



<FR1 n78 MIMO2 Ant Reduced Power>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		13.02		14.0
100	PI/2 BPSK	1	137		12.77		
100	PI/2 BPSK	1	271		12.78		
100	PI/2 BPSK	135	0		12.69		14.0
100	PI/2 BPSK	135	69		12.77		14.0
100	PI/2 BPSK	135	138		12.68		14.0
100	PI/2 BPSK	270	0		12.72		
100	QPSK	1	1		12.80		14.0
100	QPSK	1	137		12.75		
100	QPSK	1	271		12.72		
100	QPSK	135	0		12.66		14.0
100	QPSK	135	69		12.64		
100	QPSK	135	138		12.72		
100	QPSK	270	0		12.64		14.0
100	16QAM	1	1		12.62		14.0
100	64QAM	1	1		12.72		14.0
100	256QAM	1	1		12.65		14.0
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	12.72	12.74	12.61	14.0
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	12.91	12.93	12.81	14.0
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	12.88	12.81	12.83	14.0
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	12.90	12.89	12.80	14.0
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	12.98	12.91	12.94	14.0
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	13.00	12.92	12.84	14.0
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	12.86	12.80	12.82	14.0



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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		25.09		26.0
100	PI/2 BPSK	1	137		25.08		
100	PI/2 BPSK	1	271		25.06		
100	PI/2 BPSK	135	0		25.02		25.5
100	PI/2 BPSK	135	69		25.06		26.0
100	PI/2 BPSK	135	138		24.98		25.5
100	PI/2 BPSK	270	0		24.93		
100	QPSK	1	1		25.02		26.0
100	QPSK	1	137		25.08		
100	QPSK	1	271		25.03		
100	QPSK	135	0		25.03		26.0
100	QPSK	135	69		24.96		
100	QPSK	135	138		25.02		
100	QPSK	270	0		24.86		25.0
100	16QAM	1	1		23.98		25.0
100	64QAM	1	1		22.98		23.5
100	256QAM	1	1		21.12		21.5
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	25.07	25.04	24.99	26.0
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	25.05	25.06	25.01	26.0
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	25.01	25.07	25.02	26.0
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	25.01	25.06	25.00	26.0
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	25.05	25.02	25.08	26.0
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	25.06	25.05	25.04	26.0
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	24.99	25.03	25.00	26.0



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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		25.24		27.0
100	PI/2 BPSK	1	137		25.18		
100	PI/2 BPSK	1	271		25.22		
100	PI/2 BPSK	135	0		24.92		26.5
100	PI/2 BPSK	135	69		25.16		27.0
100	PI/2 BPSK	135	138		25.09		26.5
100	PI/2 BPSK	270	0		25.18		
100	QPSK	1	1		25.16		27.0
100	QPSK	1	137		25.11		
100	QPSK	1	271		25.16		
100	QPSK	135	0		25.18		27.0
100	QPSK	135	69		25.09		
100	QPSK	135	138		25.17		
100	QPSK	270	0		24.33		26.0
100	16QAM	1	1		24.19		26.0
100	64QAM	1	1		22.86		24.5
100	256QAM	1	1		21.20		22.5
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	25.21	25.21	25.12	27.0
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	25.19	25.11	25.09	27.0
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	25.10	25.17	25.23	27.0
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	25.08	25.09	25.20	27.0
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	25.10	25.18	25.20	27.0
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	25.16	25.22	25.07	27.0
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	25.12	25.18	25.10	27.0
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	25.14	25.07	25.06	27.0



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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		17.07		18.0
100	PI/2 BPSK	1	137		16.86		
100	PI/2 BPSK	1	271		16.96		
100	PI/2 BPSK	135	0		16.88		18.0
100	PI/2 BPSK	135	69		16.94		18.0
100	PI/2 BPSK	135	138		16.90		18.0
100	PI/2 BPSK	270	0		16.84		
100	QPSK	1	1		16.83		18.0
100	QPSK	1	137		16.95		
100	QPSK	1	271		16.99		
100	QPSK	135	0		16.81		18.0
100	QPSK	135	69		16.93		
100	QPSK	135	138		17.00		
100	QPSK	270	0		16.88		18.0
100	16QAM	1	1		16.98		18.0
100	64QAM	1	1		16.99		18.0
100	256QAM	1	1		16.93		18.0
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	16.80	16.84	16.99	18.0
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	16.96	16.89	16.98	18.0
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	16.87	16.96	16.88	18.0
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	16.81	16.96	16.88	18.0
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	16.84	16.81	16.84	18.0
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	16.93	16.86	16.88	18.0
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	16.85	16.88	16.90	18.0



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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		16.01		17.0
100	PI/2 BPSK	1	137		15.74		
100	PI/2 BPSK	1	271		15.75		
100	PI/2 BPSK	135	0		15.69		17.0
100	PI/2 BPSK	135	69		15.63		17.0
100	PI/2 BPSK	135	138		15.68		17.0
100	PI/2 BPSK	270	0		15.68		
100	QPSK	1	1		15.64		17.0
100	QPSK	1	137		15.79		
100	QPSK	1	271		15.80		
100	QPSK	135	0		15.70		17.0
100	QPSK	135	69		15.80		
100	QPSK	135	138		15.63		
100	QPSK	270	0		15.60		17.0
100	16QAM	1	1		15.69		17.0
100	64QAM	1	1		15.66		17.0
100	256QAM	1	1		15.80		17.0
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	15.91	15.89	15.90	17.0
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	15.89	15.91	15.95	17.0
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	15.95	15.99	15.84	17.0
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	15.87	15.93	15.91	17.0
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	15.88	15.91	15.85	17.0
Channel				647168	650000	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3750	3792.48	
15	PI/2 BPSK	1	1	15.90	15.85	15.81	17.0
Channel				647000	650000	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3750	3795	
10	PI/2 BPSK	1	1	15.96	15.85	15.88	17.0



13. SAR Test Results

General Note:

- Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - 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.
 - For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
 - For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 63.3%/62.9% = 1.006 is applied to scale-up the measured SAR result. The Reported TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
- 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
- Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥0.8W/kg.
- For the exposure positions that proximity sensor power reduction is applied for SAR compliance, additional SAR testing with EUT transmitting full power in sensor trigger distance was performed according to section 4. The test results just verification the sensor trigger distance to meet KDB 616217 requirement, when in normal usage will not operate at trigger distance, therefore, these results were not using performed Sim-Tx analysis.

UMTS Note:

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

LTE Note:

- 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.
- Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
- 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.
- Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is > not ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
- 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.
- For LTE B4/B5/B12/B17/B26/B38/B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
- LTE band 2/4/5/17/38 SAR test was covered by Band 25/66/26/12/41; according to TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - The maximum output power, including tolerance, for the smaller band is ≤ the larger band to qualify for the SAR test exclusion.
 - The channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band.

5G NR Note:

1. Referencing the procedure in KDB 941225, the test procedures are outlined as below:
 - a. To start SAR test for the largest channel bandwidth for PI/2 BPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel. Also do SAR test for 50% RB allocation for PI/2 BPSK SAR testing using 1RB PI/2 BPSK allocation procedure
 - b. For PI/2 BPSK with 100% RB allocation, SAR test 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.
 - c. For higher modulation QPSK/16QAM/64QAM/256QAM, according to tune-up document the power level is not $\frac{1}{2}$ dB higher than the same configuration in PI/2 BPSK, also reported SAR for the PI/2 BPSK configuration is less than 1.45 W/kg, QPSK/16QAM/64QAM/256QAM SAR testing are not required.
 - d. Smaller bandwidth output power for each RB allocation configuration for this device is not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
 - e. For 5G FR1 n5/n41/n66/n71/n77, the maximum channel bandwidth does not support three non-overlapping channels in the frequency band, the middle channel of the group of overlapping channels were selected for testing.
 - f. The NR n2 SAR test was covered by NR n25; due to SAR test for overlapping NR bands can be reduced if the maximum power including tolerance, for the smaller band is \leq the larger band to qualify for the SAR test exclusion and the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band.
 - g. Due to test setup limitations, SAR testing for NR was performed using Factory Test Mode software to establish the connection and perform SAR with 100% transmission. And only for TDD power class2 was performed using Factory Test Mode software to establish the connection and perform SAR with 50% transmission.



13.1 Body SAR

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Sample	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II_Main	RMC 12.2Kbps	Bottom of Laptop	9mm	Sample 1	OFF	9538	1907.6	23.72	24.50	1.197	0.04	0.496	0.594
	WCDMA II_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 1	ON	9538	1907.6	18.23	19.00	1.194	0.1	0.845	1.009
	WCDMA II_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 1	ON	9262	1852.4	18.20	19.00	1.202	-0.02	0.922	1.108
	WCDMA II_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 1	ON	9400	1880	18.12	19.00	1.225	0.03	0.864	1.058
	WCDMA II_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 2	ON	9262	1852.4	18.20	19.00	1.202	0.07	0.821	0.987
	WCDMA II_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 2	ON	9400	1880	18.12	19.00	1.225	0.04	0.813	0.996
	WCDMA II_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 2	ON	9538	1907.6	18.23	19.00	1.194	-0.03	0.793	0.947
	WCDMA II_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 3	ON	9262	1852.4	18.20	19.00	1.202	0.1	0.871	1.047
	WCDMA II_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 3	ON	9400	1880	18.12	19.00	1.225	0.01	0.853	1.045
	WCDMA II_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 3	ON	9538	1907.6	18.23	19.00	1.194	-0.08	0.839	1.002
	WCDMA II_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 4	ON	9262	1852.4	18.20	19.00	1.202	0.01	0.801	0.963
	WCDMA II_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 4	ON	9400	1880	18.12	19.00	1.225	0.04	0.781	0.956
	WCDMA II_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 4	ON	9538	1907.6	18.23	19.00	1.194	-0.02	0.763	0.911
	WCDMA II_MIMO2	RMC 12.2Kbps	Bottom of Laptop	10mm	Sample 1	OFF	9538	1907.6	23.46	24.00	1.132	0.02	0.436	0.494
	WCDMA II_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 1	ON	9538	1907.6	17.42	18.00	1.143	0.05	0.957	1.094
01	WCDMA II_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 1	ON	9262	1852.4	17.31	18.00	1.172	-0.01	0.980	1.149
	WCDMA II_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 1	ON	9400	1880	17.36	18.00	1.159	-0.01	0.951	1.102
	WCDMA II_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 2	ON	9262	1852.4	17.31	18.00	1.172	0.06	0.879	1.030
	WCDMA II_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 2	ON	9400	1880	17.36	18.00	1.159	0.03	0.863	1.000
	WCDMA II_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 2	ON	9538	1907.6	17.42	18.00	1.143	-0.01	0.814	0.930
	WCDMA II_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 3	ON	9262	1852.4	17.31	18.00	1.172	0.05	0.871	1.021
	WCDMA II_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 3	ON	9400	1880	17.36	18.00	1.159	-0.02	0.853	0.988
	WCDMA II_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 3	ON	9538	1907.6	17.42	18.00	1.143	0.06	0.849	0.970
	WCDMA II_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 4	ON	9262	1852.4	17.31	18.00	1.172	0.04	0.813	0.953
	WCDMA II_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 4	ON	9400	1880	17.36	18.00	1.159	0.01	0.792	0.918
	WCDMA II_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 4	ON	9538	1907.6	17.42	18.00	1.143	-0.08	0.793	0.906
	WCDMA IV_Main	RMC 12.2Kbps	Bottom of Laptop	9mm	Sample 1	OFF	1413	1732.6	23.92	24.50	1.143	0.06	0.534	0.610
02	WCDMA IV_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 1	ON	1312	1712.4	18.26	19.00	1.186	-0.01	0.971	1.151
	WCDMA IV_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 1	ON	1413	1732.6	18.21	19.00	1.199	-0.09	0.948	1.137
	WCDMA IV_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 1	ON	1513	1752.6	18.12	19.00	1.225	-0.01	0.929	1.138
	WCDMA IV_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 2	ON	1312	1712.4	18.26	19.00	1.186	-0.1	0.772	0.915
	WCDMA IV_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 2	ON	1413	1732.6	18.21	19.00	1.199	0.02	0.767	0.920
	WCDMA IV_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 2	ON	1513	1752.6	18.12	19.00	1.225	-0.05	0.755	0.925
	WCDMA IV_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 3	ON	1312	1712.4	18.26	19.00	1.186	0.03	0.848	1.006
	WCDMA IV_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 3	ON	1413	1732.6	18.21	19.00	1.199	-0.01	0.812	0.974
	WCDMA IV_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 3	ON	1513	1752.6	18.12	19.00	1.225	0.04	0.799	0.978
	WCDMA IV_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 4	ON	1312	1712.4	18.26	19.00	1.186	0.06	0.650	0.771
	WCDMA IV_MIMO2	RMC 12.2Kbps	Bottom of Laptop	10mm	Sample 1	OFF	1413	1732.6	23.59	24.00	1.099	0.02	0.439	0.482
	WCDMA IV_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 1	ON	1312	1712.4	17.63	18.00	1.089	0.04	0.795	0.866
	WCDMA IV_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 1	ON	1413	1732.6	17.56	18.00	1.107	-0.04	0.834	0.923
	WCDMA IV_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 1	ON	1513	1752.6	17.59	18.00	1.099	-0.02	0.877	0.964
	WCDMA IV_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 2	ON	1513	1752.6	17.59	18.00	1.099	0.04	0.686	0.754
	WCDMA IV_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 3	ON	1513	1752.6	17.59	18.00	1.099	-0.07	0.826	0.908
	WCDMA IV_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 3	ON	1413	1732.6	17.56	18.00	1.107	0.01	0.793	0.878
	WCDMA IV_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 3	ON	1312	1712.4	17.63	18.00	1.089	-0.05	0.789	0.859
	WCDMA IV_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 4	ON	1513	1752.6	17.59	18.00	1.099	0.03	0.618	0.679



Plot No.	Band	Mode	Test Position	Gap (mm)	Sample	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA V_Main	RMC 12.2Kbps	Bottom of Laptop	9mm	Sample 1	OFF	4132	826.4	23.67	24.50	1.211	0.07	0.429	0.519
	WCDMA V_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 1	ON	4132	826.4	19.99	21.00	1.262	0.1	0.863	1.089
	WCDMA V_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 1	ON	4182	836.4	19.98	21.00	1.265	-0.09	0.844	1.067
03	WCDMA V_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 1	ON	4233	846.6	19.93	21.00	1.279	-0.01	0.854	1.093
	WCDMA V_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 2	ON	4233	846.6	19.93	21.00	1.279	0.05	0.764	0.977
	WCDMA V_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 2	ON	4132	826.4	19.99	21.00	1.262	0.02	0.739	0.932
	WCDMA V_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 2	ON	4182	836.4	19.98	21.00	1.265	-0.04	0.729	0.922
	WCDMA V_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 3	ON	4233	846.6	19.93	21.00	1.279	-0.06	0.786	1.006
	WCDMA V_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 3	ON	4132	826.4	19.99	21.00	1.262	0.01	0.768	0.969
	WCDMA V_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 3	ON	4182	836.4	19.98	21.00	1.265	-0.03	0.758	0.959
	WCDMA V_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 4	ON	4233	846.6	19.93	21.00	1.279	0.06	0.742	0.949
	WCDMA V_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 4	ON	4132	826.4	19.99	21.00	1.262	0.02	0.716	0.903
	WCDMA V_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 4	ON	4182	836.4	19.98	21.00	1.265	-0.03	0.706	0.893



<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Sample	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 7_Main	20M	QPSK	1	0	Bottom of Laptop	9mm	Sample 1	OFF	21350	2560	23.37	24.00	1.156	0.03	0.296	0.342
	LTE Band 7_Main	20M	QPSK	50	0	Bottom of Laptop	9mm	Sample 1	OFF	21350	2560	22.43	23.00	1.140	0.04	0.227	0.259
	LTE Band 7_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	21350	2560	20.96	21.00	1.009	0.05	0.887	0.895
	LTE Band 7_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	20850	2510	20.93	21.00	1.016	-0.02	0.944	0.959
	LTE Band 7_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	21100	2535	20.91	21.00	1.021	-0.05	0.891	0.910
	LTE Band 7_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	21350	2560	20.73	21.00	1.064	0.03	0.804	0.856
	LTE Band 7_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	20850	2510	20.68	21.00	1.076	-0.09	0.866	0.932
	LTE Band 7_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	21100	2535	20.60	21.00	1.096	0.01	0.851	0.933
	LTE Band 7_Main	20M	QPSK	100	0	Bottom of Laptop	0mm	Sample 1	ON	21350	2560	20.70	21.00	1.072	0.08	0.867	0.929
	LTE Band 7C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	21100	2535	20.32	21.00	1.169	0.06	0.761	0.890
	LTE Band 7C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	20850	2510	20.29	21.00	1.178	0.03	0.732	0.862
	LTE Band 7C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	21350	2560	20.03	21.00	1.250	-0.02	0.683	0.854
	LTE Band 7_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	20850	2510	20.93	21.00	1.016	-0.02	0.931	0.946
	LTE Band 7_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	21100	2535	20.91	21.00	1.021	0.03	0.905	0.924
	LTE Band 7_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	21350	2560	20.96	21.00	1.009	-0.06	0.897	0.905
	LTE Band 7_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	20850	2510	20.93	21.00	1.016	0.05	0.923	0.938
	LTE Band 7_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	21100	2535	20.91	21.00	1.021	0.06	0.903	0.922
	LTE Band 7_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	21350	2560	20.96	21.00	1.009	-0.04	0.897	0.905
	LTE Band 7_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	20850	2510	20.93	21.00	1.016	-0.01	0.903	0.918
	LTE Band 7_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	21100	2535	20.91	21.00	1.021	0.03	0.886	0.905
	LTE Band 7_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	21350	2560	20.96	21.00	1.009	-0.02	0.869	0.877
	LTE Band 7_MIMO2	20M	QPSK	1	0	Bottom of Laptop	10mm	Sample 1	OFF	20850	2510	23.15	24.00	1.216	0.04	0.461	0.561
	LTE Band 7_MIMO2	20M	QPSK	50	0	Bottom of Laptop	10mm	Sample 1	OFF	20850	2510	22.16	23.00	1.213	-0.07	0.365	0.443
04	LTE Band 7_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	20850	2510	16.40	17.00	1.148	0.01	0.899	1.032
	LTE Band 7_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	21100	2535	16.36	17.00	1.159	-0.04	0.880	1.020
	LTE Band 7_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	21350	2560	16.29	17.00	1.178	-0.05	0.824	0.970
	LTE Band 7_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	20850	2510	16.31	17.00	1.172	0.06	0.863	1.012
	LTE Band 7_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	21100	2535	16.29	17.00	1.178	-0.07	0.826	0.973
	LTE Band 7_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	21350	2560	16.24	17.00	1.191	0.01	0.832	0.991
	LTE Band 7_MIMO2	20M	QPSK	100	0	Bottom of Laptop	0mm	Sample 1	ON	20850	2510	16.31	17.00	1.172	0.12	0.841	0.986
	LTE Band 7C_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	21100	2535	16.06	17.00	1.242	-0.01	0.784	0.973
	LTE Band 7C_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	20850	2510	15.73	17.00	1.340	0.04	0.742	0.994
	LTE Band 7C_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	21350	2560	15.94	17.00	1.276	-0.03	0.768	0.980
	LTE Band 7_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	20850	2510	16.40	17.00	1.148	0.07	0.714	0.820
	LTE Band 7_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	21100	2535	16.36	17.00	1.159	0.01	0.703	0.815
	LTE Band 7_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	21350	2560	16.29	17.00	1.178	0.03	0.684	0.805
	LTE Band 7_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	20850	2510	16.40	17.00	1.148	0	0.562	0.645
	LTE Band 7_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	20850	2510	16.40	17.00	1.148	0.03	0.549	0.630
05	LTE Band 12_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	OFF	23095	707.5	23.87	25.00	1.297	-0.02	0.868	1.126
	LTE Band 12_Main	10M	QPSK	25	0	Bottom of Laptop	0mm	Sample 1	OFF	23095	707.5	22.79	24.00	1.321	0.09	0.673	0.889
	LTE Band 12_Main	10M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	OFF	23095	707.5	22.71	24.00	1.346	0.03	0.659	0.887
	LTE Band 12_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	OFF	23095	707.5	23.87	25.00	1.297	0.05	0.837	1.086
	LTE Band 12_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	OFF	23095	707.5	23.87	25.00	1.297	0.02	0.667	0.865
	LTE Band 12_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	OFF	23095	707.5	23.87	25.00	1.297	-0.05	0.676	0.877
	LTE Band 13_Main	10M	QPSK	1	0	Bottom of Laptop	9mm	Sample 1	OFF	23230	782	23.94	25.00	1.276	0.04	0.346	0.442
	LTE Band 13_Main	10M	QPSK	25	0	Bottom of Laptop	9mm	Sample 1	OFF	23230	782	22.85	24.00	1.303	-0.08	0.272	0.354
06	LTE Band 13_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	23230	782	21.94	22.50	1.138	-0.02	0.912	1.038
	LTE Band 13_Main	10M	QPSK	25	12	Bottom of Laptop	0mm	Sample 1	ON	23230	782	21.90	22.50	1.148	0.06	0.834	0.958
	LTE Band 13_Main	10M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	23230	782	21.92	22.50	1.143	0.05	0.812	0.928
	LTE Band 13_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	23230	782	21.94	22.50	1.138	0.06	0.660	0.751
	LTE Band 13_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	23230	782	21.94	22.50	1.138	-0.05	0.629	0.716
	LTE Band 13_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	23230	782	21.94	22.50	1.138	0.09	0.731	0.832



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Sample	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 14_Main	10M	QPSK	1	0	Bottom of Laptop	9mm	Sample 1	OFF	23330	793	23.85	25.00	1.303	0.04	0.366	0.477
	LTE Band 14_Main	10M	QPSK	25	0	Bottom of Laptop	9mm	Sample 1	OFF	23330	793	22.78	24.00	1.324	-0.02	0.296	0.392
07	LTE Band 14_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	23330	793	21.96	22.50	1.132	0.01	1.020	1.155
	LTE Band 14_Main	10M	QPSK	25	25	Bottom of Laptop	0mm	Sample 1	ON	23330	793	21.90	22.50	1.148	0.12	0.945	1.085
	LTE Band 14_Main	10M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	23330	793	21.86	22.50	1.159	0.03	0.912	1.057
	LTE Band 14_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	23330	793	21.96	22.50	1.132	0.1	0.742	0.840
	LTE Band 14_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	23330	793	21.96	22.50	1.132	-0.04	0.654	0.741
	LTE Band 14_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	23330	793	21.96	22.50	1.132	0.08	0.824	0.933
	LTE Band 25_Main	20M	QPSK	1	0	Bottom of Laptop	9mm	Sample 1	OFF	26590	1905	23.13	24.00	1.222	-0.02	0.534	0.652
	LTE Band 25_Main	20M	QPSK	50	0	Bottom of Laptop	9mm	Sample 1	OFF	26590	1905	22.06	23.00	1.242	0.01	0.426	0.529
	LTE Band 25_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	26590	1905	18.94	19.50	1.138	0	0.832	0.947
	LTE Band 25_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	26140	1860	18.86	19.50	1.159	0	0.868	1.006
	LTE Band 25_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	26340	1880	18.93	19.50	1.140	0.04	0.864	0.985
	LTE Band 25_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	26590	1905	18.71	19.50	1.199	0.03	0.816	0.979
	LTE Band 25_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	26140	1860	18.69	19.50	1.205	0.01	0.806	0.971
	LTE Band 25_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	26340	1880	18.54	19.50	1.247	-0.05	0.797	0.994
	LTE Band 25_Main	20M	QPSK	100	0	Bottom of Laptop	0mm	Sample 1	ON	26590	1905	18.65	19.50	1.216	-0.03	0.786	0.956
	LTE Band 25_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	26140	1860	18.86	19.50	1.159	-0.06	0.811	0.940
	LTE Band 25_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	26340	1880	18.93	19.50	1.140	0.02	0.792	0.903
	LTE Band 25_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	26590	1905	18.94	19.50	1.138	-0.07	0.783	0.891
	LTE Band 25_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	26140	1860	18.86	19.50	1.159	-0.08	0.843	0.977
	LTE Band 25_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	26340	1880	18.93	19.50	1.140	0.01	0.803	0.916
	LTE Band 25_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	26590	1905	18.94	19.50	1.138	-0.06	0.826	0.940
	LTE Band 25_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	26140	1860	18.86	19.50	1.159	-0.02	0.782	0.906
	LTE Band 25_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	26340	1880	18.93	19.50	1.140	0.04	0.759	0.865
	LTE Band 25_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	26590	1905	18.94	19.50	1.138	-0.03	0.763	0.868
	LTE Band 25_MIMO2	20M	QPSK	1	0	Bottom of Laptop	10mm	Sample 1	OFF	26340	1880	23.20	24.00	1.202	0.04	0.439	0.528
	LTE Band 25_MIMO2	20M	QPSK	50	0	Bottom of Laptop	10mm	Sample 1	OFF	26340	1880	22.15	23.00	1.216	-0.01	0.340	0.414
	LTE Band 25_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	26340	1880	17.36	18.50	1.300	-0.02	0.801	1.041
08	LTE Band 25_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	26140	1860	17.30	18.50	1.318	-0.01	0.804	1.060
	LTE Band 25_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	26590	1905	17.25	18.50	1.334	0.06	0.779	1.039
	LTE Band 25_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	26340	1880	17.31	18.50	1.315	0.02	0.768	1.010
	LTE Band 25_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	26140	1860	17.23	18.50	1.340	-0.06	0.763	1.022
	LTE Band 25_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	26590	1905	17.27	18.50	1.327	-0.03	0.778	1.033
	LTE Band 25_MIMO2	20M	QPSK	100	0	Bottom of Laptop	0mm	Sample 1	ON	26590	1905	17.26	18.50	1.330	0.05	0.732	0.974
	LTE Band 25_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	26140	1860	17.30	18.50	1.318	-0.08	0.750	0.989
	LTE Band 25_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	26340	1880	17.36	18.50	1.300	0.02	0.731	0.950
	LTE Band 25_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	26590	1905	17.25	18.50	1.334	-0.05	0.718	0.957
	LTE Band 25_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	26140	1860	17.30	18.50	1.318	0.06	0.698	0.920
	LTE Band 25_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	26340	1880	17.36	18.50	1.300	0.01	0.672	0.874
	LTE Band 25_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	26590	1905	17.25	18.50	1.334	-0.03	0.669	0.892
	LTE Band 25_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	26140	1860	17.30	18.50	1.318	0.07	0.728	0.960
	LTE Band 25_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	26340	1880	17.36	18.50	1.300	0.03	0.702	0.913
	LTE Band 25_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	26590	1905	17.25	18.50	1.334	-0.09	0.693	0.924



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Sample	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 26_Main	15M	QPSK	1	0	Bottom of Laptop	9mm	Sample 1	OFF	26865	831.5	23.31	25.00	1.476	0.01	0.483	0.713
	LTE Band 26_Main	15M	QPSK	36	0	Bottom of Laptop	9mm	Sample 1	OFF	26865	831.5	22.22	24.00	1.507	-0.06	0.348	0.524
09	LTE Band 26_Main	15M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	26865	831.5	20.83	21.00	1.040	0.04	0.811	0.843
	LTE Band 26_Main	15M	QPSK	36	0	Bottom of Laptop	0mm	Sample 1	ON	26865	831.5	20.44	21.00	1.138	0.02	0.739	0.841
	LTE Band 26_Main	15M	QPSK	75	0	Bottom of Laptop	0mm	Sample 1	ON	26865	831.5	20.47	21.00	1.130	0.06	0.731	0.826
	LTE Band 5B_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	20575	841.5	20.25	21.00	1.189	0.01	0.632	0.751
	LTE Band 26_Main	15M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	26865	831.5	20.83	21.00	1.040	0.04	0.603	0.627
	LTE Band 26_Main	15M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	26865	831.5	20.83	21.00	1.040	-0.02	0.594	0.618
	LTE Band 26_Main	15M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	26865	831.5	20.83	21.00	1.040	-0.07	0.503	0.523
	LTE Band 30_Main	10M	QPSK	1	0	Bottom of Laptop	9mm	Sample 1	OFF	27710	2310	22.45	23.00	1.135	0.04	0.402	0.456
	LTE Band 30_Main	10M	QPSK	25	0	Bottom of Laptop	9mm	Sample 1	OFF	27710	2310	21.34	22.00	1.164	-0.06	0.386	0.449
	LTE Band 30_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	27710	2310	18.82	19.50	1.169	0.08	0.607	0.710
	LTE Band 30_Main	10M	QPSK	25	0	Bottom of Laptop	0mm	Sample 1	ON	27710	2310	18.40	19.50	1.288	0.03	0.531	0.684
	LTE Band 30_Main	10M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	27710	2310	18.31	19.50	1.315	-0.04	0.529	0.696
	LTE Band 30_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	27710	2310	18.82	19.50	1.169	0.01	0.861	1.007
	LTE Band 30_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	27710	2310	18.82	19.50	1.169	0.07	0.713	0.834
10	LTE Band 30_Main	10M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	27710	2310	18.82	19.50	1.169	0.02	0.915	1.070
	LTE Band 30_MIMO2	10M	QPSK	1	0	Bottom of Laptop	10mm	Sample 1	OFF	27710	2310	21.15	23.00	1.531	0.02	0.482	0.738
	LTE Band 30_MIMO2	10M	QPSK	25	0	Bottom of Laptop	10mm	Sample 1	OFF	27710	2310	20.11	22.00	1.545	-0.04	0.365	0.564
	LTE Band 30_MIMO2	10M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	27710	2310	17.77	18.00	1.054	0	0.979	1.032
	LTE Band 30_MIMO2	10M	QPSK	25	12	Bottom of Laptop	0mm	Sample 1	ON	27710	2310	17.68	18.00	1.076	0.06	0.922	0.993
	LTE Band 30_MIMO2	10M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	27710	2310	17.58	18.00	1.102	0.13	0.903	0.995
	LTE Band 30_MIMO2	10M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	27710	2310	17.77	18.00	1.054	0.06	0.950	1.002
	LTE Band 30_MIMO2	10M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	27710	2310	17.77	18.00	1.054	-0.01	0.960	1.012
	LTE Band 30_MIMO2	10M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	27710	2310	17.77	18.00	1.054	-0.07	0.954	1.006



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Sample	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 66_Main	20M	QPSK	1	0	Bottom of Laptop	9mm	Sample 1	OFF	132572	1770	22.72	24.00	1.343	0.07	0.439	0.589
	LTE Band 66_Main	20M	QPSK	50	0	Bottom of Laptop	9mm	Sample 1	OFF	132572	1770	21.66	23.00	1.361	-0.09	0.415	0.565
	LTE Band 66_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	132572	1770	18.64	19.00	1.086	-0.02	0.826	0.897
11	LTE Band 66_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	132072	1720	18.42	19.00	1.143	0	0.907	1.037
	LTE Band 66_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	132322	1745	18.56	19.00	1.107	-0.02	0.879	0.973
	LTE Band 66_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	132572	1770	18.39	19.00	1.151	0.03	0.836	0.962
	LTE Band 66_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	132072	1720	18.32	19.00	1.169	-0.05	0.819	0.958
	LTE Band 66_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	132322	1745	18.34	19.00	1.164	-0.09	0.825	0.960
	LTE Band 66_Main	20M	QPSK	100	0	Bottom of Laptop	0mm	Sample 1	ON	132572	1770	18.29	19.00	1.178	-0.04	0.811	0.955
	LTE Band 66B_Main	15M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	132322	1745	18.04	19.00	1.247	0.09	0.638	0.796
	LTE Band 66C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	132322	1745	18.16	19.00	1.213	-0.16	0.624	0.757
	LTE Band 66_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	132072	1720	18.42	19.00	1.143	-0.05	0.808	0.923
	LTE Band 66_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	132322	1745	18.56	19.00	1.107	0.03	0.782	0.865
	LTE Band 66_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	132572	1770	18.64	19.00	1.086	-0.02	0.776	0.843
	LTE Band 66_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	132072	1720	18.42	19.00	1.143	-0.01	0.815	0.931
	LTE Band 66_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	132322	1745	18.56	19.00	1.107	0.06	0.782	0.865
	LTE Band 66_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	132572	1770	18.64	19.00	1.086	-0.07	0.769	0.835
	LTE Band 66_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	132072	1720	18.42	19.00	1.143	-0.03	0.738	0.843
	LTE Band 66_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	132322	1745	18.56	19.00	1.107	0.01	0.716	0.792
	LTE Band 66_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	132572	1770	18.64	19.00	1.086	-0.02	0.722	0.784
	LTE Band 66_MIMO2	20M	QPSK	1	0	Bottom of Laptop	10mm	Sample 1	OFF	132572	1770	22.99	24.00	1.262	0.03	0.536	0.676
	LTE Band 66_MIMO2	20M	QPSK	50	0	Bottom of Laptop	10mm	Sample 1	OFF	132572	1770	21.96	23.00	1.271	-0.01	0.508	0.645
	LTE Band 66_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	132572	1770	17.83	18.50	1.167	0	0.820	0.957
	LTE Band 66_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	132072	1720	17.75	18.50	1.189	0.09	0.788	0.937
	LTE Band 66_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	132322	1745	17.82	18.50	1.169	-0.09	0.814	0.952
	LTE Band 66_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	132572	1770	17.71	18.50	1.199	0.02	0.763	0.915
	LTE Band 66_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	132072	1720	17.67	18.50	1.211	-0.03	0.753	0.912
	LTE Band 66_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	132322	1745	17.67	18.50	1.211	-0.07	0.744	0.901
	LTE Band 66_MIMO2	20M	QPSK	100	0	Bottom of Laptop	0mm	Sample 1	ON	132572	1770	17.74	18.50	1.191	0.06	0.729	0.868
	LTE Band 66B_MIMO2	15M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	132322	1745	17.30	18.50	1.318	0.12	0.604	0.796
	LTE Band 66C_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	132322	1745	17.26	18.50	1.330	-0.02	0.597	0.794
	LTE Band 66_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	132572	1770	17.83	18.50	1.167	-0.1	0.593	0.692
	LTE Band 66_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	132572	1770	17.83	18.50	1.167	0.07	0.681	0.795
	LTE Band 66_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	132572	1770	17.83	18.50	1.167	-0.08	0.580	0.677
12	LTE Band 71_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	OFF	133297	680.5	23.85	25.00	1.303	-0.04	0.907	1.182
	LTE Band 71_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	OFF	133297	680.5	22.78	24.00	1.324	0.03	0.883	1.169
	LTE Band 71_Main	20M	QPSK	100	0	Bottom of Laptop	0mm	Sample 1	OFF	133297	680.5	22.82	24.00	1.312	-0.05	0.869	1.140
	LTE Band 71_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	OFF	133297	680.5	23.85	25.00	1.303	0.04	0.713	0.929
	LTE Band 71_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	OFF	133297	680.5	23.85	25.00	1.303	0.09	0.537	0.700
	LTE Band 71_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	OFF	133297	680.5	23.85	25.00	1.303	0.03	0.652	0.850



<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Sample	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 38_Main	20M	QPSK	1	0	Bottom of Laptop	9mm	Sample 1	OFF	38000	2595	23.30	24.00	1.175	62.9	1.006	-0.08	0.383	0.453
	LTE Band 38_Main	20M	QPSK	50	0	Bottom of Laptop	9mm	Sample 1	OFF	38000	2595	22.21	23.00	1.199	62.9	1.006	0.03	0.283	0.341
13	LTE Band 38_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	38000	2595	19.61	20.00	1.094	62.9	1.006	-0.07	0.455	0.501
	LTE Band 38_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	38000	2595	19.56	20.00	1.107	62.9	1.006	0.08	0.438	0.488
	LTE Band 38C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	38150	2610	18.96	20.00	1.271	62.9	1.006	0.08	0.366	0.468
	LTE Band 38_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	38000	2595	19.61	20.00	1.094	62.9	1.006	-0.1	0.441	0.485
	LTE Band 38_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	38000	2595	19.61	20.00	1.094	62.9	1.006	0.06	0.421	0.463
	LTE Band 38_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	38000	2595	19.61	20.00	1.094	62.9	1.006	0.17	0.450	0.495
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	9mm	Sample 1	OFF	40620	2593	23.35	23.50	1.035	62.9	1.006	0.03	0.483	0.503
	LTE Band 41_Main	20M	QPSK	50	0	Bottom of Laptop	9mm	Sample 1	OFF	40620	2593	22.23	22.50	1.064	62.9	1.006	-0.06	0.365	0.391
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	41055	2636.5	19.63	20.00	1.089	62.9	1.006	0	0.612	0.670
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	39750	2506	19.47	20.00	1.130	62.9	1.006	0.02	0.601	0.683
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	40185	2549.5	19.45	20.00	1.135	62.9	1.006	-0.06	0.593	0.677
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	40620	2593	19.46	20.00	1.132	62.9	1.006	0.09	0.584	0.665
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	41490	2680	19.55	20.00	1.109	62.9	1.006	0	0.628	0.701
	LTE Band 41_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	41055	2636.5	19.52	20.00	1.117	62.9	1.006	0.04	0.579	0.651
	LTE Band 41_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	40620	2593	19.35	20.00	1.161	62.9	1.006	0.09	0.581	0.679
	LTE Band 41_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	39750	2506	19.46	20.00	1.132	62.9	1.006	0.01	0.592	0.674
	LTE Band 41_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	40185	2549.5	19.49	20.00	1.125	62.9	1.006	-0.12	0.575	0.651
	LTE Band 41_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	41490	2680	19.37	20.00	1.156	62.9	1.006	0.07	0.585	0.680
	LTE Band 41_Main	20M	QPSK	100	0	Bottom of Laptop	0mm	Sample 1	ON	41055	2636.5	19.56	20.00	1.107	62.9	1.006	0.04	0.532	0.592
	LTE Band 41_HPUE_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	40620	2593	21.21	21.50	1.069	42.9	1.009	-0.06	0.584	0.630
	LTE Band 41_HPUE_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	39750	2506	21.19	21.50	1.074	42.9	1.009	0.03	0.523	0.567
	LTE Band 41_HPUE_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	40185	2549.5	21.10	21.50	1.096	42.9	1.009	0.14	0.550	0.608
	LTE Band 41_HPUE_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	41055	2636.5	21.15	21.50	1.084	42.9	1.009	0.06	0.541	0.592
	LTE Band 41_HPUE_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	41490	2680	21.20	21.50	1.072	42.9	1.009	0.01	0.563	0.609
	LTE Band 41C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	41055	2636.5	19.10	20.00	1.230	62.9	1.006	0.07	0.481	0.595
	LTE Band 41C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	39750	2506	18.76	20.00	1.330	62.9	1.006	0.02	0.453	0.606
	LTE Band 41C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	40185	2549.5	18.93	20.00	1.279	62.9	1.006	-0.03	0.431	0.555
	LTE Band 41C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	40620	2593	18.86	20.00	1.300	62.9	1.006	0.09	0.412	0.539
	LTE Band 41C_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	41490	2680	19.06	20.00	1.242	62.9	1.006	0.05	0.451	0.563
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	41490	2680	19.55	20.00	1.109	62.9	1.006	-0.09	0.581	0.648
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	39750	2506	19.47	20.00	1.130	62.9	1.006	-0.12	0.579	0.658
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	40185	2549.5	19.45	20.00	1.135	62.9	1.006	0.17	0.602	0.687
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	40620	2593	19.46	20.00	1.132	62.9	1.006	0.19	0.548	0.624
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	41055	2636.5	19.63	20.00	1.089	62.9	1.006	0.17	0.597	0.654
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	41490	2680	19.55	20.00	1.109	62.9	1.006	0.1	0.596	0.665
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	39750	2506	19.47	20.00	1.130	62.9	1.006	0.02	0.559	0.635
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	40185	2549.5	19.45	20.00	1.135	62.9	1.006	0.1	0.541	0.618
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	40620	2593	19.46	20.00	1.132	62.9	1.006	0.17	0.566	0.645
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	41055	2636.5	19.63	20.00	1.089	62.9	1.006	-0.08	0.587	0.643
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	41490	2680	19.55	20.00	1.109	62.9	1.006	0.02	0.574	0.640
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	39750	2506	19.47	20.00	1.130	62.9	1.006	-0.17	0.551	0.626
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	40185	2549.5	19.45	20.00	1.135	62.9	1.006	0.15	0.531	0.606
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	40620	2593	19.46	20.00	1.132	62.9	1.006	-0.1	0.570	0.649
	LTE Band 41_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	41055	2636.5	19.63	20.00	1.089	62.9	1.006	0.09	0.569	0.623



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Sample	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	10mm	Sample 1	OFF	40620	2593	23.22	24.00	1.197	62.9	1.006	0.04	0.305	0.367
	LTE Band 41_MIMO2	20M	QPSK	50	0	Bottom of Laptop	10mm	Sample 1	OFF	40620	2593	22.26	23.00	1.186	62.9	1.006	0.06	0.267	0.318
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	40620	2593	18.68	19.00	1.076	62.9	1.006	-0.02	0.966	1.046
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	39750	2506	18.63	19.00	1.089	62.9	1.006	-0.1	0.956	1.047
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	40185	2549.5	18.59	19.00	1.099	62.9	1.006	-0.09	0.971	1.074
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	41055	2636.5	18.63	19.00	1.089	62.9	1.006	0.03	0.963	1.055
14	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	41490	2680	18.56	19.00	1.107	62.9	1.006	-0.04	0.978	1.089
	LTE Band 41_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	40620	2593	18.55	19.00	1.109	62.9	1.006	-0.08	0.923	1.030
	LTE Band 41_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	39750	2506	18.52	19.00	1.117	62.9	1.006	0.09	0.941	1.057
	LTE Band 41_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	40185	2549.5	18.45	19.00	1.135	62.9	1.006	-0.12	0.945	1.079
	LTE Band 41_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	41055	2636.5	18.38	19.00	1.153	62.9	1.006	0.1	0.932	1.081
	LTE Band 41_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	41490	2680	18.35	19.00	1.161	62.9	1.006	0.01	0.921	1.076
	LTE Band 41_MIMO2	20M	QPSK	100	0	Bottom of Laptop	0mm	Sample 1	ON	40620	2593	18.58	19.00	1.102	62.9	1.006	0.18	0.925	1.025
	LTE Band 41_HPUE_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	40620	2593	20.42	20.50	1.019	42.9	1.009	-0.02	0.939	0.965
	LTE Band 41_HPUE_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	39750	2506	20.27	20.50	1.054	42.9	1.009	-0.14	0.891	0.948
	LTE Band 41_HPUE_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	40185	2549.5	20.38	20.50	1.028	42.9	1.009	0.06	0.897	0.930
	LTE Band 41_HPUE_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	41055	2636.5	20.25	20.50	1.059	42.9	1.009	0.04	0.902	0.964
	LTE Band 41_HPUE_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	41490	2680	20.33	20.50	1.040	42.9	1.009	-0.05	0.916	0.961
	LTE Band 41C_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	41055	2636.5	18.20	19.00	1.202	62.9	1.006	0.01	0.826	0.999
	LTE Band 41C_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	39750	2506	17.80	19.00	1.318	62.9	1.006	0.04	0.805	1.068
	LTE Band 41C_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	40185	2549.5	17.96	19.00	1.271	62.9	1.006	0.02	0.786	1.005
	LTE Band 41C_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	40620	2593	18.12	19.00	1.225	62.9	1.006	0.04	0.801	0.987
	LTE Band 41C_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	41490	2680	18.03	19.00	1.250	62.9	1.006	0.07	0.751	0.945
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	41490	2680	18.56	19.00	1.107	62.9	1.006	-0.1	0.951	1.059
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	40620	2593	18.68	19.00	1.076	62.9	1.006	0.04	0.942	1.020
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	39750	2506	18.63	19.00	1.089	62.9	1.006	0.09	0.911	0.998
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	40185	2549.5	18.59	19.00	1.099	62.9	1.006	-0.14	0.904	0.999
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	41055	2636.5	18.63	19.00	1.089	62.9	1.006	-0.03	0.922	1.010
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	41490	2680	18.56	19.00	1.107	62.9	1.006	0.01	0.942	1.049
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	40620	2593	18.68	19.00	1.076	62.9	1.006	0.14	0.936	1.014
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	39750	2506	18.63	19.00	1.089	62.9	1.006	-0.03	0.927	1.015
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	40185	2549.5	18.59	19.00	1.099	62.9	1.006	0.05	0.933	1.032
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	41055	2636.5	18.63	19.00	1.089	62.9	1.006	0.09	0.917	1.005
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	41490	2680	18.56	19.00	1.107	62.9	1.006	0.03	0.967	1.077
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	40620	2593	18.68	19.00	1.076	62.9	1.006	0.06	0.955	1.034
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	39750	2506	18.63	19.00	1.089	62.9	1.006	0.01	0.941	1.031
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	40185	2549.5	18.59	19.00	1.099	62.9	1.006	0.11	0.943	1.043
	LTE Band 41_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	41055	2636.5	18.63	19.00	1.089	62.9	1.006	-0.06	0.933	1.022



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Sample	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 48_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	OFF	56640	3690	21.81	22.00	1.045	62.9	1.006	-0.05	0.539	0.566
	LTE Band 48_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	OFF	55340	3560	21.75	22.00	1.059	62.9	1.006	-0.03	0.503	0.536
	LTE Band 48_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	OFF	55830	3609	21.61	22.00	1.094	62.9	1.006	0.05	0.498	0.548
	LTE Band 48_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	OFF	56150	3641	21.63	22.00	1.089	62.9	1.006	-0.02	0.510	0.559
	LTE Band 48_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	OFF	56640	3690	20.72	21.00	1.067	62.9	1.006	0.03	0.445	0.477
	LTE Band 48C_Main	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	OFF	56640	3690	21.74	22.00	1.062	62.9	1.006	-0.01	0.512	0.547
	LTE Band 48_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	OFF	56640	3690	21.81	22.00	1.045	62.9	1.006	0.05	0.506	0.532
	LTE Band 48_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	OFF	56640	3690	21.81	22.00	1.045	62.9	1.006	0.03	0.510	0.536
	LTE Band 48_Main	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	OFF	56640	3690	21.81	22.00	1.045	62.9	1.006	0.08	0.513	0.539
	LTE Band 48_MIMO2	20M	QPSK	1	0	Bottom of Laptop	10mm	Sample 1	OFF	56150	3641	21.83	22.00	1.040	62.9	1.006	0.06	0.538	0.563
	LTE Band 48_MIMO2	20M	QPSK	50	0	Bottom of Laptop	10mm	Sample 1	OFF	56150	3641	20.98	21.00	1.005	62.9	1.006	0.01	0.501	0.506
15	LTE Band 48_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	56150	3641	15.85	16.00	1.035	62.9	1.006	-0.03	1.030	1.073
	LTE Band 48_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	55340	3560	15.67	16.00	1.079	62.9	1.006	-0.01	0.879	0.954
	LTE Band 48_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	55830	3609	15.68	16.00	1.076	62.9	1.006	0.07	0.921	0.997
	LTE Band 48_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 1	ON	56640	3690	15.78	16.00	1.052	62.9	1.006	0.05	1.010	1.069
	LTE Band 48_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	56150	3641	15.69	16.00	1.074	62.9	1.006	0.07	0.983	1.062
	LTE Band 48_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	55340	3560	15.65	16.00	1.084	62.9	1.006	-0.05	0.974	1.062
	LTE Band 48_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	55830	3609	15.62	16.00	1.091	62.9	1.006	0.01	0.962	1.056
	LTE Band 48_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	56640	3690	15.71	16.00	1.069	62.9	1.006	-0.18	0.981	1.055
	LTE Band 48_MIMO2	20M	QPSK	100	0	Bottom of Laptop	0mm	Sample 1	ON	56150	3641	15.68	16.00	1.076	62.9	1.006	0.06	0.959	1.039
	LTE Band 48C_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	56640	3690	15.16	16.00	1.213	62.9	1.006	-0.03	0.826	1.008
	LTE Band 48C_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	55340	3560	15.03	16.00	1.250	62.9	1.006	0.06	0.788	0.991
	LTE Band 48C_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	55830	3609	15.12	16.00	1.225	62.9	1.006	-0.01	0.801	0.987
	LTE Band 48C_MIMO2	20M	QPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	56150	3641	15.06	16.00	1.242	62.9	1.006	-0.14	0.791	0.988
	LTE Band 48_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	56150	3641	15.85	16.00	1.035	62.9	1.006	-0.01	0.971	1.011
	LTE Band 48_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	55340	3560	15.67	16.00	1.079	62.9	1.006	-0.07	0.951	1.032
	LTE Band 48_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	55830	3609	15.68	16.00	1.076	62.9	1.006	0.06	0.956	1.035
	LTE Band 48_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 2	ON	56640	3690	15.78	16.00	1.052	62.9	1.006	0.12	0.964	1.020
	LTE Band 48_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	56150	3641	15.85	16.00	1.035	62.9	1.006	-0.07	0.986	1.027
	LTE Band 48_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	55340	3560	15.67	16.00	1.079	62.9	1.006	0.11	0.970	1.053
	LTE Band 48_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	55830	3609	15.68	16.00	1.076	62.9	1.006	0.01	0.982	1.063
	LTE Band 48_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 3	ON	56640	3690	15.78	16.00	1.052	62.9	1.006	0.05	0.965	1.021
	LTE Band 48_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	56150	3641	15.85	16.00	1.035	62.9	1.006	0	0.993	1.034
	LTE Band 48_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	55340	3560	15.67	16.00	1.079	62.9	1.006	-0.06	0.941	1.021
	LTE Band 48_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	55830	3609	15.68	16.00	1.076	62.9	1.006	-0.14	0.966	1.046
	LTE Band 48_MIMO2	20M	QPSK	1	0	Bottom of Laptop	0mm	Sample 4	ON	56640	3690	15.78	16.00	1.052	62.9	1.006	0.07	0.972	1.029



<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Sample	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n5_Main	20M	BPSK	1	1	Bottom of Laptop	9mm	Sample 1	OFF	167300	836.5	24.06	25.00	1.242	0.02	0.531	0.659
	FR1 n5_Main	20M	BPSK	50	28	Bottom of Laptop	9mm	Sample 1	OFF	167300	836.5	24.03	25.00	1.250	-0.05	0.528	0.660
16	FR1 n5_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	167300	836.5	21.29	21.50	1.050	-0.04	0.826	0.867
	FR1 n5_Main	20M	BPSK	50	28	Bottom of Laptop	0mm	Sample 1	ON	167300	836.5	21.26	21.50	1.057	0.03	0.736	0.778
	FR1 n5_Main	20M	BPSK	100	0	Bottom of Laptop	0mm	Sample 1	ON	167300	836.5	21.24	21.50	1.062	0.01	0.713	0.757
	FR1 n5_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	167300	836.5	21.29	21.50	1.050	0.07	0.735	0.771
	FR1 n5_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 3	ON	167300	836.5	21.29	21.50	1.050	0	0.756	0.793
	FR1 n5_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 4	ON	167300	836.5	21.29	21.50	1.050	-0.06	0.708	0.743
	FR1 n7_Main	20M	BPSK	1	1	Bottom of Laptop	9mm	Sample 1	OFF	507000	2535	23.75	24.00	1.059	0.01	0.482	0.511
	FR1 n7_Main	20M	BPSK	50	28	Bottom of Laptop	9mm	Sample 1	OFF	507000	2535	23.73	24.00	1.064	0.06	0.438	0.466
	FR1 n7_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	507000	2535	20.43	21.00	1.140	-0.04	0.851	0.970
	FR1 n7_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	512000	2560	20.23	21.00	1.194	-0.08	0.814	0.972
	FR1 n7_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	502000	2510	20.41	21.00	1.146	-0.02	0.970	1.111
	FR1 n7_Main	20M	BPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	507000	2535	20.38	21.00	1.153	-0.02	0.814	0.939
	FR1 n7_Main	20M	BPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	512000	2560	20.33	21.00	1.167	0.03	0.792	0.924
	FR1 n7_Main	20M	BPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	502000	2510	20.35	21.00	1.161	-0.01	0.824	0.957
	FR1 n7_Main	20M	BPSK	100	0	Bottom of Laptop	0mm	Sample 1	ON	507000	2535	20.32	21.00	1.169	-0.05	0.809	0.946
	FR1 n7_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	502000	2510	20.41	21.00	1.146	-0.08	0.874	1.001
	FR1 n7_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	507000	2535	20.43	21.00	1.140	0.03	0.783	0.893
	FR1 n7_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	512000	2560	20.23	21.00	1.194	0.05	0.776	0.927
	FR1 n7_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 3	ON	502000	2510	20.41	21.00	1.146	0.08	0.810	0.928
	FR1 n7_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 3	ON	507000	2535	20.43	21.00	1.140	0.02	0.736	0.839
	FR1 n7_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 3	ON	512000	2560	20.23	21.00	1.194	-0.03	0.744	0.888
	FR1 n7_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 4	ON	502000	2510	20.41	21.00	1.146	0.09	0.755	0.865
	FR1 n7_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 4	ON	507000	2535	20.43	21.00	1.140	-0.01	0.711	0.811
	FR1 n7_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 4	ON	512000	2560	20.23	21.00	1.194	0.06	0.705	0.842
	FR1 n7_MIMO2	20M	BPSK	1	1	Bottom of Laptop	10mm	Sample 1	OFF	507000	2535	23.37	24.00	1.156	0.02	0.668	0.772
	FR1 n7_MIMO2	20M	BPSK	50	28	Bottom of Laptop	10mm	Sample 1	OFF	507000	2535	23.35	24.00	1.161	-0.03	0.638	0.741
	FR1 n7_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	507000	2535	17.08	18.00	1.236	0.05	0.942	1.164
17	FR1 n7_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	502000	2510	17.05	18.00	1.245	0.03	0.961	1.196
	FR1 n7_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	512000	2560	17.00	18.00	1.259	0.04	0.940	1.183
	FR1 n7_MIMO2	20M	BPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	507000	2535	17.01	18.00	1.256	0.03	0.893	1.122
	FR1 n7_MIMO2	20M	BPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	502000	2510	16.85	18.00	1.303	0.05	0.876	1.142
	FR1 n7_MIMO2	20M	BPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	512000	2560	16.90	18.00	1.288	-0.01	0.859	1.107
	FR1 n7_MIMO2	20M	BPSK	100	0	Bottom of Laptop	0mm	Sample 1	ON	507000	2535	16.89	18.00	1.291	0.04	0.832	1.074
	FR1 n7_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	502000	2510	17.05	18.00	1.245	-0.03	0.793	0.987
	FR1 n7_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	507000	2535	17.08	18.00	1.236	0.02	0.782	0.967
	FR1 n7_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	512000	2560	17.00	18.00	1.259	-0.06	0.776	0.977
	FR1 n7_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 3	ON	502000	2510	17.05	18.00	1.245	-0.1	0.516	0.642
	FR1 n7_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 4	ON	502000	2510	17.05	18.00	1.245	-0.04	0.495	0.616



FCC SAR TEST REPORT

Report No. : FA2N1462

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Sample	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n25_Main	20M	BPSK	1	1	Bottom of Laptop	9mm	Sample 1	OFF	376500	1882.5	22.94	24.00	1.276	0.06	0.429	0.548
	FR1 n25_Main	20M	BPSK	50	28	Bottom of Laptop	9mm	Sample 1	OFF	376500	1882.5	22.91	24.00	1.285	0.02	0.396	0.509
	FR1 n25_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	376500	1882.5	18.65	19.00	1.084	0.03	0.932	1.010
	FR1 n25_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	372000	1860	18.58	19.00	1.102	-0.07	0.877	0.966
	FR1 n25_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	381000	1905	18.35	19.00	1.161	0.09	0.863	1.002
	FR1 n25_Main	20M	BPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	376500	1882.5	18.44	19.00	1.138	0.02	0.816	0.928
	FR1 n25_Main	20M	BPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	372000	1860	18.35	19.00	1.161	0.04	0.801	0.930
	FR1 n25_Main	20M	BPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	381000	1905	18.36	19.00	1.159	-0.03	0.812	0.941
	FR1 n25_Main	20M	BPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	376500	1882.5	18.55	19.00	1.109	0.04	0.784	0.870
	FR1 n25_Main	20M	BPSK	100	0	Bottom of Laptop	0mm	Sample 1	ON	376500	1882.5	18.55	19.00	1.109	0.04	0.784	0.870
	FR1 n25_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	376500	1882.5	18.65	19.00	1.084	0.08	0.696	0.754
	FR1 n25_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 3	ON	376500	1882.5	18.65	19.00	1.084	-0.09	0.666	0.722
	FR1 n25_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 4	ON	376500	1882.5	18.65	19.00	1.084	0	0.586	0.635
	FR1 n25_MIMO2	20M	BPSK	1	1	Bottom of Laptop	10mm	Sample 1	OFF	376500	1882.5	22.98	24.00	1.265	0.01	0.486	0.615
	FR1 n25_MIMO2	20M	BPSK	50	28	Bottom of Laptop	10mm	Sample 1	OFF	376500	1882.5	22.92	24.00	1.282	0.04	0.453	0.581
	FR1 n25_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	376500	1882.5	17.20	18.00	1.202	0.05	0.764	0.919
18	FR1 n25_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	372000	1860	16.96	18.00	1.271	-0.01	0.835	1.061
	FR1 n25_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	381000	1905	17.03	18.00	1.250	0.09	0.781	0.976
	FR1 n25_MIMO2	20M	BPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	376500	1882.5	17.02	18.00	1.253	-0.06	0.712	0.892
	FR1 n25_MIMO2	20M	BPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	372000	1860	16.74	18.00	1.337	0.02	0.738	0.986
	FR1 n25_MIMO2	20M	BPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	381000	1905	16.84	18.00	1.306	0.06	0.706	0.922
	FR1 n25_MIMO2	20M	BPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	376500	1882.5	16.86	18.00	1.300	0.1	0.678	0.882
	FR1 n25_MIMO2	20M	BPSK	100	0	Bottom of Laptop	0mm	Sample 1	ON	376500	1882.5	16.86	18.00	1.300	0.1	0.678	0.882
	FR1 n25_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	372000	1860	16.96	18.00	1.271	0.03	0.828	1.052
	FR1 n25_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	376500	1882.5	17.20	18.00	1.202	-0.08	0.768	0.923
	FR1 n25_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	381000	1905	17.03	18.00	1.250	0.06	0.743	0.929
	FR1 n25_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 3	ON	372000	1860	16.96	18.00	1.271	0.04	0.801	1.018
	FR1 n25_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 3	ON	376500	1882.5	17.20	18.00	1.202	-0.05	0.732	0.880
	FR1 n25_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 3	ON	381000	1905	17.03	18.00	1.250	0.1	0.711	0.889
	FR1 n25_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 4	ON	372000	1860	16.96	18.00	1.271	-0.06	0.794	1.009
	FR1 n25_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 4	ON	376500	1882.5	17.20	18.00	1.202	-0.1	0.726	0.873
	FR1 n25_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 4	ON	381000	1905	17.03	18.00	1.250	-0.07	0.703	0.879
	FR1 n30_Main	10M	BPSK	1	1	Bottom of Laptop	9mm	Sample 1	OFF	462000	2310	22.02	23.00	1.253	0.01	0.453	0.568
	FR1 n30_Main	10M	BPSK	25	14	Bottom of Laptop	9mm	Sample 1	OFF	462000	2310	21.97	23.00	1.268	-0.06	0.412	0.522
	FR1 n30_Main	10M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	462000	2310	17.95	18.00	1.012	-0.07	0.923	0.934
	FR1 n30_Main	10M	BPSK	25	0	Bottom of Laptop	0mm	Sample 1	ON	462000	2310	17.66	18.00	1.081	0.02	0.812	0.878
	FR1 n30_Main	10M	BPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	462000	2310	17.58	18.00	1.102	0.04	0.801	0.882
	FR1 n30_Main	10M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	462000	2310	17.95	18.00	1.012	0.01	0.836	0.846
	FR1 n30_Main	10M	BPSK	1	1	Bottom of Laptop	0mm	Sample 3	ON	462000	2310	17.95	18.00	1.012	-0.05	0.656	0.664
	FR1 n30_Main	10M	BPSK	1	1	Bottom of Laptop	0mm	Sample 4	ON	462000	2310	17.95	18.00	1.012	0.06	0.797	0.806
	FR1 n30_MIMO2	10M	BPSK	1	1	Bottom of Laptop	10mm	Sample 1	OFF	462000	2310	22.79	23.00	1.050	0.04	0.506	0.531
	FR1 n30_MIMO2	10M	BPSK	25	14	Bottom of Laptop	10mm	Sample 1	OFF	462000	2310	22.60	23.00	1.096	-0.02	0.468	0.513
19	FR1 n30_MIMO2	10M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	462000	2310	16.38	17.00	1.153	0.02	0.961	1.108
	FR1 n30_MIMO2	10M	BPSK	25	0	Bottom of Laptop	0mm	Sample 1	ON	462000	2310	16.34	17.00	1.164	0.04	0.882	1.027
	FR1 n30_MIMO2	10M	BPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	462000	2310	16.27	17.00	1.183	-0.03	0.864	1.022
	FR1 n30_MIMO2	10M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	462000	2310	16.38	17.00	1.153	-0.02	0.921	1.062
	FR1 n30_MIMO2	10M	BPSK	1	1	Bottom of Laptop	0mm	Sample 3	ON	462000	2310	16.38	17.00	1.153	0.07	0.462	0.533
	FR1 n30_MIMO2	10M	BPSK	1	1	Bottom of Laptop	0mm	Sample 4	ON	462000	2310	16.38	17.00	1.153	-0.06	0.537	0.619



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Sample	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n38_Main	20M	BPSK	1	1	Bottom of Laptop	9mm	Sample 1	OFF	519000	2595	22.63	24.00	1.371	0.02	0.286	0.392
	FR1 n38_Main	20M	BPSK	25	13	Bottom of Laptop	9mm	Sample 1	OFF	519000	2595	22.57	23.50	1.239	-0.04	0.240	0.297
	FR1 n38_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	519000	2595	17.30	17.50	1.047	-0.02	0.380	0.398
	FR1 n38_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	516000	2580	17.23	17.50	1.064	-0.04	0.364	0.387
	FR1 n38_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	522000	2610	17.25	17.50	1.059	0.02	0.375	0.397
	FR1 n38_Main	20M	BPSK	25	13	Bottom of Laptop	0mm	Sample 1	ON	519000	2595	17.21	17.50	1.069	0.02	0.338	0.361
	FR1 n38_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	519000	2595	17.30	17.50	1.047	-0.07	0.352	0.369
	FR1 n38_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 3	ON	519000	2595	17.30	17.50	1.047	0.04	0.371	0.388
	FR1 n38_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 4	ON	519000	2595	17.30	17.50	1.047	-0.02	0.363	0.380
	FR1 n38_MIMO2	20M	BPSK	1	1	Bottom of Laptop	10mm	Sample 1	OFF	519000	2595	23.62	24.00	1.091	0.04	0.625	0.682
	FR1 n38_MIMO2	20M	BPSK	25	13	Bottom of Laptop	10mm	Sample 1	OFF	519000	2595	23.54	24.00	1.112	-0.03	0.582	0.647
	FR1 n38_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	519000	2595	16.21	16.50	1.069	0.01	0.926	0.990
20	FR1 n38_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	516000	2580	16.09	16.50	1.099	-0.01	0.964	1.059
	FR1 n38_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	522000	2610	15.85	16.50	1.161	0.02	0.837	0.972
	FR1 n38_MIMO2	20M	BPSK	25	13	Bottom of Laptop	0mm	Sample 1	ON	519000	2595	16.14	16.50	1.086	0.01	0.863	0.938
	FR1 n38_MIMO2	20M	BPSK	25	13	Bottom of Laptop	0mm	Sample 1	ON	516000	2580	16.03	16.50	1.114	-0.03	0.876	0.976
	FR1 n38_MIMO2	20M	BPSK	25	13	Bottom of Laptop	0mm	Sample 1	ON	522000	2610	16.12	16.50	1.091	-0.04	0.802	0.875
	FR1 n38_MIMO2	20M	BPSK	50	0	Bottom of Laptop	0mm	Sample 1	ON	519000	2595	16.05	16.50	1.109	0.06	0.805	0.893
	FR1 n38_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	516000	2580	16.09	16.50	1.099	0.02	0.778	0.855
	FR1 n38_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	519000	2595	16.21	16.50	1.069	-0.06	0.751	0.803
	FR1 n38_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	522000	2610	15.85	16.50	1.161	-0.12	0.712	0.827
	FR1 n38_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 3	ON	516000	2580	16.09	16.50	1.099	0.01	0.642	0.706
	FR1 n38_MIMO2	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 4	ON	516000	2580	16.09	16.50	1.099	-0.02	0.631	0.693



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Sample	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n41_Main	100M	BPSK	1	1	Bottom of Laptop	9mm	Sample 1	OFF	518598	2592.99	22.66	23.50	1.213	0.05	0.241	0.292
	FR1 n41_Main	100M	BPSK	135	69	Bottom of Laptop	9mm	Sample 1	OFF	518598	2592.99	22.57	23.50	1.239	-0.04	0.225	0.279
	FR1 n41_Main	100M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	518598	2592.99	17.40	17.50	1.023	-0.08	0.287	0.294
	FR1 n41_Main	100M	BPSK	135	69	Bottom of Laptop	0mm	Sample 1	ON	518598	2592.99	17.24	17.50	1.062	-0.09	0.231	0.245
	FR1 n41_HPUE_Main	100M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	518598	2592.99	20.25	20.50	1.059	0.01	0.264	0.280
	FR1 n41_Main	100M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	518598	2592.99	17.40	17.50	1.023	0.05	0.265	0.271
	FR1 n41_Main	100M	BPSK	1	1	Bottom of Laptop	0mm	Sample 3	ON	518598	2592.99	17.40	17.50	1.023	0.02	0.257	0.263
	FR1 n41_Main	100M	BPSK	1	1	Bottom of Laptop	0mm	Sample 4	ON	518598	2592.99	17.40	17.50	1.023	0.1	0.281	0.288
	FR1 n41_MIMO2	100M	BPSK	1	1	Bottom of Laptop	10mm	Sample 1	OFF	518598	2592.99	22.84	24.00	1.306	0.05	0.458	0.598
	FR1 n41_MIMO2	100M	BPSK	135	69	Bottom of Laptop	10mm	Sample 1	OFF	518598	2592.99	22.79	24.00	1.321	0.03	0.423	0.559
	FR1 n41_MIMO2	100M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	518598	2592.99	16.24	16.50	1.062	-0.02	0.806	0.856
	FR1 n41_MIMO2	100M	BPSK	135	69	Bottom of Laptop	0mm	Sample 1	ON	518598	2592.99	16.20	16.50	1.072	0.06	0.738	0.791
	FR1 n41_MIMO2	100M	BPSK	270	0	Bottom of Laptop	0mm	Sample 1	ON	518598	2592.99	16.15	16.50	1.084	0.03	0.683	0.740
	FR1 n41_HPUE_MIMO2	100M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	518598	2592.99	19.23	19.50	1.064	0.03	0.776	0.826
	FR1 n41_MIMO2	100M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	518598	2592.99	16.24	16.50	1.062	-0.04	0.784	0.832
	FR1 n41_MIMO2	100M	BPSK	1	1	Bottom of Laptop	0mm	Sample 3	ON	518598	2592.99	16.24	16.50	1.062	-0.04	0.796	0.845
	FR1 n41_MIMO2	100M	BPSK	1	1	Bottom of Laptop	0mm	Sample 4	ON	518598	2592.99	16.24	16.50	1.062	0.07	0.763	0.810
21	FR1 n41_MIMO1	100M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	OFF	518598	2592.99	17.39	17.50	1.026	-0.03	1.120	1.149
	FR1 n41_MIMO1	100M	BPSK	135	69	Bottom of Laptop	0mm	Sample 1	OFF	518598	2592.99	17.21	17.50	1.069	0.02	0.987	1.055
	FR1 n41_MIMO1	100M	BPSK	270	0	Bottom of Laptop	0mm	Sample 1	OFF	518598	2592.99	17.16	17.50	1.081	0.11	0.951	1.028
	FR1 n41_MIMO1	100M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	OFF	518598	2592.99	17.39	17.50	1.026	0.09	1.030	1.056
	FR1 n41_MIMO1	100M	BPSK	1	1	Bottom of Laptop	0mm	Sample 3	OFF	518598	2592.99	17.39	17.50	1.026	-0.03	0.964	0.989
	FR1 n41_MIMO1	100M	BPSK	1	1	Bottom of Laptop	0mm	Sample 4	OFF	518598	2592.99	17.39	17.50	1.026	-0.08	0.987	1.012
	FR1 n41_Aux	100M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	OFF	518598	2592.99	18.80	19.00	1.047	0.02	1.080	1.131
	FR1 n41_Aux	100M	BPSK	135	69	Bottom of Laptop	0mm	Sample 1	OFF	518598	2592.99	18.76	19.00	1.057	0.02	0.987	1.043
	FR1 n41_Aux	100M	BPSK	270	0	Bottom of Laptop	0mm	Sample 1	OFF	518598	2592.99	18.71	19.00	1.069	0.11	0.951	1.017
	FR1 n41_Aux	100M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	OFF	518598	2592.99	18.80	19.00	1.047	0.05	0.984	1.030
	FR1 n41_Aux	100M	BPSK	1	1	Bottom of Laptop	0mm	Sample 3	OFF	518598	2592.99	18.80	19.00	1.047	-0.01	0.991	1.038
	FR1 n41_Aux	100M	BPSK	1	1	Bottom of Laptop	0mm	Sample 4	OFF	518598	2592.99	18.80	19.00	1.047	0.04	0.979	1.025



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Sample	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n66_Main	40M	BPSK	1	1	Bottom of Laptop	9mm	Sample 1	OFF	349000	1745	23.65	24.00	1.084	0.04	0.403	0.437
	FR1 n66_Main	40M	BPSK	108	54	Bottom of Laptop	9mm	Sample 1	OFF	349000	1745	23.63	24.00	1.089	-0.02	0.385	0.419
	FR1 n66_Main	40M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	349000	1745	18.41	19.00	1.146	0.02	0.825	0.945
	FR1 n66_Main	40M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	346000	1730	18.35	19.00	1.161	-0.04	0.855	0.993
	FR1 n66_Main	40M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	352000	1760	18.23	19.00	1.194	-0.05	0.828	0.989
	FR1 n66_Main	40M	BPSK	108	0	Bottom of Laptop	0mm	Sample 1	ON	349000	1745	18.35	19.00	1.161	0.02	0.765	0.889
	FR1 n66_Main	40M	BPSK	108	0	Bottom of Laptop	0mm	Sample 1	ON	346000	1730	18.29	19.00	1.178	0.06	0.783	0.922
	FR1 n66_Main	40M	BPSK	108	0	Bottom of Laptop	0mm	Sample 1	ON	352000	1760	18.17	19.00	1.211	0.01	0.755	0.914
	FR1 n66_Main	40M	BPSK	216	0	Bottom of Laptop	0mm	Sample 1	ON	349000	1745	18.28	19.00	1.180	-0.06	0.738	0.871
	FR1 n66_Main	40M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	346000	1730	18.35	19.00	1.161	-0.08	0.647	0.751
	FR1 n66_Main	40M	BPSK	1	1	Bottom of Laptop	0mm	Sample 3	ON	346000	1730	18.35	19.00	1.161	0.07	0.594	0.690
	FR1 n66_Main	40M	BPSK	1	1	Bottom of Laptop	0mm	Sample 4	ON	346000	1730	18.35	19.00	1.161	-0.03	0.534	0.620
	FR1 n66_MIMO2	40M	BPSK	1	1	Bottom of Laptop	10mm	Sample 1	OFF	349000	1745	23.06	24.00	1.242	0.02	0.483	0.600
	FR1 n66_MIMO2	40M	BPSK	108	54	Bottom of Laptop	10mm	Sample 1	OFF	349000	1745	22.90	24.00	1.288	-0.06	0.452	0.582
22	FR1 n66_MIMO2	40M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	352000	1760	17.09	18.50	1.384	0	0.773	1.069
	FR1 n66_MIMO2	40M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	346000	1730	16.64	18.50	1.535	0.05	0.649	0.996
	FR1 n66_MIMO2	40M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	ON	349000	1745	16.57	18.50	1.560	-0.06	0.683	1.065
	FR1 n66_MIMO2	40M	BPSK	108	0	Bottom of Laptop	0mm	Sample 1	ON	352000	1760	17.05	18.50	1.396	0.01	0.683	0.954
	FR1 n66_MIMO2	40M	BPSK	108	0	Bottom of Laptop	0mm	Sample 1	ON	346000	1730	16.64	18.50	1.535	0.02	0.593	0.910
	FR1 n66_MIMO2	40M	BPSK	108	0	Bottom of Laptop	0mm	Sample 1	ON	349000	1745	16.55	18.50	1.567	0.08	0.634	0.993
	FR1 n66_MIMO2	40M	BPSK	216	0	Bottom of Laptop	0mm	Sample 1	ON	352000	1760	17.00	18.50	1.413	-0.02	0.633	0.894
	FR1 n66_MIMO2	40M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	352000	1760	17.09	18.50	1.384	0.1	0.704	0.974
	FR1 n66_MIMO2	40M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	346000	1730	16.64	18.50	1.535	-0.09	0.613	0.941
	FR1 n66_MIMO2	40M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	ON	349000	1745	16.57	18.50	1.560	0.04	0.656	1.023
	FR1 n66_MIMO2	40M	BPSK	1	1	Bottom of Laptop	0mm	Sample 3	ON	352000	1760	17.09	18.50	1.384	0.1	0.715	0.989
	FR1 n66_MIMO2	40M	BPSK	1	1	Bottom of Laptop	0mm	Sample 3	ON	346000	1730	16.64	18.50	1.535	-0.07	0.635	0.974
	FR1 n66_MIMO2	40M	BPSK	1	1	Bottom of Laptop	0mm	Sample 3	ON	349000	1745	16.57	18.50	1.560	0	0.660	1.029
	FR1 n66_MIMO2	40M	BPSK	1	1	Bottom of Laptop	0mm	Sample 4	ON	352000	1760	17.09	18.50	1.384	-0.03	0.730	1.010
	FR1 n66_MIMO2	40M	BPSK	1	1	Bottom of Laptop	0mm	Sample 4	ON	346000	1730	16.64	18.50	1.535	-0.01	0.646	0.991
	FR1 n66_MIMO2	40M	BPSK	1	1	Bottom of Laptop	0mm	Sample 4	ON	349000	1745	16.57	18.50	1.560	-0.04	0.683	1.065
23	FR1 n71_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 1	OFF	136100	680.5	24.22	25.00	1.197	-0.05	0.711	0.851
	FR1 n71_Main	20M	BPSK	50	28	Bottom of Laptop	0mm	Sample 1	OFF	136100	680.5	24.16	25.00	1.213	0.03	0.684	0.830
	FR1 n71_Main	20M	BPSK	100	0	Bottom of Laptop	0mm	Sample 1	OFF	136100	680.5	23.76	24.50	1.186	0.01	0.663	0.786
	FR1 n71_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 2	OFF	136100	680.5	24.22	25.00	1.197	0.1	0.685	0.820
	FR1 n71_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 3	OFF	136100	680.5	24.22	25.00	1.197	0.04	0.603	0.722
	FR1 n71_Main	20M	BPSK	1	1	Bottom of Laptop	0mm	Sample 4	OFF	136100	680.5	24.22	25.00	1.197	-0.07	0.612	0.732



13.2 Repeated SAR Measurement

No.	Band	Mode	Test Position	Gap (mm)	Sample	Power Reduction	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	WCDMA II_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 1	ON	9262	1852.4	17.31	18.00	1.172			-0.01	0.980	-	1.149
2nd	WCDMA II_MIMO2	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 1	ON	9262	1852.4	17.31	18.00	1.172			0.06	0.972	1.01	1.139
1st	WCDMA IV_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 1	ON	1312	1712.4	18.26	19.00	1.186			-0.01	0.971	-	1.151
2nd	WCDMA IV_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 1	ON	1312	1712.4	18.26	19.00	1.186			0.04	0.962	1.01	1.141
1st	WCDMA V_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 1	ON	4132	826.4	19.99	21.00	1.262			0.1	0.863	-	1.089
2nd	WCDMA V_Main	RMC 12.2Kbps	Bottom of Laptop	0mm	Sample 1	ON	4132	826.4	19.99	21.00	1.262			0.04	0.851	1.01	1.074
1st	LTE Band 14_Main	10M_QPSK_1_0	Bottom of Laptop	0mm	Sample 1	ON	23330	793	21.96	22.50	1.132			0.01	1.020	-	1.155
2nd	LTE Band 14_Main	10M_QPSK_1_0	Bottom of Laptop	0mm	Sample 1	ON	23330	793	21.96	22.50	1.132			-0.03	0.996	1.02	1.128
1st	LTE Band 30_MIMO2	10M_QPSK_1_0	Bottom of Laptop	0mm	Sample 1	ON	27710	2310	17.77	18.00	1.054			0	0.979	-	1.032
2nd	LTE Band 30_MIMO2	10M_QPSK_1_0	Bottom of Laptop	0mm	Sample 1	ON	27710	2310	17.77	18.00	1.054			0.02	0.967	1.01	1.020
1st	LTE Band 48_MIMO2	20M_QPSK_1_0	Bottom of Laptop	0mm	Sample 1	ON	56150	3641	15.85	16.00	1.035	62.9	1.006	-0.03	1.030	-	1.073
2nd	LTE Band 48_MIMO2	20M_QPSK_1_0	Bottom of Laptop	0mm	Sample 1	ON	56150	3641	15.85	16.00	1.035	62.9	1.006	0.06	0.986	1.04	1.027
1st	FR1 n41_MIMO1	100M_BPSK_1_1	Bottom of Laptop	0mm	Sample 1	OFF	518598	2592.99	17.39	17.50	1.026			-0.03	1.120	-	1.149
2nd	FR1 n41_MIMO1	100M_BPSK_1_1	Bottom of Laptop	0mm	Sample 1	OFF	518598	2592.99	17.39	17.50	1.026			0.02	1.080	1.04	1.108
1st	FR1 n77_Aux	100M_BPSK_1_1	Bottom of Laptop	0mm	Sample 1	OFF	633332	3499.98	20.89	21.50	1.151			0.06	0.898	-	1.033
2nd	FR1 n77_Aux	100M_BPSK_1_1	Bottom of Laptop	0mm	Sample 1	OFF	633332	3499.98	20.89	21.50	1.151			0.02	0.875	1.03	1.007

General Note:

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



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

This device support Power Class 2 and Power Class 3 operations for LTE Band 41. The highest available duty cycle for Power Class 2 operation is 43.3% using UL-DL configuration 1. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each LTE configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg, Separate SAR testing for Power Class 2 is not required
Use PC3 power level and SAR to estimated PC2 SAR linearly, and check if the deviation from the measured PC2 SAR is <10%

<Main>

Table with 3 columns: Parameters, LTE Band 41_Main Ant (Power Class 3), and LTE Band 41_Main Ant (Power Class 2). Rows include Maximum Tune up Power (dBm), Reported 1g SAR (W/kg), Duty Cycle, Frame Averaged (mW), Linearity SAR(W/kg), and % deviation from expected linearity.

<MIMO 2>

Table with 3 columns: Parameters, LTE Band 41_MIMO2 Ant (Power Class 3), and LTE Band 41_MIMO2 Ant (Power Class 2). Rows include Maximum Tune up Power (dBm), Reported 1g SAR (W/kg), Duty Cycle, Frame Averaged (mW), Linearity SAR(W/kg), and % deviation from expected linearity.



13.4 FR1 n41/n77 Power Class 2 and Power Class 3 Linearity

This device support Power Class 2 and Power Class 3 operations for FR1 n41/n77. The highest available duty cycle for Power Class 2 operation is 50% 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 FR1 configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg, Separate SAR testing for Power Class 2 is not required.

Use PC3 power level and SAR to estimated PC2 SAR linearly, and check if the deviation from the measured PC2 SAR is <10%

<Main>

	FR1 n41_Main Ant (Power Class 3)	FR1 n41_Main Ant (Power Class 2)
Maximum Tune up Power (dBm)	17.5	20.5
Reported 1g SAR (W/kg)	0.294	0.28
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	56.23	56.10
Linearity SAR(W/kg)	0.29	
% deviation from expected linearity		-4.54%

	FR1 n77_Main Ant (Power Class 3)	FR1 n77_Main Ant (Power Class 2)
Maximum Tune up Power (dBm)	24	26
Reported 1g SAR (W/kg)	0.384	0.284
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	251.19	199.05
Linearity SAR(W/kg)	0.30	
% deviation from expected linearity		-6.67%

<MIMO 2>

	FR1 n41_MIMO2 Ant (Power Class 3)	FR1 n41_MIMO2 Ant (Power Class 2)
Maximum Tune up Power (dBm)	16.5	19.5
Reported 1g SAR (W/kg)	0.856	0.826
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	44.67	44.56
Linearity SAR(W/kg)	0.85	
% deviation from expected linearity		-3.28%

	FR1 n77_MIMO2 Ant (Power Class 3)	FR1 n77_MIMO2 Ant (Power Class 2)
Maximum Tune up Power (dBm)	24	27
Reported 1g SAR (W/kg)	1.065	0.993
Duty Cycle	100.00%	50.00%
Frame Averaged (mW)	251.19	250.59
Linearity SAR(W/kg)	1.06	
% deviation from expected linearity		-6.54%

14. Simultaneous Transmission Analysis

WWAN + WLAN <Intel AX211D2W>		
NO.	Simultaneous Transmission Configurations	Body
1.	WWAN Main + WWAN MIMO 2 + 2.4GHz WLAN Ant 1 + Bluetooth Ant 2	Yes
2.	WWAN Main + WWAN MIMO 2 + 2.4GHz WLAN Ant 1 + 2.4GHz WLAN Ant 2	Yes
3.	WWAN Main + WWAN MIMO 2 + WLAN5/6GHz Ant 1 + WLAN5/6GHz Ant 2 + Bluetooth Ant 2	Yes
4.	WWAN MIMO 1 + WLAN2.4GHz Ant 1 + Bluetooth Ant 2	Yes
5.	WWAN MIMO 1 + 2.4GHz WLAN Ant 1 + 2.4GHz WLAN Ant 2	Yes
6.	WWAN MIMO 1 + WLAN5/6GHz Ant 1 + WLAN5/6GHz Ant 2 + Bluetooth Ant 2	Yes
7.	WWAN Aux + WLAN2.4GHz Ant 1 + Bluetooth Ant 2	Yes
8.	WWAN Aux + 2.4GHz WLAN Ant 1 + 2.4GHz WLAN Ant 2	Yes
9.	WWAN Aux + WLAN5/6GHz Ant 1 + WLAN5/6GHz Ant 2 + Bluetooth Ant 2	Yes

WWAN + WLAN <Qualcomm QCNFA725>		
NO.	Simultaneous Transmission Configurations	Body
1.	WWAN Main + WWAN MIMO 2 + WLAN2.4GHz Ant 1+2 + WLAN5/6GHz Ant 1+2	Yes
2.	WWAN Main + WWAN MIMO 2 + WLAN5/6GHz Ant 1+2 + Bluetooth Ant 2	Yes
3.	WWAN MIMO 1 + WLAN2.4GHz Ant 1+2 + WLAN5/6GHz Ant 1+2	Yes
4.	WWAN MIMO 1 + WLAN5/6GHz Ant 1+2 + Bluetooth Ant 2	Yes
5.	WWAN Aux + WLAN2.4GHz Ant 1+2 + WLAN5/6GHz Ant 1+2	Yes
6.	WWAN Aux + WLAN5/6GHz Ant 1+2 + Bluetooth Ant 2	Yes

General Note:

1. The Intel AX211D2W WLAN/BT module is integrated into this host. The WLAN 2.4GHz/5GHz/BT SAR results referenced from Intel SAR report, report No.: 201120-03.TR10 (FCC ID: PD9AX211D2), WLAN 6GHz SAR results referred to report No.:201120-03.TR50 (FCC ID: PD9AX211D2), the result is used to do simultaneous transmission analysis.
2. The Qualcomm QCNFA725 WLAN/Bluetooth module is also integrated into this host, WLAN/Bluetooth SAR testing data, which can be referred to Sporton SAR Test Report, Report No.: FA2N1456-03 and the result is used to do simultaneous transmission analysis.
3. The Scaled SAR summation is calculated based on the same configuration and test position.
4. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - i) Scalar SAR summation < 1.6W/kg.
 - ii) $SPLSR = (SAR1 + SAR2)^{1.5} / (\text{min. separation distance, mm})$, and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
 - iii) If $SPLSR \leq 0.04$, simultaneously transmission SAR measurement is not necessary.
 - iv) Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.
 - v) The SPLSR calculated results please refer to section 14.2.

14.1 Body Exposure Conditions

With AX211D2W PPS Platform

<WWAN Main + WWAN MIMO 2 + WLAN + Bluetooth>

Exposure Position	6	7	1	2	3	4	5	1+5+6+7 Summed 1g SAR (W/kg)	1+2+6+7 Summed 1g SAR (W/kg)	3+4+5+6+7 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN Main Ant	Maximum WWAN MIMO2 Ant	WLAN2.4GHz Ant 1	WLAN2.4GHz Ant 2	WLAN5/6GHz Ant 1	WLAN5/6GHz Ant 2	Bluetooth Ant 2					
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)					
Bottom of Laptop at 0mm	1.182	1.196	0.570	0.630	0.690	0.600	0.090	3.038	3.578	3.758	0.02	Case 1

<WWAN MIMO 1 + WLAN + Bluetooth>

Exposure Position	6	1	2	3	4	5	1+5+6 Summed 1g SAR (W/kg)	1+2+6 Summed 1g SAR (W/kg)	3+4+5+6 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN MIMO1 Ant	WLAN2.4GHz Ant 1	WLAN2.4GHz Ant 2	WLAN5/6GHz Ant 1	WLAN5/6GHz Ant 2	Bluetooth Ant 2					
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)					
Bottom of Laptop at 0mm	1.149	0.570	0.630	0.690	0.600	0.090	1.809	2.349	2.529	0.02	Case 2

<WWAN Aux + WLAN + Bluetooth>

Exposure Position	6	1	2	3	4	5	1+5+6 Summed 1g SAR (W/kg)	1+2+6 Summed 1g SAR (W/kg)	3+4+5+6 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN Aux Ant	WLAN2.4GHz Ant 1	WLAN2.4GHz Ant 2	WLAN5/6GHz Ant 1	WLAN5/6GHz Ant 2	Bluetooth Ant 2					
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)					
Bottom of Laptop at 0mm	1.131	0.570	0.630	0.690	0.600	0.090	1.791	2.331	2.511	0.01	Case 3

With AX211D2W AL Platform

<WWAN Main + WWAN MIMO 2 + WLAN + Bluetooth>

Exposure Position	6	7	1	2	3	4	5	1+5+6+7 Summed 1g SAR (W/kg)	1+2+6+7 Summed 1g SAR (W/kg)	3+4+5+6+7 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN Main Ant	Maximum WWAN MIMO2 Ant	WLAN2.4GHz Ant 1	WLAN2.4GHz Ant 2	WLAN5/6GHz Ant 1	WLAN5/6GHz Ant 2	Bluetooth Ant 2					
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)					
Bottom of Laptop at 0mm	1.182	1.196	0.570	0.630	0.690	0.600	0.090	3.038	3.578	3.758	0.02	Case 4

<WWAN MIMO 1 + WLAN + Bluetooth>

Exposure Position	6	1	2	3	4	5	1+5+6 Summed 1g SAR (W/kg)	1+2+6 Summed 1g SAR (W/kg)	3+4+5+6 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN MIMO1 Ant	WLAN2.4GHz Ant 1	WLAN2.4GHz Ant 2	WLAN5/6GHz Ant 1	WLAN5/6GHz Ant 2	Bluetooth Ant 2					
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)					
Bottom of Laptop at 0mm	1.149	0.570	0.630	0.690	0.600	0.090	1.809	2.349	2.529	0.02	Case 5

<WWAN Aux + WLAN + Bluetooth>

Exposure Position	6	1	2	3	4	5	1+5+6 Summed 1g SAR (W/kg)	1+2+6 Summed 1g SAR (W/kg)	3+4+5+6 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN Aux Ant	WLAN2.4GHz Ant 1	WLAN2.4GHz Ant 2	WLAN5/6GHz Ant 1	WLAN5/6GHz Ant 2	Bluetooth Ant 2					
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)					
Bottom of Laptop at 0mm	1.131	0.570	0.630	0.690	0.600	0.090	1.791	2.331	2.511	0.02	Case 6

With QCNFA725 PPS Platform

<WWAN Main + WWAN MIMO 2 + WLAN + Bluetooth>

Exposure Position	4	5	1	2	3	1+2+4+5 Summed 1g SAR (W/kg)	2+3+4+5 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN Main Ant	Maximum WWAN MIMO2 Ant	WLAN2.4GHz Ant 1+2	WLAN5/6GHz Ant 1+2	Bluetooth Ant 2				
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
Bottom of Laptop at 0mm	1.182	1.196	0.400	0.400	0.400	3.178	3.178	0.02	Case 7

<WWAN Main + WWAN MIMO 2 + WLAN + Bluetooth>

Exposure Position	4	1	2	3	1+2+4 Summed 1g SAR (W/kg)	2+3+4 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN MIMO1 Ant	WLAN2.4GHz Ant 1+2	WLAN5/6GHz Ant 1+2	Bluetooth Ant 2				
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
Bottom of Laptop at 0mm	1.149	0.400	0.400	0.400	1.949	1.949	0.02	Case 8

<WWAN Aux + WLAN + Bluetooth>

Exposure Position	4	1	2	3	1+2+4 Summed 1g SAR (W/kg)	2+3+4 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN Aux Ant	WLAN2.4GHz Ant 1+2	WLAN5/6GHz Ant 1+2	Bluetooth Ant 2				
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
Bottom of Laptop at 0mm	1.131	0.400	0.400	0.400	1.931	1.931	0.01	Case 9

With QCNFA725 AL Platform

<WWAN Main + WWAN MIMO 2 + WLAN + Bluetooth>

Exposure Position	4	5	1	2	3	1+2+4+5 Summed 1g SAR (W/kg)	2+3+4+5 Summed 1g SAR (W/kg)	SPLSR	Case No
	Maximum WWAN Main Ant	Maximum WWAN MIMO2 Ant	WLAN2.4GHz Ant 1+2	WLAN5/6GHz Ant 1+2	Bluetooth Ant 2				
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
Bottom of Laptop at 0mm	1.182	1.196	0.231	0.130	0.031	2.739	2.539	0.02	Case 10

<WWAN Main + WWAN MIMO 2 + WLAN + Bluetooth>

Exposure Position	4	1	2	3	1+2+4 Summed 1g SAR (W/kg)	2+3+4 Summed 1g SAR (W/kg)
	Maximum WWAN MIMO1 Ant	WLAN2.4GHz Ant 1+2	WLAN5/6GHz Ant 1+2	Bluetooth Ant 2		
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
Bottom of Laptop at 0mm	1.149	0.231	0.130	0.031	1.510	1.310

<WWAN Aux + WLAN + Bluetooth>

Exposure Position	4	1	2	3	1+2+4 Summed 1g SAR (W/kg)	2+3+4 Summed 1g SAR (W/kg)
	Maximum WWAN Aux Ant	WLAN2.4GHz Ant 1+2	WLAN5/6GHz Ant 1+2	Bluetooth Ant 2		
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
Bottom of Laptop at 0mm	1.131	0.231	0.130	0.031	1.492	1.292



14.2 SPLSR Evaluation and Analysis

General Note:

1. According to antenna location of appendix D, the minimum distance between each transmit antenna is using for SPLSR analysis.
2. For SPLSR analysis is selected highest standalone SAR from each WWAN transmit antenna to be evaluated and it is conservative.
3. $SPLSR = (SAR_1 + SAR_2)^{1.5} / (min. \text{ separation distance, mm})$. If $SPLSR \leq 0.04$, simultaneously transmission SAR measurement is not necessary

PPS Platform							
	Band	Position	SAR (W/kg)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 1	Maximum WWAN Main Ant	Bottom of Laptop	1.182	245.0	1.75	0.01	Not required
	WLAN2.4GHz Ant 1		0.57				
	WLAN2.4GHz Ant 1	Bottom of Laptop	0.57	156.0	0.66	0.00	Not required
	Bluetooth Ant 2		0.09				
	Maximum WWAN Main Ant	Bottom of Laptop	1.182	210.0	1.81	0.01	Not required
	WLAN2.4GHz Ant 2		0.63				
	WLAN2.4GHz Ant 1	Bottom of Laptop	0.57	156.0	1.20	0.01	Not required
	WLAN2.4GHz Ant 2		0.63				
	Maximum WWAN Main Ant	Bottom of Laptop	1.182	245.0	1.87	0.01	Not required
	WLAN5/6GHz Ant 1		0.69				
	Maximum WWAN Main Ant	Bottom of Laptop	1.182	210.0	1.87	0.01	Not required
	WLAN5/6GHz Ant 2+Bluetooth Ant 2		0.69				
	WLAN5GHz Ant 1	Bottom of Laptop	0.69	156.0	1.38	0.01	Not required
	WLAN5/6GHz Ant 2+Bluetooth Ant 2		0.69				
	Maximum WWAN MIMO2 Ant	Bottom of Laptop	1.196	155.0	1.77	0.02	Not required
	WLAN2.4GHz Ant 1		0.57				
	Maximum WWAN MIMO2 Ant	Bottom of Laptop	1.196	245.0	1.83	0.01	Not required
	WLAN2.4GHz Ant 2		0.63				
	Maximum WWAN MIMO2 Ant	Bottom of Laptop	1.196	155.0	1.89	0.02	Not required
	WLAN5/6GHz Ant 1		0.69				
Maximum WWAN MIMO2 Ant	Bottom of Laptop	1.196	245.0	1.89	0.01	Not required	
WLAN5/6GHz Ant 2+Bluetooth Ant 2		0.69					
Maximum WWAN Main Ant	Bottom of Laptop	1.182	192.0	2.38	0.02	Not required	
Maximum WWAN MIMO2 Ant		1.196					

PPS Platform							
	Band	Position	SAR (W/kg)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 2	WLAN2.4GHz Ant 1	Bottom of Laptop	0.57	156.0	0.66	0.00	Not required
	Bluetooth Ant 2		0.09				
	WLAN2.4GHz Ant 1	Bottom of Laptop	0.57	245.0	1.72	0.01	Not required
	Maximum WWAN MIMO1 Ant		1.149				
	WLAN2.4GHz Ant 1	Bottom of Laptop	0.57	156.0	1.20	0.01	Not required
	WLAN2.4GHz Ant 2		0.63				
	WLAN2.4GHz Ant 2	Bottom of Laptop	0.63	155.0	1.78	0.02	Not required
	Maximum WWAN MIMO1 Ant		1.149				
	WLAN5/6GHz Ant 1	Bottom of Laptop	0.69	156.0	1.38	0.01	Not required
	WLAN5/6GHz Ant 2+Bluetooth Ant 2		0.69				
	WLAN5/6GHz Ant 1	Bottom of Laptop	0.69	245.0	1.84	0.01	Not required
	Maximum WWAN MIMO1 Ant		1.149				
	Maximum WWAN MIMO1 Ant	Bottom of Laptop	1.149	155.0	1.84	0.02	Not required
	WLAN5/6GHz Ant 2+Bluetooth Ant 2		0.69				



PPS Platform							
Case 3	Band	Position	SAR (W/kg)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WLAN2.4GHz Ant 1	Bottom of Laptop	0.57	156.0	0.66	0.00	Not required
	Bluetooth Ant 2		0.09				
	WLAN2.4GHz Ant 1	Bottom of Laptop	0.57	210.0	1.70	0.01	Not required
	Maximum WWAN Aux Ant		1.131				
	WLAN2.4GHz Ant 1	Bottom of Laptop	0.57	156.0	1.20	0.01	Not required
	WLAN2.4GHz Ant 2		0.63				
	WLAN2.4GHz Ant 2	Bottom of Laptop	0.63	245.0	1.76	0.01	Not required
	Maximum WWAN Aux Ant		1.131				
	WLAN5/6GHz Ant 1	Bottom of Laptop	0.69	156.0	1.38	0.01	Not required
	WLAN5/6GHz Ant 2+Bluetooth Ant 2		0.69				
	WLAN5/6GHz Ant 1	Bottom of Laptop	0.69	210.0	1.82	0.01	Not required
	Maximum WWAN Aux Ant		1.131				
	Maximum WWAN Aux Ant	Bottom of Laptop	1.131	245.0	1.82	0.01	Not required
WLAN5/6GHz Ant 2+Bluetooth Ant 2	0.69						

AL Platform							
Case 4	Band	Position	SAR (W/kg)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	Maximum WWAN Main Ant	Bottom of Laptop	1.182	210.0	1.75	0.01	Not required
	WLAN2.4GHz Ant 1		0.57				
	WLAN2.4GHz Ant 1	Bottom of Laptop	0.57	77.0	0.66	0.01	Not required
	Bluetooth Ant 2		0.09				
	Maximum WWAN Main Ant	Bottom of Laptop	1.182	230.0	1.81	0.01	Not required
	WLAN2.4GHz Ant 2		0.63				
	WLAN2.4GHz Ant 1	Bottom of Laptop	0.57	77.0	1.20	0.02	Not required
	WLAN2.4GHz Ant 2		0.63				
	Maximum WWAN Main Ant	Bottom of Laptop	1.182	210.0	1.87	0.01	Not required
	WLAN5/6GHz Ant 1		0.69				
	Maximum WWAN Main Ant	Bottom of Laptop	1.182	230.0	1.87	0.01	Not required
	WLAN5/6GHz Ant 2+Bluetooth Ant 2		0.69				
	WLAN5GHz Ant 1	Bottom of Laptop	0.69	77.0	1.38	0.02	Not required
	WLAN5/6GHz Ant 2+Bluetooth Ant 2		0.69				
	Maximum WWAN MIMO2 Ant	Bottom of Laptop	1.196	230.0	1.77	0.01	Not required
	WLAN2.4GHz Ant 1		0.57				
	Maximum WWAN MIMO2 Ant	Bottom of Laptop	1.196	170.0	1.83	0.01	Not required
	WLAN2.4GHz Ant 2		0.63				
	Maximum WWAN MIMO2 Ant	Bottom of Laptop	1.196	230.0	1.89	0.01	Not required
	WLAN5/6GHz Ant 1		0.69				
	Maximum WWAN MIMO2 Ant	Bottom of Laptop	1.196	170.0	1.89	0.02	Not required
	WLAN5/6GHz Ant 2+Bluetooth Ant 2		0.69				
	Maximum WWAN Main Ant	Bottom of Laptop	1.182	192.0	2.38	0.02	Not required
Maximum WWAN MIMO2 Ant	1.196						



AL Platform							
Case 5	Band	Position	SAR (W/kg)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WLAN2.4GHz Ant 1	Bottom of Laptop	0.57	77.0	0.66	0.01	Not required
	Bluetooth Ant 2		0.09				
	WLAN2.4GHz Ant 1	Bottom of Laptop	0.57	170.0	1.72	0.01	Not required
	Maximum WWAN MIMO1 Ant		1.149				
	WLAN2.4GHz Ant 1	Bottom of Laptop	0.57	77.0	1.20	0.02	Not required
	WLAN2.4GHz Ant 2		0.63				
	WLAN2.4GHz Ant 2	Bottom of Laptop	0.63	230.0	1.78	0.01	Not required
	Maximum WWAN MIMO1 Ant		1.149				
	WLAN5/6GHz Ant 1	Bottom of Laptop	0.69	77.0	1.38	0.02	Not required
	WLAN5/6GHz Ant 2+Bluetooth Ant 2		0.69				
	WLAN5/6GHz Ant 1	Bottom of Laptop	0.69	170.0	1.84	0.01	Not required
	Maximum WWAN MIMO1 Ant		1.149				
	Maximum WWAN MIMO1 Ant	Bottom of Laptop	1.149	230.0	1.84	0.01	Not required
WLAN5/6GHz Ant 2+Bluetooth Ant 2	0.69						

AL Platform							
Case 6	Band	Position	SAR (W/kg)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WLAN2.4GHz Ant 1	Bottom of Laptop	0.57	77.0	0.66	0.01	Not required
	Bluetooth Ant 2		0.09				
	WLAN2.4GHz Ant 1	Bottom of Laptop	0.57	230.0	1.70	0.01	Not required
	Maximum WWAN Aux Ant		1.131				
	WLAN2.4GHz Ant 1	Bottom of Laptop	0.57	77.0	1.20	0.02	Not required
	WLAN2.4GHz Ant 2		0.63				
	WLAN2.4GHz Ant 2	Bottom of Laptop	0.63	210.0	1.76	0.01	Not required
	Maximum WWAN Aux Ant		1.131				
	WLAN5/6GHz Ant 1	Bottom of Laptop	0.69	77.0	1.38	0.02	Not required
	WLAN5/6GHz Ant 2+Bluetooth Ant 2		0.69				
	WLAN5/6GHz Ant 1	Bottom of Laptop	0.69	230.0	1.82	0.01	Not required
	Maximum WWAN Aux Ant		1.131				
	Maximum WWAN Aux Ant	Bottom of Laptop	1.131	210.0	1.82	0.01	Not required
WLAN5/6GHz Ant 2+Bluetooth Ant 2	0.69						

PPS Platform							
Case 7	Band	Position	SAR (W/kg)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WLAN2.4GHz Ant 1+2 + WLAN5GHz Ant 1+2	Bottom of Laptop	0.8	210.0	1.98	0.01	Not required
	Maximum WWAN Main Ant		1.182				
	WLAN2.4GHz Ant 1+2 + WLAN5GHz Ant 1+2	Bottom of Laptop	0.8	155.0	2.00	0.02	Not required
	Maximum WWAN MIMO2 Ant		1.196				
	Maximum WWAN Main Ant	Bottom of Laptop	1.182	192.0	2.38	0.02	Not required
	Maximum WWAN MIMO2 Ant		1.196				
	WLAN5GHz Ant 1+2 + Bluetooth Ant 2	Bottom of Laptop	0.8	210.0	1.98	0.01	Not required
	Maximum WWAN Main Ant		1.182				
	WLAN5GHz Ant 1+2 + Bluetooth Ant 2	Bottom of Laptop	0.8	155.0	2.00	0.02	Not required
Maximum WWAN MIMO2 Ant	1.196						



PPS Platform							
Case 8	Band	Position	SAR (W/kg)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WLAN2.4GHz Ant 1+2 + WLAN5GHz Ant 1+2	Bottom of Laptop	0.8	155.0	1.95	0.02	Not required
	Maximum WWAN MIMO1 Ant		1.149				
	WLAN5GHz Ant 1+2 + Bluetooth Ant 2	Bottom of Laptop	0.8	155.0	1.95	0.02	Not required
Maximum WWAN MIMO1 Ant	1.149						

PPS Platform							
Case 9	Band	Position	SAR (W/kg)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WLAN2.4GHz Ant 1+2 + WLAN5GHz Ant 1+2	Bottom of Laptop	0.8	210.0	1.93	0.01	Not required
	Maximum WWAN Aux Ant		1.131				
	WLAN5GHz Ant 1+2 + Bluetooth Ant 2	Bottom of Laptop	0.8	210.0	1.93	0.01	Not required
Maximum WWAN Aux Ant	1.131						

AL Platform							
Case 10	Band	Position	SAR (W/kg)	Minimum distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WLAN2.4GHz Ant 1+2 + WLAN5GHz Ant 1+2	Bottom of Laptop	0.361	210.0	1.54	0.01	Not required
	Maximum WWAN Main Ant		1.182				
	WLAN2.4GHz Ant 1+2 + WLAN5GHz Ant 1+2	Bottom of Laptop	0.361	170.0	1.56	0.01	Not required
	Maximum WWAN MIMO2 Ant		1.196				
	Maximum WWAN Main Ant	Bottom of Laptop	1.182	192.0	2.38	0.02	Not required
	Maximum WWAN MIMO2 Ant		1.196				
	WLAN5GHz Ant 1+2 + Bluetooth Ant 2	Bottom of Laptop	0.161	210.0	1.34	0.01	Not required
	Maximum WWAN Main Ant		1.182				
	WLAN5GHz Ant 1+2 + Bluetooth Ant 2	Bottom of Laptop	0.161	170.0	1.36	0.01	Not required
Maximum WWAN MIMO2 Ant	1.196						

Test Engineer : Bevis Chang, Rain Chiu and Bob Cheng



15. Uncertainty Assessment

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

Declaration of Conformity:

The test results with all measurement uncertainty excluded is presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

16. References

- [1] FCC 47 CFR Part 2 "Frequency Allocations and Radio Treaty Matters; General Rules and Regulations"
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- [5] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015
- [6] FCC KDB 941225 D01 v03r01, "3G SAR MEAUREMENT PROCEDURES", Oct 2015
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- [9] FCC KDB 616217 D04 v01r02, "SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers", Oct 2015
- [10] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
- [11] FCC KDB 865664 D02 v01r02, "RF Exposure Compliance Reporting and Documentation Considerations" Oct 2015.