

**B.2.2.22 LTE Band38 TDD – Laptop / Tablet Modes /ULCA – Antenna 5**

SAR Measurement for LTE Band 38 TDD (Frequency range: 2570 – 2620MHz) is covered by LTE Band 41 TDD (Frequency range: 2496 – 2690MHz) due to overlapping frequency range, same maximum tune-up and same bandwidth.

**B.2.2.23 LTE Band 41 TDD – Laptop Mode – Antenna 5**

Band	BW	Channel #	Freq (MHz)	% RB Allocation	RB Position	QPSK			16 QAM				
						Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)		
LTE41	20 MHz	39750	2506	1RB Low	1 Pos 0	19.50	0	18.85	19.50	1	18.04		
				1RB Mid	1 Pos 50	19.50	0	18.50	19.50	1	17.74		
				1RB High	1 Pos 99	19.50	0	18.08	19.50	1	17.28		
				50% RB Low	50 Pos 0	19.50	1	17.63	19.50	2	16.67		
				50% RB Mid	50 Pos 24	19.50	1	17.55	19.50	2	16.55		
				50% RB High	50 Pos 50	19.50	1	17.39	19.50	2	16.38		
		40185	2549.5	2593	2636.5	100% RB	100 Pos 0	19.50	1	17.56	19.50	2	16.53
						1RB Low	1 Pos 0	19.50	0	17.79	19.50	1	17.48
						1RB Mid	1 Pos 50	19.50	0	17.78	19.50	1	17.44
						1RB High	1 Pos 99	19.50	0	17.71	19.50	1	17.37
						50% RB Low	50 Pos 0	19.50	1	16.86	19.50	2	15.82
						50% RB Mid	50 Pos 24	19.50	1	16.77	19.50	2	15.80
		40620	2593	2680	2680	50% RB High	50 Pos 50	19.50	1	16.72	19.50	2	15.74
						100% RB	100 Pos 0	19.50	1	16.76	19.50	2	15.75
						1RB Low	1 Pos 0	19.50	0	18.20	19.50	1	17.14
						1RB Mid	1 Pos 50	19.50	0	18.41	19.50	1	17.37
						1RB High	1 Pos 99	19.50	0	18.45	19.50	1	17.42
						50% RB Low	50 Pos 0	19.50	1	17.29	19.50	2	16.19
		41055	2636.5	2680	2680	50% RB Mid	50 Pos 24	19.50	1	17.29	19.50	2	16.31
						50% RB High	50 Pos 50	19.50	1	17.42	19.50	2	16.42
						100% RB	100 Pos 0	19.50	1	17.37	19.50	2	16.31
						1RB Low	1 Pos 0	19.50	0	18.72	19.50	1	17.90
						1RB Mid	1 Pos 50	19.50	0	18.99	19.50	1	18.19
						1RB High	1 Pos 99	19.50	0	19.09	19.50	1	18.26
		41490	2680	2680	2680	50% RB Low	50 Pos 0	19.50	1	17.97	19.50	2	16.93
						50% RB Mid	50 Pos 24	19.50	1	18.01	19.50	2	17.08
						50% RB High	50 Pos 50	19.50	1	18.08	19.50	2	17.13
						100% RB	100 Pos 0	19.50	1	17.95	19.50	2	16.98
						1RB Low	1 Pos 0	19.50	0	18.42	19.50	1	17.10
						1RB Mid	1 Pos 50	19.50	0	18.35	19.50	1	17.03
		41490	2680	2680	2680	1RB High	1 Pos 99	19.50	0	18.24	19.50	1	16.92
						50% RB Low	50 Pos 0	19.50	1	17.37	19.50	2	16.38
						50% RB Mid	50 Pos 24	19.50	1	17.41	19.50	2	16.43
						50% RB High	50 Pos 50	19.50	1	17.37	19.50	2	16.39
						100% RB	100 Pos 0	19.50	1	17.42	19.50	2	16.40

Band	BW	Channel #	Freq (MHz)	% RB Allocation	RB Position	QPSK			16 QAM		
						Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)
LTE41	15 MHz	39750	2506	1RB Low	1 Pos 0	19.50	0	18.77	19.50	1	18.07
				1RB Mid	1 Pos 38	19.50	0	18.51	19.50	1	17.84
				1RB High	1 Pos 74	19.50	0	18.20	19.50	1	17.55
				50% RB Low	38 Pos 0	19.50	1	17.57	19.50	2	16.59
				50% RB Mid	38 Pos 19	19.50	1	17.47	19.50	2	16.55
				50% RB High	38 Pos 39	19.50	1	17.33	19.50	2	16.41
		40185	2549.5	100% RB	75 Pos 0	19.50	1	17.51	19.50	2	16.52
				1RB Low	1 Pos 0	19.50	0	17.84	19.50	1	16.82
				1RB Mid	1 Pos 38	19.50	0	17.76	19.50	1	16.80
				1RB High	1 Pos 74	19.50	0	17.71	19.50	1	16.78
				50% RB Low	38 Pos 0	19.50	1	16.70	19.50	2	15.71
				50% RB Mid	38 Pos 19	19.50	1	16.72	19.50	2	15.71
		40620	2593	50% RB High	38 Pos 39	19.50	1	16.75	19.50	2	15.73
				100% RB	75 Pos 0	19.50	1	16.71	19.50	2	15.71
				1RB Low	1 Pos 0	19.50	0	18.10	19.50	1	17.54
				1RB Mid	1 Pos 38	19.50	0	18.31	19.50	1	17.69
				1RB High	1 Pos 74	19.50	0	18.39	19.50	1	17.74
				50% RB Low	38 Pos 0	19.50	1	17.19	19.50	2	16.21
		41055	2636.5	50% RB Mid	38 Pos 19	19.50	1	17.31	19.50	2	16.27
				50% RB High	38 Pos 39	19.50	1	17.33	19.50	2	16.40
				100% RB	75 Pos 0	19.50	1	17.31	19.50	2	16.36
				1RB Low	1 Pos 0	19.50	0	18.90	19.50	1	17.90
				1RB Mid	1 Pos 38	19.50	0	19.09	19.50	1	18.06
				1RB High	1 Pos 74	19.50	0	19.18	19.50	1	18.16
		41490	2680.0	50% RB Low	38 Pos 0	19.50	1	17.88	19.50	2	16.87
				50% RB Mid	38 Pos 19	19.50	1	18.00	19.50	2	16.95
				50% RB High	38 Pos 39	19.50	1	18.07	19.50	2	17.08
				100% RB	75 Pos 0	19.50	1	17.95	19.50	2	17.01
				1RB Low	1 Pos 0	19.50	0	18.45	19.50	1	17.53
				1RB Mid	1 Pos 38	19.50	0	18.41	19.50	1	17.46
		41490	2680.0	1RB High	1 Pos 74	19.50	0	18.32	19.50	1	17.35
				50% RB Low	38 Pos 0	19.50	1	17.40	19.50	2	16.42
				50% RB Mid	38 Pos 19	19.50	1	17.34	19.50	2	16.36
				50% RB High	38 Pos 39	19.50	1	17.38	19.50	2	16.41
				100% RB	75 Pos 0	19.50	1	17.37	19.50	2	16.34

Band	BW	Channel #	Freq (MHz)	% RB Allocation	RB Position	QPSK			16 QAM		
						Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)
LTE41	10 MHz	39750	2506	1RB Low	1 Pos 0	19.50	0	18.69	19.50	1	18.01
				1RB Mid	1 Pos 24	19.50	0	18.54	19.50	1	17.90
				1RB High	1 Pos 49	19.50	0	18.25	19.50	1	17.66
				50% RB Low	25 Pos 0	19.50	1	17.56	19.50	2	16.62
				50% RB Mid	25 Pos 12	19.50	1	17.49	19.50	2	16.64
				50% RB High	25 Pos 24	19.50	1	17.49	19.50	2	16.55
		40185	2549.5	100% RB	50 Pos 0	19.50	1	17.51	19.50	2	16.55
				1RB Low	1 Pos 0	19.50	0	17.79	19.50	1	16.72
				1RB Mid	1 Pos 24	19.50	0	17.74	19.50	1	16.65
				1RB High	1 Pos 49	19.50	0	17.74	19.50	1	16.65
				50% RB Low	25 Pos 0	19.50	1	16.82	19.50	2	15.81
				50% RB Mid	25 Pos 12	19.50	1	16.79	19.50	2	15.71
		40620	2593	50% RB High	25 Pos 24	19.50	1	16.75	19.50	2	15.75
				100% RB	50 Pos 0	19.50	1	16.79	19.50	2	15.78
				1RB Low	1 Pos 0	19.50	0	18.34	19.50	1	17.33
				1RB Mid	1 Pos 24	19.50	0	18.37	19.50	1	17.40
				1RB High	1 Pos 49	19.50	0	18.44	19.50	1	17.48
				50% RB Low	25 Pos 0	19.50	1	17.29	19.50	2	16.32
		41055	2636.5	50% RB Mid	25 Pos 12	19.50	1	17.33	19.50	2	16.34
				100% RB	50 Pos 0	19.50	1	17.41	19.50	2	16.41
				1RB Low	1 Pos 0	19.50	1	17.35	19.50	2	16.33
				1RB Mid	1 Pos 24	19.50	0	18.90	19.50	1	18.23
				1RB High	1 Pos 49	19.50	0	19.01	19.50	1	18.29
				50% RB Low	25 Pos 0	19.50	0	19.14	19.50	1	18.40
		41490	2680	50% RB Mid	25 Pos 12	19.50	1	17.95	19.50	2	17.09
				100% RB	50 Pos 0	19.50	1	17.98	19.50	2	17.11
				1RB Low	1 Pos 0	19.50	1	18.06	19.50	2	17.10
				1RB Mid	1 Pos 24	19.50	1	18.03	19.50	2	16.99
				1RB High	1 Pos 49	19.50	0	18.47	19.50	1	17.30
				50% RB Low	25 Pos 0	19.50	0	18.41	19.50	1	17.27
				50% RB Mid	25 Pos 12	19.50	0	18.37	19.50	1	17.29
				100% RB	50 Pos 0	19.50	1	17.39	19.50	2	16.39
				1RB Low	1 Pos 0	19.50	1	17.37	19.50	2	16.36
				1RB Mid	1 Pos 24	19.50	1	17.38	19.50	2	16.38
				1RB High	1 Pos 49	19.50	1	17.36	19.50	2	16.34

Band	BW	Channel #	Freq (MHz)	% RB Allocation	RB Position	QPSK			16 QAM		
						Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)
LTE41	5.0 MHz	39750	2506	1RB Low	1 Pos 0	19.50	0	18.65	19.50	1	18.01
				1RB Mid	1 Pos 12	19.50	0	18.57	19.50	1	17.92
				1RB High	1 Pos 24	19.50	0	18.48	19.50	1	17.83
				50% RB Low	12 Pos 0	19.50	1	17.58	19.50	2	16.53
				50% RB Mid	12 Pos 6	19.50	1	17.54	19.50	2	16.49
				50% RB High	12 Pos 11	19.50	1	17.53	19.50	2	16.48
		40185	2549.5	100% RB	25 Pos 0	19.50	1	17.57	19.50	2	16.56
				1RB Low	1 Pos 0	19.50	0	17.77	19.50	1	17.06
				1RB Mid	1 Pos 12	19.50	0	17.70	19.50	1	16.96
				1RB High	1 Pos 24	19.50	0	17.75	19.50	1	16.97
				50% RB Low	12 Pos 0	19.50	1	16.74	19.50	2	15.78
				50% RB Mid	12 Pos 6	19.50	1	16.76	19.50	2	15.75
		40620	2593	50% RB High	12 Pos 11	19.50	1	16.72	19.50	2	15.80
				100% RB	25 Pos 0	19.50	1	16.78	19.50	2	15.76
				1RB Low	1 Pos 0	19.50	0	18.43	19.50	1	17.76
				1RB Mid	1 Pos 12	19.50	0	18.43	19.50	1	17.75
				1RB High	1 Pos 24	19.50	0	18.44	19.50	1	17.75
				50% RB Low	12 Pos 0	19.50	1	17.28	19.50	2	16.30
		41055	2636.5	50% RB Mid	12 Pos 6	19.50	1	17.31	19.50	2	16.29
				50% RB High	12 Pos 11	19.50	1	17.34	19.50	2	16.31
				100% RB	25 Pos 0	19.50	1	17.33	19.50	2	16.37
				1RB Low	1 Pos 0	19.50	0	18.88	19.50	1	18.19
				1RB Mid	1 Pos 12	19.50	0	18.98	19.50	1	18.19
				1RB High	1 Pos 24	19.50	0	19.02	19.50	1	18.25
		41490	2680	50% RB Low	12 Pos 0	19.50	1	17.95	19.50	2	17.03
				50% RB Mid	12 Pos 6	19.50	1	17.99	19.50	2	17.02
				50% RB High	12 Pos 11	19.50	1	18.00	19.50	2	17.04
				100% RB	25 Pos 0	19.50	1	18.02	19.50	2	17.02
				1RB Low	1 Pos 0	19.50	0	18.40	19.50	1	17.59
				1RB Mid	1 Pos 12	19.50	0	18.36	19.50	1	17.54
				1RB High	1 Pos 24	19.50	0	18.42	19.50	1	17.53
				50% RB Low	12 Pos 0	19.50	1	17.31	19.50	2	16.28
				50% RB Mid	12 Pos 6	19.50	1	17.35	19.50	2	16.27
				50% RB High	12 Pos 11	19.50	1	17.32	19.50	2	16.28
				100% RB	25 Pos 0	19.50	1	17.36	19.50	2	16.32

**B.2.2.1 LTE Band 41 TDD – Tablet Mode – Antenna 5**

Band	BW	Channel #	Freq (MHz)	% RB Allocation	RB Position	QPSK			16 QAM			
						Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	
LTE41	20 MHz	39750	2506	1RB Low	1 Pos 0	16.00	0	15.76	16.00	1	14.95	
				1RB Mid	1 Pos 50	16.00	0	15.46	16.00	1	14.64	
				1RB High	1 Pos 99	16.00	0	15.06	16.00	1	14.21	
				50% RB Low	50 Pos 0	16.00	1	14.61	16.00	2	13.58	
				50% RB Mid	50 Pos 24	16.00	1	14.49	16.00	2	13.47	
				50% RB High	50 Pos 50	16.00	1	14.30	16.00	2	13.28	
		40185	2549.5	2593	100% RB	100 Pos 0	16.00	1	14.45	16.00	2	13.41
					1RB Low	1 Pos 0	16.00	0	14.67	16.00	1	13.83
					1RB Mid	1 Pos 50	16.00	0	14.75	16.00	1	13.89
					1RB High	1 Pos 99	16.00	0	14.58	16.00	1	13.78
					50% RB Low	50 Pos 0	16.00	1	13.74	16.00	2	12.75
					50% RB Mid	50 Pos 24	16.00	1	13.76	16.00	2	12.74
		40620	2636.5	2680	50% RB High	50 Pos 50	16.00	1	13.68	16.00	2	12.60
					100% RB	100 Pos 0	16.00	1	13.73	16.00	2	12.71
					1RB Low	1 Pos 0	16.00	0	15.09	16.00	1	14.26
					1RB Mid	1 Pos 50	16.00	0	15.35	16.00	1	14.55
					1RB High	1 Pos 99	16.00	0	15.39	16.00	1	14.58
					50% RB Low	50 Pos 0	16.00	1	14.21	16.00	2	13.18
		41055	2680	2680	50% RB Mid	50 Pos 24	16.00	1	14.28	16.00	2	13.25
					50% RB High	50 Pos 50	16.00	1	14.36	16.00	2	13.34
					100% RB	100 Pos 0	16.00	1	14.29	16.00	2	13.26
					1RB Low	1 Pos 0	16.00	0	15.70	16.00	1	14.90
					1RB Mid	1 Pos 50	16.00	0	15.99	16.00	1	14.08
					1RB High	1 Pos 99	16.00	0	15.07	16.00	1	14.19
		41490	2680	2680	50% RB Low	50 Pos 0	16.00	1	14.83	16.00	2	13.84
					50% RB Mid	50 Pos 24	16.00	1	13.92	16.00	2	13.92
					50% RB High	50 Pos 50	16.00	1	13.99	16.00	2	12.97
					100% RB	100 Pos 0	16.00	1	14.93	16.00	2	13.85
					1RB Low	1 Pos 0	16.00	0	15.30	16.00	1	14.51
					1RB Mid	1 Pos 50	16.00	0	15.32	16.00	1	14.49
		41490	2680	2680	1RB High	1 Pos 99	16.00	0	15.19	16.00	1	14.33
					50% RB Low	50 Pos 0	16.00	1	14.33	16.00	2	13.32
					50% RB Mid	50 Pos 24	16.00	1	14.32	16.00	2	13.31
					50% RB High	50 Pos 50	16.00	1	14.35	16.00	2	13.30
					100% RB	100 Pos 0	16.00	1	14.33	16.00	2	13.28

Band	BW	Channel #	Freq (MHz)	% RB Allocation	RB Position	QPSK			16 QAM		
						Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)
LTE41	15 MHz	39750	2506	1RB Low	1 Pos 0	16.00	0	15.69	16.00	1	14.99
				1RB Mid	1 Pos 38	16.00	0	15.40	16.00	1	14.74
				1RB High	1 Pos 74	16.00	0	15.13	16.00	1	14.45
				50% RB Low	38 Pos 0	16.00	1	14.53	16.00	2	13.52
				50% RB Mid	38 Pos 19	16.00	1	14.44	16.00	2	13.45
				50% RB High	38 Pos 39	16.00	1	14.34	16.00	2	13.32
		40185	2549.5	100% RB	75 Pos 0	16.00	1	14.44	16.00	2	13.42
				1RB Low	1 Pos 0	16.00	0	14.69	16.00	1	13.98
				1RB Mid	1 Pos 38	16.00	0	14.58	16.00	1	14.00
				1RB High	1 Pos 74	16.00	0	14.64	16.00	1	13.97
				50% RB Low	38 Pos 0	16.00	1	13.69	16.00	2	12.70
				50% RB Mid	38 Pos 19	16.00	1	13.67	16.00	2	12.73
		40620	2593	50% RB High	38 Pos 39	16.00	1	13.64	16.00	2	12.63
				100% RB	75 Pos 0	16.00	1	13.61	16.00	2	12.62
				1RB Low	1 Pos 0	16.00	0	15.08	16.00	1	14.42
				1RB Mid	1 Pos 38	16.00	0	15.27	16.00	1	14.62
				1RB High	1 Pos 74	16.00	0	15.30	16.00	1	14.66
				50% RB Low	38 Pos 0	16.00	1	14.19	16.00	2	13.14
		41055	2636.5	50% RB Mid	38 Pos 19	16.00	1	14.21	16.00	2	13.21
				50% RB High	38 Pos 39	16.00	1	14.30	16.00	2	13.27
				100% RB	75 Pos 0	16.00	1	14.30	16.00	2	13.25
				1RB Low	1 Pos 0	16.00	0	15.74	16.00	1	13.97
				1RB Mid	1 Pos 38	16.00	0	15.97	16.00	1	14.19
				1RB High	1 Pos 74	16.00	0	14.96	16.00	1	14.30
		41490	2680.0	50% RB Low	38 Pos 0	16.00	1	14.80	16.00	2	13.80
				50% RB Mid	38 Pos 19	16.00	1	14.91	16.00	2	13.92
				50% RB High	38 Pos 39	16.00	1	14.99	16.00	2	14.00
				100% RB	75 Pos 0	16.00	1	14.92	16.00	2	13.92
				1RB Low	1 Pos 0	16.00	0	15.33	16.00	1	14.69
				1RB Mid	1 Pos 38	16.00	0	15.29	16.00	1	14.64
		41490	2680.0	1RB High	1 Pos 74	16.00	0	15.24	16.00	1	14.55
				50% RB Low	38 Pos 0	16.00	1	14.36	16.00	2	13.32
				50% RB Mid	38 Pos 19	16.00	1	14.22	16.00	2	13.24
				50% RB High	38 Pos 39	16.00	1	14.30	16.00	2	13.29
				100% RB	75 Pos 0	16.00	1	14.32	16.00	2	13.27

Band	BW	Channel #	Freq (MHz)	% RB Allocation	RB Position	QPSK			16 QAM		
						Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)
LTE41	10 MHz	39750	2506	1RB Low	1 Pos 0	16.00	0	15.59	16.00	1	14.95
				1RB Mid	1 Pos 24	16.00	0	15.50	16.00	1	14.79
				1RB High	1 Pos 49	16.00	0	15.26	16.00	1	14.53
				50% RB Low	25 Pos 0	16.00	1	14.54	16.00	2	13.58
				50% RB Mid	25 Pos 12	16.00	1	14.44	16.00	2	13.54
				50% RB High	25 Pos 24	16.00	1	14.37	16.00	2	13.42
		40185	2549.5	100% RB	50 Pos 0	16.00	1	14.45	16.00	2	13.46
				1RB Low	1 Pos 0	16.00	0	14.73	16.00	1	14.04
				1RB Mid	1 Pos 24	16.00	0	14.65	16.00	1	13.99
				1RB High	1 Pos 49	16.00	0	14.71	16.00	1	13.99
				50% RB Low	25 Pos 0	16.00	1	13.81	16.00	2	12.79
				50% RB Mid	25 Pos 12	16.00	1	13.62	16.00	2	12.78
		40620	2593	50% RB High	25 Pos 24	16.00	1	13.65	16.00	2	12.72
				100% RB	50 Pos 0	16.00	0	15.59	16.00	1	14.95
				1RB Low	1 Pos 0	16.00	0	15.18	16.00	1	14.50
				1RB Mid	1 Pos 24	16.00	0	15.33	16.00	1	14.64
				1RB High	1 Pos 49	16.00	0	15.33	16.00	1	14.67
				50% RB Low	25 Pos 0	16.00	1	14.20	16.00	2	13.26
		41055	2636.5	50% RB Mid	25 Pos 12	16.00	1	14.23	16.00	2	13.31
				100% RB	50 Pos 0	16.00	1	14.30	16.00	2	13.35
				1RB Low	1 Pos 0	16.00	1	14.30	16.00	2	13.21
				1RB Mid	1 Pos 24	16.00	0	15.83	16.00	1	14.11
				1RB High	1 Pos 49	16.00	0	16.00	16.00	1	14.24
				50% RB Low	25 Pos 0	16.00	0	14.96	16.00	1	14.26
		41490	2680	50% RB Mid	25 Pos 12	16.00	1	14.90	16.00	2	13.98
				100% RB	50 Pos 0	16.00	1	14.90	16.00	2	13.99
				1RB Low	1 Pos 0	16.00	1	14.96	16.00	2	13.00
				1RB Mid	1 Pos 24	16.00	1	14.98	16.00	2	13.92
				1RB High	1 Pos 49	16.00	0	15.32	16.00	1	14.64
				50% RB Low	25 Pos 0	16.00	0	15.32	16.00	1	14.63
				50% RB Mid	25 Pos 12	16.00	0	15.28	16.00	1	14.62
				100% RB	50 Pos 0	16.00	1	14.28	16.00	2	13.34
				1RB Low	1 Pos 0	16.00	1	14.25	16.00	2	13.32
				1RB Mid	1 Pos 24	16.00	1	14.29	16.00	2	13.37
				1RB High	1 Pos 49	16.00	1	14.31	16.00	2	13.30

Band	BW	Channel #	Freq (MHz)	% RB Allocation	RB Position	QPSK			16 QAM			
						Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	
LTE41	5.0 MHz	39750	2506	1RB Low	1 Pos 0	16.00	0	15.56	16.00	1	14.96	
				1RB Mid	1 Pos 12	16.00	0	15.52	16.00	1	14.85	
				1RB High	1 Pos 24	16.00	0	15.39	16.00	1	14.74	
				50% RB Low	12 Pos 0	16.00	1	14.49	16.00	2	13.44	
				50% RB Mid	12 Pos 6	16.00	1	14.47	16.00	2	13.39	
				50% RB High	12 Pos 11	16.00	1	14.44	16.00	2	13.34	
		40185	2549.5	100% RB	25 Pos 0	16.00	1	14.48	16.00	2	13.45	
				1RB Low	1 Pos 0	16.00	0	14.80	16.00	1	14.07	
				1RB Mid	1 Pos 12	16.00	0	14.71	16.00	1	14.04	
				1RB High	1 Pos 24	16.00	0	14.71	16.00	1	14.03	
				50% RB Low	12 Pos 0	16.00	1	13.73	16.00	2	12.61	
				50% RB Mid	12 Pos 6	16.00	1	13.68	16.00	2	12.58	
		40620	2593	50% RB High	12 Pos 11	16.00	1	13.66	16.00	2	12.58	
				100% RB	25 Pos 0	16.00	1	13.69	16.00	2	12.71	
				1RB Low	1 Pos 0	16.00	0	15.22	16.00	1	14.71	
				1RB Mid	1 Pos 12	16.00	0	15.26	16.00	1	14.75	
				1RB High	1 Pos 24	16.00	0	15.26	16.00	1	14.71	
				50% RB Low	12 Pos 0	16.00	1	14.29	16.00	2	13.20	
		41055	2636.5	50% RB Mid	12 Pos 6	16.00	1	14.28	16.00	2	13.18	
				50% RB High	12 Pos 11	16.00	1	14.28	16.00	2	13.19	
				100% RB	25 Pos 0	16.00	1	14.31	16.00	2	13.28	
				1RB Low	1 Pos 0	16.00	0	15.89	16.00	1	14.16	
				1RB Mid	1 Pos 12	16.00	0	16.00	16.00	1	14.28	
				1RB High	1 Pos 24	16.00	0	15.02	16.00	1	14.30	
		41490	2680	50% RB Low	12 Pos 0	16.00	1	14.94	16.00	2	13.86	
				50% RB Mid	12 Pos 6	16.00	1	14.92	16.00	2	13.85	
				50% RB High	12 Pos 11	16.00	1	15.00	16.00	2	13.89	
				100% RB	25 Pos 0	16.00	1	14.98	16.00	2	13.93	
				1RB Low	1 Pos 0	16.00	0	15.26	16.00	1	14.67	
				1RB Mid	1 Pos 12	16.00	0	15.21	16.00	1	14.70	
				1RB High	1 Pos 24	16.00	0	15.25	16.00	1	14.68	
				50% RB Low	12 Pos 0	16.00	1	14.30	16.00	2	13.21	
				50% RB Mid	12 Pos 6	16.00	1	14.29	16.00	2	13.19	
				50% RB High	12 Pos 11	16.00	1	14.29	16.00	2	13.23	
				100% RB	25 Pos 0	16.00	1	14.30	16.00	2	13.27	



**B.2.2.2 LTE Band 41 TDD – Tablet Mode – Antenna 8**

Band	BW	Channel #	Freq (MHz)	% RB Allocation	RB Position	QPSK			16 QAM		
						Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)
LTE41	20 MHz	39750	2506	1RB Low	1 Pos 0	18.50	0	17.17	18.50	1	16.30
				1RB Mid	1 Pos 50	18.50	0	17.30	18.50	1	16.48
				1RB High	1 Pos 99	18.50	0	17.26	18.50	1	16.39
				50% RB Low	50 Pos 0	18.50	1	16.27	18.50	2	15.26
				50% RB Mid	50 Pos 24	18.50	1	16.32	18.50	2	15.30
				50% RB High	50 Pos 50	18.50	1	16.26	18.50	2	15.26
		40185	2549.5	100% RB	100 Pos 0	18.50	1	16.28	18.50	2	15.25
				1RB Low	1 Pos 0	18.50	0	17.25	18.50	1	16.40
				1RB Mid	1 Pos 50	18.50	0	17.26	18.50	1	16.43
				1RB High	1 Pos 99	18.50	0	17.19	18.50	1	16.32
				50% RB Low	50 Pos 0	18.50	1	16.31	18.50	2	15.32
				50% RB Mid	50 Pos 24	18.50	1	16.29	18.50	2	15.29
		40620	2593	50% RB High	50 Pos 50	18.50	1	16.13	18.50	2	15.33
				100% RB	100 Pos 0	18.50	1	16.28	18.50	2	15.26
				1RB Low	1 Pos 0	18.50	0	17.49	18.50	1	16.69
				1RB Mid	1 Pos 50	18.50	0	17.71	18.50	1	16.88
				1RB High	1 Pos 99	18.50	0	17.56	18.50	1	16.76
				50% RB Low	50 Pos 0	18.50	1	16.59	18.50	2	15.60
		41055	2636.5	50% RB Mid	50 Pos 24	18.50	1	16.61	18.50	2	15.58
				50% RB High	50 Pos 50	18.50	1	16.61	18.50	2	15.58
				100% RB	100 Pos 0	18.50	1	16.60	18.50	2	15.56
				1RB Low	1 Pos 0	18.50	0	17.48	18.50	1	16.11
				1RB Mid	1 Pos 50	18.50	0	17.64	18.50	1	16.30
				1RB High	1 Pos 99	18.50	0	17.56	18.50	1	16.26
		41490	2680	50% RB Low	50 Pos 0	18.50	1	16.48	18.50	2	15.48
				50% RB Mid	50 Pos 24	18.50	1	16.55	18.50	2	15.60
				50% RB High	50 Pos 50	18.50	1	16.60	18.50	2	15.62
				100% RB	100 Pos 0	18.50	1	16.54	18.50	2	15.52
				1RB Low	1 Pos 0	18.50	0	17.22	18.50	1	16.40
				1RB Mid	1 Pos 50	18.50	0	17.34	18.50	1	16.52
				1RB High	1 Pos 99	18.50	0	17.24	18.50	1	16.44
				50% RB Low	50 Pos 0	18.50	1	16.38	18.50	2	15.35
				50% RB Mid	50 Pos 24	18.50	1	16.37	18.50	2	15.30
				50% RB High	50 Pos 50	18.50	1	16.34	18.50	2	15.28
				100% RB	100 Pos 0	18.50	1	16.35	18.50	2	15.31

Band	BW	Channel #	Freq (MHz)	% RB Allocation	RB Position	QPSK			16 QAM		
						Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)
LTE41	15 MHz	39750	2506	1RB Low	1 Pos 0	18.50	0	17.19	18.50	1	16.51
				1RB Mid	1 Pos 38	18.50	0	17.29	18.50	1	16.58
				1RB High	1 Pos 74	18.50	0	17.22	18.50	1	16.55
				50% RB Low	38 Pos 0	18.50	1	16.20	18.50	2	15.16
				50% RB Mid	38 Pos 19	18.50	1	16.23	18.50	2	15.24
				50% RB High	38 Pos 39	18.50	1	16.19	18.50	2	15.19
		40185	2549.5	100% RB	75 Pos 0	18.50	1	16.24	18.50	2	15.28
				1RB Low	1 Pos 0	18.50	0	17.34	18.50	1	16.34
				1RB Mid	1 Pos 38	18.50	0	17.32	18.50	1	16.31
				1RB High	1 Pos 74	18.50	0	17.27	18.50	1	16.32
				50% RB Low	38 Pos 0	18.50	1	16.25	18.50	2	15.24
				50% RB Mid	38 Pos 19	18.50	1	16.27	18.50	2	15.26
		40620	2593	50% RB High	38 Pos 39	18.50	1	16.18	18.50	2	15.17
				100% RB	75 Pos 0	18.50	1	16.25	18.50	2	15.24
				1RB Low	1 Pos 0	18.50	0	17.54	18.50	1	16.61
				1RB Mid	1 Pos 38	18.50	0	17.67	18.50	1	16.69
				1RB High	1 Pos 74	18.50	0	17.56	18.50	1	16.66
				50% RB Low	38 Pos 0	18.50	1	16.58	18.50	2	15.62
		41055	2636.5	50% RB Mid	38 Pos 19	18.50	1	16.59	18.50	2	15.58
				50% RB High	38 Pos 39	18.50	1	16.58	18.50	2	15.57
				100% RB	75 Pos 0	18.50	1	16.65	18.50	2	15.57
				1RB Low	1 Pos 0	18.50	0	17.43	18.50	1	16.75
				1RB Mid	1 Pos 38	18.50	0	17.49	18.50	1	16.85
				1RB High	1 Pos 74	18.50	0	17.58	18.50	1	16.88
		41490	2680.0	50% RB Low	38 Pos 0	18.50	1	16.44	18.50	2	15.42
				50% RB Mid	38 Pos 19	18.50	1	16.55	18.50	2	15.57
				50% RB High	38 Pos 39	18.50	1	16.55	18.50	2	15.54
				100% RB	75 Pos 0	18.50	1	16.51	18.50	2	15.48
				1RB Low	1 Pos 0	18.50	0	17.31	18.50	1	16.61
				1RB Mid	1 Pos 38	18.50	0	17.32	18.50	1	16.62
		41490	2680.0	1RB High	1 Pos 74	18.50	0	17.24	18.50	1	16.60
				50% RB Low	38 Pos 0	18.50	1	16.29	18.50	2	15.27
				50% RB Mid	38 Pos 19	18.50	1	16.26	18.50	2	15.29
				50% RB High	38 Pos 39	18.50	1	16.31	18.50	2	15.30
				100% RB	75 Pos 0	18.50	1	16.32	18.50	2	15.30

Band	BW	Channel #	Freq (MHz)	% RB Allocation	RB Position	QPSK			16 QAM			
						Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	
LTE41	10 MHz	39750	2506	1RB Low	1 Pos 0	18.50	0	17.23	18.50	1	16.55	
				1RB Mid	1 Pos 24	18.50	0	17.31	18.50	1	16.60	
				1RB High	1 Pos 49	18.50	0	17.24	18.50	1	16.57	
				50% RB Low	25 Pos 0	18.50	1	16.28	18.50	2	15.32	
				50% RB Mid	25 Pos 12	18.50	1	16.26	18.50	2	15.34	
				50% RB High	25 Pos 24	18.50	1	16.26	18.50	2	15.33	
		40185	2549.5	100% RB	50 Pos 0	18.50	1	16.27	18.50	2	15.22	
				1RB Low	1 Pos 0	18.50	0	17.34	18.50	1	16.21	
				1RB Mid	1 Pos 24	18.50	0	17.30	18.50	1	16.16	
				1RB High	1 Pos 49	18.50	0	17.31	18.50	1	16.17	
				50% RB Low	25 Pos 0	18.50	1	16.27	18.50	2	15.29	
				50% RB Mid	25 Pos 12	18.50	1	16.24	18.50	2	15.25	
		40620	2593	50% RB High	25 Pos 24	18.50	1	16.20	18.50	2	15.18	
				100% RB	50 Pos 0	18.50	1	16.28	18.50	2	15.27	
				1RB Low	1 Pos 0	18.50	0	17.58	18.50	1	16.89	
				1RB Mid	1 Pos 24	18.50	0	17.65	18.50	1	16.96	
				1RB High	1 Pos 49	18.50	0	17.60	18.50	1	16.92	
				50% RB Low	25 Pos 0	18.50	1	16.62	18.50	2	15.64	
		41055	2636.5	50% RB Mid	25 Pos 12	18.50	1	16.57	18.50	2	15.63	
				100% RB	50 Pos 0	18.50	1	16.59	18.50	2	15.64	
				1RB Low	1 Pos 0	18.50	1	16.61	18.50	2	15.57	
				1RB Mid	1 Pos 24	18.50	0	17.57	18.50	1	16.41	
				1RB High	1 Pos 49	18.50	0	17.64	18.50	1	16.46	
				50% RB Low	25 Pos 0	18.50	0	17.57	18.50	1	16.48	
		41490	2680	50% RB Mid	25 Pos 12	18.50	1	16.52	18.50	2	15.51	
				100% RB	50 Pos 0	18.50	1	16.52	18.50	2	15.51	
				1RB Low	1 Pos 0	18.50	1	16.55	18.50	2	15.55	
				1RB Mid	1 Pos 24	18.50	1	16.59	18.50	2	15.56	
				1RB High	1 Pos 49	18.50	0	17.35	18.50	1	16.36	
				50% RB Low	25 Pos 0	18.50	0	17.35	18.50	1	16.38	
				50% RB Mid	25 Pos 12	18.50	0	17.36	18.50	1	16.42	
				100% RB	50 Pos 0	18.50	1	16.31	18.50	2	15.32	
				1RB Low	1 Pos 0	18.50	1	16.32	18.50	2	15.34	
				1RB Mid	1 Pos 24	18.50	1	16.30	18.50	2	15.31	
				1RB High	1 Pos 49	18.50	1	16.31	18.50	2	15.29	

Band	BW	Channel #	Freq (MHz)	% RB Allocation	RB Position	QPSK			16 QAM			
						Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	
LTE41	5.0 MHz	39750	2506	1RB Low	1 Pos 0	18.50	0	17.32	18.50	1	16.66	
				1RB Mid	1 Pos 12	18.50	0	17.34	18.50	1	16.68	
				1RB High	1 Pos 24	18.50	0	17.34	18.50	1	16.62	
				50% RB Low	12 Pos 0	18.50	1	16.27	18.50	2	15.21	
				50% RB Mid	12 Pos 6	18.50	1	16.25	18.50	2	15.21	
				50% RB High	12 Pos 11	18.50	1	16.26	18.50	2	15.20	
		40185	2549.5	2593	100% RB	25 Pos 0	18.50	1	16.28	18.50	2	15.29
					1RB Low	1 Pos 0	18.50	0	17.32	18.50	1	16.57
					1RB Mid	1 Pos 12	18.50	0	17.22	18.50	1	16.50
					1RB High	1 Pos 24	18.50	0	17.24	18.50	1	16.51
					50% RB Low	12 Pos 0	18.50	1	16.32	18.50	2	15.31
					50% RB Mid	12 Pos 6	18.50	1	16.20	18.50	2	15.23
		40620	2593	2636.5	50% RB High	12 Pos 11	18.50	1	16.24	18.50	2	15.25
					100% RB	25 Pos 0	18.50	1	16.31	18.50	2	15.23
					1RB Low	1 Pos 0	18.50	0	17.73	18.50	1	16.91
					1RB Mid	1 Pos 12	18.50	0	17.72	18.50	1	16.89
					1RB High	1 Pos 24	18.50	0	17.71	18.50	1	16.86
					50% RB Low	12 Pos 0	18.50	1	16.64	18.50	2	15.58
		41055	2636.5	2680	50% RB Mid	12 Pos 6	18.50	1	16.63	18.50	2	15.53
					50% RB High	12 Pos 11	18.50	1	16.59	18.50	2	15.53
					100% RB	25 Pos 0	18.50	1	16.63	18.50	2	15.57
					1RB Low	1 Pos 0	18.50	0	17.50	18.50	1	16.91
					1RB Mid	1 Pos 12	18.50	0	17.57	18.50	1	16.96
					1RB High	1 Pos 24	18.50	0	17.58	18.50	1	16.95
		41490	2680	2680	50% RB Low	12 Pos 0	18.50	1	16.54	18.50	2	15.45
					50% RB Mid	12 Pos 6	18.50	1	16.52	18.50	2	15.47
					50% RB High	12 Pos 11	18.50	1	16.57	18.50	2	15.49
					100% RB	25 Pos 0	18.50	1	16.58	18.50	2	15.55
					1RB Low	1 Pos 0	18.50	0	17.31	18.50	1	16.57
					1RB Mid	1 Pos 12	18.50	0	17.34	18.50	1	16.60
		41490	2680	2680	1RB High	1 Pos 24	18.50	0	17.34	18.50	1	16.58
					50% RB Low	12 Pos 0	18.50	1	16.32	18.50	2	15.31
					50% RB Mid	12 Pos 6	18.50	1	16.30	18.50	2	15.33
					50% RB High	12 Pos 11	18.50	1	16.32	18.50	2	15.34
					100% RB	25 Pos 0	18.50	1	16.34	18.50	2	15.32

**B.2.2.3 LTE Band 48 TDD – Tablet Mode – Antenna 8**

Band	BW	Channel #	Freq (MHz)	% RB Allocation	RB Position	QPSK			16 QAM		
						Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)
LTE 48	20 MHz	55340	3560	1RB Low	1 Pos 0	14.50	0	13.77	14.50	1	12.96
				1RB Mid	1 Pos 50	14.50	0	14.07	14.50	1	13.20
				1RB High	1 Pos 99	14.50	0	14.08	14.50	1	13.13
				50% RB Low	50 Pos 0	14.50	1	12.95	14.50	2	11.98
				50% RB Mid	50 Pos 24	14.50	1	12.98	14.50	2	11.95
				50% RB High	50 Pos 50	14.50	1	13.00	14.50	2	11.98
		100% RB	100 Pos 0	14.50	1	12.97	14.50	2	12.00		
		55990	3625	1RB Low	1 Pos 0	14.50	0	14.06	14.50	1	13.13
				1RB Mid	1 Pos 50	14.50	0	14.28	14.50	1	13.31
				1RB High	1 Pos 99	14.50	0	14.05	14.50	1	13.30
				50% RB Low	50 Pos 0	14.50	1	13.23	14.50	2	12.24
				50% RB Mid	50 Pos 24	14.50	1	13.15	14.50	2	12.16
				50% RB High	50 Pos 50	14.50	1	13.17	14.50	2	12.16
		100% RB	100 Pos 0	14.50	1	13.16	14.50	2	12.15		
		56640	3690	1RB Low	1 Pos 0	14.50	0	14.25	14.50	1	13.42
				1RB Mid	1 Pos 50	14.50	0	14.28	14.50	1	13.50
				1RB High	1 Pos 99	14.50	0	14.18	14.50	1	13.48
				50% RB Low	50 Pos 0	14.50	1	13.37	14.50	2	12.39
	50% RB Mid			50 Pos 24	14.50	1	13.35	14.50	2	12.36	
	50% RB High			50 Pos 50	14.50	1	13.25	14.50	2	12.31	
	100% RB	100 Pos 0	14.50	1	13.30	14.50	2	12.30			
	15 MHz	55315	3557.5	1RB Low	1 Pos 0	14.50	0	13.74	14.50	1	12.82
				1RB Mid	1 Pos 38	14.50	0	13.94	14.50	1	13.04
				1RB High	1 Pos 74	14.50	0	13.96	14.50	1	13.13
				50% RB Low	38 Pos 0	14.50	1	12.87	14.50	2	11.94
				50% RB Mid	38 Pos 19	14.50	1	12.91	14.50	2	11.95
				50% RB High	38 Pos 39	14.50	1	12.96	14.50	2	12.01
		100% RB	75 Pos 0	14.50	1	12.96	14.50	2	12.02		
		55990	3625	1RB Low	1 Pos 0	14.50	0	14.06	14.50	1	13.40
				1RB Mid	1 Pos 38	14.50	0	14.21	14.50	1	13.50
				1RB High	1 Pos 74	14.50	0	14.24	14.50	1	13.50
				50% RB Low	38 Pos 0	14.50	1	13.14	14.50	2	12.12
				50% RB Mid	38 Pos 19	14.50	1	13.10	14.50	2	12.08
				50% RB High	38 Pos 39	14.50	1	13.18	14.50	2	12.08
		100% RB	75 Pos 0	14.50	1	13.17	14.50	2	12.18		
		56665	3692.5	1RB Low	1 Pos 0	14.50	0	14.16	14.50	1	13.40
				1RB Mid	1 Pos 38	14.50	0	14.31	14.50	1	13.45
				1RB High	1 Pos 74	14.50	0	14.22	14.50	1	12.39
				50% RB Low	38 Pos 0	14.50	1	13.39	14.50	2	12.50
	50% RB Mid			38 Pos 19	14.50	1	13.30	14.50	2	12.37	
	50% RB High			38 Pos 39	14.50	1	13.21	14.50	2	12.32	
	100% RB	75 Pos 0	14.50	1	13.29	14.50	2	12.50			
	10 MHz	55290	3555	1RB Low	1 Pos 0	14.50	0	13.92	14.50	1	13.02
				1RB Mid	1 Pos 24	14.50	0	13.98	14.50	1	13.12
				1RB High	1 Pos 49	14.50	0	14.07	14.50	1	13.22
				50% RB Low	25 Pos 0	14.50	1	12.90	14.50	2	11.91
				50% RB Mid	25 Pos 12	14.50	1	12.95	14.50	2	12.00
				50% RB High	25 Pos 25	14.50	1	12.97	14.50	2	11.99
		100% RB	50 Pos0	14.50	1	12.94	14.50	2	11.97		
		55990	3625	1RB Low	1 Pos 0	14.50	0	14.01	14.50	1	13.20
				1RB Mid	1 Pos 24	14.50	0	14.06	14.50	1	13.24
				1RB High	1 Pos 49	14.50	0	14.18	14.50	1	13.35
				50% RB Low	25 Pos 0	14.50	1	13.08	14.50	2	12.15
				50% RB Mid	25 Pos 12	14.50	1	13.13	14.50	2	12.13
				50% RB High	25 Pos 25	14.50	1	13.14	14.50	2	12.14
		100% RB	50 Pos0	14.50	1	13.15	14.50	2	12.13		
		56690	3695	1RB Low	1 Pos 0	14.50	0	14.35	14.50	1	13.46
				1RB Mid	1 Pos 24	14.50	0	14.31	14.50	1	13.43
				1RB High	1 Pos 49	14.50	0	14.28	14.50	1	13.39
				50% RB Low	25 Pos 0	14.50	1	13.35	14.50	2	12.34
50% RB Mid	25 Pos 12			14.50	1	13.32	14.50	2	12.33		
50% RB High	25 Pos 25			14.50	1	13.32	14.50	2	12.31		
100% RB	50 Pos0	14.50	1	13.36	14.50	2	12.32				

Band	BW	Channel #	Freq (MHz)	% RB Allocation	RB Position	QPSK			16 QAM		
						Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)
LTE 48	5 MHz	55265	3552.5	1RB Low	1 Pos 0	14.50	0	14.02	14.50	1	13.11
				1RB Mid	1 Pos 12	14.50	0	14.06	14.50	1	13.17
				1RB High	1 Pos 24	14.50	0	14.10	14.50	1	13.16
				50% RB Low	12 Pos 0	14.50	1	13.02	14.50	2	12.03
				50% RB Mid	12 Pos 6	14.50	1	13.01	14.50	2	12.02
				50% RB High	12 Pos 11	14.50	1	13.00	14.50	2	12.05
		100% RB	25 Pos 0	14.50	1	13.02	14.50	2	11.96		
		55990	3625	1RB Low	1 Pos 0	14.50	0	14.10	14.50	1	13.49
				1RB Mid	1 Pos 12	14.50	0	14.16	14.50	1	13.48
				1RB High	1 Pos 24	14.50	0	14.15	14.50	1	13.50
				50% RB Low	12 Pos 0	14.50	1	13.08	14.50	2	12.16
				50% RB Mid	12 Pos 6	14.50	1	13.12	14.50	2	12.17
				50% RB High	12 Pos 11	14.50	1	13.16	14.50	2	12.16
		100% RB	25 Pos 0	14.50	1	13.15	14.50	2	12.19		
		56715	3697.5	1RB Low	1 Pos 0	14.50	0	14.45	14.50	1	13.44
				1RB Mid	1 Pos 12	14.50	0	14.42	14.50	1	13.47
				1RB High	1 Pos 24	14.50	0	14.40	14.50	1	13.50
				50% RB Low	12 Pos 0	14.50	1	13.33	14.50	2	12.39
				50% RB Mid	12 Pos 6	14.50	1	13.28	14.50	2	12.28
				50% RB High	12 Pos 11	14.50	1	13.30	14.50	2	12.25
		100% RB	25 Pos 0	14.50	1	13.32	14.50	2	12.32		

**B.2.2.4 LTE Band 66 FDD – Laptop Mode – Antenna 5**

Band	BW	Channel #	Freq (MHz)	% RB Allocation	RB Position	QPSK			16 QAM		
						Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)
LTE66	20 MHz	132072	1720	1RB Low	1 Pos 0	21.00	0	20.22	21.00	1	19.37
				1RB Mid	1 Pos 50	21.00	0	20.27	21.00	1	19.43
				1RB High	1 Pos 99	21.00	0	20.23	21.00	1	19.40
				50% RB Low	50 Pos 0	21.00	1	19.24	21.00	2	18.16
				50% RB Mid	50 Pos 24	21.00	1	19.33	21.00	2	18.27
				50% RB High	50 Pos 50	21.00	1	19.25	21.00	2	18.24
		100% RB	100 Pos 0	21.00	1	19.30	21.00	2	18.28		
		132322	1745	1RB Low	1 Pos 0	21.00	0	20.17	21.00	1	19.72
				1RB Mid	1 Pos 50	21.00	0	20.27	21.00	1	19.78
				1RB High	1 Pos 99	21.00	0	20.27	21.00	1	19.81
				50% RB Low	50 Pos 0	21.00	1	19.39	21.00	2	18.34
				50% RB Mid	50 Pos 24	21.00	1	19.35	21.00	2	18.33
				50% RB High	50 Pos 50	21.00	1	19.30	21.00	2	18.27
		100% RB	100 Pos 0	21.00	1	19.35	21.00	2	18.30		
		132572	1770	1RB Low	1 Pos 0	21.00	0	20.23	21.00	1	19.36
				1RB Mid	1 Pos 50	21.00	0	20.33	21.00	1	19.46
				1RB High	1 Pos 99	21.00	0	20.25	21.00	1	19.39
				50% RB Low	50 Pos 0	21.00	1	19.41	21.00	2	18.36
	50% RB Mid			50 Pos 24	21.00	1	19.40	21.00	2	18.40	
	50% RB High			50 Pos 50	21.00	1	19.42	21.00	2	18.37	
	100% RB	100 Pos 0	21.00	1	19.35	21.00	2	18.32			
	15 MHz	132047	1717.5	1RB Low	1 Pos 0	21.00	0	20.31	21.00	1	19.77
				1RB Mid	1 Pos 38	21.00	0	20.35	21.00	1	19.79
				1RB High	1 Pos 74	21.00	0	20.29	21.00	1	19.76
				50% RB Low	38 Pos 0	21.00	1	19.23	21.00	2	18.19
				50% RB Mid	38 Pos 19	21.00	1	19.28	21.00	2	18.26
				50% RB High	38 Pos 39	21.00	1	19.30	21.00	2	18.25
		100% RB	75 Pos 0	21.00	1	19.24	21.00	2	18.26		
		132422	1755	1RB Low	1 Pos 0	21.00	0	20.19	21.00	1	19.43
				1RB Mid	1 Pos 38	21.00	0	20.22	21.00	1	19.48
				1RB High	1 Pos 74	21.00	0	20.26	21.00	1	19.50
				50% RB Low	38 Pos 0	21.00	1	19.35	21.00	2	18.36
				50% RB Mid	38 Pos 19	21.00	1	19.32	21.00	2	18.35
				50% RB High	38 Pos 39	21.00	1	19.28	21.00	2	18.29
		100% RB	75 Pos 0	21.00	1	19.31	21.00	2	18.29		
		132597	1772.5	1RB Low	1 Pos 0	21.00	0	20.34	21.00	1	19.31
				1RB Mid	1 Pos 38	21.00	0	20.37	21.00	1	19.35
				1RB High	1 Pos 74	21.00	0	20.32	21.00	1	19.31
				50% RB Low	38 Pos 0	21.00	1	19.31	21.00	2	18.30
	50% RB Mid			38 Pos 19	21.00	1	19.33	21.00	2	18.29	
	50% RB High			38 Pos 39	21.00	1	19.33	21.00	2	18.30	
	100% RB	75 Pos 0	21.00	1	19.33	21.00	2	18.32			
	10 MHz	132022	1715	1RB Low	1 Pos 0	21.00	0	20.38	21.00	1	19.79
				1RB Mid	1 Pos 24	21.00	0	20.36	21.00	1	19.77
				1RB High	1 Pos 49	21.00	0	20.36	21.00	1	19.77
				50% RB Low	25 Pos 0	21.00	1	19.23	21.00	2	18.29
				50% RB Mid	25 Pos 12	21.00	1	19.31	21.00	2	18.34
				50% RB High	25 Pos 24	21.00	1	19.33	21.00	2	18.39
		100% RB	50 Pos 0	21.00	1	19.31	21.00	2	18.31		
		132422	1755	1RB Low	1 Pos 0	21.00	0	20.27	21.00	1	19.07
				1RB Mid	1 Pos 24	21.00	0	20.31	21.00	1	19.12
				1RB High	1 Pos 49	21.00	0	20.35	21.00	1	19.17
				50% RB Low	25 Pos 0	21.00	1	19.33	21.00	2	18.46
				50% RB Mid	25 Pos 12	21.00	1	19.35	21.00	2	18.44
				50% RB High	25 Pos 24	21.00	1	19.30	21.00	2	18.38
		100% RB	50 Pos 0	21.00	1	19.37	21.00	2	18.37		
		132622	1775	1RB Low	1 Pos 0	21.00	0	20.38	21.00	1	19.34
				1RB Mid	1 Pos 24	21.00	0	20.31	21.00	1	19.33
				1RB High	1 Pos 49	21.00	0	20.34	21.00	1	19.34
				50% RB Low	25 Pos 0	21.00	1	19.32	21.00	2	18.33
50% RB Mid	25 Pos 12			21.00	1	19.27	21.00	2	18.33		
50% RB High	25 Pos 24			21.00	1	19.34	21.00	2	18.35		
100% RB	50 Pos 0	21.00	1	19.35	21.00	2	18.35				



Band	BW	Channel #	Freq (MHz)	% RB Allocation	RB Position	QPSK			16 QAM		
						Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)
LTE66	5.0 MHz	131997	1712.5	1RB Low	1 Pos 0	21.00	0	20.48	21.00	1	19.14
				1RB Mid	1 Pos 12	21.00	0	20.45	21.00	1	19.09
				1RB High	1 Pos 24	21.00	0	20.47	21.00	1	19.09
				50% RB Low	12 Pos 0	21.00	1	19.31	21.00	2	18.32
				50% RB Mid	12 Pos 6	21.00	1	19.28	21.00	2	18.24
				50% RB High	12 Pos 11	21.00	1	19.30	21.00	2	18.25
		100% RB	25 Pos 0	21.00	1	19.27	21.00	2	18.34		
		132422	1755	1RB Low	1 Pos 0	21.00	0	20.37	21.00	1	19.22
				1RB Mid	1 Pos 12	21.00	0	20.31	21.00	1	19.16
				1RB High	1 Pos 24	21.00	0	20.35	21.00	1	19.20
				50% RB Low	12 Pos 0	21.00	1	19.32	21.00	2	18.27
				50% RB Mid	12 Pos 6	21.00	1	19.33	21.00	2	18.21
				50% RB High	12 Pos 11	21.00	1	19.28	21.00	2	18.21
		100% RB	25 Pos 0	21.00	1	19.30	21.00	2	18.33		
		132647	1777.5	1RB Low	1 Pos 0	21.00	0	20.29	21.00	1	19.46
				1RB Mid	1 Pos 12	21.00	0	20.35	21.00	1	19.49
				1RB High	1 Pos 24	21.00	0	20.35	21.00	1	19.52
				50% RB Low	12 Pos 0	21.00	1	19.33	21.00	2	18.36
	50% RB Mid			12 Pos 6	21.00	1	19.33	21.00	2	18.32	
	50% RB High			12 Pos 11	21.00	1	19.33	21.00	2	18.32	
	100% RB	25 Pos 0	21.00	1	19.33	21.00	2	18.33			
	3.0 MHz	131987	1711.5	1RB Low	1 Pos 0	21.00	0	20.39	21.00	1	19.79
				1RB Mid	1 Pos 7	21.00	0	20.35	21.00	1	19.77
				1RB High	1 Pos 14	21.00	0	20.30	21.00	1	19.73
				50% RB Low	8 Pos 0	21.00	1	19.28	21.00	2	18.45
				50% RB Mid	8 Pos 4	21.00	1	19.29	21.00	2	18.40
				50% RB High	8 Pos 7	21.00	1	19.22	21.00	2	18.41
		100% RB	15 Pos 0	21.00	1	19.27	21.00	2	18.31		
		132422	1755	1RB Low	1 Pos 0	21.00	0	20.35	21.00	1	19.80
				1RB Mid	1 Pos 7	21.00	0	20.29	21.00	1	19.77
				1RB High	1 Pos 14	21.00	0	20.31	21.00	1	19.76
				50% RB Low	8 Pos 0	21.00	1	19.28	21.00	2	18.47
				50% RB Mid	8 Pos 4	21.00	1	19.27	21.00	2	18.43
				50% RB High	8 Pos 7	21.00	1	19.26	21.00	2	18.43
		100% RB	15 Pos 0	21.00	1	19.31	21.00	2	18.36		
		132657	1778.5	1RB Low	1 Pos 0	21.00	0	20.36	21.00	1	19.85
				1RB Mid	1 Pos 7	21.00	0	20.36	21.00	1	19.84
				1RB High	1 Pos 14	21.00	0	20.34	21.00	1	19.79
				50% RB Low	8 Pos 0	21.00	1	19.32	21.00	2	18.48
	50% RB Mid			8 Pos 4	21.00	1	19.33	21.00	2	18.49	
	50% RB High			8 Pos 7	21.00	1	19.31	21.00	2	18.49	
	100% RB	15 Pos 0	21.00	1	19.31	21.00	2	18.39			
	1.4 MHz	131979	1710	1RB Low	1 Pos 0	21.00	0	20.30	21.00	1	18.98
				1RB Mid	1 Pos 2	21.00	0	20.29	21.00	1	18.99
				1RB High	1 Pos 5	21.00	0	20.27	21.00	1	18.98
				50% RB Low	3 Pos 0	21.00	0	20.29	21.00	1	19.39
				50% RB Mid	3 Pos 1	21.00	0	20.29	21.00	1	19.41
				50% RB High	3 Pos 2	21.00	0	20.28	21.00	1	19.40
		100% RB	6 Pos 0	21.00	1	19.29	21.00	2	18.23		
		132422	1755	1RB Low	1 Pos 0	21.00	0	20.32	21.00	1	19.00
				1RB Mid	1 Pos 2	21.00	0	20.27	21.00	1	19.00
				1RB High	1 Pos 5	21.00	0	20.23	21.00	1	18.94
				50% RB Low	3 Pos 0	21.00	0	20.32	21.00	1	19.38
				50% RB Mid	3 Pos 1	21.00	0	20.28	21.00	1	19.39
				50% RB High	3 Pos 2	21.00	0	20.27	21.00	1	19.40
		100% RB	6 Pos 0	21.00	1	19.28	21.00	2	18.22		
		132665	1779.3	1RB Low	1 Pos 0	21.00	0	20.28	21.00	1	19.05
				1RB Mid	1 Pos 2	21.00	0	20.33	21.00	1	19.03
				1RB High	1 Pos 5	21.00	0	20.31	21.00	1	19.05
				50% RB Low	3 Pos 0	21.00	0	20.35	21.00	1	19.40
50% RB Mid	3 Pos 1			21.00	0	20.34	21.00	1	19.42		
50% RB High	3 Pos 2			21.00	0	20.30	21.00	1	19.42		
100% RB	6 Pos 0	21.00	1	19.34	21.00	2	18.27				



**B.2.2.5 LTE Band 66 FDD – Tablet Mode – Antenna 5**

Band	BW	Channel #	Freq (MHz)	% RB Allocation	RB Position	QPSK			16 QAM		
						Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)
LTE66	20 MHz	132072	1720	1RB Low	1 Pos 0	16.50	0	16.08	16.50	1	15.33
				1RB Mid	1 Pos 50	16.50	0	16.17	16.50	1	15.41
				1RB High	1 Pos 99	16.50	0	16.13	16.50	1	15.36
				50% RB Low	50 Pos 0	16.50	1	15.10	16.50	2	14.12
				50% RB Mid	50 Pos 24	16.50	1	15.19	16.50	2	14.23
				50% RB High	50 Pos 50	16.50	1	15.19	16.50	2	14.15
		100% RB	100 Pos 0	16.50	1	15.20	16.50	2	14.14		
		132322	1745	1RB Low	1 Pos 0	16.50	0	16.04	16.50	1	15.30
				1RB Mid	1 Pos 50	16.50	0	16.17	16.50	1	15.42
				1RB High	1 Pos 99	16.50	0	16.13	16.50	1	15.39
				50% RB Low	50 Pos 0	16.50	1	15.22	16.50	2	14.21
				50% RB Mid	50 Pos 24	16.50	1	15.29	16.50	2	14.26
				50% RB High	50 Pos 50	16.50	1	15.22	16.50	2	14.17
		100% RB	100 Pos 0	16.50	1	15.21	16.50	2	14.19		
		132572	1770	1RB Low	1 Pos 0	16.50	0	16.07	16.50	1	15.33
				1RB Mid	1 Pos 50	16.50	0	16.21	16.50	1	15.47
				1RB High	1 Pos 99	16.50	0	16.14	16.50	1	15.34
				50% RB Low	50 Pos 0	16.50	1	15.25	16.50	2	14.28
	50% RB Mid			50 Pos 24	16.50	1	15.28	16.50	2	14.28	
	50% RB High			50 Pos 50	16.50	1	15.33	16.50	2	14.30	
	100% RB	100 Pos 0	16.50	1	15.28	16.50	2	14.25			
	15 MHz	132047	1717.5	1RB Low	1 Pos 0	16.50	0	16.10	16.50	1	15.46
				1RB Mid	1 Pos 38	16.50	0	16.14	16.50	1	15.48
				1RB High	1 Pos 74	16.50	0	16.09	16.50	1	15.44
				50% RB Low	38 Pos 0	16.50	1	15.08	16.50	2	14.13
				50% RB Mid	38 Pos 19	16.50	1	15.21	16.50	2	14.20
				50% RB High	38 Pos 39	16.50	1	15.22	16.50	2	14.18
		100% RB	75 Pos 0	16.50	1	15.17	16.50	2	14.19		
		132422	1755	1RB Low	1 Pos 0	16.50	0	16.11	16.50	1	15.42
				1RB Mid	1 Pos 38	16.50	0	16.12	16.50	1	15.47
				1RB High	1 Pos 74	16.50	0	16.11	16.50	1	15.49
				50% RB Low	38 Pos 0	16.50	1	15.28	16.50	2	14.26
				50% RB Mid	38 Pos 19	16.50	1	15.25	16.50	2	14.21
				50% RB High	38 Pos 39	16.50	1	15.20	16.50	2	14.16
		100% RB	75 Pos 0	16.50	1	15.22	16.50	2	14.24		
		132597	1772.5	1RB Low	1 Pos 0	16.50	0	16.08	16.50	1	15.48
				1RB Mid	1 Pos 38	16.50	0	16.18	16.50	1	15.50
				1RB High	1 Pos 74	16.50	0	16.10	16.50	1	15.47
				50% RB Low	38 Pos 0	16.50	1	15.23	16.50	2	14.18
	50% RB Mid			38 Pos 19	16.50	1	15.24	16.50	2	14.22	
	50% RB High			38 Pos 39	16.50	1	15.22	16.50	2	14.28	
	100% RB	75 Pos 0	16.50	1	15.28	16.50	2	14.23			
	10 MHz	132022	1715	1RB Low	1 Pos 0	16.50	0	16.15	16.50	1	15.48
				1RB Mid	1 Pos 24	16.50	0	16.17	16.50	1	15.47
				1RB High	1 Pos 49	16.50	0	16.13	16.50	1	15.45
				50% RB Low	25 Pos 0	16.50	1	15.14	16.50	2	14.17
				50% RB Mid	25 Pos 12	16.50	1	15.20	16.50	2	14.24
				50% RB High	25 Pos 24	16.50	1	15.24	16.50	2	14.28
		100% RB	50 Pos 0	16.50	1	15.21	16.50	2	14.22		
		132422	1755	1RB Low	1 Pos 0	16.50	0	16.17	16.50	1	15.49
				1RB Mid	1 Pos 24	16.50	0	16.16	16.50	1	15.50
				1RB High	1 Pos 49	16.50	0	16.18	16.50	1	15.50
				50% RB Low	25 Pos 0	16.50	1	15.27	16.50	2	14.33
				50% RB Mid	25 Pos 12	16.50	1	15.29	16.50	2	14.29
				50% RB High	25 Pos 24	16.50	1	15.21	16.50	2	14.25
		100% RB	50 Pos 0	16.50	1	15.31	16.50	2	14.25		
		132622	1775	1RB Low	1 Pos 0	16.50	0	16.19	16.50	1	15.50
				1RB Mid	1 Pos 24	16.50	0	16.19	16.50	1	15.49
				1RB High	1 Pos 49	16.50	0	16.17	16.50	1	15.48
				50% RB Low	25 Pos 0	16.50	1	15.19	16.50	2	14.24
50% RB Mid	25 Pos 12			16.50	1	15.23	16.50	2	14.26		
50% RB High	25 Pos 24			16.50	1	15.26	16.50	2	14.31		
100% RB	50 Pos 0	16.50	1	15.26	16.50	2	14.19				

Band	BW	Channel #	Freq (MHz)	% RB Allocation	RB Position	QPSK			16 QAM		
						Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)
LTE66	5.0 MHz	131997	1712.5	1RB Low	1 Pos 0	16.50	0	16.27	16.50	1	15.50
				1RB Mid	1 Pos 12	16.50	0	16.25	16.50	1	15.50
				1RB High	1 Pos 24	16.50	0	16.22	16.50	1	15.50
				50% RB Low	12 Pos 0	16.50	1	15.19	16.50	2	14.15
				50% RB Mid	12 Pos 6	16.50	1	15.21	16.50	2	14.14
				50% RB High	12 Pos 11	16.50	1	15.21	16.50	2	14.17
		100% RB	25 Pos 0	16.50	1	15.21	16.50	2	14.22		
		1RB Low	1 Pos 0	16.50	0	16.25	16.50	1	15.50		
		1RB Mid	1 Pos 12	16.50	0	16.24	16.50	1	15.50		
		1RB High	1 Pos 24	16.50	0	16.24	16.50	1	15.50		
		50% RB Low	12 Pos 0	16.50	1	15.23	16.50	2	14.21		
		50% RB Mid	12 Pos 6	16.50	1	15.23	16.50	2	14.19		
		50% RB High	12 Pos 11	16.50	1	15.20	16.50	2	14.17		
		100% RB	25 Pos 0	16.50	1	15.28	16.50	2	14.26		
		1RB Low	1 Pos 0	16.50	0	16.23	16.50	1	15.50		
		1RB Mid	1 Pos 12	16.50	0	16.33	16.50	1	15.50		
		1RB High	1 Pos 24	16.50	0	16.25	16.50	1	15.50		
		50% RB Low	12 Pos 0	16.50	1	15.23	16.50	2	14.22		
	50% RB Mid	12 Pos 6	16.50	1	15.20	16.50	2	14.18			
	50% RB High	12 Pos 11	16.50	1	15.23	16.50	2	14.16			
	100% RB	25 Pos 0	16.50	1	15.24	16.50	2	14.25			
	3.0 MHz	131987	1711.5	1RB Low	1 Pos 0	16.50	0	16.13	16.50	1	15.49
				1RB Mid	1 Pos 7	16.50	0	16.18	16.50	1	15.50
				1RB High	1 Pos 14	16.50	0	16.03	16.50	1	15.43
				50% RB Low	8 Pos 0	16.50	1	15.17	16.50	2	14.20
				50% RB Mid	8 Pos 4	16.50	1	15.19	16.50	2	14.22
				50% RB High	8 Pos 7	16.50	1	15.18	16.50	2	14.18
		100% RB	15 Pos 0	16.50	1	15.16	16.50	2	14.15		
		1RB Low	1 Pos 0	16.50	0	16.16	16.50	1	15.50		
		1RB Mid	1 Pos 7	16.50	0	16.14	16.50	1	15.48		
		1RB High	1 Pos 14	16.50	0	16.09	16.50	1	15.49		
		50% RB Low	8 Pos 0	16.50	1	15.24	16.50	2	14.24		
		50% RB Mid	8 Pos 4	16.50	1	15.23	16.50	2	14.22		
		50% RB High	8 Pos 7	16.50	1	15.25	16.50	2	14.25		
		100% RB	15 Pos 0	16.50	1	15.24	16.50	2	14.17		
		1RB Low	1 Pos 0	16.50	0	16.16	16.50	1	15.50		
		1RB Mid	1 Pos 7	16.50	0	16.21	16.50	1	15.50		
		1RB High	1 Pos 14	16.50	0	16.15	16.50	1	15.50		
		50% RB Low	8 Pos 0	16.50	1	15.26	16.50	2	14.26		
	50% RB Mid	8 Pos 4	16.50	1	15.24	16.50	2	14.28			
	50% RB High	8 Pos 7	16.50	1	15.22	16.50	2	14.25			
	100% RB	15 Pos 0	16.50	1	15.25	16.50	2	14.19			
	1.4 MHz	131979	1710	1RB Low	1 Pos 0	16.50	0	16.24	16.50	1	15.22
				1RB Mid	1 Pos 2	16.50	0	16.29	16.50	1	15.32
				1RB High	1 Pos 5	16.50	0	16.24	16.50	1	15.26
				50% RB Low	3 Pos 0	16.50	0	16.14	16.50	1	15.36
				50% RB Mid	3 Pos 1	16.50	0	16.17	16.50	1	15.38
				50% RB High	3 Pos 2	16.50	0	16.20	16.50	1	15.37
		100% RB	6 Pos 0	16.50	1	15.21	16.50	2	14.17		
		1RB Low	1 Pos 0	16.50	0	16.24	16.50	1	15.24		
		1RB Mid	1 Pos 2	16.50	0	16.28	16.50	1	15.29		
		1RB High	1 Pos 5	16.50	0	16.19	16.50	1	15.20		
		50% RB Low	3 Pos 0	16.50	0	16.20	16.50	1	15.37		
		50% RB Mid	3 Pos 1	16.50	0	16.16	16.50	1	15.34		
		50% RB High	3 Pos 2	16.50	0	16.16	16.50	1	15.35		
		100% RB	6 Pos 0	16.50	1	15.17	16.50	2	14.21		
		1RB Low	1 Pos 0	16.50	0	16.23	16.50	1	15.27		
		1RB Mid	1 Pos 2	16.50	0	16.30	16.50	1	15.33		
		1RB High	1 Pos 5	16.50	0	16.21	16.50	1	15.24		
		50% RB Low	3 Pos 0	16.50	0	16.18	16.50	1	15.39		
50% RB Mid		3 Pos 1	16.50	0	16.21	16.50	1	15.41			
50% RB High		3 Pos 2	16.50	0	16.20	16.50	1	15.40			
100% RB		6 Pos 0	16.50	1	15.24	16.50	2	14.24			

**B.2.2.6 LTE Band 66 FDD – Tablet Mode – Antenna 8**

Band	BW	Channel #	Freq (MHz)	% RB Allocation	RB Position	QPSK			16 QAM		
						Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)
LTE66	20 MHz	132072	1720	1RB Low	1 Pos 0	16.50	0	15.64	16.50	1	14.89
				1RB Mid	1 Pos 50	16.50	0	15.79	16.50	1	15.03
				1RB High	1 Pos 99	16.50	0	15.77	16.50	1	15.02
				50% RB Low	50 Pos 0	16.50	1	14.78	16.50	2	13.79
				50% RB Mid	50 Pos 24	16.50	1	14.83	16.50	2	13.81
				50% RB High	50 Pos 50	16.50	1	14.95	16.50	2	13.91
		100% RB	100 Pos 0	16.50	1	14.85	16.50	2	13.81		
		132322	1745	1RB Low	1 Pos 0	16.50	0	15.86	16.50	1	15.08
				1RB Mid	1 Pos 50	16.50	0	15.95	16.50	1	15.22
				1RB High	1 Pos 99	16.50	0	16.00	16.50	1	15.21
				50% RB Low	50 Pos 0	16.50	1	15.09	16.50	2	14.13
				50% RB Mid	50 Pos 24	16.50	1	15.05	16.50	2	14.07
				50% RB High	50 Pos 50	16.50	1	15.08	16.50	2	14.02
		100% RB	100 Pos 0	16.50	1	15.12	16.50	2	14.05		
		132572	1770	1RB Low	1 Pos 0	16.50	0	15.91	16.50	1	15.15
				1RB Mid	1 Pos 50	16.50	0	16.06	16.50	1	15.29
				1RB High	1 Pos 99	16.50	0	15.91	16.50	1	15.12
				50% RB Low	50 Pos 0	16.50	1	15.02	16.50	2	14.00
	50% RB Mid			50 Pos 24	16.50	1	15.16	16.50	2	14.08	
	50% RB High			50 Pos 50	16.50	1	15.04	16.50	2	14.01	
	100% RB	100 Pos 0	16.50	1	14.98	16.50	2	13.99			
	15 MHz	132047	1717.5	1RB Low	1 Pos 0	16.50	0	15.66	16.50	1	15.01
				1RB Mid	1 Pos 38	16.50	0	15.74	16.50	1	15.09
				1RB High	1 Pos 74	16.50	0	15.74	16.50	1	15.09
				50% RB Low	38 Pos 0	16.50	1	14.76	16.50	2	13.72
				50% RB Mid	38 Pos 19	16.50	1	14.79	16.50	2	13.79
				50% RB High	38 Pos 39	16.50	1	14.79	16.50	2	13.85
		100% RB	75 Pos 0	16.50	1	14.81	16.50	2	13.79		
		132422	1755	1RB Low	1 Pos 0	16.50	0	15.86	16.50	1	15.22
				1RB Mid	1 Pos 38	16.50	0	15.93	16.50	1	15.29
				1RB High	1 Pos 74	16.50	0	15.91	16.50	1	15.30
				50% RB Low	38 Pos 0	16.50	1	15.07	16.50	2	14.04
				50% RB Mid	38 Pos 19	16.50	1	15.06	16.50	2	14.04
				50% RB High	38 Pos 39	16.50	1	15.05	16.50	2	14.01
		100% RB	75 Pos 0	16.50	1	15.09	16.50	2	14.05		
		132597	1772.5	1RB Low	1 Pos 0	16.50	0	15.95	16.50	1	15.30
				1RB Mid	1 Pos 38	16.50	0	15.97	16.50	1	15.33
				1RB High	1 Pos 74	16.50	0	15.89	16.50	1	15.24
				50% RB Low	38 Pos 0	16.50	1	15.05	16.50	2	14.03
	50% RB Mid			38 Pos 19	16.50	1	15.07	16.50	2	14.04	
	50% RB High			38 Pos 39	16.50	1	14.96	16.50	2	13.95	
	100% RB	75 Pos 0	16.50	1	15.03	16.50	2	14.00			
	10 MHz	132022	1715	1RB Low	1 Pos 0	16.50	0	15.75	16.50	1	15.06
				1RB Mid	1 Pos 24	16.50	0	15.79	16.50	1	15.08
				1RB High	1 Pos 49	16.50	0	15.74	16.50	1	15.07
				50% RB Low	25 Pos 0	16.50	1	14.76	16.50	2	13.82
				50% RB Mid	25 Pos 12	16.50	1	14.77	16.50	2	13.85
				50% RB High	25 Pos 24	16.50	1	14.83	16.50	2	13.86
100% RB		50 Pos 0	16.50	1	14.86	16.50	2	13.79			
132422		1755	1RB Low	1 Pos 0	16.50	0	15.97	16.50	1	15.25	
			1RB Mid	1 Pos 24	16.50	0	15.99	16.50	1	15.30	
			1RB High	1 Pos 49	16.50	0	16.01	16.50	1	15.34	
			50% RB Low	25 Pos 0	16.50	1	15.04	16.50	2	14.17	
			50% RB Mid	25 Pos 12	16.50	1	15.07	16.50	2	14.12	
			50% RB High	25 Pos 24	16.50	1	15.06	16.50	2	14.10	
100% RB		50 Pos 0	16.50	1	15.11	16.50	2	14.05			
132622		1775	1RB Low	1 Pos 0	16.50	0	16.00	16.50	1	15.34	
			1RB Mid	1 Pos 24	16.50	0	15.99	16.50	1	15.31	
			1RB High	1 Pos 49	16.50	0	15.97	16.50	1	15.33	
			50% RB Low	25 Pos 0	16.50	1	15.00	16.50	2	14.06	
	50% RB Mid		25 Pos 12	16.50	1	14.98	16.50	2	14.12		
	50% RB High		25 Pos 24	16.50	1	15.00	16.50	2	14.06		
100% RB	50 Pos 0	16.50	1	15.07	16.50	2	14.03				

Band	BW	Channel #	Freq (MHz)	% RB Allocation	RB Position	QPSK			16 QAM			
						Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	
LTE66	5.0 MHz	131997	1712.5	1RB Low	1 Pos 0	16.50	0	15.85	16.50	1	15.08	
				1RB Mid	1 Pos 12	16.50	0	15.82	16.50	1	15.08	
				1RB High	1 Pos 24	16.50	0	15.82	16.50	1	15.06	
				50% RB Low	12 Pos 0	16.50	1	14.84	16.50	2	13.72	
				50% RB Mid	12 Pos 6	16.50	1	14.77	16.50	2	13.75	
				50% RB High	12 Pos 11	16.50	1	14.79	16.50	2	13.74	
		100% RB	25 Pos 0	16.50	1	14.81	16.50	2	13.83			
		132422	1755	1RB Low	1 Pos 0	16.50	0	16.05	16.50	1	15.35	
				1RB Mid	1 Pos 12	16.50	0	16.06	16.50	1	15.33	
				1RB High	1 Pos 24	16.50	0	16.07	16.50	1	15.35	
				50% RB Low	12 Pos 0	16.50	1	15.04	16.50	2	14.00	
				50% RB Mid	12 Pos 6	16.50	1	15.04	16.50	2	13.99	
				50% RB High	12 Pos 11	16.50	1	15.03	16.50	2	13.98	
		100% RB	25 Pos 0	16.50	1	15.06	16.50	2	14.06			
		132647	1777.5	1RB Low	1 Pos 0	16.50	0	16.02	16.50	1	15.26	
				1RB Mid	1 Pos 12	16.50	0	16.09	16.50	1	15.30	
				1RB High	1 Pos 24	16.50	0	16.08	16.50	1	15.32	
				50% RB Low	12 Pos 0	16.50	1	15.03	16.50	2	13.99	
				50% RB Mid	12 Pos 6	16.50	1	15.01	16.50	2	13.94	
				50% RB High	12 Pos 11	16.50	1	15.00	16.50	2	13.93	
		100% RB	25 Pos 0	16.50	1	15.03	16.50	2	14.05			
		3.0 MHz	131987	1711.5	1RB Low	1 Pos 0	16.50	0	15.69	16.50	1	15.05
					1RB Mid	1 Pos 7	16.50	0	15.75	16.50	1	15.08
					1RB High	1 Pos 14	16.50	0	15.62	16.50	1	15.02
					50% RB Low	8 Pos 0	16.50	1	14.77	16.50	2	13.77
					50% RB Mid	8 Pos 4	16.50	1	14.78	16.50	2	13.79
					50% RB High	8 Pos 7	16.50	1	14.72	16.50	2	13.74
			100% RB	15 Pos 0	16.50	1	14.75	16.50	2	13.72		
			132422	1755	1RB Low	1 Pos 0	16.50	0	15.97	16.50	1	15.29
					1RB Mid	1 Pos 7	16.50	0	15.99	16.50	1	15.33
	1RB High				1 Pos 14	16.50	0	15.89	16.50	1	15.32	
	50% RB Low				8 Pos 0	16.50	1	15.03	16.50	2	14.07	
	50% RB Mid				8 Pos 4	16.50	1	15.02	16.50	2	14.03	
	50% RB High				8 Pos 7	16.50	1	15.05	16.50	2	14.05	
	100% RB		15 Pos 0	16.50	1	15.06	16.50	2	13.96			
	132657		1778.5	1RB Low	1 Pos 0	16.50	0	15.95	16.50	1	15.32	
				1RB Mid	1 Pos 7	16.50	0	15.99	16.50	1	15.34	
				1RB High	1 Pos 14	16.50	0	15.90	16.50	1	15.29	
				50% RB Low	8 Pos 0	16.50	1	15.00	16.50	2	14.05	
				50% RB Mid	8 Pos 4	16.50	1	15.02	16.50	2	14.02	
				50% RB High	8 Pos 7	16.50	1	15.01	16.50	2	14.05	
	100% RB		15 Pos 0	16.50	1	15.05	16.50	2	13.98			
	1.4 MHz		131979	1710	1RB Low	1 Pos 0	16.50	0	15.81	16.50	1	14.79
					1RB Mid	1 Pos 2	16.50	0	15.85	16.50	1	14.87
					1RB High	1 Pos 5	16.50	0	15.82	16.50	1	14.81
					50% RB Low	3 Pos 0	16.50	0	15.71	16.50	1	14.94
					50% RB Mid	3 Pos 1	16.50	0	15.74	16.50	1	14.93
					50% RB High	3 Pos 2	16.50	0	15.75	16.50	1	14.94
			100% RB	6 Pos 0	16.50	1	14.76	16.50	2	13.76		
			132422	1755	1RB Low	1 Pos 0	16.50	0	16.07	16.50	1	15.04
					1RB Mid	1 Pos 2	16.50	0	16.06	16.50	1	15.12
		1RB High			1 Pos 5	16.50	0	16.05	16.50	1	15.02	
		50% RB Low			3 Pos 0	16.50	0	16.01	16.50	1	15.19	
		50% RB Mid			3 Pos 1	16.50	0	15.99	16.50	1	15.14	
		50% RB High			3 Pos 2	16.50	0	15.99	16.50	1	15.18	
		100% RB	6 Pos 0	16.50	1	14.97	16.50	2	13.99			
		132665	1779.3	1RB Low	1 Pos 0	16.50	0	16.04	16.50	1	15.03	
				1RB Mid	1 Pos 2	16.50	0	16.10	16.50	1	15.11	
				1RB High	1 Pos 5	16.50	0	16.04	16.50	1	15.05	
				50% RB Low	3 Pos 0	16.50	0	15.97	16.50	1	15.17	
				50% RB Mid	3 Pos 1	16.50	0	15.97	16.50	1	15.17	
				50% RB High	3 Pos 2	16.50	0	16.01	16.50	1	15.21	
		100% RB	6 Pos 0	16.50	1	15.01	16.50	2	14.02			

**B.2.2.7 LTE Band 71 FDD – Laptop Mode – Antenna 5**

Band	BW	Channel #	Freq (MHz)	% RB Allocation	RB Position	QPSK			16 QAM		
						Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)
LTE71	20 MHz	133297	680.5	1RB Low	1 Pos 0	21.50	0	21.00	21.50	1	20.33
				1RB Mid	1 Pos 50	21.50	0	21.22	21.50	1	20.53
				1RB High	1 Pos 99	21.50	0	21.12	21.50	1	20.47
				50% RB Low	50 Pos 0	21.50	1	20.26	21.50	2	19.23
				50% RB Mid	50 Pos 24	21.50	1	20.26	21.50	2	19.27
				50% RB High	50 Pos 50	21.50	1	20.37	21.50	2	19.36
	15 MHz	133297	680.5	100% RB	100 Pos 0	21.50	1	20.27	21.50	2	19.25
				1RB Low	1 Pos 0	21.50	0	21.07	21.50	1	20.40
				1RB Mid	1 Pos 50	21.50	0	21.19	21.50	1	20.54
				1RB High	1 Pos 99	21.50	0	21.14	21.50	1	20.48
				50% RB Low	50 Pos 0	21.50	1	20.22	21.50	2	19.25
				50% RB Mid	50 Pos 24	21.50	1	20.23	21.50	2	19.24
	10 MHz	133172	668	50% RB High	50 Pos 50	21.50	1	20.26	21.50	2	19.41
				100% RB	100 Pos 0	21.50	1	20.19	21.50	2	19.18
				1RB Low	1 Pos 0	21.50	0	21.07	21.50	1	20.05
				1RB Mid	1 Pos 50	21.50	0	21.13	21.50	1	20.16
				1RB High	1 Pos 99	21.50	0	21.12	21.50	1	20.11
				50% RB Low	50 Pos 0	21.50	1	20.21	21.50	2	19.32
		133297	680.5	50% RB Mid	50 Pos 24	21.50	1	20.15	21.50	2	19.26
				50% RB High	50 Pos 50	21.50	1	20.26	21.50	2	19.33
				100% RB	100 Pos 0	21.50	1	20.19	21.50	2	19.18
				1RB Low	1 Pos 0	21.50	0	21.11	21.50	1	19.90
				1RB Mid	1 Pos 38	21.50	0	21.20	21.50	1	20.00
				1RB High	1 Pos 74	21.50	0	21.21	21.50	1	20.04
		133422	693	50% RB Low	38 Pos 0	21.50	1	20.25	21.50	2	19.35
				50% RB Mid	38 Pos 19	21.50	1	20.22	21.50	2	19.38
				50% RB High	38 Pos 39	21.50	1	20.19	21.50	2	19.34
				100% RB	75 Pos 0	21.50	1	20.24	21.50	2	19.28
				1RB Low	1 Pos 0	21.50	0	21.15	21.50	1	20.52
				1RB Mid	1 Pos 38	21.50	0	21.13	21.50	1	20.53
	5 MHz	133147	665.5	1RB High	1 Pos 74	21.50	0	21.10	21.50	1	20.51
				50% RB Low	38 Pos 0	21.50	1	20.19	21.50	2	19.24
				50% RB Mid	38 Pos 19	21.50	1	20.16	21.50	2	19.23
				50% RB High	38 Pos 39	21.50	1	20.11	21.50	2	19.24
				100% RB	75 Pos 0	21.50	1	20.19	21.50	2	19.19
				1RB Low	1 Pos 0	21.50	0	21.24	21.50	1	20.18
		133297	680.5	1RB Mid	1 Pos 24	21.50	0	21.22	21.50	1	20.18
				1RB High	1 Pos 49	21.50	0	21.26	21.50	1	20.22
				50% RB Low	25 Pos 0	21.50	1	20.13	21.50	2	19.16
				50% RB Mid	25 Pos 12	21.50	1	20.14	21.50	2	19.19
				50% RB High	25 Pos 24	21.50	1	20.10	21.50	2	19.15
				100% RB	50 Pos 0	21.50	1	20.14	21.50	2	19.18
		133447	695.5	1RB Low	1 Pos 0	21.50	0	21.16	21.50	1	20.78
				1RB Mid	1 Pos 24	21.50	0	21.20	21.50	1	20.83
				1RB High	1 Pos 49	21.50	0	21.22	21.50	1	20.77
				50% RB Low	25 Pos 0	21.50	1	20.25	21.50	2	19.33
				50% RB Mid	25 Pos 12	21.50	1	20.17	21.50	2	19.26
				50% RB High	25 Pos 24	21.50	1	20.19	21.50	2	19.28
133447	695.5	100% RB	50 Pos 0	21.50	1	20.22	21.50	2	19.32		
		1RB Low	1 Pos 0	21.50	0	21.14	21.50	1	20.17		
		1RB Mid	1 Pos 24	21.50	0	21.12	21.50	1	20.14		
		1RB High	1 Pos 49	21.50	0	21.16	21.50	1	20.13		
		50% RB Low	25 Pos 0	21.50	1	20.21	21.50	2	19.23		
		50% RB Mid	25 Pos 12	21.50	1	20.13	21.50	2	19.21		
133447	695.5	50% RB High	25 Pos 24	21.50	1	20.12	21.50	2	19.19		
		100% RB	50 Pos 0	21.50	1	20.16	21.50	2	19.17		



**B.2.2.8 LTE Band 71 FDD – Tablet Mode – Antenna 5**

Band	BW	Channel #	Freq (MHz)	% RB Allocation	RB Position	QPSK			16 QAM		
						Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)	Factory Upper Tolerance (dBm)	M P R	Measured Output Power (dBm)
LTE71	20 MHz	133297	680.5	1RB Low	1 Pos 0	19.00	0	17.91	19.00	1	17.30
				1RB Mid	1 Pos 50	19.00	0	18.07	19.00	1	17.47
				1RB High	1 Pos 99	19.00	0	18.08	19.00	1	17.51
				50% RB Low	50 Pos 0	19.00	1	16.95	19.00	2	15.94
				50% RB Mid	50 Pos 24	19.00	1	17.02	19.00	2	16.00
				50% RB High	50 Pos 50	19.00	1	16.94	19.00	2	15.92
	15 MHz	133297	680.5	100% RB	100 Pos 0	19.00	1	16.93	19.00	2	15.90
				1RB Low	1 Pos 0	19.00	0	17.93	19.00	1	17.26
				1RB Mid	1 Pos 50	19.00	0	17.94	19.00	1	17.30
				1RB High	1 Pos 99	19.00	0	17.97	19.00	1	17.44
				50% RB Low	50 Pos 0	19.00	1	16.99	19.00	2	16.02
				50% RB Mid	50 Pos 24	19.00	1	16.96	19.00	2	16.01
	10 MHz	133172	668	50% RB High	50 Pos 50	19.00	1	17.01	19.00	2	16.09
				100% RB	100 Pos 0	19.00	1	17.01	19.00	2	16.04
				1RB Low	1 Pos 0	19.00	0	18.03	19.00	1	17.45
				1RB Mid	1 Pos 50	19.00	0	18.10	19.00	1	17.48
				1RB High	1 Pos 99	19.00	0	18.09	19.00	1	17.52
				50% RB Low	50 Pos 0	19.00	1	17.14	19.00	2	16.19
		133297	680.5	50% RB Mid	50 Pos 24	19.00	1	17.10	19.00	2	16.16
				50% RB High	50 Pos 50	19.00	1	17.16	19.00	2	16.22
				100% RB	100 Pos 0	19.00	1	17.19	19.00	2	16.17
				1RB Low	1 Pos 0	19.00	0	18.09	19.00	1	17.04
				1RB Mid	1 Pos 38	19.00	0	18.20	19.00	1	17.13
				1RB High	1 Pos 74	19.00	0	18.15	19.00	1	17.12
		133422	693	50% RB Low	38 Pos 0	19.00	1	17.18	19.00	2	16.28
				50% RB Mid	38 Pos 19	19.00	1	17.15	19.00	2	16.24
				50% RB High	38 Pos 39	19.00	1	17.10	19.00	2	16.22
				100% RB	75 Pos 0	19.00	1	17.21	19.00	2	16.18
				1RB Low	1 Pos 0	19.00	0	18.04	19.00	1	17.06
				1RB Mid	1 Pos 38	19.00	0	18.06	19.00	1	17.05
	5 MHz	133147	665.5	1RB High	1 Pos 74	19.00	0	18.06	19.00	1	17.08
				50% RB Low	38 Pos 0	19.00	1	17.11	19.00	2	16.17
				50% RB Mid	38 Pos 19	19.00	1	17.11	19.00	2	16.21
				50% RB High	38 Pos 39	19.00	1	17.10	19.00	2	16.20
				100% RB	75 Pos 0	19.00	1	17.11	19.00	2	16.10
				1RB Low	1 Pos 0	19.00	0	18.06	19.00	1	17.17
		133297	680.5	1RB Mid	1 Pos 24	19.00	0	18.06	19.00	1	17.20
				1RB High	1 Pos 49	19.00	0	18.12	19.00	1	17.26
				50% RB Low	25 Pos 0	19.00	1	16.99	19.00	2	16.01
				50% RB Mid	25 Pos 12	19.00	1	17.04	19.00	2	16.09
				50% RB High	25 Pos 24	19.00	1	17.05	19.00	2	16.07
				100% RB	50 Pos 0	19.00	1	17.01	19.00	2	15.96
		133447	695.5	1RB Low	1 Pos 0	19.00	0	18.19	19.00	1	17.28
				1RB Mid	1 Pos 24	19.00	0	18.24	19.00	1	17.35
				1RB High	1 Pos 49	19.00	0	18.21	19.00	1	17.34
				50% RB Low	25 Pos 0	19.00	1	17.14	19.00	2	16.18
				50% RB Mid	25 Pos 12	19.00	1	17.09	19.00	2	16.13
				50% RB High	25 Pos 24	19.00	1	17.08	19.00	2	16.16
133447	695.5	100% RB	50 Pos 0	19.00	1	17.13	19.00	2	16.14		
		1RB Low	1 Pos 0	19.00	0	18.09	19.00	1	17.51		
		1RB Mid	1 Pos 24	19.00	0	18.10	19.00	1	17.57		
		1RB High	1 Pos 49	19.00	0	18.10	19.00	1	17.58		
		50% RB Low	25 Pos 0	19.00	1	17.08	19.00	2	16.18		
		50% RB Mid	25 Pos 12	19.00	1	17.05	19.00	2	16.14		
133447	695.5	50% RB High	25 Pos 24	19.00	1	17.05	19.00	2	16.17		
		100% RB	50 Pos 0	19.00	1	17.10	19.00	2	16.15		

### B.2.3 Intra-Band Contiguous

UL CA shall be tested based on the worst-case SAR configuration determined from non-CA SAR testing result. The UL CA mode power measurements represent the total power across both carriers.

According to November 2017 TCB workshop, the following needs to be performed: The maximum measured output power, RB allocation, CC offsets, CC channel BWs, MPR, modulation and other relevant information for all UL CA SAR configurations are required in SAR reports to support the test setup and results, including explanations, call box configurations and certain testing restriction

1) When the maximum output for UL CA is  $\leq$  standalone LTE mode

- The primary carrier is configured according to the highest standalone SAR configuration tested
- The secondary carrier and subsequent CCs are configured according to procedures used for power measurement and parameters similar to that used for the PCC

2) When the Reported SAR for UL CA configuration, is  $> 1.2$  W/kg, UL CA SAR is also required for all the other test channels.

#### B.2.3.1 LTE CA 5B Antenna 5 – Laptop mode:

Band	Modulation / BW	PCC			SCC			Pwr Avg (dBm)	Factory Upper Tolerance (dBm)
		Ch	Freq (MHz)	RB Allocation	Ch	Freq (MHz)	RB Allocation		
LTE 5B	QPSK / 10MHz	26775	822.5	1RB High	20476	831.6	1RB Low	21.39	21.50

#### B.2.3.1 LTE CA 7C Antenna 5 – Tablet mode:

Band	Modulation / BW	PCC			SCC			Pwr Avg (dBm)	Factory Upper Tolerance (dBm)
		Ch	Freq (MHz)	RB Allocation	Ch	Freq (MHz)	RB Allocation		
LTE 41C	QPSK / 20MHz	20850	2510	1RB High	21100	2535	1RB Low	15.93	16.00

#### B.2.3.2 LTE CA 41C Antenna 5 – Tablet mode:

Band	Modulation / BW	PCC			SCC			Pwr Avg (dBm)	Factory Upper Tolerance (dBm)
		Ch	Freq (MHz)	RB Allocation	Ch	Freq (MHz)	RB Allocation		
LTE 41C	QPSK / 20MHz	40521	2583.1	1RB High	40719	2602.9	1RB Low	15.88	16.00

#### B.2.3.3 LTE CA 48C Antenna 8 – Tablet mode:

Band	Modulation / BW	PCC			SCC			Pwr Avg (dBm)	Factory Upper Tolerance (dBm)
		Ch	Freq (MHz)	RB Allocation	Ch	Freq (MHz)	RB Allocation		
LTE 41C	QPSK / 20MHz	55891	3615.1	1RB High	56089	3634.9	1RB Low	14.40	14.50

#### B.2.3.4 LTE CA 66B, 66C Antenna 5 – Laptop mode:

Band	Modulation / BW	PCC			SCC			Pwr Avg (dBm)	Factory Upper Tolerance (dBm)
		Ch	Freq (MHz)	RB Allocation	Ch	Freq (MHz)	RB Allocation		
LTE 66B	QPSK / 10MHz	132373	1750.1	1RB High	132472	1760	1RB Low	20.56	21.00
LTE 66C	QPSK / 20MHz	132323	1745.1	1RB High	132521	1764.9	1RB Low	20.67	21.00

### B.2.4 5G NR (FR1)

#### B.2.4.1 5G NR Band 2 FDD – Laptop / Tablet Modes – Antennas 5

SAR Measurement for 5G NR Band 2 FDD (Frequency range: 1850 – 1910MHz) is covered by 5G NR Band 25 FDD (Frequency range: 1850 – 1915MHz) due to overlapping frequency range, same maximum tune-up and same bandwidth.

#### B.2.4.2 5G NR (FR1) Band 2 FDD – Tablet Mode – Antenna 8

Band	BW	Modulation	Mode	RB Allocation	RB Offset	Factory upper tolerance (dBm)	Measured Output Power (dBm) Antenna 8			
							Frequency (MHz) / Channel			
							1860	1880	1900	
NR2	20	DFS-s OFDM	PI/2 BPSK	1RB Low	0	16.50		15.71		
			QPSK	1RB Low	0	16.50		15.69		
				1RB Mid	50	16.50	15.67	15.90	15.68	
				1RB High	99	16.50		15.75		
				50% RB Low	0	16.50		15.62		
				50% RB Mid	25	16.50	15.70	15.83	15.68	
				50% RB High	49	16.50		15.89		
				100% RB	0	16.50		15.72		
			16QAM	1RB Low	0	16.50		15.89		
			64QAM	1RB Low	0	16.50		15.82		
	256QAM	1RB Low	0	16.50		16.10				
	CP-OFDM	QPSK	1RB Low	0	16.50		15.76			
								Frequency (MHz) / Channel		
								1857.5	1880	1880
								371500	376000	380500
	15	DFS-s OFDM	QPSK	1RB Low	0	16.50		15.72		
				50% RB Low	0	16.50		15.75		
								Frequency (MHz) / Channel		
								1855	1880	1905
								371000	376000	381000
	10	DFS-s OFDM	QPSK	1RB Low	0	16.50		15.64		
				50% RB Low	0	16.50		15.53		
								Frequency (MHz) / Channel		
							1900	1880	1907.5	
							370500	376000	381500	
5	DFS-s OFDM	QPSK	1RB Low	0	16.50		15.82			
			50% RB Low	0	16.50		15.77			



**B.2.4.3 5G NR (FR1) Band 5 FDD – Laptop Mode – Antenna 5**

Band	BW	Modulation	Mode	RB Allocation	RB Offset	Factory upper tolerance (dBm)	Measured Output Power (dBm) Antenna 5			
							Frequency (MHz) / Channel			
							834	836.5	839	
							166800	167300	167800	
NR5	20	DFS-s OFDM	PI/2 BPSK	1RB Low	0	21.00		20.40		
			QPSK	1RB Low	0	21.00		20.34		
				1RB Mid	50	21.00		20.54		
				1RB High	99	21.00		20.40		
				50% RB Low	0	21.00		20.46		
				50% RB Mid	25	21.00		20.54		
				50% RB High	49	21.00		20.54		
				100% RB	0	21.00		20.51		
			16QAM	1RB Low	0	21.00		20.62		
			64QAM	1RB Low	0	21.00		20.62		
			256QAM	1RB Low	0	21.00		20.42		
			CP-OFDM	QPSK	1RB Low	0	21.00		20.48	
								Frequency (MHz) / Channel		
								831.5	836.5	841.5
								166300	167300	168300
	15	DFS-s OFDM	QPSK	1RB Low	0	21.00		20.49		
				50% RB Low	0	21.00		20.54		
								Frequency (MHz) / Channel		
								829	836.5	844
								165800	167300	168800
	10	DFS-s OFDM	QPSK	1RB Low	0	21.00		20.31		
				50% RB Low	0	21.00		20.35		
								Frequency (MHz) / Channel		
								826.5	836.5	846.5
								165300	167300	169300
	5	DFS-s OFDM	QPSK	1RB Low	0	21.00		20.52		
				50% RB Low	0	21.00		20.58		

**B.2.4.4 5G NR (FR1) Band 5 FDD – Tablet Mode – Antenna 5**

Band	BW	Modulation	Mode	RB Allocation	RB Offset	Factory upper tolerance (dBm)	Measured Output Power (dBm) Antenna 5			
							Frequency (MHz) / Channel			
							834	836.5	839	
							166800	167300	167800	
NR5	20	DFS-s OFDM	PI/2 BPSK	1RB Low	0	19.00		17.88		
			QPSK	1RB Low	0	19.00		17.93		
				1RB Mid	50	19.00		17.82		
				1RB High	99	19.00		17.75		
				50% RB Low	0	19.00		17.96		
				50% RB Mid	25	19.00		17.91		
				50% RB High	49	19.00		17.84		
				100% RB	0	19.00		17.94		
			16QAM	1RB Low	0	19.00		17.74		
			64QAM	1RB Low	0	19.00		18.28		
	256QAM	1RB Low	0	19.00		17.82				
	CP-OFDM	QPSK	1RB Low	0	19.00		17.99			
								Frequency (MHz) / Channel		
								831.5	836.5	841.5
								166300	167300	168300
	15	DFS-s OFDM	QPSK	1RB Low	0	19.00		17.92		
				50% RB Low	0	19.00		17.96		
								Frequency (MHz) 23.45 / Channel		
								829	836.5	844
								165800	167300	168800
	10	DFS-s OFDM	QPSK	1RB Low	0	19.00		17.76		
				50% RB Low	0	19.00		17.84		
								Frequency (MHz) / Channel		
								826.5	836.5	846.5
							165300	167300	169300	
5	DFS-s OFDM	QPSK	1RB Low	0	19.00		17.87			
			50% RB Low	0	19.00		17.98			

**B.2.4.5 5G NR (FR1) Band 7 FDD – Laptop Mode – Antenna 5**

Band	BW	Modulation	Mode	RB Allocation	RB Offset	Factory upper tolerance (dBm)	Measured Output Power (dBm) Antenna 5			
							Frequency (MHz) / Channel			
							2510	2535	2560	
							502000	507000	512000	
NR7	20	DFS-s OFDM	PI/2 BPSK	1RB Low	0	19.00		18.49		
			QPSK	1RB Low	0	19.00		18.51		
				1RB Mid	50	19.00		18.45		
				1RB High	99	19.00		18.53		
				50% RB Low	0	19.00		18.58		
				50% RB Mid	25	19.00		18.61		
				50% RB High	49	19.00		18.65		
				100% RB	0	19.00		18.57		
			16QAM	1RB Low	0	19.00		18.26		
			64QAM	1RB Low	0	19.00		18.94		
	256QAM	1RB Low	0	19.00		18.39				
	CP-OFDM	QPSK	1RB Low	0	19.00		18.48			
								Frequency (MHz) / Channel		
								2507.5	2535	2562.5
								501500	507000	512500
	15	DFS-s OFDM	QPSK	1RB Low	0	19.00		18.42		
				50% RB Low	0	19.00		18.47		
								Frequency (MHz) / Channel		
								2505	2535	2565
								501000	507000	513000
	10	DFS-s OFDM	QPSK	1RB Low	0	19.00		18.30		
				50% RB Low	0	19.00		18.31		
								Frequency (MHz) / Channel		
								2502.5	2535	2567.5
								500500	507000	513500
	5	DFS-s OFDM	QPSK	1RB Low	0	19.00		18.44		
				50% RB Low	0	19.00		18.48		

**B.2.4.6 5G NR (FR1) Band 7 FDD – Tablet Mode – Antenna 5**

Band	BW	Modulation	Mode	RB Allocation	RB Offset	Factory upper tolerance (dBm)	Measured Output Power (dBm) Antenna 5		
							Frequency (MHz) / Channel		
							2510	2535	2560
							502000	507000	512000
NR7	20	DFS-s OFDM	PI/2 BPSK	1RB Low	0	16.00		15.06	
			QPSK	1RB Low	0	16.00		15.10	
				1RB Mid	50	16.00		15.11	
				1RB High	99	16.00		15.03	
				50% RB Low	0	16.00		15.22	
				50% RB Mid	25	16.00		15.20	
				50% RB High	49	16.00		15.21	
				100% RB	0	16.00		15.20	
			16QAM	1RB Low	0	16.00		14.93	
			64QAM	1RB Low	0	16.00		15.40	
	256QAM	1RB Low	0	16.00		15.10			
	CP-OFDM	QPSK	1RB Low	0	16.00		15.17		
							Frequency (MHz) / Channel		
							2507.5	2535	2562.5
							501500	507000	512500
	15	DFS-s OFDM	QPSK	1RB Low	0	16.00		15.10	
				50% RB Low	0	16.00		15.23	
							Frequency (MHz) / Channel		
							2505	2535	2565
							501000	507000	513000
	10	DFS-s OFDM	QPSK	1RB Low	0	16.00		15.01	
				50% RB Low	0	16.00		15.00	
							Frequency (MHz) / Channel		
							2502.5	2535	2567.5
						500500	507000	513500	
5	DFS-s OFDM	QPSK	1RB Low	0	16.00		15.09		
			50% RB Low	0	16.00		15.22		

**B.2.4.7 5G NR (FR1) Band 25 FDD – Laptop Mode – Antenna 5**

Band	BW	Modulation	Mode	RB Allocation	RB Offset	Factory upper tolerance (dBm)	Measured Output Power (dBm) Antenna 5			
							Frequency (MHz) / Channel			
							1860	1882.5	1905	
							372000	376500	381000	
NR25	20	DFS-s OFDM	PI/2 BPSK	1RB Low	0	20.50		19.52		
			QPSK	1RB Low	0	20.50		19.57		
				1RB Mid	50	20.50		19.71		
				1RB High	99	20.50		19.62		
				50% RB Low	0	20.50		19.63		
				50% RB Mid	25	20.50		19.78		
				50% RB High	49	20.50		19.77		
				100% RB	0	20.50		19.75		
			16QAM	1RB Low	0	20.50		19.59		
			64QAM	1RB Low	0	20.50		19.55		
	256QAM	1RB Low	0	20.50		19.84				
	CP-OFDM	QPSK	1RB Low	0	20.50		19.60			
								Frequency (MHz) / Channel		
								1857.5	1882.5	1907.5
								371500	376500	381500
	15	DFS-s OFDM	QPSK	1RB Low	0	20.50		19.63		
				50% RB Low	0	20.50		19.67		
								Frequency (MHz) / Channel		
								1855	1882.5	1910
								371000	376500	382000
	10	DFS-s OFDM	QPSK	1RB Low	0	20.50		19.51		
				50% RB Low	0	20.50		19.56		
								Frequency (MHz) / Channel		
								1852.5	1882.5	1912.5
							370500	376500	382500	
5	DFS-s OFDM	QPSK	1RB Low	0	20.50		19.69			
			50% RB Low	0	20.50		19.78			

**B.2.4.8 5G NR (FR1) Band 25 FDD – Tablet Mode – Antenna 5**

Band	BW	Modulation	Mode	RB Allocation	RB Offset	Factory upper tolerance (dBm)	Measured Output Power (dBm) Antenna 5			
							Frequency (MHz) / Channel			
							1860	1882.5	1905	
							372000	376500	381000	
NR25	20	DFS-s OFDM	PI/2 BPSK	1RB Low	0	16.50		15.48		
			QPSK	1RB Low	0	16.50		15.47		
				1RB Mid	50	16.50		15.56		
				1RB High	99	16.50		15.39		
				50% RB Low	0	16.50		15.38		
				50% RB Mid	25	16.50		15.68		
				50% RB High	49	16.50		15.61		
				100% RB	0	16.50		15.51		
			16QAM	1RB Low	0	16.50		15.35		
			64QAM	1RB Low	0	16.50		15.76		
	256QAM	1RB Low	0	16.50		15.48				
	CP-OFDM	QPSK	1RB Low	0	16.50		15.59			
								Frequency (MHz) / Channel		
								1857.5	1882.5	1907.5
								371500	376500	381500
	15	DFS-s OFDM	QPSK	1RB Low	0	16.50		15.58		
				50% RB Low	0	16.50		15.62		
								Frequency (MHz) / Channel		
								1855	1882.5	1910
								371000	376500	382000
	10	DFS-s OFDM	QPSK	1RB Low	0	16.50		15.42		
				50% RB Low	0	16.50		15.46		
								Frequency (MHz) / Channel		
								1852.5	1882.5	1912.5
							370500	376500	382500	
5	DFS-s OFDM	QPSK	1RB Low	0	16.50		15.54			
			50% RB Low	0	16.50		15.63			

**B.2.4.9 5G NR (FR1) Band 30 FDD – Laptop Mode – Antenna 5**

Band	BW	Modulation	Mode	RB Allocation	RB Offset	Factory upper tolerance (dBm)	Measured Output Power (dBm) Antenna 5		
							Frequency (MHz) / Channel		
NR30	10	DFS-s OFDM	PI/2 BPSK	1RB Low	0	18.50		2310	
			QPSK	1RB Low	0	18.50		46200	
				1RB Mid	25	18.50		18.04	
				1RB High	49	18.50		18.11	
				50% RB Low	0	18.50		17.59	
				50% RB Mid	12	18.50		18.05	
				50% RB High	25	18.50		18.03	
				100% RB	0	18.50		17.69	
			16QAM	1RB Low	0	18.50		17.94	
			64QAM	1RB Low	0	18.50		17.67	
			256QAM	1RB Low	0	18.50		18.12	
			CP-OFDM	QPSK	1RB Low	0		18.50	
							18.14		
							18.26		
								Frequency (MHz) / Channel	
							2310		
							46200		
							18.25		
							18.26		
	5	DFS-s OFDM	QPSK	1RB Low	0	18.50			
				50% RB Low	0	18.50			

**B.2.4.10 5G NR (FR1) Band 30 FDD – Tablet Mode – Antenna 5**

Band	BW	Modulation	Mode	RB Allocation	RB Offset	Factory upper tolerance (dBm)	Measured Output Power (dBm) Antenna 5				
							Frequency (MHz) / Channel				
NR30	10	DFS-s OFDM	PI/2 BPSK	1RB Low	0	16.50	2310	46200	15.40		
			QPSK	1RB Low	0	16.50				15.40	
				1RB Mid	25	16.50				15.44	
				1RB High	49	16.50				15.44	
				50% RB Low	0	16.50				15.25	
				50% RB Mid	12	16.50				15.49	
				50% RB High	25	16.50				15.38	
				100% RB	0	16.50				15.34	
				16QAM	1RB Low	0				16.50	15.24
			64QAM	1RB Low	0	16.50				15.74	
			256QAM	1RB Low	0	16.50				15.40	
			CP-OFDM	QPSK	1RB Low	0				16.50	15.48
										Frequency (MHz) / Channel	
								2310			
							46200				
5	DFS-s OFDM	QPSK	1RB Low	0	16.50	15.52					
			50% RB Low	0	16.50		15.66				

**B.2.4.11 5G NR (FR1) Band 38 TDD – Antennas 5 and 8**

SAR Measurement for Band NR 38 TDD (FCC Frequency range: 2570 – 2620MHz) is covered by Band NR41 TDD (FCC Frequency range: 2496 – 2690MHz) due to overlapping frequency range, same maximum tune-up and same bandwidth.



**B.2.4.12 5G NR (FR1) Band 41 TDD – Laptop Mode – Antenna 5**

Band	BW	Modulation	Mode	RB Allocation	RB Offset	Factory upper tolerance (dBm)	Measured Output Power (dBm) Antenna 5						
							Frequency (MHz) / Channel						
							2546	2569.5	2593	2616.5	2640		
NR41	100	DFS-s OFDM	PI/2 BPSK	1RB Low	0	18.00	509200	513900	518600	523300	528000		
			QPSK	1RB Low	0	18.00			16.78				
				1RB Mid	136	18.00			16.88				
				1RB High	270	18.00			17.76				
				50% RB Low	0	18.00			17.68				
				50% RB Mid	68	18.00			17.56				
				50% RB High	137	18.00			17.49				
				100% RB	0	18.00			18.00				
			16QAM	1RB Low	0	18.00			17.78				
			64QAM	1RB Low	0	18.00			16.76				
			256QAM	1RB Low	0	18.00			16.69				
	CP-OFDM	QPSK	1RB Low	0	18.00			16.69					
								16.73					
								Frequency (MHz) / Channel					
								2541	2567	2593	2619	2645	
								508200	513400	518600	523800	529000	
	90	DFS-s OFDM	QPSK	1RB Low	0	18.00			16.80				
				50% RB Low	0	18.00			17.34				
									Frequency (MHz) / Channel				
								2536	2564.5	2593	2621.5	2650	
								507200	512900	518600	524300	530000	
	80	DFS-s OFDM	QPSK	1RB Low	0	18.00			16.83				
				50% RB Low	0	18.00			17.39				
									Frequency (MHz) / Channel				
								2526	2559.5	2593	2626.5	2660	
								505200	511900	518600	525300	532000	
	60	DFS-s OFDM	QPSK	1RB Low	0	18.00			17.15				
				50% RB Low	0	18.00			17.65				
								Frequency (MHz) / Channel					
							2521	2557	2593	2629	2665		
							504200	511400	518600	525800	5330000		
50	DFS-s OFDM	QPSK	1RB Low	0	18.00			17.21					
			50% RB Low	0	18.00			17.69					
								Frequency (MHz) / Channel					
							2516	2554.5	2593	2631.5	2670		
							503200	510900	518600	526300	534000		
40	DFS-s OFDM	QPSK	1RB Low	0	18.00			17.02					
			50% RB Low	0	18.00			17.60					
								Frequency (MHz) / Channel					
							2506	2549.5	2593	2636.5	2680		
							501200	509900	518600	527300	536000		
20	DFS-s OFDM	QPSK	1RB Low	0	18.00			17.48					
			50% RB Low	0	18.00			17.85					

**B.2.4.13 5G NR (FR1) Band 41 TDD – Tablet Mode – Antenna 5**

Band	BW	Modulation	Mode	RB Allocation	RB Offset	Factory upper tolerance (dBm)	Measured Output Power (dBm) Antenna 8					
							Frequency (MHz) / Channel					
							2546	2569.5	2593	2616.5	2640	
NR41	100	DFS-s OFDM	PI/2 BPSK	1RB Low	0	16.00	509200	513900	518600	523300	528000	
			QPSK	1RB Low	0	16.00			14.52			
				1RB Mid	136	16.00			14.60			
				1RB High	270	16.00			15.53			
				50% RB Low	0	16.00			15.97			
				50% RB Mid	68	16.00			15.20			
				50% RB High	137	16.00			15.69			
				100% RB	0	16.00			15.99			
			16QAM	1RB Low	0	16.00			15.61			
			64QAM	1RB Low	0	16.00			14.76			
			256QAM	1RB Low	0	16.00			14.81			
			14.62									
			CP-OFDM	QPSK	1RB Low	0	16.00			15.44		
										Frequency (MHz) / Channel		
								2541	2567	2593	2619	2645
								508200	513400	518600	523800	529000
	90	DFS-s OFDM	QPSK	1RB Low	0	16.00			14.44			
				50% RB Low	0	16.00			15.09			
								Frequency (MHz) / Channel				
								2536	2564.5	2593	2621.5	2650
								507200	512900	518600	524300	530000
	80	DFS-s OFDM	QPSK	1RB Low	0	16.00			14.57			
				50% RB Low	0	16.00			15.26			
								Frequency (MHz) / Channel				
								2526	2559.5	2593	2626.5	2660
								505200	511900	518600	525300	532000
	60	DFS-s OFDM	QPSK	1RB Low	0	16.00			14.96			
				50% RB Low	0	16.00			15.25			
							Frequency (MHz) / Channel					
							2521	2557	2593	2629	2665	
							504200	511400	518600	525800	5330000	
50	DFS-s OFDM	QPSK	1RB Low	0	16.00			15.07				
			50% RB Low	0	16.00			14.79				
							Frequency (MHz) / Channel					
							2516	2554.5	2593	2631.5	2670	
							503200	510900	518600	526300	534000	
40	DFS-s OFDM	QPSK	1RB Low	0	16.00			14.13				
			50% RB Low	0	16.00			14.68				
							Frequency (MHz) / Channel					
							2506	2549.5	2593	2636.5	2680	
							501200	509900	518600	527300	536000	
20	DFS-s OFDM	QPSK	1RB Low	0	16.00			14.79				
			50% RB Low	0	16.00			14.88				

**B.2.4.14 5G NR (FR1) Band 41 TDD – Tablet Mode – Antenna 8**

Band	BW	Modulation	Mode	RB Allocation	RB Offset	Factory upper tolerance (dBm)	Measured Output Power (dBm) Antenna 8					
							Frequency (MHz) / Channel					
							2546	2569.5	2593	2616.5	2640	
NR41	100	DFS-s OFDM	PI/2 BPSK	1RB Low	0	18.50	509200	513900	518600	523300	528000	
			QPSK	1RB Low	0	18.50			16.99			
				1RB Mid	136	18.50			17.71			
				1RB High	270	18.50			17.22			
				50% RB Low	0	18.50			17.67			
				50% RB Mid	68	18.50			17.81			
				50% RB High	137	18.50			17.80			
				100% RB	0	18.50			17.66			
			16QAM	1RB Low	0	18.50			17.22			
			64QAM	1RB Low	0	18.50			17.21			
			256QAM	1RB Low	0	18.50			17.21			
			CP-OFDM	QPSK	1RB Low	0	18.50			18.04		
										Frequency (MHz) / Channel		
								2541	2567	2593	2619	2645
								508200	513400	518600	523800	529000
	90	DFS-s OFDM	QPSK	1RB Low	0	18.50			17.13			
				50% RB Low	0	18.50			17.54			
								Frequency (MHz) / Channel				
								2536	2564.5	2593	2621.5	2650
								507200	512900	518600	524300	530000
	80	DFS-s OFDM	QPSK	1RB Low	0	18.50			17.16			
				50% RB Low	0	18.50			17.59			
								Frequency (MHz) / Channel				
								2526	2559.5	2593	2626.5	2660
								505200	511900	518600	525300	532000
	60	DFS-s OFDM	QPSK	1RB Low	0	18.50			17.45			
				50% RB Low	0	18.50			17.75			
								Frequency (MHz) / Channel				
							2521	2557	2593	2629	2665	
							504200	511400	518600	525800	5330000	
50	DFS-s OFDM	QPSK	1RB Low	0	18.50			17.44				
			50% RB Low	0	18.50			17.71				
							Frequency (MHz) / Channel					
							2516	2554.5	2593	2631.5	2670	
							503200	510900	518600	526300	534000	
40	DFS-s OFDM	QPSK	1RB Low	0	18.50			17.28				
			50% RB Low	0	18.50			17.78				
							Frequency (MHz) / Channel					
							2506	2549.5	2593	2636.5	2680	
							501200	509900	518600	527300	536000	
20	DFS-s OFDM	QPSK	1RB Low	0	18.50			17.66				
			50% RB Low	0	18.50			17.77				

**B.2.4.15 5G NR (FR1) Band 66 FDD – Laptop Mode – Antenna 5**

Band	BW	Modulation	Mode	RB Allocation	RB Offset	Factory upper tolerance (dBm)	Measured Output Power (dBm) Antenna 5			
							Frequency (MHz) / Channel			
							1730	1745	1760	
NR66	40	DFS-s OFDM	PI/2 BPSK	1RB Low	0	20.00	346000	349000	352000	
			QPSK	1RB Low	0	20.00				19.22
				1RB Mid	136	20.00				19.23
				1RB High	270	20.00				19.80
				50% RB Low	0	20.00				19.11
				50% RB Mid	68	20.00				19.52
				50% RB High	137	20.00				19.81
				100% RB	0	20.00				19.38
			16QAM	1RB Low	0	20.00				19.55
			64QAM	1RB Low	0	20.00				19.29
			256QAM	1RB Low	0	20.00				19.10
			CP-OFDM	QPSK	1RB Low	0				20.00
								Frequency (MHz) / Channel		
								1725	1745	1765
								345000	349000	353000
	30	DFS-s OFDM	QPSK	1RB Low	0	20.00				
				50% RB Low	0	20.00				19.45
								Frequency (MHz) / Channel		
								1720	1745	1770
								344000	349000	354000
	20	DFS-s OFDM	QPSK	1RB Low	0	20.00				
				50% RB Low	0	20.00				19.60
								Frequency (MHz) / Channel		
								1717.5	1745	1772.5
								343500	349000	354500
	15	DFS-s OFDM	QPSK	1RB Low	0	20.00				
				50% RB Low	0	20.00				19.64
								Frequency (MHz) / Channel		
							1715	1745	1775	
							343000	349000	355000	
10	DFS-s OFDM	QPSK	1RB Low	0	20.00					
			50% RB Low	0	20.00				19.54	
							Frequency (MHz) / Channel			
							1712.5	1745	1745	
							342500	349000	355500	
5	DFS-s OFDM	QPSK	1RB Low	0	20.00					
			50% RB Low	0	20.00				19.63	
							Frequency (MHz) / Channel			
							1712.5	1745	1745	
							342500	349000	355500	
							Frequency (MHz) / Channel			
							1712.5	1745	1745	
							342500	349000	355500	
							Frequency (MHz) / Channel			
							1712.5	1745	1745	
							342500	349000	355500	

**B.2.5 5G NR (FR1) Band 66 FDD – Tablet Mode – Antenna 5**

Band	BW	Modulation	Mode	RB Allocation	RB Offset	Factory upper tolerance (dBm)	Measured Output Power (dBm) Antenna 5			
							Frequency (MHz) / Channel			
							1730	1745	1760	
NR66	40	DFS-s OFDM	PI/2 BPSK	1RB Low	0	16.50	346000	349000	352000	
			QPSK	1RB Low	0	16.50				15.50
				1RB Mid	136	16.50				15.48
				1RB High	270	16.50				15.85
				50% RB Low	0	16.50				15.37
				50% RB Mid	68	16.50				15.66
				50% RB High	137	16.50				15.80
				100% RB	0	16.50				15.45
			16QAM	1RB Low	0	16.50				15.53
			64QAM	1RB Low	0	16.50				15.57
	256QAM	1RB Low	0	16.50	15.59					
	CP-OFDM	QPSK	1RB Low	0	16.50	15.40				
								Frequency (MHz) / Channel		
								1725	1745	1765
								345000	349000	353000
	30	DFS-s OFDM	QPSK	1RB Low	0	16.50		15.66		
				50% RB Low	0	16.50				15.72
								Frequency (MHz) / Channel		
								1720	1745	1770
								344000	349000	354000
	20	DFS-s OFDM	QPSK	1RB Low	0	16.50		15.78		
				50% RB Low	0	16.50				15.68
								Frequency (MHz) / Channel		
								1717.5	1745	1772.5
								343500	349000	354500
	15	DFS-s OFDM	QPSK	1RB Low	0	16.50		15.87		
				50% RB Low	0	16.50				15.71
								Frequency (MHz) / Channel		
								1715	1745	1775
								343000	349000	355000
10	DFS-s OFDM	QPSK	1RB Low	0	16.50		15.71			
			50% RB Low	0	16.50				15.57	
							Frequency (MHz) / Channel			
							1712.5	1745	1745	
							342500	349000	355500	
5	DFS-s OFDM	QPSK	1RB Low	0	16.50		15.79			
			50% RB Low	0	16.50				15.79	

**B.2.5.1 5G NR (FR1) Band 66 FDD – Tablet Mode – Antenna 8**

Band	BW	Modulation	Mode	RB Allocation	RB Offset	Factory upper tolerance (dBm)	Measured Output Power (dBm) Antenna 8			
							Frequency (MHz) / Channel			
							1730	1745	1760	
NR66	40	DFS-s OFDM	PI/2 BPSK	1RB Low	0	16.50	346000	349000	352000	
			QPSK	1RB Low	0	16.50		15.62		
				1RB Mid	136	16.50		15.59		
				1RB High	270	16.50		15.98		
				50% RB Low	0	16.50		15.44		
				50% RB Mid	68	16.50		15.75		
				50% RB High	137	16.50		15.97		
				100% RB	0	16.50		15.60		
			16QAM	1RB Low	0	16.50		15.69		
			64QAM	1RB Low	0	16.50		15.88		
			256QAM	1RB Low	0	16.50		15.86		
			CP-OFDM	QPSK	1RB Low	0	16.50		16.13	
							15.75			
							Frequency (MHz) / Channel			
							1725	1745	1765	
							345000	349000	353000	
		30	DFS-s OFDM	QPSK	1RB Low	0	16.50		15.76	
	50% RB Low				0	16.50		15.90		
							Frequency (MHz) / Channel			
							1720	1745	1770	
							344000	349000	354000	
		20	DFS-s OFDM	QPSK	1RB Low	0	16.50		15.85	
	50% RB Low				0	16.50		15.89		
							Frequency (MHz) / Channel			
							1717.5	1745	1772.5	
							343500	349000	354500	
		15	DFS-s OFDM	QPSK	1RB Low	0	16.50		15.95	
	50% RB Low				0	16.50		16.00		
							Frequency (MHz) / Channel			
							1715	1745	1775	
							343000	349000	355000	
		10	DFS-s OFDM	QPSK	1RB Low	0	16.50		15.80	
50% RB Low	0				16.50		15.79			
						Frequency (MHz) / Channel				
						1712.5	1745	1745		
						342500	349000	355500		
	5	DFS-s OFDM	QPSK	1RB Low	0	16.50		15.89		
50% RB Low				0	16.50		16.03			

**B.2.5.1 5G NR (FR1) Band 71 FDD – Laptop Mode – Antenna 5**

Band	BW	Modulation	Mode	RB Allocation	RB Offset	Factory upper tolerance (dBm)	Measured Output Power (dBm) Antenna 5			
							Frequency (MHz) / Channel			
							673.0	680.5	688.0	
							134600	136100	137600	
NR71	20	DFS-s OFDM	PI/2 BPSK	1RB Low	0	21.50		21.27		
			QPSK	1RB Low	0	21.50		21.24		
				1RB Mid	50	21.50		21.50		
				1RB High	99	21.50		21.36		
				50% RB Low	0	21.50		21.43		
				50% RB Mid	25	21.50		21.50		
				50% RB High	49	21.50		21.50		
				100% RB	0	21.50		21.50		
			16QAM	1RB Low	0	21.50		21.36		
			64QAM	1RB Low	0	21.50		21.30		
	256QAM	1RB Low	0	21.50		21.37				
	CP-OFDM	QPSK	1RB Low	0	21.50		21.28			
								Frequency (MHz) / Channel		
								670.5	680.5	690.5
								134100	136100	138100
	15	DFS-s OFDM	QPSK	1RB Low	0	21.50		21.43		
				50% RB Low	0	21.50		21.50		
								Frequency (MHz) / Channel		
								668.0	680.5	693.0
								133600	136100	138600
	10	DFS-s OFDM	QPSK	1RB Low	0	21.50		21.34		
				50% RB Low	0	21.50		21.28		
								Frequency (MHz) / Channel		
								665.5	680.5	695.5
								133100	136100	139100
	5	DFS-s OFDM	QPSK	1RB Low	0	21.50		21.50		
				50% RB Low	0	21.50		21.46		

**B.2.5.2 5G NR (FR1) Band 71 FDD – Tablet Mode – Antenna 5**

Band	BW	Modulation	Mode	RB Allocation	RB Offset	Factory upper tolerance (dBm)	Measured Output Power (dBm) Antenna 5			
							Frequency (MHz) / Channel			
							673.0	680.5	688.0	
NR71	20	DFS-s OFDM	PI/2 BPSK	1RB Low	0	19.00	134600	136100	137600	
			QPSK	1RB Low	0	19.00		18.77		
				1RB Mid	50	19.00		18.73		
				1RB High	99	19.00		18.96		
				50% RB Low	0	19.00		18.84		
				50% RB Mid	25	19.00		18.90		
				50% RB High	49	19.00		19.00		
				100% RB	0	19.00		18.89		
			16QAM	1RB Low	0	19.00		18.80		
			64QAM	1RB Low	0	19.00		18.81		
	256QAM	1RB Low	0	19.00		18.87				
	CP-OFDM	QPSK	1RB Low	0	19.00		18.72			
								Frequency (MHz) / Channel		
								670.5	680.5	690.5
								134100	136100	138100
	15	DFS-s OFDM	QPSK	1RB Low	0	19.00		18.97		
				50% RB Low	0	19.00		19.00		
								Frequency (MHz) / Channel		
								668.0	680.5	693.0
								133600	136100	138600
	10	DFS-s OFDM	QPSK	1RB Low	0	19.00		18.80		
				50% RB Low	0	19.00		18.77		
								Frequency (MHz) / Channel		
							665.5	680.5	695.5	
							133100	136100	139100	
5	DFS-s OFDM	QPSK	1RB Low	0	19.00		18.99			
			50% RB Low	0	19.00		18.93			



**B.2.5.3 5G NR (FR1) Band 77 TDD – Laptop Mode – Antenna 5**

Band	BW	Modulation	Mode	RB Allocation	RB Offset	Factory upper tolerance (dBm)	Measured Output Power (dBm) Antenna 5					
							Frequency (MHz) / Channel					
							3840	3795	3750	3885	3930	
NR77	100	DFS-s OFDM	PI/2 BPSK	1RB Low	0	18.50			16.62			
			QPSK	1RB Low	0	18.50			16.63			
				1RB Mid	136	18.50			17.22			
				1RB High	270	18.50			16.58			
				50% RB Low	0	18.50			17.36			
				50% RB Mid	68	18.50			17.49			
				50% RB High	137	18.50			17.32			
				100% RB	0	18.50			17.33			
			16QAM	1RB Low	0	18.50			16.87			
			64QAM	1RB Low	0	18.50			16.94			
	256QAM	1RB Low	0	18.50			16.50					
	CP-OFDM	QPSK	1RB Low	0	18.50			16.86				
								Frequency (MHz) / Channel				
								3840	3795	3750	3885	3930
								656600	653000	650000	659000	662000
	90	DFS-s OFDM	QPSK	1RB Low	0	18.50			16.77			
				50% RB Low	0	18.50			17.21			
								Frequency (MHz) / Channel				
								3840	3795	3750	3885	3930
								656600	653000	650000	659000	662000
80	DFS-s OFDM	QPSK	1RB Low	0	18.50			16.85				
			50% RB Low	0	18.50			17.21				
							Frequency (MHz) / Channel					
							3840	3795	3750	3885	3930	
							656600	653000	650000	659000	662000	
60	DFS-s OFDM	QPSK	1RB Low	0	18.50			16.95				
			50% RB Low	0	18.50			17.29				
							Frequency (MHz) / Channel					
							3840	3795	3750	3885	3930	
							656600	653000	650000	659000	662000	
50	DFS-s OFDM	QPSK	1RB Low	0	18.50			16.98				
			50% RB Low	0	18.50			17.33				
							Frequency (MHz) / Channel					
							3840	3795	3750	3885	3930	
							656600	653000	650000	659000	662000	
40	DFS-s OFDM	QPSK	1RB Low	0	18.50			16.76				
			50% RB Low	0	18.50			17.16				
							Frequency (MHz) / Channel					
							3840	3795	3750	3885	3930	
							656600	653000	650000	659000	662000	
20	DFS-s OFDM	QPSK	1RB Low	0	18.50			16.99				
			50% RB Low	0	18.50			17.32				

**B.2.5.4 5G NR (FR1) Band 77 TDD – Tablet Mode – Antenna 5**

Band	BW	Modulation	Mode	RB Allocation	RB Offset	Factory upper tolerance (dBm)	Measured Output Power (dBm) Antenna 5					
							Frequency (MHz) / Channel					
							3840	3795	3750	3885	3930	
NR77	100	DFS-s OFDM	PI/2 BPSK	1RB Low	0	15.00			13.27			
			QPSK	1RB Low	0	15.00			13.23			
				1RB Mid	136	15.00			13.83			
				1RB High	270	15.00			13.32			
				50% RB Low	0	15.00			13.79			
				50% RB Mid	68	15.00			13.99			
				50% RB High	137	15.00			13.85			
				100% RB	0	15.00			13.81			
			16QAM	1RB Low	0	15.00			13.29			
			64QAM	1RB Low	0	15.00			13.41			
	256QAM	1RB Low	0	15.00			13.16					
	CP-OFDM	QPSK	1RB Low	0	15.00			13.28				
								Frequency (MHz) / Channel				
								3840	3795	3750	3885	3930
								656600	653000	650000	659000	662000
	90	DFS-s OFDM	QPSK	1RB Low	0	15.00			13.39			
				50% RB Low	0	15.00			13.87			
								Frequency (MHz) / Channel				
								3840	3795	3750	3885	3930
								656600	653000	650000	659000	662000
80	DFS-s OFDM	QPSK	1RB Low	0	15.00			13.51				
			50% RB Low	0	15.00			13.99				
							Frequency (MHz) / Channel					
							3840	3795	3750	3885	3930	
							656600	653000	650000	659000	662000	
60	DFS-s OFDM	QPSK	1RB Low	0	15.00			13.62				
			50% RB Low	0	15.00			13.90				
							Frequency (MHz) / Channel					
							3840	3795	3750	3885	3930	
							656600	653000	650000	659000	662000	
50	DFS-s OFDM	QPSK	1RB Low	0	15.00			13.68				
			50% RB Low	0	15.00			13.91				
							Frequency (MHz) / Channel					
							3840	3795	3750	3885	3930	
							656600	653000	650000	659000	662000	
40	DFS-s OFDM	QPSK	1RB Low	0	15.00			13.59				
			50% RB Low	0	15.00			13.90				
							Frequency (MHz) / Channel					
							3840	3795	3750	3885	3930	
							656600	653000	650000	659000	662000	
20	DFS-s OFDM	QPSK	1RB Low	0	15.00			13.99				
			50% RB Low	0	15.00			13.16				

**B.2.5.5 5G NR (FR1) Band 77 TDD – Tablet Mode – Antenna 8**

Band	BW	Modulation	Mode	RB Allocation	RB Offset	Factory upper tolerance (dBm)	Measured Output Power (dBm) Antenna 8					
							Frequency (MHz) / Channel					
							3840	3795	3750	3885	3930	
NR77	100	DFS-s OFDM	PI/2 BPSK	1RB Low	0	14.00			12.73			
			QPSK	1RB Low	0	14.00			12.67			
				1RB Mid	136	14.00			13.17			
				1RB High	270	14.00			12.68			
				50% RB Low	0	14.00			13.17			
				50% RB Mid	68	14.00			13.35			
				50% RB High	137	14.00			13.22			
				100% RB	0	14.00			13.13			
			16QAM	1RB Low	0	14.00			12.90			
			64QAM	1RB Low	0	14.00			12.82			
	256QAM	1RB Low	0	14.00			12.71					
	CP-OFDM	QPSK	1RB Low	0	14.00			12.68				
								Frequency (MHz) / Channel				
								3840	3795	3750	3885	3930
								656600	653000	650000	659000	662000
	90	DFS-s OFDM	QPSK	1RB Low	0	14.00			12.83			
				50% RB Low	0	14.00			13.23			
								Frequency (MHz) / Channel				
								3840	3795	3750	3885	3930
								656600	653000	650000	659000	662000
	80	DFS-s OFDM	QPSK	1RB Low	0	14.00			12.94			
				50% RB Low	0	14.00			13.22			
								Frequency (MHz) / Channel				
								3840	3795	3750	3885	3930
								656600	653000	650000	659000	662000
	60	DFS-s OFDM	QPSK	1RB Low	0	14.00			12.99			
				50% RB Low	0	14.00			13.17			
								Frequency (MHz) / Channel				
							3840	3795	3750	3885	3930	
							656600	653000	650000	659000	662000	
50	DFS-s OFDM	QPSK	1RB Low	0	14.00			13.09				
			50% RB Low	0	14.00			13.28				
							Frequency (MHz) / Channel					
							3840	3795	3750	3885	3930	
							656600	653000	650000	659000	662000	
40	DFS-s OFDM	QPSK	1RB Low	0	14.00			12.85				
			50% RB Low	0	14.00			13.13				
							Frequency (MHz) / Channel					
							3840	3795	3750	3885	3930	
							656600	653000	650000	659000	662000	
20	DFS-s OFDM	QPSK	1RB Low	0	14.00			13.16				
			50% RB Low	0	14.00			13.44				

**B.2.5.6 5G NR (FR1) Band 78 TDD – Antennas 5 and 8**

SAR Measurement for NR Band 78 TDD (Frequency range: 3700 – 3800MHz) is covered by NR Band 77 TDD (Frequency range: 3700 – 3980MHz) due to overlapping frequency range, same maximum tune-up and same bandwidth.

**B.2.5.7 5G NR (FR1) UL Carrier Aggregation**

For NR ULCA mode, each carrier transmits on separate antennas. Each exposure has been measured separately. For each, the highest standalone SAR conditions are added to derive the Total SAR. Refer to paragraph B.5.5

### B.3 Tissue Parameters Measurement

#### Body TSL SAR System 2

Body TSL	Target TSL		Measured TSL		Deviation %		Date
Freq (MHz)	$\epsilon'$ (F/m)	$\sigma$ (S/m)	$\epsilon'$ (F/m)	$\sigma$ (S/m)	Deviation $\epsilon'$	Deviation $\sigma$	
750	55.53	0.96	54.18	0.91	-2.43	-5.21	2022-05-23
	55.53	0.96	54.31	0.93	-2.2	-3.12	2022-06-09
835	55.15	0.99	53.97	0.95	-2.14	-4.04	2022-05-23
	55.15	0.99	57.59	0.93	4.42	-6.06	2022-06-02
1750	53.43	1.49	52.57	1.42	-1.61	-4.7	2022-05-23
	53.43	1.49	56.33	1.4	5.43	-6.04	2022-06-02
1900	53.3	1.52	52.37	1.52	-1.74	0.0	2022-05-23
	53.3	1.52	56.14	1.51	5.33	-0.66	2022-06-02
2300	52.9	1.81	55.63	1.83	5.16	1.1	2022-06-02
2600	52.51	2.16	55.2	2.12	5.12	-1.85	2022-06-02
3700	51.05	3.55	52.17	3.24	2.19	-8.73	2022-06-06

#### Body TSL SAR System 4

Body TSL	Target TSL		Measured TSL		Deviation %		Date
Freq (MHz)	$\epsilon'$ (F/m)	$\sigma$ (S/m)	$\epsilon'$ (F/m)	$\sigma$ (S/m)	Deviation $\epsilon'$	Deviation $\sigma$	
750	55.53	0.96	53.77	0.97	-3.17	1.04	2022-06-10
835	55.15	0.99	53.83	0.98	-2.39	-1.01	2022-05-30
1750	53.43	1.49	55.78	1.50	4.40	0.67	2022-05-23
1750	53.43	1.49	52.99	1.45	-0.82	-2.68	2022-05-30
1900	53.30	1.52	52.82	1.55	-0.90	1.97	2022-05-30
	53.30	1.52	57.11	1.50	7.15	-1.32	2022-06-03
2300	52.90	1.81	52.33	1.85	-1.08	2.21	2022-05-30
2600	52.51	2.16	51.87	2.12	-1.22	-1.85	2022-05-30
2600	52.51	2.16	56.16	2.08	6.95	-3.70	2022-06-03
3700	51.05	3.55	54.37	3.21	6.50	9.57	2022-06-07

See Annex D below for more details.

### B.4 System Check Measurements

#### Body Measurements SAR System #2

Frequency (MHz)	Average	Target SAR (W/kg)	Measured SAR (W/kg)	Deviation to target (%)	Limit (%)	Date
750	1g	8.75	8.15	-6.90	±10	2022-05-24
	10g	5.72	5.39	-5.77		2022-06-09
	1g	8.75	8.26	-5.60		2022-05-25
	10g	5.72	5.48	-4.20		2022-06-02
835	1g	9.65	9.40	-2.59		2022-05-25
	10g	6.32	6.20	-1.90		2022-06-02
	1g	9.65	9.64	-0.10		2022-05-25
1750	10g	6.32	6.36	0.63		2022-06-02
	1g	37.10	38.20	2.96		2022-05-25
	10g	19.60	20.00	2.04		2022-06-02
	1g	37.10	36.00	-2.96		2022-05-25
1900	10g	19.60	19.46	-0.71		2022-06-02
	1g	47.90	45.20	-5.64		2022-05-25
	10g	23.20	21.80	-6.03		2022-06-02
	1g	40.30	40.40	0.25		2022-05-25
2300	10g	21.00	21.40	1.90		2022-06-02
	1g	47.90	47.40	-1.04	2022-06-04	
	10g	23.20	22.80	-1.72	2022-06-02	
2600	1g	54.10	52.60	-2.77	2022-06-02	
	10g	24.10	23.80	-1.24	2022-06-04	
	1g	54.10	52.40	-3.14	2022-06-02	
	10g	24.10	23.80	-1.24	2022-06-04	
3700	1g	62.10	59.60	-4.03	2022-06-06	
	10g	22.20	22.80	2.70		

#### Body Measurements SAR System #4

Frequency (MHz)	Average	Target SAR (W/kg)	Measured SAR (W/kg)	Deviation to target (%)	Limit (%)	Date
750	1g	8.75	8.25	-5.37	±10	2022-06-10
	10g	5.72	5.42	-5.24		2022-06-04
835	1g	9.65	10.52	9.24		2022-05-24
	10g	6.32	6.82	8.08		2022-06-02
1750	1g	37.10	35.00	-5.66		2022-06-02
	10g	19.60	18.46	-5.82		2022-05-31
1900	1g	47.90	40.00	-0.74		2022-05-31
	10g	23.20	20.80	-0.95		2022-06-02
	1g	47.90	40.40	8.89		2022-06-02
	10g	23.20	21.20	8.16		2022-06-03
2300	1g	47.90	44.60	-6.89		2022-06-02
	10g	23.20	21.40	-7.76		2022-06-07
2600	1g	54.10	49.20	-9.06		
	10g	24.10	22.00	-8.71		
3700	1g	62.10	62.00	-0.16		
	10g	22.20	23.00	3.60		

See Annex C

## B.5 SAR Test Results

### B.5.1 WCDMA

#### B.5.1.1 WCDMA Band II

Band	Antenna / Vendor	BW (MHz)	Mod.	Channel Number	Freq (MHz)	Position	Scaling Factor (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Plot #
Band II	Ant 5 / HTK	5	RMC 12.2kbps	9400	1880	Back Face	0.19	0.70	0.73	<b>1</b>
						Laptop	0.60	0.17	0.19	
						Left Edge	0.19	0.28	0.29	
						Top Edge	0.19	0.35	0.37	
	Ant 5 / Inpaq	5	RMC 12.2kbps	9400	1880	Back Face	0.19	0.57	0.59	
						Laptop	0.60	0.12	0.14	
						Left Edge	0.19	0.07	0.07	
						Top Edge	0.19	0.04	0.04	

#### B.5.1.1 WCDMA Band IV

Band	Antenna / Vendor	BW (MHz)	Mod.	Channel Number	Freq (MHz)	Position	Scaling Factor (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Plot #
Band IV	Ant 5 / HTK	5	RMC 12.2kbps	1413	1732.6	Back Face	0.14	0.57	0.58	<b>2</b>
						Laptop	0.01	0.15	0.15	
						Left Edge	0.14	0.17	0.18	
						Top Edge	0.14	0.19	0.19	
	Ant 5 / Inpaq	5	RMC 12.2kbps	1413	1732.6	Back Face	0.14	0.51	0.52	
						Laptop	0.01	0.41	0.41	
						Left Edge	0.14	0.18	0.18	
						Top Edge	0.14	0.03	0.03	

#### B.5.1.1 WCDMA Band V

Band	Antenna / Vendor	BW (MHz)	Mod.	Channel Number	Freq (MHz)	Position	Scaling Factor (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Plot #
Band V	Ant 5 / HTK	5	RMC 12.2kbps	4132	826.4	Back Face	0.18	0.93	0.97	<b>3</b>
				4183	836.6	Back Face	0.34	0.88	0.96	
						Laptop	0.13	0.28	0.29	
						Left Edge	0.34	0.19	0.21	
						Top Edge	0.34	0.19	0.21	
				4233	846.6	Back Face	0.11	0.88	0.90	
	Ant 5 / Inpaq	5	RMC 12.2kbps	4183	836.6	Back Face	0.18	0.75	0.79	
						Back Face	0.34	0.73	0.79	
						Laptop	0.13	0.12	0.12	
						Left Edge	0.34	0.09	0.10	
						Top Edge	0.34	0.03	0.03	
						4233	846.6	Back Face	0.11	0.73

**B.5.2 LTE**

**B.5.2.1 LTE Band 7 FDD**

Band	Antenna	BW (MHz)	Mod.	Channel Number	Freq (MHz)	Position	% RB Allocation	Scaling Factor (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Plot #
LTE 7	Ant 5 / HTK	20	QPSK	21100	2535	Back Face	1RB Mid	0.79	0.51	0.61	
						Back Face	50RB Mid	0.82	0.40	0.48	
						Laptop	1RB Mid	1.38	0.18	0.25	
						Laptop	50RB Mid	1.39	0.14	0.19	
						Left Edge	1RB Mid	0.79	0.10	0.12	
						Left Edge	50RB Mid	0.82	0.08	0.10	
						Top Edge	1RB Mid	0.79	0.02	0.03	
						Top Edge	50RB Mid	0.82	0.02	0.02	
	Ant 8 / HTK	20	QPSK	21100	2535	Back Face	1RB Mid	1.69	0.03	0.04	
						Back Face	50RB Mid	1.69	0.02	0.03	
						Top Edge	1RB Mid	1.69	0.24	0.35	
						Top Edge	50RB Mid	1.69	0.19	0.28	
	Ant 5 / HTK	20	QPSK	21100	2535	Back Face	1RB Mid	0.79	0.66	0.79	4
						Back Face	50RB Mid	0.82	0.66	0.79	
						Laptop	1RB Mid	1.38	0.05	0.07	
						Laptop	50RB Mid	1.39	0.06	0.08	
						Left Edge	1RB Mid	0.79	0.12	0.15	
						Left Edge	50RB Mid	0.82	0.13	0.15	
						Top Edge	1RB Mid	0.79	0.02	0.02	
						Top Edge	50RB Mid	0.82	0.01	0.01	
	Ant 8 / Inpaq	20	QPSK	21100	2535	Back Face	1RB Mid	1.69	0.00	0.01	
						Back Face	50RB Mid	1.69	0.00	0.01	
						Top Edge	1RB Mid	1.69	0.19	0.28	
						Top Edge	50RB Mid	1.69	0.19	0.28	

**UL CA 7C**

UL CA shall be tested based on the worst-case SAR configuration determined from non-CA SAR testing result. The channel BW, channel number, RB allocation, etc. would be selected to allow contiguous CA of PCC and SCC. Uplink output power for UL CA is the total power measured across the PCC and SCC.

From the above table on standalone testing on LTE Band 7, laptop position on antenna 5 HTK, was chosen as the configurations that give the highest SAR, thus, the same is used for UL CA testing.

Band	Ant.	Modulation / BW	PCC			SCC			Position	Scaling Factor (dB)	Measured SAR 1g (W/Kg)	Reported SAR 1g (W/Kg)
			Ch	Freq (MHz)	RB Allocation	Ch	Freq (MHz)	RB Allocation				
LTE 7C	5 / HTK	QPSK / 20MHz	20850	2510	1RB High	21100	2535	1RB Low	Back face	0.07	0.40	0.41

PCC RB allocation settings for UL CA have been adjusted based on the worst-case power

**B.5.2.2 LTE Band 12 FDD**

Band	Antenna	BW (MHz)	Mod.	Channel Number	Freq (MHz)	Position	% RB Allocation	Scaling Factor (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Plot #
LTE 12	Ant 5 / HTK	10	QPSK	23095	707.5	Back Face	1RB Mid	0.84	0.70	0.85	
						Back Face	50RB Mid	0.92	0.54	0.67	
						Back Face	100RB Mid	0.88	0.52	0.64	
						Laptop	1RB Mid	1.29	0.83	1.11	5
						Laptop	50RB Mid	1.33	0.63	0.86	
						Laptop	100RB Mid	1.31	0.64	0.86	
						Left Edge	1RB Mid	0.84	0.30	0.37	
						Left Edge	50RB Mid	0.92	0.34	0.43	
						Top Edge	1RB Mid	0.84	0.11	0.13	
	Top Edge	50RB Mid	0.92	0.08	0.10						
	Ant 5 / Inpaq	10	QPSK	23095	707.5	Back Face	1RB Mid	0.84	0.16	0.19	
						Back Face	50RB Mid	0.92	0.15	0.19	
						Laptop	1RB Mid	1.29	0.21	0.29	
						Laptop	50RB Mid	1.33	0.21	0.28	
						Left Edge	1RB Mid	0.84	0.10	0.12	
						Left Edge	50RB Mid	0.92	0.10	0.12	
						Top Edge	1RB Mid	0.84	0.05	0.07	
						Top Edge	50RB Mid	0.92	0.05	0.07	

**B.5.2.3 LTE Band 13 FDD**

Band	Antenna	BW (MHz)	Mod.	Channel Number	Freq (MHz)	Position	% RB Allocation	Scaling Factor (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Plot #
LTE 13	Ant 5 / HTK	10	QPSK	23230	782	Back Face	1RB Mid	0.70	0.82	0.96	
						Back Face	50RB Mid	0.80	0.64	0.77	
						Back Face	100RB Mid	0.81	0.64	0.77	
						Laptop	1RB Mid	1.17	0.91	1.19	6
						Laptop	50RB Mid	1.19	0.71	0.93	
						Laptop	100RB Mid	1.17	0.71	0.93	
						Left Edge	1RB Mid	0.70	0.45	0.52	
						Left Edge	50RB Mid	0.80	0.35	0.42	
						Top Edge	1RB Mid	0.70	0.11	0.13	
	Top Edge	50RB Mid	0.80	0.09	0.11						
	Ant 5 / Inpaq	10	QPSK	23230	782	Back Face	1RB Mid	0.70	0.19	0.22	
						Back Face	50RB Mid	0.80	0.18	0.22	
						Laptop	1RB Mid	1.17	0.13	0.17	
						Laptop	50RB Mid	1.19	0.13	0.17	
						Left Edge	1RB Mid	0.70	0.09	0.10	
						Left Edge e	50RB Mid	0.80	0.08	0.10	
						Top Edge	1RB Mid	0.70	0.03	0.04	
						Top Edge	50RB Mid	0.80	0.03	0.04	



**B.5.2.4 LTE Band 14 FDD**

Band	Antenna	BW (MHz)	Mod.	Channel Number	Freq (MHz)	Position	% RB Allocation	Scaling Factor (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Plot #
LTE 14	Ant 5 / HTK	10	QPSK	23330	793	Back Face	1RB Mid	0.73	0.84	0.98	7
						Back Face	50RB Mid	0.77	0.65	0.78	
						Back Face	100RB Mid	0.78	0.62	0.74	
						Laptop	1RB Mid	1.23	0.57	0.75	
						Laptop	50RB Mid	1.26	0.44	0.59	
						Laptop	100RB Mid	1.22	0.43	0.57	
						Left Edge	1RB Mid	0.73	0.43	0.51	
						Left Edge	50RB Mid	0.77	0.33	0.40	
						Top Edge	1RB Mid	0.73	0.12	0.14	
	Top Edge	50RB Mid	0.77	0.09	0.11						
	Ant 5 / Inpaq	10	QPSK	23330	793	Back Face	1RB Mid	0.73	0.19	0.23	
						Back Face	50RB Mid	0.77	0.19	0.22	
						Laptop	1RB Mid	1.23	0.13	0.17	
						Laptop	50RB Mid	1.26	0.12	0.16	
						Left Edge e	1RB Mid	0.73	0.09	0.10	
						Left Edge	50RB Mid	0.77	0.08	0.10	
						Top Edge	1RB Mid	0.73	0.03	0.04	
						Top Edge	50RB Mid	0.77	0.03	0.04	

**B.5.2.5 LTE Band 25 FDD**

Band	Antenna	BW (MHz)	Mod.	Channel Number	Freq (MHz)	Position	% RB Allocation	Scaling Factor (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Plot #	
LTE 25	Ant 5 / HTK	20	QPSK	26365	1882.5	Back Face	1RB Mid	1.40	0.33	0.46		
						Back Face	50RB Mid	1.44	0.25	0.35		
						Laptop	1RB Mid	1.39	0.58	0.79	8	
						Laptop	50RB Mid	1.39	0.46	0.64		
						Left Edge	1RB Mid	1.40	0.15	0.20		
						Left Edge	50RB Mid	1.44	0.12	0.16		
						Top Edge	1RB Mid	1.40	0.09	0.12		
						Top Edge	50RB Mid	1.44	0.07	0.10		
	Ant 8 / HTK	20	QPSK	26365	1882.5	Back Face	1RB Mid	0.75	0.02	0.02		
						Back Face	50RB Mid	0.77	0.02	0.02		
						Top Edge	1RB Mid	0.75	0.33	0.39		
						Top Edge	50RB Mid	0.77	0.26	0.31		
	Ant 5 / Inpaq	20	QPSK	26365	1882.5	Back Face	1RB Mid	1.40	0.39	0.54		
						Back Face	50RB Mid	1.44	0.40	0.55		
						Laptop	1RB Mid	1.39	0.13	0.17		
						Laptop	50RB Mid	1.39	0.13	0.17		
						Left Edge	1RB Mid	1.40	0.05	0.07		
						Left Edge	50RB Mid	1.44	0.05	0.07		
						Top Edge	1RB Mid	1.40	0.27	0.37		
						Top Edge	50RB Mid	1.44	0.03	0.04		
	Ant 8 / Inpaq	20	QPSK	26365	1882.5	Back Face	1RB Mid	0.75	0.00	0.00		
						Back Face	50RB Mid	0.77	0.01	0.01		
						Top Edge	1RB Mid	0.75	0.08	0.10		
						Top Edge	50RB Mid	0.77	0.08	0.10		

**B.5.2.6 LTE Band 26 FDD**

Band	Antenna	BW (MHz)	Mod.	Channel Number	Freq (MHz)	Position	% RB Allocation	Scaling Factor (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Plot #
LTE 26	Ant 5 / HTK	15	QPSK	26775	821.5	Laptop	1RB Mid	1.15	0.84	1.09	9
						Laptop	50RB Mid	1.23	0.64	0.84	
				26865	831.5	Back Face	1RB Mid	0.59	0.69	0.79	
						Back Face	50RB Mid	0.88	0.54	0.66	
						Laptop	1RB Mid	1.29	0.79	1.06	
						Laptop	50RB Mid	1.31	0.61	0.82	
						Laptop	100RB Mid	1.31	0.59	0.80	
						Left Edge	1RB Mid	0.59	0.31	0.35	
						Left Edge	50RB Mid	0.88	0.24	0.30	
						Top Edge	1RB Mid	0.59	0.10	0.11	
	Top Edge	50RB Mid	0.88	0.08	0.10						
	26965	841.5	Laptop	1RB Mid	1.30	0.73	0.99				
			Laptop	50RB Mid	1.26	0.56	0.75				
	Ant 5 / Inpaq	15	QPSK	26865	831.5	Back Face	1RB Mid	0.59	0.29	0.33	
						Back Face	50RB Mid	0.88	0.29	0.35	
						Laptop	1RB Mid	1.29	0.12	0.16	
						Laptop	50RB Mid	1.31	0.12	0.16	
						Left Edge	1RB Mid	0.59	0.12	0.13	
						Left Edge	50RB Mid	0.88	0.09	0.11	
						Top Edge	1RB Mid	0.59	0.02	0.02	
Top Edge						50RB Mid	0.88	0.03	0.04		

**UL CA 5B**

UL CA shall be tested based on the worst-case SAR configuration determined from non-CA SAR testing result. The channel BW, channel number, RB allocation, etc. would be selected to allow contiguous CA of PCC and SCC. Uplink output power for UL CA is the total power measured across the PCC and SCC.

From the above table on standalone testing on LTE Band26, due to overlapping frequency range with band LTE 5 and, same maximum tune-up with same bandwidth, the laptop position on antenna 5 was chosen as the configurations that give the highest SAR, thus, the same is used for UL CA testing for LTE 5B.

Band	Ant.	Modulation / BW	PCC			SCC			Position	Scaling Factor (dB)	Measured SAR 1g (W/Kg)	Reported SAR 1g (W/Kg)
			Ch	Freq (MHz)	RB Allocation	Ch	Freq (MHz)	RB Allocation				
LTE 5B	5 / HTK	QPSK / 20MHz	20850	2510	1RB High	21100	2535	1RB Low	Laptop	0.11	0.46	0.47

PCC RB allocation settings for UL CA have been adjusted based on the worst-case power

**B.5.2.7 LTE Band 30 FDD**

Band	Antenna	BW (MHz)	Mod.	Channel Number	Freq (MHz)	Position	% RB Allocation	Scaling Factor (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Plot #
LTE 30	Ant 5 / HTK	10	QPSK	27710	2310	Back Face	1RB Mid	1.24	0.34	0.45	
						Back Face	50RB Mid	1.32	0.34	0.46	
						Laptop	1RB Mid	1.67	0.17	0.25	
						Laptop	50RB Mid	1.72	0.17	0.25	
						Left Edge	1RB Mid	1.24	0.06	0.08	
						Left Edge	50RB Mid	1.32	0.05	0.06	
						Top Edge	1RB Mid	1.24	0.04	0.05	
						Top Edge	50RB Mid	1.32	0.02	0.03	
	Ant 8 / HTK	10	QPSK	27710	2310	Back Face	1RB Mid	1.52	0.03	0.04	
						Back Face	50RB Mid	1.54	0.02	0.03	
						Top Edge	1RB Mid	1.52	0.07	0.10	
						Top Edge	50RB Mid	1.54	0.04	0.06	
	Ant 5 / Inpaq	10	QPSK	27710	2310	Back Face	1RB Mid	1.24	0.65	0.86	
						Back Face	50RB Mid	1.32	0.65	0.87	<b>10</b>
						Back Face	100RB Mid	1.42	0.27	0.37	
						Laptop	1RB Mid	1.67	0.16	0.23	
						Laptop	50RB Mid	1.72	0.16	0.23	
						Left Edge	1RB Mid	1.24	0.14	0.19	
						Left Edge	50RB Mid	1.32	0.14	0.18	
						Top Edge	1RB Mid	1.24	0.02	0.02	
	Top Edge	50RB Mid	1.32	0.02	0.02						
	Ant 8 / Inpaq	10	QPSK	27710	2310	Back Face	1RB Mid	1.52	0.05	0.06	
						Back Face	50RB Mid	1.54	0.04	0.05	
						Top Edge	1RB Mid	1.52	0.18	0.25	
						Top Edge	50RB Mid	1.54	0.18	0.25	

**B.5.2.8 LTE Band 41 TDD**

Band	Antenna	BW (MHz)	Mod.	Channel Number	Freq (MHz)	Position	% RB Allocation	Scaling Factor (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Plot #
LTE 41	Ant 5 / HTK	20	QPSK	40620	2593	Back Face	1RB Mid	0.65	0.39	0.45	
						Back Face	50RB Mid	0.72	0.30	0.35	
						Laptop	1RB Mid	1.09	0.15	0.19	
						Laptop	50RB Mid	1.21	0.14	0.18	
						Left Edge	1RB Mid	0.65	0.48	0.56	11
						Left Edge	50RB Mid	0.72	0.38	0.44	
						Top Edge	1RB Mid	0.65	0.04	0.05	
						Top Edge	50RB Mid	0.72	0.03	0.04	
	Ant 8 / HTK	20	QPSK	40620	2593	Back Face	1RB Mid	0.79	0.01	0.01	
						Back Face	50RB Mid	0.89	0.01	0.01	
						Top Edge	1RB Mid	0.79	0.17	0.20	
						Top Edge	50RB Mid	0.89	0.14	0.17	
	Ant 5 / Inpaq	20	QPSK	40620	2593	Back Face	1RB Mid	0.65	0.19	0.22	
						Back Face	50RB Mid	0.72	0.20	0.23	
						Laptop	1RB Mid	1.09	0.10	0.12	
						Laptop	50RB Mid	1.21	0.10	0.13	
						Left Edge	1RB Mid	0.65	0.03	0.04	
						Left Edge	50RB Mid	0.72	0.03	0.04	
						Top Edge	1RB Mid	0.65	0.02	0.02	
						Top Edge	50RB Mid	0.72	0.04	0.05	
Ant 8 / Inpaq	20	QPSK	40620	2593	Back Face	1RB Mid	0.79	0.00	0.00		
					Back Face	50RB Mid	0.89	0.02	0.02		
					Top Edge	1RB Mid	0.79	0.12	0.14		
					Top Edge	50RB Mid	0.89	0.12	0.15		

**UL CA 41C**

UL CA shall be tested based on the worst-case SAR configuration determined from non-CA SAR testing result. The channel BW, channel number, RB allocation, etc. would be selected to allow contiguous CA of PCC and SCC. Uplink output power for UL CA is the total power measured across the PCC and SCC.

From the above table on standalone testing on LTE Band41, left edge position on antenna8 was chosen as the configurations that give the highest SAR, thus, the same is used for UL CA testing.

Band	Ant.	Modulation / BW	PCC			SCC			Position	Scaling Factor (dB)	Measured SAR 1g (W/Kg)	Reported SAR 1g (W/Kg)
			Ch	Freq (MHz)	RB Allocation	Ch	Freq (MHz)	RB Allocation				
LTE 41C	5 / HTK	QPSK / 20MHz	40521	2583.1	1RB High	40719	2602.9	1RB Low	Left edge	0.12	0.30	0.31

PCC RB allocation settings for UL CA have been adjusted based on the worst-case power

**B.5.2.9 LTE Band 48 TDD**

Band	Antenna	BW (MHz)	Mod.	Channel Number	Freq (MHz)	Position	% RB Allocation	Scaling Factor (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Plot #
LTE 48	Ant 8 / HTK	20	QPSK	55340	3560	Top Edge	1RB Mid	0.43	1.01	1.12	12
						Top Edge	50RB Mid	0.52	0.82	0.92	
				55990	3625	Back Face	1RB Mid	0.22	0.02	0.02	
						Back Face	50RB Mid	0.35	0.01	0.01	
						Top Edge	1RB Mid	0.22	0.78	0.82	
						Top Edge	50RB Mid	0.35	0.62	0.67	
						Top Edge	100RB Mid	0.34	0.60	0.65	
						Top Edge	1RB Mid	0.22	0.72	0.76	
	56640	3690	Top Edge	50RB Mid	0.25	0.57	0.60				
			Top Edge	1RB Mid	0.22	0.01	0.01				
	Ant 8 / Inpaq	20	QPSK	55990	3625	Back Face	50RB Mid	0.35	0.01	0.01	
						Top Edge	1RB Mid	0.22	0.23	0.24	
						Top Edge	50RB Mid	0.35	0.18	0.19	
						Top Edge	1RB Mid	0.22	0.01	0.01	

**UL CA 48C**

UL CA shall be tested based on the worst-case SAR configuration determined from non-CA SAR testing result. The channel BW, channel number, RB allocation, etc. would be selected to allow contiguous CA of PCC and SCC. Uplink output power for UL CA is the total power measured across the PCC and SCC.

From the above table on standalone testing on LTE Band48, top edge position on antenna8 was chosen as the configurations that give the highest SAR, thus, the same is used for UL CA testing.

Band	Ant.	Modulation / BW	PCC			SCC			Position	Scaling Factor (dB)	Measured SAR 1g (W/Kg)	Reported SAR 1g (W/Kg)
			Ch	Freq (MHz)	RB Allocation	Ch	Freq (MHz)	RB Allocation				
LTE 48C	8 / HTK	QPSK / 20MHz	55891	3615.1	1RB High	56089	3634.9	1RB Low	Top edge	0.10	0.49	0.49

PCC RB allocation settings for UL CA have been adjusted based on the worst-case power

**B.5.2.10 LTE Band66 FDD**

Band	Antenna	BW (MHz)	Mod.	Channel Number	Freq (MHz)	Position	% RB Allocation	Scaling Factor (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Plot #
LTE 66	Ant 5 / HTK	20	QPSK	132072	1720	Laptop	1RB Mid	0.73	0.35	0.41	
						Laptop	50RB Mid	0.67	0.46	0.54	
				132322	1745	Back Face	1RB Mid	0.33	0.33	0.36	
						Back Face	50RB Mid	0.21	0.26	0.27	
						Laptop	1RB Mid	0.73	0.74	0.88	
						Laptop	50RB Mid	0.65	0.60	0.69	
						Laptop	100RB Mid	0.65	0.58	0.68	
						Left Edge	1RB Mid	0.33	0.25	0.27	
						Left Edge	50RB Mid	0.21	0.20	0.21	
						Top Edge	1RB Mid	0.33	0.12	0.13	
				Top Edge	50RB Mid	0.21	0.09	0.09			
				132572	1770	Laptop	1RB Mid	0.67	0.90	1.05	13
	Laptop	50RB Mid	0.60			0.71	0.82				
	Ant 8 / HTK	20	QPSK	132322	1745	Back Face	1RB Mid	0.55	0.02	0.02	
						Back Face	50RB Mid	0.45	0.02	0.02	
						Top Edge	1RB Mid	0.55	0.39	0.44	
						Top Edge	50RB Mid	0.45	0.31	0.35	
	Ant 5 / Inpaq	20	QPSK	132072	1720	Back Face	1RB Mid	0.33	0.90	0.97	
						Back Face	50RB Mid	0.31	0.89	0.95	
				132322	1745	Back Face	1RB Mid	0.33	0.86	0.93	
						Back Face	50RB Mid	0.21	0.85	0.89	
						Back Face	100RB Mid	0.29	0.81	0.86	
						Laptop	1RB Mid	0.73	0.40	0.47	
						Laptop	50RB Mid	0.65	0.40	0.46	
						Left Edge	1RB Mid	0.33	0.15	0.16	
						Left Edge	50RB Mid	0.21	0.16	0.16	
						Top Edge	1RB Mid	0.33	0.03	0.03	
				Top Edge	50RB Mid	0.21	0.03	0.03			
				132072	1720	Laptop	1RB Mid	0.29	0.87	0.93	
						Laptop	50RB Mid	0.22	0.88	0.92	
				Ant 8 / Inpaq	20	QPSK	132322	1745	Back Face	1RB Mid	0.55
	Back Face	50RB Mid	0.45						0.08	0.08	
Top Edge	1RB Mid	0.55	0.00						0.01		
Top Edge	50RB Mid	0.45	0.01						0.02		

**UL CA 66B, 66C**

UL CA shall be tested based on the worst-case SAR configuration determined from non-CA SAR testing result. The channel BW, channel number, RB allocation, etc. would be selected to allow contiguous CA of PCC and SCC. Uplink output power for UL CA is the total power measured across the PCC and SCC.

From the above table on standalone testing on LTE Band66, laptop on Ant 5 position was chosen as the configurations that give the highest SAR, thus, the same is used for UL CA testing.

Band	Ant	Modulation / BW	PCC			SCC			Position	Scaling Factor (dB)	Measured SAR 1g (W/Kg)	Reported SAR 1g (W/Kg)
			Ch	Freq (MHz)	RB Allocation	Ch	Freq (MHz)	RB Allocation				
LTE 66B	5 / HTK	QPSK / 20MHz	132373	1750.1	1RB High	132472	1760	1RB Low	Laptop	0.44	0.66	0.73
LTE 66C		QPSK / 20MHz	132323	2145.1	1RB High	132521	1764.9	1RB Low	Laptop	0.33	0.53	0.57

PCC RB allocation settings for UL CA have been adjusted based on the worst-case power

**B.5.2.11 LTE Band 71 FDD**

Band	Antenna	BW (MHz)	Mod.	Channel Number	Freq (MHz)	Position	% RB Allocation	Scaling Factor (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Plot #
LTE 71	Ant 5 / HTK	20	QPSK	133297	680.5	Back Face	1RB Mid	0.93	0.84	1.04	
						Back Face	50RB Mid	0.98	0.68	0.85	
						Back Face	100RB Mid	1.07	0.73	0.93	
						Laptop	1RB Mid	0.28	1.00	1.06	14
						Laptop	50RB Mid	0.28	1.00	1.06	
						Laptop	100RB Mid	0.24	0.78	0.82	
						Left Edge	1RB Mid	0.23	0.77	0.81	
						Left Edge	50RB Mid	0.93	0.50	0.62	
						Left Edge	100RB Mid	0.98	0.40	0.50	
						Top Edge	1RB Mid	1.07	0.43	0.55	
	Top Edge	50RB Mid	0.93	0.18	0.22						
	Ant 8 / Inpaq	20	QPSK	133297	680.5	Back Face	1RB Mid	0.93	0.70	0.86	
						Back Face	50RB Mid	0.98	0.55	0.69	
						Laptop	1RB Mid	0.28	0.84	0.89	
						Laptop	50RB Mid	0.24	0.66	0.69	
						Laptop	100RB Mid	0.23	0.65	0.68	
						Left Edge	1RB Mid	0.93	0.55	0.68	
						Left Edge	50RB Mid	0.98	0.34	0.43	
						Top Edge	1RB Mid	0.93	0.15	0.19	
Top Edge						50RB Mid	0.98	0.12	0.15		

**B.5.3 5G NR**

**B.5.3.1 5G NR 2 FDD**

Band	Antenna	Mod. / BW	Channel Number	Freq (MHz)	Position	% RB Allocation	Scaling Factor (dB)	Measured SAR 1g (W/Kg)	Reported SAR 1g (W/Kg)	Plot #
NR2	Ant 8 / HTK	QPSK / 20MHz	376000	1880.0	Back Face	1RB Mid	0.60	0.05	0.05	
						50RB Mid	0.67	0.05	0.06	
					Top edge	1RB Mid	0.60	0.86	0.99	15
			50RB Mid			0.67	0.82	0.96		
			100RB Low			0.78	0.82	0.98		
			1RB Mid			0.83	0.81	0.98		
	372000		1860.0	50RB Mid	0.80	0.82	0.99			
				1RB Mid	0.82	0.78	0.95			
			380000	1900.0	50RB Mid	0.82	0.79	0.95		
	Ant 8 / NPAQ		376000	1880.0	Back Face	1RB Mid	0.60	0.03	0.03	
						50RB Mid	0.67	0.03	0.03	
			Top edge	1RB Mid	0.60	0.24	0.29			
50RB Mid		0.67		0.25	0.29					

**B.5.3.1 5G NR 5 FDD**

Band	Antenna	Mod. / BW	Channel Number	Freq (MHz)	Position	% RB Allocation	Scaling Factor (dB)	Measured SAR 1g (W/Kg)	Reported SAR 1g (W/Kg)	Plot #
NR5	Ant5 / HTK	QPSK / 20MHz	167300	836.5	Back Face	1RB Mid	1.18	0.76	1.00	
						50RB Mid	1.09	0.79	1.02	16
						100RB Mid	1.06	0.77	0.98	
					Left edge	1RB Mid	1.18	0.50	0.62	
						50RB Mid	1.09	0.47	0.64	
					Top edge	1RB Mid	1.18	0.13	0.17	
						50RB Mid	1.09	0.13	0.17	
					Laptop	1RB Mid	0.46	0.86	0.95	
						50RB Mid	0.46	0.87	0.97	
	100RB Low					0.49	0.86	0.96		
	Back Face				1RB Mid	1.18	0.55	0.72		
					50RB Mid	1.09	0.56	0.71		
	Left edge				1RB Mid	1.18	0.20	0.26		
					50RB Mid	1.09	0.20	0.26		
	Top edge				1RB Mid	1.18	0.07	0.09		
					50RB Mid	1.09	0.07	0.09		
	Laptop				1RB Mid	0.46	0.52	0.58		
					50RB Mid	0.46	0.51	0.56		



**B.5.3.2 5G NR 7 FDD**

Band	Antenna	Mod. / BW	Channel Number	Freq (MHz)	Position	% RB Allocation	Scaling Factor (dB)	Measured SAR 1g (W/Kg)	Reported SAR 1g (W/Kg)	Plot #
NR7	Ant5 / HTK	QPSK / 20MHz	500000	2510.0	Back Face	1RB Mid	0.85	0.52	0.63	
						50RB Mid	0.80	0.52	0.62	
					Laptop	1RB Mid	0.45	0.93	1.03	
						50RB Mid	0.38	0.97	1.05	
			507000	Back Face	1RB Mid	0.89	0.86	1.05		
					50RB Mid	0.80	0.87	1.04		
					100RB Mid	0.80	0.87	1.05		
					1RB Mid	0.89	0.10	0.13		
				Left edge	50RB Mid	0.80	0.10	0.13		
					1RB Mid	0.89	0.04	0.05		
				Top edge	50RB Mid	0.80	0.04	0.05		
					1RB Mid	0.55	0.97	1.11		
	Laptop		50RB Mid	0.39	0.99	1.08				
			100RB Mid	0.43	0.98	1.08				
	514000		Back Face	1RB Mid	0.83	0.62	0.74			
				50RB Mid	0.74	0.63	0.75			
			Laptop	1RB Mid	0.34	1.10	1.19			
				50RB Mid	0.27	1.12	1.19	17		
	Ant5 / INPAQ		Back Face	1RB Mid	0.89	0.55	0.67			
				50RB Mid	0.80	0.53	0.64			
				Left edge	1RB Mid	0.89	0.20	0.24		
					50RB Mid	0.80	0.20	0.24		
			Top edge	1RB Mid	0.89	0.04	0.05			
				50RB Mid	0.80	0.04	0.05			
Laptop		1RB Mid	0.55	0.42	0.46					
		50RB Mid	0.39	0.40	0.45					

**B.5.3.3 5G NR 25 FDD**

Band	Antenna	Mod. / BW	Channel Number	Freq (MHz)	Position	% RB Allocation	Scaling Factor (dB)	Measured SAR 1g (W/Kg)	Reported SAR 1g (W/Kg)	Plot #
NR25	Ant5 / HTK	QPSK / 20MHz	370000	1860.0	Laptop	1RB Mid	0.91	0.85	1.04	
						50RB Mid	0.77	0.89	1.06	
			376500	1882.5	Back Face	1RB Mid	0.94	0.44	0.55	
						50RB Mid	0.82	0.45	0.54	
					Left edge	1RB Mid	0.94	0.23	0.28	
						50RB Mid	0.82	0.23	0.27	
					Top edge	1RB Mid	0.94	0.20	0.25	
						50RB Mid	0.82	0.20	0.24	
			Laptop	1RB Mid	0.79	0.92	1.10			
				50RB Mid	0.72	0.92	1.09			
				100RB Mid	0.75	1.01	1.20	18		
			383000	1905.0	Laptop	1RB Mid	0.86	0.90	1.09	
						50RB Mid	0.69	0.92	1.08	
			Ant5 / INPAQ	QPSK / 20MHz	370000	1860.0	Laptop	1RB Mid	0.91	0.84
	50RB Mid	0.77						0.84	1.00	
	376500	1882.5			Back Face	1RB Mid	0.94	0.59	0.73	
						50RB Mid	0.82	0.60	0.72	
					Left edge	1RB Mid	0.94	0.40	0.49	
						50RB Mid	0.82	0.40	0.48	
					Top edge	1RB Mid	0.94	0.24	0.30	
						50RB Mid	0.82	0.25	0.30	
	Laptop	1RB Mid			0.79	0.80	0.96			
		50RB Mid			0.72	0.82	0.97			
		100RB Mid			0.75	0.81	0.96			
	383000	1905.0			Laptop	1RB Mid	0.86	0.83	1.01	
						50RB Mid	0.69	0.85	1.00	

**B.5.3.4 5G NR 30 FDD**

Band	Antenna	Mod. / BW	Channel Number	Freq (MHz)	Position	% RB Allocation	Scaling Factor (dB)	Measured SAR 1g (W/Kg)	Reported SAR 1g (W/Kg)	Plot #	
NR 30	Ant5 / HTK	QPSK / 10MHz	462000	2310.0	Back Face	1RB Mid	1.06	0.69	0.88		
						50RB Mid	1.16	0.67	0.87		
					Left edge	1RB Mid	1.06	0.10	0.12		
						50RB Mid	1.01	0.08	0.10		
					Top edge	1RB Mid	1.06	0.05	0.06		
						50RB Mid	1.16	0.05	0.06		
	Laptop		1RB Mid	0.91	0.88	1.08	19				
			50RB Mid	0.81	0.89	1.07					
			100RB Mid	0.83	0.88	1.07					
	Ant5 / INPAQ		Back Face	462000	2310.0	Back Face	1RB Mid	1.06	0.43	0.55	
							50RB Mid	1.16	0.42	0.55	
			Left edge			1RB Mid	1.06	0.19	0.24		
						50RB Mid	1.01	0.19	0.24		
			Top edge			1RB Mid	1.06	0.07	0.09		
50RB Mid		1.01				0.07	0.09				
Laptop		1RB Mid	0.91	0.36	0.41						
		50RB Mid	0.81	0.37	0.45						

**B.5.3.5 5G NR 41 TDD**

Band	Antenna	Mod. / BW	Channel Number	Freq (MHz)	Position	% RB Allocation	Scaling Factor (dB)	Measured SAR 1g (W/Kg)	Reported SAR 1g (W/Kg)	Plot #	
NR41	Ant5 / HTK	QPSK / 100MHz	518601	2593	Back Face	1RB Mid	0.47	0.82	0.89		
						50RB Mid	0.31	0.91	0.98		
						100RB Low	0.39	0.86	0.96		
					Left Edge	1RB Mid	0.47	0.12	0.13		
						50RB Mid	0.31	0.12	0.12		
					Top edge	1RB Mid	0.47	0.05	0.05		
						50RB Mid	0.31	0.04	0.05		
					Laptop	1RB Mid	0.24	0.98	1.03		
						50RB Mid	0.51	0.97	1.09	20	
						100RB Low	0.22	0.85	0.90		
					Ant8 / HTK	Back Face	1RB Mid	0.79	0.01	0.01	
							50RB Mid	0.69	0.01	0.01	
	Top edge	1RB Mid	0.79	0.72		0.86					
		50RB Mid	0.69	0.77		0.90					
		100RB Low	0.84	0.49		0.60					
	Ant5 / INPAQ	QPSK / 100MHz	518601	2593	Back Face	1RB Mid	0.47	0.76	0.84		
						50RB Mid	0.31	0.82	0.88		
						100RB Low	0.39	0.85	0.93		
					Left edge	1RB Mid	0.47	0.06	0.07		
						50RB Mid	0.31	0.14	0.15		
					Top edge	1RB Mid	0.47	0.10	0.11		
						50RB Mid	0.31	0.11	0.12		
					Laptop	1RB Mid	0.24	0.53	0.56		
50RB Mid						0.51	0.57	0.64			
Ant8 / INPAQ					Back Face	1RB Mid	0.79	0.02	0.02		
						50RB Mid	0.69	0.02	0.03		
					Top edge	1RB Mid	0.79	0.83	0.99		
	50RB Mid	0.69	0.88	1.04							

**B.5.3.6 5G NR 66 FDD**

Band	Antenna	Mod. / BW	Channel Number	Freq (MHz)	Position	% RB Allocation	Scaling Factor (dB)	Measured SAR 1g (W/Kg)	Reported SAR 1g (W/Kg)	Plot #				
NR 66	Ant 5 / HTK	QPSK / 40MHz	349000	1745.0	Back Face	1RB Mid	0.65	0.27	0.31					
						50RB Mid	0.70	0.27	0.31					
					Left edge	1RB Mid	0.65	0.30	0.34					
						50RB Mid	0.53	0.30	0.34					
					Top edge	1RB Mid	0.65	0.11	0.13					
						50RB Mid	0.70	0.11	0.13					
					Laptop	1RB Mid	0.20	0.90	0.94					
						50RB Mid	0.19	0.92	0.96					
						100RB Mid	0.45	0.88	0.97					
					Ant 8 / HTK	QPSK / 40MHz	349000	1745.0	Back Face	1RB Mid	0.52	0.02	0.02	
										50RB Mid	0.53	0.02	0.03	
									Top Edge	1RB Mid	0.52	0.59	0.67	
	50RB Mid	0.53	0.60	0.67										
	Ant 5 / NPAQ	QPSK / 40MHz	349000	1745.0	Back Face	1RB Mid	0.65	0.68	0.79					
						50RB Mid	0.70	0.68	0.80					
					Left edge	1RB Mid	0.65	0.61	0.70					
						50RB Mid	0.70	0.61	0.71					
					Top edge	1RB Mid	0.65	0.18	0.21					
						50RB Mid	0.70	0.18	0.21					
					Laptop	1RB Mid	0.20	1.06	1.11					
						50RB Mid	0.19	1.07	1.12	21				
						100RB Mid	0.45	1.00	1.11					
					Ant 8 / NPAQ	QPSK / 40MHz	349000	1745.0	Back Face	1RB Mid	0.52	0.02	0.02	
										50RB Mid	0.53	0.02	0.02	
Top Edge									1RB Mid	0.52	0.45	0.50		
	50RB Mid	0.53	0.45	0.51										

**B.5.3.7 5G NR 71 FDD**

Band	Antenna	Mod. / BW	Channel Number	Freq (MHz)	Position	% RB Allocation	Scaling Factor (dB)	Measured SAR 1g (W/Kg)	Reported SAR 1g (W/Kg)	Plot #
NR71	Ant 5 / HTK	QPSK / 20MHz	136100	680.5	Back Face	1RB Mid	0.04	0.94	0.95	22
						50RB Mid	0.00	0.98	0.98	
						100RB Low	0.01	0.92	0.92	
					Left edge	1RB Mid	0.04	0.76	0.77	
						50RB Mid	0.00	0.75	0.75	
					Top edge	1RB Mid	0.04	0.18	0.18	
						50RB Mid	0.00	0.13	0.13	
					Laptop	1RB Mid	0.00	0.88	0.88	
						50RB Mid	0.00	0.83	0.83	
	100RB Low	0.00	0.81	0.81						
	Ant 5 / INPAQ	QPSK / 20MHz	136100	680.5	Back Face	1RB Mid	0.04	0.28	0.28	
						50RB Mid	0.00	0.26	0.26	
					Left edge	1RB Mid	0.04	0.19	0.19	
						50RB Mid	0.00	0.18	0.18	
					Top edge	1RB Mid	0.04	0.14	0.14	
						50RB Mid	0.00	0.14	0.14	
					Laptop	1RB Mid	0.00	0.77	0.77	
						50RB Mid	0.00	0.79	0.80	
100RB Low						0.00	0.82	0.82		

**B.5.3.1 5G NR 77 TDD**

Band	Antenna	Mod. / BW	Channel Number	Freq (MHz)	Position	% RB Allocation	Scaling Factor (dB)	Measured SAR 1g (W/Kg)	Reported SAR 1g (W/Kg)	Plot #
NR77	Ant 5 / HTK	QPSK / 100MHz	650000	3750.0	Back Face	1RB Mid	1.17	0.39	0.50	
						50RB Mid	1.01	0.39	0.49	
					Left edge	1RB Mid	1.17	0.01	0.02	
						50RB Mid	1.01	0.01	0.02	
					Top edge	1RB Mid	1.17	0.01	0.01	
						50RB Mid	1.01	0.01	0.01	
	Laptop	1RB Mid	1.28	0.33	0.45					
		50RB Mid	1.01	0.35	0.44					
	Ant 8 / HTK	QPSK / 100MHz	650000	3750.0	Back Face	1RB Mid	0.83	0.01	0.01	
						50RB Mid	0.65	0.01	0.01	
					Top edge	1RB Mid	0.83	0.44	0.54	
						50RB Mid	0.65	0.47	0.55	
	Ant 5 / NPAQ	QPSK / 100MHz	650000	3750.0	Back Face	1RB Mid	1.17	0.99	1.30	
						50RB Mid	1.01	1.03	1.30	22
						100RB Low	1.19	0.98	1.29	
					Left edge	1RB Mid	1.17	0.03	0.04	
						50RB Mid	1.01	0.04	0.05	
					Top edge	1RB Mid	1.17	0.03	0.03	
						50RB Mid	1.01	0.03	0.03	
					Laptop	1RB Mid	1.28	0.09	0.12	
	50RB Mid	1.01	0.09	0.11						
	Ant 8 / NPAQ	QPSK / 100MHz	650000	3750.0	Back Face	1RB Mid	0.83	0.01	0.01	
						50RB Mid	0.65	0.01	0.01	
					Top edge	1RB Mid	0.83	0.13	0.16	
50RB Mid						0.65	0.26	0.31		

**B.5.4 ENDC**

For EN-DC mode, the 4G and 5G carriers transmit on separate antennas. Each exposure has been measured separately. For both LTE and 5G-NR, the highest standalone SAR conditions are added to derive the Total SAR. Refer to paragraph B.5.5

### B.5.5 SAR Measurement Variability

According to FCC OET KDB 865664, SAR Measurement variability is assessed when the maximum initial measured SAR is  $\geq 0.8$  W/kg for a certain band/mode. If the measured SAR value of the initial repeated measurement is  $< 1.45$  W/kg with  $< 20\%$  variation, only one repeated measurement is required to confirm that the results are not expected to have substantial variations.

A second repeated measurement is required only if the measured results for the initial repeated measurement are within 10% of the SAR limit or vary by more than 20%.

A third repeated measurement is required only if the original, first or second repeated measurement  $\geq 1.5$  W/Kg and the ratio of largest to smallest SAR for the original, first and second repeated measurement is  $> 1.2$ .

Band / Mode	Position	Ch #	Freq. (MHz)	Measured SAR 1g (W/kg)	1 <sup>st</sup> Repeated SAR 1g (W/kg)	2 <sup>nd</sup> Repeated SAR 1g (W/kg)	Highest Ratio
LTE FDD 71 / QPSK – 20MHz	Laptop	136100	680.5	1.00	1.00		1.00
WCDMA V /QPSK – 5MHz	Back face	4132	826.4	0.93	0.93		1.00
LTE FDD 66 / QPSK – 20MHz	Laptop	132572	1770	0.90	0.88		1.02
LTE TDD 48 / QPSK – 20MHz	Top edge	55340	3560	1.01	1.01		1.00
NR 77 / QPSK – 100MHz	Back Face	656000	3750	1.03	1.02		1.01