

5.2.5 LTE Band 12

Conducted Power(dBm)								
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	23017	23095	23173	23017	23095	23173
			699.7 MHz	707.5 MHz	715.3 MHz	699.7 MHz	707.5 MHz	715.3 MHz
12	1.4	1@0	22.68	22.93	22.88	21.62	21.51	21.78
		1@3	22.77	22.86	22.97	21.67	21.48	21.81
		1@5	22.73	22.75	22.90	21.64	21.47	21.79
		3@0	22.97	22.86	22.83	21.99	21.90	21.54
		3@1	23.02	22.89	22.89	22.15	21.86	21.79
		3@3	23.00	22.91	22.84	21.98	22.07	21.47
		6@0	21.92	21.90	22.03	21.05	20.98	20.81
Band	Bandwidth (MHz)	RB	23025	23095	23165	23025	23095	23165
			700.5 MHz	707.5 MHz	714.5 MHz	700.5 MHz	707.5 MHz	714.5 MHz
12	3	1@0	22.74	22.80	22.84	22.28	21.67	21.39
		1@8	22.75	22.77	22.81	22.24	21.66	21.61
		1@14	22.98	22.58	22.78	22.01	21.58	21.58
		8@0	21.77	21.84	21.89	21.00	20.83	20.85
		8@4	21.90	21.84	22.00	21.10	21.06	20.84
		8@7	21.90	21.77	21.91	21.06	20.80	20.75
		15@0	21.88	21.91	21.75	20.98	20.79	20.78
Band	Bandwidth (MHz)	RB	23035	23095	23155	23035	23095	23155
			701.5 MHz	707.5 MHz	713.5 MHz	701.5 MHz	707.5 MHz	713.5 MHz
12	5	1@0	22.92	23.03	22.80	21.75	22.02	21.77
		1@12	23.23	23.04	23.09	21.74	22.05	21.92
		1@24	23.04	22.79	22.93	21.82	22.15	21.76
		12@0	21.73	21.91	21.83	20.83	20.94	20.79
		12@7	22.00	22.02	21.91	21.05	21.19	20.93
		12@13	21.91	22.02	21.66	20.82	21.13	20.59
		25@0	21.84	22.08	21.74	20.89	21.07	20.79
Band	Bandwidth (MHz)	RB	23060	23095	23130	23060	23095	23130
			704 MHz	707.5 MHz	711 MHz	704 MHz	707.5 MHz	711 MHz
12	10	1@0	22.90	23.10	23.07	21.84	22.27	21.96
		1@25	23.25	23.01	22.95	21.89	22.38	22.04
		1@49	22.95	23.00	23.09	21.79	22.31	21.96
		25@0	21.79	22.01	21.85	20.82	21.16	20.99
		25@12	21.93	22.01	22.03	21.06	21.08	21.17
		25@25	21.81	22.22	21.87	20.91	21.31	20.83
		50@0	21.84	22.19	21.85	20.82	21.26	20.84

5.2.6 LTE Band 13

Conducted Power(dBm)								
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	23205	23230	23255	23205	23230	23255
			779.5 MHz	782 MHz	784.5 MHz	779.5 MHz	782 MHz	784.5 MHz
13	5	1@0	22.93	22.71	22.56	21.31	21.66	21.43
		1@12	22.96	22.81	22.65	21.47	21.79	21.58
		1@24	22.70	22.57	22.61	21.30	21.68	21.51
		12@0	21.65	21.66	21.60	20.52	20.59	20.49
		12@7	21.74	21.71	21.73	20.73	20.80	20.75
		12@13	21.62	21.67	21.62	20.56	20.61	20.55
		25@0	21.63	21.66	21.67	20.64	20.61	20.65
Band	Bandwidth (MHz)	RB	--	23230	--	--	23230	--
			--	782 MHz	--	--	782 MHz	--
13	10	1@0	--	22.95	--	--	21.40	--
		1@25	--	22.97	--	--	21.44	--
		1@49	--	22.68	--	--	21.46	--
		25@0	--	21.60	--	--	20.66	--
		25@12	--	21.67	--	--	20.74	--
		25@25	--	21.70	--	--	20.71	--
		50@0	--	21.62	--	--	20.57	--

5.2.7 LTE Band 17

Conducted Power(dBm)								
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	23755	23790	23825	23755	23790	23825
			706.5 MHz	710 MHz	713.5 MHz	706.5 MHz	710 MHz	713.5 MHz
17	5	1@0	22.95	22.83	22.77	21.80	21.51	21.88
		1@12	23.06	22.84	23.04	21.91	21.76	22.05
		1@24	22.79	22.88	23.01	21.69	21.49	21.93
		12@0	22.05	21.82	21.77	20.90	20.86	20.76
		12@7	21.97	21.96	21.85	21.01	21.09	20.96
		12@13	21.99	21.97	21.65	20.87	20.94	20.66
		25@0	22.04	21.99	21.71	21.03	21.04	20.70
Band	Bandwidth (MHz)	RB	23780	23790	23800	23780	23790	23800
			709 MHz	710 MHz	711 MHz	709 MHz	710 MHz	711 MHz
17	10	1@0	23.06	23.06	23.01	21.84	22.25	21.96
		1@25	22.86	22.74	22.85	21.72	22.48	21.96
		1@49	23.10	23.06	23.08	21.74	22.25	21.94
		25@0	22.03	21.89	21.77	21.11	20.98	20.80
		25@12	22.03	22.01	21.96	21.16	21.00	21.07
		25@25	22.13	21.93	21.85	21.21	21.06	20.83
		50@0	22.06	21.96	21.80	21.09	20.99	20.81

5.2.8 LTE Band 25

Conducted Power(dBm)								
Modulation			QPSK			16QAM		
Band	Bandwidth	RB	26047	26365	266263	26047	26365	266263
	(MHz)		1850.7 MHz	1882.5 MHz	1914.3 MHz	1850.7 MHz	1882.5 MHz	1914.3 MHz
25	1.4	1@0	21.44	21.43	21.44	20.22	20.19	20.35
		1@3	21.53	21.48	21.52	20.30	20.25	20.47
		1@5	21.43	21.40	21.42	20.25	20.14	20.36
		3@0	21.51	21.54	21.51	20.54	20.66	20.42
		3@1	21.55	21.58	21.57	20.72	20.57	20.67
		3@3	21.52	21.51	21.52	20.50	20.65	20.41
		6@0	20.61	20.56	20.62	19.51	19.62	19.65
Band	Bandwidth	RB	26055	26365	26675	26055	26365	26675
	(MHz)		1851.5 MHz	1882.5 MHz	1913.5 MHz	1851.5 MHz	1882.5 MHz	1913.5 MHz
25	3	1@0	21.28	21.25	21.24	19.98	20.78	20.21
		1@8	21.34	21.37	21.37	20.15	20.87	20.35
		1@14	21.25	21.22	21.30	20.16	20.74	20.27
		8@0	20.46	20.49	20.52	19.54	19.58	19.45
		8@4	20.52	20.50	20.51	19.60	19.64	19.60
		8@7	20.44	20.43	20.45	19.49	19.63	19.37
		15@0	20.44	20.44	20.45	19.48	19.50	19.38
Band	Bandwidth	RB	26065	26365	26665	26065	26365	26665
	(MHz)		1852.5 MHz	1882.5 MHz	1912.5 MHz	1852.5 MHz	1882.5 MHz	1912.5 MHz
25	5	1@0	21.53	21.56	21.54	20.36	20.35	20.68
		1@12	21.69	21.71	21.69	20.50	20.46	20.79
		1@24	21.50	21.54	21.55	20.38	20.32	20.68
		12@0	20.53	20.53	20.54	19.51	19.48	19.55
		12@7	20.58	20.61	20.61	19.66	19.68	19.77
		12@13	20.54	20.54	20.54	19.53	19.53	19.55
		25@0	20.54	20.52	20.58	19.63	19.59	19.54
Band	Bandwidth	RB	26090	26365	26640	26090	26365	26640
	(MHz)		1855 MHz	1882.5 MHz	1910 MHz	1855 MHz	1882.5 MHz	1910 MHz
25	10	1@0	21.60	21.66	21.60	20.40	21.15	20.53
		1@25	21.65	21.64	21.63	20.43	21.19	20.60
		1@49	21.63	21.61	21.64	20.45	21.10	20.55
		25@0	20.48	20.47	20.49	19.62	19.58	19.52
		25@12	20.59	20.60	20.59	19.76	19.68	19.63
		25@25	20.52	20.57	20.48	19.67	19.64	19.51
		50@0	20.53	20.57	20.49	19.56	19.53	19.50
Band	Bandwidth	RB	26115	26365	26615	26115	26365	26615
	(MHz)		1857.5 MHz	1882.5 MHz	1907.5 MHz	1857.5 MHz	1882.5 MHz	1907.5 MHz
25	15	1@0	21.61	21.56	21.54	20.69	21.09	20.51
		1@37	21.66	21.67	21.66	20.85	21.17	20.66
		1@74	21.64	21.56	21.59	20.79	21.11	20.55
		36@0	20.62	20.55	20.51	19.50	19.57	19.51
		36@20	20.64	20.62	20.65	19.60	19.58	19.72
		36@39	20.63	20.57	20.55	19.58	19.60	19.61
		75@0	20.66	20.61	20.62	19.58	19.59	19.57
Band	Bandwidth	RB	26140	26365	8590	26140	26365	8590
	(MHz)		1860 MHz	1882.5 MHz	1905 MHz	1860 MHz	1882.5 MHz	1905 MHz
25	20	1@0	21.50	21.53	21.49	20.88	20.63	20.51
		1@49	21.65	21.67	21.74	21.08	20.88	20.77
		1@99	21.53	21.56	21.56	20.95	20.68	20.60
		50@0	20.62	20.54	20.52	19.58	19.53	19.50
		50@24	20.67	20.67	20.66	19.63	19.72	19.66
		50@50	20.64	20.66	20.57	19.58	19.66	19.54
		100@0	20.56	20.59	20.55	19.59	19.62	19.53

5.2.9 LTE Band 26 (Part 90S)

Conducted Power(dBm)								
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	26697	26740	26783	26697	26740	26783
			814.7 MHz	819 MHz	823.3 MHz	814.7 MHz	819 MHz	823.3 MHz
26	1.4	1@0	22.52	22.76	22.65	21.36	21.54	21.33
		1@3	22.71	22.82	22.72	21.41	21.65	21.42
		1@5	22.65	22.71	22.67	21.34	21.58	21.41
		3@0	22.71	22.68	22.60	21.79	21.52	21.56
		3@1	22.72	22.71	22.64	21.65	21.73	21.69
		3@3	22.65	22.67	22.62	21.78	21.49	21.59
		6@0	21.86	21.85	21.78	20.74	20.75	20.62
Band	Bandwidth (MHz)	RB	26705	26740	26775	26705	26740	26775
			815.5 MHz	819 MHz	822.5 MHz	815.5 MHz	819 MHz	822.5 MHz
26	3	1@0	22.57	22.61	22.53	21.30	21.95	21.41
		1@8	22.72	22.74	22.67	21.45	21.97	21.56
		1@14	22.55	22.67	22.55	21.34	21.86	21.50
		8@0	21.71	21.74	21.70	20.69	20.74	20.56
		8@4	21.80	21.82	21.71	20.77	20.80	20.72
		8@7	21.74	21.77	21.65	20.74	20.75	20.56
		15@0	21.67	21.69	21.65	20.66	20.68	20.51
Band	Bandwidth (MHz)	RB	26715	26740	26765	26715	26740	26765
			816.5 MHz	819 MHz	821.5 MHz	816.5 MHz	819 MHz	821.5 MHz
26	5	1@0	22.75	22.82	22.81	21.47	21.85	21.55
		1@12	22.96	22.96	22.92	21.59	21.97	21.62
		1@24	22.89	22.81	22.79	21.50	21.84	21.62
		12@0	21.64	21.78	21.79	20.56	20.68	20.71
		12@7	21.80	21.78	21.75	20.81	20.84	20.74
		12@13	21.70	21.61	21.67	20.65	20.58	20.56
		25@0	21.65	21.69	21.72	20.73	20.66	20.71
Band	Bandwidth (MHz)	RB	--	26740	--	--	26740	--
			--	819 MHz	--	--	819 MHz	--
26	10	1@0	--	22.81	--	--	22.26	--
		1@25	--	22.92	--	--	22.25	--
		1@49	--	22.92	--	--	22.22	--
		25@0	--	21.69	--	--	20.71	--
		25@12	--	21.72	--	--	20.78	--
		25@25	--	21.56	--	--	20.59	--
		50@0	--	21.67	--	--	20.61	--
Band	Bandwidth (MHz)	RB	--	--	26765	--	--	26765
			--	--	821.5 MHz	--	--	821.5 MHz
26	15	1@0	--	--	22.82	--	--	21.87
		1@37	--	--	22.98	--	--	21.93
		1@74	--	--	22.89	--	--	21.98
		36@0	--	--	21.85	--	--	20.80
		36@20	--	--	21.93	--	--	20.80
		36@39	--	--	21.84	--	--	20.78
		75@0	--	--	21.87	--	--	20.76

5.2.10 LTE Band 26 (Part 22)

Conducted Power(dBm)								
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	26797	26915	27033	26797	26915	27033
			824.7 MHz	836.5 MHz	848.3 MHz	824.7 MHz	836.5 MHz	848.3 MHz
26	1.4	1@0	22.65	22.56	22.60	21.32	21.50	21.32
		1@3	22.68	22.63	22.68	21.34	21.55	21.39
		1@5	22.65	22.59	22.62	21.31	21.49	21.30
		3@0	22.67	22.59	22.58	21.69	21.44	21.51
		3@1	22.68	22.61	22.58	21.59	21.68	21.65
		3@3	22.65	22.60	22.59	21.73	21.50	21.51
		6@0	21.74	21.77	21.75	20.69	20.71	20.58
Band	Bandwidth (MHz)	RB	26805	26915	27025	26805	26915	27025
			825.5 MHz	836.5 MHz	847.5 MHz	825.5 MHz	836.5 MHz	847.5 MHz
26	3	1@0	22.48	22.48	22.38	21.45	21.18	21.82
		1@8	22.61	22.59	22.55	21.56	21.35	21.90
		1@14	22.55	22.52	22.49	21.48	21.28	21.76
		8@0	21.71	21.62	21.68	20.56	20.65	20.73
		8@4	21.79	21.71	21.70	20.77	20.66	20.70
		8@7	21.67	21.63	21.59	20.61	20.59	20.67
		15@0	21.65	21.61	21.57	20.57	20.60	20.59
Band	Bandwidth (MHz)	RB	26815	26915	27015	26815	26915	27015
			826.5 MHz	836.5 MHz	846.5 MHz	826.5 MHz	836.5 MHz	846.5 MHz
26	5	1@0	22.75	22.65	22.75	21.82	21.46	21.46
		1@12	22.85	22.81	22.82	21.94	21.61	21.46
		1@24	22.77	22.75	22.71	21.92	21.54	21.38
		12@0	21.72	21.68	21.54	20.74	20.56	20.56
		12@7	21.79	21.71	21.77	20.91	20.70	20.73
		12@13	21.79	21.59	21.56	20.84	20.50	20.42
		25@0	21.74	21.64	21.54	20.78	20.68	20.56
Band	Bandwidth (MHz)	RB	26840	26915	26990	26840	26915	26990
			829 MHz	836.5 MHz	844 MHz	829 MHz	836.5 MHz	844 MHz
26	10	1@0	22.81	22.72	22.80	21.76	21.56	22.17
		1@25	22.81	22.79	22.75	21.80	21.56	22.33
		1@49	22.85	22.84	22.81	21.75	21.61	22.13
		25@0	21.68	21.63	21.69	20.67	20.73	20.79
		25@12	21.79	21.76	21.82	20.86	20.82	20.85
		25@25	21.85	21.53	21.72	20.86	20.61	20.79
		50@0	21.85	21.64	21.73	20.83	20.62	20.73
Band	Bandwidth (MHz)	RB	26865	26915	26965	26865	26915	26965
			831.5 MHz	836.5 MHz	841.5 MHz	831.5 MHz	836.5 MHz	841.5 MHz
26	15	1@0	22.87	22.71	22.78	21.89	22.23	21.67
		1@37	22.91	22.89	22.89	22.05	22.20	21.82
		1@74	22.86	22.80	22.81	21.89	22.31	21.67
		36@0	21.68	21.66	21.95	20.64	20.67	20.88
		36@20	21.84	21.82	21.83	20.80	20.77	20.85
		36@39	21.74	21.74	21.88	20.66	20.74	20.85
		75@0	21.75	21.69	21.99	20.68	20.68	20.93

5.2.11 LTE Band 30

Conducted Power(dBm)								
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	27685	27710	27735	27685	27710	27735
			2307.5 MHz	2310.0 MHz	2312.5 MHz	2307.5 MHz	2310.0 MHz	2312.5 MHz
30	5	1@0	22.39	22.38	22.31	21.03	21.41	21.14
		1@12	22.47	22.49	22.46	21.16	21.54	21.28
		1@24	22.37	22.35	22.33	21.04	21.40	21.17
		12@0	21.27	21.32	21.35	20.15	20.22	20.21
		12@7	21.33	21.36	21.37	20.40	20.43	20.38
		12@13	21.30	21.31	21.28	20.28	20.26	20.22
		25@0	21.28	21.27	21.30	20.26	20.26	20.26
Band	Bandwidth (MHz)	RB	--	27710	--	--	27710	--
			--	2310.0 MHz	--	--	2310.0 MHz	--
30	10	1@0	--	22.42	--	--	21.29	--
		1@25	--	22.42	--	--	21.39	--
		1@49	--	22.50	--	--	21.34	--
		25@0	--	21.30	--	--	20.31	--
		25@12	--	21.34	--	--	20.41	--
		25@25	--	21.30	--	--	20.32	--
		50@0	--	21.29	--	--	20.28	--

5.2.12 LTE Band 38

Conducted Power(dBm)								
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	37775	38000	38225	37775	38000	38225
			2572.5 MHz	2595 MHz	2617.5 MHz	2572.5 MHz	2595 MHz	2617.5 MHz
38	5	1@0	22.24	22.28	22.23	21.06	21.15	21.38
		1@12	22.30	22.41	22.36	21.15	21.27	21.54
		1@24	22.17	22.28	22.27	21.06	21.16	21.40
		12@0	21.10	21.23	21.34	20.08	20.19	20.36
		12@7	21.18	21.33	21.42	20.17	20.28	20.52
		12@13	21.13	21.25	21.40	20.08	20.24	20.35
		25@0	21.09	21.27	21.33	20.12	20.26	20.32
Band	Bandwidth (MHz)	RB	37800	38000	38200	37800	38000	38200
			2575 MHz	2595 MHz	2615 MHz	2575 MHz	2595 MHz	2615 MHz
38	10	1@0	22.21	22.31	22.28	21.01	21.30	21.06
		1@25	22.23	22.34	22.36	21.03	21.37	21.16
		1@49	22.31	22.31	22.32	21.07	21.34	21.16
		25@0	21.12	21.28	21.25	20.13	20.23	20.29
		25@12	21.14	21.30	21.31	20.16	20.30	20.40
		25@25	21.13	21.28	21.39	20.15	20.28	20.42
		50@0	21.14	21.31	21.32	20.17	20.26	20.31
Band	Bandwidth (MHz)	RB	37825	38000	38175	37825	38000	38175
			2577.5 MHz	2595 MHz	2612.5 MHz	2577.5 MHz	2595 MHz	2612.5 MHz
38	15	1@0	22.15	22.29	22.15	21.14	21.01	21.32
		1@37	22.19	22.37	22.25	21.20	21.13	21.43
		1@74	22.25	22.31	22.16	21.27	21.03	21.39
		36@0	21.13	21.25	21.19	20.10	20.15	20.30
		36@20	21.19	21.31	21.37	20.17	20.34	20.37
		36@39	21.25	21.25	21.33	20.19	20.23	20.36
		75@0	21.17	21.29	21.33	20.13	20.23	20.32
Band	Bandwidth (MHz)	RB	37850	38000	38150	37850	38000	38150
			2580 MHz	2595 MHz	2610 MHz	2580 MHz	2595 MHz	2610 MHz
38	20	1@0	22.04	22.16	22.07	21.10	20.98	20.89
		1@49	22.23	22.46	22.26	21.35	21.22	21.12
		1@99	22.21	22.25	22.16	21.26	21.12	21.04
		50@0	21.05	21.15	21.15	20.02	20.10	20.17
		50@24	21.15	21.26	21.33	20.14	20.24	20.29
		50@50	21.16	21.26	21.24	20.11	20.24	20.31
		100@0	21.10	21.20	21.18	20.04	20.18	20.17

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5.2.13 LTE Band 40A

Conducted Power(dBm)								
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	38725	38750	38775	38725	38750	38775
			2307.5 MHz	2310 MHz	2312.5 MHz	2307.5 MHz	2310 MHz	2312.5 MHz
40	5	1@0	21.80	21.81	21.82	20.75	20.72	20.88
		1@12	21.92	21.92	21.93	20.88	20.85	21.02
		1@24	21.84	21.78	21.73	20.77	20.74	20.91
		12@0	20.75	20.74	20.77	19.74	19.74	19.88
		12@7	20.84	20.76	20.74	19.88	19.86	20.01
		12@13	20.79	20.78	20.81	19.79	19.77	19.90
		25@0	20.76	20.78	20.75	19.84	19.82	19.95
Band	Bandwidth (MHz)	RB	--	38750	--	--	38750	--
			--	2310 MHz	--	--	2310 MHz	--
40	10	1@0	--	21.84	--	--	20.99	--
		1@25	--	21.95	--	--	21.01	--
		1@49	--	21.81	--	--	20.93	--
		25@0	--	20.75	--	--	19.76	--
		25@12	--	20.81	--	--	19.91	--
		25@25	--	20.77	--	--	19.81	--
		50@0	--	20.80	--	--	19.78	--

5.2.14 LTE Band 40B

Conducted Power(dBm)								
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	39175	39200	39225	39175	39200	39225
			2353.5 MHz	2355 MHz	2357.5 MHz	2353.5 MHz	2355 MHz	2357.5 MHz
40	5	1@0	21.78	21.75	21.79	20.67	20.77	20.78
		1@12	21.85	21.91	21.95	20.82	20.92	20.94
		1@24	21.74	21.83	21.79	20.70	20.77	20.78
		12@0	20.76	20.74	20.77	19.67	19.68	19.79
		12@7	20.72	20.76	20.73	19.64	19.72	19.74
		12@13	20.73	20.79	20.74	19.68	19.75	19.75
		25@0	20.71	20.76	20.76	19.73	19.79	19.74
Band	Bandwidth (MHz)	RB	--	39200	--	--	39200	--
			--	2355 MHz	--	--	2355 MHz	--
40	10	1@0	--	21.85	--	--	20.88	--
		1@25	--	21.96	--	--	20.97	--
		1@49	--	21.91	--	--	20.91	--
		25@0	--	20.74	--	--	19.74	--
		25@12	--	20.82	--	--	19.84	--
		25@25	--	20.81	--	--	19.88	--
		50@0	--	20.78	--	--	19.75	--

5.2.15 LTE Band 41

Conducted Power(dBm)								
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	39675	40620	41565	39675	40620	41565
			2498.5 MHz	2593 MHz	2687.5 MHz	2498.5 MHz	2593 MHz	2687.5 MHz
41	5	1@0	22.35	22.11	22.37	20.97	20.96	21.33
		1@12	22.23	22.22	22.53	21.04	21.09	21.49
		1@24	22.13	22.17	22.50	20.96	21.01	21.37
		12@0	21.01	21.03	21.34	19.89	20.01	20.42
		12@7	21.09	21.17	21.46	20.06	20.10	20.48
		12@13	21.04	21.10	21.35	19.96	20.10	20.34
		25@0	20.98	21.03	21.30	19.99	20.07	20.27
Band	Bandwidth (MHz)	RB	39700	40620	41540	39700	40620	41540
			2501 MHz	2593 MHz	2685 MHz	2501 MHz	2593 MHz	2685 MHz
41	10	1@0	22.38	22.14	22.42	21.10	20.88	21.22
		1@25	22.19	22.20	22.53	21.10	20.99	21.26
		1@49	22.20	22.20	22.62	21.07	21.00	21.25
		25@0	21.06	21.06	21.43	19.96	20.10	20.42
		25@12	21.11	21.14	21.38	20.12	20.14	20.44
		25@25	21.13	21.18	21.33	20.04	20.14	20.32
		50@0	21.05	21.13	21.44	19.98	20.09	20.40
Band	Bandwidth (MHz)	RB	39725	40620	41515	39725	40620	41515
			2503.5 MHz	2593 MHz	2682.5 MHz	2503.5 MHz	2593 MHz	2682.5 MHz
41	15	1@0	22.24	22.13	22.25	21.06	20.90	21.39
		1@37	22.20	22.23	22.41	21.14	20.99	21.47
		1@74	22.09	22.18	22.50	20.98	20.95	21.49
		36@0	21.08	21.11	21.44	20.00	20.07	20.45
		36@20	21.14	21.18	21.50	20.08	20.13	20.46
		36@39	21.17	21.18	21.46	20.10	20.09	20.40
		75@0	21.09	21.19	21.52	20.04	20.14	20.43
Band	Bandwidth (MHz)	RB	39750	40620	41490	39750	40620	41490
			2506 MHz	2593 MHz	2680 MHz	2506 MHz	2593 MHz	2680 MHz
41	20	1@0	22.11	22.08	22.17	21.07	20.86	20.99
		1@49	22.25	22.26	22.41	21.20	21.11	21.22
		1@99	22.44	22.52	22.64	21.00	21.00	21.16
		50@0	20.90	21.04	21.45	19.88	19.97	20.45
		50@24	21.06	21.13	21.43	20.01	20.13	20.39
		50@50	21.07	21.15	21.26	20.05	20.13	20.21
		100@0	21.02	21.08	21.39	19.94	20.09	20.35

5.2.16 LTE Band 66

Conducted Power(dBm)								
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	131979	132322	132665	131979	132322	132665
			1710.7 MHz	1745 MHz	1779.3 MHz	1710.7 MHz	1745 MHz	1779.3 MHz
66	1.4	1@0	21.99	22.01	21.84	20.77	20.66	20.74
		1@3	22.00	22.01	21.91	20.85	20.71	20.84
		1@5	21.99	21.97	21.82	20.77	20.68	20.72
		3@0	22.05	22.02	21.88	20.98	21.01	20.69
		3@1	22.06	22.04	21.91	21.16	20.96	20.96
		3@3	22.06	21.99	21.84	20.99	21.05	20.71
		6@0	21.17	21.15	21.01	20.05	20.05	19.94
Band	Bandwidth (MHz)	RB	131987	132322	132657	131987	132322	132657
			1711.5 MHz	1745 MHz	1778.5 MHz	1711.5 MHz	1745 MHz	1778.5 MHz
66	3	1@0	21.85	21.84	21.69	20.62	21.24	20.64
		1@8	21.94	21.90	21.81	20.73	21.29	20.73
		1@14	21.83	21.86	21.71	20.69	21.21	20.67
		8@0	21.03	21.00	20.90	20.05	20.07	19.80
		8@4	21.10	21.07	20.94	20.08	20.09	19.96
		8@7	21.03	21.02	20.92	20.01	20.06	19.80
		15@0	20.95	20.99	20.83	20.01	19.98	19.74
Band	Bandwidth (MHz)	RB	131997	132322	132647	131997	132322	132647
			1712.5 MHz	1745 MHz	1777.5 MHz	1712.5 MHz	1745 MHz	1777.5 MHz
66	5	1@0	22.04	22.07	21.96	20.95	20.81	21.06
		1@12	22.14	22.18	22.06	21.06	20.87	21.12
		1@24	22.02	22.02	21.97	20.98	20.80	21.04
		12@0	21.04	21.00	20.92	19.96	19.92	19.84
		12@7	21.13	21.10	20.97	20.11	20.09	20.04
		12@13	21.13	21.02	20.91	20.00	19.97	19.88
		25@0	21.06	21.03	20.90	20.05	20.05	19.85
Band	Bandwidth (MHz)	RB	132022	132322	132622	132022	132322	132622
			1715 MHz	1745 MHz	1775 MHz	1715 MHz	1745 MHz	1775 MHz
66	10	1@0	22.20	22.17	22.09	20.96	21.52	21.02
		1@25	22.20	22.16	22.07	20.99	21.58	21.04
		1@49	22.18	22.14	22.03	21.03	21.54	20.94
		25@0	21.03	20.99	20.95	20.13	20.01	19.89
		25@12	21.17	21.07	20.99	20.23	20.08	20.01
		25@25	21.21	21.01	20.89	20.21	20.00	19.85
		50@0	21.12	21.01	20.88	20.09	19.94	19.84
Band	Bandwidth (MHz)	RB	132047	132322	132597	132047	132322	132597
			1717.5 MHz	1745 MHz	1772.5 MHz	1717.5 MHz	1745 MHz	1772.5 MHz
66	15	1@0	22.08	22.08	22.01	21.21	21.47	20.98
		1@37	22.20	22.22	22.12	21.32	21.57	21.05
		1@74	22.10	22.06	21.97	21.19	21.42	20.88
		36@0	21.09	21.09	21.01	20.01	20.05	19.97
		36@20	21.26	21.10	21.09	20.14	20.05	20.11
		36@39	21.21	21.06	21.03	20.15	20.04	19.97
		75@0	21.15	21.07	21.07	20.10	20.03	20.02
Band	Bandwidth (MHz)	RB	132072	132322	132572	132072	132322	132572
			1720 MHz	1745 MHz	1770 MHz	1720 MHz	1745 MHz	1770 MHz
66	20	1@0	22.05	21.95	21.95	21.05	21.30	21.03
		1@49	22.25	22.17	22.11	21.23	21.54	21.22
		1@99	22.08	21.93	21.94	21.10	21.33	20.96
		50@0	21.09	21.04	20.96	20.00	19.94	19.88
		50@24	21.19	21.13	21.03	20.12	20.03	20.01
		50@50	21.17	21.03	20.97	20.11	19.97	19.91
		100@0	21.15	21.00	20.97	20.08	19.94	19.95

5.2.17 LTE Band 71

Conducted Power(dBm)								
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	133147	133297	133447	133147	133297	133447
			665.5 MHz	680.5 MHz	695.5 MHz	665.5 MHz	680.5 MHz	695.5 MHz
71	5	1@0	23.24	23.29	23.06	22.04	22.22	21.78
		1@12	23.54	23.34	23.15	22.15	22.33	21.93
		1@24	23.41	23.20	23.04	21.97	22.21	21.81
		12@0	22.22	22.17	22.04	21.22	21.16	20.92
		12@7	22.40	22.28	22.16	21.47	21.34	21.20
		12@13	22.36	22.20	22.08	21.36	21.18	21.06
		25@0	22.31	22.21	22.11	21.38	21.19	21.10
Band	Bandwidth (MHz)	RB	133172	133297	133422	133172	133297	133422
			668 MHz	680.5 MHz	693 MHz	668 MHz	680.5 MHz	693 MHz
71	10	1@0	23.36	23.39	23.31	22.73	22.17	21.89
		1@25	23.50	23.30	23.26	22.78	22.24	21.87
		1@49	23.54	23.27	23.19	22.63	22.15	21.87
		25@0	22.27	22.24	22.17	21.31	21.25	21.18
		25@12	22.41	22.30	22.14	21.43	21.30	21.31
		25@25	22.36	22.27	22.17	21.39	21.23	21.24
		50@0	22.31	22.26	22.16	21.33	21.27	21.20
Band	Bandwidth (MHz)	RB	133197	133297	133397	133197	133297	133397
			670.5 MHz	680.5 MHz	690.5 MHz	670.5 MHz	680.5 MHz	690.5 MHz
71	15	1@0	23.39	23.41	23.16	22.40	22.54	22.11
		1@37	23.43	23.36	23.27	22.35	22.67	22.05
		1@74	23.39	23.38	23.19	22.32	22.53	22.06
		36@0	22.17	22.22	22.13	21.20	21.25	21.15
		36@20	22.31	22.25	22.13	21.28	21.22	21.17
		36@39	22.26	22.23	22.09	21.30	21.18	21.14
		75@0	22.28	22.24	22.12	21.23	21.24	21.15
Band	Bandwidth (MHz)	RB	133222	133322	133372	133222	133322	133372
			673 MHz	683 MHz	688 MHz	673 MHz	683 MHz	688 MHz
71	20	1@0	23.30	23.27	23.14	22.48	22.13	22.11
		1@49	23.56	23.28	23.35	22.61	22.37	22.16
		1@99	23.17	23.19	23.08	22.51	22.12	22.06
		50@0	22.14	22.22	22.04	21.14	21.17	21.13
		50@24	22.32	22.22	22.18	21.28	21.27	21.25
		50@50	22.27	22.12	22.10	21.27	21.11	21.07
		100@0	22.24	22.13	22.08	21.20	21.17	21.14

5.3 ERP OR EIRP

Test Requirement: FCC 47 CFR Part 2.1046(a)
LTE Band 2 & LTE Band 25: FCC 47 CFR Part 24.232(c)
LTE Band 4 & LTE Band 66: FCC 47 CFR Part 27.50(d)(4)
LTE Band 5 & LTE Band 26: FCC 47 CFR Part 22.913(a)
LTE Band 7 & Band 38 & Band 41: FCC 47 CFR Part 27.50(h)(2)
LTE Band 12 & Band 17 & Band 71: FCC 47 CFR Part 27.50(c)(10)
LTE Band 13: FCC 47 CFR Part 27.50(b)(10)
LTE Band 26: FCC 47 CFR Part 90.635
LTE Band 30 & Band 40: FCC 47 CFR Part 27.50(a)(3)
Test Method: KDB 971168 D01v03r01 Section 5.6 & ANSI C63.26-2015

Limit:

FCC 47 CFR Part 22.913(a):

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

FCC 47 CFR Part 24.232(c):

Mobile and portable stations are limited to 2 watts EIRP.

FCC 47 CFR Part 27.50(d)(4):

Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

FCC 47 CFR Part 27.50(c)(10):

Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

FCC 47 CFR Part 27.50(h)(2):

Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

FCC 47 CFR Part 27.50(b)(10):

Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP.

FCC 47 CFR Part 27.50(a)(3):

For mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth. For mobile and portable stations using time division duplexing (TDD) technology, the duty cycle must not exceed 38 percent in the 2305-2315 MHz and 2350-2360 MHz bands. Mobile and portable stations using FDD technology are restricted to transmitting in the 2305-2315 MHz band. Power averaging shall not include intervals in which the transmitter is off.

FCC 47 CFR Part 90.635:

(a) The effective radiated power and antenna height for base stations may not exceed 1 kilowatt (30 dBw) and 304 m. (1,000 ft.) above average terrain (AAT), respectively, or the equivalent thereof as determined from the Table. These are maximum values, and applicants will be required to justify power levels and antenna heights requested.

(b) The maximum output power of the transmitter for mobile stations is 100 watts (20 dBw).

Table—Equivalent Power and Antenna Heights for Base Stations in the 851–869 MHz and 935–940 MHz Bands Which Have a Requirement for a 32 km (20 mi) Service Area Radius

Antenna height (ATT) meters (feet)	Effective radiated power (watts) ^{1 2 4}
Above 1,372 (4,500)	65
Above 1,220 (4,000) to 1,372 (4,500)	70

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Above 1,067 (3,500) to 1,220 (4,000)	75
Above 915 (3,000) to 1,067 (3,500)	100
Above 763 (2,500) to 915 (3,000)	140
Above 610 (2,000) to 763 (2,500)	200
Above 458 (1,500) to 610 (2,000)	350
Above 305 (1,000) to 458 (1,500)	600
Up to 305 (1,000)	31,000

1. Power is given in terms of effective radiated power (ERP).
2. Applicants in the Los Angeles, CA, area who demonstrate a need to serve both the downtown and fringe areas will be permitted to utilize an ERP of 1 kw at the following mountaintop sites: Santiago Park, Sierra Peak, Mount Lukens, and Mount Wilson.
3. Stations with antennas below 305 m (1,000 ft) (AAT) will be restricted to a maximum power of 1 kw (ERP).
4. Licensees in San Diego, CA, will be permitted to utilize an ERP of 500 watts at the following mountaintop sites: Palomar, Otay, Woodson and Miguel.

Test Procedure:

According to KDB 412172 D01 Power Approach,

- $ERP \text{ or } EIRP = P_T + G_T - L_c$
- $ERP = EIRP - 2.15$

where

- P_T = transmitter output power, expressed in dBW, dBm, or PSD;
- G_T = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);
- L_c = **signal attenuation in the connecting cable between the transmitter and antenna, in dB.**

Test Setup: Refer to section 4.2.1 for details.

Instruments Used: Refer to section 3 for details

Test Mode: Link mode

Test Results: Pass

Test Data: See table below

Note: The maximum ERP/EIRP is calculated from max output power and antenna gain, the antenna gain provided by the customer, and the customer takes all the responsibilities for the accuracy of antenna gain.

5.3.1 LTE Band 2

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 1.4MHz							
Lowest	21.73	20.82	33.01	0.1489	0.1208	2	Pass
Middle	21.65	20.77	33.01	0.1462	0.1194	2	Pass
Highest	21.60	20.79	33.01	0.1445	0.1199	2	Pass
Channel Bandwidth: 3MHz							
Lowest	21.79	21.01	33.01	0.1510	0.1262	2	Pass
Middle	21.49	20.44	33.01	0.1409	0.1107	2	Pass
Highest	21.45	20.30	33.01	0.1396	0.1072	2	Pass
Channel Bandwidth: 5MHz							
Lowest	21.86	20.60	33.01	0.1535	0.1148	2	Pass
Middle	21.78	20.93	33.01	0.1507	0.1239	2	Pass
Highest	21.69	20.58	33.01	0.1476	0.1143	2	Pass
Channel Bandwidth: 10MHz							
Lowest	21.77	21.27	33.01	0.1503	0.1340	2	Pass
Middle	21.68	20.69	33.01	0.1472	0.1172	2	Pass
Highest	21.80	20.58	33.01	0.1514	0.1143	2	Pass
Channel Bandwidth: 15MHz							
Lowest	21.84	21.33	33.01	0.1528	0.1358	2	Pass
Middle	21.76	20.74	33.01	0.1500	0.1186	2	Pass
Highest	21.74	20.96	33.01	0.1493	0.1247	2	Pass
Channel Bandwidth: 20MHz							
Lowest	21.87	20.95	33.01	0.1538	0.1245	2	Pass
Middle	21.73	20.81	33.01	0.1489	0.1205	2	Pass
Highest	21.71	21.15	33.01	0.1483	0.1303	2	Pass

5.3.2 LTE Band 4

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 1.4MHz							
Lowest	22.33	21.37	30.00	0.1710	0.1371	1	Pass
Middle	22.31	21.39	30.00	0.1702	0.1377	1	Pass
Highest	22.22	21.34	30.00	0.1667	0.1361	1	Pass
Channel Bandwidth: 3MHz							
Lowest	22.23	21.03	30.00	0.1671	0.1268	1	Pass
Middle	22.19	21.61	30.00	0.1656	0.1449	1	Pass
Highest	22.15	21.06	30.00	0.1641	0.1276	1	Pass
Channel Bandwidth: 5MHz							
Lowest	22.44	21.58	30.00	0.1754	0.1439	1	Pass
Middle	22.38	21.32	30.00	0.1730	0.1355	1	Pass
Highest	22.39	21.16	30.00	0.1734	0.1306	1	Pass
Channel Bandwidth: 10MHz							
Lowest	22.41	21.28	30.00	0.1742	0.1343	1	Pass
Middle	22.43	21.83	30.00	0.1750	0.1524	1	Pass
Highest	22.38	21.37	30.00	0.1730	0.1371	1	Pass
Channel Bandwidth: 15MHz							
Lowest	22.39	21.57	30.00	0.1734	0.1435	1	Pass
Middle	22.42	21.82	30.00	0.1746	0.1521	1	Pass
Highest	22.39	21.36	30.00	0.1734	0.1368	1	Pass
Channel Bandwidth: 20MHz							
Lowest	22.44	21.80	30.00	0.1754	0.1514	1	Pass
Middle	22.43	21.58	30.00	0.1750	0.1439	1	Pass
Highest	22.43	21.45	30.00	0.1750	0.1396	1	Pass

5.3.3 LTE Band 5

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 1.4MHz							
Lowest	18.34	17.24	38.45	0.0682	0.0530	7	Pass
Middle	18.20	17.22	38.45	0.0661	0.0527	7	Pass
Highest	18.22	17.24	38.45	0.0664	0.0530	7	Pass
Channel Bandwidth: 3MHz							
Lowest	18.26	17.53	38.45	0.0670	0.0566	7	Pass
Middle	18.09	16.98	38.45	0.0644	0.0499	7	Pass
Highest	18.09	16.83	38.45	0.0644	0.0482	7	Pass
Channel Bandwidth: 5MHz							
Lowest	18.40	17.10	38.45	0.0692	0.0513	7	Pass
Middle	18.33	17.38	38.45	0.0681	0.0547	7	Pass
Highest	18.32	17.15	38.45	0.0679	0.0519	7	Pass
Channel Bandwidth: 10MHz							
Lowest	18.47	17.85	38.45	0.0703	0.0610	7	Pass
Middle	18.35	17.29	38.45	0.0684	0.0536	7	Pass
Highest	18.39	17.12	38.45	0.0690	0.0515	7	Pass

5.3.4 LTE Band 7

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 5MHz							
Lowest	22.32	21.09	33.01	0.1706	0.1285	2	Pass
Middle	22.25	20.92	33.01	0.1679	0.1236	2	Pass
Highest	22.30	21.36	33.01	0.1698	0.1368	2	Pass
Channel Bandwidth: 10MHz							
Lowest	22.37	21.09	33.01	0.1726	0.1285	2	Pass
Middle	22.29	21.67	33.01	0.1694	0.1469	2	Pass
Highest	22.28	21.22	33.01	0.1690	0.1324	2	Pass
Channel Bandwidth: 15MHz							
Lowest	22.39	21.69	33.01	0.1734	0.1476	2	Pass
Middle	22.23	21.20	33.01	0.1671	0.1318	2	Pass
Highest	22.22	21.37	33.01	0.1667	0.1371	2	Pass
Channel Bandwidth: 20MHz							
Lowest	22.45	21.56	33.01	0.1758	0.1432	2	Pass
Middle	22.23	21.36	33.01	0.1671	0.1368	2	Pass
Highest	22.22	21.23	33.01	0.1667	0.1327	2	Pass

5.3.5 LTE Band 12

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 1.4MHz							
Lowest	18.32	17.45	34.77	0.0679	0.0556	3	Pass
Middle	18.23	17.37	34.77	0.0665	0.0546	3	Pass
Highest	18.27	17.11	34.77	0.0671	0.0514	3	Pass
Channel Bandwidth: 3MHz							
Lowest	18.28	17.58	34.77	0.0673	0.0573	3	Pass
Middle	18.10	16.97	34.77	0.0646	0.0498	3	Pass
Highest	18.14	16.91	34.77	0.0652	0.0491	3	Pass
Channel Bandwidth: 5MHz							
Lowest	18.53	17.12	34.77	0.0713	0.0515	3	Pass
Middle	18.34	17.45	34.77	0.0682	0.0556	3	Pass
Highest	18.39	17.22	34.77	0.0690	0.0527	3	Pass
Channel Bandwidth: 10MHz							
Lowest	18.55	17.19	34.77	0.0716	0.0524	3	Pass
Middle	18.40	17.68	34.77	0.0692	0.0586	3	Pass
Highest	18.39	17.34	34.77	0.0690	0.0542	3	Pass

5.3.6 LTE Band 13

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 5MHz							
Lowest	18.59	17.10	34.77	0.0723	0.0513	3	Pass
Middle	18.44	17.42	34.77	0.0698	0.0552	3	Pass
Highest	18.28	17.21	34.77	0.0673	0.0526	3	Pass
Channel Bandwidth: 10MHz							
Middle	18.60	17.09	34.77	0.0724	0.0512	3	Pass

5.3.7 LTE Band 17

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 5MHz							
Lowest	18.40	17.25	34.77	0.0692	0.0531	3	Pass
Middle	18.22	17.10	34.77	0.0664	0.0513	3	Pass
Highest	18.38	17.39	34.77	0.0689	0.0548	3	Pass
Channel Bandwidth: 10MHz							
Lowest	18.44	17.18	34.77	0.0698	0.0522	3	Pass
Middle	18.40	17.82	34.77	0.0692	0.0605	3	Pass
Highest	18.42	17.30	34.77	0.0695	0.0537	3	Pass

5.3.8 LTE Band 25

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 1.4MHz							
Lowest	21.71	20.88	33.01	0.1483	0.1225	2	Pass
Middle	21.74	20.82	33.01	0.1493	0.1208	2	Pass
Highest	21.73	20.83	33.01	0.1489	0.1211	2	Pass
Channel Bandwidth: 3MHz							
Lowest	21.50	20.32	33.01	0.1413	0.1076	2	Pass
Middle	21.53	21.03	33.01	0.1422	0.1268	2	Pass
Highest	21.53	20.51	33.01	0.1422	0.1125	2	Pass
Channel Bandwidth: 5MHz							
Lowest	21.85	20.66	33.01	0.1531	0.1164	2	Pass
Middle	21.87	20.62	33.01	0.1538	0.1153	2	Pass
Highest	21.85	20.95	33.01	0.1531	0.1245	2	Pass
Channel Bandwidth: 10MHz							
Lowest	21.81	20.61	33.01	0.1517	0.1151	2	Pass
Middle	21.82	21.35	33.01	0.1521	0.1365	2	Pass
Highest	21.80	20.76	33.01	0.1514	0.1191	2	Pass
Channel Bandwidth: 15MHz							
Lowest	21.82	21.01	33.01	0.1521	0.1262	2	Pass
Middle	21.83	21.33	33.01	0.1524	0.1358	2	Pass
Highest	21.82	20.82	33.01	0.1521	0.1208	2	Pass
Channel Bandwidth: 20MHz							
Lowest	21.81	21.24	33.01	0.1517	0.1330	2	Pass
Middle	21.83	21.04	33.01	0.1524	0.1271	2	Pass
Highest	21.90	20.93	33.01	0.1549	0.1239	2	Pass

5.3.9 LTE Band 26(Part 22)

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 1.4MHz							
Lowest	18.21	17.26	38.45	0.0662	0.0532	7	Pass
Middle	18.16	17.21	38.45	0.0655	0.0526	7	Pass
Highest	18.21	17.18	38.45	0.0662	0.0522	7	Pass
Channel Bandwidth: 3MHz							
Lowest	18.14	17.09	38.45	0.0652	0.0512	7	Pass
Middle	18.12	16.88	38.45	0.0649	0.0488	7	Pass
Highest	18.08	17.43	38.45	0.0643	0.0553	7	Pass
Channel Bandwidth: 5MHz							
Lowest	18.38	17.47	38.45	0.0689	0.0558	7	Pass
Middle	18.34	17.14	38.45	0.0682	0.0518	7	Pass
Highest	18.35	16.99	38.45	0.0684	0.0500	7	Pass
Channel Bandwidth: 10MHz							
Lowest	18.38	17.33	38.45	0.0689	0.0541	7	Pass
Middle	18.37	17.14	38.45	0.0687	0.0518	7	Pass
Highest	18.34	17.86	38.45	0.0682	0.0611	7	Pass
Channel Bandwidth: 15MHz							
Lowest	18.44	17.58	38.45	0.0698	0.0573	7	Pass
Middle	18.42	17.84	38.45	0.0695	0.0608	7	Pass
Highest	18.42	17.35	38.45	0.0695	0.0543	7	Pass

5.3.10 LTE Band 26 (Part 90S)

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 1.4MHz							
Lowest	18.25	17.32	50.00	0.0668	0.0540	100	Pass
Middle	18.35	17.26	50.00	0.0684	0.0532	100	Pass
Highest	18.25	17.22	50.00	0.0668	0.0527	100	Pass
Channel Bandwidth: 3MHz							
Lowest	18.25	16.98	50.00	0.0668	0.0499	100	Pass
Middle	18.27	17.50	50.00	0.0671	0.0562	100	Pass
Highest	18.20	17.09	50.00	0.0661	0.0512	100	Pass
Channel Bandwidth: 5MHz							
Lowest	18.49	17.12	50.00	0.0706	0.0515	100	Pass
Middle	18.49	17.50	50.00	0.0706	0.0562	100	Pass
Highest	18.45	17.15	50.00	0.0700	0.0519	100	Pass
Channel Bandwidth: 10MHz							
Middle	18.45	17.79	50.00	0.0700	0.0601	100	Pass
Channel Bandwidth: 15MHz							
Highest	18.51	17.51	50.00	0.0710	0.0564	100	Pass

5.3.11 LTE Band 30

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 5MHz							
Lowest	22.47	21.16	23.98	0.1766	0.1306	0.25	Pass
Middle	22.49	21.54	23.98	0.1774	0.1426	0.25	Pass
Highest	22.46	21.28	23.98	0.1762	0.1343	0.25	Pass
Channel Bandwidth: 10MHz							
Middle	22.50	21.39	23.98	0.1778	0.1377	0.25	Pass

5.3.12 LTE Band 38

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 5MHz							
Lowest	22.63	21.48	33.01	0.1832	0.1406	2	Pass
Middle	22.74	21.60	33.01	0.1879	0.1445	2	Pass
Highest	22.69	21.87	33.01	0.1858	0.1538	2	Pass
Channel Bandwidth: 10MHz							
Lowest	22.64	21.40	33.01	0.1837	0.1380	2	Pass
Middle	22.67	21.70	33.01	0.1849	0.1479	2	Pass
Highest	22.69	21.49	33.01	0.1858	0.1409	2	Pass
Channel Bandwidth: 15MHz							
Lowest	22.58	21.60	33.01	0.1811	0.1445	2	Pass
Middle	22.70	21.46	33.01	0.1862	0.1400	2	Pass
Highest	22.58	21.76	33.01	0.1811	0.1500	2	Pass
Channel Bandwidth: 20MHz							
Lowest	22.56	21.68	33.01	0.1803	0.1472	2	Pass
Middle	22.79	21.55	33.01	0.1901	0.1429	2	Pass
Highest	22.59	21.45	33.01	0.1816	0.1396	2	Pass

5.3.13 LTE Band 40A

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 5MHz							
Lowest	22.27	21.23	23.98	0.1687	0.1327	0.25	Pass
Middle	22.27	21.20	23.98	0.1687	0.1318	0.25	Pass
Highest	22.28	21.37	23.98	0.1690	0.1371	0.25	Pass
Channel Bandwidth: 10MHz							
Middle	22.30	21.36	23.98	0.1698	0.1368	0.25	Pass

5.3.14 LTE Band 40B

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 5MHz							
Lowest	22.20	21.17	23.98	0.1660	0.1309	0.25	Pass
Middle	22.26	21.27	23.98	0.1683	0.1340	0.25	Pass
Highest	22.30	21.29	23.98	0.1698	0.1346	0.25	Pass
Channel Bandwidth: 10MHz							
Middle	22.31	21.32	23.98	0.1702	0.1355	0.25	Pass

5.3.15 LTE Band 41

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 5MHz							
Lowest	22.68	21.37	33.01	0.1854	0.1371	2	Pass
Middle	22.55	21.42	33.01	0.1799	0.1387	2	Pass
Highest	22.86	21.82	33.01	0.1932	0.1521	2	Pass
Channel Bandwidth: 10MHz							
Lowest	22.71	21.43	33.01	0.1866	0.1390	2	Pass
Middle	22.53	21.33	33.01	0.1791	0.1358	2	Pass
Highest	22.95	21.59	33.01	0.1972	0.1442	2	Pass
Channel Bandwidth: 15MHz							
Lowest	22.57	21.47	33.01	0.1807	0.1403	2	Pass
Middle	22.56	21.32	33.01	0.1803	0.1355	2	Pass
Highest	22.83	21.82	33.01	0.1919	0.1521	2	Pass
Channel Bandwidth: 20MHz							
Lowest	22.77	21.53	33.01	0.1892	0.1422	2	Pass
Middle	22.85	21.44	33.01	0.1928	0.1393	2	Pass
Highest	22.97	21.55	33.01	0.1982	0.1429	2	Pass

5.3.16 LTE Band 66

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 1.4MHz							
Lowest	22.28	21.38	30.00	0.1690	0.1374	1	Pass
Middle	22.26	21.27	30.00	0.1683	0.1340	1	Pass
Highest	22.13	21.18	30.00	0.1633	0.1312	1	Pass
Channel Bandwidth: 3MHz							
Lowest	22.16	20.95	30.00	0.1644	0.1245	1	Pass
Middle	22.12	21.51	30.00	0.1629	0.1416	1	Pass
Highest	22.03	20.95	30.00	0.1596	0.1245	1	Pass
Channel Bandwidth: 5MHz							
Lowest	22.36	21.28	30.00	0.1722	0.1343	1	Pass
Middle	22.40	21.09	30.00	0.1738	0.1285	1	Pass
Highest	22.28	21.34	30.00	0.1690	0.1361	1	Pass
Channel Bandwidth: 10MHz							
Lowest	22.42	21.25	30.00	0.1746	0.1334	1	Pass
Middle	22.39	21.80	30.00	0.1734	0.1514	1	Pass
Highest	22.31	21.26	30.00	0.1702	0.1337	1	Pass
Channel Bandwidth: 15MHz							
Lowest	22.42	21.54	30.00	0.1746	0.1426	1	Pass
Middle	22.44	21.79	30.00	0.1754	0.1510	1	Pass
Highest	22.34	21.27	30.00	0.1714	0.1340	1	Pass
Channel Bandwidth: 20MHz							
Lowest	22.47	21.45	30.00	0.1766	0.1396	1	Pass
Middle	22.39	21.76	30.00	0.1734	0.1500	1	Pass
Highest	22.33	21.44	30.00	0.1710	0.1393	1	Pass

5.3.17 LTE Band 71

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 5MHz							
Lowest	18.63	17.24	34.77	0.0729	0.0530	3	Pass
Middle	18.43	17.42	34.77	0.0697	0.0552	3	Pass
Highest	18.24	17.02	34.77	0.0667	0.0504	3	Pass
Channel Bandwidth: 10MHz							
Lowest	18.63	17.87	34.77	0.0729	0.0612	3	Pass
Middle	18.48	17.33	34.77	0.0705	0.0541	3	Pass
Highest	18.40	16.98	34.77	0.0692	0.0499	3	Pass
Channel Bandwidth: 15MHz							
Lowest	18.52	17.49	34.77	0.0711	0.0561	3	Pass
Middle	18.50	17.76	34.77	0.0708	0.0597	3	Pass
Highest	18.36	17.20	34.77	0.0685	0.0525	3	Pass
Channel Bandwidth: 20MHz							
Lowest	18.65	17.70	34.77	0.0733	0.0589	3	Pass
Middle	18.37	17.46	34.77	0.0687	0.0557	3	Pass
Highest	18.44	17.25	34.77	0.0698	0.0531	3	Pass

5.4 PEAK-TO-AVERAGE RATIO

Test Requirement:	LTE Band 2 & LTE Band 25: FCC 47 CFR Part 24.232(d)
	LTE Band 4 & LTE Band 66: FCC 47 CFR Part 27.50(d)(5)
	LTE Band 5 & LTE Band 26: FCC 47 CFR Part 22.913(a)
	LTE Band 7 & Band 38 & Band 41: FCC 47 CFR Part 27.50(d)(5)
	LTE Band 12 & Band 17 & Band 71: FCC 47 CFR Part 27.50(d)(5)
Test Method:	LTE Band 13: FCC 47 CFR Part 27.50(d)(5)
	KDB 971168 D01v03r01 Section 5.7
Limit:	In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB
Test Procedure:	
The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer.	
a) Set resolution/measurement bandwidth $\geq$ signal's occupied bandwidth	
b) Set the number of counts to a value that stabilizes the measured CCDF curve	
c) Record the maximum PAPR level associated with a probability of 0.1 %	
Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.	
Test Setup:	Refer to section 4.2.2 for details.
Instruments Used:	Refer to section 3 for details
Test Mode:	Link mode
Test Results:	Pass
Test Data:	Please refer to Appendix A

5.5 99%&26DB BANDWIDTH

Test Requirement: FCC 47 CFR Part 2.1049(h)

Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01 Section 4

Limit: No Limit, for reporting purposes only.

Test Procedure:

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at the low, middle and high channel in each band. The 99% and -26dB bandwidths was also measured and recorded.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

Test Setup: Refer to section 4.2.2 for details.

Instruments Used: Refer to section 3 for details

Test Mode: Link mode

Test Results: Pass

Test Data: Please refer to Appendix A

5.6 BAND EDGE AT ANTENNA TERMINALS

Test Requirement: LTE Band 2 & LTE Band 25: FCC 47 CFR Part 24.238(a)
LTE Band 4 & LTE Band 66: FCC 47 CFR Part 27.53(h)(1)
LTE Band 5 & LTE Band 26: FCC 47 CFR Part 22.917(a)
LTE Band 41: FCC 47 CFR Part 27.53(m)(4)
LTE Band 12 & Band 71: FCC 47 CFR Part 27.53(g)
LTE Band 13: FCC 47 CFR Part 27.53(c)(2)
LTE Band 26: FCC 47 CFR Part 90.691
LTE Band 30 & Band 40: FCC 47 CFR Part 27.53(a)(4)
Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01

Limit:

FCC 47 CFR Part 24.238(a), 27.53(h)(1), 22.917(a):

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13 dBm.

FCC 47 CFR Part 27.53(m)(4):

For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log(P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log(P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log(P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log(P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log(P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

FCC 47 CFR Part 27.53(g):

For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log(P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

FCC 47 CFR Part 27.53(c)(2):

On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB;

FCC 47 CFR Part 27.53(a)(4): For mobile and portable stations operating in the 2305-2315 MHz and 2350-2360 MHz bands:

- (i) By a factor of not less than: $43 + 10 \log(P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than $55 + 10 \log(P)$ dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than $61 + 10 \log(P)$ dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than $67 + 10 \log(P)$ dB on all frequencies between 2328 and 2337 MHz;
- (ii) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2300 and 2305 MHz, $55 + 10 \log(P)$ dB on all frequencies between 2296 and 2300 MHz, $61 + 10 \log(P)$ dB on all frequencies between 2292 and 2296 MHz, $67 + 10 \log(P)$ dB on all frequencies between 2288 and 2292 MHz, and $70 + 10 \log(P)$ dB below 2288 MHz;
- (iii) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2360 and 2365 MHz, and not less than $70 + 10 \log(P)$ dB above 2365 MHz.

FCC 47 CFR Part 27.53(a)(5): Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the channel blocks at 2305, 2310, 2315, 2320, 2345, 2350, 2355, and 2360 MHz, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required

measurement bandwidth (i.e., 1 MHz). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

FCC 47 CFR Part 90.691:

(a)(1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $116 \log_{10}(f/6.1)$ decibels or $50 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

(a)(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

Test Procedure:

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer.

For each band edge measurement:

- 1) Set the spectrum analyzer span to include the block edge frequency.
- 2) Set a marker to point the corresponding band edge frequency in each test case.
- 3) Set display line at -13 dBm
- 4) Set resolution bandwidth to at least 1% of emission bandwidth.
- 5) Set spectrum analyzer with RMS detector.
- 6) Record the max trace plot into the test report

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

Test Setup: Refer to section 4.2.2 for details.

Instruments Used: Refer to section 3 for details

Test Mode: Link mode

Test Results: Pass

Test Data: Please refer to Appendix A

5.7 SPURIOUS EMISSIONS AT ANTENNA TERMINALS

Test Requirement: LTE Band 2 & LTE Band 25: FCC 47 CFR Part 24.238(a)
LTE Band 4 & LTE Band 66: FCC 47 CFR Part 27.53(h)
LTE Band 5 & LTE Band 26: FCC 47 CFR Part 22.917(a)
LTE Band 7 & Band 41: FCC 47 CFR Part 27.53(m)(4)
LTE Band 12 & Band 17 & Band 71: FCC 47 CFR Part 27.53(g)
LTE Band 13: FCC 47 CFR Part 27.53
LTE Band 26: FCC 47 CFR Part 90.691
LTE Band 30 & Band 40: FCC 47 CFR Part 27.53(a)(4)

Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01

Limit:

FCC 47 CFR Part 24.238(a), 27.53(h)(1), 22.917(a), 27.53(g), 27.53(c)(2), 90.691:

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13 dBm.

FCC 47 CFR Part 27.53(a)(4): For mobile and portable stations operating in the 2305-2315 MHz and 2350-2360 MHz bands:

(i) By a factor of not less than: $43 + 10 \log(P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than $55 + 10 \log(P)$ dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than $61 + 10 \log(P)$ dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than $67 + 10 \log(P)$ dB on all frequencies between 2328 and 2337 MHz;

(ii) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2300 and 2305 MHz, $55 + 10 \log(P)$ dB on all frequencies between 2296 and 2300 MHz, $61 + 10 \log(P)$ dB on all frequencies between 2292 and 2296 MHz, $67 + 10 \log(P)$ dB on all frequencies between 2288 and 2292 MHz, and $70 + 10 \log(P)$ dB below 2288 MHz;

(iii) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2360 and 2365 MHz, and not less than $70 + 10 \log(P)$ dB above 2365 MHz.

FCC 47 CFR Part 27.53(m)(4):

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $55 + 10 \log(P)$ dB. The emission limit equal to -25 dBm.

Test Procedure:

The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range. b. Measuring frequency range is from 30 MHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower. Set RBW & VBW to 100 kHz for the measurement below 1 GHz, and 1 MHz for the measurement above 1 GHz.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

Test Setup: Refer to section 4.2.2 for details.

Instruments Used: Refer to section 3 for details

Test Mode: Link mode

Test Results: Pass

Test Data: Please refer to Appendix A

5.8 FIELD STRENGTH OF SPURIOUS RADIATION

Test Requirement: LTE Band 2 & LTE Band 25: FCC 47 CFR Part 24.238(a)
 LTE Band 4 & LTE Band 66: FCC 47 CFR Part 27.53(h)
 LTE Band 5 & LTE Band 26: FCC 47 CFR Part 22.917(a)
 LTE Band 7 & Band 41: FCC 47 CFR Part 27.53(m)(4)
 LTE Band 12 & Band 17 & Band 71: FCC 47 CFR Part 27.53(g)
 LTE Band 13: FCC 47 CFR Part 27.53
 LTE Band 26: FCC 47 CFR Part 90.691
 LTE Band 30 & Band 40: FCC 47 CFR Part 27.53(a)(4)

Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01

Receiver Setup:

Frequency	Detector	RBW	VBW	Remark
0.009 MHz-30 MHz	Peak	10 kHz	30 KHz	Peak
30 MHz-1 GHz	Quasi-peak	100 kHz	300 KHz	Peak
Above 1 GHz	Peak	1 MHz	3 MHz	Peak

Limits:

FCC 47 CFR Part 24.238(a), 27.53(h)(1), 22.917(a), 27.53(g), 27.53(c)(2), 90.691:

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13 dBm.

FCC 47 CFR Part 27.53(a)(4): For mobile and portable stations operating in the 2305-2315 MHz and 2350-2360 MHz bands:

- (i) By a factor of not less than: $43 + 10 \log(P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than $55 + 10 \log(P)$ dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than $61 + 10 \log(P)$ dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than $67 + 10 \log(P)$ dB on all frequencies between 2328 and 2337 MHz;
- (ii) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2300 and 2305 MHz, $55 + 10 \log(P)$ dB on all frequencies between 2296 and 2300 MHz, $61 + 10 \log(P)$ dB on all frequencies between 2292 and 2296 MHz, $67 + 10 \log(P)$ dB on all frequencies between 2288 and 2292 MHz, and $70 + 10 \log(P)$ dB below 2288 MHz;
- (iii) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2360 and 2365 MHz, and not less than $70 + 10 \log(P)$ dB above 2365 MHz.

FCC 47 CFR Part 27.53(m)(4):

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $55 + 10 \log(P)$ dB. The emission limit equal to -25 dBm.

FCC 47 CFR Part 27.53:

- (c) The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.
- (f) Emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals. ($-70 \text{ dBW/MHz} = -40 \text{ dBm/MHz}$).

Test Setup: Refer to section 4.2.1 for details.

Test Procedures: KDB 971168 D01v03r01 Section 7

Equipment Used: Refer to section 3 for details.

Test Result: Pass

The measurement data as follows:

5.8.1 LTE Band 2

LTE Band 2_ 20 MHz_ QPSK							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
Lowest Channel							
1	531.291	-73.84	7.99	-65.85	-13.00	-52.85	Horizontal
2	925.613	-80.77	14.71	-66.06	-13.00	-53.06	Horizontal
3	952.000	-80.36	14.50	-65.86	-13.00	-52.86	Horizontal
4	3720.000	-57.22	8.67	-48.55	-13.00	-35.55	Horizontal
5	5580.000	-70.73	12.08	-58.65	-13.00	-45.65	Horizontal
6	531.291	-70.12	7.99	-62.13	-13.00	-49.13	Vertical
7	827.179	-80.43	12.79	-67.64	-13.00	-54.64	Vertical
8	906.304	-81.54	14.40	-67.14	-13.00	-54.14	Vertical
9	3720.000	-56.71	8.67	-48.04	-13.00	-35.04	Vertical
10	5580.000	-68.21	12.08	-56.13	-13.00	-43.13	Vertical
Middle Channel							
1	531.291	-73.52	7.99	-65.53	-13.00	-52.53	Horizontal
2	798.620	-78.53	12.97	-65.56	-13.00	-52.56	Horizontal
3	925.613	-79.96	14.71	-65.25	-13.00	-52.25	Horizontal
4	3760.000	-54.25	8.78	-45.47	-13.00	-32.47	Horizontal
5	5640.000	-71.43	12.00	-59.43	-13.00	-46.43	Horizontal
6	531.291	-71.08	7.99	-63.09	-13.00	-50.09	Vertical
7	798.620	-80.18	12.97	-67.21	-13.00	-54.21	Vertical
8	925.613	-80.44	14.71	-65.73	-13.00	-52.73	Vertical
9	3760.000	-52.16	8.78	-43.38	-13.00	-30.38	Vertical
10	5640.000	-70.99	12.00	-58.99	-13.00	-45.99	Vertical
Highest Channel							
1	531.291	-75.26	7.99	-67.27	-13.00	-54.27	Horizontal
2	798.620	-80.21	12.97	-67.24	-13.00	-54.24	Horizontal
3	906.304	-81.66	14.40	-67.26	-13.00	-54.26	Horizontal
4	3800.000	-54.25	8.89	-45.36	-13.00	-32.36	Horizontal
5	5700.000	-73.47	11.93	-61.54	-13.00	-48.54	Horizontal
6	531.291	-71.37	7.99	-63.38	-13.00	-50.38	Vertical
7	875.013	-81.42	14.01	-67.41	-13.00	-54.41	Vertical
8	912.695	-80.77	14.39	-66.38	-13.00	-53.38	Vertical
9	3800.000	-52.46	8.89	-43.57	-13.00	-30.57	Vertical
10	5700.000	-73.38	11.93	-61.45	-13.00	-48.45	Vertical

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5.8.2 LTE Band 4

LTE Band 4_ 20 MHz_ QPSK							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	531.291	-75.24	7.99	-67.25	-13.00	-54.25	Horizontal
2	798.620	-80.74	12.97	-67.77	-13.00	-54.77	Horizontal
3	925.613	-81.11	14.71	-66.40	-13.00	-53.40	Horizontal
4	3440.000	-66.64	7.60	-59.04	-13.00	-46.04	Horizontal
5	5160.000	-51.54	10.81	-40.73	-13.00	-27.73	Horizontal
6	531.291	-70.89	7.99	-62.90	-13.00	-49.90	Vertical
7	804.252	-81.01	12.90	-68.11	-13.00	-55.11	Vertical
8	992.997	-81.65	14.84	-66.81	-13.00	-53.81	Vertical
9	3440.000	-68.09	7.60	-60.49	-13.00	-47.49	Vertical
10	5160.000	-52.80	10.81	-41.99	-13.00	-28.99	Vertical
Middle Channel							
1	531.291	-75.60	7.99	-67.61	-13.00	-54.61	Horizontal
2	798.620	-80.38	12.97	-67.41	-13.00	-54.41	Horizontal
3	932.141	-81.18	14.85	-66.33	-13.00	-53.33	Horizontal
4	3465.000	-65.72	7.74	-57.98	-13.00	-44.98	Horizontal
5	5197.500	-48.25	10.91	-37.34	-13.00	-24.34	Horizontal
6	531.291	-70.87	7.99	-62.88	-13.00	-49.88	Vertical
7	660.602	-79.06	10.77	-68.29	-13.00	-55.29	Vertical
8	932.141	-81.37	14.85	-66.52	-13.00	-53.52	Vertical
9	3465.000	-67.21	7.74	-59.47	-13.00	-46.47	Vertical
10	5197.500	-52.78	10.91	-41.87	-13.00	-28.87	Vertical
Highest Channel							
1	531.291	-70.87	7.99	-62.88	-13.00	-49.88	Horizontal
2	660.602	-79.06	10.77	-68.29	-13.00	-55.29	Horizontal
3	932.141	-81.37	14.85	-66.52	-13.00	-53.52	Horizontal
4	3490.000	-67.17	7.89	-59.28	-13.00	-46.28	Horizontal
5	5235.000	-68.33	11.06	-57.27	-13.00	-44.27	Horizontal
6	531.291	-75.10	7.99	-67.11	-13.00	-54.11	Vertical
7	798.620	-78.87	12.97	-65.90	-13.00	-52.90	Vertical
8	809.924	-79.25	12.71	-66.54	-13.00	-53.54	Vertical
9	3490.000	-67.92	7.89	-60.03	-13.00	-47.03	Vertical
10	5235.000	-68.51	11.06	-57.45	-13.00	-44.45	Vertical

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5.8.3 LTE Band 5

LTE Band 5_ 10 MHz_ QPSK							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	875.013	-87.82	42.62	-45.20	-13.00	-32.20	Horizontal
2	932.141	-87.38	43.32	-44.06	-13.00	-31.06	Horizontal
3	986.044	-87.25	43.06	-44.19	-13.00	-31.19	Horizontal
4	1658.000	-52.62	0.08	-52.54	-13.00	-39.54	Horizontal
5	2487.000	-55.90	4.11	-51.79	-13.00	-38.79	Horizontal
6	637.795	-88.51	39.41	-49.10	-13.00	-36.10	Vertical
7	787.475	-89.03	41.73	-47.30	-13.00	-34.30	Vertical
8	986.044	-87.66	43.06	-44.60	-13.00	-31.60	Vertical
9	1658.000	-49.48	0.08	-49.40	-13.00	-36.40	Vertical
10	2487.000	-60.61	4.11	-56.50	-13.00	-43.50	Vertical
Middle Channel							
1	565.978	-88.63	37.53	-51.10	-13.00	-38.10	Horizontal
2	776.485	-88.99	41.51	-47.48	-13.00	-34.48	Horizontal
3	992.997	-88.15	43.17	-44.98	-13.00	-31.98	Horizontal
4	1673.000	-53.75	0.15	-53.60	-13.00	-40.60	Horizontal
5	2509.500	-62.47	4.20	-58.27	-13.00	-45.27	Horizontal
6	698.804	-89.02	40.84	-48.18	-13.00	-35.18	Vertical
7	899.958	-87.94	42.87	-45.07	-13.00	-32.07	Vertical
8	938.714	-87.59	43.17	-44.42	-13.00	-31.42	Vertical
9	1673.000	-52.97	0.15	-52.82	-13.00	-39.82	Vertical
10	2509.500	-63.35	4.20	-59.15	-13.00	-46.15	Vertical
Highest Channel							
1	765.648	-88.28	41.20	-47.08	-13.00	-34.08	Horizontal
2	793.028	-88.51	41.79	-46.72	-13.00	-33.72	Horizontal
3	972.283	-87.67	42.96	-44.71	-13.00	-31.71	Horizontal
4	1688.000	-54.95	0.22	-54.73	-13.00	-41.73	Horizontal
5	2532.000	-61.53	4.24	-57.29	-13.00	-44.29	Horizontal
6	684.226	-88.98	40.22	-48.76	-13.00	-35.76	Vertical
7	798.620	-88.30	41.76	-46.54	-13.00	-33.54	Vertical
8	925.613	-87.24	43.20	-44.04	-13.00	-31.04	Vertical
9	1688.000	-54.21	0.22	-53.99	-13.00	-40.99	Vertical
10	2532.000	-62.87	4.24	-58.63	-13.00	-45.63	Vertical

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5.8.4 LTE Band 7

LTE Band 7_ 20 MHz_ QPSK							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	531.291	-75.34	7.99	-67.35	-25.00	-42.35	Horizontal
2	798.620	-79.35	12.97	-66.38	-25.00	-41.38	Horizontal
3	1000.000	-80.44	14.99	-65.45	-25.00	-40.45	Horizontal
4	5020.000	-60.77	10.46	-50.31	-25.00	-25.31	Horizontal
5	7530.000	-68.52	14.20	-54.32	-25.00	-29.32	Horizontal
6	531.291	-70.44	7.99	-62.45	-25.00	-37.45	Vertical
7	862.802	-79.72	13.35	-66.37	-25.00	-41.37	Vertical
8	906.304	-81.62	14.40	-67.22	-25.00	-42.22	Vertical
9	5020.000	-62.69	10.46	-52.23	-25.00	-27.23	Vertical
10	7530.000	-67.35	14.20	-53.15	-25.00	-28.15	Vertical
Middle Channel							
1	531.291	-75.35	7.99	-67.36	-25.00	-42.36	Horizontal
2	776.485	-80.90	12.71	-68.19	-25.00	-43.19	Horizontal
3	875.013	-81.62	14.01	-67.61	-25.00	-42.61	Horizontal
4	5070.000	-63.43	10.59	-52.84	-25.00	-27.84	Horizontal
5	7605.000	-67.14	14.36	-52.78	-25.00	-27.78	Horizontal
6	531.291	-70.82	7.99	-62.83	-25.00	-37.83	Vertical
7	703.731	-79.74	11.90	-67.84	-25.00	-42.84	Vertical
8	793.028	-80.23	13.00	-67.23	-25.00	-42.23	Vertical
9	5070.000	-63.43	10.59	-52.84	-25.00	-27.84	Vertical
10	7605.000	-67.14	14.36	-52.78	-25.00	-27.78	Vertical
Highest Channel							
1	531.291	-75.55	7.99	-67.56	-25.00	-42.56	Horizontal
2	833.013	-80.69	13.10	-67.59	-25.00	-42.59	Horizontal
3	925.613	-81.06	14.71	-66.35	-25.00	-41.35	Horizontal
4	5120.000	-68.66	10.71	-57.95	-25.00	-32.95	Horizontal
5	7680.000	-70.95	14.51	-56.44	-25.00	-31.44	Horizontal
6	531.291	-71.10	7.99	-63.11	-25.00	-38.11	Vertical
7	887.398	-81.12	13.86	-67.26	-25.00	-42.26	Vertical
8	986.044	-81.56	14.72	-66.84	-25.00	-41.84	Vertical
9	5120.000	-70.54	10.71	-59.83	-25.00	-34.83	Vertical
10	7680.000	-69.76	14.51	-55.25	-25.00	-30.25	Vertical

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5.8.5 LTE Band 12

LTE Band 12_ 10 MHz_ QPSK							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	765.648	-87.91	41.20	-46.71	-13.00	-33.71	Horizontal
2	875.013	-87.89	42.62	-45.27	-13.00	-32.27	Horizontal
3	938.714	-88.12	43.17	-44.95	-13.00	-31.95	Horizontal
4	1408.000	-56.50	-0.78	-57.28	-13.00	-44.28	Horizontal
5	2112.000	-60.75	1.91	-58.84	-13.00	-45.84	Horizontal
6	798.620	-89.01	41.76	-47.25	-13.00	-34.25	Vertical
7	881.184	-88.13	42.25	-45.88	-13.00	-32.88	Vertical
8	972.283	-87.76	42.96	-44.80	-13.00	-31.80	Vertical
9	1408.000	-55.65	-0.78	-56.43	-13.00	-43.43	Vertical
10	2112.000	-63.62	1.91	-61.71	-13.00	-48.71	Vertical
Middle Channel							
1	646.822	-89.31	39.75	-49.56	-13.00	-36.56	Horizontal
2	793.028	-88.86	41.79	-47.07	-13.00	-34.07	Horizontal
3	945.334	-87.87	42.86	-45.01	-13.00	-32.01	Horizontal
4	1415.000	-60.44	-0.75	-61.19	-13.00	-48.19	Horizontal
5	2122.500	-62.33	1.97	-60.36	-13.00	-47.36	Horizontal
6	793.028	-88.38	41.79	-46.59	-13.00	-33.59	Vertical
7	938.714	-87.84	43.17	-44.67	-13.00	-31.67	Vertical
8	965.474	-87.09	42.84	-44.25	-13.00	-31.25	Vertical
9	1415.000	-52.95	-0.75	-53.70	-13.00	-40.70	Vertical
10	2122.500	-62.05	1.97	-60.08	-13.00	-47.08	Vertical
Highest Channel							
1	781.961	-88.65	41.56	-47.09	-13.00	-34.09	Horizontal
2	856.760	-88.08	41.79	-46.29	-13.00	-33.29	Horizontal
3	979.139	-87.90	43.21	-44.69	-13.00	-31.69	Horizontal
4	1422.000	-55.74	-0.73	-56.47	-13.00	-43.47	Horizontal
5	2133.000	-59.46	2.01	-57.45	-13.00	-44.45	Horizontal
6	660.602	-89.18	39.60	-49.58	-13.00	-36.58	Vertical
7	787.475	-88.98	41.73	-47.25	-13.00	-34.25	Vertical
8	932.141	-87.96	43.32	-44.64	-13.00	-31.64	Vertical
9	1422.000	-51.77	-0.73	-52.50	-13.00	-39.50	Vertical
10	2133.000	-60.24	2.01	-58.23	-13.00	-45.23	Vertical

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5.8.6 LTE Band 13

LTE Band 13_ 5 MHz_ QPSK							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	693.910	-89.19	40.68	-48.51	-13.00	-35.51	Horizontal
2	833.013	-88.49	41.81	-46.68	-13.00	-33.68	Horizontal
3	925.613	-88.49	43.20	-45.29	-13.00	-32.29	Horizontal
4	1559.000	-59.17	-0.31	-59.48	-13.00	-46.48	Horizontal
5	2338.500	-62.87	3.19	-59.68	-13.00	-46.68	Horizontal
6	708.694	-88.80	40.46	-48.34	-13.00	-35.34	Vertical
7	932.141	-87.98	43.32	-44.66	-13.00	-31.66	Vertical
8	972.283	-87.27	42.96	-44.31	-13.00	-31.31	Vertical
9	1559.000	-56.17	-0.31	-56.48	-13.00	-43.48	Vertical
10	2338.500	-60.21	3.19	-57.02	-13.00	-44.02	Vertical
Highest Channel							
1	698.804	-88.79	40.84	-47.95	-13.00	-34.95	Horizontal
2	906.304	-88.51	42.93	-45.58	-13.00	-32.58	Horizontal
3	972.283	-88.07	42.96	-45.11	-13.00	-32.11	Horizontal
4	1564.000	-44.62	-0.29	-44.91	-13.00	-31.91	Horizontal
5	2346.000	-30.89	3.23	-27.66	-13.00	-14.66	Horizontal
6	684.226	-88.87	40.22	-48.65	-13.00	-35.65	Vertical
7	881.184	-88.50	42.25	-46.25	-13.00	-33.25	Vertical
8	919.132	-88.34	43.02	-45.32	-13.00	-32.32	Vertical
9	1564.000	-41.79	-0.29	-42.08	-13.00	-29.08	Vertical
10	2346.000	-22.99	3.23	-19.76	-13.00	-6.76	Vertical

LTE Band 13_ 10 MHz_ QPSK							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Middle Channel							
1	698.804	-89.24	40.84	-48.40	-13.00	-35.40	Horizontal
2	875.013	-88.31	42.62	-45.69	-13.00	-32.69	Horizontal
3	906.304	-88.17	42.93	-45.24	-13.00	-32.24	Horizontal
4	1569.000	-58.80	-0.29	-59.09	-13.00	-46.09	Horizontal
5	2353.500	-62.35	3.28	-59.07	-13.00	-46.07	Horizontal
6	674.677	-88.43	39.92	-48.51	-13.00	-35.51	Vertical
7	906.304	-88.15	42.93	-45.22	-13.00	-32.22	Vertical
8	932.141	-87.57	43.32	-44.25	-13.00	-31.25	Vertical
9	1569.000	-53.36	-0.29	-53.65	-13.00	-40.65	Vertical
10	2353.500	-63.38	3.28	-60.10	-13.00	-47.10	Vertical

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