

RF Power Output and Effective Radiated Power

Band2	Channel/ Frequency(MHz)	Index	RB# RBstart QPSK	RB# RBstart 16QAM	Conducted Power (dBm)	
					QPSK	16QAM
1.4MHz	18607/1850.7	0	1#0		23.23	22.18
		0	6#0	5#0	21.06	21.02
	18900/1880	0	1#0		23.36	22.31
		0	6#0	5#0	21.06	21.19
	19193/1909.3	0	1#5	1#5	23.17	22.16
		0	6#0	5#0	21.31	21.26
3MHz	18615/1851.5	0	1#0		23.32	22.21
		0	6#0	5#0	21.00	21.18
	18900/1880	0	1#0	1#0	23.56	22.42
		0	6#0	5#0	21.32	21.27
	19185/1908.5	1	1#5	1#5	23.27	22.12
		1	6#0	5#0	21.19	21.25
5MHz	18625/1852.5	3	1#0	1#0	23.26	22.81
		0	6#0	5#0	22.08	21.31
	18900/1880	0	1#0	1#0	23.51	23.61
		0	6#0	5#0	22.31	21.35
	19175/1907.5	0	1#5	1#5	23.05	22.98
		3	6#0	5#0	22.26	21.41
10MHz	18650/1855	3	1#0	1#0	23.12	23.01
		0	4#0	4#0	23.21	21.65
	18900/1880	0	1#0	1#0	23.50	23.51
		0	4#0	4#0	23.25	21.80
	19150/1905	4	1#5	1#5	23.10	23.07
		7	4#2	4#2	23.15	22.13
15MHz	18675/1857.5	3	1#0	1#0	23.32	22.94
		0	6#0	5#0	23.16	23.56
	18900/1880	0	1#0	1#0	23.35	23.53
		0	6#0	5#0	23.23	23.24
	19125/1902.5	8	1#5	1#5	22.96	23.01
		11	6#0	5#0	23.20	23.51
20MHz	18700/1860	3	1#0	1#0	23.21	23.02
		0	6#0	5#0	23.23	23.51
	18900/1880	0	1#0	1#0	23.43	23.49
		0	6#0	5#0	23.27	23.40
	19100/1900	12	1#5	1#5	23.05	22.97
		15	6#0	5#0	23.28	23.51

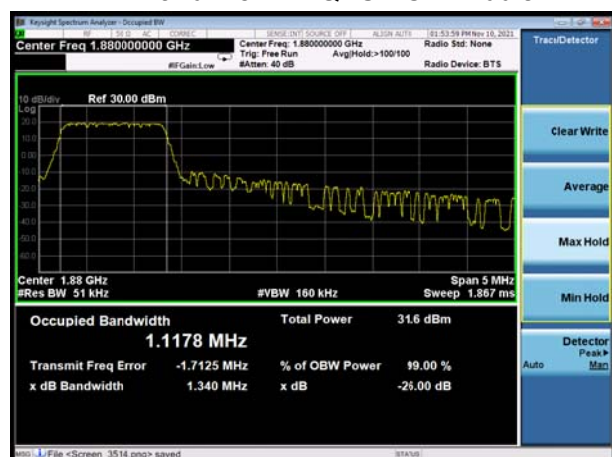
Band25	Channel/ Frequency(MHz)	Index	RB# RBstart QPSK	RB# RBstart 16QAM	Conducted Power (dBm)	
					QPSK	16QAM
1.4MHz	26047/1850.7	0	1#0	1#0	23.58	22.42
		0	6#0	5#0	21.27	21.25
	26365/1882.5	0	1#0	1#0	23.18	22.02
		0	6#0	5#0	21.35	21.32
	26683/1914.3	0	1#5	1#5	23.32	22.22
		0	6#0	5#0	21.29	21.33
3MHz	26055/1851.5	0	1#0	1#0	23.53	22.37
		0	6#0	5#0	21.34	21.38
	26365/1882.5	0	1#0	1#0	23.41	22.40
		0	6#0	5#0	21.30	21.25
	26675/1913.5	1	1#5	1#5	23.17	22.05
		1	6#0	5#0	21.31	21.26
5MHz	26065/1852.5	3	1#0	1#0	23.49	23.06
		0	6#0	5#0	22.34	21.52
	26365/1882.5	0	1#0	1#0	23.45	23.61
		0	6#0	5#0	22.32	21.52
	26665/1912.5	0	1#5	1#5	23.09	22.92
		3	6#0	5#0	22.24	21.39
10MHz	26090/1855	3	1#0	1#0	23.34	23.24
		0	4#0	4#0	23.37	21.90
	26365/1882.5	0	1#0	1#0	23.49	23.58
		0	4#0	4#0	23.36	22.38
	26640/1910	4	1#5	1#5	23.10	23.33
		7	4#2	4#2	23.23	22.12
15MHz	26115/1857.5	3	1#0	1#0	23.63	23.21
		0	6#0	5#0	23.37	23.62
	26365/1882.5	0	1#0	1#0	23.48	23.62
		0	6#0	5#0	23.37	23.35
	26615/1907.5	8	1#5	1#5	22.94	22.95
		11	6#0	5#0	23.28	23.39
20MHz	26140/1860	3	1#0	1#0	23.41	23.29
		0	6#0	5#0	23.35	23.61
	26365/1882.5	0	1#0	1#0	23.51	23.35
		0	6#0	5#0	23.38	23.36
	26590/1905	12	1#5	1#5	23.12	22.84
		15	6#0	5#0	23.24	23.23

Occupied Bandwidth

Mode	Bandwidth	Modulation	Channel/ Frequency(MHz)	RB	Bandwidth(MHz)	
					99% Power	-26dBc
LTE Band 2	5MHz	QPSK	18900/1880	6#0	0	1.118
		16QAM	18900/1880	6#0	0	0.947

Mode	Bandwidth	Modulation	Channel/ Frequency(MHz)	RB	Bandwidth(MHz)	
					99% Power	-26dBc
LTE Band 25	15MHz	QPSK	26365/1882.5	6#0	0	1.135
		16QAM	26365/1882.5	6#0	0	0.972

LTE Band 2 5MHz QPSK CH-Middle



LTE Band 2 5MHz 16QAM CH-Middle



LTE Band 25 15MHz QPSK CH-Middle

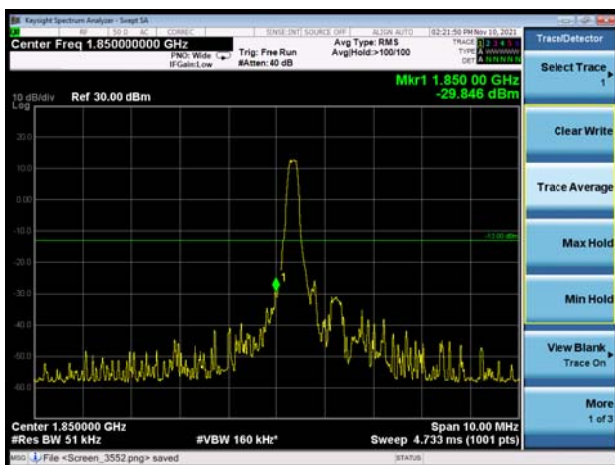


LTE Band 25 15MHz 16QAM CH-Middle



Band Edge Compliance

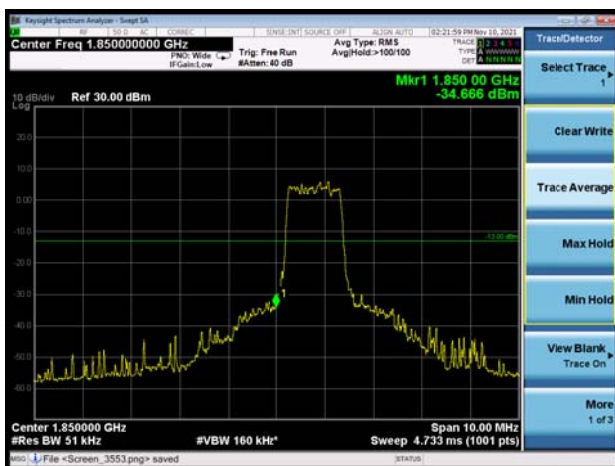
LTE Band 2 5MHz QPSK 1RB CH-Low



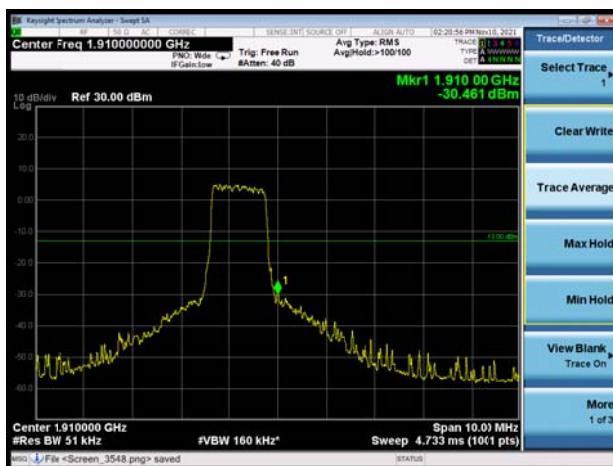
LTE Band 2 5MHz QPSK 1RB CH-High



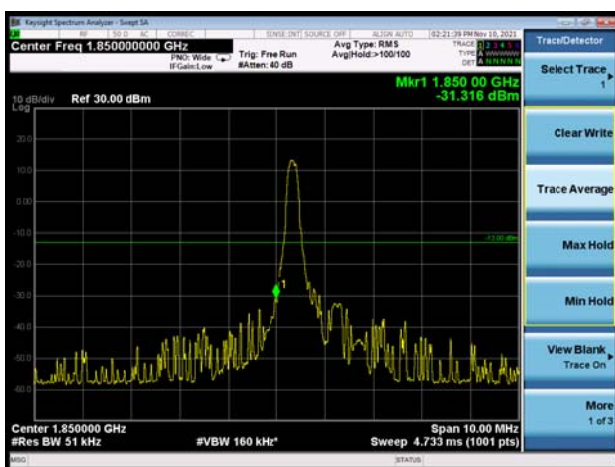
LTE Band 2 5MHz QPSK 100%RB CH-Low



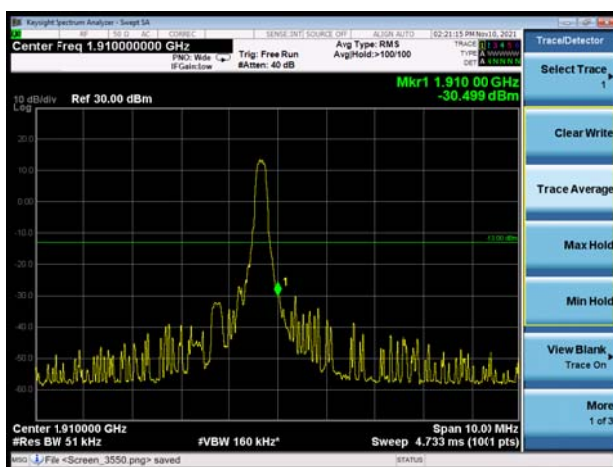
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LTE Band 2 5MHz 16QAM 1RB CH-Low

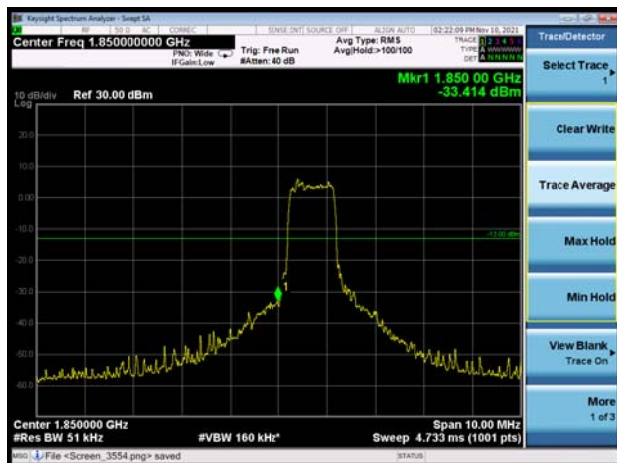


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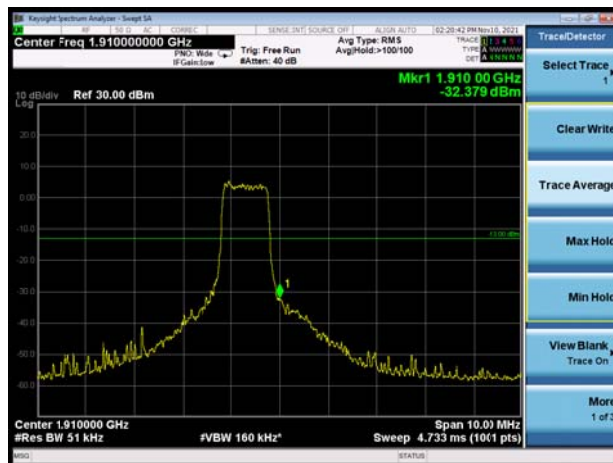




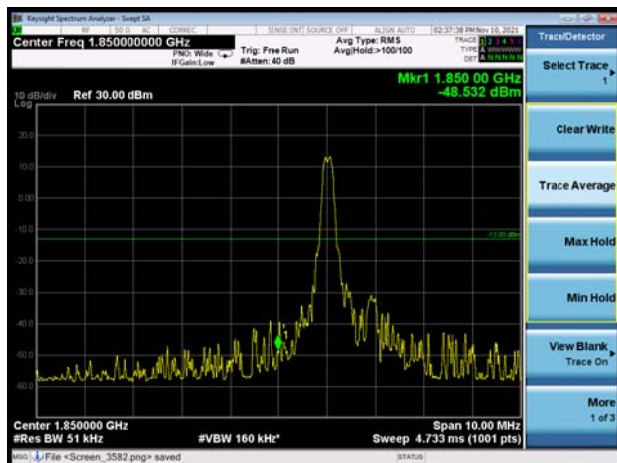
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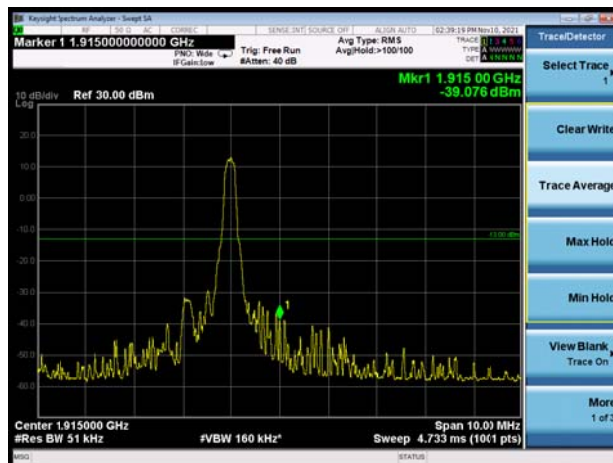
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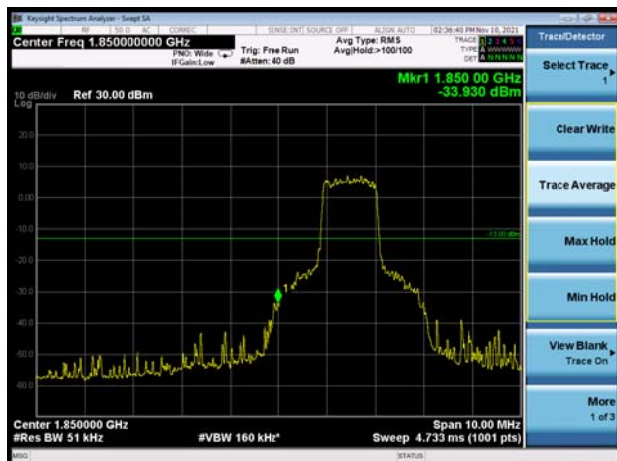
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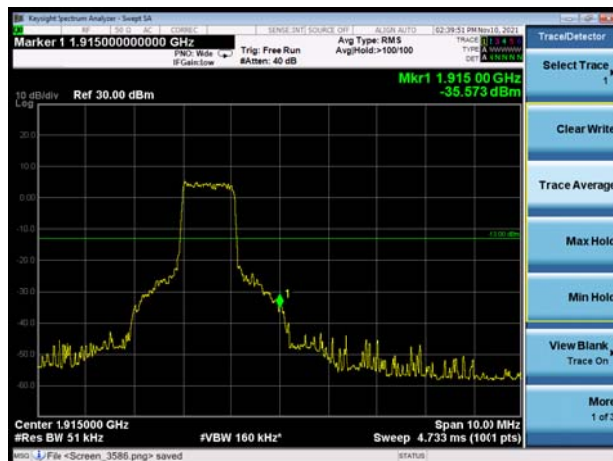
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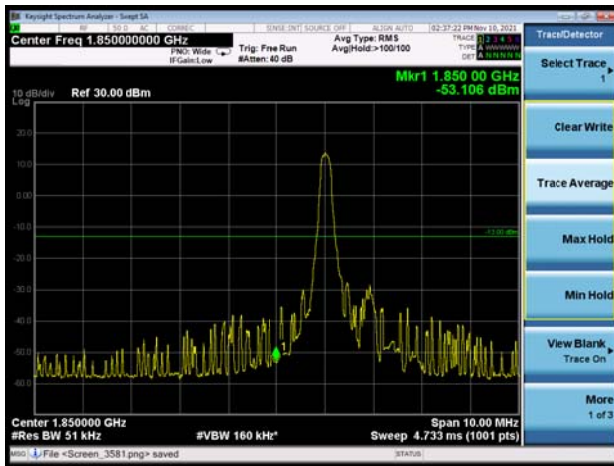


LTE Band 25 15MHz QPSK 100%RB CH-High

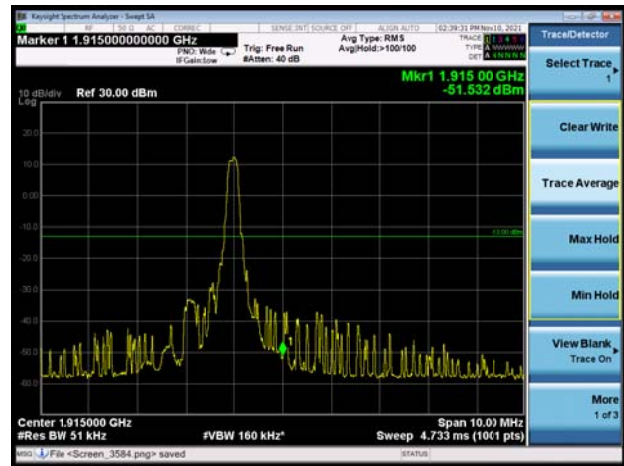




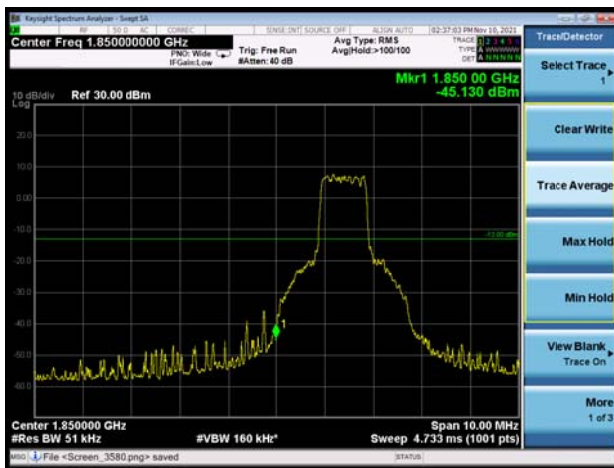
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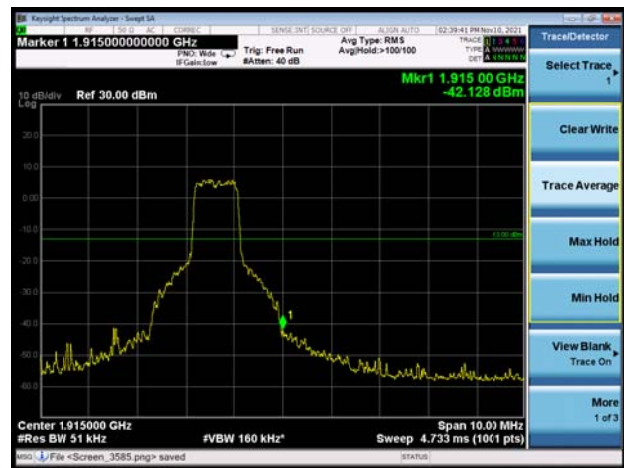
LTE Band 25 15MHz 16QAM 1RB CH-High



LTE Band 25 15MHz 16QAM 100%RB CH-Low



LTE Band 25 15MHz 16QAM 100%RB CH-High



Peak-to-Average Power Ratio (PAPR)

Mode	Bandwidth	Modulation	Channel/ Frequency(MHz)	Peak-to-Average Power Ratio (PAPR)			Limit(dB)	Conclusion
				Peak(dBm)	Avg(dBm)	PAPR(dB)		
LTE Band 2	1.4MHz	QPSK	18900/1880	26.31	16.45	9.86	≤13	PASS
		16QAM	18900/1880	26.88	16.93	9.95	≤13	PASS
	3MHz	QPSK	18900/1880	26.22	16.77	9.45	≤13	PASS
		16QAM	18900/1880	26.86	16.72	10.14	≤13	PASS
	5MHz	QPSK	18900/1880	26.89	17.24	9.65	≤13	PASS
		16QAM	18900/1880	26.88	16.76	10.12	≤13	PASS
	10MHz	QPSK	18900/1880	26.96	17.41	9.55	≤13	PASS
		16QAM	18900/1880	27.40	16.08	11.32	≤13	PASS
	15MHz	QPSK	18900/1880	27.46	18.25	9.21	≤13	PASS
		16QAM	18900/1880	27.90	18.43	9.47	≤13	PASS
	20MHz	QPSK	18900/1880	27.48	19.12	8.36	≤13	PASS
		16QAM	18900/1880	27.94	18.38	9.56	≤13	PASS

Mode	Bandwidth	Modulation	Channel/ Frequency(MHz)	Peak-to-Average Power Ratio (PAPR)			Limit(dB)	Conclusion
				Peak(dBm)	Avg(dBm)	PAPR(dB)		
LTE Band 25	1.4MHz	QPSK	26365/1882.5	25.67	14.46	11.21	≤13	PASS
		16QAM	26365/1882.5	26.51	14.70	11.81	≤13	PASS
	3MHz	QPSK	26365/1882.5	25.83	17.00	8.83	≤13	PASS
		16QAM	26365/1882.5	26.55	16.56	9.99	≤13	PASS
	5MHz	QPSK	26365/1882.5	26.65	17.48	9.17	≤13	PASS
		16QAM	26365/1882.5	26.58	16.70	9.88	≤13	PASS
	10MHz	QPSK	26365/1882.5	26.63	17.16	9.47	≤13	PASS
		16QAM	26365/1882.5	27.21	16.57	10.64	≤13	PASS
	15MHz	QPSK	26365/1882.5	27.29	17.78	9.51	≤13	PASS
		16QAM	26365/1882.5	27.94	19.19	8.75	≤13	PASS
	20MHz	QPSK	26365/1882.5	27.33	18.55	8.78	≤13	PASS
		16QAM	26365/1882.5	27.88	18.64	9.24	≤13	PASS

Frequency Stability

LTE Band 2						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	1.4MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	10.34	14.72	0.00550	0.00783	PASS
Extreme (85℃)		12.04	13.49	0.00640	0.00718	PASS
Extreme (80℃)		11.31	12.24	0.00602	0.00651	PASS
Extreme (70℃)		12.99	9.63	0.00691	0.00512	PASS
Extreme (60℃)		12.18	16.63	0.00648	0.00885	PASS
Extreme (55℃)		14.28	10.23	0.00759	0.00544	PASS
Extreme (50℃)		14.63	2.19	0.00778	0.00116	PASS
Extreme (40℃)		1.13	6.18	0.00060	0.00329	PASS
Extreme (30℃)		2.20	16.31	0.00117	0.00868	PASS
Extreme (20℃)		1.24	6.72	0.00066	0.00358	PASS
Extreme (10℃)		9.82	16.08	0.00522	0.00855	PASS
Extreme (0℃)		1.89	15.07	0.00101	0.00802	PASS
Extreme (-10℃)		2.77	14.82	0.00147	0.00788	PASS
Extreme (-20℃)		7.92	11.56	0.00421	0.00615	PASS
Extreme (-30℃)		11.74	11.30	0.00625	0.00601	PASS
Extreme (-40℃)		17.28	12.36	0.00919	0.00658	PASS
25℃	LV	1.26	5.84	0.00067	0.00310	PASS
	HV	6.81	6.26	0.00362	0.00333	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	3MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	7.01	1.40	0.00373	0.00075	PASS
Extreme (85℃)		17.03	11.32	0.00906	0.00602	PASS
Extreme (80℃)		12.11	15.44	0.00644	0.00821	PASS
Extreme (70℃)		12.46	13.19	0.00663	0.00702	PASS
Extreme (60℃)		13.00	9.00	0.00691	0.00479	PASS
Extreme (55℃)		9.00	6.00	0.00479	0.00319	PASS
Extreme (50℃)		17.00	9.00	0.00904	0.00479	PASS
Extreme (40℃)		11.00	13.00	0.00585	0.00691	PASS
Extreme (30℃)		1.00	12.00	0.00053	0.00638	PASS
Extreme (20℃)		12.45	17.39	0.00662	0.00925	PASS
Extreme (10℃)		9.32	5.00	0.00496	0.00266	PASS
Extreme (0℃)		3.25	3.90	0.00173	0.00207	PASS
Extreme (-10℃)		3.20	17.99	0.00170	0.00957	PASS



Extreme (-20℃)			1.69	17.18	0.00090	0.00914	PASS
Extreme (-30℃)			13.89	14.43	0.00739	0.00768	PASS
Extreme (-40℃)			11.30	1.87	0.00601	0.00100	PASS
25℃		LV	9.59	2.48	0.00510	0.00132	PASS
		HV	1.56	12.29	0.00083	0.00654	PASS
Condition		5MHz	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH							
Temperature		Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)		Normal	3.57	1.88	0.00190	0.00100	PASS
Extreme (85℃)			6.80	12.48	0.00362	0.00664	PASS
Extreme (80℃)			5.83	2.65	0.00310	0.00141	PASS
Extreme (70℃)			7.17	15.59	0.00382	0.00829	PASS
Extreme (60℃)			5.00	13.00	0.00266	0.00691	PASS
Extreme (55℃)			11.00	4.00	0.00585	0.00213	PASS
Extreme (50℃)			9.00	1.00	0.00479	0.00053	PASS
Extreme (40℃)			5.00	13.00	0.00266	0.00691	PASS
Extreme (30℃)			12.00	14.00	0.00638	0.00745	PASS
Extreme (20℃)			10.64	12.85	0.00566	0.00683	PASS
Extreme (10℃)			8.37	14.73	0.00445	0.00783	PASS
Extreme (0℃)			13.93	3.11	0.00741	0.00165	PASS
Extreme (-10℃)			6.81	3.36	0.00362	0.00179	PASS
Extreme (-20℃)			16.51	13.79	0.00878	0.00733	PASS
Extreme (-30℃)			12.63	15.47	0.00672	0.00823	PASS
Extreme (-40℃)			1.86	15.67	0.00099	0.00833	PASS
25℃		LV	7.94	16.65	0.00422	0.00886	PASS
		HV	2.01	12.55	0.00107	0.00668	PASS
Condition		10MHz	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH							
Temperature		Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)		Normal	13.25	15.59	0.00705	0.00829	PASS
Extreme (85℃)			1.12	17.45	0.00060	0.00928	PASS
Extreme (80℃)			10.95	16.68	0.00582	0.00887	PASS
Extreme (70℃)			7.70	12.85	0.00409	0.00684	PASS
Extreme (60℃)			3.00	3.00	0.00160	0.00160	PASS
Extreme (55℃)			5.00	15.00	0.00266	0.00798	PASS
Extreme (50℃)			14.00	15.00	0.00745	0.00798	PASS
Extreme (40℃)			5.00	3.00	0.00266	0.00160	PASS
Extreme (30℃)			15.00	17.00	0.00798	0.00904	PASS
Extreme (20℃)			14.26	9.54	0.00758	0.00507	PASS
Extreme (10℃)			6.51	2.41	0.00346	0.00128	PASS



Extreme (0℃)		17.09	6.59	0.00909	0.00351	PASS
Extreme (-10℃)		6.48	8.05	0.00345	0.00428	PASS
Extreme (-20℃)		14.14	9.37	0.00752	0.00498	PASS
Extreme (-30℃)		10.27	5.37	0.00546	0.00286	PASS
Extreme (-40℃)		12.47	17.60	0.00663	0.00936	PASS
25℃	LV	10.15	11.01	0.00540	0.00586	PASS
	HV	7.50	17.74	0.00399	0.00944	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	15MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	16.78	3.37	0.00892	0.00179	PASS
Extreme (85℃)		9.48	5.77	0.00504	0.00307	PASS
Extreme (80℃)		1.18	8.64	0.00063	0.00459	PASS
Extreme (70℃)		11.83	4.21	0.00630	0.00224	PASS
Extreme (60℃)		5.20	12.19	0.00277	0.00648	PASS
Extreme (55℃)		5.79	17.20	0.00308	0.00915	PASS
Extreme (50℃)		9.00	11.00	0.00479	0.00585	PASS
Extreme (40℃)		1.00	12.00	0.00053	0.00638	PASS
Extreme (30℃)		7.00	13.00	0.00372	0.00691	PASS
Extreme (20℃)		13.00	7.00	0.00691	0.00372	PASS
Extreme (10℃)		2.00	1.00	0.00106	0.00053	PASS
Extreme (0℃)		13.97	6.91	0.00743	0.00368	PASS
Extreme (-10℃)		5.46	6.33	0.00290	0.00337	PASS
Extreme (-20℃)		15.11	4.34	0.00804	0.00231	PASS
Extreme (-30℃)		8.10	12.62	0.00431	0.00672	PASS
Extreme (-40℃)		16.59	1.72	0.00882	0.00092	PASS
25℃	LV	16.76	3.43	0.00892	0.00182	PASS
	HV	15.11	16.06	0.00804	0.00854	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	20MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	6.87	8.68	0.00365	0.00462	PASS
Extreme (85℃)		14.44	7.68	0.00768	0.00409	PASS
Extreme (80℃)		6.39	16.66	0.00340	0.00886	PASS
Extreme (70℃)		2.42	6.42	0.00129	0.00341	PASS
Extreme (60℃)		8.57	1.36	0.00456	0.00072	PASS
Extreme (55℃)		7.00	14.00	0.00372	0.00745	PASS
Extreme (50℃)		9.00	6.00	0.00479	0.00319	PASS
Extreme (40℃)		4.00	2.00	0.00213	0.00106	PASS



Extreme (30℃)		16.00	13.00	0.00851	0.00691	PASS
Extreme (20℃)		1.00	12.00	0.00053	0.00638	PASS
Extreme (10℃)		6.30	3.26	0.00335	0.00173	PASS
Extreme (0℃)		5.17	7.05	0.00275	0.00375	PASS
Extreme (-10℃)		9.53	10.58	0.00507	0.00563	PASS
Extreme (-20℃)		12.75	9.05	0.00678	0.00481	PASS
Extreme (-30℃)		7.95	16.67	0.00423	0.00887	PASS
Extreme (-40℃)		1.18	14.89	0.00063	0.00792	PASS
25℃	LV	15.92	3.30	0.00847	0.00175	PASS
	HV	8.41	12.49	0.00448	0.00664	PASS

LTE Band 25						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	1.4MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	2.95	3.21	0.00157	0.00170	PASS
Extreme (85℃)		11.17	16.70	0.00593	0.00887	PASS
Extreme (80℃)		5.55	8.84	0.00295	0.00470	PASS
Extreme (70℃)		2.35	1.37	0.00125	0.00073	PASS
Extreme (60℃)		8.73	5.25	0.00464	0.00279	PASS
Extreme (55℃)		8.93	7.68	0.00475	0.00408	PASS
Extreme (50℃)		15.31	14.15	0.00813	0.00752	PASS
Extreme (40℃)		5.96	10.96	0.00317	0.00582	PASS
Extreme (30℃)		11.61	15.08	0.00617	0.00801	PASS
Extreme (20℃)		6.59	5.05	0.00350	0.00268	PASS
Extreme (10℃)		7.92	12.47	0.00421	0.00663	PASS
Extreme (0℃)		13.68	4.27	0.00727	0.00227	PASS
Extreme (-10℃)		8.86	16.98	0.00471	0.00902	PASS
Extreme (-20℃)		3.13	14.74	0.00166	0.00783	PASS
Extreme (-30℃)		10.41	3.63	0.00553	0.00193	PASS
Extreme (-40℃)		11.57	9.42	0.00615	0.00501	PASS
25℃	LV	6.20	6.95	0.00330	0.00369	PASS
	HV	1.21	3.85	0.00065	0.00204	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	3MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	2.55	7.85	0.00135	0.00417	PASS
Extreme (85℃)		15.75	2.78	0.00836	0.00148	PASS
Extreme (80℃)		6.65	6.48	0.00353	0.00344	PASS



Extreme (70℃)		11.39	6.30	0.00605	0.00334	PASS
Extreme (60℃)		12.00	5.00	0.00637	0.00266	PASS
Extreme (55℃)		15.00	10.00	0.00797	0.00531	PASS
Extreme (50℃)		16.00	10.00	0.00850	0.00531	PASS
Extreme (40℃)		13.00	13.00	0.00691	0.00691	PASS
Extreme (30℃)		5.00	3.00	0.00266	0.00159	PASS
Extreme (20℃)		13.23	14.64	0.00703	0.00778	PASS
Extreme (10℃)		10.32	3.65	0.00548	0.00194	PASS
Extreme (0℃)		10.03	17.94	0.00533	0.00953	PASS
Extreme (-10℃)		13.49	15.97	0.00717	0.00849	PASS
Extreme (-20℃)		8.88	6.00	0.00472	0.00319	PASS
Extreme (-30℃)		15.46	2.45	0.00821	0.00130	PASS
Extreme (-40℃)		2.66	5.40	0.00141	0.00287	PASS
25℃	LV	13.22	5.96	0.00702	0.00316	PASS
	HV	17.83	7.16	0.00947	0.00380	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	5MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	6.20	14.19	0.00329	0.00754	PASS
Extreme (85℃)		5.66	15.50	0.00301	0.00823	PASS
Extreme (80℃)		7.20	12.14	0.00382	0.00645	PASS
Extreme (70℃)		4.71	1.10	0.00250	0.00058	PASS
Extreme (60℃)		10.00	15.00	0.00531	0.00797	PASS
Extreme (55℃)		7.00	14.00	0.00372	0.00744	PASS
Extreme (50℃)		14.00	6.00	0.00744	0.00319	PASS
Extreme (40℃)		14.00	10.00	0.00744	0.00531	PASS
Extreme (30℃)		15.00	12.00	0.00797	0.00637	PASS
Extreme (20℃)		16.86	9.74	0.00895	0.00517	PASS
Extreme (10℃)		14.53	17.59	0.00772	0.00934	PASS
Extreme (0℃)		16.60	15.61	0.00882	0.00829	PASS
Extreme (-10℃)		11.59	13.12	0.00616	0.00697	PASS
Extreme (-20℃)		11.12	5.71	0.00591	0.00303	PASS
Extreme (-30℃)		13.96	8.25	0.00742	0.00438	PASS
Extreme (-40℃)		16.29	7.13	0.00865	0.00379	PASS
25℃	LV	9.44	8.20	0.00501	0.00435	PASS
	HV	17.96	5.28	0.00954	0.00280	PASS



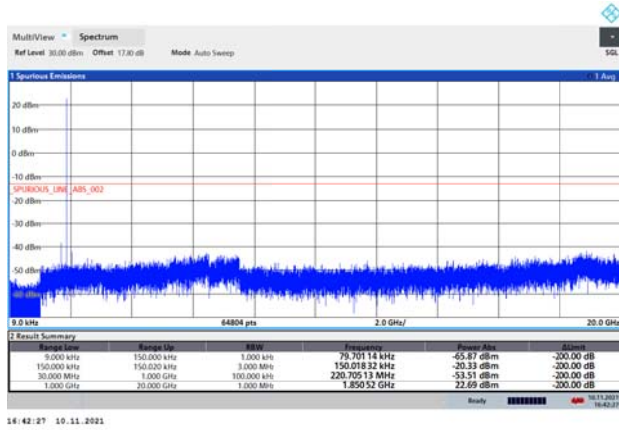
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	10MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	5.87	2.53	0.00312	0.00135	
Extreme (85℃)		1.26	17.23	0.00067	0.00915	PASS
Extreme (80℃)		5.90	17.17	0.00313	0.00912	PASS
Extreme (70℃)		3.49	3.90	0.00185	0.00207	PASS
Extreme (60℃)		3.00	9.00	0.00159	0.00478	PASS
Extreme (55℃)		14.00	2.00	0.00744	0.00106	PASS
Extreme (50℃)		6.00	4.00	0.00319	0.00212	PASS
Extreme (40℃)		3.00	10.00	0.00159	0.00531	PASS
Extreme (30℃)		1.00	14.00	0.00053	0.00744	PASS
Extreme (20℃)		7.56	14.56	0.00402	0.00774	PASS
Extreme (10℃)		1.42	6.83	0.00075	0.00363	PASS
Extreme (0℃)		14.43	4.99	0.00767	0.00265	PASS
Extreme (-10℃)		17.32	17.98	0.00920	0.00955	PASS
Extreme (-20℃)		17.26	12.83	0.00917	0.00682	PASS
Extreme (-30℃)		13.08	7.44	0.00695	0.00395	PASS
Extreme (-40℃)		9.89	3.76	0.00525	0.00200	PASS
25℃	LV	16.72	3.46	0.00888	0.00184	PASS
	HV	15.87	8.55	0.00843	0.00454	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	15MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	6.90	2.89	0.00366	0.00153	
Extreme (85℃)		16.98	8.49	0.00902	0.00451	PASS
Extreme (80℃)		12.35	16.77	0.00656	0.00891	PASS
Extreme (70℃)		7.76	5.70	0.00412	0.00303	PASS
Extreme (60℃)		4.71	13.62	0.00250	0.00723	PASS
Extreme (55℃)		4.97	3.66	0.00264	0.00194	PASS
Extreme (50℃)		13.00	4.00	0.00691	0.00212	PASS
Extreme (40℃)		10.00	13.00	0.00531	0.00691	PASS
Extreme (30℃)		9.00	5.00	0.00478	0.00266	PASS
Extreme (20℃)		9.00	9.00	0.00478	0.00478	PASS
Extreme (10℃)		5.00	11.00	0.00266	0.00584	PASS
Extreme (0℃)		2.25	11.60	0.00119	0.00616	PASS
Extreme (-10℃)		17.81	17.87	0.00946	0.00949	PASS
Extreme (-20℃)		12.82	9.36	0.00681	0.00497	PASS
Extreme (-30℃)		5.50	7.16	0.00292	0.00380	PASS



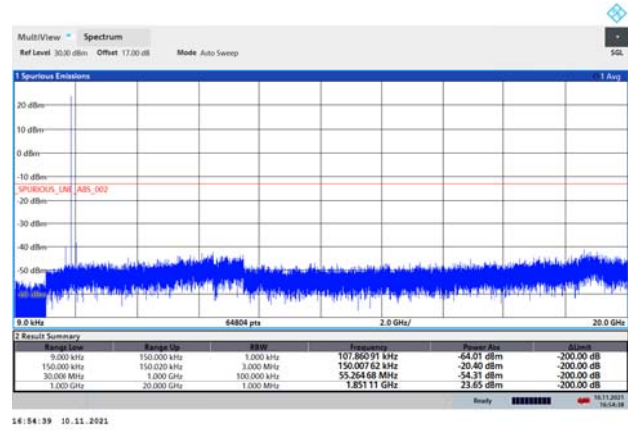
Extreme (-40℃)		16.25	12.65	0.00863	0.00672	PASS
25℃	LV	10.64	12.79	0.00565	0.00679	PASS
	HV	6.85	16.02	0.00364	0.00851	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	20MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	11.05	5.05	0.00587	0.00268	PASS
Extreme (85℃)		9.88	12.36	0.00525	0.00657	PASS
Extreme (80℃)		5.15	16.99	0.00273	0.00903	PASS
Extreme (70℃)		17.10	17.31	0.00908	0.00920	PASS
Extreme (60℃)		3.63	5.50	0.00193	0.00292	PASS
Extreme (55℃)		3.00	5.00	0.00159	0.00266	PASS
Extreme (50℃)		12.00	3.00	0.00637	0.00159	PASS
Extreme (40℃)		6.00	6.00	0.00319	0.00319	PASS
Extreme (30℃)		10.00	5.00	0.00531	0.00266	PASS
Extreme (20℃)		16.00	1.00	0.00850	0.00053	PASS
Extreme (10℃)		9.70	4.88	0.00515	0.00259	PASS
Extreme (0℃)		3.79	7.24	0.00201	0.00384	PASS
Extreme (-10℃)		11.47	3.93	0.00609	0.00209	PASS
Extreme (-20℃)		15.40	11.27	0.00818	0.00599	PASS
Extreme (-30℃)		3.84	11.76	0.00204	0.00625	PASS
Extreme (-40℃)		17.61	1.18	0.00936	0.00063	PASS
25℃	LV	5.20	1.52	0.00276	0.00081	PASS
	HV	3.04	15.11	0.00162	0.00802	PASS

Spurious Emissions at Antenna Terminals

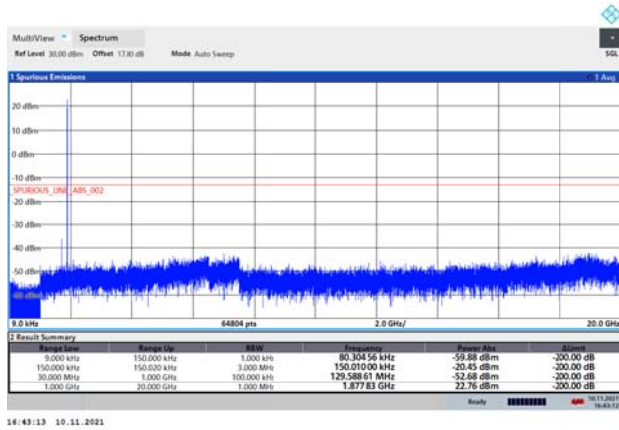
LTE Band 2 5MHz CH-Low 9kHz~20GHz



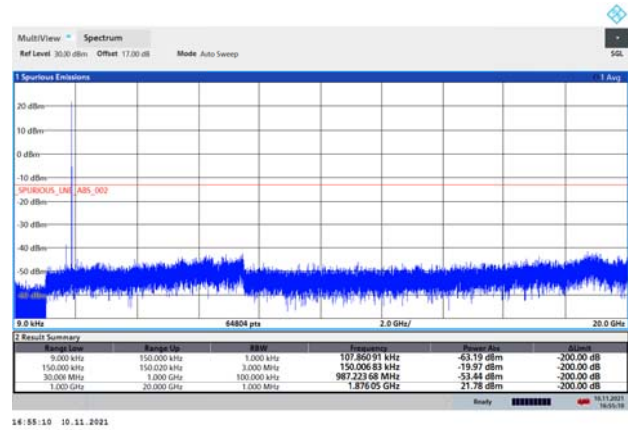
LTE Band 25 15MHz CH-Low 9kHz~20GHz



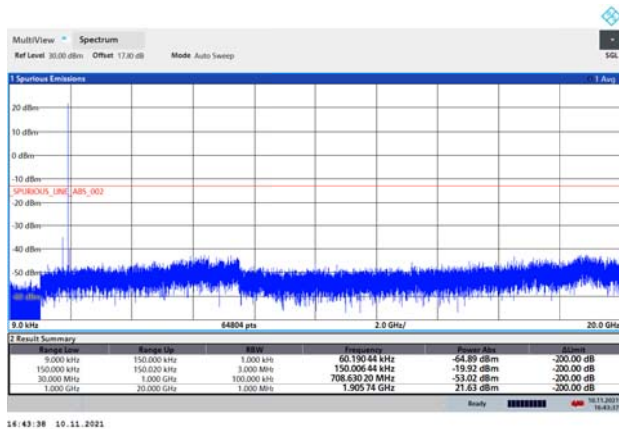
LTE Band 2 5MHz CH-Middle 9kHz~20GHz



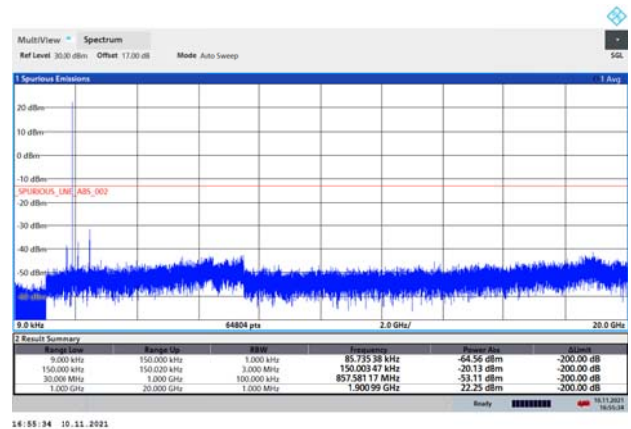
LTE Band 25 15MHz CH-Middle 9kHz~20GHz



LTE Band 2 5MHz CH-High 9kHz~20GHz



LTE Band 25 15MHz CH-High 9kHz~20GHz



Radiates Spurious Emission

LTE Band 2 1.4MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3759.0	-53.04	5.10	11.05	Horizontal	-47.09	-13.00	34.09	45
3	5638.9	-45.42	5.42	12.65	Horizontal	-38.19	-13.00	25.19	0
4	7520.0	-48.57	6.70	13.85	Horizontal	-41.42	-13.00	28.42	225
5	9400.0	-49.90	7.01	14.75	Horizontal	-42.16	-13.00	29.16	225
6	11280.0	-51.53	7.48	15.95	Horizontal	-43.06	-13.00	30.06	315
7	13160.0	-52.12	7.51	16.55	Horizontal	-43.08	-13.00	30.08	135
8	15040.0	-45.70	8.24	15.35	Horizontal	-38.59	-13.00	25.59	0
9	16920.0	-47.19	8.41	14.95	Horizontal	-40.65	-13.00	27.65	315
10	18800.0	--	--	--	--	--	--	--	--

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.

LTE Band 2 5MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3755.6	-53.15	5.10	11.05	Horizontal	-47.20	-13.00	34.20	90
3	5633.6	-45.98	5.42	12.65	Horizontal	-38.75	-13.00	25.75	315
4	7520.0	-48.87	6.70	13.85	Horizontal	-41.72	-13.00	28.72	0
5	9400.0	-50.44	7.01	14.75	Horizontal	-42.70	-13.00	29.70	0
6	11280.0	-53.14	7.48	15.95	Horizontal	-44.67	-13.00	31.67	90
7	13160.0	-51.58	7.51	16.55	Horizontal	-42.54	-13.00	29.54	90
8	15040.0	-46.04	8.24	15.35	Horizontal	-38.93	-13.00	25.93	135
9	16920.0	-46.62	8.41	14.95	Horizontal	-40.08	-13.00	27.08	315
10	18800.0	--	--	--	--	--	--	--	--

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.

LTE Band 2 20MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3742.1	-54.24	5.10	11.05	Horizontal	-48.29	-13.00	35.29	225
3	5613.4	-43.98	5.42	12.65	Horizontal	-36.75	-13.00	23.75	45
4	7484.6	-45.84	6.70	13.85	Horizontal	-38.69	-13.00	25.69	90
5	9400.0	-47.44	7.01	14.75	Horizontal	-39.70	-13.00	26.70	45
6	11280.0	-52.60	7.48	15.95	Horizontal	-44.13	-13.00	31.13	225
7	13160.0	-51.60	7.51	16.55	Horizontal	-42.56	-13.00	29.56	0
8	15040.0	-44.97	8.24	15.35	Horizontal	-37.86	-13.00	24.86	90
9	16920.0	-47.02	8.41	14.95	Horizontal	-40.48	-13.00	27.48	225
10	18800.0	--	--	--	--	--	--	--	--

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.

LTE Band 25 1.4MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3765.0	-55.06	5.10	11.05	Horizontal	-49.11	-13.00	36.11	45
3	5647.5	-47.65	5.42	12.65	Horizontal	-40.42	-13.00	27.42	225
4	7530.0	-46.88	6.70	13.85	Horizontal	-39.73	-13.00	26.73	45
5	9412.5	-48.73	7.01	14.75	Horizontal	-40.99	-13.00	27.99	90
6	11295.0	-54.84	7.48	15.95	Horizontal	-46.37	-13.00	33.37	225
7	13177.5	-53.30	7.51	16.55	Horizontal	-44.26	-13.00	31.26	90
8	15060.0	-45.73	8.24	15.35	Horizontal	-38.62	-13.00	25.62	135
9	16942.5	-47.46	8.41	14.95	Horizontal	-40.92	-13.00	27.92	225
10	18825.0	--	--	--	--	--	--	--	--

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.

LTE Band 25 5MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3765.0	-55.55	5.10	11.05	Horizontal	-49.60	-13.00	36.60	45
3	5647.5	-41.26	5.42	12.65	Horizontal	-34.03	-13.00	21.03	225
4	7530.0	-45.71	6.70	13.85	Horizontal	-38.56	-13.00	25.56	0
5	9412.5	-47.79	7.01	14.75	Horizontal	-40.05	-13.00	27.05	270
6	11295.0	-51.07	7.48	15.95	Horizontal	-42.60	-13.00	29.60	135
7	13177.5	-52.05	7.51	16.55	Horizontal	-43.01	-13.00	30.01	0
8	15060.0	-44.97	8.24	15.35	Horizontal	-37.86	-13.00	24.86	135
9	16942.5	-49.37	8.41	14.95	Horizontal	-42.83	-13.00	29.83	270
10	18825.0	--	--	--	--	--	--	--	--

Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.

LTE Band 25 20MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3748.1	-55.08	5.10	11.05	Horizontal	-49.13	-13.00	36.13	270
3	5622.0	-43.10	5.42	12.65	Horizontal	-35.87	-13.00	22.87	315
4	7496.0	-45.40	6.70	13.85	Horizontal	-38.25	-13.00	25.25	270
5	9370.0	-46.13	7.01	14.75	Horizontal	-38.39	-13.00	25.39	180
6	11244.0	-52.50	7.48	15.95	Horizontal	-44.03	-13.00	31.03	90
7	13118.0	-52.44	7.51	16.55	Horizontal	-43.40	-13.00	30.40	45
8	14992.0	-44.42	8.24	15.35	Horizontal	-37.31	-13.00	24.31	45
9	16866.0	-49.03	8.41	14.95	Horizontal	-42.49	-13.00	29.49	270
10	18740.0	--	--	--	--	--	--	--	--

Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.

Main Test Instruments

Date of Testing (variant): August 24, 2021 ~ November 25, 2021

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Base Station Simulator	R&S	CMW500	113824	2021-05-15	2022-05-14
Climate Chamber	Weiss	VT4002	58226119450010	2021-05-15	2022-05-14
Spectrum Analyzer	Key sight	N9020	MY52330084	2021-05-15	2022-05-14
Signal Analyzer	R&S	FSV3030	101411	2020-12-13	2021-12-12
Signal Analyzer	R&S	FSV30	100815	2020-12-13	2021-12-12
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	01111	2019--9-12	2022-09-11
Horn Antenna	Schwarzbeck	BBHA 9120D	1594	2020-12-17	2021-12-16
Horn Antenna	ETS-Lindgren	3160-09	00102643	2018-06-20	2023-06-19
Software	R&S	EMC32	10.35.10	/	/