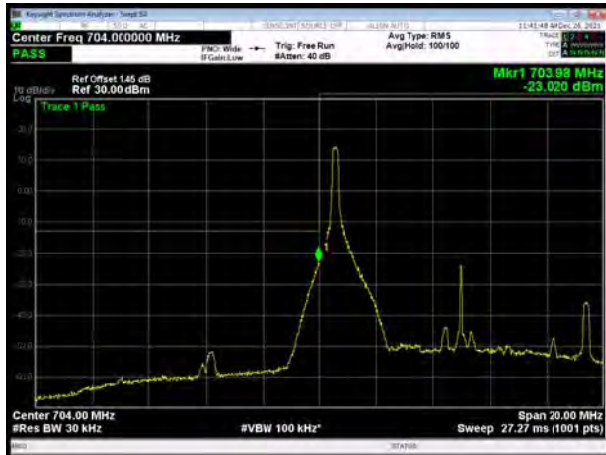
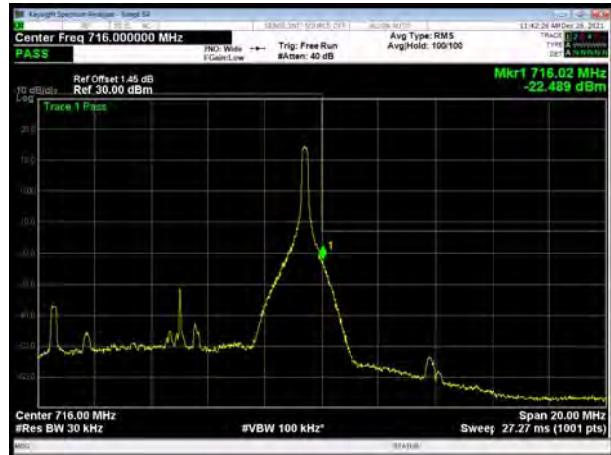




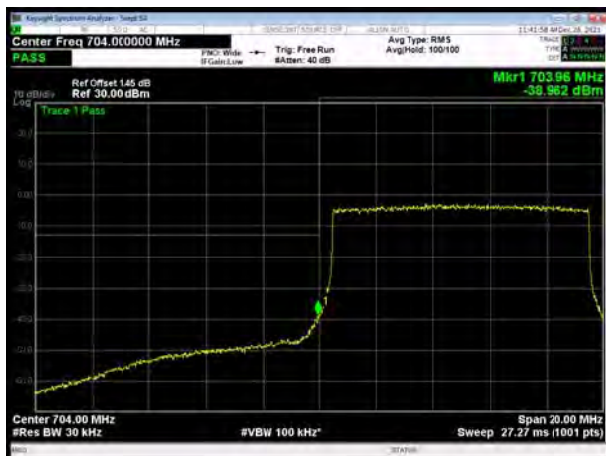
LTE Band 17 16QAM 10MHz CH-Low, 1 RB



LTE Band 17 16QAM 10MHz CH-High, 1 RB



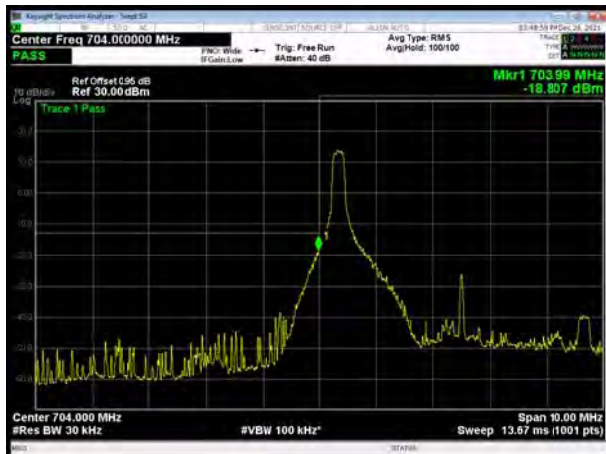
LTE Band 17 16QAM 10MHz CH-Low, 100%RB



LTE Band 17 16QAM 10MHz CH-High, 100%RB



LTE Band 17 64QAM 5MHz CH-Low, 1 RB



LTE Band 17 64QAM 5MHz CH-High, 1 RB

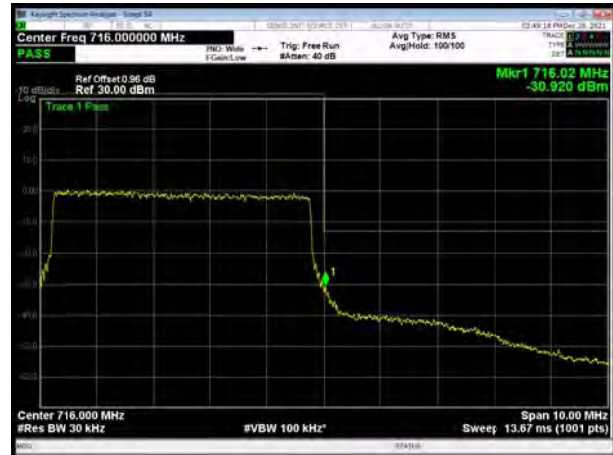




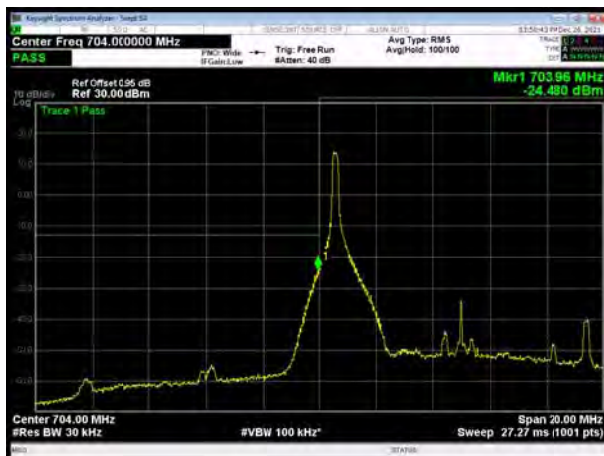
LTE Band 17 64QAM 5MHz CH-Low, 100%RB



LTE Band 17 64QAM 5MHz CH-High, 100%RB



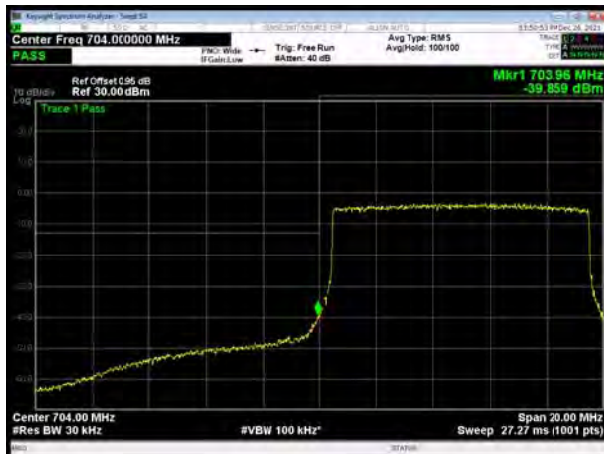
LTE Band 17 64QAM 10MHz CH-Low, 1 RB



LTE Band 17 64QAM 10MHz CH-High, 1 RB



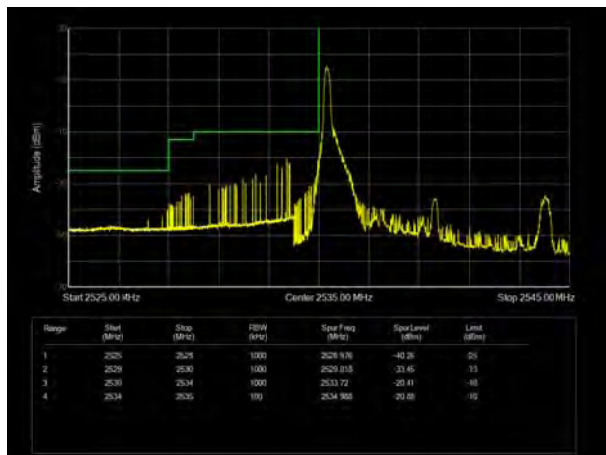
LTE Band 17 64QAM 10MHz CH-Low, 100%RB



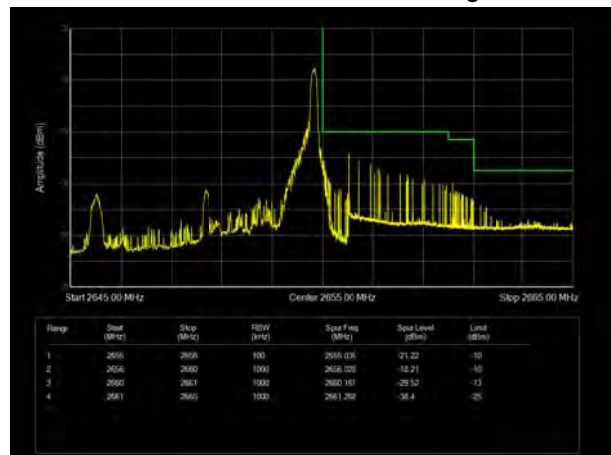
LTE Band 17 64QAM 10MHz CH-High, 100%RB



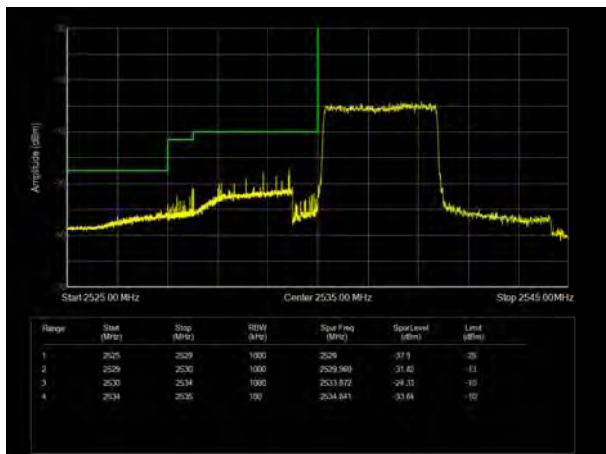
LTE Band 41 QPSK 5MHz CH-Low, 1 RB



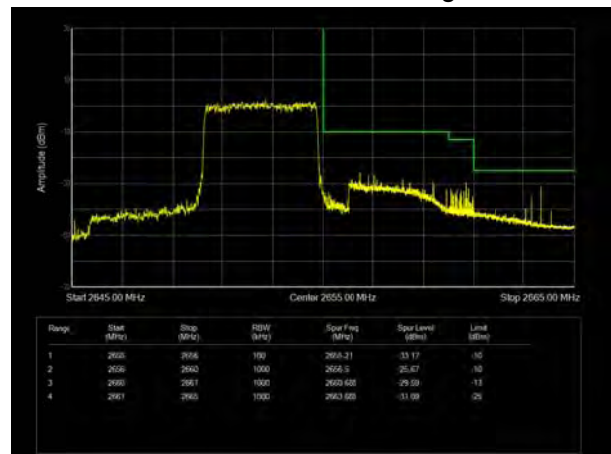
LTE Band 41 QPSK 5MHz CH-High, 1 RB



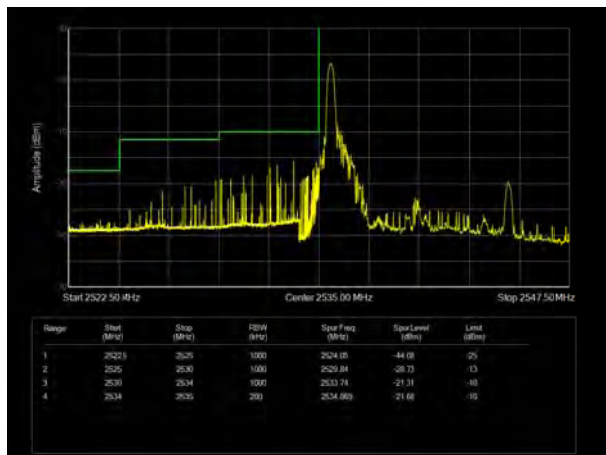
LTE Band 41 QPSK 5MHz CH-Low, 100%RB



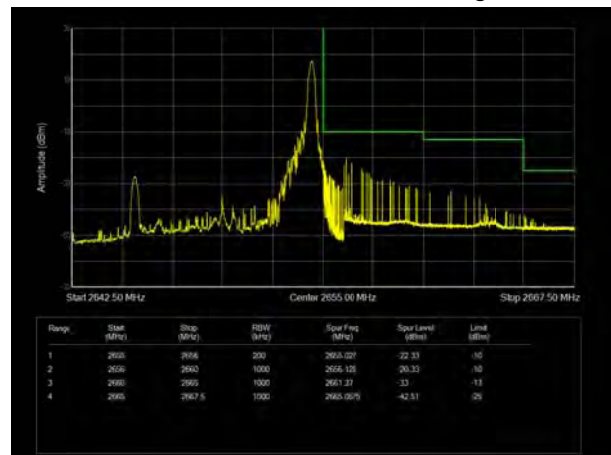
LTE Band 41 QPSK 5MHz CH-High, 100%RB



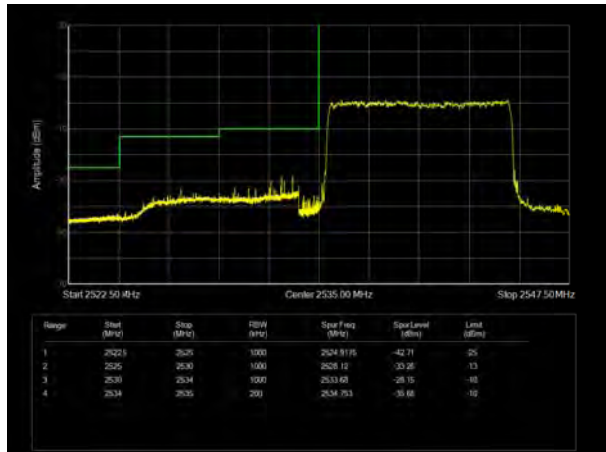
LTE Band 41 QPSK 10MHz CH-Low, 1 RB



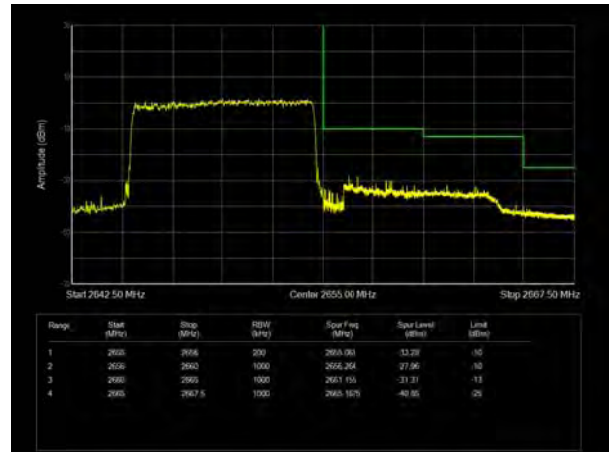
LTE Band 41 QPSK 10MHz CH-High, 1 RB



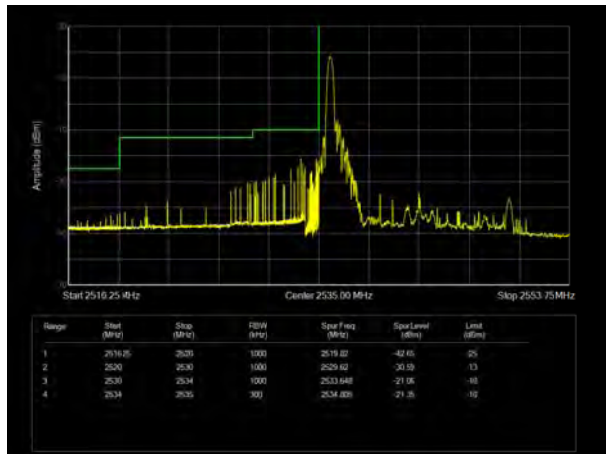
LTE Band 41 QPSK 10MHz CH-Low, 100%RB



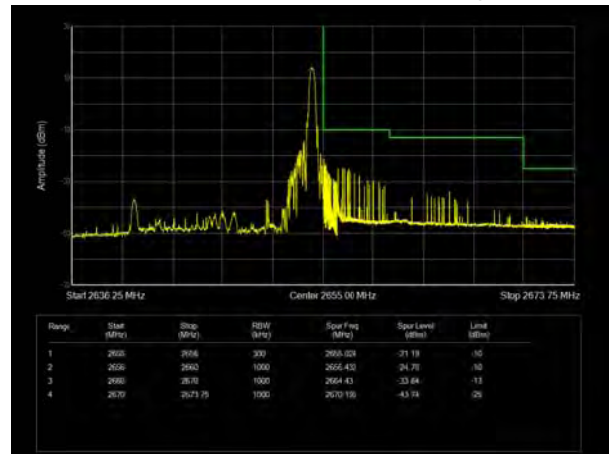
LTE Band 41 QPSK 10MHz CH-High, 100%RB



LTE Band 41 QPSK 15MHz CH-Low, 1 RB



LTE Band 41 QPSK 15MHz CH-High, 1 RB



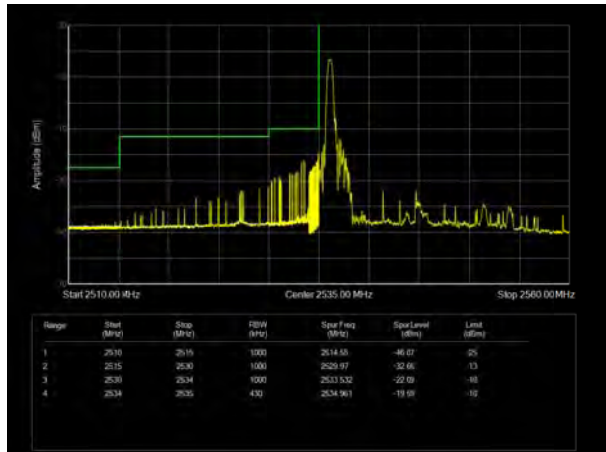
LTE Band 41 QPSK 15MHz CH-Low, 100%RB



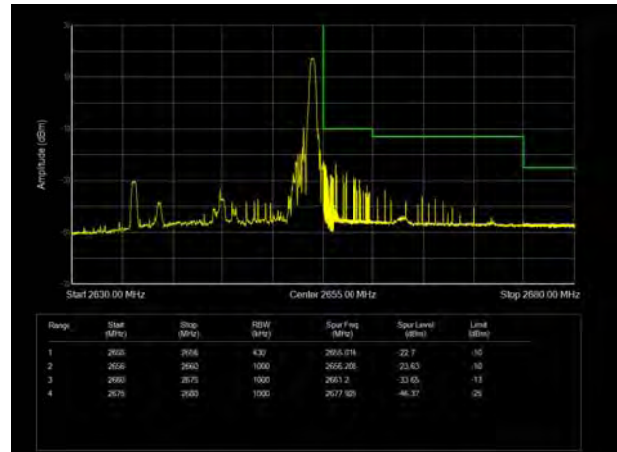
LTE Band 41 QPSK 15MHz CH-High, 100%RB



LTE Band 41 QPSK 20MHz CH-Low, 1 RB



LTE Band 41 QPSK 20MHz CH-High, 1 RB



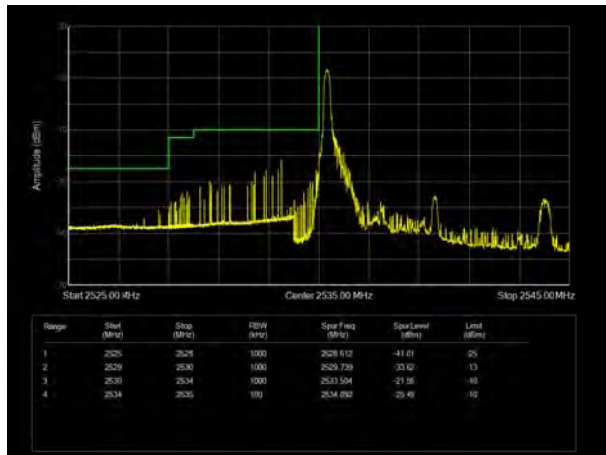
LTE Band 41 QPSK 20MHz CH-Low, 100%RB



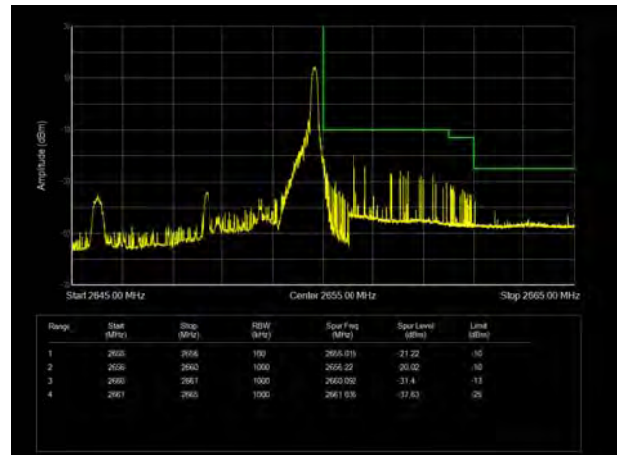
LTE Band 41 QPSK 20MHz CH-High, 100%RB



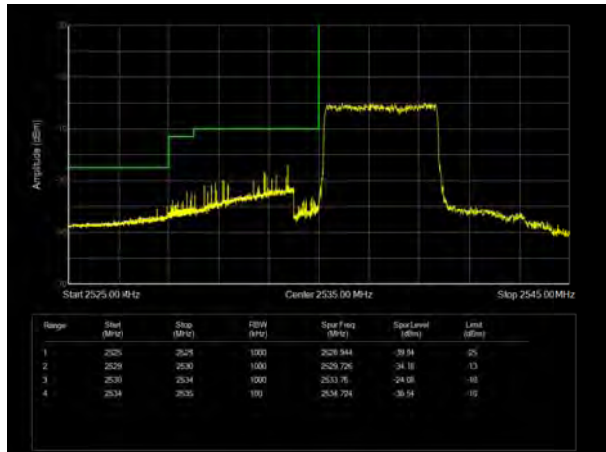
LTE Band 41 16QAM 5MHz CH-Low, 1 RB



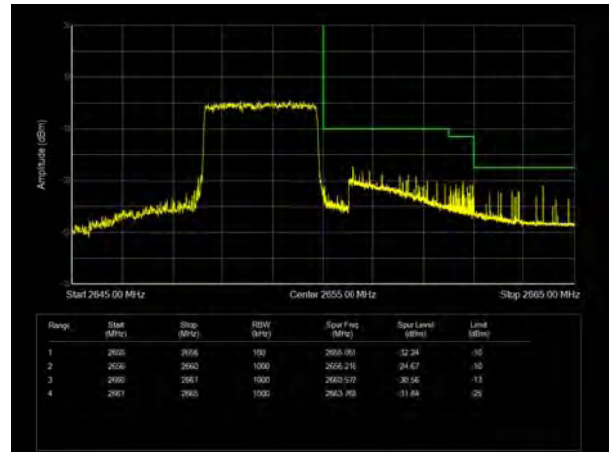
LTE Band 41 16QAM 5MHz CH-High, 1 RB



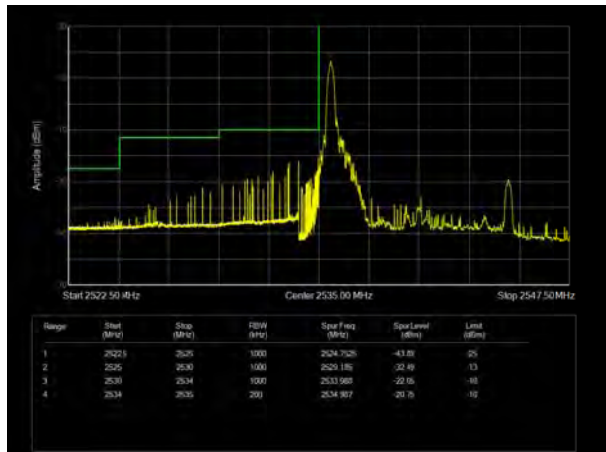
LTE Band 41 16QAM 5MHz CH-Low, 100%RB



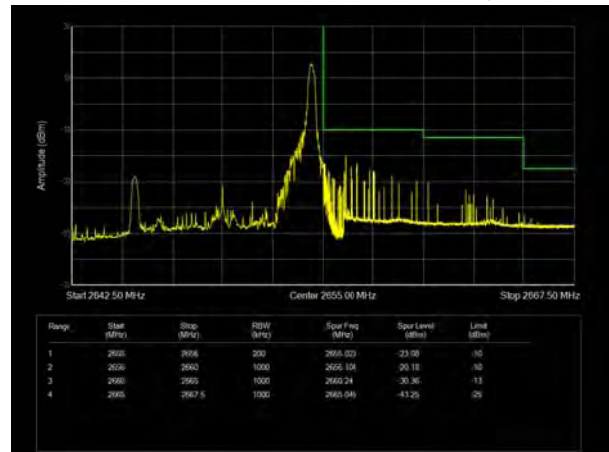
LTE Band 41 16QAM 5MHz CH-High, 100%RB



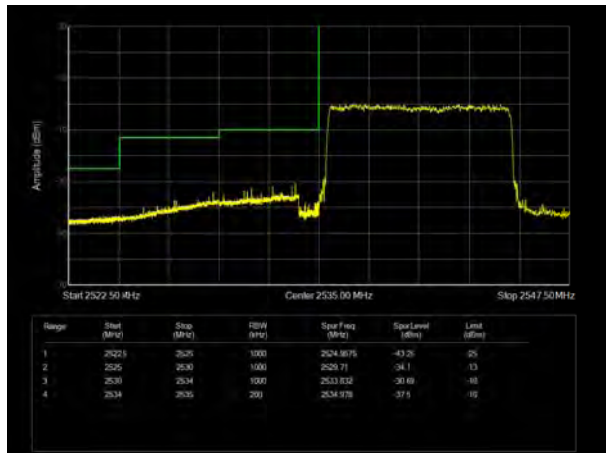
LTE Band 41 16QAM 10MHz CH-Low, 1 RB



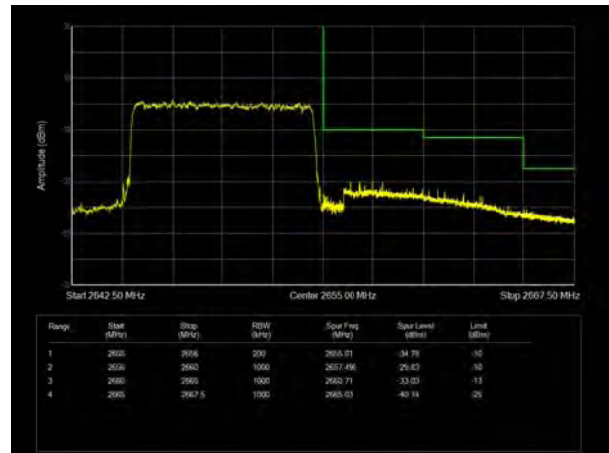
LTE Band 41 16QAM 10MHz CH-High, 1 RB



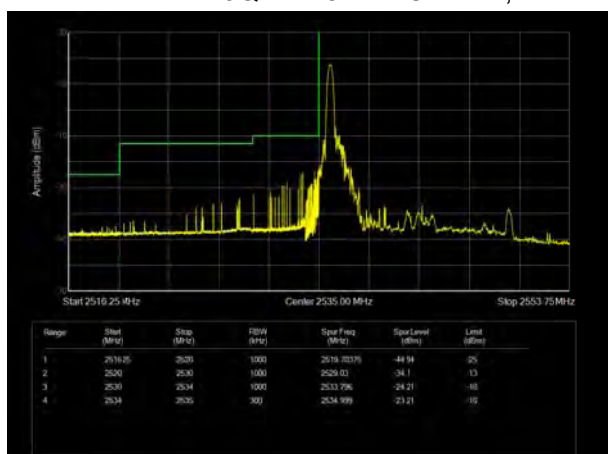
LTE Band 41 16QAM 10MHz CH-Low, 100%RB



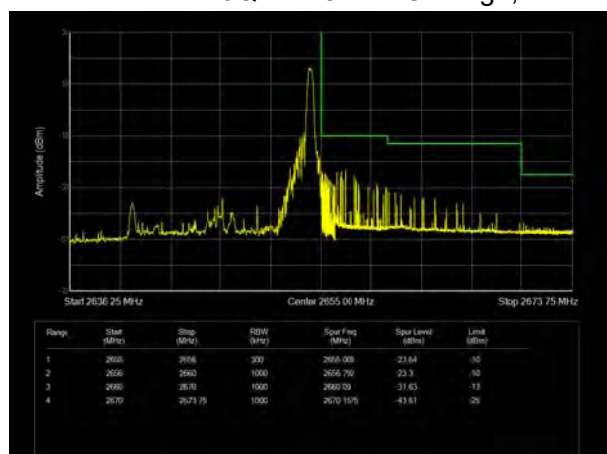
LTE Band 41 16QAM 10MHz CH-High, 100%RB



LTE Band 41 16QAM 15MHz CH-Low, 1 RB



LTE Band 41 16QAM 15MHz CH-High, 1 RB



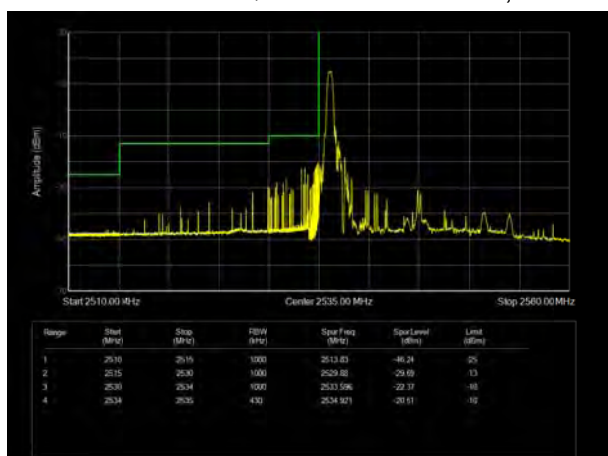
LTE Band 41 16QAM 15MHz CH-Low, 100%RB



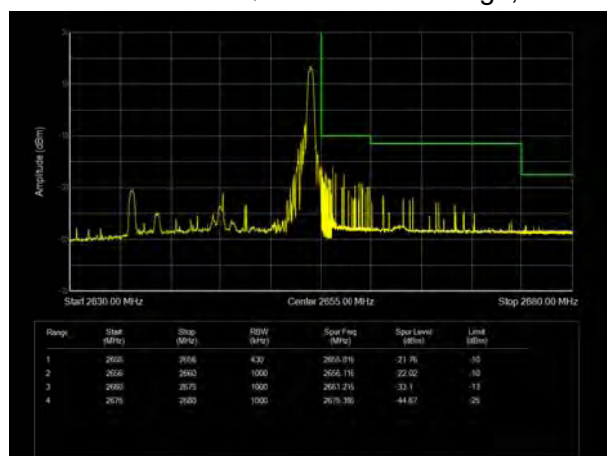
LTE Band 41 16QAM 15MHz CH-High, 100%RB



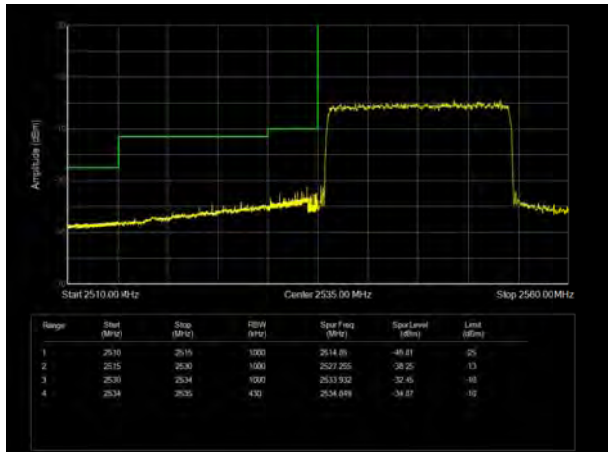
LTE Band 41 16QAM 20MHz CH-Low, RB 1



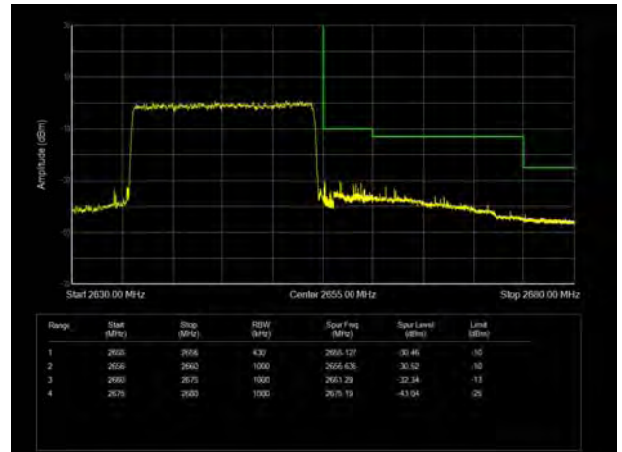
LTE Band 41 16QAM 20MHz CH-High, RB 1



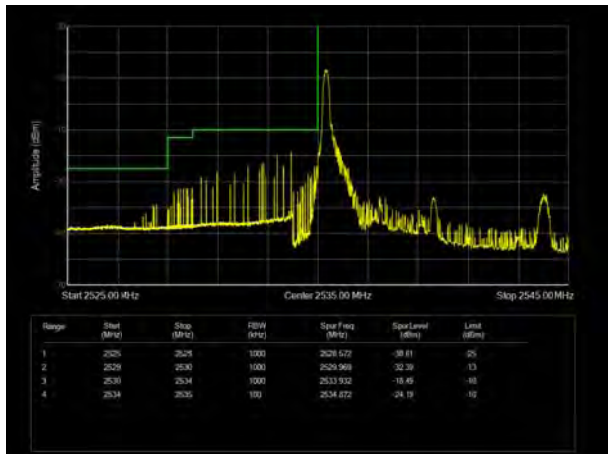
LTE Band 41 16QAM 20MHz CH-Low, 100%RB



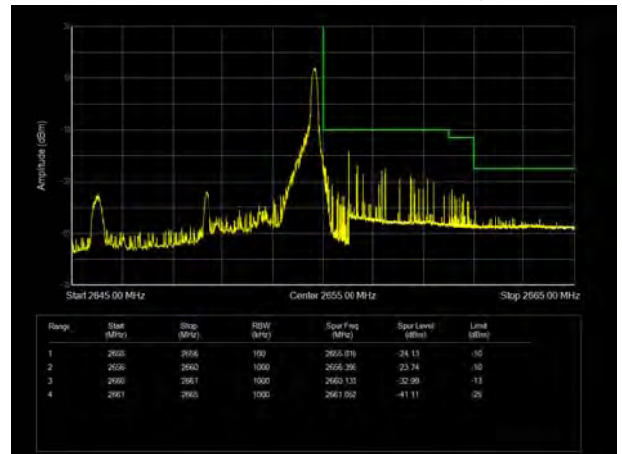
LTE Band 41 16QAM 20MHz CH-High, 100%RB



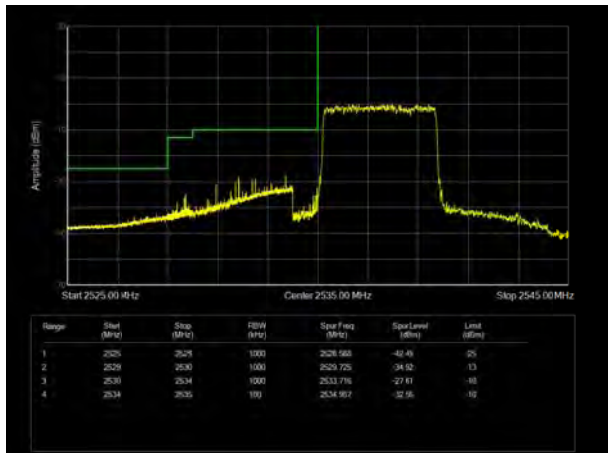
LTE Band 41 64QAM 5MHz CH-Low, 1 RB



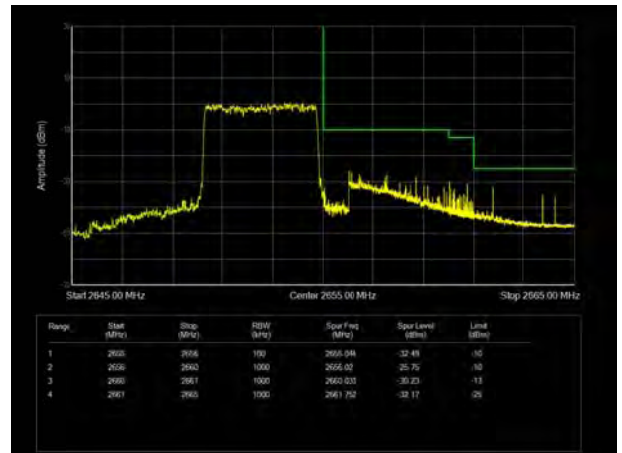
LTE Band 41 64QAM 5MHz CH-High, 1 RB



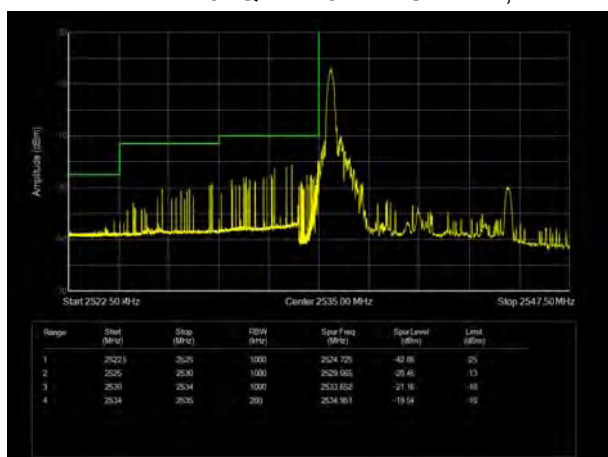
LTE Band 41 64QAM 5MHz CH-Low, 100%RB



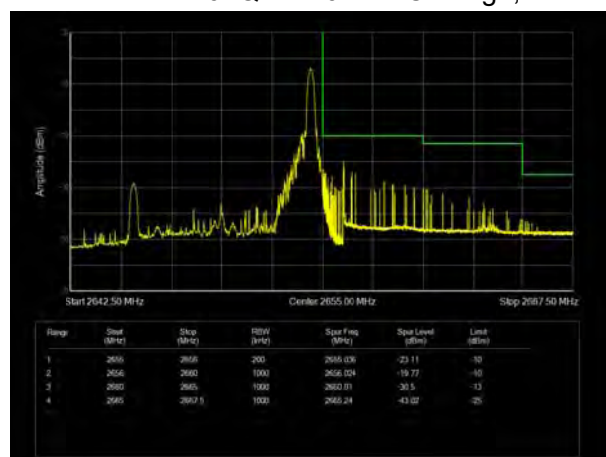
LTE Band 41 64QAM 5MHz CH-High, 100%RB



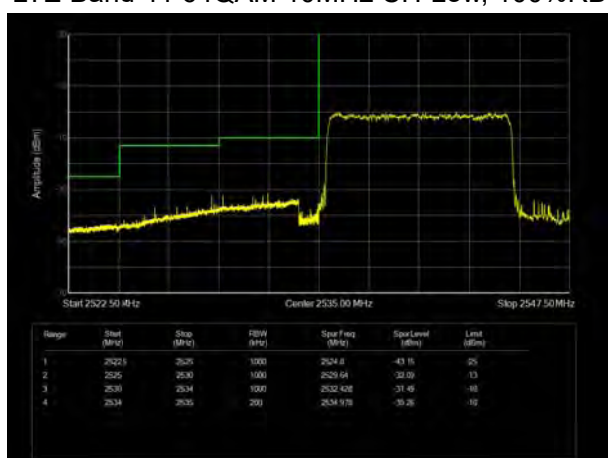
LTE Band 41 64QAM 10MHz CH-Low, 1 RB



LTE Band 41 64QAM 10MHz CH-High, 1 RB



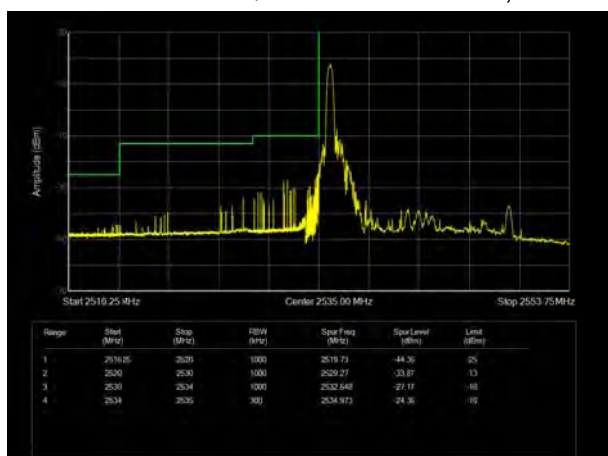
LTE Band 41 64QAM 10MHz CH-Low, 100%RB



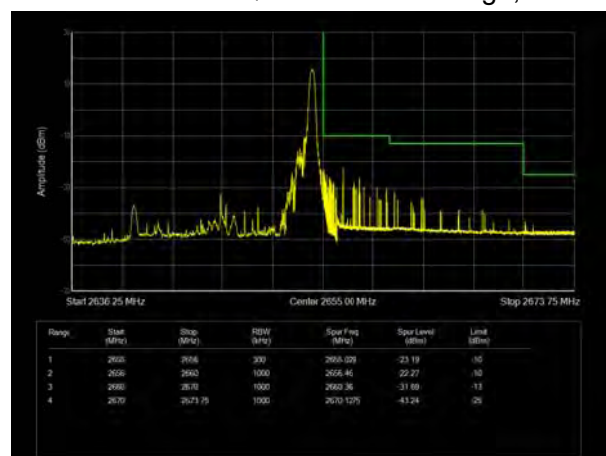
LTE Band 41 64QAM 10MHz CH-High, 100%RB



LTE Band 41 64QAM 15MHz CH-Low, 1 RB



LTE Band 41 64QAM 15MHz CH-High, 1 RB



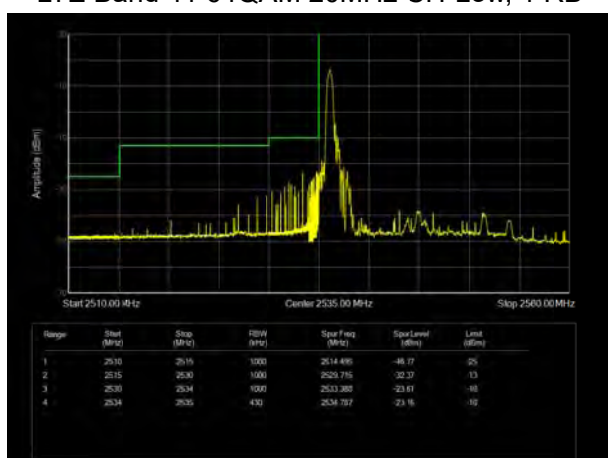
LTE Band 41 64QAM 15MHz CH-Low, 100%RB



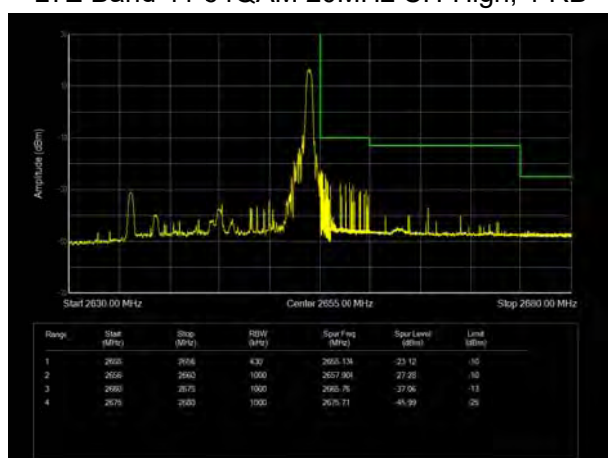
LTE Band 41 64QAM 15MHz CH-High, 100%RB



LTE Band 41 64QAM 20MHz CH-Low, 1 RB



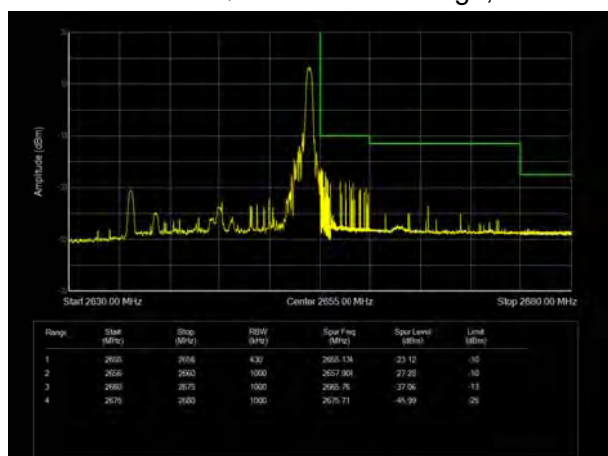
LTE Band 41 64QAM 20MHz CH-High, 1 RB



LTE Band 41 64QAM 20MHz CH-Low, 100%RB



LTE Band 41 64QAM 20MHz CH-High, 100%RB



6.4 Peak-to-Average Power Ratio (PAPR)

WCDMA Band IV	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
RMC	1312	1712.4	24.30	21.15	3.15	≤13	PASS
	1413	1732.6	24.35	21.25	3.10	≤13	PASS
	1513	1752.6	24.20	21.12	3.08	≤13	PASS

LTE Band 4								
Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
QPSK	1.4	19957	1710.7	25.77	20.49	5.28	≤13	PASS
		20175	1732.5	26.02	20.47	5.55	≤13	PASS
		20393	1754.3	25.85	20.54	5.31	≤13	PASS
	3	19965	1711.5	25.88	20.46	5.42	≤13	PASS
		20175	1732.5	25.88	20.44	5.44	≤13	PASS
		20385	1753.5	25.89	20.50	5.39	≤13	PASS
	5	19975	1712.5	25.94	20.46	5.48	≤13	PASS
		20175	1732.5	26.00	20.46	5.54	≤13	PASS
		20375	1752.5	25.97	20.52	5.45	≤13	PASS
	10	20000	1715	26.12	20.56	5.56	≤13	PASS
		20175	1732.5	26.03	20.47	5.56	≤13	PASS
		20350	1750	25.94	20.48	5.46	≤13	PASS
	15	20025	1717.5	26.53	20.63	5.90	≤13	PASS
		20175	1732.5	26.40	20.49	5.91	≤13	PASS
		20325	1747.5	26.27	20.49	5.78	≤13	PASS
	20	20050	1720	26.29	20.57	5.72	≤13	PASS
		20175	1732.5	26.07	20.47	5.60	≤13	PASS
		20300	1745	26.03	20.46	5.57	≤13	PASS
16QAM	1.4	19957	1710.7	25.81	19.63	6.18	≤13	PASS
		20175	1732.5	25.80	19.51	6.29	≤13	PASS
		20393	1754.3	25.78	19.62	6.16	≤13	PASS
	3	19965	1711.5	25.76	19.52	6.24	≤13	PASS
		20175	1732.5	25.87	19.49	6.38	≤13	PASS
		20385	1753.5	25.81	19.57	6.24	≤13	PASS
	5	19975	1712.5	25.74	19.50	6.24	≤13	PASS
		20175	1732.5	25.83	19.50	6.33	≤13	PASS
		20375	1752.5	25.73	19.56	6.17	≤13	PASS
	10	20000	1715	25.93	19.57	6.36	≤13	PASS



		20175	1732.5	25.86	19.53	6.33	≤13	PASS
		20350	1750	25.73	19.52	6.21	≤13	PASS
		20025	1717.5	25.99	19.56	6.43	≤13	PASS
	15	20175	1732.5	25.95	19.51	6.44	≤13	PASS
		20325	1747.5	25.87	19.53	6.34	≤13	PASS
		20050	1720	26.04	19.60	6.44	≤13	PASS
	20	20175	1732.5	25.92	19.54	6.38	≤13	PASS
		20300	1745	25.86	19.52	6.34	≤13	PASS
		20000	1715	24.79	18.58	6.21	≤13	PASS
64QAM	1.4	19957	1710.7	24.53	18.54	5.99	≤13	PASS
		20175	1732.5	21.73	15.54	6.19	≤13	PASS
		20393	1754.3	24.85	18.79	6.06	≤13	PASS
	3	19965	1711.5	24.65	18.57	6.08	≤13	PASS
		20175	1732.5	24.74	18.50	6.24	≤13	PASS
		20385	1753.5	24.85	18.74	6.11	≤13	PASS
	5	19975	1712.5	21.65	15.56	6.09	≤13	PASS
		20175	1732.5	24.76	18.52	6.24	≤13	PASS
		20375	1752.5	24.80	18.73	6.07	≤13	PASS
	10	20000	1715	24.79	18.58	6.21	≤13	PASS
		20175	1732.5	24.79	18.54	6.25	≤13	PASS
		20350	1750	24.86	18.71	6.15	≤13	PASS
	15	20025	1717.5	24.92	18.52	6.40	≤13	PASS
		20175	1732.5	24.94	18.54	6.40	≤13	PASS
		20325	1747.5	24.93	18.67	6.26	≤13	PASS
	20	20050	1720	25.02	18.61	6.41	≤13	PASS
		20175	1732.5	24.91	18.55	6.36	≤13	PASS
		20300	1745	24.89	18.63	6.26	≤13	PASS

LTE Band 7								
Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
QPSK	5	20775	2502.5	25.31	20.06	5.25	≤13	PASS
		21100	2535	25.60	20.36	5.24	≤13	PASS
		21425	2567.5	25.42	20.31	5.11	≤13	PASS
	10	20800	2505	25.52	20.18	5.34	≤13	PASS
		21100	2535	25.59	20.36	5.23	≤13	PASS
		21400	2565	25.38	20.36	5.02	≤13	PASS
	15	20825	2507.5	25.97	20.21	5.76	≤13	PASS
		21100	2535	26.04	20.43	5.61	≤13	PASS



	20	21375	2562.5	25.71	20.39	5.32	≤13	PASS
		20850	2510	25.72	20.19	5.53	≤13	PASS
		21100	2535	25.86	20.41	5.45	≤13	PASS
		21350	2560	25.48	20.22	5.26	≤13	PASS
16QAM	5	20775	2502.5	25.07	19.12	5.95	≤13	PASS
		21100	2535	25.35	19.41	5.94	≤13	PASS
		21425	2567.5	25.17	19.31	5.86	≤13	PASS
	10	20800	2505	25.26	19.20	6.06	≤13	PASS
		21100	2535	25.38	19.39	5.99	≤13	PASS
		21400	2565	25.18	19.34	5.84	≤13	PASS
	15	20825	2507.5	25.46	19.20	6.26	≤13	PASS
		21100	2535	25.58	19.42	6.16	≤13	PASS
		21375	2562.5	25.27	19.36	5.91	≤13	PASS
	20	20850	2510	25.42	19.20	6.22	≤13	PASS
		21100	2535	25.58	19.42	6.16	≤13	PASS
		21350	2560	25.22	19.25	5.97	≤13	PASS
64QAM	5	20775	2502.5	23.71	17.75	5.96	≤13	PASS
		21100	2535	23.98	17.99	5.99	≤13	PASS
		21425	2567.5	24.07	18.17	5.90	≤13	PASS
	10	20800	2505	24.01	17.87	6.14	≤13	PASS
		21100	2535	24.06	18.02	6.04	≤13	PASS
		21400	2565	24.05	18.21	5.84	≤13	PASS
	15	20825	2507.5	24.38	18.04	6.34	≤13	PASS
		21100	2535	24.28	18.07	6.21	≤13	PASS
		21375	2562.5	24.16	18.25	5.91	≤13	PASS
	20	20850	2510	24.36	18.05	6.31	≤13	PASS
		21100	2535	24.35	18.13	6.22	≤13	PASS
		21350	2560	24.11	18.14	5.97	≤13	PASS

LTE Band 17								
Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
QPSK	5	23755	706.5	27.01	21.43	5.58	≤13	PASS
		23790	710	26.81	21.40	5.41	≤13	PASS
		23825	713.5	26.99	21.53	5.46	≤13	PASS



	10	23780	709	26.67	21.30	5.37	≤13	PASS
		23790	710	26.71	21.32	5.39	≤13	PASS
		23800	711	26.79	21.38	5.41	≤13	PASS
16QAM	5	23755	706.5	26.72	20.44	6.28	≤13	PASS
		23790	710	26.50	20.43	6.07	≤13	PASS
		23825	713.5	26.43	20.26	6.17	≤13	PASS
	10	23780	709	26.51	20.33	6.18	≤13	PASS
		23790	710	26.44	20.30	6.14	≤13	PASS
		23800	711	26.59	20.41	6.18	≤13	PASS
64QAM	5	23755	706.5	26.21	19.95	6.26	≤13	PASS
		23790	710	25.91	19.94	5.97	≤13	PASS
		23825	713.5	26.16	20.13	6.03	≤13	PASS
	10	23780	709	25.97	19.85	6.12	≤13	PASS
		23790	710	25.95	19.86	6.09	≤13	PASS
		23800	711	26.04	19.95	6.09	≤13	PASS

LTE Band 41								
Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
QPSK	5	40065	2537.5	24.91	16.52	8.39	≤13	PASS
		40640	2595	25.31	16.64	8.67	≤13	PASS
		41215	2652.5	25.29	15.97	9.32	≤13	PASS
	10	40090	2540	24.97	15.97	9.00	≤13	PASS
		40640	2595	25.33	15.80	9.53	≤13	PASS
		41190	2650	25.35	16.68	8.67	≤13	PASS
	15	40115	2542.5	25.39	15.89	9.50	≤13	PASS
		40640	2595	25.65	15.97	9.68	≤13	PASS
		41165	2647.5	25.74	16.48	9.26	≤13	PASS
	20	40140	2545	25.05	15.68	9.37	≤13	PASS
		40640	2595	25.32	16.16	9.16	≤13	PASS
		41140	2645	25.56	16.85	8.71	≤13	PASS
16QAM	5	40065	2537.5	24.53	14.86	9.67	≤13	PASS
		40640	2595	24.91	14.89	10.02	≤13	PASS
		41215	2652.5	24.95	15.41	9.54	≤13	PASS
	10	40090	2540	24.74	15.45	9.29	≤13	PASS



		40640	2595	25.11	15.81	9.30	≤13	PASS
		41190	2650	25.17	15.83	9.34	≤13	PASS
	15	40115	2542.5	24.96	15.53	9.43	≤13	PASS
		40640	2595	25.20	15.27	9.93	≤13	PASS
		41165	2647.5	25.29	15.98	9.31	≤13	PASS
	20	40140	2545	24.80	15.34	9.46	≤13	PASS
		40640	2595	25.03	16.01	9.02	≤13	PASS
		41140	2645	25.19	16.14	9.05	≤13	PASS
64QAM	5	40065	2537.5	24.10	14.53	9.57	≤13	PASS
		40640	2595	24.33	13.76	10.57	≤13	PASS
		41215	2652.5	24.37	15.03	9.34	≤13	PASS
	10	40090	2540	24.28	15.27	9.01	≤13	PASS
		40640	2595	24.57	15.23	9.34	≤13	PASS
		41190	2650	24.56	15.81	8.75	≤13	PASS
	15	40115	2542.5	24.46	14.59	9.87	≤13	PASS
		40640	2595	24.80	15.84	8.96	≤13	PASS
		41165	2647.5	24.74	15.55	9.19	≤13	PASS
	20	40140	2545	24.20	13.47	10.73	≤13	PASS
		40640	2595	24.51	14.58	9.93	≤13	PASS
		41140	2645	24.54	14.56	9.98	≤13	PASS

6.5 Frequency Stability

WCDMA Band IV						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
Temperature	Voltage	BPSK	QPSK	BPSK	QPSK	
Normal (25℃)	Normal	15.24	10.90	0.00880	0.00629	PASS
Extreme (50℃)		4.43	2.47	0.00256	0.00142	PASS
Extreme (40℃)		2.80	17.55	0.00162	0.01013	PASS
Extreme (30℃)		17.44	14.45	0.01006	0.00834	PASS
Extreme (20℃)		13.98	10.15	0.00807	0.00586	PASS
Extreme (10℃)		17.59	7.65	0.01015	0.00442	PASS
Extreme (0℃)		8.76	12.34	0.00506	0.00712	PASS
Extreme (-10℃)		3.48	8.23	0.00201	0.00475	PASS
Extreme (-20℃)		14.60	13.78	0.00842	0.00795	PASS
Extreme (-30℃)		14.15	17.15	0.00817	0.00990	PASS
25℃	LV	6.77	17.06	0.00391	0.00984	PASS
	HV	9.21	10.69	0.00531	0.00617	PASS

LTE Band 4								
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	1.4MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	9.08	16.49	16.63	0.00524	0.00952	0.00960	PASS
Extreme (50℃)		11.50	10.40	4.43	0.00664	0.00600	0.00256	PASS
Extreme (40℃)		10.89	15.18	2.58	0.00628	0.00876	0.00149	PASS
Extreme (30℃)		12.26	1.66	9.37	0.00708	0.00096	0.00541	PASS
Extreme (20℃)		3.39	11.24	15.94	0.00196	0.00649	0.00920	PASS
Extreme (10℃)		11.06	5.78	15.28	0.00638	0.00334	0.00882	PASS
Extreme (0℃)		3.65	13.10	5.56	0.00211	0.00756	0.00321	PASS
Extreme (-10℃)		13.85	2.10	5.50	0.00800	0.00121	0.00318	PASS
Extreme (-20℃)		12.96	1.40	9.19	0.00748	0.00081	0.00531	PASS
Extreme (-30℃)		17.30	7.79	16.08	0.00998	0.00450	0.00928	PASS
25℃	LV	8.68	3.31	11.47	0.00501	0.00191	0.00662	PASS
	HV	15.26	2.04	7.69	0.00881	0.00118	0.00444	PASS



Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	3MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	4.44	1.05	11.48	0.00256	0.00061	0.00663	PASS
Extreme (50℃)		1.19	5.70	5.59	0.00069	0.00329	0.00323	PASS
Extreme (40℃)		5.50	16.50	2.58	0.00318	0.00952	0.00149	PASS
Extreme (30℃)		12.60	4.24	13.84	0.00727	0.00245	0.00799	PASS
Extreme (20℃)		16.38	12.93	5.80	0.00945	0.00746	0.00335	PASS
Extreme (10℃)		13.22	15.40	15.61	0.00763	0.00889	0.00901	PASS
Extreme (0℃)		4.59	13.82	16.09	0.00265	0.00798	0.00929	PASS
Extreme (-10℃)		13.06	12.94	12.21	0.00754	0.00747	0.00705	PASS
Extreme (-20℃)		10.77	16.21	10.02	0.00621	0.00935	0.00579	PASS
Extreme (-30℃)		16.59	9.12	13.97	0.00958	0.00526	0.00806	PASS
25℃	LV	4.67	4.79	6.73	0.00270	0.00276	0.00389	PASS
	HV	14.06	7.97	11.60	0.00812	0.00460	0.00670	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	5MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	15.50	17.70	6.79	0.00895	0.01022	0.00392	PASS
Extreme (50℃)		13.03	13.00	9.03	0.00752	0.00751	0.00521	PASS
Extreme (40℃)		9.98	4.54	2.35	0.00576	0.00262	0.00135	PASS
Extreme (30℃)		6.20	15.18	10.73	0.00358	0.00876	0.00619	PASS
Extreme (20℃)		10.76	4.30	3.34	0.00621	0.00248	0.00193	PASS
Extreme (10℃)		6.08	3.04	14.19	0.00351	0.00175	0.00819	PASS
Extreme (0℃)		7.44	1.33	11.36	0.00430	0.00076	0.00656	PASS
Extreme (-10℃)		13.02	14.64	3.44	0.00752	0.00845	0.00199	PASS
Extreme (-20℃)		1.61	15.64	4.87	0.00093	0.00903	0.00281	PASS
Extreme (-30℃)		11.24	14.56	10.23	0.00649	0.00840	0.00590	PASS
25℃	LV	8.89	4.94	6.75	0.00513	0.00285	0.00389	PASS
	HV	16.11	17.97	8.52	0.00930	0.01037	0.00492	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	10MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	8.90	8.47	15.35	0.00513	0.00489	0.00886	PASS
Extreme (50℃)		11.88	15.37	13.51	0.00686	0.00887	0.00780	PASS
Extreme (40℃)		5.03	8.39	12.51	0.00290	0.00485	0.00722	PASS
Extreme (30℃)		7.39	17.32	15.67	0.00426	0.00999	0.00904	PASS



Extreme (20℃)		6.50	12.91	10.74	0.00375	0.00745	0.00620	PASS
Extreme (10℃)		10.70	10.73	16.70	0.00618	0.00620	0.00964	PASS
Extreme (0℃)		10.40	14.03	17.79	0.00600	0.00810	0.01027	PASS
Extreme (-10℃)		10.10	7.33	10.81	0.00583	0.00423	0.00624	PASS
Extreme (-20℃)		12.23	16.45	1.27	0.00706	0.00950	0.00073	PASS
Extreme (-30℃)		15.68	13.86	12.72	0.00905	0.00800	0.00734	PASS
25℃	LV	9.15	4.69	2.37	0.00528	0.00271	0.00137	PASS
	HV	4.59	2.84	1.29	0.00265	0.00164	0.00074	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	15MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	11.97	2.86	11.74	0.00691	0.00165	0.00677	PASS
Extreme (50℃)		2.80	7.19	4.61	0.00161	0.00415	0.00266	PASS
Extreme (40℃)		14.87	10.07	12.57	0.00858	0.00582	0.00726	PASS
Extreme (30℃)		13.95	9.08	4.40	0.00805	0.00524	0.00254	PASS
Extreme (20℃)		2.21	8.68	4.14	0.00127	0.00501	0.00239	PASS
Extreme (10℃)		8.50	5.60	7.74	0.00491	0.00323	0.00447	PASS
Extreme (0℃)		17.54	13.61	17.68	0.01013	0.00786	0.01021	PASS
Extreme (-10℃)		2.36	12.71	11.54	0.00136	0.00734	0.00666	PASS
Extreme (-20℃)		6.95	11.19	15.28	0.00401	0.00646	0.00882	PASS
Extreme (-30℃)		17.57	13.86	5.04	0.01014	0.00800	0.00291	PASS
25℃	LV	1.35	2.57	11.96	0.00078	0.00148	0.00691	PASS
	HV	2.72	13.13	1.65	0.00157	0.00758	0.00095	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	20MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	8.46	9.69	14.15	0.00489	0.00559	0.00817	PASS
Extreme (50℃)		15.83	15.38	2.66	0.00914	0.00888	0.00154	PASS
Extreme (40℃)		4.62	7.06	4.62	0.00267	0.00407	0.00267	PASS
Extreme (30℃)		6.55	3.49	17.23	0.00378	0.00202	0.00995	PASS
Extreme (20℃)		4.98	11.36	15.33	0.00288	0.00656	0.00885	PASS
Extreme (10℃)		11.15	14.71	8.94	0.00643	0.00849	0.00516	PASS
Extreme (0℃)		6.56	4.14	1.58	0.00379	0.00239	0.00091	PASS
Extreme (-10℃)		7.09	11.98	16.13	0.00409	0.00691	0.00931	PASS
Extreme (-20℃)		4.91	8.41	1.46	0.00283	0.00486	0.00084	PASS
Extreme (-30℃)		14.29	17.24	10.54	0.00825	0.00995	0.00608	PASS
25℃	LV	9.68	6.34	7.73	0.00559	0.00366	0.00446	PASS
	HV	17.77	8.79	1.44	0.01026	0.00507	0.00083	PASS



LTE Band 7								
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	5MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	3.95	1.92	17.14	0.00156	0.00076	0.00676	PASS
Extreme (50℃)		3.54	16.33	16.08	0.00140	0.00644	0.00634	PASS
Extreme (40℃)		4.56	9.67	7.89	0.00180	0.00382	0.00311	PASS
Extreme (30℃)		3.92	13.70	15.87	0.00155	0.00540	0.00626	PASS
Extreme (20℃)		17.95	5.83	9.29	0.00708	0.00230	0.00367	PASS
Extreme (10℃)		6.37	12.43	14.52	0.00251	0.00490	0.00573	PASS
Extreme (0℃)		11.72	8.45	5.24	0.00462	0.00333	0.00207	PASS
Extreme (-10℃)		14.09	4.73	11.90	0.00556	0.00186	0.00469	PASS
Extreme (-20℃)		3.28	8.14	5.93	0.00129	0.00321	0.00234	PASS
Extreme (-30℃)		1.59	12.99	3.11	0.00063	0.00512	0.00123	PASS
25℃	LV	2.25	4.38	3.62	0.00089	0.00173	0.00143	PASS
	HV	2.85	6.02	6.03	0.00112	0.00238	0.00238	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	10MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	5.87	10.01	14.47	0.00231	0.00395	0.00571	PASS
Extreme (50℃)		2.49	16.61	16.17	0.00098	0.00655	0.00638	PASS
Extreme (40℃)		13.37	16.14	1.87	0.00528	0.00637	0.00074	PASS
Extreme (30℃)		10.36	12.81	1.08	0.00409	0.00505	0.00043	PASS
Extreme (20℃)		15.16	9.36	11.76	0.00598	0.00369	0.00464	PASS
Extreme (10℃)		4.29	13.93	5.16	0.00169	0.00550	0.00204	PASS
Extreme (0℃)		13.59	15.28	9.15	0.00536	0.00603	0.00361	PASS
Extreme (-10℃)		13.70	14.36	8.88	0.00540	0.00567	0.00350	PASS
Extreme (-20℃)		6.50	4.84	15.27	0.00257	0.00191	0.00602	PASS
Extreme (-30℃)		14.08	6.95	15.75	0.00555	0.00274	0.00621	PASS
25℃	LV	4.63	2.70	1.48	0.00183	0.00106	0.00058	PASS
	HV	8.34	8.75	15.16	0.00329	0.00345	0.00598	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	15MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	9.05	10.83	3.25	0.00357	0.00427	0.00128	PASS
Extreme (50℃)		4.74	2.53	10.86	0.00187	0.00100	0.00428	PASS
Extreme (40℃)		12.93	1.46	15.09	0.00510	0.00057	0.00595	PASS



Extreme (30℃)		8.26	16.44	12.23	0.00326	0.00649	0.00482	PASS
Extreme (20℃)		10.66	8.84	13.05	0.00420	0.00349	0.00515	PASS
Extreme (10℃)		7.39	15.14	10.01	0.00291	0.00597	0.00395	PASS
Extreme (0℃)		14.02	3.92	6.54	0.00553	0.00154	0.00258	PASS
Extreme (-10℃)		15.81	5.25	4.40	0.00623	0.00207	0.00174	PASS
Extreme (-20℃)		9.08	5.91	2.98	0.00358	0.00233	0.00118	PASS
Extreme (-30℃)		13.31	11.48	2.97	0.00525	0.00453	0.00117	PASS
25℃	LV	17.04	3.62	3.89	0.00672	0.00143	0.00153	PASS
	HV	6.32	1.37	2.12	0.00249	0.00054	0.00084	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	20MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	7.33	14.42	11.76	0.00289	0.00569	0.00464	PASS
Extreme (50℃)		9.08	12.18	2.77	0.00358	0.00481	0.00109	PASS
Extreme (40℃)		4.62	9.07	9.32	0.00182	0.00358	0.00368	PASS
Extreme (30℃)		12.21	4.33	6.70	0.00482	0.00171	0.00264	PASS
Extreme (20℃)		6.46	13.39	10.64	0.00255	0.00528	0.00420	PASS
Extreme (10℃)		1.73	2.71	9.64	0.00068	0.00107	0.00380	PASS
Extreme (0℃)		17.02	17.52	10.97	0.00672	0.00691	0.00433	PASS
Extreme (-10℃)		5.77	15.77	12.38	0.00228	0.00622	0.00488	PASS
Extreme (-20℃)		11.42	6.20	12.51	0.00450	0.00245	0.00494	PASS
Extreme (-30℃)		14.78	1.32	2.90	0.00583	0.00052	0.00115	PASS
25℃	LV	12.44	4.77	12.67	0.00491	0.00188	0.00500	PASS
	HV	17.87	16.62	7.28	0.00705	0.00656	0.00287	PASS

LTE Band 17								
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	5MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	12.89	5.92	4.88	0.01815	0.00834	0.00687	PASS
Extreme (50℃)		4.04	4.27	5.02	0.00569	0.00602	0.00707	PASS
Extreme (40℃)		17.08	3.02	15.85	0.02406	0.00425	0.02232	PASS
Extreme (30℃)		12.65	4.54	17.30	0.01782	0.00640	0.02436	PASS
Extreme (20℃)		17.12	17.55	8.19	0.02411	0.02472	0.01154	PASS
Extreme (10℃)		4.85	7.52	13.34	0.00683	0.01059	0.01879	PASS
Extreme (0℃)		17.06	8.07	1.26	0.02402	0.01136	0.00178	PASS
Extreme (-10℃)		5.89	14.78	11.91	0.00830	0.02081	0.01678	PASS
Extreme (-20℃)		7.31	17.03	9.47	0.01030	0.02399	0.01334	PASS
Extreme (-30℃)		3.29	2.24	6.97	0.00464	0.00315	0.00982	PASS



25℃	LV	13.52	4.08	12.30	0.01904	0.00574	0.01733	PASS
	HV	7.91	5.55	5.94	0.01114	0.00781	0.00836	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	10MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	3.70	2.36	15.58	0.00521	0.00332	0.02194	PASS
Extreme (50℃)		14.87	17.55	6.81	0.02094	0.02472	0.00960	PASS
Extreme (40℃)		16.11	17.73	11.13	0.02269	0.02497	0.01567	PASS
Extreme (30℃)		16.61	3.29	12.39	0.02340	0.00463	0.01745	PASS
Extreme (20℃)		13.56	13.15	16.43	0.01910	0.01852	0.02314	PASS
Extreme (10℃)		15.39	9.36	15.10	0.02168	0.01319	0.02126	PASS
Extreme (0℃)		17.29	15.86	4.35	0.02435	0.02233	0.00613	PASS
Extreme (-10℃)		8.47	13.89	3.27	0.01193	0.01956	0.00461	PASS
Extreme (-20℃)		10.35	10.16	14.31	0.01458	0.01431	0.02016	PASS
Extreme (-30℃)		7.46	14.33	6.78	0.01051	0.02018	0.00955	PASS
25℃	LV	5.09	7.88	1.18	0.00717	0.01110	0.00166	PASS
	HV	13.66	10.32	6.10	0.01924	0.01454	0.00859	PASS

LTE Band 41								
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	5MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	5.00	15.00	16.00	0.00193	0.00578	0.00617	PASS
Extreme (50℃)		1.00	12.00	3.00	0.00039	0.00463	0.00116	PASS
Extreme (40℃)		11.00	8.00	16.00	0.00424	0.00309	0.00617	PASS
Extreme (30℃)		15.00	5.00	15.00	0.00578	0.00193	0.00578	PASS
Extreme (20℃)		10.00	11.00	1.00	0.00386	0.00424	0.00039	PASS
Extreme (10℃)		12.00	11.00	3.00	0.00463	0.00424	0.00116	PASS
Extreme (0℃)		3.00	9.00	12.00	0.00116	0.00347	0.00463	PASS
Extreme (-10℃)		12.00	15.00	16.00	0.00463	0.00578	0.00617	PASS
Extreme (-20℃)		4.00	8.00	11.00	0.00154	0.00309	0.00424	PASS
Extreme (-30℃)		12.00	2.00	11.00	0.00463	0.00077	0.00424	PASS
25℃	LV	9.00	4.00	15.00	0.00347	0.00154	0.00578	PASS
	HV	2.00	6.00	6.00	0.00077	0.00231	0.00231	PASS



Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	10MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	15.00	2.00	17.00	0.00578	0.00077	0.00656	PASS
Extreme (50℃)		5.00	2.00	4.00	0.00193	0.00077	0.00154	PASS
Extreme (40℃)		5.00	13.00	1.00	0.00193	0.00501	0.00039	PASS
Extreme (30℃)		13.00	12.00	11.00	0.00501	0.00463	0.00424	PASS
Extreme (20℃)		3.00	14.00	13.00	0.00116	0.00540	0.00501	PASS
Extreme (10℃)		5.00	5.00	12.00	0.00193	0.00193	0.00463	PASS
Extreme (0℃)		3.00	15.00	1.00	0.00116	0.00578	0.00039	PASS
Extreme (-10℃)		17.00	14.00	11.00	0.00656	0.00540	0.00424	PASS
Extreme (-20℃)		2.00	4.00	7.00	0.00077	0.00154	0.00270	PASS
Extreme (-30℃)		6.00	5.00	11.00	0.00231	0.00193	0.00424	PASS
25℃	LV	5.00	1.00	5.00	0.00193	0.00039	0.00193	PASS
	HV	7.00	3.00	1.00	0.00270	0.00116	0.00039	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	15MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	17.00	4.00	12.00	0.00656	0.00154	0.00463	PASS
Extreme (50℃)		7.00	9.00	1.00	0.00270	0.00347	0.00039	PASS
Extreme (40℃)		15.00	10.00	14.00	0.00578	0.00386	0.00540	PASS
Extreme (30℃)		8.00	4.00	10.00	0.00309	0.00154	0.00386	PASS
Extreme (20℃)		17.00	17.00	4.00	0.00656	0.00656	0.00154	PASS
Extreme (10℃)		6.00	4.00	17.00	0.00231	0.00154	0.00656	PASS
Extreme (0℃)		1.00	12.00	16.00	0.00039	0.00463	0.00617	PASS
Extreme (-10℃)		9.00	15.00	2.00	0.00347	0.00578	0.00077	PASS
Extreme (-20℃)		16.00	7.00	16.00	0.00617	0.00270	0.00617	PASS
Extreme (-30℃)		11.00	1.00	11.00	0.00424	0.00039	0.00424	PASS
25℃	LV	5.00	10.00	2.00	0.00193	0.00386	0.00077	PASS
	HV	5.00	11.00	15.00	0.00193	0.00424	0.00578	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	20MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	1.00	7.00	17.00	0.00039	0.00270	0.00656	PASS
Extreme (50℃)		2.00	15.00	9.00	0.00077	0.00578	0.00347	PASS
Extreme (40℃)		8.00	7.00	12.00	0.00309	0.00270	0.00463	PASS
Extreme (30℃)		11.00	5.00	17.00	0.00424	0.00193	0.00656	PASS



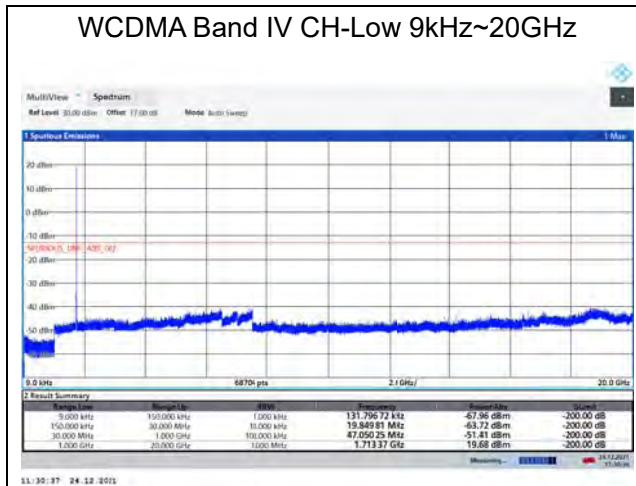
Extreme (20℃)		9.00	12.00	16.00	0.00347	0.00463	0.00617	PASS
Extreme (10℃)		3.00	6.00	4.00	0.00116	0.00231	0.00154	PASS
Extreme (0℃)		3.00	9.00	8.00	0.00116	0.00347	0.00309	PASS
Extreme (-10℃)		5.00	6.00	14.00	0.00193	0.00231	0.00540	PASS
Extreme (-20℃)		12.00	8.00	7.00	0.00463	0.00309	0.00270	PASS
Extreme (-30℃)		5.00	14.00	5.00	0.00193	0.00540	0.00193	PASS
25℃	LV	14.00	1.00	15.00	0.00540	0.00039	0.00578	PASS
	HV	6.00	9.00	5.00	0.00231	0.00347	0.00193	PASS

6.6 Spurious Emissions at Antenna Terminals

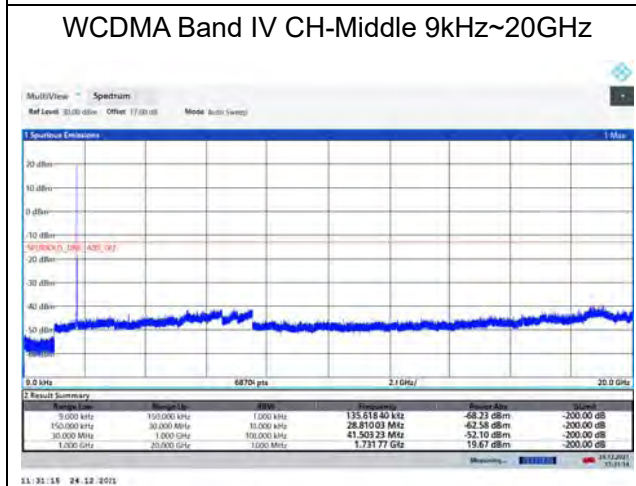
Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the emissions more than 20 dB below the limit are not reported.

The signal beyond the limit is carrier.

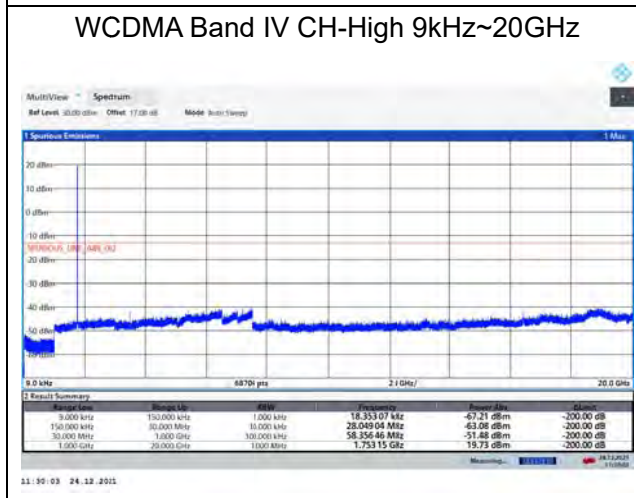
WCDMA Band IV CH-Low 9kHz~20GHz



WCDMA Band IV CH-Middle 9kHz~20GHz

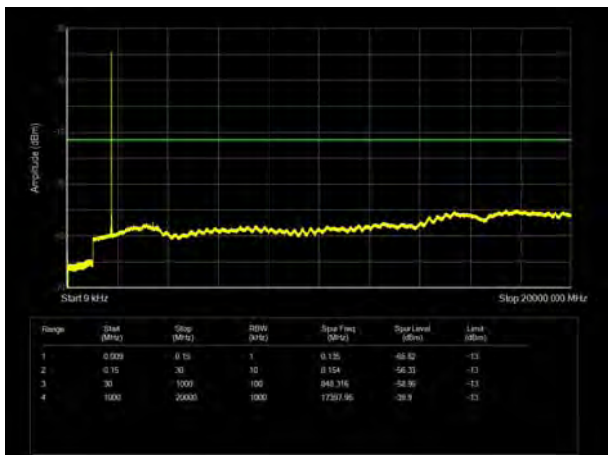


WCDMA Band IV CH-High 9kHz~20GHz

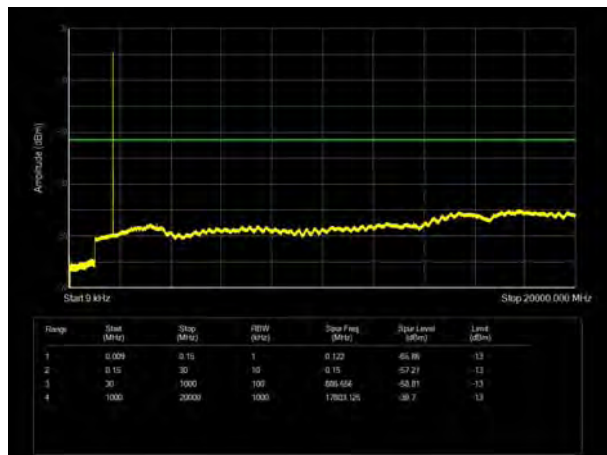




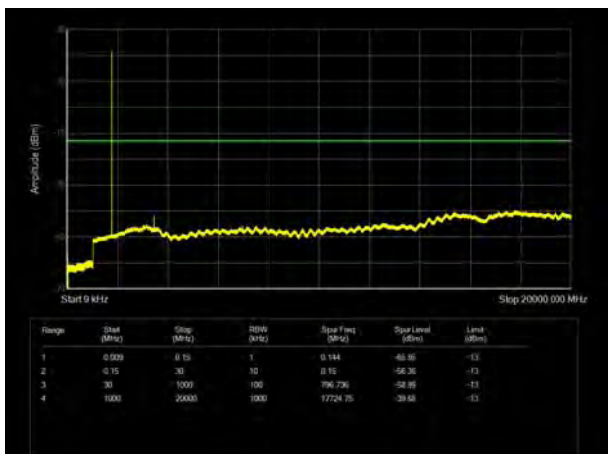
LTE Band 4 1.4MHz CH-Low 9kHz~20GHz



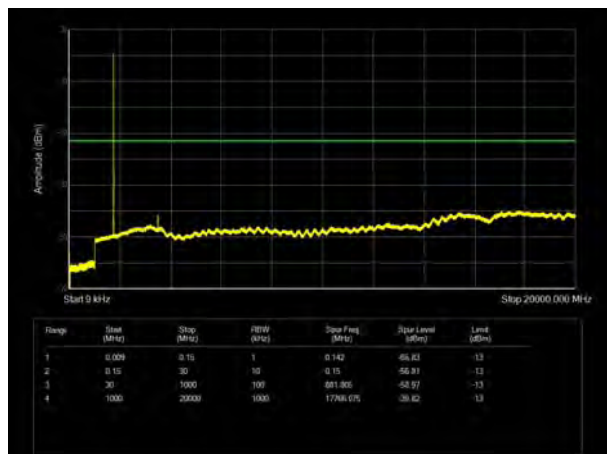
LTE Band 4 3MHz CH- Low 9kHz~20GHz



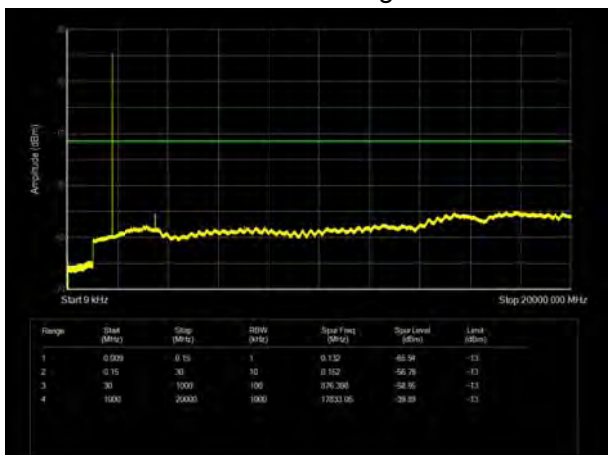
LTE Band 4 1.4MHz CH- Middle 9kHz~20GHz



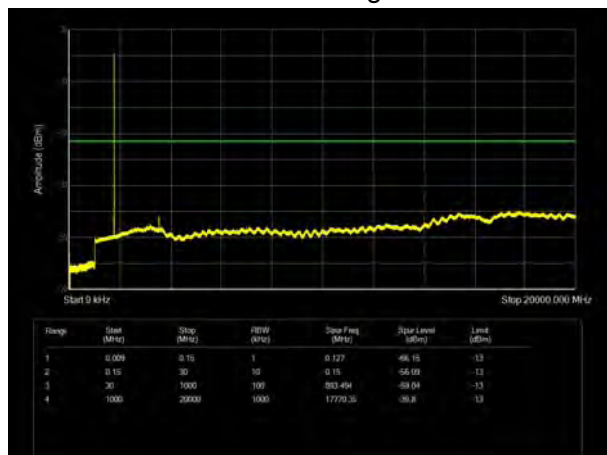
LTE Band 4 3MHz CH- Middle 9kHz~20GHz



LTE Band 4 1.4MHz CH- High 9kHz~20GHz

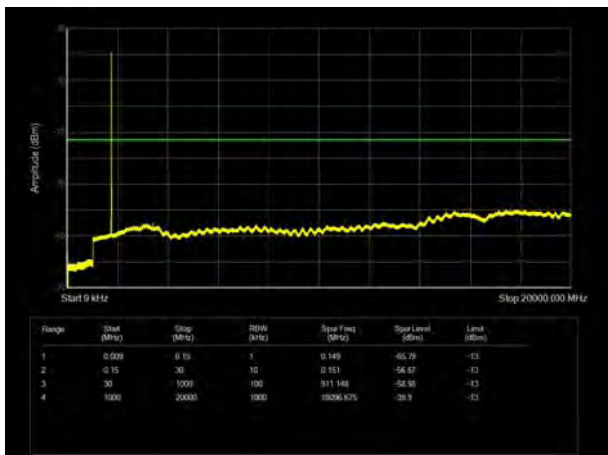


LTE Band 4 3MHz CH-High 9kHz~20GHz

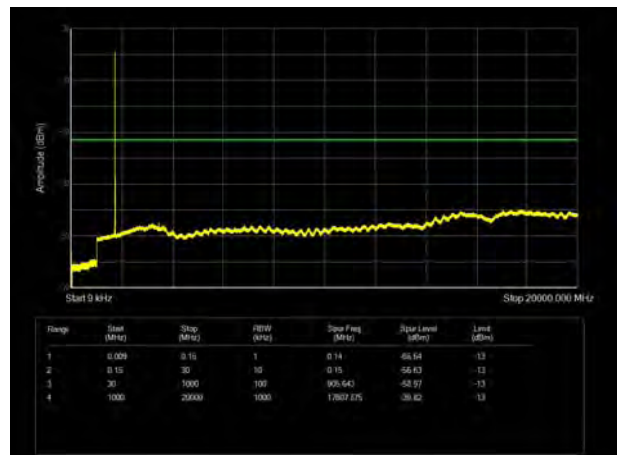




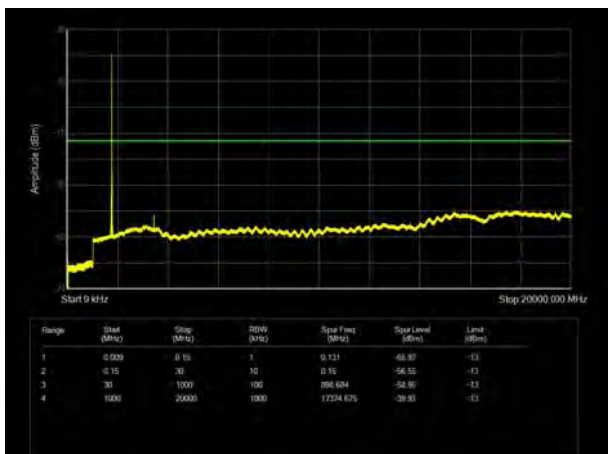
LTE Band 4 5MHz CH- Low 9kHz~20GHz



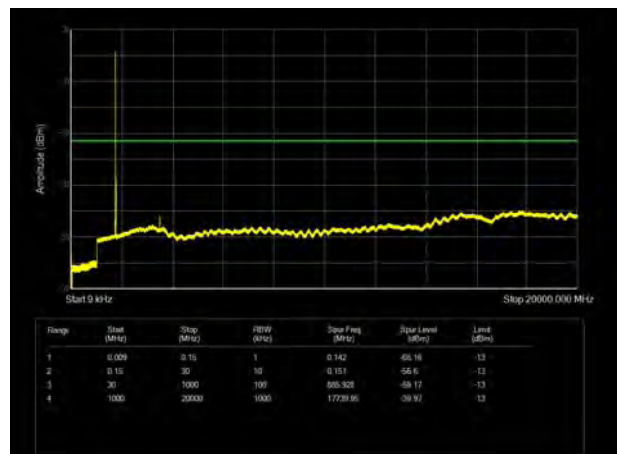
LTE Band 4 10MHz CH-Low 9kHz~20GHz



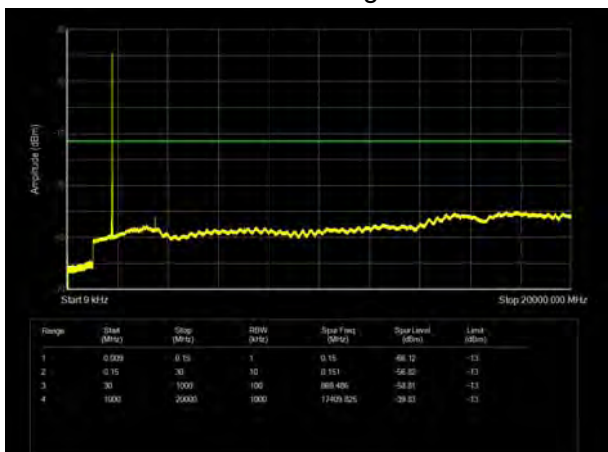
LTE Band 4 5MHz CH- Middle 9kHz~20GHz



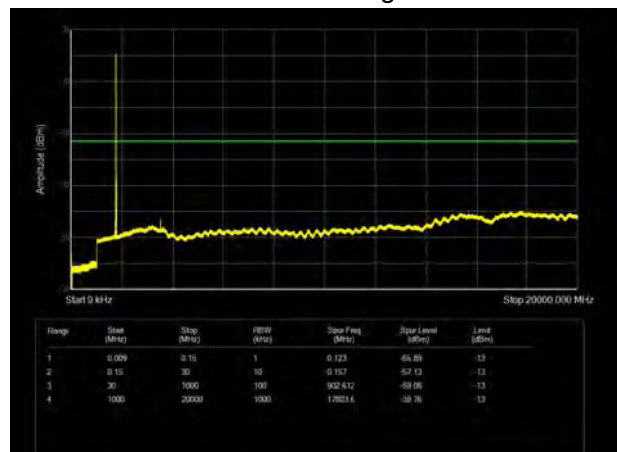
LTE Band 4 10MHz CH- Middle 9kHz~20GHz



LTE Band 4 5MHz CH-High 9kHz~20GHz

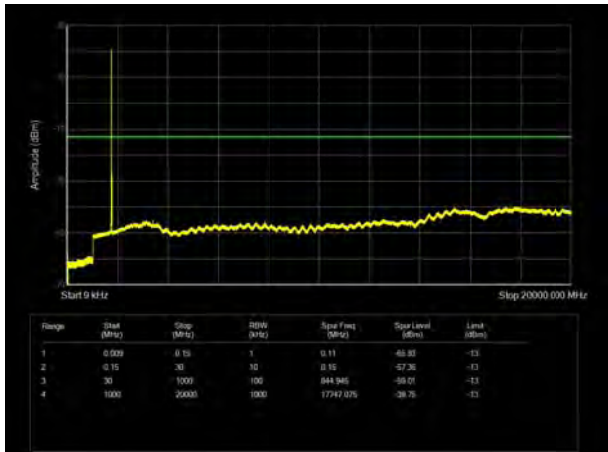


LTE Band 4 10MHz CH- High 9kHz~20GHz

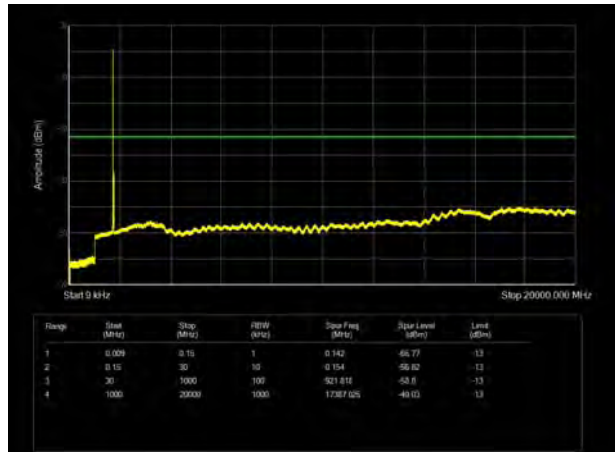




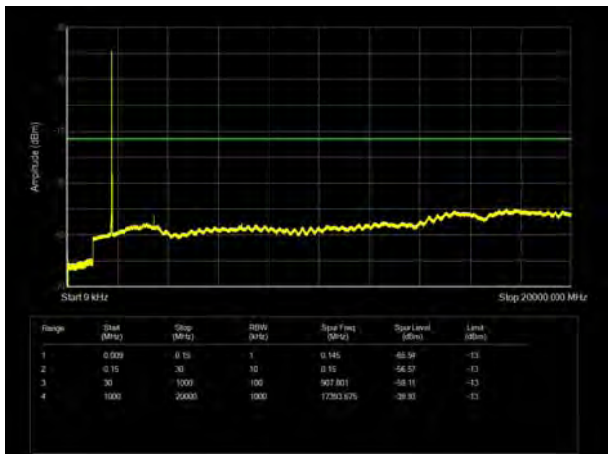
LTE Band 4 15MHz CH- Low 9kHz~20GHz



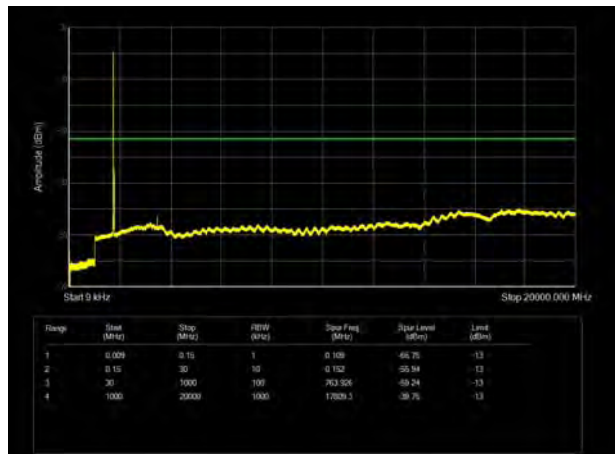
LTE Band 4 20MHz CH-Low 9kHz~20GHz



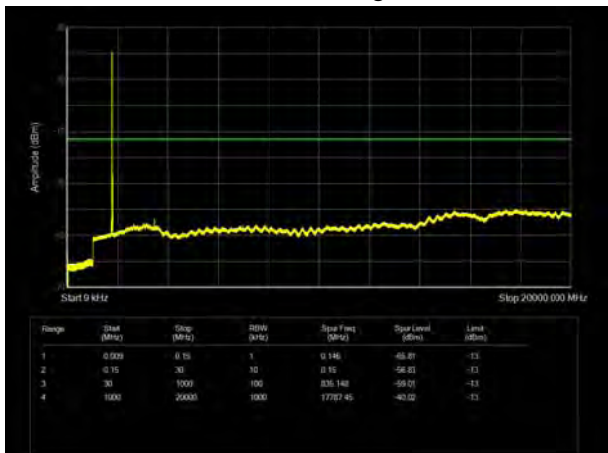
LTE Band 4 15MHz CH- Middle 9kHz~20GHz



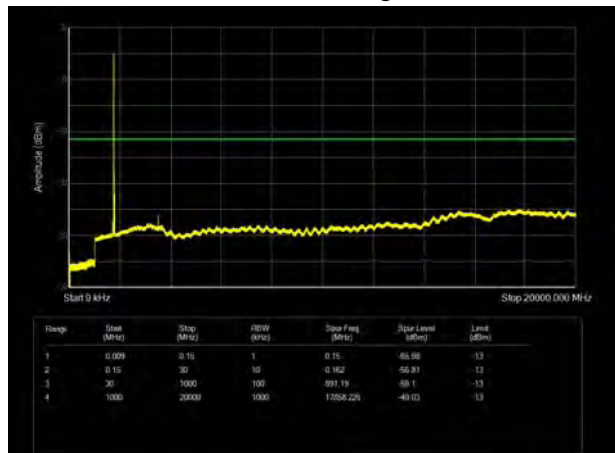
LTE Band 4 20MHz CH- Middle 9kHz~20GHz



LTE Band 4 15MHz CH-High 9kHz~20GHz

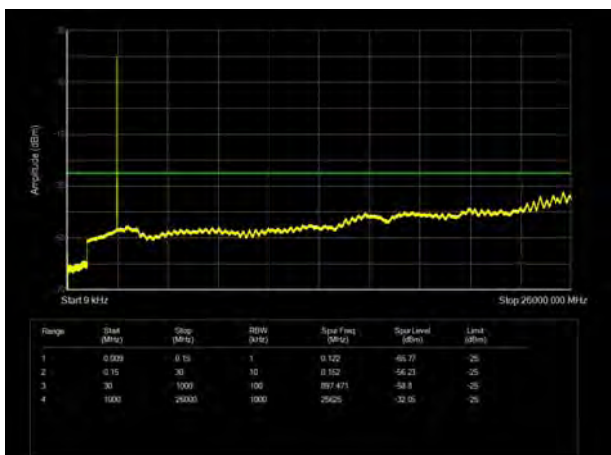


LTE Band 4 20MHz CH- High 9kHz~20GHz

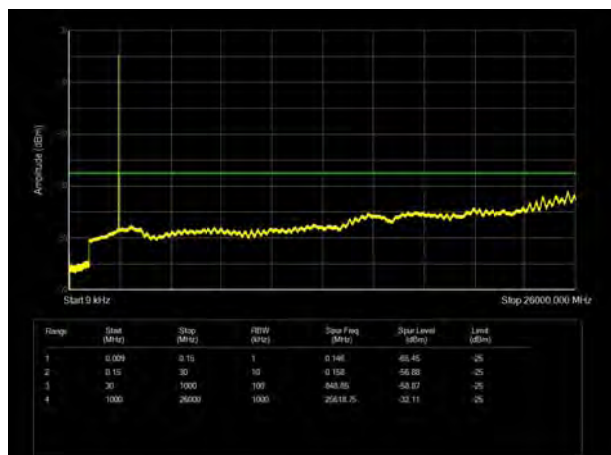




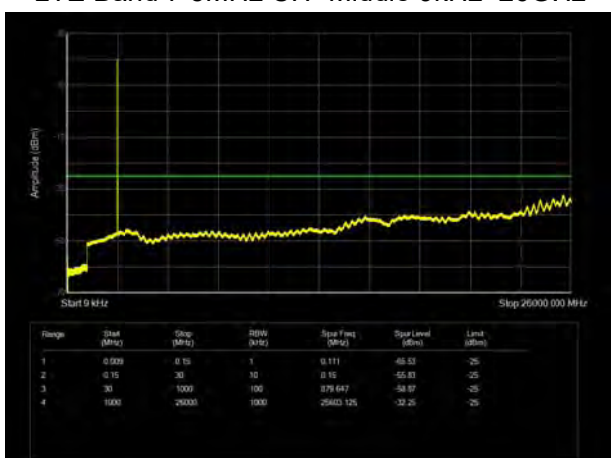
LTE Band 7 5MHz CH- Low 9kHz~26GHz



LTE Band 7 10MHz CH-Low 9kHz~26GHz



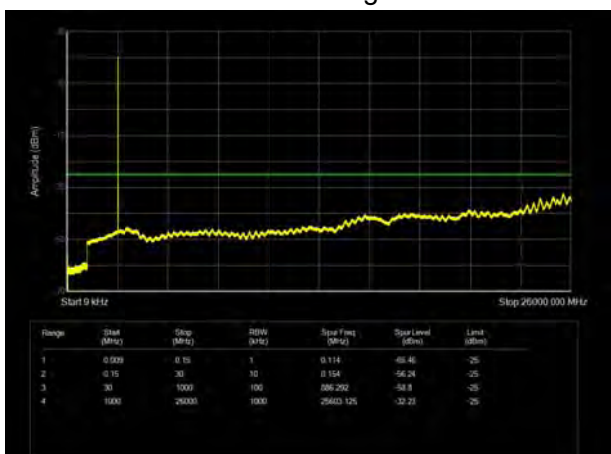
LTE Band 7 5MHz CH- Middle 9kHz~26GHz



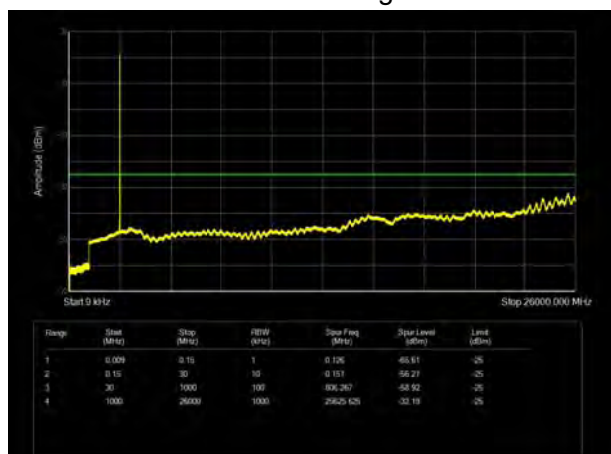
LTE Band 7 10MHz CH- Middle 9kHz~26GHz



LTE Band 7 5MHz CH-High 9kHz~26GHz

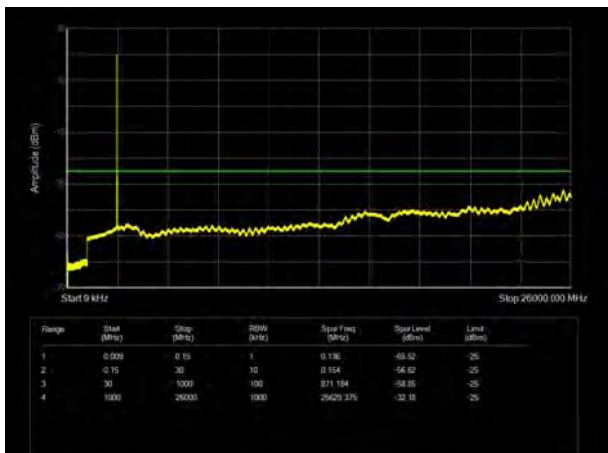


LTE Band 7 10MHz CH- High 9kHz~26GHz

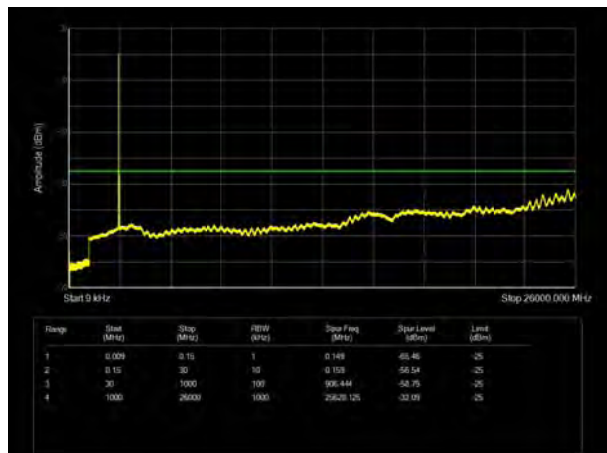




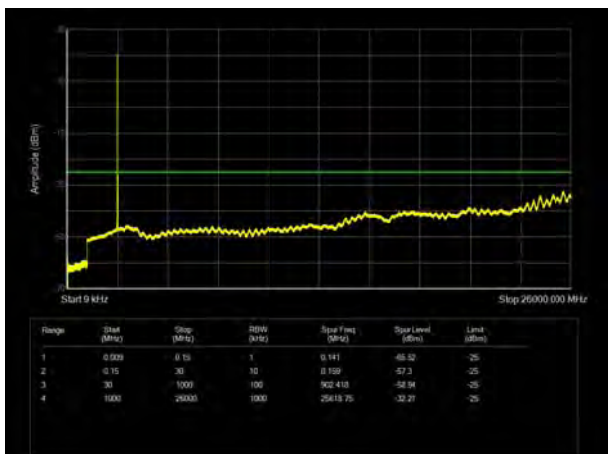
LTE Band 7 15MHz CH- Low 9kHz~26GHz



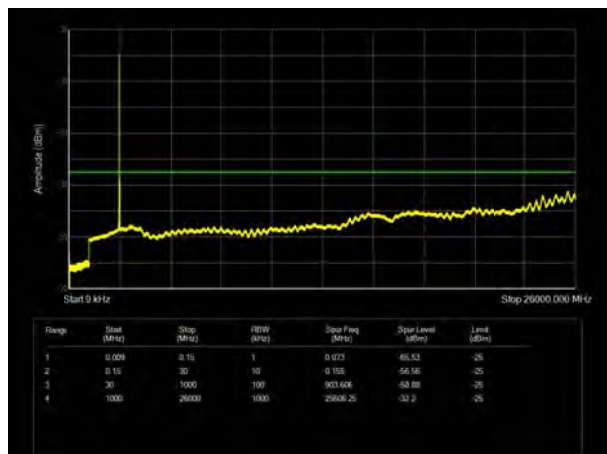
LTE Band 7 20MHz CH-Low 9kHz~26GHz



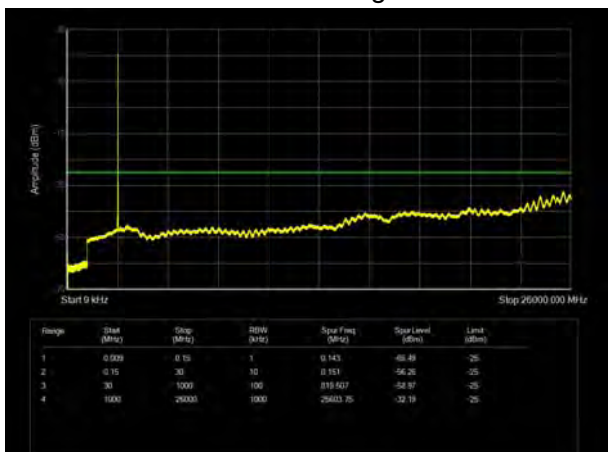
LTE Band 7 15MHz CH- Middle 9kHz~26GHz



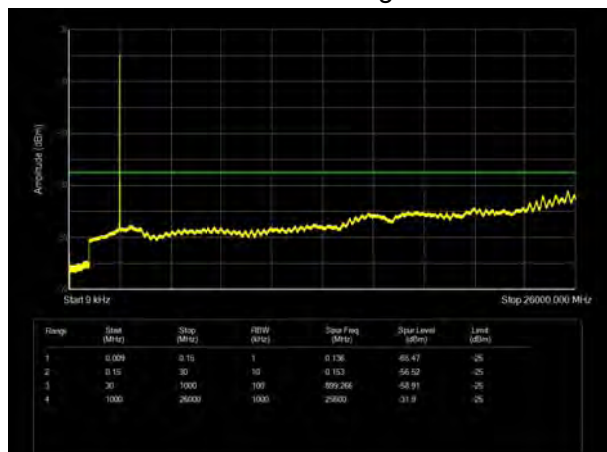
LTE Band 7 20MHz CH- Middle 9kHz~26GHz



LTE Band 7 15MHz CH-High 9kHz~26GHz

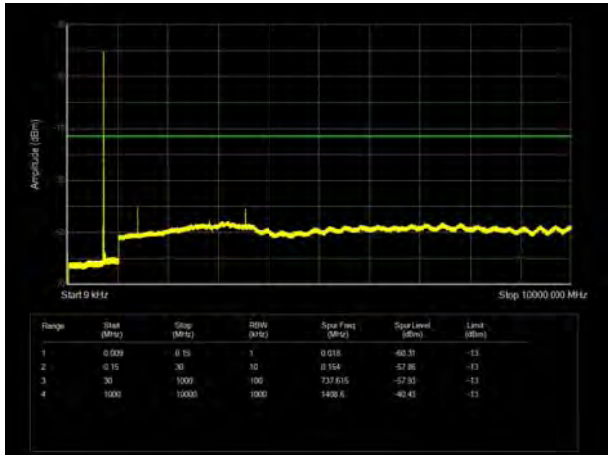


LTE Band 7 20MHz CH- High 9kHz~26GHz

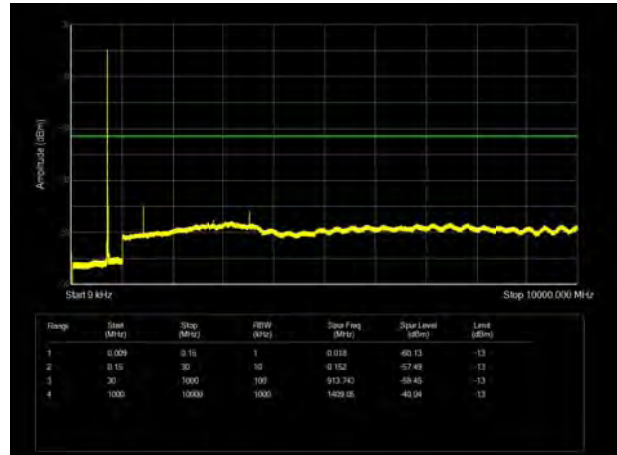




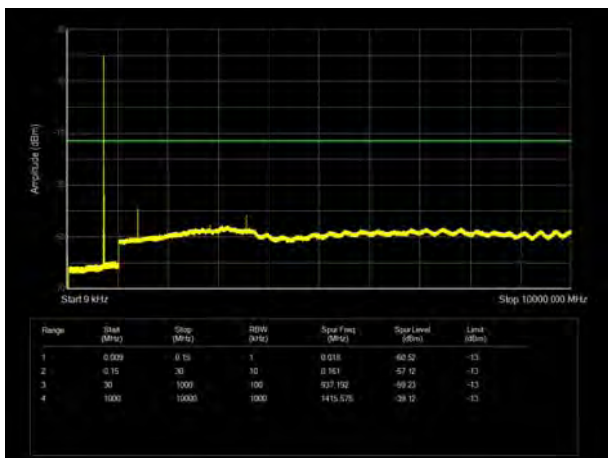
LTE Band 17 5MHz CH- Low 9kHz~10GHz



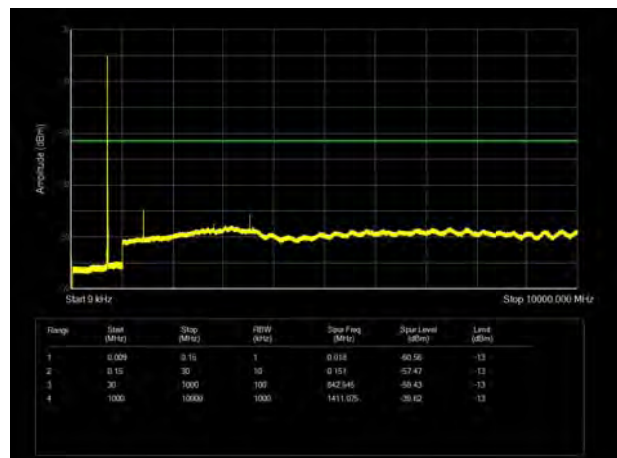
LTE Band 17 10MHz CH-Low 9kHz~10GHz



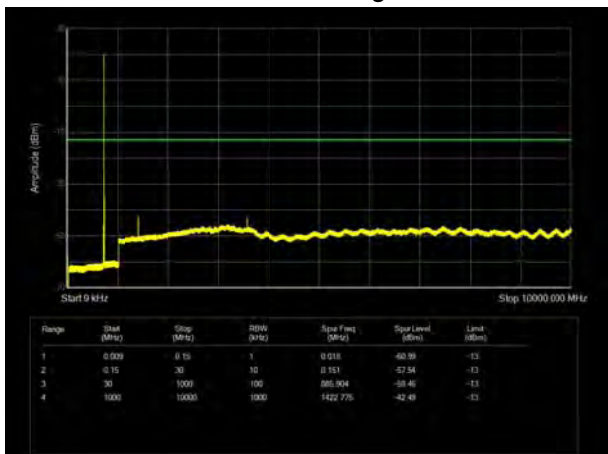
LTE Band 17 5MHz CH- Middle 9kHz~10GHz



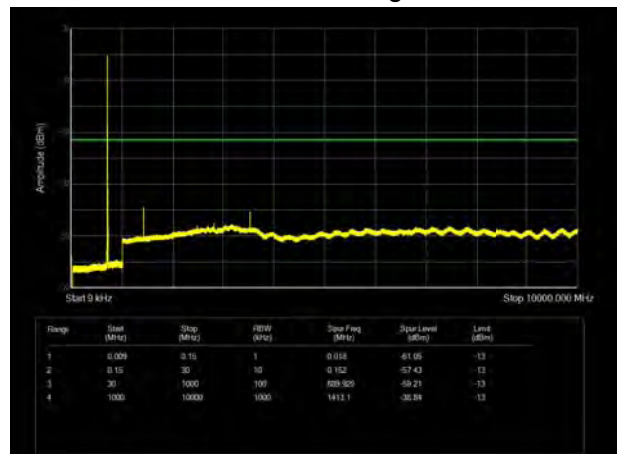
LTE Band 17 10MHz CH- Middle 9kHz~10GHz



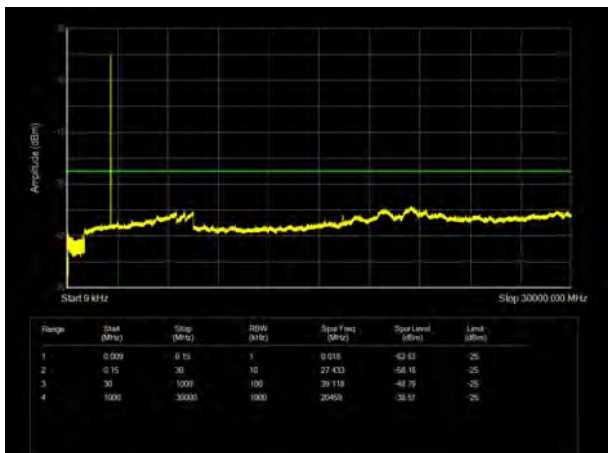
LTE Band 17 5MHz CH-High 9kHz~10GHz



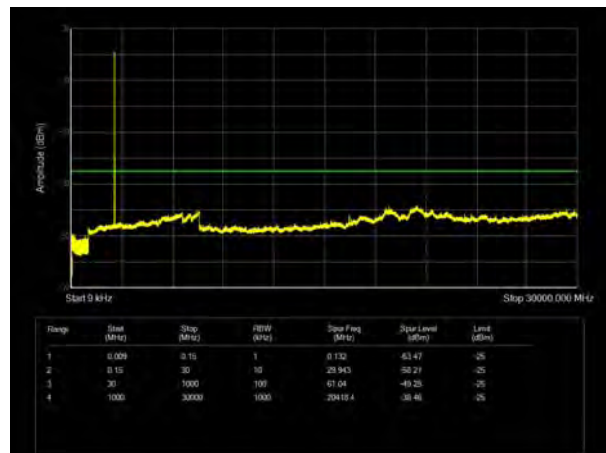
LTE Band 17 10MHz CH- High 9kHz~10GHz



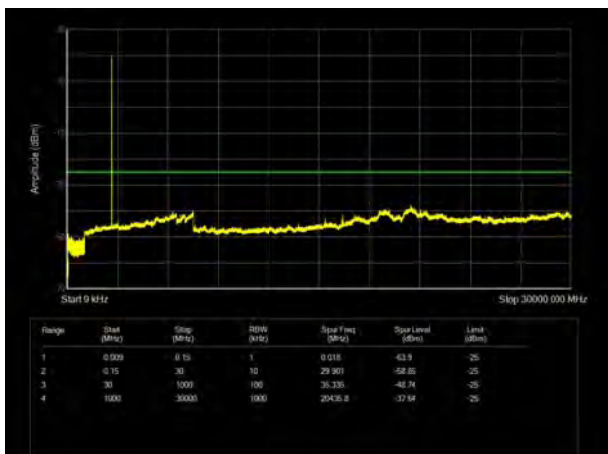
LTE Band 41 5MHz CH-Low 9kHz~30GHz



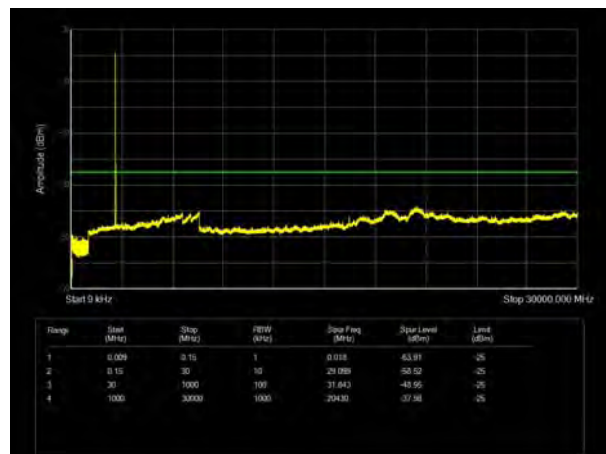
LTE Band 41 10MHz CH- Low 9kHz~30GHz



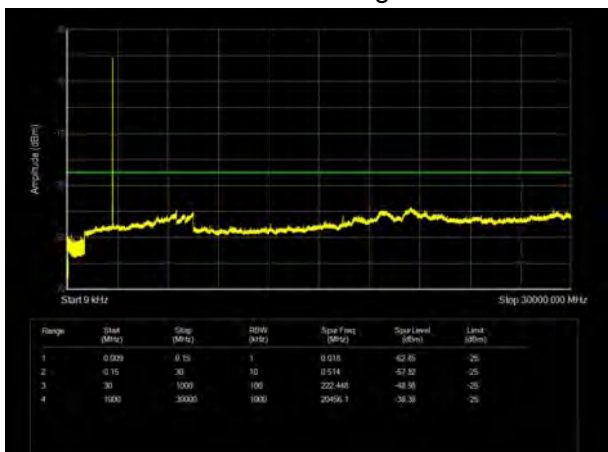
LTE Band 41 5MHz CH- Middle 9kHz~30GHz



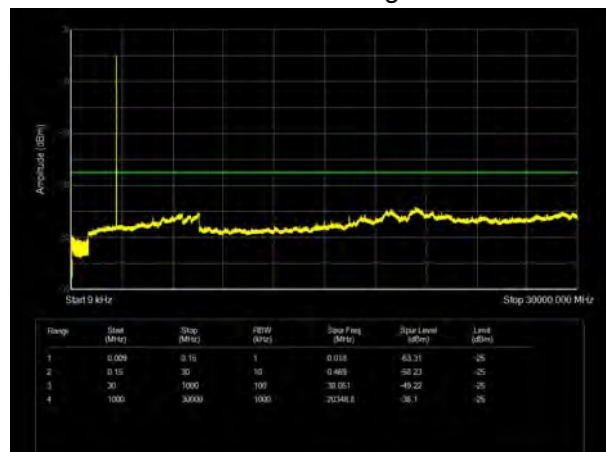
LTE Band 41 10MHz CH- Middle 9kHz~30GHz



LTE Band 41 5MHz CH- High 9kHz~30GHz



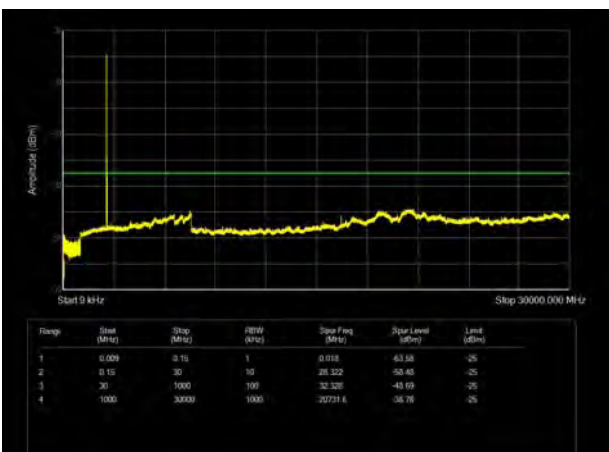
LTE Band 41 10MHz CH-High 9kHz~30GHz



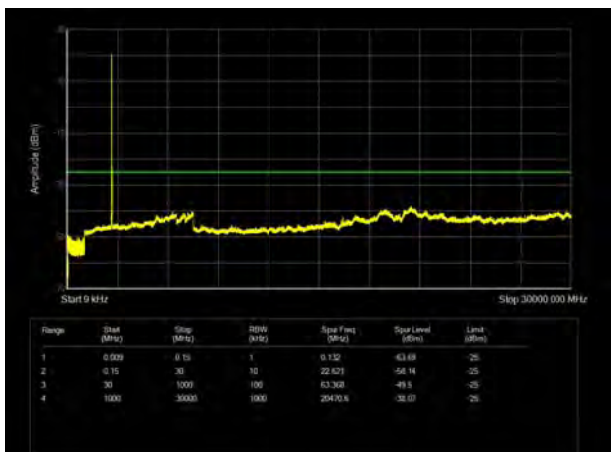
LTE Band 41 15MHz CH- Low 9kHz~30GHz



LTE Band 41 20MHz CH-Low 9kHz~30GHz



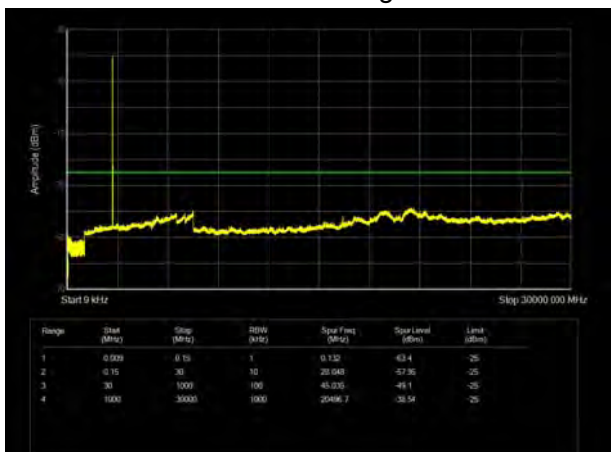
LTE Band 41 15MHz CH- Middle 9kHz~30GHz



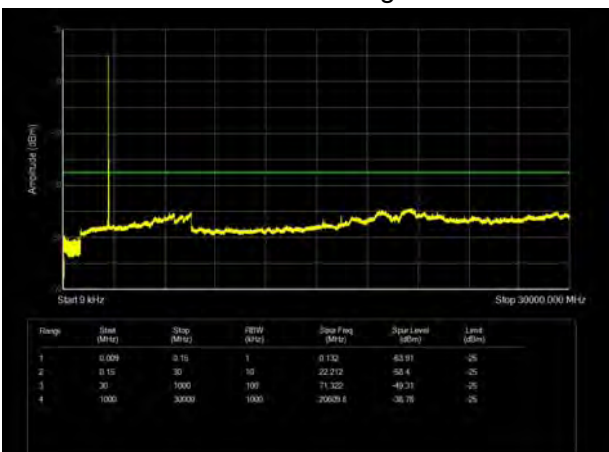
LTE Band 41 20MHz CH- Middle 9kHz~30GHz



LTE Band 41 15MHz CH-High 9kHz~30GHz



LTE Band 41 20MHz CH- High 9kHz~30GHz



6.7 Radiates Spurious Emission

Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the emissions below the noise floor will not be recorded in the report.

WCDMA Band IV CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3465.20	-50.81	2.70	12.70	Horizontal	-40.81	-13.00	27.81	315
3	5197.80	-41.46	3.20	12.50	Horizontal	-32.16	-13.00	19.16	315
4	6930.40	-47.43	4.20	11.80	Horizontal	-39.83	-13.00	26.83	315
5	8663.00	-49.80	4.40	12.50	Horizontal	-41.70	-13.00	28.70	0
6	10395.60	-44.93	4.70	11.30	Horizontal	-38.33	-13.00	25.33	45
7	12128.20	-47.35	5.20	13.80	Horizontal	-38.75	-13.00	25.75	90
8	13860.80	-39.63	5.70	11.30	Horizontal	-34.03	-13.00	21.03	135
9	15593.40	-50.57	6.10	16.80	Horizontal	-39.87	-13.00	26.87	315
10	17326.00	-44.50	6.10	14.20	Horizontal	-36.40	-13.00	23.40	270
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 4 QPSK 1.4MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3463.60	-47.49	2.70	12.70	Vertical	-37.49	-13.00	24.49	45
3	5195.40	-48.21	3.20	12.50	Vertical	-38.91	-13.00	25.91	225
4	6927.20	-54.79	4.20	11.80	Vertical	-47.19	-13.00	34.19	270
5	8659.00	-53.10	4.40	12.50	Vertical	-45.00	-13.00	32.00	0
6	10390.80	-49.41	4.70	11.30	Vertical	-42.81	-13.00	29.81	180
7	12122.60	-49.96	5.20	13.80	Vertical	-41.36	-13.00	28.36	45
8	13854.40	-50.47	5.70	11.30	Vertical	-44.87	-13.00	31.87	315
9	15586.20	-52.74	6.10	16.80	Vertical	-42.04	-13.00	29.04	90
10	17318.00	-49.89	6.10	14.20	Vertical	-41.79	-13.00	28.79	180
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 Vertical position.									



LTE Band 4 QPSK 5MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3460.50	-48.06	2.70	12.70	Vertical	-38.06	-13.00	25.06	225
3	5191.50	-49.46	3.20	12.50	Vertical	-40.16	-13.00	27.16	45
4	6930.00	-53.95	4.20	11.80	Vertical	-46.35	-13.00	33.35	135
5	8662.50	-53.57	4.40	12.50	Vertical	-45.47	-13.00	32.47	0
6	10395.00	-49.54	4.70	11.30	Vertical	-42.94	-13.00	29.94	90
7	12127.50	-51.95	5.20	13.80	Vertical	-43.35	-13.00	30.35	315
8	13860.00	-49.05	5.70	11.30	Vertical	-43.45	-13.00	30.45	180
9	15592.50	-52.97	6.10	16.80	Vertical	-42.27	-13.00	29.27	135
10	17325.00	-50.10	6.10	14.20	Vertical	-42.00	-13.00	29.00	45
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 Vertical position.									

LTE Band 4 QPSK 20MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3447.75	-49.97	2.70	12.70	Vertical	-39.97	-13.00	26.97	315
3	5170.88	-48.33	3.20	12.50	Vertical	-39.03	-13.00	26.03	45
4	6890.00	-53.66	4.20	11.80	Vertical	-46.06	-13.00	33.06	180
5	8612.50	-52.39	4.40	12.50	Vertical	-44.29	-13.00	31.29	0
6	10395.00	-48.27	4.70	11.30	Vertical	-41.67	-13.00	28.67	135
7	12057.50	-46.39	5.20	13.80	Vertical	-37.79	-13.00	24.79	225
8	13785.20	-50.16	5.70	11.30	Vertical	-44.56	-13.00	31.56	45
9	15502.50	-53.79	6.10	16.80	Vertical	-43.09	-13.00	30.09	315
10	17225.00	-48.44	6.10	14.20	Vertical	-40.34	-13.00	27.34	270
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 Vertical position.									



LTE Band 7 QPSK 5MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	5065.00	-41.45	3.40	12.50	Vertical	-32.35	-25.00	7.35	225
3	7597.50	-41.15	4.40	12.20	Vertical	-33.35	-25.00	8.35	45
4	10130.00	-45.55	4.70	11.30	Vertical	-38.95	-25.00	13.95	180
5	12662.50	-40.39	5.40	13.20	Vertical	-32.59	-25.00	7.59	0
6	15195.00	-47.86	6.10	13.10	Vertical	-40.86	-25.00	15.86	315
7	17727.50	-47.11	6.10	14.20	Vertical	-39.01	-25.00	14.01	225
8	20280.00	--	--	--	--	--	--	--	--
9	22815.00	--	--	--	--	--	--	--	--
10	25350.00	--	--	--	--	--	--	--	--

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 Vertical position.

LTE Band 7 QPSK 20MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	5050.00	-41.88	3.40	12.50	Vertical	-32.78	-25.00	7.78	135
3	7575.00	-41.04	4.40	12.20	Vertical	-33.24	-25.00	8.24	90
4	10100.00	-45.14	4.70	11.30	Vertical	-38.54	-25.00	13.54	135
5	12625.00	-40.69	5.40	13.20	Vertical	-32.89	-25.00	7.89	0
6	15150.00	-47.78	6.10	13.10	Vertical	-40.78	-25.00	15.78	315
7	17675.00	-48.67	6.10	14.20	Vertical	-40.57	-25.00	15.57	45
8	20240.00	--	--	--	--	--	--	--	--
9	22770.00	--	--	--	--	--	--	--	--
10	25300.00	--	--	--	--	--	--	--	--

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 Vertical position.



LTE Band 17 QPSK 5MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1415.00	-60.75	1.70	8.70	Vertical	-55.90	-13.00	42.90	135
3	2122.50	-64.12	2.10	11.10	Vertical	-57.27	-13.00	44.27	45
4	2830.00	-59.70	2.50	13.10	Vertical	-51.25	-13.00	38.25	0
5	3537.50	-57.38	2.60	12.70	Vertical	-49.43	-13.00	36.43	225
6	4245.00	-62.05	3.30	12.50	Vertical	-55.00	-13.00	42.00	135
7	4952.00	-60.61	3.40	12.50	Vertical	-53.66	-13.00	40.66	45
8	5660.00	-60.32	3.40	12.80	Vertical	-53.07	-13.00	40.07	0
9	6367.50	-57.81	4.10	11.50	Vertical	-52.56	-13.00	39.56	180
10	7075.00	-56.52	4.20	12.20	Vertical	-50.67	-13.00	37.67	315

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 Vertical position.

LTE Band 17 QPSK 10MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1410.00	-60.80	1.70	8.70	Vertical	-55.95	-13.00	42.95	225
3	2115.00	-63.79	2.10	11.10	Vertical	-56.94	-13.00	43.94	135
4	2820.00	-59.59	2.50	13.10	Vertical	-51.14	-13.00	38.14	270
5	3525.00	-57.30	2.60	12.70	Vertical	-49.35	-13.00	36.35	90
6	4230.00	-61.84	3.30	12.50	Vertical	-54.79	-13.00	41.79	225
7	4935.00	-60.36	3.40	12.50	Vertical	-53.41	-13.00	40.41	135
8	5640.00	-58.67	3.40	12.80	Vertical	-51.42	-13.00	38.42	45
9	6345.00	-57.17	4.10	11.50	Vertical	-51.92	-13.00	38.92	180
10	7050.00	-56.75	4.20	12.20	Vertical	-50.90	-13.00	37.90	315

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 Vertical position.



LTE Band 41 QPSK 5MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	5181.00	-36.77	3.20	12.50	Vertical	-27.47	-25.00	2.47	135
3	7771.50	-41.24	4.40	12.30	Vertical	-33.34	-25.00	8.34	225
4	10362.00	-44.03	4.70	11.80	Vertical	-36.93	-25.00	11.93	45
5	12952.50	-38.96	5.40	14.00	Vertical	-30.36	-25.00	5.36	180
6	15543.00	-53.61	6.10	16.80	Vertical	-42.91	-25.00	17.91	135
7	18071.55	-35.92	5.70	14.15	Vertical	-27.47	-25.00	2.47	135
8	20653.20	--	--	--	--	--	--	--	--
9	23234.85	--	--	--	--	--	--	--	--
10	25816.50	--	--	--	--	--	--	--	--

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 Vertical position.

LTE Band 41 QPSK 20MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	5166.00	-37.58	3.20	12.50	Vertical	-28.28	-25.00	3.28	45
3	7749.00	-42.47	4.40	12.30	Vertical	-34.57	-25.00	9.57	180
4	10332.00	-44.13	4.70	11.80	Vertical	-37.03	-25.00	12.03	315
5	12915.00	-40.60	5.40	14.00	Vertical	-32.00	-25.00	7.00	0
6	15498.00	-52.64	6.10	16.80	Vertical	-41.94	-25.00	16.94	225
7	18023.60	--	--	--	--	--	--	--	--
8	20598.40	--	--	--	--	--	--	--	--
9	23173.20	--	--	--	--	--	--	--	--
10	25748.00	--	--	--	--	--	--	--	--

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 Vertical position.



7 Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Base Station Simulator	R&S	CMW500	150415	2021-05-15	2022-05-14
Climate Chamber	WEISS	VT 4002	58226119450010	2021-05-15	2022-05-14
Spectrum Analyzer	Keysight	N9020A	MY52330084	2021-05-15	2022-05-14
Universal Radio Communication Tester	Agilent	E5515C	GB44400275	2021-05-15	2022-05-14
Signal Analyzer	R&S	FSV3030	101411	2020-12-13	2021-12-12
				2021-12-12	2022-12-11
Signal Analyzer	R&S	FSV30	103591	2021-05-15	2022-05-14
Horn Antenna	Schwarzbeck	BBHA 9120D	1594	2020-12-17	2023-12-16
Software	R&S	EMC32	10.35.10	/	/

*****END OF REPORT *****



ANNEX A: The EUT Appearance

The EUT Appearance are submitted separately.



ANNEX B: Test Setup Photos

The Test Setup Photos are submitted separately.