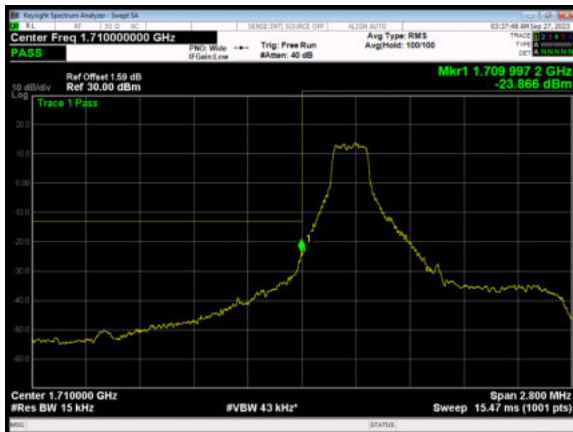
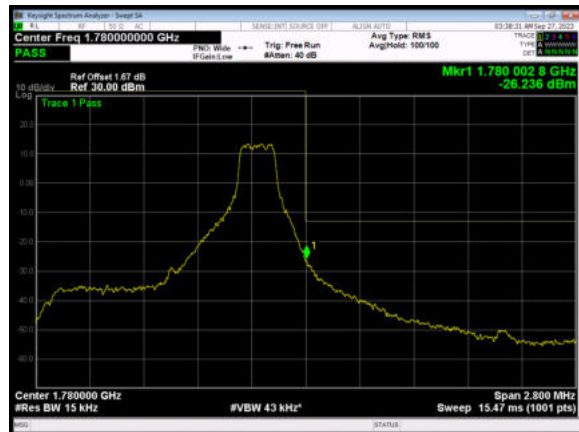


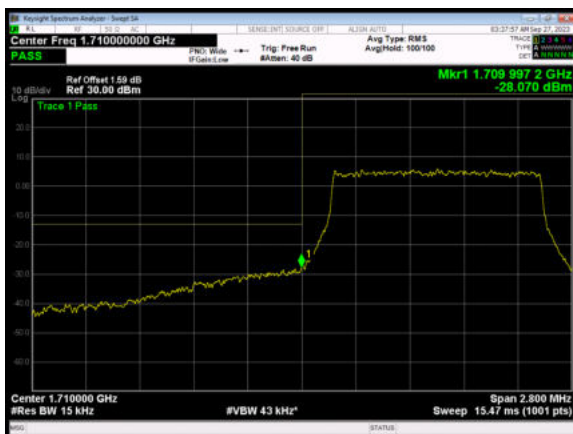
LTE Band 66 16QAM 1.4MHz CH-Low, 1 RB



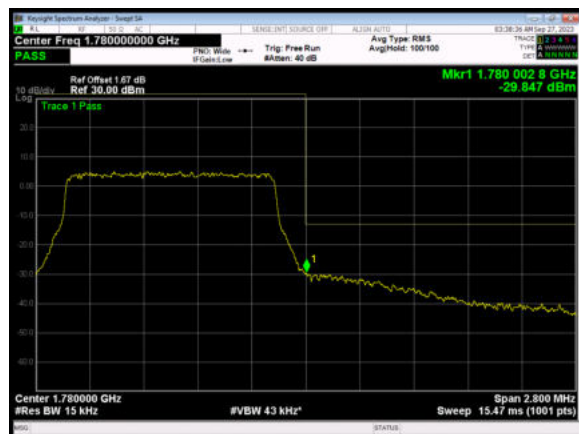
LTE Band 66 16QAM 1.4MHz CH-High, 1 RB



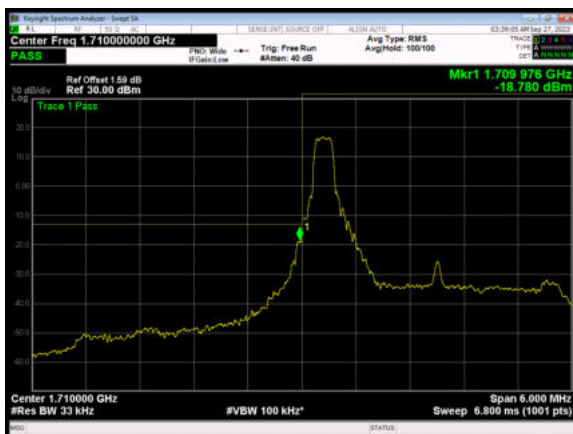
LTE Band 66 16QAM 1.4MHz CH-Low, 100%RB



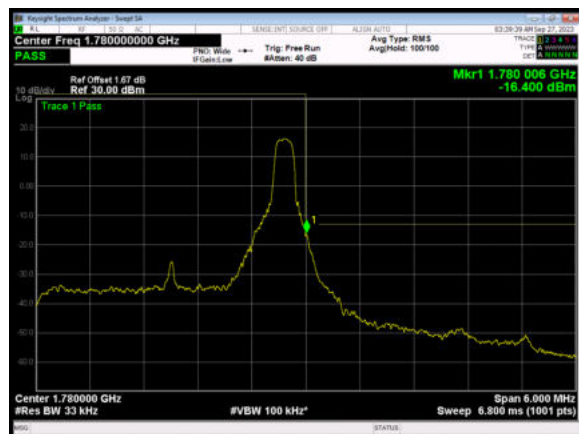
LTE Band 66 16QAM 1.4MHz CH-High, 100%RB



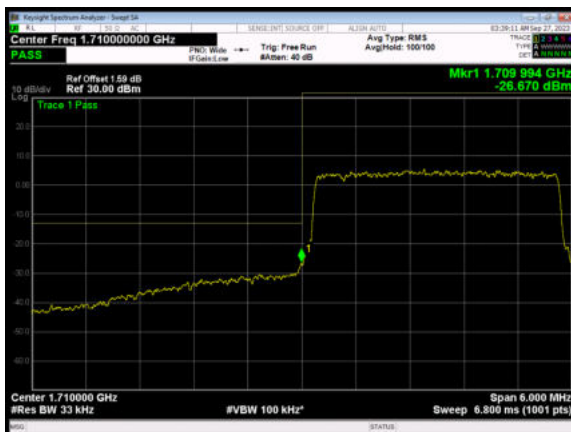
LTE Band 66 16QAM 3MHz CH-Low, 1 RB



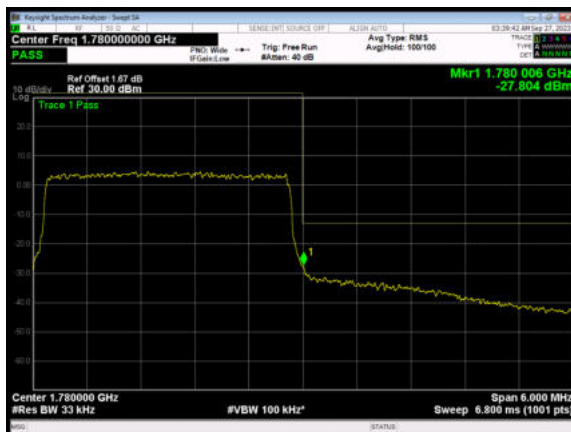
LTE Band 66 16QAM 3MHz CH-High, 1 RB



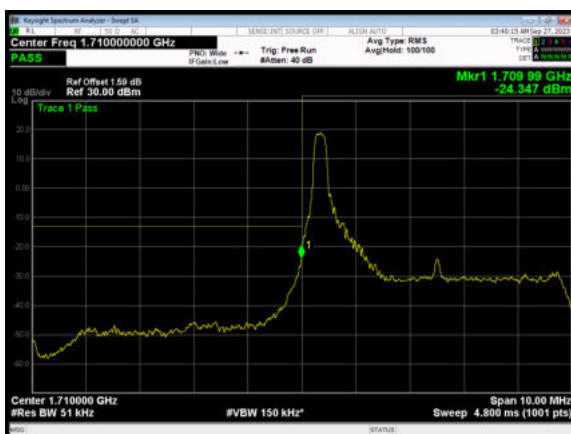
LTE Band 66 16QAM 3MHz CH-Low, 100%RB



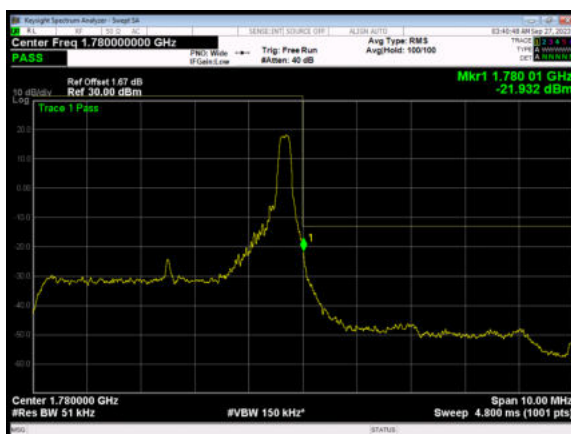
LTE Band 66 16QAM 3MHz CH-High, 100%RB



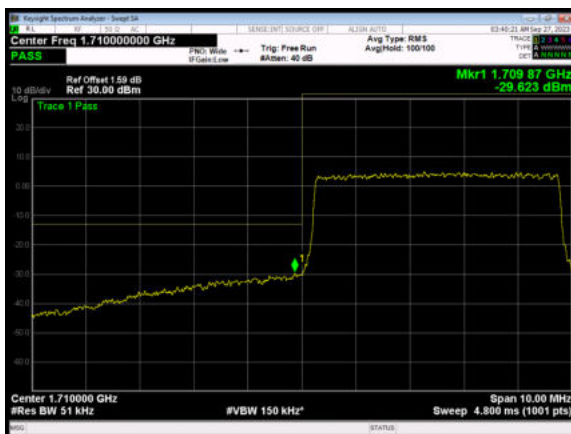
LTE Band 66 16QAM 5MHz CH-Low, 1 RB



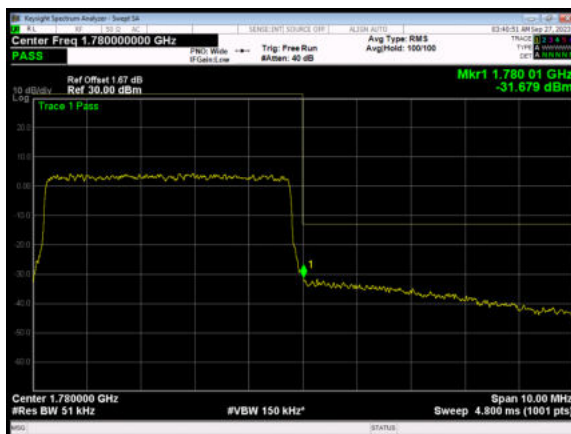
LTE Band 66 16QAM 5MHz CH-High, 1 RB



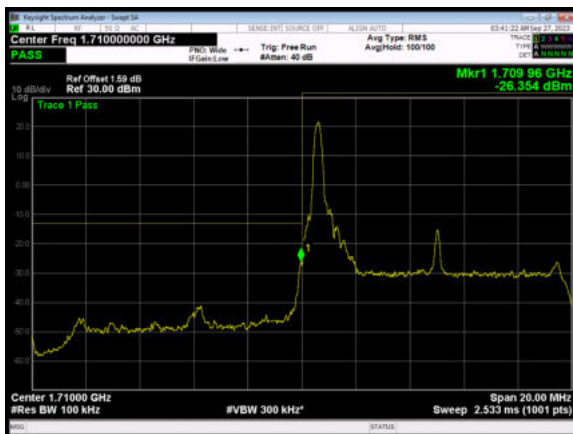
LTE Band 66 16QAM 5MHz CH-Low, 100%RB



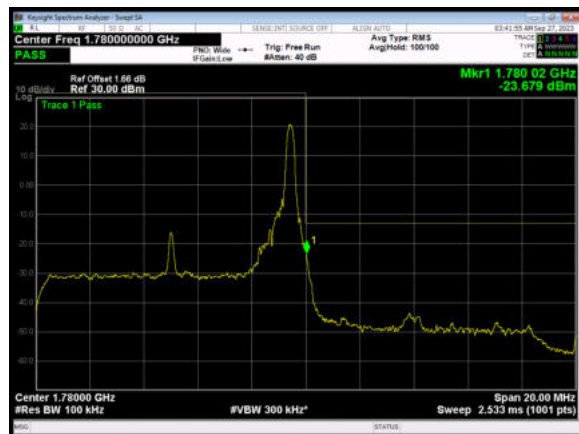
LTE Band 66 16QAM 5MHz CH-High, 100%RB



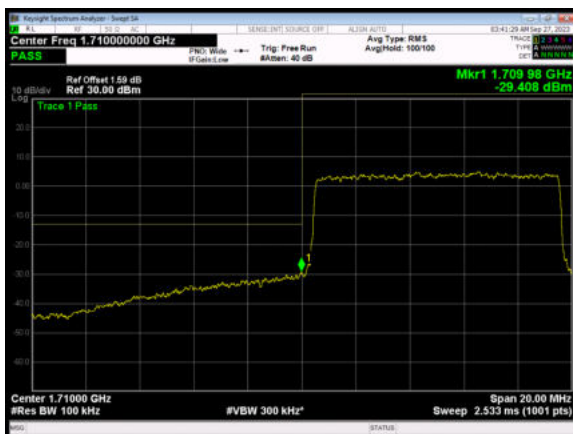
LTE Band 66 16QAM 10MHz CH-Low, 1 RB



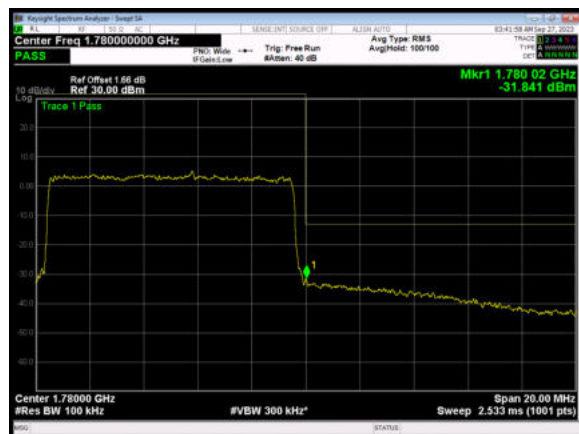
LTE Band 66 16QAM 10MHz CH-High, 1 RB



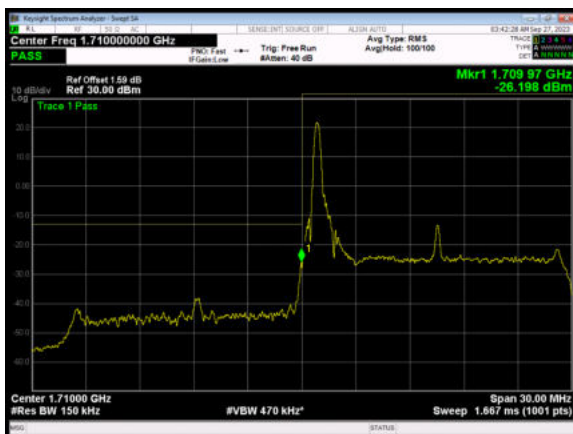
LTE Band 66 16QAM 10MHz CH-Low, 100%RB



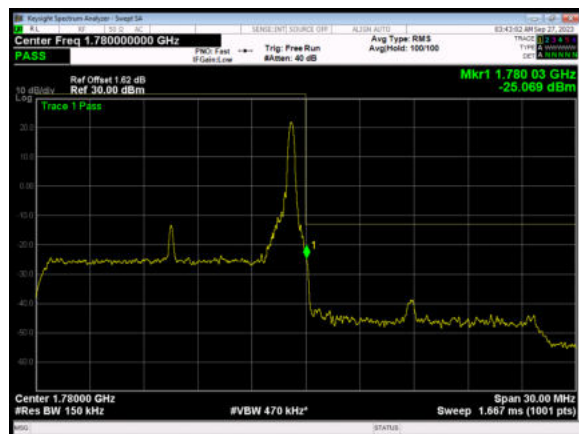
LTE Band 66 16QAM 10MHz CH-High, 100%RB



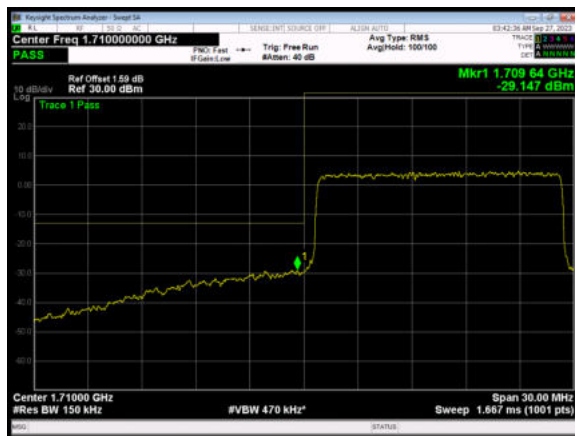
LTE Band 66 16QAM 15MHz CH-Low, 1 RB



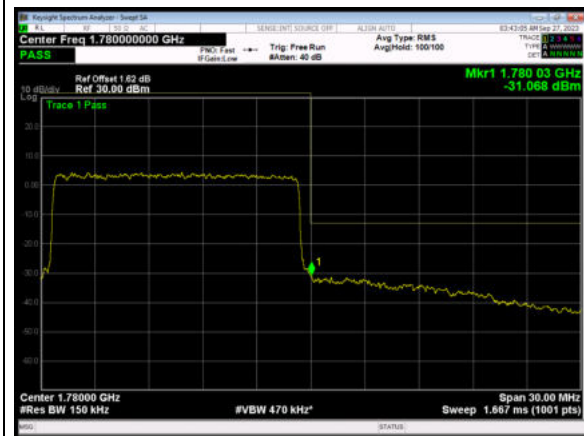
LTE Band 66 16QAM 15MHz CH-High, 1 RB



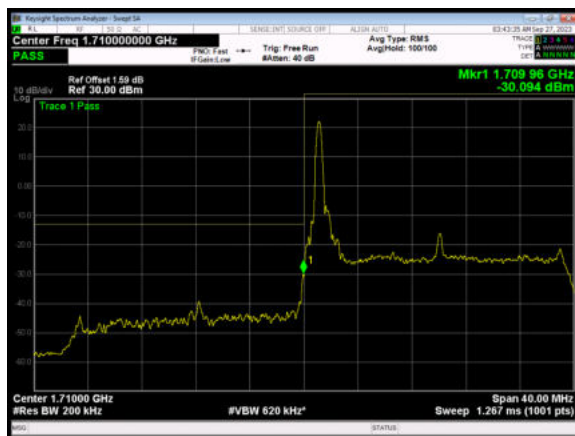
LTE Band 66 16QAM 15MHz CH-Low, 100%RB



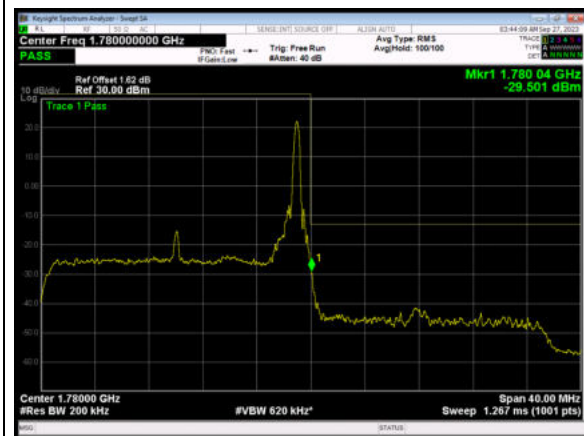
LTE Band 66 16QAM 15MHz CH-High, 100%RB



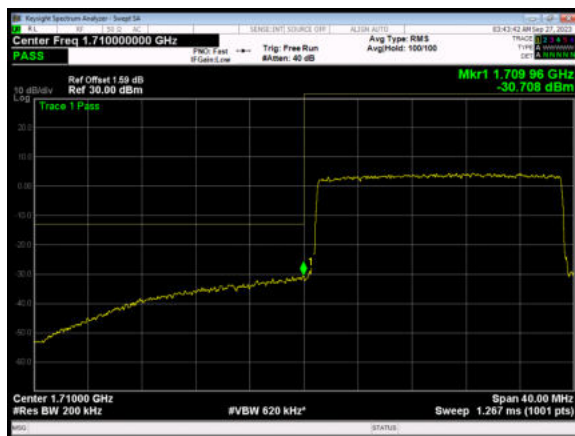
LTE Band 66 16QAM 20MHz CH-Low, 1 RB



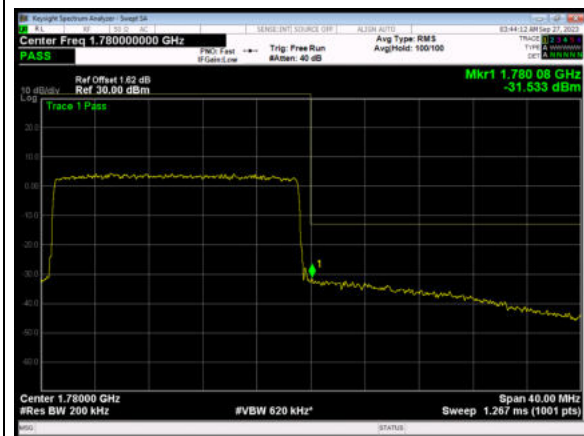
LTE Band 66 16QAM 20MHz CH-High, 1 RB



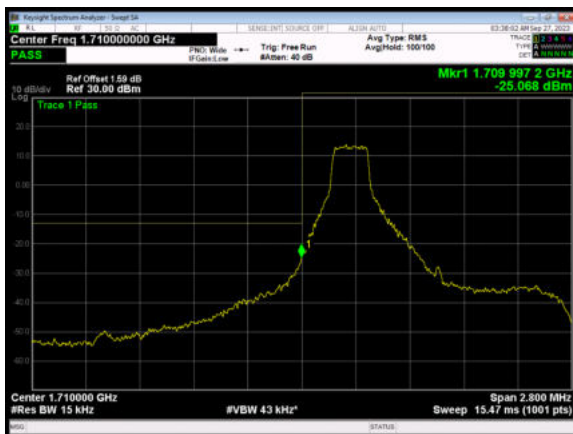
LTE Band 66 16QAM 20MHz CH-Low, 100%RB



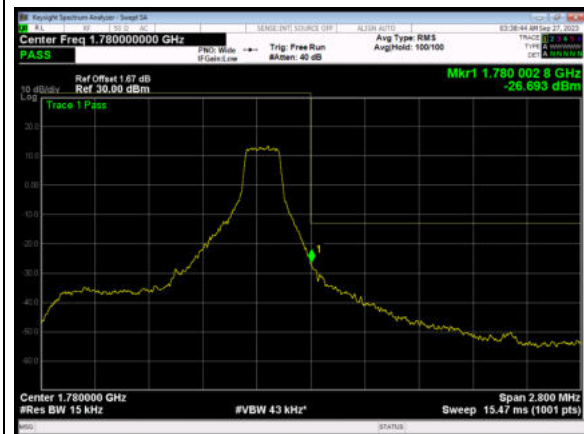
LTE Band 66 16QAM 20MHz CH-High, 100%RB



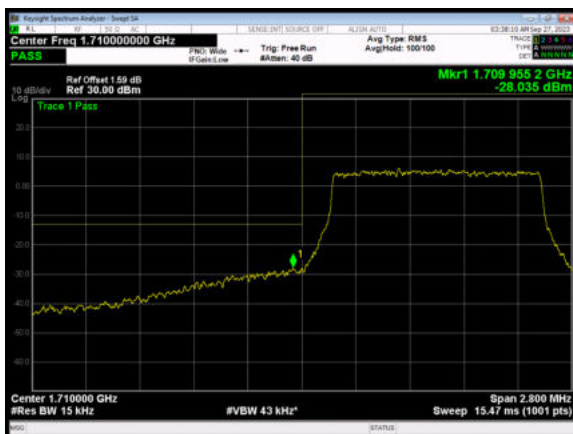
LTE Band 66 64QAM 1.4MHz CH-Low, 1 RB



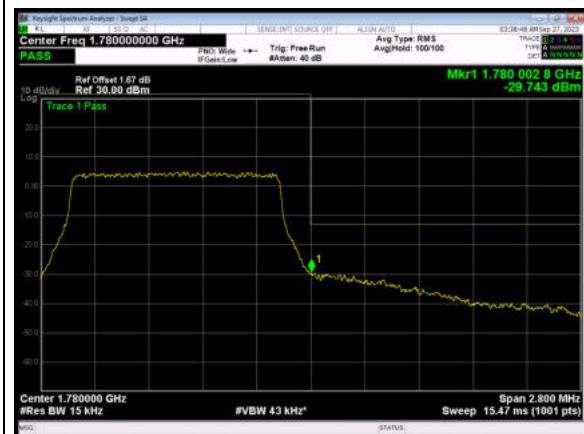
LTE Band 66 64QAM 1.4MHz CH-High, 1 RB



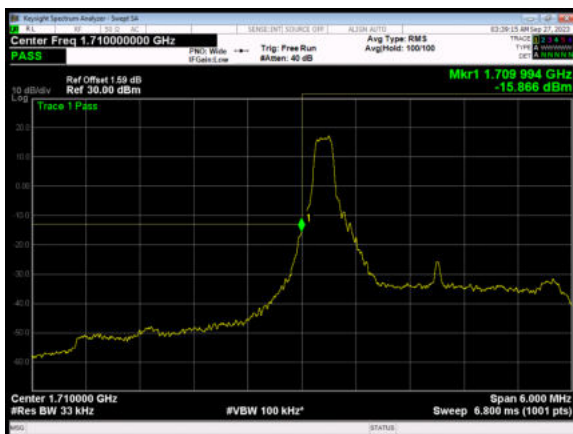
LTE Band 66 64QAM 1.4MHz CH-Low, 100%RB



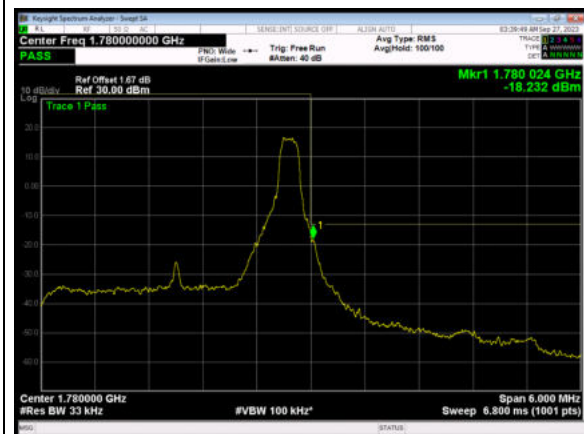
LTE Band 66 64QAM 1.4MHz CH-High, 100%RB



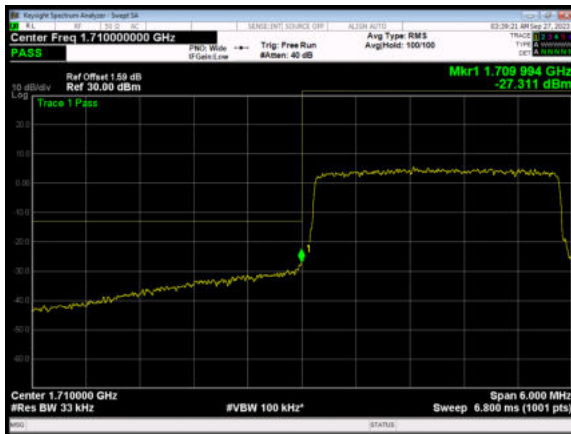
LTE Band 66 64QAM 3MHz CH-Low, 1 RB



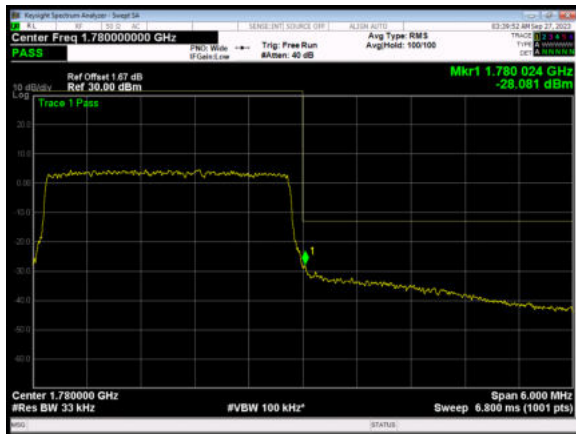
LTE Band 66 64QAM 3MHz CH-High, 1 RB



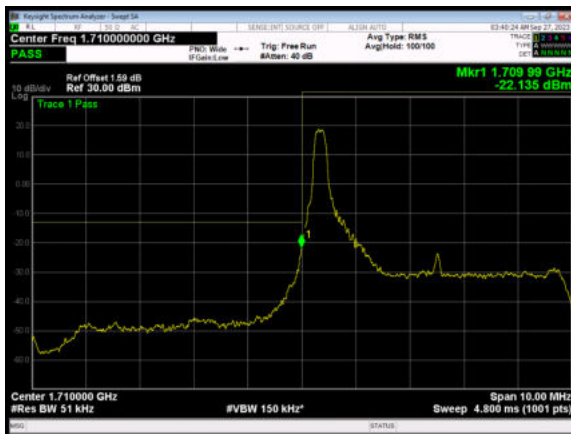
LTE Band 66 64QAM 3MHz CH-Low, 100%RB



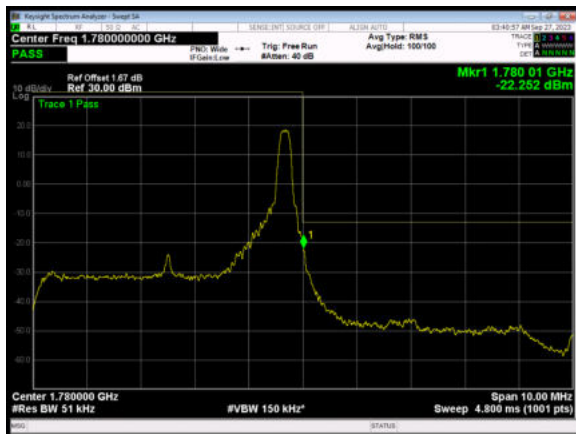
LTE Band 66 64QAM 3MHz CH-High, 100%RB



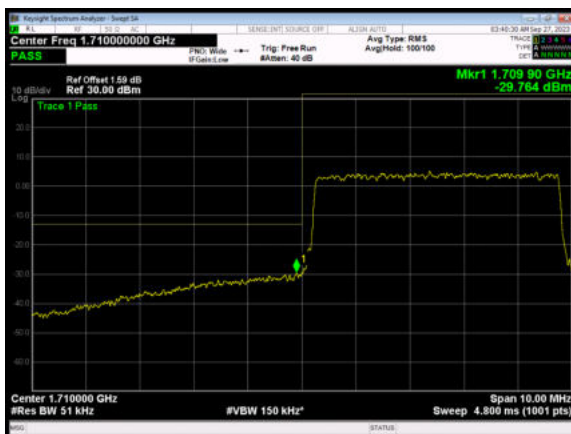
LTE Band 66 64QAM 5MHz CH-Low, 1 RB



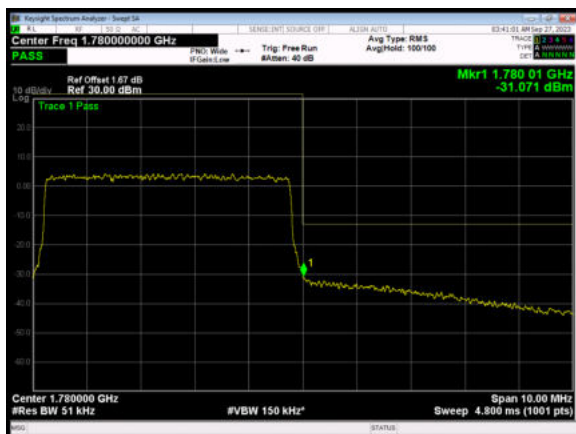
LTE Band 66 64QAM 5MHz CH-High, 1 RB



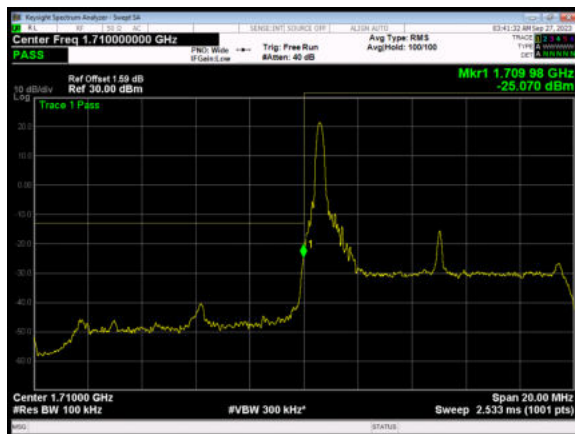
LTE Band 66 64QAM 5MHz CH-Low, 100%RB



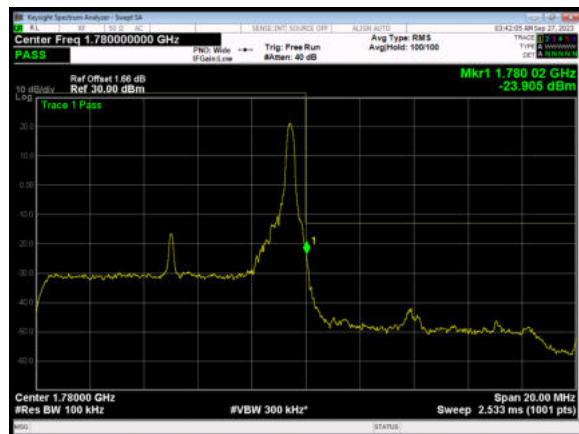
LTE Band 66 64QAM 5MHz CH-High, 100%RB



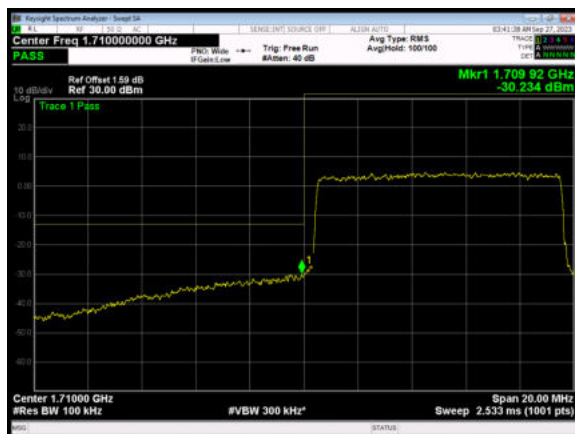
LTE Band 66 64QAM 10MHz CH-Low, 1 RB



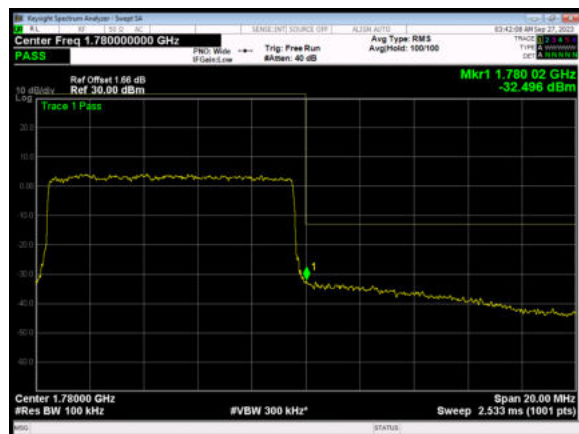
LTE Band 66 64QAM 10MHz CH-High, 1 RB



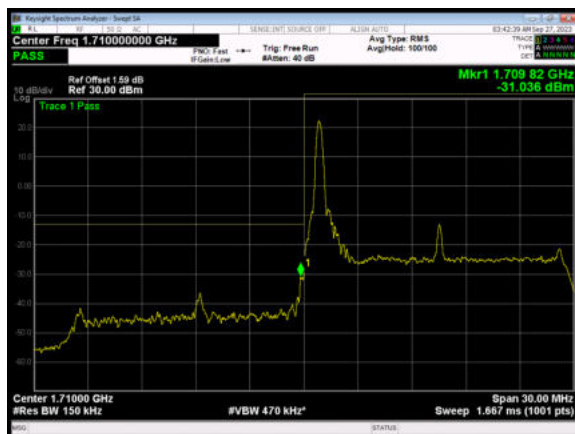
LTE Band 66 64QAM 10MHz CH-Low, 100%RB



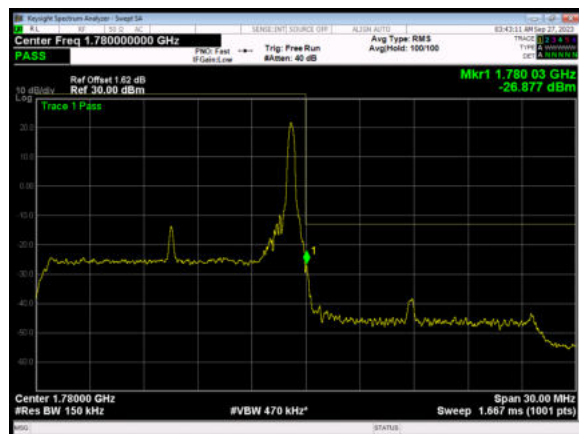
LTE Band 66 64QAM 10MHz CH-High, 100%RB



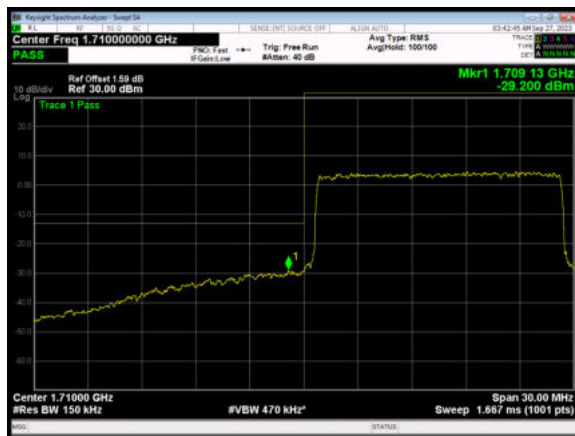
LTE Band 66 64QAM 15MHz CH-Low, 1 RB



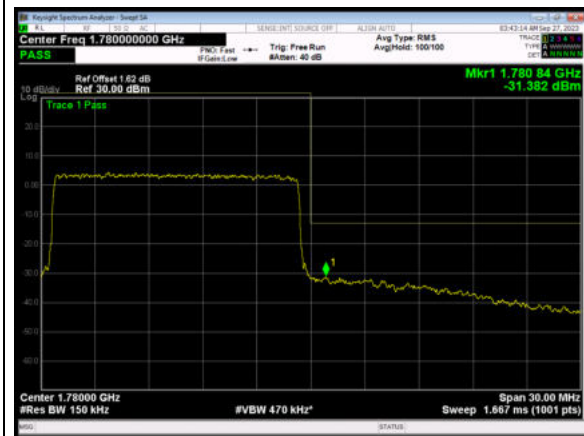
LTE Band 66 64QAM 15MHz CH-High, 1 RB



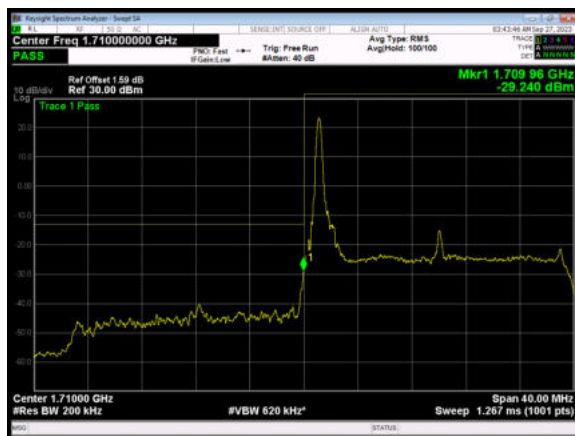
LTE Band 66 64QAM 15MHz CH-Low, 100%RB



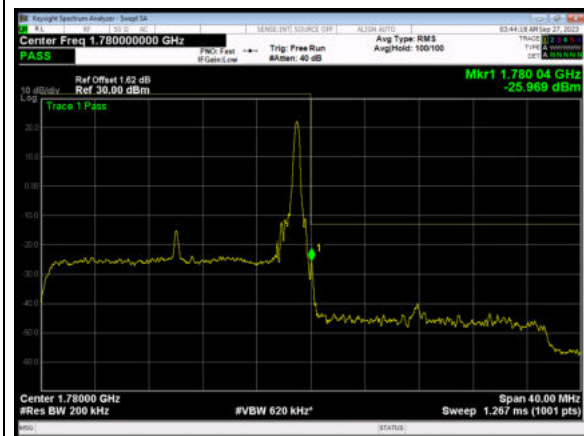
LTE Band 66 64QAM 15MHz CH-High, 100%RB



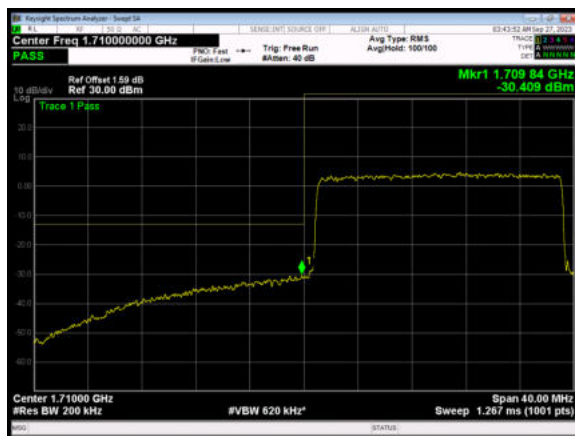
LTE Band 66 64QAM 20MHz CH-Low, 1 RB



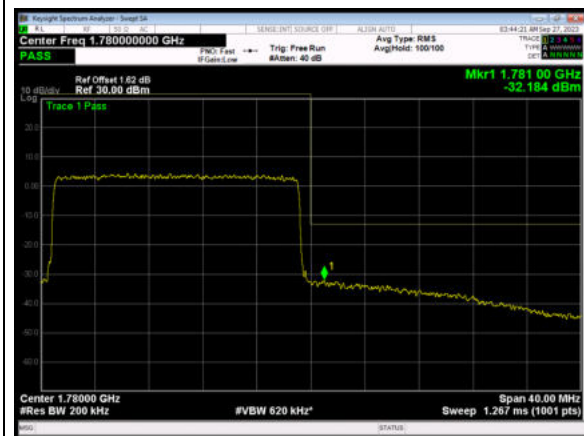
LTE Band 66 64QAM 20MHz CH-High, 1 RB



LTE Band 66 64QAM 20MHz CH-Low, 100%RB



LTE Band 66 64QAM 20MHz CH-High, 100%RB



5.4 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	27.72	25.25	2.47	≤13	PASS
	1413	1732.6	27.88	25.21	2.67	≤13	PASS
	1513	1752.6	27.96	25.30	2.66	≤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	27.44	23.81	3.63	≤13	PASS
		20175	1732.5	27.62	23.46	4.16	≤13	PASS
		20393	1754.3	27.74	23.71	4.03	≤13	PASS
	3	19965	1711.5	27.38	23.58	3.80	≤13	PASS
		20175	1732.5	27.58	23.32	4.26	≤13	PASS
		20385	1753.5	27.70	23.53	4.17	≤13	PASS
	5	19975	1712.5	27.46	23.58	3.88	≤13	PASS
		20175	1732.5	27.66	23.37	4.29	≤13	PASS
		20375	1752.5	27.80	23.56	4.24	≤13	PASS
	10	20000	1715	27.50	23.61	3.89	≤13	PASS
		20175	1732.5	27.72	23.37	4.35	≤13	PASS
		20350	1750	27.87	23.51	4.36	≤13	PASS
	15	20025	1717.5	28.09	23.82	4.27	≤13	PASS
		20175	1732.5	28.17	23.52	4.65	≤13	PASS
		20325	1747.5	28.36	23.62	4.74	≤13	PASS
16QAM	1.4	20050	1720	28.13	23.56	4.57	≤13	PASS
		20175	1732.5	28.18	23.42	4.76	≤13	PASS
		20300	1745	28.26	23.38	4.88	≤13	PASS
	3	19957	1710.7	27.26	22.70	4.56	≤13	PASS
		20175	1732.5	27.52	22.45	5.07	≤13	PASS
		20393	1754.3	27.57	22.63	4.94	≤13	PASS
	5	19965	1711.5	27.26	22.51	4.75	≤13	PASS
		20175	1732.5	27.46	22.27	5.19	≤13	PASS
		20385	1753.5	27.61	22.55	5.06	≤13	PASS
	10	19975	1712.5	27.34	22.62	4.72	≤13	PASS
		20175	1732.5	27.53	22.38	5.15	≤13	PASS
		20375	1752.5	27.67	22.61	5.06	≤13	PASS
	15	20000	1715	27.36	22.59	4.77	≤13	PASS
		20175	1732.5	27.55	22.35	5.20	≤13	PASS
		20350	1750	27.76	22.54	5.22	≤13	PASS

	20	20175	1732.5	27.87	22.45	5.42	≤13	PASS
		20325	1747.5	28.07	22.56	5.51	≤13	PASS
		20050	1720	27.86	22.56	5.30	≤13	PASS
		20175	1732.5	27.92	22.37	5.55	≤13	PASS
		20300	1745	28.05	22.40	5.65	≤13	PASS
64QAM	1.4	19957	1710.7	27.22	22.67	4.55	≤13	PASS
		20175	1732.5	27.51	22.48	5.03	≤13	PASS
		20393	1754.3	27.56	22.61	4.95	≤13	PASS
	3	19965	1711.5	27.23	22.52	4.71	≤13	PASS
		20175	1732.5	27.50	22.30	5.20	≤13	PASS
		20385	1753.5	27.60	22.52	5.08	≤13	PASS
	5	19975	1712.5	27.32	22.58	4.74	≤13	PASS
		20175	1732.5	27.54	22.39	5.15	≤13	PASS
		20375	1752.5	27.65	22.61	5.04	≤13	PASS
	10	20000	1715	27.34	22.56	4.78	≤13	PASS
		20175	1732.5	27.55	22.37	5.18	≤13	PASS
		20350	1750	27.76	22.54	5.22	≤13	PASS
	15	20025	1717.5	27.77	22.74	5.03	≤13	PASS
		20175	1732.5	27.86	22.45	5.41	≤13	PASS
		20325	1747.5	28.05	22.56	5.49	≤13	PASS
	20	20050	1720	27.85	22.55	5.30	≤13	PASS
		20175	1732.5	27.93	22.37	5.56	≤13	PASS
		20300	1745	28.06	22.44	5.62	≤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	28.23	23.84	4.39	≤13	PASS
		21100	2535	27.91	23.34	4.57	≤13	PASS
		21425	2567.5	27.51	23.66	3.85	≤13	PASS
	10	20800	2505	28.19	23.82	4.37	≤13	PASS
		21100	2535	27.92	23.39	4.53	≤13	PASS
		21400	2565	27.67	23.71	3.96	≤13	PASS
	15	20825	2507.5	28.60	23.85	4.75	≤13	PASS
		21100	2535	28.36	23.49	4.87	≤13	PASS
		21375	2562.5	28.26	23.85	4.41	≤13	PASS
	20	20850	2510	28.56	23.65	4.91	≤13	PASS
		21100	2535	28.40	23.40	5.00	≤13	PASS
		21350	2560	28.31	23.59	4.72	≤13	PASS
16QAM	5	20775	2502.5	28.05	22.84	5.21	≤13	PASS
		21100	2535	27.76	22.36	5.40	≤13	PASS
		21425	2567.5	27.46	22.67	4.79	≤13	PASS
	10	20800	2505	28.04	22.81	5.23	≤13	PASS

		21100	2535	27.82	22.40	5.42	≤13	PASS
		21400	2565	27.62	22.71	4.91	≤13	PASS
		20825	2507.5	28.28	22.77	5.51	≤13	PASS
	15	21100	2535	28.03	22.41	5.62	≤13	PASS
		21375	2562.5	27.96	22.73	5.23	≤13	PASS
		20850	2510	28.35	22.68	5.67	≤13	PASS
	20	21100	2535	28.13	22.38	5.75	≤13	PASS
		21350	2560	28.11	22.60	5.51	≤13	PASS
		21350	2560	28.11	22.60	5.51	≤13	PASS
64QAM	5	20775	2502.5	28.05	22.85	5.20	≤13	PASS
		21100	2535	27.77	22.36	5.41	≤13	PASS
		21425	2567.5	27.44	22.65	4.79	≤13	PASS
	10	20800	2505	28.05	22.82	5.23	≤13	PASS
		21100	2535	27.81	22.39	5.42	≤13	PASS
		21400	2565	27.61	22.72	4.89	≤13	PASS
	15	20825	2507.5	28.27	22.77	5.50	≤13	PASS
		21100	2535	28.04	22.42	5.62	≤13	PASS
		21375	2562.5	27.96	22.73	5.23	≤13	PASS
	20	20850	2510	28.34	22.65	5.69	≤13	PASS
		21100	2535	28.11	22.41	5.70	≤13	PASS
		21350	2560	28.11	22.61	5.50	≤13	PASS

LTE Band 12								
Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
QPSK	1.4	23017	699.7	27.99	23.40	4.59	≤13	PASS
		23095	707.5	27.99	23.36	4.63	≤13	PASS
		23173	715.3	27.42	23.34	4.08	≤13	PASS
	3	23025	700.5	28.12	23.31	4.81	≤13	PASS
		23095	707.5	27.96	23.25	4.71	≤13	PASS
		23165	714.5	27.77	23.19	4.58	≤13	PASS
	5	23035	701.5	28.30	23.36	4.94	≤13	PASS
		23095	707.5	28.08	23.28	4.80	≤13	PASS
		23155	713.5	28.13	23.24	4.89	≤13	PASS
	10	23060	704	28.21	23.29	4.92	≤13	PASS
		23095	707.5	28.25	23.25	5.00	≤13	PASS
		23130	711	28.33	23.37	4.96	≤13	PASS
16QAM	1.4	23017	699.7	27.74	22.34	5.40	≤13	PASS
		23095	707.5	27.85	22.37	5.48	≤13	PASS
		23173	715.3	27.28	22.27	5.01	≤13	PASS
	3	23025	700.5	27.96	22.28	5.68	≤13	PASS
		23095	707.5	27.89	22.22	5.67	≤13	PASS
		23165	714.5	27.69	22.20	5.49	≤13	PASS
	5	23035	701.5	28.12	22.38	5.74	≤13	PASS

	10	23095	707.5	27.95	22.30	5.65	≤13	PASS
		23155	713.5	27.93	22.25	5.68	≤13	PASS
		23060	704	28.04	22.27	5.77	≤13	PASS
		23095	707.5	28.09	22.23	5.86	≤13	PASS
		23130	711	28.13	22.31	5.82	≤13	PASS
64QAM	1.4	23017	699.7	27.73	22.35	5.38	≤13	PASS
		23095	707.5	27.87	22.39	5.48	≤13	PASS
		23173	715.3	27.31	22.28	5.03	≤13	PASS
	3	23025	700.5	27.97	22.29	5.68	≤13	PASS
		23095	707.5	27.91	22.21	5.70	≤13	PASS
		23165	714.5	27.70	22.17	5.53	≤13	PASS
	5	23035	701.5	28.12	22.36	5.76	≤13	PASS
		23095	707.5	27.95	22.29	5.66	≤13	PASS
		23155	713.5	27.95	22.26	5.69	≤13	PASS
	10	23060	704	28.02	22.25	5.77	≤13	PASS
		23095	707.5	28.05	22.22	5.83	≤13	PASS
		23130	711	28.13	22.35	5.78	≤13	PASS

LTE Band 13								
Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
QPSK	5	23205	779.5	27.96	23.52	4.44	≤13	PASS
		23230	782	28.00	23.51	4.49	≤13	PASS
		23255	784.5	28.05	23.55	4.50	≤13	PASS
	10	23230	782	28.04	23.44	4.60	≤13	PASS
16QAM	5	23205	779.5	27.79	22.51	5.28	≤13	PASS
		23230	782	27.81	22.49	5.32	≤13	PASS
		23255	784.5	27.90	22.57	5.33	≤13	PASS
	10	23230	782	27.86	22.39	5.47	≤13	PASS
64QAM	5	23205	779.5	27.79	22.52	5.27	≤13	PASS
		23230	782	27.80	22.50	5.30	≤13	PASS
		23255	784.5	27.88	22.55	5.33	≤13	PASS
	10	23230	782	27.84	22.39	5.45	≤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	28.27	23.18	5.09	≤13	PASS
		23790	710	28.43	23.22	5.21	≤13	PASS
		23825	713.5	28.30	23.18	5.12	≤13	PASS
	10	23780	709	28.54	23.23	5.31	≤13	PASS
		23790	710	28.56	23.28	5.28	≤13	PASS
		23800	711	28.50	23.26	5.24	≤13	PASS
16QAM	5	23755	706.5	28.14	22.20	5.94	≤13	PASS
		23790	710	28.17	22.22	5.95	≤13	PASS
		23825	713.5	28.13	22.22	5.91	≤13	PASS
	10	23780	709	28.29	22.21	6.08	≤13	PASS
		23790	710	28.33	22.24	6.09	≤13	PASS
		23800	711	28.31	22.26	6.05	≤13	PASS
64QAM	5	23755	706.5	28.13	22.19	5.94	≤13	PASS
		23790	710	28.23	22.24	5.99	≤13	PASS
		23825	713.5	28.08	22.19	5.89	≤13	PASS
	10	23780	709	28.28	22.21	6.07	≤13	PASS
		23790	710	28.33	22.24	6.09	≤13	PASS
		23800	711	28.32	22.26	6.06	≤13	PASS

LTE Band 38								
Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
QPSK	5	37775	2572.5	28.24	21.16	7.08	≤13	PASS
		38000	2595	27.98	20.85	7.13	≤13	PASS
		38225	2617.5	28.02	21.27	6.75	≤13	PASS
	10	37800	2575	28.45	22.40	6.05	≤13	PASS
		38000	2595	28.14	21.07	7.07	≤13	PASS
		38200	2615	28.09	21.01	7.08	≤13	PASS
	15	37825	2577.5	28.70	21.54	7.16	≤13	PASS
		38000	2595	28.51	21.65	6.86	≤13	PASS
		38175	2612.5	28.51	21.39	7.12	≤13	PASS
	20	37850	2580	28.63	21.82	6.81	≤13	PASS
		38000	2595	28.35	21.30	7.05	≤13	PASS
		38150	2610	28.41	21.22	7.19	≤13	PASS
16QAM	5	37775	2572.5	28.06	20.64	7.42	≤13	PASS
		38000	2595	27.88	20.16	7.72	≤13	PASS
		38225	2617.5	27.87	20.30	7.57	≤13	PASS
	10	37800	2575	28.29	20.61	7.68	≤13	PASS
		38000	2595	27.94	19.77	8.17	≤13	PASS

	15	38200	2615	27.97	20.49	7.48	≤13	PASS
		37825	2577.5	28.40	20.82	7.58	≤13	PASS
		38000	2595	28.22	20.75	7.47	≤13	PASS
		38175	2612.5	28.21	20.45	7.76	≤13	PASS
	20	37850	2580	28.36	20.63	7.73	≤13	PASS
		38000	2595	28.11	19.72	8.39	≤13	PASS
		38150	2610	28.25	20.92	7.33	≤13	PASS
64QAM	5	37775	2572.5	28.01	19.21	8.80	≤13	PASS
		38000	2595	27.92	20.57	7.35	≤13	PASS
		38225	2617.5	27.87	20.58	7.29	≤13	PASS
	10	37800	2575	28.23	20.59	7.64	≤13	PASS
		38000	2595	27.97	20.37	7.60	≤13	PASS
		38200	2615	27.97	20.64	7.33	≤13	PASS
	15	37825	2577.5	28.38	20.61	7.77	≤13	PASS
		38000	2595	28.10	19.06	9.04	≤13	PASS
		38175	2612.5	28.22	20.47	7.75	≤13	PASS
	20	37850	2580	28.21	19.45	8.76	≤13	PASS
		38000	2595	28.17	20.58	7.59	≤13	PASS
		38150	2610	28.25	20.98	7.27	≤13	PASS

LTE Band 41								
Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
QPSK	5	39675	2498.5	28.36	21.51	6.85	≤13	PASS
		40620	2593	27.99	20.80	7.19	≤13	PASS
		41565	2687.5	27.27	21.62	5.65	≤13	PASS
	10	39700	2501	28.53	21.26	7.27	≤13	PASS
		40620	2593	28.14	21.11	7.03	≤13	PASS
		41540	2685	27.43	22.04	5.39	≤13	PASS
	15	39725	2503.5	29.01	21.69	7.32	≤13	PASS
		40620	2593	28.47	20.97	7.50	≤13	PASS
		41515	2682.5	27.95	22.30	5.65	≤13	PASS
	20	39750	2506	28.82	21.80	7.02	≤13	PASS
		40620	2593	28.41	21.25	7.16	≤13	PASS
		41490	2680	28.06	21.24	6.82	≤13	PASS
16QAM	5	39675	2498.5	28.18	20.70	7.48	≤13	PASS
		40620	2593	27.88	20.11	7.77	≤13	PASS
		41565	2687.5	27.19	20.61	6.58	≤13	PASS
	10	39700	2501	28.41	21.03	7.38	≤13	PASS
		40620	2593	27.92	19.93	7.99	≤13	PASS
		41540	2685	27.25	19.93	7.32	≤13	PASS
	15	39725	2503.5	28.66	20.94	7.72	≤13	PASS
		40620	2593	28.16	19.18	8.98	≤13	PASS
		41515	2682.5	27.67	20.41	7.26	≤13	PASS
	20	39750	2506	28.49	19.55	8.94	≤13	PASS
		40620	2593	28.16	20.57	7.59	≤13	PASS
		41490	2680	27.84	20.45	7.39	≤13	PASS
64QAM	5	39675	2498.5	28.20	20.83	7.37	≤13	PASS
		40620	2593	27.99	21.26	6.73	≤13	PASS
		41565	2687.5	27.19	20.46	6.73	≤13	PASS
	10	39700	2501	28.43	21.21	7.22	≤13	PASS
		40620	2593	27.97	20.13	7.84	≤13	PASS
		41540	2685	27.27	20.22	7.05	≤13	PASS
	15	39725	2503.5	28.56	19.67	8.89	≤13	PASS
		40620	2593	28.21	20.22	7.99	≤13	PASS
		41515	2682.5	27.66	20.28	7.38	≤13	PASS
	20	39750	2506	28.55	20.09	8.46	≤13	PASS
		40620	2593	28.10	19.56	8.54	≤13	PASS
		41490	2680	27.84	20.89	6.95	≤13	PASS

LTE Band 66								
Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
QPSK	1.4	131979	1710.7	27.72	23.77	3.95	≤13	PASS
		132322	1745	28.11	23.53	4.58	≤13	PASS
		132665	1779.3	27.50	23.25	4.25	≤13	PASS
	3	131987	1711.5	27.85	23.68	4.17	≤13	PASS
		132322	1745	28.16	23.43	4.73	≤13	PASS
		132657	1778.5	27.54	23.17	4.37	≤13	PASS
	5	131997	1712.5	27.90	23.70	4.20	≤13	PASS
		132322	1745	28.32	23.52	4.80	≤13	PASS
		132647	1777.5	27.73	23.25	4.48	≤13	PASS
	10	132022	1715	27.95	23.73	4.22	≤13	PASS
		132322	1745	28.31	23.53	4.78	≤13	PASS
		132622	1775	27.78	23.30	4.48	≤13	PASS
	15	132047	1717.5	28.45	23.87	4.58	≤13	PASS
		132322	1745	28.70	23.61	5.09	≤13	PASS
		132597	1772.5	28.28	23.47	4.81	≤13	PASS
	20	132072	1720	28.41	23.65	4.76	≤13	PASS
		132322	1745	28.63	23.56	5.07	≤13	PASS
		132572	1770	28.31	23.42	4.89	≤13	PASS
16QAM	1.4	131979	1710.7	27.55	22.75	4.80	≤13	PASS
		132322	1745	28.04	22.55	5.49	≤13	PASS
		132665	1779.3	27.32	22.22	5.10	≤13	PASS
	3	131987	1711.5	27.71	22.67	5.04	≤13	PASS
		132322	1745	28.07	22.42	5.65	≤13	PASS
		132657	1778.5	27.45	22.20	5.25	≤13	PASS
	5	131997	1712.5	27.76	22.74	5.02	≤13	PASS
		132322	1745	28.15	22.58	5.57	≤13	PASS
		132647	1777.5	27.59	22.30	5.29	≤13	PASS
	10	132022	1715	27.79	22.73	5.06	≤13	PASS
		132322	1745	28.14	22.56	5.58	≤13	PASS
		132622	1775	27.68	22.34	5.34	≤13	PASS
	15	132047	1717.5	28.10	22.77	5.33	≤13	PASS
		132322	1745	28.38	22.60	5.78	≤13	PASS
		132597	1772.5	27.95	22.44	5.51	≤13	PASS
	20	132072	1720	28.19	22.65	5.54	≤13	PASS
		132322	1745	28.43	22.59	5.84	≤13	PASS
		132572	1770	28.07	22.41	5.66	≤13	PASS
64QAM	1.4	131979	1710.7	27.56	22.75	4.81	≤13	PASS
		132322	1745	28.05	22.58	5.47	≤13	PASS
		132665	1779.3	27.33	22.20	5.13	≤13	PASS

	3	131987	1711.5	27.70	22.65	5.05	≤13	PASS
		132322	1745	28.07	22.41	5.66	≤13	PASS
		132657	1778.5	27.44	22.20	5.24	≤13	PASS
	5	131997	1712.5	27.75	22.73	5.02	≤13	PASS
		132322	1745	28.17	22.57	5.60	≤13	PASS
		132647	1777.5	27.60	22.30	5.30	≤13	PASS
	10	132022	1715	27.79	22.74	5.05	≤13	PASS
		132322	1745	28.20	22.57	5.63	≤13	PASS
		132622	1775	27.69	22.32	5.37	≤13	PASS
	15	132047	1717.5	28.12	22.79	5.33	≤13	PASS
		132322	1745	28.37	22.61	5.76	≤13	PASS
		132597	1772.5	27.95	22.42	5.53	≤13	PASS
	20	132072	1720	28.20	22.67	5.53	≤13	PASS
		132322	1745	28.46	22.61	5.85	≤13	PASS
		132572	1770	28.07	22.43	5.64	≤13	PASS

5.5 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	17.31	2.55	0.00999	0.00147	PASS
Extreme (50℃)		2.02	7.65	0.00117	0.00441	PASS
Extreme (40℃)		13.80	1.25	0.00796	0.00072	PASS
Extreme (30℃)		14.74	15.82	0.00851	0.00913	PASS
Extreme (20℃)		8.92	17.16	0.00515	0.00991	PASS
Extreme (10℃)		6.22	14.43	0.00359	0.00833	PASS
Extreme (0℃)		11.15	15.17	0.00644	0.00875	PASS
Extreme (-10℃)		2.14	9.88	0.00124	0.00570	PASS
Extreme (-20℃)		5.31	9.65	0.00307	0.00557	PASS
Extreme (-30℃)		10.03	14.39	0.00579	0.00831	PASS
25℃	LV	12.03	5.12	0.00695	0.00295	PASS
	HV	10.57	1.68	0.00610	0.00097	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	15.41	14.99	7.99	0.00890	0.00865	0.00461	PASS
Extreme (50℃)		1.18	17.48	17.34	0.00068	0.01009	0.01001	PASS
Extreme (40℃)		11.29	17.93	17.76	0.00652	0.01035	0.01025	PASS
Extreme (30℃)		4.72	14.26	1.07	0.00272	0.00823	0.00062	PASS
Extreme (20℃)		4.66	2.65	16.54	0.00269	0.00153	0.00955	PASS
Extreme (10℃)		2.59	13.92	16.74	0.00149	0.00803	0.00966	PASS
Extreme (0℃)		6.56	11.67	7.56	0.00379	0.00674	0.00436	PASS
Extreme (-10℃)		17.59	4.14	4.28	0.01015	0.00239	0.00247	PASS
Extreme (-20℃)		16.90	1.53	5.21	0.00975	0.00088	0.00301	PASS
Extreme (-30℃)		5.85	10.41	13.73	0.00338	0.00601	0.00792	PASS
25℃	LV	8.04	16.02	13.17	0.00464	0.00925	0.00760	PASS
	HV	7.49	7.18	3.98	0.00432	0.00414	0.00230	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	10.03	15.49	10.87	0.00579	0.00894	0.00627	PASS
Extreme (50℃)		6.63	5.33	1.27	0.00383	0.00307	0.00073	PASS
Extreme (40℃)		3.62	3.79	16.65	0.00209	0.00219	0.00961	PASS
Extreme (30℃)		4.78	8.36	8.54	0.00276	0.00483	0.00493	PASS
Extreme (20℃)		17.25	11.26	11.13	0.00996	0.00650	0.00643	PASS
Extreme (10℃)		13.32	16.17	6.02	0.00769	0.00933	0.00347	PASS
Extreme (0℃)		11.49	16.87	2.10	0.00663	0.00974	0.00121	PASS
Extreme (-10℃)		2.15	2.64	6.09	0.00124	0.00152	0.00351	PASS
Extreme (-20℃)		9.07	9.72	15.48	0.00524	0.00561	0.00893	PASS
Extreme (-30℃)		9.90	17.83	11.12	0.00572	0.01029	0.00642	PASS
25℃	LV	6.82	10.60	8.49	0.00394	0.00612	0.00490	PASS
	HV	11.05	13.01	15.76	0.00638	0.00751	0.00910	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	6.10	12.59	11.99	0.00352	0.00727	0.00692	PASS
Extreme (50℃)		7.81	12.69	4.90	0.00451	0.00733	0.00283	PASS
Extreme (40℃)		9.57	3.84	3.33	0.00552	0.00222	0.00192	PASS
Extreme (30℃)		12.67	6.99	13.31	0.00732	0.00403	0.00768	PASS
Extreme (20℃)		5.18	6.53	15.89	0.00299	0.00377	0.00917	PASS

Extreme (10℃)		1.06	14.51	5.21	0.00061	0.00837	0.00301	PASS
Extreme (0℃)		14.40	6.86	10.89	0.00831	0.00396	0.00629	PASS
Extreme (-10℃)		13.17	7.70	12.62	0.00760	0.00444	0.00728	PASS
Extreme (-20℃)		7.21	13.97	9.42	0.00416	0.00806	0.00544	PASS
Extreme (-30℃)		4.13	12.43	9.83	0.00238	0.00718	0.00567	PASS
25℃	LV	4.76	14.93	10.10	0.00275	0.00862	0.00583	PASS
	HV	6.55	4.70	13.10	0.00378	0.00271	0.00756	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	8.92	4.16	7.25	0.00515	0.00240	0.00418	PASS
Extreme (50℃)		15.70	5.42	6.97	0.00906	0.00313	0.00402	PASS
Extreme (40℃)		1.01	6.90	3.15	0.00058	0.00398	0.00182	PASS
Extreme (30℃)		13.04	17.69	15.40	0.00753	0.01021	0.00889	PASS
Extreme (20℃)		5.92	1.30	9.51	0.00342	0.00075	0.00549	PASS
Extreme (10℃)		5.46	9.01	6.61	0.00315	0.00520	0.00382	PASS
Extreme (0℃)		17.54	15.90	4.97	0.01012	0.00917	0.00287	PASS
Extreme (-10℃)		15.60	12.24	10.58	0.00901	0.00706	0.00611	PASS
Extreme (-20℃)		1.86	1.63	5.84	0.00108	0.00094	0.00337	PASS
Extreme (-30℃)		1.63	7.95	2.27	0.00094	0.00459	0.00131	PASS
25℃	LV	8.66	10.11	1.37	0.00500	0.00583	0.00079	PASS
	HV	11.95	6.17	14.10	0.00690	0.00356	0.00814	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	1.72	2.53	5.68	0.00099	0.00146	0.00328	PASS
Extreme (50℃)		7.67	8.53	16.72	0.00443	0.00492	0.00965	PASS
Extreme (40℃)		4.51	7.13	13.95	0.00261	0.00411	0.00805	PASS
Extreme (30℃)		6.15	5.04	2.57	0.00355	0.00291	0.00149	PASS
Extreme (20℃)		12.82	16.27	3.91	0.00740	0.00939	0.00226	PASS
Extreme (10℃)		10.94	5.40	16.60	0.00632	0.00312	0.00958	PASS
Extreme (0℃)		16.32	4.73	12.03	0.00942	0.00273	0.00695	PASS
Extreme (-10℃)		4.49	6.47	10.49	0.00259	0.00373	0.00606	PASS
Extreme (-20℃)		14.61	15.47	16.53	0.00843	0.00893	0.00954	PASS
Extreme (-30℃)		2.60	17.54	1.30	0.00150	0.01012	0.00075	PASS
25℃	LV	10.92	9.27	12.07	0.00631	0.00535	0.00697	PASS
	HV	3.12	2.78	12.77	0.00180	0.00160	0.00737	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	15.88	6.23	12.34	0.00917	0.00359	0.00712	PASS
Extreme (50℃)		7.80	17.52	4.29	0.00450	0.01011	0.00247	PASS
Extreme (40℃)		8.74	5.80	1.14	0.00504	0.00335	0.00066	PASS
Extreme (30℃)		10.68	14.94	16.50	0.00616	0.00863	0.00952	PASS
Extreme (20℃)		15.74	14.64	2.24	0.00909	0.00845	0.00130	PASS
Extreme (10℃)		13.10	2.47	8.62	0.00756	0.00143	0.00498	PASS
Extreme (0℃)		7.82	8.06	7.55	0.00451	0.00465	0.00436	PASS
Extreme (-10℃)		9.34	7.14	9.54	0.00539	0.00412	0.00550	PASS
Extreme (-20℃)		4.91	15.31	13.61	0.00283	0.00884	0.00785	PASS
Extreme (-30℃)		4.97	2.35	8.72	0.00287	0.00136	0.00504	PASS
25℃	LV	15.42	9.12	4.76	0.00890	0.00526	0.00275	PASS
	HV	4.45	15.31	9.37	0.00257	0.00883	0.00541	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	5.17	2.16	8.09	0.00204	0.00085	0.00319	PASS
Extreme (50℃)		14.94	5.58	6.47	0.00589	0.00220	0.00255	PASS
Extreme (40℃)		14.98	3.02	1.66	0.00591	0.00119	0.00066	PASS
Extreme (30℃)		8.15	2.70	9.13	0.00322	0.00107	0.00360	PASS
Extreme (20℃)		12.44	5.63	2.53	0.00491	0.00222	0.00100	PASS
Extreme (10℃)		13.85	7.63	3.72	0.00546	0.00301	0.00147	PASS
Extreme (0℃)		16.32	9.06	16.78	0.00644	0.00357	0.00662	PASS
Extreme (-10℃)		15.75	10.07	3.08	0.00621	0.00397	0.00121	PASS
Extreme (-20℃)		6.21	8.40	6.62	0.00245	0.00331	0.00261	PASS
Extreme (-30℃)		4.52	2.28	10.79	0.00178	0.00090	0.00426	PASS
25℃	LV	8.16	13.13	6.75	0.00322	0.00518	0.00266	PASS
	HV	13.32	17.30	6.71	0.00525	0.00682	0.00265	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	6.19	9.20	17.64	0.00244	0.00363	0.00696	PASS
Extreme (50℃)		14.27	13.87	5.58	0.00563	0.00547	0.00220	PASS
Extreme (40℃)		12.06	12.13	10.09	0.00476	0.00479	0.00398	PASS
Extreme (30℃)		16.65	5.82	8.46	0.00657	0.00230	0.00334	PASS

Extreme (20℃)		7.38	7.00	15.83	0.00291	0.00276	0.00624	PASS
Extreme (10℃)		4.77	14.67	11.37	0.00188	0.00579	0.00449	PASS
Extreme (0℃)		10.08	13.50	4.13	0.00397	0.00532	0.00163	PASS
Extreme (-10℃)		12.20	3.73	6.77	0.00481	0.00147	0.00267	PASS
Extreme (-20℃)		3.41	5.32	11.72	0.00135	0.00210	0.00462	PASS
Extreme (-30℃)		5.82	12.17	15.14	0.00229	0.00480	0.00597	PASS
25℃	LV	15.20	1.89	15.41	0.00600	0.00074	0.00608	PASS
	HV	3.27	4.03	1.36	0.00129	0.00159	0.00054	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	4.54	7.78	13.83	0.00179	0.00307	0.00545	PASS
Extreme (50℃)		14.41	15.09	11.68	0.00569	0.00595	0.00461	PASS
Extreme (40℃)		14.94	5.11	3.51	0.00589	0.00202	0.00138	PASS
Extreme (30℃)		9.64	17.74	12.32	0.00380	0.00700	0.00486	PASS
Extreme (20℃)		8.78	12.69	12.32	0.00346	0.00501	0.00486	PASS
Extreme (10℃)		1.01	17.94	6.03	0.00040	0.00708	0.00238	PASS
Extreme (0℃)		6.14	13.80	15.44	0.00242	0.00544	0.00609	PASS
Extreme (-10℃)		5.34	17.15	7.13	0.00211	0.00677	0.00281	PASS
Extreme (-20℃)		3.75	1.62	14.15	0.00148	0.00064	0.00558	PASS
Extreme (-30℃)		14.83	5.82	15.17	0.00585	0.00230	0.00599	PASS
25℃	LV	13.52	1.37	2.20	0.00533	0.00054	0.00087	PASS
	HV	9.19	14.37	13.31	0.00363	0.00567	0.00525	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	13.42	1.46	10.76	0.00530	0.00057	0.00424	PASS
Extreme (50℃)		10.32	11.20	4.68	0.00407	0.00442	0.00185	PASS
Extreme (40℃)		11.99	17.18	7.92	0.00473	0.00678	0.00313	PASS
Extreme (30℃)		2.91	11.99	17.06	0.00115	0.00473	0.00673	PASS
Extreme (20℃)		13.95	3.30	1.87	0.00550	0.00130	0.00074	PASS
Extreme (10℃)		3.42	9.55	1.09	0.00135	0.00377	0.00043	PASS
Extreme (0℃)		3.20	9.72	13.00	0.00126	0.00384	0.00513	PASS
Extreme (-10℃)		8.82	11.27	12.03	0.00348	0.00445	0.00475	PASS
Extreme (-20℃)		6.39	14.62	4.07	0.00252	0.00577	0.00161	PASS
Extreme (-30℃)		11.51	15.09	8.59	0.00454	0.00595	0.00339	PASS
25℃	LV	8.71	4.65	13.86	0.00344	0.00183	0.00547	PASS
	HV	17.14	15.43	14.46	0.00676	0.00609	0.00570	PASS

LTE Band 12								
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	13.37	15.84	1.98	0.01812	0.02148	0.00269	PASS
Extreme (50℃)		8.42	6.66	13.00	0.01142	0.00903	0.01763	PASS
Extreme (40℃)		17.17	4.94	2.44	0.02328	0.00670	0.00331	PASS
Extreme (30℃)		10.41	14.20	3.78	0.01411	0.01926	0.00512	PASS
Extreme (20℃)		9.08	14.83	15.76	0.01232	0.02011	0.02137	PASS
Extreme (10℃)		15.00	8.07	3.48	0.02034	0.01094	0.00472	PASS
Extreme (0℃)		13.18	9.42	6.32	0.01787	0.01278	0.00857	PASS
Extreme (-10℃)		1.79	14.76	3.46	0.00243	0.02002	0.00469	PASS
Extreme (-20℃)		7.27	7.94	11.27	0.00985	0.01077	0.01529	PASS
Extreme (-30℃)		15.50	14.77	12.27	0.02102	0.02002	0.01664	PASS
25℃	LV	12.14	7.73	5.47	0.01647	0.01048	0.00742	PASS
	HV	14.57	3.81	7.97	0.01975	0.00516	0.01081	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	3.24	14.80	17.49	0.00439	0.02007	0.02372	PASS
Extreme (50℃)		14.29	11.29	10.91	0.01938	0.01530	0.01479	PASS
Extreme (40℃)		15.18	6.15	1.96	0.02058	0.00834	0.00266	PASS
Extreme (30℃)		16.13	1.22	9.15	0.02188	0.00165	0.01241	PASS
Extreme (20℃)		11.10	8.77	7.68	0.01505	0.01189	0.01041	PASS
Extreme (10℃)		4.67	13.84	6.93	0.00634	0.01876	0.00940	PASS
Extreme (0℃)		1.34	16.70	3.68	0.00181	0.02264	0.00499	PASS
Extreme (-10℃)		12.68	3.08	16.54	0.01719	0.00417	0.02242	PASS
Extreme (-20℃)		4.03	7.23	11.72	0.00546	0.00981	0.01590	PASS
Extreme (-30℃)		13.92	9.27	12.19	0.01888	0.01257	0.01653	PASS
25℃	LV	14.81	2.77	4.56	0.02008	0.00376	0.00618	PASS
	HV	12.39	12.84	4.76	0.01680	0.01741	0.00645	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	6.70	7.99	11.46	0.00909	0.01084	0.01553	PASS
Extreme (50℃)		13.05	2.46	6.13	0.01770	0.00334	0.00831	PASS
Extreme (40℃)		15.66	9.80	10.60	0.02123	0.01329	0.01438	PASS
Extreme (30℃)		1.03	15.61	6.76	0.00140	0.02116	0.00917	PASS
Extreme (20℃)		7.67	16.48	11.93	0.01041	0.02235	0.01617	PASS

Extreme (10℃)		5.75	12.18	17.45	0.00779	0.01651	0.02365	PASS
Extreme (0℃)		12.59	4.43	3.02	0.01708	0.00600	0.00409	PASS
Extreme (-10℃)		7.18	11.62	2.72	0.00974	0.01575	0.00369	PASS
Extreme (-20℃)		13.53	9.45	5.87	0.01835	0.01281	0.00796	PASS
Extreme (-30℃)		7.05	14.40	10.63	0.00956	0.01953	0.01441	PASS
25℃	LV	5.92	14.24	3.79	0.00803	0.01930	0.00514	PASS
	HV	11.34	15.68	17.77	0.01538	0.02127	0.02410	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	10.26	6.91	11.09	0.01391	0.00937	0.01504	PASS
Extreme (50℃)		15.87	4.84	12.63	0.02152	0.00656	0.01713	PASS
Extreme (40℃)		9.44	3.75	12.00	0.01280	0.00509	0.01627	PASS
Extreme (30℃)		11.30	15.08	11.76	0.01533	0.02044	0.01594	PASS
Extreme (20℃)		9.04	16.98	16.14	0.01226	0.02302	0.02188	PASS
Extreme (10℃)		10.01	14.54	1.70	0.01357	0.01972	0.00231	PASS
Extreme (0℃)		13.26	14.03	1.29	0.01798	0.01902	0.00176	PASS
Extreme (-10℃)		10.75	4.05	15.72	0.01458	0.00549	0.02132	PASS
Extreme (-20℃)		13.82	2.58	3.67	0.01874	0.00350	0.00497	PASS
Extreme (-30℃)		11.14	14.40	1.47	0.01510	0.01953	0.00200	PASS
25℃	LV	13.81	7.00	15.16	0.01872	0.00950	0.02056	PASS
	HV	8.92	13.48	11.40	0.01210	0.01828	0.01545	PASS

LTE Band 13								
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	17.77	5.79	13.71	0.02366	0.00771	0.01826	PASS
Extreme (50℃)		6.92	5.48	14.12	0.00921	0.00730	0.01880	PASS
Extreme (40℃)		1.86	8.56	13.84	0.00248	0.01139	0.01842	PASS
Extreme (30℃)		17.82	4.67	17.61	0.02373	0.00622	0.02345	PASS
Extreme (20℃)		10.12	15.66	9.04	0.01348	0.02085	0.01203	PASS
Extreme (10℃)		9.18	1.64	5.07	0.01222	0.00219	0.00675	PASS
Extreme (0℃)		3.25	6.89	8.67	0.00432	0.00918	0.01155	PASS
Extreme (-10℃)		13.37	11.52	15.63	0.01781	0.01535	0.02081	PASS
Extreme (-20℃)		1.81	15.11	9.75	0.00241	0.02012	0.01298	PASS
Extreme (-30℃)		3.25	16.30	1.54	0.00433	0.02170	0.00205	PASS
25℃	LV	4.22	9.73	5.87	0.00562	0.01296	0.00781	PASS
	HV	3.43	4.46	7.38	0.00456	0.00594	0.00983	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	5.36	12.35	1.01	0.00713	0.01645	0.00135	PASS
Extreme (50℃)		2.36	6.81	14.37	0.00315	0.00907	0.01913	PASS
Extreme (40℃)		17.77	10.17	11.50	0.02366	0.01354	0.01532	PASS
Extreme (30℃)		11.47	17.61	9.37	0.01527	0.02344	0.01248	PASS
Extreme (20℃)		2.58	17.50	7.96	0.00344	0.02330	0.01060	PASS
Extreme (10℃)		10.72	4.98	9.17	0.01427	0.00664	0.01220	PASS
Extreme (0℃)		4.72	2.48	17.62	0.00629	0.00331	0.02346	PASS
Extreme (-10℃)		15.48	13.84	14.89	0.02062	0.01843	0.01982	PASS
Extreme (-20℃)		10.25	8.92	15.92	0.01365	0.01188	0.02119	PASS
Extreme (-30℃)		4.70	10.87	7.83	0.00626	0.01448	0.01042	PASS
25℃	LV	1.42	7.73	12.26	0.00189	0.01029	0.01633	PASS
	HV	5.25	12.91	13.95	0.00699	0.01720	0.01858	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	4.69	5.75	8.14	0.00634	0.00776	0.01100	PASS
Extreme (50℃)		11.57	1.84	2.05	0.01564	0.00249	0.00277	PASS
Extreme (40℃)		3.39	12.78	6.64	0.00458	0.01726	0.00898	PASS
Extreme (30℃)		17.67	14.13	16.49	0.02388	0.01910	0.02228	PASS
Extreme (20℃)		11.05	10.28	8.00	0.01493	0.01389	0.01082	PASS
Extreme (10℃)		3.83	2.34	8.36	0.00518	0.00316	0.01130	PASS
Extreme (0℃)		6.55	13.30	4.93	0.00885	0.01798	0.00666	PASS
Extreme (-10℃)		8.26	6.17	3.94	0.01116	0.00833	0.00532	PASS
Extreme (-20℃)		15.94	4.89	17.97	0.02155	0.00660	0.02429	PASS
Extreme (-30℃)		8.34	9.79	11.14	0.01128	0.01323	0.01505	PASS
25℃	LV	5.96	8.98	8.59	0.00805	0.01214	0.01160	PASS
	HV	6.30	17.00	3.89	0.00852	0.02297	0.00526	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	7.48	13.05	3.61	0.01010	0.01763	0.00487	PASS
Extreme (50℃)		14.50	2.69	2.13	0.01959	0.00363	0.00288	PASS
Extreme (40℃)		13.62	17.85	13.62	0.01840	0.02412	0.01841	PASS
Extreme (30℃)		8.95	7.68	11.92	0.01210	0.01037	0.01611	PASS

Extreme (20℃)		6.60	7.51	11.32	0.00892	0.01015	0.01530	PASS
Extreme (10℃)		13.97	12.23	17.52	0.01888	0.01653	0.02367	PASS
Extreme (0℃)		15.11	1.64	9.34	0.02042	0.00222	0.01262	PASS
Extreme (-10℃)		7.01	9.95	13.94	0.00947	0.01344	0.01884	PASS
Extreme (-20℃)		7.50	17.89	15.99	0.01014	0.02417	0.02160	PASS
Extreme (-30℃)		9.88	1.05	10.88	0.01335	0.00142	0.01470	PASS
25℃	LV	3.84	2.28	10.64	0.00519	0.00308	0.01437	PASS
	HV	10.46	16.89	9.40	0.01414	0.02282	0.01271	PASS

LTE Band 38								
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	6.12	4.82	9.76	0.00236	0.00186	0.00376	PASS
Extreme (50℃)		5.98	5.81	8.77	0.00230	0.00224	0.00338	PASS
Extreme (40℃)		14.52	3.59	7.19	0.00560	0.00138	0.00277	PASS
Extreme (30℃)		13.71	3.14	5.76	0.00528	0.00121	0.00222	PASS
Extreme (20℃)		12.61	16.63	9.80	0.00486	0.00641	0.00378	PASS
Extreme (10℃)		12.20	2.83	15.25	0.00470	0.00109	0.00588	PASS
Extreme (0℃)		6.83	11.89	8.67	0.00263	0.00458	0.00334	PASS
Extreme (-10℃)		15.72	10.89	12.54	0.00606	0.00420	0.00483	PASS
Extreme (-20℃)		1.18	11.94	5.30	0.00045	0.00460	0.00204	PASS
Extreme (-30℃)		13.23	2.82	16.42	0.00510	0.00109	0.00633	PASS
25℃	LV	10.79	17.10	11.61	0.00416	0.00659	0.00447	PASS
	HV	10.17	2.06	14.29	0.00392	0.00079	0.00551	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	15.04	16.66	3.90	0.00580	0.00642	0.00150	PASS
Extreme (50℃)		2.32	2.99	6.20	0.00089	0.00115	0.00239	PASS
Extreme (40℃)		12.29	6.88	7.12	0.00474	0.00265	0.00274	PASS
Extreme (30℃)		14.66	4.09	12.70	0.00565	0.00158	0.00489	PASS
Extreme (20℃)		12.89	9.20	9.48	0.00497	0.00355	0.00365	PASS
Extreme (10℃)		4.25	3.32	4.01	0.00164	0.00128	0.00155	PASS
Extreme (0℃)		4.84	13.80	5.97	0.00187	0.00532	0.00230	PASS
Extreme (-10℃)		16.90	2.75	11.26	0.00651	0.00106	0.00434	PASS
Extreme (-20℃)		3.57	6.25	17.01	0.00138	0.00241	0.00656	PASS
Extreme (-30℃)		10.16	16.50	8.76	0.00392	0.00636	0.00337	PASS
25℃	LV	11.57	9.03	1.53	0.00446	0.00348	0.00059	PASS
	HV	17.03	15.93	11.90	0.00656	0.00614	0.00459	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	14.06	10.19	3.38	0.00542	0.00393	0.00130	PASS
Extreme (50℃)		3.03	15.22	14.67	0.00117	0.00586	0.00565	PASS
Extreme (40℃)		15.72	7.41	3.96	0.00606	0.00285	0.00153	PASS
Extreme (30℃)		15.19	9.06	1.93	0.00585	0.00349	0.00074	PASS
Extreme (20℃)		5.60	10.04	11.37	0.00216	0.00387	0.00438	PASS
Extreme (10℃)		10.84	10.84	15.81	0.00418	0.00418	0.00609	PASS
Extreme (0℃)		5.83	5.81	5.91	0.00225	0.00224	0.00228	PASS
Extreme (-10℃)		16.75	1.06	16.19	0.00645	0.00041	0.00624	PASS
Extreme (-20℃)		17.44	15.14	12.89	0.00672	0.00584	0.00497	PASS
Extreme (-30℃)		12.95	2.56	11.75	0.00499	0.00099	0.00453	PASS
25℃	LV	14.36	10.37	1.17	0.00553	0.00400	0.00045	PASS
	HV	7.52	2.35	14.47	0.00290	0.00091	0.00557	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	16.03	12.04	7.95	0.00618	0.00464	0.00306	PASS
Extreme (50℃)		3.14	5.74	2.10	0.00121	0.00221	0.00081	PASS
Extreme (40℃)		8.07	5.18	11.35	0.00311	0.00200	0.00437	PASS
Extreme (30℃)		6.78	9.86	2.22	0.00261	0.00380	0.00085	PASS
Extreme (20℃)		14.23	7.02	4.50	0.00548	0.00271	0.00173	PASS
Extreme (10℃)		9.07	11.78	9.17	0.00349	0.00454	0.00354	PASS
Extreme (0℃)		14.03	6.31	4.00	0.00541	0.00243	0.00154	PASS
Extreme (-10℃)		13.00	2.50	9.81	0.00501	0.00096	0.00378	PASS
Extreme (-20℃)		16.52	1.86	15.60	0.00637	0.00072	0.00601	PASS
Extreme (-30℃)		15.83	14.49	10.87	0.00610	0.00558	0.00419	PASS
25℃	LV	14.55	2.45	7.03	0.00561	0.00094	0.00271	PASS
	HV	9.76	13.10	14.56	0.00376	0.00505	0.00561	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							
Normal (25℃)	Normal	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	PASS
Extreme (50℃)		16.24	16.90	11.76	0.00626	0.00652	0.00454	PASS
Extreme (40℃)		10.33	10.69	2.63	0.00398	0.00412	0.00101	PASS
Extreme (30℃)		14.75	9.97	14.90	0.00569	0.00385	0.00574	PASS
Extreme (20℃)		16.67	7.74	15.93	0.00643	0.00298	0.00614	PASS
Extreme (10℃)		11.97	10.02	16.14	0.00462	0.00386	0.00623	PASS
Extreme (0℃)		4.96	15.07	15.13	0.00191	0.00581	0.00584	PASS
Extreme (-10℃)		5.97	5.64	14.98	0.00230	0.00217	0.00578	PASS
Extreme (-20℃)		8.95	7.11	17.51	0.00345	0.00274	0.00675	PASS
Extreme (-30℃)		10.85	4.07	6.97	0.00418	0.00157	0.00269	PASS
25℃	16.45	1.74	8.79	0.00634	0.00067	0.00339	PASS	
	LV	14.45	17.19	2.13	0.00557	0.00663	0.00082	PASS
	HV	10.43	12.08	16.50	0.00402	0.00466	0.00636	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							
Normal (25℃)	Normal	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	PASS
Extreme (50℃)		4.71	12.06	14.76	0.00182	0.00465	0.00569	PASS
Extreme (40℃)		10.26	10.24	17.88	0.00396	0.00395	0.00689	PASS
Extreme (30℃)		3.10	7.11	15.39	0.00120	0.00274	0.00594	PASS
Extreme (20℃)		15.26	14.38	15.84	0.00589	0.00554	0.00611	PASS
Extreme (10℃)		4.61	16.37	15.65	0.00178	0.00631	0.00604	PASS
Extreme (0℃)		15.70	14.78	1.40	0.00605	0.00570	0.00054	PASS
Extreme (-10℃)		10.93	2.62	16.68	0.00422	0.00101	0.00643	PASS
Extreme (-20℃)		6.08	1.91	11.92	0.00235	0.00074	0.00460	PASS
Extreme (-30℃)		9.58	12.47	12.40	0.00370	0.00481	0.00478	PASS
25℃	10.14	3.17	9.50	0.00391	0.00122	0.00366	PASS	
	LV	7.87	2.97	11.55	0.00304	0.00115	0.00445	PASS
	HV	17.40	2.04	13.12	0.00671	0.00079	0.00506	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							
Normal (25℃)	Normal	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	PASS
Extreme (50℃)		3.33	11.25	12.89	0.00128	0.00434	0.00497	PASS
Extreme (40℃)		12.22	8.44	8.80	0.00471	0.00326	0.00339	PASS
Extreme (30℃)		16.18	5.54	17.62	0.00624	0.00214	0.00679	PASS
Extreme (20℃)		3.25	8.56	11.53	0.00125	0.00330	0.00445	PASS
		3.27	5.61	16.93	0.00126	0.00216	0.00653	PASS

Extreme (10℃)		5.44	10.55	11.19	0.00210	0.00407	0.00432	PASS
Extreme (0℃)		5.06	14.81	11.33	0.00195	0.00571	0.00437	PASS
Extreme (-10℃)		5.88	15.28	11.60	0.00227	0.00589	0.00447	PASS
Extreme (-20℃)		3.53	5.97	13.44	0.00136	0.00230	0.00518	PASS
Extreme (-30℃)		1.79	9.54	5.50	0.00069	0.00368	0.00212	PASS
25℃	LV	12.26	17.18	9.46	0.00473	0.00662	0.00365	PASS
	HV	2.25	15.36	4.30	0.00087	0.00592	0.00166	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	15.46	5.75	7.60	0.00596	0.00222	0.00293	PASS
Extreme (50℃)		15.26	2.46	12.80	0.00589	0.00095	0.00494	PASS
Extreme (40℃)		3.25	9.12	1.12	0.00125	0.00352	0.00043	PASS
Extreme (30℃)		1.15	15.07	7.91	0.00044	0.00581	0.00305	PASS
Extreme (20℃)		9.58	10.93	12.96	0.00369	0.00421	0.00500	PASS
Extreme (10℃)		11.50	5.87	16.00	0.00443	0.00226	0.00617	PASS
Extreme (0℃)		12.79	17.35	16.65	0.00493	0.00669	0.00642	PASS
Extreme (-10℃)		14.46	8.50	10.49	0.00558	0.00328	0.00404	PASS
Extreme (-20℃)		4.75	11.36	17.43	0.00183	0.00438	0.00672	PASS
Extreme (-30℃)		4.81	14.03	5.71	0.00185	0.00541	0.00220	PASS
25℃	LV	13.77	8.46	8.08	0.00531	0.00326	0.00312	PASS
	HV	1.80	17.73	2.17	0.00070	0.00684	0.00084	PASS

LTE Band 66								
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	17.53	3.07	13.98	0.01004	0.00176	0.00801	PASS
Extreme (50℃)		17.35	16.66	15.69	0.00994	0.00955	0.00899	PASS
Extreme (40℃)		13.46	1.92	15.16	0.00772	0.00110	0.00869	PASS
Extreme (30℃)		17.04	11.71	16.49	0.00976	0.00671	0.00945	PASS
Extreme (20℃)		5.57	14.11	16.17	0.00319	0.00809	0.00927	PASS
Extreme (10℃)		1.80	7.69	17.45	0.00103	0.00441	0.01000	PASS
Extreme (0℃)		16.66	9.17	2.52	0.00955	0.00526	0.00145	PASS
Extreme (-10℃)		15.67	13.25	6.35	0.00898	0.00759	0.00364	PASS
Extreme (-20℃)		12.70	9.50	8.59	0.00728	0.00545	0.00492	PASS
Extreme (-30℃)		12.09	13.04	7.88	0.00693	0.00748	0.00452	PASS
25℃	LV	2.51	14.25	6.87	0.00144	0.00817	0.00394	PASS
	HV	14.95	14.41	1.42	0.00857	0.00826	0.00082	PASS

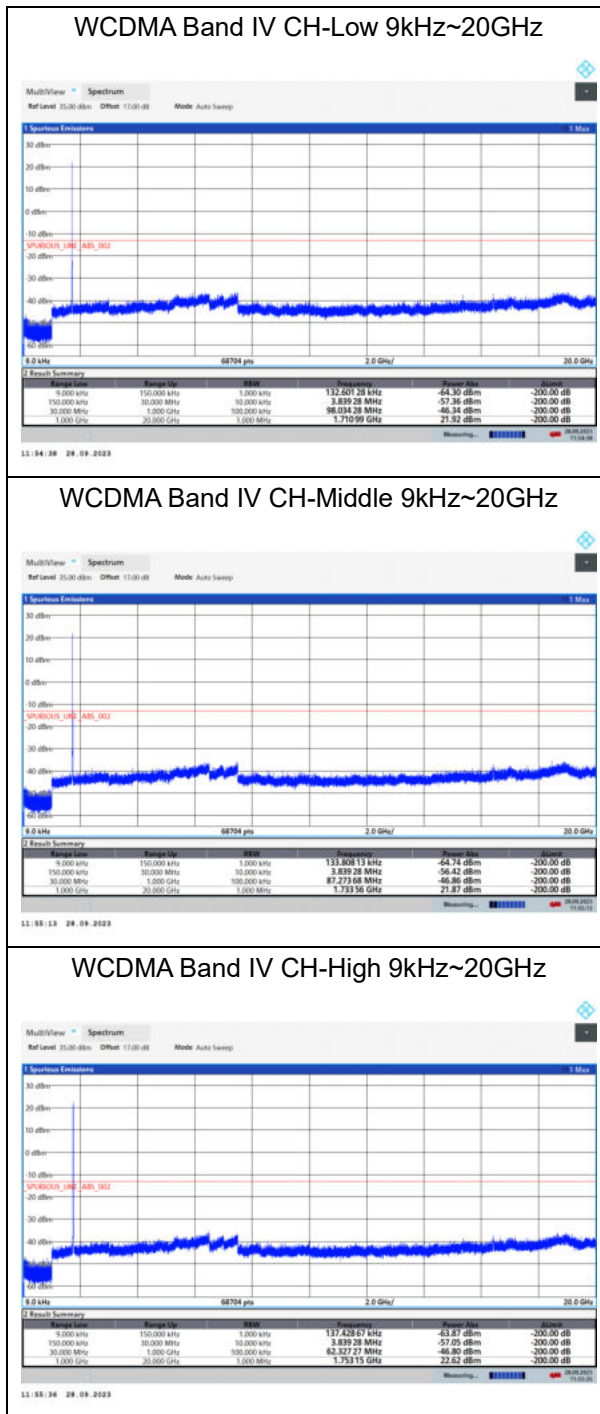
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	3MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal (25℃)	Normal	14.08	1.27	7.44	0.00807	0.00073	0.00426	PASS
Extreme (50℃)		3.09	8.69	17.30	0.00177	0.00498	0.00991	PASS
Extreme (40℃)		11.63	5.56	2.85	0.00666	0.00319	0.00163	PASS
Extreme (30℃)		1.03	1.35	7.43	0.00059	0.00077	0.00426	PASS
Extreme (20℃)		9.75	12.91	8.15	0.00559	0.00740	0.00467	PASS
Extreme (10℃)		16.32	17.66	16.33	0.00935	0.01012	0.00936	PASS
Extreme (0℃)		6.29	13.50	16.73	0.00361	0.00774	0.00959	PASS
Extreme (-10℃)		14.18	7.52	5.49	0.00812	0.00431	0.00315	PASS
Extreme (-20℃)		4.28	10.05	13.01	0.00245	0.00576	0.00746	PASS
Extreme (-30℃)		4.44	16.87	9.20	0.00254	0.00967	0.00527	PASS
25℃	LV	10.71	10.15	6.41	0.00614	0.00581	0.00367	PASS
	HV	16.53	1.51	11.59	0.00947	0.00086	0.00664	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	13.74	14.07	3.14	0.00787	0.00806	0.00180	PASS
Extreme (50℃)		2.43	9.80	16.85	0.00139	0.00562	0.00966	PASS
Extreme (40℃)		8.62	10.39	17.82	0.00494	0.00595	0.01021	PASS
Extreme (30℃)		10.59	10.29	2.00	0.00607	0.00590	0.00115	PASS
Extreme (20℃)		15.29	15.12	11.78	0.00876	0.00866	0.00675	PASS
Extreme (10℃)		17.41	13.94	11.63	0.00998	0.00799	0.00667	PASS
Extreme (0℃)		4.20	7.40	1.90	0.00241	0.00424	0.00109	PASS
Extreme (-10℃)		7.15	1.76	18.00	0.00410	0.00101	0.01031	PASS
Extreme (-20℃)		9.57	4.70	14.10	0.00549	0.00270	0.00808	PASS
Extreme (-30℃)		3.05	17.12	13.86	0.00175	0.00981	0.00794	PASS
25℃	LV	11.28	7.68	10.89	0.00646	0.00440	0.00624	PASS
	HV	2.68	12.21	12.16	0.00153	0.00700	0.00697	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	4.43	3.77	5.04	0.00254	0.00216	0.00289	PASS
Extreme (50℃)		12.80	13.82	13.74	0.00734	0.00792	0.00787	PASS
Extreme (40℃)		10.47	4.65	10.30	0.00600	0.00266	0.00590	PASS
Extreme (30℃)		10.85	11.26	5.81	0.00622	0.00646	0.00333	PASS
Extreme (20℃)		10.86	11.59	10.48	0.00622	0.00664	0.00601	PASS
Extreme (10℃)		17.31	15.81	7.18	0.00992	0.00906	0.00411	PASS

Extreme (0℃)		7.65	10.05	14.88	0.00439	0.00576	0.00853	PASS
Extreme (-10℃)		11.53	2.65	6.06	0.00661	0.00152	0.00347	PASS
Extreme (-20℃)		9.85	11.53	17.06	0.00565	0.00661	0.00978	PASS
Extreme (-30℃)		13.21	16.66	13.86	0.00757	0.00955	0.00794	PASS
25℃	LV	4.32	1.04	1.90	0.00248	0.00060	0.00109	PASS
	HV	9.26	8.32	3.67	0.00531	0.00477	0.00210	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	5.63	3.36	9.05	0.00322	0.00192	0.00519	PASS
Extreme (50℃)		7.08	14.56	11.01	0.00406	0.00834	0.00631	PASS
Extreme (40℃)		6.96	8.87	13.59	0.00399	0.00508	0.00779	PASS
Extreme (30℃)		8.22	11.38	7.22	0.00471	0.00652	0.00414	PASS
Extreme (20℃)		2.34	12.82	15.43	0.00134	0.00735	0.00884	PASS
Extreme (10℃)		1.08	8.11	10.93	0.00062	0.00465	0.00626	PASS
Extreme (0℃)		14.82	8.79	9.65	0.00849	0.00504	0.00553	PASS
Extreme (-10℃)		10.69	13.90	8.94	0.00613	0.00796	0.00512	PASS
Extreme (-20℃)		12.61	16.77	6.99	0.00722	0.00961	0.00401	PASS
Extreme (-30℃)		4.64	1.13	1.81	0.00266	0.00065	0.00104	PASS
25℃	LV	16.66	14.66	10.82	0.00955	0.00840	0.00620	PASS
	HV	10.65	11.67	9.25	0.00610	0.00669	0.00530	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	14.17	12.43	10.21	0.00812	0.00712	0.00585	PASS
Extreme (50℃)		4.53	7.38	14.51	0.00260	0.00423	0.00832	PASS
Extreme (40℃)		6.07	1.00	6.00	0.00348	0.00058	0.00344	PASS
Extreme (30℃)		16.14	7.74	13.71	0.00925	0.00444	0.00786	PASS
Extreme (20℃)		14.81	3.46	11.73	0.00849	0.00198	0.00672	PASS
Extreme (10℃)		13.46	3.98	14.29	0.00771	0.00228	0.00819	PASS
Extreme (0℃)		14.57	11.22	3.95	0.00835	0.00643	0.00226	PASS
Extreme (-10℃)		13.04	15.64	3.12	0.00747	0.00896	0.00179	PASS
Extreme (-20℃)		5.27	2.89	15.45	0.00302	0.00166	0.00885	PASS
Extreme (-30℃)		4.92	11.13	9.72	0.00282	0.00638	0.00557	PASS
25℃	LV	8.74	5.07	1.51	0.00501	0.00291	0.00087	PASS
	HV	13.60	6.63	13.28	0.00780	0.00380	0.00761	PASS

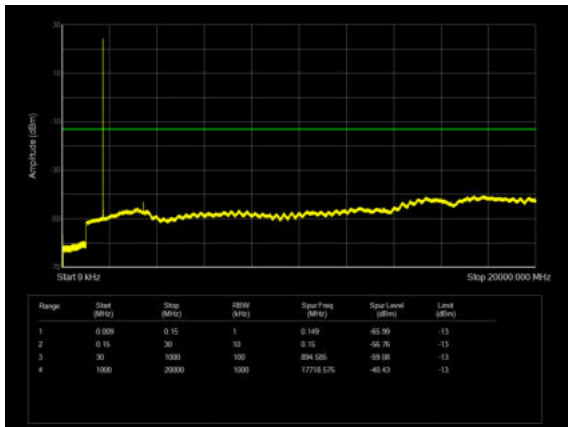
5.6 Spurious Emissions at Antenna Terminals

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.

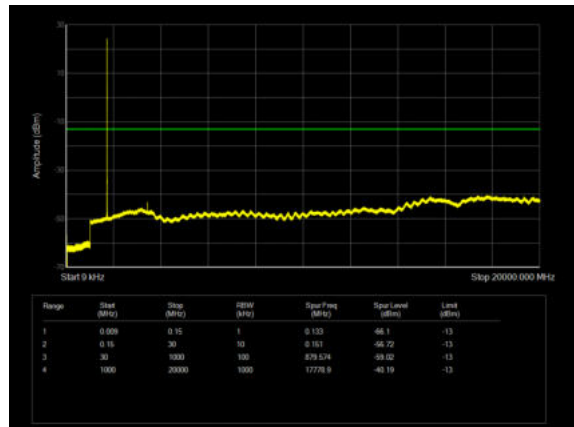
The signal beyond the limit is carrier.



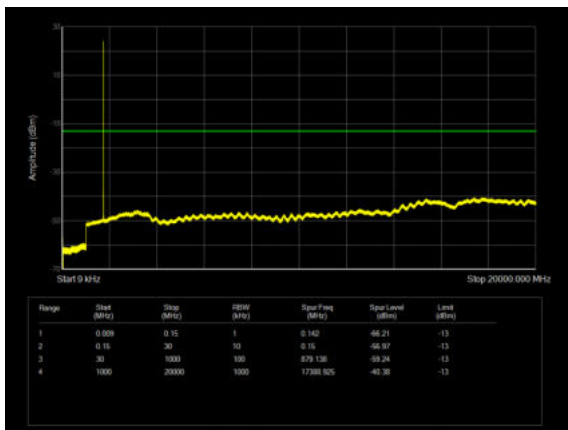
LTE Band 4 1.4MHz CH-Low 9kHz~20GHz



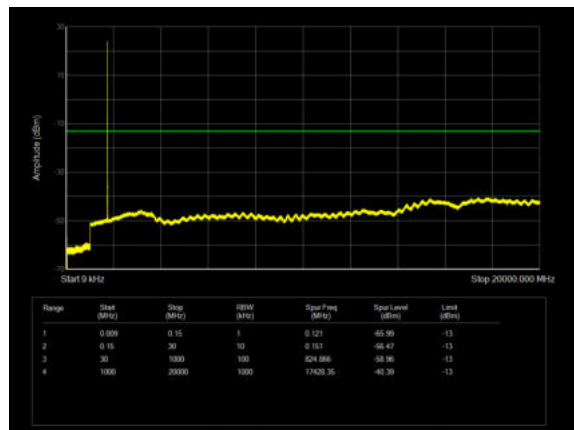
LTE Band 4 3MHz CH- Low 9kHz~20GHz



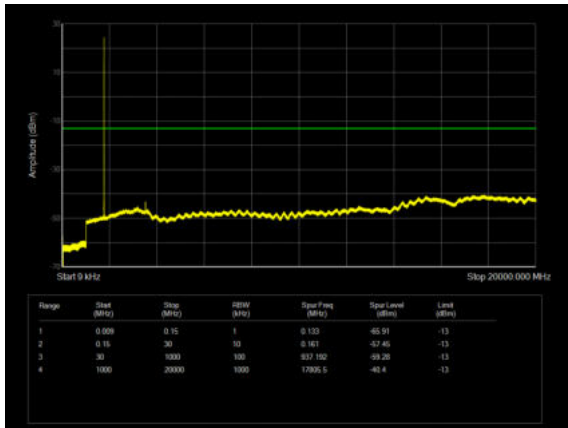
LTE Band 4 1.4MHz CH- Middle 9kHz~20GHz



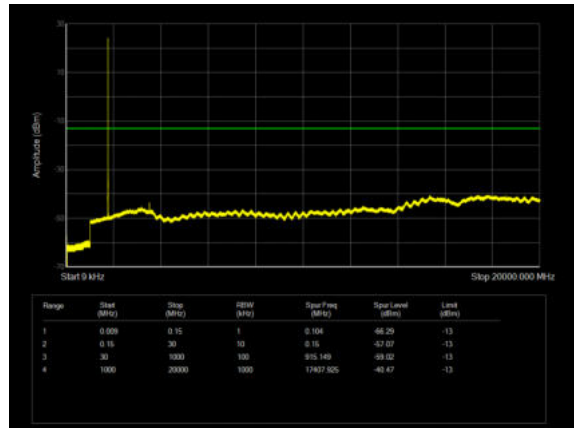
LTE Band 4 3MHz CH- Middle 9kHz~20GHz



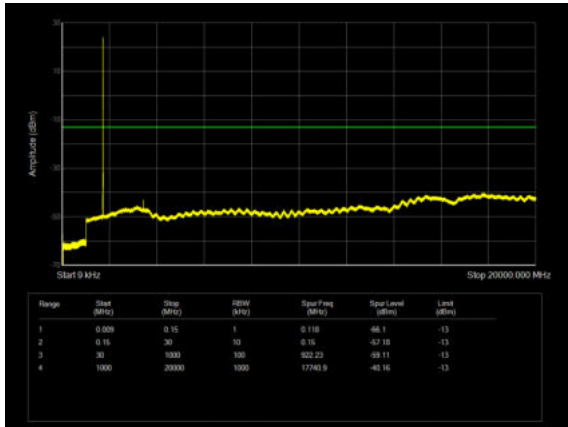
LTE Band 4 1.4MHz CH- High 9kHz~20GHz



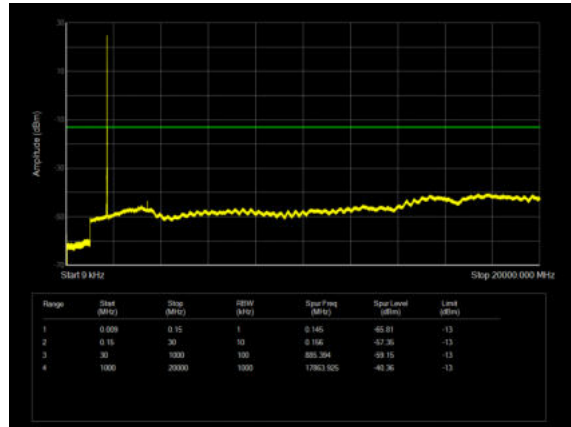
LTE Band 4 3MHz CH-High 9kHz~20GHz



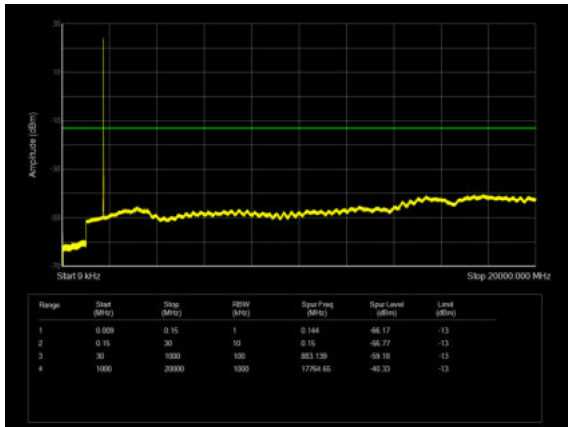
LTE Band 4 5MHz CH- Low 9kHz~20GHz



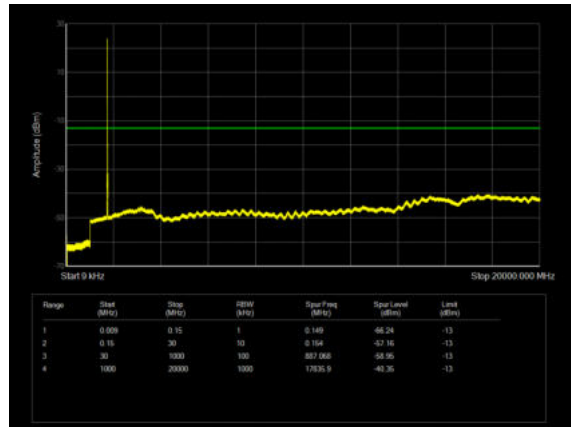
LTE Band 4 10MHz CH-Low 9kHz~20GHz



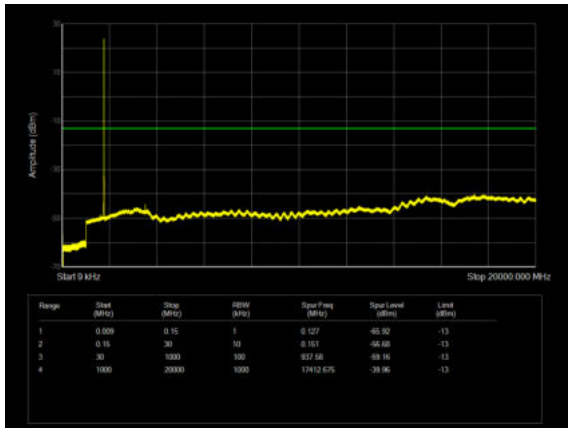
LTE Band 4 5MHz CH- Middle 9kHz~20GHz



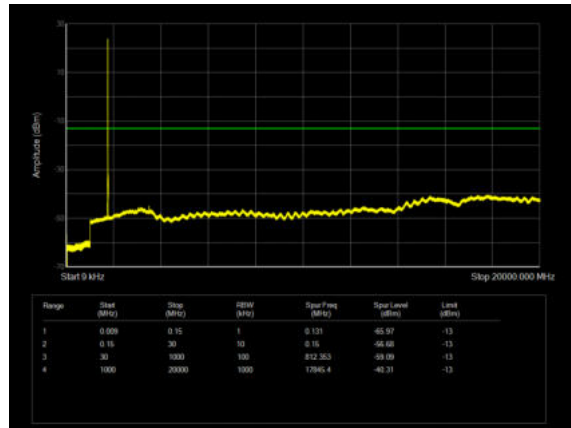
LTE Band 4 10MHz CH- Middle 9kHz~20GHz



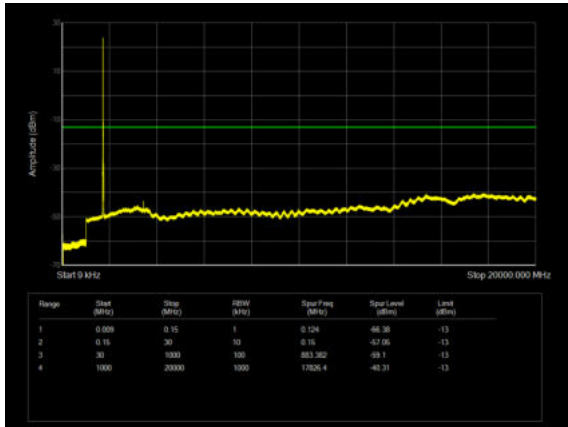
LTE Band 4 5MHz CH-High 9kHz~20GHz



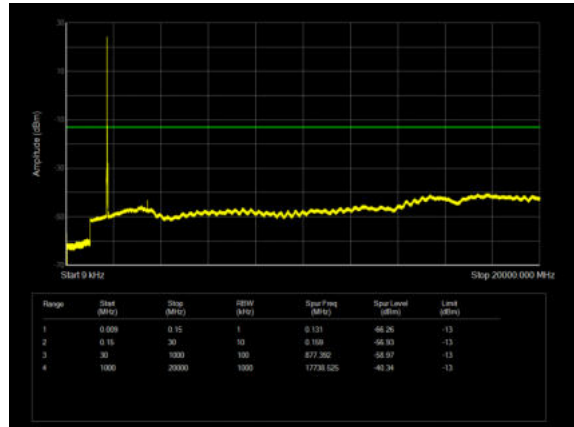
LTE Band 4 10MHz CH- High 9kHz~20GHz



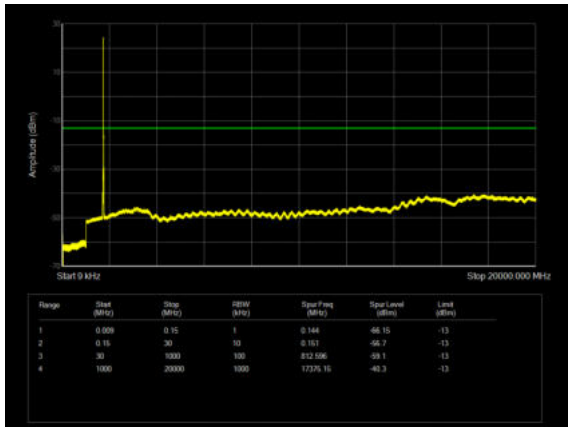
LTE Band 4 15MHz CH- Low 9kHz~20GHz



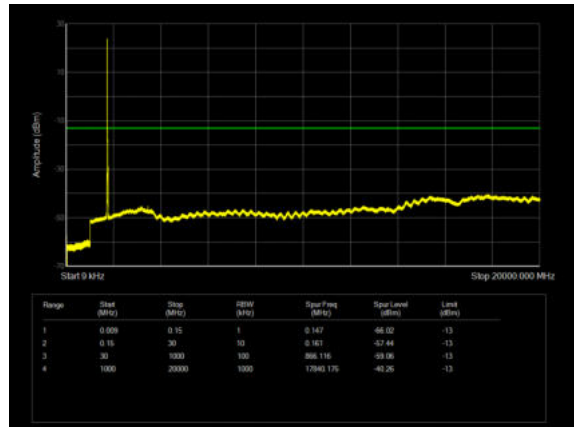
LTE Band 4 20MHz CH-Low 9kHz~20GHz



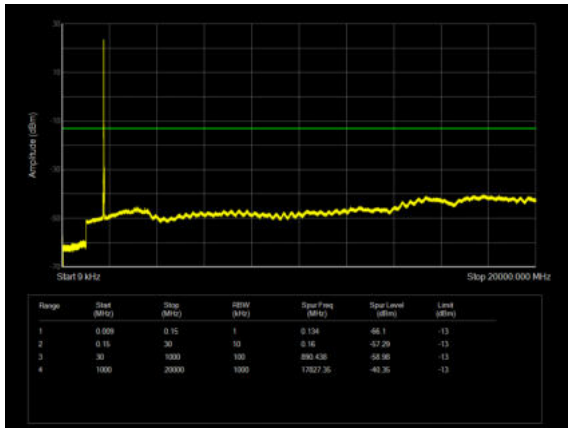
LTE Band 4 15MHz CH- Middle 9kHz~20GHz



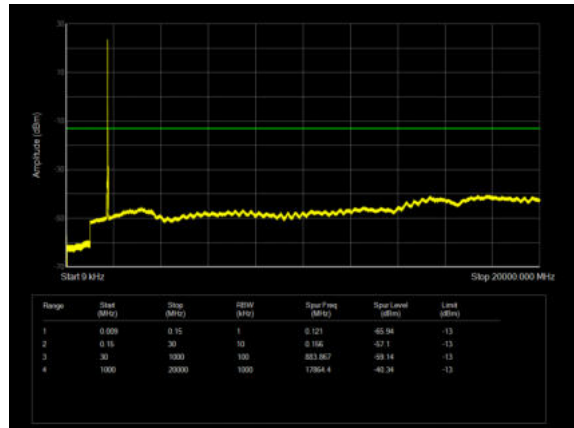
LTE Band 4 20MHz CH- Middle 9kHz~20GHz



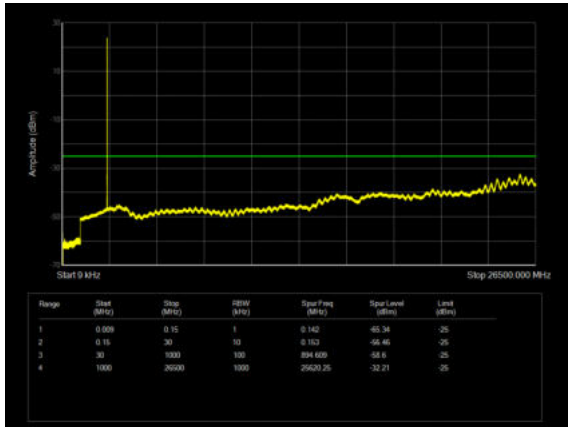
LTE Band 4 15MHz CH-High 9kHz~20GHz



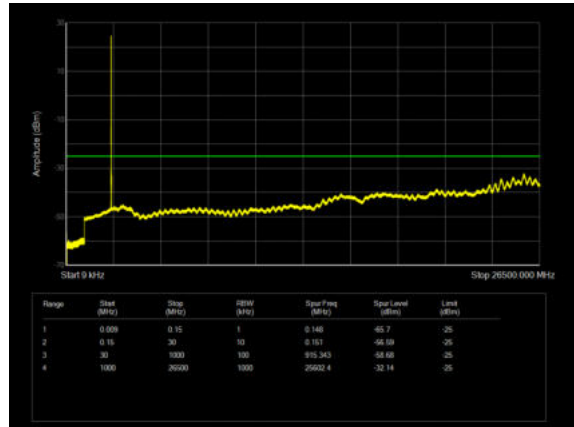
LTE Band 4 20MHz CH- High 9kHz~20GHz



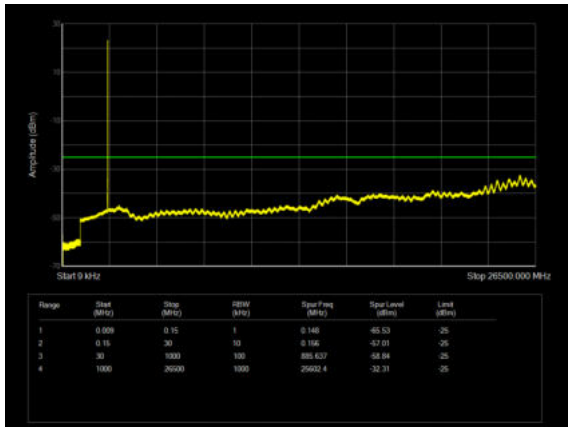
LTE Band 7 5MHz CH- Low 9kHz~26.5GHz



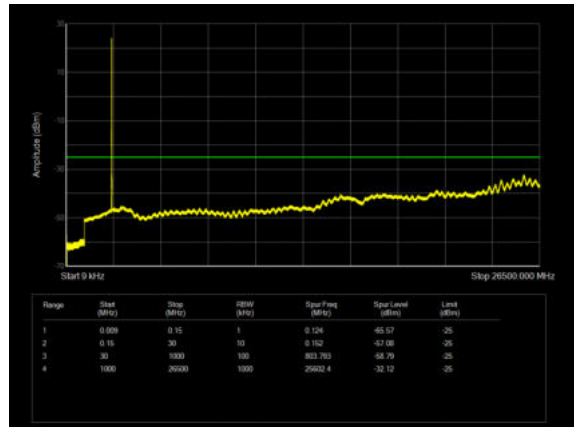
LTE Band 7 10MHz CH-Low 9kHz~26.5GHz



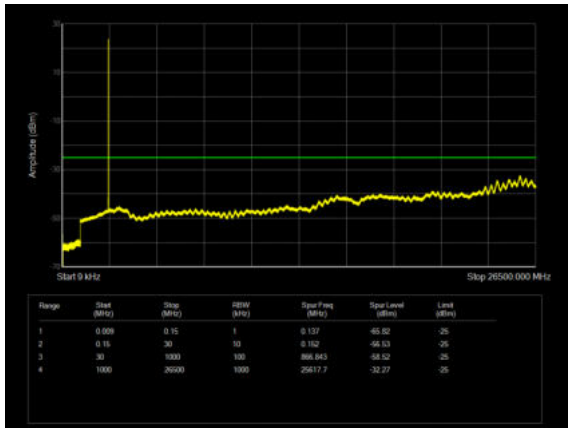
LTE Band 7 5MHz CH- Middle 9kHz~26.5GHz



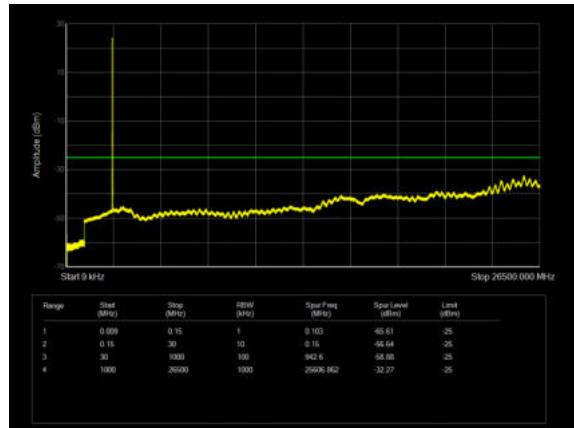
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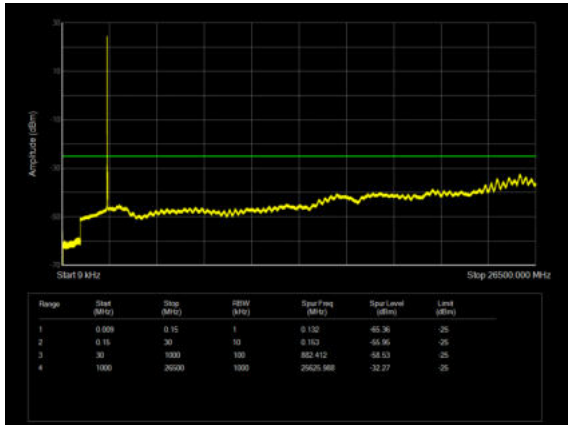
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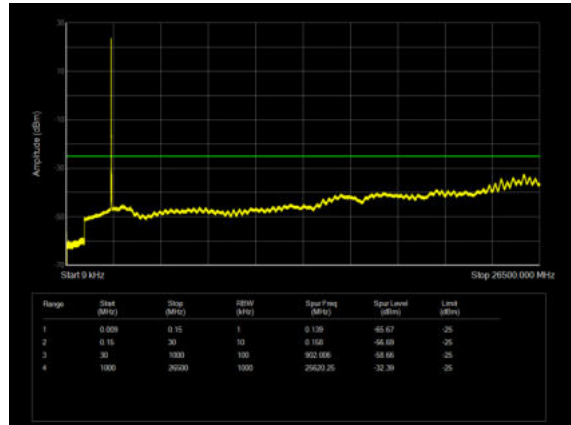
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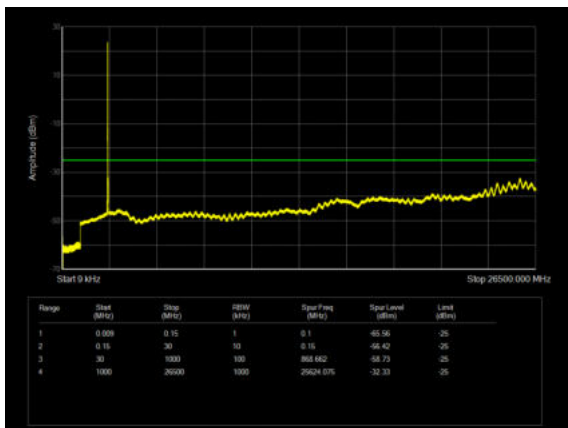
LTE Band 7 15MHz CH- Low 9kHz~26.5GHz



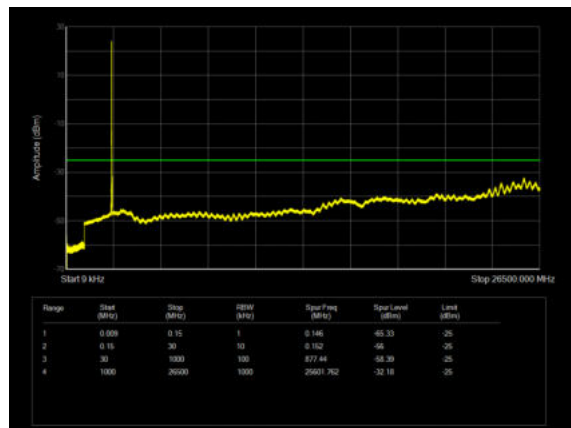
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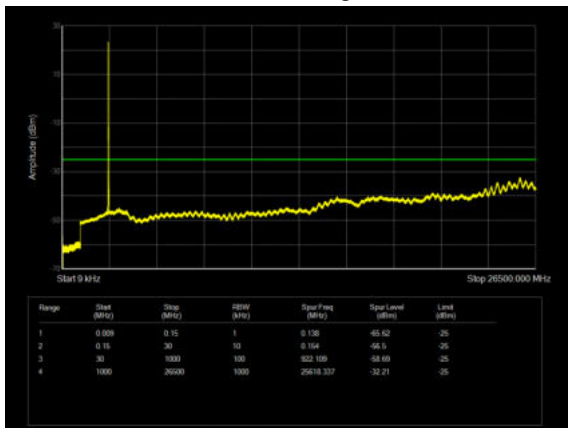
LTE Band 7 15MHz CH- Middle 9kHz~26.5GHz



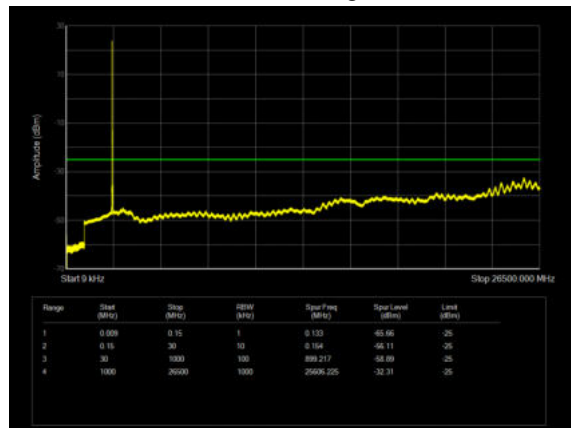
LTE Band 7 20MHz CH- Middle 9kHz~26.5GHz



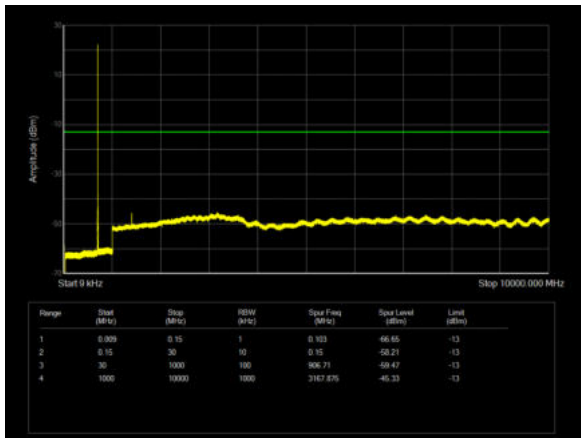
LTE Band 7 15MHz CH-High 9kHz~26.5GHz



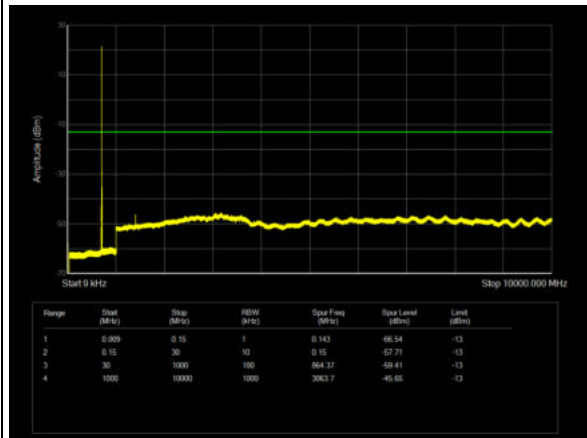
LTE Band 7 20MHz CH- High 9kHz~26.5GHz



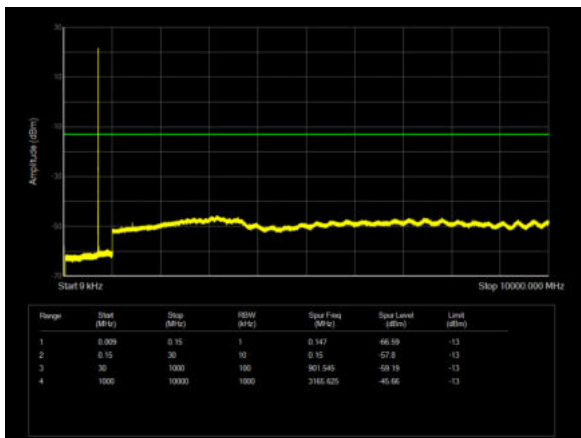
LTE Band 12 1.4MHz CH-Low 9kHz ~10GHz



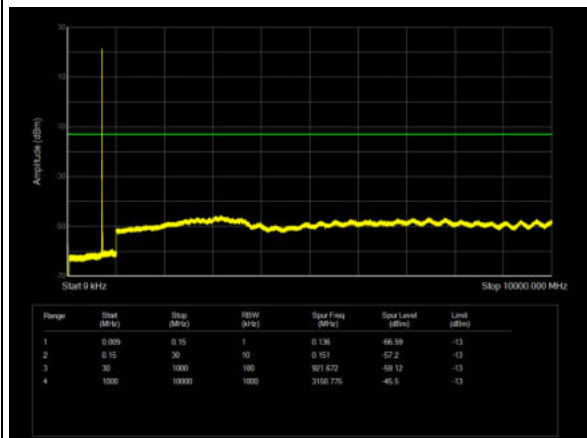
LTE Band 12 3MHz CH-Low 9kHz ~10GHz



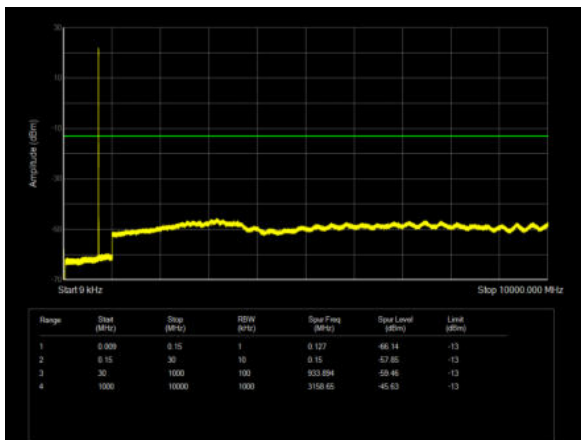
LTE Band 12 1.4MHz CH- Middle 9kHz ~10GHz



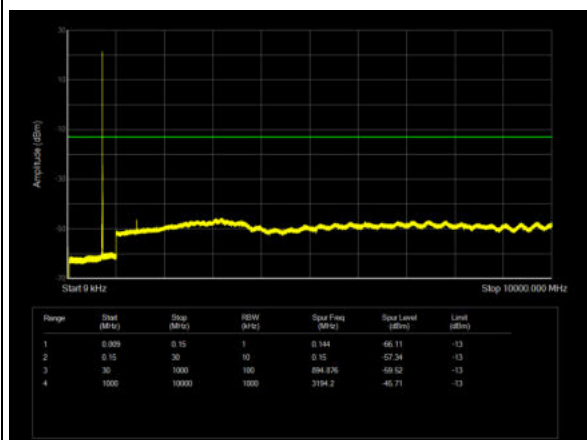
LTE Band 12 3MHz CH- Middle 9kHz ~10GHz



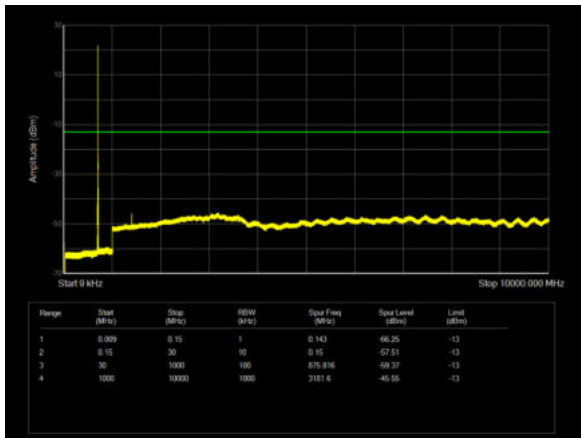
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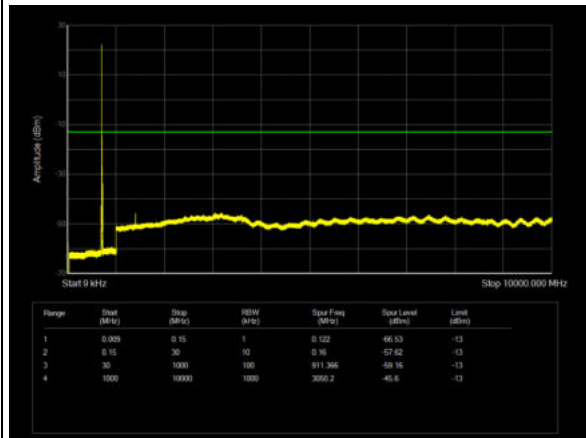
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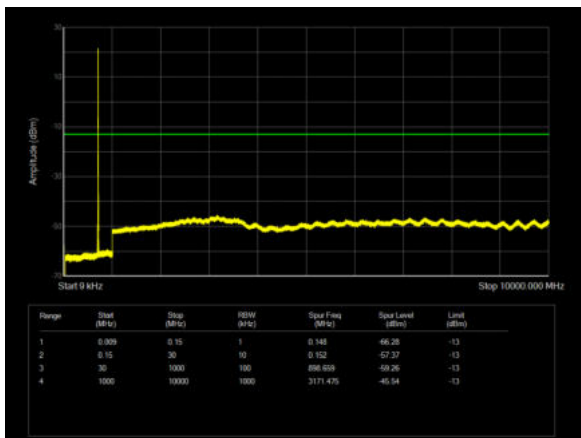
LTE Band 12 5MHz CH-Low 9kHz ~10GHz



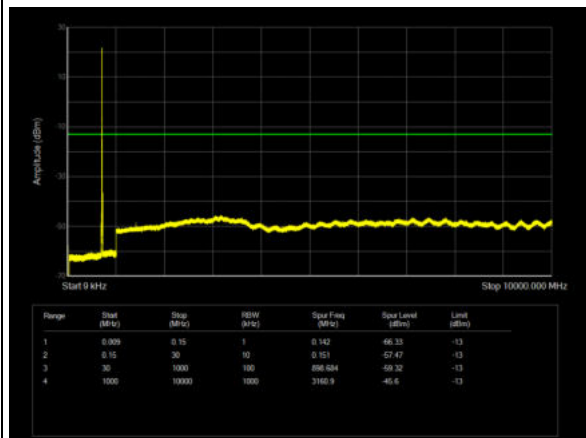
LTE Band 12 10MHz CH-Low 9kHz ~10GHz



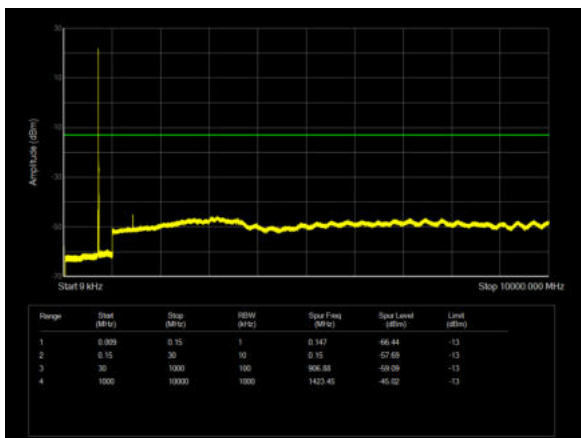
LTE Band 12 5MHz CH- Middle 9kHz ~10GHz



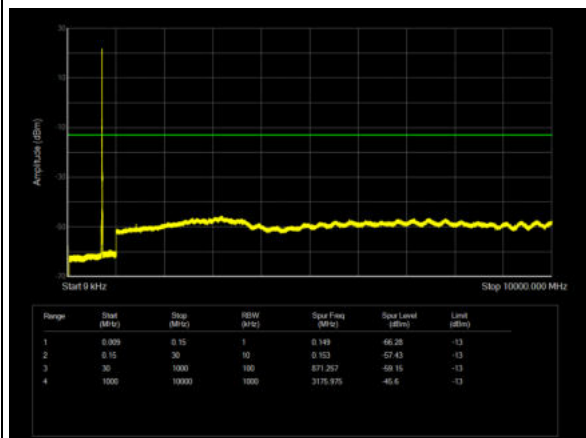
LTE Band 12 10MHz CH- Middle 9kHz ~10GHz



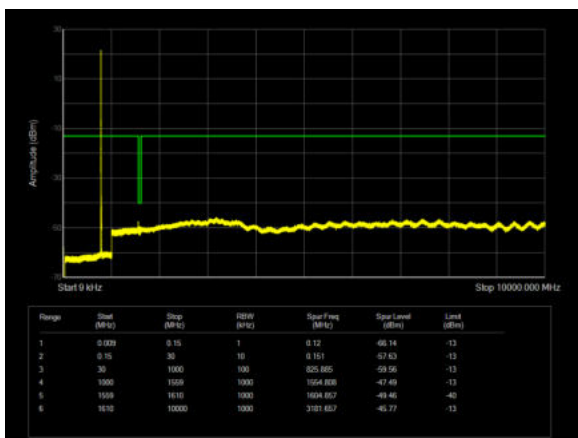
LTE Band 12 5MHz CH-High 9kHz ~10GHz



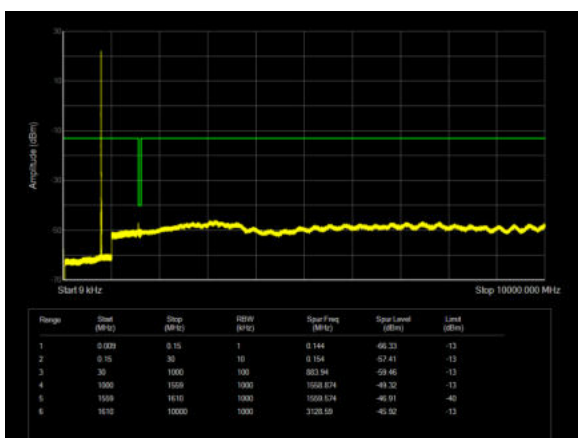
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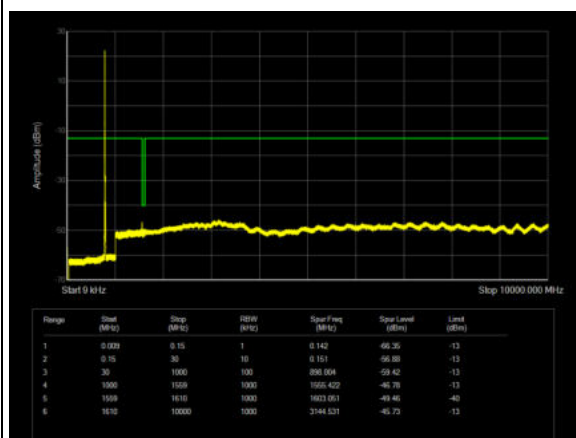
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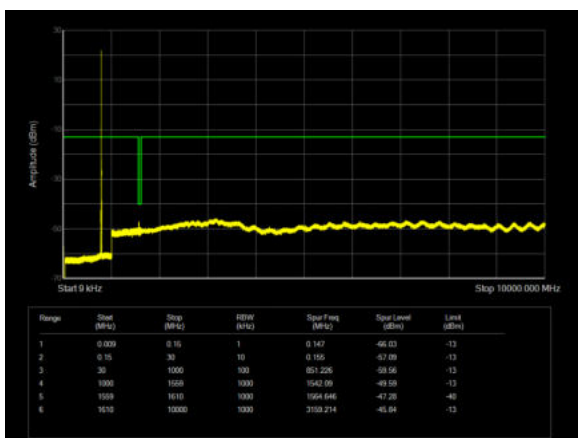
LTE Band 13 5MHz CH-Middle 9kHz ~10GHz



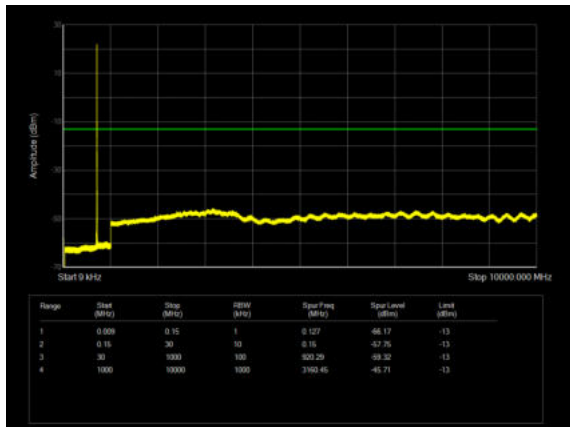
LTE Band 13 10MHz CH-Middle 9kHz ~10GHz



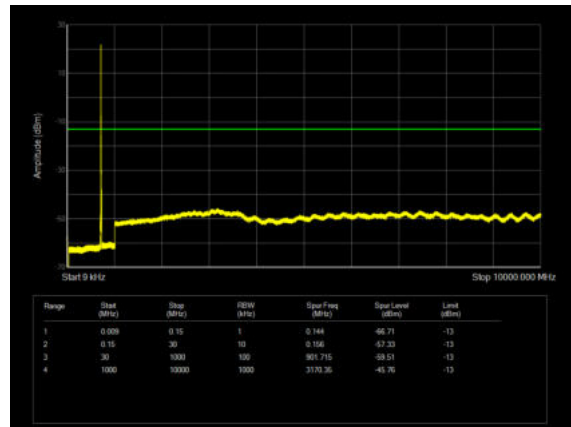
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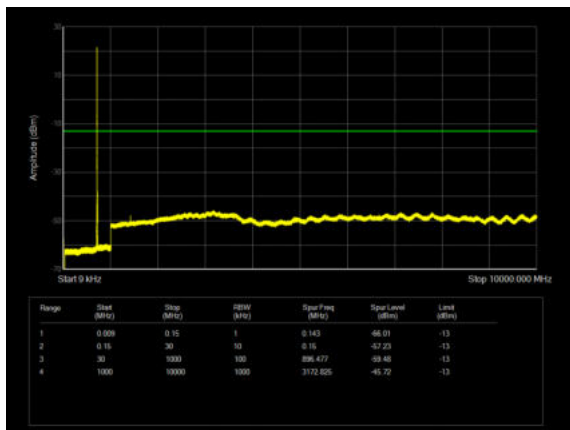
LTE Band 17 5MHz CH-Low 9kHz ~10GHz



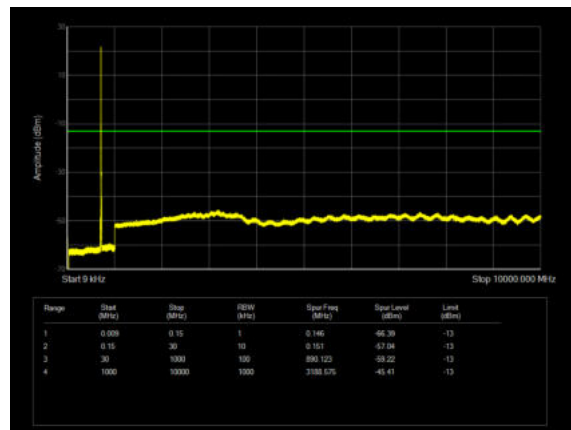
LTE Band 17 10MHz CH-Low 9kHz ~10GHz



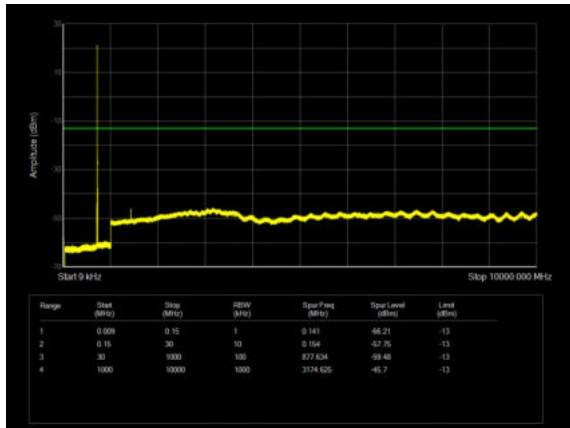
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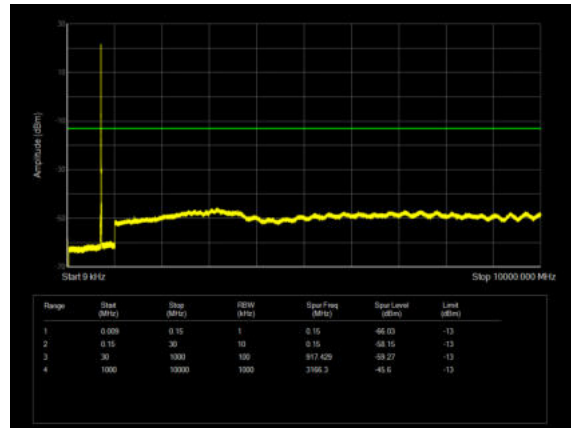
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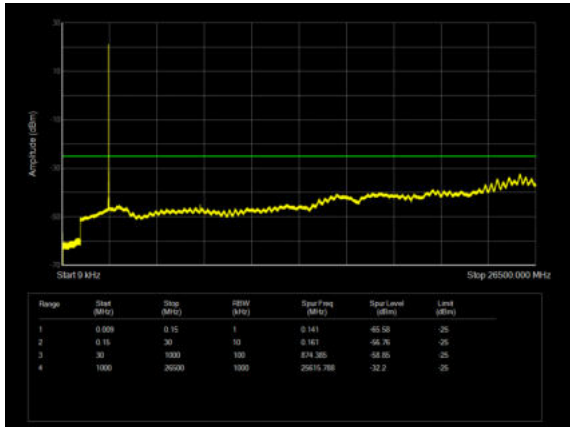
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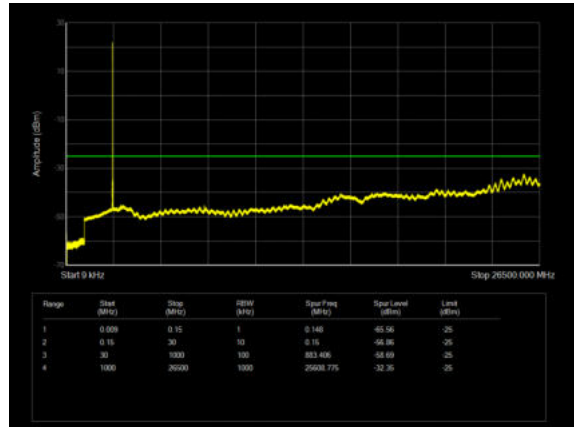
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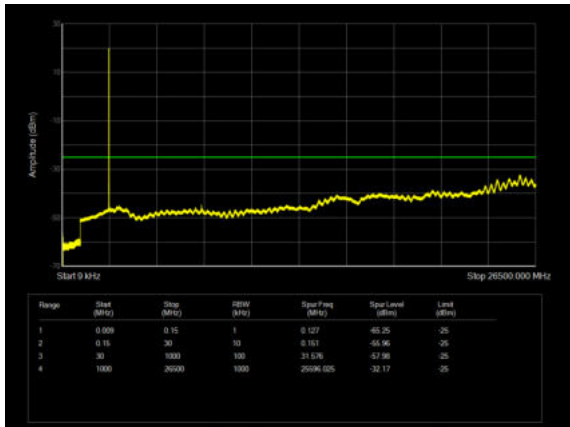
LTE Band 38 5MHz CH- Low 9kHz~26.5GHz



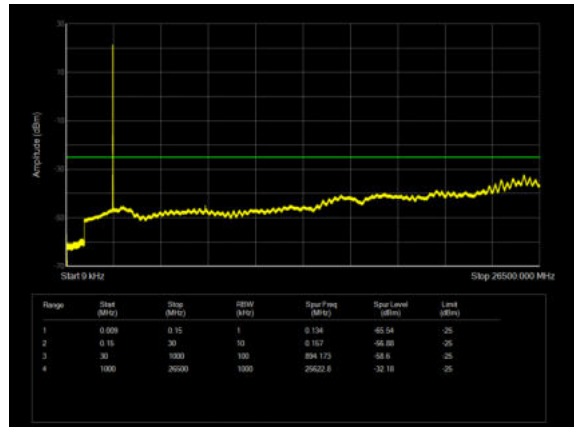
LTE Band 38 10MHz CH- Low 9kHz~26.5GHz



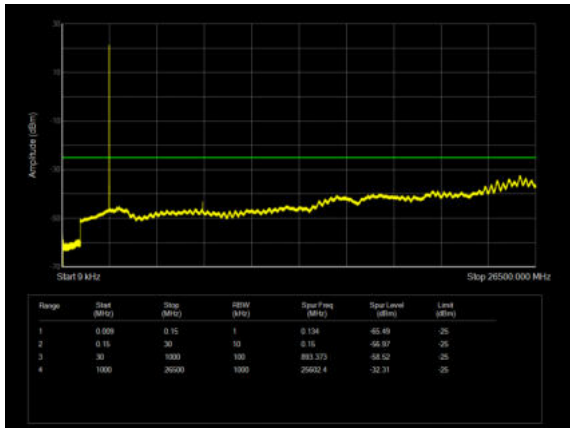
LTE Band 38 5MHz CH- Middle 9kHz~26.5GHz



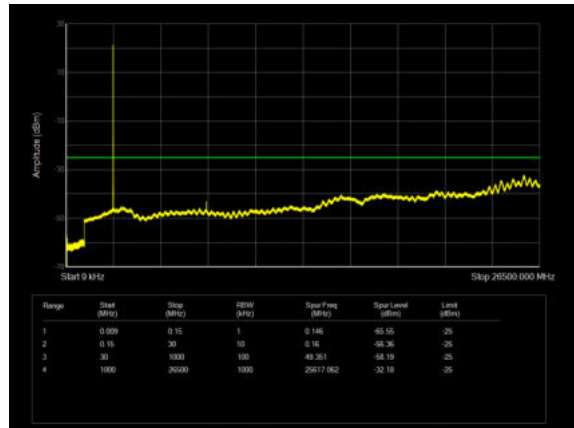
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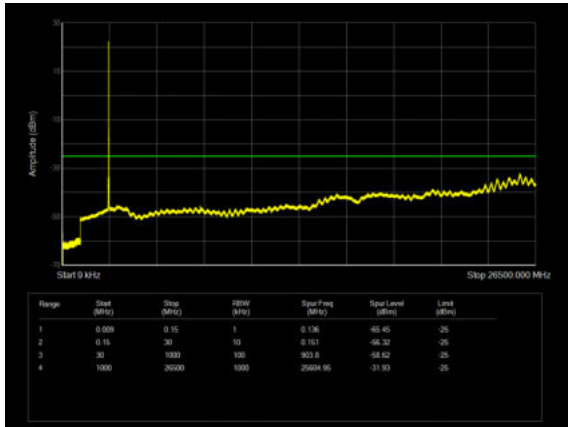
LTE Band 38 5MHz CH-High 9kHz~26.5GHz



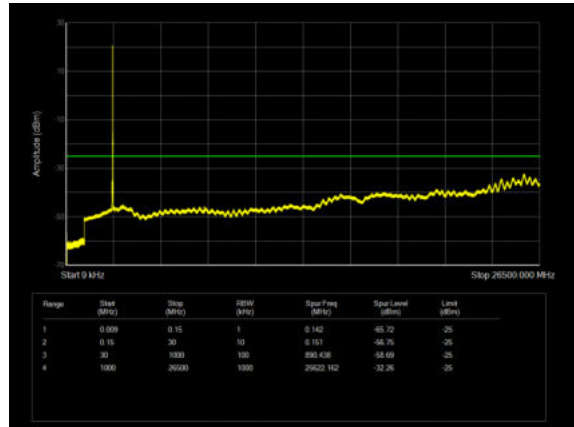
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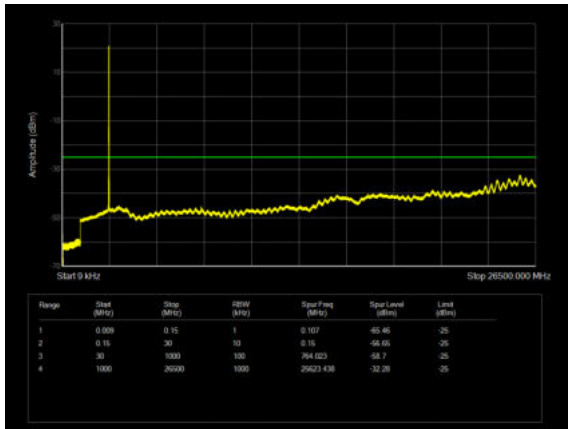
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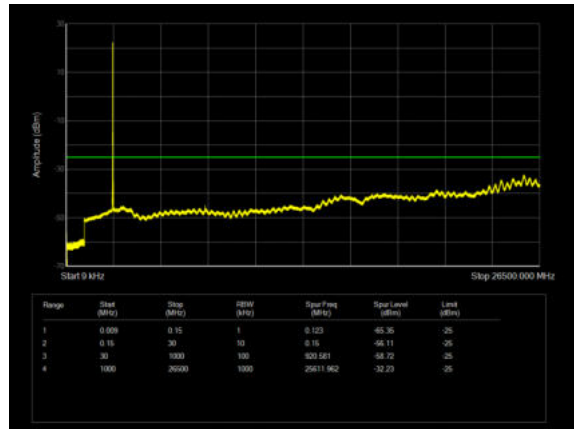
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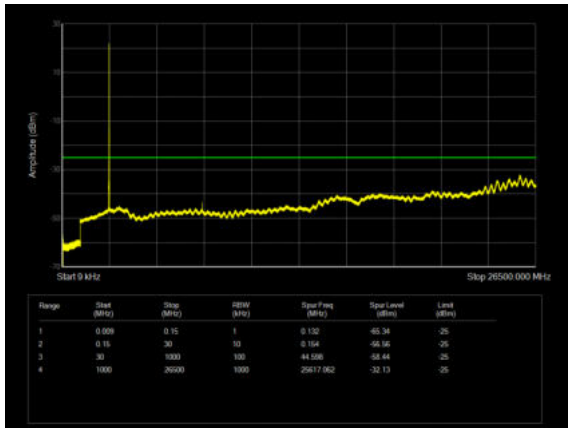
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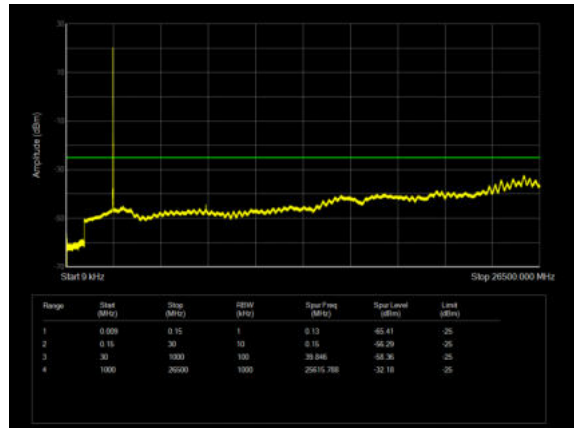
LTE Band 38 20MHz CH- Middle 9kHz~26.5GHz



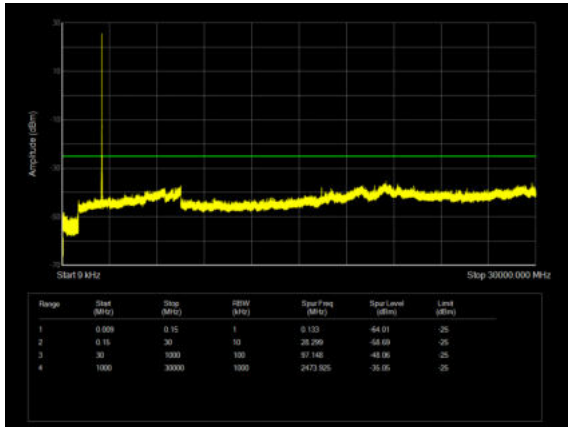
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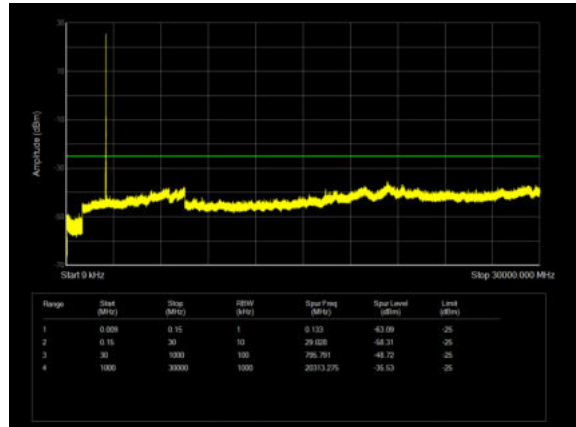
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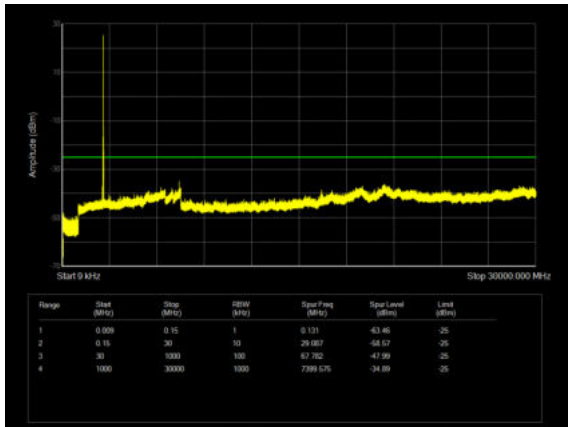
LTE Band 41 5MHz CH- Low 9kHz~30GHz



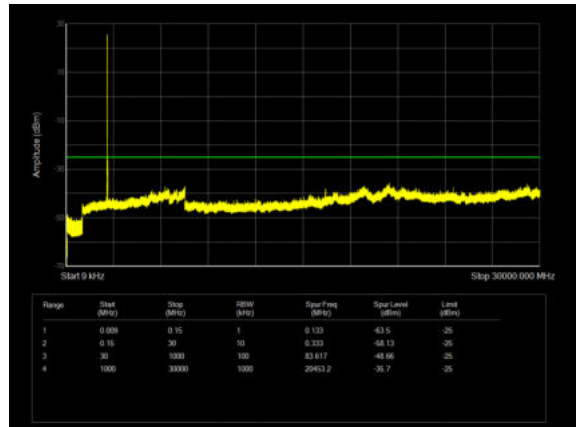
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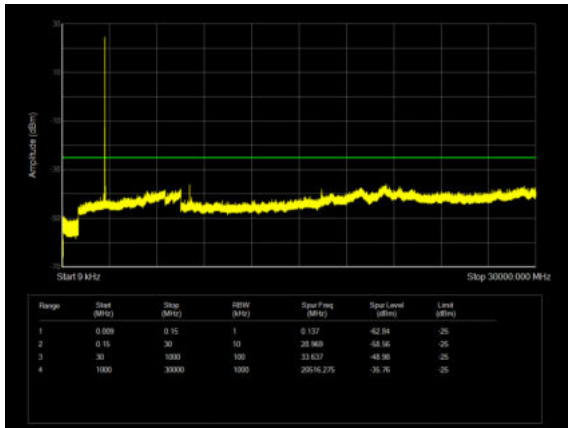
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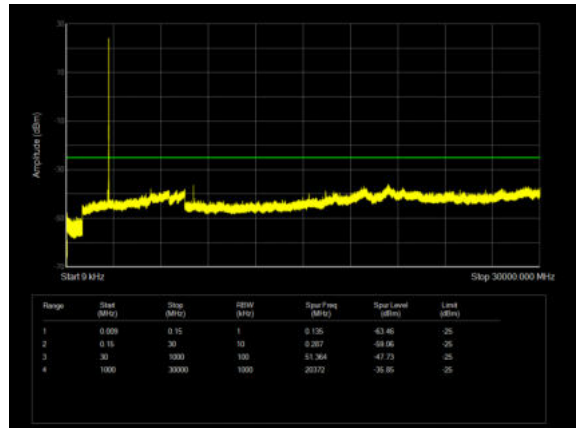
LTE Band 41 10MHz CH- Middle 9kHz~30GHz



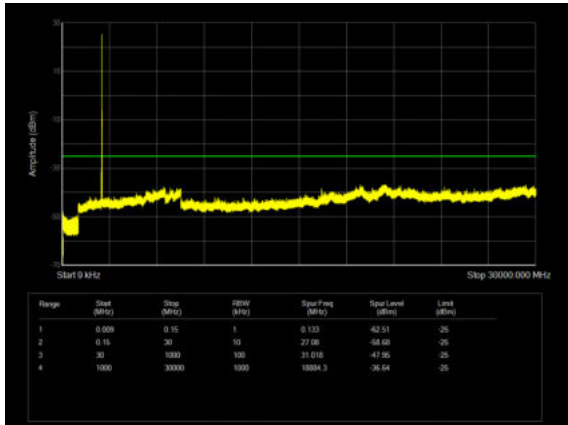
LTE Band 41 5MHz CH-High 9kHz~30GHz



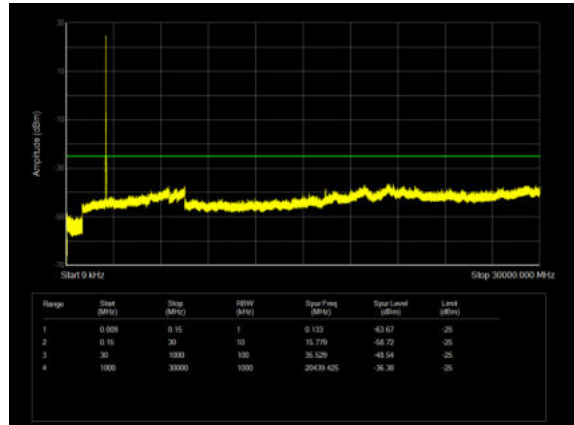
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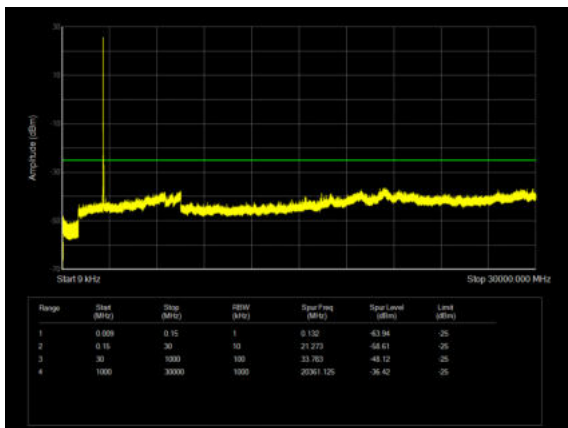
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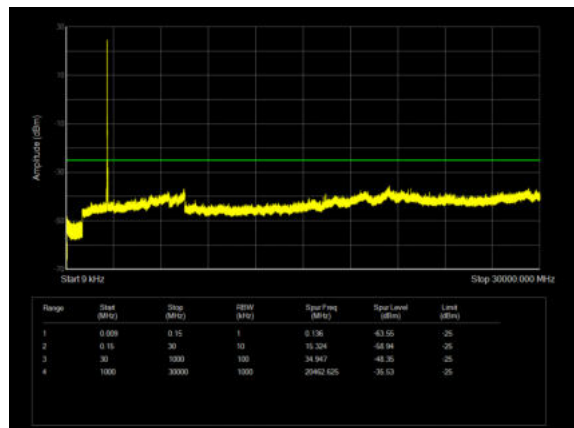
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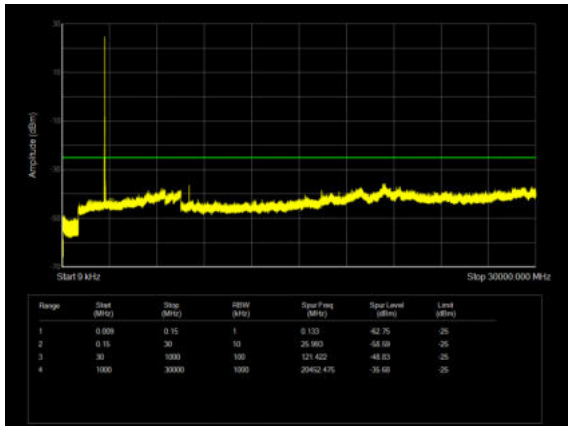
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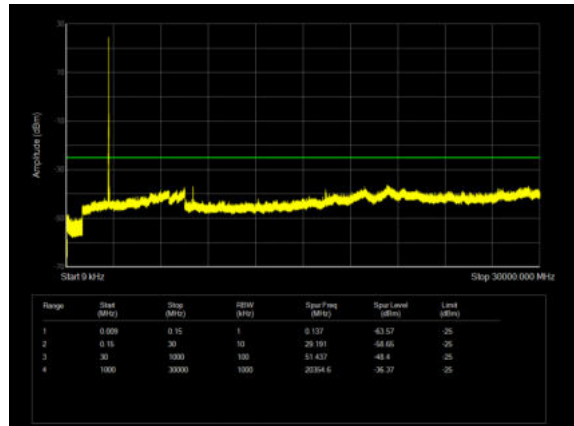
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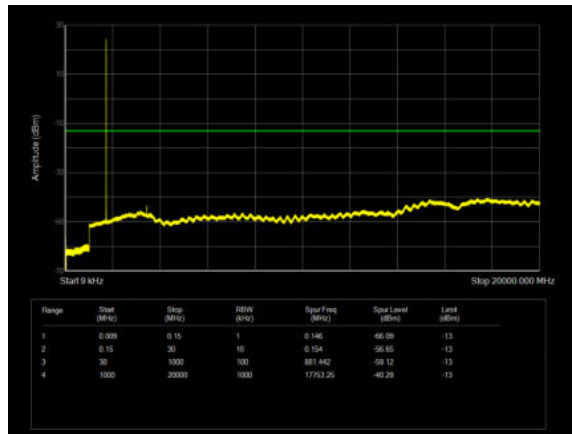
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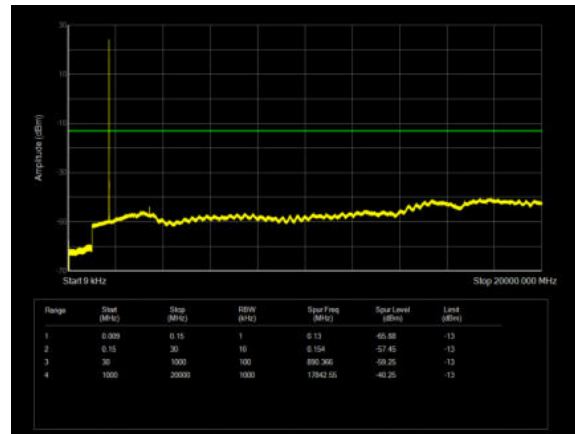
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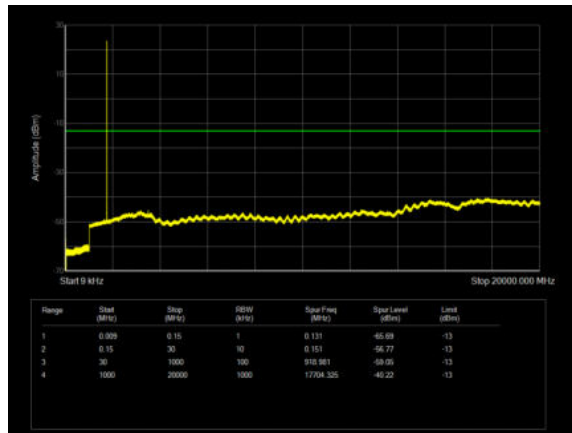
LTE Band 66 1.4MHz CH-Low 9kHz ~20GHz



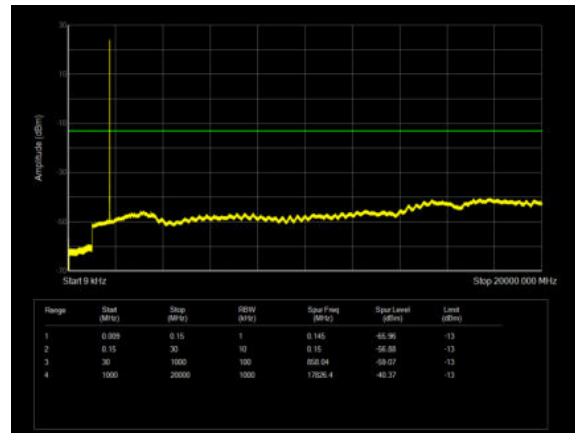
LTE Band 66 3MHz CH-Low 9kHz ~20GHz



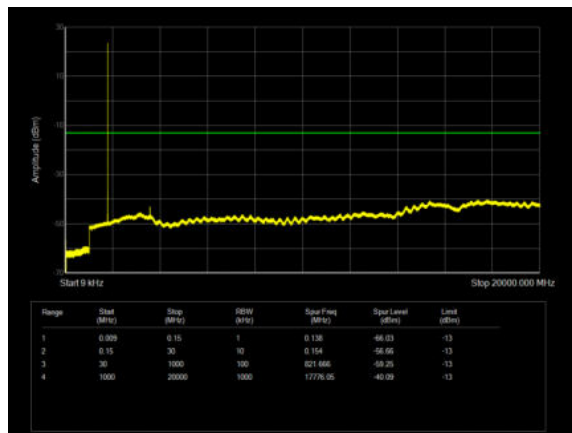
LTE Band 66 1.4MHz CH-Middle 9kHz ~20GHz



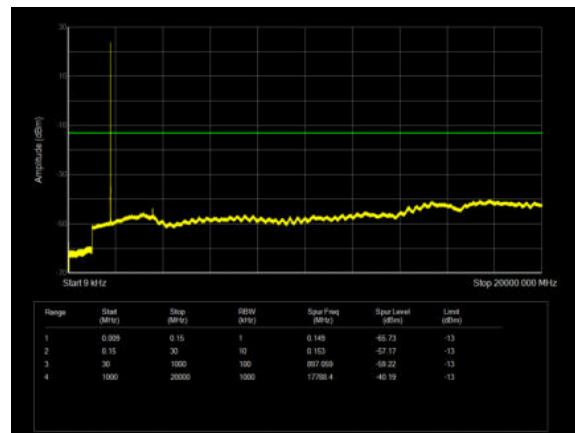
LTE Band 66 3MHz CH-Middle 9kHz ~20GHz



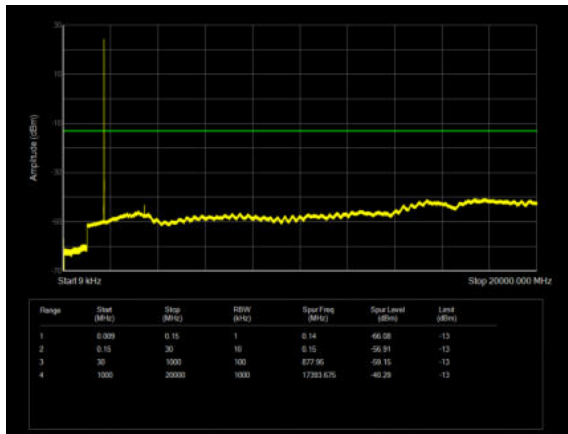
LTE Band 66 1.4MHz CH-High 9kHz ~20GHz



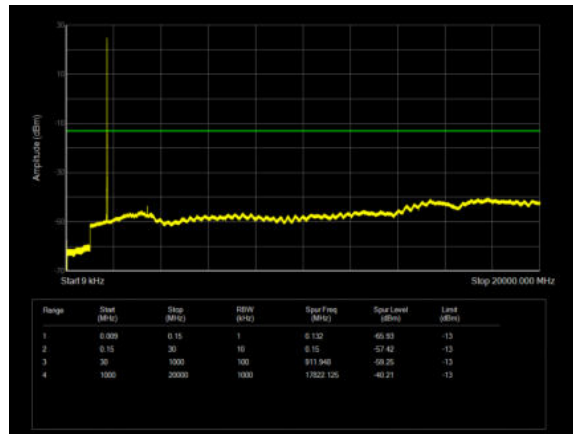
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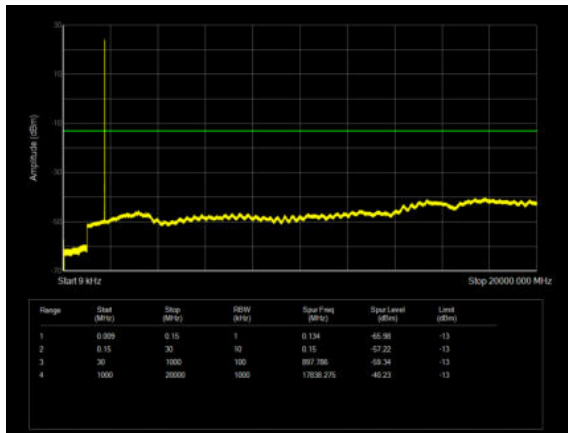
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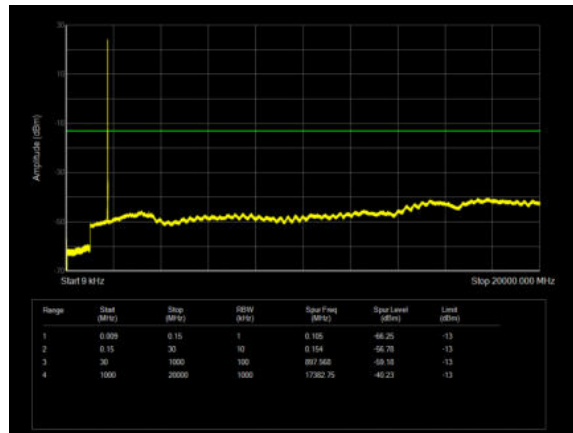
LTE Band 66 10MHz CH-Low 9kHz ~20GHz



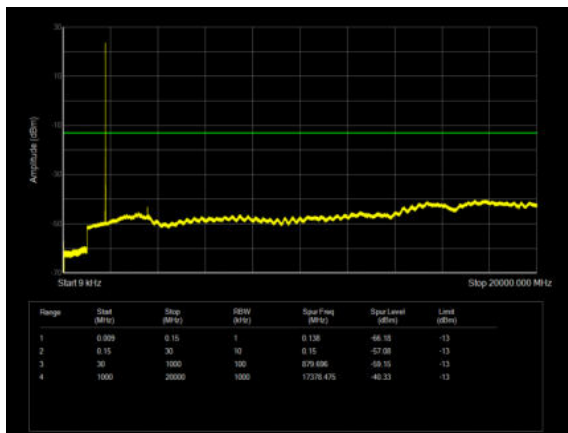
LTE Band 66 5MHz CH-Middle 9kHz ~20GHz



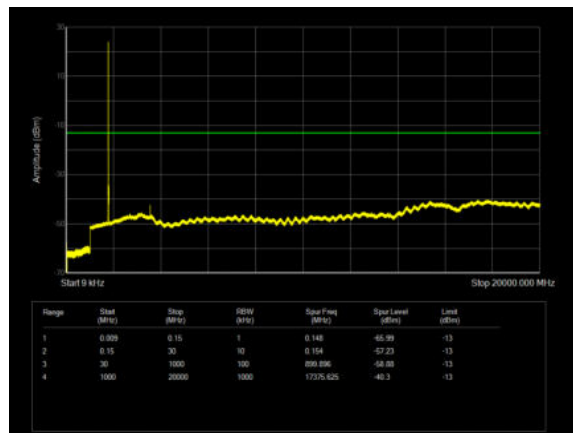
LTE Band 66 10MHz CH-Middle 9kHz ~20GHz



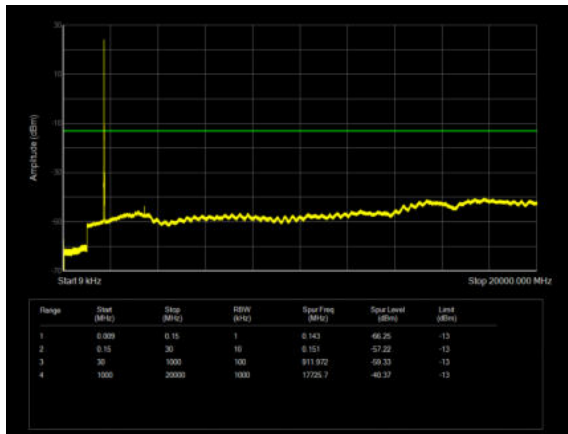
LTE Band 66 5MHz CH-High 9kHz ~20GHz



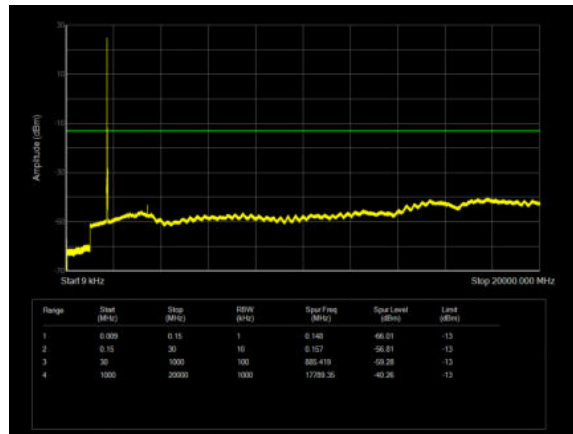
LTE Band 66 10MHz CH-High 9kHz ~20GHz



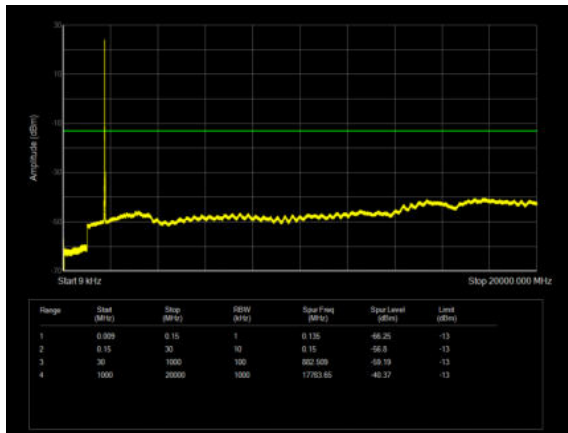
LTE Band 66 15MHz CH-Low 9kHz ~20GHz



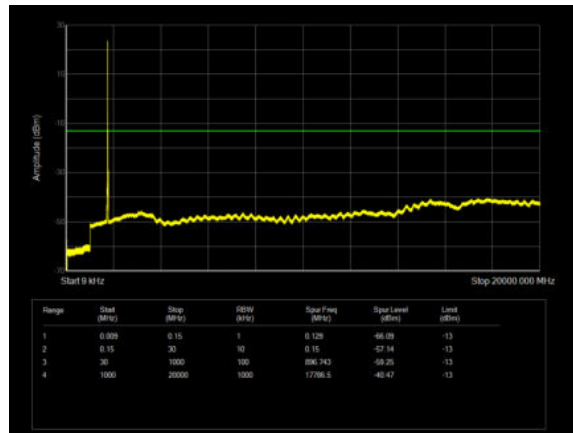
LTE Band 66 20MHz CH-Low 9kHz ~20GHz



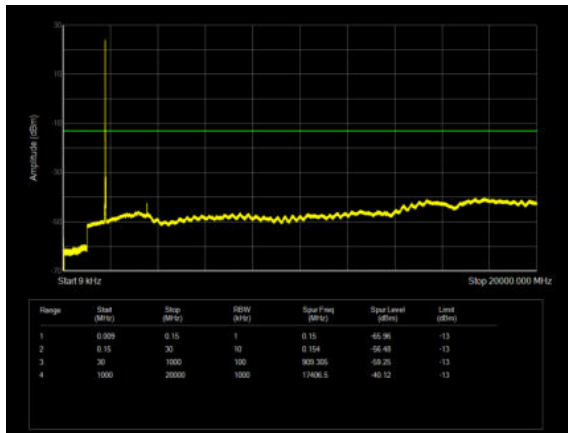
LTE Band 66 15MHz CH-Middle 9kHz ~20GHz



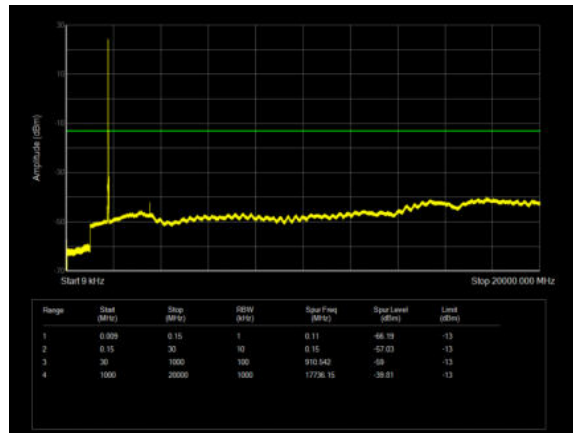
LTE Band 66 20MHz CH-Middle 9kHz ~20GHz



LTE Band 66 15MHz CH-High 9kHz ~20GHz



LTE Band 66 20MHz CH-High 9kHz ~20GHz



5.7 Radiated 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.

Low Antenna

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	-67.24	2.70	12.70	Vertical	-57.24	-13.00	44.24	111
3	5197.80	-63.23	3.20	12.50	Vertical	-53.93	-13.00	40.93	26
4	6930.40	-60.94	4.20	11.80	Vertical	-53.34	-13.00	40.34	133
5	8663.00	-55.90	4.40	12.50	Vertical	-47.80	-13.00	34.80	74
6	10395.60	-52.20	4.70	11.30	Vertical	-45.60	-13.00	32.60	169
7	12128.20	-53.35	5.20	13.80	Vertical	-44.75	-13.00	31.75	76
8	13860.80	-49.06	5.70	11.30	Vertical	-43.46	-13.00	30.46	22
9	15593.40	-57.31	6.10	16.80	Vertical	-46.61	-13.00	33.61	46
10	17326.00	-51.56	6.10	14.20	Vertical	-43.46	-13.00	30.46	111
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 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	3464.25	-73.09	2.70	12.70	Horizontal	-63.09	-13.00	50.09	13
3	5197.50	-71.94	3.20	12.50	Horizontal	-62.64	-13.00	49.64	91
4	6930.00	-71.91	4.20	11.80	Horizontal	-64.31	-13.00	51.31	86
5	8662.50	-65.95	4.40	12.50	Horizontal	-57.85	-13.00	44.85	124
6	10395.00	-61.50	4.70	11.30	Horizontal	-54.90	-13.00	41.90	45
7	12127.50	-63.10	5.20	13.80	Horizontal	-54.50	-13.00	41.50	135
8	13860.00	-58.56	5.70	11.30	Horizontal	-52.96	-13.00	39.96	146
9	15592.50	-66.91	6.10	16.80	Horizontal	-56.21	-13.00	43.21	201
10	17325.00	-61.45	6.10	14.20	Horizontal	-53.35	-13.00	40.35	33
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 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	-74.45	2.70	12.70	Horizontal	-64.45	-13.00	51.45	116
3	5191.50	-71.59	3.20	12.50	Horizontal	-62.29	-13.00	49.29	18
4	6920.00	-72.55	4.20	11.80	Horizontal	-64.95	-13.00	51.95	104
5	8650.00	-66.63	4.40	12.50	Horizontal	-58.53	-13.00	45.53	92
6	10380.00	-61.46	4.70	11.30	Horizontal	-54.86	-13.00	41.86	66
7	12110.00	-63.44	5.20	13.80	Horizontal	-54.84	-13.00	41.84	45
8	13840.00	-58.39	5.70	11.30	Horizontal	-52.79	-13.00	39.79	93
9	15570.00	-66.78	6.10	16.80	Horizontal	-56.08	-13.00	43.08	78
10	17300.00	-61.15	6.10	14.20	Horizontal	-53.05	-13.00	40.05	135

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 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	3445.00	-77.38	2.70	12.70	Horizontal	-67.38	-13.00	54.38	45
3	5170.88	-69.11	3.20	12.50	Horizontal	-59.81	-13.00	46.81	201
4	6890.00	-72.30	4.20	11.80	Horizontal	-64.70	-13.00	51.70	117
5	8612.50	-67.64	4.40	12.50	Horizontal	-59.54	-13.00	46.54	83
6	10335.00	-63.19	4.70	11.30	Horizontal	-56.59	-13.00	43.59	90
7	12057.50	-63.67	5.20	13.80	Horizontal	-55.07	-13.00	42.07	11
8	13780.00	-59.12	5.70	11.30	Horizontal	-53.52	-13.00	40.52	46
9	15502.50	-67.24	6.10	16.80	Horizontal	-56.54	-13.00	43.54	32
10	17225.00	-61.02	6.10	14.20	Horizontal	-52.92	-13.00	39.92	153

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 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	-62.60	3.40	12.50	Horizontal	-53.50	-25.00	28.50	69
3	7597.50	-58.41	4.40	12.20	Horizontal	-50.61	-25.00	25.61	45
4	10130.00	-49.34	4.70	11.30	Horizontal	-42.74	-25.00	17.74	135
5	12662.50	-42.67	5.40	13.20	Horizontal	-34.87	-25.00	9.87	150
6	15195.00	-51.80	6.10	13.10	Horizontal	-44.80	-25.00	19.80	304
7	17727.50	-51.54	6.10	14.20	Horizontal	-43.44	-25.00	18.44	89
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 Horizontal 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	-62.97	3.40	12.50	Horizontal	-53.87	-25.00	28.87	135
3	7575.00	-58.95	4.40	12.20	Horizontal	-51.15	-25.00	26.15	98
4	10100.00	-51.42	4.70	11.30	Horizontal	-44.82	-25.00	19.82	107
5	12625.00	-44.30	5.40	13.20	Horizontal	-36.50	-25.00	11.50	82
6	15150.00	-53.38	6.10	13.10	Horizontal	-46.38	-25.00	21.38	201
7	17675.00	-51.25	6.10	14.20	Horizontal	-43.15	-25.00	18.15	225
8	20208.80	--	--	--	--	--	--	--	--
9	22734.90	--	--	--	--	--	--	--	--
10	25261.00	--	--	--	--	--	--	--	--
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 Horizontal position.									

LTE Band 12 QPSK 1.4MHz 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	1413.60	-65.05	1.70	8.70	Horizontal	-60.20	-13.00	47.20	90
3	2120.40	-66.57	2.10	11.10	Horizontal	-59.72	-13.00	46.72	106
4	2827.20	-67.04	2.30	13.10	Horizontal	-58.39	-13.00	45.39	302
5	3537.50	-66.28	2.60	12.70	Horizontal	-58.33	-13.00	45.33	225
6	4245.00	-64.39	3.30	12.50	Horizontal	-57.34	-13.00	44.34	168
7	4952.50	-61.41	3.40	12.50	Horizontal	-54.46	-13.00	41.46	90
8	5660.00	-62.76	3.30	12.50	Horizontal	-55.71	-13.00	42.71	101
9	6367.50	-58.64	3.80	11.50	Horizontal	-53.09	-13.00	40.09	152
10	7075.00	-56.84	4.20	11.80	Horizontal	-51.39	-13.00	38.39	73
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 12 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	1410.60	-65.47	1.70	8.70	Horizontal	-60.62	-13.00	47.62	18
3	2115.90	-66.89	2.10	11.10	Horizontal	-60.04	-13.00	47.04	261
4	2820.00	-68.55	2.30	13.10	Horizontal	-59.90	-13.00	46.90	45
5	3525.00	-66.20	2.60	12.70	Horizontal	-58.25	-13.00	45.25	135
6	4230.00	-64.17	3.30	12.50	Horizontal	-57.12	-13.00	44.12	40
7	4935.00	-62.80	3.40	12.50	Horizontal	-55.85	-13.00	42.85	16
8	5640.00	-61.97	3.30	12.50	Horizontal	-54.92	-13.00	41.92	65
9	6345.00	-58.49	3.80	11.50	Horizontal	-52.94	-13.00	39.94	308
10	7050.00	-56.60	4.20	11.80	Horizontal	-51.15	-13.00	38.15	92
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 12 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	1405.00	-65.71	1.70	8.70	Horizontal	-60.86	-13.00	47.86	225
3	2107.50	-65.60	2.10	11.10	Horizontal	-58.75	-13.00	45.75	68
4	2810.00	-68.77	2.30	13.10	Horizontal	-60.12	-13.00	47.12	45
5	3512.50	-65.73	2.60	12.70	Horizontal	-57.78	-13.00	44.78	171
6	4215.00	-63.91	3.30	12.50	Horizontal	-56.86	-13.00	43.86	32
7	4917.50	-62.69	3.40	12.50	Horizontal	-55.74	-13.00	42.74	108
8	5620.00	-61.85	3.30	12.50	Horizontal	-54.80	-13.00	41.80	247
9	6322.50	-58.23	3.80	11.50	Horizontal	-52.68	-13.00	39.68	135
10	7025.00	-57.14	4.20	11.80	Horizontal	-51.69	-13.00	38.69	90
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 13 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	1559.00	-70.51	1.70	8.70	Horizontal	-63.51	-40.00	23.51	135
Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
3	2339.40	-65.82	2.10	12.00	Horizontal	-58.07	-13.00	45.07	204
4	3118.00	-67.44	2.30	13.10	Horizontal	-58.79	-13.00	45.79	45
5	3897.50	-64.09	2.90	12.50	Horizontal	-56.64	-13.00	43.64	221
6	4677.00	-62.78	3.10	12.50	Horizontal	-55.53	-13.00	42.53	90
7	5456.50	-61.55	3.30	12.50	Horizontal	-54.50	-13.00	41.50	16
8	6236.00	-59.94	3.50	12.80	Horizontal	-52.79	-13.00	39.79	152
9	7015.50	-56.74	4.20	11.80	Horizontal	-51.29	-13.00	38.29	83
10	7795.00	-57.08	4.40	12.30	Horizontal	-51.33	-13.00	38.33	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 13 QPSK 10MHz 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	1576.00	-79.30	1.70	8.70	Horizontal	-72.30	-40.00	32.30	0
Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
3	2333.32	-66.84	2.10	12.00	Horizontal	-59.09	-13.00	46.09	93
4	3108.00	-66.79	2.30	13.10	Horizontal	-58.14	-13.00	45.14	274
5	3885.00	-64.09	2.90	12.50	Horizontal	-56.64	-13.00	43.64	128
6	4662.00	-62.13	3.10	12.50	Horizontal	-54.88	-13.00	41.88	45
7	5439.00	-61.56	3.30	12.50	Horizontal	-54.51	-13.00	41.51	62
8	6216.00	-59.81	3.50	12.80	Horizontal	-52.66	-13.00	39.66	173
9	6993.00	-59.14	4.20	11.80	Horizontal	-53.69	-13.00	40.69	95
10	7770.00	-55.83	4.40	12.30	Horizontal	-50.08	-13.00	37.08	236
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 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	-65.62	1.70	8.70	Horizontal	-60.77	-13.00	47.77	18
3	2122.50	-66.45	2.10	11.10	Horizontal	-59.60	-13.00	46.60	201
4	3118.00	-66.66	2.50	13.10	Horizontal	-58.21	-13.00	45.21	3
5	3897.50	-64.36	2.60	12.70	Horizontal	-56.41	-13.00	43.41	28
6	4677.00	-61.91	3.30	12.50	Horizontal	-54.86	-13.00	41.86	17
7	5456.50	-61.29	3.40	12.50	Horizontal	-54.34	-13.00	41.34	183
8	6236.00	-59.52	3.40	12.80	Horizontal	-52.27	-13.00	39.27	24
9	7015.50	-56.30	4.10	11.50	Horizontal	-51.05	-13.00	38.05	14
10	7795.00	-55.89	4.20	12.20	Horizontal	-50.04	-13.00	37.04	174
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 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	-66.17	1.70	8.70	Horizontal	-61.32	-13.00	48.32	0
3	2115.00	-66.36	2.10	11.10	Horizontal	-59.51	-13.00	46.51	135
4	3108.00	-67.11	2.50	13.10	Horizontal	-58.66	-13.00	45.66	138
5	3885.00	-64.45	2.60	12.70	Horizontal	-56.50	-13.00	43.50	28
6	4662.00	-62.75	3.30	12.50	Horizontal	-55.70	-13.00	42.70	165
7	5439.00	-61.16	3.40	12.50	Horizontal	-54.21	-13.00	41.21	75
8	6216.00	-59.63	3.40	12.80	Horizontal	-52.38	-13.00	39.38	83
9	6993.00	-59.40	4.10	11.50	Horizontal	-54.15	-13.00	41.15	41
10	7770.00	-56.61	4.20	12.20	Horizontal	-50.76	-13.00	37.76	11
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 38 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	5185.00	-63.34	3.20	12.50	Horizontal	-54.04	-25.00	29.04	38
3	7777.50	-58.17	4.40	12.30	Horizontal	-50.27	-25.00	25.27	16
4	10370.00	-48.23	4.70	11.80	Horizontal	-41.13	-25.00	16.13	125
5	12962.50	-47.41	5.40	14.00	Horizontal	-38.81	-25.00	13.81	142
6	15555.00	-56.60	6.10	16.80	Horizontal	-45.90	-25.00	20.90	135
7	18147.50	--	--	--	--	--	--	--	--
8	20740.00	--	--	--	--	--	--	--	--
9	23332.50	--	--	--	--	--	--	--	--
10	25925.00	--	--	--	--	--	--	--	--
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 Horizontal position.									

LTE Band 38 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	5170.00	-63.92	3.20	12.50	Horizontal	-54.62	-25.00	29.62	48
3	7755.00	-58.28	4.40	12.30	Horizontal	-50.38	-25.00	25.38	222
4	10340.00	-46.23	4.70	11.80	Horizontal	-39.13	-25.00	14.13	14
5	12925.00	-46.21	5.40	14.00	Horizontal	-37.61	-25.00	12.61	24
6	15510.00	-57.14	6.10	16.80	Horizontal	-46.44	-25.00	21.44	14
7	18095.00	--	--	--	--	--	--	--	--
8	20680.00	--	--	--	--	--	--	--	--
9	23265.00	--	--	--	--	--	--	--	--
10	25850.00	--	--	--	--	--	--	--	--

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 Horizontal 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	-62.73	3.20	12.50	Horizontal	-53.43	-25.00	28.43	90
3	7771.50	-58.25	4.40	12.30	Horizontal	-50.35	-25.00	25.35	68
4	10362.00	-45.95	4.70	11.80	Horizontal	-38.85	-25.00	13.85	220
5	12952.50	-47.23	5.40	14.00	Horizontal	-38.63	-25.00	13.63	135
6	15543.00	-56.34	6.10	16.80	Horizontal	-45.64	-25.00	20.64	46
7	18133.50	--	--	--	--	--	--	--	--
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 Horizontal 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	-62.85	3.20	12.50	Horizontal	-53.55	-25.00	28.55	135
3	7749.00	-57.45	4.40	12.30	Horizontal	-49.55	-25.00	24.55	217
4	10332.00	-45.74	4.70	11.80	Horizontal	-38.64	-25.00	13.64	52
5	12915.00	-45.94	5.40	14.00	Horizontal	-37.34	-25.00	12.34	90
6	15498.00	-56.47	6.10	16.80	Horizontal	-45.77	-25.00	20.77	45
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 Horizontal position.

LTE Band 66 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	3488.60	-71.26	2.70	12.70	Horizontal	-61.26	-13.00	48.26	135
3	5232.90	-74.24	3.20	12.50	Horizontal	-64.94	-13.00	51.94	0
4	6977.20	-72.44	4.20	11.80	Horizontal	-64.84	-13.00	51.84	88
5	8721.50	-65.20	4.40	12.50	Horizontal	-57.10	-13.00	44.10	42
6	10465.80	-62.63	4.70	11.80	Horizontal	-55.53	-13.00	42.53	178
7	12210.10	-62.57	5.20	13.80	Horizontal	-53.97	-13.00	40.97	201
8	13954.40	-61.33	5.70	13.20	Horizontal	-53.83	-13.00	40.83	33
9	15698.70	-66.16	6.10	16.80	Horizontal	-55.46	-13.00	42.46	64
10	17443.00	-61.44	6.10	14.20	Horizontal	-53.34	-13.00	40.34	9

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 66 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	3486.00	39.67	2.70	12.70	Horizontal	49.67	221	49.67	221
3	5229.00	41.85	3.20	12.50	Horizontal	51.15	108	51.15	108
4	6972.00	43.80	4.20	11.80	Horizontal	51.40	75	51.40	75
5	8715.00	36.84	4.40	12.50	Horizontal	44.94	32	44.94	32
6	10458.00	35.46	4.70	11.80	Horizontal	42.56	48	42.56	48
7	12201.00	32.44	5.20	13.80	Horizontal	41.04	163	41.04	163
8	13944.00	32.85	5.70	13.20	Horizontal	40.35	180	40.35	180
9	15687.00	31.32	6.10	16.80	Horizontal	42.02	45	42.02	45
10	17430.00	32.82	6.10	14.20	Horizontal	40.92	276	40.92	276

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 66 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	3472.88	-73.53	2.70	12.70	Horizontal	-63.53	-13.00	50.53	308
3	5209.00	-71.74	3.20	12.50	Horizontal	-62.44	-13.00	49.44	294
4	6945.75	-72.66	4.20	11.80	Horizontal	-65.06	-13.00	52.06	180
5	8682.00	-66.78	4.40	12.50	Horizontal	-58.68	-13.00	45.68	45
6	10418.63	-62.69	4.70	11.80	Horizontal	-55.59	-13.00	42.59	111
7	12455.00	-64.24	5.20	13.80	Horizontal	-55.64	-13.00	42.64	38
8	13891.50	-61.23	5.70	13.20	Horizontal	-53.73	-13.00	40.73	46
9	15627.00	-66.24	6.10	16.80	Horizontal	-55.54	-13.00	42.54	12
10	17364.38	-61.56	6.10	14.20	Horizontal	-53.46	-13.00	40.46	114

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.

Upper Antenna

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	-66.77	2.70	12.70	Horizontal	-56.77	-13.00	43.77	165
3	5197.80	-63.12	3.20	12.50	Horizontal	-53.82	-13.00	40.82	79
4	6930.40	-61.90	4.20	11.80	Horizontal	-54.30	-13.00	41.30	11
5	8663.00	-56.20	4.40	12.50	Horizontal	-48.10	-13.00	35.10	38
6	10395.60	-51.51	4.70	11.30	Horizontal	-44.91	-13.00	31.91	74
7	12128.20	-52.61	5.20	13.80	Horizontal	-44.01	-13.00	31.01	28
8	13860.80	-48.31	5.70	11.30	Horizontal	-42.71	-13.00	29.71	186
9	15593.40	-55.26	6.10	16.80	Horizontal	-44.56	-13.00	31.56	28
10	17326.00	-50.00	6.10	14.20	Horizontal	-41.90	-13.00	28.90	14

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	3464.25	-66.97	2.70	12.70	Vertical	-56.97	-13.00	43.97	13
3	5197.50	-75.08	3.20	12.50	Vertical	-65.78	-13.00	52.78	91
4	6930.00	-72.53	4.20	11.80	Vertical	-64.93	-13.00	51.93	86
5	8662.50	-65.94	4.40	12.50	Vertical	-57.84	-13.00	44.84	124
6	10395.00	-61.70	4.70	11.30	Vertical	-55.10	-13.00	42.10	45
7	12127.50	-63.49	5.20	13.80	Vertical	-54.89	-13.00	41.89	135
8	13860.00	-59.37	5.70	11.30	Vertical	-53.77	-13.00	40.77	146
9	15592.50	-66.81	6.10	16.80	Vertical	-56.11	-13.00	43.11	201
10	17325.00	-61.72	6.10	14.20	Vertical	-53.62	-13.00	40.62	33

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	-68.31	2.70	12.70	Vertical	-58.31	-13.00	45.31	116
3	5191.50	-74.33	3.20	12.50	Vertical	-65.03	-13.00	52.03	18
4	6920.00	-72.56	4.20	11.80	Vertical	-64.96	-13.00	51.96	104
5	8650.00	-66.80	4.40	12.50	Vertical	-58.70	-13.00	45.70	92
6	10380.00	-62.12	4.70	11.30	Vertical	-55.52	-13.00	42.52	66
7	12110.00	-63.27	5.20	13.80	Vertical	-54.67	-13.00	41.67	45
8	13840.00	-58.29	5.70	11.30	Vertical	-52.69	-13.00	39.69	93
9	15570.00	-66.65	6.10	16.80	Vertical	-55.95	-13.00	42.95	78
10	17300.00	-61.09	6.10	14.20	Vertical	-52.99	-13.00	39.99	135

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	3445.00	-68.58	2.70	12.70	Vertical	-58.58	-13.00	45.58	45
3	5170.88	-73.81	3.20	12.50	Vertical	-64.51	-13.00	51.51	201
4	6890.00	-73.02	4.20	11.80	Vertical	-65.42	-13.00	52.42	117
5	8612.50	-67.70	4.40	12.50	Vertical	-59.60	-13.00	46.60	83
6	10335.00	-62.99	4.70	11.30	Vertical	-56.39	-13.00	43.39	90
7	12057.50	-63.86	5.20	13.80	Vertical	-55.26	-13.00	42.26	11
8	13780.00	-59.48	5.70	11.30	Vertical	-53.88	-13.00	40.88	46
9	15502.50	-66.85	6.10	16.80	Vertical	-56.15	-13.00	43.15	32
10	17225.00	-61.53	6.10	14.20	Vertical	-53.43	-13.00	40.43	153

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	-62.91	3.40	12.50	Vertical	-53.81	-25.00	28.81	69
3	7597.50	-57.21	4.40	12.20	Vertical	-49.41	-25.00	24.41	45
4	10130.00	-47.61	4.70	11.30	Vertical	-41.01	-25.00	16.01	135
5	12662.50	-42.51	5.40	13.20	Vertical	-34.71	-25.00	9.71	150
6	15195.00	-52.25	6.10	13.10	Vertical	-45.25	-25.00	20.25	304
7	17727.50	-50.22	6.10	14.20	Vertical	-42.12	-25.00	17.12	89
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	-63.46	3.40	12.50	Vertical	-54.36	-25.00	29.36	135
3	7575.00	-58.14	4.40	12.20	Vertical	-50.34	-25.00	25.34	98
4	10100.00	-51.15	4.70	11.30	Vertical	-44.55	-25.00	19.55	107
5	12625.00	-43.97	5.40	13.20	Vertical	-36.17	-25.00	11.17	82
6	15150.00	-51.37	6.10	13.10	Vertical	-44.37	-25.00	19.37	201
7	17675.00	-50.12	6.10	14.20	Vertical	-42.02	-25.00	17.02	225
8	20208.80	--	--	--	--	--	--	--	--
9	22734.90	--	--	--	--	--	--	--	--
10	25261.00	--	--	--	--	--	--	--	--
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 12 QPSK 1.4MHz 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	1413.60	-60.26	1.70	8.70	Vertical	-55.41	-13.00	42.41	90
3	2120.40	-59.53	2.10	11.10	Vertical	-52.68	-13.00	39.68	261
4	2827.20	-68.01	2.30	13.10	Vertical	-59.36	-13.00	46.36	88
5	3537.50	-66.22	2.60	12.70	Vertical	-58.27	-13.00	45.27	225
6	4245.00	-63.20	3.30	12.50	Vertical	-56.15	-13.00	43.15	168
7	4952.50	-62.10	3.40	12.50	Vertical	-55.15	-13.00	42.15	90
8	5660.00	-61.59	3.30	12.50	Vertical	-54.54	-13.00	41.54	101
9	6367.50	-58.70	3.80	11.50	Vertical	-53.15	-13.00	40.15	152
10	7075.00	-55.85	4.20	11.80	Vertical	-50.40	-13.00	37.40	73

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 12 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	1410.60	-63.95	1.70	8.70	Vertical	-59.10	-13.00	46.10	127
3	2115.90	-58.63	2.10	11.10	Vertical	-51.78	-13.00	38.78	45
4	2820.00	-68.39	2.30	13.10	Vertical	-59.74	-13.00	46.74	13
5	3525.00	-66.32	2.60	12.70	Vertical	-58.37	-13.00	45.37	135
6	4230.00	-63.74	3.30	12.50	Vertical	-56.69	-13.00	43.69	40
7	4935.00	-62.31	3.40	12.50	Vertical	-55.36	-13.00	42.36	16
8	5640.00	-62.15	3.30	12.50	Vertical	-55.10	-13.00	42.10	65
9	6345.00	-58.98	3.80	11.50	Vertical	-53.43	-13.00	40.43	308
10	7050.00	-56.54	4.20	11.80	Vertical	-51.09	-13.00	38.09	92

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 12 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	1405.00	-61.64	1.70	8.70	Vertical	-56.79	-13.00	43.79	92
3	2107.50	-59.40	2.10	11.10	Vertical	-52.55	-13.00	39.55	47
4	2810.00	-68.37	2.30	13.10	Vertical	-59.72	-13.00	46.72	101
5	3512.50	-66.03	2.60	12.70	Vertical	-58.08	-13.00	45.08	171
6	4215.00	-63.17	3.30	12.50	Vertical	-56.12	-13.00	43.12	32
7	4917.50	-62.51	3.40	12.50	Vertical	-55.56	-13.00	42.56	108
8	5620.00	-61.69	3.30	12.50	Vertical	-54.64	-13.00	41.64	247
9	6322.50	-58.68	3.80	11.50	Vertical	-53.13	-13.00	40.13	135
10	7025.00	-56.49	4.20	11.80	Vertical	-51.04	-13.00	38.04	90

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 13 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	1559.00	-68.65	1.70	8.70	Vertical	-61.65	-40.00	21.65	45
Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
3	2339.40	-58.48	2.10	12.00	Vertical	-50.73	-13.00	37.73	93
4	3118.00	-66.99	2.30	13.10	Vertical	-58.34	-13.00	45.34	16
5	3897.50	-65.08	2.90	12.50	Vertical	-57.63	-13.00	44.63	27
6	4677.00	-62.75	3.10	12.50	Vertical	-55.50	-13.00	42.50	165
7	5456.50	-61.67	3.30	12.50	Vertical	-54.62	-13.00	41.62	38
8	6236.00	-60.13	3.50	12.80	Vertical	-52.98	-13.00	39.98	11
9	7015.50	-55.50	4.20	11.80	Vertical	-50.05	-13.00	37.05	224
10	7795.00	-56.68	4.40	12.30	Vertical	-50.93	-13.00	37.93	114

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 13 QPSK 10MHz 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	1576.00	-78.83	1.70	8.70	Vertical	-71.83	-40.00	31.83	314
Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
3	2333.32	-57.58	2.10	12.00	Vertical	-49.83	-13.00	36.83	189
4	3108.00	-68.54	2.30	13.10	Vertical	-59.89	-13.00	46.89	45
5	3885.00	-64.48	2.90	12.50	Vertical	-57.03	-13.00	44.03	22
6	4662.00	-63.13	3.10	12.50	Vertical	-55.88	-13.00	42.88	186
7	5439.00	-61.68	3.30	12.50	Vertical	-54.63	-13.00	41.63	97
8	6216.00	-60.11	3.50	12.80	Vertical	-52.96	-13.00	39.96	80
9	6993.00	-60.10	4.20	11.80	Vertical	-54.65	-13.00	41.65	135
10	7770.00	-58.20	4.40	12.30	Vertical	-52.45	-13.00	39.45	249
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	-57.69	1.70	8.70	Vertical	-52.84	-13.00	39.84	225
3	2122.50	-57.90	2.10	11.10	Vertical	-51.05	-13.00	38.05	90
4	2830.00	-67.46	2.50	13.10	Vertical	-59.01	-13.00	46.01	135
5	3118.00	-65.75	2.60	12.70	Vertical	-57.80	-13.00	44.80	3
6	3897.50	-64.12	3.30	12.50	Vertical	-57.07	-13.00	44.07	28
7	4677.00	-62.23	3.40	12.50	Vertical	-55.28	-13.00	42.28	17
8	5456.50	-61.05	3.40	12.80	Vertical	-53.80	-13.00	40.80	183
9	6236.00	-58.30	4.10	11.50	Vertical	-53.05	-13.00	40.05	24
10	7015.50	-56.83	4.20	12.20	Vertical	-50.98	-13.00	37.98	14
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	-61.79	1.70	8.70	Vertical	-56.94	-13.00	43.94	45
3	2115.00	-58.19	2.10	11.10	Vertical	-51.34	-13.00	38.34	0
4	2820.00	-68.02	2.50	13.10	Vertical	-59.57	-13.00	46.57	86
5	3108.00	-66.10	2.60	12.70	Vertical	-58.15	-13.00	45.15	138
6	3885.00	-63.62	3.30	12.50	Vertical	-56.57	-13.00	43.57	28
7	4662.00	-62.11	3.40	12.50	Vertical	-55.16	-13.00	42.16	165
8	5439.00	-61.45	3.40	12.80	Vertical	-54.20	-13.00	41.20	75
9	6216.00	-57.53	4.10	11.50	Vertical	-52.28	-13.00	39.28	83
10	6993.00	-60.07	4.20	12.20	Vertical	-54.22	-13.00	41.22	41

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 38 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	5185.00	-61.00	3.20	12.50	Vertical	-51.70	-25.00	26.70	38
3	7777.50	-56.65	4.40	12.30	Vertical	-48.75	-25.00	23.75	16
4	10370.00	-45.37	4.70	11.80	Vertical	-38.27	-25.00	13.27	125
5	12962.50	-44.83	5.40	14.00	Vertical	-36.23	-25.00	11.23	142
6	15555.00	-56.49	6.10	16.80	Vertical	-45.79	-25.00	20.79	135
7	18147.50	--	--	--	--	--	--	--	--
8	20740.00	--	--	--	--	--	--	--	--
9	23332.50	--	--	--	--	--	--	--	--
10	25925.00	--	--	--	--	--	--	--	--

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 38 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	5170.00	-63.99	3.20	12.50	Vertical	-54.69	-25.00	29.69	75
3	7755.00	-58.02	4.40	12.30	Vertical	-50.12	-25.00	25.12	25
4	10340.00	-45.35	4.70	11.80	Vertical	-38.25	-25.00	13.25	38
5	12925.00	-47.69	5.40	14.00	Vertical	-39.09	-25.00	14.09	75
6	15510.00	-56.58	6.10	16.80	Vertical	-45.88	-25.00	20.88	125
7	18095.00	--	--	--	--	--	--	--	--
8	20680.00	--	--	--	--	--	--	--	--
9	23265.00	--	--	--	--	--	--	--	--
10	25850.00	--	--	--	--	--	--	--	--

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 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	-61.53	3.20	12.50	Vertical	-52.23	-25.00	27.23	135
3	7771.50	-49.54	4.40	12.30	Vertical	-41.64	-25.00	16.64	270
4	10362.00	-48.42	4.70	11.80	Vertical	-41.32	-25.00	16.32	45
5	13952.50	-48.28	5.40	14.00	Vertical	-39.68	-25.00	14.68	90
6	15543.00	-56.68	6.10	16.80	Vertical	-45.98	-25.00	20.98	264
7	18133.50	--	--	--	--	--	--	--	--
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	-59.43	3.20	12.50	Vertical	-50.13	-25.00	25.13	106
3	7749.00	-46.25	4.40	12.30	Vertical	-38.35	-25.00	13.35	82
4	10332.00	-50.00	4.70	11.80	Vertical	-42.90	-25.00	17.90	73
5	12915.00	-46.88	5.40	14.00	Vertical	-38.28	-25.00	13.28	135
6	15498.00	-57.88	6.10	16.80	Vertical	-47.18	-25.00	22.18	241
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.

LTE Band 66 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	3488.60	-69.56	2.70	12.70	Vertical	-59.56	-13.00	46.56	180
3	5232.90	-73.92	3.20	12.50	Vertical	-64.62	-13.00	51.62	53
4	6977.20	-73.21	4.20	11.80	Vertical	-65.61	-13.00	52.61	261
5	8721.50	-67.37	4.40	12.50	Vertical	-59.27	-13.00	46.27	78
6	10465.80	-63.09	4.70	11.80	Vertical	-55.99	-13.00	42.99	135
7	12210.10	-62.78	5.20	13.80	Vertical	-54.18	-13.00	41.18	164
8	13954.40	-61.62	5.70	13.20	Vertical	-54.12	-13.00	41.12	99
9	15698.70	-66.81	6.10	16.80	Vertical	-56.11	-13.00	43.11	0
10	17443.00	-63.19	6.10	14.20	Vertical	-55.09	-13.00	42.09	204

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 66 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	3486.00	-70.59	2.70	12.70	Vertical	-60.59	-13.00	47.59	45
3	5229.00	-74.72	3.20	12.50	Vertical	-65.42	-13.00	52.42	143
4	6972.00	-73.16	4.20	11.80	Vertical	-65.56	-13.00	52.56	81
5	8715.00	-67.23	4.40	12.50	Vertical	-59.13	-13.00	46.13	92
6	10458.00	-63.24	4.70	11.80	Vertical	-56.14	-13.00	43.14	228
7	12201.00	-62.36	5.20	13.80	Vertical	-53.76	-13.00	40.76	254
8	13944.00	-62.25	5.70	13.20	Vertical	-54.75	-13.00	41.75	309
9	15687.00	-66.45	6.10	16.80	Vertical	-55.75	-13.00	42.75	60
10	17430.00	-63.37	6.10	14.20	Vertical	-55.27	-13.00	42.27	272

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 66 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	3472.88	-69.21	2.70	12.70	Vertical	-59.21	-13.00	46.21	48
3	5209.00	-74.10	3.20	12.50	Vertical	-64.80	-13.00	51.80	13
4	6945.75	-72.90	4.20	11.80	Vertical	-65.30	-13.00	52.30	225
5	8682.00	-66.97	4.40	12.50	Vertical	-58.87	-13.00	45.87	184
6	10418.63	-63.08	4.70	11.80	Vertical	-55.98	-13.00	42.98	90
7	12455.00	-65.28	5.20	13.80	Vertical	-56.68	-13.00	43.68	135
8	13891.50	-61.77	5.70	13.20	Vertical	-54.27	-13.00	41.27	19
9	15627.00	-66.37	6.10	16.80	Vertical	-55.67	-13.00	42.67	108
10	17364.38	-61.87	6.10	14.20	Vertical	-53.77	-13.00	40.77	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.

6 Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Climate Chamber	WEISS	VT 4002	582261194500 10	2023-05-12	2024-05-11
Wireless Communication Tester	R&S	CMW500	150415	2023-05-12	2024-05-11
Spectrum Analyzer	Keysight	N9020A	MY50510203	2023-05-12	2024-05-11
Wireless Communication Tester	Agilent	E5515C	MY48367192	2023-05-12	2024-05-11
DC Power Supply	UNI-T	UTP1310+	C220795889	2023-05-12	2024-05-11
Spectrum Analyzer	R&S	FSV3030	101411	2022-12-10	2023-12-09
Radiated Spurious Emission					
Signal Analyzer	R&S	FSV30	100815	2022-12-10	2023-12-09
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2023-04-16	2026-04-15
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	391	2022-09-29	2025-09-28
Horn Antenna	Schwarzbeck	BBHA 9120D	1594	2020-12-17	2023-12-16
Horn Antenna	ETS-Lindgren	3160-09	00102643	2021-10-10	2024-10-09
Software	R&S	EMC32	10.35.10	/	/

ANNEX A: The EUT Appearance

The EUT Appearance are submitted separately.

ANNEX B: Test Setup Photos

The Test Setup Photos are submitted separately.

ANNEX C: Product Change Description

The Product Change Description are submitted separately.

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