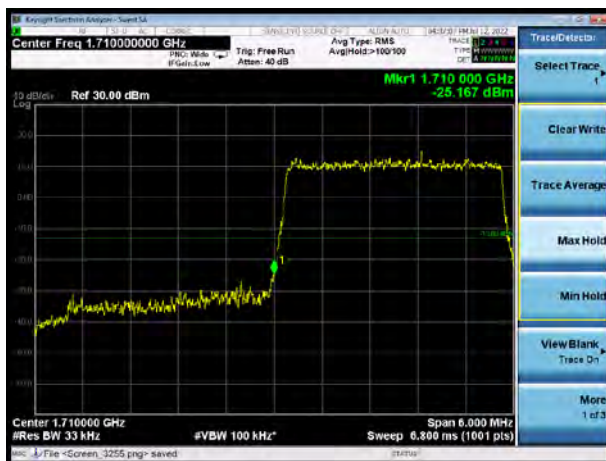
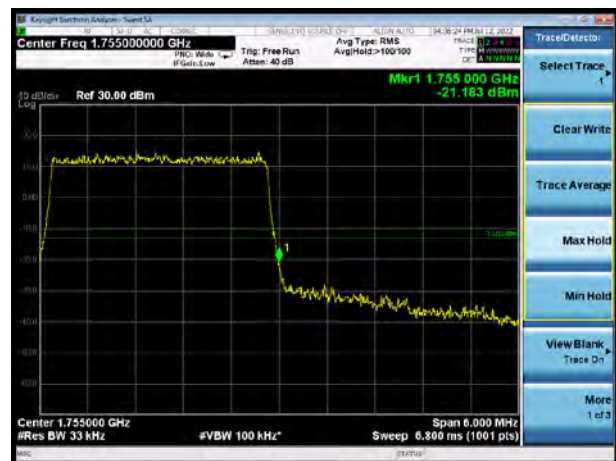




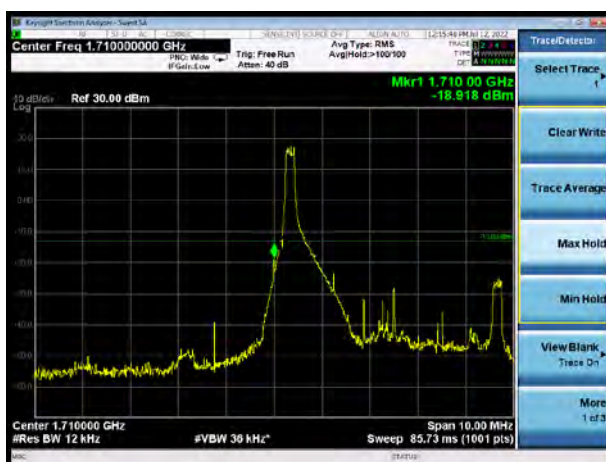
LTE Band 4 QPSK 3MHz CH-Low, 100%RB



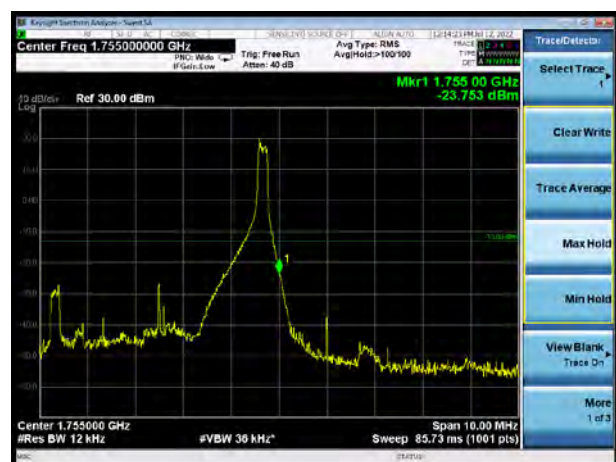
LTE Band 4 QPSK 3MHz CH-High, 100%RB



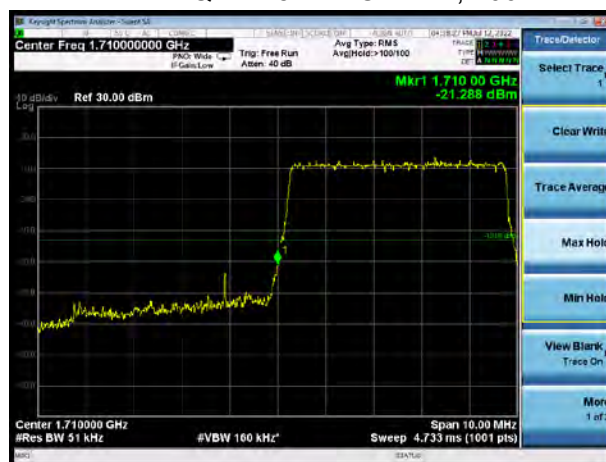
LTE Band 4 QPSK 5MHz CH-Low, 1 RB



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



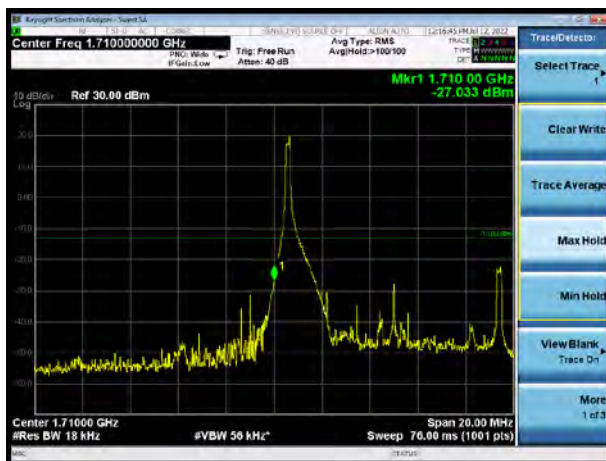
LTE Band 4 QPSK 5MHz CH-Low, 100%RB



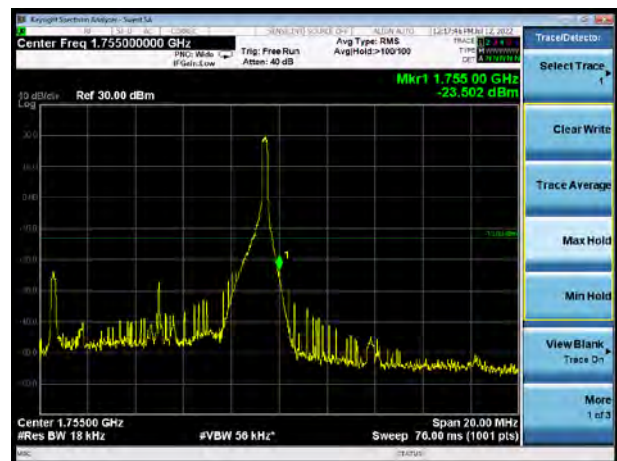
LTE Band 4 QPSK 5MHz CH-High, 100%RB



LTE Band 4 QPSK 10MHz CH-Low, 1 RB



LTE Band 4 QPSK 10MHz CH-High, 1 RB



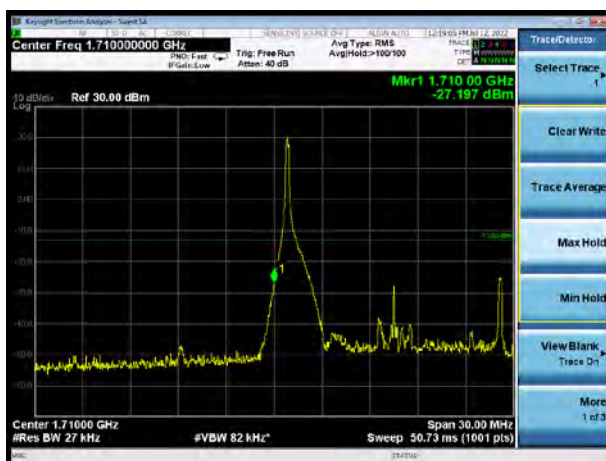
LTE Band 4 QPSK 10MHz CH-Low, 100%RB



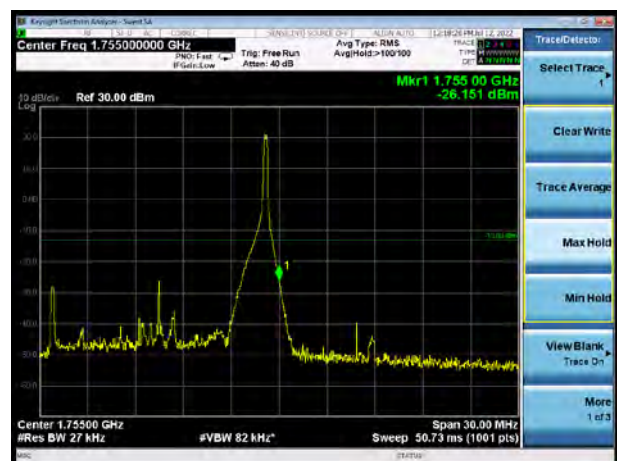
LTE Band 4 QPSK 10MHz CH-High, 100%RB



LTE Band 4 QPSK 15MHz CH-Low, 1 RB

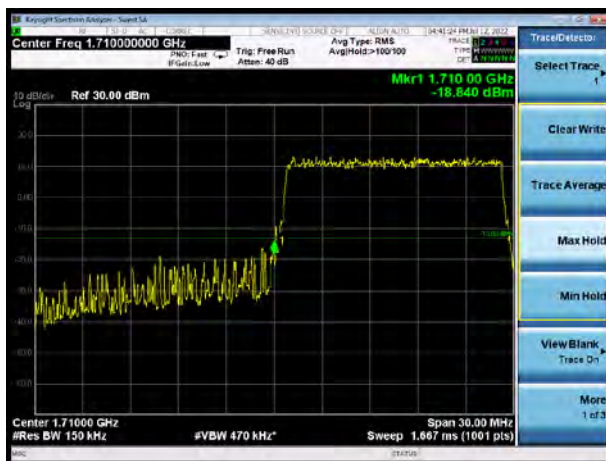


LTE Band 4 QPSK 15MHz CH-High, 1 RB





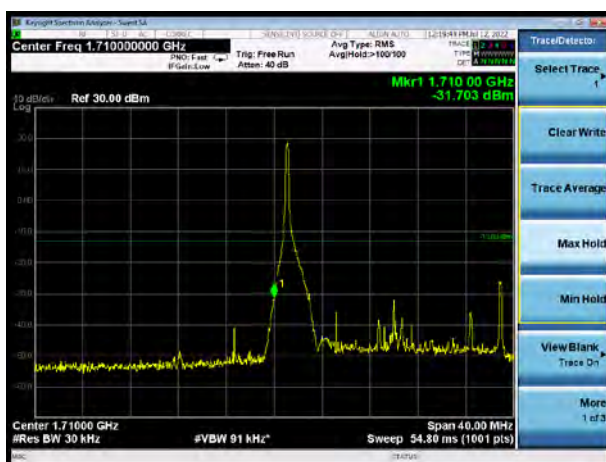
LTE Band 4 QPSK 15MHz CH-Low, 100%RB



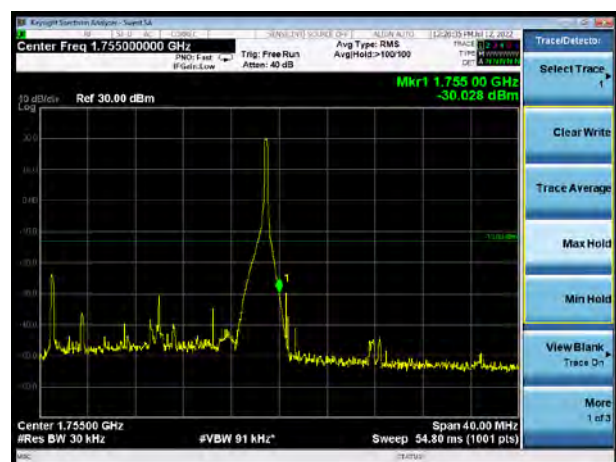
LTE Band 4 QPSK 15MHz CH-High, 100%RB



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



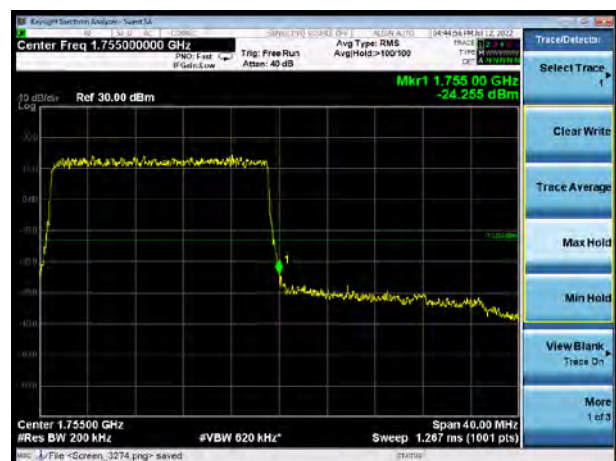
LTE Band 4 QPSK 20MHz CH-High, 1 RB



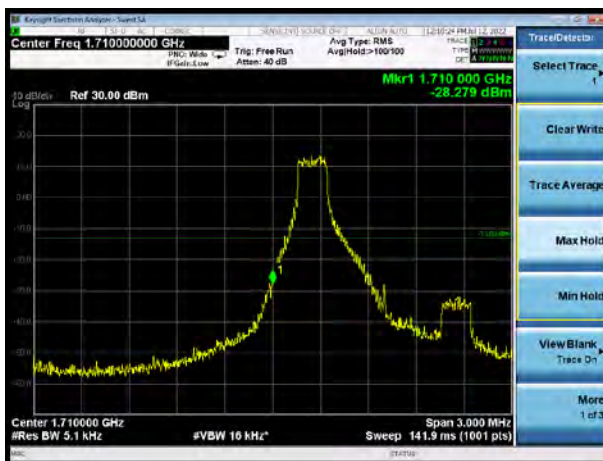
LTE Band 4 QPSK 20MHz CH-Low, 100%RB



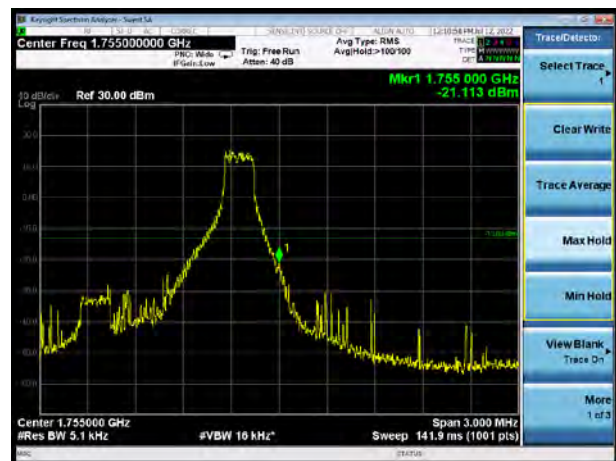
LTE Band 4 QPSK 20MHz CH-High, 100%RB



LTE Band 4 16QAM 1.4MHz CH-Low, 1 RB



LTE Band 4 16QAM 1.4MHz CH-High, 1 RB



LTE Band 4 16QAM 1.4MHz CH-Low, 100%RB



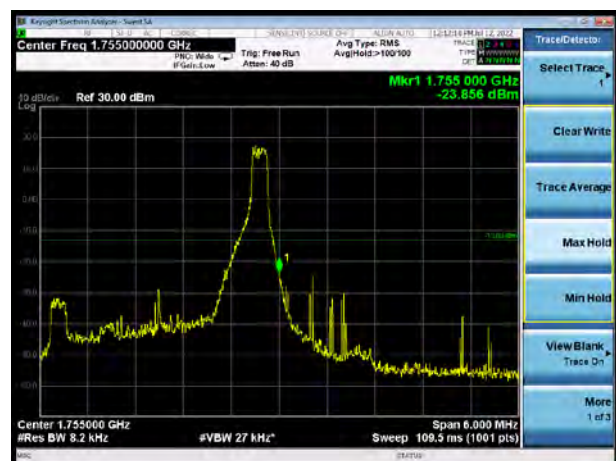
LTE Band 4 16QAM 1.4MHz CH-High, 100%RB



LTE Band 4 16QAM 3MHz CH-Low, 1 RB

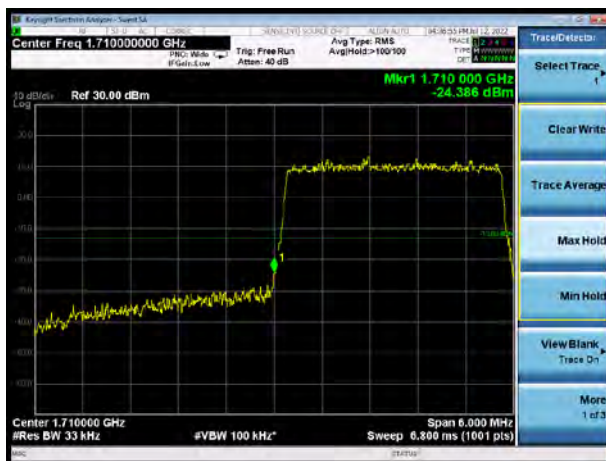


LTE Band 4 16QAM 3MHz CH-High, 1 RB

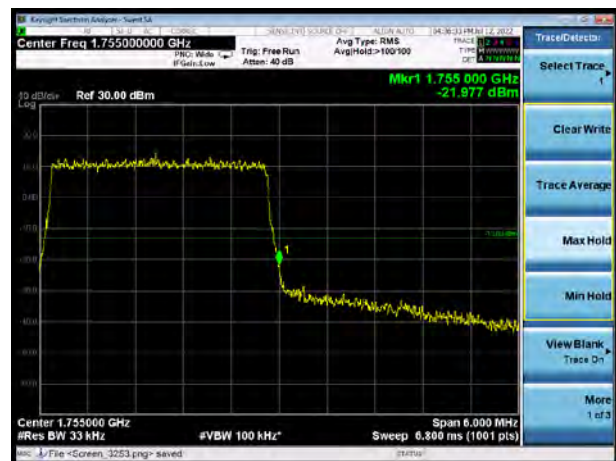




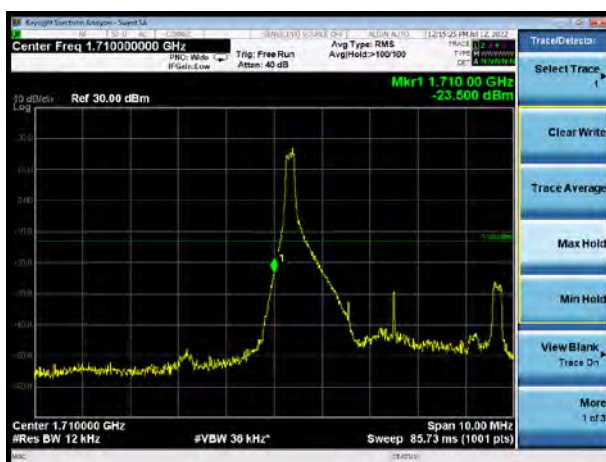
LTE Band 4 16QAM 3MHz CH-Low, 100%RB



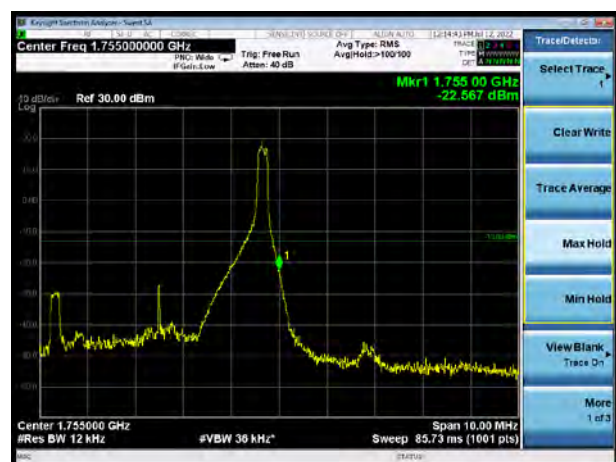
LTE Band 4 16QAM 3MHz CH-High, 100%RB



LTE Band 4 16QAM 5MHz CH-Low, 1 RB



LTE Band 4 16QAM 5MHz CH-High, 1 RB



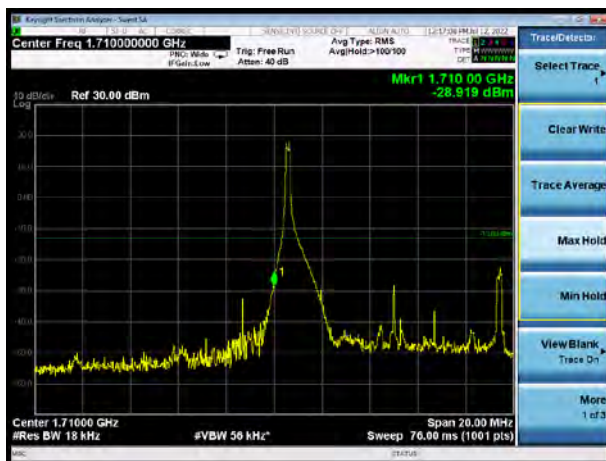
LTE Band 4 16QAM 5MHz CH-Low, 100%RB



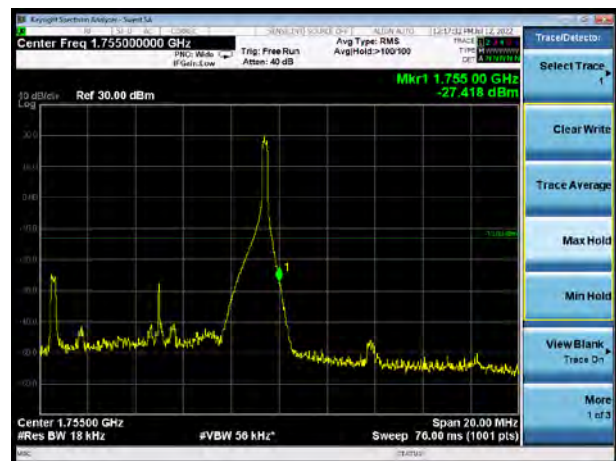
LTE Band 4 16QAM 5MHz CH-High, 100%RB



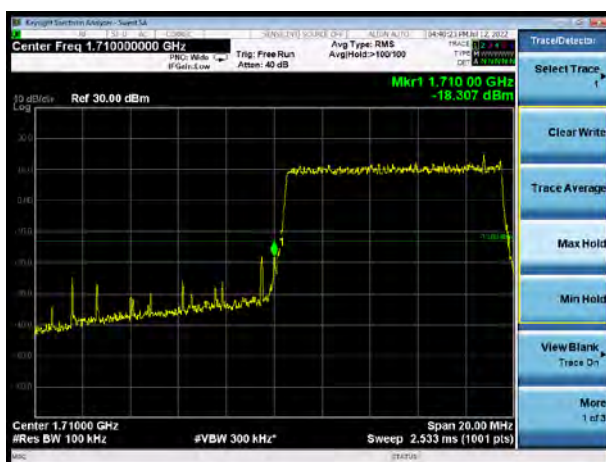
LTE Band 4 16QAM 10MHz CH-Low, 1 RB



LTE Band 4 16QAM 10MHz CH-High, 1 RB



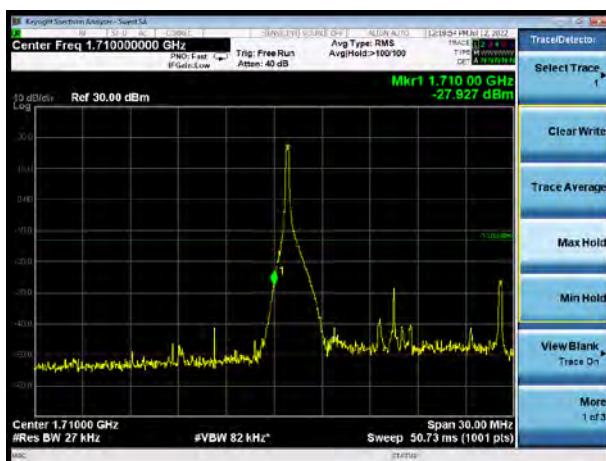
LTE Band 4 16QAM 10MHz CH-Low, 100%RB



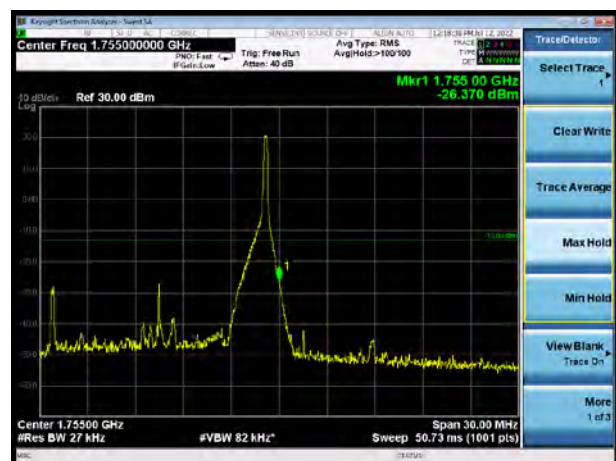
LTE Band 4 16QAM 10MHz CH-High, 100%RB



LTE Band 4 16QAM 15MHz CH-Low, 1 RB

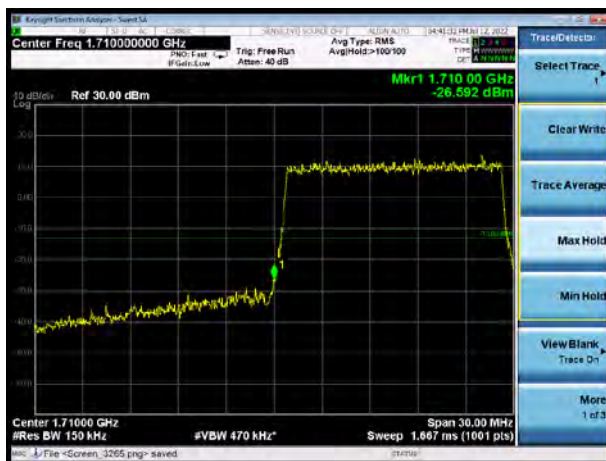


LTE Band 4 16QAM 15MHz CH-High, 1 RB





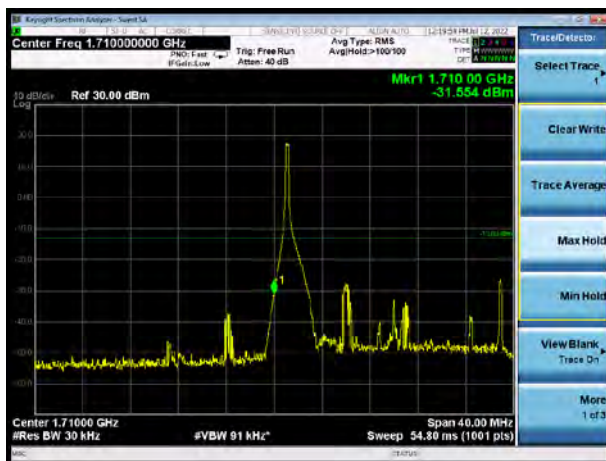
LTE Band 4 16QAM 15MHz CH-Low, 100%RB



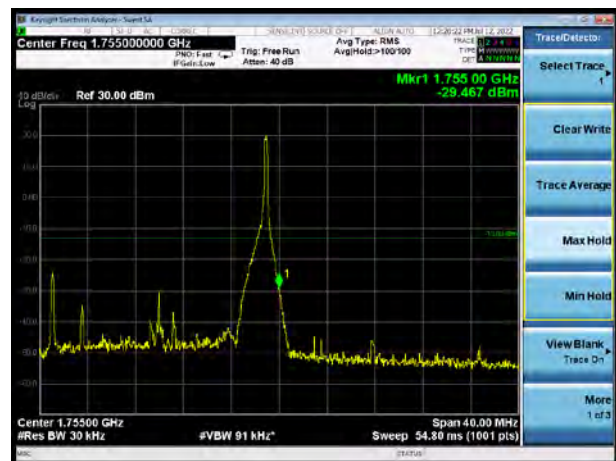
LTE Band 4 16QAM 15MHz CH-High, 100%RB



LTE Band 4 16QAM 20MHz CH-Low, 1 RB



LTE Band 4 16QAM 20MHz CH-High, 1 RB



LTE Band 4 16QAM 20MHz CH-Low, 100%RB

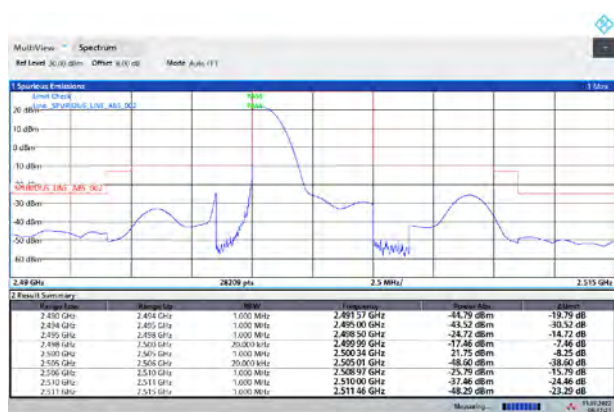


LTE Band 4 16QAM 20MHz CH-High, 100%RB



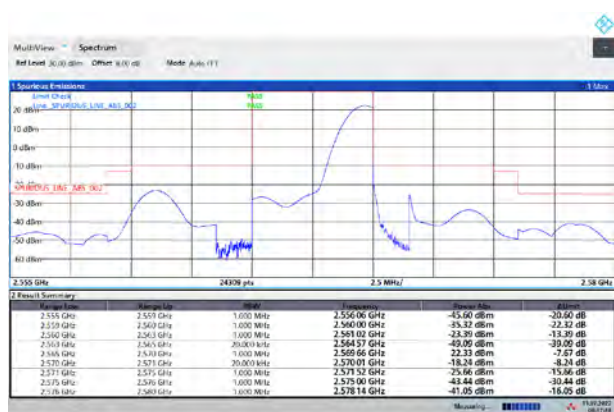


LTE Band 7 QPSK 5MHz CH-Low, 1 RB



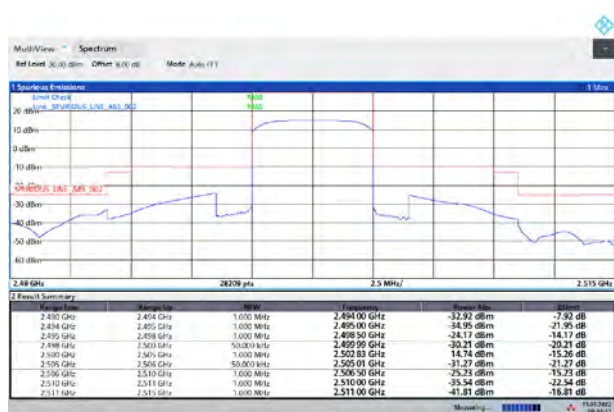
04:17:22 13.07.2022

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



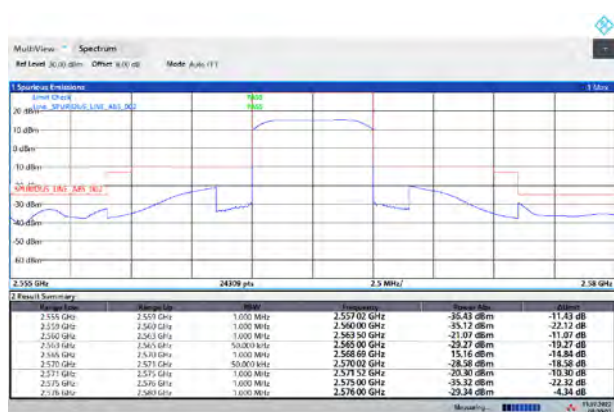
08:17:49 13.07.2022

LTE Band 7 QPSK 5MHz CH-Low, 100%RB



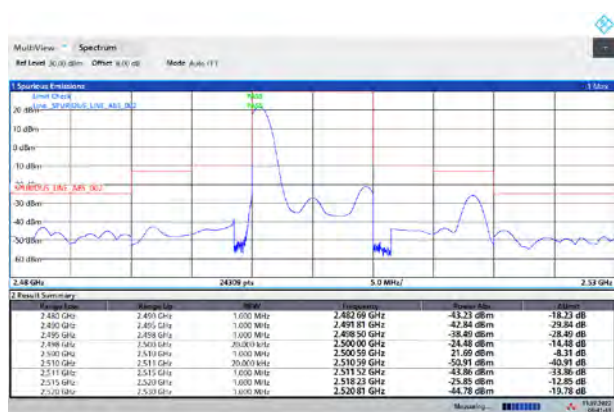
04:24:12 13.07.2022

LTE Band 7 QPSK 5MHz CH-High, 100%RB



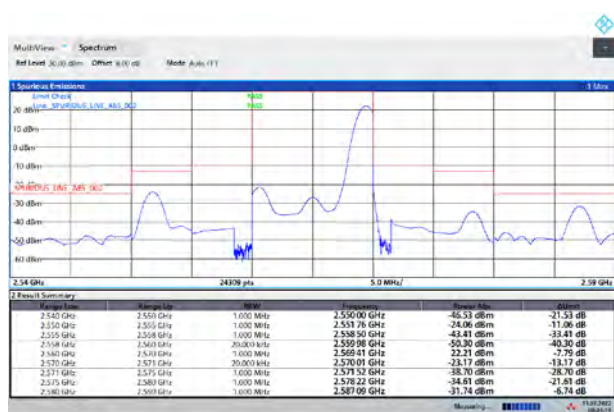
08:20:03 13.07.2022

LTE Band 7 QPSK 10MHz CH-Low, 1 RB



04:45:45 13.07.2022

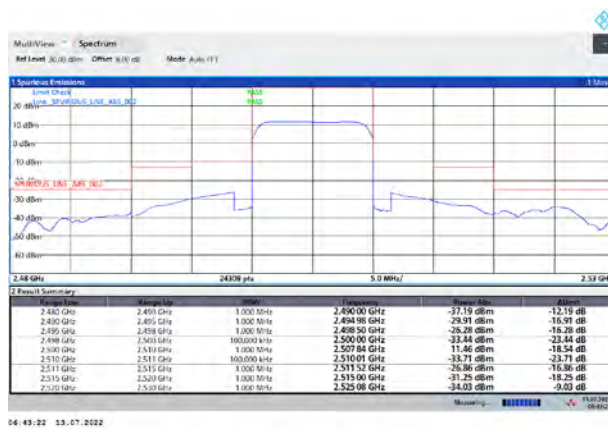
LTE Band 7 QPSK 10MHz CH-High, 1 RB



08:24:16 13.07.2022

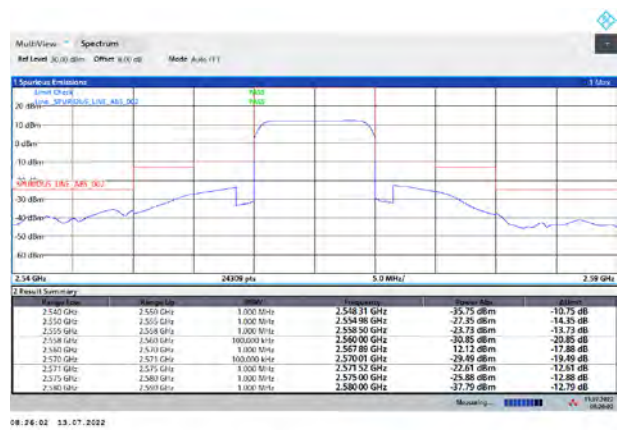


LTE Band 7 QPSK 10MHz CH-Low, 100%RB



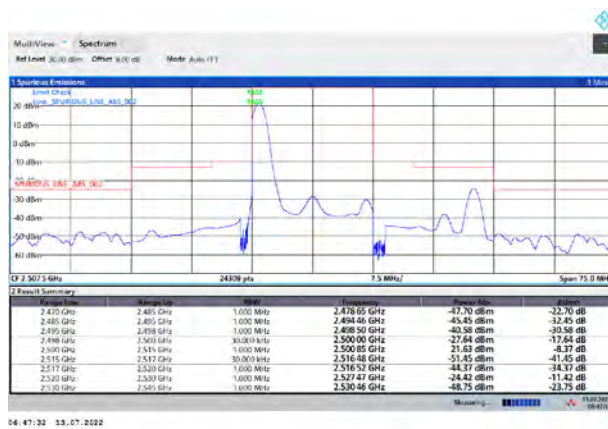
04:43:22 13.07.2022

LTE Band 7 QPSK 10MHz CH-High, 100%RB



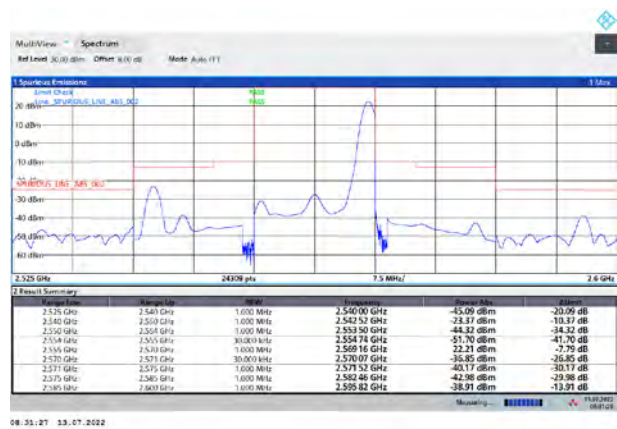
08:24:02 13.07.2022

LTE Band 7 QPSK 15MHz CH-Low, 1 RB



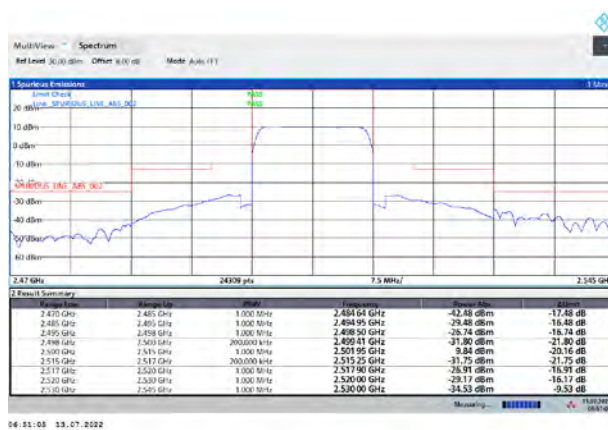
04:47:32 13.07.2022

LTE Band 7 QPSK 15MHz CH-High, 1 RB



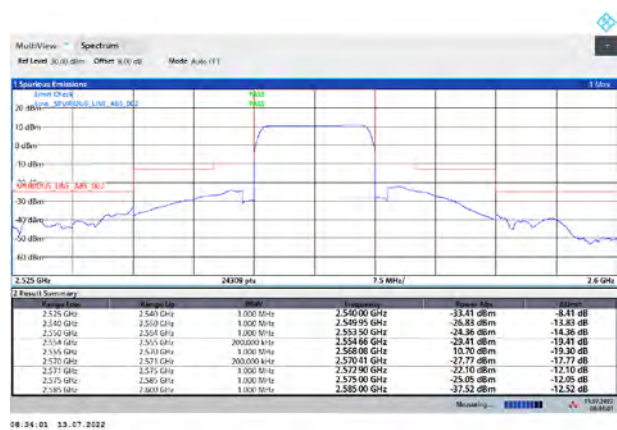
08:25:27 13.07.2022

LTE Band 7 QPSK 15MHz CH-Low, 100%RB



04:51:08 13.07.2022

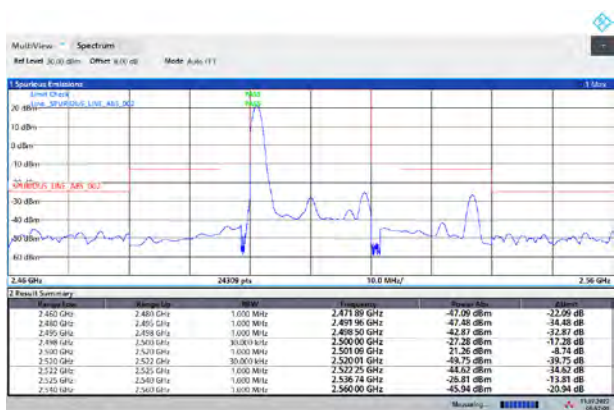
LTE Band 7 QPSK 15MHz CH-High, 100%RB



08:24:03 13.07.2022

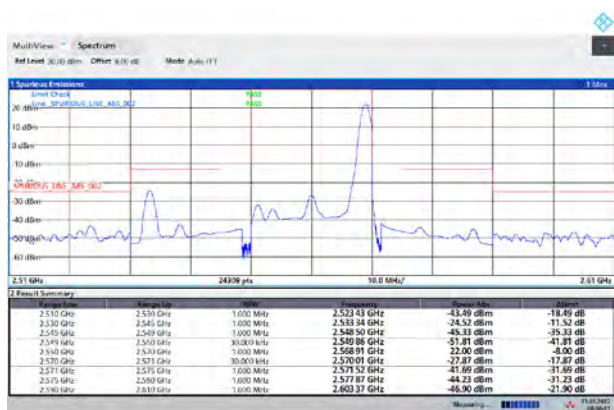


LTE Band 7 QPSK 20MHz CH-Low, 1 RB



06:51:04 13.07.2022

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



08:26:42 13.07.2022

LTE Band 7 QPSK 20MHz CH-Low, 100%RB



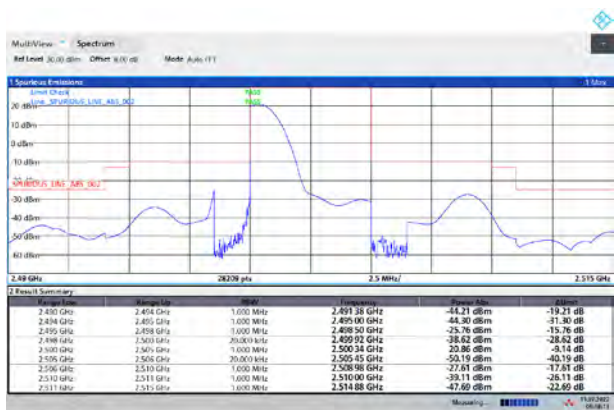
06:59:40 13.07.2022

LTE Band 7 QPSK 20MHz CH-High, 100%RB



08:28:21 13.07.2022

LTE Band 7 16QAM 5MHz CH-Low, 1 RB



06:59:13 13.07.2022

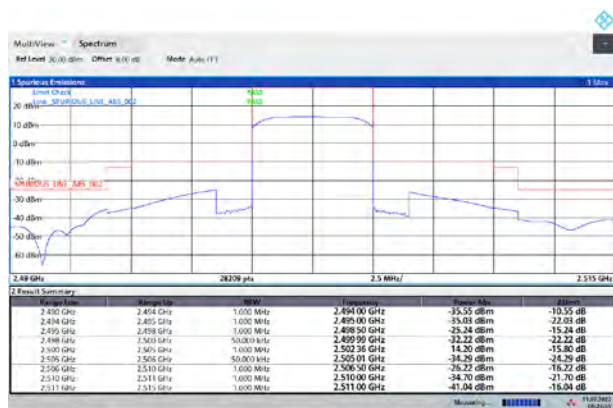
LTE Band 7 16QAM 5MHz CH-High, 1 RB



08:30:25 13.07.2022

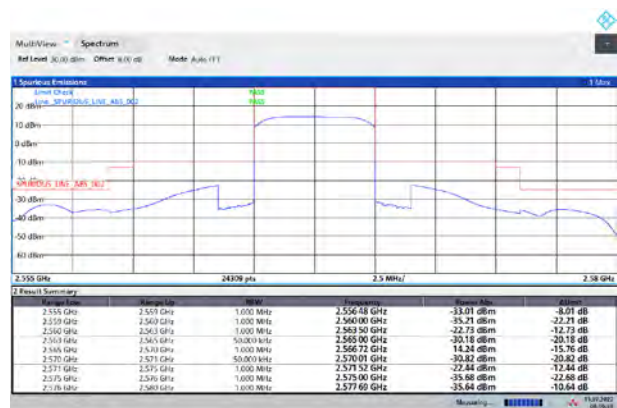


LTE Band 7 16QAM 5MHz CH-Low, 100%RB



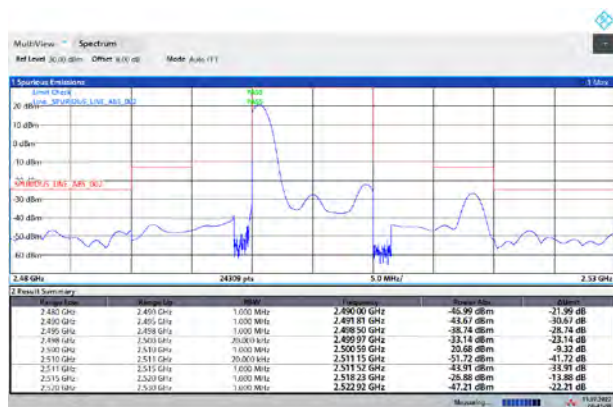
04:23:35 13.07.2022

LTE Band 7 16QAM 5MHz CH-High, 100%RB



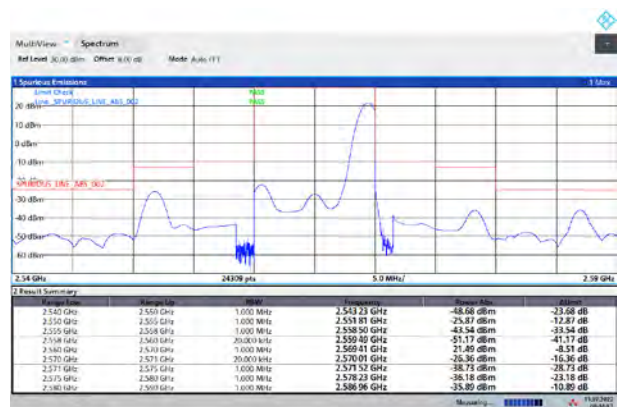
08:19:40 13.07.2022

LTE Band 7 16QAM 10MHz CH-Low, 1 RB



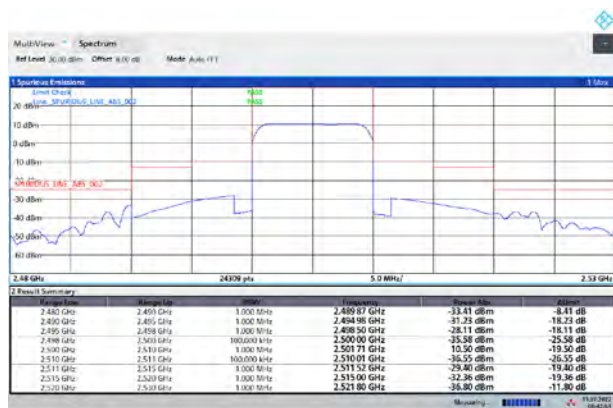
04:42:09 13.07.2022

LTE Band 7 16QAM 10MHz CH-High, 1 RB



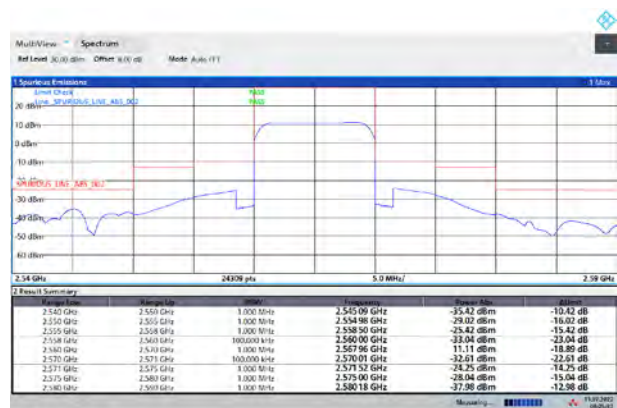
08:24:58 13.07.2022

LTE Band 7 16QAM 10MHz CH-Low, 100%RB



04:42:55 13.07.2022

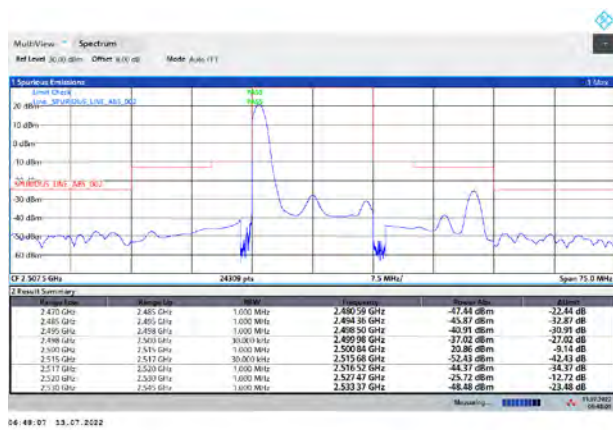
LTE Band 7 16QAM 10MHz CH-High, 100%RB



08:25:37 13.07.2022

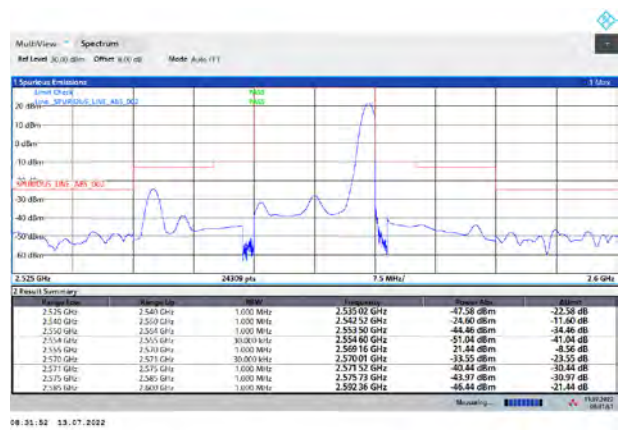


LTE Band 7 16QAM 15MHz CH-Low, 1 RB



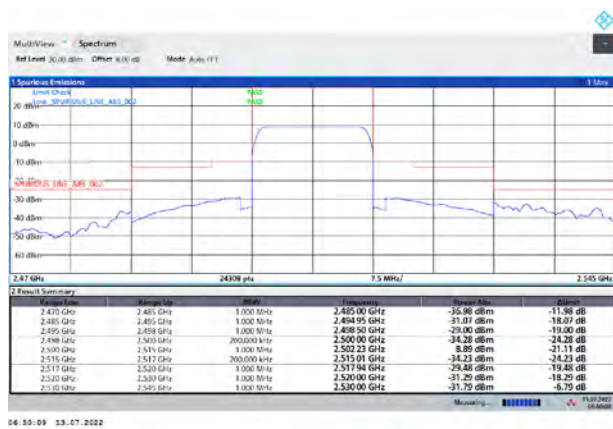
04:49:01 13.07.2022

LTE Band 7 16QAM 15MHz CH-High, 1 RB



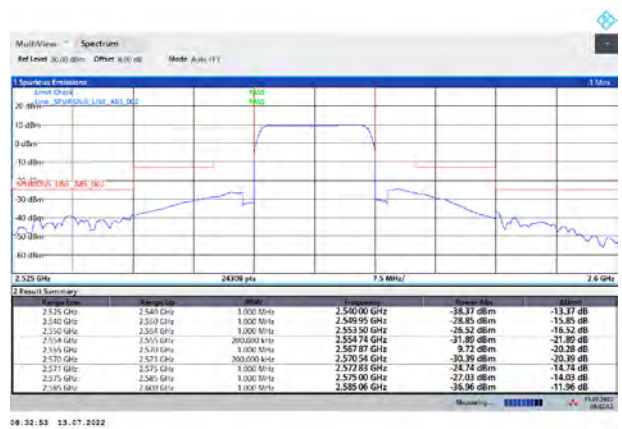
08:35:52 13.07.2022

LTE Band 7 16QAM 15MHz CH-Low, 100%RB



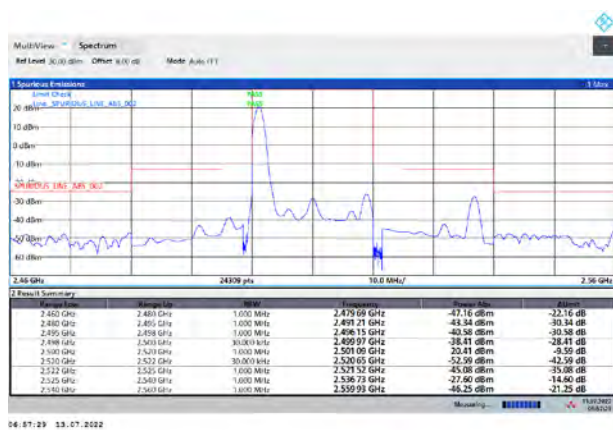
04:50:09 13.07.2022

LTE Band 7 16QAM 15MHz CH-High, 100%RB



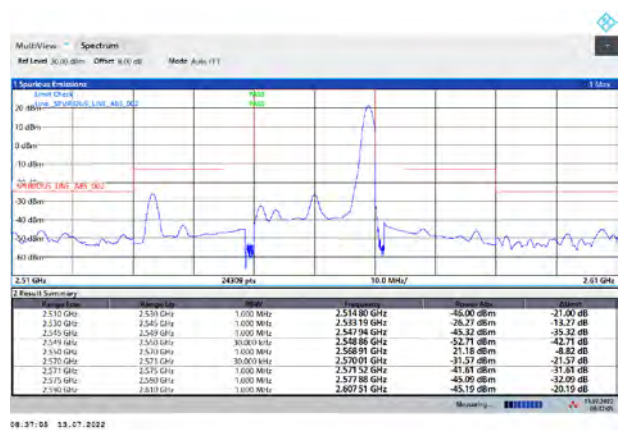
08:35:53 13.07.2022

LTE Band 7 16QAM 20MHz CH-Low, 1 RB



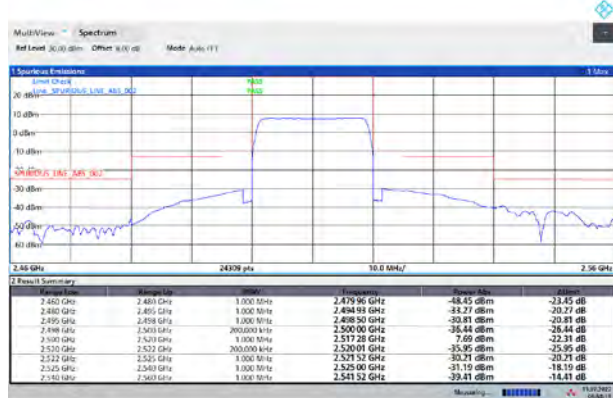
04:51:29 13.07.2022

LTE Band 7 16QAM 20MHz CH-High, 1 RB



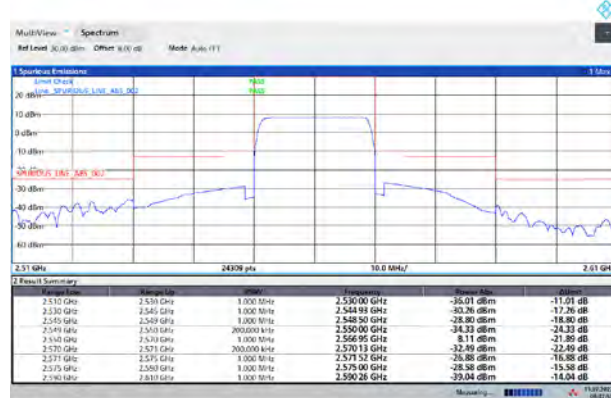
08:37:08 13.07.2022

LTE Band 7 16QAM 20MHz CH-Low, 100% RB



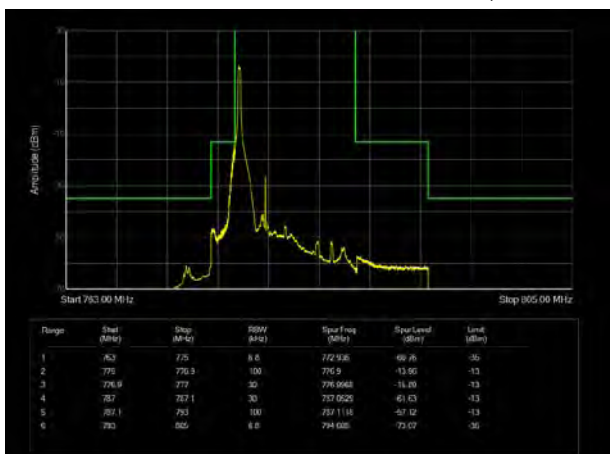
06:58:17 19-07-2022

LTE Band 7 16QAM 20MHz CH-High, 100% RB

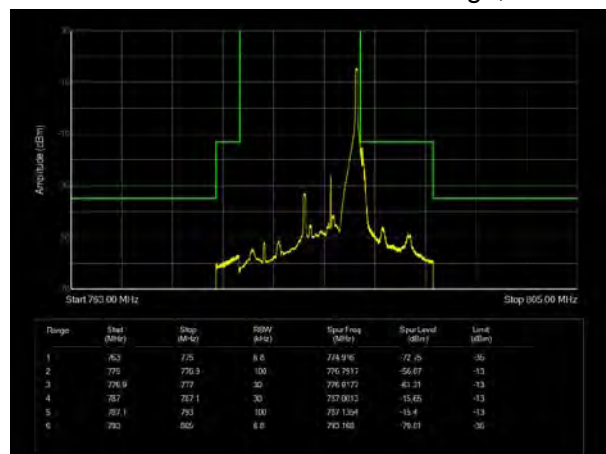


08-37-50 18-07-2022

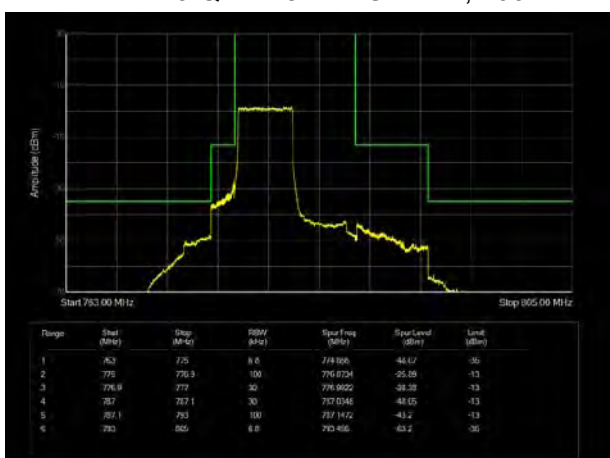
LTE Band 13 QPSK 5MHz CH-Low, 1 RB



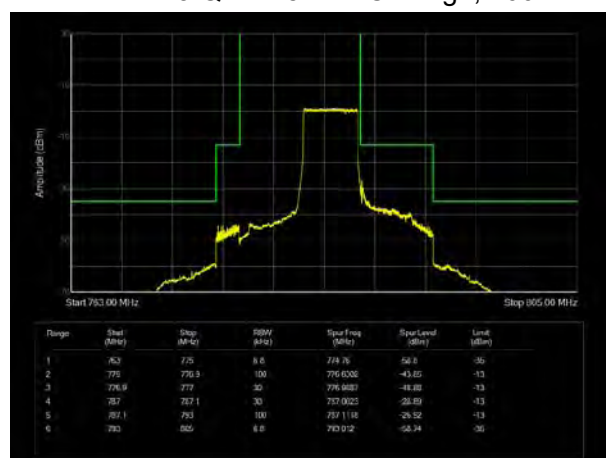
LTE Band 13 QPSK 5MHz CH-High, 1 RB



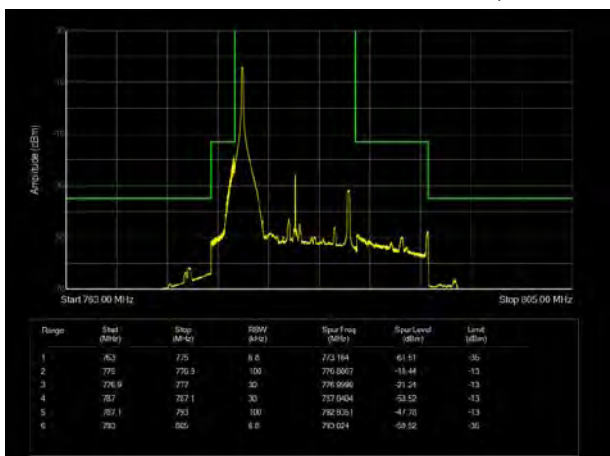
LTE Band 13 QPSK 5MHz CH-Low, 100%RB



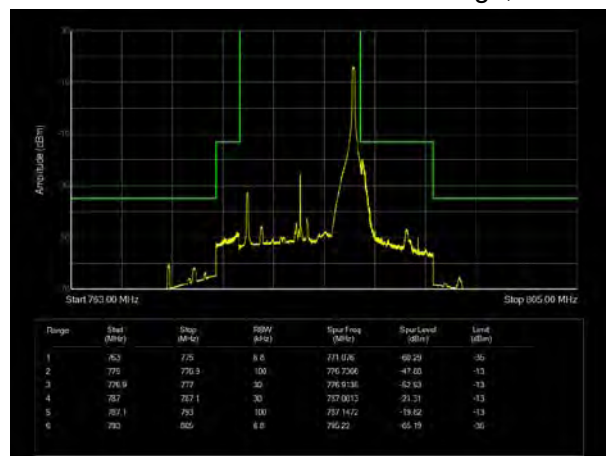
LTE Band 13 QPSK 5MHz CH-High, 100%RB



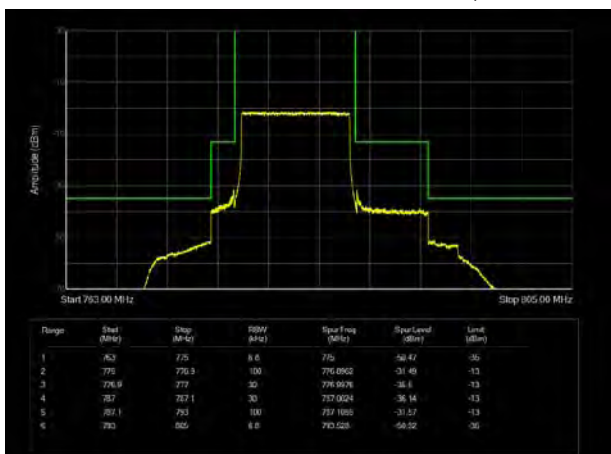
LTE Band 13 QPSK 10MHz CH-Low, 1 RB



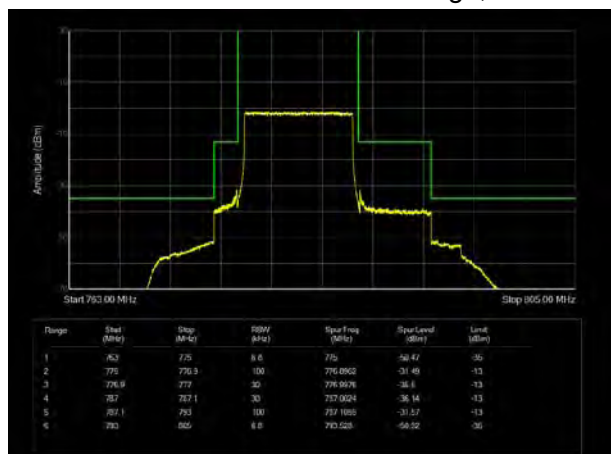
LTE Band 13 QPSK 10MHz CH-High, 1 RB



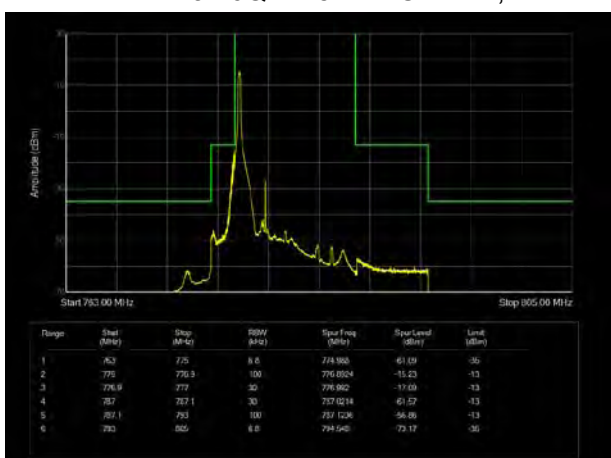
LTE Band 13 QPSK 10MHz CH-Low, 100%RB



LTE Band 13 QPSK 10MHz CH-High, 100%RB



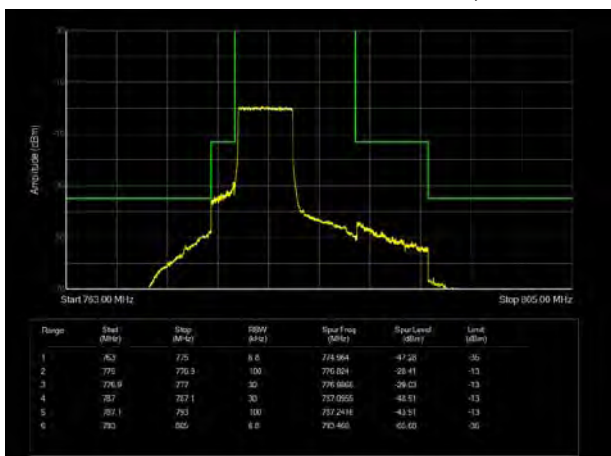
LTE Band 13 16QAM 5MHz CH-Low, 1 RB



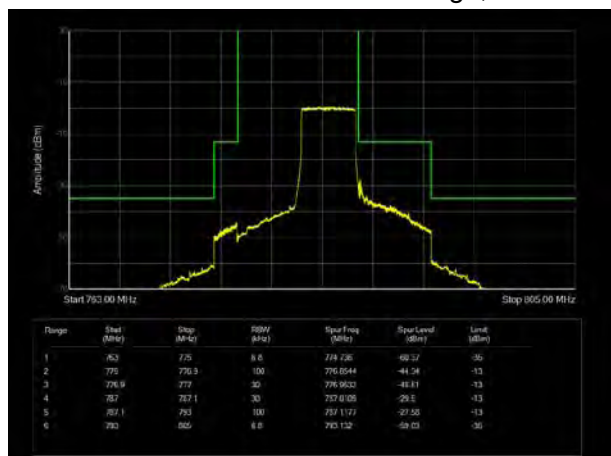
LTE Band 13 16QAM 5MHz CH-High, 1 RB



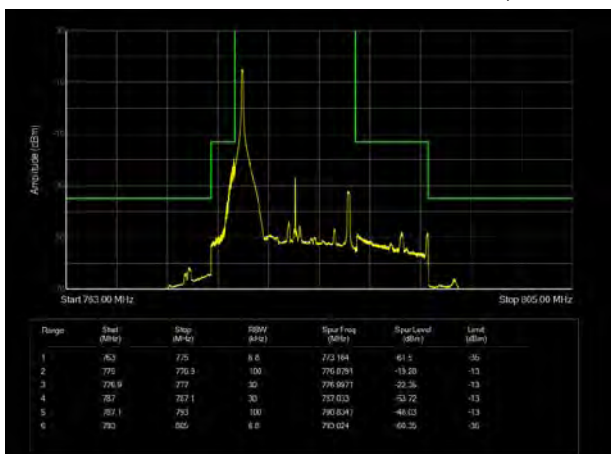
LTE Band 13 16QAM 5MHz CH-Low, 100%RB



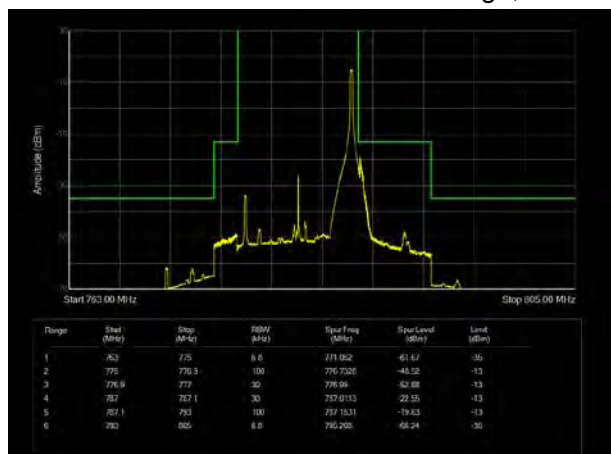
LTE Band 13 16QAM 5MHz CH-High, 100%RB



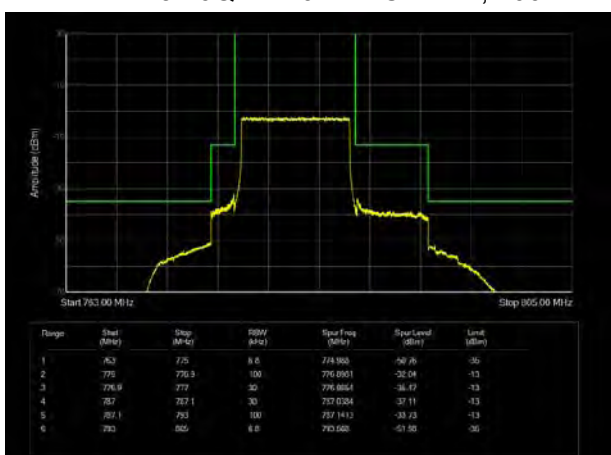
LTE Band 13 16QAM 10MHz CH-Low, 1 RB



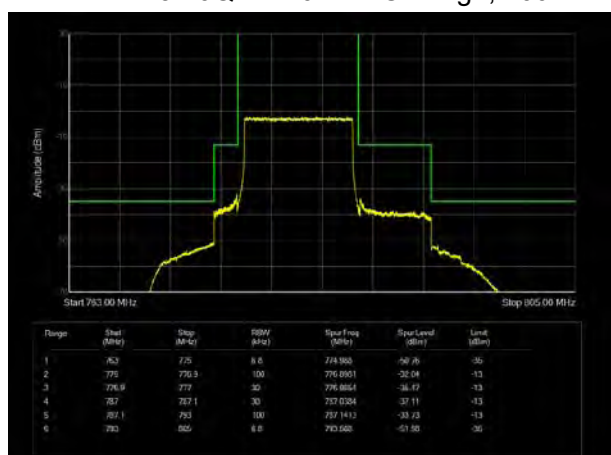
LTE Band 13 16QAM 10MHz CH-High, 1 RB



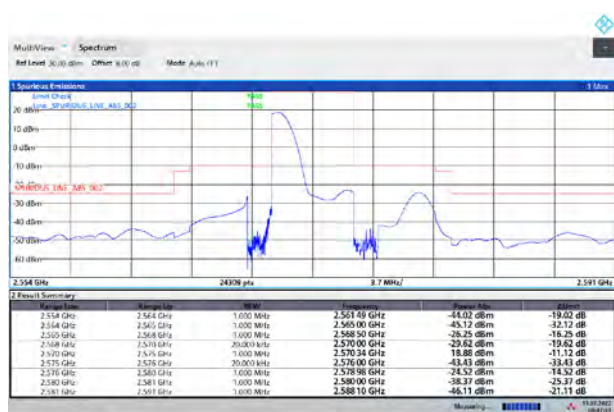
LTE Band 13 16QAM 10MHz CH-Low, 100%RB



LTE Band 13 16QAM 10MHz CH-High, 100%RB

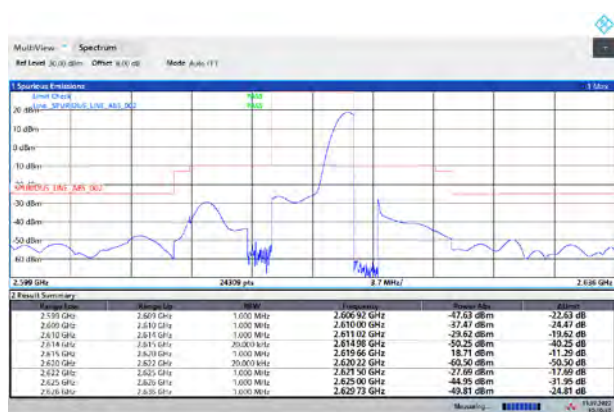


LTE Band 38 QPSK 5MHz CH-Low, 1 RB



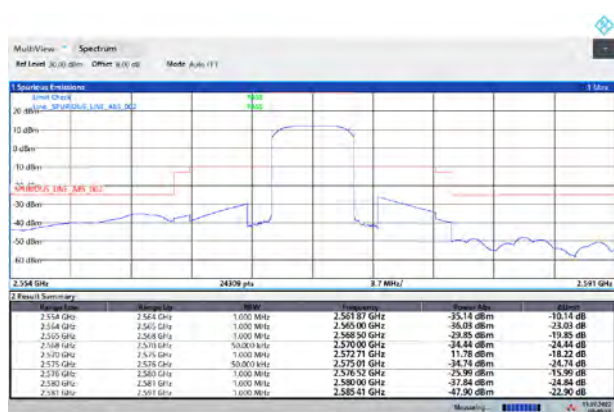
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LTE Band 38 QPSK 5MHz CH-High, 1 RB



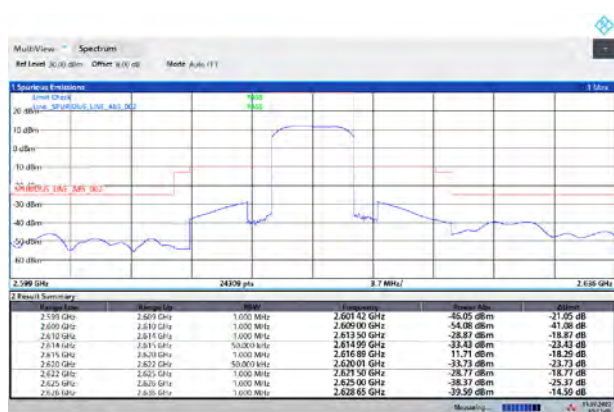
10:10:30 13.07.2022

LTE Band 38 QPSK 5MHz CH-Low, 100%RB



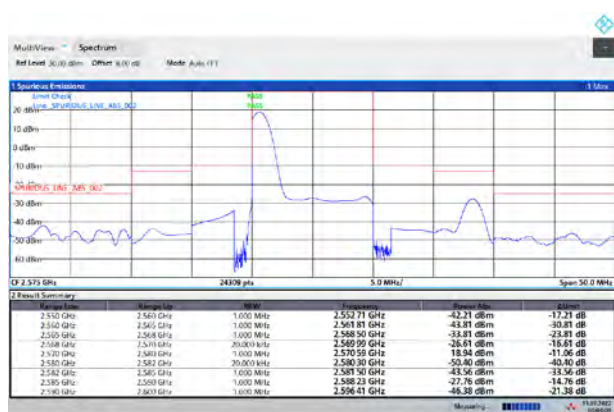
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LTE Band 38 QPSK 5MHz CH-High, 100%RB



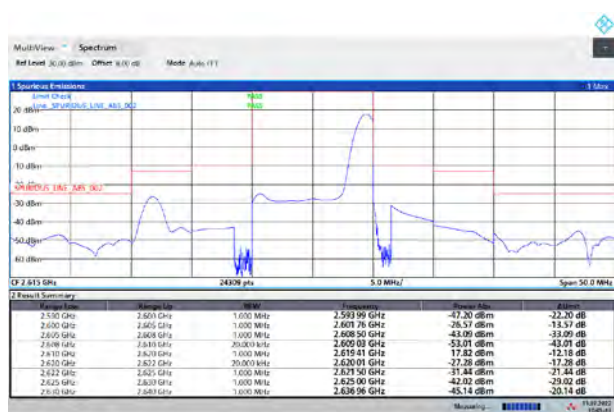
10:12:06 11-07-2022

LTE Band 38 QPSK 10MHz CH-Low, 1 RB



09:04:07 13.07.2022

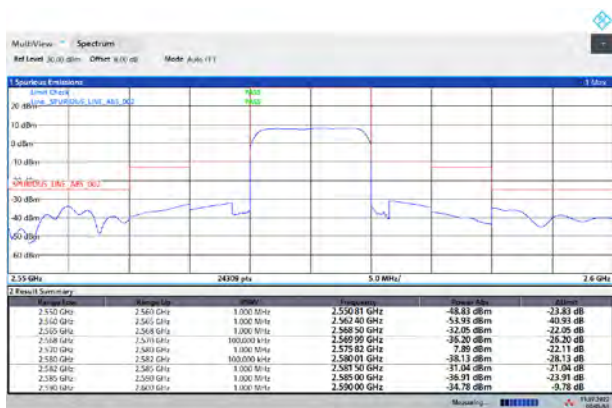
LTE Band 38 QPSK 10MHz CH-High, 1 RB



10:05:46 13.07.2022

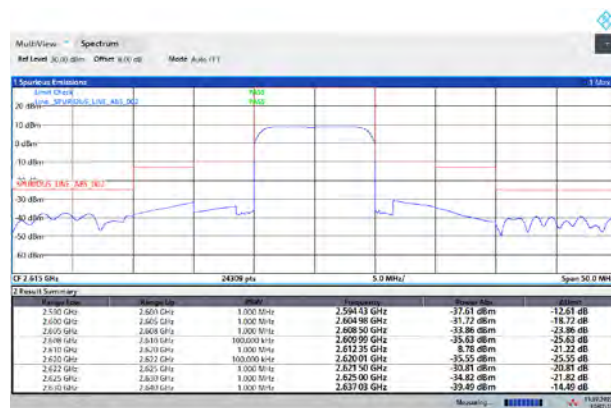


LTE Band 38 QPSK 10MHz CH-Low, 100%RB



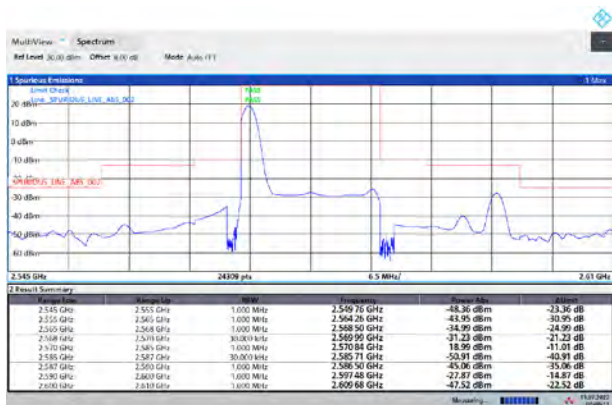
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LTE Band 38 QPSK 10MHz CH-High, 100%RB



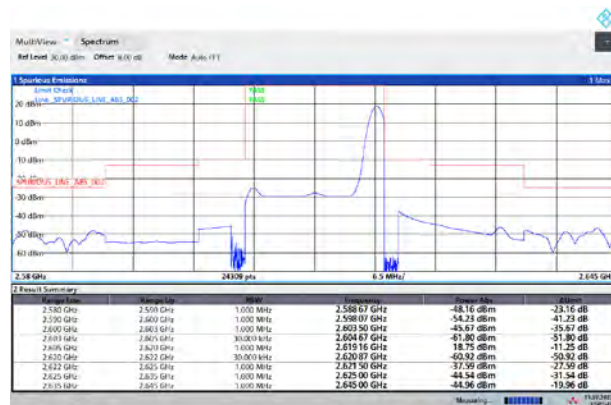
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LTE Band 38 QPSK 15MHz CH-Low, 1 RB



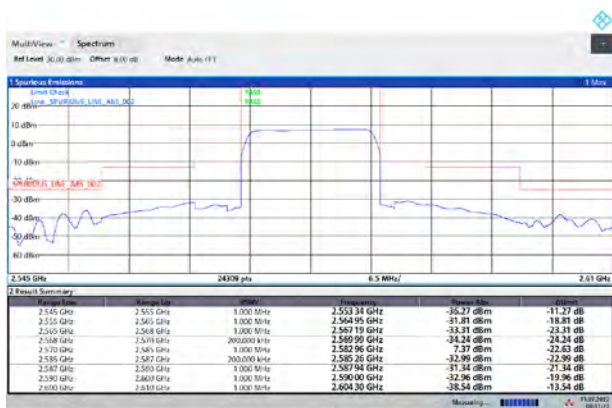
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LTE Band 38 QPSK 15MHz CH-High, 1 RB



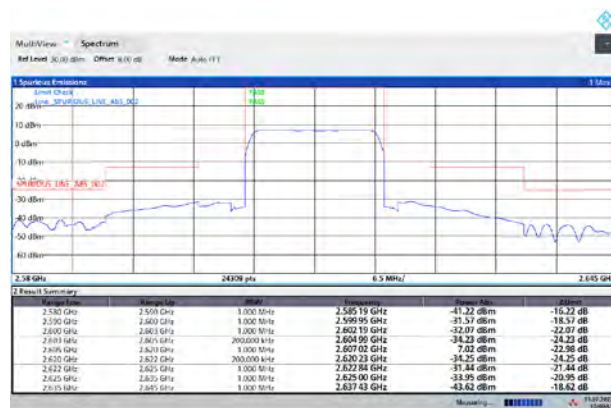
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LTE Band 38 QPSK 15MHz CH-Low, 100%RB



09:11:17 13.07.2022

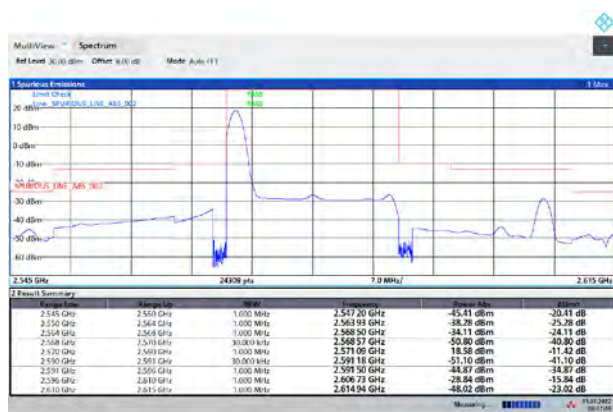
LTE Band 38 QPSK 15MHz CH-High, 100%RB



10:00:53 13.07.2022

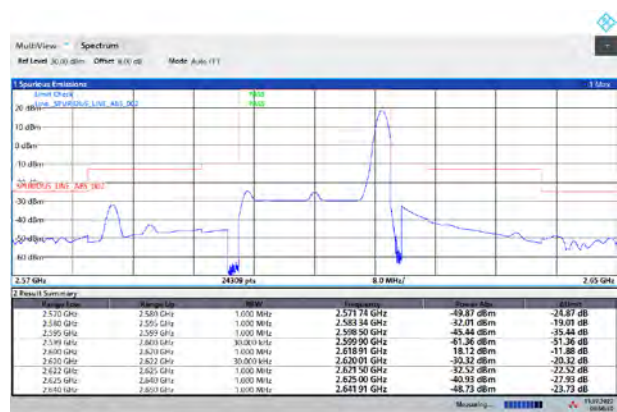


LTE Band 38 QPSK 20MHz CH-Low, 1 RB



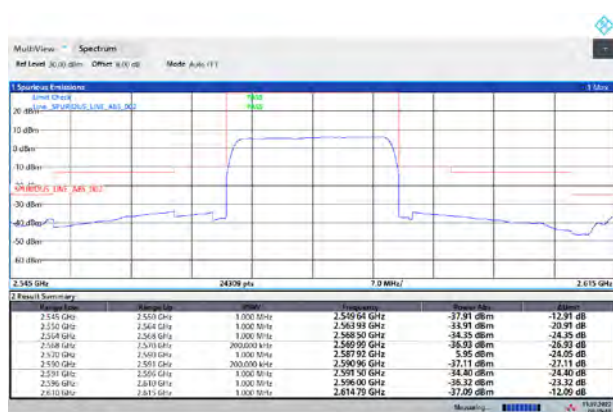
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LTE Band 38 QPSK 20MHz CH-High, 1 RB



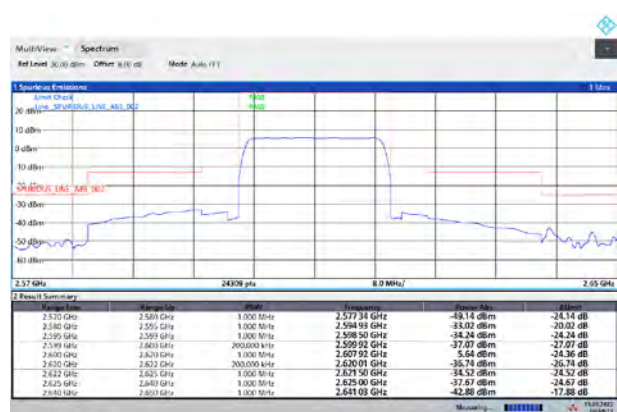
09:18:30 13.07.2022

LTE Band 38 QPSK 20MHz CH-Low, 100%RB



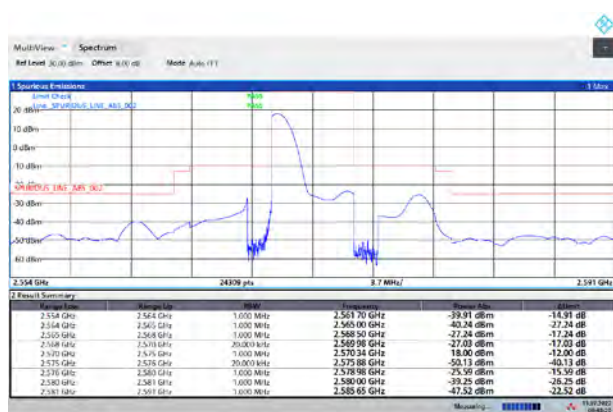
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LTE Band 38 QPSK 20MHz CH-High, 100%RB



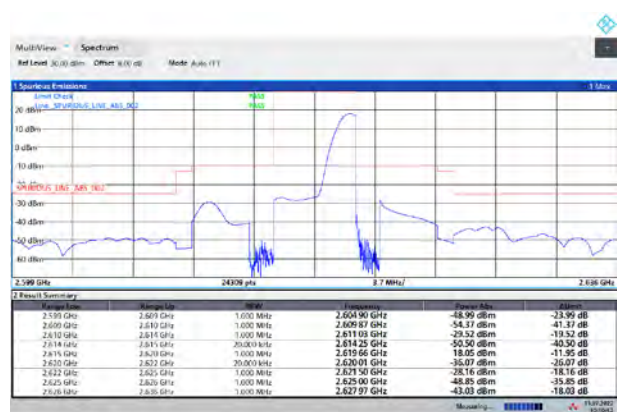
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LTE Band 38 16QAM 5MHz CH-Low, 1 RB



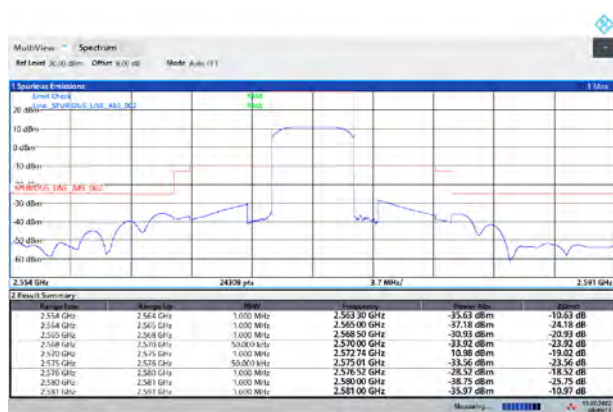
08:49:25 13.07.2022

LTE Band 38 16QAM 5MHz CH-High, 1 RB



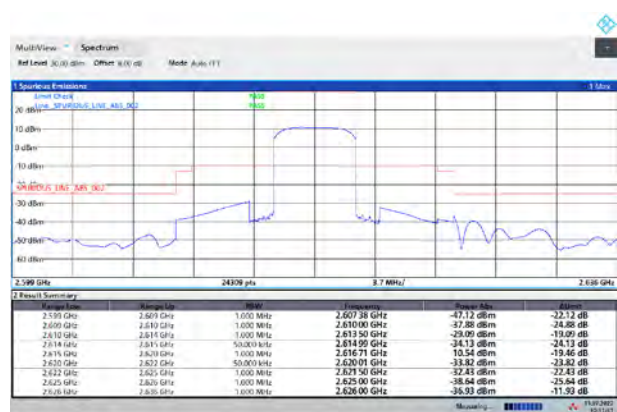
10:10:53 13.07.2022

LTE Band 38 16QAM 5MHz CH-Low, 100%RB



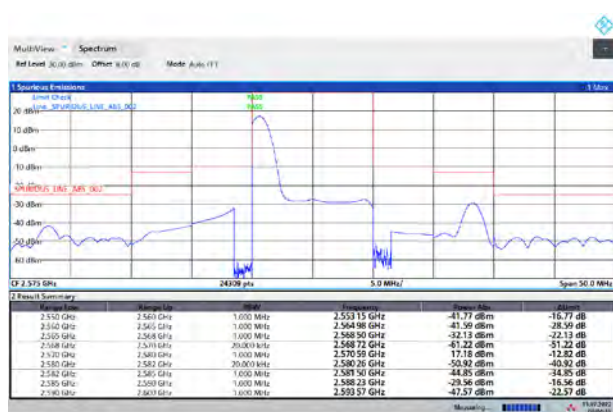
08:49:14 13.07.2022

LTE Band 38 16QAM 5MHz CH-High, 100%RB



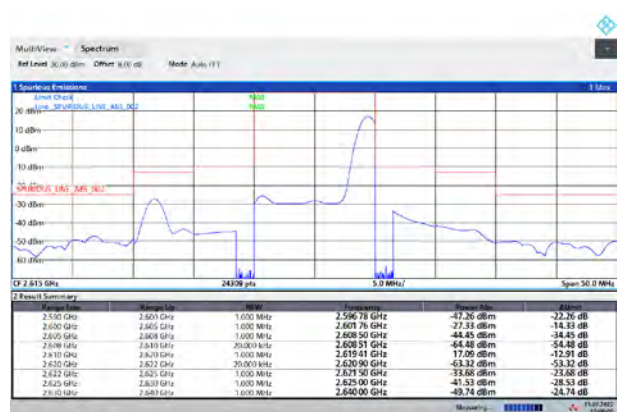
10:11:32 13.07.2022

LTE Band 38 16QAM 10MHz CH-Low, 1 RB



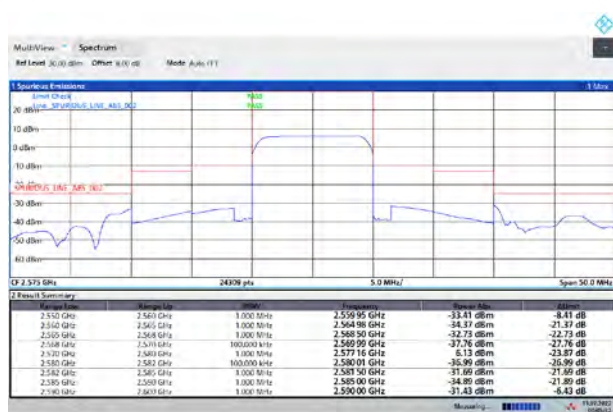
09:04:46 13.07.2022

LTE Band 38 16QAM 10MHz CH-High, 1 RB



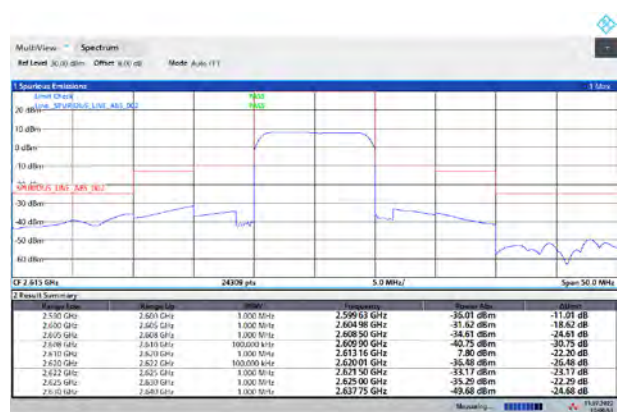
10:06:10 13.07.2022

LTE Band 38 16QAM 10MHz CH-Low, 100%RB



09:05:33 13.07.2022

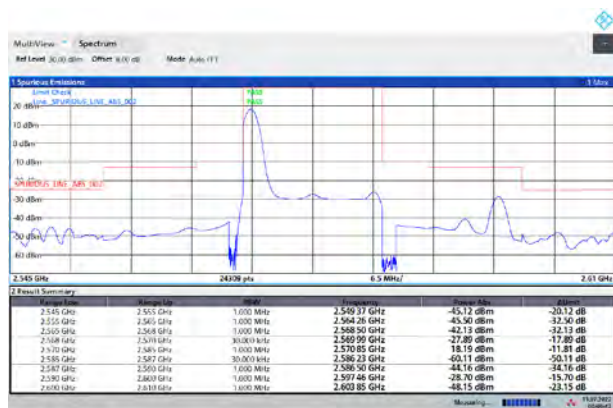
LTE Band 38 16QAM 10MHz CH-High, 100%RB



10:06:54 13.07.2022

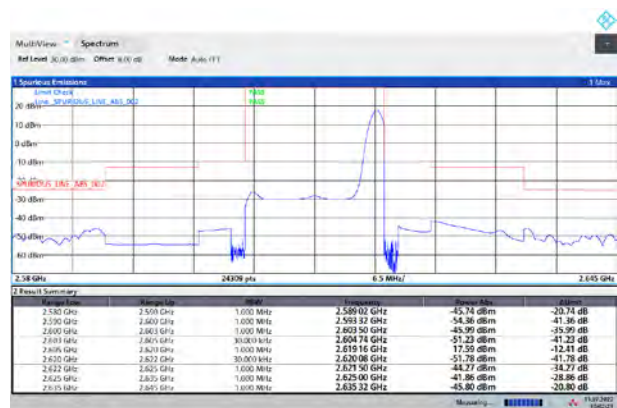


LTE Band 38 16QAM 15MHz CH-Low, 1 RB



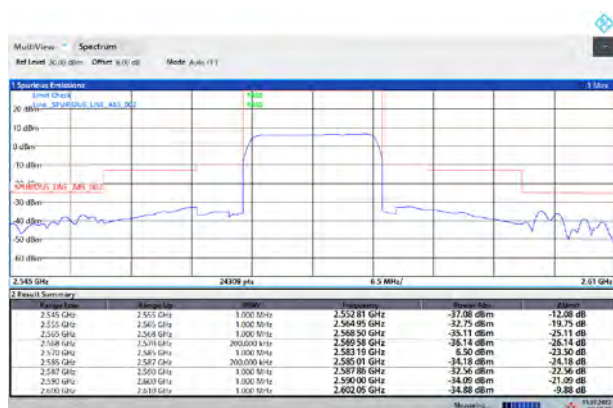
09:09:48 13.07.2022

LTE Band 38 16QAM 15MHz CH-High, 1 RB



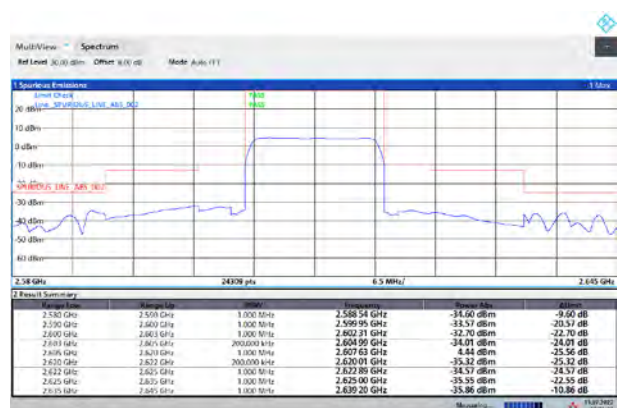
10:02:28 13.07.2022

LTE Band 38 16QAM 15MHz CH-Low, 100%RB



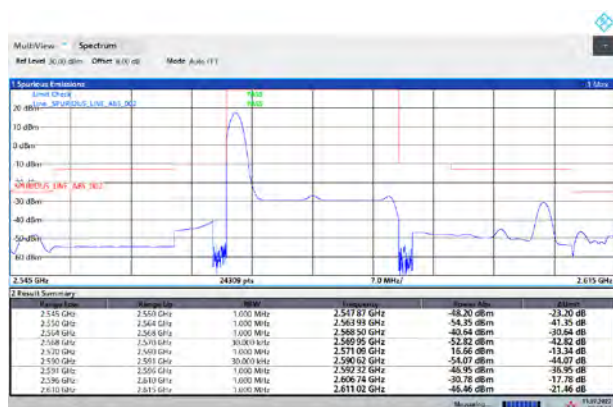
09:10:46 13.07.2022

LTE Band 38 16QAM 15MHz CH-High, 100%RB



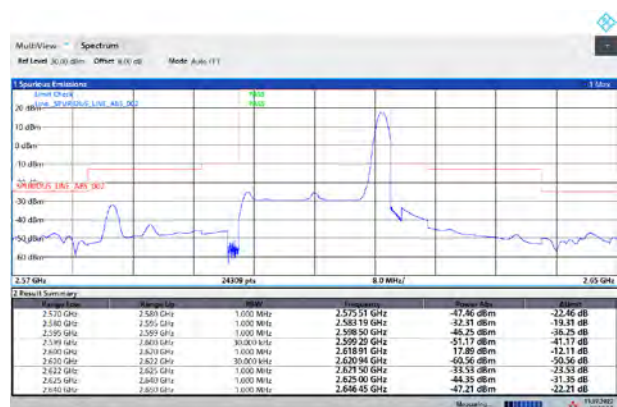
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LTE Band 38 16QAM 20MHz CH-Low, 1 RB



09:10:22 13.07.2022

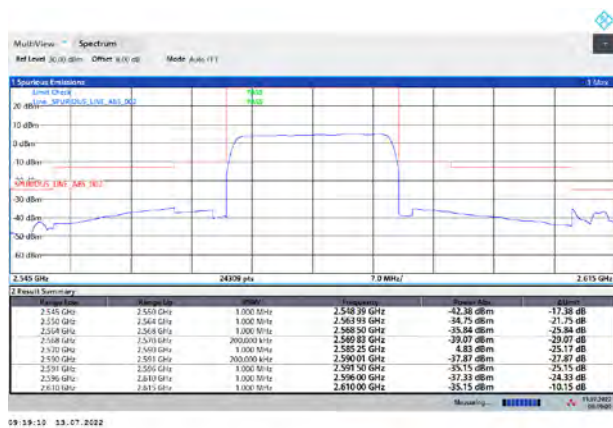
LTE Band 38 16QAM 20MHz CH-High, 1 RB



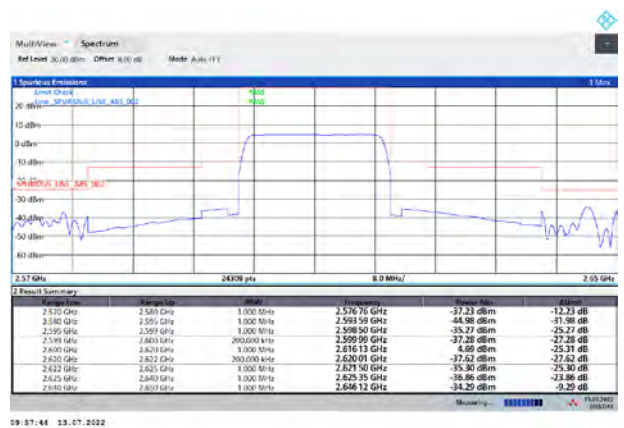
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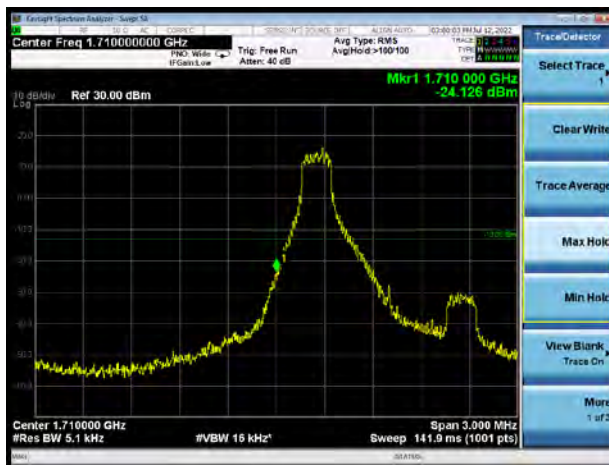
LTE Band 38 16QAM 20MHz CH-Low, 100%RB



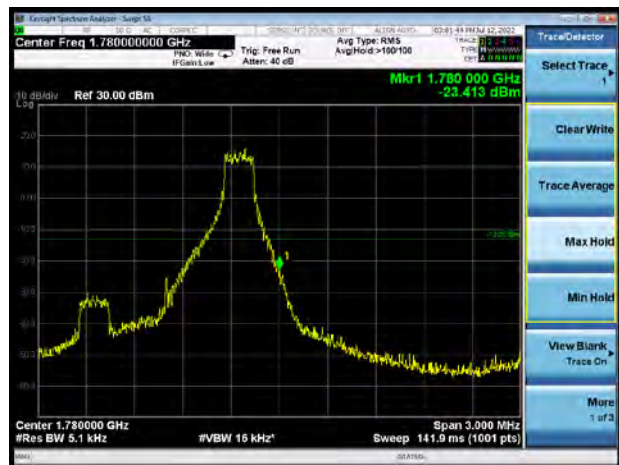
LTE Band 38 16QAM 20MHz CH-High, 100%RB



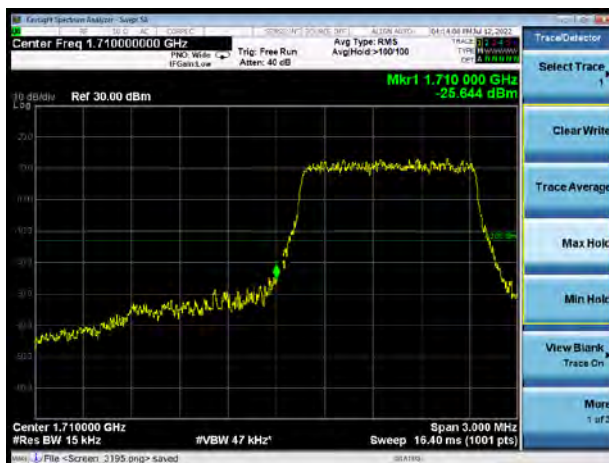
LTE Band 66 QPSK 1.4MHz CH-Low, 1 RB



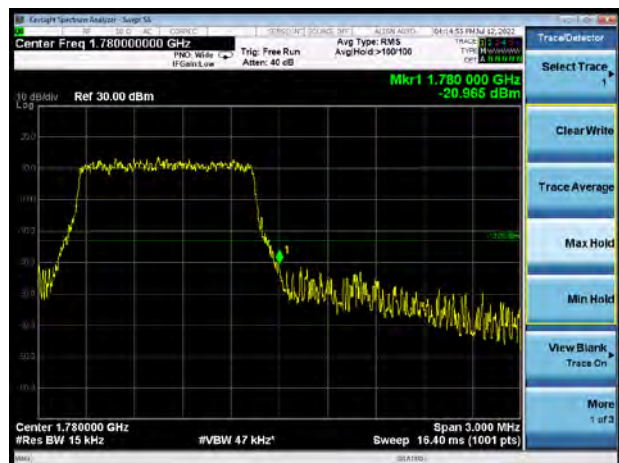
LTE Band 66 QPSK 1.4MHz CH-High, 1 RB



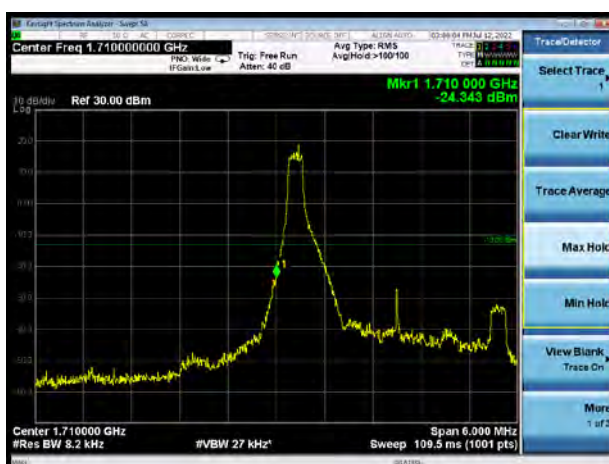
LTE Band 66 QPSK 1.4MHz CH-Low, 100%RB



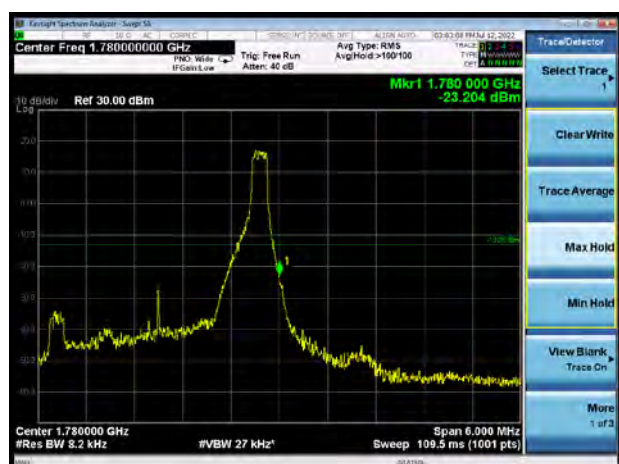
LTE Band 66 QPSK 1.4MHz CH-High, 100%RB



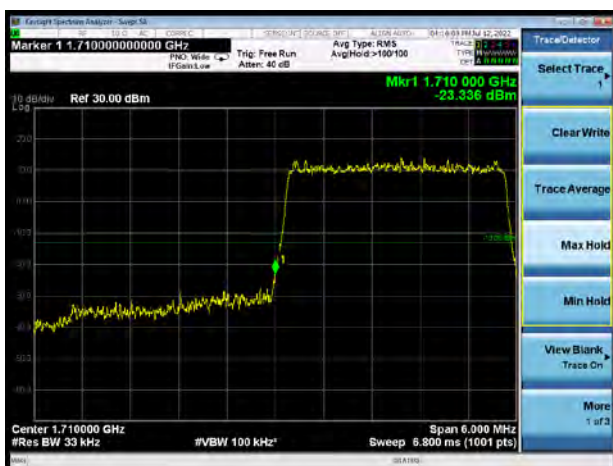
LTE Band 66 QPSK 3MHz CH-Low, 1 RB



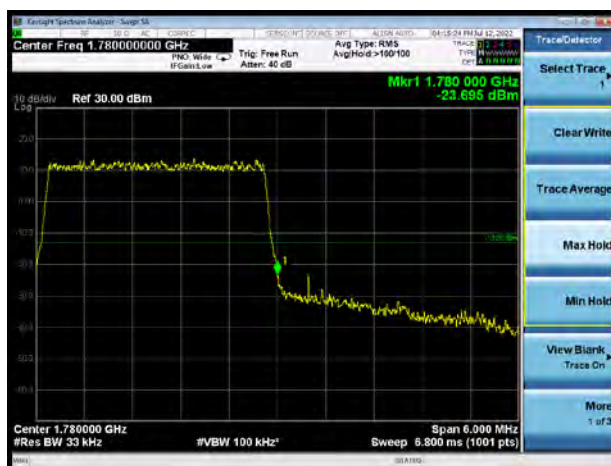
LTE Band 66 QPSK 3MHz CH-High, 1 RB



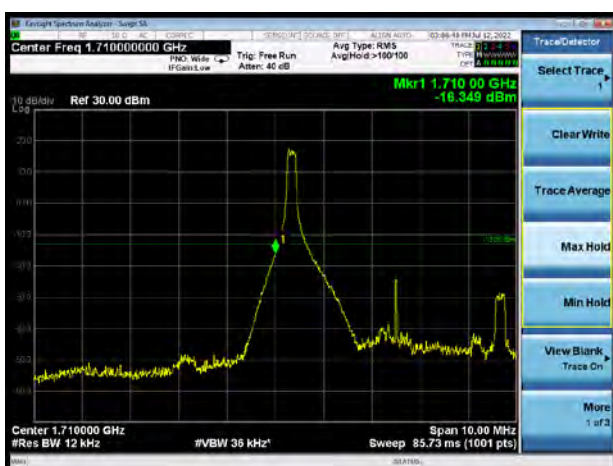
LTE Band 66 QPSK 3MHz CH-Low, 100%RB



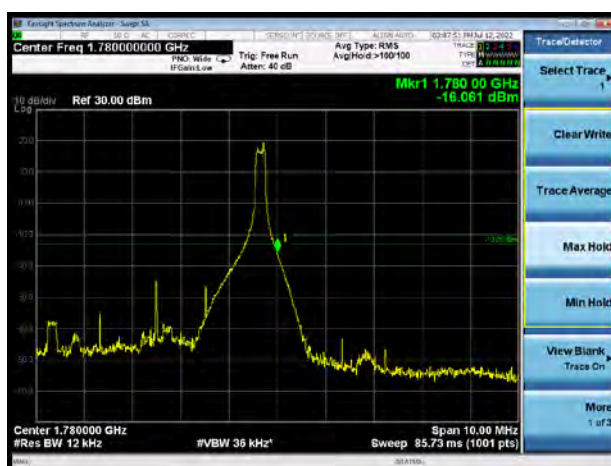
LTE Band 66 QPSK 3MHz CH-High, 100%RB



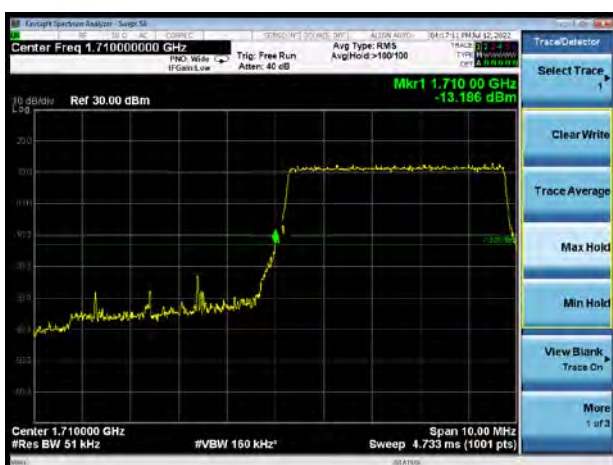
LTE Band 66 QPSK 5MHz CH-Low, 1 RB



LTE Band 66 QPSK 5MHz CH-High, 1 RB



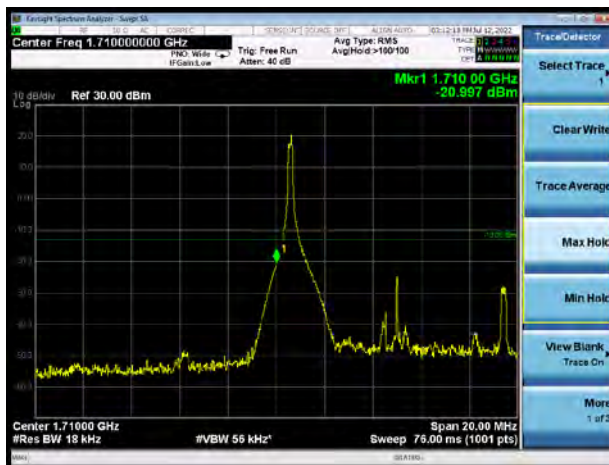
LTE Band 66 QPSK 5MHz CH-Low, 100%RB



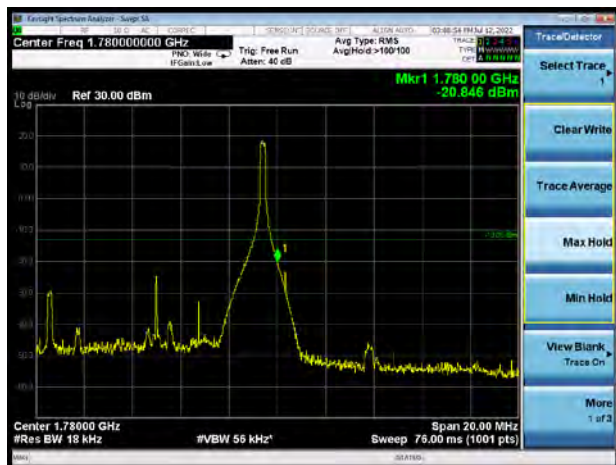
LTE Band 66 QPSK 5MHz CH-High, 100%RB



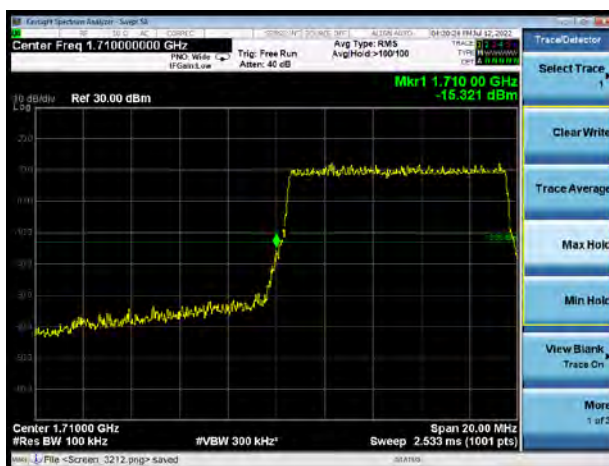
LTE Band 66 QPSK 10MHz CH-Low, 1 RB



LTE Band 66 QPSK 10MHz CH-High, 1 RB



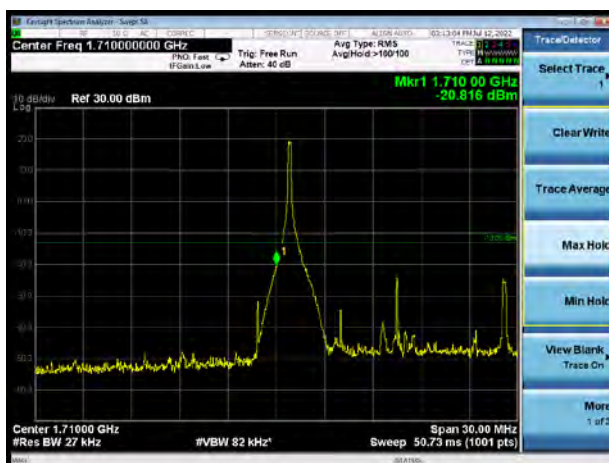
LTE Band 66 QPSK 10MHz CH-Low, 100%RB



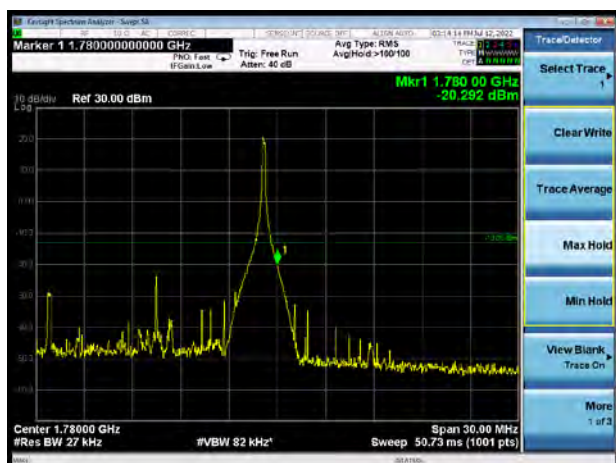
LTE Band 66 QPSK 10MHz CH-High, 100%RB



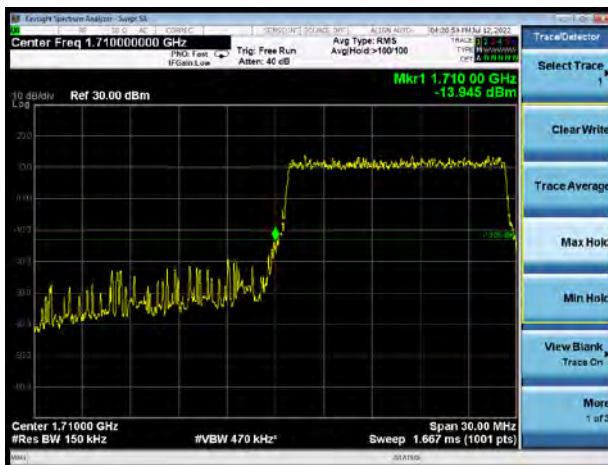
LTE Band 66 QPSK 15MHz CH-Low, 1 RB



LTE Band 66 QPSK 15MHz CH-High, 1 RB



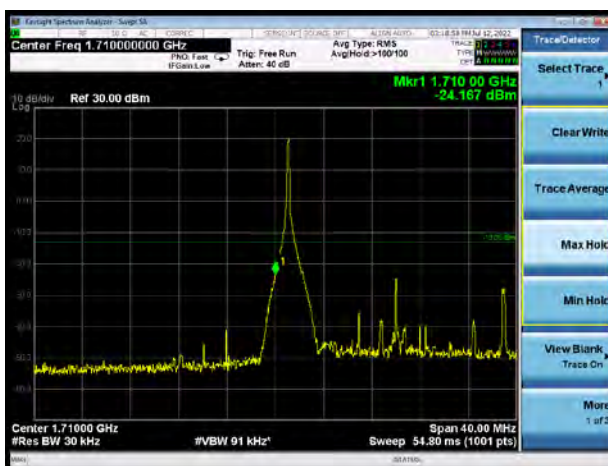
LTE Band 66 QPSK 15MHz CH-Low, 100%RB



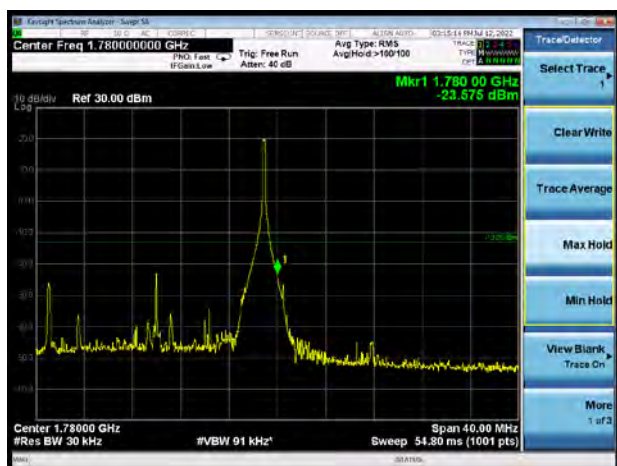
LTE Band 66 QPSK 15MHz CH-High, 100%RB



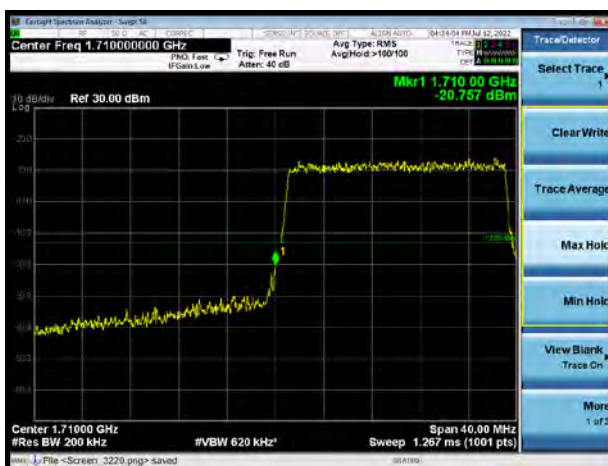
LTE Band 66 QPSK 20MHz CH-Low, 1 RB



LTE Band 66 QPSK 20MHz CH-High, 1 RB



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

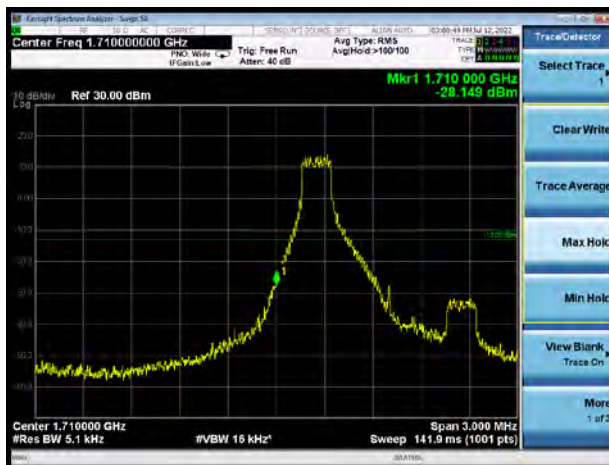


LTE Band 66 QPSK 20MHz CH-High, 100%RB

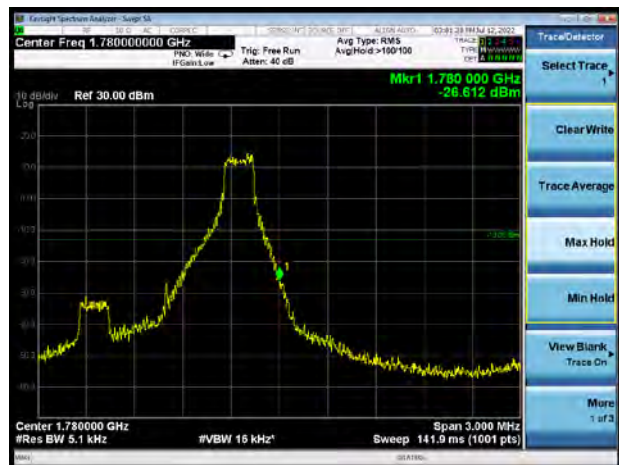




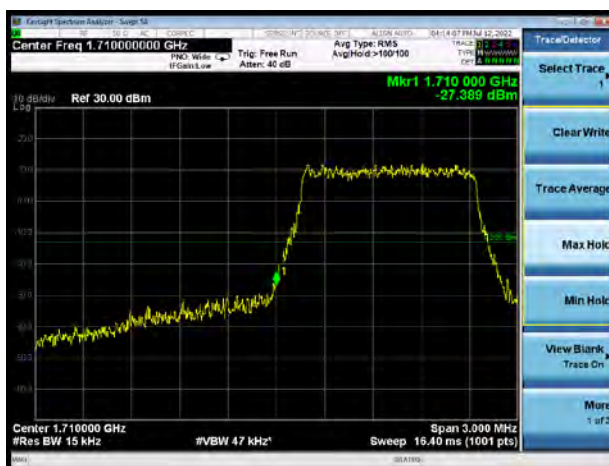
LTE Band 66 16QAM 1.4MHz CH-Low, 1 RB



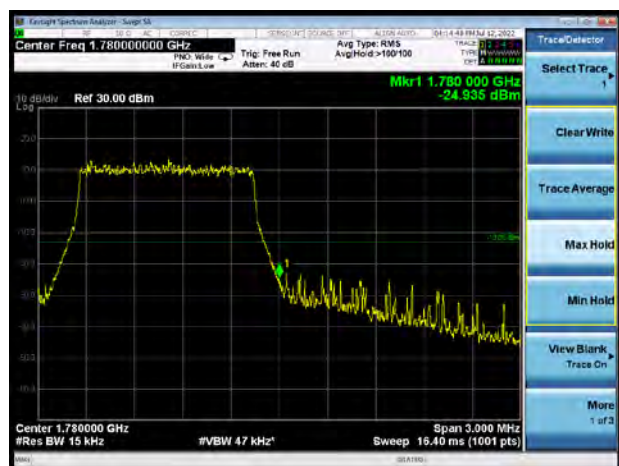
LTE Band 66 16QAM 1.4MHz CH-High, 1 RB



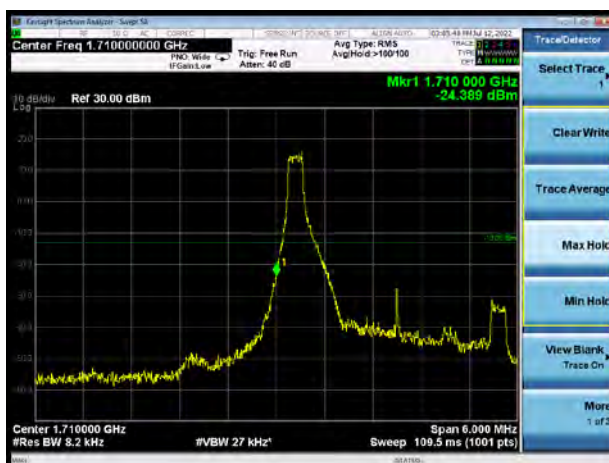
LTE Band 66 16QAM 1.4MHz CH-Low, 100%RB



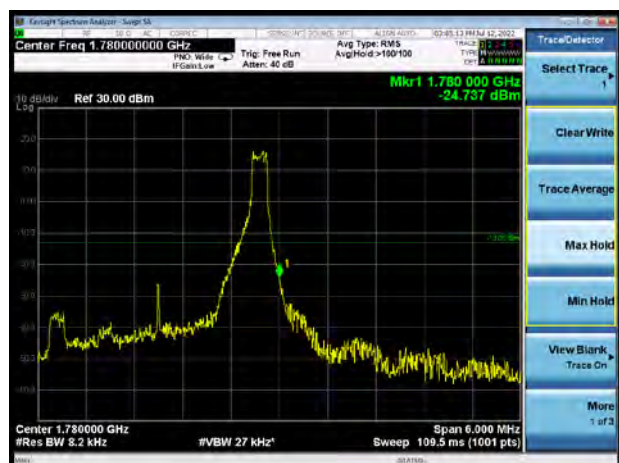
LTE Band 66 16QAM 1.4MHz CH-High, 100%RB



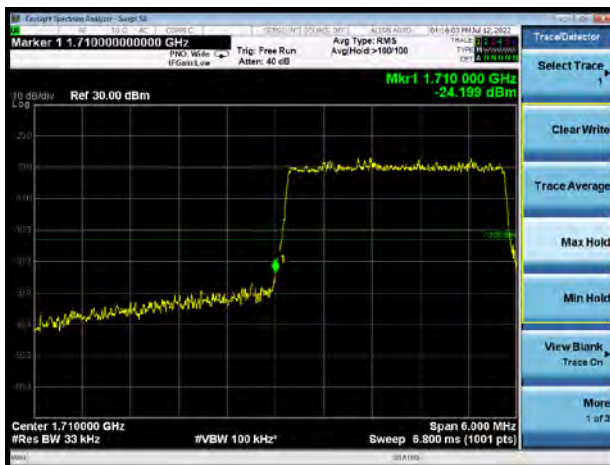
LTE Band 66 16QAM 3MHz CH-Low, 1 RB



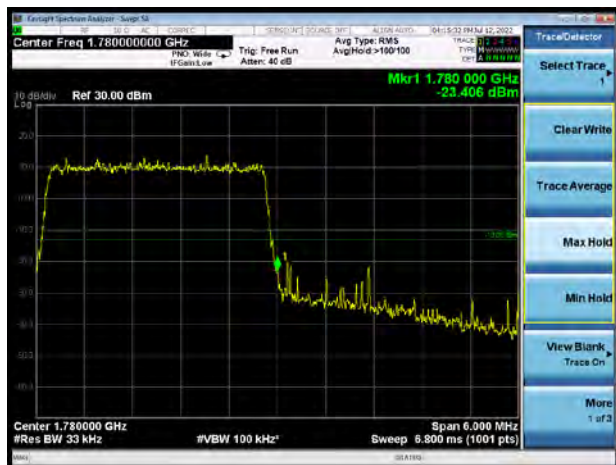
LTE Band 66 16QAM 3MHz CH-High, 1 RB



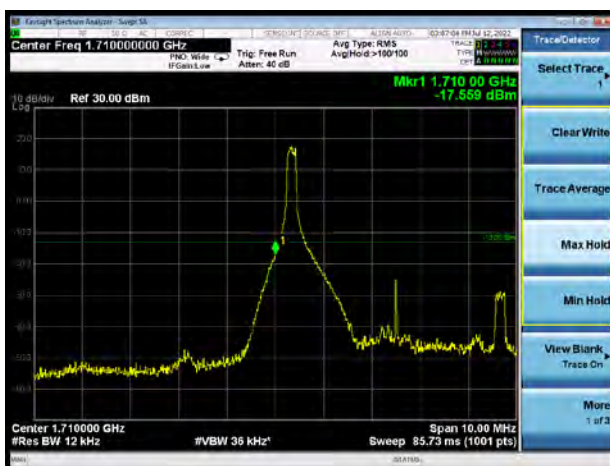
LTE Band 66 16QAM 3MHz CH-Low, 100%RB



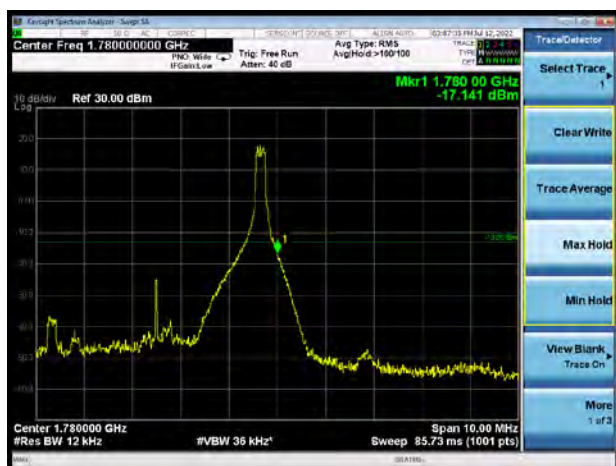
LTE Band 66 16QAM 3MHz CH-High, 100%RB



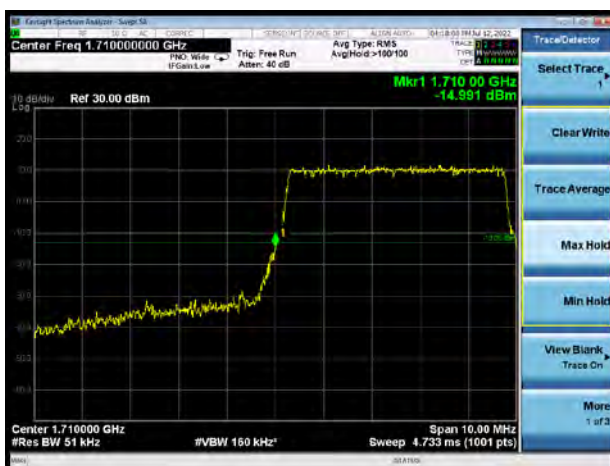
LTE Band 66 16QAM 5MHz CH-Low, 1 RB



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



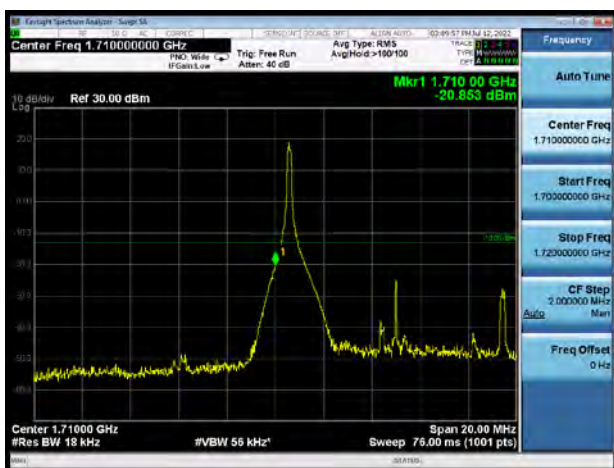
LTE Band 66 16QAM 5MHz CH-Low, 100%RB



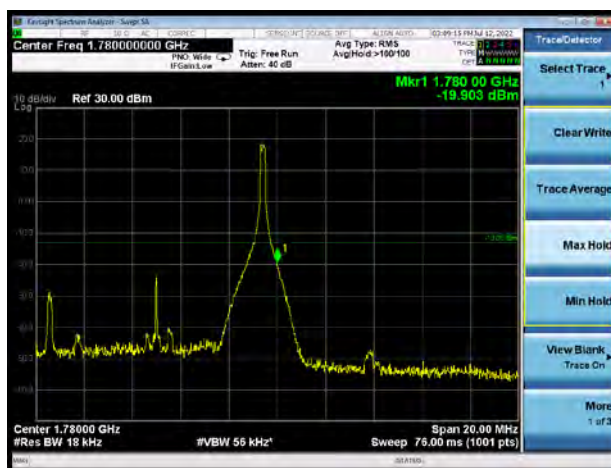
LTE Band 66 16QAM 5MHz CH-High, 100%RB



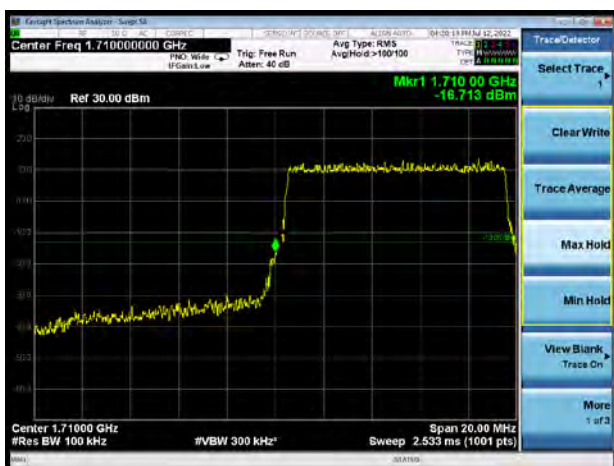
LTE Band 66 16QAM 10MHz CH-Low, 1 RB



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



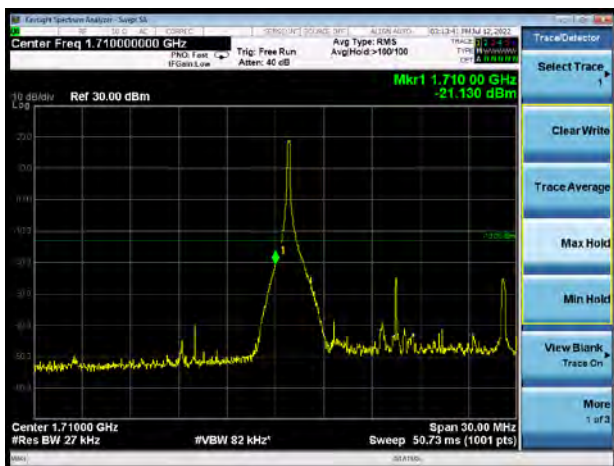
LTE Band 66 16QAM 10MHz CH-Low, 100%RB



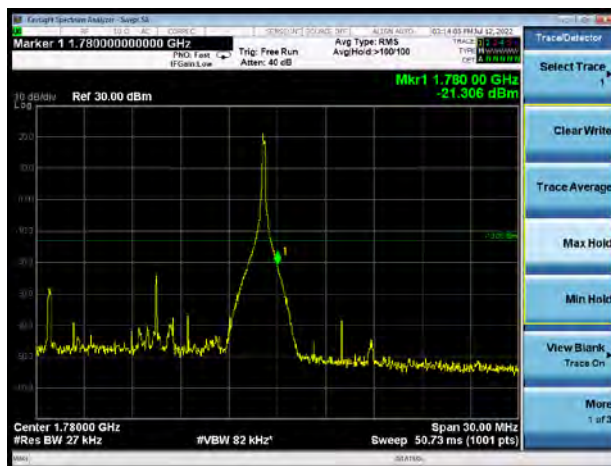
LTE Band 66 16QAM 10MHz CH-High, 100%RB



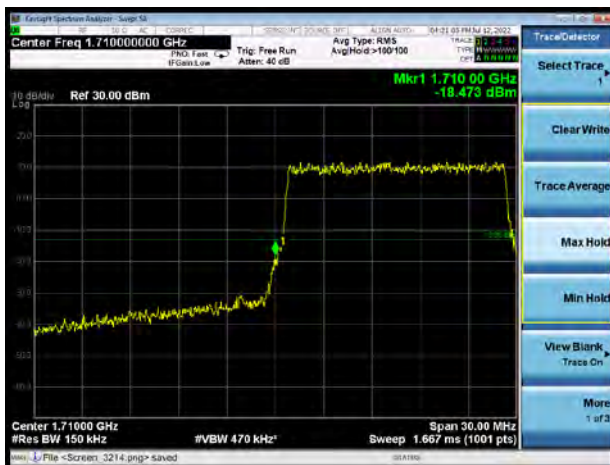
LTE Band 66 16QAM 15MHz CH-Low, 1 RB



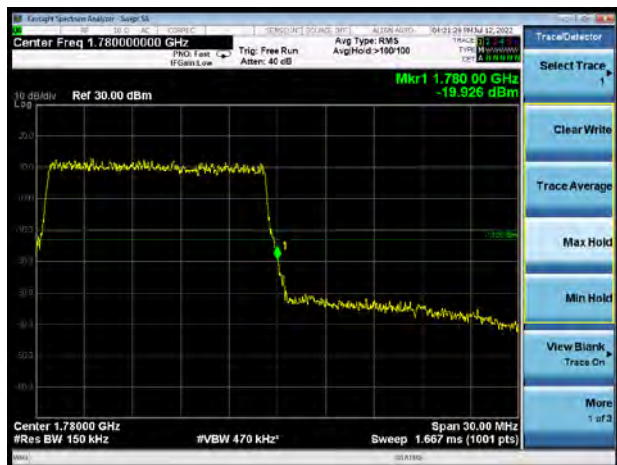
LTE Band 66 16QAM 15MHz CH-High, 1 RB



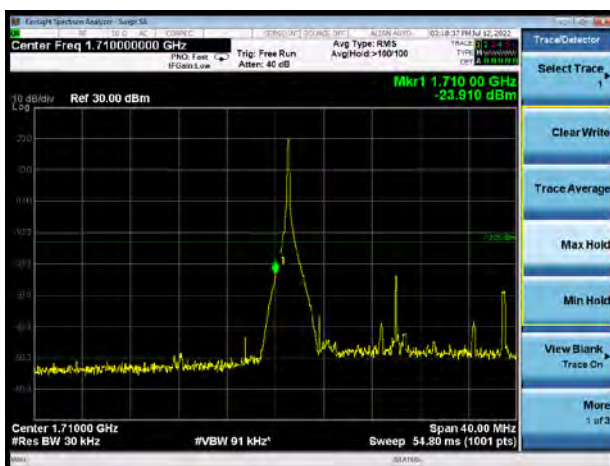
LTE Band 66 16QAM 15MHz CH-Low, 100%RB



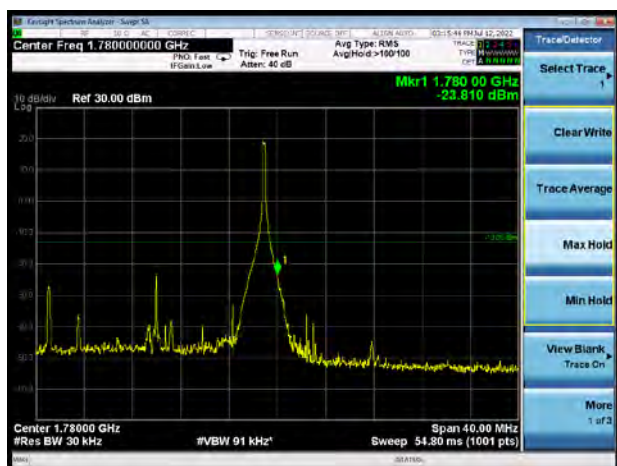
LTE Band 66 16QAM 15MHz CH-High, 100%RB



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



6.4 Peak-to-Average Power Ratio (PAPR)

WCDMA Band IV	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
RMC	1312	1712.4	27.92	25.23	2.69	≤13	PASS
	1413	1732.6	28.07	25.17	2.90	≤13	PASS
	1513	1752.6	27.78	24.82	2.96	≤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	26.91	21.67	5.24	≤13	PASS
		20175	1732.5	26.94	21.64	5.30	≤13	PASS
		20393	1754.3	26.82	21.63	5.19	≤13	PASS
	3	19965	1711.5	26.86	21.61	5.25	≤13	PASS
		20175	1732.5	26.88	21.58	5.30	≤13	PASS
		20385	1753.5	26.83	21.59	5.24	≤13	PASS
	5	19975	1712.5	27.06	21.61	5.45	≤13	PASS
		20175	1732.5	27.20	21.61	5.59	≤13	PASS
		20375	1752.5	27.00	21.60	5.40	≤13	PASS
	10	20000	1715	27.11	21.64	5.47	≤13	PASS
		20175	1732.5	27.22	21.65	5.57	≤13	PASS
		20350	1750	27.16	21.64	5.52	≤13	PASS
	15	20025	1717.5	27.47	21.64	5.83	≤13	PASS
		20175	1732.5	27.58	21.65	5.93	≤13	PASS
		20325	1747.5	27.56	21.67	5.89	≤13	PASS
	20	20050	1720	27.19	21.57	5.62	≤13	PASS
		20175	1732.5	27.17	21.58	5.59	≤13	PASS
		20300	1745	27.23	21.59	5.64	≤13	PASS
16QAM	1.4	19957	1710.7	26.65	20.62	6.03	≤13	PASS
		20175	1732.5	26.68	20.61	6.07	≤13	PASS
		20393	1754.3	26.67	20.66	6.01	≤13	PASS
	3	19965	1711.5	26.65	20.62	6.03	≤13	PASS
		20175	1732.5	26.72	20.59	6.13	≤13	PASS
		20385	1753.5	26.67	20.58	6.09	≤13	PASS
	5	19975	1712.5	26.76	20.61	6.15	≤13	PASS
		20175	1732.5	26.84	20.61	6.23	≤13	PASS
		20375	1752.5	26.74	20.59	6.15	≤13	PASS
	10	20000	1715	26.89	20.67	6.22	≤13	PASS



		20175	1732.5	26.97	20.63	6.34	≤13	PASS
		20350	1750	26.82	20.63	6.19	≤13	PASS
	15	20025	1717.5	26.98	20.62	6.36	≤13	PASS
		20175	1732.5	27.08	20.64	6.44	≤13	PASS
		20325	1747.5	27.05	20.67	6.38	≤13	PASS
	20	20050	1720	26.92	20.59	6.33	≤13	PASS
		20175	1732.5	26.95	20.58	6.37	≤13	PASS
		20300	1745	26.98	20.60	6.38	≤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	26.07	21.12	4.95	≤13	PASS
		21100	2535	26.41	21.13	5.28	≤13	PASS
		21425	2567.5	26.30	21.25	5.05	≤13	PASS
	10	20800	2505	26.23	21.21	5.02	≤13	PASS
		21100	2535	26.46	21.18	5.28	≤13	PASS
		21400	2565	26.25	21.26	4.99	≤13	PASS
	15	20825	2507.5	26.69	21.24	5.45	≤13	PASS
		21100	2535	26.82	21.20	5.62	≤13	PASS
		21375	2562.5	26.67	21.32	5.35	≤13	PASS
	20	20850	2510	26.58	21.18	5.40	≤13	PASS
		21100	2535	26.50	21.10	5.40	≤13	PASS
		21350	2560	26.52	21.24	5.28	≤13	PASS
16QAM	5	20775	2502.5	25.88	20.09	5.79	≤13	PASS
		21100	2535	26.12	20.11	6.01	≤13	PASS
		21425	2567.5	26.07	20.20	5.87	≤13	PASS
	10	20800	2505	26.00	20.16	5.84	≤13	PASS
		21100	2535	26.28	20.20	6.08	≤13	PASS
		21400	2565	26.12	20.28	5.84	≤13	PASS
	15	20825	2507.5	26.27	20.21	6.06	≤13	PASS
		21100	2535	26.37	20.16	6.21	≤13	PASS
		21375	2562.5	26.25	20.24	6.01	≤13	PASS
	20	20850	2510	26.31	20.19	6.12	≤13	PASS
		21100	2535	26.31	20.12	6.19	≤13	PASS
		21350	2560	26.27	20.23	6.04	≤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	27.92	22.44	5.48	≤13	PASS
		23230	782	27.92	22.44	5.48	≤13	PASS
		23255	784.5	27.84	22.41	5.43	≤13	PASS
	10	23230	782	27.92	22.47	5.45	≤13	PASS
16QAM	5	23205	779.5	27.74	21.50	6.24	≤13	PASS
		23230	782	27.72	21.50	6.22	≤13	PASS
		23255	784.5	27.67	21.46	6.21	≤13	PASS
	10	23230	782	27.77	21.52	6.25	≤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	26.18	16.73	9.45	≤13	PASS
		38000	2595	26.06	16.29	9.77	≤13	PASS
		38225	2617.5	26.10	16.73	9.37	≤13	PASS
	10	37800	2575	26.15	16.67	9.48	≤13	PASS
		38000	2595	26.17	17.18	8.99	≤13	PASS
		38200	2615	26.18	16.92	9.26	≤13	PASS
	15	37825	2577.5	26.61	17.14	9.47	≤13	PASS
		38000	2595	26.54	17.10	9.44	≤13	PASS
		38175	2612.5	26.59	17.30	9.29	≤13	PASS
	20	37850	2580	26.27	16.97	9.30	≤13	PASS
		38000	2595	26.23	17.03	9.20	≤13	PASS
		38150	2610	26.25	17.44	8.81	≤13	PASS
16QAM	5	37775	2572.5	25.92	16.61	9.31	≤13	PASS
		38000	2595	25.84	16.49	9.35	≤13	PASS
		38225	2617.5	25.76	14.89	10.87	≤13	PASS
	10	37800	2575	26.04	16.67	9.37	≤13	PASS
		38000	2595	25.82	15.34	10.48	≤13	PASS
		38200	2615	25.99	16.85	9.14	≤13	PASS
	15	37825	2577.5	26.15	16.28	9.87	≤13	PASS
		38000	2595	26.06	15.84	10.22	≤13	PASS



	20	38175	2612.5	26.16	16.29	9.87	≤13	PASS
		37850	2580	25.69	14.00	11.69	≤13	PASS
		38000	2595	25.83	15.17	10.66	≤13	PASS
		38150	2610	25.91	15.91	10.00	≤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	26.58	20.60	5.98	≤13	PASS
		132322	1745	26.94	21.68	5.26	≤13	PASS
		132665	1779.3	26.83	21.58	5.25	≤13	PASS
	3	131987	1711.5	26.77	21.67	5.10	≤13	PASS
		132322	1745	27.08	21.69	5.39	≤13	PASS
		132657	1778.5	26.82	21.56	5.26	≤13	PASS
	5	131997	1712.5	27.09	21.69	5.40	≤13	PASS
		132322	1745	27.14	21.69	5.45	≤13	PASS
		132647	1777.5	27.18	21.62	5.56	≤13	PASS
	10	132022	1715	27.17	21.71	5.46	≤13	PASS
		132322	1745	27.20	21.73	5.47	≤13	PASS
		132622	1775	27.17	21.64	5.53	≤13	PASS
	15	132047	1717.5	27.55	21.73	5.82	≤13	PASS
		132322	1745	27.57	21.75	5.82	≤13	PASS
		132597	1772.5	27.41	21.61	5.80	≤13	PASS
	20	132072	1720	27.28	21.66	5.62	≤13	PASS
		132322	1745	27.30	21.68	5.62	≤13	PASS
		132572	1770	27.13	21.55	5.58	≤13	PASS
16QAM	1.4	131979	1710.7	26.61	20.65	5.96	≤13	PASS
		132322	1745	26.65	20.62	6.03	≤13	PASS
		132665	1779.3	26.65	20.58	6.07	≤13	PASS
	3	131987	1711.5	26.66	20.65	6.01	≤13	PASS
		132322	1745	26.86	20.70	6.16	≤13	PASS
		132657	1778.5	26.72	20.57	6.15	≤13	PASS
	5	131997	1712.5	26.82	20.68	6.14	≤13	PASS
		132322	1745	26.85	20.69	6.16	≤13	PASS
		132647	1777.5	26.91	20.62	6.29	≤13	PASS
	10	132022	1715	27.00	20.74	6.26	≤13	PASS
		132322	1745	26.95	20.72	6.23	≤13	PASS
		132622	1775	26.96	20.64	6.32	≤13	PASS
	15	132047	1717.5	27.09	20.71	6.38	≤13	PASS



		132322	1745	27.07	20.70	6.37	≤13	PASS
		132597	1772.5	26.95	20.59	6.36	≤13	PASS
	20	132072	1720	26.98	20.66	6.32	≤13	PASS
		132322	1745	27.06	20.69	6.37	≤13	PASS
		132572	1770	26.88	20.54	6.34	≤13	PASS

6.5 Frequency Stability

WCDMA Band IV						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
Temperature	Voltage	QPSK	BPSK	QPSK	BPSK	
Normal(25℃)	Normal	5.99	3.59	0.00346	0.00207	PASS
Extreme(50℃)		7.92	8.29	0.00457	0.00479	PASS
Extreme(40℃)		17.22	8.21	0.00994	0.00474	PASS
Extreme(30℃)		17.75	17.43	0.01025	0.01006	PASS
Extreme(20℃)		14.48	14.63	0.00836	0.00845	PASS
Extreme(10℃)		13.72	4.24	0.00792	0.00245	PASS
Extreme(0℃)		1.51	2.59	0.00087	0.00149	PASS
Extreme(-10℃)		2.62	3.69	0.00151	0.00213	PASS
Extreme(-20℃)		5.69	17.27	0.00329	0.00997	PASS
Extreme(-30℃)		2.16	1.14	0.00125	0.00066	PASS
25℃	LV	16.01	2.09	0.00924	0.00121	PASS
	HV	5.37	15.37	0.00310	0.00887	PASS

LTE Band 4						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	1.4MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal(25℃)	Normal	13.86	9.20	0.00800	0.00531	PASS
Extreme(50℃)		13.73	16.79	0.00793	0.00969	PASS
Extreme(40℃)		10.49	2.30	0.00606	0.00133	PASS
Extreme(30℃)		3.95	4.01	0.00228	0.00231	PASS
Extreme(20℃)		10.80	2.42	0.00623	0.00140	PASS
Extreme(10℃)		9.03	13.29	0.00521	0.00767	PASS
Extreme(0℃)		2.99	2.63	0.00173	0.00152	PASS
Extreme(-10℃)		4.02	10.18	0.00232	0.00588	PASS
Extreme(-20℃)		10.08	14.23	0.00582	0.00822	PASS
Extreme(-30℃)		14.85	12.04	0.00857	0.00695	PASS
25℃	LV	17.68	13.22	0.01020	0.00763	PASS
	HV	12.69	15.54	0.00732	0.00897	PASS



Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	3MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal(25℃)	Normal	12.76	1.47	0.00736	0.00085	PASS
Extreme(50℃)		12.50	3.94	0.00721	0.00227	PASS
Extreme(40℃)		3.03	17.61	0.00175	0.01016	PASS
Extreme(30℃)		10.33	11.39	0.00596	0.00657	PASS
Extreme(20℃)		16.63	15.42	0.00960	0.00890	PASS
Extreme(10℃)		10.13	6.29	0.00585	0.00363	PASS
Extreme(0℃)		12.72	16.57	0.00734	0.00957	PASS
Extreme(-10℃)		6.67	17.05	0.00385	0.00984	PASS
Extreme(-20℃)		2.22	9.08	0.00128	0.00524	PASS
Extreme(-30℃)		9.25	5.98	0.00534	0.00345	PASS
25℃	LV	2.06	8.74	0.00119	0.00504	PASS
	HV	6.92	8.79	0.00400	0.00508	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	5MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal(25℃)	Normal	1.42	13.38	0.00082	0.00772	PASS
Extreme(50℃)		3.92	14.25	0.00226	0.00822	PASS
Extreme(40℃)		13.01	13.01	0.00751	0.00751	PASS
Extreme(30℃)		7.46	11.19	0.00431	0.00646	PASS
Extreme(20℃)		17.51	11.15	0.01010	0.00644	PASS
Extreme(10℃)		1.32	15.01	0.00076	0.00867	PASS
Extreme(0℃)		13.70	1.92	0.00791	0.00111	PASS
Extreme(-10℃)		15.73	4.58	0.00908	0.00264	PASS
Extreme(-20℃)		5.19	11.01	0.00300	0.00636	PASS
Extreme(-30℃)		10.04	10.35	0.00579	0.00597	PASS
25℃	LV	14.62	3.91	0.00844	0.00226	PASS
	HV	16.87	2.79	0.00974	0.00161	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	10MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal(25℃)	Normal	17.13	15.91	0.00988	0.00918	PASS
Extreme(50℃)		4.41	2.16	0.00254	0.00125	PASS
Extreme(40℃)		16.86	11.80	0.00973	0.00681	PASS
Extreme(30℃)		13.49	14.97	0.00779	0.00864	PASS



Extreme(20℃)		14.64	11.08	0.00845	0.00640	PASS
Extreme(10℃)		17.51	9.85	0.01011	0.00569	PASS
Extreme(0℃)		16.49	5.88	0.00952	0.00340	PASS
Extreme(-10℃)		5.48	5.24	0.00316	0.00303	PASS
Extreme(-20℃)		15.24	13.67	0.00879	0.00789	PASS
Extreme(-30℃)		16.06	3.02	0.00927	0.00174	PASS
25℃	LV	6.59	1.00	0.00380	0.00058	PASS
	HV	7.39	16.56	0.00427	0.00956	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	15MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal(25℃)	Normal	11.43	15.12	0.00660	0.00873	PASS
Extreme(50℃)		1.51	9.83	0.00087	0.00567	PASS
Extreme(40℃)		11.46	9.74	0.00661	0.00562	PASS
Extreme(30℃)		9.58	14.58	0.00553	0.00842	PASS
Extreme(20℃)		8.20	16.23	0.00473	0.00937	PASS
Extreme(10℃)		9.38	16.95	0.00541	0.00978	PASS
Extreme(0℃)		16.29	9.24	0.00940	0.00533	PASS
Extreme(-10℃)		7.10	4.11	0.00410	0.00237	PASS
Extreme(-20℃)		11.95	2.54	0.00690	0.00147	PASS
Extreme(-30℃)		14.20	9.83	0.00820	0.00567	PASS
25℃	LV	1.44	9.38	0.00083	0.00542	PASS
	HV	2.64	13.53	0.00153	0.00781	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	20MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal(25℃)	Normal	5.33	14.07	0.00308	0.00812	PASS
Extreme(50℃)		5.22	5.05	0.00301	0.00291	PASS
Extreme(40℃)		9.43	9.24	0.00544	0.00533	PASS
Extreme(30℃)		5.92	14.82	0.00342	0.00856	PASS
Extreme(20℃)		11.56	9.39	0.00667	0.00542	PASS
Extreme(10℃)		8.66	1.37	0.00500	0.00079	PASS
Extreme(0℃)		16.85	3.18	0.00972	0.00184	PASS
Extreme(-10℃)		2.58	3.40	0.00149	0.00196	PASS
Extreme(-20℃)		13.11	5.12	0.00757	0.00296	PASS
Extreme(-30℃)		16.32	10.97	0.00942	0.00633	PASS
25℃	LV	11.55	11.09	0.00666	0.00640	PASS
	HV	12.01	7.78	0.00693	0.00449	PASS



Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	5MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal(25℃)	Normal	6.57	16.41	0.00259	0.00647	PASS
Extreme(50℃)		3.78	4.42	0.00149	0.00174	PASS
Extreme(40℃)		7.94	16.62	0.00313	0.00656	PASS
Extreme(30℃)		9.46	8.54	0.00373	0.00337	PASS
Extreme(20℃)		6.33	14.24	0.00250	0.00562	PASS
Extreme(10℃)		5.91	17.92	0.00233	0.00707	PASS
Extreme(0℃)		3.02	4.91	0.00119	0.00194	PASS
Extreme(-10℃)		14.23	5.00	0.00561	0.00197	PASS
Extreme(-20℃)		17.79	13.99	0.00702	0.00552	PASS
Extreme(-30℃)		2.67	6.23	0.00105	0.00246	PASS
25℃	LV	5.22	9.18	0.00206	0.00362	PASS
	HV	8.47	17.06	0.00334	0.00673	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	10MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal(25℃)	Normal	1.97	13.25	0.00078	0.00522	PASS
Extreme(50℃)		2.35	14.23	0.00093	0.00561	PASS
Extreme(40℃)		9.93	2.70	0.00392	0.00106	PASS
Extreme(30℃)		12.83	2.81	0.00506	0.00111	PASS
Extreme(20℃)		10.59	7.58	0.00418	0.00299	PASS
Extreme(10℃)		14.06	9.38	0.00555	0.00370	PASS
Extreme(0℃)		11.70	9.72	0.00462	0.00384	PASS
Extreme(-10℃)		10.73	16.45	0.00423	0.00649	PASS
Extreme(-20℃)		11.69	7.11	0.00461	0.00280	PASS
Extreme(-30℃)		17.47	12.93	0.00689	0.00510	PASS
25℃	LV	6.20	14.68	0.00244	0.00579	PASS
	HV	15.02	3.43	0.00592	0.00135	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	15MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal(25℃)	Normal	10.99	6.07	0.00433	0.00239	PASS
Extreme(50℃)		10.33	16.14	0.00408	0.00637	PASS
Extreme(40℃)		15.11	6.55	0.00596	0.00258	PASS
Extreme(30℃)		1.96	4.96	0.00077	0.00196	PASS



Extreme(20℃)		10.06	11.50	0.00397	0.00454	PASS
Extreme(10℃)		14.07	8.58	0.00555	0.00339	PASS
Extreme(0℃)		4.85	1.01	0.00191	0.00040	PASS
Extreme(-10℃)		3.49	17.50	0.00138	0.00690	PASS
Extreme(-20℃)		13.75	12.99	0.00542	0.00512	PASS
Extreme(-30℃)		8.75	4.61	0.00345	0.00182	PASS
25℃	LV	13.21	2.87	0.00521	0.00113	PASS
	HV	6.48	13.39	0.00256	0.00528	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	20MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal(25℃)	Normal	16.34	5.92	0.00645	0.00233	PASS
Extreme(50℃)		15.16	12.92	0.00598	0.00510	PASS
Extreme(40℃)		12.67	9.06	0.00500	0.00357	PASS
Extreme(30℃)		9.44	2.11	0.00372	0.00083	PASS
Extreme(20℃)		13.43	4.51	0.00530	0.00178	PASS
Extreme(10℃)		13.25	16.02	0.00523	0.00632	PASS
Extreme(0℃)		12.86	16.24	0.00507	0.00641	PASS
Extreme(-10℃)		10.20	8.37	0.00402	0.00330	PASS
Extreme(-20℃)		9.25	12.46	0.00365	0.00492	PASS
Extreme(-30℃)		6.58	17.57	0.00259	0.00693	PASS
25℃	LV	3.34	16.30	0.00132	0.00643	PASS
	HV	13.09	11.02	0.00516	0.00435	PASS

LTE Band 13						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	5MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal(25℃)	Normal	2.95	16.27	0.00392	0.02166	PASS
Extreme(50℃)		17.02	14.72	0.02266	0.01960	PASS
Extreme(40℃)		6.79	17.31	0.00904	0.02305	PASS
Extreme(30℃)		9.98	5.56	0.01329	0.00740	PASS
Extreme(20℃)		16.66	3.84	0.02218	0.00512	PASS
Extreme(10℃)		1.71	15.16	0.00227	0.02019	PASS
Extreme(0℃)		2.07	9.20	0.00276	0.01226	PASS
Extreme(-10℃)		7.24	11.81	0.00964	0.01573	PASS
Extreme(-20℃)		8.62	11.85	0.01147	0.01578	PASS
Extreme(-30℃)		8.52	9.21	0.01134	0.01227	PASS
25℃	LV	6.00	6.30	0.00799	0.00839	PASS



	HV	17.83	2.51	0.02374	0.00334	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	10MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal(25℃)	Normal	2.30	9.12	0.00306	0.01214	
Extreme(50℃)		6.51	5.91	0.00866	0.00787	PASS
Extreme(40℃)		1.27	5.62	0.00168	0.00748	PASS
Extreme(30℃)		16.74	4.93	0.02228	0.00656	PASS
Extreme(20℃)		1.07	13.08	0.00142	0.01742	PASS
Extreme(10℃)		7.06	13.01	0.00940	0.01733	PASS
Extreme(0℃)		9.68	5.00	0.01289	0.00666	PASS
Extreme(-10℃)		6.60	7.09	0.00879	0.00944	PASS
Extreme(-20℃)		3.91	8.64	0.00521	0.01151	PASS
Extreme(-30℃)		5.65	4.64	0.00752	0.00618	PASS
25℃	LV	4.57	13.60	0.00609	0.01811	PASS
	HV	2.54	10.71	0.00338	0.01426	PASS

LTE Band 38						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	5MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal(25℃)	Normal	15.60	4.43	0.00601	0.00171	PASS
Extreme(50℃)		15.93	15.28	0.00614	0.00589	PASS
Extreme(40℃)		14.50	7.28	0.00559	0.00280	PASS
Extreme(30℃)		3.84	8.69	0.00148	0.00335	PASS
Extreme(20℃)		8.11	12.83	0.00312	0.00494	PASS
Extreme(10℃)		13.05	7.21	0.00503	0.00278	PASS
Extreme(0℃)		11.68	17.69	0.00450	0.00682	PASS
Extreme(-10℃)		9.85	17.83	0.00380	0.00687	PASS
Extreme(-20℃)		4.25	6.02	0.00164	0.00232	PASS
Extreme(-30℃)		6.98	9.61	0.00269	0.00370	PASS
25℃	LV	4.06	10.49	0.00156	0.00404	PASS
	HV	7.18	5.24	0.00277	0.00202	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	10MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal(25℃)	Normal	1.50	10.74	0.00058	0.00414	PASS
Extreme(50℃)		5.75	4.42	0.00222	0.00170	PASS



Extreme(40℃)		17.56	7.03	0.00677	0.00271	PASS
Extreme(30℃)		1.13	15.01	0.00044	0.00578	PASS
Extreme(20℃)		7.74	12.45	0.00298	0.00480	PASS
Extreme(10℃)		5.02	14.30	0.00193	0.00551	PASS
Extreme(0℃)		12.30	13.58	0.00474	0.00523	PASS
Extreme(-10℃)		13.14	10.16	0.00506	0.00392	PASS
Extreme(-20℃)		8.53	6.30	0.00329	0.00243	PASS
Extreme(-30℃)		11.82	7.49	0.00455	0.00289	PASS
25℃	LV	1.78	5.78	0.00068	0.00223	PASS
	HV	17.01	7.40	0.00655	0.00285	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	15MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal(25℃)	Normal	3.72	2.87	0.00143	0.00111	PASS
Extreme(50℃)		15.91	12.65	0.00613	0.00487	PASS
Extreme(40℃)		16.44	14.11	0.00634	0.00544	PASS
Extreme(30℃)		13.84	6.87	0.00533	0.00265	PASS
Extreme(20℃)		2.70	7.99	0.00104	0.00308	PASS
Extreme(10℃)		16.32	16.10	0.00629	0.00620	PASS
Extreme(0℃)		6.91	10.11	0.00266	0.00389	PASS
Extreme(-10℃)		12.08	10.57	0.00465	0.00408	PASS
Extreme(-20℃)		5.48	9.77	0.00211	0.00377	PASS
Extreme(-30℃)		15.74	16.12	0.00606	0.00621	PASS
25℃	LV	12.07	6.72	0.00465	0.00259	PASS
	HV	12.61	2.64	0.00486	0.00102	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	20MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal(25℃)	Normal	8.48	7.53	0.00327	0.00290	PASS
Extreme(50℃)		5.68	14.78	0.00219	0.00570	PASS
Extreme(40℃)		11.39	18.00	0.00439	0.00693	PASS
Extreme(30℃)		12.11	4.15	0.00467	0.00160	PASS
Extreme(20℃)		15.18	2.29	0.00585	0.00088	PASS
Extreme(10℃)		14.29	13.43	0.00551	0.00518	PASS
Extreme(0℃)		13.12	8.36	0.00506	0.00322	PASS
Extreme(-10℃)		12.54	2.25	0.00483	0.00087	PASS
Extreme(-20℃)		4.34	6.49	0.00167	0.00250	PASS
Extreme(-30℃)		16.01	2.92	0.00617	0.00112	PASS
25℃	LV	13.45	3.97	0.00518	0.00153	PASS



	HV	5.84	13.90	0.00225	0.00536	PASS
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LTE Band 66						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	1.4MHz	16QAM	QPSK	16QAM	QPSK	
Temperature	Voltage					
Normal(25℃)	Normal	1.97	12.07	0.00113	0.00692	PASS
Extreme(50℃)		7.98	10.61	0.00457	0.00608	PASS
Extreme(40℃)		12.73	17.82	0.00730	0.01021	PASS
Extreme(30℃)		5.33	8.11	0.00305	0.00465	PASS
Extreme(20℃)		14.07	13.17	0.00806	0.00755	PASS
Extreme(10℃)		14.84	4.92	0.00850	0.00282	PASS
Extreme(0℃)		17.95	17.78	0.01029	0.01019	PASS
Extreme(-10℃)		4.60	9.10	0.00263	0.00522	PASS
Extreme(-20℃)		17.99	1.45	0.01031	0.00083	PASS
Extreme(-30℃)		9.40	13.02	0.00539	0.00746	PASS
25℃	LV	12.47	7.56	0.00715	0.00433	PASS
	HV	16.29	12.75	0.00933	0.00731	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	3MHz	16QAM	QPSK	16QAM	QPSK	
Temperature	Voltage					
Normal(25℃)	Normal	13.21	10.18	0.00757	0.00583	PASS
Extreme(50℃)		9.40	8.43	0.00539	0.00483	PASS
Extreme(40℃)		5.83	5.43	0.00334	0.00311	PASS
Extreme(30℃)		13.46	4.39	0.00772	0.00252	PASS
Extreme(20℃)		12.22	9.06	0.00700	0.00519	PASS
Extreme(10℃)		15.36	17.86	0.00880	0.01023	PASS
Extreme(0℃)		15.77	9.16	0.00904	0.00525	PASS
Extreme(-10℃)		12.20	1.32	0.00699	0.00076	PASS
Extreme(-20℃)		10.80	17.91	0.00619	0.01027	PASS
Extreme(-30℃)		1.46	8.48	0.00084	0.00486	PASS
25℃	LV	15.48	12.15	0.00887	0.00696	PASS
	HV	3.90	4.00	0.00224	0.00229	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	5MHz	16QAM	QPSK	16QAM	QPSK	
Temperature	Voltage					
Normal(25℃)	Normal	11.43	9.76	0.00655	0.00559	PASS



Extreme(50℃)		1.69	4.93	0.00097	0.00283	PASS
Extreme(40℃)		11.53	11.58	0.00661	0.00664	PASS
Extreme(30℃)		10.09	13.12	0.00578	0.00752	PASS
Extreme(20℃)		7.20	9.87	0.00412	0.00566	PASS
Extreme(10℃)		16.57	15.72	0.00949	0.00901	PASS
Extreme(0℃)		10.55	2.89	0.00604	0.00165	PASS
Extreme(-10℃)		16.38	12.06	0.00939	0.00691	PASS
Extreme(-20℃)		3.41	1.04	0.00195	0.00060	PASS
Extreme(-30℃)		1.54	6.10	0.00088	0.00350	PASS
25℃	LV	12.93	15.03	0.00741	0.00861	PASS
	HV	13.35	7.12	0.00765	0.00408	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	10MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal(25℃)	Normal	14.22	1.18	0.00815	0.00068	PASS
Extreme(50℃)		7.06	15.24	0.00405	0.00873	PASS
Extreme(40℃)		3.06	3.11	0.00175	0.00178	PASS
Extreme(30℃)		5.01	15.77	0.00287	0.00904	PASS
Extreme(20℃)		2.15	8.71	0.00123	0.00499	PASS
Extreme(10℃)		6.68	10.43	0.00383	0.00598	PASS
Extreme(0℃)		5.27	2.45	0.00302	0.00140	PASS
Extreme(-10℃)		8.71	4.53	0.00499	0.00260	PASS
Extreme(-20℃)		5.00	2.61	0.00287	0.00150	PASS
Extreme(-30℃)		12.93	2.79	0.00741	0.00160	PASS
25℃	LV	16.19	7.07	0.00928	0.00405	PASS
	HV	11.22	9.69	0.00643	0.00555	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	15MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal(25℃)	Normal	11.67	14.11	0.00669	0.00809	PASS
Extreme(50℃)		10.64	1.58	0.00610	0.00091	PASS
Extreme(40℃)		9.53	4.67	0.00546	0.00267	PASS
Extreme(30℃)		9.71	4.71	0.00557	0.00270	PASS
Extreme(20℃)		5.50	14.92	0.00315	0.00855	PASS
Extreme(10℃)		4.84	5.33	0.00277	0.00305	PASS
Extreme(0℃)		10.65	6.49	0.00610	0.00372	PASS
Extreme(-10℃)		16.98	2.76	0.00973	0.00158	PASS
Extreme(-20℃)		3.81	3.14	0.00218	0.00180	PASS
Extreme(-30℃)		5.11	11.62	0.00293	0.00666	PASS

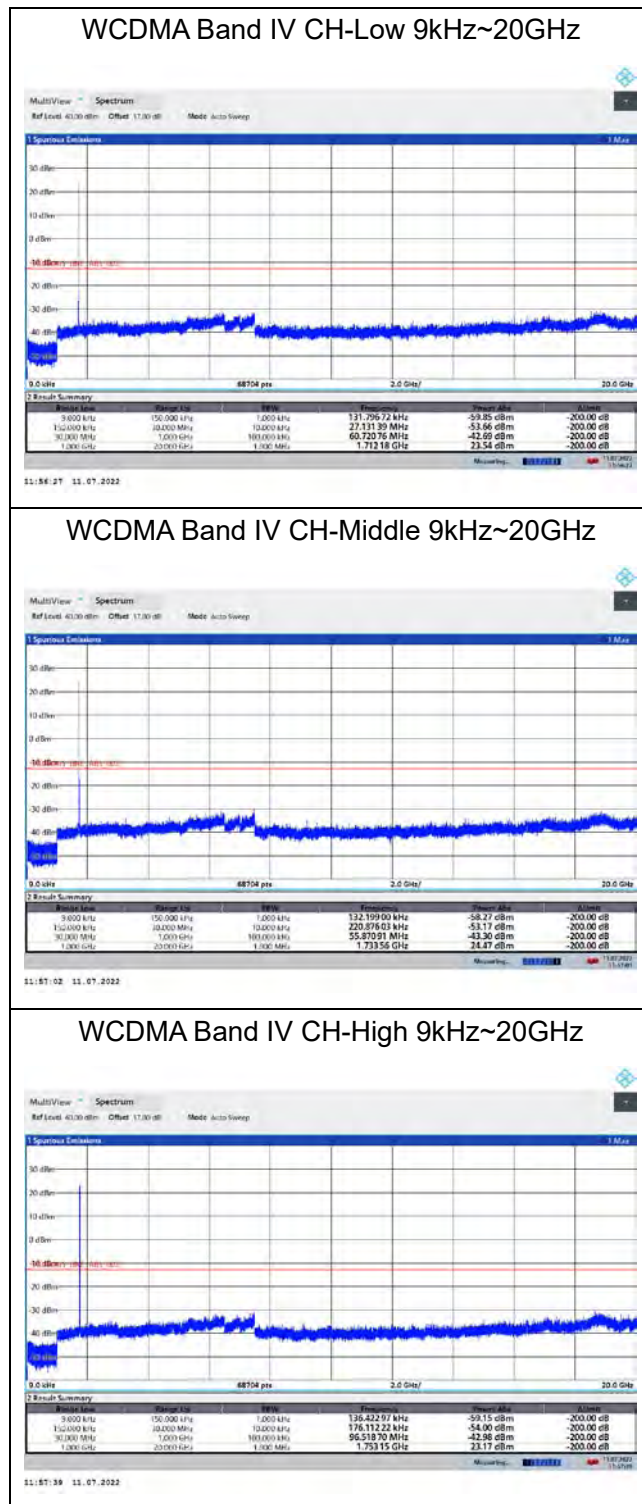


25°C	LV	1.30	10.63	0.00074	0.00609	PASS
	HV	16.53	11.36	0.00947	0.00651	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability(ppm)	Frequency Stability(ppm)	Verdict
BANDWIDTH	20MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal(25°C)	Normal	7.56	16.55	0.00433	0.00948	PASS
Extreme(50°C)		17.13	1.21	0.00981	0.00070	PASS
Extreme(40°C)		11.88	11.57	0.00681	0.00663	PASS
Extreme(30°C)		16.45	15.45	0.00943	0.00885	PASS
Extreme(20°C)		7.67	12.46	0.00440	0.00714	PASS
Extreme(10°C)		3.01	7.29	0.00172	0.00418	PASS
Extreme(0°C)		1.24	16.14	0.00071	0.00925	PASS
Extreme(-10°C)		12.09	9.65	0.00693	0.00553	PASS
Extreme(-20°C)		14.21	3.44	0.00814	0.00197	PASS
Extreme(-30°C)		12.66	14.08	0.00726	0.00807	PASS
25°C	LV	16.58	8.22	0.00950	0.00471	PASS
	HV	11.04	7.73	0.00633	0.00443	PASS

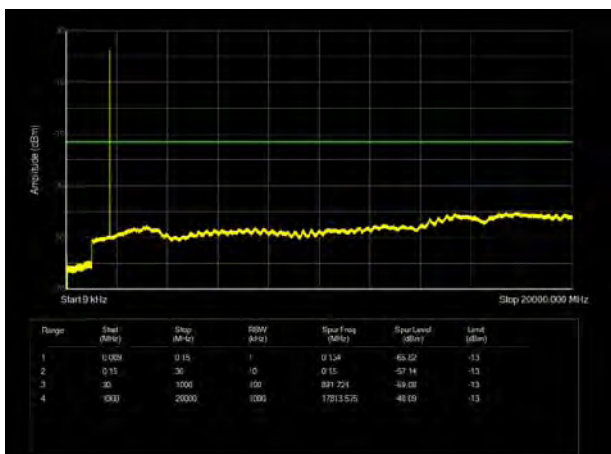
6.6 Spurious Emissions at Antenna Terminals

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

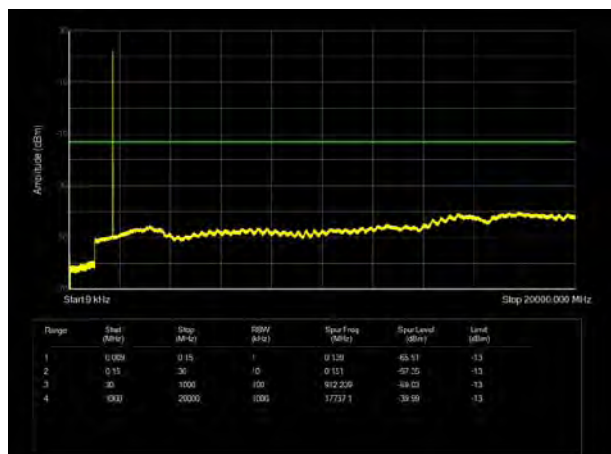
The signal beyond the limit is carrier.



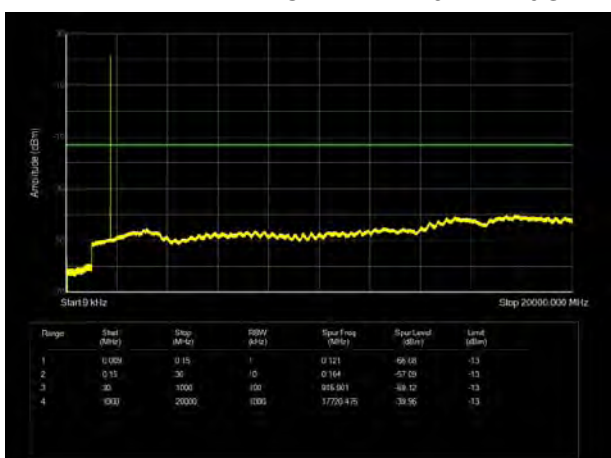
LTE Band 4 1.4MHz CH-Low 9kHz~20GHz



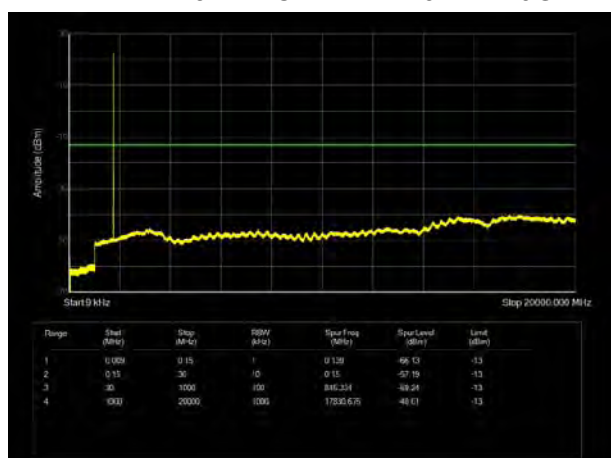
LTE Band 4 3MHz CH- Low 9kHz~20GHz



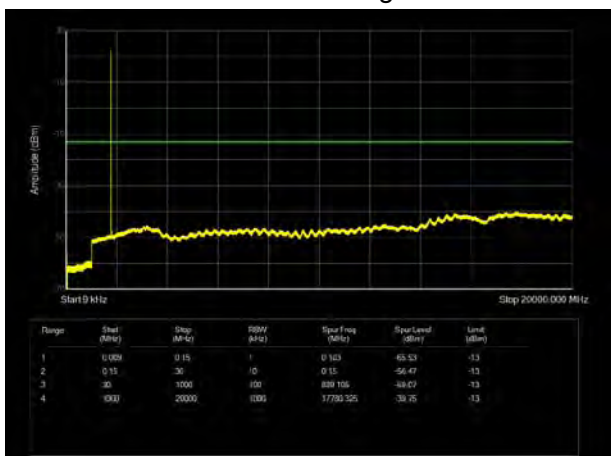
LTE Band 4 1.4MHz CH- Middle 9kHz~20GHz



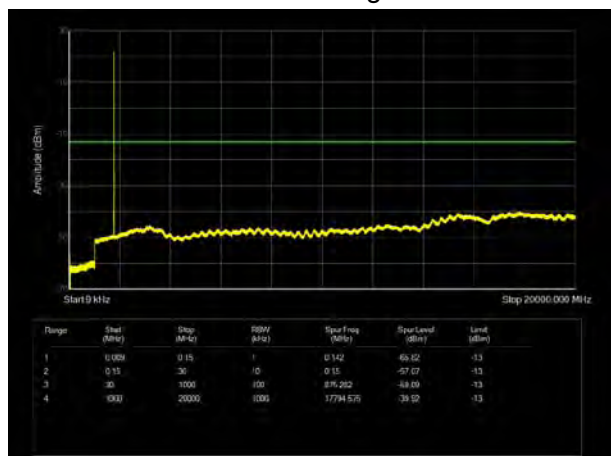
LTE Band 4 3MHz CH- Middle 9kHz~20GHz



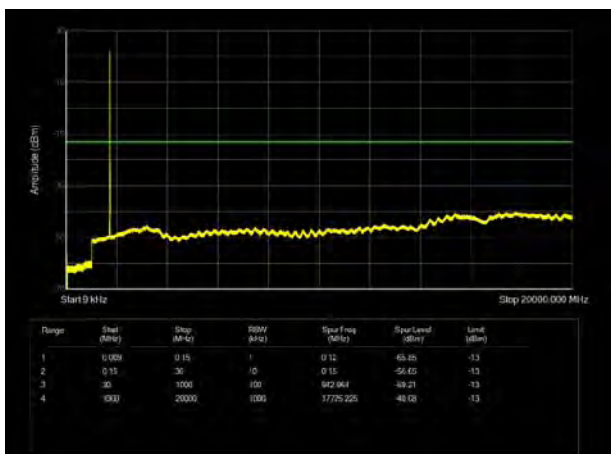
LTE Band 4 1.4MHz CH- High 9kHz~20GHz



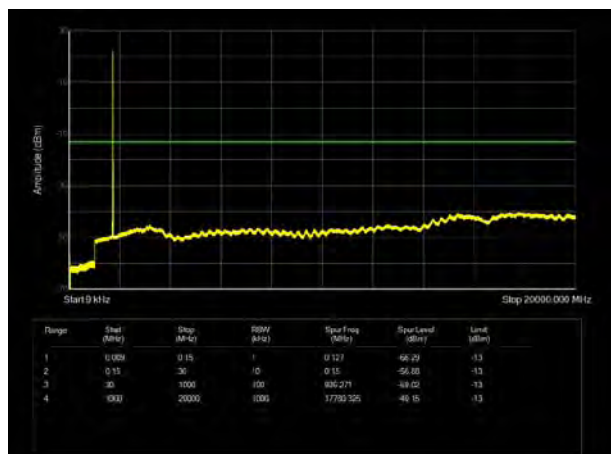
LTE Band 4 3MHz CH-High 9kHz~20GHz



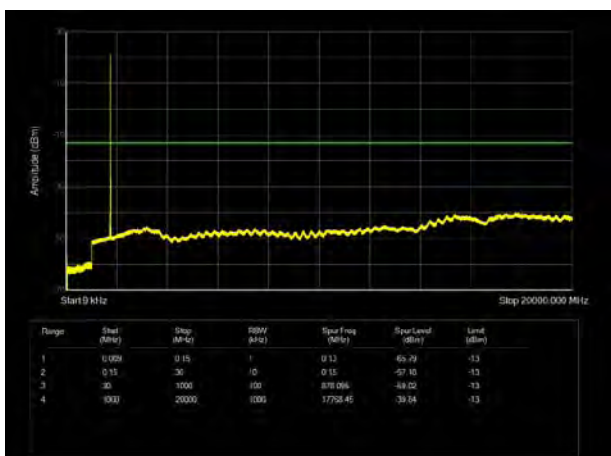
LTE Band 4 5MHz CH- Low 9kHz~20GHz



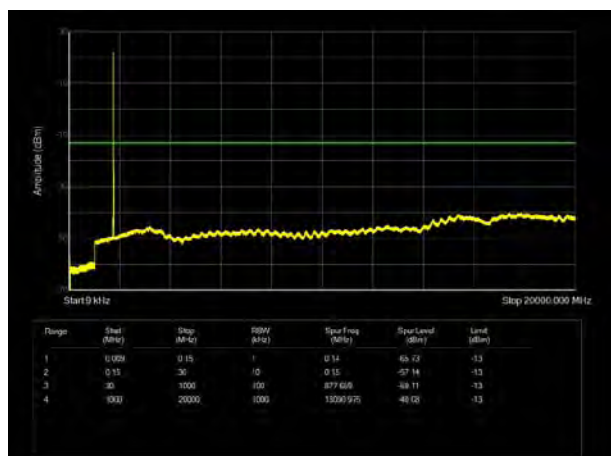
LTE Band 4 10MHz CH-Low 9kHz~20GHz



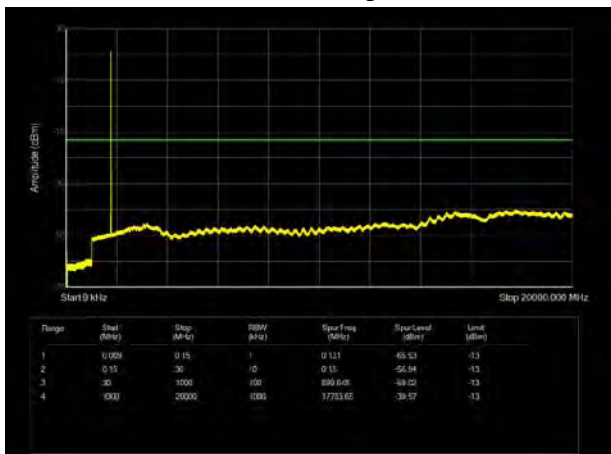
LTE Band 4 5MHz CH- Middle 9kHz~20GHz



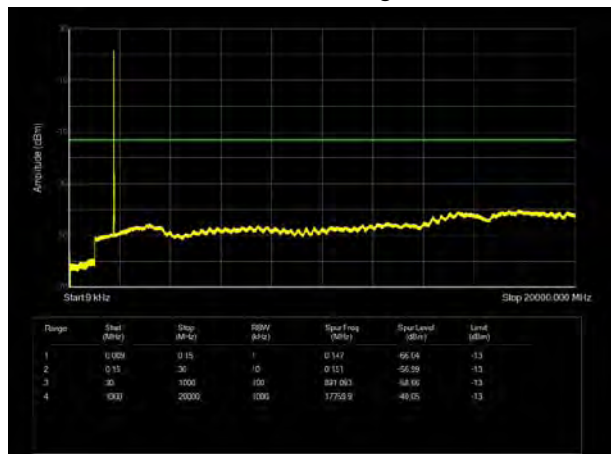
LTE Band 4 10MHz CH- Middle 9kHz~20GHz



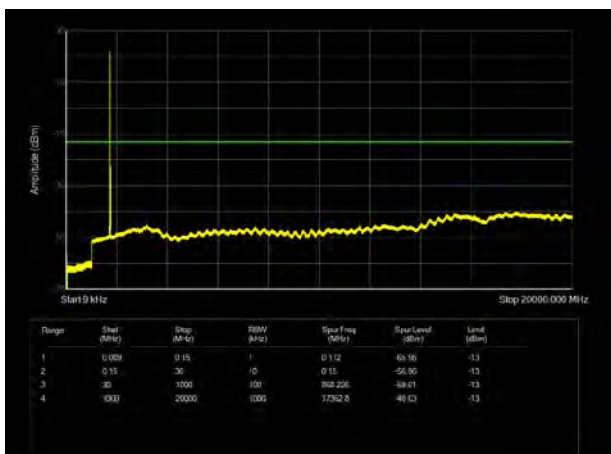
LTE Band 4 5MHz CH-High 9kHz~20GHz



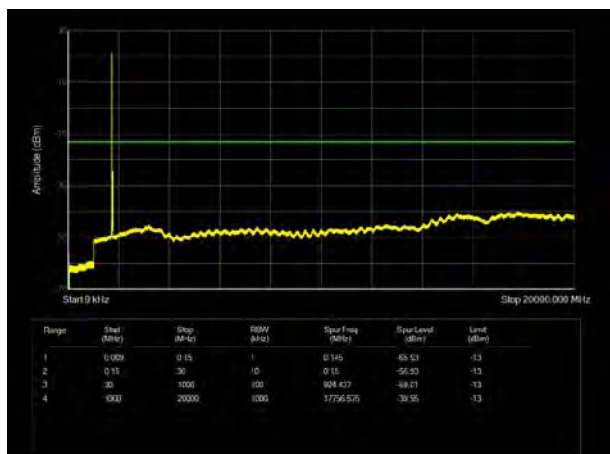
LTE Band 4 10MHz CH- High 9kHz~20GHz



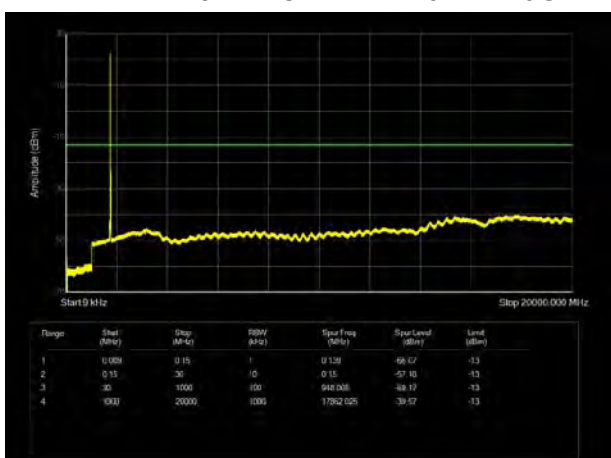
LTE Band 4 15MHz CH- Low 9kHz~20GHz



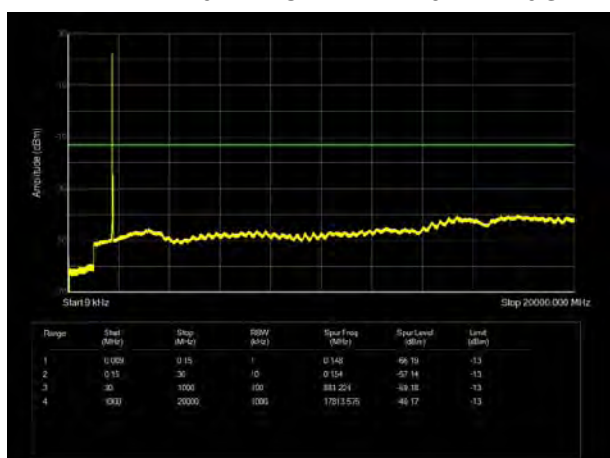
LTE Band 4 20MHz CH-Low 9kHz~20GHz



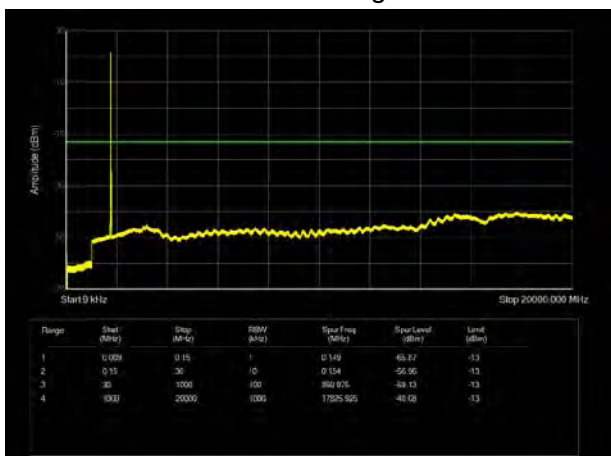
LTE Band 4 15MHz CH- Middle 9kHz~20GHz



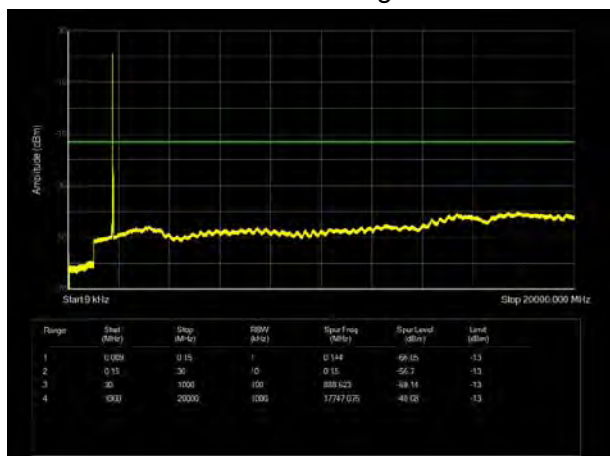
LTE Band 4 20MHz CH- Middle 9kHz~20GHz



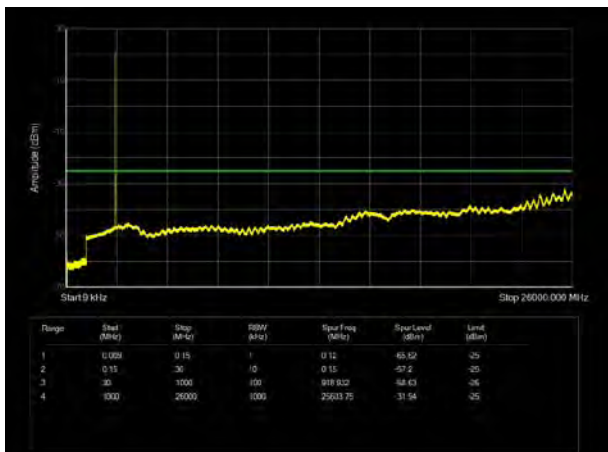
LTE Band 4 15MHz CH-High 9kHz~20GHz



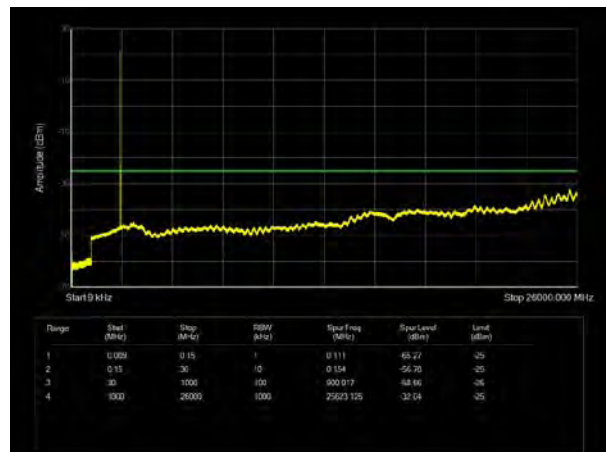
LTE Band 4 20MHz CH- High 9kHz~20GHz



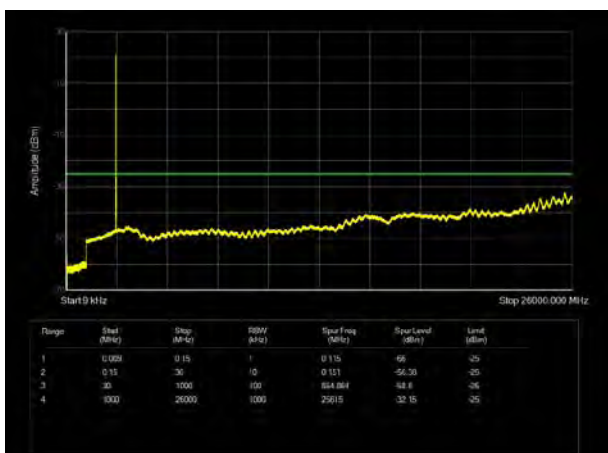
LTE Band 7 5MHz CH- Low 9kHz~26GHz



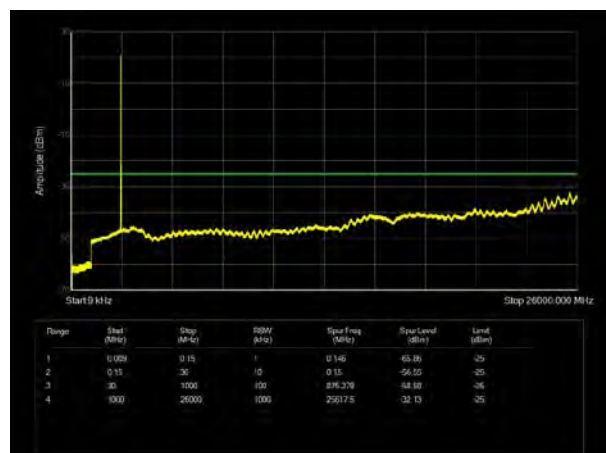
LTE Band 7 10MHz CH-Low 9kHz~26GHz



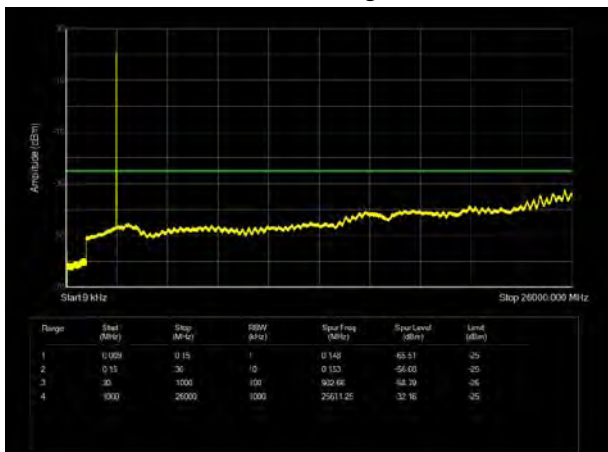
LTE Band 7 5MHz CH- Middle 9kHz~26GHz



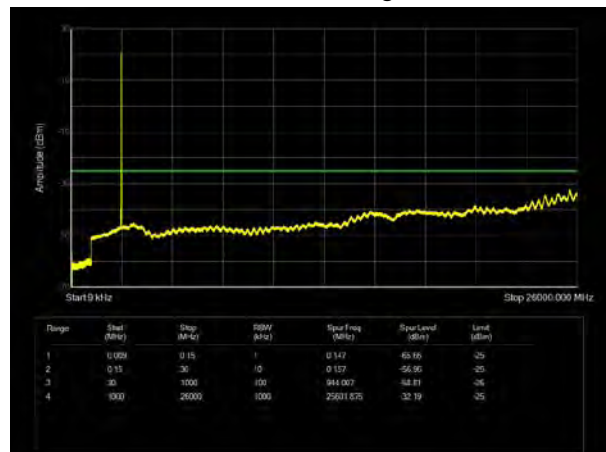
LTE Band 7 10MHz CH- Middle 9kHz~26GHz



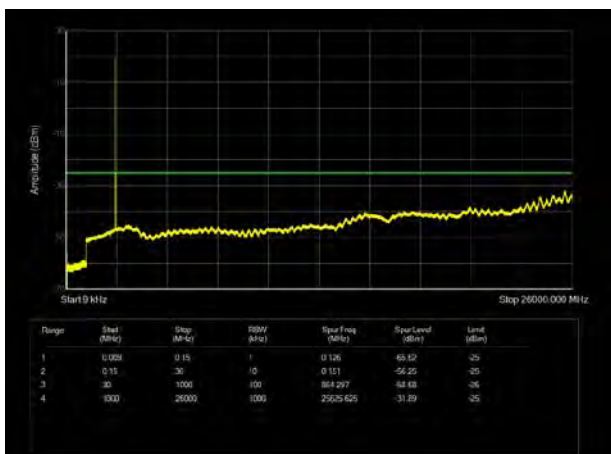
LTE Band 7 5MHz CH-High 9kHz~26GHz



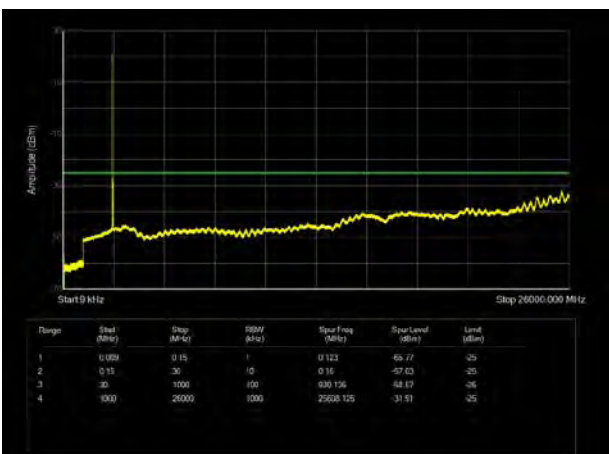
LTE Band 7 10MHz CH- High 9kHz~26GHz



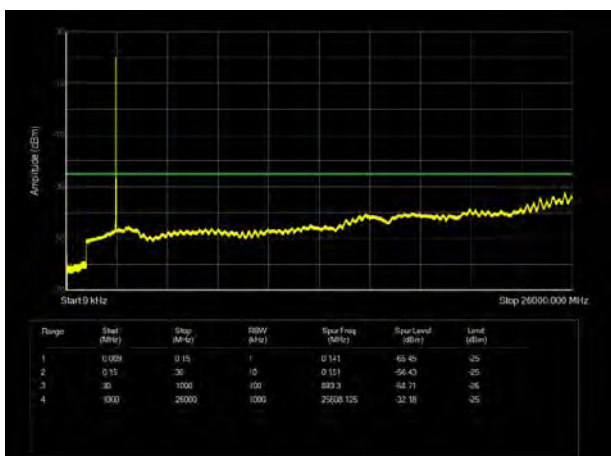
LTE Band 7 15MHz CH- Low 9kHz~26GHz



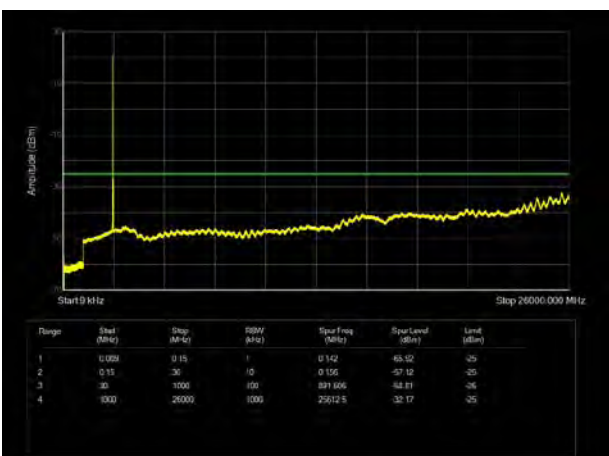
LTE Band 7 20MHz CH-Low 9kHz~26GHz



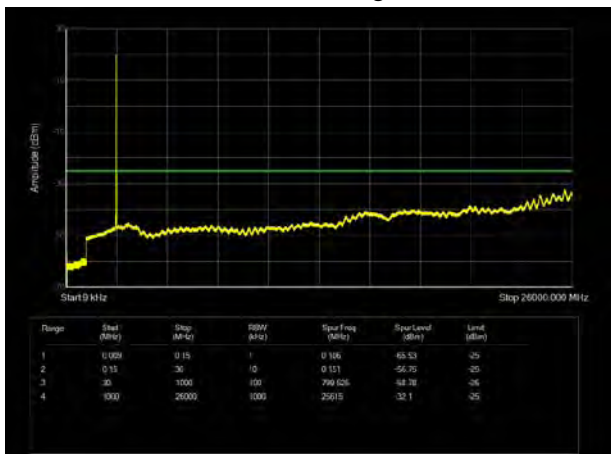
LTE Band 7 15MHz CH- Middle 9kHz~26GHz



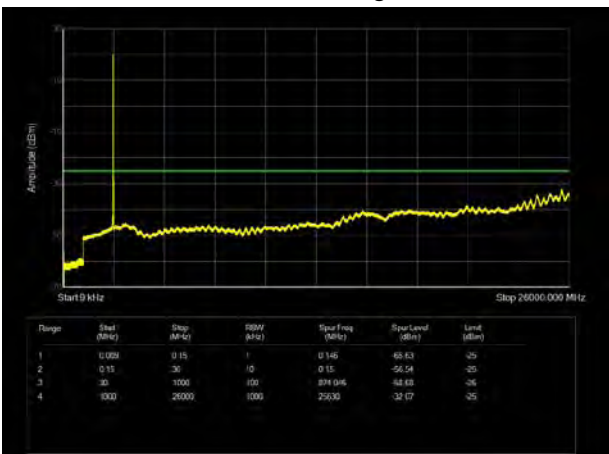
LTE Band 7 20MHz CH- Middle 9kHz~26GHz



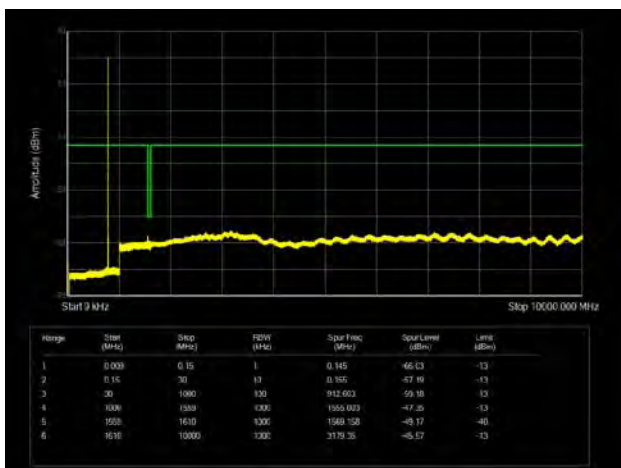
LTE Band 7 15MHz CH-High 9kHz~26GHz



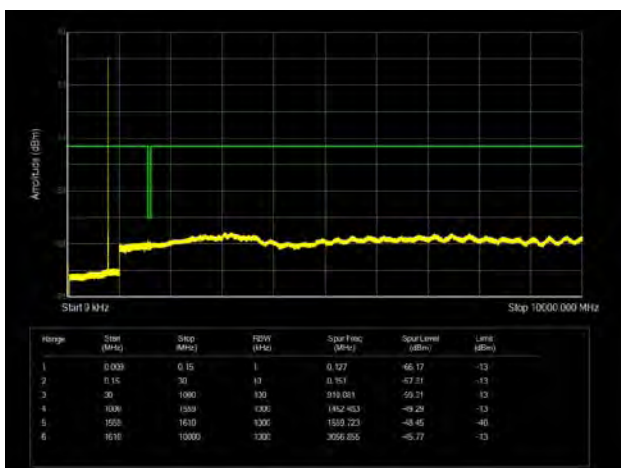
LTE Band 7 20MHz CH- High 9kHz~26GHz



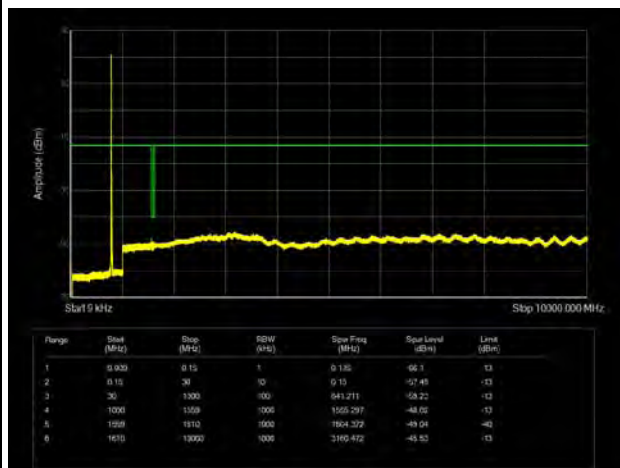
LTE Band 13 5MHz CH-Low 9kHz ~10GHz



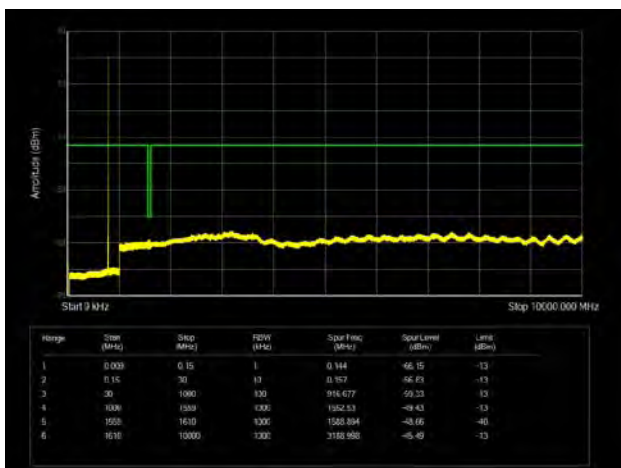
LTE Band 13 5MHz CH-Middle 9kHz ~10GHz



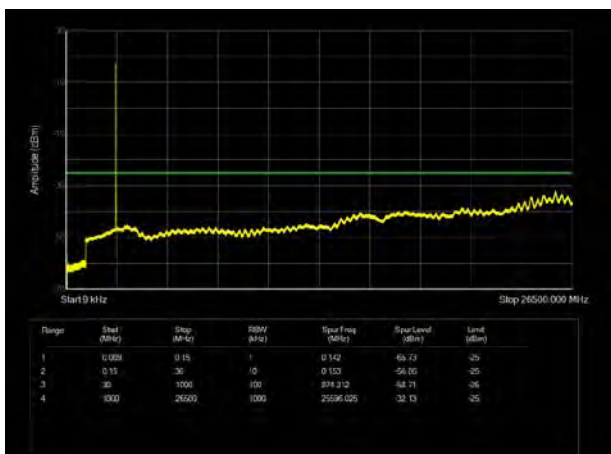
LTE Band 13 10MHz CH-Middle 9kHz ~10GHz



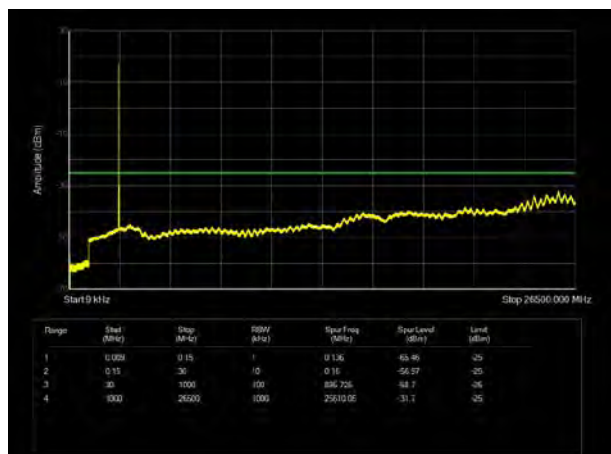
LTE Band 13 5MHz CH-High 9kHz ~10GHz



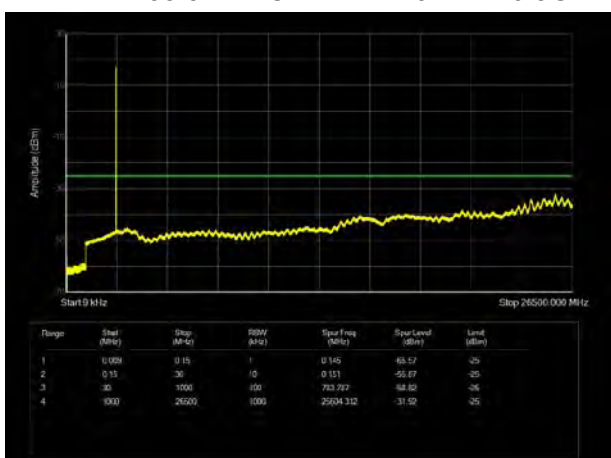
LTE Band 38 5MHz CH- Low 9kHz~26.5GHz



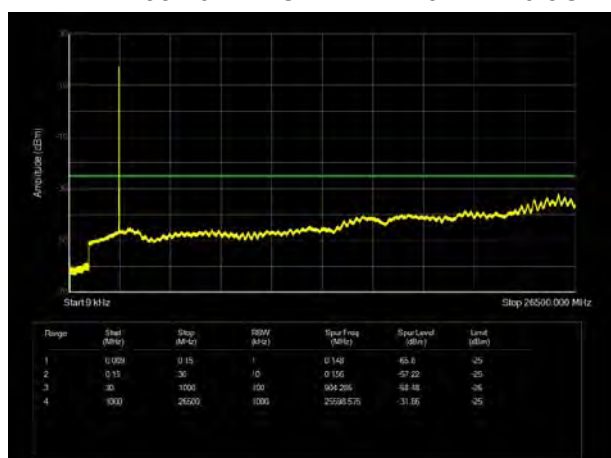
LTE Band 38 10MHz CH- Low 9kHz~26.5GHz



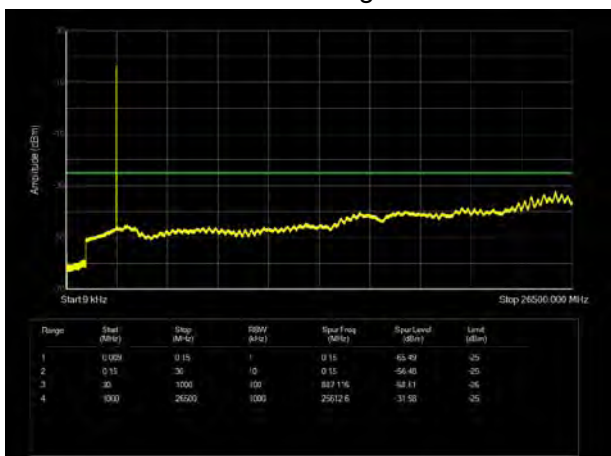
LTE Band 38 5MHz CH- Middle 9kHz~26.5GHz



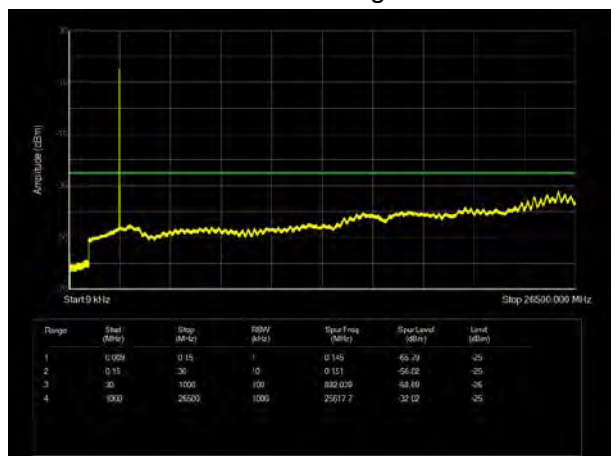
LTE Band 38 10MHz CH- Middle 9kHz~26.5GHz



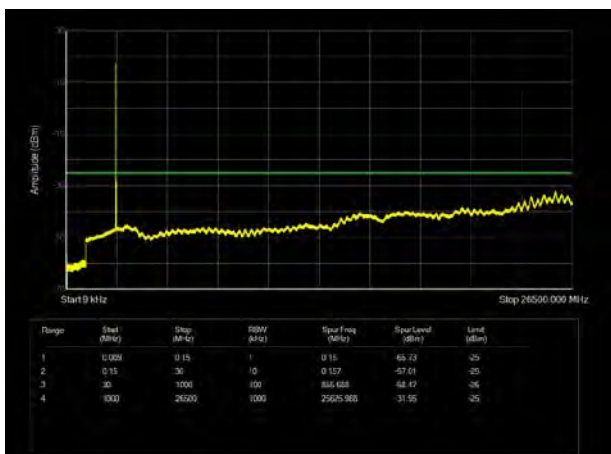
LTE Band 38 5MHz CH-High 9kHz~26.5GHz



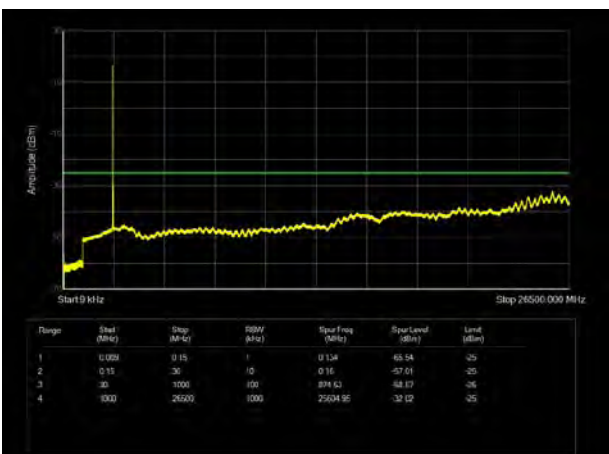
LTE Band 38 10MHz CH-High 9kHz~26.5GHz



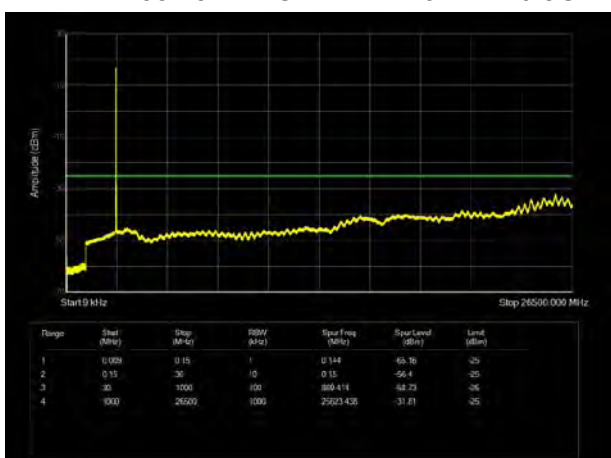
LTE Band 38 15MHz CH- Low 9kHz~26.5GHz



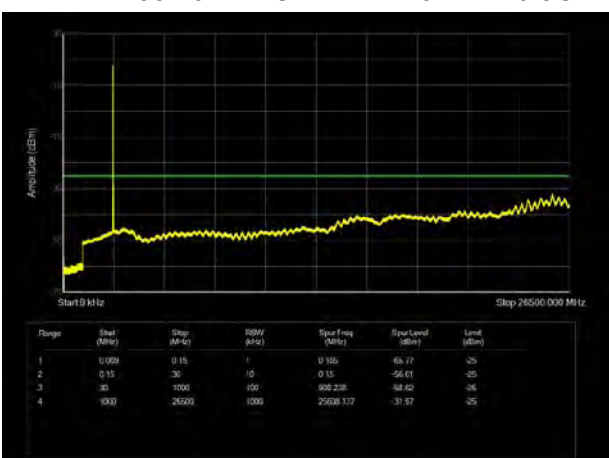
LTE Band 38 20MHz CH-Low 9kHz~26.5GHz



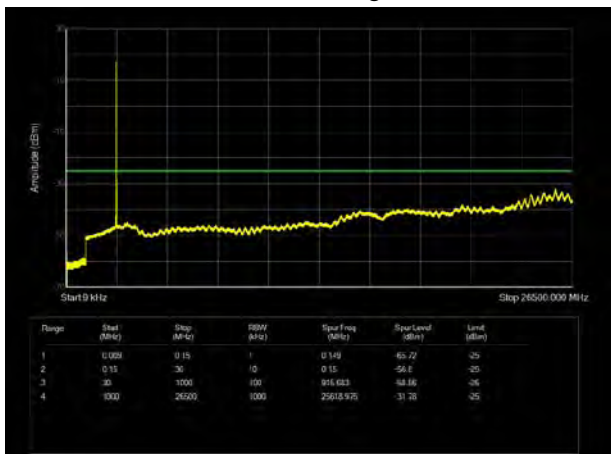
LTE Band 38 15MHz CH- Middle 9kHz~26.5GHz



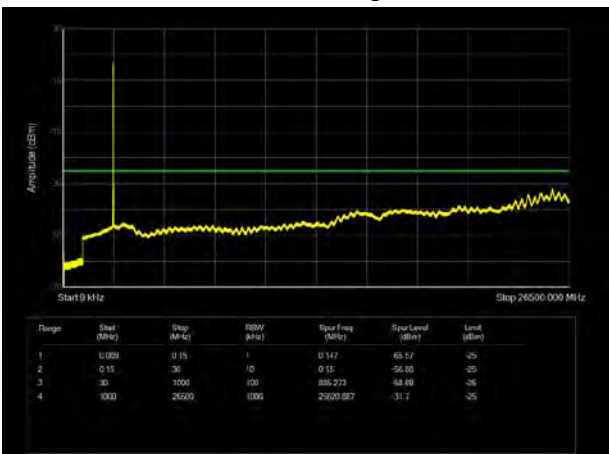
LTE Band 38 20MHz CH- Middle 9kHz~26.5GHz



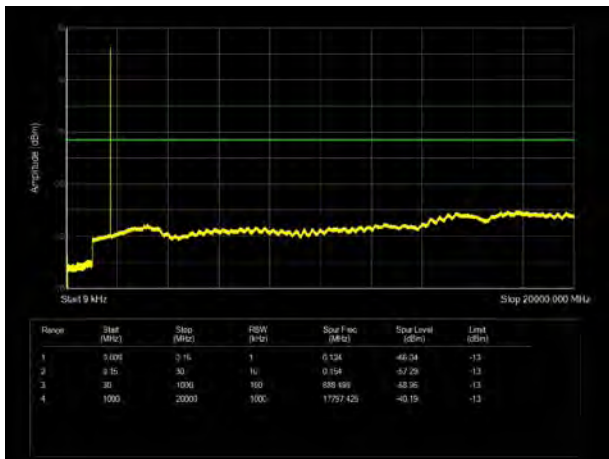
LTE Band 38 15MHz CH-High 9kHz~26.5GHz



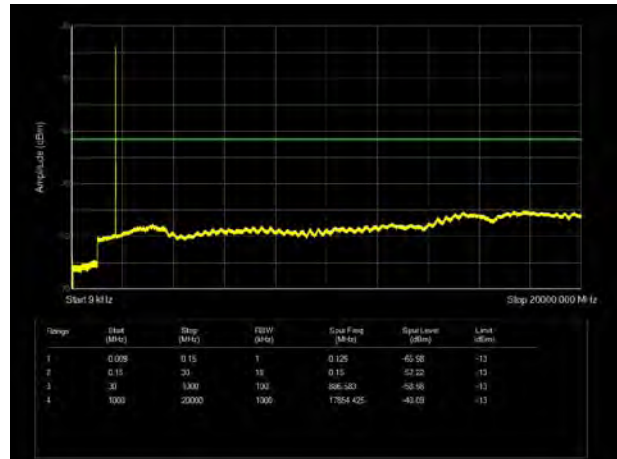
LTE Band 38 20MHz CH- High 9kHz~26.5GHz



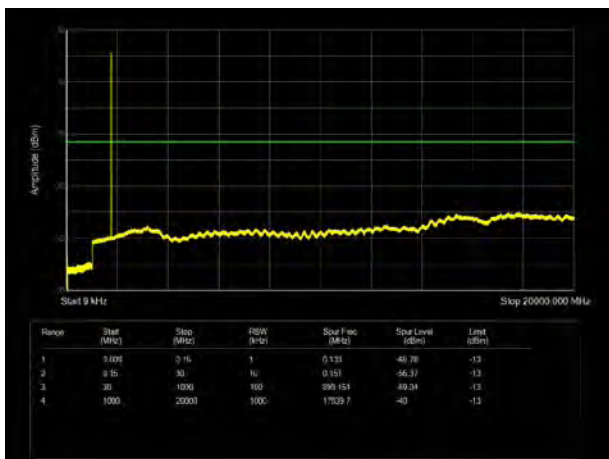
LTE Band 66 1.4MHz CH-Low 9kHz ~20GHz



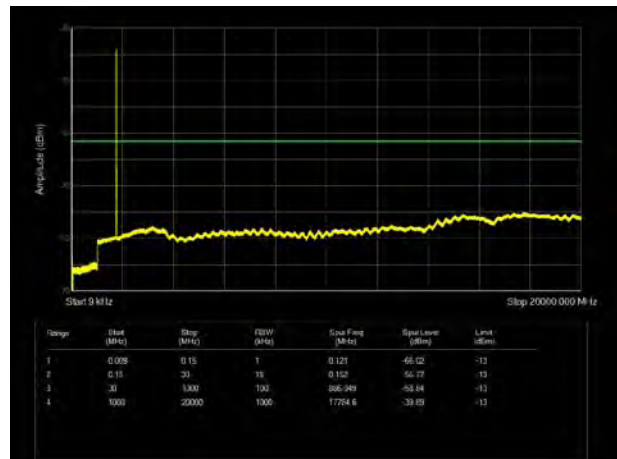
LTE Band 66 3MHz CH-Low 9kHz ~20GHz



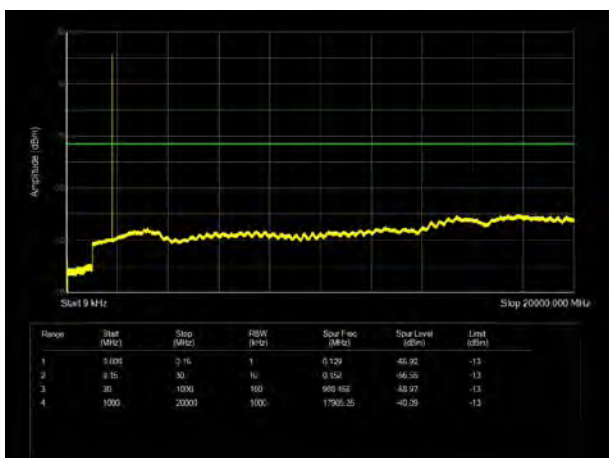
LTE Band 66 1.4MHz CH-Middle 9kHz ~20GHz



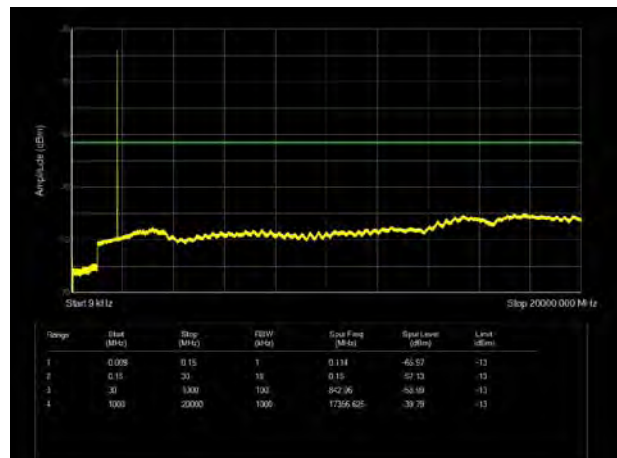
LTE Band 66 3MHz CH-Middle 9kHz ~20GHz



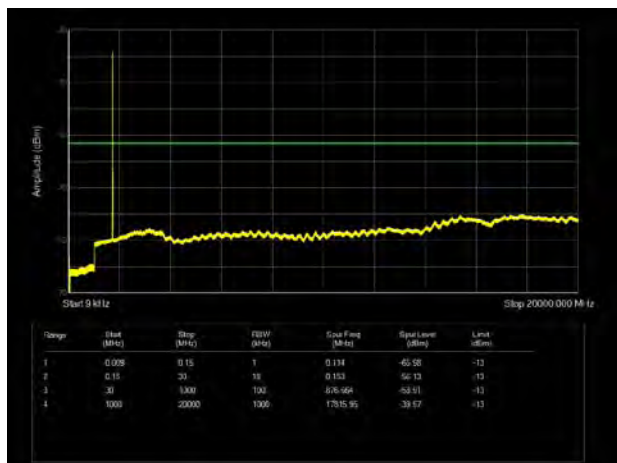
LTE Band 66 1.4MHz CH-High 9kHz ~20GHz



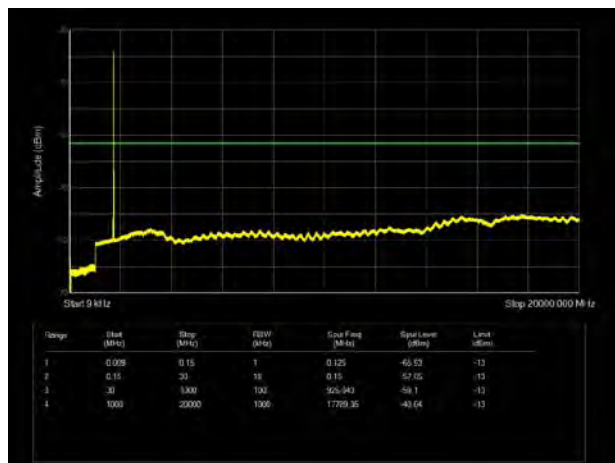
LTE Band 66 3MHz CH-High 9kHz ~20GHz



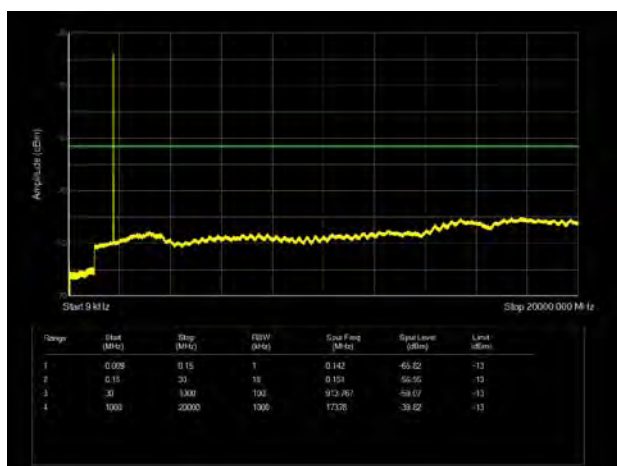
LTE Band 66 5MHz CH-Low 9kHz ~20GHz



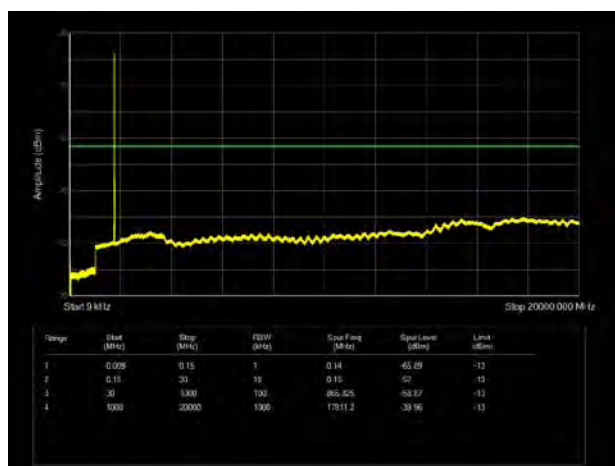
LTE Band 66 10MHz CH-Low 9kHz ~20GHz



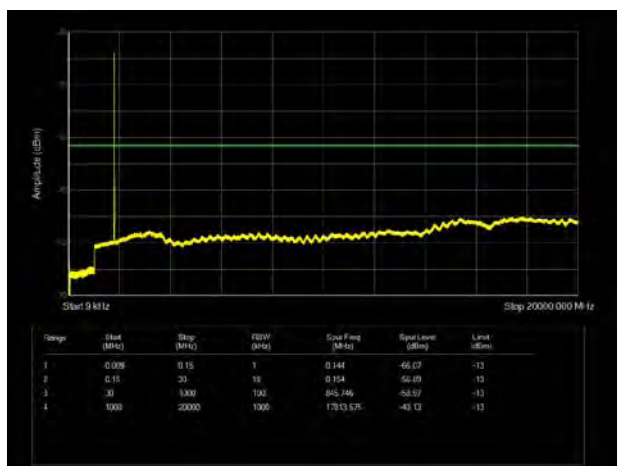
LTE Band 66 5MHz CH-Middle 9kHz ~20GHz



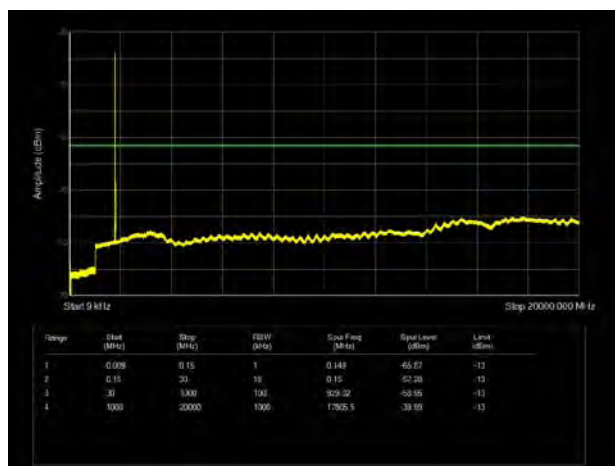
LTE Band 66 10MHz CH-Middle 9kHz ~20GHz



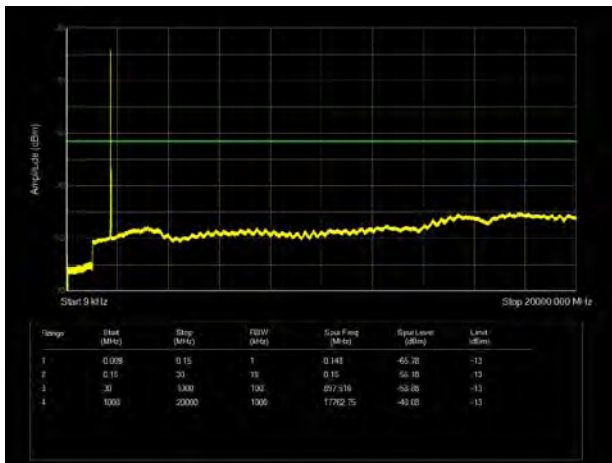
LTE Band 66 5MHz CH-High 9kHz ~20GHz



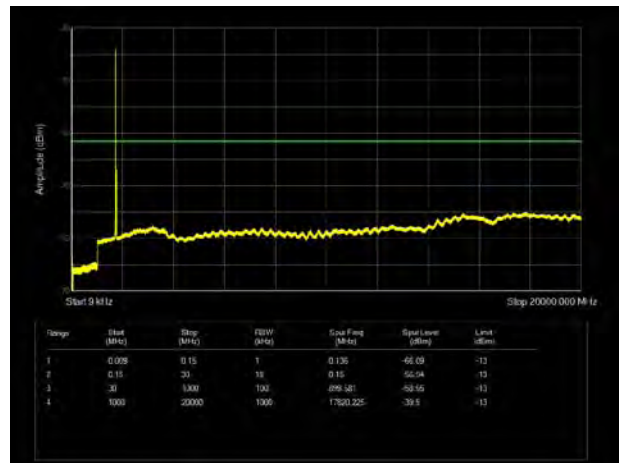
LTE Band 66 10MHz CH-High 9kHz ~20GHz



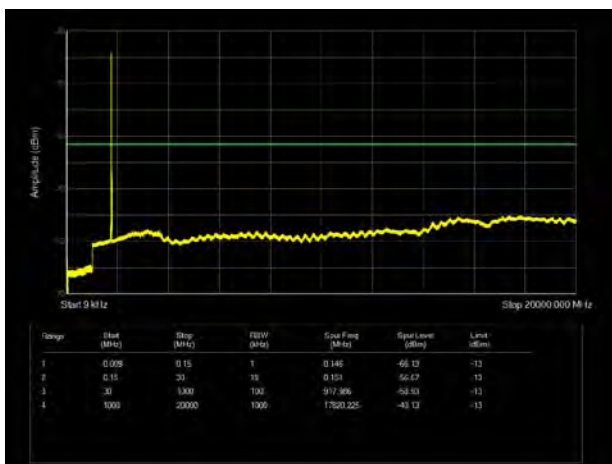
LTE Band 66 15MHz CH-Low 9kHz ~20GHz



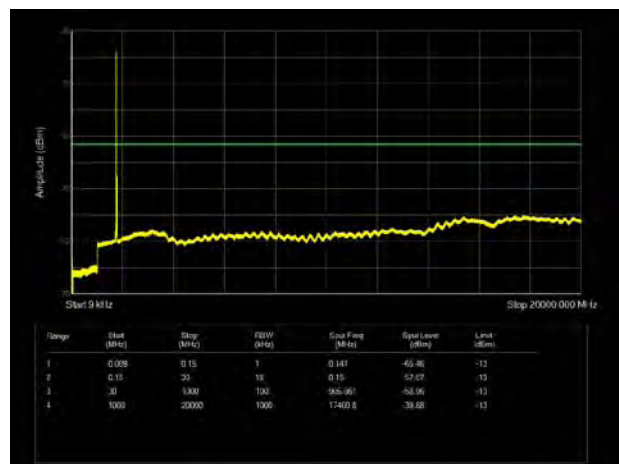
LTE Band 66 20MHz CH-Low 9kHz ~20GHz



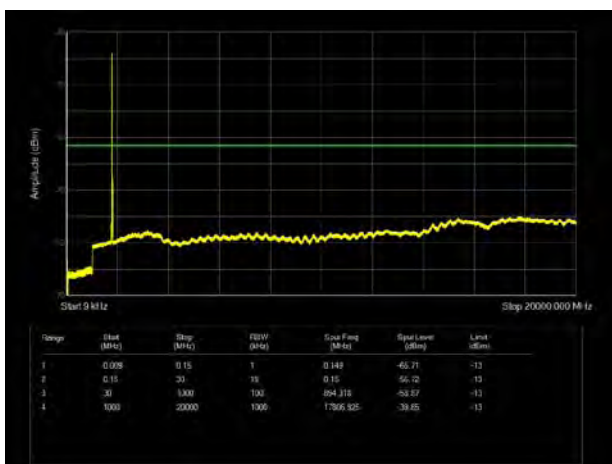
LTE Band 66 15MHz CH-Middle 9kHz ~20GHz



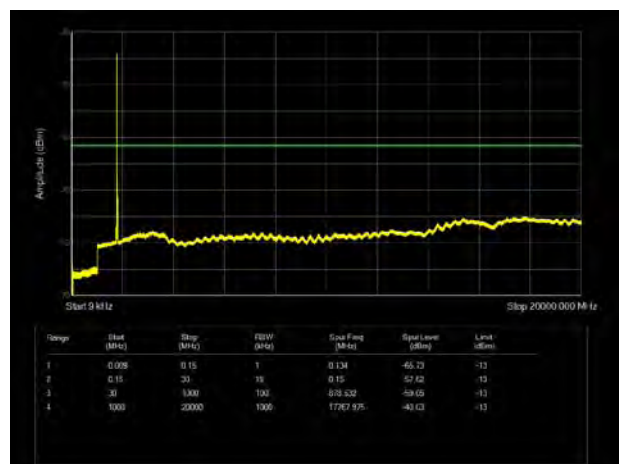
LTE Band 66 20MHz CH-Middle 9kHz ~20GHz



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



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





6.7 Radiates Spurious Emission

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

Main 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	-67.16	2.70	12.70	Vertical	-57.16	-13.00	44.16	0
3	5197.80	-65.75	3.20	12.50	Vertical	-56.45	-13.00	43.45	180
4	6930.40	-64.43	4.20	11.80	Vertical	-56.83	-13.00	43.83	315
5	8663.00	-58.13	4.40	12.50	Vertical	-50.03	-13.00	37.03	0
6	10395.60	-53.97	4.70	11.30	Vertical	-47.37	-13.00	34.37	180
7	12128.20	-52.89	5.20	13.80	Vertical	-44.29	-13.00	31.29	0
8	13860.80	-50.19	5.70	11.30	Vertical	-44.59	-13.00	31.59	180
9	15593.40	-55.71	6.10	16.80	Vertical	-45.01	-13.00	32.01	315
10	17326.00	-49.15	6.10	14.20	Vertical	-41.05	-13.00	28.05	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 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	-65.66	2.70	12.70	Vertical	-55.66	-13.00	42.66	0
3	5197.50	-65.64	3.20	12.50	Vertical	-56.34	-13.00	43.34	180
4	6930.00	-56.55	4.20	11.80	Vertical	-48.95	-13.00	35.95	225
5	8662.50	-55.39	4.40	12.50	Vertical	-47.29	-13.00	34.29	270
6	10395.00	-50.06	4.70	11.30	Vertical	-43.46	-13.00	30.46	0
7	12127.50	-52.65	5.20	13.80	Vertical	-44.05	-13.00	31.05	180
8	13860.00	-49.83	5.70	11.30	Vertical	-44.23	-13.00	31.23	45
9	15592.50	-56.53	6.10	16.80	Vertical	-45.83	-13.00	32.83	180
10	17325.00	-49.30	6.10	14.20	Vertical	-41.20	-13.00	28.20	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 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	-65.68	2.70	12.70	Vertical	-55.68	-13.00	42.68	315
3	5191.50	-65.69	3.20	12.50	Vertical	-56.39	-13.00	43.39	0
4	6930.00	-63.37	4.20	11.80	Vertical	-55.77	-13.00	42.77	315
5	8662.50	-57.02	4.40	12.50	Vertical	-48.92	-13.00	35.92	270
6	10380.00	-54.26	4.70	11.30	Vertical	-47.66	-13.00	34.66	0
7	12110.00	-54.73	5.20	13.80	Vertical	-46.13	-13.00	33.13	180
8	13840.00	-51.48	5.70	11.30	Vertical	-45.88	-13.00	32.88	225
9	15570.00	-55.64	6.10	16.80	Vertical	-44.94	-13.00	31.94	270
10	17300.00	-49.36	6.10	14.20	Vertical	-41.26	-13.00	28.26	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 Vertical position.

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

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3447.75	-65.56	2.70	12.70	Vertical	-55.56	-13.00	42.56	180
3	5170.88	-65.15	3.20	12.50	Vertical	-55.85	-13.00	42.85	45
4	6930.00	-56.95	4.20	11.80	Vertical	-49.35	-13.00	36.35	180
5	8662.50	-56.60	4.40	12.50	Vertical	-48.50	-13.00	35.50	0
6	10395.00	-53.90	4.70	11.30	Vertical	-47.30	-13.00	34.30	180
7	12127.50	-53.73	5.20	13.80	Vertical	-45.13	-13.00	32.13	315
8	13860.00	-47.67	5.70	11.30	Vertical	-42.07	-13.00	29.07	0
9	15592.50	-55.03	6.10	16.80	Vertical	-44.33	-13.00	31.33	315
10	17325.00	-50.15	6.10	14.20	Vertical	-42.05	-13.00	29.05	270

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

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



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

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	5052.20	-62.93	3.40	12.50	Vertical	-53.83	-25.00	28.83	180
3	7578.30	-56.21	4.40	12.20	Vertical	-48.41	-25.00	23.41	0
4	10104.40	-52.50	4.70	11.30	Vertical	-45.90	-25.00	20.90	315
5	12630.50	-51.97	5.40	13.20	Vertical	-44.17	-25.00	19.17	0
6	15156.60	-52.82	6.10	13.10	Vertical	-45.82	-25.00	20.82	180
7	17745.00	-49.13	6.10	14.20	Vertical	-41.03	-25.00	16.03	0
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 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	5065.80	-63.89	3.40	12.50	Vertical	-54.79	-25.00	29.79	0
3	7598.60	-57.00	4.40	12.20	Vertical	-49.20	-25.00	24.20	90
4	10130.63	-52.82	4.70	11.30	Vertical	-46.22	-25.00	21.22	180
5	12675.00	-53.41	5.40	13.20	Vertical	-45.61	-25.00	20.61	315
6	15210.00	-53.35	6.10	13.10	Vertical	-46.35	-25.00	21.35	225
7	17745.00	-49.65	6.10	14.20	Vertical	-41.55	-25.00	16.55	270
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 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	1559.55	-65.75	1.70	8.70	Vertical	-60.90	-40.00	20.90	45
Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
3	2338.50	-65.02	2.10	12.00	Vertical	-57.27	-13.00	44.27	180
4	3118.00	-64.90	2.30	13.10	Vertical	-56.25	-13.00	43.25	315
5	3897.50	-64.17	2.90	12.50	Vertical	-56.72	-13.00	43.72	0
6	4677.00	-61.88	3.10	12.50	Vertical	-54.63	-13.00	41.63	180
7	5456.50	-65.06	3.30	12.50	Vertical	-58.01	-13.00	45.01	225
8	6236.00	-60.76	3.50	12.80	Vertical	-53.61	-13.00	40.61	270
9	7015.50	-55.79	4.20	11.80	Vertical	-50.34	-13.00	37.34	0
10	7795.00	-55.25	4.40	12.30	Vertical	-49.50	-13.00	36.50	180
Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Vertical position.									

LTE Band 13 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	1554.00	-64.74	1.70	8.70	Vertical	-59.89	-13.00	46.89	0
3	2331.00	-65.63	2.10	12.00	Vertical	-57.88	-13.00	44.88	180
4	3108.00	-65.61	2.30	13.10	Vertical	-56.96	-13.00	43.96	45
5	3885.00	-64.65	2.90	12.50	Vertical	-57.20	-13.00	44.20	180
6	4662.00	-63.56	3.10	12.50	Vertical	-56.31	-13.00	43.31	0
7	5439.00	-64.71	3.30	12.50	Vertical	-57.66	-13.00	44.66	180
8	6216.00	-63.43	3.50	12.80	Vertical	-56.28	-13.00	43.28	315
9	6993.00	-56.14	4.20	11.80	Vertical	-50.69	-13.00	37.69	0
10	7770.00	-54.54	4.40	12.30	Vertical	-48.79	-13.00	35.79	315
Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Vertical position.									



LTE Band 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	-65.59	3.20	12.50	Vertical	-56.29	-25.00	31.29	315
3	7777.50	-56.61	4.40	12.30	Vertical	-48.71	-25.00	23.71	270
4	10370.00	-52.69	4.70	11.80	Vertical	-45.59	-25.00	20.59	225
5	12962.50	-53.37	5.40	14.00	Vertical	-44.77	-25.00	19.77	180
6	15555.00	-56.27	6.10	16.80	Vertical	-45.57	-25.00	20.57	0
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	-63.38	3.20	12.50	Vertical	-54.08	-25.00	29.08	180
3	7755.00	-56.80	4.40	12.30	Vertical	-48.90	-25.00	23.90	315
4	10340.00	-51.68	4.70	11.80	Vertical	-44.58	-25.00	19.58	0
5	12925.00	-52.65	5.40	14.00	Vertical	-44.05	-25.00	19.05	180
6	15510.00	-55.56	6.10	16.80	Vertical	-44.86	-25.00	19.86	225
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 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	3509.25	-67.58	2.70	12.70	Vertical	-57.58	-13.00	44.58	45
3	5262.50	-66.37	3.20	12.50	Vertical	-57.07	-13.00	44.07	180
4	7018.00	-63.09	4.20	11.80	Vertical	-55.49	-13.00	42.49	0
5	8772.50	-56.46	4.40	12.50	Vertical	-48.36	-13.00	35.36	180
6	10527.00	-54.58	4.70	11.80	Vertical	-47.48	-13.00	34.48	315
7	12281.50	-51.57	5.20	13.80	Vertical	-42.97	-13.00	29.97	45
8	14036.00	-49.12	5.70	13.20	Vertical	-41.62	-13.00	28.62	0
9	15790.50	-55.97	6.10	16.80	Vertical	-45.27	-13.00	32.27	90
10	17545.00	-49.20	6.10	14.20	Vertical	-41.10	-13.00	28.10	180

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

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

LTE Band 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	-67.01	2.70	12.70	Vertical	-57.01	-13.00	44.01	315
3	5229.00	-65.88	3.20	12.50	Vertical	-56.58	-13.00	43.58	0
4	6972.00	-62.68	4.20	11.80	Vertical	-55.08	-13.00	42.08	180
5	8715.00	-57.90	4.40	12.50	Vertical	-49.80	-13.00	36.80	0
6	10458.00	-54.76	4.70	11.80	Vertical	-47.66	-13.00	34.66	45
7	12201.00	-55.76	5.20	13.80	Vertical	-47.16	-13.00	34.16	270
8	13944.00	-53.21	5.70	13.20	Vertical	-45.71	-13.00	32.71	225
9	15687.00	-56.03	6.10	16.80	Vertical	-45.33	-13.00	32.33	180
10	17430.00	-49.09	6.10	14.20	Vertical	-40.99	-13.00	27.99	180

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

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

LTE Band 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	-65.59	2.70	12.70	Vertical	-55.59	-13.00	42.59	180
3	5209.00	-65.52	3.20	12.50	Vertical	-56.22	-13.00	43.22	315
4	6945.75	-64.63	4.20	11.80	Vertical	-57.03	-13.00	44.03	45
5	8682.00	-55.75	4.40	12.50	Vertical	-47.65	-13.00	34.65	0
6	10418.63	-53.93	4.70	11.80	Vertical	-46.83	-13.00	33.83	90
7	12455.00	-52.98	5.20	13.80	Vertical	-44.38	-13.00	31.38	180
8	13891.50	-52.83	5.70	13.20	Vertical	-45.33	-13.00	32.33	135
9	15627.00	-56.03	6.10	16.80	Vertical	-45.33	-13.00	32.33	0
10	17364.38	-49.48	6.10	14.20	Vertical	-41.38	-13.00	28.38	180
Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Vertical position.									

**Second 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	-67.56	2.70	12.70	Horizontal	-57.56	-13.00	44.56	90
3	5197.80	-65.48	3.20	12.50	Horizontal	-56.18	-13.00	43.18	45
4	6930.40	-61.26	4.20	11.80	Horizontal	-53.66	-13.00	40.66	180
5	8663.00	-55.68	4.40	12.50	Horizontal	-47.58	-13.00	34.58	0
6	10395.60	-50.82	4.70	11.30	Horizontal	-44.22	-13.00	31.22	45
7	12128.20	-54.24	5.20	13.80	Horizontal	-45.64	-13.00	32.64	225
8	13860.80	-47.46	5.70	11.30	Horizontal	-41.86	-13.00	28.86	90
9	15593.40	-55.86	6.10	16.80	Horizontal	-45.16	-13.00	32.16	45
10	17326.00	-49.83	6.10	14.20	Horizontal	-41.73	-13.00	28.73	315

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

2. The worst emission was found in the antenna is 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	-65.58	2.70	12.70	Horizontal	-55.58	-13.00	42.58	0
3	5197.50	-65.52	3.20	12.50	Horizontal	-56.22	-13.00	43.22	180
4	6930.00	-61.50	4.20	11.80	Horizontal	-53.90	-13.00	40.90	225
5	8662.50	-54.64	4.40	12.50	Horizontal	-46.54	-13.00	33.54	270
6	10395.00	-50.42	4.70	11.30	Horizontal	-43.82	-13.00	30.82	0
7	12127.50	-52.30	5.20	13.80	Horizontal	-43.70	-13.00	30.70	180
8	13860.00	-48.86	5.70	11.30	Horizontal	-43.26	-13.00	30.26	45
9	15592.50	-55.87	6.10	16.80	Horizontal	-45.17	-13.00	32.17	180
10	17325.00	-49.44	6.10	14.20	Horizontal	-41.34	-13.00	28.34	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 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	-65.42	2.70	12.70	Horizontal	-55.42	-13.00	42.42	315
3	5191.50	-65.45	3.20	12.50	Horizontal	-56.15	-13.00	43.15	0
4	6930.00	-62.23	4.20	11.80	Horizontal	-54.63	-13.00	41.63	315
5	8662.50	-57.44	4.40	12.50	Horizontal	-49.34	-13.00	36.34	270
6	10380.00	-54.67	4.70	11.30	Horizontal	-48.07	-13.00	35.07	0
7	12110.00	-52.36	5.20	13.80	Horizontal	-43.76	-13.00	30.76	180
8	13840.00	-48.21	5.70	11.30	Horizontal	-42.61	-13.00	29.61	225
9	15570.00	-55.87	6.10	16.80	Horizontal	-45.17	-13.00	32.17	270
10	17300.00	-49.60	6.10	14.20	Horizontal	-41.50	-13.00	28.50	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 4 QPSK 20MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3447.75	-67.39	2.70	12.70	Horizontal	-57.39	-13.00	44.39	180
3	5170.88	-64.71	3.20	12.50	Horizontal	-55.41	-13.00	42.41	45
4	6930.00	-61.29	4.20	11.80	Horizontal	-53.69	-13.00	40.69	180
5	8662.50	-57.18	4.40	12.50	Horizontal	-49.08	-13.00	36.08	0
6	10395.00	-52.14	4.70	11.30	Horizontal	-45.54	-13.00	32.54	180
7	12127.50	-54.32	5.20	13.80	Horizontal	-45.72	-13.00	32.72	315
8	13860.00	-48.33	5.70	11.30	Horizontal	-42.73	-13.00	29.73	0
9	15592.50	-56.90	6.10	16.80	Horizontal	-46.20	-13.00	33.20	315
10	17325.00	-48.36	6.10	14.20	Horizontal	-40.26	-13.00	27.26	270
Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Horizontal position.									



LTE Band 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	5052.20	-65.11	3.40	12.50	Horizontal	-56.01	-25.00	31.01	180
3	7578.30	-56.45	4.40	12.20	Horizontal	-48.65	-25.00	23.65	0
4	10104.40	-51.36	4.70	11.30	Horizontal	-44.76	-25.00	19.76	315
5	12630.50	-52.55	5.40	13.20	Horizontal	-44.75	-25.00	19.75	0
6	15156.60	-53.29	6.10	13.10	Horizontal	-46.29	-25.00	21.29	180
7	17745.00	-49.54	6.10	14.20	Horizontal	-41.44	-25.00	16.44	0
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 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	5065.80	-65.39	3.40	12.50	Horizontal	-56.29	-25.00	31.29	0
3	7598.60	-57.85	4.40	12.20	Horizontal	-50.05	-25.00	25.05	90
4	10130.63	-53.24	4.70	11.30	Horizontal	-46.64	-25.00	21.64	180
5	12675.00	-52.27	5.40	13.20	Horizontal	-44.47	-25.00	19.47	315
6	15210.00	-51.90	6.10	13.10	Horizontal	-44.90	-25.00	19.90	225
7	17745.00	-50.00	6.10	14.20	Horizontal	-41.90	-25.00	16.90	270
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 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	1559.55	-60.39	1.70	8.70	Horizontal	-55.54	-40.00	15.54	90
Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
3	2338.50	-66.59	2.10	12.00	Horizontal	-58.84	-13.00	45.84	225
4	3118.00	-65.36	2.30	13.10	Horizontal	-56.71	-13.00	43.71	315
5	3897.50	-64.47	2.90	12.50	Horizontal	-57.02	-13.00	44.02	0
6	4677.00	-64.68	3.10	12.50	Horizontal	-57.43	-13.00	44.43	180
7	5456.50	-63.27	3.30	12.50	Horizontal	-56.22	-13.00	43.22	225
8	6236.00	-61.47	3.50	12.80	Horizontal	-54.32	-13.00	41.32	270
9	7015.50	-53.56	4.20	11.80	Horizontal	-48.11	-13.00	35.11	0
10	7795.00	-54.08	4.40	12.30	Horizontal	-48.33	-13.00	35.33	180
Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Horizontal position.									

LTE Band 13 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	1554.00	-59.18	1.70	8.70	Horizontal	-54.33	-13.00	41.33	0
3	2331.00	-65.89	2.10	12.00	Horizontal	-58.14	-13.00	45.14	135
4	3108.00	-65.60	2.30	13.10	Horizontal	-56.95	-13.00	43.95	45
5	3885.00	-64.17	2.90	12.50	Horizontal	-56.72	-13.00	43.72	180
6	4662.00	-63.24	3.10	12.50	Horizontal	-55.99	-13.00	42.99	0
7	5439.00	-62.87	3.30	12.50	Horizontal	-55.82	-13.00	42.82	180
8	6216.00	-61.64	3.50	12.80	Horizontal	-54.49	-13.00	41.49	315
9	6993.00	-54.79	4.20	11.80	Horizontal	-49.34	-13.00	36.34	0
10	7770.00	-54.01	4.40	12.30	Horizontal	-48.26	-13.00	35.26	315
Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is 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	-66.70	3.20	12.50	Horizontal	-57.40	-25.00	32.40	315
3	7777.50	-58.51	4.40	12.30	Horizontal	-50.61	-25.00	25.61	270
4	10370.00	-54.87	4.70	11.80	Horizontal	-47.77	-25.00	22.77	225
5	12962.50	-54.76	5.40	14.00	Horizontal	-46.16	-25.00	21.16	180
6	15555.00	-54.96	6.10	16.80	Horizontal	-44.26	-25.00	19.26	0
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	-65.69	3.20	12.50	Horizontal	-56.39	-25.00	31.39	180
3	7755.00	-58.41	4.40	12.30	Horizontal	-50.51	-25.00	25.51	315
4	10340.00	-52.85	4.70	11.80	Horizontal	-45.75	-25.00	20.75	0
5	12925.00	-52.91	5.40	14.00	Horizontal	-44.31	-25.00	19.31	180
6	15510.00	-55.78	6.10	16.80	Horizontal	-45.08	-25.00	20.08	225
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 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	3509.25	-69.68	2.70	12.70	Horizontal	-56.98	-13.00	43.98	45
3	5262.50	-69.40	3.20	12.50	Horizontal	-56.90	-13.00	43.90	180
4	7018.00	-67.59	4.20	11.80	Horizontal	-55.79	-13.00	42.79	0
5	8772.50	-61.42	4.40	12.50	Horizontal	-48.92	-13.00	35.92	180
6	10527.00	-56.63	4.70	11.80	Horizontal	-44.83	-13.00	31.83	315
7	12281.50	-56.73	5.20	13.80	Horizontal	-42.93	-13.00	29.93	45
8	14036.00	-55.57	5.70	13.20	Horizontal	-42.37	-13.00	29.37	0
9	15790.50	-59.38	6.10	16.80	Horizontal	-42.58	-13.00	29.58	90
10	17545.00	-54.96	6.10	14.20	Horizontal	-40.76	-13.00	27.76	180

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.
2. The worst emission was found in the antenna is 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	-67.46	2.70	12.70	Horizontal	-57.46	-13.00	44.46	315
3	5229.00	-65.43	3.20	12.50	Horizontal	-56.13	-13.00	43.13	0
4	6972.00	-62.37	4.20	11.80	Horizontal	-54.77	-13.00	41.77	180
5	8715.00	-57.80	4.40	12.50	Horizontal	-49.70	-13.00	36.70	0
6	10458.00	-53.61	4.70	11.80	Horizontal	-46.51	-13.00	33.51	45
7	12201.00	-54.64	5.20	13.80	Horizontal	-46.04	-13.00	33.04	270
8	13944.00	-52.83	5.70	13.20	Horizontal	-45.33	-13.00	32.33	225
9	15687.00	-54.47	6.10	16.80	Horizontal	-43.77	-13.00	30.77	180
10	17430.00	-50.25	6.10	14.20	Horizontal	-42.15	-13.00	29.15	180

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.
2. The worst emission was found in the antenna is 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	-67.83	2.70	12.70	Horizontal	-57.83	-13.00	44.83	180
3	5209.00	-65.74	3.20	12.50	Horizontal	-56.44	-13.00	43.44	315
4	6945.75	-64.92	4.20	11.80	Horizontal	-57.32	-13.00	44.32	45
5	8682.00	-57.98	4.40	12.50	Horizontal	-49.88	-13.00	36.88	0
6	10418.63	-55.27	4.70	11.80	Horizontal	-48.17	-13.00	35.17	90
7	12455.00	-52.92	5.20	13.80	Horizontal	-44.32	-13.00	31.32	180
8	13891.50	-51.78	5.70	13.20	Horizontal	-44.28	-13.00	31.28	135
9	15627.00	-56.16	6.10	16.80	Horizontal	-45.46	-13.00	32.46	0
10	17364.38	-49.17	6.10	14.20	Horizontal	-41.07	-13.00	28.07	180
Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Horizontal position.									



7 Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Base Station Simulator	R&S	CMW500	113824	2022-05-14	2023-05-13
Spectrum Analyzer	Keysight	N9020A	MY50510203	2021-12-12	2022-12-11
Universal Radio Communication Tester	Agilent	E5515C	GB44400275	2021-12-12	2022-12-11
Signal Analyzer	R&S	FSV3030	101411	2021-12-12	2022-12-11
Climatic Chamber	ESPEC	SU-242	93000506	2021-12-12	2022-12-11
Radiates Spurious Emission					
Signal Analyzer	R&S	FSV30	100815	2021-12-12	2022-12-11
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2020-04-02	2023-04-01
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	391	2019-12-16	2022-12-15
Horn Antenna	R&S	HF907	102723	2020-08-11	2023-08-10
Horn Antenna	ETS-Lindgren	3160-09	00102643	2021-10-10	2024-10-09
Horn Antenna	STEATITE	QSH-SL-26-40-K-15	16779	2019-12-24	2022-12-23
Software	R&S	EMC32	10.35.10	/	/

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



ANNEX A: The EUT Appearance

The EUT Appearance are submitted separately.



ANNEX B: Test Setup Photos

The Test Setup Photos are submitted separately.