

RF Power Output and Effective Radiated Power

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	Verdict
LTE Band4	1.4	19957	1	#0	QPSK	22.14	PASS
LTE Band4	1.4	19957	1	#Mid	QPSK	22.27	PASS
LTE Band4	1.4	19957	1	#Max	QPSK	22.19	PASS
LTE Band4	1.4	19957	3	#0	QPSK	22.25	PASS
LTE Band4	1.4	19957	3	#Mid	QPSK	22.25	PASS
LTE Band4	1.4	19957	3	#Max	QPSK	22.24	PASS
LTE Band4	1.4	19957	6	#0	QPSK	21.18	PASS
LTE Band4	1.4	19957	1	#0	QAM16	21.07	PASS
LTE Band4	1.4	19957	1	#Mid	QAM16	21.55	PASS
LTE Band4	1.4	19957	1	#Max	QAM16	21.12	PASS
LTE Band4	1.4	19957	3	#0	QAM16	21.20	PASS
LTE Band4	1.4	19957	3	#Mid	QAM16	21.20	PASS
LTE Band4	1.4	19957	3	#Max	QAM16	21.22	PASS
LTE Band4	1.4	19957	6	#0	QAM16	20.08	PASS
LTE Band4	1.4	20175	1	#0	QPSK	22.26	PASS
LTE Band4	1.4	20175	1	#Mid	QPSK	22.56	PASS
LTE Band4	1.4	20175	1	#Max	QPSK	22.17	PASS
LTE Band4	1.4	20175	3	#0	QPSK	22.46	PASS
LTE Band4	1.4	20175	3	#Mid	QPSK	22.46	PASS
LTE Band4	1.4	20175	3	#Max	QPSK	22.45	PASS
LTE Band4	1.4	20175	6	#0	QPSK	21.50	PASS
LTE Band4	1.4	20175	1	#0	QAM16	22.00	PASS
LTE Band4	1.4	20175	1	#Mid	QAM16	22.12	PASS
LTE Band4	1.4	20175	1	#Max	QAM16	21.84	PASS
LTE Band4	1.4	20175	3	#0	QAM16	21.30	PASS
LTE Band4	1.4	20175	3	#Mid	QAM16	21.31	PASS
LTE Band4	1.4	20175	3	#Max	QAM16	21.41	PASS
LTE Band4	1.4	20175	6	#0	QAM16	20.42	PASS
LTE Band4	1.4	20393	1	#0	QPSK	22.51	PASS
LTE Band4	1.4	20393	1	#Mid	QPSK	22.50	PASS
LTE Band4	1.4	20393	1	#Max	QPSK	22.28	PASS
LTE Band4	1.4	20393	3	#0	QPSK	22.26	PASS
LTE Band4	1.4	20393	3	#Mid	QPSK	22.26	PASS
LTE Band4	1.4	20393	3	#Max	QPSK	22.17	PASS
LTE Band4	1.4	20393	6	#0	QPSK	21.15	PASS
LTE Band4	1.4	20393	1	#0	QAM16	20.86	PASS
LTE Band4	1.4	20393	1	#Mid	QAM16	20.96	PASS
LTE Band4	1.4	20393	1	#Max	QAM16	20.76	PASS



LTE Band4	1.4	20393	3	#0	QAM16	21.06	PASS
LTE Band4	1.4	20393	3	#Mid	QAM16	21.07	PASS
LTE Band4	1.4	20393	3	#Max	QAM16	21.10	PASS
LTE Band4	1.4	20393	6	#0	QAM16	20.05	PASS
LTE Band4	3	19965	1	#0	QPSK	22.24	PASS
LTE Band4	3	19965	1	#Mid	QPSK	22.25	PASS
LTE Band4	3	19965	1	#Max	QPSK	22.38	PASS
LTE Band4	3	19965	8	#0	QPSK	21.23	PASS
LTE Band4	3	19965	8	#Mid	QPSK	21.23	PASS
LTE Band4	3	19965	8	#Max	QPSK	21.27	PASS
LTE Band4	3	19965	15	#0	QPSK	21.25	PASS
LTE Band4	3	19965	1	#0	QAM16	21.61	PASS
LTE Band4	3	19965	1	#Mid	QAM16	21.42	PASS
LTE Band4	3	19965	1	#Max	QAM16	21.48	PASS
LTE Band4	3	19965	8	#0	QAM16	20.24	PASS
LTE Band4	3	19965	8	#Mid	QAM16	20.22	PASS
LTE Band4	3	19965	8	#Max	QAM16	20.25	PASS
LTE Band4	3	19965	15	#0	QAM16	20.10	PASS
LTE Band4	3	20175	1	#0	QPSK	22.41	PASS
LTE Band4	3	20175	1	#Mid	QPSK	22.19	PASS
LTE Band4	3	20175	1	#Max	QPSK	22.38	PASS
LTE Band4	3	20175	8	#0	QPSK	21.36	PASS
LTE Band4	3	20175	8	#Mid	QPSK	21.36	PASS
LTE Band4	3	20175	8	#Max	QPSK	21.46	PASS
LTE Band4	3	20175	15	#0	QPSK	21.45	PASS
LTE Band4	3	20175	1	#0	QAM16	21.71	PASS
LTE Band4	3	20175	1	#Mid	QAM16	21.89	PASS
LTE Band4	3	20175	1	#Max	QAM16	21.92	PASS
LTE Band4	3	20175	8	#0	QAM16	20.45	PASS
LTE Band4	3	20175	8	#Mid	QAM16	20.46	PASS
LTE Band4	3	20175	8	#Max	QAM16	20.45	PASS
LTE Band4	3	20175	15	#0	QAM16	20.34	PASS
LTE Band4	3	20385	1	#0	QPSK	22.64	PASS
LTE Band4	3	20385	1	#Mid	QPSK	22.46	PASS
LTE Band4	3	20385	1	#Max	QPSK	22.60	PASS
LTE Band4	3	20385	8	#0	QPSK	21.23	PASS
LTE Band4	3	20385	8	#Mid	QPSK	21.24	PASS
LTE Band4	3	20385	8	#Max	QPSK	21.34	PASS
LTE Band4	3	20385	15	#0	QPSK	21.26	PASS
LTE Band4	3	20385	1	#0	QAM16	21.18	PASS
LTE Band4	3	20385	1	#Mid	QAM16	20.77	PASS
LTE Band4	3	20385	1	#Max	QAM16	21.27	PASS
LTE Band4	3	20385	8	#0	QAM16	20.00	PASS



LTE Band4	3	20385	8	#Mid	QAM16	20.11	PASS
LTE Band4	3	20385	8	#Max	QAM16	20.09	PASS
LTE Band4	3	20385	15	#0	QAM16	20.26	PASS
LTE Band4	5	19975	1	#0	QPSK	22.41	PASS
LTE Band4	5	19975	1	#Mid	QPSK	22.24	PASS
LTE Band4	5	19975	1	#Max	QPSK	22.44	PASS
LTE Band4	5	19975	12	#0	QPSK	21.28	PASS
LTE Band4	5	19975	12	#Mid	QPSK	21.29	PASS
LTE Band4	5	19975	12	#Max	QPSK	21.38	PASS
LTE Band4	5	19975	25	#0	QPSK	21.31	PASS
LTE Band4	5	19975	1	#0	QAM16	21.61	PASS
LTE Band4	5	19975	1	#Mid	QAM16	21.24	PASS
LTE Band4	5	19975	1	#Max	QAM16	21.62	PASS
LTE Band4	5	19975	12	#0	QAM16	20.13	PASS
LTE Band4	5	19975	12	#Mid	QAM16	20.24	PASS
LTE Band4	5	19975	12	#Max	QAM16	20.33	PASS
LTE Band4	5	19975	25	#0	QAM16	20.28	PASS
LTE Band4	5	20175	1	#0	QPSK	22.61	PASS
LTE Band4	5	20175	1	#Mid	QPSK	22.24	PASS
LTE Band4	5	20175	1	#Max	QPSK	22.39	PASS
LTE Band4	5	20175	12	#0	QPSK	21.48	PASS
LTE Band4	5	20175	12	#Mid	QPSK	21.48	PASS
LTE Band4	5	20175	12	#Max	QPSK	21.38	PASS
LTE Band4	5	20175	25	#0	QPSK	21.36	PASS
LTE Band4	5	20175	1	#0	QAM16	21.56	PASS
LTE Band4	5	20175	1	#Mid	QAM16	21.28	PASS
LTE Band4	5	20175	1	#Max	QAM16	21.45	PASS
LTE Band4	5	20175	12	#0	QAM16	20.13	PASS
LTE Band4	5	20175	12	#Mid	QAM16	20.13	PASS
LTE Band4	5	20175	12	#Max	QAM16	20.13	PASS
LTE Band4	5	20175	25	#0	QAM16	20.32	PASS
LTE Band4	5	20375	1	#0	QPSK	22.26	PASS
LTE Band4	5	20375	1	#Mid	QPSK	22.36	PASS
LTE Band4	5	20375	1	#Max	QPSK	22.49	PASS
LTE Band4	5	20375	12	#0	QPSK	21.45	PASS
LTE Band4	5	20375	12	#Mid	QPSK	21.46	PASS
LTE Band4	5	20375	12	#Max	QPSK	21.42	PASS
LTE Band4	5	20375	25	#0	QPSK	21.47	PASS
LTE Band4	5	20375	1	#0	QAM16	21.37	PASS
LTE Band4	5	20375	1	#Mid	QAM16	21.30	PASS
LTE Band4	5	20375	1	#Max	QAM16	21.66	PASS
LTE Band4	5	20375	12	#0	QAM16	20.37	PASS
LTE Band4	5	20375	12	#Mid	QAM16	20.39	PASS



LTE Band4	5	20375	12	#Max	QAM16	20.45	PASS
LTE Band4	5	20375	25	#0	QAM16	20.45	PASS
LTE Band4	10	20000	1	#0	QPSK	22.26	PASS
LTE Band4	10	20000	1	#Mid	QPSK	22.38	PASS
LTE Band4	10	20000	1	#Max	QPSK	22.30	PASS
LTE Band4	10	20000	25	#0	QPSK	21.25	PASS
LTE Band4	10	20000	25	#Mid	QPSK	21.25	PASS
LTE Band4	10	20000	25	#Max	QPSK	21.35	PASS
LTE Band4	10	20000	50	#0	QPSK	21.37	PASS
LTE Band4	10	20000	1	#0	QAM16	21.91	PASS
LTE Band4	10	20000	1	#Mid	QAM16	22.06	PASS
LTE Band4	10	20000	1	#Max	QAM16	21.51	PASS
LTE Band4	10	20000	25	#0	QAM16	20.26	PASS
LTE Band4	10	20000	25	#Mid	QAM16	20.30	PASS
LTE Band4	10	20000	25	#Max	QAM16	20.48	PASS
LTE Band4	10	20000	50	#0	QAM16	20.33	PASS
LTE Band4	10	20175	1	#0	QPSK	22.50	PASS
LTE Band4	10	20175	1	#Mid	QPSK	22.46	PASS
LTE Band4	10	20175	1	#Max	QPSK	22.28	PASS
LTE Band4	10	20175	25	#0	QPSK	21.41	PASS
LTE Band4	10	20175	25	#Mid	QPSK	21.41	PASS
LTE Band4	10	20175	25	#Max	QPSK	21.33	PASS
LTE Band4	10	20175	50	#0	QPSK	21.37	PASS
LTE Band4	10	20175	1	#0	QAM16	21.91	PASS
LTE Band4	10	20175	1	#Mid	QAM16	22.06	PASS
LTE Band4	10	20175	1	#Max	QAM16	21.81	PASS
LTE Band4	10	20175	25	#0	QAM16	20.59	PASS
LTE Band4	10	20175	25	#Mid	QAM16	20.60	PASS
LTE Band4	10	20175	25	#Max	QAM16	20.51	PASS
LTE Band4	10	20175	50	#0	QAM16	20.42	PASS
LTE Band4	10	20350	1	#0	QPSK	22.57	PASS
LTE Band4	10	20350	1	#Mid	QPSK	22.59	PASS
LTE Band4	10	20350	1	#Max	QPSK	22.41	PASS
LTE Band4	10	20350	25	#0	QPSK	21.39	PASS
LTE Band4	10	20350	25	#Mid	QPSK	21.40	PASS
LTE Band4	10	20350	25	#Max	QPSK	21.30	PASS
LTE Band4	10	20350	50	#0	QPSK	21.41	PASS
LTE Band4	10	20350	1	#0	QAM16	21.21	PASS
LTE Band4	10	20350	1	#Mid	QAM16	21.04	PASS
LTE Band4	10	20350	1	#Max	QAM16	20.98	PASS
LTE Band4	10	20350	25	#0	QAM16	20.24	PASS
LTE Band4	10	20350	25	#Mid	QAM16	20.36	PASS
LTE Band4	10	20350	25	#Max	QAM16	20.37	PASS



LTE Band4	10	20350	50	#0	QAM16	20.37	PASS
LTE Band4	15	20025	1	#0	QPSK	22.25	PASS
LTE Band4	15	20025	1	#Mid	QPSK	22.37	PASS
LTE Band4	15	20025	1	#Max	QPSK	22.42	PASS
LTE Band4	15	20025	36	#0	QPSK	21.30	PASS
LTE Band4	15	20025	36	#Mid	QPSK	21.30	PASS
LTE Band4	15	20025	36	#Max	QPSK	21.36	PASS
LTE Band4	15	20025	75	#0	QPSK	21.28	PASS
LTE Band4	15	20025	1	#0	QAM16	21.41	PASS
LTE Band4	15	20025	1	#Mid	QAM16	21.48	PASS
LTE Band4	15	20025	1	#Max	QAM16	21.62	PASS
LTE Band4	15	20025	36	#0	QAM16	20.29	PASS
LTE Band4	15	20025	36	#Mid	QAM16	20.26	PASS
LTE Band4	15	20025	36	#Max	QAM16	20.27	PASS
LTE Band4	15	20025	75	#0	QAM16	20.26	PASS
LTE Band4	15	20175	1	#0	QPSK	22.28	PASS
LTE Band4	15	20175	1	#Mid	QPSK	22.14	PASS
LTE Band4	15	20175	1	#Max	QPSK	22.25	PASS
LTE Band4	15	20175	36	#0	QPSK	21.42	PASS
LTE Band4	15	20175	36	#Mid	QPSK	21.42	PASS
LTE Band4	15	20175	36	#Max	QPSK	21.41	PASS
LTE Band4	15	20175	75	#0	QPSK	21.37	PASS
LTE Band4	15	20175	1	#0	QAM16	22.01	PASS
LTE Band4	15	20175	1	#Mid	QAM16	21.49	PASS
LTE Band4	15	20175	1	#Max	QAM16	21.98	PASS
LTE Band4	15	20175	36	#0	QAM16	20.41	PASS
LTE Band4	15	20175	36	#Mid	QAM16	20.41	PASS
LTE Band4	15	20175	36	#Max	QAM16	20.31	PASS
LTE Band4	15	20175	75	#0	QAM16	20.36	PASS
LTE Band4	15	20325	1	#0	QPSK	22.50	PASS
LTE Band4	15	20325	1	#Mid	QPSK	22.53	PASS
LTE Band4	15	20325	1	#Max	QPSK	22.42	PASS
LTE Band4	15	20325	36	#0	QPSK	21.34	PASS
LTE Band4	15	20325	36	#Mid	QPSK	21.34	PASS
LTE Band4	15	20325	36	#Max	QPSK	21.40	PASS
LTE Band4	15	20325	75	#0	QPSK	21.32	PASS
LTE Band4	15	20325	1	#0	QAM16	21.05	PASS
LTE Band4	15	20325	1	#Mid	QAM16	21.02	PASS
LTE Band4	15	20325	1	#Max	QAM16	21.07	PASS
LTE Band4	15	20325	36	#0	QAM16	20.18	PASS
LTE Band4	15	20325	36	#Mid	QAM16	20.30	PASS
LTE Band4	15	20325	36	#Max	QAM16	20.39	PASS
LTE Band4	15	20325	75	#0	QAM16	20.31	PASS



LTE Band4	20	20050	1	#0	QPSK	22.12	PASS
LTE Band4	20	20050	1	#Mid	QPSK	22.33	PASS
LTE Band4	20	20050	1	#Max	QPSK	22.34	PASS
LTE Band4	20	20050	50	#0	QPSK	21.31	PASS
LTE Band4	20	20050	50	#Mid	QPSK	21.27	PASS
LTE Band4	20	20050	50	#Max	QPSK	21.50	PASS
LTE Band4	20	20050	100	#0	QPSK	21.29	PASS
LTE Band4	20	20050	1	#0	QAM16	20.99	PASS
LTE Band4	20	20050	1	#Mid	QAM16	21.33	PASS
LTE Band4	20	20050	1	#Max	QAM16	21.83	PASS
LTE Band4	20	20050	50	#0	QAM16	20.49	PASS
LTE Band4	20	20050	50	#Mid	QAM16	20.39	PASS
LTE Band4	20	20050	50	#Max	QAM16	20.34	PASS
LTE Band4	20	20050	100	#0	QAM16	20.43	PASS
LTE Band4	20	20175	1	#0	QPSK	22.35	PASS
LTE Band4	20	20175	1	#Mid	QPSK	22.30	PASS
LTE Band4	20	20175	1	#Max	QPSK	22.46	PASS
LTE Band4	20	20175	50	#0	QPSK	21.34	PASS
LTE Band4	20	20175	50	#Mid	QPSK	21.35	PASS
LTE Band4	20	20175	50	#Max	QPSK	21.21	PASS
LTE Band4	20	20175	100	#0	QPSK	21.28	PASS
LTE Band4	20	20175	1	#0	QAM16	21.07	PASS
LTE Band4	20	20175	1	#Mid	QAM16	20.66	PASS
LTE Band4	20	20175	1	#Max	QAM16	20.70	PASS
LTE Band4	20	20175	50	#0	QAM16	20.30	PASS
LTE Band4	20	20175	50	#Mid	QAM16	20.55	PASS
LTE Band4	20	20175	50	#Max	QAM16	20.17	PASS
LTE Band4	20	20175	100	#0	QAM16	20.28	PASS
LTE Band4	20	20300	1	#0	QPSK	22.49	PASS
LTE Band4	20	20300	1	#Mid	QPSK	22.47	PASS
LTE Band4	20	20300	1	#Max	QPSK	22.17	PASS
LTE Band4	20	20300	50	#0	QPSK	21.31	PASS
LTE Band4	20	20300	50	#Mid	QPSK	21.32	PASS
LTE Band4	20	20300	50	#Max	QPSK	21.33	PASS
LTE Band4	20	20300	100	#0	QPSK	21.26	PASS
LTE Band4	20	20300	1	#0	QAM16	21.19	PASS
LTE Band4	20	20300	1	#Mid	QAM16	21.52	PASS
LTE Band4	20	20300	1	#Max	QAM16	21.25	PASS
LTE Band4	20	20300	50	#0	QAM16	20.07	PASS
LTE Band4	20	20300	50	#Mid	QAM16	20.33	PASS
LTE Band4	20	20300	50	#Max	QAM16	20.34	PASS
LTE Band4	20	20300	100	#0	QAM16	20.24	PASS

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	Verdict
LTE Band7	5	20775	1	#0	QPSK	22.46	PASS
LTE Band7	5	20775	1	#Mid	QPSK	22.61	PASS
LTE Band7	5	20775	1	#Max	QPSK	22.53	PASS
LTE Band7	5	20775	12	#0	QPSK	21.74	PASS
LTE Band7	5	20775	12	#Mid	QPSK	21.76	PASS
LTE Band7	5	20775	12	#Max	QPSK	21.72	PASS
LTE Band7	5	20775	25	#0	QPSK	21.74	PASS
LTE Band7	5	20775	1	#0	QAM16	21.85	PASS
LTE Band7	5	20775	1	#Mid	QAM16	21.73	PASS
LTE Band7	5	20775	1	#Max	QAM16	21.76	PASS
LTE Band7	5	20775	12	#0	QAM16	20.72	PASS
LTE Band7	5	20775	12	#Mid	QAM16	20.74	PASS
LTE Band7	5	20775	12	#Max	QAM16	20.71	PASS
LTE Band7	5	20775	25	#0	QAM16	20.72	PASS
LTE Band7	5	21100	1	#0	QPSK	22.81	PASS
LTE Band7	5	21100	1	#Mid	QPSK	22.64	PASS
LTE Band7	5	21100	1	#Max	QPSK	22.61	PASS
LTE Band7	5	21100	12	#0	QPSK	21.75	PASS
LTE Band7	5	21100	12	#Mid	QPSK	21.76	PASS
LTE Band7	5	21100	12	#Max	QPSK	21.72	PASS
LTE Band7	5	21100	25	#0	QPSK	21.69	PASS
LTE Band7	5	21100	1	#0	QAM16	21.94	PASS
LTE Band7	5	21100	1	#Mid	QAM16	21.52	PASS
LTE Band7	5	21100	1	#Max	QAM16	21.61	PASS
LTE Band7	5	21100	12	#0	QAM16	20.53	PASS
LTE Band7	5	21100	12	#Mid	QAM16	20.55	PASS
LTE Band7	5	21100	12	#Max	QAM16	20.47	PASS
LTE Band7	5	21100	25	#0	QAM16	20.67	PASS
LTE Band7	5	21425	1	#0	QPSK	22.57	PASS
LTE Band7	5	21425	1	#Mid	QPSK	22.49	PASS
LTE Band7	5	21425	1	#Max	QPSK	22.43	PASS
LTE Band7	5	21425	12	#0	QPSK	21.63	PASS
LTE Band7	5	21425	12	#Mid	QPSK	21.65	PASS
LTE Band7	5	21425	12	#Max	QPSK	21.58	PASS
LTE Band7	5	21425	25	#0	QPSK	21.66	PASS
LTE Band7	5	21425	1	#0	QAM16	22.06	PASS
LTE Band7	5	21425	1	#Mid	QAM16	21.61	PASS
LTE Band7	5	21425	1	#Max	QAM16	21.45	PASS
LTE Band7	5	21425	12	#0	QAM16	20.62	PASS
LTE Band7	5	21425	12	#Mid	QAM16	20.63	PASS



LTE Band7	5	21425	12	#Max	QAM16	20.59	PASS
LTE Band7	5	21425	25	#0	QAM16	20.80	PASS
LTE Band7	10	20800	1	#0	QPSK	22.74	PASS
LTE Band7	10	20800	1	#Mid	QPSK	22.45	PASS
LTE Band7	10	20800	1	#Max	QPSK	22.59	PASS
LTE Band7	10	20800	25	#0	QPSK	21.80	PASS
LTE Band7	10	20800	25	#Mid	QPSK	21.79	PASS
LTE Band7	10	20800	25	#Max	QPSK	21.74	PASS
LTE Band7	10	20800	50	#0	QPSK	21.74	PASS
LTE Band7	10	20800	1	#0	QAM16	21.99	PASS
LTE Band7	10	20800	1	#Mid	QAM16	21.90	PASS
LTE Band7	10	20800	1	#Max	QAM16	21.95	PASS
LTE Band7	10	20800	25	#0	QAM16	20.79	PASS
LTE Band7	10	20800	25	#Mid	QAM16	20.82	PASS
LTE Band7	10	20800	25	#Max	QAM16	20.91	PASS
LTE Band7	10	20800	50	#0	QAM16	20.72	PASS
LTE Band7	10	21100	1	#0	QPSK	22.88	PASS
LTE Band7	10	21100	1	#Mid	QPSK	22.71	PASS
LTE Band7	10	21100	1	#Max	QPSK	22.82	PASS
LTE Band7	10	21100	25	#0	QPSK	21.71	PASS
LTE Band7	10	21100	25	#Mid	QPSK	21.69	PASS
LTE Band7	10	21100	25	#Max	QPSK	21.70	PASS
LTE Band7	10	21100	50	#0	QPSK	21.71	PASS
LTE Band7	10	21100	1	#0	QAM16	22.48	PASS
LTE Band7	10	21100	1	#Mid	QAM16	22.02	PASS
LTE Band7	10	21100	1	#Max	QAM16	22.31	PASS
LTE Band7	10	21100	25	#0	QAM16	20.94	PASS
LTE Band7	10	21100	25	#Mid	QAM16	20.80	PASS
LTE Band7	10	21100	25	#Max	QAM16	20.74	PASS
LTE Band7	10	21100	50	#0	QAM16	20.64	PASS
LTE Band7	10	21400	1	#0	QPSK	22.52	PASS
LTE Band7	10	21400	1	#Mid	QPSK	22.52	PASS
LTE Band7	10	21400	1	#Max	QPSK	22.59	PASS
LTE Band7	10	21400	25	#0	QPSK	21.77	PASS
LTE Band7	10	21400	25	#Mid	QPSK	21.77	PASS
LTE Band7	10	21400	25	#Max	QPSK	21.58	PASS
LTE Band7	10	21400	50	#0	QPSK	21.77	PASS
LTE Band7	10	21400	1	#0	QAM16	21.24	PASS
LTE Band7	10	21400	1	#Mid	QAM16	21.55	PASS
LTE Band7	10	21400	1	#Max	QAM16	21.49	PASS
LTE Band7	10	21400	25	#0	QAM16	20.81	PASS
LTE Band7	10	21400	25	#Mid	QAM16	20.80	PASS
LTE Band7	10	21400	25	#Max	QAM16	20.70	PASS



LTE Band7	10	21400	50	#0	QAM16	20.66	PASS
LTE Band7	15	20825	1	#0	QPSK	22.75	PASS
LTE Band7	15	20825	1	#Mid	QPSK	22.31	PASS
LTE Band7	15	20825	1	#Max	QPSK	22.58	PASS
LTE Band7	15	20825	36	#0	QPSK	21.63	PASS
LTE Band7	15	20825	36	#Mid	QPSK	21.65	PASS
LTE Band7	15	20825	36	#Max	QPSK	21.72	PASS
LTE Band7	15	20825	75	#0	QPSK	21.67	PASS
LTE Band7	15	20825	1	#0	QAM16	21.88	PASS
LTE Band7	15	20825	1	#Mid	QAM16	21.88	PASS
LTE Band7	15	20825	1	#Max	QAM16	21.82	PASS
LTE Band7	15	20825	36	#0	QAM16	20.59	PASS
LTE Band7	15	20825	36	#Mid	QAM16	20.62	PASS
LTE Band7	15	20825	36	#Max	QAM16	20.70	PASS
LTE Band7	15	20825	75	#0	QAM16	20.66	PASS
LTE Band7	15	21100	1	#0	QPSK	22.54	PASS
LTE Band7	15	21100	1	#Mid	QPSK	22.67	PASS
LTE Band7	15	21100	1	#Max	QPSK	22.83	PASS
LTE Band7	15	21100	36	#0	QPSK	21.67	PASS
LTE Band7	15	21100	36	#Mid	QPSK	21.71	PASS
LTE Band7	15	21100	36	#Max	QPSK	21.56	PASS
LTE Band7	15	21100	75	#0	QPSK	21.64	PASS
LTE Band7	15	21100	1	#0	QAM16	21.58	PASS
LTE Band7	15	21100	1	#Mid	QAM16	21.82	PASS
LTE Band7	15	21100	1	#Max	QAM16	22.04	PASS
LTE Band7	15	21100	36	#0	QAM16	20.67	PASS
LTE Band7	15	21100	36	#Mid	QAM16	20.71	PASS
LTE Band7	15	21100	36	#Max	QAM16	20.50	PASS
LTE Band7	15	21100	75	#0	QAM16	20.59	PASS
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LTE Band7	15	21375	1	#Mid	QPSK	22.68	PASS
LTE Band7	15	21375	1	#Max	QPSK	22.77	PASS
LTE Band7	15	21375	36	#0	QPSK	21.68	PASS
LTE Band7	15	21375	36	#Mid	QPSK	21.66	PASS
LTE Band7	15	21375	36	#Max	QPSK	21.64	PASS
LTE Band7	15	21375	75	#0	QPSK	21.57	PASS
LTE Band7	15	21375	1	#0	QAM16	21.35	PASS
LTE Band7	15	21375	1	#Mid	QAM16	21.37	PASS
LTE Band7	15	21375	1	#Max	QAM16	20.76	PASS
LTE Band7	15	21375	36	#0	QAM16	20.62	PASS
LTE Band7	15	21375	36	#Mid	QAM16	20.60	PASS
LTE Band7	15	21375	36	#Max	QAM16	20.71	PASS
LTE Band7	15	21375	75	#0	QAM16	20.67	PASS



LTE Band7	20	20850	1	#0	QPSK	22.67	PASS
LTE Band7	20	20850	1	#Mid	QPSK	22.66	PASS
LTE Band7	20	20850	1	#Max	QPSK	22.72	PASS
LTE Band7	20	20850	50	#0	QPSK	21.65	PASS
LTE Band7	20	20850	50	#Mid	QPSK	21.74	PASS
LTE Band7	20	20850	50	#Max	QPSK	21.80	PASS
LTE Band7	20	20850	100	#0	QPSK	21.64	PASS
LTE Band7	20	20850	1	#0	QAM16	21.65	PASS
LTE Band7	20	20850	1	#Mid	QAM16	21.98	PASS
LTE Band7	20	20850	1	#Max	QAM16	21.91	PASS
LTE Band7	20	20850	50	#0	QAM16	20.72	PASS
LTE Band7	20	20850	50	#Mid	QAM16	20.73	PASS
LTE Band7	20	20850	50	#Max	QAM16	20.77	PASS
LTE Band7	20	20850	100	#0	QAM16	20.61	PASS
LTE Band7	20	21100	1	#0	QPSK	22.52	PASS
LTE Band7	20	21100	1	#Mid	QPSK	22.60	PASS
LTE Band7	20	21100	1	#Max	QPSK	22.65	PASS
LTE Band7	20	21100	50	#0	QPSK	21.62	PASS
LTE Band7	20	21100	50	#Mid	QPSK	21.66	PASS
LTE Band7	20	21100	50	#Max	QPSK	21.72	PASS
LTE Band7	20	21100	100	#0	QPSK	21.73	PASS
LTE Band7	20	21100	1	#0	QAM16	21.23	PASS
LTE Band7	20	21100	1	#Mid	QAM16	21.53	PASS
LTE Band7	20	21100	1	#Max	QAM16	21.45	PASS
LTE Band7	20	21100	50	#0	QAM16	20.71	PASS
LTE Band7	20	21100	50	#Mid	QAM16	20.75	PASS
LTE Band7	20	21100	50	#Max	QAM16	20.84	PASS
LTE Band7	20	21100	100	#0	QAM16	20.84	PASS
LTE Band7	20	21350	1	#0	QPSK	22.77	PASS
LTE Band7	20	21350	1	#Mid	QPSK	23.16	PASS
LTE Band7	20	21350	1	#Max	QPSK	22.42	PASS
LTE Band7	20	21350	50	#0	QPSK	21.55	PASS
LTE Band7	20	21350	50	#Mid	QPSK	21.54	PASS
LTE Band7	20	21350	50	#Max	QPSK	21.70	PASS
LTE Band7	20	21350	100	#0	QPSK	21.59	PASS
LTE Band7	20	21350	1	#0	QAM16	21.49	PASS
LTE Band7	20	21350	1	#Mid	QAM16	21.71	PASS
LTE Band7	20	21350	1	#Max	QAM16	21.48	PASS
LTE Band7	20	21350	50	#0	QAM16	20.69	PASS
LTE Band7	20	21350	50	#Mid	QAM16	20.66	PASS
LTE Band7	20	21350	50	#Max	QAM16	20.80	PASS
LTE Band7	20	21350	100	#0	QAM16	20.68	PASS

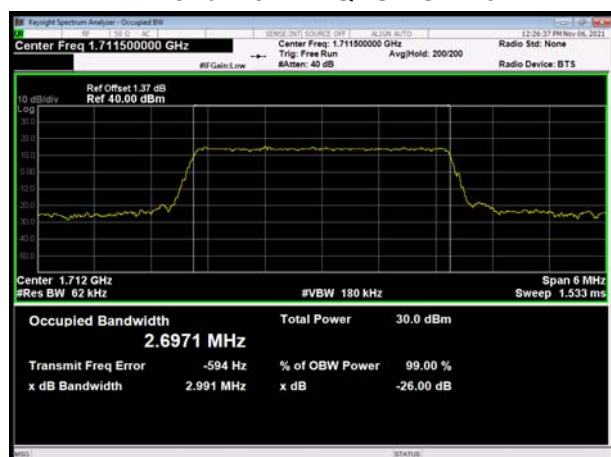
Occupied Bandwidth

LTE Band 4						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth (MHz)
100%	QPSK	3	19965	1711.5	2.6971	2.991
			20175	1732.5	2.7186	2.995
			20385	1753.5	2.7024	2.968
	16QAM	3	19965	1711.5	2.6962	2.995
			20175	1732.5	2.7004	2.965
			20385	1753.5	2.6989	2.994

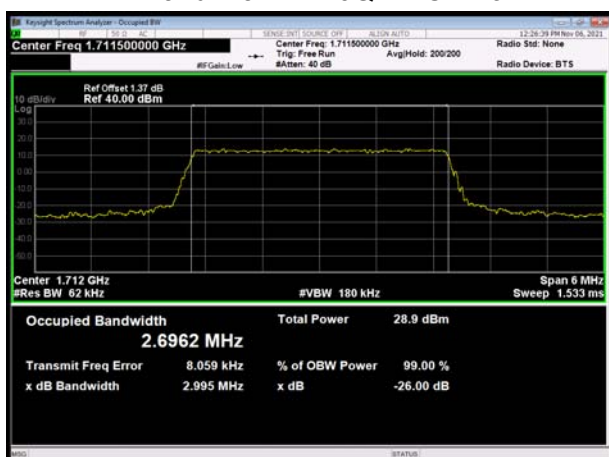
LTE Band 7						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth (MHz)
100%	QPSK	20	20850	2510	17.964	19.32
			21100	2535	17.857	19.18
			21350	2560	17.865	19.34
	16QAM	20	20850	2510	17.988	19.27
			21100	2535	17.881	19.40
			21350	2560	17.886	19.29



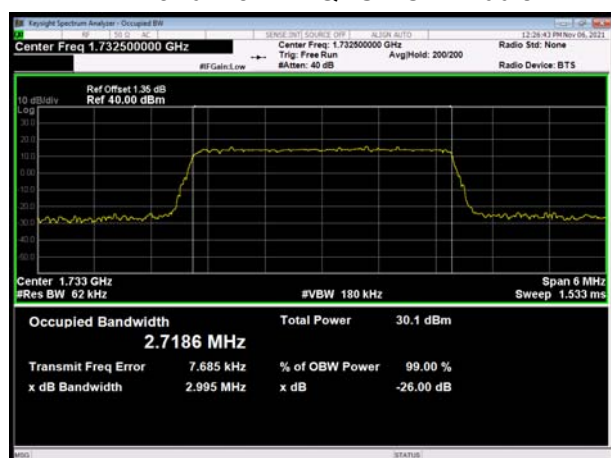
LTE Band 4 3MHz QPSK CH-Low



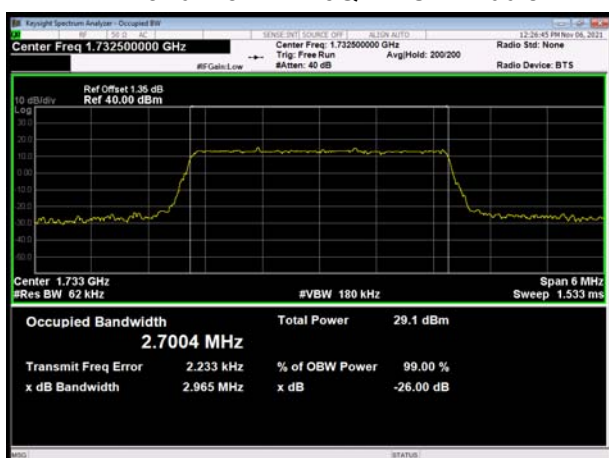
LTE Band 4 3MHz 16QAM CH-Low



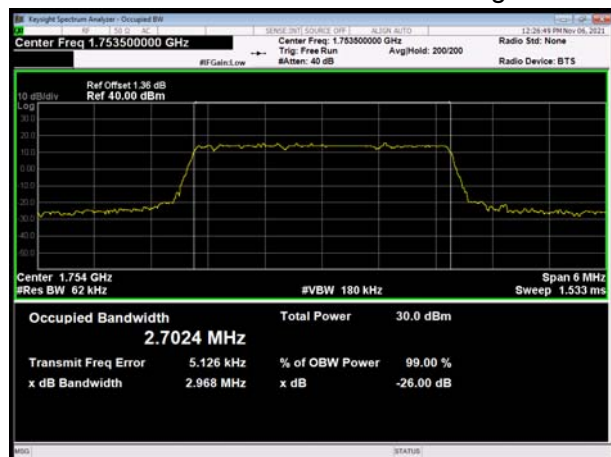
LTE Band 4 3MHz QPSK CH-Middle



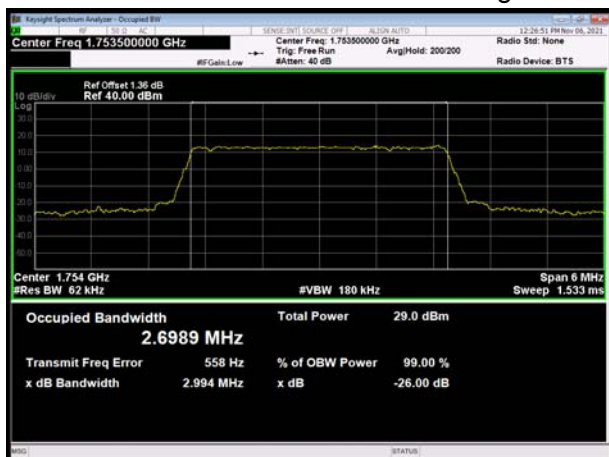
LTE Band 4 3MHz 16QAM CH-Middle



LTE Band 4 3MHz QPSK CH-High

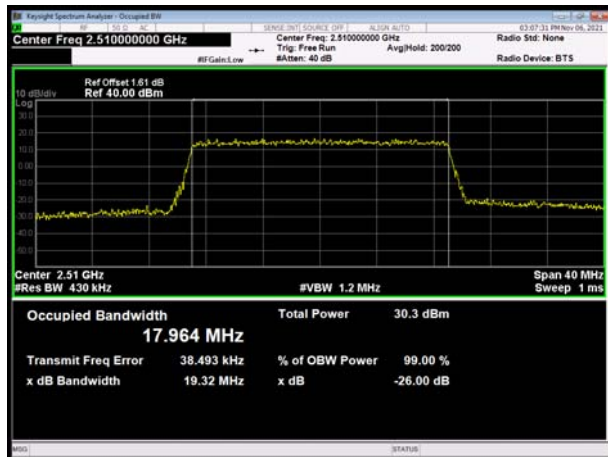


LTE Band 4 3MHz 16QAM CH-High

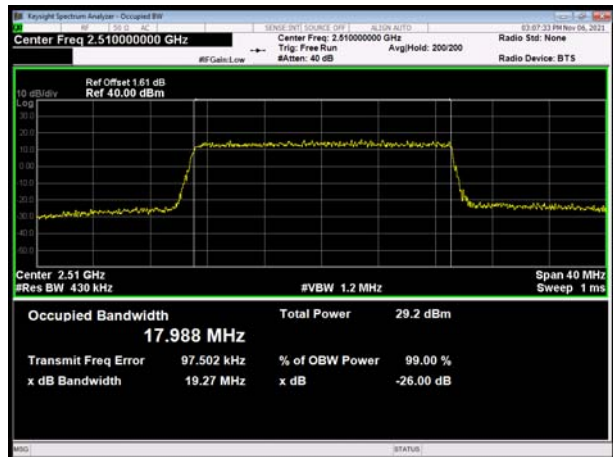




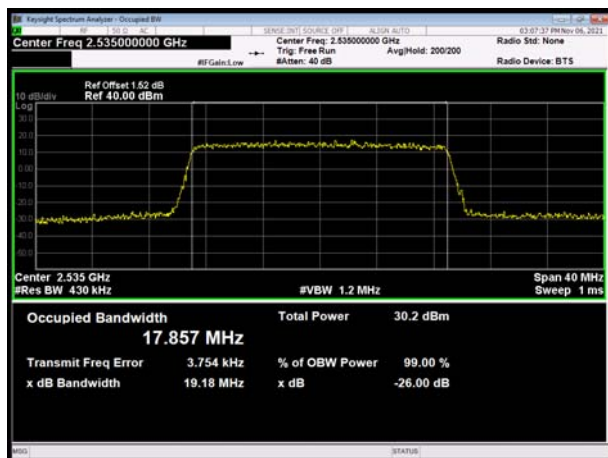
LTE Band 7 20MHz QPSK CH-Low



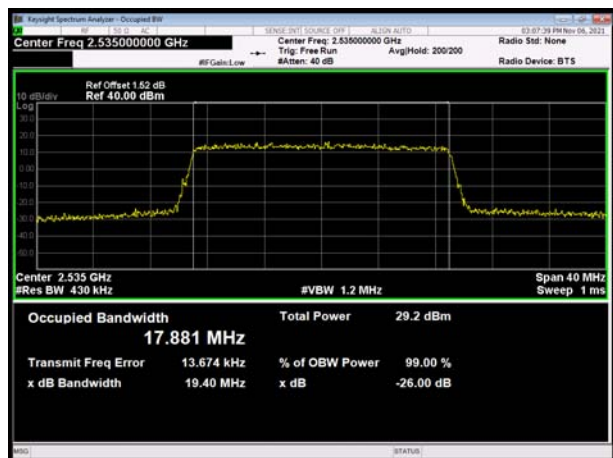
LTE Band 7 20MHz 16QAM CH-Low



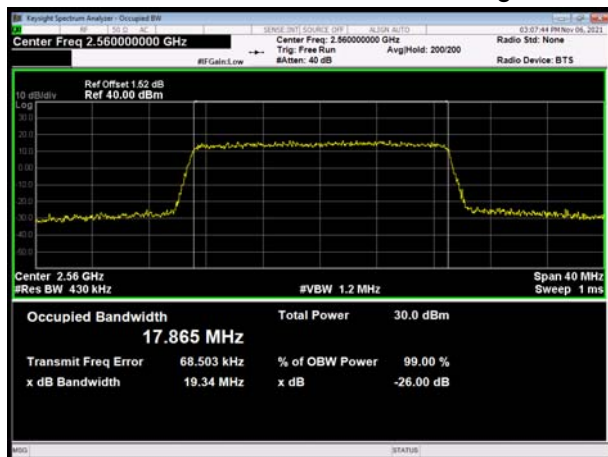
LTE Band 7 20MHz QPSK CH-Middle



LTE Band 7 20MHz 16QAM CH-Middle



LTE Band 7 20MHz QPSK CH-High

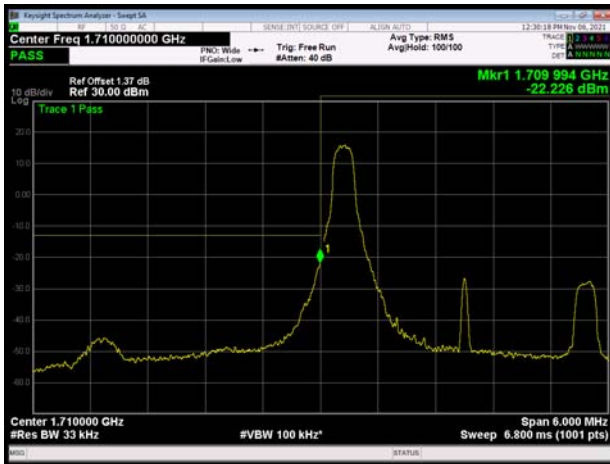


LTE Band 7 20MHz 16QAM CH-High

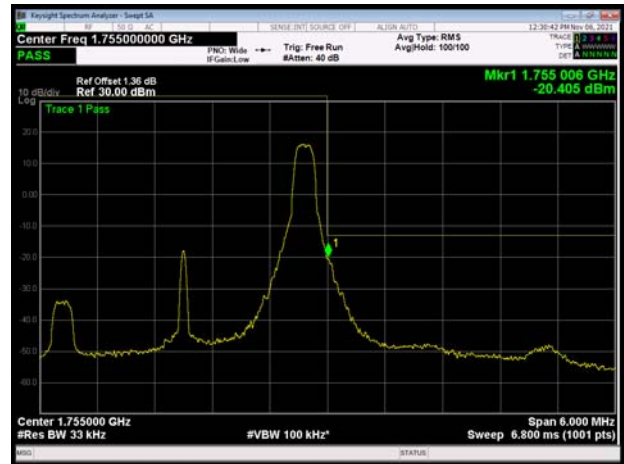


Band Edge Compliance

LTE Band 4 3MHz QPSK 1RB CH-Low



LTE Band 4 3MHz QPSK 1RB CH-High



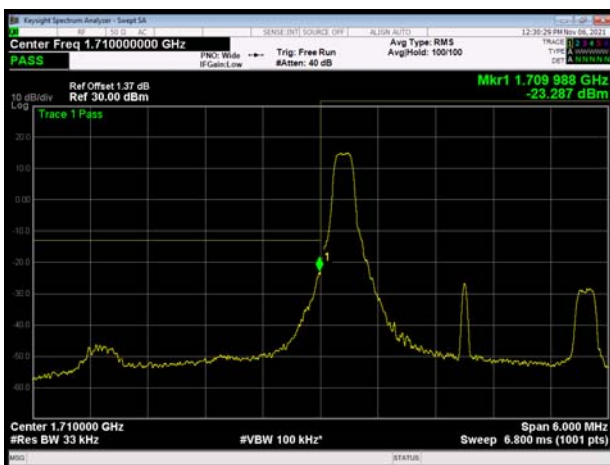
LTE Band 4 3MHz QPSK 100%RB CH-Low



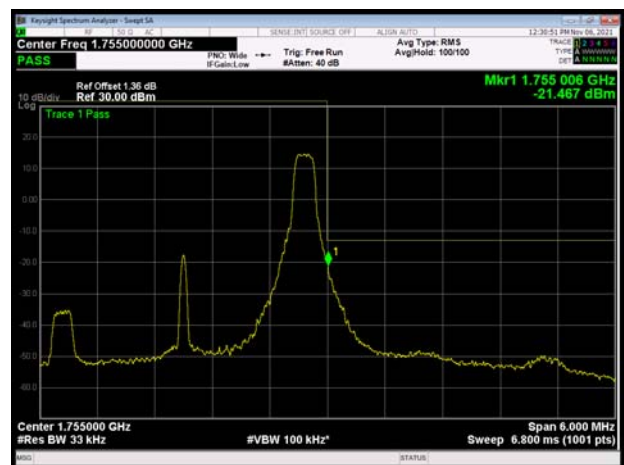
LTE Band 4 3MHz QPSK 100%RB CH-High



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

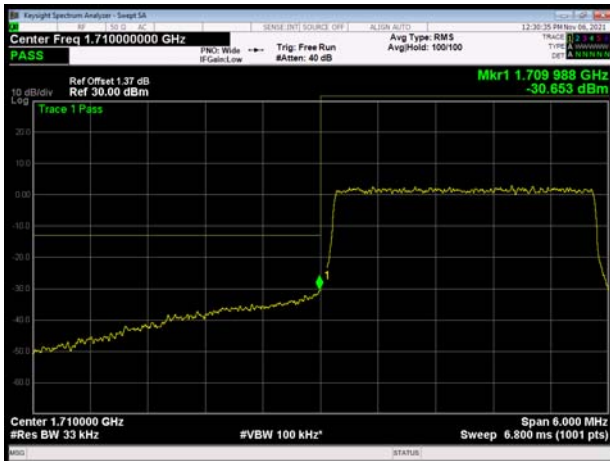


LTE Band 4 3MHz 16QAM 1RB CH-High





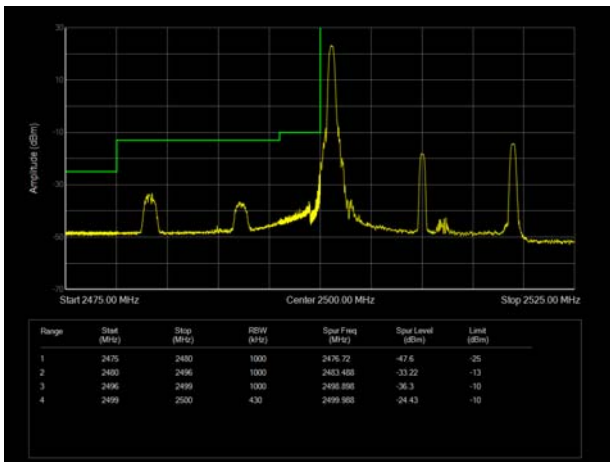
LTE Band 4 3MHz 16QAM 100%RB CH-Low



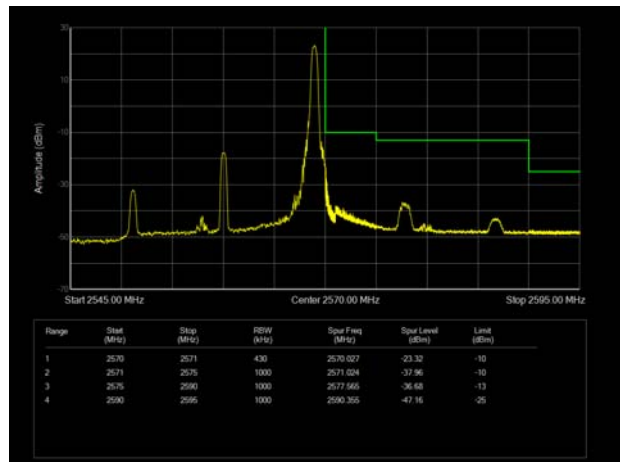
LTE Band 4 3MHz 16QAM 100%RB CH-High



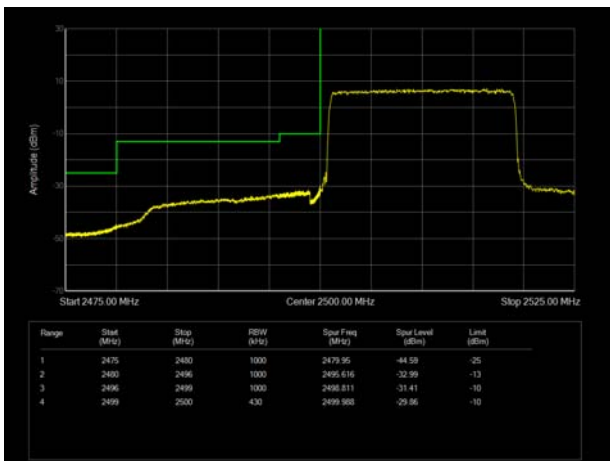
LTE Band 7 20MHz QPSK 1RB CH-Low



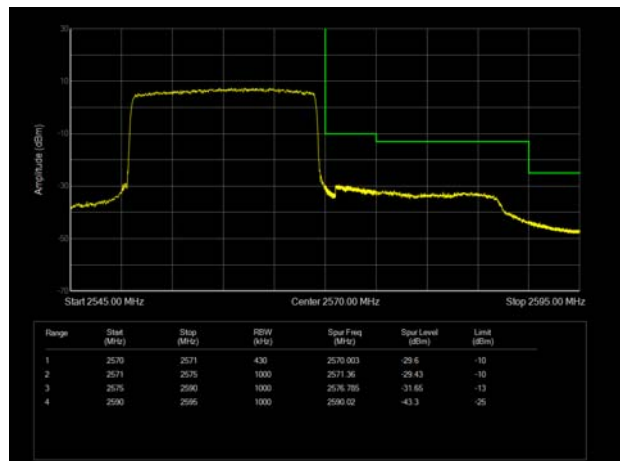
LTE Band 7 20MHz QPSK 1RB CH-High



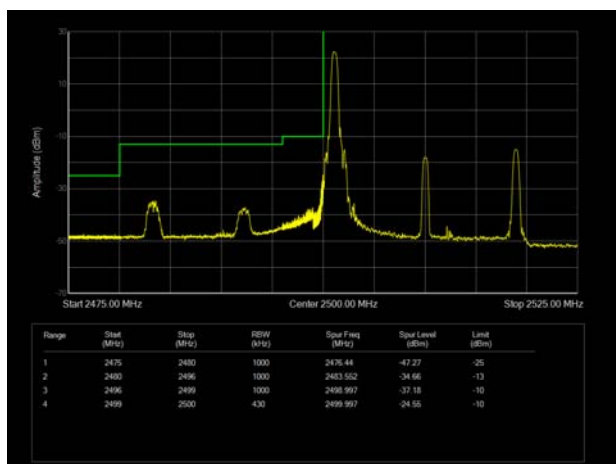
LTE Band 7 20MHz QPSK 100%RB CH-Low



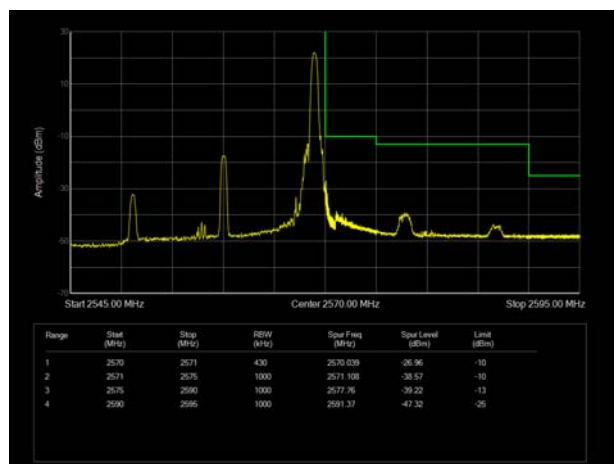
LTE Band 7 20MHz QPSK 100%RB CH-High



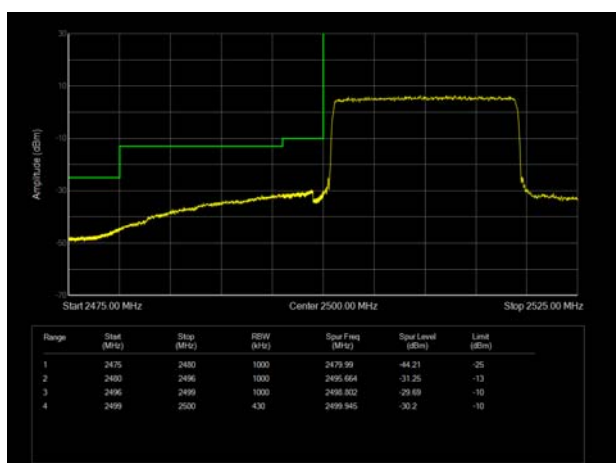
LTE Band 7 20MHz 16QAM 1RB CH-Low



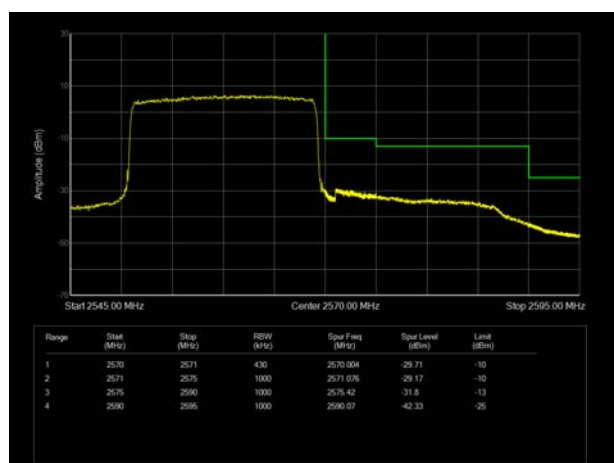
LTE Band 7 20MHz 16QAM 1RB CH-High



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



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



Peak-to-Average Power Ratio (PAPR)

LTE Band 4								
Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
QPSK	1.4	19957	1710.7	26.46	21.30	5.16	≤13	PASS
		20175	1732.5	26.01	21.41	4.60	≤13	PASS
		20393	1754.3	26.44	21.35	5.09	≤13	PASS
	3	19965	1711.5	26.53	21.34	5.19	≤13	PASS
		20175	1732.5	26.00	21.40	4.60	≤13	PASS
		20385	1753.5	26.53	21.40	5.13	≤13	PASS
	5	19975	1712.5	26.54	21.38	5.16	≤13	PASS
		20175	1732.5	26.05	21.50	4.55	≤13	PASS
		20375	1752.5	26.62	21.61	5.01	≤13	PASS
	10	20000	1715	26.48	21.35	5.13	≤13	PASS
		20175	1732.5	25.98	21.39	4.59	≤13	PASS
		20350	1750	26.52	21.54	4.98	≤13	PASS
	15	20025	1717.5	26.65	21.45	5.20	≤13	PASS
		20175	1732.5	26.30	21.44	4.86	≤13	PASS
		20325	1747.5	26.57	21.45	5.12	≤13	PASS
	20	20050	1720	26.45	21.44	5.01	≤13	PASS
		20175	1732.5	26.18	21.36	4.82	≤13	PASS
		20300	1745	26.46	21.49	4.97	≤13	PASS
16QAM	1.4	19957	1710.7	26.36	20.24	6.12	≤13	PASS
		20175	1732.5	25.86	20.29	5.57	≤13	PASS
		20393	1754.3	26.38	20.41	5.97	≤13	PASS
	3	19965	1711.5	26.41	20.29	6.12	≤13	PASS
		20175	1732.5	25.99	20.49	5.50	≤13	PASS
		20385	1753.5	26.44	20.41	6.03	≤13	PASS
	5	19975	1712.5	26.38	20.32	6.06	≤13	PASS
		20175	1732.5	25.94	20.48	5.46	≤13	PASS
		20375	1752.5	26.56	20.69	5.87	≤13	PASS
	10	20000	1715	26.36	20.37	5.99	≤13	PASS
		20175	1732.5	25.80	20.28	5.52	≤13	PASS
		20350	1750	26.41	20.48	5.93	≤13	PASS
	15	20025	1717.5	26.41	20.40	6.01	≤13	PASS
		20175	1732.5	26.10	20.41	5.69	≤13	PASS
		20325	1747.5	26.46	20.54	5.92	≤13	PASS
	20	20050	1720	26.47	20.58	5.89	≤13	PASS



		20175	1732.5	26.03	20.33	5.70	≤13	PASS
		20300	1745	26.31	20.45	5.86	≤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	26.53	22.15	4.38	≤13	PASS
		21100	2535	26.99	22.08	4.91	≤13	PASS
		21425	2567.5	26.31	21.94	4.37	≤13	PASS
	10	20800	2505	26.85	22.35	4.50	≤13	PASS
		21100	2535	27.05	22.08	4.97	≤13	PASS
		21400	2565	26.59	22.05	4.54	≤13	PASS
	15	20825	2507.5	27.29	22.40	4.89	≤13	PASS
		21100	2535	27.28	22.12	5.16	≤13	PASS
		21375	2562.5	26.87	21.92	4.95	≤13	PASS
	20	20850	2510	27.25	22.34	4.91	≤13	PASS
		21100	2535	27.16	22.19	4.97	≤13	PASS
		21350	2560	26.94	22.08	4.86	≤13	PASS
16QAM	5	20775	2502.5	26.44	21.20	5.24	≤13	PASS
		21100	2535	27.07	21.35	5.72	≤13	PASS
		21425	2567.5	26.38	21.21	5.17	≤13	PASS
	10	20800	2505	26.63	21.18	5.45	≤13	PASS
		21100	2535	27.04	21.26	5.78	≤13	PASS
		21400	2565	26.54	21.08	5.46	≤13	PASS
	15	20825	2507.5	26.97	21.20	5.77	≤13	PASS
		21100	2535	27.10	21.15	5.95	≤13	PASS
		21375	2562.5	26.80	21.06	5.74	≤13	PASS
	20	20850	2510	26.98	21.15	5.83	≤13	PASS
		21100	2535	27.09	21.26	5.83	≤13	PASS
		21350	2560	26.99	21.23	5.76	≤13	PASS

Frequency Stability

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	4.50	10.05	0.00260	0.00580	
Extreme (85℃)		3.44	14.96	0.00199	0.00863	PASS
Extreme (80℃)		11.16	1.01	0.00644	0.00059	PASS
Extreme (70℃)		1.14	14.92	0.00066	0.00861	PASS
Extreme (60℃)		11.23	16.99	0.00648	0.00981	PASS
Extreme (50℃)		3.15	17.37	0.00182	0.01002	PASS
Extreme (40℃)		5.16	2.69	0.00298	0.00155	PASS
Extreme (30℃)		3.88	9.90	0.00224	0.00571	PASS
Extreme (20℃)		11.07	17.62	0.00639	0.01017	PASS
Extreme (10℃)		12.77	12.28	0.00737	0.00709	PASS
Extreme (0℃)		9.18	13.70	0.00530	0.00791	PASS
Extreme (-10℃)		7.98	12.01	0.00461	0.00693	PASS
Extreme (-20℃)		14.41	4.05	0.00832	0.00234	PASS
Extreme (-30℃)		12.31	16.31	0.00710	0.00941	PASS
Extreme (-40℃)		15.89	13.76	0.00917	0.00794	PASS
25℃	LV	4.54	10.48	0.00262	0.00605	PASS
	HV	5.21	12.05	0.00301	0.00696	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	9.86	15.14	0.00569	0.00874	
Extreme (85℃)		2.80	9.75	0.00162	0.00562	PASS
Extreme (80℃)		16.98	9.97	0.00980	0.00575	PASS
Extreme (70℃)		7.79	17.27	0.00450	0.00997	PASS
Extreme (60℃)		8.01	5.67	0.00462	0.00327	PASS
Extreme (50℃)		5.05	3.19	0.00291	0.00184	PASS
Extreme (40℃)		5.28	7.66	0.00305	0.00442	PASS
Extreme (30℃)		11.85	5.41	0.00684	0.00312	PASS
Extreme (20℃)		4.53	7.78	0.00262	0.00449	PASS
Extreme (10℃)		15.66	3.22	0.00904	0.00186	PASS
Extreme (0℃)		7.50	15.88	0.00433	0.00917	PASS
Extreme (-10℃)		17.13	8.90	0.00989	0.00513	PASS
Extreme (-20℃)		11.19	2.27	0.00646	0.00131	PASS



Extreme (-30℃)		9.29	5.05	0.00536	0.00291	PASS
Extreme (-40℃)		4.22	16.45	0.00243	0.00949	PASS
25℃	LV	9.20	11.76	0.00531	0.00679	PASS
	HV	3.93	17.90	0.00227	0.01033	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	11.32	17.94	0.00653	0.01036	PASS
Extreme (85℃)		5.76	8.57	0.00333	0.00494	PASS
Extreme (80℃)		15.30	2.35	0.00883	0.00136	PASS
Extreme (70℃)		6.69	17.19	0.00386	0.00992	PASS
Extreme (60℃)		17.25	16.84	0.00996	0.00972	PASS
Extreme (50℃)		1.87	9.01	0.00108	0.00520	PASS
Extreme (40℃)		8.67	2.59	0.00500	0.00150	PASS
Extreme (30℃)		9.51	1.64	0.00549	0.00095	PASS
Extreme (20℃)		8.73	5.07	0.00504	0.00292	PASS
Extreme (10℃)		14.56	8.64	0.00841	0.00499	PASS
Extreme (0℃)		11.84	1.09	0.00683	0.00063	PASS
Extreme (-10℃)		5.61	7.97	0.00324	0.00460	PASS
Extreme (-20℃)		17.38	11.51	0.01003	0.00665	PASS
Extreme (-30℃)		15.43	9.07	0.00890	0.00524	PASS
Extreme (-40℃)		16.09	8.31	0.00929	0.00480	PASS
25℃	LV	3.13	1.17	0.00181	0.00068	PASS
	HV	6.36	16.16	0.00367	0.00933	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	17.82	3.70	0.01028	0.00214	PASS
Extreme (85℃)		17.52	10.53	0.01011	0.00608	PASS
Extreme (80℃)		17.84	14.05	0.01030	0.00811	PASS
Extreme (70℃)		9.23	16.43	0.00533	0.00948	PASS
Extreme (60℃)		9.63	16.99	0.00556	0.00981	PASS
Extreme (50℃)		5.32	4.68	0.00307	0.00270	PASS
Extreme (40℃)		9.38	16.10	0.00541	0.00929	PASS
Extreme (30℃)		8.57	17.41	0.00495	0.01005	PASS
Extreme (20℃)		16.03	5.15	0.00925	0.00298	PASS
Extreme (10℃)		3.83	6.01	0.00221	0.00347	PASS
Extreme (0℃)		8.46	5.31	0.00488	0.00306	PASS
Extreme (-10℃)		16.47	4.76	0.00951	0.00275	PASS



Extreme (-20℃)		14.28	1.94	0.00824	0.00112	PASS
Extreme (-30℃)		4.44	14.95	0.00256	0.00863	PASS
Extreme (-40℃)		9.64	10.76	0.00556	0.00621	PASS
25℃	LV	4.26	13.37	0.00246	0.00772	PASS
	HV	4.84	11.61	0.00280	0.00670	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	11.49	7.06	0.00663	0.00408	PASS
Extreme (85℃)		12.07	10.34	0.00697	0.00597	PASS
Extreme (80℃)		9.77	12.88	0.00564	0.00744	PASS
Extreme (70℃)		1.20	11.63	0.00069	0.00672	PASS
Extreme (60℃)		7.67	14.46	0.00443	0.00835	PASS
Extreme (50℃)		8.33	6.87	0.00481	0.00396	PASS
Extreme (40℃)		7.03	2.49	0.00406	0.00144	PASS
Extreme (30℃)		6.80	11.52	0.00392	0.00665	PASS
Extreme (20℃)		8.84	1.73	0.00510	0.00100	PASS
Extreme (10℃)		15.32	3.54	0.00884	0.00204	PASS
Extreme (0℃)		7.62	14.74	0.00440	0.00851	PASS
Extreme (-10℃)		10.88	14.33	0.00628	0.00827	PASS
Extreme (-20℃)		7.57	7.91	0.00437	0.00457	PASS
Extreme (-30℃)		1.13	3.57	0.00065	0.00206	PASS
Extreme (-40℃)		11.64	14.50	0.00672	0.00837	PASS
25℃	LV	5.45	5.71	0.00314	0.00329	PASS
	HV	14.99	7.71	0.00865	0.00445	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	12.08	2.95	0.00697	0.00170	PASS
Extreme (85℃)		10.23	8.57	0.00590	0.00495	PASS
Extreme (80℃)		11.11	14.76	0.00641	0.00852	PASS
Extreme (70℃)		5.39	10.03	0.00311	0.00579	PASS
Extreme (60℃)		17.52	9.26	0.01011	0.00535	PASS
Extreme (50℃)		11.27	15.15	0.00651	0.00874	PASS
Extreme (40℃)		17.39	7.12	0.01004	0.00411	PASS
Extreme (30℃)		16.89	1.07	0.00975	0.00062	PASS
Extreme (20℃)		2.53	14.51	0.00146	0.00837	PASS
Extreme (10℃)		13.84	8.70	0.00799	0.00502	PASS
Extreme (0℃)		6.59	17.81	0.00380	0.01028	PASS



Extreme (-10℃)		8.88	10.78	0.00512	0.00622	PASS
Extreme (-20℃)		6.74	5.05	0.00389	0.00291	PASS
Extreme (-30℃)		15.70	17.04	0.00906	0.00983	PASS
Extreme (-40℃)		14.14	14.26	0.00816	0.00823	PASS
25℃	LV	13.58	15.84	0.00784	0.00914	PASS
	HV	14.11	12.21	0.00814	0.00705	PASS

LTE Band 7						
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	10.03	5.72	0.00396	0.00226	PASS
Extreme (85℃)		4.81	4.61	0.00190	0.00182	PASS
Extreme (80℃)		11.83	12.08	0.00466	0.00476	PASS
Extreme (70℃)		16.65	3.24	0.00657	0.00128	PASS
Extreme (60℃)		5.77	14.22	0.00227	0.00561	PASS
Extreme (50℃)		3.64	16.45	0.00143	0.00649	PASS
Extreme (40℃)		7.07	6.91	0.00279	0.00273	PASS
Extreme (30℃)		13.49	3.62	0.00532	0.00143	PASS
Extreme (20℃)		5.92	1.64	0.00234	0.00065	PASS
Extreme (10℃)		2.60	8.83	0.00102	0.00348	PASS
Extreme (0℃)		11.36	17.68	0.00448	0.00697	PASS
Extreme (-10℃)		8.80	16.27	0.00347	0.00642	PASS
Extreme (-20℃)		2.88	1.30	0.00114	0.00051	PASS
Extreme (-30℃)		3.58	8.26	0.00141	0.00326	PASS
Extreme (-40℃)		3.94	15.58	0.00155	0.00615	PASS
25℃	LV	12.15	6.34	0.00479	0.00250	PASS
	HV	17.16	2.35	0.00677	0.00093	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	14.89	11.08	0.00587	0.00437	PASS
Extreme (85℃)		10.23	13.27	0.00403	0.00523	PASS
Extreme (80℃)		3.23	7.49	0.00127	0.00296	PASS
Extreme (70℃)		6.98	17.89	0.00275	0.00706	PASS
Extreme (60℃)		4.51	1.98	0.00178	0.00078	PASS
Extreme (50℃)		5.56	17.78	0.00219	0.00701	PASS
Extreme (40℃)		1.19	9.00	0.00047	0.00355	PASS
Extreme (30℃)		2.98	15.30	0.00118	0.00604	PASS



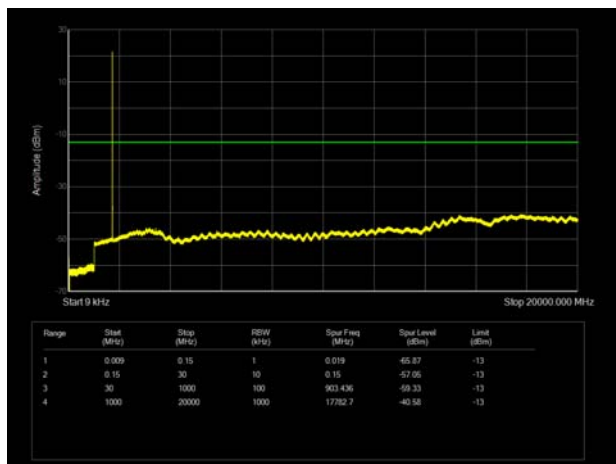
Extreme (20℃)		15.14	6.02	0.00597	0.00237	PASS
Extreme (10℃)		12.35	16.60	0.00487	0.00655	PASS
Extreme (0℃)		6.32	12.03	0.00249	0.00475	PASS
Extreme (-10℃)		6.59	17.46	0.00260	0.00689	PASS
Extreme (-20℃)		3.97	15.24	0.00156	0.00601	PASS
Extreme (-30℃)		6.60	16.29	0.00260	0.00642	PASS
Extreme (-40℃)		15.79	15.84	0.00623	0.00625	PASS
25℃	LV	10.43	17.29	0.00411	0.00682	PASS
	HV	2.98	6.02	0.00118	0.00238	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	12.33	10.90	0.00486	0.00430	
Extreme (85℃)		7.83	16.62	0.00309	0.00655	PASS
Extreme (80℃)		12.40	17.90	0.00489	0.00706	PASS
Extreme (70℃)		1.16	4.47	0.00046	0.00176	PASS
Extreme (60℃)		12.25	11.12	0.00483	0.00439	PASS
Extreme (50℃)		16.74	8.07	0.00660	0.00318	PASS
Extreme (40℃)		6.94	11.19	0.00274	0.00442	PASS
Extreme (30℃)		2.70	11.67	0.00106	0.00460	PASS
Extreme (20℃)		3.29	1.57	0.00130	0.00062	PASS
Extreme (10℃)		2.46	16.31	0.00097	0.00643	PASS
Extreme (0℃)		6.91	16.14	0.00273	0.00637	PASS
Extreme (-10℃)		15.30	2.32	0.00603	0.00091	PASS
Extreme (-20℃)		2.58	17.95	0.00102	0.00708	PASS
Extreme (-30℃)		9.59	16.65	0.00378	0.00657	PASS
Extreme (-40℃)		12.77	17.21	0.00504	0.00679	PASS
25℃	LV	14.23	11.13	0.00561	0.00439	PASS
	HV	1.40	17.20	0.00055	0.00678	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	12.73	8.63	0.00502	0.00340	
Extreme (85℃)		7.13	2.35	0.00281	0.00093	PASS
Extreme (80℃)		13.09	9.87	0.00517	0.00389	PASS
Extreme (70℃)		6.51	2.60	0.00257	0.00103	PASS
Extreme (60℃)		16.45	10.22	0.00649	0.00403	PASS
Extreme (50℃)		8.90	14.13	0.00351	0.00557	PASS
Extreme (40℃)		14.25	2.06	0.00562	0.00081	PASS



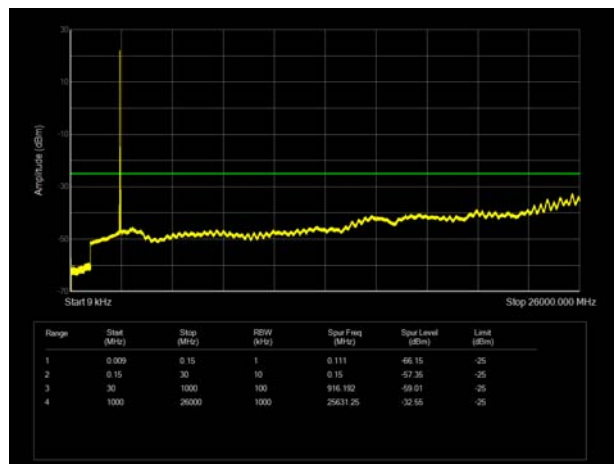
Extreme (30℃)		14.59	11.94	0.00576	0.00471	PASS
Extreme (20℃)		2.58	1.61	0.00102	0.00064	PASS
Extreme (10℃)		13.80	9.46	0.00544	0.00373	PASS
Extreme (0℃)		6.26	9.24	0.00247	0.00364	PASS
Extreme (-10℃)		4.06	17.03	0.00160	0.00672	PASS
Extreme (-20℃)		13.38	3.78	0.00528	0.00149	PASS
Extreme (-30℃)		1.53	4.06	0.00060	0.00160	PASS
Extreme (-40℃)		6.42	6.54	0.00253	0.00258	PASS
25℃	LV	14.78	12.50	0.00583	0.00493	PASS
	HV	14.07	12.91	0.00555	0.00509	PASS

Spurious Emissions at Antenna Terminals

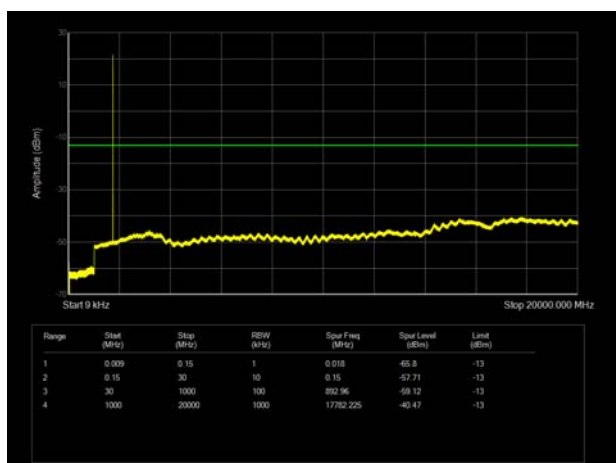
LTE Band 4 3MHz CH-Low 9kHz~20GHz



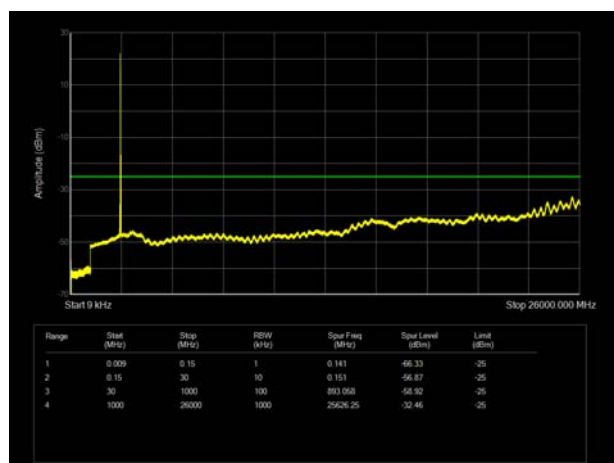
LTE Band 7 20MHz CH-Low 9kHz~20GHz



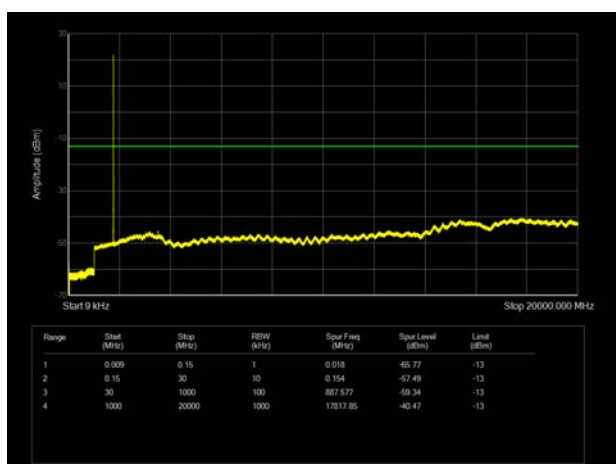
LTE Band 4 3MHz CH-Middle 9kHz~20GHz



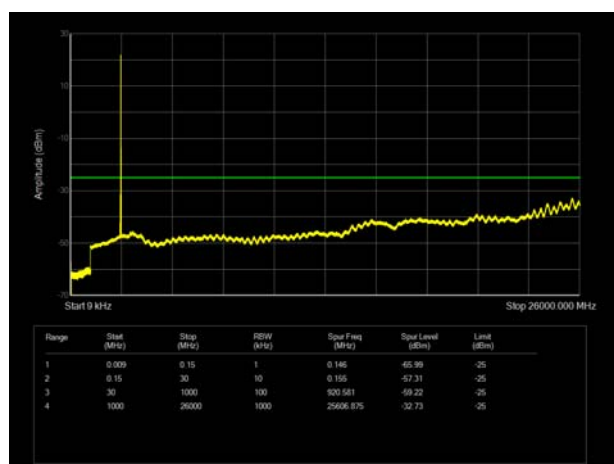
LTE Band 7 20MHz CH-Middle 9kHz~20GHz



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



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



Radiates Spurious Emission

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	3447.0	-57.34	2.70	12.70	Horizontal	-47.34	-13.00	34.34	180
3	5170.9	-40.76	3.20	12.50	Horizontal	-31.46	-13.00	18.46	135
4	6894.8	-56.84	4.20	11.80	Horizontal	-49.24	-13.00	36.24	0
5	8618.6	-49.30	4.40	12.50	Horizontal	-41.20	-13.00	28.20	90
6	10342.5	-49.02	4.70	11.30	Horizontal	-42.42	-13.00	29.42	225
7	12066.4	-50.29	5.20	13.80	Horizontal	-41.69	-13.00	28.69	270
8	13790.3	-48.52	5.70	11.30	Horizontal	-42.92	-13.00	29.92	270
9	15514.1	-52.92	6.10	16.80	Horizontal	-42.22	-13.00	29.22	315
10	17238.0	-51.16	6.10	14.20	Horizontal	-43.06	-13.00	30.06	135

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.
2. The worst emission was found in the antenna is Horizontal position.

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

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	5065.8	-41.15	3.40	12.50	Horizontal	-32.05	-25.00	7.05	0
3	7598.6	-46.87	4.40	12.20	Horizontal	-39.07	-25.00	14.07	270
4	10130.6	-37.72	4.70	11.30	Horizontal	-31.12	-25.00	6.12	45
5	12675.0	-53.69	5.40	13.20	Horizontal	-45.89	-25.00	20.89	315
6	15210.0	-51.95	6.10	13.10	Horizontal	-44.95	-25.00	19.95	180
7	17745.0	-51.75	6.10	14.20	Horizontal	-43.65	-25.00	18.65	90
8	20280.0	--	--	--	--	--	--	--	--
9	22815.0	--	--	--	--	--	--	--	--
10	25350.0	--	--	--	--	--	--	--	--

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 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	5052.4	-40.48	3.40	12.50	Horizontal	-31.38	-25.00	6.38	135
3	7578.0	-48.14	4.40	12.20	Horizontal	-40.34	-25.00	15.34	225
4	10103.6	-38.93	4.70	11.30	Horizontal	-32.33	-25.00	7.33	135
5	12629.3	-54.36	5.40	13.20	Horizontal	-46.56	-25.00	21.56	0
6	15154.9	-52.64	6.10	13.10	Horizontal	-45.64	-25.00	20.64	0
7	17680.5	-51.42	6.10	14.20	Horizontal	-43.32	-25.00	18.32	225
8	20206.1	--	--	--	--	--	--	--	--
9	22731.8	--	--	--	--	--	--	--	--
10	25257.4	--	--	--	--	--	--	--	--

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

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

Main Test Instruments

Date of Testing (variant): November 6, 2021 ~ November 25, 2021

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Base Station Simulator	R&S	CMW500	113824	2021-05-15	2022-05-14
Climate Chamber	Weiss	VT4002	582261194500 10	2021-05-15	2022-05-14
Spectrum Analyzer	Key sight	N9020	MY52330084	2021-05-15	2022-05-14
Signal Analyzer	R&S	FSV3030	101411	2020-12-13	2021-12-12
Signal Analyzer	R&S	FSV30	100815	2020-12-13	2021-12-12
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	01111	2019--9-12	2022-09-11
Horn Antenna	Schwarzbeck	BBHA 9120D	1594	2020-12-17	2021-12-16