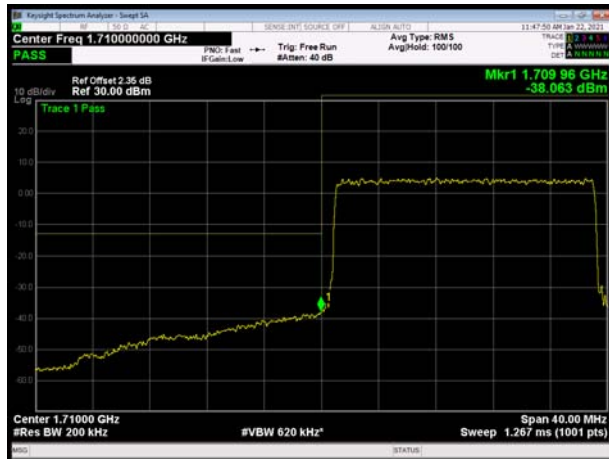




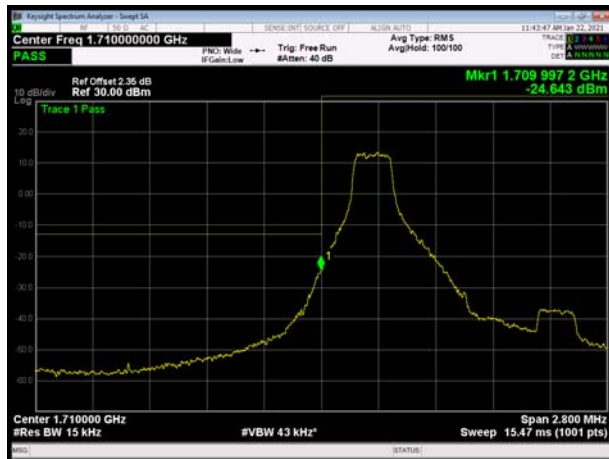
LTE Band 4 QPSK 20MHz CH-Low, 100%RB



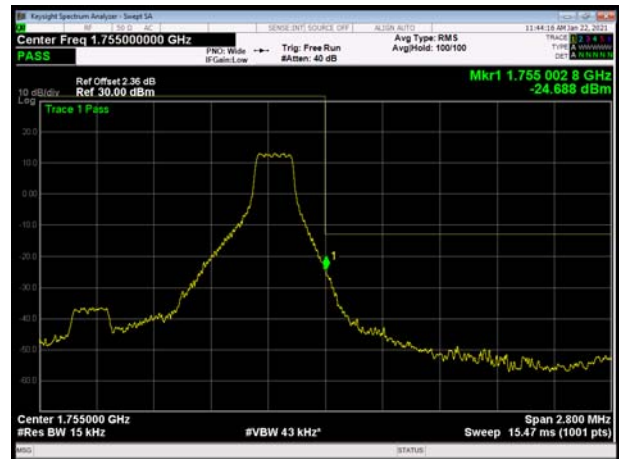
LTE Band 4 QPSK 20MHz CH-High, 100%RB



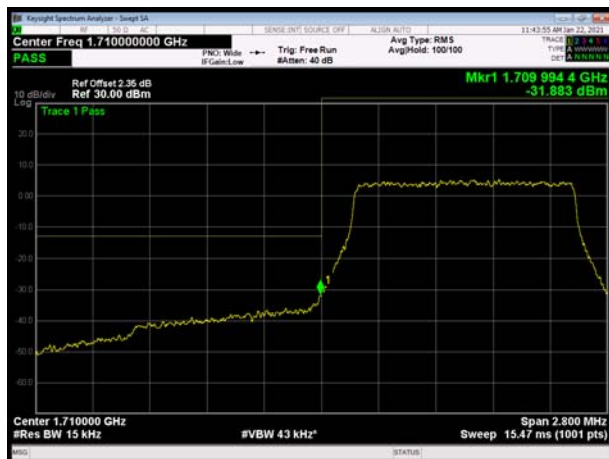
LTE Band 4 16QAM 1.4MHz CH-Low, 1 RB



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



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

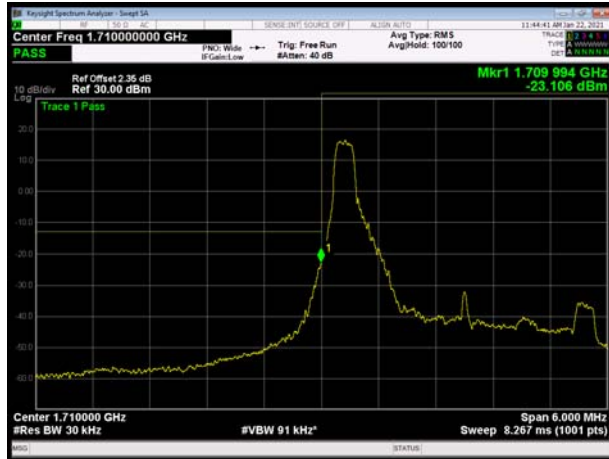


LTE Band 4 16QAM 1.4MHz CH-High, 100%RB

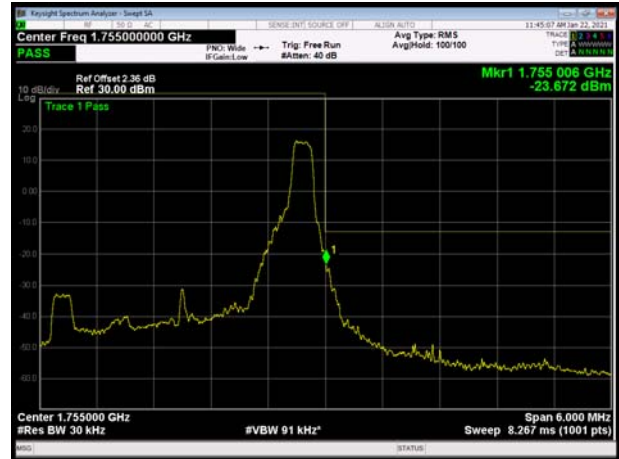




LTE Band 4 16QAM 3MHz CH-Low, 1 RB



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



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



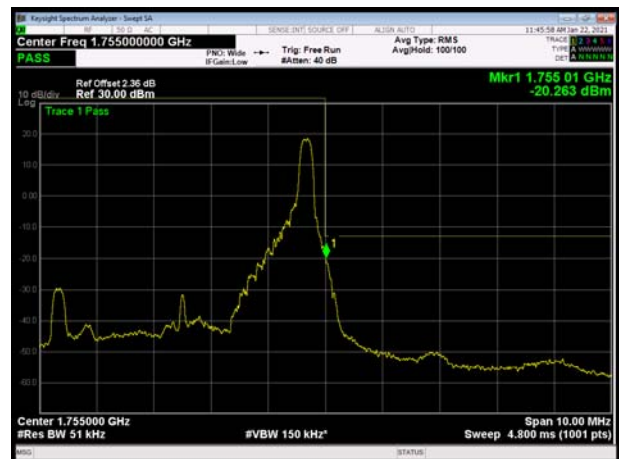
LTE Band 4 16QAM 3MHz CH-High, 100%RB



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

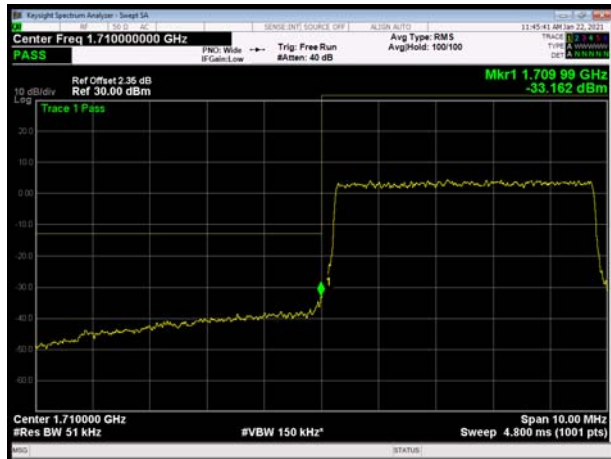


LTE Band 4 16QAM 5MHz CH-High, 1 RB

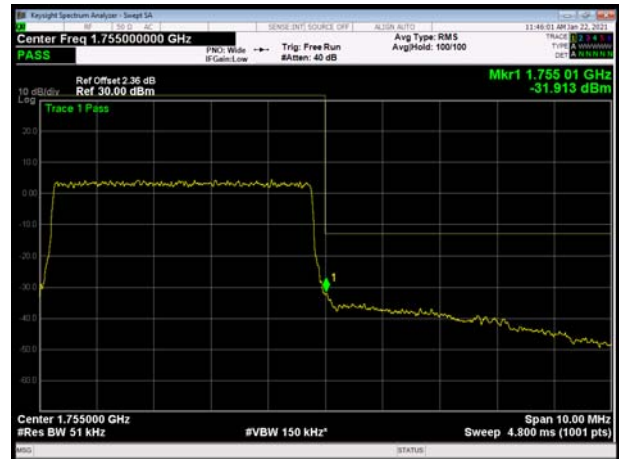




LTE Band 4 16QAM 5MHz CH-Low, 100%RB



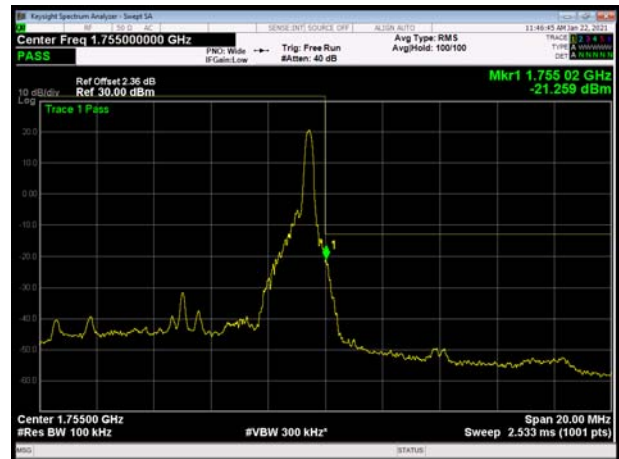
LTE Band 4 16QAM 5MHz CH-High, 100%RB



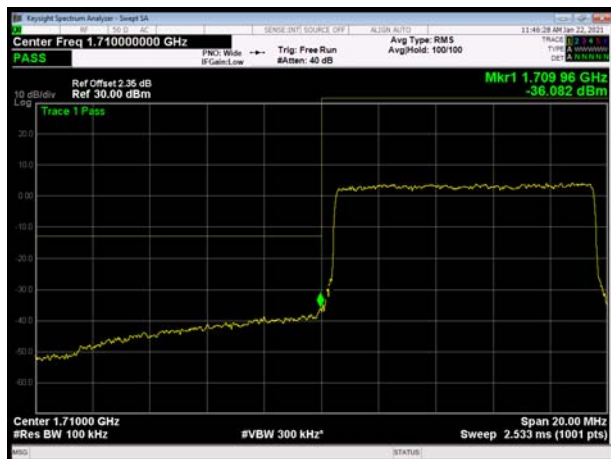
LTE Band 4 16QAM 10MHz CH-Low, 1 RB



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

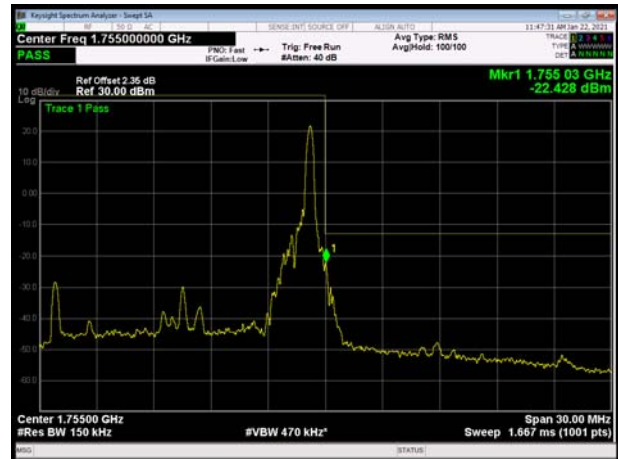




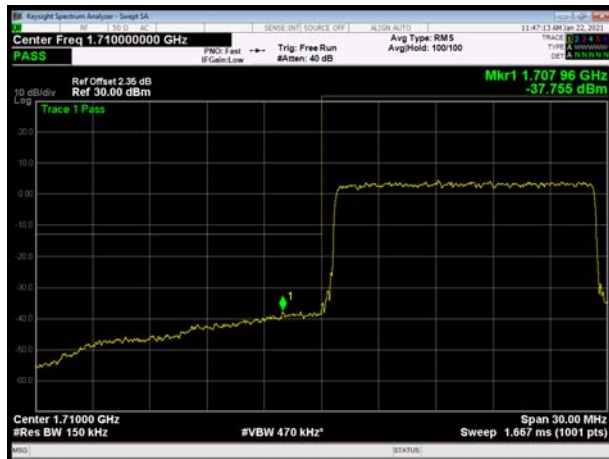
LTE Band 4 16QAM 15MHz CH-Low, 1 RB



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



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



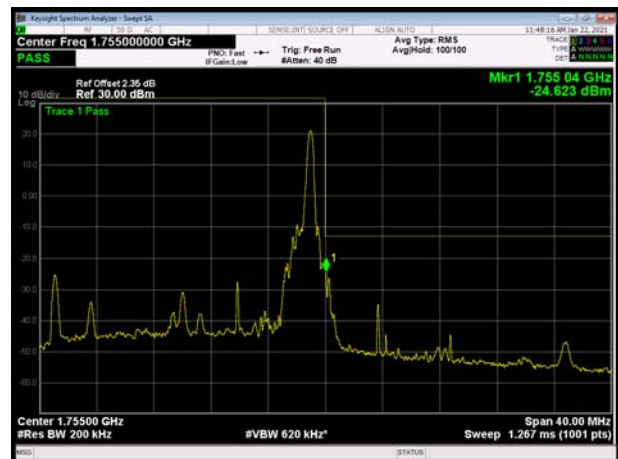
LTE Band 4 16QAM 15MHz CH-High, 100%RB



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

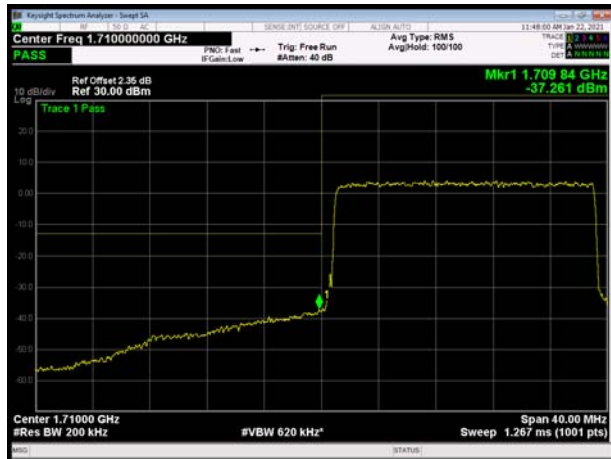


LTE Band 4 16QAM 20MHz CH-High, 1 RB





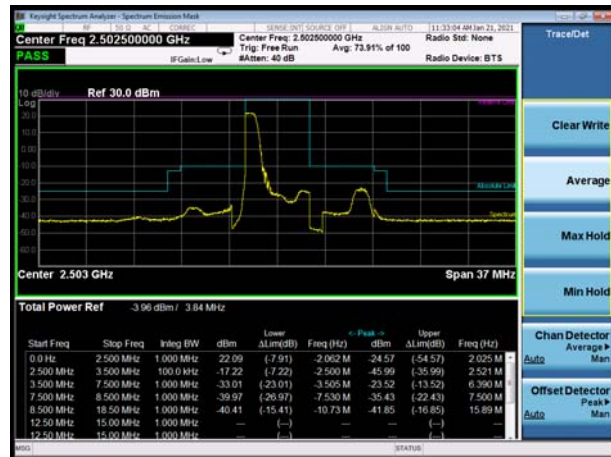
LTE Band 4 16QAM 20MHz CH-Low, 100%RB



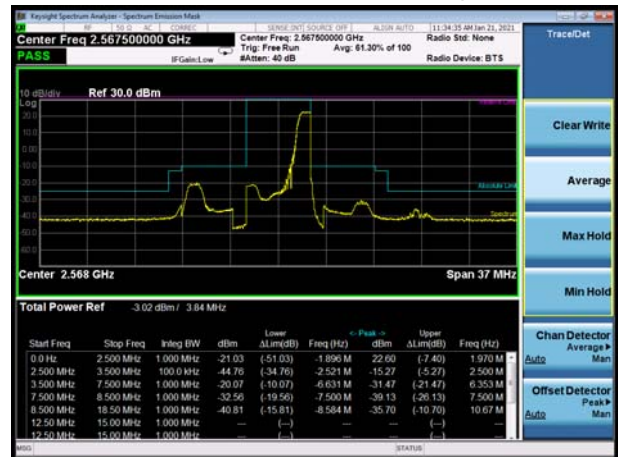
LTE Band 4 16QAM 20MHz CH-High, 100%RB



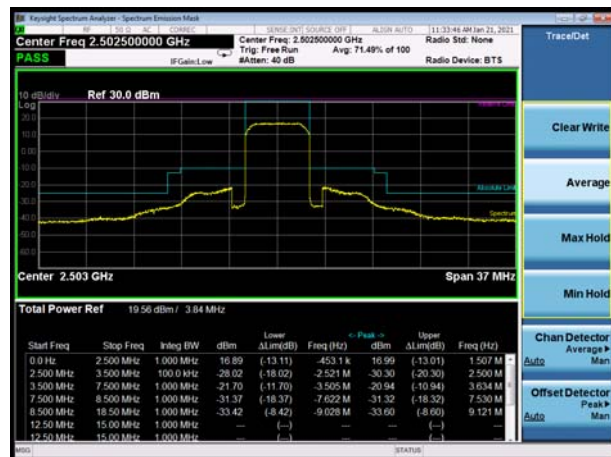
LTE Band 7 QPSK 5MHz CH-Low, 1 RB



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



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



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

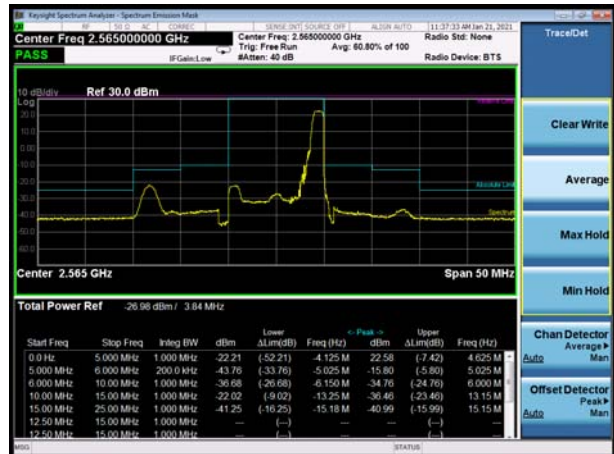




LTE Band 7 QPSK 10MHz CH-Low, 1 RB



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



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



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



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



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





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



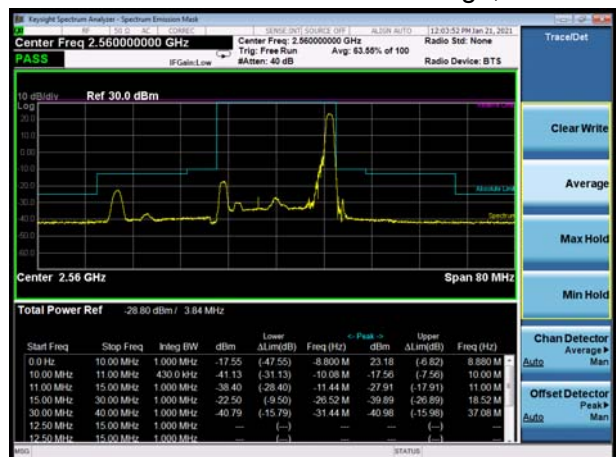
LTE Band 7 QPSK 15MHz CH-High, 100%RB



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



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



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

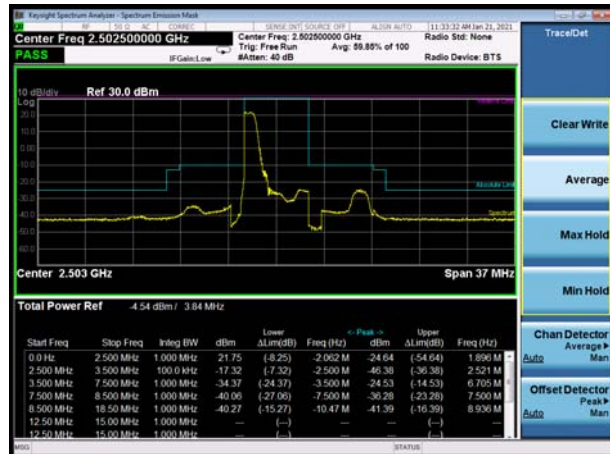


LTE Band 7 QPSK 20MHz CH-High, 100%RB

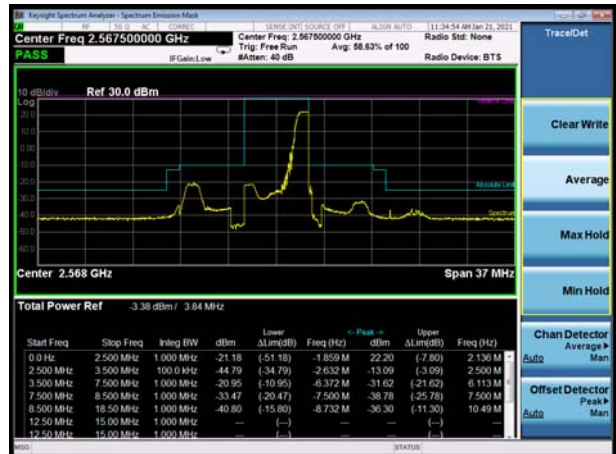




LTE Band 7 16QAM 5MHz CH-Low, 1 RB



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



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



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



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



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

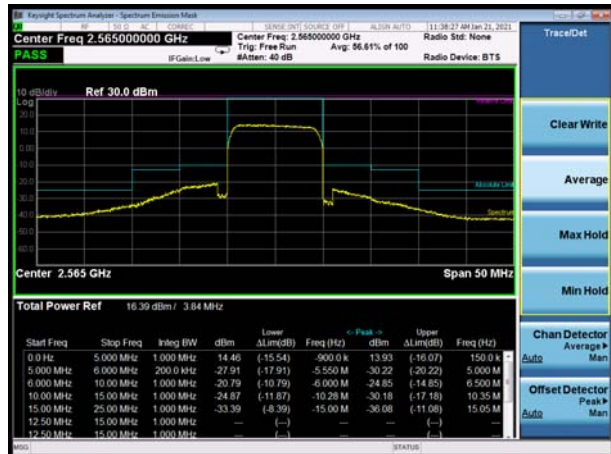




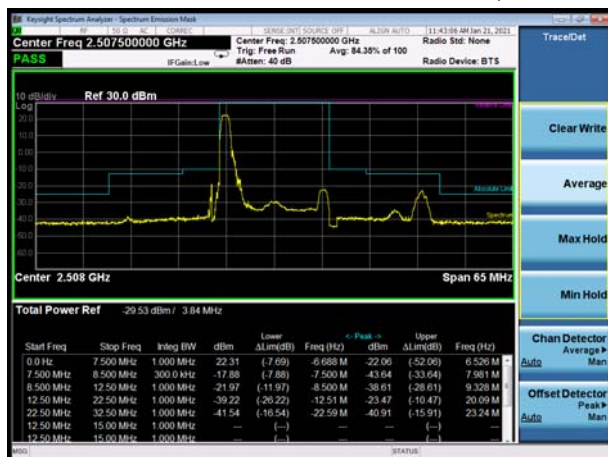
LTE Band 7 16QAM 10MHz CH-Low, 100%RB



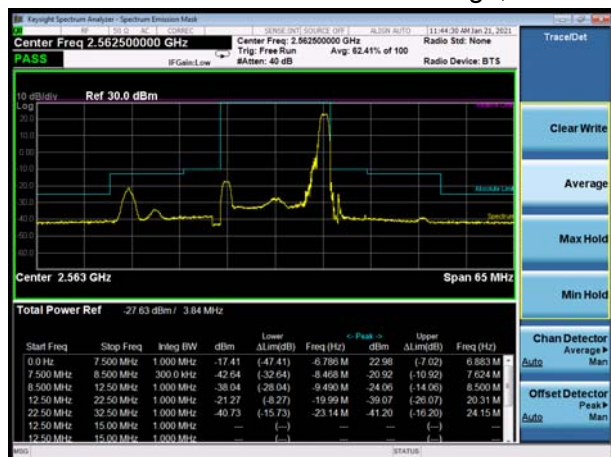
LTE Band 7 16QAM 10MHz CH-High, 100%RB



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



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



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

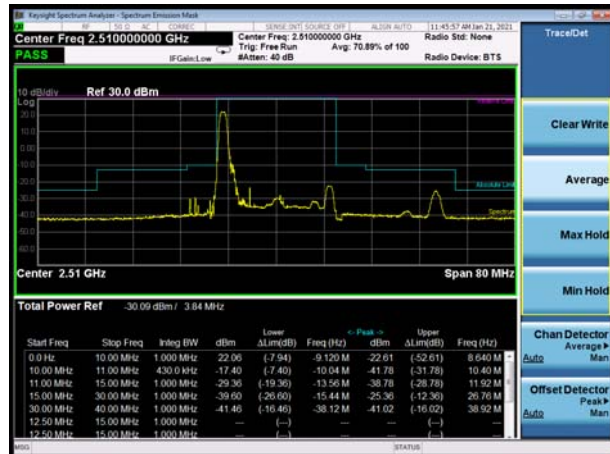


LTE Band 7 16QAM 15MHz CH-High, 100%RB





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



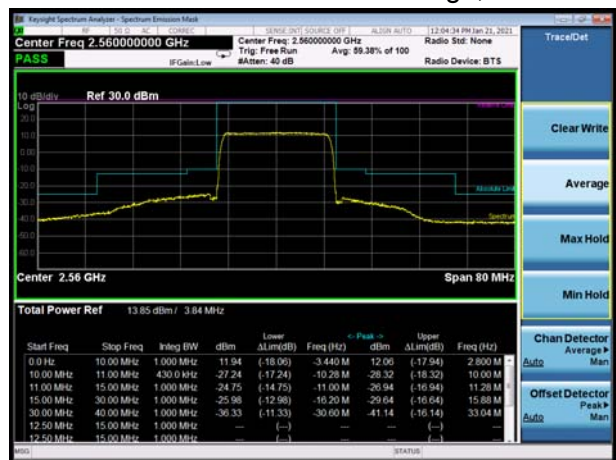
LTE Band 7 16QAM 20MHz CH-High, 1 RB



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



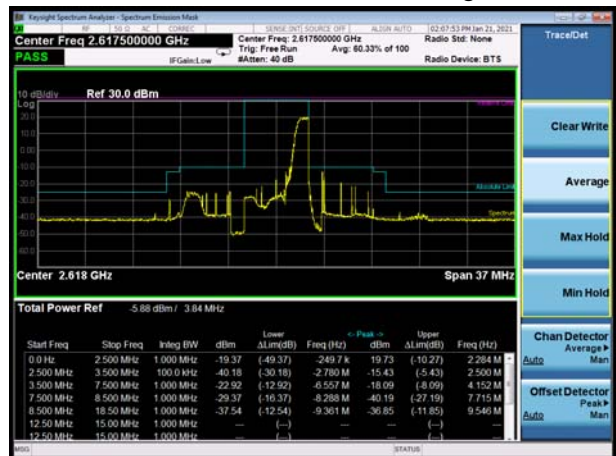
LTE Band 7 16QAM 20MHz CH-High, 100%RB



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

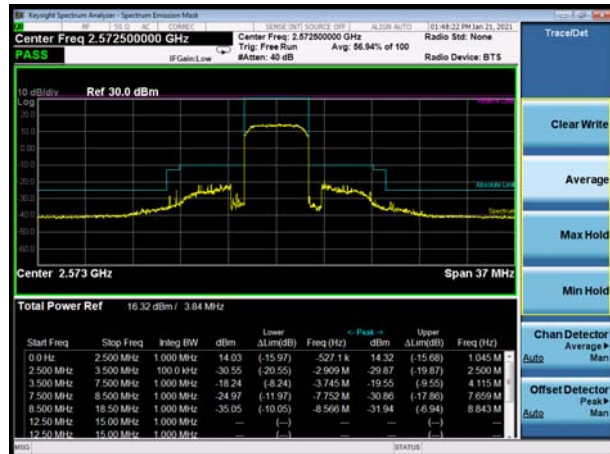


LTE Band 38 QPSK 5MHz CH-High, 1 RB





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



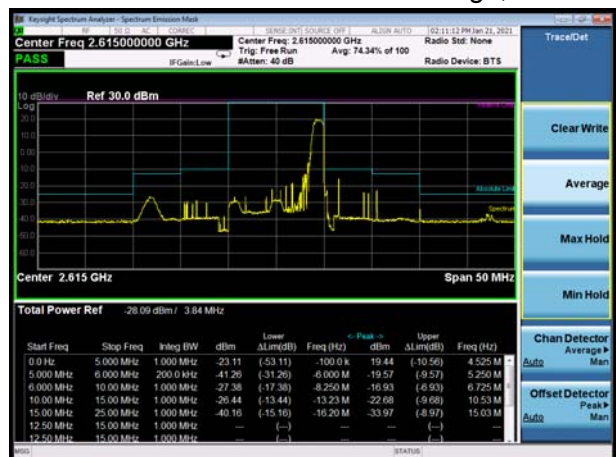
LTE Band 38 QPSK 5MHz CH-High, 100%RB



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



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



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



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

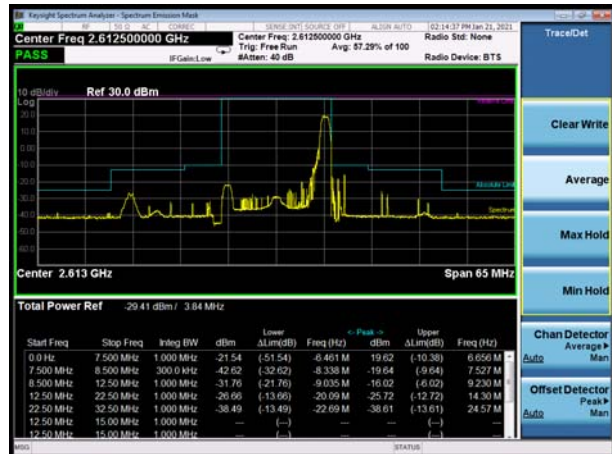




LTE Band 38 QPSK 15MHz CH-Low, 1 RB



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



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



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



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



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

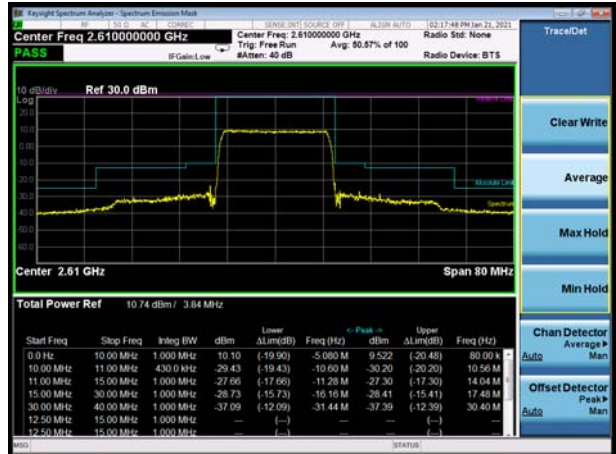




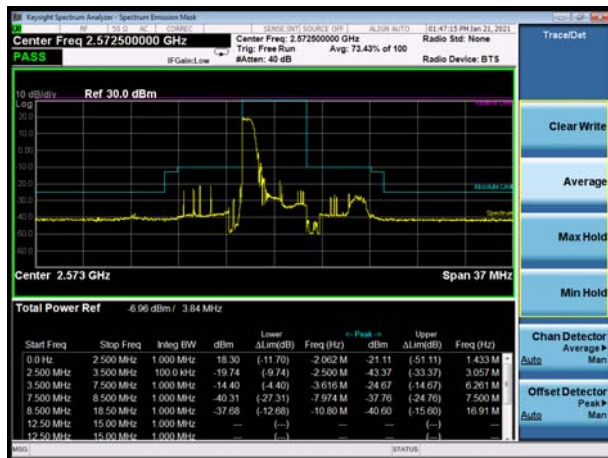
LTE Band 38 QPSK 20MHz CH-Low, 100%RB



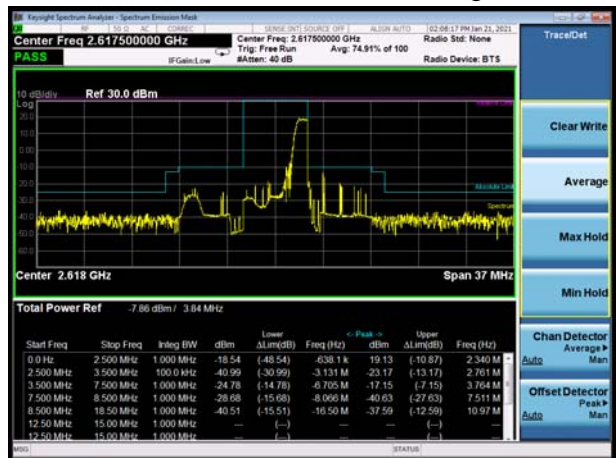
LTE Band 38 QPSK 20MHz CH-High, 100%RB



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



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



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



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

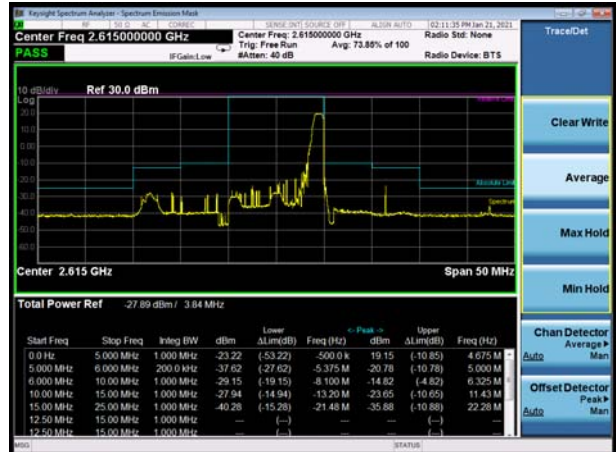




LTE Band 38 16QAM 10MHz CH-Low, 1 RB



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



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



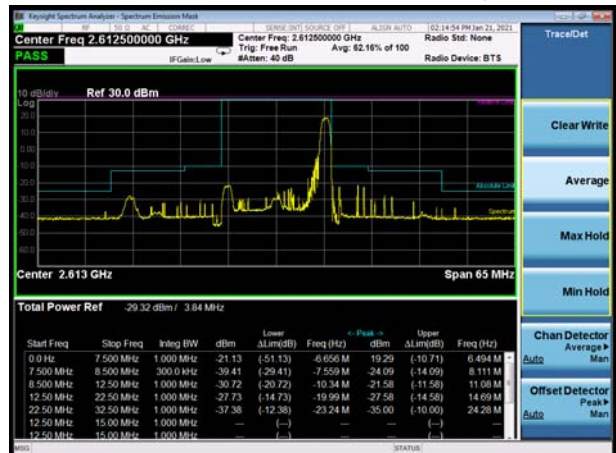
LTE Band 38 16QAM 10MHz CH-High, 100%RB



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



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





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



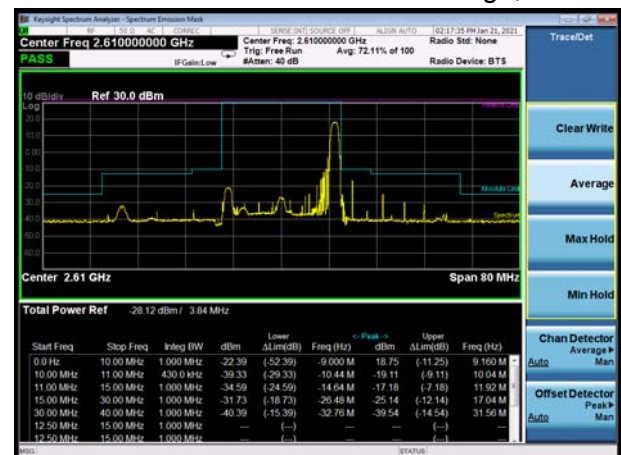
LTE Band 38 16QAM 15MHz CH-High, 100%RB



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



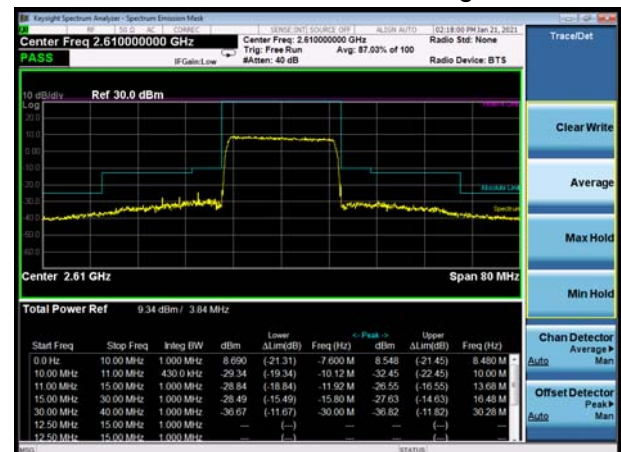
LTE Band 38 16QAM 20MHz CH-High, 1 RB



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



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





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



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



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



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



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



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





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



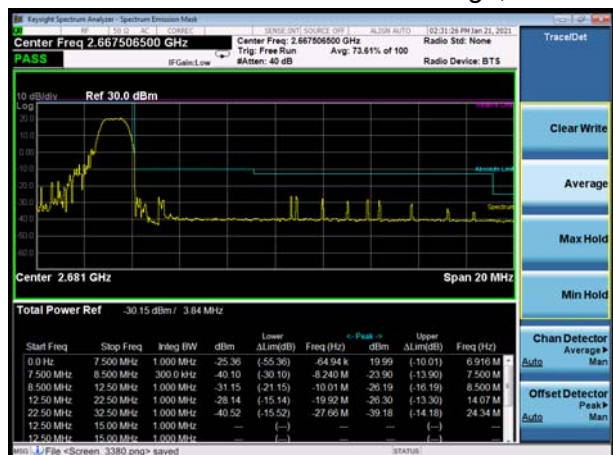
LTE Band 41 QPSK 10MHz CH-High, 100%RB



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



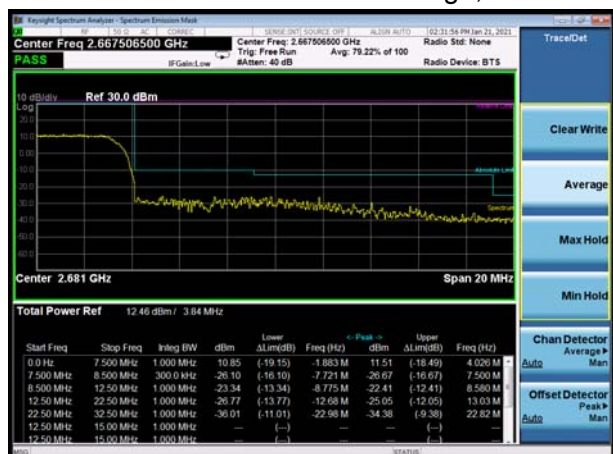
LTE Band 41 QPSK 15MHz CH-High, 1 RB



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



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

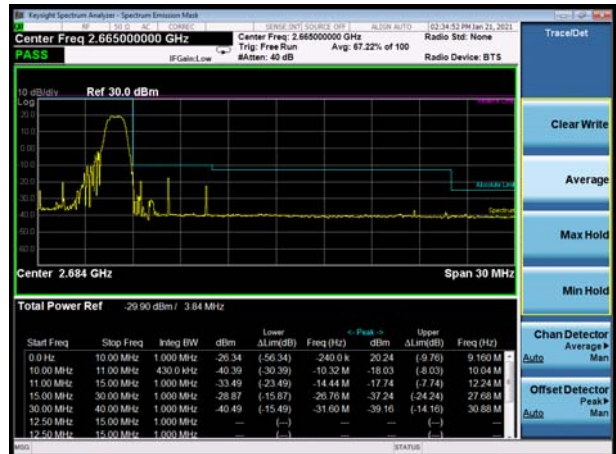




LTE Band 41 QPSK 20MHz CH-Low, 1 RB



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



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



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



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



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





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



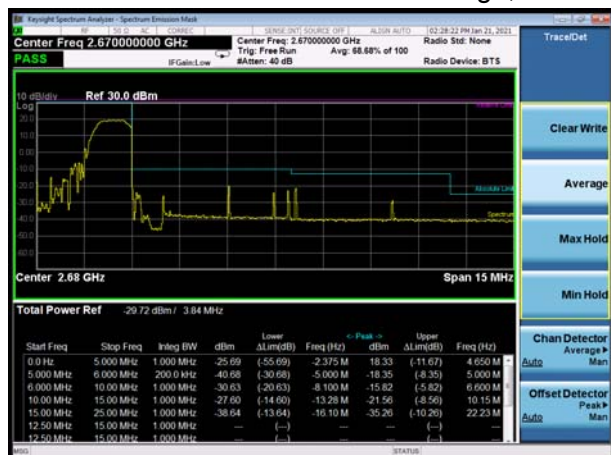
LTE Band 41 16QAM 5MHz CH-High, 100%RB



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



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



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



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

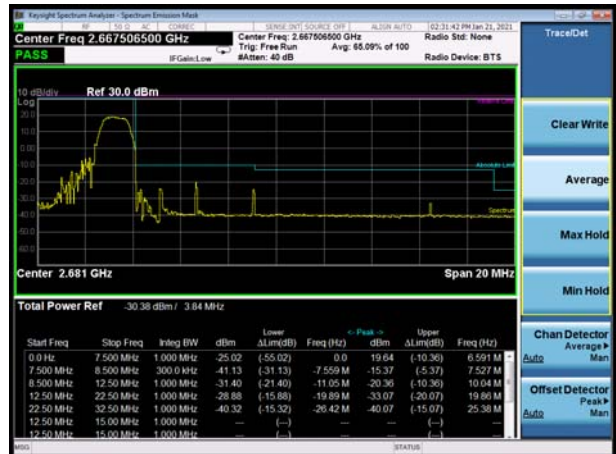




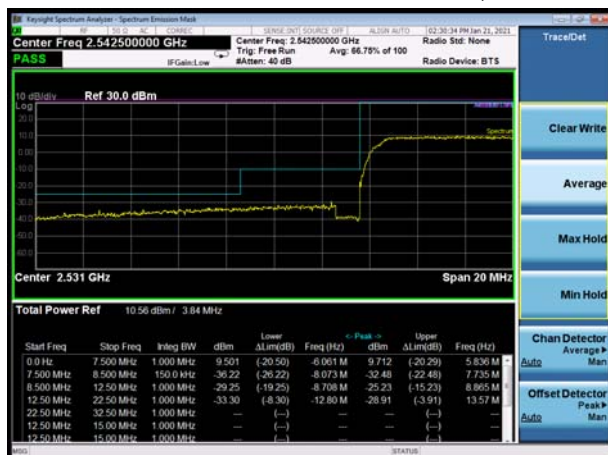
LTE Band 41 16QAM 15MHz CH-Low, 1 RB



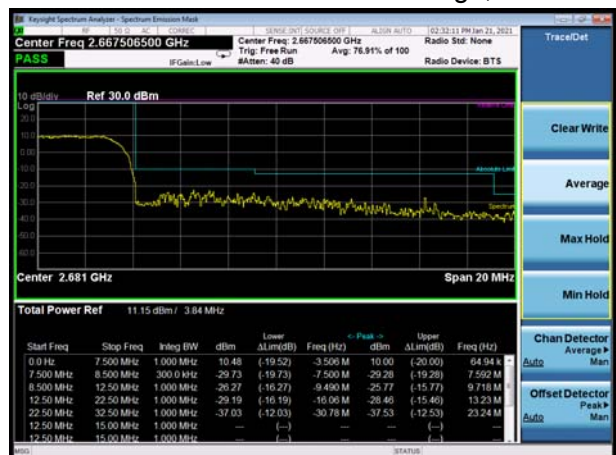
LTE Band 41 16QAM 15MHz CH-High, 1 RB



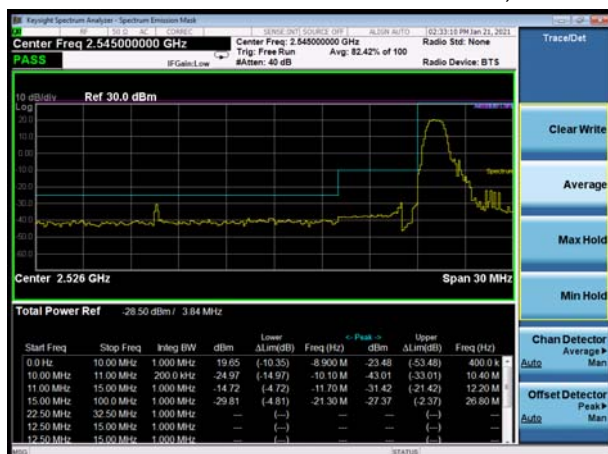
LTE Band 41 16QAM 15MHz CH-Low, 100%RB



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



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

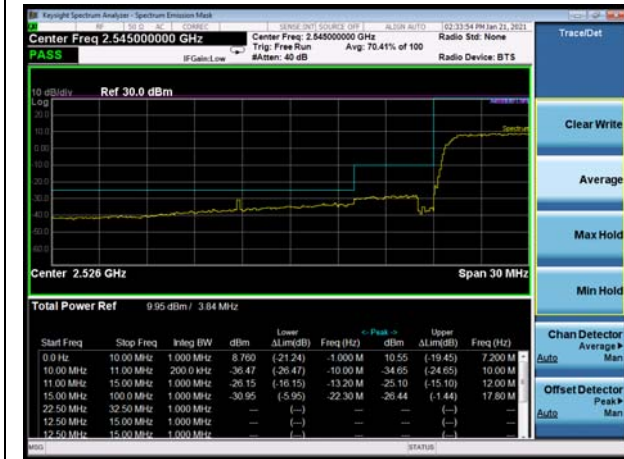


LTE Band 41 16QAM 20MHz CH-High, RB 1





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



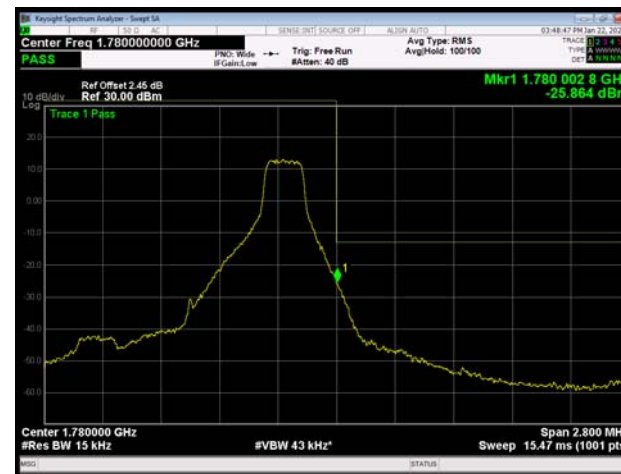
LTE Band 41 16QAM 20MHz CH-High, 100%RB



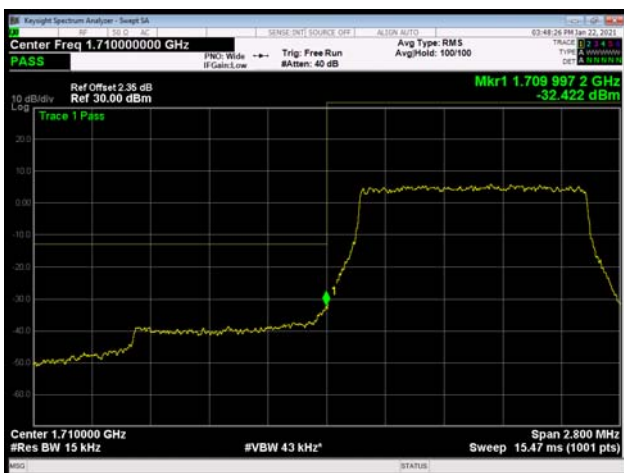
LTE Band 66 QPSK 1.4MHz CH-Low, 1 RB



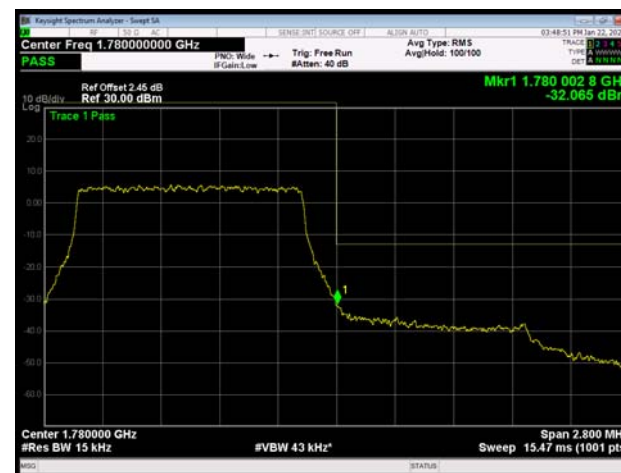
LTE Band 66 QPSK 1.4MHz CH-High, 1 RB



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

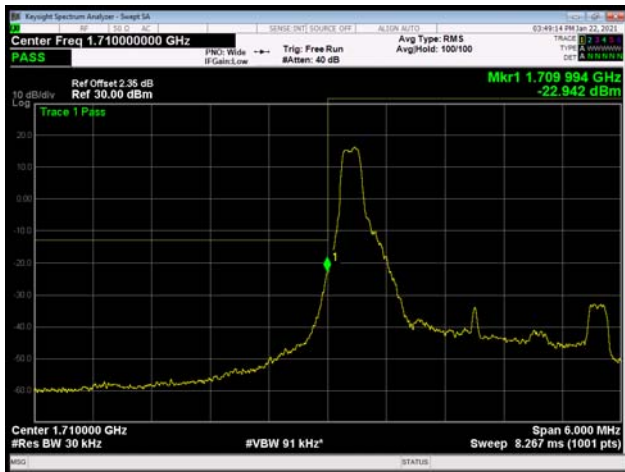


LTE Band 66 QPSK 1.4MHz CH-High, 100%RB





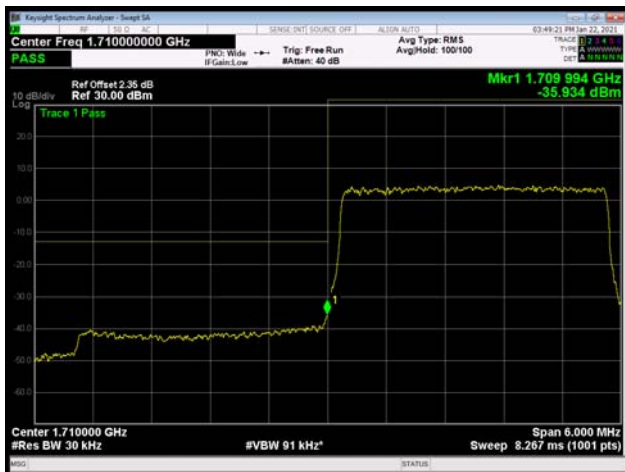
LTE Band 66 QPSK 3MHz CH-Low, 1 RB



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



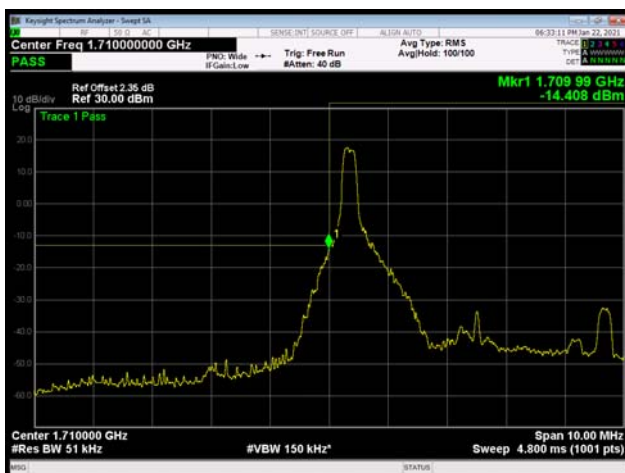
LTE Band 66 QPSK 3MHz CH-Low, 100%RB



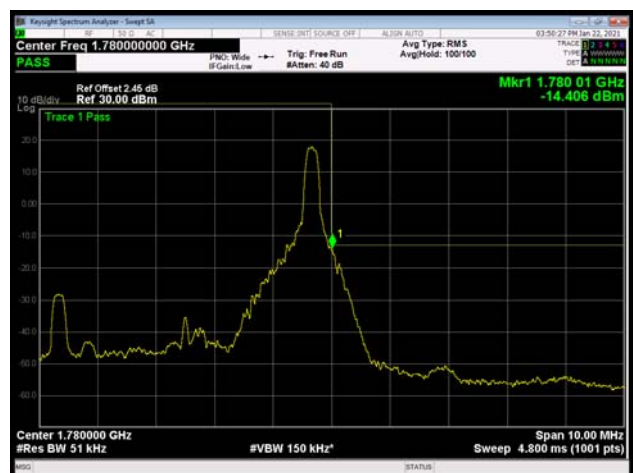
LTE Band 66 QPSK 3MHz CH-High, 100%RB



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

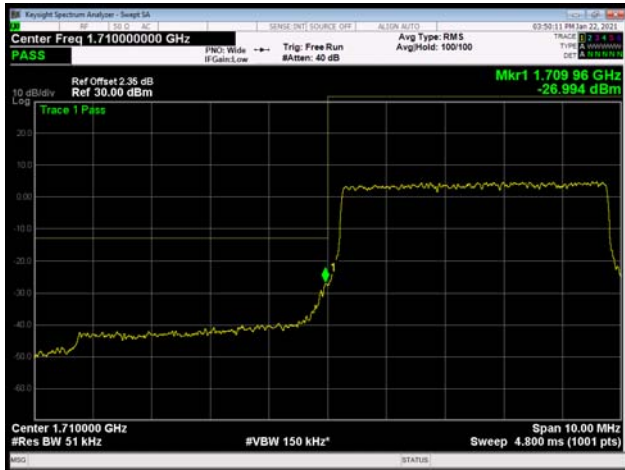


LTE Band 66 QPSK 5MHz CH-High, 1 RB

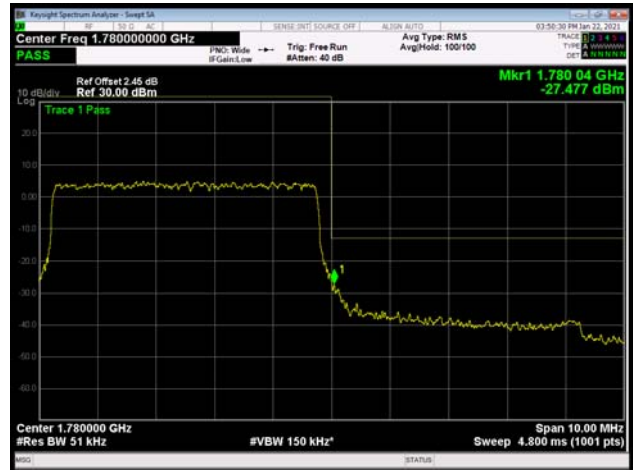




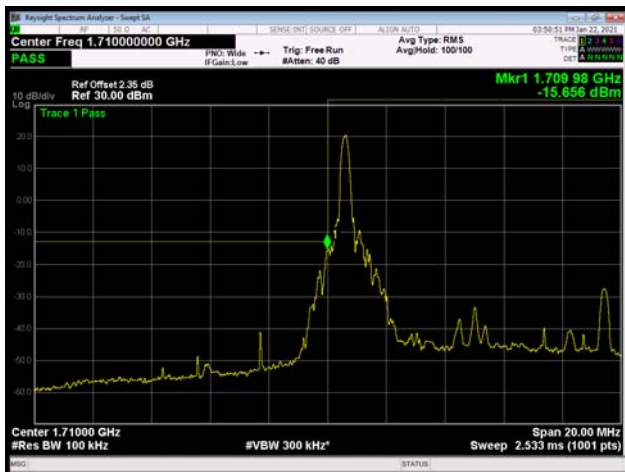
LTE Band 66 QPSK 5MHz CH-Low, 100%RB



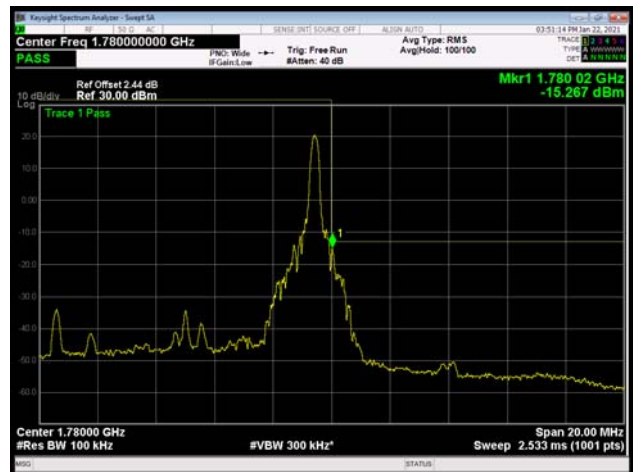
LTE Band 66 QPSK 5MHz CH-High, 100%RB



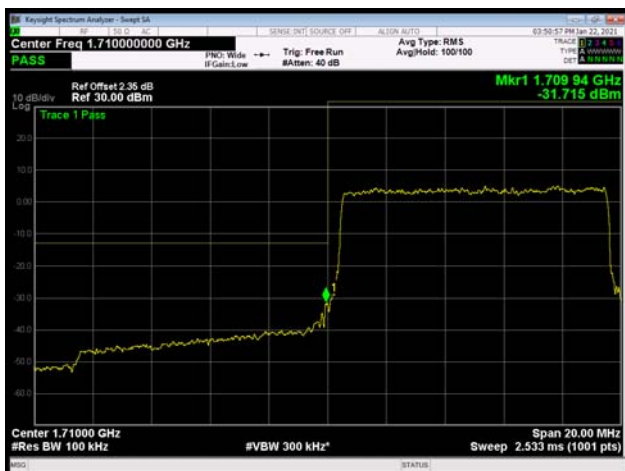
LTE Band 66 QPSK 10MHz CH-Low, 1 RB



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

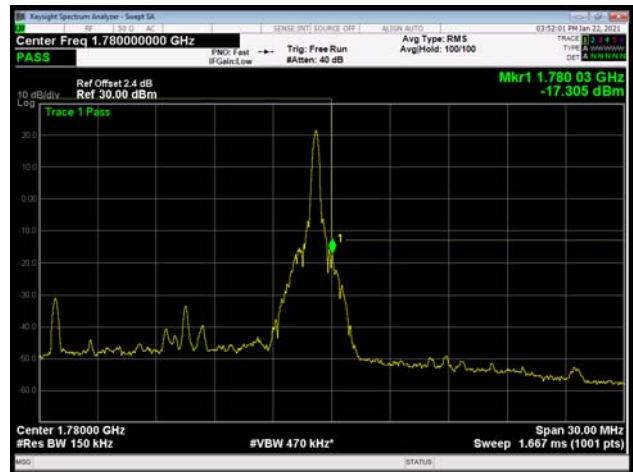




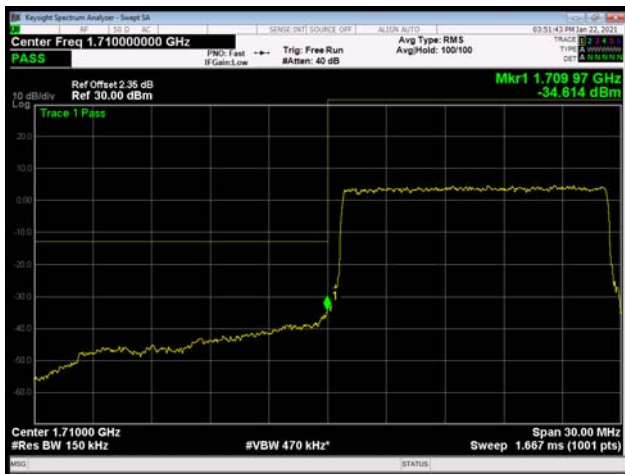
LTE Band 66 QPSK 15MHz CH-Low, 1 RB



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



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



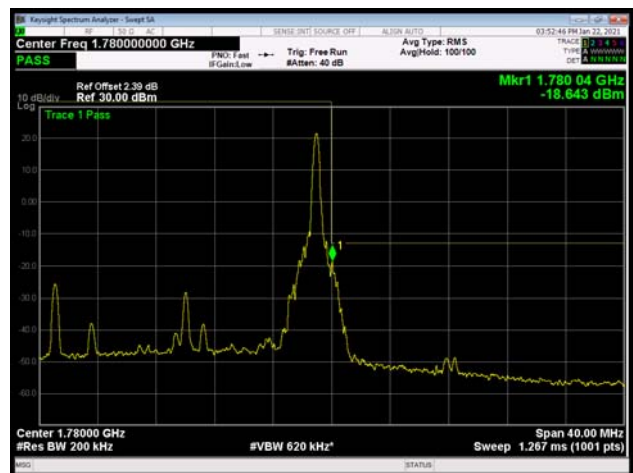
LTE Band 66 QPSK 15MHz CH-High, 100%RB



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

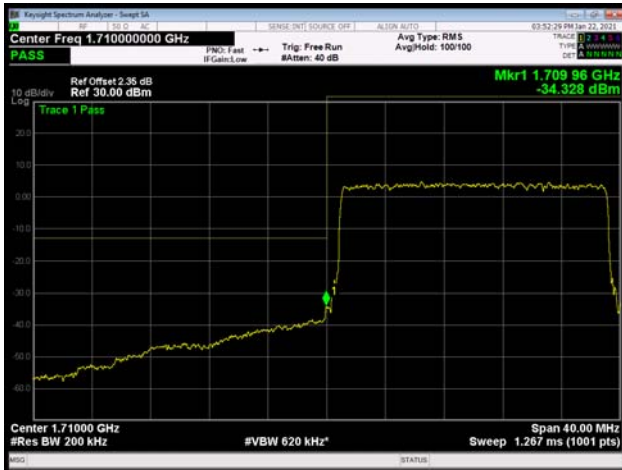


LTE Band 66 QPSK 20MHz CH-High, 1 RB





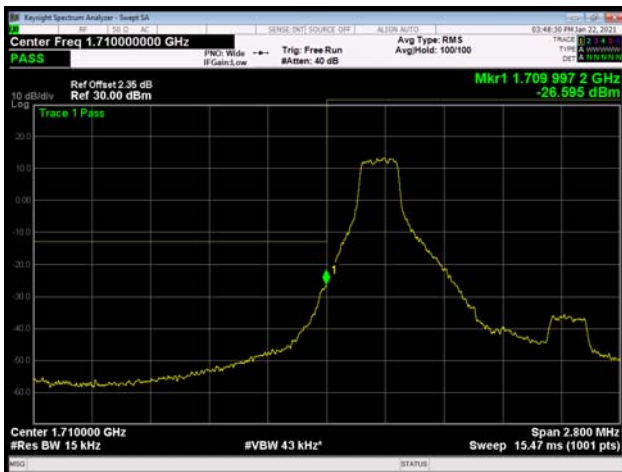
LTE Band 66 QPSK 20MHz CH-Low, 100%RB



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

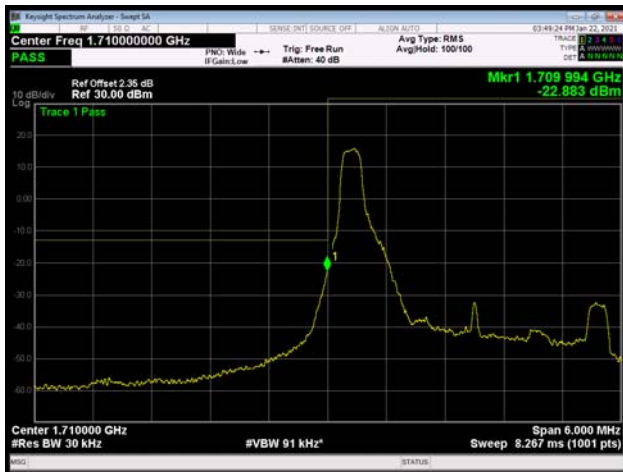


LTE Band 66 16QAM 1.4MHz CH-High, 100%RB





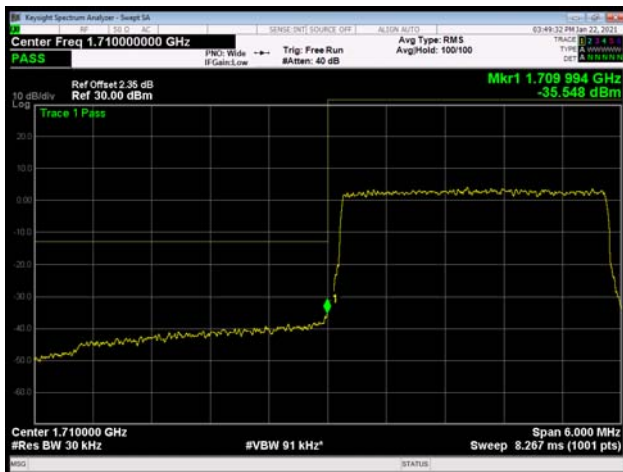
LTE Band 66 16QAM 3MHz CH-Low, 1 RB



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



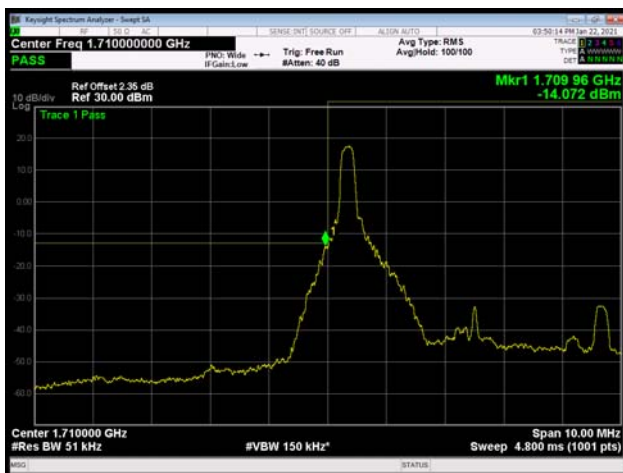
LTE Band 66 16QAM 3MHz CH-Low, 100%RB



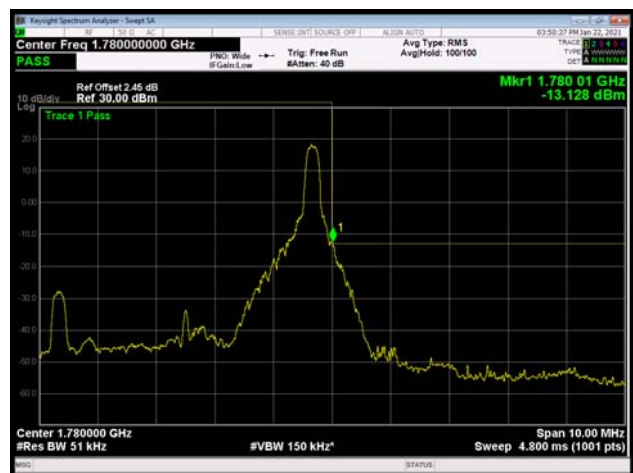
LTE Band 66 16QAM 3MHz CH-High, 100%RB



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

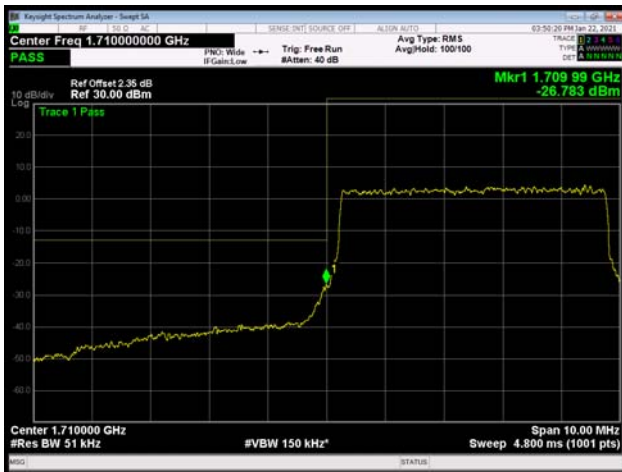


LTE Band 66 16QAM 5MHz CH-High, 1 RB





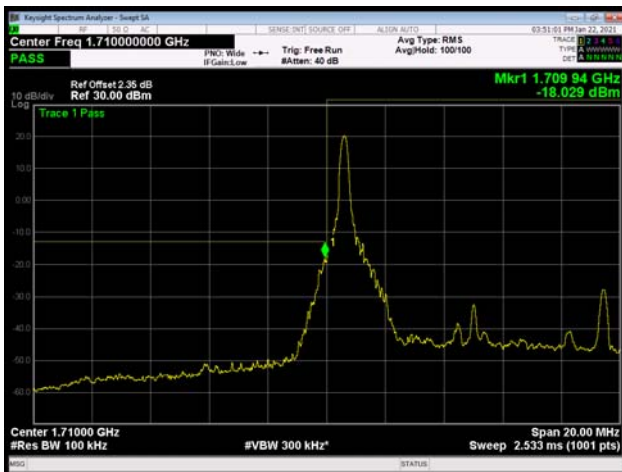
LTE Band 66 16QAM 5MHz CH-Low, 100%RB



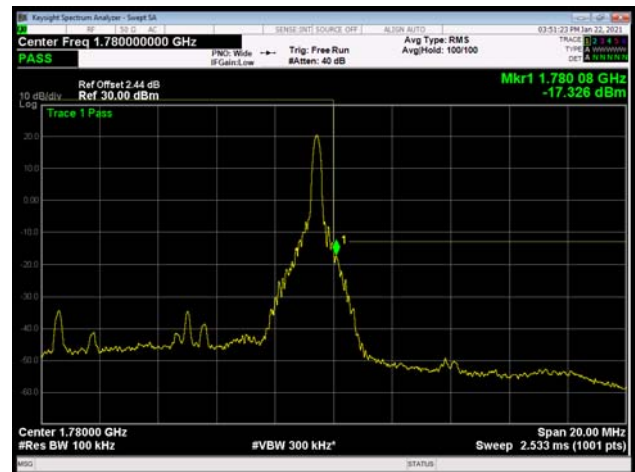
LTE Band 66 16QAM 5MHz CH-High, 100%RB



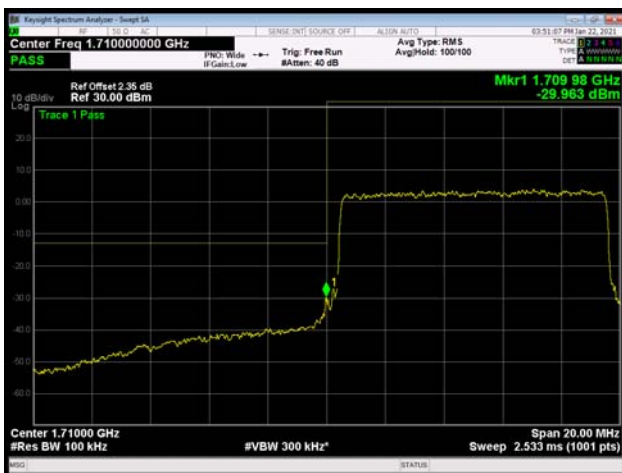
LTE Band 66 16QAM 10MHz CH-Low, 1 RB



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



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

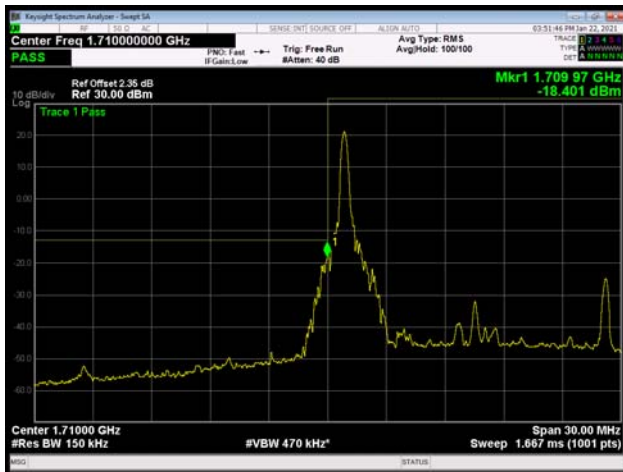


LTE Band 66 16QAM 10MHz CH-High, 100%RB

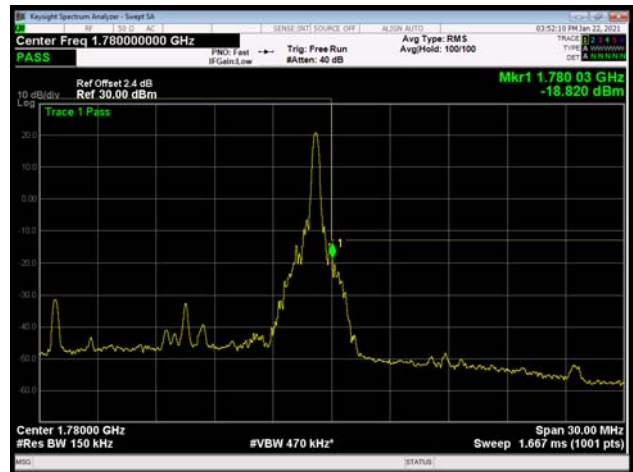




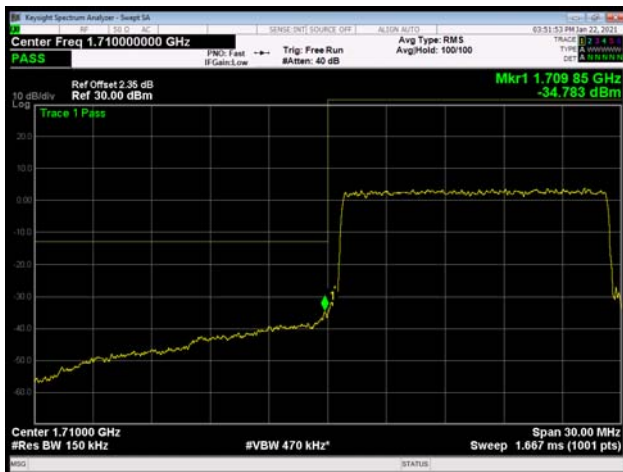
LTE Band 66 16QAM 15MHz CH-Low, 1 RB



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



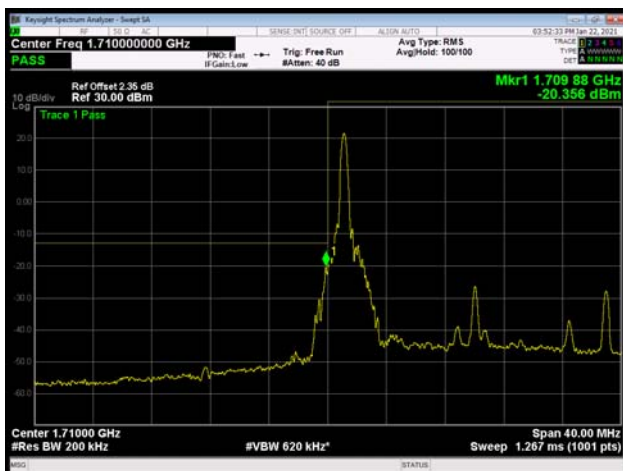
LTE Band 66 16QAM 15MHz CH-Low, 100%RB



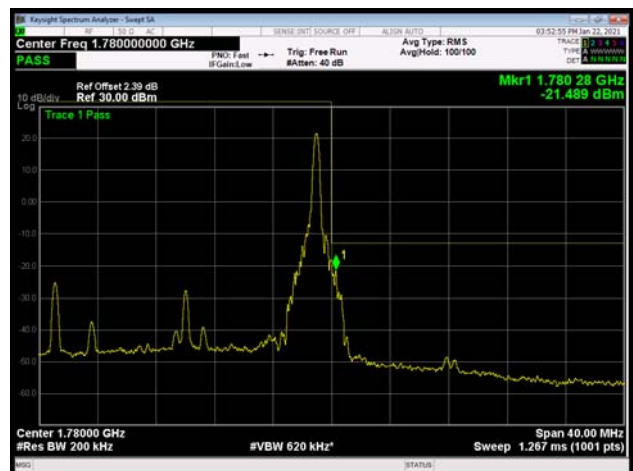
LTE Band 66 16QAM 15MHz CH-High, 100%RB



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

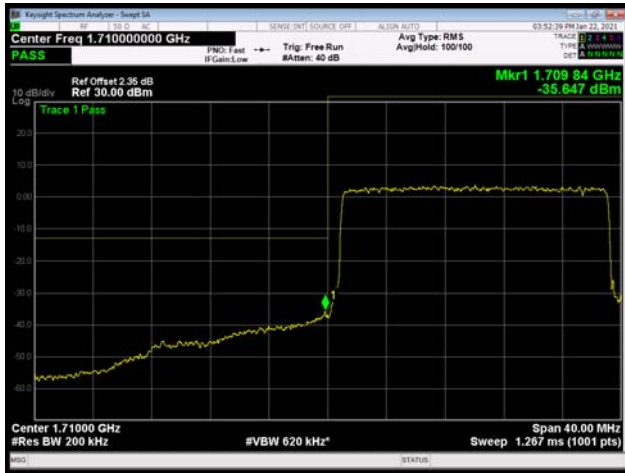


LTE Band 66 16QAM 20MHz CH-High, 1 RB





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



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



5.4 Peak-to-Average Power Ratio (PAPR)

Ambient condition

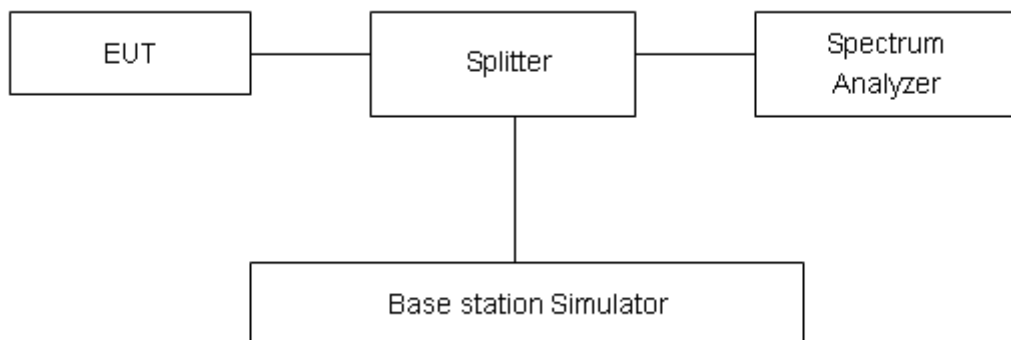
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

Measure the total peak power and record as PPk. And measure the total average power and record as PAvg. Both the peak and average power levels must be expressed in the same logarithmic units (e.g., dBm). Determine the PAPR from:

$$\text{PAPR (dB)} = \text{PPk (dBm)} - \text{PAvg (dBm)}.$$

Test Setup



Limits

Rule Part 27.50(d)(5) Equipment employed must be authorized in accordance with the provisions of 24.51. Power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (d)(6) of this section. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.4$ dB.



Test Results

WCDMA Band IV	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
RMC	1312	1712.4	24.24	21.11	3.13	≤13	PASS
	1413	1732.6	24.42	21.28	3.14	≤13	PASS
	1513	1752.6	24.41	21.32	3.09	≤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	28.33	23.29	5.04	≤13	PASS
		20175	1732.5	28.68	23.27	5.41	≤13	PASS
		20393	1754.3	28.53	23.26	5.27	≤13	PASS
	3	19965	1711.5	28.36	23.22	5.14	≤13	PASS
		20175	1732.5	28.54	23.23	5.31	≤13	PASS
		20385	1753.5	28.59	23.23	5.36	≤13	PASS
	5	19975	1712.5	28.49	23.23	5.26	≤13	PASS
		20175	1732.5	28.74	23.24	5.50	≤13	PASS
		20375	1752.5	28.74	23.27	5.47	≤13	PASS
	10	20000	1715	28.59	23.21	5.38	≤13	PASS
		20175	1732.5	28.77	23.25	5.52	≤13	PASS
		20350	1750	28.75	23.28	5.47	≤13	PASS
	15	20025	1717.5	28.96	23.26	5.70	≤13	PASS
		20175	1732.5	29.13	23.28	5.85	≤13	PASS
		20325	1747.5	29.06	23.28	5.78	≤13	PASS
	20	20050	1720	28.73	23.18	5.55	≤13	PASS
		20175	1732.5	28.87	23.26	5.61	≤13	PASS
		20300	1745	28.73	23.20	5.53	≤13	PASS
16QAM	1.4	19957	1710.7	28.09	22.28	5.81	≤13	PASS
		20175	1732.5	28.28	22.25	6.03	≤13	PASS
		20393	1754.3	28.49	22.30	6.19	≤13	PASS
	3	19965	1711.5	28.20	22.23	5.97	≤13	PASS
		20175	1732.5	28.41	22.23	6.18	≤13	PASS
		20385	1753.5	28.46	22.26	6.20	≤13	PASS
	5	19975	1712.5	28.27	22.24	6.03	≤13	PASS
		20175	1732.5	28.49	22.26	6.23	≤13	PASS
		20375	1752.5	28.51	22.27	6.24	≤13	PASS
	10	20000	1715	28.40	22.24	6.16	≤13	PASS
		20175	1732.5	28.57	22.27	6.30	≤13	PASS
		20350	1750	28.52	22.27	6.25	≤13	PASS



	15	20025	1717.5	28.57	22.29	6.28	≤13	PASS
		20175	1732.5	28.72	22.30	6.42	≤13	PASS
		20325	1747.5	28.61	22.26	6.35	≤13	PASS
	20	20050	1720	28.50	22.23	6.27	≤13	PASS
		20175	1732.5	28.60	22.25	6.35	≤13	PASS
		20300	1745	28.52	22.21	6.31	≤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	27.50	22.44	5.06	≤13	PASS
		21100	2535	28.24	23.08	5.16	≤13	PASS
		21425	2567.5	28.00	23.01	4.99	≤13	PASS
	10	20800	2505	27.66	22.50	5.16	≤13	PASS
		21100	2535	28.27	23.14	5.13	≤13	PASS
		21400	2565	28.02	23.01	5.01	≤13	PASS
	15	20825	2507.5	28.13	22.57	5.56	≤13	PASS
		21100	2535	28.61	23.12	5.49	≤13	PASS
		21375	2562.5	28.45	23.07	5.38	≤13	PASS
	20	20850	2510	27.97	22.58	5.39	≤13	PASS
		21100	2535	28.43	23.05	5.38	≤13	PASS
		21350	2560	28.31	22.99	5.32	≤13	PASS
16QAM	5	20775	2502.5	27.31	21.50	5.81	≤13	PASS
		21100	2535	28.04	22.14	5.90	≤13	PASS
		21425	2567.5	27.82	22.06	5.76	≤13	PASS
	10	20800	2505	27.49	21.55	5.94	≤13	PASS
		21100	2535	28.11	22.17	5.94	≤13	PASS
		21400	2565	27.84	22.03	5.81	≤13	PASS
	15	20825	2507.5	27.74	21.61	6.13	≤13	PASS
		21100	2535	28.23	22.15	6.08	≤13	PASS
		21375	2562.5	28.07	22.06	6.01	≤13	PASS
	20	20850	2510	27.79	21.64	6.15	≤13	PASS
		21100	2535	28.18	22.07	6.11	≤13	PASS
		21350	2560	28.10	22.03	6.07	≤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	27.51	18.11	9.40	≤13	PASS
		38000	2595	27.51	18.00	9.51	≤13	PASS
		38225	2617.5	27.69	18.16	9.53	≤13	PASS
	10	37800	2575	27.58	18.18	9.40	≤13	PASS
		38000	2595	27.63	18.69	8.94	≤13	PASS
		38200	2615	27.77	18.48	9.29	≤13	PASS
	15	37825	2577.5	27.94	18.39	9.55	≤13	PASS
		38000	2595	28.10	19.76	8.34	≤13	PASS
		38175	2612.5	28.26	20.12	8.14	≤13	PASS
	20	37850	2580	27.76	18.97	8.79	≤13	PASS
		38000	2595	27.65	17.01	10.64	≤13	PASS
		38150	2610	27.93	18.75	9.18	≤13	PASS
16QAM	5	37775	2572.5	27.25	17.52	9.73	≤13	PASS
		38000	2595	27.33	17.65	9.68	≤13	PASS
		38225	2617.5	27.52	17.93	9.59	≤13	PASS
	10	37800	2575	27.31	16.38	10.93	≤13	PASS
		38000	2595	27.45	17.98	9.47	≤13	PASS
		38200	2615	27.60	18.07	9.53	≤13	PASS
	15	37825	2577.5	27.61	17.85	9.76	≤13	PASS
		38000	2595	27.69	18.19	9.50	≤13	PASS
		38175	2612.5	27.87	18.49	9.38	≤13	PASS
	20	37850	2580	27.50	18.12	9.38	≤13	PASS
		38000	2595	27.60	18.33	9.27	≤13	PASS
		38150	2610	27.63	17.68	9.95	≤13	PASS

LTE Band 41								
Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
QPSK	5	40065	2537.5	26.30	17.26	9.04	≤13	PASS
		40740	2605	26.23	18.10	8.13	≤13	PASS
		41415	2672.5	26.30	17.37	8.93	≤13	PASS
	10	40090	2540	26.38	17.09	9.29	≤13	PASS
		40740	2605	26.29	18.10	8.19	≤13	PASS
		41390	2670	26.46	17.73	8.73	≤13	PASS
	15	40115	2542.5	26.50	17.57	8.93	≤13	PASS
		40740	2605	26.34	17.48	8.86	≤13	PASS
		41365	2667.5	26.56	17.41	9.15	≤13	PASS
	20	40140	2545	26.57	17.27	9.30	≤13	PASS
		40740	2605	26.46	17.36	9.10	≤13	PASS
		41340	2665	26.70	17.52	9.18	≤13	PASS
16QAM	5	40065	2537.5	25.94	16.31	9.63	≤13	PASS
		40740	2605	25.90	16.75	9.15	≤13	PASS
		41415	2672.5	26.02	16.37	9.65	≤13	PASS
	10	40090	2540	26.14	16.71	9.43	≤13	PASS
		40740	2605	25.98	16.53	9.45	≤13	PASS
		41390	2670	26.22	16.55	9.67	≤13	PASS
	15	40115	2542.5	26.12	16.59	9.53	≤13	PASS
		40740	2605	26.02	16.77	9.25	≤13	PASS
		41365	2667.5	26.28	16.94	9.34	≤13	PASS
	20	40140	2545	26.19	16.46	9.73	≤13	PASS
		40740	2605	26.09	16.41	9.68	≤13	PASS
		41340	2665	26.38	16.73	9.65	≤13	PASS



LTE Band 66								
Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
QPSK	1.4	131979	1710.7	27.97	22.79	5.18	≤13	PASS
		132322	1745	28.05	22.80	5.25	≤13	PASS
		132665	1779.3	27.88	22.85	5.03	≤13	PASS
	3	131987	1711.5	28.05	22.75	5.30	≤13	PASS
		132322	1745	28.06	22.77	5.29	≤13	PASS
		132657	1778.5	28.00	22.77	5.23	≤13	PASS
	5	131997	1712.5	28.22	22.77	5.45	≤13	PASS
		132322	1745	28.24	22.79	5.45	≤13	PASS
		132647	1777.5	28.09	22.80	5.29	≤13	PASS
	10	132022	1715	28.30	22.78	5.52	≤13	PASS
		132322	1745	28.32	22.83	5.49	≤13	PASS
		132622	1775	28.31	22.85	5.46	≤13	PASS
	15	132047	1717.5	28.63	22.78	5.85	≤13	PASS
		132322	1745	28.69	22.86	5.83	≤13	PASS
		132597	1772.5	28.70	22.89	5.81	≤13	PASS
	20	132072	1720	28.34	22.74	5.60	≤13	PASS
		132322	1745	28.40	22.79	5.61	≤13	PASS
		132572	1770	28.48	22.85	5.63	≤13	PASS
16QAM	1.4	131979	1710.7	27.80	21.80	6.00	≤13	PASS
		132322	1745	27.80	21.83	5.97	≤13	PASS
		132665	1779.3	27.95	21.89	6.06	≤13	PASS
	3	131987	1711.5	27.93	21.77	6.16	≤13	PASS
		132322	1745	27.97	21.81	6.16	≤13	PASS
		132657	1778.5	27.86	21.82	6.04	≤13	PASS
	5	131997	1712.5	28.01	21.81	6.20	≤13	PASS
		132322	1745	27.97	21.83	6.14	≤13	PASS
		132647	1777.5	27.87	21.85	6.02	≤13	PASS
	10	132022	1715	28.12	21.82	6.30	≤13	PASS
		132322	1745	28.08	21.85	6.23	≤13	PASS
		132622	1775	28.06	21.88	6.18	≤13	PASS
	15	132047	1717.5	28.20	21.81	6.39	≤13	PASS
		132322	1745	28.22	21.86	6.36	≤13	PASS
		132597	1772.5	28.27	21.91	6.36	≤13	PASS
	20	132072	1720	28.16	21.77	6.39	≤13	PASS
		132322	1745	28.14	21.83	6.31	≤13	PASS
		132572	1770	28.26	21.89	6.37	≤13	PASS