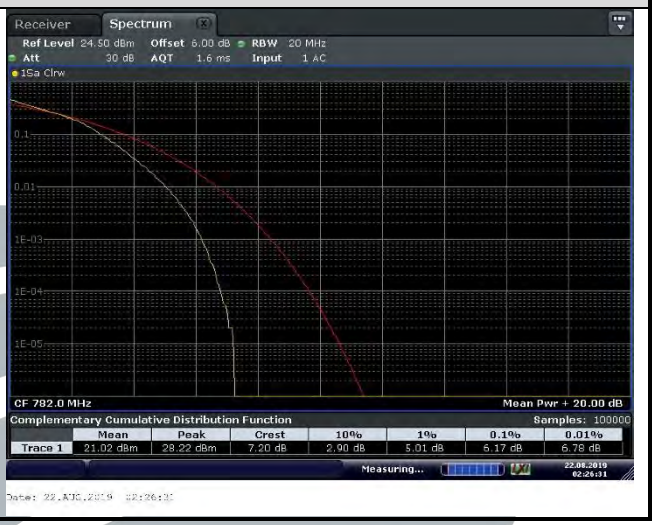
LTE Band 13 / 64QAM	
5 MHz	10 MHz
	

5.4.7 LTE Band 17

LTE Band 2 Peak-to-average ratio (dB)						
Channel Bandwidth(MHz)	RB Configuration	QPSK	16QAM	64QAM	Limit (dB)	Result
5	Full RB	5.65	6.43	6.49	13	Pass
10	Full RB	5.59	6.43	6.38	13	Pass

LTE Band 17 / 5 MHz

QPSK

16QAM

LTE Band 17 / 10 MHz

QPSK

16QAM

LTE Band 17 / 64QAM	
5 MHz	10 MHz

5.4.8 LTE Band 25

LTE Band 2 Peak-to-average ratio (dB)						
Channel Bandwidth(MHz)	RB Configuration	QPSK	16QAM	64QAM	Limit (dB)	Result
1.4	Full RB	4.52	5.42	5.42	13	Pass
3	Full RB	5.39	6.32	6.12	13	Pass
5	Full RB	5.62	6.20	6.23	13	Pass
10	Full RB	5.45	6.17	6.26	13	Pass
15	Full RB	5.74	6.26	6.35	13	Pass
20	Full RB	5.39	6.17	6.29	13	Pass

LTE Band 25 / 1.4 MHz

QPSK

16QAM

LTE Band 25 / 3 MHz

QPSK

16QAM

LTE Band 25 / 5 MHz

QPSK

16QAM

LTE Band 25 / 10 MHz

QPSK

16QAM

LTE Band 25 / 15 MHz

QPSK

16QAM

LTE Band 25 / 20 MHz

QPSK

16QAM

LTE Band 25 / 64QAM

1.4 MHz

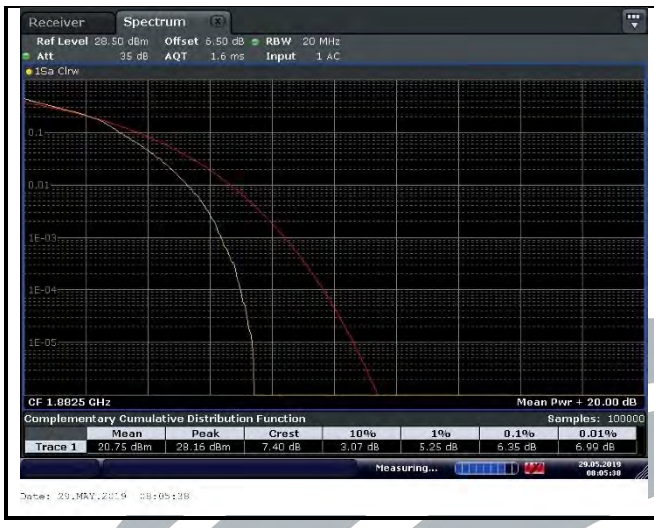
3 MHz

5 MHz

10MHz

15 MHz

20MHz


Receiver
Spectrum
Ref Level 28.50 dBm Offset 6.50 dB RBW 20 MHz
Att 35 dB AQT 1.6 ms Input 1 AC
1Sa Clrw
CF 1.8825 GHz
Mean Pwr + 20.00 dB
Complementary Cumulative Distribution Function
Samples: 100000
Mean Peak Crest 10% 1% 0.1% 0.01%
Trace 1 20.75 dBm 28.16 dBm 7.40 dB 3.07 dB 5.25 dB 6.35 dB 6.99 dB
Measuring...

Receiver
Spectrum
Ref Level 28.50 dBm Offset 6.50 dB RBW 20 MHz
Att 35 dB AQT 1.6 ms Input 1 AC
1Sa Clrw
CF 1.8825 GHz
Mean Pwr + 20.00 dB
Complementary Cumulative Distribution Function
Samples: 100000
Mean Peak Crest 10% 1% 0.1% 0.01%
Trace 1 20.45 dBm 28.19 dBm 7.73 dB 2.96 dB 5.04 dB 6.29 dB 6.90 dB
Measuring...

5.4.9 LTE Band 41

LTE Band 2 Peak-to-average ratio (dB)						
Channel Bandwidth(MHz)	RB Configuration	QPSK	16QAM	64QAM	Limit (dB)	Result
5	Full RB	5.97	6.32	6.55	13	Pass
10	Full RB	5.68	6.32	6.58	13	Pass
15	Full RB	5.83	6.64	7.04	13	Pass
20	Full RB	5.39	6.29	6.20	13	Pass

LTE Band 41 / 5 MHz

QPSK

16QAM

LTE Band 41 / 10 MHz

QPSK

16QAM

LTE Band 41 / 15 MHz

QPSK

16QAM

LTE Band 41 / 20 MHz

QPSK

16QAM

LTE Band 41 / 64QAM

5 MHz

10 MHz

15 MHz

20MHz

5.4.10 LTE Band 66

LTE Band 2 Peak-to-average ratio (dB)						
Channel Bandwidth(MHz)	RB Configuration	QPSK	16QAM	64QAM	Limit (dB)	Result
1.4	Full RB	5.65	6.23	6.23	13	Pass
3	Full RB	5.77	6.49	6.49	13	Pass
5	Full RB	5.77	6.23	6.35	13	Pass
10	Full RB	5.59	6.43	6.38	13	Pass
15	Full RB	5.77	6.35	6.41	13	Pass
20	Full RB	5.28	6.26	6.20	13	Pass

LTE Band 66 / 1.4 MHz

QPSK

16QAM

LTE Band 66 / 3 MHz

QPSK

16QAM

LTE Band 66 / 5 MHz

QPSK

16QAM

LTE Band 66 / 10 MHz

QPSK

16QAM

LTE Band 66 / 15 MHz

QPSK

16QAM

LTE Band 66 / 20 MHz

QPSK

16QAM

LTE Band 66 / 64QAM

1.4 MHz

3 MHz

5 MHz

10 MHz

15 MHz

20MHz

5.5 99%&26DB BANDWIDTH

Test Requirement: FCC 47 CFR Part 2.1049(h)

Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01 Section 4

Limit: No Limit, for reporting purposes only.

Test Procedure:

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at the low, middle and high channel in each band. The 99% and -26dB bandwidths was also measured and recorded.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

Test Setup: Refer to section 4.2.2 for details.

Instruments Used: Refer to section 3 for details

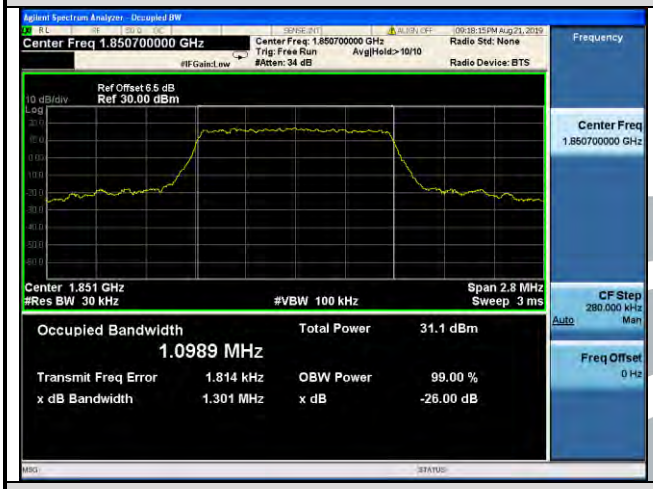
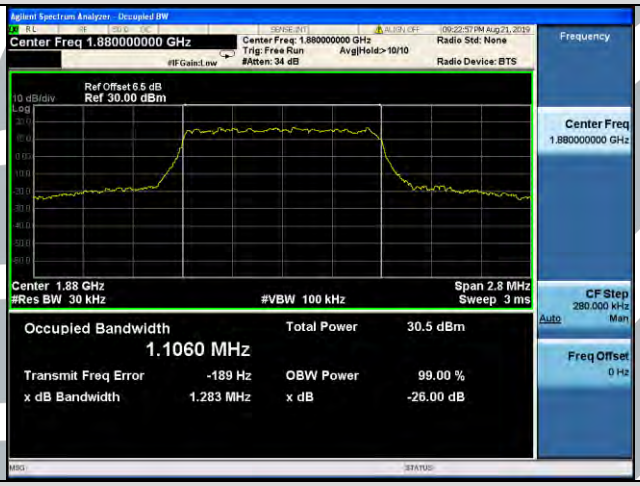
Test Mode: Link mode

Test Results: Pass

Test Data: See table below

5.5.1 LTE Band 2

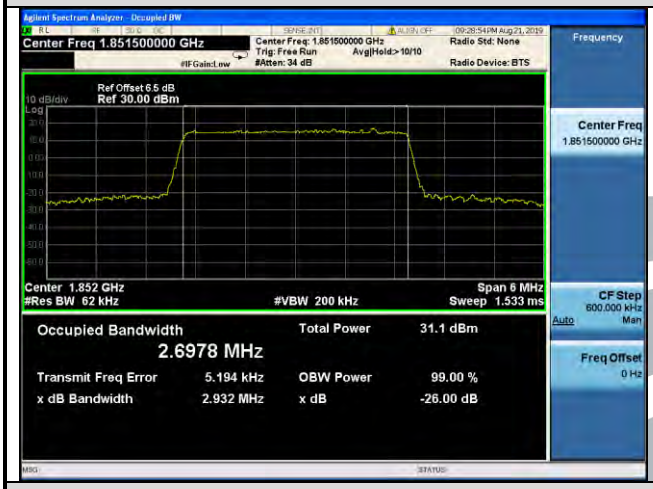
LTE Band 2								
Channel	RB Configuration		26 dB BW (MHz)			99% BW (MHz)		
	Size	Offset	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Channel Bandwidth: 1.4 MHz								
Lowest	6	0	1.301	1.274	1.277	1.0989	1.0958	1.0936
Middle	6	0	1.283	1.286	1.288	1.1060	1.0936	1.0963
Highest	6	0	1.291	1.312	1.309	1.0944	1.1009	1.1008
Channel Bandwidth: 3 MHz								
Lowest	15	0	2.932	2.930	2.930	2.6978	2.6952	2.6945
Middle	15	0	2.941	2.950	2.945	2.6910	2.6936	2.6971
Highest	15	0	2.935	2.923	2.933	2.7024	2.6897	2.6945
Channel Bandwidth: 5 MHz								
Lowest	25	0	5.174	5.197	5.182	4.5269	4.5465	4.5392
Middle	25	0	5.187	5.269	5.244	4.5228	4.5607	4.5578
Highest	25	0	5.181	5.212	5.239	4.5195	4.5431	4.5485
Channel Bandwidth: 10 MHz								
Lowest	50	0	10.17	10.07	10.01	9.0384	9.0225	9.0315
Middle	50	0	10.12	10.23	10.23	9.0370	9.0296	9.0188
Highest	50	0	10.07	10.12	10.12	9.0078	9.0324	9.0067
Channel Bandwidth: 15 MHz								
Lowest	75	0	15.13	14.98	14.97	13.524	13.524	13.485
Middle	75	0	15.17	15.14	15.10	13.593	13.539	13.570
Highest	75	0	15.02	15.06	15.47	13.497	13.537	13.552
Channel Bandwidth: 20 MHz								
Lowest	100	0	19.68	19.78	19.77	17.954	18.033	18.022
Middle	100	0	20.21	19.95	19.95	18.118	18.106	18.084
Highest	100	0	19.71	19.92	20.16	18.011	18.040	18.014

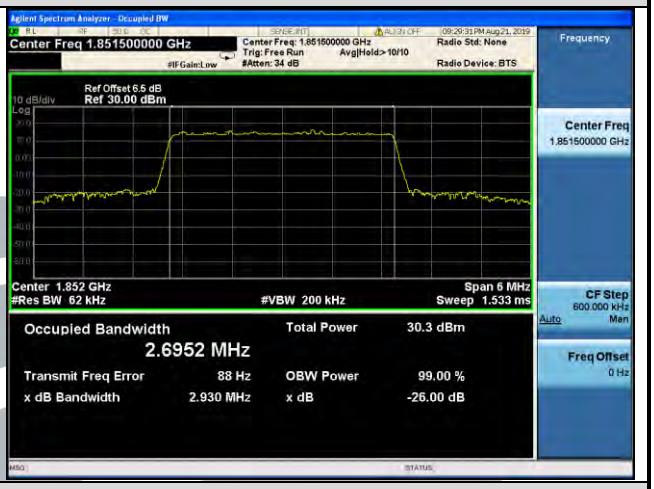
LTE Band 2_ Channel Bandwidth: 1.4 MHz	
QPSK	16QAM
Lowest Channel	
	
Middle Channel	
	
Highest Channel	

LTE Band 2_ Channel Bandwidth: 3 MHz

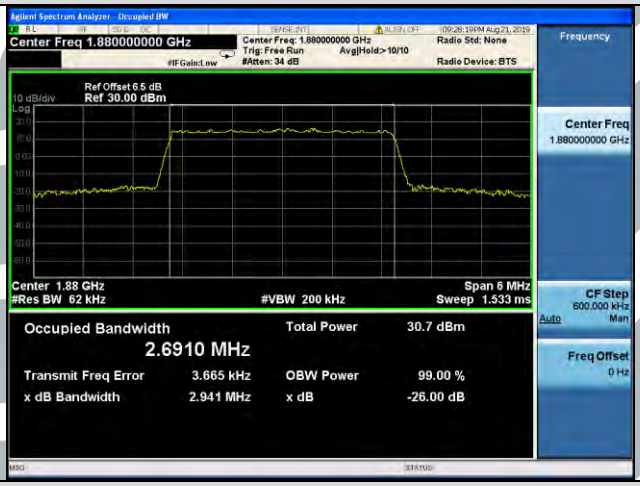
QPSK	16QAM

Lowest Channel

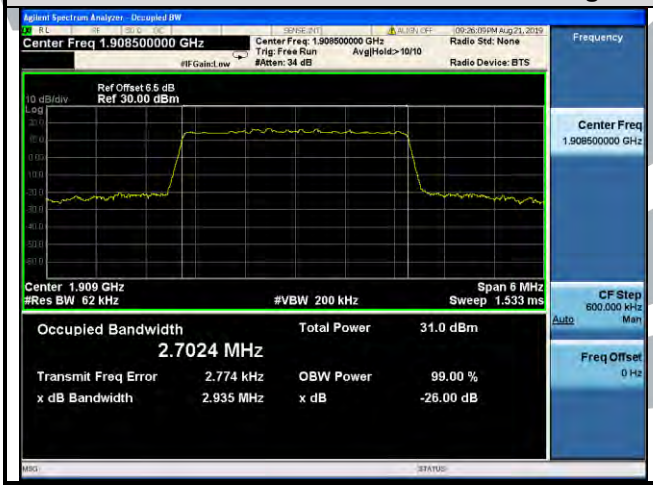




Middle Channel



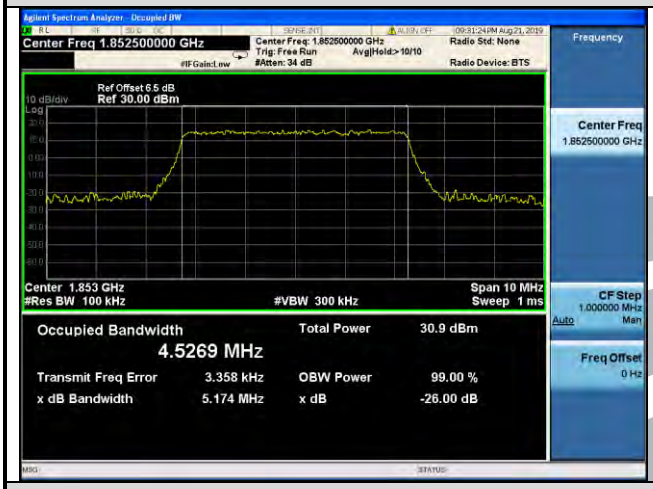
Highest Channel



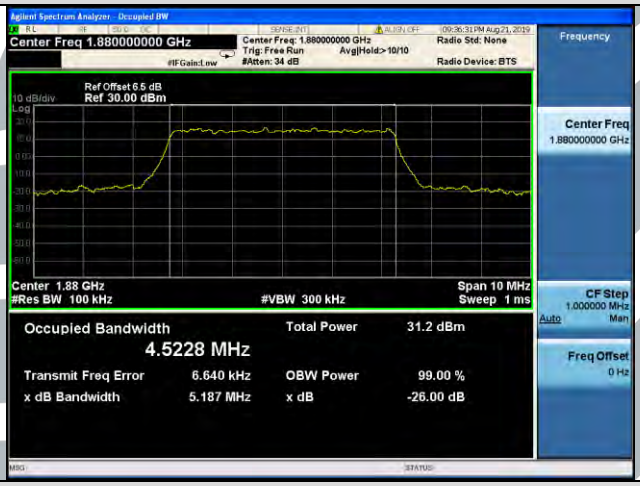
LTE Band 2_ Channel Bandwidth: 5 MHz

QPSK	16QAM

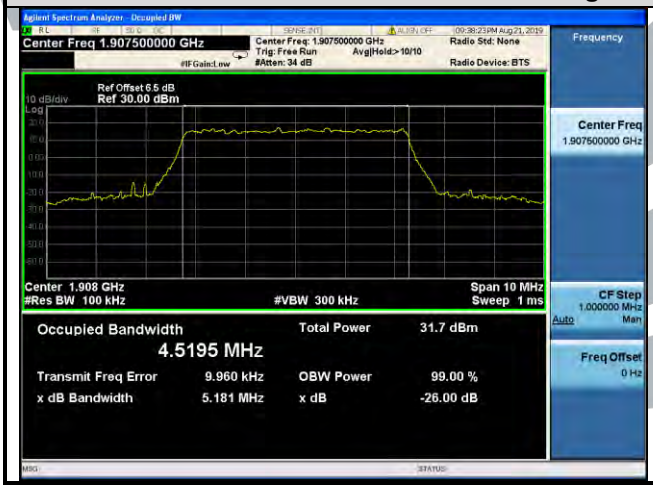
Lowest Channel



Middle Channel



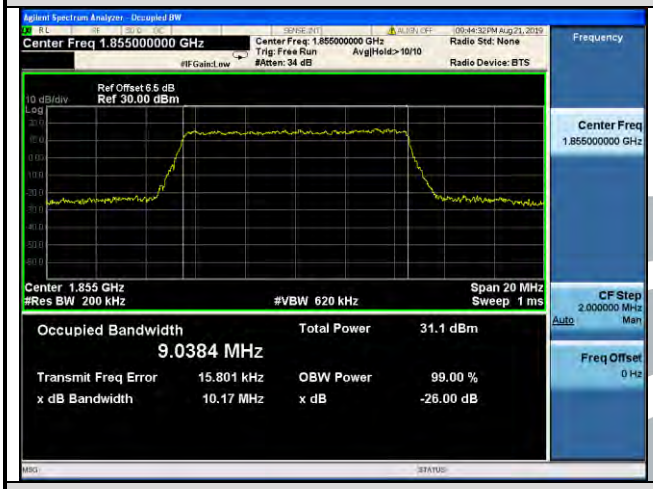
Highest Channel



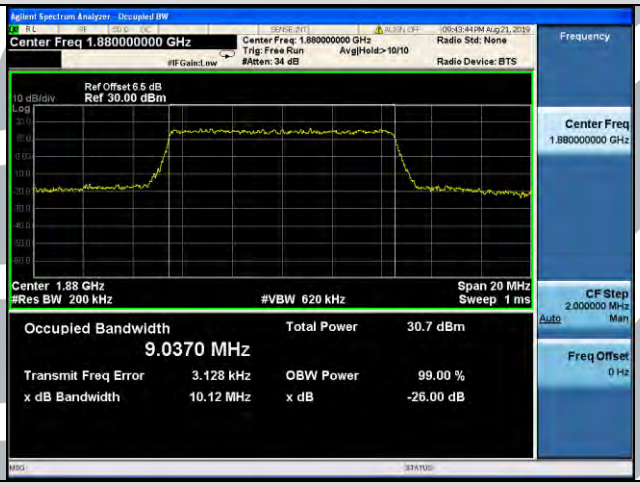
LTE Band 2_ Channel Bandwidth: 10 MHz

QPSK	16QAM

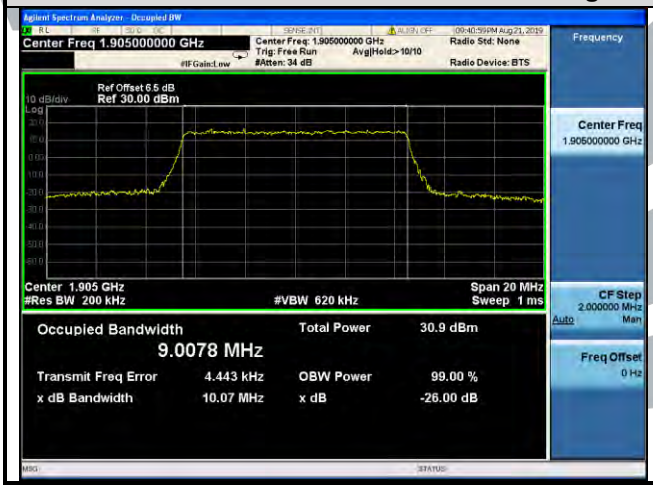
Lowest Channel

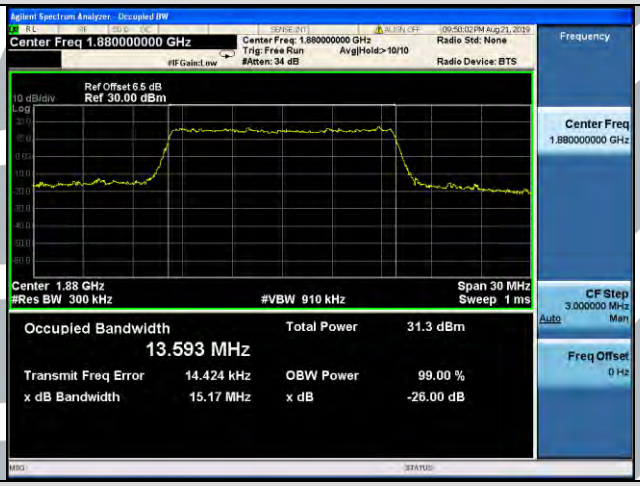
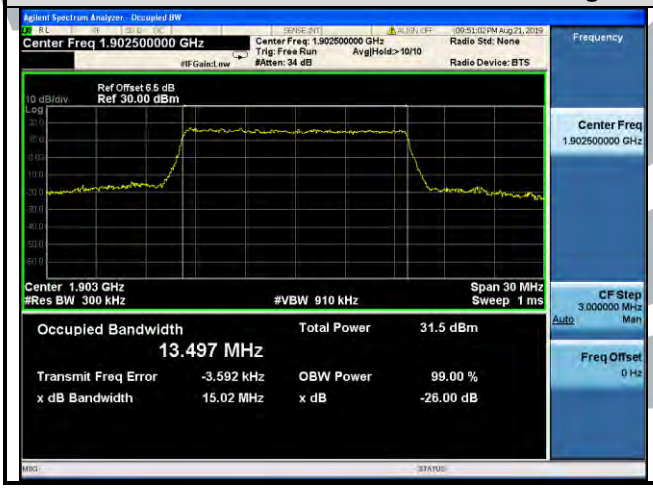


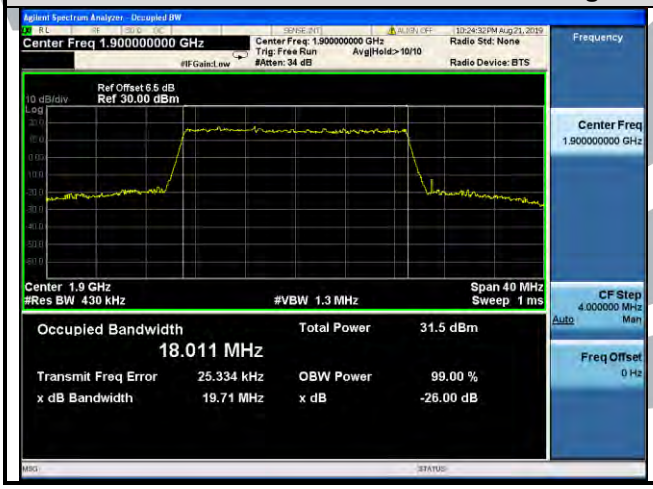
Middle Channel

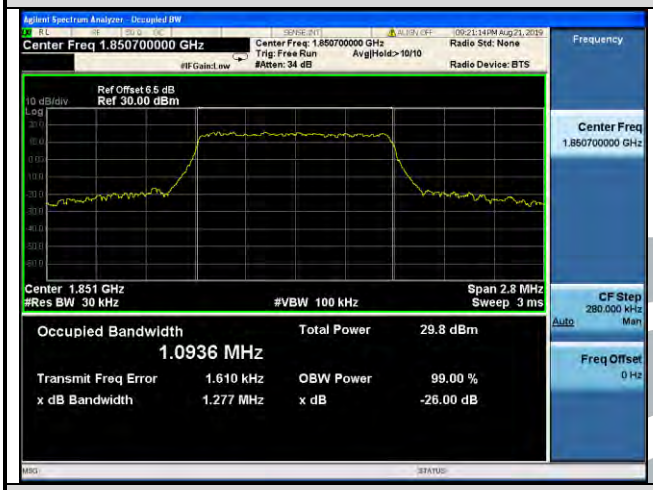
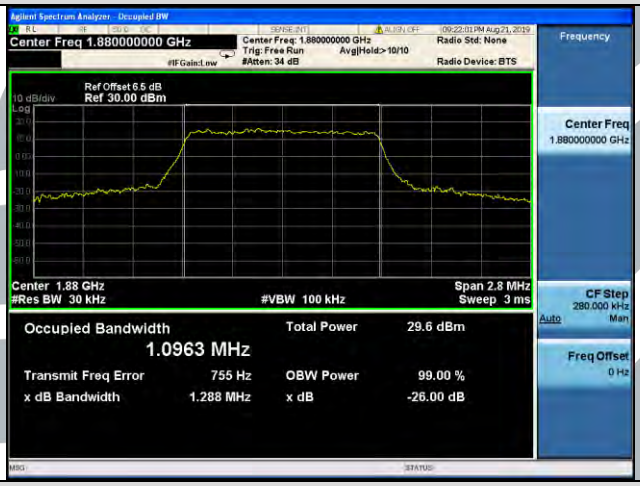
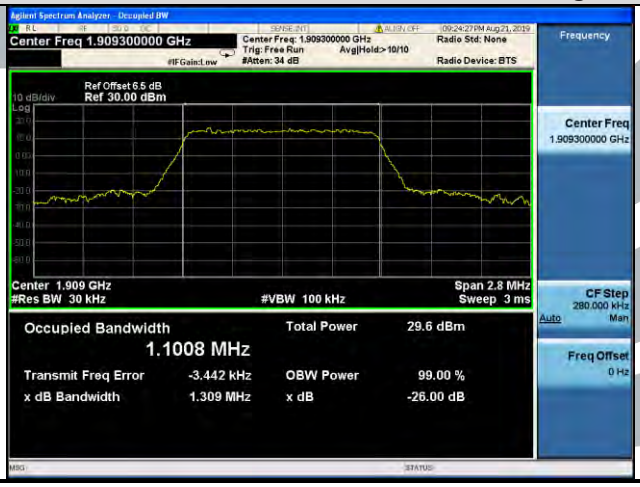


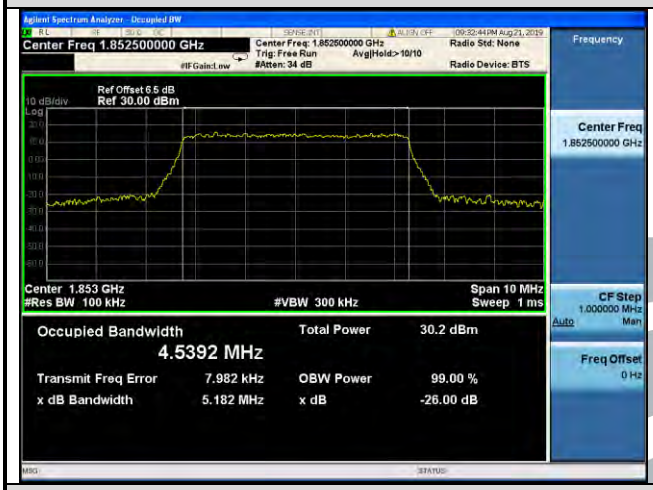
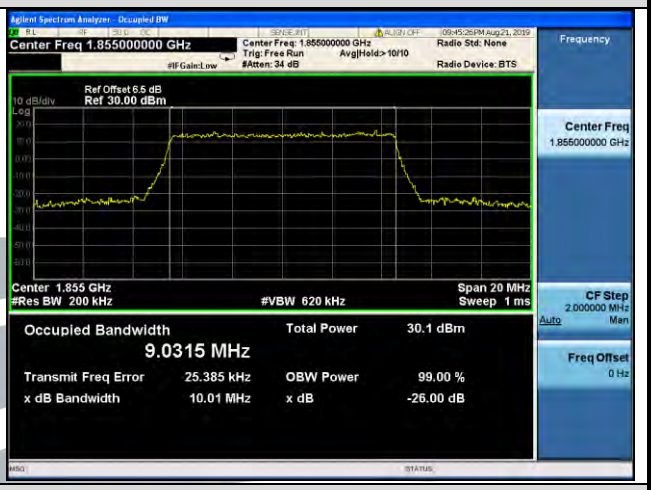
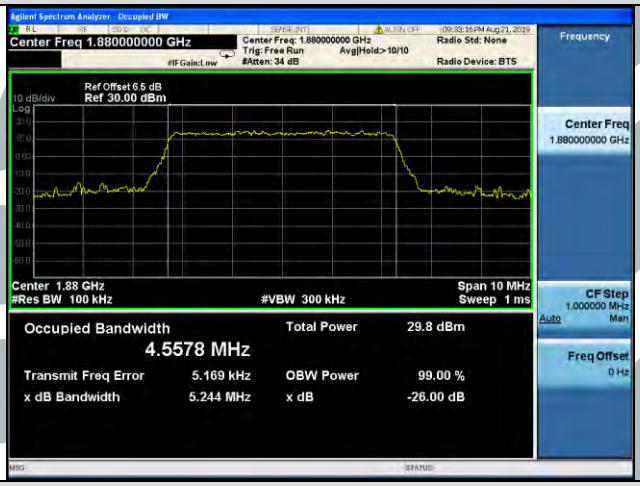
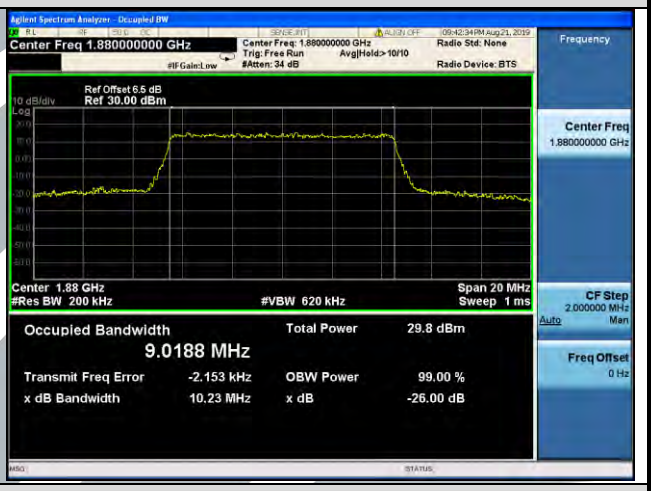
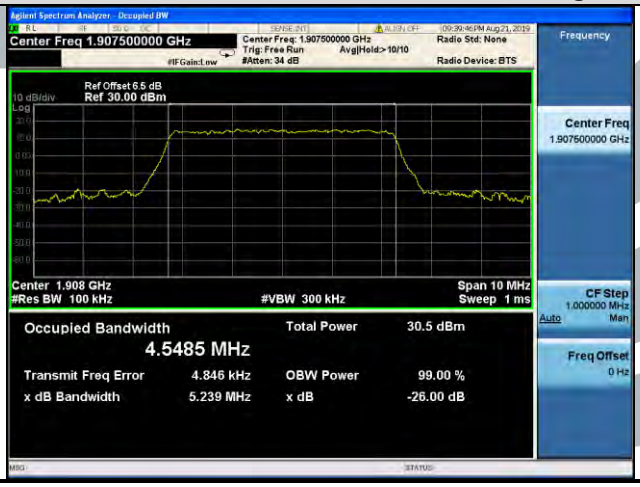
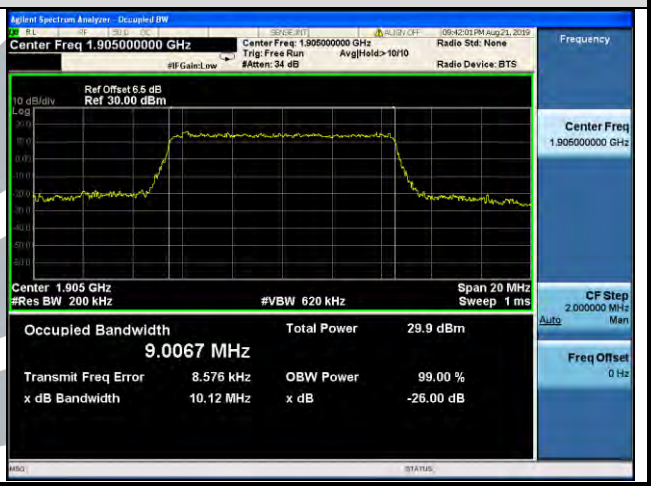
Highest Channel

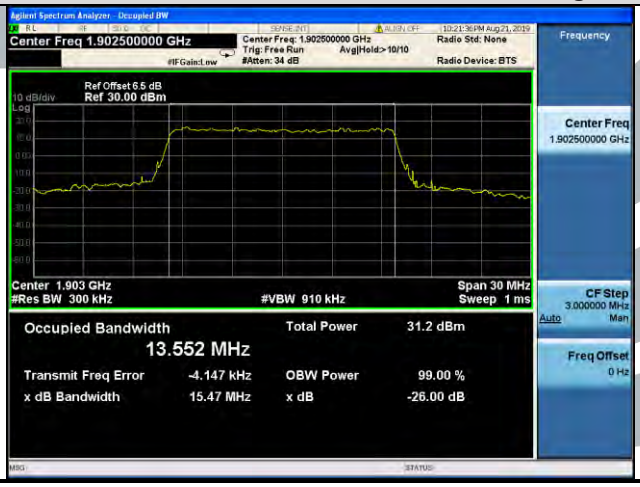


LTE Band 2_ Channel Bandwidth: 15 MHz	
QPSK	16QAM
Lowest Channel	
Middle Channel	
	
Highest Channel	
	

LTE Band 2_ Channel Bandwidth: 20 MHz	
QPSK	16QAM
Lowest Channel	
Middle Channel	
Highest Channel	
	

LTE Band 2 / 1.4MHz / 64QAM	LTE Band 2 / 3MHz / 64QAM
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

LTE Band 2 / 5MHz / 64QAM	LTE Band 2 / 10MHz / 64QAM
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

LTE Band 2 / 15MHz / 64QAM	LTE Band 2 / 20MHz / 64QAM
Lowest Channel	
Middle Channel	
Highest Channel	
	

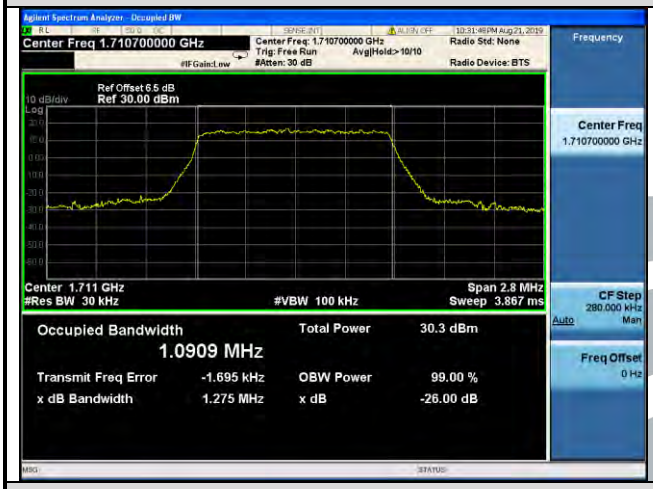
5.5.2 LTE Band 4

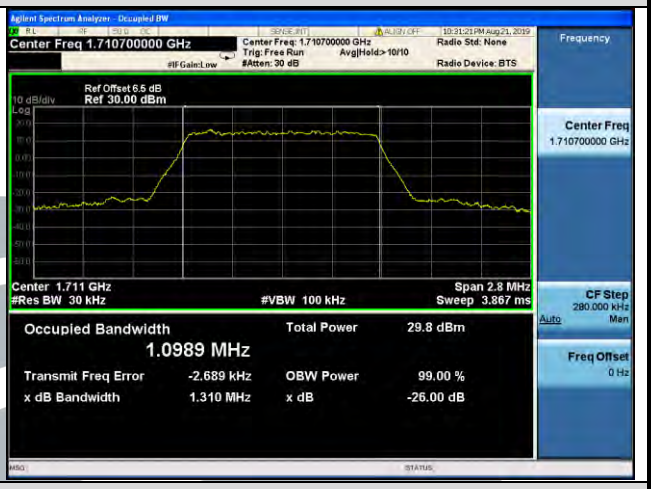
LTE Band 4								
Channel	RB Configuration		26 dB BW (MHz)			99% BW (MHz)		
	Size	Offset	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Channel Bandwidth: 1.4 MHz								
Lowest	6	0	1.275	1.310	1.310	1.0909	1.0989	1.0980
Middle	6	0	1.286	1.278	1.278	1.0935	1.0927	1.0931
Highest	6	0	1.271	1.284	1.271	1.1024	1.0947	1.0936
Channel Bandwidth: 3 MHz								
Lowest	15	0	2.926	2.926	2.925	2.6963	2.6859	2.6865
Middle	15	0	2.911	2.925	2.905	2.6941	2.6913	2.6887
Highest	15	0	2.922	2.936	2.913	2.6893	2.6878	2.6864
Channel Bandwidth: 5 MHz								
Lowest	25	0	5.208	5.185	5.179	4.5350	4.5168	4.5193
Middle	25	0	5.134	5.215	5.139	4.5114	4.5223	4.5131
Highest	25	0	5.157	5.199	5.193	4.5137	4.5351	4.5269
Channel Bandwidth: 10 MHz								
Lowest	50	0	10.13	10.17	9.992	9.0191	9.0039	8.9939
Middle	50	0	9.988	10.08	10.10	8.9858	9.0026	9.0003
Highest	50	0	10.21	10.04	9.934	9.0264	9.0150	9.0039
Channel Bandwidth: 15 MHz								
Lowest	75	0	15.09	15.04	14.92	13.517	13.514	13.508
Middle	75	0	14.98	15.08	14.95	13.465	13.502	13.495
Highest	75	0	15.10	14.94	14.95	13.497	13.507	13.504
Channel Bandwidth: 20 MHz								
Lowest	100	0	19.72	19.74	19.73	17.989	18.044	18.035
Middle	100	0	19.91	19.73	19.72	17.983	17.991	17.990
Highest	100	0	19.68	19.83	19.68	17.985	18.020	18.008

LTE Band 4_ Channel Bandwidth: 1.4 MHz

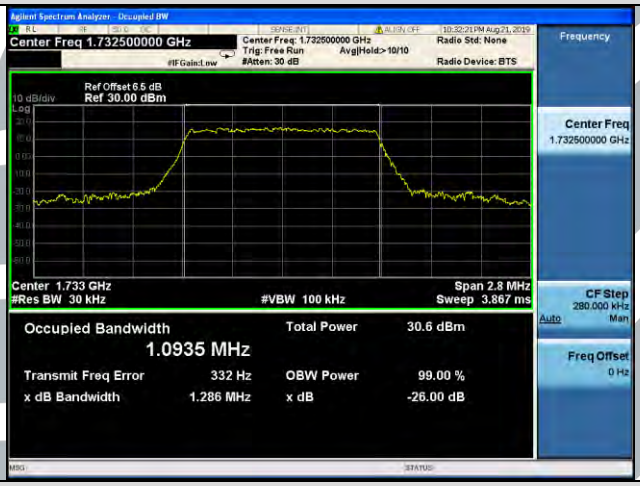
QPSK	16QAM

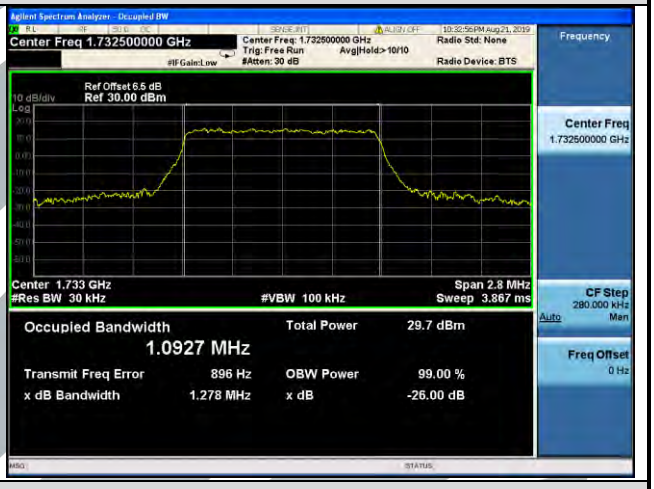
Lowest Channel



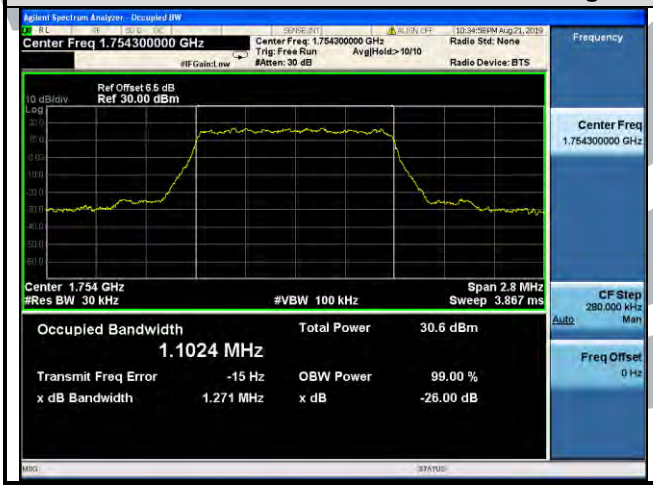


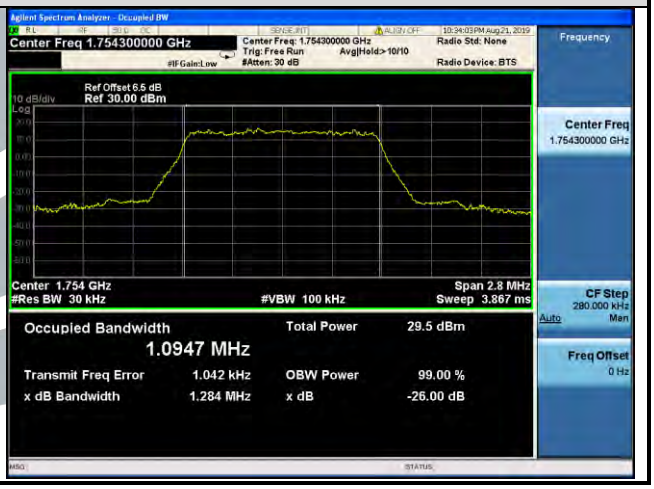
Middle Channel





Highest Channel

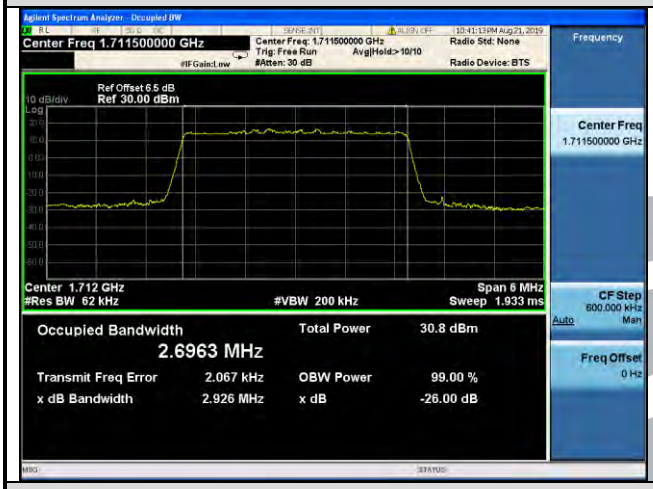




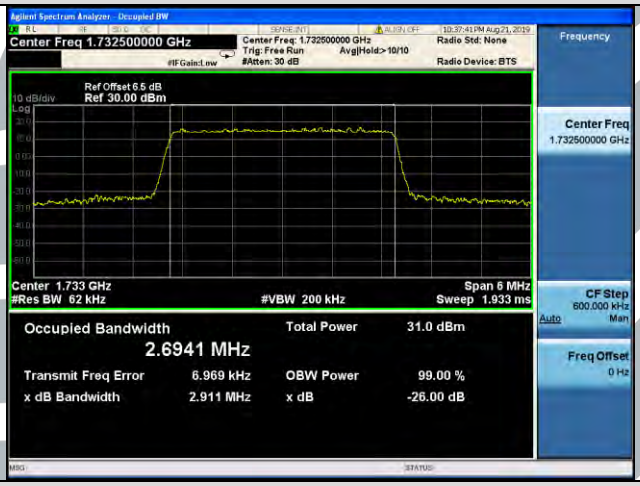
LTE Band 4_ Channel Bandwidth: 3 MHz

QPSK	16QAM

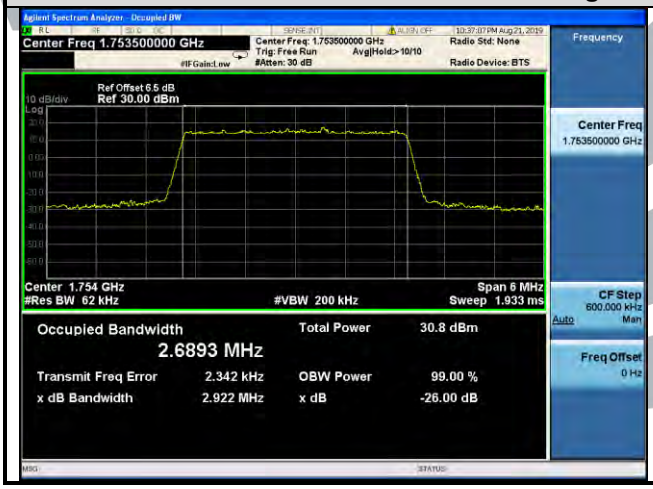
Lowest Channel



Middle Channel



Highest Channel

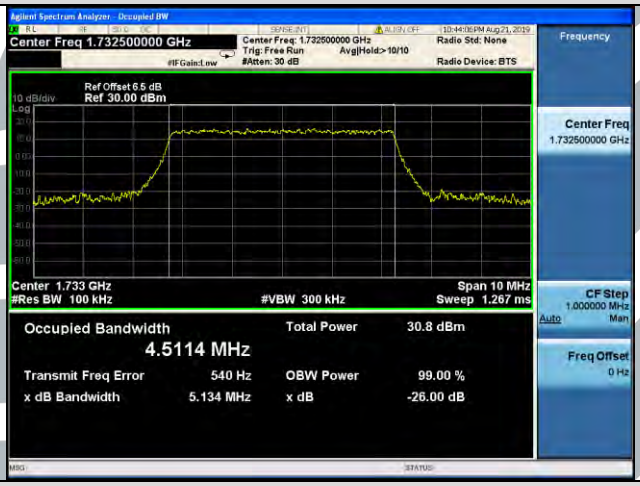


LTE Band 4_ Channel Bandwidth: 5 MHz

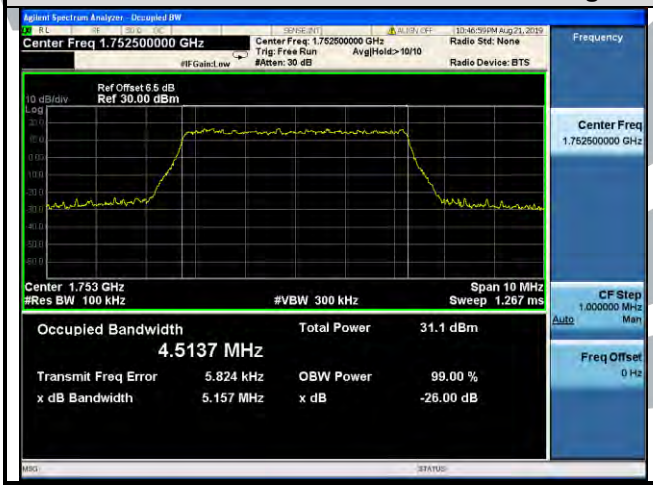
QPSK	16QAM

Lowest Channel

Middle Channel



Highest Channel

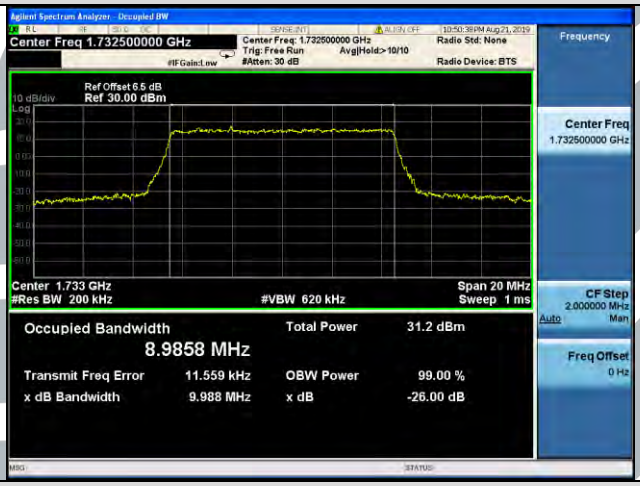


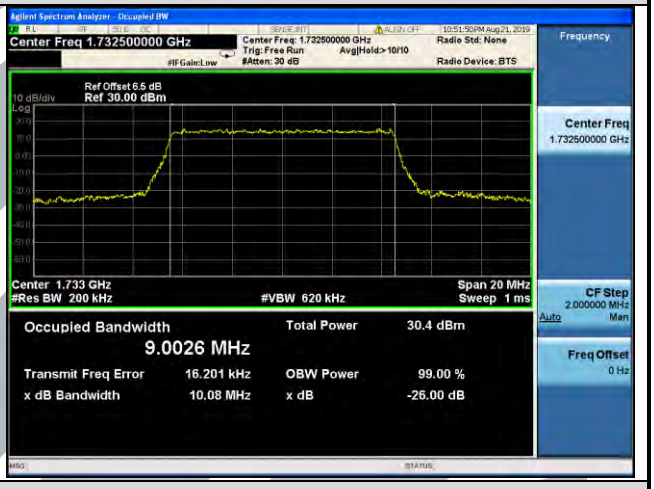
LTE Band 4_ Channel Bandwidth: 10 MHz

QPSK	16QAM

Lowest Channel

Middle Channel



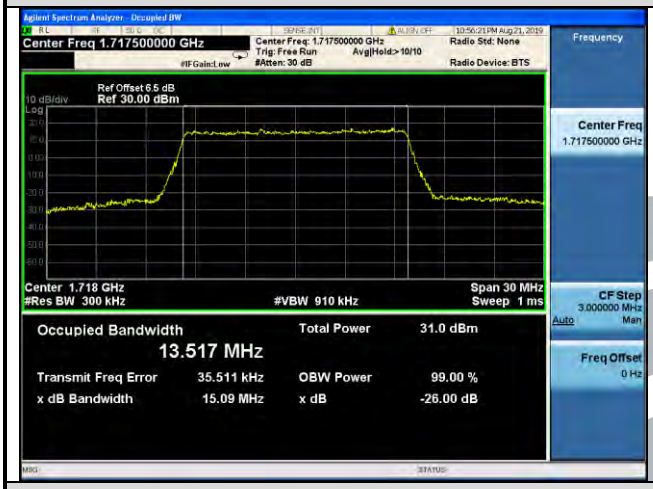


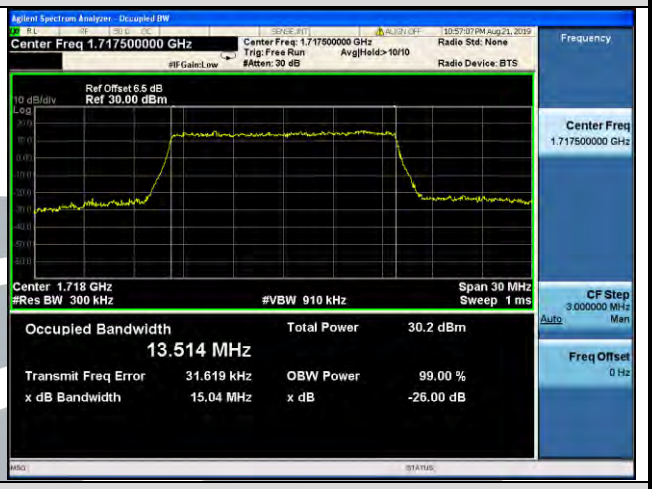
Highest Channel

LTE Band 4_ Channel Bandwidth: 15 MHz

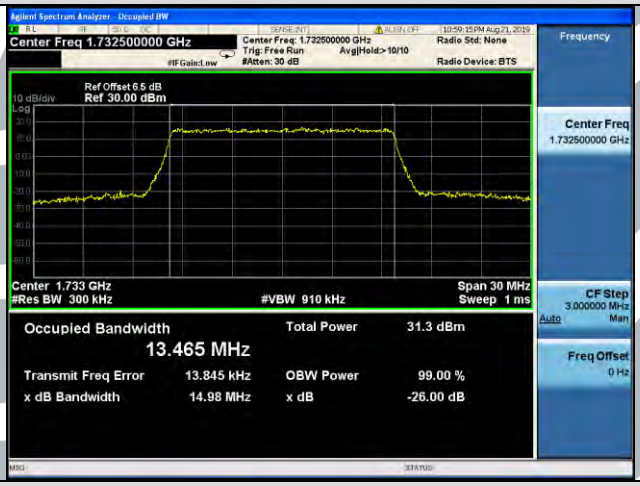
QPSK	16QAM

Lowest Channel

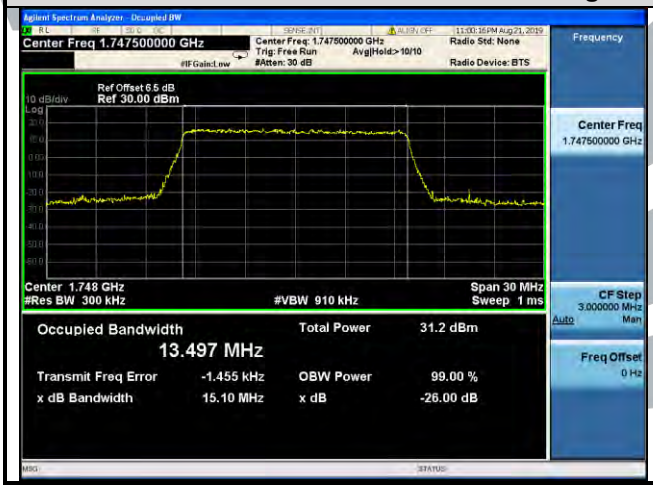




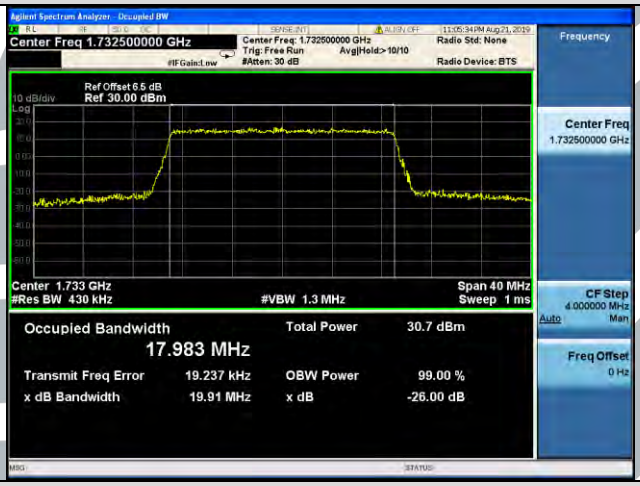
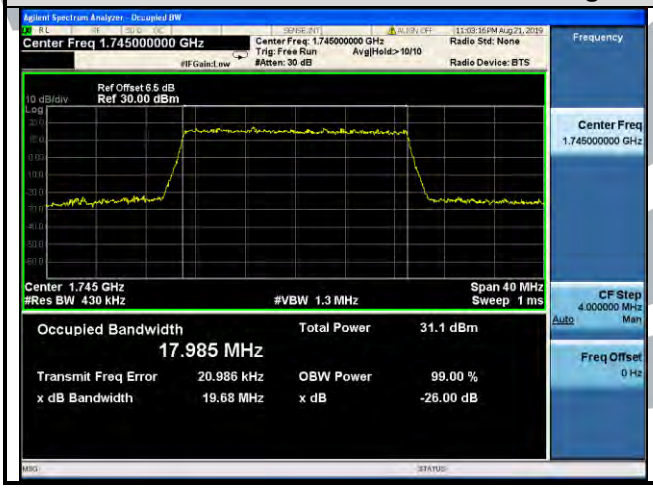
Middle Channel



Highest Channel



LTE Band 4_ Channel Bandwidth: 20 MHz

QPSK	16QAM
Lowest Channel	
Middle Channel	
	
Highest Channel