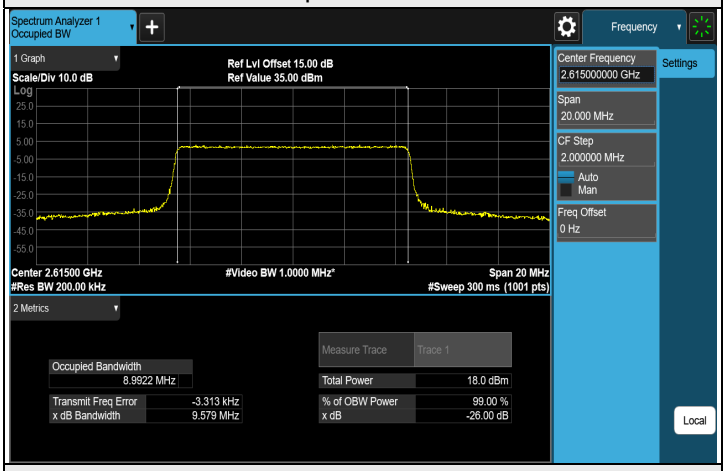
LTE Band 38 - Ant 6, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	37800	2575	8.9841	9.597
QPSK	38000	2595	8.9900	9.565
QPSK	38200	2615	8.9831	9.615
16QAM	37800	2575	8.9783	9.528
16QAM	38000	2595	8.9841	9.534
16QAM	38200	2615	8.9920	9.594
64QAM	37800	2575	8.9729	9.547
64QAM	38000	2595	8.9781	9.594
64QAM	38200	2615	8.9777	9.558
256QAM	37800	2575	8.9796	9.531
256QAM	38000	2595	8.9801	9.583
256QAM	38200	2615	8.9922	9.579

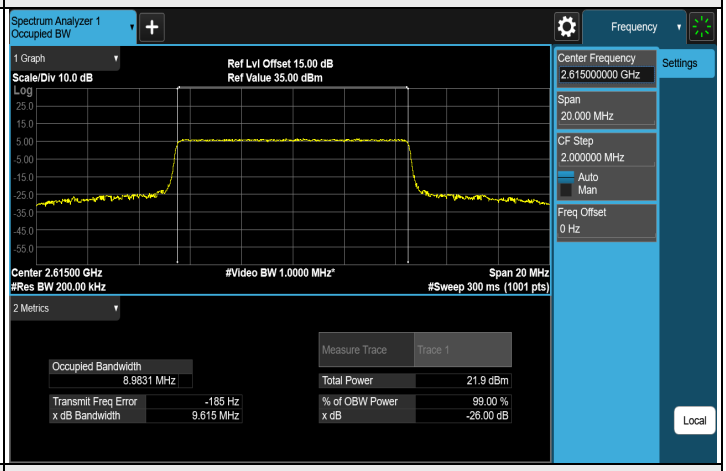
Spectrum Plot of Worst Value

Occupied bandwidth



256QAM CH 38200 (2615 MHz)

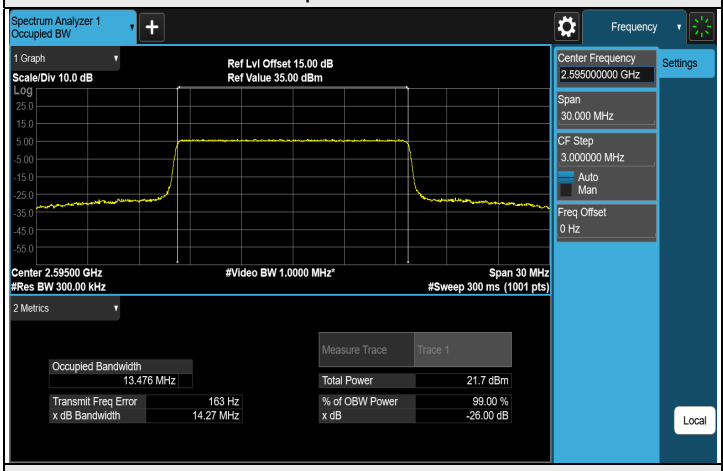
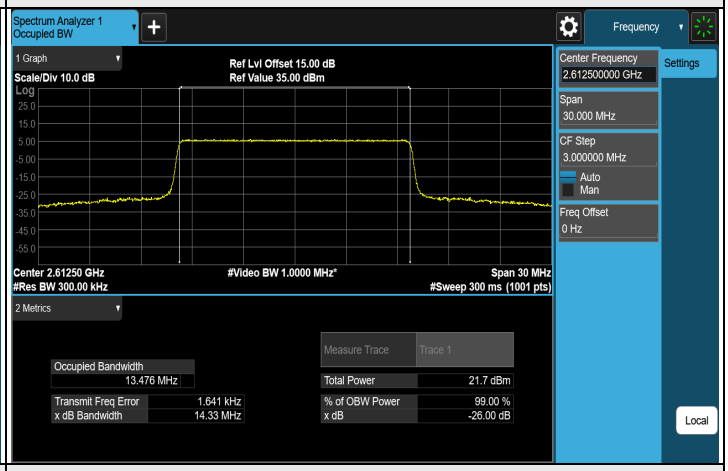
26 dB Bandwidth



QPSK CH 38200 (2615 MHz)

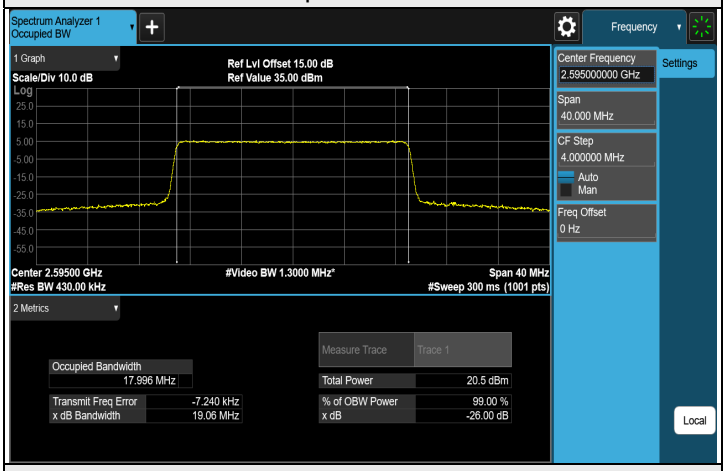
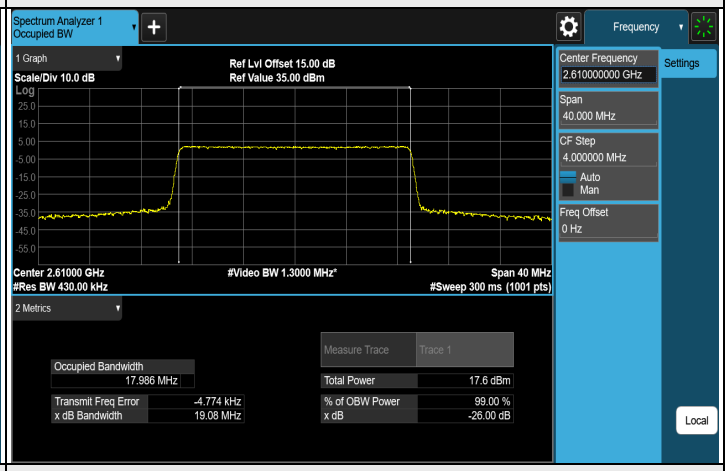
LTE Band 38 - Ant 6, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	37825	2577.5	13.4722	14.206
QPSK	38000	2595	13.4762	14.269
QPSK	38175	2612.5	13.4759	14.329
16QAM	37825	2577.5	13.4711	14.256
16QAM	38000	2595	13.4655	14.253
16QAM	38175	2612.5	13.4706	14.275
64QAM	37825	2577.5	13.4732	14.285
64QAM	38000	2595	13.4707	14.258
64QAM	38175	2612.5	13.4594	14.256
256QAM	37825	2577.5	13.4682	14.256
256QAM	38000	2595	13.4750	14.260
256QAM	38175	2612.5	13.4672	14.271

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 38000 (2595 MHz)	QPSK CH 38175 (2612.5 MHz)

LTE Band 38 - Ant 6, Channel Bandwidth: 20 MHz

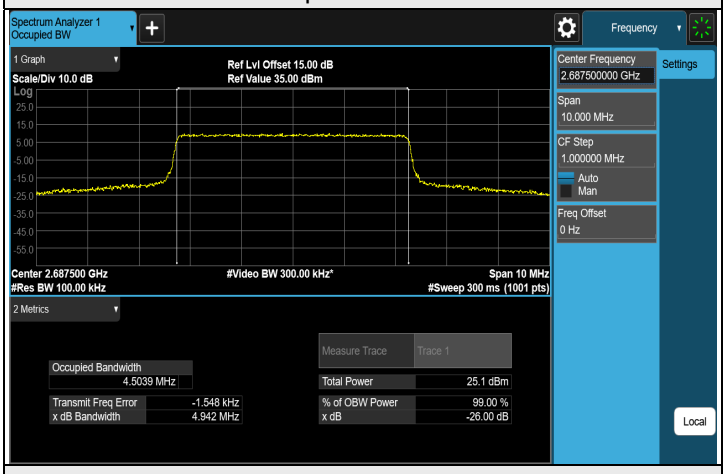
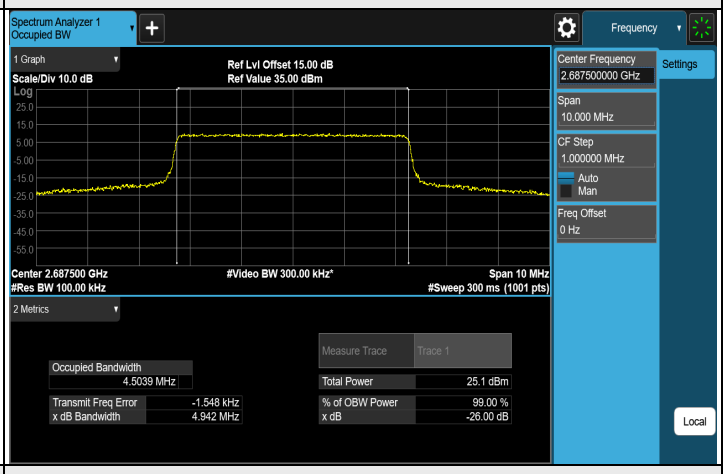
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	37850	2580	17.9825	19.073
QPSK	38000	2595	17.9870	19.072
QPSK	38150	2610	17.9825	19.076
16QAM	37850	2580	17.9713	19.076
16QAM	38000	2595	17.9955	19.062
16QAM	38150	2610	17.9762	19.058
64QAM	37850	2580	17.9771	19.042
64QAM	38000	2595	17.9852	19.069
64QAM	38150	2610	17.9829	19.029
256QAM	37850	2580	17.9911	19.055
256QAM	38000	2595	17.9750	19.048
256QAM	38150	2610	17.9859	19.077

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16QAM CH 38000 (2595 MHz)	256QAM CH 38150 (2610 MHz)

7.4.14 LTE Band 41

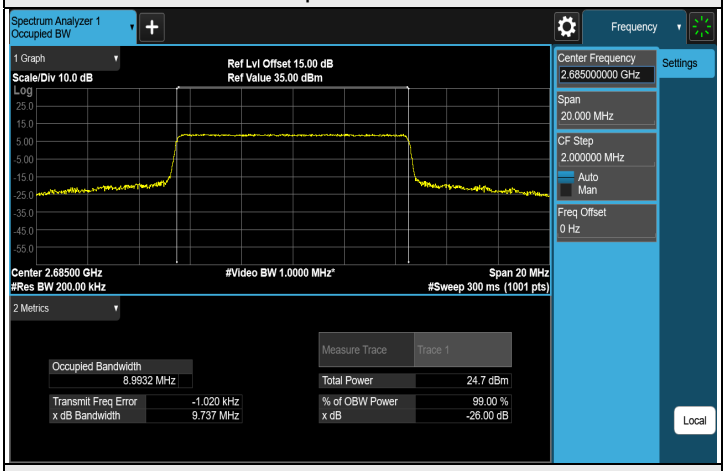
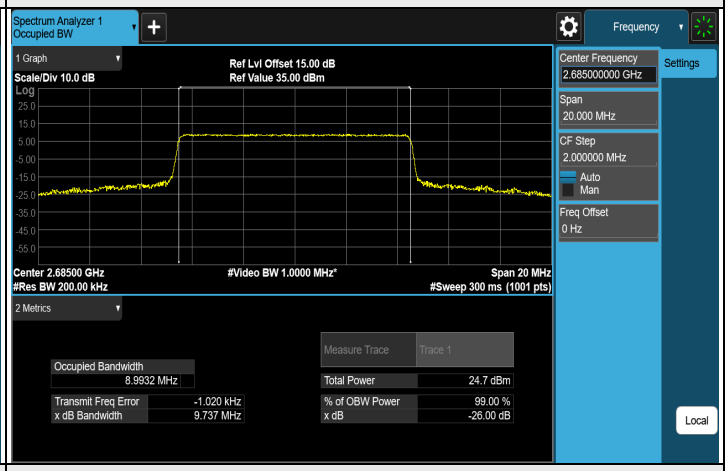
LTE Band 41 - Ant 5_PC2, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	39675	2498.5	4.4989	4.889
QPSK	40620	2593	4.4963	4.899
QPSK	41565	2687.5	4.5039	4.942
16QAM	39675	2498.5	4.4962	4.868
16QAM	40620	2593	4.4945	4.871
16QAM	41565	2687.5	4.5001	4.850
64QAM	39675	2498.5	4.4912	4.866
64QAM	40620	2593	4.4919	4.857
64QAM	41565	2687.5	4.4889	4.942
256QAM	39675	2498.5	4.4959	4.831
256QAM	40620	2593	4.4959	4.852
256QAM	41565	2687.5	4.4920	4.838

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 41565 (2687.5 MHz)	QPSK CH 41565 (2687.5 MHz)

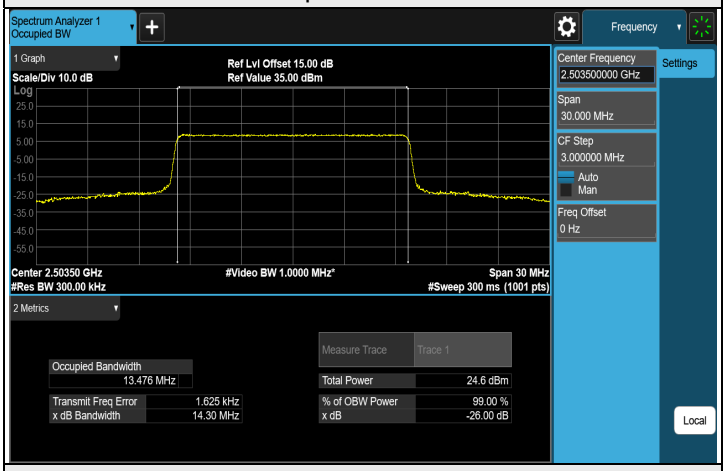
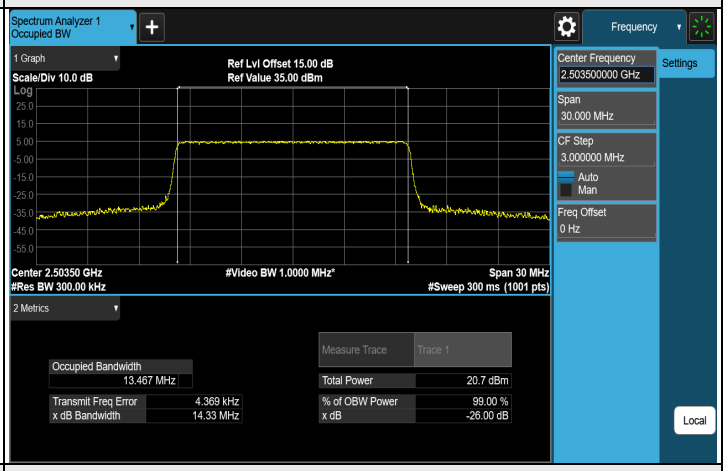
LTE Band 41 - Ant 5_PC2, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	39700	2501	8.9849	9.547
QPSK	40620	2593	8.9920	9.564
QPSK	41540	2685	8.9932	9.737
16QAM	39700	2501	8.9839	9.589
16QAM	40620	2593	8.9785	9.577
16QAM	41540	2685	8.9841	9.581
64QAM	39700	2501	8.9728	9.531
64QAM	40620	2593	8.9811	9.581
64QAM	41540	2685	8.9775	9.522
256QAM	39700	2501	8.9810	9.536
256QAM	40620	2593	8.9891	9.572
256QAM	41540	2685	8.9821	9.533

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 41540 (2685 MHz)	QPSK CH 41540 (2685 MHz)

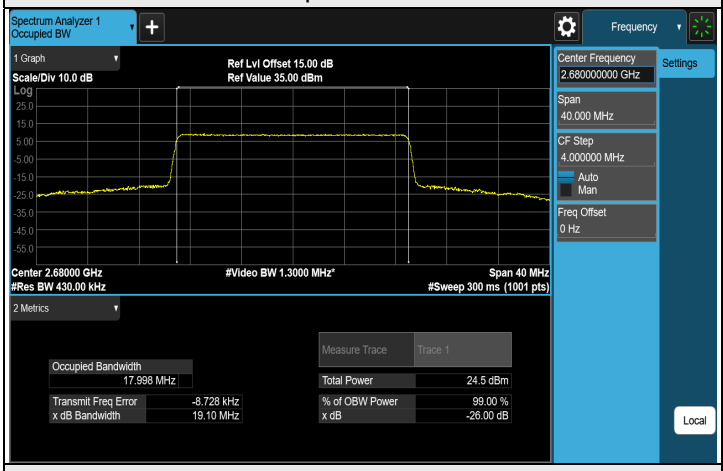
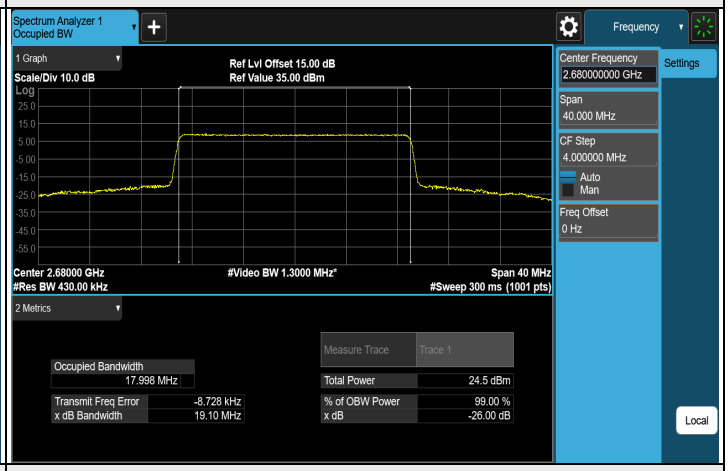
LTE Band 41 - Ant 5_PC2, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	39725	2503.5	13.4759	14.303
QPSK	40620	2593	13.4683	14.266
QPSK	41515	2682.5	13.4679	14.299
16QAM	39725	2503.5	13.4600	14.270
16QAM	40620	2593	13.4614	14.269
16QAM	41515	2682.5	13.4585	14.263
64QAM	39725	2503.5	13.4616	14.273
64QAM	40620	2593	13.4633	14.259
64QAM	41515	2682.5	13.4615	14.273
256QAM	39725	2503.5	13.4669	14.326
256QAM	40620	2593	13.4746	14.309
256QAM	41515	2682.5	13.4631	14.264

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 39725 (2503.5 MHz)	256QAM CH 39725 (2503.5 MHz)

LTE Band 41 - Ant 5_PC2, Channel Bandwidth: 20 MHz

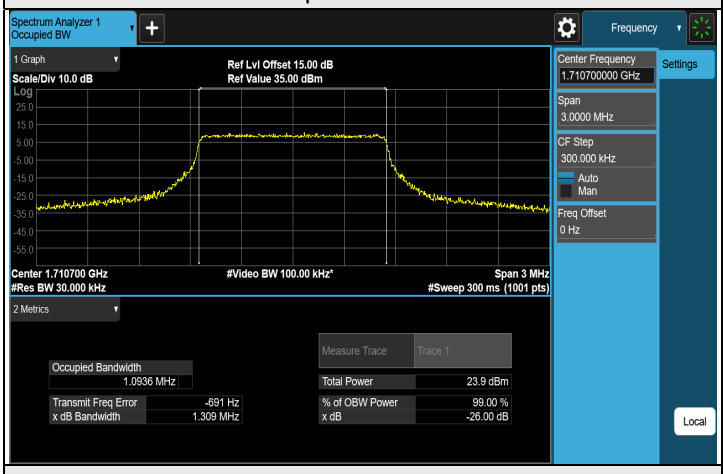
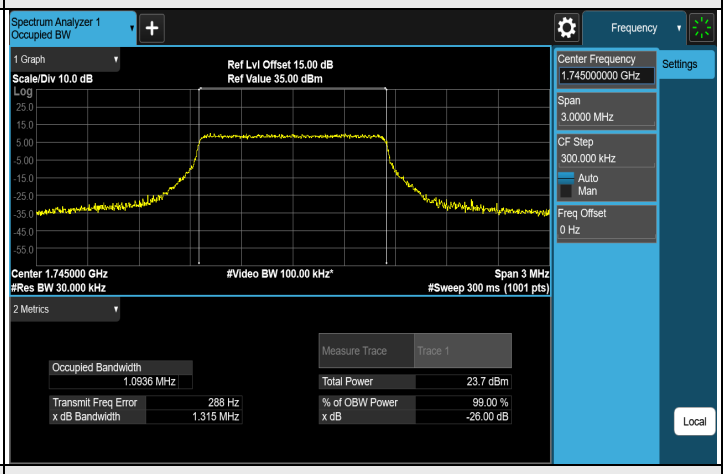
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	39750	2506	17.9651	19.067
QPSK	40620	2593	17.9809	19.056
QPSK	41490	2680	17.9979	19.097
16QAM	39750	2506	17.9761	19.056
16QAM	40620	2593	17.9725	19.073
16QAM	41490	2680	17.9818	19.090
64QAM	39750	2506	17.9714	19.032
64QAM	40620	2593	17.9805	19.060
64QAM	41490	2680	17.9761	19.060
256QAM	39750	2506	17.9767	19.072
256QAM	40620	2593	17.9712	19.086
256QAM	41490	2680	17.9740	19.074

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 41490 (2680 MHz)	QPSK CH 41490 (2680 MHz)

7.4.15 LTE Band 66

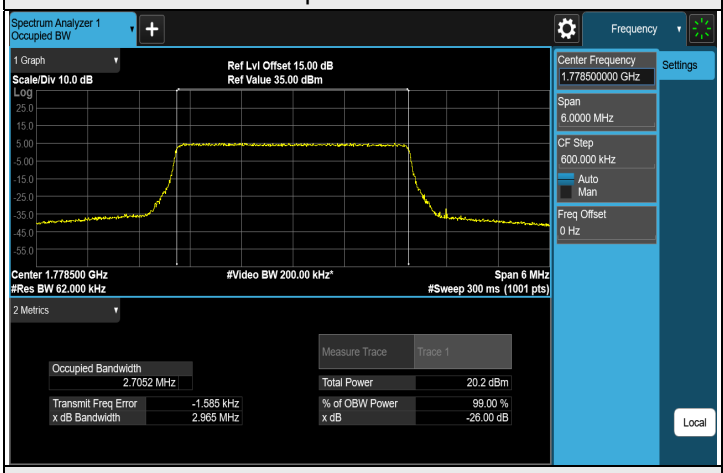
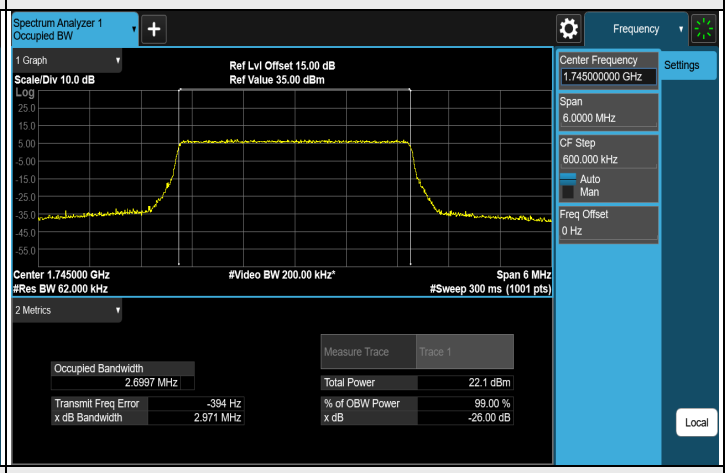
LTE Band 66 - Ant 0, Channel Bandwidth: 1.4 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	131979	1710.7	1.0903	1.302
QPSK	132322	1745	1.0924	1.302
QPSK	132665	1779.3	1.0919	1.295
16QAM	131979	1710.7	1.0936	1.309
16QAM	132322	1745	1.0936	1.315
16QAM	132665	1779.3	1.0927	1.304
64QAM	131979	1710.7	1.0906	1.309
64QAM	132322	1745	1.0916	1.298
64QAM	132665	1779.3	1.0896	1.294
256QAM	131979	1710.7	1.0914	1.298
256QAM	132322	1745	1.0896	1.314
256QAM	132665	1779.3	1.0886	1.294

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16QAM CH 131979 (1710.7 MHz)	16QAM CH 132322 (1745 MHz)

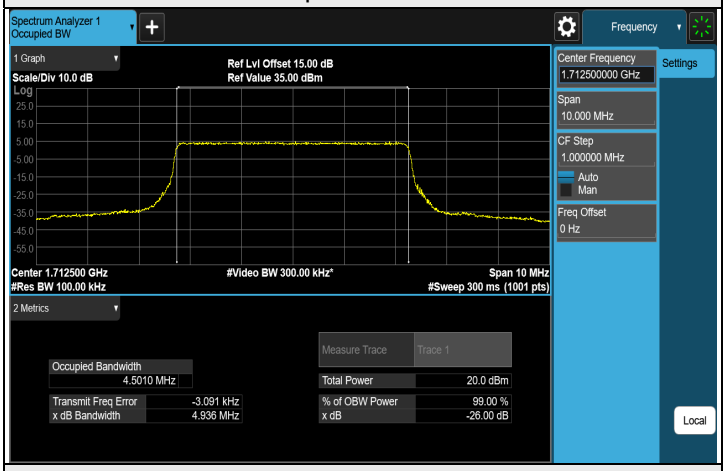
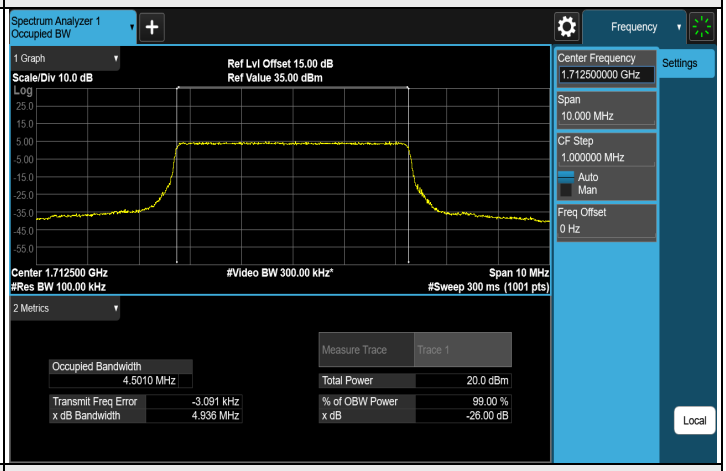
LTE Band 66 - Ant 0, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	131987	1711.5	2.7029	2.962
QPSK	132322	1745	2.6984	2.931
QPSK	132657	1778.5	2.7009	2.958
16QAM	131987	1711.5	2.7027	2.966
16QAM	132322	1745	2.7000	2.954
16QAM	132657	1778.5	2.7005	2.961
64QAM	131987	1711.5	2.7013	2.951
64QAM	132322	1745	2.6997	2.971
64QAM	132657	1778.5	2.7035	2.970
256QAM	131987	1711.5	2.7048	2.952
256QAM	132322	1745	2.6998	2.954
256QAM	132657	1778.5	2.7052	2.965

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 132657 (1778.5 MHz)	64QAM CH 132322 (1745 MHz)

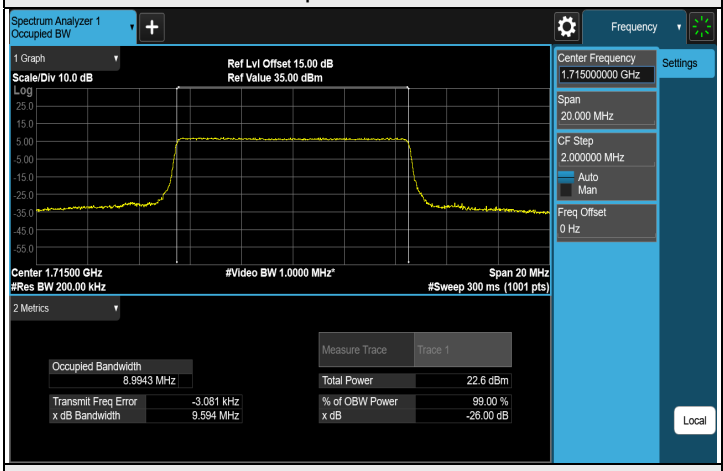
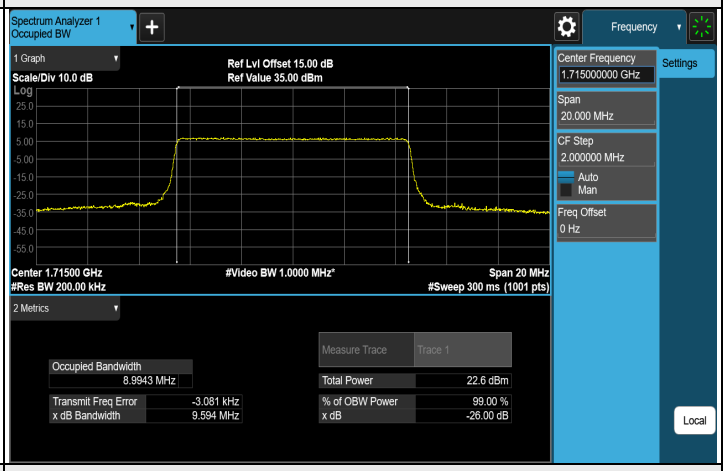
LTE Band 66 - Ant 0, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	131997	1712.5	4.4947	4.887
QPSK	132322	1745	4.4966	4.895
QPSK	132647	1777.5	4.4959	4.868
16QAM	131997	1712.5	4.4925	4.899
16QAM	132322	1745	4.4897	4.916
16QAM	132647	1777.5	4.4968	4.855
64QAM	131997	1712.5	4.4971	4.868
64QAM	132322	1745	4.4961	4.892
64QAM	132647	1777.5	4.4938	4.859
256QAM	131997	1712.5	4.5010	4.936
256QAM	132322	1745	4.4991	4.875
256QAM	132647	1777.5	4.4958	4.889

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 131997 (1712.5 MHz)	256QAM CH 131997 (1712.5 MHz)

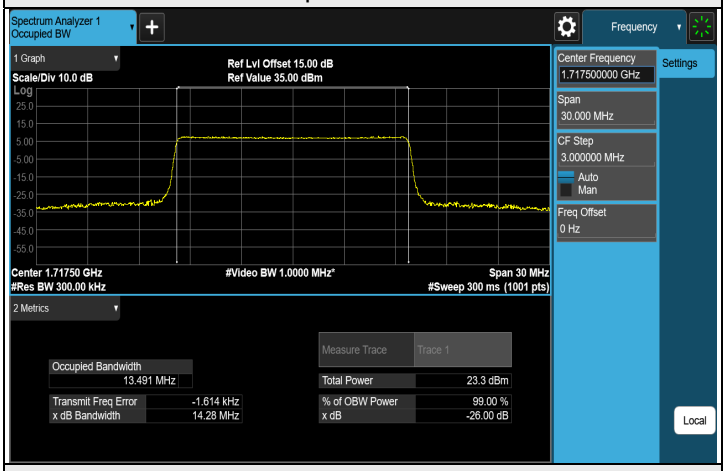
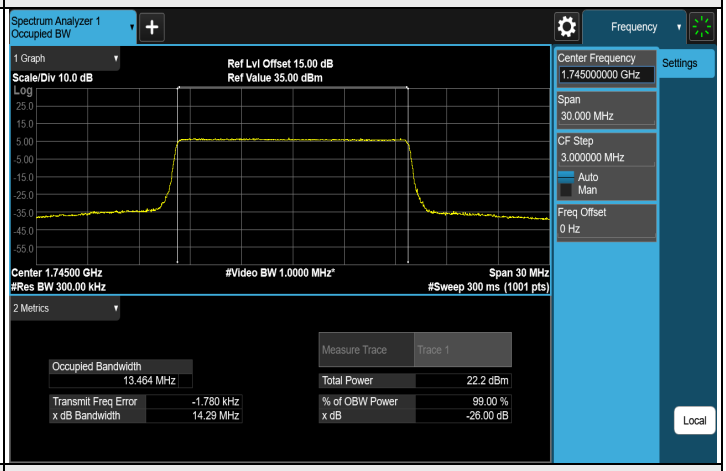
LTE Band 66 - Ant 0, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	132022	1715	8.9836	9.569
QPSK	132322	1745	8.9818	9.549
QPSK	132622	1775	8.9802	9.568
16QAM	132022	1715	8.9943	9.594
16QAM	132322	1745	8.9832	9.549
16QAM	132622	1775	8.9823	9.547
64QAM	132022	1715	8.9883	9.538
64QAM	132322	1745	8.9846	9.546
64QAM	132622	1775	8.9831	9.557
256QAM	132022	1715	8.9844	9.569
256QAM	132322	1745	8.9847	9.549
256QAM	132622	1775	8.9790	9.542

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16QAM CH 132022 (1715 MHz)	16QAM CH 132022 (1715 MHz)

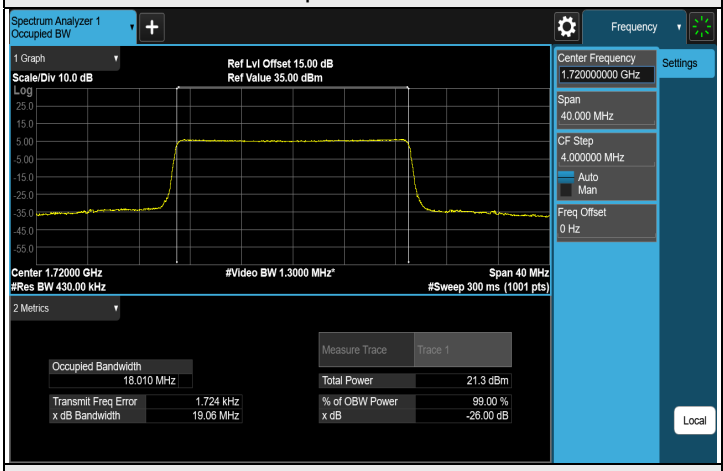
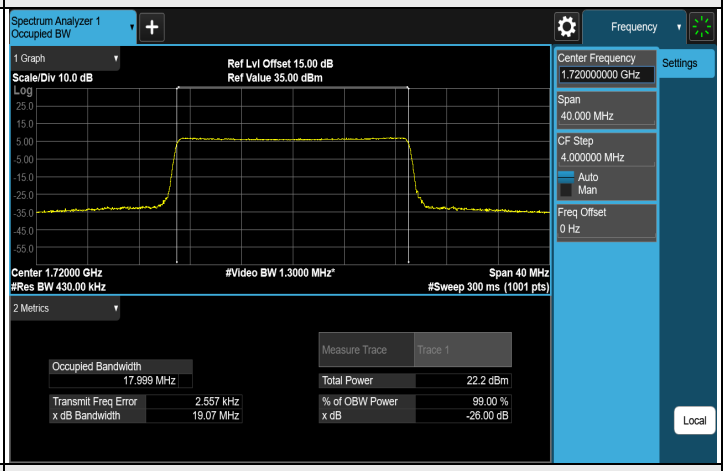
LTE Band 66 - Ant 0, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	132047	1717.5	13.4905	14.284
QPSK	132322	1745	13.4677	14.270
QPSK	132597	1772.5	13.4547	14.247
16QAM	132047	1717.5	13.4782	14.282
16QAM	132322	1745	13.4642	14.295
16QAM	132597	1772.5	13.4616	14.279
64QAM	132047	1717.5	13.4886	14.268
64QAM	132322	1745	13.4641	14.265
64QAM	132597	1772.5	13.4513	14.263
256QAM	132047	1717.5	13.4798	14.289
256QAM	132322	1745	13.4629	14.273
256QAM	132597	1772.5	13.4493	14.286

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 132047 (1717.5 MHz)	16QAM CH 132322 (1745 MHz)

LTE Band 66 - Ant 0, Channel Bandwidth: 20 MHz

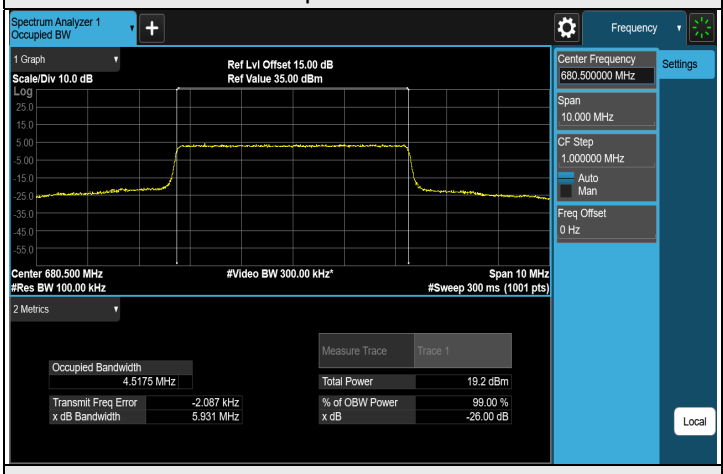
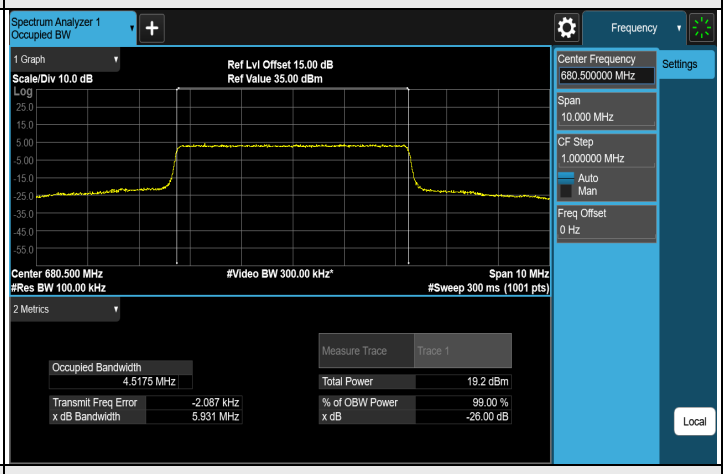
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	132072	1720	18.0010	19.049
QPSK	132322	1745	17.9691	19.037
QPSK	132572	1770	17.9534	19.051
16QAM	132072	1720	17.9987	19.073
16QAM	132322	1745	17.9645	19.056
16QAM	132572	1770	17.9520	19.053
64QAM	132072	1720	18.0095	19.060
64QAM	132322	1745	17.9630	19.059
64QAM	132572	1770	17.9460	19.055
256QAM	132072	1720	18.0036	19.071
256QAM	132322	1745	17.9653	19.070
256QAM	132572	1770	17.9400	19.064

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 132072 (1720 MHz)	16QAM CH 132072 (1720 MHz)

7.4.16 LTE Band 71

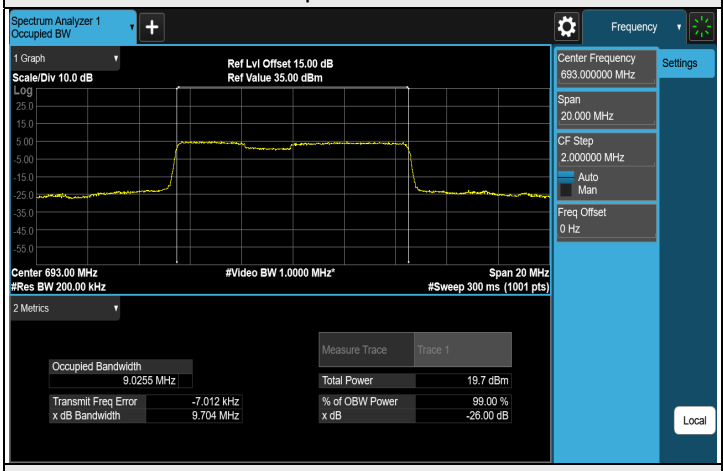
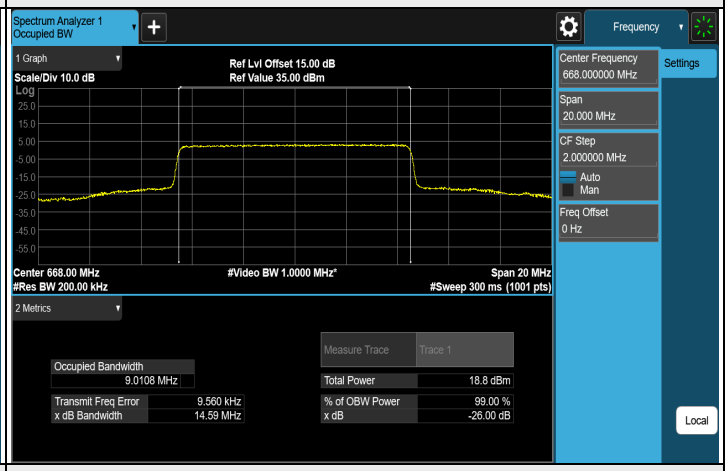
LTE Band 71 - Ant 0, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	133147	665.5	4.4972	4.919
QPSK	133297	680.5	4.5038	4.974
QPSK	133447	695.5	4.4991	4.900
16QAM	133147	665.5	4.4981	4.893
16QAM	133297	680.5	4.5096	4.993
16QAM	133447	695.5	4.5036	4.917
64QAM	133147	665.5	4.5010	4.880
64QAM	133297	680.5	4.5078	4.994
64QAM	133447	695.5	4.5053	4.892
256QAM	133147	665.5	4.5069	5.585
256QAM	133297	680.5	4.5175	5.931
256QAM	133447	695.5	4.5154	5.080

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 133297 (680.5 MHz)	256QAM CH 133297 (680.5 MHz)

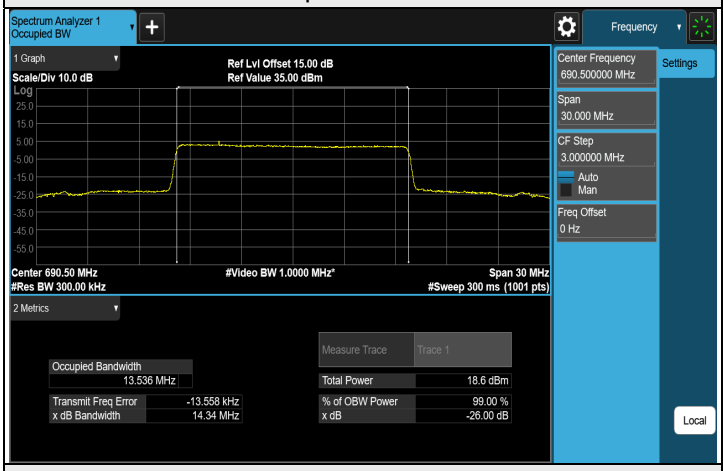
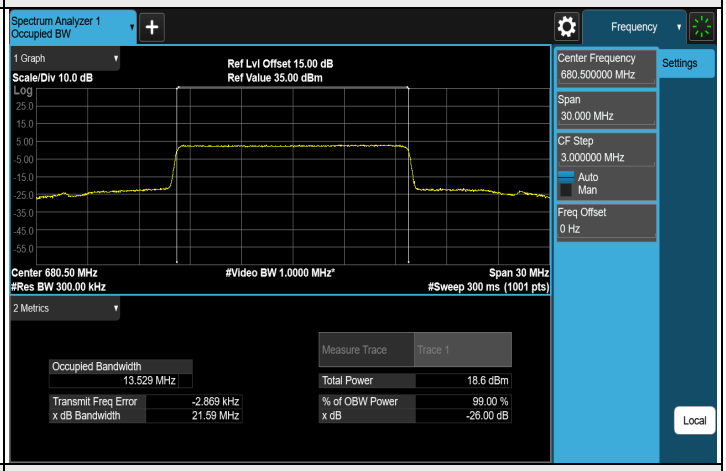
LTE Band 71 - Ant 0, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	133172	668	8.9838	9.609
QPSK	133297	680.5	8.9940	9.621
QPSK	133422	693	8.9983	9.580
16QAM	133172	668	8.9848	9.623
16QAM	133297	680.5	9.0003	9.735
16QAM	133422	693	9.0047	9.657
64QAM	133172	668	8.9991	9.787
64QAM	133297	680.5	9.0057	9.737
64QAM	133422	693	8.9986	9.626
256QAM	133172	668	9.0108	14.586
256QAM	133297	680.5	9.0212	14.477
256QAM	133422	693	9.0255	9.704

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 133422 (693 MHz)	256QAM CH 133172 (668 MHz)

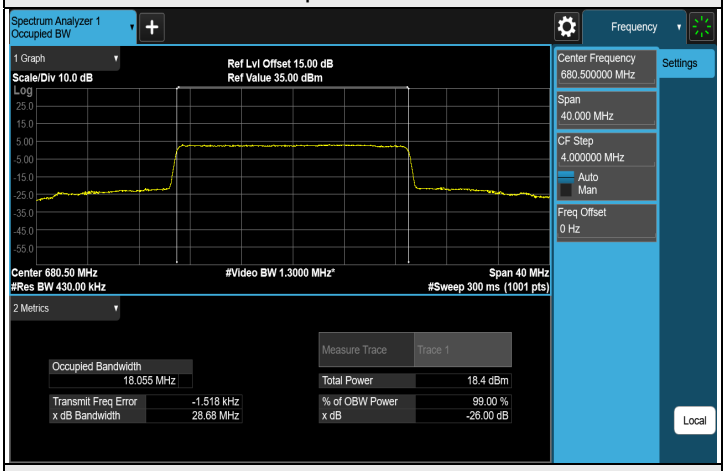
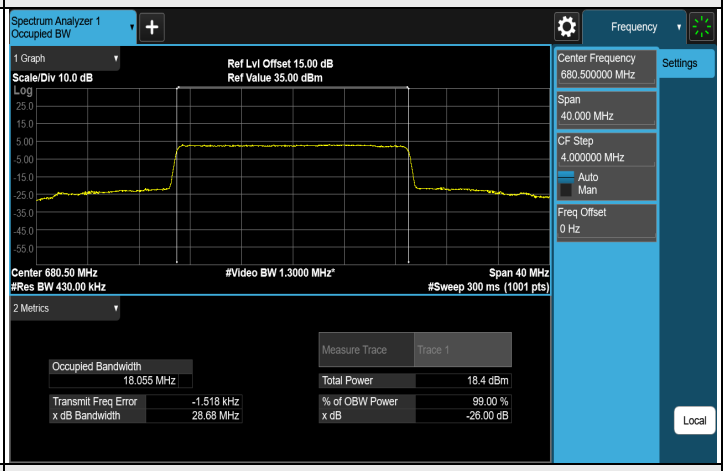
LTE Band 71 - Ant 0, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	133197	670.5	13.4760	14.374
QPSK	133297	680.5	13.4750	14.311
QPSK	133397	690.5	13.4874	14.325
16QAM	133197	670.5	13.4765	14.344
16QAM	133297	680.5	13.4997	14.385
16QAM	133397	690.5	13.5001	14.293
64QAM	133197	670.5	13.4890	14.737
64QAM	133297	680.5	13.5048	14.484
64QAM	133397	690.5	13.5148	14.357
256QAM	133197	670.5	13.5107	19.308
256QAM	133297	680.5	13.5293	21.589
256QAM	133397	690.5	13.5363	14.343

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 133397 (690.5 MHz)	256QAM CH 133297 (680.5 MHz)

LTE Band 71 - Ant 0, Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	133222	673	17.9680	19.117
QPSK	133297	680.5	17.9790	19.097
QPSK	133372	688	17.9535	19.071
16QAM	133222	673	17.9877	18.960
16QAM	133297	680.5	17.9687	18.548
16QAM	133372	688	17.9721	19.018
64QAM	133222	673	17.9943	19.913
64QAM	133297	680.5	18.0123	20.570
64QAM	133372	688	17.9986	18.778
256QAM	133222	673	18.0250	25.487
256QAM	133297	680.5	18.0549	28.685
256QAM	133372	688	18.0490	26.365

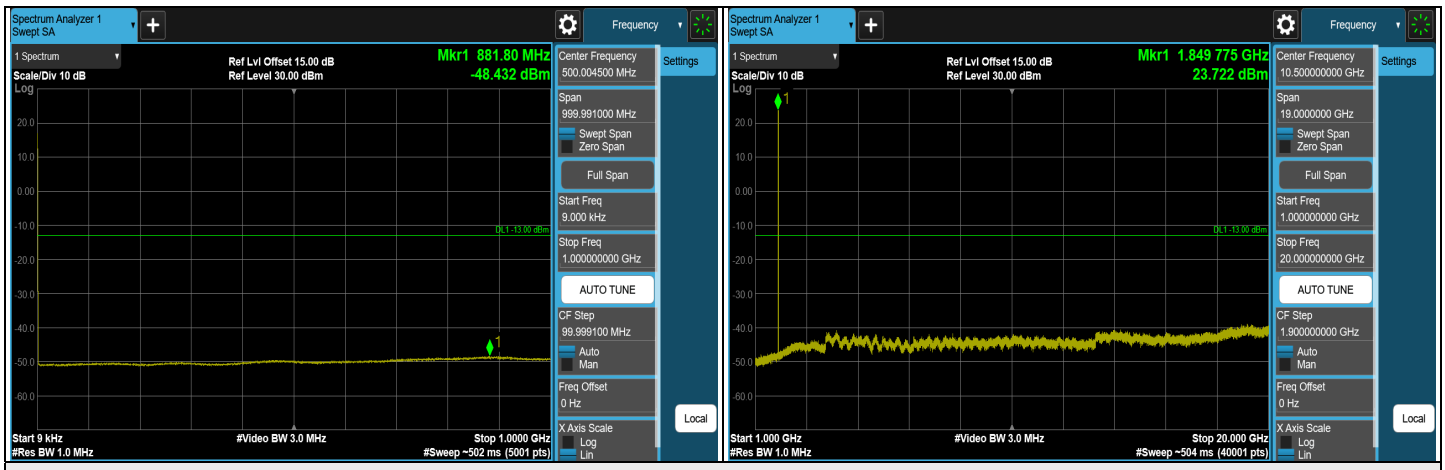
Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 133297 (680.5 MHz)	256QAM CH 133297 (680.5 MHz)

7.5 Conducted Spurious Emissions

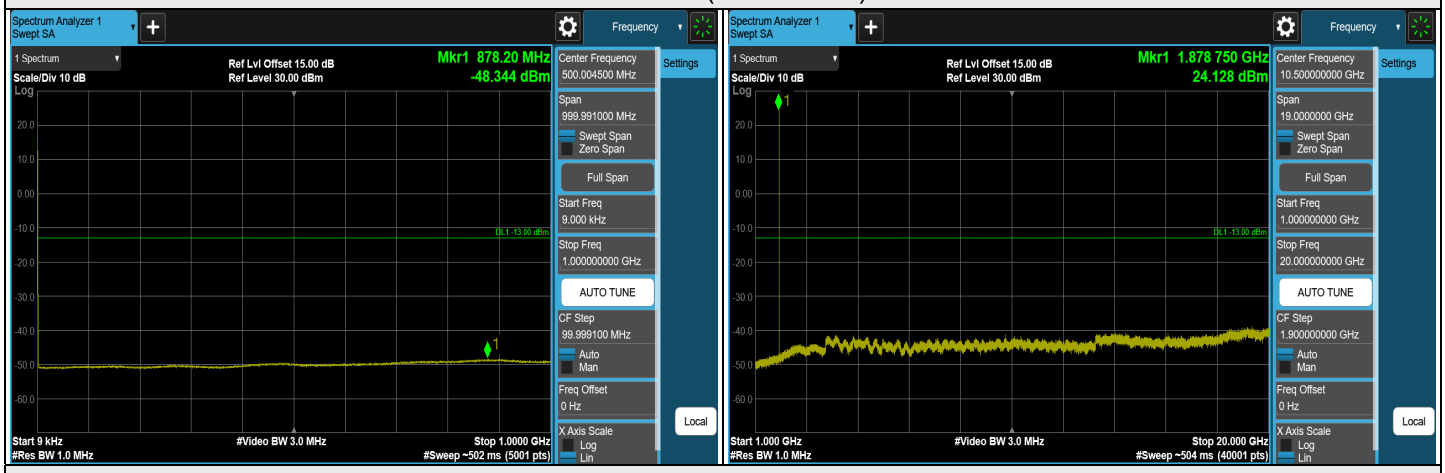
Input Power:	3.87 Vdc	Environmental Conditions:	20°C, 72% RH	Tested By:	Willy Cheng

7.5.1 LTE Band 2

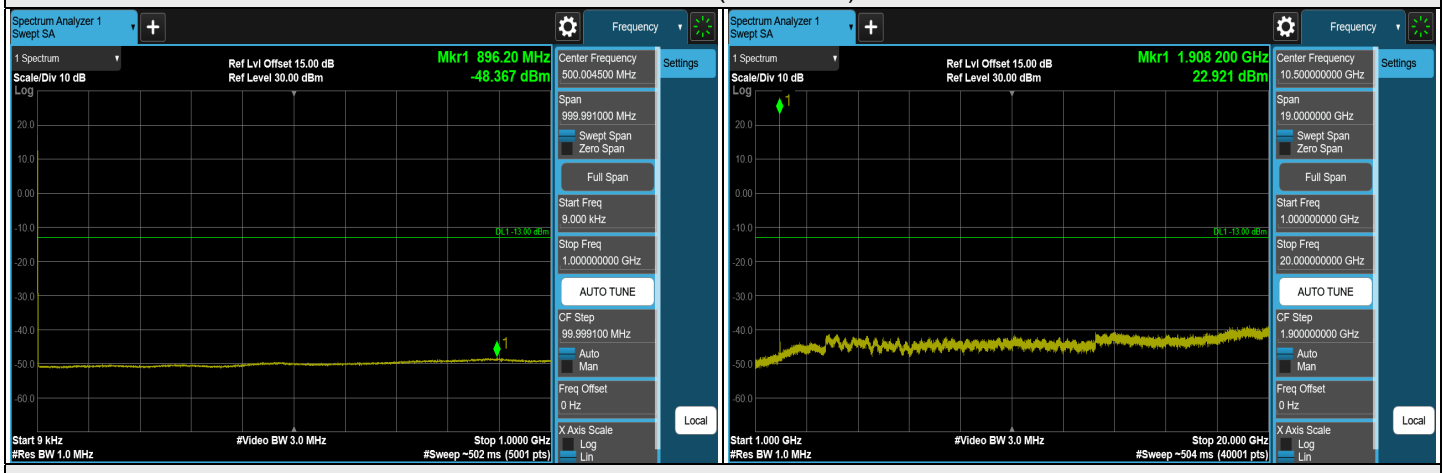
LTE Band 2 - Ant 0, Channel Bandwidth: 1.4 MHz



CH 18607 (1850.7 MHz)



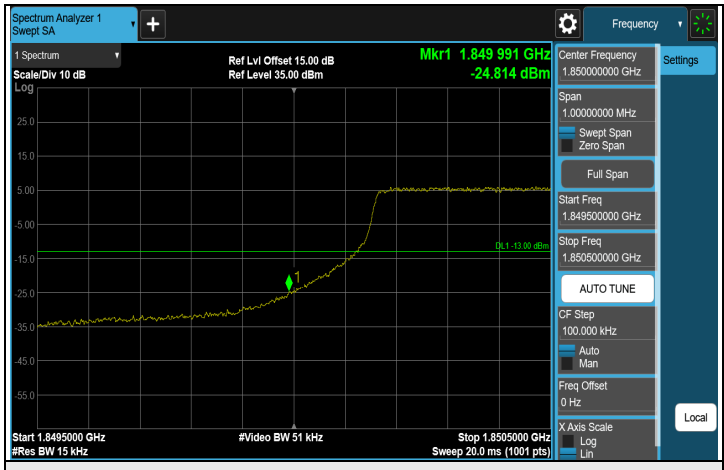
CH 18900 (1880 MHz)



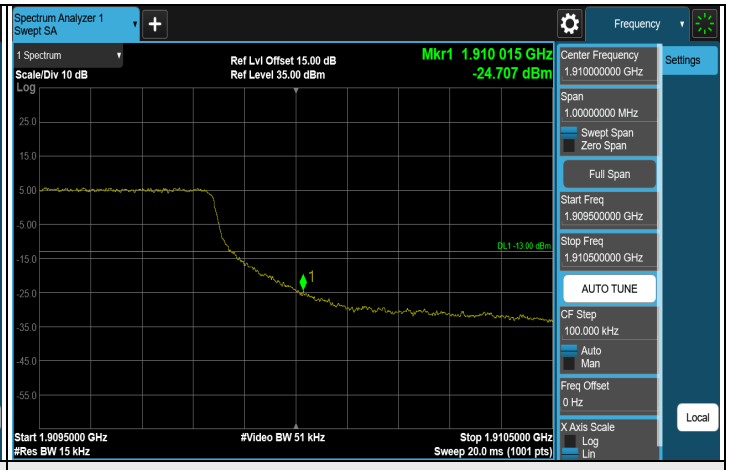
CH 19193 (1909.3 MHz)

Note: The signal at 9 kHz is IF signal from spectrum analyzer.

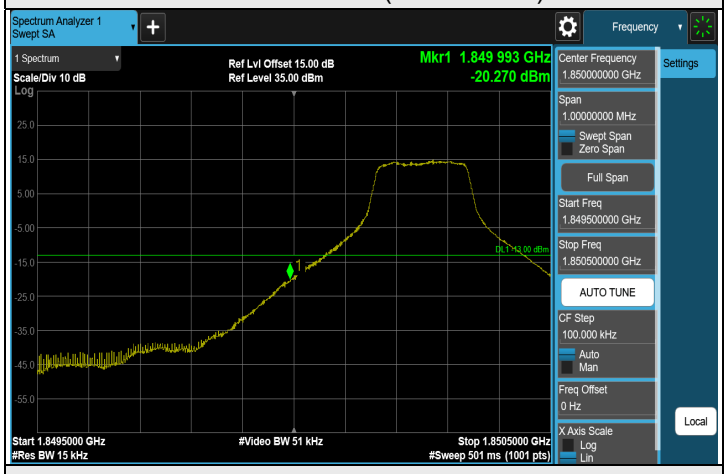
LTE Band 2 - Ant 0, Channel Bandwidth: 1.4 MHz



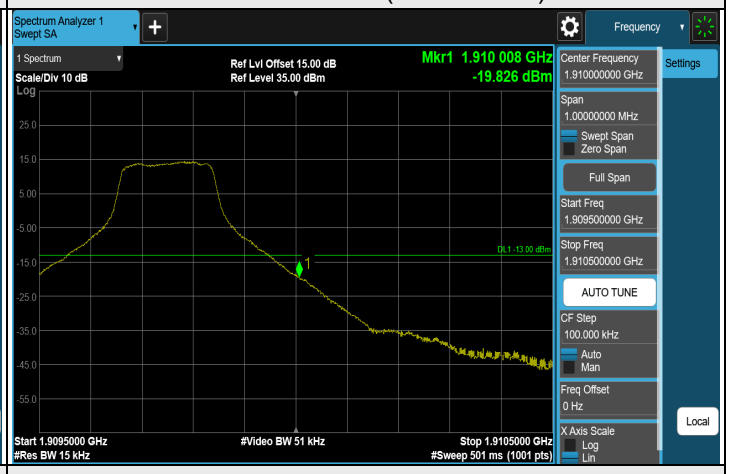
FULL CH 18607 (1850.7 MHz)



FULL CH 19193 (1909.3 MHz)

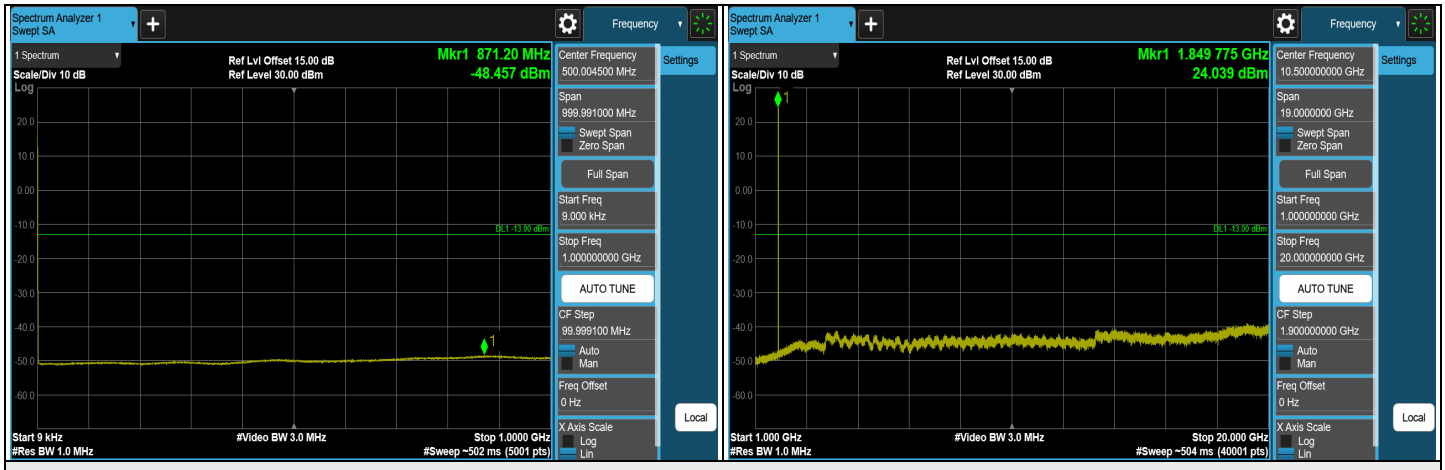


1RB CH 18607 (1850.7 MHz)

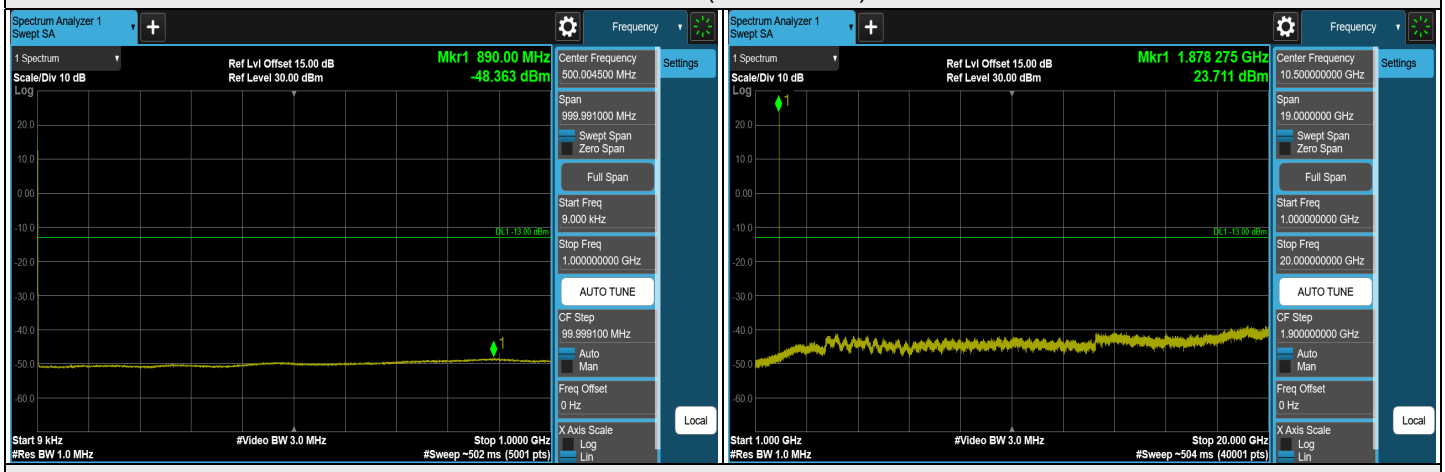


1RB CH 19193 (1909.3 MHz)

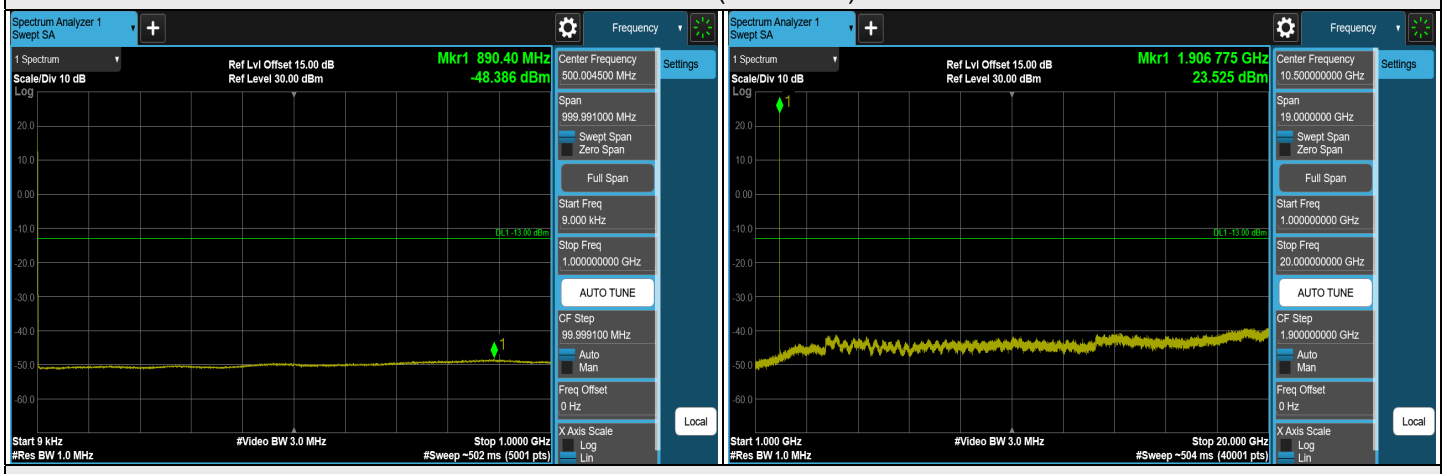
LTE Band 2 - Ant 0, Channel Bandwidth: 3 MHz



CH 18615 (1851.5 MHz)



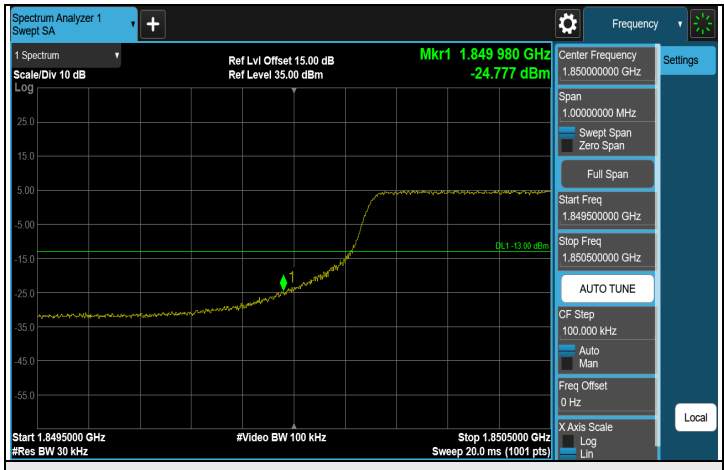
CH 18900 (1880 MHz)



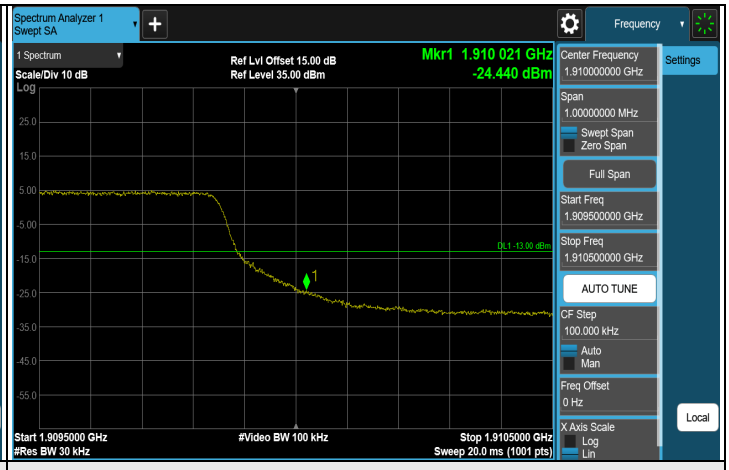
CH 19185 (1908.5 MHz)

Note: The signal at 9 kHz is IF signal from spectrum analyzer.

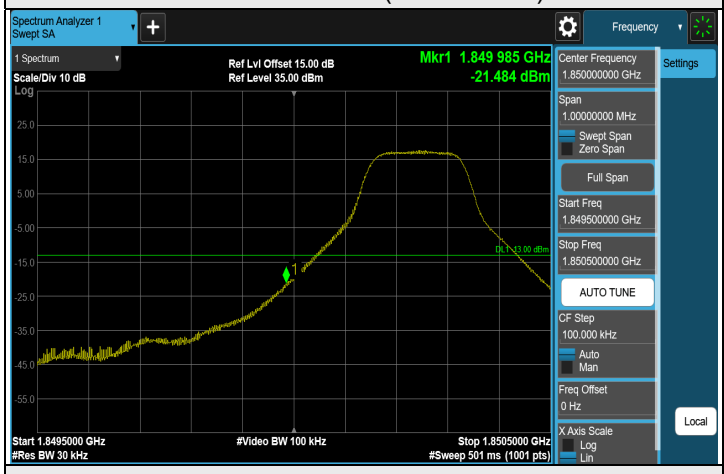
LTE Band 2 - Ant 0, Channel Bandwidth: 3 MHz



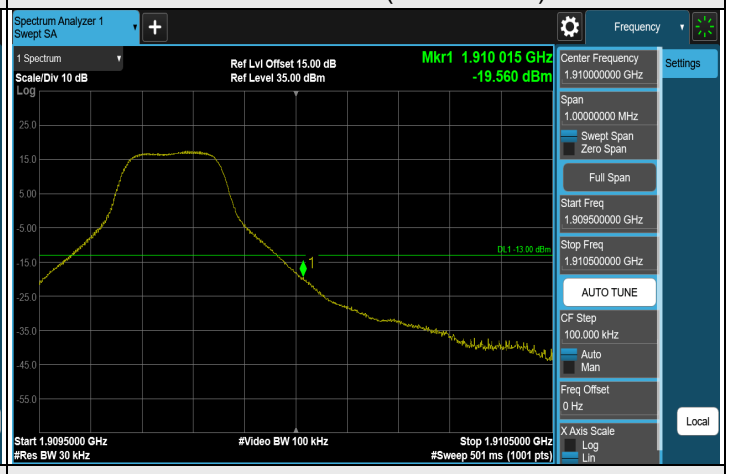
FULL CH 18615 (1851.5 MHz)



FULL CH 19185 (1908.5 MHz)

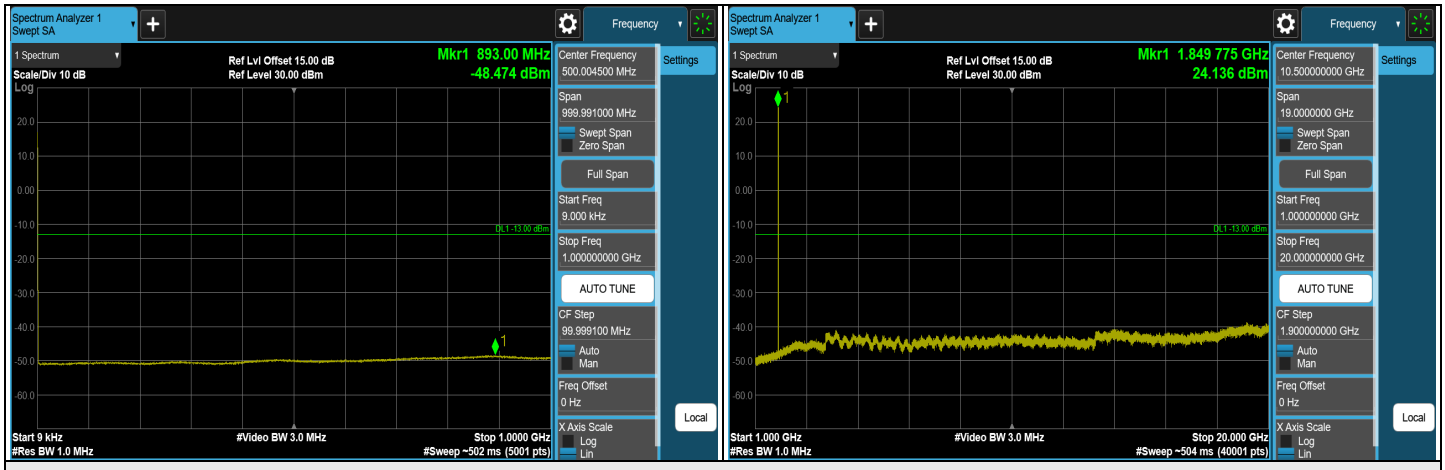


1RB CH 18615 (1851.5 MHz)

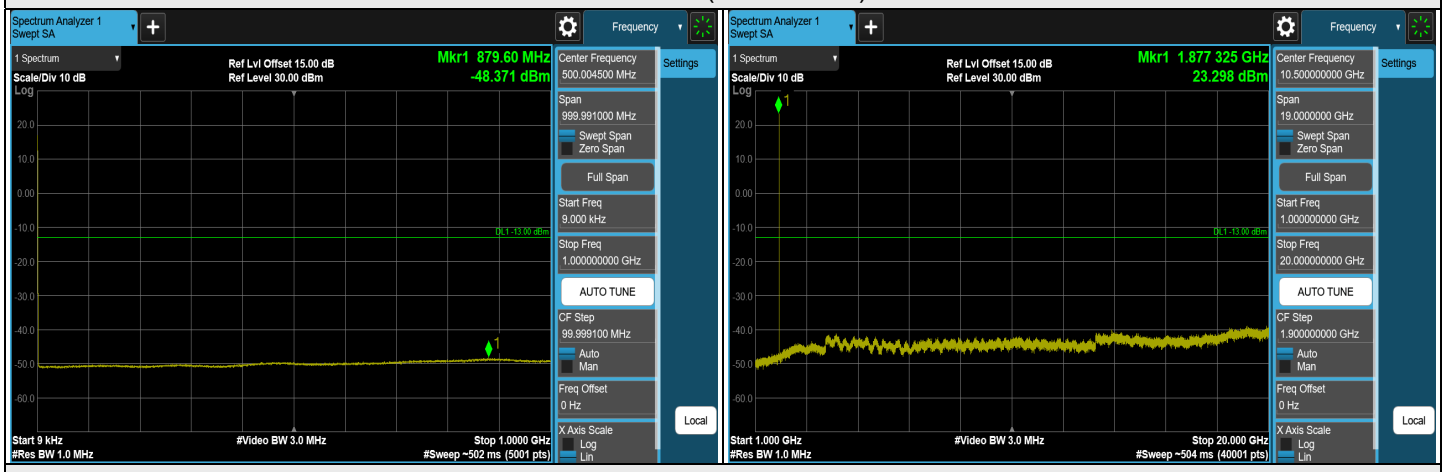


1RB CH 19185 (1908.5 MHz)

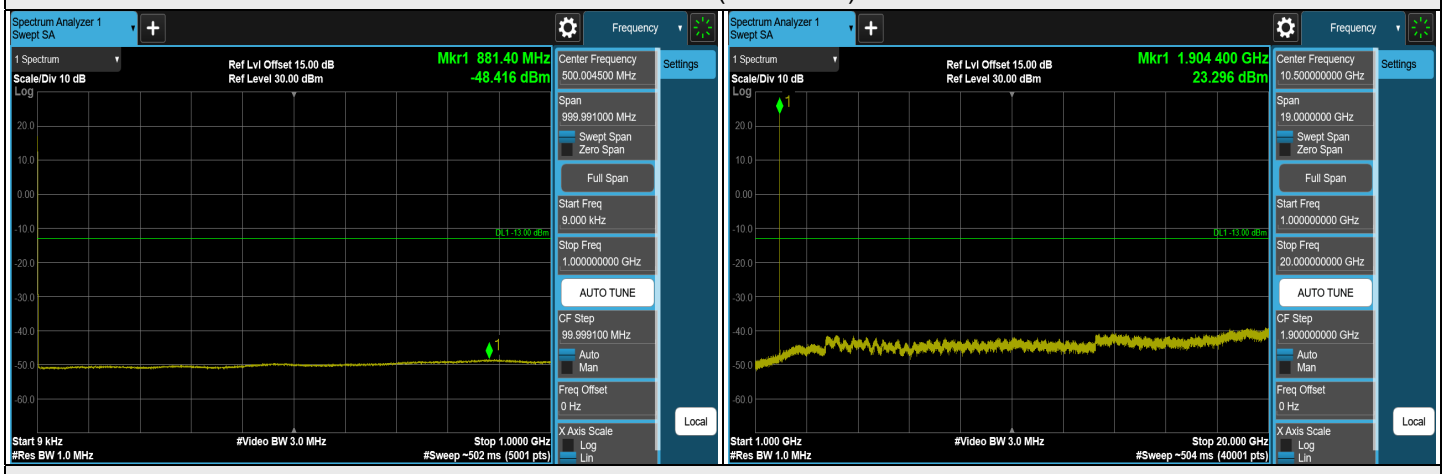
LTE Band 2 - Ant 0, Channel Bandwidth: 5 MHz



CH 18625 (1852.5 MHz)



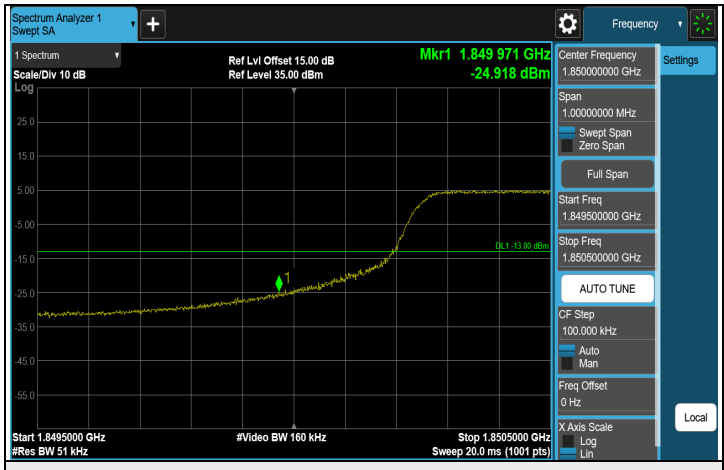
CH 18900 (1880 MHz)



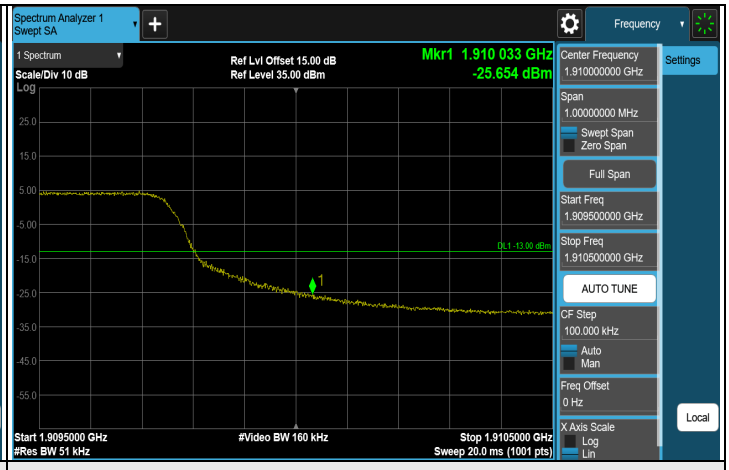
CH 19175 (1907.5 MHz)

Note: The signal at 9 kHz is IF signal from spectrum analyzer.

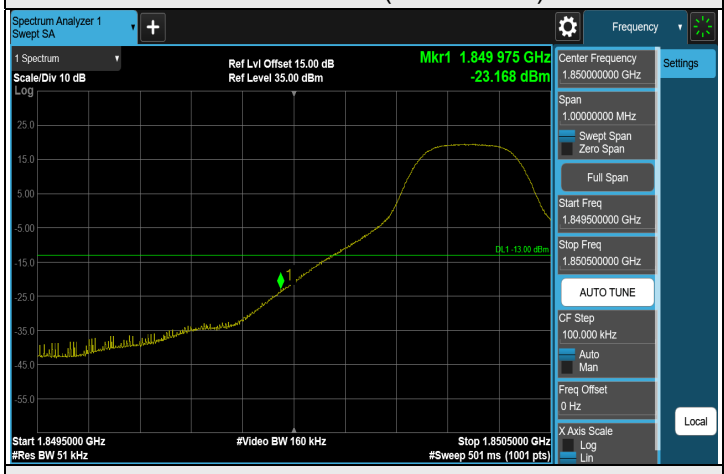
LTE Band 2 - Ant 0, Channel Bandwidth: 5 MHz



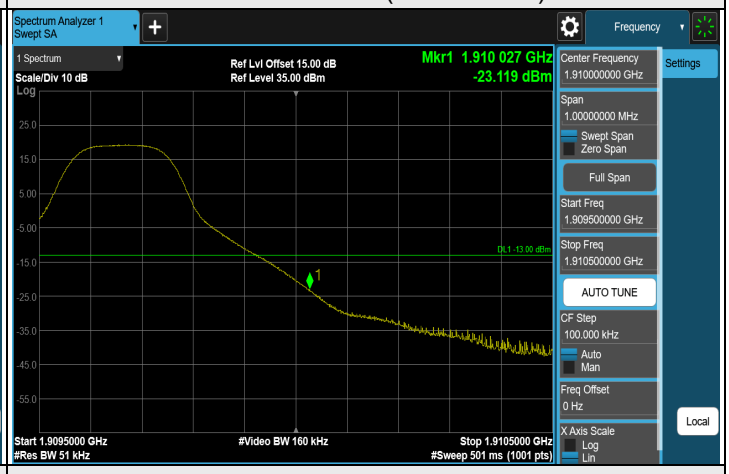
FULL CH 18625 (1852.5 MHz)



FULL CH 19175 (1907.5 MHz)

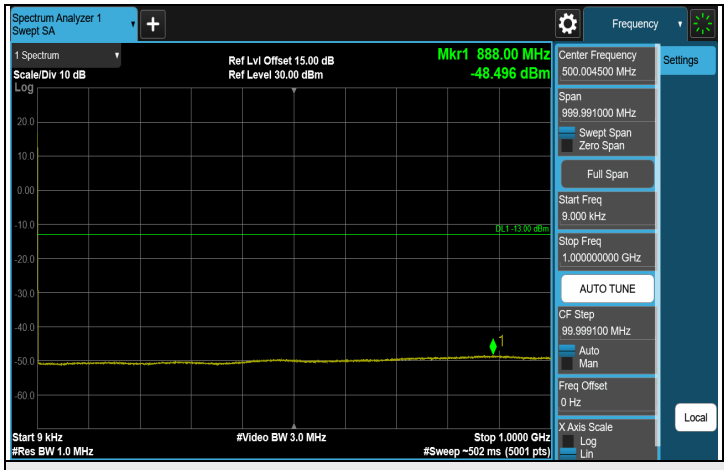


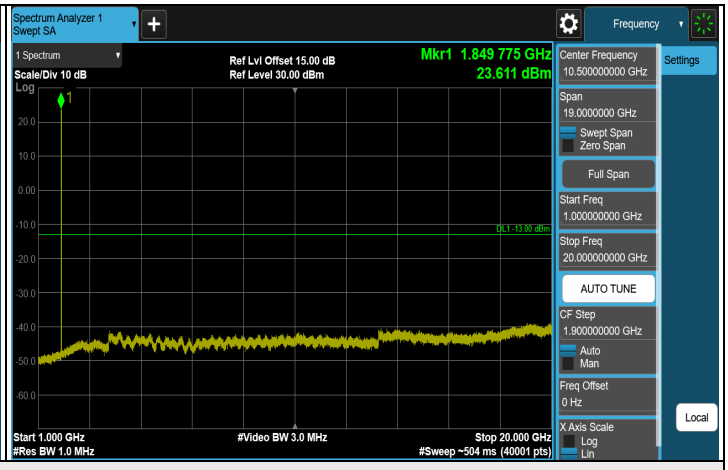
1RB CH 18625 (1852.5 MHz)



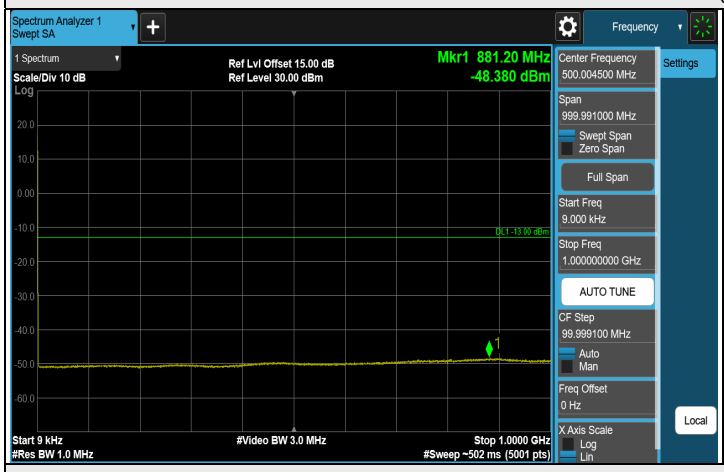
1RB CH 19175 (1907.5 MHz)

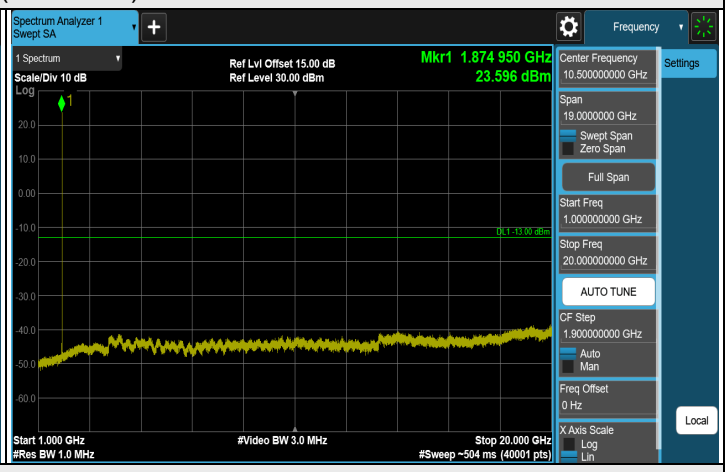
LTE Band 2 - Ant 0, Channel Bandwidth: 10 MHz



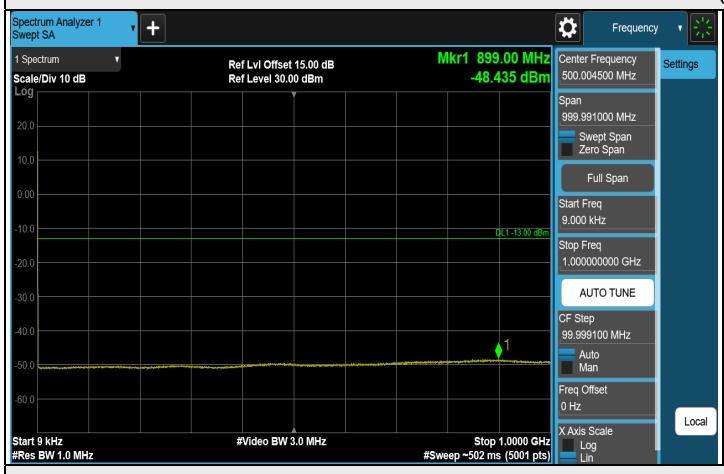


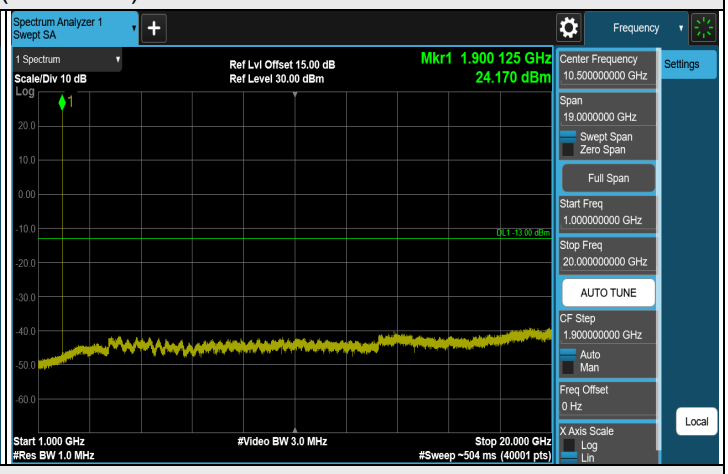
CH 18650 (1855 MHz)





CH 18900 (1880 MHz)

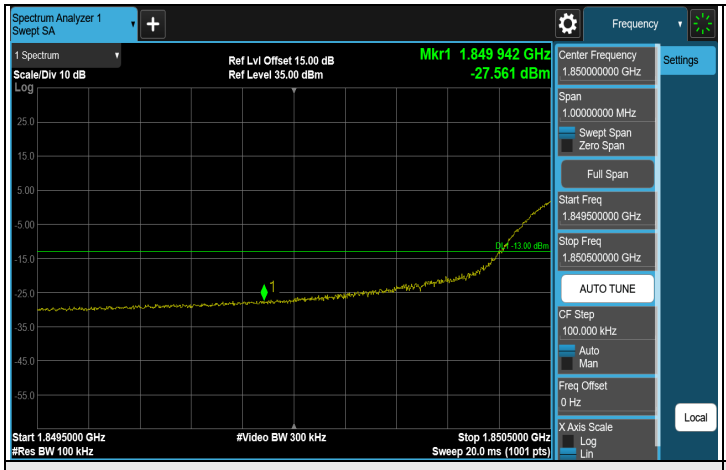




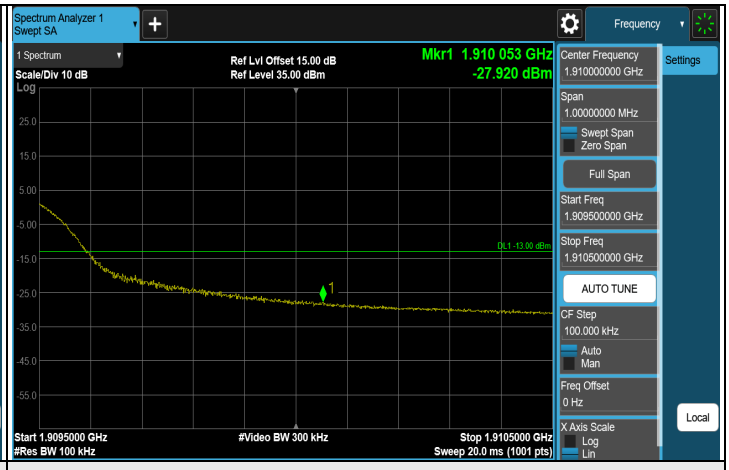
CH 19150 (1905 MHz)

Note: The signal at 9 kHz is IF signal from spectrum analyzer.

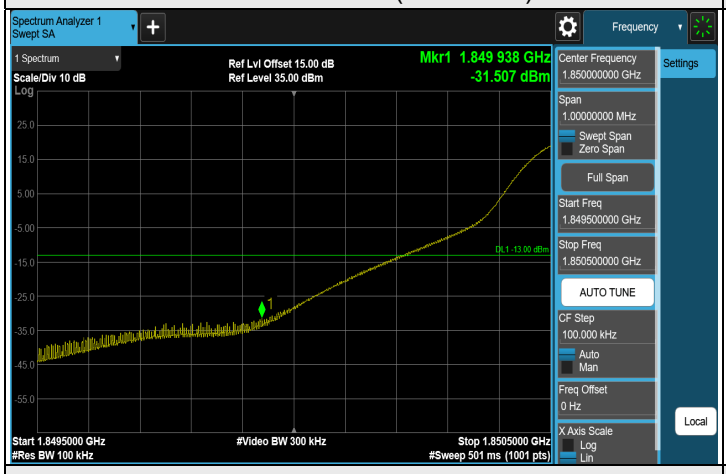
LTE Band 2 - Ant 0, Channel Bandwidth: 10 MHz



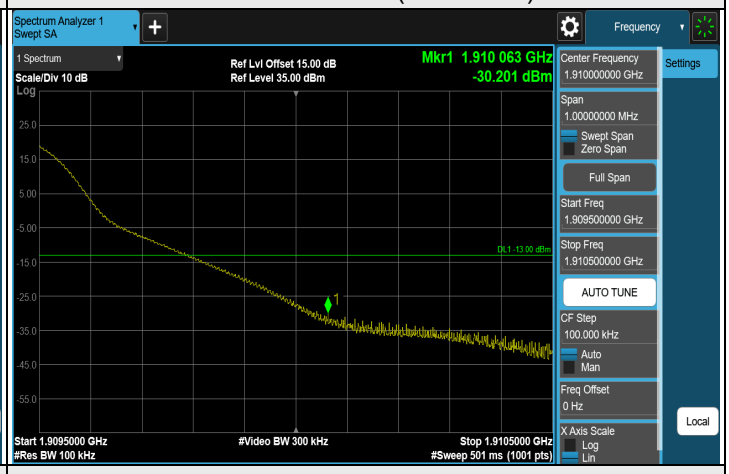
FULL CH 18650 (1855 MHz)



FULL CH 19150 (1905 MHz)

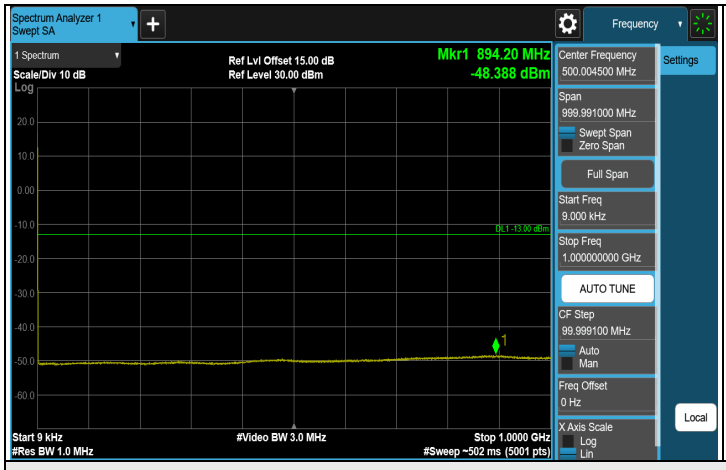


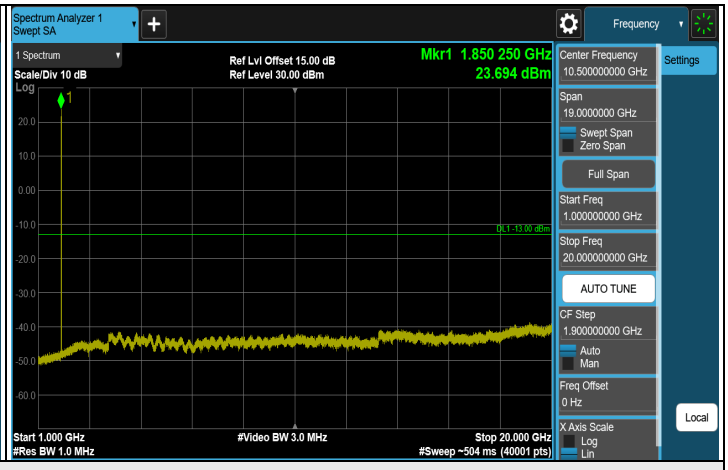
1RB CH 18650 (1855 MHz)



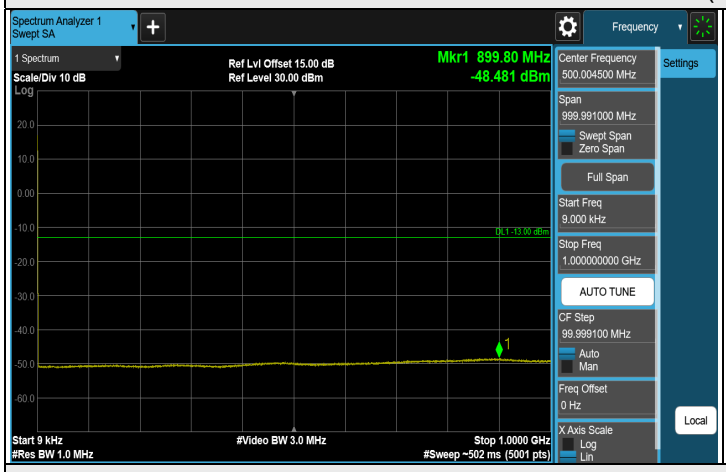
1RB CH 19150 (1905 MHz)

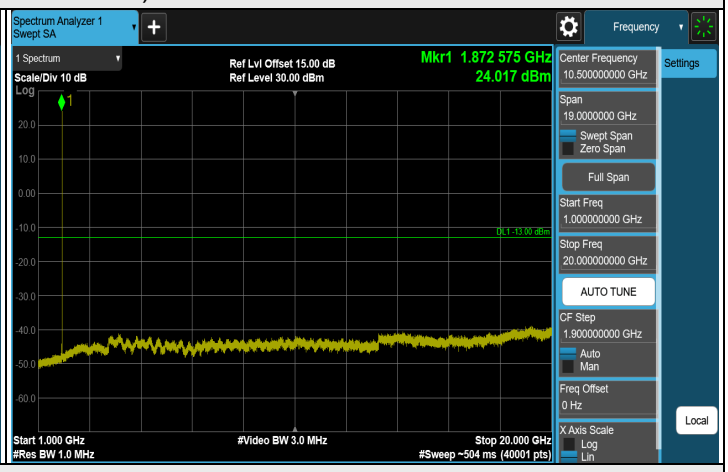
LTE Band 2 - Ant 0, Channel Bandwidth: 15 MHz



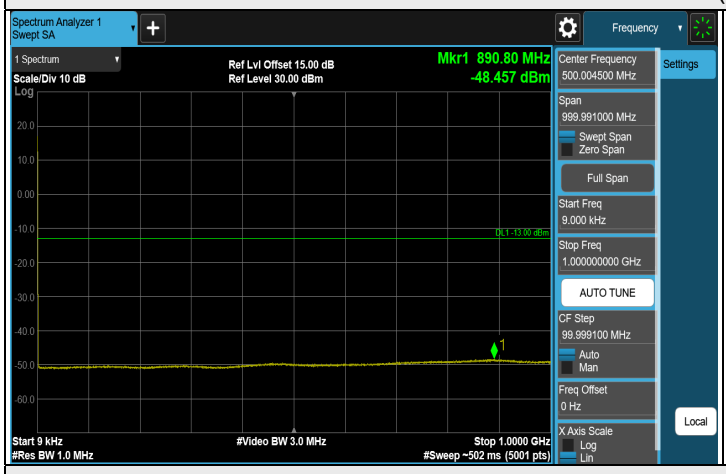


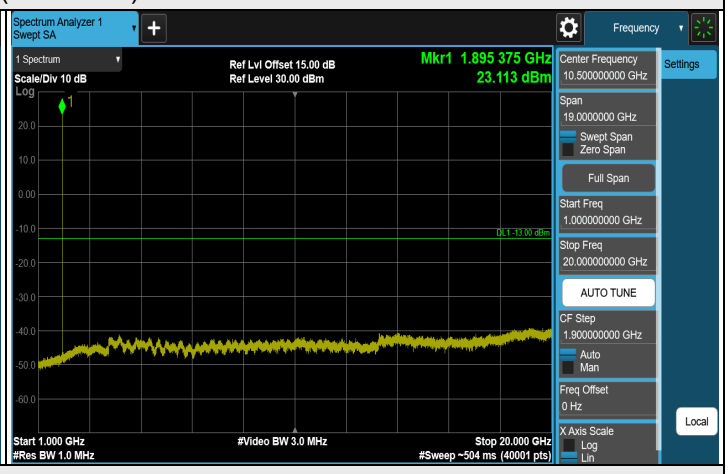
CH 18675 (1857.5 MHz)





CH 18900 (1880 MHz)

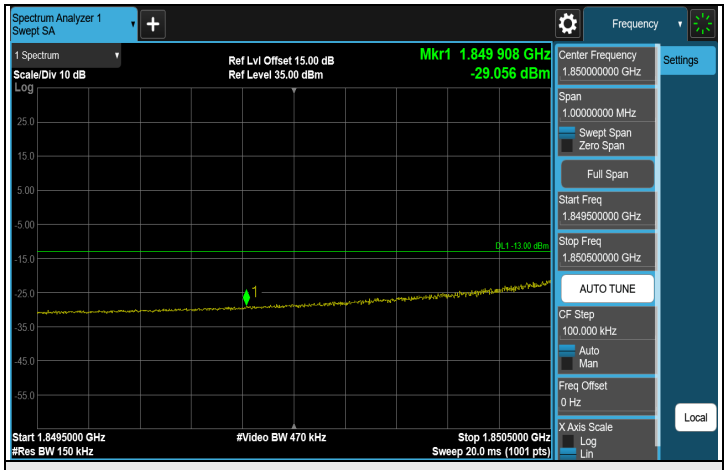




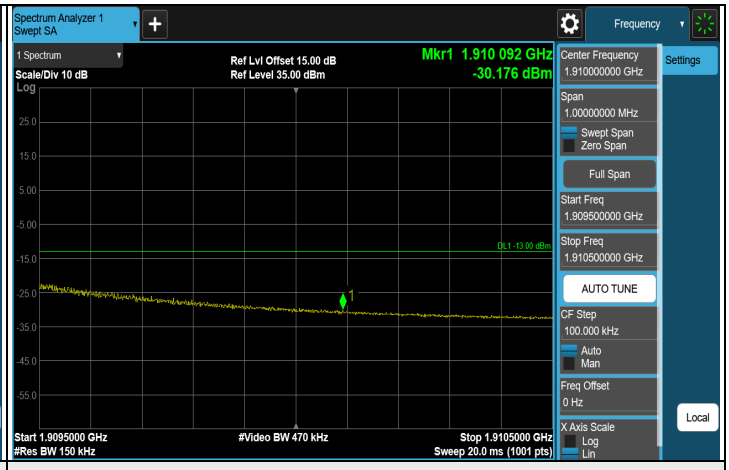
CH 19125 (1902.5 MHz)

Note: The signal at 9 kHz is IF signal from spectrum analyzer.

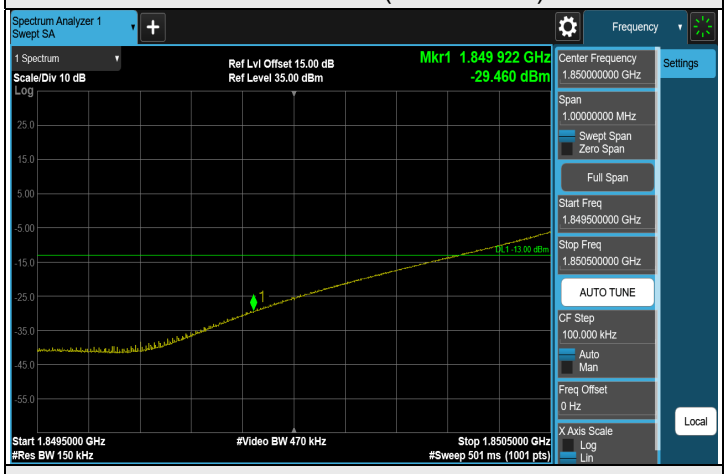
LTE Band 2 - Ant 0, Channel Bandwidth: 15 MHz



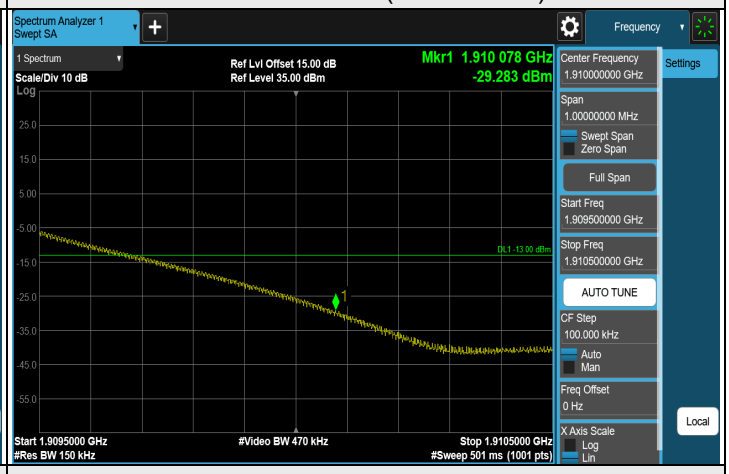
FULL CH 18675 (1857.5 MHz)



FULL CH 19125 (1902.5 MHz)

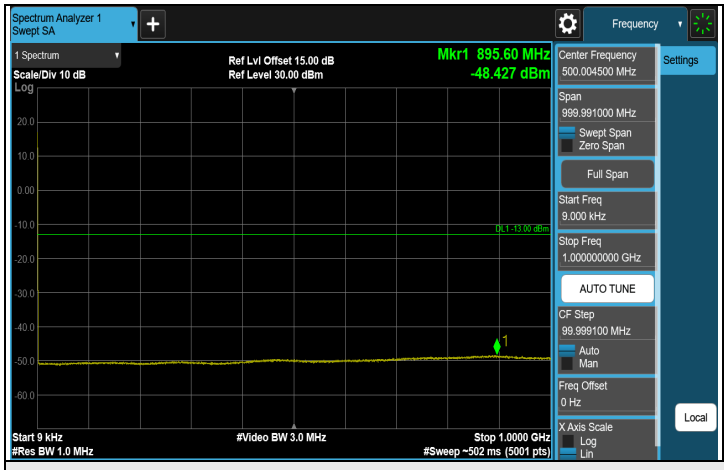


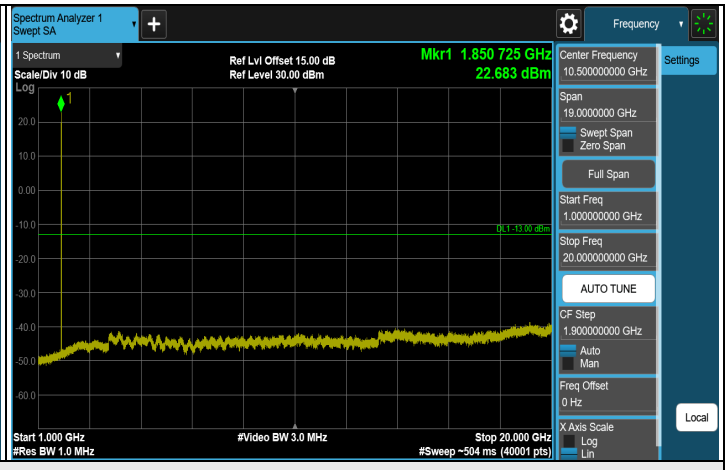
1RB CH 18675 (1857.5 MHz)



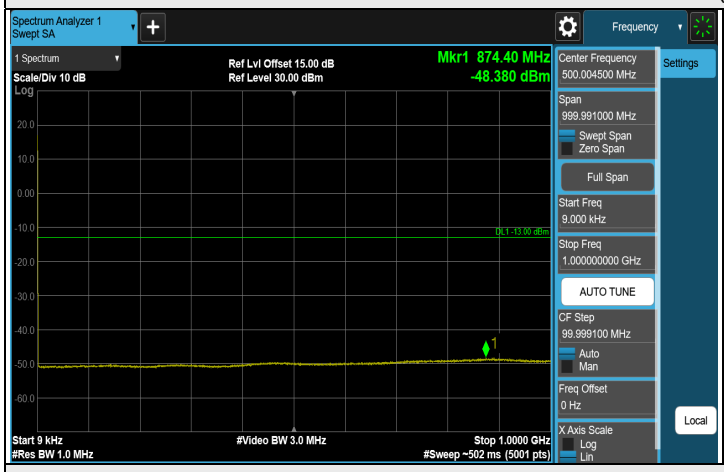
1RB CH 19125 (1902.5 MHz)

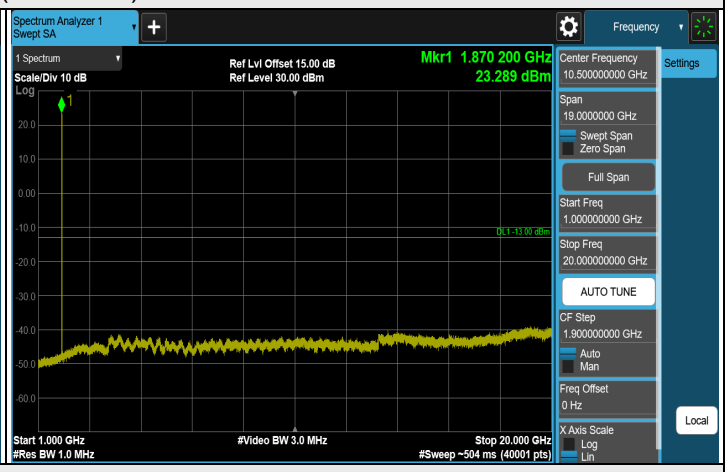
LTE Band 2 - Ant 0, Channel Bandwidth: 20 MHz



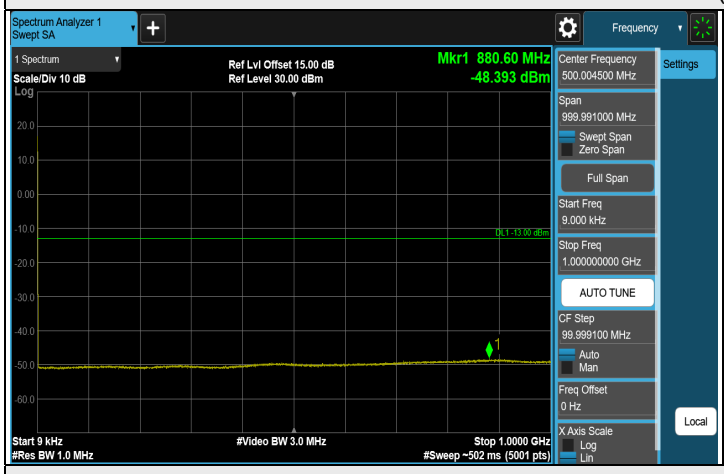


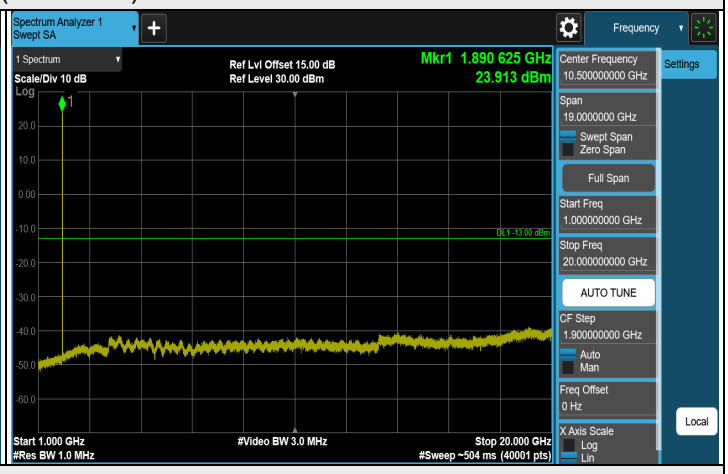
CH 18700 (1860 MHz)





CH 18900 (1880 MHz)





CH 19100 (1900 MHz)

Note: The signal at 9 kHz is IF signal from spectrum analyzer.