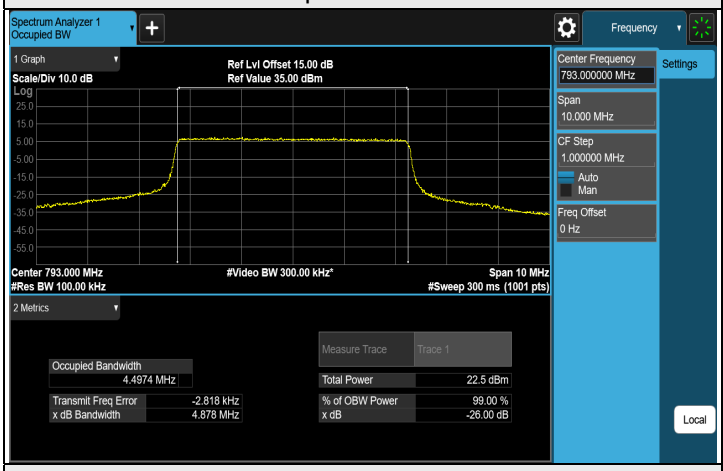
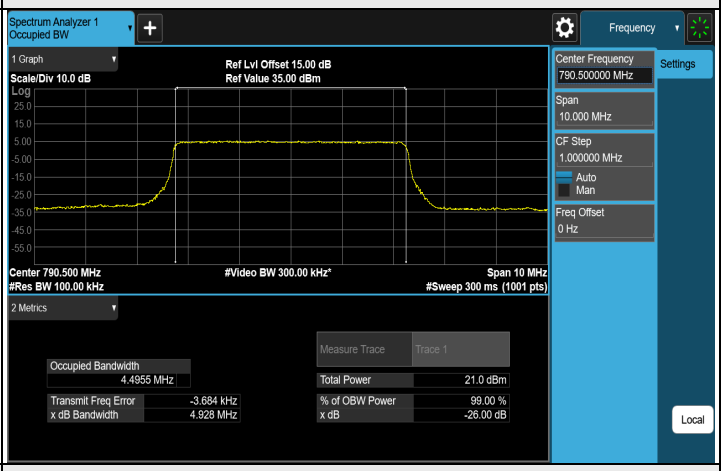
7.4.6 LTE Band 14

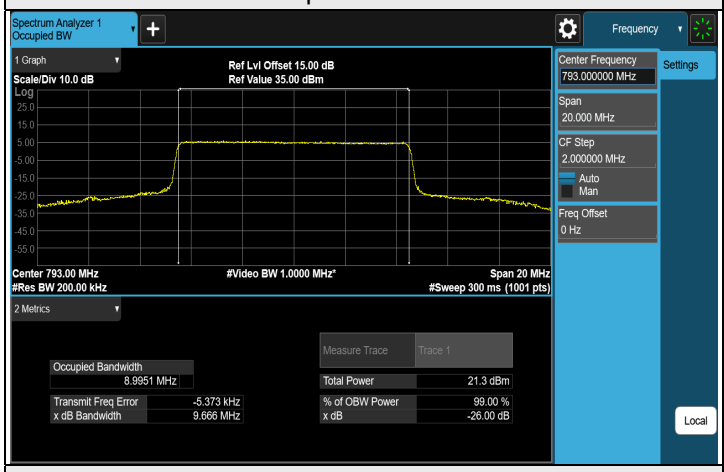
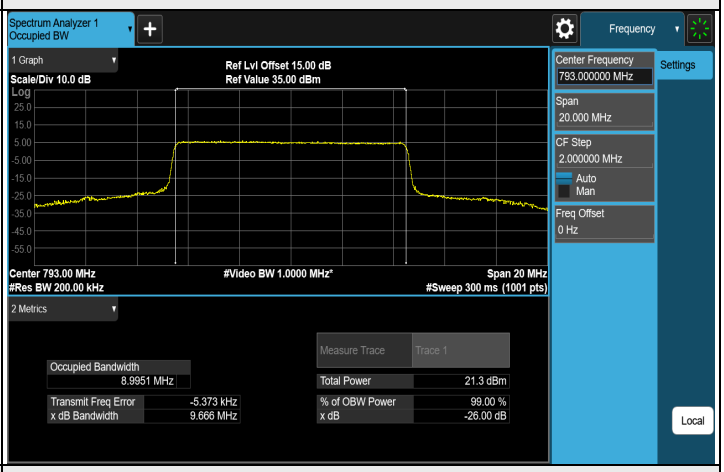
LTE Band 14, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	23305	790.5	4.4935	4.893
QPSK	23330	793	4.4974	4.878
QPSK	23355	795.5	4.4959	4.910
16QAM	23305	790.5	4.4919	4.904
16QAM	23330	793	4.4945	4.869
16QAM	23355	795.5	4.4943	4.876
64QAM	23305	790.5	4.4955	4.928
64QAM	23330	793	4.4952	4.922
64QAM	23355	795.5	4.4917	4.872
256QAM	23305	790.5	4.4939	4.895
256QAM	23330	793	4.4961	4.852
256QAM	23355	795.5	4.4960	4.895

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 23330 (793 MHz)	64QAM CH 23305 (790.5 MHz)

LTE Band 14, Channel Bandwidth: 10 MHz

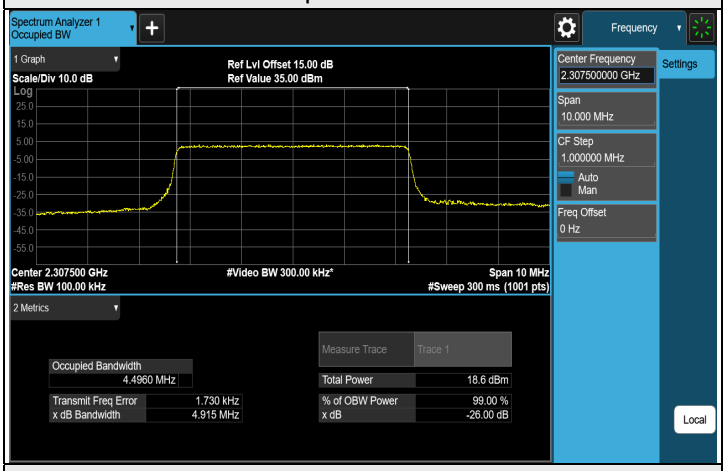
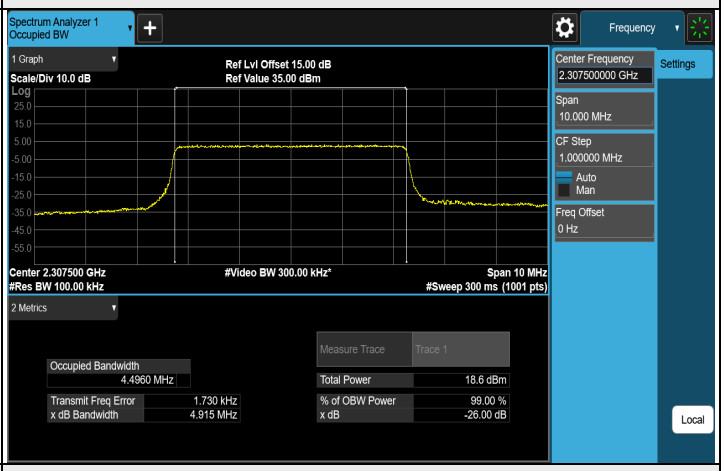
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	23330	793	8.9903	9.646
16QAM	23330	793	8.9951	9.666
64QAM	23330	793	8.9835	9.655
256QAM	23330	793	8.9843	9.588

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16QAM CH 23330 (793 MHz)	16QAM CH 23330 (793 MHz)

7.4.7 LTE Band 30

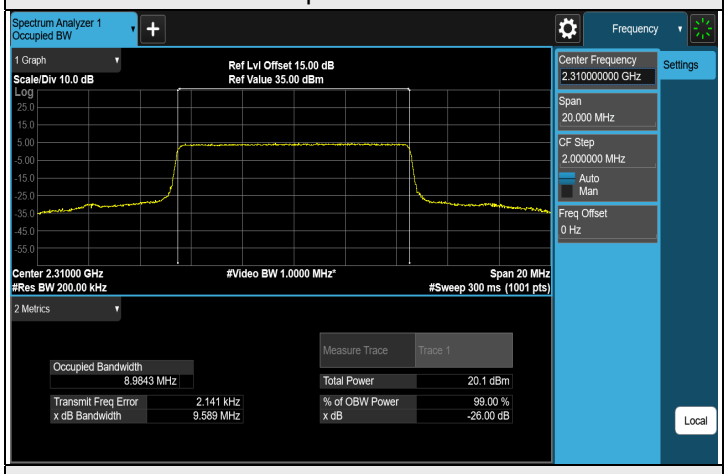
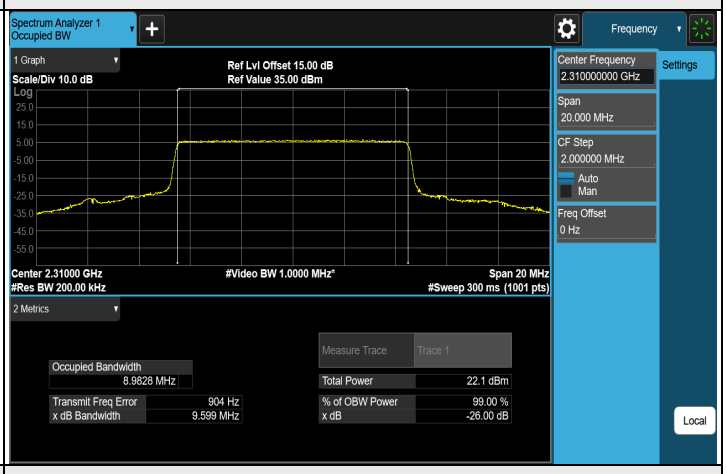
LTE Band 30, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	27685	2307.5	4.4936	4.865
QPSK	27710	2310	4.4953	4.906
QPSK	27735	2312.5	4.4901	4.906
16QAM	27685	2307.5	4.4946	4.879
16QAM	27710	2310	4.4945	4.871
16QAM	27735	2312.5	4.4901	4.874
64QAM	27685	2307.5	4.4921	4.813
64QAM	27710	2310	4.4927	4.901
64QAM	27735	2312.5	4.4902	4.876
256QAM	27685	2307.5	4.4960	4.915
256QAM	27710	2310	4.4932	4.881
256QAM	27735	2312.5	4.4919	4.867

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 27685 (2307.5 MHz)	256QAM CH 27685 (2307.5 MHz)

LTE Band 30, Channel Bandwidth: 10 MHz

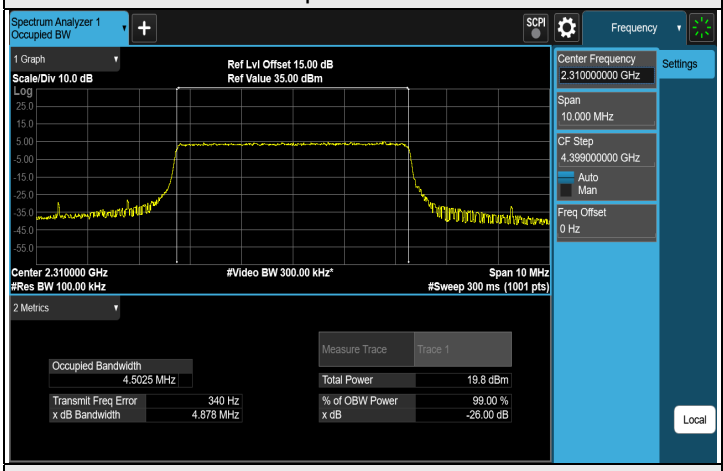
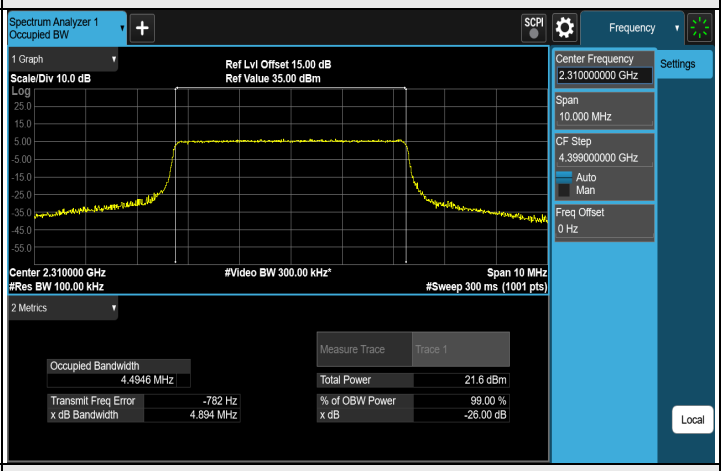
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	27710	2310	8.9828	9.599
16QAM	27710	2310	8.9823	9.586
64QAM	27710	2310	8.9843	9.589
256QAM	27710	2310	8.9814	9.564

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 27710 (2310 MHz)	QPSK CH 27710 (2310 MHz)

7.4.8 LTE Band 40 (2.305 GHz ~ 2.315 GHz)

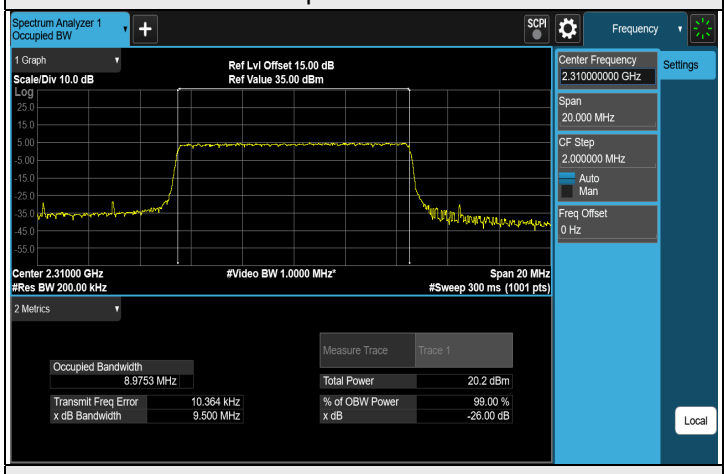
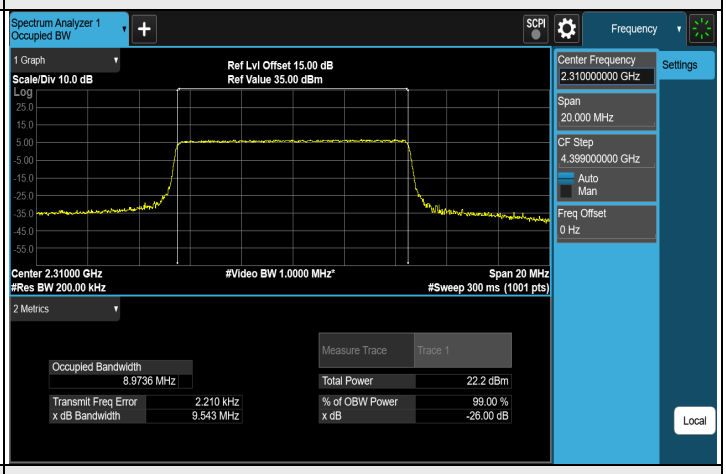
LTE Band 40 (2.305 GHz ~ 2.315 GHz), Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	38725	2307.5	4.4919	4.870
QPSK	38750	2310	4.4756	4.849
QPSK	38775	2312.5	4.4929	4.823
16QAM	38725	2307.5	4.4956	4.871
16QAM	38750	2310	4.4946	4.894
16QAM	38775	2312.5	4.4927	4.846
64QAM	38725	2307.5	4.4880	4.855
64QAM	38750	2310	4.4989	4.892
64QAM	38775	2312.5	4.4962	4.885
256QAM	38725	2307.5	4.4968	4.863
256QAM	38750	2310	4.5025	4.878
256QAM	38775	2312.5	4.4993	4.865

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 38750 (2310 MHz)	16QAM CH 38750 (2310 MHz)

LTE Band 40 (2.305 GHz ~ 2.315 GHz), Channel Bandwidth: 10 MHz

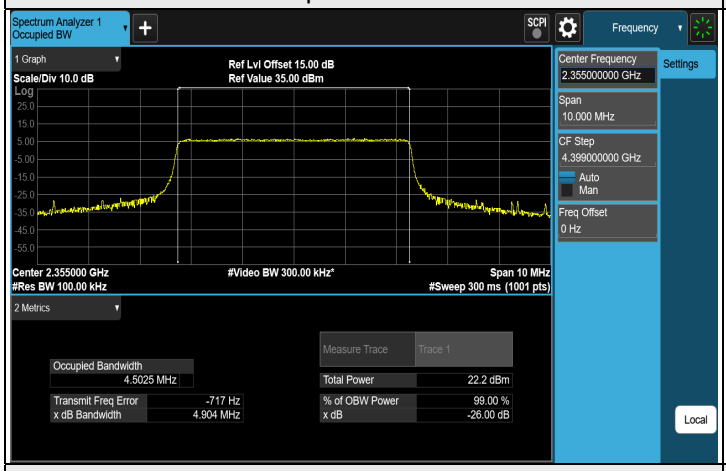
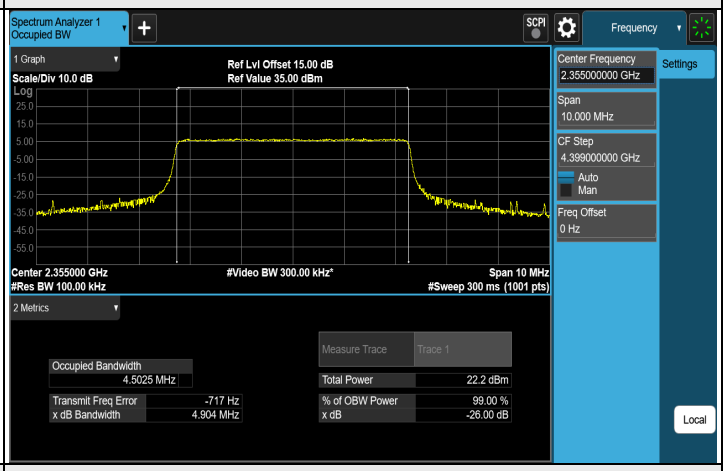
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	38750	2310	8.9675	9.516
16QAM	38750	2310	8.9686	9.532
64QAM	38750	2310	8.9736	9.543
256QAM	38750	2310	8.9753	9.500

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 38750 (2310 MHz)	64QAM CH 38750 (2310 MHz)

7.4.9 LTE Band 40 (2.35 GHz ~ 2.36 GHz)

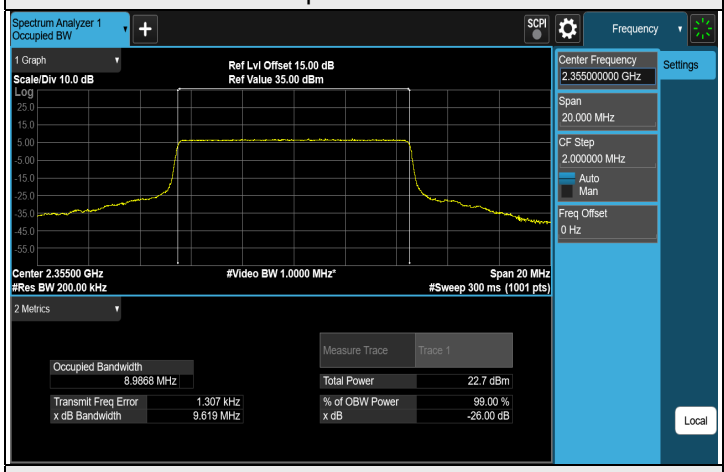
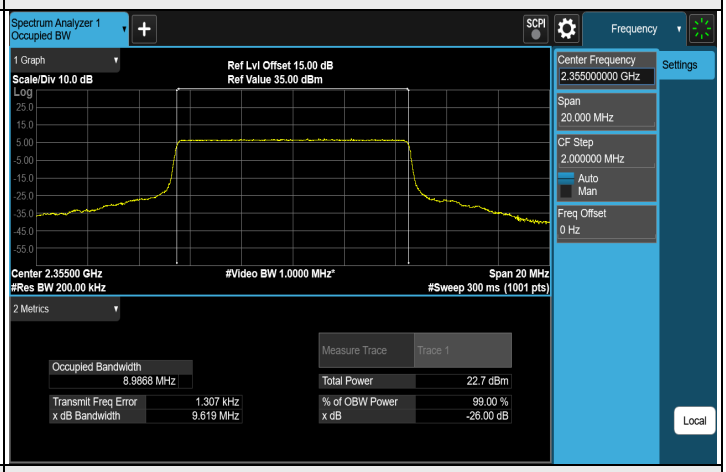
LTE Band 40 (2.35 GHz ~ 2.36 GHz), Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	39175	2352.5	4.4951	4.882
QPSK	39200	2355	4.5007	4.899
QPSK	39225	2357.5	4.4834	4.831
16QAM	39175	2352.5	4.4906	4.838
16QAM	39200	2355	4.4349	4.887
16QAM	39225	2357.5	4.4969	4.903
64QAM	39175	2352.5	4.4992	4.896
64QAM	39200	2355	4.5025	4.904
64QAM	39225	2357.5	4.4986	4.890
256QAM	39175	2352.5	4.5014	4.880
256QAM	39200	2355	4.4958	4.840
256QAM	39225	2357.5	4.4882	4.862

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 39200 (2355 MHz)	64QAM CH 39200 (2355 MHz)

LTE Band 40 (2.35 GHz ~ 2.36 GHz), Channel Bandwidth: 10 MHz

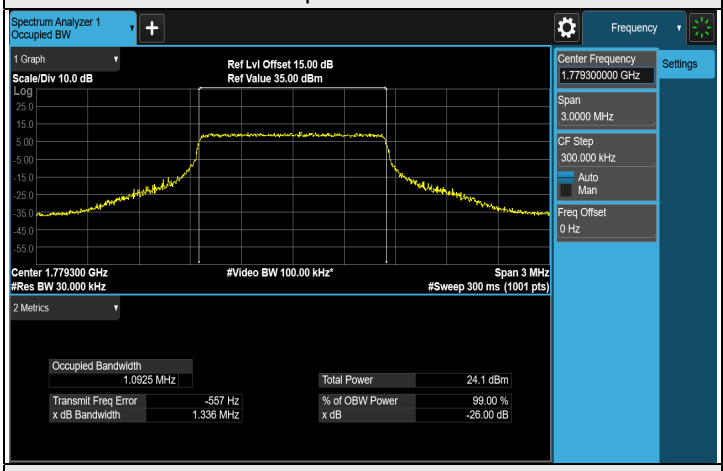
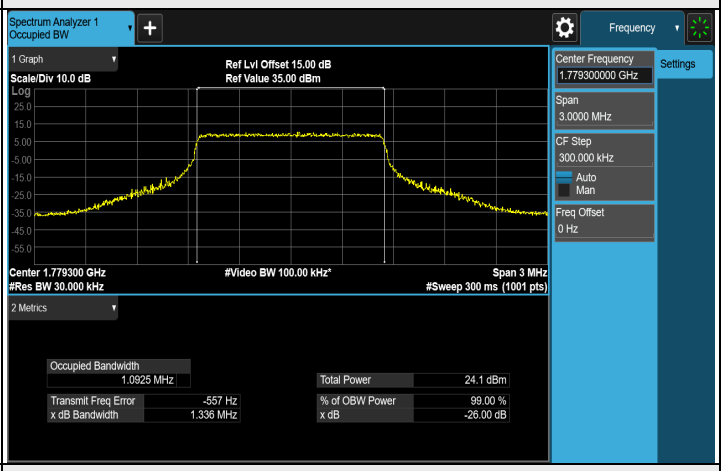
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	39200	2355	8.9868	9.619
16QAM	39200	2355	8.9711	9.533
64QAM	39200	2355	8.9747	9.570
256QAM	39200	2355	8.9686	9.534

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 39200 (2355 MHz)	QPSK CH 39200 (2355 MHz)

7.4.10 LTE Band 66

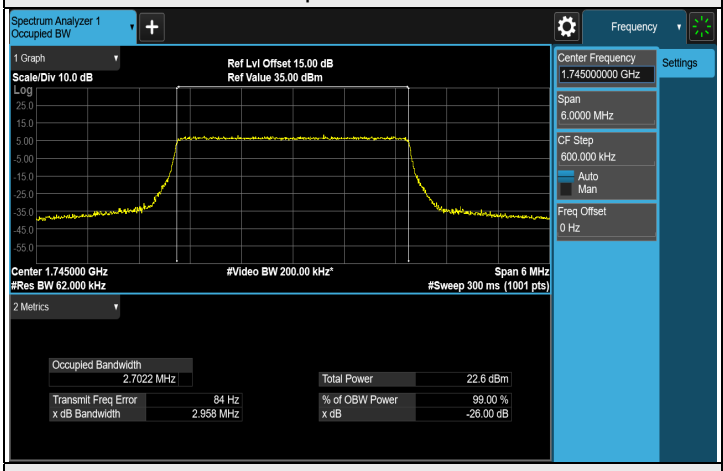
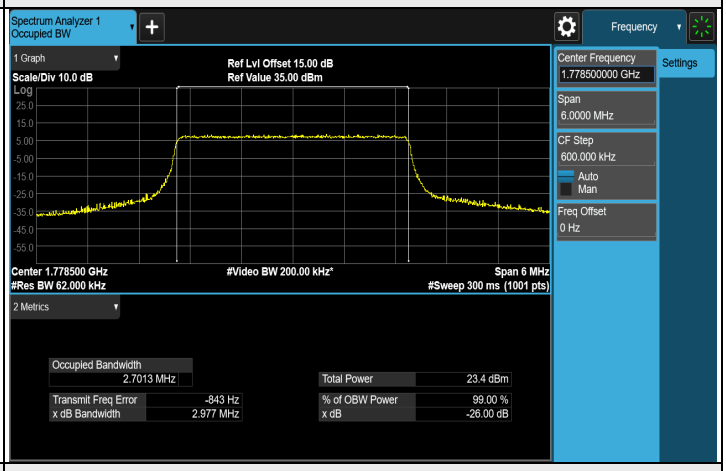
LTE Band 66, Channel Bandwidth: 1.4 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	131979	1710.7	1.0912	1.321
QPSK	132322	1745	1.0906	1.324
QPSK	132665	1779.3	1.0917	1.320
16QAM	131979	1710.7	1.0917	1.329
16QAM	132322	1745	1.0918	1.327
16QAM	132665	1779.3	1.0925	1.336
64QAM	131979	1710.7	1.0923	1.297
64QAM	132322	1745	1.0913	1.301
64QAM	132665	1779.3	1.0918	1.286
256QAM	131979	1710.7	1.0877	1.311
256QAM	132322	1745	1.0900	1.287
256QAM	132665	1779.3	1.0912	1.310

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16QAM CH 132665 (1779.3 MHz)	16QAM CH 132665 (1779.3 MHz)

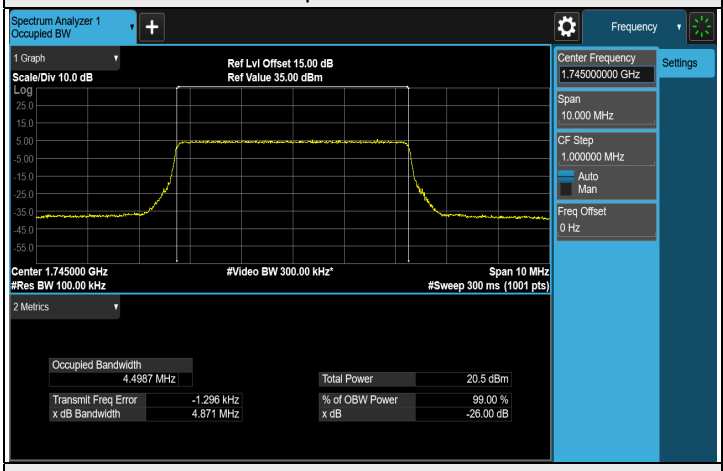
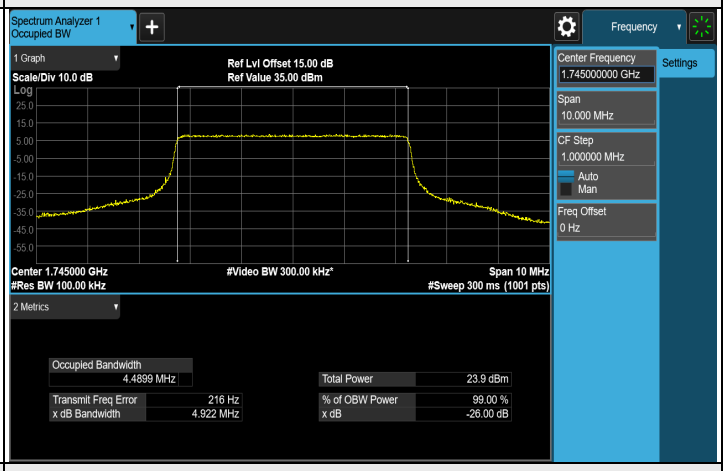
LTE Band 66, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	131987	1711.5	2.6995	2.961
QPSK	132322	1745	2.7008	2.943
QPSK	132657	1778.5	2.6983	2.950
16QAM	131987	1711.5	2.7007	2.956
16QAM	132322	1745	2.7011	2.972
16QAM	132657	1778.5	2.7013	2.977
64QAM	131987	1711.5	2.6985	2.968
64QAM	132322	1745	2.7022	2.958
64QAM	132657	1778.5	2.6997	2.971
256QAM	131987	1711.5	2.7008	2.935
256QAM	132322	1745	2.6970	2.945
256QAM	132657	1778.5	2.7006	2.935

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 132322 (1745 MHz)	16QAM CH 132657 (1778.5 MHz)

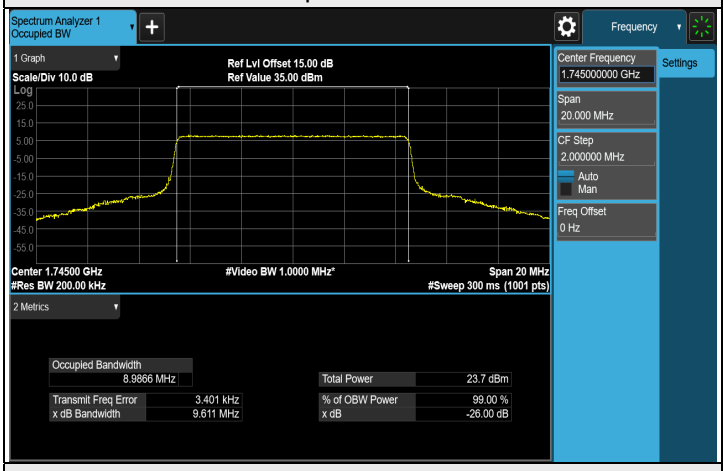
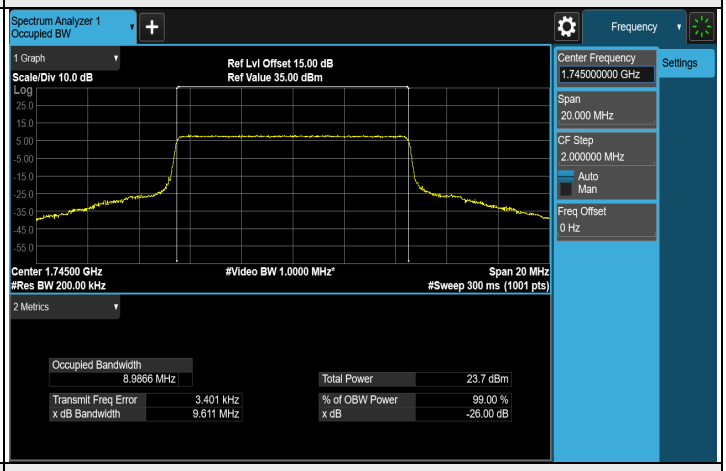
LTE Band 66, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	131997	1712.5	4.4936	4.855
QPSK	132322	1745	4.4899	4.922
QPSK	132647	1777.5	4.4948	4.885
16QAM	131997	1712.5	4.4927	4.908
16QAM	132322	1745	4.4979	4.904
16QAM	132647	1777.5	4.4959	4.896
64QAM	131997	1712.5	4.4943	4.855
64QAM	132322	1745	4.4930	4.886
64QAM	132647	1777.5	4.4975	4.921
256QAM	131997	1712.5	4.4954	4.886
256QAM	132322	1745	4.4987	4.871
256QAM	132647	1777.5	4.4975	4.859

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

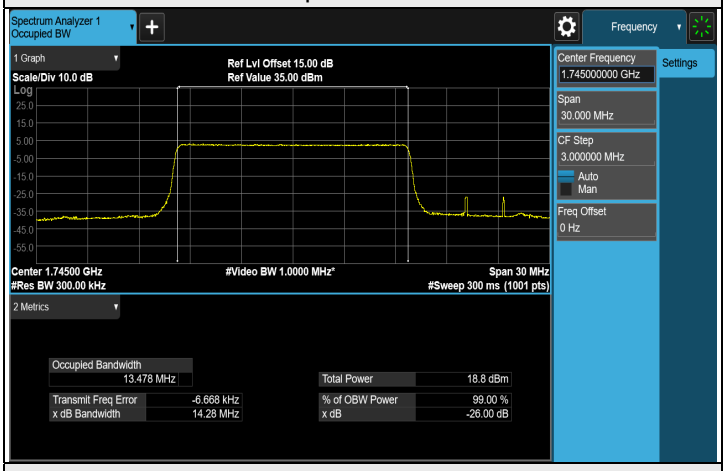
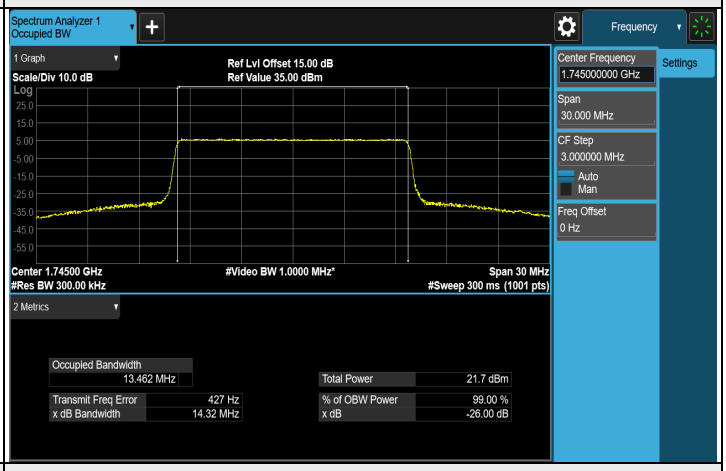
LTE Band 66, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	132022	1715	8.9792	9.573
QPSK	132322	1745	8.9866	9.611
QPSK	132622	1775	8.9863	9.581
16QAM	132022	1715	8.9852	9.575
16QAM	132322	1745	8.9800	9.553
16QAM	132622	1775	8.9837	9.568
64QAM	132022	1715	8.9783	9.552
64QAM	132322	1745	8.9749	9.544
64QAM	132622	1775	8.9805	9.567
256QAM	132022	1715	8.9743	9.545
256QAM	132322	1745	8.9791	9.559
256QAM	132622	1775	8.9865	9.545

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

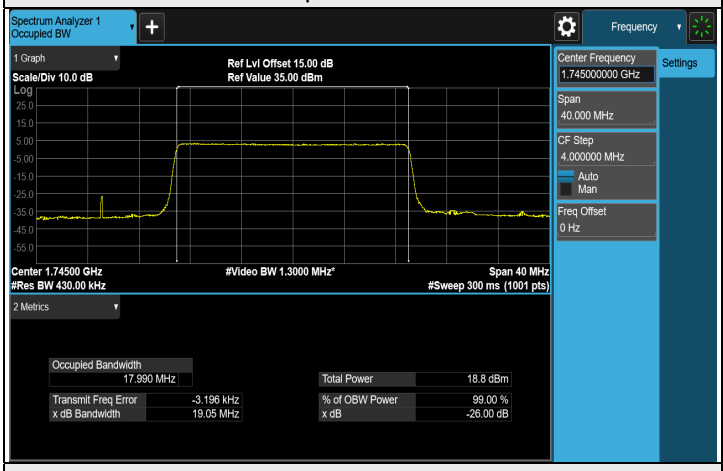
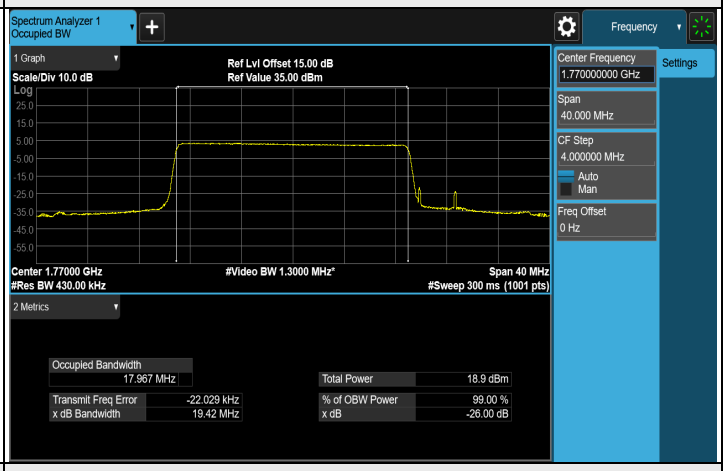
LTE Band 66, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	132047	1717.5	13.4700	14.317
QPSK	132322	1745	13.4718	14.303
QPSK	132597	1772.5	13.4768	14.311
16QAM	132047	1717.5	13.4627	14.281
16QAM	132322	1745	13.4736	14.300
16QAM	132597	1772.5	13.4745	14.318
64QAM	132047	1717.5	13.4655	14.267
64QAM	132322	1745	13.4616	14.321
64QAM	132597	1772.5	13.4739	14.275
256QAM	132047	1717.5	13.4638	14.213
256QAM	132322	1745	13.4777	14.276
256QAM	132597	1772.5	13.4725	14.244

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

LTE Band 66, Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	132072	1720	17.9683	19.074
QPSK	132322	1745	17.9806	19.080
QPSK	132572	1770	17.9681	19.069
16QAM	132072	1720	17.9710	19.065
16QAM	132322	1745	17.9755	19.042
16QAM	132572	1770	17.9715	19.049
64QAM	132072	1720	17.9645	19.036
64QAM	132322	1745	17.9712	19.048
64QAM	132572	1770	17.9612	19.036
256QAM	132072	1720	17.9727	19.004
256QAM	132322	1745	17.9902	19.046
256QAM	132572	1770	17.9674	19.421

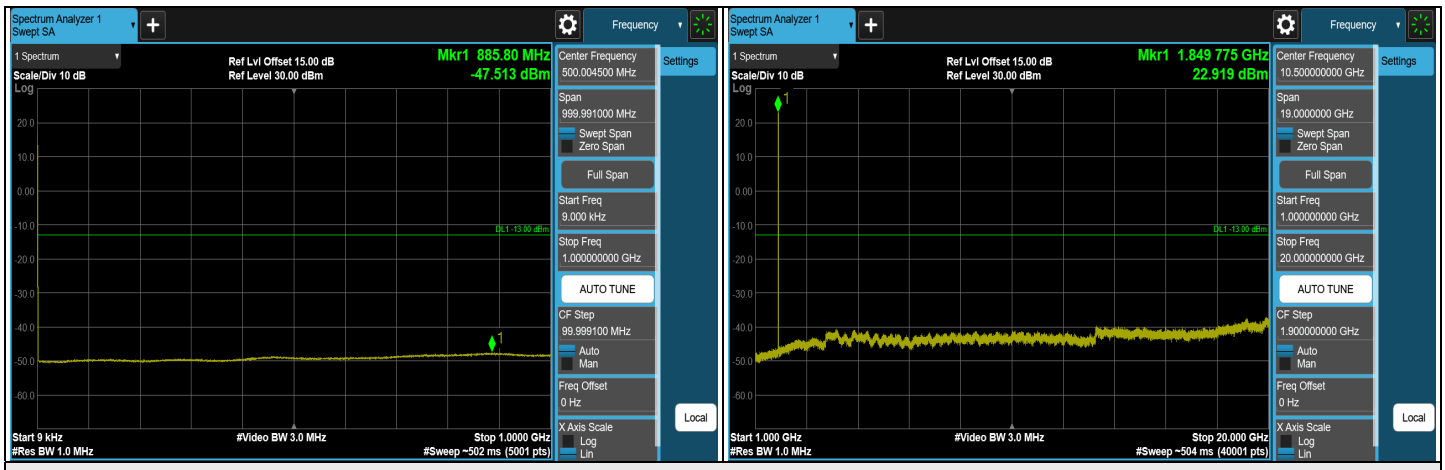
Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 132322 (1745 MHz)	256QAM CH 132572 (1770 MHz)

7.5 Conducted Spurious Emissions

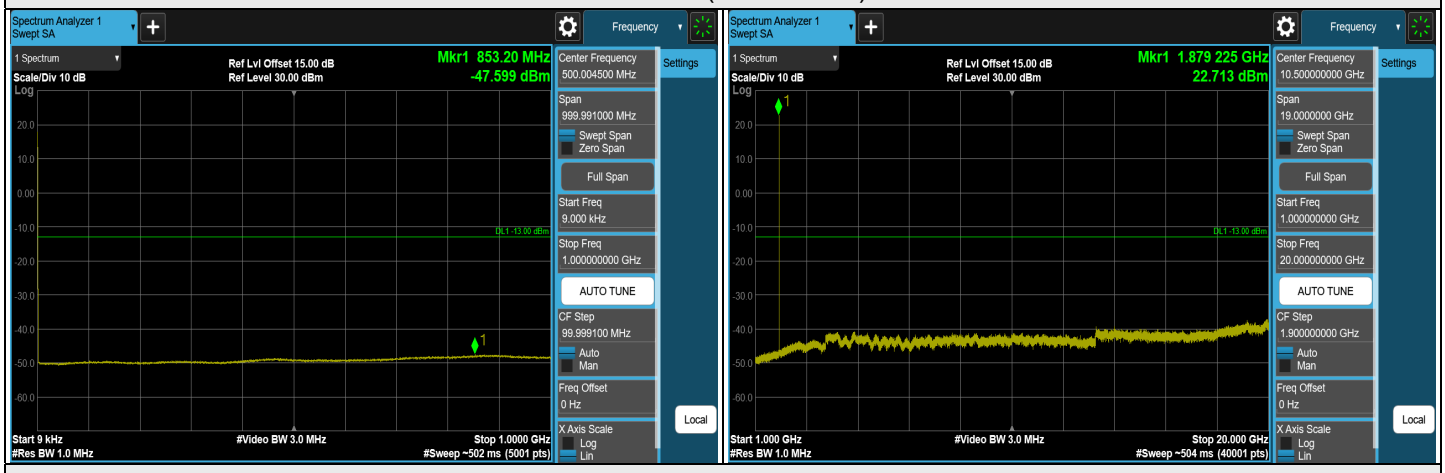
Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 69% RH	Tested By:	Noah Chang

7.5.1 LTE Band 2

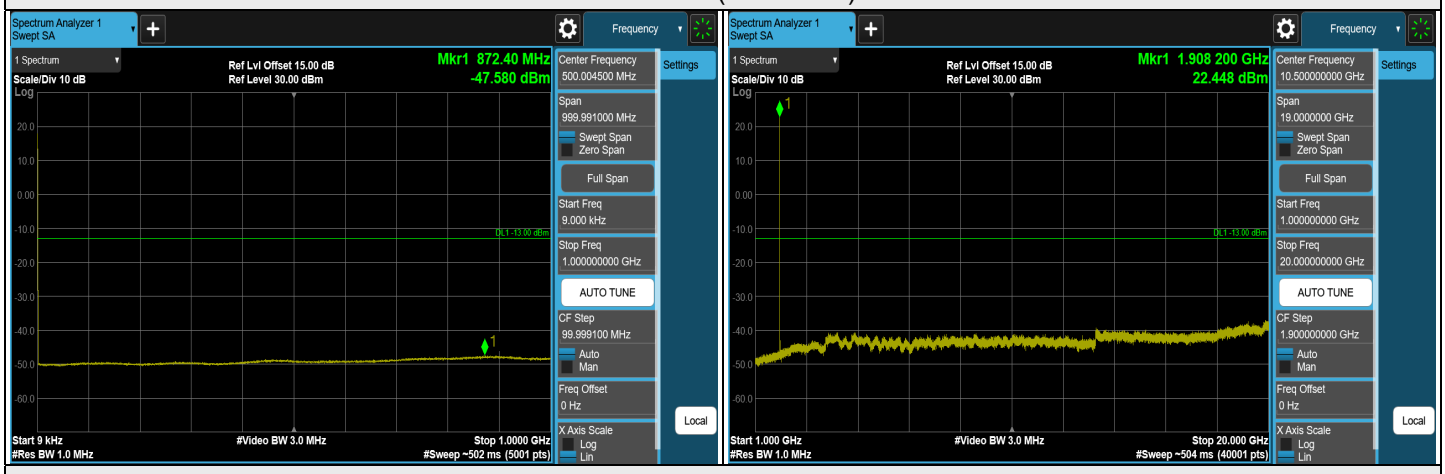
LTE Band 2, Channel Bandwidth: 1.4 MHz



CH 18607 (1850.7 MHz)



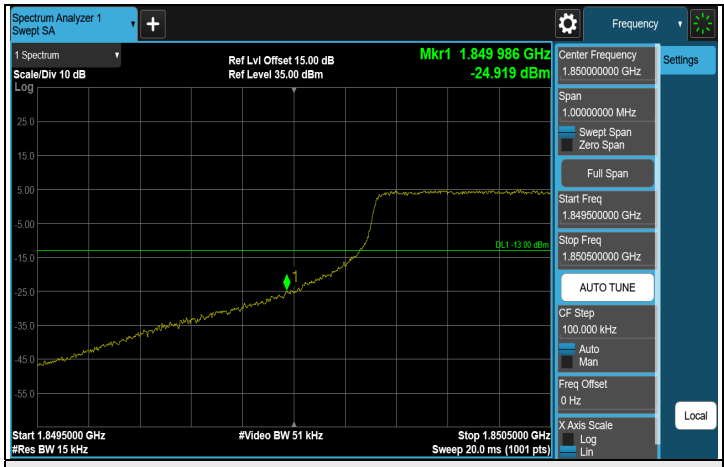
CH 18900 (1880 MHz)



CH 19193 (1909.3 MHz)

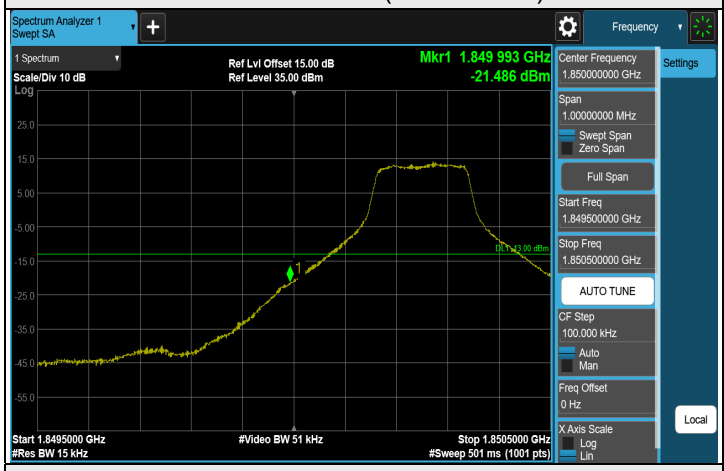
Note: The signal at 9 kHz is IF signal from spectrum analyzer.

LTE Band 2, Channel Bandwidth: 1.4 MHz

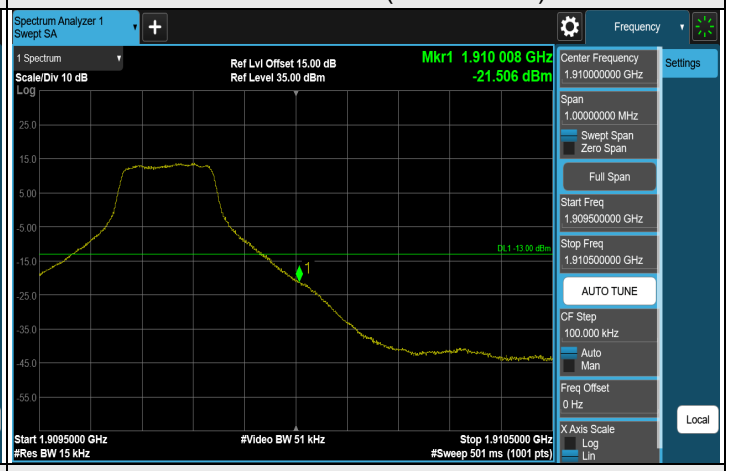


FULL CH 18607 (1850.7 MHz)

FULL CH 19193 (1909.3 MHz)

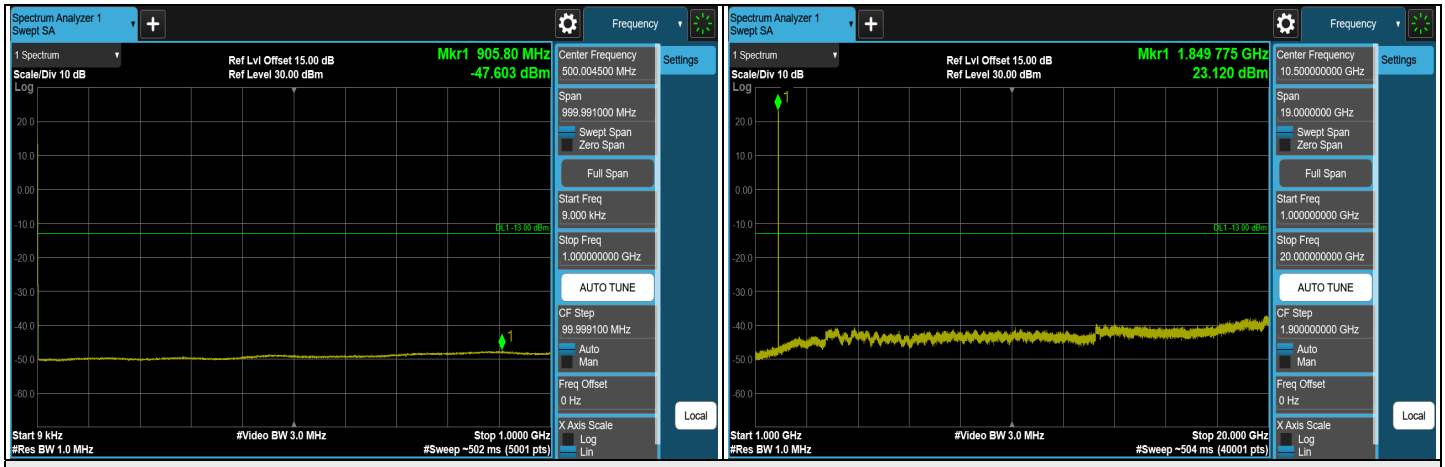


1RB CH 18607 (1850.7 MHz)

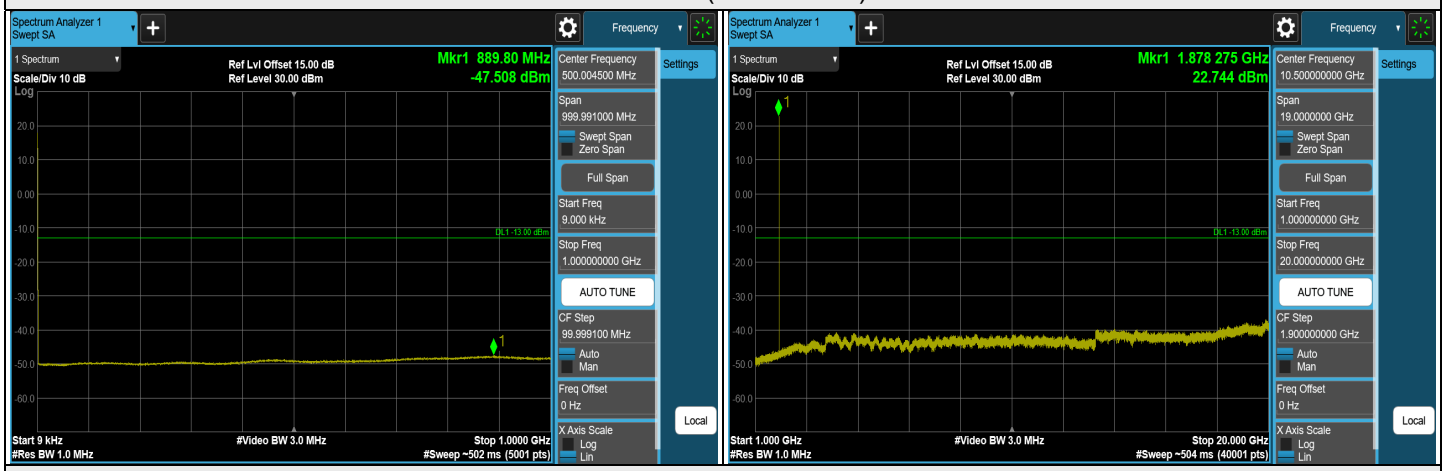


1RB CH 19193 (1909.3 MHz)

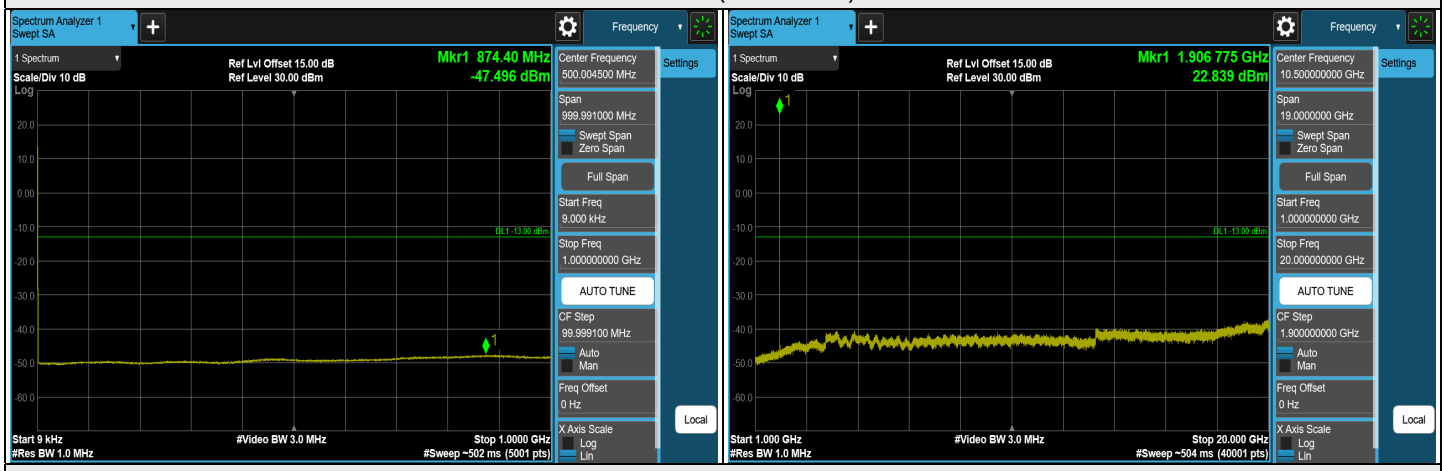
LTE Band 2, Channel Bandwidth: 3 MHz



CH 18615 (1851.5 MHz)



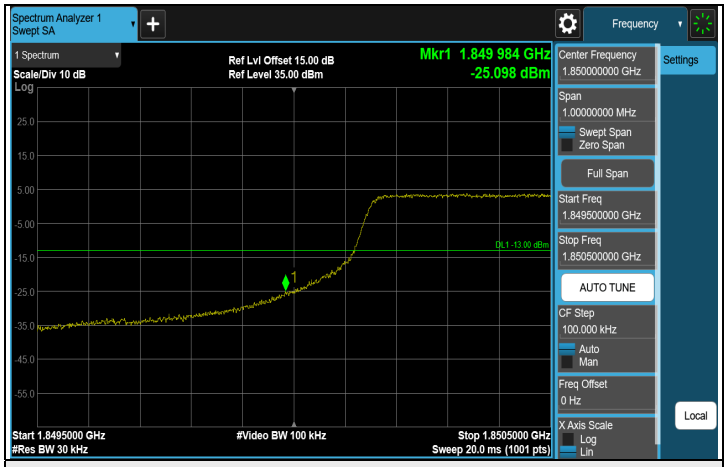
CH 18900 (1880 MHz)



CH 19185 (1908.5 MHz)

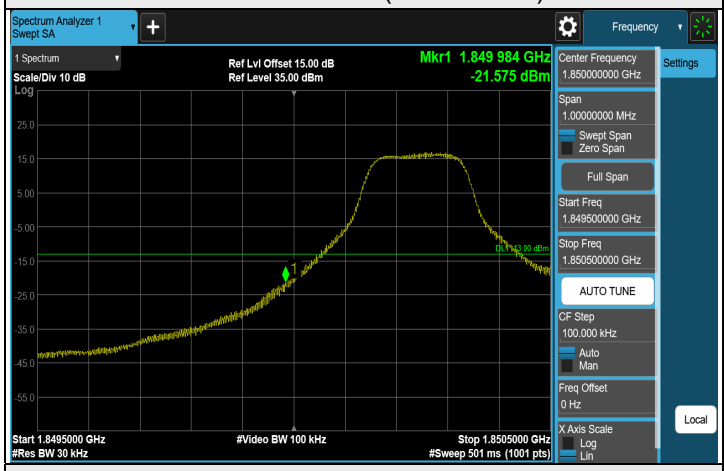
Note: The signal at 9 kHz is IF signal from spectrum analyzer.

LTE Band 2, Channel Bandwidth: 3 MHz

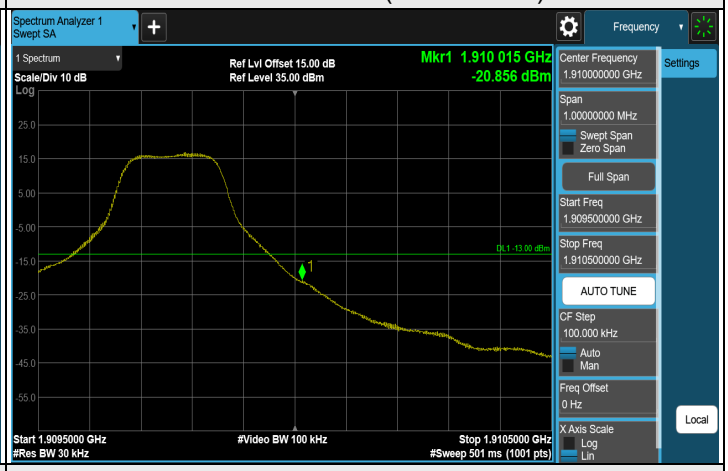


FULL CH 18615 (1851.5 MHz)

FULL CH 19185 (1908.5 MHz)

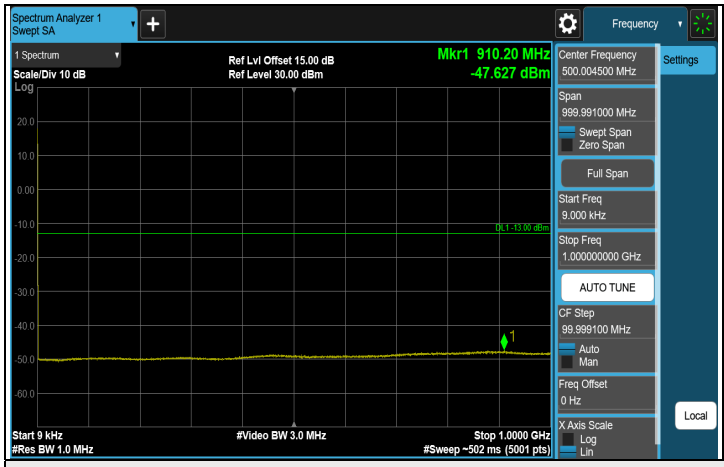


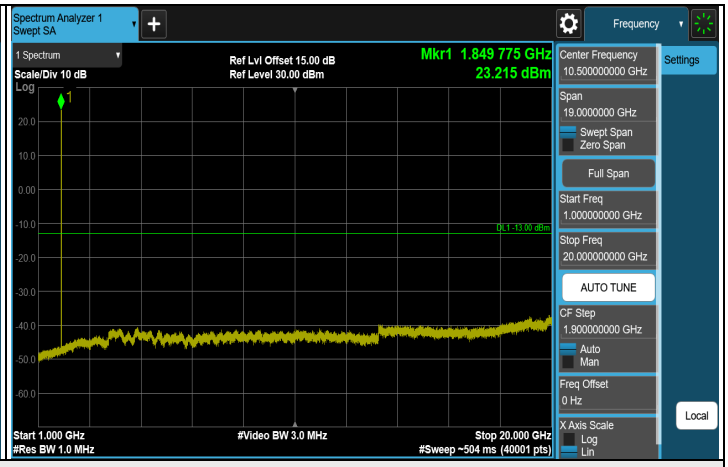
1RB CH 18615 (1851.5 MHz)



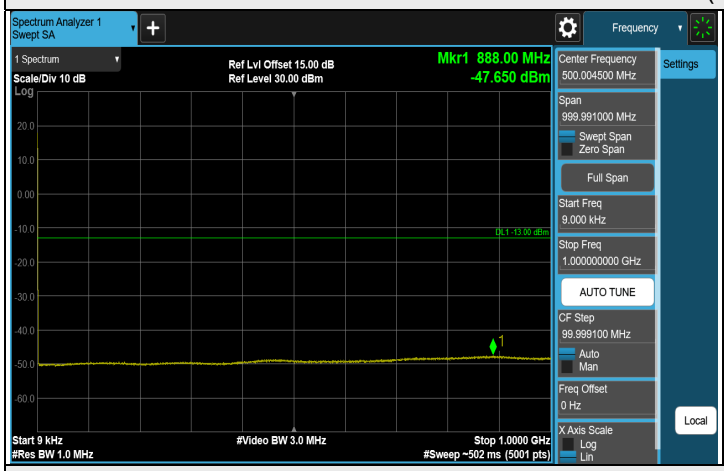
1RB CH 19185 (1908.5 MHz)

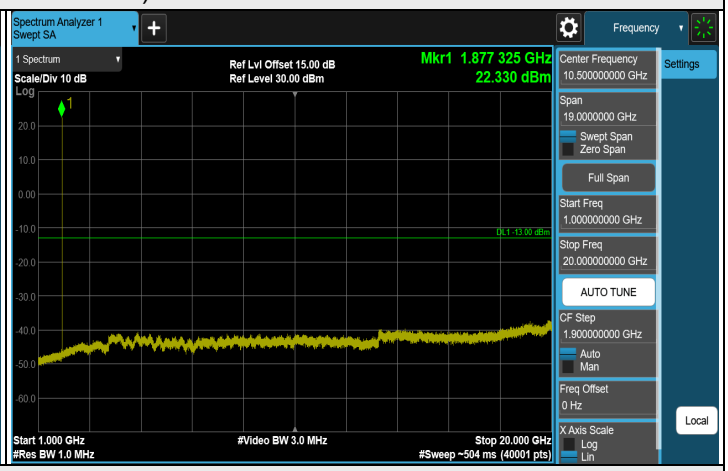
LTE Band 2, Channel Bandwidth: 5 MHz



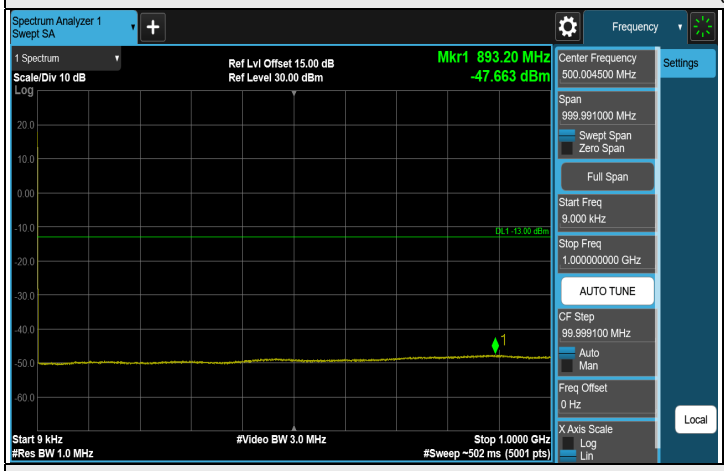


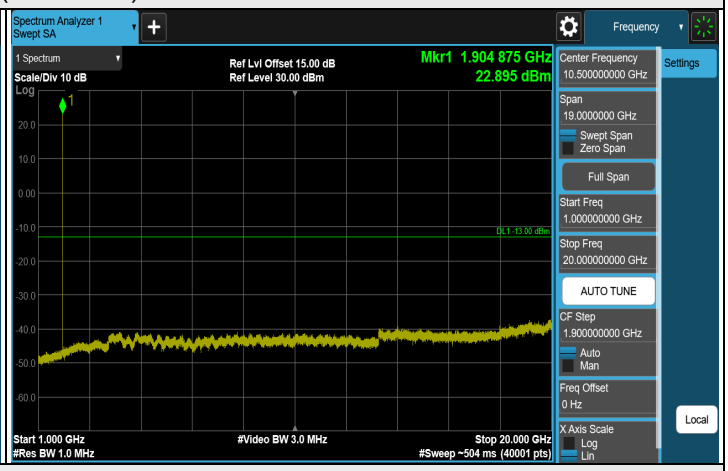
CH 18625 (1852.5 MHz)





CH 18900 (1880 MHz)

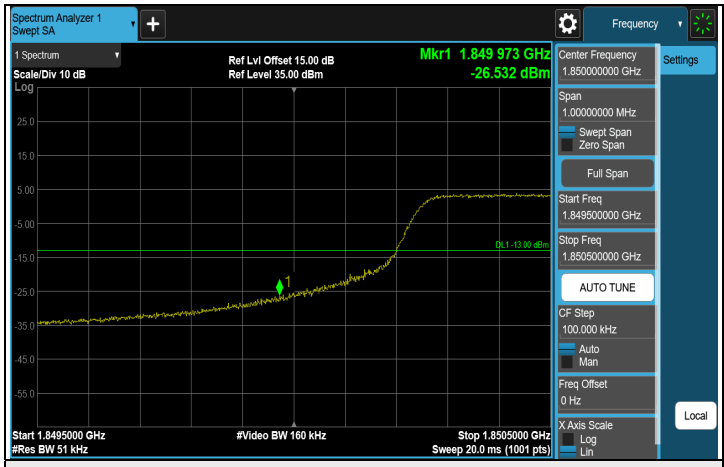




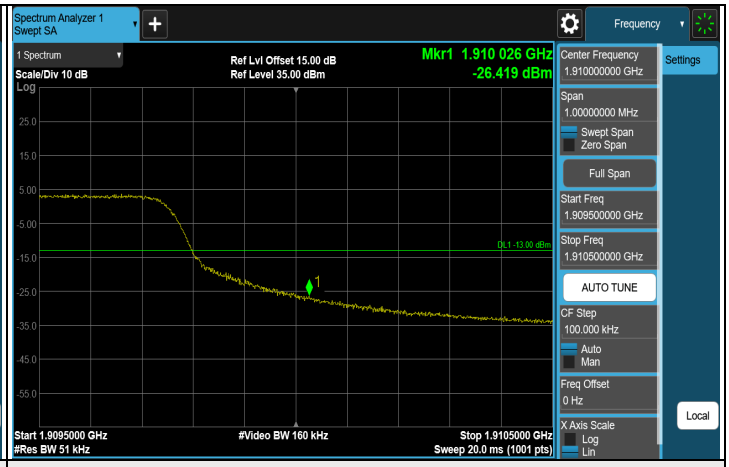
CH 19175 (1907.5 MHz)

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

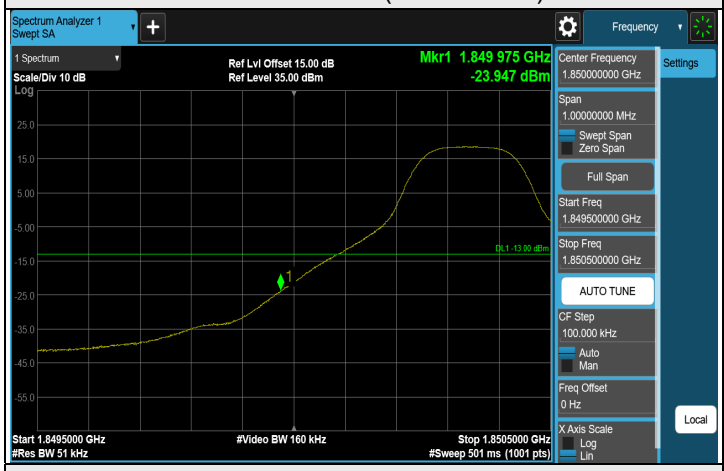
LTE Band 2, Channel Bandwidth: 5 MHz



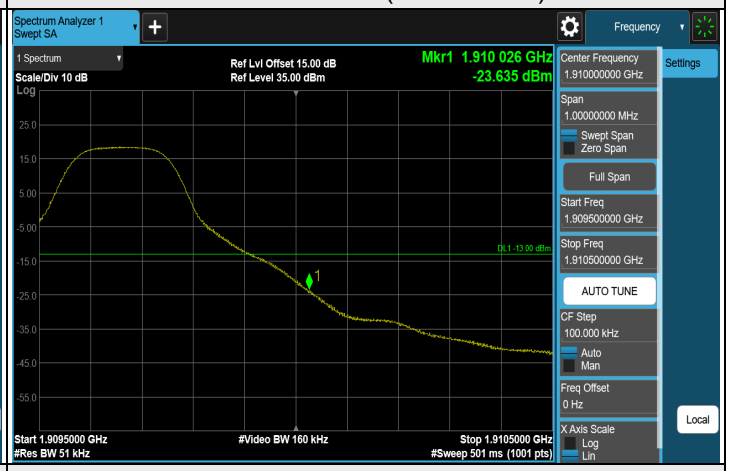
FULL CH 18625 (1852.5 MHz)



FULL CH 19175 (1907.5 MHz)

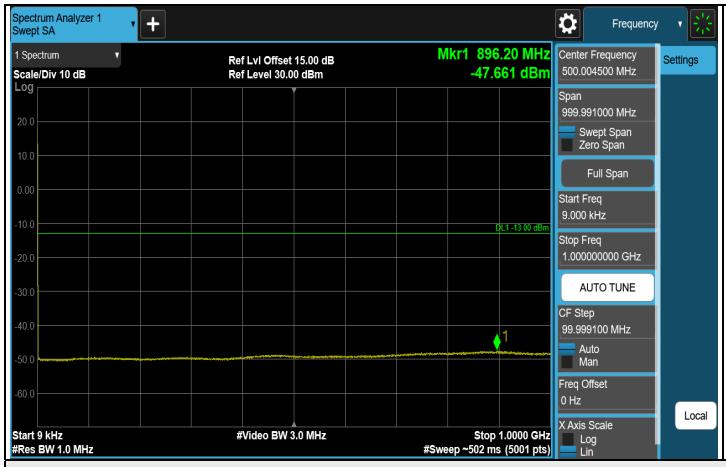


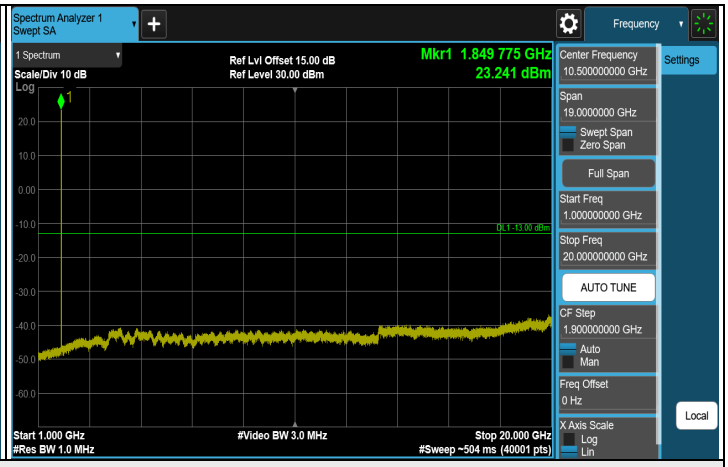
1RB CH 18625 (1852.5 MHz)



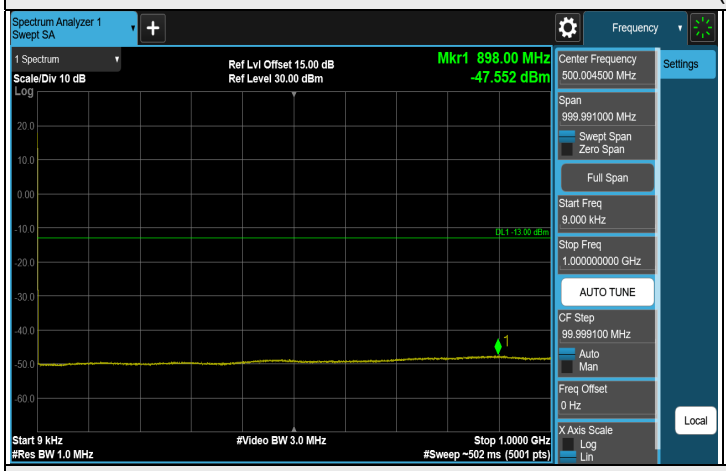
1RB CH 19175 (1907.5 MHz)

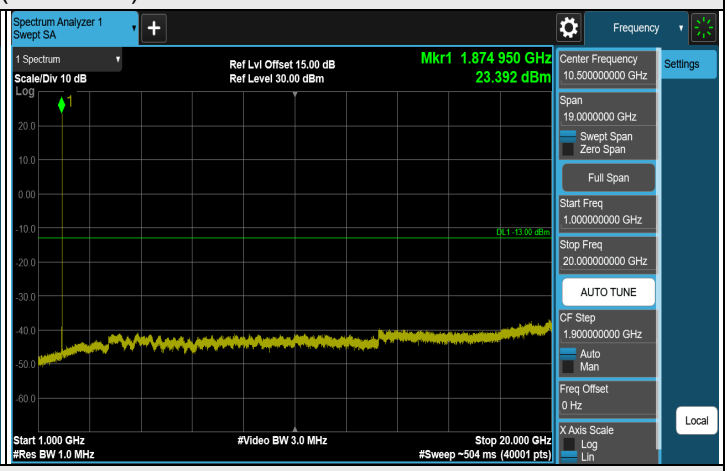
LTE Band 2, Channel Bandwidth: 10 MHz



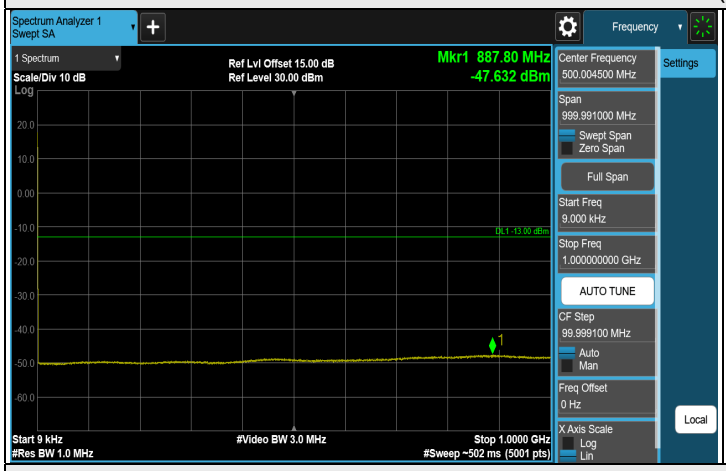


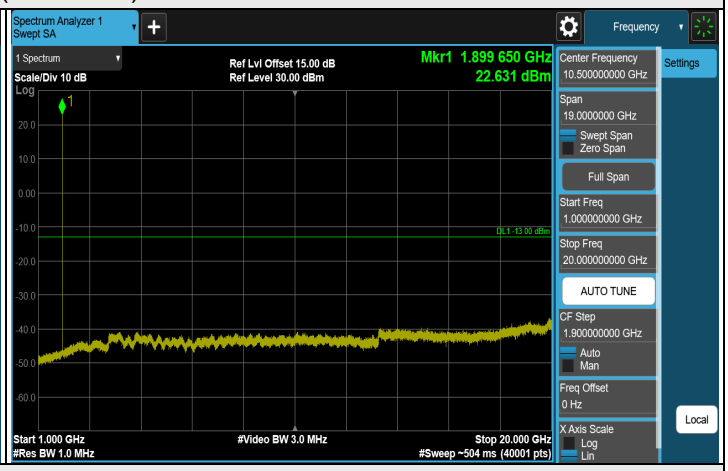
CH 18650 (1855 MHz)





CH 18900 (1880 MHz)

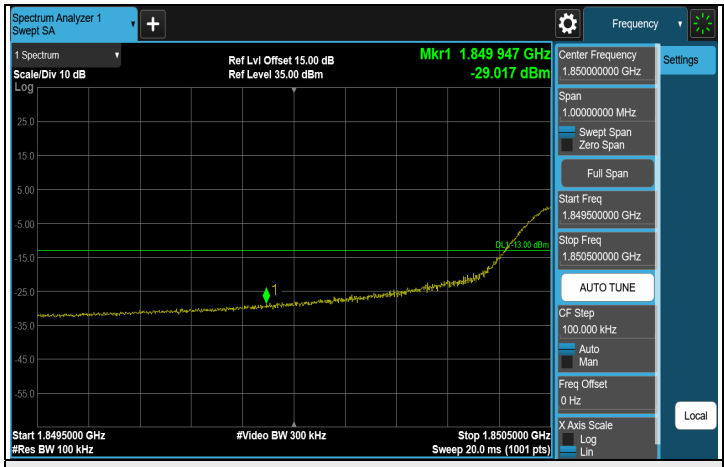




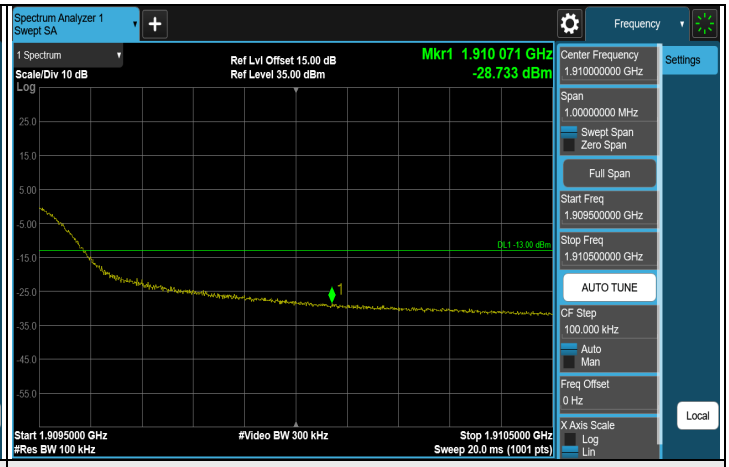
CH 19150 (1905 MHz)

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

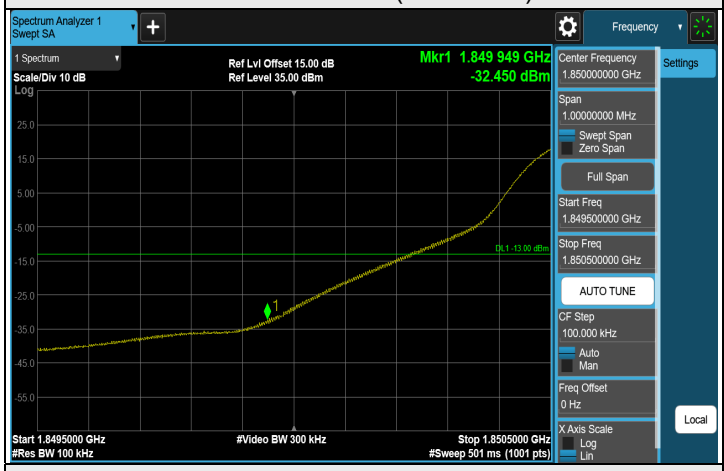
LTE Band 2, Channel Bandwidth: 10 MHz



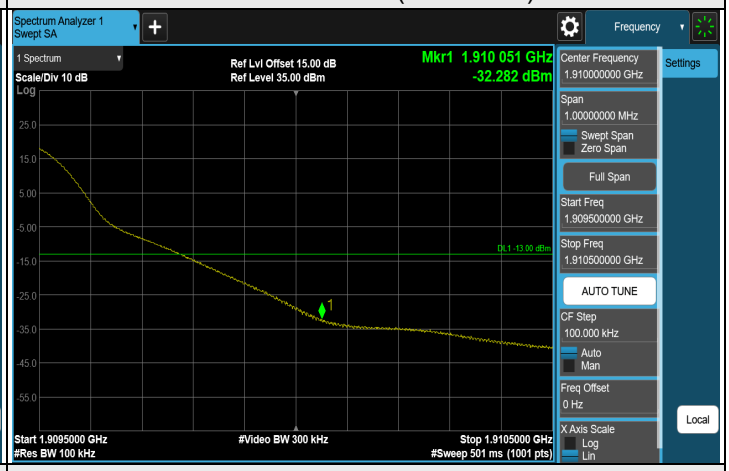
FULL CH 18650 (1855 MHz)



FULL CH 19150 (1905 MHz)

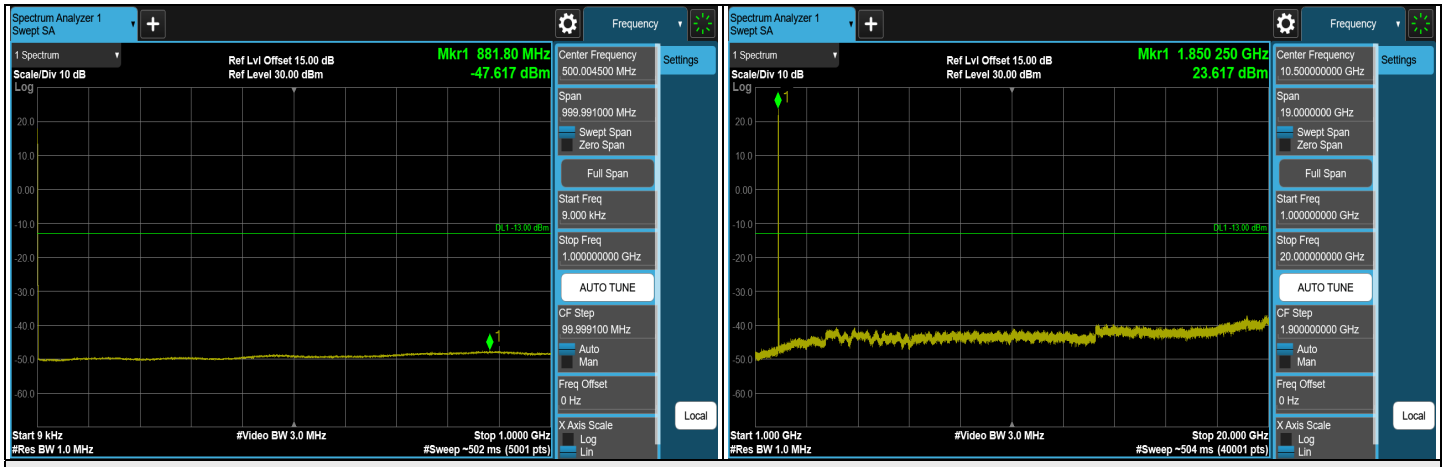


1RB CH 18650 (1855 MHz)

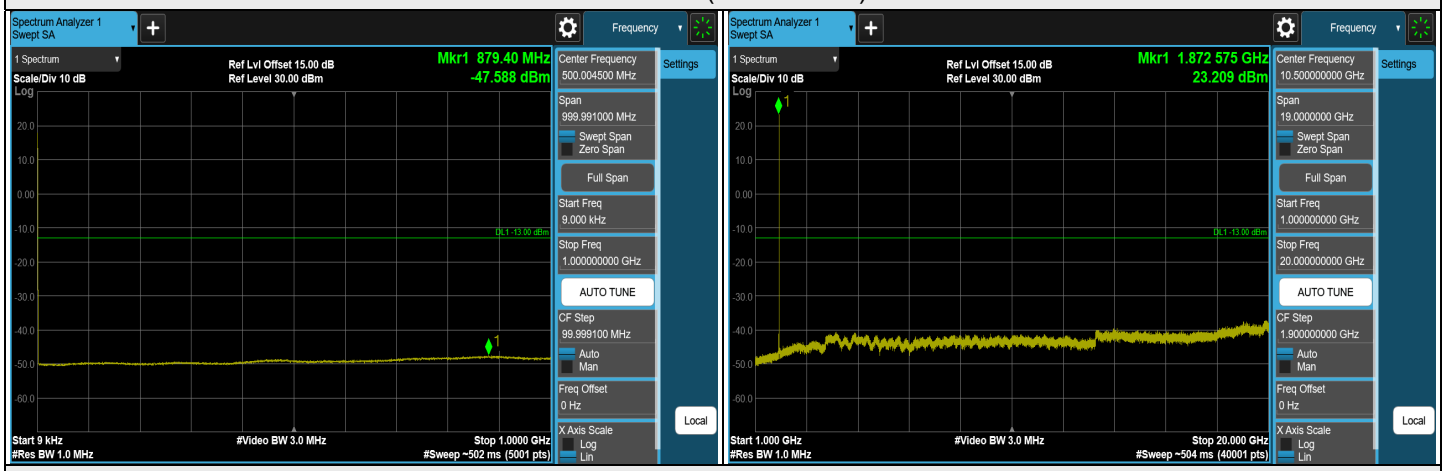


1RB CH 19150 (1905 MHz)

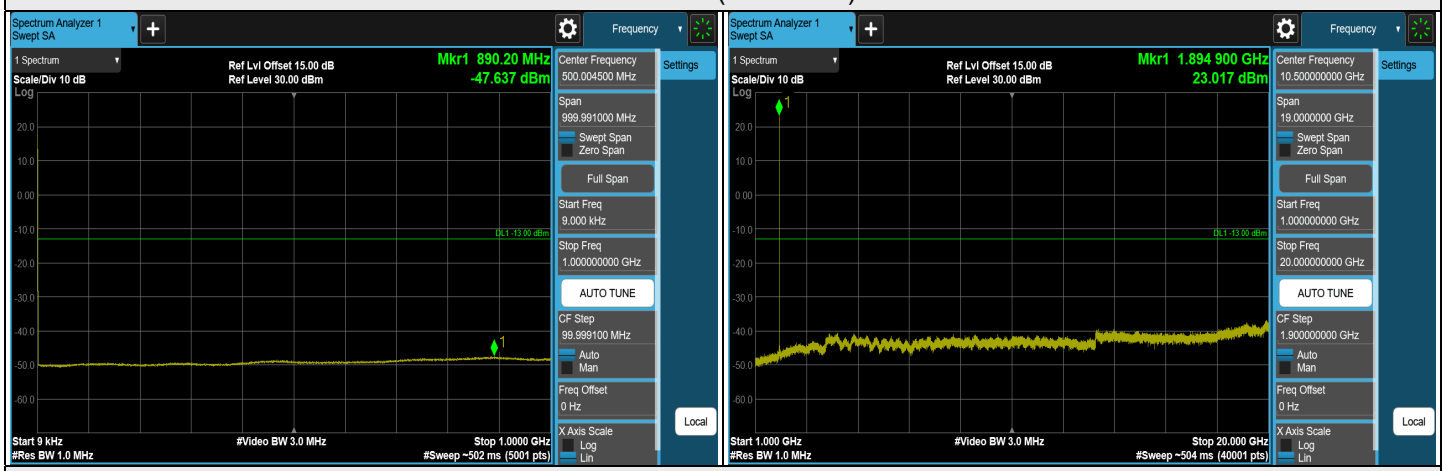
LTE Band 2, Channel Bandwidth: 15 MHz



CH 18675 (1857.5 MHz)



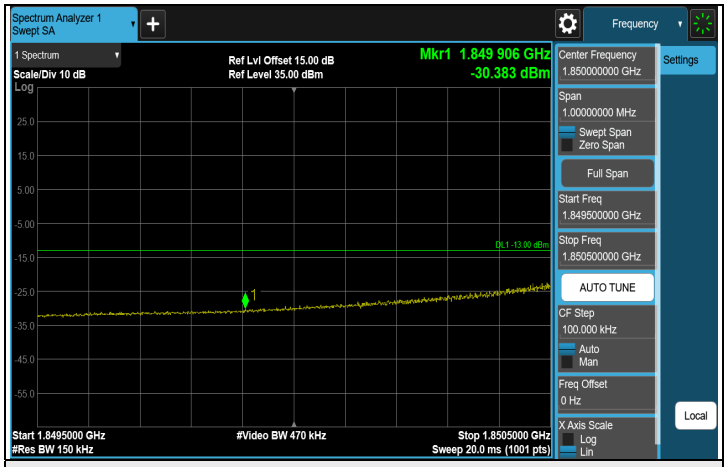
CH 18900 (1880 MHz)



CH 19125 (1902.5 MHz)

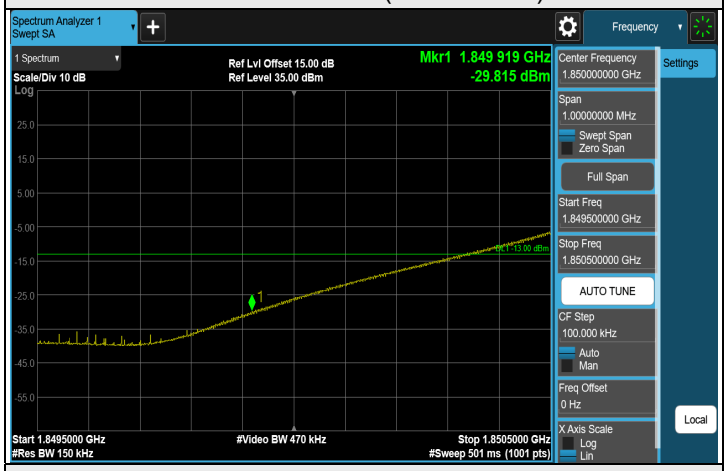
Note: The signal at 9 kHz is IF signal from spectrum analyzer.

LTE Band 2, Channel Bandwidth: 15 MHz

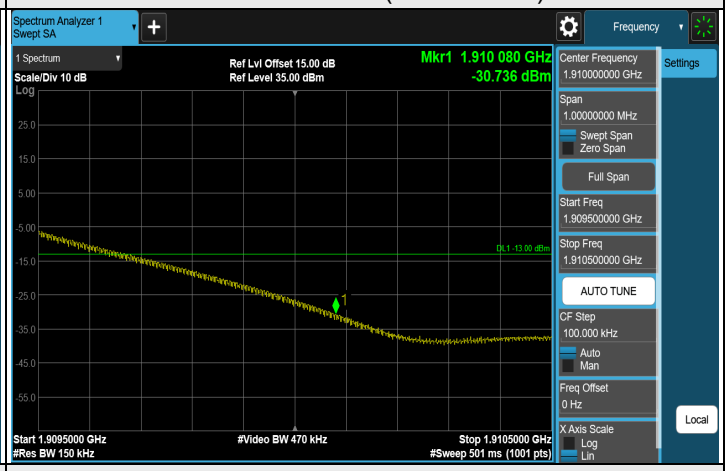


FULL CH 18675 (1857.5 MHz)

FULL CH 19125 (1902.5 MHz)

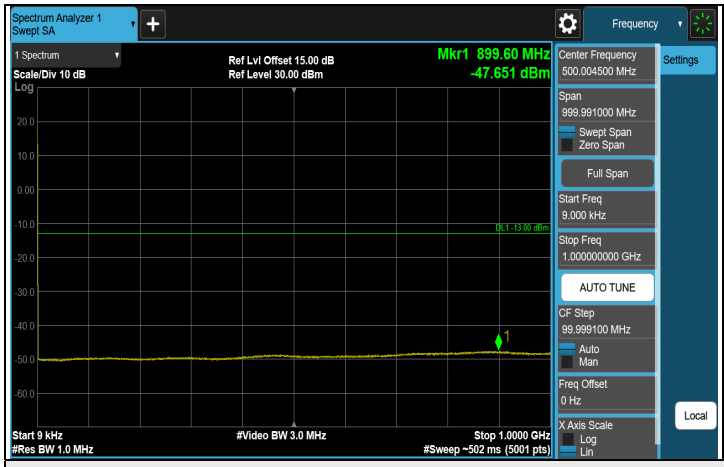


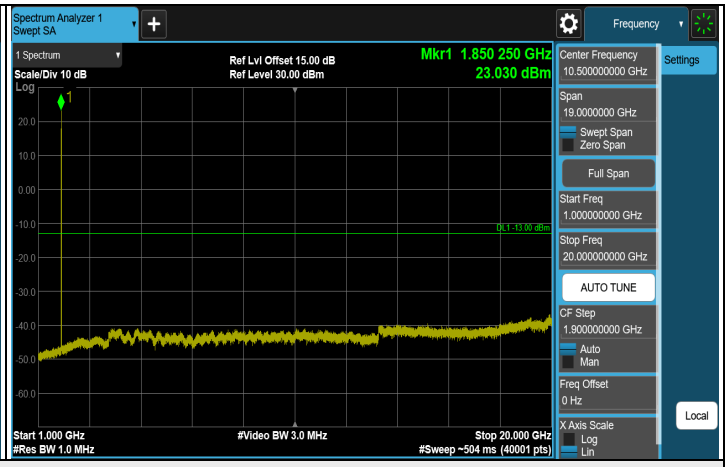
1RB CH 18675 (1857.5 MHz)



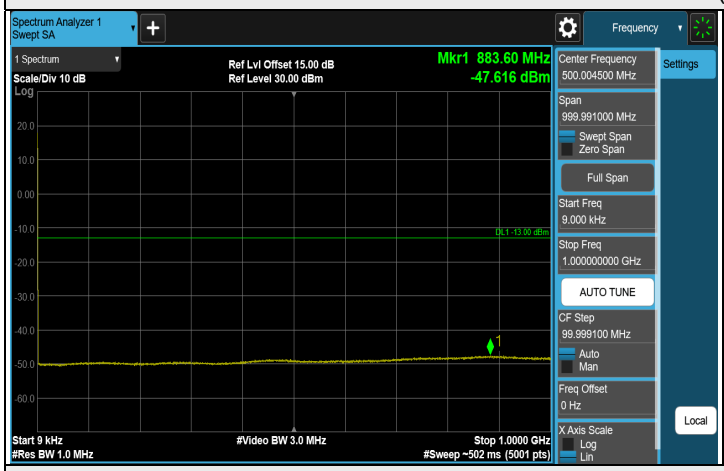
1RB CH 19125 (1902.5 MHz)

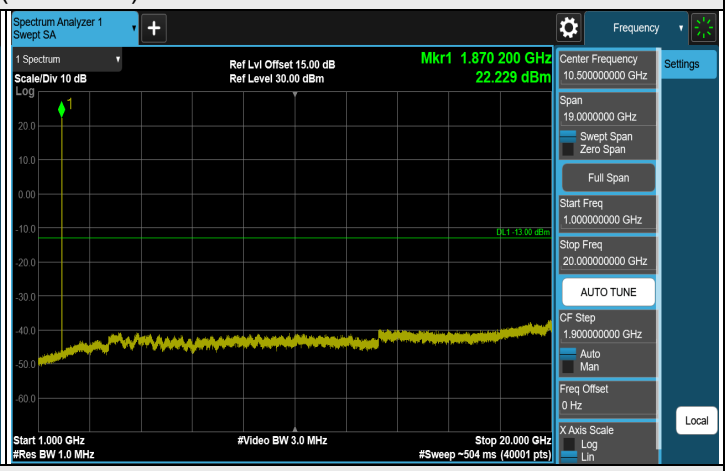
LTE Band 2, Channel Bandwidth: 20 MHz



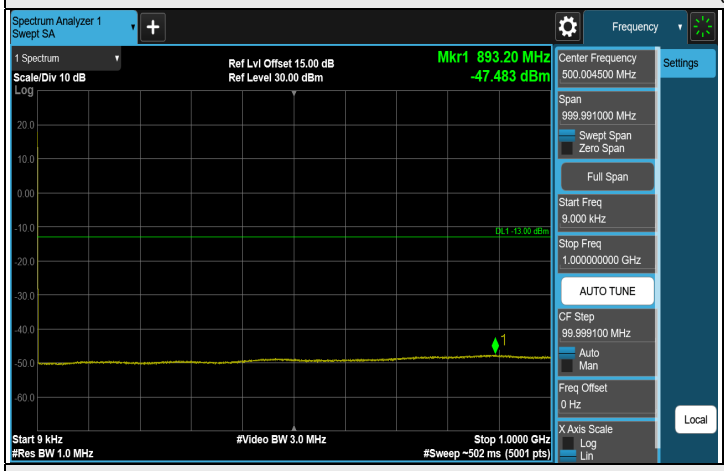


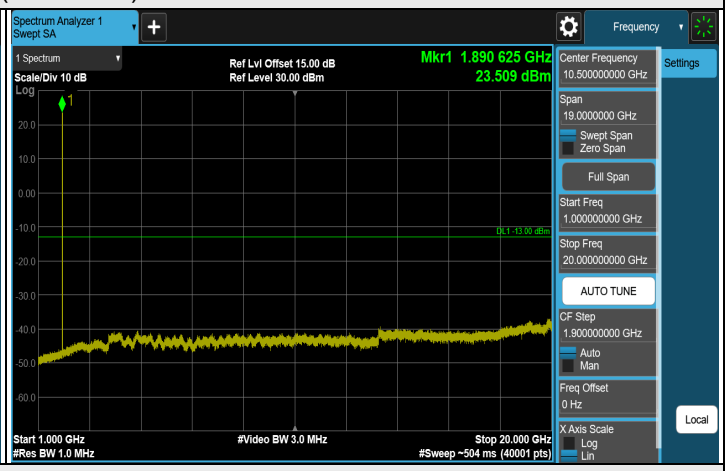
CH 18700 (1860 MHz)





CH 18900 (1880 MHz)

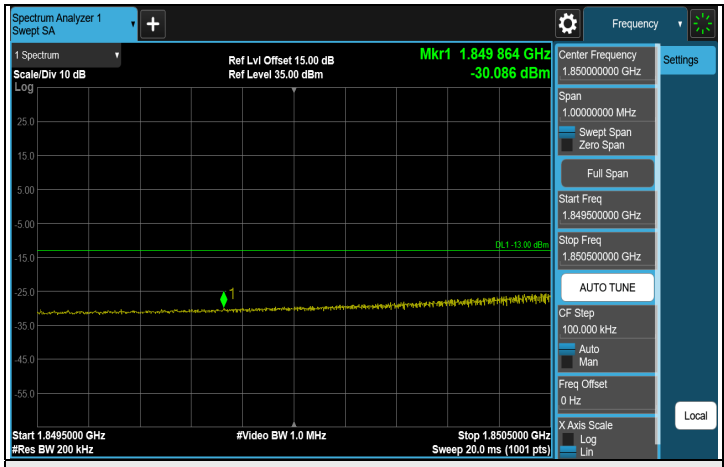




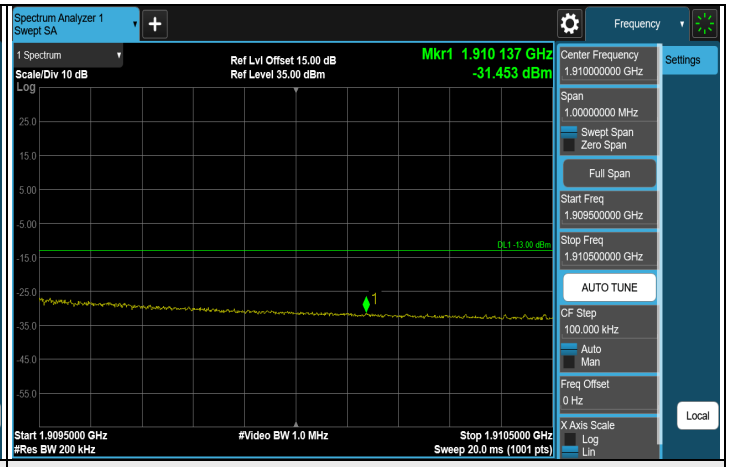
CH 19100 (1900 MHz)

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

LTE Band 2, Channel Bandwidth: 20 MHz

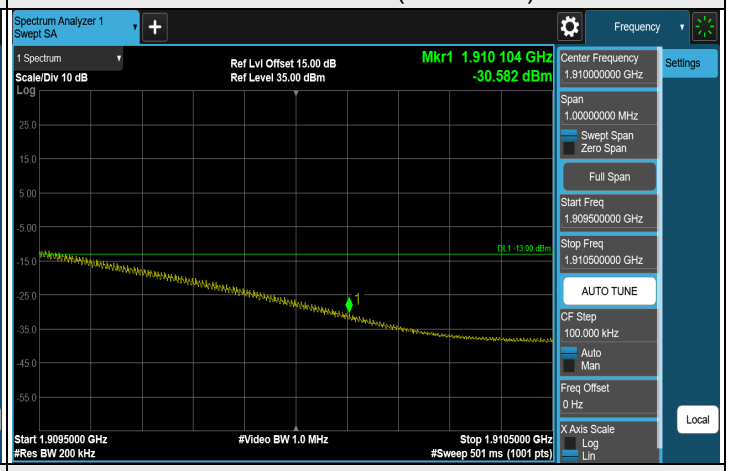


FULL CH 18700 (1860 MHz)



FULL CH 19100 (1900 MHz)

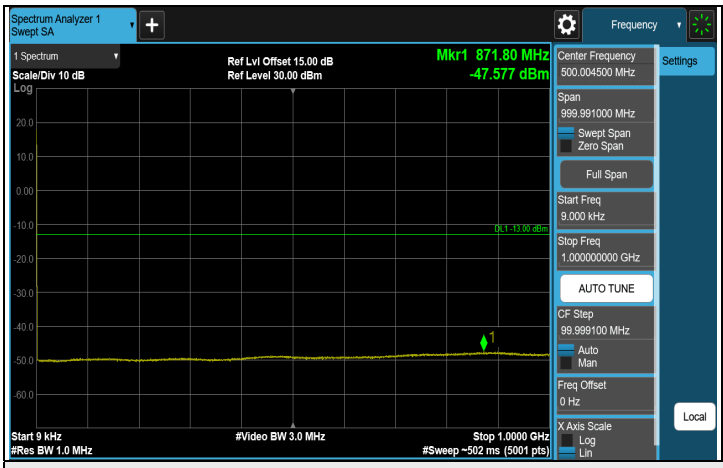
1RB CH 18700 (1860 MHz)

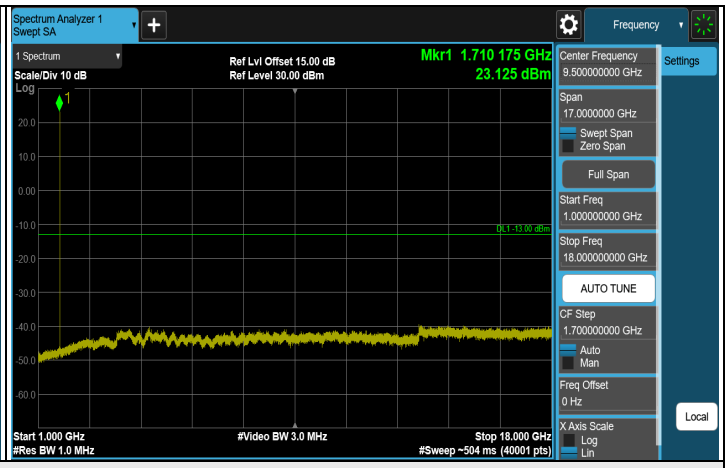


1RB CH 19100 (1900 MHz)

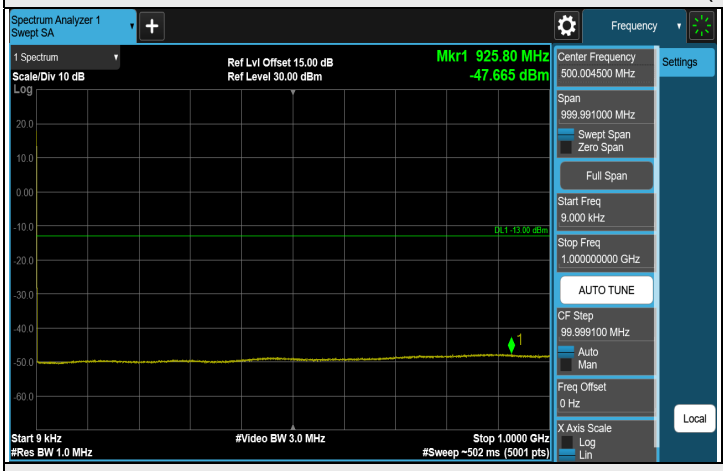
7.5.2 LTE Band 4

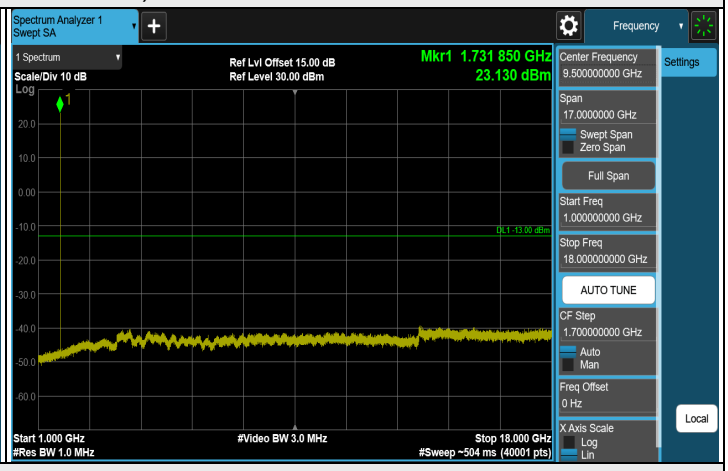
LTE Band 4, Channel Bandwidth: 1.4 MHz



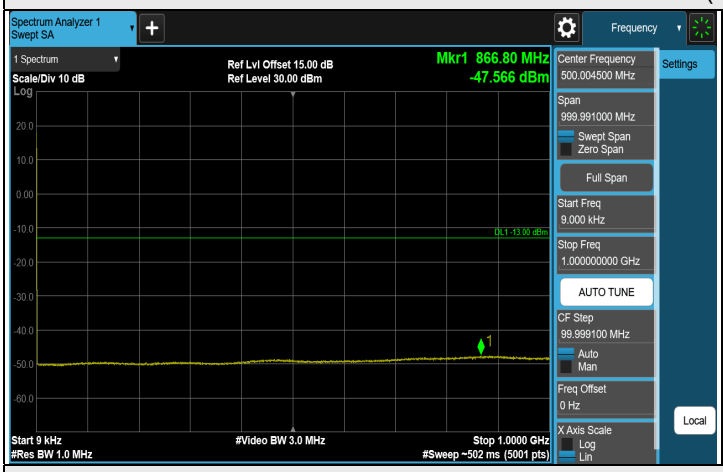


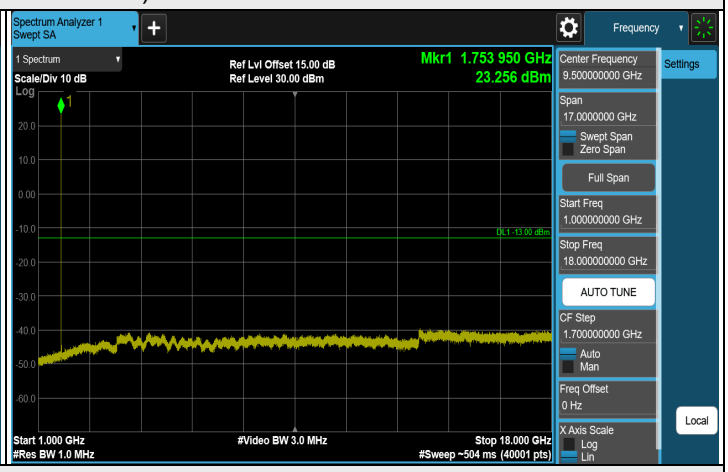
CH 19957 (1710.7 MHz)





CH 20175 (1732.5 MHz)

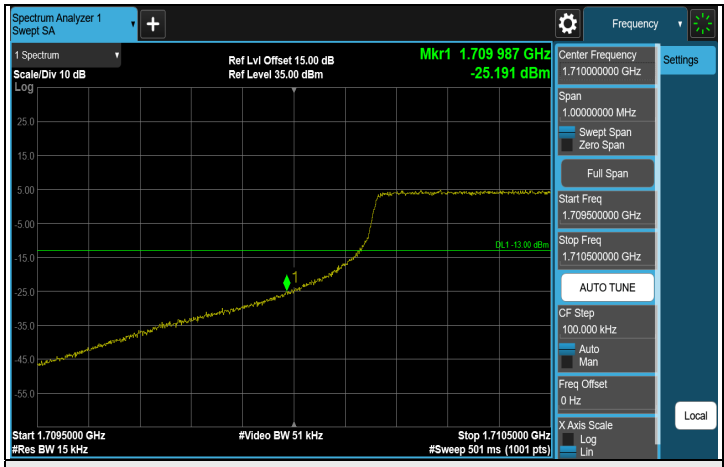




CH 20393 (1754.3 MHz)

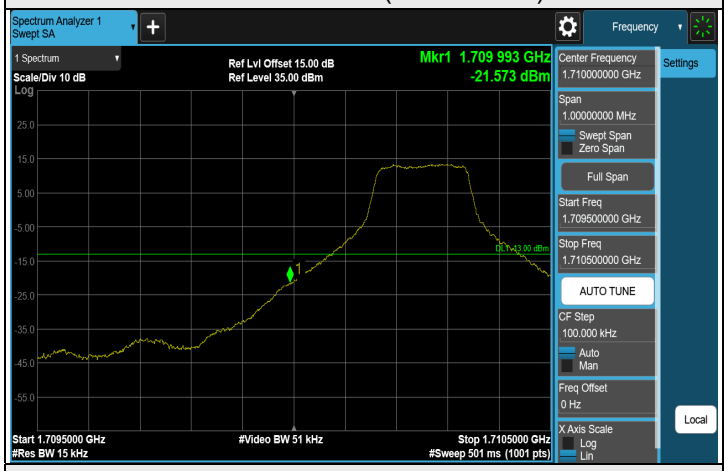
Note: The signal at 9 kHz is IF signal from spectrum analyzer.

LTE Band 4, Channel Bandwidth: 1.4 MHz

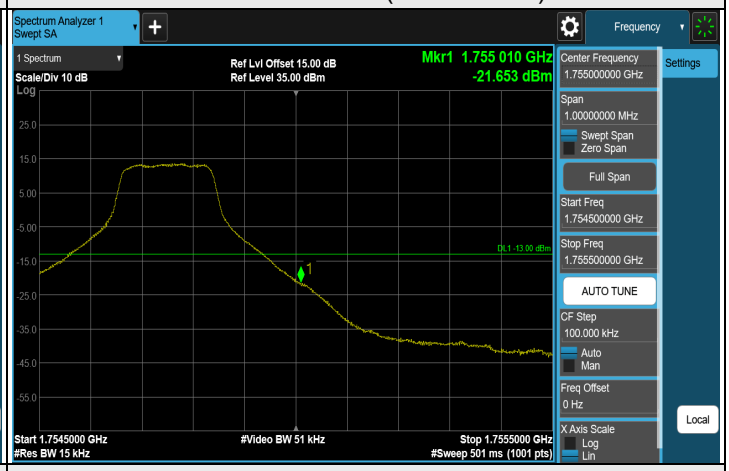


FULL CH 19957 (1710.7 MHz)

FULL CH 20393 (1754.3 MHz)

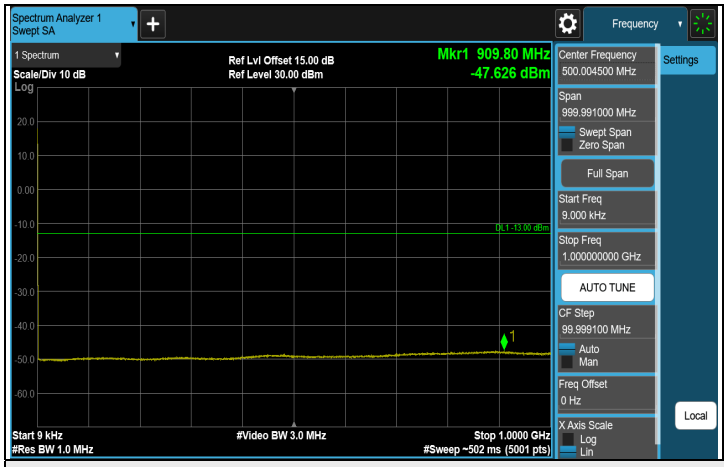


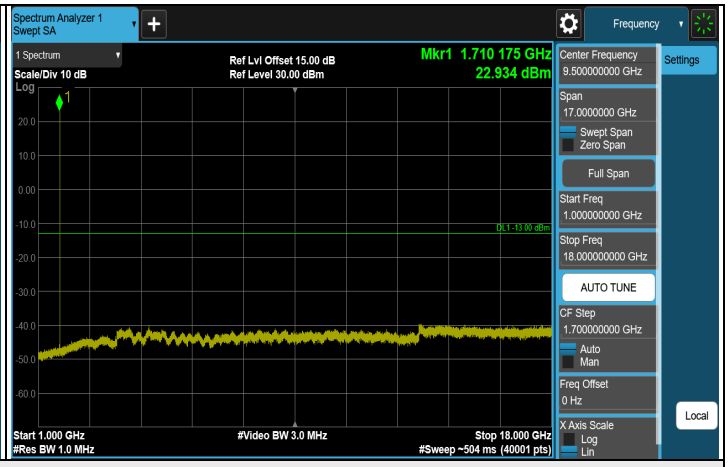
1RB CH 19957 (1710.7 MHz)



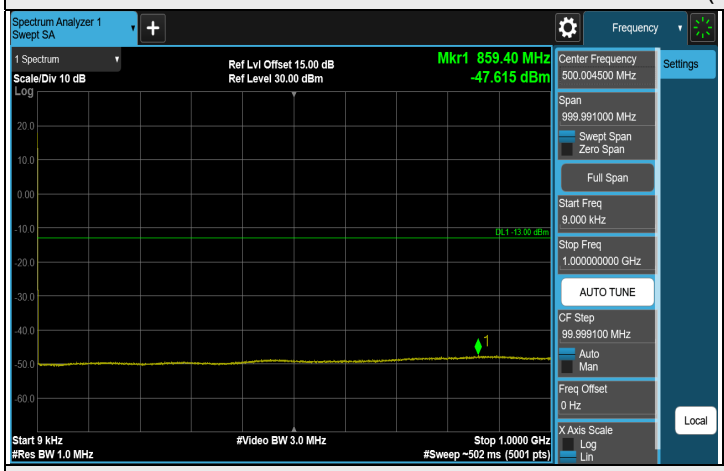
1RB CH 20393 (1754.3 MHz)

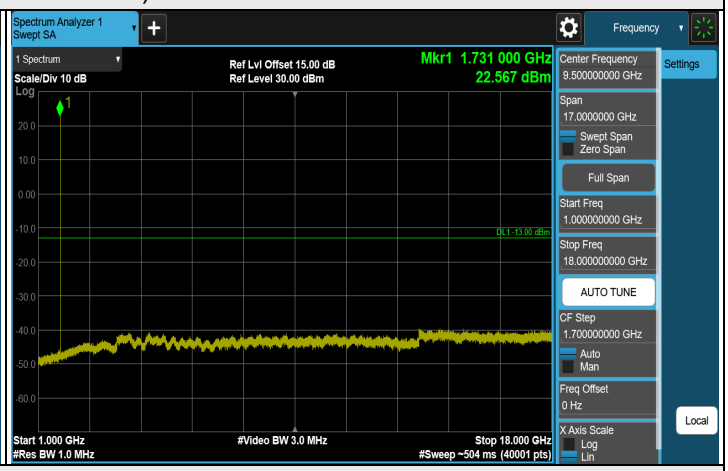
LTE Band 4, Channel Bandwidth: 3 MHz



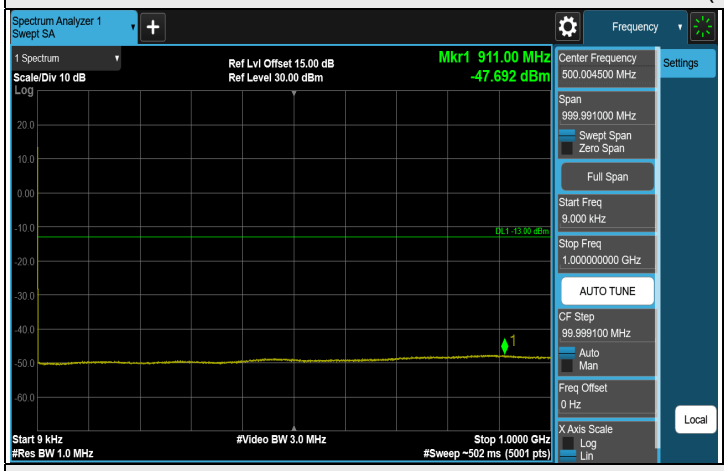


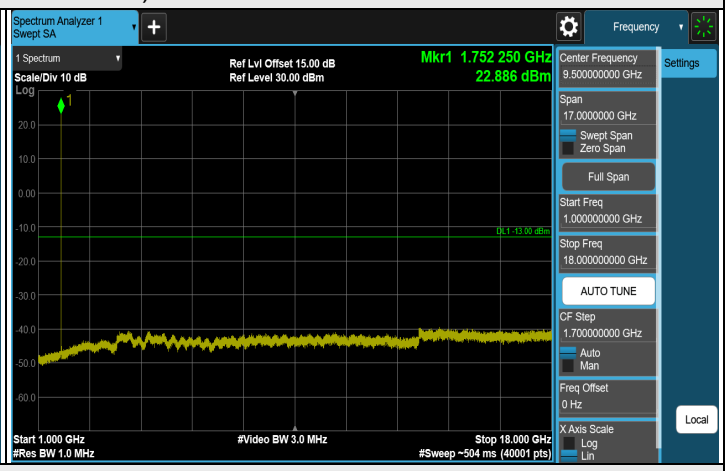
CH 19965 (1711.5 MHz)





CH 20175 (1732.5 MHz)





CH 20385 (1753.5 MHz)

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