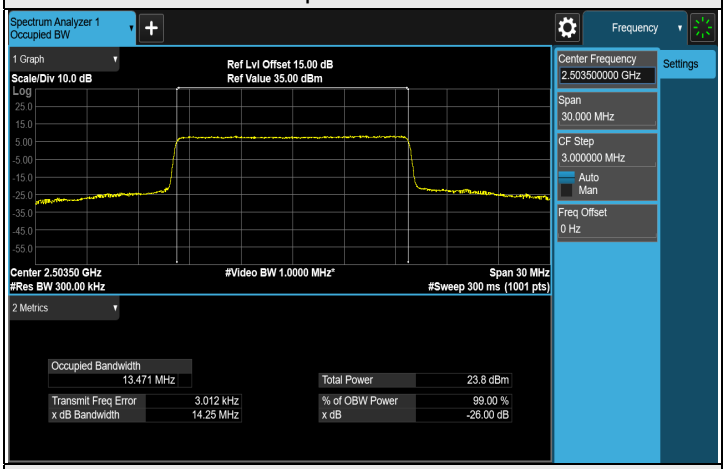
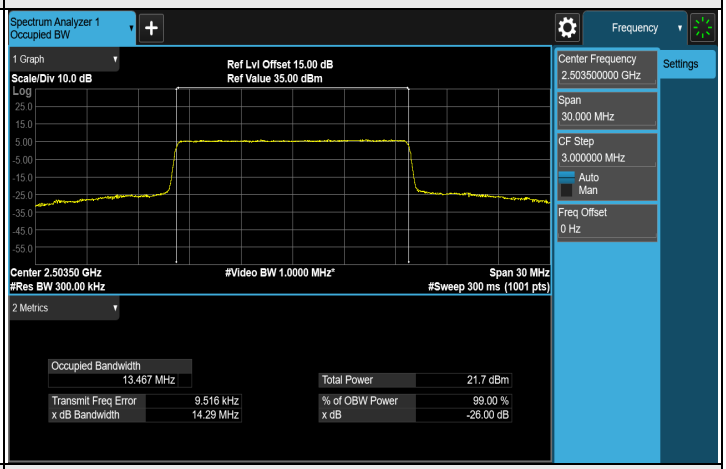
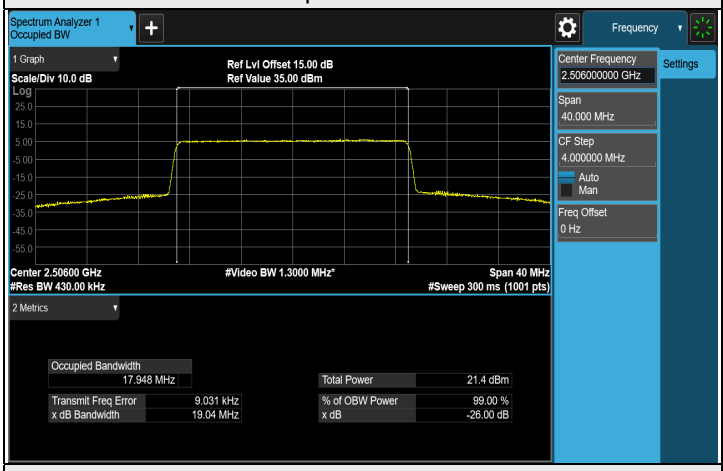
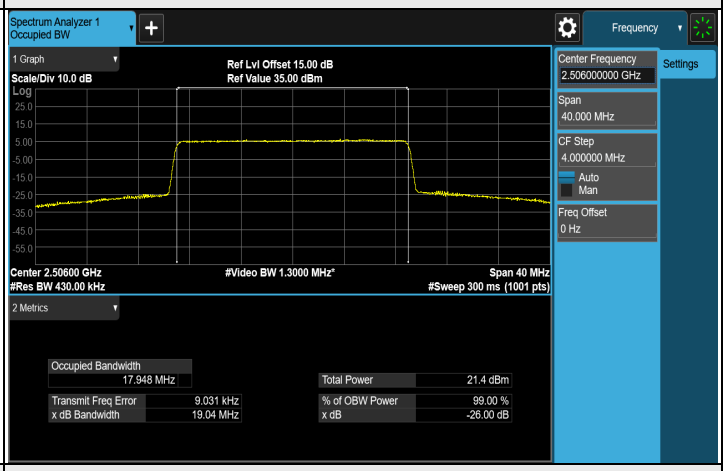
LTE Band 41, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	39725	2503.5	13.4707	14.253
QPSK	40620	2593	13.4644	14.249
QPSK	41515	2682.5	13.4484	14.232
16QAM	39725	2503.5	13.4628	14.235
16QAM	40620	2593	13.4543	14.239
16QAM	41515	2682.5	13.4487	14.219
64QAM	39725	2503.5	13.4668	14.289
64QAM	40620	2593	13.4542	14.130
64QAM	41515	2682.5	13.4577	14.253
256QAM	39725	2503.5	13.4405	14.218
256QAM	40620	2593	13.4234	14.053
256QAM	41515	2682.5	13.4412	14.237

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 39725 (2503.5 MHz)	64QAM CH 39725 (2503.5 MHz)

LTE Band 41, Channel Bandwidth: 20 MHz

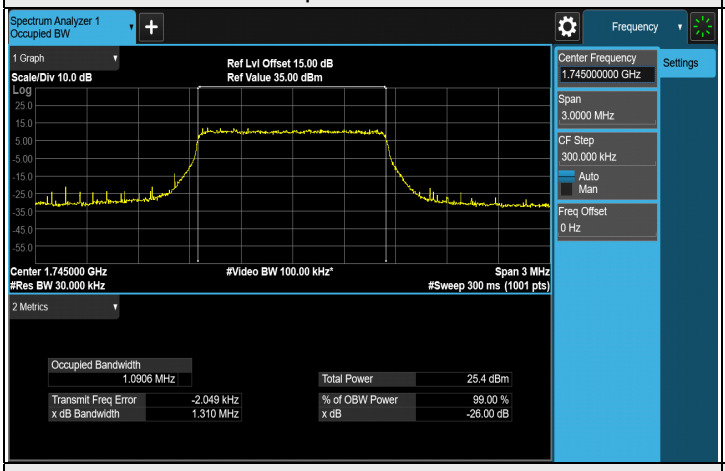
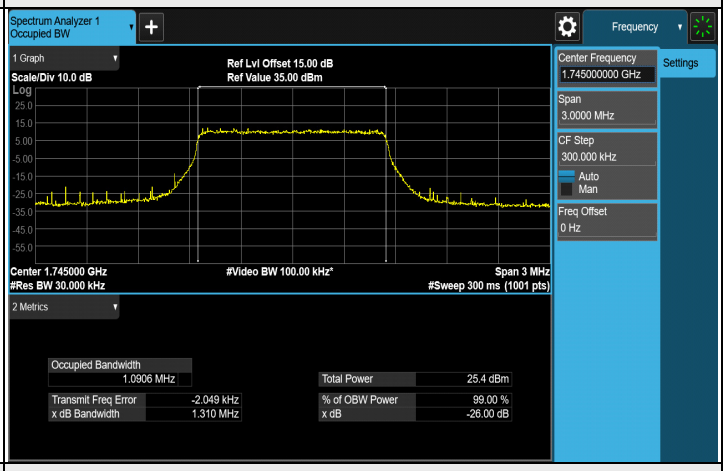
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	39750	2506	17.9370	19.028
QPSK	40620	2593	17.9295	19.015
QPSK	41490	2680	17.9188	18.996
16QAM	39750	2506	17.9331	19.026
16QAM	40620	2593	17.9428	19.033
16QAM	41490	2680	17.9174	19.005
64QAM	39750	2506	17.9477	19.041
64QAM	40620	2593	17.9466	19.025
64QAM	41490	2680	17.9438	19.028
256QAM	39750	2506	17.9304	19.016
256QAM	40620	2593	17.9328	19.016
256QAM	41490	2680	17.9206	19.017

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 39750 (2506 MHz)	64QAM CH 39750 (2506 MHz)

7.4.18 LTE Band 66

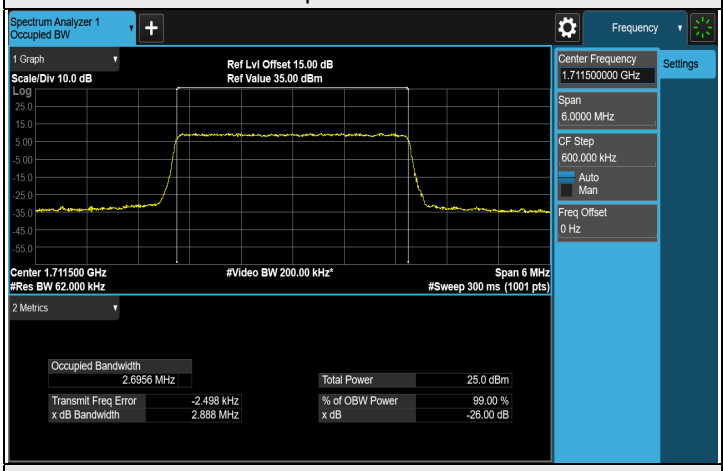
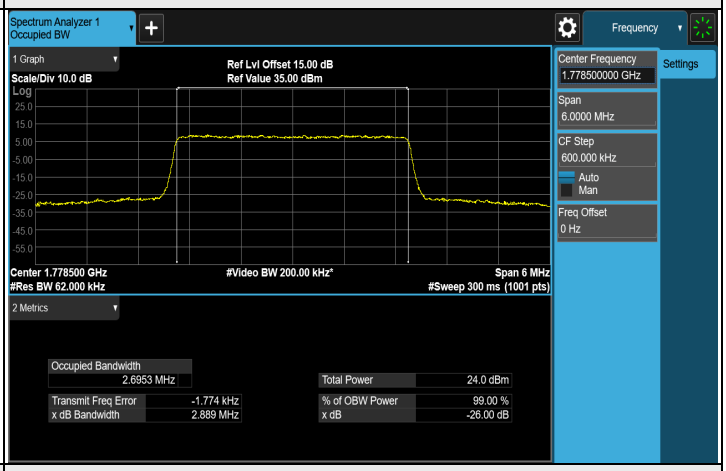
LTE Band 66, Channel Bandwidth: 1.4 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	131979	1710.7	1.0844	1.247
QPSK	132322	1745	1.0906	1.310
QPSK	132665	1779.3	1.0906	1.257
16QAM	131979	1710.7	1.0881	1.243
16QAM	132322	1745	1.0885	1.253
16QAM	132665	1779.3	1.0876	1.256
64QAM	131979	1710.7	1.0854	1.243
64QAM	132322	1745	1.0860	1.252
64QAM	132665	1779.3	1.0895	1.262
256QAM	131979	1710.7	1.0842	1.230
256QAM	132322	1745	1.0835	1.207
256QAM	132665	1779.3	1.0850	1.231

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

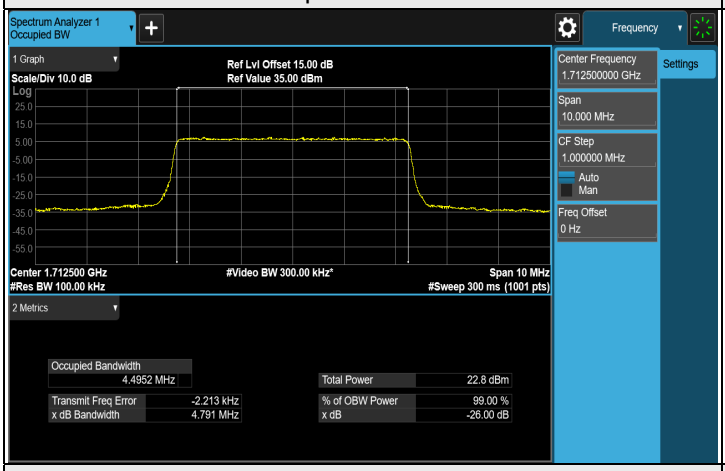
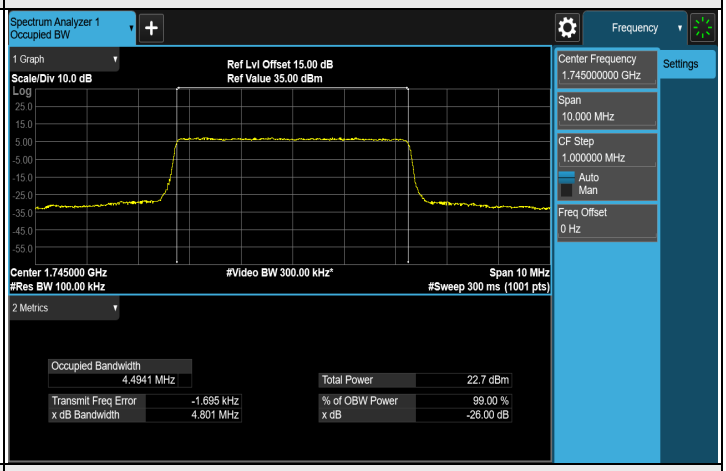
LTE Band 66, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	131987	1711.5	2.6956	2.888
QPSK	132322	1745	2.6956	2.874
QPSK	132657	1778.5	2.6946	2.879
16QAM	131987	1711.5	2.6943	2.880
16QAM	132322	1745	2.6940	2.884
16QAM	132657	1778.5	2.6953	2.889
64QAM	131987	1711.5	2.6955	2.874
64QAM	132322	1745	2.6947	2.874
64QAM	132657	1778.5	2.6922	2.800
256QAM	131987	1711.5	2.6921	2.871
256QAM	132322	1745	2.6927	2.859
256QAM	132657	1778.5	2.6955	2.873

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 131987 (1711.5 MHz)	16QAM CH 132657 (1778.5 MHz)

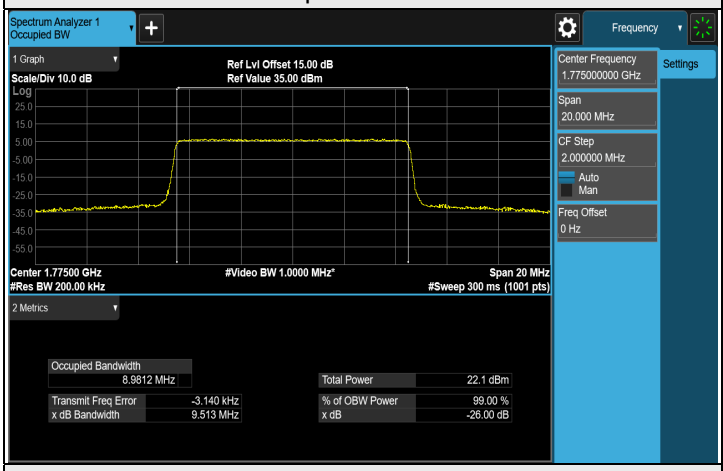
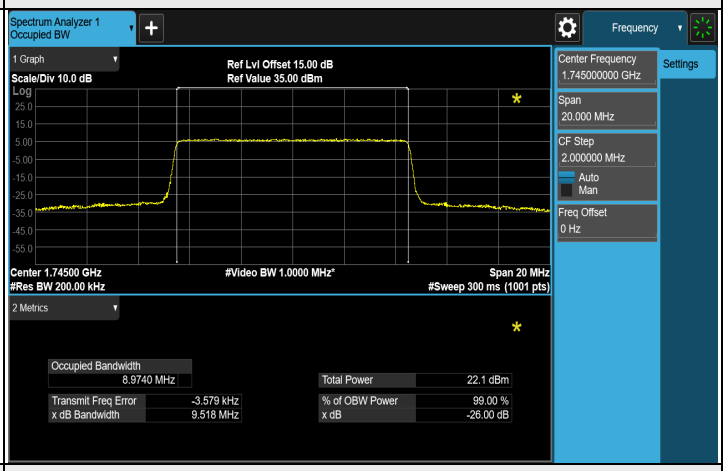
LTE Band 66, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	131997	1712.5	4.4924	4.743
QPSK	132322	1745	4.4942	4.785
QPSK	132647	1777.5	4.4903	4.728
16QAM	131997	1712.5	4.4900	4.785
16QAM	132322	1745	4.4907	4.776
16QAM	132647	1777.5	4.4910	4.783
64QAM	131997	1712.5	4.4952	4.791
64QAM	132322	1745	4.4941	4.801
64QAM	132647	1777.5	4.4945	4.786
256QAM	131997	1712.5	4.4874	4.787
256QAM	132322	1745	4.4893	4.792
256QAM	132647	1777.5	4.4886	4.777

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 131997 (1712.5 MHz)	64QAM CH 132322 (1745 MHz)

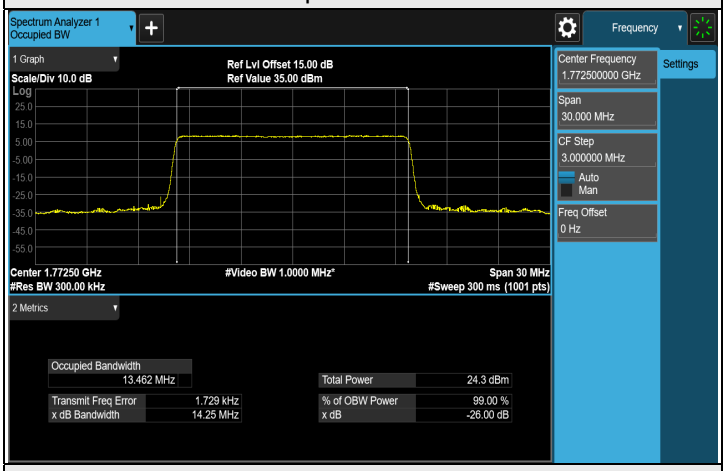
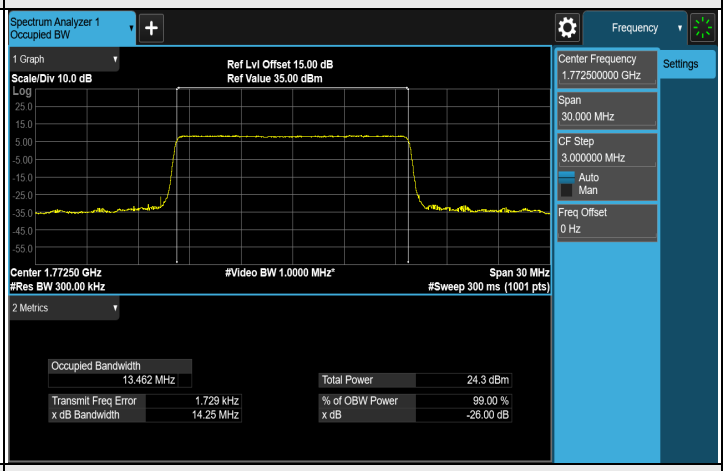
LTE Band 66, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	132022	1715	8.9728	9.510
QPSK	132322	1745	8.9719	9.491
QPSK	132622	1775	8.9730	9.494
16QAM	132022	1715	8.9662	9.496
16QAM	132322	1745	8.9720	9.502
16QAM	132622	1775	8.9604	9.354
64QAM	132022	1715	8.9775	9.512
64QAM	132322	1745	8.9740	9.518
64QAM	132622	1775	8.9812	9.513
256QAM	132022	1715	8.9690	9.510
256QAM	132322	1745	8.9684	9.508
256QAM	132622	1775	8.9691	9.496

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 132622 (1775 MHz)	64QAM CH 132322 (1745 MHz)

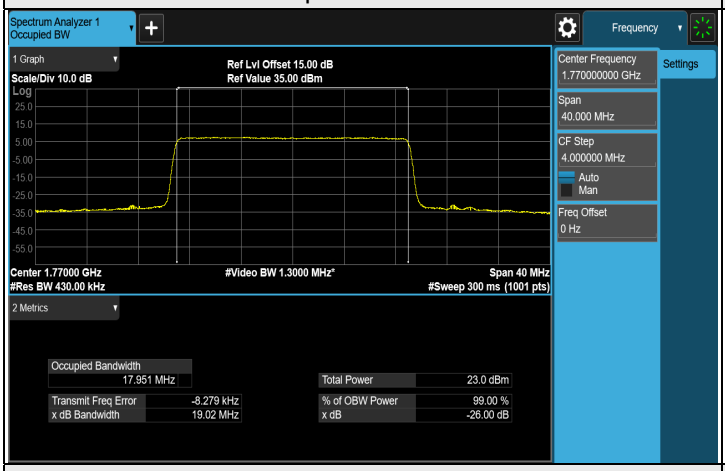
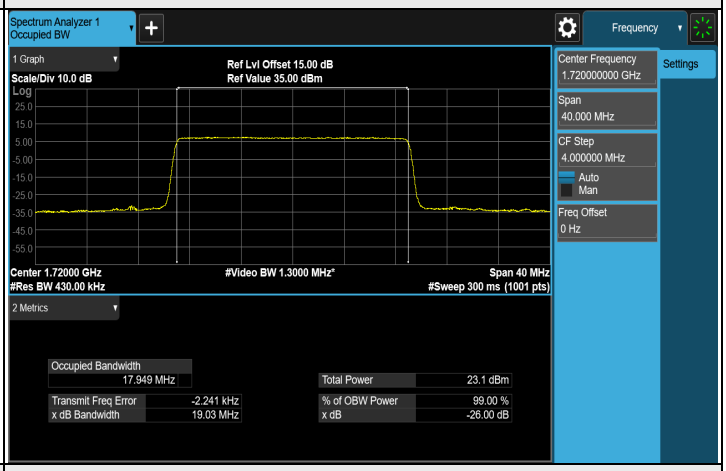
LTE Band 66, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	132047	1717.5	13.4619	14.231
QPSK	132322	1745	13.4600	14.224
QPSK	132597	1772.5	13.4623	14.245
16QAM	132047	1717.5	13.4521	14.209
16QAM	132322	1745	13.4496	14.225
16QAM	132597	1772.5	13.4437	14.047
64QAM	132047	1717.5	13.4476	14.229
64QAM	132322	1745	13.4461	14.217
64QAM	132597	1772.5	13.4504	14.238
256QAM	132047	1717.5	13.4519	14.225
256QAM	132322	1745	13.4468	14.137
256QAM	132597	1772.5	13.4476	14.216

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 132597 (1772.5 MHz)	QPSK CH 132597 (1772.5 MHz)

LTE Band 66, Channel Bandwidth: 20 MHz

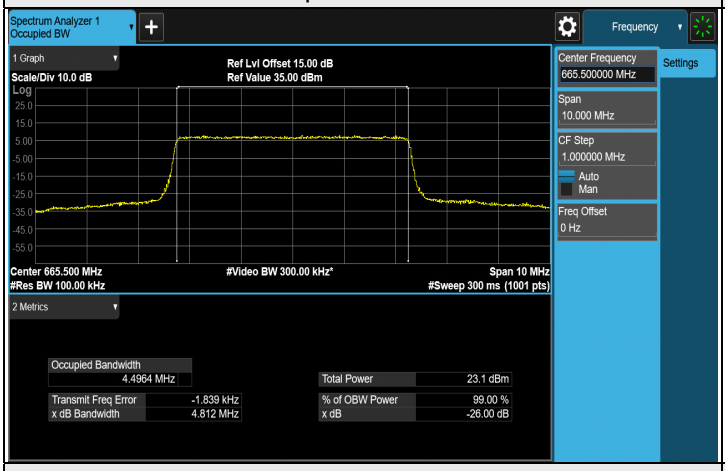
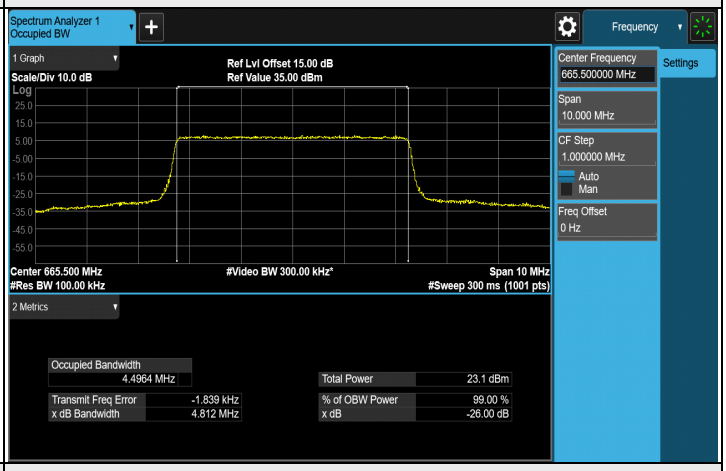
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	132072	1720	17.9334	19.004
QPSK	132322	1745	17.9133	18.968
QPSK	132572	1770	17.9377	19.023
16QAM	132072	1720	17.9488	19.025
16QAM	132322	1745	17.9395	18.987
16QAM	132572	1770	17.9507	19.018
64QAM	132072	1720	17.9492	19.021
64QAM	132322	1745	17.9435	19.023
64QAM	132572	1770	17.9434	19.015
256QAM	132072	1720	17.9496	19.018
256QAM	132322	1745	17.9448	19.019
256QAM	132572	1770	17.9450	19.015

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16QAM CH 132572 (1770 MHz)	16QAM CH 132072 (1720 MHz)

7.4.19 LTE Band 71

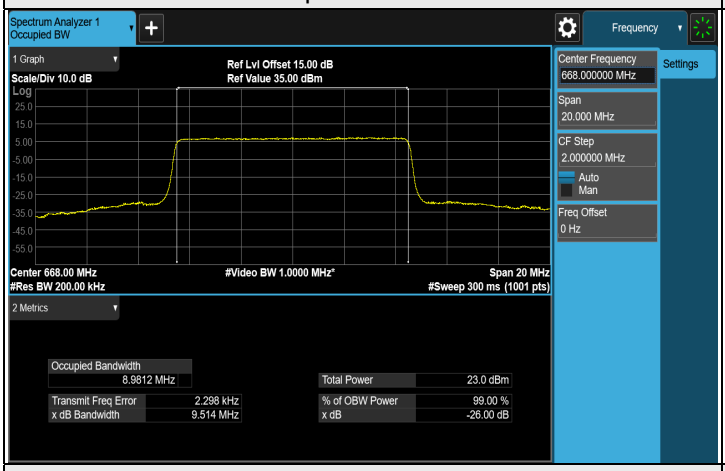
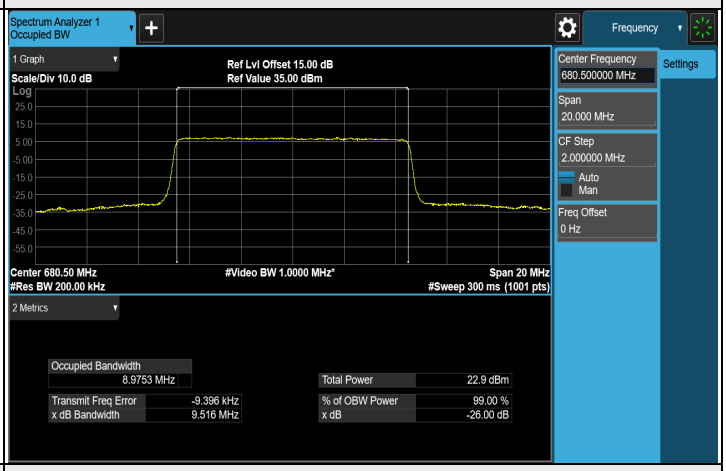
LTE Band 71, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	133147	665.5	4.4847	4.713
QPSK	133297	680.5	4.4921	4.777
QPSK	133447	695.5	4.4912	4.787
16QAM	133147	665.5	4.4894	4.775
16QAM	133297	680.5	4.4900	4.779
16QAM	133447	695.5	4.4900	4.782
64QAM	133147	665.5	4.4964	4.812
64QAM	133297	680.5	4.4926	4.778
64QAM	133447	695.5	4.4920	4.792
256QAM	133147	665.5	4.4860	4.788
256QAM	133297	680.5	4.4864	4.770
256QAM	133447	695.5	4.4883	4.774

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 133147 (665.5 MHz)	64QAM CH 133147 (665.5 MHz)

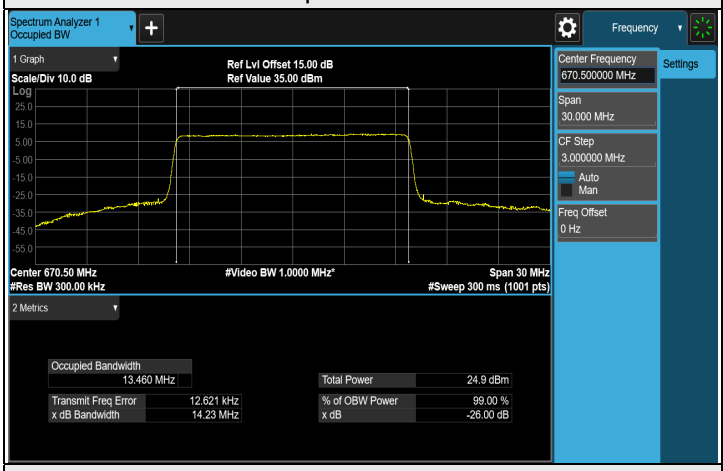
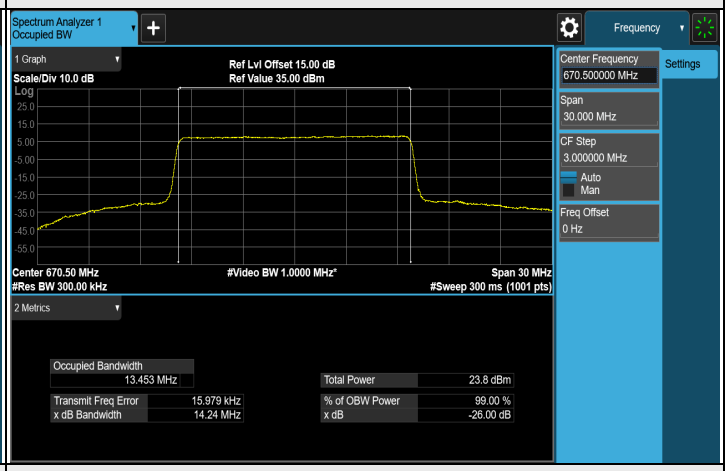
LTE Band 71, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	133172	668	8.9753	9.499
QPSK	133297	680.5	8.9733	9.494
QPSK	133422	693	8.9522	9.490
16QAM	133172	668	8.9768	9.500
16QAM	133297	680.5	8.9734	9.499
16QAM	133422	693	8.9520	9.490
64QAM	133172	668	8.9812	9.514
64QAM	133297	680.5	8.9753	9.516
64QAM	133422	693	8.9558	9.505
256QAM	133172	668	8.9681	9.507
256QAM	133297	680.5	8.9676	9.505
256QAM	133422	693	8.9489	9.475

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 133172 (668 MHz)	64QAM CH 133297 (680.5 MHz)

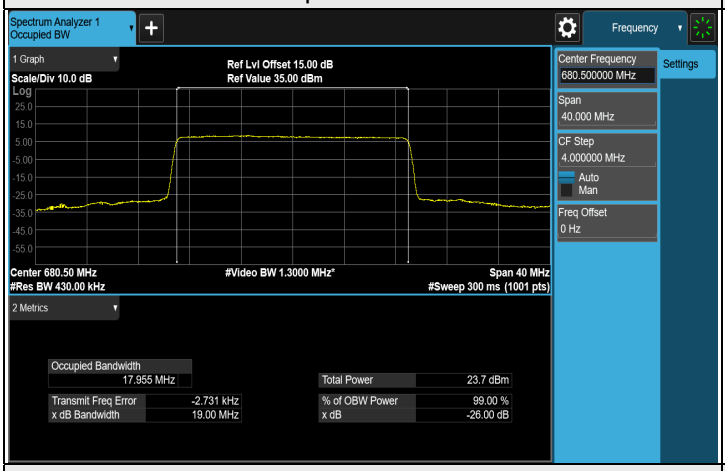
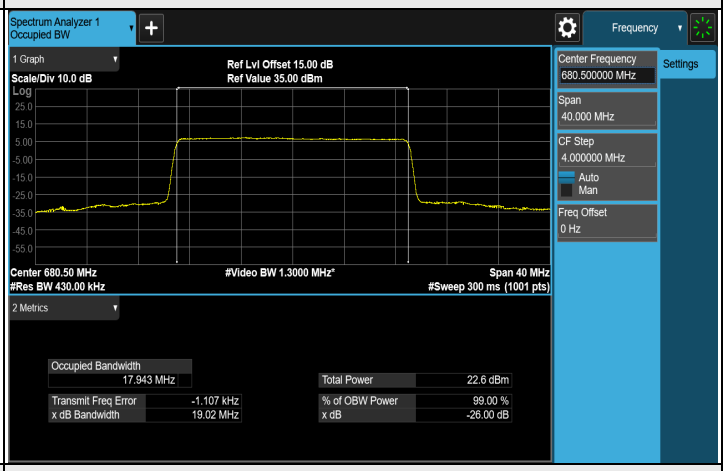
LTE Band 71, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	133197	670.5	13.4597	14.225
QPSK	133297	680.5	13.4585	14.221
QPSK	133397	690.5	13.4281	14.211
16QAM	133197	670.5	13.4530	14.244
16QAM	133297	680.5	13.4492	14.215
16QAM	133397	690.5	13.4223	14.213
64QAM	133197	670.5	13.4479	14.227
64QAM	133297	680.5	13.4429	14.230
64QAM	133397	690.5	13.4174	14.222
256QAM	133197	670.5	13.4552	14.235
256QAM	133297	680.5	13.4483	14.234
256QAM	133397	690.5	13.4220	14.224

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 133197 (670.5 MHz)	16QAM CH 133197 (670.5 MHz)

LTE Band 71, Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	133222	673	17.9261	19.006
QPSK	133297	680.5	17.9365	19.017
QPSK	133372	688	17.9095	18.998
16QAM	133222	673	17.9379	19.011
16QAM	133297	680.5	17.9546	19.004
16QAM	133372	688	17.9194	18.890
64QAM	133222	673	17.9326	19.010
64QAM	133297	680.5	17.9433	19.020
64QAM	133372	688	17.9214	19.001
256QAM	133222	673	17.9311	19.002
256QAM	133297	680.5	17.9354	18.960
256QAM	133372	688	17.9129	18.997

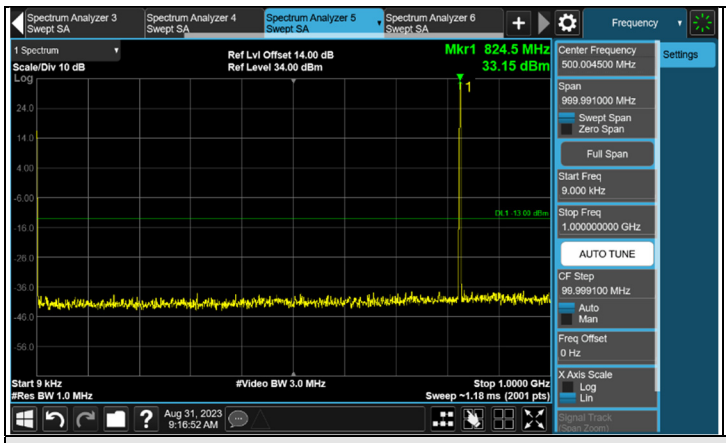
Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16QAM CH 133297 (680.5 MHz)	64QAM CH 133297 (680.5 MHz)

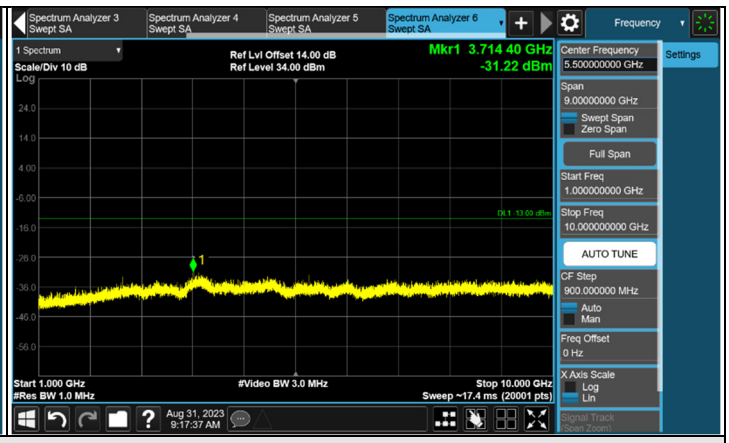
7.5 Conducted Spurious Emissions

Input Power:	4.7 Vdc	Environmental Conditions:	22°C, 73% RH	Tested By:	Willy Cheng

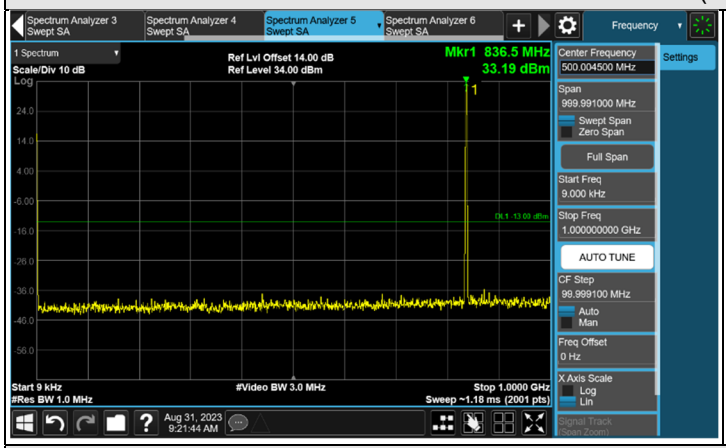
7.5.1 GSM 850

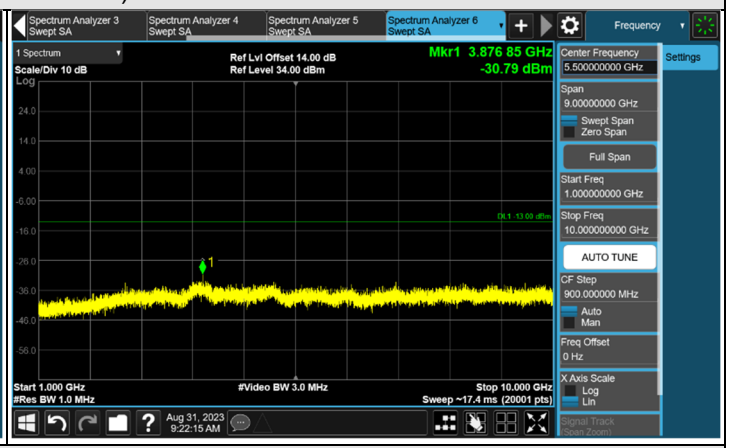
GSM



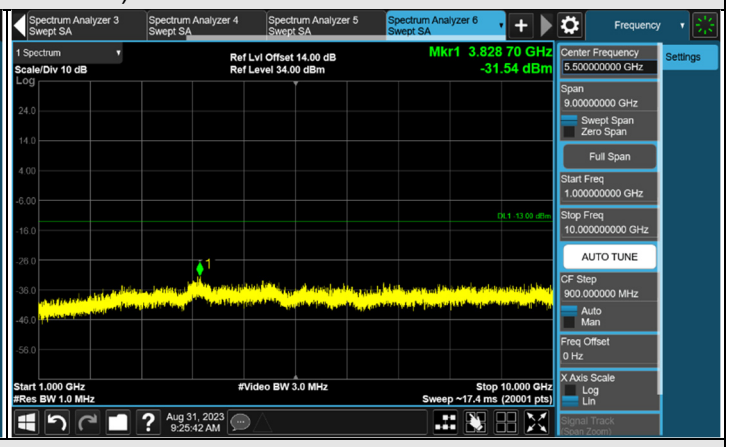


CH 128 (824.2 MHz)



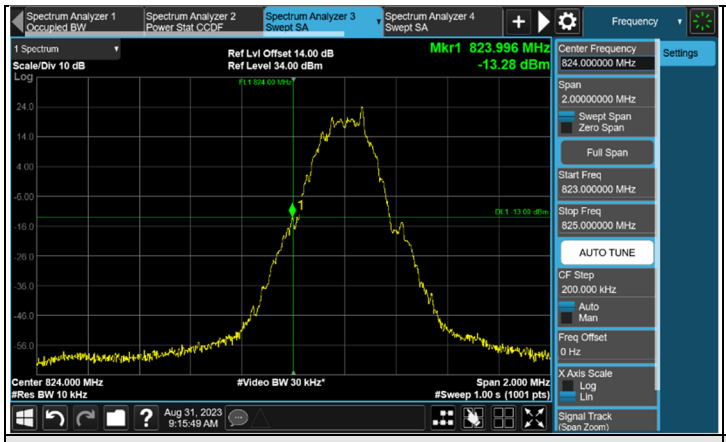


CH 189 (836.4 MHz)

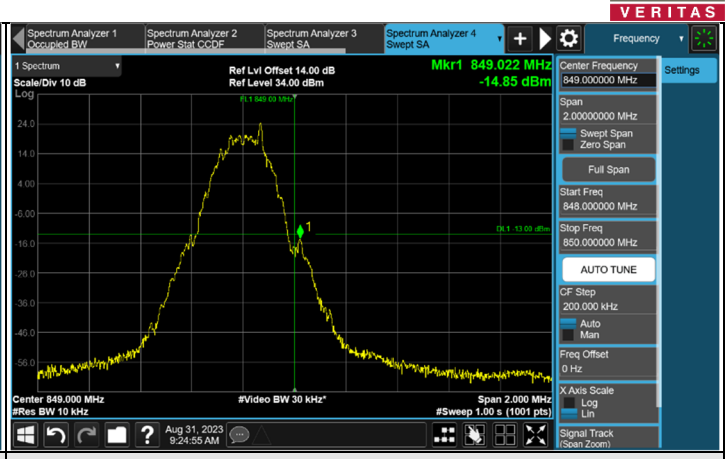


CH 251 (848.8 MHz)

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

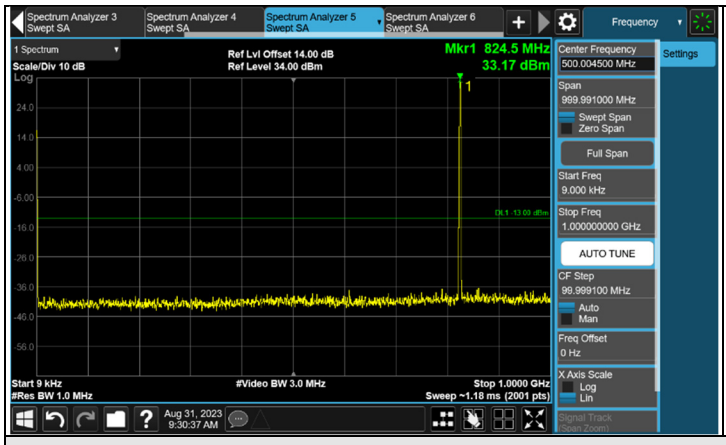


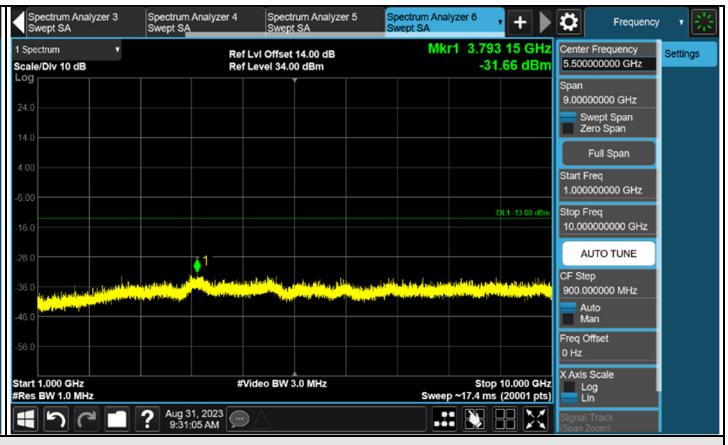
CH 128 (824.2 MHz)



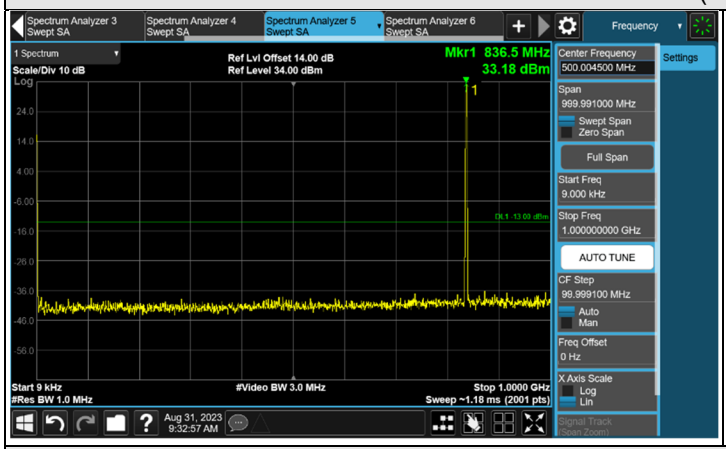
CH 251 (848.8 MHz)

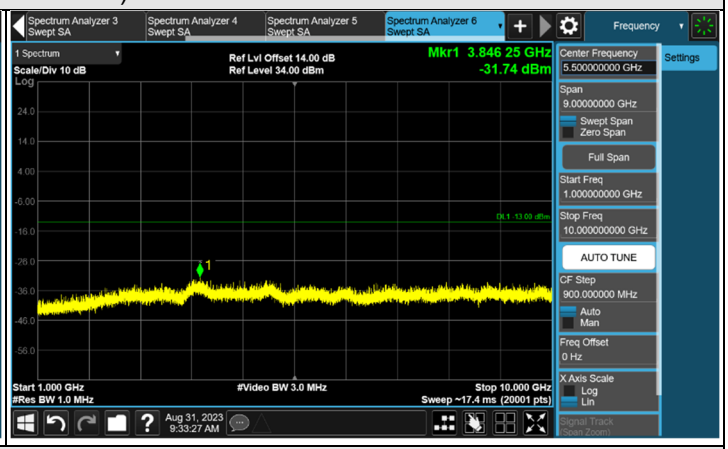
GPRS



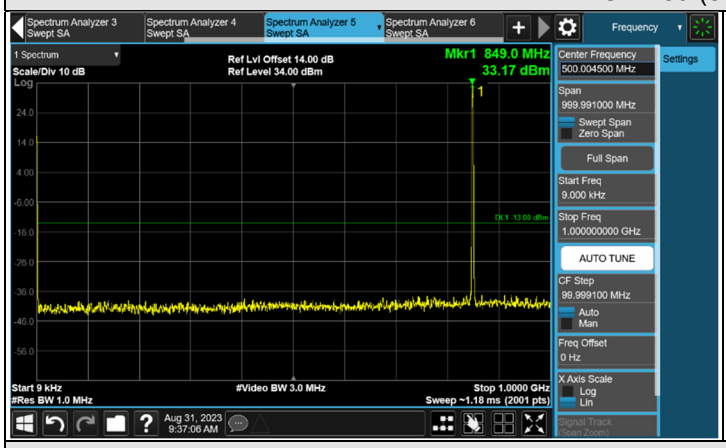


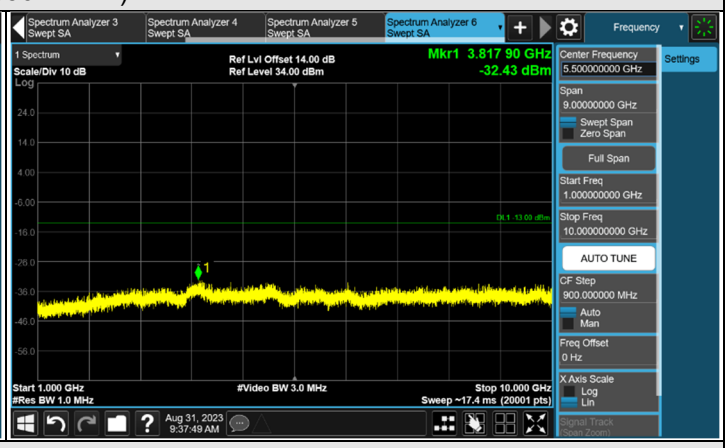
CH 128 (824.2 MHz)





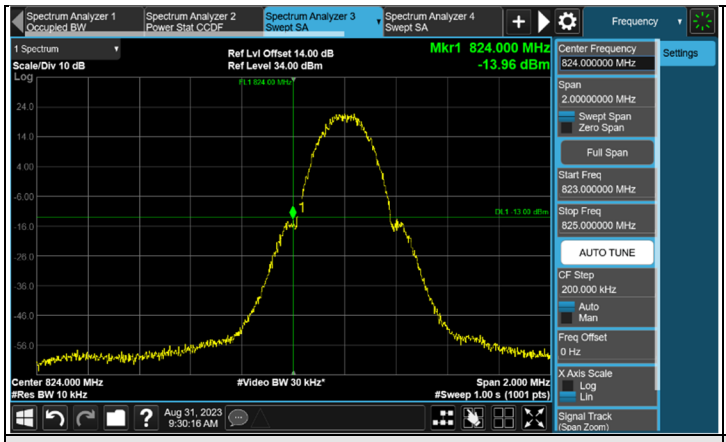
CH 189 (836.4 MHz)



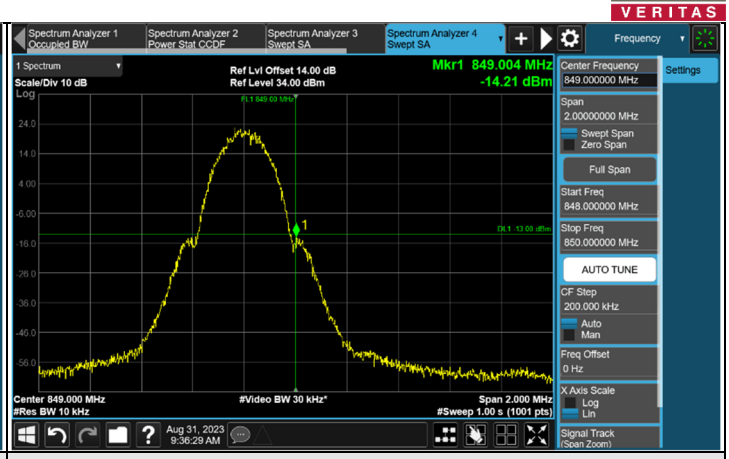


CH 251 (848.8 MHz)

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



CH 128 (824.2 MHz)



CH 251 (848.8 MHz)