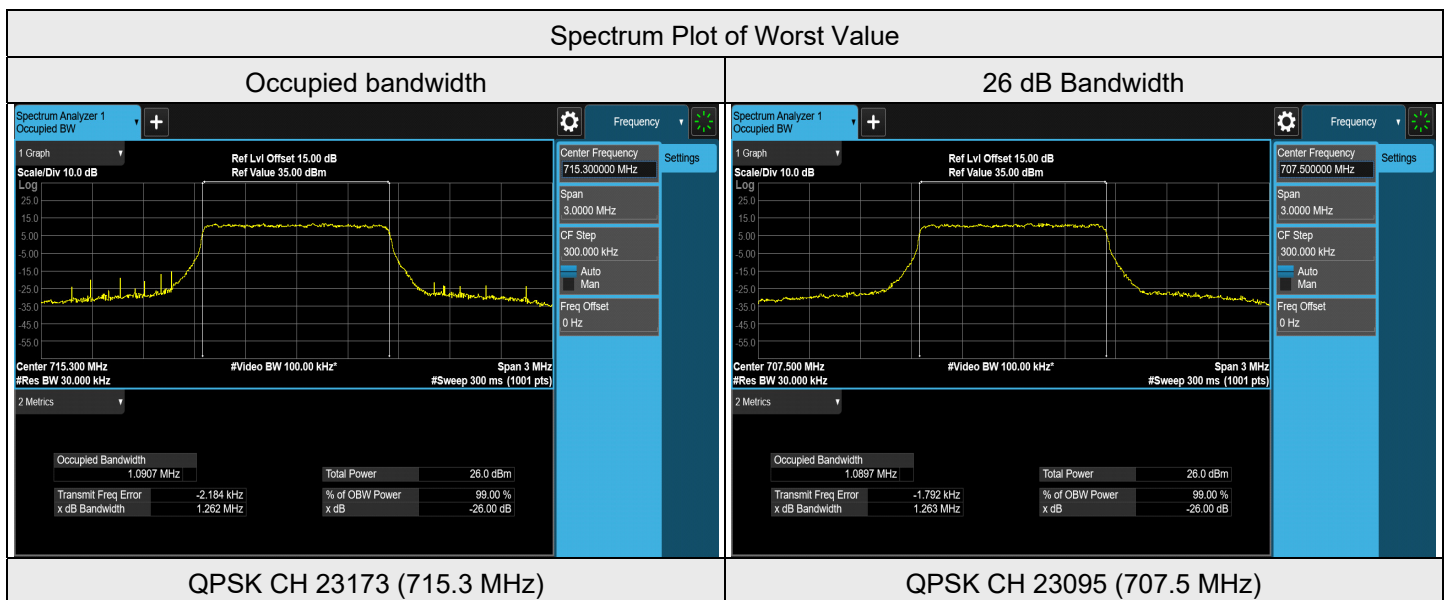


7.4.10 LTE Band 12

LTE Band 12, Channel Bandwidth: 1.4 MHz

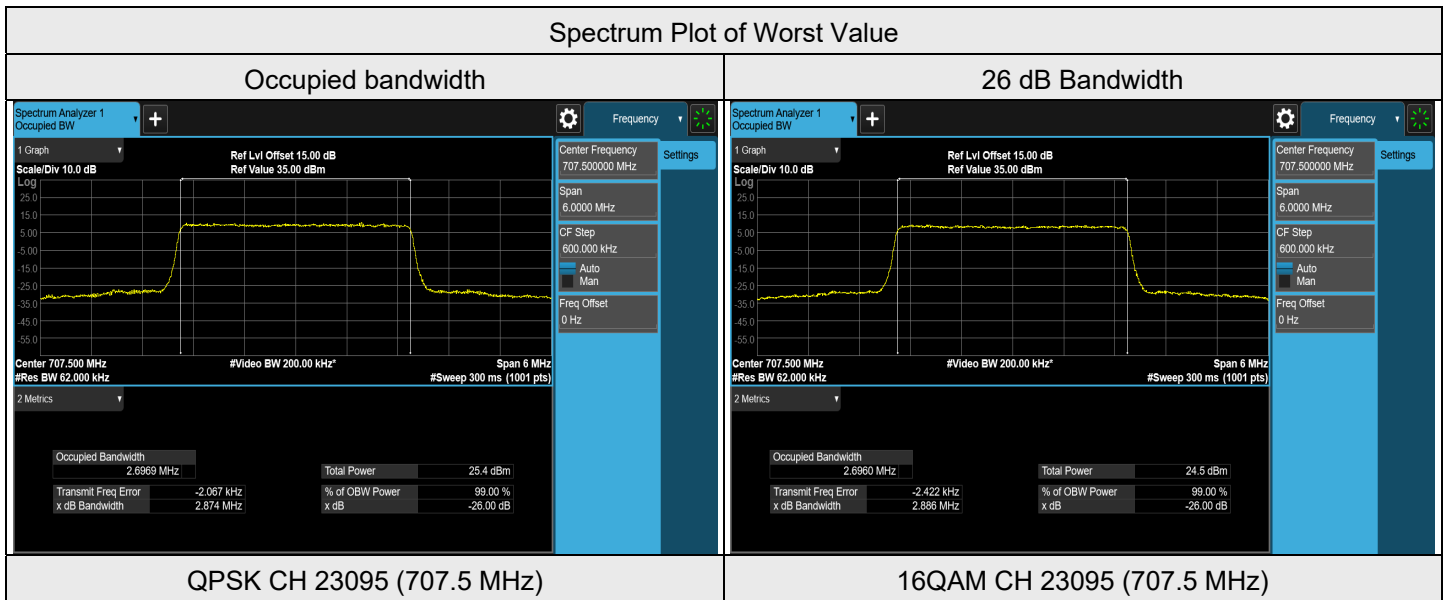
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	23017	699.7	1.0872	1.246
QPSK	23095	707.5	1.0897	1.263
QPSK	23173	715.3	1.0907	1.262
16QAM	23017	699.7	1.0867	1.218
16QAM	23095	707.5	1.0888	1.254
16QAM	23173	715.3	1.0873	1.247
64QAM	23017	699.7	1.0873	1.224
64QAM	23095	707.5	1.0888	1.249
64QAM	23173	715.3	1.0889	1.250
256QAM	23017	699.7	1.0835	1.220
256QAM	23095	707.5	1.0807	1.174
256QAM	23173	715.3	1.0829	1.201





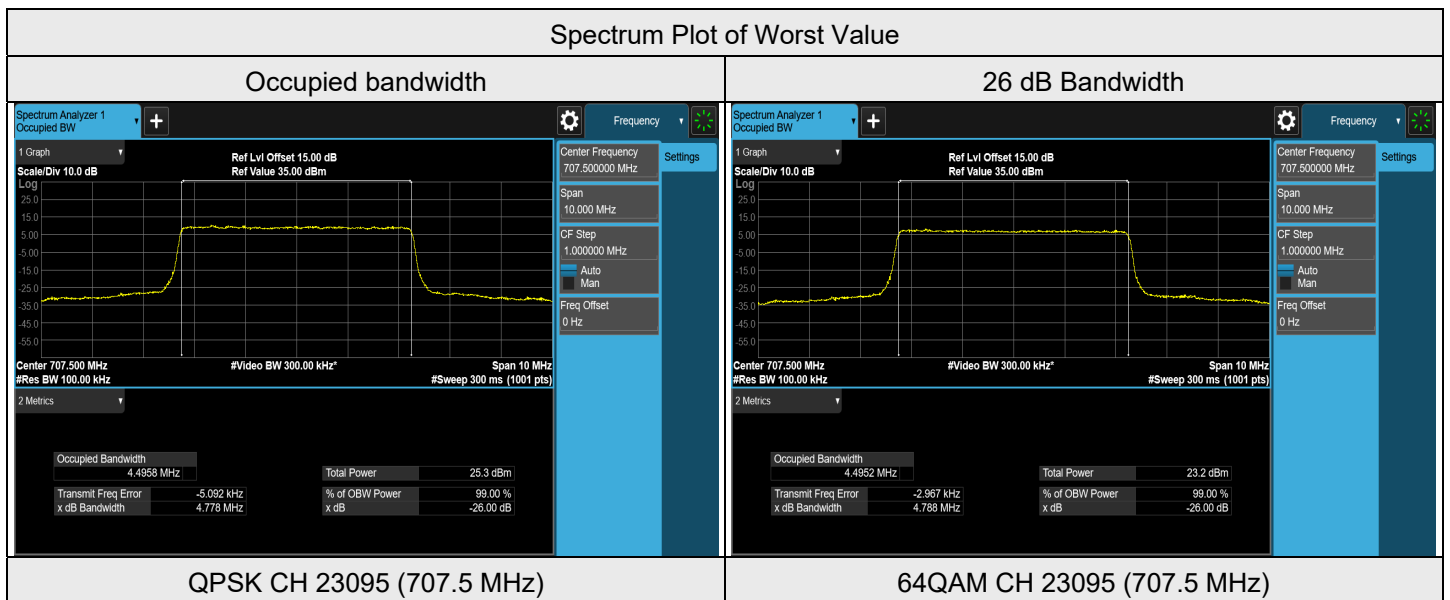
LTE Band 12, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	23025	700.5	2.6917	2.884
QPSK	23095	707.5	2.6969	2.874
QPSK	23165	714.5	2.6925	2.875
16QAM	23025	700.5	2.6946	2.885
16QAM	23095	707.5	2.6960	2.886
16QAM	23165	714.5	2.6937	2.881
64QAM	23025	700.5	2.6844	2.801
64QAM	23095	707.5	2.6928	2.811
64QAM	23165	714.5	2.6920	2.841
256QAM	23025	700.5	2.6955	2.881
256QAM	23095	707.5	2.6868	2.815
256QAM	23165	714.5	2.6859	2.787



LTE Band 12, Channel Bandwidth: 5 MHz

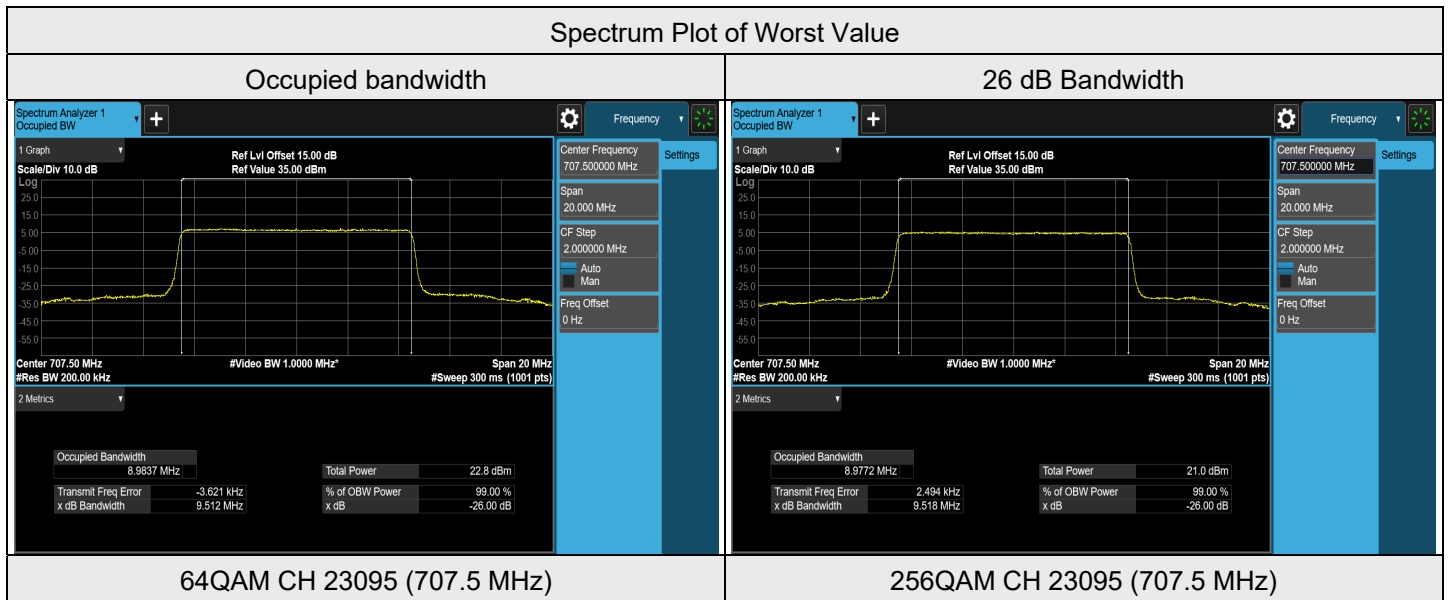
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	23035	701.5	4.4829	4.707
QPSK	23095	707.5	4.4958	4.778
QPSK	23155	713.5	4.4880	4.780
16QAM	23035	701.5	4.4855	4.721
16QAM	23095	707.5	4.4941	4.784
16QAM	23155	713.5	4.4840	4.766
64QAM	23035	701.5	4.4707	4.690
64QAM	23095	707.5	4.4952	4.788
64QAM	23155	713.5	4.4849	4.781
256QAM	23035	701.5	4.4597	4.674
256QAM	23095	707.5	4.4745	4.704
256QAM	23155	713.5	4.4818	4.785





LTE Band 12, Channel Bandwidth: 10 MHz

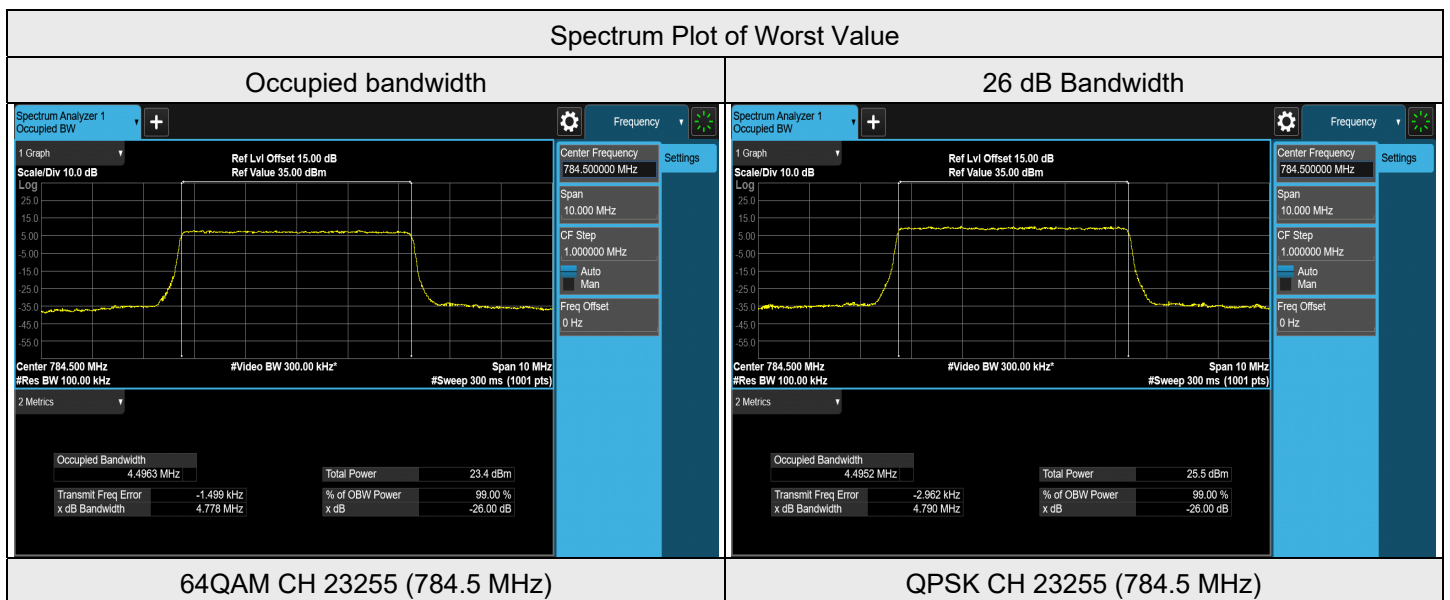
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	23060	704	8.9714	9.488
QPSK	23095	707.5	8.9407	9.367
QPSK	23130	711	8.9657	9.447
16QAM	23060	704	8.9761	9.504
16QAM	23095	707.5	8.9786	9.499
16QAM	23130	711	8.9634	9.488
64QAM	23060	704	8.9767	9.510
64QAM	23095	707.5	8.9837	9.512
64QAM	23130	711	8.9691	9.510
256QAM	23060	704	8.9700	9.499
256QAM	23095	707.5	8.9772	9.518
256QAM	23130	711	8.9619	9.420



7.4.11 LTE Band 13

LTE Band 13, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	23205	779.5	4.4804	4.761
QPSK	23230	782	4.4899	4.775
QPSK	23255	784.5	4.4952	4.790
16QAM	23205	779.5	4.4824	4.771
16QAM	23230	782	4.4858	4.773
16QAM	23255	784.5	4.4902	4.773
64QAM	23205	779.5	4.4857	4.772
64QAM	23230	782	4.4917	4.790
64QAM	23255	784.5	4.4963	4.778
256QAM	23205	779.5	4.4673	4.677
256QAM	23230	782	4.4851	4.783
256QAM	23255	784.5	4.4887	4.767

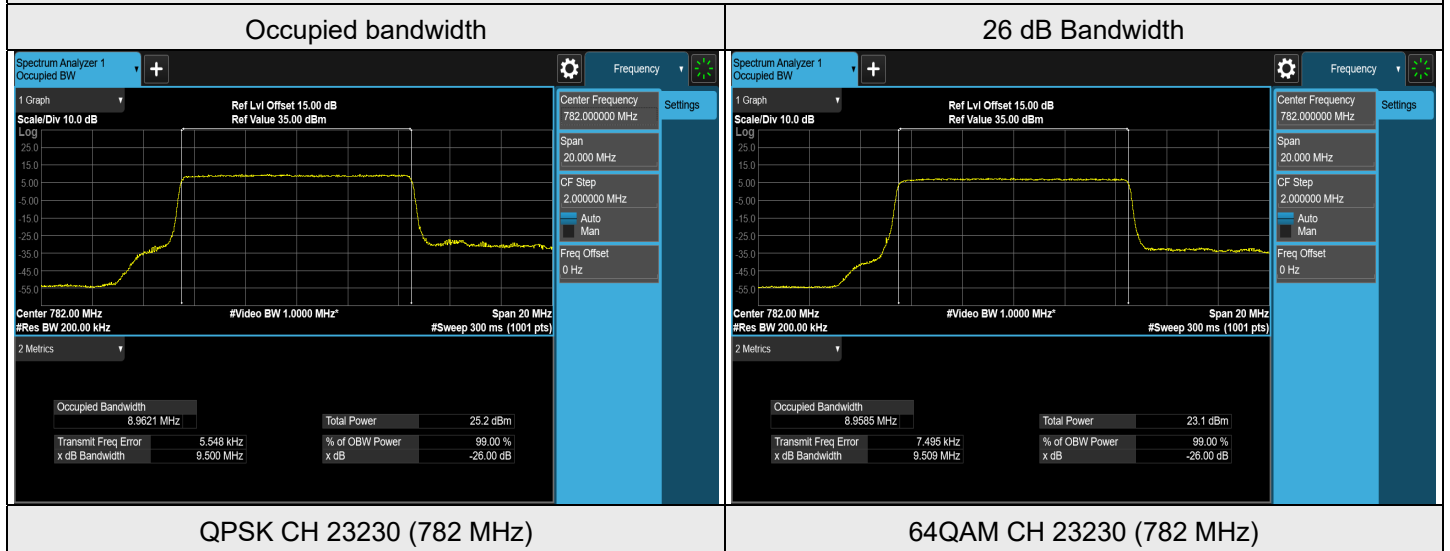




LTE Band 13, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	23230	782	8.9621	9.500
16QAM	23230	782	8.9580	9.485
64QAM	23230	782	8.9585	9.509
256QAM	23230	782	8.9533	9.489

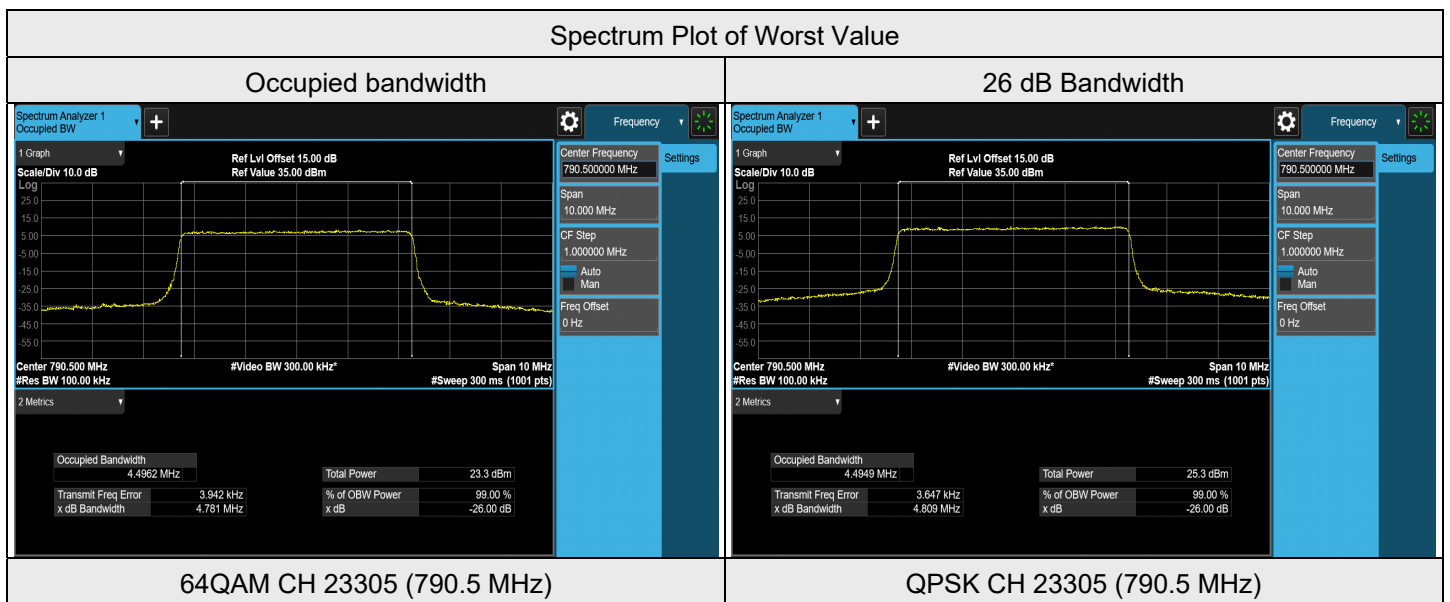
Spectrum Plot of Worst Value



7.4.12 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	4.4949	4.809
QPSK	23330	793	4.4917	4.793
QPSK	23355	795.5	4.4934	4.789
16QAM	23305	790.5	4.4920	4.773
16QAM	23330	793	4.4886	4.792
16QAM	23355	795.5	4.4909	4.783
64QAM	23305	790.5	4.4962	4.781
64QAM	23330	793	4.4878	4.778
64QAM	23355	795.5	4.4941	4.780
256QAM	23305	790.5	4.4898	4.785
256QAM	23330	793	4.4820	4.785
256QAM	23355	795.5	4.4860	4.771

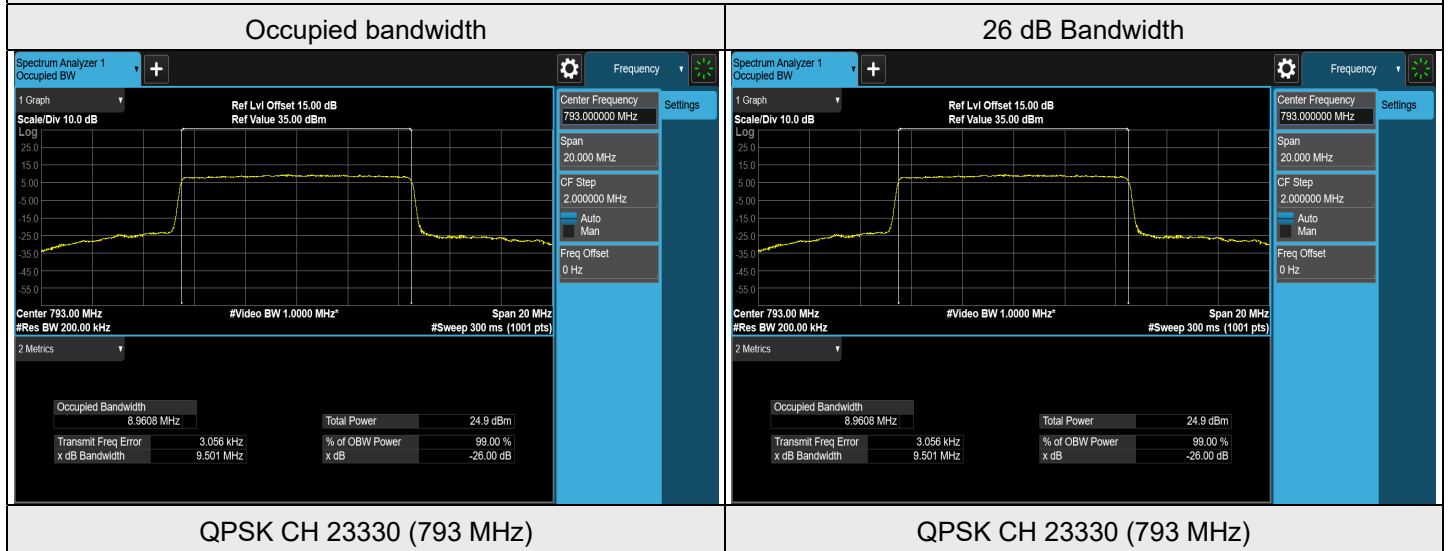




LTE Band 14, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	23330	793	8.9608	9.501
16QAM	23330	793	8.9577	9.489
64QAM	23330	793	8.9585	9.488
256QAM	23330	793	8.9502	9.476

Spectrum Plot of Worst Value

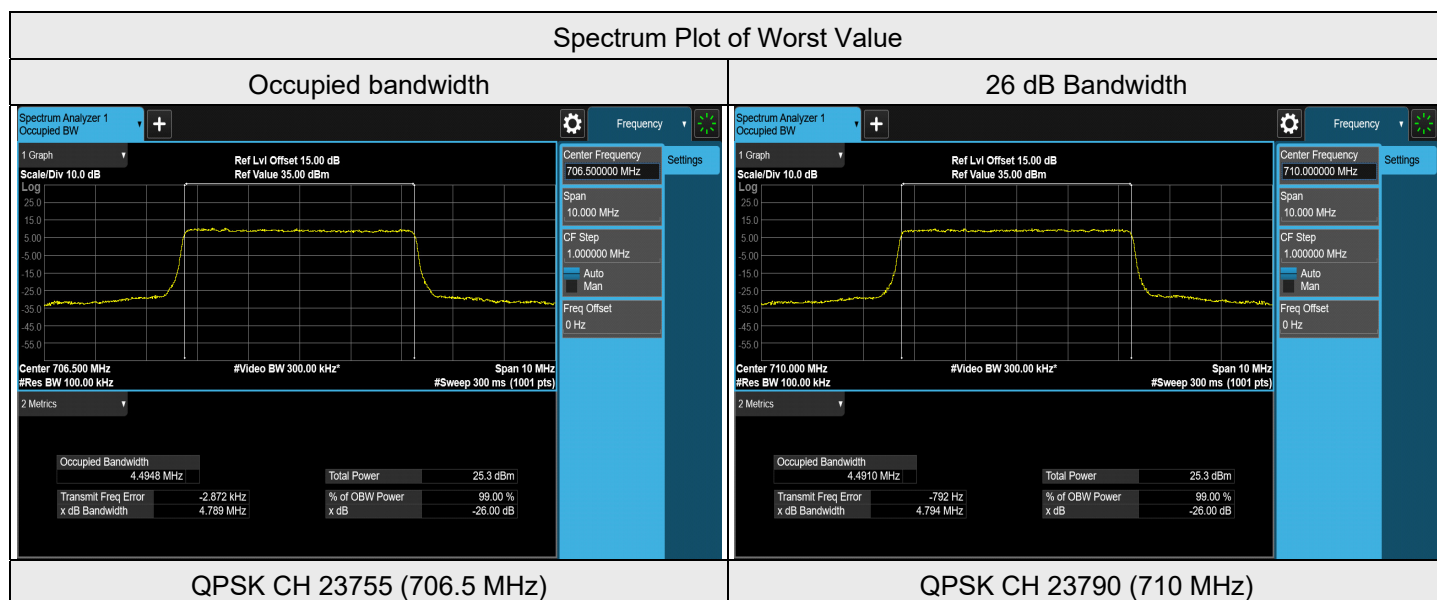


7.4.13 LTE Band 17

LTE Band 17, Channel Bandwidth: 5 MHz

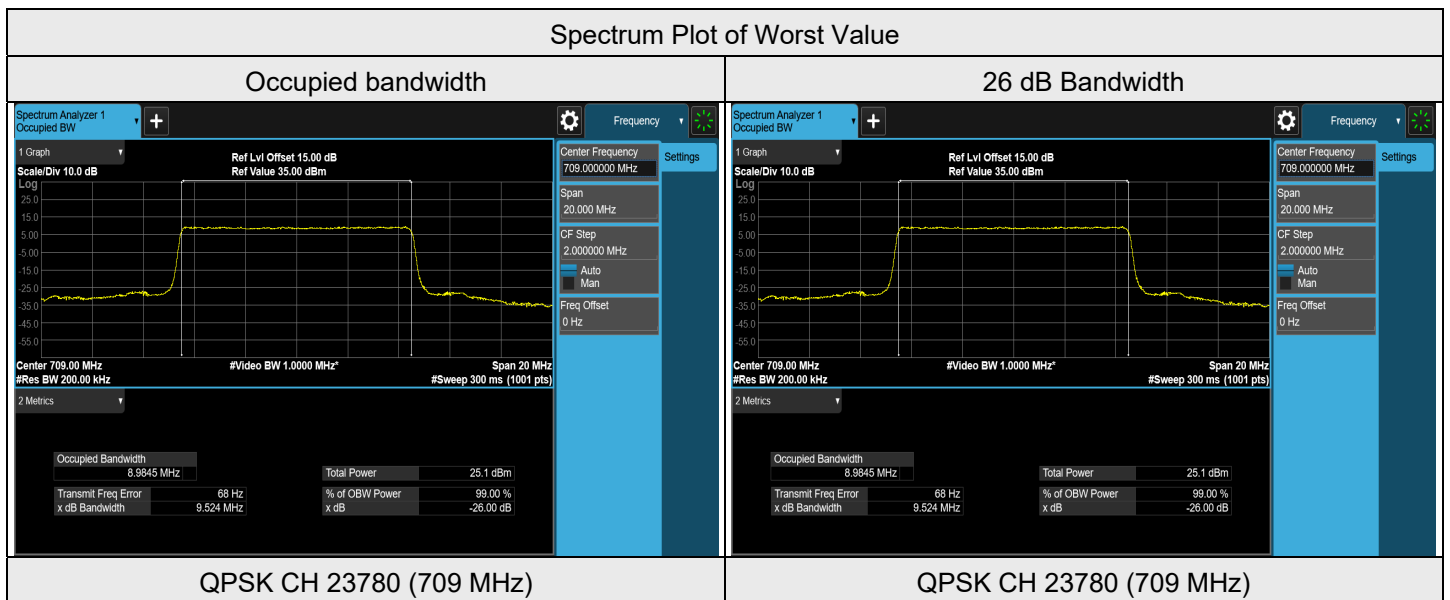
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	23755	706.5	4.4948	4.789
QPSK	23790	710	4.4910	4.794
QPSK	23825	713.5	4.4866	4.788
16QAM	23755	706.5	4.4912	4.778
16QAM	23790	710	4.4910	4.782
16QAM	23825	713.5	4.4795	4.673
64QAM	23755	706.5	4.4895	4.778
64QAM	23790	710	4.4941	4.790
64QAM	23825	713.5	4.4884	4.783
256QAM	23755	706.5	4.4862	4.779
256QAM	23790	710	4.4865	4.774
256QAM	23825	713.5	4.4816	4.784

Spectrum Plot of Worst Value



LTE Band 17, Channel Bandwidth: 10 MHz

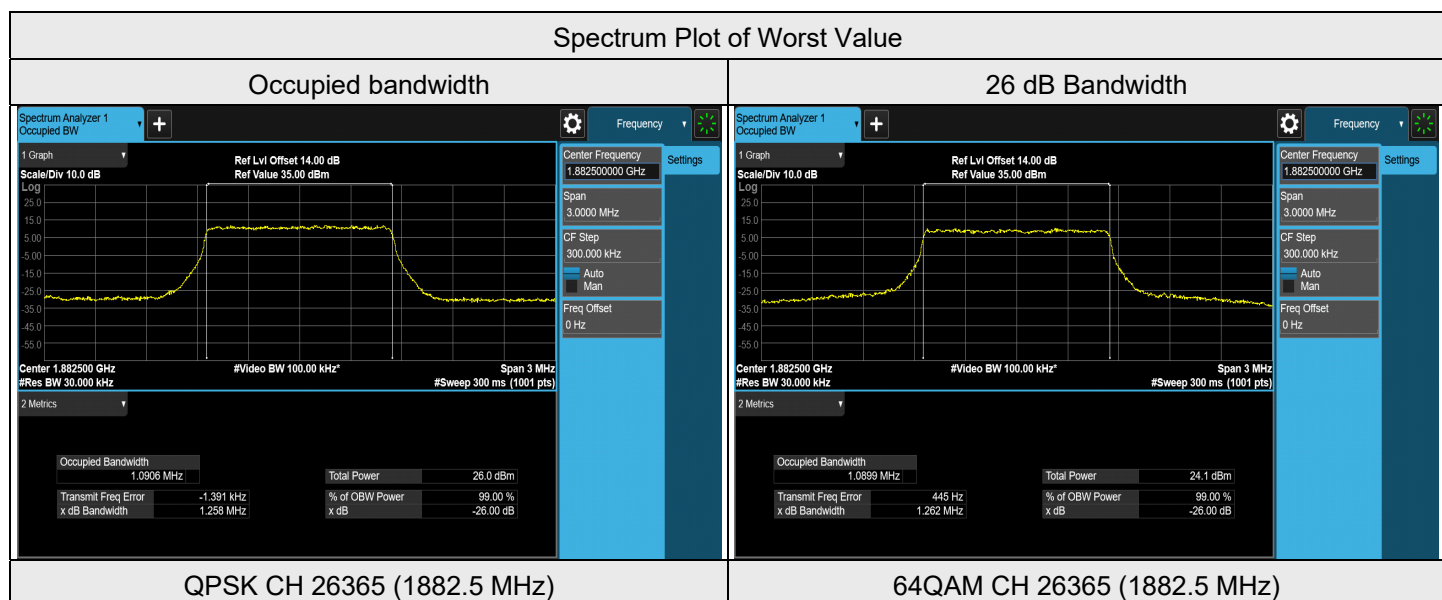
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	23780	709	8.9845	9.524
QPSK	23790	710	8.9761	9.496
QPSK	23800	711	8.9666	9.491
16QAM	23780	709	8.9739	9.398
16QAM	23790	710	8.9834	9.492
16QAM	23800	711	8.9645	9.501
64QAM	23780	709	8.8126	9.328
64QAM	23790	710	8.9835	9.518
64QAM	23800	711	8.9722	9.511
256QAM	23780	709	8.9745	9.505
256QAM	23790	710	8.9761	9.511
256QAM	23800	711	8.9624	9.488



7.4.14 LTE Band 25

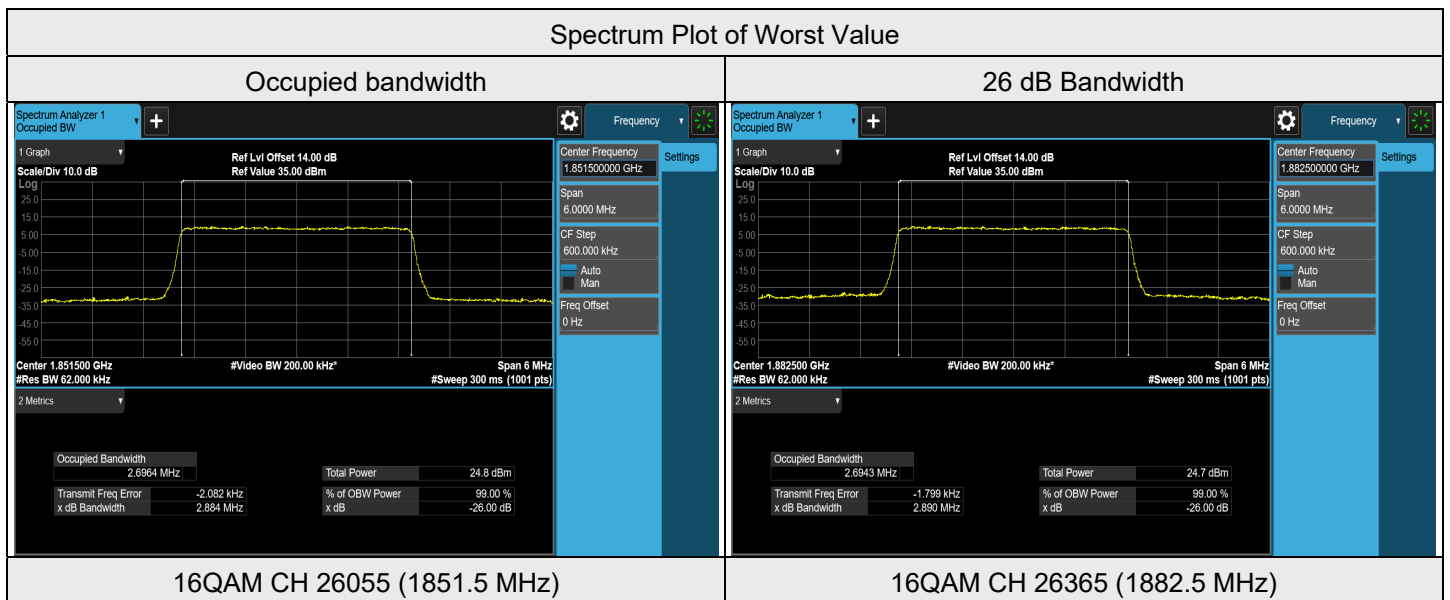
LTE Band 25, Channel Bandwidth: 1.4 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	26047	1850.7	1.0880	1.257
QPSK	26365	1882.5	1.0906	1.258
QPSK	26683	1914.3	1.0906	1.256
16QAM	26047	1850.7	1.0877	1.246
16QAM	26365	1882.5	1.0882	1.251
16QAM	26683	1914.3	1.0878	1.250
64QAM	26047	1850.7	1.0881	1.259
64QAM	26365	1882.5	1.0899	1.262
64QAM	26683	1914.3	1.0893	1.251
256QAM	26047	1850.7	1.0844	1.237
256QAM	26365	1882.5	1.0858	1.236
256QAM	26683	1914.3	1.0842	1.231



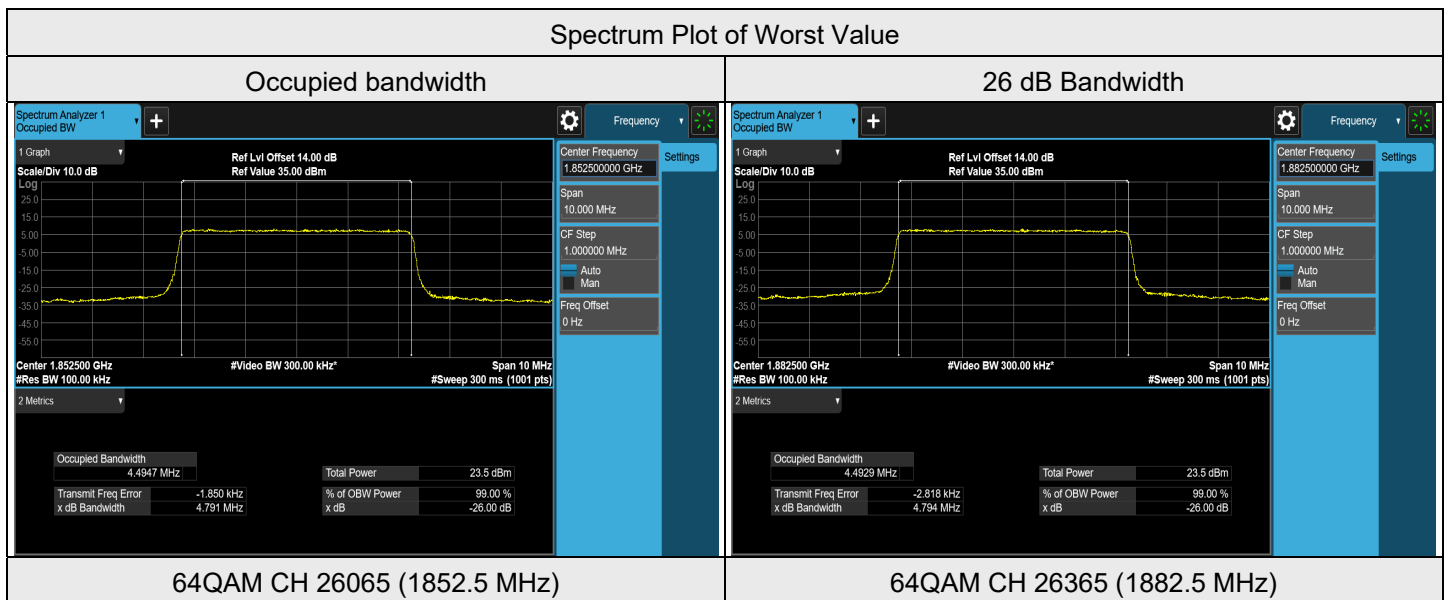
LTE Band 25, Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	26055	1851.5	2.6944	2.886
QPSK	26365	1882.5	2.6924	2.882
QPSK	26675	1913.5	2.6948	2.880
16QAM	26055	1851.5	2.6964	2.884
16QAM	26365	1882.5	2.6943	2.890
16QAM	26675	1913.5	2.6932	2.878
64QAM	26055	1851.5	2.6920	2.868
64QAM	26365	1882.5	2.6937	2.873
64QAM	26675	1913.5	2.6932	2.868
256QAM	26055	1851.5	2.6956	2.879
256QAM	26365	1882.5	2.6964	2.876
256QAM	26675	1913.5	2.6958	2.873



LTE Band 25, Channel Bandwidth: 5 MHz

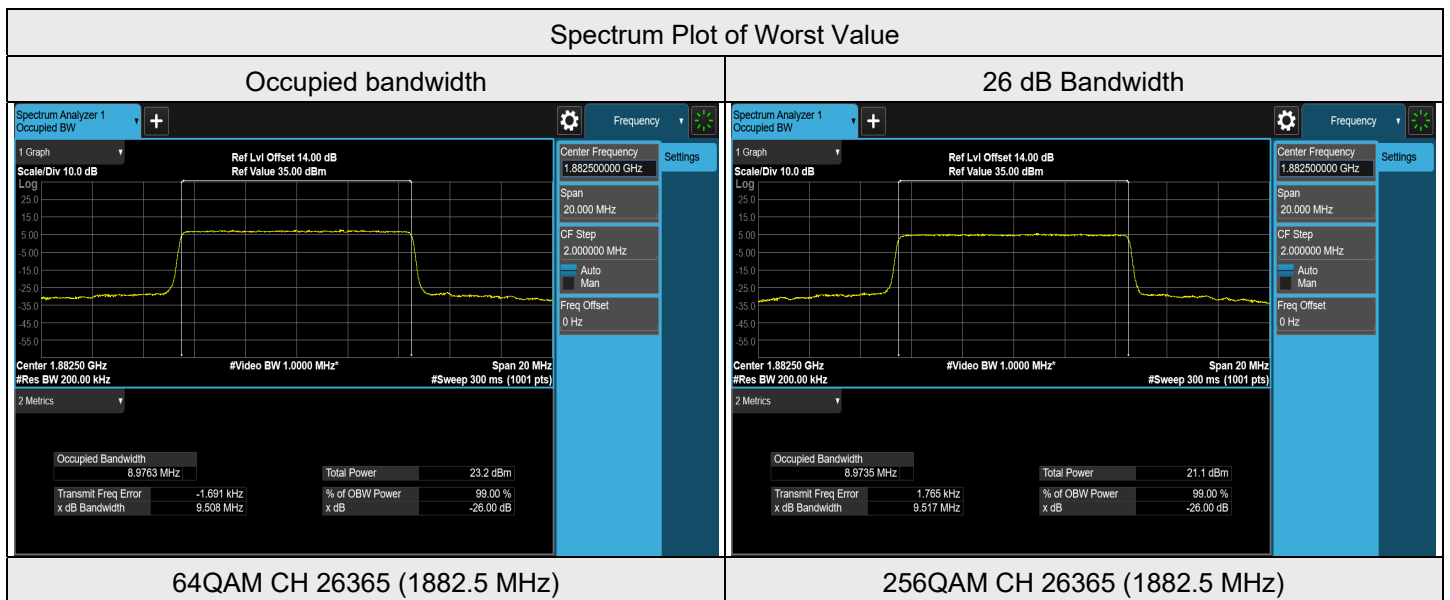
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	26065	1852.5	4.4942	4.787
QPSK	26365	1882.5	4.4933	4.788
QPSK	26665	1912.5	4.4921	4.772
16QAM	26065	1852.5	4.4899	4.779
16QAM	26365	1882.5	4.4911	4.788
16QAM	26665	1912.5	4.4900	4.778
64QAM	26065	1852.5	4.4947	4.791
64QAM	26365	1882.5	4.4929	4.794
64QAM	26665	1912.5	4.4935	4.785
256QAM	26065	1852.5	4.4878	4.784
256QAM	26365	1882.5	4.4886	4.788
256QAM	26665	1912.5	4.4861	4.779





LTE Band 25, Channel Bandwidth: 10 MHz

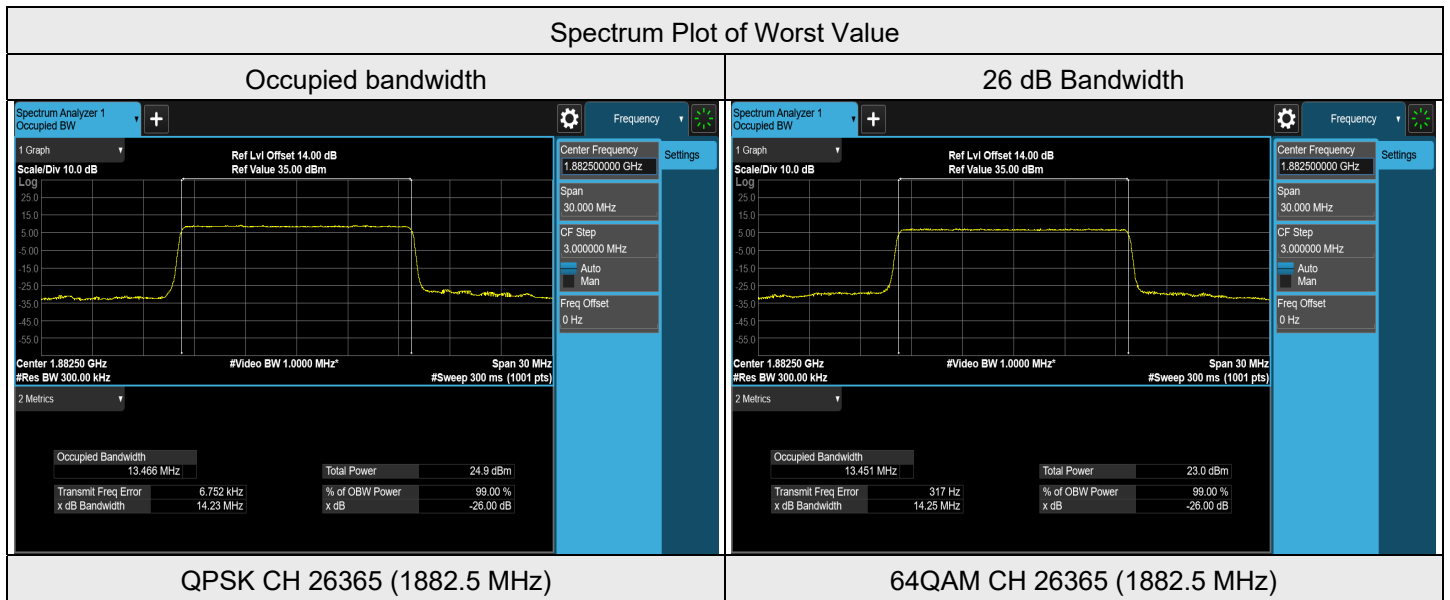
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	26090	1855	8.9754	9.514
QPSK	26365	1882.5	8.9740	9.498
QPSK	26640	1910	8.9717	9.501
16QAM	26090	1855	8.9735	9.503
16QAM	26365	1882.5	8.9692	9.513
16QAM	26640	1910	8.9648	9.504
64QAM	26090	1855	8.9753	9.510
64QAM	26365	1882.5	8.9763	9.508
64QAM	26640	1910	8.9709	9.508
256QAM	26090	1855	8.9730	9.502
256QAM	26365	1882.5	8.9735	9.517
256QAM	26640	1910	8.9682	9.507





LTE Band 25, Channel Bandwidth: 15 MHz

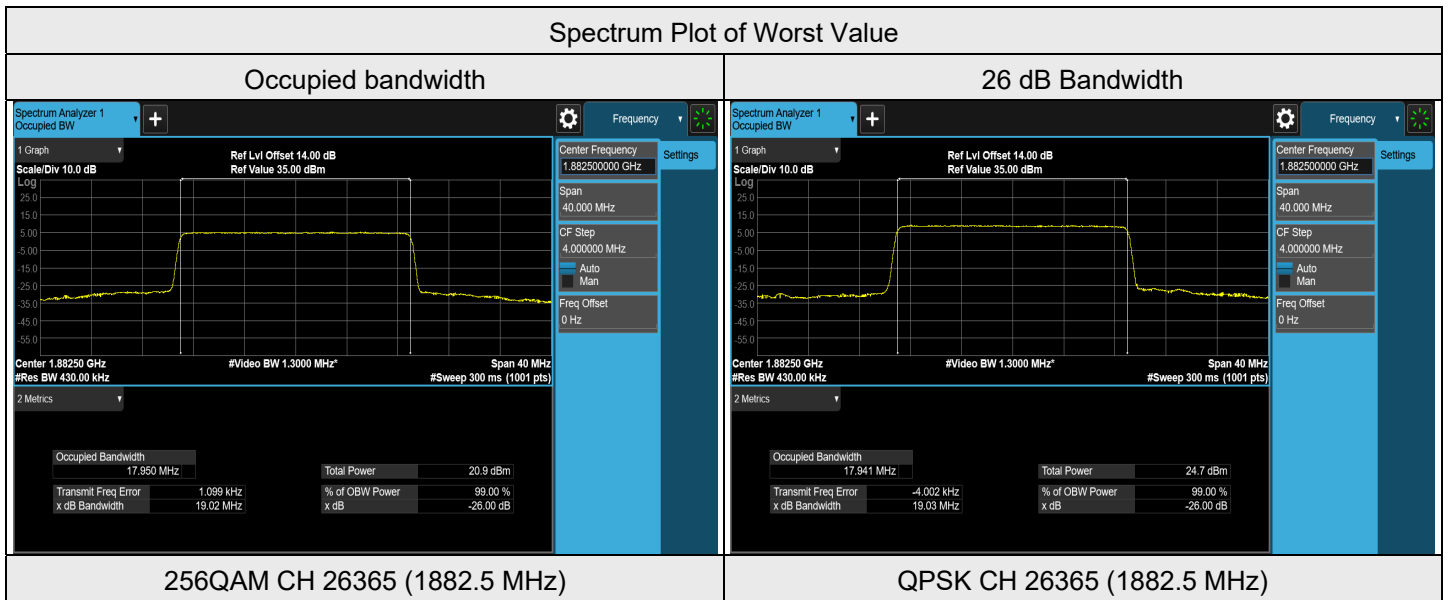
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	26115	1857.5	13.4586	14.217
QPSK	26365	1882.5	13.4657	14.226
QPSK	26615	1907.5	13.4466	14.221
16QAM	26115	1857.5	13.4548	14.231
16QAM	26365	1882.5	13.4541	14.235
16QAM	26615	1907.5	13.4482	14.231
64QAM	26115	1857.5	13.4476	14.240
64QAM	26365	1882.5	13.4511	14.246
64QAM	26615	1907.5	13.4444	14.226
256QAM	26115	1857.5	13.4595	14.229
256QAM	26365	1882.5	13.4599	14.245
256QAM	26615	1907.5	13.4507	14.243





LTE Band 25, Channel Bandwidth: 20 MHz

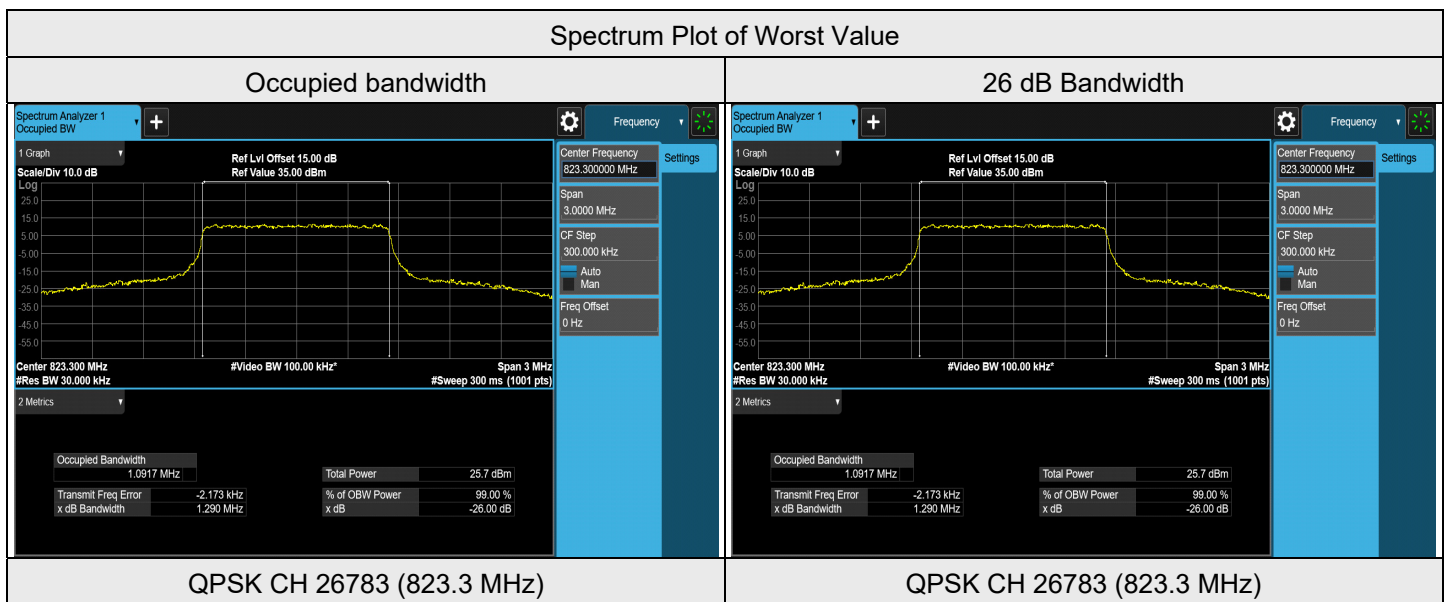
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	26140	1860	17.9341	19.025
QPSK	26365	1882.5	17.9409	19.028
QPSK	26590	1905	17.9289	18.999
16QAM	26140	1860	17.9428	19.022
16QAM	26365	1882.5	17.9446	19.027
16QAM	26590	1905	17.9446	19.022
64QAM	26140	1860	17.9426	19.021
64QAM	26365	1882.5	17.9453	19.027
64QAM	26590	1905	17.9402	19.021
256QAM	26140	1860	17.9456	19.022
256QAM	26365	1882.5	17.9501	19.020
256QAM	26590	1905	17.9383	19.027



7.4.15 LTE Band 26 (814-824 MHz)

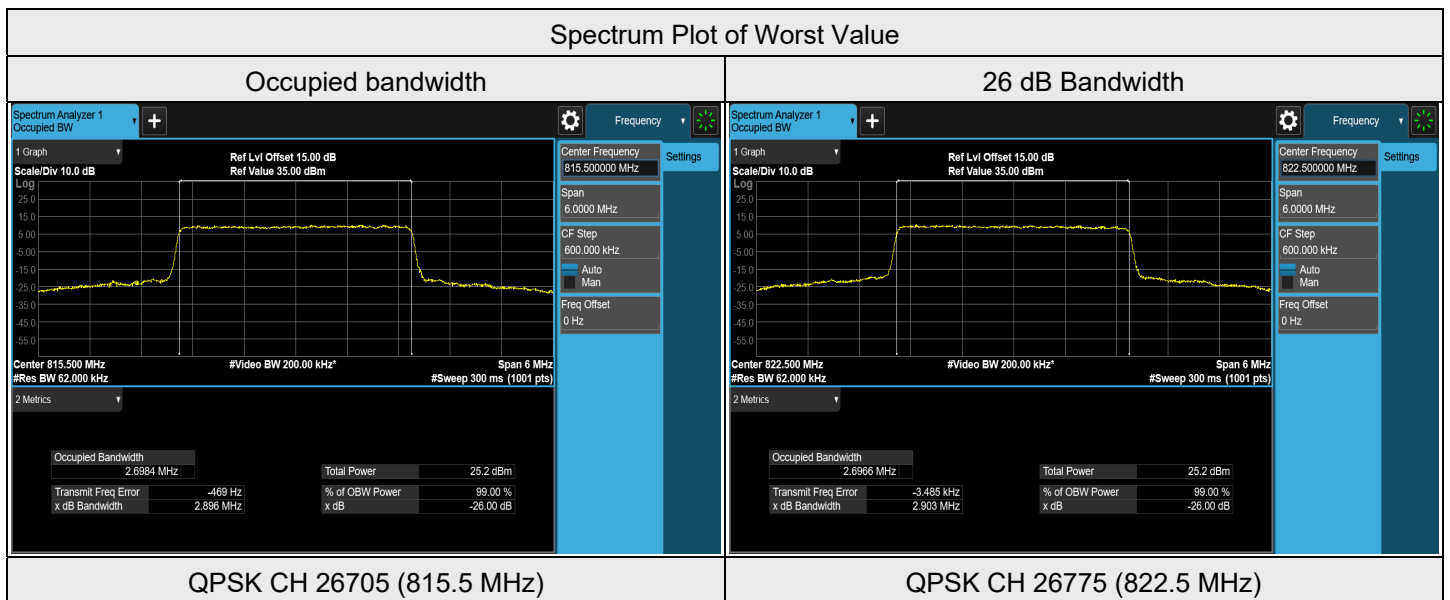
LTE Band 26 (814-824 MHz), Channel Bandwidth: 1.4 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	26697	814.7	1.0891	1.259
QPSK	26740	819	1.0916	1.262
QPSK	26783	823.3	1.0917	1.290
16QAM	26697	814.7	1.0888	1.262
16QAM	26740	819	1.0886	1.250
16QAM	26783	823.3	1.0879	1.257
64QAM	26697	814.7	1.0892	1.255
64QAM	26740	819	1.0882	1.251
64QAM	26783	823.3	1.0888	1.255
256QAM	26697	814.7	1.0854	1.239
256QAM	26740	819	1.0848	1.238
256QAM	26783	823.3	1.0838	1.235



LTE Band 26 (814-824 MHz), Channel Bandwidth: 3 MHz

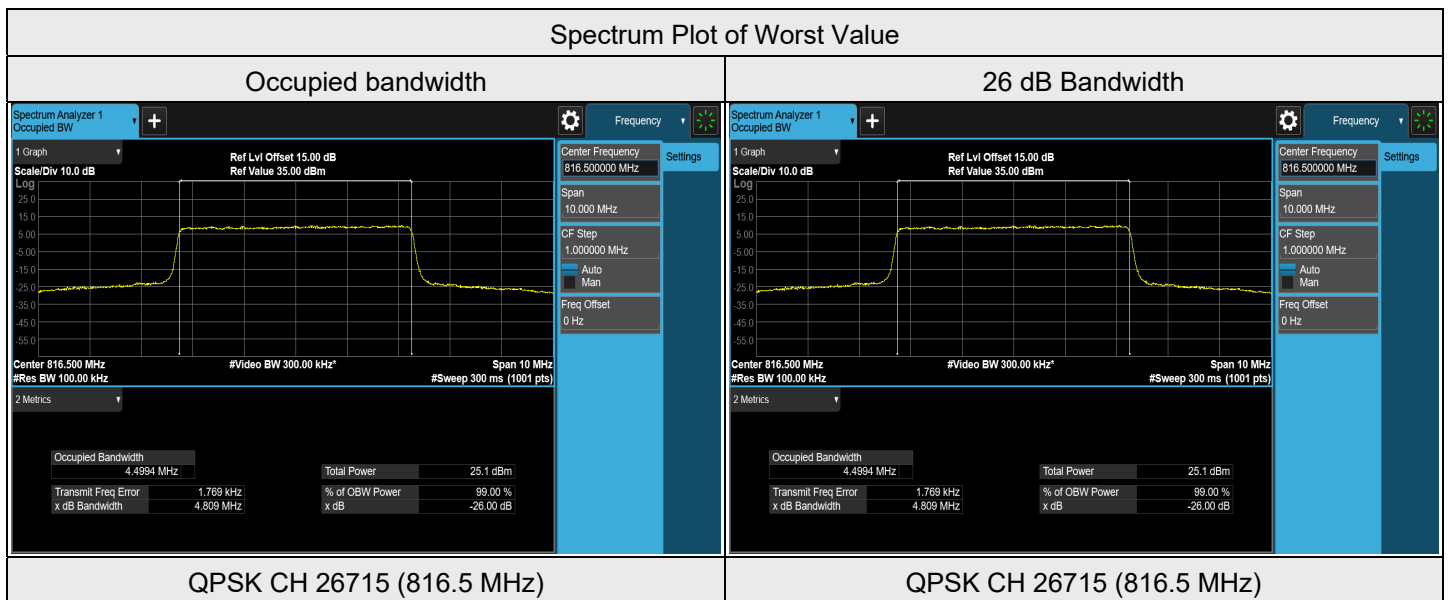
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	26705	815.5	2.6984	2.896
QPSK	26740	819	2.6951	2.881
QPSK	26775	822.5	2.6966	2.903
16QAM	26705	815.5	2.6975	2.892
16QAM	26740	819	2.6965	2.891
16QAM	26775	822.5	2.6968	2.887
64QAM	26705	815.5	2.6946	2.864
64QAM	26740	819	2.6939	2.864
64QAM	26775	822.5	2.6931	2.864
256QAM	26705	815.5	2.6958	2.882
256QAM	26740	819	2.6954	2.878
256QAM	26775	822.5	2.6935	2.872





LTE Band 26 (814-824 MHz), Channel Bandwidth: 5 MHz

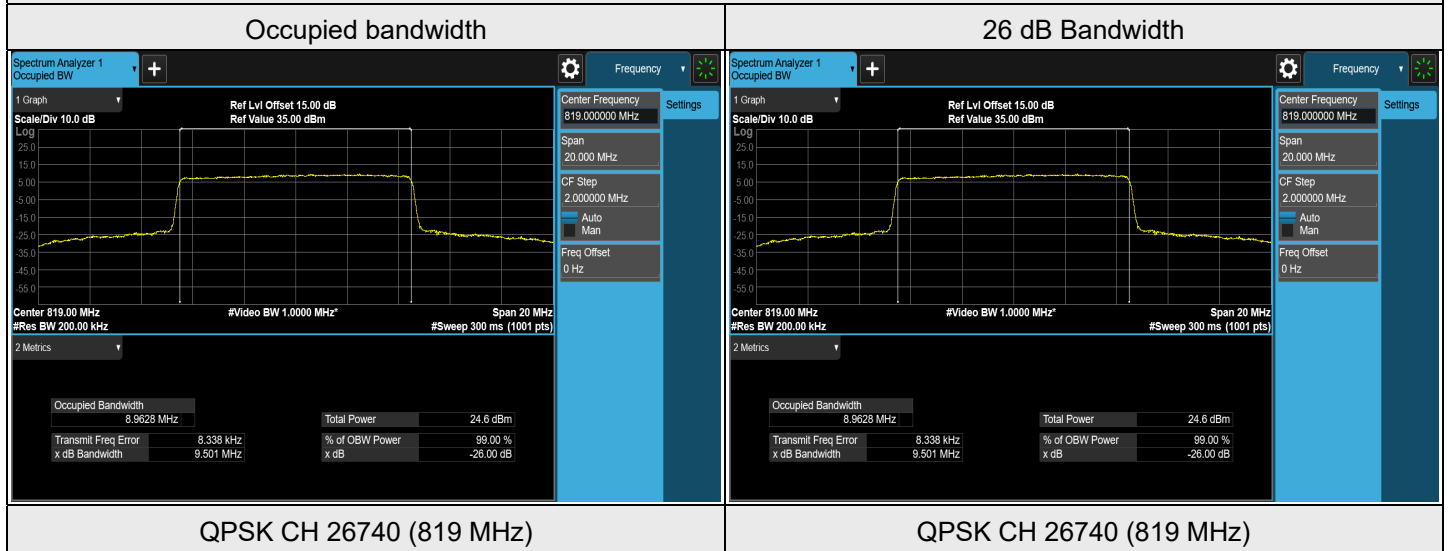
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	26715	816.5	4.4994	4.809
QPSK	26740	819	4.4917	4.785
QPSK	26765	821.5	4.4911	4.790
16QAM	26715	816.5	4.4944	4.786
16QAM	26740	819	4.4879	4.781
16QAM	26765	821.5	4.4877	4.777
64QAM	26715	816.5	4.4980	4.792
64QAM	26740	819	4.4916	4.782
64QAM	26765	821.5	4.4877	4.776
256QAM	26715	816.5	4.4923	4.794
256QAM	26740	819	4.4827	4.785
256QAM	26765	821.5	4.4854	4.792



LTE Band 26 (814-824 MHz), Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	26740	819	8.9628	9.501
16QAM	26740	819	8.9625	9.490
64QAM	26740	819	8.9553	9.485
256QAM	26740	819	8.9577	9.488

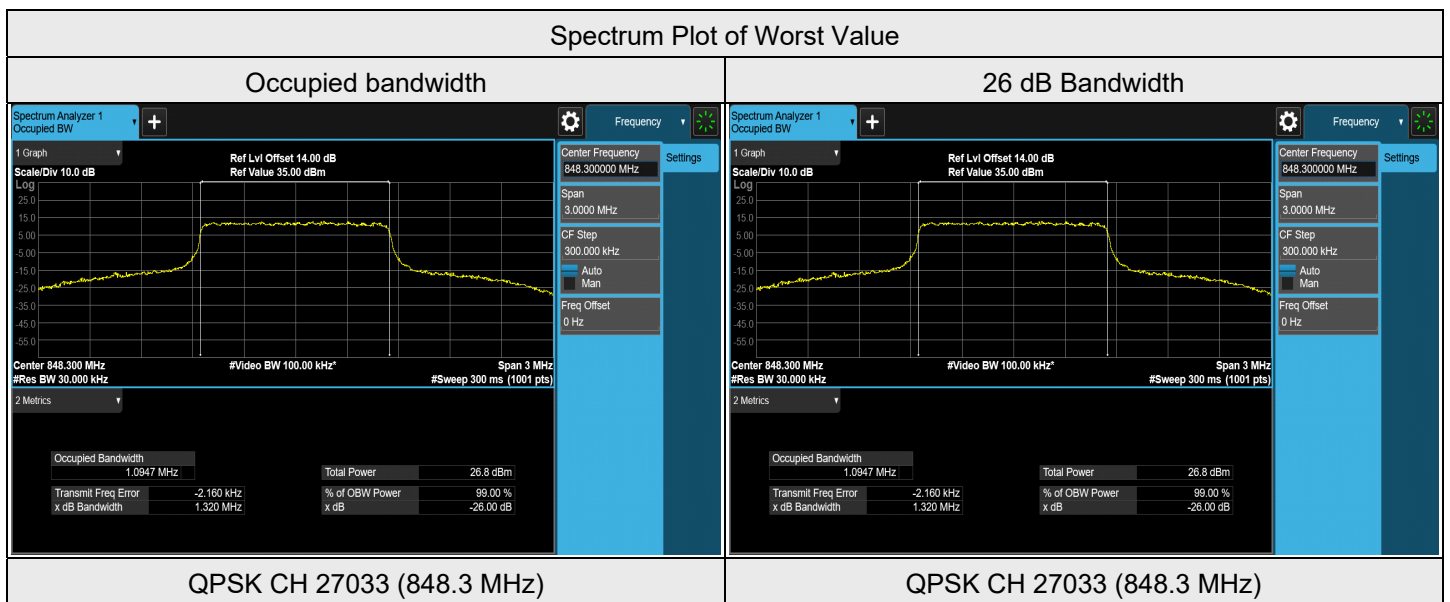
Spectrum Plot of Worst Value



7.4.16 LTE Band 26 (824-849 MHz)

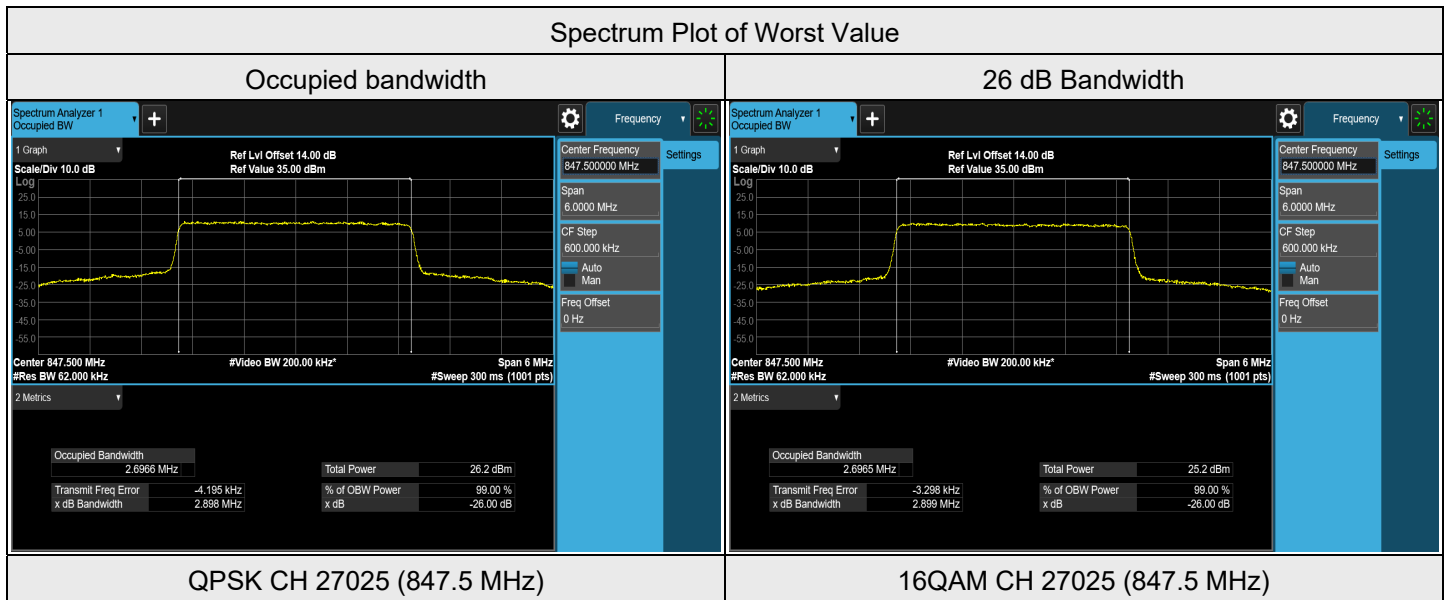
LTE Band 26 (824-849 MHz), Channel Bandwidth: 1.4 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	26797	824.7	1.0892	1.260
QPSK	26915	836.5	1.0906	1.267
QPSK	27033	848.3	1.0947	1.320
16QAM	26797	824.7	1.0882	1.249
16QAM	26915	836.5	1.0880	1.247
16QAM	27033	848.3	1.0888	1.269
64QAM	26797	824.7	1.0880	1.252
64QAM	26915	836.5	1.0889	1.250
64QAM	27033	848.3	1.0906	1.257
256QAM	26797	824.7	1.0850	1.243
256QAM	26915	836.5	1.0841	1.238
256QAM	27033	848.3	1.0835	1.235



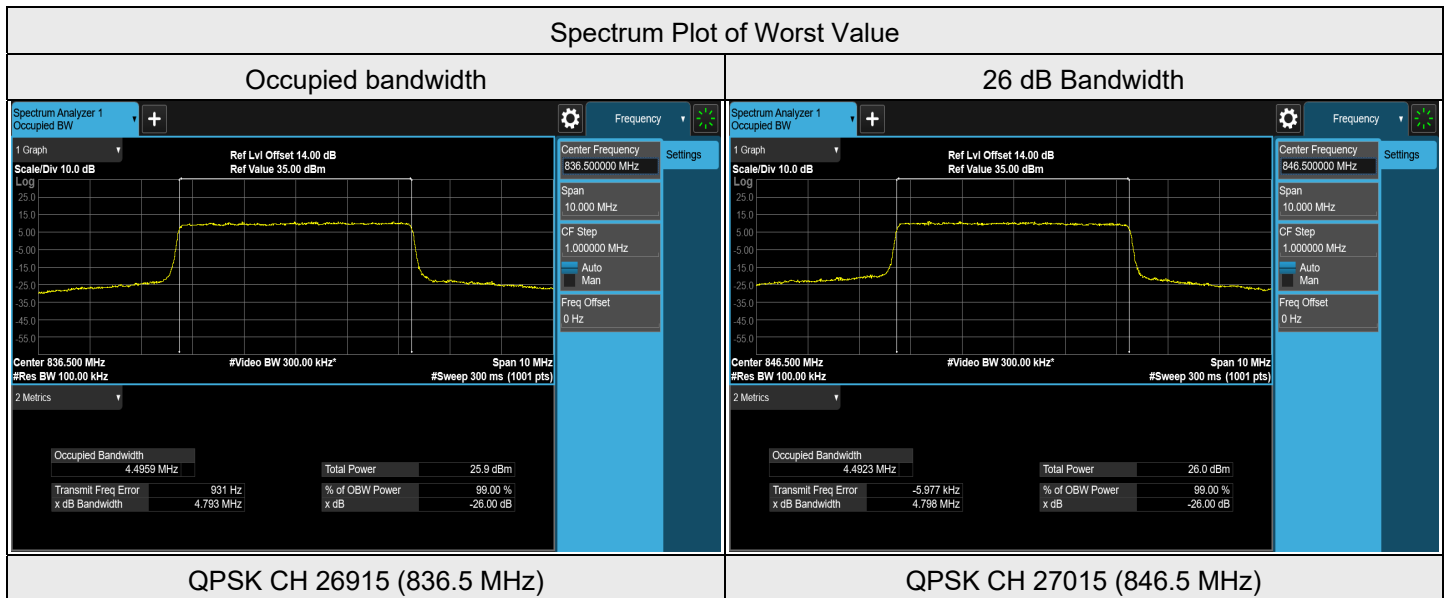
LTE Band 26 (824-849 MHz), Channel Bandwidth: 3 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	26805	825.5	2.6948	2.884
QPSK	26915	836.5	2.6956	2.891
QPSK	27025	847.5	2.6966	2.898
16QAM	26805	825.5	2.6963	2.883
16QAM	26915	836.5	2.6954	2.895
16QAM	27025	847.5	2.6965	2.899
64QAM	26805	825.5	2.6935	2.867
64QAM	26915	836.5	2.6940	2.864
64QAM	27025	847.5	2.6935	2.871
256QAM	26805	825.5	2.6943	2.876
256QAM	26915	836.5	2.6942	2.882
256QAM	27025	847.5	2.6936	2.876



LTE Band 26 (824-849 MHz), Channel Bandwidth: 5 MHz

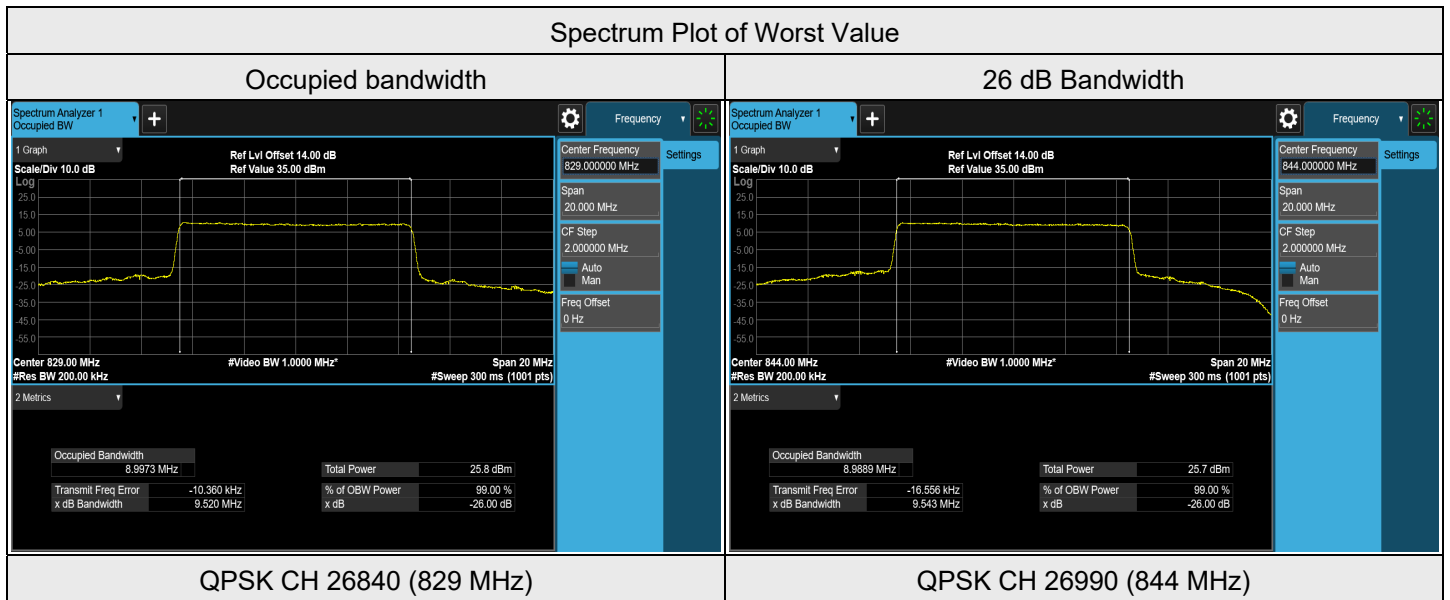
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	26815	826.5	4.4952	4.790
QPSK	26915	836.5	4.4959	4.793
QPSK	27015	846.5	4.4923	4.798
16QAM	26815	826.5	4.4898	4.782
16QAM	26915	836.5	4.4877	4.775
16QAM	27015	846.5	4.4892	4.782
64QAM	26815	826.5	4.4927	4.795
64QAM	26915	836.5	4.4934	4.790
64QAM	27015	846.5	4.4943	4.796
256QAM	26815	826.5	4.4866	4.772
256QAM	26915	836.5	4.4855	4.791
256QAM	27015	846.5	4.4882	4.775





LTE Band 26 (824-849 MHz), Channel Bandwidth: 10 MHz

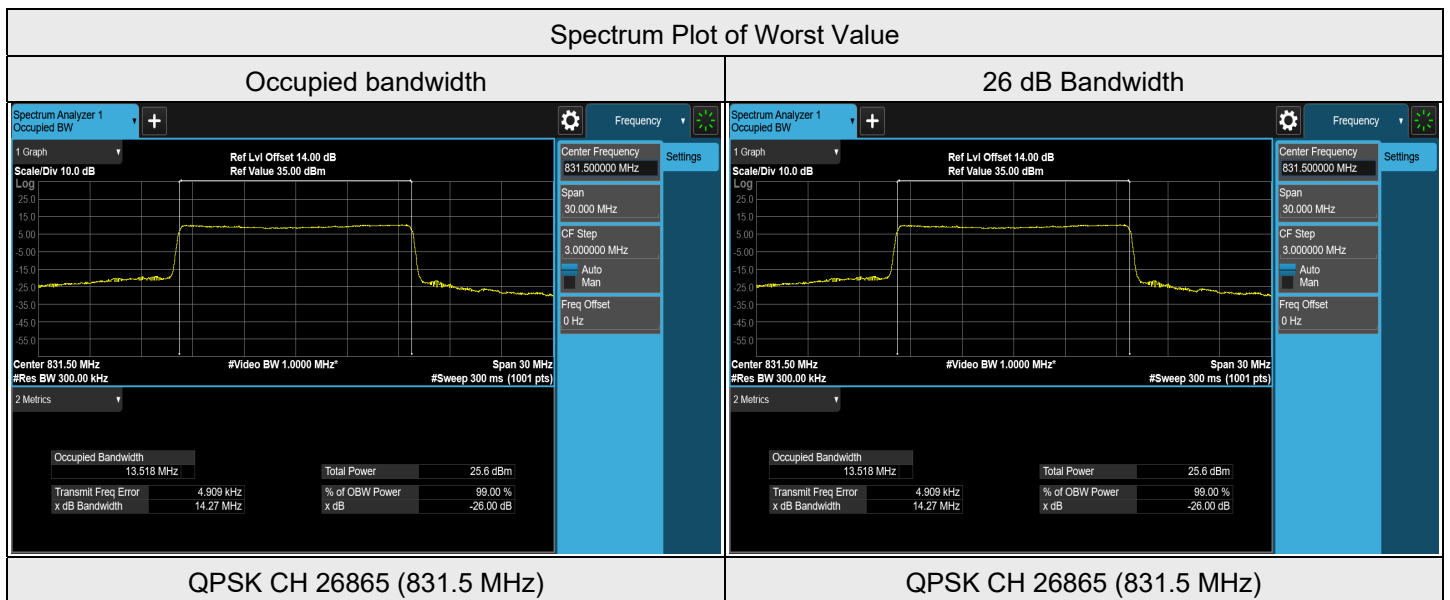
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	26840	829	8.9973	9.520
QPSK	26915	836.5	8.9630	9.494
QPSK	26990	844	8.9889	9.543
16QAM	26840	829	8.9918	9.504
16QAM	26915	836.5	8.9615	9.483
16QAM	26990	844	8.9810	9.508
64QAM	26840	829	8.9973	9.527
64QAM	26915	836.5	8.9642	9.504
64QAM	26990	844	8.9814	9.509
256QAM	26840	829	8.9867	9.512
256QAM	26915	836.5	8.9581	9.485
256QAM	26990	844	8.9703	9.502





LTE Band 26 (824-849 MHz), Channel Bandwidth: 15 MHz

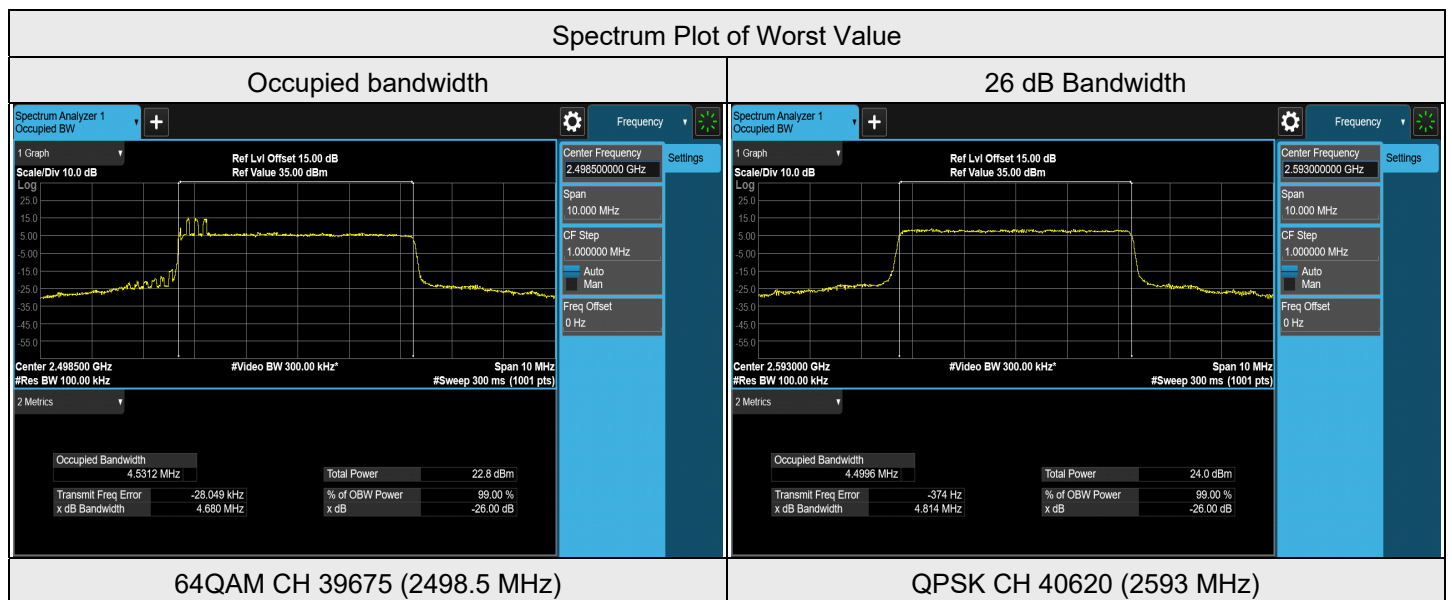
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	26865	831.5	13.5179	14.266
QPSK	26915	836.5	13.4338	14.217
QPSK	26965	841.5	13.4382	14.215
16QAM	26865	831.5	13.5046	14.254
16QAM	26915	836.5	13.4281	14.221
16QAM	26965	841.5	13.4198	14.202
64QAM	26865	831.5	13.4994	14.255
64QAM	26915	836.5	13.4192	14.205
64QAM	26965	841.5	13.4243	14.223
256QAM	26865	831.5	13.5013	14.245
256QAM	26915	836.5	13.4242	14.210
256QAM	26965	841.5	13.4254	14.208



7.4.17 LTE Band 41

LTE Band 41, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	39675	2498.5	4.4933	4.809
QPSK	40620	2593	4.4996	4.814
QPSK	41565	2687.5	4.4868	4.739
16QAM	39675	2498.5	4.4932	4.807
16QAM	40620	2593	4.4893	4.777
16QAM	41565	2687.5	4.4902	4.783
64QAM	39675	2498.5	4.5312	4.680
64QAM	40620	2593	4.4994	4.781
64QAM	41565	2687.5	4.4970	4.778
256QAM	39675	2498.5	4.4881	4.796
256QAM	40620	2593	4.4814	4.777
256QAM	41565	2687.5	4.4776	4.783



LTE Band 41, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	39700	2501	8.9799	9.496
QPSK	40620	2593	8.9791	9.508
QPSK	41540	2685	8.9673	9.475
16QAM	39700	2501	8.9754	9.445
16QAM	40620	2593	8.9792	9.508
16QAM	41540	2685	8.9663	9.499
64QAM	39700	2501	8.9774	9.506
64QAM	40620	2593	8.9780	9.524
64QAM	41540	2685	8.9721	9.503
256QAM	39700	2501	8.9642	9.499
256QAM	40620	2593	8.9591	9.506
256QAM	41540	2685	8.9595	9.495

