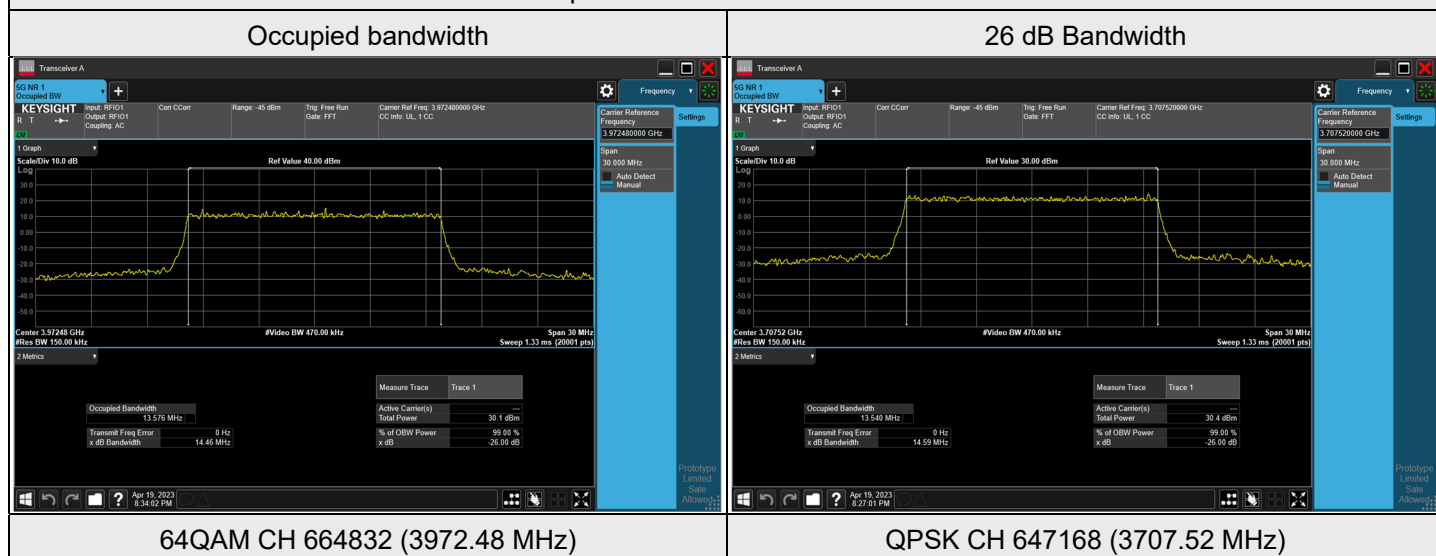


**NR n77 (3700-3980 MHz) SCS 30 kHz, Channel Bandwidth: 15 MHz**

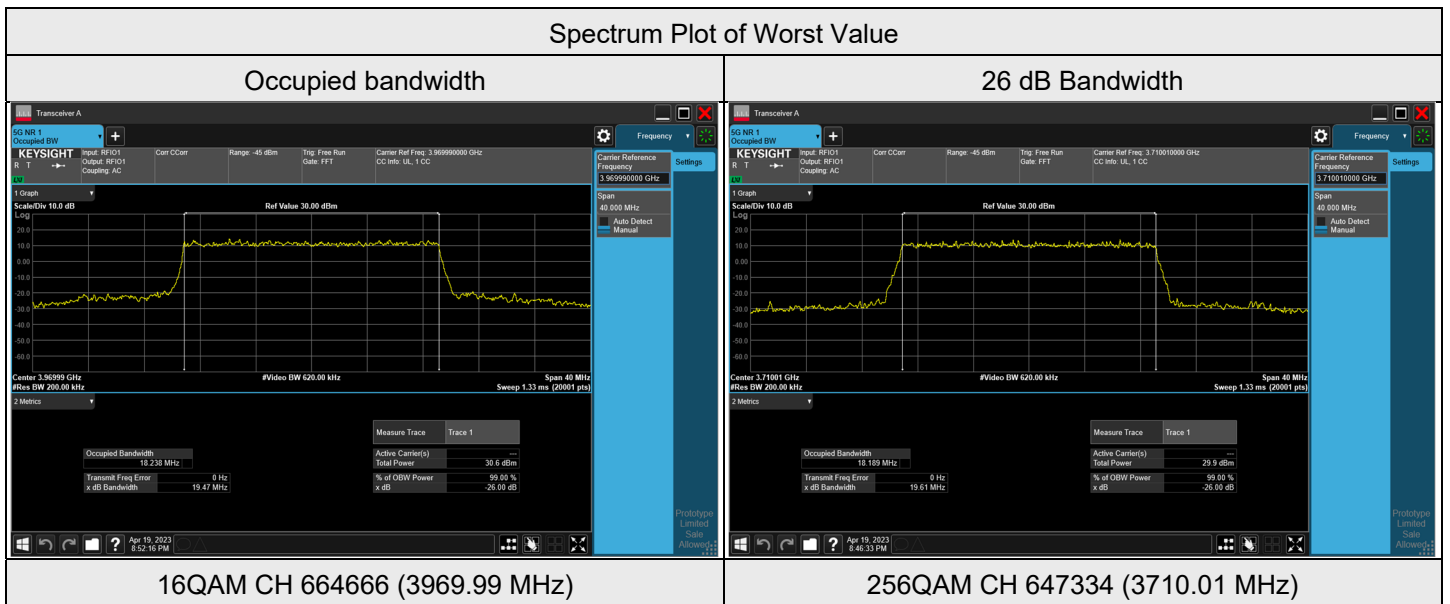
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	647168	3707.52	13.468	13.91
BPSK	656000	3840	13.432	13.76
BPSK	664832	3972.48	13.516	13.96
QPSK	647168	3707.52	13.540	14.59
QPSK	656000	3840	13.540	14.46
QPSK	664832	3972.48	13.543	14.48
16QAM	647168	3707.52	13.537	14.57
16QAM	656000	3840	13.531	14.49
16QAM	664832	3972.48	13.533	14.35
64QAM	647168	3707.52	13.555	14.51
64QAM	656000	3840	13.560	14.41
64QAM	664832	3972.48	13.576	14.46
256QAM	647168	3707.52	13.548	14.54
256QAM	656000	3840	13.536	14.43
256QAM	664832	3972.48	13.554	14.54

**Spectrum Plot of Worst Value**



**NR n77 (3700-3980 MHz) SCS 30 kHz, Channel Bandwidth: 20 MHz**

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	647334	3710.01	18.069	18.95
BPSK	656000	3840	18.030	19.11
BPSK	664666	3969.99	18.025	18.88
QPSK	647334	3710.01	18.157	19.34
QPSK	656000	3840	18.162	19.42
QPSK	664666	3969.99	18.165	19.34
16QAM	647334	3710.01	18.208	19.35
16QAM	656000	3840	18.225	19.37
16QAM	664666	3969.99	18.238	19.47
64QAM	647334	3710.01	18.192	19.35
64QAM	656000	3840	18.193	19.56
64QAM	664666	3969.99	18.196	19.29
256QAM	647334	3710.01	18.189	19.61
256QAM	656000	3840	18.177	19.39
256QAM	664666	3969.99	18.188	19.57

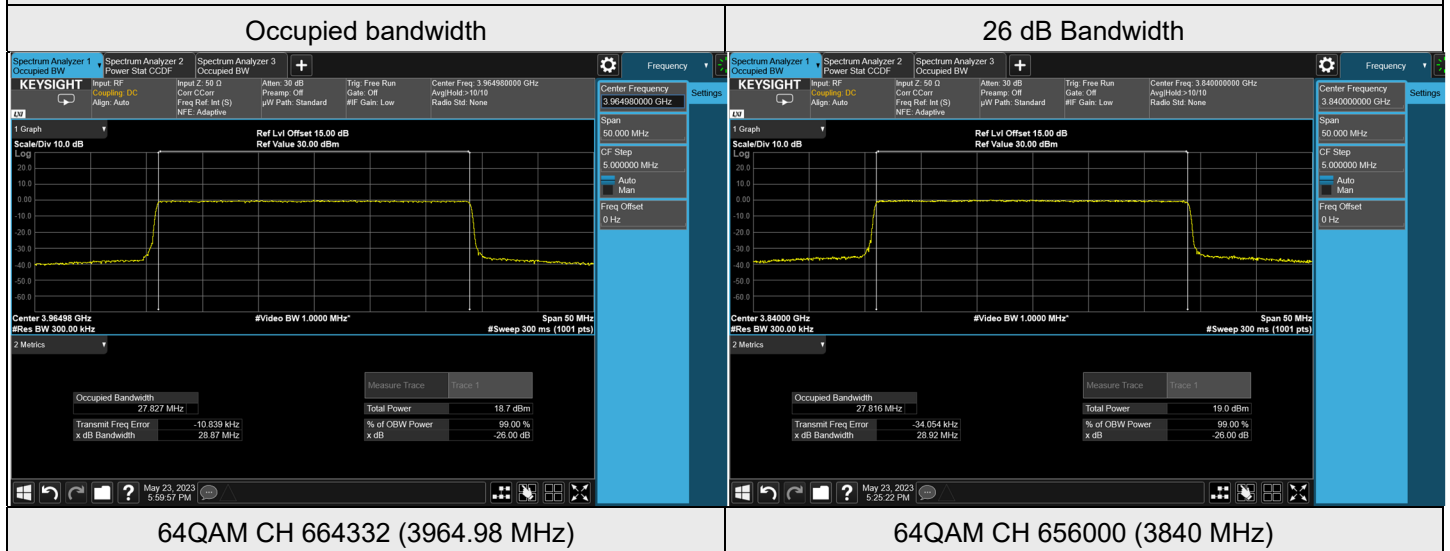




NR n77 (3700-3980 MHz) SCS 30 kHz, Channel Bandwidth: 30 MHz

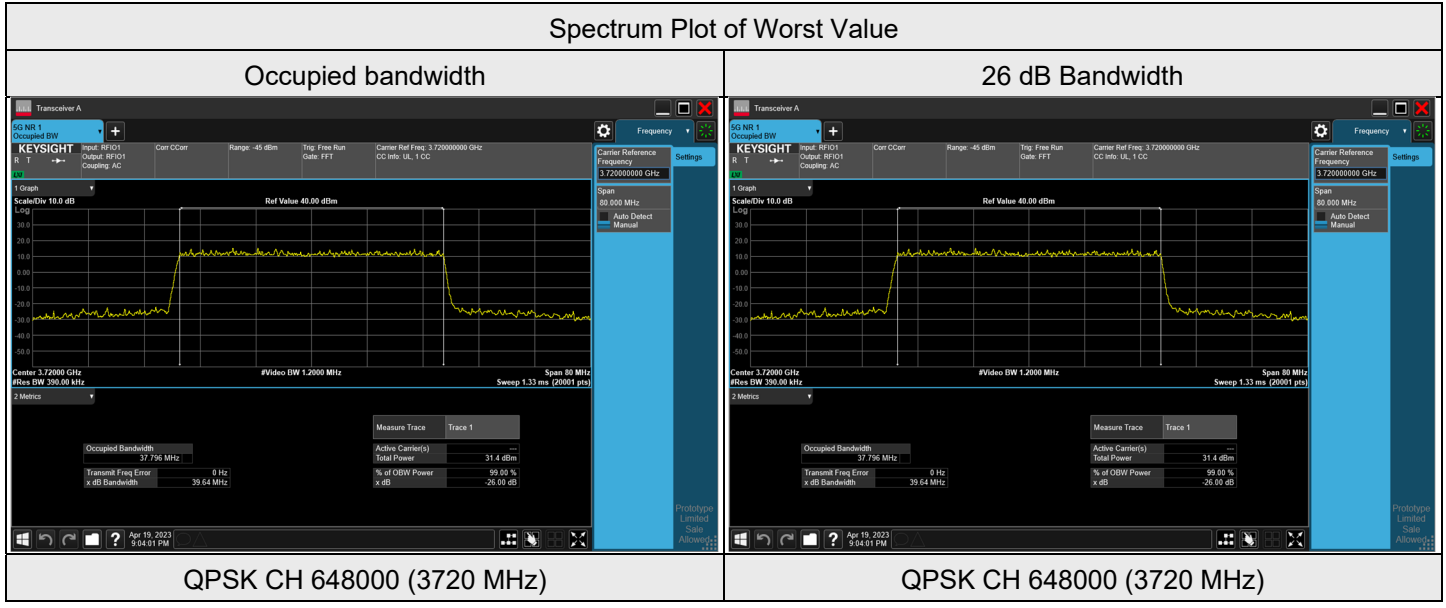
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	647668	3715.02	26.762	27.84
BPSK	656000	3840	26.744	27.81
BPSK	664332	3964.98	26.755	27.87
QPSK	647668	3715.02	27.819	28.86
QPSK	656000	3840	27.820	28.87
QPSK	664332	3964.98	27.820	28.92
16QAM	647668	3715.02	27.811	28.87
16QAM	656000	3840	27.817	28.83
16QAM	664332	3964.98	27.812	28.88
64QAM	647668	3715.02	27.800	28.87
64QAM	656000	3840	27.816	28.92
64QAM	664332	3964.98	27.827	28.87
256QAM	647668	3715.02	27.805	28.87
256QAM	656000	3840	27.809	28.85
256QAM	664332	3964.98	27.814	28.91

Spectrum Plot of Worst Value



**NR n77 (3700-3980 MHz) SCS 30 kHz, Channel Bandwidth: 40 MHz**

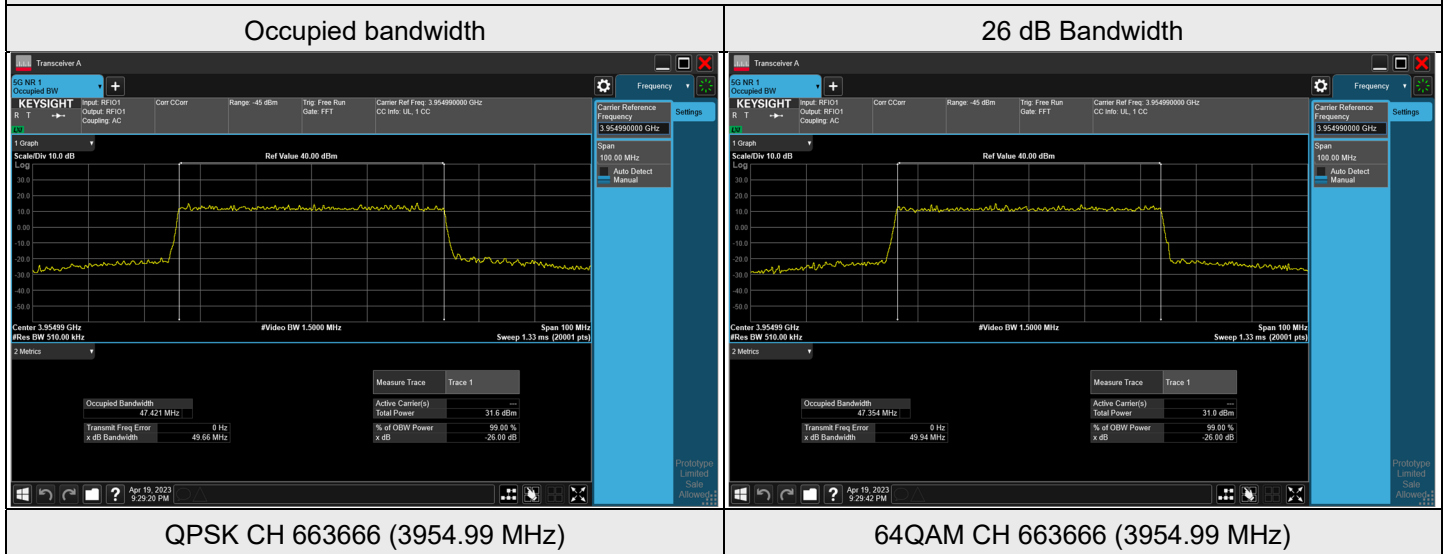
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	648000	3720	37.524	37.40
BPSK	656000	3840	37.490	37.11
BPSK	664000	3960	37.513	37.10
QPSK	648000	3720	37.796	39.64
QPSK	656000	3840	37.738	39.54
QPSK	664000	3960	37.747	39.41
16QAM	648000	3720	37.690	39.50
16QAM	656000	3840	37.697	39.43
16QAM	664000	3960	37.722	39.51
64QAM	648000	3720	37.683	39.53
64QAM	656000	3840	37.731	39.50
64QAM	664000	3960	37.738	39.48
256QAM	648000	3720	37.744	39.60
256QAM	656000	3840	37.731	39.41
256QAM	664000	3960	37.762	39.43



**NR n77 (3700-3980 MHz) SCS 30 kHz, Channel Bandwidth: 50 MHz**

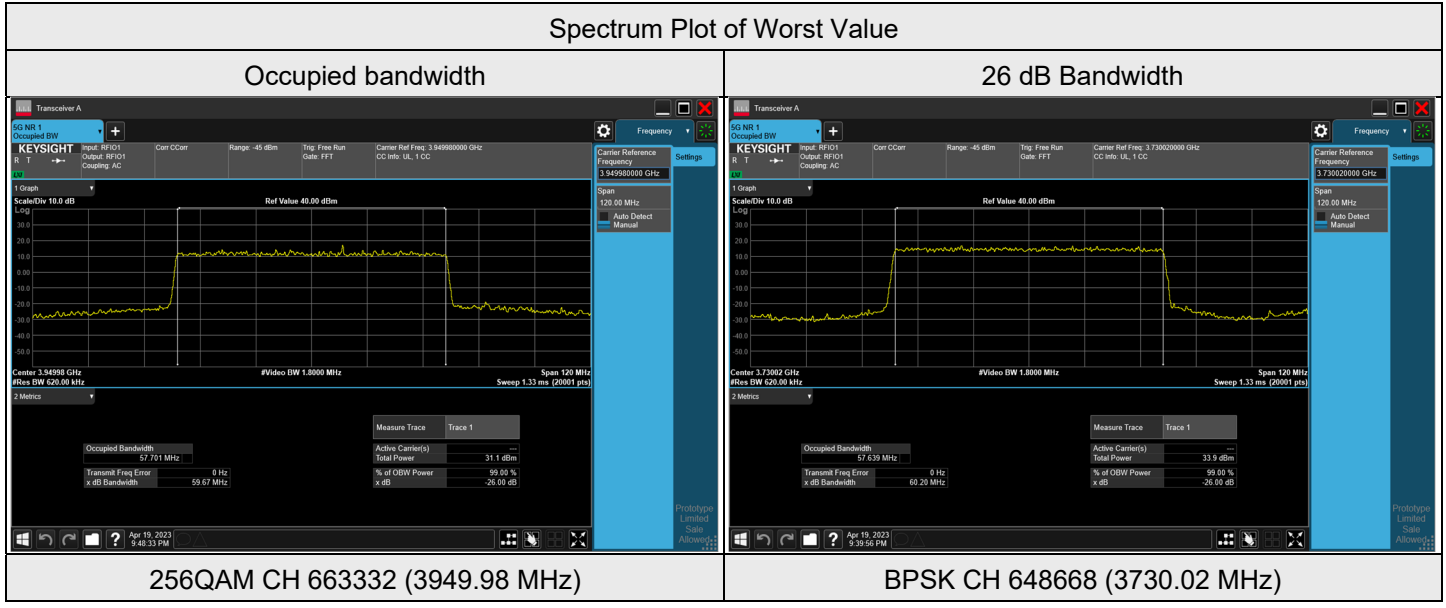
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	648334	3725.01	46.911	47.99
BPSK	656000	3840	47.054	47.91
BPSK	663666	3954.99	46.830	47.80
QPSK	648334	3725.01	47.360	49.78
QPSK	656000	3840	47.400	49.65
QPSK	663666	3954.99	47.421	49.66
16QAM	648334	3725.01	47.280	49.80
16QAM	656000	3840	47.344	49.92
16QAM	663666	3954.99	47.382	49.75
64QAM	648334	3725.01	47.342	49.81
64QAM	656000	3840	47.334	49.92
64QAM	663666	3954.99	47.354	49.94
256QAM	648334	3725.01	47.322	49.52
256QAM	656000	3840	47.263	49.71
256QAM	663666	3954.99	47.342	49.70

**Spectrum Plot of Worst Value**



**NR n77 (3700-3980 MHz) SCS 30 kHz, Channel Bandwidth: 60 MHz**

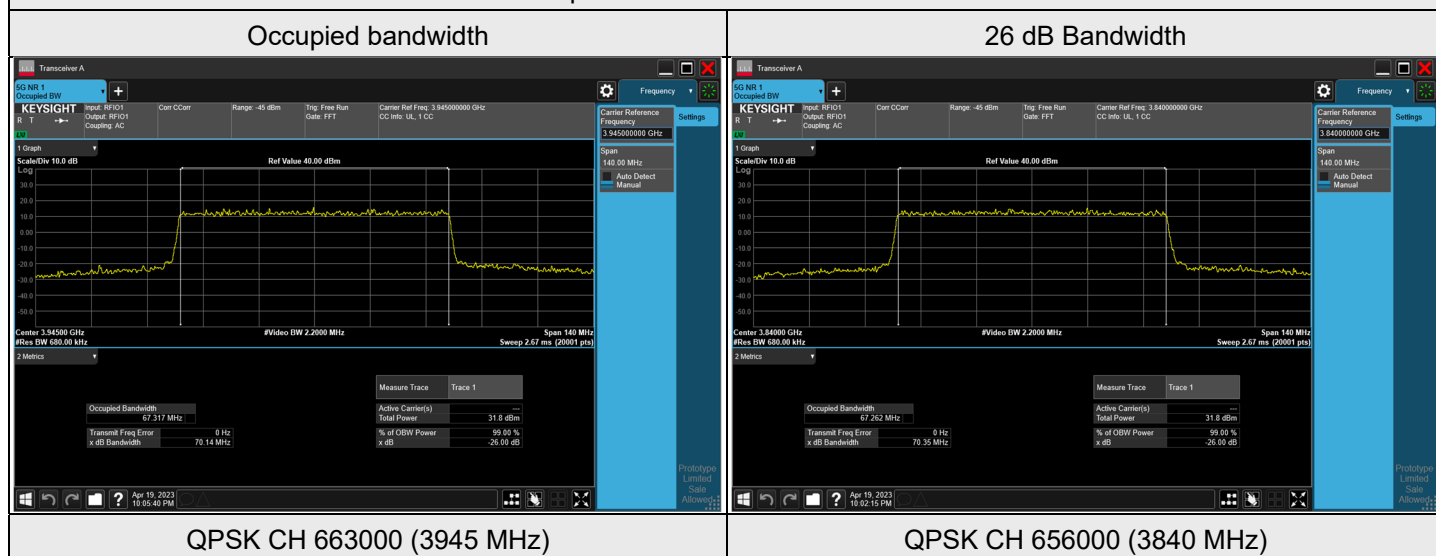
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	648668	3730.02	57.639	60.20
BPSK	656000	3840	57.626	59.95
BPSK	663332	3949.98	57.577	59.86
QPSK	648668	3730.02	57.580	60.13
QPSK	656000	3840	57.543	60.09
QPSK	663332	3949.98	57.614	59.91
16QAM	648668	3730.02	57.579	60.06
16QAM	656000	3840	57.557	60.05
16QAM	663332	3949.98	57.641	60.09
64QAM	648668	3730.02	57.665	60.07
64QAM	656000	3840	57.653	59.83
64QAM	663332	3949.98	57.685	59.93
256QAM	648668	3730.02	57.676	59.83
256QAM	656000	3840	57.684	59.93
256QAM	663332	3949.98	57.701	59.67



NR n77 (3700-3980 MHz) SCS 30 kHz, Channel Bandwidth: 70 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	649000	3735	66.337	66.93
BPSK	656000	3840	66.266	66.82
BPSK	663000	3945	66.535	66.68
QPSK	649000	3735	67.276	70.22
QPSK	656000	3840	67.262	70.35
QPSK	663000	3945	67.317	70.14
16QAM	649000	3735	67.288	70.32
16QAM	656000	3840	67.203	70.10
16QAM	663000	3945	67.249	70.10
64QAM	649000	3735	67.150	70.04
64QAM	656000	3840	67.145	69.88
64QAM	663000	3945	67.202	70.17
256QAM	649000	3735	67.260	70.19
256QAM	656000	3840	67.289	70.24
256QAM	663000	3945	67.290	70.24

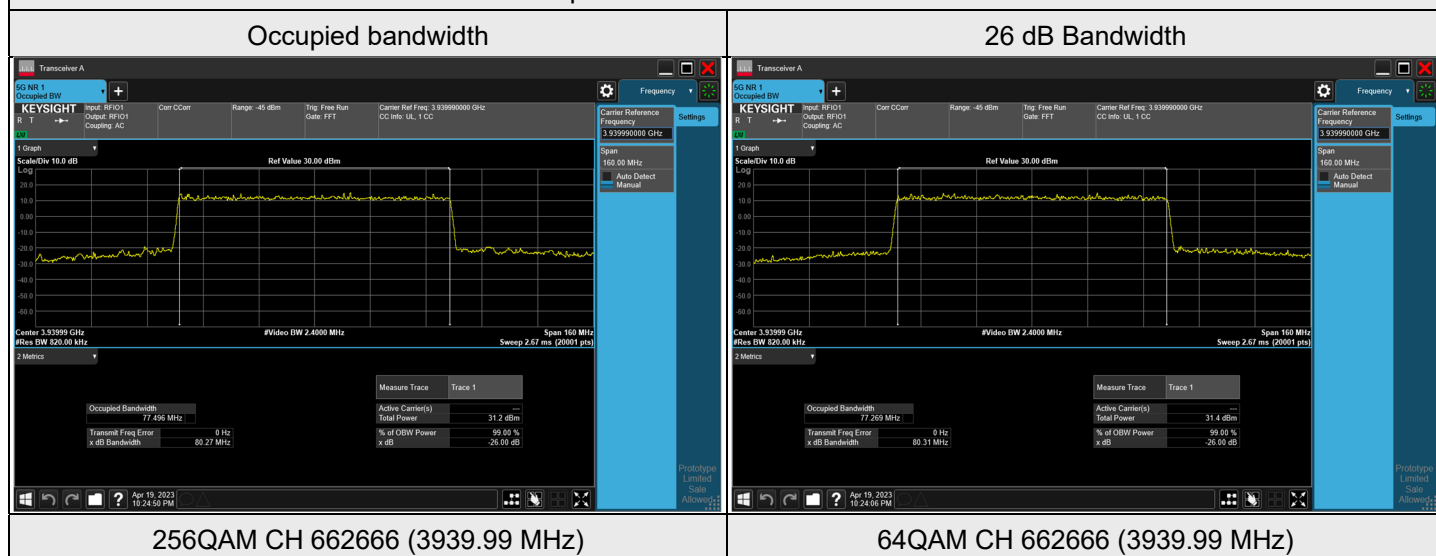
Spectrum Plot of Worst Value



**NR n77 (3700-3980 MHz) SCS 30 kHz, Channel Bandwidth: 80 MHz**

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	649334	3740.01	76.918	79.85
BPSK	656000	3840	76.773	79.96
BPSK	662666	3939.99	76.920	79.84
QPSK	649334	3740.01	77.285	80.24
QPSK	656000	3840	77.297	80.28
QPSK	662666	3939.99	77.377	79.86
16QAM	649334	3740.01	77.265	80.17
16QAM	656000	3840	77.346	80.19
16QAM	662666	3939.99	77.393	80.17
64QAM	649334	3740.01	77.272	80.11
64QAM	656000	3840	77.318	79.96
64QAM	662666	3939.99	77.269	80.31
256QAM	649334	3740.01	77.412	80.24
256QAM	656000	3840	77.457	79.75
256QAM	662666	3939.99	77.496	80.27

**Spectrum Plot of Worst Value**

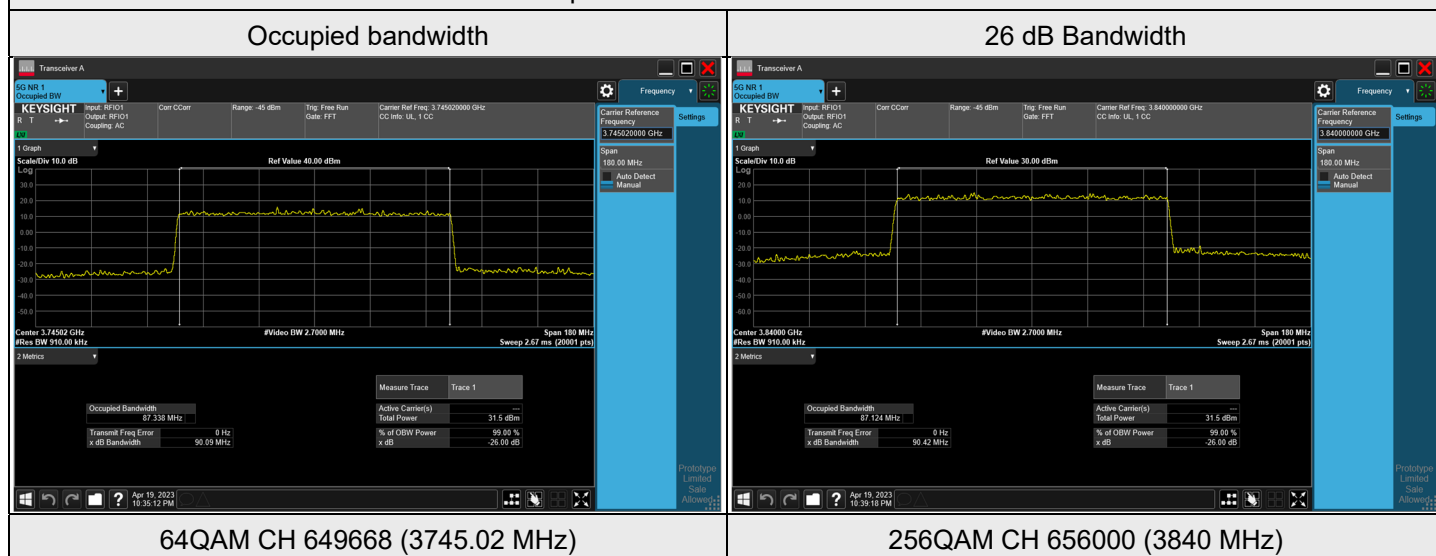




NR n77 (3700-3980 MHz) SCS 30 kHz, Channel Bandwidth: 90 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	649668	3745.02	86.386	89.78
BPSK	656000	3840	86.354	89.73
BPSK	662332	3934.98	86.548	89.87
QPSK	649668	3745.02	86.923	90.30
QPSK	656000	3840	86.923	90.09
QPSK	662332	3934.98	86.923	90.13
16QAM	649668	3745.02	87.051	90.17
16QAM	656000	3840	87.126	90.27
16QAM	662332	3934.98	87.001	90.16
64QAM	649668	3745.02	87.338	90.09
64QAM	656000	3840	87.251	90.31
64QAM	662332	3934.98	87.090	90.24
256QAM	649668	3745.02	87.037	90.29
256QAM	656000	3840	87.124	90.42
256QAM	662332	3934.98	87.031	90.22

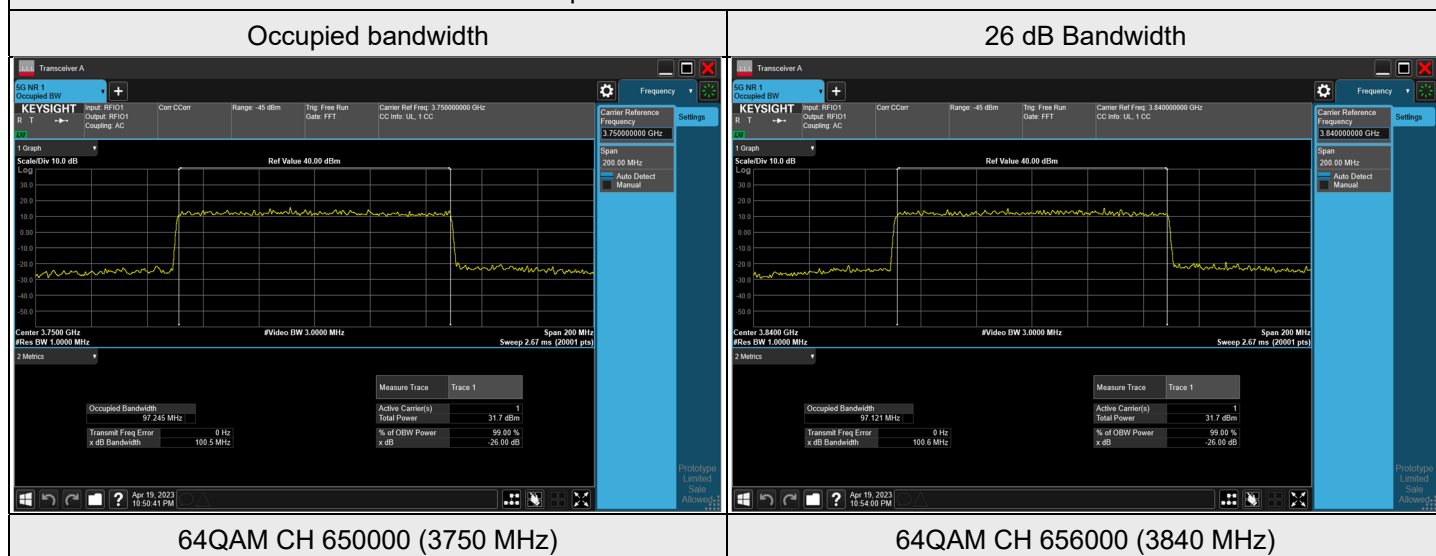
Spectrum Plot of Worst Value



NR n77 (3700-3980 MHz) SCS 30 kHz, Channel Bandwidth: 100 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	650000	3750	96.409	99.51
BPSK	656000	3840	96.684	99.70
BPSK	662000	3930	96.642	99.56
QPSK	650000	3750	96.941	100.4
QPSK	656000	3840	97.041	100.4
QPSK	662000	3930	97.089	100.4
16QAM	650000	3750	97.040	100.3
16QAM	656000	3840	97.089	100.3
16QAM	662000	3930	97.162	100.3
64QAM	650000	3750	97.245	100.5
64QAM	656000	3840	97.121	100.6
64QAM	662000	3930	97.207	100.5
256QAM	650000	3750	97.165	100.5
256QAM	656000	3840	97.201	100.5
256QAM	662000	3930	97.209	100.5

Spectrum Plot of Worst Value

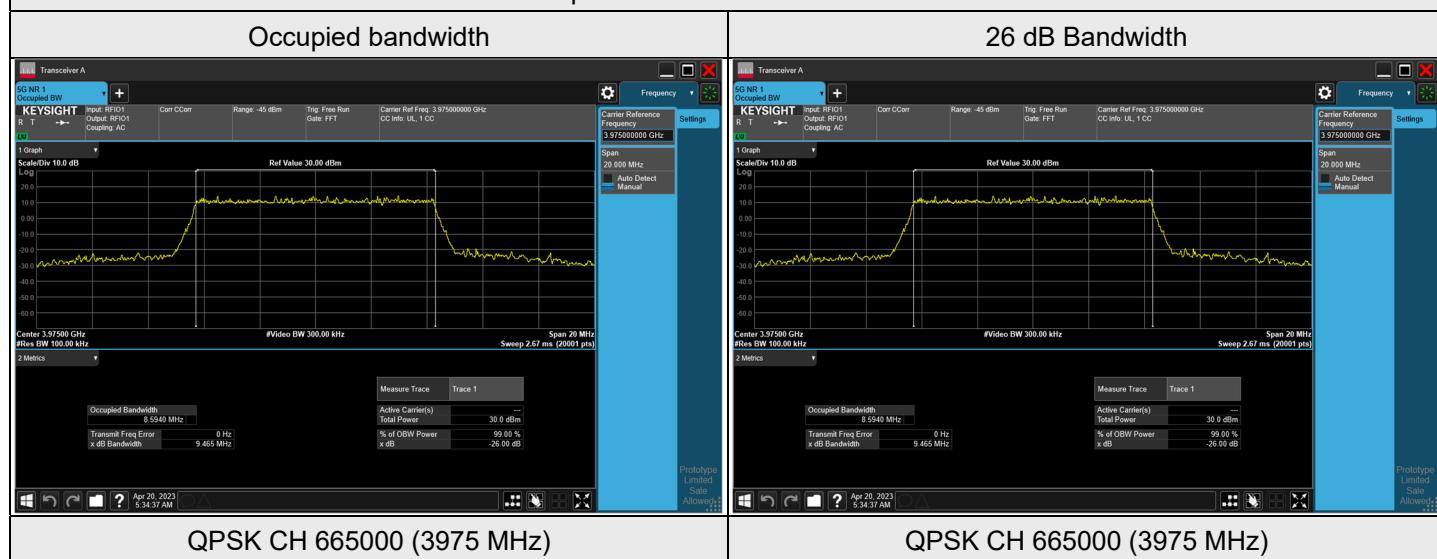


7.4.4 NR n77 (3700-3980 MHz) SCS 30 kHz (Ant.: M2)

NR n77 (3700-3980 MHz) SCS 30 kHz, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	647000	3705	8.5564	9.271
BPSK	656000	3840	8.5667	9.435
BPSK	665000	3975	8.5689	9.315
QPSK	647000	3705	8.5640	9.414
QPSK	656000	3840	8.5706	9.295
QPSK	665000	3975	8.5940	9.465
16QAM	647000	3705	8.5485	9.189
16QAM	656000	3840	8.5783	9.400
16QAM	665000	3975	8.5506	9.216
64QAM	647000	3705	8.5648	9.373
64QAM	656000	3840	8.5840	9.391
64QAM	665000	3975	8.5643	9.382
256QAM	647000	3705	8.5728	9.356
256QAM	656000	3840	8.5767	9.465
256QAM	665000	3975	8.5843	9.404

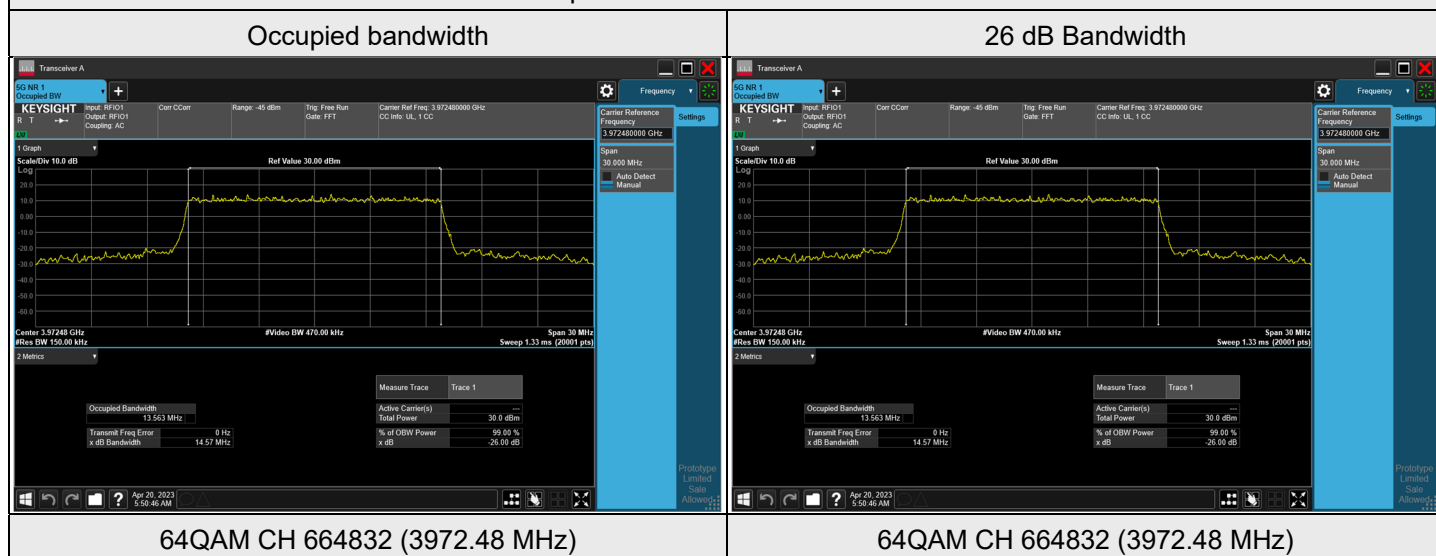
Spectrum Plot of Worst Value



NR n77 (3700-3980 MHz) SCS 30 kHz, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	647168	3707.52	13.540	14.10
BPSK	656000	3840	13.486	13.83
BPSK	664832	3972.48	13.468	14.02
QPSK	647168	3707.52	13.539	14.45
QPSK	656000	3840	13.542	14.44
QPSK	664832	3972.48	13.540	14.41
16QAM	647168	3707.52	13.534	14.47
16QAM	656000	3840	13.534	14.45
16QAM	664832	3972.48	13.527	14.43
64QAM	647168	3707.52	13.561	14.49
64QAM	656000	3840	13.558	14.44
64QAM	664832	3972.48	13.563	14.57
256QAM	647168	3707.52	13.540	14.52
256QAM	656000	3840	13.540	14.38
256QAM	664832	3972.48	13.539	14.56

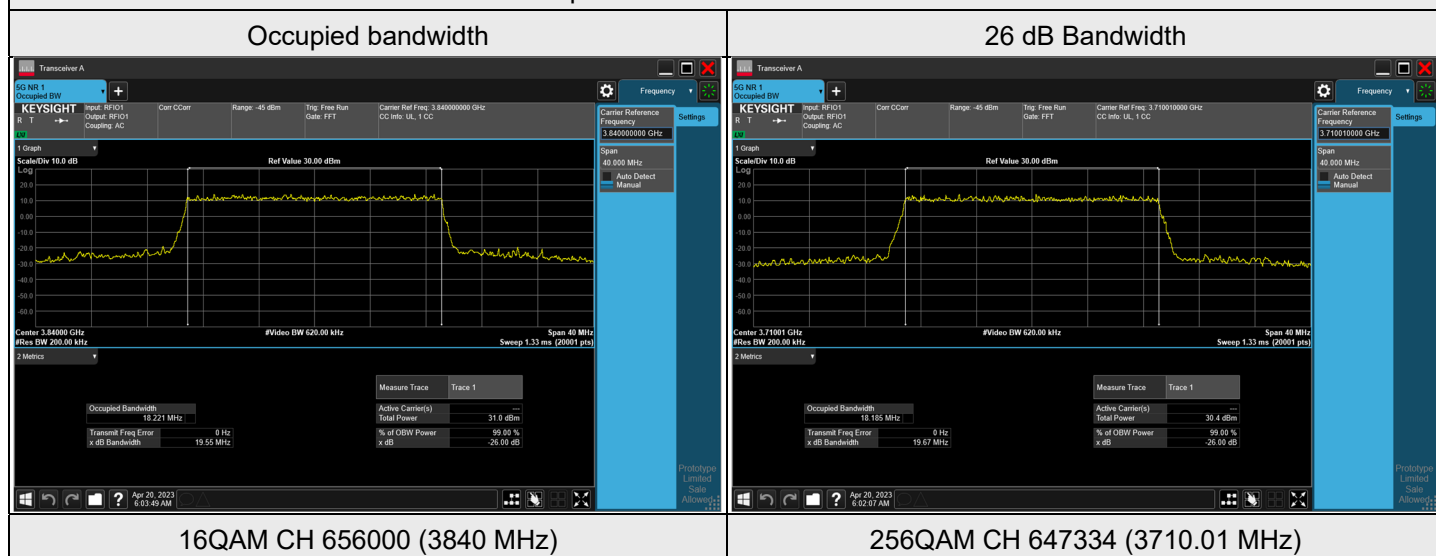
Spectrum Plot of Worst Value



**NR n77 (3700-3980 MHz) SCS 30 kHz, Channel Bandwidth: 20 MHz**

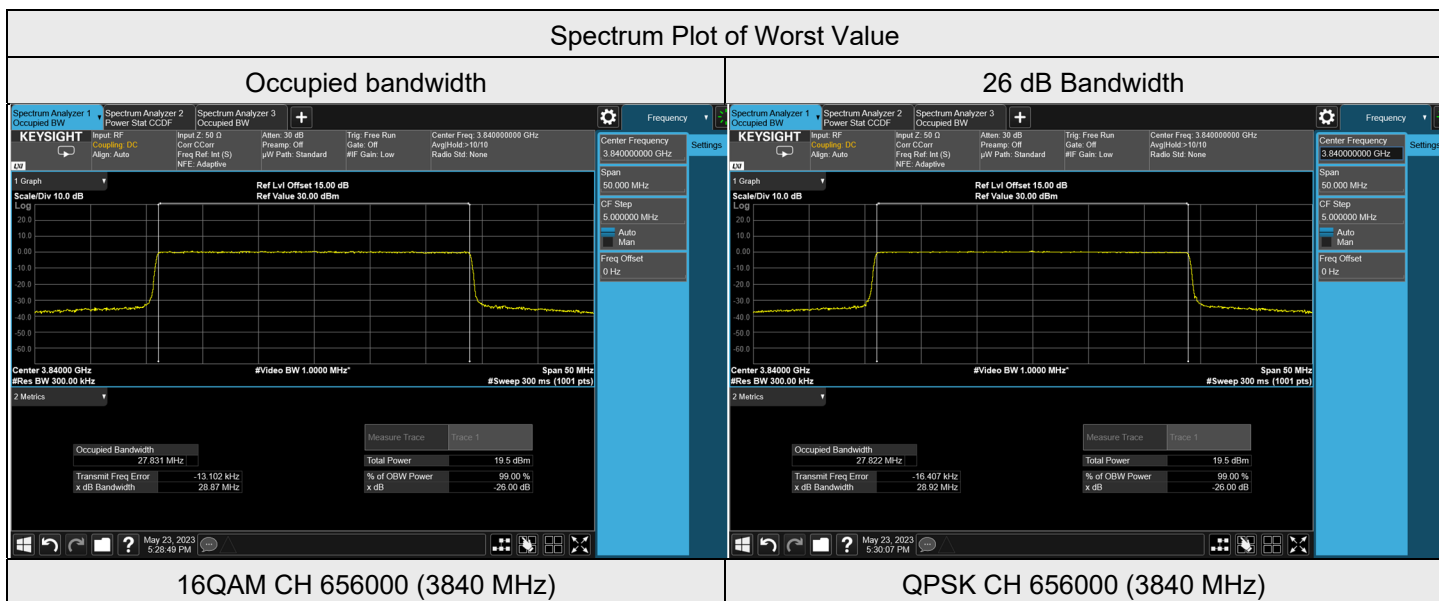
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	647334	3710.01	18.005	19.11
BPSK	656000	3840	18.020	19.15
BPSK	664666	3969.99	17.965	19.05
QPSK	647334	3710.01	18.164	19.40
QPSK	656000	3840	18.165	19.39
QPSK	664666	3969.99	18.165	19.36
16QAM	647334	3710.01	18.149	19.31
16QAM	656000	3840	18.221	19.55
16QAM	664666	3969.99	18.221	19.42
64QAM	647334	3710.01	18.186	19.38
64QAM	656000	3840	18.181	19.32
64QAM	664666	3969.99	18.193	19.38
256QAM	647334	3710.01	18.185	19.67
256QAM	656000	3840	18.177	19.38
256QAM	664666	3969.99	18.221	19.46

**Spectrum Plot of Worst Value**



NR n77 (3700-3980 MHz) SCS 30 kHz, Channel Bandwidth: 30 MHz

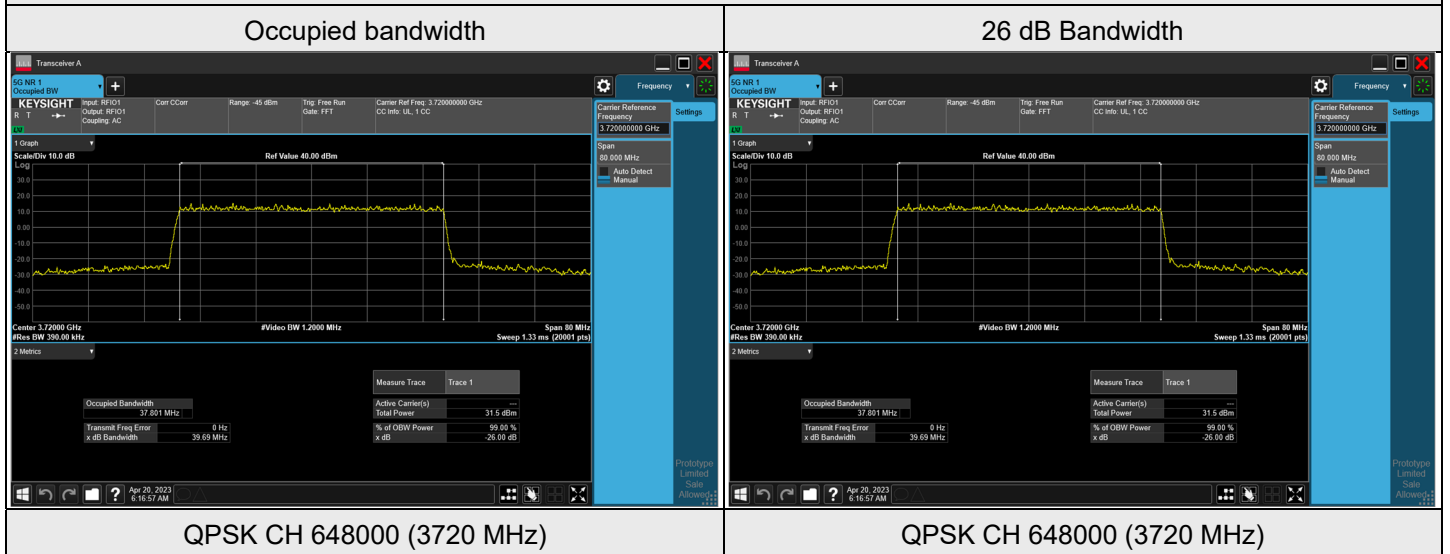
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	647668	3715.02	26.753	27.80
BPSK	656000	3840	26.746	27.85
BPSK	664332	3964.98	26.758	27.84
QPSK	647668	3715.02	27.820	28.88
QPSK	656000	3840	27.822	28.92
QPSK	664332	3964.98	27.820	28.89
16QAM	647668	3715.02	27.815	28.85
16QAM	656000	3840	27.831	28.87
16QAM	664332	3964.98	27.819	28.89
64QAM	647668	3715.02	27.795	28.91
64QAM	656000	3840	27.816	28.85
64QAM	664332	3964.98	27.827	28.90
256QAM	647668	3715.02	27.809	28.88
256QAM	656000	3840	27.806	28.89
256QAM	664332	3964.98	27.816	28.90



**NR n77 (3700-3980 MHz) SCS 30 kHz, Channel Bandwidth: 40 MHz**

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	648000	3720	37.580	37.26
BPSK	656000	3840	37.576	37.17
BPSK	664000	3960	37.490	37.29
QPSK	648000	3720	37.801	39.69
QPSK	656000	3840	37.779	39.64
QPSK	664000	3960	37.748	39.47
16QAM	648000	3720	37.691	39.45
16QAM	656000	3840	37.690	39.47
16QAM	664000	3960	37.714	39.51
64QAM	648000	3720	37.738	39.54
64QAM	656000	3840	37.736	39.53
64QAM	664000	3960	37.739	39.46
256QAM	648000	3720	37.738	39.52
256QAM	656000	3840	37.762	39.59
256QAM	664000	3960	37.756	39.44

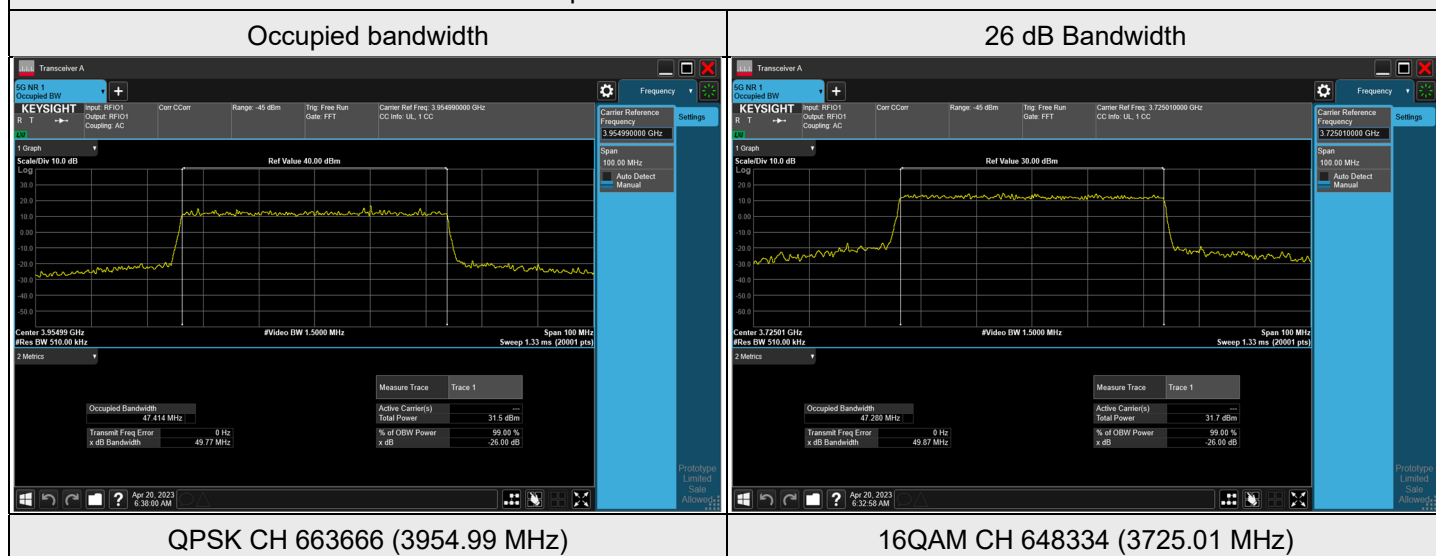
**Spectrum Plot of Worst Value**



NR n77 (3700-3980 MHz) SCS 30 kHz, Channel Bandwidth: 50 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	648334	3725.01	46.801	47.93
BPSK	656000	3840	46.995	47.89
BPSK	663666	3954.99	46.792	47.84
QPSK	648334	3725.01	47.354	49.73
QPSK	656000	3840	47.335	49.69
QPSK	663666	3954.99	47.414	49.77
16QAM	648334	3725.01	47.280	49.87
16QAM	656000	3840	47.353	49.77
16QAM	663666	3954.99	47.404	49.58
64QAM	648334	3725.01	47.343	49.77
64QAM	656000	3840	47.411	49.82
64QAM	663666	3954.99	47.363	49.84
256QAM	648334	3725.01	47.292	49.55
256QAM	656000	3840	47.314	49.75
256QAM	663666	3954.99	47.333	49.72

Spectrum Plot of Worst Value

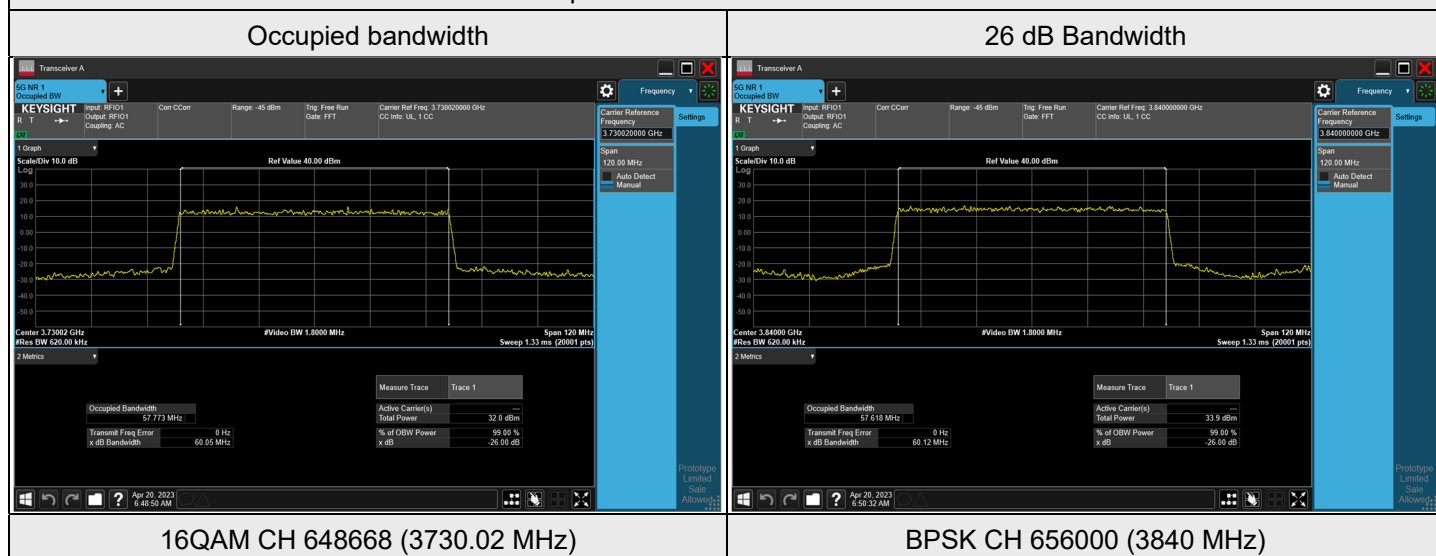




NR n77 (3700-3980 MHz) SCS 30 kHz, Channel Bandwidth: 60 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	648668	3730.02	57.662	60.00
BPSK	656000	3840	57.618	60.12
BPSK	663332	3949.98	57.649	60.09
QPSK	648668	3730.02	57.554	60.10
QPSK	656000	3840	57.580	60.09
QPSK	663332	3949.98	57.625	59.93
16QAM	648668	3730.02	57.773	60.05
16QAM	656000	3840	57.567	60.00
16QAM	663332	3949.98	57.640	59.94
64QAM	648668	3730.02	57.674	60.01
64QAM	656000	3840	57.654	60.00
64QAM	663332	3949.98	57.676	60.00
256QAM	648668	3730.02	57.677	59.93
256QAM	656000	3840	57.675	59.73
256QAM	663332	3949.98	57.733	59.74

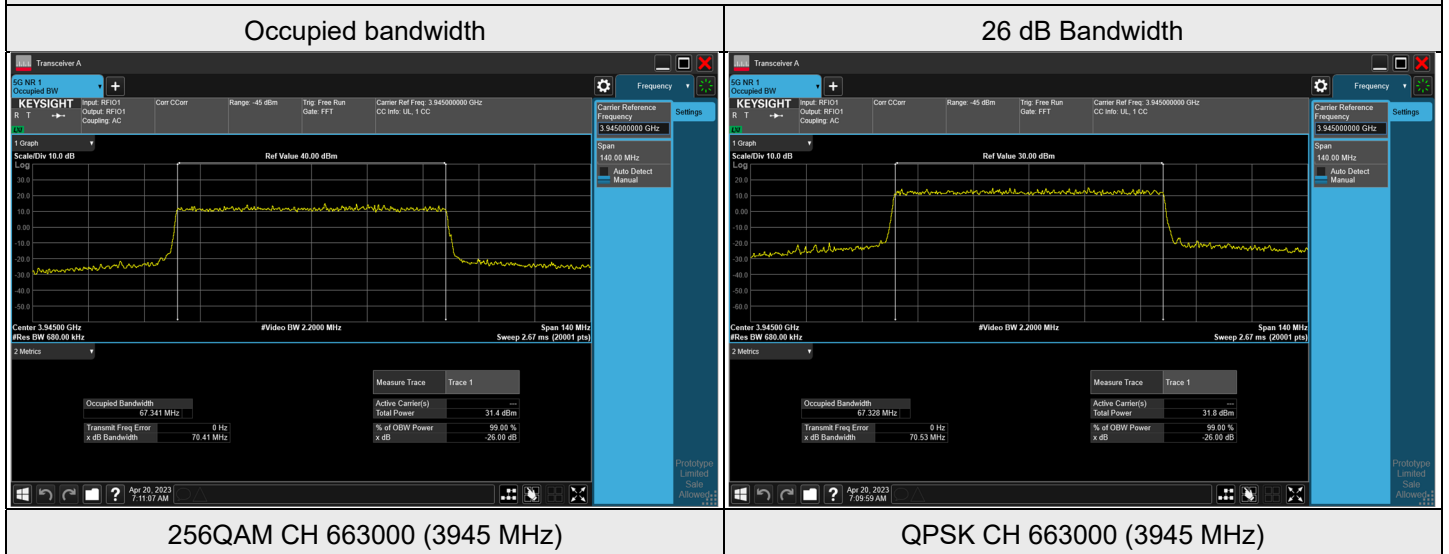
Spectrum Plot of Worst Value



**NR n77 (3700-3980 MHz) SCS 30 kHz, Channel Bandwidth: 70 MHz**

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	649000	3735	66.445	66.87
BPSK	656000	3840	66.347	66.99
BPSK	663000	3945	66.254	67.02
QPSK	649000	3735	67.191	70.23
QPSK	656000	3840	67.272	70.31
QPSK	663000	3945	67.328	70.53
16QAM	649000	3735	67.287	70.05
16QAM	656000	3840	67.205	70.23
16QAM	663000	3945	67.277	70.32
64QAM	649000	3735	67.148	70.11
64QAM	656000	3840	67.130	70.05
64QAM	663000	3945	67.248	70.33
256QAM	649000	3735	67.326	70.16
256QAM	656000	3840	67.327	70.27
256QAM	663000	3945	67.341	70.41

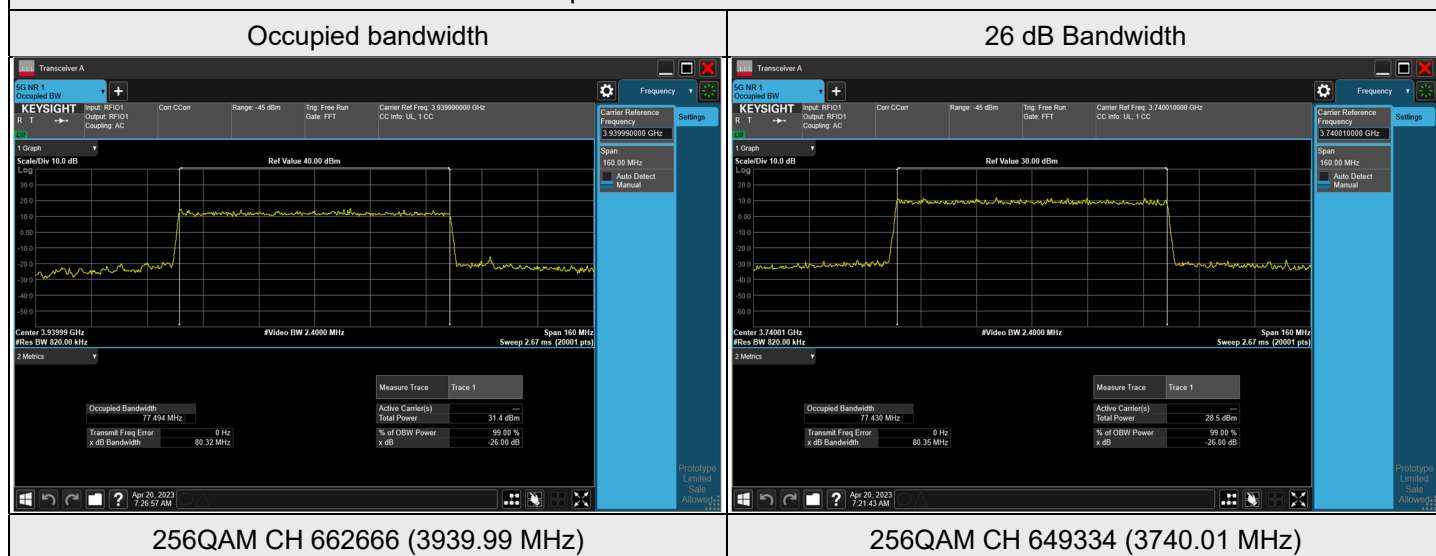
**Spectrum Plot of Worst Value**



NR n77 (3700-3980 MHz) SCS 30 kHz, Channel Bandwidth: 80 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	649334	3740.01	76.790	79.84
BPSK	656000	3840	76.742	79.81
BPSK	662666	3939.99	76.771	79.74
QPSK	649334	3740.01	77.224	80.20
QPSK	656000	3840	77.379	79.82
QPSK	662666	3939.99	77.330	79.68
16QAM	649334	3740.01	77.254	80.17
16QAM	656000	3840	77.478	79.98
16QAM	662666	3939.99	77.316	80.22
64QAM	649334	3740.01	77.318	80.07
64QAM	656000	3840	77.191	80.07
64QAM	662666	3939.99	77.413	80.15
256QAM	649334	3740.01	77.430	80.35
256QAM	656000	3840	77.448	80.02
256QAM	662666	3939.99	77.494	80.32

Spectrum Plot of Worst Value



**NR n77 (3700-3980 MHz) SCS 30 kHz, Channel Bandwidth: 90 MHz**

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	649668	3745.02	86.494	89.53
BPSK	656000	3840	86.335	89.77
BPSK	662332	3934.98	86.455	89.85
QPSK	649668	3745.02	86.947	90.22
QPSK	656000	3840	87.031	90.12
QPSK	662332	3934.98	87.019	90.30
16QAM	649668	3745.02	87.036	90.13
16QAM	656000	3840	87.072	90.44
16QAM	662332	3934.98	87.178	90.11
64QAM	649668	3745.02	87.254	90.34
64QAM	656000	3840	87.354	90.27
64QAM	662332	3934.98	87.193	90.33
256QAM	649668	3745.02	87.038	90.22
256QAM	656000	3840	86.985	90.12
256QAM	662332	3934.98	87.054	90.28

