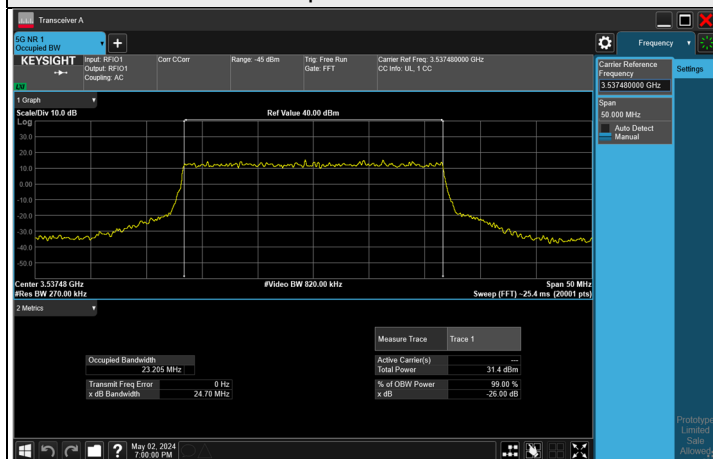


NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) Chain 1, Channel Bandwidth: 25 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	630834	3462.51	23.156	24.86
QPSK	633334	3500.01	23.182	24.69
QPSK	635832	3537.48	23.130	24.53
16QAM	630834	3462.51	23.111	24.80
16QAM	633334	3500.01	23.156	24.85
16QAM	635832	3537.48	23.151	25.02
64QAM	630834	3462.51	23.171	24.65
64QAM	633334	3500.01	23.181	25.00
64QAM	635832	3537.48	23.205	24.70
256QAM	630834	3462.51	23.136	24.65
256QAM	633334	3500.01	23.162	24.85
256QAM	635832	3537.48	23.152	24.89

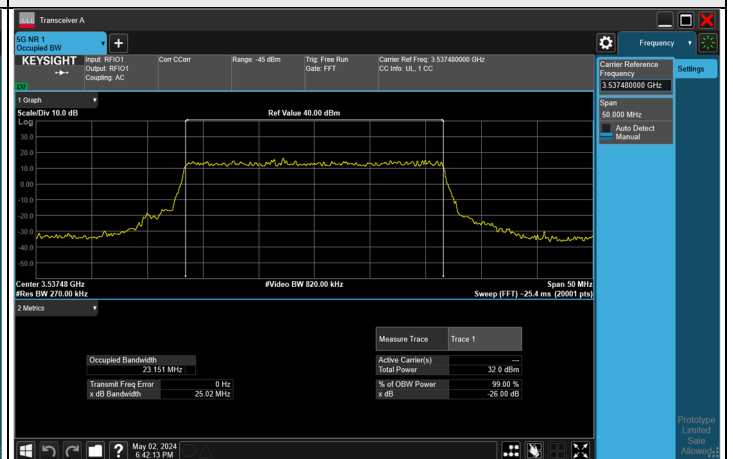
Spectrum Plot of Worst Value

Occupied bandwidth



64QAM CH 635832 (3537.48 MHz)

26 dB Bandwidth



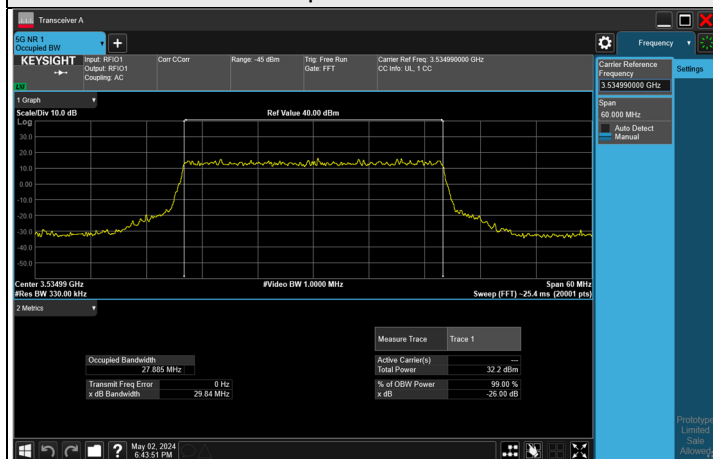
16QAM CH 635832 (3537.48 MHz)

NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) Chain 1, Channel Bandwidth: 30 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	631000	3465	27.818	29.44
QPSK	633334	3500.01	27.786	29.56
QPSK	635666	3534.99	27.830	29.49
16QAM	631000	3465	27.842	29.82
16QAM	633334	3500.01	27.782	29.55
16QAM	635666	3534.99	27.885	29.84
64QAM	631000	3465	27.831	29.63
64QAM	633334	3500.01	27.807	29.65
64QAM	635666	3534.99	27.783	29.57
256QAM	631000	3465	27.810	29.58
256QAM	633334	3500.01	27.758	29.55
256QAM	635666	3534.99	27.870	29.80

Spectrum Plot of Worst Value

Occupied bandwidth



16QAM CH 635666 (3534.99 MHz)

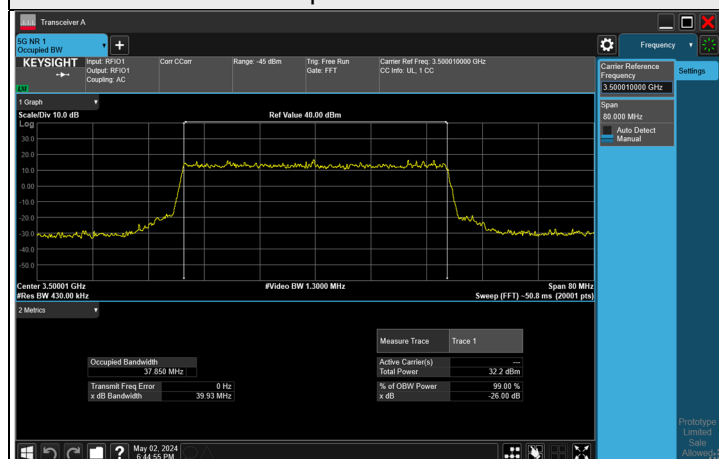
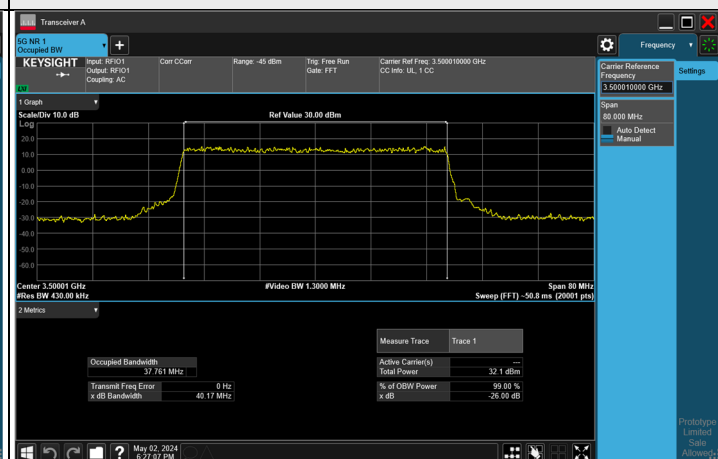
26 dB Bandwidth



16QAM CH 635666 (3534.99 MHz)

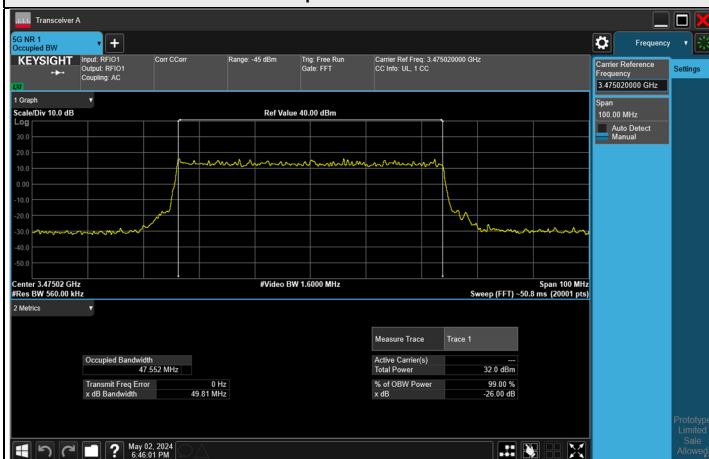
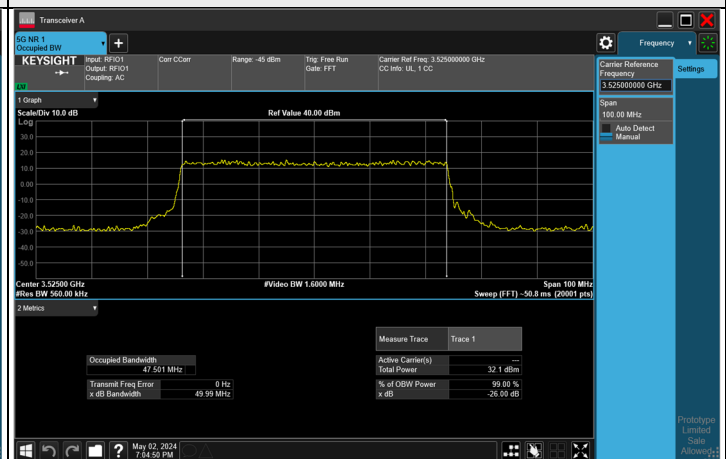
NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) Chain 1, Channel Bandwidth: 40 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	631334	3470.01	37.816	39.73
QPSK	633334	3500.01	37.761	40.17
QPSK	635332	3529.98	37.843	39.88
16QAM	631334	3470.01	37.772	39.31
16QAM	633334	3500.01	37.850	39.93
16QAM	635332	3529.98	37.780	39.78
64QAM	631334	3470.01	37.786	40.01
64QAM	633334	3500.01	37.780	39.81
64QAM	635332	3529.98	37.769	39.73
256QAM	631334	3470.01	37.826	40.06
256QAM	633334	3500.01	37.816	39.89
256QAM	635332	3529.98	37.794	39.90

Spectrum Plot of Worst Value
Occupied bandwidth

16QAM CH 633334 (3500.01 MHz)
26 dB Bandwidth

QPSK CH 633334 (3500.01 MHz)

NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) Chain 1, Channel Bandwidth: 50 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	631668	3475.02	47.431	49.78
QPSK	633334	3500.01	47.313	49.77
QPSK	635000	3525	47.353	49.90
16QAM	631668	3475.02	47.552	49.81
16QAM	633334	3500.01	47.380	49.83
16QAM	635000	3525	47.381	49.66
64QAM	631668	3475.02	47.343	49.83
64QAM	633334	3500.01	47.382	49.79
64QAM	635000	3525	47.501	49.99
256QAM	631668	3475.02	47.285	49.50
256QAM	633334	3500.01	47.471	49.77
256QAM	635000	3525	47.503	49.79

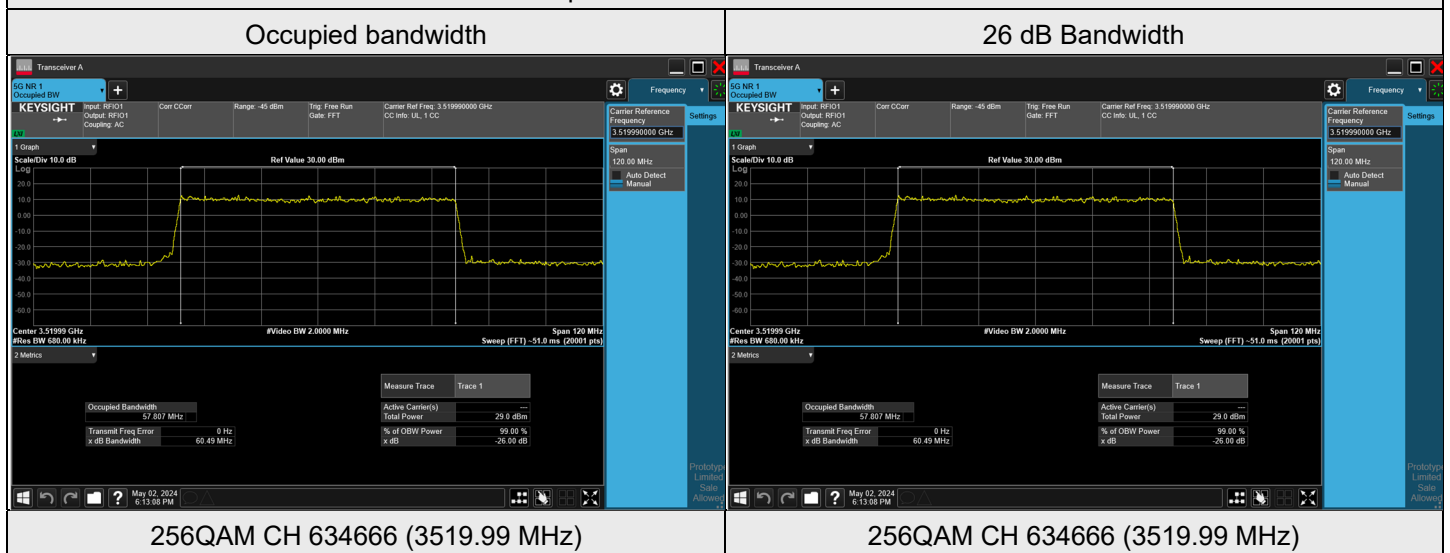
Spectrum Plot of Worst Value
Occupied bandwidth

16QAM CH 631668 (3475.02 MHz)
26 dB Bandwidth

64QAM CH 635000 (3525 MHz)



NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) Chain 1, Channel Bandwidth: 60 MHz

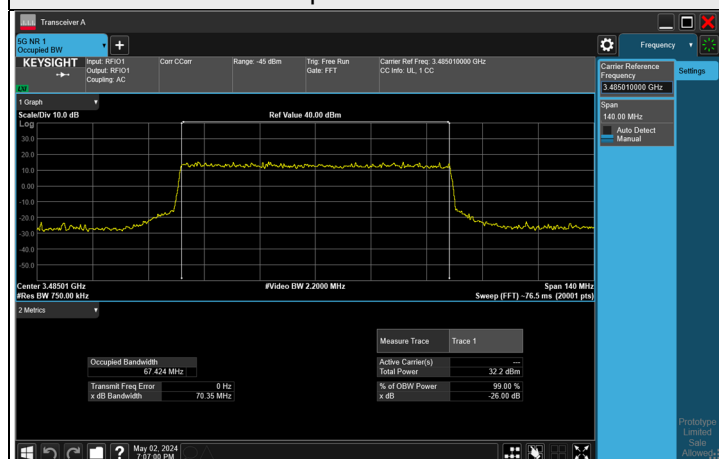
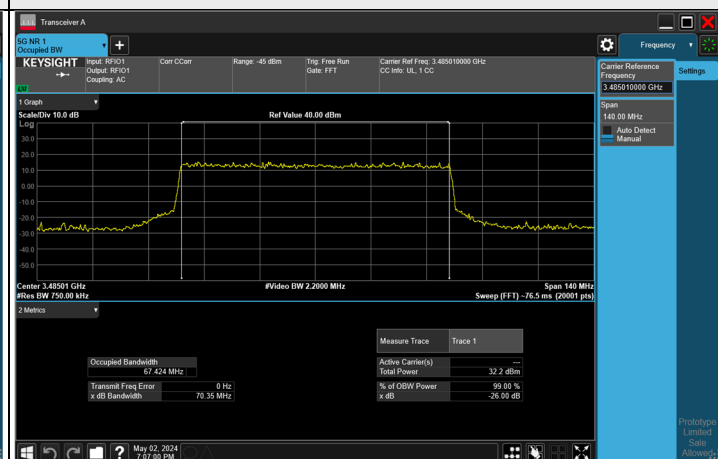
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	632000	3480	57.650	60.25
QPSK	633334	3500.01	57.735	60.34
QPSK	634666	3519.99	57.770	60.24
16QAM	632000	3480	57.738	60.23
16QAM	633334	3500.01	57.759	60.35
16QAM	634666	3519.99	57.805	60.40
64QAM	632000	3480	57.711	60.44
64QAM	633334	3500.01	57.722	60.39
64QAM	634666	3519.99	57.771	60.33
256QAM	632000	3480	57.662	60.47
256QAM	633334	3500.01	57.749	60.32
256QAM	634666	3519.99	57.807	60.49

Spectrum Plot of Worst Value



NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) Chain 1, Channel Bandwidth: 70 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	632334	3485.01	67.401	70.05
QPSK	633334	3500.01	67.298	70.12
QPSK	634332	3514.98	67.360	70.27
16QAM	632334	3485.01	67.301	70.08
16QAM	633334	3500.01	67.341	70.16
16QAM	634332	3514.98	67.271	70.23
64QAM	632334	3485.01	67.424	70.35
64QAM	633334	3500.01	67.234	70.24
64QAM	634332	3514.98	67.356	70.26
256QAM	632334	3485.01	67.204	70.30
256QAM	633334	3500.01	67.327	70.30
256QAM	634332	3514.98	67.298	70.35

Spectrum Plot of Worst Value
Occupied bandwidth

64QAM CH 632334 (3485.01 MHz)
26 dB Bandwidth

64QAM CH 632334 (3485.01 MHz)

NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) Chain 1, Channel Bandwidth: 80 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	632668	3490.02	77.234	80.33
QPSK	633334	3500.01	77.250	80.48
QPSK	634000	3510	77.296	80.28
16QAM	632668	3490.02	77.335	80.45
16QAM	633334	3500.01	77.426	80.67
16QAM	634000	3510	77.447	80.70
64QAM	632668	3490.02	77.393	80.36
64QAM	633334	3500.01	77.239	80.41
64QAM	634000	3510	77.314	80.30
256QAM	632668	3490.02	77.174	80.53
256QAM	633334	3500.01	77.317	80.66
256QAM	634000	3510	77.223	80.56

Spectrum Plot of Worst Value

Occupied bandwidth



16QAM CH 634000 (3510 MHz)

26 dB Bandwidth



16QAM CH 634000 (3510 MHz)

NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) Chain 1, Channel Bandwidth: 90 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	633000	3495	87.247	90.43
QPSK	633334	3500.01	87.253	90.35
QPSK	633666	3504.99	87.360	90.53
16QAM	633000	3495	87.309	91.03
16QAM	633334	3500.01	87.336	90.29
16QAM	633666	3504.99	87.319	90.63
64QAM	633000	3495	87.196	90.52
64QAM	633334	3500.01	87.357	90.97
64QAM	633666	3504.99	87.341	90.62
256QAM	633000	3495	87.445	90.57
256QAM	633334	3500.01	87.393	90.80
256QAM	633666	3504.99	87.248	90.57

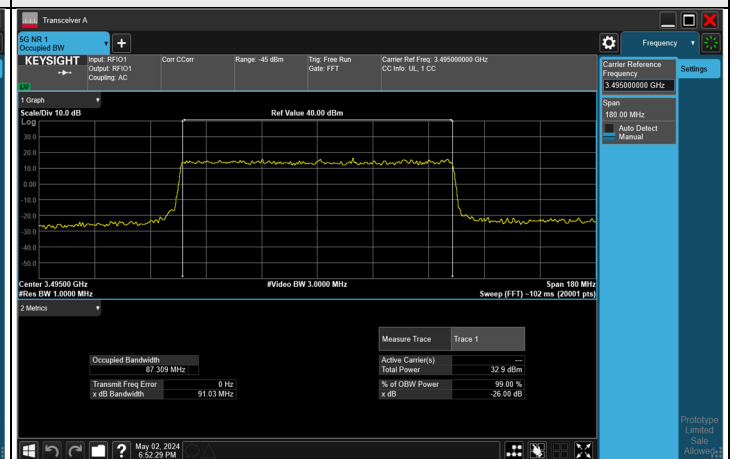
Spectrum Plot of Worst Value

Occupied bandwidth



256QAM CH 633000 (3495 MHz)

26 dB Bandwidth



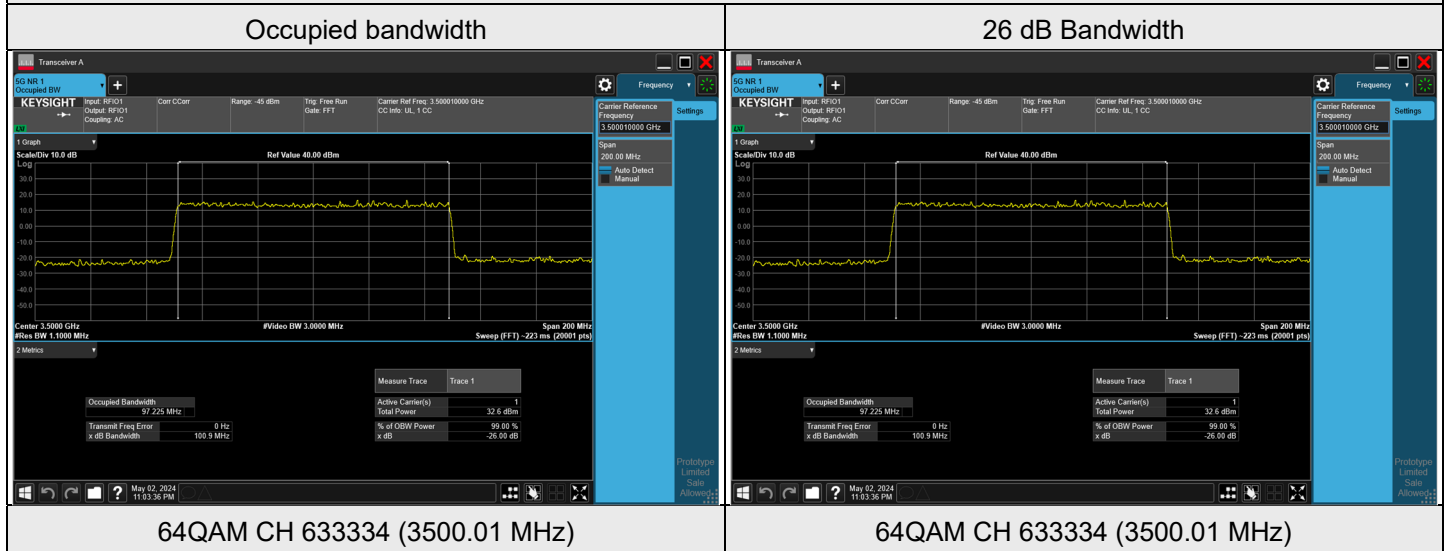
16QAM CH 633000 (3495 MHz)



NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) Chain 1, Channel Bandwidth: 100 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	633334	3500.01	97.128	100.8
16QAM	633334	3500.01	97.185	100.8
64QAM	633334	3500.01	97.225	100.9
256QAM	633334	3500.01	97.220	100.9

Spectrum Plot of Worst Value

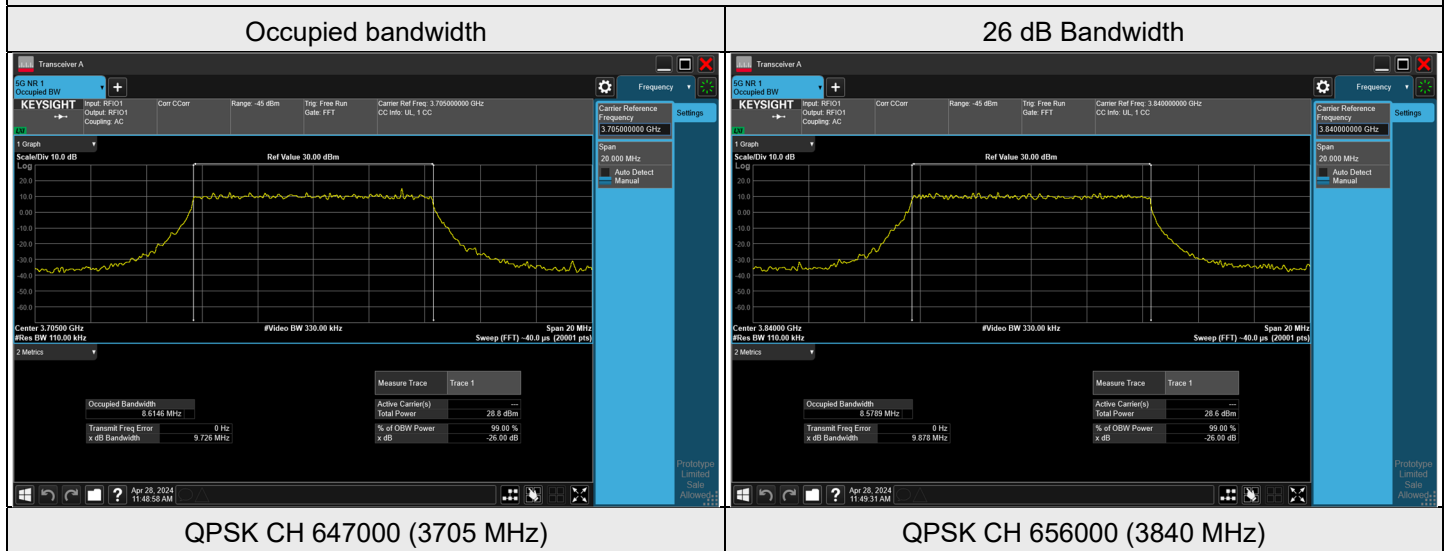


7.4.9 NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz) – MIMO (Chain 0)

NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz) Chain 0, Channel Bandwidth: 10 MHz

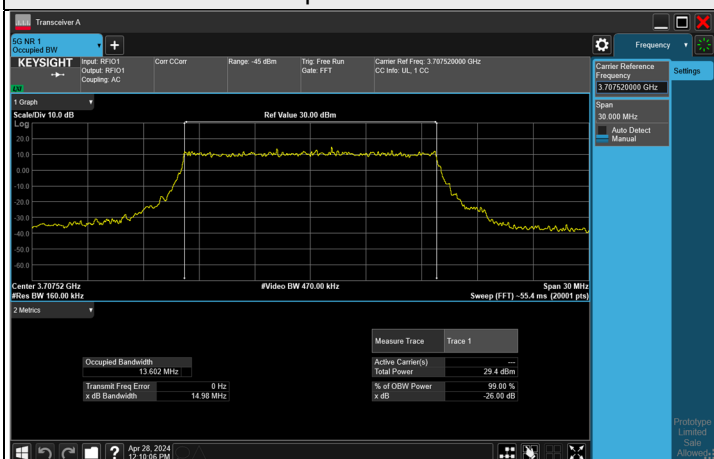
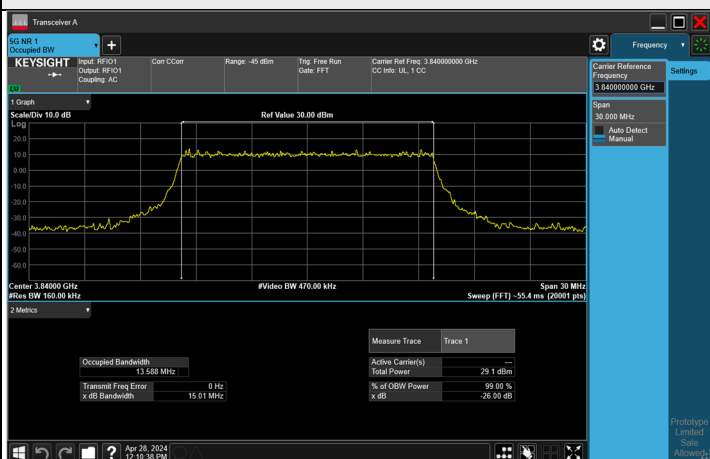
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	647000	3705	8.6146	9.726
QPSK	656000	3840	8.5789	9.878
QPSK	665000	3975	8.5784	9.616
16QAM	647000	3705	8.5903	9.767
16QAM	656000	3840	8.6047	9.775
16QAM	665000	3975	8.6069	9.680
64QAM	647000	3705	8.5943	9.853
64QAM	656000	3840	8.5965	9.725
64QAM	665000	3975	8.6085	9.867
256QAM	647000	3705	8.5920	9.646
256QAM	656000	3840	8.5624	9.640
256QAM	665000	3975	8.5768	9.739

Spectrum Plot of Worst Value



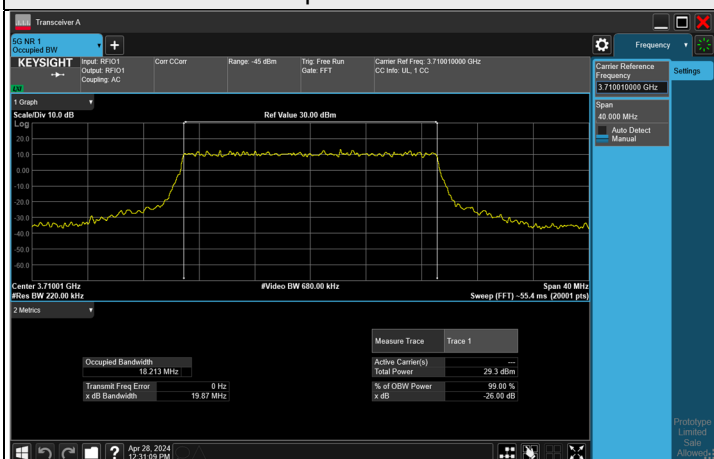
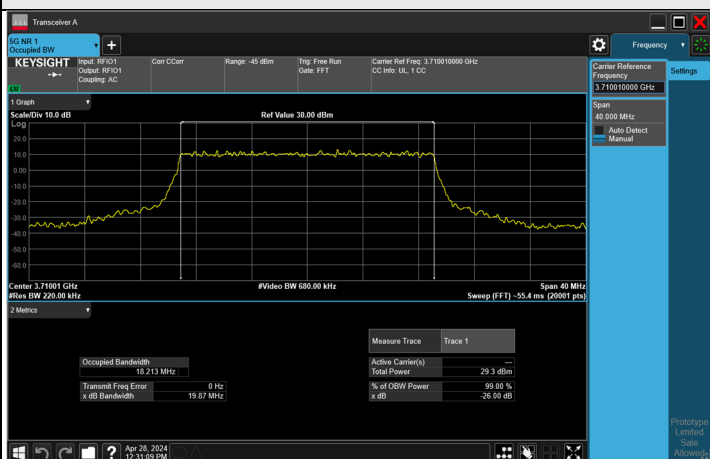
NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz) Chain 0, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	647168	3707.52	13.549	14.83
QPSK	656000	3840	13.561	14.78
QPSK	664832	3972.48	13.588	14.93
16QAM	647168	3707.52	13.602	14.98
16QAM	656000	3840	13.588	15.01
16QAM	664832	3972.48	13.578	14.87
64QAM	647168	3707.52	13.564	14.88
64QAM	656000	3840	13.555	14.78
64QAM	664832	3972.48	13.555	14.86
256QAM	647168	3707.52	13.567	14.95
256QAM	656000	3840	13.567	14.79
256QAM	664832	3972.48	13.567	15.00

Spectrum Plot of Worst Value
Occupied bandwidth

16QAM CH 647168 (3707.52 MHz)
26 dB Bandwidth

16QAM CH 656000 (3840 MHz)

NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz) Chain 0, Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	647334	3710.01	18.200	19.65
QPSK	656000	3840	18.166	19.55
QPSK	664666	3969.99	18.172	19.80
16QAM	647334	3710.01	18.186	19.51
16QAM	656000	3840	18.193	19.52
16QAM	664666	3969.99	18.197	19.57
64QAM	647334	3710.01	18.213	19.87
64QAM	656000	3840	18.210	19.71
64QAM	664666	3969.99	18.142	19.49
256QAM	647334	3710.01	18.174	19.83
256QAM	656000	3840	18.173	19.81
256QAM	664666	3969.99	18.190	19.60

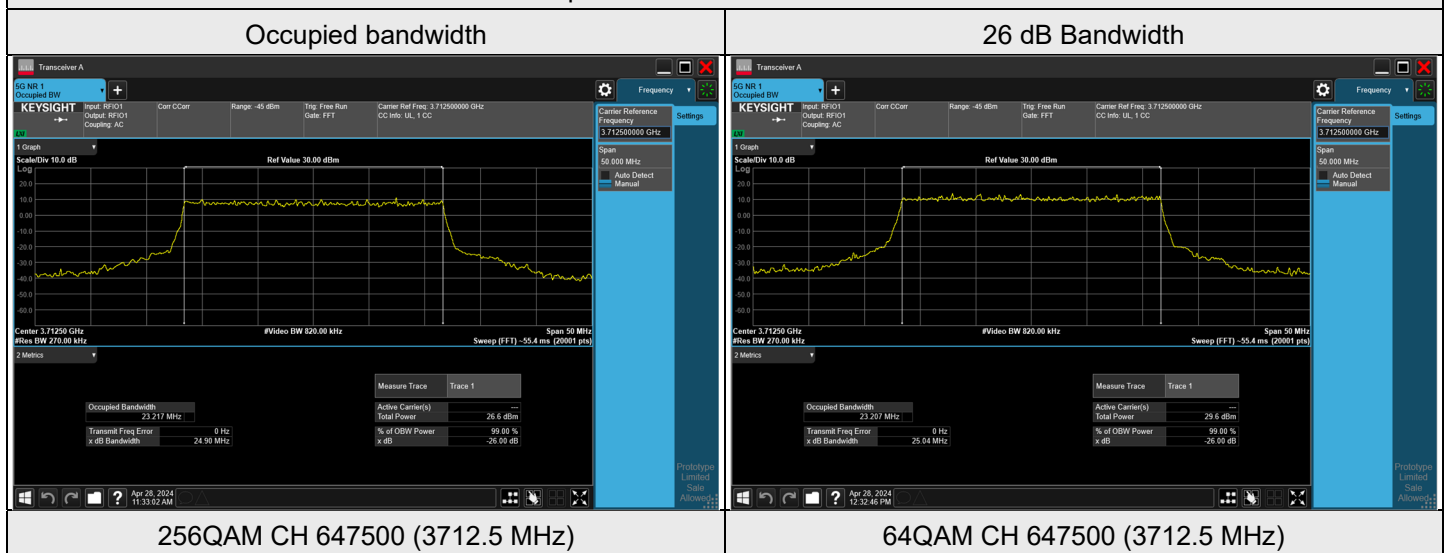
Spectrum Plot of Worst Value
Occupied bandwidth

64QAM CH 647334 (3710.01 MHz)
26 dB Bandwidth

64QAM CH 647334 (3710.01 MHz)



NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz) Chain 0, Channel Bandwidth: 25 MHz

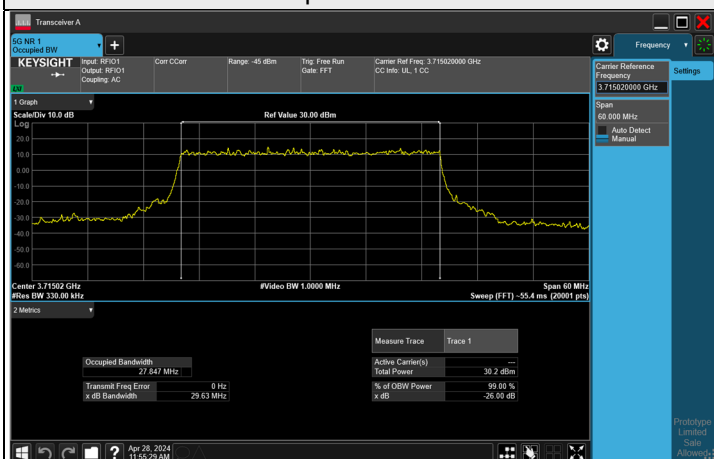
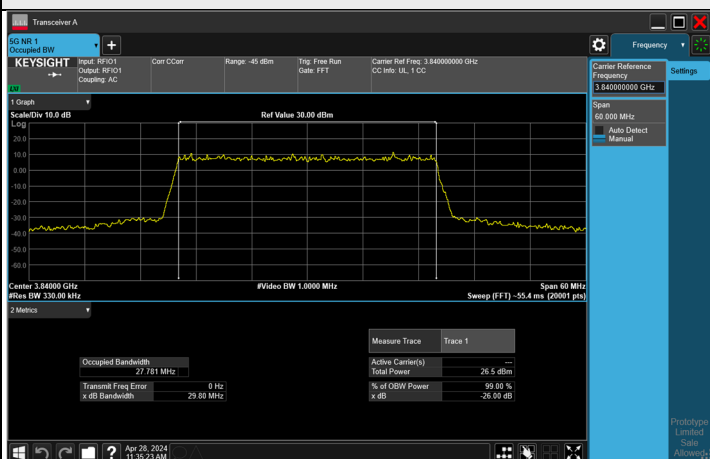
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	647500	3712.5	23.176	24.89
QPSK	656000	3840	23.142	24.75
QPSK	664500	3967.5	23.151	24.87
16QAM	647500	3712.5	23.141	24.83
16QAM	656000	3840	23.171	24.90
16QAM	664500	3967.5	23.151	24.71
64QAM	647500	3712.5	23.207	25.04
64QAM	656000	3840	23.175	24.86
64QAM	664500	3967.5	23.157	24.83
256QAM	647500	3712.5	23.217	24.90
256QAM	656000	3840	23.167	24.93
256QAM	664500	3967.5	23.175	24.95

Spectrum Plot of Worst Value



NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz) Chain 0, Channel Bandwidth: 30 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	647668	3715.02	27.847	29.63
QPSK	656000	3840	27.810	29.66
QPSK	664332	3964.98	27.829	29.78
16QAM	647668	3715.02	27.805	29.72
16QAM	656000	3840	27.788	29.55
16QAM	664332	3964.98	27.770	29.36
64QAM	647668	3715.02	27.788	29.71
64QAM	656000	3840	27.842	29.45
64QAM	664332	3964.98	27.777	29.17
256QAM	647668	3715.02	27.752	29.72
256QAM	656000	3840	27.781	29.80
256QAM	664332	3964.98	27.817	29.54

Spectrum Plot of Worst Value
Occupied bandwidth

QPSK CH 647668 (3715.02 MHz)
26 dB Bandwidth

256QAM CH 656000 (3840 MHz)

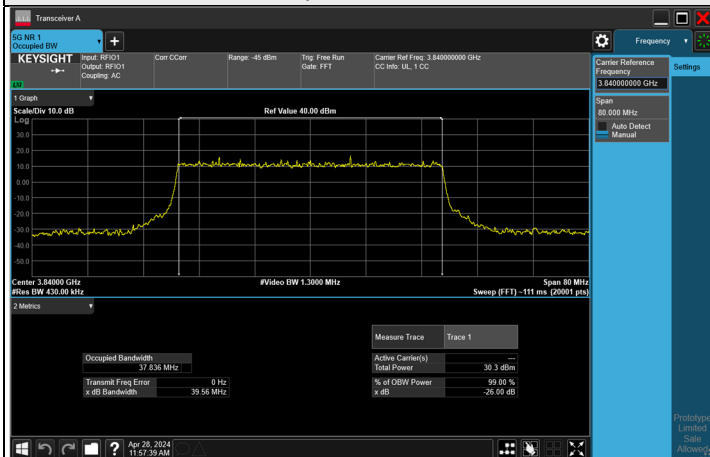


NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz) Chain 0, Channel Bandwidth: 40 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	648000	3720	37.784	39.78
QPSK	656000	3840	37.836	39.56
QPSK	664000	3960	37.792	39.78
16QAM	648000	3720	37.786	39.75
16QAM	656000	3840	37.732	39.81
16QAM	664000	3960	37.745	39.75
64QAM	648000	3720	37.731	39.85
64QAM	656000	3840	37.780	39.90
64QAM	664000	3960	37.834	39.91
256QAM	648000	3720	37.728	39.93
256QAM	656000	3840	37.762	39.92
256QAM	664000	3960	37.752	39.78

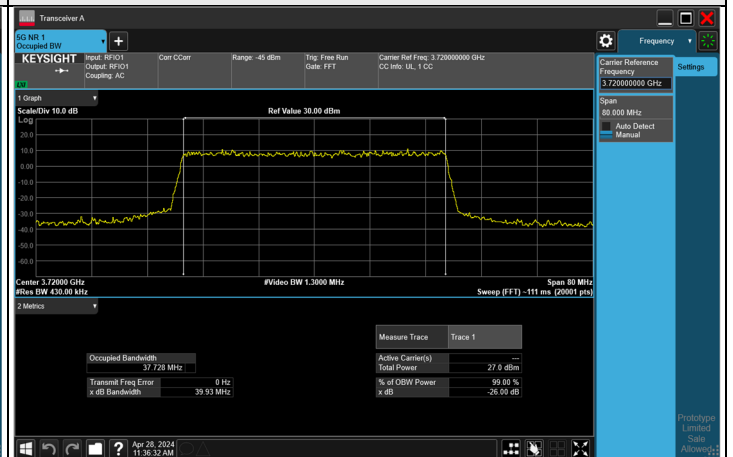
Spectrum Plot of Worst Value

Occupied bandwidth



QPSK CH 656000 (3840 MHz)

26 dB Bandwidth



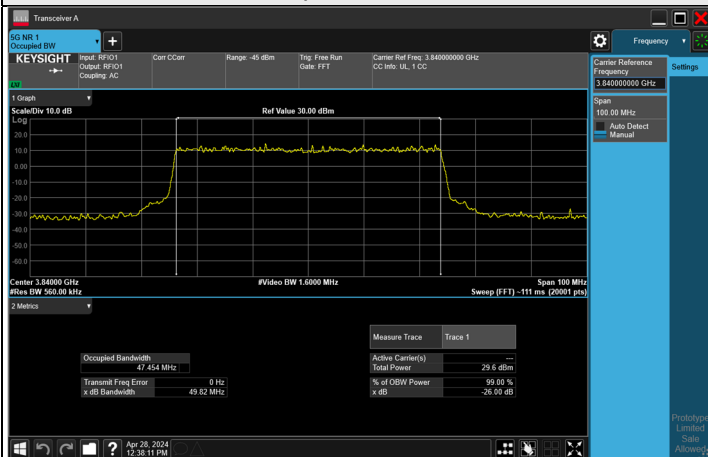
256QAM CH 648000 (3720 MHz)

NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz) Chain 0, Channel Bandwidth: 50 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	648334	3725.01	47.394	49.76
QPSK	656000	3840	47.405	49.86
QPSK	663666	3954.99	47.403	49.88
16QAM	648334	3725.01	47.424	49.99
16QAM	656000	3840	47.400	49.64
16QAM	663666	3954.99	47.412	49.82
64QAM	648334	3725.01	47.382	49.75
64QAM	656000	3840	47.454	49.82
64QAM	663666	3954.99	47.442	49.82
256QAM	648334	3725.01	47.391	49.77
256QAM	656000	3840	47.371	49.68
256QAM	663666	3954.99	47.364	49.70

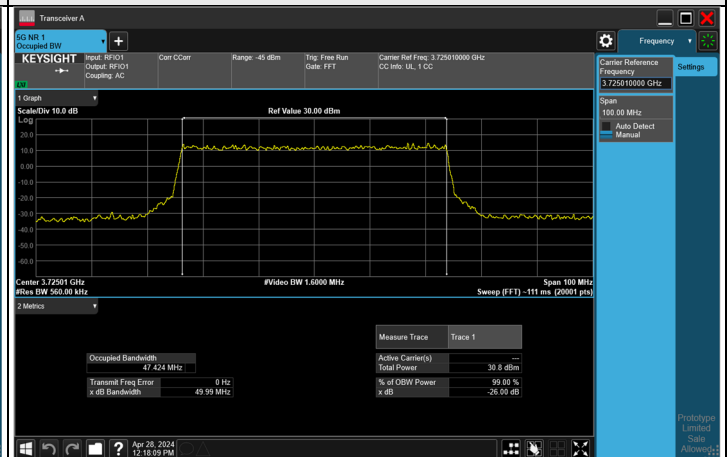
Spectrum Plot of Worst Value

Occupied bandwidth



64QAM CH 656000 (3840 MHz)

26 dB Bandwidth



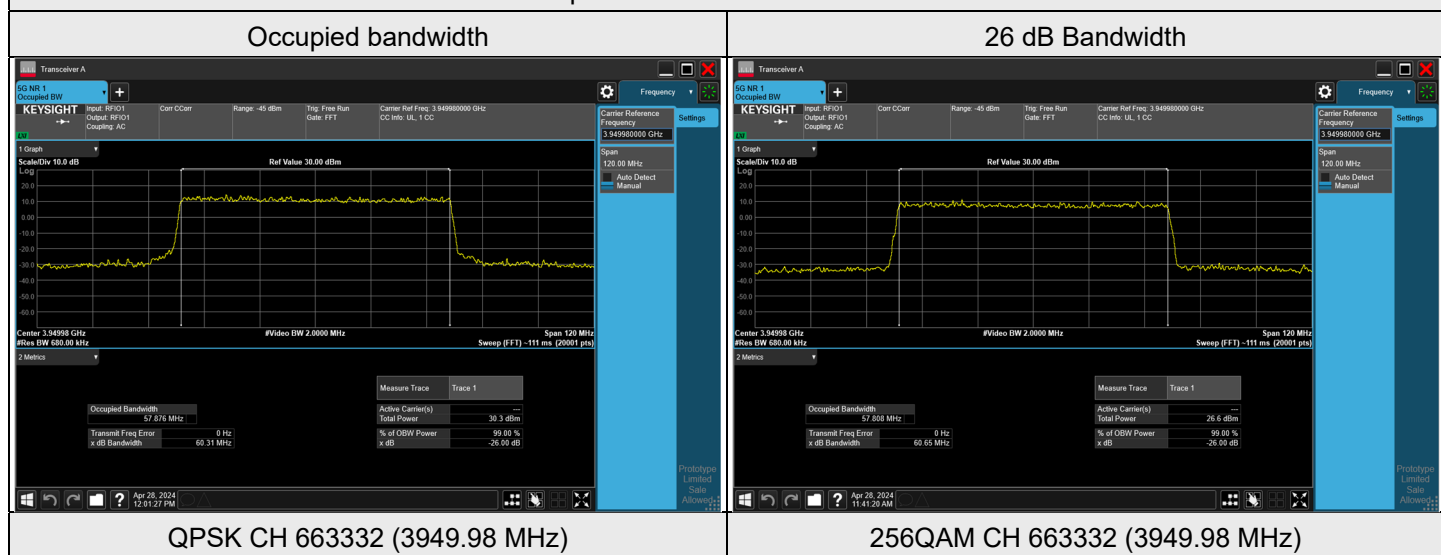
16QAM CH 648334 (3725.01 MHz)



NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz) Chain 0, Channel Bandwidth: 60 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	648668	3730.02	57.819	60.40
QPSK	656000	3840	57.604	60.44
QPSK	663332	3949.98	57.876	60.31
16QAM	648668	3730.02	57.627	60.26
16QAM	656000	3840	57.744	60.29
16QAM	663332	3949.98	57.590	60.24
64QAM	648668	3730.02	57.641	60.27
64QAM	656000	3840	57.702	60.24
64QAM	663332	3949.98	57.663	60.06
256QAM	648668	3730.02	57.710	60.35
256QAM	656000	3840	57.628	60.48
256QAM	663332	3949.98	57.808	60.65

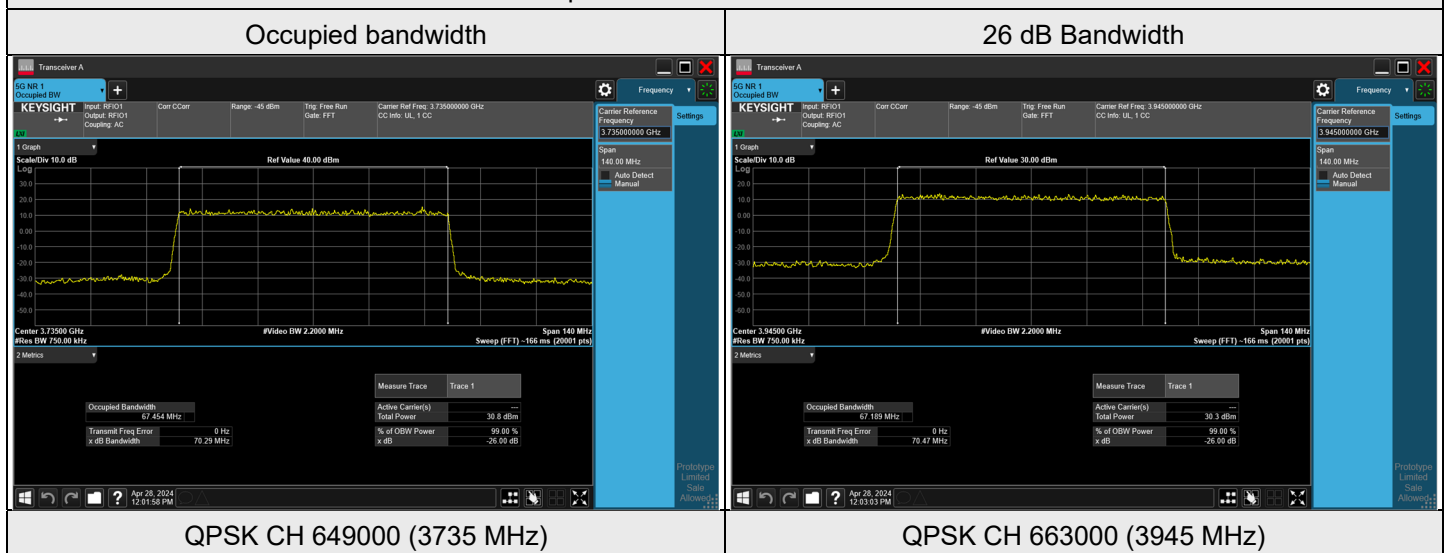
Spectrum Plot of Worst Value



NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz) Chain 0, Channel Bandwidth: 70 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	649000	3735	67.454	70.29
QPSK	656000	3840	67.275	70.24
QPSK	663000	3945	67.189	70.47
16QAM	649000	3735	67.319	70.29
16QAM	656000	3840	67.354	70.10
16QAM	663000	3945	67.332	70.10
64QAM	649000	3735	67.148	69.86
64QAM	656000	3840	67.186	70.15
64QAM	663000	3945	67.161	70.23
256QAM	649000	3735	67.161	70.18
256QAM	656000	3840	67.247	70.07
256QAM	663000	3945	67.312	70.14

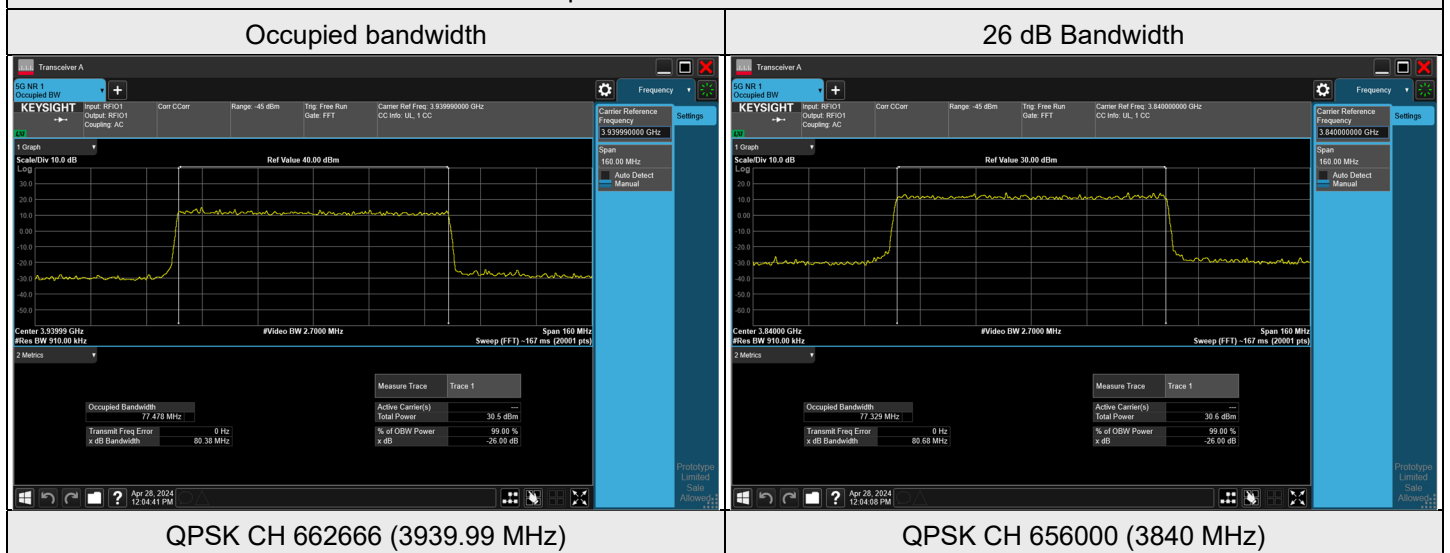
Spectrum Plot of Worst Value



NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz) Chain 0, Channel Bandwidth: 80 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	649334	3740.01	77.176	80.52
QPSK	656000	3840	77.329	80.68
QPSK	662666	3939.99	77.478	80.38
16QAM	649334	3740.01	77.361	80.53
16QAM	656000	3840	77.430	80.48
16QAM	662666	3939.99	77.381	80.66
64QAM	649334	3740.01	77.171	80.37
64QAM	656000	3840	77.248	80.33
64QAM	662666	3939.99	77.398	80.54
256QAM	649334	3740.01	77.333	80.56
256QAM	656000	3840	77.398	80.52
256QAM	662666	3939.99	77.287	80.60

Spectrum Plot of Worst Value

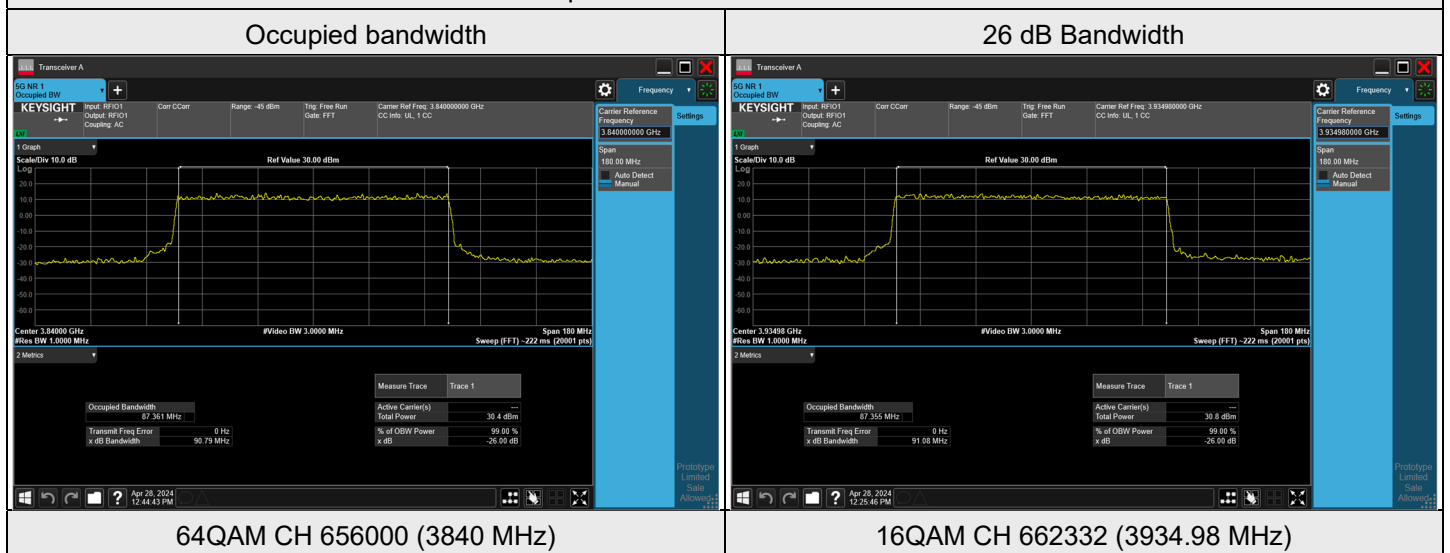




NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz) Chain 0, Channel Bandwidth: 90 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	649668	3745.02	87.216	90.67
QPSK	656000	3840	87.233	90.73
QPSK	662332	3934.98	87.287	90.75
16QAM	649668	3745.02	87.085	90.47
16QAM	656000	3840	87.175	90.73
16QAM	662332	3934.98	87.355	91.08
64QAM	649668	3745.02	87.053	90.45
64QAM	656000	3840	87.361	90.79
64QAM	662332	3934.98	87.324	90.69
256QAM	649668	3745.02	87.142	90.65
256QAM	656000	3840	87.272	91.07
256QAM	662332	3934.98	87.164	90.57

Spectrum Plot of Worst Value



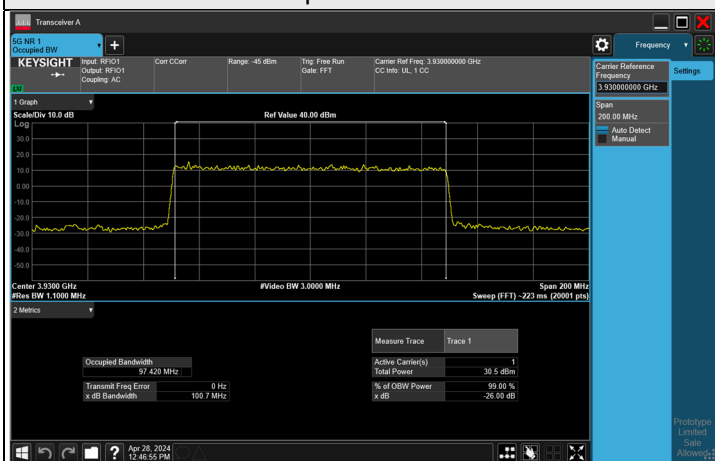


NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz) Chain 0, Channel Bandwidth: 100 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
QPSK	650000	3750	97.120	101.0
QPSK	656000	3840	97.268	100.9
QPSK	662000	3930	97.330	100.8
16QAM	650000	3750	97.121	100.9
16QAM	656000	3840	97.270	100.7
16QAM	662000	3930	97.264	100.9
64QAM	650000	3750	97.088	101.0
64QAM	656000	3840	97.246	100.9
64QAM	662000	3930	97.420	100.7
256QAM	650000	3750	97.321	101.0
256QAM	656000	3840	97.244	101.0
256QAM	662000	3930	97.149	100.9

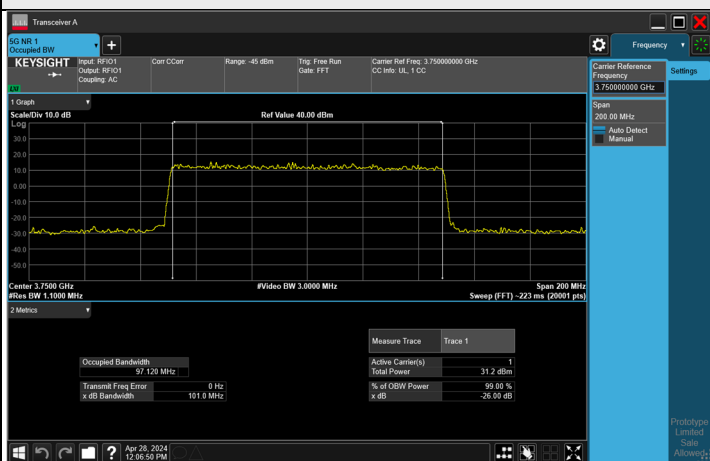
Spectrum Plot of Worst Value

Occupied bandwidth



64QAM CH 662000 (3930 MHz)

26 dB Bandwidth



QPSK CH 650000 (3750 MHz)