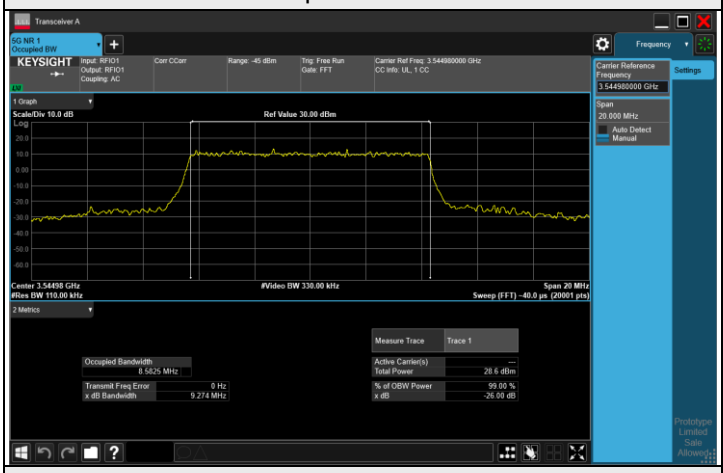
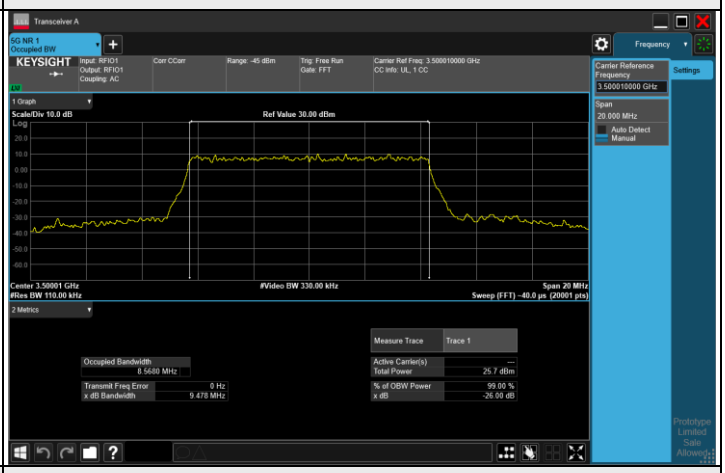
7.4.7 NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) (PC2)

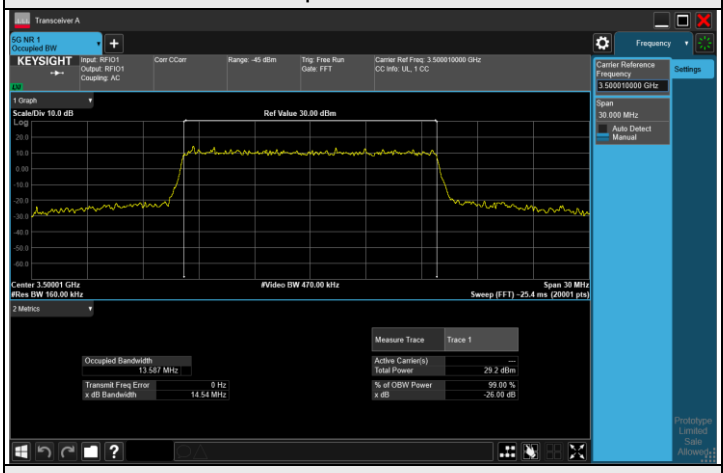
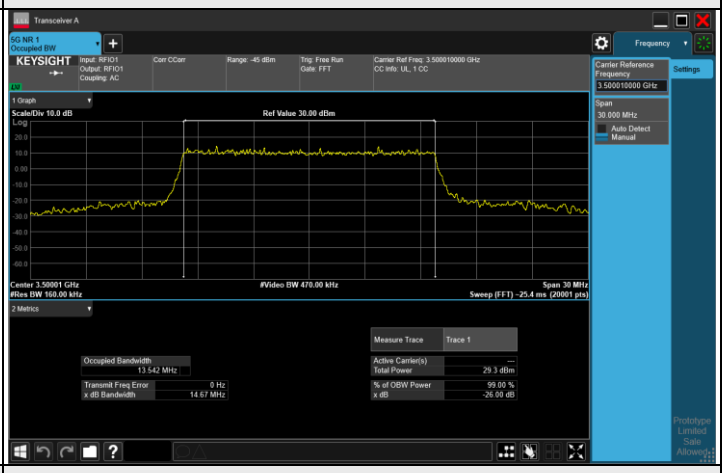
NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	630334	3455.01	8.5388	9.389
BPSK	633334	3500.01	8.5366	9.254
BPSK	636332	3544.98	8.5462	9.380
QPSK	630334	3455.01	8.5530	9.276
QPSK	633334	3500.01	8.5662	9.349
QPSK	636332	3544.98	8.5748	9.454
16 QAM	630334	3455.01	8.5525	9.320
16 QAM	633334	3500.01	8.5662	9.308
16 QAM	636332	3544.98	8.5623	9.306
64 QAM	630334	3455.01	8.5761	9.311
64 QAM	633334	3500.01	8.5765	9.228
64 QAM	636332	3544.98	8.5825	9.274
256 QAM	630334	3455.01	8.5510	9.268
256 QAM	633334	3500.01	8.5680	9.478
256 QAM	636332	3544.98	8.5490	9.305

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64 QAM CH 636332 (3544.98 MHz)	256 QAM CH 633334 (3500.01 MHz)

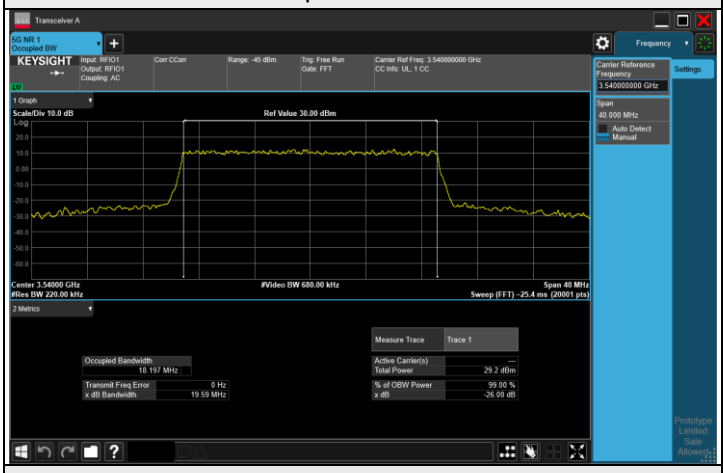
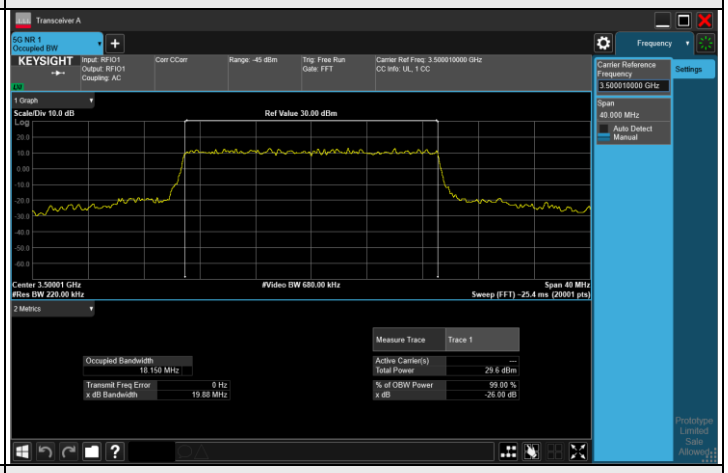
NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	630500	3457.5	13.488	13.79
BPSK	633334	3500.01	13.425	13.82
BPSK	636166	3542.49	13.417	13.89
QPSK	630500	3457.5	13.528	14.51
QPSK	633334	3500.01	13.542	14.67
QPSK	636166	3542.49	13.534	14.46
16 QAM	630500	3457.5	13.561	14.56
16 QAM	633334	3500.01	13.587	14.54
16 QAM	636166	3542.49	13.548	14.45
64 QAM	630500	3457.5	13.546	14.56
64 QAM	633334	3500.01	13.540	14.40
64 QAM	636166	3542.49	13.564	14.56
256 QAM	630500	3457.5	13.507	14.47
256 QAM	633334	3500.01	13.552	14.40
256 QAM	636166	3542.49	13.549	14.52

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16 QAM CH 633334 (3500.01 MHz)	QPSK CH 633334 (3500.01 MHz)

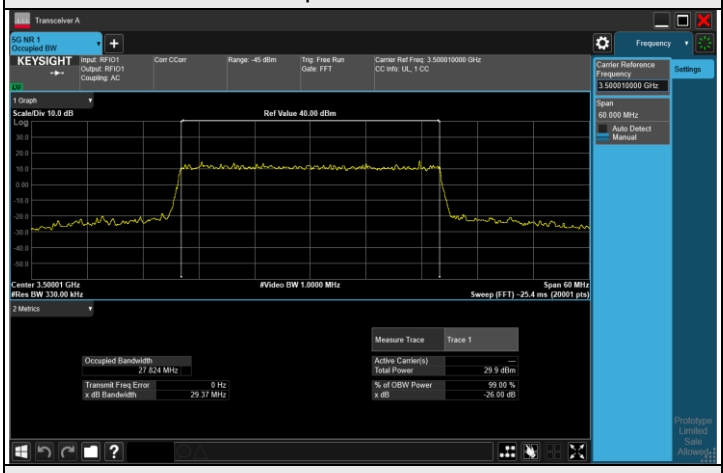
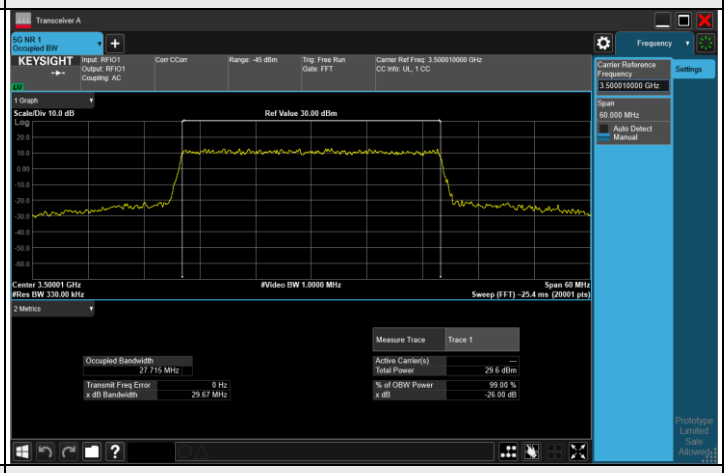
NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	630668	3460.02	17.954	18.92
BPSK	633334	3500.01	17.981	19.08
BPSK	636000	3540	18.010	19.03
QPSK	630668	3460.02	18.169	19.38
QPSK	633334	3500.01	18.169	19.54
QPSK	636000	3540	18.165	19.49
16 QAM	630668	3460.02	18.114	19.17
16 QAM	633334	3500.01	18.150	19.88
16 QAM	636000	3540	18.132	19.25
64 QAM	630668	3460.02	18.165	19.22
64 QAM	633334	3500.01	18.193	19.48
64 QAM	636000	3540	18.197	19.59
256 QAM	630668	3460.02	18.153	19.53
256 QAM	633334	3500.01	18.142	19.39
256 QAM	636000	3540	18.157	19.31

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64 QAM CH 636000 (3540 MHz)	16 QAM CH 633334 (3500.01 MHz)

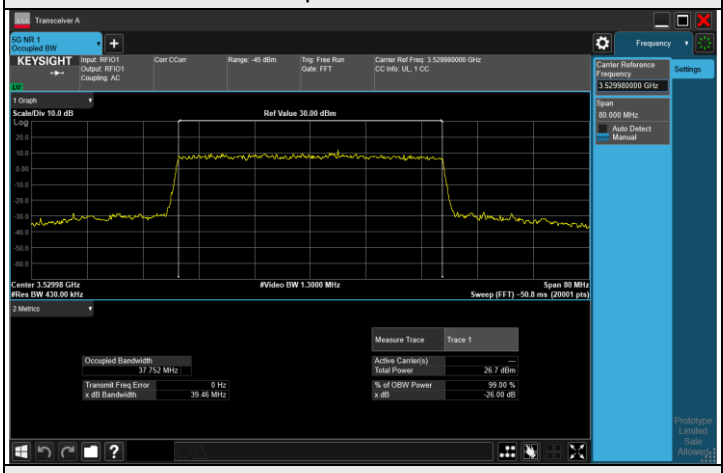
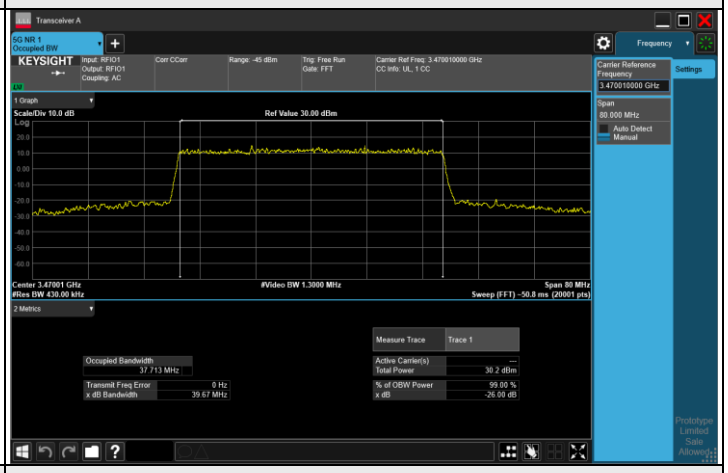
NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 30 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	631000	3465	27.361	28.66
BPSK	633334	3500.01	27.506	28.48
BPSK	635666	3534.99	27.453	28.45
QPSK	631000	3465	27.740	29.49
QPSK	633334	3500.01	27.740	29.36
QPSK	635666	3534.99	27.734	29.44
16 QAM	631000	3465	27.776	29.49
16 QAM	633334	3500.01	27.824	29.37
16 QAM	635666	3534.99	27.786	29.41
64 QAM	631000	3465	27.819	29.52
64 QAM	633334	3500.01	27.715	29.67
64 QAM	635666	3534.99	27.717	29.62
256 QAM	631000	3465	27.722	29.09
256 QAM	633334	3500.01	27.745	29.38
256 QAM	635666	3534.99	27.739	29.39

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16 QAM CH 633334 (3500.01 MHz)	64 QAM CH 633334 (3500.01 MHz)

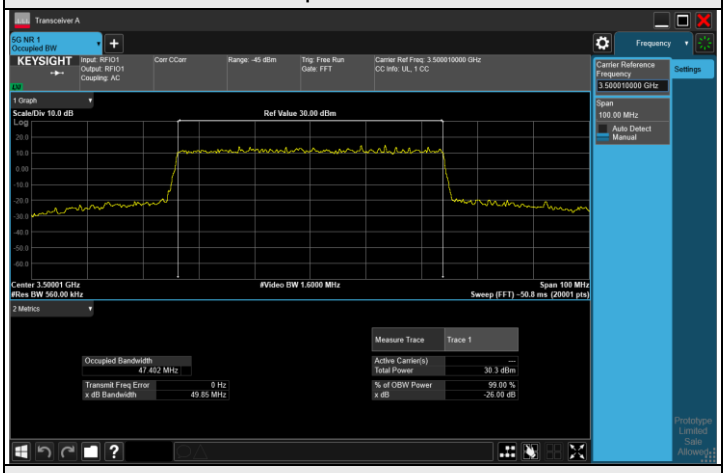
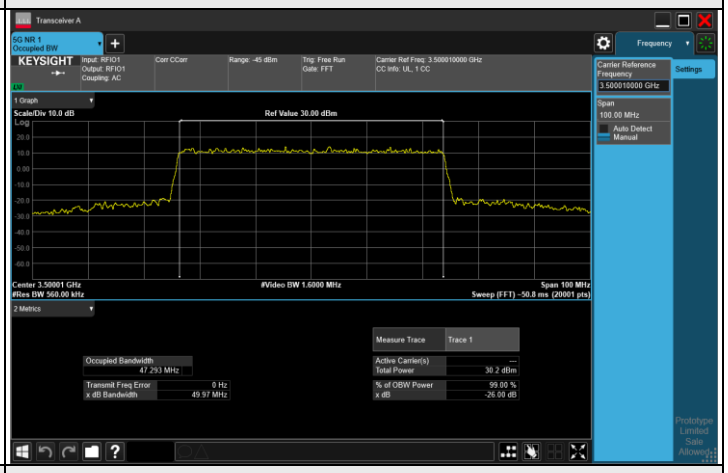
NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 40 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	631334	3470.01	37.346	37.48
BPSK	633334	3500.01	37.388	37.53
BPSK	635332	3529.98	37.339	37.59
QPSK	631334	3470.01	37.706	39.49
QPSK	633334	3500.01	37.723	39.48
QPSK	635332	3529.98	37.716	39.45
16 QAM	631334	3470.01	37.713	39.67
16 QAM	633334	3500.01	37.707	39.66
16 QAM	635332	3529.98	37.715	39.62
64 QAM	631334	3470.01	37.680	39.62
64 QAM	633334	3500.01	37.729	39.59
64 QAM	635332	3529.98	37.681	39.59
256 QAM	631334	3470.01	37.691	39.49
256 QAM	633334	3500.01	37.736	39.57
256 QAM	635332	3529.98	37.752	39.46

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256 QAM CH 635332 (3529.98 MHz)	16 QAM CH 631334 (3470.01 MHz)

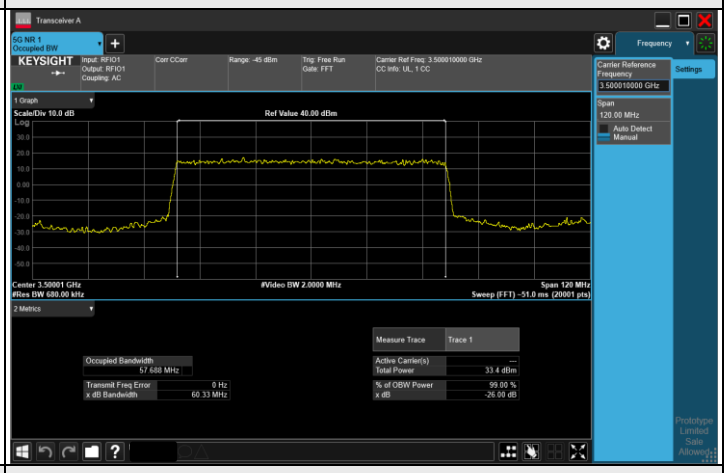
NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 50 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	631668	3475.02	47.061	48.26
BPSK	633334	3500.01	47.103	48.27
BPSK	635000	3525	46.893	48.19
QPSK	631668	3475.02	47.312	49.40
QPSK	633334	3500.01	47.402	49.85
QPSK	635000	3525	47.393	49.84
16 QAM	631668	3475.02	47.293	49.62
16 QAM	633334	3500.01	47.293	49.97
16 QAM	635000	3525	47.344	49.68
64 QAM	631668	3475.02	47.321	49.66
64 QAM	633334	3500.01	47.375	49.64
64 QAM	635000	3525	47.263	49.85
256 QAM	631668	3475.02	47.303	49.86
256 QAM	633334	3500.01	47.265	49.63
256 QAM	635000	3525	47.273	49.92

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 633334 (3500.01 MHz)	16 QAM CH 633334 (3500.01 MHz)

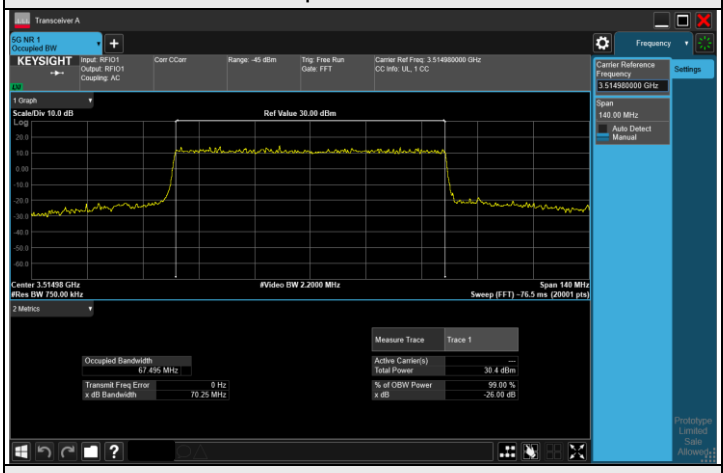
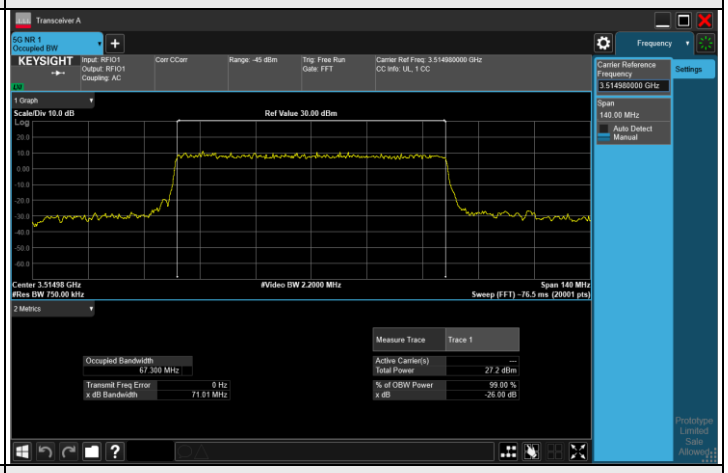
NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 60 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	632000	3480	57.629	60.27
BPSK	633334	3500.01	57.688	60.33
BPSK	634666	3519.99	57.666	60.16
QPSK	632000	3480	57.709	59.83
QPSK	633334	3500.01	57.688	59.84
QPSK	634666	3519.99	57.724	60.01
16 QAM	632000	3480	57.618	60.07
16 QAM	633334	3500.01	57.545	60.15
16 QAM	634666	3519.99	57.649	60.07
64 QAM	632000	3480	57.697	60.09
64 QAM	633334	3500.01	57.733	60.21
64 QAM	634666	3519.99	57.735	60.14
256 QAM	632000	3480	57.660	60.05
256 QAM	633334	3500.01	57.639	59.94
256 QAM	634666	3519.99	57.625	59.90

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64 QAM CH 634666 (3519.99 MHz)	BPSK CH 633334 (3500.01 MHz)

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

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	632334	3485.01	66.431	67.18
BPSK	633334	3500.01	66.561	67.39
BPSK	634332	3514.98	66.727	67.25
QPSK	632334	3485.01	67.374	69.97
QPSK	633334	3500.01	67.371	70.34
QPSK	634332	3514.98	67.495	70.25
16 QAM	632334	3485.01	67.247	70.47
16 QAM	633334	3500.01	67.286	70.09
16 QAM	634332	3514.98	67.271	70.22
64 QAM	632334	3485.01	67.076	70.15
64 QAM	633334	3500.01	67.106	70.52
64 QAM	634332	3514.98	67.159	70.26
256 QAM	632334	3485.01	67.214	70.38
256 QAM	633334	3500.01	67.275	70.52
256 QAM	634332	3514.98	67.300	71.01

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 634332 (3514.98 MHz)	256 QAM CH 634332 (3514.98 MHz)

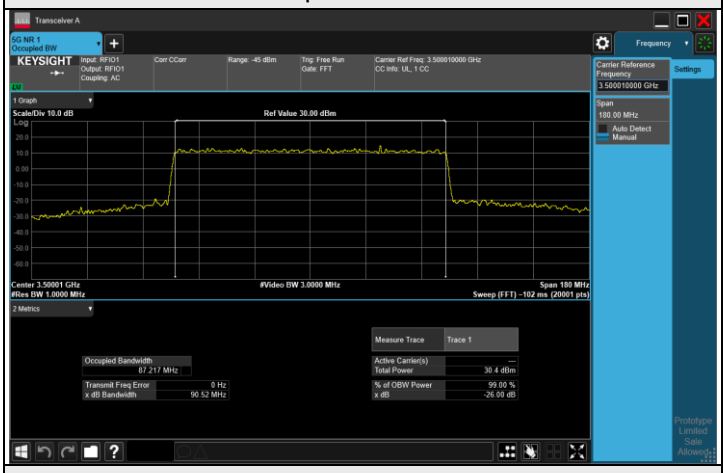
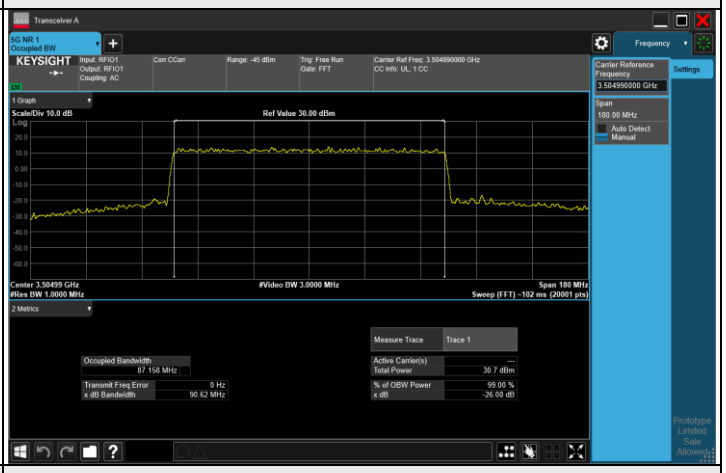
NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 80 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	632668	3490.02	76.821	80.08
BPSK	633334	3500.01	76.869	79.84
BPSK	634000	3510	77.063	80.02
QPSK	632668	3490.02	77.156	80.27
QPSK	633334	3500.01	77.222	80.32
QPSK	634000	3510	77.173	80.33
16 QAM	632668	3490.02	77.350	80.56
16 QAM	633334	3500.01	77.442	80.50
16 QAM	634000	3510	77.412	80.71
64 QAM	632668	3490.02	77.089	80.29
64 QAM	633334	3500.01	77.094	80.39
64 QAM	634000	3510	77.219	80.20
256 QAM	632668	3490.02	77.094	80.34
256 QAM	633334	3500.01	77.095	80.10
256 QAM	634000	3510	77.203	80.09

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
16 QAM CH 633334 (3500.01 MHz)	16 QAM CH 634000 (3510 MHz)

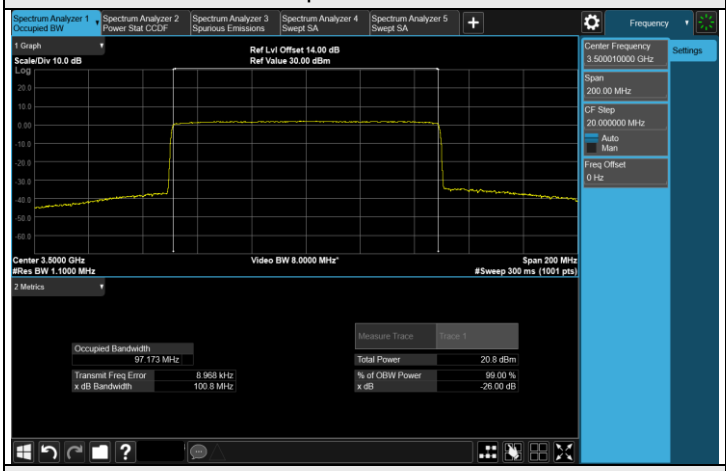
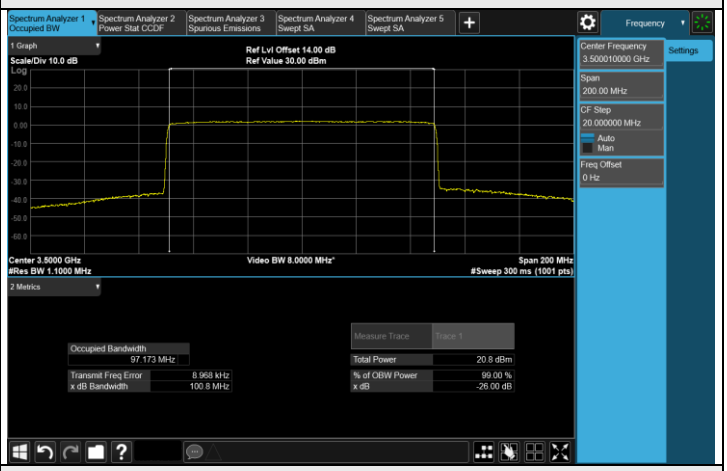
NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 90 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	633000	3495	86.352	89.65
BPSK	633334	3500.01	86.491	89.54
BPSK	633666	3504.99	86.442	89.71
QPSK	633000	3495	86.960	90.10
QPSK	633334	3500.01	87.066	90.23
QPSK	633666	3504.99	86.979	90.16
16 QAM	633000	3495	87.213	90.38
16 QAM	633334	3500.01	87.217	90.52
16 QAM	633666	3504.99	87.158	90.62
64 QAM	633000	3495	87.158	90.31
64 QAM	633334	3500.01	87.196	90.52
64 QAM	633666	3504.99	87.194	90.60
256 QAM	633000	3495	87.177	90.21
256 QAM	633334	3500.01	87.162	90.28
256 QAM	633666	3504.99	87.176	90.32

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16 QAM CH 633334 (3500.01 MHz)	16 QAM CH 633666 (3504.99 MHz)

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

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	633334	3500.01	96.028	99.51
QPSK	633334	3500.01	97.150	100.8
16 QAM	633334	3500.01	97.173	100.8
64 QAM	633334	3500.01	97.156	100.8
256 QAM	633334	3500.01	97.134	100.8

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16 QAM CH 633334 (3500.01 MHz)	16 QAM CH 633334 (3500.01 MHz)

7.4.8 NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) (PC3)

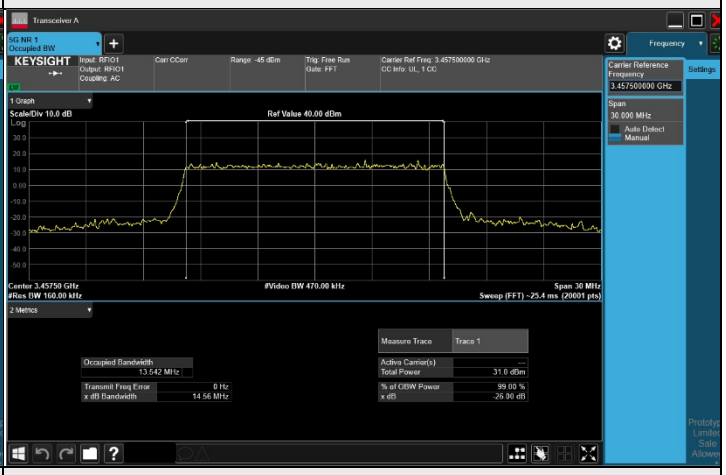
NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	630334	3455.01	8.5649	9.339
BPSK	633334	3500.01	8.5423	9.282
BPSK	636332	3544.98	8.5503	9.327
QPSK	630334	3455.01	8.5480	9.128
QPSK	633334	3500.01	8.5444	9.197
QPSK	636332	3544.98	8.5529	9.210
16QAM	630334	3455.01	8.6127	11.49
16QAM	633334	3500.01	8.5722	10.71
16QAM	636332	3544.98	8.5685	9.282
64QAM	630334	3455.01	8.5801	9.329
64QAM	633334	3500.01	8.5746	9.338
64QAM	636332	3544.98	8.5609	9.386
256QAM	630334	3455.01	8.5668	9.414
256QAM	633334	3500.01	8.5860	9.382
256QAM	636332	3544.98	8.5704	9.391

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
16QAM CH 630334 (3455.01 MHz)	16QAM CH 630334 (3455.01 MHz)

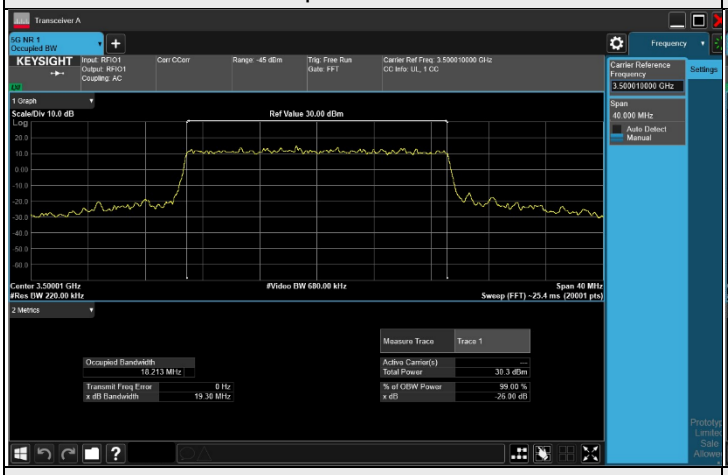
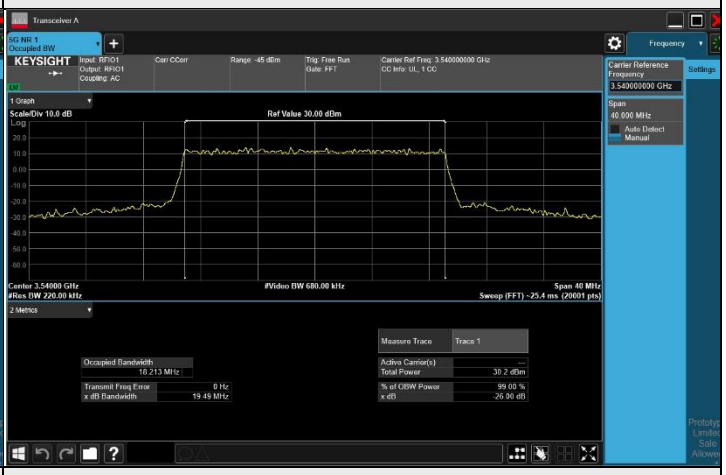
NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	630500	3457.5	13.501	13.97
BPSK	633334	3500.01	13.551	13.97
BPSK	636166	3542.49	13.510	13.83
QPSK	630500	3457.5	13.537	14.44
QPSK	633334	3500.01	13.540	14.55
QPSK	636166	3542.49	13.531	14.39
16QAM	630500	3457.5	13.542	14.56
16QAM	633334	3500.01	13.539	14.51
16QAM	636166	3542.49	13.531	14.49
64QAM	630500	3457.5	13.536	14.51
64QAM	633334	3500.01	13.522	14.51
64QAM	636166	3542.49	13.546	14.44
256QAM	630500	3457.5	13.557	14.38
256QAM	633334	3500.01	13.552	14.45
256QAM	636166	3542.49	13.528	14.51

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 630500 (3457.5 MHz)	16QAM CH 630500 (3457.5 MHz)

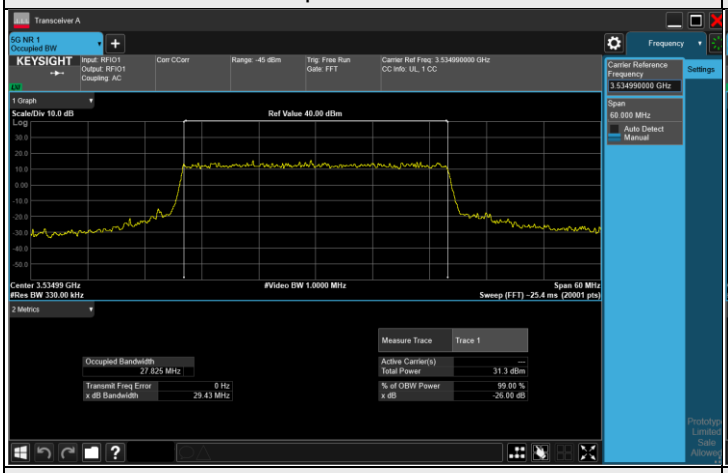
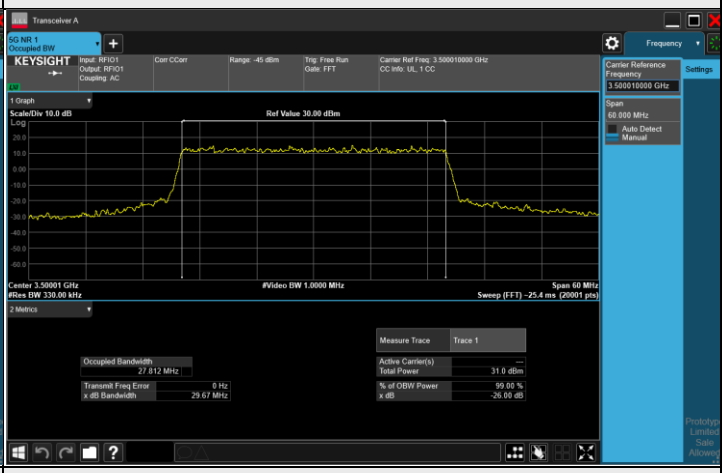
NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	630668	3460.02	17.937	19.16
BPSK	633334	3500.01	17.962	19.03
BPSK	636000	3540	17.949	19.15
QPSK	630668	3460.02	18.148	19.21
QPSK	633334	3500.01	18.182	19.21
QPSK	636000	3540	18.133	19.35
16QAM	630668	3460.02	18.173	19.35
16QAM	633334	3500.01	18.213	19.30
16QAM	636000	3540	18.176	19.35
64QAM	630668	3460.02	18.152	19.19
64QAM	633334	3500.01	18.201	19.30
64QAM	636000	3540	18.213	19.49
256QAM	630668	3460.02	18.177	19.23
256QAM	633334	3500.01	18.133	19.33
256QAM	636000	3540	18.158	19.37

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16QAM CH 633334 (3500.01 MHz)	64QAM CH 636000 (3540 MHz)

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

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	631000	3465	27.474	28.63
BPSK	633334	3500.01	27.588	28.57
BPSK	635666	3534.99	27.571	28.56
QPSK	631000	3465	27.824	29.53
QPSK	633334	3500.01	27.782	29.58
QPSK	635666	3534.99	27.825	29.43
16QAM	631000	3465	27.735	29.29
16QAM	633334	3500.01	27.733	29.27
16QAM	635666	3534.99	27.764	29.36
64QAM	631000	3465	27.823	29.65
64QAM	633334	3500.01	27.812	29.67
64QAM	635666	3534.99	27.763	29.67
256QAM	631000	3465	27.750	29.39
256QAM	633334	3500.01	27.776	29.47
256QAM	635666	3534.99	27.752	29.44

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 635666 (3534.99 MHz)	64 QAM CH 633334 (3500.01 MHz)

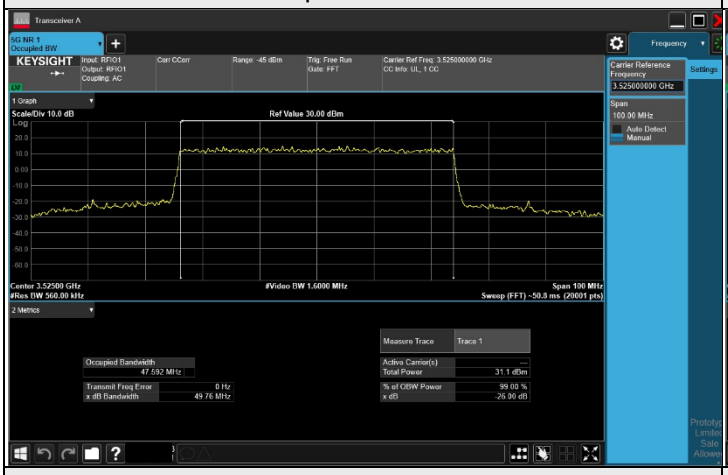
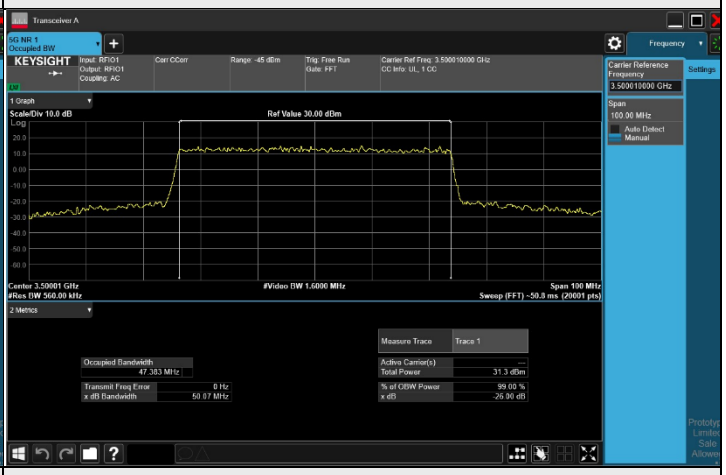
NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 40 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	631334	3470.01	37.340	37.22
BPSK	633334	3500.01	37.394	37.36
BPSK	635332	3529.98	37.378	37.77
QPSK	631334	3470.01	37.690	39.49
QPSK	633334	3500.01	37.722	39.05
QPSK	635332	3529.98	37.707	39.51
16QAM	631334	3470.01	37.714	39.59
16QAM	633334	3500.01	37.784	39.50
16QAM	635332	3529.98	37.763	39.44
64QAM	631334	3470.01	37.642	39.58
64QAM	633334	3500.01	37.692	39.48
64QAM	635332	3529.98	37.681	39.39
256QAM	631334	3470.01	37.732	39.61
256QAM	633334	3500.01	37.769	39.62
256QAM	635332	3529.98	37.817	39.63

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
256QAM CH 635332 (3529.98 MHz)	256QAM CH 635332 (3529.98 MHz)

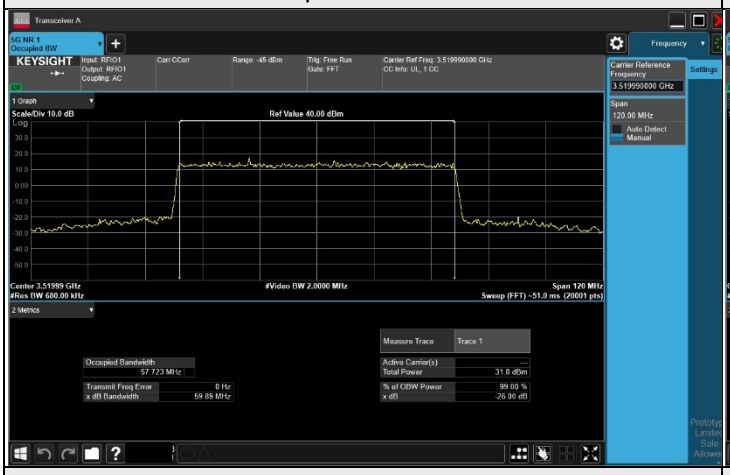
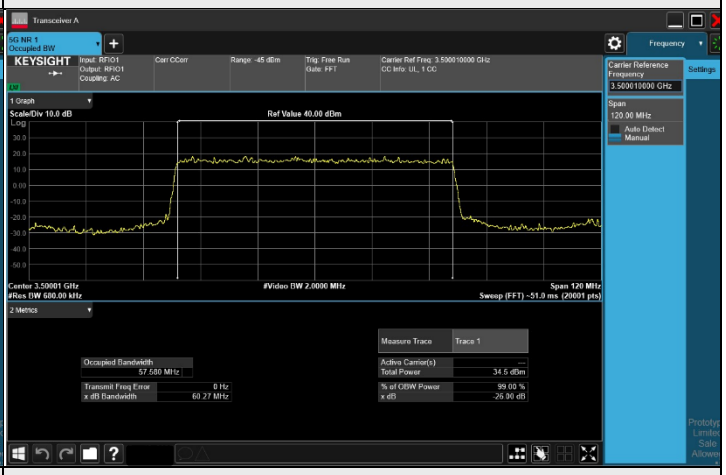
NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 50 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	631668	3475.02	46.782	48.08
BPSK	633334	3500.01	46.852	47.97
BPSK	635000	3525	46.793	47.85
QPSK	631668	3475.02	47.393	49.66
QPSK	633334	3500.01	47.383	50.07
QPSK	635000	3525	47.592	49.76
16QAM	631668	3475.02	47.334	49.74
16QAM	633334	3500.01	47.422	49.93
16QAM	635000	3525	47.271	49.82
64QAM	631668	3475.02	47.354	49.74
64QAM	633334	3500.01	47.400	49.65
64QAM	635000	3525	47.404	49.82
256QAM	631668	3475.02	47.312	49.62
256QAM	633334	3500.01	47.341	49.80
256QAM	635000	3525	47.334	49.61

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 635000 (3525 MHz)	QPSK CH 633334 (3500.01 MHz)

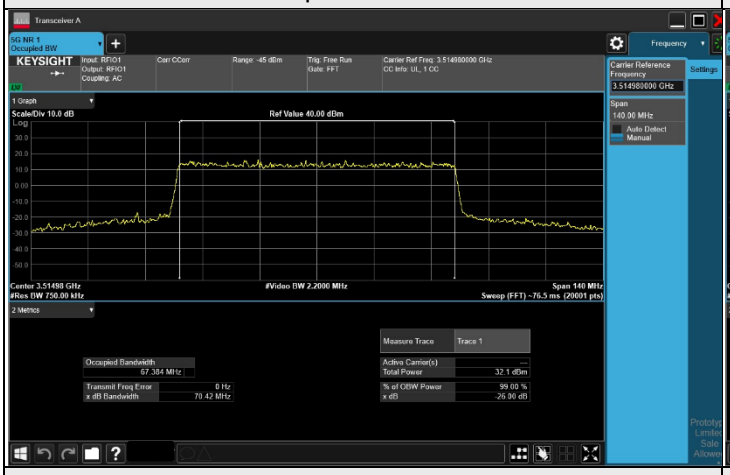
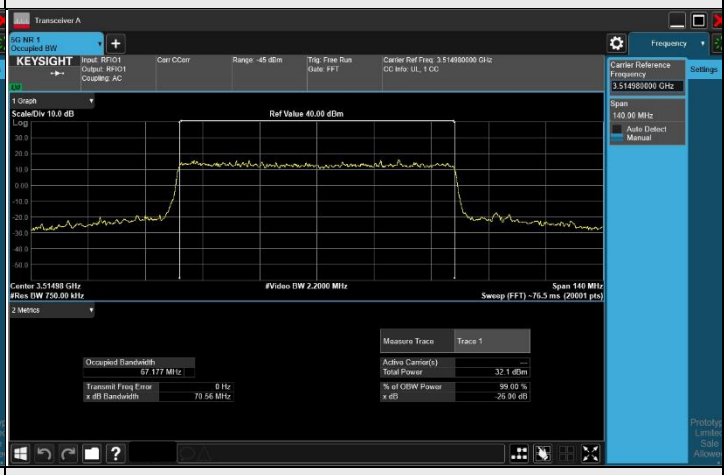
NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 60 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	632000	3480	57.565	60.14
BPSK	633334	3500.01	57.580	60.27
BPSK	634666	3519.99	57.603	60.12
QPSK	632000	3480	57.530	59.94
QPSK	633334	3500.01	57.578	59.93
QPSK	634666	3519.99	57.662	59.88
16QAM	632000	3480	57.553	60.01
16QAM	633334	3500.01	57.565	60.04
16QAM	634666	3519.99	57.625	60.13
64QAM	632000	3480	57.601	60.03
64QAM	633334	3500.01	57.666	59.98
64QAM	634666	3519.99	57.723	59.89
256QAM	632000	3480	57.601	60.04
256QAM	633334	3500.01	57.651	60.10
256QAM	634666	3519.99	57.685	60.08

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 634666 (3519.99 MHz)	BPSK CH 633334 (3500.01 MHz)

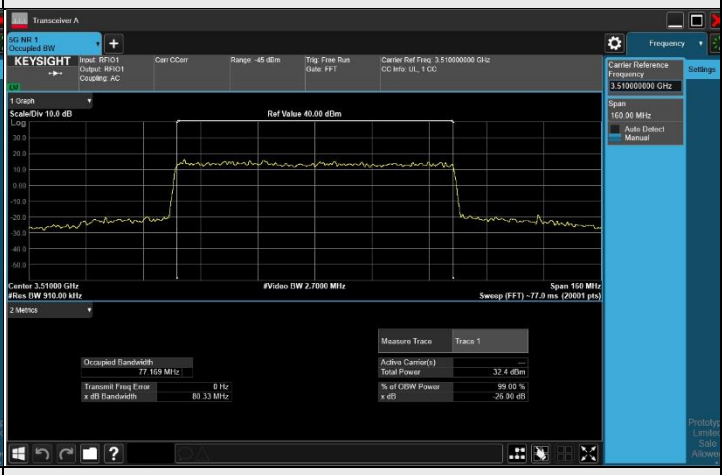
NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 70 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	632334	3485.01	66.476	67.37
BPSK	633334	3500.01	66.743	67.19
BPSK	634332	3514.98	66.687	67.31
QPSK	632334	3485.01	67.193	70.42
QPSK	633334	3500.01	67.234	70.28
QPSK	634332	3514.98	67.384	70.42
16QAM	632334	3485.01	67.290	70.33
16QAM	633334	3500.01	67.384	70.31
16QAM	634332	3514.98	67.177	70.56
64QAM	632334	3485.01	67.187	70.22
64QAM	633334	3500.01	67.272	70.24
64QAM	634332	3514.98	67.216	70.04
256QAM	632334	3485.01	67.287	70.07
256QAM	633334	3500.01	67.317	70.54
256QAM	634332	3514.98	67.258	70.09

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 634332 (3514.98 MHz)	16QAM CH 634332 (3514.98 MHz)

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

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	632668	3490.02	77.026	79.95
BPSK	633334	3500.01	76.817	80.08
BPSK	634000	3510	77.064	80.03
QPSK	632668	3490.02	77.091	80.32
QPSK	633334	3500.01	77.189	80.25
QPSK	634000	3510	77.169	80.33
16QAM	632668	3490.02	77.056	80.23
16QAM	633334	3500.01	77.272	80.07
16QAM	634000	3510	77.251	80.27
64QAM	632668	3490.02	77.105	80.02
64QAM	633334	3500.01	77.252	80.33
64QAM	634000	3510	77.190	79.87
256QAM	632668	3490.02	76.966	80.32
256QAM	633334	3500.01	77.009	80.10
256QAM	634000	3510	77.206	80.32

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16QAM CH 633334 (3500.01 MHz)	QPSK CH 634000 (3510 MHz)

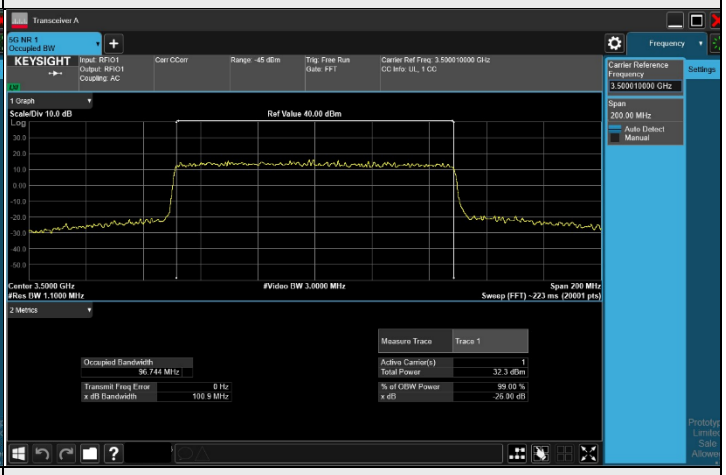
NR n77 SCS 30 kHz (3.45 GHz ~ 3.55 GHz), Channel Bandwidth: 90 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	633000	3495	86.803	89.67
BPSK	633334	3500.01	86.805	89.57
BPSK	633666	3504.99	86.745	89.53
QPSK	633000	3495	87.158	90.39
QPSK	633334	3500.01	87.213	90.20
QPSK	633666	3504.99	87.210	90.43
16QAM	633000	3495	86.999	90.09
16QAM	633334	3500.01	86.998	90.40
16QAM	633666	3504.99	87.074	90.58
64QAM	633000	3495	87.021	90.15
64QAM	633334	3500.01	87.072	90.24
64QAM	633666	3504.99	87.102	90.36
256QAM	633000	3495	86.871	90.25
256QAM	633334	3500.01	87.069	90.56
256QAM	633666	3504.99	87.108	90.47

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
QPSK CH 633334 (3500.01 MHz)	16QAM CH 633666 (3504.99 MHz)

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

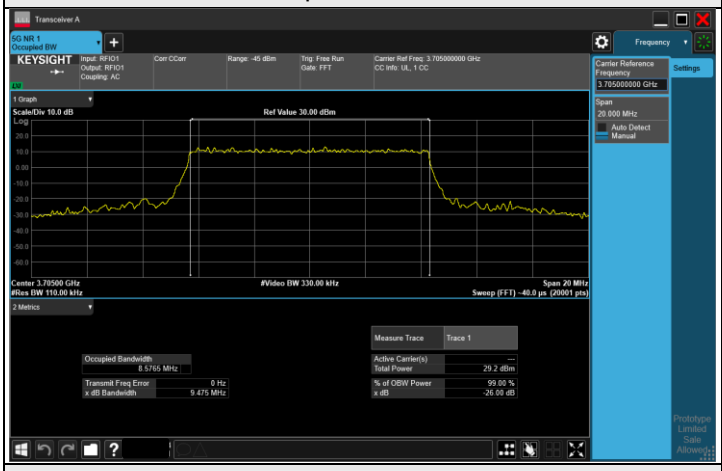
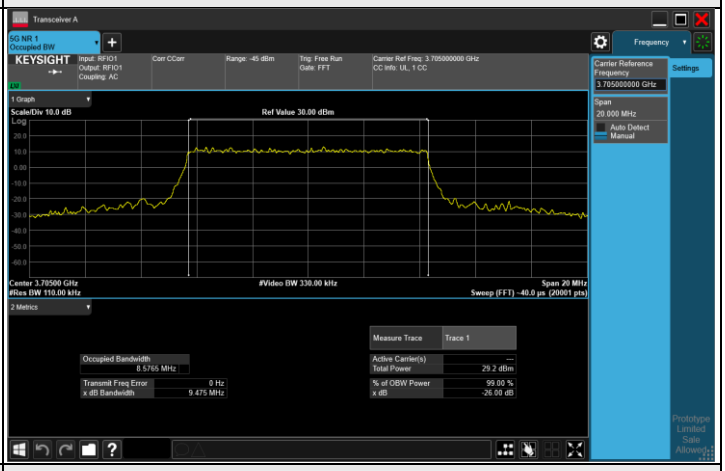
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	633334	3500.01	96.104	99.66
BPSK	633334	3500.01	96.302	99.85
BPSK	633334	3500.01	96.323	100.3
QPSK	633334	3500.01	96.723	100.4
QPSK	633334	3500.01	96.849	100.4
QPSK	633334	3500.01	96.800	100.2
16QAM	633334	3500.01	96.941	100.6
16QAM	633334	3500.01	96.730	100.6
16QAM	633334	3500.01	96.744	100.9
64QAM	633334	3500.01	97.086	100.6
64QAM	633334	3500.01	96.949	100.6
64QAM	633334	3500.01	96.982	100.7
256QAM	633334	3500.01	97.102	100.6
256QAM	633334	3500.01	97.166	100.5
256QAM	633334	3500.01	96.748	100.4

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 633334 (3500.01 MHz)	16QAM CH 633334 (3500.01 MHz)

7.4.9 NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz) (PC2)

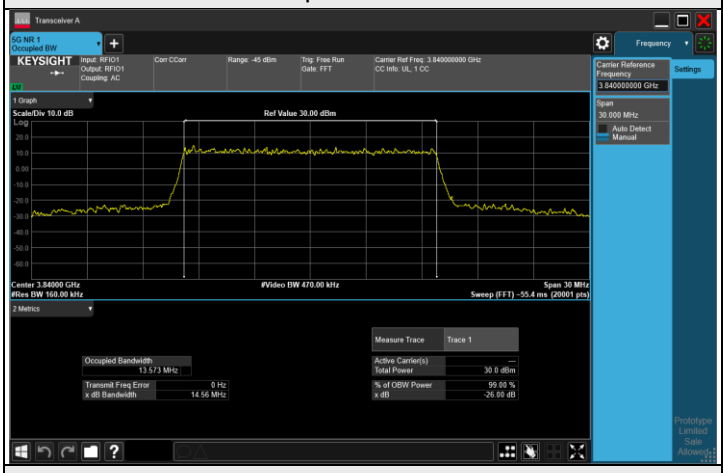
NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz), Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	647000	3705	8.5410	9.419
BPSK	656000	3840	8.5362	9.249
BPSK	665000	3975	8.5361	9.295
QPSK	647000	3705	8.5765	9.475
QPSK	656000	3840	8.5648	9.401
QPSK	665000	3975	8.5627	9.318
16 QAM	647000	3705	8.5562	9.111
16 QAM	656000	3840	8.5607	9.320
16 QAM	665000	3975	8.5705	9.243
64 QAM	647000	3705	8.5605	9.340
64 QAM	656000	3840	8.5741	9.413
64 QAM	665000	3975	8.5702	9.260
256 QAM	647000	3705	8.5468	9.351
256 QAM	656000	3840	8.5728	9.341
256 QAM	665000	3975	8.5560	9.468

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 647000 (3705 MHz)	QPSK CH 647000 (3705 MHz)

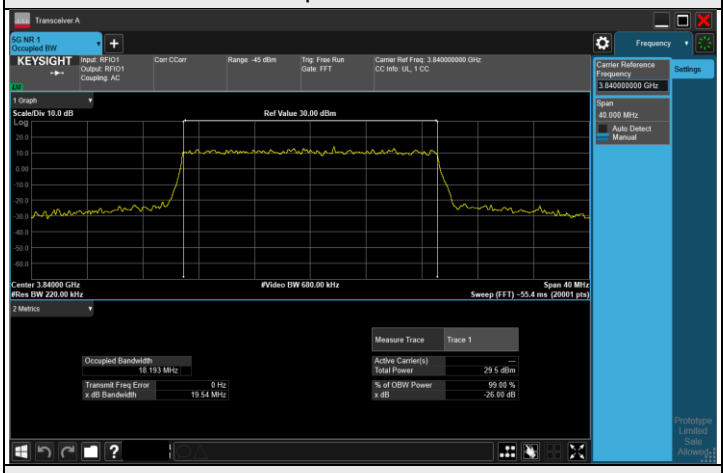
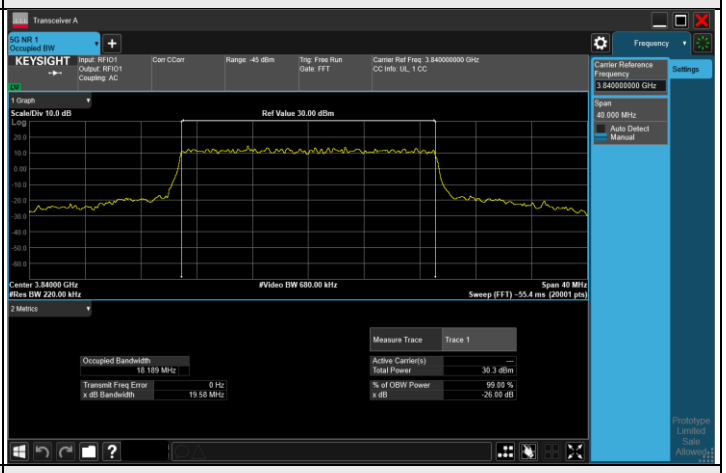
NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz), Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	647168	3707.52	13.495	13.70
BPSK	656000	3840	13.512	13.91
BPSK	664832	3972.48	13.435	13.88
QPSK	647168	3707.52	13.528	14.44
QPSK	656000	3840	13.545	14.58
QPSK	664832	3972.48	13.528	14.61
16 QAM	647168	3707.52	13.561	14.60
16 QAM	656000	3840	13.573	14.56
16 QAM	664832	3972.48	13.560	14.55
64 QAM	647168	3707.52	13.527	14.46
64 QAM	656000	3840	13.543	14.45
64 QAM	664832	3972.48	13.536	14.45
256 QAM	647168	3707.52	13.507	14.43
256 QAM	656000	3840	13.551	14.47
256 QAM	664832	3972.48	13.558	14.67

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16QAM CH 656000 (3840 MHz)	256QAM CH 664832 (3972.48 MHz)

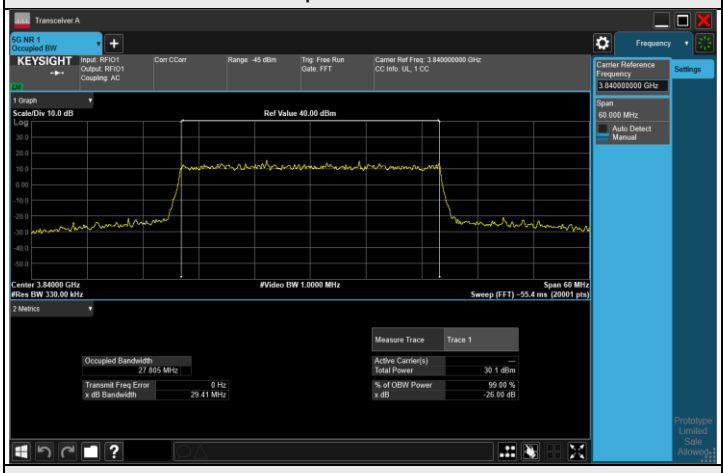
NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz), Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	647334	3710.01	17.949	18.85
BPSK	656000	3840	17.984	19.03
BPSK	664666	3969.99	17.977	19.13
QPSK	647334	3710.01	18.154	19.20
QPSK	656000	3840	18.172	19.28
QPSK	664666	3969.99	18.164	19.53
16 QAM	647334	3710.01	18.113	19.27
16 QAM	656000	3840	18.189	19.58
16 QAM	664666	3969.99	18.126	19.40
64 QAM	647334	3710.01	18.177	19.29
64 QAM	656000	3840	18.193	19.54
64 QAM	664666	3969.99	18.176	19.32
256 QAM	647334	3710.01	18.146	19.49
256 QAM	656000	3840	18.161	19.31
256 QAM	664666	3969.99	18.160	19.40

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 656000 (3840 MHz)	16QAM CH 656000 (3840 MHz)

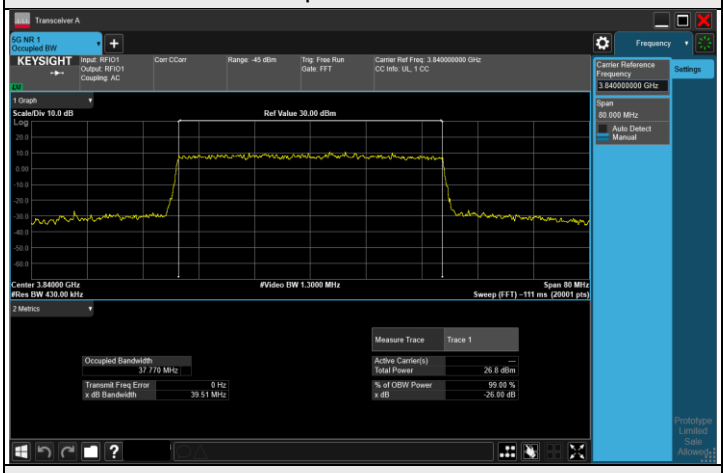
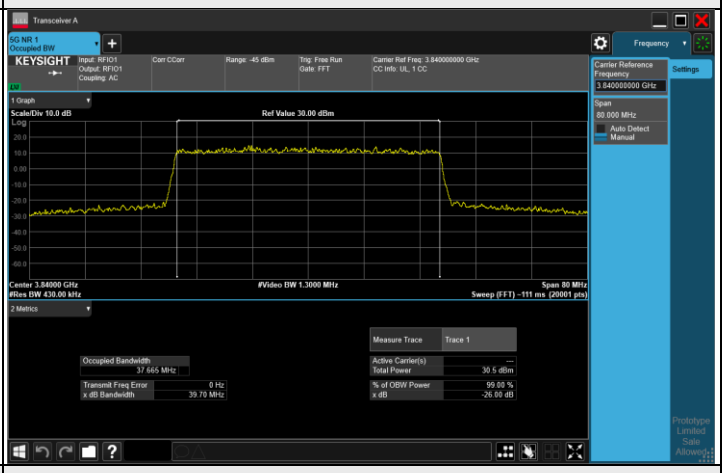
NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz), Channel Bandwidth: 30 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	647668	3715.02	27.488	28.46
BPSK	656000	3840	27.475	28.52
BPSK	664332	3964.98	27.506	28.66
QPSK	647668	3715.02	27.727	29.34
QPSK	656000	3840	27.734	29.17
QPSK	664332	3964.98	27.735	29.13
16 QAM	647668	3715.02	27.770	29.39
16 QAM	656000	3840	27.787	29.32
16 QAM	664332	3964.98	27.762	29.19
64 QAM	647668	3715.02	27.697	29.56
64 QAM	656000	3840	27.805	29.41
64 QAM	664332	3964.98	27.770	29.60
256 QAM	647668	3715.02	27.733	29.37
256 QAM	656000	3840	27.741	29.39
256 QAM	664332	3964.98	27.716	29.22

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 656000 (3840 MHz)	64QAM CH 664332 (3964.98 MHz)

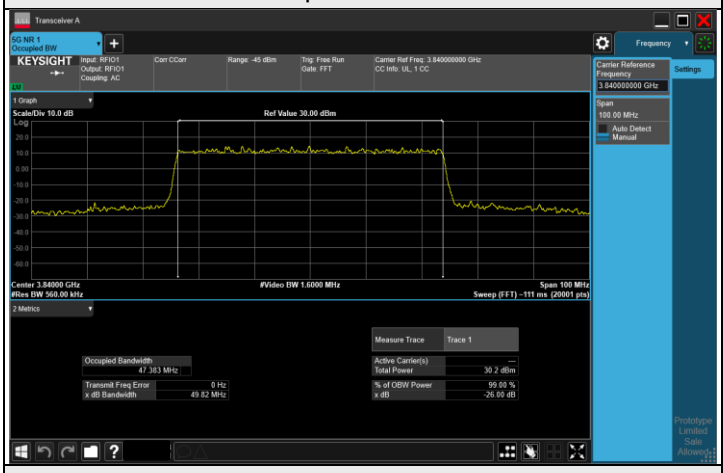
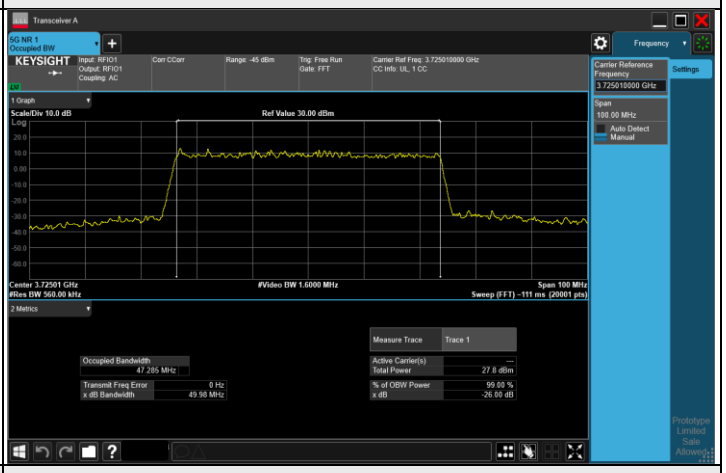
NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz), Channel Bandwidth: 40 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	648000	3720	37.361	37.55
BPSK	656000	3840	37.386	37.50
BPSK	664000	3960	37.346	37.52
QPSK	648000	3720	37.738	39.57
QPSK	656000	3840	37.642	39.43
QPSK	664000	3960	37.667	39.37
16 QAM	648000	3720	37.642	39.68
16 QAM	656000	3840	37.665	39.70
16 QAM	664000	3960	37.738	39.51
64 QAM	648000	3720	37.672	39.49
64 QAM	656000	3840	37.643	39.66
64 QAM	664000	3960	37.641	39.54
256 QAM	648000	3720	37.659	39.00
256 QAM	656000	3840	37.770	39.51
256 QAM	664000	3960	37.708	39.64

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 656000 (3840 MHz)	16QAM CH 656000 (3840 MHz)

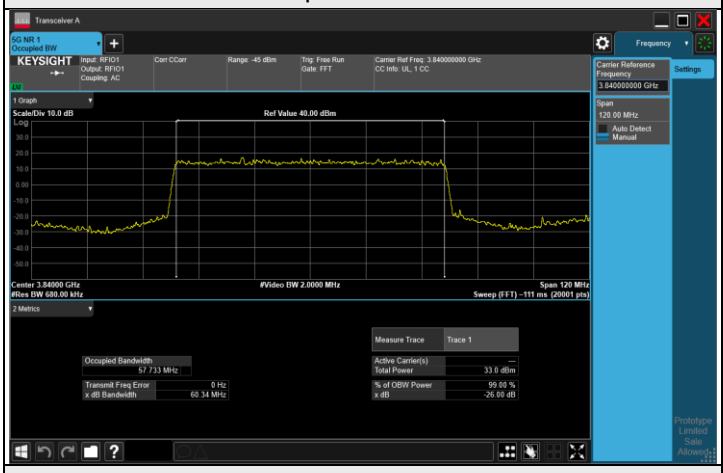
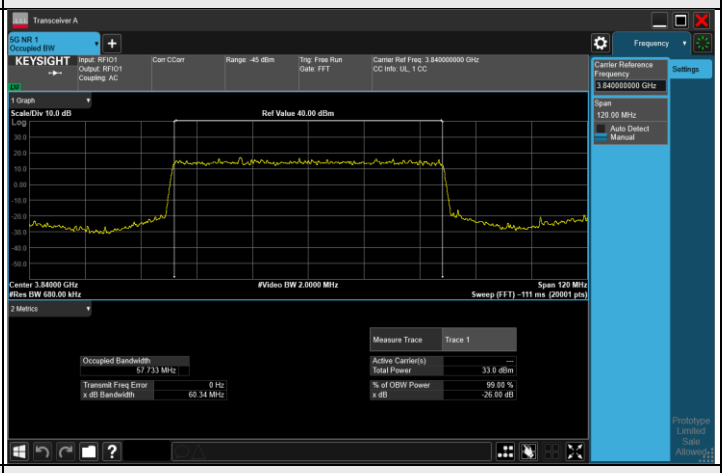
NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz), Channel Bandwidth: 50 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	648334	3725.01	46.973	48.04
BPSK	656000	3840	46.883	48.49
BPSK	663666	3954.99	46.973	48.10
QPSK	648334	3725.01	47.294	49.60
QPSK	656000	3840	47.350	49.93
QPSK	663666	3954.99	47.273	49.67
16 QAM	648334	3725.01	47.231	49.49
16 QAM	656000	3840	47.332	49.64
16 QAM	663666	3954.99	47.323	49.71
64 QAM	648334	3725.01	47.325	49.69
64 QAM	656000	3840	47.383	49.82
64 QAM	663666	3954.99	47.341	49.63
256 QAM	648334	3725.01	47.285	49.98
256 QAM	656000	3840	47.335	49.83
256 QAM	663666	3954.99	47.271	49.84

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 656000 (3840 MHz)	256QAM CH 648334 (3725.01 MHz)

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

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	648668	3730.02	57.580	60.30
BPSK	656000	3840	57.733	60.34
BPSK	663332	3949.98	57.697	60.04
QPSK	648668	3730.02	57.602	60.05
QPSK	656000	3840	57.639	60.22
QPSK	663332	3949.98	57.554	60.09
16 QAM	648668	3730.02	57.639	60.07
16 QAM	656000	3840	57.564	60.01
16 QAM	663332	3949.98	57.665	60.18
64 QAM	648668	3730.02	57.565	60.03
64 QAM	656000	3840	57.711	60.12
64 QAM	663332	3949.98	57.678	60.18
256 QAM	648668	3730.02	57.580	59.93
256 QAM	656000	3840	57.652	59.92
256 QAM	663332	3949.98	57.651	59.86

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
BPSK CH 656000 (3840 MHz)	BPSK CH 656000 (3840 MHz)

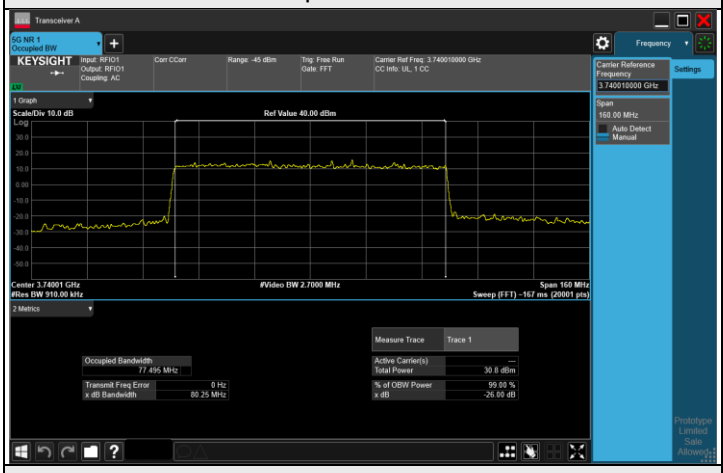
NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz), Channel Bandwidth: 70 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	649000	3735	66.294	66.92
BPSK	656000	3840	66.227	67.18
BPSK	663000	3945	66.361	67.26
QPSK	649000	3735	67.261	70.20
QPSK	656000	3840	67.383	69.89
QPSK	663000	3945	67.399	70.11
16 QAM	649000	3735	67.285	69.97
16 QAM	656000	3840	67.261	70.69
16 QAM	663000	3945	67.288	70.44
64 QAM	649000	3735	67.134	70.39
64 QAM	656000	3840	67.215	70.43
64 QAM	663000	3945	67.259	70.61
256 QAM	649000	3735	67.244	70.12
256 QAM	656000	3840	67.313	70.33
256 QAM	663000	3945	67.314	70.37

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
QPSK CH 663000 (3945 MHz)	16QAM CH 656000 (3840 MHz)

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

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	649334	3740.01	76.644	79.89
BPSK	656000	3840	77.044	79.93
BPSK	662666	3939.99	77.112	80.05
QPSK	649334	3740.01	77.143	80.25
QPSK	656000	3840	77.239	80.30
QPSK	662666	3939.99	77.206	80.27
16 QAM	649334	3740.01	77.495	80.25
16 QAM	656000	3840	77.298	80.10
16 QAM	662666	3939.99	77.351	80.35
64 QAM	649334	3740.01	77.141	80.27
64 QAM	656000	3840	77.139	80.32
64 QAM	662666	3939.99	77.169	80.35
256 QAM	649334	3740.01	77.108	80.37
256 QAM	656000	3840	77.248	80.13
256 QAM	662666	3939.99	77.175	80.25

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16QAM CH 649334 (3740.01 MHz)	256QAM CH 649334 (3740.01 MHz)

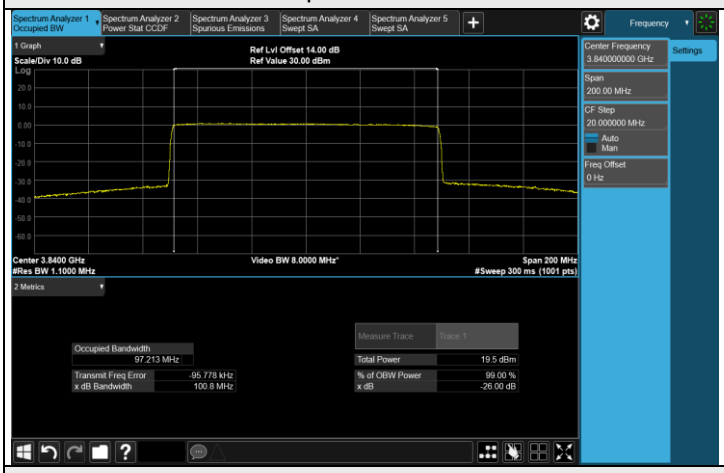
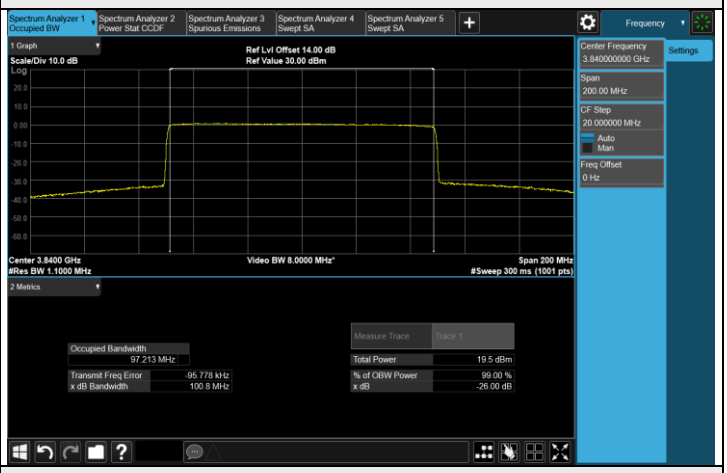
NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz), Channel Bandwidth: 90 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	649668	3745.02	86.568	89.79
BPSK	656000	3840	86.528	89.58
BPSK	662332	3934.98	86.583	89.97
QPSK	649668	3745.02	86.904	90.24
QPSK	656000	3840	86.949	90.10
QPSK	662332	3934.98	87.054	90.24
16 QAM	649668	3745.02	87.156	90.37
16 QAM	656000	3840	87.144	90.26
16 QAM	662332	3934.98	87.178	90.57
64 QAM	649668	3745.02	87.162	90.22
64 QAM	656000	3840	87.236	90.58
64 QAM	662332	3934.98	87.233	90.67
256 QAM	649668	3745.02	87.196	90.24
256 QAM	656000	3840	87.210	90.29
256 QAM	662332	3934.98	87.248	90.25

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
256QAM CH 662332 (3934.98 MHz)	64QAM CH 662332 (3934.98 MHz)

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

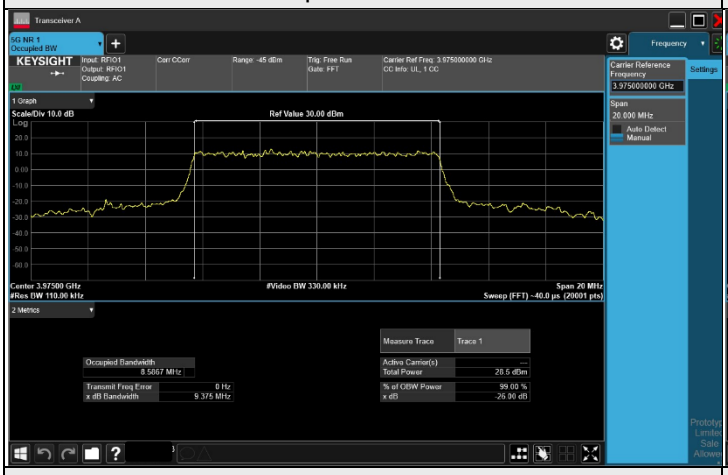
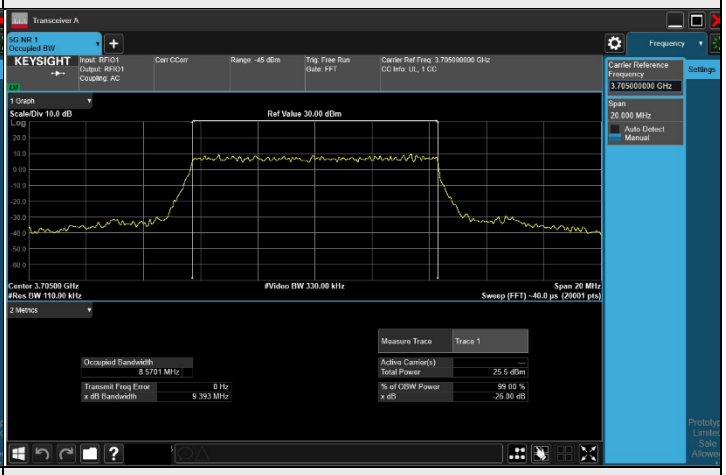
Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	650000	3750	96.115	99.53
BPSK	656000	3840	96.056	99.52
BPSK	662000	3930	96.054	99.5
QPSK	650000	3750	97.200	100.8
QPSK	656000	3840	97.213	100.8
QPSK	662000	3930	97.207	100.8
16 QAM	650000	3750	97.173	100.8
16 QAM	656000	3840	97.195	100.8
16 QAM	662000	3930	97.190	100.8
64 QAM	650000	3750	97.164	100.8
64 QAM	656000	3840	97.190	100.8
64 QAM	662000	3930	97.209	100.8
256 QAM	650000	3750	97.147	100.8
256 QAM	656000	3840	97.149	100.8
256 QAM	656000	3840	97.175	100.8

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 656000 (3840 MHz)	QPSK CH 656000 (3840 MHz)

7.4.10 NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz) (PC3)

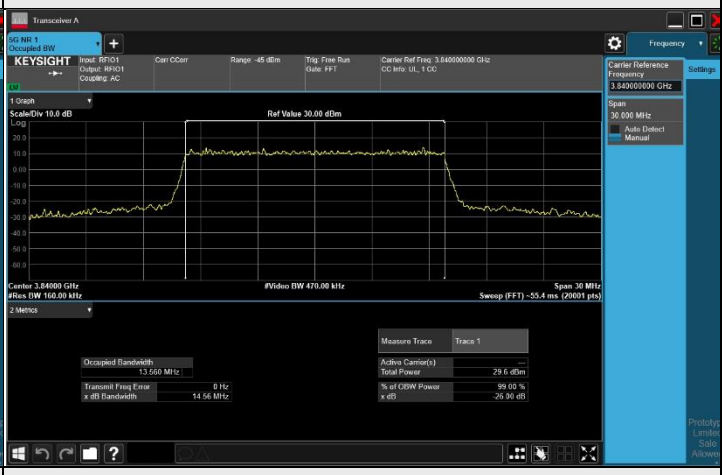
NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz), Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	647000	3705	8.5488	9.291
BPSK	656000	3840	8.5584	9.298
BPSK	665000	3975	8.5625	9.295
QPSK	647000	3705	8.5525	9.132
QPSK	656000	3840	8.5607	9.227
QPSK	665000	3975	8.5583	9.209
16QAM	647000	3705	8.5769	9.303
16QAM	656000	3840	8.5507	9.340
16QAM	665000	3975	8.5549	9.390
64QAM	647000	3705	8.5668	9.342
64QAM	656000	3840	8.5749	9.342
64QAM	665000	3975	8.5867	9.375
256QAM	647000	3705	8.5701	9.393
256QAM	656000	3840	8.5684	9.347
256QAM	665000	3975	8.5620	9.281

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 665000 (3975 MHz)	256QAM CH 647000 (3705 MHz)

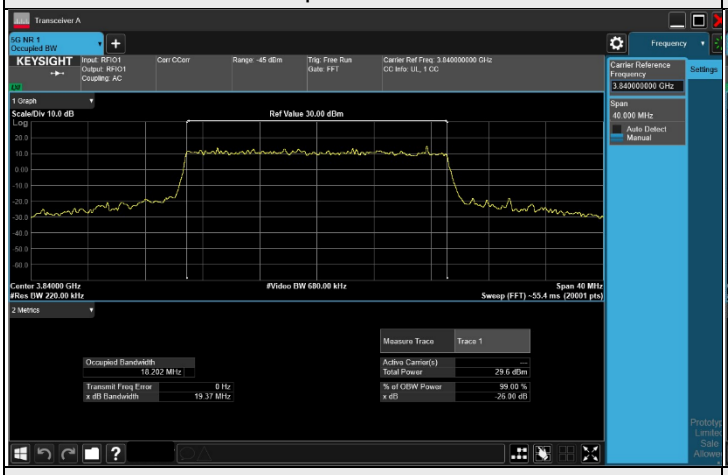
NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz), Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	647168	3707.52	13.464	13.63
BPSK	656000	3840	13.470	13.76
BPSK	664832	3972.48	13.489	13.76
QPSK	647168	3707.52	13.522	14.38
QPSK	656000	3840	13.566	14.38
QPSK	664832	3972.48	13.527	14.35
16QAM	647168	3707.52	13.524	14.48
16QAM	656000	3840	13.560	14.56
16QAM	664832	3972.48	13.524	14.39
64QAM	647168	3707.52	13.551	14.42
64QAM	656000	3840	13.560	14.49
64QAM	664832	3972.48	13.546	14.47
256QAM	647168	3707.52	13.530	14.39
256QAM	656000	3840	13.531	14.40
256QAM	664832	3972.48	13.555	14.44

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 656000 (3840 MHz)	16QAM CH 656000 (3840 MHz)

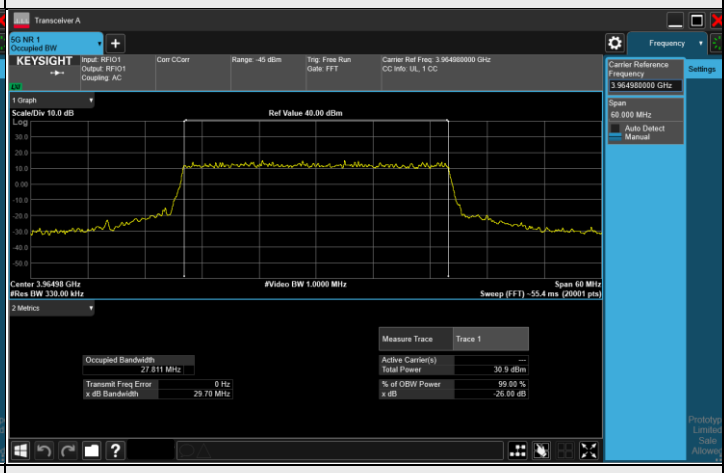
NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz), Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	647334	3710.01	17.985	19.23
BPSK	656000	3840	17.977	19.10
BPSK	664666	3969.99	17.949	19.13
QPSK	647334	3710.01	18.126	19.12
QPSK	656000	3840	18.153	19.24
QPSK	664666	3969.99	18.124	19.25
16QAM	647334	3710.01	18.152	19.39
16QAM	656000	3840	18.157	19.18
16QAM	664666	3969.99	18.157	19.34
64QAM	647334	3710.01	18.190	19.22
64QAM	656000	3840	18.202	19.37
64QAM	664666	3969.99	18.190	19.31
256QAM	647334	3710.01	18.170	19.45
256QAM	656000	3840	18.161	19.33
256QAM	664666	3969.99	18.153	19.30

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
64QAM CH 656000 (3840 MHz)	256QAM CH 647334 (3710.01 MHz)

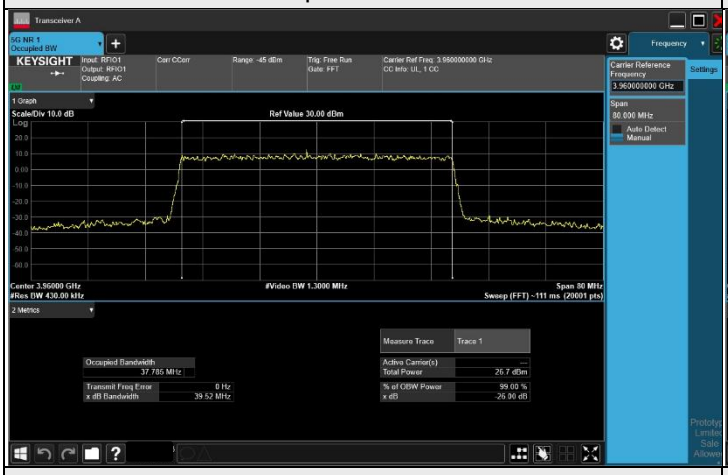
NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz), Channel Bandwidth: 30 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	647668	3715.02	27.627	28.71
BPSK	656000	3840	27.596	28.55
BPSK	664332	3964.98	27.559	28.75
QPSK	647668	3715.02	27.804	29.49
QPSK	656000	3840	27.805	29.49
QPSK	664332	3964.98	27.811	29.70
16QAM	647668	3715.02	27.740	29.44
16QAM	656000	3840	27.843	29.59
16QAM	664332	3964.98	27.757	29.47
64QAM	647668	3715.02	27.758	29.59
64QAM	656000	3840	27.758	29.45
64QAM	664332	3964.98	27.828	29.66
256QAM	647668	3715.02	27.811	29.21
256QAM	656000	3840	27.817	29.53
256QAM	664332	3964.98	27.771	29.29

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
16 QAM CH 656000 (3840 MHz)	QPSK CH 664332 (3964.98 MHz)

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

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	648000	3720	37.328	37.56
BPSK	656000	3840	37.353	37.34
BPSK	664000	3960	37.321	37.52
QPSK	648000	3720	37.696	39.43
QPSK	656000	3840	37.706	39.49
QPSK	664000	3960	37.728	39.59
16QAM	648000	3720	37.722	39.57
16QAM	656000	3840	37.770	39.56
16QAM	664000	3960	37.761	39.47
64QAM	648000	3720	37.683	39.67
64QAM	656000	3840	37.706	39.65
64QAM	664000	3960	37.674	39.56
256QAM	648000	3720	37.732	39.68
256QAM	656000	3840	37.748	39.57
256QAM	664000	3960	37.785	39.52

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
256QAM CH 664000 (3960 MHz)	256QAM CH 648000 (3720 MHz)

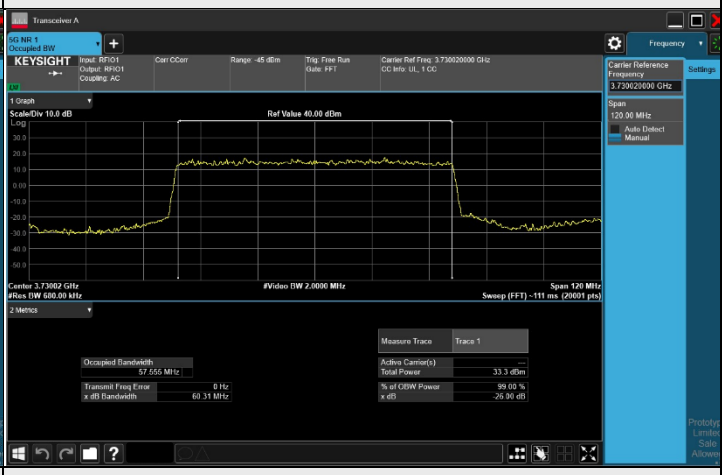
NR n77 SCS 30 kHz (3.7 GHz ~ 3.98 GHz), Channel Bandwidth: 50 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	648334	3725.01	46.853	48.27
BPSK	656000	3840	46.914	47.90
BPSK	663666	3954.99	47.042	48.33
QPSK	648334	3725.01	47.393	49.70
QPSK	656000	3840	47.383	49.71
QPSK	663666	3954.99	47.394	49.97
16QAM	648334	3725.01	47.251	49.89
16QAM	656000	3840	47.273	49.84
16QAM	663666	3954.99	47.245	49.77
64QAM	648334	3725.01	47.332	49.61
64QAM	656000	3840	47.305	49.59
64QAM	663666	3954.99	47.381	49.71
256QAM	648334	3725.01	47.301	49.95
256QAM	656000	3840	47.350	49.90
256QAM	663666	3954.99	47.322	49.77

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
QPSK CH 663666 (3954.99 MHz)	QPSK CH 663666 (3954.99 MHz)

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

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	648668	3730.02	57.555	60.31
BPSK	656000	3840	57.641	60.15
BPSK	663332	3949.98	57.627	60.05
QPSK	648668	3730.02	57.592	59.87
QPSK	656000	3840	57.677	60.03
QPSK	663332	3949.98	57.613	59.94
16QAM	648668	3730.02	57.570	60.01
16QAM	656000	3840	57.590	60.02
16QAM	663332	3949.98	57.520	59.91
64QAM	648668	3730.02	57.593	59.94
64QAM	656000	3840	57.638	60.02
64QAM	663332	3949.98	57.665	60.03
256QAM	648668	3730.02	57.617	60.07
256QAM	656000	3840	57.675	60.12
256QAM	663332	3949.98	57.604	59.85

Spectrum Plot of Worst Value	
Occupied bandwidth	26 dB Bandwidth
	
QPSK CH 656000 (3840 MHz)	BPSK CH 648668 (3730.02 MHz)