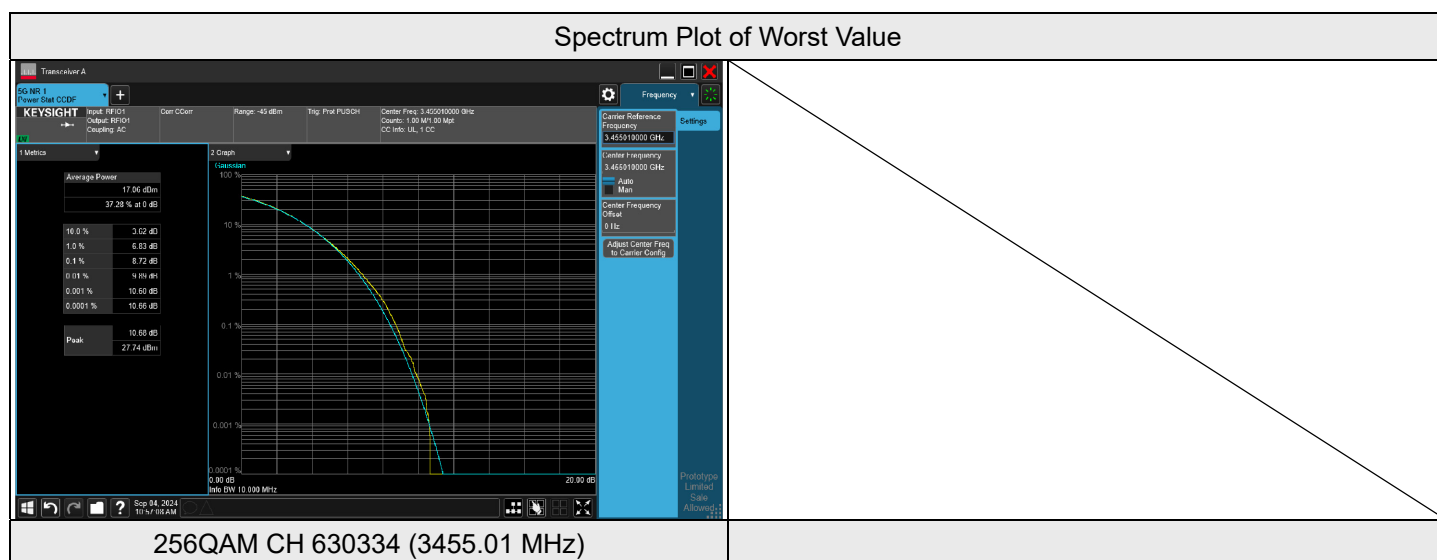


NR n78 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) - MIMO-Ant 3, Channel Bandwidth: 10 MHz

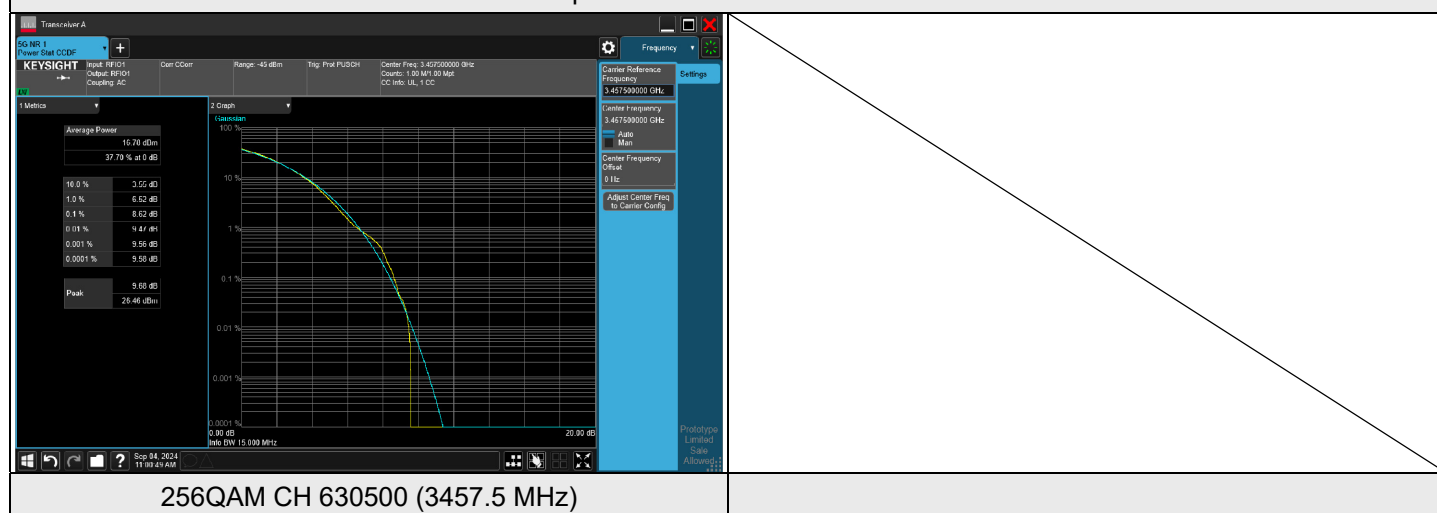
Modulation	RB Size	RB Offset	Peak To Average Ratio (dB)		
			CH 630334	CH 633334	CH 636332
			3455.01 MHz	3500.01 MHz	3544.98 MHz
BPSK	1	23	5.05	4.79	5.12
	1	0	4.93	4.68	4.78
	24	0	4.85	4.77	4.79
QPSK	1	23	7.89	7.51	7.57
	1	0	8.08	7.70	7.67
	24	0	7.76	7.50	7.28
16QAM	1	23	8.21	7.62	8.06
	1	0	8.23	7.68	7.69
	24	0	8.18	7.48	7.60
64QAM	1	23	8.07	7.99	8.02
	1	0	7.97	8.15	7.92
	24	0	8.54	7.98	8.14
256QAM	1	23	8.33	8.52	8.62
	1	0	8.72	8.54	8.55
	24	0	8.68	8.72	8.70



NR n78 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) - MIMO-Ant 3, Channel Bandwidth: 15 MHz

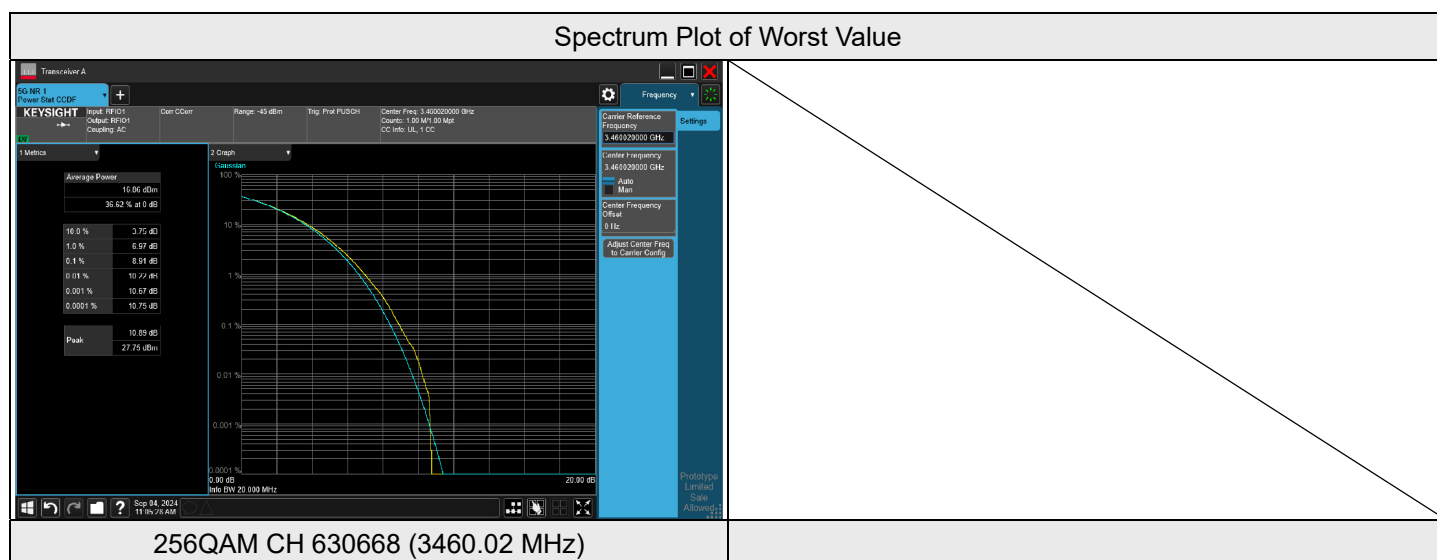
Modulation	RB Size	RB Offset	Peak To Average Ratio (dB)		
			CH 630500	CH 633334	CH 636166
			3457.5 MHz	3500.01 MHz	3542.49 MHz
BPSK	1	37	4.75	5.04	4.77
	1	0	4.76	5.03	4.99
	36	0	5.15	4.80	4.97
QPSK	1	37	8.12	7.63	7.96
	1	0	8.41	7.66	7.66
	38	0	7.99	7.27	7.61
16QAM	1	37	7.30	7.91	8.11
	1	0	7.41	7.84	7.96
	38	0	8.01	7.89	7.82
64QAM	1	37	7.98	8.05	7.72
	1	0	8.00	7.87	7.96
	38	0	8.58	8.17	8.32
256QAM	1	37	8.62	8.62	8.59
	1	0	8.52	8.57	8.15
	38	0	8.46	8.49	8.29

Spectrum Plot of Worst Value



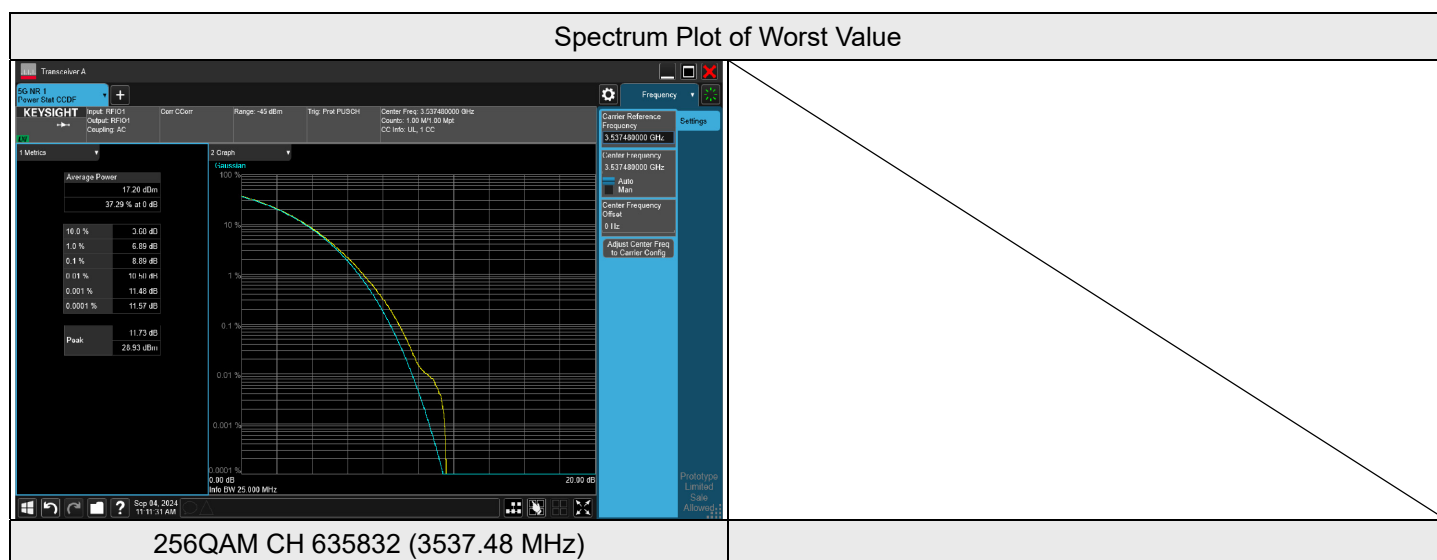
NR n78 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) - MIMO-Ant 3, Channel Bandwidth: 20 MHz

Modulation	RB Size	RB Offset	Peak To Average Ratio (dB)		
			CH 630668	CH 633334	CH 636000
			3460.02 MHz	3500.01 MHz	3540 MHz
BPSK	1	50	4.46	4.92	5.00
	1	0	4.47	4.83	4.97
	50	0	5.12	4.49	4.66
QPSK	1	50	7.82	7.25	7.59
	1	0	7.77	7.34	7.50
	51	0	7.44	7.03	7.37
16QAM	1	50	7.33	7.59	7.97
	1	0	7.39	7.59	7.93
	51	0	7.99	7.35	7.58
64QAM	1	50	8.23	7.99	7.90
	1	0	8.12	8.08	7.90
	51	0	8.74	8.10	8.28
256QAM	1	50	8.14	8.42	8.19
	1	0	8.80	8.29	8.41
	51	0	8.91	8.79	8.63



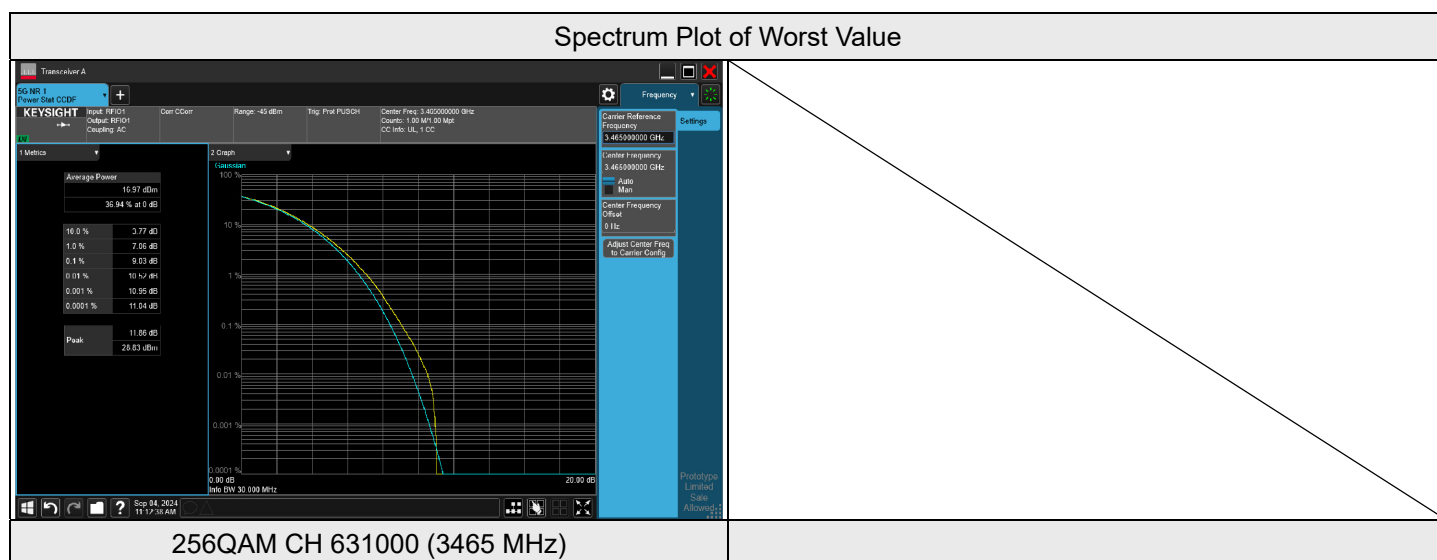
NR n78 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) - MIMO-Ant 3, Channel Bandwidth: 25 MHz

Modulation	RB Size	RB Offset	Peak To Average Ratio (dB)		
			CH 630834	CH 633334	CH 635832
			3462.51 MHz	3500.01 MHz	3537.48 MHz
BPSK	1	64	4.95	5.16	4.74
	1	0	4.85	5.11	4.96
	64	0	5.30	4.85	4.99
QPSK	1	64	8.10	8.36	7.63
	1	0	8.07	8.15	7.70
	65	0	7.95	8.23	7.45
16QAM	1	64	7.60	7.67	8.15
	1	0	7.97	8.29	7.94
	65	0	8.21	7.81	7.87
64QAM	1	64	7.81	8.20	7.75
	1	0	7.79	8.06	8.11
	65	0	8.77	8.06	8.23
256QAM	1	64	8.44	8.30	8.24
	1	0	8.47	8.83	8.33
	65	0	8.72	8.78	8.89



NR n78 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) - MIMO-Ant 3, Channel Bandwidth: 30 MHz

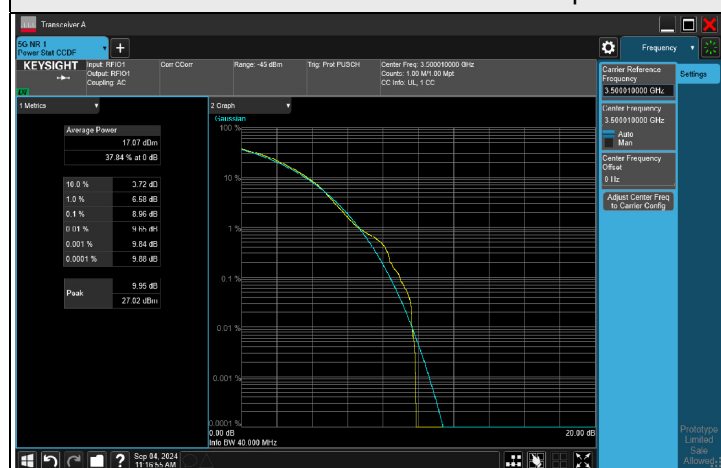
Modulation	RB Size	RB Offset	Peak To Average Ratio (dB)		
			CH 631000	CH 633334	CH 635666
			3465 MHz	3500.01 MHz	3534.99 MHz
BPSK	1	77	4.75	4.72	4.78
	1	0	4.92	4.96	4.83
	75	0	4.91	4.58	4.97
QPSK	1	77	8.13	7.62	7.33
	1	0	7.79	8.12	7.45
	78	0	7.83	8.15	8.35
16QAM	1	77	7.44	7.56	7.94
	1	0	8.36	7.55	7.67
	78	0	8.42	7.80	8.00
64QAM	1	77	8.14	8.31	8.25
	1	0	8.02	7.97	7.90
	78	0	8.81	8.38	8.46
256QAM	1	77	8.29	8.03	7.89
	1	0	8.50	8.63	8.53
	78	0	9.03	8.83	8.69



NR n78 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) - MIMO-Ant 3, Channel Bandwidth: 40 MHz

Modulation	RB Size	RB Offset	Peak To Average Ratio (dB)		
			CH 631334	CH 633334	CH 635332
			3470.01 MHz	3500.01 MHz	3529.98 MHz
BPSK	1	105	4.86	4.81	4.82
	1	0	4.78	4.79	5.07
	100	0	5.31	4.71	4.67
QPSK	1	105	7.54	7.69	7.73
	1	0	8.16	8.41	7.73
	106	0	7.60	7.91	8.08
16QAM	1	105	7.90	7.64	8.11
	1	0	7.36	7.83	7.76
	106	0	7.57	7.54	7.44
64QAM	1	105	8.33	8.05	8.10
	1	0	7.93	8.14	7.94
	106	0	8.79	7.76	8.38
256QAM	1	105	8.39	8.31	8.14
	1	0	8.61	8.96	8.48
	106	0	8.73	8.83	8.92

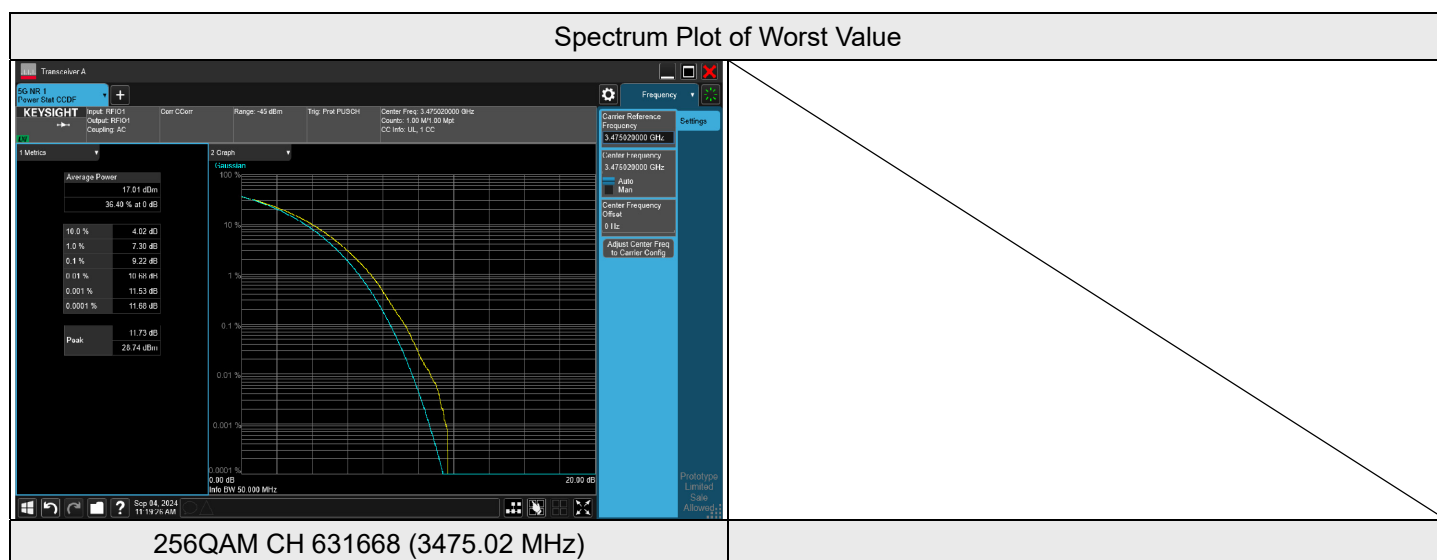
Spectrum Plot of Worst Value



256QAM CH 633334 (3500.01 MHz)

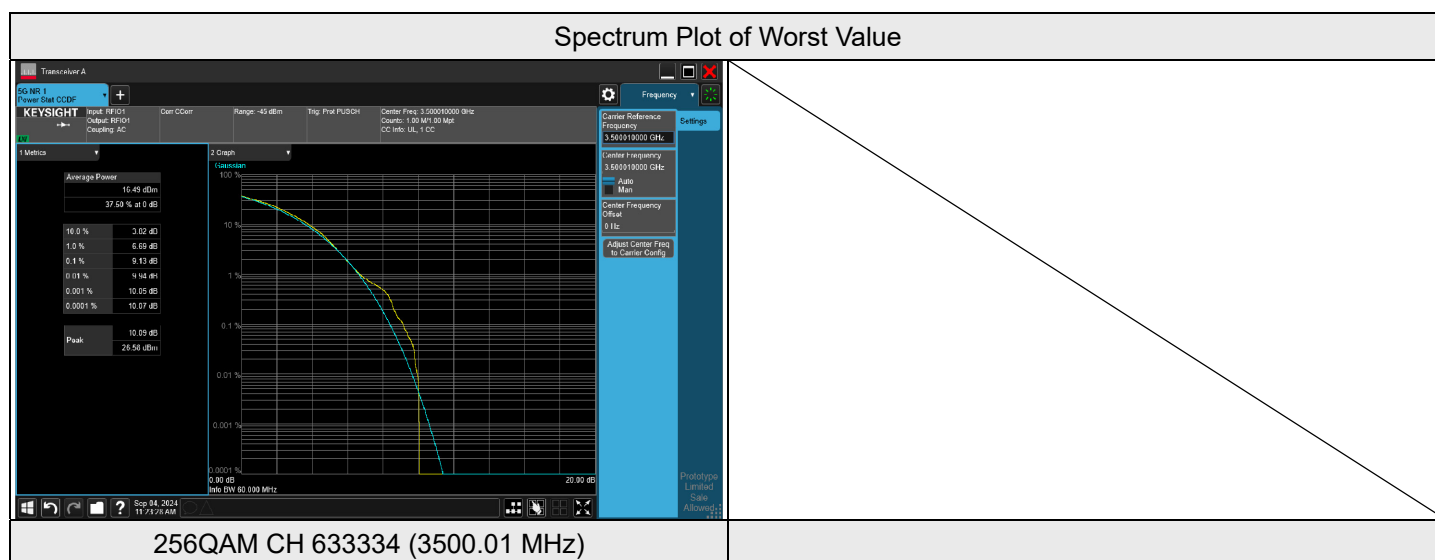
NR n78 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) - MIMO-Ant 3, Channel Bandwidth: 50 MHz

Modulation	RB Size	RB Offset	Peak To Average Ratio (dB)		
			CH 631668	CH 633334	CH 635000
			3475.02 MHz	3500.01 MHz	3525 MHz
BPSK	1	132	4.75	4.87	4.91
	1	0	4.61	5.12	5.02
	128	0	4.59	4.61	4.97
QPSK	1	132	8.04	7.66	8.16
	1	0	8.11	7.45	8.03
	133	0	8.14	7.30	7.50
16QAM	1	132	8.19	7.94	7.53
	1	0	7.78	8.15	7.92
	133	0	7.36	8.10	7.55
64QAM	1	132	8.05	7.93	7.68
	1	0	7.91	7.91	8.09
	133	0	8.03	8.32	8.35
256QAM	1	132	8.51	7.91	8.29
	1	0	8.60	8.46	8.66
	133	0	9.22	8.64	8.50



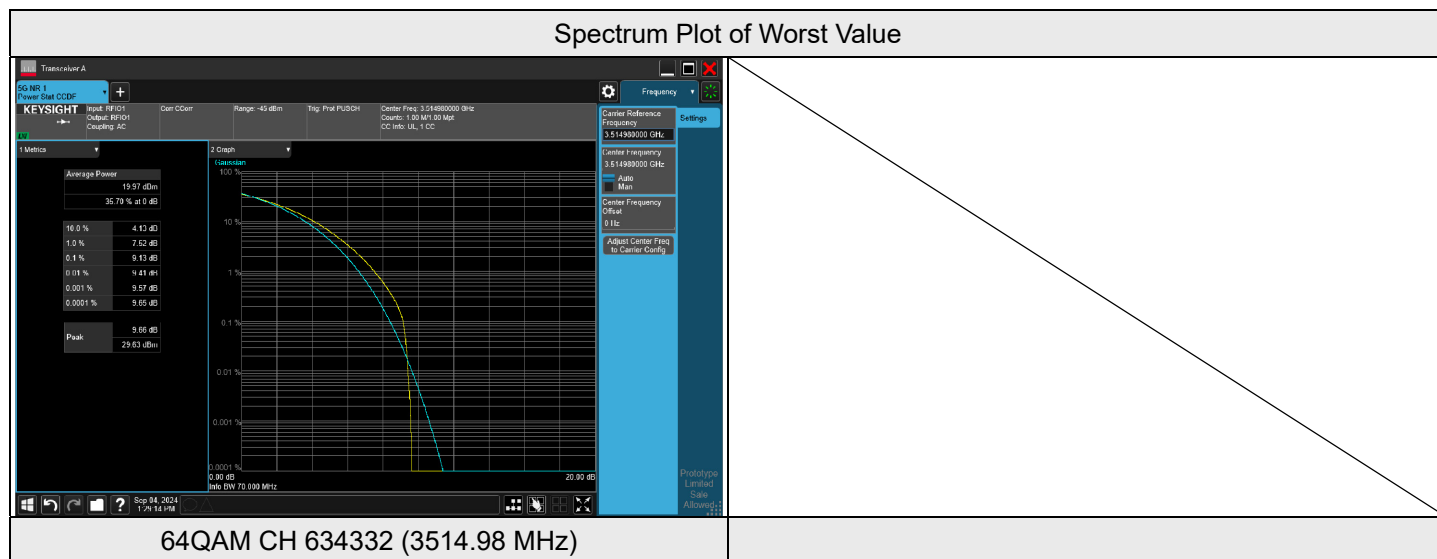
NR n78 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) - MIMO-Ant 3, Channel Bandwidth: 60 MHz

Modulation	RB Size	RB Offset	Peak To Average Ratio (dB)		
			CH 632000	CH 633334	CH 634666
			3480 MHz	3500.01 MHz	3519.99 MHz
BPSK	1	161	4.76	4.96	4.67
	1	0	4.67	4.94	5.05
	162	0	4.75	4.66	4.65
QPSK	1	161	8.18	7.86	7.67
	1	0	8.08	7.84	8.09
	162	0	7.53	8.24	8.04
16QAM	1	161	7.66	7.34	7.94
	1	0	7.59	7.65	8.12
	162	0	8.21	8.39	8.24
64QAM	1	161	8.30	8.28	7.96
	1	0	8.01	8.09	8.19
	162	0	8.59	8.25	8.86
256QAM	1	161	8.85	8.66	8.69
	1	0	8.66	9.13	8.45
	162	0	8.59	8.57	8.82



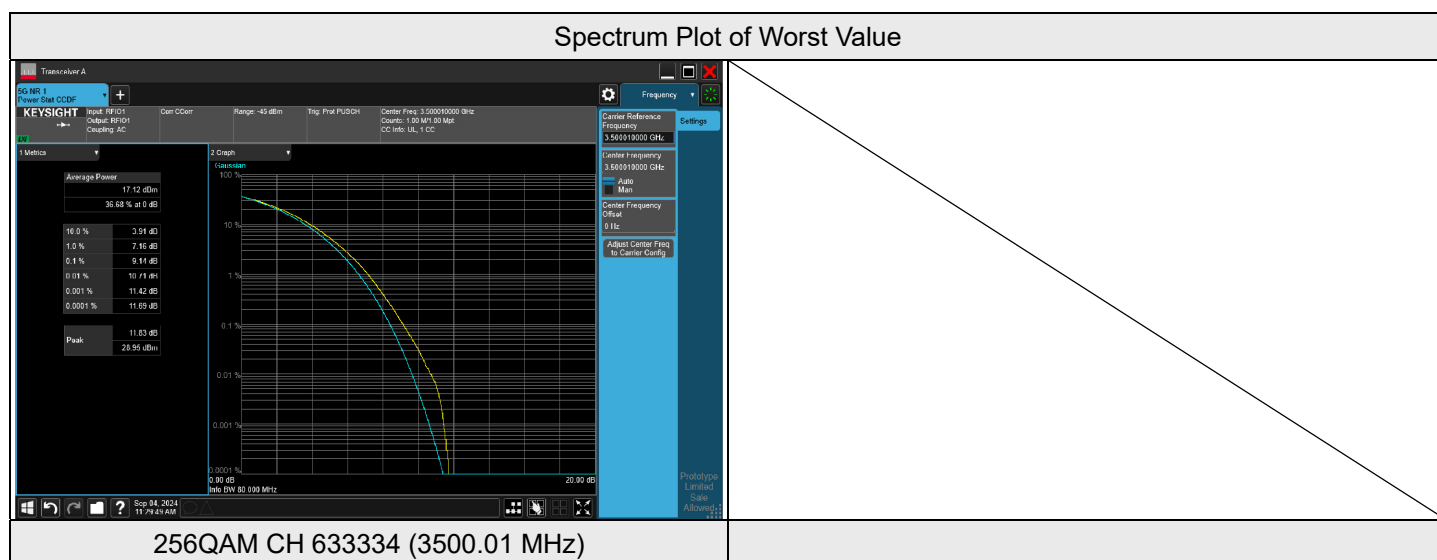
NR n78 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) - MIMO-Ant 3, Channel Bandwidth: 70 MHz

Modulation	RB Size	RB Offset	Peak To Average Ratio (dB)		
			CH 632334	CH 633334	CH 634332
			3485.01 MHz	3500.01 MHz	3514.98 MHz
BPSK	1	188	5.22	5.00	5.34
	1	0	4.62	5.17	4.73
	180	0	4.62	4.85	5.03
QPSK	1	188	7.91	8.11	7.44
	1	0	7.51	7.57	8.31
	189	0	7.58	7.64	7.81
16QAM	1	188	8.43	7.51	7.71
	1	0	7.64	7.87	8.29
	189	0	8.07	8.05	7.88
64QAM	1	188	8.15	8.39	7.84
	1	0	7.77	7.81	7.77
	189	0	8.47	8.27	9.13
256QAM	1	188	8.88	7.89	8.50
	1	0	8.55	8.37	8.30
	189	0	8.79	8.80	8.82



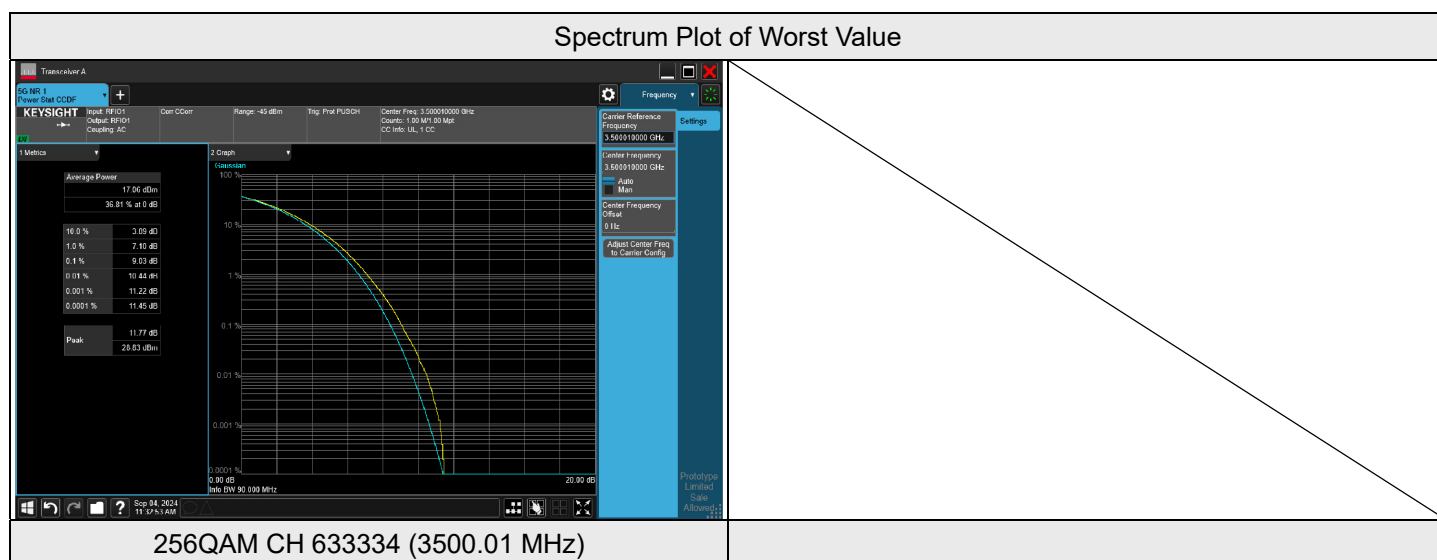
NR n78 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) - MIMO-Ant 3, Channel Bandwidth: 80 MHz

Modulation	RB Size	RB Offset	Peak To Average Ratio (dB)		
			CH 632668	CH 633334	CH 634000
			3490.02 MHz	3500.01 MHz	3510 MHz
BPSK	1	216	4.77	4.95	4.85
	1	0	5.48	4.62	4.99
	216	0	4.71	4.75	5.09
QPSK	1	216	8.09	7.97	7.55
	1	0	7.83	8.10	7.67
	217	0	7.93	7.95	7.78
16QAM	1	216	7.29	7.28	7.86
	1	0	8.11	7.49	7.61
	217	0	7.68	7.77	8.11
64QAM	1	216	8.46	8.08	8.16
	1	0	8.02	7.79	7.82
	217	0	8.36	8.41	8.48
256QAM	1	216	8.03	8.29	8.20
	1	0	8.77	8.84	8.63
	217	0	8.88	9.14	8.85



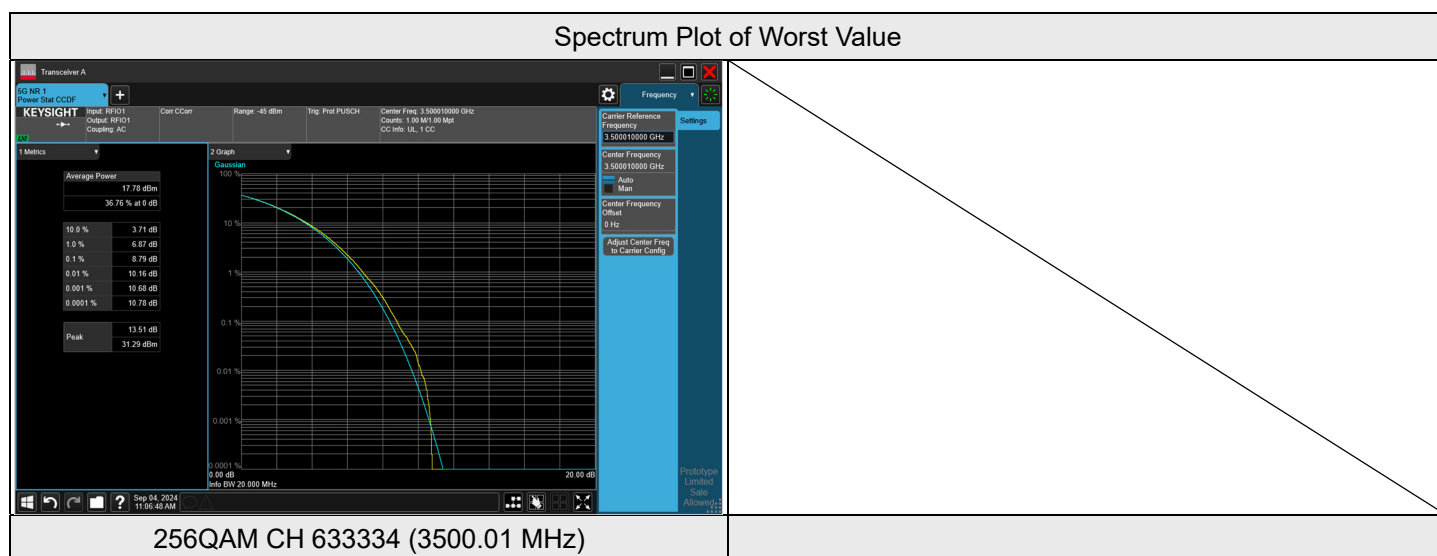
NR n78 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) - MIMO-Ant 3, Channel Bandwidth: 90 MHz

Modulation	RB Size	RB Offset	Peak To Average Ratio (dB)		
			CH 633000	CH 633334	CH 633666
			3495 MHz	3500.01 MHz	3504.99 MHz
BPSK	1	244	4.95	4.72	4.90
	1	0	5.02	4.77	4.74
	243	0	4.60	4.93	4.43
QPSK	1	244	7.65	7.72	7.48
	1	0	7.77	7.76	7.72
	245	0	7.58	7.63	7.66
16QAM	1	244	7.88	7.46	7.48
	1	0	8.07	7.77	7.80
	245	0	7.68	8.03	7.81
64QAM	1	244	7.98	8.06	7.94
	1	0	8.04	7.80	7.89
	245	0	8.45	8.21	8.52
256QAM	1	244	8.04	8.34	8.42
	1	0	8.14	8.45	8.64
	245	0	8.79	9.03	9.01



NR n78 SCS 30 kHz (3.45 GHz ~ 3.55 GHz) - MIMO-Ant 3, Channel Bandwidth: 100 MHz

Modulation	RB Size	RB Offset	Peak To Average Ratio (dB)
			CH 633334
			3500.01 MHz
BPSK	1	272	4.57
	1	0	4.61
	270	0	5.17
QPSK	1	272	7.94
	1	0	7.84
	273	0	7.84
16QAM	1	272	7.89
	1	0	8.19
	273	0	8.46
64QAM	1	272	8.48
	1	0	7.79
	273	0	8.57
256QAM	1	272	8.32
	1	0	8.63
	273	0	8.79



7.4 Bandwidth

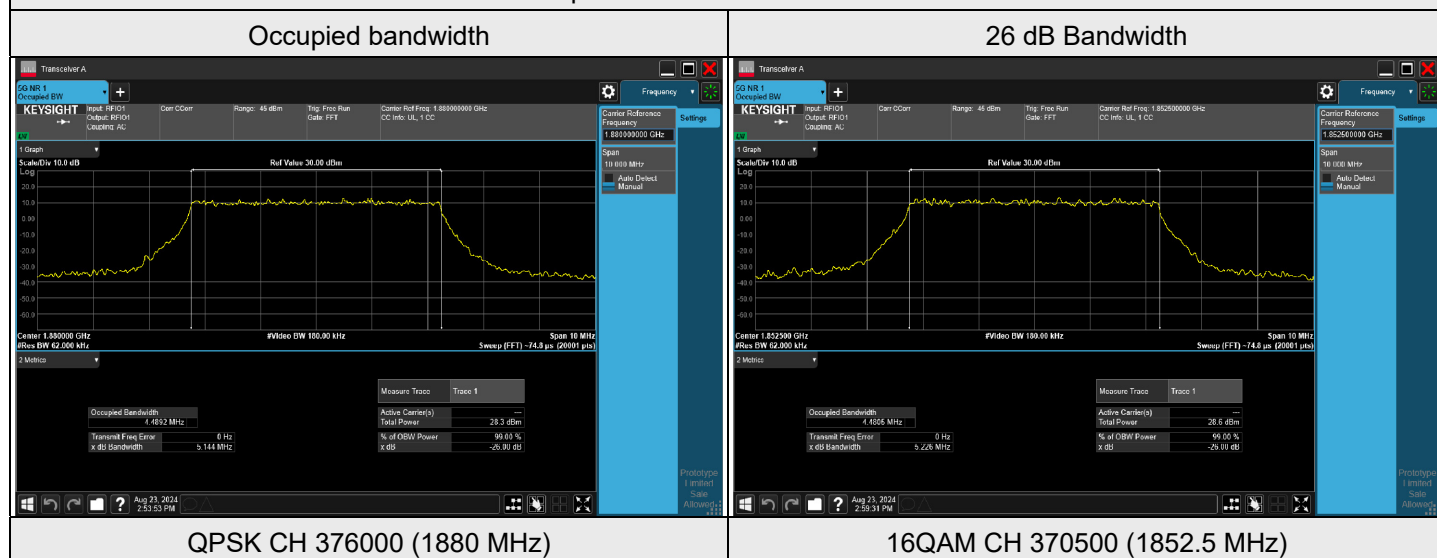
Input Power:	3.8 Vdc	Environmental Conditions:	22°C, 73% RH	Tested By:	James Yang
--------------	---------	---------------------------	--------------	------------	------------

7.4.1 NR n2 SCS 15 kHz

NR n2 SCS 15 kHz, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	370500	1852.5	4.4851	5.199
BPSK	376000	1880	4.4804	5.033
BPSK	381500	1907.5	4.4678	4.873
QPSK	370500	1852.5	4.4670	5.155
QPSK	376000	1880	4.4892	5.144
QPSK	381500	1907.5	4.4633	4.924
16QAM	370500	1852.5	4.4805	5.226
16QAM	376000	1880	4.4622	4.999
16QAM	381500	1907.5	4.4675	4.817
64QAM	370500	1852.5	4.4634	4.939
64QAM	376000	1880	4.4664	5.045
64QAM	381500	1907.5	4.4675	4.83
256QAM	370500	1852.5	4.4812	5.027
256QAM	376000	1880	4.4826	4.495
256QAM	381500	1907.5	4.4600	4.811

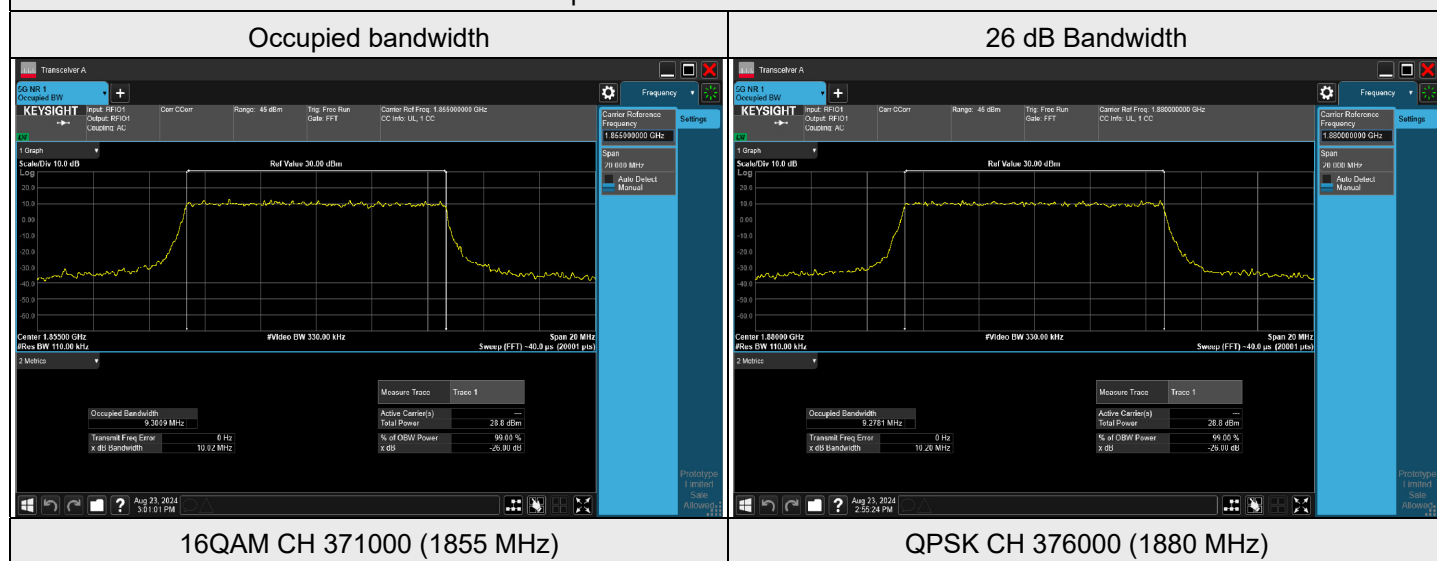
Spectrum Plot of Worst Value



NR n2 SCS 15 kHz, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	371000	1855	9.1864	9.501
BPSK	376000	1880	9.1789	9.512
BPSK	381000	1905	9.1982	9.534
QPSK	371000	1855	9.2768	10.14
QPSK	376000	1880	9.2781	10.20
QPSK	381000	1905	9.2685	10.05
16QAM	371000	1855	9.3009	10.02
16QAM	376000	1880	9.2790	9.867
16QAM	381000	1905	9.2681	9.843
64QAM	371000	1855	9.2561	9.945
64QAM	376000	1880	9.2510	10.03
64QAM	381000	1905	9.2501	10.03
256QAM	371000	1855	9.2865	10.10
256QAM	376000	1880	9.2946	10.15
256QAM	381000	1905	9.2926	10.10

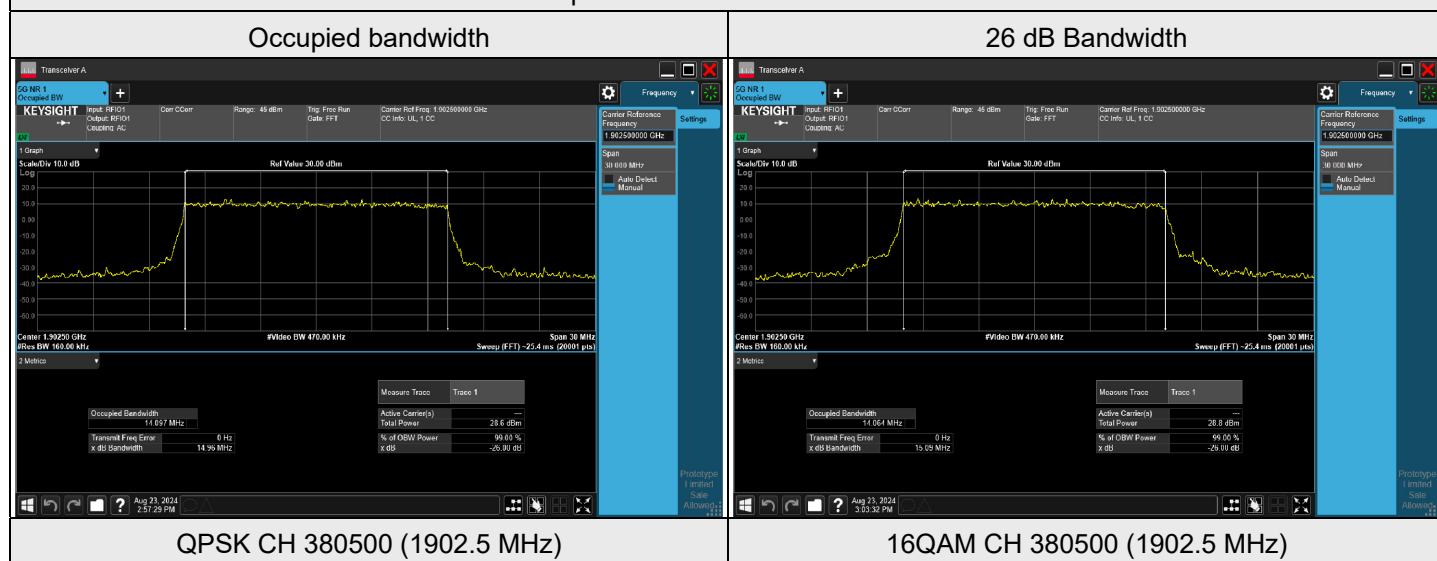
Spectrum Plot of Worst Value



NR n2 SCS 15 kHz, Channel Bandwidth: 15 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	371500	1857.5	14.017	14.41
BPSK	376000	1880	13.996	14.28
BPSK	380500	1902.5	13.993	14.35
QPSK	371500	1857.5	14.094	15.07
QPSK	376000	1880	14.071	14.90
QPSK	380500	1902.5	14.097	14.96
16QAM	371500	1857.5	14.089	15.05
16QAM	376000	1880	14.065	14.88
16QAM	380500	1902.5	14.064	15.09
64QAM	371500	1857.5	14.077	14.84
64QAM	376000	1880	14.070	14.91
64QAM	380500	1902.5	14.034	14.86
256QAM	371500	1857.5	14.083	15.00
256QAM	376000	1880	14.065	14.96
256QAM	380500	1902.5	14.062	14.97

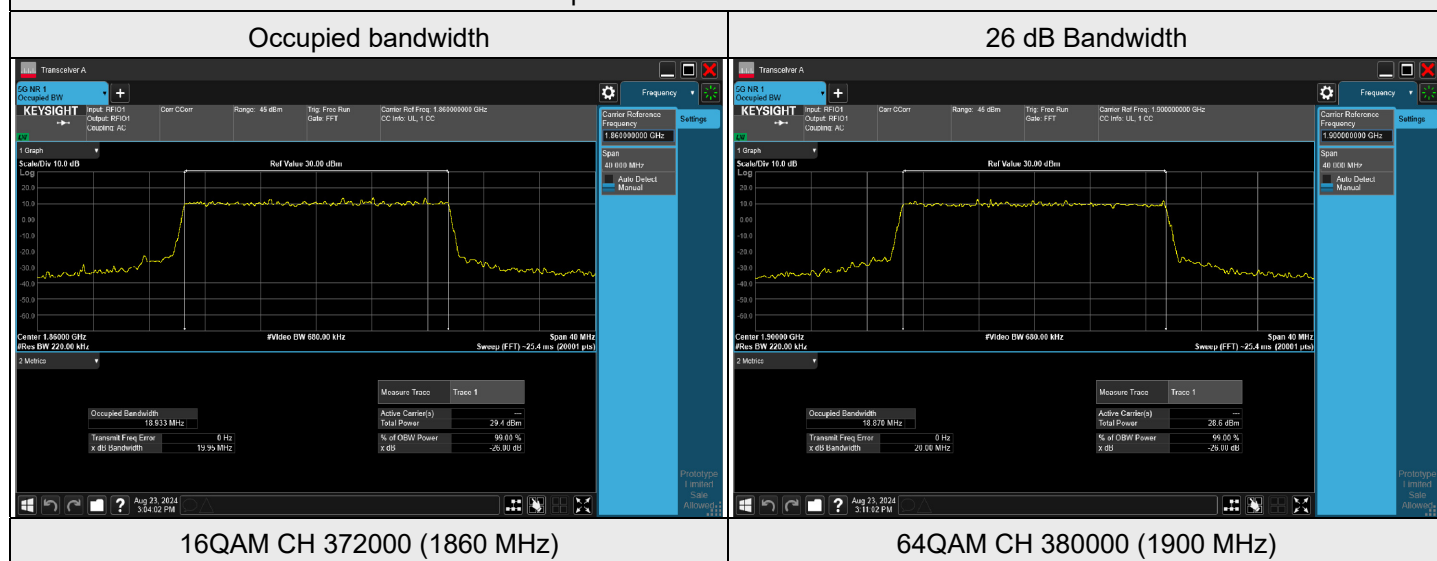
Spectrum Plot of Worst Value



NR n2 SCS 15 kHz, Channel Bandwidth: 20 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	372000	1860	18.713	18.78
BPSK	376000	1880	18.733	18.79
BPSK	380000	1900	18.721	18.82
QPSK	372000	1860	18.848	19.96
QPSK	376000	1880	18.825	19.99
QPSK	380000	1900	18.869	19.95
16QAM	372000	1860	18.933	19.95
16QAM	376000	1880	18.901	19.99
16QAM	380000	1900	18.828	19.90
64QAM	372000	1860	18.888	19.99
64QAM	376000	1880	18.873	19.99
64QAM	380000	1900	18.870	20.00
256QAM	372000	1860	18.864	19.81
256QAM	376000	1880	18.845	19.81
256QAM	380000	1900	18.837	19.82

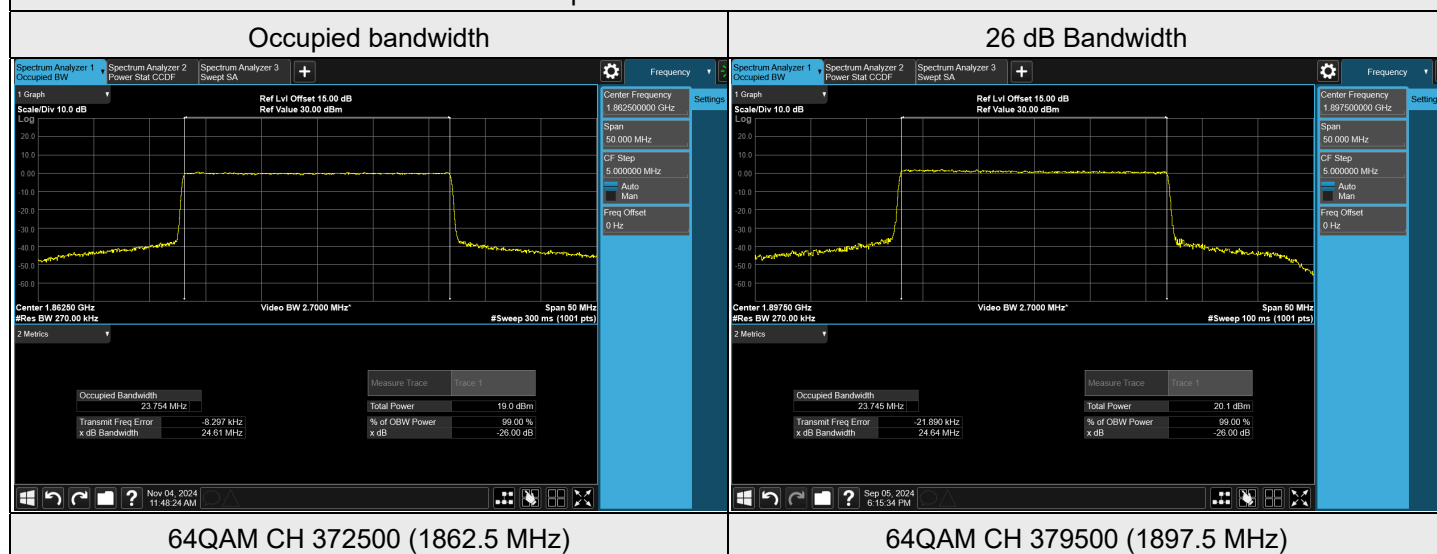
Spectrum Plot of Worst Value



NR n2 SCS 15 kHz, Channel Bandwidth: 25 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	372500	1862.5	22.868	23.7
BPSK	376000	1880	22.862	23.72
BPSK	379500	1897.5	22.863	23.7
QPSK	372500	1862.5	23.741	24.63
QPSK	376000	1880	23.725	24.62
QPSK	379500	1897.5	23.737	24.64
16QAM	372500	1862.5	23.734	24.61
16QAM	376000	1880	23.72	24.6
16QAM	379500	1897.5	23.723	24.61
64QAM	372500	1862.5	23.754	24.61
64QAM	376000	1880	23.743	24.61
64QAM	379500	1897.5	23.745	24.64
256QAM	372500	1862.5	23.744	24.62
256QAM	376000	1880	23.724	24.63
256QAM	379500	1897.5	23.746	24.62

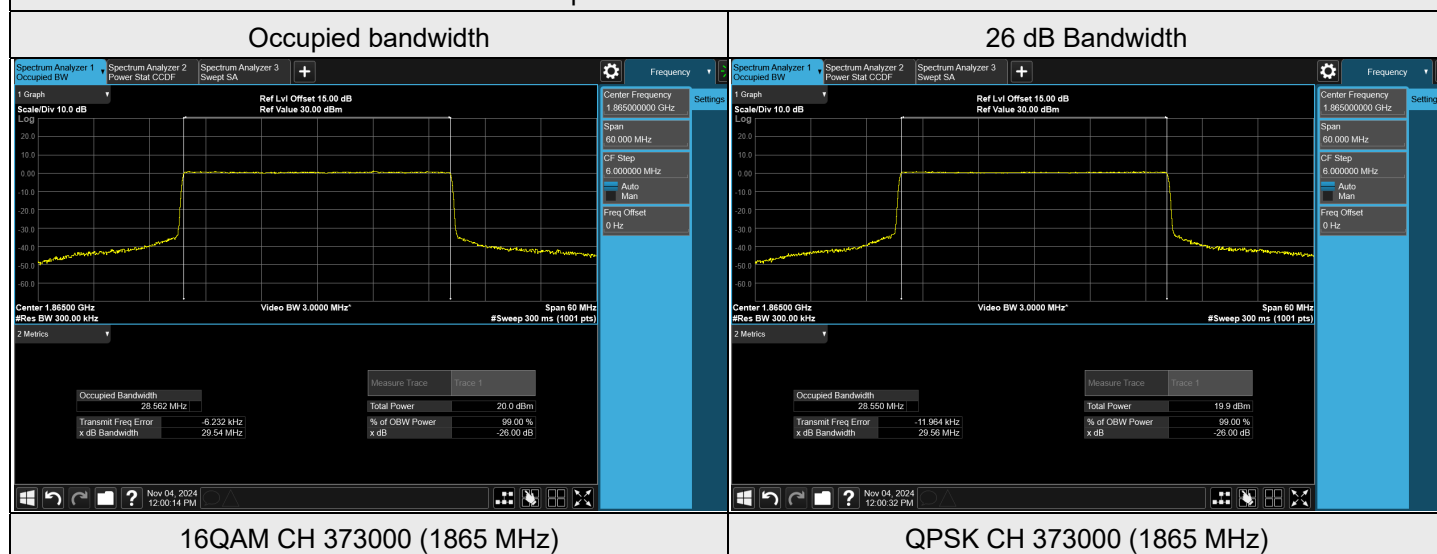
Spectrum Plot of Worst Value



NR n2 SCS 15 kHz, Channel Bandwidth: 30 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	373000	1865	28.55	29.54
BPSK	376000	1880	28.546	29.52
BPSK	379000	1895	28.559	29.51
QPSK	373000	1865	28.55	29.56
QPSK	376000	1880	28.535	29.52
QPSK	379000	1895	28.523	29.52
16QAM	373000	1865	28.562	29.54
16QAM	376000	1880	28.548	29.53
16QAM	379000	1895	28.546	29.51
64QAM	373000	1865	28.538	29.52
64QAM	376000	1880	28.531	29.52
64QAM	379000	1895	28.515	29.52
256QAM	373000	1865	28.543	29.53
256QAM	376000	1880	28.523	29.54
256QAM	379000	1895	28.534	29.53

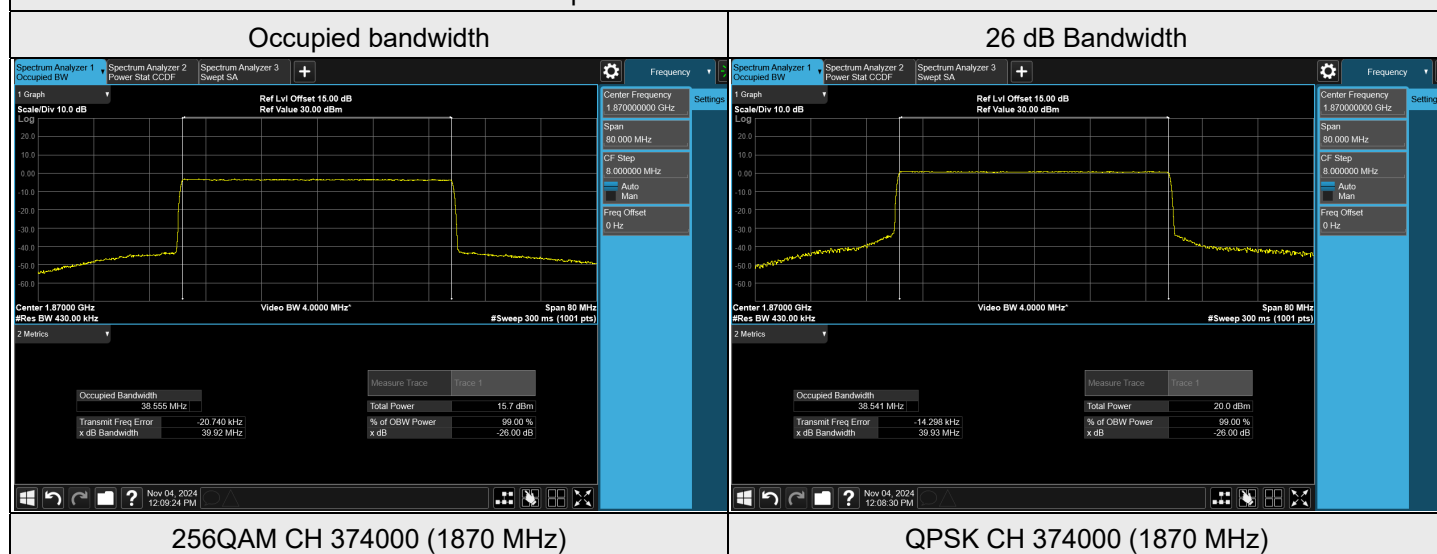
Spectrum Plot of Worst Value



NR n2 SCS 15 kHz, Channel Bandwidth: 40 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	374000	1870	38.551	39.92
BPSK	376000	1880	38.507	39.88
BPSK	378000	1890	38.542	39.91
QPSK	374000	1870	38.541	39.93
QPSK	376000	1880	38.499	39.91
QPSK	378000	1890	38.517	39.89
16QAM	374000	1870	38.549	39.93
16QAM	376000	1880	38.499	39.9
16QAM	378000	1890	38.532	39.88
64QAM	374000	1870	38.545	39.92
64QAM	376000	1880	38.501	39.89
64QAM	378000	1890	38.507	39.89
256QAM	374000	1870	38.555	39.92
256QAM	376000	1880	38.496	39.89
256QAM	378000	1890	38.536	39.89

Spectrum Plot of Worst Value

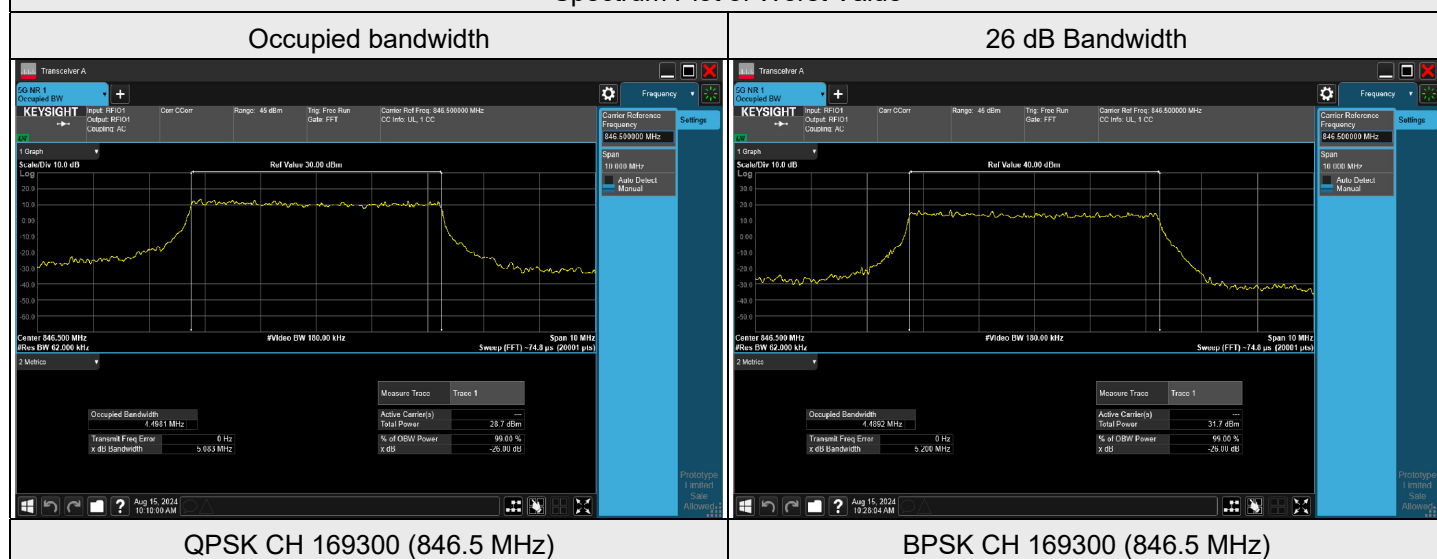


7.4.2 NR n5 SCS 15 kHz

NR n5 SCS 15 kHz, Channel Bandwidth: 5 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	165300	826.5	4.4723	5.136
BPSK	167300	836.5	4.4721	4.980
BPSK	169300	846.5	4.4892	5.200
QPSK	165300	826.5	4.4830	5.094
QPSK	167300	836.5	4.4614	4.920
QPSK	169300	846.5	4.4981	5.083
16QAM	165300	826.5	4.4621	5.020
16QAM	167300	836.5	4.4580	5.019
16QAM	169300	846.5	4.4861	5.072
64QAM	165300	826.5	4.4655	4.960
64QAM	167300	836.5	4.4600	5.093
64QAM	169300	846.5	4.4883	4.998
256QAM	165300	826.5	4.4823	5.024
256QAM	167300	836.5	4.4743	5.065
256QAM	169300	846.5	4.4673	5.028

Spectrum Plot of Worst Value



NR n5 SCS 15 kHz, Channel Bandwidth: 10 MHz

Modulation	Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
BPSK	165800	829	9.1783	9.485
BPSK	167300	836.5	9.1688	9.621
BPSK	168800	844	9.1967	9.553
QPSK	165800	829	9.2527	10.03
QPSK	167300	836.5	9.2689	9.963
QPSK	168800	844	9.2726	10.14
16QAM	165800	829	9.2806	9.883
16QAM	167300	836.5	9.2887	10.05
16QAM	168800	844	9.2828	9.919
64QAM	165800	829	9.2465	10.04
64QAM	167300	836.5	9.2502	10.02
64QAM	168800	844	9.2482	9.915
256QAM	165800	829	9.2647	9.845
256QAM	167300	836.5	9.2967	10.11
256QAM	168800	844	9.2820	10.09

Spectrum Plot of Worst Value

