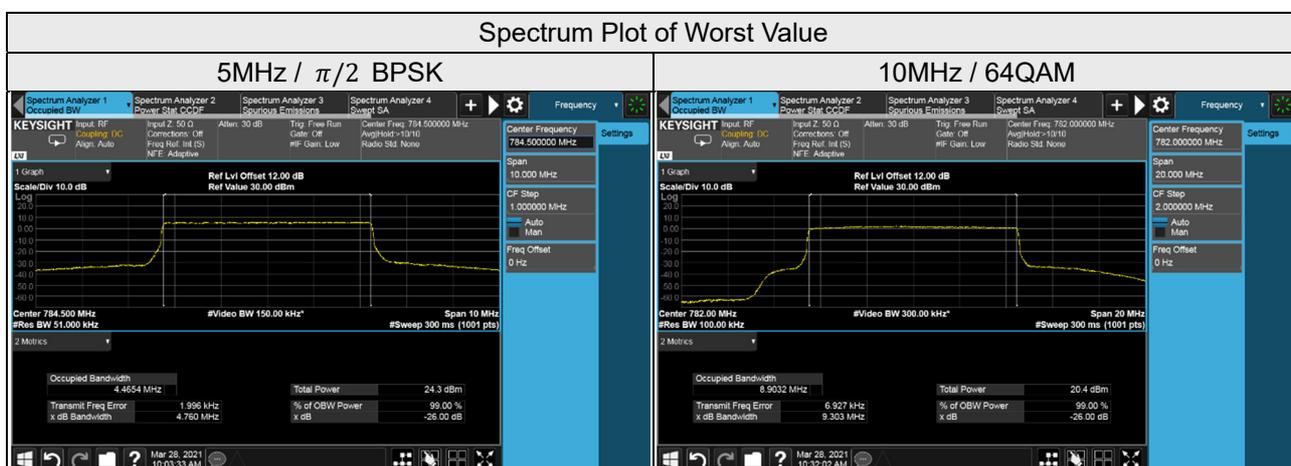


n13, Channel Bandwidth 5MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
155900	779.5	4.46	4.46	4.46	4.46	4.46
156400	782.0	4.46	4.46	4.46	4.46	4.46
156900	784.5	4.47	4.46	4.46	4.46	4.46

n13, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
156400	782.0	8.90	8.90	8.89	8.90	8.90



n30, Channel Bandwidth 5MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
461500	2307.5	4.47	4.47	4.46	4.47	4.47
462000	2310.0	4.47	4.47	4.47	4.47	4.48
462500	2312.5	4.47	4.47	4.47	4.47	4.47

n30, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
462000	2310.0	9.16	9.29	9.29	9.28	9.29



n38, Channel Bandwidth 20MHz

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
516000	2580.0	18.03	18.20	18.19	18.19	18.19
519000	2595.0	18.09	18.19	18.20	18.20	18.19
522000	2610.0	18.02	18.19	18.19	18.19	18.19

n38, Channel Bandwidth 30MHz

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
517000	2585.0	27.63	27.85	27.85	27.86	27.85
519000	2595.0	27.62	27.85	27.85	27.84	27.85
521000	2605.0	27.61	27.85	27.84	27.84	27.85

n38, Channel Bandwidth 40MHz

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
518000	2590.0	37.50	37.81	37.81	37.81	37.81
519000	2595.0	37.48	37.81	37.80	37.80	37.80
520000	2600.0	37.36	37.80	37.80	37.81	37.80

Spectrum Plot of Worst Value

20MHz / 64QAM



30MHz / 64QAM



40MHz / 64QAM



n41, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
501204	2506.02	17.94	18.19	18.19	18.19	18.19
518598	2592.99	18.01	18.20	18.19	18.19	18.19
535998	2679.99	18.04	18.20	18.19	18.20	18.19
n41, Channel Bandwidth 30MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
502200	2511.00	27.37	27.86	27.86	27.87	27.85
518598	2592.99	27.51	27.85	27.86	27.85	27.85
534996	2674.98	27.53	27.86	27.85	27.85	27.85
n41, Channel Bandwidth 40MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
503202	2516.01	37.02	37.82	37.81	37.82	37.81
518598	2592.99	37.35	37.82	37.82	37.82	37.82
534000	2670.00	37.48	37.81	37.81	37.80	37.79
n41, Channel Bandwidth 50MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
504204	2521.02	47.01	47.50	47.61	47.49	47.49
518598	2592.99	46.90	47.49	47.48	47.49	47.49
532998	2664.99	47.05	47.46	47.45	47.46	47.45
n41, Channel Bandwidth 60MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
505200	2526.00	57.91	57.89	57.89	57.89	57.89
518598	2592.99	57.70	57.89	57.89	57.88	57.88
531996	2659.98	57.69	57.71	57.70	57.71	57.71

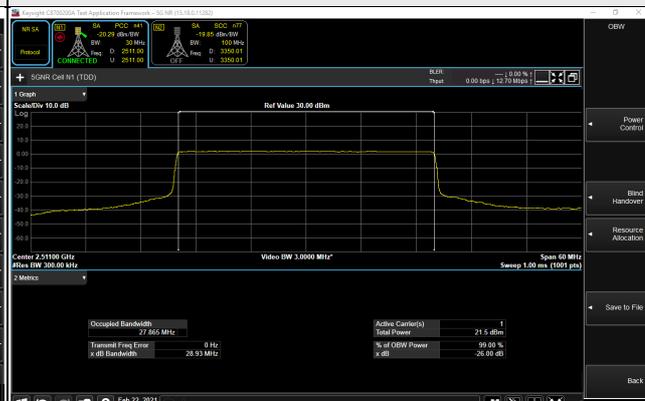
n41, Channel Bandwidth 80MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
507204	2536.02	77.12	77.45	77.44	77.44	77.44
518598	2592.99	76.95	77.52	77.52	77.52	77.50
529998	2649.99	76.94	77.21	77.22	77.23	77.22
n41, Channel Bandwidth 90MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
508200	2541.00	86.55	87.25	87.26	87.25	87.23
518598	2592.99	86.57	87.56	87.57	87.56	87.55
528996	2644.98	86.55	87.23	87.23	87.22	87.24
n41, Channel Bandwidth 100MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
509202	2546.01	96.41	97.25	97.22	97.25	97.24
518598	2592.99	96.45	97.65	97.64	97.63	97.62
528000	2640.00	96.55	97.31	97.32	97.30	97.29

Spectrum Plot of Worst Value

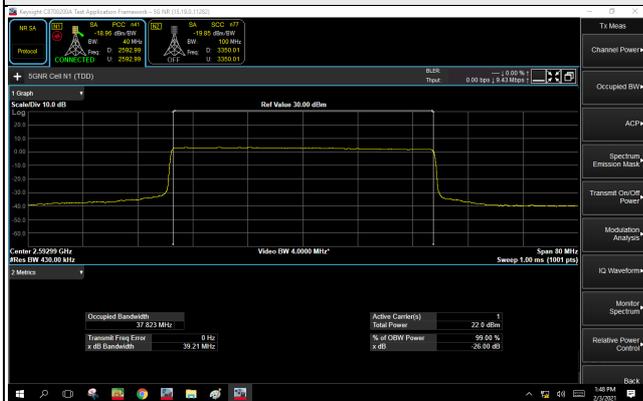
20MHz / 64QAM



30MHz / 64QAM



40MHz / 16QAM



50MHz / 16QAM



60MHz / $\pi/2$ BPSK



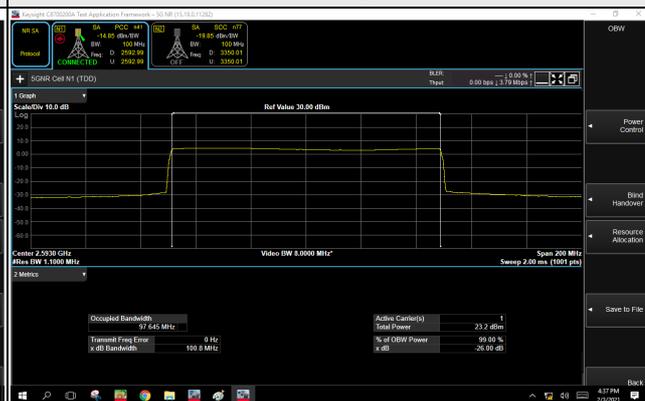
80MHz / 64QAM



90MHz / 16QAM



100MHz / QPSK



n66, Channel Bandwidth 5MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
342500	1712.5	4.48	4.47	4.47	4.47	4.46
349000	1745.0	4.47	4.47	4.47	4.46	4.47
355500	1777.5	4.46	4.47	4.47	4.47	4.47
n66, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
343000	1715.0	9.20	9.28	9.28	9.28	9.29
349000	1745.0	9.18	9.28	9.28	9.26	9.28
355000	1775.0	9.20	9.29	9.29	9.29	9.28
n66, Channel Bandwidth 15MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
343500	1717.5	14.00	14.11	14.11	14.11	14.11
349000	1745.0	14.00	14.11	14.11	14.11	14.11
354500	1772.5	14.00	14.12	14.11	14.12	14.11
n66, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
344000	1720.0	18.68	18.91	18.91	18.91	18.91
349000	1745.0	18.74	18.90	18.90	18.90	18.90
354000	1770.0	18.75	18.92	18.92	18.91	18.91
n66, Channel Bandwidth 30MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
345000	1725.0	28.49	28.57	28.50	28.57	28.50
349000	1745.0	28.49	28.50	28.50	28.50	28.49
353000	1765.0	28.57	28.57	28.58	28.57	28.57

n66, Channel Bandwidth 40MHz

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
346000	1730.0	38.22	38.47	38.45	38.45	38.45
349000	1745.0	38.24	38.48	38.37	38.43	38.46
352000	1760.0	38.25	38.52	38.37	38.38	38.41

Spectrum Plot of Worst Value

5MHz / $\pi/2$ BPSK



10MHz / 256QAM



15MHz / 64QAM



20MHz / 16QAM



30MHz / 16QAM



40MHz / QPSK



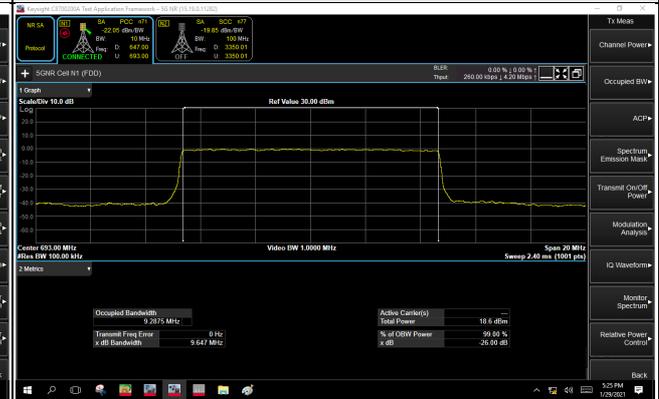
n71, Channel Bandwidth 5MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
133100	665.5	4.47	4.47	4.47	4.46	4.47
136100	680.5	4.47	4.47	4.47	4.47	4.47
139100	695.5	4.46	4.47	4.47	4.47	4.47
n71, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
133600	668.0	9.18	9.29	9.28	9.28	9.29
136100	680.5	9.18	9.29	9.29	9.28	9.29
138600	693.0	9.21	9.28	9.28	9.26	9.29
n71 Channel Bandwidth 15MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
134100	670.5	13.93	14.11	14.11	14.07	14.11
136100	680.5	13.94	14.11	14.11	14.11	14.07
138100	690.5	14.00	14.11	14.11	14.10	14.11
n71, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
134600	673.0	18.60	18.90	18.90	18.89	18.88
136100	680.5	18.73	18.90	18.90	18.90	18.90
137600	688.0	18.73	18.90	18.90	18.90	18.90

Spectrum Plot of Worst Value

5MHz / $\pi/2$ BPSK



10MHz / 256QAM



15MHz / 16QAM



20MHz / QPSK



n77, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
647334	3710.01	18.03	18.24	18.24	18.20	18.20
656000	3840.00	18.03	18.20	18.20	18.24	18.24
664666	3969.99	18.08	18.20	18.19	18.20	18.19
n77, Channel Bandwidth 30MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
647668	3715.02	27.53	27.86	27.86	27.87	27.86
656000	3840.00	27.61	27.86	27.87	27.85	27.86
664332	3964.98	27.62	27.86	27.86	27.85	27.85
n77, Channel Bandwidth 40MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
648000	3720.00	37.47	37.83	37.83	37.81	37.82
656000	3840.00	37.47	37.82	37.82	37.83	37.81
664000	3960.00	37.44	37.81	37.81	37.81	37.81
n77, Channel Bandwidth 50MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
648334	3725.01	47.02	47.48	47.48	47.47	47.47
656000	3840.00	47.03	47.47	47.47	47.46	47.47
663666	3954.99	46.87	47.46	47.46	47.47	47.46
n77, Channel Bandwidth 60MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
648668	3730.02	57.86	57.88	57.87	57.87	57.87
656000	3840.00	57.87	57.87	57.87	57.87	57.87
663332	3949.98	57.86	57.88	57.89	57.88	57.86

n77, Channel Bandwidth 70MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
649000	3735.00	66.76	67.51	67.53	67.51	67.51
656000	3840.00	66.94	67.53	67.53	67.55	67.54
663000	3945.00	66.99	67.53	67.55	67.53	67.53
n77, Channel Bandwidth 80MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
649334	3740.01	77.13	77.50	77.50	77.50	77.48
656000	3840.00	77.18	77.50	77.51	77.49	77.51
662666	3939.99	77.18	77.53	77.54	77.53	77.52
n77, Channel Bandwidth 90MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
649558	3745.02	86.83	87.52	87.53	87.50	87.52
656000	3840.00	86.87	87.54	87.54	87.54	87.53
662332	3934.98	86.88	87.55	87.57	87.57	87.55
n77, Channel Bandwidth 100MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
650000	3750.00	96.59	97.39	97.60	97.61	97.37
656000	3840.00	96.82	97.64	97.65	97.63	97.40
662000	3930.00	96.83	97.63	97.64	97.64	97.63

Spectrum Plot of Worst Value

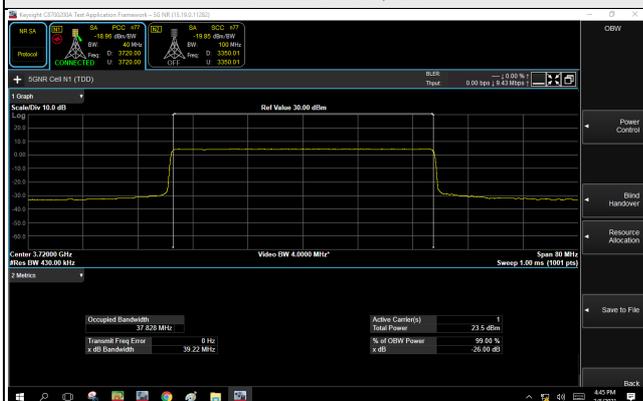
20MHz / 64QAM



30MHz / 64QAM



40MHz / 16QAM



50MHz / 16QAM



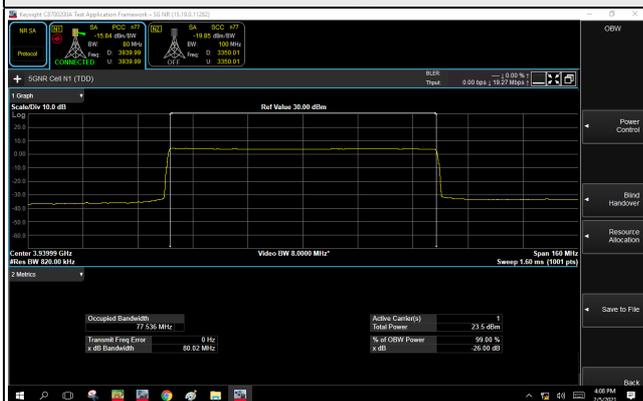
60MHz / 16QAM



70MHz / 64QAM



80MHz / 16QAM



90MHz / 64QAM



100MHz / 16QAM



26dB Bandwidth

n7, Channel Bandwidth 5MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
500500	2502.5	4.76	4.75	4.74	4.74	4.74
507000	2535.0	4.76	4.76	4.74	4.75	4.74
513500	2567.5	4.73	4.74	4.71	4.75	4.70
n7, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
501000	2505.0	9.28	9.72	9.65	9.66	9.65
507000	2535.0	9.25	9.69	9.70	9.74	9.65
513000	2565.0	9.29	9.64	9.63	9.67	9.64
n7, Channel Bandwidth 15MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
501500	2507.5	13.88	14.63	14.62	14.61	14.60
507000	2535.0	13.90	14.63	14.64	14.61	14.63
512500	2562.5	13.88	14.61	14.60	14.59	14.61
n7, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
502000	2510.0	18.46	19.58	19.58	19.55	19.55
507000	2535.0	18.48	19.59	19.59	19.59	19.57
512000	2560.0	18.47	19.58	19.56	19.56	19.54
n7, Channel Bandwidth 25MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
502500	2512.5	24.03	24.87	24.88	24.87	24.81
507000	2535.0	24.03	24.87	24.88	24.88	24.78
511500	2557.5	24.04	24.88	24.89	24.88	24.80

n7, Channel Bandwidth 30MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
503000	2515.0	27.77	28.98	28.96	28.92	28.90
507000	2535.0	27.81	28.89	28.94	28.86	28.86
511000	2555.0	27.79	28.95	28.89	28.89	28.82
n7, Channel Bandwidth 40MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
504000	2520.0	37.03	38.25	39.24	39.22	39.20
507000	2535.0	37.03	39.19	39.21	39.19	39.18
510000	2550.0	37.07	39.19	39.19	39.21	39.18
n7, Channel Bandwidth 50MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
505000	2525.0	47.32	49.13	49.13	49.13	49.12
507000	2535.0	47.32	49.12	49.13	49.12	49.07
509000	2545.0	47.29	49.13	49.13	49.09	49.07

Spectrum Plot of Worst Value

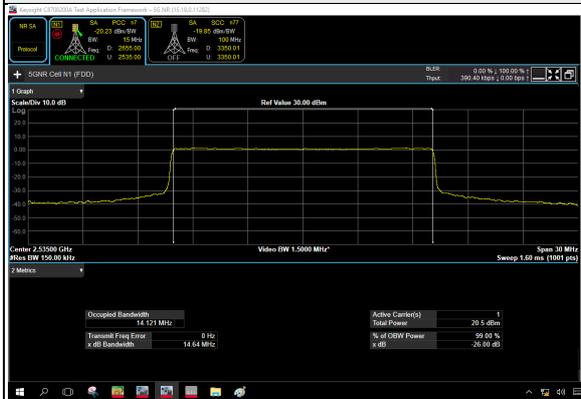
5MHz / $\pi/2$ BPSK



10MHz / 64QAM



15MHz / 16QAM



20MHz / 16QAM



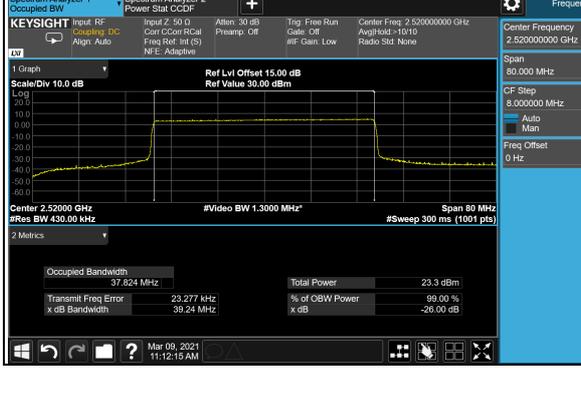
25MHz / 16QAM



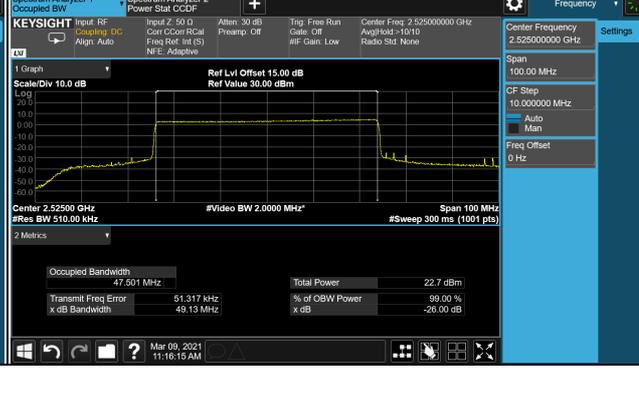
30MHz / QPSK



40MHz / 16QAM



50MHz / 16QAM



n12, Channel Bandwidth 5MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
140300	701.5	4.74	4.76	4.77	4.76	4.74
141500	707.5	4.77	4.76	4.75	4.73	4.73
142700	713.5	4.77	4.69	4.72	4.69	4.73
n12, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
140800	704.0	9.30	9.66	9.65	9.67	9.66
141500	707.5	9.27	9.64	9.71	9.64	9.64
142200	711.0	9.32	9.62	9.62	9.60	9.63
n12, Channel Bandwidth 15MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
141300	706.5	13.91	14.60	14.61	14.63	14.59
141500	707.5	13.89	14.61	14.63	14.61	14.60
141700	708.5	13.88	14.60	14.60	14.60	14.61

Spectrum Plot of Worst Value

5MHz / $\pi/2$ BPSK



10MHz / 16QAM

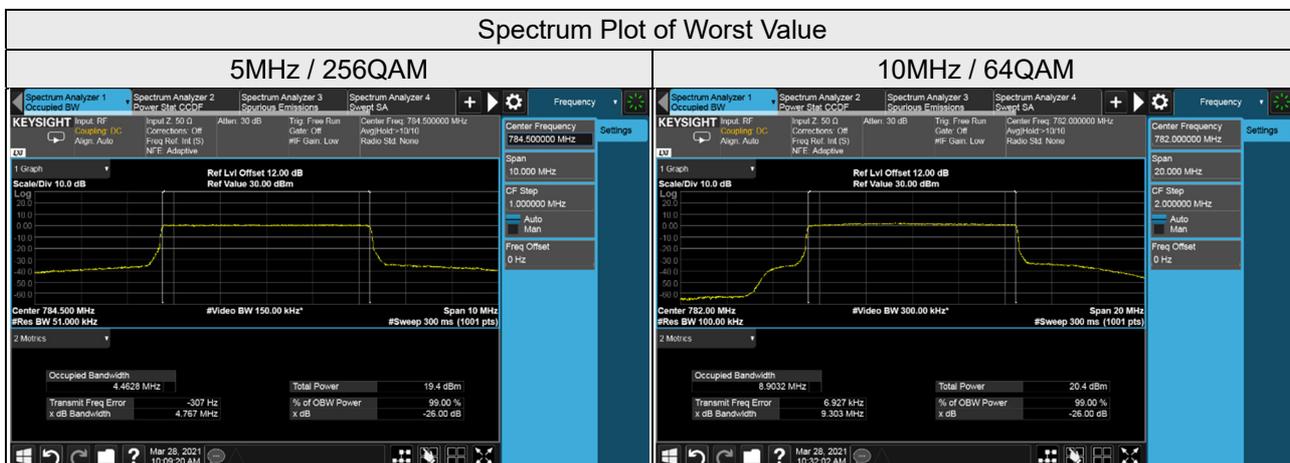


15MHz / 16QAM



n13, Channel Bandwidth 5MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
155900	779.5	4.72	4.73	4.75	4.75	4.73
156400	782.0	4.76	4.73	4.76	4.74	4.76
156900	784.5	4.76	4.76	4.75	4.75	4.77

n13, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
156400	782.0	9.30	9.28	9.28	9.30	9.30



n30, Channel Bandwidth 5MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
461500	2307.5	4.72	4.68	4.74	4.73	4.75
462000	2310.0	4.73	4.77	4.78	4.76	4.77
462500	2312.5	4.72	4.74	4.74	4.77	4.74

n30, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
462000	2310.0	9.28	9.69	9.68	9.65	9.65



n38, Channel Bandwidth 20MHz

Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
516000	2580.0	18.55	19.04	18.93	18.97	18.97
519000	2595.0	18.54	19.00	19.06	18.93	18.92
522000	2610.0	18.54	19.03	18.96	18.99	18.98

n38, Channel Bandwidth 30MHz

Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
517000	2585.0	27.79	28.86	28.88	28.88	28.85
519000	2595.0	27.80	28.90	28.87	28.88	28.86
521000	2605.0	27.78	28.88	28.88	28.86	28.83

n38, Channel Bandwidth 40MHz

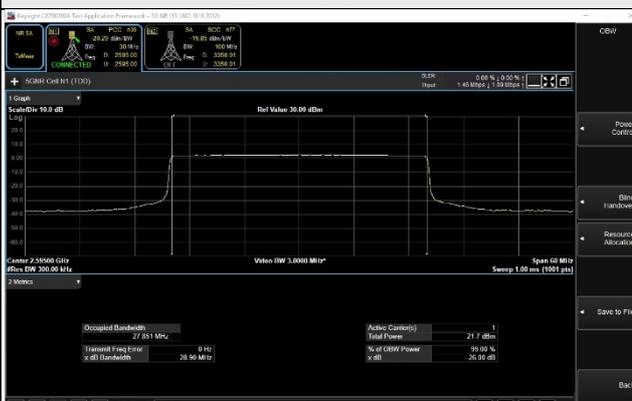
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
518000	2590.0	37.06	39.20	39.21	39.21	39.20
519000	2595.0	37.05	39.21	39.18	39.18	39.18
520000	2600.0	37.06	39.20	39.17	39.19	39.17

Spectrum Plot of Worst Value

20MHz / 16QAM



30MHz / QPSK



40MHz / 64QAM



n41, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
501204	2506.02	18.56	19.01	19.02	18.97	18.93
518598	2592.99	18.55	19.01	19.03	18.90	18.92
535998	2679.99	18.57	19.09	19.06	19.00	18.94
n41, Channel Bandwidth 30MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
502200	2511.00	27.74	28.93	28.94	28.93	28.84
518598	2592.99	27.74	28.90	28.86	28.85	28.84
534996	2674.98	27.76	28.94	28.88	28.85	28.83
n41, Channel Bandwidth 40MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
503202	2516.01	36.99	39.19	39.20	39.19	39.19
518598	2592.99	37.01	39.21	39.21	39.19	39.21
534000	2670.00	37.03	39.20	39.17	39.21	39.16
n41, Channel Bandwidth 50MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
504204	2521.02	47.25	49.13	49.12	49.12	49.08
518598	2592.99	47.29	49.11	49.10	49.10	49.06
532998	2664.99	47.25	49.10	49.10	49.09	49.08
n41, Channel Bandwidth 60MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
505200	2526.00	59.73	59.74	59.73	59.75	59.74
518598	2592.99	59.74	59.76	59.76	59.76	59.73
531996	2659.98	59.72	59.75	59.73	59.76	59.74

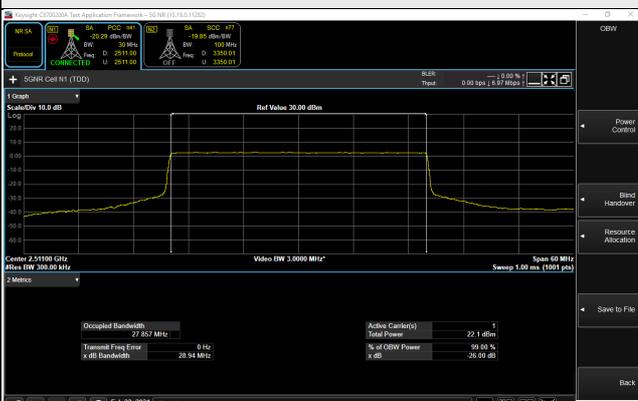
n41, Channel Bandwidth 80MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
507204	2536.02	79.64	79.95	79.95	79.96	79.95
518598	2592.99	79.63	80.03	80.01	80.03	79.97
529998	2649.99	79.60	79.94	79.94	79.96	79.94
n41, Channel Bandwidth 90MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
508200	2541.00	89.52	90.26	90.26	90.24	90.22
518598	2592.99	89.58	90.36	90.36	90.33	90.31
528996	2644.98	89.50	90.24	90.25	90.23	90.25
n41, Channel Bandwidth 100MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
509202	2546.01	99.62	100.70	100.70	100.70	100.70
518598	2592.99	99.73	100.80	100.90	100.80	100.80
528000	2640.00	99.65	100.70	100.70	100.70	100.70

Spectrum Plot of Worst Value

20MHz / QPSK



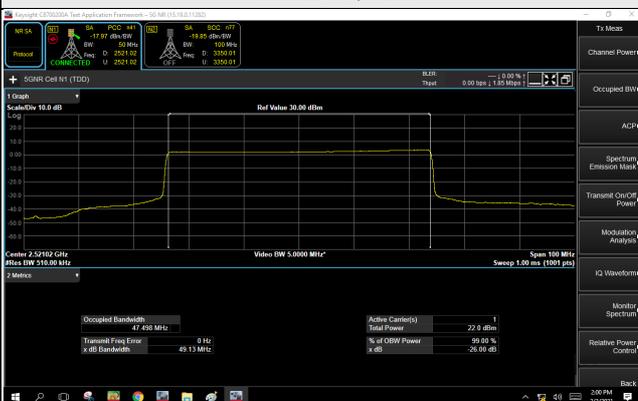
30MHz / 16QAM



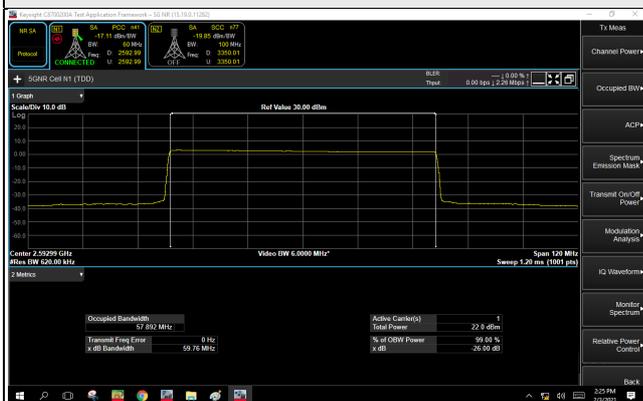
40MHz / QPSK



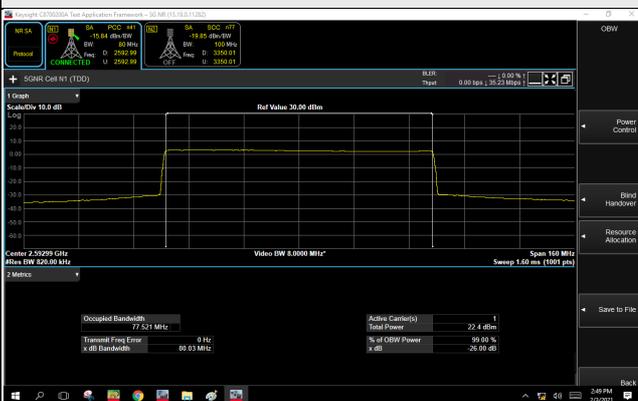
50MHz / QPSK



60MHz / QPSK



80MHz / 64QAM



90MHz / 16QAM



100MHz / 16QAM



n66, Channel Bandwidth 5MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
342500	1712.5	4.74	4.72	4.73	4.76	4.76
349000	1745.0	4.72	4.76	4.76	4.69	4.77
355500	1777.5	4.74	4.76	4.72	4.72	4.76
n66, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
343000	1715.0	9.30	9.68	9.64	9.62	9.68
349000	1745.0	9.27	9.64	9.67	9.65	9.64
355000	1775.0	9.27	9.66	9.65	9.65	9.65
n66, Channel Bandwidth 15MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
343500	1717.5	13.88	14.62	14.65	14.62	14.62
349000	1745.0	13.88	14.62	14.60	14.62	14.60
354500	1772.5	13.90	14.62	14.62	14.61	14.62
n66, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
344000	1720.0	18.48	19.59	19.58	19.58	19.57
349000	1745.0	18.48	19.58	19.58	19.56	19.54
354000	1770.0	18.47	19.59	19.60	19.57	19.55
n66, Channel Bandwidth 30MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
345000	1725.0	29.48	29.51	29.51	29.51	29.49
349000	1745.0	29.47	29.51	29.50	29.50	29.48
353000	1765.0	29.49	29.52	29.53	29.51	29.49

n66, Channel Bandwidth 40MHz

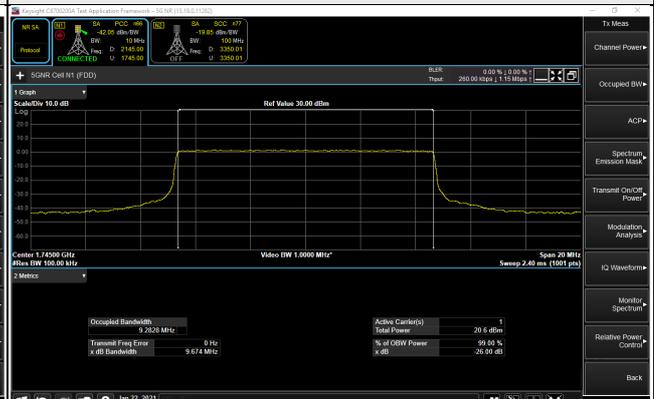
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
346000	1730.0	39.65	39.85	39.84	39.83	39.83
349000	1745.0	39.49	39.89	39.82	39.74	39.89
352000	1760.0	39.43	39.78	39.74	39.66	39.64

Spectrum Plot of Worst Value

5MHz / 256QAM



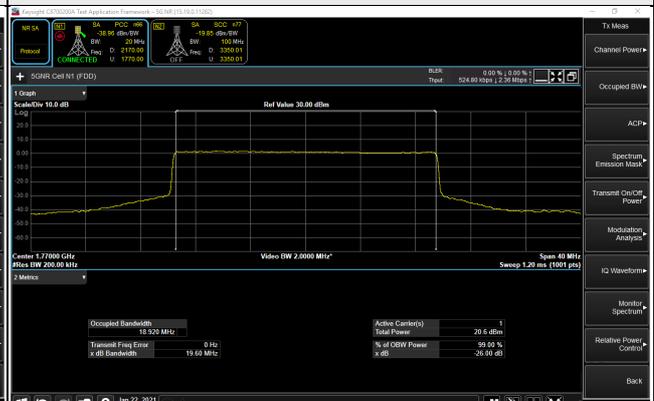
10MHz / 16QAM



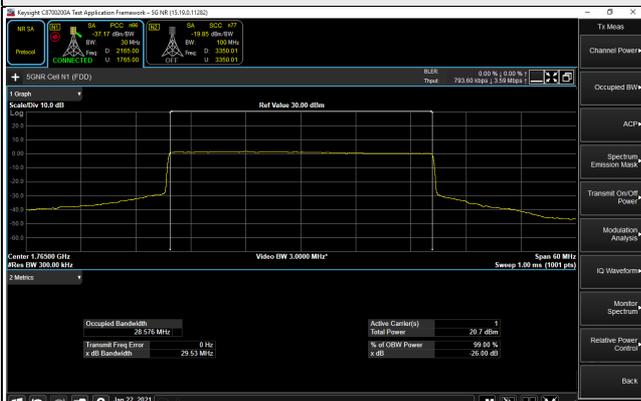
15MHz / QPSK



20MHz / 16QAM



30MHz / 16QAM



40MHz / QPSK



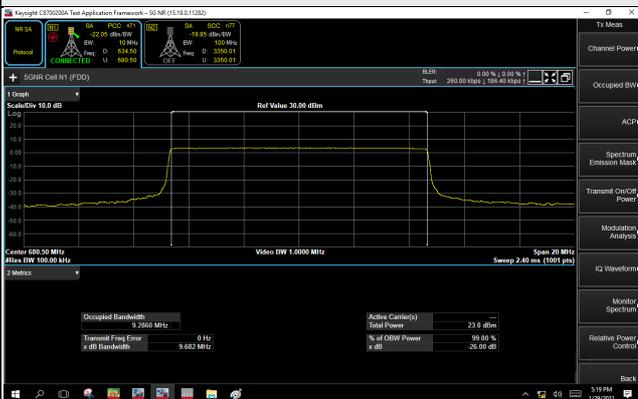
n71, Channel Bandwidth 5MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
133100	665.5	4.77	4.74	4.73	4.75	4.73
136100	680.5	4.75	4.77	4.74	4.74	4.74
139100	695.5	4.75	4.74	4.79	4.70	4.71
n71, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
133600	668.0	9.31	9.68	9.67	9.67	9.64
136100	680.5	9.29	9.68	9.67	9.65	9.64
138600	693.0	9.30	9.64	9.63	9.64	9.65
n71 Channel Bandwidth 15MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
134100	670.5	13.89	14.64	14.60	14.61	14.61
136100	680.5	13.88	14.61	14.61	14.61	14.59
138100	690.5	13.88	14.60	14.62	14.60	14.60
n71, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
134600	673.0	18.46	19.57	19.56	19.56	19.54
136100	680.5	18.49	19.58	19.57	19.56	19.56
137600	688.0	18.48	19.58	19.57	19.56	19.57

Spectrum Plot of Worst Value

5MHz / $\pi/2$ BPSK



10MHz / QPSK



15MHz / QPSK



20MHz / QPSK



n77, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
647334	3710.01	18.61	19.10	19.07	18.96	19.00
656000	3840.00	18.56	19.02	18.99	19.01	18.98
664666	3969.99	18.59	19.06	19.02	19.07	18.97
n77, Channel Bandwidth 30MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
647668	3715.02	27.80	28.91	28.90	28.94	28.88
656000	3840.00	27.78	28.94	28.97	28.89	28.85
664332	3964.98	27.78	28.93	28.88	28.85	28.82
n77, Channel Bandwidth 40MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
648000	3720.00	37.04	39.22	39.22	39.20	39.20
656000	3840.00	37.03	39.21	39.20	39.22	39.19
664000	3960.00	37.03	39.20	39.20	39.20	39.17
n77, Channel Bandwidth 50MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
648334	3725.01	47.28	49.14	49.14	49.15	49.12
656000	3840.00	47.27	49.13	49.11	49.10	49.11
663666	3954.99	47.26	49.14	49.11	49.13	49.09
n77, Channel Bandwidth 60MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
648668	3730.02	59.75	59.80	59.80	59.80	59.78
656000	3840.00	59.76	59.81	59.81	59.78	59.74
663332	3949.98	59.75	59.87	59.82	59.78	59.74

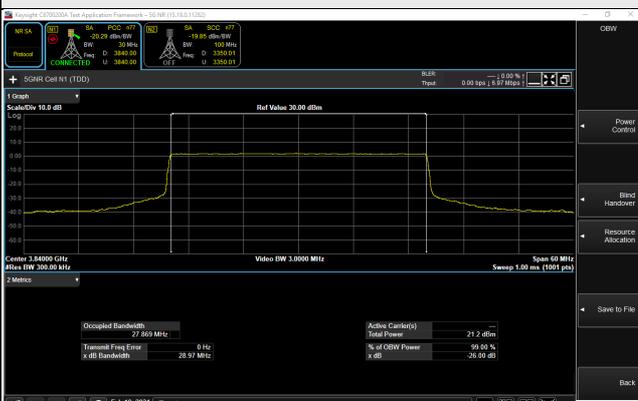
n77, Channel Bandwidth 70MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
649000	3735.00	66.52	69.82	69.85	69.85	69.78
656000	3840.00	66.54	69.82	69.83	69.84	69.77
663000	3945.00	66.54	69.82	69.86	69.82	69.77
n77, Channel Bandwidth 80MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
649334	3740.01	79.63	80.01	80.00	80.03	79.98
656000	3840.00	79.67	80.01	80.01	80.02	79.99
662666	3939.99	79.65	80.03	80.02	80.04	80.02
n77, Channel Bandwidth 90MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
649558	3745.02	89.56	90.35	90.35	90.30	90.30
656000	3840.00	89.57	90.34	90.37	90.34	90.30
662332	3934.98	89.56	90.34	90.36	90.36	90.31
n77, Channel Bandwidth 100MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
650000	3750.00	99.69	100.80	100.80	100.80	100.80
656000	3840.00	99.73	100.80	100.80	100.80	100.80
662000	3930.00	99.72	100.80	100.80	100.80	100.80

Spectrum Plot of Worst Value

20MHz / 64QAM



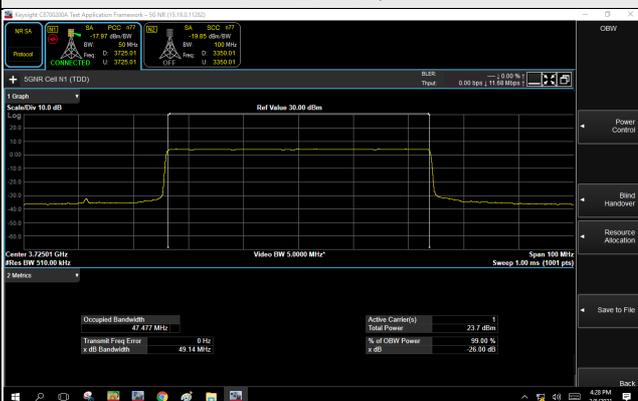
30MHz / 16QAM



40MHz / 16QAM



50MHz / 16QAM



60MHz / 16QAM



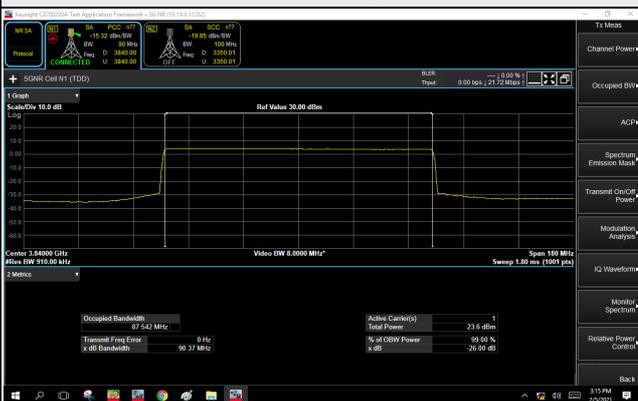
70MHz / 64QAM



80MHz / 64QAM



90MHz / 16QAM



100MHz / 16QAM



4.5 Channel Edge / Out-of-Band Emissions Measurement

4.5.1 Limits of Band Edge / Out-of-Band Emissions Measurement

For n7, n38, n41:

According to FCC 27.53(m)(4) specified that power of any emission outside of the channel edge must be attenuated below the transmitting power (P) by a factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth. In addition, the attenuation factor shall not be less that $43 + 10 \log (P)$ dB on all frequencies between 2490.5MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5MHz. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed, except when the 1 megahertz band is 2495-2496 MHz, in which case a resolution bandwidth of at least one percent may be employed.

For n12, n71:

According to FCC 27.53(g) for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater.

For n13:

According to FCC 27.53(c)(2) for on any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB.

According to 27.53(c)(4) On all frequencies between 763-775MHz and 793-805MHz, by a factor not less than $65 + 10 \log (P)$ dB in a 6.25 kHz band segment, for mobile and portable stations

For n30:

According to FCC 27.53(a) (4) For mobile and portable stations operating in the 2305-2315MHz and 2350-2360 MHz bands:

- (i) By a factor of not less than: $43 + 10 \log (P)$ dB on all frequencies between 2305 and 2320MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than $55 + 10 \log (P)$ dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345MHz, not less than $61 + 10 \log (P)$ dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than $67 + 10 \log (P)$ dB on all frequencies between 2328 and 2337 MHz;
- (ii) By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2300 and 2305MHz, $55 + 10 \log (P)$ dB on all frequencies between 2296 and 2300 MHz, $61 + 10 \log (P)$ dB on all frequencies between 2292 and 2296 MHz, $67 + 10 \log (P)$ dB on all frequencies between 2288 and 2292 MHz, and $70 + 10 \log (P)$ dB below 2288 MHz;
- (iii) By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2360 and 2365MHz, and not less than $70 + 10 \log (P)$ dB above 2365MHz.

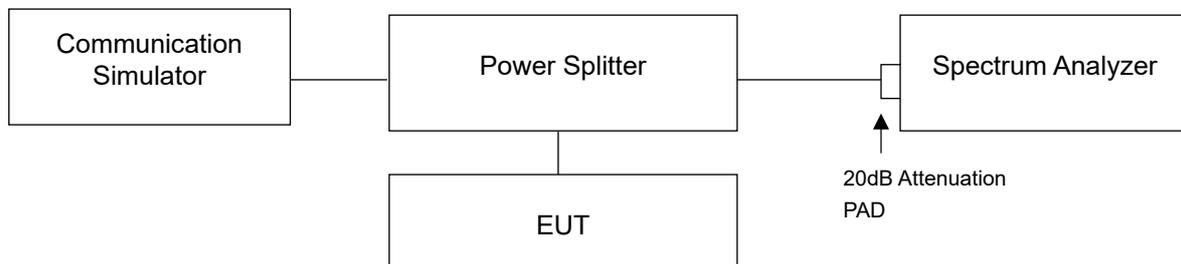
For n66:

According to FCC 27.53(h) for operations in the 1695-1710MHz, 1710-1755MHz, 1755-1780 MHz, 1915-1920MHz, 1995-2000 MHz, 2000-2020MHz, 2110-2155MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log (P)$ dB.

For n77:

According to FCC 27.53(l) for mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz. Compliance with this paragraph (l)(2) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be either one percent of the emission bandwidth of the fundamental emission of the transmitter or 350 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

4.5.2 Test Setup



4.5.3 Test Procedures

- The testing follows ANSI C63.26 section 5.7
- The EUT was connected to spectrum analyzer and system simulator via a power divider.
- The band edges of low and high channels for the highest RF powers were measured.
- Set RBW \geq 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
- Beyond the 1 MHz band from the band edge, RBW=1MHz was used.
- Set spectrum analyzer with RMS detector.
- Checked that all the results comply with the emission limit line.