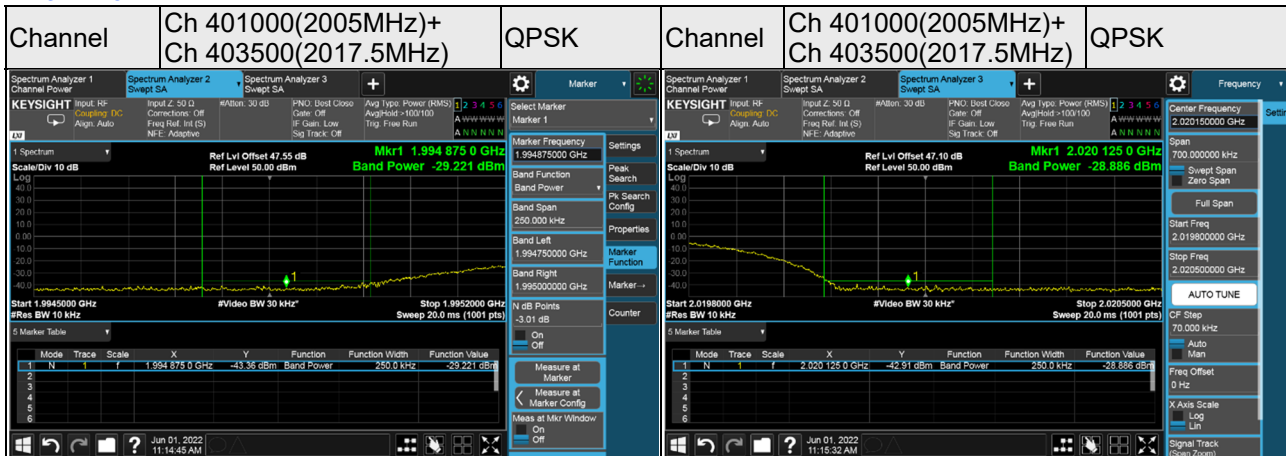


20MHz+5MHz
Ant. TX 0



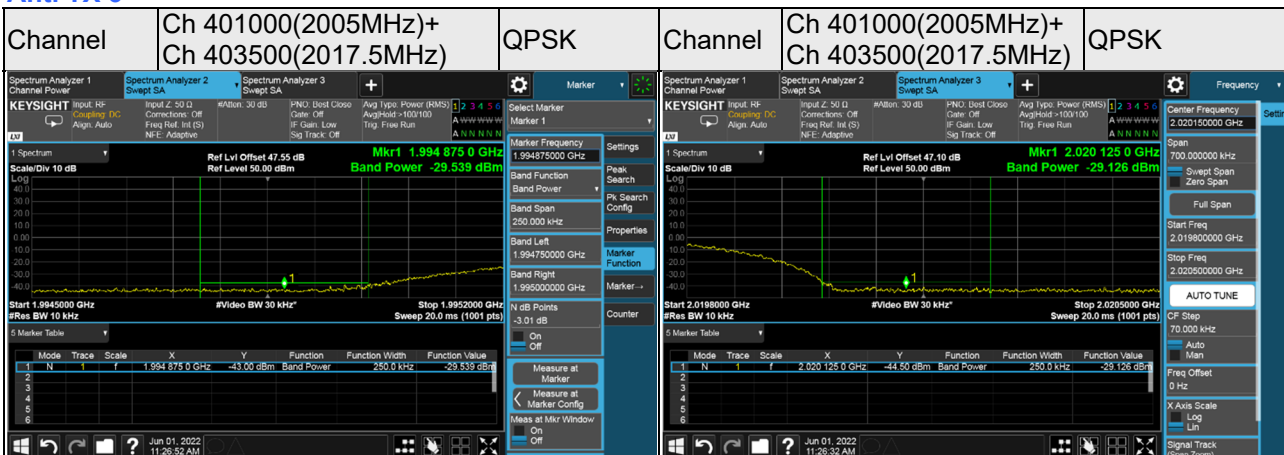
Ant. TX 1



Ant. TX 2

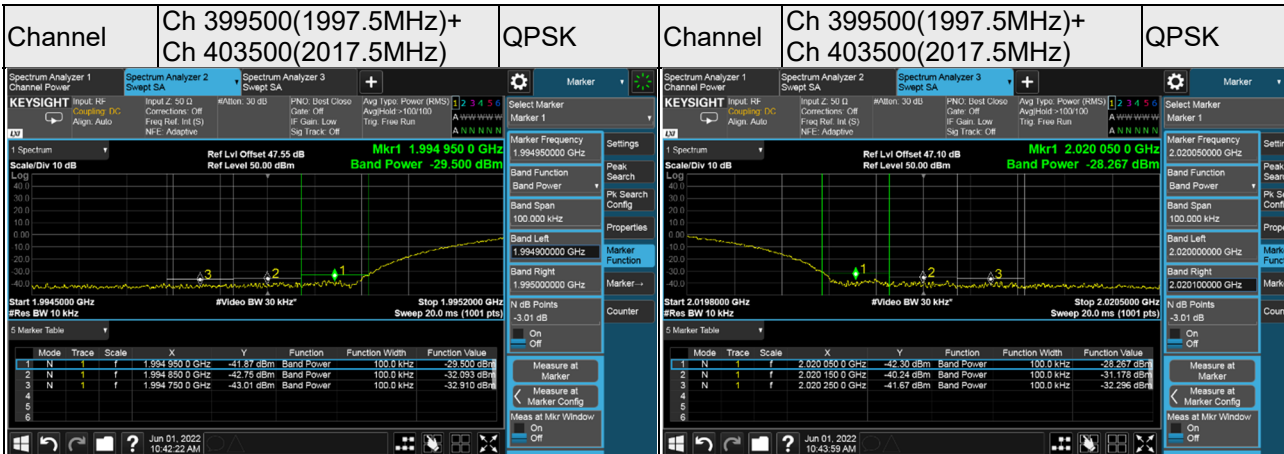


Ant. TX 3

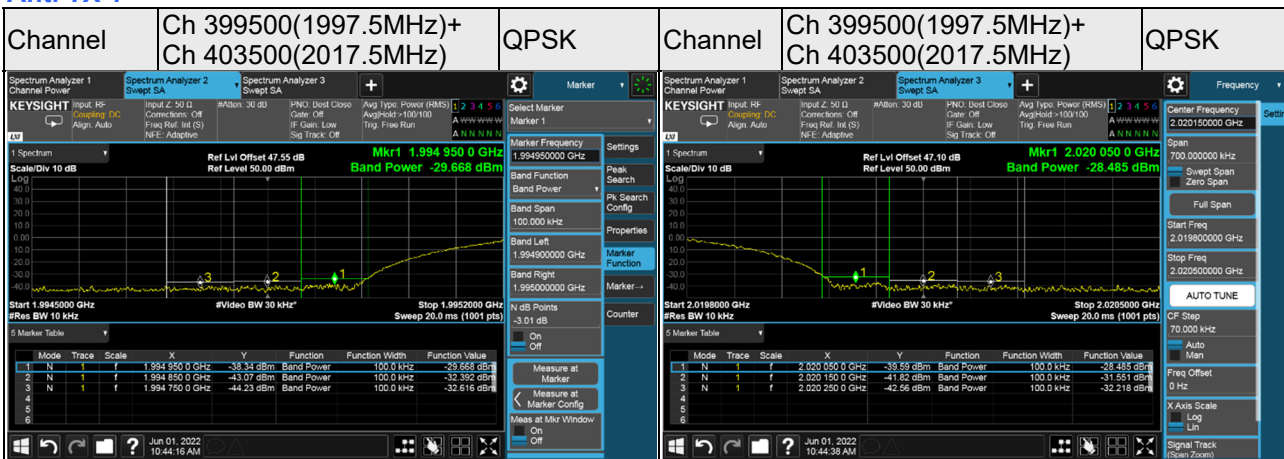


CA-Non-Contiguous

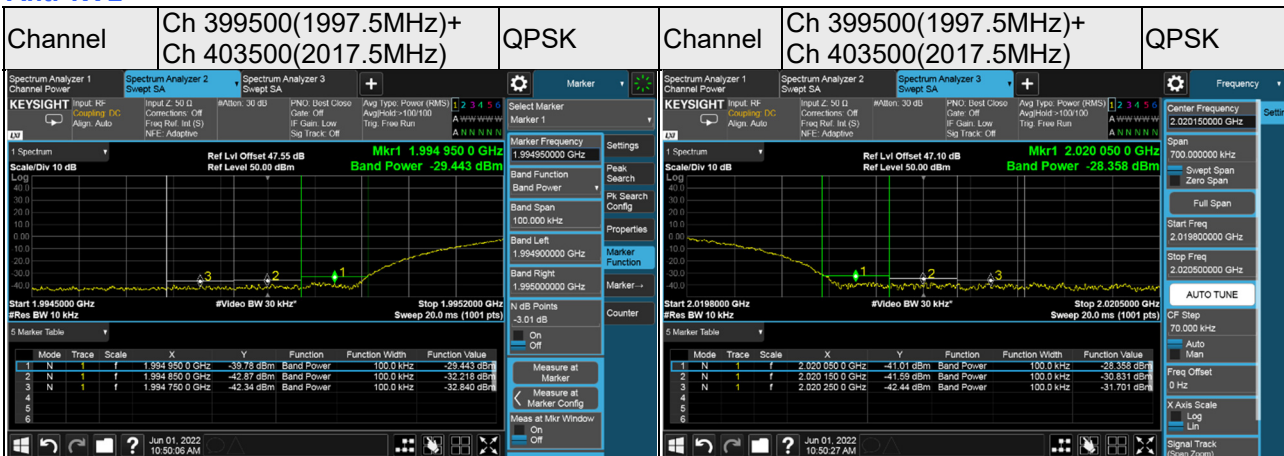
5MHz+5MHz
Ant. TX 0



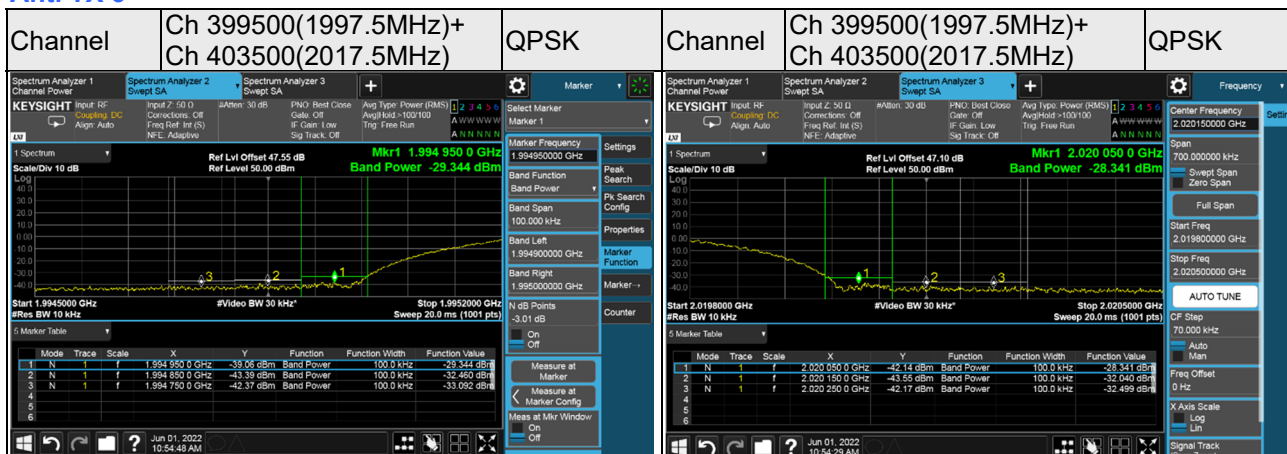
Ant. TX 1



Ant. TX 2



Ant. TX 3

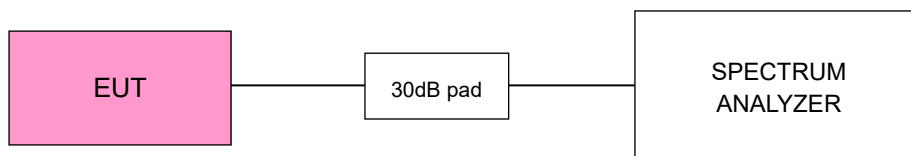


4.6 Peak to Average Ratio

4.6.1 Limits of Peak to Average Ratio Measurement

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB

4.6.2 Test Setup



4.6.3 Test Procedures

1. Set resolution/measurement bandwidth \geq signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1%.

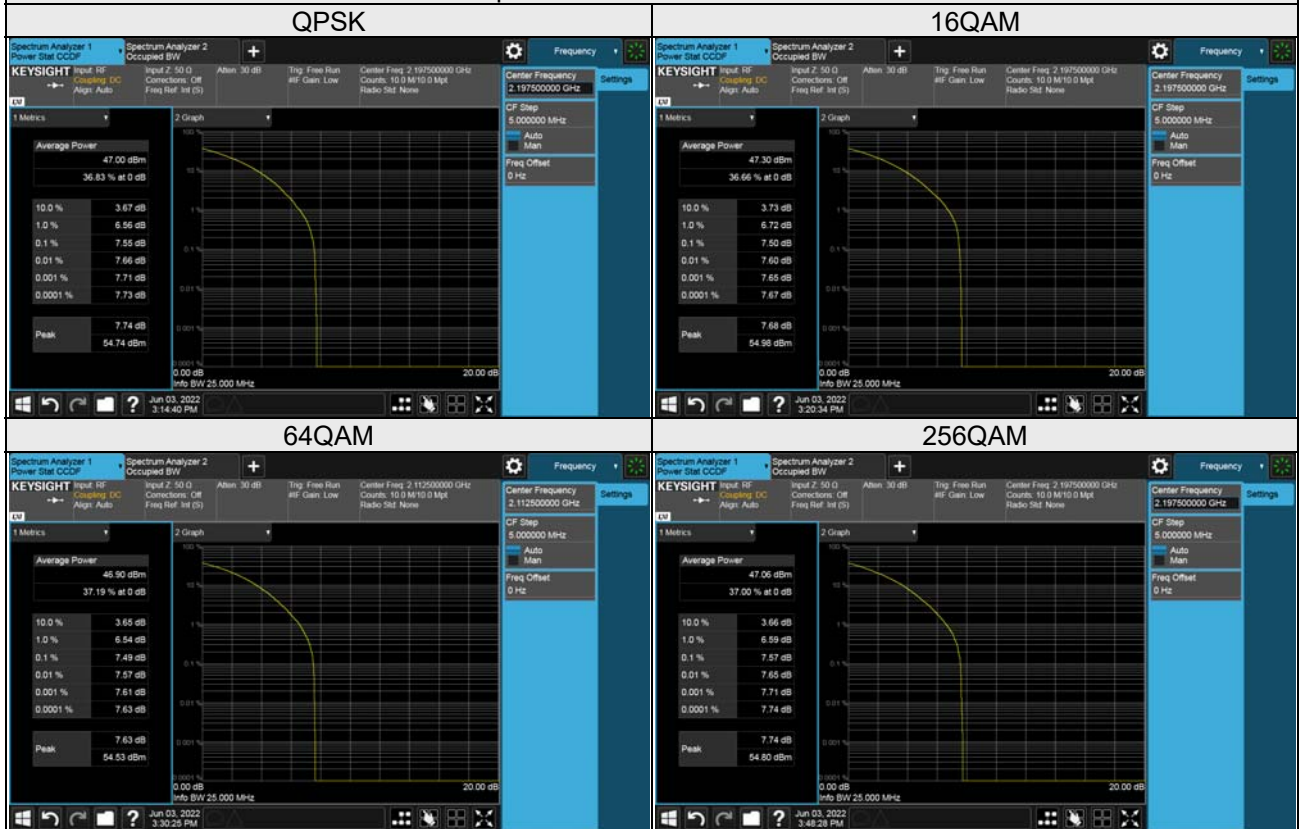
4.6.4 Test Results

Band n66 Single Carrier

5MHz

Channel Number	Freq. (MHz)	Peak-to-Average Power Ratio (dB)															
		Ant. TX0				Ant. TX1				Ant. TX2				Ant. TX3			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
422500	2112.5	7.54	7.46	7.48	7.56	7.54	7.46	7.46	7.55	7.54	7.46	7.48	7.56	7.54	7.45	7.49	7.55
431000	2155	7.54	7.45	7.43	7.56	7.53	7.44	7.49	7.55	7.52	7.44	7.46	7.54	7.53	7.45	7.47	7.56
439500	2197.5	7.55	7.45	7.44	7.57	7.53	7.46	7.48	7.55	7.55	7.47	7.45	7.56	7.54	7.50	7.47	7.54

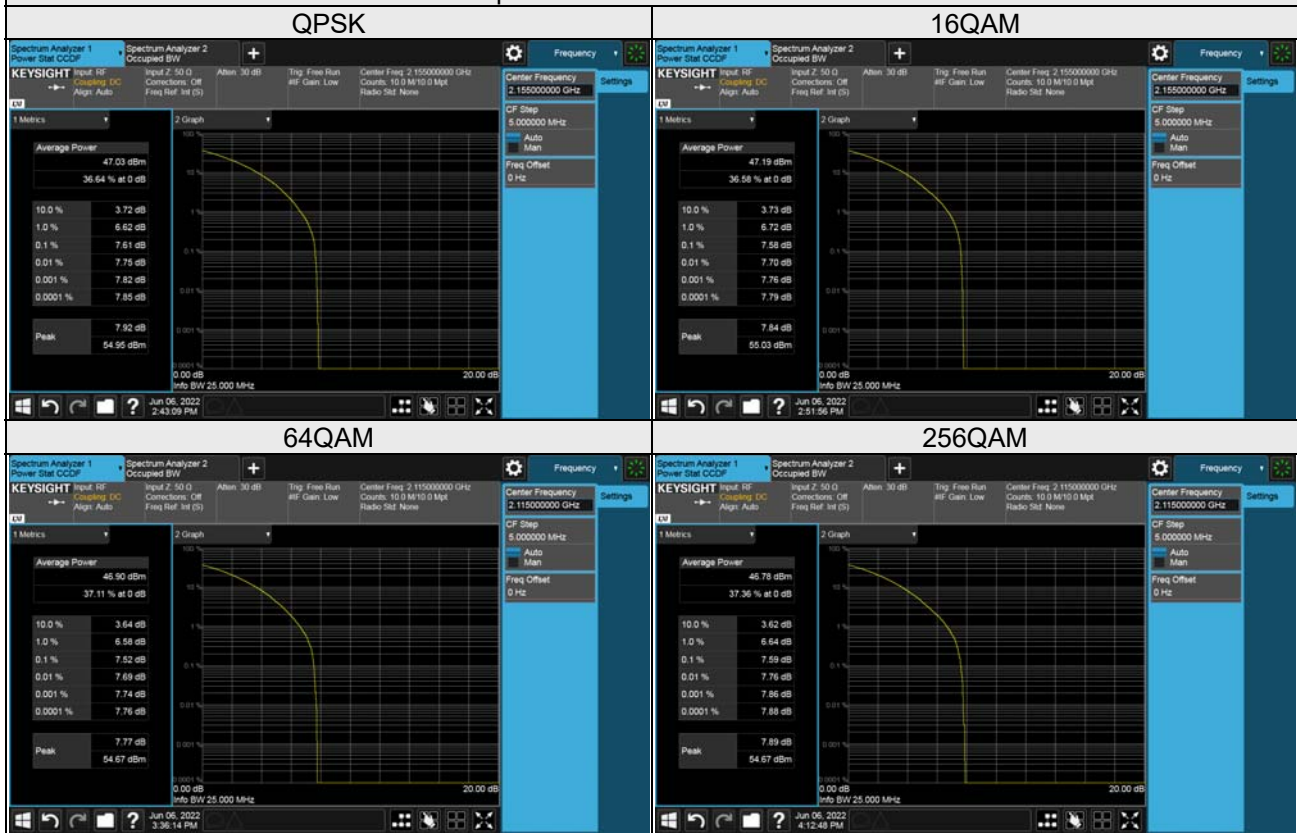
Spectrum Plot of Worst Value



10MHz

Channel Number	Freq. (MHz)	Peak-to-Average Power Ratio (dB)															
		Ant. TX0				Ant. TX1				Ant. TX2				Ant. TX3			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
423000	2115	7.56	7.53	7.50	7.59	7.57	7.53	7.51	7.59	7.56	7.56	7.50	7.56	7.57	7.54	7.52	7.57
431000	2155	7.61	7.56	7.49	7.57	7.58	7.58	7.48	7.57	7.57	7.55	7.49	7.59	7.56	7.55	7.49	7.57
439000	2195	7.56	7.50	7.50	7.56	7.55	7.49	7.48	7.59	7.54	7.49	7.47	7.56	7.57	7.52	7.48	7.57

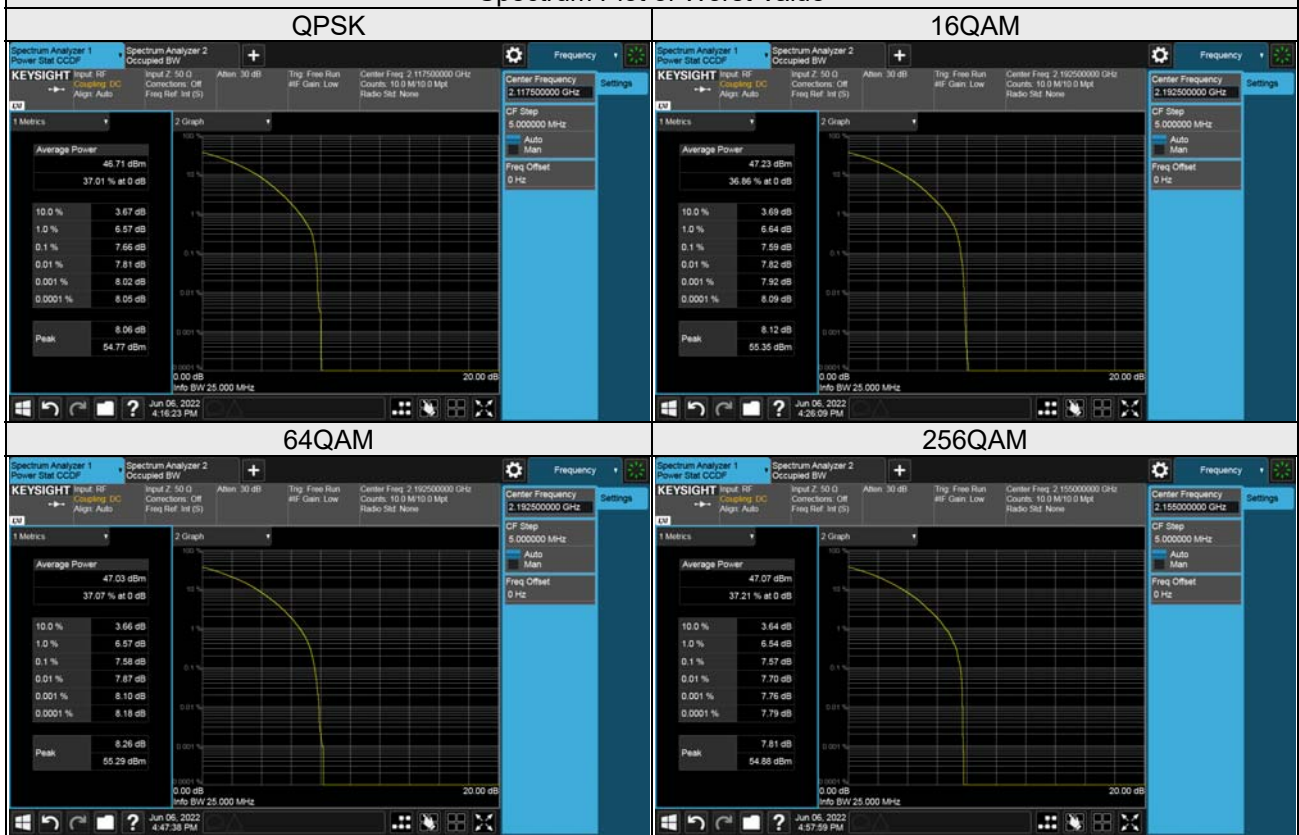
Spectrum Plot of Worst Value



15MHz

Channel Number	Freq. (MHz)	Peak-to-Average Power Ratio (dB)															
		Ant. TX0				Ant. TX1				Ant. TX2				Ant. TX3			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
423500	2117.5	7.66	7.56	7.54	7.51	7.63	7.53	7.51	7.54	7.62	7.51	7.54	7.52	7.63	7.56	7.56	7.52
431000	2155	7.62	7.58	7.55	7.52	7.63	7.56	7.56	7.57	7.62	7.57	7.55	7.55	7.62	7.56	7.56	7.54
438500	2192.5	7.59	7.56	7.52	7.54	7.57	7.56	7.54	7.51	7.62	7.57	7.58	7.54	7.57	7.59	7.51	7.52

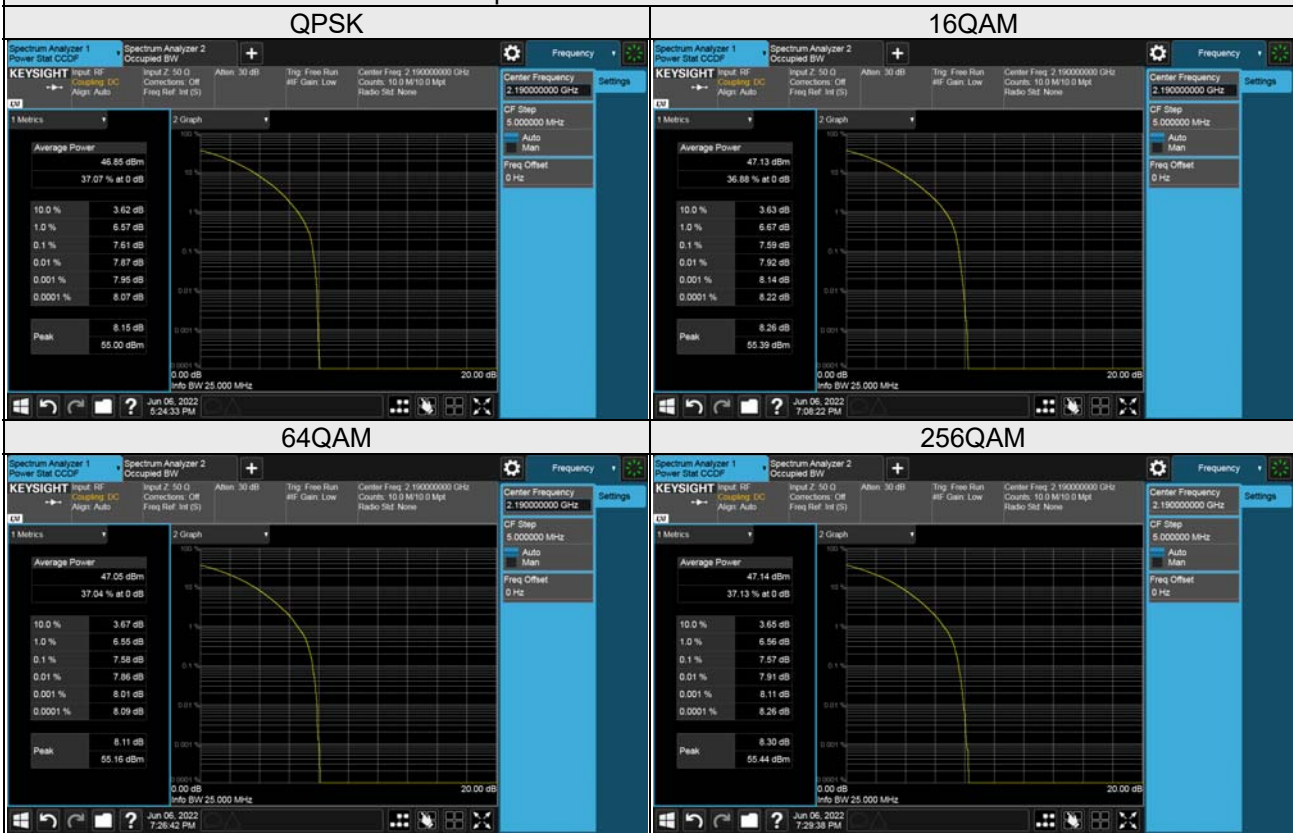
Spectrum Plot of Worst Value



20MHz

Channel Number	Freq. (MHz)	Peak-to-Average Power Ratio (dB)															
		Ant. TX0				Ant. TX1				Ant. TX2				Ant. TX3			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
424000	2120	7.59	7.58	7.53	7.54	7.54	7.57	7.54	7.55	7.55	7.58	7.57	7.54	7.59	7.58	7.57	7.53
431000	2155	7.57	7.48	7.54	7.52	7.60	7.48	7.53	7.53	7.56	7.50	7.49	7.50	7.57	7.54	7.52	7.51
438000	2190	7.60	7.59	7.56	7.55	7.61	7.57	7.53	7.56	7.60	7.52	7.57	7.56	7.59	7.53	7.58	7.57

Spectrum Plot of Worst Value

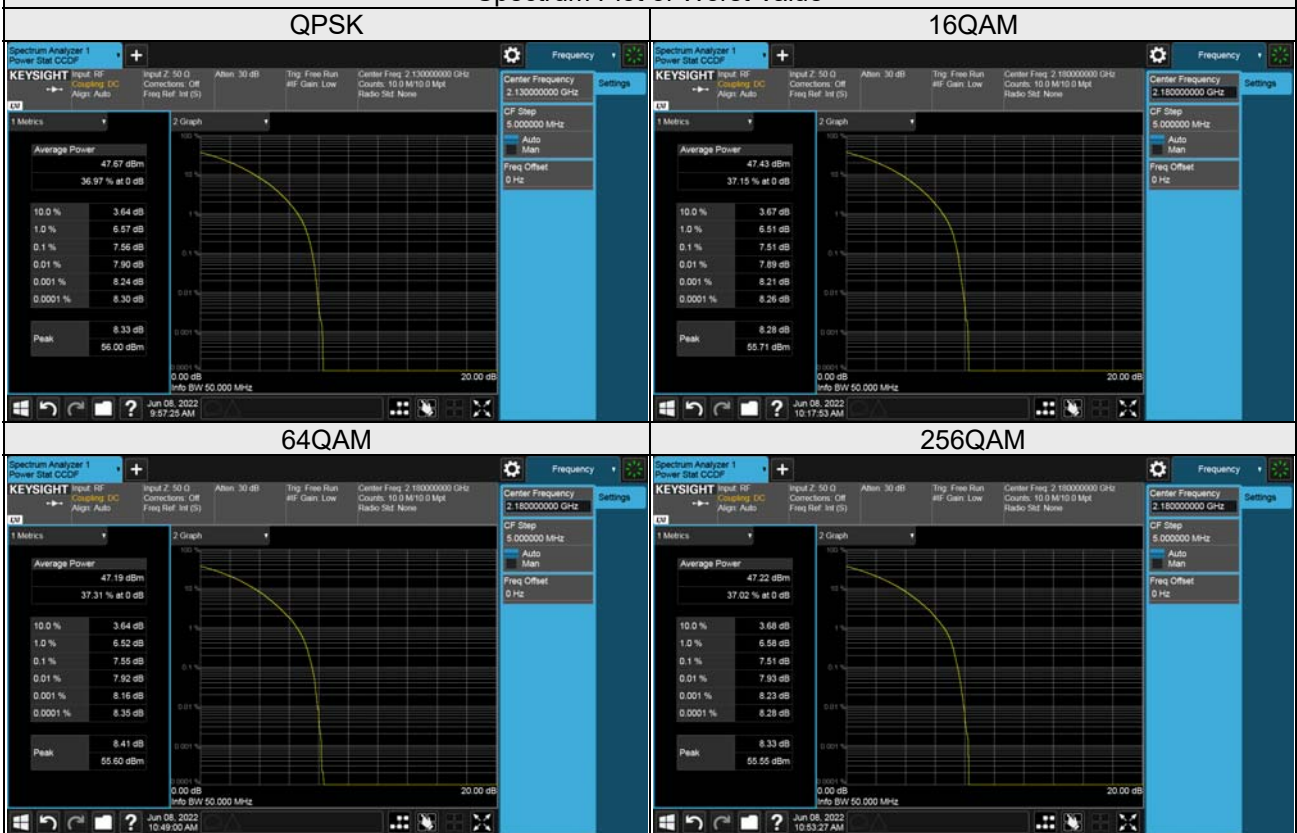


CA Contiguous

20MHz+20MHz

Channel Number	Freq. (MHz)	Peak-to-Average Power Ratio (dB)															
		Ant. TX0				Ant. TX1				Ant. TX2				Ant. TX3			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
424000+428000	2120.0+2140.0	7.52	7.46	7.49	7.48	7.49	7.45	7.44	7.46	7.49	7.43	7.45	7.47	7.56	7.47	7.47	7.49
429000+433000	2145.0+2165.0	7.40	7.36	7.36	7.35	7.39	7.35	7.35	7.36	7.40	7.34	7.33	7.35	7.39	7.35	7.36	7.37
434000+438000	2170.0+2190.0	7.55	7.51	7.48	7.50	7.55	7.47	7.48	7.50	7.52	7.50	7.50	7.51	7.52	7.49	7.55	7.45

Spectrum Plot of Worst Value

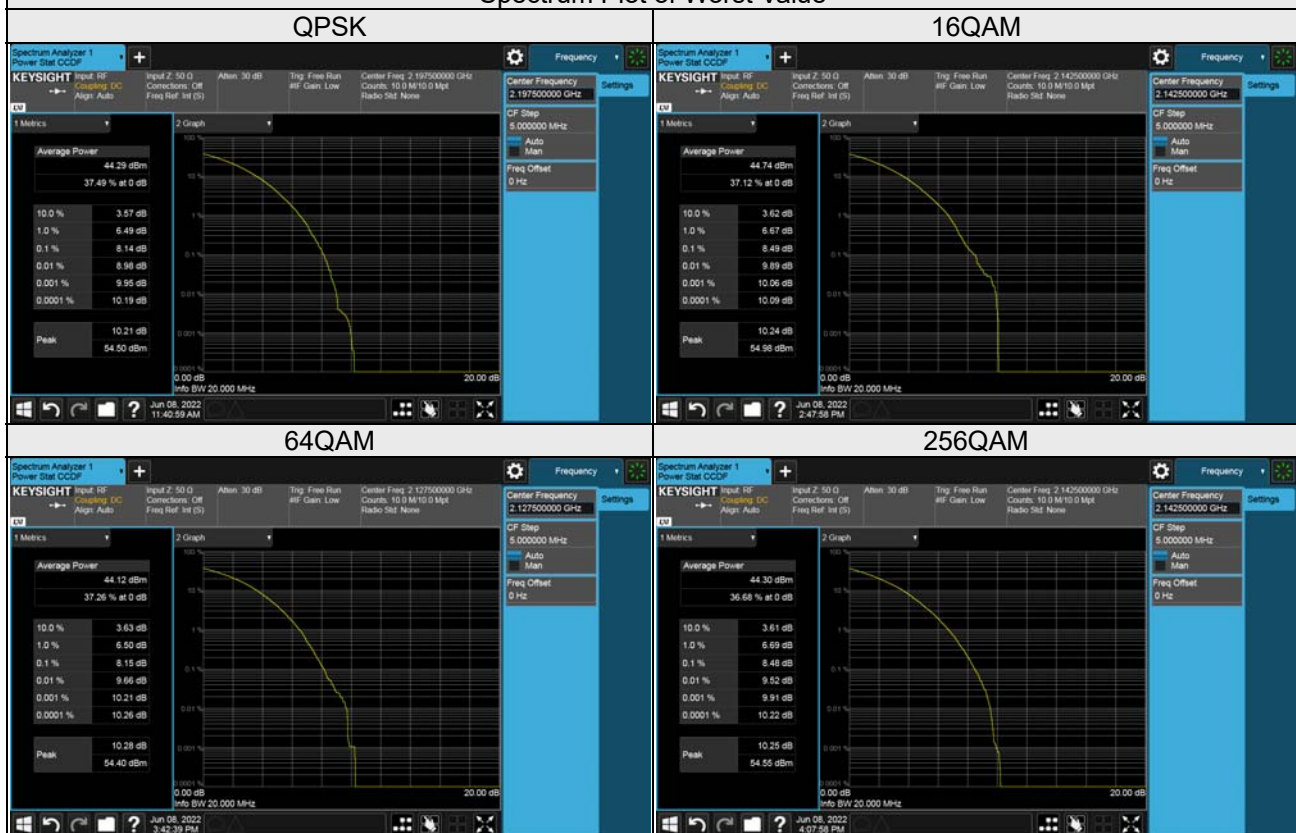


CA-Non-Contiguous

5MHz+5MHz

Channel Number	Freq. (MHz)	Peak-to-Average Power Ratio (dB)															
		Ant. TX0				Ant. TX1				Ant. TX2				Ant. TX3			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
422500+433500	2112.5+2167.5	8.13	8.38	8.09	8.32	8.02	8.35	8.11	8.31	8.12	8.31	8.13	8.32	8.12	8.48	8.10	8.30
425500+436500	2127.5+2182.5	8.08	8.35	8.10	8.27	8.09	8.37	8.15	8.29	8.13	8.30	8.08	8.29	8.08	8.38	8.06	8.29
428500+439500	2142.5+2197.5	8.14	8.35	8.14	8.48	8.12	8.37	8.15	8.32	8.09	8.27	8.14	8.33	8.13	8.49	8.13	8.30

Spectrum Plot of Worst Value

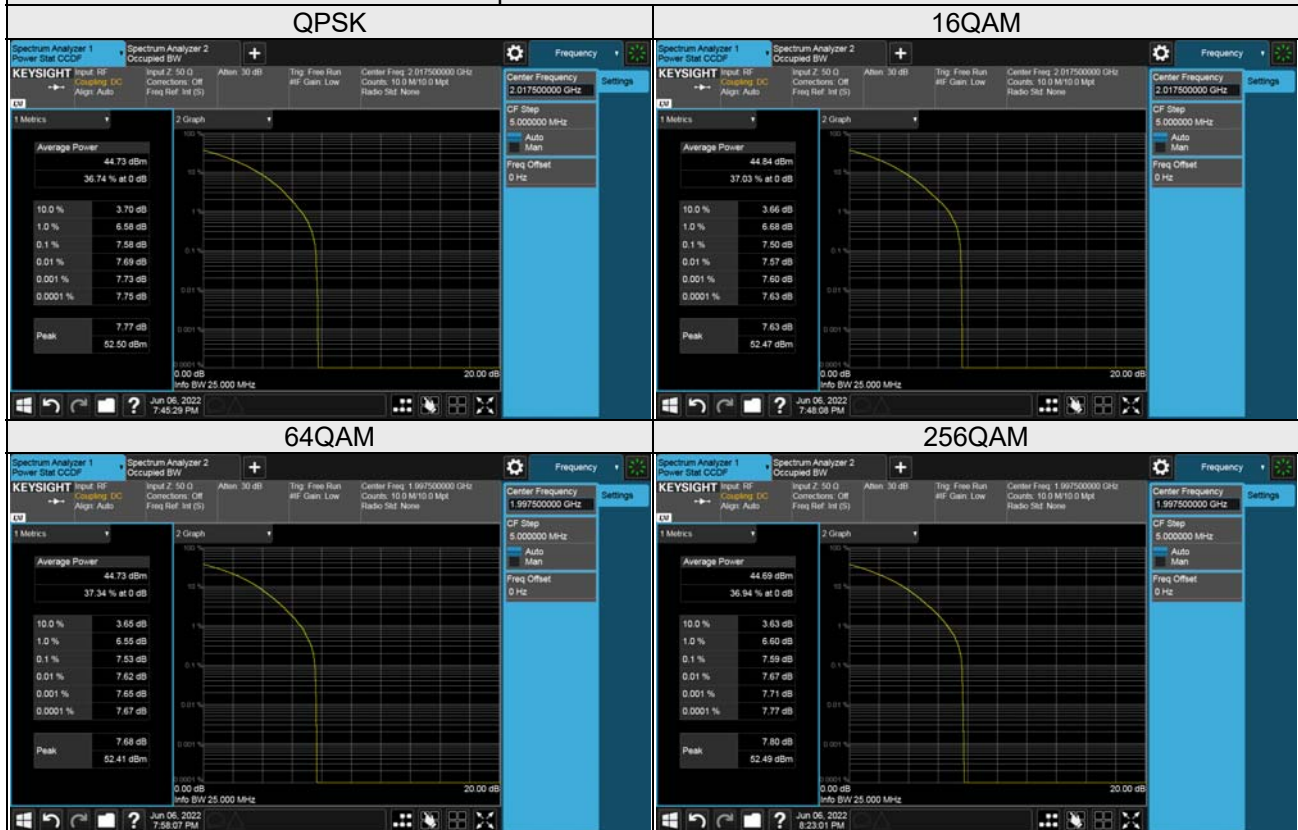


**Band n70
Single Carrier**

5MHz

Channel Number	Freq. (MHz)	Peak-to-Average Power Ratio (dB)															
		Ant. TX0				Ant. TX1				Ant. TX2				Ant. TX3			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
399500	1997.5	7.55	7.49	7.53	7.59	7.55	7.48	7.51	7.58	7.55	7.49	7.51	7.58	7.56	7.49	7.50	7.59
401500	2007.5	7.56	7.46	7.47	7.57	7.55	7.47	7.47	7.56	7.56	7.47	7.48	7.57	7.56	7.47	7.47	7.57
403500	2017.5	7.58	7.50	7.52	7.59	7.57	7.49	7.50	7.58	7.57	7.48	7.51	7.59	7.57	7.48	7.51	7.58

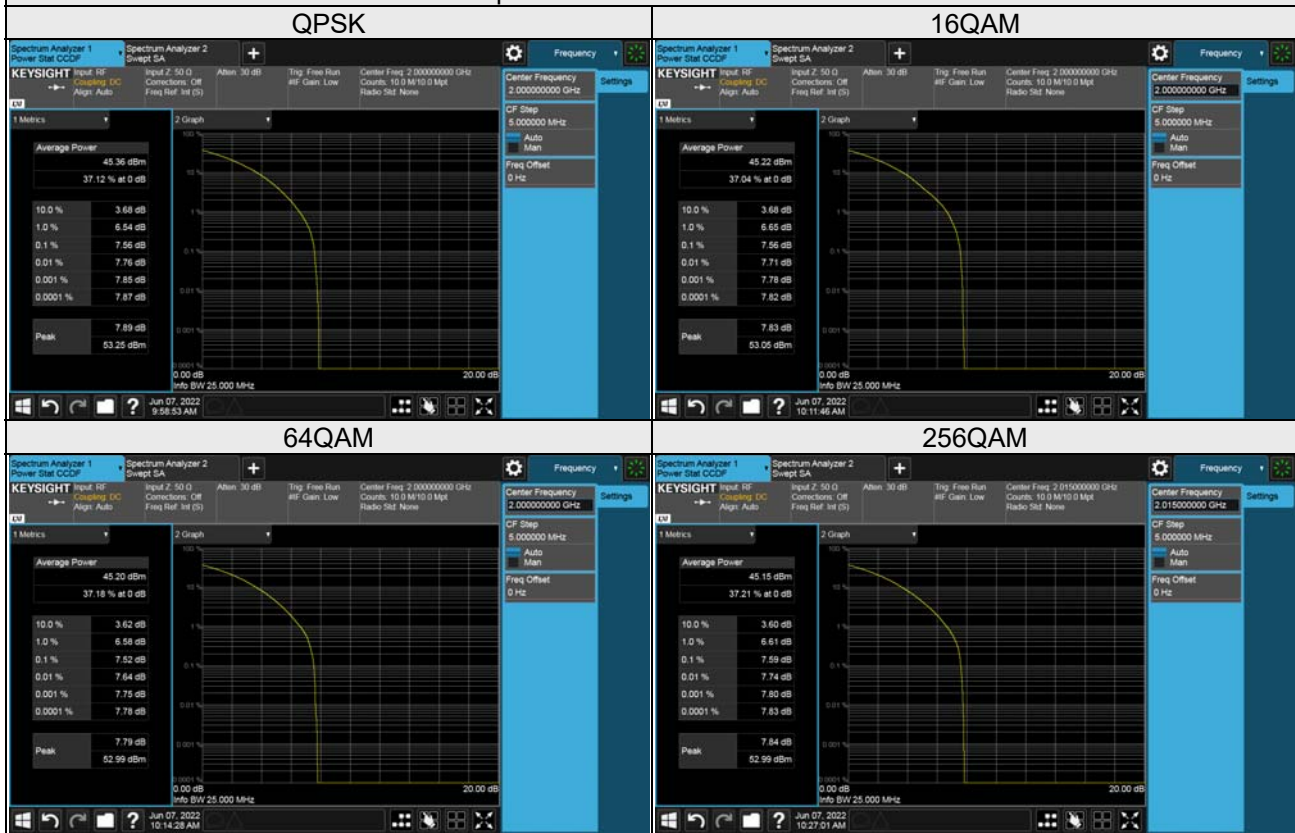
Spectrum Plot of Worst Value



10MHz

Channel Number	Freq. (MHz)	Peak-to-Average Power Ratio (dB)															
		Ant. TX0				Ant. TX1				Ant. TX2				Ant. TX3			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
400000	2000	7.55	7.53	7.52	7.57	7.56	7.56	7.52	7.57	7.56	7.53	7.52	7.60	7.56	7.55	7.51	7.55
401500	2007.5	7.55	7.50	7.48	7.56	7.56	7.52	7.48	7.57	7.53	7.51	7.48	7.58	7.53	7.50	7.49	7.57
403000	2015	7.54	7.51	7.52	7.57	7.55	7.51	7.52	7.58	7.55	7.50	7.52	7.59	7.54	7.51	7.51	7.58

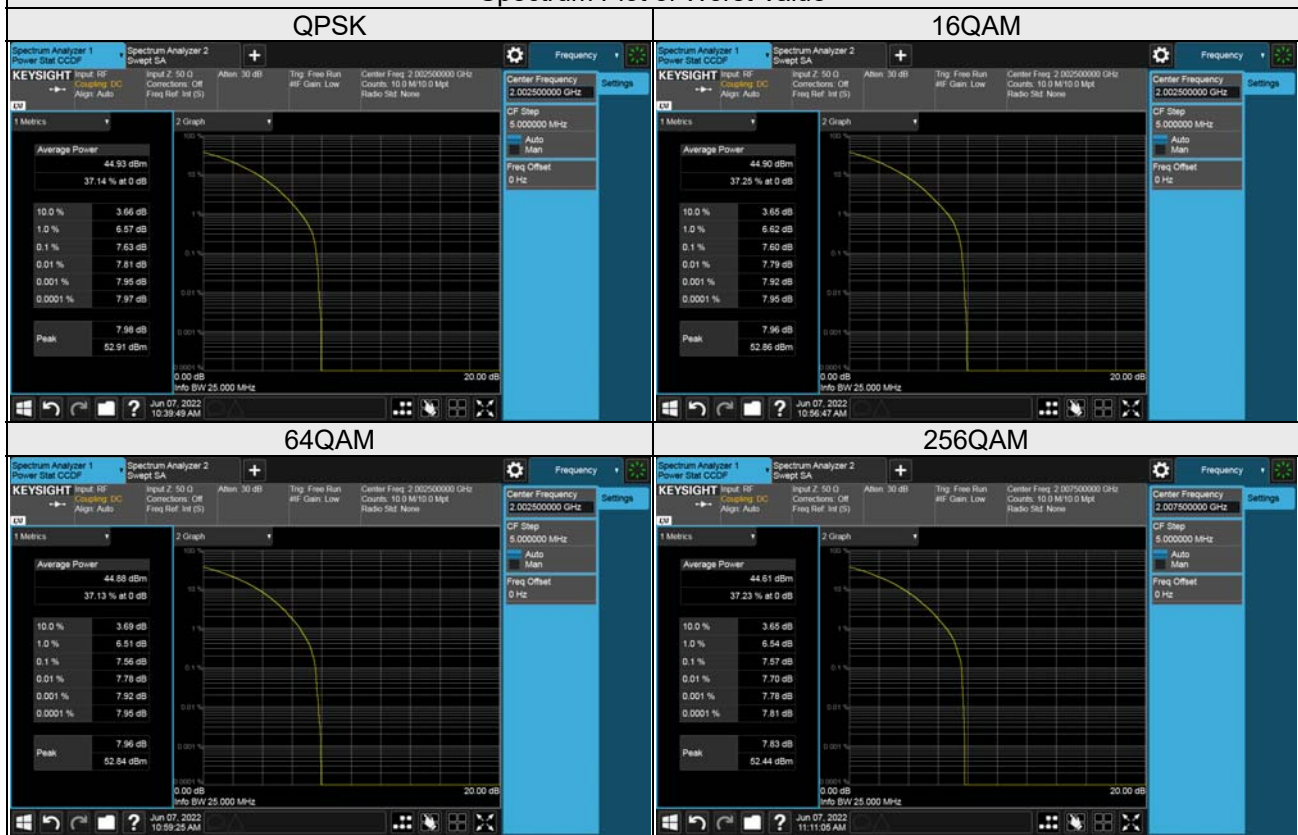
Spectrum Plot of Worst Value



15MHz

Channel Number	Freq. (MHz)	Peak-to-Average Power Ratio (dB)															
		Ant. TX0				Ant. TX1				Ant. TX2				Ant. TX3			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
400500	2002.5	7.62	7.59	7.54	7.51	7.61	7.57	7.56	7.50	7.63	7.58	7.52	7.49	7.60	7.60	7.50	7.54
401500	2007.5	7.60	7.56	7.53	7.53	7.61	7.57	7.52	7.56	7.61	7.54	7.53	7.55	7.62	7.57	7.50	7.57
402500	2012.5	7.60	7.55	7.53	7.53	7.58	7.57	7.56	7.55	7.57	7.56	7.55	7.56	7.61	7.57	7.51	7.54

Spectrum Plot of Worst Value



20MHz

Channel Number	Freq. (MHz)	Peak-to-Average Power Ratio (dB)															
		Ant. TX0				Ant. TX1				Ant. TX2				Ant. TX3			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
401000	2005	7.59	7.56	7.54	7.55	7.54	7.56	7.58	7.55	7.58	7.54	7.58	7.57	7.56	7.53	7.59	7.57
401500	2007.5	7.59	7.54	7.57	7.53	7.59	7.53	7.53	7.54	7.60	7.52	7.56	7.55	7.60	7.55	7.55	7.56
402000	2010	7.59	7.53	7.55	7.56	7.61	7.56	7.59	7.56	7.58	7.58	7.55	7.55	7.61	7.57	7.56	7.55

Spectrum Plot of Worst Value



25MHz

Channel Number	Freq. (MHz)	Peak-to-Average Power Ratio (dB)															
		Ant. TX0				Ant. TX1				Ant. TX2				Ant. TX3			
		QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
401500	2007.5	7.52	7.52	7.55	7.53	7.54	7.56	7.58	7.55	7.55	7.54	7.53	7.54	7.56	7.57	7.55	7.53

Spectrum Plot of Worst Value

