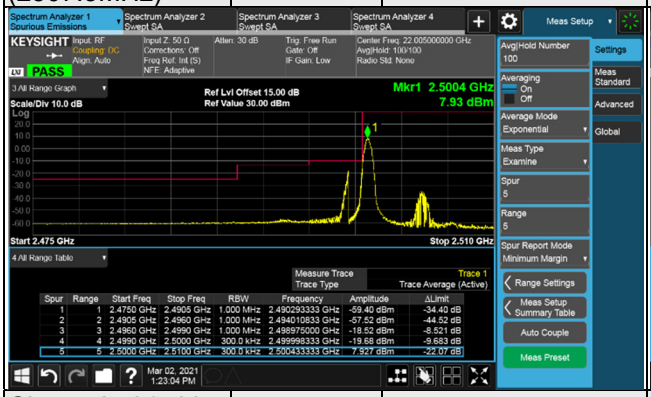
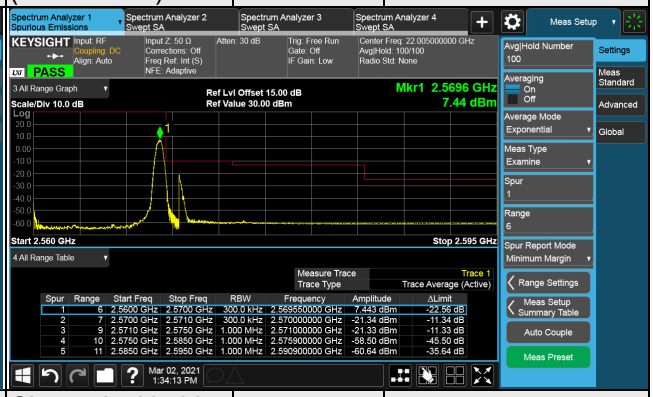
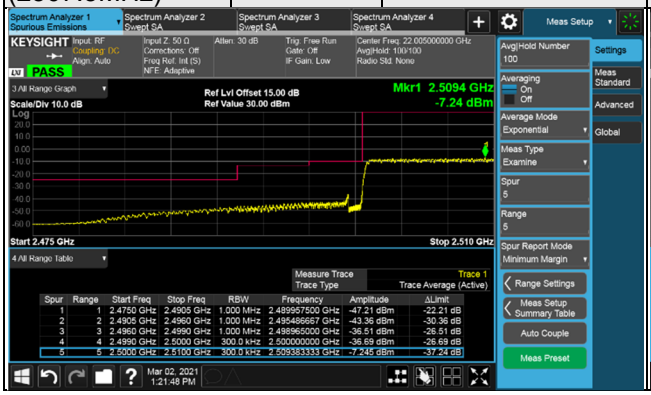
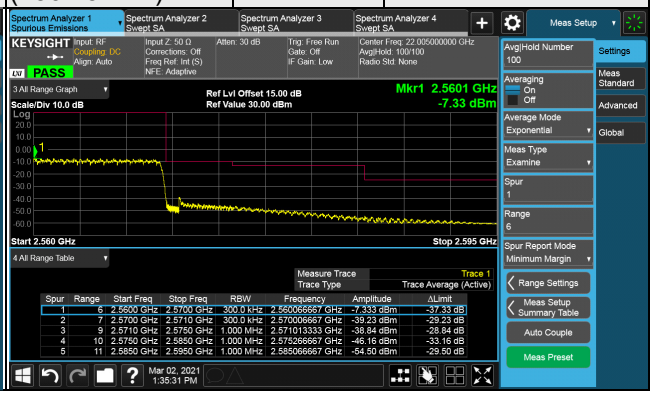
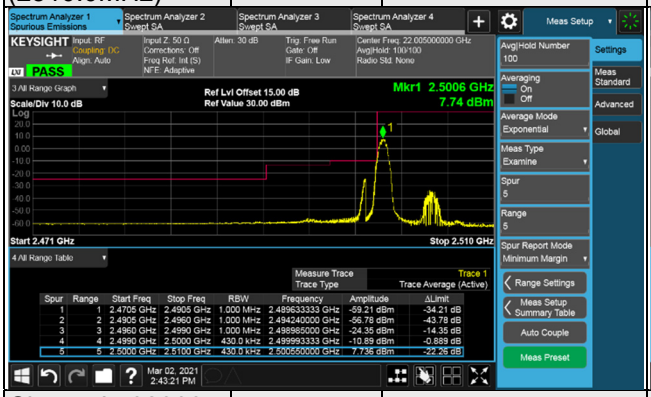
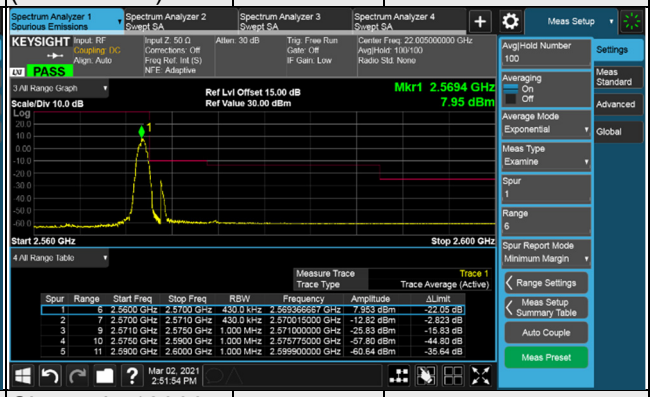
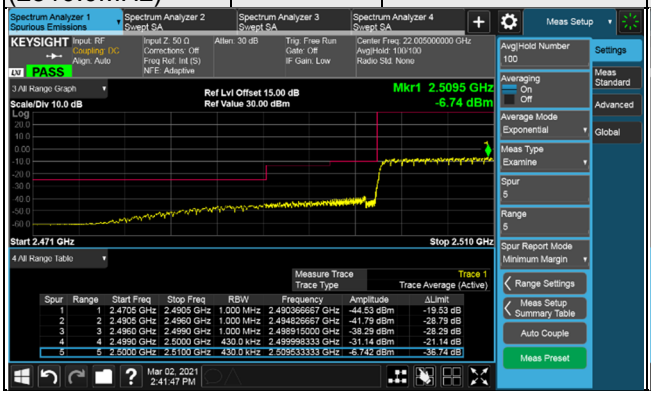
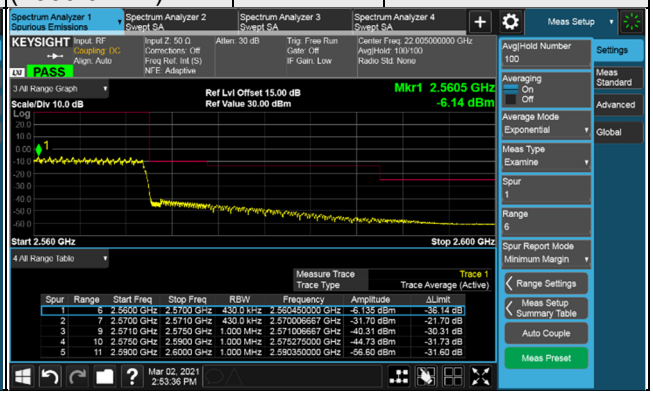
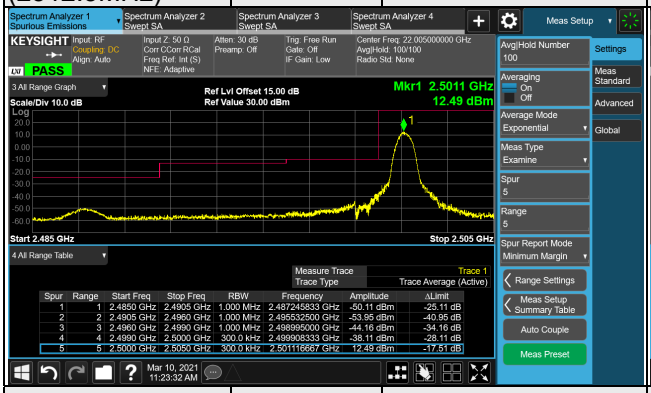
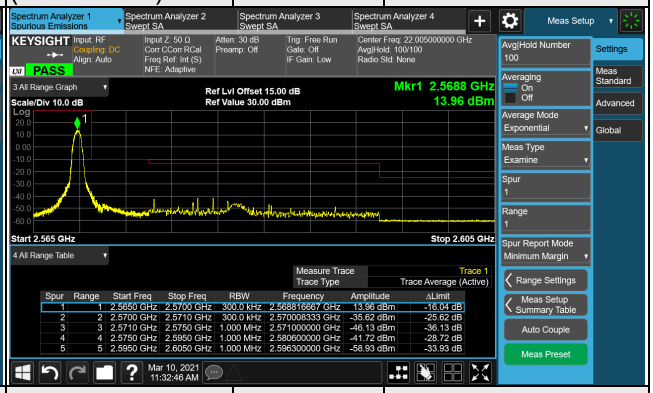
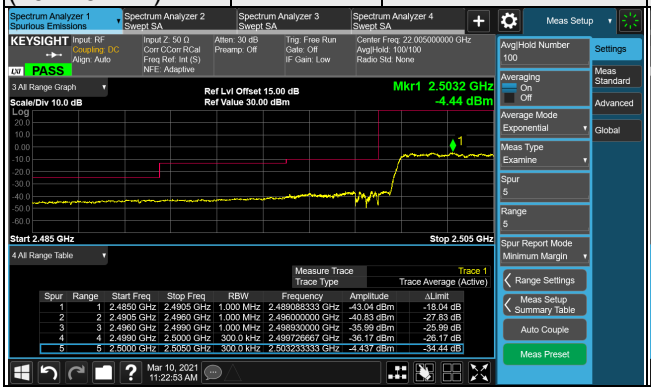
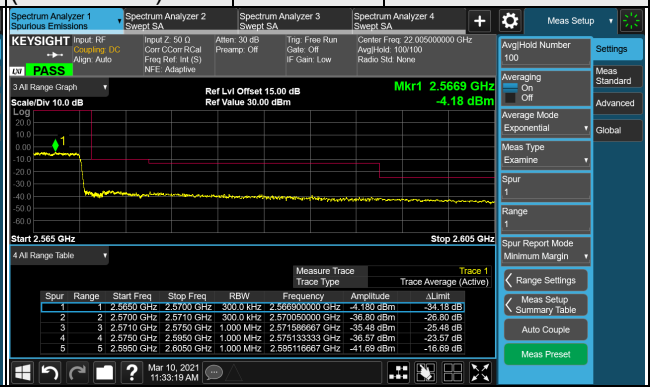
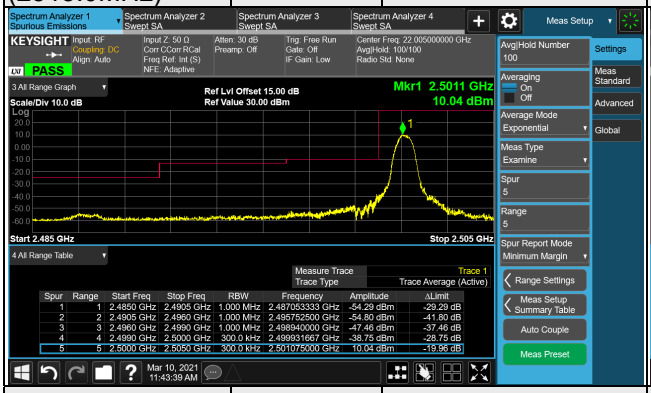
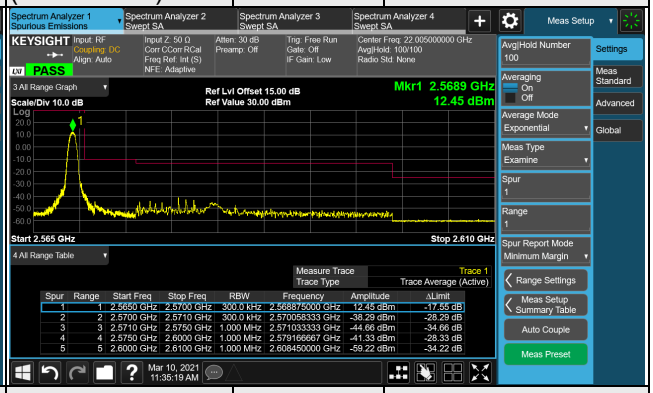
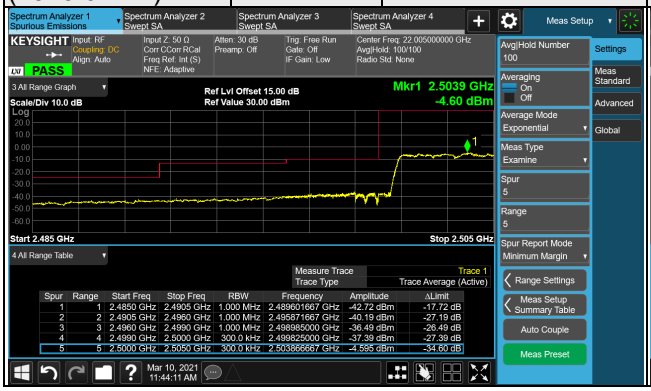
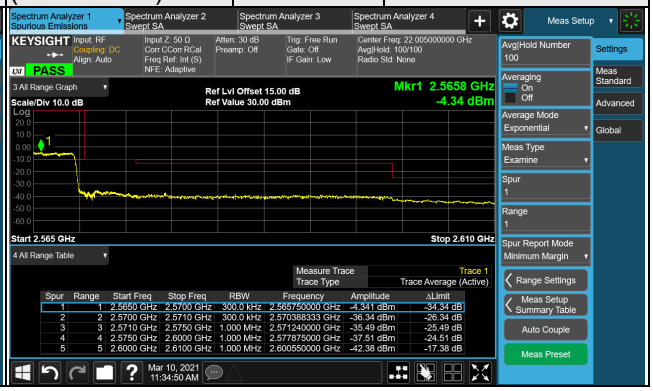
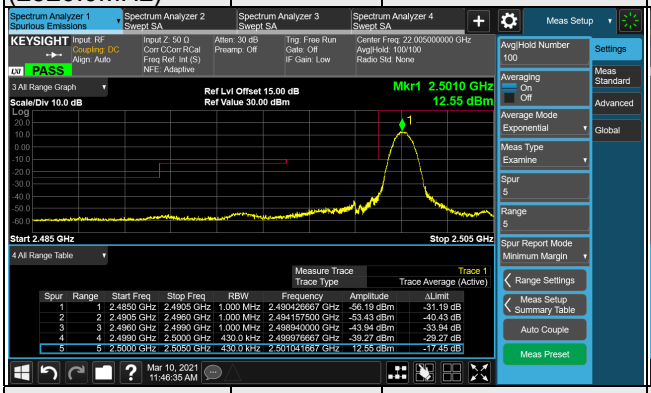
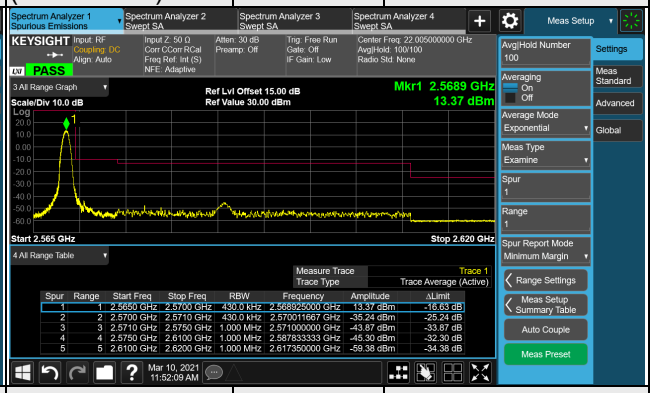
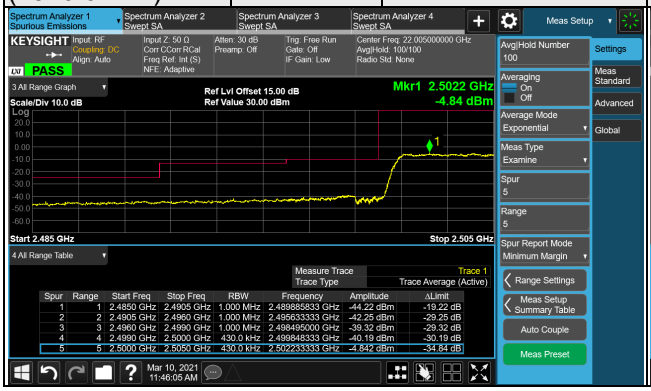
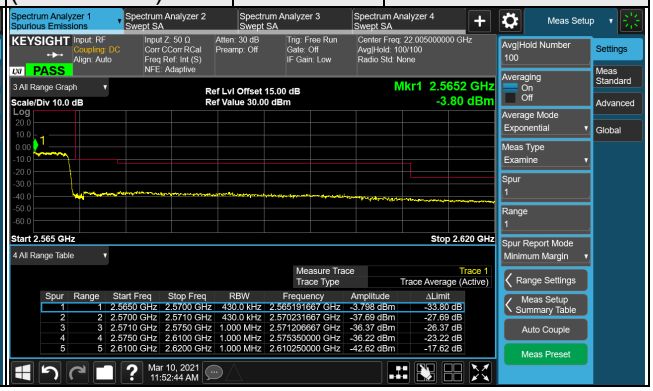
n7, Channel Bandwidth 15MHz					
Channel 501500 (2507.5MHz)	QPSK	1 RB / 0 RB Offset	Channel 512500 (2562.5MHz)	QPSK	1 RB / 78 RB Offset
					
Channel 501500 (2507.5MHz)	QPSK	79 RB / 0 RB Offset	Channel 512500 (2562.5MHz)	QPSK	79 RB / 0 RB Offset
					

n7, Channel Bandwidth 20MHz					
Channel 502000 (2510.0MHz)	QPSK	1 RB / 0 RB Offset	Channel 512000 (2560.0MHz)	QPSK	1 RB / 105 RB Offset
					
Channel 502000 (2510.0MHz)	QPSK	106 RB / 0 RB Offset	Channel 512000 (2560.0MHz)	QPSK	106 RB / 0 RB Offset
					

n7, Channel Bandwidth 25MHz					
Channel 502500 (2512.5MHz)	QPSK	1 RB / 0 RB Offset	Channel 511500 (2557.5MHz)	QPSK	1 RB / 132 RB Offset
					
Channel 502500 (2512.5MHz)	QPSK	133 RB / 0 RB Offset	Channel 511500 (2557.5MHz)	QPSK	133 RB / 0 RB Offset
					

n7, Channel Bandwidth 30MHz					
Channel 503000 (2515.0MHz)	QPSK	1 RB / 0 RB Offset	Channel 511000 (2555.0MHz)	QPSK	1 RB / 159 RB Offset
					
Channel 503000 (2515.0MHz)	QPSK	160 RB / 0 RB Offset	Channel 511000 (2555.0MHz)	QPSK	160 RB / 0 RB Offset
					

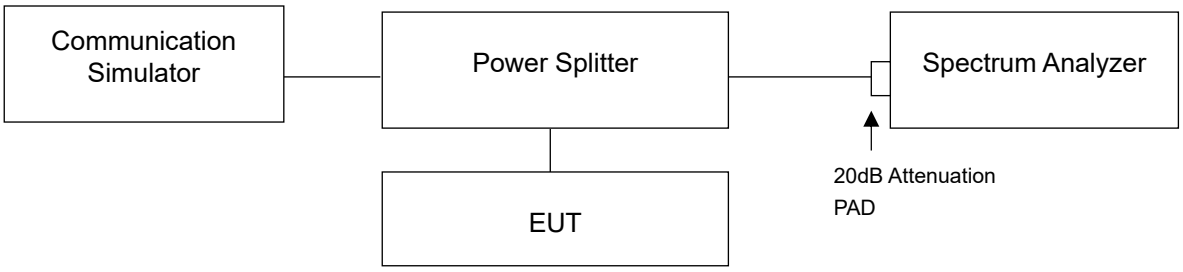
n7, Channel Bandwidth 40MHz					
Channel 504000 (2520.0MHz)	QPSK	1 RB / 0 RB Offset	Channel 510000 (2550.0MHz)	QPSK	1 RB / 215 RB Offset
					
Channel 504000 (2520.0MHz)	QPSK	216 RB / 0 RB Offset	Channel 510000 (2550.0MHz)	QPSK	216 RB / 0 RB Offset
					

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



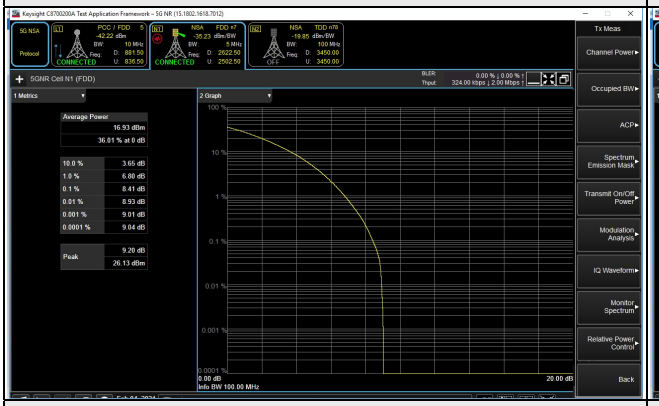
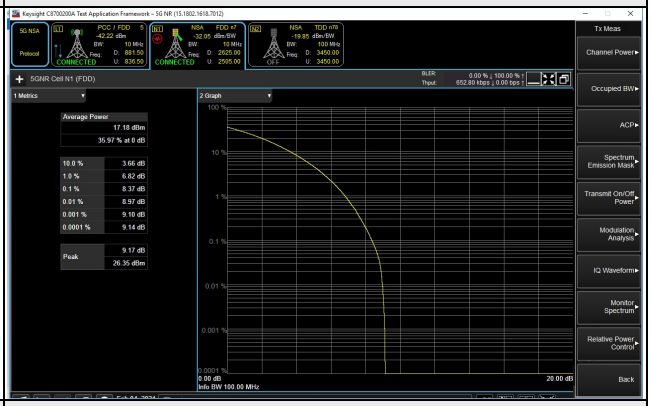
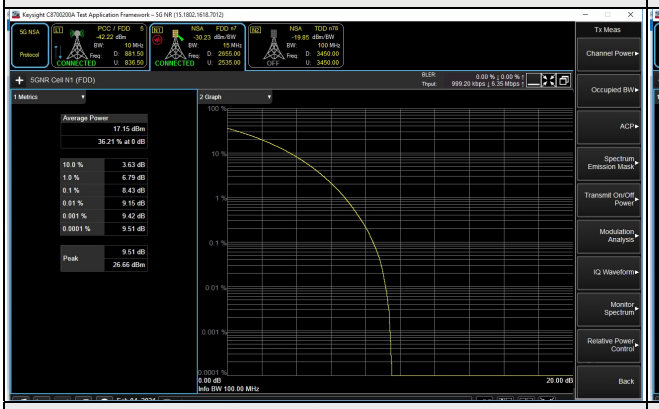
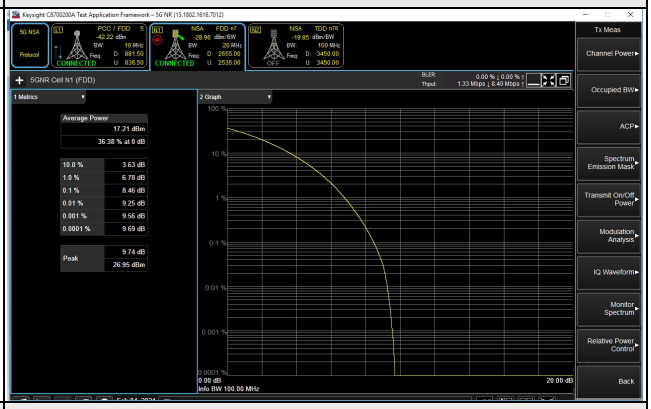
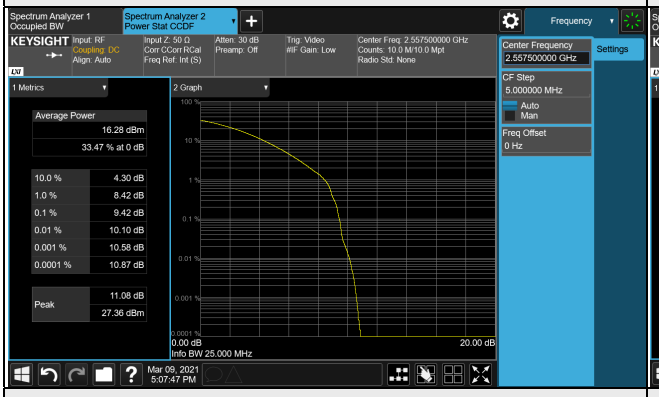
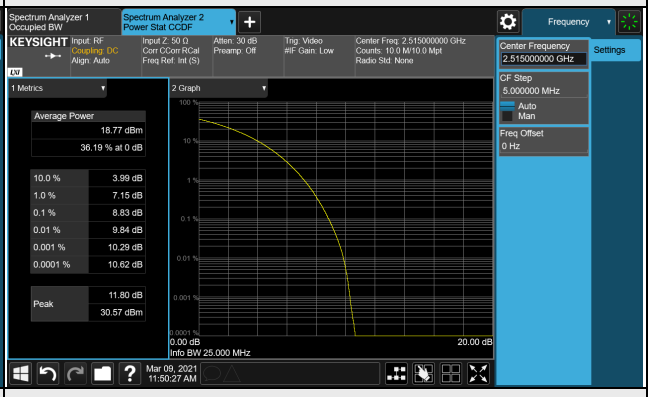
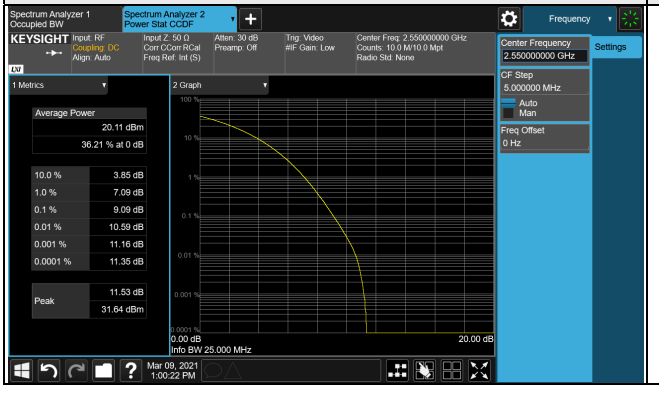
4.6.3 Test Procedures

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

4.6.4 Test Results

n7, Channel Bandwidth 5MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
500500	2502.5	3.70	5.93	5.94	6.62	8.41
507000	2535.0	3.95	6.55	6.60	7.03	8.40
513500	2567.5	3.82	6.31	6.18	6.74	8.25
n7, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
501000	2505.0	3.79	6.13	5.99	6.45	8.37
507000	2535.0	4.02	6.64	6.66	7.08	8.36
513000	2565.0	3.91	6.30	6.35	6.77	8.34
n7, Channel Bandwidth 15MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
501500	2507.5	3.99	6.16	6.32	6.71	8.31
507000	2535.0	4.02	6.61	6.60	7.12	8.43
512500	2562.5	3.98	6.37	6.39	6.86	8.24
n7, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
502000	2510.0	4.00	6.42	6.34	6.74	8.41
507000	2535.0	3.84	6.56	6.57	6.97	8.46
512000	2560.0	3.84	6.47	6.46	6.90	8.39
n7, Channel Bandwidth 25MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
502500	2512.5	4.75	6.52	6.86	7.86	8.57
507000	2535.0	4.40	6.96	7.35	7.89	8.70
511500	2557.5	4.66	7.74	7.95	8.21	9.42

n7, Channel Bandwidth 30MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
503000	2515.0	4.92	7.10	7.40	7.82	8.83
507000	2535.0	4.53	7.13	7.29	7.69	8.67
511000	2555.0	4.98	7.22	7.28	7.81	8.62
n7, Channel Bandwidth 40MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
504000	2520.0	5.08	6.32	6.73	8.16	9.07
507000	2535.0	5.14	6.39	6.66	7.99	9.00
510000	2550.0	4.88	6.50	6.92	8.28	9.09

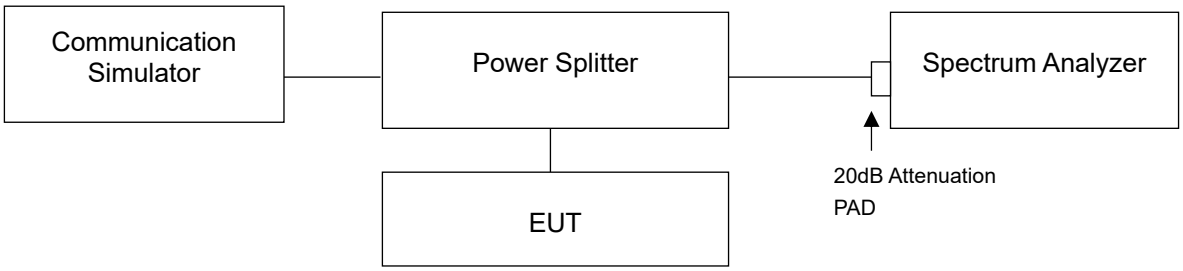
Spectrum Plot of Worst Value	
5MHz / 256QAM	10MHz / 256QAM
	
15MHz / 256QAM	20MHz / 256QAM
	
25MHz / 256QAM	30MHz / 256QAM
	
40MHz / 256QAM	
	

4.7 Conducted Spurious Emissions

4.7.1 Limits of Conducted Spurious Emissions Measurement

In the FCC 27.53(m)(4),On any frequency outside a licensee's frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least 55 + 10 log (P) dB. The emission limit equal to –25dBm.

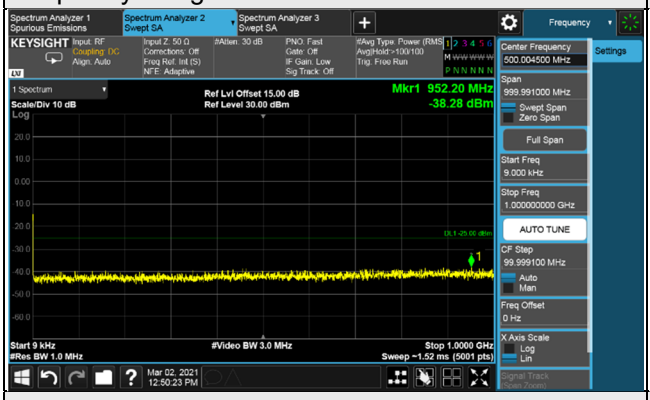
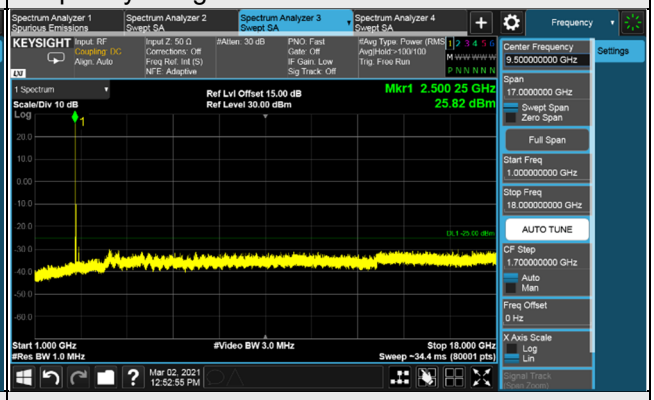
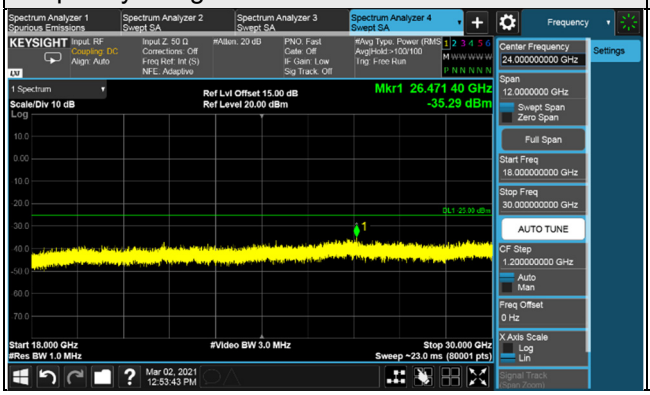
4.7.2 Test Setup



4.7.3 Test Procedure

a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
b. Measuring frequency range is from 9kHz to 30GHz. 20dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz are used for conducted emission measurement.

4.7.4 Test Results

n7, Channel Bandwidth 5MHz	
Channel 500500 (2502.5MHz)	
Frequency Range : 9kHz ~ 1GHz	Frequency Range : 1GHz ~ 18GHz
	
Frequency Range : 18GHz ~ 30GHz	
	

*The 9kHz signal over the limit is from Spectrum.