

n41, Channel Bandwidth 100MHz

Channel 509202
(2546.01MHz)

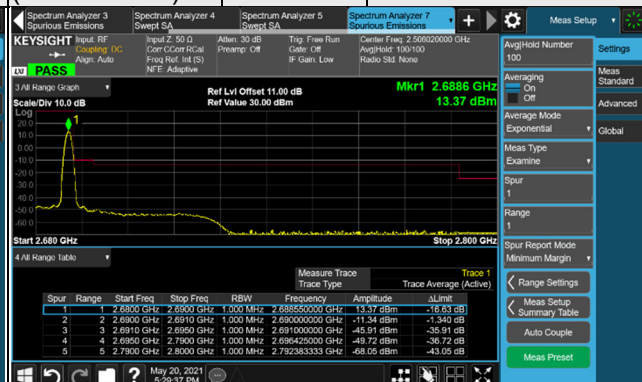
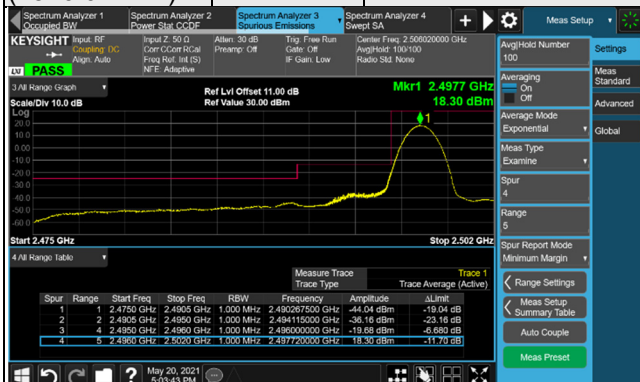
QPSK

1 RB / 0 RB Offset

Channel 528000
(2640.00MHz)

QPSK

1 RB / 272 RB Offset



Channel 509202
(2546.01MHz)

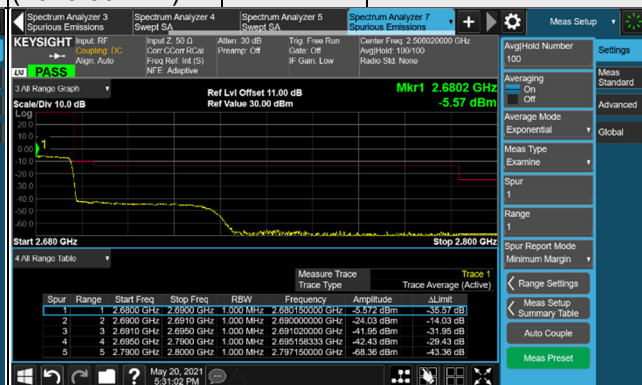
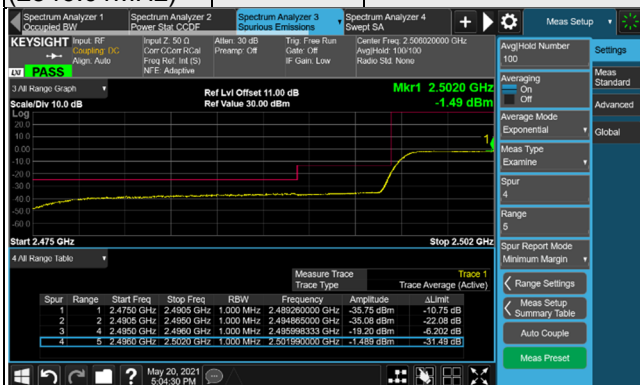
QPSK

273 RB / 0 RB Offset

Channel 528000
(2640.00MHz)

QPSK

273 RB / 0 RB Offset

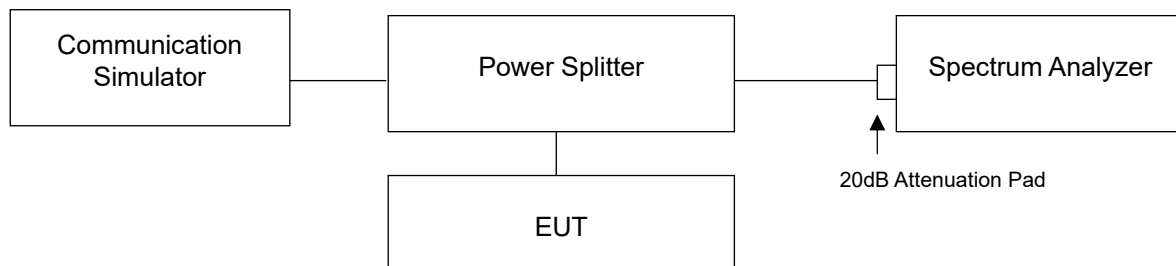


4.6 Peak to Average Ratio

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

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

4.6.4 Test Results

n41, Channel Bandwidth: 10MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
500202	2501.01	6.74	7.66	7.30	6.39	8.09
518598	2592.99	7.00	7.98	7.36	6.31	8.15
537000	2685.00	6.98	8.00	7.31	6.28	8.08
n41, Channel Bandwidth: 15MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
500700	2503.50	6.73	7.64	7.30	6.38	8.09
518598	2592.99	6.99	7.38	7.38	6.39	8.17
536496	2682.48	6.97	7.91	7.33	6.36	8.09
n41, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
501204	2506.02	6.70	7.66	7.27	6.30	8.06
518598	2592.99	6.96	7.94	7.31	6.35	8.12
535998	2679.99	6.92	7.90	7.24	6.34	8.05
n41, Channel Bandwidth 40MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
503202	2516.01	6.78	7.92	7.29	6.34	8.12
518598	2592.99	6.98	7.95	7.34	6.35	8.17
534000	2670.00	6.92	7.86	7.27	6.31	8.09
n41, Channel Bandwidth 50MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
504204	2521.02	6.82	7.81	7.29	6.39	8.12
518598	2592.99	6.99	8.00	7.31	6.39	8.16
532998	2664.99	6.93	7.93	7.25	6.36	8.08

n41, Channel Bandwidth 60MHz

Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
505200	2526.00	6.83	7.81	7.34	6.39	8.18
518598	2592.99	7.01	8.01	7.39	6.39	8.22
531996	2659.98	6.95	7.95	7.33	6.36	8.15

n41, Channel Bandwidth 80MHz

Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
507204	2536.02	6.78	7.78	7.30	6.31	8.13
518598	2592.99	7.01	8.08	7.35	6.34	8.18
529998	2649.99	6.99	8.06	7.32	6.29	8.13

n41, Channel Bandwidth 90MHz

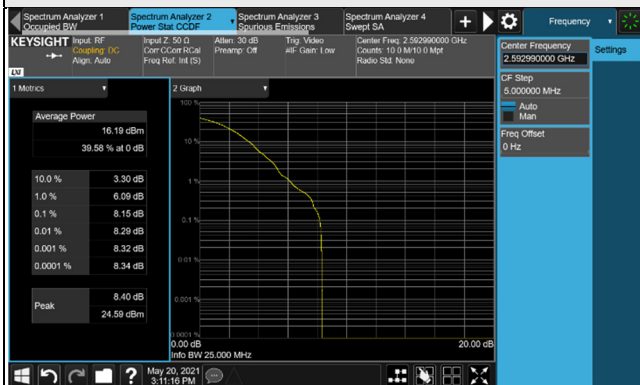
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
508200	2541.00	6.94	7.73	7.30	6.31	8.11
518598	2592.99	6.99	8.07	7.32	6.37	8.18
528996	2644.98	7.03	8.00	7.30	6.34	8.13

n41, Channel Bandwidth 100MHz

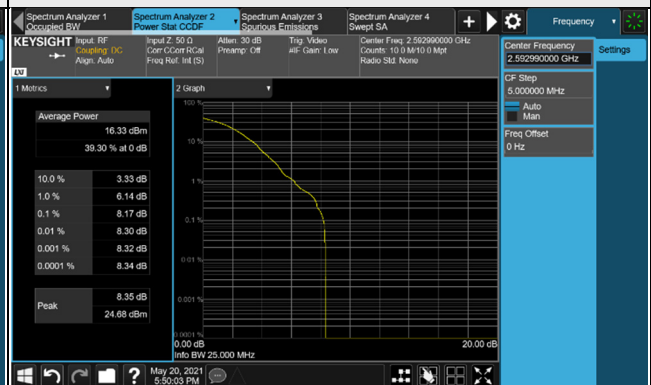
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
509202	2546.01	6.64	7.58	7.22	6.38	8.06
518598	2592.99	6.99	8.01	7.32	6.39	8.18
528000	2640.00	7.00	8.03	7.30	6.38	8.13

Spectrum Plot of Worst Value

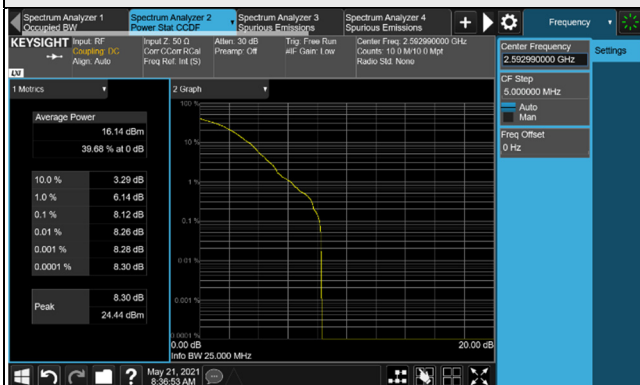
10MHz / 256QAM



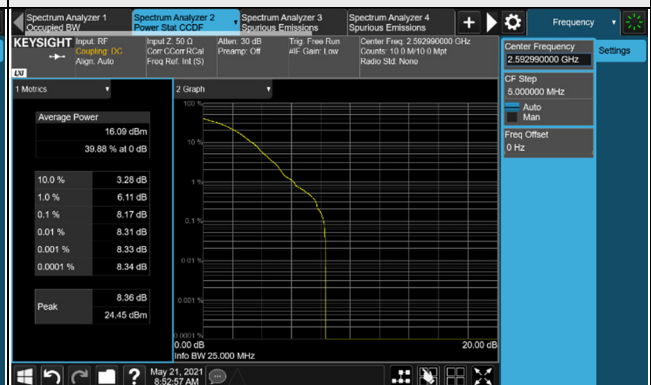
15MHz / 256QAM



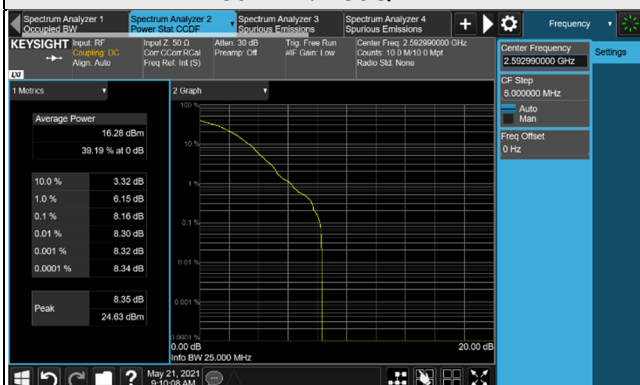
20MHz / 256QAM



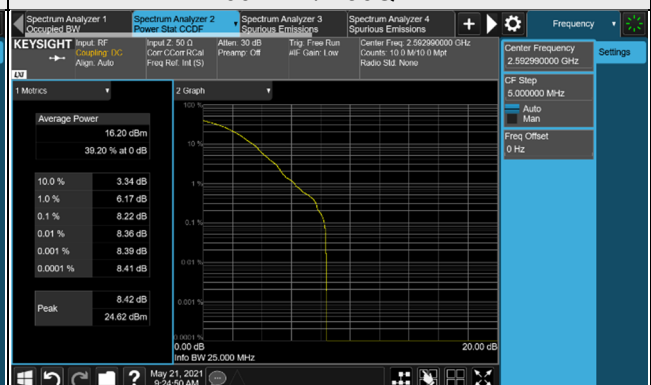
40MHz / 256QAM



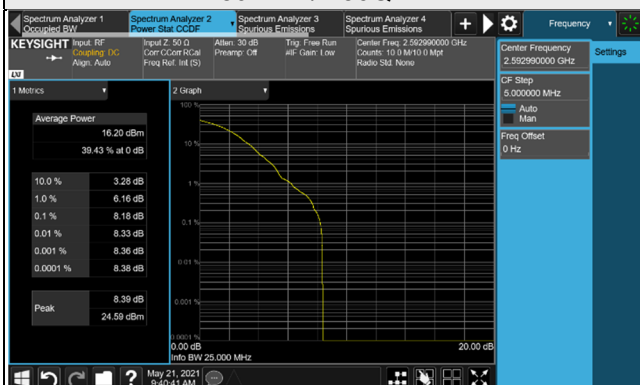
50MHz / 256QAM



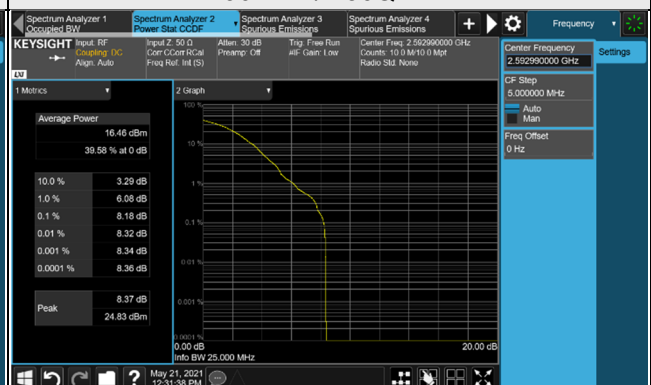
60MHz / 256QAM

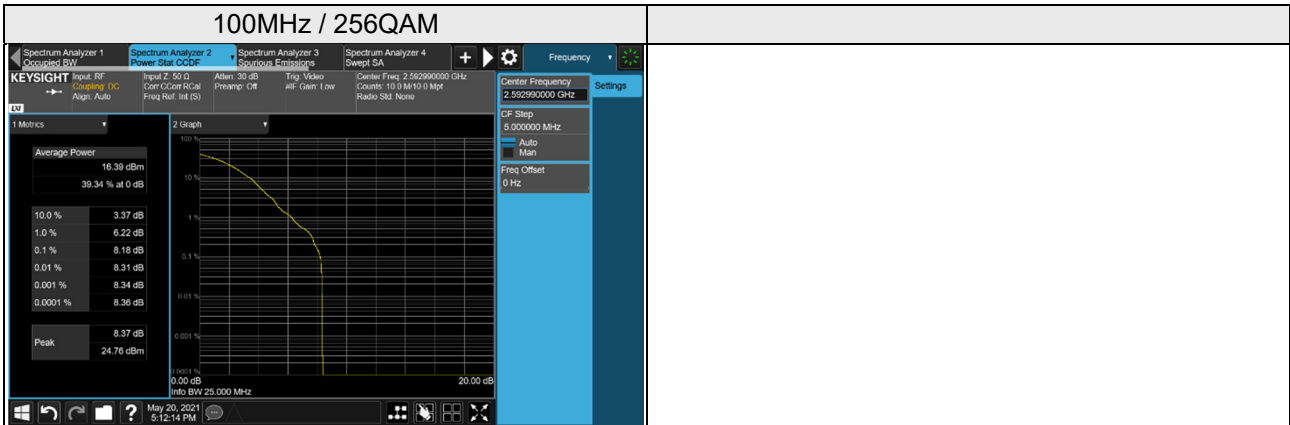


80MHz / 256QAM



90MHz / 256QAM



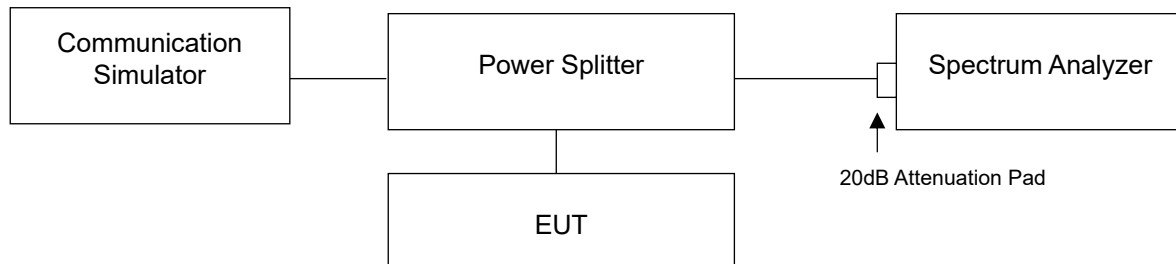


4.7 Conducted Spurious Emissions

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

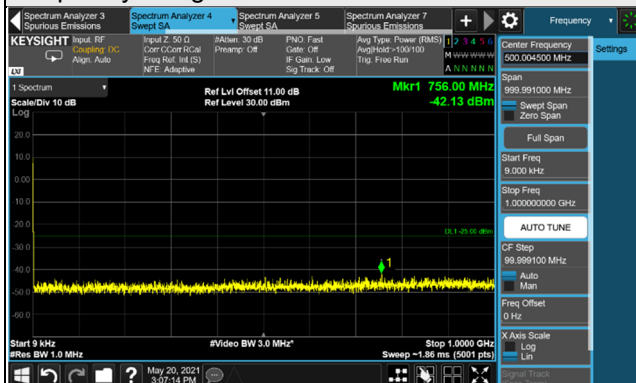
- All measurements were done at low and high channels operational frequency range.
- Measuring frequency range is from 9kHz to 30GHz. 20dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz are used for conducted emission measurement

4.7.4 Test Results

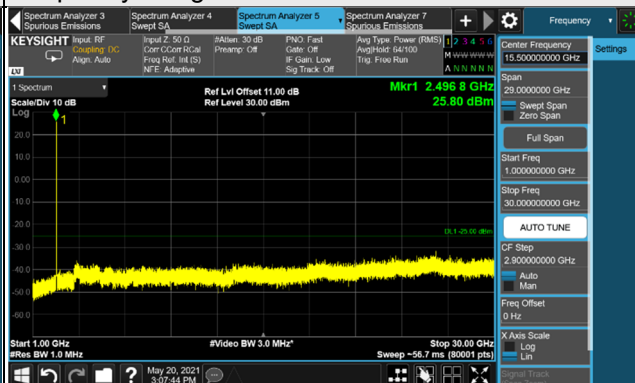
n41, Channel Bandwidth 10MHz

Channel 500202 (2501.01MHz)

Frequency Range : 9kHz ~ 1GHz

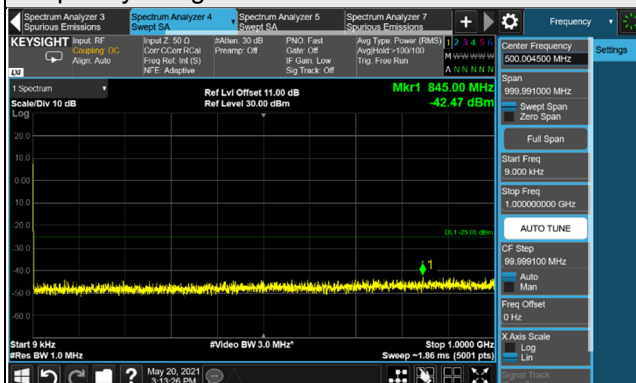


Frequency Range : 1GHz ~ 30GHz

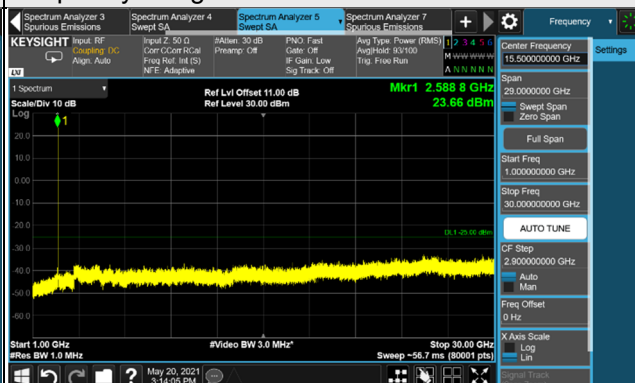


Channel 518598 (2592.99MHz)

Frequency Range : 9kHz ~ 1GHz

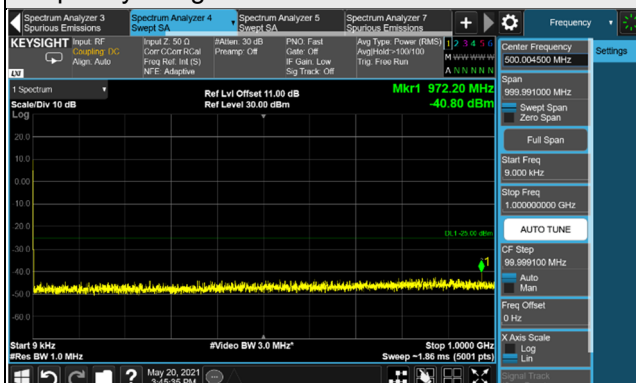


Frequency Range : 1GHz ~ 30GHz

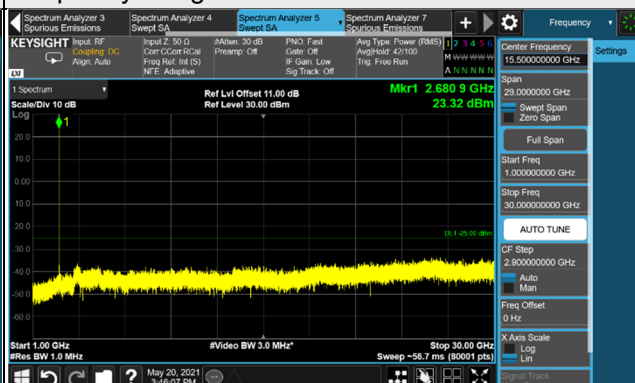


Channel 537000 (2685.00MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 30GHz

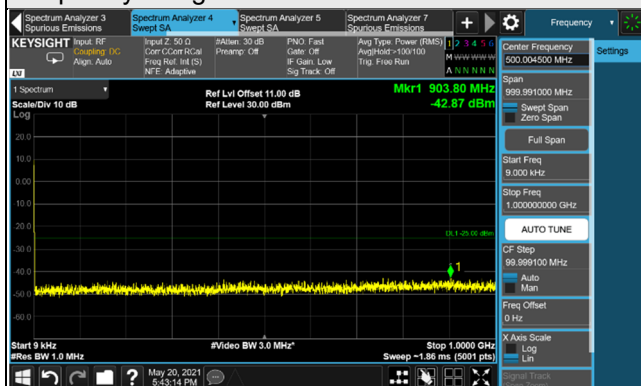


*The 9kHz signal over the limit is from Spectrum.

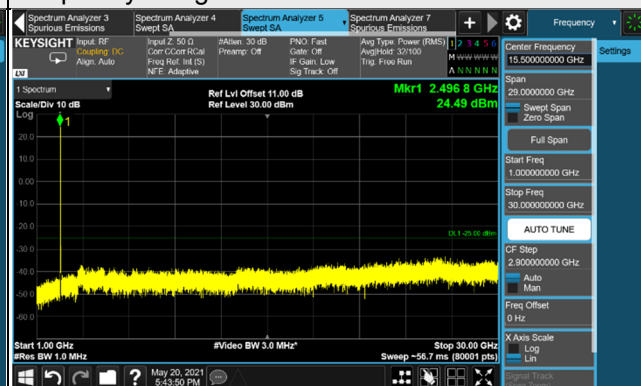
n41, Channel Bandwidth 15MHz

Channel 500700 (2503.50MHz)

Frequency Range : 9kHz ~ 1GHz

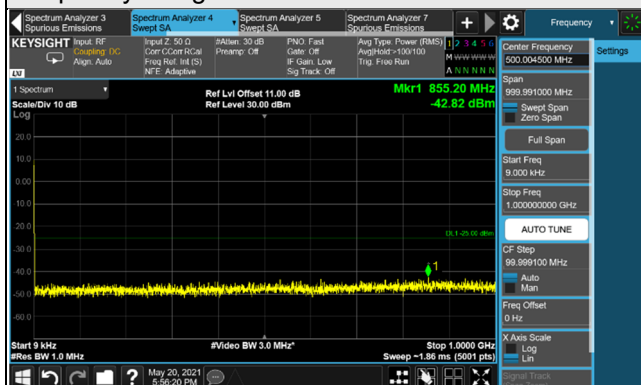


Frequency Range : 1GHz ~ 30GHz

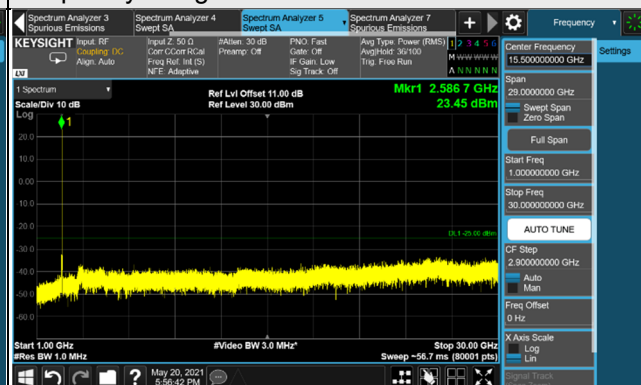


Channel 518598 (2592.99MHz)

Frequency Range : 9kHz ~ 1GHz

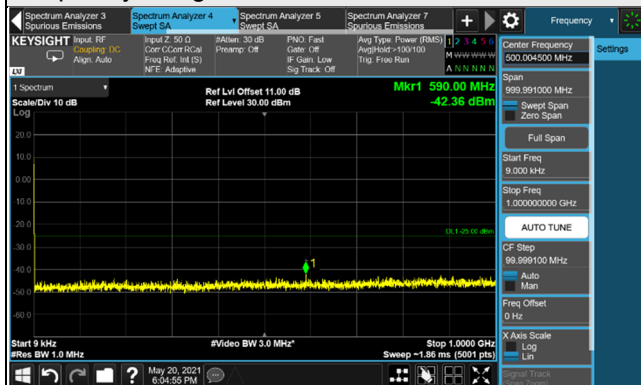


Frequency Range : 1GHz ~ 30GHz

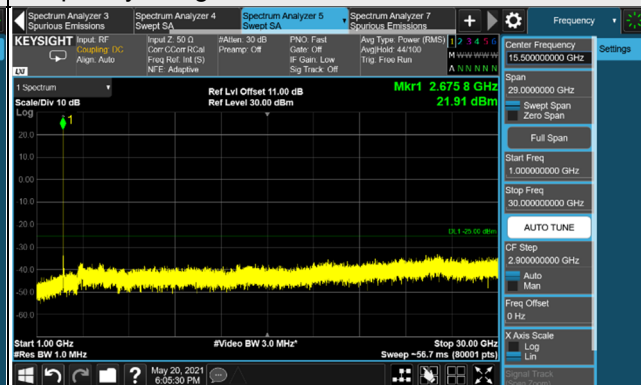


Channel 536496 (2682.48MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 30GHz



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