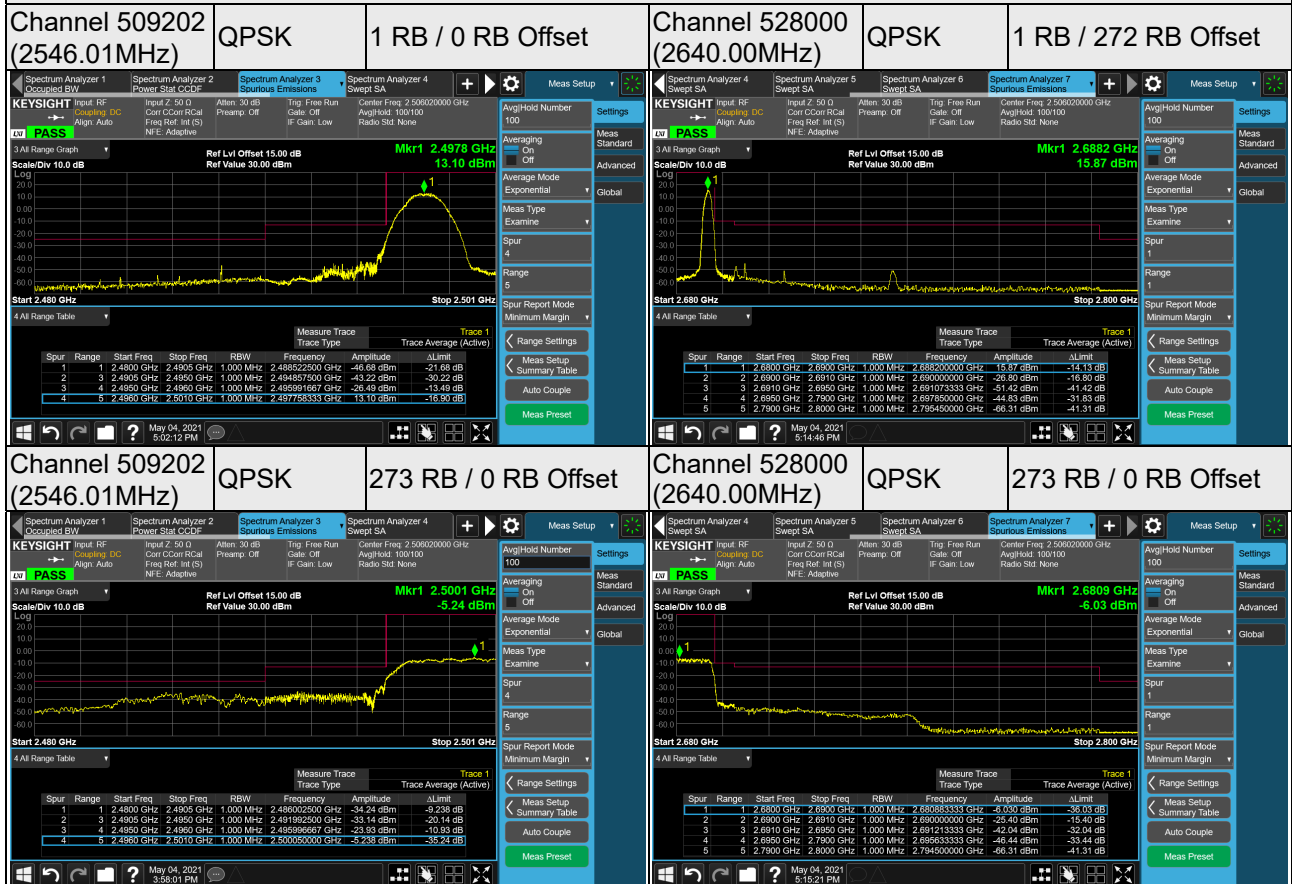


n41, Channel Bandwidth 100MHz

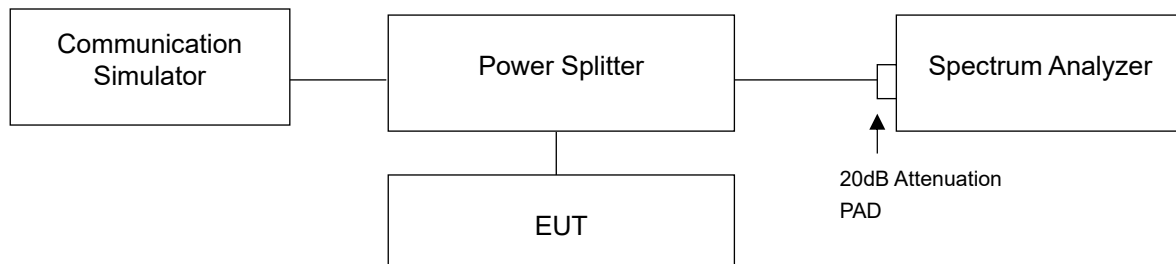


4.6 Peak to Average Ratio

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%.

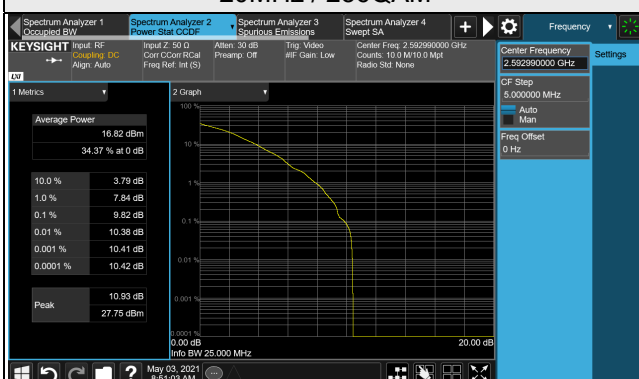
4.6.4 Test Results

n41, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
501204	2506.02	5.13	6.53	6.94	7.90	8.80
518598	2592.99	5.17	7.73	8.01	7.82	9.82
535998	2679.99	5.06	6.66	7.17	8.95	9.36
n41, Channel Bandwidth 30MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
502200	2511.00	4.74	6.69	7.27	8.20	10.19
518598	2592.99	4.93	7.39	7.83	8.36	10.04
534996	2674.98	5.03	6.64	7.45	8.79	9.74
n41, Channel Bandwidth 40MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
503202	2516.01	4.63	7.21	7.21	8.01	9.15
518598	2592.99	4.44	6.69	7.33	7.99	9.30
534000	2670.00	5.09	6.51	7.53	8.32	9.02
n41, Channel Bandwidth 50MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
504204	2521.02	4.51	5.94	6.65	8.10	9.02
518598	2592.99	4.88	7.01	7.88	7.47	9.24
532998	2664.99	5.06	7.01	7.84	7.36	9.09
n41, Channel Bandwidth 60MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
505200	2526.00	4.59	5.87	6.02	7.82	9.85
518598	2592.99	4.74	7.14	7.69	7.53	9.62
531996	2659.98	4.51	5.97	6.28	7.74	8.96

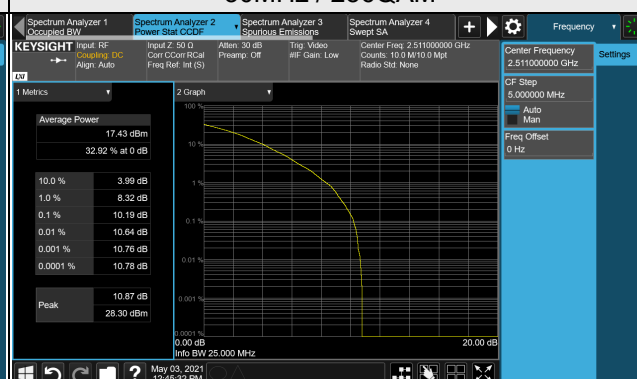
n41, Channel Bandwidth 80MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
507204	2536.02	4.56	5.87	6.05	7.68	9.17
518598	2592.99	4.66	5.97	6.16	7.90	9.81
529998	2649.99	4.80	6.37	6.85	8.36	10.00
n41, Channel Bandwidth 90MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
508200	2541.00	4.58	7.83	5.95	7.34	9.51
518598	2592.99	4.43	7.04	6.05	7.75	9.40
528996	2644.98	4.82	6.45	6.92	8.16	9.53
n41, Channel Bandwidth 100MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
509202	2546.01	4.44	7.79	8.05	7.61	8.94
518598	2592.99	4.86	7.46	6.08	7.95	9.76
528000	2640.00	4.93	6.32	6.91	8.39	10.16

Spectrum Plot of Worst Value

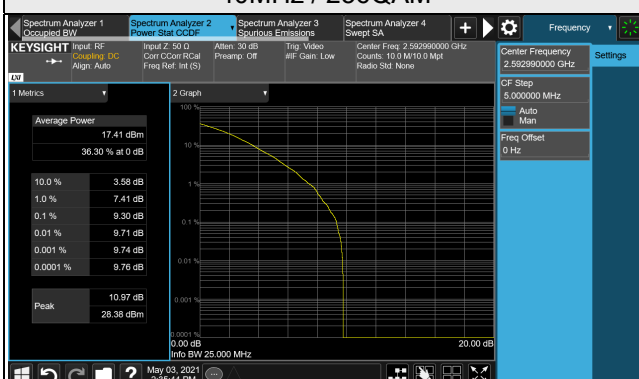
20MHz / 256QAM



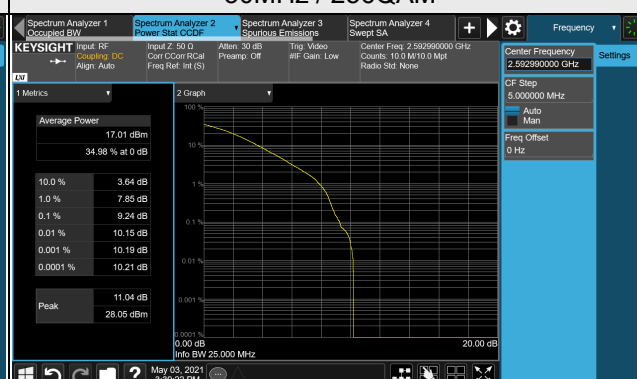
30MHz / 256QAM



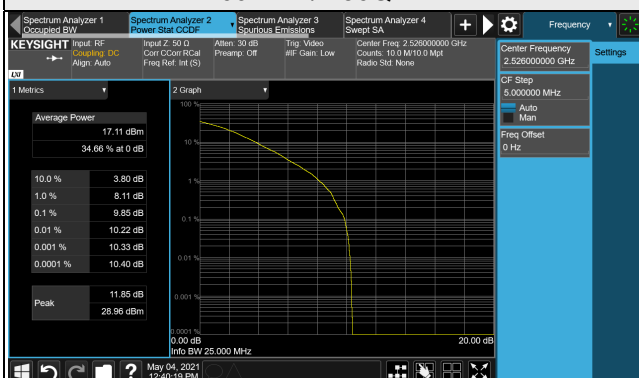
40MHz / 256QAM



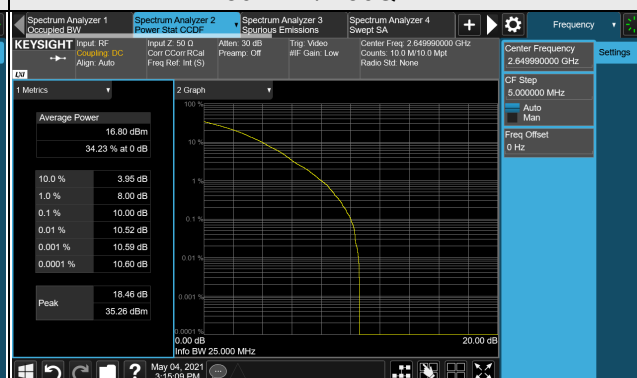
50MHz / 256QAM



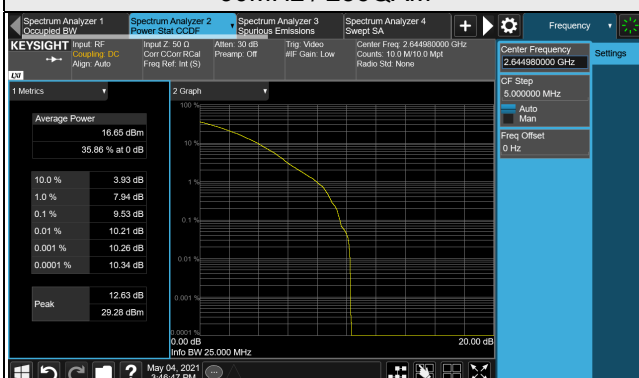
60MHz / 256QAM



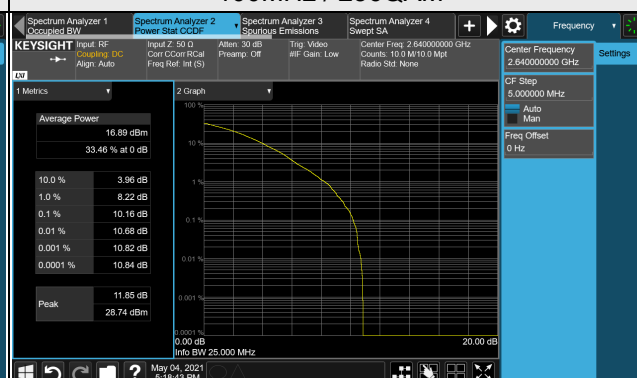
80MHz / 256QAM



90MHz / 256QAM



100MHz / 256QAM

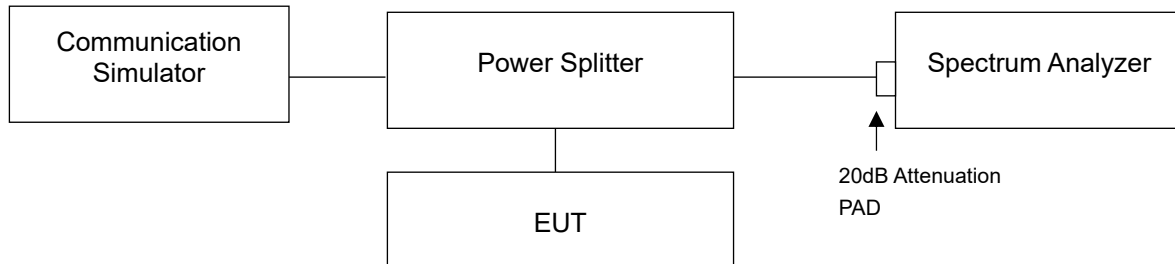


4.7 Conducted Spurious Emissions

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

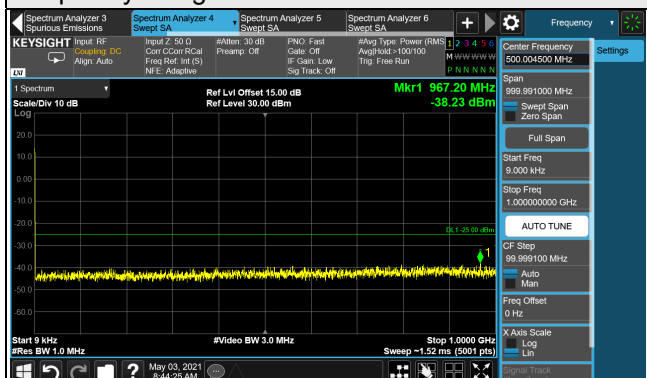
- The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- Measuring frequency range is from 9kHz to 30GHz. 20dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz are used for conducted emission measurement.

4.7.4 Test Results

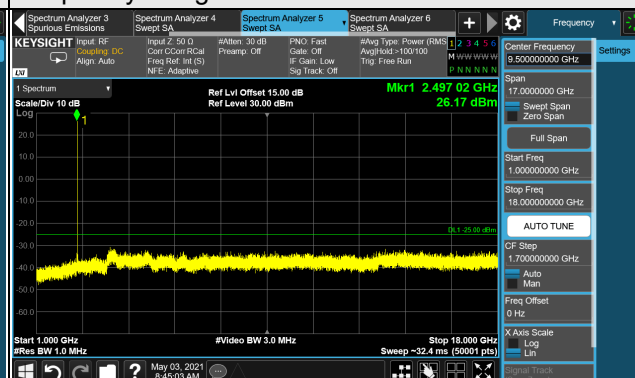
n41, Channel Bandwidth 20MHz

Channel 501204 (2506.02MHz)

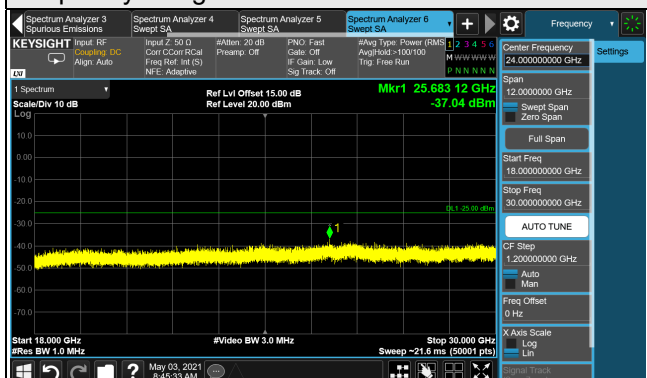
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz



Frequency Range : 18GHz ~ 30GHz

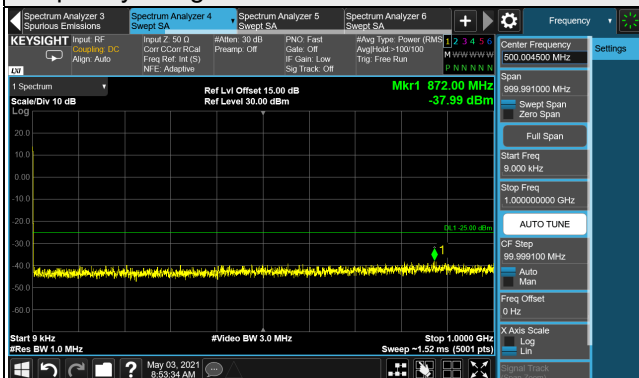


*The 9kHz signal over the limit is from Spectrum.

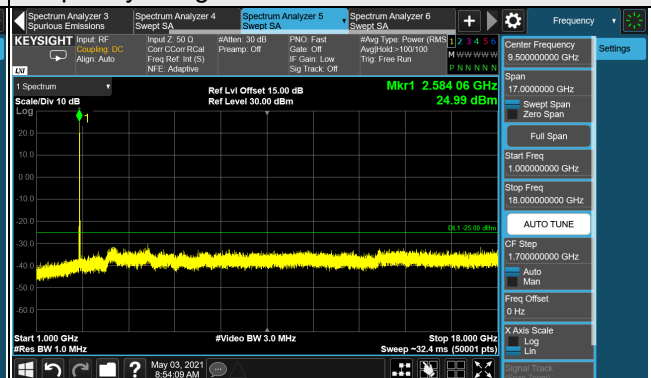
n41, Channel Bandwidth 20MHz

Channel 518598 (2592.99MHz)

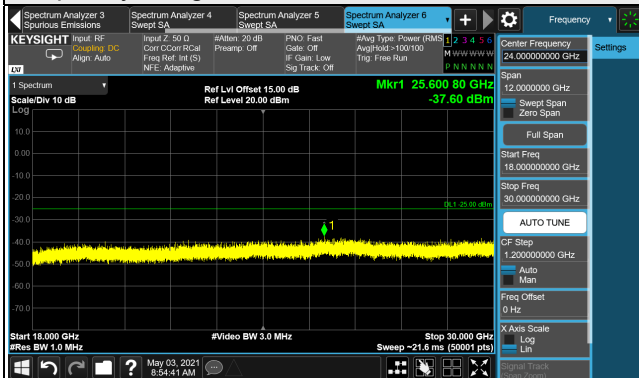
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz



Frequency Range : 18GHz ~ 30GHz

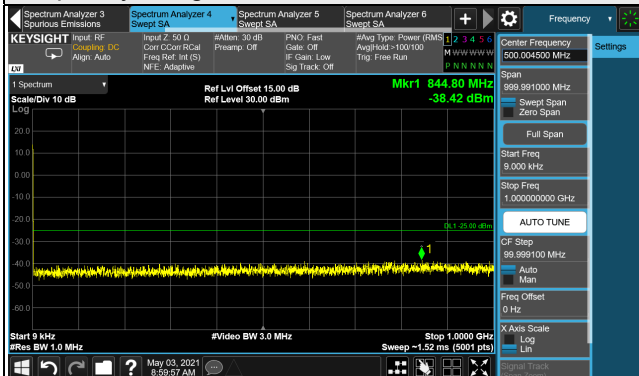


*The 9kHz signal over the limit is from Spectrum.

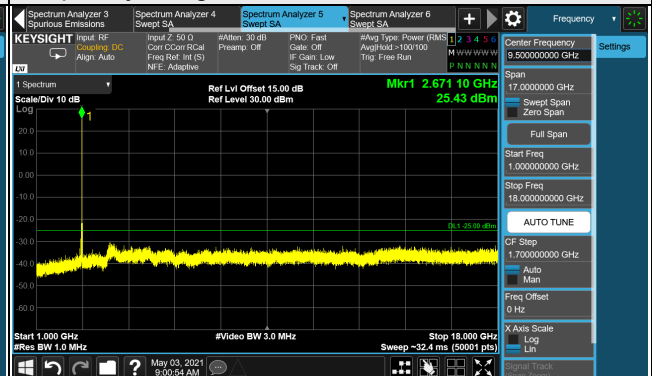
n41, Channel Bandwidth 20MHz

Channel 535998 (2679.99MHz)

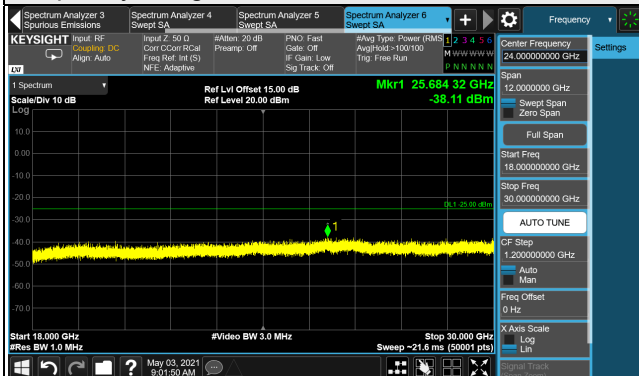
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz



Frequency Range : 18GHz ~ 30GHz

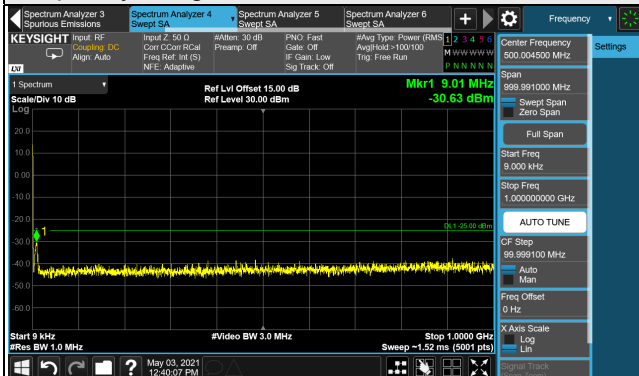


*The 9kHz signal over the limit is from Spectrum.

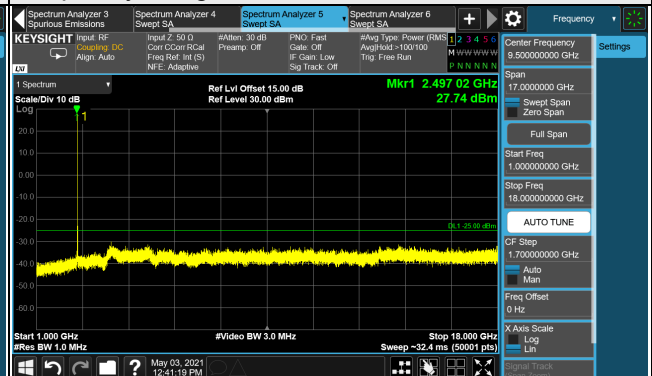
n41, Channel Bandwidth 30MHz

Channel 502200 (2511.00MHz)

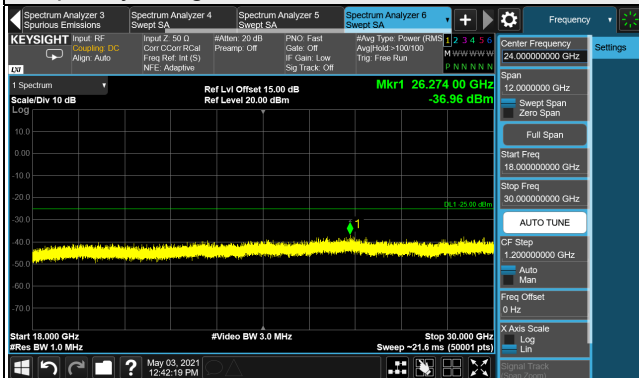
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz



Frequency Range : 18GHz ~ 30GHz

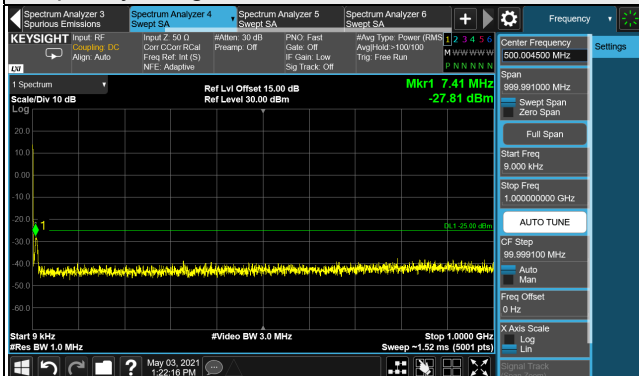


*The 9kHz signal over the limit is from Spectrum.

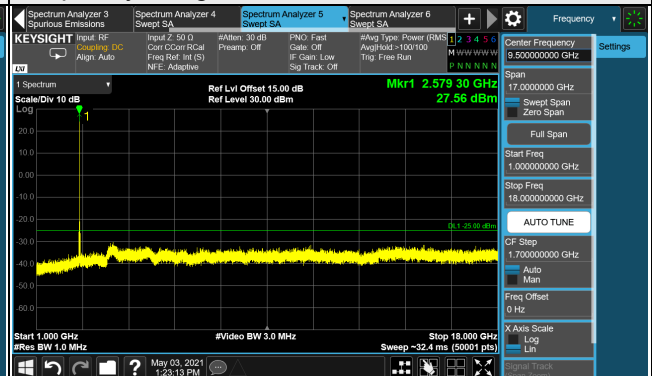
n41, Channel Bandwidth 30MHz

Channel 518598 (2592.99MHz)

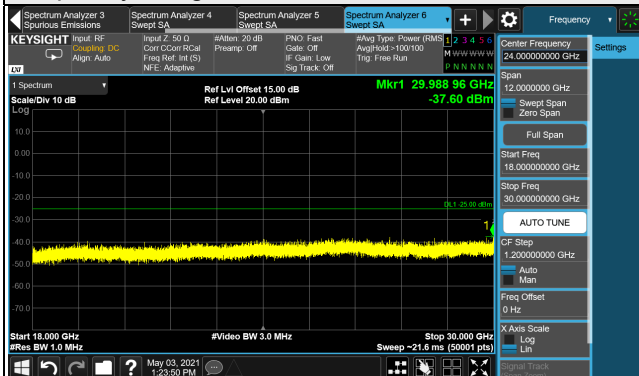
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz



Frequency Range : 18GHz ~ 30GHz

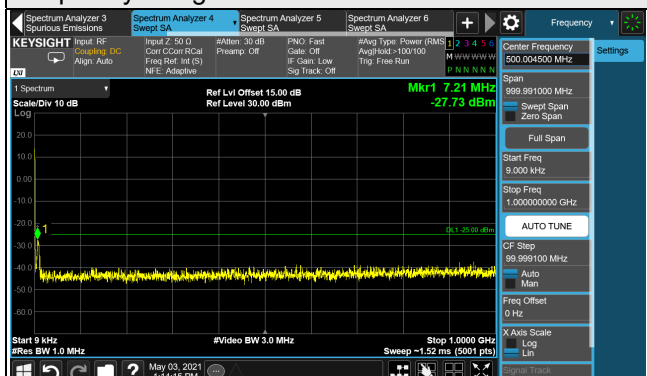


*The 9kHz signal over the limit is from Spectrum.

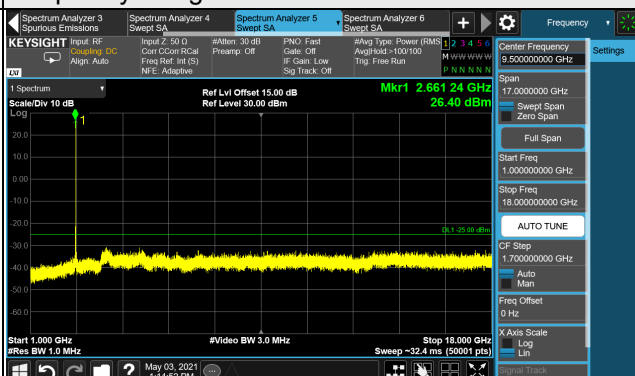
n41, Channel Bandwidth 30MHz

Channel 534996 (2674.98MHz)

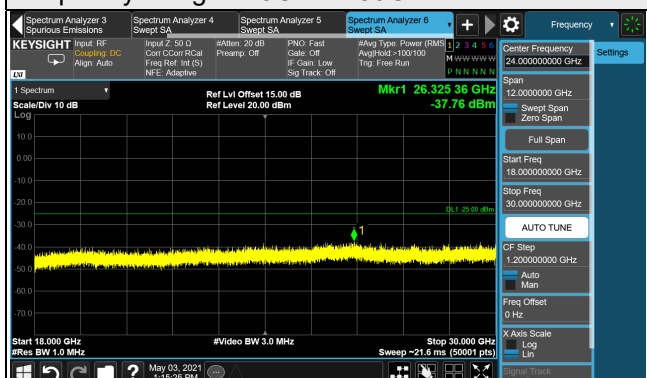
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz



Frequency Range : 18GHz ~ 30GHz

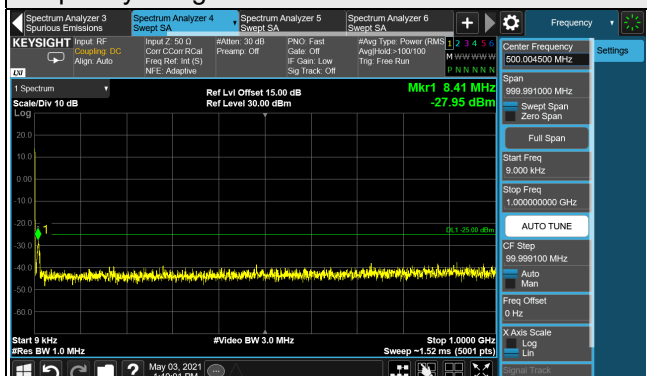


*The 9kHz signal over the limit is from Spectrum.

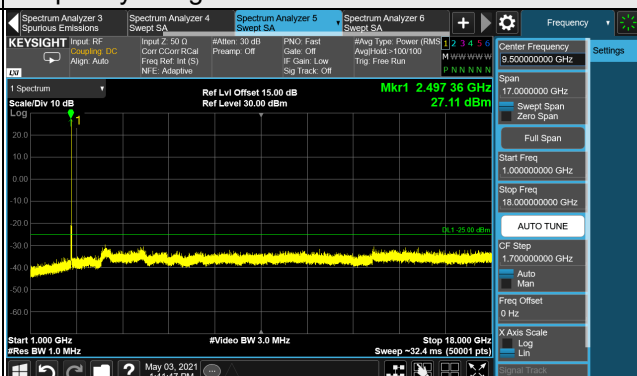
n41, Channel Bandwidth 40MHz

Channel 503202 (2516.01MHz)

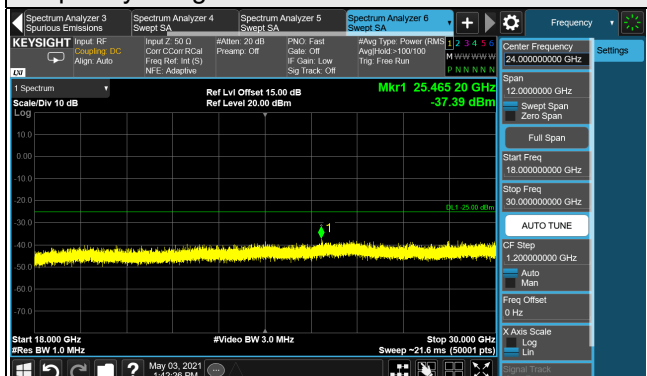
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz



Frequency Range : 18GHz ~ 30GHz

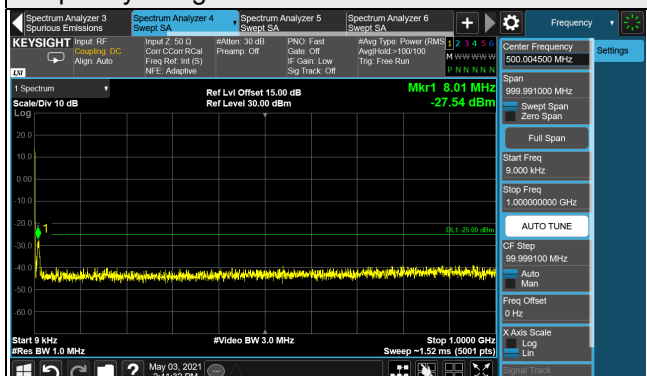


*The 9kHz signal over the limit is from Spectrum.

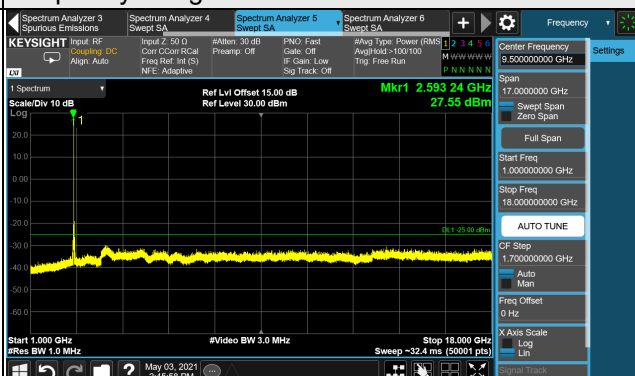
n41, Channel Bandwidth 40MHz

Channel 518598 (2592.99MHz)

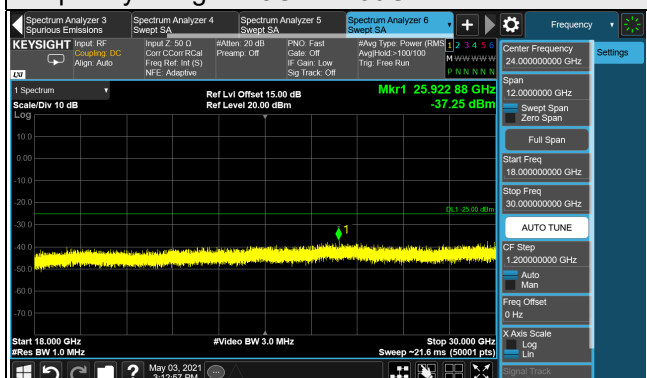
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz



Frequency Range : 18GHz ~ 30GHz

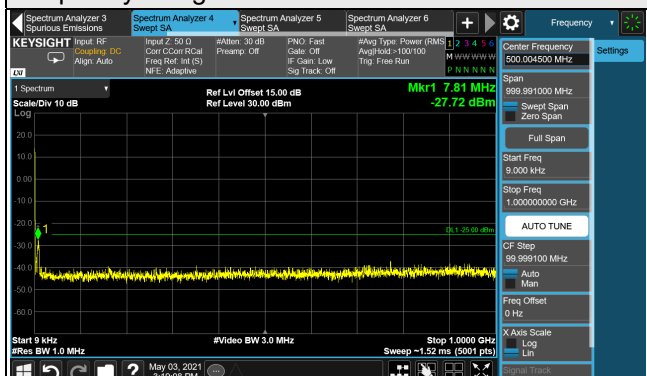


*The 9kHz signal over the limit is from Spectrum.

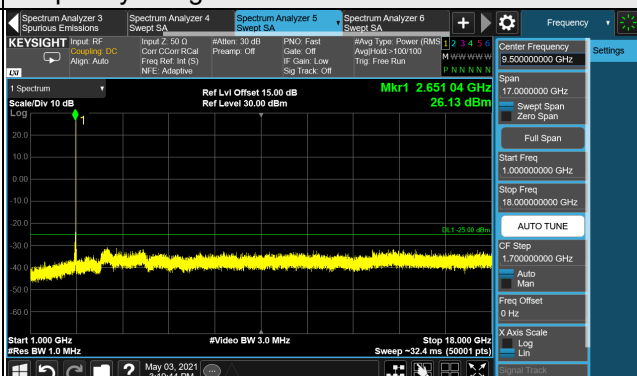
n41, Channel Bandwidth 40MHz

Channel 534000 (2670.00MHz)

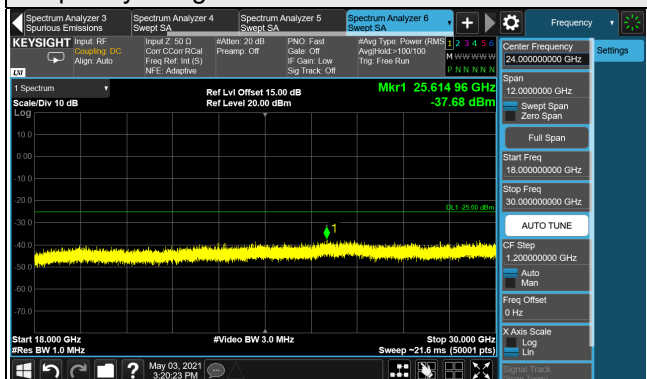
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz



Frequency Range : 18GHz ~ 30GHz

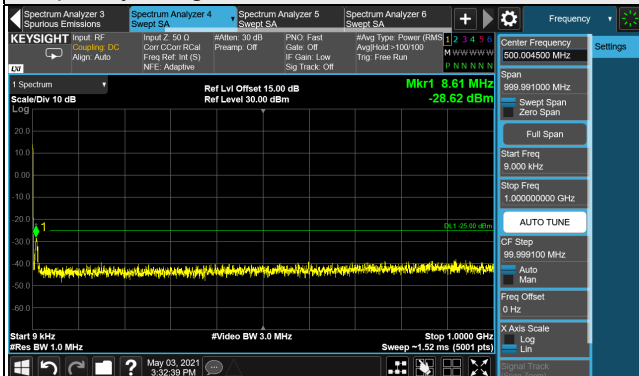


*The 9kHz signal over the limit is from Spectrum.

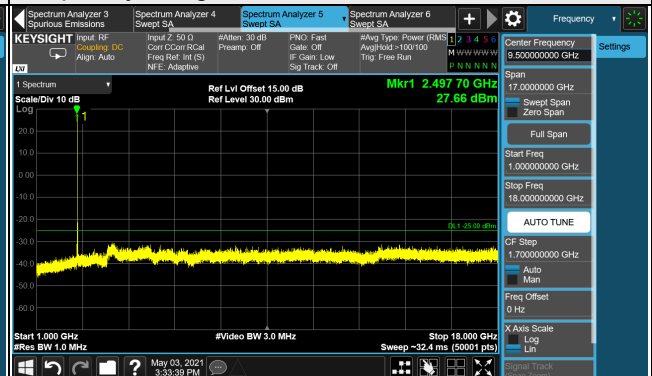
n41, Channel Bandwidth 50MHz

Channel 504204 (2521.02MHz)

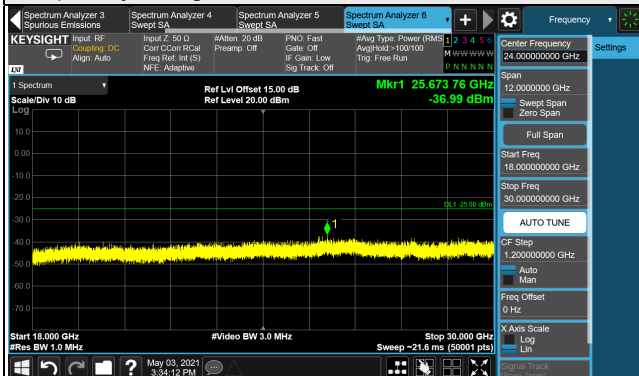
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz



Frequency Range : 18GHz ~ 30GHz

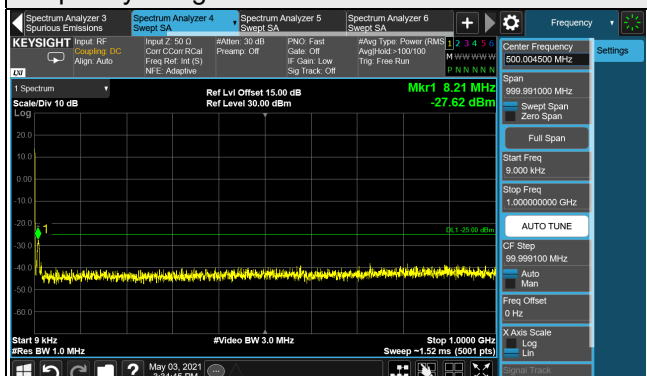


*The 9kHz signal over the limit is from Spectrum.

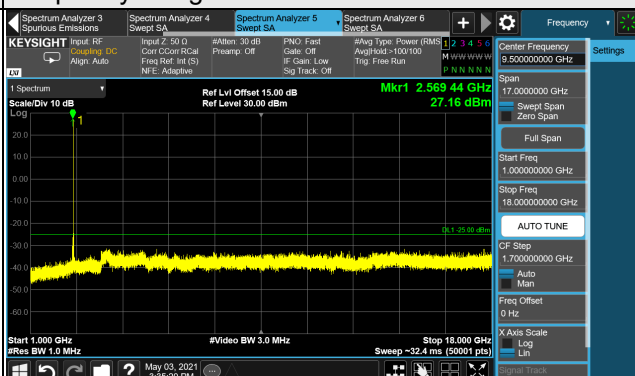
n41, Channel Bandwidth 50MHz

Channel 518598 (2592.99MHz)

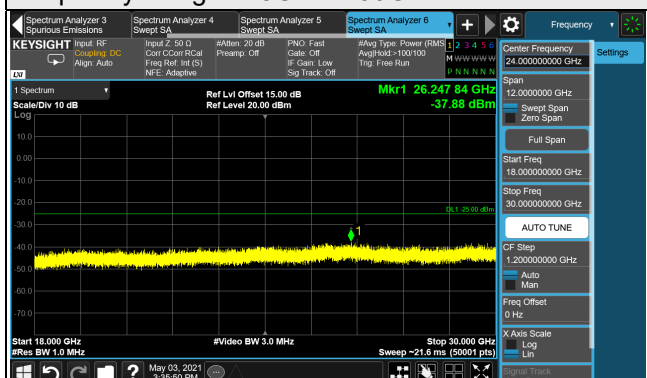
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz



Frequency Range : 18GHz ~ 30GHz

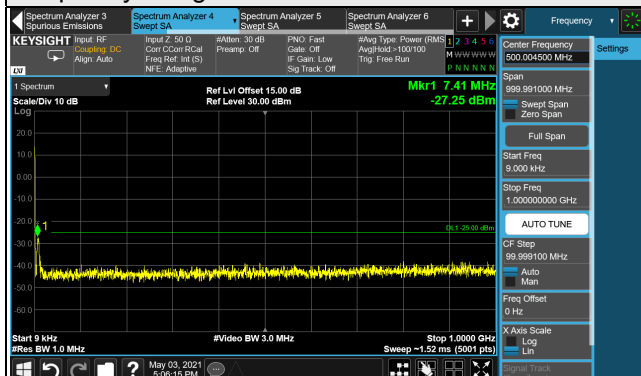


*The 9kHz signal over the limit is from Spectrum.

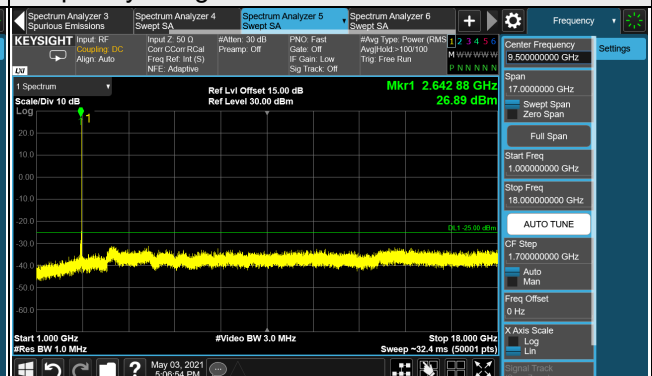
n41, Channel Bandwidth 50MHz

Channel 532998 (2664.99MHz)

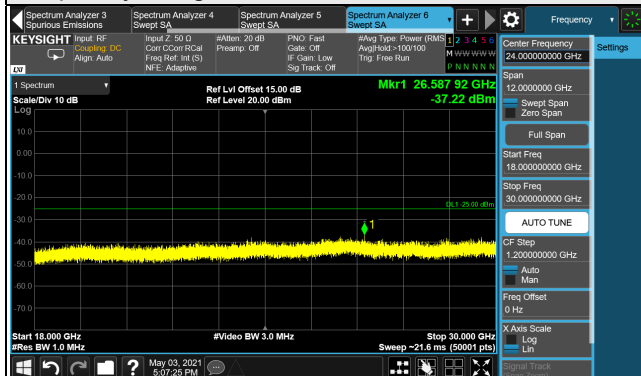
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz



Frequency Range : 18GHz ~ 30GHz

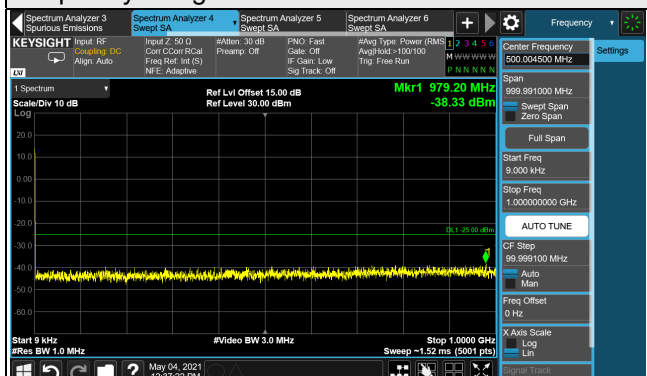


*The 9kHz signal over the limit is from Spectrum.

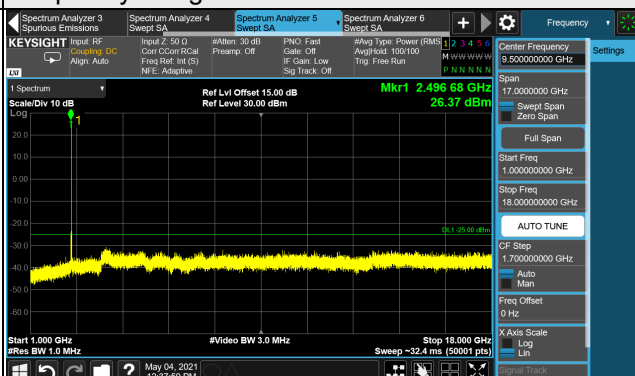
n41, Channel Bandwidth 60MHz

Channel 505200 (2526.00MHz)

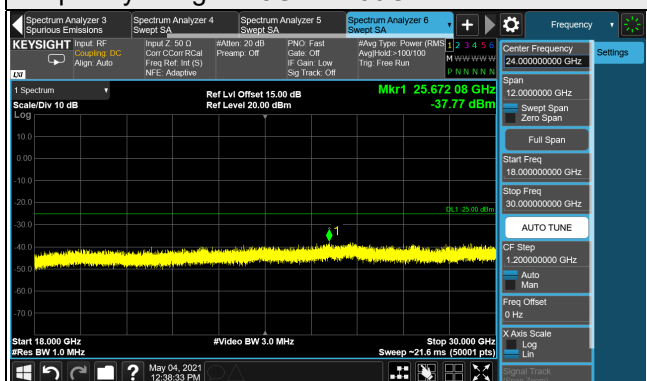
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz



Frequency Range : 18GHz ~ 30GHz

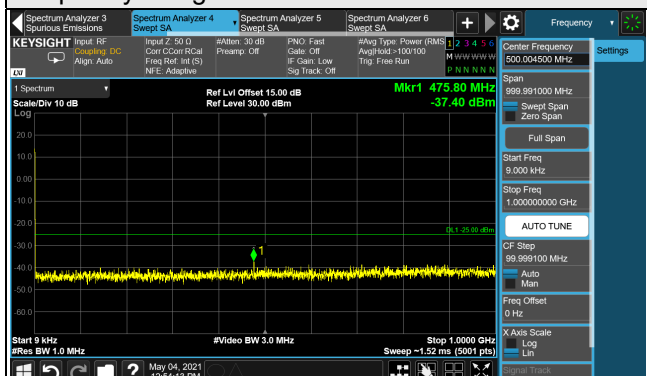


*The 9kHz signal over the limit is from Spectrum.

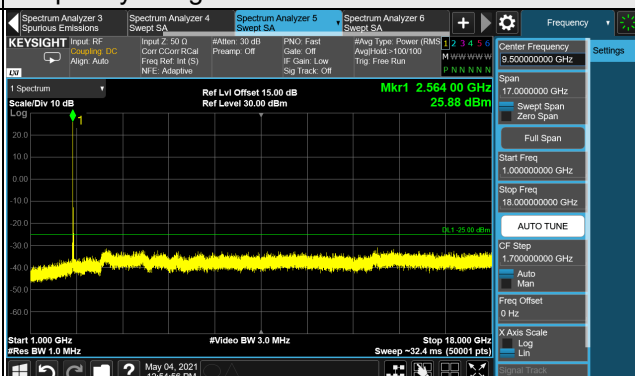
n41, Channel Bandwidth 60MHz

Channel 518598 (2592.99MHz)

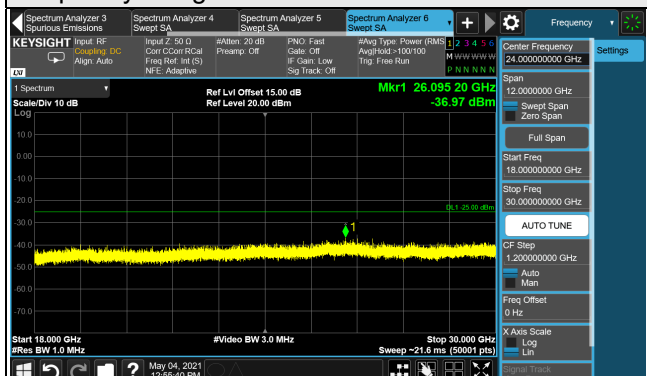
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz



Frequency Range : 18GHz ~ 30GHz

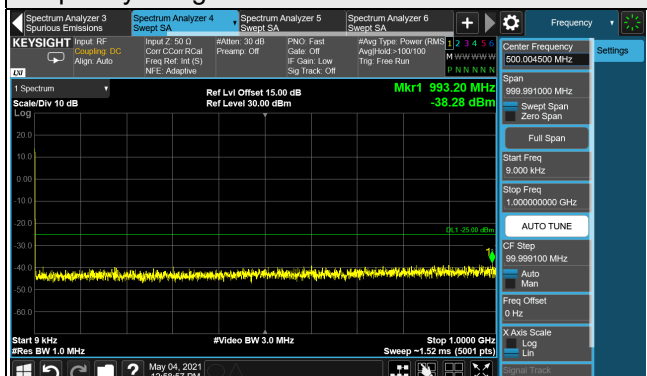


*The 9kHz signal over the limit is from Spectrum.

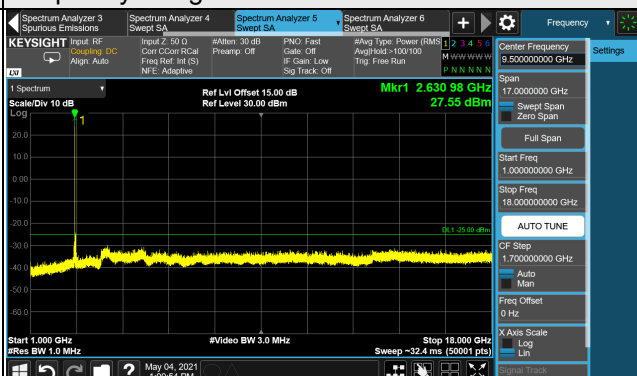
n41, Channel Bandwidth 60MHz

Channel 531996 (2659.98MHz)

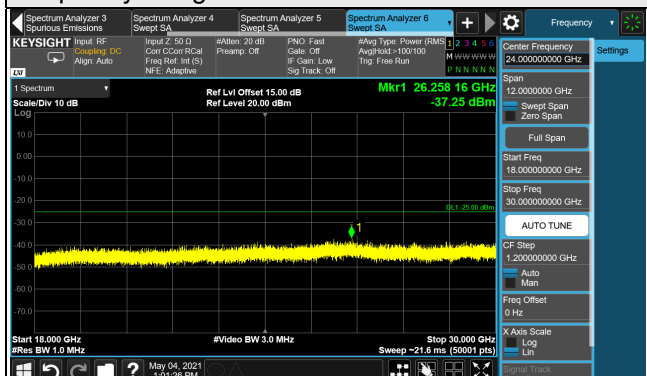
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz



Frequency Range : 18GHz ~ 30GHz

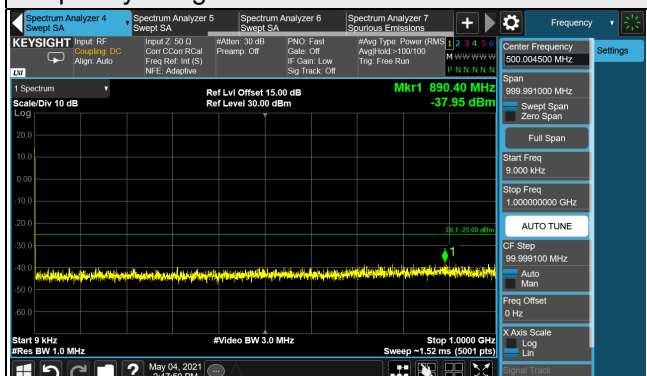


*The 9kHz signal over the limit is from Spectrum.

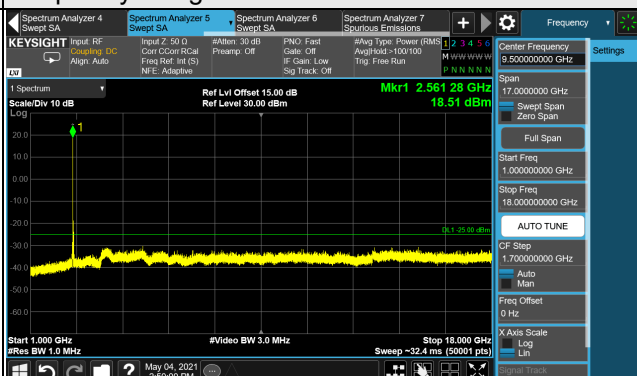
n41, Channel Bandwidth 80MHz

Channel 507204 (2536.02MHz)

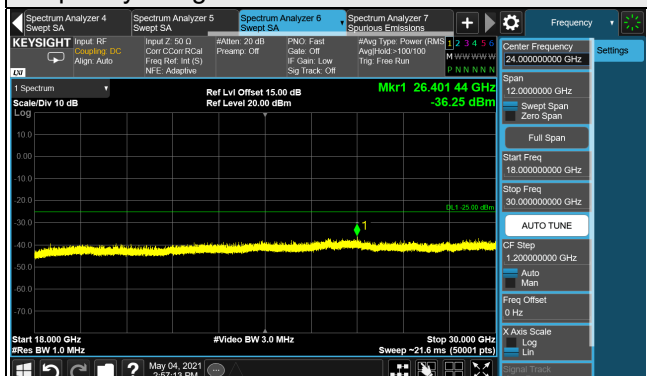
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz



Frequency Range : 18GHz ~ 30GHz

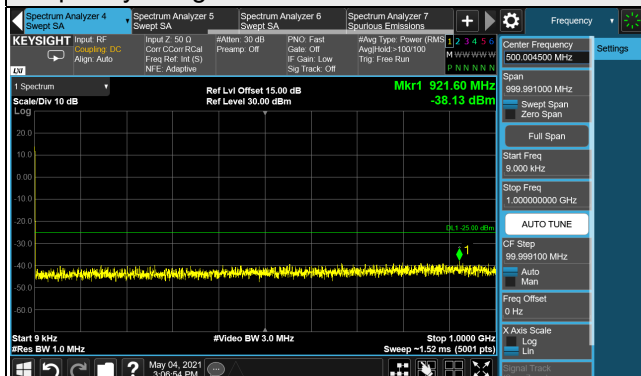


*The 9kHz signal over the limit is from Spectrum.

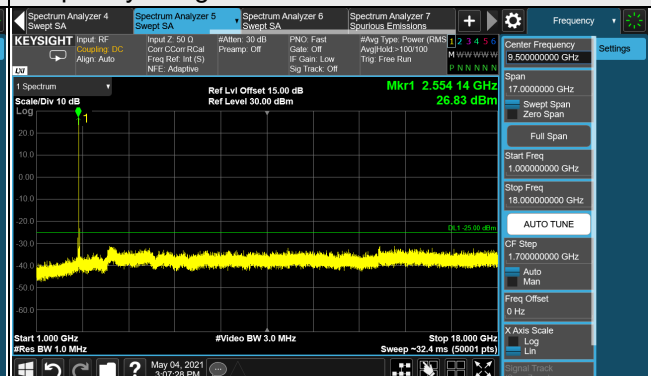
n41, Channel Bandwidth 80MHz

Channel 518598 (2592.99MHz)

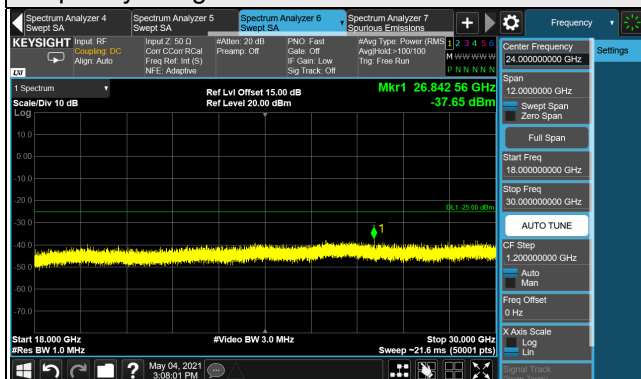
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz



Frequency Range : 18GHz ~ 30GHz



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