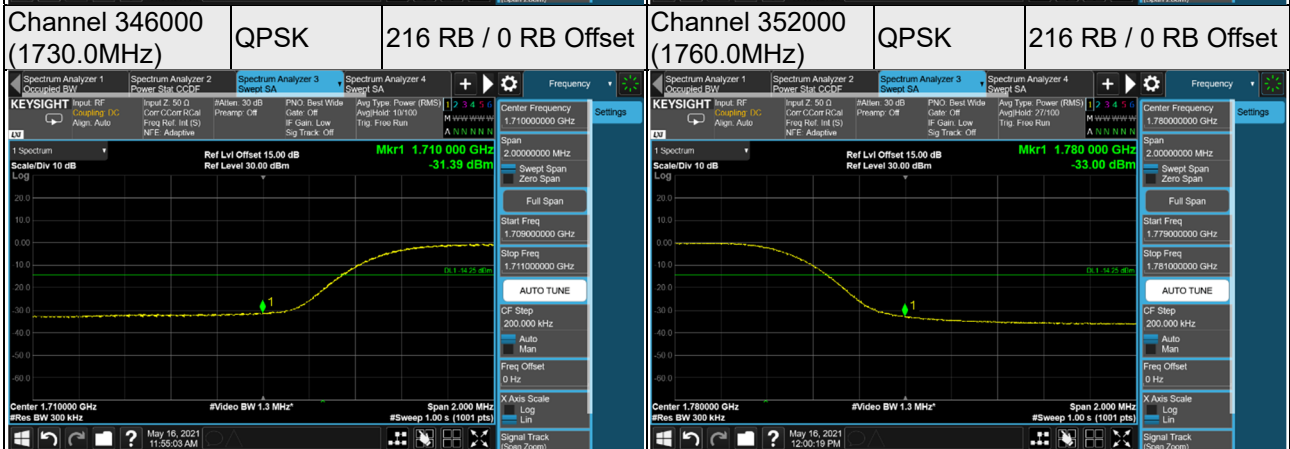
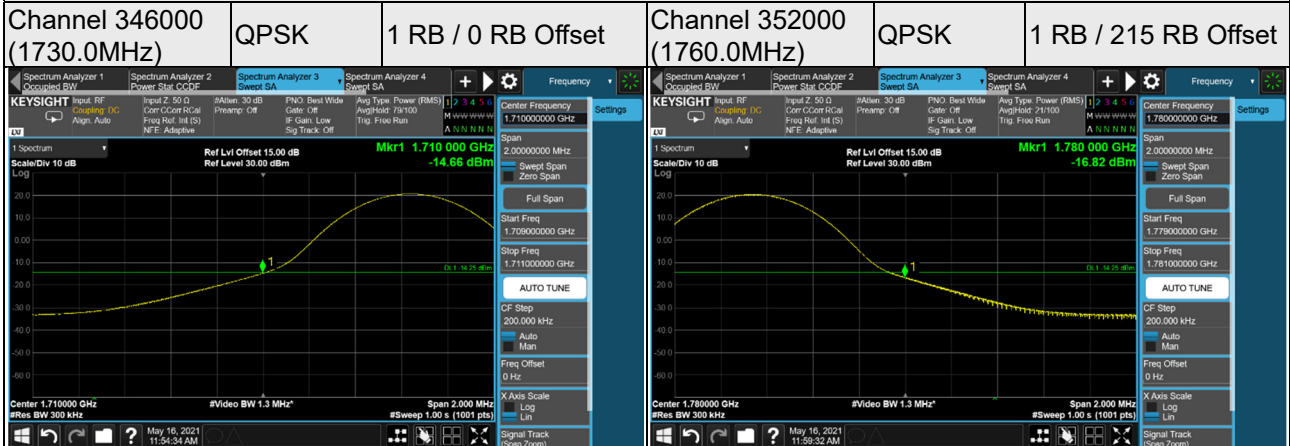


n66, Channel Bandwidth 40MHz



\* RBW factor =  $10 \log [(reference\ bandwidth) / (resolution\ or\ measurement\ bandwidth)]$   
 $= 10 \log [(300kHz/400kHz)]$   
 $= -1.25dB$

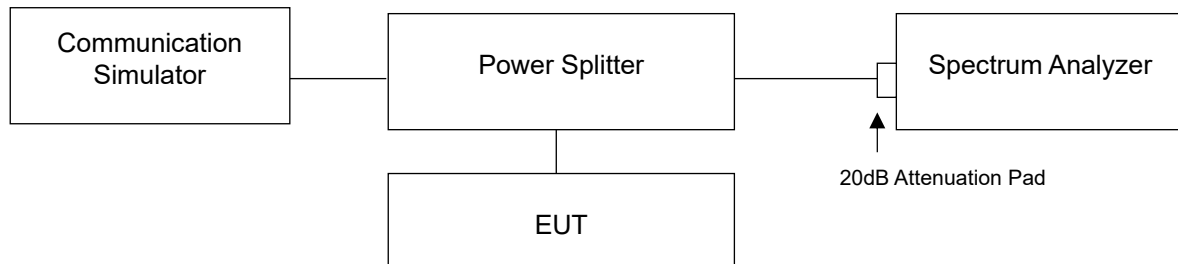
\* Limit =  $-13dB + (-1.25dB) = -14.25dB$

## 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

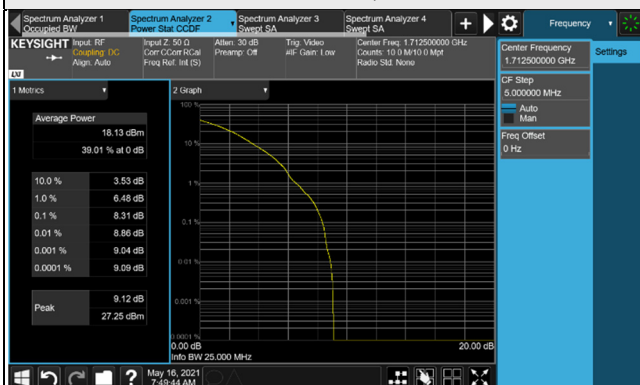
- Set resolution/measurement bandwidth  $\geq$  signal's occupied bandwidth;
- Set the number of counts to a value that stabilizes the measured CCDF curve;
- Record the maximum PAPR level associated with a probability of 0.1%.

#### 4.6.4 Test Results

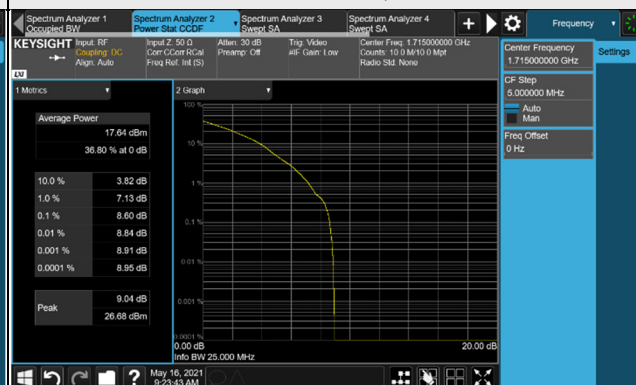
n66, Channel Bandwidth 5MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
342500	1712.5	4.72	6.75	8.18	8.31	7.65
349000	1745.0	4.35	6.25	7.49	7.92	7.74
355500	1777.5	4.60	7.03	7.35	7.58	7.75
n66, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
343000	1715.0	4.61	8.01	7.78	8.60	8.33
349000	1745.0	3.46	7.33	7.20	7.60	7.66
355000	1775.0	3.57	7.72	7.50	7.80	7.51
n66, Channel Bandwidth 15MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
343500	1717.5	3.56	6.57	8.24	7.23	7.13
349000	1745.0	3.47	6.00	7.73	7.06	7.32
354500	1772.5	3.54	6.42	8.08	8.10	6.93
n66, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
344000	1720.0	3.57	6.35	8.39	7.30	6.98
349000	1745.0	3.41	6.06	7.56	6.99	7.39
354000	1770.0	3.51	6.27	8.16	8.07	6.95
n66, Channel Bandwidth 40MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
346000	1730.0	3.62	7.46	9.02	7.77	7.29
349000	1745.0	3.41	6.03	7.71	6.80	8.34
352000	1760.0	3.57	7.29	8.87	8.25	6.99

### Spectrum Plot of Worst Value

#### 5MHz / 64QAM



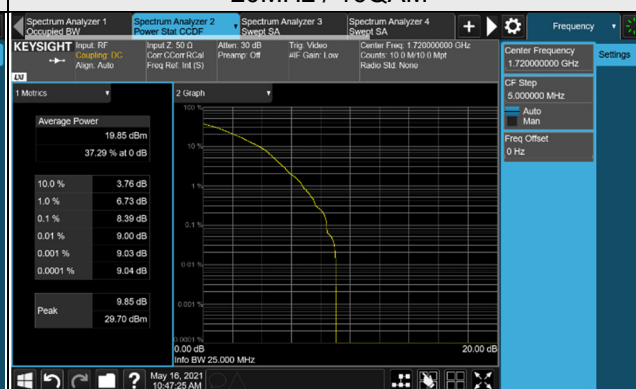
#### 10MHz / 64QAM



#### 15MHz / 16QAM



#### 20MHz / 16QAM



#### 40MHz / 16QAM

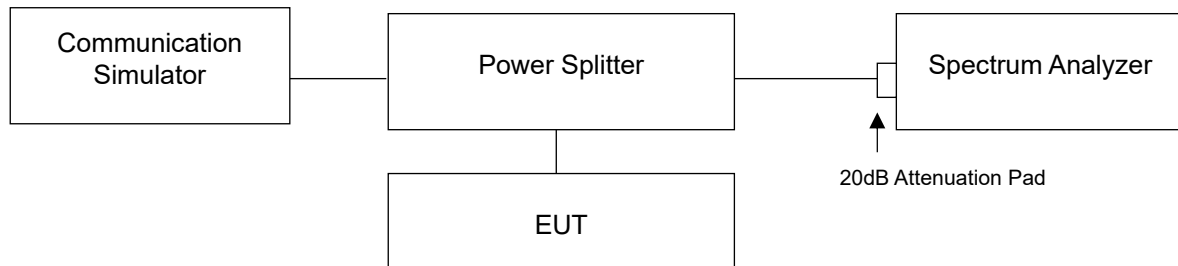


## 4.7 Conducted Spurious Emissions

### 4.7.1 Limits of Conducted Spurious Emissions Measurement

In the FCC 27.53(h), 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  $43 + 10 \log (P)$  dB. The emission limit equal to  $-13\text{dBm}$ .

### 4.7.2 Test Setup



### 4.7.3 Test Procedure

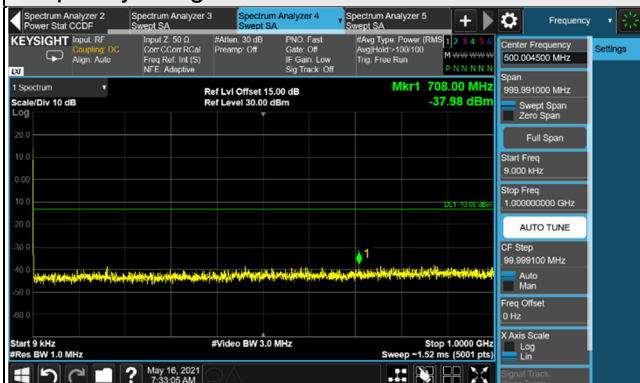
- All measurements were done at low and high channels operational frequency range.
- Measuring frequency range is from 9kHz to 20GHz. 20dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz are used for conducted emission measurement

### 4.7.4 Test Results

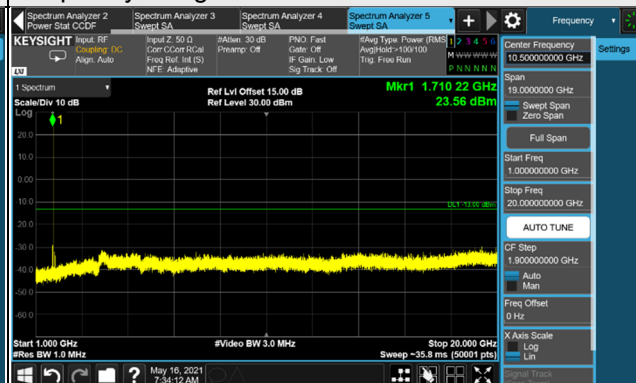
n66, Channel Band width 5MHz

Channel 342500 (1712.5MHz)

Frequency Range : 9kHz ~ 1GHz

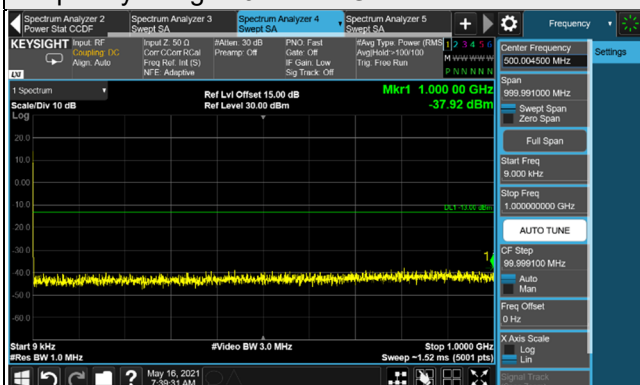


Frequency Range : 1GHz ~ 20GHz

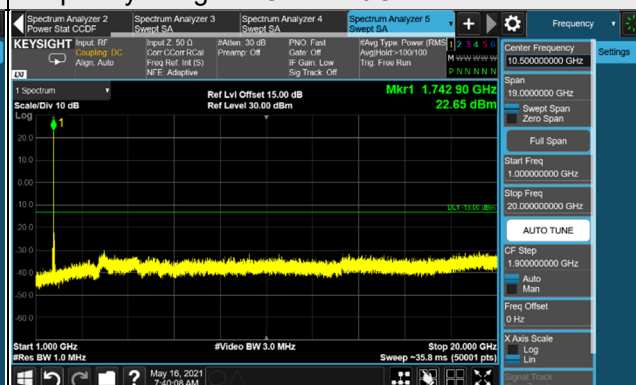


Channel 349000 (1745.0MHz)

Frequency Range : 9kHz ~ 1GHz

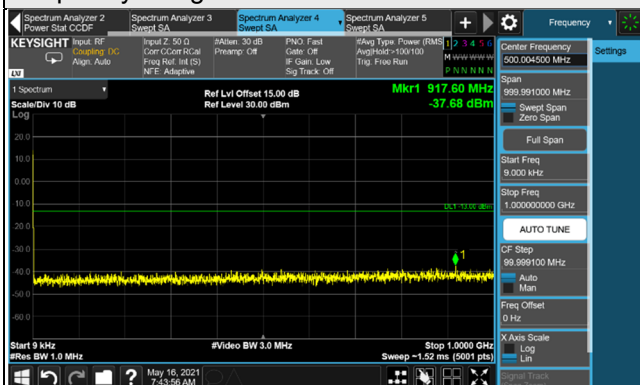


Frequency Range : 1GHz ~ 20GHz

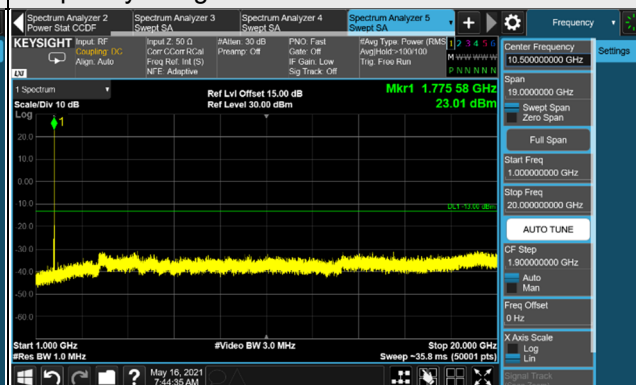


Channel 355500 (1777.5MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 20GHz

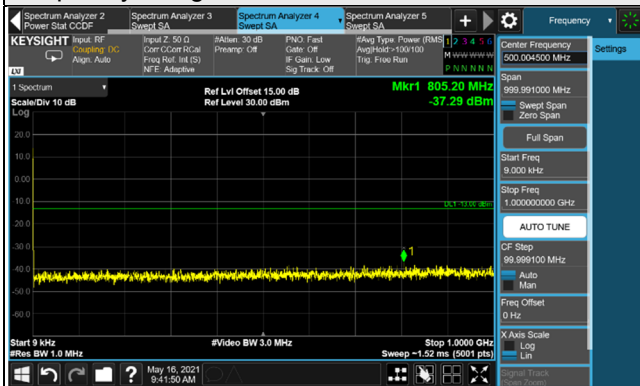


\*The 9kHz signal over the limit is from Spectrum.

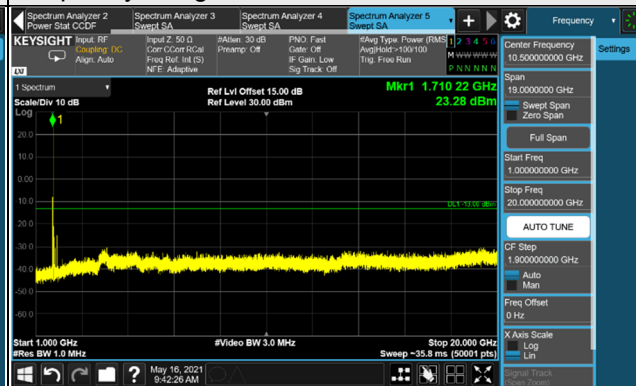
n66, Channel Bandwidth 10MHz

Channel 343000 (1715.0MHz)

Frequency Range : 9kHz ~ 1GHz

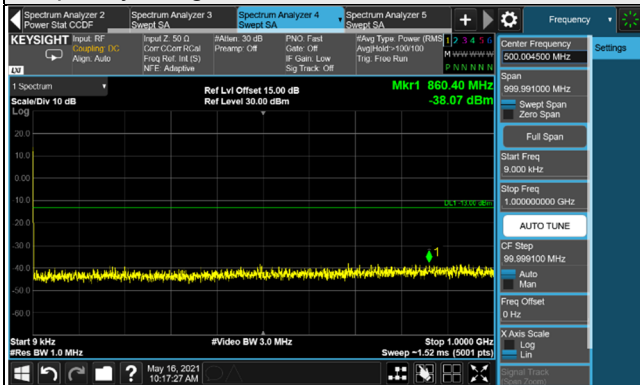


Frequency Range : 1GHz ~ 20GHz

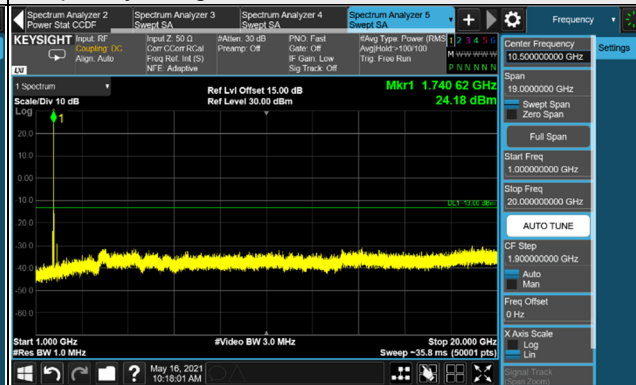


Channel 349000 (1745.0MHz)

Frequency Range : 9kHz ~ 1GHz

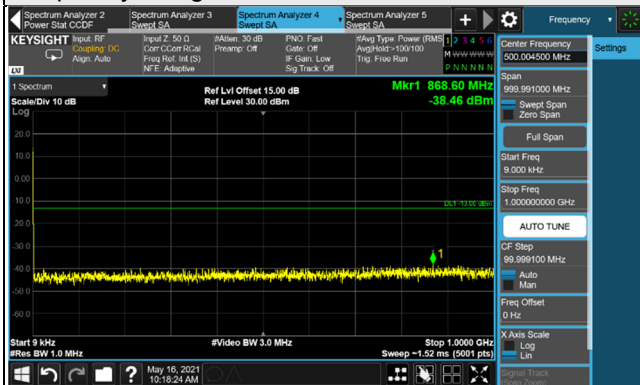


Frequency Range : 1GHz ~ 20GHz

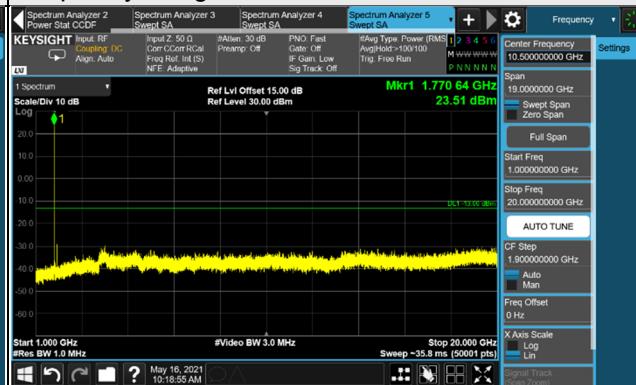


Channel 355000 (1775.0MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 20GHz

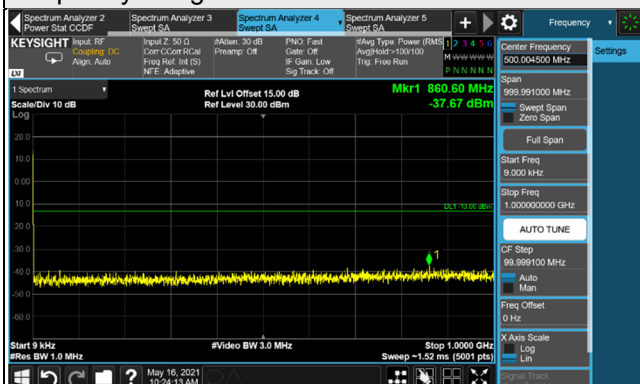




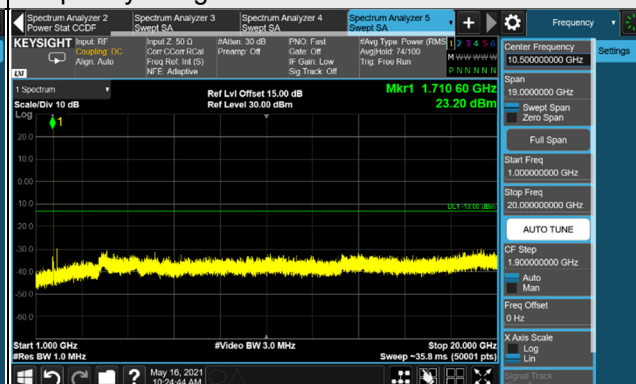
n66, Channel Bandwidth 15MHz

Channel 343500 (1717.5MHz)

Frequency Range : 9kHz ~ 1GHz

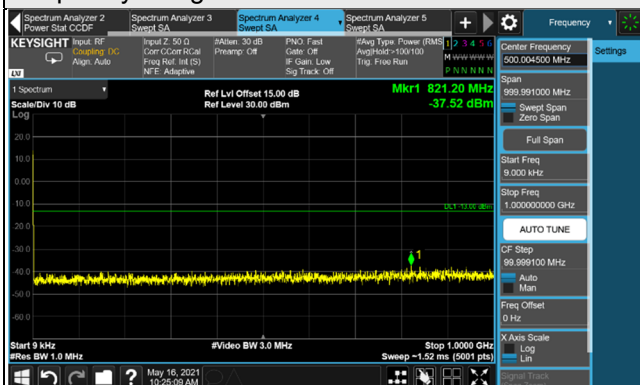


Frequency Range : 1GHz ~ 20GHz

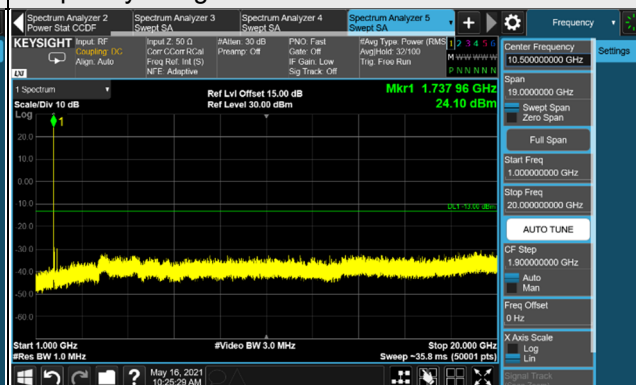


Channel 349000 (1745.0MHz)

Frequency Range : 9kHz ~ 1GHz

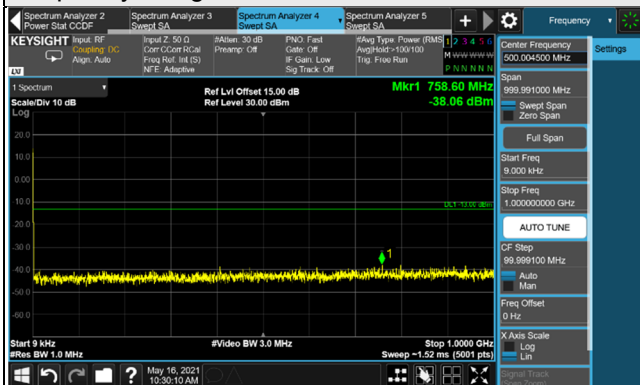


Frequency Range : 1GHz ~ 20GHz

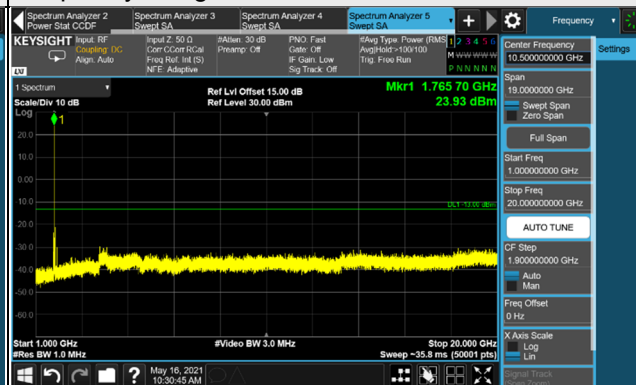


Channel 354500 (1772.5MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 20GHz



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