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<p>Appendix B: 802.11ax Test Plot</p>	<p>FCC ID A3LSMM356B</p>
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REVISION HISTORY

The revision history for this document is shown in table.

Revision No.	Date of Issue	Description
0	March 21, 2024	Initial Release

Note:

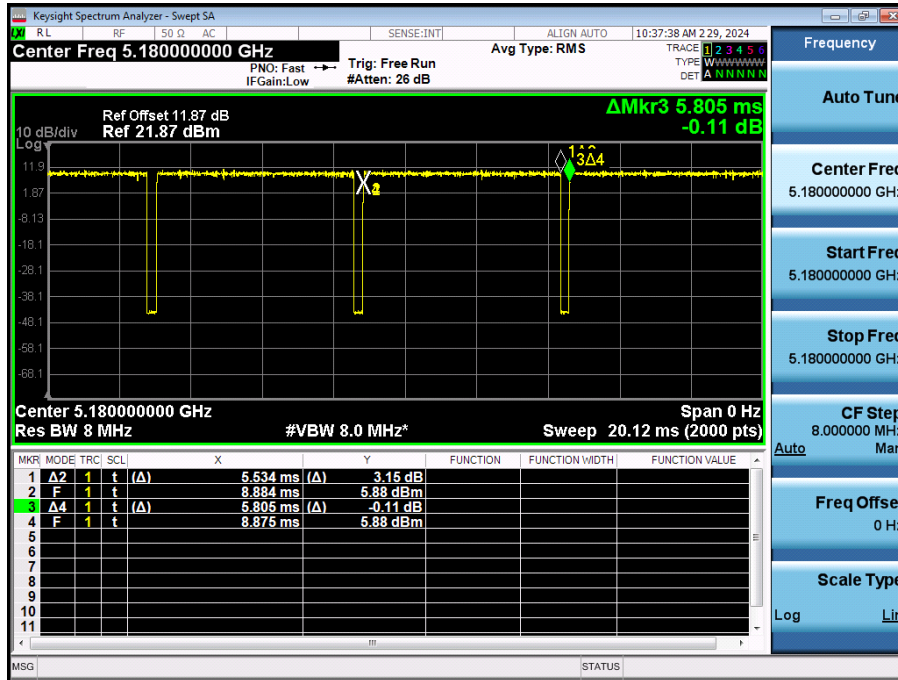
In order to simplify the report, attached plots were only the most lowest datarate.

1. Duty Cycle

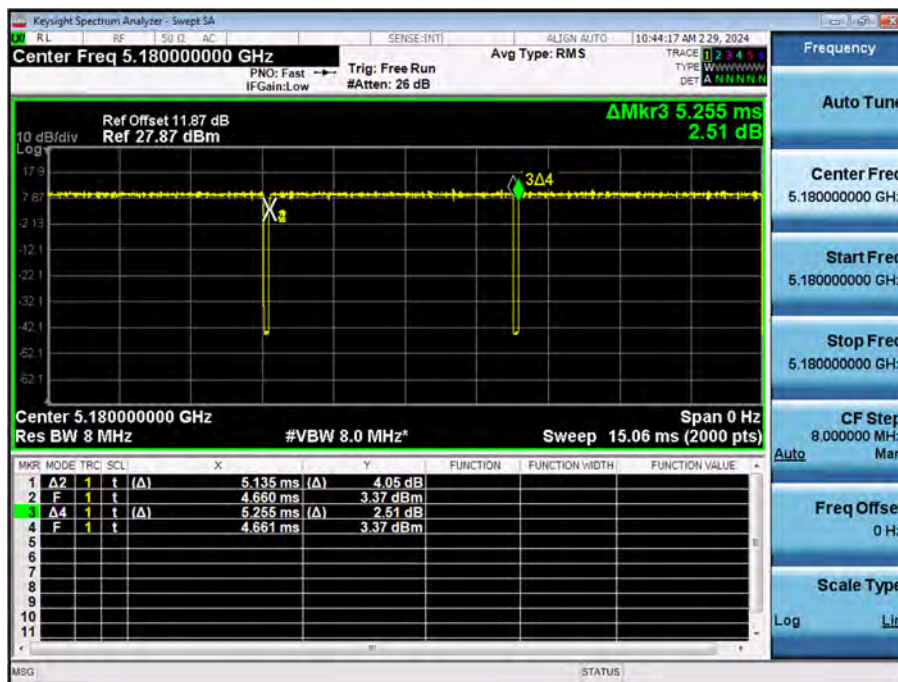
Note : In order to simplify the report, attached plots were only the most lowest datarate.

1.1 SISO Ant. 2

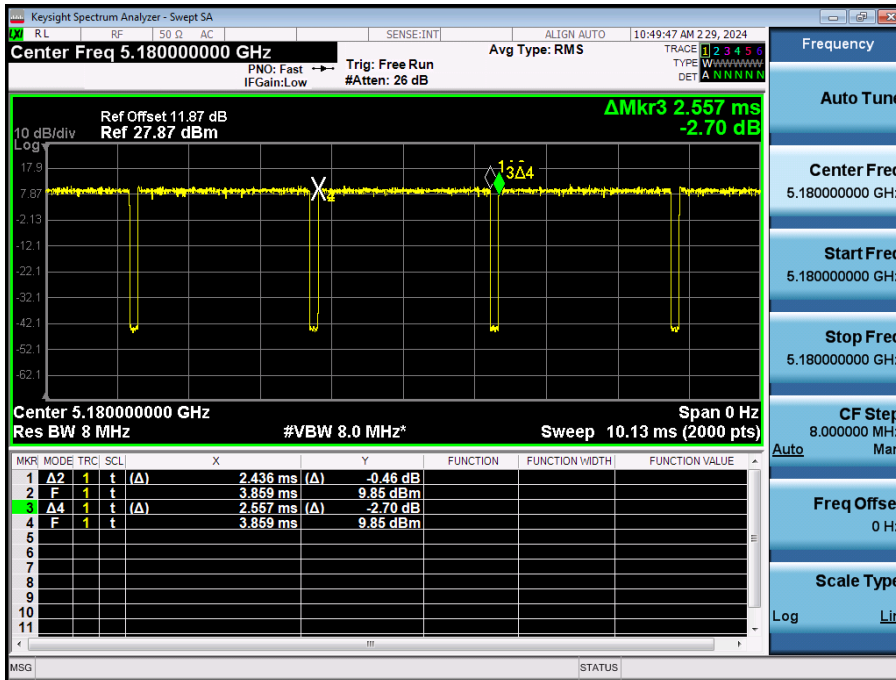
Bandwidth 20M 26 Tone MCS 0



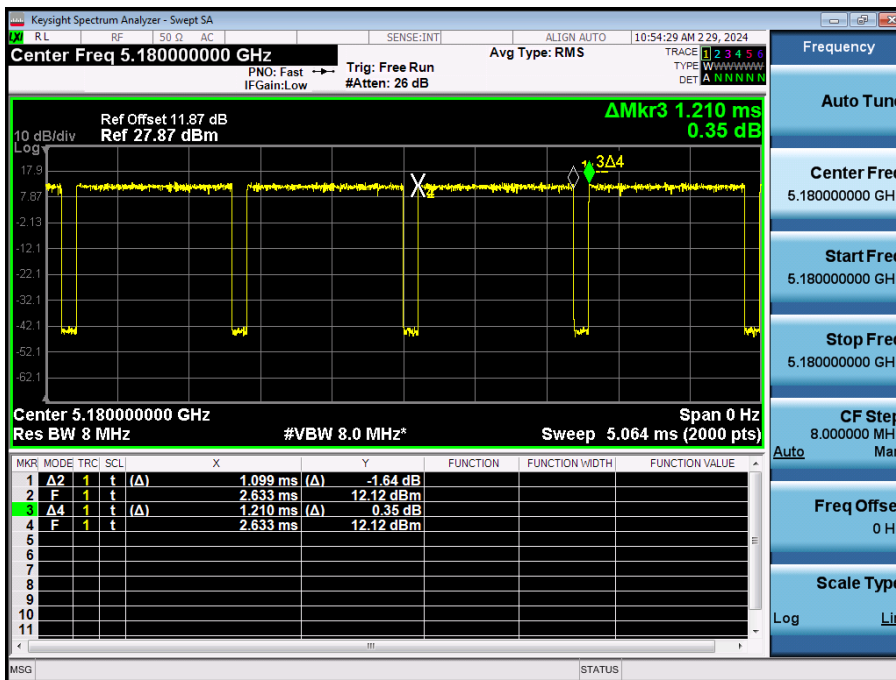
Bandwidth 20M 52 Tone MCS 0



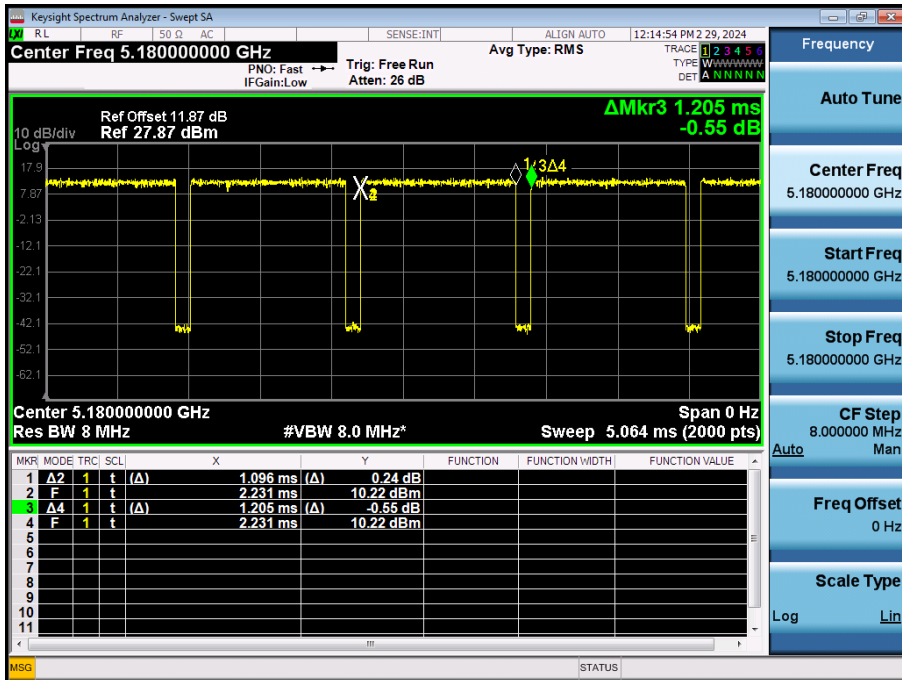
Bandwidth 20M 106 Tone MCS 0



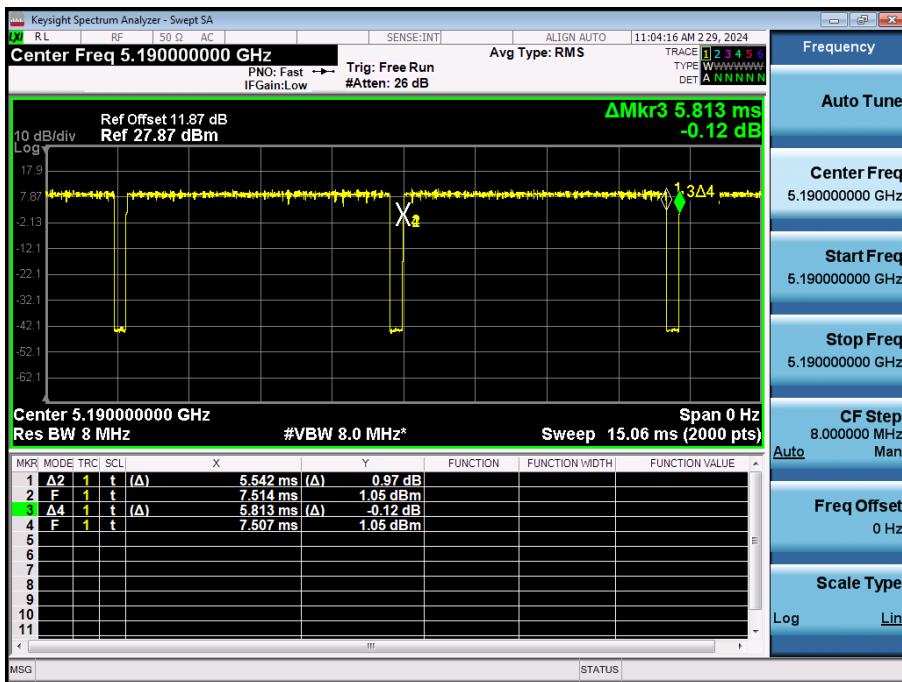
Bandwidth 20M 242 Tone MCS 0



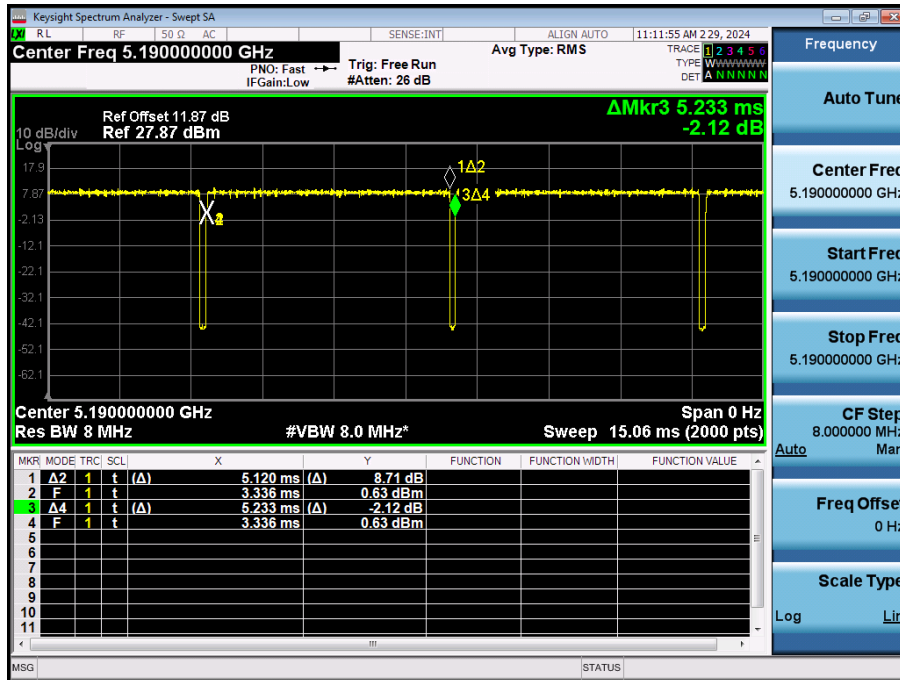
Bandwidth 20M SU MCS 0



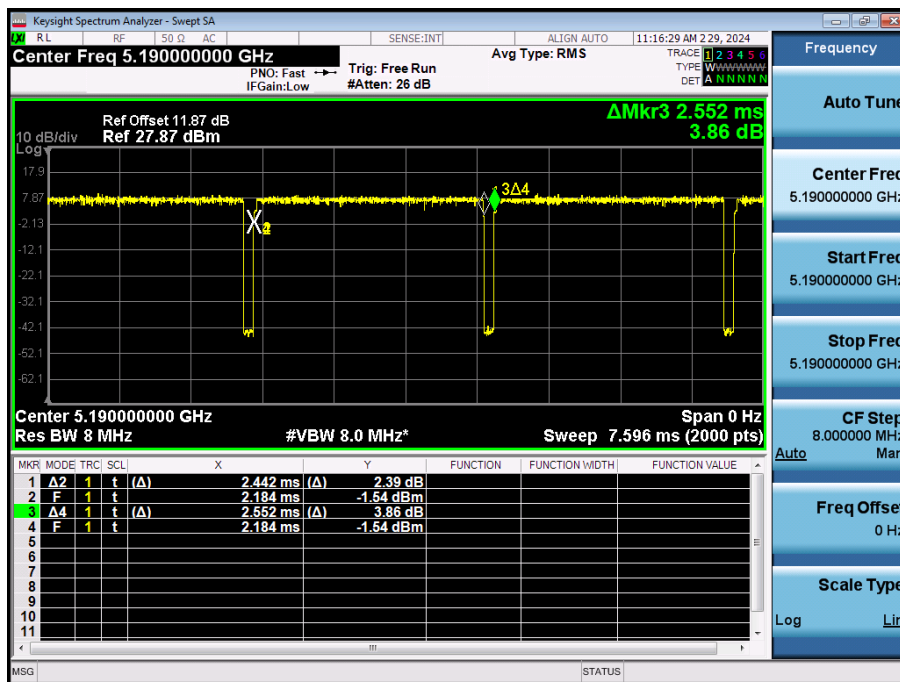
Bandwidth 40M 26 Tone MCS 0



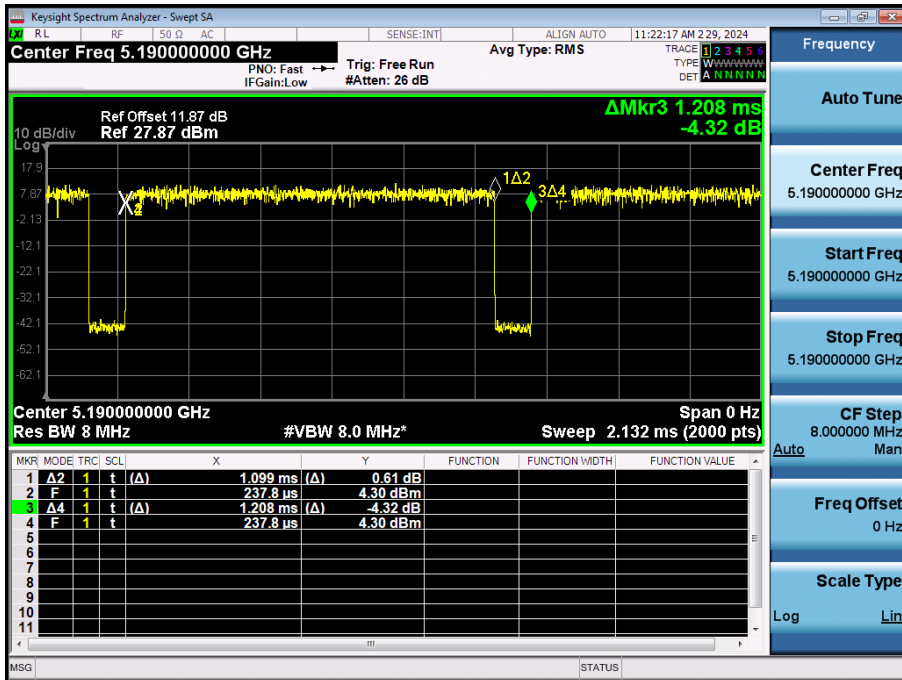
Bandwidth 40M 52 Tone MCS 0



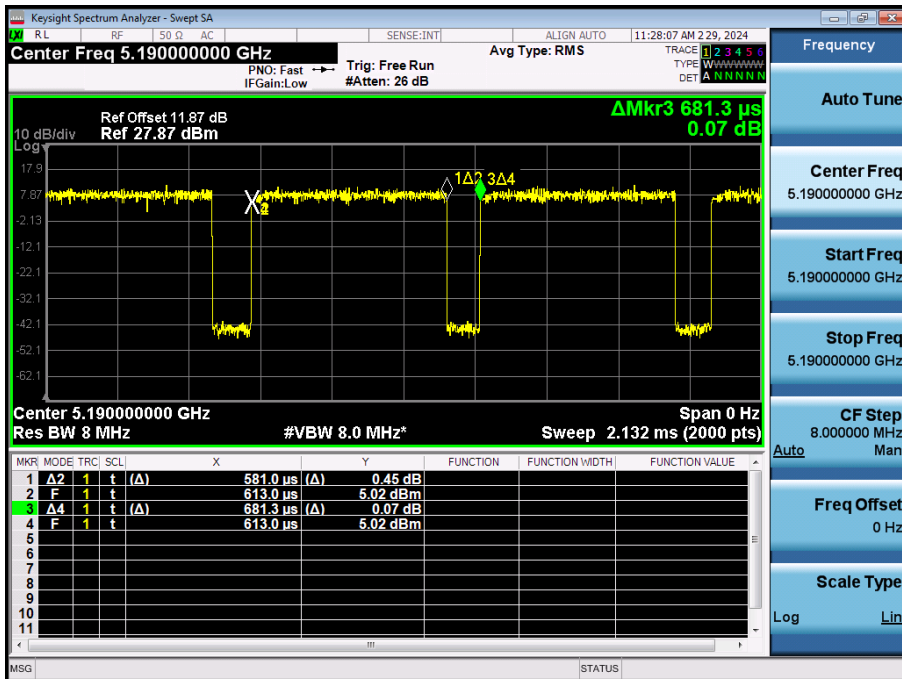
Bandwidth 40M 106 Tone MCS 0



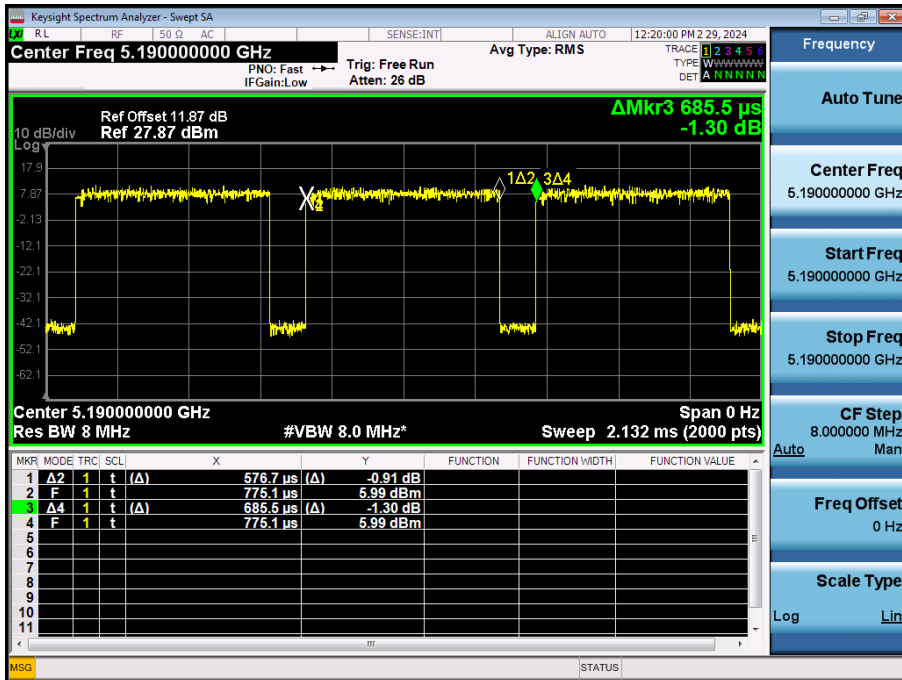
Bandwidth 40M 242 Tone MCS 0



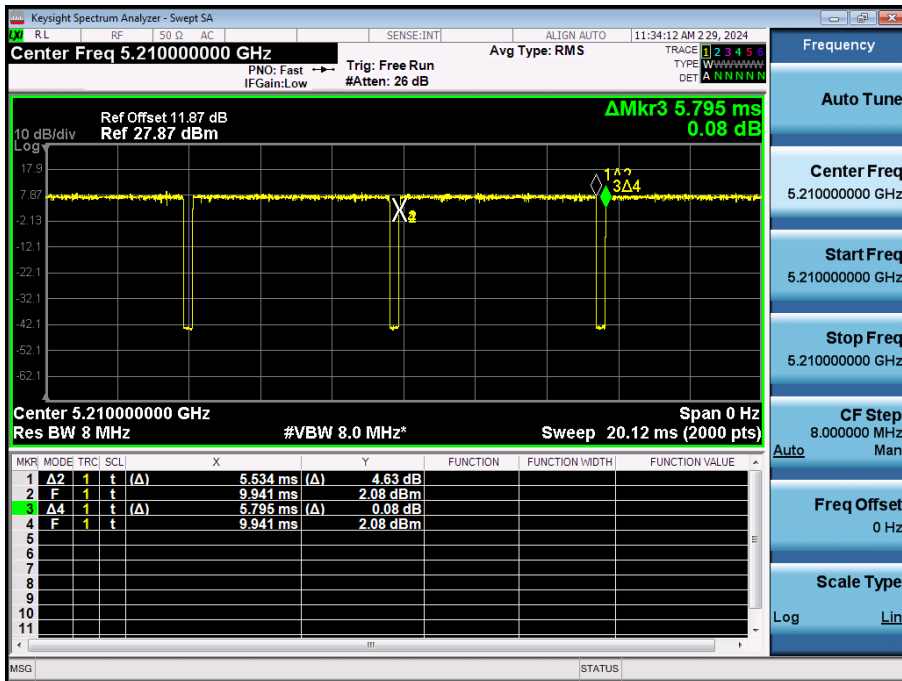
Bandwidth 40M 484 Tone MCS 0



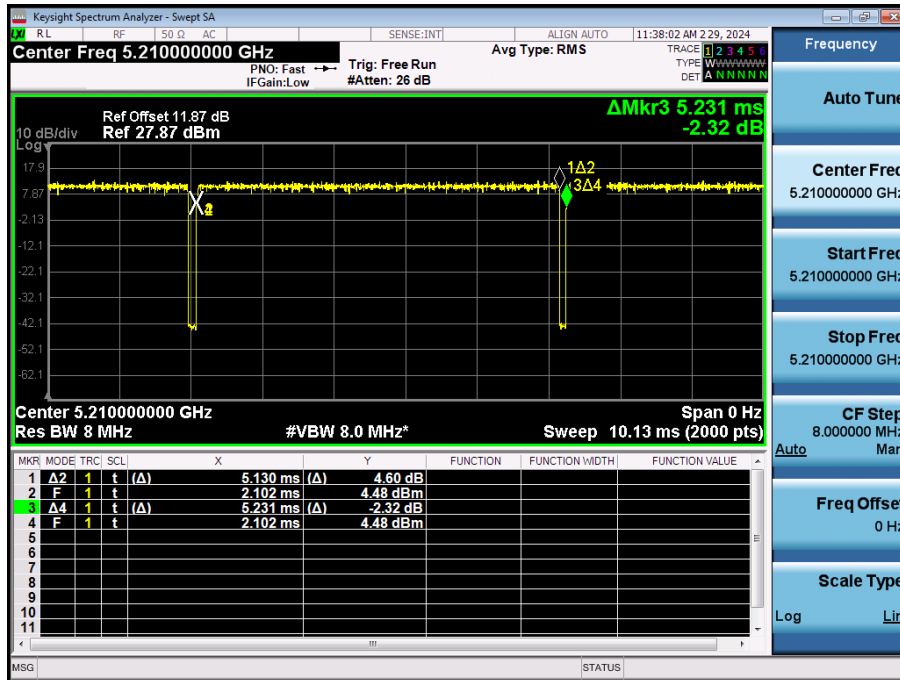
Bandwidth 40M SU MCS 0



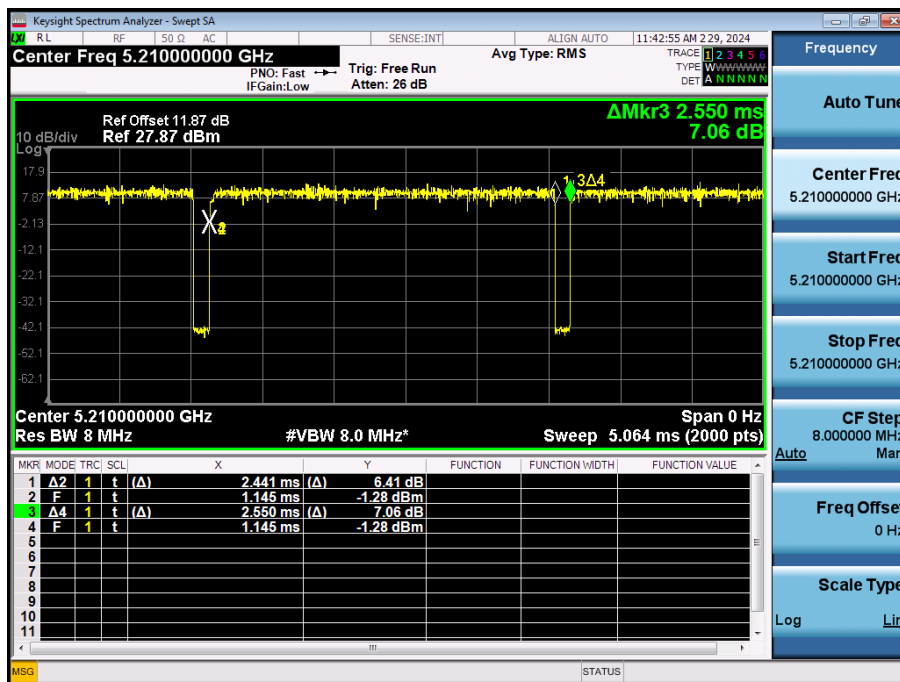
Bandwidth 80M 26 Tone MCS 0



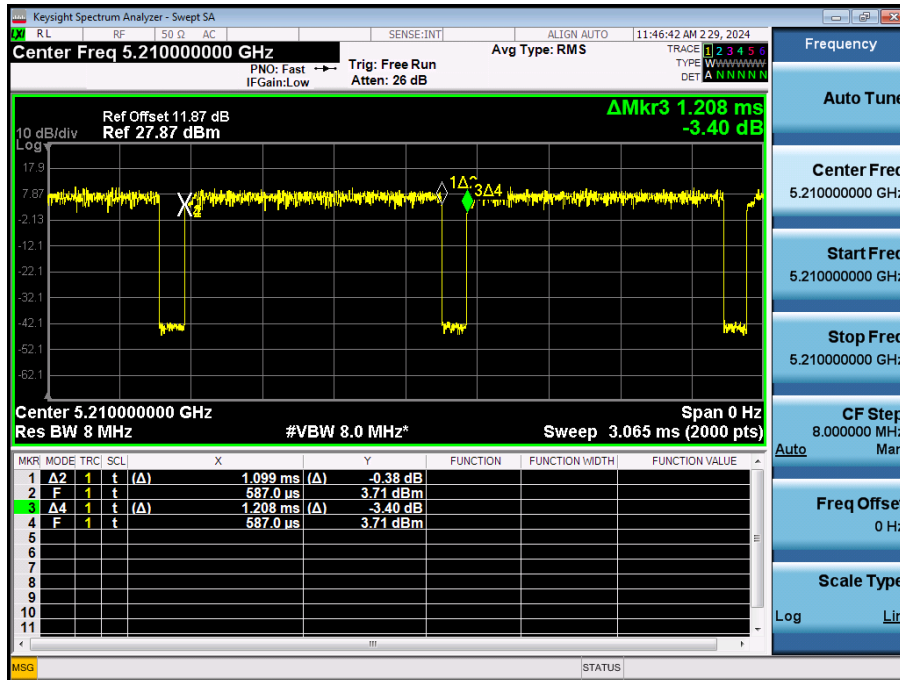
Bandwidth 80M 52 Tone MCS 0



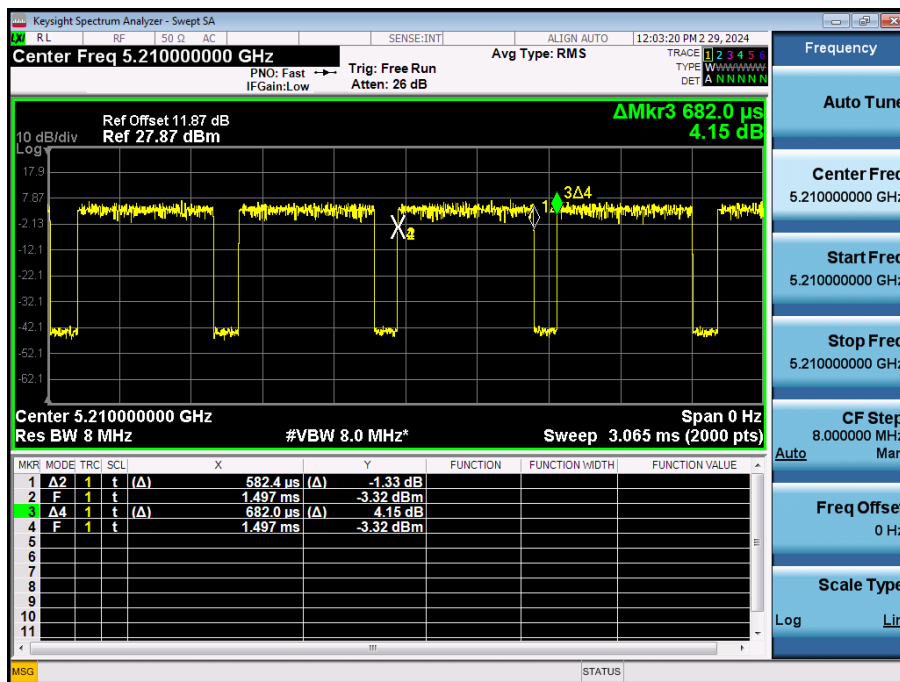
Bandwidth 80M 106 Tone MCS 0



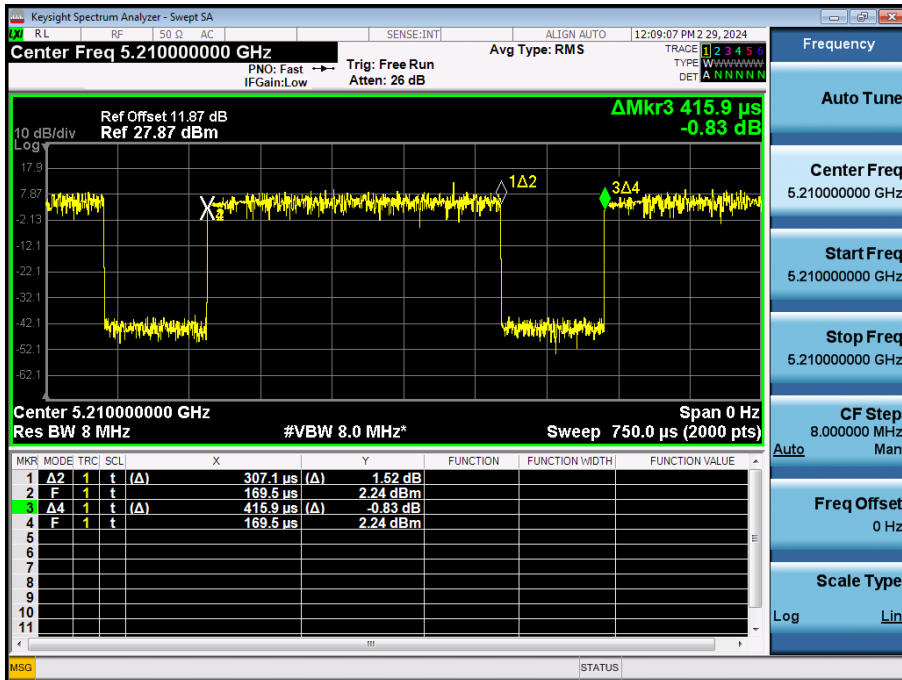
Bandwidth 80M 242 Tone MCS 0



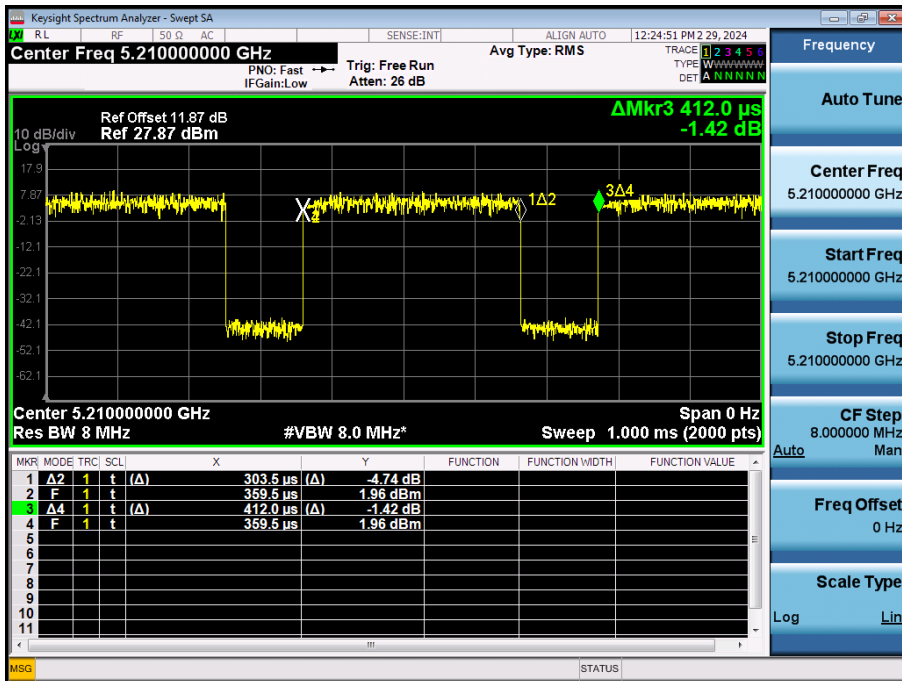
Bandwidth 80M 484 Tone MCS 0



Bandwidth 80M 996 Tone MCS 0

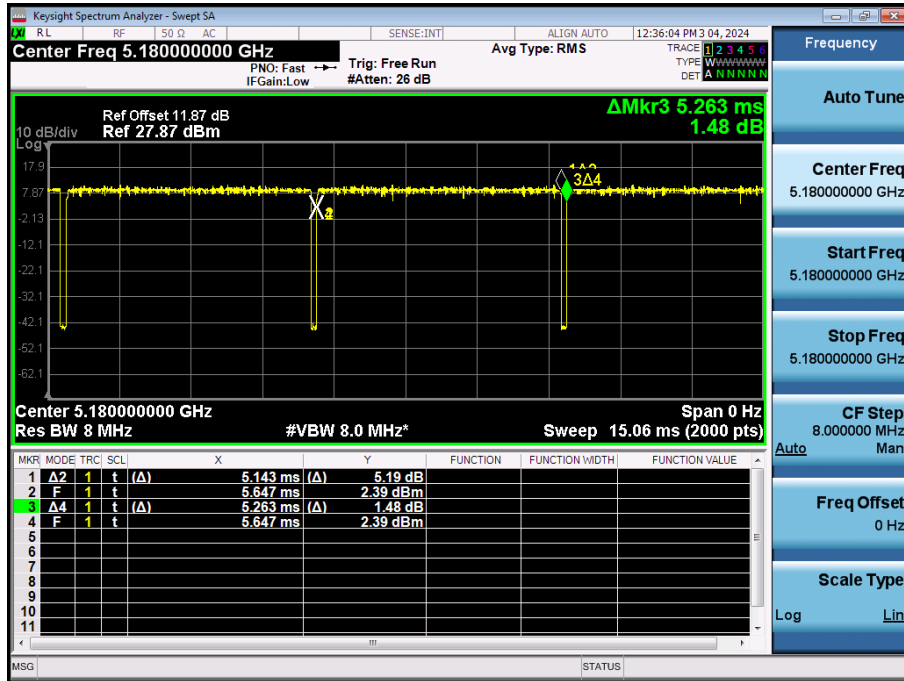


Bandwidth 80M SU MCS 0

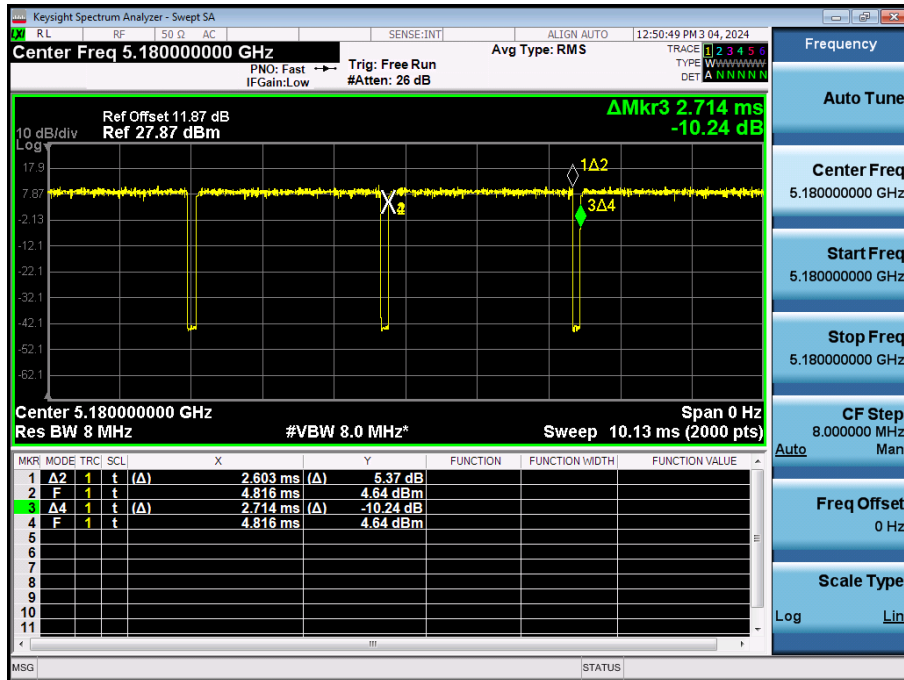


1.2 MIMO_SDM(Ant1+Ant2)

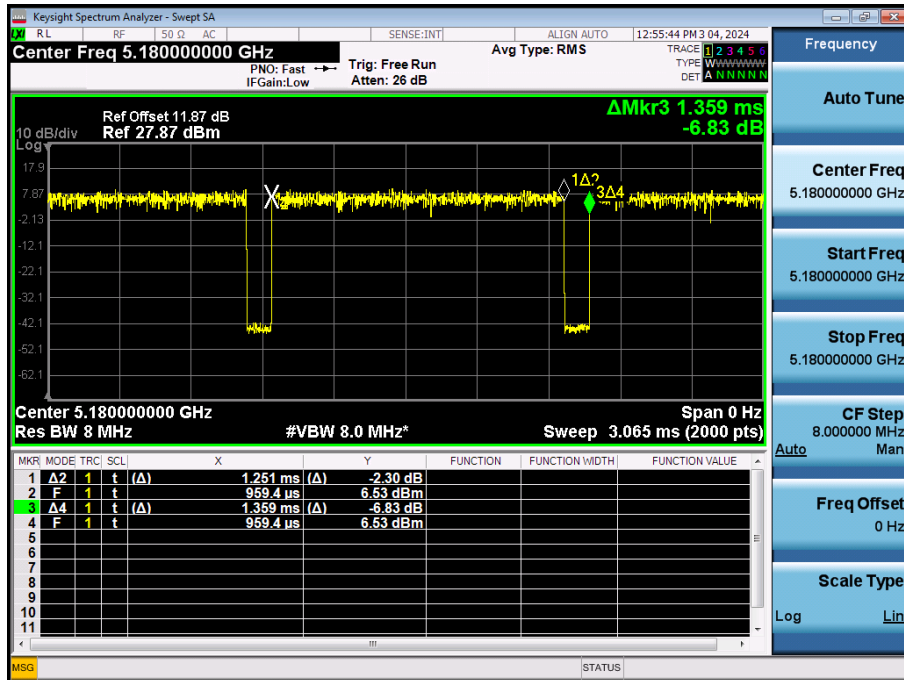
Bandwidth 20M 26 Tone MCS 0



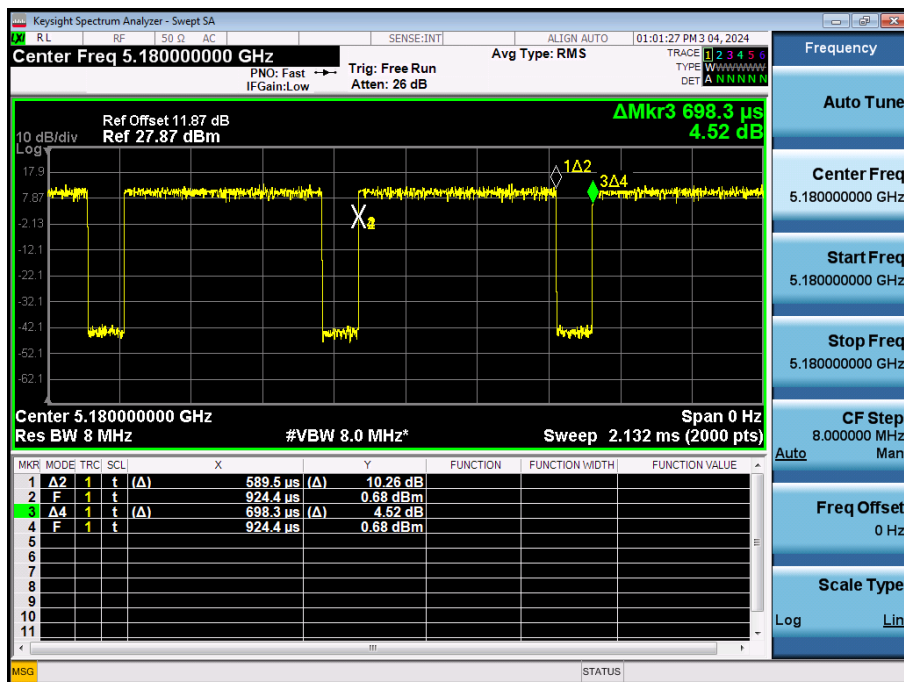
Bandwidth 20M 52 Tone MCS 0



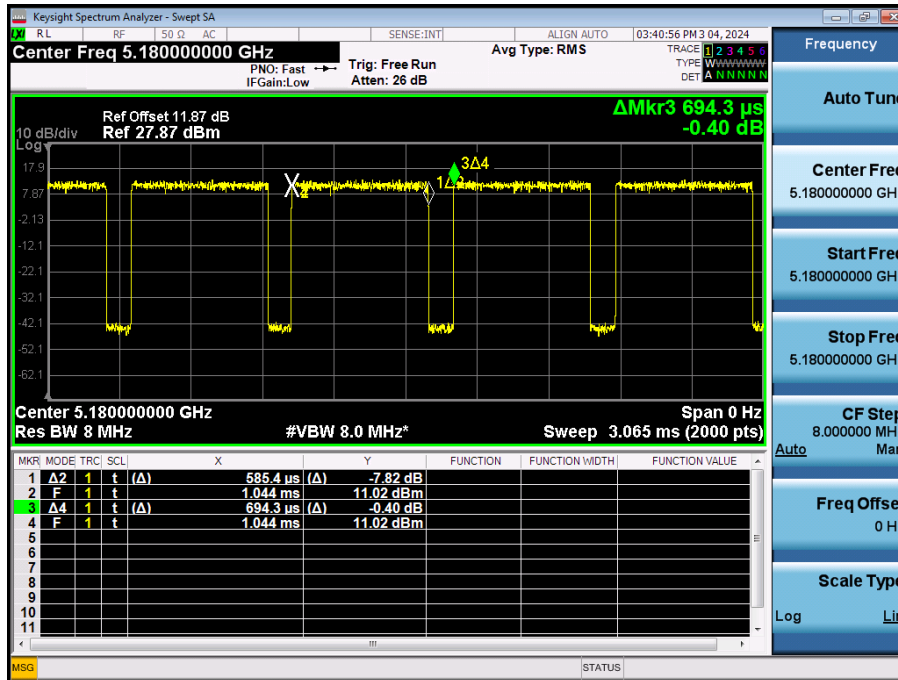
Bandwidth 20M 106 Tone MCS 0



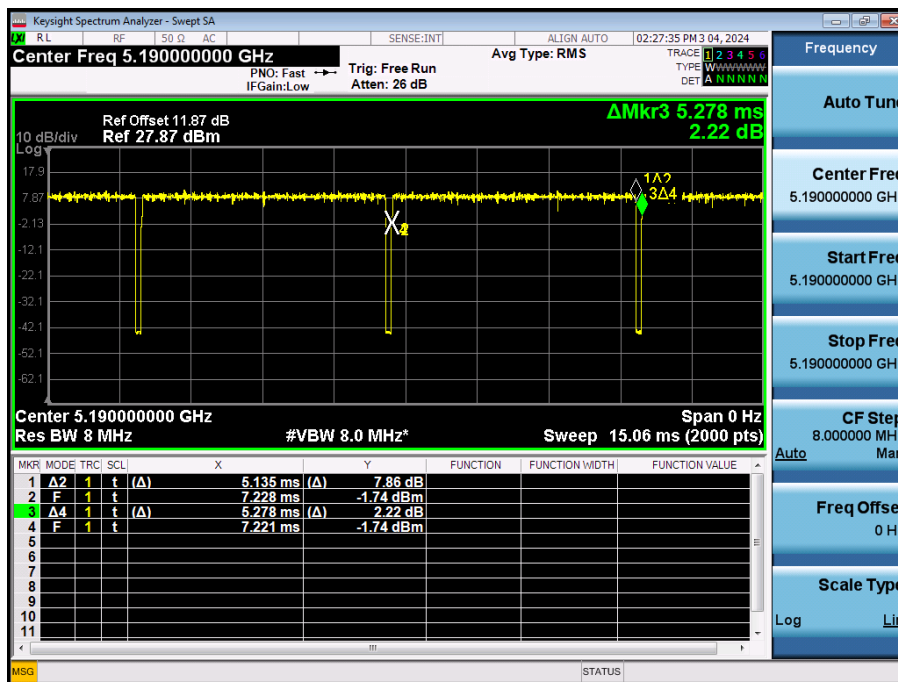
Bandwidth 20M 242 Tone MCS 0



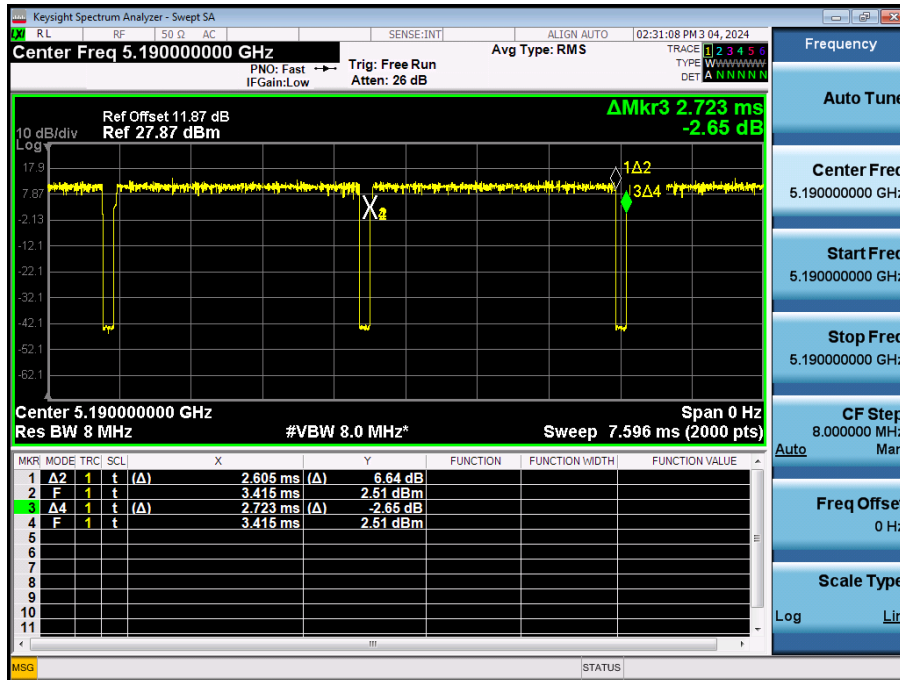
Bandwidth 20M SU MCS 0



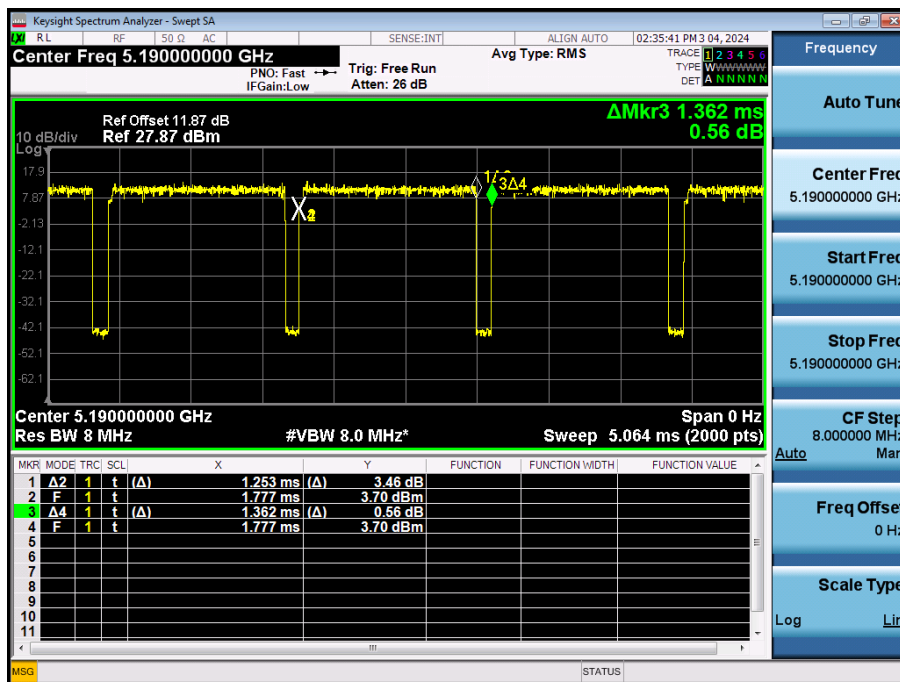
Bandwidth 40M 26 Tone MCS 0



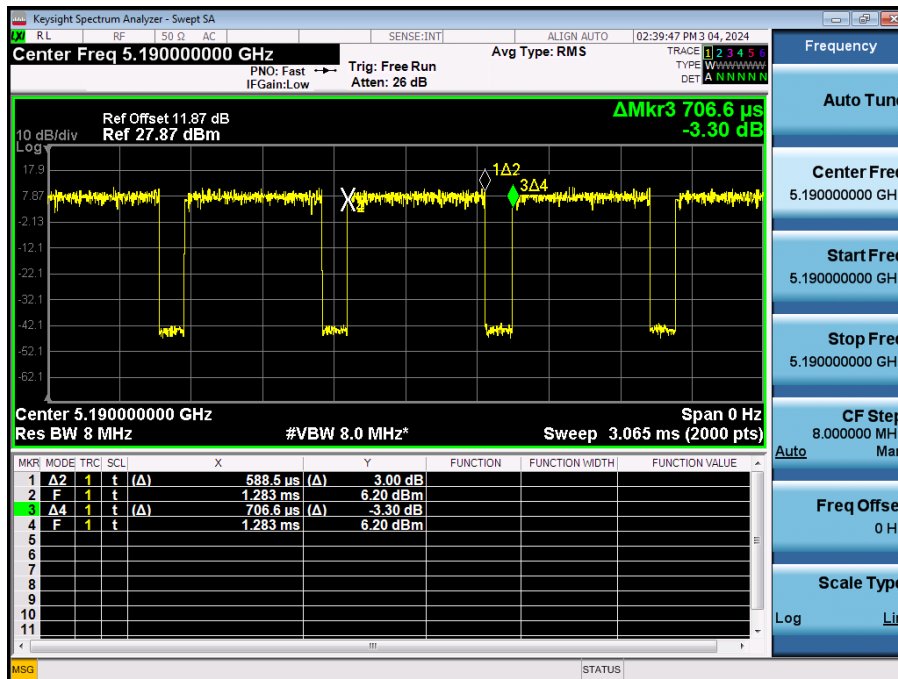
Bandwidth 40M 52 Tone MCS 0



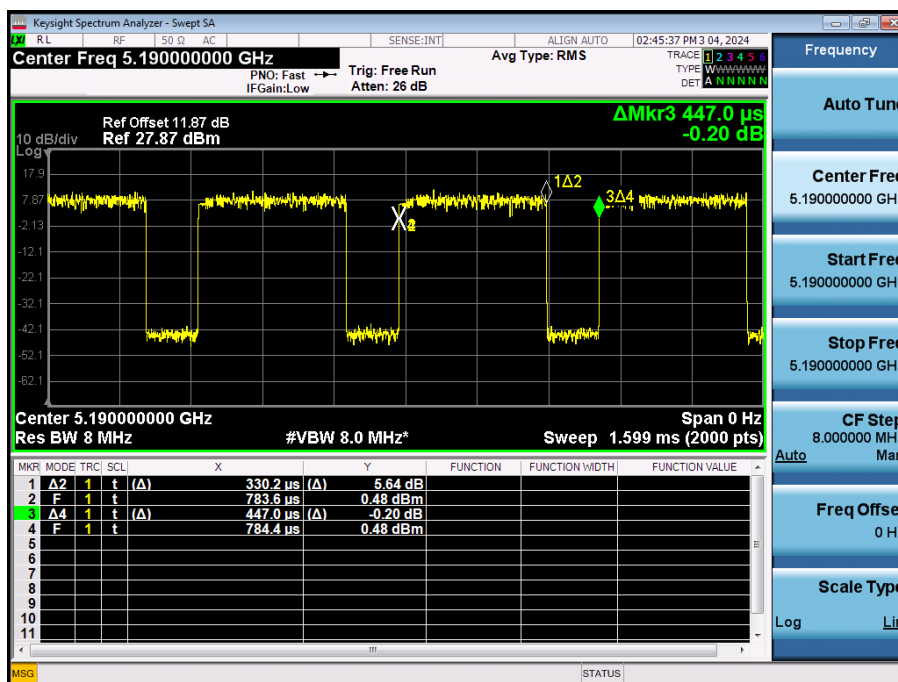
Bandwidth 40M 106 Tone MCS 0



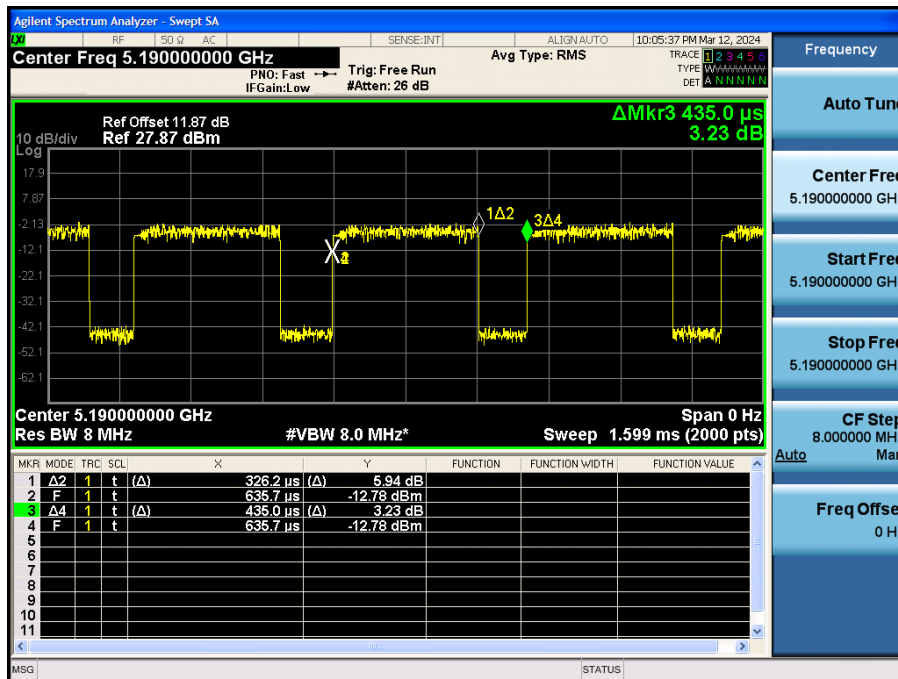
Bandwidth 40M 242 Tone MCS 0



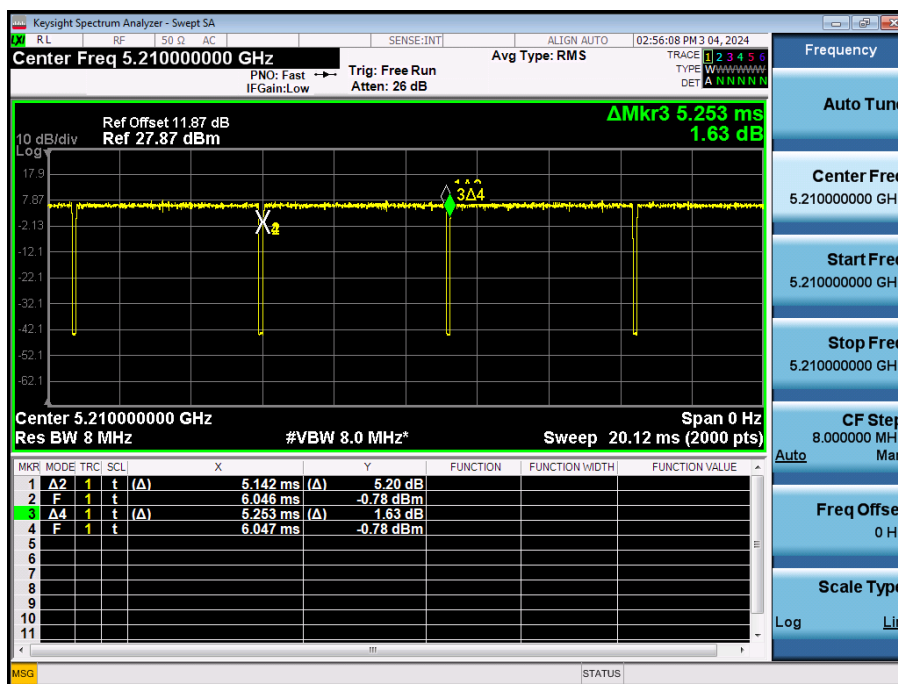
Bandwidth 40M 484 Tone MCS 0



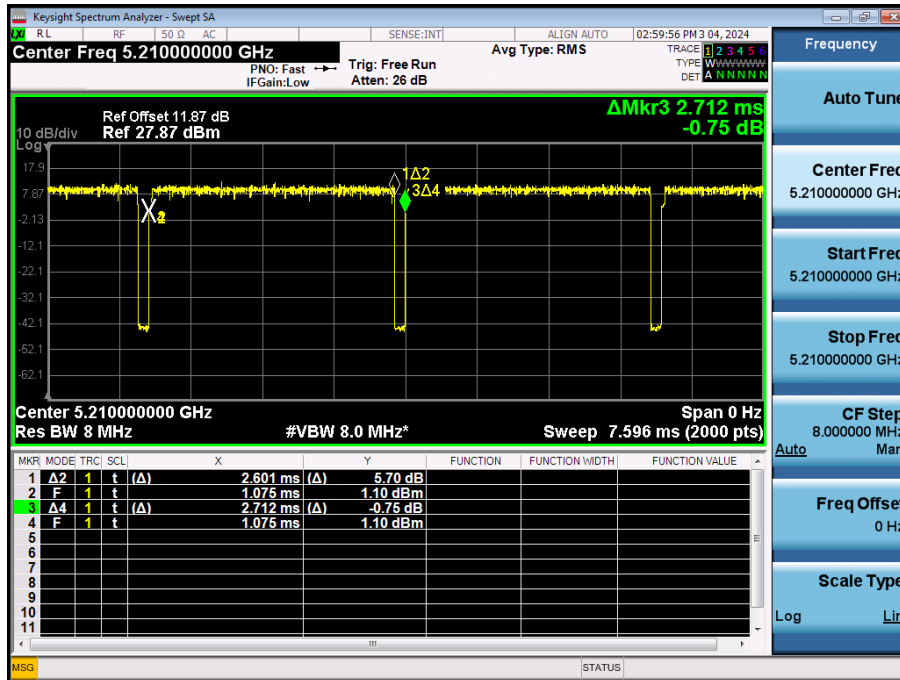
Bandwidth 40M SU MCS 0



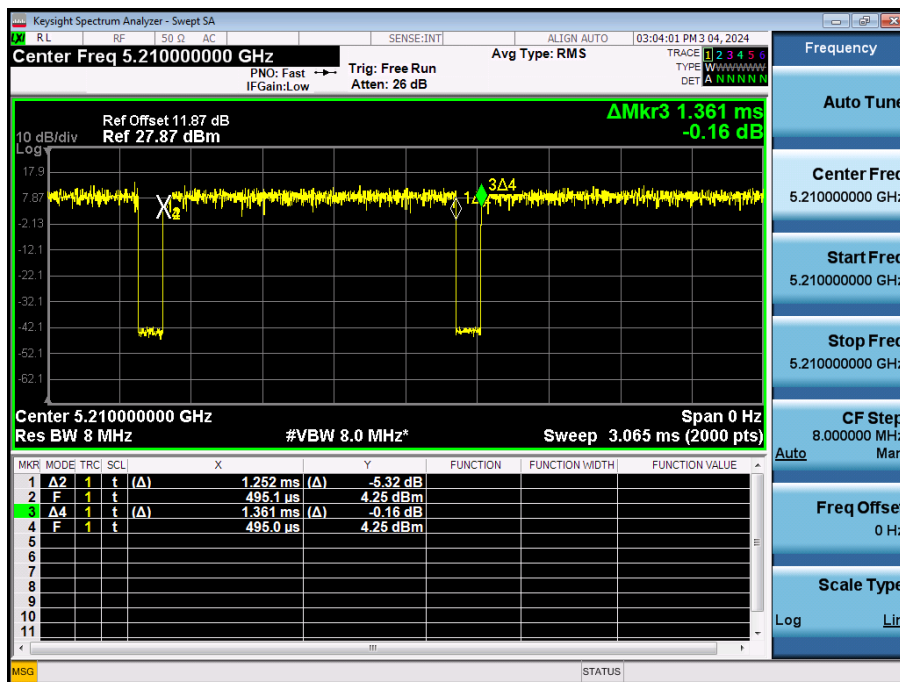
Bandwidth 80M 26 Tone MCS 0



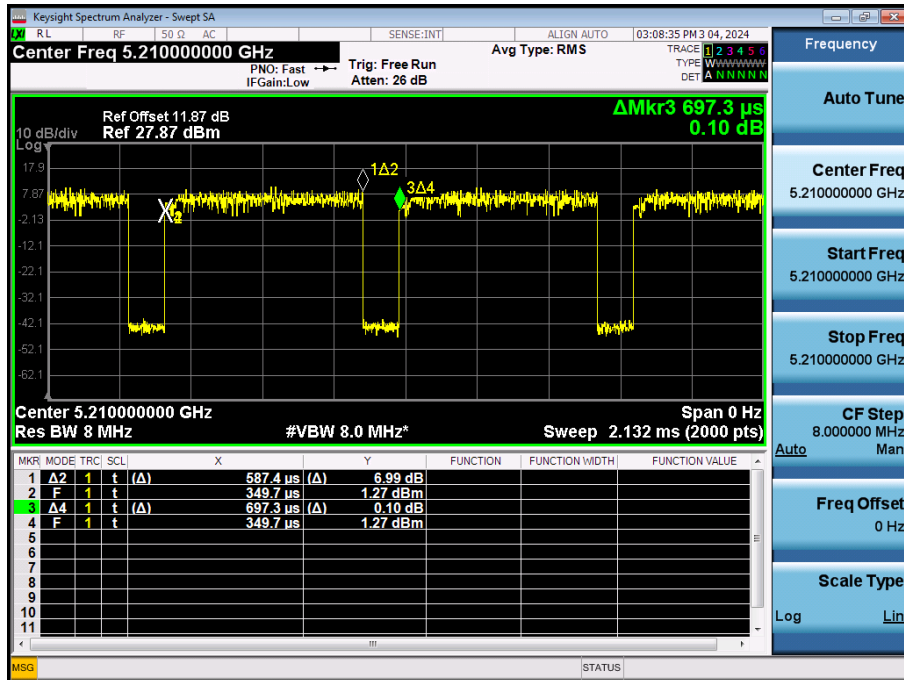
Bandwidth 80M 52 Tone MCS 0



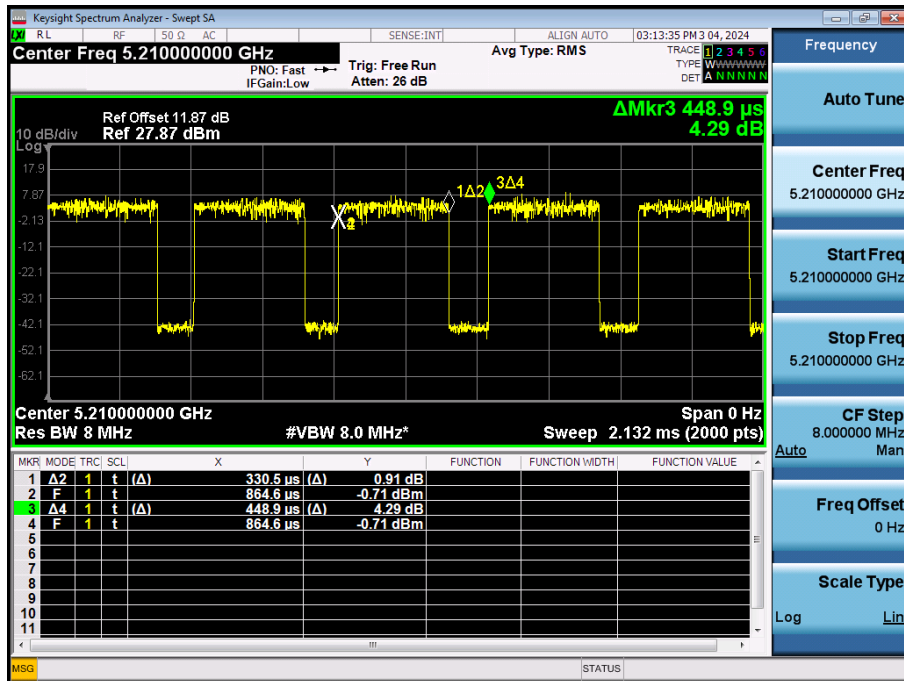
Bandwidth 80M 106 Tone MCS 0



Bandwidth 80M 242 Tone MCS 0



Bandwidth 80M 484 Tone MCS 0



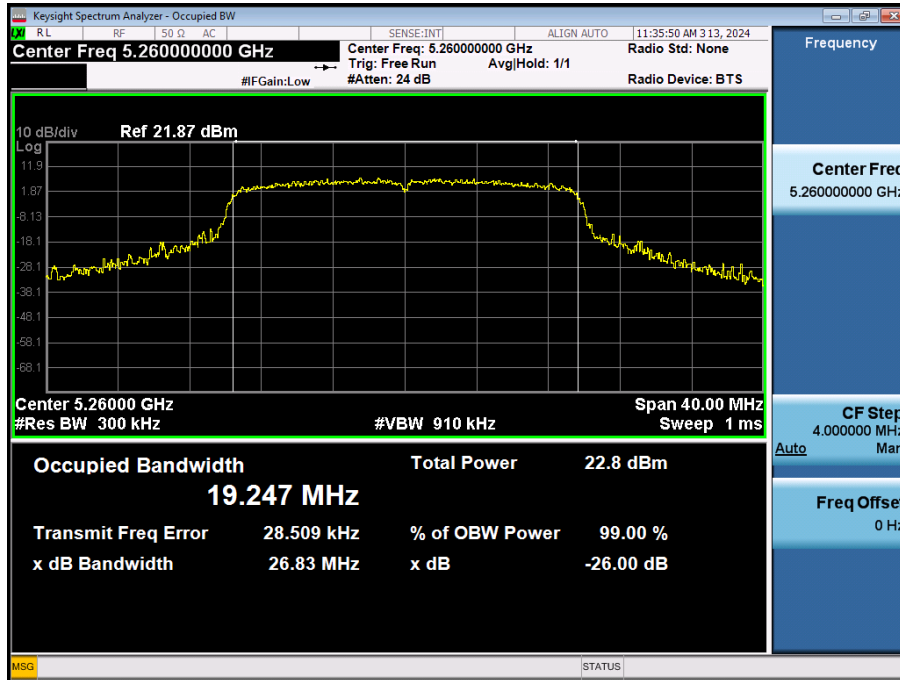
2. 26dB Bandwidth

Note:

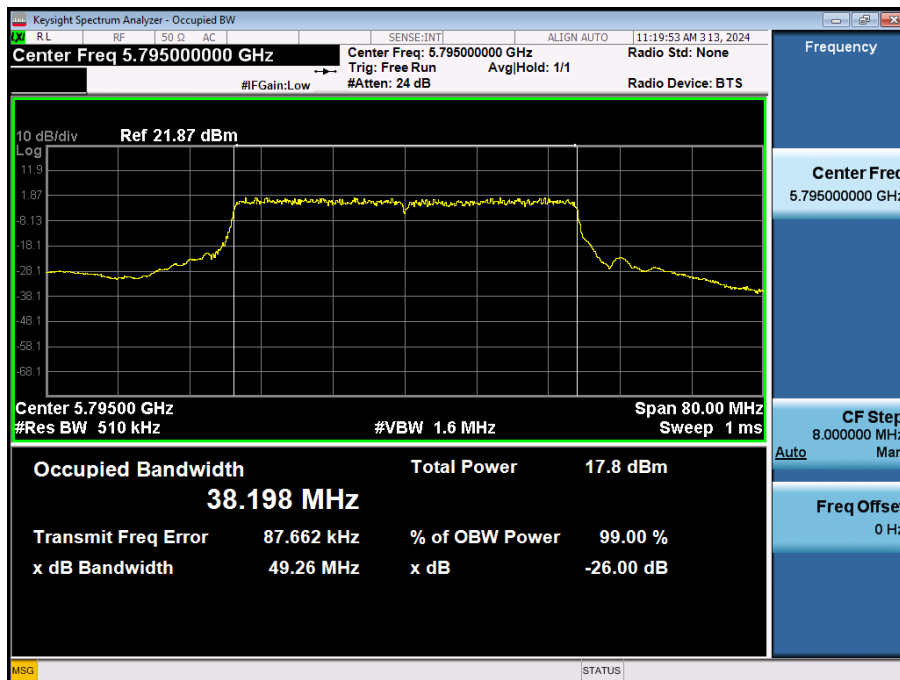
1. In order to simplify the report, attached plots were only the widest channel.

2.1 SISO Ant. 2

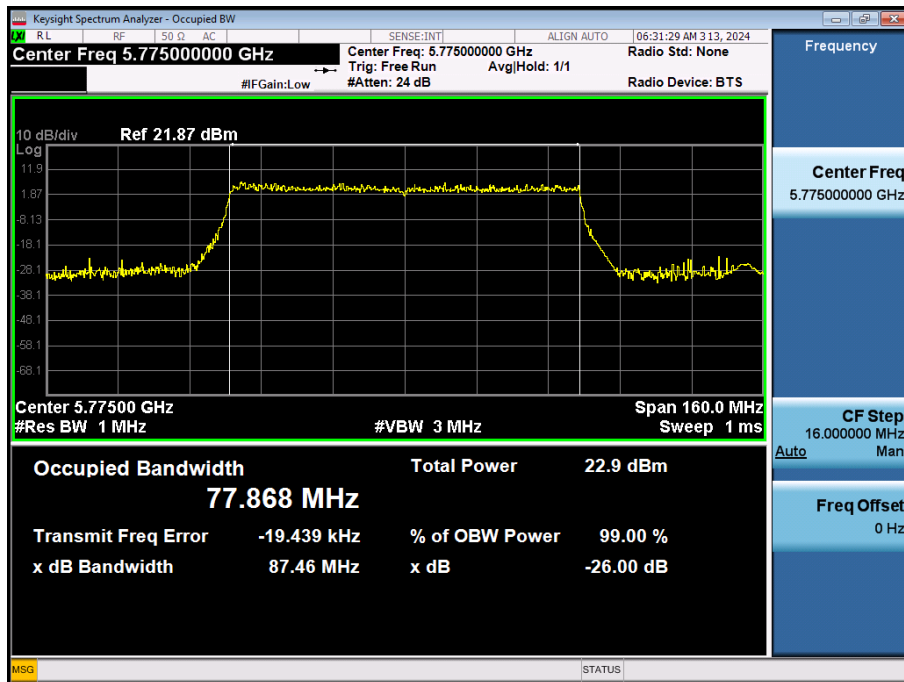
Bandwidth 20M Ch.52(5260 MHz) SU



Bandwidth 40M Ch.159(5795 MHz) 484 Tones RU 65

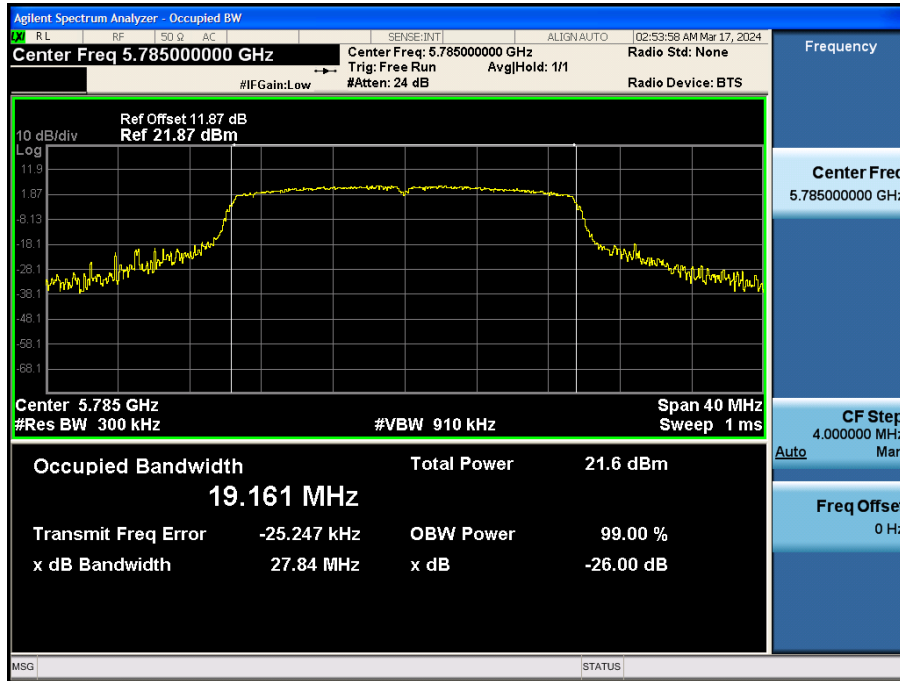


Bandwidth 80M Ch.155(5775 MHz) 996 Tones RU 67

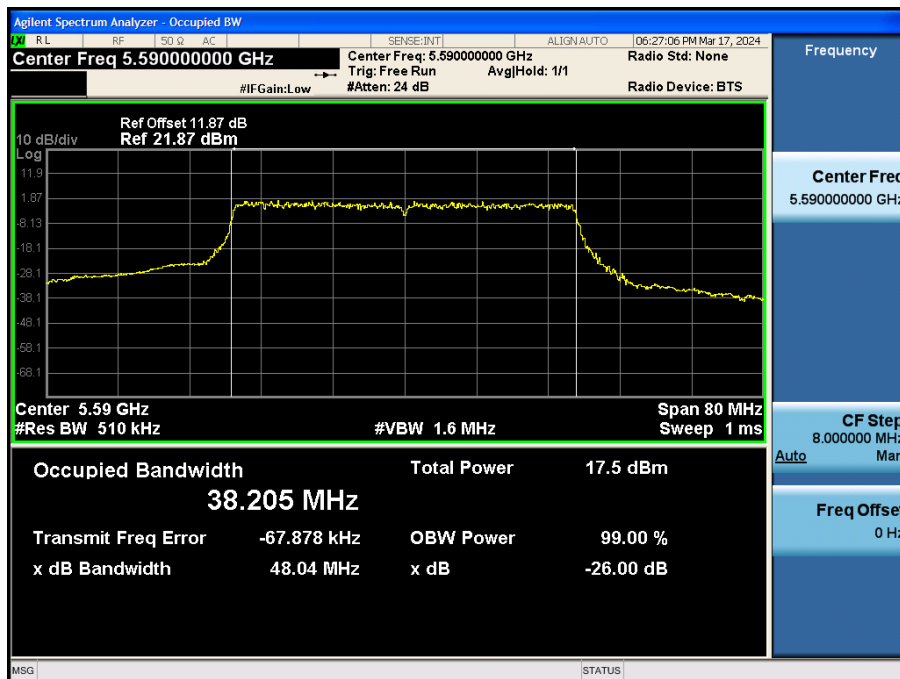


2.2 MIMO_SDM(Ant. 1)

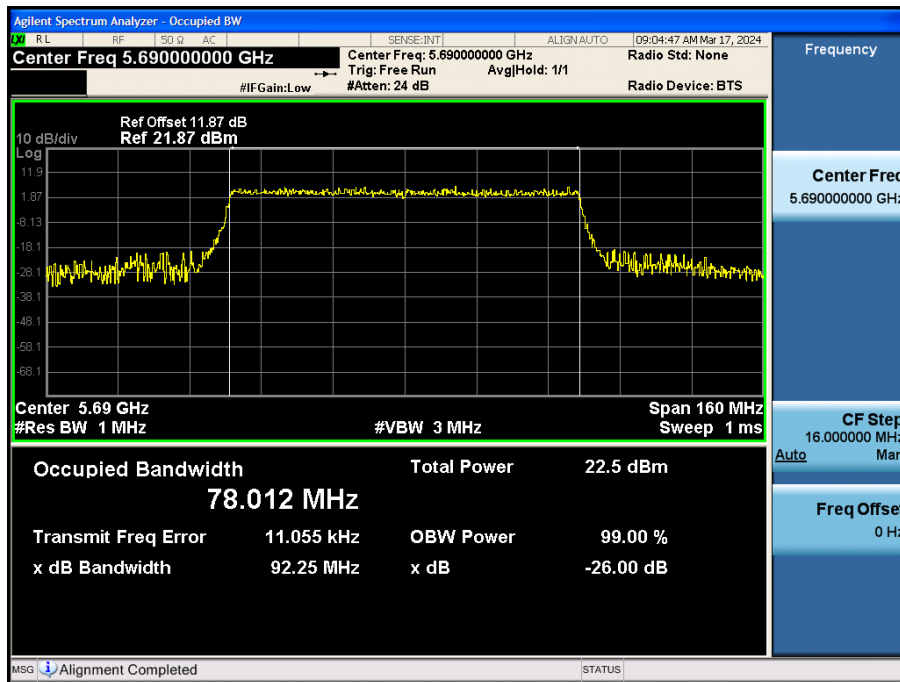
Bandwidth 20M Ch.157(5785 MHz) 242 Tones RU 61



Bandwidth 40M Ch.118(5590 MHz) 484 Tones RU 65

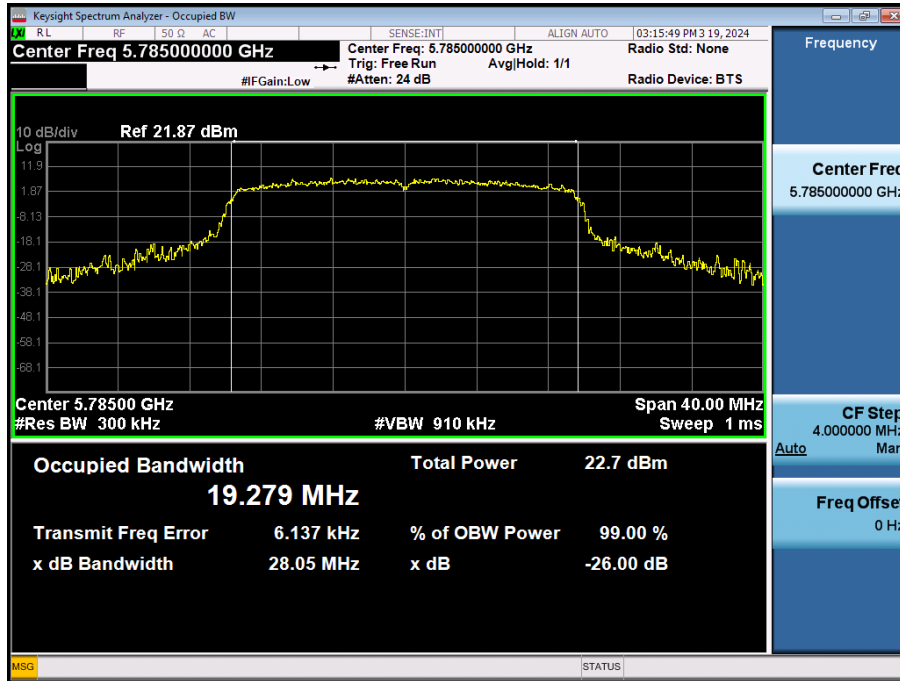


Bandwidth 80M Ch.138(5690 MHz) 996 Tones RU 67

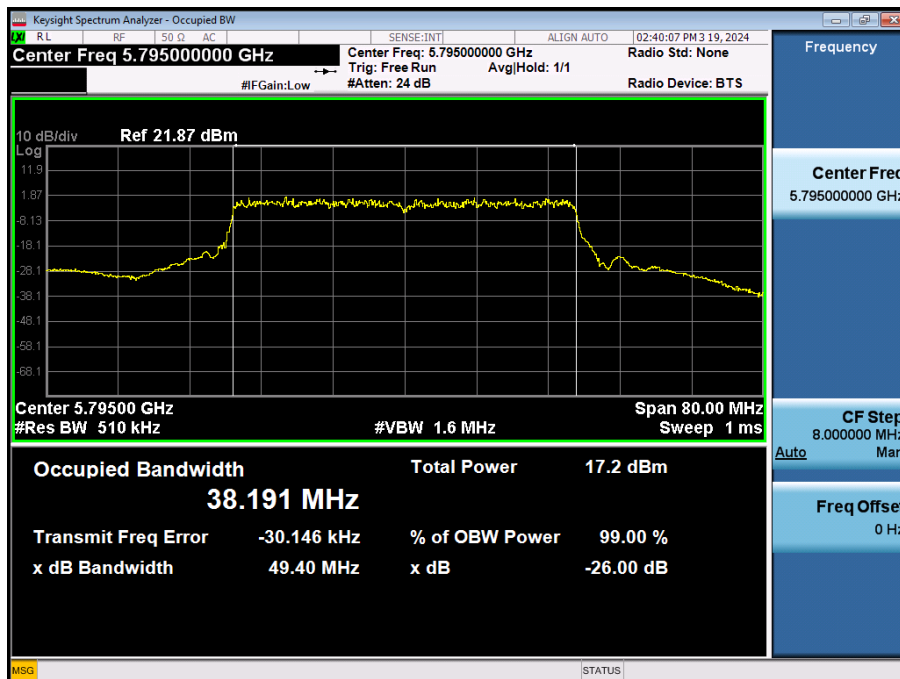


2.3 MIMO_SDM(Ant. 2)

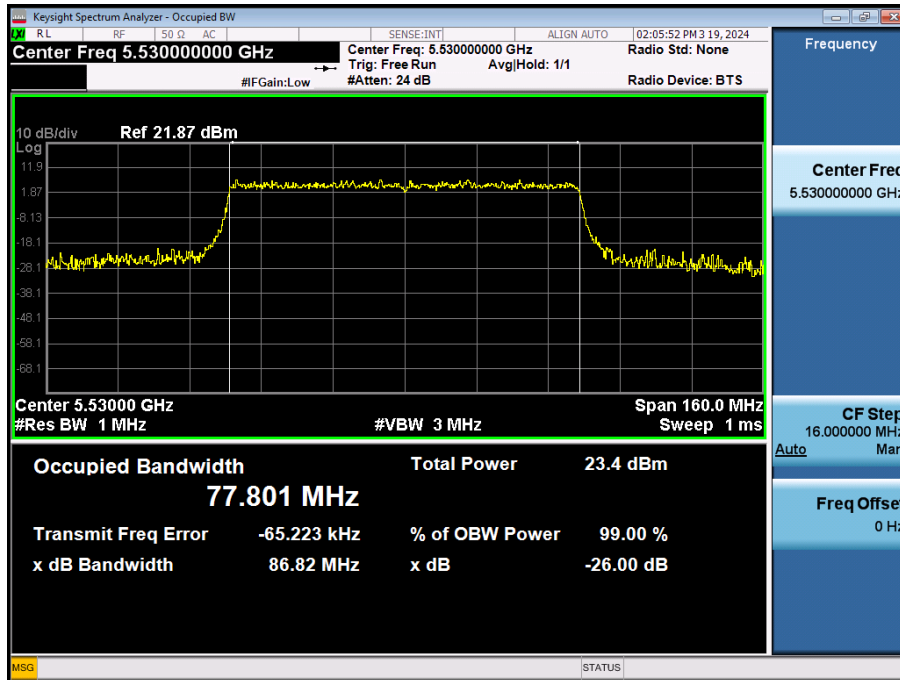
Bandwidth 20M Ch.157(5785 MHz) SU



Bandwidth 40M Ch.159(5795 MHz) 484 Tones RU 65



Bandwidth 80M Ch.106(5530 MHz) 996 Tones RU 67



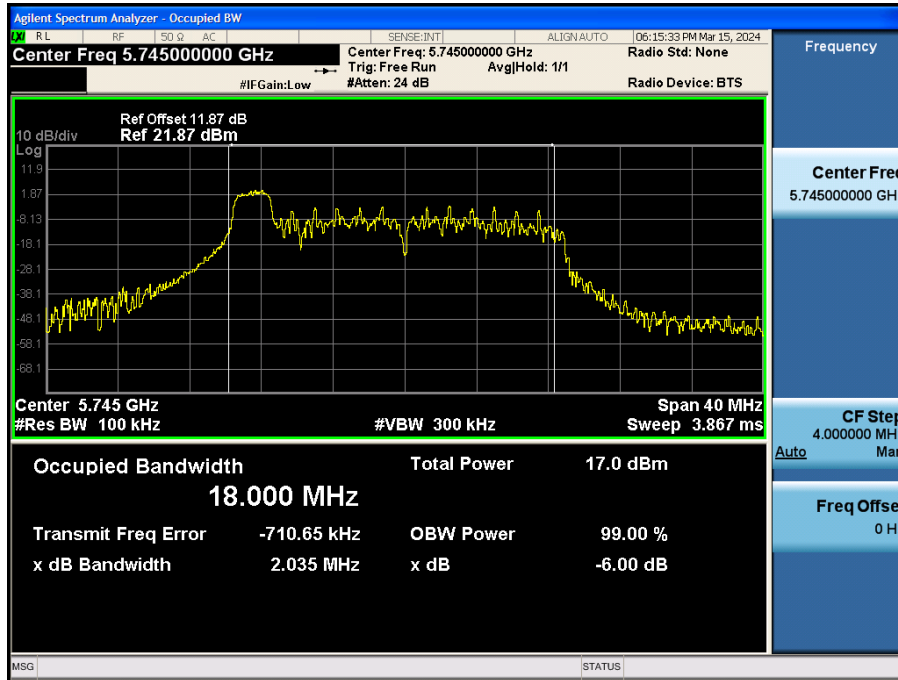
3. 6dB Bandwidth

Note:

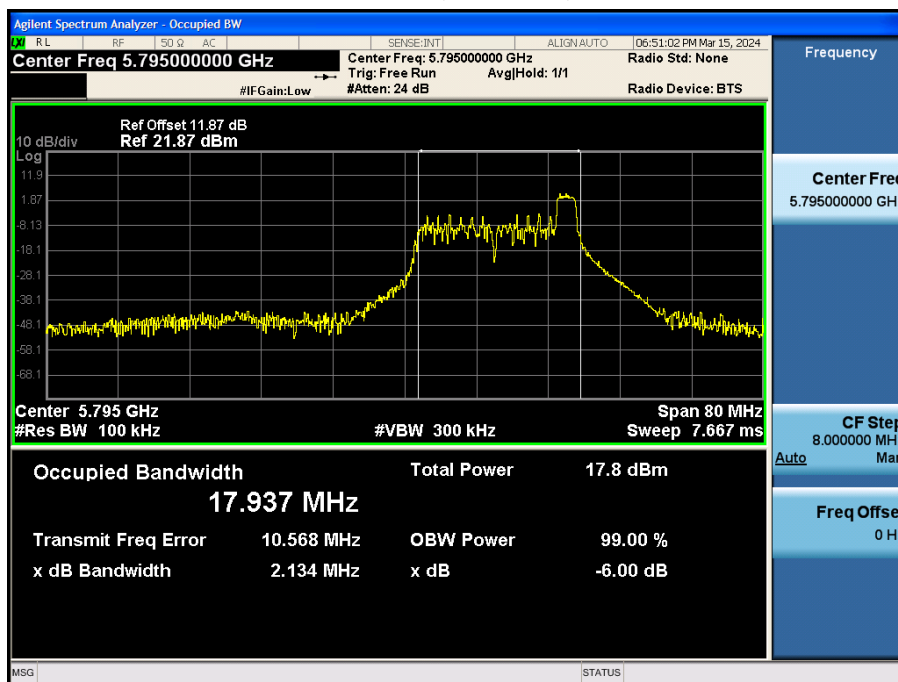
1. In order to simplify the report, attached plots were only the narrowest channel.

3.1 SISO Ant. 2

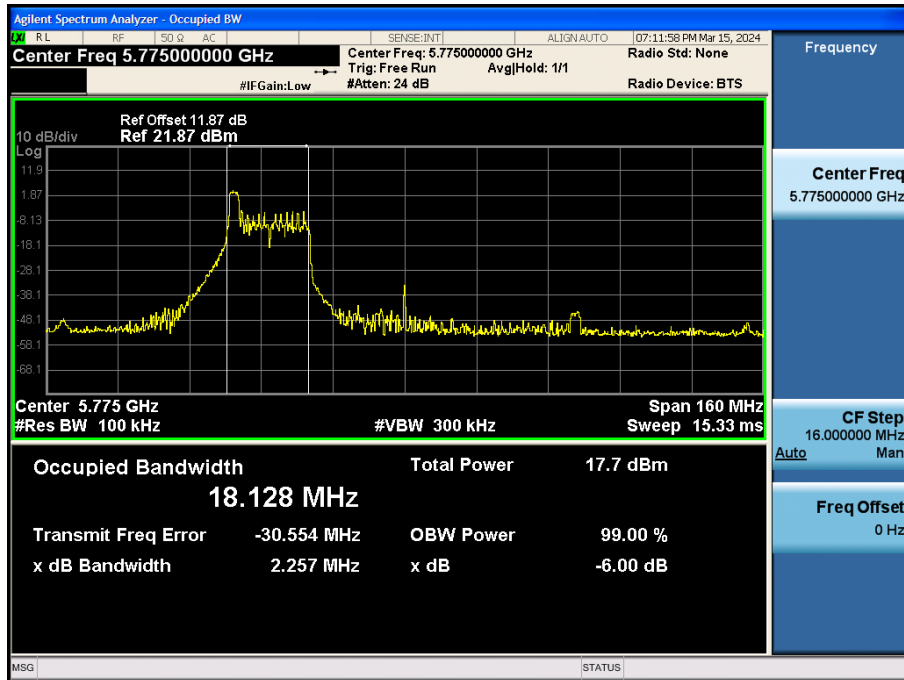
Bandwidth 20M Ch.149(5745 MHz) 26 Tones RU 0



Bandwidth 40M Ch.159(5795 MHz) 26 Tones RU 17

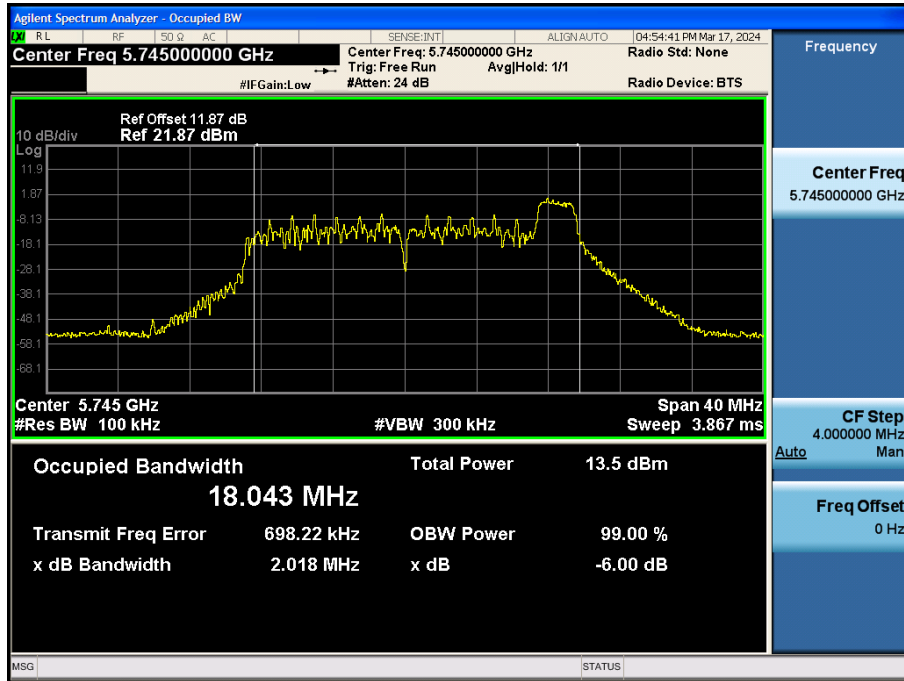


Bandwidth 80M Ch.155(5775 MHz) 26 Tones RU 0

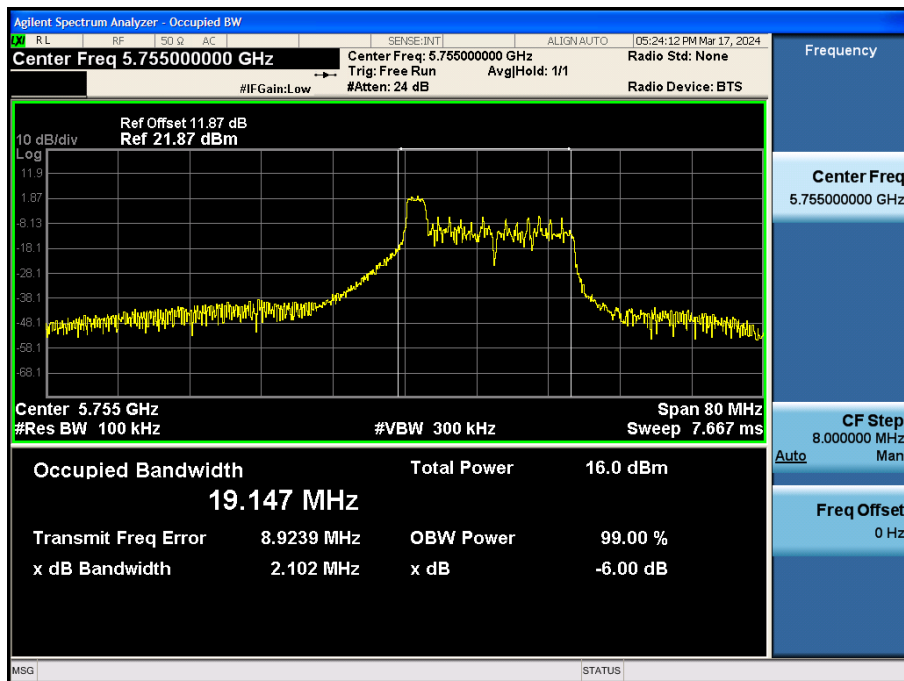


3.2 MIMO_SDM(Ant. 1)

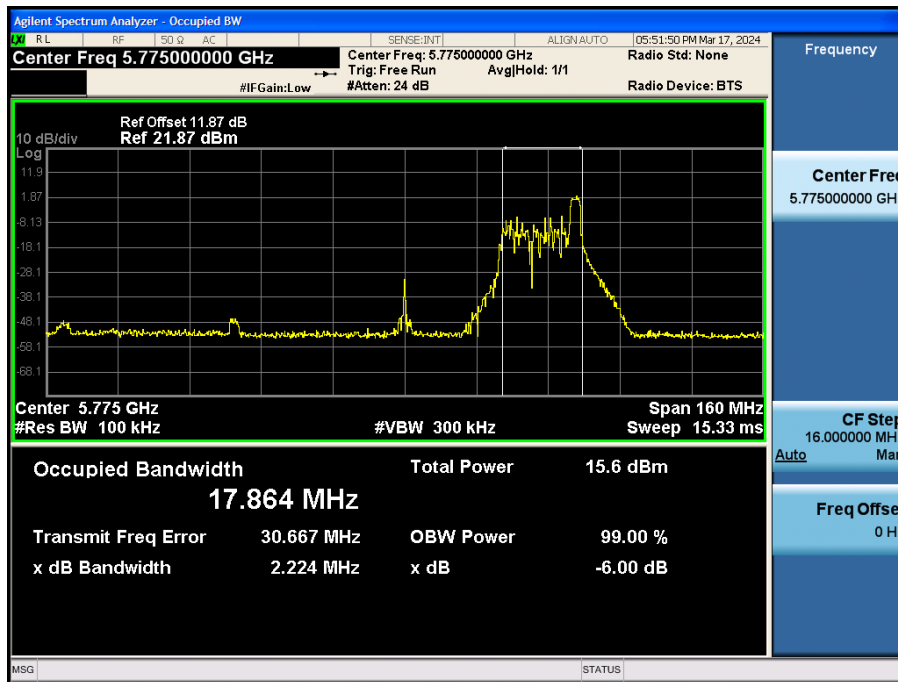
Bandwidth 20M Ch.149(5745 MHz) 26 Tones RU 8



Bandwidth 40M Ch.151(5755 MHz) 26 Tones RU 9

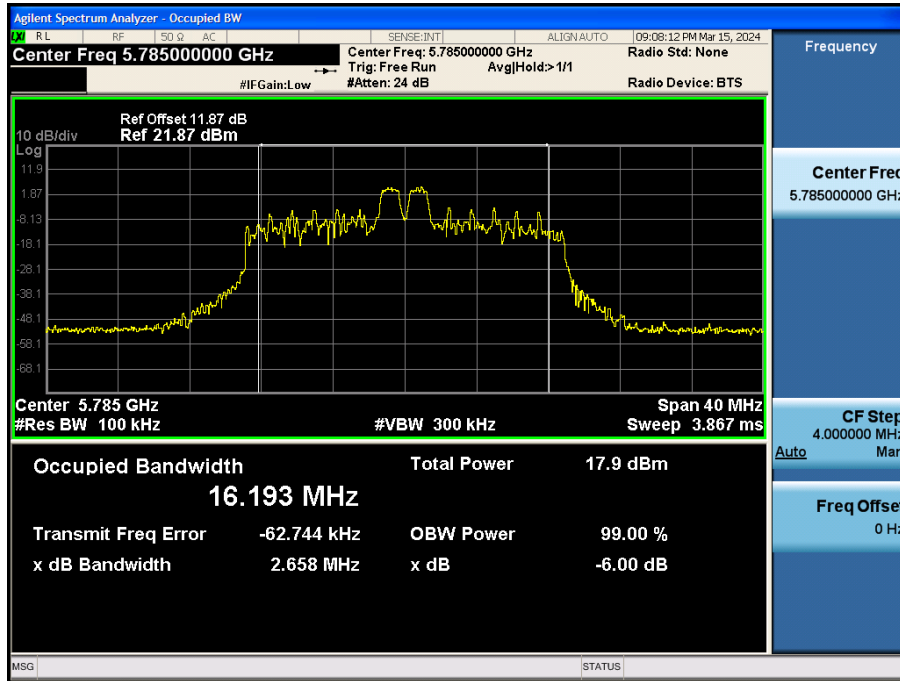


Bandwidth 80M Ch.155(5775 MHz) 26 Tones RU 36

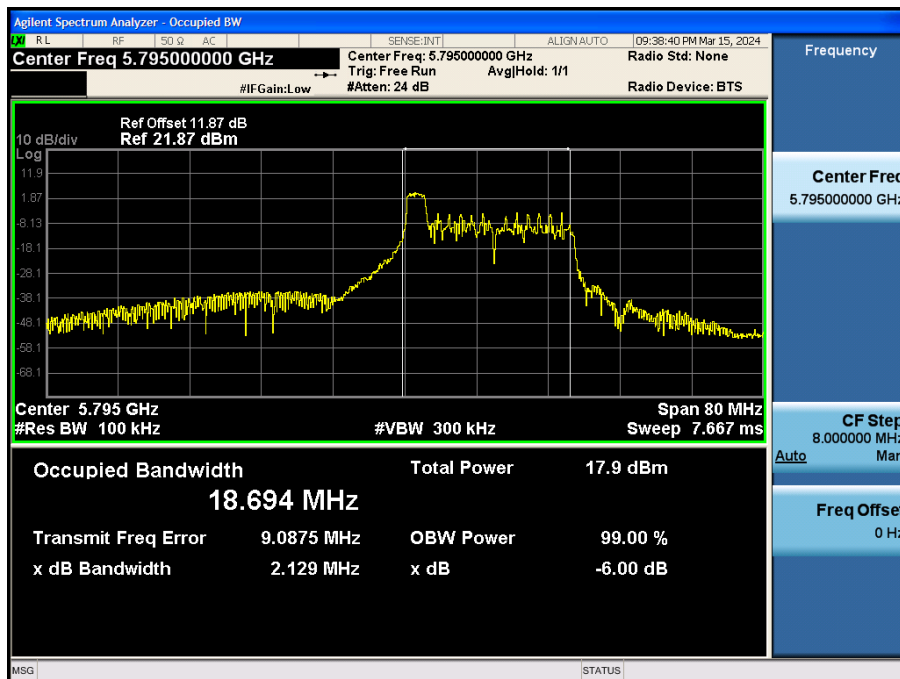


3.3 MIMO_SDM(Ant. 2)

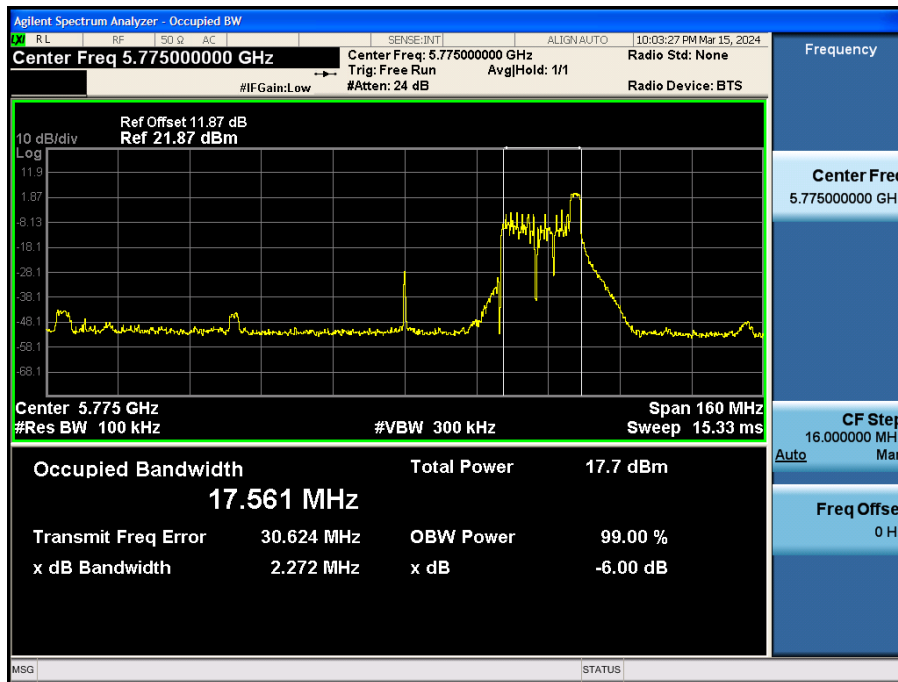
Bandwidth 20M Ch.157(5785 MHz) 26 Tones RU 4



Bandwidth 40M Ch.159(5795 MHz) 26 Tones RU 9



Bandwidth 80M Ch.155(5775 MHz) 26 Tones RU 36



4. Power Spectral Density

Note: In order to simplify the report, attached plots were only channel of highest PSD.

4.1 SISO Ant.2

Bandwidth 20M Ch.60(5300MHz) 52 Tone RU 38



PSD (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm/MHz)
6.793	0.100	6.893

Note:

$$\text{Total PSD (dBm/MHz)} = \text{Measured Value (dBm/MHz)} + \text{Duty Cycle Factor (dB)}$$

Bandwidth 20M Ch.165(5825 MHz) 26 Tone RU 4



PSD (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm/MHz)
3.761	0.208	3.969

Note:

Total PSD (dBm/MHz) = Measured Value (dBm/MHz) + Duty Cycle Factor (dB)

Bandwidth 40M Ch.62(5310MHz) 52 Tone RU 37

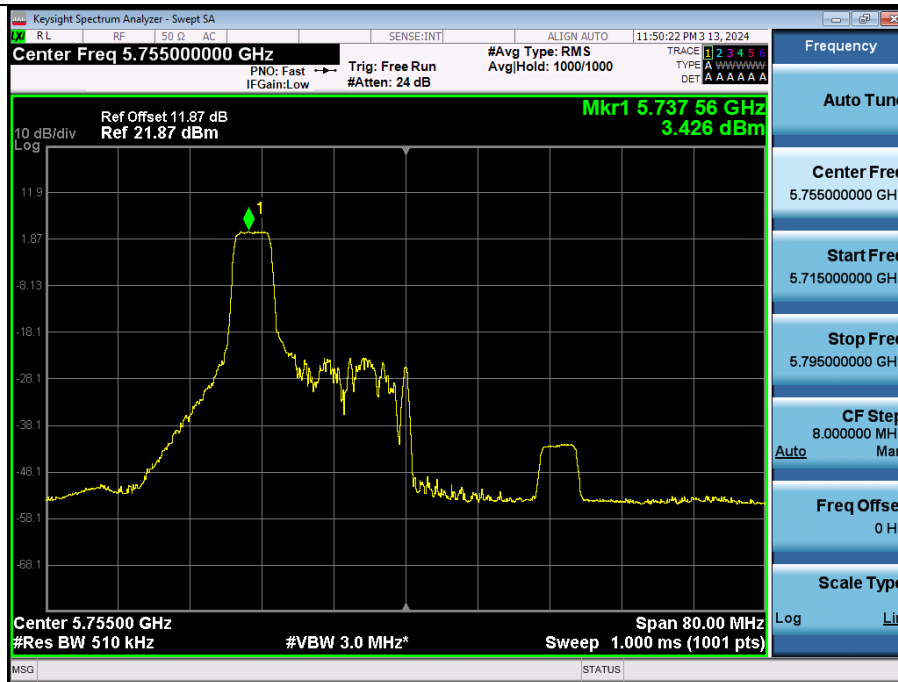


PSD (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm/MHz)
6.807	0.095	6.902

Note:

Total PSD (dBm/MHz) = Measured Value (dBm/MHz) + Duty Cycle Factor (dB)

Bandwidth 40M Ch.151(5755MHz) 52 Tone RU 37

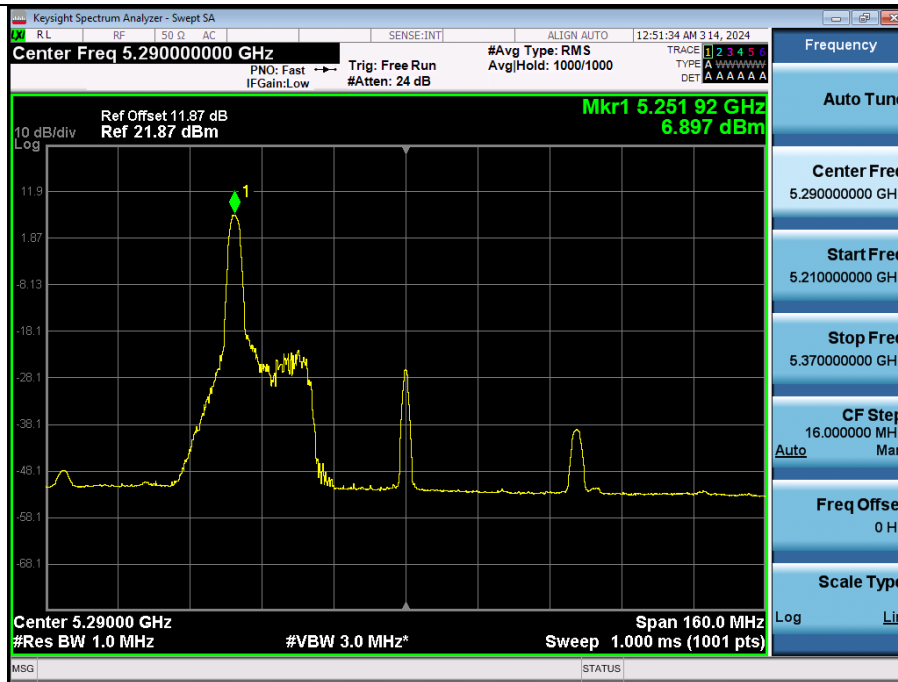


PSD (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm/MHz)
3.426	0.095	3.521

Note:

Total PSD (dBm/MHz) = Measured Value (dBm/MHz) + Duty Cycle Factor (dB)

Bandwidth 80M Ch.58(5290MHz) 26 Tone RU 0

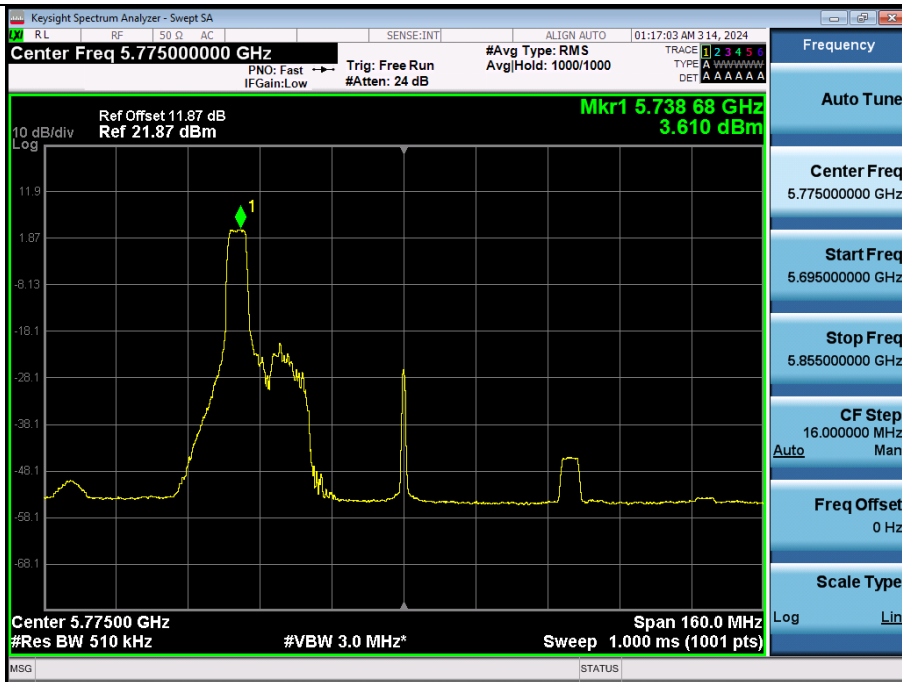


PSD (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm/MHz)
6.897	0.200	7.097

Note:

Total PSD (dBm/MHz) = Measured Value (dBm/MHz) + Duty Cycle Factor (dB)

Bandwidth 80M Ch.155 (5775 MHz) 52 Tone RU 37



PSD (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm/MHz)
3.610	0.085	3.695

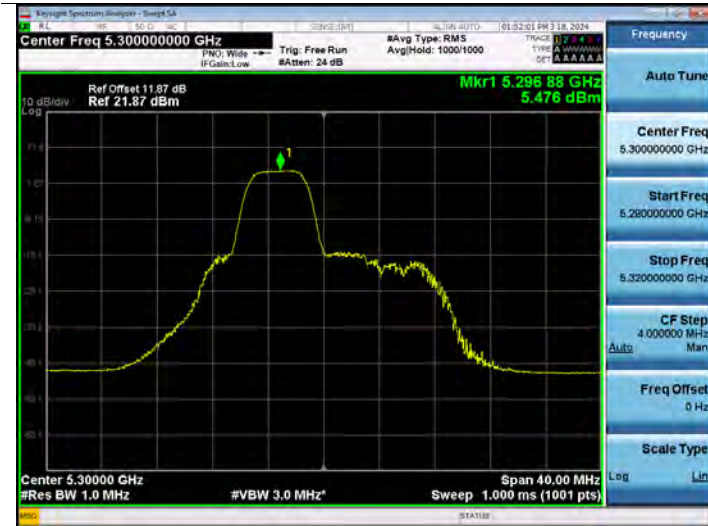
Note:

Total PSD (dBm/MHz) = Measured Value (dBm/MHz) + Duty Cycle Factor (dB)

4.1 MIMO_SDM(Ant1+Ant2)

Bandwidth 20M Ch.60(5300 MHz) 52 Tone RU 38

Ant.1



Ant.2



SUM PSD (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm/MHz)
9.415	0.181	9.596

Note:

Total PSD (dBm/MHz) = Measured Value (dBm/MHz) + Duty Cycle Factor (dB)

Bandwidth 20M Ch.165(5825 MHz) 26 Tone RU 4

Ant.1



Ant.2



SUM PSD (dBm/500kHz)	Duty Cycle Factor (dB)	Total PSD (dBm/500kHz)
7.296	0.100	7.396

Note:

Total PSD (dBm/500kHz) = Measured Value (dBm/500kHz) + Duty Cycle Factor (dB)

Bandwidth 40M Ch.54 (5270 MHz) 26 Tone RU 0

Ant.1



Ant.2



SUM PSD (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm/MHz)
8.769	0.119	8.888

Note:

Total PSD (dBm/MHz) = Measured Value (dBm/MHz) + Duty Cycle Factor (dB)

Bandwidth 40M Ch.151 (5755 MHz) 26 Tone RU 0

Ant.1



Ant.2



SUM PSD (dBm/500kHz)	Duty Cycle Factor (dB)	Total PSD (dBm/500kHz)
5.632	0.119	5.751

Note:

Total PSD (dBm/500kHz) = Measured Value (dBm/500kHz) + Duty Cycle Factor (dB)

Bandwidth 80M Ch.42 (5210 MHz) 26 Tone RU 0

Ant.1



Ant.2



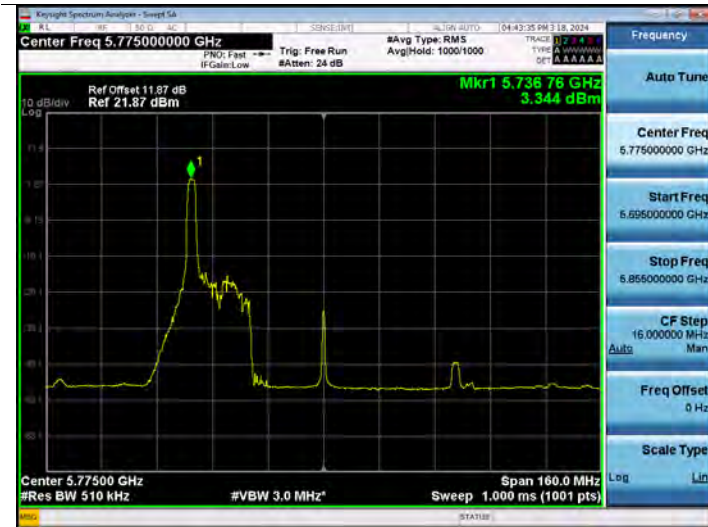
SUM PSD (dBm/MHz)	Duty Cycle Factor (dB)	Total PSD (dBm/MHz)
9.462	0.093	9.555

Note:

Total PSD (dBm/MHz) = Measured Value (dBm/MHz) + Duty Cycle Factor (dB)

Bandwidth 80M Ch.155 (5775 MHz) 26 Tone RU 0

Ant.1



Ant.2



SUM PSD (dBm/500kHz)	Duty Cycle Factor (dB)	Total PSD (dBm/500kHz)
6.420	0.093	6.513

Note:

Total PSD (dBm/500kHz) = Measured Value (dBm/500kHz) + Duty Cycle Factor (dB)

5. Straddle Channel

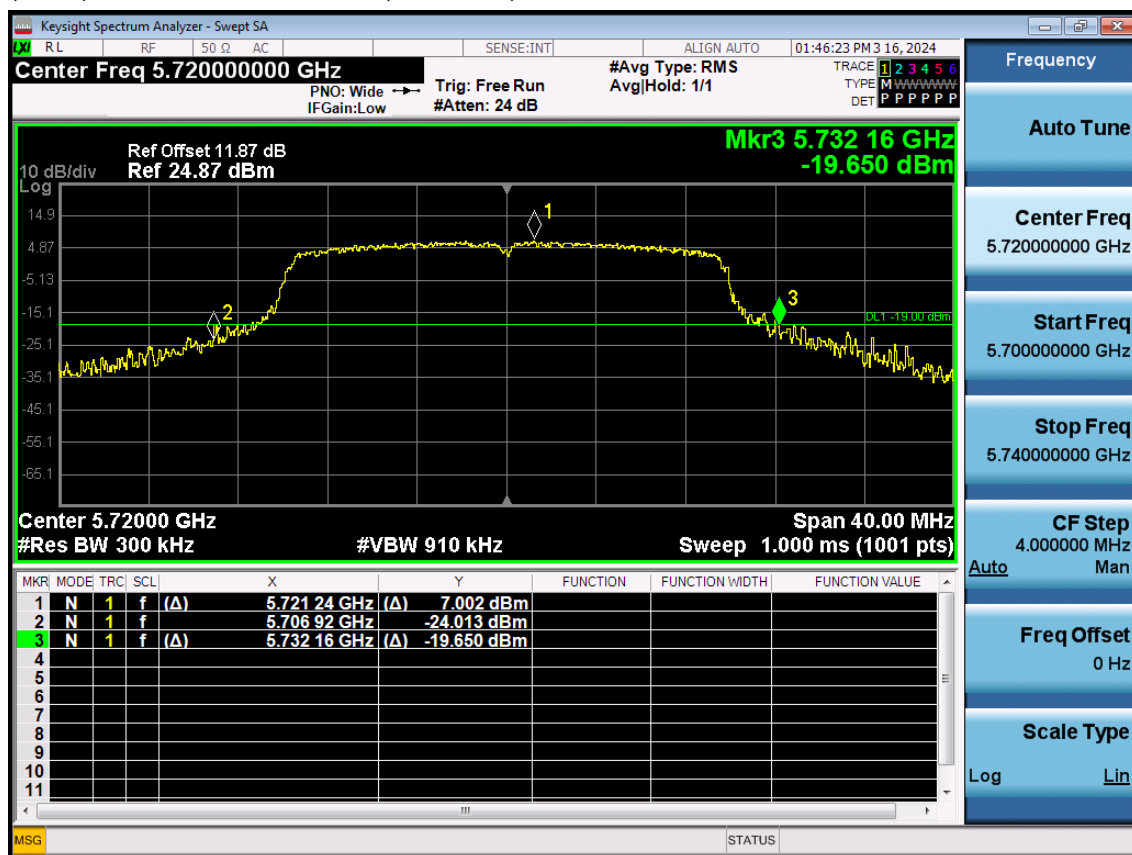
5.1 26dB Bandwidth

Note:

1. In order to simplify the report, attached plots were only the widest channel.

5.1.1 SISO Ant. 2

(26dB) Bandwidth 20M Ch.144(5720 MHz) SU



UNII 2C	Straddle Frequency	Measured Frequency	26dB Bandwidth
	[MHz]	[MHz]	[MHz]
	5725	5706.92	18.08

Note:

1. [UNII 2C] 26 dB Bandwidth = 5725 MHz - Measured Frequency[MHz]

(26 dB) Bandwidth 20M Ch.144(5720 MHz) 242 Tones RU 61



UNII 3	Measured Frequency	Straddle Frequency	26dB Bandwidth
	[MHz]	[MHz]	[MHz]
	5733.72	5725	8.72

Note:

1. [UNII 3] 26 dB Bandwidth = Measured Frequency[MHz] -5725 MHz

(26dB) Bandwidth 40M Ch.142(5710 MHz) 484 Tones RU 65



UNII 2C	Straddle Frequency	Measured Frequency	26dB Bandwidth
	[MHz]	[MHz]	[MHz]
	5725	5685.44	39.56
UNII 3	Measured Frequency	Straddle Frequency	26dB Bandwidth
	[MHz]	[MHz]	[MHz]
	5735.04	5725	10.04

Note:

1. [UNII 2C] 26 dB Bandwidth = 5725 MHz - Measured Frequency[MHz]
2. [UNII 3] 26 dB Bandwidth = Measured Frequency[MHz] - 5725 MHz

(26dB) Bandwidth 80M Ch.138(5690 MHz) 996 Tones RU 67



	Straddle Frequency	Measured Frequency	26dB Bandwidth
UNII 2C	[MHz]	[MHz]	[MHz]
	5725	5645.68	79.32

Note:

1. [UNII 2C] 26dB Bandwidth = 5725 MHz - Measured Frequency[MHz]

(26dB) Bandwidth 80M Ch.138(5690 MHz) 106 Tones RU 60



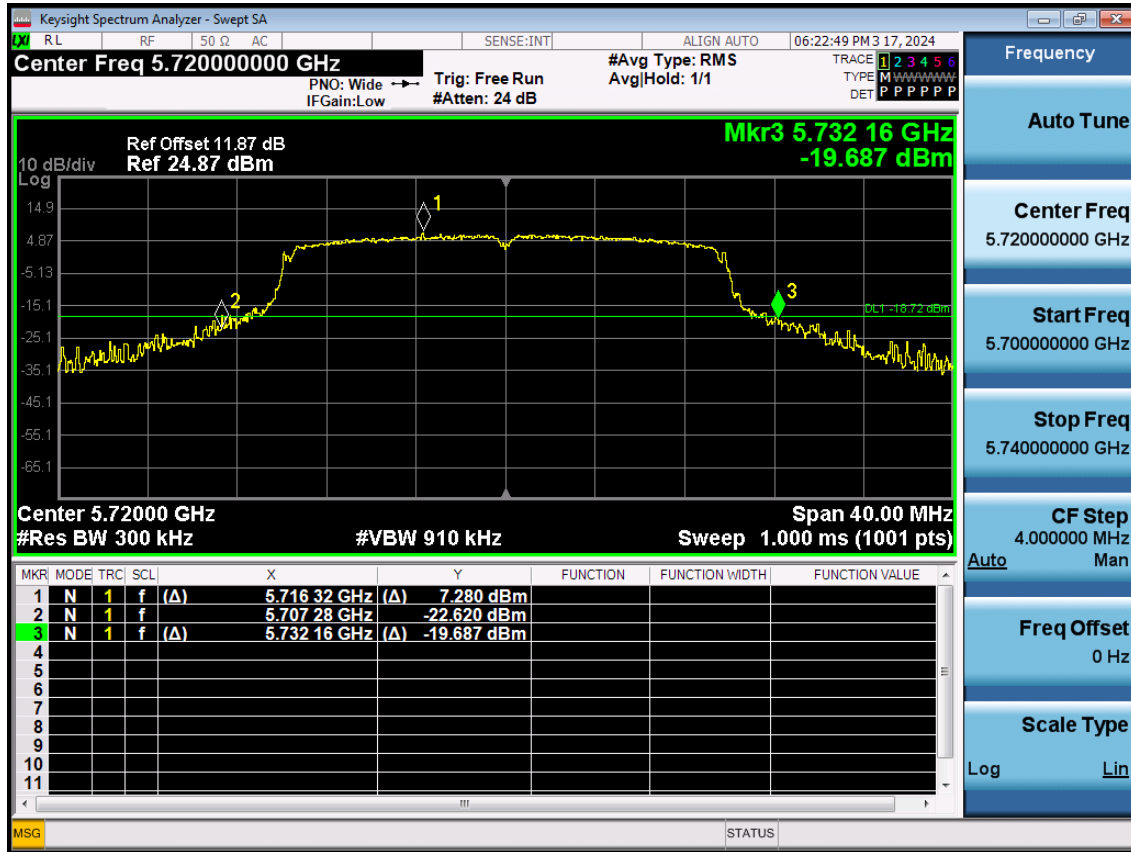
	Measured Frequency	Straddle Frequency	26dB Bandwidth
UNII 3	[MHz]	[MHz]	[MHz]
	5734.48	5725	9.48

Note:

1. [UNII 3] 26 dB Bandwidth = Measured Frequency[MHz] -5725 MHz

5.1.2 MIMO_SDM(Ant. 1)

(26dB) Bandwidth 20M Ch.144(5720 MHz) 242 Tones RU 61



UNII 2C	Straddle Frequency	Measured Frequency	26dB Bandwidth
	[MHz]	[MHz]	[MHz]
UNII 3	Measured Frequency	Straddle Frequency	26dB Bandwidth
	[MHz]	[MHz]	[MHz]

Note:

1. [UNII 2C] 26 dB Bandwidth = 5725 MHz - Measured Frequency[MHz]
2. [UNII 3] 26 dB Bandwidth = Measured Frequency[MHz] - 5725 MHz

(26dB) Bandwidth 40M Ch.142(5710 MHz) 484 Tones RU 65



	Straddle Frequency	Measured Frequency	26dB Bandwidth
UNII 2C	[MHz]	[MHz]	[MHz]
	5725	5687.20	37.80

Note:

1. [UNII 2C] 26dB Bandwidth = 5725 MHz - Measured Frequency[MHz]

(26dB) Bandwidth 40M Ch.142(5710 MHz) 106 Tones RU 56



	Measured Frequency	Straddle Frequency	26dB Bandwidth
UNII 3	[MHz]	[MHz]	[MHz]
	5733.36	5725	8.36

Note:

1. [UNII 3] 26 dB Bandwidth = Measured Frequency[MHz] -5725 MHz

(26dB) Bandwidth 80M Ch.138(5690 MHz) 996 Tones RU 67

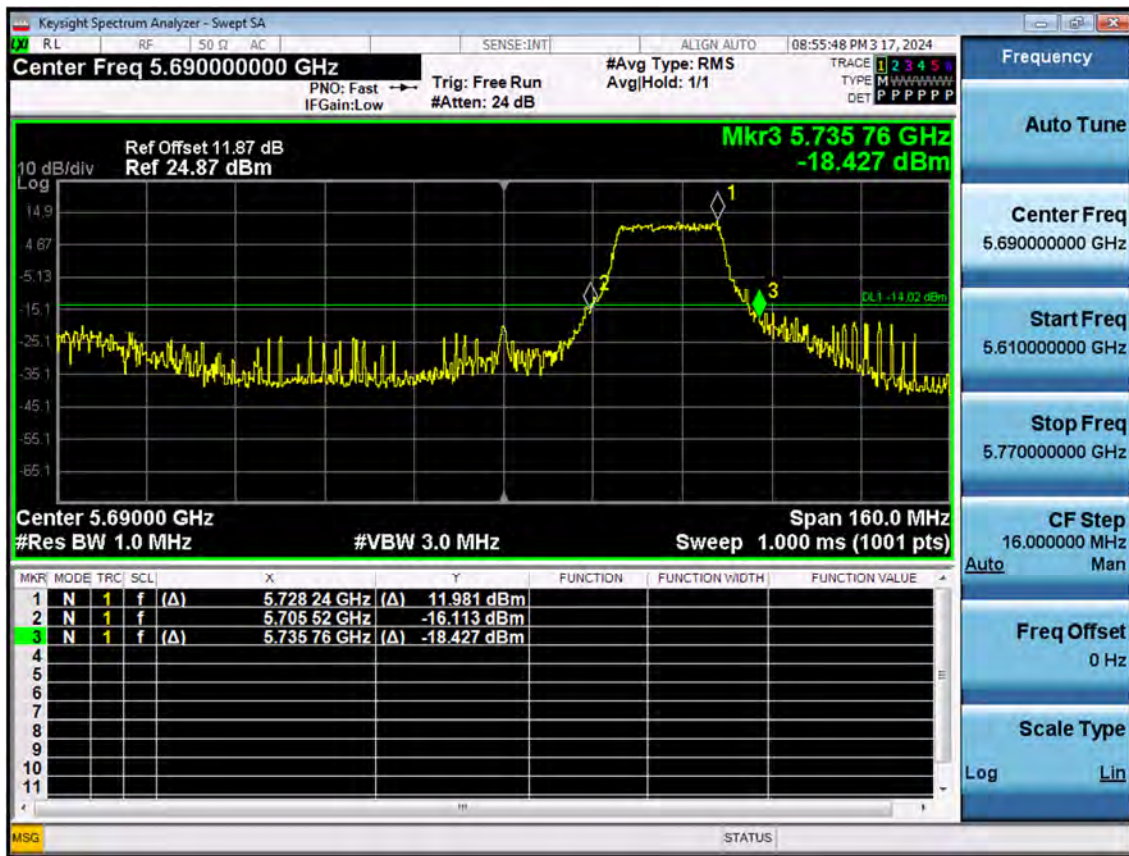


	Straddle Frequency	Measured Frequency	26dB Bandwidth
UNII 2C	[MHz]	[MHz]	[MHz]
	5725	5646.32	78.68

Note:

1. [UNII 2C] 26 dB Bandwidth = 5725 MHz - Measured Frequency[MHz]

(26dB) Bandwidth 80M Ch.138(5690 MHz) 242 Tones RU 64



UNII 3	Measured Frequency	Straddle Frequency	26dB Bandwidth
	[MHz]	[MHz]	[MHz]
	5735.76	5725	10.76

Note:

1. [UNII 3] 26 dB Bandwidth = Measured Frequency[MHz] -5725 MHz

5.1.3 MIMO_SDM(Ant. 2)

(26dB) Bandwidth 20M Ch.144(5720 MHz) SU



UNII 2C	Straddle Frequency	Measured Frequency	26dB Bandwidth
	[MHz]	[MHz]	[MHz]
	5725	5707.6	17.40

Note:

1. [UNII 2C] 26 dB Bandwidth = 5725 MHz - Measured Frequency[MHz]

(26dB) Bandwidth 20M Ch.144(5720 MHz) 242 Tones RU 61

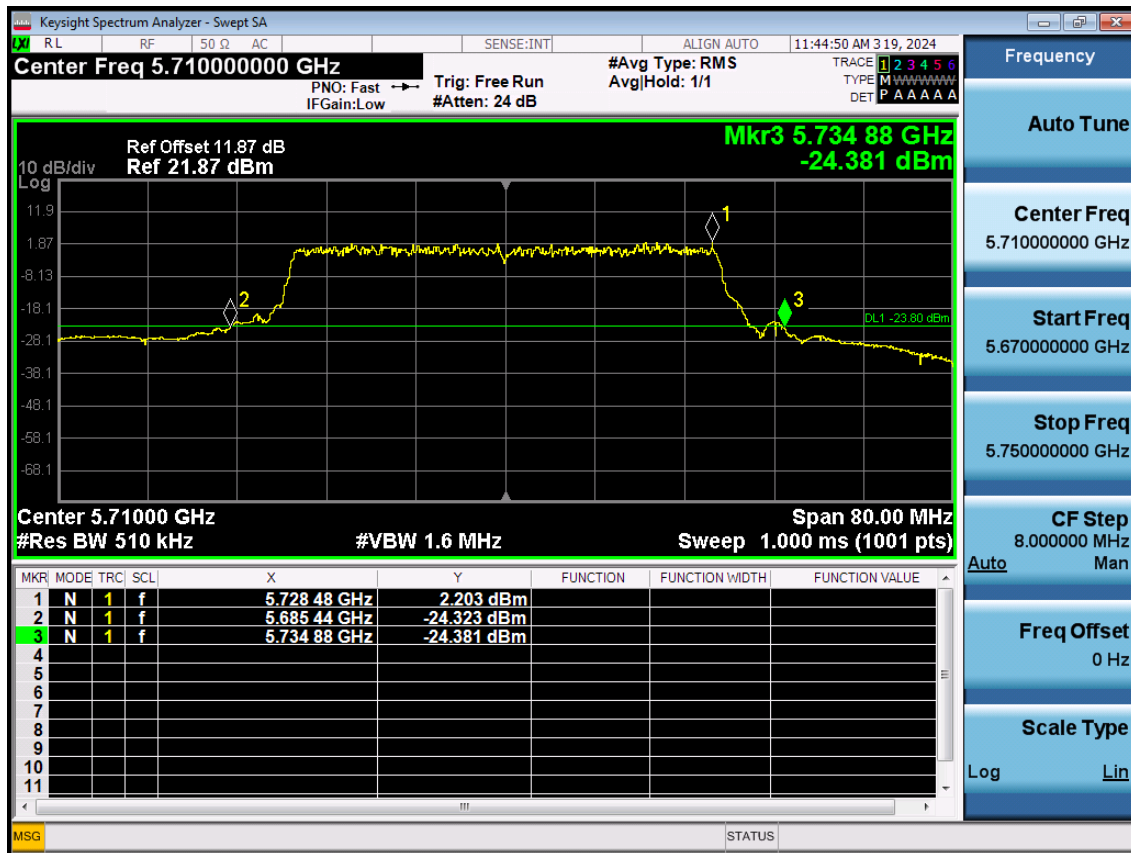


UNII 3	Measured Frequency	Straddle Frequency	26dB Bandwidth
	[MHz]	[MHz]	[MHz]
	5733.04	5725	8.04

Note:

1. [UNII 3] 26 dB Bandwidth = Measured Frequency[MHz] -5725 MHz

(26dB) Bandwidth 40M Ch.142(5710 MHz) 484 Tones RU 65



UNII 2C	Straddle Frequency	Measured Frequency	26dB Bandwidth
	[MHz]	[MHz]	[MHz]
	5725	5685.44	39.56

Note:

1. [UNII 2C] 26dB Bandwidth = 5725 MHz - Measured Frequency[MHz]

(26dB) Bandwidth 40M Ch.142(5710 MHz) SU

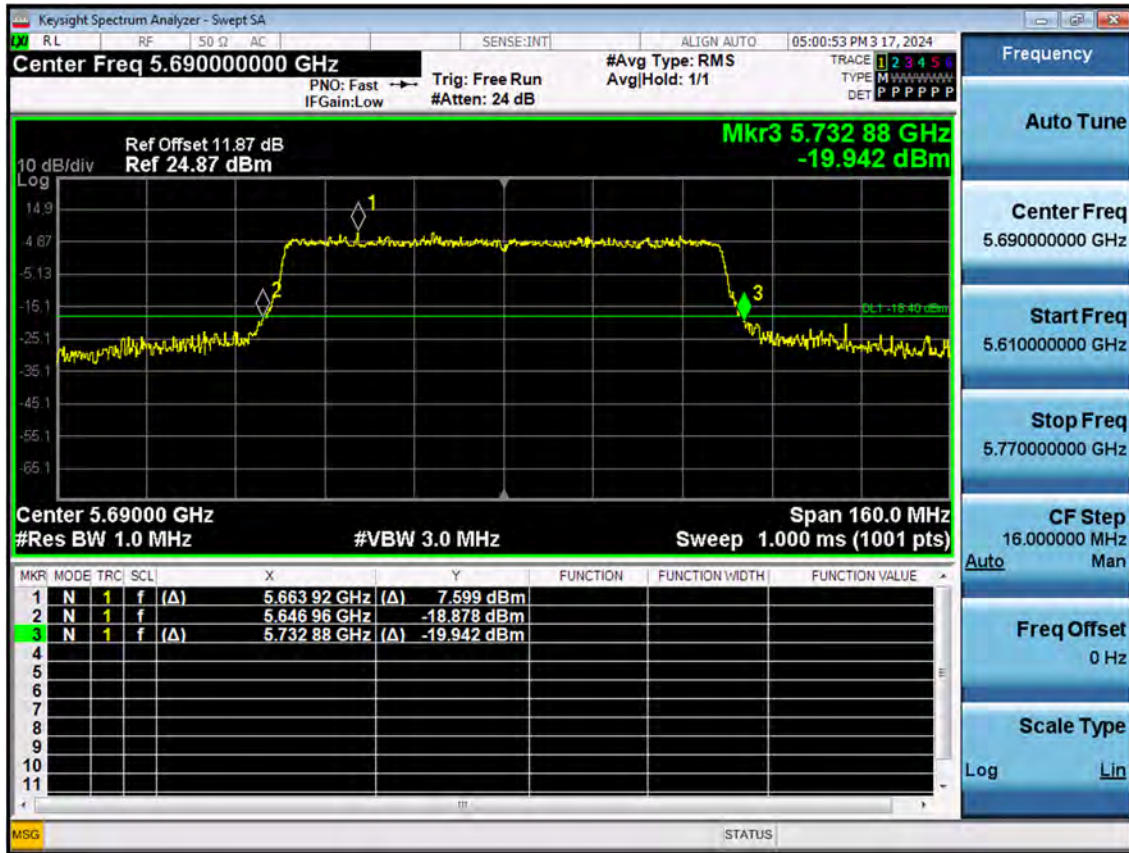


UNII 3	Measured Frequency	Straddle Frequency	26dB Bandwidth
	[MHz]	[MHz]	[MHz]
	5735.76	5725	10.76

Note:

1. [UNII 3] 26 dB Bandwidth = Measured Frequency[MHz] -5725 MHz

(26dB) Bandwidth 80M Ch.138(5690 MHz) SU



	Straddle Frequency	Measured Frequency	26dB Bandwidth
UNII 2C	[MHz]	[MHz]	[MHz]
	5725	5646.96	78.04

Note:

1. [UNII 2C] 26 dB Bandwidth = 5725 MHz - Measured Frequency[MHz]

(26dB) Bandwidth 80M Ch.138(5690 MHz) 106 Tones RU 60



UNII 3	Measured Frequency [MHz]	Straddle Frequency [MHz]	26dB Bandwidth [MHz]
	5734.64	5725	9.64

Note:

1. [UNII 3] 26 dB Bandwidth = Measured Frequency[MHz] -5725 MHz

5.2 6dB Bandwidth

Note:

1. In order to simplify the report, attached plots were only the narrowest channel. (UNII1~3)

5.2.1 SISO Ant. 2

(6dB) Bandwidth 20M Ch.144(5720 MHz) 26 Tones RU 7

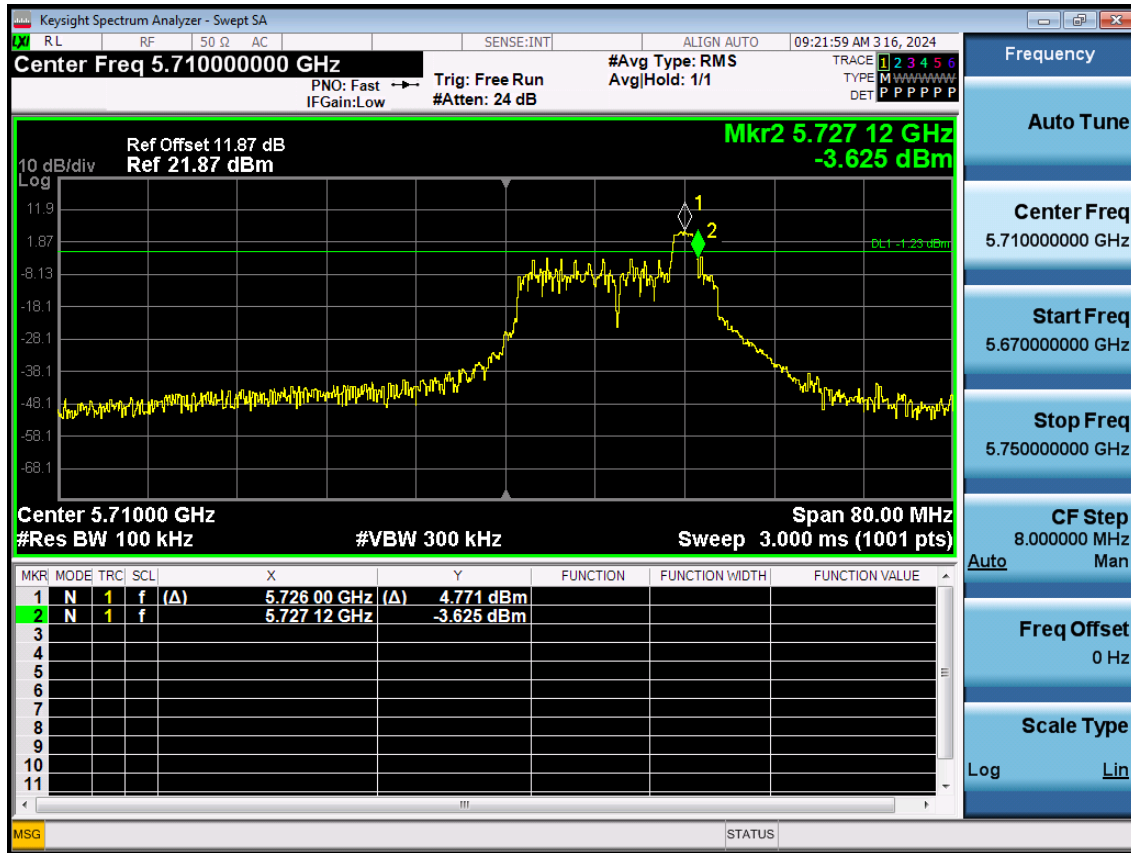


Measured Frequency [MHz]	Straddle Frequency [MHz]	6dB Bandwidth [MHz]
5727.48	5725	2.48

Note:

$$6\text{dB Bandwidth} = \text{Measured Frequency}[\text{MHz}] - 5725 \text{ MHz}$$

(6dB) Bandwidth 40M Ch.142(5710 MHz) 26 Tones RU 16

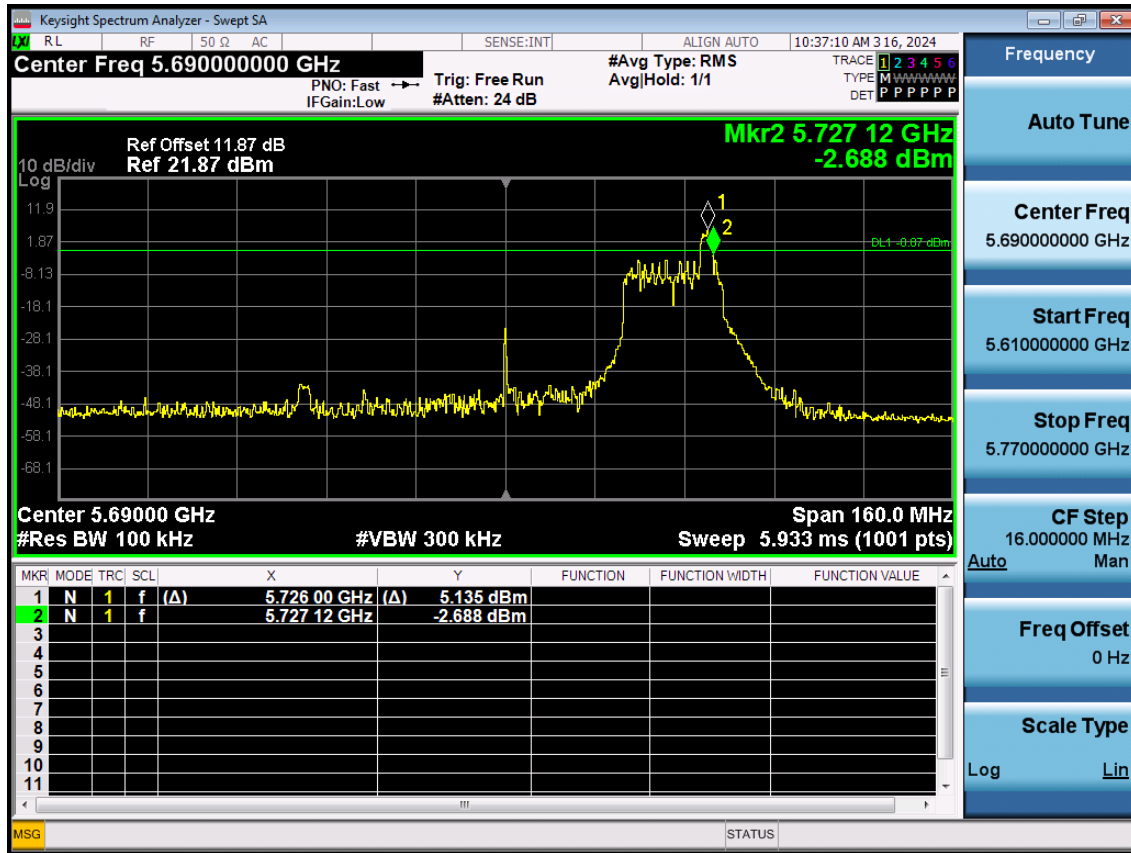


Measured Frequency [MHz]	Straddle Frequency [MHz]	6dB Bandwidth [MHz]
5727.12	5725	2.12

Note:

6dB Bandwidth = Measured Frequency[MHz] – 5725 MHz

(6dB) Bandwidth 80M Ch.138(5690 MHz) 26 Tones RU 35



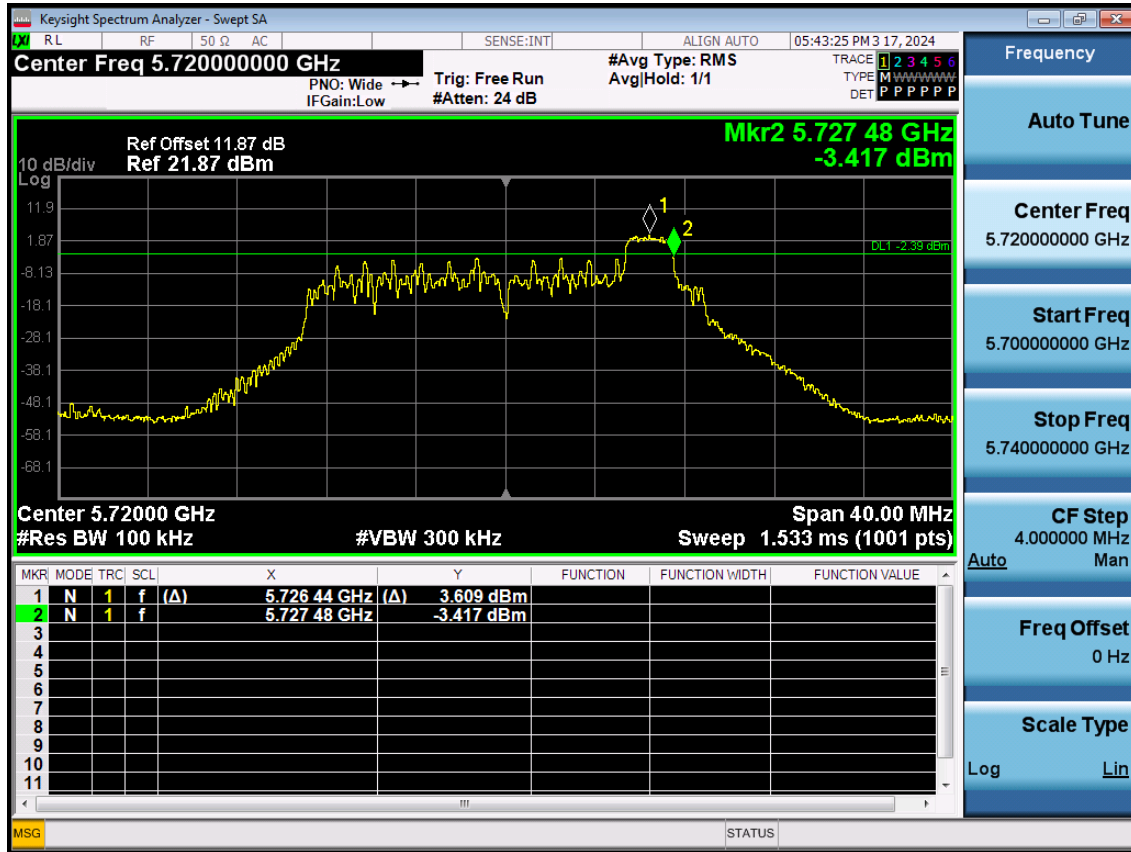
Measured Frequency [MHz]	Straddle Frequency [MHz]	6dB Bandwidth [MHz]
5727.12	5725	2.12

Note:

6dB Bandwidth = Measured Frequency[MHz] – 5725 MHz

5.2.2 MIMO_SDM(Ant. 1)

(6dB) Bandwidth 20M Ch.144(5720 MHz) 26 Tones RU 7

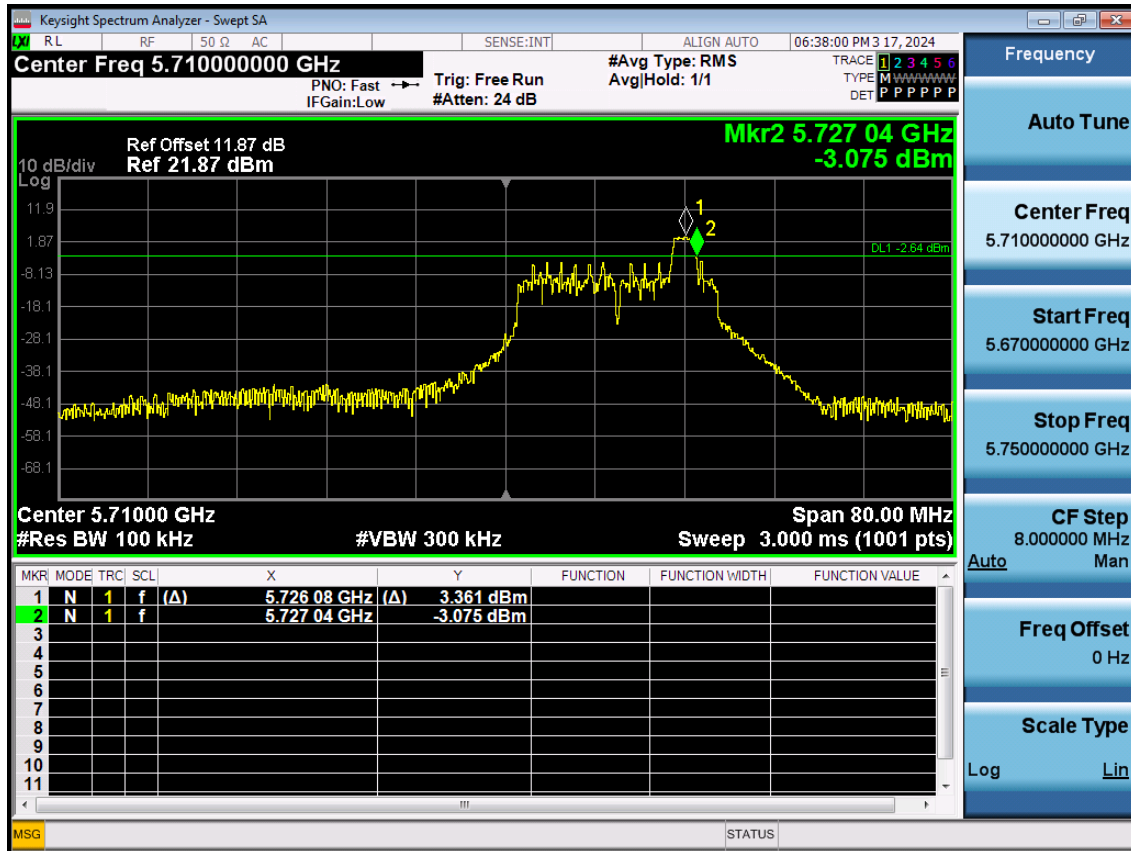


Measured Frequency [MHz]	Straddle Frequency [MHz]	6dB Bandwidth [MHz]
5727.48	5725	2.48

Note:

6dB Bandwidth = Measured Frequency[MHz] – 5725 MHz

(6dB) Bandwidth 40M Ch.142(5710 MHz) 26 Tones RU 16

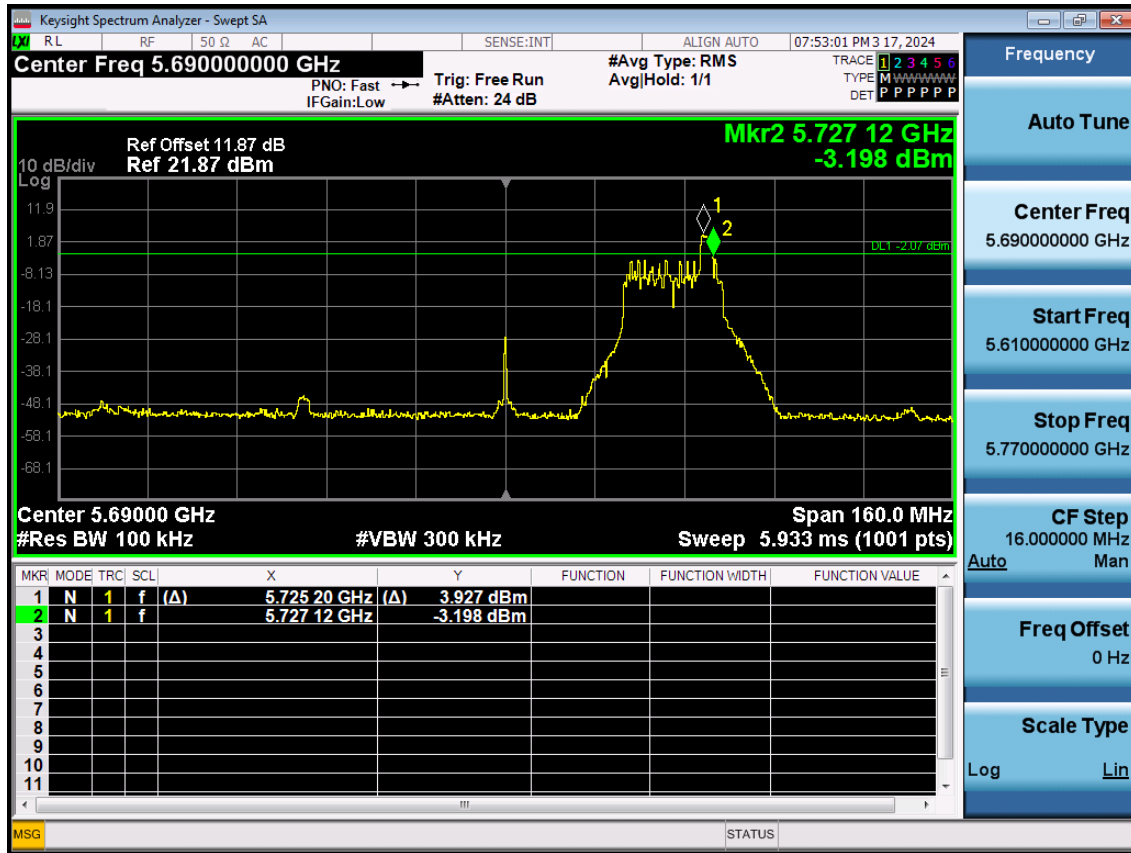


Measured Frequency [MHz]	Straddle Frequency [MHz]	6dB Bandwidth [MHz]
5727.04	5725	2.04

Note:

6dB Bandwidth = Measured Frequency[MHz] – 5725 MHz

(6dB) Bandwidth 80M Ch.138(5690 MHz) 26 Tones RU 35



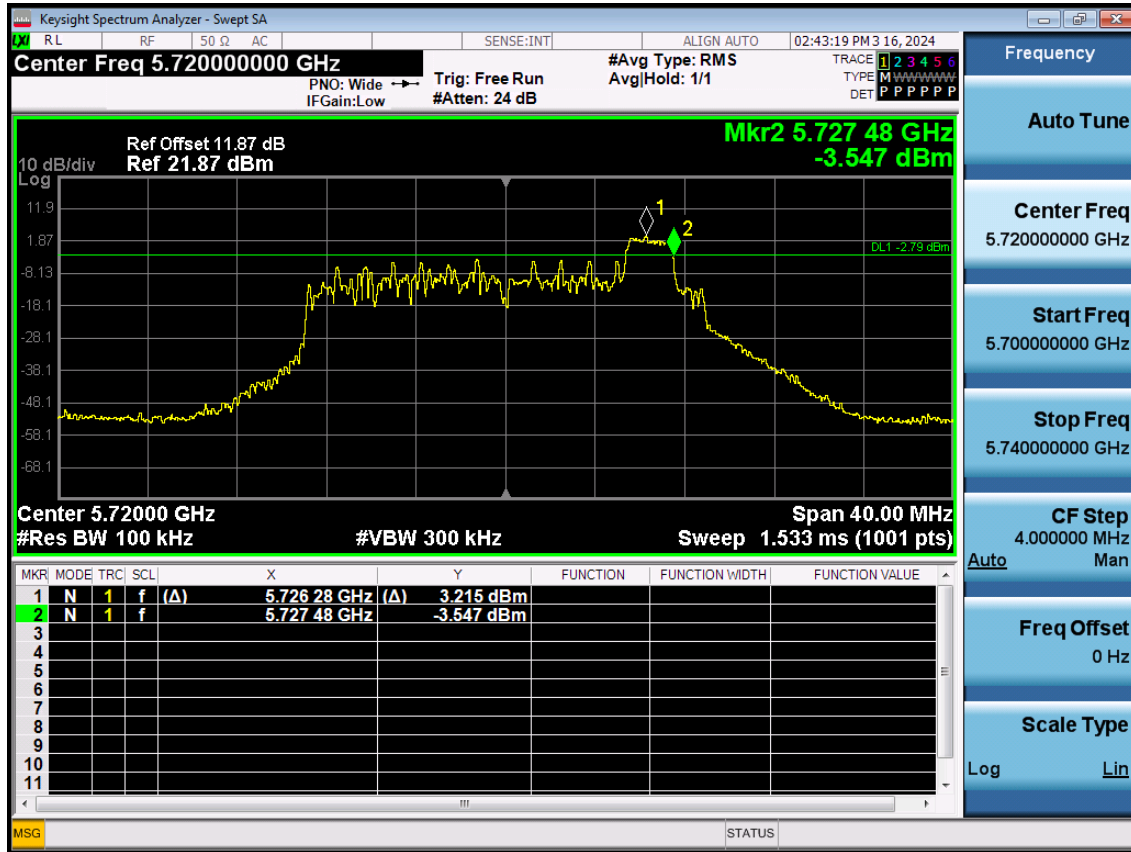
Measured Frequency [MHz]	Straddle Frequency [MHz]	6dB Bandwidth [MHz]
5727.12	5725	2.12

Note:

6dB Bandwidth = Measured Frequency[MHz] – 5725 MHz

5.2.3 MIMO_SDM(Ant. 2)

(6dB) Bandwidth 20M Ch.144(5720 MHz) 26 Tones RU 7

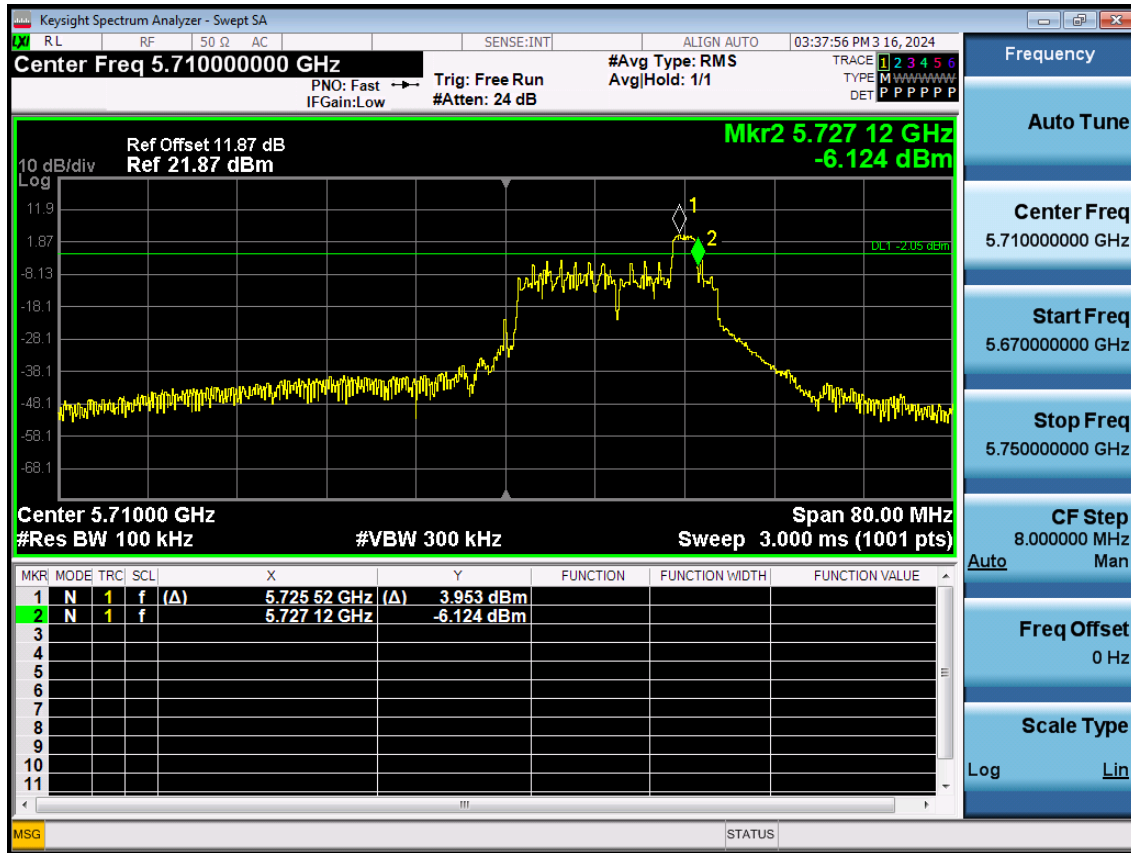


Measured Frequency [MHz]	Straddle Frequency [MHz]	6dB Bandwidth [MHz]
5727.48	5725	2.48

Note:

6dB Bandwidth = Measured Frequency[MHz] – 5725 MHz

(6dB) Bandwidth 40M Ch.142(5710 MHz) 26 Tones RU 16

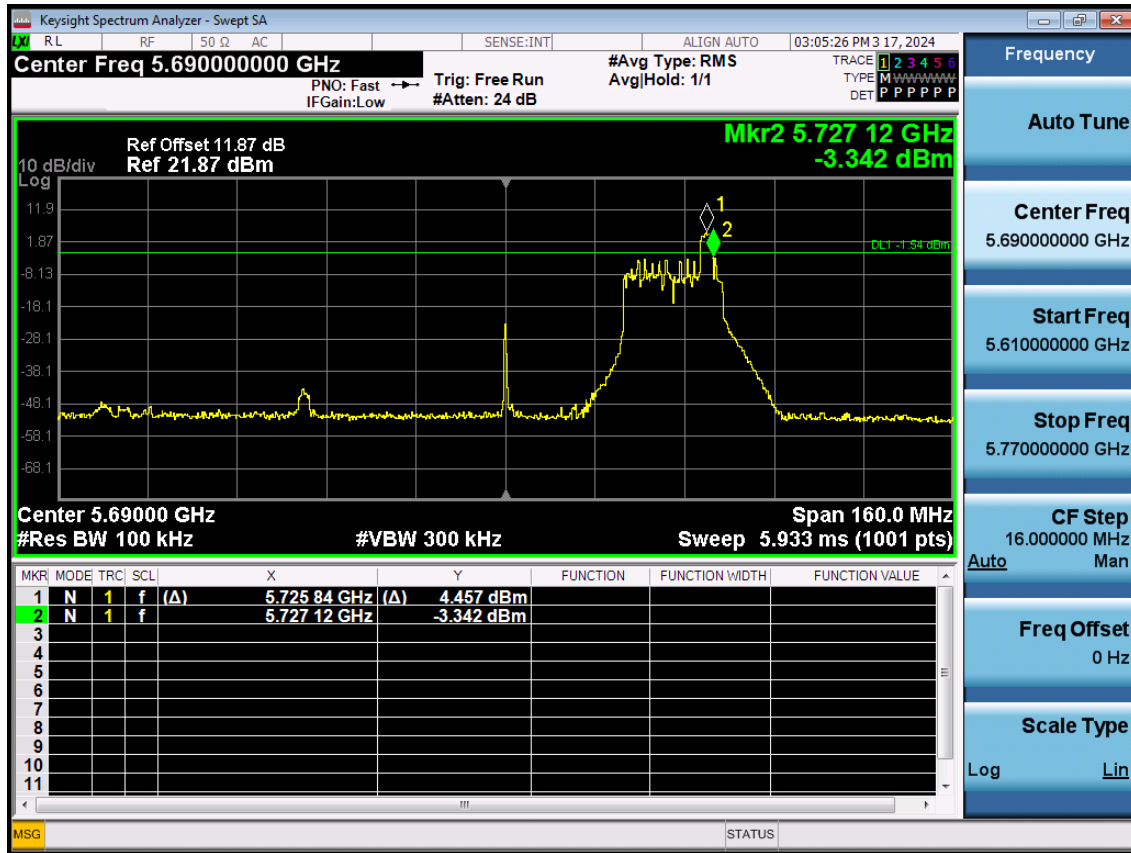


Measured Frequency [MHz]	Straddle Frequency [MHz]	6dB Bandwidth [MHz]
5727.12	5725	2.12

Note:

6dB Bandwidth = Measured Frequency[MHz] – 5725 MHz

(6dB) Bandwidth 80M Ch.138(5690 MHz) 26 Tones RU 35



Measured Frequency [MHz]	Straddle Frequency [MHz]	6dB Bandwidth [MHz]
5727.12	5725	2.12

Note:

6dB Bandwidth = Measured Frequency[MHz] – 5725 MHz

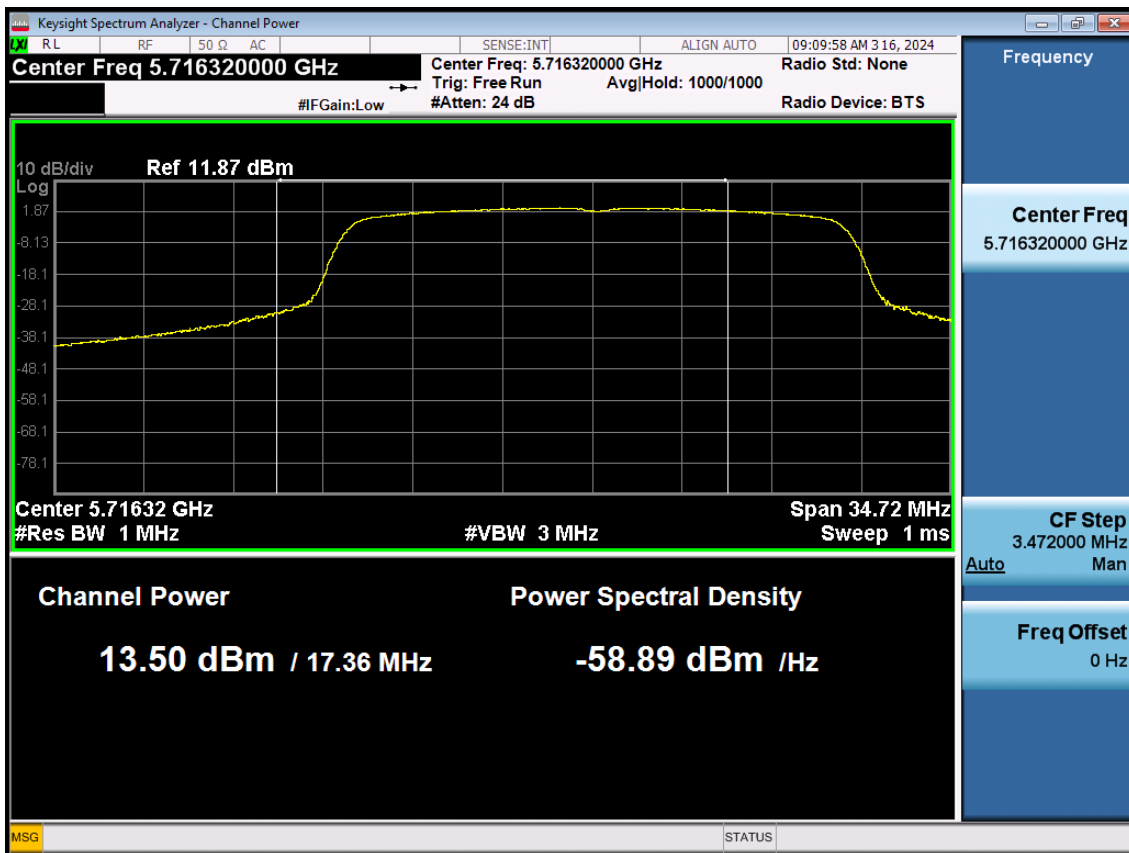
5.3 Output Power

Note:

1. In order to simplify the report, attached plots were only channel of highest Power.

5.3.1 SISO Ant. 2

(UNII 2C) Bandwidth 20M Ch.144(5720 MHz) 242 Tones RU 61

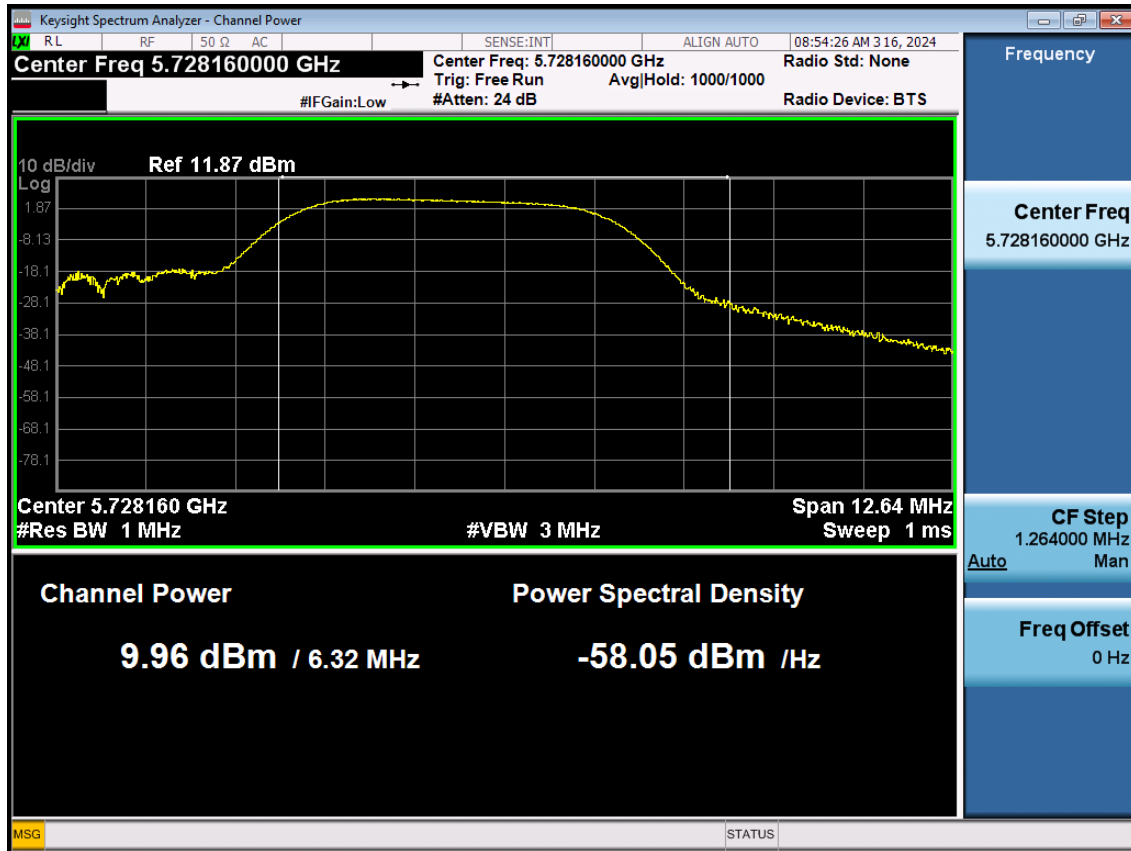


Measured Value (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)
13.50	0.418	13.92

Note:

Total Power (dBm) = Measured Value (dBm) + Duty Cycle Factor (dB)

(UNII 3) Bandwidth 20M Ch.144(5720 MHz) 52 Tones RU 40

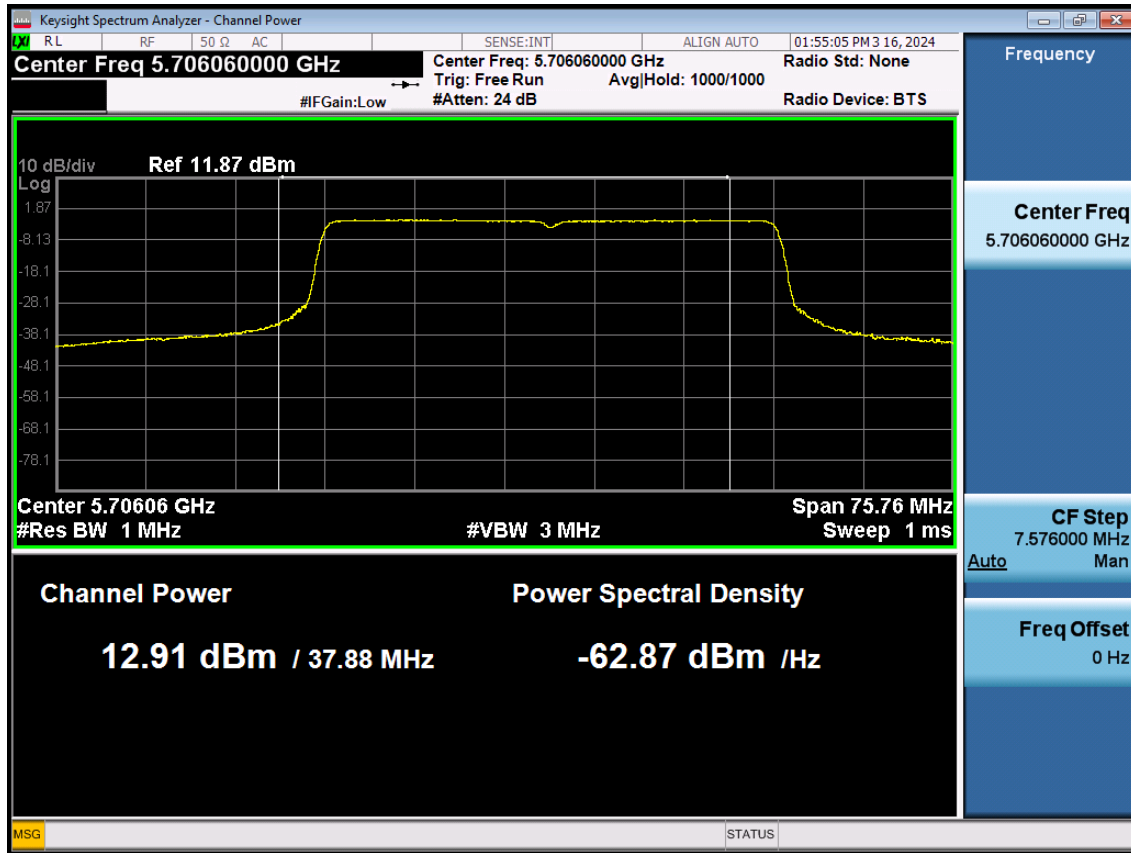


Measured Value (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)
9.96	0.100	10.06

Note:

Total Power (dBm) = Measured Value (dBm) + Duty Cycle Factor (dB)

(UNII 2C) Bandwidth 40M Ch.142(5710 MHz) SU

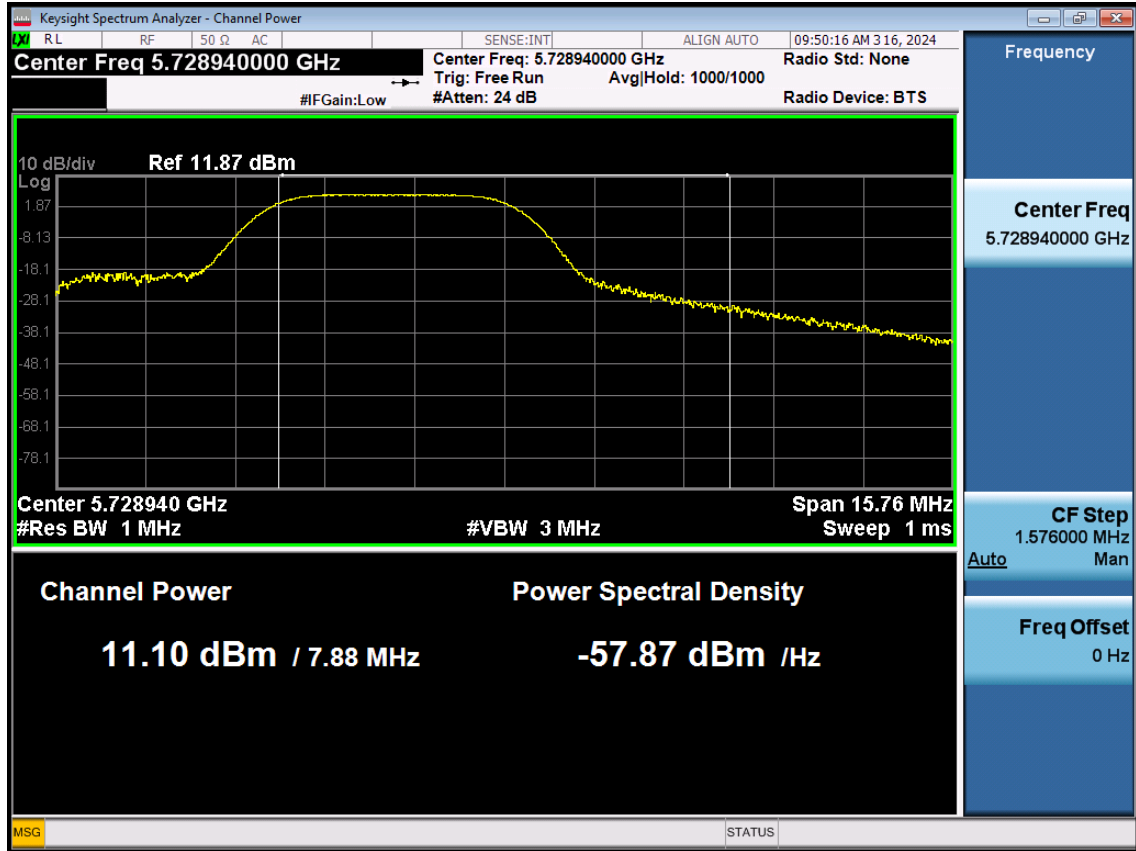


Measured Value (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)
12.91	0.751	13.66

Note:

Total Power (dBm) = Measured Value (dBm) + Duty Cycle Factor (dB)

(UNII 3) Bandwidth 40M Ch.142(5710 MHz) 52 Tones RU 44

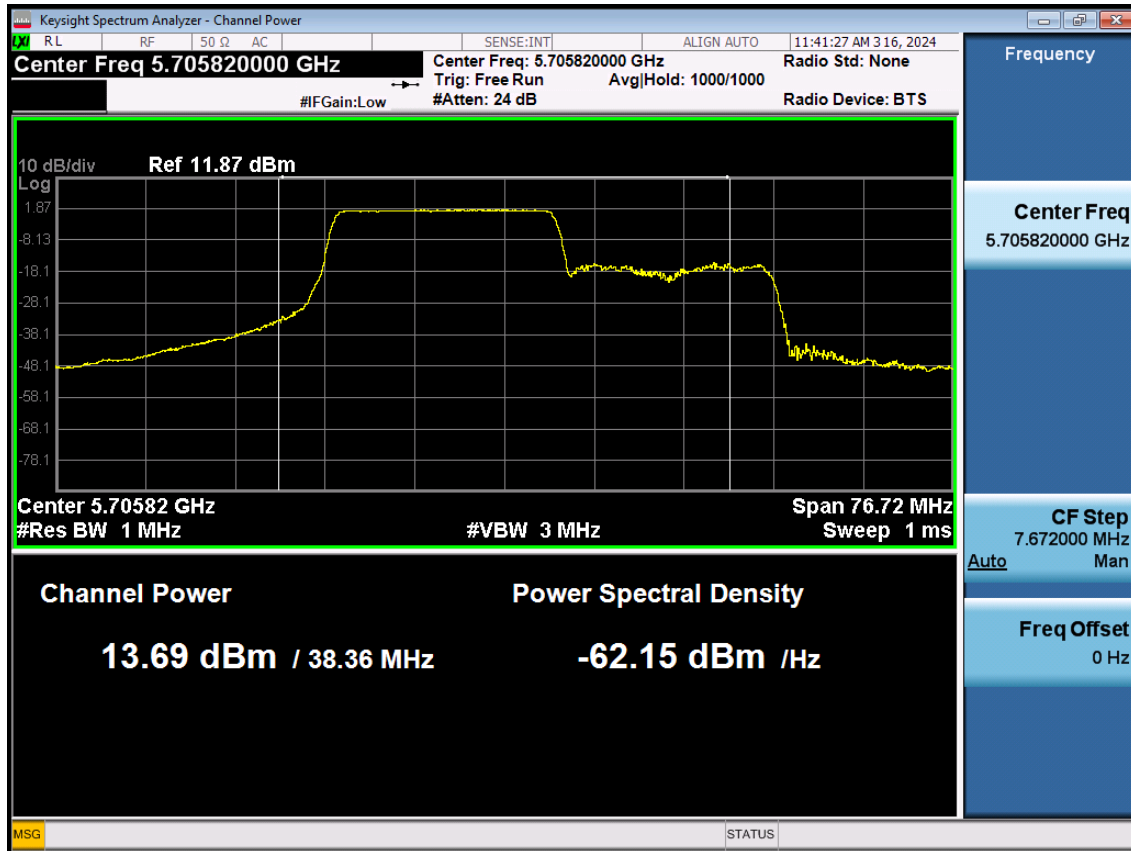


Measured Value (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)
11.10	0.095	11.20

Note:

Total Power (dBm) = Measured Value (dBm) + Duty Cycle Factor (dB)

(UNII 2C) Bandwidth 80M Ch.138(5690 MHz) 242 Tones RU 63

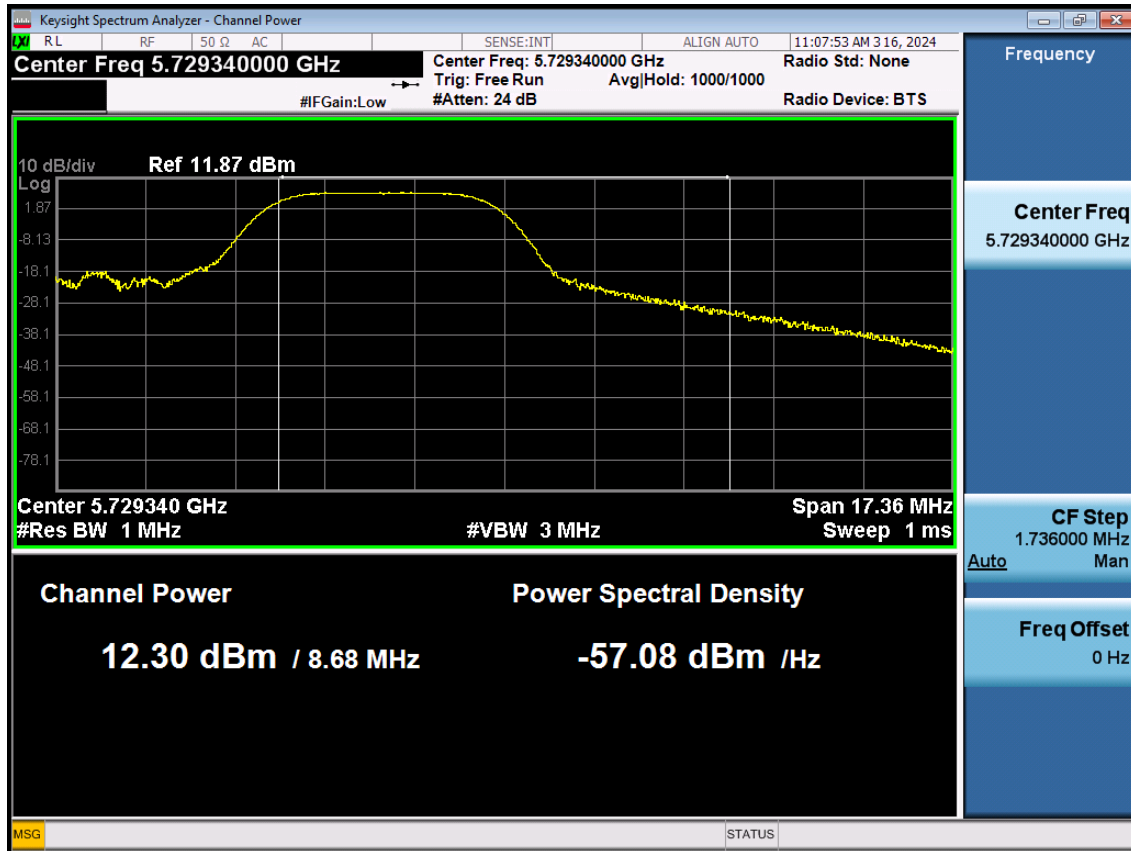


Measured Value (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)
13.69	0.411	14.10

Note:

Total Power (dBm) = Measured Value (dBm) + Duty Cycle Factor (dB)

(UNII 3) Bandwidth 80M Ch.138(5690 MHz) 52 Tones RU 52



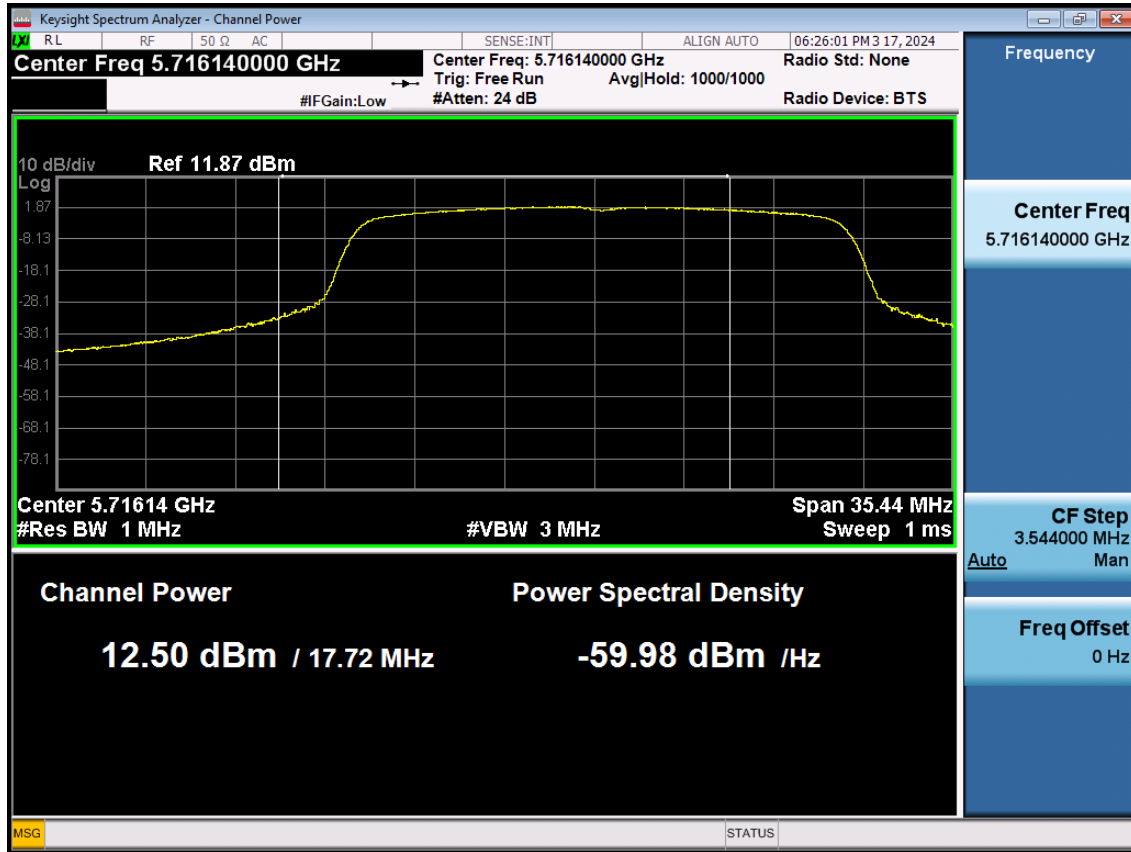
Measured Value (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)
12.30	0.085	12.39

Note:

Total Power (dBm) = Measured Value (dBm) + Duty Cycle Factor (dB)

5.3.2 MIMO_SDM(Ant. 1)

(UNII 2C) Bandwidth 20M Ch.144(5720 MHz) 242 Tones RU 61



Measured Value (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)
12.50	0.736	13.24

Note:

$$\text{Total Power (dBm)} = \text{Measured Value (dBm)} + \text{Duty Cycle Factor (dB)}$$