APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Antenna	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)	Plot
802.11a	Chain0	5720	99.08%	0	Fig.1
802.11n HT20	Chain0	5720	99.07%	0	Fig.2
802.11ac VHT20	Chain0	5720	98.93%	0	Fig.3
802.11n HT40	Chain0	5710	98.13%	0	Fig.4
802.11ac VHT40	Chain0	5710	97.75%	0.10	Fig.5
802.11ac VHT80	Chain0	5690	95.21%	0.21	Fig.6

Note: Correction Factor=10*log (1/Duty Cycle)

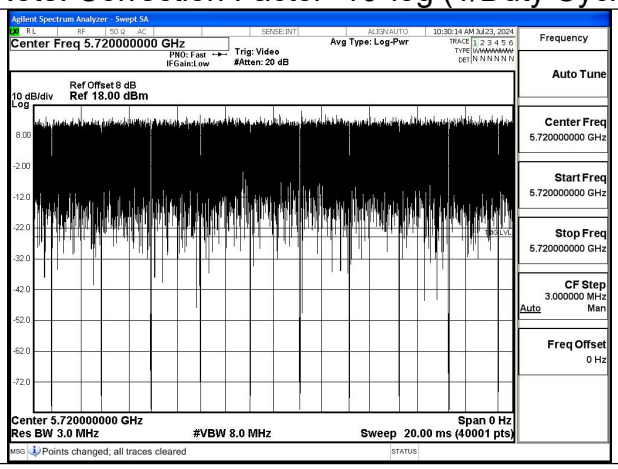


Fig.1

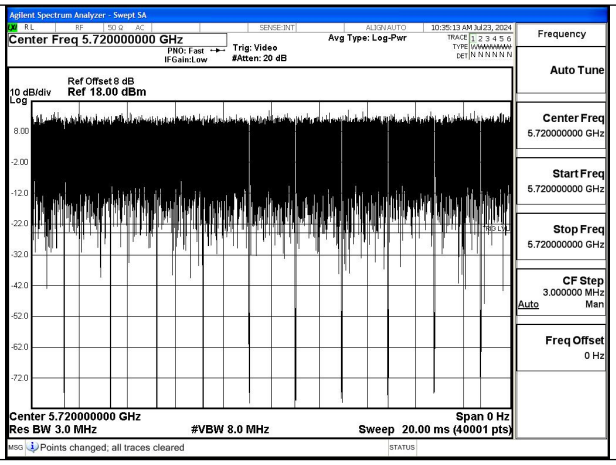


Fig.2

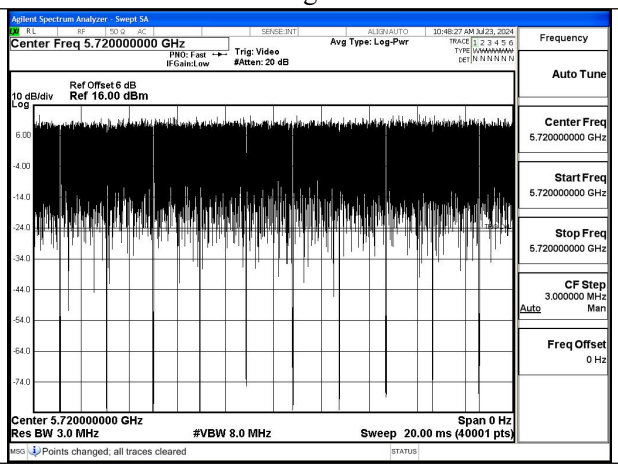


Fig.3

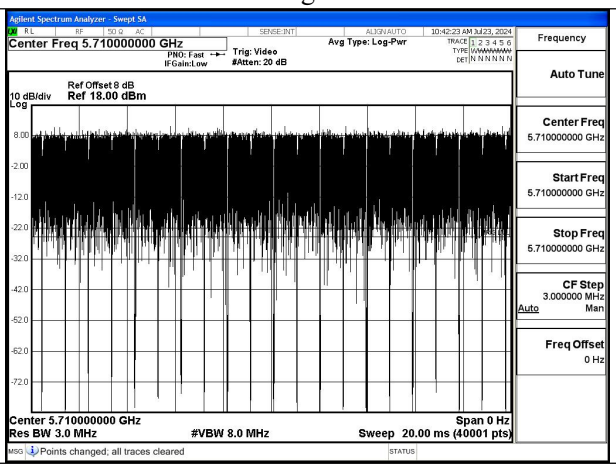


Fig.4

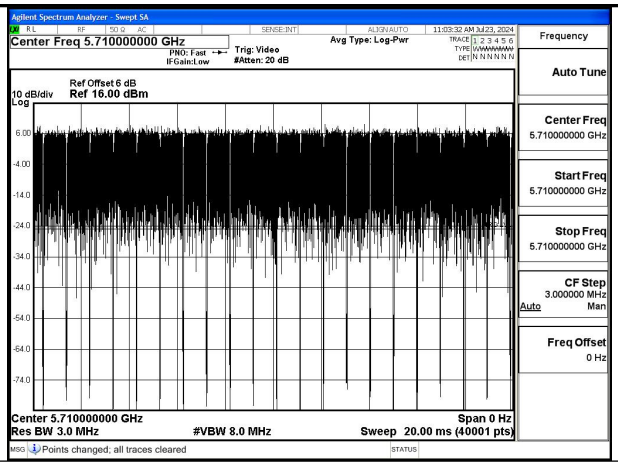

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.710000000 GHz
PNO: Fast
IFGain:Low
Trig: Video
#Atten: 20 dB
Avg Type: Log-Pwr
11:03:32 AM Jul 23, 2024
Ref Offset 6 dB
10 dB/div Ref 16.00 dBm
Log
Center 5.710000000 GHz
Res BW 3.0 MHz
#VBW 8.0 MHz
Span 0 Hz
Sweep 20.00 ms (40001 pts)
Frequency
Auto Tune
Center Freq 5.710000000 GHz
Start Freq 5.710000000 GHz
Stop Freq 5.710000000 GHz
CF Step 3.000000 MHz
Auto Man
Freq Offset 0 Hz
Points changed; all traces cleared

Fig.5

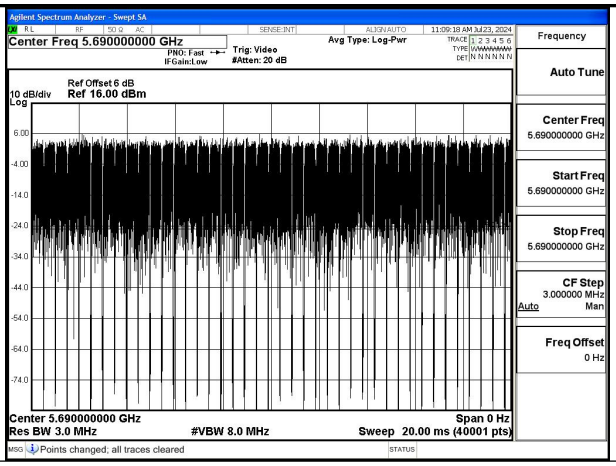

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.690000000 GHz
PNO: Fast
IFGain:Low
Trig: Video
#Atten: 20 dB
Avg Type: Log-Pwr
11:09:18 AM Jul 23, 2024
Ref Offset 6 dB
10 dB/div Ref 16.00 dBm
Log
Center 5.690000000 GHz
Res BW 3.0 MHz
#VBW 8.0 MHz
Span 0 Hz
Sweep 20.00 ms (40001 pts)
Frequency
Auto Tune
Center Freq 5.690000000 GHz
Start Freq 5.690000000 GHz
Stop Freq 5.690000000 GHz
CF Step 3.000000 MHz
Auto Man
Freq Offset 0 Hz
Points changed; all traces cleared

Fig.6

Output Power

NII2C

Title	Test Mode	Tones/ RU Index	Freq (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
NII2C	802.11a	NA	5720	Chain0	10.04	9.74
NII2C	802.11n HT20	NA	5720	Chain0	9.98	9.68
NII2C	802.11ac VHT20	NA	5720	Chain0	10.49	10.19
NII2C	802.11n HT40	NA	5710	Chain0	8.90	8.60
NII2C	802.11ac VHT40	NA	5710	Chain0	9.49	9.19
NII2C	802.11ac VHT80	NA	5690	Chain0	9.29	8.99

NII3

Title	Test Mode	Tones/ RU Index	Freq (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
NII3	802.11a	NA	5720	Chain0	3.67	3.37
NII3	802.11n HT20	NA	5720	Chain0	3.02	2.72
NII3	802.11ac VHT20	NA	5720	Chain0	-0.77	-1.07
NII3	802.11n HT40	NA	5710	Chain0	2.61	2.31
NII3	802.11ac VHT40	NA	5710	Chain0	-1.40	-1.70
NII3	802.11ac VHT80	NA	5690	Chain0	-4.84	-5.14

Emission Bandwidth

NII2C

Offset 8dB = Attenuator + Temporary antenna connector loss + Cable loss

26dB Bandwidth (MHz)			
Title	Test Mode	Antenna	5720MHz
NII2C	802.11a	Chain0	15.62
NII2C	802.11n HT20	Chain0	16.64
NII2C	802.11ac VHT20	Chain0	16.52

26dB Bandwidth (MHz)			
Title	Test Mode	Antenna	5710MHz
NII2C	802.11n HT40	Chain0	34.92
NII2C	802.11ac VHT40	Chain0	35.28

26dB Bandwidth (MHz)			
Title	Test Mode	Antenna	5690MHz
NII2C	802.11ac VHT80	Chain0	76.52

NII3

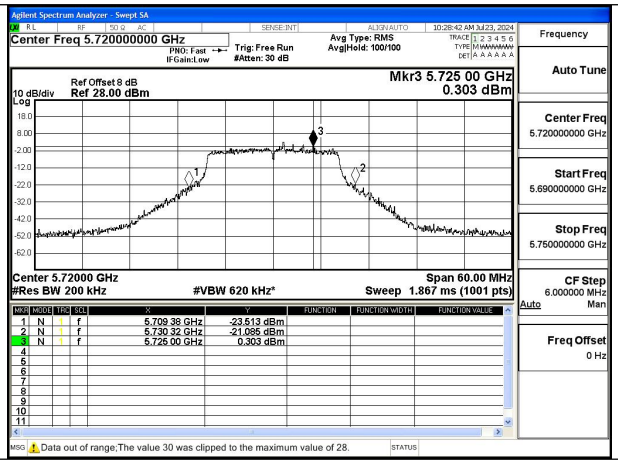
Offset 8dB = Attenuator + Temporary antenna connector loss + Cable loss

26dB Bandwidth (MHz)			
Title	Test Mode	Antenna	5720MHz
NII3	802.11a	Chain0	5.32
NII3	802.11n HT20	Chain0	6.34
NII3	802.11ac VHT20	Chain0	6.76

26dB Bandwidth (MHz)			
Title	Test Mode	Antenna	5710MHz
NII3	802.11n HT40	Chain0	5.40
NII3	802.11ac VHT40	Chain0	5.88

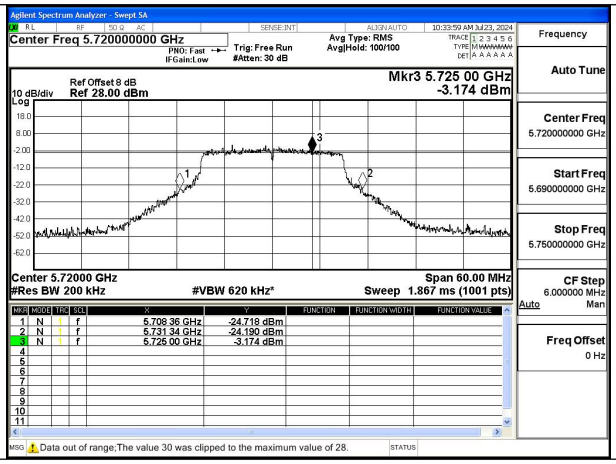
26dB Bandwidth (MHz)			
Title	Test Mode	Antenna	5690MHz
NII3	802.11ac VHT80	Chain0	7.24

Test Mode: 802.11a



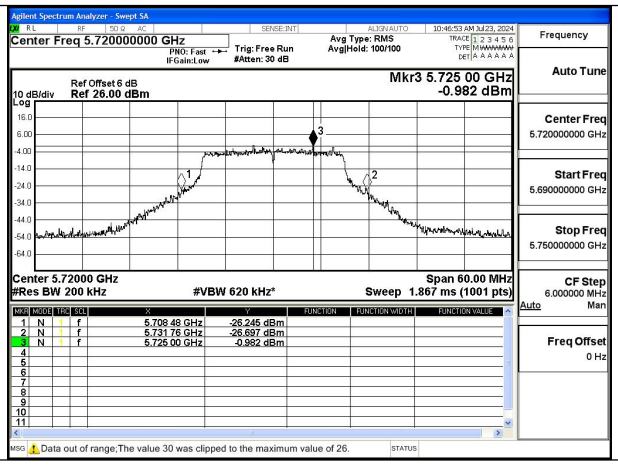
Mode:802.11a Frequency:5720MHz Ant:Chain0 scope:NII2C

Test Mode: 802.11n HT20



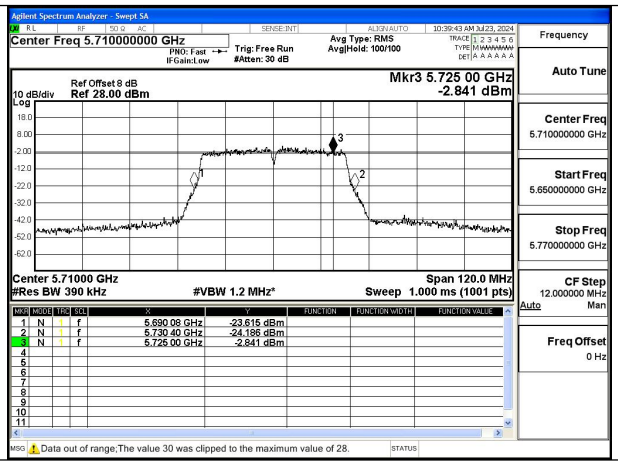
Mode:802.11n HT20 Frequency:5720MHz Ant:Chain0 scope:NII2C

Test Mode: 802.11ac VHT20



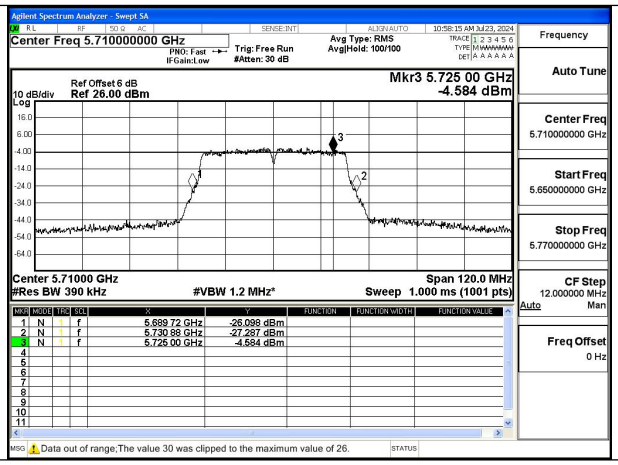
Mode:802.11ac VHT20 Frequency:5720MHz Ant:Chain0 scope:NII2C

Test Mode: 802.11n HT40



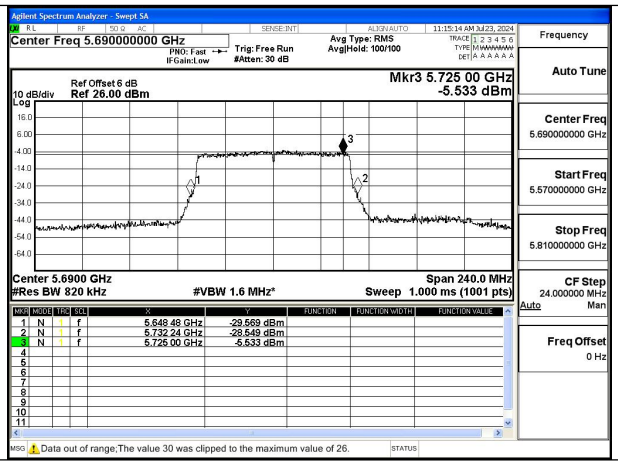
Mode:802.11n HT40 Frequency:5710MHz Ant:Chain0 scope:NII2C

Test Mode: 802.11ac VHT40



Mode:802.11ac VHT40 Frequency:5710MHz Ant:Chain0 scope:NII2C

Test Mode: 802.11ac VHT80



Mode:802.11ac VHT80 Frequency:5690MHz Ant:Chain0 scope:NII2C

Occupied Bandwidth

NII2C

Offset 8dB = Attenuator + Temporary antenna connector loss + Cable loss

Occupied Bandwidth (MHz)			
Title	Test Mode	Antenna	5720MHz
NII2C	802.11a	Chain0	13.27
NII2C	802.11n HT20	Chain0	13.91
NII2C	802.11ac VHT20	Chain0	13.94

Occupied Bandwidth (MHz)			
Title	Test Mode	Antenna	5710MHz
NII2C	802.11n HT40	Chain0	33.03
NII2C	802.11ac VHT40	Chain0	33.1

Occupied Bandwidth (MHz)			
Title	Test Mode	Antenna	5690MHz
NII2C	802.11ac VHT80	Chain0	73.01

NII3

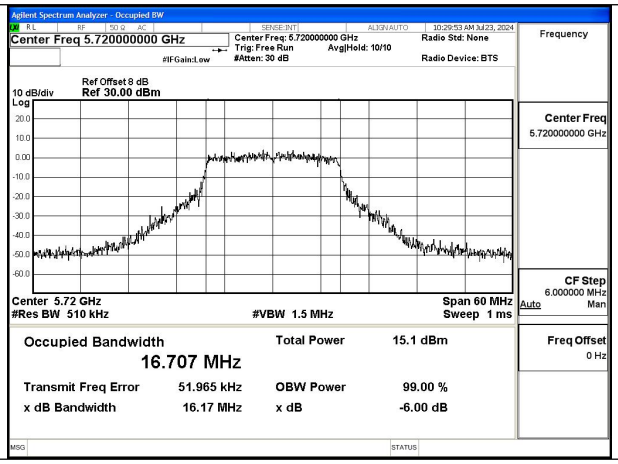
Offset 8dB = Attenuator + Temporary antenna connector loss + Cable loss

Occupied Bandwidth (MHz)			
Title	Test Mode	Antenna	5720MHz
NII3	802.11a	Chain0	3.40
NII3	802.11n HT20	Chain0	4.03
NII3	802.11ac VHT20	Chain0	3.99

Occupied Bandwidth (MHz)			
Title	Test Mode	Antenna	5710MHz
NII3	802.11n HT40	Chain0	3.43
NII3	802.11ac VHT40	Chain0	3.32

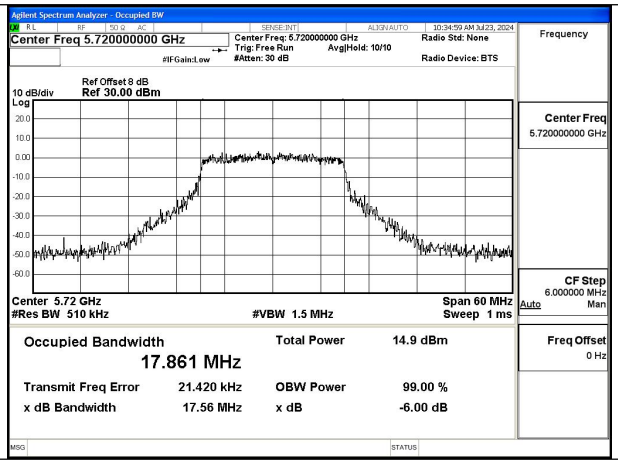
Occupied Bandwidth (MHz)			
Title	Test Mode	Antenna	5690MHz
NII3	802.11ac VHT80	Chain0	3.29

Test Mode: 802.11a



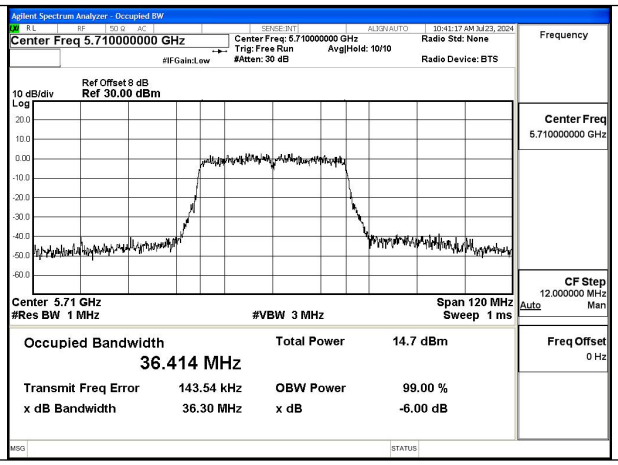
Mode:802.11a Frequency:5720MHz Ant:Chain0 scope:NII2C

Test Mode: 802.11n HT20



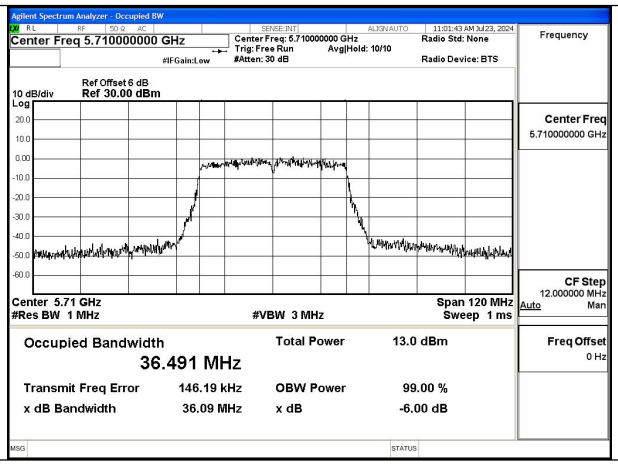
Mode:802.11n HT20 Frequency:5720MHz Ant:Chain0 scope:NII2C

Test Mode: 802.11n HT40



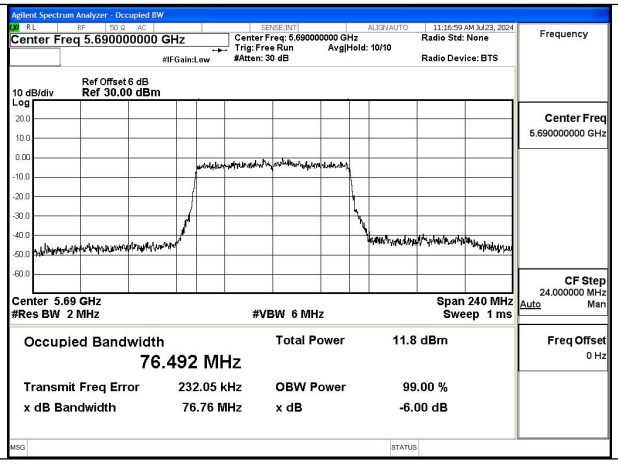
Mode:802.11n HT40 Frequency:5710MHz Ant:Chain0 scope:NII2C

Test Mode: 802.11ac VHT40



Mode:802.11ac VHT40 Frequency:5710MHz Ant:Chain0 scope:NII2C

Test Mode: 802.11ac VHT80



Mode:802.11ac VHT80 Frequency:5690MHz Ant:Chain0 scope:NII2C

6dB Bandwidth

NII2C

Offset 8dB = Attenuator + Temporary antenna connector loss + Cable loss

6dB Bandwidth (MHz)			
Title	Test Mode	Antenna	5720MHz
NII2C	802.11a	Chain0	13.16
NII2C	802.11n HT20	Chain0	13.76
NII2C	802.11ac VHT20	Chain0	13.15

6dB Bandwidth (MHz)			
Title	Test Mode	Antenna	5710MHz
NII2C	802.11n HT40	Chain0	33.14
NII2C	802.11ac VHT40	Chain0	32.88

6dB Bandwidth (MHz)			
Title	Test Mode	Antenna	5690MHz
NII2C	802.11ac VHT80	Chain0	72.51

NII3

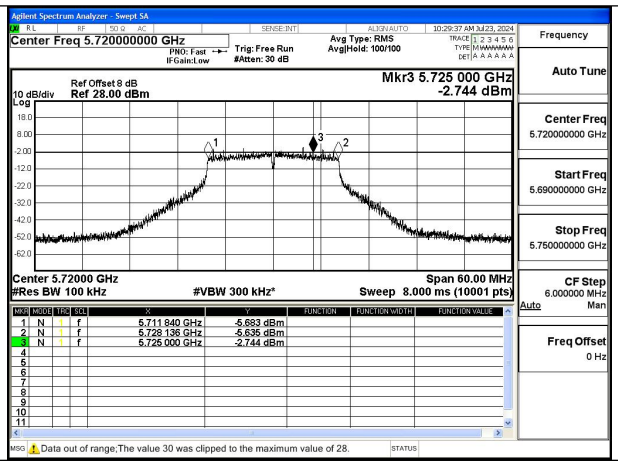
Offset 8dB = Attenuator + Temporary antenna connector loss + Cable loss

6dB Bandwidth (MHz)			
Title	Test Mode	Antenna	5720MHz
NII3	802.11a	Chain0	3.14
NII3	802.11n HT20	Chain0	3.74
NII3	802.11ac VHT20	Chain0	3.12

6dB Bandwidth (MHz)			
Title	Test Mode	Antenna	5710MHz
NII3	802.11n HT40	Chain0	3.12
NII3	802.11ac VHT40	Chain0	2.77

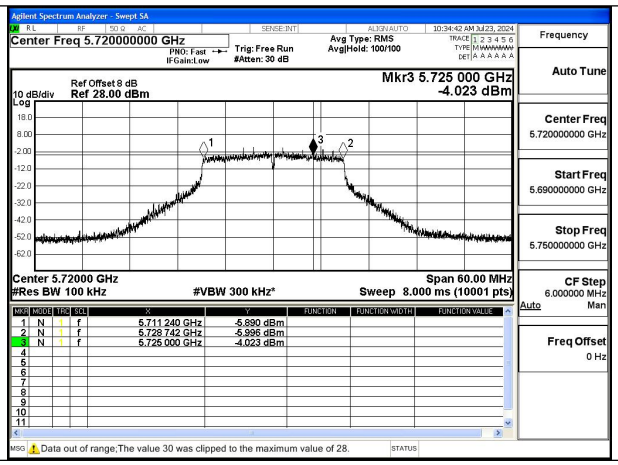
6dB Bandwidth (MHz)			
Title	Test Mode	Antenna	5690MHz
NII3	802.11ac VHT80	Chain0	2.44

Test Mode: 802.11a



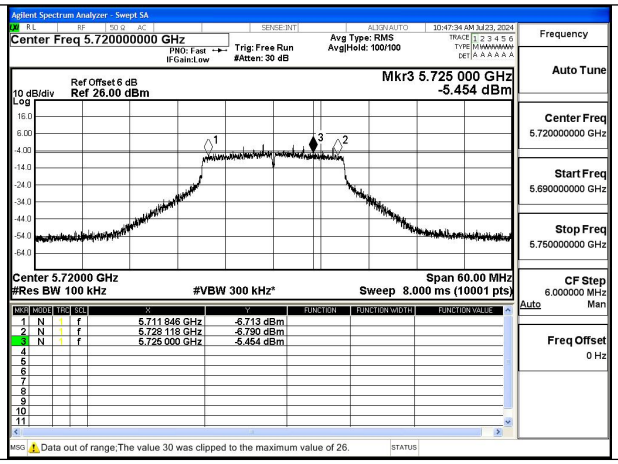
Mode:802.11a Frequency:5720MHz Ant:Chain0 scope:NII2C

Test Mode: 802.11n HT20



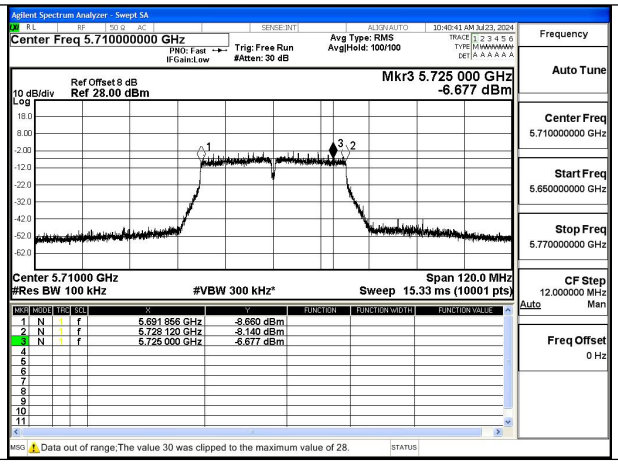
Mode:802.11n HT20 Frequency:5720MHz Ant:Chain0 scope:NII2C

Test Mode: 802.11ac VHT20



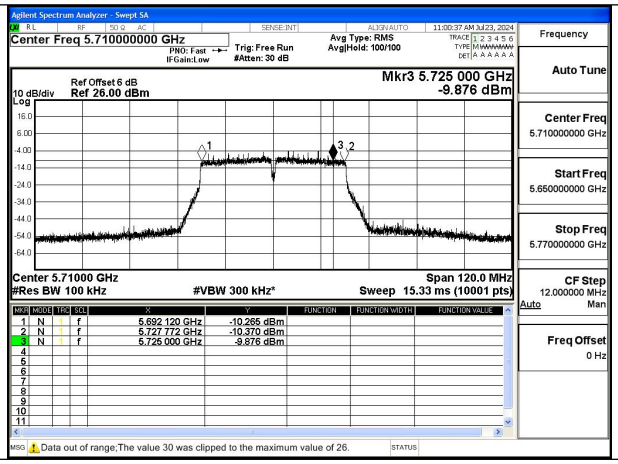
Mode:802.11ac VHT20 Frequency:5720MHz Ant:Chain0 scope:NII2C

Test Mode: 802.11n HT40



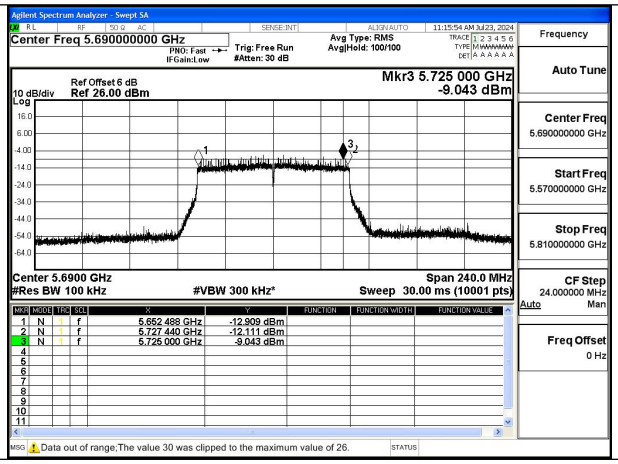
Mode:802.11n HT40 Frequency:5710MHz Ant:Chain0 scope:NII2C

Test Mode: 802.11ac VHT40



Mode:802.11ac VHT40 Frequency:5710MHz Ant:Chain0 scope:NII2C

Test Mode: 802.11ac VHT80



Mode:802.11ac VHT80 Frequency:5690MHz Ant:Chain0 scope:NII2C

Transmitter Power Spectral Density

NII2C

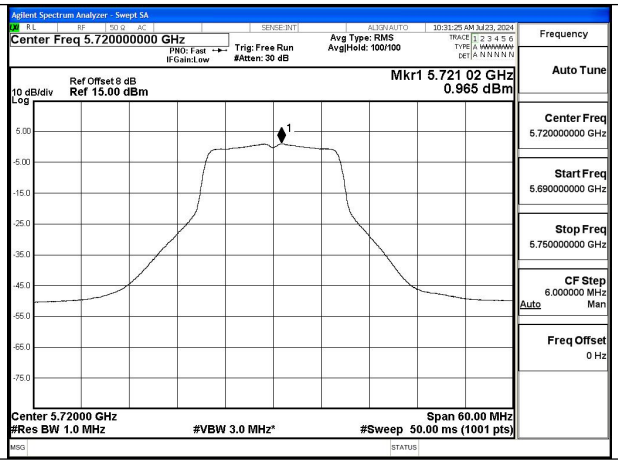
Offset 8dB = Attenuator + Temporary antenna connector loss + Cable loss

Title	Test Mode	Antenna	5720MHz	
			Correction Factor(dB)	Power Density (dBm/MHz)
NII2C	802.11a	Chain0	0	0.965
NII2C	802.11n HT20	Chain0	0	0.498
NII2C	802.11ac VHT20	Chain0	0	-1.378

Title	Test Mode	Antenna	5710MHz	
			Correction Factor(dB)	Power Density (dBm/MHz)
NII2C	802.11n HT40	Chain0	0	-2.366
NII2C	802.11ac VHT40	Chain0	0.10	-6.216

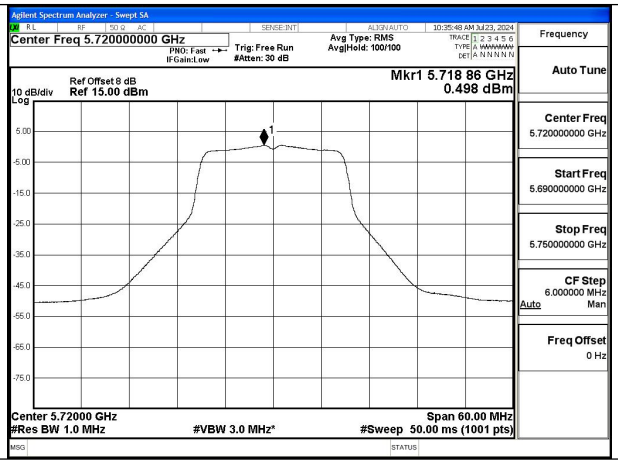
Title	Test Mode	Antenna	5690MHz	
			Correction Factor(dB)	Power Density (dBm/MHz)
NII2C	802.11ac VHT80	Chain0	0.21	-7.691

Test Mode: 802.11a



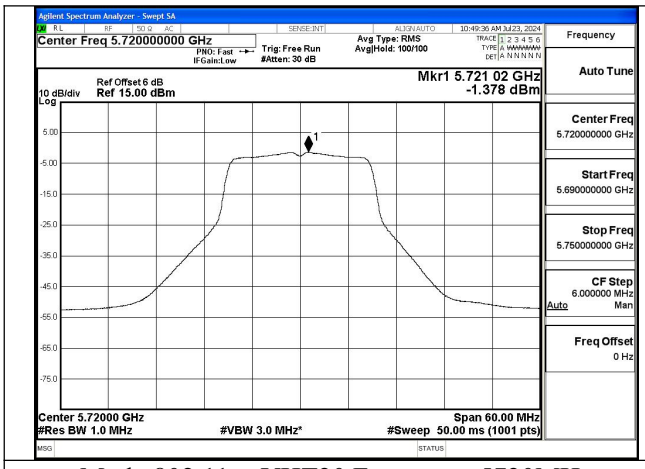
Mode:802.11a Frequency:5720MHz Ant:Chain0
scope:NII2C

Test Mode: 802.11n HT20



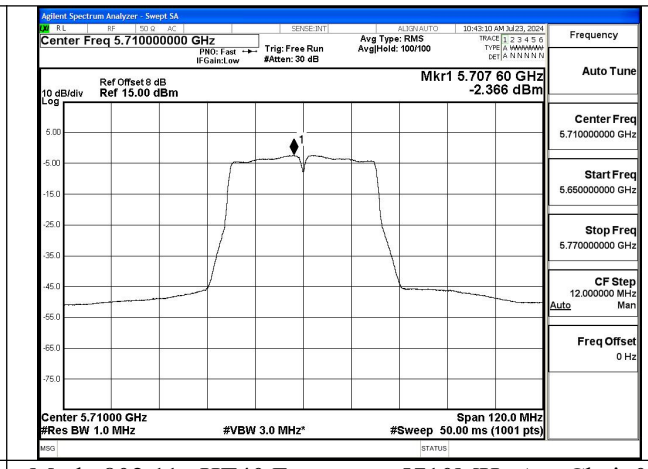
Mode:802.11n HT20 Frequency:5720MHz Ant:Chain0
scope:NII2C

Test Mode: 802.11ac VHT20



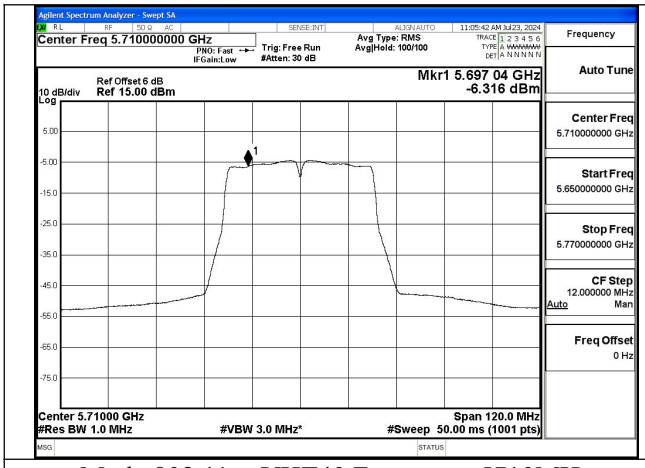
Mode:802.11ac VHT20 Frequency:5720MHz Ant:Chain0 scope:NII2C

Test Mode: 802.11n HT40



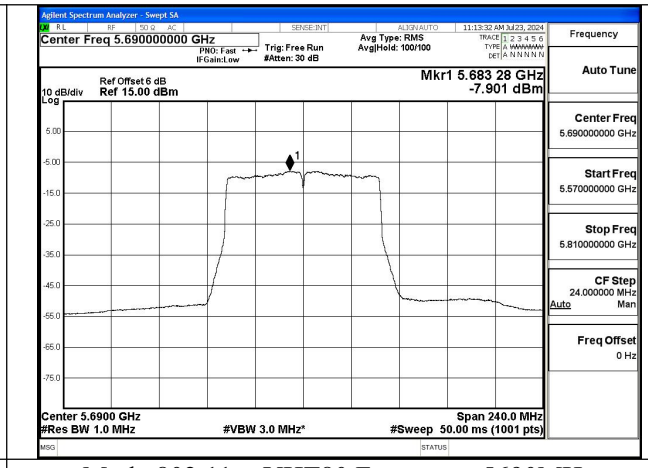
Mode:802.11n HT40 Frequency:5710MHz Ant:Chain0 scope:NII2C

Test Mode: 802.11ac VHT40



Mode:802.11ac VHT40 Frequency:5710MHz Ant:Chain0 scope:NII2C

Test Mode: 802.11ac VHT80



Mode:802.11ac VHT80 Frequency:5690MHz Ant:Chain0 scope:NII2C

NII3

Offset 8dB = Attenuator + Temporary antenna connector loss + Cable loss

Title	Test Mode	Antenna	5720MHz	
			Correction Factor(dB)	Power Density (dBm/500KHz)
NII3	802.11a	Chain0	0	-2.493
NII3	802.11n HT20	Chain0	0	-2.545
NII3	802.11ac VHT20	Chain0	0	-4.473

Note: As measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10log(500kHz/RBW) to the measured result.

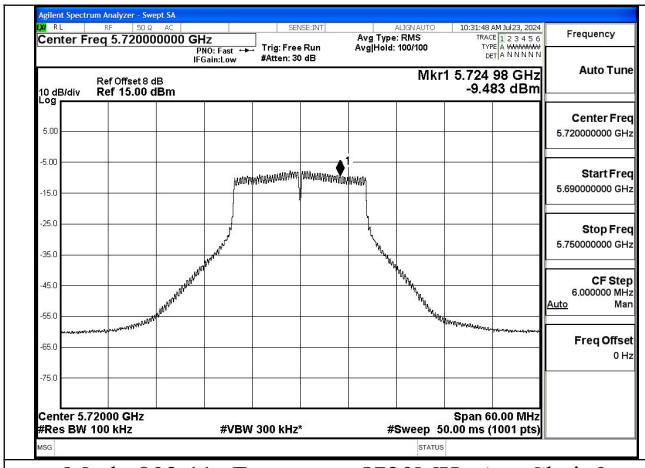
Title	Test Mode	Antenna	5710MHz	
			Correction Factor(dB)	Power Density (dBm/500KHz)
NII3	802.11n HT40	Chain0	0	-6.122
NII3	802.11ac VHT40	Chain0	0.10	-8.130

Note: As measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10log(500kHz/RBW) to the measured result.

Title	Test Mode	Antenna	5690MHz	
			Correction Factor(dB)	Power Density (dBm/500KHz)
NII3	802.11ac VHT80	Chain0	0.21	-11.782

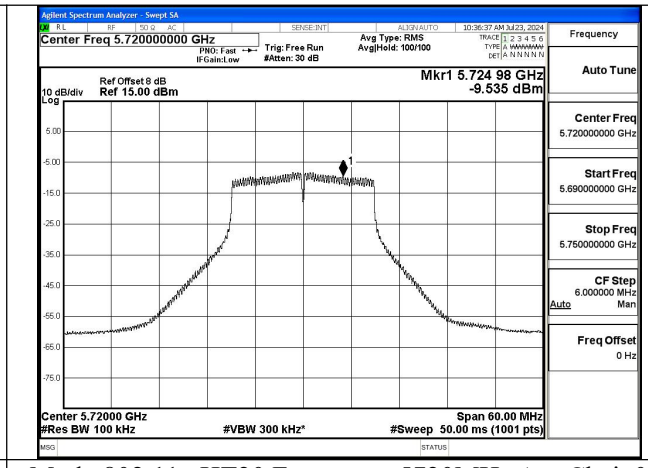
Note: As measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10log(500kHz/RBW) to the measured result.

Test Mode: 802.11a



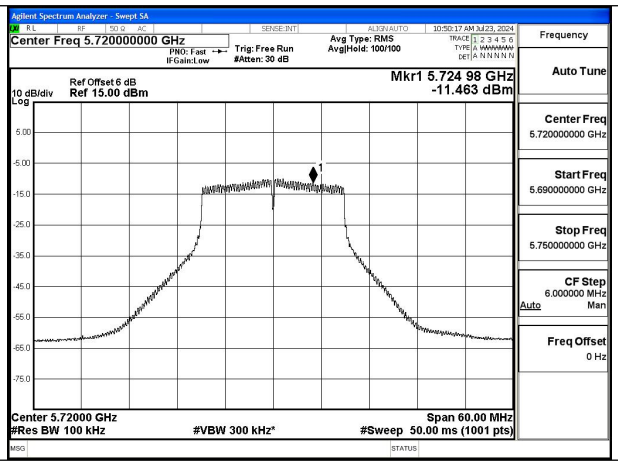
Mode:802.11a Frequency:5720MHz Ant:Chain0 scope:NII3

Test Mode: 802.11n HT20



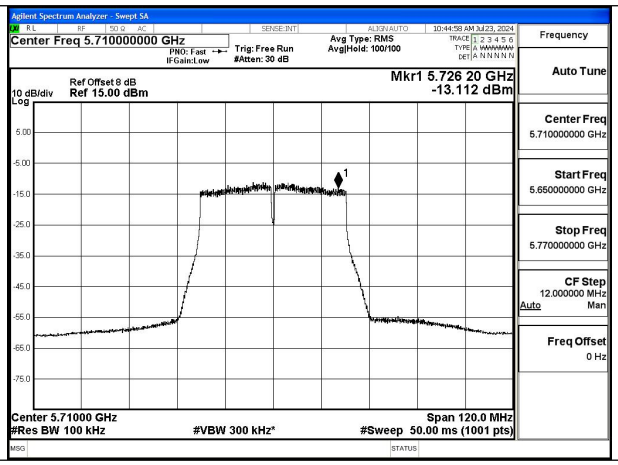
Mode:802.11n HT20 Frequency:5720MHz Ant:Chain0 scope:NII3

Test Mode: 802.11ac VHT20



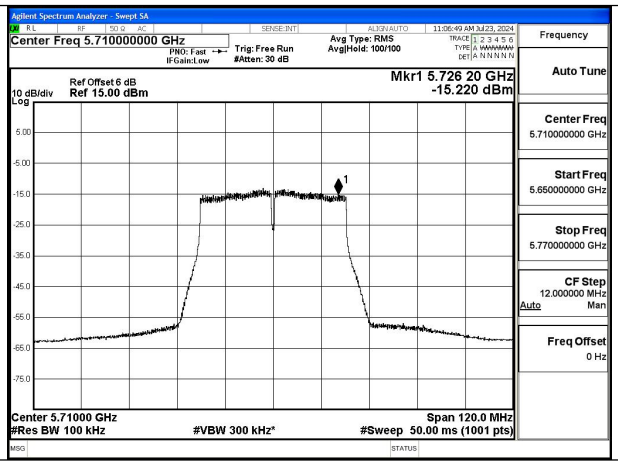
Mode:802.11ac VHT20 Frequency:5720MHz Ant:Chain0 scope:NII3

Test Mode: 802.11n HT40



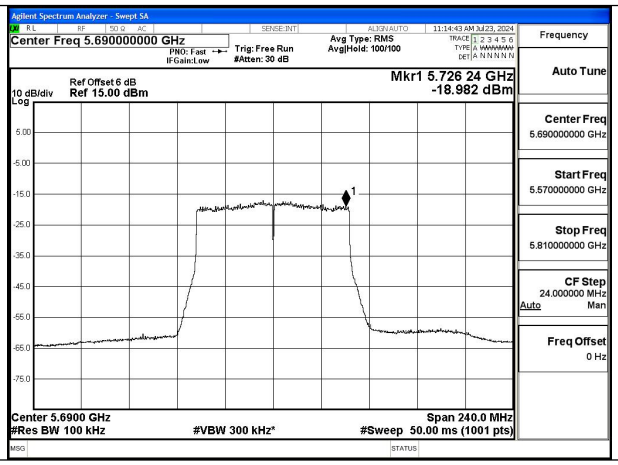
Mode:802.11n HT40 Frequency:5710MHz Ant:Chain0 scope:NII3

Test Mode: 802.11ac VHT40



Mode:802.11ac VHT40 Frequency:5710MHz Ant:Chain0 scope:NII3

Test Mode: 802.11ac VHT80



Mode:802.11ac VHT80 Frequency:5690MHz Ant:Chain0 scope:NII3