

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)

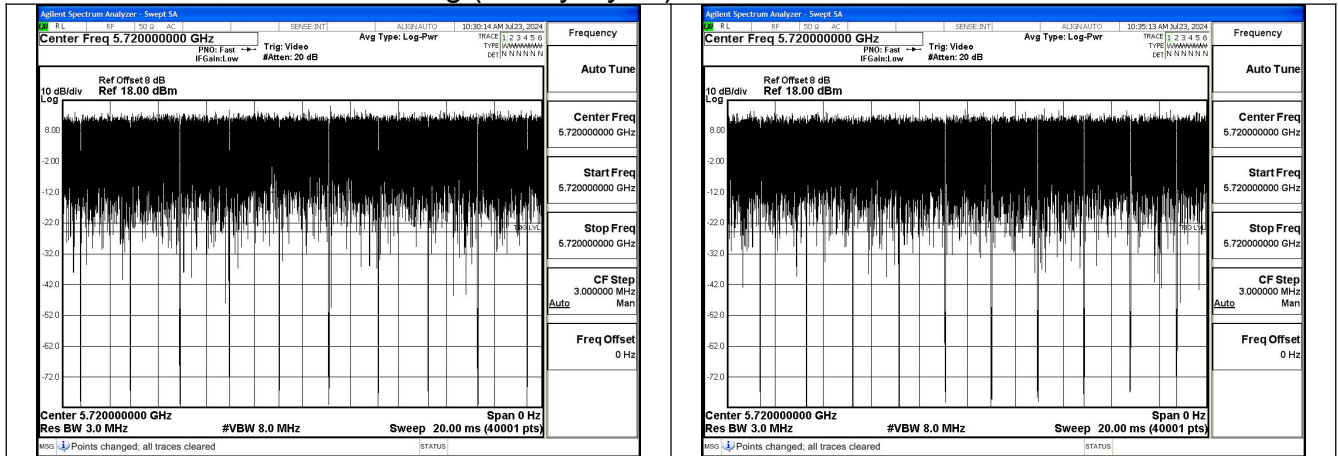


Fig.1

Fig.2

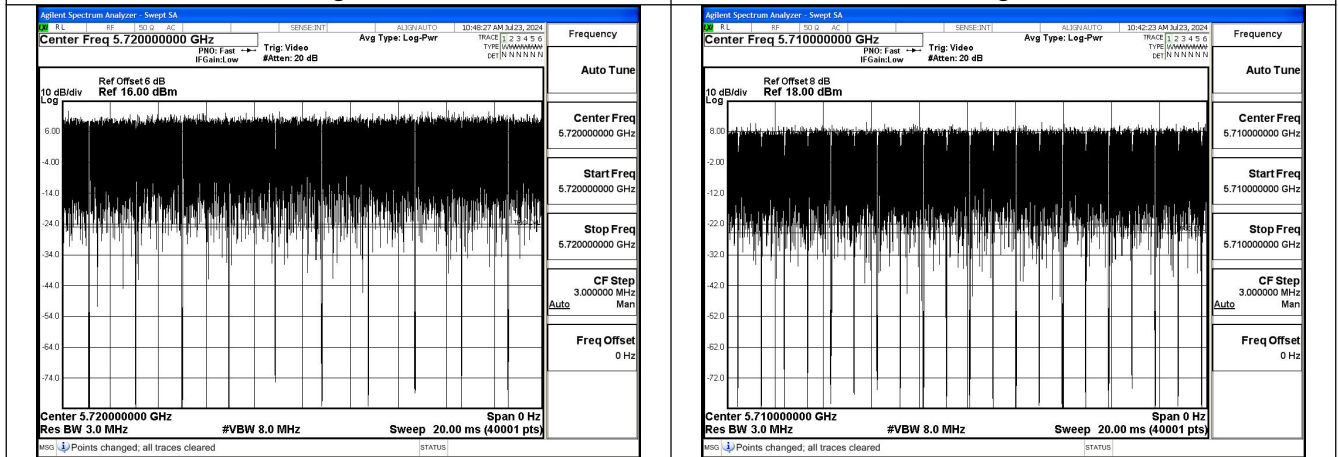


Fig.3

Fig.4

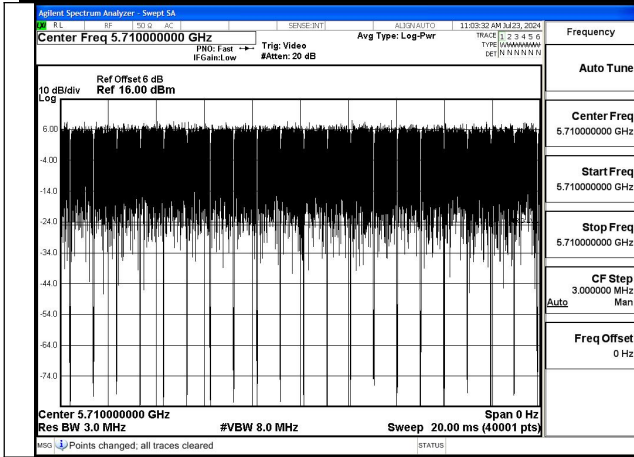


Fig.5

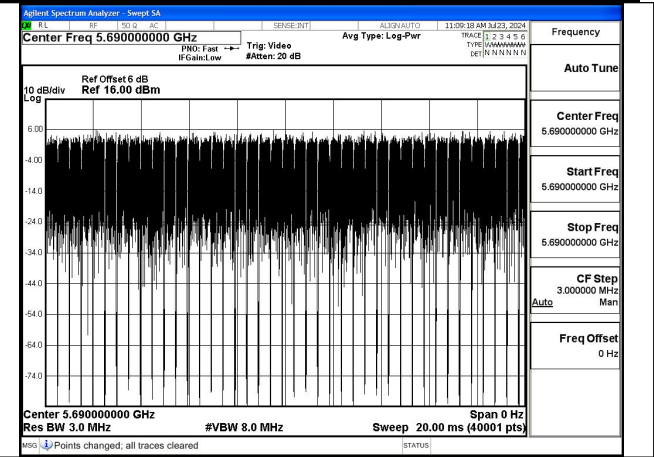


Fig.6

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

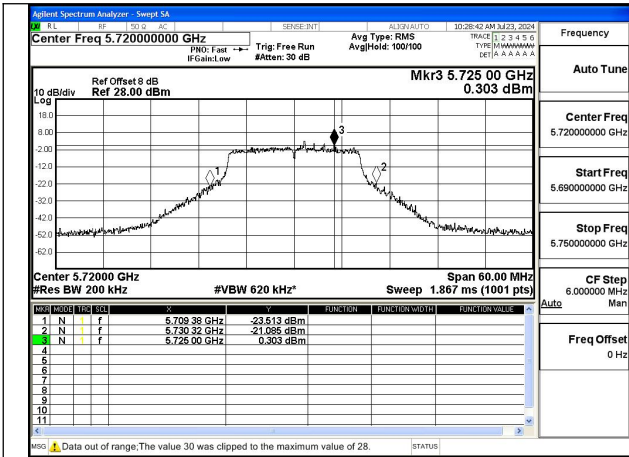
Offset 8dB = Attenuator + Temporary antenna connector loss + Cable loss

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

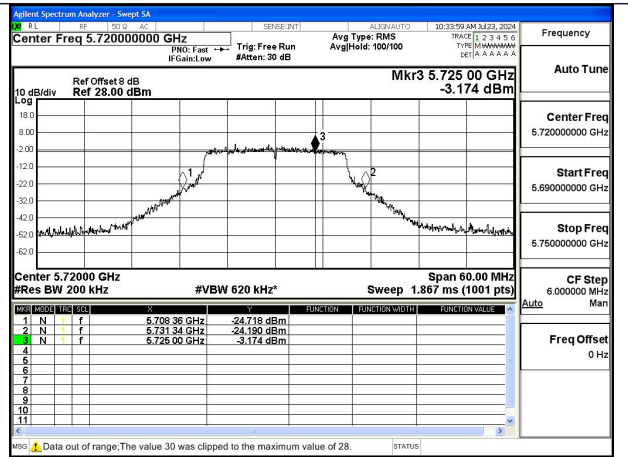
26dB Bandwidth (MHz)			
Title	Test Mode	Antenna	5690MHz
NII3	802.11ac VHT80	Chain0	7.24

Test Mode: 802.11a



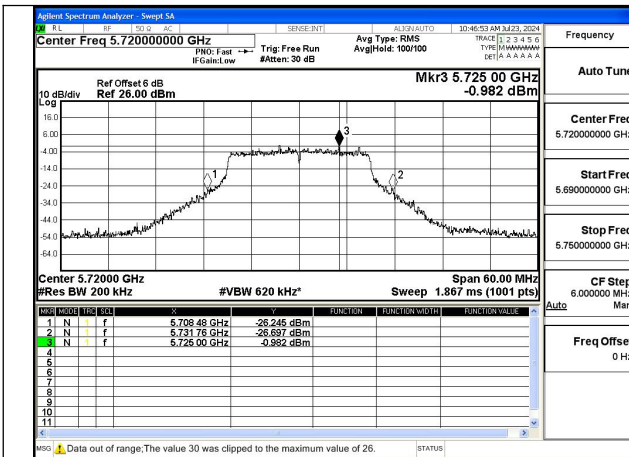
Mode:802.11a Frequency:5720MHz Ant:Chain0
scope:NII2C

Test Mode: 802.11n HT20



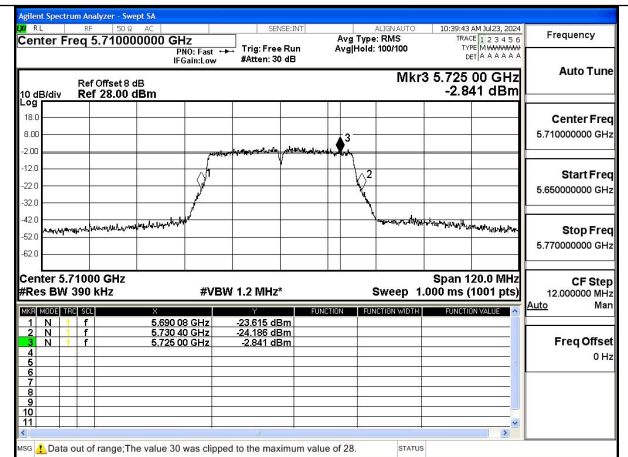
Mode:802.11n HT20 Frequency:5720MHz Ant:Chain0
scope:NII2C

Test Mode: 802.11ac VHT20



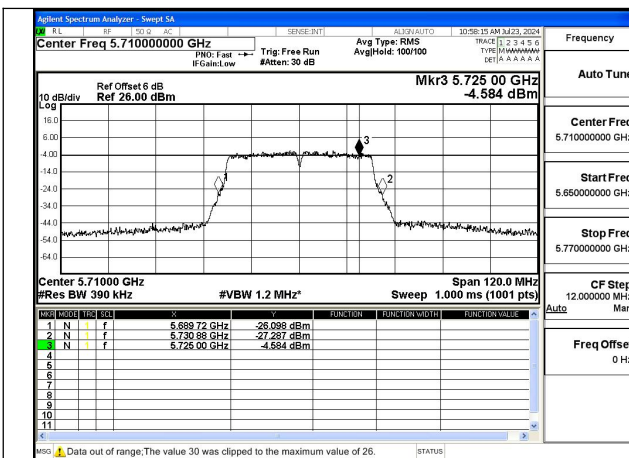
Mode:802.11ac VHT20 Frequency:5720MHz
Ant:Chain0 scope:NII2C

Test Mode: 802.11n HT40



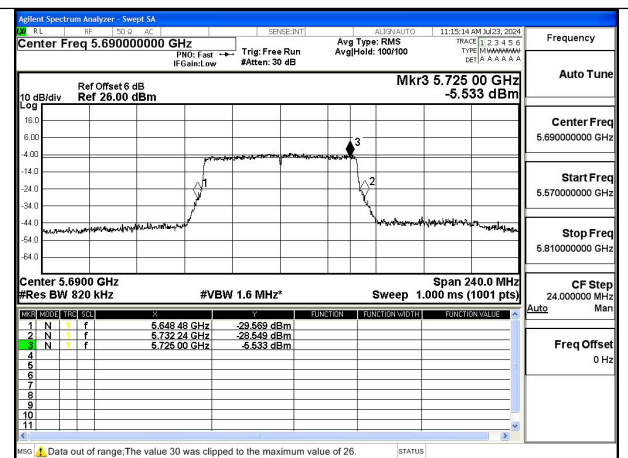
Mode:802.11n HT40 Frequency:5710MHz Ant:Chain0
scope:NII2C

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

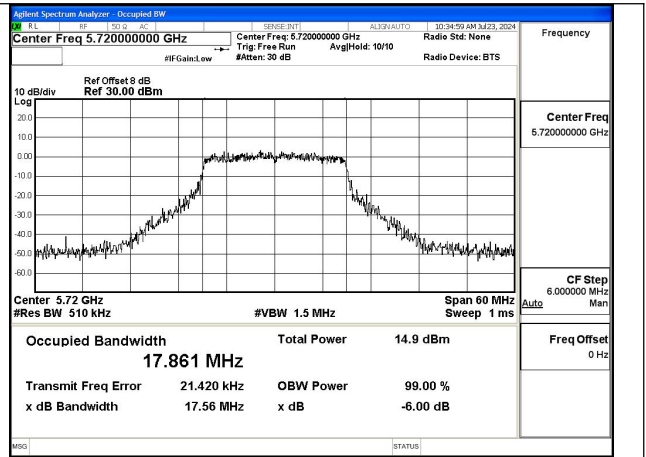
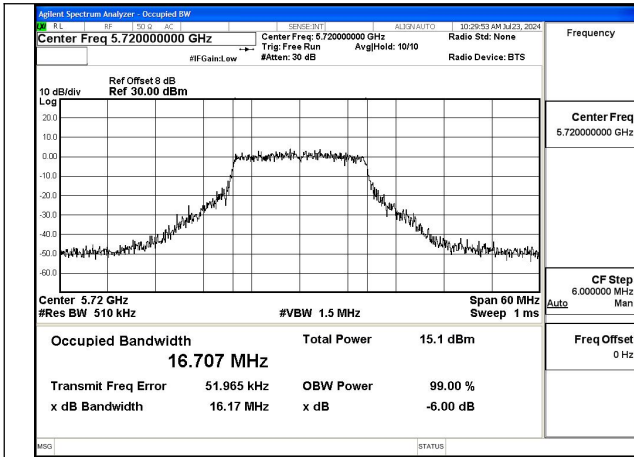
Occupied Bandwidth (MHz)			
Title	Test Mode	Antenna	5720MHz
NII3	802.11a	Chain0	3.40
NII3	802.11n HT20	Chain0	4.03
NII3	802.11ac VHT20	Chain0	3.99

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

Test Mode: 802.11n HT20

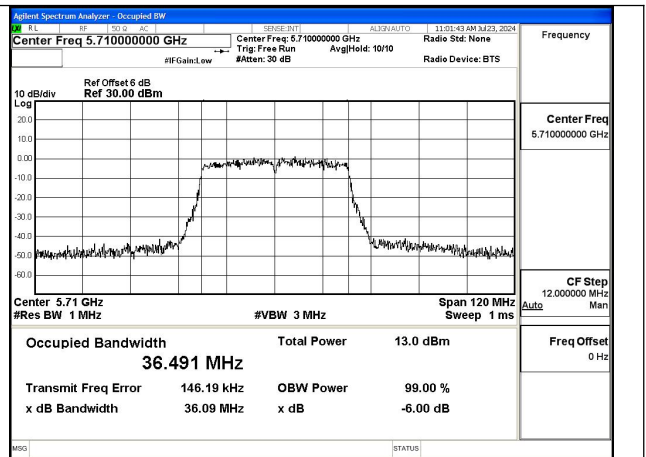
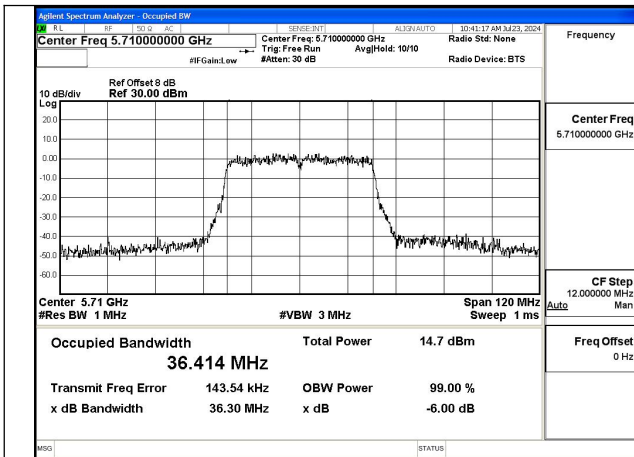


Mode:802.11a Frequency:5720MHz Ant:Chain0
scope:NII2C

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

Test Mode: 802.11n HT40

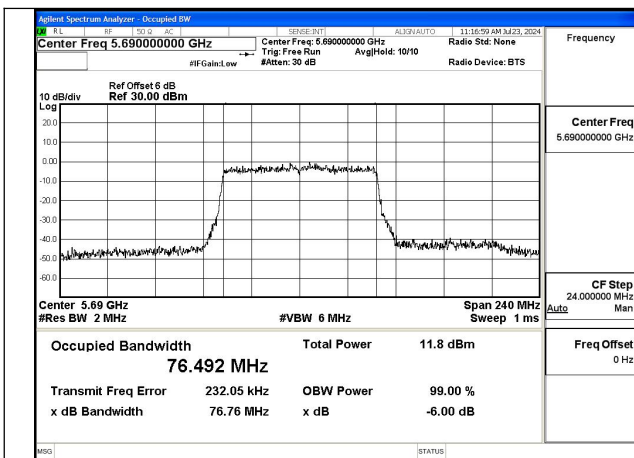
Test Mode: 802.11ac VHT40



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

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

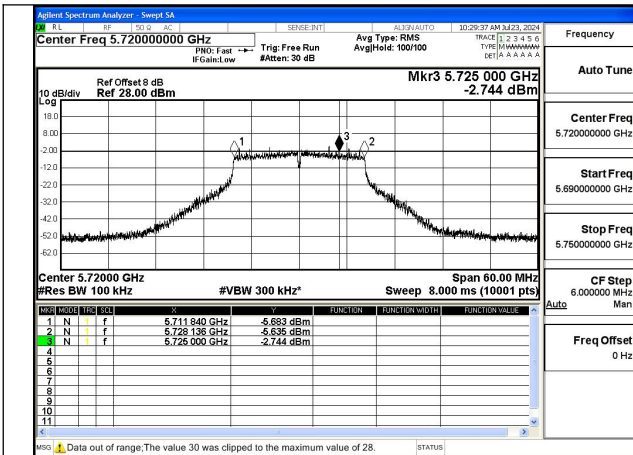
Offset 8dB = Attenuator + Temporary antenna connector loss + Cable loss

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

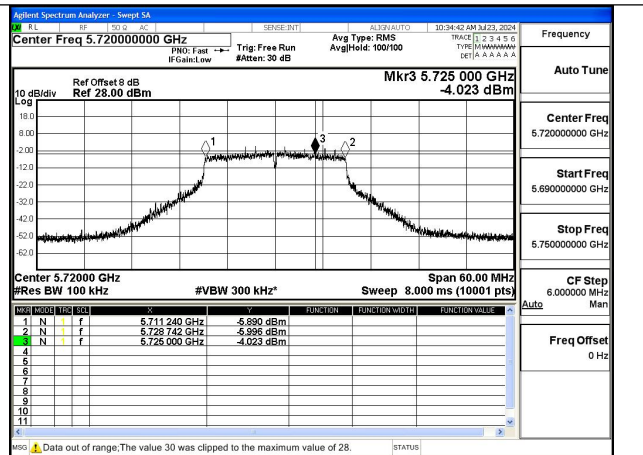
6dB Bandwidth (MHz)			
Title	Test Mode	Antenna	5690MHz
NII3	802.11ac VHT80	Chain0	2.44

Test Mode: 802.11a



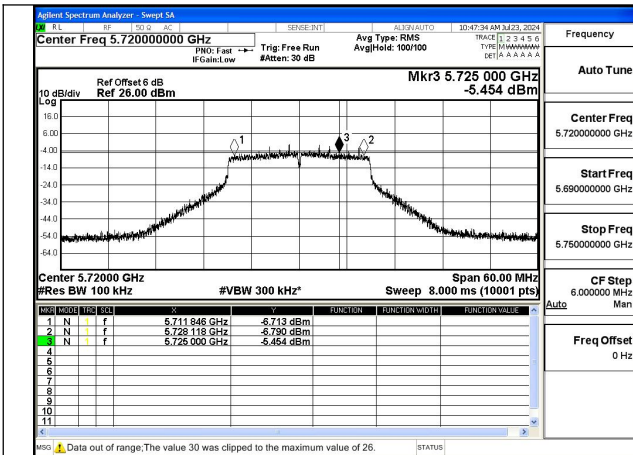
Mode:802.11a Frequency:5720MHz Ant:Chain0
scope:NII2C

Test Mode: 802.11n HT20



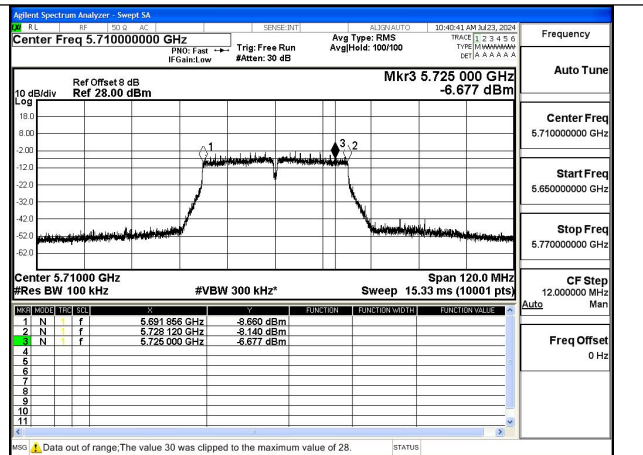
Mode:802.11n HT20 Frequency:5720MHz Ant:Chain0
scope:NII2C

Test Mode: 802.11ac VHT20



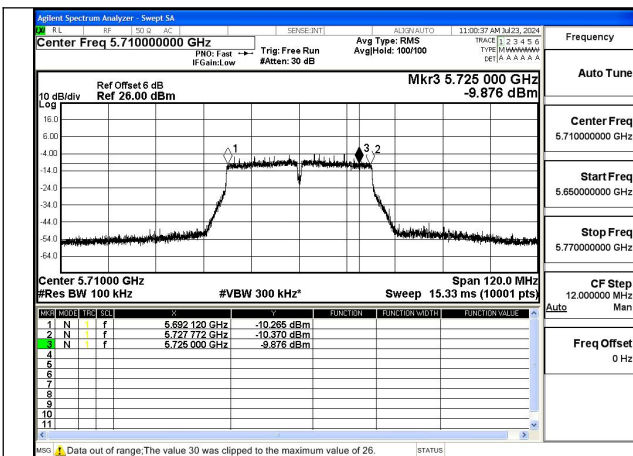
Mode:802.11ac VHT20 Frequency:5720MHz
Ant:Chain0 scope:NII2C

Test Mode: 802.11n HT40



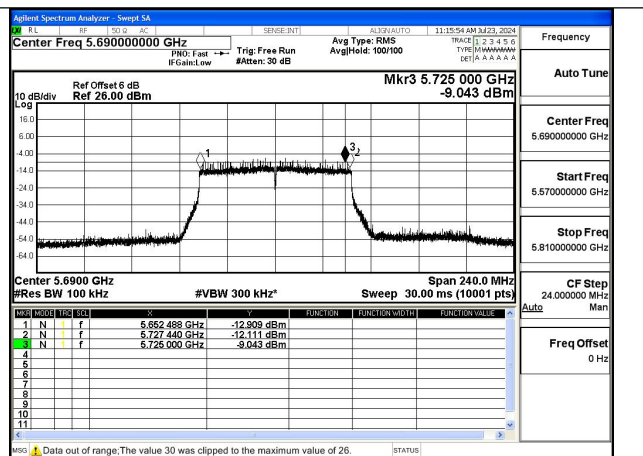
Mode:802.11n HT40 Frequency:5710MHz Ant:Chain0
scope:NII2C

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

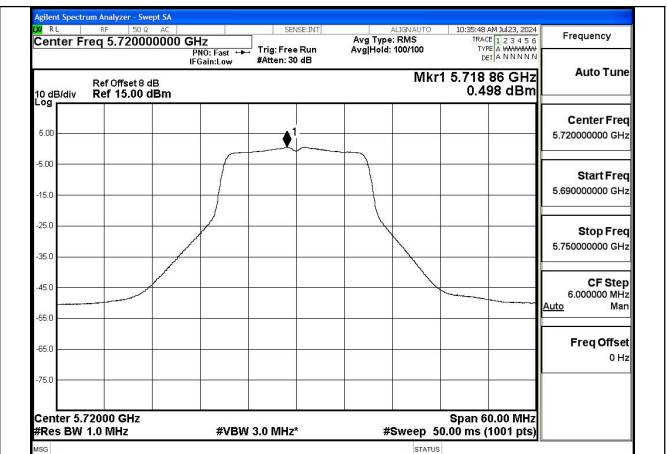
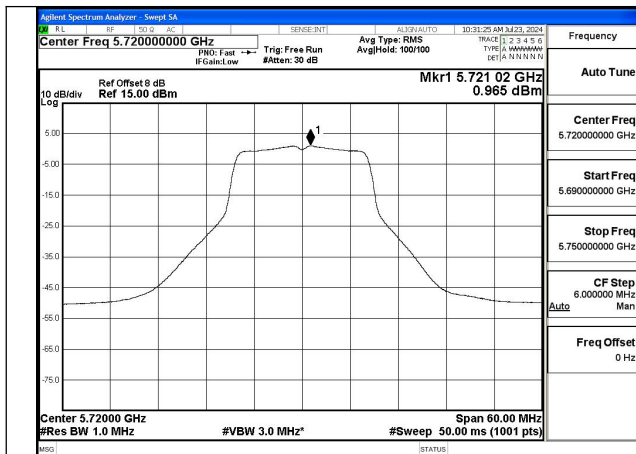
Title	Test Mode	Antenna	5720MHz	
			Correction Factor(dB)	Power Density (dBm/MHz)
NII2C	802.11a	Chain0	0	0.965
NII2C	802.11n HT20	Chain0	0	0.498
NII2C	802.11ac VHT20	Chain0	0	-1.378

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

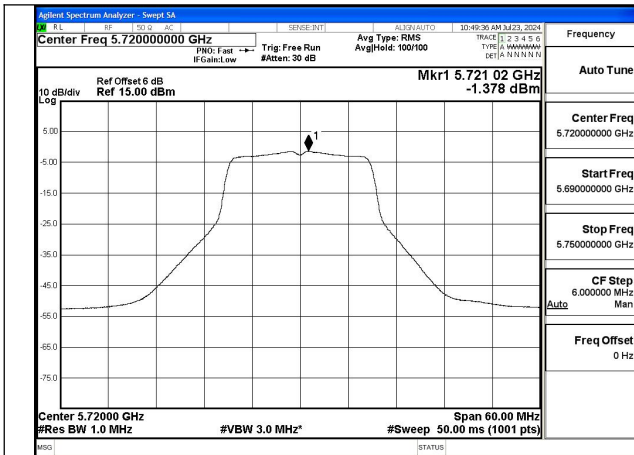
Test Mode: 802.11n HT20



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

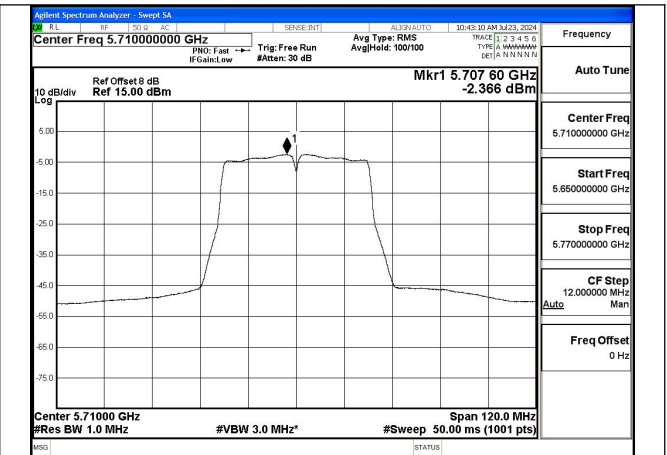
Mode:802.11n HT20 Frequency:5720MHz Ant:Chain0
scope:NII2C

Test Mode: 802.11ac VHT20



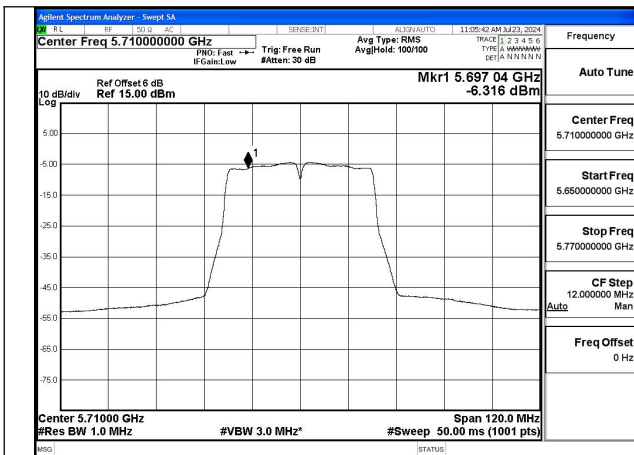
Mode:802.11ac VHT20 Frequency:5720MHz
Ant:Chain0 scope:NII2C

Test Mode: 802.11n HT40



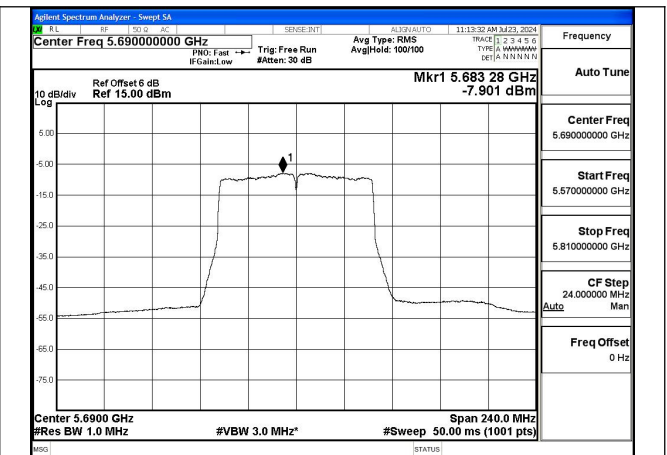
Mode:802.11n HT40 Frequency:5710MHz Ant:Chain0
scope:NII2C

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

NI13

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

Title	Test Mode	Antenna	5720MHz	
			Correction Factor(dB)	Power Density (dBm/500KHz)
NI13	802.11a	Chain0	0	-2.493
NI13	802.11n HT20	Chain0	0	-2.545
NI13	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)
NI13	802.11n HT40	Chain0	0	-6.122
NI13	802.11ac VHT40	Chain0	0.10	-8.130

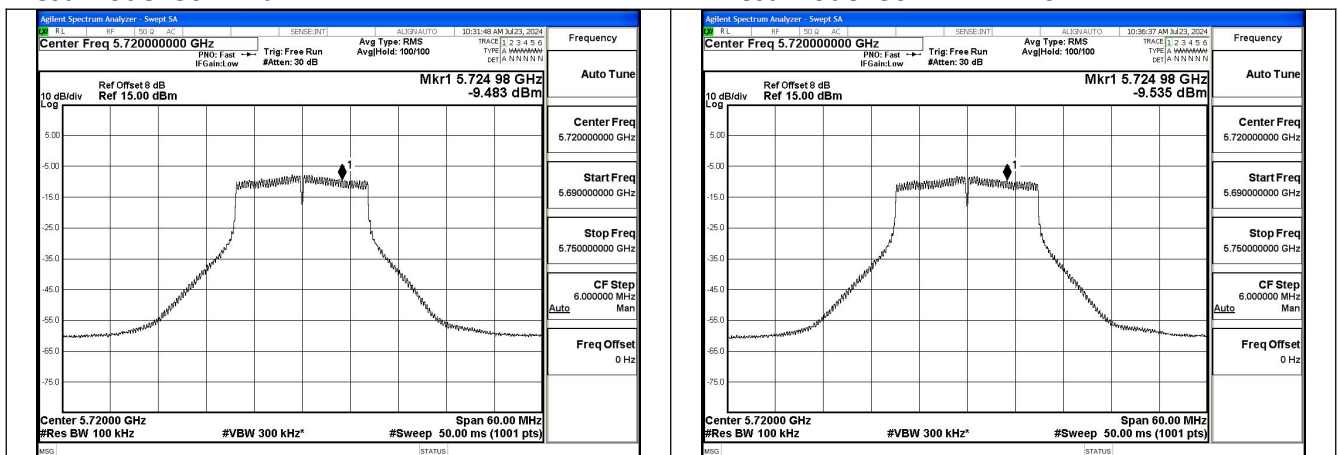
Note: As measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10log(500kHz/RBW) to the measured result.

Title	Test Mode	Antenna	5690MHz	
			Correction Factor(dB)	Power Density (dBm/500KHz)
NI13	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

Test Mode: 802.11n HT20

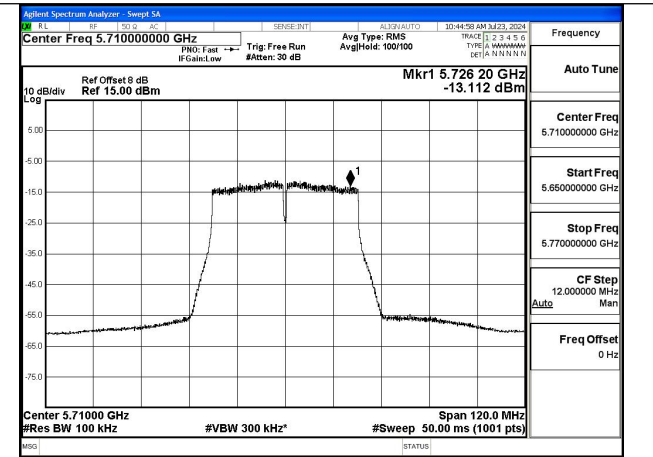
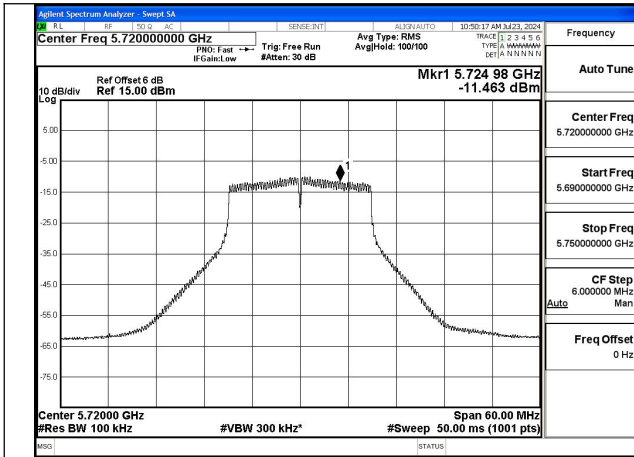


Mode:802.11a Frequency:5720MHz Ant:Chain0
scope:NI13

Mode:802.11n HT20 Frequency:5720MHz Ant:Chain0
scope:NI13

Test Mode: 802.11ac VHT20

Test Mode: 802.11n HT40

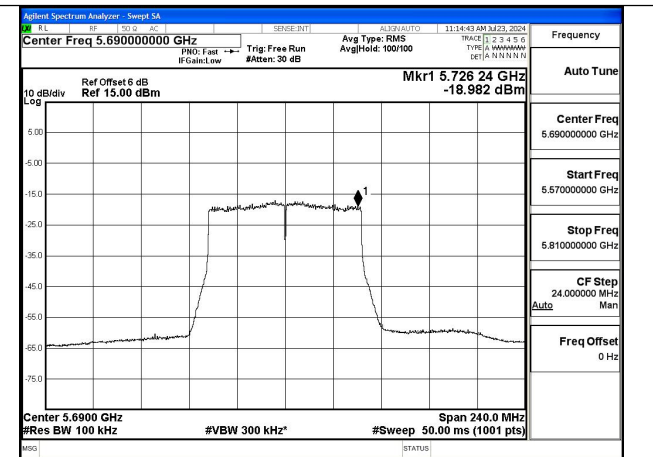
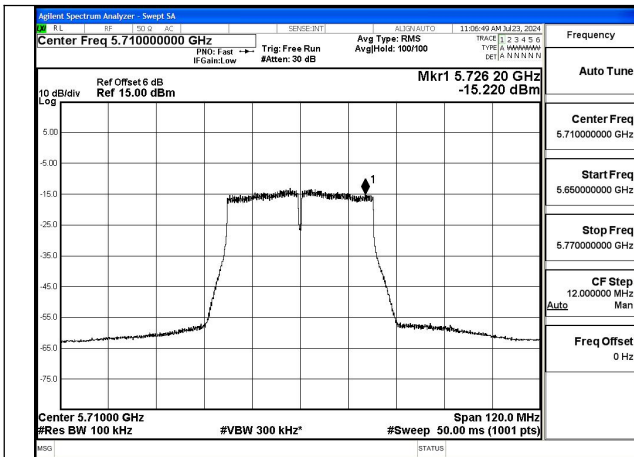


Mode:802.11ac VHT20 Frequency:5720MHz
Ant:Chain0 scope:NII3

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

Test Mode: 802.11ac VHT40

Test Mode: 802.11ac VHT80



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

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