

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

CHANNEL AGGREGATION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)
802.11a	5720	98.69%	0
802.11a	5720	98.70%	0
802.11n HT20	5720	98.59%	0
802.11n HT20	5720	98.63%	0
802.11ac VHT20	5720	98.61%	0
802.11ac VHT20	5720	98.60%	0
802.11n HT40	5710	97.30%	0.12
802.11n HT40	5710	97.29%	0.12
802.11ac VHT40	5710	97.29%	0.12
802.11ac VHT40	5710	97.39%	0.11
802.11ac VHT80	5690	94.89%	0.23
802.11ac VHT80	5690	94.79%	0.23

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

Output Power

NII2C

Title	Test Mode	Tones/ RUIndex	Freq (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
NII2C	802.11a	NA	5720	Chain0	17.29	19.29
NII2C	802.11a	NA	5720	Chain1	14.17	15.67
NII2C	802.11n HT20	NA	5720	Chain0	17.11	19.11
NII2C	802.11n HT20	NA	5720	Chain1	14.03	15.53
NII2C	802.11n HT20	NA	5720	MIMO	18.85	20.61
NII2C	802.11ac VHT20	NA	5720	Chain0	17.10	19.10
NII2C	802.11ac VHT20	NA	5720	Chain1	14.00	15.50
NII2C	802.11ac VHT20	NA	5720	MIMO	18.83	20.59
NII2C	802.11n HT40	NA	5710	Chain0	17.85	19.85
NII2C	802.11n HT40	NA	5710	Chain1	11.81	13.31
NII2C	802.11n HT40	NA	5710	MIMO	18.82	20.58
NII2C	802.11ac VHT40	NA	5710	Chain0	17.82	19.82
NII2C	802.11ac VHT40	NA	5710	Chain1	11.82	13.32
NII2C	802.11ac VHT40	NA	5710	MIMO	18.79	20.55
NII2C	802.11ac VHT80	NA	5690	Chain0	13.73	15.73
NII2C	802.11ac VHT80	NA	5690	Chain1	14.37	15.87
NII2C	802.11ac VHT80	NA	5690	MIMO	17.07	18.83

NII3

Title	Test Mode	Tones/ RUIndex	Freq (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
NII3	802.11a	NA	5720	Chain0	9.64	11.64
NII3	802.11a	NA	5720	Chain1	6.55	8.05
NII3	802.11n HT20	NA	5720	Chain0	9.93	11.93
NII3	802.11n HT20	NA	5720	Chain1	6.91	8.41
NII3	802.11n HT20	NA	5720	MIMO	11.69	13.45
NII3	802.11ac VHT20	NA	5720	Chain0	10.06	12.06
NII3	802.11ac VHT20	NA	5720	Chain1	6.94	8.44
NII3	802.11ac VHT20	NA	5720	MIMO	11.78	13.54
NII3	802.11n HT40	NA	5710	Chain0	5.82	7.82
NII3	802.11n HT40	NA	5710	Chain1	2.28	3.78
NII3	802.11n HT40	NA	5710	MIMO	7.41	9.17
NII3	802.11ac VHT40	NA	5710	Chain0	5.89	7.89
NII3	802.11ac VHT40	NA	5710	Chain1	2.32	3.82
NII3	802.11ac VHT40	NA	5710	MIMO	7.47	9.23
NII3	802.11ac VHT80	NA	5690	Chain0	-1.46	0.54
NII3	802.11ac VHT80	NA	5690	Chain1	-0.96	0.54
NII3	802.11ac VHT80	NA	5690	MIMO	1.81	3.57

Emission Bandwidth

NII2C

Offset 11.16dB = Attenuator + Temporary antenna connector loss + Cable loss

26dB Bandwidth (MHz)			
Title	Test Mode	Antenna	Channel No.662
			5720MHz
NII2C	802.11a	Chain0	19.10
NII2C	802.11a	Chain1	14.84
NII2C	802.11n HT20	Chain0	17.48
NII2C	802.11n HT20	Chain1	15.08
NII2C	802.11ac VHT20	Chain0	15.92
NII2C	802.11ac VHT20	Chain1	15.02

26dB Bandwidth (MHz)			
Title	Test Mode	Antenna	Channel No.660
			5710MHz
NII2C	802.11n HT40	Chain0	45.72
NII2C	802.11n HT40	Chain1	34.92
NII2C	802.11ac VHT40	Chain0	46.44
NII2C	802.11ac VHT40	Chain1	35.16

26dB Bandwidth (MHz)			
Title	Test Mode	Antenna	Channel No.656
			5690MHz
NII2C	802.11ac VHT80	Chain0	75.08
NII2C	802.11ac VHT80	Chain1	75.32

NII3

Offset 11.16dB = Attenuator + Temporary antenna connector loss + Cable loss

26dB Bandwidth (MHz)			
Title	Test Mode	Antenna	Channel No.662
			5720MHz
NII3	802.11a	Chain0	5.74
NII3	802.11a	Chain1	4.72
NII3	802.11n HT20	Chain0	5.56
NII3	802.11n HT20	Chain1	4.96
NII3	802.11ac VHT20	Chain0	5.08
NII3	802.11ac VHT20	Chain1	5.02

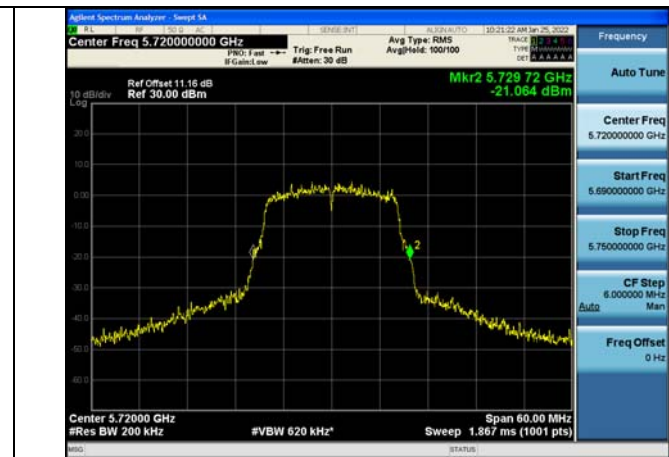
26dB Bandwidth (MHz)			
Title	Test Mode	Antenna	Channel No.660
			5710MHz
NII3	802.11n HT40	Chain0	6.60
NII3	802.11n HT40	Chain1	4.92
NII3	802.11ac VHT40	Chain0	5.52
NII3	802.11ac VHT40	Chain1	5.04

26dB Bandwidth (MHz)			
Title	Test Mode	Antenna	Channel No.656
			5690MHz
NII3	802.11ac VHT80	Chain0	5.32
NII3	802.11ac VHT80	Chain1	5.08

Test Mode: 802.11a



Test Mode:802.11a 5720MHz Chain0

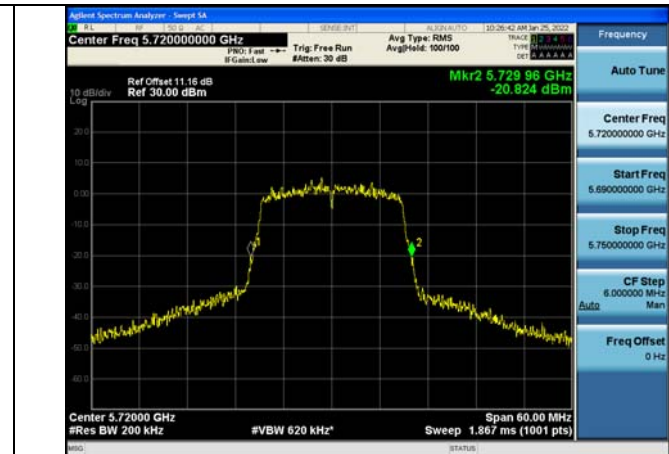


Test Mode:802.11a 5720MHz Chain1

Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5720MHz Chain0



Test Mode:802.11n HT20 5720MHz Chain1

Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5720MHz Chain0

Test Mode: 802.11n HT40



Test Mode:802.11ac VHT20 5720MHz Chain1



Test Mode:802.11n HT40 5710MHz Chain0

Test Mode: 802.11ac VHT40



Test Mode:802.11n HT40 5710MHz Chain1



Test Mode:802.11ac VHT40 5710MHz Chain0

Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT40 5710MHz Chain1



Test Mode:802.11ac VHT80 5690MHz Chain0



Test Mode:802.11ac VHT80 5690MHz Chain1

Occupied Bandwidth

NII2C

Offset 11.16dB = Attenuator + Temporary antenna connector loss + Cable loss

Occupied Bandwidth (MHz)			
Title	Test Mode	Antenna	Channel No.662
			5720MHz
NII2C	802.11a	Chain0	13.37
NII2C	802.11a	Chain1	13.25
NII2C	802.11n HT20	Chain0	14.00
NII2C	802.11n HT20	Chain1	13.75
NII2C	802.11ac VHT20	Chain0	13.90
NII2C	802.11ac VHT20	Chain1	13.79

Occupied Bandwidth (MHz)			
Title	Test Mode	Antenna	Channel No.660
			5710MHz
NII2C	802.11n HT40	Chain0	33.22
NII2C	802.11n HT40	Chain1	32.96
NII2C	802.11ac VHT40	Chain0	33.19
NII2C	802.11ac VHT40	Chain1	33.00

Occupied Bandwidth (MHz)			
Title	Test Mode	Antenna	Channel No.656
			5690MHz
NII2C	802.11ac VHT80	Chain0	72.98
NII2C	802.11ac VHT80	Chain1	73.03

NII3

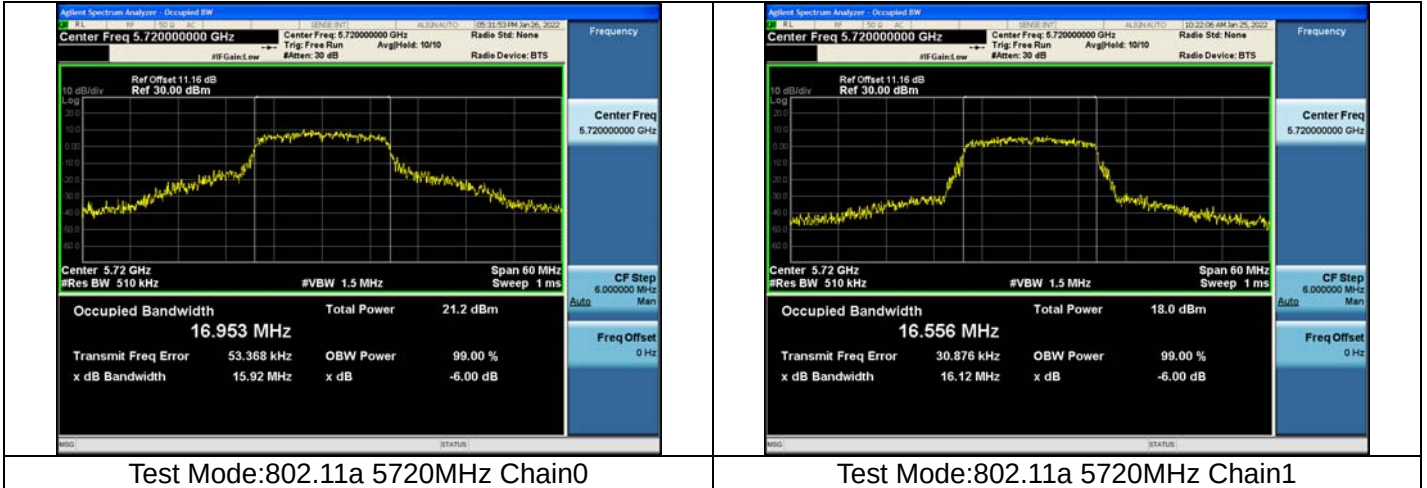
Offset 11.16dB = Attenuator + Temporary antenna connector loss + Cable loss

Occupied Bandwidth (MHz)			
Title	Test Mode	Antenna	Channel No.662
			5720MHz
NII3	802.11a	Chain0	3.48
NII3	802.11a	Chain1	3.31
NII3	802.11n HT20	Chain0	4.02
NII3	802.11n HT20	Chain1	3.85
NII3	802.11ac VHT20	Chain0	3.99
NII3	802.11ac VHT20	Chain1	3.92

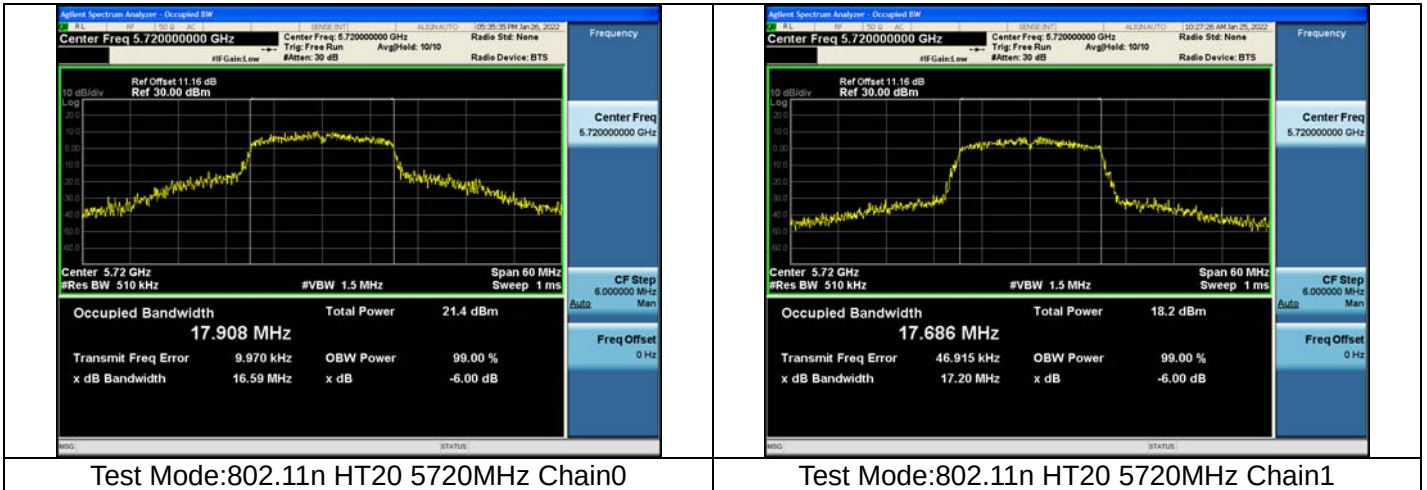
Occupied Bandwidth (MHz)			
Title	Test Mode	Antenna	Channel No.660
			5710MHz
NII3	802.11n HT40	Chain0	3.52
NII3	802.11n HT40	Chain1	3.21
NII3	802.11ac VHT40	Chain0	3.51
NII3	802.11ac VHT40	Chain1	3.23

Occupied Bandwidth (MHz)			
Title	Test Mode	Antenna	Channel No.656
			5690MHz
NII3	802.11ac VHT80	Chain0	2.93
NII3	802.11ac VHT80	Chain1	3.07

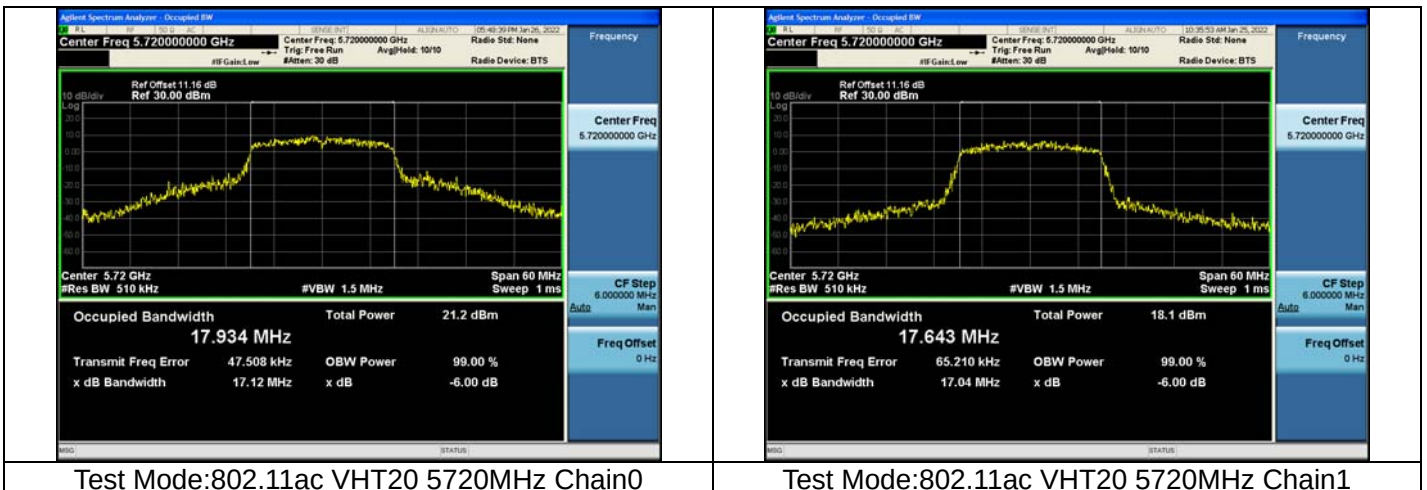
Test Mode: 802.11a



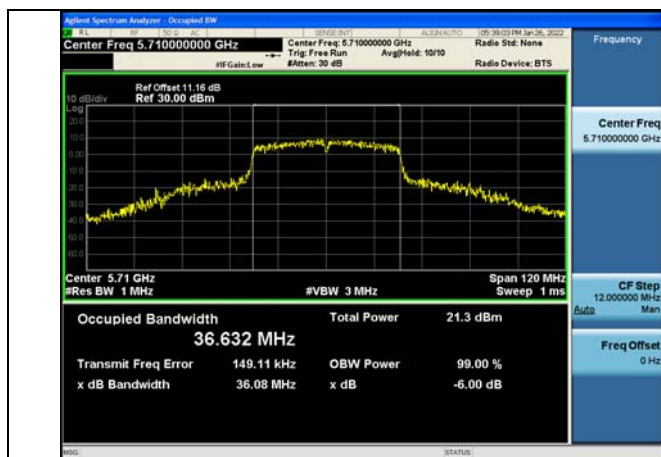
Test Mode: 802.11n HT20



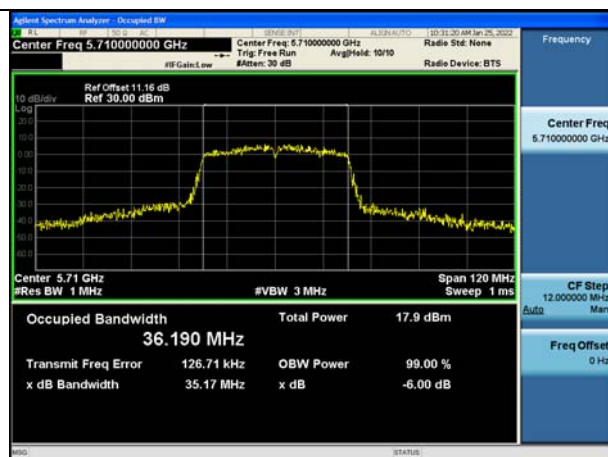
Test Mode: 802.11ac VHT20



Test Mode: 802.11n HT40

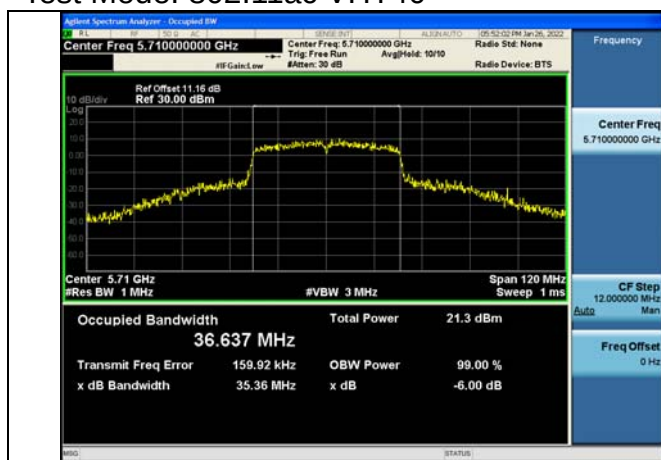


Test Mode:802.11n HT40 5710MHz Chain0



Test Mode:802.11n HT40 5710MHz Chain1

Test Mode: 802.11ac VHT40

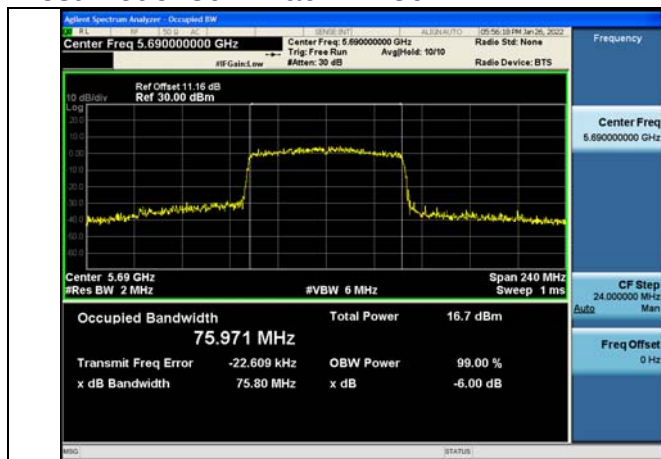


Test Mode:802.11ac VHT40 5710MHz Chain0



Test Mode:802.11ac VHT40 5710MHz Chain1

Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT80 5690MHz Chain0



Test Mode:802.11ac VHT80 5690MHz Chain1

6dB Bandwidth

NII2C

Offset 11.16dB = Attenuator + Temporary antenna connector loss + Cable loss

6dB Bandwidth (MHz)			
Title	Test Mode	Antenna	Channel No.662
			5720MHz
NII2C	802.11a	Chain0	12.79
NII2C	802.11a	Chain1	13.18
NII2C	802.11n HT20	Chain0	12.94
NII2C	802.11n HT20	Chain1	12.60
NII2C	802.11ac VHT20	Chain0	13.53
NII2C	802.11ac VHT20	Chain1	13.53

6dB Bandwidth (MHz)			
Title	Test Mode	Antenna	Channel No.660
			5710MHz
NII2C	802.11n HT40	Chain0	32.59
NII2C	802.11n HT40	Chain1	32.59
NII2C	802.11ac VHT40	Chain0	32.59
NII2C	802.11ac VHT40	Chain1	32.57

6dB Bandwidth (MHz)			
Title	Test Mode	Antenna	Channel No.656
			5690MHz
NII2C	802.11ac VHT80	Chain0	72.58
NII2C	802.11ac VHT80	Chain1	72.58

NII3

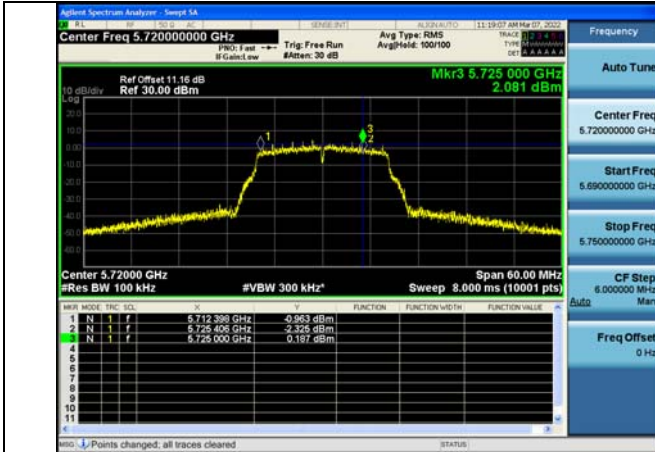
Offset 11.16dB = Attenuator + Temporary antenna connector loss + Cable loss

6dB Bandwidth (MHz)			
Title	Test Mode	Antenna	Channel No.662
			5720MHz
NII3	802.11a	Chain0	0.10
NII3	802.11a	Chain1	0.49
NII3	802.11n HT20	Chain0	0.09
NII3	802.11n HT20	Chain1	0.04
NII3	802.11ac VHT20	Chain0	0.06
NII3	802.11ac VHT20	Chain1	0.06

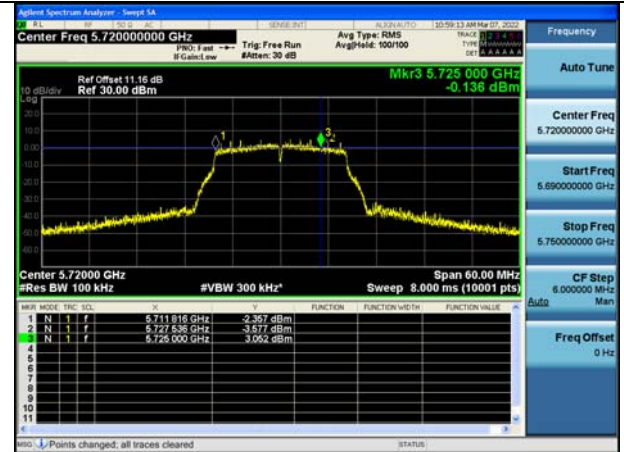
6dB Bandwidth (MHz)			
Title	Test Mode	Antenna	Channel No.660
			5710MHz
NII3	802.11n HT40	Chain0	0.04
NII3	802.11n HT40	Chain1	0.05
NII3	802.11ac VHT40	Chain0	0.05
NII3	802.11ac VHT40	Chain1	0.05

6dB Bandwidth (MHz)			
Title	Test Mode	Antenna	Channel No.656
			5690MHz
NII3	802.11ac VHT80	Chain0	0.06
NII3	802.11ac VHT80	Chain1	0.02

Test Mode: 802.11a

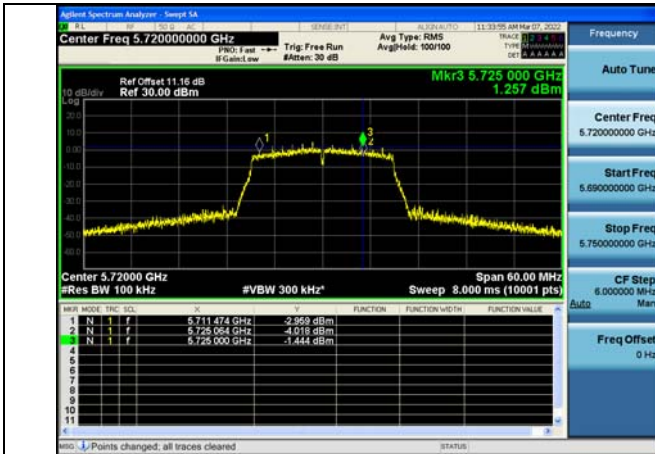


Test Mode:802.11a 5720MHz Chain0

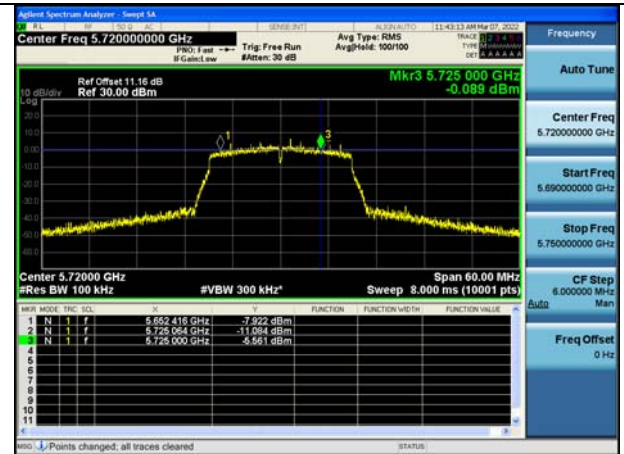


Test Mode:802.11a 5720MHz Chain1

Test Mode: 802.11n HT20

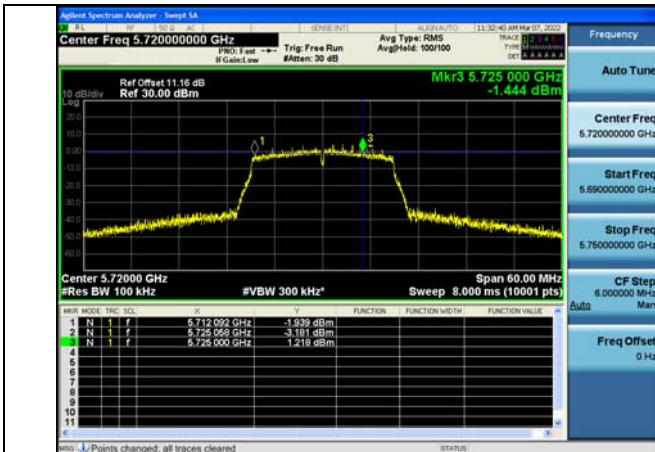


Test Mode:802.11n HT20 5720MHz Chain0

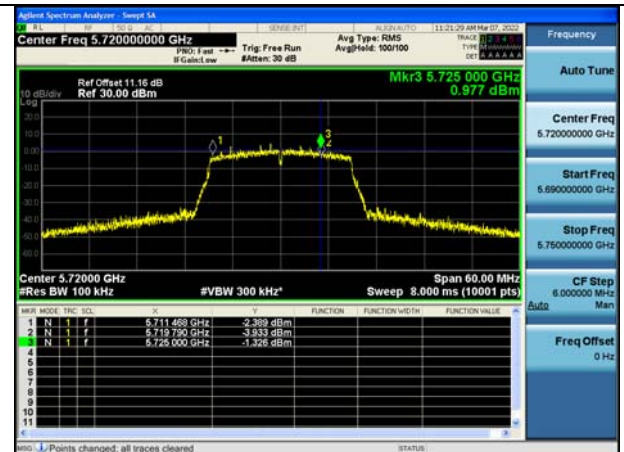


Test Mode:802.11n HT20 5720MHz Chain1

Test Mode: 802.11ac VHT20

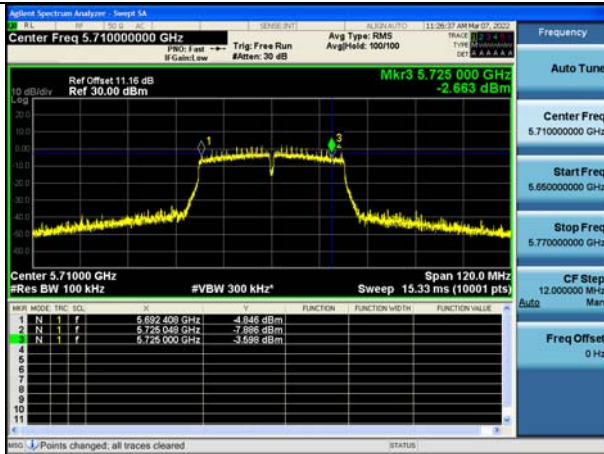


Test Mode:802.11ac VHT20 5720MHz Chain0



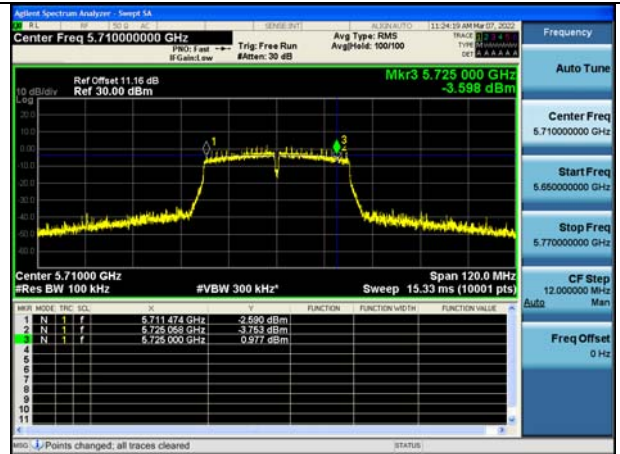
Test Mode:802.11ac VHT20 5720MHz Chain1

Test Mode: 802.11n HT40

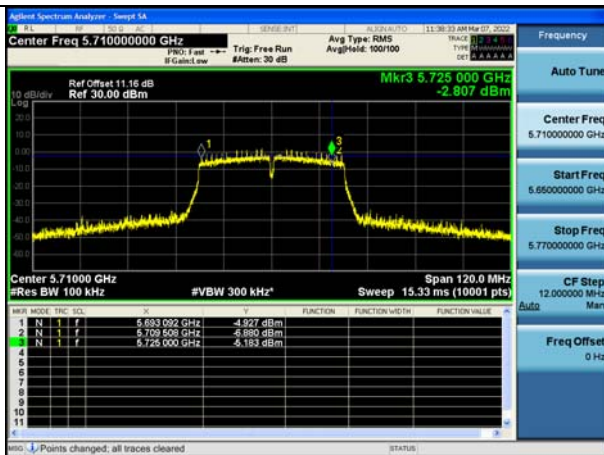


Test Mode:802.11n HT40 5710MHz Chain0

Test Mode: 802.11ac VHT40

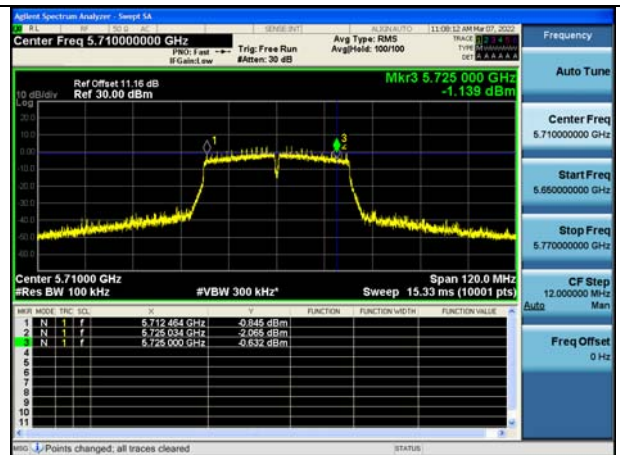


Test Mode:802.11n HT40 5710MHz Chain1

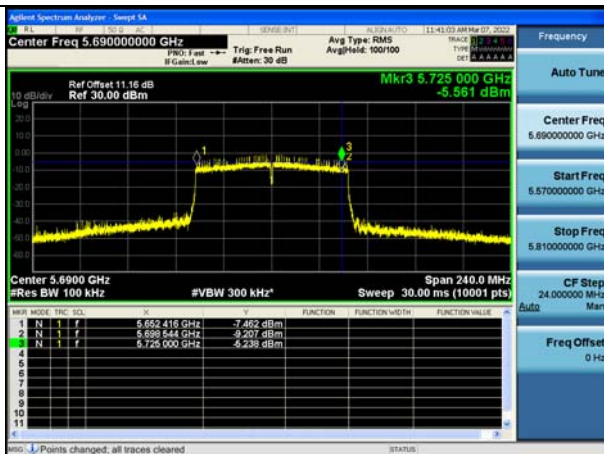


Test Mode:802.11ac VHT40 5710MHz Chain0

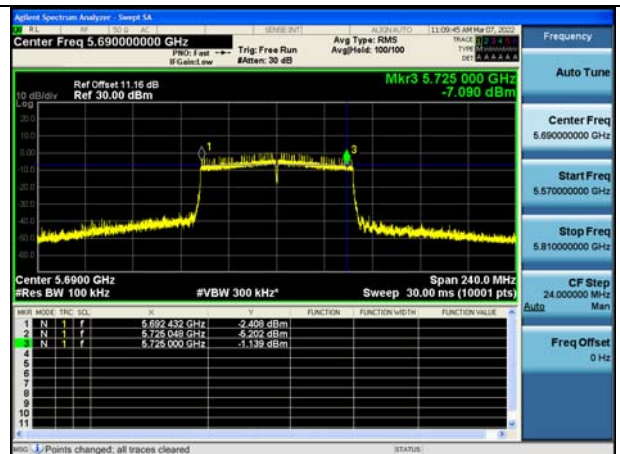
Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT40 5710MHz Chain1



Test Mode:802.11ac VHT80 5690MHz Chain0



Test Mode:802.11ac VHT80 5690MHz Chain1

Transmitter Power Spectral Density

NII2C

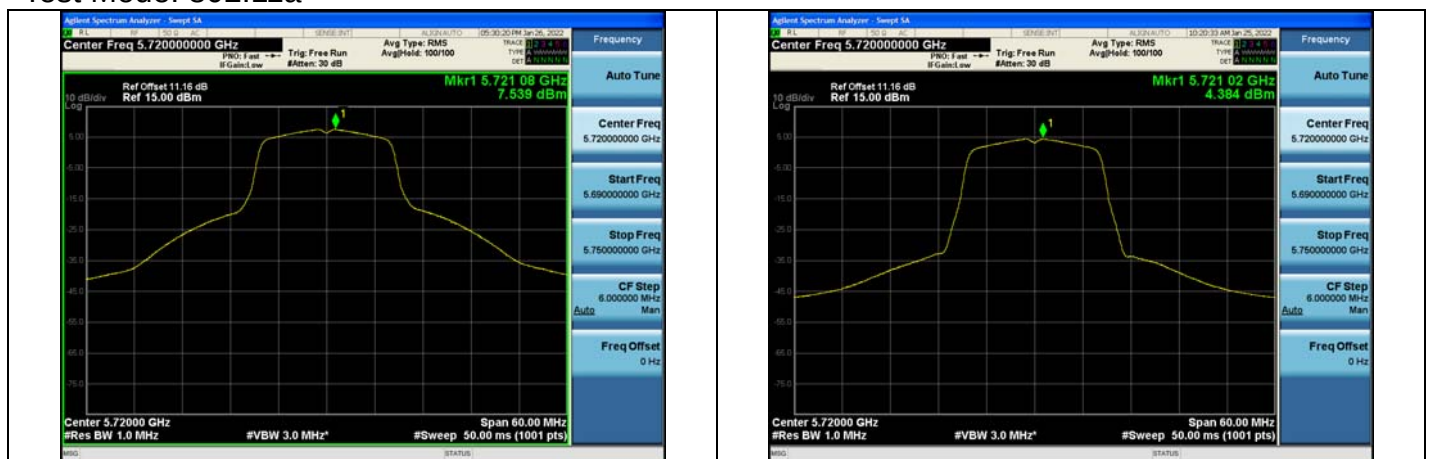
Offset 11.16dB = Attenuator + Temporary antenna connector loss + Cable loss

Title	Test Mode	Antenna	5720MHz	
			Correction Factor(dB)	Power Density (dBm/MHz)
NII2C	802.11a	Chain0	0	7.539
NII2C	802.11a	Chain1	0	4.385
NII2C	802.11n HT20	Chain0	0	7.205
NII2C	802.11n HT20	Chain1	0	4.097
NII2C	802.11n HT20	MIMO	3.010	4.097
NII2C	802.11ac VHT20	Chain0	0	7.262
NII2C	802.11ac VHT20	Chain1	0	4.128
NII2C	802.11ac VHT20	MIMO	3.010	4.128

Title	Test Mode	Antenna	5710MHz	
			Correction Factor(dB)	Power Density (dBm/MHz)
NII2C	802.11n HT40	Chain0	0.12	4.395
NII2C	802.11n HT40	Chain1	0.12	1.205
NII2C	802.11n HT40	MIMO	3.130	1.205
NII2C	802.11ac VHT40	Chain0	0.12	4.539
NII2C	802.11ac VHT40	Chain1	0.12	1.199
NII2C	802.11ac VHT40	MIMO	3.130	1.199

Title	Test Mode	Antenna	5690MHz	
			Correction Factor(dB)	Power Density (dBm/MHz)
NII2C	802.11ac VHT80	Chain0	0.23	-5.89
NII2C	802.11ac VHT80	Chain1	0.23	-2.04
NII2C	802.11ac VHT80	MIMO	3.240	-2.04

Test Mode: 802.11a



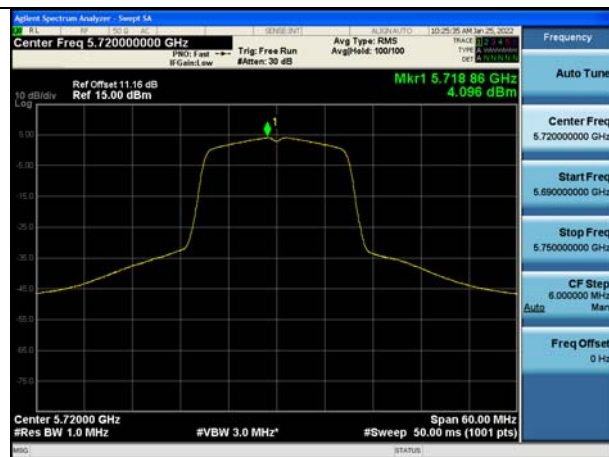
Test Mode:802.11a 5720MHz Chain0 NII2C

Test Mode:802.11a 5720MHz Chain1 NII2C

Test Mode: 802.11n HT20



Test Mode:802.11n HT20 5720MHz Chain0 NII2C

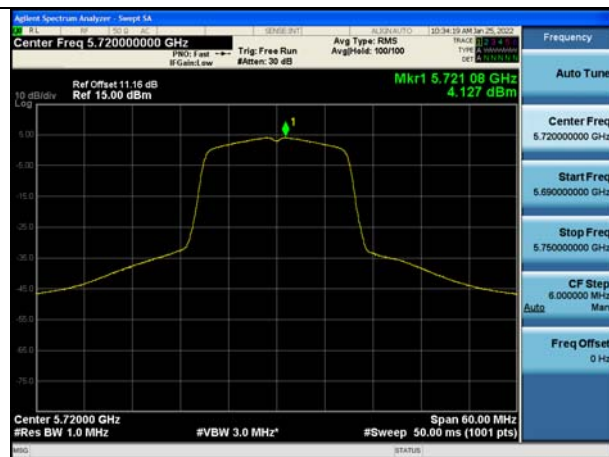


Test Mode:802.11n HT20 5720MHz Chain1 NII2C

Test Mode: 802.11ac VHT20



Test Mode:802.11ac VHT20 5720MHz Chain0 NII2C



Test Mode:802.11ac VHT20 5720MHz Chain1 NII2C

Test Mode: 802.11n HT40



Test Mode:802.11n HT40 5710MHz Chain0 NII2C

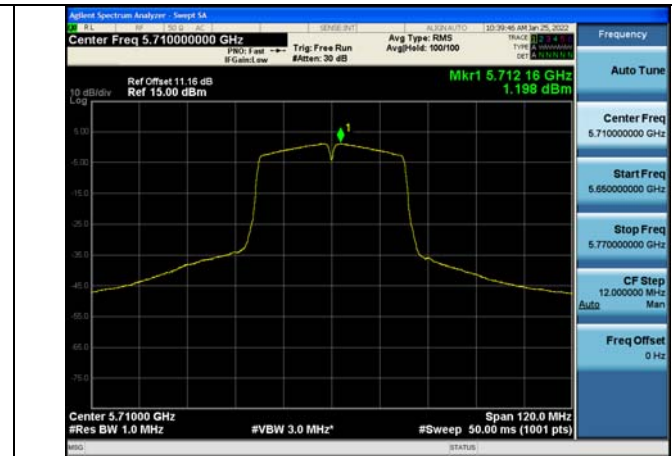


Test Mode:802.11n HT40 5710MHz Chain1 NII2C

Test Mode: 802.11ac VHT40



Test Mode:802.11ac VHT40 5710MHz Chain0 NII2C

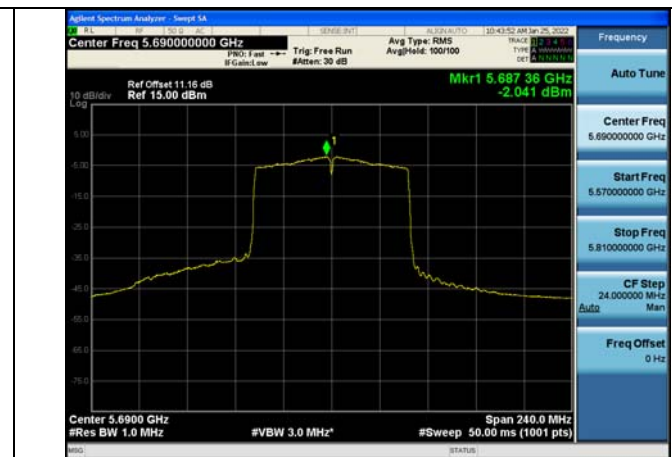


Test Mode:802.11ac VHT40 5710MHz Chain1 NII2C

Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT80 5690MHz Chain0 NII2C



Test Mode:802.11ac VHT80 5690MHz Chain1 NII2C

NII3

Offset 11.16dB = Attenuator + Temporary antenna connector loss + Cable loss

Title	Test Mode	Antenna	5720MHz	
			Correction Factor(dB)	Power Density (dBm/500KHz)
NII3	802.11a	Chain0	0	3.942
NII3	802.11a	Chain1	0	0.701
NII3	802.11n HT20	Chain0	0	3.935
NII3	802.11n HT20	Chain1	0	0.387
NII3	802.11n HT20	MIMO	3.010	5.526
NII3	802.11ac VHT20	Chain0	0	3.903
NII3	802.11ac VHT20	Chain1	0	0.876
NII3	802.11ac VHT20	MIMO	3.010	5.658

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

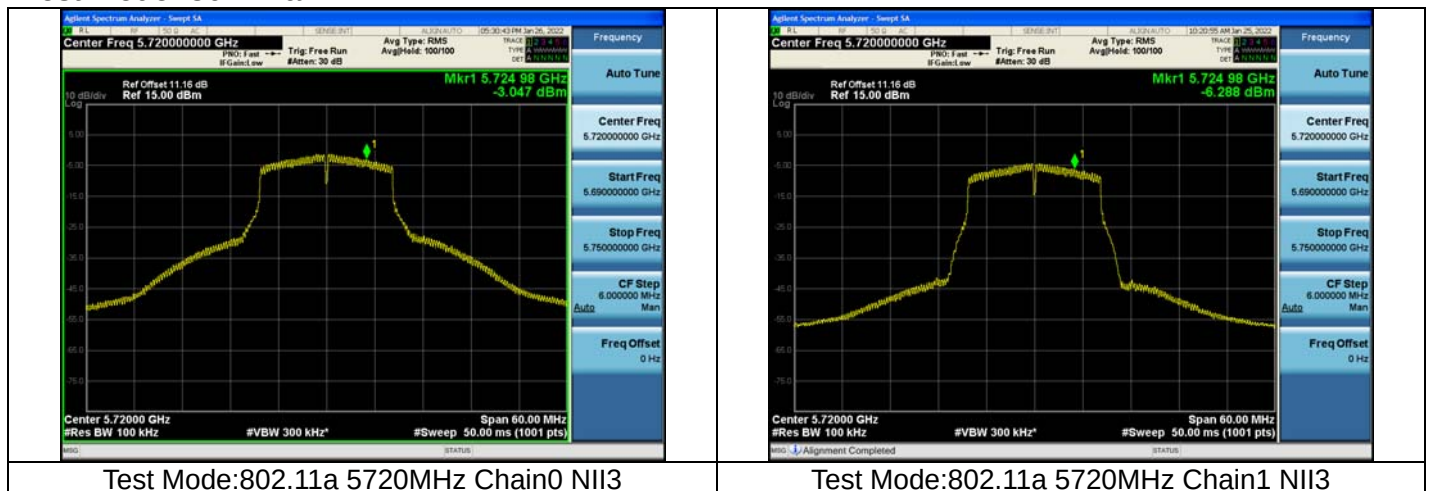
Title	Test Mode	Antenna	5710MHz	
			Correction Factor(dB)	Power Density (dBm/500KHz)
NII3	802.11n HT40	Chain0	0.12	-0.583
NII3	802.11n HT40	Chain1	0.12	-4.001
NII3	802.11n HT40	MIMO	3.130	1.046
NII3	802.11ac VHT40	Chain0	0.12	-0.526
NII3	802.11ac VHT40	Chain1	0.12	-4.145
NII3	802.11ac VHT40	MIMO	3.130	1.041

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

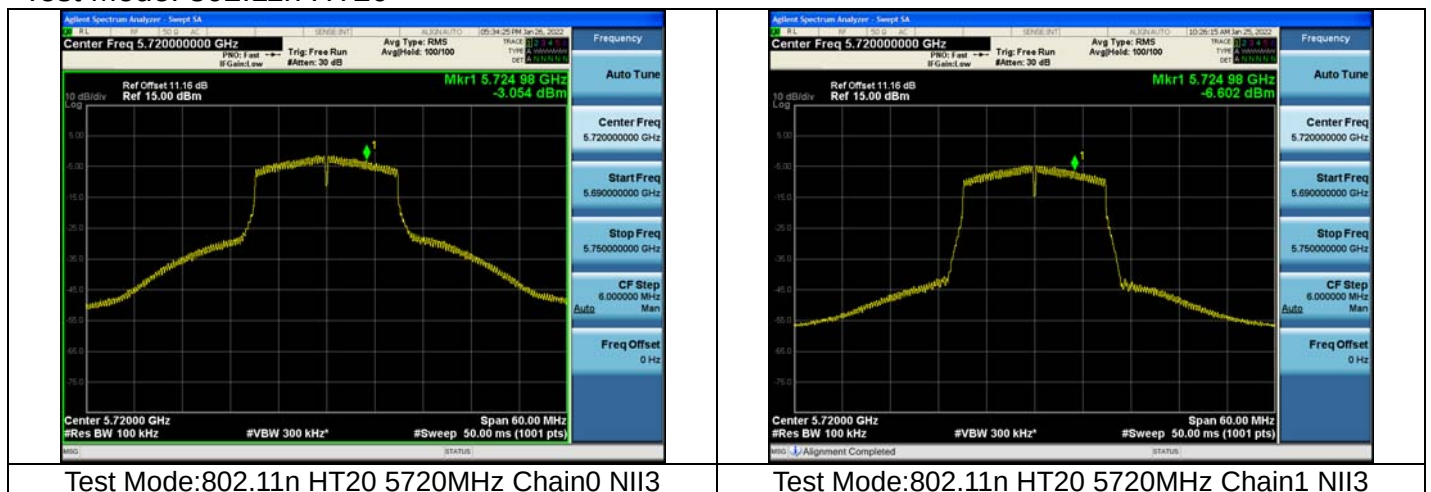
Title	Test Mode	Antenna	5690MHz	
			Correction Factor(dB)	Power Density (dBm/500KHz)
NII3	802.11ac VHT80	Chain0	0.23	-8.696
NII3	802.11ac VHT80	Chain1	0.23	-7.986
NII3	802.11ac VHT80	MIMO	3.240	-5.316

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

Test Mode: 802.11a



Test Mode: 802.11n HT20

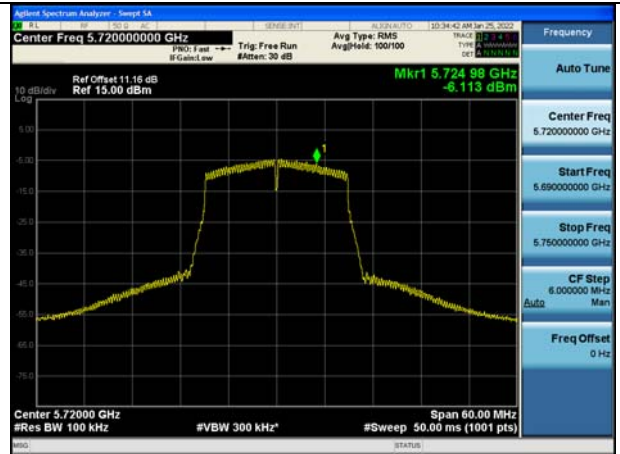


Test Mode: 802.11ac VHT20

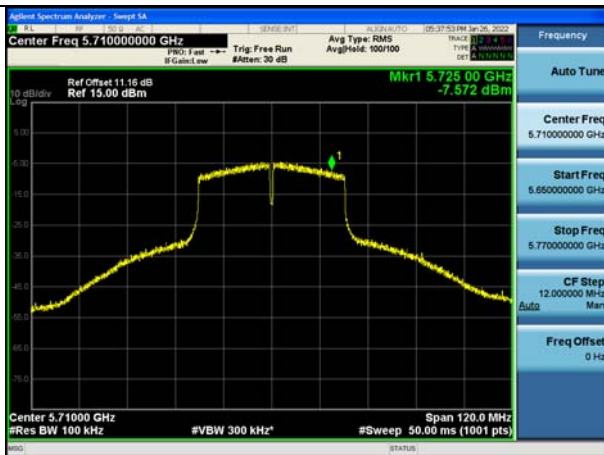


Test Mode:802.11ac VHT20 5720MHz Chain0 NII3

Test Mode: 802.11n HT40

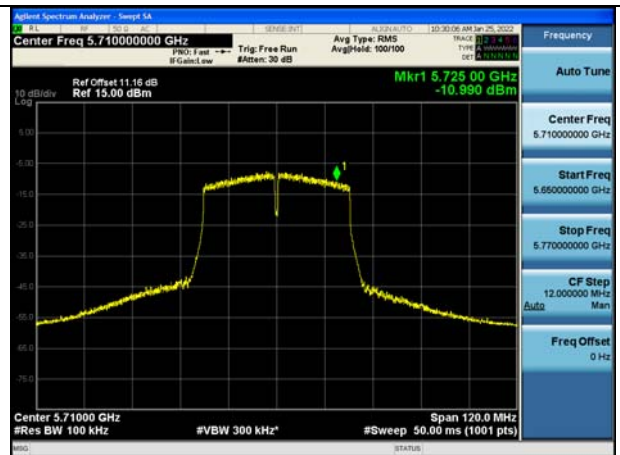


Test Mode:802.11ac VHT20 5720MHz Chain1 NII3



Test Mode:802.11n HT40 5710MHz Chain0 NII3

Test Mode: 802.11ac VHT40

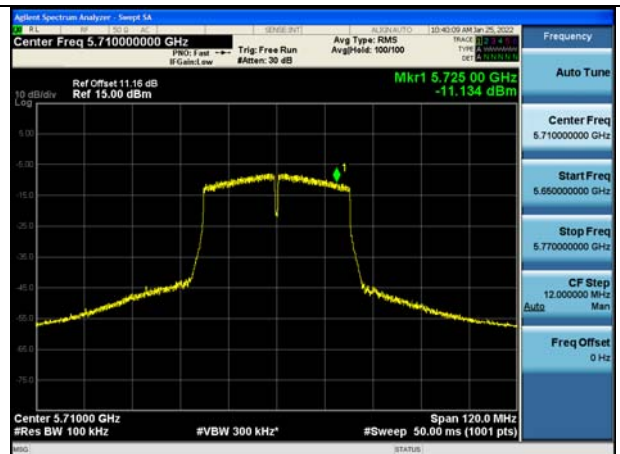


Test Mode:802.11n HT40 5710MHz Chain1 NII3



Test Mode:802.11ac VHT40 5710MHz Chain0 NII3

Test Mode: 802.11ac VHT80



Test Mode:802.11ac VHT40 5710MHz Chain1 NII3



Test Mode:802.11ac VHT80 5690MHz Chain0 NI13



Test Mode:802.11ac VHT80 5690MHz Chain1 NI13