

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)	Plot
802.11a	5720	98.84%	0	Fig.1
802.11n HT20	5720	99.82%	0	Fig.2
802.11ac VHT20	5720	99.70%	0	Fig.3
802.11ax HE20	5720	98.91%	0	Fig.4
802.11n HT40	5710	99.89%	0	Fig.5
802.11ac VHT40	5710	99.40%	0	Fig.6
802.11ax HE40	5710	92.98%	0.32	Fig.7

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

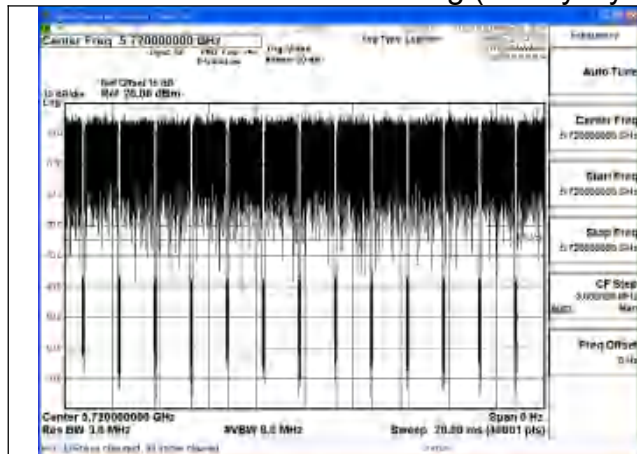


Fig.1

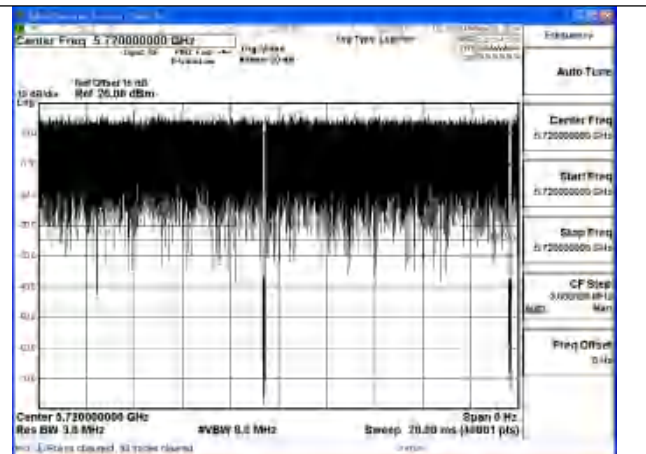


Fig.2

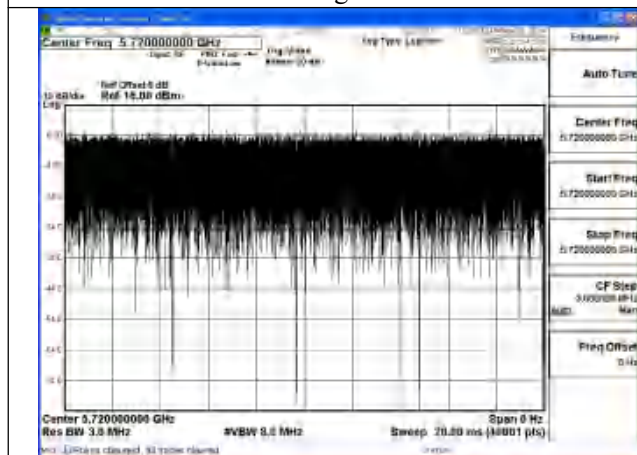


Fig.3

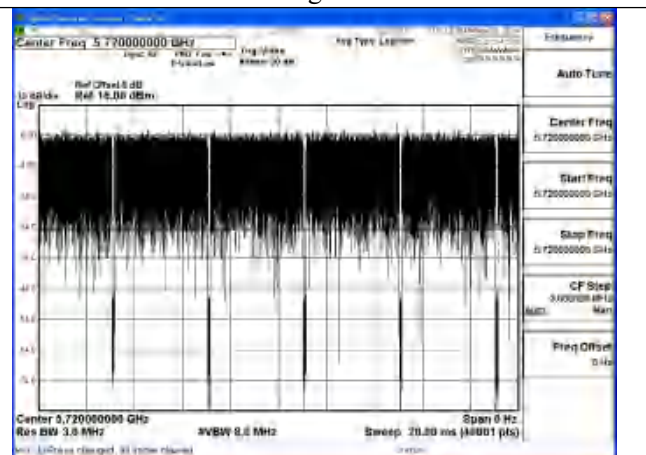


Fig.4

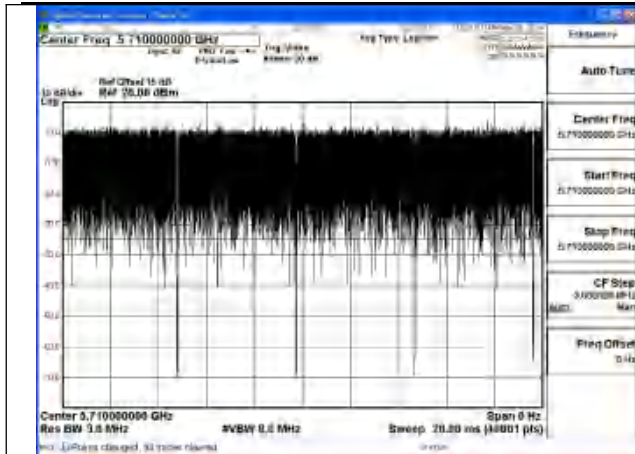


Fig.5

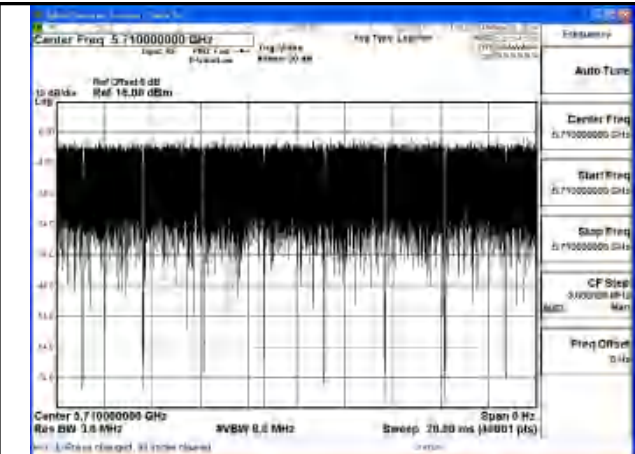


Fig.6

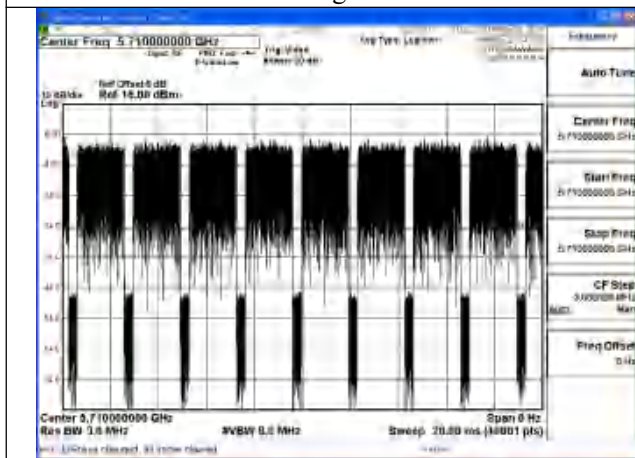


Fig.7



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	13.24	15.05
NII2C	802.11n HT20	NA	5720	Chain0	13.40	15.21
NII2C	802.11ac VHT20	NA	5720	Chain0	4.37	5.37
NII2C	802.11n HT40	NA	5710	Chain0	14.49	16.30
NII2C	802.11ac VHT40	NA	5710	Chain0	5.35	6.35

Title	Test Mode	Tones/ RU Index	Freq (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
NII2C	802.11ax HE20	242T 61L	5720	Chain0	4.71	5.71
NII2C	802.11ax HE40	484T 65L	5710	Chain0	4.28	5.28

NII3

Title	Test Mode	Tones/ RU Index	Freq (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
NII3	802.11a	NA	5720	Chain0	7.27	9.08
NII3	802.11n HT20	NA	5720	Chain0	7.89	9.70
NII3	802.11ac VHT20	NA	5720	Chain0	-1.07	-0.07
NII3	802.11n HT40	NA	5710	Chain0	4.53	6.34
NII3	802.11ac VHT40	NA	5710	Chain0	-4.53	-3.53

Title	Test Mode	Tones/ RU Index	Freq (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
NII3	802.11ax HE20	242T 61R	5720	Chain0	-0.31	0.69
NII3	802.11ax HE40	484T 65R	5710	Chain0	-4.75	-3.75



Emission Bandwidth

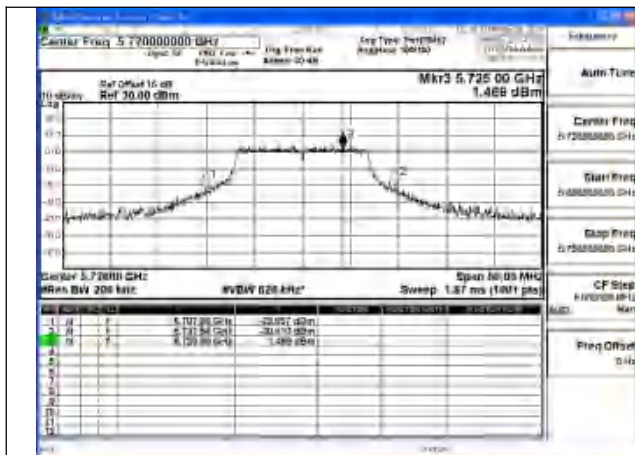
NII2C

Offset 15dB = Attenuator + Temporary antenna connector loss + Cable loss

26dB Bandwidth (MHz)			
Title	Test Mode	Antenna	5720MHz
NII2C	802.11a	Chain0	17.12
NII2C	802.11n HT20	Chain0	17.66
NII2C	802.11ac VHT20	Chain0	18.02
NII2C	802.11ax HE20	Chain0	17.00

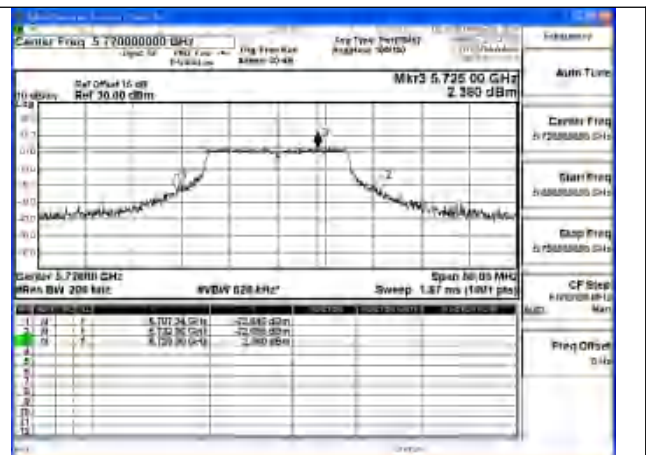
26dB Bandwidth (MHz)			
Title	Test Mode	Antenna	5710MHz
NII2C	802.11n HT40	Chain0	44.04
NII2C	802.11ac VHT40	Chain0	39.00
NII2C	802.11ax HE40	Chain0	37.44

Test Mode: 802.11a



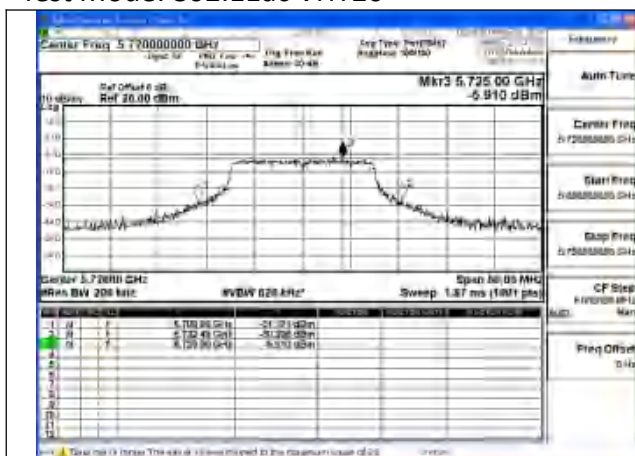
Mode:802.11a Frequency:5720MHz Ant:Chain0
scope:NII2C

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: 802.11ax HE20



Mode:802.11ax HE20 Frequency:5720MHz Ant:Chain0
scope:NII2C

Test Mode: 802.11ax HE20

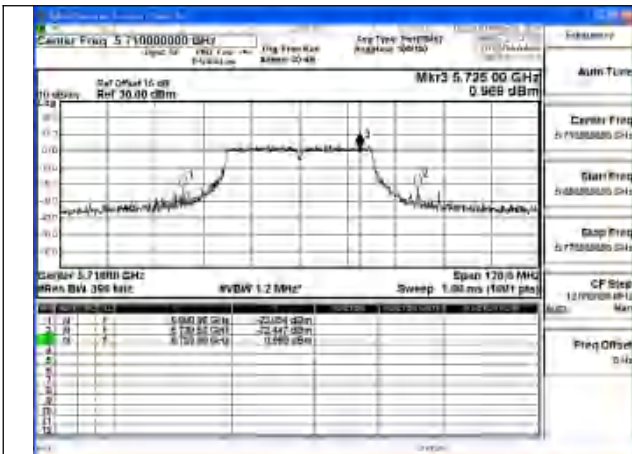
The State Radio_monitoring_center Testing Center (SRTC)

Tel: 86-10-57996183

Fax: 86-10-57996388

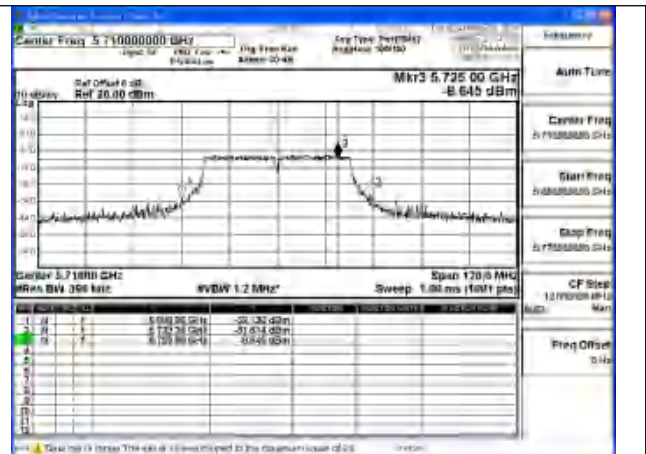


Test Mode: 802.11n HT40



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: 802.11ax HE40



Mode:802.11ax HE40 Frequency:5710MHz Ant:Chain0
scope:NII2C

NII3

Offset 15dB = Attenuator + Temporary antenna connector loss + Cable loss

26dB Bandwidth (MHz)			
Title	Test Mode	Antenna	5720MHz
NII3	802.11a	Chain0	6.58
NII3	802.11n HT20	Chain0	7.90
NII3	802.11ac VHT20	Chain0	7.48
NII3	802.11ax HE20	Chain0	7.30

26dB Bandwidth (MHz)			
Title	Test Mode	Antenna	5710MHz
NII3	802.11n HT40	Chain0	14.52
NII3	802.11ac VHT40	Chain0	8.28
NII3	802.11ax HE40	Chain0	8.28



Occupied Bandwidth

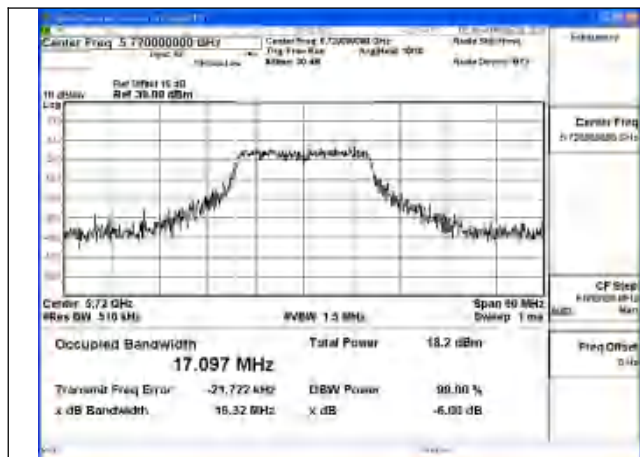
NII2C

Offset 15dB = Attenuator + Temporary antenna connector loss + Cable loss

Occupied Bandwidth (MHz)			
Title	Test Mode	Antenna	5720MHz
NII2C	802.11a	Chain0	13.54
NII2C	802.11n HT20	Chain0	14.01
NII2C	802.11ac VHT20	Chain0	13.97
NII2C	802.11ax HE20	Chain0	14.57

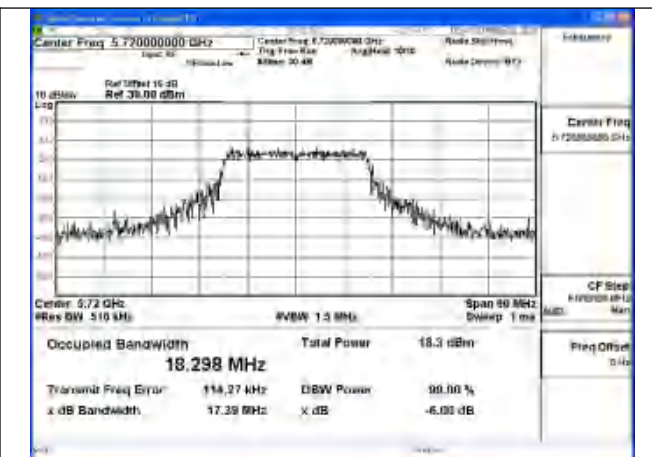
Occupied Bandwidth (MHz)			
Title	Test Mode	Antenna	5710MHz
NII2C	802.11n HT40	Chain0	33.35
NII2C	802.11ac VHT40	Chain0	33.39
NII2C	802.11ax HE40	Chain0	34.03

Test Mode: 802.11a



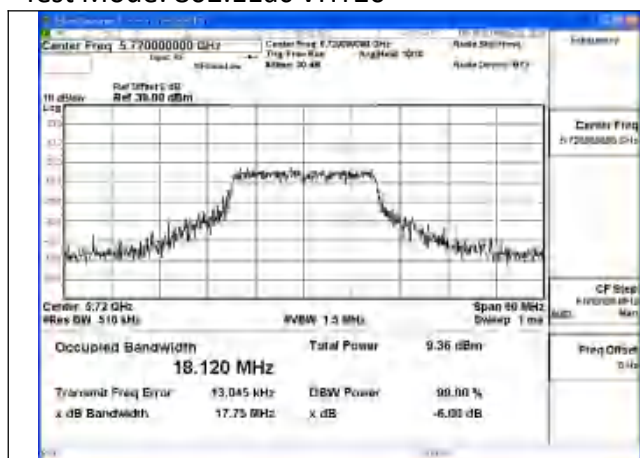
Mode:802.11a Frequency:5720MHz Ant:Chain0
scope:NII2C

Test Mode: 802.11n HT20



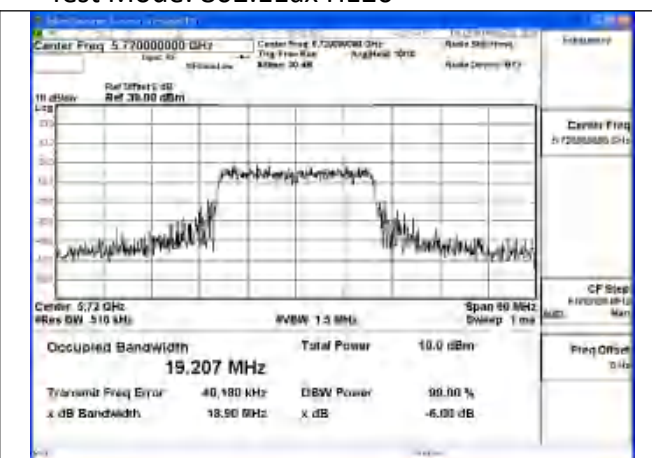
Mode:802.11n HT20 Frequency:5720MHz Ant:Chain0
scope:NII2C

Test Mode: 802.11ac VHT20



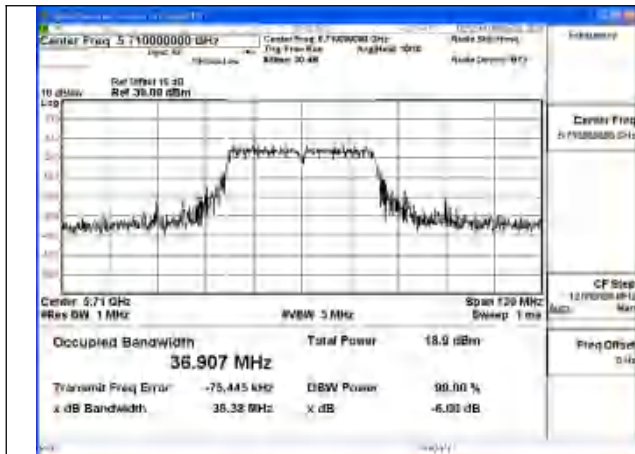
Mode:802.11ac VHT20 Frequency:5720MHz
Ant:Chain0 scope:NII2C

Test Mode: 802.11ax HE20



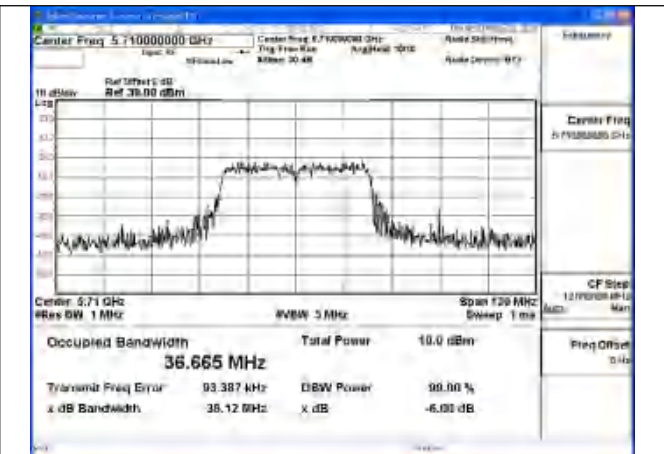
Mode:802.11ax HE20 Frequency:5720MHz Ant:Chain0
scope:NII2C

Test Mode: 802.11n HT40



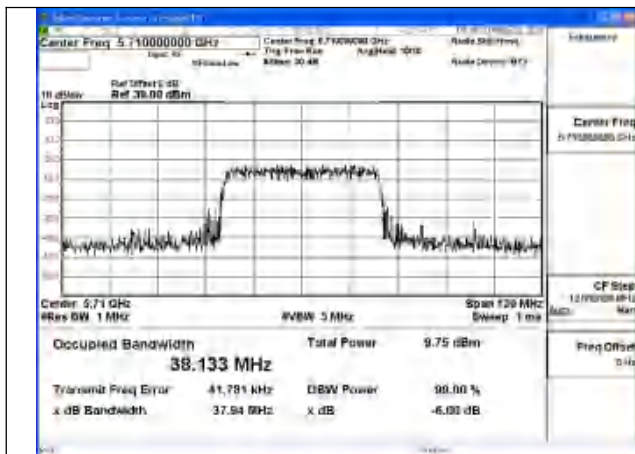
Mode:802.11n HT40 Frequency:5710MHz Ant:Chain0
scope:NII2C

Test Mode: 802.11ac VHT40



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

Test Mode: 802.11ax HE40



Mode:802.11ax HE40 Frequency:5710MHz Ant:Chain0
scope:NII2C

NII3

Offset 15dB = Attenuator + Temporary antenna connector loss + Cable loss

Occupied Bandwidth (MHz)			
Title	Test Mode	Antenna	5720MHz
NII3	802.11a	Chain0	3.67
NII3	802.11n HT20	Chain0	4.09
NII3	802.11ac VHT20	Chain0	4.08
NII3	802.11ax HE20	Chain0	4.65

Occupied Bandwidth (MHz)			
Title	Test Mode	Antenna	5710MHz
NII3	802.11n HT40	Chain0	3.30
NII3	802.11ac VHT40	Chain0	3.40
NII3	802.11ax HE40	Chain0	4.20

6dB Bandwidth

NII2C

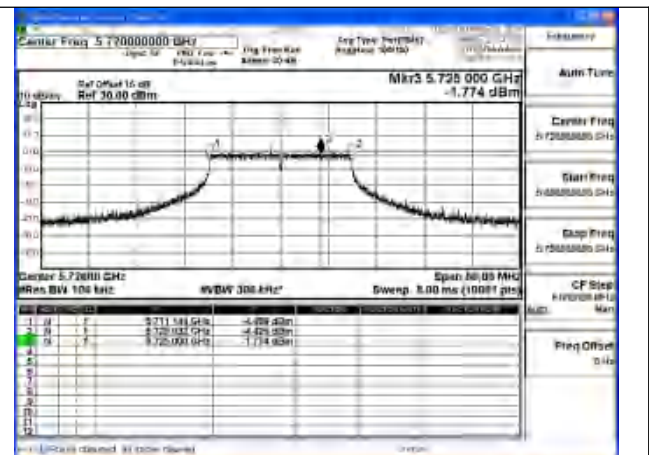
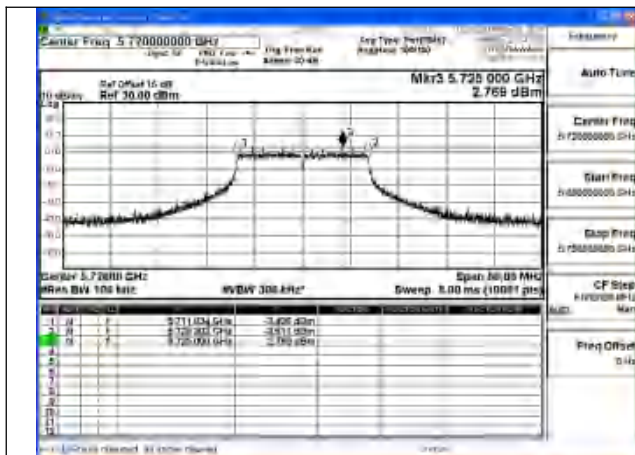
Offset 15dB = Attenuator + Temporary antenna connector loss + Cable loss

6dB Bandwidth (MHz)			
Title	Test Mode	Antenna	5720MHz
NII2C	802.11a	Chain0	13.17
NII2C	802.11n HT20	Chain0	13.86
NII2C	802.11ac VHT20	Chain0	13.84
NII2C	802.11ax HE20	Chain0	14.48

6dB Bandwidth (MHz)			
Title	Test Mode	Antenna	5710MHz
NII2C	802.11n HT40	Chain0	33.17
NII2C	802.11ac VHT40	Chain0	33.17
NII2C	802.11ax HE40	Chain0	33.95

Test Mode: 802.11a

Test Mode: 802.11n HT20

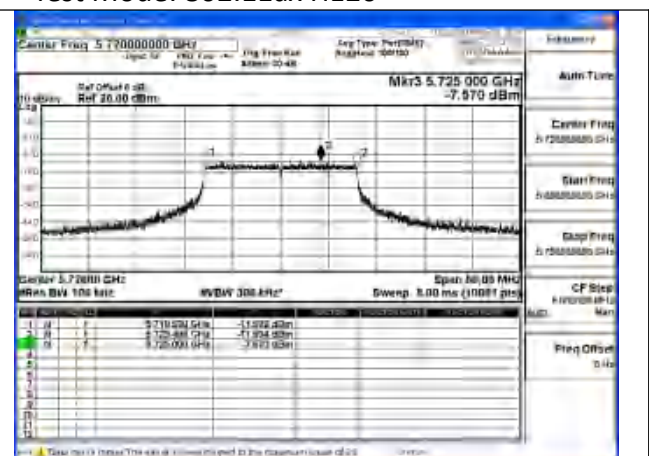
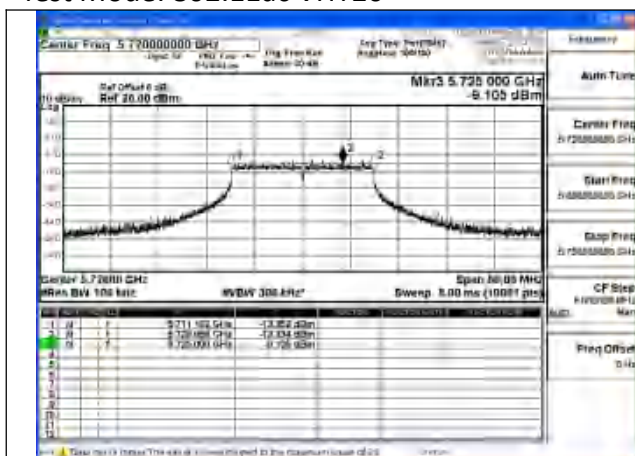


Mode:802.11a Frequency:5720MHz Ant:Chain0
scope:NII2C

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

Test Mode: 802.11ac VHT20

Test Mode: 802.11ax HE20

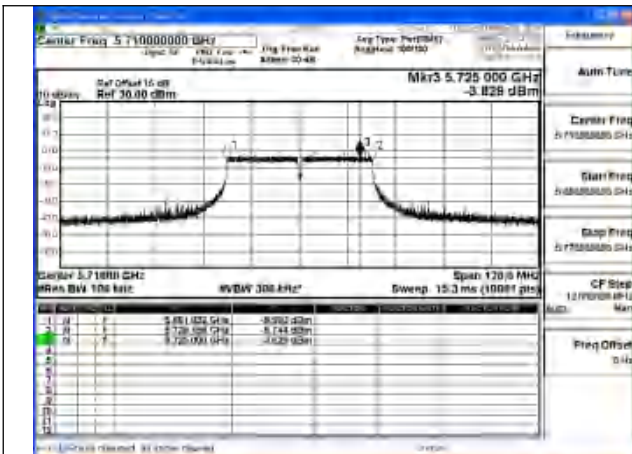


Mode:802.11ac VHT20 Frequency:5720MHz
Ant:Chain0 scope:NII2C

Mode:802.11ax HE20 Frequency:5720MHz Ant:Chain0
scope:NII2C

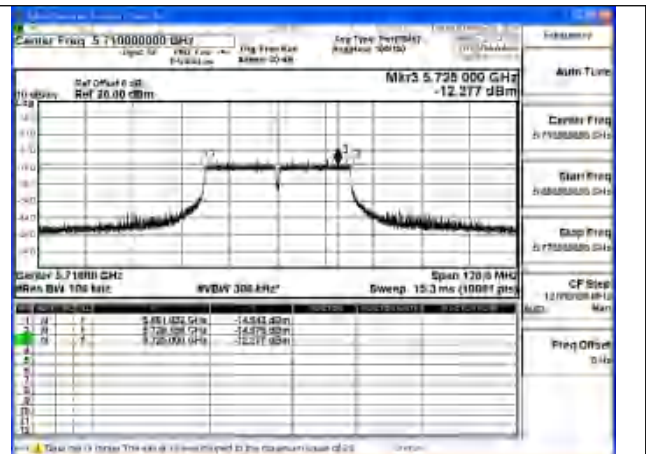


Test Mode: 802.11n HT40



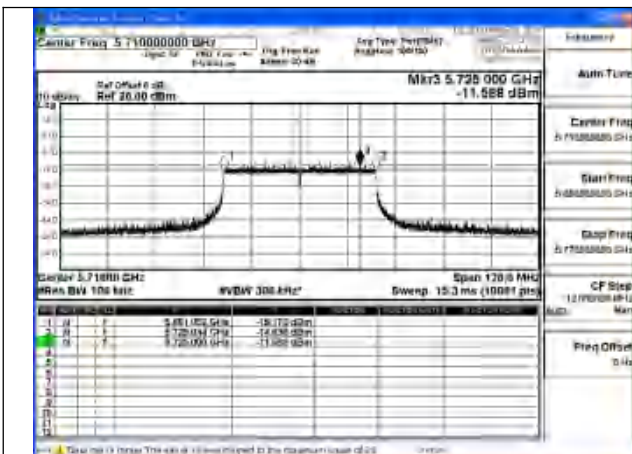
Mode:802.11n HT40 Frequency:5710MHz Ant:Chain0
scope:NII2C

Test Mode: 802.11ac VHT40



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

Test Mode: 802.11ax HE40



Mode:802.11ax HE40 Frequency:5710MHz Ant:Chain0
scope:NII2C

NII3

Offset 15dB = Attenuator + Temporary antenna connector loss + Cable loss

6dB Bandwidth (MHz)			
Title	Test Mode	Antenna	5720MHz
NII3	802.11a	Chain0	3.20
NII3	802.11n HT20	Chain0	3.83
NII3	802.11ac VHT20	Chain0	3.87
NII3	802.11ax HE20	Chain0	4.50

6dB Bandwidth (MHz)			
Title	Test Mode	Antenna	5710MHz
NII3	802.11n HT40	Chain0	3.16
NII3	802.11ac VHT40	Chain0	3.16
NII3	802.11ax HE40	Chain0	4.04



Transmitter Power Spectral Density

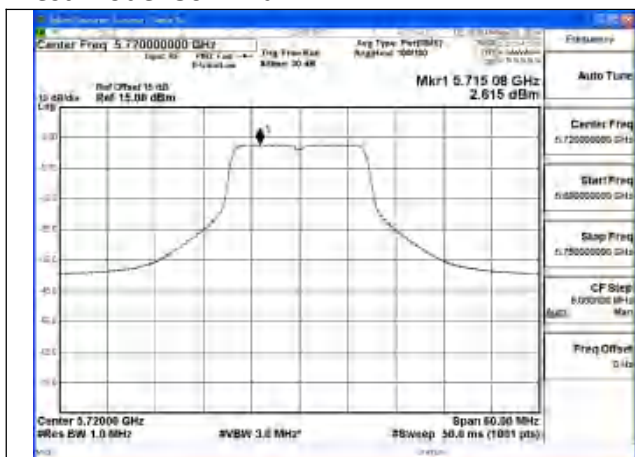
NII2C

Offset 15dB = Attenuator + Temporary antenna connector loss + Cable loss

Title	Test Mode	Antenna	5720MHz	
			Correction Factor(dB)	Power Density (dBm/500KHz)
NII2C	802.11a	Chain0	0	2.615
NII2C	802.11n HT20	Chain0	0	2.388
NII2C	802.11ac VHT20	Chain0	0	-6.560
NII2C	802.11ax HE20	Chain0	0	-6.412

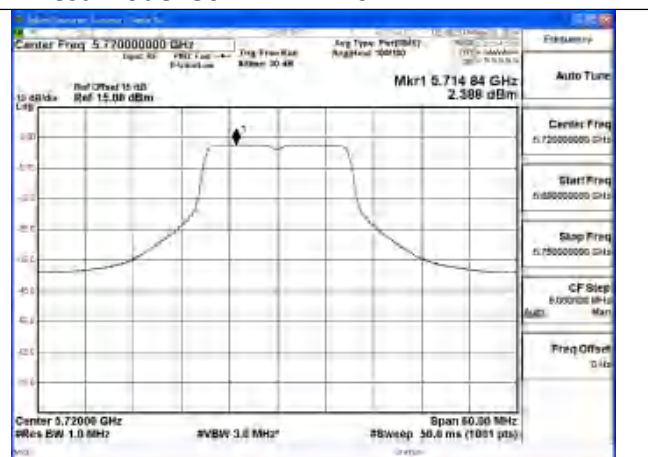
Title	Test Mode	Antenna	5710MHz	
			Correction Factor(dB)	Power Density (dBm/500KHz)
NII2C	802.11n HT40	Chain0	0	-0.169
NII2C	802.11ac VHT40	Chain0	0	-9.281
NII2C	802.11ax HE40	Chain0	0.32	-9.727

Test Mode: 802.11a



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

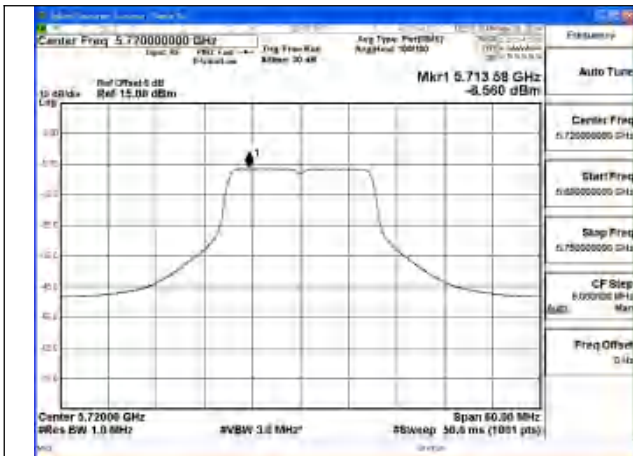
Test Mode: 802.11n HT20



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

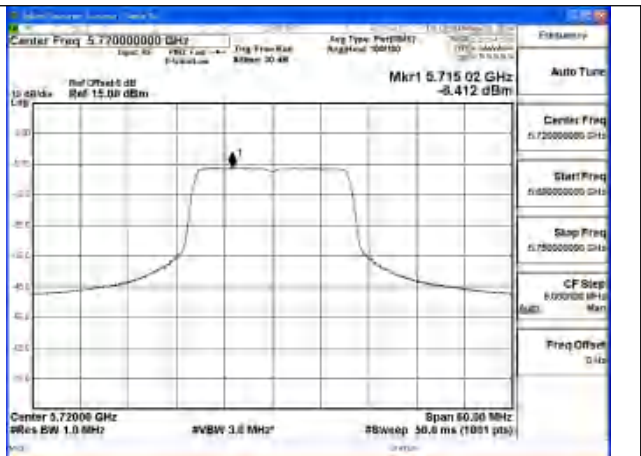


Test Mode: 802.11ac VHT20



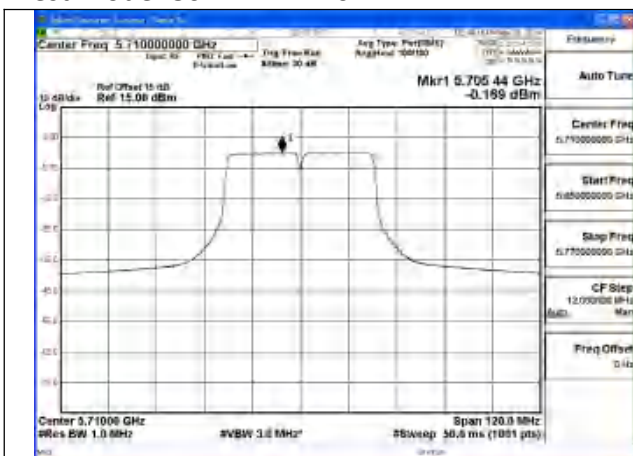
Mode:802.11ac VHT20 Frequency:5720MHz
Ant:Chain0 scope:NII2C

Test Mode: 802.11ax HE20



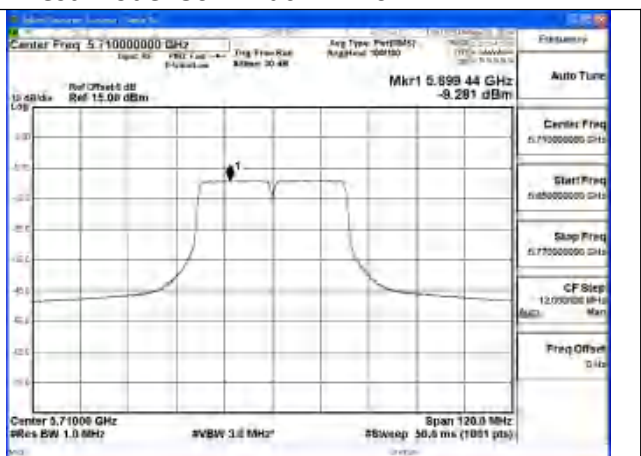
Mode:802.11ax HE20 Tone:242TL
Frequency:5720MHz Ant:Chain0 scope:NII2C

Test Mode: 802.11n HT40



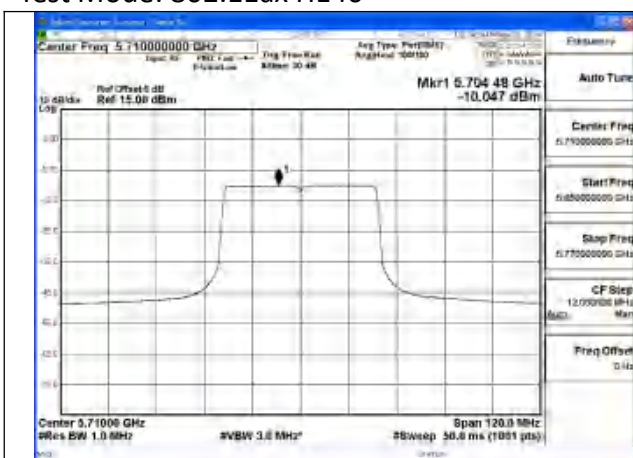
Mode:802.11n HT40 Frequency:5710MHz Ant:Chain0
scope:NII2C

Test Mode: 802.11ac VHT40



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

Test Mode: 802.11ax HE40



Mode:802.11ax HE40 Tone:484TL
Frequency:5710MHz Ant:Chain0 scope:NII2C

NII3

Offset 15dB = Attenuator + Temporary antenna connector loss + Cable loss

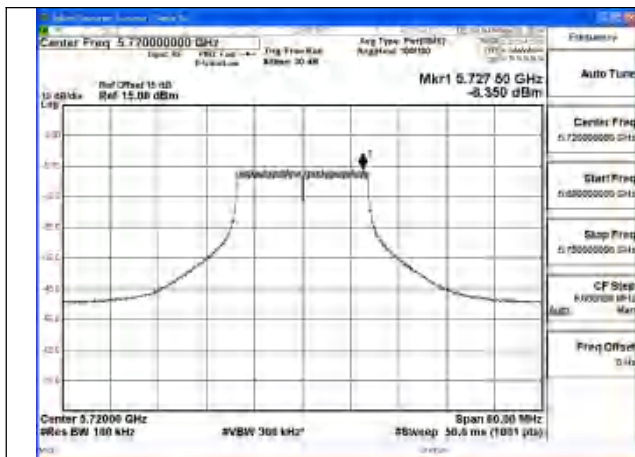
Title	Test Mode	Antenna	5720MHz	
			Correction Factor(dB)	Power Density (dBm/500KHz)
NII3	802.11a	Chain0	0	0.640
NII3	802.11n HT20	Chain0	0	0.282
NII3	802.11ac VHT20	Chain0	0	-8.445
NII3	802.11ax HE20	Chain0	0	-9.413

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	-2.482
NII3	802.11ac VHT40	Chain0	0	-11.349
NII3	802.11ax HE40	Chain0	0.32	-12.632

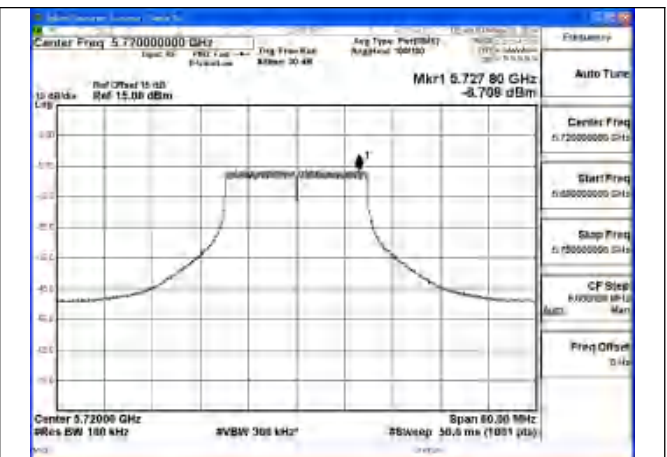
Note: As measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10\log(500\text{kHz}/\text{RBW})$ to the measured result.

Test Mode: 802.11a



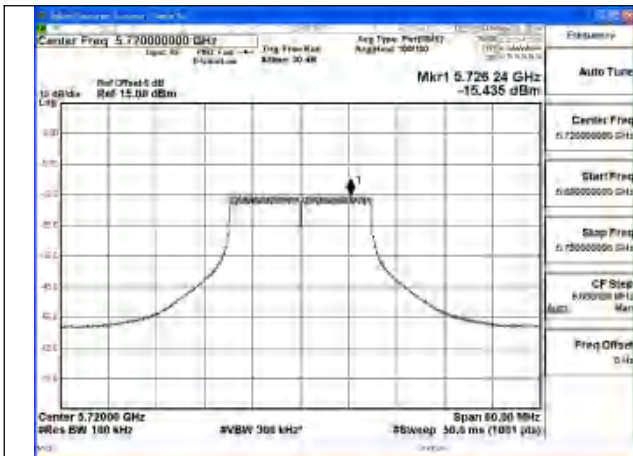
Mode:802.11a Frequency:5720MHz Ant:Chain0
scope:NII3

Test Mode: 802.11n HT20



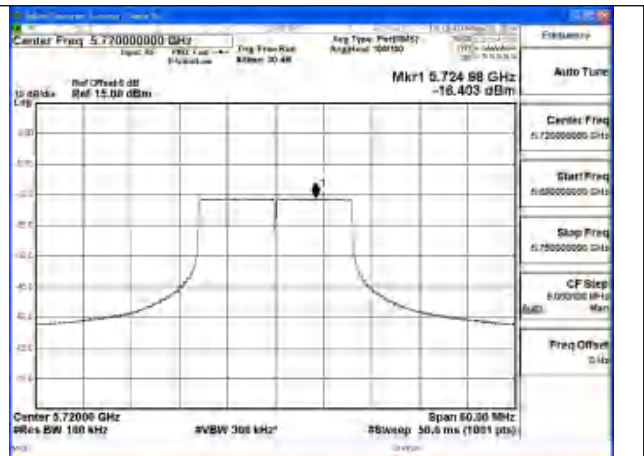
Mode:802.11n HT20 Frequency:5720MHz Ant:Chain0
scope:NII3

Test Mode: 802.11ac VHT20



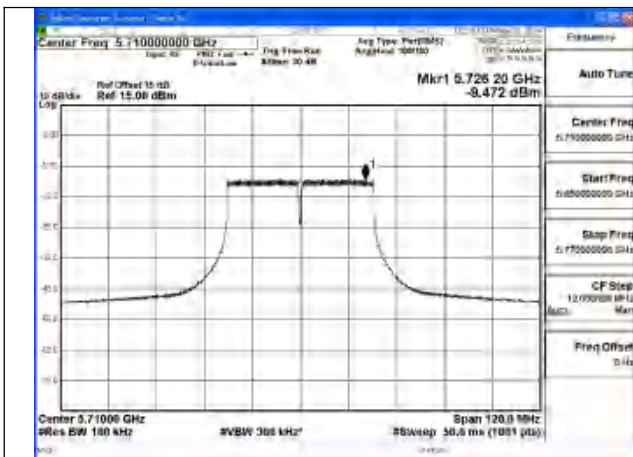
Mode:802.11ac VHT20 Frequency:5720MHz
Ant:Chain0 scope:NII3

Test Mode: 802.11ax HE20



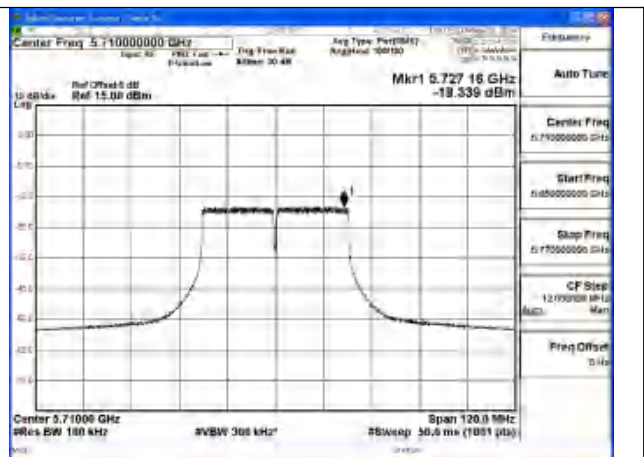
Mode:802.11ax HE20 Tone:242TR
Frequency:5720MHz Ant:Chain0 scope:NII3

Test Mode: 802.11n HT40



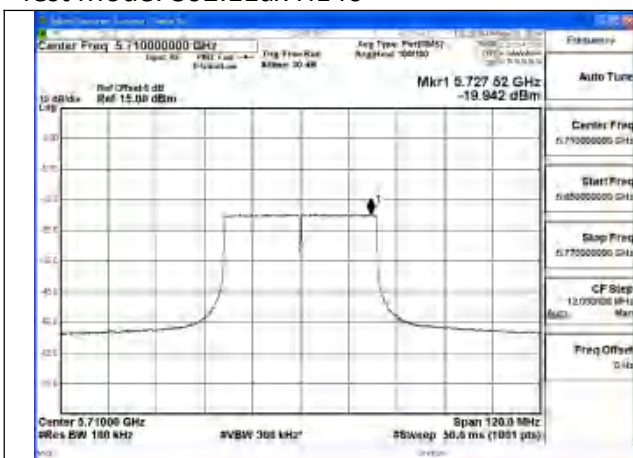
Mode:802.11n HT40 Frequency:5710MHz Ant:Chain0
scope:NII3

Test Mode: 802.11ac VHT40



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

Test Mode: 802.11ax HE40



Mode:802.11ax HE40 Tone:484TR
Frequency:5710MHz Ant:Chain0 scope:NII3