

## Test Report - Appendix AIR-AP1572xxx-B-K9

(Where x = model options not effecting the radio module)

FCC ID: LDK102093P

5150 - 5250 MHz

#### **Conducted Peak Bandedge**

#### Covers supported antennas up to 14 dBi gain

Cisco Systems 170 West Tasman Drive San Jose, CA 95134

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Test Engineer:

Date:



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#### Conducted Bandedge - Peak

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

Connect the antenna port(s) to the spectrum analyzer input. Place the radio in continuous transmit mode. Be sure to enter all losses between the transmitter output and the spectrum analyzer.

Reference Level: 10 dBm Attenuation: 4 dB Sweep Time: Coupled Resolution Bandwidth: 1MHz

Video Bandwidth: 100 Hz for average

Detector: Peak

Save 2 plots: 1) Average Plot (Vertical and Horizontal), Limit= -41.25 dBm eirp (54dBuV @3m)

2) Peak plot (Vertical and Horizontal), Limit = -27 dBm eirp (68dBuV @3m)

Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands.

The "measure-and-sum technique" is used for measuring in-band transmit power of a device. In the measure-and-sum approach, the conducted emission level is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically to determine the total emission level from the device. Summing is performed in linear power units.

This report represents the worst case data for all supported operating modes and antennas.



#### Antenna Gain 4 dBi

Frequency (MHz)	Mode Non-HT///HT20 C to 54 Mbms	Tx Paths	Correlated Antenna Gain (dBi)	Tx 1 Bandedge Level (dBm)	Tx 2 Bandedge Level (dBm)	Tx 3 Bandedge Level (dBm)	Tx 4 Bandedge Level (dBm)	Total Tx Bandedge Level (dBm)	Peak Limit (dBm)	Margin (dB)
	Non HT/VHT20, 6 to 54 Mbps	1	4	-32.2	41 C			-28.2	-27	1.2
	Non HT/VHT20, 6 to 54 Mbps	3	4	-40.9 -40.5	-41.6	-40.9		-34.2	-27	7.2
	Non HT/VHT20, 6 to 54 Mbps		4	-40.5	-38.6	-40.9	-46.1	-31.1	-27 -27	4.1 9.4
	Non HT/VHT20, 6 to 54 Mbps	4	4 7	-40.5	-47.5 -38.6	-45.7	-40.1	-36.4	-27 -27	
	Non HT/VHT20 Beam Forming, 6 to 54 Mbps  Non HT/VHT20 Beam Forming, 6 to 54 Mbps	3	9	-40.5	-45.2	-43.6		-29.4 -31.8	-27 -27	2.4 4.8
	Non HT/VHT20 Beam Forming, 6 to 54 Mbps	4	10	-49.1	-43.2	-45.6	-46.7	-31.8	-27	4.8
	HT/VHT20, M0 to M7, M0.1 to M9.1	1	4	-34.9	-40.3	-40.4	-40.7	-30.9	-27	3.9
	HT/VHT20, M0 to M7, M0.1 to M9.1	2	4	-39.3	-32.9			-28.0	-27	1.0
	HT/VHT20, M8 to M15, M0.2 to M9.2	2	4	-39.3	-32.9			-28.0	-27	1.0
	HT/VHT20, M0 to M7, M0.1 to M9.1	3	4	-44.2	-43.1	-35.2		-30.1	-27	3.1
	HT/VHT20, M8 to M15, M0.2 to M9.2	3	4	-44.2	-43.1	-35.2		-30.1	-27	3.1
	HT/VHT20, M16 to M23, M0.3 to M9.3	3	4	-44.2	-43.1	-35.2		-30.1	-27	3.1
5180	HT/VHT20, M0 to M7, M0.1 to M9.1	4	4	-44.5	-44.4	-42.9	-41.2	-33.0	-27	6.0
51	HT/VHT20, M8 to M15, M0.2 to M9.2	4	4	-44.2	-43.1	-35.2	-37.5	-28.5	-27	1.5
	HT/VHT20, M16 to M23, M0.3 to M9.3	4	4	-44.2	-43.1	-35.2	-37.5	-28.5	-27	1.5
	HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1	2	7	-44.2	-43.1	33.2	37.3	-33.6	-27	6.6
	HT/VHT20 Beam Forming, M8 to M15, M0.2 to M9.2	2	4	-39.3	-32.9			-28.0	-27	1.0
	HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1	3	9	-44.5	-44.4	-42.9		-30.3	-27	3.3
	HT/VHT20 Beam Forming, M8 to M15, M0.2 to M9.2	3	6	-44.2	-43.1	-35.2		-28.3	-27	1.3
	HT/VHT20 Beam Forming, M16 to M23, M0.3 to M9.3	3	4	-44.2	-43.1	-35.2		-30.1	-27	3.1
	HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1	4	10	-48.1	-45.3	-45.1	-45.8	-29.9	-27	2.9
	HT/VHT20 Beam Forming, M8 to M15, M0.2 to M9.2	4	7	-44.5	-44.4	-42.9	-41.2	-30.0	-27	3.0
	HT/VHT20 Beam Forming, M16 to M23, M0.3 to M9.3	4	5	-44.2	-43.1	-35.2	-37.5	-27.3	-27	0.3
	HT/VHT20 STBC, M0 to M7, M0.1 to M9.1	2	4	-39.3	-32.9			-28.0	-27	1.0
	HT/VHT20 STBC, M0 to M7, M0.1 to M9.1	3	4	-44.2	-43.1	-35.2		-30.1	-27	3.1
	HT/VHT20 STBC, M0 to M7, M0.1 to M9.1	4	4	-44.2	-43.1	-35.2	-37.5	-28.5	-27	1.5
	Non HT/VHT40, 6 to 54 Mbps	1	4	-35.4				-31.4	-27	4.4
	Non HT/VHT40, 6 to 54 Mbps	2	4	-35.0	-35.0			-28.0	-27	1.0
5190	Non HT/VHT40, 6 to 54 Mbps	3	4	-41.5	-44.5	-34.8		-29.6	-27	2.6
51	Non HT/VHT40, 6 to 54 Mbps	4	4	-46.6	-36.2	-43.3	-40.5	-30.0	-27	3.0
	HT/VHT40, M0 to M7, M0.1 to M9.1	1	4	-35.2				-31.2	-27	4.2
	HT/VHT40, M0 to M7, M0.1 to M9.1	2	4	-36.5	-39.5			-30.7	-27	3.7



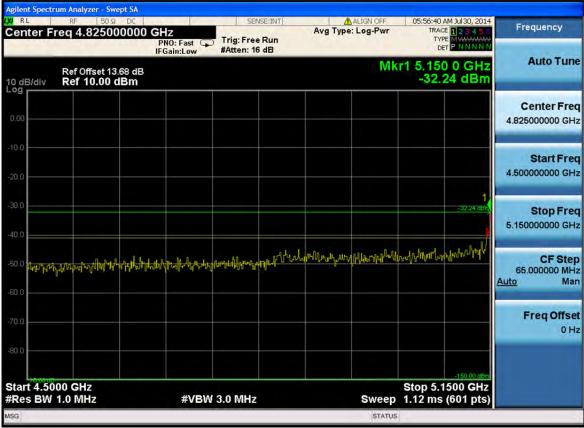
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	HT/VHT40, M8 to M15, M0.2 to M9.2	2	4	-36.5	-39.5	22.0		-30.7	-27	3.7
	HT/VHT40, M0 to M7, M0.1 to M9.1	3	4	-42.7	-40.9	-33.9		-28.7	-27	1.7
	HT/VHT40, M8 to M15, M0.2 to M9.2	3	4	-42.7	-40.9	-33.9		-28.7	-27	1.7
	HT/VHT40, M16 to M23, M0.3 to M9.3	3	4	-42.7	-40.9	-33.9	11.6	-28.7	-27	1.7
	HT/VHT40, M0 to M7, M0.1 to M9.1	4	4	-43.8	-42.7	-37.2	-41.6	-30.5	-27	3.5
	HT/VHT40, M8 to M15, M0.2 to M9.2	4	4	-43.8	-42.7	-37.2	-41.6	-30.5	-27	3.5
	HT/VHT40, M16 to M23, M0.3 to M9.3	4	4	-43.8	-42.7	-37.2	-41.6	-30.5	-27	3.5
	HT/VHT40 Beam Forming, M0 to M7, M0.1 to M9.1	2	7	-42.7	-40.9			-31.7	-27	4.7
	HT/VHT40 Beam Forming, M8 to M15, M0.2 to M9.2	2	4	-36.5	-39.5			-30.7	-27	3.7
	HT/VHT40 Beam Forming, M0 to M7, M0.1 to M9.1	3	9	-47.1	-45.5	-48.1		-33.2	-27	6.2
	HT/VHT40 Beam Forming, M8 to M15, M0.2 to M9.2	3	6	-43.8	-42.7	-37.2		-29.6	-27	2.6
	HT/VHT40 Beam Forming, M16 to M23, M0.3 to M9.3	3	4	-42.7	-40.9	-33.9		-28.7	-27	1.7
	HT/VHT40 Beam Forming, M0 to M7, M0.1 to M9.1	4	10	-52.2	-50.2	-48.7	-50.5	-34.2	-27	7.2
	HT/VHT40 Beam Forming, M8 to M15, M0.2 to M9.2	4	7	-47.1	-45.5	-48.1	-44.1	-32.9	-27	5.9
	HT/VHT40 Beam Forming, M16 to M23, M0.3 to M9.3	4	5	-45.7	-45.7	-44.2	-43.3	-33.4	-27	6.4
	HT/VHT40 STBC, M0 to M7, M0.1 to M9.1	2	4	-36.5	-39.5			-30.7	-27	3.7
	HT/VHT40 STBC, M0 to M7, M0.1 to M9.1	3	4	-42.7	-40.9	-33.9		-28.7	-27	1.7
	HT/VHT40 STBC, M0 to M7, M0.1 to M9.1	4	4	-43.8	-42.7	-37.2	-41.6	-30.5	-27	3.5
	Non HT/VHT80, 6 to 54 Mbps	1	4	-37.0				-33.0	-27	6.0
	Non HT/VHT80, 6 to 54 Mbps	2	4	-42.8	-38.7			-33.3	-27	6.3
	Non HT/VHT80, 6 to 54 Mbps	3	4	-45.0	-44.9	-45.0		-36.2	-27	9.2
	Non HT/VHT80, 6 to 54 Mbps	4	4	-45.4	-46.5	-43.8	-43.4	-34.6	-27	7.6
	HT/VHT80, M0 to M7, M0.1 to M9.1	1	4	-36.7				-32.7	-27	5.7
	HT/VHT80, M0 to M7, M0.1 to M9.1	2	4	-40.8	-37.6			-31.9	-27	4.9
	HT/VHT80, M8 to M15, M0.2 to M9.2	2	4	-40.8	-37.6			-31.9	-27	4.9
	HT/VHT80, M0 to M7, M0.1 to M9.1	3	4	-41.9	-41.3	-41.7		-32.9	-27	5.9
	HT/VHT80, M8 to M15, M0.2 to M9.2	3	4	-41.9	-41.3	-41.7		-32.9	-27	5.9
	HT/VHT80, M16 to M23, M0.3 to M9.3	3	4	-41.9	-41.3	-41.7		-32.9	-27	5.9
	HT/VHT80, M0 to M7, M0.1 to M9.1	4	4	-42.6	-41.6	-40.3	-39.8	-30.9	-27	3.9
5210	HT/VHT80, M8 to M15, M0.2 to M9.2	4	4	-42.6	-41.6	-40.3	-39.8	-30.9	-27	3.9
5	HT/VHT80, M16 to M23, M0.3 to M9.3	4	4	-42.6	-41.6	-40.3	-39.8	-30.9	-27	3.9
	HT/VHT80 Beam Forming, M0 to M7, M0.1 to M9.1	2	7	-41.9	-41.3			-31.6	-27	4.6
	HT/VHT80 Beam Forming, M8 to M15, M0.2 to M9.2	2	4	-40.8	-37.6			-31.9	-27	4.9
	HT/VHT80 Beam Forming, M0 to M7, M0.1 to M9.1	3	9	-48.6	-43.1	-44.0		-31.1	-27	4.1
	HT/VHT80 Beam Forming, M8 to M15, M0.2 to M9.2	3	6	-42.6	-41.6	-40.3		-30.8	-27	3.8
	HT/VHT80 Beam Forming, M16 to M23, M0.3 to M9.3	3	4	-41.9	-41.3	-41.7		-32.9	-27	5.9
	HT/VHT80 Beam Forming, M0 to M7, M0.1 to M9.1	4	10	-50.0	-49.0	-50.4	-48.5	-33.4	-27	6.4
	HT/VHT80 Beam Forming, M8 to M15, M0.2 to M9.2	4	7	-48.6	-43.1	-44.0	-38.8	-29.3	-27	2.3
	HT/VHT80 Beam Forming, M16 to M23, M0.3 to M9.3	4	5	-43.9	-44.8	-40.0	-40.4	-30.6	-27	3.6
	HT/VHT80 STBC, M0 to M7, M0.1 to M9.1	2	4	-40.8	-37.6			-31.9	-27	4.9
	HT/VHT80 STBC, M0 to M7, M0.1 to M9.1	3	4	-41.9	-41.3	-41.7		-32.9	-27	5.9
	,	)		+1.5	11.5	r±./		32.3	۷,	5.5

Custom EMC Test Report No: **EDCS – 1471743** 



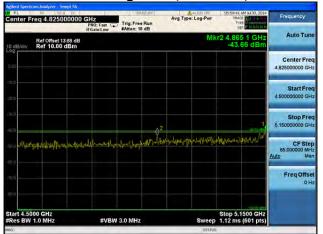
HT/VHT80 STBC, M0 to M7, M0.1 to M9.1 4 4 -42.6 -41.6 -40.3 -39.8 -30.9 -27 3.9

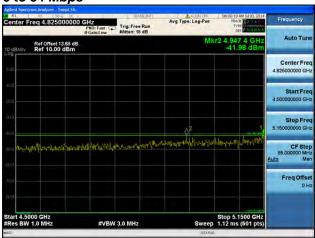




Antenna A

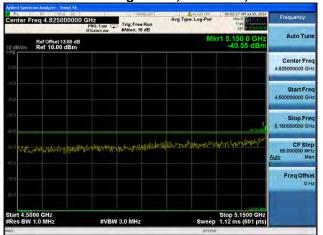






Antenna B





# | Second | S

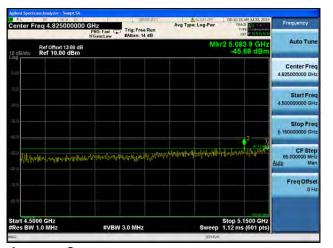


Antenna C

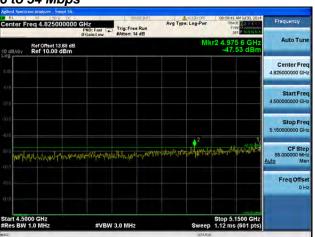
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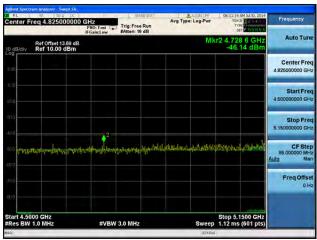




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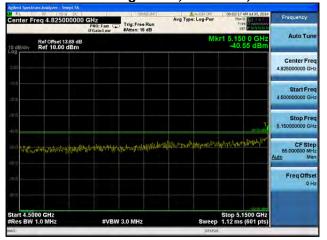


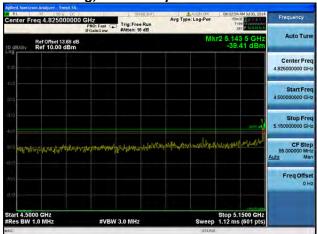
Antenna B



Antenna D



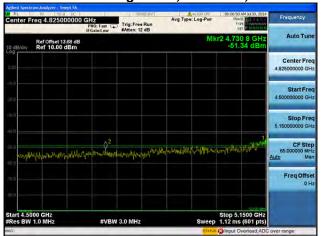


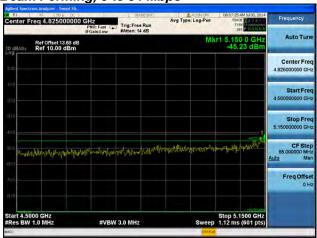


Antenna A

Antenna B

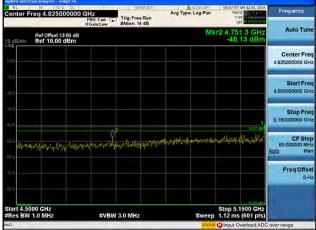






Antenna B





Antenna C

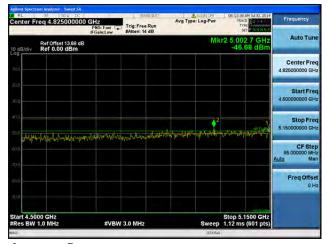








Antenna B

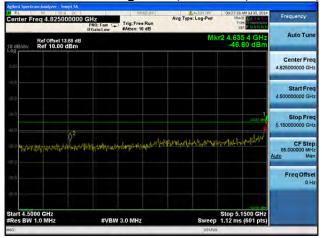


Antenna C

Antenna D



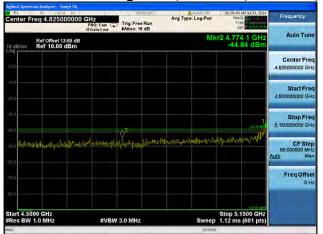
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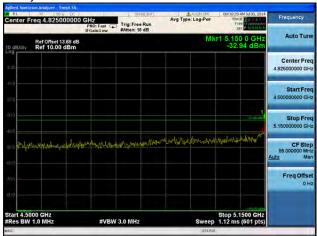


Antenna A



#### Conducted Bandedge Peak, 5180 MHz, HT/VHT20, M0 to M7, M0.1 to M9.1



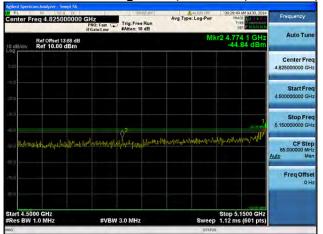


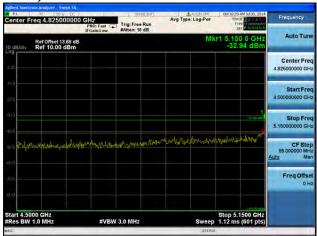
Antenna A

Antenna B



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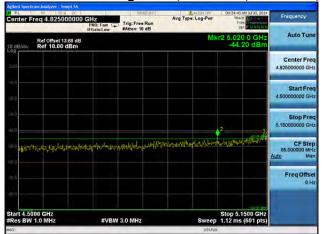


Antenna A

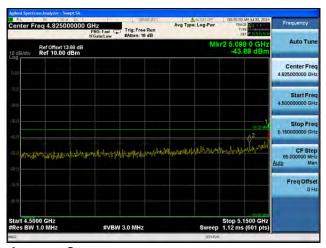
Antenna B



#### Conducted Bandedge Peak, 5180 MHz, HT/VHT20, M0 to M7, M0.1 to M9.1



# Center Freq 4.825000000 GHz Pito: hard | Trigs: Free Run Freq Units | Trigs: Free Run Free Ru

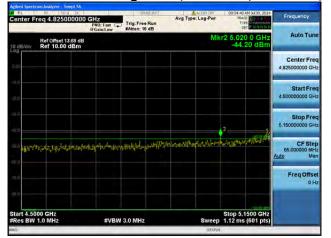


Antenna C

16

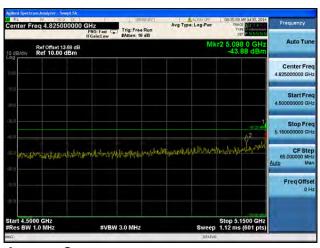


#### Conducted Bandedge Peak, 5180 MHz, HT/VHT20, M8 to M15, M0.2 to M9.2



## Center Freq 4.325000000 GHz PRO Fact 1 Set 2 Set

#### Antenna A

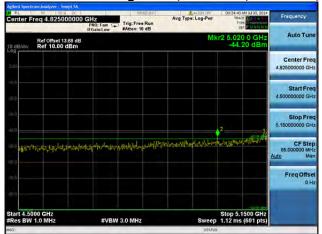


Antenna C

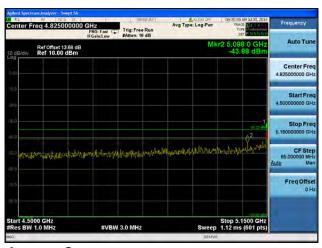
Antenna B



#### Conducted Bandedge Peak, 5180 MHz, HT/VHT20, M16 to M23, M0.3 to M9.3



## 



Antenna C

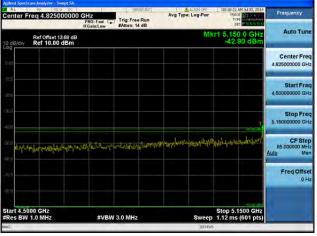
Antenna B



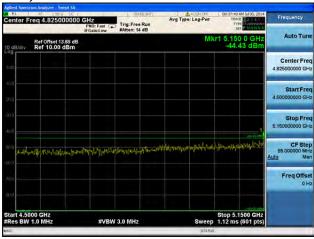
#### Conducted Bandedge Peak, 5180 MHz, HT/VHT20, M0 to M7, M0.1 to M9.1



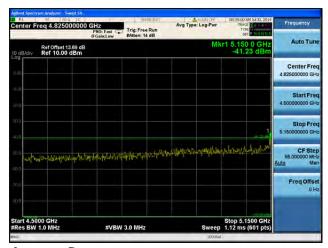
#### Antenna A



Antenna C



#### Antenna B



Antenna D



Auto Tun

Center Freq 4.825000000 GHz

Freq Offset

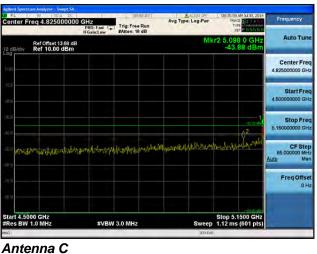
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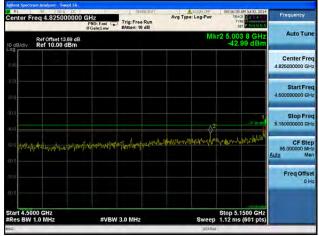


Antenna B

Ref Offset 13.68 dB Ref 10.00 dBm

#### Antenna A





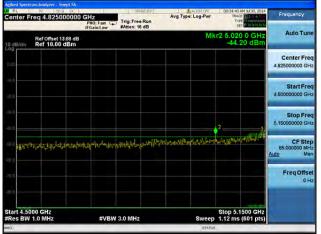
#VBW 3.0 MHz

Avg Type: Log-Pwr

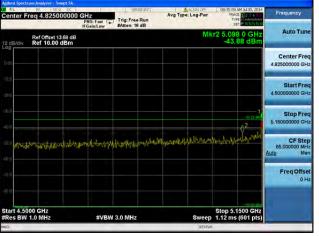
Antenna D



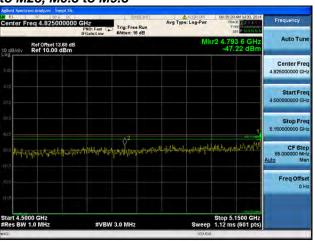
#### Conducted Bandedge Peak, 5180 MHz, HT/VHT20, M16 to M23, M0.3 to M9.3



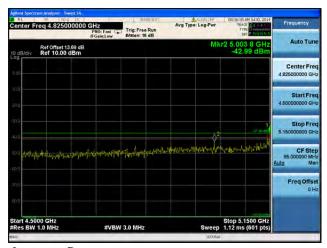
#### Antenna A



Antenna C



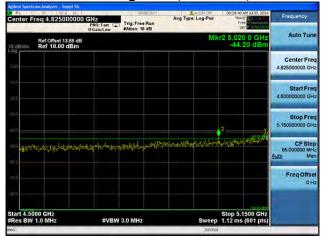
#### Antenna B



Antenna D



Conducted Bandedge Peak, 5180 MHz, HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1

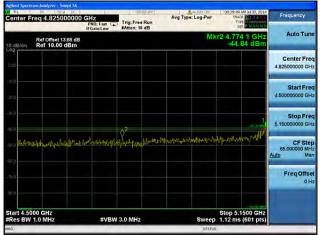


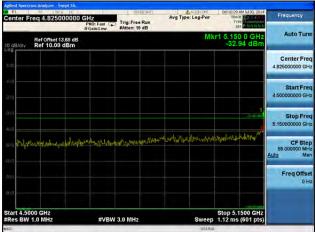


Antenna B



Conducted Bandedge Peak, 5180 MHz, HT/VHT20 Beam Forming, M8 to M15, M0.2 to M9.2

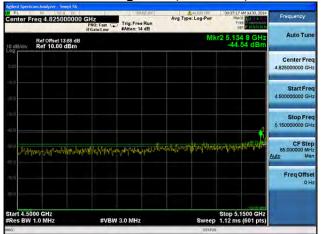


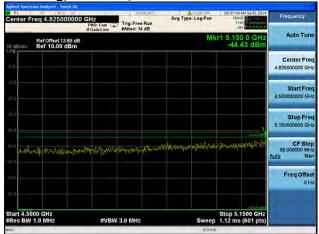


Antenna B

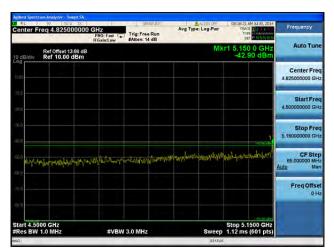


#### Conducted Bandedge Peak, 5180 MHz, HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1





Antenna B

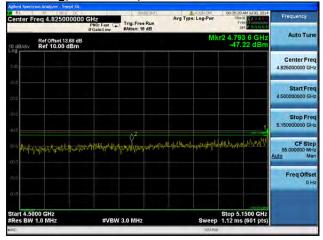


Antenna C



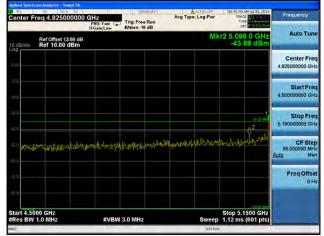
Conducted Bandedge Peak, 5180 MHz, HT/VHT20 Beam Forming, M8 to M15, M0.2 to M9.2





Antenna A

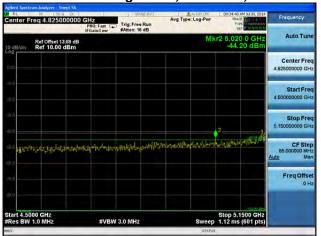
Antenna B



Antenna C

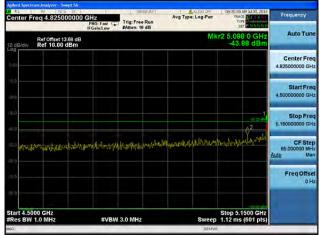


#### Conducted Bandedge Peak, 5180 MHz, HT/VHT20 Beam Forming, M16 to M23, M0.3 to M9.3



# | Auguste | Augu

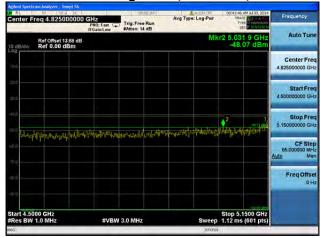




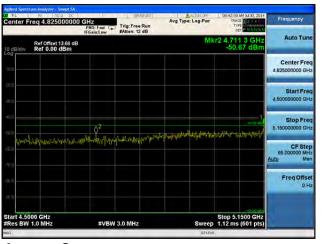
Antenna C



#### Conducted Bandedge Peak, 5180 MHz, HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1



## 



Antenna B

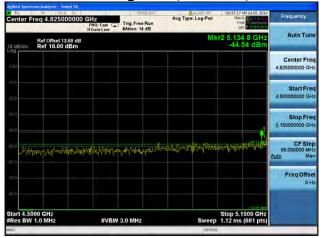


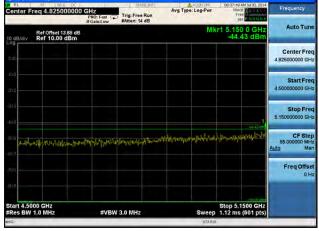
Antenna C

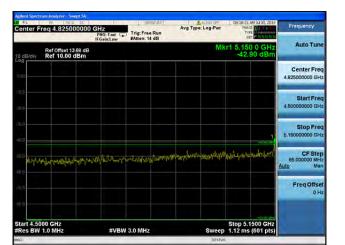
Antenna D



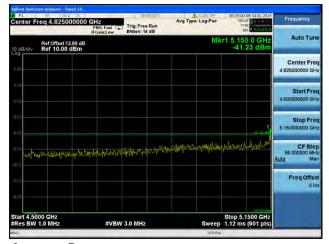
Conducted Bandedge Peak, 5180 MHz, HT/VHT20 Beam Forming, M8 to M15, M0.2 to M9.2







Antenna B



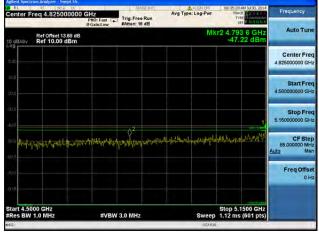
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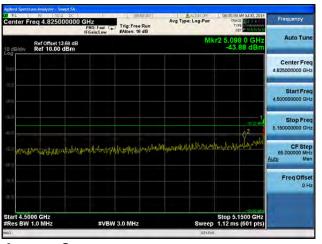
Antenna D



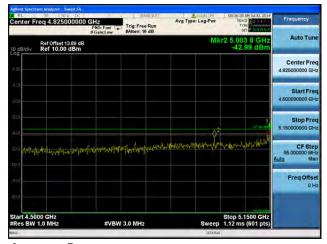
#### Conducted Bandedge Peak, 5180 MHz, HT/VHT20 Beam Forming, M16 to M23, M0.3 to M9.3







Antenna B

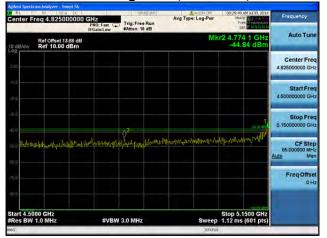


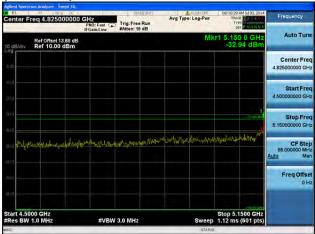
Antenna C

Antenna D



#### Conducted Bandedge Peak, 5180 MHz, HT/VHT20 STBC, M0 to M7, M0.1 to M9.1

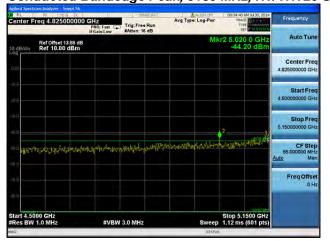




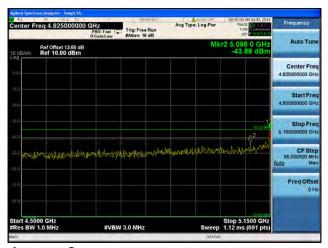
Antenna B



#### Conducted Bandedge Peak, 5180 MHz, HT/VHT20 STBC, M0 to M7, M0.1 to M9.1



## 



Antenna C

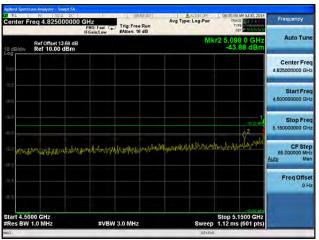
31



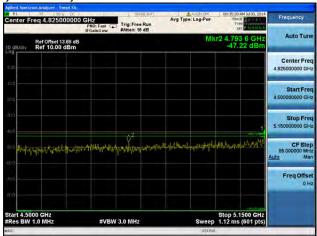
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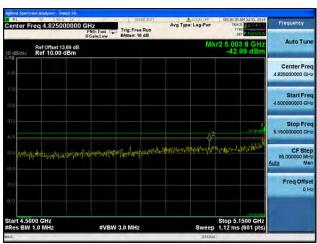


#### Antenna A Antenna B

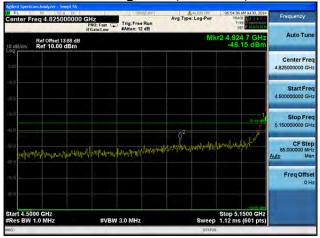


Antenna C Antenna D



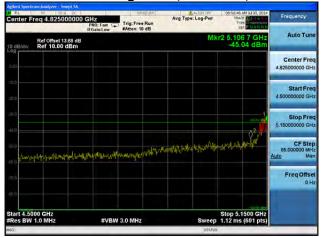


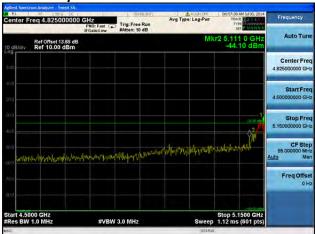




Antenna A

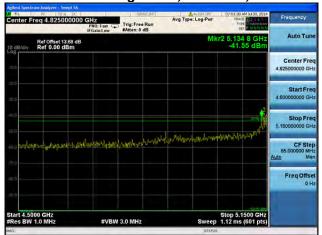


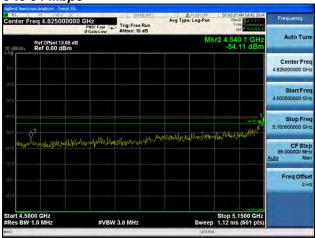


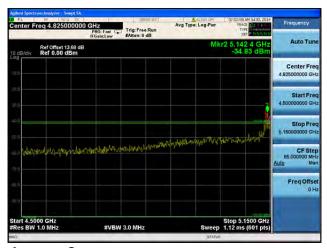


Antenna B





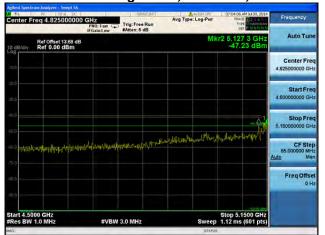




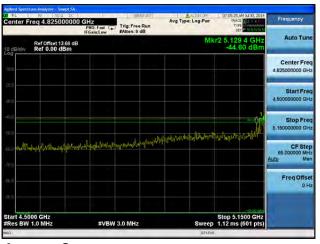
Antenna C

Antenna B

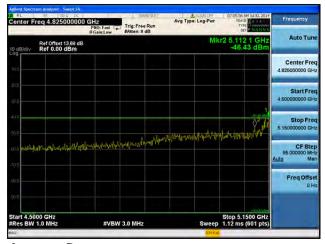




### 



Antenna B



Antenna C

Antenna D



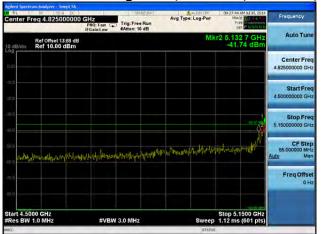
### Conducted Bandedge Peak, 5190 MHz, HT/VHT40, M0 to M7, M0.1 to M9.1



Antenna A



### Conducted Bandedge Peak, 5190 MHz, HT/VHT40, M0 to M7, M0.1 to M9.1



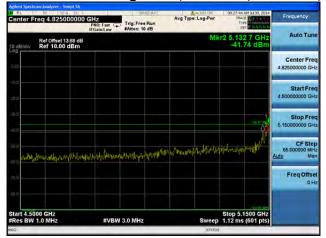


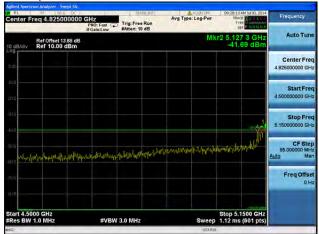
Antenna A

Antenna B



### Conducted Bandedge Peak, 5190 MHz, HT/VHT40, M8 to M15, M0.2 to M9.2



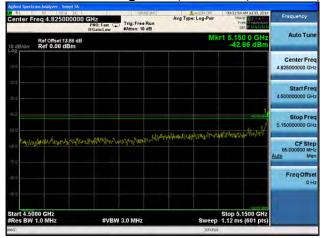


Antenna A

Antenna B



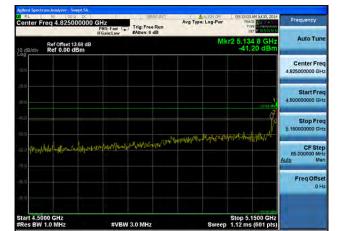
### Conducted Bandedge Peak, 5190 MHz, HT/VHT40, M0 to M7, M0.1 to M9.1



### 

Antenna B

Avg Type: Log-Pwr

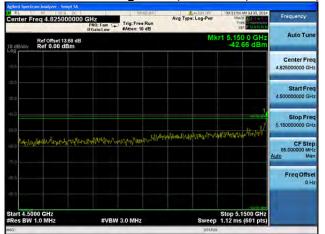


Antenna C

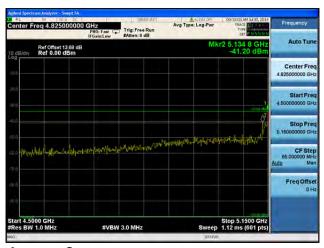
40



### Conducted Bandedge Peak, 5190 MHz, HT/VHT40, M8 to M15, M0.2 to M9.2



# Center Freq 4.825000000 GHz Frequency Frequenc

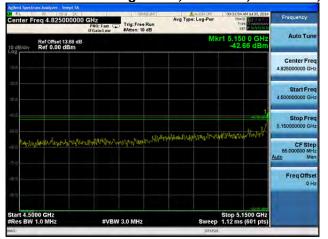


Antenna C

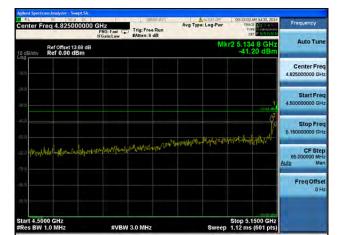
41



### Conducted Bandedge Peak, 5190 MHz, HT/VHT40, M16 to M23, M0.3 to M9.3



### Center Freq 4.825000000 GHz PRO Fact To Ref O.00 dBm Start 4.5000 GHz Start 4.5000 GHz Res BW 1.0 MHz Start 8.5000 GHz

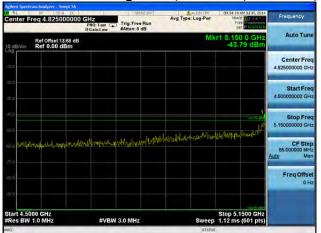


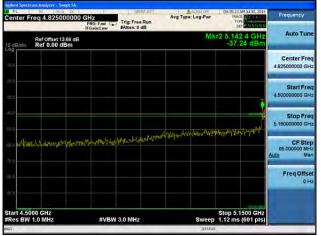
Antenna C

Antenna B

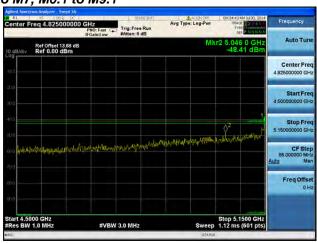


### Conducted Bandedge Peak, 5190 MHz, HT/VHT40, M0 to M7, M0.1 to M9.1

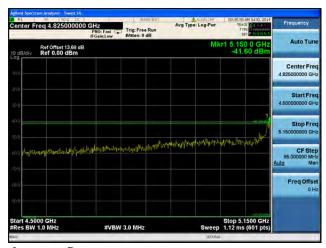




Antenna C



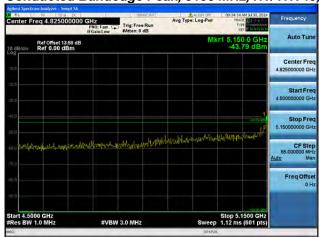
Antenna B



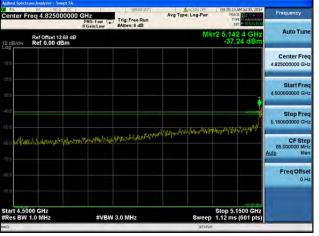
Antenna D



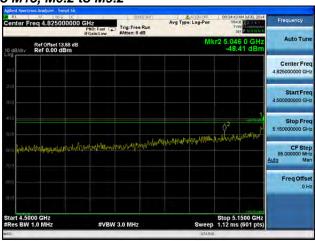
### Conducted Bandedge Peak, 5190 MHz, HT/VHT40, M8 to M15, M0.2 to M9.2



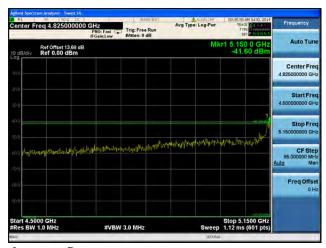
### Antenna A



Antenna C



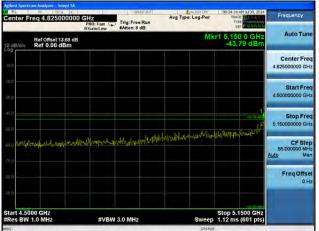
### Antenna B

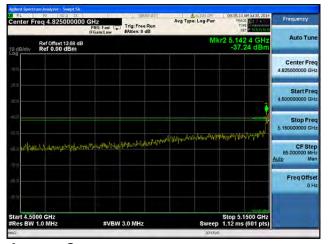


Antenna D

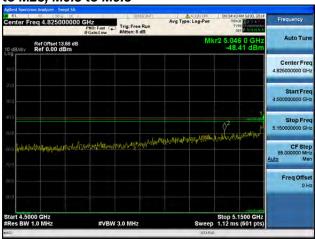


### Conducted Bandedge Peak, 5190 MHz, HT/VHT40, M16 to M23, M0.3 to M9.3

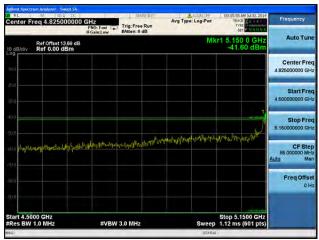




Antenna C



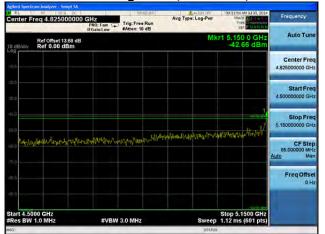
Antenna B



Antenna D



Conducted Bandedge Peak, 5190 MHz, HT/VHT40 Beam Forming, M0 to M7, M0.1 to M9.1

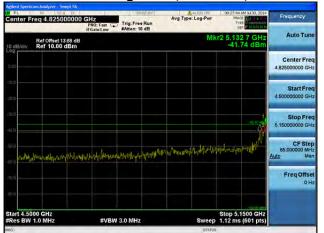


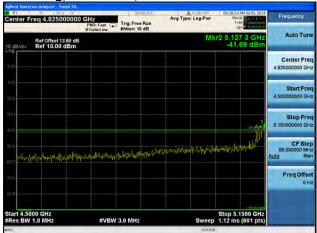


Antenna B



Conducted Bandedge Peak, 5190 MHz, HT/VHT40 Beam Forming, M8 to M15, M0.2 to M9.2

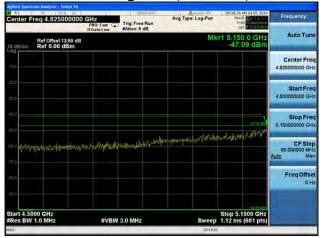




Antenna B



### Conducted Bandedge Peak, 5190 MHz, HT/VHT40 Beam Forming, M0 to M7, M0.1 to M9.1



### | Conter Freq 4.825000000 GHz | Freq Run | F

Antenna B

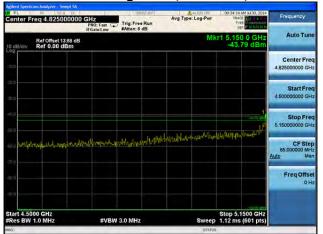


Antenna C

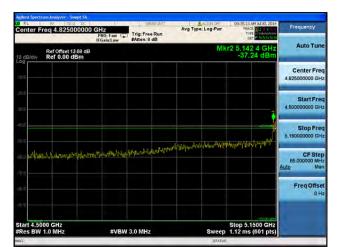
48



### Conducted Bandedge Peak, 5190 MHz, HT/VHT40 Beam Forming, M8 to M15, M0.2 to M9.2



# Conter Freq 4.825000000 GHz PIO Frant PIO Frant PIO Frant PIO France Bull PIO France Bull PIO Frant PIO France Bull PIO Frant PIO France Bull PIO France Bull

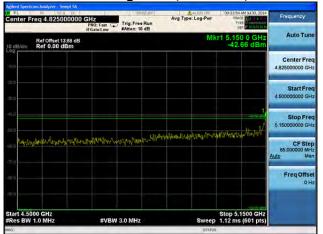


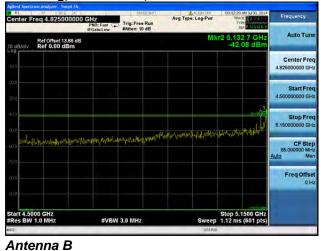
Antenna C

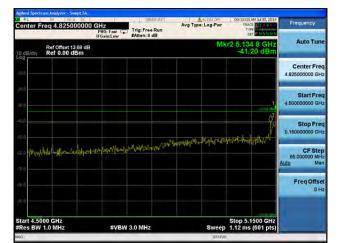
49



### Conducted Bandedge Peak, 5190 MHz, HT/VHT40 Beam Forming, M16 to M23, M0.3 to M9.3





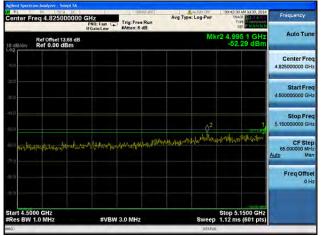


Antenna C

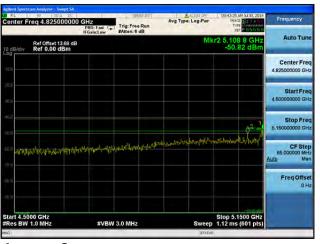


Auto Tun

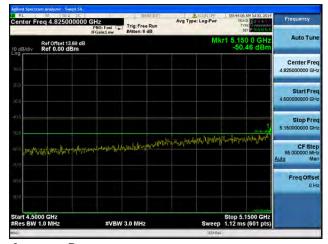
### Conducted Bandedge Peak, 5190 MHz, HT/VHT40 Beam Forming, M0 to M7, M0.1 to M9.1



### Ref Offset 1.388 GB Ref 0.00 dBm Center Freq AB2500000 GHz Start Freq 4.5000000 GHz Start Freq 4.5000000 GHz Start A.300 GHz Start 4.500 GHz Start 4.500 GHz Start Tend 4.5000000 GHz Start Freq 4.5000000 GHz Start Freq 4.5000000 GHz Start A.500 GHz Start A.500 GHz Fres BW 1.0 MHz Sweep 1.12 ms (601 pts)



Antenna B



Antenna C

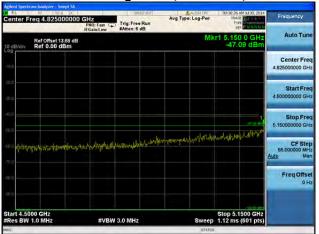
Antenna D



Conducted Bandedge Peak, 5190 MHz, HT/VHT40 Beam Forming, M8 to M15, M0.2 to M9.2

Freq Offset 0 Hz

Stop 5.1500 GHz Sweep 1.12 ms (601 pts)



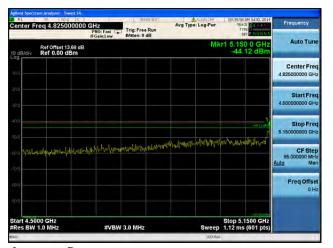


### Antenna A

| Avg Type: Leg Per | Auto Tune | Frequency | Avg Type: Leg Per | Auto Tune | Auto Tune | Avg Type: Leg Per | Auto Tune | Auto Tun

#VBW 3.0 MHz

Antenna B



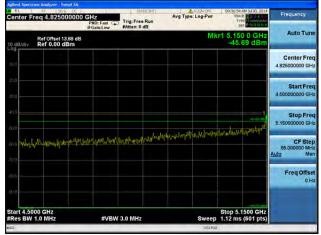
Antenna C

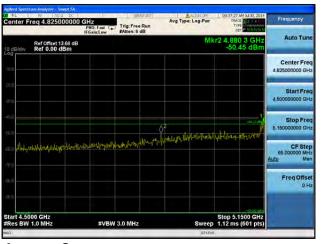
Antenna D



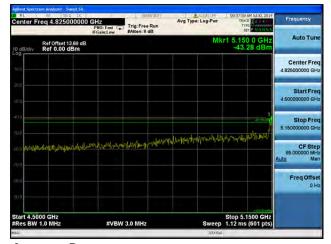
### Conducted Bandedge Peak, 5190 MHz, HT/VHT40 Beam Forming, M16 to M23, M0.3 to M9.3







Antenna B

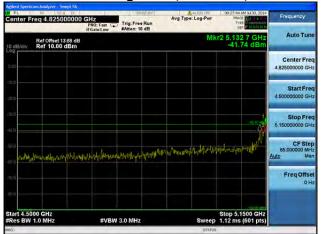


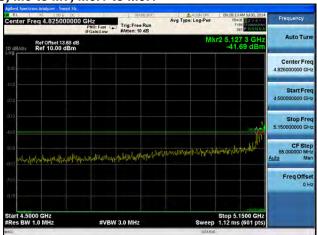
Antenna C

Antenna D



### Conducted Bandedge Peak, 5190 MHz, HT/VHT40 STBC, M0 to M7, M0.1 to M9.1



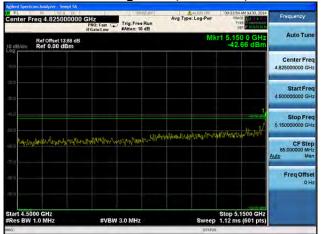


Antenna A

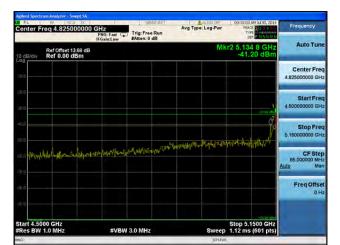
Antenna B



### Conducted Bandedge Peak, 5190 MHz, HT/VHT40 STBC, M0 to M7, M0.1 to M9.1



### Center Freq 4.82500000 GHz Pio. Fast Center Freq 4.82500000 GHz Ref Office t 3.89 dB Ref 0.00 dBm R

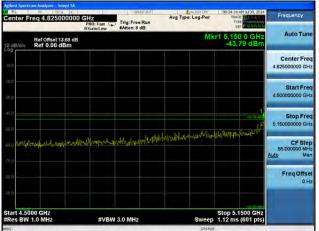


Antenna C

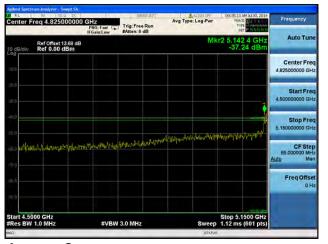
Antenna B



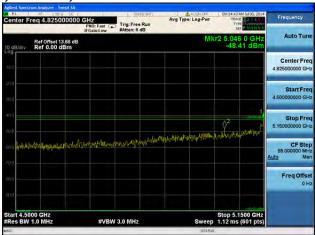
### Conducted Bandedge Peak, 5190 MHz, HT/VHT40 STBC, M0 to M7, M0.1 to M9.1



### Antenna A Antenna B



Antenna C Antenna D







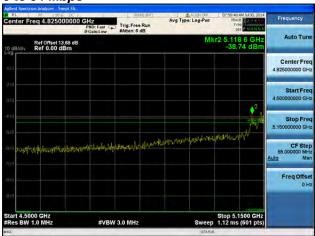




Antenna A

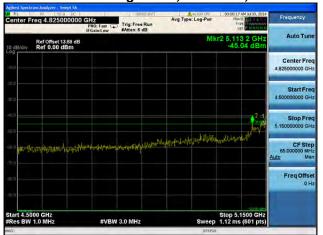






Antenna B





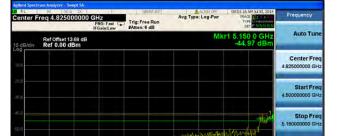
### 

Antenna B

Freq Offset 0 Hz

Stop 5.1500 GHz Sweep 1.12 ms (601 pts)

### Antenna A

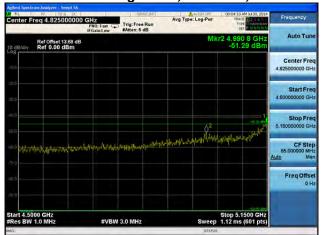


#VBW 3.0 MHz

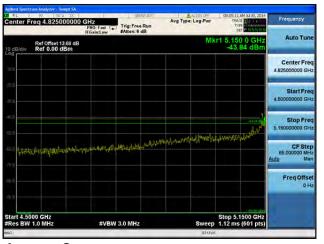
Antenna C

MSG

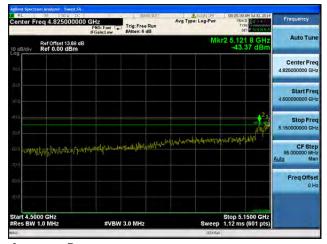




### 



Antenna B



Antenna C

Antenna D



### Conducted Bandedge Peak, 5210 MHz, HT/VHT80, M0 to M7, M0.1 to M9.1



Antenna A



### Conducted Bandedge Peak, 5210 MHz, HT/VHT80, M0 to M7, M0.1 to M9.1



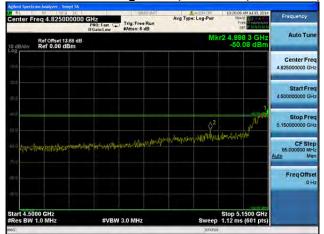


Antenna A

Antenna B



### Conducted Bandedge Peak, 5210 MHz, HT/VHT80, M8 to M15, M0.2 to M9.2





Antenna A

Antenna B



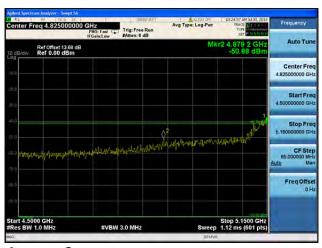
### Conducted Bandedge Peak, 5210 MHz, HT/VHT80, M0 to M7, M0.1 to M9.1



### 

Antenna B

Avg Type: Log-Pwr

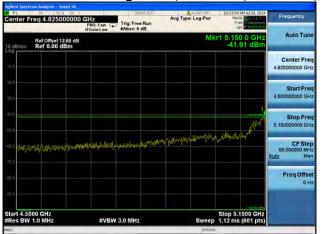


Antenna C

64

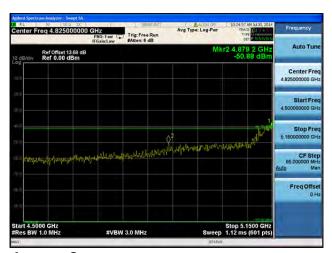


### Conducted Bandedge Peak, 5210 MHz, HT/VHT80, M8 to M15, M0.2 to M9.2



### | Start | Frequency | Start | Frequency | Start | Frequency | Freq

Antenna B



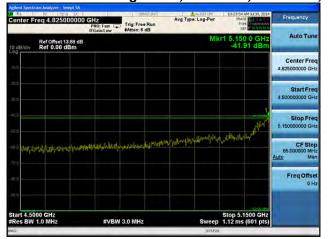
Antenna C



Auto Tun

Freq Offset

### Conducted Bandedge Peak, 5210 MHz, HT/VHT80, M16 to M23, M0.3 to M9.3

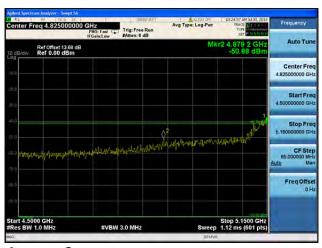


### Center Freq 4.825000000 GHz #VBW 3.0 MHz

Ref Offset 13,68 dB Ref 0.00 dBm

Antenna B

Avg Type: Log-Pwr



Antenna C

66



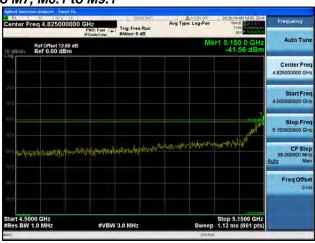
### Conducted Bandedge Peak, 5210 MHz, HT/VHT80, M0 to M7, M0.1 to M9.1



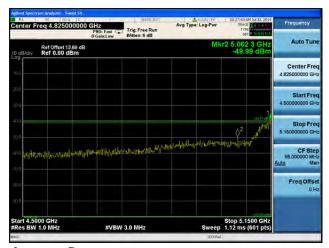
### Antenna A



Antenna C



### Antenna B



Antenna D



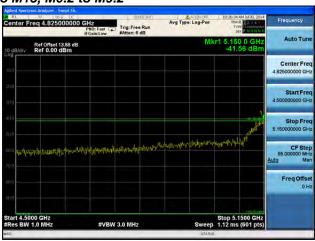
### Conducted Bandedge Peak, 5210 MHz, HT/VHT80, M8 to M15, M0.2 to M9.2



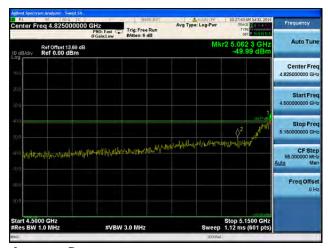
### Antenna A



Antenna C



### Antenna B



Antenna D



Auto Tun

Center Freq 4.825000000 GHz

CF Step 55.000000 Mi

Freq Offse

Stop Free 5.150000000 GH:

CF Step 85.000000 MHz 0 Mar

Freq Offset

Stop 5.1500 GHz Sweep 1.12 ms (601 pts)

Avg Type: Log-Pwr

5.150 0 GI -41.56 dB

### Conducted Bandedge Peak, 5210 MHz, HT/VHT80, M16 to M23, M0.3 to M9.3



Antenna B

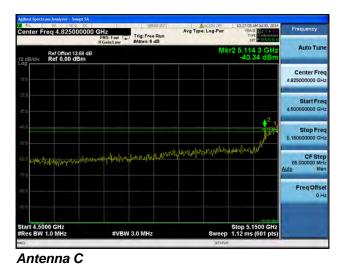
enter Freq 4.825000000 GHz
PNO: Fast Trig: Free Run

Ref Offset 13.68 dB Ref 0.00 dBm

#VBW 3.0 MHz

#VBW 3.0 MHz

Ref Offset 13,68 dB Ref 0,00 dBm

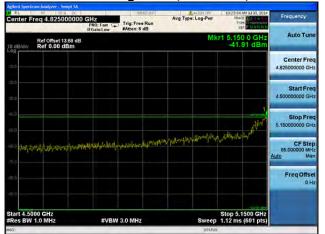


Antenna D





Conducted Bandedge Peak, 5210 MHz, HT/VHT80 Beam Forming, M0 to M7, M0.1 to M9.1

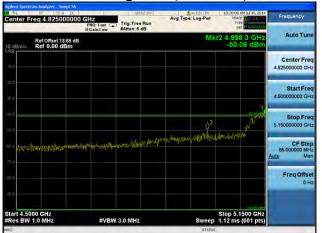




Antenna B



Conducted Bandedge Peak, 5210 MHz, HT/VHT80 Beam Forming, M8 to M15, M0.2 to M9.2

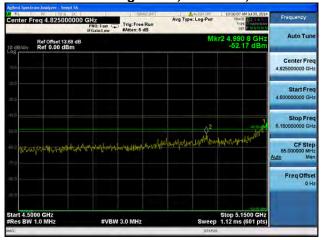


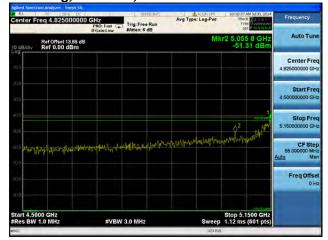


Antenna B

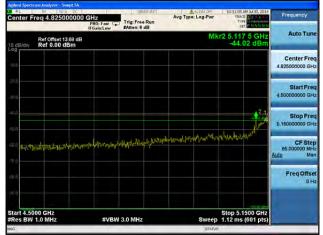


Conducted Bandedge Peak, 5210 MHz, HT/VHT80 Beam Forming, M0 to M7, M0.1 to M9.1









Antenna C

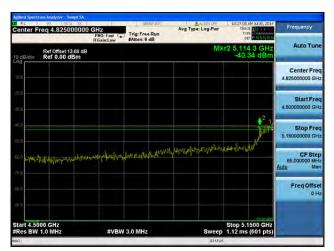


### Conducted Bandedge Peak, 5210 MHz, HT/VHT80 Beam Forming, M8 to M15, M0.2 to M9.2



# | Section | Sect

Antenna B



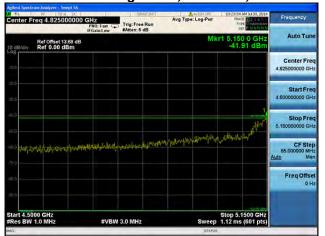
Antenna C

73

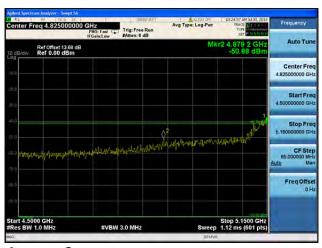


### Conducted Bandedge Peak, 5210 MHz, HT/VHT80 Beam Forming, M16 to M23, M0.3 to M9.3

Antenna B



# | Auto |

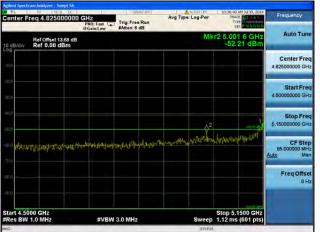


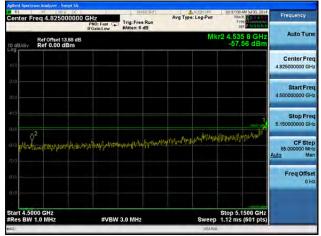
Antenna C

74



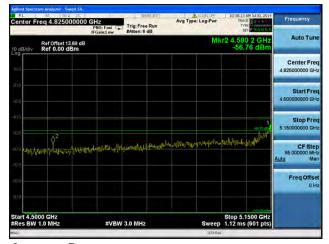
### Conducted Bandedge Peak, 5210 MHz, HT/VHT80 Beam Forming, M0 to M7, M0.1 to M9.1







Antenna B

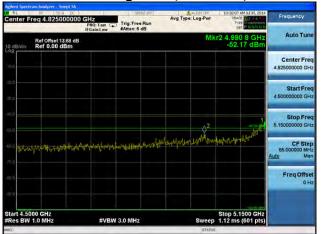


Antenna C

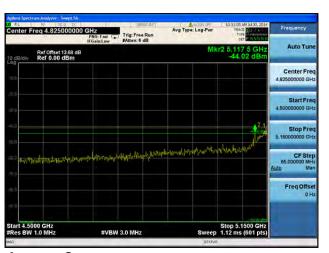
Antenna D



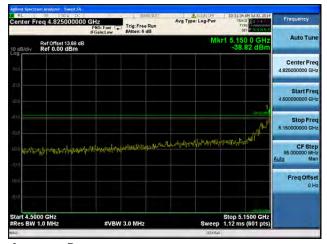
Conducted Bandedge Peak, 5210 MHz, HT/VHT80 Beam Forming, M8 to M15, M0.2 to M9.2







Antenna B

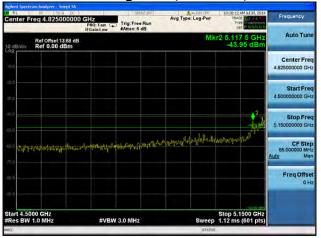


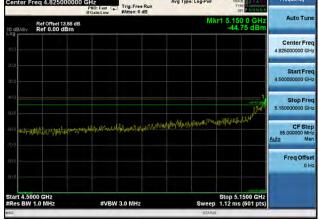
Antenna C

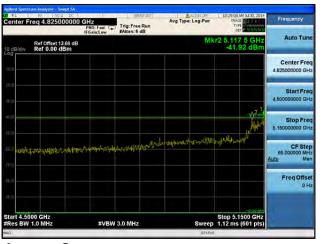
Antenna D



Conducted Bandedge Peak, 5210 MHz, HT/VHT80 Beam Forming, M16 to M23, M0.3 to M9.3







Antenna B

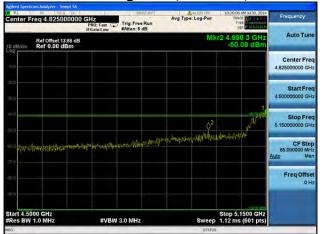


Antenna C

Antenna D



## Conducted Bandedge Peak, 5210 MHz, HT/VHT80 STBC, M0 to M7, M0.1 to M9.1





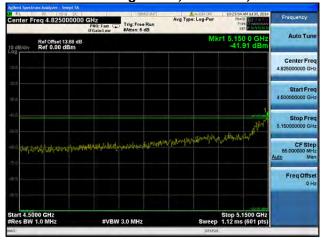
Antenna A

Antenna B



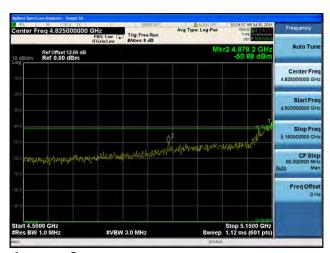
Auto Tun

## Conducted Bandedge Peak, 5210 MHz, HT/VHT80 STBC, M0 to M7, M0.1 to M9.1



# Ref Offset 1388 GB Ref 0.00 dBm -55.72 dBm Center Freq A 82500000 GHz Start Freq 4.5000000 GHz Start 4.5000 GHz Start 4.5000 GHz Free SBW 1.0 MHz Sweep 1.12 ms (601 pts)

Avg Type: Log-Pwr



Antenna C

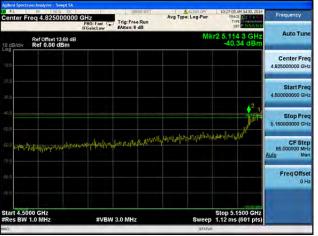
Antenna B



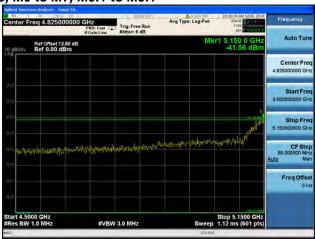
### Conducted Bandedge Peak, 5210 MHz, HT/VHT80 STBC, M0 to M7, M0.1 to M9.1



### Antenna A



Antenna C



### Antenna B



Antenna D



## Antenna Gain 5 dBi

Antenna Gain 3 dbi										
Frequency (MHz)	Mode	Tx Paths	Correlated Antenna Gain (dBi)	Tx 1 Bandedge Level (dBm)	Tx 2 Bandedge Level (dBm)	Tx 3 Bandedge Level (dBm)	Tx 4 Bandedge Level (dBm)	Total Tx Bandedge Level (dBm)	Limit (dBm)	Margin (dB)
	Non HT/VHT20, 6 to 54 Mbps	1	5	-32.2				-27.2	-27	0.2
	Non HT/VHT20, 6 to 54 Mbps	2	5	-40.9	-41.6			-33.2	-27	6.2
	Non HT/VHT20, 6 to 54 Mbps	3	5	-46.0	-42.8	-41.2		-33.1	-27	6.1
	Non HT/VHT20, 6 to 54 Mbps	4	5	-51.0	-48.5	-46.4	-46.7	-36.8	-27	9.8
	Non HT/VHT20 Beam Forming, 6 to 54 Mbps	2	8	-40.5	-38.6			-28.4	-27	1.4
	Non HT/VHT20 Beam Forming, 6 to 54 Mbps	3	10	-49.1	-45.2	-43.6		-30.8	-27	3.8
	Non HT/VHT20 Beam Forming, 6 to 54 Mbps	4	11	-49.9	-49.9	-51.2	-48.1	-32.6	-27	5.6
	HT/VHT20, M0 to M7, M0.1 to M9.1	1	5	-34.9				-29.9	-27	2.9
	HT/VHT20, M0 to M7, M0.1 to M9.1	2	5	-44.2	-43.1			-35.6	-27	8.6
	HT/VHT20, M8 to M15, M0.2 to M9.2	2	5	-44.2	-43.1			-35.6	-27	8.6
	HT/VHT20, M0 to M7, M0.1 to M9.1	3	5	-44.2	-43.1	-35.2		-29.1	-27	2.1
	HT/VHT20, M8 to M15, M0.2 to M9.2	3	5	-44.2	-43.1	-35.2		-29.1	-27	2.1
	HT/VHT20, M16 to M23, M0.3 to M9.3	3	5	-44.2	-43.1	-35.2		-29.1	-27	2.1
5180	HT/VHT20, M0 to M7, M0.1 to M9.1	4	5	-47.2	-45.6	-48.4	-46.2	-35.7	-27	8.7
5	HT/VHT20, M8 to M15, M0.2 to M9.2	4	5	-44.2	-43.1	-35.2	-37.5	-27.5	-27	0.5
	HT/VHT20, M16 to M23, M0.3 to M9.3	4	5	-44.2	-43.1	-35.2	-37.5	-27.5	-27	0.5
	HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1	2	8	-44.2	-43.1			-32.6	-27	5.6
	HT/VHT20 Beam Forming, M8 to M15, M0.2 to M9.2	2	5	-44.2	-43.1			-35.6	-27	8.6
	HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1	3	10	-44.5	-44.4	-42.9		-29.3	-27	2.3
	HT/VHT20 Beam Forming, M8 to M15, M0.2 to M9.2	3	7	-44.2	-43.1	-35.2		-27.3	-27	0.3
	HT/VHT20 Beam Forming, M16 to M23, M0.3 to M9.3	3	5	-44.2	-43.1	-35.2		-29.1	-27	2.1
	HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1	4	11	-49.8	-48.4	-49.8	-46.5	-31.4	-27	4.4
	HT/VHT20 Beam Forming, M8 to M15, M0.2 to M9.2	4	8	-44.5	-44.4	-42.9	-41.2	-29.0	-27	2.0
	HT/VHT20 Beam Forming, M16 to M23, M0.3 to M9.3	4	6	-44.5	-44.4	-42.9	-41.2	-30.8	-27	3.8
	HT/VHT20 STBC, M0 to M7, M0.1 to M9.1	2	5	-44.2	-43.1			-35.6	-27	8.6
	HT/VHT20 STBC, M0 to M7, M0.1 to M9.1	3	5	-44.2	-43.1	-35.2		-29.1	-27	2.1
	HT/VHT20 STBC, M0 to M7, M0.1 to M9.1	4	5	-44.2	-43.1	-35.2	-37.5	-27.5	-27	0.5
<u> </u>										
	Non HT/VHT40, 6 to 54 Mbps	1	5	-35.0				-30.0	-27	3.0
	Non HT/VHT40, 6 to 54 Mbps	2	5	-41.5	-44.5			-34.7	-27	7.7
90	Non HT/VHT40, 6 to 54 Mbps	3	5	-41.5	-44.5	-34.8		-28.6	-27	1.6
5190	Non HT/VHT40, 6 to 54 Mbps	4	5	-46.6	-36.2	-43.3	-40.5	-29.0	-27	2.0
	HT/VHT40, M0 to M7, M0.1 to M9.1	1	5	-36.5				-31.5	-27	4.5
	HT/VHT40, M0 to M7, M0.1 to M9.1	2	5	-39.7	-39.3			-31.5	-27	4.5



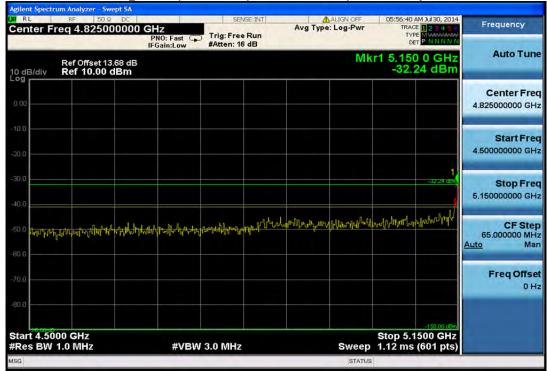
	HT/VHT40, M8 to M15, M0.2 to M9.2	2	5	-39.7	-39.3			-31.5	-27	4.5
	HT/VHT40, M0 to M7, M0.1 to M9.1	3	5	-43.8	-42.7	-37.2		-30.4	-27	3.4
	HT/VHT40, M8 to M15, M0.2 to M9.2	3	5	-43.8	-42.7	-37.2		-30.4	-27	3.4
	HT/VHT40, M16 to M23, M0.3 to M9.3	3	5	-43.8	-42.7	-37.2		-30.4	-27	3.4
	HT/VHT40, M0 to M7, M0.1 to M9.1	4	5	-45.7	-45.7	-44.2	-43.3	-33.6	-27	6.6
	HT/VHT40, M8 to M15, M0.2 to M9.2	4	5	-45.7	-45.7	-44.2	-43.3	-33.6	-27	6.6
	HT/VHT40, M16 to M23, M0.3 to M9.3	4	5	-45.7	-45.7	-44.2	-43.3	-33.6	-27	6.6
	HT/VHT40 Beam Forming, M0 to M7, M0.1 to M9.1	2	8	-43.8	-42.7			-32.2	-27	5.2
	HT/VHT40 Beam Forming, M8 to M15, M0.2 to M9.2	2	5	-39.7	-39.3			-31.5	-27	4.5
	HT/VHT40 Beam Forming, M0 to M7, M0.1 to M9.1	3	10	-47.7	-48.3	-48.6		-33.6	-27	6.6
	HT/VHT40 Beam Forming, M8 to M15, M0.2 to M9.2	3	7	-45.7	-45.7	-44.2		-33.6	-27	6.6
	HT/VHT40 Beam Forming, M16 to M23, M0.3 to M9.3	3	5	-43.8	-42.7	-37.2		-30.4	-27	3.4
	HT/VHT40 Beam Forming, M0 to M7, M0.1 to M9.1	4	11	-48.9	-52.1	-50.3	-49.9	-33.1	-27	6.1
	HT/VHT40 Beam Forming, M8 to M15, M0.2 to M9.2	4	8	-47.7	-48.3	-48.6	-46.1	-33.5	-27	6.5
	HT/VHT40 Beam Forming, M16 to M23, M0.3 to M9.3	4	6	-47.1	-45.5	-48.1	-44.1	-33.7	-27	6.7
	HT/VHT40 STBC, M0 to M7, M0.1 to M9.1	2	5	-39.7	-39.3			-31.5	-27	4.5
	HT/VHT40 STBC, M0 to M7, M0.1 to M9.1	3	5	-43.8	-42.7	-37.2		-30.4	-27	3.4
	HT/VHT40 STBC, M0 to M7, M0.1 to M9.1	4	5	-45.7	-45.7	-44.2	-43.3	-33.6	-27	6.6
	Non HT/VHT80, 6 to 54 Mbps	1	5	-38.6				-33.6	-27	6.6
	Non HT/VHT80, 6 to 54 Mbps	2	5	-45.0	-44.9			-36.9	-27	9.9
	Non HT/VHT80, 6 to 54 Mbps	3	5	-46.8	-45.3	-42.6		-34.8	-27	7.8
	Non HT/VHT80, 6 to 54 Mbps	4	5	-45.4	-46.5	-43.8	-43.4	-33.6	-27	6.6
5210	HT/VHT80, M0 to M7, M0.1 to M9.1	1	5	-36.7				-31.7	-27	4.7
	HT/VHT80, M0 to M7, M0.1 to M9.1	2	5	-38.2	-40.7			-31.3	-27	4.3
	HT/VHT80, M8 to M15, M0.2 to M9.2	2	5	-38.2	-40.7			-31.3	-27	4.3
	HT/VHT80, M0 to M7, M0.1 to M9.1	3	5	-42.6	-41.6	-40.3		-31.6	-27	4.6
	HT/VHT80, M8 to M15, M0.2 to M9.2	3	5	-42.6	-41.6	-40.3		-31.6	-27	4.6
	HT/VHT80, M16 to M23, M0.3 to M9.3	3	5	-42.6	-41.6	-40.3		-31.6	-27	4.6
	HT/VHT80, M0 to M7, M0.1 to M9.1	4	5	-43.9	-44.8	-40.0	-40.4	-30.8	-27	3.8
	HT/VHT80, M8 to M15, M0.2 to M9.2	4	5	-43.9	-44.8	-40.0	-40.4	-30.8	-27	3.8
	HT/VHT80, M16 to M23, M0.3 to M9.3	4	5	-43.9	-44.8	-40.0	-40.4	-30.8	-27	3.8
	HT/VHT80 Beam Forming, M0 to M7, M0.1 to M9.1	2	8	-42.6	-41.6			-31.1	-27	4.1
	HT/VHT80 Beam Forming, M8 to M15, M0.2 to M9.2	2	5	-38.2	-40.7			-31.3	-27	4.3
	HT/VHT80 Beam Forming, M0 to M7, M0.1 to M9.1	3	10	-46.4	-44.8	-48.2		-31.7	-27	4.7
	HT/VHT80 Beam Forming, M8 to M15, M0.2 to M9.2	3	7	-43.9	-44.8	-40.0		-30.8	-27	3.8
	HT/VHT80 Beam Forming, M16 to M23, M0.3 to M9.3	3	5	-42.6	-41.6	-40.3		-31.6	-27	4.6
	HT/VHT80 Beam Forming, M0 to M7, M0.1 to M9.1	4	11	-49.8	-53.6	-48.5	-51.1	-33.4	-27	6.4
	HT/VHT80 Beam Forming, M8 to M15, M0.2 to M9.2	4	8	-46.4	-44.8	-48.2	-43.7	-31.4	-27	4.4
	HT/VHT80 Beam Forming, M16 to M23, M0.3 to M9.3	4	6	-48.6	-43.1	-44.0	-38.8	-30.1	-27	3.1
	HT/VHT80 STBC, M0 to M7, M0.1 to M9.1	2	5	-38.2	-40.7			-31.3	-27	4.3
	HT/VHT80 STBC, M0 to M7, M0.1 to M9.1	3	5	-42.6	-41.6	-40.3		-31.6	-27	4.6
	, , , , , , , , , , , , , , , , , , , ,							•		



HT/VHT80 STBC, M0 to M7, M0.1 to M9.1 4 5 -43.9 -44.8 -40.0 -40.4 -30.8 -27 3.8



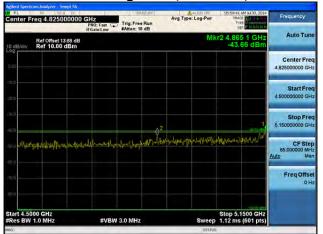


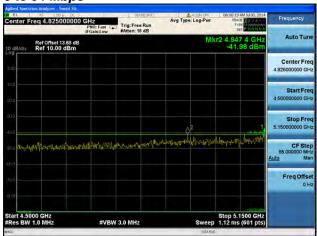


Antenna A



### Conducted Bandedge Peak, 5180 MHz, Non HT/VHT20, 6 to 54 Mbps





Antenna B

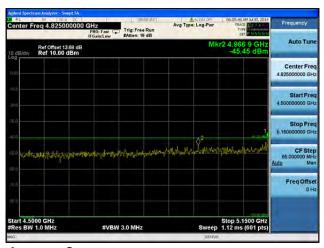


### Conducted Bandedge Peak, 5180 MHz, Non HT/VHT20, 6 to 54 Mbps



## 

Antenna B



Antenna C

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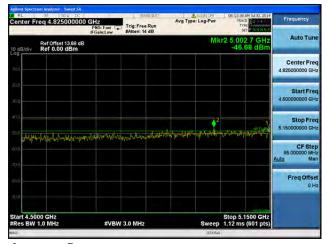
### Conducted Bandedge Peak, 5180 MHz, Non HT/VHT20, 6 to 54 Mbps



# | Aug | Type | Log Pur | Red | Type | Log Pur | Red | Red | O.000 | GHz | Red | Type | Log Pur | Red | Red | O.000 | GHz | Red | Type | Log Pur | Red | Red | O.000 | GHz | G.000 | GHz



Antenna B

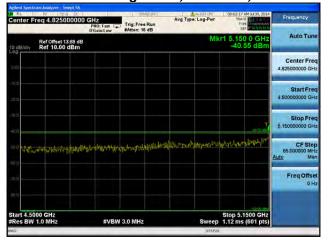


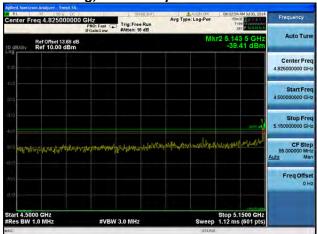
Antenna C

Antenna D



Conducted Bandedge Peak, 5180 MHz, Non HT/VHT20 Beam Forming, 6 to 54 Mbps



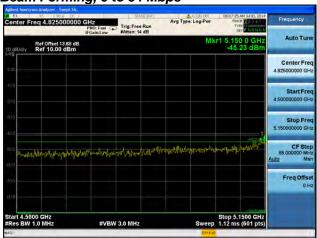


Antenna B

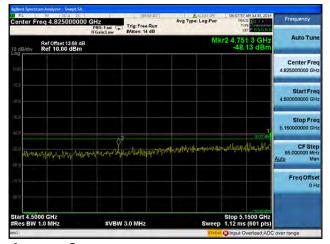


### Conducted Bandedge Peak, 5180 MHz, Non HT/VHT20 Beam Forming, 6 to 54 Mbps





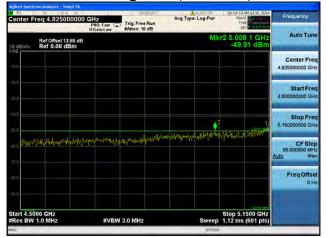




Antenna C



### Conducted Bandedge Peak, 5180 MHz, Non HT/VHT20 Beam Forming, 6 to 54 Mbps



# Conter Freq 4.825000000 GHz Frighten 10 dB Ref Offset 13.88 dB Ref 0.00 dBm Ref 0.



Antenna B

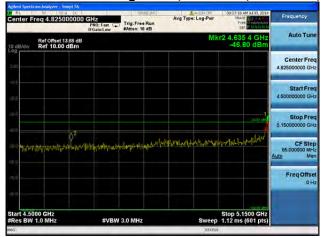


Antenna C

Antenna D



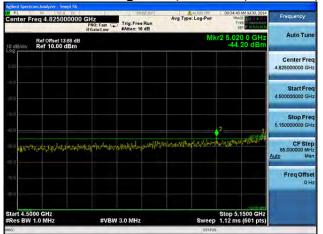
### Conducted Bandedge Peak, 5180 MHz, HT/VHT20, M0 to M7, M0.1 to M9.1

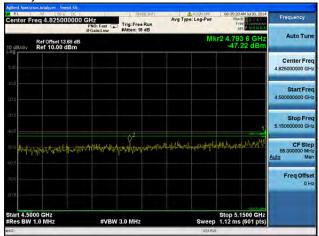


Antenna A



### Conducted Bandedge Peak, 5180 MHz, HT/VHT20, M0 to M7, M0.1 to M9.1



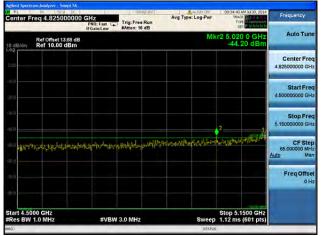


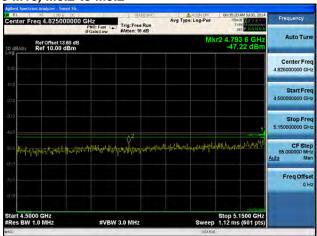
Antenna A

Antenna B



### Conducted Bandedge Peak, 5180 MHz, HT/VHT20, M8 to M15, M0.2 to M9.2



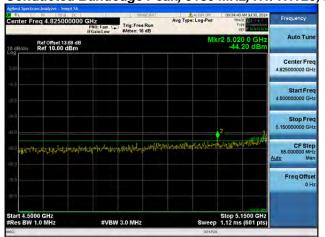


Antenna A

Antenna B

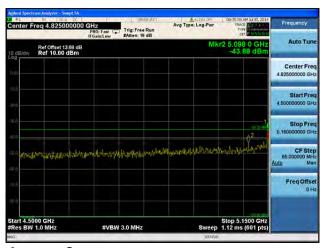


### Conducted Bandedge Peak, 5180 MHz, HT/VHT20, M0 to M7, M0.1 to M9.1



# Center Freq 4.825000000 GHz Pio: hard Pio: ha

Antenna B



Antenna C

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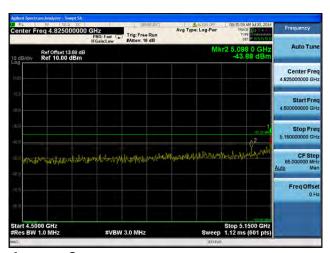


### Conducted Bandedge Peak, 5180 MHz, HT/VHT20, M8 to M15, M0.2 to M9.2



# 

Antenna B



Antenna C

95



Auto Tun

Center Freq 4.825000000 GHz

Freq Offset

Avg Type: Log-Pwr

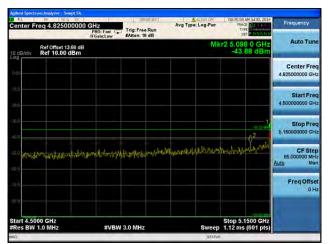
Ref Offset 13.68 dB Ref 10.00 dBm

Antenna B

#VBW 3.0 MHz

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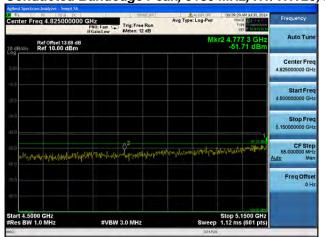




Antenna C



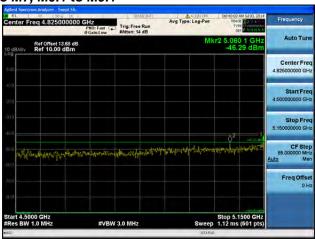
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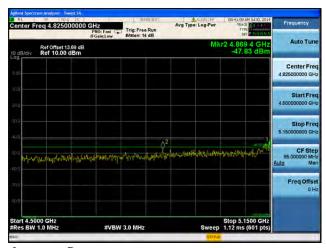
### Antenna A



Antenna C



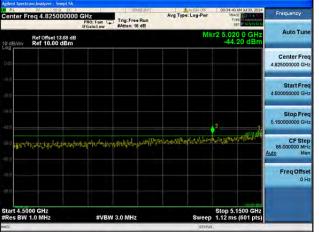
### Antenna B



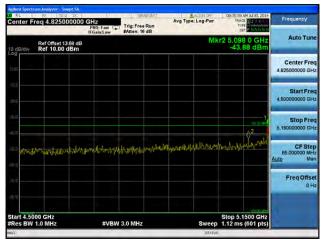
Antenna D



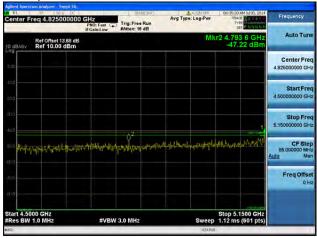
### Conducted Bandedge Peak, 5180 MHz, HT/VHT20, M8 to M15, M0.2 to M9.2

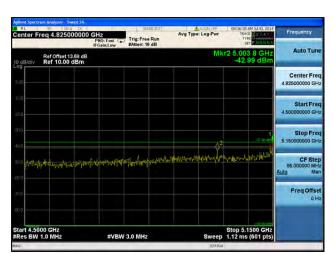


## Antenna A Antenna B



Antenna C Antenna D



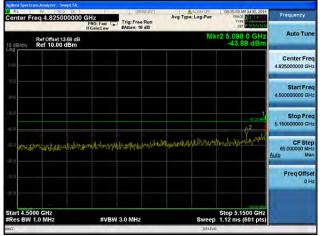




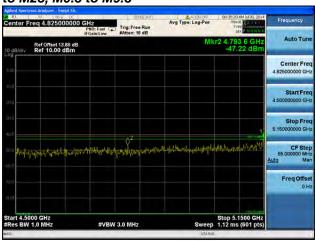
### Conducted Bandedge Peak, 5180 MHz, HT/VHT20, M16 to M23, M0.3 to M9.3



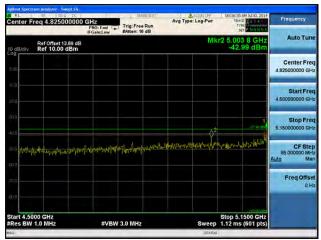
### Antenna A



Antenna C



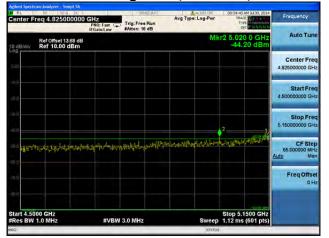
### Antenna B



Antenna D



### Conducted Bandedge Peak, 5180 MHz, HT/VHT20 Beam Forming, M0 to M7, M0.1 to M9.1





Antenna A

Antenna B