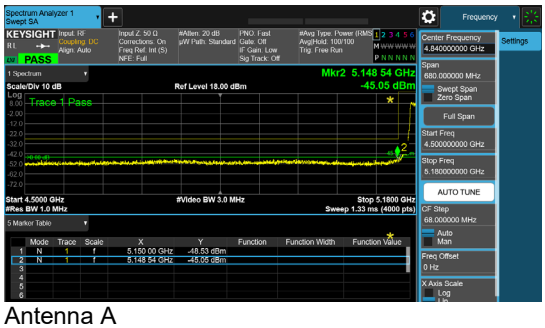
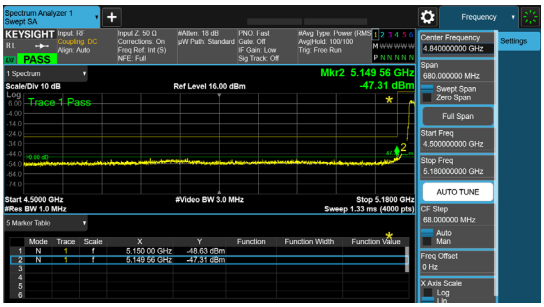
Data Screenshots – Antenna gain 13dBi Peak.

5180 MHz: HT/VHT20, M0 to M7

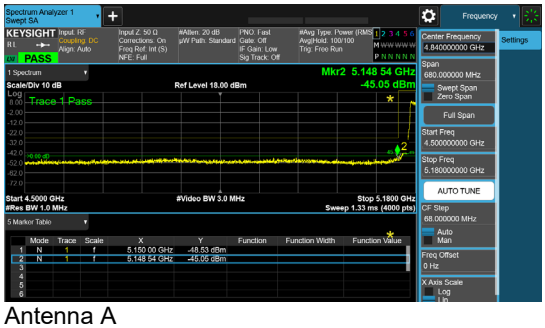


Antenna A

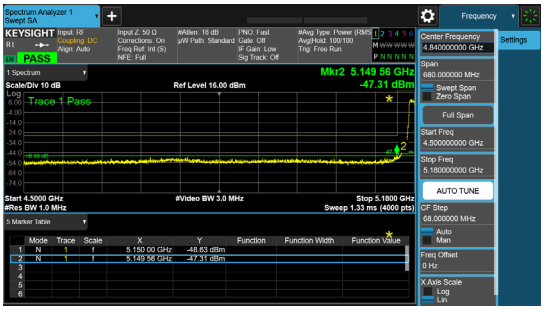


Antenna B

5180 MHz: HT/VHT20, M8 to M15

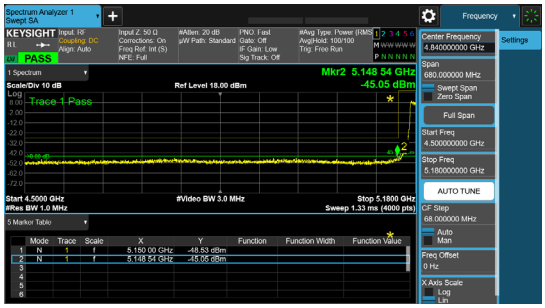


Antenna A

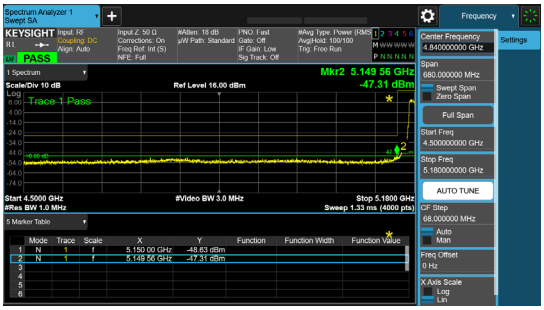


Antenna B

5180 MHz: HT/VHT20 Beam Forming, M0 to M7



Antenna A



Antenna B

Conducted Band Edge Average – Antenna gain 15dBi.

Frequency 5180 MHz

Mode	Tx Paths	Correlated Antenna Gain (dBi)	Tx 1 Band Edge Level (dBm)	Tx 2 Band Edge Level (dBm)	Duty Cycle (dB)	Total Tx Band Edge Level (dBm)	Limit (dB)	Margin (dB)
Non HT20, 6 to 54 Mbps	1	15	-56.9		0.26	-41.6	-41	0.39
Non HT20, 6 to 54 Mbps	2	15	-60.7	-59.5	0.26	-41.8	-41	0.54
Non HT20 Beam Forming, 6 to 54 Mbps	2	15	-60.7	-59.5	0.26	-41.8	-41	0.54
HT/VHT20, M0 to M7	1	15	-57.0		0.36	-41.6	-41	0.39
HT/VHT20, M0 to M7	**2**	**15**	**-60.0**	**-59.6**	**0.36**	**-41.4**	**-41**	**0.18**
HT/VHT20, M8 to M15	**2**	**15**	**-60.0**	**-59.6**	**0.36**	**-41.4**	**-41**	**0.18**
HT/VHT20 Beam Forming, M0 to M7	**2**	**15**	**-60.0**	**-59.6**	**0.36**	**-41.4**	**-41**	**0.18**
HT/VHT20 Beam Forming, M8 to M15	2	15	-60.0	-59.6	0.36	-41.4	-41	0.18
HT/VHT20 STBC, M8 to M15	2	15	-60.0	-59.6	0.36	-41.4	-41	0.18
HE20, M0 to M11 1ss	1	15	-57.2		0.28	-41.9	-41	0.67
HE20, M0 to M11 1ss	2	15	-61.0	-61.6	0.28	-43.0	-41	1.75
HE20, M0 to M11 2ss	2	15	-61.0	-61.6	0.28	-43.0	-41	1.75
HE20 Beam Forming, M0 to M11 1ss	2	15	-61.0	-61.6	0.28	-43.0	-41	1.75
HE20 Beam Forming, M0 to M11 2ss	2	15	-61.0	-61.6	0.28	-43.0	-41	1.75
HE20 STBC, M0 to M11 2ss	2	15	-61.0	-61.6	0.28	-43.0	-41	1.75

Frequency 5190 MHz

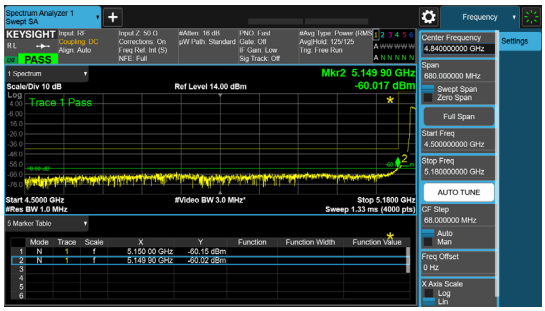
Mode	Tx Paths	Correlated Antenna Gain (dBi)	Tx 1 Band Edge Level (dBm)	Tx 2 Band Edge Level (dBm)	Duty Cycle (dB)	Total Tx Band Edge Level (dBm)	Limit (dB)	Margin (dB)
Non HT40, 6 to 54 Mbps	1	15	-59.0		0.17	-43.8	-41	2.58
Non HT40, 6 to 54 Mbps	2	15	-62.5	-62.6	0.17	-44.4	-41	3.12
HT/VHT40, M0 to M7	1	15	-59.1		0.3	-43.8	-41	2.55
HT/VHT40, M0 to M7	2	15	-60.6	-60.4	0.3	-42.2	-41	0.94
HT/VHT40, M8 to M15	2	15	-60.6	-60.4	0.3	-42.2	-41	0.94
HT/VHT40 Beam Forming, M0 to M7	2	15	-60.6	-60.4	0.3	-42.2	-41	0.94
HT/VHT40 Beam Forming, M8 to M15	2	15	-60.6	-60.4	0.3	-42.2	-41	0.94
HT/VHT40 STBC, M8 to M15	2	15	-60.6	-60.4	0.3	-42.2	-41	0.94
HE40, M0 to M11 1ss	1	15	-58.1		0.27	-42.8	-41	1.58
HE40, M0 to M11 1ss	2	15	-60.6	-61.1	0.27	-42.6	-41	1.31
HE40, M0 to M11 2ss	2	15	-60.6	-61.1	0.27	-42.6	-41	1.31
HE40 Beam Forming, M0 to M11 1ss	2	15	-60.6	-61.1	0.27	-42.6	-41	1.31
HE40 Beam Forming, M0 to M11 2ss	2	15	-60.6	-61.1	0.27	-42.6	-41	1.31
HE40 STBC, M0 to M11 2ss	2	15	-60.6	-61.1	0.27	-42.6	-41	1.31

Frequency 5210 MHz

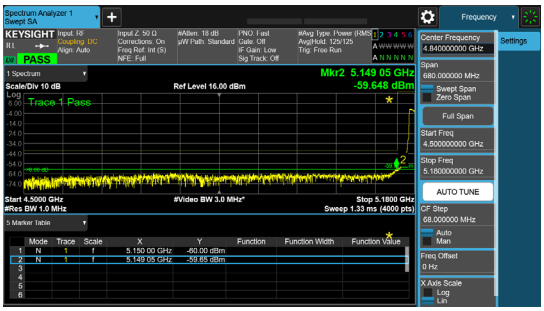
Mode	Tx Paths	Correlated Antenna Gain (dBi)	Tx 1 Band Edge Level (dBm)	Tx 2 Band Edge Level (dBm)	Duty Cycle (dB)	Total Tx Band Edge Level (dBm)	Limit (dB)	Margin (dB)
Non HT80, 6 to 54 Mbps	1	15	-56.9		0.38	-41.5	-41	0.27
Non HT80, 6 to 54 Mbps	2	15	-62.7	-62.2	0.38	-44.1	-41	2.8
VHT80, M0 to M11 1ss	1	15	-57.5		0.33	-42.2	-41	0.92
VHT80, M0 to M11 1ss	2	15	-59.9	-60.1	0.33	-41.7	-41	0.41
VHT80, M0 to M11 2ss	2	15	-59.9	-60.1	0.33	-41.7	-41	0.41
VHT80 Beam Forming, M0 to M11 1ss	2	15	-59.9	-60.1	0.33	-41.7	-41	0.41
VHT80 Beam Forming, M0 to M11 2ss	2	15	-59.9	-60.1	0.33	-41.7	-41	0.41
VHT80 STBC, M0 to M11 2ss	2	15	-59.9	-60.1	0.33	-41.7	-41	0.41
HE80, M0 to M11 1ss	1	15	-58.9		0.29	-43.6	-41	2.36
HE80, M0 to M11 1ss	2	15	-62.7	-62.8	0.29	-44.4	-41	3.2
HE80, M0 to M11 2ss	2	15	-62.7	-62.8	0.29	-44.4	-41	3.2
HE80 Beam Forming, M0 to M11 1ss	2	15	-62.7	-62.8	0.29	-44.4	-41	3.2
HE80 Beam Forming, M0 to M11 2ss	2	15	-62.7	-62.8	0.29	-44.4	-41	3.2
HE80 STBC, M0 to M11 2ss	2	15	-62.7	-62.8	0.29	-44.4	-41	3.2

Data Screenshots – Antenna gain 15dBi average.

5180 MHz: HT/VHT20, M0 to M7

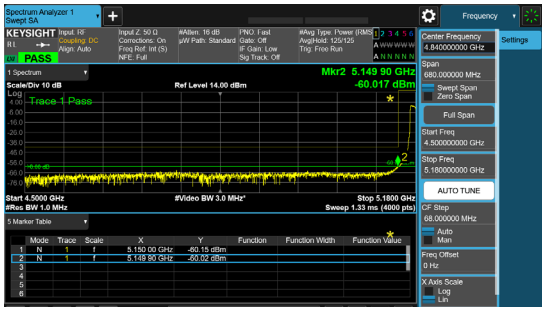


Antenna A

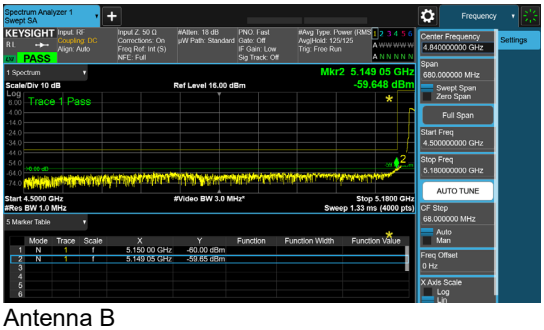


Antenna B

5180 MHz: HT/VHT20, M8 to M15

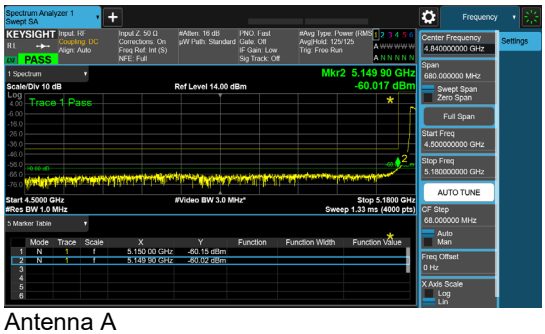


Antenna A

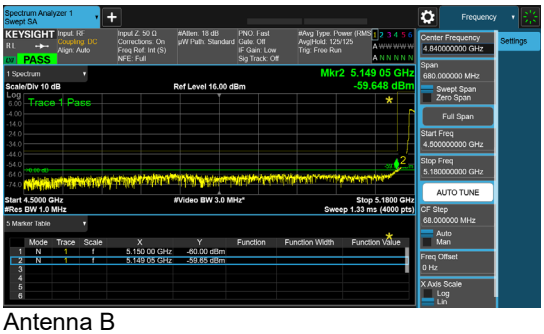


Antenna B

5180 MHz: HT/VHT20 Beam Forming, M0 to M7



Antenna A



Antenna B

Conducted Band Edge Peak – Antenna gain 15dBi.

Frequency 5180 MHz

Mode	Tx Paths	Correlated Antenna Gain (dBi)	Tx 1 Band Edge Level (dBm)	Tx 2 Band Edge Level (dBm)	Total Tx Band Edge Level (dBm)	Limit (dB)	Margin (dB)
Non HT20, 6 to 54 Mbps	1	15	-45.7		-30.4	-27	3.44
Non HT20, 6 to 54 Mbps	2	15	-46.4	-49.1	-29.3	-27	2.28
Non HT20 Beam Forming, 6 to 54 Mbps	2	15	-46.4	-49.1	-29.3	-27	2.28
HT/VHT20, M0 to M7	1	15	-45.2		-29.8	-27	2.84
HT/VHT20, M0 to M7	**2**	**15**	**-46.9**	**-47.7**	**-28.9**	**-27**	**1.91**
HT/VHT20, M8 to M15	**2**	**15**	**-46.9**	**-47.7**	**-28.9**	**-27**	**1.91**
HT/VHT20 Beam Forming, M0 to M7	**2**	**15**	**-46.9**	**-47.7**	**-28.9**	**-27**	**1.91**
HT/VHT20 Beam Forming, M8 to M15	2	15	-46.9	-47.7	-28.9	-27	1.91
HT/VHT20 STBC, M8 to M15	2	15	-46.9	-47.7	-28.9	-27	1.91
HE20, M0 to M11 1ss	1	15	-44.3		-29.0	-27	2.02
HE20, M0 to M11 1ss	2	15	-50.7	-50.2	-32.2	-27	5.15
HE20, M0 to M11 2ss	2	15	-50.7	-50.2	-32.2	-27	5.15
HE20 Beam Forming, M0 to M11 1ss	2	15	-50.7	-50.2	-32.2	-27	5.15
HE20 Beam Forming, M0 to M11 2ss	2	15	-50.7	-50.2	-32.2	-27	5.15
HE20 STBC, M0 to M11 2ss	2	15	-50.7	-50.2	-32.2	-27	5.15

Frequency 5190 MHz

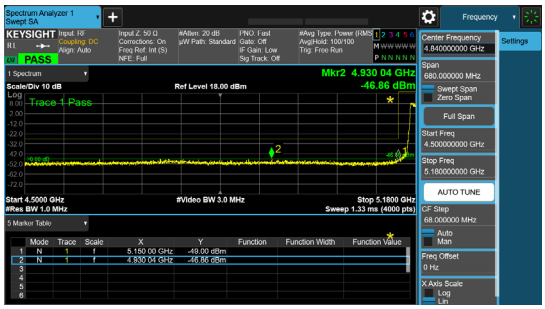
Mode	Tx Paths	Correlated Antenna Gain (dBi)	Tx 1 Band Edge Level (dBm)	Tx 2 Band Edge Level (dBm)	Total Tx Band Edge Level (dBm)	Limit (dB)	Margin (dB)
Non HT40, 6 to 54 Mbps	1	15	-47.9		-32.7	-27	5.73
Non HT40, 6 to 54 Mbps	2	15	-52.3	-50.8	-33.3	-27	6.31
HT/VHT40, M0 to M7	1	15	-48.5		-33.2	-27	6.2
HT/VHT40, M0 to M7	2	15	-50.2	-51.0	-32.3	-27	5.27
HT/VHT40, M8 to M15	2	15	-50.2	-51.0	-32.3	-27	5.27
HT/VHT40 Beam Forming, M0 to M7	2	15	-50.2	-51.0	-32.3	-27	5.27
HT/VHT40 Beam Forming, M8 to M15	2	15	-50.2	-51.0	-32.3	-27	5.27
HT/VHT40 STBC, M8 to M15	2	15	-50.2	-51.0	-32.3	-27	5.27
HE40, M0 to M11 1ss	1	15	-47.7		-32.4	-27	5.43
HE40, M0 to M11 1ss	2	15	-48.8	-49.7	-30.9	-27	3.94
HE40, M0 to M11 2ss	2	15	-48.8	-49.7	-30.9	-27	3.94
HE40 Beam Forming, M0 to M11 1ss	2	15	-48.8	-49.7	-30.9	-27	3.94
HE40 Beam Forming, M0 to M11 2ss	2	15	-48.8	-49.7	-30.9	-27	3.94
HE40 STBC, M0 to M11 2ss	2	15	-48.8	-49.7	-30.9	-27	3.94

Frequency 5210 MHz

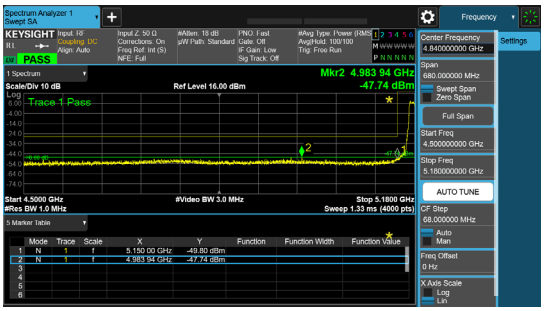
Mode	Tx Paths	Correlated Antenna Gain (dBi)	Tx 1 Band Edge Level (dBm)	Tx 2 Band Edge Level (dBm)	Total Tx Band Edge Level (dBm)	Limit (dB)	Margin (dB)
Non HT80, 6 to 54 Mbps	1	15	-46.3		-30.9	-27	3.92
Non HT80, 6 to 54 Mbps	2	15	-52.0	-50.3	-32.7	-27	5.67
VHT80, M0 to M11 1ss	1	15	-48.2		-32.9	-27	5.87
VHT80, M0 to M11 1ss	2	15	-48.7	-50.0	-31.0	-27	3.96
VHT80, M0 to M11 2ss	2	15	-48.7	-50.0	-31.0	-27	3.96
VHT80 Beam Forming, M0 to M11 1ss	2	15	-48.7	-50.0	-31.0	-27	3.96
VHT80 Beam Forming, M0 to M11 2ss	2	15	-48.7	-50.0	-31.0	-27	3.96
VHT80 STBC, M0 to M11 2ss	2	15	-48.7	-50.0	-31.0	-27	3.96
HE80, M0 to M11 1ss	1	15	-48.8		-33.5	-27	6.51
HE80, M0 to M11 1ss	2	15	-51.7	-52.4	-33.7	-27	6.73
HE80, M0 to M11 2ss	2	15	-51.7	-52.4	-33.7	-27	6.73
HE80 Beam Forming, M0 to M11 1ss	2	15	-51.7	-52.4	-33.7	-27	6.73
HE80 Beam Forming, M0 to M11 2ss	2	15	-51.7	-52.4	-33.7	-27	6.73
HE80 STBC, M0 to M11 2ss	2	15	-51.7	-52.4	-33.7	-27	6.73

Data Screenshots – Antenna gain 15dBi peak.

5180 MHz: HT/VHT20, M0 to M7

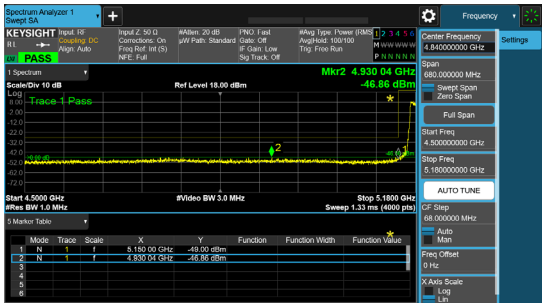


Antenna A

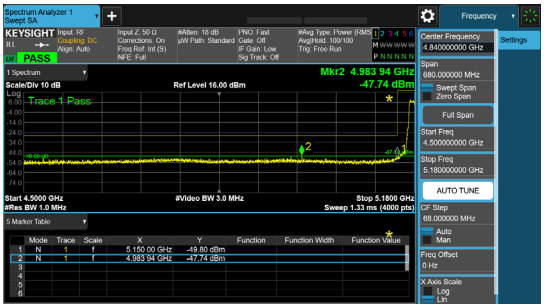


Antenna B

5180 MHz: HT/VHT20, M8 to M15

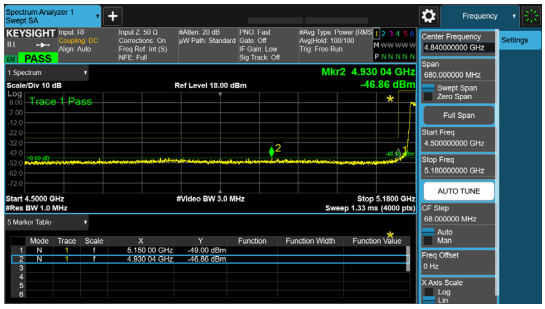


Antenna A

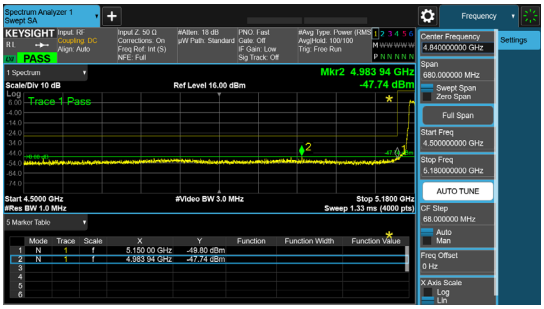


Antenna B

5180 MHz: HT/VHT20 Beam Forming, M0 to M7



Antenna A

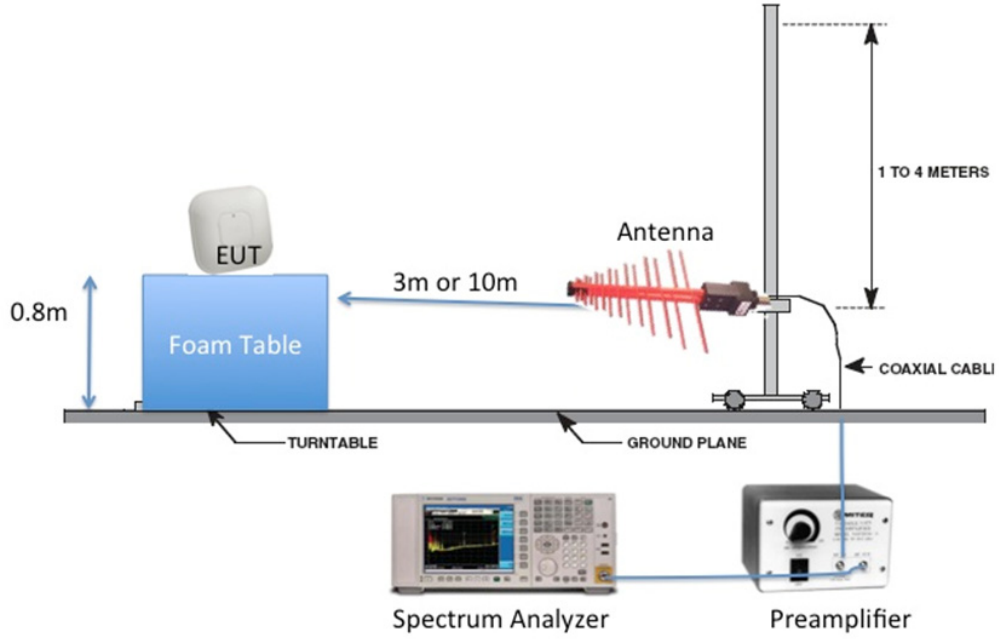


Antenna B

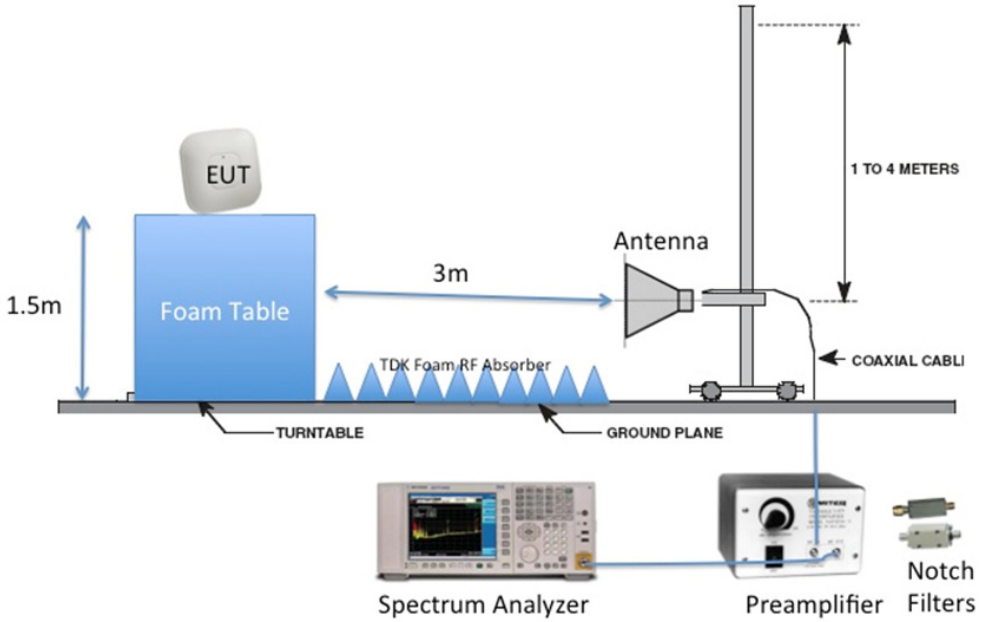
Appendix B: Emission Test Results

Testing Laboratory: Cisco Systems, Inc., 125 West Tasman Drive, San Jose, CA 95134, USA

Radiated Emission Setup Diagram-Below 1G



Radiated Emission Setup Diagram-Above 1G



B.1: Radiated Spurious Emissions

FCC 15.205 | 15.407 | LP0002 (2018-01-10) (3.6)

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)).

Radiated Spurious emissions results are covered in **EDCS # 23771100.**

B.2: Radiated Emissions 30MHz to 1GHz

FCC 15.209 | 15.205 | 15.407

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)) and RSS-Gen §8.9.

Ref. ANSI C63.10: 2013 section 6.5

Radiated Spurious emissions results are covered in **EDCS # 23771100.**

B.3: AC Conducted Emissions

FCC 15.207 | LP0002 (2020-07-01) (3.3)

Except when the requirements applicable to a given device state otherwise, for any radio apparatus equipped to operate from the public utility AC power supply, either directly or indirectly (such as with a battery charger), the radio frequency voltage of emissions conducted back onto the AC power lines in the frequency range of 0.15 MHz to 30 MHz shall not exceed the limits shown in the table in these sections. The more stringent limit applies at the frequency range boundaries.

Measurement Procedure
Accordance with ANSI C63.10:2013 section 6.2

Section 1 : Test Case Details

Test Case ID: 5088 **Test Type: Conducted Emissions**			
Product Standard	**Port Type**	**Test Details**	**Comments**
15.207	DC (Indoor)	Start Freq: 0.15MHz - Stop Freq: 30MHz Power: DC Range : 150KHz to 30MHz. Class: N/A Measure: Voltage(dBuV) Detector(s): Quasi-Peak and Average 150kHz - 500kHz - 89dBuV (QP) 76(AV) 500kHz - 30MHz - 83dBuV (QP) 70(AV)	ANSI C63.4.
Overall Result	Pass		
Deviation	NA		

Section 2:

Subtest Details

Subtest Number: 5088-1 Subtest Date : 5/31/2023		
Engineer	Evelyn Preza	
Lab Information	Bldg. P - Shield Room 1	
Subtest Results		
Subtest Title	5088-1	
Port Reference	[J] DC Input	
Measured Voltage	48.1VDC	
Transducer	LISN	
Subtest Result	Pass	
Comments on the above Test Results	EUT powered by 48VDC. DC Input unit is under test. Test results verified by Jose Huamani.	
Environmental Conditions		
Temperature: (59 to 95)ºF	70.6	
Humidity: (10 to 75)%	60	
Test Result File	**Start Freq[MHz]**	**Stop Freq[MHz]**
plce_48vdc_return [26-5-2023 10.23]	.15	30
plce_48vdc_supply [26-5-2023 10.23]	.15	30

Section 3:

Operation Mode

Mode#	Title	Description
1	Formal Test	EUT is set to auto-boot with Linux version 4.4.60 (root@137067b22dab) (gcc version 5.2.0 (OpenWrt GCC 5.2.0 c17576669+r49254)) #41 SMP PREEMPT Tue Oct 25 15:03:29 UTC 2022

Section 4:

Hardware Configuration

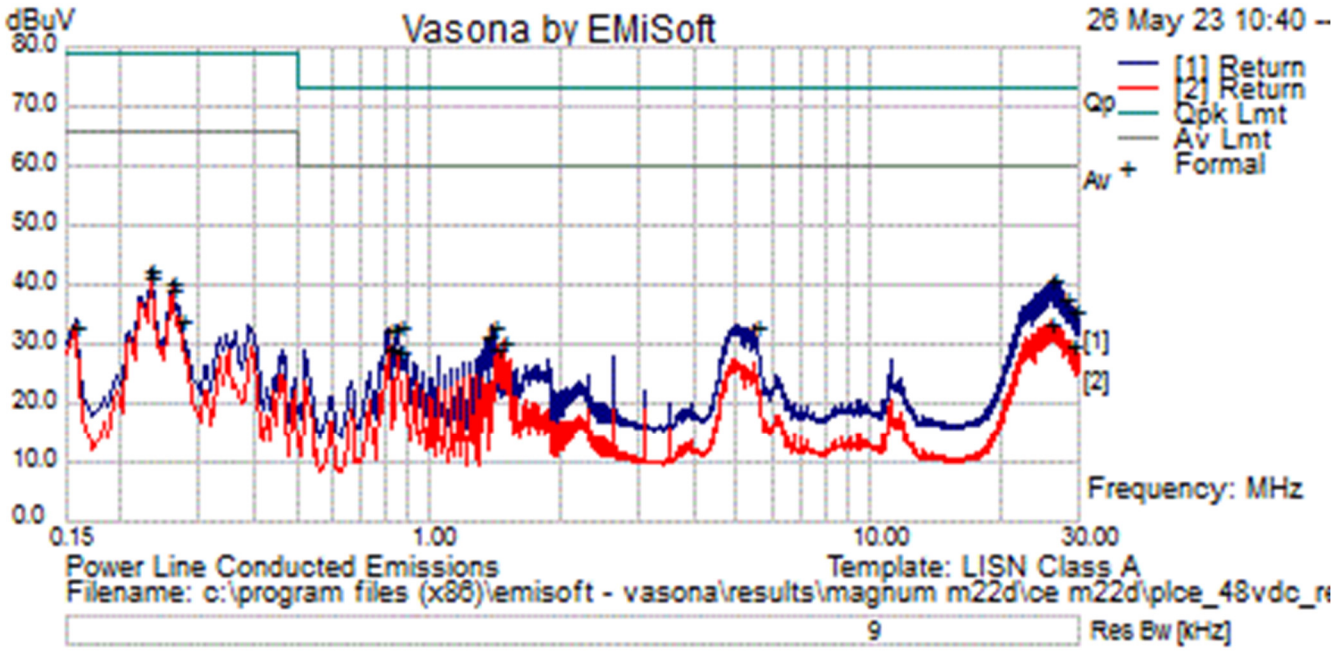
Config#	Title	Description
1	Mode-1 (DC Generator without M12)	Configuration 1: M22D powered up through DC Generator, without M12

Section 5:

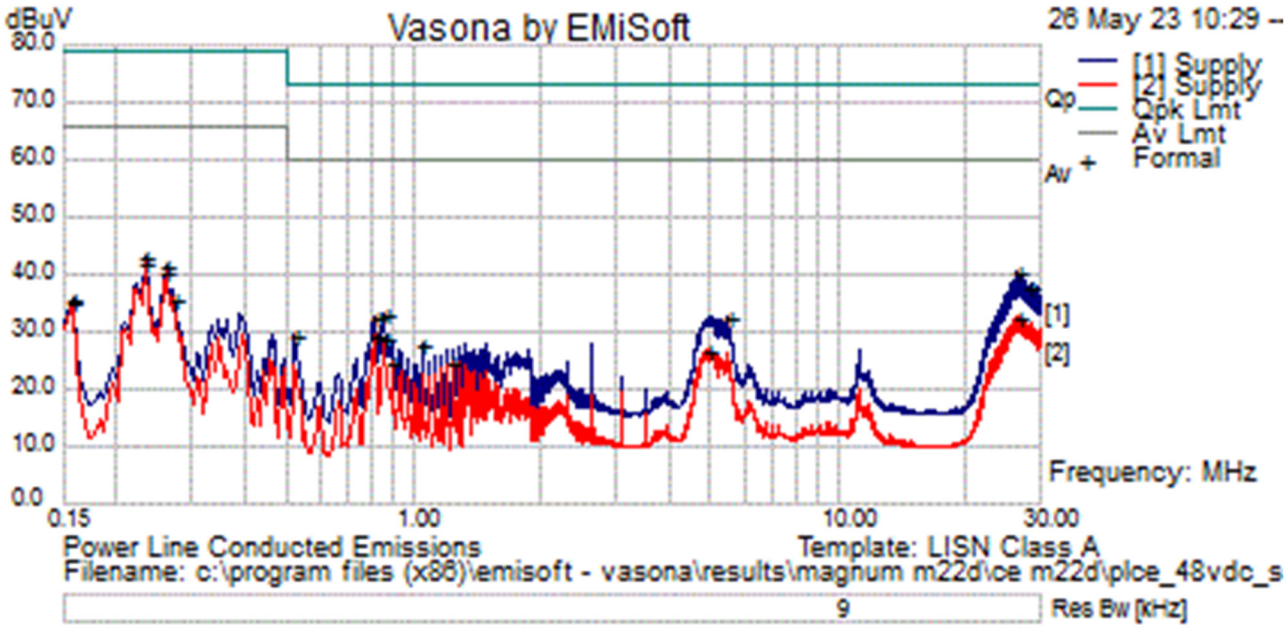
Systems Details

System Number	Description	Samples	System under Test
5	IXIA Traffic Generator (Support)	1, 3, 2	No
3	Support: 2.4GHz & 5GHz Clients, Switch, and Laptop	4, 5, 8, 9	No
1	EUT - Configuration 1: M22D powered up through DC Generator, without M12	2	Yes

Section 6: Test Results Details



Formal Data											
No	**Frequency MHz**	**Raw dBuV**	**Cable Loss**	**Factors dB**	**Level dBuV**	**Measurement Type**	**Line**	**Limit dBuV**	**Margin dB**	**Pass /Fail**	**Comments**
1	.233	21.3	19.9	.0	41.2	Average	Return	66.0	-24.8	Pass	
2	25.865	12.6	20.5	.3	33.5	Average	Return	60.0	-26.5	Pass	
3	.260	19.4	19.9	.0	39.3	Average	Return	66.0	-26.7	Pass	
4	1.478	10.4	19.9	.0	30.3	Average	Return	60.0	-29.7	Pass	
5	28.646	8.6	20.6	.4	29.6	Average	Return	60.0	-30.4	Pass	
6	1.433	9.4	19.9	.0	29.3	Average	Return	60.0	-30.7	Pass	
7	.814	9.4	19.9	.0	29.3	Average	Return	60.0	-30.7	Pass	
8	.852	9.1	19.9	.0	29.0	Average	Return	60.0	-31.0	Pass	
9	.272	14.4	19.8	.0	34.3	Average	Return	66.0	-31.7	Pass	
10	26.140	20.2	20.5	.3	41.1	Quasi Peak	Return	73.0	-31.9	Pass	
11	.157	12.3	20.9	.1	33.3	Average	Return	66.0	-32.7	Pass	
12	27.825	17.0	20.6	.4	37.9	Quasi Peak	Return	73.0	-35.1	Pass	
13	.233	22.6	19.9	.0	42.5	Quasi Peak	Return	79.0	-36.5	Pass	
14	29.528	14.5	20.6	.4	35.5	Quasi Peak	Return	73.0	-37.5	Pass	
15	.260	20.6	19.9	.0	40.5	Quasi Peak	Return	79.0	-38.5	Pass	
16	1.392	13.3	19.9	.0	33.2	Quasi Peak	Return	73.0	-39.8	Pass	
17	.852	13.3	19.9	.0	33.2	Quasi Peak	Return	73.0	-39.8	Pass	
18	5.498	13.1	20.0	.1	33.1	Quasi Peak	Return	73.0	-39.9	Pass	
19	.814	12.7	19.9	.0	32.6	Quasi Peak	Return	73.0	-40.4	Pass	
20	1.352	11.3	19.9	.0	31.2	Quasi Peak	Return	73.0	-41.8	Pass	



Formal Data

No	Frequency MHz	Raw dBuV	Cable Loss	Factors dB	Level dBuV	Measurement Type	Line	Limit dBuV	Margin dB	Pass /Fail	Comments
1	.233	22.2	19.9	.0	42.1	Average	Supply	66.0	-23.9	Pass	
2	.260	20.6	19.9	.0	40.4	Average	Supply	66.0	-25.6	Pass	
3	26.529	11.6	20.5	.3	32.5	Average	Supply	60.0	-27.5	Pass	
4	.272	16.0	19.8	.0	35.9	Average	Supply	66.0	-30.1	Pass	
5	.157	14.3	20.9	.1	35.2	Average	Supply	66.0	-30.8	Pass	
6	.814	9.2	19.9	.0	29.1	Average	Supply	60.0	-30.9	Pass	
7	.852	9.1	19.9	.0	29.0	Average	Supply	60.0	-31.0	Pass	
8	26.507	19.5	20.5	.3	40.4	Quasi Peak	Supply	73.0	-32.6	Pass	
9	4.954	6.8	20.0	.1	26.9	Average	Supply	60.0	-33.1	Pass	
10	28.460	16.9	20.6	.4	37.9	Quasi Peak	Supply	73.0	-35.1	Pass	
11	.890	4.7	19.9	.0	24.6	Average	Supply	60.0	-35.4	Pass	
12	1.239	4.5	19.9	.0	24.4	Average	Supply	60.0	-35.6	Pass	
13	.233	23.1	19.9	.0	43.0	Quasi Peak	Supply	79.0	-36.0	Pass	
14	.260	21.4	19.9	.0	41.3	Quasi Peak	Supply	79.0	-37.7	Pass	

15	.852	13.3	19.9	.0	33.2	Quasi Peak	Supply	73.0	-39.8	Pass	
16	5.498	12.7	20.0	.1	32.8	Quasi Peak	Supply	73.0	-40.2	Pass	
17	.814	12.7	19.9	.0	32.6	Quasi Peak	Supply	73.0	-40.4	Pass	
18	.157	14.9	20.9	.1	35.9	Quasi Peak	Supply	79.0	-43.1	Pass	
19	.524	9.6	19.9	.0	29.5	Quasi Peak	Supply	73.0	-43.5	Pass	
20	1.048	7.9	19.9	.0	27.8	Quasi Peak	Supply	73.0	-45.2	Pass	

Section 7: Questions & Answers

The category of cable simulated by the AAN, where emissions from wired network ports are measured using an AAN. See Table EN55032 C.2	N/A

Appendix C: List of Test Equipment Used to perform the test

Equipment #	Manufacturer/ Model	Description	Last Cal	Next Due	Test Item
Test Equipment used for conducted tests – Rack 11					
58721	Cisco/Automation Test Insertion Loss	Rack 11	Verify Before Use	Verify Before Use	A.1-A.6
58785	Keysight (Agilent/HP)/ N9030B-550 OPT LNP EP0	PXA Signal Analyzer, 2Hz-50GHz with Options LNP and EP0	20th July 2022	20th July 2023	A.1-A.6
58803	NATIONAL INSTRUMENTS / PXIe-1085	CHASSIS	Cal Not Required	Cal Not Required	A.1-A.6
58787	NATIONAL INSTRUMENTS / PXIe-8840	Up to 2.6 GHz Quad-Core PXI Express Controller	Cal Not Required	Cal Not Required	A.1-A.6
58788	NATIONAL INSTRUMENTS / PXI-2796	40 GHz Dual 6x1 Multiplexer (SP6T)	Verify Before Use	Verify Before Use	A.1-A.6
58789	NATIONAL INSTRUMENTS / PXI-2796	40 GHz Dual 6x1 Multiplexer (SP6T)	Verify Before Use	Verify Before Use	A.1-A.6
58786	NATIONAL INSTRUMENTS / PXI-2799	Switch 1x1	Verify Before Use	Verify Before Use	A.1-A.6
54235	PASTERNACK/ PE5019-1	Torque Wrench	23rd March 2023	23rd March 2024	A.1-A.6
58256	COMET/ T7611-4	WEB SENSOR FOR REMOTE THERMOMETER HYGROMETER	2nd Feb 2023	2nd Feb 2024	A.1-A.6
56122	PASTERNACK/PE6072	SMA 50 Ohm Termination	1st Sep 2022	1st Sep 2023	A.1-A.6
56127	PASTERNACK/PE6072	SMA 50 Ohm Termination	1st Sep 2022	1st Sep 2023	A.1-A.6

Test Equipment used for AC line Conducted emissions.

Cis-Id	Manufacturer	Model	Description	Calibrated Date	Calibration Due Date
004003	Fischer Custom Communications	FCC-801-M2-32A	CDN, 2-LINE, 32A	11/30/2022	11/30/2023
008496	Fischer Custom Communications	FCC-450B-2.4-N	Instrumentation Limiter	2/14/2023	2/14/2024
018960	York	CNE V	Comparison Noise Emitter, 30 - 1000MHz	NA	NA
045435	Hefley	PAT 50A	EFT Attenuator	7/22/2022	7/22/2023
046002	Fischer Custom Communications	F-090527-1009-1	Line Impedance Stabilization Network	12/20/2022	12/20/2023
046003	Fischer Custom Communications	F-090527-1009-2	LISN Adapter	12/19/2022	12/19/2023
049534	TTE	H785-150K-50-21378	150kHz HI Pass Filter	2/13/2023	2/13/2024
058276	ROHDE & SCHWARZ	ESR3	EMI Receiver	7/29/2022	7/29/2023
058758	Coleman	RG-223	RF Coaxial Cable to 1GHz, 7.6m	8/2/2022	8/2/2023

Appendix D: Abbreviation Key and Definitions

The following table defines abbreviations used within this test report.

Abbreviation	Description	Abbreviation	Description
EMC	Electro Magnetic Compatibility	°F	Degrees Fahrenheit
EMI	Electro Magnetic Interference	°C	Degrees Celsius
EUT	Equipment Under Test	Temp	Temperature
ITE	Information Technology Equipment	S/N	Serial Number
TAP	Test Assessment Schedule	Qty	Quantity
ESD	Electro Static Discharge	emf	Electromotive force
EFT	Electric Fast Transient	RMS	Root mean square
EDCS	Engineering Document Control System	Qp	Quasi Peak
Config	Configuration	Av	Average
CIS#	Cisco Number (unique identification number for Cisco test equipment)	Pk	Peak
Cal	Calibration	kHz	Kilohertz ($1x10^3$)
EN	European Norm	MHz	MegaHertz ($1x10^6$)
IEC	International Electro technical Commission	GHz	Gigahertz ($1x10^9$)
CISPR	International Special Committee on Radio Interference	H	Horizontal
CDN	Coupling/Decoupling Network	V	Vertical
LISN	Line Impedance Stabilization Network	dB	decibel
PE	Protective Earth	V	Volt
GND	Ground	kV	Kilovolt ($1x10^3$)
L1	Line 1	µV	Microvolt ($1x10^{-6}$)
L2	Line2	A	Amp
L3	Line 3	µA	Micro Amp ($1x10^{-6}$)
DC	Direct Current	mS	Milli Second ($1x10^{-3}$)
RAW	Uncorrected measurement value, as indicated by the measuring device	µS	Micro Second ($1x10^{-6}$)
RF	Radio Frequency	µS	Micro Second ($1x10^{-6}$)
SLCE	Signal Line Conducted Emissions	m	Meter
Meas dist	Measurement distance	Spec dist	Specification distance
N/A or NA	Not Applicable	SL	Signal Line (or Telecom Line)
P	Power Line	L	Live Line
N	Neutral Line	R	Return
S	Supply	AC	Alternating Current

Appendix E: Photographs of Test Setups

EUT Photos have been omitted from this test report. Photos can be found in the supplementary exhibit included in the submission and EDCS# 24259624.

Appendix F: Software Used to Perform Testing

Cisco Internal LabView Radio Test Automation Software:

RF Automation Main versions: 208, 218
RF Domain Report Generation - version 3

Appendix G: Test Procedures

Measurements were made in accordance with:

- LP0002 (2020-07-01)
- KDB Publication No. 789033 - D02 General UNII Test Procedures New Rules v02r01
- KDB Publication No. 662911 - MIMO
- ANSI C63.4 2014 Unintentional Radiators
- ANSI C63.10 2013 Intentional Radiators

Test procedures are summarized below:

FCC 5GHz Test Procedures	EDCS # 1445048
FCC 5GHz RSE Test Procedures	EDCS # 1511600

Appendix H: Scope of Accreditation (A2LA certificate number 1178-01)

The scope of accreditation of Cisco Systems, Inc. can be found on the A2LA web page at:

http://www.a2la.org/scopepdf/1178-01.pdf

Appendix I: Test Assessment Plan

Compliance Test Plan (Excel) EDCS# 23771099
Target Power Tables EDCS# 23074232

Appendix J: Worst Case Justification

N/A

End