TESTREPORT

Applicant Name :	Crestron Electronics Inc
Address :	15 Volvo Drive, Rockleigh, New Jersey, 07647, USA
Report Number :	SZNS220923-43608E-RF-00B
FCC ID:	EROAM-TX3-200

Test Standard (s)

FCC PART 15.407

Sample Description

Product Type:	WIRELESS MEDIA TRANSMITTER
Model No.:	M202106002
Trade Mark:	CRESTRON
Date Received:	2022/09/23
Report Date:	2022/12/08

Test Result:	Pass*

* In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:

Andy Yu
EMC Engineer

Approved By:

Candy Li
EMC Engineer

Note: This report may contain data that are not covered by the A2LA accreditation and are marked with an asterisk "★ ".
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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Frequency Range	5G Wi-Fi: 5150-5250MHz; 5250-5350MHz; 5470-5725MHz; 5725-5850MHz
Mode	802.11a/n20/n40/ac20/ac40/ac80/ ax20/ax40/ax80
Maximum Conducted Average Ouput Power	5150-5250 MHz: 15.93dBm 5250-5350MHz: 15.57dBm 5470-5725MHz: 17.98dBm 5725-5850 MHz: 15.13dBm
Modulation Technique	OFDM,OFDMA
Antenna Specification*	3.5dBi
Voltage Range	DC 24V from adapter or 48 from POE or DC 5V from Type-C port
Sample serial number	SZNS220923-43608E-RF-S1 for Conducted and Radiated Emissions SZNS220923-43608E-RF-S2 for RF Conducted Test (Assigned by ATC)
Sample/EUT Status	Good condition

Objective

This test report is in accordance with Part 2-Subpart J, Part 15-Subparts A and E of the Federal Communication Commissions rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart E, section 15.203, 15.205, 15.207, 15.209 and 15.407 rules.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices. And KDB789033 D02 General U-NII Test Procedures New Rules v02r01.

All emissions measurement was performed at Shenzhen Accurate Technology Co., Ltd. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Each test item follows test standards and with no deviation.

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		5%
RF output power, conducted		0.73dB
Unwanted Emission, conducted		1.6dB
AC Power Lines Conducted Emissions		2.72dB
Emissions, Radiated	30MHz - 1GHz	4.28dB
	1GHz- 18GHz	4.98dB
	18GHz- 26.5GHz	5.06dB
	26.5GHz- 40GHz	4.72dB
Temperature		1℃
Humidity		6%
Supply voltages		0.4%

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Test Facility

The test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China.

The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No.: 708358, the FCC Designation No.: CN1189. Accredited by American Association for Laboratory Accreditation (A2LA) The Certificate Number is 429 7.01.

Listed by Innovation, Science and Economic Development Canada (ISEDC), the Registration Number is 5077A.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

For 5150-5250MHz Band, 7 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220
38	5190	46	5230
40	5200	48	5240
42	5210	/	/

For 802.11a, 802.11n20/ac20/ax20 mode: channel 36, 40, 48 were tested; For 802.11n40/ac40/ax40 mode: channel 38, 46 were tested. For 802.11ac80/ax80 mode, channel 42 was tested.

For 5250-5350MHz Band, 7 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	60	5300
54	5270	62	5310
56	5280	64	5320
58	5290	/	/

For 802.11a, 802.11n20/ac20/ax20 mode: channel 52, 56, 64 were tested; For 802.11n40/ac40/ax40 mode: channel 54, 62 were tested. For 802.11ac80/ax80 mode, channel 58 was tested.

For 5470-5725MHz Band, 18 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	120	5600
102	5510	122	5610
104	5520	124	5620
106	5530	126	5630
108	5540	128	5640
110	5550	132	5660
112	5560	134	5670
116	5580	136	5680
118	5590	140	5700

For 802.11a, 802.11n20/ac20/ax20 mode: channel 100, 116, 140 were tested; For 802.11n40/ac40/ax40 mode: channel 102, 110, 134 were tested. For 802.11ac80/ax80 mode, channel 106, 122 was tested.

For 5725-5850MHz Band, 8 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	157	5785
151	5755	159	5795
153	5765	161	5805
155	5775	165	5825

For 802.11a, 802.11n20/ac20/ax20 mode: channel 149, 157, 165 were tested; For 802.11n40/ac40/ax40 mode: channel 151, 159 were tested. For 802.11ac80/ax80 mode, channel 155 was tested.

EUT Exercise Software

CMD command was used. The software and power level was provided by the manufacturer.

The worst case was performed under:

U-NII	Mode	Frequency (MHz)	Data Rate	Power Level*
5150 – 5250MHz	802.11 a	5180	6Mbps	default
		5200	6Mbps	default
		5240	6Mbps	default
	802.11 n20	5180	MCS0	default
		5200	MCS0	default
		5240	MCS0	default
	802.11 n40	5190	MCS0	11
		5230	MCS0	11
	802.11 ac20	5180	MCS0	default
		5200	MCS0	default
		5240	MCS0	default
	802.11 ac40	5190	MCS0	12
		5230	MCS0	12
	802.11 ac80	5210	MCS0	11

U-NII	Mode	RU Size	RU Index*	Power Level*		
				Low channel	Middle channel	High channel
5150 – 5250MHz	802.11 ax20	26	0	8	8	8
		52	37	8	8	8
		106	53	8	8	8
		242	61	default	default	default
	802.11 ax40	26	0	8	/	8
		52	37	8	/	8
		106	53	8	/	8
		242	61	8	/	8
		484	65	11	/	11
	802.11 ax80	26	0	/	8	/
		52	37	/	8	/
		106	53	/	8	/
		242	61	/	8	/
		484	65	/	8	/
		996	67	/	11	/

U-NII	Mode	Frequency (MHz)	Data Rate	Power Level*
5250 – 5350MHz	802.11 a	5260	6Mbps	default
		5280	6Mbps	default
		5320	6Mbps	default
	802.11 n20	5260	MCS0	default
		5280	MCS0	default
		5320	MCS0	default
	802.11 n40	5270	MCS0	11
		5310	MCS0	11
	802.11 ac20	5260	MCS0	default
		5280	MCS0	default
		5320	MCS0	default
	802.11 ac40	5270	MCS0	default
		5310	MCS0	default
	802.11 ac80	5290	MCS0	12

U-NII	Mode	RU Size	RU Index*	Power Level*		
				Low channel	Middle channel	High channel
5250 – 5350MHz	802.11 ax20	26	0	8	8	8
		52	37	8	8	8
		106	53	8	8	8
		242	61	default	default	default
	802.11 ax40	26	0	8	/	8
		52	37	8	/	8
		106	53	8	/	8
		242	61	8	/	8
		484	65	default	/	default
	802.11 ax80	26	0	/	8	/
		52	37	/	8	/
		106	53	/	8	/
		242	61	/	8	/
		484	65	/	8	/
		996	67	/	12	/

U-NII	Mode	Frequency (MHz)	Data Rate set	Power Level*
5470 – 5725MHz	802.11 a	5500	6Mbps	default
		5580	6Mbps	default
		5700	6Mbps	default
	802.11 n20	5500	MCS0	default
		5580	MCS0	default
		5700	MCS0	default
	802.11 n40	5510	MCS0	10
		5550	MCS0	10
		5670	MCS0	10
	802.11 ac20	5500	MCS0	default
		5580	MCS0	default
		5700	MCS0	default
	802.11 ac40	5510	MCS0	9
		5550	MCS0	9
		5670	MCS0	9
	802.11 ac80	5530	MCS0	9
		5610	MCS0	9

U-NII	Mode	RU Size	RU Index*	Power Level*		
				Low channel	Middle channel	High channel
5470 – 5725MHz	802.11 ax20	26	0	8	8	8
		52	37	8	8	8
		106	53	8	8	8
		242	61	default	default	default
	802.11 ax40	26	0	8	8	8
		52	37	8	8	8
		106	53	8	8	8
		242	61	8	8	8
		484	65	9	9	9
	802.11 ax80	26	0	8	/	8
		52	37	8	/	8
		106	53	8	/	8
		242	61	8	/	8
		484	65	8	/	8
		996	67	9	/	9

U-NII	Mode	Frequency (MHz)	Data Rate	Power Level*
5725 – 5850MHz	802.11 a	5745	6Mbps	default
		5785	6Mbps	default
		5825	6Mbps	default
	802.11 n20	5745	MCS0	default
		5785	MCS0	default
		5825	MCS0	default
	802.11 n40	5755	MCS0	default
		5795	MCS0	default
	802.11 ac20	5745	MCS0	default
		5785	MCS0	default
		5825	MCS0	default
	802.11 ac40	5755	MCS0	default
		5795	MCS0	default
	802.11 ac80	5775	MCS0	default

U-NII	Mode	RU Size	RU Index*	Power Level*		
				Low channel	Middle channel	High channel
5725 – 5850MHz	802.11 ax20	26	0	8	8	8
		52	37	8	8	8
		106	53	8	8	8
		242	61	default	default	default
	802.11 ax40	26	0	8	/	8
		52	37	8	/	8
		106	53	8	/	8
		242	61	8	/	8
		484	65	default	/	default
	802.11 ax80	26	0	/	8	/
		52	37	/	8	/
		106	53	/	8	/
		242	61	/	8	/
		484	65	/	8	/
		996	67	/	default	/

The worse-case data rates are determined to be as above for each mode based upon investigations by measuring the output power and PSD across all data rates, bandwidths and modulations.

EUT have two antennas, the 802.11a mode only support SISO transmit, the 802.11n/ac/ax mode support SISO/MIMO transmit. For 802.11n/ac/ax mode, according pre-scan, the worst case MIMO mode was selected to test and record in report.

The two antennas have same power setting.

Duty cycle

Test Result: Pass. Please refer to the Appendix.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
DELL	Note Book	XXJL-2	Unknown
HUAWEI	Router	WS5100	A4933FEF1D01
Unknown	U disk	Unknown	Unknown
GOSPELL	POE	G0720-480-050	200200019
CRESTRON	Adapter	HU10600-16024	344329
Grandstream	IP Phone	GXV 3450	Unknown
TECNO	Adapter1	U180TSA	Unknown

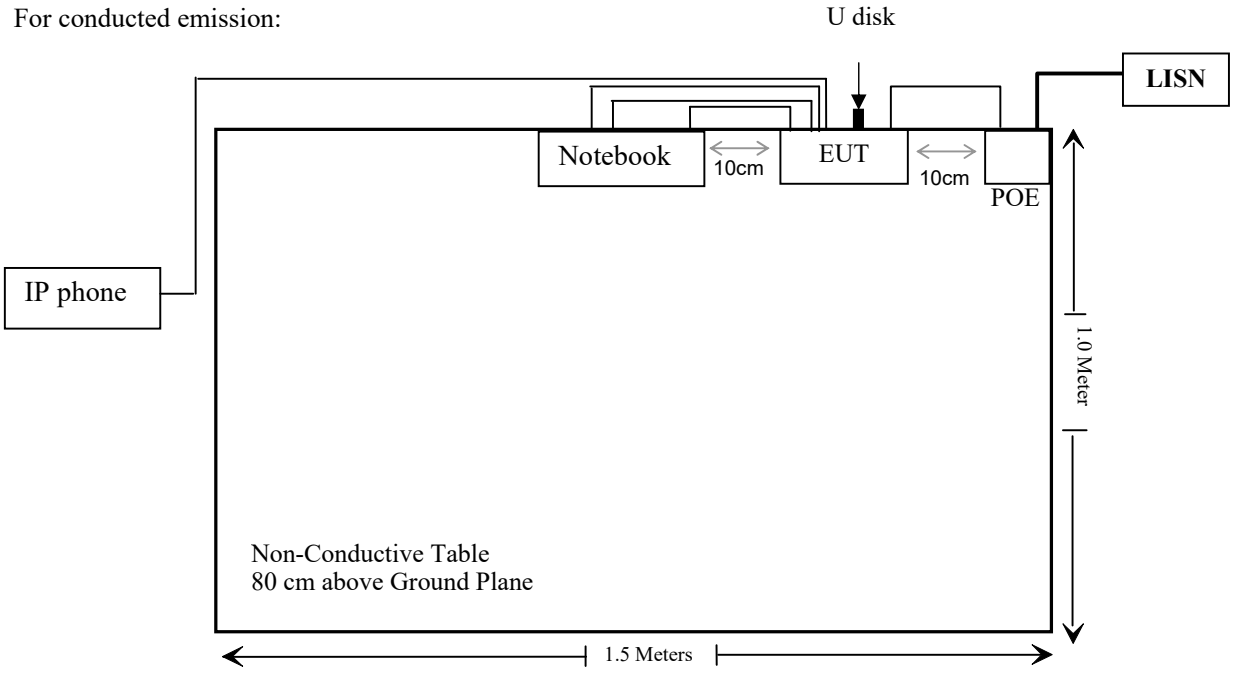
External I/O Cable

Cable Description	Length (m)	From/Port	To
Unshielded detachable AC cable	1.5	POE/adapter	LISN
Un-shielded detachable RJ45 cable	1.5	POE	EUT
Un-shielded detachable RJ45 cable	8.0	EUT	Router
Un-shielded detachable HDMI cable	1.5	EUT	NoteBook
Un-shielded detachable RJ45 cable	8.0	IP Phone	EUT
Un-shielded Un-detachable DC cable	2.5	Adapter	EUT
Un-shielded Un-detachable USB cable*2	2.5	EUT	NoteBook
Un-shielded Un-detachable USB cable	2.5	EUT	Adapter1

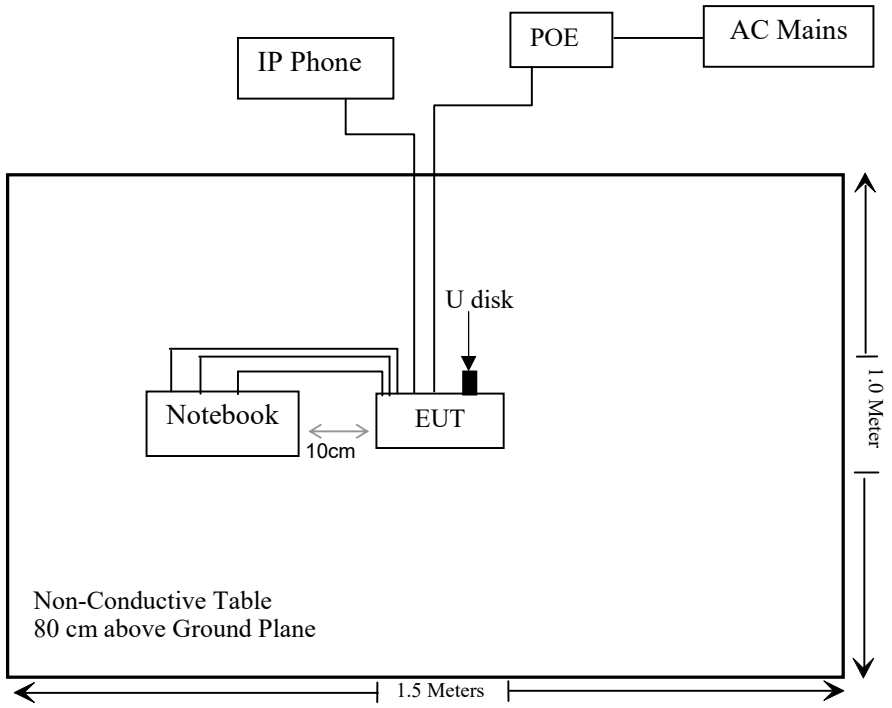
Block Diagram of Test Setup

Powered by POE:

For conducted emission:

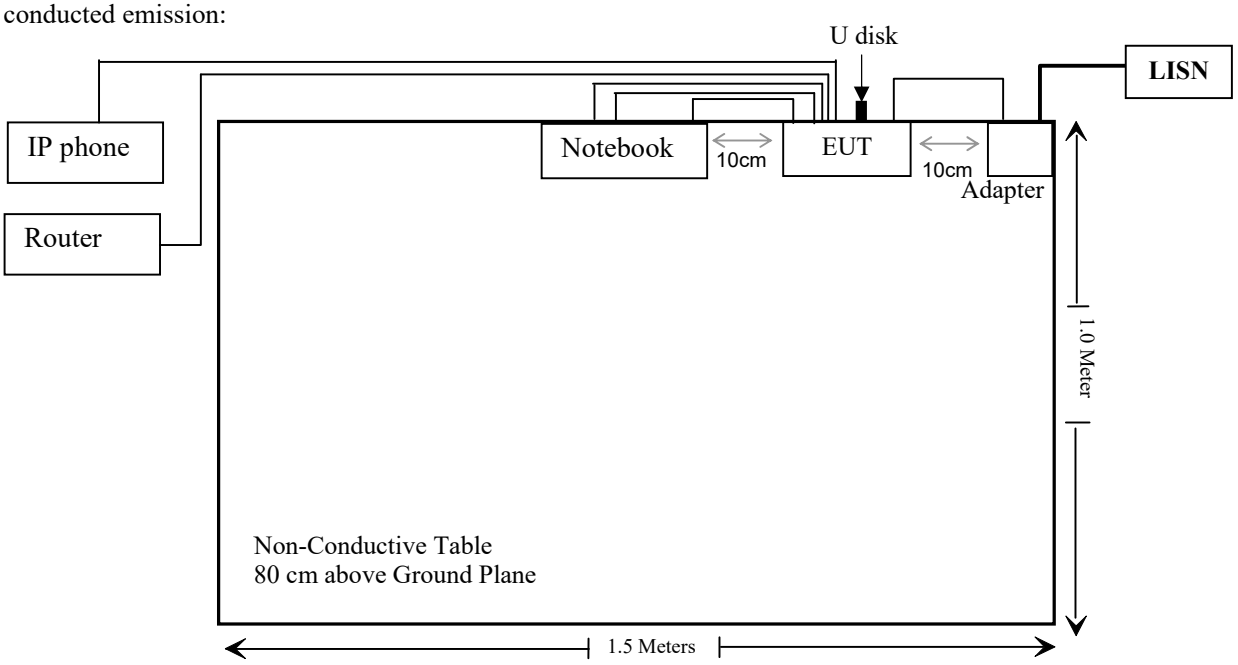


For radiated emission:

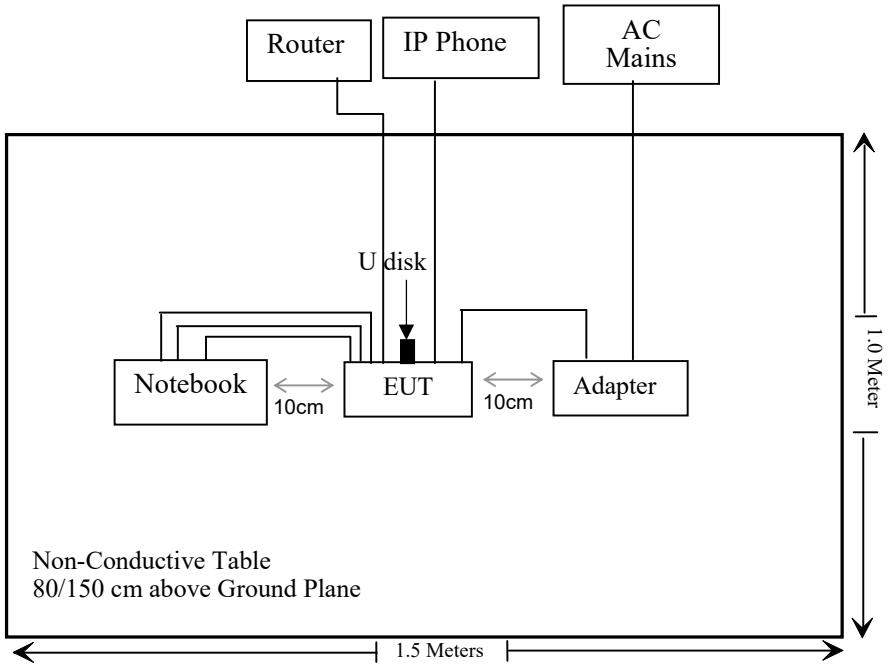


Powered by adapter:

For conducted emission:

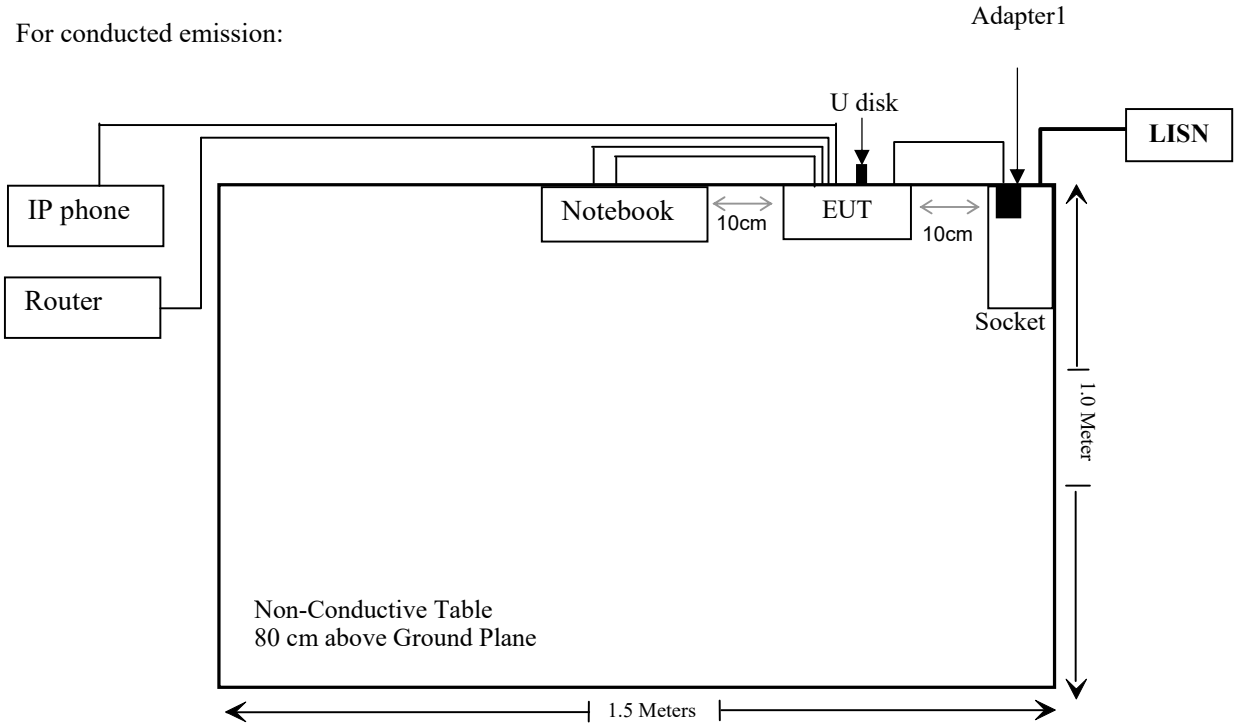


For radiated emission:

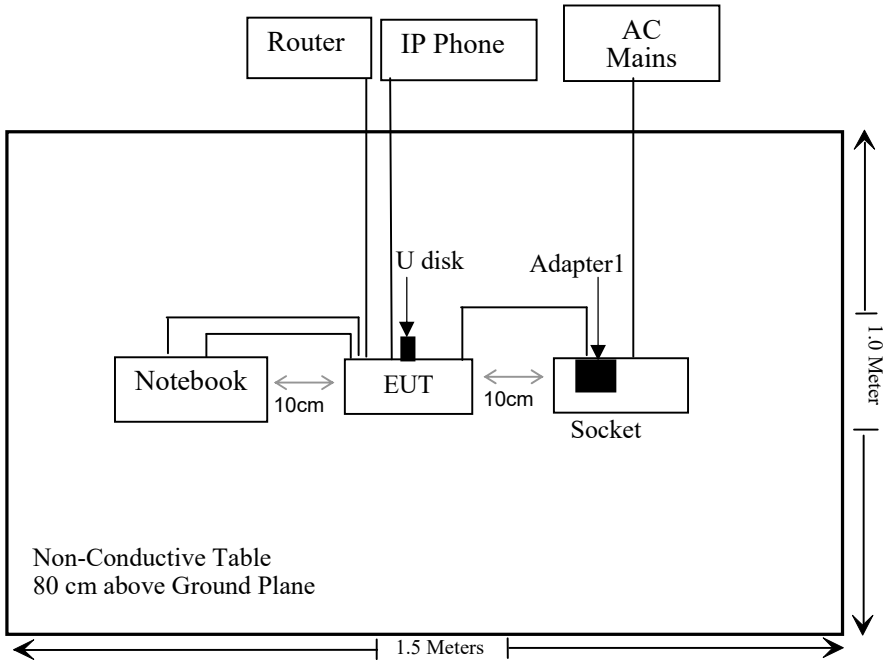


Powered by Type-C:

For conducted emission:



For radiated emission:



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1307 (b) (1) & §2.1091	RF Exposure	Compliant
§15.203	Antenna Requirement	Compliant
§15.407(b)(9)& §15.207(a)	Conducted Emissions	Compliant
§15.205& §15.209 &§15.407(b)	Undesirable Emission& Restricted Bands	Compliant
§15.407(a) (e)	26 dB Emission Bandwidth & 6dB Bandwidth	Compliant
§15.407(a)	Conducted Transmitter Output Power	Compliant
§15.407 (a)	Power Spectral Density	Compliant
§15.407 (h)	Transmit Power Control (TPC)	Not Applicable
§15.407 (h)	Dynamic Frequency Selection (DFS)	Compliant*

Not Applicable: the EUT has no TPC function which was declarded by the applicant.
Compliant*: Please refer to the DFS report: SZNS220923-43608E-00C.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted Emissions Test					
Rohde& Schwarz	EMI Test Receiver	ESCI	100784	2021/12/13	2022/12/12
Rohde & Schwarz	L.I.S.N.	ESH3-Z5	100305	2021/12/13	2022/12/12
Anritsu Corp	50 Coaxial Switch	MP59B	6100237248	2021/12/13	2022/12/12
Unknown	RF Coaxial Cable	No.17	N0350	2021/12/14	2022/12/13
Conducted Emission Test Software: e3 19821b (V9)					
Radiated Emissions Test					
Rohde& Schwarz	Test Receiver	ESR	102725	2021/12/13	2022/12/12
Rohde&Schwarz	Spectrum Analyzer	FSV40	101949	2021/12/13	2022/12/12
SONOMA INSTRUMENT	Amplifier	310 N	186131	2022/11/08	2023/11/07
A.H. Systems, inc.	Preamplifier	PAM-0118P	135	2021/11/09	2022/11/08
Quinstar	Amplifier	QLW-18405536-J0	15964001002	2021/11/11	2022/11/10
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2021/07/06	2024/07/05
Schwarzbeck	Horn Antenna	BBHA9120D	9120D-1067	2020/01/05	2023/01/04
Schwarzbeck	HORN ANTENNA	BBHA9170	9170-359	2020/01/05	2023/01/04
Radiated Emission Test Software: e3 19821b (V9)					
Unknown	RF Coaxial Cable	No.10	N050	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.11	N1000	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.12	N040	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.13	N300	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.14	N800	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.15	N600	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.16	N650	2021/12/14	2022/12/13
CD	Band Reject Filter	BRM-5.15/5.35g-45	075	2021/12/14	2022/12/13
CD	Band Reject Filter	BRM-5.725/5.875G-45	065	2021/12/14	2022/12/13

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Conducted Test					
Tonscend	RF Control Unit	JS0806-2	19G8060182	2021/10/25	2022/10/24
Tonscend	RF Control Unit	JS0806-2	19G8060182	2022/10/25	2023/10/24
Rohde&Schwarz	Spectrum Analyzer	FSV-40	101495	2021/12/13	2022/12/12
WEINSCHEL	10dB Attenuator	5324	AU 3842	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.31	RF-01	Each time	
Unknown	RF Cable	Unknown	1	Each time	

*** Statement of Traceability:** Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC §15.247 (i) & §1.1307 (b) (3) & §2.1091- RF Exposure

Applicable Standard

According to subpart 15.247 (i) and subpart 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

According to KDB 447498 D04 Interim General RF Exposure Guidance

MPE-Based Exemption:

General frequency and separation-distance dependent MPE-based effective radiated power(ERP) thresholds are in Table B.1 [Table 1 of § 1.1307(b)(1)(i)(C)] to support an exemptionfrom further evaluation from 300 kHz through 100 GHz.

Table 1 to § 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	1,920 R^2.
1.34-30	3,450 R^2/f^2.
30-300	3.83 R^2.
300-1,500	0.0128 R^2f.
1,500-100,000	19.2R^2.

Ris the minimum separation distance in meters
f = frequency in MHz

For multiple RF sources: Multiple RF sources are exempt if:

in the case of fixed RF sources operating in the same time-averaging period, or of multiple mobile or portable RF sources within a device operating in the same time averaging period, if the sum of the fractional contributions to the applicable thresholds is less than or equal to 1 as indicated in the following equation:

$$\sum_{i=1}^{a}\frac{P_i}{P_{th,i}}+\sum_{j=1}^{b}\frac{ERP_j}{ERP_{th,j}}+\sum_{k=1}^{c}\frac{Evaluated_k}{Exposure\ Limit_k}\leq 1$$

Result

Frequency (MHz)	Tune up conducted power	Antenna Gain		ERP		Evaluation Distance (m)	ERP Limit (W)
	(dBm)	(dBi)	(dBd)	(dBm)	(W)		
2412-2462	24.0	4.5	2.35	26.35	0.432	0.2	0.768
5150-5250	16.5	3.5	1.35	17.85	0.061	0.2	0.768
5250-5350	16.0	3.5	1.35	17.35	0.054	0.2	0.768
5470-5725	18.5	3.5	1.35	19.85	0.097	0.2	0.768
5725-5850	16.0	3.5	1.35	17.35	0.054	0.2	0.768

Note: 1. The tune up conducted power and antenna gain was declared by the applicant.
2. The 2.4GHz wifi and 5GHz wifi cannot transmit at same time.

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 20cm from nearby persons.

Result: Compliant.

FCC §15.203 – ANTENNA REQUIREMENT

Applicable Standard

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

a. Antenna must be permanently attached to the unit.
b. Antenna must use a unique type of connector to attach to the EUT.

Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.407 (a), if the transmitting antennas of directional gain greater than 6dBi are used, the transmit power and power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Antenna Connector Construction

The EUT has two internal antennas arrangement for 5G Wi-Fi, which were permanently attached to the EUT. Please refer to the EUT photos.

Type	Antenna Gain	Impedance	Frequency Range
Dipole	3.5dBi	50 Ω	5150-5850MHz

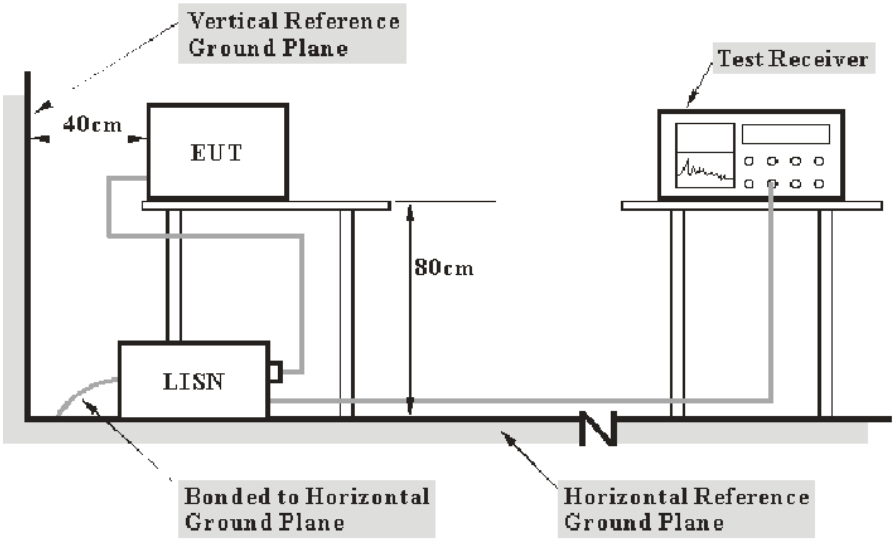
Result: Compliant.

FCC §15.407 (b) (6) §15.207 (a) – CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207, §15.407(b) (6)

EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

Test Procedure

During the conducted emission test, the adapter was connected to the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and Average detection mode.

Corrected Factor & Margin Calculation

The Corrected factor is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss. The basic equation is as follows:

Factor = LISN VDF + Cable Loss

The "Over Limit" column of the following data tables indicates the degree of compliance with the applicable limit. For example, an over limit of -7 dB means the emission is 7 dB below the limit. The equation for margin calculation is as follows:

Over Limit = Level – Limit
Level = Reading level + Factor

Test Data

Environmental Conditions

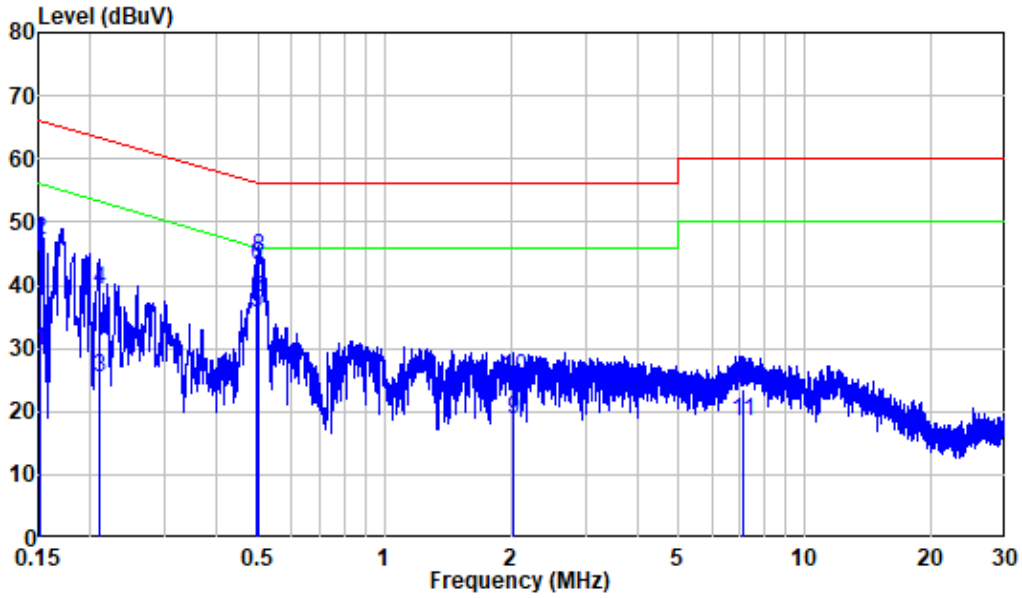
Temperature:	24~25°C
Relative Humidity:	47~60 %
ATM Pressure:	101.0 kPa

The testing was performed by Lipa on 2022-11-11 and 2022-12-06.

EUT operation mode: Transmitting (worst case for 802.11 n20 5500MHz)

For Adapter:

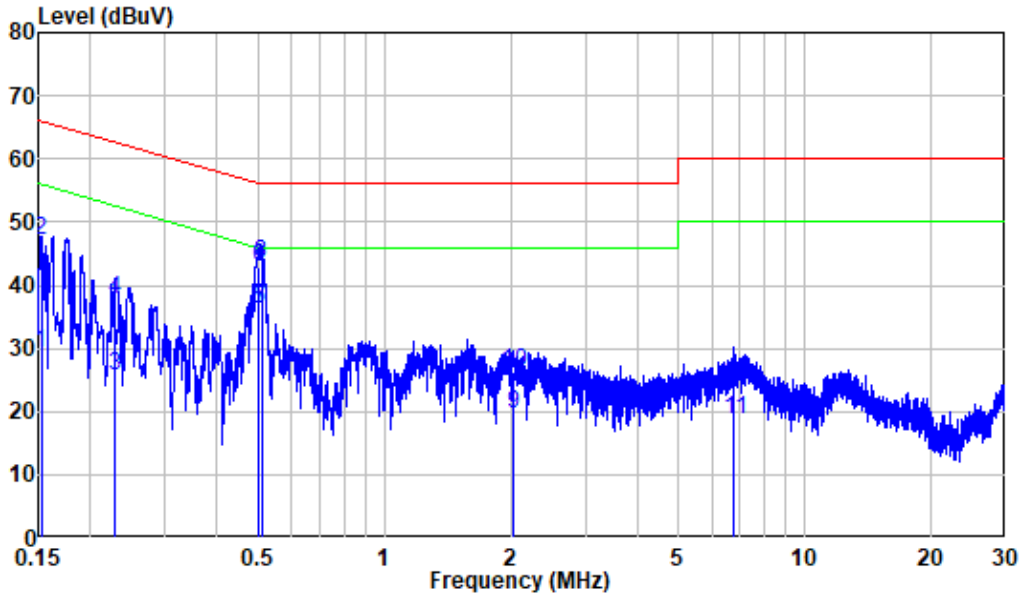
AC 120V/60 Hz, Line



Site : Shielding Room
Condition: Line
Job No. : SZNS220923-43608E-RF
Mode : 5G WIFI (Adapter)
Power : AC 120V 60Hz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.152	9.80	19.88	29.68	55.87	-26.19	Average
2	0.152	9.80	37.39	47.19	65.87	-18.68	QP
3	0.209	9.80	15.43	25.23	53.23	-28.00	Average
4	0.209	9.80	29.56	39.36	63.23	-23.87	QP
5	0.497	9.80	25.91	35.71	46.05	-10.34	Average
6	0.497	9.80	33.39	43.19	56.05	-12.86	QP
7	0.502	9.80	27.86	37.66	46.00	-8.34	Average
8	0.502	9.80	34.51	44.31	56.00	-11.69	QP
9	2.020	9.82	8.81	18.63	46.00	-27.37	Average
10	2.020	9.82	15.64	25.46	56.00	-30.54	QP
11	7.109	9.87	8.49	18.36	50.00	-31.64	Average
12	7.109	9.87	13.81	23.68	60.00	-36.32	QP

AC 120V/60 Hz, Neutral

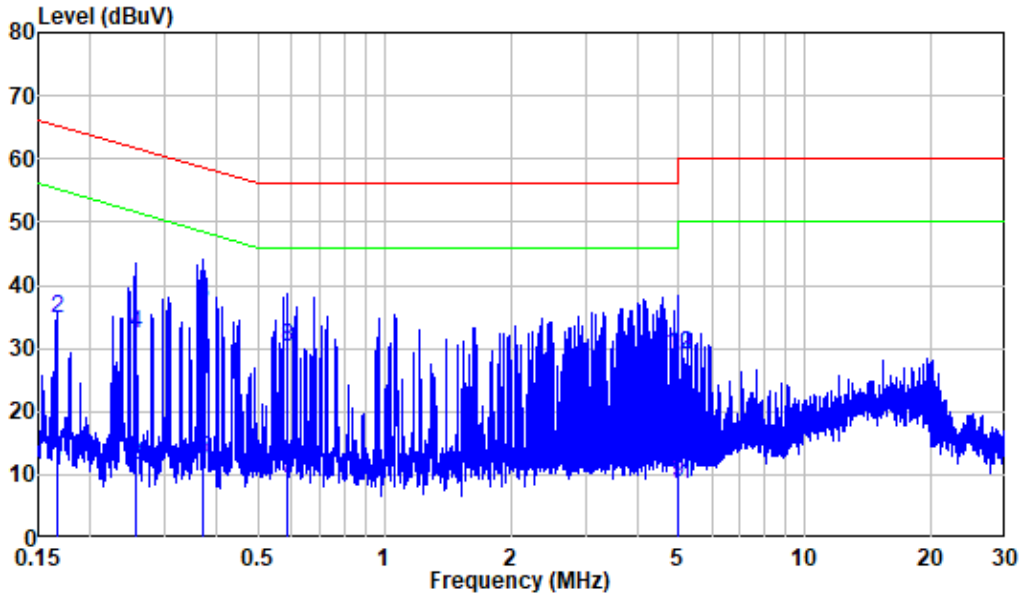


Site : Shielding Room
Condition: Neutral
Job No. : SZNS220923-43608E-RF
Mode : 5G WIFI (Adapter)
Power : AC 120V 60Hz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.152	9.80	19.49	29.29	55.87	-26.58	Average
2	0.152	9.80	37.16	46.96	65.87	-18.91	QP
3	0.228	9.80	15.75	25.55	52.52	-26.97	Average
4	0.228	9.80	27.90	37.70	62.52	-24.82	QP
5	0.500	9.80	26.48	36.28	46.00	-9.72	Average
6	0.500	9.80	33.07	42.87	56.00	-13.13	QP
7	0.509	9.81	26.63	36.44	46.00	-9.56	Average
8	0.509	9.81	33.52	43.33	56.00	-12.67	QP
9	2.016	9.82	9.86	19.68	46.00	-26.32	Average
10	2.016	9.82	16.59	26.41	56.00	-29.59	QP
11	6.787	9.96	8.78	18.74	50.00	-31.26	Average
12	6.787	9.96	14.06	24.02	60.00	-35.98	QP

For POE:

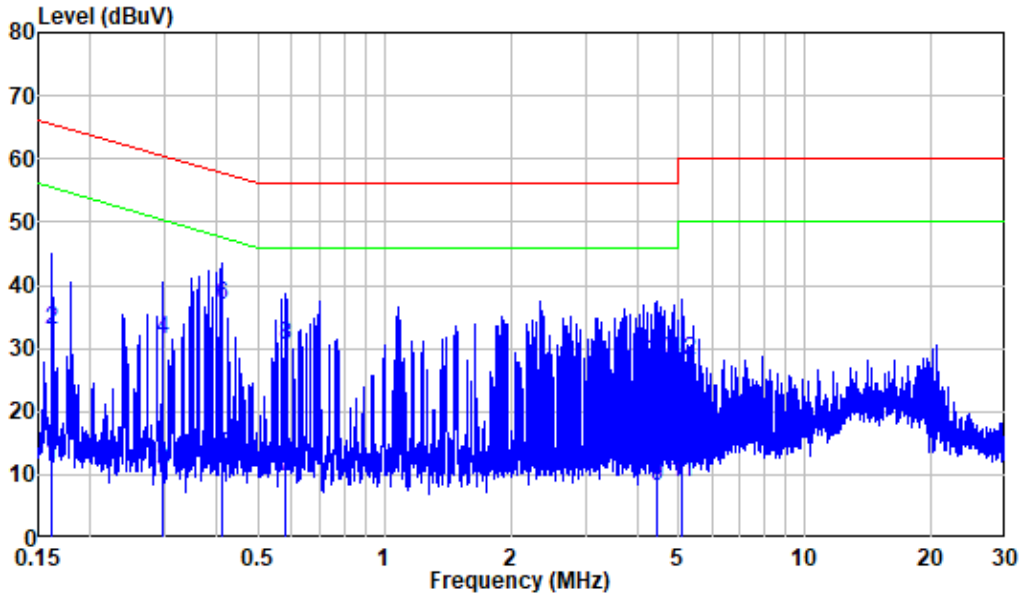
AC 120V/60 Hz, Line



Site : Shielding Room
Condition: Line
Job No. : SZNS220923-43608E-RF
Mode : 5G WIFI(POE)
Power : AC 120V 60Hz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.166	9.80	2.20	12.00	55.15	-43.15	Average
2	0.166	9.80	24.84	34.64	65.15	-30.51	QP
3	0.255	9.80	1.53	11.33	51.59	-40.26	Average
4	0.255	9.80	22.54	32.34	61.59	-29.25	QP
5	0.368	9.80	2.48	12.28	48.54	-36.26	Average
6	0.368	9.80	27.07	36.87	58.54	-21.67	QP
7	0.587	9.81	-0.60	9.21	46.00	-36.79	Average
8	0.587	9.81	20.32	30.13	56.00	-25.87	QP
9	4.991	9.85	-0.96	8.89	46.00	-37.11	Average
10	4.991	9.85	19.22	29.07	56.00	-26.93	QP
11	5.011	9.85	-1.48	8.37	50.00	-41.63	Average
12	5.011	9.85	19.20	29.05	60.00	-30.95	QP

AC 120V/60 Hz, Neutral

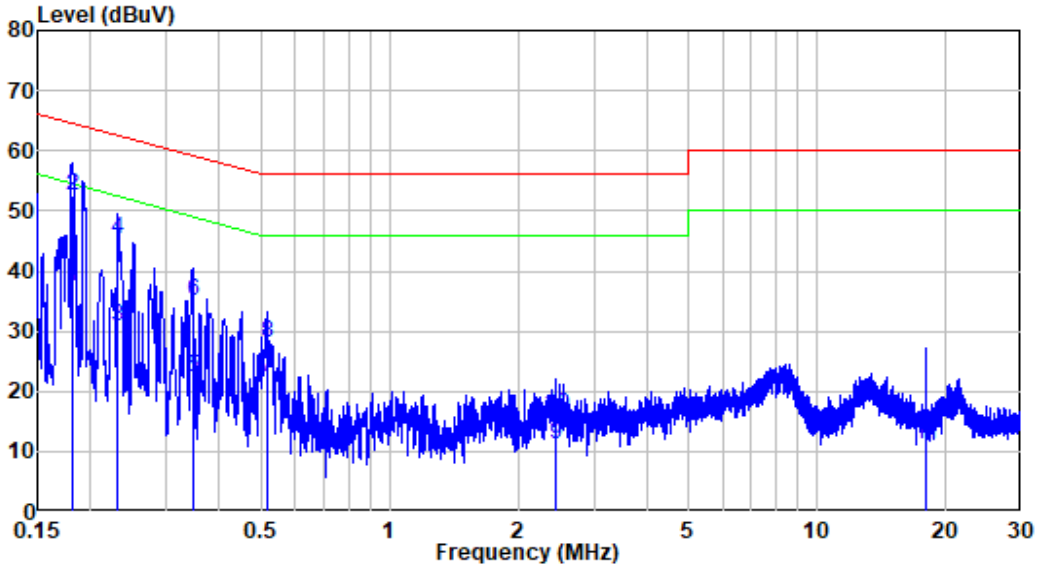


Site : Shielding Room
Condition: Neutral
Job No. : SZNS220923-43608E-RF
Mode : 5G WIFI(POE)
Power : AC 120V 60Hz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.162	9.80	1.71	11.51	55.37	-43.86	Average
2	0.162	9.80	23.07	32.87	65.37	-32.50	QP
3	0.296	9.80	0.82	10.62	50.35	-39.73	Average
4	0.296	9.80	21.69	31.49	60.35	-28.86	QP
5	0.410	9.80	3.21	13.01	47.66	-34.65	Average
6	0.410	9.80	27.14	36.94	57.66	-20.72	QP
7	0.583	9.81	-0.12	9.69	46.00	-36.31	Average
8	0.583	9.81	20.75	30.56	56.00	-25.44	QP
9	4.439	9.86	-1.64	8.22	46.00	-37.78	Average
10	4.439	9.86	18.23	28.09	56.00	-27.91	QP
11	5.078	9.89	-1.06	8.83	50.00	-41.17	Average
12	5.078	9.89	18.07	27.96	60.00	-32.04	QP

For Type-C

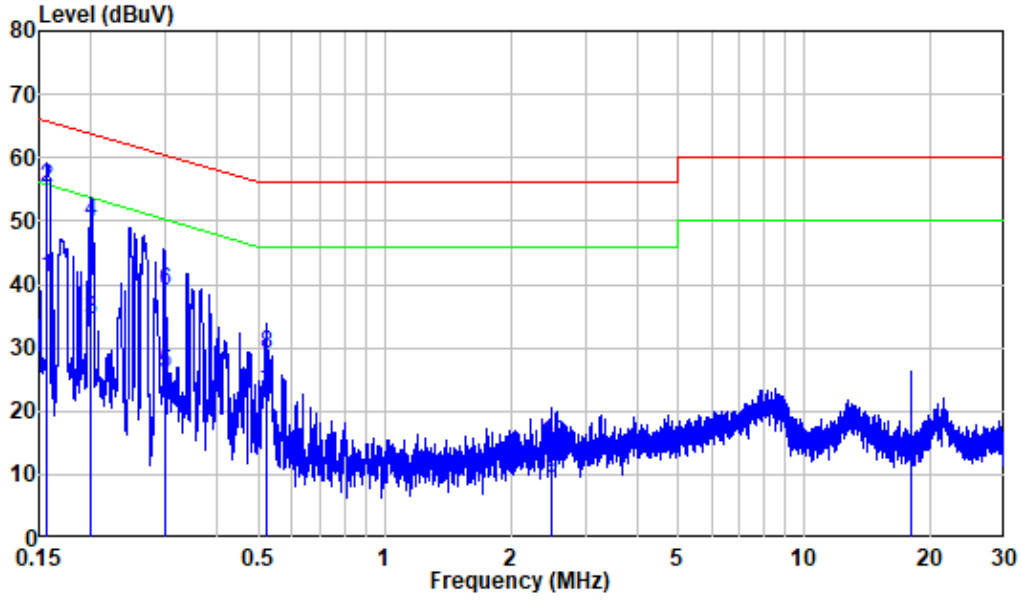
AC 120V/60 Hz, Line



Site : Shielding Room
Condition: Line
Job No. : SZNS220923-43608E-RF
Mode : 5G WIFI
Power : AC 120V 60Hz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.181	9.80	27.78	37.58	54.44	-16.86	Average
2	0.181	9.80	42.70	52.50	64.44	-11.94	QP
3	0.231	9.80	20.91	30.71	52.43	-21.72	Average
4	0.231	9.80	35.38	45.18	62.43	-17.25	QP
5	0.346	9.80	12.44	22.24	49.05	-26.81	Average
6	0.346	9.80	25.24	35.04	59.05	-24.01	QP
7	0.517	9.81	12.62	22.43	46.00	-23.57	Average
8	0.517	9.81	18.19	28.00	56.00	-28.00	QP
9	2.449	9.82	1.20	11.02	46.00	-34.98	Average
10	2.449	9.82	6.26	16.08	56.00	-39.92	QP
11	17.944	9.98	1.33	11.31	50.00	-38.69	Average
12	17.944	9.98	3.20	13.18	60.00	-46.82	QP

AC 120V/60 Hz, Neutral



Site : Shielding Room
Condition: Neutral
Job No. : SZNS220923-43608E-RF
Mode : 5G WIFI
Power : AC 120V 60Hz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.157	9.80	31.15	40.95	55.61	-14.66	Average
2	0.157	9.80	45.46	55.26	65.61	-10.35	QP
3	0.200	9.80	24.71	34.51	53.61	-19.10	Average
4	0.200	9.80	39.89	49.69	63.61	-13.92	QP
5	0.300	9.80	16.31	26.11	50.25	-24.14	Average
6	0.300	9.80	29.03	38.83	60.25	-21.42	QP
7	0.522	9.81	12.71	22.52	46.00	-23.48	Average
8	0.522	9.81	19.15	28.96	56.00	-27.04	QP
9	2.495	9.82	-0.58	9.24	46.00	-36.76	Average
10	2.495	9.82	4.82	14.64	56.00	-41.36	QP
11	17.944	10.08	0.81	10.89	50.00	-39.11	Average
12	17.944	10.08	2.81	12.89	60.00	-47.11	QP

§15.205 & §15.209 & §15.407(B)– UNDESIRABLE EMISSION

Applicable Standard

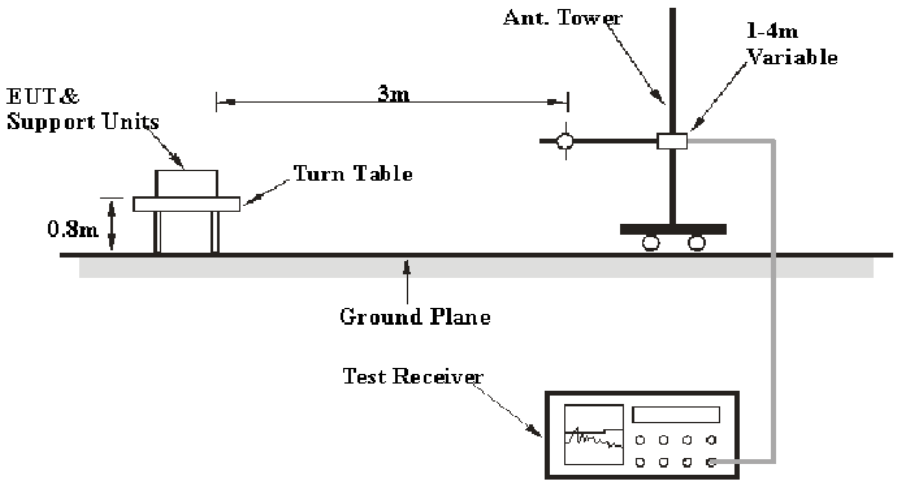
FCC §15.407 (b); §15.209; §15.205;

(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:
(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
(4) For transmitters operating in the 5.725-5.85 GHz band:
(i) All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

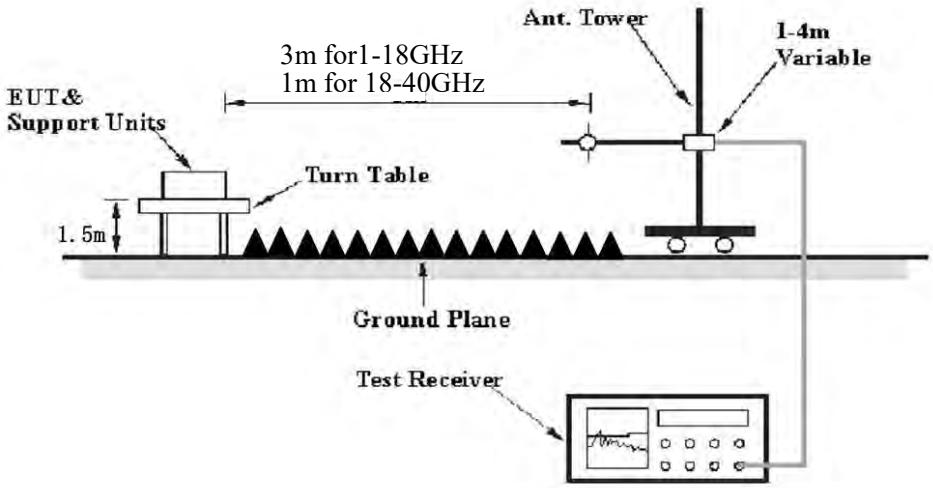
Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

EUT Setup

Below 1 GHz:



Above 1 GHz:



The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC 15.209 and FCC 15.407 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 40 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Measurement
30 MHz – 1000 MHz	100 kHz	300 kHz	120 kHz	QP
Above 1 GHz	1 MHz	3 MHz	/	PK
	1MHz	10 Hz Note 1	/	Average
	1MHz	＞1/T Note 2	/	Average

Note 1: when duty cycle is no less than 98%
Note 2: when duty cycle is less than 98%

Test Procedure

Radiated Spurious Emission

During the radiated emission test, the adapter was connected to the AC floor outlet.

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all the installation combinations.

Data was recorded in Quasi-peak detection mode for frequency range of 30 MHz-1GHz, peak and Average detection modes for frequencies above 1GHz.

According to ANSI C63.10-2013,9.4: For field strength measurements made at other than the distance at which the applicable limit is specified,extrapolate the measured field strength to the field strength at the distance specified by the limit using an inverse distance correction factor (20 dB/decade of distance). In some cases, a different distance correction factor may be required;

$$E_{\mathrm{SpecLimit}} = E_{\mathrm{Meas}} + 20\log\left(\frac{d_{\mathrm{Meas}}}{d_{\mathrm{SpecLimit}}}\right)$$

where

$E_{\mathrm{SpecLimit}}$	is the field strength of the emission at the distance specified by the limit, in dBμV/m
E_{Meas}	is the field strength of the emission at the measurement distance, in dBμV/m
d_{Meas}	is the measurement distance, in m
$d_{\mathrm{SpecLimit}}$	is the distance specified by the limit, in m

So the extrapolation factor of 1m is 20*log(1/3)= -9.5 dB, for 18-40GHz range, the limit of 1m distance was added by 9.5dB from limit of 3m to compared with the result measurement at 1m distance.

Corrected Factor & Margin Calculation

The Corrected Factor is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain. The basic equation is as follows:

Corrected Amplitude = Antenna Factor + Cable Loss - Amplifier Gain

The "**Margin/Over Limit**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin/over limit of -7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin/Over limit = Corrected Amplitude/Level - Limit
Corrected Amplitude/Level = Reading + Factor

Test Data

Environmental Conditions

Temperature:	24~24.5℃
Relative Humidity:	50~59%
ATM Pressure:	101.0 kPa

The testing was performed by Level Li on 2022-11-22 and 2022-12-06 for below 1GHz,Jeff Jiang on 2022-10-09 for above 1GHz.

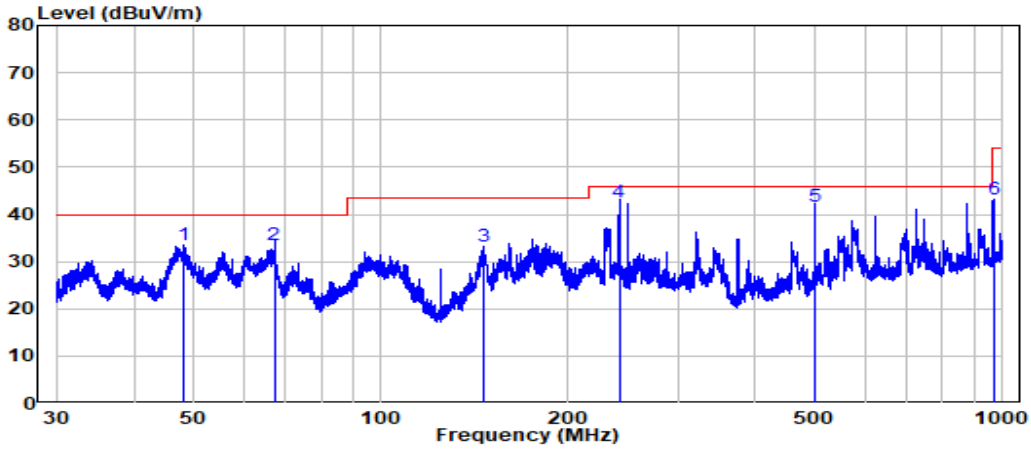
EUT operation mode: Transmitting (Pre-scan in the X,Y and Z axes of orientation, the worst case X-axes of orientation was recorded)

30MHz-1GHz: (worst case for 802.11 n20 5500MHz)

Note: When the test result of Peak was less than the limit of QP, just the peak value was recorded.

For Adapter）

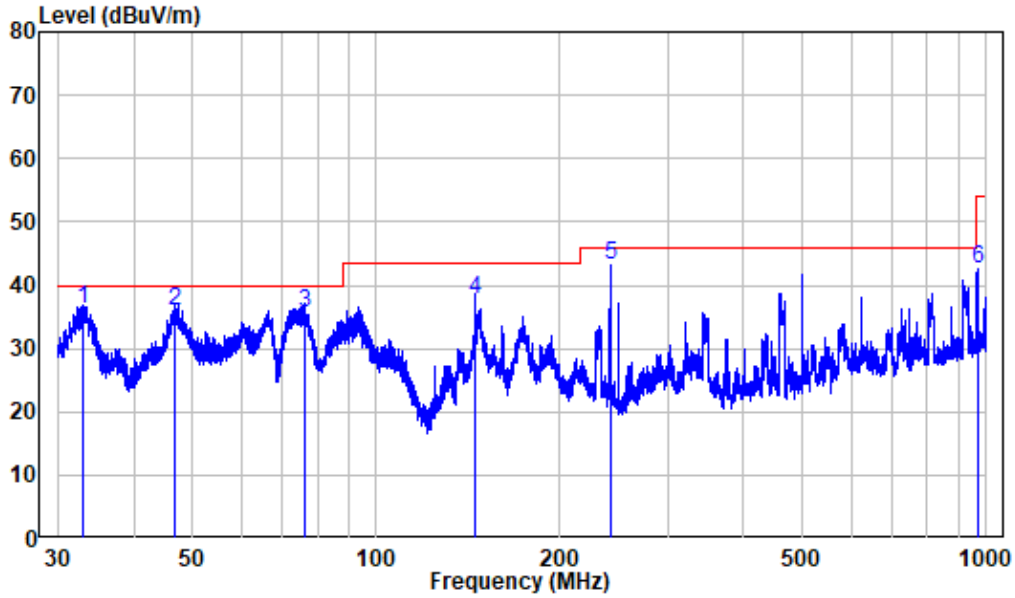
Horizontal



Site : chamber
Condition: 3m HORIZONTAL
Job No. : SZNS220923-43608E-RF
Test Mode: 5G WIFI
Note : Adapter

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	48.015	-10.00	43.41	33.41	40.00	-6.59	Peak
2	67.261	-13.48	47.10	33.62	40.00	-6.38	QP
3	145.733	-15.51	48.74	33.23	43.50	-10.27	Peak
4	241.465	-10.81	53.47	42.66	46.00	-3.34	QP
5	500.082	-4.25	46.00	41.75	46.00	-4.25	QP
6	966.389	2.44	40.80	43.24	54.00	-10.76	Peak

Vertical

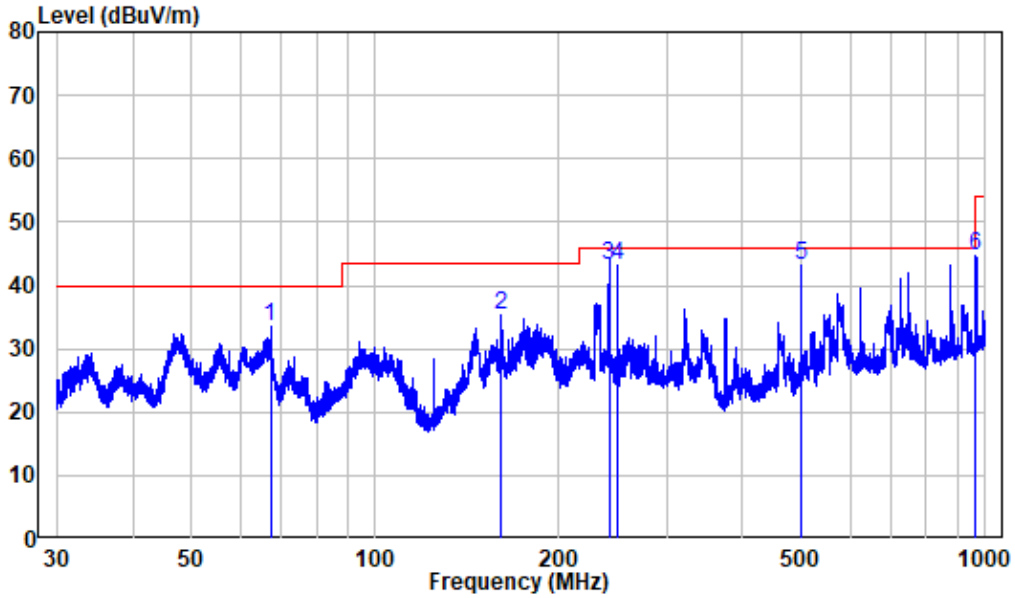


Site : chamber
Condition: 3m VERTICAL
Job No. : SZNS220923-43608E-RF
Test Mode: 5G WIFI
Note : Adapter

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	32.950	-12.03	48.31	36.28	40.00	-3.72	QP
2	46.728	-10.00	46.00	36.00	40.00	-4.00	QP
3	76.345	-16.45	52.00	35.55	40.00	-4.45	QP
4	144.905	-15.51	53.10	37.59	43.50	-5.91	QP
5	241.570	-10.81	53.86	43.05	46.00	-2.95	QP
6	966.389	2.44	40.22	42.66	54.00	-11.34	Peak

For POE

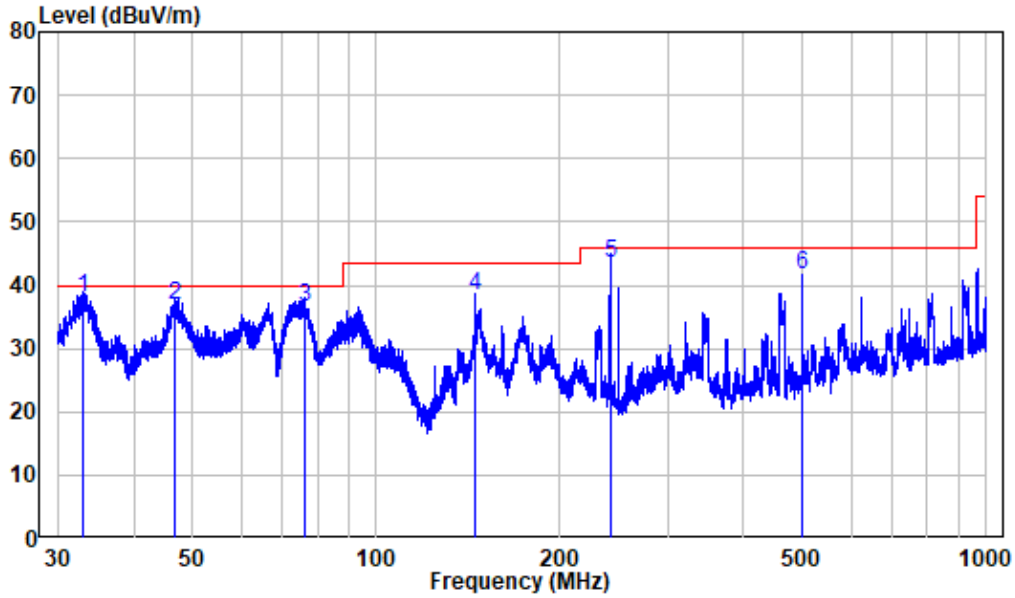
Horizontal



Site : chamber
Condition: 3m HORIZONTAL
Job No. : SZNS220923-43608E-RF
Test Mode: 5G WIFI
Note : POE

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	67.261	-13.48	47.00	33.52	40.00	-6.48	Peak
2	161.050	-14.24	49.70	35.46	43.50	-8.04	Peak
3	241.465	-10.81	54.10	43.29	46.00	-2.71	QP
4	250.082	-10.75	54.01	43.26	46.00	-2.74	QP
5	500.082	-4.25	47.40	43.15	46.00	-2.85	QP
6	965.965	2.43	42.14	44.57	54.00	-9.43	Peak

Vertical

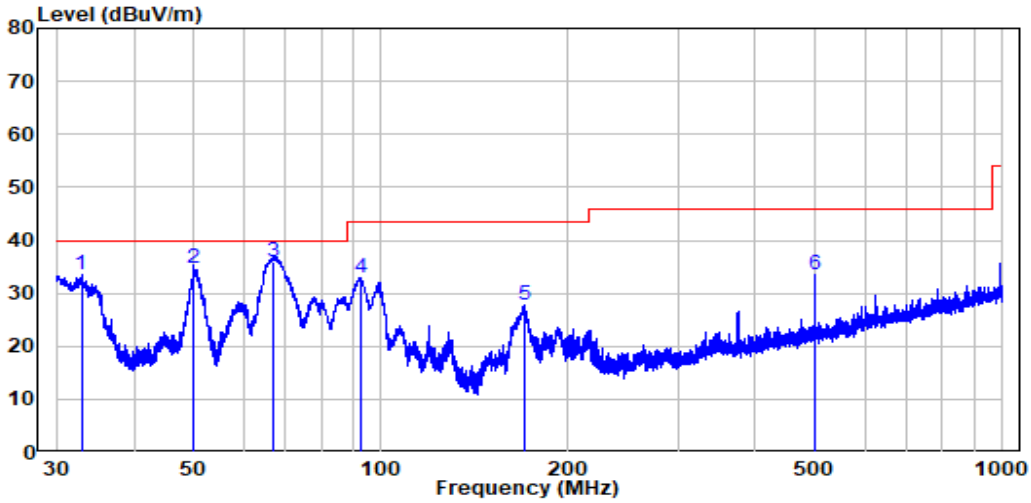


Site : chamber
Condition: 3m VERTICAL
Job No. : SZNS220923-43608E-RF
Test Mode: 5G WIFI
Note : POE

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	32.950	-12.03	49.95	37.92	40.00	-2.08	QP
2	46.728	-10.00	46.75	36.75	40.00	-3.25	QP
3	76.345	-16.45	53.10	36.65	40.00	-3.35	QP
4	144.905	-15.51	54.00	38.49	43.50	-5.01	QP
5	241.570	-10.81	54.30	43.49	46.00	-2.51	QP
6	500.082	-4.25	45.80	41.55	46.00	-4.45	QP

For Type-C:

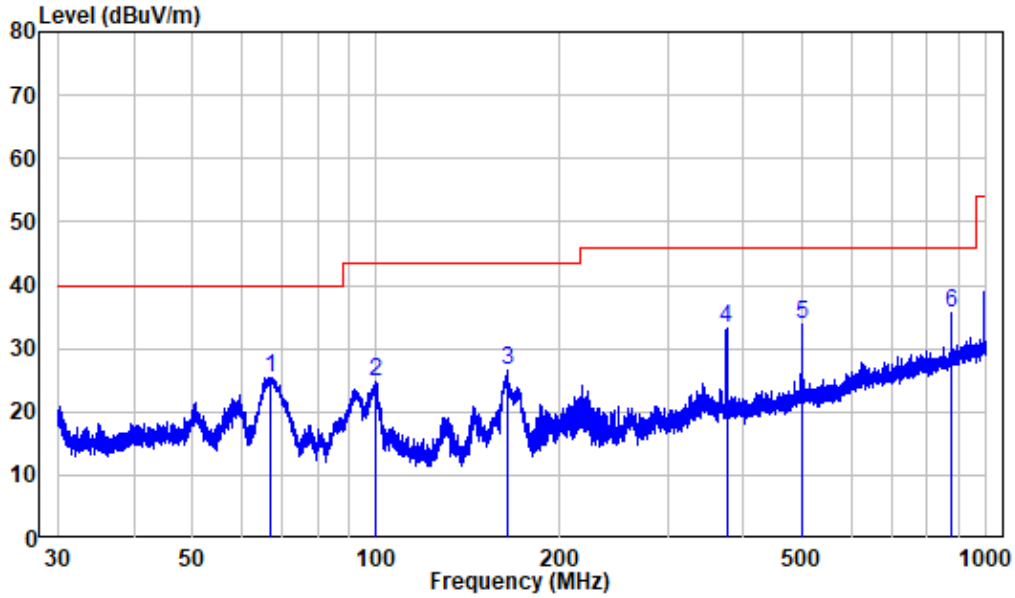
Horizontal



Site : chamber
Condition: 3m VERTICAL
Job No. : SZNS220923-43608E-RF
Test Mode: 5G Wifi

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	32.907	-12.03	45.45	33.42	40.00	-6.58	Peak
2	49.991	-9.91	44.50	34.59	40.00	-5.41	QP
3	67.084	-13.40	49.20	35.80	40.00	-4.20	QP
4	93.032	-12.99	45.96	32.97	43.50	-10.53	Peak
5	169.599	-13.62	41.50	27.88	43.50	-15.62	Peak
6	500.082	-4.25	37.76	33.51	46.00	-12.49	Peak

Vertical



Site : chamber
Condition: 3m HORIZONTAL
Job No. : SZNS220923-43608E-RF
Test Mode: 5G Wifi

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	66.996	-13.36	38.82	25.46	40.00	-14.54	Peak
2	99.659	-11.88	36.78	24.90	43.50	-18.60	Peak
3	163.827	-14.28	40.87	26.59	43.50	-16.91	Peak
4	375.116	-7.28	40.41	33.13	46.00	-12.87	Peak
5	500.082	-4.25	38.14	33.89	46.00	-12.11	Peak
6	875.247	1.18	34.56	35.74	46.00	-10.26	Peak

Above 1GHz: *(worst case adapter)*

5150-5250 MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11a(worst case antenna 1)									
5180 MHz									
4500	63.57	PK	151	2.2	H	-4.72	58.85	74	-15.15
4500	52.35	AV	151	2.2	H	-4.72	47.63	54	-6.37
4500	64.00	PK	325	1.5	V	-4.72	59.28	74	-14.72
4500	52.10	AV	325	1.5	V	-4.72	47.38	54	-6.62
5150	63.64	PK	341	2.1	H	-2.73	60.91	74	-13.09
5150	52.99	AV	341	2.1	H	-2.73	50.26	54	-3.74
5150	63.66	PK	335	1.9	V	-2.73	60.93	74	-13.07
5150	52.80	AV	335	1.9	V	-2.73	50.07	54	-3.93
10360	42.69	PK	1	2.4	H	8.12	50.81	68.2	-17.39
10360	41.96	PK	276	2.4	V	8.12	50.08	68.2	-18.12
5200 MHz									
10400	42.11	PK	323	1.9	H	8.24	50.35	68.2	-17.85
10400	41.79	PK	300	1.9	V	8.24	50.03	68.2	-18.17
5240 MHz									
5350	63.46	PK	38	1.3	H	-2.33	61.13	74	-12.87
5350	53.30	AV	38	1.3	H	-2.33	50.97	54	-3.03
5350	63.90	PK	222	1.5	V	-2.33	61.57	74	-12.43
5350	53.23	AV	222	1.5	V	-2.33	50.90	54	-3.10
5460	63.36	PK	286	1.4	H	-2.26	61.10	74	-12.90
5460	52.70	AV	286	1.4	H	-2.26	50.44	54	-3.56
5460	63.52	PK	349	1.1	V	-2.26	61.26	74	-12.74
5460	52.81	AV	349	1.1	V	-2.26	50.55	54	-3.45
10480	41.47	PK	351	1.7	H	8.56	50.03	68.2	-18.17
10480	41.51	PK	122	1.7	V	8.56	50.07	68.2	-18.13

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11n20(worst case MIMO)									
5180 MHz									
4500	63.69	PK	89	1.9	H	-4.72	58.97	74	-15.03
4500	52.14	AV	89	1.9	H	-4.72	47.42	54	-6.58
4500	63.92	PK	91	1.4	V	-4.72	59.20	74	-14.80
4500	52.24	AV	91	1.4	V	-4.72	47.52	54	-6.48
5150	63.69	PK	88	1.9	H	-2.73	60.96	74	-13.04
5150	52.90	AV	88	1.9	H	-2.73	50.17	54	-3.83
5150	63.82	PK	177	1.9	V	-2.73	61.09	74	-12.91
5150	52.88	AV	177	1.9	V	-2.73	50.15	54	-3.85
10360	41.52	PK	286	1.9	H	8.12	49.64	68.2	-18.56
10360	41.44	PK	32	1.9	V	8.12	49.56	68.2	-18.64
5200 MHz									
10400	41.58	PK	43	2.2	H	8.24	49.82	68.2	-18.38
10400	41.63	PK	330	2.2	V	8.24	49.87	68.2	-18.33
5240 MHz									
5350	63.49	PK	308	1.8	H	-2.33	61.16	74	-12.84
5350	53.24	AV	308	1.8	H	-2.33	50.91	54	-3.09
5350	63.49	PK	305	2.1	V	-2.33	61.16	74	-12.84
5350	53.31	AV	305	2.1	V	-2.33	50.98	54	-3.02
5460	63.32	PK	301	1.1	H	-2.26	61.06	74	-12.94
5460	52.70	AV	301	1.1	H	-2.26	50.44	54	-3.56
5460	63.44	PK	266	2.4	V	-2.26	61.18	74	-12.82
5460	52.73	AV	266	2.4	V	-2.26	50.47	54	-3.53
10480	40.86	PK	284	1.7	H	8.56	49.42	68.2	-18.78
10480	41.07	PK	269	1.7	V	8.56	49.63	68.2	-18.57

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11N40(worst case MIMO)									
5190 MHz									
4500	64.02	PK	38	1.3	H	-4.72	59.30	74	-14.70
4500	52.26	AV	38	1.3	H	-4.72	47.54	54	-6.46
4500	63.88	PK	15	1.9	V	-4.72	59.16	74	-14.84
4500	52.22	AV	15	1.9	V	-4.72	47.50	54	-6.50
5150	66.67	PK	238	1.2	H	-2.73	63.94	74	-10.06
5150	54.94	AV	238	1.2	H	-2.73	52.21	54	-1.79
5150	66.06	PK	230	2.5	V	-2.73	63.33	74	-10.67
5150	54.06	AV	230	2.5	V	-2.73	51.33	54	-2.67
10380	41.25	PK	240	1	H	8.18	49.43	68.2	-18.77
10380	41.69	PK	227	1	V	8.18	49.87	68.2	-18.33
5230 MHz									
5350	63.85	PK	356	2	H	-2.33	61.52	74	-12.48
5350	53.21	AV	356	2	H	-2.33	50.88	54	-3.12
5350	63.48	PK	207	2.1	V	-2.33	61.15	74	-12.85
5350	53.12	AV	207	2.1	V	-2.33	50.79	54	-3.21
5460	63.29	PK	221	1.5	H	-2.26	61.03	74	-12.97
5460	52.87	AV	221	1.5	H	-2.26	50.61	54	-3.39
5460	63.16	PK	324	1.7	V	-2.26	60.90	74	-13.10
5460	52.89	AV	324	1.7	V	-2.26	50.63	54	-3.37
10460	41.08	PK	253	1.7	H	8.47	49.55	68.2	-18.65
10460	40.74	PK	153	1.7	V	8.47	49.21	68.2	-18.99

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC20(worst case MIMO)									
5180 MHz									
4500	64.01	PK	119	1.7	H	-4.72	59.29	74	-14.71
4500	51.22	AV	119	1.7	H	-4.72	46.50	54	-7.50
4500	63.75	PK	143	2.2	V	-4.72	59.03	74	-14.97
4500	51.38	AV	143	2.2	V	-4.72	46.66	54	-7.34
5150	63.92	PK	328	1.5	H	-2.73	61.19	74	-12.81
5150	51.12	AV	328	1.5	H	-2.73	48.39	54	-5.61
5150	64.07	PK	53	1.5	V	-2.73	61.34	74	-12.66
5150	50.99	AV	53	1.5	V	-2.73	48.26	54	-5.74
10360	41.74	PK	48	1.2	H	8.12	49.86	68.2	-18.34
10360	41.59	PK	243	1.2	V	8.12	49.71	68.2	-18.49
5200 MHz									
10400	41.46	PK	123	1	H	8.24	49.7	68.2	-18.50
10400	41.63	PK	304	1	V	8.24	49.87	68.2	-18.33
5240MHz									
5350	63.58	PK	179	1.9	H	-2.33	61.25	74	-12.75
5350	51.72	AV	179	1.9	H	-2.33	49.39	54	-4.61
5350	63.52	PK	83	2.3	V	-2.33	61.19	74	-12.81
5350	51.64	AV	83	2.3	V	-2.33	49.31	54	-4.69
5460	63.45	PK	241	2.3	H	-2.26	61.19	74	-12.81
5460	51.21	AV	241	2.3	H	-2.26	48.95	54	-5.05
5460	63.39	PK	250	1.6	V	-2.26	61.13	74	-12.87
5460	51.13	AV	250	1.6	V	-2.26	48.87	54	-5.13
10480	40.78	PK	75	1.7	H	8.56	49.34	68.2	-18.86
10480	40.82	PK	156	1.7	V	8.56	49.38	68.2	-18.82

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC40(worst case MIMO)									
5190MHz									
4500	63.66	PK	101	2.4	H	-4.72	58.94	74	-15.06
4500	51.30	AV	101	2.4	H	-4.72	46.58	54	-7.42
4500	63.60	PK	136	2.5	V	-4.72	58.88	74	-15.12
4500	51.56	AV	136	2.5	V	-4.72	46.84	54	-7.16
5150	69.56	PK	23	2.2	H	-2.73	66.83	74	-7.17
5150	54.21	AV	23	2.2	H	-2.73	51.48	54	-2.52
5150	66.94	PK	27	2	V	-2.73	64.21	74	-9.79
5150	54.13	AV	27	2	V	-2.73	51.40	54	-2.60
10380	41.64	PK	105	2.5	H	8.18	49.82	68.2	-18.38
10380	41.27	PK	310	2.5	V	8.18	49.45	68.2	-18.75
5230MHz									
5350	63.79	PK	319	2.4	H	-2.33	61.46	74	-12.54
5350	51.56	AV	319	2.4	H	-2.33	49.23	54	-4.77
5350	63.89	PK	286	1.6	V	-2.33	61.56	74	-12.44
5350	51.74	AV	286	1.6	V	-2.33	49.41	54	-4.59
5460	63.25	PK	337	1.8	H	-2.26	60.99	74	-13.01
5460	51.15	AV	337	1.8	H	-2.26	48.89	54	-5.11
5460	63.47	PK	341	2.3	V	-2.26	61.21	74	-12.79
5460	51.38	AV	341	2.3	V	-2.26	49.12	54	-4.88
10460	40.92	PK	106	1.7	H	8.47	49.39	68.2	-18.81
10460	40.81	PK	358	1.7	V	8.47	49.28	68.2	-18.92

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ac80(worst case MIMO)									
5210MHz									
4500	63.74	PK	99	1.3	H	-4.72	59.02	74	-14.98
4500	51.16	AV	99	1.3	H	-4.72	46.44	54	-7.56
4500	63.62	PK	92	1.7	V	-4.72	58.90	74	-15.10
4500	51.50	AV	92	1.7	V	-4.72	46.78	54	-7.22
5150	70.77	PK	14	1.2	H	-2.73	68.04	74	-5.96
5150	54.35	AV	14	1.2	H	-2.73	51.62	54	-2.38
5150	68.87	PK	258	2.5	V	-2.73	66.14	74	-7.86
5150	53.71	AV	258	2.5	V	-2.73	50.98	54	-3.02
5350	63.80	PK	69	2.2	H	-2.33	61.47	74	-12.53
5350	51.65	AV	69	2.2	H	-2.33	49.32	54	-4.68
5350	63.44	PK	59	2	V	-2.33	61.11	74	-12.89
5350	51.81	AV	59	2	V	-2.33	49.48	54	-4.52
5460	63.34	PK	114	1.8	H	-2.26	61.08	74	-12.92
5460	51.34	AV	114	1.8	H	-2.26	49.08	54	-4.92
5460	63.40	PK	208	1.7	V	-2.26	61.14	74	-12.86
5460	51.14	AV	208	1.7	V	-2.26	48.88	54	-5.12
10420	41.37	PK	200	1.7	H	8.32	49.69	68.2	-18.51
10420	41.58	PK	169	1.7	V	8.32	49.90	68.2	-18.30

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AX20 (worst case MIMO)									
5180MHz (Worst Case 242Tone_RU61)									
4500	63.16	PK	73	2.5	H	-4.72	58.44	74	-15.56
4500	49.91	AV	73	2.5	H	-4.72	45.19	54	-8.81
4500	63.37	PK	254	1.7	V	-4.72	58.65	74	-15.35
4500	50.00	AV	254	1.7	V	-4.72	45.28	54	-8.72
5150	62.99	PK	220	2.4	H	-2.73	60.26	74	-13.74
5150	50.74	AV	220	2.4	H	-2.73	48.01	54	-5.99
5150	62.71	PK	286	1.5	V	-2.73	59.98	74	-14.02
5150	50.19	AV	286	1.5	V	-2.73	47.46	54	-6.54
10360	39.47	PK	239	1.4	H	8.12	47.59	68.2	-20.61
10360	39.39	PK	126	1.4	V	8.12	47.51	68.2	-20.69
5200MHz(Worst Case 242Tone_RU61)									
10400	39.93	PK	359	2	H	8.24	48.17	68.2	-20.03
10400	39.37	PK	309	2	V	8.24	47.61	68.2	-20.59
5240MHz(Worst Case 242Tone_RU61)									
5350	64.47	PK	36	1.8	H	-2.33	62.14	74	-11.86
5350	51.01	AV	36	1.8	H	-2.33	48.68	54	-5.32
5350	63.86	PK	110	1.7	V	-2.33	61.53	74	-12.47
5350	50.91	AV	110	1.7	V	-2.33	48.58	54	-5.42
5460	64.43	PK	185	1.7	H	-2.26	62.17	74	-11.83
5460	50.72	AV	185	1.7	H	-2.26	48.46	54	-5.54
5460	64.96	PK	343	1.3	V	-2.26	62.70	74	-11.30
5460	50.65	AV	343	1.3	V	-2.26	48.39	54	-5.61
10480	40.39	PK	16	1.7	H	8.56	48.95	68.2	-19.25
10480	40.81	PK	284	1.7	V	8.56	49.37	68.2	-18.83

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AX40									
5190MHz (Worst Case 484Tone_RU65)									
4500	63.63	PK	223	1.2	H	-4.72	58.91	74	-15.09
4500	49.98	AV	223	1.2	H	-4.72	45.26	54	-8.74
4500	63.69	PK	204	2	V	-4.72	58.97	74	-15.03
4500	49.89	AV	204	2	V	-4.72	45.17	54	-8.83
5150	68.06	PK	324	1.4	H	-2.73	65.33	74	-8.67
5150	54.91	AV	324	1.4	H	-2.73	52.18	54	-1.82
5150	63.08	PK	280	1.7	V	-2.73	60.35	74	-13.65
5150	51.59	AV	280	1.7	V	-2.73	48.86	54	-5.14
10380	40.53	PK	161	1.3	H	8.18	48.71	68.2	-19.49
10380	40.72	PK	101	1.3	V	8.18	48.90	68.2	-19.30
5230MHz (Worst Case 484Tone_RU65)									
5350	64.60	PK	67	2.3	H	-2.33	62.27	74	-11.73
5350	50.88	AV	67	2.3	H	-2.33	48.55	54	-5.45
5350	64.10	PK	45	1.2	V	-2.33	61.77	74	-12.23
5350	50.94	AV	45	1.2	V	-2.33	48.61	54	-5.39
5460	63.84	PK	79	2	H	-2.26	61.58	74	-12.42
5460	50.67	AV	79	2	H	-2.26	48.41	54	-5.59
5460	64.07	PK	25	1	V	-2.26	61.81	74	-12.19
5460	50.62	AV	25	1	V	-2.26	48.36	54	-5.64
10460	40.54	PK	177	1.7	H	8.47	49.01	68.2	-19.19
10460	40.37	PK	347	1.7	V	8.47	48.84	68.2	-19.36
802.11AX80									
5210MHz (Worst Case 996Tone_RU65)									
4500	63.85	PK	287	2.3	H	-4.72	59.13	74	-14.87
4500	49.91	AV	287	2.3	H	-4.72	45.19	54	-8.81
4500	63.41	PK	326	1.4	V	-4.72	58.69	74	-15.31
4500	49.93	AV	326	1.4	V	-4.72	45.21	54	-8.79
5150	68.66	PK	325	1.8	H	-2.73	65.93	74	-8.07
5150	54.54	AV	325	1.8	H	-2.73	51.81	54	-2.19
5150	64.68	PK	6	1.5	V	-2.73	61.95	74	-12.05
5150	51.84	AV	6	1.5	V	-2.73	49.11	54	-4.89
5350	65.15	PK	220	2.4	H	-2.33	62.82	74	-11.18
5350	50.97	AV	220	2.4	H	-2.33	48.64	54	-5.36
5350	64.51	PK	344	1.9	V	-2.33	62.18	74	-11.82
5350	50.92	AV	344	1.9	V	-2.33	48.59	54	-5.41
5460	64.34	PK	206	2.1	H	-2.26	62.08	74	-11.92
5460	50.77	AV	206	2.1	H	-2.26	48.51	54	-5.49
5460	64.69	PK	309	1.2	V	-2.26	62.43	74	-11.57
5460	50.77	AV	309	1.2	V	-2.26	48.51	54	-5.49
10420	40.35	PK	107	1.7	H	8.32	48.67	68.2	-19.53
10420	40.11	PK	316	1.7	V	8.32	48.43	68.2	-19.77

5250-5350 MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11a(worst case antenna 1)									
5260MHz									
4500	63.82	PK	76	2.1	H	-4.72	59.10	74	-14.90
4500	51.95	AV	76	2.1	H	-4.72	47.23	54	-6.77
4500	64.25	PK	352	1.1	V	-4.72	59.53	74	-14.47
4500	52.19	AV	352	1.1	V	-4.72	47.47	54	-6.53
5150	62.84	PK	358	1.8	H	-2.73	60.11	74	-13.89
5150	52.74	AV	358	1.8	H	-2.73	50.01	54	-3.99
5150	63.27	PK	353	1.6	V	-2.73	60.54	74	-13.46
5150	52.50	AV	353	1.6	V	-2.73	49.77	54	-4.23
10520	40.14	PK	268	1.4	H	8.65	48.79	68.2	-19.41
10520	39.96	PK	215	1.4	V	8.65	48.61	68.2	-19.59
5280MHz									
10560	40.59	PK	304	1.2	H	8.69	49.28	68.2	-18.92
10560	40.93	PK	198	1.2	V	8.69	49.62	68.2	-18.58
5320MHz									
5350	64.96	PK	307	1.5	H	-2.33	62.63	74	-11.37
5350	53.06	AV	307	1.5	H	-2.33	50.73	54	-3.27
5350	63.67	PK	323	1.2	V	-2.33	61.34	74	-12.66
5350	53.25	AV	323	1.2	V	-2.33	50.92	54	-3.08
5460	64.57	PK	134	1.4	H	-2.26	62.31	74	-11.69
5460	53.16	AV	134	1.4	H	-2.26	50.90	54	-3.10
5460	63.86	PK	22	1.1	V	-2.26	61.60	74	-12.40
5460	52.96	AV	22	1.1	V	-2.26	50.70	54	-3.30
10640	36.48	PK	90	1.7	H	8.92	45.40	74	-28.60
10640	35.72	PK	241	1.7	V	8.92	44.64	74	-29.36

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11n20(worst case MIMO)									
5260MHz									
4500	63.70	PK	312	1.4	H	-4.72	58.98	74	-15.02
4500	52.09	AV	312	1.4	H	-4.72	47.37	54	-6.63
4500	63.63	PK	126	2	V	-4.72	58.91	74	-15.09
4500	52.21	AV	126	2	V	-4.72	47.49	54	-6.51
5150	63.59	PK	211	2.2	H	-2.73	60.86	74	-13.14
5150	52.67	AV	211	2.2	H	-2.73	49.94	54	-4.06
5150	62.90	PK	85	2.1	V	-2.73	60.17	74	-13.83
5150	52.58	AV	85	2.1	V	-2.73	49.85	54	-4.15
10520	39.50	PK	338	1.3	H	8.65	48.15	68.2	-20.05
10520	39.39	PK	357	1.3	V	8.65	48.04	68.2	-20.16
5280MHz									
10560	39.99	PK	348	1.4	H	8.69	48.68	68.2	-19.52
10560	40.07	PK	206	1.4	V	8.69	48.76	68.2	-19.44
5320MHz									
5350	64.03	PK	158	1.3	H	-2.33	61.70	74	-12.30
5350	53.09	AV	158	1.3	H	-2.33	50.76	54	-3.24
5350	64.25	PK	142	1.6	V	-2.33	61.92	74	-12.08
5350	53.07	AV	142	1.6	V	-2.33	50.74	54	-3.26
5460	63.88	PK	92	1.1	H	-2.26	61.62	74	-12.38
5460	53.13	AV	92	1.1	H	-2.26	50.87	54	-3.13
5460	64.00	PK	202	2.5	V	-2.26	61.74	74	-12.26
5460	52.97	AV	202	2.5	V	-2.26	50.71	54	-3.29
10640	35.30	PK	247	1.7	H	8.92	44.22	74	-29.78
10640	34.61	PK	7	1.7	V	8.92	43.53	74	-30.47

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11N40(worst case MIMO)									
5270MHz									
4500	63.50	PK	190	1.7	H	-4.72	58.78	74	-15.22
4500	52.07	AV	190	1.7	H	-4.72	47.35	54	-6.65
4500	63.37	PK	51	2.4	V	-4.72	58.65	74	-15.35
4500	52.13	AV	51	2.4	V	-4.72	47.41	54	-6.59
5150	63.59	PK	337	2	H	-2.73	60.86	74	-13.14
5150	52.43	AV	337	2	H	-2.73	49.70	54	-4.30
5150	62.70	PK	16	2.2	V	-2.73	59.97	74	-14.03
5150	53.16	AV	16	2.2	V	-2.73	50.43	54	-3.57
10540	40.17	PK	249	2.4	H	8.65	48.82	68.2	-19.38
10540	40.50	PK	283	2.4	V	8.65	49.15	68.2	-19.05
5310MHz									
5350	65.77	PK	79	1.8	H	-2.33	63.44	74	-10.56
5350	54.61	AV	79	1.8	H	-2.33	52.28	54	-1.72
5350	64.46	PK	297	1.8	V	-2.33	62.13	74	-11.87
5350	53.12	AV	297	1.8	V	-2.33	50.79	54	-3.21
5460	64.65	PK	348	1.1	H	-2.26	62.39	74	-11.61
5460	53.10	AV	348	1.1	H	-2.26	50.84	54	-3.16
5460	64.74	PK	150	2.2	V	-2.26	62.48	74	-11.52
5460	52.59	AV	150	2.2	V	-2.26	50.33	54	-3.67
10620	35.68	PK	265	1.7	H	8.89	44.57	74	-29.43
10620	36.04	PK	153	1.7	V	8.89	44.93	74	-29.07

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC20(worst case MIMO)									
5260MHz									
4500	63.68	PK	299	1.3	H	-4.72	58.96	74	-15.04
4500	52.63	AV	299	1.3	H	-4.72	47.91	54	-6.09
4500	63.78	PK	66	2.3	V	-4.72	59.06	74	-14.94
4500	52.43	AV	66	2.3	V	-4.72	47.71	54	-6.29
5150	63.50	PK	66	1.8	H	-2.73	60.77	74	-13.23
5150	52.91	AV	66	1.8	H	-2.73	50.18	54	-3.82
5150	62.72	PK	357	2	V	-2.73	59.99	74	-14.01
5150	52.33	AV	357	2	V	-2.73	49.60	54	-4.40
10520	40.14	PK	299	2.1	H	8.65	48.79	68.2	-19.41
10520	40.89	PK	320	2.1	V	8.65	49.54	68.2	-18.66
5280MHz									
10560	40.74	PK	67	1.9	H	8.69	49.43	68.2	-18.77
10560	40.87	PK	127	1.9	V	8.69	49.56	68.2	-18.64
5320MHz									
5350	64.90	PK	133	2	H	-2.33	62.57	74	-11.43
5350	52.48	AV	133	2	H	-2.33	50.15	54	-3.85
5350	64.33	PK	324	1.3	V	-2.33	62.00	74	-12.00
5350	52.67	AV	324	1.3	V	-2.33	50.34	54	-3.66
5460	63.28	PK	236	1.6	H	-2.26	61.02	74	-12.98
5460	52.26	AV	236	1.6	H	-2.26	50.00	54	-4.00
5460	63.45	PK	221	1.4	V	-2.26	61.19	74	-12.81
5460	52.35	AV	221	1.4	V	-2.26	50.09	54	-3.91
10640	35.56	PK	182	1.7	H	8.92	44.48	74	-29.52
10640	35.67	PK	81	1.7	V	8.92	44.59	74	-29.41
802.11AC40(worst case MIMO)									
5270MHz									
4500	63.95	PK	302	1.5	H	-4.72	59.23	74	-14.77
4500	51.13	AV	302	1.5	H	-4.72	46.41	54	-7.59
4500	63.58	PK	256	1.4	V	-4.72	58.86	74	-15.14
4500	51.43	AV	256	1.4	V	-4.72	46.71	54	-7.29
5150	64.36	PK	93	1.7	H	-2.73	61.63	74	-12.37
5150	50.85	AV	93	1.7	H	-2.73	48.12	54	-5.88
5150	63.96	PK	327	2.3	V	-2.73	61.23	74	-12.77
5150	51.00	AV	327	2.3	V	-2.73	48.27	54	-5.73
10540	40.60	PK	290	1.3	H	8.65	49.25	68.2	-18.95
10540	40.27	PK	163	1.3	V	8.65	48.92	68.2	-19.28
5310MHz									
5350	71.10	PK	79	2.5	H	-2.33	68.77	74	-5.23
5350	53.50	AV	79	2.5	H	-2.33	51.17	54	-2.83
5350	68.99	PK	254	1.8	V	-2.33	66.66	74	-7.34
5350	53.30	AV	254	1.8	V	-2.33	50.97	54	-3.03
5460	63.54	PK	93	2	H	-2.26	61.28	74	-12.72
5460	51.15	AV	93	2	H	-2.26	48.89	54	-5.11
5460	63.20	PK	16	1.3	V	-2.26	60.94	74	-13.06
5460	51.35	AV	16	1.3	V	-2.26	49.09	54	-4.91
10620	35.77	PK	100	1.7	H	8.89	44.66	74	-29.34
10620	35.59	PK	57	1.7	V	8.89	44.48	74	-29.52

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC80(worst case MIMO)									
5290 MHz									
4500	63.93	PK	166	1.2	H	-4.72	59.21	74	-14.79
4500	51.19	AV	166	1.2	H	-4.72	46.47	54	-7.53
4500	63.72	PK	196	1.9	V	-4.72	59.00	74	-15.00
4500	51.18	AV	196	1.9	V	-4.72	46.46	54	-7.54
5150	64.26	PK	186	1.2	H	-2.73	61.53	74	-12.47
5150	51.01	AV	186	1.2	H	-2.73	48.28	54	-5.72
5150	63.74	PK	279	2.3	V	-2.73	61.01	74	-12.99
5150	50.67	AV	279	2.3	V	-2.73	47.94	54	-6.06
5350	68.87	PK	165	2.1	H	-2.33	66.54	74	-7.46
5350	53.99	AV	165	2.1	H	-2.33	51.66	54	-2.34
5350	67.18	PK	263	1.3	V	-2.33	64.85	74	-9.15
5350	53.70	AV	263	1.3	V	-2.33	51.37	54	-2.63
5460	63.43	PK	258	1.7	H	-2.26	61.17	74	-12.83
5460	51.38	AV	258	1.7	H	-2.26	49.12	54	-4.88
5460	63.49	PK	330	1.9	V	-2.26	61.23	74	-12.77
5460	51.14	AV	330	1.9	V	-2.26	48.88	54	-5.12
10580	41.21	PK	334	1.9	H	8.77	49.98	68.2	-18.22
10580	41.28	PK	228	1.9	V	8.77	50.05	68.2	-18.15

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AX20(worst case MIMO)									
5260MHz (Worst Case 242Tone_RU61)									
4500	63.57	PK	357	1.9	H	-4.72	58.85	74	-15.15
4500	49.94	AV	357	1.9	H	-4.72	45.22	54	-8.78
4500	63.09	PK	309	1.8	V	-4.72	58.37	74	-15.63
4500	49.97	AV	309	1.8	V	-4.72	45.25	54	-8.75
5150	63.34	PK	180	1.5	H	-2.73	60.61	74	-13.39
5150	50.47	AV	180	1.5	H	-2.73	47.74	54	-6.26
5150	62.75	PK	288	1.9	V	-2.73	60.02	74	-13.98
5150	50.39	AV	288	1.9	V	-2.73	47.66	54	-6.34
10520	41.00	PK	23	2.3	H	8.56	49.56	68.2	-18.64
10520	40.83	PK	245	2.3	V	8.56	49.39	68.2	-18.81
5280MHz (Worst Case 242Tone_RU61)									
10560	41.42	PK	164	2.5	H	8.69	50.11	68.2	-18.09
10560	41.75	PK	151	2.5	V	8.69	50.44	68.2	-17.76
5320MHz (Worst Case 242Tone_RU61)									
5350	65.44	PK	309	1.8	H	-2.33	63.11	74	-10.89
5350	51.09	AV	309	1.8	H	-2.33	48.76	54	-5.24
5350	64.14	PK	39	2.2	V	-2.33	61.81	74	-12.19
5350	50.96	AV	39	2.2	V	-2.33	48.63	54	-5.37
5460	64.14	PK	237	1.3	H	-2.26	61.88	74	-12.12
5460	50.76	AV	237	1.3	H	-2.26	48.50	54	-5.50
5460	64.87	PK	39	1.4	V	-2.26	62.61	74	-11.39
5460	50.63	AV	39	1.4	V	-2.26	48.37	54	-5.63
10640	36.17	PK	71	1.7	H	8.92	45.09	74	-28.91
10640	36.25	PK	150	1.7	V	8.92	45.17	74	-28.83

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AX40(worst case MIMO)									
5270MHz (Worst Case 484Tone_RU65)									
4500	63.70	PK	69	2.3	H	-4.72	58.98	74	-15.02
4500	49.86	AV	69	2.3	H	-4.72	45.14	54	-8.86
4500	63.35	PK	6	1.3	V	-4.72	58.63	74	-15.37
4500	49.91	AV	6	1.3	V	-4.72	45.19	54	-8.81
5150	63.58	PK	242	2	H	-2.73	60.85	74	-13.15
5150	50.44	AV	242	2	H	-2.73	47.71	54	-6.29
5150	62.86	PK	279	2	V	-2.73	60.13	74	-13.87
5150	50.54	AV	279	2	V	-2.73	47.81	54	-6.19
10540	40.35	PK	22	2.1	H	8.56	48.91	68.2	-19.29
10540	40.19	PK	230	2.1	V	8.56	48.75	68.2	-19.45
5310MHz (Worst Case 484Tone_RU65)									
5350	72.96	PK	195	1.7	H	-2.33	70.63	74	-3.37
5350	54.57	AV	195	1.7	H	-2.33	52.24	54	-1.76
5350	67.44	PK	295	1.7	V	-2.33	65.11	74	-8.89
5350	52.20	AV	295	1.7	V	-2.33	49.87	54	-4.13
5460	64.35	PK	324	2.1	H	-2.26	62.09	74	-11.91
5460	50.80	AV	324	2.1	H	-2.26	48.54	54	-5.46
5460	64.10	PK	219	1.5	V	-2.26	61.84	74	-12.16
5460	50.96	AV	219	1.5	V	-2.26	48.70	54	-5.30
10620	35.13	PK	94	1.7	H	8.89	44.02	74	-29.98
10620	35.58	PK	313	1.7	V	8.89	44.47	74	-29.53
802.11AX80(worst case MIMO)									
5290MHz (Worst Case 996Tone_RU65)									
4500	63.12	PK	68	1.3	H	-4.72	58.40	74	-15.60
4500	49.95	AV	68	1.3	H	-4.72	45.23	54	-8.77
4500	62.94	PK	147	2.2	V	-4.72	58.22	74	-15.78
4500	49.93	AV	147	2.2	V	-4.72	45.21	54	-8.79
5150	62.95	PK	130	1.7	H	-2.73	60.22	74	-13.78
5150	50.57	AV	130	1.7	H	-2.73	47.84	54	-6.16
5150	62.47	PK	24	1.3	V	-2.73	59.74	74	-14.26
5150	50.30	AV	24	1.3	V	-2.73	47.57	54	-6.43
5350	69.73	PK	282	1.6	H	-2.33	67.40	74	-6.60
5350	54.88	AV	282	1.6	H	-2.33	52.55	54	-1.45
5350	64.20	PK	210	2	V	-2.33	61.87	74	-12.13
5350	51.00	AV	210	2	V	-2.33	48.67	54	-5.33
5460	64.81	PK	218	1.3	H	-2.26	62.55	74	-11.45
5460	50.83	AV	218	1.3	H	-2.26	48.57	54	-5.43
5460	63.83	PK	324	1.3	V	-2.26	61.57	74	-12.43
5460	50.74	AV	324	1.3	V	-2.26	48.48	54	-5.52
10580	41.65	PK	182	1.5	H	8.77	50.42	68.2	-17.78
10580	41.17	PK	289	1.5	V	8.77	49.94	68.2	-18.26

5470-5725MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11a(worst case antenna 1)									
5500 MHz									
5460	64.38	PK	64	1.6	H	-2.26	62.12	74	-11.88
5460	52.28	AV	64	1.6	H	-2.26	50.02	54	-3.98
5460	64.58	PK	214	1.9	V	-2.26	62.32	74	-11.68
5460	52.35	AV	214	1.9	V	-2.26	50.09	54	-3.91
5470	65.37	PK	78	1.7	H	-2.22	63.15	68.2	-5.05
5470	65.46	PK	239	2	V	-2.22	63.24	68.2	-4.96
11000	40.62	PK	251	1.7	H	9.67	50.29	74	-23.71
11000	40.67	PK	225	1.7	V	9.67	50.34	74	-23.66
5580MHz									
11160	41.32	PK	154	2.4	H	8.68	50.00	74	-24.00
11160	41.28	PK	350	1.7	V	8.68	49.96	74	-24.04
5700MHz									
5725	59.38	PK	230	1.5	H	-1.96	57.42	68.2	-10.78
5725	59.18	PK	336	1.4	V	-1.96	57.22	68.2	-10.98
5745	58.54	PK	318	2.4	H	-1.91	56.63	68.2	-11.57
5745	58.25	PK	209	2.3	V	-1.91	56.34	68.2	-11.86
11400	43.10	PK	155	1.2	H	7.26	50.36	74	-23.64
11400	43.08	PK	196	1.2	V	7.26	50.34	74	-23.66
802.11n20(worst case MIMO)									
5500 MHz									
5460	64.62	PK	314	1.2	H	-2.26	62.36	74	-11.64
5460	52.36	AV	314	1.2	H	-2.26	50.10	54	-3.90
5460	64.60	PK	278	2	V	-2.26	62.34	74	-11.66
5460	52.24	AV	278	2	V	-2.26	49.98	54	-4.02
5470	65.35	PK	62	1.8	H	-2.22	63.13	68.2	-5.07
5470	65.20	PK	167	1.5	V	-2.22	62.98	68.2	-5.22
11000	40.58	PK	97	1.2	H	9.67	50.25	74	-23.75
11000	40.66	PK	43	1.7	V	9.67	50.33	74	-23.67
5580 MHz									
11160	41.31	PK	210	1.4	H	8.68	49.99	74	-24.01
11160	41.30	PK	300	1.8	V	8.68	49.98	74	-24.02
5700 MHz									
5725	59.24	PK	232	2	H	-1.96	57.28	68.2	-10.92
5725	59.46	PK	148	2	V	-1.96	57.50	68.2	-10.70
5745	58.52	PK	317	2.3	H	-1.91	56.61	68.2	-11.59
5745	58.59	PK	302	1.2	V	-1.91	56.68	68.2	-11.52
11400	42.99	PK	244	2.3	H	7.26	50.25	74	-23.75
11400	42.99	PK	57	2.4	V	7.26	50.25	74	-23.75

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11N40(worst case MIMO)									
5510 MHz									
5460	64.44	PK	211	2.5	H	-2.26	62.18	74	-11.82
5460	52.34	AV	211	2.5	H	-2.26	50.08	54	-3.92
5460	64.30	PK	232	1.3	V	-2.26	62.04	74	-11.96
5460	52.35	AV	232	1.3	V	-2.26	50.09	54	-3.91
5470	68.88	PK	166	1.3	H	-2.22	66.66	68.2	-1.54
5470	67.51	PK	84	1.2	V	-2.22	65.29	68.2	-2.91
11020	40.69	PK	332	1.3	H	9.57	50.26	74	-23.74
11020	40.77	PK	189	1.7	V	9.57	50.34	74	-23.66
5550 MHz									
11100	40.34	PK	321	1.4	H	9.12	49.46	74	-24.54
11100	40.28	PK	97	2.4	V	9.12	49.40	74	-24.60
5670 MHz									
5725	59.18	PK	19	1.2	H	-1.96	57.22	68.2	-10.98
5725	59.23	PK	46	1.5	V	-1.96	57.27	68.2	-10.93
5745	58.48	PK	336	1.5	H	-1.91	56.57	68.2	-11.63
5745	58.13	PK	198	2.2	V	-1.91	56.22	68.2	-11.98
11340	42.37	PK	215	1.6	H	7.81	50.18	74	-23.82
11340	42.31	PK	160	1.2	V	7.81	50.12	74	-23.88

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC 20(worst case MIMO)									
5500 MHz									
5460	64.50	PK	18	1.1	H	-2.26	62.24	74	-11.76
5460	51.32	AV	18	1.1	H	-2.26	49.06	54	-4.94
5460	64.63	PK	323	1.8	V	-2.26	62.37	74	-11.63
5460	51.18	AV	323	1.8	V	-2.26	48.92	54	-5.08
5470	65.13	PK	109	1.8	H	-2.22	62.91	68.2	-5.29
5470	65.50	PK	158	2.4	V	-2.22	63.28	68.2	-4.92
11000	40.68	PK	109	1.1	H	9.67	50.35	74	-23.65
11000	40.66	PK	40	2	V	9.67	50.33	74	-23.67
5580 MHz									
11160	41.46	PK	207	1.4	H	8.68	50.14	74	-23.86
11160	41.41	PK	0	1.7	V	8.68	50.09	74	-23.91
5700 MHz									
5725	59.29	PK	79	1.1	H	-1.96	57.33	68.2	-10.87
5725	59.41	PK	331	1.5	V	-1.96	57.45	68.2	-10.75
5745	58.35	PK	109	2.3	H	-1.91	56.44	68.2	-11.76
5745	58.46	PK	308	1.8	V	-1.91	56.55	68.2	-11.65
11400	43.22	PK	175	1.3	H	7.26	50.48	74	-23.52
11400	42.98	PK	20	1.9	V	7.26	50.24	74	-23.76

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC 40(worst case MIMO)									
5510 MHz									
5460	64.19	PK	165	1.8	H	-2.26	61.93	74	-12.07
5460	50.81	AV	165	1.8	H	-2.26	48.55	54	-5.45
5460	64.35	PK	157	2.1	V	-2.26	62.09	74	-11.91
5460	50.68	AV	157	2.1	V	-2.26	48.42	54	-5.58
5470	68.77	PK	343	2.3	H	-2.22	66.55	68.2	-1.65
5470	67.27	PK	48	1.1	V	-2.22	65.05	68.2	-3.15
11020	40.82	PK	81	2.5	H	9.57	50.39	74	-23.61
11020	40.60	PK	243	2	V	9.57	50.17	74	-23.83
5550 MHz									
11100	40.34	PK	313	1.2	H	9.12	49.46	74	-24.54
11100	40.28	PK	0	2.2	V	9.12	49.40	74	-24.60
5670 MHz									
5725	59.94	PK	119	1.7	H	-1.96	57.98	68.2	-10.22
5725	60.02	PK	61	2.4	V	-1.96	58.06	68.2	-10.14
5745	58.20	PK	73	2.3	H	-1.91	56.29	68.2	-11.91
5745	58.51	PK	10	1.7	V	-1.91	56.60	68.2	-11.60
11340	42.25	PK	160	1.5	H	7.81	50.06	74	-23.94
11340	42.40	PK	343	1.2	V	7.81	50.21	74	-23.79
802.11AC 80(worst case MIMO)									
5530 MHz									
5460	64.61	PK	232	2.5	H	-2.26	62.35	74	-11.65
5460	50.69	AV	232	2.5	H	-2.26	48.43	54	-5.57
5460	64.24	PK	65	2	V	-2.26	61.98	74	-12.02
5460	50.78	AV	65	2	V	-2.26	48.52	54	-5.48
5470	68.88	PK	136	1	H	-2.22	66.66	68.2	-1.54
5470	67.37	PK	56	2	V	-2.22	65.15	68.2	-3.05
11060	40.10	PK	237	1.4	H	9.37	49.47	74	-24.53
11060	40.13	PK	341	1.3	V	9.37	49.50	74	-24.50
5610 MHz									
5725	59.99	PK	169	2	H	-1.96	58.03	68.2	-10.17
5725	59.87	PK	170	1.8	V	-1.96	57.91	68.2	-10.29
5745	58.52	PK	225	1.6	H	-1.91	56.61	68.2	-11.59
5745	58.43	PK	357	1.8	V	-1.91	56.52	68.2	-11.68
11220	41.70	PK	9	1.7	H	8.33	50.03	74	-23.97
11220	41.86	PK	222	1.1	V	8.33	50.19	74	-23.81

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AX20(worst case MIMO)									
5500MHz (Worst Case 242Tone_RU61)									
5460	64.27	PK	322	1.6	H	-2.26	62.01	74	-11.99
5460	50.79	AV	322	1.6	H	-2.26	48.53	54	-5.47
5460	64.44	PK	318	1.2	V	-2.26	62.18	74	-11.82
5460	50.69	AV	318	1.2	V	-2.26	48.43	54	-5.57
5470	65.81	PK	235	2.2	H	-2.22	63.59	68.2	-4.61
5470	65.62	PK	217	1.3	V	-2.22	63.40	68.2	-4.80
11000	40.56	PK	146	1.2	H	9.67	50.23	74	-23.77
11000	40.63	PK	124	2.5	V	9.67	50.30	74	-23.70
5580MHz (Worst Case 242Tone_RU61)									
11160	41.45	PK	51	1.7	H	8.68	50.13	74	-23.87
11160	41.45	PK	95	2	V	8.68	50.13	74	-23.87
5700MHz (Worst Case 242Tone_RU61)									
5725	65.53	PK	7	1.4	H	-1.96	63.57	68.2	-4.63
5725	65.81	PK	244	1.8	V	-1.96	63.85	68.2	-4.35
5745	63.94	PK	278	1.4	H	-1.91	62.03	68.2	-6.17
5745	64.27	PK	190	1.4	V	-1.91	62.36	68.2	-5.84
11400	42.99	PK	125	1.7	H	7.26	50.25	74	-23.75
11400	43.09	PK	334	1	V	7.26	50.35	74	-23.65
802.11AX40(worst case MIMO)									
5510MHz (Worst Case 484Tone_RU61)									
5460	64.23	PK	41	2	H	-2.26	61.97	74	-12.03
5460	50.80	AV	41	2	H	-2.26	48.54	54	-5.46
5460	64.31	PK	249	1.2	V	-2.26	62.05	74	-11.95
5460	50.88	AV	249	1.2	V	-2.26	48.62	54	-5.38
5470	68.78	PK	245	2.1	H	-2.22	66.56	68.2	-1.64
5470	67.46	PK	64	1.1	V	-2.22	65.24	68.2	-2.96
11020	40.84	PK	302	2.3	H	9.57	50.41	74	-23.59
11020	40.66	PK	143	2.2	V	9.57	50.23	74	-23.77
5550MHz (Worst Case 484Tone_RU61)									
11100	40.16	PK	72	1.8	H	9.12	49.28	74	-24.72
11100	40.23	PK	302	1.6	V	9.12	49.35	74	-24.65
5670MHz (Worst Case 484Tone_RU61)									
5725	65.46	PK	100	2.3	H	-1.96	63.50	68.2	-4.70
5725	65.88	PK	213	2.4	V	-1.96	63.92	68.2	-4.28
5745	64.00	PK	40	2.4	H	-1.91	62.09	68.2	-6.11
5745	64.31	PK	181	1.6	V	-1.91	62.40	68.2	-5.80
11340	42.27	PK	292	1.8	H	7.81	50.08	74	-23.92
11340	42.14	PK	15	2.5	V	7.81	49.95	74	-24.05

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AX80(worst case MIMO)									
5530MHz (Worst Case 996Tone_RU61)									
5460	64.24	PK	268	1.8	H	-2.26	61.98	74	-12.02
5460	50.79	AV	268	1.8	H	-2.26	48.53	54	-5.47
5460	64.46	PK	70	2.3	V	-2.26	62.20	74	-11.80
5460	50.75	AV	70	2.3	V	-2.26	48.49	54	-5.51
5470	68.60	PK	116	1.4	H	-2.22	66.38	68.2	-1.82
5470	67.34	PK	8	1.6	V	-2.22	65.12	68.2	-3.08
11060	39.97	PK	330	2.3	H	9.37	49.34	74	-24.66
11060	39.95	PK	162	1.2	V	9.37	49.32	74	-24.68
5610MHz (Worst Case 996Tone_RU61)									
5725	65.78	PK	81	1.9	H	-1.96	63.82	68.2	-4.38
5725	65.77	PK	175	1.6	V	-1.96	63.81	68.2	-4.39
5745	64.02	PK	184	2	H	-1.91	62.11	68.2	-6.09
5745	64.37	PK	341	1.3	V	-1.91	62.46	68.2	-5.74
11220	41.76	PK	36	2.4	H	8.33	50.09	74	-23.91
11220	41.65	PK	267	2.3	V	8.33	49.98	74	-24.02

5725-5850 MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11a(worst case antenna 1)									
5745MHz									
5650	64.97	PK	315	1.4	H	-1.95	63.02	68.2	-5.18
5650	65.07	PK	223	2.4	V	-1.95	63.12	68.2	-5.08
5700	66.29	PK	22	1.2	H	-2.02	64.27	105.2	-40.93
5700	66.44	PK	19	1.3	V	-2.02	64.42	105.2	-40.78
5720	68.54	PK	302	1.4	H	-1.97	66.57	110.8	-44.23
5720	68.61	PK	17	1.2	V	-1.97	66.64	110.8	-44.16
5725	72.28	PK	26	1.8	H	-1.96	70.32	122.2	-51.88
5725	72.45	PK	292	2.3	V	-1.96	70.49	122.2	-51.71
11490	44.11	PK	77	2	H	6.63	50.74	74	-23.26
11490	43.54	PK	159	2.3	V	6.63	50.17	74	-23.83
5785MHz									
11570	44.21	PK	247	1.7	H	6.59	50.80	74	-23.20
11570	43.74	PK	79	1.1	V	6.59	50.33	74	-23.67
5825MHz									
5850	67.20	PK	298	1.7	H	-1.81	65.39	122.2	-56.81
5850	67.51	PK	126	1.7	V	-1.81	65.70	122.2	-56.50
5855	66.46	PK	77	2.5	H	-1.81	64.65	110.8	-46.15
5855	66.65	PK	22	1.9	V	-1.81	64.84	110.8	-45.96
5875	66.03	PK	331	1.2	H	-1.84	64.19	105.2	-41.01
5875	65.23	PK	176	2	V	-1.84	63.39	105.2	-41.81
5925	65.57	PK	219	1.9	H	-1.82	63.75	68.2	-4.45
5925	65.78	PK	198	1.4	V	-1.82	63.96	68.2	-4.24
11650	42.86	PK	34	1.4	H	6.77	49.63	74	-24.37
11650	42.37	PK	292	1.6	V	6.77	49.14	74	-24.86

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11n20(worst case MIMO)									
5745MHz									
5650	65.08	PK	198	1.2	H	-1.95	63.13	68.2	-5.07
5650	65.26	PK	207	2.4	V	-1.95	63.31	68.2	-4.89
5700	66.44	PK	61	1.4	H	-2.02	64.42	105.2	-40.78
5700	66.15	PK	289	2	V	-2.02	64.13	105.2	-41.07
5720	70.21	PK	238	1.8	H	-1.97	68.24	110.8	-42.56
5720	70.01	PK	147	1.5	V	-1.97	68.04	110.8	-42.76
5725	73.14	PK	24	2	H	-1.96	71.18	122.2	-51.02
5725	73.28	PK	340	1.6	V	-1.96	71.32	122.2	-50.88
11490	44.19	PK	128	2.5	H	6.63	50.82	74	-23.18
11490	43.54	PK	246	2	V	6.63	50.17	74	-23.83
5785MHz									
11570	44.24	PK	232	1.2	H	6.59	50.83	74	-23.17
11570	43.81	PK	176	2.5	V	6.59	50.40	74	-23.60
5825MHz									
5850	68.19	PK	339	2.2	H	-1.81	66.38	122.2	-55.82
5850	68.25	PK	58	2.3	V	-1.81	66.44	122.2	-55.76
5855	67.18	PK	338	1.9	H	-1.81	65.37	110.8	-45.43
5855	67.50	PK	333	1.7	V	-1.81	65.69	110.8	-45.11
5875	65.48	PK	117	1.4	H	-1.84	63.64	105.2	-41.56
5875	65.79	PK	49	2.2	V	-1.84	63.95	105.2	-41.25
5925	65.90	PK	330	2.3	H	-1.82	64.08	68.2	-4.12
5925	65.49	PK	306	1.6	V	-1.82	63.67	68.2	-4.53
11650	42.51	PK	311	1.5	H	6.77	49.28	74	-24.72
11650	42.11	PK	153	1.9	V	6.77	48.88	74	-25.12

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11N40(worst case MIMO)									
5755MHz									
5650	65.15	PK	130	2.1	H	-1.95	63.20	68.2	-5.00
5650	65.06	PK	164	2.4	V	-1.95	63.11	68.2	-5.09
5700	66.10	PK	154	2.3	H	-2.02	64.08	105.2	-41.12
5700	66.06	PK	76	1.1	V	-2.02	64.04	105.2	-41.16
5720	72.04	PK	49	1.1	H	-1.97	70.07	110.8	-40.73
5720	71.97	PK	90	1.9	V	-1.97	70.00	110.8	-40.80
5725	74.28	PK	186	1.5	H	-1.96	72.32	122.2	-49.88
5725	73.03	PK	50	2.1	V	-1.96	71.07	122.2	-51.13
11510	44.22	PK	192	1.1	H	6.59	50.81	74	-23.19
11510	43.79	PK	268	2.4	V	6.59	50.38	74	-23.62
5795MHz									
5850	68.02	PK	345	1	H	-1.81	66.21	122.2	-55.99
5850	67.97	PK	74	1.8	V	-1.81	66.16	122.2	-56.04
5855	66.67	PK	348	1.9	H	-1.81	64.86	110.8	-45.94
5855	66.23	PK	194	2.1	V	-1.81	64.42	110.8	-46.38
5875	65.70	PK	265	1.1	H	-1.84	63.86	105.2	-41.34
5875	65.40	PK	343	1.9	V	-1.84	63.56	105.2	-41.64
5925	65.48	PK	222	2.5	H	-1.82	63.66	68.2	-4.54
5925	65.55	PK	14	2.2	V	-1.82	63.73	68.2	-4.47
11590	44.28	PK	203	1.2	H	6.57	50.85	74	-23.15
11590	43.93	PK	228	2	V	6.57	50.50	74	-23.50

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC20(worst case MIMO)									
5745 MHz									
5650	65.26	PK	317	2.3	H	-1.95	63.31	68.2	-4.89
5650	65.36	PK	228	1.7	V	-1.95	63.41	68.2	-4.79
5700	66.03	PK	303	2.5	H	-2.02	64.01	105.2	-41.19
5700	66.10	PK	54	1.6	V	-2.02	64.08	105.2	-41.12
5720	69.98	PK	187	2.1	H	-1.97	68.01	110.8	-42.79
5720	70.38	PK	159	2.5	V	-1.97	68.41	110.8	-42.39
5725	73.20	PK	29	1.8	H	-1.96	71.24	122.2	-50.96
5725	73.25	PK	202	2.4	V	-1.96	71.29	122.2	-50.91
11490	44.00	PK	257	1.9	H	6.63	50.63	74	-23.37
11490	43.76	PK	168	2.3	V	6.63	50.39	74	-23.61
5785MHz									
11570	44.20	PK	233	2.1	H	6.59	50.79	74	-23.21
11570	43.44	PK	46	1.8	V	6.59	50.03	74	-23.97
5825MHz									
5850	68.43	PK	25	1	H	-1.81	66.62	122.2	-55.58
5850	68.49	PK	344	1.2	V	-1.81	66.68	122.2	-55.52
5855	66.65	PK	99	2.1	H	-1.81	64.84	110.8	-45.96
5855	66.45	PK	308	2	V	-1.81	64.64	110.8	-46.16
5875	65.34	PK	31	2.3	H	-1.84	63.50	105.2	-41.70
5875	65.62	PK	139	1.7	V	-1.84	63.78	105.2	-41.42
5925	65.84	PK	275	2.2	H	-1.82	64.02	68.2	-4.18
5925	65.96	PK	84	1.3	V	-1.82	64.14	68.2	-4.06
11650	42.79	PK	248	1.5	H	6.77	49.56	74	-24.44
11650	42.07	PK	280	1.4	V	6.77	48.84	74	-25.16

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC40(worst case MIMO)									
5755MHz									
5650	64.99	PK	35	2.1	H	-1.95	63.04	68.2	-5.16
5650	65.25	PK	92	1.6	V	-1.95	63.30	68.2	-4.90
5700	66.12	PK	267	1.8	H	-2.02	64.10	105.2	-41.10
5700	66.02	PK	275	1.9	V	-2.02	64.00	105.2	-41.20
5720	72.30	PK	280	1.4	H	-1.97	70.33	110.8	-40.47
5720	72.26	PK	112	1.8	V	-1.97	70.29	110.8	-40.51
5725	73.21	PK	170	1.4	H	-1.96	71.25	122.2	-50.95
5725	73.32	PK	191	1.1	V	-1.96	71.36	122.2	-50.84
11510	44.24	PK	17	1.7	H	6.59	50.83	74	-23.17
11510	43.54	PK	268	1.7	V	6.59	50.13	74	-23.87
5795MHz									
5850	67.51	PK	306	1.8	H	-1.81	65.70	122.2	-56.50
5850	67.56	PK	199	1.9	V	-1.81	65.75	122.2	-56.45
5855	66.45	PK	242	1.1	H	-1.81	64.64	110.8	-46.16
5855	66.63	PK	39	1.4	V	-1.81	64.82	110.8	-45.98
5875	66.05	PK	171	1.7	H	-1.84	64.21	105.2	-40.99
5875	65.60	PK	194	2.2	V	-1.84	63.76	105.2	-41.44
5925	66.15	PK	126	1.7	H	-1.82	64.33	68.2	-3.87
5925	66.27	PK	112	1.8	V	-1.82	64.45	68.2	-3.75
11590	44.41	PK	103	1	H	6.57	50.98	74	-23.02
11590	43.70	PK	165	2.2	V	6.57	50.27	74	-23.73
802.11AC80(worst case MIMO)									
5775MHz									
5650	67.33	PK	60	1.6	H	-1.95	65.38	68.2	-2.82
5650	67.29	PK	252	2	V	-1.95	65.34	68.2	-2.86
5700	74.01	PK	162	1.9	H	-2.02	71.99	105.2	-33.21
5700	74.45	PK	305	1	V	-2.02	72.43	105.2	-32.77
5720	76.38	PK	207	1.5	H	-1.97	74.41	110.8	-36.39
5720	76.01	PK	334	2.3	V	-1.97	74.04	110.8	-36.76
5725	77.33	PK	71	2.4	H	-1.96	75.37	122.2	-46.83
5725	77.27	PK	97	1.7	V	-1.96	75.31	122.2	-46.89
5850	76.11	PK	124	2.2	H	-1.81	74.30	122.2	-47.90
5850	75.77	PK	322	1.8	V	-1.81	73.96	122.2	-48.24
5855	74.51	PK	12	1.6	H	-1.81	72.70	110.8	-38.10
5855	74.47	PK	50	2.4	V	-1.81	72.66	110.8	-38.14
5875	67.81	PK	177	1.9	H	-1.84	65.97	105.2	-39.23
5875	67.54	PK	64	1.3	V	-1.84	65.70	105.2	-39.50
5925	66.16	PK	101	1	H	-1.82	64.34	68.2	-3.86
5925	65.71	PK	130	1.9	V	-1.82	63.89	68.2	-4.31
11550	44.37	PK	193	1.8	H	6.61	50.98	74	-23.02
11550	43.62	PK	85	1.6	V	6.61	50.23	74	-23.77

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AX20(worst case MIMO)									
5745MHz (Worst Case 242Tone_RU61)									
5650	64.98	PK	41	1.5	H	-1.95	63.03	68.2	-5.17
5650	65.02	PK	188	1.8	V	-1.95	63.07	68.2	-5.13
5700	66.05	PK	72	1.1	H	-2.02	64.03	105.2	-41.17
5700	66.45	PK	260	1.5	V	-2.02	64.43	105.2	-40.77
5720	70.49	PK	296	1.7	H	-1.97	68.52	110.8	-42.28
5720	70.56	PK	196	1.1	V	-1.97	68.59	110.8	-42.21
5725	74.30	PK	346	1.2	H	-1.96	72.34	122.2	-49.86
5725	73.99	PK	345	2.3	V	-1.96	72.03	122.2	-50.17
11490	44.08	PK	13	2	H	6.63	50.71	74	-23.29
11490	43.53	PK	338	1.4	V	6.63	50.16	74	-23.84
5785MHz (Worst Case 242Tone_RU61)									
11570	44.27	PK	38	1.8	H	6.59	50.86	74	-23.14
11570	43.57	PK	134	1.8	V	6.59	50.16	74	-23.84
5825MHz (Worst Case 242Tone_RU61)									
5850	68.29	PK	221	2.2	H	-1.81	66.48	122.2	-55.72
5850	68.83	PK	45	1.5	V	-1.81	67.02	122.2	-55.18
5855	66.34	PK	81	1.9	H	-1.81	64.53	110.8	-46.27
5855	66.42	PK	10	1.7	V	-1.81	64.61	110.8	-46.19
5875	66.48	PK	15	1.3	H	-1.84	64.64	105.2	-40.56
5875	66.63	PK	300	2	V	-1.84	64.79	105.2	-40.41
5925	66.18	PK	9	1.6	H	-1.82	64.36	68.2	-3.84
5925	65.52	PK	358	1.3	V	-1.82	63.70	68.2	-4.50
11650	42.56	PK	45	1.5	H	6.77	49.33	74	-24.67
11650	42.09	PK	285	1.5	V	6.77	48.86	74	-25.14

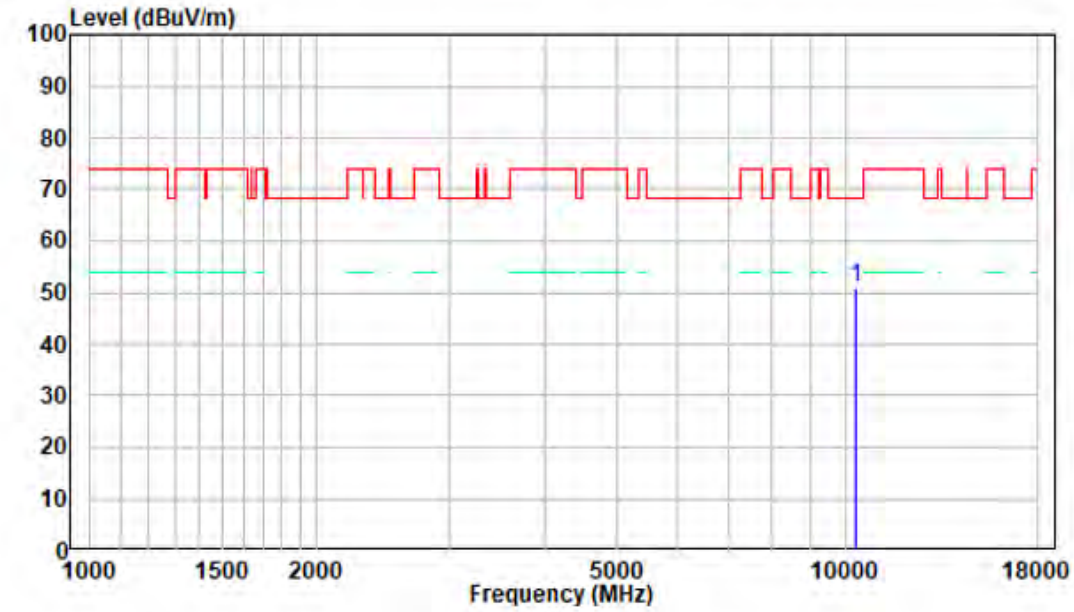
Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AX40									
5755MHz (Worst Case 484Tone_RU61)									
5650	65.37	PK	240	1.4	H	-1.95	63.42	68.2	-4.78
5650	65.44	PK	150	1.5	V	-1.95	63.49	68.2	-4.71
5700	66.30	PK	243	1.4	H	-2.02	64.28	105.2	-40.92
5700	66.27	PK	87	1.2	V	-2.02	64.25	105.2	-40.95
5720	72.15	PK	192	1.4	H	-1.97	70.18	110.8	-40.62
5720	72.14	PK	236	2.3	V	-1.97	70.17	110.8	-40.63
5725	73.06	PK	256	2.1	H	-1.96	71.10	122.2	-51.10
5725	73.07	PK	205	2	V	-1.96	71.11	122.2	-51.09
11510	44.24	PK	67	1.5	H	6.59	50.83	74	-23.17
11510	43.71	PK	33	1.6	V	6.59	50.30	74	-23.70
5795MHz (Worst Case 484Tone_RU61)									
5850	68.03	PK	187	1.8	H	-1.81	66.22	122.2	-55.98
5850	67.38	PK	294	1.6	V	-1.81	65.57	122.2	-56.63
5855	66.30	PK	357	2.4	H	-1.81	64.49	110.8	-46.31
5855	66.23	PK	306	1.3	V	-1.81	64.42	110.8	-46.38
5875	65.96	PK	304	2	H	-1.84	64.12	105.2	-41.08
5875	66.15	PK	302	1.4	V	-1.84	64.31	105.2	-40.89
5925	65.60	PK	261	1.6	H	-1.82	63.78	68.2	-4.42
5925	65.55	PK	284	1.6	V	-1.82	63.73	68.2	-4.47
11590	44.14	PK	350	2	H	6.57	50.71	74	-23.29
11590	43.85	PK	204	1	V	6.57	50.42	74	-23.58
802.11AX80									
5775MHz (Worst Case 996Tone_RU61)									
5650	67.19	PK	4	1.2	H	-1.95	65.24	68.2	-2.96
5650	67.17	PK	127	1.6	V	-1.95	65.22	68.2	-2.98
5700	74.13	PK	20	1.7	H	-2.02	72.11	105.2	-33.09
5700	74.36	PK	184	2.3	V	-2.02	72.34	105.2	-32.86
5720	75.96	PK	186	2.5	H	-1.97	73.99	110.8	-36.81
5720	76.18	PK	121	1.5	V	-1.97	74.21	110.8	-36.59
5725	77.22	PK	175	1.8	H	-1.96	75.26	122.2	-46.94
5850	75.98	PK	38	1.5	H	-1.81	74.17	122.2	-48.03
5850	75.82	PK	260	1.5	V	-1.81	74.01	122.2	-48.19
5855	74.23	PK	353	1.1	H	-1.81	72.42	110.8	-38.38
5855	74.63	PK	297	1.6	V	-1.81	72.82	110.8	-37.98
5875	68.06	PK	334	2.2	H	-1.84	66.22	105.2	-38.98
5875	67.50	PK	227	1.9	V	-1.84	65.66	105.2	-39.54
5925	65.49	PK	74	1.8	H	-1.82	63.67	68.2	-4.53
5925	66.27	PK	226	1.2	V	-1.82	64.45	68.2	-3.75
11550	43.93	PK	276	1.8	H	6.61	50.54	74	-23.46
11550	43.78	PK	42	1.2	V	6.61	50.39	74	-23.61

Note:
Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Absolute Level (Corrected Amplitude)= Factor + Reading
Margin = Absolute Level (Corrected Amplitude) - Limit
The other spurious emission which is 20dB below to the limit or in the noise floor was not recorded.
The test result of peak was less than the limit of average, so just peak values were recorded.

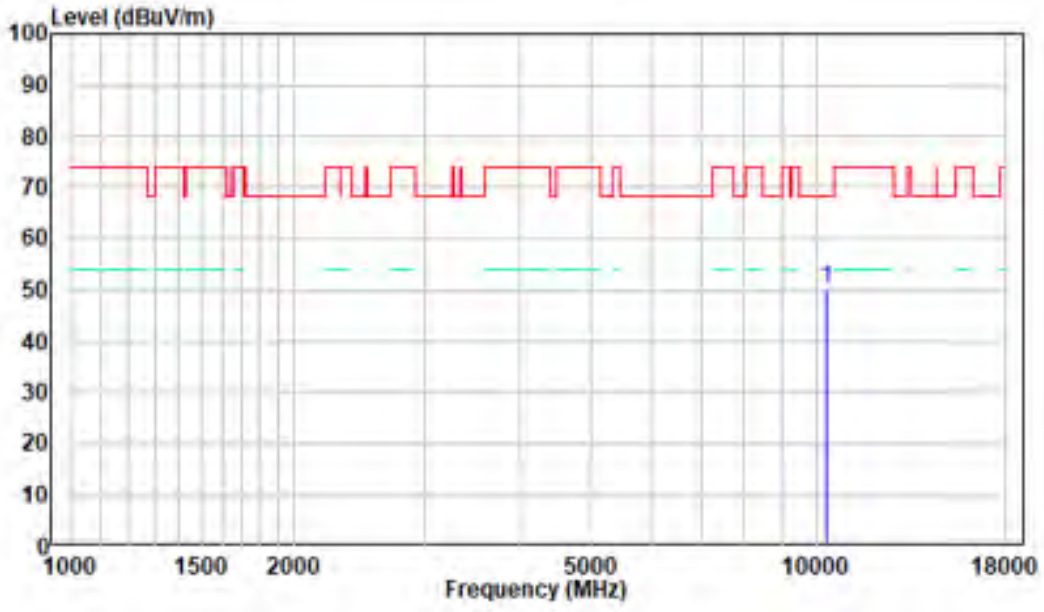
1-18 GHz:

Pre-scan Plots:

802.11a 5180MHz
Horizontal



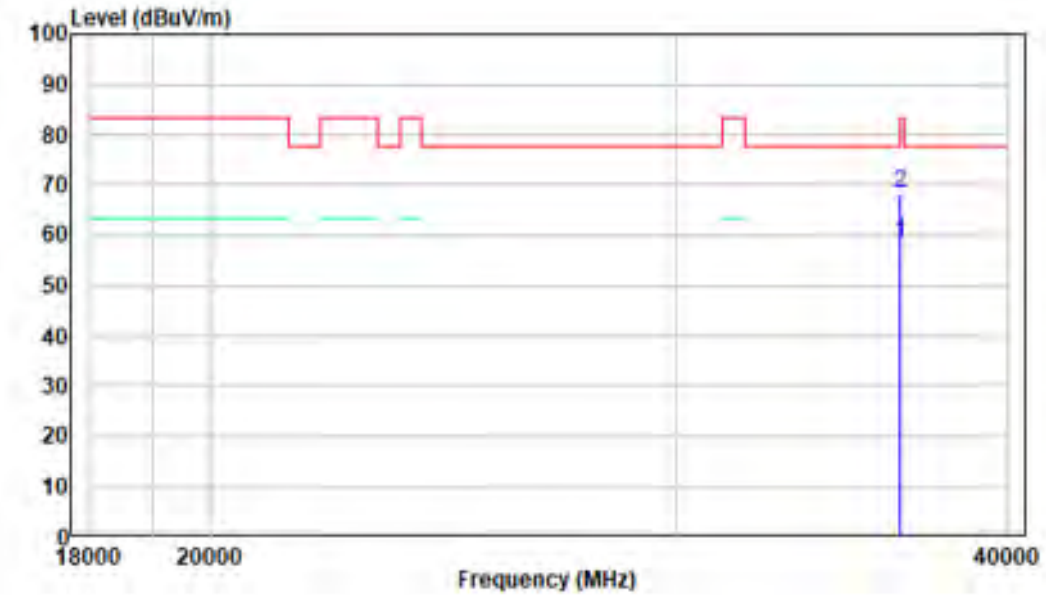
Vertical



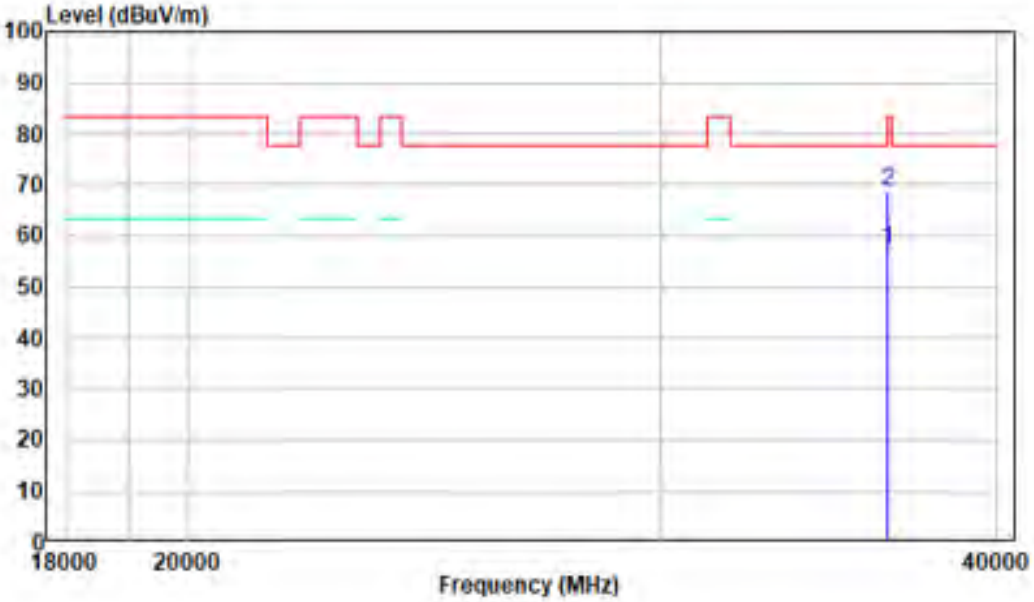
18 -40GHz:

Pre-scan Plots:

802.11a 5180MHz
Horizontal



Vertical



FCC §15.407(a),(e) – 26 dB & 6dB EMISSION BANDWIDTH

Applicable Standard

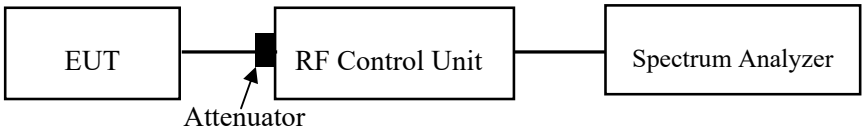
The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

Test Procedure

1. Emission Bandwidth (EBW)
a) Set RBW = approximately 1% of the emission bandwidth.
b) Set the VBW > RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

2. **Minimum Emission Bandwidth for the band 5.725-5.85 GHz**
Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.725-5.85 GHz. The following procedure shall be used for measuring this bandwidth:
a) Set RBW = 100 kHz.
b) Set the video bandwidth (VBW) ≥ 3 × RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.
g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.



Test Data

Environmental Conditions

Temperature:	25~27℃
Relative Humidity:	56-60 %
ATM Pressure:	101.0 kPa

The testing was performed by Roger Ling from 2022-11-07 to 2022-11-08.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the Appendix.

FCC §15.407(a) – CONDUCTED TRANSMITTER OUTPUT POWER

Applicable Standard

For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

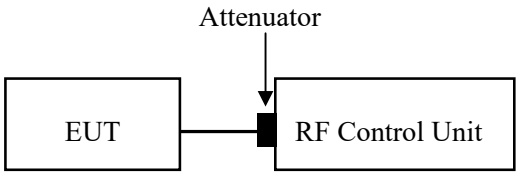
For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

Test Procedure

c. Place the EUT on a bench and set it in transmitting mode.

d. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.

e. Add a correction factor to the display.



Note: the RF control unit has built-in power sensor.

Test Data

Environmental Conditions

Temperature:	25~27℃
Relative Humidity:	56-60 %
ATM Pressure:	101.0 kPa

The testing was performed by Roger Ling from 2022-10-09 to 2022-11-08.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the Appendix.

FCC §15.407(a) - POWER SPECTRAL DENSITY

For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

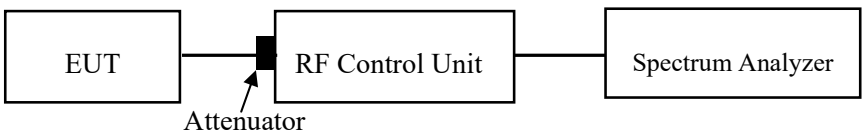
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

Test Procedure

For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, "provided that the measured power is integrated over the full reference bandwidth" to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:

a) Set RBW $\geqslant$ 1/T, where T is defined in section II.B.l.a).
b) Set VBW $\geqslant$ 3 RBW.
c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10 log (500 kHz/RBW) to the measured result, whereas RBW (< 500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add 10 log (1MHz/RBW) to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.
e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.



Test Data

Environmental Conditions

Temperature:	25~27℃
Relative Humidity:	56-60 %
ATM Pressure:	101.0 kPa

The testing was performed by Roger Ling from 2022-10-09 to 2022-12-07.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the Appendix.

APPENDIX

Appendix A1: Emission Bandwidth

Test Result

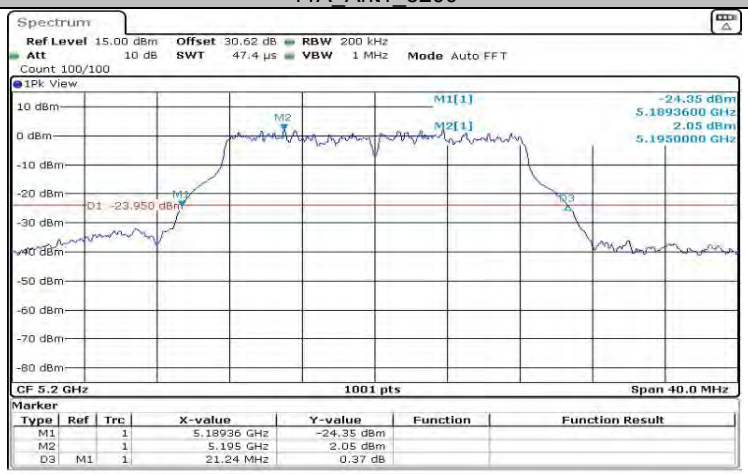
Test Mode	Antenna	Frequency [MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	21.16	5169.36	5190.52	---	---
	Ant1	5200	21.24	5189.36	5210.60	---	---
	Ant1	5240	21.24	5229.36	5250.60	---	---
	Ant1	5260	21.20	5249.40	5270.60	---	---
	Ant1	5280	21.20	5269.36	5290.56	---	---
	Ant1	5320	21.24	5309.36	5330.60	---	---
	Ant1	5500	21.24	5489.40	5510.64	---	---
	Ant1	5580	21.28	5569.36	5590.64	---	---
	Ant1	5700	21.32	5689.36	5710.68	---	---
11N20MIMO	Ant1	5180	21.32	5169.36	5190.68	---	---
	Ant1	5200	21.48	5189.32	5210.80	---	---
	Ant1	5240	21.56	5229.40	5250.96	---	---
	Ant1	5260	21.64	5249.28	5270.92	---	---
	Ant1	5280	21.44	5269.32	5290.76	---	---
	Ant1	5320	21.40	5309.32	5330.72	---	---
	Ant1	5500	21.64	5489.24	5510.88	---	---
	Ant1	5580	21.52	5569.24	5590.76	---	---
	Ant1	5700	21.44	5689.28	5710.72	---	---
11N40MIMO	Ant1	5190	40.72	5169.44	5210.16	---	---
	Ant1	5230	40.32	5209.84	5250.16	---	---
	Ant1	5270	40.64	5249.76	5290.40	---	---
	Ant1	5310	40.32	5289.92	5330.24	---	---
	Ant1	5510	40.24	5489.92	5530.16	---	---
	Ant1	5550	40.40	5529.92	5570.32	---	---
	Ant1	5670	40.16	5650.00	5690.16	---	---
11AC20MIMO	Ant1	5180	21.80	5168.96	5190.76	---	---
	Ant1	5200	21.44	5189.32	5210.76	---	---
	Ant1	5240	21.44	5229.32	5250.76	---	---
	Ant1	5260	21.28	5249.40	5270.68	---	---
	Ant1	5280	21.44	5269.32	5290.76	---	---
	Ant1	5320	21.32	5309.48	5330.80	---	---
	Ant1	5500	21.36	5489.36	5510.72	---	---
	Ant1	5580	21.28	5569.52	5590.80	---	---
	Ant1	5700	21.60	5689.28	5710.88	---	---
11AC40MIMO	Ant1	5190	40.24	5169.92	5210.16	---	---
	Ant1	5230	39.84	5210.08	5249.92	---	---
	Ant1	5270	40.16	5250.08	5290.24	---	---
	Ant1	5310	40.00	5290.08	5330.08	---	---
	Ant1	5510	40.00	5490.08	5530.08	---	---
	Ant1	5550	40.08	5530.08	5570.16	---	---
	Ant1	5670	40.00	5650.16	5690.16	---	---
11AC80MIMO	Ant1	5210	87.68	5163.76	5251.44	---	---
	Ant1	5290	82.56	5249.04	5331.60	---	---
	Ant1	5530	82.88	5488.88	5571.76	---	---
	Ant1	5610	82.40	5568.88	5651.28	---	---
11AX20MIMO (worst case 242Tone_RU61)	Ant1	5180	21.32	5169.36	5190.68	---	---
	Ant1	5200	21.44	5189.40	5210.84	---	---
	Ant1	5240	21.16	5229.44	5250.60	---	---
	Ant1	5260	21.00	5249.60	5270.60	---	---
	Ant1	5280	21.20	5269.44	5290.64	---	---
	Ant1	5320	21.16	5309.48	5330.64	---	---

	Ant1	5500	21.36	5489.44	5510.80	---	---
	Ant1	5580	21.32	5569.40	5590.72	---	---
	Ant1	5700	20.88	5689.64	5710.52	---	---
11AX40MIMO (worst case 484Tone_RU65)	Ant1	5190	40.32	5169.92	5210.24	---	---
	Ant1	5230	40.32	5209.92	5250.24	---	---
	Ant1	5270	40.40	5249.84	5290.24	---	---
	Ant1	5310	40.32	5289.92	5330.24	---	---
	Ant1	5510	40.24	5489.92	5530.16	---	---
	Ant1	5550	40.48	5529.92	5570.40	---	---
	Ant1	5670	40.32	5649.92	5690.24	---	---
11AX80MIMO (worst case 996Tone_RU67)	Ant1	5210	82.40	5169.04	5251.44	---	---
	Ant1	5290	82.24	5249.20	5331.44	---	---
	Ant1	5530	82.08	5489.04	5571.12	---	---
	Ant1	5610	82.08	5569.04	5651.12	---	---

Test Graphs

11A_Ant1_5180

11A_Ant1_5200



11A_Ant1_5240

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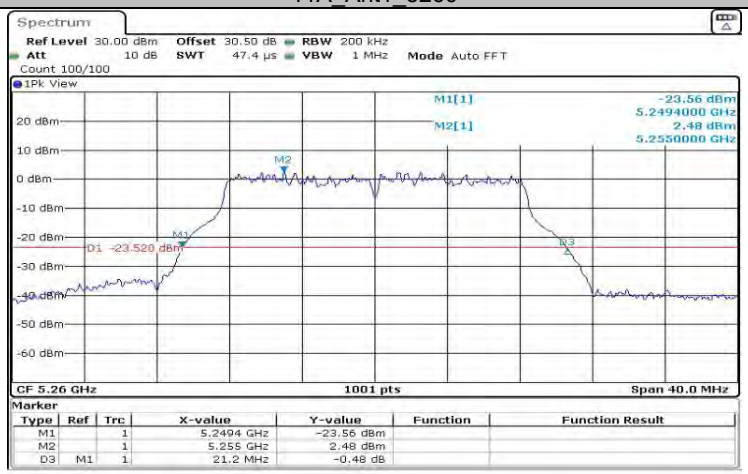

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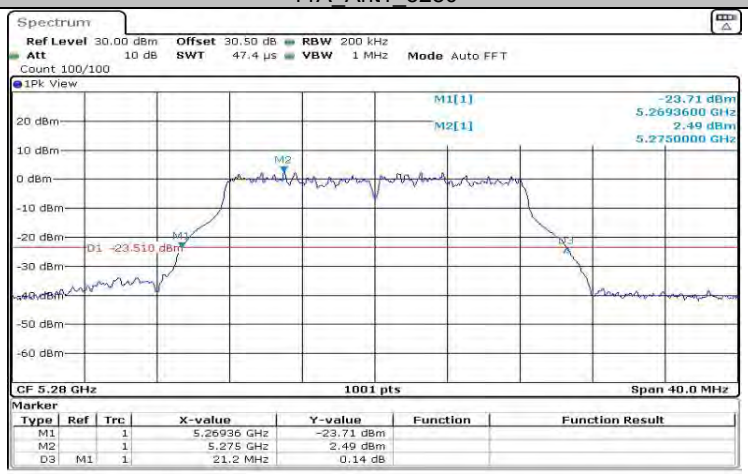
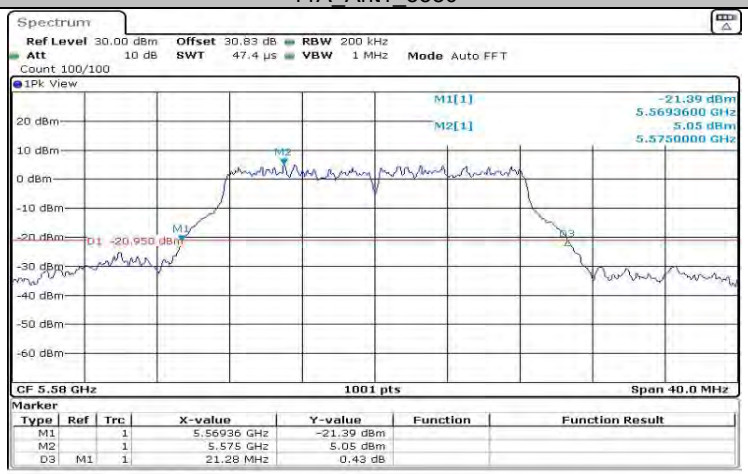


11A_Ant1_5320

11A_Ant1_5500

11A_Ant1_5580



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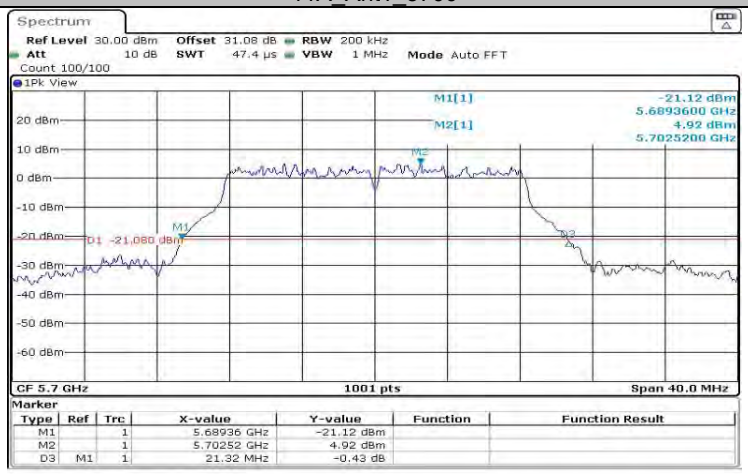

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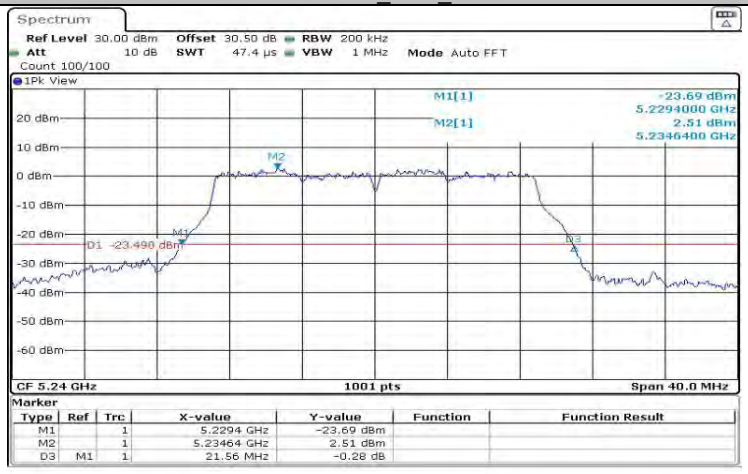
11N20MIMO_Ant1_5200

11N20MIMO_Ant1_5240



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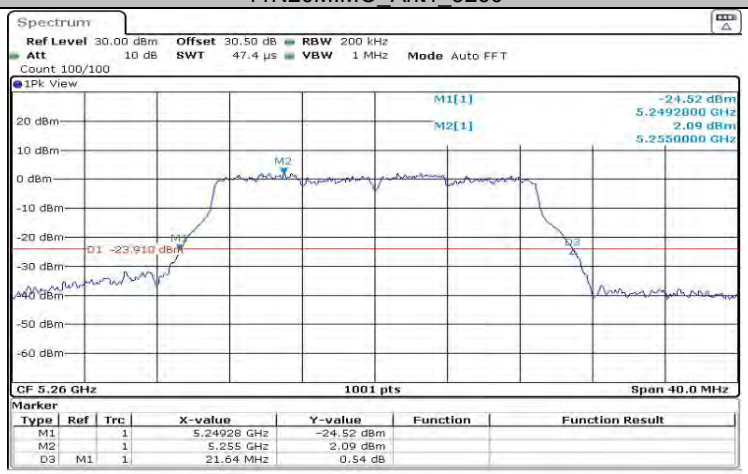

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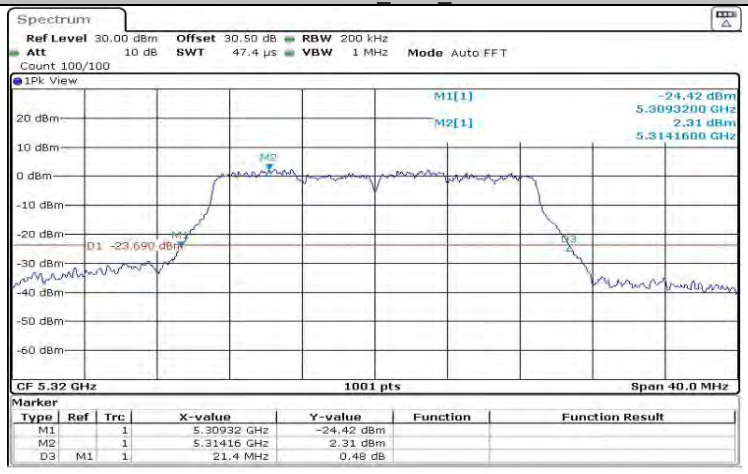

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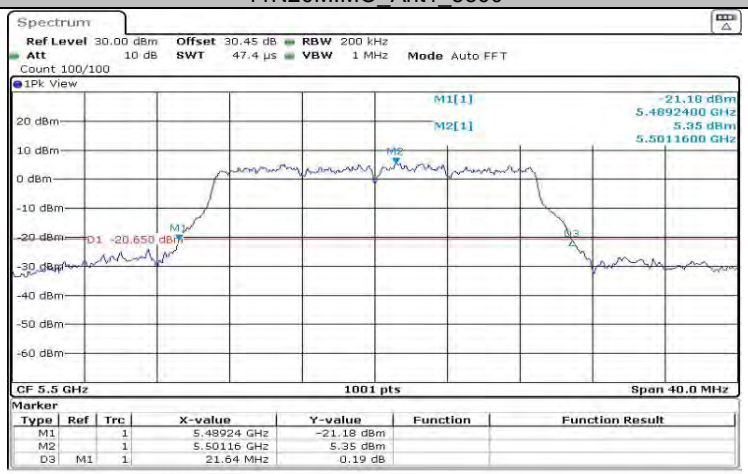

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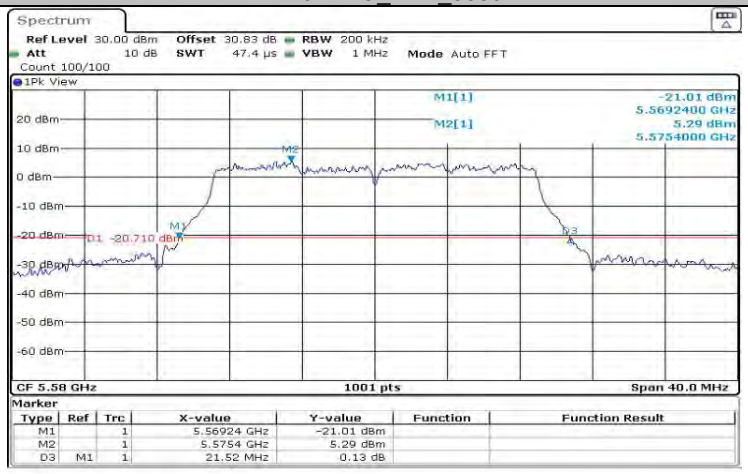

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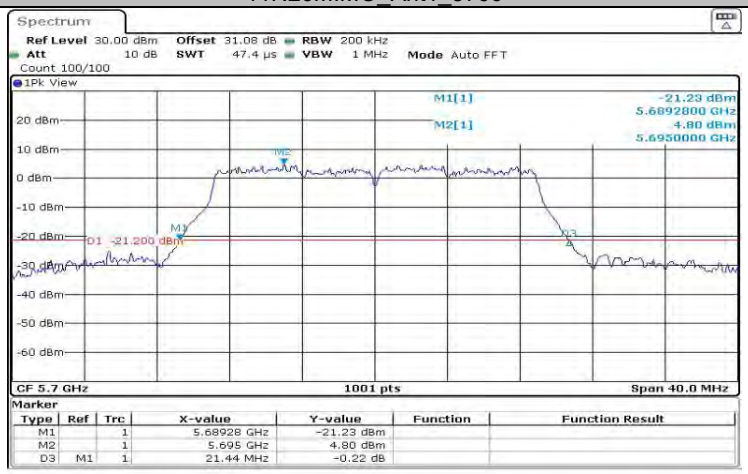
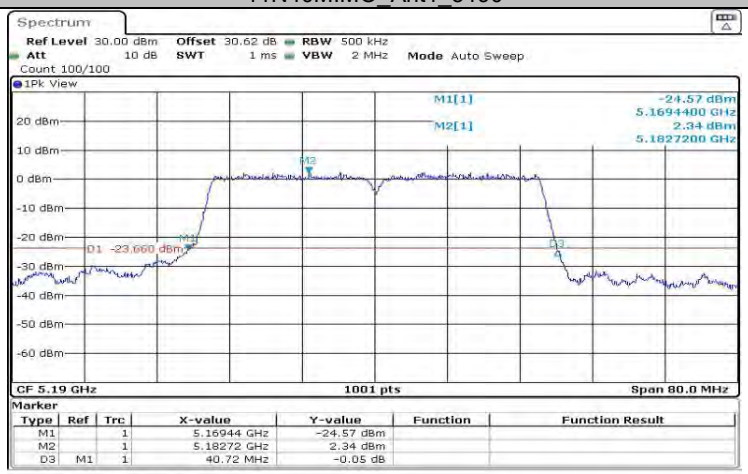


11N40MIMO_Ant1_5190



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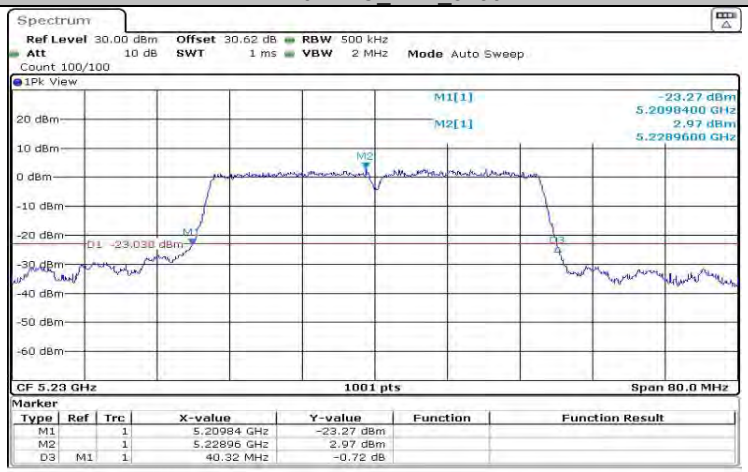

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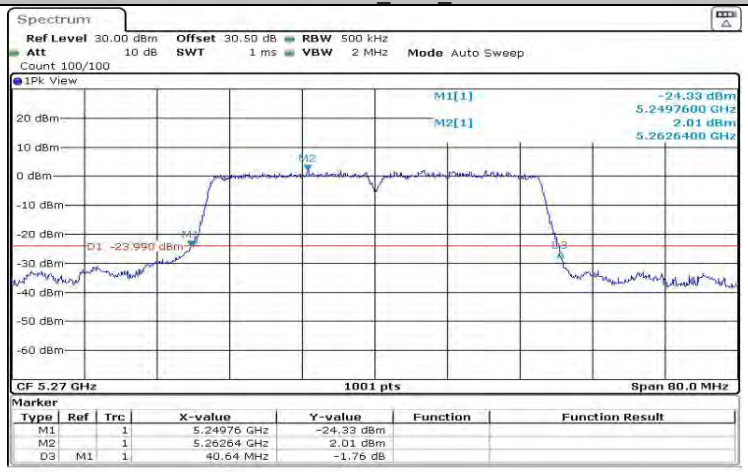

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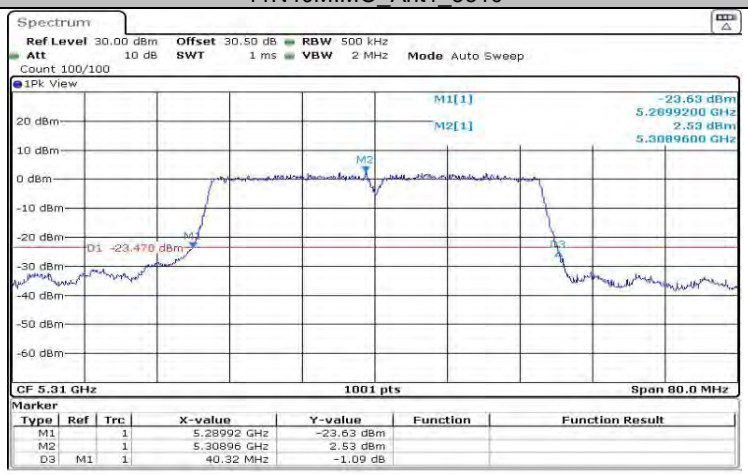

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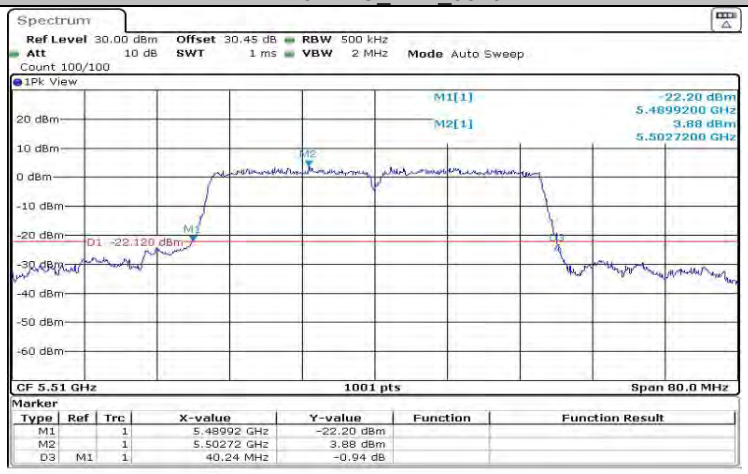
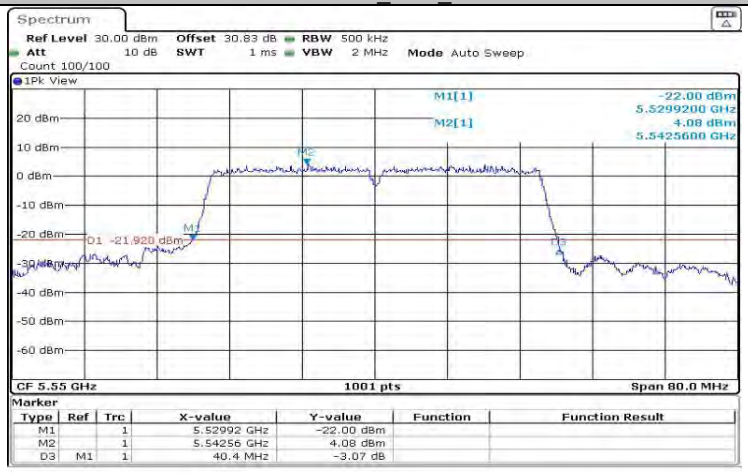
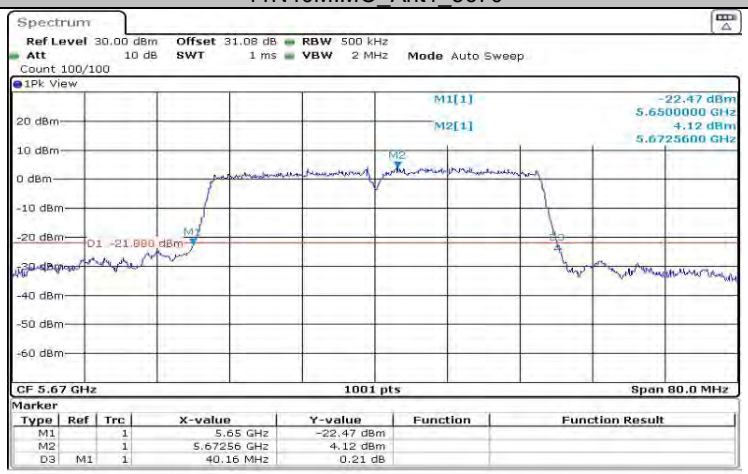


11N40MIMO_Ant1_5550



11N40MIMO_Ant1_5670



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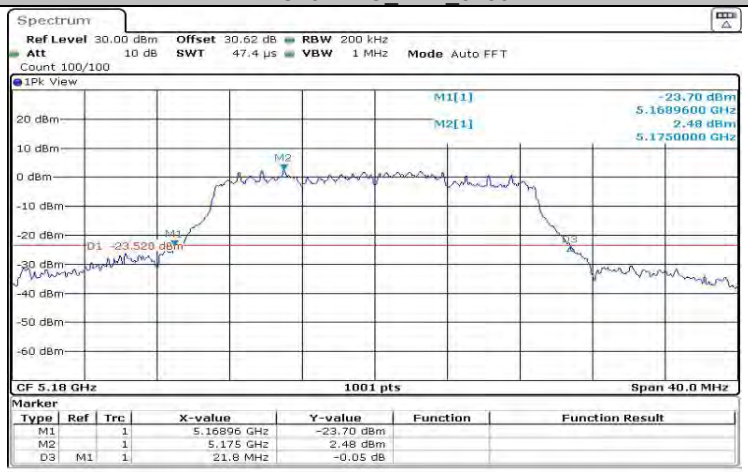
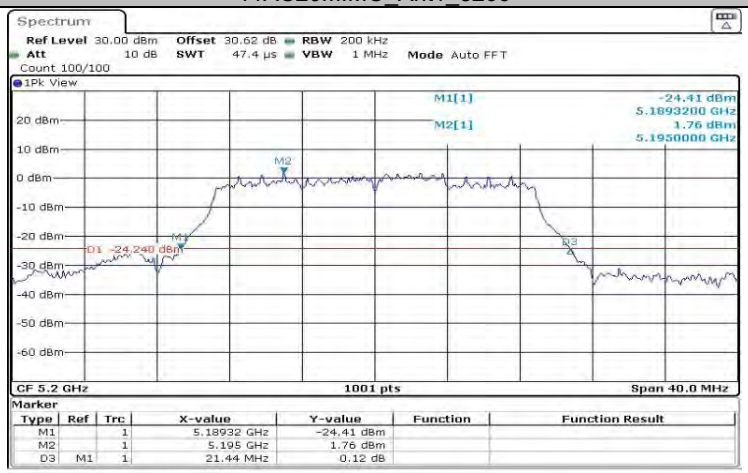


11AC20MIMO_Ant1_5200



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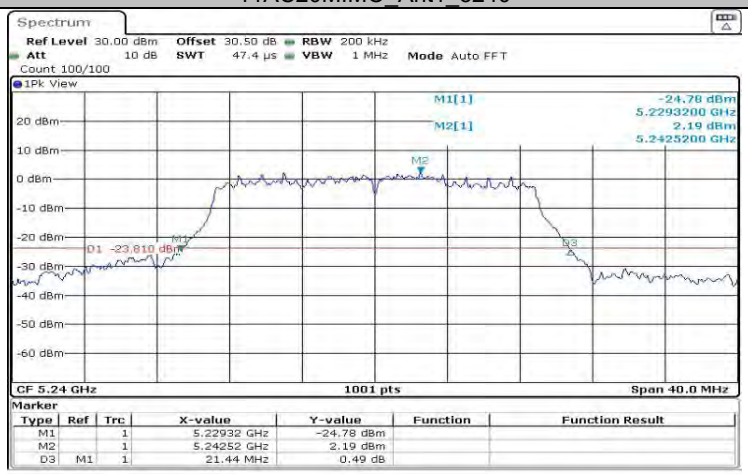
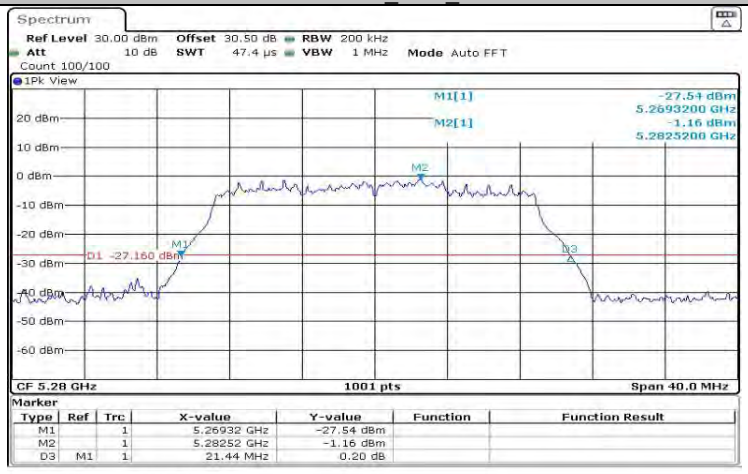


11AC20MIMO_Ant1_5260

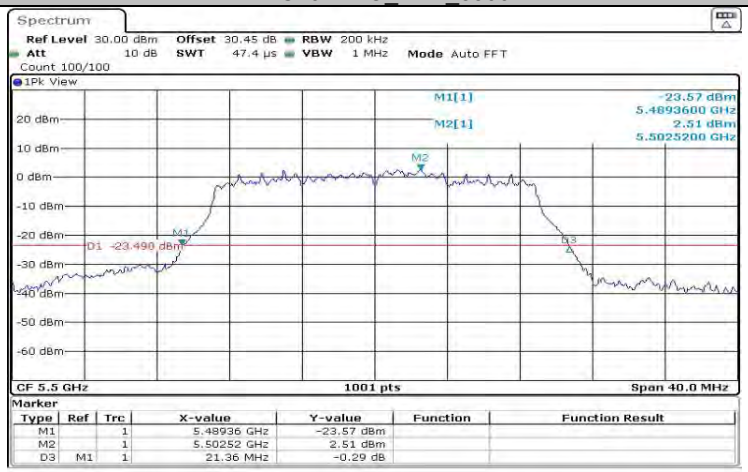
11AC20MIMO_Ant1_5280



11AC20MIMO_Ant1_5320

Date: 8.NOV.2022 01:03:34

11AC20MIMO_Ant1_5500



Date: 8.NOV.2022 01:07:07

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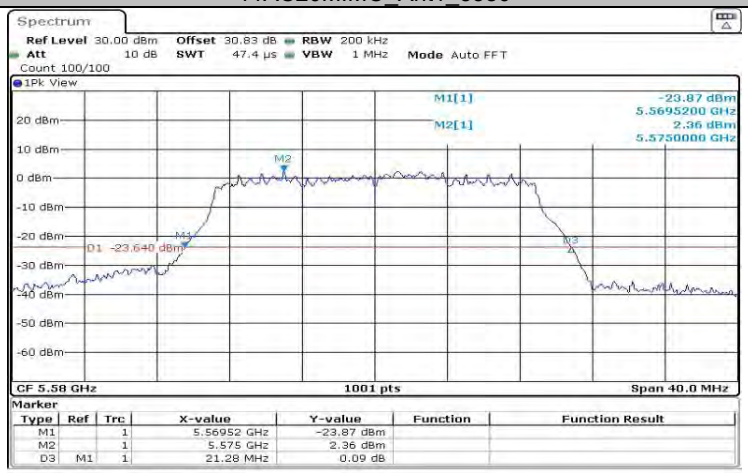
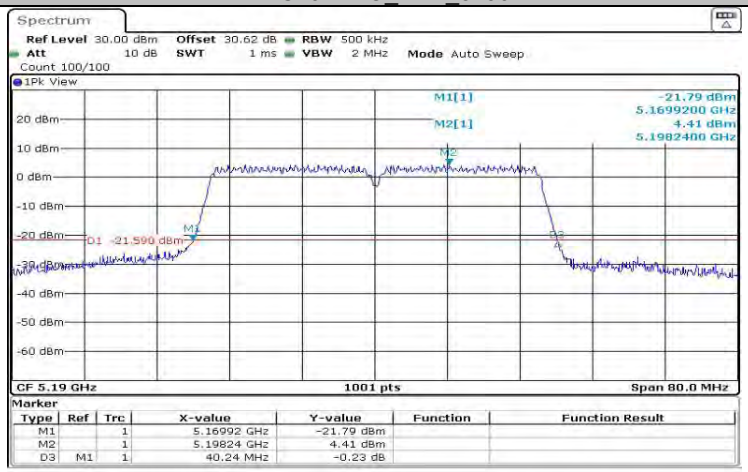


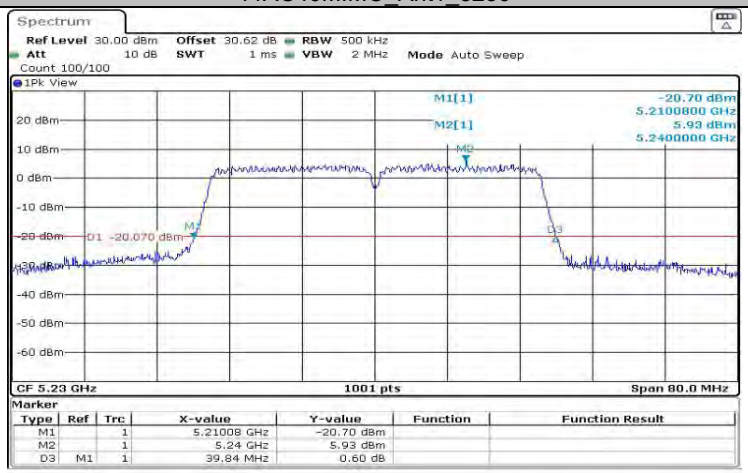
Date: 8.NOV.2022 01:10:31

11AC20MIMO_Ant1_5700

11AC40MIMO_Ant1_5190



11AC40MIMO_Ant1_5230



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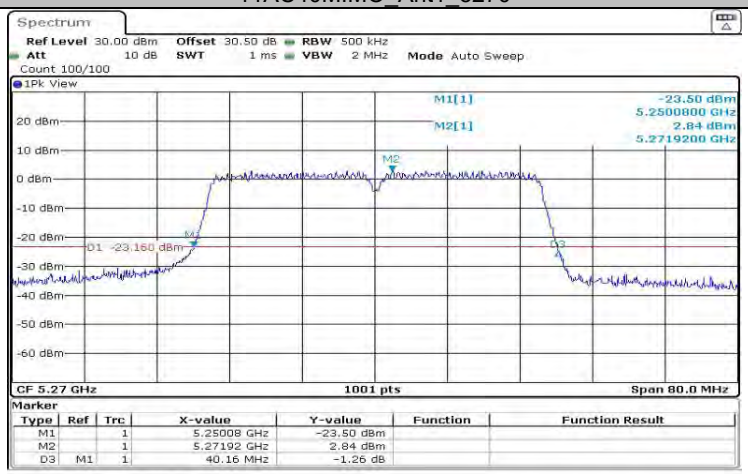

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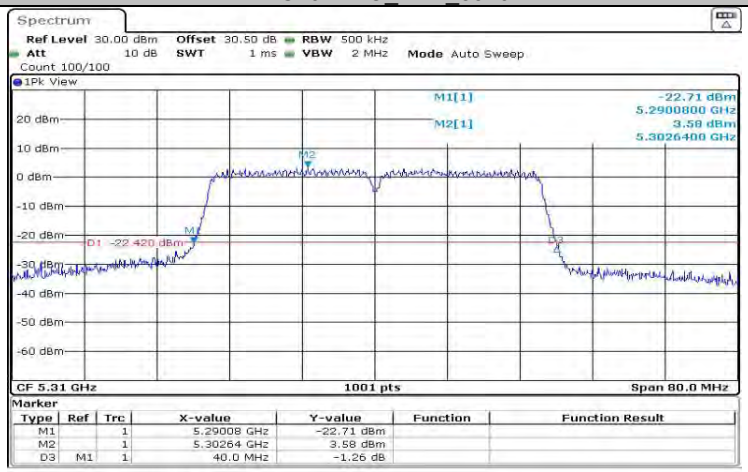
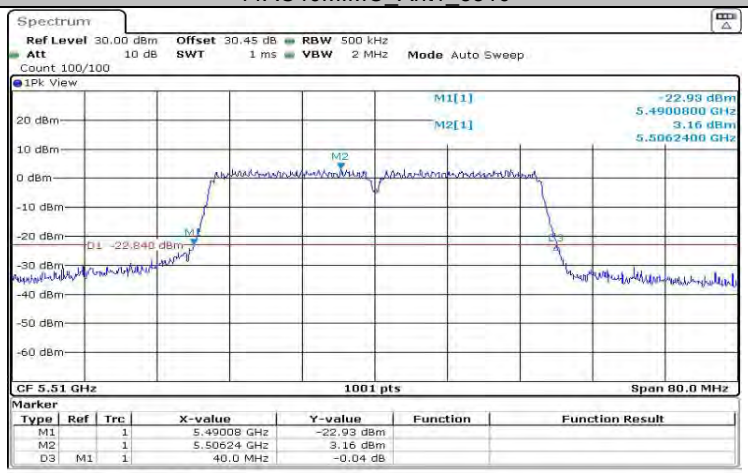
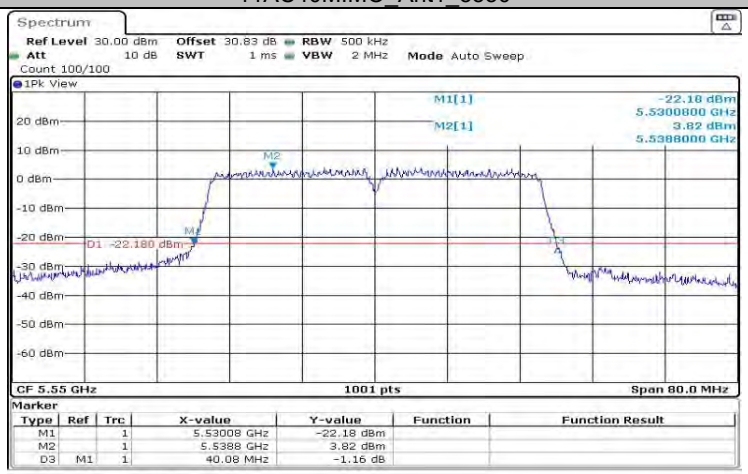


11AC40MIMO_Ant1_5510



11AC40MIMO_Ant1_5550



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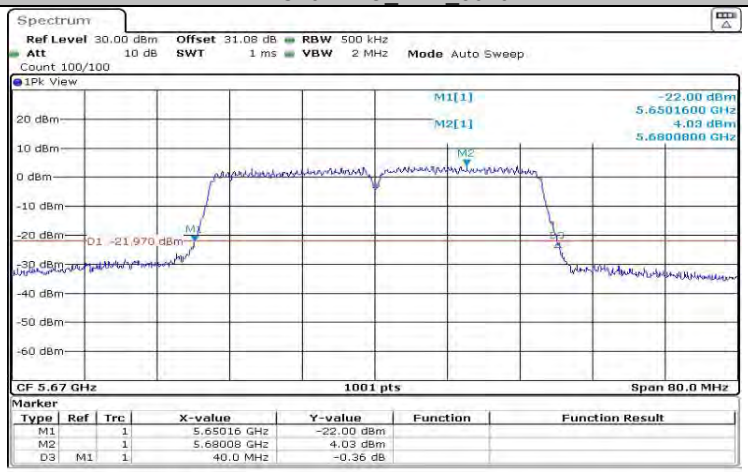

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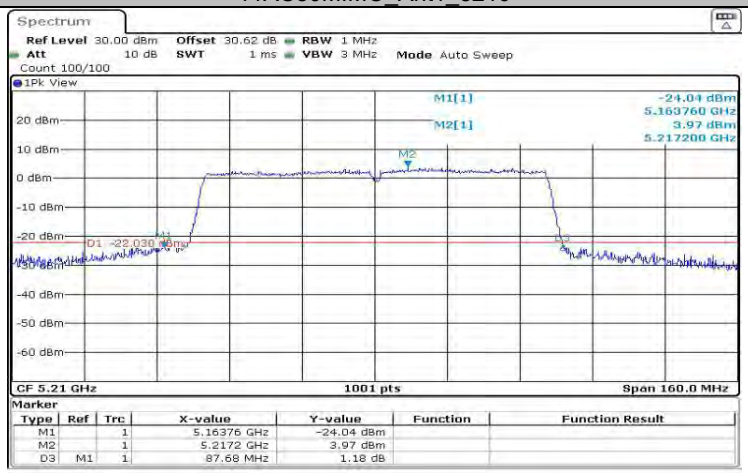

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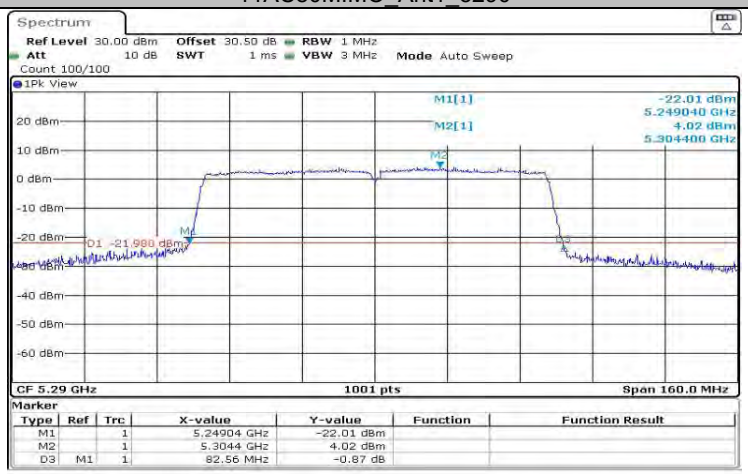
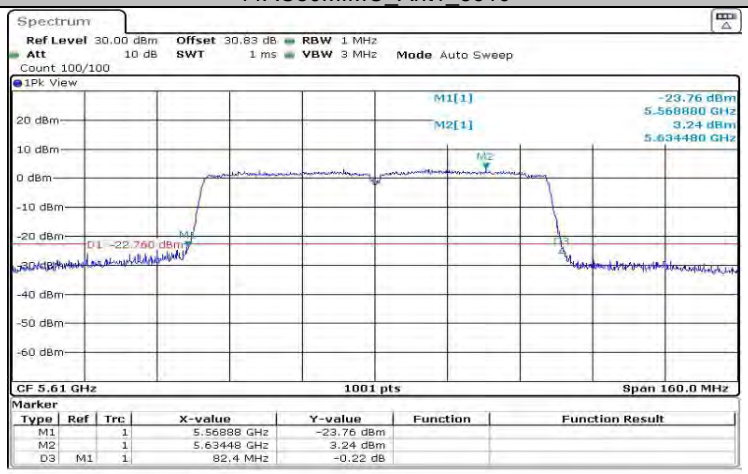
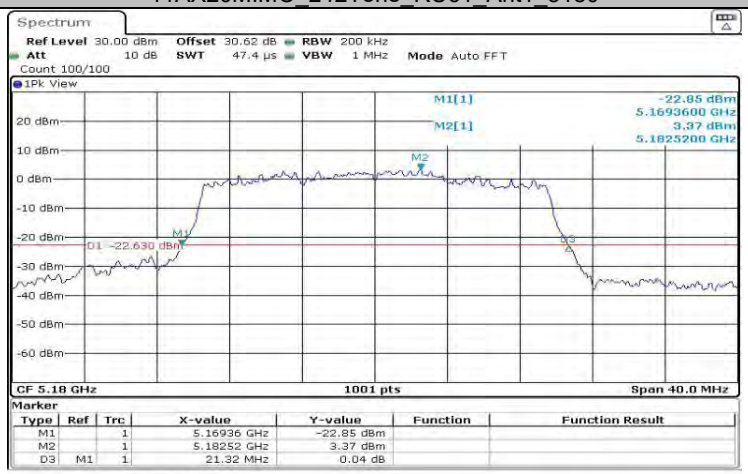


11AC80MIMO_Ant1_5530

11AC80MIMO_Ant1_5610



11AX20MIMO_242Tone_RU61_Ant1_5180

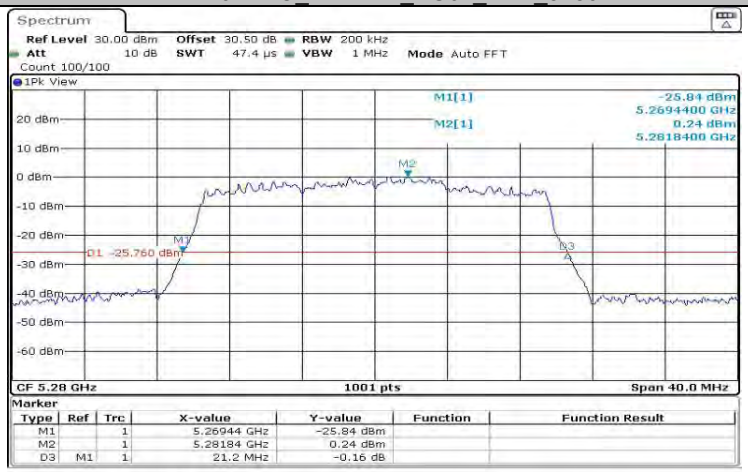


11AX20MIMO_242Tone_RU61_Ant1_5200

11AX20MIMO_242Tone_RU61_Ant1_5240

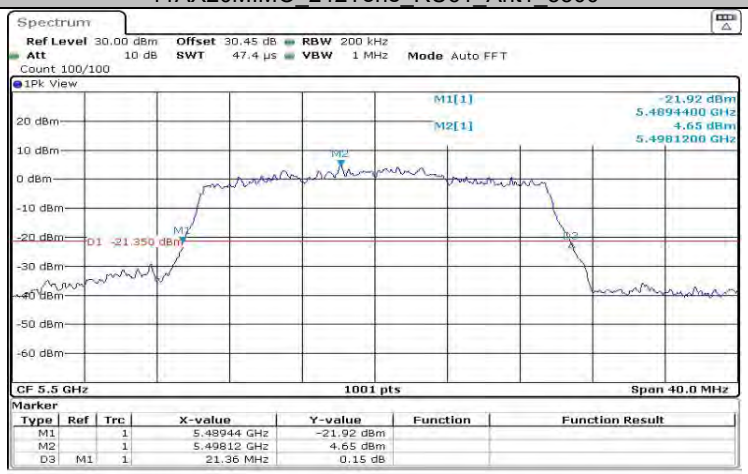
11AX20MIMO_242Tone_RU61_Ant1_5260

11AX20MIMO_242Tone_RU61_Ant1_5280

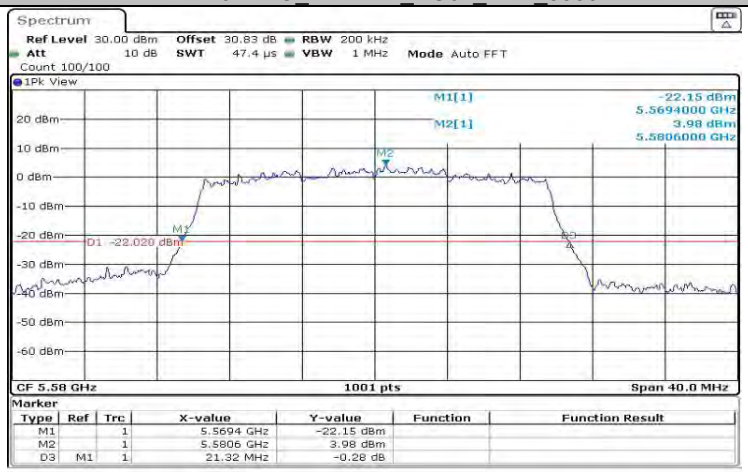


11AX20MIMO_242Tone_RU61_Ant1_5320

11AX20MIMO_242Tone_RU61_Ant1_5500

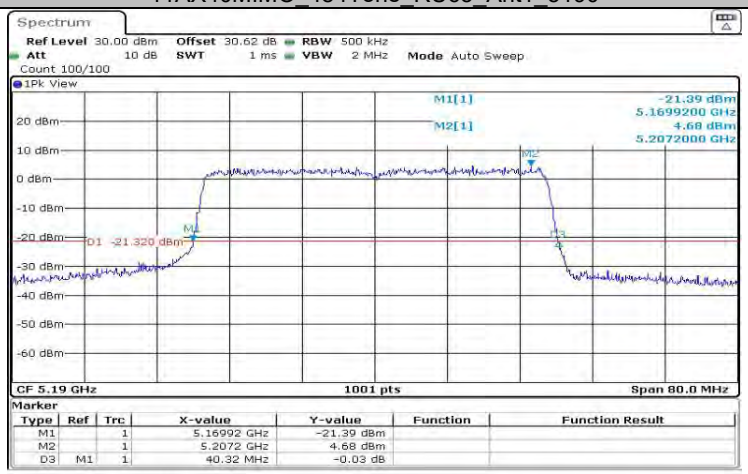


11AX20MIMO_242Tone_RU61_Ant1_5580

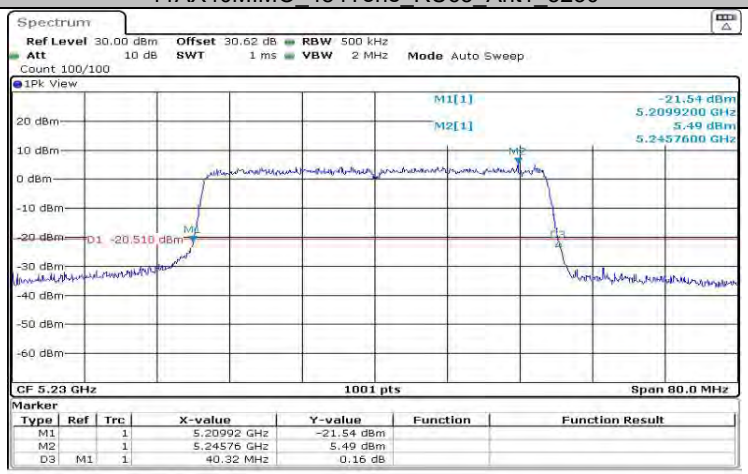


11AX20MIMO_242Tone_RU61_Ant1_5700

11AX40MIMO_484Tone_RU65_Ant1_5190



11AX40MIMO_484Tone_RU65_Ant1_5230



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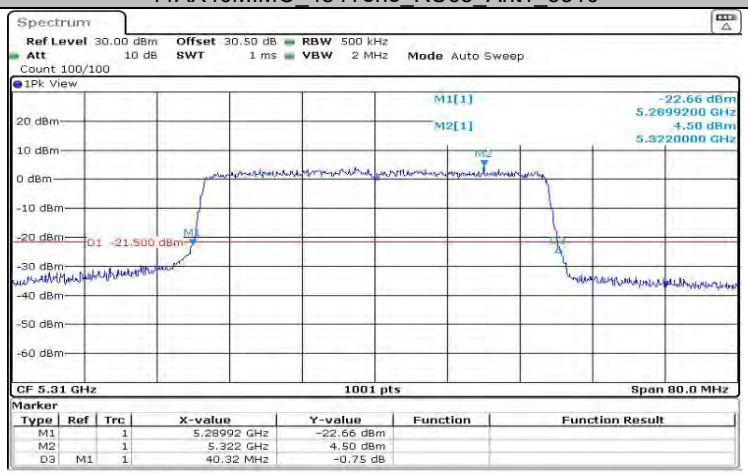
11AX40MIMO_484Tone_RU65_Ant1_5310



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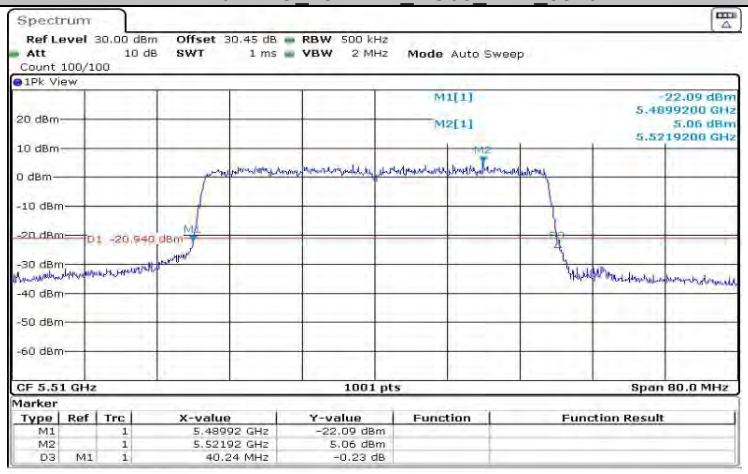
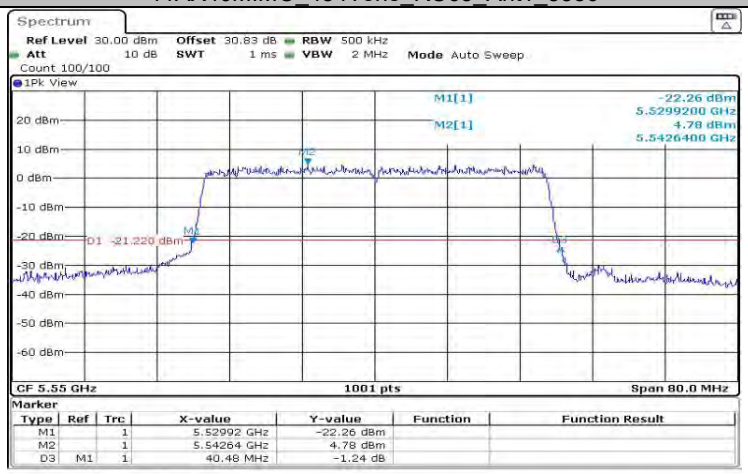
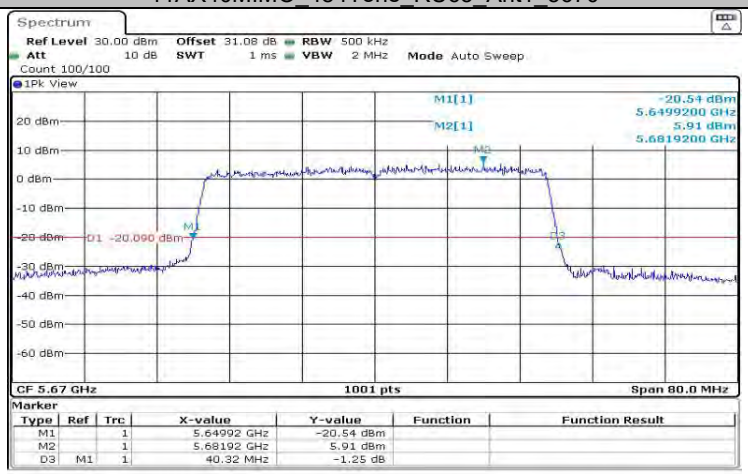


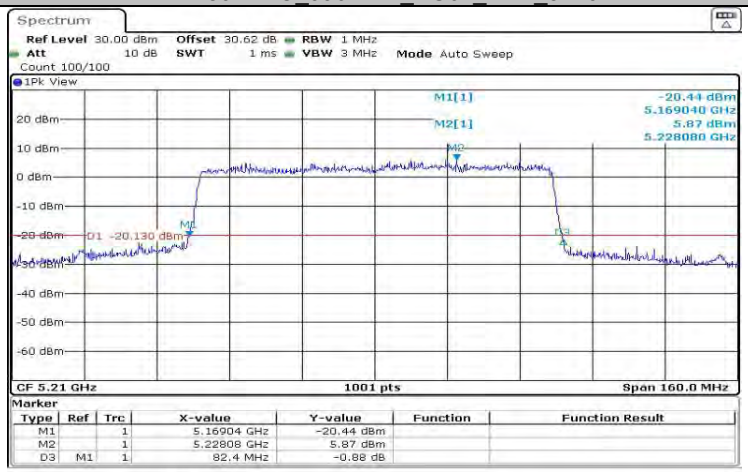
11AX40MIMO_484Tone_RU65_Ant1_5550



11AX40MIMO_484Tone_RU65_Ant1_5670



11AX80MIMO_996Tone_RU67_Ant1_5210



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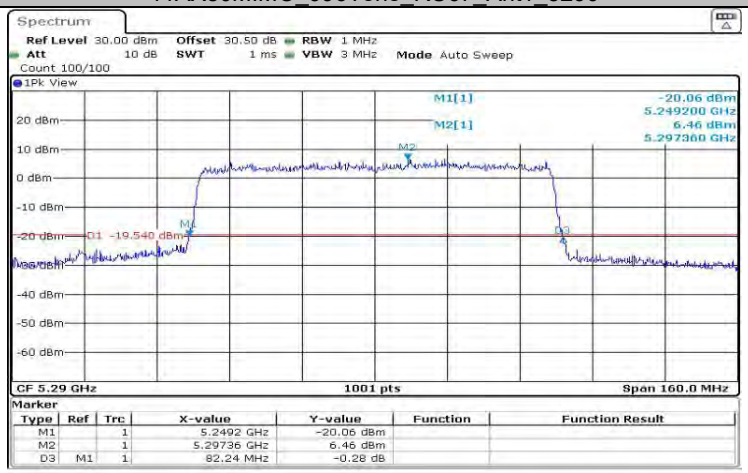

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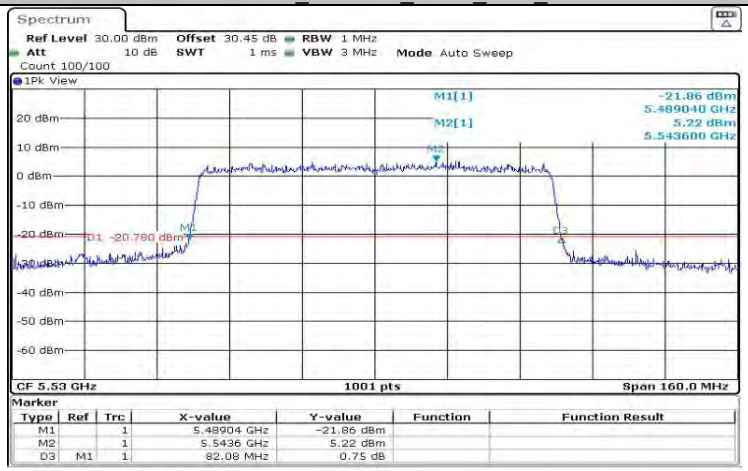

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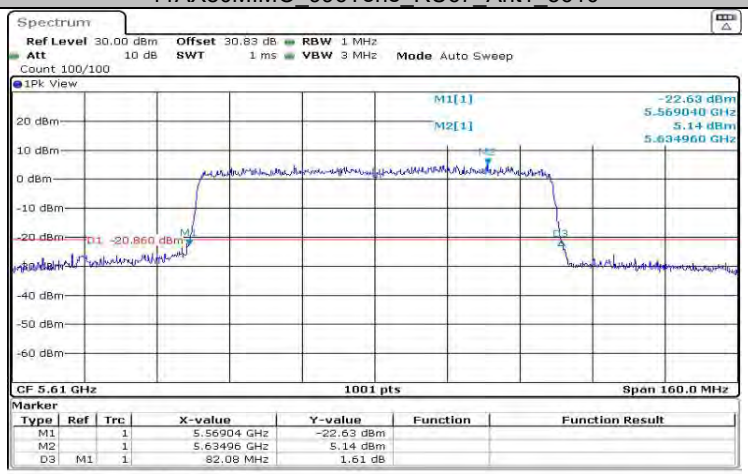


AppendixA2: Occupied channel bandwidth

Test Result

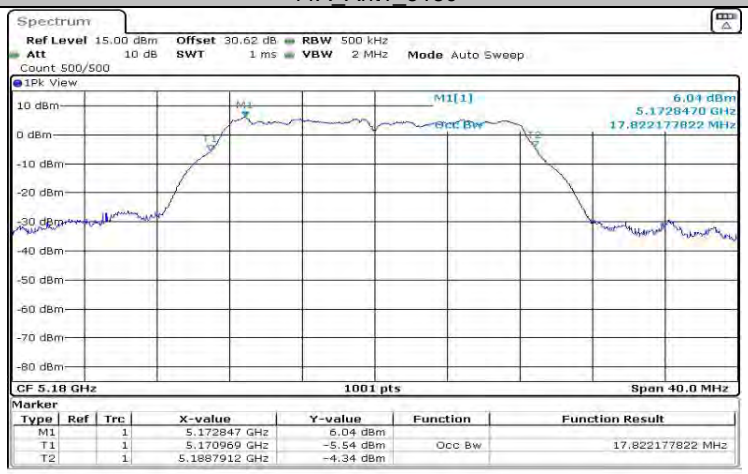
Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.822	5170.969	5188.791	---	---
	Ant1	5200	17.822	5191.009	5208.831	---	---
	Ant1	5240	17.822	5231.009	5248.831	---	---
	Ant1	5260	17.782	5251.009	5268.791	---	---
	Ant1	5280	17.822	5271.009	5288.831	---	---
	Ant1	5320	17.822	5310.969	5328.791	---	---
	Ant1	5500	17.782	5491.009	5508.791	---	---
	Ant1	5580	17.822	5571.009	5588.831	---	---
	Ant1	5700	17.902	5690.969	5708.871	---	---
	Ant1	5745	17.902	5735.929	5753.831	---	---
	Ant1	5785	17.822	5775.969	5793.791	---	---
	Ant1	5825	17.742	5816.049	5833.791	---	---
11N20MIMO	Ant1	5180	18.581	5170.729	5189.311	---	---
	Ant1	5200	18.541	5190.769	5209.311	---	---
	Ant1	5240	18.581	5230.729	5249.311	---	---
	Ant1	5260	18.501	5250.809	5269.311	---	---
	Ant1	5280	18.581	5270.769	5289.351	---	---
	Ant1	5320	18.501	5310.769	5329.271	---	---
	Ant1	5500	18.501	5490.809	5509.311	---	---
	Ant1	5580	18.581	5570.769	5589.351	---	---
	Ant1	5700	18.661	5690.729	5709.391	---	---
	Ant1	5745	18.541	5735.769	5754.311	---	---
	Ant1	5785	18.462	5775.809	5794.271	---	---
	Ant1	5825	18.462	5815.809	5834.271	---	---
11N40MIMO	Ant1	5190	36.923	5171.618	5208.541	---	---
	Ant1	5230	36.843	5211.698	5248.541	---	---
	Ant1	5270	36.843	5251.698	5288.541	---	---
	Ant1	5310	36.763	5291.698	5328.462	---	---
	Ant1	5510	36.923	5491.618	5528.541	---	---
	Ant1	5550	36.843	5531.698	5568.541	---	---
	Ant1	5670	36.763	5651.778	5688.541	---	---
	Ant1	5755	36.923	5736.618	5773.541	---	---
	Ant1	5795	36.923	5776.618	5813.541	---	---
11AC20MIMO	Ant1	5180	18.262	5170.849	5189.111	---	---
	Ant1	5200	18.222	5190.929	5209.151	---	---
	Ant1	5240	18.222	5230.929	5249.151	---	---
	Ant1	5260	18.102	5251.009	5269.111	---	---
	Ant1	5280	18.142	5270.969	5289.111	---	---
	Ant1	5320	18.142	5310.929	5329.071	---	---
	Ant1	5500	18.102	5490.969	5509.071	---	---
	Ant1	5580	18.142	5570.969	5589.111	---	---
	Ant1	5700	18.182	5690.929	5709.111	---	---
	Ant1	5745	18.182	5735.929	5754.111	---	---
	Ant1	5785	18.142	5775.929	5794.071	---	---
	Ant1	5825	18.102	5816.009	5834.111	---	---
11AC40MIMO	Ant1	5190	36.923	5171.618	5208.541	---	---
	Ant1	5230	36.923	5211.618	5248.541	---	---
	Ant1	5270	36.843	5251.698	5288.541	---	---
	Ant1	5310	36.763	5291.698	5328.462	---	---
	Ant1	5510	36.763	5491.698	5528.462	---	---
	Ant1	5550	36.763	5531.698	5568.462	---	---
	Ant1	5670	36.763	5651.778	5688.541	---	---
	Ant1	5755	36.923	5736.618	5773.541	---	---
	Ant1	5795	36.923	5776.618	5813.541	---	---
11AC80MIMO	Ant1	5210	76.404	5171.958	5248.362	---	---

	Ant1	5290	76.084	5252.118	5328.202	---	---
	Ant1	5530	76.084	5492.118	5568.202	---	---
	Ant1	5610	76.084	5572.118	5648.202	---	---
	Ant1	5775	76.244	5737.118	5813.362	---	---
11AX20MIMO (worst case 242Tone_RU61)	Ant1	5180	19.061	5170.490	5189.550	---	---
	Ant1	5200	19.101	5190.529	5209.630	---	---
	Ant1	5240	19.101	5230.490	5249.590	---	---
	Ant1	5260	19.021	5250.529	5269.550	---	---
	Ant1	5280	19.061	5270.529	5289.590	---	---
	Ant1	5320	19.101	5310.490	5329.590	---	---
	Ant1	5500	19.061	5490.490	5509.550	---	---
	Ant1	5580	19.061	5570.529	5589.590	---	---
	Ant1	5700	19.141	5690.450	5709.590	---	---
	Ant1	5745	19.141	5735.490	5754.630	---	---
	Ant1	5785	19.101	5775.490	5794.590	---	---
	Ant1	5825	19.061	5815.529	5834.590	---	---
11AX40MIMO (worst case 484Tone_RU65)	Ant1	5190	37.882	5171.139	5209.021	---	---
	Ant1	5230	37.882	5211.139	5249.021	---	---
	Ant1	5270	37.882	5251.139	5289.021	---	---
	Ant1	5310	37.802	5291.219	5329.021	---	---
	Ant1	5510	37.802	5491.219	5529.021	---	---
	Ant1	5550	37.802	5531.139	5568.941	---	---
	Ant1	5670	37.802	5651.299	5689.101	---	---
	Ant1	5755	37.882	5736.219	5774.101	---	---
	Ant1	5795	37.802	5776.219	5814.021	---	---
11AX80MIMO (worst case 996Tone_RU67)	Ant1	5210	77.682	5171.319	5249.001	---	---
	Ant1	5290	77.522	5251.479	5329.001	---	---
	Ant1	5530	77.682	5491.319	5569.001	---	---
	Ant1	5610	77.363	5571.479	5648.841	---	---
	Ant1	5775	77.682	5736.319	5814.001	---	---

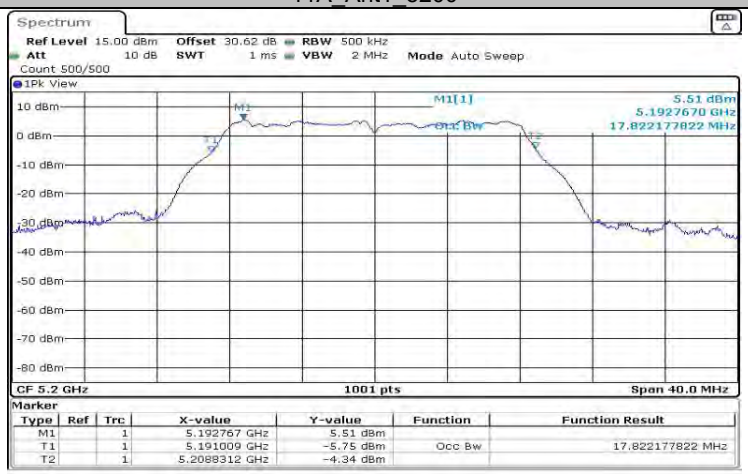
Note: for 5150-5250 band, the device not operate with any part of OBW fall within 5250-5350MHz range for 5725-5850 band, the device not operate with any part of OBW fall within 5470-5725MHz range.

Test Graphs

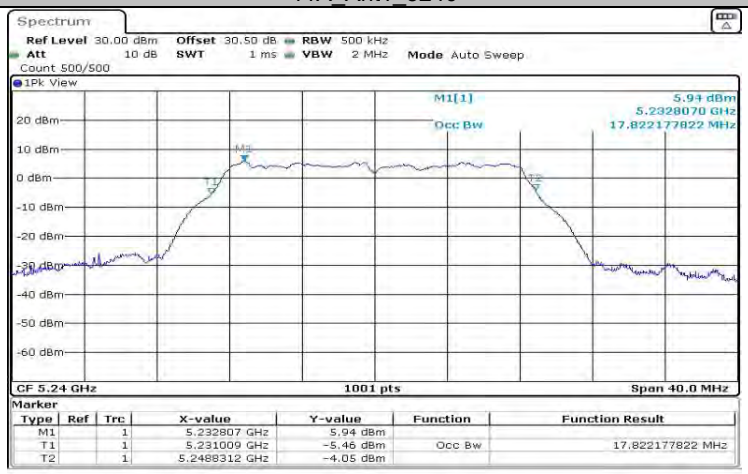
11A_Ant1_5180



11A_Ant1_5200



11A_Ant1_5240



11A_Ant1_5260

11A_Ant1_5280

11A_Ant1_5320

11A_Ant1_5500

11A_Ant1_5580

11A_Ant1_5700

11A_Ant1_5745

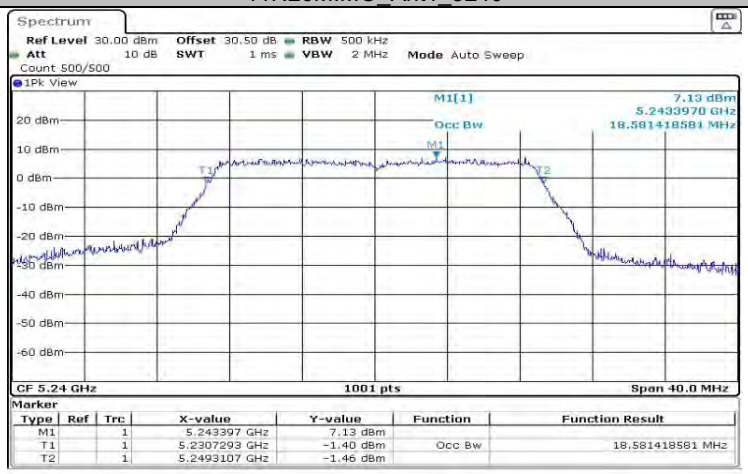
11A_Ant1_5785

11A_Ant1_5825

11N20MIMO_Ant1_5180

11N20MIMO_Ant1_5200

11N20MIMO_Ant1_5240



11N20MIMO_Ant1_5260

11N20MIMO_Ant1_5280

11N20MIMO_Ant1_5320

11N20MIMO_Ant1_5500

11N20MIMO_Ant1_5580

11N20MIMO_Ant1_5700

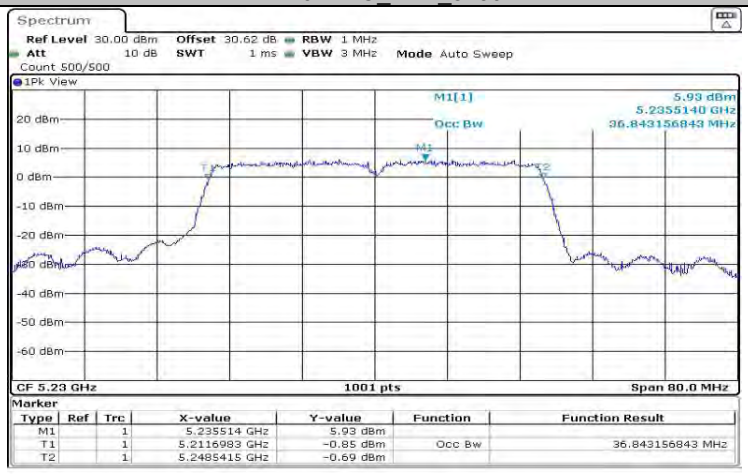
11N20MIMO_Ant1_5745

11N20MIMO_Ant1_5785

11N20MIMO_Ant1_5825

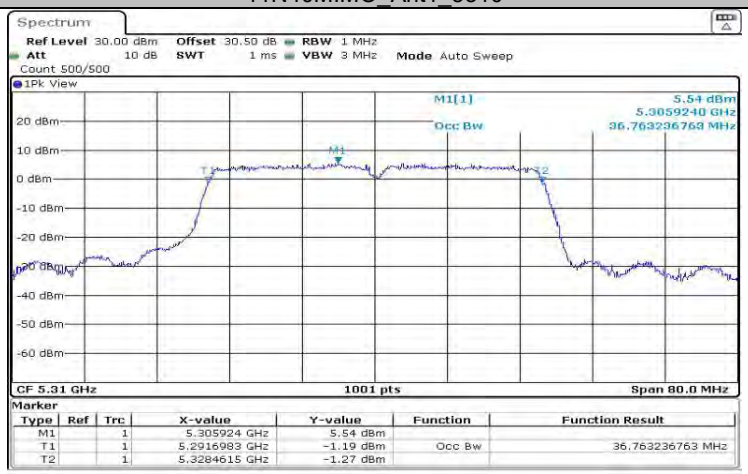
11N40MIMO_Ant1_5190

11N40MIMO_Ant1_5230

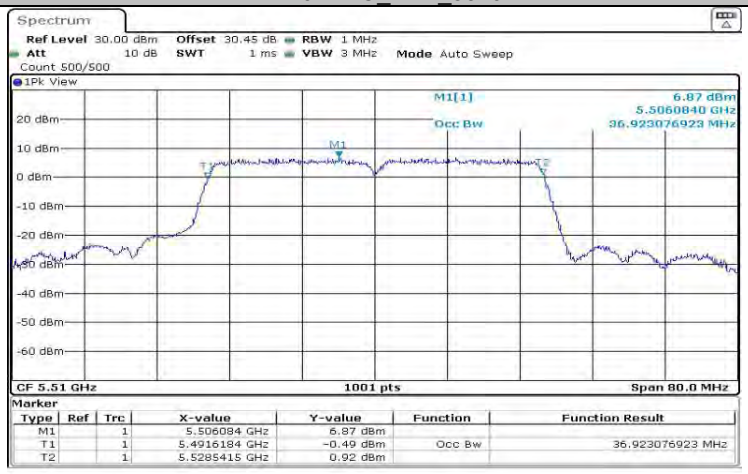


11N40MIMO_Ant1_5270

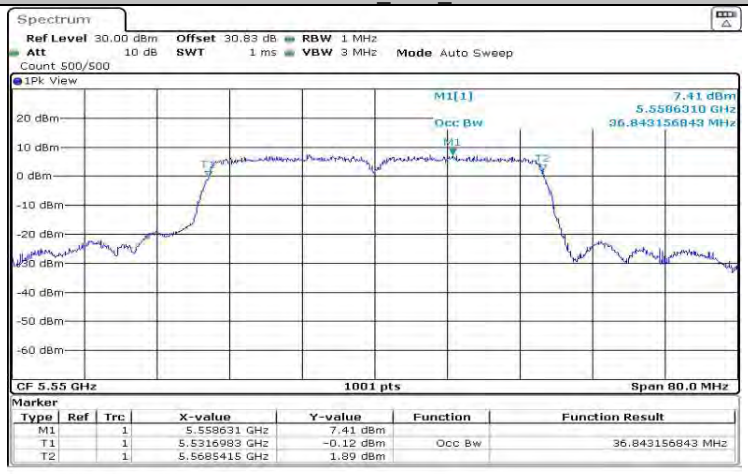
11N40MIMO_Ant1_5310



11N40MIMO_Ant1_5510



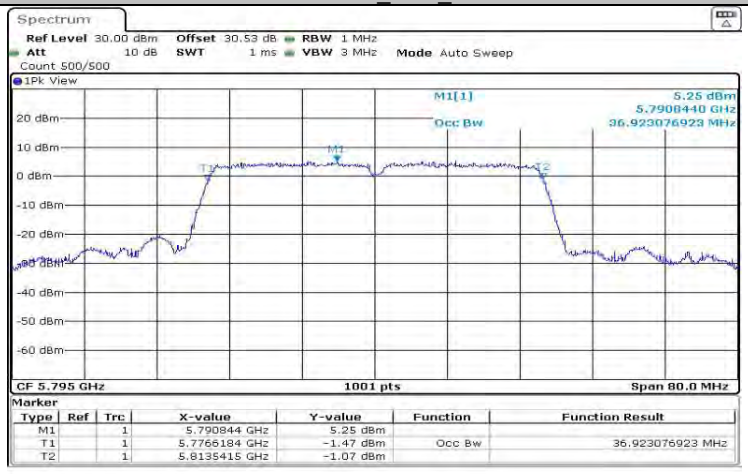
11N40MIMO_Ant1_5550



11N40MIMO_Ant1_5670

11N40MIMO_Ant1_5755

11N40MIMO_Ant1_5795



11AC20MIMO_Ant1_5180

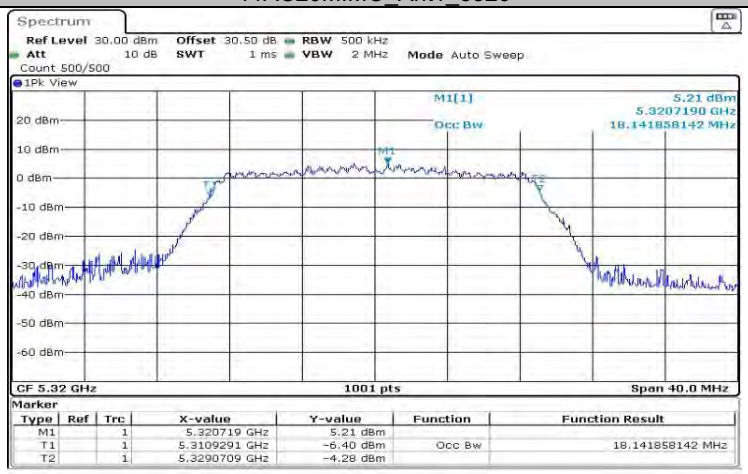
11AC20MIMO_Ant1_5200

11AC20MIMO_Ant1_5240

11AC20MIMO_Ant1_5260

11AC20MIMO_Ant1_5280

11AC20MIMO_Ant1_5320



11AC20MIMO_Ant1_5500

11AC20MIMO_Ant1_5580

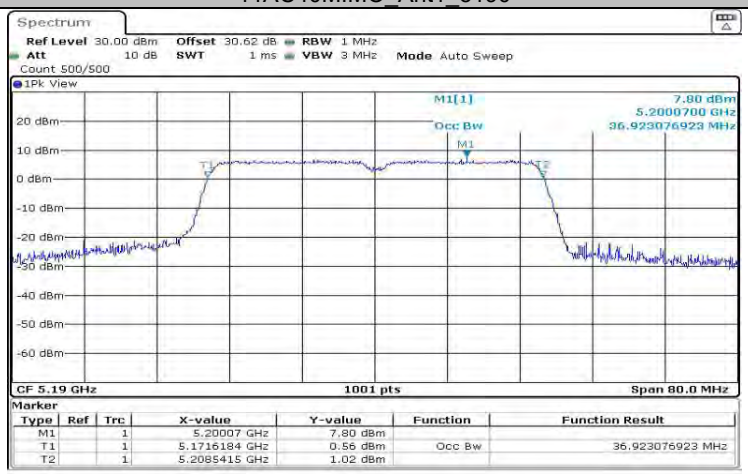
11AC20MIMO_Ant1_5700

11AC20MIMO_Ant1_5745

11AC20MIMO_Ant1_5785

11AC20MIMO_Ant1_5825

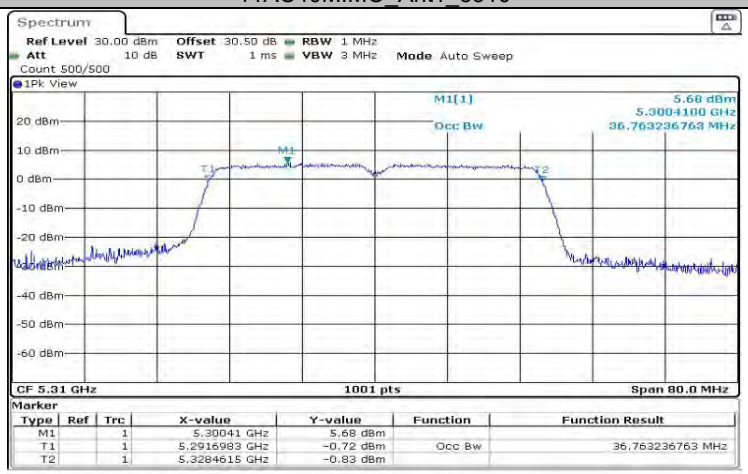
11AC40MIMO_Ant1_5190



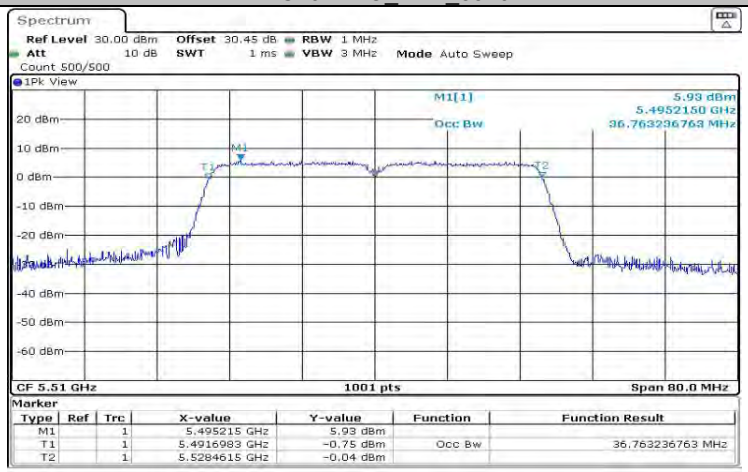
11AC40MIMO_Ant1_5230

11AC40MIMO_Ant1_5270

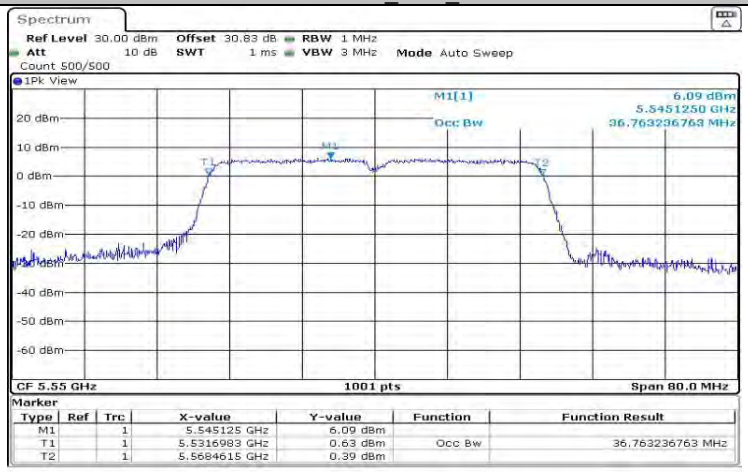
11AC40MIMO_Ant1_5310



11AC40MIMO_Ant1_5510



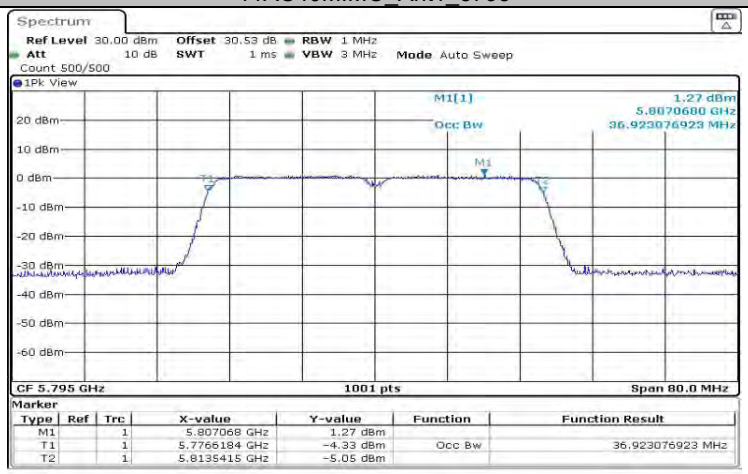
11AC40MIMO_Ant1_5550



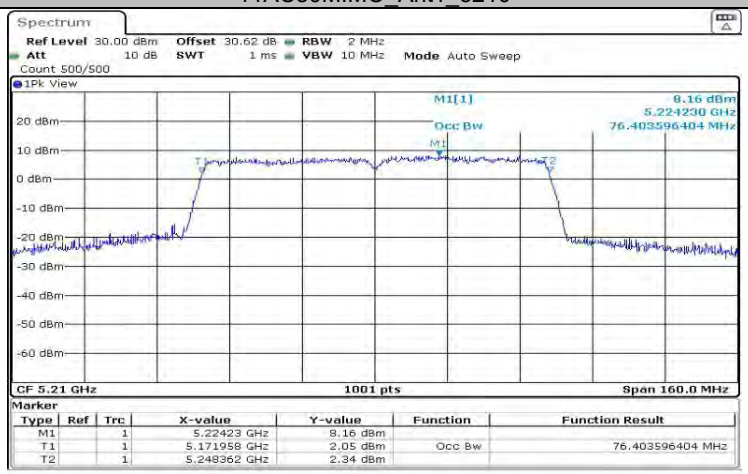
11AC40MIMO_Ant1_5670

11AC40MIMO_Ant1_5755

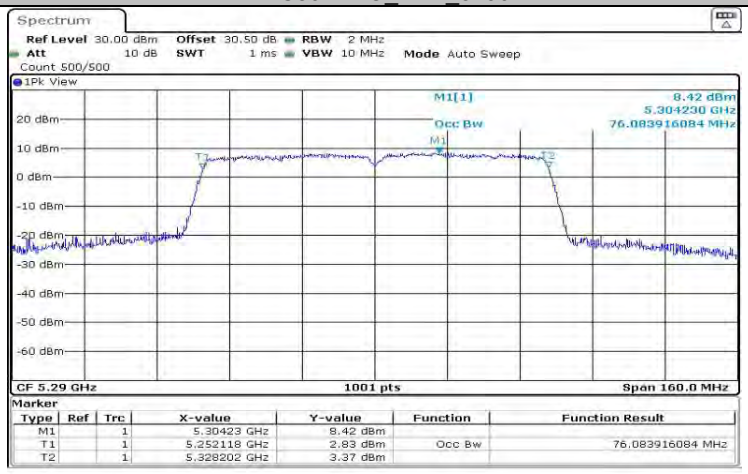
11AC40MIMO_Ant1_5795



11AC80MIMO_Ant1_5210

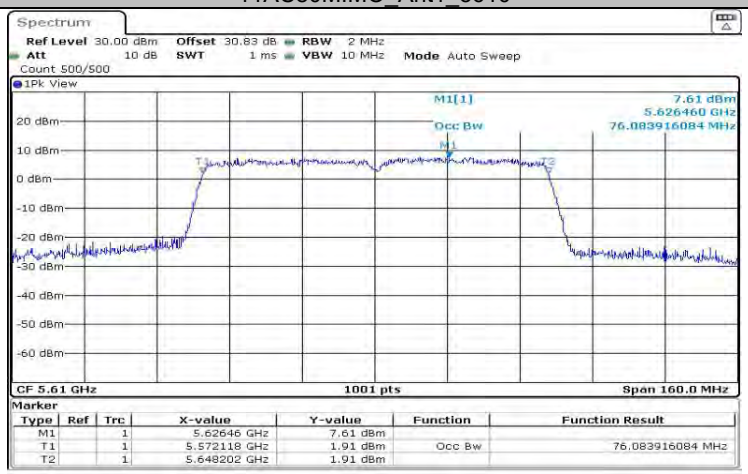


11AC80MIMO_Ant1_5290

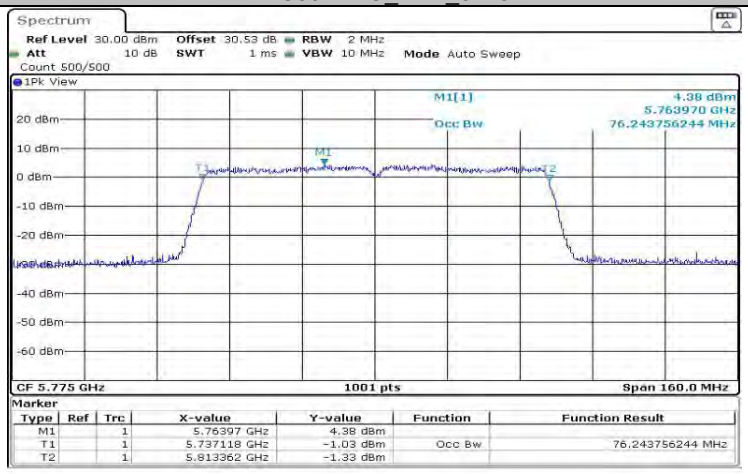


11AC80MIMO_Ant1_5530

11AC80MIMO_Ant1_5610

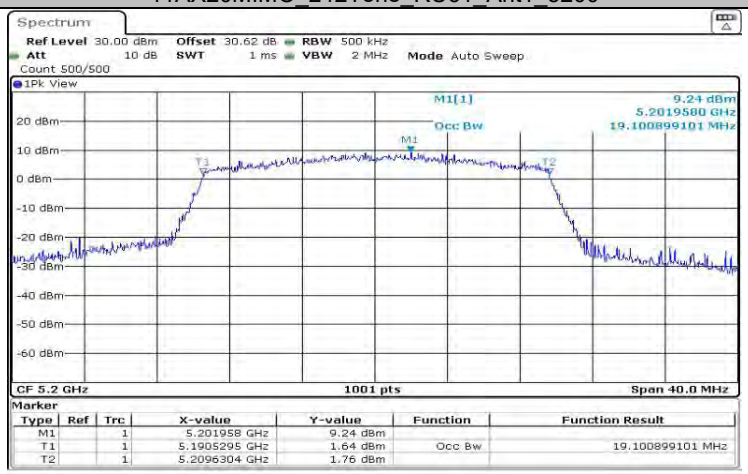


11AC80MIMO_Ant1_5775



11AX20MIMO_242Tone_RU61_Ant1_5180

11AX20MIMO_242Tone_RU61_Ant1_5200



11AX20MIMO_242Tone_RU61_Ant1_5240

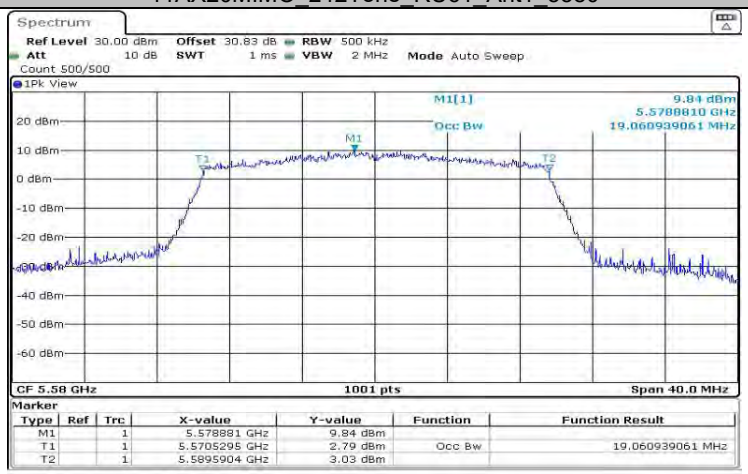
11AX20MIMO_242Tone_RU61_Ant1_5260

11AX20MIMO_242Tone_RU61_Ant1_5280

11AX20MIMO_242Tone_RU61_Ant1_5320

11AX20MIMO_242Tone_RU61_Ant1_5500

11AX20MIMO_242Tone_RU61_Ant1_5580



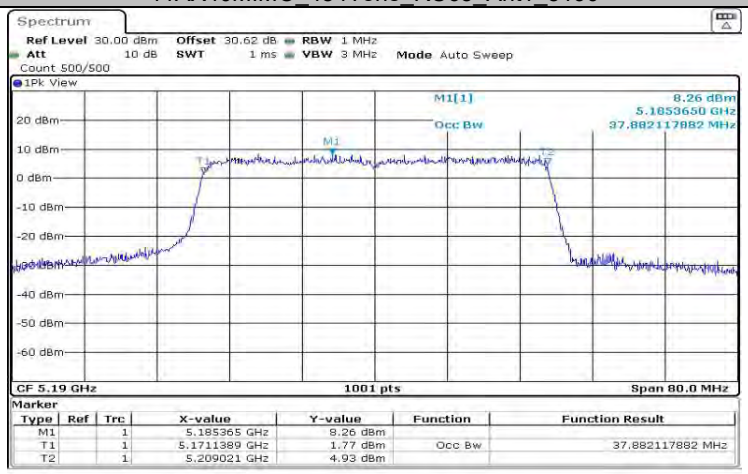
11AX20MIMO_242Tone_RU61_Ant1_5700

11AX20MIMO_242Tone_RU61_Ant1_5745

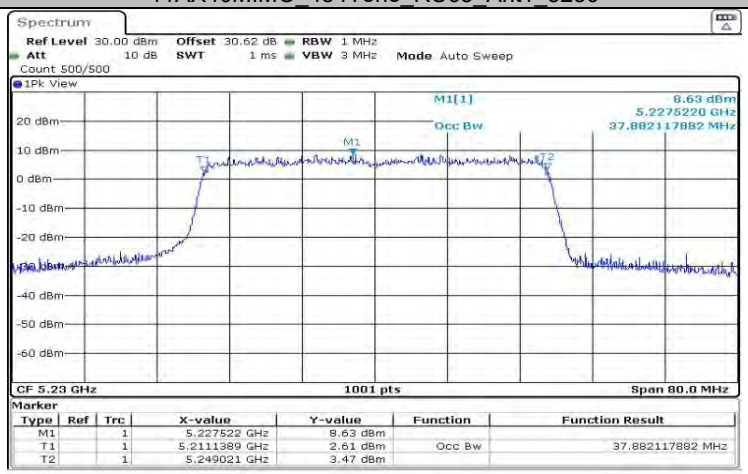
11AX20MIMO_242Tone_RU61_Ant1_5785

11AX20MIMO_242Tone_RU61_Ant1_5825

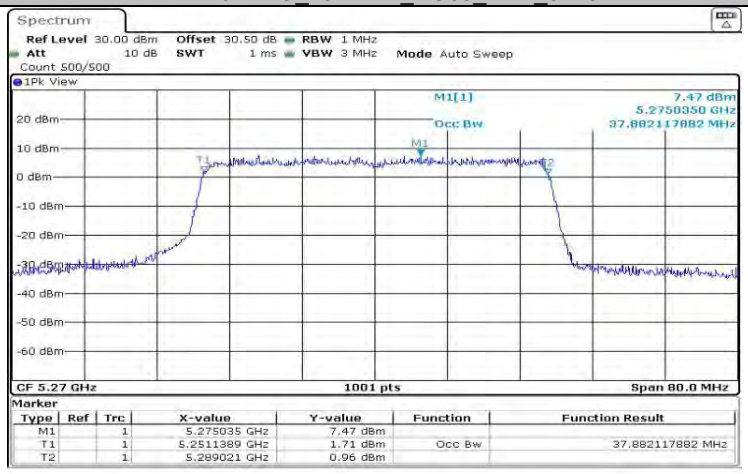
11AX40MIMO_484Tone_RU65_Ant1_5190



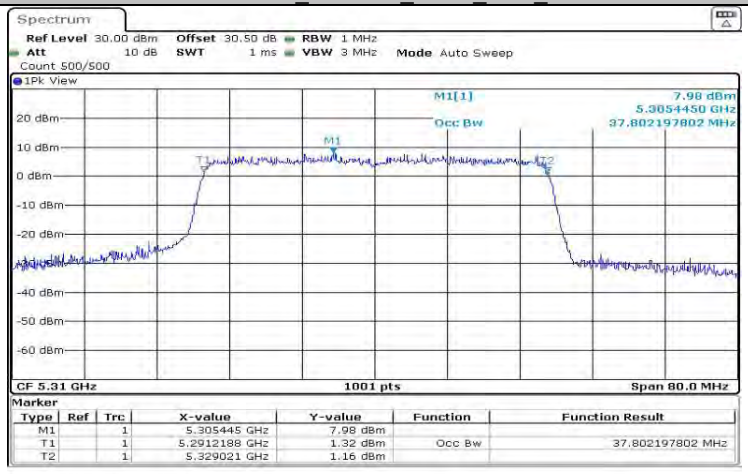
11AX40MIMO_484Tone_RU65_Ant1_5230



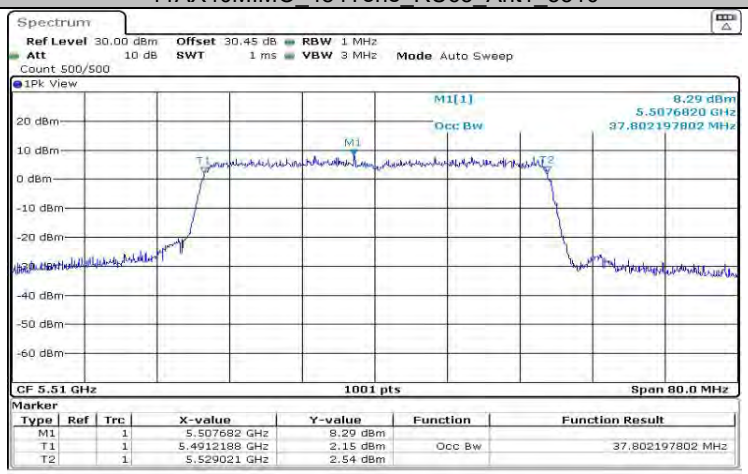
11AX40MIMO_484Tone_RU65_Ant1_5270



11AX40MIMO_484Tone_RU65_Ant1_5310

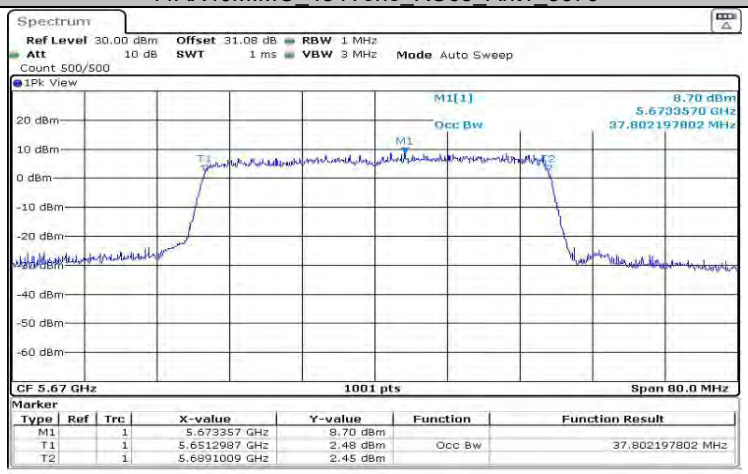


11AX40MIMO_484Tone_RU65_Ant1_5510

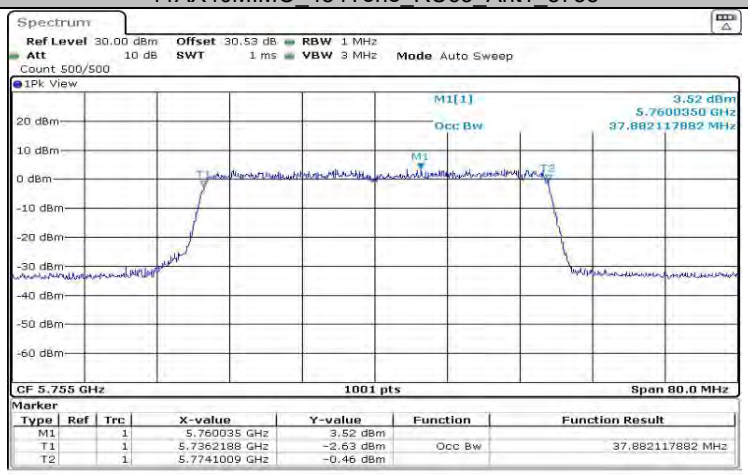


11AX40MIMO_484Tone_RU65_Ant1_5550

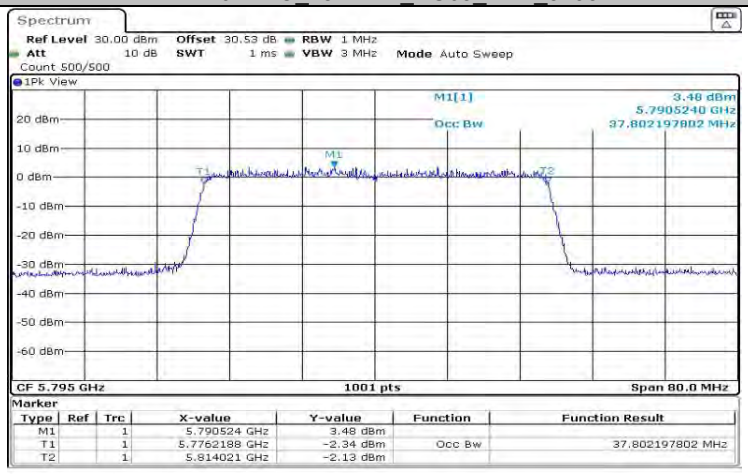
11AX40MIMO_484Tone_RU65_Ant1_5670



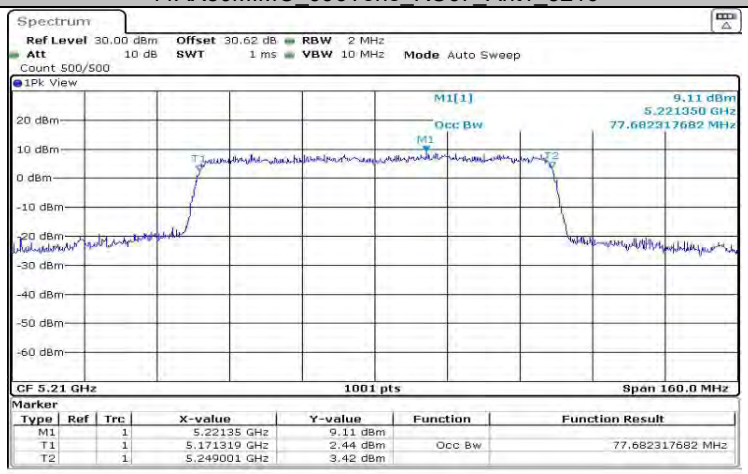
11AX40MIMO_484Tone_RU65_Ant1_5755



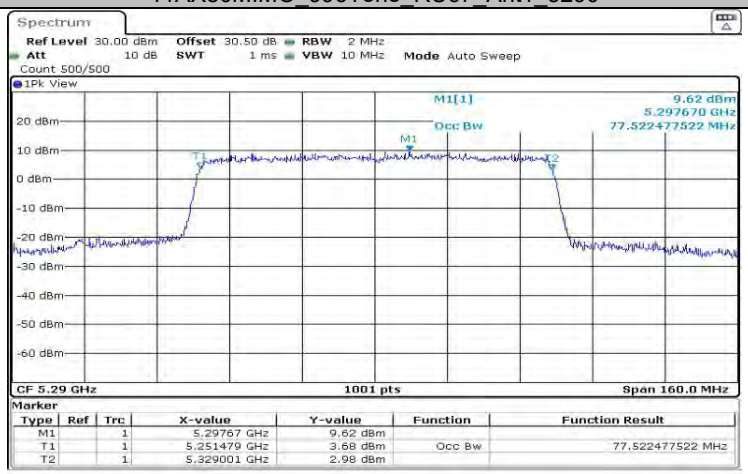
11AX40MIMO_484Tone_RU65_Ant1_5795



11AX80MIMO_996Tone_RU67_Ant1_5210



11AX80MIMO_996Tone_RU67_Ant1_5290



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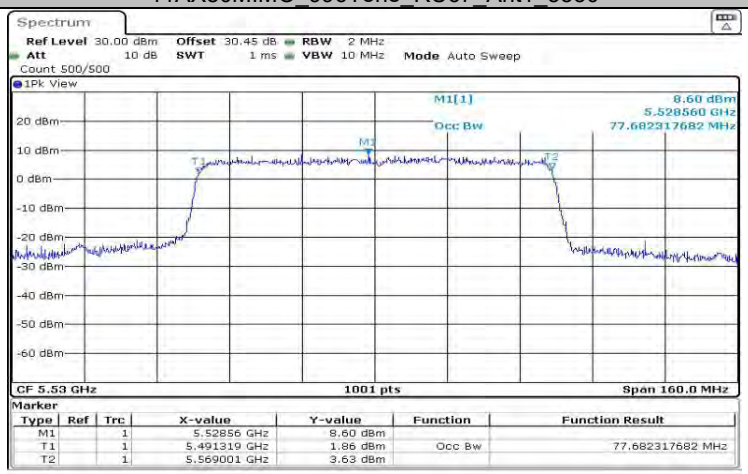
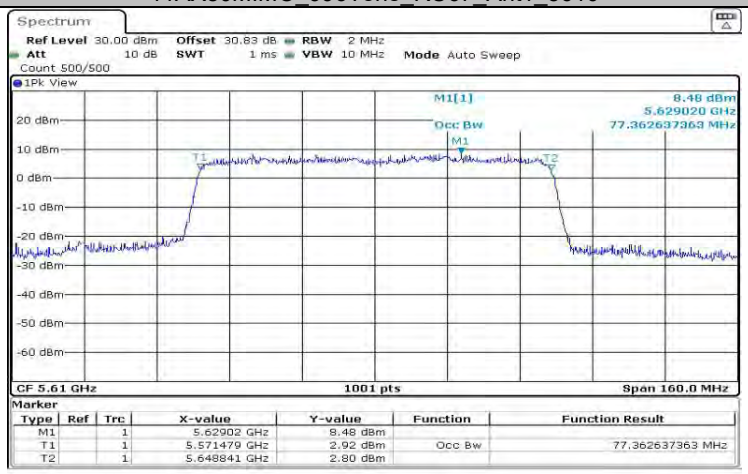
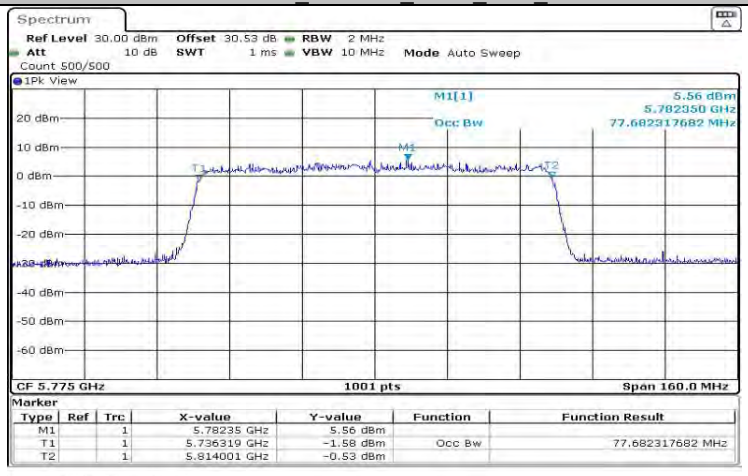


11AX80MIMO_996Tone_RU67_Ant1_5610



11AX80MIMO_996Tone_RU67_Ant1_5775



AppendixA3: Min emission bandwidth

Test Result B4

Test Mode	Antenna	Frequency[MHz]	6db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.08	5737.12	5753.20	0.5	PASS
	Ant1	5785	16.08	5776.84	5792.92	0.5	PASS
	Ant1	5825	16.12	5817.12	5833.24	0.5	PASS
11N20MIMO	Ant1	5745	17.68	5736.20	5753.88	0.5	PASS
	Ant1	5785	17.64	5776.20	5793.84	0.5	PASS
	Ant1	5825	17.72	5816.16	5833.88	0.5	PASS
11N40MIMO	Ant1	5755	36.56	5736.76	5773.32	0.5	PASS
	Ant1	5795	36.40	5776.84	5813.24	0.5	PASS
11AC20MIMO	Ant1	5745	17.56	5736.24	5753.80	0.5	PASS
	Ant1	5785	17.56	5776.24	5793.80	0.5	PASS
	Ant1	5825	16.96	5816.84	5833.80	0.5	PASS
11AC40MIMO	Ant1	5755	36.40	5736.84	5773.24	0.5	PASS
	Ant1	5795	36.40	5776.84	5813.24	0.5	PASS
11AC80MIMO	Ant1	5775	76.00	5736.76	5812.76	0.5	PASS
11AX20MIMO (worst case 242Tone_RU61)	Ant1	5745	17.00	5737.44	5754.44	0.5	PASS
	Ant1	5785	16.48	5776.12	5792.60	0.5	PASS
	Ant1	5825	17.00	5817.44	5834.44	0.5	PASS
11AX40MIMO (worst case 484Tone_RU65)	Ant1	5755	37.60	5736.20	5773.80	0.5	PASS
	Ant1	5795	37.60	5776.28	5813.88	0.5	PASS
11AX80MIMO (worst case 996Tone_RU67)	Ant1	5775	76.48	5736.12	5812.60	0.5	PASS