



TEST REPORT

Applicant Name : Thundercomm Technology Co., Ltd
Address : Building 4, No. 99, Data Valley Middle Road, Xiantao District,
Yubei District, Chongqing, China
Report Number : SZNS211109-57647E-RF-00C
FCC ID: 2AOHHTURBOXC845SOM

Test Standard (s)

FCC PART 15.407

Sample Description

Product Type: Turbox-845
Model No.: TurboX-C845-SOM
Multiple Model(s) No.: N/A
Trade Mark: N/A
Date Received: 2021/11/09
Date of Test: 2021/11/18~2021/12/19
Report Date: 2021/12/20

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:

Black Ding

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EMC Engineer

Approved By:

Candy Li

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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
Maximum Conducted Average Output Power	5150-5250 MHz: 16.7dBm 5250-5350MHz: 16.8dBm 5470-5725MHz: 16.8dBm 5725-5850 MHz: 16.0dBm
Modulation Technique	OFDM
Antenna Specification*	3dBi (provided by the applicant)
Voltage Range	DC 3.8V from I/O board
Sample serial number	SZNS211109-57647E-RF-S1 (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 Frequency		0.082×10^{-7}
RF output power, conducted		0.73dB
Unwanted Emission, conducted		1.6dB
AC Power Lines Conducted Emissions		2.72dB
Emissions, Radiated	9kHz - 30MHz	2.66dB
	30MHz - 1GHz	4.28dB
	1GHz - 18GHz	4.98dB
	18GHz - 26.5GHz	5.06dB
	26.5GHz - 40GHz	4.72dB
Temperature		1 °C
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 (ISED), the Registration Number is 5077A.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in an engineering mode, which was provided by manufacturer.

The device supports 5G Wi-Fi 802.11a/n20/n40/ac20/ac40/ac80 modes, which was declared by manufacturer.

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 mode: channel 36, 40, 48 were tested; For 802.11n40/ac40 mode: channel 38, 46 were tested. For 802.11ac80 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 mode: channel 52, 56, 64 were tested; For 802.11n40/ac40 mode: channel 54, 62 were tested. For 802.11ac80 mode, channel 58 was tested.

For 5470-5725MHz Band, 21 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	124	5620
102	5510	126	5630
104	5520	128	5640
106	5530	132	5660
108	5540	134	5670
110	5550	136	5680
112	5560	138	5690
116	5580	140	5700
118	5590	142	5710
120	5600	144	5720
122	5610	/	/

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

Channel 144 for 802.11a/n20/ac20, Channel 142 for 802.11n40/ac40, Channel 138 for 802.11ac80 cross the band U-NII 2C to U-NII 3, were choose to test for compliance requirement.

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 mode: channel 149, 157, 165 were tested; For 802.11n40/ac40 mode: channel 151, 159 were tested. For 802.11ac80 mode, channel 155 was tested.

EUT Exercise Software

“QRCT3.0”* exercise software was used. The software and power level was provided by the applicant.

The worst case was performed under:

U-NII	Mode	Frequency (MHz)	Data Rate	Power Level*
5150 – 5250MHz	802.11 a	5180	6Mbps	13
		5200	6Mbps	13
		5240	6Mbps	13
	802.11 n20	5180	MCS0	13
		5200	MCS0	13
		5240	MCS0	13
	802.11 n40	5190	MCS0	13
		5230	MCS0	13
	802.11 ac20	5180	MCS0	13
		5200	MCS0	13
		5240	MCS0	13
	802.11 ac40	5190	MCS0	12
		5230	MCS0	12
	802.11 ac80	5210	MCS0	11

U-NII	Mode	Frequency (MHz)	Data Rate	Power Level*
5250 – 5350MHz	802.11 a	5260	6Mbps	13
		5280	6Mbps	13
		5320	6Mbps	13
	802.11 n20	5260	MCS0	13
		5280	MCS0	13
		5320	MCS0	13
	802.11 n40	5270	MCS0	13
		5310	MCS0	13
	802.11 ac20	5260	MCS0	13
		5280	MCS0	13
		5320	MCS0	13
	802.11 ac40	5270	MCS0	12
		5310	MCS0	12
	802.11 ac80	5290	MCS0	11

U-NII	Mode	Frequency (MHz)	Data Rate set	Power Level*
5470 – 5725MHz	802.11 a	5500	6Mbps	13
		5580	6Mbps	13
		5700	6Mbps	13
		5720	6Mbps	13
	802.11 n20	5500	MCS0	13
		5580	MCS0	13
		5700	MCS0	13
		5720	MCS0	13
	802.11 n40	5510	MCS0	13
		5550	MCS0	13
		5670	MCS0	13
		5710	MCS0	13
	802.11 ac20	5500	MCS0	13
		5580	MCS0	13
		5700	MCS0	13
		5720	MCS0	13
	802.11 ac40	5510	MCS0	12
		5550	MCS0	12
		5670	MCS0	12
		5710	MCS0	13
	802.11 ac80	5530	MCS0	11
		5610	MCS0	11
		5690	MCS0	11

U-NII	Mode	Frequency (MHz)	Data Rate	Power Level*
5725 – 5850MHz	802.11 a	5745	6Mbps	13
		5785	6Mbps	13
		5825	6Mbps	13
	802.11 n20	5745	MCS0	13
		5785	MCS0	13
		5825	MCS0	13
	802.11 n40	5755	MCS0	13
		5795	MCS0	13
	802.11 ac20	5745	MCS0	13
		5785	MCS0	13
		5825	MCS0	13
	802.11 ac40	5755	MCS0	12
		5795	MCS0	12
	802.11 ac80	5775	MCS0	11

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

The device supports SISO for all modes and MIMO for 802.11 n20/n40/ac20/ac40/ac80 modes, per pretest, the MIMO mode was the worst mode. And All the antenna ports have the same power level for SISO and MIMO modes.

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

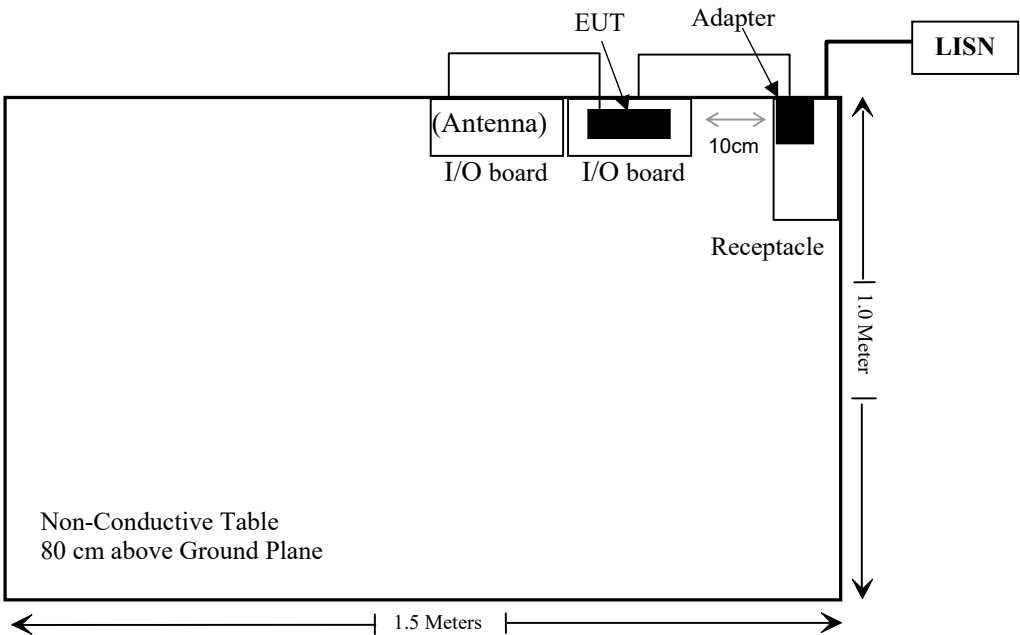
Manufacturer	Description	Model	Serial Number
Thundercomm Technology Co., Ltd	I/O board	Unknown	Unknown
SHENZHEN LIANYUNDA ELECTRONIC CO.,LTD	Adapter	LYD1202000B	E360964

External I/O Cable

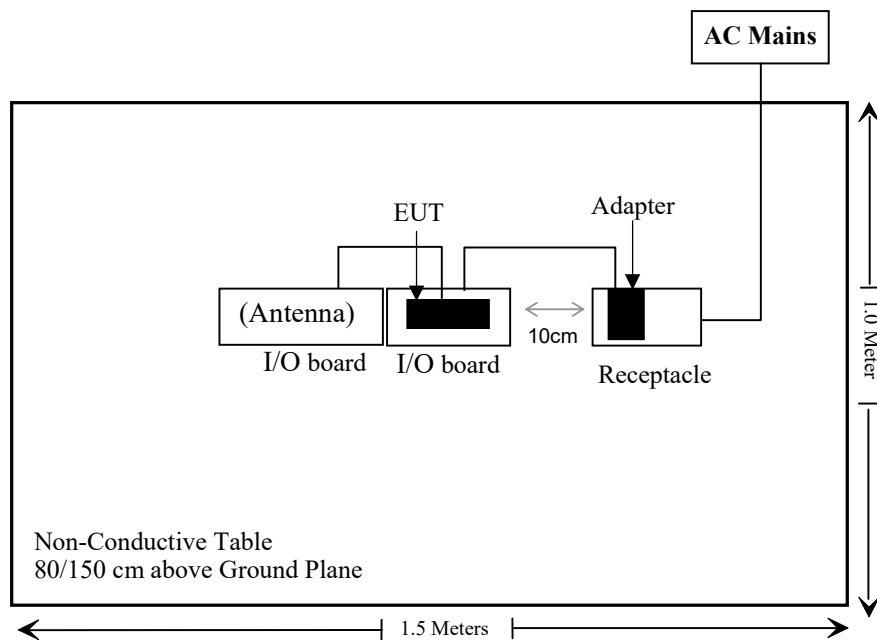
Cable Description	Length (m)	From Port	To
Un-shielded detachable DC cable	1.0	Adapter	EUT

Block Diagram of Test Setup

For conducted emission:



For Radation emission:



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1307 (b) (1) & §2.1091	Maximum Permissible exposure (MPE)	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 declared by the applicant.

Compliant*: Please refer to the DFS report: SZNS211109-57647E-RF-00D.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted emission test					
Rohde& Schwarz	Test Receiver	ESPI3	100396	2020/12/24	2021/12/23
R & S	L.I.S.N.	ENV216	101314	2020/12/25	2021/12/24
Anritsu Corp	50ΩCoaxial Switch	MP59B	6200506474	2020/12/25	2021/12/24
Unknown	RF Coaxial Cable	N-2m	No.2	2020/12/25	2021/12/24
Conducted Emission Test Software: e3 19821b (V9)					
Radiated emission test					
Rohde& Schwarz	Test Receiver	ESR	101817	2020/12/24	2021/12/23
Rohde&Schwarz	Spectrum Analyzer	FSV40	101495	2020/12/24	2021/12/23
SONOMA INSTRUMENT	Amplifier	310 N	186131	2020/12/25	2021/12/24
A.H. Systems, inc.	Preamplifier	PAM-0118P	531	2021/11/09	2022/11/08
Quinstar	Amplifier	QLW-18405536-J0	15964001002	2020/11/28	2021/11/27
Anritsu Corp	50 Coaxial Switch	MP59B	6100237248	2020/12/25	2021/12/24
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2020/01/05	2023/01/04
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	N-5m	No.3	2020/12/25	2021/12/24
Unknown	RF Coaxial Cable	N-5m	No.4	2020/12/25	2021/12/24
Unknown	RF Coaxial Cable	N-1m	No.5	2020/12/25	2021/12/24
Unknown	RF Coaxial Cable	N-1m	No.6	2020/12/25	2021/12/24
CD	Band Reject Filter	BRM-5.15/5.35g-45	075	2020/12/25	2021/12/24
CD	Band Reject Filter	BRM-5.47/5.725G-45	075	2020/12/25	2021/12/24
CD	Band Reject Filter	BRM-5.725/5.875G-45	065	2020/12/25	2021/12/24

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF conducted test					
Rohde & Schwarz	Spectrum Analyzer	FSV-40	101495	2020/12/24	2021/12/23
Tonscend	RF Control Unit	JS0806-2	19G8060182	2021/07/06	2022/07/05

* **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).

1.1307 (b) (1) & §2.1091- MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to subpart 1.1307 (b)(1), 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.

Limits for General Population/Uncontrolled Exposure

Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (Minutes)
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

f = frequency in MHz

* = Plane-wave equivalent power density

a)

Result

Calculated Formulary:

Predication of MPE limit at a given distance

$$S = \frac{PG}{4\pi R^2}$$

S = power density (in appropriate units, e.g. mW/cm²)

P = power input to the antenna (in appropriate units, e.g., mW).

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain.

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

For worst case:

Mode	Frequency (MHz)	Antenna Gain		Tune up conducted power		Evaluation Distance (cm)	Power Density (mW/cm ²)	MPE Limit (mW/cm ²)
		(dBi)	(numeric)	(dBm)	(mW)			
5G Wi-Fi	5150-5250	3.0	2.0	17.0	50.12	20	0.02	1
	5250-5350	3.0	2.0	17.0	50.12	20	0.02	1
	5470-5725	3.0	2.0	17.0	50.12	20	0.02	1
	5725-5850	3.0	2.0	17.0	50.12	20	0.02	1

Note: 1. The tune up conducted power was declared by the applicant.
 2. Bluetooth can not transmit at the same time with Wi-Fi.
 3. The 2.4G Wi-Fi can not transmit at the same time with the 5G Wi-Fi.

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:

- b. Antenna must be permanently attached to the unit.
- c. 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 PCB antennas arrangement for Wi-Fi, which each uses a unique connector and all the antenna gain is 3.0 dBi, fulfill the requirement of this section. Please refer to the EUT photos.

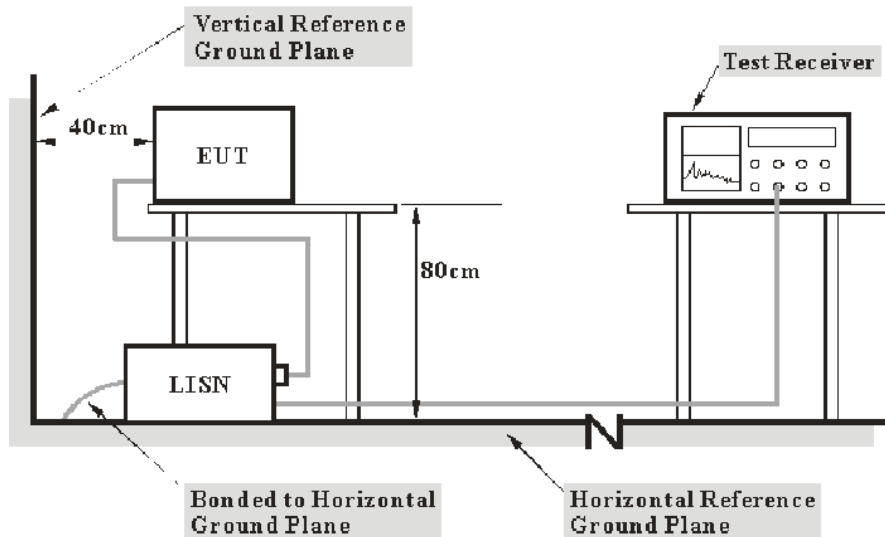
Result: Compliant.

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.

Transd Factor & Margin Calculation

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

$$\text{Transd Factor} = \text{LISN VDF} + \text{Cable Loss}$$

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 calculation is as follows:

$$\begin{aligned}\text{Over Limit} &= \text{Level} - \text{Limit} \\ \text{Level} &= \text{Read Level} + \text{Factor}\end{aligned}$$

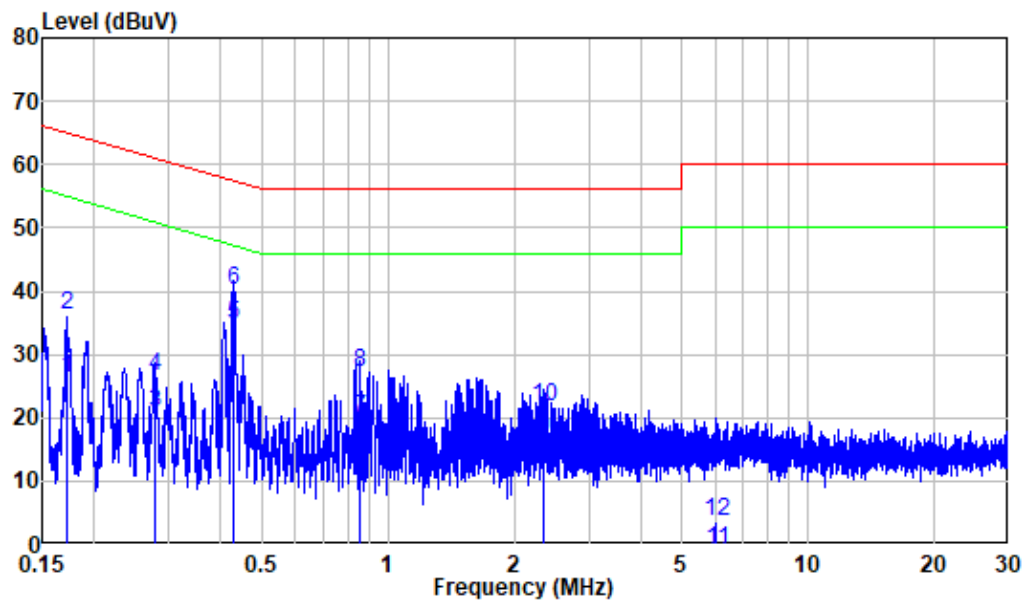
Test Data

Environmental Conditions

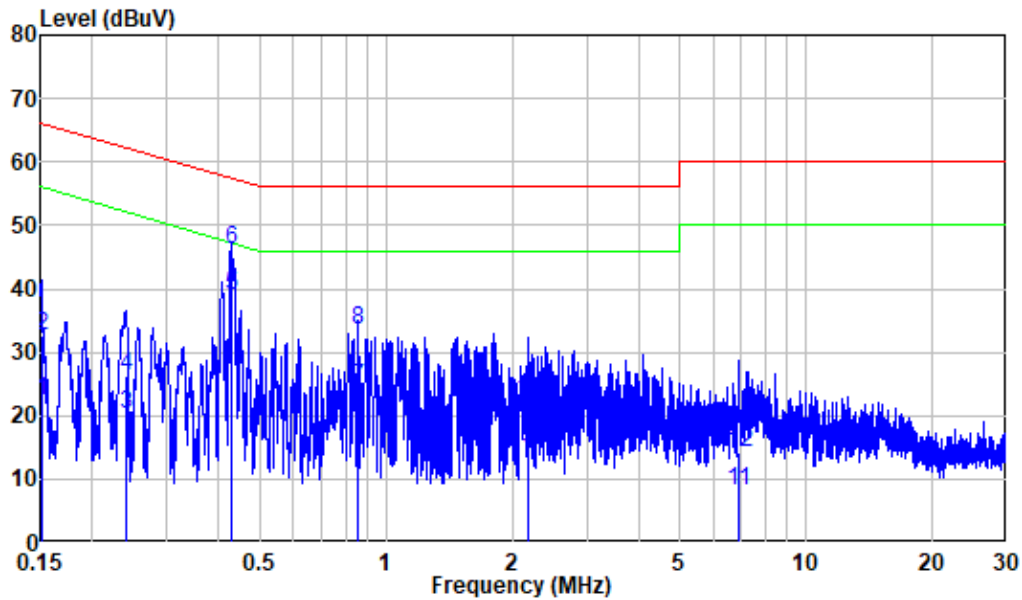
Temperature:	25 °C
Relative Humidity:	64 %
ATM Pressure:	101.0 kPa

The testing was performed by Bin Duan on 2021-11-25.

EUT operation mode: Transmitting (the worst case is 802.11a Mode, High channel)

AC 120V/60 Hz, Line:

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.172	9.85	16.36	26.21	54.87	-28.66	Average
2	0.172	9.85	26.49	36.34	64.87	-28.53	QP
3	0.278	9.80	11.17	20.97	50.87	-29.90	Average
4	0.278	9.80	16.75	26.55	60.87	-34.32	QP
5	0.428	9.80	25.06	34.86	47.29	-12.43	Average
6	0.428	9.80	30.50	40.30	57.29	-16.99	QP
7	0.857	9.81	10.17	19.98	46.00	-26.02	Average
8	0.857	9.81	17.33	27.14	56.00	-28.86	QP
9	2.355	9.92	6.66	16.58	46.00	-29.42	Average
10	2.355	9.92	11.67	21.59	56.00	-34.41	QP
11	6.044	10.03	-10.88	-0.85	50.00	-50.85	Average
12	6.044	10.03	-6.32	3.71	60.00	-56.29	QP

AC 120V/60 Hz, Neutral:

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.151	9.90	12.52	22.42	55.93	-33.51	Average
2	0.151	9.90	22.76	32.66	65.93	-33.27	QP
3	0.240	9.98	10.19	20.17	52.10	-31.93	Average
4	0.240	9.98	16.32	26.30	62.10	-35.80	QP
5	0.428	9.92	29.15	39.07	47.29	-8.22	Average
6	0.428	9.92	36.15	46.07	57.29	-11.22	QP
7	0.857	9.91	14.61	24.52	46.00	-21.48	Average
8	0.857	9.91	23.54	33.45	56.00	-22.55	QP
9	2.178	9.93	4.80	14.73	46.00	-31.27	Average
10	2.178	9.93	12.35	22.28	56.00	-33.72	QP
11	6.896	10.07	-2.02	8.05	50.00	-41.95	Average
12	6.896	10.07	4.19	14.26	60.00	-45.74	QP

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

Applicable Standard

FCC §15.407 (b); §15.209; §15.205;

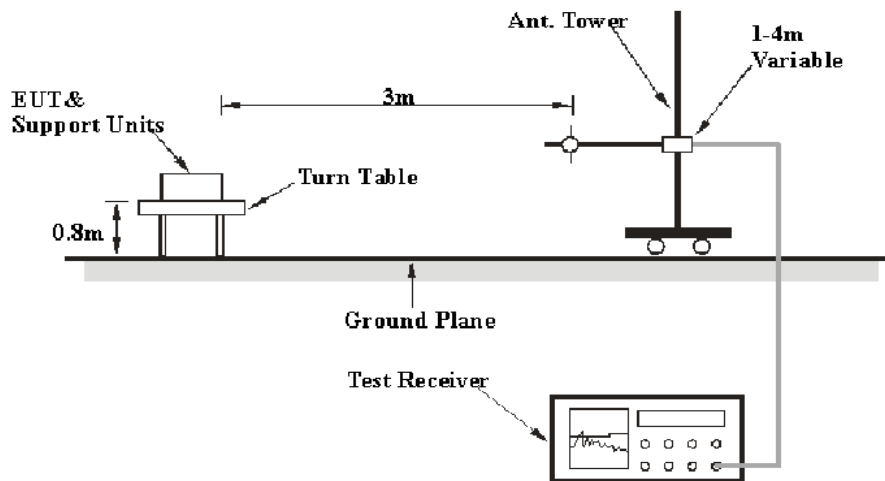
(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

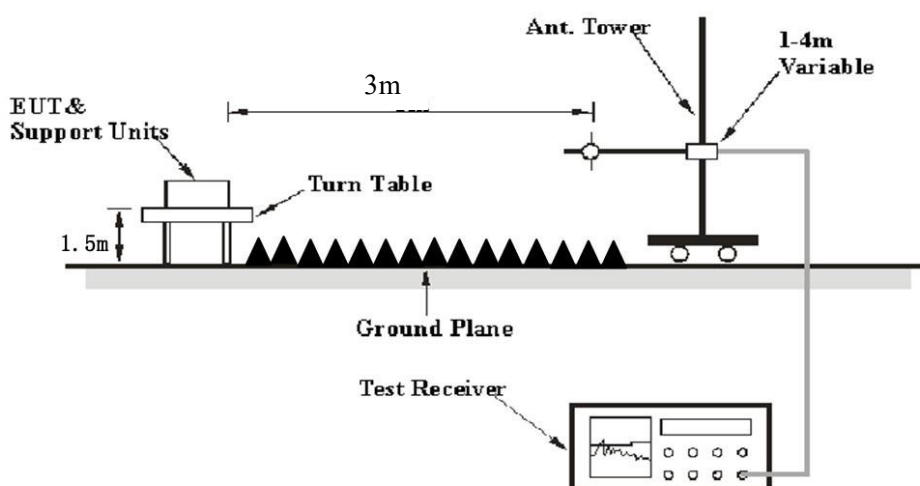
- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (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.

Corrected Amplitude & Margin Calculation

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

$$\text{Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

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

$$\begin{aligned}\text{Over Limit/Margin} &= \text{Level} / \text{Corrected Amplitude} - \text{Limit} \\ \text{Level} / \text{Corrected Amplitude} &= \text{Read Level} + \text{Factor}\end{aligned}$$

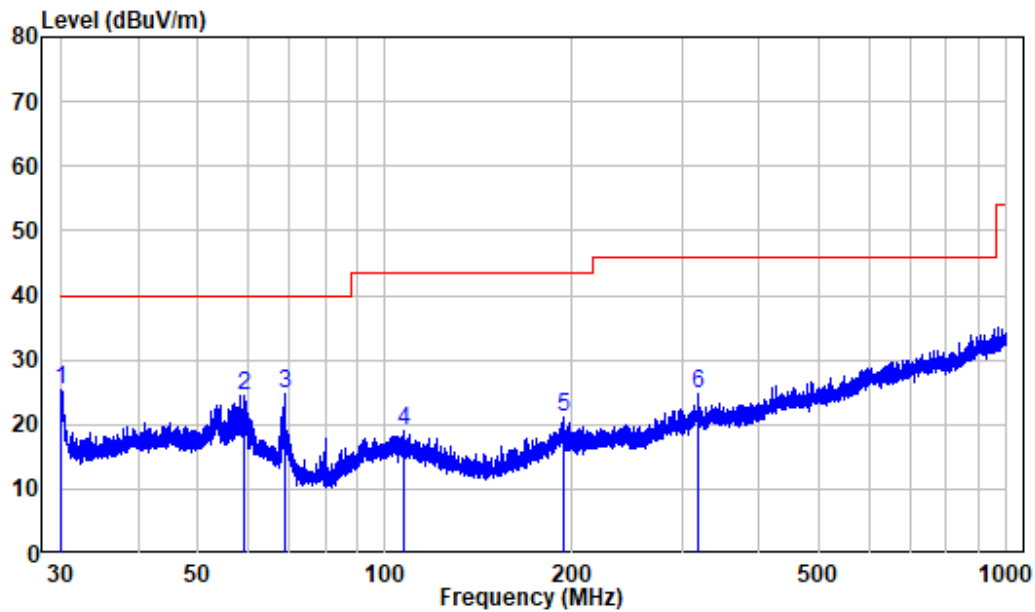
Test Data

Environmental Conditions

Temperature:	25-26 °C
Relative Humidity:	58-64 %
ATM Pressure:	101.0 -101.6kPa

The testing was performed by Bin Deng on 2021-11-25 for below 1GHz and Chao Mo from 2021-11-25 to 2021-11-30 for above 1GHz.

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

30 MHz – 1 GHz: (the worst case is 802.11a Mode, High channel)**Horizontal:**

Site : chamber

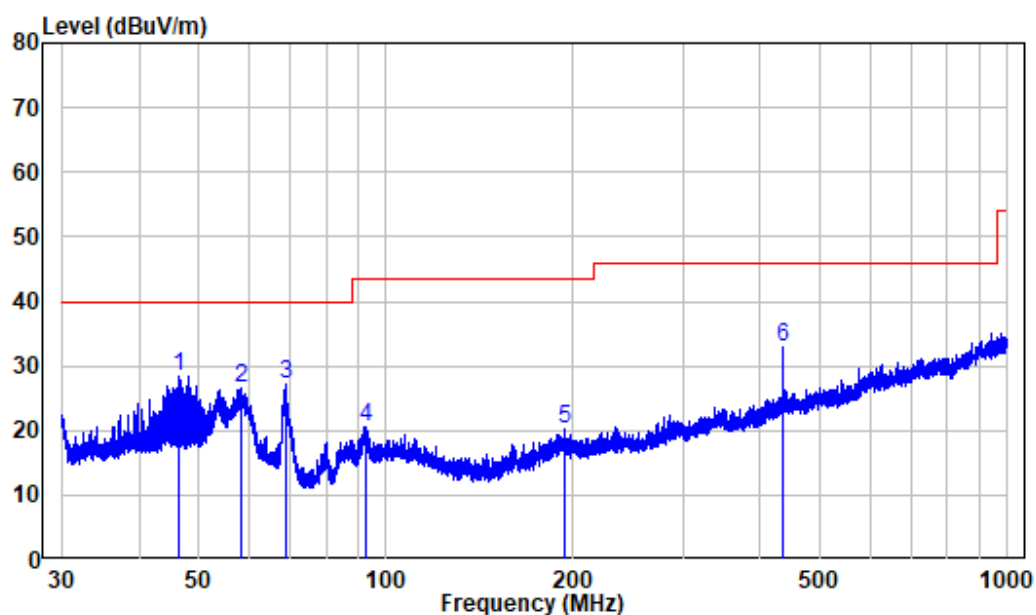
Condition: 3m HORIZONTAL

Job No. : SZNS211109-57647E-RF

Mode : 5G WIFI TX

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	30.04	-12.32	37.75	25.43	40.00	-14.57	
2	59.41	-10.38	34.95	24.57	40.00	-15.43	
3	69.02	-14.29	38.92	24.63	40.00	-15.37	
4	107.37	-12.00	30.92	18.92	43.50	-24.58	
5	194.11	-11.21	32.20	20.99	43.50	-22.51	
6	319.80	-8.20	32.92	24.72	46.00	-21.28	

Vertical



Site : chamber
 Condition: 3m VERTICAL
 Job No. : SZNS211109-57647E-RF
 Mode : 5G WIFI TX

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	46.30	-9.92	38.30	28.38	40.00	-11.62	Peak
2	58.56	-10.05	36.49	26.44	40.00	-13.56	Peak
3	68.78	-14.18	41.43	27.25	40.00	-12.75	Peak
4	92.99	-13.08	33.68	20.60	43.50	-22.90	Peak
5	194.20	-11.22	31.44	20.22	43.50	-23.28	Peak
6	434.07	-5.38	38.41	33.03	46.00	-12.97	Peak

Above 1GHz: worst case as below

5150-5250 MHz:

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBµV/m)	FCC Part 15.407	
	Reading (dBµV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBµV/m)	Margin (dB)
802.11a, antenna 2									
5180 MHz									
4500	62.04	PK	99	1.7	H	-4.72	57.32	74	-16.68
4500	49.61	AV	99	1.7	H	-4.72	44.89	54	-9.11
5150	66.45	PK	320	1.1	H	-2.73	63.72	74	-10.28
5150	52.85	AV	320	1.1	H	-2.73	50.12	54	-3.88
4500	61.88	PK	213	1.3	V	-4.72	57.16	74	-16.84
4500	49.52	AV	213	1.3	V	-4.72	44.80	54	-9.2
5150	65.41	PK	7	1.1	V	-2.73	62.68	74	-11.32
5150	52.28	AV	7	1.1	V	-2.73	49.55	54	-4.45
10360	47.62	PK	183	1	H	8.12	55.74	68.2	-12.46
10360	48.54	PK	25	1.3	V	8.12	56.66	68.2	-11.54
5200 MHz									
10400	46.72	PK	287	2.4	H	8.24	54.96	68.2	-13.24
10400	47.63	PK	343	1.8	V	8.24	55.87	68.2	-12.33
5240 MHz									
5350	64.83	PK	16	1.6	H	-2.33	62.5	74	-11.5
5350	50.16	AV	16	1.6	H	-2.33	47.83	54	-6.17
5460	62.80	PK	122	1.6	H	-2.26	60.54	74	-13.46
5460	49.61	AV	122	1.6	H	-2.26	47.35	54	-6.65
5350	64.66	PK	319	1.8	V	-2.33	62.33	74	-11.67
5350	50.10	AV	319	1.8	V	-2.33	47.77	54	-6.23
5460	62.65	PK	274	1.6	V	-2.26	60.39	74	-13.61
5460	49.49	AV	274	1.6	V	-2.26	47.23	54	-6.77
10480	46.01	PK	122	2.1	H	8.55	54.56	68.2	-13.64
10480	48.10	PK	335	2.2	V	8.55	56.65	68.2	-11.55

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	FCC Part 15.407	
	Reading (dBμV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
802.11n20, 2TX									
5180 MHz									
4500	62.42	PK	154	1.6	H	-4.72	57.70	74	-16.3
4500	50.21	AV	154	1.6	H	-4.72	45.49	54	-8.51
5150	68.07	PK	1	1.2	H	-2.73	65.34	74	-8.66
5150	53.24	AV	1	1.2	H	-2.73	50.51	54	-3.49
4500	62.01	PK	300	1.1	V	-4.72	57.29	74	-16.71
4500	50.07	AV	300	1.1	V	-4.72	45.35	54	-8.65
5150	66.36	PK	122	1.3	V	-2.73	63.63	74	-10.37
5150	52.95	AV	122	1.3	V	-2.73	50.22	54	-3.78
10360	47.45	PK	314	1.5	H	8.12	55.57	68.2	-12.63
10360	47.64	PK	326	2.4	V	8.12	55.76	68.2	-12.44
5200 MHz									
10400	46.90	PK	258	1.4	H	8.24	55.14	68.2	-13.06
10400	47.47	PK	333	1.6	V	8.24	55.71	68.2	-12.49
5240 MHz									
5350	64.71	PK	346	1.6	H	-2.33	62.38	74	-11.62
5350	50.12	AV	346	1.6	H	-2.33	47.79	54	-6.21
5460	63.59	PK	39	1.6	H	-2.26	61.33	74	-12.67
5460	49.66	AV	39	1.6	H	-2.26	47.4	54	-6.6
5350	64.37	PK	161	2.2	V	-2.33	62.04	74	-11.96
5350	50.08	AV	161	2.2	V	-2.33	47.75	54	-6.25
5460	63.41	PK	336	1.7	V	-2.26	61.15	74	-12.85
5460	49.55	AV	336	1.7	V	-2.26	47.29	54	-6.71
10480	46.24	PK	133	1.6	H	8.55	54.79	68.2	-13.41
10480	46.98	PK	291	2.5	V	8.55	55.53	68.2	-12.67

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	FCC Part 15.407	
	Reading (dBμV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
802.11n40, 2TX									
5190 MHz									
4500	62.34	PK	75	2.4	H	-4.72	57.62	74	-16.38
4500	50.55	AV	75	2.4	H	-4.72	45.83	54	-8.17
5150	63.27	PK	270	1.2	H	-2.73	60.54	74	-13.46
5150	50.98	AV	270	1.2	H	-2.73	48.25	54	-5.75
4500	62.31	PK	97	2.4	V	-4.72	57.59	74	-16.41
4500	50.80	AV	97	2.4	V	-4.72	46.08	54	-7.92
5150	63.02	PK	130	2.2	V	-2.73	60.29	74	-13.71
5150	50.91	AV	130	2.2	V	-2.73	48.18	54	-5.82
10380	45.37	PK	337	2	H	8.18	53.55	68.2	-14.65
10380	45.58	PK	356	1.3	V	8.18	53.76	68.2	-14.44
5230 MHz									
5350	64.59	PK	105	1.8	H	-2.33	62.26	74	-11.74
5350	51.43	AV	105	1.8	H	-2.33	49.1	54	-4.9
5460	64.54	PK	174	2.2	H	-2.26	62.28	74	-11.72
5460	51.25	AV	174	2.2	H	-2.26	48.99	54	-5.01
5350	65.27	PK	293	1.8	V	-2.33	62.94	74	-11.06
5350	51.41	AV	293	1.8	V	-2.33	49.08	54	-4.92
5460	63.26	PK	75	1.7	V	-2.26	61	74	-13
5460	51.21	AV	75	1.7	V	-2.26	48.95	54	-5.05
10460	44.03	PK	145	1.8	H	8.47	52.50	68.2	-15.7
10460	44.15	PK	75	1.3	V	8.47	52.62	68.2	-15.58

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	FCC Part 15.407	
	Reading (dBμV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
802.11ac20, 2TX									
5180 MHz									
4500	62.34	PK	86	1.7	H	-4.72	57.62	74	-16.38
4500	49.55	AV	86	1.7	H	-4.72	44.83	54	-9.17
5150	66.27	PK	275	1.5	H	-2.73	63.54	74	-10.46
5150	53.16	AV	275	1.5	H	-2.73	50.43	54	-3.57
4500	62.12	PK	28	1.9	V	-4.72	57.40	74	-16.6
4500	49.51	AV	28	1.9	V	-4.72	44.79	54	-9.21
5150	65.31	PK	119	1.6	V	-2.73	62.58	74	-11.42
5150	52.47	AV	119	1.6	V	-2.73	49.74	54	-4.26
10360	47.84	PK	159	2.1	H	8.12	55.96	68.2	-12.24
10360	47.93	PK	159	2.1	V	8.12	56.05	68.2	-12.15
5200 MHz									
10400	47.20	PK	23	1	H	8.24	55.44	68.2	-12.76
10400	47.36	PK	294	1.1	V	8.24	55.6	68.2	-12.6
5240 MHz									
5350	64.57	PK	71	2.2	H	-2.33	62.24	74	-11.76
5350	50.10	AV	71	2.2	H	-2.33	47.77	54	-6.23
5460	63.06	PK	20	2.1	H	-2.26	60.8	74	-13.2
5460	49.77	AV	20	2.1	H	-2.26	47.51	54	-6.49
5350	64.34	PK	185	1.1	V	-2.33	62.01	74	-11.99
5350	50.09	AV	185	1.1	V	-2.33	47.76	54	-6.24
5460	62.98	PK	305	1.3	V	-2.26	60.72	74	-13.28
5460	49.71	AV	305	1.3	V	-2.26	47.45	54	-6.55
10480	46.86	PK	102	2.1	H	8.55	55.41	68.2	-12.79
10480	47.22	PK	146	1.3	V	8.55	55.77	68.2	-12.43

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	FCC Part 15.407	
	Reading (dBμV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
802.11ac40, 2TX									
5190 MHz									
4500	62.01	PK	329	2.2	H	-4.72	57.29	74	-16.71
4500	50.42	AV	329	2.2	H	-4.72	45.70	54	-8.3
5150	63.08	PK	191	2.3	H	-2.73	60.35	74	-13.65
5150	51.01	AV	191	2.3	H	-2.73	48.28	54	-5.72
4500	61.67	PK	48	2.2	V	-4.72	56.95	74	-17.05
4500	50.31	AV	48	2.2	V	-4.72	45.59	54	-8.41
5150	63.05	PK	234	1.6	V	-2.73	60.32	74	-13.68
5150	50.94	AV	234	1.6	V	-2.73	48.21	54	-5.79
10380	45.08	PK	168	1.6	H	8.18	53.26	68.2	-14.94
10380	45.82	PK	353	1.1	V	8.18	54.00	68.2	-14.2
5230 MHz									
5350	64.57	PK	151	1.9	H	-2.33	62.24	74	-11.76
5350	51.54	AV	151	1.9	H	-2.33	49.21	54	-4.79
5460	63.24	PK	208	1.9	H	-2.26	60.98	74	-13.02
5460	50.97	AV	208	1.9	H	-2.26	48.71	54	-5.29
5350	64.15	PK	308	1.5	V	-2.33	61.82	74	-12.18
5350	51.40	AV	308	1.5	V	-2.33	49.07	54	-4.93
5460	63.09	PK	24	2.5	V	-2.26	60.83	74	-13.17
5460	50.90	AV	24	2.5	V	-2.26	48.64	54	-5.36
10460	44.32	PK	286	2.3	H	8.47	52.79	68.2	-15.41
10460	45.13	PK	165	1.3	V	8.47	53.60	68.2	-14.6

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	FCC Part 15.407	
	Reading (dBμV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
802.11ac80, 2TX									
4500	66.49	PK	110	1.6	H	-4.72	61.77	74	-12.23
4500	53.51	AV	110	1.6	H	-4.72	48.79	54	-5.21
5150	65.19	PK	182	2.1	H	-2.73	62.46	74	-11.54
5150	52.18	AV	182	2.1	H	-2.73	49.45	54	-4.55
4500	65.86	PK	33	2.4	V	-4.72	61.14	74	-12.86
4500	53.37	AV	33	2.4	V	-4.72	48.65	54	-5.35
5150	64.09	PK	222	1.9	V	-2.73	61.36	74	-12.64
5150	51.63	AV	222	1.9	V	-2.73	48.90	54	-5.1
5350	64.46	PK	227	1.3	H	-2.33	62.13	74	-11.87
5350	51.84	AV	227	1.3	H	-2.33	49.51	54	-4.49
5460	64.25	PK	85	1.3	H	-2.26	61.99	74	-12.01
5460	51.48	AV	85	1.3	H	-2.26	49.22	54	-4.78
5350	64.09	PK	325	2.1	V	-2.33	61.76	74	-12.24
5350	51.70	AV	325	2.1	V	-2.33	49.37	54	-4.63
5460	63.24	PK	39	2.2	V	-2.26	60.98	74	-13.02
5460	51.12	AV	39	2.2	V	-2.26	48.86	54	-5.14
10420	43.95	PK	166	1.8	H	8.31	52.26	68.2	-15.94
10420	44.83	PK	223	1.6	V	8.31	53.14	68.2	-15.06

5250-5350 MHz:

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	FCC Part 15.407	
	Reading (dBμV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
802.11a, Antenna 2									
5260 MHz									
4500	61.92	PK	313	2.3	H	-4.72	57.20	74	-16.8
4500	49.54	AV	313	2.3	H	-4.72	44.82	54	-9.18
5150	63.17	PK	236	1.3	H	-2.73	60.44	74	-13.56
5150	49.60	AV	236	1.3	H	-2.73	46.87	54	-7.13
4500	62.01	PK	108	2.4	V	-4.72	57.29	74	-16.71
4500	49.59	AV	108	2.4	V	-4.72	44.87	54	-9.13
5150	63.47	PK	232	2	V	-2.73	60.74	74	-13.26
5150	49.69	AV	232	2	V	-2.73	46.96	54	-7.04
10520	45.99	PK	287	1.7	H	8.65	54.64	68.2	-13.56
10520	47.62	PK	60	2.3	V	8.65	56.27	68.2	-11.93
5280 MHz									
10560	47.37	PK	113	2.1	H	8.69	56.06	68.2	-12.14
10560	48.44	PK	163	2	V	8.69	57.13	68.2	-11.07
5320 MHz									
5350	64.28	PK	25	1.4	H	-2.33	61.95	74	-12.05
5350	50.13	AV	25	1.4	H	-2.33	47.8	54	-6.2
5460	62.25	PK	21	2.4	H	-2.26	59.99	74	-14.01
5460	49.88	AV	21	2.4	H	-2.26	47.62	54	-6.38
5350	64.66	PK	273	2.3	V	-2.33	62.33	74	-11.67
5350	50.20	AV	273	2.3	V	-2.33	47.87	54	-6.13
5460	63.39	PK	241	1.2	V	-2.26	61.13	74	-12.87
5460	49.94	AV	241	1.2	V	-2.26	47.68	54	-6.32
10640	49.17	PK	327	1.5	H	8.92	58.09	74	-15.91
10640	34.81	AV	327	1.5	H	8.92	43.73	54	-10.27
10640	50.28	PK	119	1.6	V	8.92	59.20	74	-14.8
10640	36.12	AV	119	1.6	V	8.92	45.04	54	-8.96

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	FCC Part 15.407	
	Reading (dBμV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
802.11n20, 2TX									
5260 MHz									
4500	61.81	PK	115	1.4	H	-4.72	57.09	74	-16.91
4500	49.60	AV	115	1.4	H	-4.72	44.88	54	-9.12
5150	63.61	PK	13	1.3	H	-2.73	60.88	74	-13.12
5150	49.75	AV	13	1.3	H	-2.73	47.02	54	-6.98
4500	61.98	PK	343	1	V	-4.72	57.26	74	-16.74
4500	49.70	AV	343	1	V	-4.72	44.98	54	-9.02
5150	63.98	PK	353	2.2	V	-2.73	61.25	74	-12.75
5150	49.82	AV	353	2.2	V	-2.73	47.09	54	-6.91
10520	46.36	PK	219	1.7	H	8.65	55.01	68.2	-13.19
10520	47.34	PK	348	2.2	V	8.65	55.99	68.2	-12.21
5280 MHz									
10560	47.95	PK	288	1.2	H	8.69	56.64	68.2	-11.56
10560	49.13	PK	240	1.7	V	8.69	57.82	68.2	-10.38
5320 MHz									
5350	64.40	PK	204	2.1	H	-2.33	62.07	74	-11.93
5350	50.14	AV	204	2.1	H	-2.33	47.81	54	-6.19
5460	62.99	PK	335	1.4	H	-2.26	60.73	74	-13.27
5460	49.67	AV	335	1.4	H	-2.26	47.41	54	-6.59
5350	64.70	PK	323	1.1	V	-2.33	62.37	74	-11.63
5350	50.18	AV	323	1.1	V	-2.33	47.85	54	-6.15
5460	63.05	PK	349	1.4	V	-2.26	60.79	74	-13.21
5460	49.76	AV	349	1.4	V	-2.26	47.5	54	-6.5
10640	49.98	PK	229	2.1	H	8.92	58.90	74	-15.1
10640	34.75	AV	229	2.1	H	8.92	43.67	54	-10.33
10640	51.23	PK	75	2.5	V	8.92	60.15	74	-13.85
10640	35.70	AV	75	2.5	V	8.92	44.62	54	-9.38

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	FCC Part 15.407	
	Reading (dBμV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
802.11n40, 2TX									
5270 MHz									
4500	62.32	PK	169	2.4	H	-4.72	57.60	74	-16.4
4500	50.51	AV	169	2.4	H	-4.72	45.79	54	-8.21
5150	63.20	PK	218	1.4	H	-2.73	60.47	74	-13.53
5150	50.91	AV	218	1.4	H	-2.73	48.18	54	-5.82
4500	62.41	PK	34	1.6	V	-4.72	57.69	74	-16.31
4500	50.58	AV	34	1.6	V	-4.72	45.86	54	-8.14
5150	63.87	PK	171	2.3	V	-2.73	61.14	74	-12.86
5150	50.99	AV	171	2.3	V	-2.73	48.26	54	-5.74
10540	45.24	PK	344	1.3	H	8.65	53.89	68.2	-14.31
10540	46.18	PK	171	1.2	V	8.65	54.83	68.2	-13.37
5310 MHz									
5350	64.16	PK	314	1.8	H	-2.33	61.83	74	-12.17
5350	51.38	AV	314	1.8	H	-2.33	49.05	54	-4.95
5460	62.85	PK	351	1.2	H	-2.26	60.59	74	-13.41
5460	51.34	AV	351	1.2	H	-2.26	49.08	54	-4.92
5350	64.40	PK	230	1.6	V	-2.33	62.07	74	-11.93
5350	51.49	AV	230	1.6	V	-2.33	49.16	54	-4.84
5460	63.34	PK	63	1	V	-2.26	61.08	74	-12.92
5460	51.36	AV	63	1	V	-2.26	49.1	54	-4.9
10620	47.43	PK	177	2	H	8.92	56.35	74	-17.65
10620	34.48	AV	177	2	H	8.92	43.40	54	-10.6
10620	48.13	PK	269	2.4	V	8.92	57.05	74	-16.95
10620	35.80	AV	269	2.4	V	8.92	44.72	54	-9.28

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	FCC Part 15.407	
	Reading (dBμV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
802.11ac20, 2TX									
5260 MHz									
4500	61.98	PK	56	2.3	H	-4.72	57.26	74	-16.74
4500	49.61	AV	56	2.3	H	-4.72	44.89	54	-9.11
5150	64.31	PK	112	1.9	H	-2.73	61.58	74	-12.42
5150	49.79	AV	112	1.9	H	-2.73	47.06	54	-6.94
4500	62.11	PK	317	1.9	V	-4.72	57.39	74	-16.61
4500	49.64	AV	317	1.9	V	-4.72	44.92	54	-9.08
5150	64.84	PK	40	2.2	V	-2.73	62.11	74	-11.89
5150	49.87	AV	40	2.2	V	-2.73	47.14	54	-6.86
10520	46.74	PK	248	1.2	H	8.65	55.39	68.2	-12.81
10520	47.67	PK	54	2	V	8.65	56.32	68.2	-11.88
5280 MHz									
10560	48.17	PK	348	2.3	H	8.69	56.86	68.2	-11.34
10560	49.59	PK	203	1.8	V	8.69	58.28	68.2	-9.92
5320 MHz									
5350	64.58	PK	313	1.4	H	-2.33	62.25	74	-11.75
5350	50.27	AV	313	1.4	H	-2.33	47.94	54	-6.06
5460	63.39	PK	54	2.5	H	-2.26	61.13	74	-12.87
5460	49.76	AV	54	2.5	H	-2.26	47.5	54	-6.5
5350	65.10	PK	66	2	V	-2.33	62.77	74	-11.23
5350	50.44	AV	66	2	V	-2.33	48.11	54	-5.89
5460	63.67	PK	197	1.2	V	-2.26	61.41	74	-12.59
5460	49.88	AV	197	1.2	V	-2.26	47.62	54	-6.38
10640	50.37	PK	26	1.9	H	8.92	59.29	74	-14.71
10640	34.93	AV	26	1.9	H	8.92	43.85	54	-10.15
10640	51.65	PK	287	1.5	V	8.92	60.57	74	-13.43
10640	35.82	AV	287	1.5	V	8.92	44.74	54	-9.26

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	FCC Part 15.407	
	Reading (dBμV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
802.11ac40, 2TX									
5270 MHz									
4500	62.40	PK	20	2	H	-4.72	57.68	74	-16.32
4500	50.25	AV	20	2	H	-4.72	45.53	54	-8.47
5150	64.06	PK	291	1.7	H	-2.73	61.33	74	-12.67
5150	50.89	AV	291	1.7	H	-2.73	48.16	54	-5.84
4500	62.51	PK	211	1.9	V	-4.72	57.79	74	-16.21
4500	50.42	AV	211	1.9	V	-4.72	45.70	54	-8.3
5150	64.47	PK	65	1	V	-2.73	61.74	74	-12.26
5150	51.01	AV	65	1	V	-2.73	48.28	54	-5.72
10540	44.87	PK	173	2.3	H	8.65	53.52	68.2	-14.68
10540	46.02	PK	309	1.5	V	8.65	54.67	68.2	-13.53
5310 MHz									
5350	64.67	PK	21	1.4	H	-2.33	62.34	74	-11.66
5350	51.60	AV	21	1.4	H	-2.33	49.27	54	-4.73
5460	63.09	PK	341	2.1	H	-2.26	60.83	74	-13.17
5460	51.30	AV	341	2.1	H	-2.26	49.04	54	-4.96
5350	64.88	PK	103	2.5	V	-2.33	62.55	74	-11.45
5350	51.70	AV	103	2.5	V	-2.33	49.37	54	-4.63
5460	63.25	PK	272	1.9	V	-2.26	60.99	74	-13.01
5460	51.38	AV	272	1.9	V	-2.26	49.12	54	-4.88
10620	47.18	PK	290	1	H	8.92	56.10	74	-17.9
10620	34.83	AV	290	1	H	8.92	43.75	54	-10.25
10620	48.27	PK	304	2.5	V	8.92	57.19	74	-16.81
10620	35.91	AV	304	2.5	V	8.92	44.83	54	-9.17

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	FCC Part 15.407	
	Reading (dBμV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
802.11ac80, 2TX									
4500	62.56	PK	242	1.6	H	-4.72	57.84	74	-16.16
4500	50.07	AV	242	1.6	H	-4.72	45.35	54	-8.65
5150	63.68	PK	49	1.6	H	-2.73	60.95	74	-13.05
5150	51.52	AV	49	1.6	H	-2.73	48.79	54	-5.21
4500	62.86	PK	171	2.5	V	-4.72	58.14	74	-15.86
4500	50.77	AV	171	2.5	V	-4.72	46.05	54	-7.95
5150	64.11	PK	148	2	V	-2.73	61.38	74	-12.62
5150	51.92	AV	148	2	V	-2.73	49.19	54	-4.81
5350	62.58	PK	81	2.1	H	-2.33	60.25	74	-13.75
5350	48.87	AV	81	2.1	H	-2.33	46.54	54	-7.46
5460	64.41	PK	322	1.6	H	-2.26	62.15	74	-11.85
5460	51.49	AV	322	1.6	H	-2.26	49.23	54	-4.77
5350	63.15	PK	8	1	V	-2.33	60.82	74	-13.18
5350	48.98	AV	8	1	V	-2.33	46.65	54	-7.35
5460	64.79	PK	63	1.1	V	-2.26	62.53	74	-11.47
5460	51.70	AV	63	1.1	V	-2.26	49.44	54	-4.56
10580	46.09	PK	346	1.9	H	8.77	54.86	68.2	-13.34
10580	46.56	PK	346	1.9	V	8.77	55.33	68.2	-12.87

5470-5725 MHz:

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	FCC Part 15.407	
	Reading (dBμV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
802.11a, Antenna 2									
5500 MHz									
5400	67.14	PK	145	1.2	H	-2.29	64.85	74	-9.15
5400	49.43	AV	145	1.2	H	-2.29	47.14	54	-6.86
5470	65.61	PK	75	1.1	H	-2.22	63.39	68.2	-4.81
5400	66.65	PK	36	1	V	-2.29	64.36	74	-9.64
5400	49.86	AV	36	1	V	-2.29	47.57	54	-6.43
5470	65.23	PK	196	1.7	V	-2.22	63.01	68.2	-5.19
11000	49.13	PK	19	1.5	H	9.67	58.80	74	-15.2
11000	33.38	AV	19	1.5	H	9.67	43.05	54	-10.95
11000	49.85	PK	58	1.9	V	9.67	59.52	74	-14.48
11000	35.70	AV	58	1.9	V	9.67	45.37	54	-8.63
5600 MHz									
11200	49.45	PK	150	1.5	H	8.42	57.87	74	-16.13
11200	34.19	AV	150	1.5	H	8.42	42.61	54	-11.39
11200	52.58	PK	333	1.4	V	8.42	61.00	74	-13
11200	36.85	AV	333	1.4	V	8.42	45.27	54	-8.73
5720 MHz									
5850	66.46	PK	275	1.1	H	-1.81	64.65	68.2	-3.55
5925	62.15	PK	265	1.5	H	-1.82	60.33	68.2	-7.87
5850	66.93	PK	177	2.3	V	-1.81	65.12	68.2	-3.08
5925	62.43	PK	346	1.3	V	-1.82	60.61	68.2	-7.59
11440	52.24	PK	207	1.1	H	6.83	59.07	74	-14.93
11440	36.47	AV	207	1.1	H	6.83	43.30	54	-10.7
11440	55.55	PK	102	1.4	V	6.83	62.38	74	-11.62
11440	41.74	AV	102	1.4	V	6.83	48.57	54	-5.43

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBµV/m)	FCC Part 15.407	
	Reading (dBµV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBµV/m)	Margin (dB)
802.11n20, 2TX									
5550 MHz									
5400	66.51	PK	48	1.5	H	-2.29	64.22	74	-9.78
5400	49.23	AV	48	1.5	H	-2.29	46.94	54	-7.06
5470	65.50	PK	350	1.4	H	-2.22	63.28	68.2	-4.92
5400	66.43	PK	138	2.5	V	-2.29	64.14	74	-9.86
5400	49.07	AV	138	2.5	V	-2.29	46.78	54	-7.22
5470	64.73	PK	128	1.5	V	-2.22	62.51	68.2	-5.69
11000	48.07	PK	17	1.5	H	9.67	57.74	74	-16.26
11000	32.75	AV	17	1.5	H	9.67	42.42	54	-11.58
11000	50.41	PK	124	1	V	9.67	60.08	74	-13.92
11000	33.54	AV	124	1	V	9.67	43.21	54	-10.79
5600 MHz									
11200	49.28	PK	286	1.8	H	8.42	57.70	74	-16.3
11200	33.79	AV	286	1.8	H	8.42	42.21	54	-11.79
11200	52.80	PK	24	2.1	V	8.42	61.22	74	-12.78
11200	34.74	AV	24	2.1	V	8.42	43.16	54	-10.84
5720 MHz									
5850	67.01	PK	133	1.9	H	-1.81	65.20	68.2	-3
5925	62.32	PK	136	1.7	H	-1.82	60.50	68.2	-7.7
5850	66.89	PK	27	2	V	-1.81	65.08	68.2	-3.12
5925	62.56	PK	257	1.9	V	-1.82	60.74	68.2	-7.46
11440	52.05	PK	230	2.4	H	6.83	58.88	74	-15.12
11440	36.76	AV	230	2.4	H	6.83	43.59	54	-10.41
11440	55.94	PK	236	2.2	V	6.83	62.77	74	-11.23
11440	40.49	AV	236	2.2	V	6.83	47.32	54	-6.68

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	FCC Part 15.407	
	Reading (dBμV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
802.11n40, 2TX									
5510 MHz									
5400	68.40	PK	128	1.5	H	-2.29	66.11	74	-7.89
5400	51.53	AV	128	1.5	H	-2.29	49.24	54	-4.76
5470	67.33	PK	258	1.6	H	-2.22	65.11	68.2	-3.09
5400	67.34	PK	139	2.5	V	-2.29	65.05	74	-8.95
5400	50.67	AV	139	2.5	V	-2.29	48.38	54	-5.62
5470	65.30	PK	236	2.5	V	-2.22	63.08	68.2	-5.12
11020	45.22	PK	85	1.3	H	9.57	54.79	74	-19.21
11020	32.67	AV	85	1.3	H	9.57	42.24	54	-11.76
11020	46.96	PK	256	1.4	V	9.57	56.53	74	-17.47
11020	35.60	AV	256	1.4	V	9.57	45.17	54	-8.83
5550 MHz									
11100	44.29	PK	42	1.2	H	9.12	53.41	74	-20.59
11100	46.99	PK	136	1.4	V	9.12	56.11	74	-17.89
11100	35.45	AV	136	1.4	V	9.12	44.57	54	-9.43
5710 MHz									
5850	66.90	PK	222	1	H	-1.81	65.09	68.2	-3.11
5925	61.93	PK	83	2.1	H	-1.82	60.11	68.2	-8.09
5850	66.54	PK	248	1.8	V	-1.81	64.73	68.2	-3.47
5925	61.47	PK	264	2	V	-1.82	59.65	68.2	-8.55
11420	48.54	PK	237	1.7	H	7.08	55.62	74	-18.38
11420	37.61	AV	237	1.7	H	7.08	44.69	54	-9.31
11420	51.72	PK	79	1.1	V	7.08	58.80	74	-15.2
11420	40.87	AV	79	1.1	V	7.08	47.95	54	-6.05

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	FCC Part 15.407	
	Reading (dBμV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
802.11ac20, 2TX									
5500 MHz									
5400	66.73	PK	77	2.3	H	-2.29	64.44	74	-9.56
5400	49.31	AV	77	2.3	H	-2.29	47.02	54	-6.98
5470	65.57	PK	11	2.5	H	-2.22	63.35	68.2	-4.85
5400	66.53	PK	288	2.4	V	-2.29	64.24	74	-9.76
5400	49.22	AV	288	2.4	V	-2.29	46.93	54	-7.07
5470	65.04	PK	251	2.3	V	-2.22	62.82	68.2	-5.38
11000	47.25	PK	132	1.3	H	9.67	56.92	74	-17.08
11000	32.08	AV	189	2.2	H	9.67	41.75	54	-12.25
11000	50.06	PK	33	2.2	V	9.67	59.73	74	-14.27
11000	33.43	AV	33	2.2	V	9.67	43.10	54	-10.9
5600 MHz									
11200	48.72	PK	83	2.2	H	8.42	57.14	74	-16.86
11200	33.25	AV	83	2.2	H	8.42	41.67	54	-12.33
11200	52.50	PK	5	2	V	8.42	60.92	74	-13.08
11200	36.06	AV	5	2	V	8.42	44.48	54	-9.52
5720 MHz									
5850	66.83	PK	80	1.1	H	-1.81	65.02	68.2	-3.18
5925	62.31	PK	96	1.6	H	-1.82	60.49	68.2	-7.71
5850	66.64	PK	330	1.8	V	-1.81	64.83	68.2	-3.37
5925	62.04	PK	278	1	V	-1.82	60.22	68.2	-7.98
11440	51.68	PK	278	1.3	H	6.83	58.51	74	-15.49
11440	35.29	AV	278	1.3	H	6.83	42.12	54	-11.88
11440	55.54	PK	71	2.1	V	6.83	62.37	74	-11.63
11440	39.17	AV	71	2.1	V	6.83	46.00	54	-8

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	FCC Part 15.407	
	Reading (dBμV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
802.11ac40, 2TX									
5510 MHz									
5400	67.40	PK	60	1	H	-2.29	65.11	74	-8.89
5400	49.56	AV	60	1	H	-2.29	47.27	54	-6.73
5470	67.04	PK	20	1.8	H	-2.22	64.82	68.2	-3.38
5400	67.16	PK	22	2.4	V	-2.29	64.87	74	-9.13
5400	49.32	AV	22	2.4	V	-2.29	47.03	54	-6.97
5470	65.98	PK	70	1.5	V	-2.22	63.76	68.2	-4.44
11020	44.31	PK	260	1.9	H	9.57	53.88	74	-20.12
11020	45.48	PK	337	2.4	V	9.57	55.05	74	-18.95
11020	35.00	AV	259	1.7	V	9.57	44.57	54	-9.43
5550 MHz									
11100	43.45	PK	161	1.7	H	9.12	52.57	74	-21.43
11100	45.56	PK	82	1.2	V	9.12	54.68	74	-19.32
11100	34.78	AV	82	1.2	V	9.12	43.90	54	-10.1
5710 MHz									
5850	66.71	PK	272	1.1	H	-1.81	64.90	68.2	-3.3
5925	64.45	PK	199	1.3	H	-1.82	62.63	68.2	-5.57
5850	66.97	PK	330	2.1	V	-1.81	65.16	68.2	-3.04
5925	64.83	PK	206	1.2	V	-1.82	63.01	68.2	-5.19
11420	48.84	PK	279	1.1	H	7.08	55.92	74	-18.08
11420	36.99	AV	264	2	V	7.08	44.07	54	-9.93
11420	51.67	PK	247	2.2	H	7.08	58.75	74	-15.25
11420	40.36	AV	77	2.2	V	7.08	47.44	54	-6.56

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	FCC Part 15.407	
	Reading (dBμV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
802.11ac80, 2TX									
5530 MHz									
5400	66.27	PK	90	1	H	-2.29	63.98	74	-10.02
5400	49.13	AV	90	1	H	-2.29	46.84	54	-7.16
5470	66.05	PK	340	2.4	H	-2.22	63.83	68.2	-4.37
5400	66.64	PK	168	2.1	V	-2.29	64.35	74	-9.65
5400	49.94	AV	168	2.1	V	-2.29	47.65	54	-6.35
5470	65.34	PK	149	2.2	V	-2.22	63.12	68.2	-5.08
11060	43.07	PK	302	2.4	H	9.37	52.44	74	-21.56
11060	44.69	PK	131	2.1	V	9.37	54.06	74	-19.94
11060	32.62	AV	131	2.1	V	9.37	41.99	54	-12.01
5610 MHz									
11220	45.23	PK	140	1.1	H	8.34	53.57	74	-20.43
11220	47.09	PK	152	1.9	V	8.34	55.43	74	-18.57
11220	34.63	AV	336	2	V	8.34	42.97	54	-11.03
5690 MHz									
5850	66.62	PK	262	1.6	H	-1.81	64.81	68.2	-3.39
5925	64.55	PK	9	1.5	H	-1.82	62.73	68.2	-5.47
5850	66.81	PK	97	2.1	V	-1.81	65.00	68.2	-3.2
5925	64.93	PK	200	1.6	V	-1.82	63.11	68.2	-5.09
11380	55.26	PK	266	1.7	H	7.4	62.66	74	-11.34
11380	36.68	AV	266	1.7	H	7.4	44.08	54	-9.92
11380	50.19	PK	172	1.9	V	7.4	57.59	74	-16.41
11380	37.87	AV	172	1.9	V	7.4	45.27	54	-8.73

5725-5850 MHz:

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	FCC Part 15.407	
	Reading (dBμV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
802.11a, Antenna 2									
5745 MHz									
5650	65.15	PK	198	2.2	H	-1.95	63.20	68.2	-5
5700	65.39	PK	242	1.7	H	-2.02	63.37	105.2	-41.83
5720	65.71	PK	198	1.9	H	-1.97	63.74	110.8	-47.06
5725	66.71	PK	1	1.6	H	-1.96	64.75	122.2	-57.45
5650	65.28	PK	31	1.4	V	-1.95	63.33	68.2	-4.87
5700	65.57	PK	328	2.1	V	-2.02	63.55	105.2	-41.65
5720	65.85	PK	142	1.6	V	-1.97	63.88	110.8	-46.92
5725	66.87	PK	254	1.6	V	-1.96	64.91	122.2	-57.29
11490	49.80	PK	203	1.6	H	6.63	56.43	74	-17.57
11490	35.08	AV	203	1.6	H	6.63	41.71	54	-12.29
11490	53.55	PK	108	2.1	V	6.63	60.18	74	-13.82
11490	39.04	AV	108	2.1	V	6.63	45.67	54	-8.33
5785 MHz									
11570	48.34	PK	27	1	H	6.59	54.93	74	-19.07
11570	34.10	AV	27	1	H	6.59	40.69	54	-13.31
11570	53.25	PK	344	2.2	V	6.59	59.84	74	-14.16
11570	38.33	AV	344	2.2	V	6.59	44.92	54	-9.08
5825 MHz									
5850	67.27	PK	29	2.5	H	-1.81	65.46	122.2	-56.74
5855	66.64	PK	51	2.4	H	-1.82	64.82	110.8	-45.98
5875	67.07	PK	313	2	H	-1.84	65.23	105.2	-39.97
5925	65.92	PK	279	1.4	H	-1.82	64.10	68.2	-4.1
5850	67.07	PK	99	2.1	V	-1.81	65.26	122.2	-56.94
5855	66.75	PK	37	1.3	V	-1.82	64.93	110.8	-45.87
5875	66.96	PK	164	1.7	V	-1.84	65.12	105.2	-40.08
5925	66.11	PK	160	2.2	V	-1.82	64.29	68.2	-3.91
11650	46.43	PK	330	1.3	H	6.77	53.20	74	-20.8
11650	51.03	PK	159	2	V	6.77	57.80	74	-16.2
11650	36.45	AV	159	2	V	6.77	43.22	54	-10.78

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBµV/m)	FCC Part 15.407	
	Reading (dBµV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBµV/m)	Margin (dB)
802.11n20, 2TX									
5745 MHz									
5650	64.90	PK	289	2.5	H	-1.95	62.95	68.2	-5.25
5700	65.43	PK	337	2.4	H	-2.02	63.41	105.2	-41.79
5720	65.60	PK	45	2	H	-1.97	63.63	110.8	-47.17
5725	66.60	PK	140	2.3	H	-1.96	64.64	122.2	-57.56
5650	65.20	PK	204	1.8	V	-1.95	63.25	68.2	-4.95
5700	65.65	PK	7	1.8	V	-2.02	63.63	105.2	-41.57
5720	65.78	PK	206	1.5	V	-1.97	63.81	110.8	-46.99
5725	66.93	PK	233	1.7	V	-1.96	64.97	122.2	-57.23
11490	50.68	PK	167	2.5	H	6.63	57.31	74	-16.69
11490	34.99	AV	167	2.5	H	6.63	41.62	54	-12.38
11490	54.83	PK	194	1.7	V	6.63	61.46	74	-12.54
11490	39.15	AV	194	1.7	V	6.63	45.78	54	-8.22
5785 MHz									
11570	48.78	PK	113	1.6	H	6.59	55.37	74	-18.63
11570	33.69	AV	113	1.6	H	6.59	40.28	54	-13.72
11570	53.66	PK	262	2.4	V	6.59	60.25	74	-13.75
11570	37.94	AV	262	2.4	V	6.59	44.53	54	-9.47
5825 MHz									
5850	67.13	PK	117	1.2	H	-1.81	65.32	122.2	-56.88
5855	66.73	PK	355	2.3	H	-1.82	64.91	110.8	-45.89
5875	66.54	PK	6	1.2	H	-1.84	64.70	105.2	-40.5
5925	66.51	PK	41	2.2	H	-1.82	64.69	68.2	-3.51
5850	67.30	PK	137	2.2	V	-1.81	65.49	122.2	-56.71
5855	66.87	PK	277	2.1	V	-1.82	65.05	110.8	-45.75
5875	66.77	PK	93	2.4	V	-1.84	64.93	105.2	-40.27
5925	66.64	PK	127	1.9	V	-1.82	64.82	68.2	-3.38
11650	46.75	PK	335	1.3	H	6.77	53.52	74	-20.48
11650	51.30	PK	227	1.8	V	6.77	58.07	74	-15.93
11650	35.27	AV	227	1.8	V	6.77	42.04	54	-11.96

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	FCC Part 15.407	
	Reading (dBμV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
802.11n40, 2TX									
5755 MHz									
5650	65.25	PK	89	1.8	H	-1.95	63.30	68.2	-4.9
5700	65.78	PK	9	2.2	H	-2.02	63.76	105.2	-41.44
5720	69.39	PK	213	1.9	H	-1.97	67.42	110.8	-43.38
5725	70.51	PK	193	2.3	H	-1.96	68.55	122.2	-53.65
5650	65.48	PK	308	1.6	V	-1.95	63.53	68.2	-4.67
5700	65.90	PK	127	1.4	V	-2.02	63.88	105.2	-41.32
5720	69.78	PK	218	1.2	V	-1.97	67.81	110.8	-42.99
5725	70.81	PK	34	2	V	-1.96	68.85	122.2	-53.35
11510	45.16	PK	188	2.5	H	8.97	54.13	74	-19.87
11510	32.83	AV	188	2.5	H	8.97	41.80	54	-12.2
11510	47.57	PK	11	1.7	V	8.97	56.54	74	-17.46
11510	36.26	AV	11	1.7	V	8.97	45.23	54	-8.77
5795 MHz									
5850	67.49	PK	132	1.2	H	-1.81	65.68	122.2	-56.52
5855	67.11	PK	261	2	H	-1.82	65.29	110.8	-45.51
5875	66.99	PK	286	1	H	-1.84	65.15	105.2	-40.05
5925	66.43	PK	136	2.3	H	-1.82	64.61	68.2	-3.59
5850	67.63	PK	197	1.1	V	-1.81	65.82	122.2	-56.38
5855	67.32	PK	40	1	V	-1.82	65.50	110.8	-45.3
5875	67.15	PK	7	1.8	V	-1.84	65.31	105.2	-39.89
5925	66.61	PK	126	1.1	V	-1.82	64.79	68.2	-3.41
11590	46.39	PK	197	2.4	H	6.57	52.96	74	-21.04
11590	50.31	PK	105	1.3	V	6.57	56.88	74	-17.12
11590	39.09	AV	105	1.3	V	6.57	45.66	54	-8.34

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	FCC Part 15.407	
	Reading (dBμV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
802.11ac20, 2TX									
5745 MHz									
5650	65.20	PK	286	1.5	H	-1.95	63.25	68.2	-4.95
5700	65.49	PK	72	2	H	-2.02	63.47	105.2	-41.73
5720	66.11	PK	232	2.3	H	-1.97	64.14	110.8	-46.66
5725	67.34	PK	162	2.3	H	-1.96	65.38	122.2	-56.82
5650	65.29	PK	110	1.2	V	-1.95	63.34	68.2	-4.86
5700	65.75	PK	133	2	V	-2.02	63.73	105.2	-41.47
5720	66.22	PK	100	1.5	V	-1.97	64.25	110.8	-46.55
5725	67.57	PK	167	2.2	V	-1.96	65.61	122.2	-56.59
11490	50.61	PK	2	2	H	6.63	57.24	74	-16.76
11490	34.38	AV	2	2	H	6.63	41.01	54	-12.99
11490	54.98	PK	33	1.6	V	6.63	61.61	74	-12.39
11490	38.17	AV	33	1.6	V	6.63	44.80	54	-9.2
5785 MHz									
11570	48.78	PK	24	1.1	H	6.59	55.37	74	-18.63
11570	33.60	AV	24	1.1	H	6.59	40.19	54	-13.81
11570	54.74	PK	345	2.5	V	6.59	61.33	74	-12.67
11570	37.93	AV	345	2.5	V	6.59	44.52	54	-9.48
5825 MHz									
5850	66.84	PK	53	2.3	H	-1.81	65.03	122.2	-57.17
5855	66.94	PK	203	2.1	H	-1.82	65.12	110.8	-45.68
5875	67.12	PK	105	1	H	-1.84	65.28	105.2	-39.92
5925	66.45	PK	245	1.4	H	-1.82	64.63	68.2	-3.57
5850	67.05	PK	233	1	V	-1.81	65.24	122.2	-56.96
5855	67.36	PK	172	2.4	V	-1.82	65.54	110.8	-45.26
5875	67.55	PK	7	1.7	V	-1.84	65.71	105.2	-39.49
5925	66.54	PK	263	1.2	V	-1.82	64.72	68.2	-3.48
11650	45.26	PK	304	1.1	H	6.77	52.03	74	-21.97
11650	52.15	PK	250	1.4	V	6.77	58.92	74	-15.08
11650	35.62	AV	250	1.4	V	6.77	42.39	54	-11.61

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	FCC Part 15.407	
	Reading (dBμV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
802.11ac40, 2TX									
5755 MHz									
5650	65.34	PK	299	1.2	H	-1.95	63.39	68.2	-4.81
5700	66.25	PK	243	2	H	-2.02	64.23	105.2	-40.97
5720	70.29	PK	164	1.2	H	-1.97	68.32	110.8	-42.48
5725	70.60	PK	327	1.2	H	-1.96	68.64	122.2	-53.56
5650	65.72	PK	220	2	V	-1.95	63.77	68.2	-4.43
5700	66.53	PK	293	2.1	V	-2.02	64.51	105.2	-40.69
5720	70.65	PK	332	1.2	V	-1.97	68.68	110.8	-42.12
5725	70.92	PK	219	2	V	-1.96	68.96	122.2	-53.24
11510	48.06	PK	316	1.1	H	6.59	54.65	74	-19.35
11510	35.00	AV	316	1.1	H	6.59	41.59	54	-12.41
11510	50.20	PK	199	2.1	V	6.59	56.79	74	-17.21
11510	38.23	AV	199	2.1	V	6.59	44.82	54	-9.18
5795 MHz									
5850	67.26	PK	297	2.3	H	-1.81	65.45	122.2	-56.75
5855	67.05	PK	348	2.1	H	-1.82	65.23	110.8	-45.57
5875	66.90	PK	66	1.4	H	-1.84	65.06	105.2	-40.14
5925	66.53	PK	141	1.8	H	-1.82	64.71	68.2	-3.49
5850	67.41	PK	200	1.8	V	-1.81	65.60	122.2	-56.6
5855	67.17	PK	264	2.3	V	-1.82	65.35	110.8	-45.45
5875	67.10	PK	22	2.3	V	-1.84	65.26	105.2	-39.94
5925	66.66	PK	127	1.3	V	-1.82	64.84	68.2	-3.36
11590	46.40	PK	181	1.4	H	6.57	52.97	74	-21.03
11590	51.00	PK	55	2.3	V	6.57	57.57	74	-16.43
11590	38.48	AV	55	2.3	V	6.57	45.05	54	-8.95

Frequency (MHz)	Receiver		Turn- Table Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	FCC Part 15.407	
	Reading (dBμV)	PK/QP/AV		Height (m)	Polar (H/V)			Limit (dBμV/m)	Margin (dB)
802.11ac80, 2TX									
5650	65.22	PK	48	2.1	H	-1.95	63.27	68.2	-4.93
5700	66.37	PK	351	1.9	H	-2.02	64.35	105.2	-40.85
5720	67.44	PK	212	1	H	-1.97	65.47	110.8	-45.33
5725	68.22	PK	329	2.2	H	-1.96	66.26	122.2	-55.94
5650	65.39	PK	240	1.3	V	-1.95	63.44	68.2	-4.76
5700	66.64	PK	102	1.4	V	-2.02	64.62	105.2	-40.58
5720	67.72	PK	275	1.7	V	-1.97	65.75	110.8	-45.05
5725	68.39	PK	270	1.8	V	-1.96	66.43	122.2	-55.77
5850	69.64	PK	176	1.1	H	-1.81	67.83	122.2	-54.37
5855	68.41	PK	319	2	H	-1.82	66.59	110.8	-44.21
5875	67.35	PK	141	2	H	-1.84	65.51	105.2	-39.69
5925	66.62	PK	124	2	H	-1.82	64.80	68.2	-3.4
5850	69.43	PK	11	2.4	V	-1.81	67.62	122.2	-54.58
5855	68.77	PK	179	1.8	V	-1.82	66.95	110.8	-43.85
5875	67.67	PK	116	1.8	V	-1.84	65.83	105.2	-39.37
5925	66.78	PK	22	1.5	V	-1.82	64.96	68.2	-3.24
11550	45.58	PK	129	1.2	H	6.61	52.19	74	-21.81
11550	47.36	PK	219	1.2	V	6.61	53.97	74	-20.03

Note:

Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor

Absolute Level (Corrected Amplitude) = Factor + Reading

Margin = Absolute Level (Corrected Amplitude) – Limit

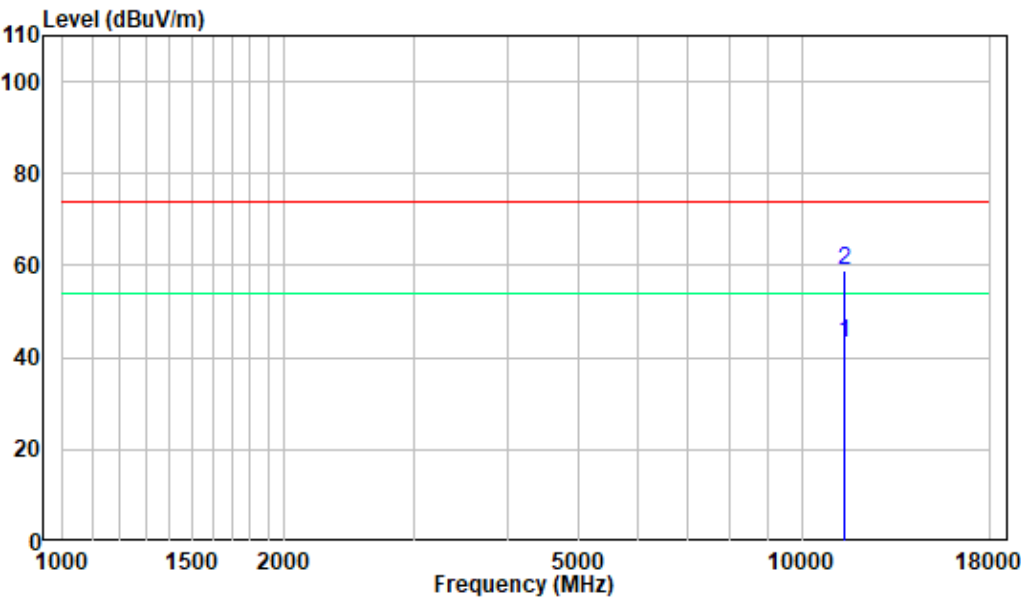
The other spurious emission which is in the noise floor level was not recorded.

The test result of peak was 20dB below to the limit of peak, which can be compliant to the average limit, so just peak value was recorded.

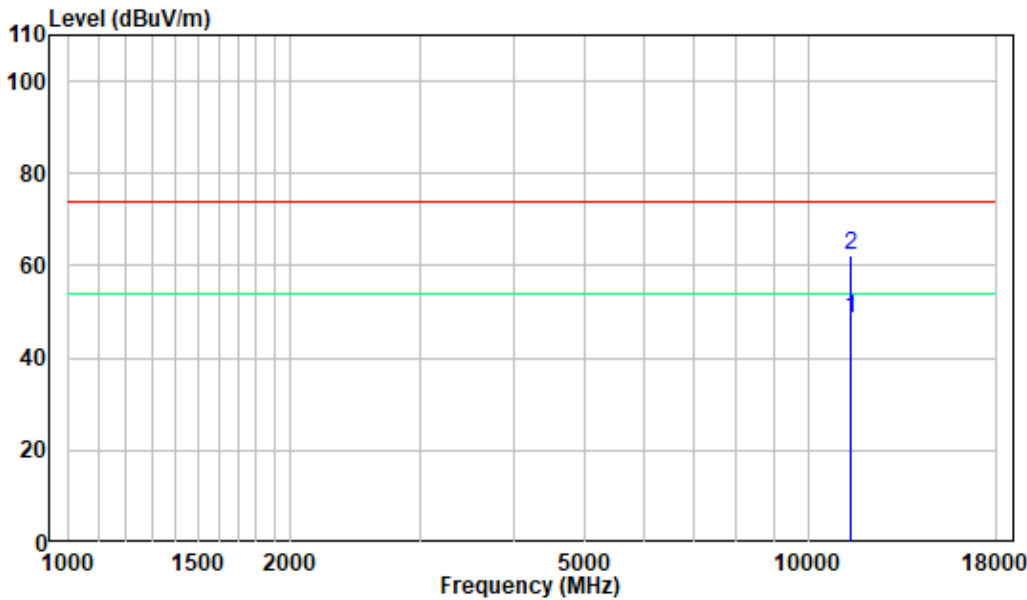
1-18GHz

Pre-scan plots, 802.11a 5720MHz

Horizontal:



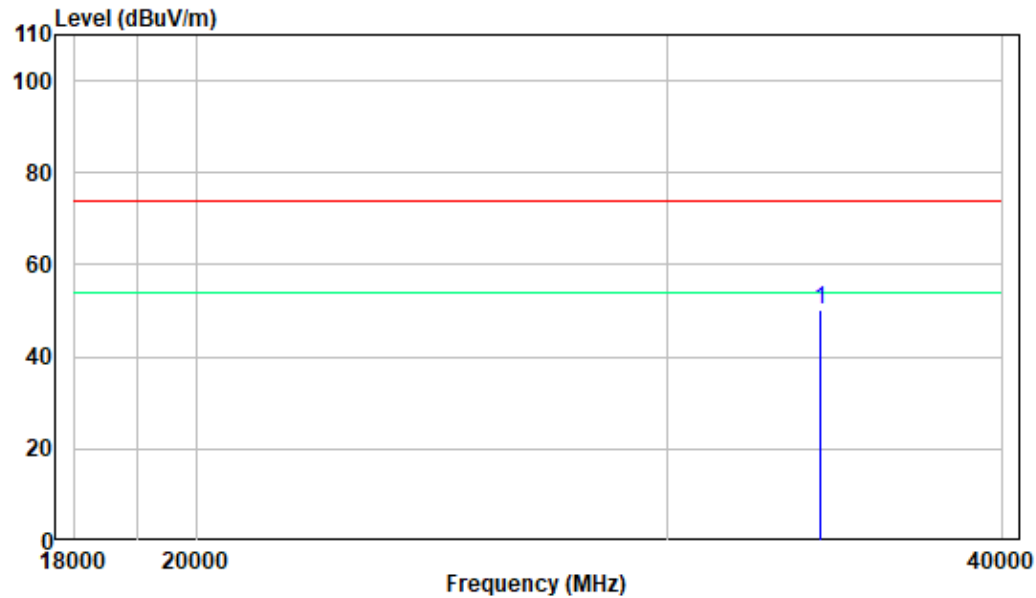
Vertical:



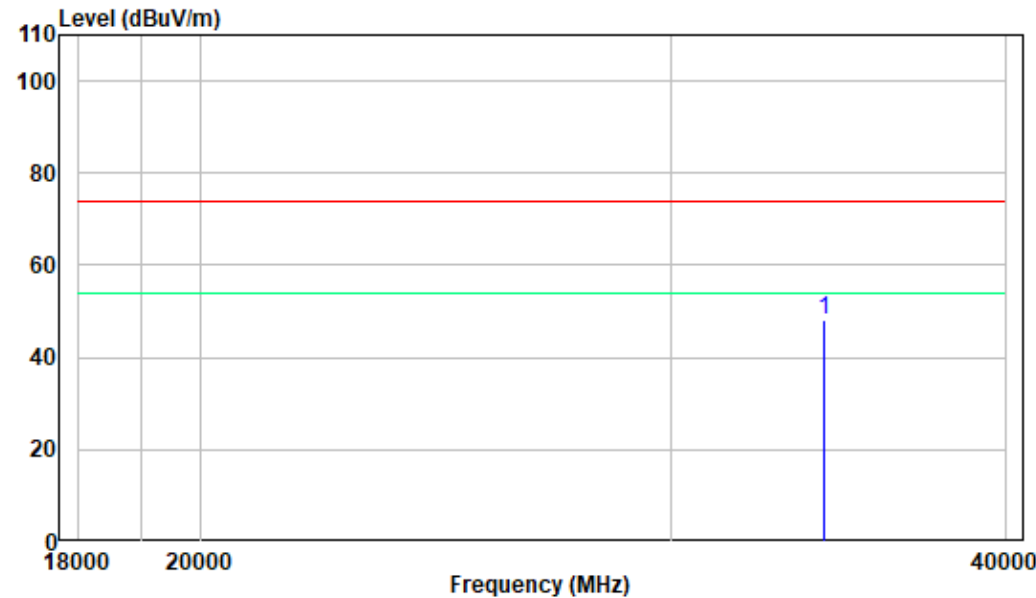
18-40GHz

Pre-scan Plots, 802.11a 5720MHz

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

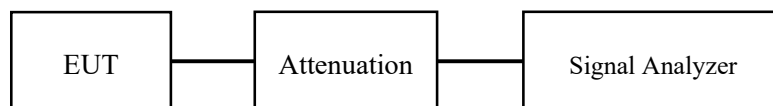
1. Emission Bandwidth (EBW)

- 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) $\geq 3 \times$ 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:	21 °C
Relative Humidity:	62 %
ATM Pressure:	101.0 kPa

The testing was performed by Black Ding from 2021-11-18 to 2021-12-19.

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.

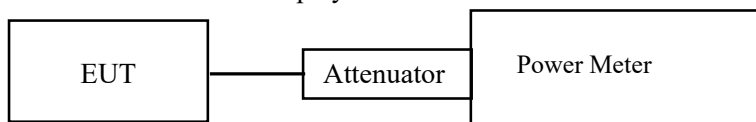
For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting 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 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 $11 \text{ dBm} + 10 \log B$, 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

- d. Place the EUT on a bench and set it in transmitting mode.
- e. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.
- f. Add a correction factor to the display.



Test Data**Environmental Conditions**

Temperature:	21 °C
Relative Humidity:	62 %
ATM Pressure:	101.0 kPa

The testing was performed by Black Ding from 2021-11-18 to 2021-12-19.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the Appendix.

FCC §15.407(a) - POWER SPECTRAL DENSITY

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. 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 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 $11 \text{ dBm} + 10 \log B$, 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 ($< 1 \text{ MHz}$, or $< 500 \text{ kHz}$) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:

- a) Set $\text{RBW} \geq 1/T$, where T is defined in section II.B.1.a).
- b) Set $\text{VBW} \geq 3 \text{ RBW}$.
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10 \log (500 \text{ kHz}/\text{RBW})$ to the measured result, whereas $\text{RBW} (< 500 \text{ kHz})$ 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 $10 \log (1\text{MHz}/\text{RBW})$ to the measured result, whereas $\text{RBW} (< 1 \text{ MHz})$ 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:	21 °C
Relative Humidity:	62 %
ATM Pressure:	101.0 kPa

The testing was performed by Black Ding from 2021-11-18 to 2021-12-19.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the Appendix.

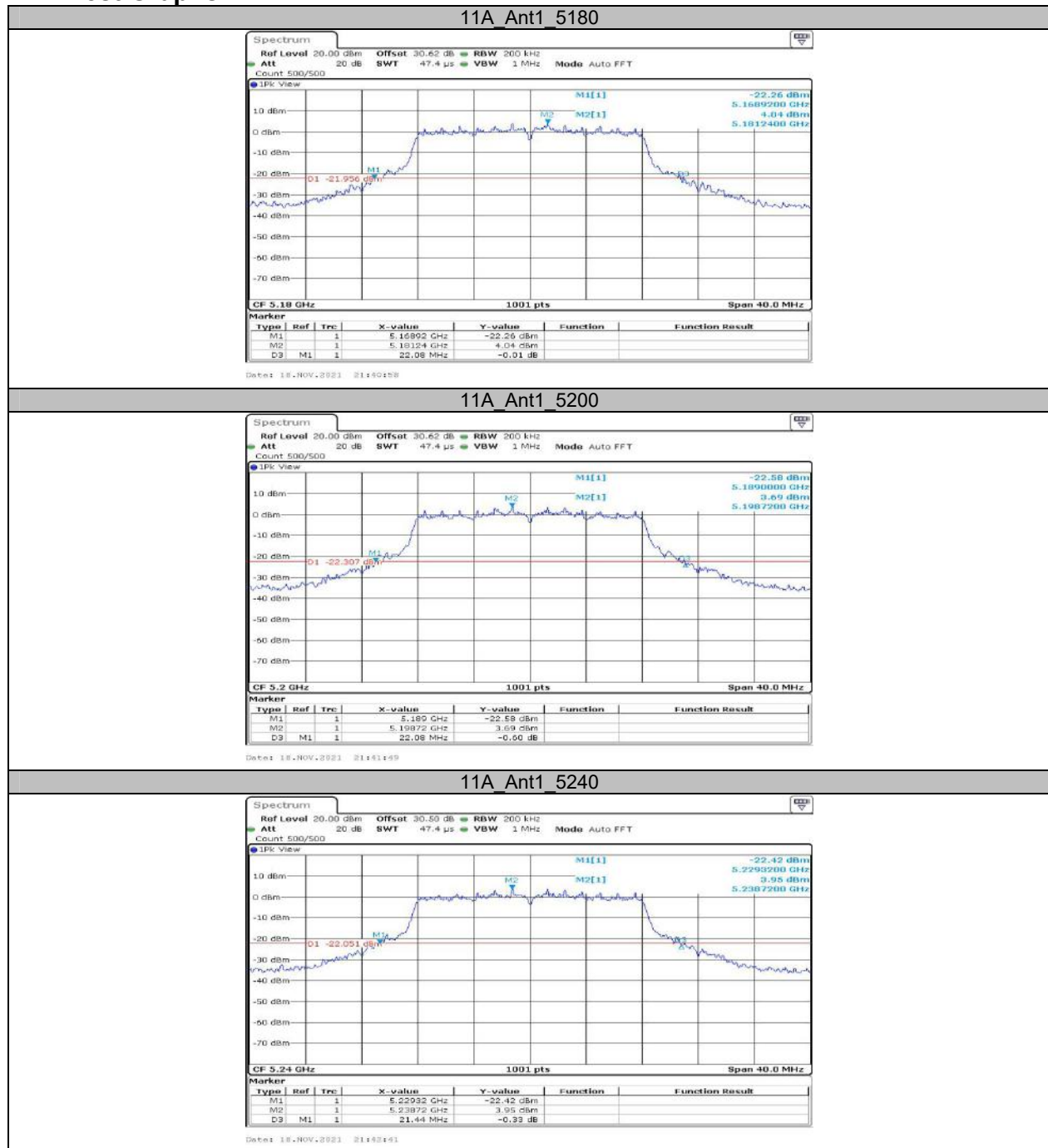
APPENDIX

Appendix A1: Emission Bandwidth Test Result

Test Mode	Antenna	Channel	26db EBW [MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	22.080	---	PASS
	Ant1	5200	22.080	---	PASS
	Ant1	5240	21.440	---	PASS
	Ant1	5260	23.240	---	PASS
	Ant1	5280	21.520	---	PASS
	Ant1	5320	22.160	---	PASS
	Ant1	5500	21.760	---	PASS
	Ant1	5600	22.040	---	PASS
	Ant1	5720	22.120	---	PASS
	Ant1	5720 UNII-2C	16.08	---	PASS
	Ant1	5720 UNII-3	6.04	---	PASS
11N20MIMO	Ant1	5180	22.760	---	PASS
	Ant1	5200	23.360	---	PASS
	Ant1	5240	22.800	---	PASS
	Ant1	5260	23.480	---	PASS
	Ant1	5280	24.000	---	PASS
	Ant1	5320	22.760	---	PASS
	Ant1	5500	22.960	---	PASS
	Ant1	5600	23.440	---	PASS
	Ant1	5720	23.160	---	PASS
	Ant1	5720 UNII-2C	16.36	---	PASS
	Ant1	5720 UNII-3	6.8	---	PASS
11N40MIMO	Ant1	5190	42.400	---	PASS
	Ant1	5230	41.920	---	PASS
	Ant1	5270	42.400	---	PASS
	Ant1	5310	42.240	---	PASS
	Ant1	5510	42.320	---	PASS
	Ant1	5550	42.240	---	PASS
	Ant1	5710	42.800	---	PASS
	Ant1	5710 UNII-2C	36.36	---	PASS
	Ant1	5710 UNII-3	6.44	---	PASS
11AC20MIMO	Ant1	5180	23.280	---	PASS
	Ant1	5200	24.560	---	PASS
	Ant1	5240	22.240	---	PASS
	Ant1	5260	23.400	---	PASS
	Ant1	5280	22.480	---	PASS
	Ant1	5320	23.000	---	PASS
	Ant1	5500	22.720	---	PASS
	Ant1	5600	23.560	---	PASS
	Ant1	5720	22.680	---	PASS
	Ant1	5720 UNII-2C	16.08	---	PASS
	Ant1	5720 UNII-3	6.6	---	PASS
11AC40MIMO	Ant1	5190	42.400	---	PASS
	Ant1	5230	42.480	---	PASS
	Ant1	5270	41.760	---	PASS
	Ant1	5310	42.320	---	PASS
	Ant1	5510	42.160	---	PASS
	Ant1	5550	42.080	---	PASS
	Ant1	5710	42.800	---	PASS
	Ant1	5710 UNII-2C	36.52	---	PASS
	Ant1	5710 UNII-3	6.28	---	PASS

11AC80MIMO	Ant1	5210	86.400	---	PASS
	Ant1	5290	86.080	---	PASS
	Ant1	5530	84.640	---	PASS
	Ant1	5610	86.560	---	PASS
	Ant1	5690	84.480	---	PASS
	Ant1	5690_UNII-2C	76.92	---	PASS
	Ant1	5690_UNII-3	7.56	---	PASS

Test Graphs



11A_Ant1_5260



11A_Ant1_5280



11A_Ant1_5320



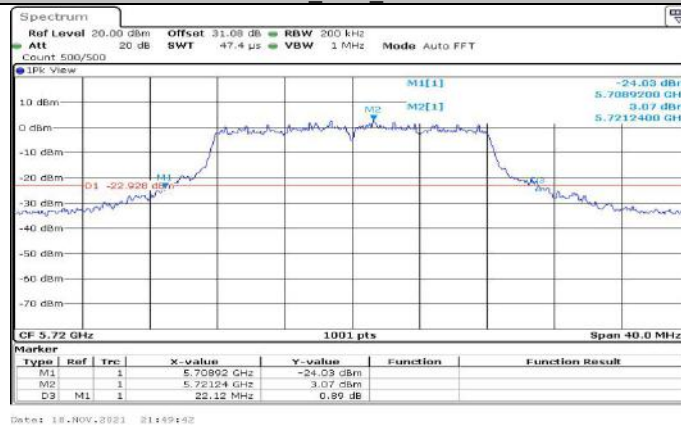
11A_Ant1_5500



11A_Ant1_5600



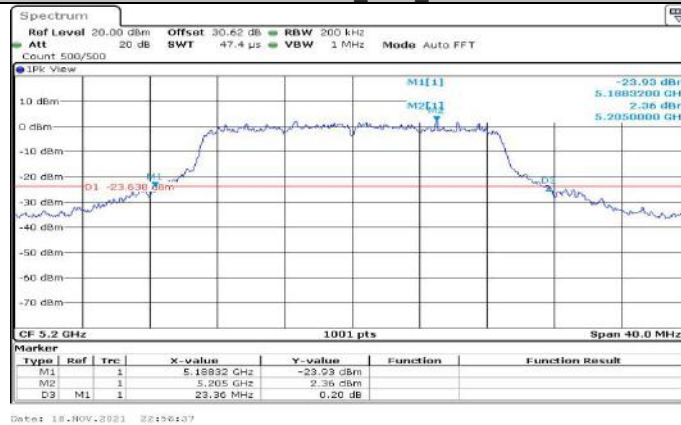
11A_Ant1_5720



11N20MIMO_Ant1_5180



11N20MIMO_Ant1_5200



11N20MIMO_Ant1_5240



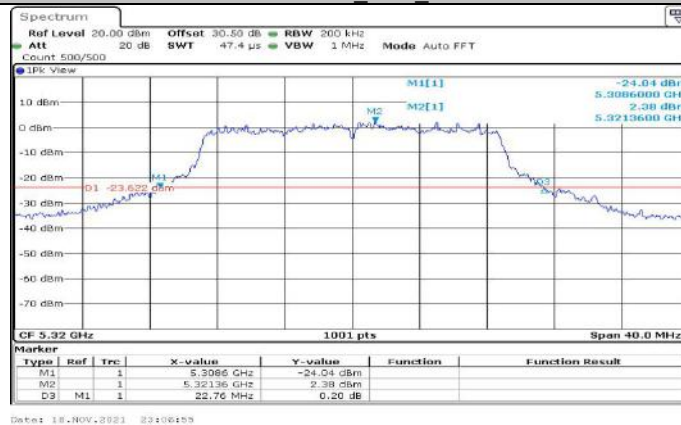
11N20MIMO_Ant1_5260



11N20MIMO_Ant1_5280



11N20MIMO_Ant1_5320



11N20MIMO_Ant1_5500



11N20MIMO_Ant1_5600



11N20MIMO_Ant1_5720



11N40MIMO_Ant1_5190



11N40MIMO_Ant1_5230



11N40MIMO_Ant1_5270



11N40MIMO_Ant1_5310



11N40MIMO_Ant1_5510



11N40MIMO_Ant1_5550



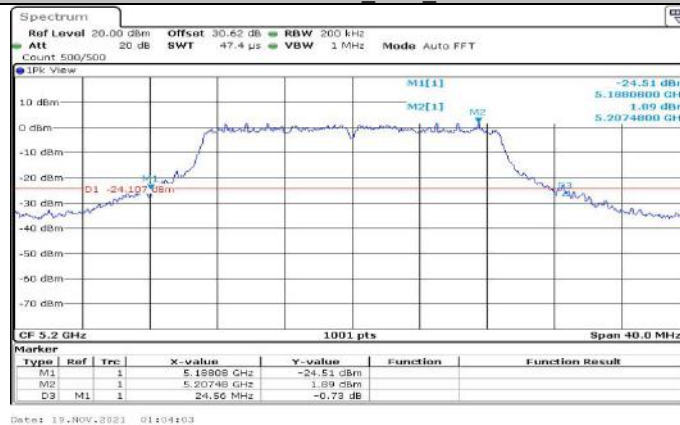
11N40MIMO_Ant1_5710



11AC20MIMO_Ant1_5180



11AC20MIMO_Ant1_5200



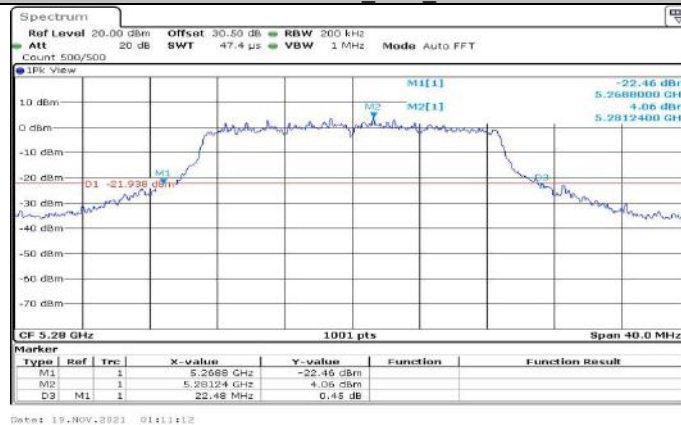
11AC20MIMO Ant1 5240



11AC20MIMO Ant1 5260



11AC20MIMO Ant1 5280



11AC20MIMO Ant1_5320



11AC20MIMO Ant1_5500



11AC20MIMO Ant1_5600



11AC20MIMO Ant1 5720



11AC40MIMO Ant1 5190



11AC40MIMO Ant1 5230



11AC40MIMO Ant1 5270



11AC40MIMO Ant1 5310



11AC40MIMO Ant1 5510



11AC40MIMO Ant1 5550



11AC40MIMO Ant1 5710



11AC80MIMO Ant1 5210



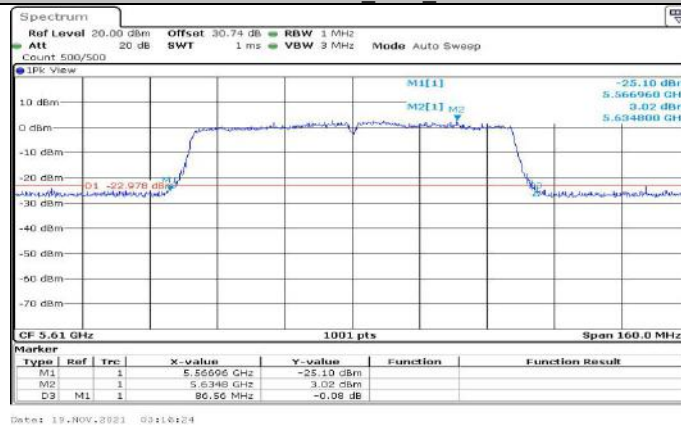
11AC80MIMO Ant1 5290

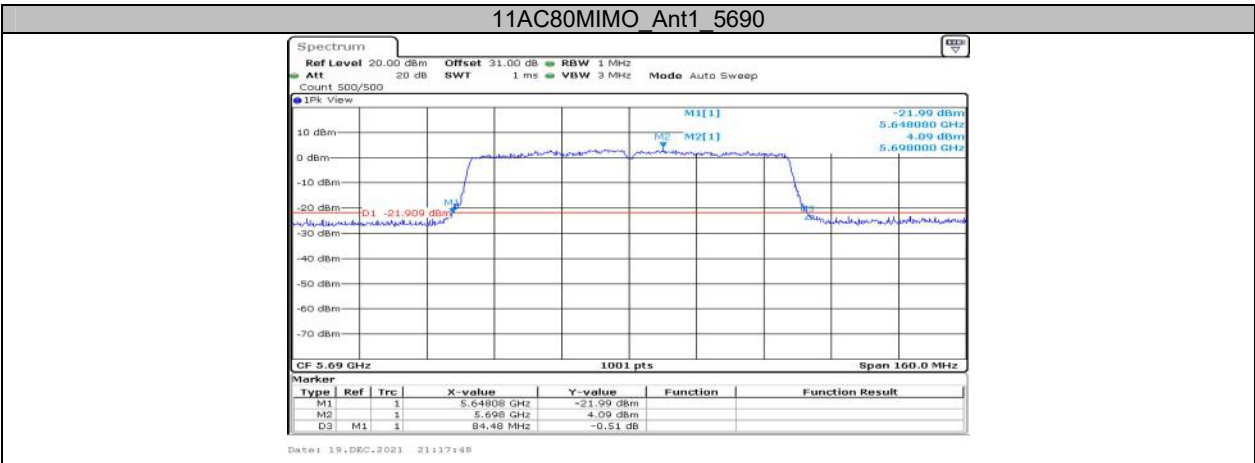


11AC80MIMO Ant1 5530



11AC80MIMO Ant1 5610





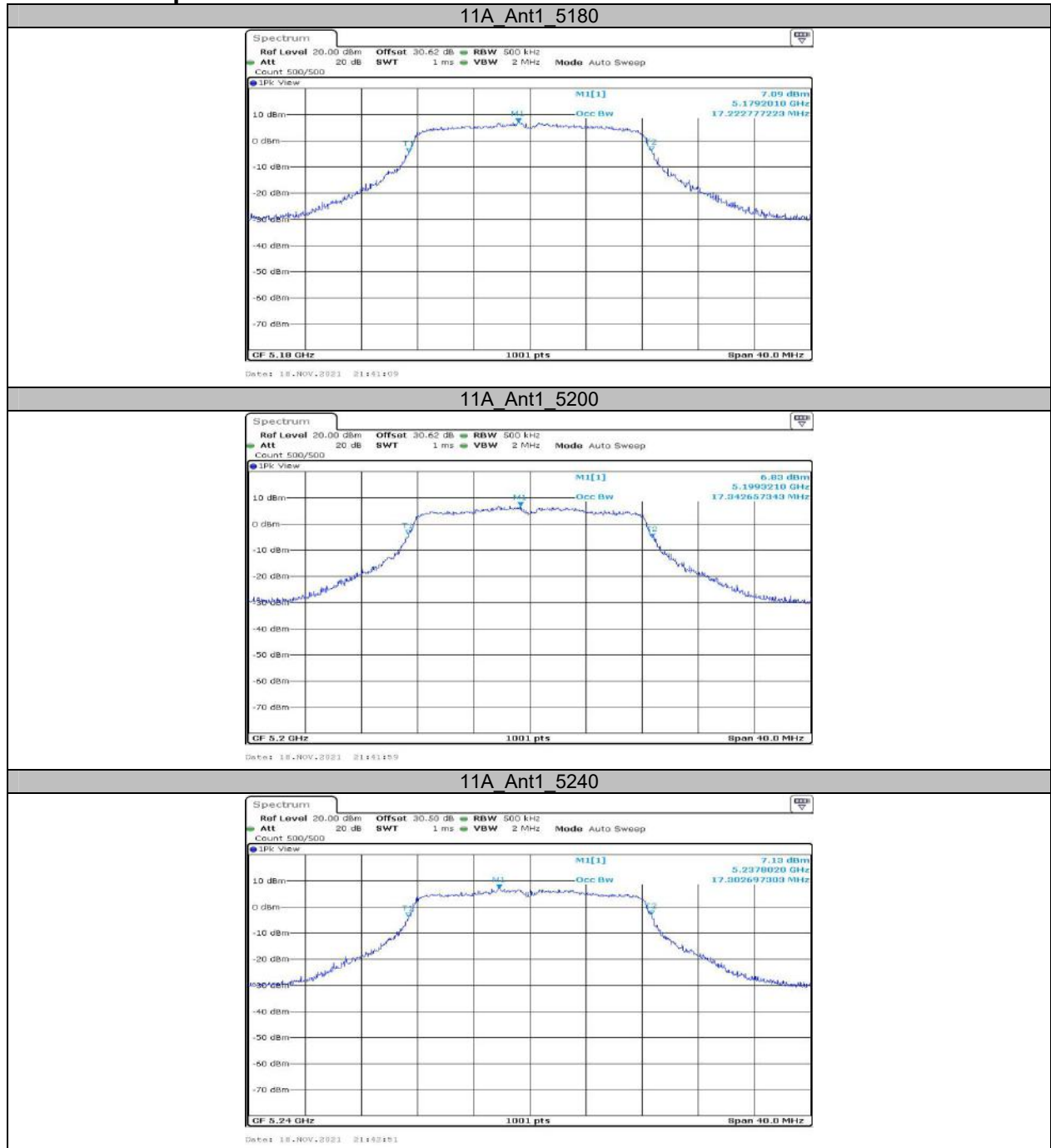
Appendix A2: Occupied channel bandwidth Test Result

Test Mode	Antenna	Channel	OCB [MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.223	---	PASS
	Ant1	5200	17.343	---	PASS
	Ant1	5240	17.303	---	PASS
	Ant1	5260	17.303	---	PASS
	Ant1	5280	17.303	---	PASS
	Ant1	5320	17.303	---	PASS
	Ant1	5500	17.263	---	PASS
	Ant1	5600	17.303	---	PASS
	Ant1	5720	17.343	---	PASS
	Ant1	5720 UNII-2C	13.591	---	PASS
	Ant1	5720 UNII-3	3.751	---	PASS
	Ant1	5745	17.383	---	PASS
	Ant1	5785	17.343	---	PASS
11N20MIMO	Ant1	5825	17.343	---	PASS
	Ant1	5180	18.262	---	PASS
	Ant1	5200	18.342	---	PASS
	Ant1	5240	18.342	---	PASS
	Ant1	5260	18.422	---	PASS
	Ant1	5280	18.422	---	PASS
	Ant1	5320	18.342	---	PASS
	Ant1	5500	18.422	---	PASS
	Ant1	5600	18.382	---	PASS
	Ant1	5720	18.382	---	PASS
	Ant1	5720 UNII-2C	14.111	---	PASS
	Ant1	5720 UNII-3	4.271	---	PASS
	Ant1	5745	18.462	---	PASS
11N40MIMO	Ant1	5785	18.541	---	PASS
	Ant1	5825	18.382	---	PASS
	Ant1	5190	36.763	---	PASS
	Ant1	5230	36.523	---	PASS
	Ant1	5270	36.683	---	PASS
	Ant1	5310	36.683	---	PASS
	Ant1	5510	36.683	---	PASS
	Ant1	5550	36.683	---	PASS
	Ant1	5710	36.683	---	PASS
	Ant1	5710 UNII-2C	33.222	---	PASS
11AC20MIMO	Ant1	5710 UNII-3	3.462	---	PASS
	Ant1	5755	36.763	---	PASS
	Ant1	5795	36.763	---	PASS
	Ant1	5180	18.262	---	PASS
	Ant1	5200	18.501	---	PASS
	Ant1	5240	18.342	---	PASS
	Ant1	5260	18.382	---	PASS
	Ant1	5280	18.342	---	PASS
	Ant1	5320	18.382	---	PASS
	Ant1	5500	18.422	---	PASS
	Ant1	5600	18.462	---	PASS
	Ant1	5720	18.501	---	PASS
	Ant1	5720 UNII-2C	14.151	---	PASS
	Ant1	5720 UNII-3	4.351	---	PASS
	Ant1	5745	18.462	---	PASS
	Ant1	5785	18.462	---	PASS
	Ant1	5825	18.541	---	PASS

11AC40MIMO	Ant1	5190	36.683	---	PASS
	Ant1	5230	36.603	---	PASS
	Ant1	5270	36.763	---	PASS
	Ant1	5310	36.763	---	PASS
	Ant1	5510	36.763	---	PASS
	Ant1	5550	36.763	---	PASS
	Ant1	5710	36.843	---	PASS
	Ant1	5710 UNII-2C	33.302	---	PASS
	Ant1	5710 UNII-3	3.541	---	PASS
	Ant1	5755	36.843	---	PASS
	Ant1	5795	36.763	---	PASS
11AC80MIMO	Ant1	5210	76.244	---	PASS
	Ant1	5290	76.404	---	PASS
	Ant1	5530	76.563	---	PASS
	Ant1	5610	76.563	---	PASS
	Ant1	5690	76.404	---	PASS
	Ant1	5690 UNII-2C	73.042	---	PASS
	Ant1	5690 UNII-3	3.362	---	PASS
	Ant1	5775	76.723	---	PASS

Note: OBWfor U-NII-1 and U-NII-3 bands will not within frequency range for U-NII-2A and U-NII-2C bands.

Test Graphs



11A_Ant1_5260



11A_Ant1_5280



11A_Ant1_5320



11A_Ant1_5500



11A_Ant1_5600



11A_Ant1_5720



11A_Ant1_5745



11A_Ant1_5785



11A_Ant1_5825



11N20MIMO_Ant1_5180



11N20MIMO_Ant1_5200



11N20MIMO_Ant1_5240



11N20MIMO_Ant1_5260

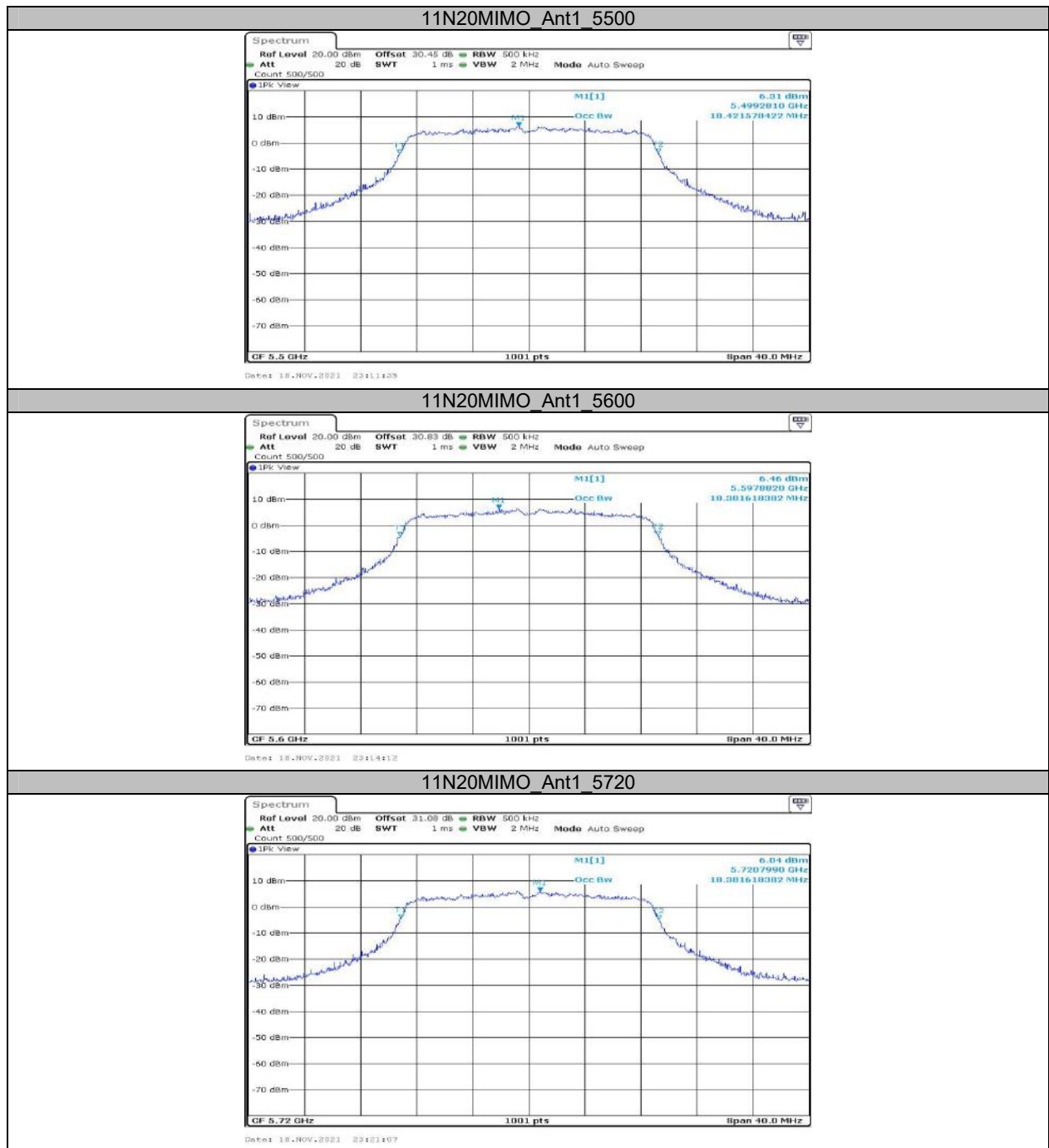


11N20MIMO_Ant1_5280



11N20MIMO_Ant1_5320





11N20MIMO_Ant1_5745



11N20MIMO_Ant1_5785



11N20MIMO_Ant1_5825



11N40MIMO_Ant1_5190



11N40MIMO_Ant1_5230



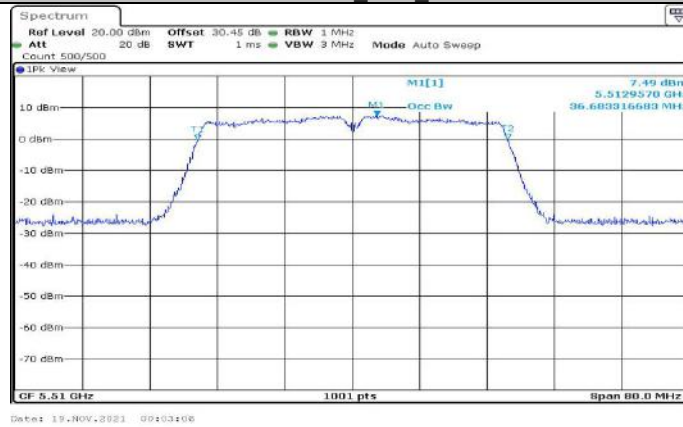
11N40MIMO_Ant1_5270



11N40MIMO_Ant1_5310



11N40MIMO_Ant1_5510



11N40MIMO_Ant1_5550



11N40MIMO_Ant1_5710



11N40MIMO_Ant1_5755



11N40MIMO_Ant1_5795

