

ATC

TEST REPORT

Applicant Name : Grandstream Networks, Inc.
Address : 126 Brookline Ave, 3rd Floor Boston, MA 02215, USA
Manufacturer Name : Grandstream Networks, Inc.
Address : 126 Brookline Ave, 3rd Floor Boston, MA 02215, USA
Report Number : SZNS220124-03493E-RF-00B
FCC ID: YZZGWN7664LR

Test Standard (s)

FCC PART 15.407

Sample Description

Product Type: High-Performance Outdoor Long-Range Wi-Fi 6 Access Point
Model No.: GWN7664LR
Multiple Model(s) No.: N/A
Trade Mark: GRANDSTREAM
Date Received: 2022/01/24
Report Date: 2022/07/06

Test Result:	Pass*
--------------	-------

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

Prepared and Checked By:

A handwritten signature in black ink, appearing to read "Ting Lü".

Ting Lü
EMC Engineer

Approved By:

A handwritten signature in black ink, appearing to read "Candy Li".

Candy Li
EMC Engineer

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

Shenzhen Accurate Technology Co., Ltd. is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with an asterisk **. Customer model name, addresses, names, trademarks etc. are not considered data.

This report cannot be reproduced except in full, without prior written approval of the Company. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

Shenzhen Accurate Technology Co., Ltd.

1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China

Tel: +86 755-26503290 Fax: +86 755-26503396 Web: www.atc-lab.com

TABLE OF CONTENTS

GENERAL INFORMATION.....	4
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	4
OBJECTIVE	4
TEST METHODOLOGY	4
MEASUREMENT UNCERTAINTY	5
TEST FACILITY	5
SYSTEM TEST CONFIGURATION	6
DESCRIPTION OF TEST CONFIGURATION	6
EUT EXERCISE SOFTWARE	7
DUTY CYCLE	10
EQUIPMENT MODIFICATIONS	19
SUPPORT EQUIPMENT LIST AND DETAILS	19
EXTERNAL I/O CABLE.....	19
BLOCK DIAGRAM OF TEST SETUP	20
SUMMARY OF TEST RESULTS.....	21
TEST EQUIPMENT LIST	22
1.1307 (B) (1) & §2.1091- MAXIMUM PERMISSIBLE EXPOSURE (MPE).....	24
APPLICABLE STANDARD	24
RESULT	24
FCC §15.203 – ANTENNA REQUIREMENT	26
APPLICABLE STANDARD	26
ANTENNA CONNECTOR CONSTRUCTION	26
FCC §15.407 (B) (6) §15.207 (A) – CONDUCTED EMISSIONS	27
APPLICABLE STANDARD	27
EUT SETUP.....	27
EMI TEST RECEIVER SETUP.....	27
TEST PROCEDURE	27
CORRECTED FACTOR & MARGIN CALCULATION	28
TEST DATA	28
§15.205 & §15.209 & §15.407(B)– UNDESIRABLE EMISSION	31
APPLICABLE STANDARD	31
EUT SETUP.....	31
EMI TEST RECEIVER & SPECTRUM ANALYZER SETUP	32
TEST PROCEDURE	32
CORRECTED FACTOR & MARGIN CALCULATION	33
TEST DATA	33
FCC §15.407(A),(E) – 26 DB & 6DB EMISSION BANDWIDTH.....	75
APPLICABLE STANDARD	75
TEST PROCEDURE	75
TEST DATA	76
FCC §15.407(A) – CONDUCTED TRANSMITTER OUTPUT POWER.....	77
APPLICABLE STANDARD	77
TEST PROCEDURE	77

TEST DATA	78
FCC §15.407(A) - POWER SPECTRAL DENSITY	99
TEST PROCEDURE	99
TEST DATA	100

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 Output Power	<p>5150-5250 MHz: 802.11a: 22.52dBm, 802.11n20: 17.11dBm, 802.11n40: 17.14dBm 802.11ac20: 17.16dBm, 802.11ac40: 17.19dBm, 802.11ac80: 17.19dBm 802.11ax20: 17.18dBm, 802.11ax40: 17.01dBm, 802.11ax80: 17.02dBm</p> <p>5250-5350MHz: 802.11a: 18.62dBm, 802.11n20: 17.49dBm, 802.11n40: 17.49dBm 802.11ac20: 17.49dBm, 802.11ac40: 17.49dBm, 802.11ac80: 17.49dBm 802.11ax20: 17.49dBm, 802.11ax40: 17.45dBm, 802.11ax80: 17.46dBm</p> <p>5470-5725MHz: 802.11a: 18.89dBm, 802.11n20: 17.47dBm, 802.11n40: 17.42dBm 802.11ac20: 17.48dBm, 802.11ac40: 17.43dBm, 802.11ac80: 17.11dBm 802.11ax20: 17.46dBm, 802.11ax40: 17.35dBm, 802.11ax80: 17.48dBm</p> <p>5725-5850 MHz: 802.11a: 23.59dBm, 802.11n20: 23.49dBm, 802.11n40: 23.70dBm 802.11ac20: 23.66dBm, 802.11ac40: 23.65dBm, 802.11ac80: 23.35dBm 802.11ax20: 23.85dBm, 802.11ax40: 23.08dBm, 802.11ax80: 20.95dBm</p>
Modulation Technique	OFDM, OFDMA
Antenna Specification*	3.5 dBi (It is provided by the applicant)
TPC	Not support
Beam-forming	Support(only for n/ac/ax mode)
Voltage Range	DC 48V from POE
Sample serial number	CE&RE: SZNS220124-03493E-RF-S2 RF Conducted: SZNS220124-03493E-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 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 °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

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, 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/ax20 mode: channel 100, 116, 144 were tested; For 802.11n40/ac40/ax40 mode: channel 102, 110, 142 were tested. For 802.11ac80/ax80 mode, channel 106, 122, 138 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

“QRCT 4”* exercise software was used. The software and power level was provided by the manufacturer. The worst case was performed under:

U-NII	Test Mode	Data rate	RU Size	RU Index	Power Level*		
					Low Channel	Middle Channel	High Channel
5150 – 5250MHz	802.11a	6 Mbps	NA	NA	18	18	18
	802.11n20	MCS0	NA	NA	15	15	14
	802.11n40	MCS0	NA	NA	15	/	14
	802.11ac20	MCS0	NA	NA	15	15	14
	802.11ac40	MCS0	NA	NA	15	/	14
	802.11ac80	MCS0	NA	NA	/	15	/
	11AX20	MCS0	26Tone	RU0	15	14	15
			52Tone	RU37	15	15	15
			106Tone	RU53	15	15	15
			242Tone	RU61	15	15	15
	11AX40	MCS0	26Tone	RU0	13	/	13
			52Tone	RU37	13	/	13
			106Tone	RU53	14	/	14
			242Tone	RU61	14	/	14
			484Tone	RU65	15	/	15
	11AX80	MCS0	26Tone	RU0	/	13	/
			52Tone	RU37	/	14	/
			106Tone	RU53	/	14	/
			242Tone	RU61	/	15	/
			484Tone	RU65	/	15	/
			996Tone	RU67	/	15	/

U-NII	Test Mode	Data rate	RU Size	RU Index	Power Level*		
					Low Channel	Middle Channel	High Channel
5250 – 5350MHz	802.11a	6 Mbps	NA	NA	14	14	14
	802.11n20	MCS0	NA	NA	13	13	13
	802.11n40	MCS0	NA	NA	13	/	13
	802.11ac20	MCS0	NA	NA	13	13	13
	802.11ac40	MCS0	NA	NA	13	/	13
	802.11ac80	MCS0	NA	NA	/	12	/
	11AX20	MCS0	26Tone	RU0	10	10	10
			52Tone	RU37	12	12	12
			106Tone	RU53	13	13	13
			242Tone	RU61	14	14	14
	11AX40	MCS0	26Tone	RU0	11	/	11
			52Tone	RU37	12	/	12
			106Tone	RU53	13	/	13
			242Tone	RU61	14	/	14
			484Tone	RU65	14	/	14
	11AX80	MCS0	26Tone	RU0	/	10	/
			52Tone	RU37	/	12	/
			106Tone	RU53	/	14	/
			242Tone	RU61	/	14	/
			484Tone	RU65	/	14	/
			996Tone	RU67	/	14	/

U-NII	Test Mode	Data rate	RU Size	RU Index	Power Level		
					Low Channel	Middle Channel	High Channel
5470-5725MHz	802.11a	6 Mbps	NA	NA	17	17	17
	802.11n20	MCS0	NA	NA	16	16	16
	802.11n40	MCS0	NA	NA	15	15	15
	802.11ac20	MCS0	NA	NA	16	16	16
	802.11ac40	MCS0	NA	NA	15	15	15
	802.11ac80	MCS0	NA	NA	15	15	15
	11AX20	MCS0	26Tone	RU0	11	11	11*
			52Tone	RU37	13	13	13*
			106Tone	RU53	14	14	14*
			242Tone	RU61	14	14	14*
	11AX40	MCS0	26Tone	RU0	11	11	11*
			52Tone	RU37	12	13	13*
			106Tone	RU53	13	13	13*
			242Tone	RU61	14	14	14*
			484Tone	RU65	14	14	14*
	11AX80	MCS0	26Tone	RU0	10	10	11*
			52Tone	RU37	12	12	12*
			106Tone	RU53	14	14	14*
			242Tone	RU61	14	14	15*
			484Tone	RU65	14	14	15*
			996Tone	RU67	14	14	15*

Note: *: For 5470-5725MHz Band, the max RU index is the worst case for high channel which was selected to test and reported.

U-NII	Test Mode	Data rate	RU Size	RU Index	Power Level		
					Low Channel	Middle Channel	High Channel
5725-5850MHz	802.11a	6 Mbps	NA	NA	20	20	20
	802.11n20	MCS0	NA	NA	20	20	20
	802.11n40	MCS0	NA	NA	20	/	20
	802.11ac20	MCS0	NA	NA	20	20	20
	802.11ac40	MCS0	NA	NA	20	/	20
	802.11ac80	MCS0	NA	NA	/	20	/
	11AX20	MCS0	26Tone	RU0	20	20	20
			52Tone	RU37	20	20	20
			106Tone	RU53	20	20	20
			242Tone	RU61	20	20	20
	11AX40	MCS0	26Tone	RU0	20	/	20
			52Tone	RU37	20	/	20
			106Tone	RU53	20	/	20
			242Tone	RU61	20	/	20
			484Tone	RU65	20	/	20
	11AX80	MCS0	26Tone	RU0	/	18	/
			52Tone	RU37	/	18	/
			106Tone	RU53	/	18	/
			242Tone	RU61	/	18	/
			484Tone	RU65	/	18	/
			996Tone	RU67	/	18	/

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.

The device support SISO and MIMO, for n/ac/ax mode, the MIMO mode support beamforming, the SISO/MIMO and beamforming/nonbeamforming modes have same parameter, which was declared by applicant. The MIMO/beamforming was the worst mode which was selected to test.

All the antenna ports have the same power level.

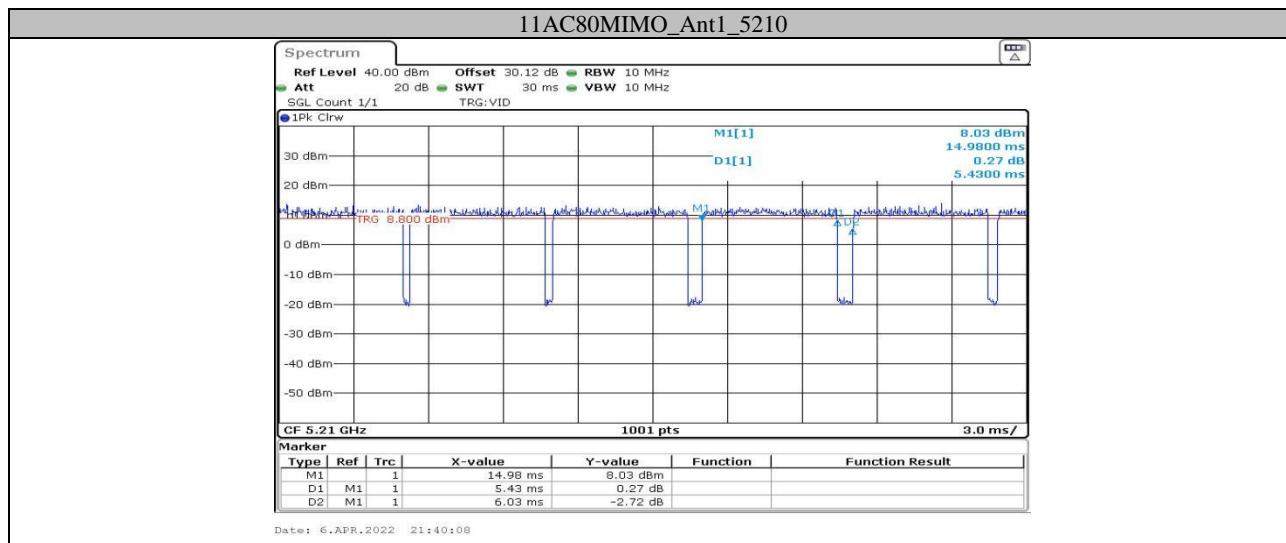
Duty cycle

Test Mode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A-CDD	Ant1	5200	1.97	2.08	94.71
11N20MIMO	Ant1	5200	5.43	5.73	94.76
11N40MIMO	Ant1	5190	5.43	5.70	95.26
11AC20MIMO	Ant1	5200	5.43	5.73	94.76
11AC40MIMO	Ant1	5190	5.43	5.70	95.26
11AC80MIMO	Ant1	5210	5.43	6.03	90.05

Test Graphs

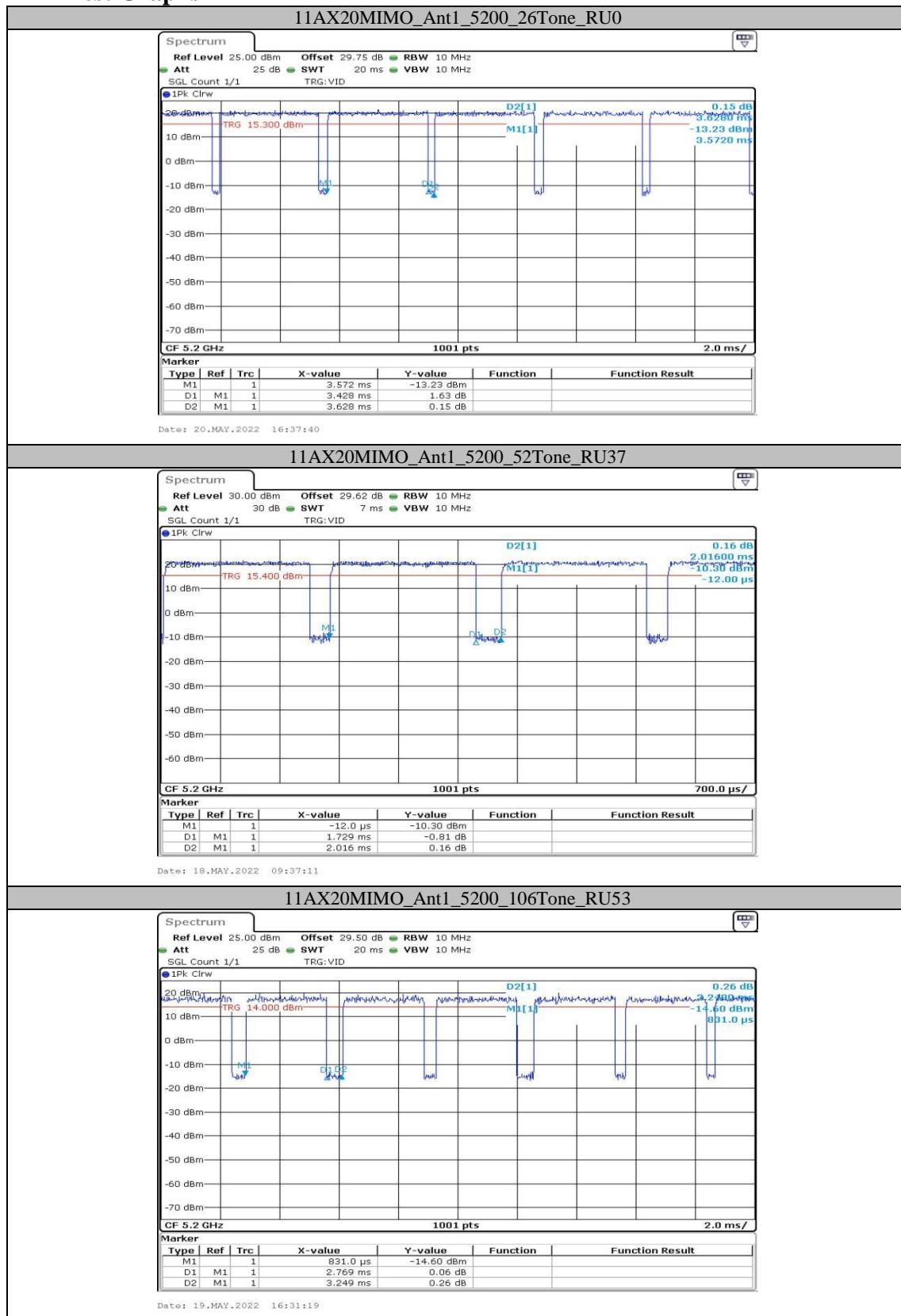


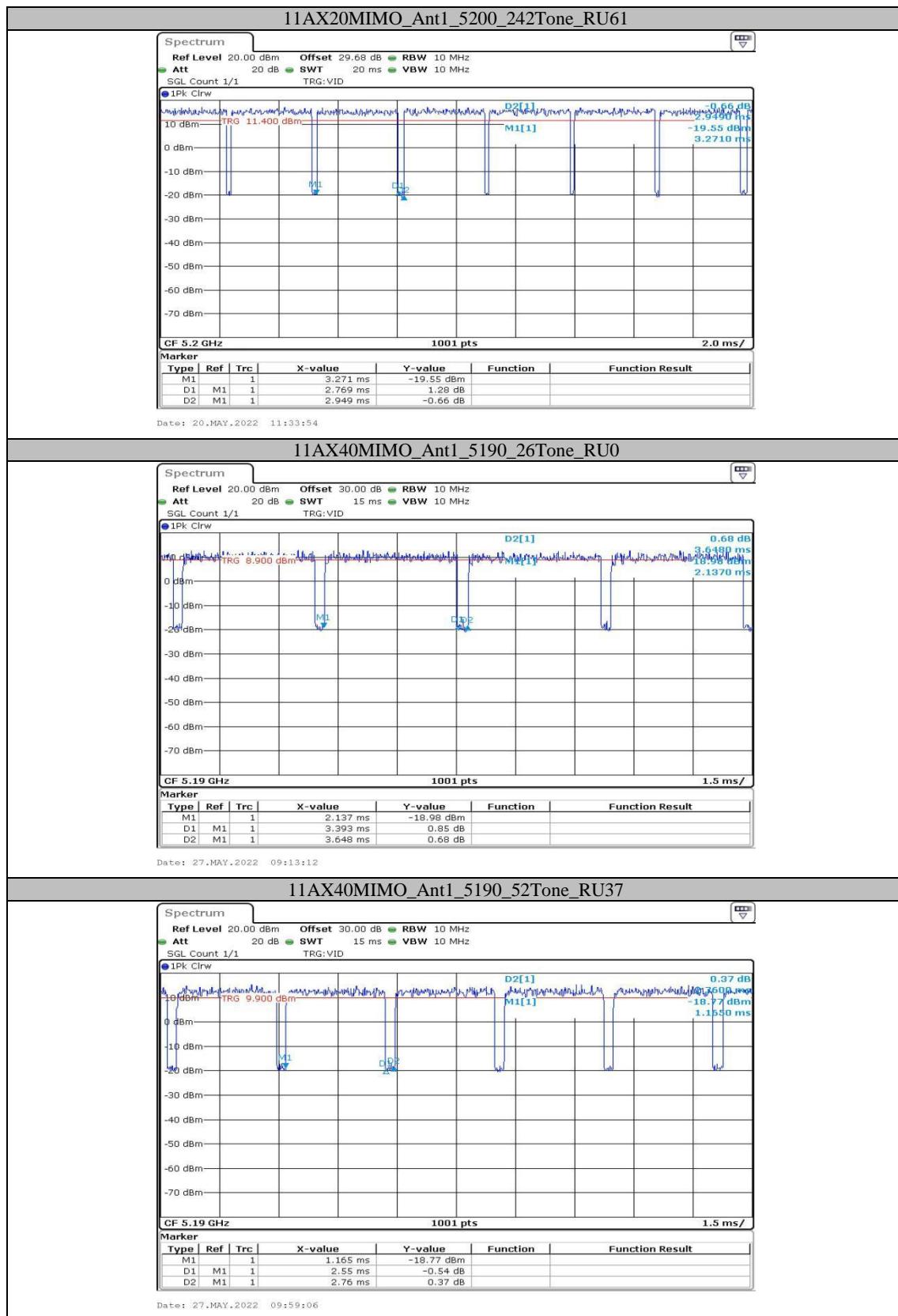


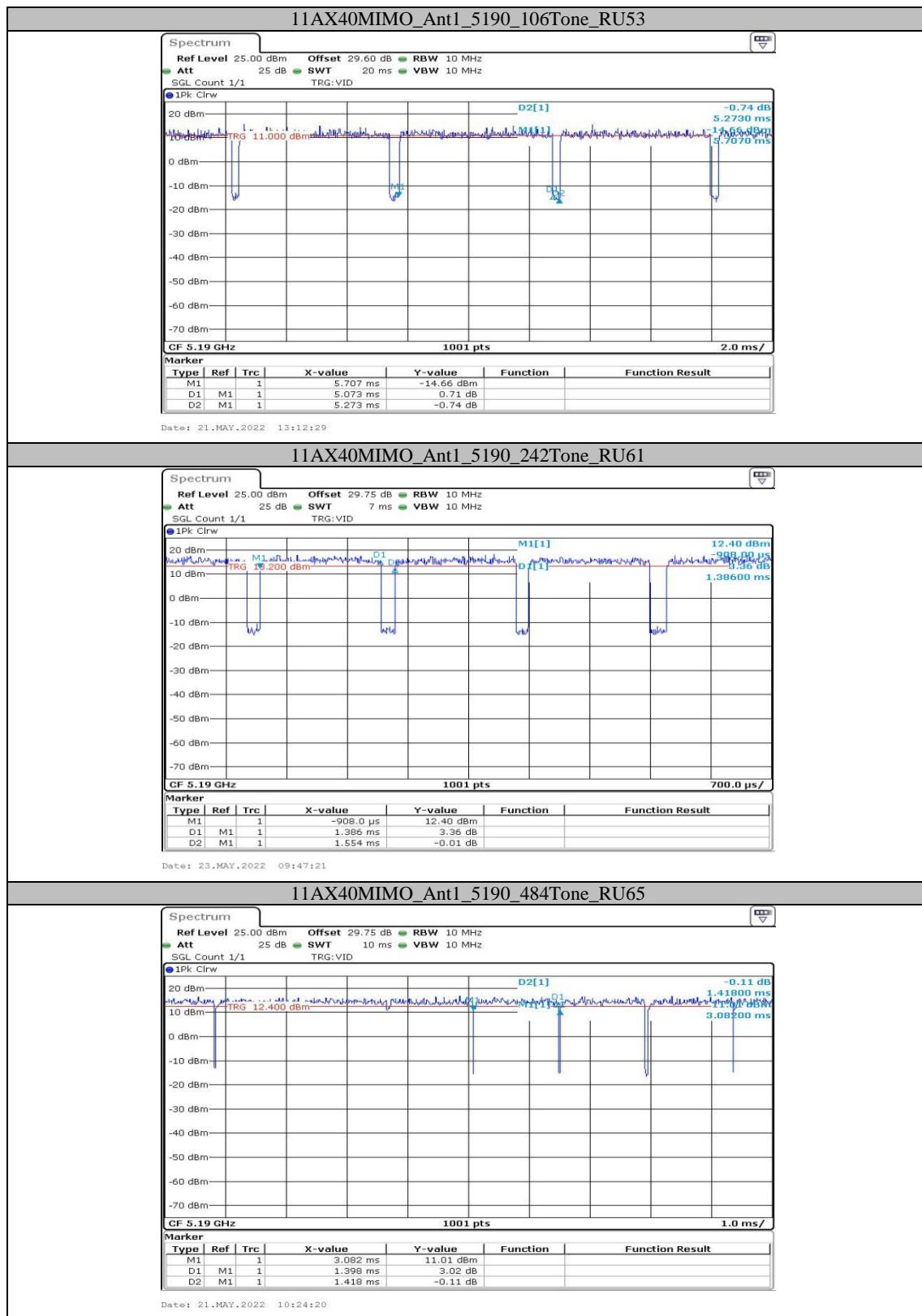


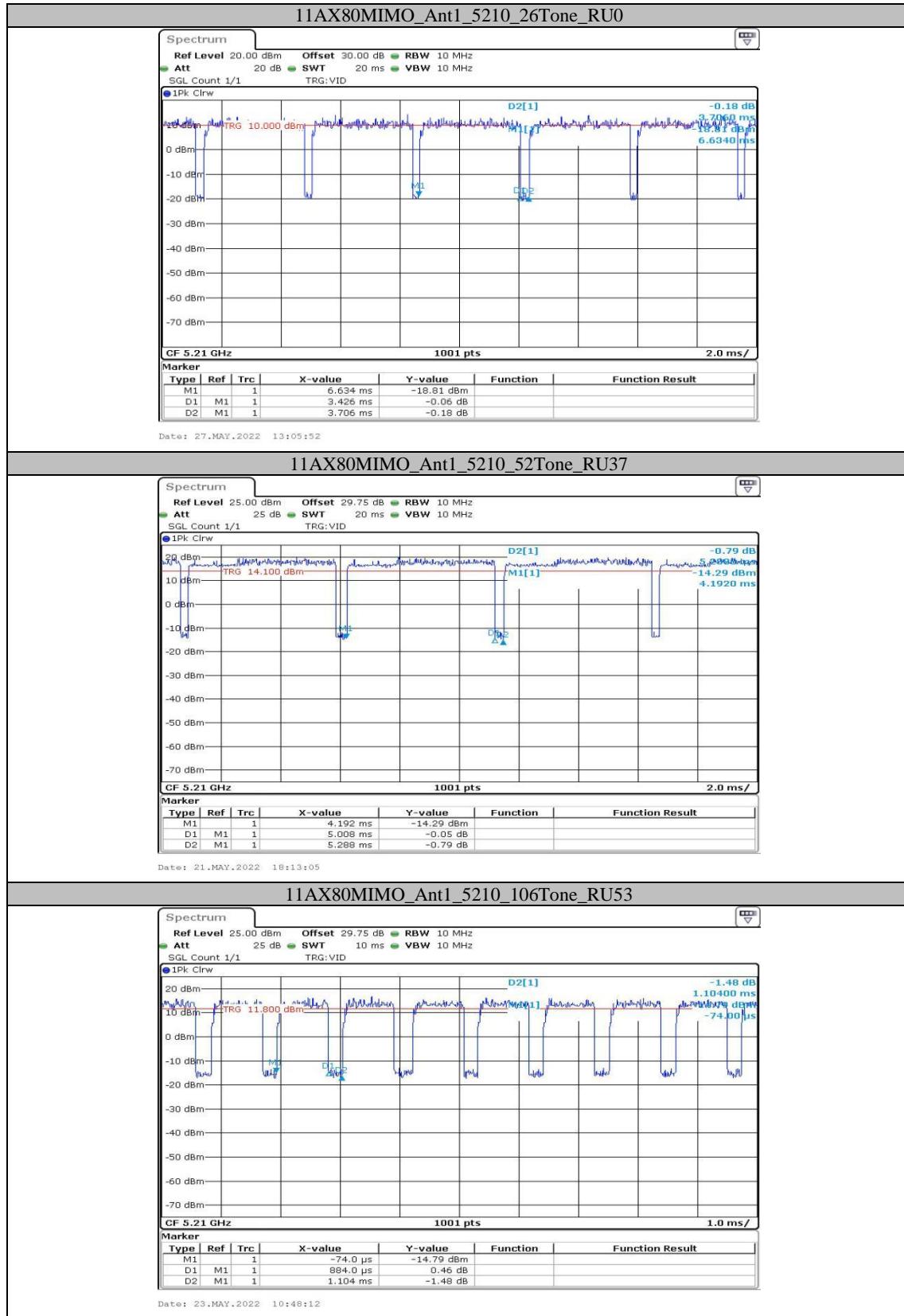
Test Mode	Antenna	Channel	RuSize	RuIndex	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11AX20MIMO	Ant1	5200	26Tone	RU0	3.43	3.63	94.49
			52Tone	RU37	1.73	2.02	85.64
			106Tone	RU53	2.77	3.25	85.23
			242Tone	RU61	2.77	2.95	93.90
11AX40MIMO	Ant1	5190	26Tone	RU0	3.39	3.65	92.88
			52Tone	RU37	2.55	2.76	92.39
			106Tone	RU53	5.07	5.27	96.20
			242Tone	RU61	1.39	1.55	89.68
			484Tone	RU65	1.40	1.42	98.59
11AX80MIMO	Ant1	5210	26Tone	RU0	3.43	3.71	92.45
			52Tone	RU37	5.01	5.29	94.71
			106Tone	RU53	0.88	1.10	80.00
			242Tone	RU61	1.60	1.91	83.77
			484Tone	RU65	5.01	5.21	96.16
			996Tone	RU67	5.01	5.21	96.16

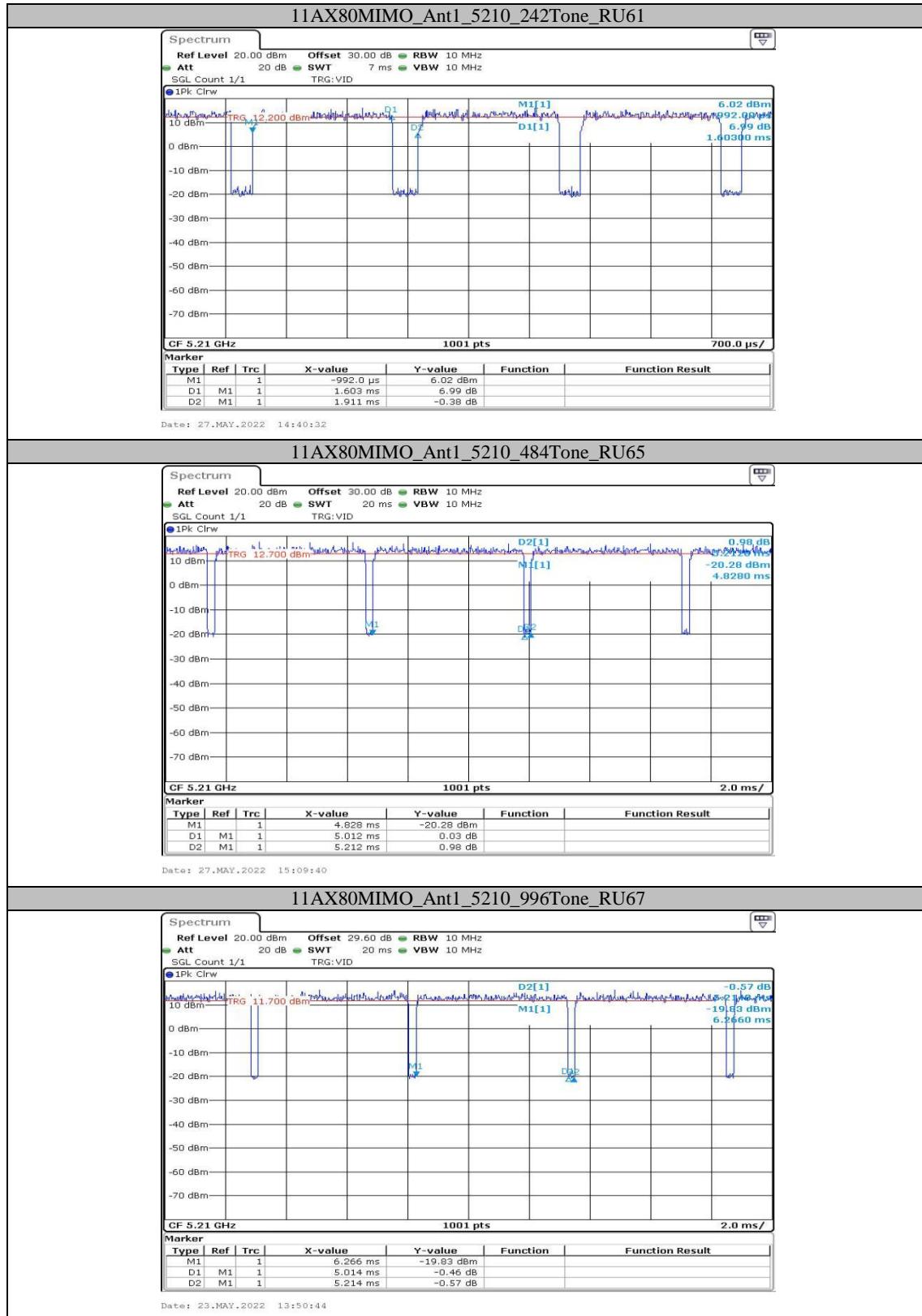
Test Graphs











Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

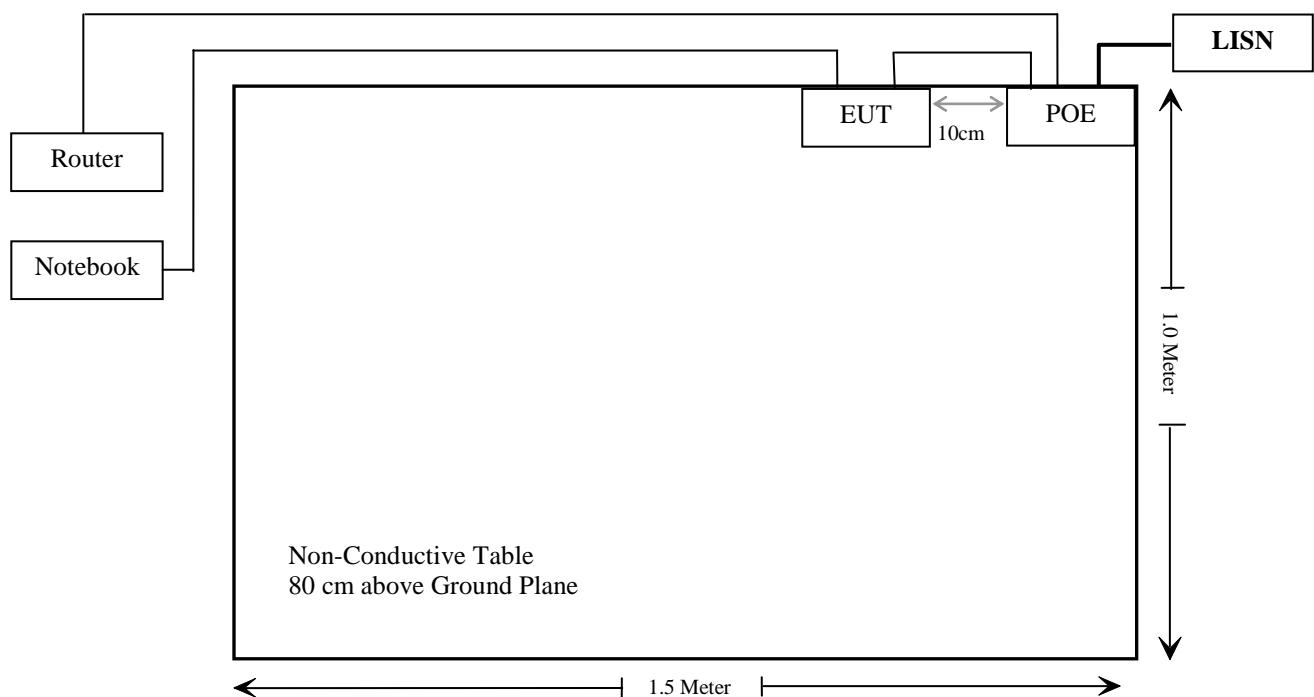
Manufacturer	Description	Model	Serial Number
GOSPELL	POE	G0720-480-050	G0720-480-050
DELL	Notebook	Latitude E6410	11429208685
HIKVISION	Router	DS-3WR03-E	10021642429

External I/O Cable

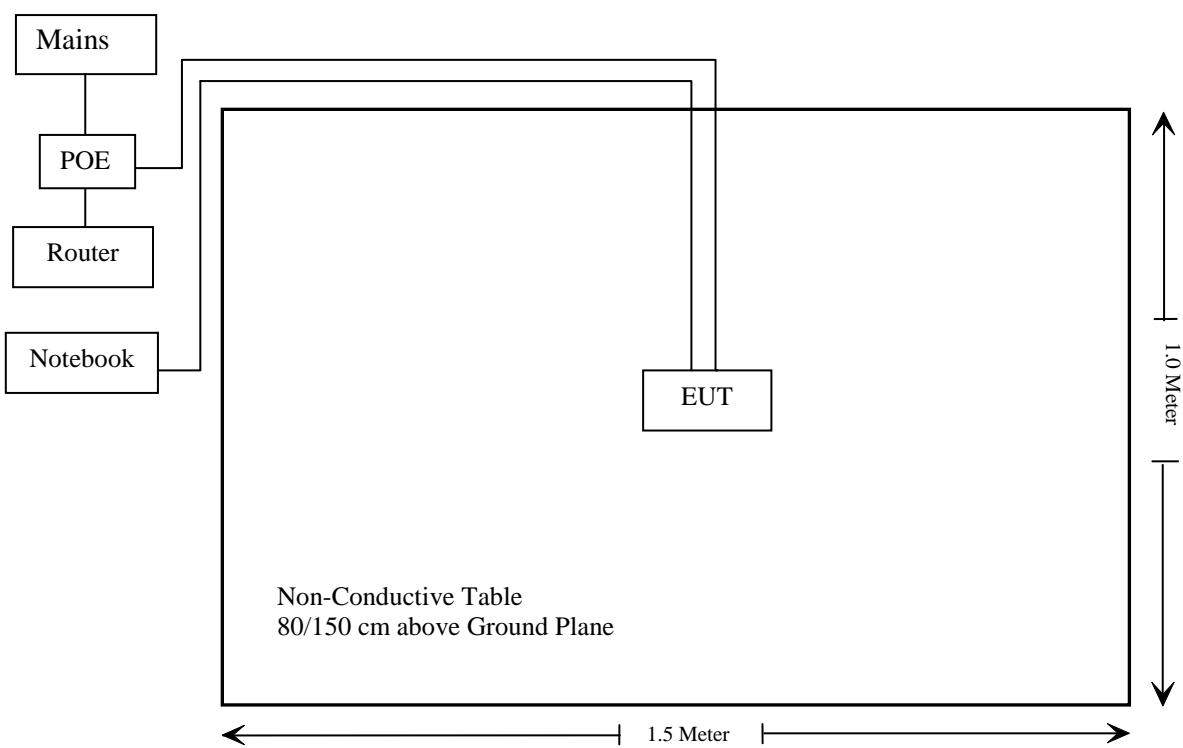
Cable Description	Length (m)	From Port	To
Unshielded detachable RJ45 Cable	1.5	POE	EUT
Un-Shielding Detachable RJ45 Cable	5.0	EUT	Notebook
Un-shielded Un-detachable AC Cable	1.2	LISN	POE
Unshielded detachable RJ45 cable	5.0	POE	Router

Block Diagram of Test Setup

For conducted emission:



For radiated 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: SZNS220124-03493E-RFB.

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.	ENV216	101314	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	2021/11/09	2022/11/08
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

RF Conducted Test					
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Spectrum Analyzer	FSV-40	101495	2021/12/13	2022/12/12
HP	20dB Attenuator	8491A	53857	2021/12/14	2022/12/13
Tonscend	RF Control Unit	JS0806-2	19G8060182	2021/07/06	2022/07/05
Tonscend	RF Control Unit	JS0806-2	19G8060182	2022/07/06	2023/07/05
Unknown	RF Cable	Unknown	Unknown	Each time	
Unknown	RF Coaxial Cable	No.31	RF-01	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).

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/cm²)	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 simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

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)			
2412-2462 (non-beamforming)	3.5	2.24	27.0	501.19	25	0.143	1
2412-2462 (beamforming)	9.5	8.91	25.0	316.23	25	0.359	1
5180-5240	9.5	8.91	23.0	199.53	25	0.226	1
5260-5320	9.5	8.91	19.0	79.43	25	0.090	1
5500-5720	9.5	8.91	19.0	79.43	25	0.090	1
5745-5825	9.5	8.91	24.0	251.19	25	0.285	1

- Note:
1. The tune up conducted power was declared by the applicant.
 2. The 2.4G Wi-Fi can transmit at the same time with the 5G Wi-Fi.
 3. For the 2.4G Wi-Fi, as it can support the beam-forming function, so the directional antenna gain should add the $10\lg 4$, $3.5\text{dBi}+10\lg 4=9.5\text{dBi}$.
 4. For the 5G Wi-Fi, as it can support the beam-forming function, so the directional antenna gain should add the $10\lg 4$, $3.5\text{dBi}+10\lg 4=9.5\text{dBi}$.

Simultaneous transmitting consideration (worst case):

The ratio= $\text{MPE}_{2.4\text{G Wi-Fi}}/\text{limit}+\text{MPE}_{5\text{G Wi-Fi}}/\text{limit}=0.359+0.285=0.644<1.0$, so simultaneous exposure is compliant.

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 27"cm 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

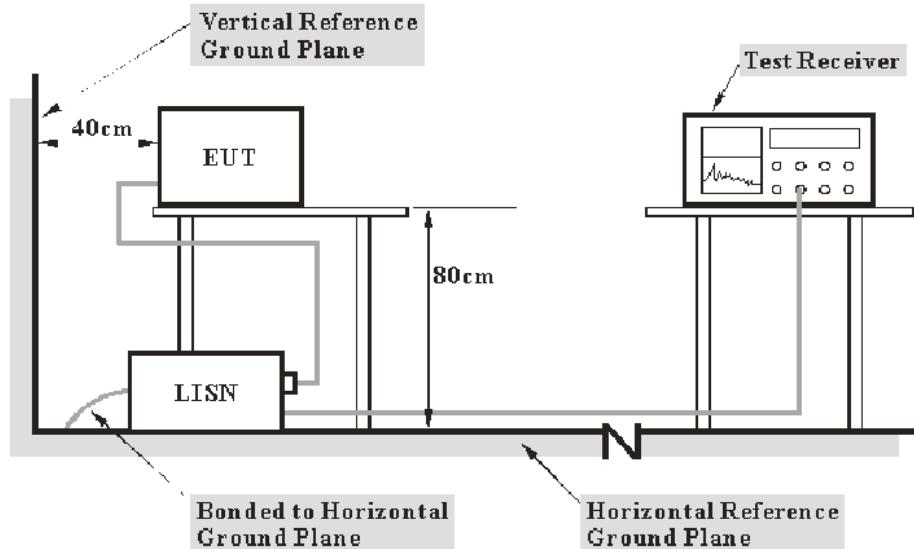
The EUT has four external antennas with unique antenna connect for 5G Wi-Fi, which were permanently attached to the EUT. Please refer to the EUT photos.

Type	Antenna Gain	Impedance	Frequency Range
External	3.5dBi	50Ω	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:

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

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 margin calculation is as follows:

$$\text{Over Limit} = \text{Level} - \text{Limit}$$

$$\text{Level} = \text{Reading level} + \text{Factor}$$

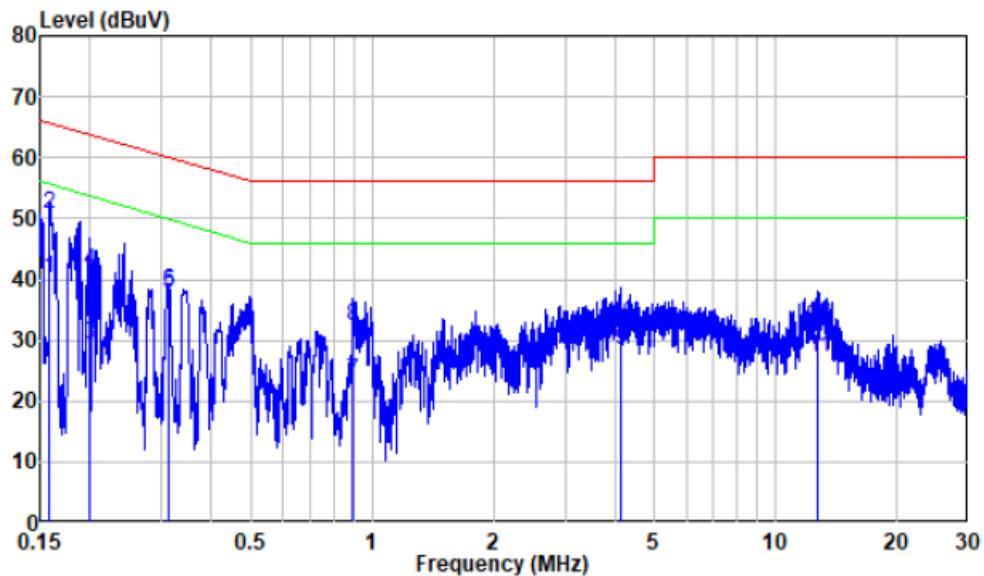
Test Data

Environmental Conditions

Temperature:	23 °C
Relative Humidity:	53 %
ATM Pressure:	101.0 kPa

The testing was performed by Caro Hu on 2022-03-08.

EUT operation mode: Transmitting (worst case for 802.11 a 5745MHz)

AC 120V/60 Hz, Line

Site : Shielding Room

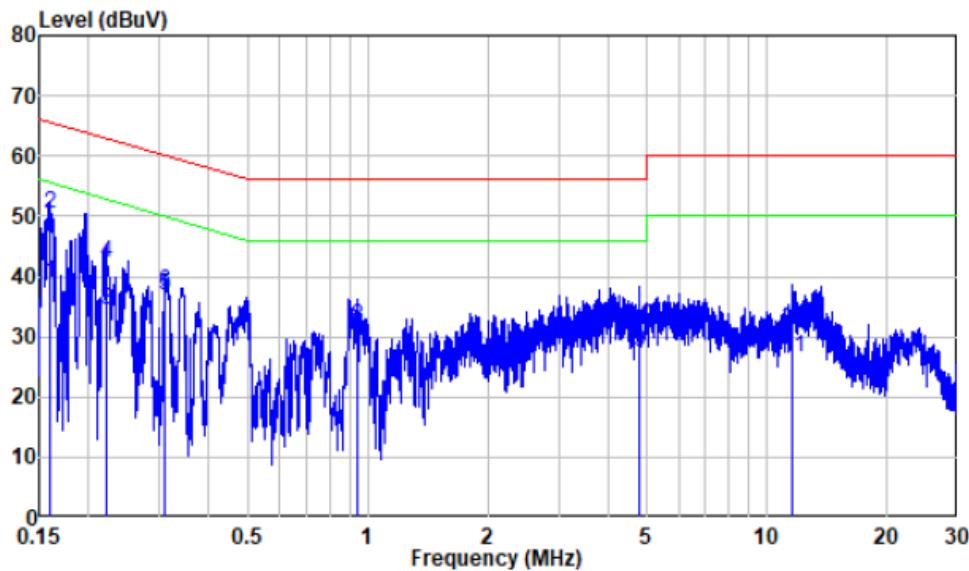
Condition: Line

Mode : 5G

Model : GWN7664LR

Power : AC 120V 60Hz

	Freq	Factor	Read Level	Limit Level	Line	Over Limit	Remark
	MHz		dB	dBuV	dBuV	dB	
1	0.159	9.80	30.32	40.12	55.52	-15.40	Average
2	0.159	9.80	41.04	50.84	65.52	-14.68	QP
3	0.200	9.80	19.52	29.32	53.62	-24.30	Average
4	0.200	9.80	31.51	41.31	63.62	-22.31	QP
5	0.312	9.80	27.85	37.65	49.91	-12.26	Average
6	0.312	9.80	28.13	37.93	59.91	-21.98	QP
7	0.895	9.81	13.55	23.36	46.00	-22.64	Average
8	0.895	9.81	22.36	32.17	56.00	-23.83	QP
9	4.116	9.84	18.43	28.27	46.00	-17.73	Average
10	4.116	9.84	22.79	32.63	56.00	-23.37	QP
11	12.750	9.93	17.24	27.17	50.00	-22.83	Average
12	12.750	9.93	22.54	32.47	60.00	-27.53	QP

AC 120V/60 Hz, Neutral

Site : Shielding Room

Condition: Neutral

Mode : 5G

Model : GWN7664LR

Power : AC 120V 60Hz

	Freq	Factor	Read Level	Limit Level	Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.159	9.80	29.05	38.85	55.51	-16.66	Average
2	0.159	9.80	40.73	50.53	65.51	-14.98	QP
3	0.222	9.80	24.54	34.34	52.76	-18.42	Average
4	0.222	9.80	32.50	42.30	62.76	-20.46	QP
5	0.311	9.80	27.02	36.82	49.95	-13.13	Average
6	0.311	9.80	27.69	37.49	59.95	-22.46	QP
7	0.941	9.81	17.82	27.63	46.00	-18.37	Average
8	0.941	9.81	21.88	31.69	56.00	-24.31	QP
9	4.806	9.88	17.65	27.53	46.00	-18.47	Average
10	4.806	9.88	21.79	31.67	56.00	-24.33	QP
11	11.590	10.02	16.58	26.60	50.00	-23.40	Average
12	11.590	10.02	21.44	31.46	60.00	-28.54	QP

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

Applicable Standard

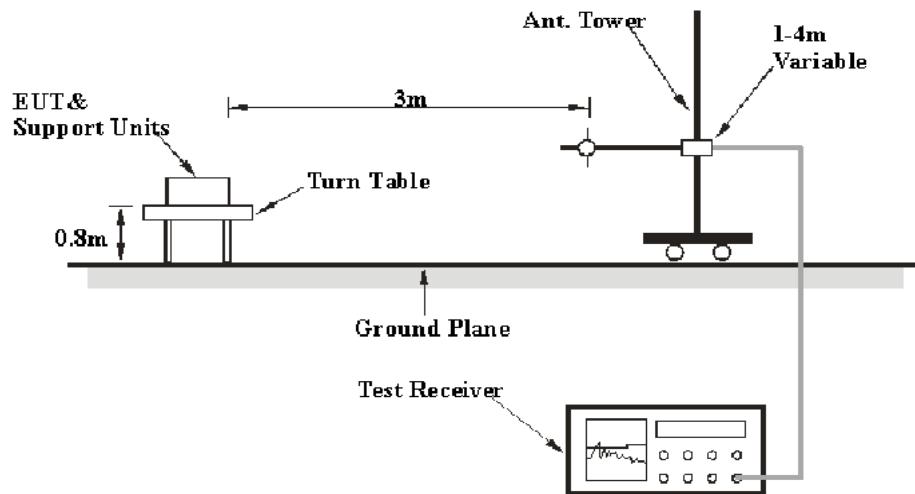
FCC §15.407 (b); §15.209; §15.205;

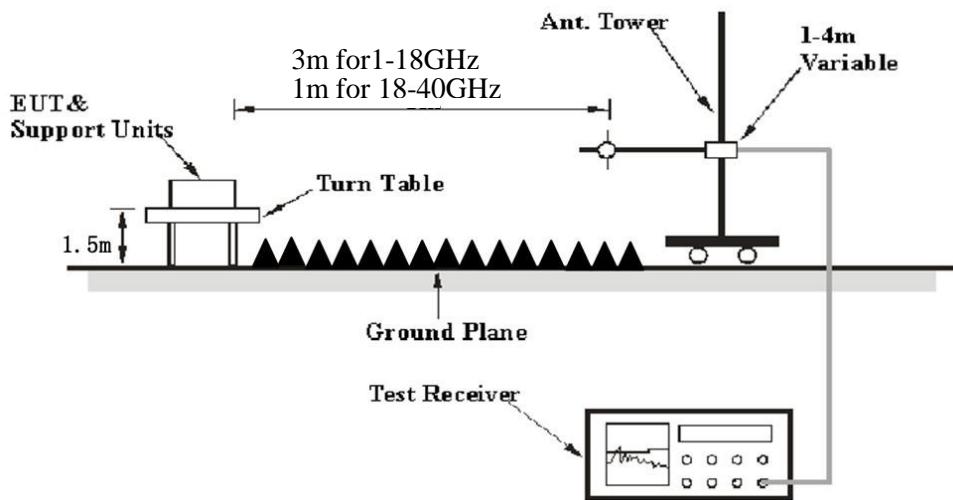
- (b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:
- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 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;

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

where

$E_{\text{SpecLimit}}$ is the field strength of the emission at the distance specified by the limit, in dB μ V/m

E_{Meas} is the field strength of the emission at the measurement distance, in dB μ V/m

d_{Meas} is the measurement distance, in m

$d_{\text{SpecLimit}}$ 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:

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

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:

$$\text{Margin/Over limit} = \text{Corrected Amplitude/Level} - \text{Limit}$$

$$\text{Corrected Amplitude/Level} = \text{Reading} + \text{Factor}$$

Test Data

Environmental Conditions

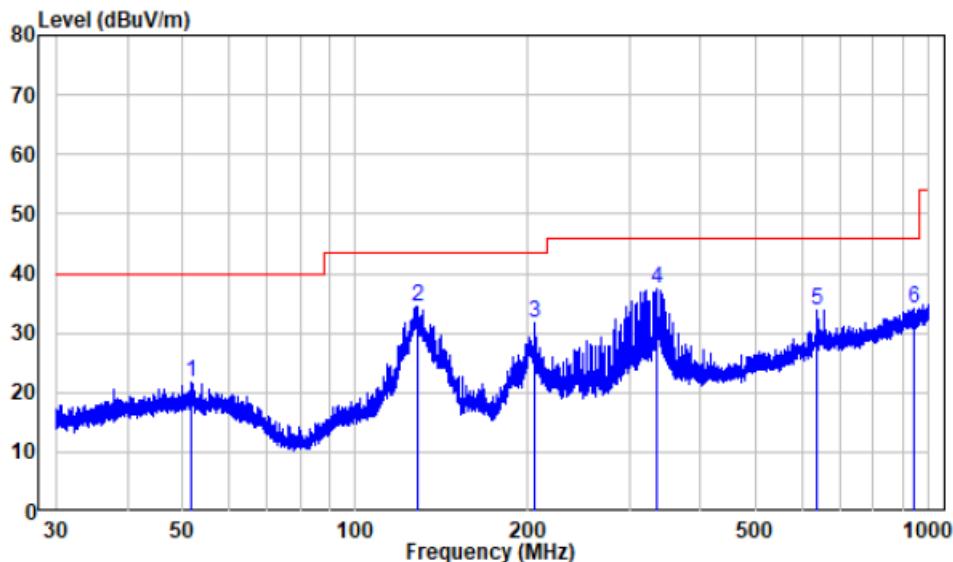
Temperature:	20~28 °C
Relative Humidity:	51~58 %
ATM Pressure:	101.0 kPa

The testing was performed by Caro Hu on 2022-03-07 for below 1GHz and Nick Fang from 2022-02-17 to 2022-04-25 for above 1GHz.

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

30MHz-1GHz: (worst case for 802.11 a 5745MHz)

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

Horizontal

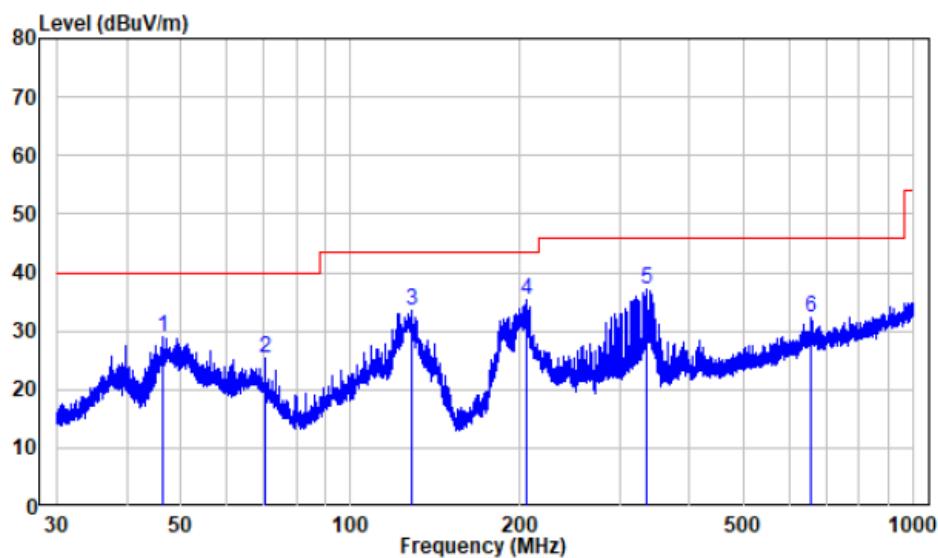
Site : chamber

Condition: 3m HORIZONTAL

Job No. : SZNS220124-03493E-RF

Test Mode: 5G WIFI Transmitting

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
1	51.594	-9.96	31.59	21.63	40.00 -18.37 Peak
2	127.945	-14.69	49.23	34.54	43.50 -8.96 Peak
3	205.856	-11.84	43.43	31.59	43.50 -11.91 Peak
4	336.035	-7.58	45.03	37.45	46.00 -8.55 Peak
5	640.050	-1.92	35.79	33.87	46.00 -12.13 Peak
6	941.305	1.78	32.31	34.09	46.00 -11.91 Peak

Vertical

Site : chamber
Condition: 3m VERTICAL
Job No. : SZNS220124-03493E-RF
Test Mode: 5G WIFI Transmitting

Freq	Factor	Read	Limit	Over	Remark
		Level	Level	Line	
1	46.239	-9.99	39.01	29.02	40.00 -10.98 Peak
2	70.398	-14.95	40.29	25.34	40.00 -14.66 Peak
3	128.001	-14.70	48.18	33.48	43.50 -10.02 Peak
4	204.596	-11.80	47.19	35.39	43.50 -8.11 Peak
5	336.035	-7.58	44.83	37.25	46.00 -8.75 Peak
6	656.242	-1.59	33.80	32.21	46.00 -13.79 Peak

5150-5250 MHz:

Frequency (MHz)	Receiver		Turn- Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407				
	Reading (dB μ V)	Detector (PK/QP/AV)		Angle Degree	Height (m)			Limit (dB μ V/m)	Margin (dB)			
802.11A MIMO (worst case)												
5180 MHz												
4500	63.83	PK	354	1.8	H	-4.72	59.11	74	-14.89			
4500	50.50	AV	354	1.8	H	-4.72	45.78	54	-8.22			
4500	64.08	PK	324	1.6	V	-4.72	59.36	74	-14.64			
4500	50.48	AV	324	1.6	V	-4.72	45.76	54	-8.24			
5150	67.00	PK	130	1.6	H	-2.73	64.27	74	-9.73			
5150	53.28	AV	130	1.6	H	-2.73	50.55	54	-3.45			
5150	63.64	PK	257	2.1	V	-2.73	60.91	74	-13.09			
5150	51.49	AV	257	2.1	V	-2.73	48.76	54	-5.24			
10360	44.11	PK	142	1.8	H	8.10	52.21	68.2	-15.99			
10360	44.85	PK	68	1.8	V	8.10	52.95	68.2	-15.25			
5200 MHz												
10400	44.26	PK	294	1.7	H	8.24	52.5	68.2	-15.70			
10400	45.18	PK	108	1.7	V	8.24	53.42	68.2	-14.78			
5240MHz												
5350	64.91	PK	10	1	H	-2.33	62.58	74	-11.42			
5350	52.03	AV	10	1	H	-2.33	49.7	54	-4.30			
5350	63.67	PK	206	2.1	V	-2.33	61.34	74	-12.66			
5350	51.30	AV	206	2.1	V	-2.33	48.97	54	-5.03			
5460	63.75	PK	6	1.8	H	-2.30	61.45	74	-12.55			
5460	51.39	AV	6	1.8	H	-2.30	49.09	54	-4.91			
5460	63.74	PK	276	1.1	V	-2.30	61.44	74	-12.56			
5460	51.57	AV	276	1.1	V	-2.30	49.27	54	-4.73			
10480	43.16	PK	98	1.7	H	8.60	51.76	68.2	-16.44			
10480	46.16	PK	293	1.7	V	8.60	54.76	68.2	-13.44			

Frequency (MHz)	Receiver		Turn- Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/AV)	Angle Degree	Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)		
802.11n20 MIMO + No-BF (Worst case)											
5180 MHz											
4500	63.87	PK	225	2.5	H	-4.72	59.15	74	-14.85		
4500	50.39	AV	225	2.5	H	-4.72	45.67	54	-8.33		
4500	64.54	PK	345	1.5	V	-4.72	59.82	74	-14.18		
4500	50.12	AV	345	1.5	V	-4.72	45.40	54	-8.60		
5150	69.98	PK	156	1.1	H	-2.73	67.25	74	-6.75		
5150	53.36	AV	156	1.1	H	-2.73	50.63	54	-3.37		
5150	63.72	PK	302	1.4	V	-2.73	60.99	74	-13.01		
5150	51.36	AV	302	1.4	V	-2.73	48.63	54	-5.37		
10360	43.89	PK	128	2.2	H	8.10	51.99	68.2	-16.21		
10360	47.29	PK	55	2.2	V	8.10	55.39	68.2	-12.81		
5200MHz											
10400	43.87	PK	139	1.2	H	8.24	52.11	68.2	-16.09		
10400	47.22	PK	90	1.2	V	8.24	55.46	68.2	-12.74		
5240MHz											
5350	64.61	PK	305	1.4	H	-2.33	62.28	74	-11.72		
5350	52.06	AV	305	1.4	H	-2.33	49.73	54	-4.27		
5350	63.55	PK	240	2.4	V	-2.33	61.22	74	-12.78		
5350	51.20	AV	240	2.4	V	-2.33	48.87	54	-5.13		
5460	64.12	PK	37	1.3	H	-2.30	61.82	74	-12.18		
5460	51.44	AV	37	1.3	H	-2.30	49.14	54	-4.86		
5460	64.16	PK	143	1.9	V	-2.30	61.86	74	-12.14		
5460	51.63	AV	143	1.9	V	-2.30	49.33	54	-4.67		
10480	43.25	PK	250	1.7	H	8.60	51.85	68.2	-16.35		
10480	46.24	PK	338	1.7	V	8.60	54.84	68.2	-13.36		

Frequency (MHz)	Receiver		Turn- Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/AV)	Angle Degree	Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)		
802.11N40 MIMO + No-BF (Worst case)											
5190 MHz											
4500	64.02	PK	244	1.7	H	-4.72	59.30	74	-14.70		
4500	50.52	AV	244	1.7	H	-4.72	45.80	54	-8.20		
4500	63.75	PK	47	1.4	V	-4.72	59.03	74	-14.97		
4500	50.27	AV	47	1.4	V	-4.72	45.55	54	-8.45		
5150	67.95	PK	206	1	H	-2.73	65.22	74	-8.78		
5150	53.32	AV	206	1	H	-2.73	50.59	54	-3.41		
5150	64.84	PK	352	1.8	V	-2.73	62.11	74	-11.89		
5150	51.61	AV	352	1.8	V	-2.73	48.88	54	-5.12		
10380	42.00	PK	151	1.4	H	8.20	50.20	68.2	-18.00		
10380	42.09	PK	160	1.4	V	8.20	50.29	68.2	-17.91		
5230MHz											
5350	64.84	PK	272	1.8	H	-2.33	62.51	74	-11.49		
5350	51.27	AV	272	1.8	H	-2.33	48.94	54	-5.06		
5350	63.91	PK	195	1.7	V	-2.33	61.58	74	-12.42		
5350	51.12	AV	195	1.7	V	-2.33	48.79	54	-5.21		
5460	64.10	PK	325	2.2	H	-2.30	61.8	74	-12.20		
5460	51.42	AV	325	2.2	H	-2.30	49.12	54	-4.88		
5460	63.86	PK	56	1.8	V	-2.30	61.56	74	-12.44		
5460	51.50	AV	56	1.8	V	-2.30	49.2	54	-4.80		
10460	42.26	PK	191	1.7	H	8.43	50.69	68.2	-17.51		
10460	43.39	PK	135	1.7	V	8.43	51.82	68.2	-16.38		

Frequency (MHz)	Receiver		Turn- Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/AV)	Angle Degree	Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)		
802.11AC20 MIMO + No-BF (Worst case)											
5180 MHz											
4500	64.24	PK	317	1.5	H	-4.72	59.52	74	-14.48		
4500	50.20	AV	317	1.5	H	-4.72	45.48	54	-8.52		
4500	63.74	PK	218	1.5	V	-4.72	59.02	74	-14.98		
4500	50.37	AV	218	1.5	V	-4.72	45.65	54	-8.35		
5150	66.92	PK	208	1.4	H	-2.73	64.19	74	-9.81		
5150	52.21	AV	208	1.4	H	-2.73	49.48	54	-4.52		
5150	64.98	PK	229	1.8	V	-2.73	62.25	74	-11.75		
5150	51.26	AV	229	1.8	V	-2.73	48.53	54	-5.47		
10360	45.00	PK	159	1.1	H	8.10	53.10	68.2	-15.10		
10360	45.01	PK	263	1.1	V	8.10	53.11	68.2	-15.09		
5200 MHz											
10400	44.94	PK	201	1.8	H	8.24	53.18	68.2	-15.02		
10400	44.98	PK	62	1.8	V	8.24	53.22	68.2	-14.98		
5240MHz											
5350	64.46	PK	258	1.9	H	-2.33	62.13	74	-11.87		
5350	50.97	AV	258	1.9	H	-2.33	48.64	54	-5.36		
5350	63.67	PK	50	2.4	V	-2.33	61.34	74	-12.66		
5350	51.38	AV	50	2.4	V	-2.33	49.05	54	-4.95		
5460	64.00	PK	25	2.3	H	-2.30	61.7	74	-12.30		
5460	51.31	AV	25	2.3	H	-2.30	49.01	54	-4.99		
5460	63.87	PK	335	1.1	V	-2.30	61.57	74	-12.43		
5460	51.61	AV	335	1.1	V	-2.30	49.31	54	-4.69		
10480	43.66	PK	219	1.7	H	8.60	52.26	68.2	-15.94		
10480	46.08	PK	231	1.7	V	8.60	54.68	68.2	-13.52		

Frequency (MHz)	Receiver		Turn- Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/AV)	Angle Degree	Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)		
802.11AC40 MIMO + No-BF (Worst case)											
5190 MHz											
4500	64.25	PK	277	1.2	H	-4.72	59.53	74	-14.47		
4500	50.37	AV	277	1.2	H	-4.72	45.65	54	-8.35		
4500	63.99	PK	186	2.4	V	-4.72	59.27	74	-14.73		
4500	50.21	AV	186	2.4	V	-4.72	45.49	54	-8.51		
5150	65.82	PK	355	2.3	H	-2.73	63.09	74	-10.91		
5150	53.10	AV	355	2.3	H	-2.73	50.37	54	-3.63		
5150	63.64	PK	219	2.2	V	-2.73	60.91	74	-13.09		
5150	51.60	AV	219	2.2	V	-2.73	48.87	54	-5.13		
10380	42.09	PK	128	2.1	H	8.20	50.29	68.2	-17.91		
10380	41.74	PK	275	2.1	V	8.20	49.94	68.2	-18.26		
5230MHz											
5350	64.48	PK	10	1.7	H	-2.33	62.15	74	-11.85		
5350	51.04	AV	10	1.7	H	-2.33	48.71	54	-5.29		
5350	63.87	PK	260	2	V	-2.33	61.54	74	-12.46		
5350	51.25	AV	260	2	V	-2.33	48.92	54	-5.08		
5460	64.13	PK	339	2	H	-2.30	61.83	74	-12.17		
5460	51.56	AV	339	2	H	-2.30	49.26	54	-4.74		
5460	63.75	PK	229	2.2	V	-2.30	61.45	74	-12.55		
5460	51.27	AV	229	2.2	V	-2.30	48.97	54	-5.03		
10460	42.64	PK	248	1.7	H	8.43	51.07	68.2	-17.13		
10460	43.49	PK	258	1.7	V	8.43	51.92	68.2	-16.28		

Frequency (MHz)	Receiver		Turn- Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/AV)	Angle Degree	Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)		
802.11AC80 MIMO + No-BF (Worst case)											
5210MHz											
4500	64.13	PK	308	2.1	H	-4.72	59.41	74	-14.59		
4500	50.47	AV	308	2.1	H	-4.72	45.75	54	-8.25		
4500	63.93	PK	8	1.3	V	-4.72	59.21	74	-14.79		
4500	50.35	AV	8	1.3	V	-4.72	45.63	54	-8.37		
5150	67.71	PK	288	2.1	H	-2.73	64.98	74	-9.02		
5150	53.64	AV	288	2.1	H	-2.73	50.91	54	-3.09		
5150	65.07	PK	72	1.2	V	-2.73	62.34	74	-11.66		
5150	51.41	AV	72	1.2	V	-2.73	48.68	54	-5.32		
5350	64.89	PK	282	1.1	H	-2.33	62.56	74	-11.44		
5350	51.63	AV	282	1.1	H	-2.33	49.3	54	-4.70		
5350	63.87	PK	135	1.6	V	-2.33	61.54	74	-12.46		
5350	51.01	AV	135	1.6	V	-2.33	48.68	54	-5.32		
5460	63.98	PK	338	1.7	H	-2.30	61.68	74	-12.32		
5460	51.39	AV	338	1.7	H	-2.30	49.09	54	-4.91		
5460	63.81	PK	20	2.1	V	-2.30	61.51	74	-12.49		
5460	51.45	AV	20	2.1	V	-2.30	49.15	54	-4.85		
10420	42.73	PK	290	1.7	H	8.32	51.05	68.2	-17.15		
10420	43.17	PK	39	1.7	V	8.32	51.49	68.2	-16.71		

Frequency (MHz)	Receiver		Turn- Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/AV)	Angle Degree	Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)		
802.11AX20 MIMO + No-BF (Worst case)											
5180MHz_26Tone_RU0(Worst Case)											
4500	64.44	PK	89	1.6	H	-4.72	59.72	74	-14.28		
4500	50.16	AV	89	1.6	H	-4.72	45.44	54	-8.56		
4500	64.45	PK	93	2.5	V	-4.72	59.73	74	-14.27		
4500	50.14	AV	93	2.5	V	-4.72	45.42	54	-8.58		
5150	69.94	PK	319	2.1	H	-2.73	67.21	74	-6.79		
5150	54.17	AV	319	2.1	H	-2.73	51.44	54	-2.56		
5150	64.00	PK	34	1.4	V	-2.73	61.27	74	-12.73		
5150	51.43	AV	34	1.4	V	-2.73	48.70	54	-5.30		
5180MHz_242Tone_RU61(Worst Case)											
10360	44.50	PK	154	2	H	8.10	52.60	68.2	-15.60		
10360	46.93	PK	196	2	V	8.10	55.03	68.2	-13.17		
5200MHz_242Tone_RU61(Worst Case)											
10400	44.39	PK	224	1.5	H	8.24	52.63	68.2	-15.57		
10400	46.80	PK	125	1.5	V	8.24	55.04	68.2	-13.16		
5240MHz_26Tone_RU8(Worst Case)											
5350	64.62	PK	83	2.4	H	-2.33	62.29	74	-11.71		
5350	51.91	AV	83	2.4	H	-2.33	49.58	54	-4.42		
5350	63.60	PK	48	1.3	V	-2.33	61.27	74	-12.73		
5350	51.12	AV	48	1.3	V	-2.33	48.79	54	-5.21		
5460	63.86	PK	108	1.2	H	-2.30	61.56	74	-12.44		
5460	51.51	AV	108	1.2	H	-2.30	49.21	54	-4.79		
5460	63.95	PK	163	1.8	V	-2.30	61.65	74	-12.35		
5460	51.46	AV	163	1.8	V	-2.30	49.16	54	-4.84		
5240MHz_242Tone_RU61(Worst Case)											
10480	43.93	PK	283	1.7	H	8.60	52.53	68.2	-15.67		
10480	44.65	PK	110	1.7	V	8.60	53.25	68.2	-14.95		

Frequency (MHz)	Receiver		Turn- Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/AV)	Angle Degree	Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)		
802.11AX40 MIMO + No-BF (Worst case)											
5190MHz_26Tone_RU0(Worst Case)											
4500	64.13	PK	53	1.1	H	-4.72	59.41	74	-14.59		
4500	50.41	AV	53	1.1	H	-4.72	45.69	54	-8.31		
4500	63.99	PK	7	1.5	V	-4.72	59.27	74	-14.73		
4500	50.53	AV	7	1.5	V	-4.72	45.81	54	-8.19		
5150	66.81	PK	6	1.6	H	-2.73	64.08	74	-9.92		
5150	52.83	AV	6	1.6	H	-2.73	50.10	54	-3.90		
5150	63.86	PK	38	1.5	V	-2.73	61.13	74	-12.87		
5150	51.22	AV	38	1.5	V	-2.73	48.49	54	-5.51		
5190MHz_484Tone_RU65(Worst Case)											
10380	44.34	PK	237	2.1	H	8.20	52.54	68.2	-15.66		
10380	43.04	PK	212	2.1	V	8.20	51.24	68.2	-16.96		
5230MHz_26Tone_RU17(Worst Case)											
5350	64.50	PK	63	2.5	H	-2.33	62.17	74	-11.83		
5350	51.61	AV	63	2.5	H	-2.33	49.28	54	-4.72		
5350	63.82	PK	73	1.4	V	-2.33	61.49	74	-12.51		
5350	51.38	AV	73	1.4	V	-2.33	49.05	54	-4.95		
5460	63.71	PK	347	2.1	H	-2.30	61.41	74	-12.59		
5460	51.22	AV	347	2.1	H	-2.30	48.92	54	-5.08		
5460	64.04	PK	145	2.4	V	-2.30	61.74	74	-12.26		
5460	51.64	AV	145	2.4	V	-2.30	49.34	54	-4.66		
5230MHz_484Tone_RU65(Worst Case)											
10460	43.87	PK	173	1.7	H	8.43	52.30	68.2	-15.90		
10460	42.30	PK	174	1.7	V	8.43	50.73	68.2	-17.47		

Frequency (MHz)	Receiver		Turn- Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/AV)	Angle Degree	Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)		
802.11AX80 MIMO + No-BF (Worst case)											
5210MHz_26Tone_RU0(Worst Case)											
4500	64.32	PK	327	2	H	-4.72	59.60	74	-14.40		
4500	50.24	AV	327	2	H	-4.72	45.52	54	-8.48		
4500	64.37	PK	289	2.3	V	-4.72	59.65	74	-14.35		
4500	50.24	AV	289	2.3	V	-4.72	45.52	54	-8.48		
5150	67.67	PK	225	1.7	H	-2.73	64.94	74	-9.06		
5150	54.08	AV	225	1.7	H	-2.73	51.35	54	-2.65		
5150	63.94	PK	141	2.2	V	-2.73	61.21	74	-12.79		
5150	51.57	AV	141	2.2	V	-2.73	48.84	54	-5.16		
5210MHz_26Tone_RU36(Worst Case)											
5350	64.91	PK	191	2.3	H	-2.33	62.58	74	-11.42		
5350	51.91	AV	191	2.3	H	-2.33	49.58	54	-4.42		
5350	63.72	PK	188	2.3	V	-2.33	61.39	74	-12.61		
5350	51.26	AV	188	2.3	V	-2.33	48.93	54	-5.07		
5460	64.05	PK	320	2.5	H	-2.30	61.75	74	-12.25		
5460	51.34	AV	320	2.5	H	-2.30	49.04	54	-4.96		
5460	63.75	PK	184	1.3	V	-2.30	61.45	74	-12.55		
5460	51.34	AV	184	1.3	V	-2.30	49.04	54	-4.96		
5210MHz_996Tone_RU67(Worst Case)											
10420	41.60	PK	149	1.7	H	8.32	49.92	68.2	-18.28		
10420	41.53	PK	356	1.7	V	8.32	49.85	68.2	-18.35		

5250-5350 MHz:

Frequency (MHz)	Receiver		Turn-Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/AV)	Angle Degree	Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)		
802.11A MIMO(Worst case)											
5260MHz											
4500	64.43	PK	12	1.6	H	-4.72	59.71	74	-14.29		
4500	50.43	AV	32	1.6	H	-4.72	45.71	54	-8.29		
4500	63.92	PK	163	1.7	V	-4.72	59.20	74	-14.8		
4500	50.49	AV	169	1.7	V	-4.72	45.77	54	-8.23		
5150	65.12	PK	51	1.9	H	-2.73	62.39	74	-11.61		
5150	53.91	AV	164	1.9	H	-2.73	51.18	54	-2.82		
5150	63.83	PK	211	1.6	V	-2.73	61.10	74	-12.9		
5150	51.45	AV	263	1.6	V	-2.73	48.72	54	-5.28		
10520	44.48	PK	69	1.7	H	8.65	53.13	68.2	-15.07		
10520	46.25	PK	113	1.7	V	8.65	54.90	68.2	-13.30		
5280MHz											
10560	45.21	PK	186	2.1	H	8.65	53.86	68.2	-14.34		
10560	46.82	PK	253	2.1	V	8.65	55.47	68.2	-12.73		
5320MHz											
5350	69.07	PK	345	2.2	H	-2.33	66.74	74	-7.26		
5350	55.17	AV	345	2.2	H	-2.33	52.84	54	-1.16		
5350	63.91	PK	245	1.5	V	-2.33	61.58	74	-12.42		
5350	51.24	AV	245	1.5	V	-2.33	48.91	54	-5.09		
5460	63.86	PK	280	2.3	H	-2.30	61.56	74	-12.44		
5460	51.54	AV	280	2.3	H	-2.30	49.24	54	-4.76		
5460	63.75	PK	155	2.5	V	-2.30	61.45	74	-12.55		
5460	51.21	AV	155	2.5	V	-2.30	48.91	54	-5.09		
10640	47.03	PK	317	1	H	8.93	55.96	74	-18.04		
10640	37.86	AV	317	1	H	8.93	46.79	54	-7.21		
10640	47.68	PK	241	2.4	V	8.93	56.61	74	-17.39		
10640	43.98	AV	241	2.4	V	8.93	52.91	54	-1.09		

Frequency (MHz)	Receiver		Turn- Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/AV)	Angle Degree	Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)		
802.11N20 MIMO + No-BF (Worst case)											
5260MHz											
4500	64.10	PK	85	2	H	-4.72	59.38	74	-14.62		
4500	50.11	AV	49	2	H	-4.72	45.39	54	-8.61		
4500	63.92	PK	355	1.1	V	-4.72	59.20	74	-14.8		
4500	50.04	AV	158	1.1	V	-4.72	45.32	54	-8.68		
5150	64.48	PK	340	1.4	H	-2.73	61.75	74	-12.25		
5150	51.44	AV	295	1.4	H	-2.73	48.71	54	-5.29		
5150	63.87	PK	283	1.9	V	-2.73	61.14	74	-12.86		
5150	51.20	AV	224	1.9	V	-2.73	48.47	54	-5.53		
10520	43.27	PK	283	1.2	H	8.65	51.92	68.2	-16.28		
10520	44.98	PK	11	1.2	V	8.65	53.63	68.2	-14.57		
5280MHz											
10560	45.24	PK	288	1.4	H	8.65	53.89	68.2	-14.31		
10560	46.72	PK	138	1.4	V	8.65	55.37	68.2	-12.83		
5320MHz											
5350	69.68	PK	156	1.1	H	-2.33	67.35	74	-6.65		
5350	54.49	AV	156	1.1	H	-2.33	52.16	54	-1.84		
5350	65.41	PK	213	1.9	V	-2.33	63.08	74	-10.92		
5350	51.77	AV	213	1.9	V	-2.33	49.44	54	-4.56		
5460	64.06	PK	157	1.2	H	-2.30	61.76	74	-12.24		
5460	51.08	AV	157	1.2	H	-2.30	48.78	54	-5.22		
5460	63.71	PK	227	1.5	V	-2.30	61.41	74	-12.59		
5460	50.92	AV	227	1.5	V	-2.30	48.62	54	-5.38		
10640	44.63	PK	155	2.3	H	8.93	53.56	74	-20.44		
10640	45.70	PK	323	1.4	V	8.93	54.63	74	-19.37		
10640	38.19	AV	323	1.4	V	8.93	47.12	54	-6.88		

Frequency (MHz)	Receiver		Turn- Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/AV)	Angle Degree	Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)		
802.11N40 MIMO + No-BF (Worst case)											
5270MHz											
4500	64.13	PK	230	1	H	-4.72	59.41	74	-14.59		
4500	50.08	AV	88	1	H	-4.72	45.36	54	-8.64		
4500	63.97	PK	46	1.5	V	-4.72	59.25	74	-14.75		
4500	50.02	AV	195	1.5	V	-4.72	45.30	54	-8.7		
5150	65.30	PK	332	2.2	H	-2.73	62.57	74	-11.43		
5150	51.35	AV	46	2.2	H	-2.73	48.62	54	-5.38		
5150	64.52	PK	130	1.8	V	-2.73	61.79	74	-12.21		
5150	50.96	AV	66	1.8	V	-2.73	48.23	54	-5.77		
10540	43.61	PK	31	1.3	H	8.65	52.26	68.2	-15.94		
10540	44.92	PK	140	1.3	V	8.65	53.57	68.2	-14.63		
5310MHz											
5350	70.46	PK	286	2.2	H	-2.33	68.13	74	-5.87		
5350	55.15	AV	286	2.2	H	-2.33	52.82	54	-1.18		
5350	64.81	PK	102	1.7	V	-2.33	62.48	74	-11.52		
5350	51.75	AV	102	1.7	V	-2.33	49.42	54	-4.58		
5460	64.02	PK	191	1.6	H	-2.30	61.72	74	-12.28		
5460	50.95	AV	191	1.6	H	-2.30	48.65	54	-5.35		
5460	63.78	PK	327	1.4	V	-2.30	61.48	74	-12.52		
5460	50.83	AV	327	1.4	V	-2.30	48.53	54	-5.47		
10620	44.36	PK	164	2.2	H	8.80	53.16	74	-20.84		
10620	45.93	PK	109	1.7	V	8.80	54.73	74	-19.27		
10620	38.25	AV	200	1.7	V	8.80	47.05	54	-6.95		

Frequency (MHz)	Receiver		Turn- Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/AV)	Angle Degree	Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)		
802.11AC20 MIMO + No-BF (Worst case)											
5260MHz											
4500	64.24	PK	82	1.9	H	-4.72	59.52	74	-14.48		
4500	50.15	AV	352	1.9	H	-4.72	45.43	54	-8.57		
4500	64.01	PK	346	1	V	-4.72	59.29	74	-14.71		
4500	50.08	AV	315	1	V	-4.72	45.36	54	-8.64		
5150	64.84	PK	50	2.2	H	-2.73	62.11	74	-11.89		
5150	51.59	AV	318	2.2	H	-2.73	48.86	54	-5.14		
5150	64.20	PK	271	2.4	V	-2.73	61.47	74	-12.53		
5150	51.26	AV	194	2.4	V	-2.73	48.53	54	-5.47		
10520	43.79	PK	52	1.4	H	8.65	52.44	68.2	-15.76		
10520	45.07	PK	261	1.4	V	8.65	53.72	68.2	-14.48		
5280MHz											
10560	45.08	PK	266	2	H	8.65	53.73	68.2	-14.47		
10560	46.63	PK	331	2	V	8.65	55.28	68.2	-12.92		
5320MHz											
5350	70.76	PK	191	2.5	H	-2.33	68.43	74	-5.57		
5350	54.70	AV	191	2.5	H	-2.33	52.37	54	-1.63		
5350	65.47	PK	7	1.9	V	-2.33	63.14	74	-10.86		
5350	51.79	AV	7	1.9	V	-2.33	49.46	54	-4.54		
5460	64.08	PK	294	1.2	H	-2.30	61.78	74	-12.22		
5460	51.19	AV	294	1.2	H	-2.30	48.89	54	-5.11		
5460	63.85	PK	220	2.3	V	-2.30	61.55	74	-12.45		
5460	51.06	AV	220	2.3	V	-2.30	48.76	54	-5.24		
10640	44.94	PK	56	1.1	H	8.93	53.87	74	-20.13		
10640	46.12	PK	92	1.3	V	8.93	55.05	74	-18.95		
10640	38.30	AV	92	1.3	V	8.93	47.23	54	-6.77		

Frequency (MHz)	Receiver		Turn- Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/AV)	Angle Degree	Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)		
802.11AC40 MIMO + No-BF (Worst case)											
5270MHz											
4500	64.30	PK	59	1.6	H	-4.72	59.58	74	-14.42		
4500	50.19	AV	149	1.6	H	-4.72	45.47	54	-8.53		
4500	64.15	PK	208	2.3	V	-4.72	59.43	74	-14.57		
4500	50.12	AV	190	2.3	V	-4.72	45.40	54	-8.6		
5150	65.48	PK	197	1.4	H	-2.73	62.75	74	-11.25		
5150	51.49	AV	92	1.4	H	-2.73	48.76	54	-5.24		
5150	64.50	PK	171	1.2	V	-2.73	61.77	74	-12.23		
5150	51.15	AV	100	1.2	V	-2.73	48.42	54	-5.58		
10540	43.88	PK	265	1.1	H	8.65	52.53	68.2	-15.67		
10540	45.17	PK	326	1.1	V	8.65	53.82	68.2	-14.38		
5310MHz											
5350	71.61	PK	25	2.1	H	-2.33	69.28	74	-4.72		
5350	55.24	AV	25	2.1	H	-2.33	52.91	54	-1.09		
5350	65.17	PK	150	1.3	V	-2.33	62.84	74	-11.16		
5350	51.86	AV	150	1.3	V	-2.33	49.53	54	-4.47		
5460	64.13	PK	55	1.6	H	-2.30	61.83	74	-12.17		
5460	51.04	AV	55	1.6	H	-2.30	48.74	54	-5.26		
5460	63.95	PK	4	1.8	V	-2.30	61.65	74	-12.35		
5460	50.90	AV	4	1.8	V	-2.30	48.6	54	-5.4		
10620	44.64	PK	320	1.9	H	8.80	53.44	74	-20.56		
10620	46.03	PK	300	1.7	V	8.80	54.83	74	-19.17		
10620	38.29	AV	275	1.7	V	8.80	47.09	54	-6.91		

Frequency (MHz)	Receiver		Turn- Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/AV)	Angle Degree	Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)		
802.11AC80 MIMO + No-BF (Worst case)											
5290MHz											
4500	66.34	PK	238	2.2	H	-4.72	61.62	74	-12.38		
4500	52.65	AV	178	2.2	H	-4.72	47.93	54	-6.07		
4500	66.10	PK	200	1.7	V	-4.72	61.38	74	-12.62		
4500	52.49	AV	63	1.7	V	-4.72	47.77	54	-6.23		
5150	63.52	PK	282	1.6	H	-2.73	60.79	74	-13.21		
5150	49.85	AV	306	1.6	H	-2.73	47.12	54	-6.88		
5150	63.56	PK	92	1.8	V	-2.73	60.83	74	-13.17		
5150	49.71	AV	240	1.8	V	-2.73	46.98	54	-7.02		
5350	69.86	PK	324	2.2	H	-2.33	67.53	74	-6.47		
5350	55.31	AV	324	2.2	H	-2.33	52.98	54	-1.02		
5350	65.37	PK	10	1.7	V	-2.33	63.04	74	-10.96		
5350	51.13	AV	10	1.7	V	-2.33	48.8	54	-5.2		
5460	69.18	PK	132	2.4	H	-2.30	66.88	74	-7.12		
5460	53.96	AV	132	2.4	H	-2.30	51.66	54	-2.34		
5460	64.88	PK	172	2.3	V	-2.30	62.58	74	-11.42		
5460	50.63	AV	172	2.3	V	-2.30	48.33	54	-5.67		
10580	44.94	PK	319	1.4	H	8.70	53.64	68.2	-14.56		
10580	46.53	PK	316	1.4	V	8.70	55.23	68.2	-12.97		

Frequency (MHz)	Receiver		Turn- Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/AV)	Angle Degree	Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)		
802.11AX20 MIMO + No-BF (Worst case)											
5260MHz_26Tone_RU0(Worst Case)											
4500	64.34	PK	243	1	H	-4.72	59.62	74	-14.38		
4500	50.22	AV	12	1	H	-4.72	45.50	54	-8.5		
4500	64.20	PK	292	1.5	V	-4.72	59.48	74	-14.52		
4500	50.13	AV	141	1.5	V	-4.72	45.41	54	-8.59		
5150	64.82	PK	301	1.8	H	-2.73	62.09	74	-11.91		
5150	51.57	AV	121	1.8	H	-2.73	48.84	54	-5.16		
5150	64.08	PK	80	1.4	V	-2.73	61.35	74	-12.65		
5150	51.24	AV	234	1.4	V	-2.73	48.51	54	-5.49		
5260MHz_242Tone_RU61(Worst Case)											
10520	44.11	PK	239	2.4	H	8.65	52.76	68.2	-15.44		
10520	45.42	PK	360	2.4	V	8.65	54.07	68.2	-14.13		
5280MHz_242Tone_RU61(Worst Case)											
10560	45.38	PK	347	2.2	H	8.65	54.03	68.2	-14.17		
10560	46.34	PK	290	2.2	V	8.65	54.99	68.2	-13.21		
5320MHz_26Tone_RU8(Worst Case)											
5350	70.41	PK	66	2	H	-2.33	68.08	74	-5.92		
5350	54.85	AV	66	2	H	-2.33	52.52	54	-1.48		
5350	65.60	PK	99	1.5	V	-2.33	63.27	74	-10.73		
5350	51.76	AV	99	1.5	V	-2.33	49.43	54	-4.57		
5460	64.04	PK	47	1.3	H	-2.30	61.74	74	-12.26		
5460	51.13	AV	47	1.3	H	-2.30	48.83	54	-5.17		
5460	66.80	PK	228	1.3	V	-2.30	64.5	74	-9.5		
5460	50.92	AV	228	1.3	V	-2.30	48.62	54	-5.38		
5320MHz_242Tone_RU61(Worst Case)											
10640	45.09	PK	152	1.8	H	8.93	54.02	74	-19.98		
10640	36.50	AV	152	1.8	H	8.93	45.43	54	-8.57		
10640	46.27	PK	67	2.1	V	8.93	55.20	74	-18.80		
10640	38.06	AV	67	2.1	V	8.93	46.99	54	-7.01		

Frequency (MHz)	Receiver		Turn- Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/AV)	Angle Degree	Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)		
802.11AX40 MIMO + No-BF (Worst case)											
5270MHz_26Tone_RU0(Worst Case)											
4500	64.45	PK	122	1.2	H	-4.72	59.73	74	-14.27		
4500	50.31	AV	148	1.2	H	-4.72	45.59	54	-8.41		
4500	65.34	PK	186	1.1	V	-4.72	60.62	74	-13.38		
4500	50.20	AV	243	1.1	V	-4.72	45.48	54	-8.52		
5150	65.09	PK	324	1	H	-2.73	62.36	74	-11.64		
5150	51.55	AV	325	1	H	-2.73	48.82	54	-5.18		
5150	64.30	PK	60	1.4	V	-2.73	61.57	74	-12.43		
5150	51.14	AV	111	1.4	V	-2.73	48.41	54	-5.59		
5270MHz_484Tone_RU65(Worst Case)											
10540	43.98	PK	352	1.3	H	8.65	52.63	68.2	-15.57		
10540	45.04	PK	280	1.3	V	8.65	53.69	68.2	-14.51		
5310MHz_26Tone_RU17(Worst Case)											
5350	72.44	PK	213	1.9	H	-2.33	70.11	74	-3.89		
5350	55.06	AV	213	1.9	H	-2.33	52.73	54	-1.27		
5350	65.58	PK	111	1.5	V	-2.33	63.25	74	-10.75		
5350	51.81	AV	111	1.5	V	-2.33	49.48	54	-4.52		
5460	63.95	PK	92	1.8	H	-2.30	61.65	74	-12.35		
5460	51.03	AV	92	1.8	H	-2.30	48.73	54	-5.27		
5460	63.76	PK	263	2.3	V	-2.30	61.46	74	-12.54		
5460	50.91	AV	263	2.3	V	-2.30	48.61	54	-5.39		
5310MHz_484Tone_RU65(Worst Case)											
10620	44.52	PK	21	1.2	H	8.80	53.32	74	-20.68		
10620	46.25	PK	56	1.4	V	8.80	55.05	74	-18.95		
10620	38.00	AV	7	1.4	V	8.80	46.80	54	-7.20		

Frequency (MHz)	Receiver		Turn- Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/AV)	Angle Degree	Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)		
802.11AX80 MIMO + No-BF (Worst case)											
5290MHz_26Tone_RU0(Worst Case)											
4500	66.86	PK	336	2.3	H	-4.72	62.14	74	-11.86		
4500	52.81	AV	43	2.3	H	-4.72	48.09	54	-5.91		
4500	66.25	PK	120	2	V	-4.72	61.53	74	-12.47		
4500	52.67	AV	263	2	V	-4.72	47.95	54	-6.05		
5150	64.09	PK	107	1.1	H	-2.73	61.36	74	-12.64		
5150	50.61	AV	240	1.1	H	-2.73	47.88	54	-6.12		
5150	63.89	PK	220	1.6	V	-2.73	61.16	74	-12.84		
5150	50.60	AV	241	1.6	V	-2.73	47.87	54	-6.13		
5290MHz_26Tone_RU36(Worst Case)											
5350	70.59	PK	36	2	H	-2.33	68.26	74	-5.74		
5350	55.14	AV	36	2	H	-2.33	52.81	54	-1.19		
5350	65.30	PK	254	1.5	V	-2.33	62.97	74	-11.03		
5350	51.37	AV	254	1.5	V	-2.33	49.04	54	-4.96		
5460	69.99	PK	323	1.5	H	-2.30	67.69	74	-6.31		
5460	53.93	AV	323	1.5	H	-2.30	51.63	54	-2.37		
5460	63.84	PK	96	2.5	V	-2.30	61.54	74	-12.46		
5460	51.12	AV	96	2.5	V	-2.30	48.82	54	-5.18		
5290MHz_996Tone_RU67(Worst Case)											
10580	45.07	PK	83	1.1	H	8.70	53.77	68.2	-14.43		
10580	46.40	PK	145	1.1	V	8.70	55.10	68.2	-13.10		

5470-5725MHz:

Frequency (MHz)	Receiver		Turn- Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407				
	Reading (dB μ V)	Detector (PK/QP/AV)		Angle Degree	Height (m)			Limit (dB μ V/m)	Margin (dB)			
802.11A MIMO(Worst case)												
5500MHz												
5460	63.78	PK	119	2.2	H	-2.26	61.52	74	-12.48			
5460	51.45	AV	119	2.2	H	-2.26	49.19	54	-4.81			
5460	63.51	PK	297	1.8	V	-2.26	61.25	74	-12.75			
5460	50.99	AV	297	1.8	V	-2.26	48.73	54	-5.27			
5470	66.66	PK	160	1.1	H	-2.20	64.46	68.2	-3.74			
5470	64.91	PK	86	1.9	V	-2.20	62.71	68.2	-5.49			
11000	42.81	PK	261	2	H	9.67	52.48	74	-21.52			
11000	43.57	PK	156	1.5	V	9.67	53.24	74	-20.76			
5580MHz												
11160	44.17	PK	234	1.8	H	8.60	52.77	74	-21.23			
11160	44.83	PK	238	1.8	V	8.60	53.43	74	-20.57			
5700MHz												
5725	69.19	PK	264	1.3	H	-2.02	67.17	68.2	-1.03			
5725	66.26	AV	264	1.3	H	-2.02	64.24	68.2	-3.96			
11400	47.12	PK	320	1.2	H	7.26	54.38	74	-19.62			
11400	36.09	AV	320	1.2	H	7.26	43.35	54	-10.65			
11400	47.95	PK	8	1.2	V	7.26	55.21	74	-18.79			
11400	37.03	AV	8	1.2	V	7.26	44.29	54	-9.71			
5720MHz												
5850	66.10	PK	140	2.2	H	-1.81	64.29	68.2	-3.91			
5850	65.79	PK	201	1.2	V	-1.81	63.98	68.2	-4.22			
6000	65.26	PK	206	1.2	H	-1.71	63.55	68.2	-4.65			
6000	65.16	PK	300	1.8	V	-1.71	63.45	68.2	-4.75			
11440	46.61	PK	168	2.1	H	6.91	53.52	74	-20.48			
11440	47.05	PK	349	1.5	V	6.91	53.96	74	-20.04			

Frequency (MHz)	Receiver		Turn- Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/AV)	Angle Degree	Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)		
802.11N20 MIMO + No-BF (Worst case)											
5500MHz											
5460	63.88	PK	217	2.5	H	-2.26	61.62	74	-12.38		
5460	51.40	AV	217	2.5	H	-2.26	49.14	54	-4.86		
5460	63.67	PK	228	2.4	V	-2.26	61.41	74	-12.59		
5460	50.69	AV	228	2.4	V	-2.26	48.43	54	-5.57		
5470	66.88	PK	142	1.5	H	-2.20	64.68	68.2	-3.52		
5470	65.49	PK	197	1.1	V	-2.20	63.29	68.2	-4.91		
11000	42.85	PK	113	2	H	9.67	52.52	74	-21.48		
11000	44.11	PK	343	1.1	V	9.67	53.78	74	-20.22		
5580MHz											
11160	43.25	PK	40	1.7	H	8.60	51.85	74	-22.15		
11160	44.07	PK	38	1.7	V	8.60	52.67	74	-21.33		
5700MHz											
5725	69.22	PK	33	1.7	H	-2.02	67.2	68.2	-1.00		
5725	66.24	AV	33	1.7	H	-2.02	64.22	68.2	-3.98		
11400	45.91	PK	352	1.2	H	7.26	53.17	74	-20.83		
11400	47.14	PK	138	1.1	V	7.26	54.4	74	-19.60		
11400	37.19	AV	138	1.1	V	7.26	44.45	54	-9.55		
5720MHz											
5850	66.07	PK	230	1.7	H	-1.81	64.26	68.2	-3.94		
5850	65.73	PK	3	1.4	V	-1.81	63.92	68.2	-4.28		
6000	65.38	PK	289	1.2	H	-1.71	63.67	68.2	-4.53		
6000	65.28	PK	265	2.5	V	-1.71	63.57	68.2	-4.63		
11440	46.42	PK	170	1.6	H	6.91	53.33	74	-20.67		
11440	46.93	PK	165	1.9	V	6.91	53.84	74	-20.16		

Frequency (MHz)	Receiver		Turn- Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/AV)	Angle Degree	Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)		
802.11N40 MIMO + No-BF (Worst case)											
5510MHz											
5460	63.77	PK	255	1	H	-2.26	61.51	74	-12.49		
5460	51.85	AV	255	1	H	-2.26	49.59	54	-4.41		
5460	63.64	PK	191	2.4	V	-2.26	61.38	74	-12.62		
5460	50.82	AV	191	2.4	V	-2.26	48.56	54	-5.44		
5470	66.55	PK	55	1.5	H	-2.20	64.35	68.2	-3.85		
5470	65.20	PK	305	2.4	V	-2.20	63.00	68.2	-5.20		
11020	42.44	PK	71	1.7	H	9.6	52.04	74	-21.96		
11020	42.71	PK	302	1.2	V	9.6	52.31	74	-21.69		
5550MHz											
11100	40.85	PK	211	1.7	H	9.12	49.97	74	-24.03		
11100	41.13	PK	279	1.7	V	9.12	50.25	74	-23.75		
5670MHz											
5725	66.26	PK	169	2.2	H	-2.02	64.24	68.2	-3.96		
5725	65.85	AV	169	2.2	H	-2.02	63.83	68.2	-4.37		
11340	44.20	PK	9	2.4	H	7.60	51.8	74	-22.20		
11340	45.52	PK	311	1	V	7.60	53.12	74	-20.88		
5710MHz											
5850	66.10	PK	265	1.6	H	-1.81	64.29	68.2	-3.91		
5850	66.07	PK	119	1.1	V	-1.81	64.26	68.2	-3.94		
6000	65.24	PK	175	1.6	H	-1.71	63.53	68.2	-4.67		
6000	65.55	PK	281	1.3	V	-1.71	63.84	68.2	-4.36		
11420	48.33	PK	299	1.0	H	7.08	55.41	74	-18.59		
11420	38.31	AV	299	1	H	7.08	45.39	54	-8.61		
11420	49.18	PK	317	1.7	V	7.08	56.26	74	-17.74		
11420	39.37	AV	317	1.7	V	7.08	46.45	54	-7.55		

Frequency (MHz)	Receiver		Turn- Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407				
	Reading (dB μ V)	Detector (PK/QP/AV)		Angle Degree	Height (m)			Limit (dB μ V/m)	Margin (dB)			
802.11AC20 MIMO + No-BF (Worst case)												
5500MHz												
5460	63.99	PK	279	1.4	H	-2.26	61.73	74	-12.27			
5460	51.47	AV	279	1.4	H	-2.26	49.21	54	-4.79			
5460	63.84	PK	208	1.9	V	-2.26	61.58	74	-12.42			
5460	50.78	AV	208	1.9	V	-2.26	48.52	54	-5.48			
5470	66.94	PK	206	1.5	H	-2.20	64.74	68.2	-3.46			
5470	65.76	PK	221	2	V	-2.20	63.56	68.2	-4.64			
11000	43.07	PK	108	2.3	H	9.67	52.74	74	-21.26			
11000	44.46	PK	156	1.1	V	9.67	54.13	74	-19.87			
11000	34.94	AV	156	1.1	V	9.67	44.61	54	-9.39			
5580MHz												
11160	43.45	PK	43	1.6	H	8.60	52.05	74	-21.95			
11160	44.50	PK	36	1.6	V	8.60	53.10	74	-20.90			
5700MHz												
5725	68.99	PK	67	1	H	-2.02	66.97	68.2	-1.23			
5725	66.55	AV	67	1	H	-2.02	64.53	68.2	-3.67			
11400	46.33	PK	137	2.3	H	7.26	53.59	74	-20.41			
11400	47.30	PK	213	1.1	V	7.26	54.56	74	-19.44			
11400	37.42	AV	213	1.1	V	7.26	44.68	54	-9.32			
5720MHz												
5850	66.09	PK	306	1	H	-1.81	64.28	68.2	-3.92			
5850	65.91	PK	357	1	V	-1.81	64.10	68.2	-4.10			
6000	65.31	PK	135	2.1	H	-1.71	63.60	68.2	-4.60			
6000	65.22	PK	204	1.2	V	-1.71	63.51	68.2	-4.69			
11440	46.39	PK	208	2.5	H	6.91	53.30	74	-20.70			
11440	47.04	PK	162	2.5	V	6.91	53.95	74	-20.05			

Frequency (MHz)	Receiver		Turn-Table	Rx Antenna			Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/AV)	Angle Degree	Height (m)	Polar (H / V)	Limit (dB μ V/m)			Limit (dB μ V/m)	Margin (dB)		
802.11AC40 MIMO + No-BF (Worst case)												
5510MHz												
5460	64.06	PK	104	2.2	H	-2.26	61.80	74	-12.20			
5460	52.01	AV	104	2.2	H	-2.26	49.75	54	-4.25			
5460	63.89	PK	280	1.7	V	-2.26	61.63	74	-12.37			
5460	51.00	AV	280	1.7	V	-2.26	48.74	54	-5.26			
5470	66.99	PK	156	1.7	H	-2.20	64.79	68.2	-3.41			
5470	65.72	PK	37	2.3	V	-2.20	63.52	68.2	-4.68			
11020	42.58	PK	292	2.3	H	9.6	52.18	74	-21.82			
11020	43.17	PK	345	1.3	V	9.6	52.77	74	-21.23			
5550MHz												
11100	41.21	PK	333	1.3	H	9.12	50.33	74	-23.67			
11100	42.46	PK	148	1.3	V	9.12	51.58	74	-22.42			
5670MHz												
5725	66.88	PK	242	2	H	-2.02	64.86	68.2	-3.34			
5725	65.80	AV	242	2	H	-2.02	63.78	68.2	-4.42			
11340	44.78	PK	359	1.4	H	7.6	52.38	74	-21.62			
11340	45.99	PK	45	1.4	V	7.6	53.59	74	-20.41			
5710MHz												
5850	66.16	PK	305	1.2	H	-1.81	64.35	68.2	-3.85			
5850	66.11	PK	87	1.6	V	-1.81	64.30	68.2	-3.90			
6000	65.36	PK	236	2.1	H	-1.71	63.65	68.2	-4.55			
6000	65.41	PK	265	1.6	V	-1.71	63.70	68.2	-4.50			
11420	48.29	PK	337	1.3	H	7.08	55.37	74	-18.63			
11420	38.65	AV	337	1.3	H	7.08	45.73	54	-8.27			
11420	49.33	PK	331	1.7	V	7.08	56.41	74	-17.59			
11420	39.92	AV	331	1.7	V	7.08	47.00	54	-7.00			

Frequency (MHz)	Receiver		Turn-Table	Rx Antenna			Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/AV)	Angle Degree	Height (m)	Polar (H / V)	Limit (dB μ V/m)			Limit (dB μ V/m)	Margin (dB)		
802.11AC80 MIMO + No-BF (Worst case)												
5530MHz												
5460	66.07	PK	247	2.4	H	-2.26	63.81	74	-10.19			
5460	53.18	AV	247	2.4	H	-2.26	50.92	54	-3.08			
5460	63.69	PK	330	1.6	V	-2.26	61.43	74	-12.57			
5460	50.91	AV	330	1.6	V	-2.26	48.65	54	-5.35			
5470	67.31	PK	276	1.7	H	-2.20	65.11	68.2	-3.09			
5470	65.96	PK	158	1.2	V	-2.20	63.76	68.2	-4.44			
11060	41.11	PK	134	2	H	9.40	50.51	74	-23.49			
11060	41.60	PK	281	2	V	9.40	51.00	74	-23.00			
5610MHz												
5725	67.20	PK	249	2	H	-2.02	65.18	68.2	-3.02			
5725	66.92	AV	249	2	H	-2.02	64.90	68.2	-3.30			
11220	42.71	PK	147	2.1	H	8.40	51.11	74	-22.89			
11220	43.36	PK	91	2.1	V	8.40	51.76	74	-22.24			
5690MHz												
5850	66.34	PK	10	2	H	-1.81	64.53	68.2	-3.67			
5850	66.57	PK	128	1.5	V	-1.81	64.76	68.2	-3.44			
6000	65.77	PK	347	1.3	H	-1.71	64.06	68.2	-4.14			
6000	65.59	PK	291	1.5	V	-1.71	63.88	68.2	-4.32			
11380	46.97	PK	187	1.2	H	7.40	54.37	74	-19.63			
11380	37.93	AV	187	1.2	H	7.40	45.33	54	-8.67			
11380	47.89	PK	54	2.2	V	7.40	55.29	74	-18.71			
11380	38.36	AV	54	2.2	V	7.40	45.76	54	-8.24			

Frequency (MHz)	Receiver		Turn-Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/AV)	Angle Degree	Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)		
802.11AX20 MIMO + No-BF (Worst case)											
5500MHz_26Tone_RU0(Worst Case)											
5460	63.86	PK	259	1.6	H	-2.26	61.60	74	-12.40		
5460	51.55	AV	259	1.6	H	-2.26	49.29	54	-4.71		
5460	63.72	PK	120	2.3	V	-2.26	61.46	74	-12.54		
5460	50.88	AV	120	2.3	V	-2.26	48.62	54	-5.38		
5470	66.85	PK	245	2.4	H	-2.20	64.65	68.2	-3.55		
5470	65.93	PK	153	2.1	V	-2.20	63.73	68.2	-4.47		
5500MHz_242Tone_RU61(Worst Case)											
11000	43.20	PK	102	2.2	H	9.67	52.87	74	-21.13		
11000	44.41	PK	189	2.3	V	9.67	54.08	74	-19.92		
11000	35.04	AV	189	2.3	V	9.67	44.71	54	-9.29		
5580MHz_242Tone_RU61(Worst Case)											
11160	43.68	PK	262	1.5	H	8.60	52.28	74	-21.72		
11160	44.76	PK	196	1.5	V	8.60	53.36	74	-20.64		
5700MHz_26Tone_RU8(Worst Case)											
5725	69.12	PK	312	1.9	H	-2.02	67.1	68.2	-1.10		
5725	66.69	AV	312	1.9	H	-2.02	64.67	68.2	-3.53		
5700MHz_242Tone_RU61(Worst Case)											
11400	46.63	PK	199	1.7	H	7.26	53.89	74	-20.11		
11400	47.75	PK	359	2.4	V	7.26	55.01	74	-18.99		
11400	37.50	AV	359	2.4	V	7.26	44.76	54	-9.24		
5720MHz_26Tone_RU8(Worst Case)											
5850	65.96	PK	229	1.9	H	-1.81	64.15	68.2	-4.05		
5850	65.97	PK	75	2	V	-1.81	64.16	68.2	-4.04		
6000	65.42	PK	189	2.2	H	-1.71	63.71	68.2	-4.49		
6000	65.29	PK	54	2.3	V	-1.71	63.58	68.2	-4.62		
5720MHz_242Tone_RU61(Worst Case)											
11440	46.38	PK	114	1.6	H	6.91	53.29	74	-20.71		
11440	46.98	PK	243	2.4	V	6.91	53.89	74	-20.11		

Frequency (MHz)	Receiver		Turn-Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/A V)	Angle Degree	Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)		
802.11AX40 MIMO + No-BF (Worst case)											
5510MHz_26Tone_RU0(Worst Case)											
5460	63.97	PK	205	1	H	-2.26	61.71	74	-12.29		
5460	51.88	AV	205	1	H	-2.26	49.62	54	-4.38		
5460	63.79	PK	205	1.8	V	-2.26	61.53	74	-12.47		
5460	50.96	AV	205	1.8	V	-2.26	48.70	54	-5.30		
5470	67.23	PK	82	1.9	H	-2.20	65.03	68.2	-3.17		
5470	65.94	PK	139	2.1	V	-2.20	63.74	68.2	-4.46		
5510MHz_484Tone_RU65(Worst Case)											
11020	42.80	PK	59	1.2	H	9.6	52.4	74	-21.60		
11020	43.34	PK	140	2.2	V	9.6	52.94	74	-21.06		
5550MHz_484Tone_RU65(Worst Case)											
11100	41.64	PK	47	2.1	H	9.12	50.76	74	-23.24		
11100	42.79	PK	192	2.1	V	9.12	51.91	74	-22.09		
5670MHz_26Tone_RU17(Worst Case)											
5725	66.99	PK	267	1.6	H	-2.02	64.97	68.2	-3.23		
5725	66.13	AV	267	1.6	H	-2.02	64.11	68.2	-4.09		
5670MHz_484Tone_RU65(Worst Case)											
11340	45.19	PK	251	1.8	H	7.60	52.79	74	-21.21		
11340	46.27	PK	147	1.8	V	7.60	53.87	74	-20.13		
5710MHz_26Tone_RU17(Worst Case)											
5850	66.04	PK	77	1.6	H	-1.81	64.23	68.2	-3.97		
5850	66.16	PK	299	1.2	V	-1.81	64.35	68.2	-3.85		
6000	65.17	PK	21	1.9	H	-1.71	63.46	68.2	-4.74		
6000	65.31	PK	199	1.5	V	-1.71	63.60	68.2	-4.60		
5710MHz_484Tone_RU65(Worst Case)											
11420	48.31	PK	21	1.3	H	7.08	55.39	74	-18.61		
11420	38.69	AV	21	1.3	H	7.08	45.77	54	-8.23		
11420	49.21	PK	176	2.2	V	7.08	56.29	74	-17.71		
11420	40.13	AV	176	2.2	V	7.08	47.21	54	-6.79		

Frequency (MHz)	Receiver		Turn-Table	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407			
	Reading (dB μ V)	Detector (PK/QP/A V)	Angle Degree	Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)		
802.11AX80 MIMO + No-BF (Worst case)											
5530MHz_26Tone_RU0(Worst Case)											
5460	65.87	PK	102	1.3	H	-2.26	63.61	74	-10.39		
5460	53.31	AV	102	1.3	H	-2.26	51.05	54	-2.95		
5460	64.02	PK	326	2.4	V	-2.26	61.76	74	-12.24		
5460	51.05	AV	326	2.4	V	-2.26	48.79	54	-5.21		
5470	67.26	PK	7	1.9	H	-2.2	65.06	68.2	-3.14		
5470	66.33	PK	96	1.3	V	-2.2	64.13	68.2	-4.07		
5610MHz_26Tone_RU36(Worst Case)											
5725	67.37	PK	101	2.1	H	-2.02	65.35	68.2	-2.85		
5725	66.79	AV	101	2.1	H	-2.02	64.77	68.2	-3.43		
5610MHz_996Tone_RU67(Worst Case)											
11220	42.94	PK	237	1.4	H	8.40	51.34	74	-22.66		
11220	43.62	PK	266	1.4	V	8.40	52.02	74	-21.98		
5690MHz_26Tone_RU36(Worst Case)											
5850	66.33	PK	68	2.5	H	-1.81	64.52	68.2	-3.68		
5850	66.57	PK	86	2.4	V	-1.81	64.76	68.2	-3.44		
6000	65.97	PK	17	1.2	H	-1.71	64.26	68.2	-3.94		
6000	65.72	PK	274	2.1	V	-1.71	64.01	68.2	-4.19		
5690MHz_996Tone_RU67(Worst Case)											
11380	46.98	PK	32	2.4	H	7.40	54.38	74	-19.62		
11380	38.38	AV	32	2.4	H	7.40	45.78	54	-8.22		
11380	48.08	PK	93	1.4	V	7.40	55.48	74	-18.52		
11380	38.33	AV	93	1.4	V	7.40	45.73	54	-8.27		

5725-5850 MHz:

Frequency (MHz)	Receiver		Turn-Table Angle Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407				
	Reading (dB μ V)	Detector (PK/QP/A V)		Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)			
802.11A MIMO(Worst case)												
5745MHz												
5650	65.32	PK	263	2.3	H	-1.95	63.37	68.2	-4.83			
5650	65.33	PK	37	1.6	V	-1.95	63.38	68.2	-4.82			
5700	72.50	PK	23	1.7	H	-2.02	70.48	105.2	-34.72			
5700	70.03	PK	256	2.2	V	-2.02	68.01	105.2	-37.19			
5720	81.25	PK	247	2.4	H	-2.00	79.25	110.8	-31.55			
5720	78.04	PK	23	1.7	V	-2.00	76.04	110.8	-34.76			
5725	98.35	PK	25	1.7	H	-2.00	96.35	122.2	-25.85			
5725	94.17	PK	328	1.7	V	-2.00	92.17	122.2	-30.03			
11490	49.36	PK	188	2	H	6.58	55.94	74	-18.06			
11490	39.60	AV	188	2	H	6.58	46.18	54	-7.82			
11490	49.90	PK	342	1.2	V	6.58	56.48	74	-17.52			
11490	39.56	AV	342	1.2	V	6.58	46.14	54	-7.86			
5785MHz												
11570	49.69	PK	252	1.7	H	6.60	56.29	74	-17.71			
11570	39.85	AV	293	1.7	V	6.60	46.45	54	-7.55			
11570	50.51	PK	267	1.7	H	6.60	57.11	74	-16.89			
11570	40.91	AV	302	1.7	V	6.60	47.51	54	-6.49			
5825MHz												
5850	91.62	PK	54	1.5	H	-1.81	89.81	122.2	-32.39			
5850	87.19	PK	213	1.1	V	-1.81	85.38	122.2	-36.82			
5855	259.80	PK	78	2.1	H	-181	78.80	110.8	-32.00			
5855	77.29	PK	159	2.2	V	-1.81	75.48	110.8	-35.32			
5875	72.25	PK	132	2.5	H	-1.84	70.41	105.2	-34.79			
5875	69.51	PK	218	2.2	V	-1.84	67.67	105.2	-37.53			
5925	65.91	PK	290	1.7	H	-1.80	64.11	68.2	-4.09			
5925	66.14	PK	52	1.7	V	-1.80	64.34	68.2	-3.86			
11650	49.25	PK	30	1.5	H	6.77	56.02	74	-17.98			
11650	38.14	AV	285	1.5	H	6.77	44.91	54	-9.09			
11650	50.98	PK	348	1.3	V	6.77	57.75	74	-16.25			
11650	41.08	AV	348	1.3	V	6.77	47.85	54	-6.15			

Frequency (MHz)	Receiver		Turn-Table Angle Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407				
	Reading (dB μ V)	Detector (PK/QP/A V)		Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)			
802.11N20 MIMO + No-BF (Worst case)												
5745MHz												
5650	65.11	PK	13	2.1	H	-1.95	63.16	68.2	-5.04			
5650	65.11	PK	187	2.3	V	-1.95	63.16	68.2	-5.04			
5700	71.18	PK	234	1.4	H	-2.02	69.16	105.2	-36.04			
5700	69.16	PK	349	2.2	V	-2.02	67.14	105.2	-38.06			
5720	85.38	PK	24	2	H	-2.00	83.38	110.8	-27.42			
5720	85.38	PK	141	2.3	V	-2.00	83.38	110.8	-27.42			
5725	92.43	PK	189	1.7	H	-2.00	90.43	122.2	-31.77			
5725	90.02	PK	90	1.7	V	-2.00	88.02	122.2	-34.18			
11490	45.83	PK	182	1.6	H	6.58	52.41	74	-21.59			
11490	50.87	PK	272	1.3	V	6.58	57.45	74	-16.55			
11490	43.74	AV	287	1.3	V	6.58	50.32	54	-3.68			
5785MHz												
11570	46.57	PK	113	1.7	H	6.60	53.17	74	-20.83			
11570	51.86	PK	129	2	V	6.60	58.46	74	-15.54			
11570	44.17	AV	129	2	V	6.60	50.77	54	-3.23			
5825MHz												
5850	89.55	PK	297	1.6	H	-1.81	87.74	122.2	-34.46			
5850	86.43	PK	3	2.1	V	-1.81	84.62	122.2	-37.58			
5855	259.86	PK	219	1.3	H	-1.81	78.86	110.8	-31.94			
5855	76.58	PK	220	1.3	V	-1.81	74.77	110.8	-36.03			
5875	68.65	PK	266	1.4	H	-1.84	66.81	105.2	-38.39			
5875	67.75	PK	18	1.6	V	-1.84	65.91	105.2	-39.29			
5925	66.01	PK	111	1.7	H	-1.80	64.21	68.2	-3.99			
5925	66.01	PK	347	1.7	V	-1.80	64.21	68.2	-3.99			
11650	45.12	PK	114	1.2	H	6.77	51.89	74	-22.11			
11650	51.19	PK	141	1.5	V	6.77	57.96	74	-16.04			
11650	43.49	AV	141	1.5	V	6.77	50.26	54	-3.74			

Frequency (MHz)	Receiver		Turn-Table Angle Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407				
	Reading (dB μ V)	Detector (PK/QP/A V)		Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)			
802.11N40 MIMO + No-BF (Worst case)												
5755MHz												
5650	65.04	PK	100	2.2	H	-1.95	63.09	68.2	-5.11			
5650	64.96	PK	323	1.8	V	-1.95	63.01	68.2	-5.19			
5700	77.49	PK	146	2.4	H	-2.02	75.47	105.2	-29.73			
5700	74.38	PK	319	2.1	V	-2.02	72.36	105.2	-32.84			
5720	82.09	PK	175	2.1	H	-2.00	80.09	110.8	-30.71			
5720	79.20	PK	147	1.4	V	-2.00	77.20	110.8	-33.6			
5725	92.20	PK	215	1.7	H	-2.00	90.20	122.2	-32.00			
5725	90.18	PK	90	1.7	V	-2.00	88.18	122.2	-34.02			
11510	45.30	PK	199	1.3	H	6.50	51.80	74	-22.20			
11510	48.48	PK	232	2.4	V	6.50	54.98	74	-19.02			
11510	42.87	AV	147	2.4	V	6.50	49.37	54	-4.63			
5795MHz												
5850	77.61	PK	276	2.4	H	-1.81	75.80	122.2	-46.4			
5850	73.33	PK	68	2.4	V	-1.81	71.52	122.2	-50.68			
5855	251.56	PK	244	1.4	H	-181	70.56	110.8	-40.24			
5855	70.33	PK	268	1.5	V	-1.81	68.52	110.8	-42.28			
5875	68.01	PK	66	1.6	H	-1.84	66.17	105.2	-39.03			
5875	67.60	PK	113	2.3	V	-1.84	65.76	105.2	-39.44			
5925	66.06	PK	104	1.7	H	-1.80	64.26	68.2	-3.94			
5925	65.56	PK	168	1.7	V	-1.80	63.76	68.2	-4.44			
11590	45.03	PK	87	1.5	H	6.58	51.61	74	-22.39			
11590	48.55	PK	332	2.5	V	6.58	55.13	74	-18.87			
11590	42.92	AV	55	2.5	V	6.58	49.50	54	-4.50			

Frequency (MHz)	Receiver		Turn-Table Angle Degree	Rx Antenna		Corrected d Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407				
	Reading (dB μ V)	Detector (PK/QP/A V)		Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)			
802.11AC20 MIMO + No-BF (Worst case)												
5745MHz												
5650	65.19	PK	225	2.4	H	-1.95	63.24	68.2	-4.96			
5650	65.29	PK	252	1.1	V	-1.95	63.34	68.2	-4.86			
5700	72.21	PK	121	1.6	H	-2.02	70.19	105.2	-35.01			
5700	70.23	PK	180	2.1	V	-2.02	68.21	105.2	-36.99			
5720	87.02	PK	256	1.7	H	-2.00	85.02	110.8	-25.78			
5720	83.10	PK	6	2.1	V	-2.00	81.1	110.8	-29.7			
5725	91.48	PK	230	1.7	H	-2.00	89.48	122.2	-32.72			
5725	88.41	PK	335	1.7	V	-2.00	86.41	122.2	-35.79			
11490	45.70	PK	149	1.5	H	6.58	52.28	74	-21.72			
11490	48.72	PK	283	1.8	V	6.58	55.30	74	-18.70			
11490	41.68	AV	330	1.8	V	6.58	48.26	54	-5.74			
5785MHz												
11570	45.42	PK	355	1.7	H	6.60	52.02	74	-21.98			
11570	48.54	PK	331	1.7	H	6.60	55.14	74	-18.86			
11570	41.91	AV	46	1.7	V	6.60	48.51	54	-5.49			
5825MHz												
5850	89.21	PK	64	2.1	H	-1.81	87.40	122.2	-34.8			
5850	86.57	PK	68	1.2	V	-1.81	84.76	122.2	-37.44			
5855	259.56	PK	111	1.6	H	-1.81	78.56	110.8	-32.24			
5855	75.29	PK	4	1.2	V	-1.81	73.48	110.8	-37.32			
5875	69.32	PK	330	1.9	H	-1.84	67.48	105.2	-37.72			
5875	68.87	PK	85	1.5	V	-1.84	67.03	105.2	-38.17			
5925	66.11	PK	268	1.7	H	-1.80	64.31	68.2	-3.89			
5925	66.13	PK	37	1.7	V	-1.80	64.33	68.2	-3.87			
11650	44.10	PK	32	1.8	H	6.77	50.87	74	-23.13			
11650	47.37	PK	148	2.2	V	6.77	54.14	74	-19.86			
11650	40.13	AV	86	2.2	V	6.77	46.90	54	-7.10			

Frequency (MHz)	Receiver		Turn-Table Angle Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407				
	Reading (dB μ V)	Detector (PK/QP/A V)		Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)			
802.11AC40 MIMO + No-BF (Worst case)												
5755MHz												
5650	65.35	PK	308	1.1	H	-1.95	63.40	68.2	-4.8			
5650	65.21	PK	181	2.2	V	-1.95	63.26	68.2	-4.94			
5700	77.20	PK	117	1	H	-2.02	75.18	105.2	-30.02			
5700	74.34	PK	142	1.9	V	-2.02	72.32	105.2	-32.88			
5720	82.10	PK	81	1.1	H	-2.00	80.1	110.8	-30.7			
5720	79.04	PK	199	1.8	V	-2.00	77.04	110.8	-33.76			
5725	91.45	PK	26	1.7	H	-2.00	89.45	122.2	-32.75			
5725	90.07	PK	79	1.7	V	-2.00	88.07	122.2	-34.13			
11510	45.73	PK	340	2	H	6.50	52.23	74	-21.77			
11510	48.72	PK	205	1.2	V	6.50	55.22	74	-18.78			
11510	41.53	AV	132	1.2	V	6.50	48.03	54	-5.97			
5795MHz												
5850	78.38	PK	229	2.1	H	-1.81	76.57	122.2	-45.63			
5850	73.39	PK	125	2.3	V	-1.81	71.58	122.2	-50.62			
5855	250.57	PK	340	2.5	H	-181	69.57	110.8	-41.23			
5855	70.47	PK	49	2.2	V	-1.81	68.66	110.8	-42.14			
5875	68.12	PK	10	1.2	H	-1.84	66.28	105.2	-38.92			
5875	68.02	PK	219	2	V	-1.84	66.18	105.2	-39.02			
5925	65.77	PK	74	1.7	H	-1.80	63.97	68.2	-4.23			
5925	65.55	PK	197	1.7	V	-1.80	63.75	68.2	-4.45			
11590	45.46	PK	249	1.5	H	6.58	52.04	74	-21.96			
11590	48.62	PK	90	2.1	V	6.58	55.20	74	-18.80			
11590	41.43	AV	196	2.1	V	6.58	48.01	54	-5.99			

Frequency (MHz)	Receiver		Turn-Table Angle Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407				
	Reading (dB μ V)	Detector (PK/QP/A V)		Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)			
802.11AC80 MIMO + No-BF (Worst case)												
5775MHz												
5650	68.30	PK	100	2.3	H	-1.95	66.35	68.2	-1.85			
5650	66.35	PK	93	2	V	-1.95	64.40	68.2	-3.8			
5700	74.19	PK	178	2.3	H	-2.02	72.17	105.2	-33.03			
5700	72.34	PK	262	2	V	-2.02	70.32	105.2	-34.88			
5720	80.44	PK	188	1.9	H	-2.00	78.44	110.8	-32.36			
5720	77.15	PK	37	1.9	V	-2.00	75.15	110.8	-35.65			
5725	81.45	PK	4	1.7	H	-2.00	79.45	122.2	-42.75			
5725	79.40	PK	227	1.7	V	-2.00	77.40	122.2	-44.80			
5850	78.51	PK	17	2.1	H	-1.81	76.70	122.2	-45.50			
5850	76.54	PK	175	1	V	-1.81	74.73	122.2	-47.47			
5855	253.81	PK	34	1.9	H	-181	72.81	110.8	-37.99			
5855	71.51	PK	35	1.8	V	-1.81	69.70	110.8	-41.10			
5875	71.74	PK	123	1.8	H	-1.84	69.90	105.2	-35.30			
5875	68.23	PK	56	2.4	V	-1.84	66.39	105.2	-38.81			
5925	65.44	PK	168	1.7	H	-1.8	63.64	68.2	-4.56			
5925	65.47	PK	81	1.7	V	-1.8	63.67	68.2	-4.53			
11550	45.72	PK	344	2.2	H	6.61	52.33	74	-21.67			
11550	46.58	PK	136	1.5	V	6.61	53.19	74	-20.81			

Frequency (MHz)	Receiver		Turn-Table Angle Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407				
	Reading (dB μ V)	Detector (PK/QP/A V)		Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)			
802.11AX20 MIMO + No-BF (Worst case)												
5745MHz_26Tone_RU0(Worst Case)												
5650	65.17	PK	338	2.4	H	-1.95	63.22	68.2	-4.98			
5650	65.44	PK	290	1.6	V	-1.95	63.49	68.2	-4.71			
5700	72.44	PK	115	1.4	H	-2.02	70.42	105.2	-34.78			
5700	70.45	PK	2	1.9	V	-2.02	68.43	105.2	-36.77			
5720	87.20	PK	235	1	H	-2.00	85.2	110.8	-25.60			
5720	83.49	PK	223	1.1	V	-2.00	81.49	110.8	-29.31			
5725	91.18	PK	206	1.7	H	-2.00	89.18	122.2	-33.02			
5725	88.00	PK	105	1.7	V	-2.00	86.00	122.2	-36.20			
5745MHz_242Tone_RU61(Worst Case)												
11490	45.88	PK	279	1	H	6.58	52.46	74	-21.54			
11490	48.48	PK	112	2.1	V	6.58	55.06	74	-18.94			
11490	42.68	AV	31	2.1	V	6.58	49.26	54	-4.74			
5785MHz_242Tone_RU61(Worst Case)												
11570	45.46	PK	269	1.7	H	6.60	52.06	74	-21.94			
11570	48.85	PK	313	1.7	H	6.60	55.45	74	-18.55			
11570	42.61	AV	179	1.7	V	6.60	49.21	54	-4.79			
5825MHz_26Tone_RU8(Worst Case)												
5850	89.64	PK	131	2.1	H	-1.81	87.83	122.2	-34.37			
5850	85.35	PK	204	2.5	V	-1.81	83.54	122.2	-38.66			
5855	259.76	PK	113	1.8	H	-181	78.76	110.8	-32.04			
5855	75.67	PK	336	1.8	V	-1.81	73.86	110.8	-36.94			
5875	70.80	PK	275	2.4	H	-1.84	68.96	105.2	-36.24			
5875	67.23	PK	271	1.7	V	-1.84	65.39	105.2	-39.81			
5925	66.12	PK	265	1.7	H	-1.80	64.32	68.2	-3.88			
5925	65.80	PK	249	1.7	V	-1.80	64.00	68.2	-4.20			
5825MHz_242Tone_RU61(Worst Case)												
11650	44.24	PK	173	1	H	6.77	51.01	74	-22.99			
11650	47.12	PK	358	2	V	6.77	53.89	74	-20.11			

Frequency (MHz)	Receiver		Turn-Table Angle Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407				
	Reading (dB μ V)	Detector (PK/QP/A V)		Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)			
802.11AX40 MIMO + No-BF (Worst case)												
5755MHz_26Tone_RU0(Worst Case)												
5650	65.40	PK	165	2.5	H	-1.95	63.45	68.2	-4.75			
5650	65.15	PK	184	2	V	-1.95	63.20	68.2	-5.00			
5700	77.43	PK	227	1.4	H	-2.02	75.41	105.2	-29.79			
5700	73.31	PK	180	2.1	V	-2.02	71.29	105.2	-33.91			
5720	82.05	PK	203	1.9	H	-2.00	80.05	110.8	-30.75			
5720	80.00	PK	326	1.1	V	-2.00	78.00	110.8	-32.8			
5725	91.44	PK	62	1.7	H	-2.00	89.44	122.2	-32.76			
5725	88.17	PK	188	1.7	V	-2.00	86.17	122.2	-36.03			
5755MHz_484Tone_RU65(Worst Case)												
11510	45.67	PK	274	2.5	H	6.50	52.17	74	-21.83			
11510	48.97	PK	299	2.1	V	6.50	55.47	74	-18.53			
11510	41.71	AV	257	2.1	V	6.50	48.21	54	-5.79			
5795MHz_26Tone_RU17(Worst Case)												
5850	78.30	PK	29	2.3	H	-1.81	76.49	122.2	-45.71			
5850	73.50	PK	118	1.5	V	-1.81	71.69	122.2	-50.51			
5855	250.61	PK	351	1.2	H	-181	69.61	110.8	-41.19			
5855	69.31	PK	274	1.2	V	-1.81	67.5	110.8	-43.30			
5875	67.66	PK	19	2.3	H	-1.84	65.82	105.2	-39.38			
5875	68.16	PK	269	1.1	V	-1.84	66.32	105.2	-38.88			
5925	65.46	PK	43	1.7	H	-1.80	63.66	68.2	-4.54			
5925	65.63	PK	57	1.7	V	-1.80	63.83	68.2	-4.37			
5795MHz_484Tone_RU65(Worst Case)												
11590	45.47	PK	107	1.2	H	6.58	52.05	74	-21.95			
11590	48.75	PK	15	1.7	V	6.58	55.33	74	-18.67			
11590	41.74	AV	269	1.7	V	6.58	48.32	54	-5.68			

Frequency (MHz)	Receiver		Turn-Table Angle Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	FCC Part 15.407				
	Reading (dB μ V)	Detector (PK/QP/A V)		Height (m)	Polar (H / V)			Limit (dB μ V/m)	Margin (dB)			
802.11AX80 MIMO + No-BF (Worst case)												
5775MHz_26Tone_RU0(Worst Case)												
5650	68.23	PK	352	2	H	-1.95	66.28	68.2	-1.92			
5650	66.14	PK	282	1.4	V	-1.95	64.19	68.2	-4.01			
5700	74.12	PK	143	1.1	H	-2.02	72.1	105.2	-33.1			
5700	72.43	PK	290	1.4	V	-2.02	70.41	105.2	-34.79			
5720	80.39	PK	126	2.3	H	-2.00	78.39	110.8	-32.41			
5720	77.15	PK	151	1.5	V	-2.00	75.15	110.8	-35.65			
5725	81.38	PK	26	1.7	H	-2.00	79.38	122.2	-42.82			
5725	79.18	PK	33	1.7	V	-2.00	77.18	122.2	-45.02			
5775MHz_26Tone_RU36(Worst Case)												
5850	78.41	PK	116	1.6	H	-1.81	76.60	122.2	-45.60			
5850	76.46	PK	306	1.9	V	-1.81	74.65	122.2	-47.55			
5855	253.78	PK	166	2.4	H	-181	72.78	110.8	-38.02			
5855	71.64	PK	233	1.4	V	-1.81	69.83	110.8	-40.97			
5875	72.14	PK	359	1.3	H	-1.84	70.3	105.2	-34.90			
5875	71.25	PK	259	2.2	V	-1.84	69.41	105.2	-35.79			
5925	65.43	PK	309	1.7	H	-1.80	63.63	68.2	-4.57			
5925	65.95	PK	9	1.7	V	-1.80	64.15	68.2	-4.05			
5775MHz_996Tone_RU67(Worst Case)												
11550	45.60	PK	340	2.2	H	6.61	52.21	74	-21.79			
11550	46.71	PK	289	2.3	V	6.61	53.32	74	-20.68			

Simultaneously transmission:

Worst case is 2.4G Wi-Fi (802.11b mode, 2437MHz) & 5G Wi-Fi (802.11a mode, 5320MHz)

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	PK/QP/Ave.		Height (m)	Polar (H/V)				
336.04	44.96	PK	36	1.1	H	-7.58	37.38	46	-8.62
336.04	44.61	PK	88	1.3	V	-7.58	37.03	46	-8.97
4874	59.06	PK	273	2.1	H	-3.42	55.64	74	-18.36
4874	51.13	AV	273	2.1	H	-3.42	47.71	54	-6.29
4874	60.51	PK	271	1.1	V	-3.42	57.09	74	-16.91
4874	53.24	AV	271	1.1	V	-3.42	49.82	54	-4.18
10640	45.95	PK	316	1.1	H	8.93	54.88	74	-19.12
10640	37.51	AV	316	1.1	H	8.93	46.44	54	-7.56
10640	47.51	PK	243	2.4	V	8.93	56.44	74	-17.56
10640	43.79	AV	243	2.4	V	8.93	52.72	54	-1.28

Note:

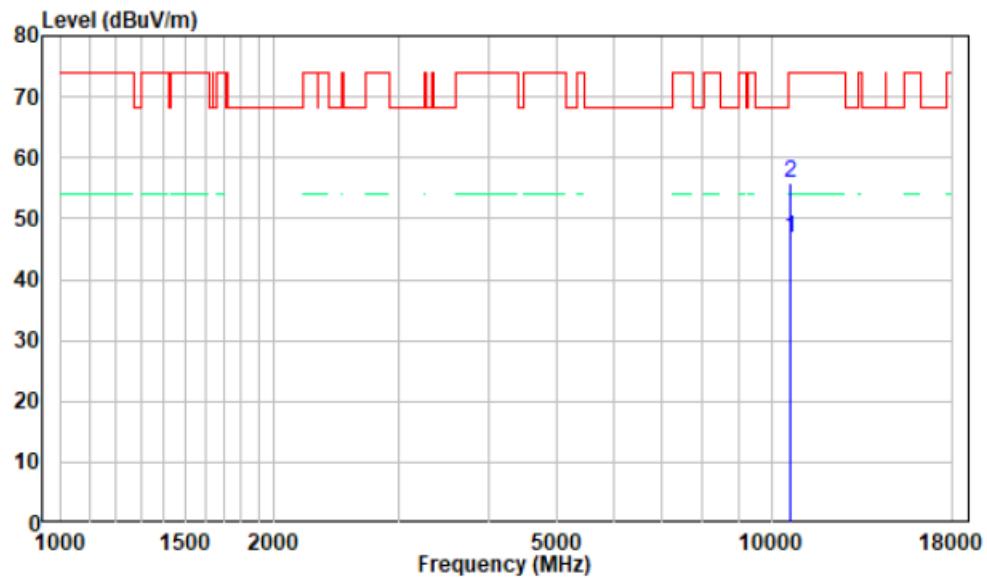
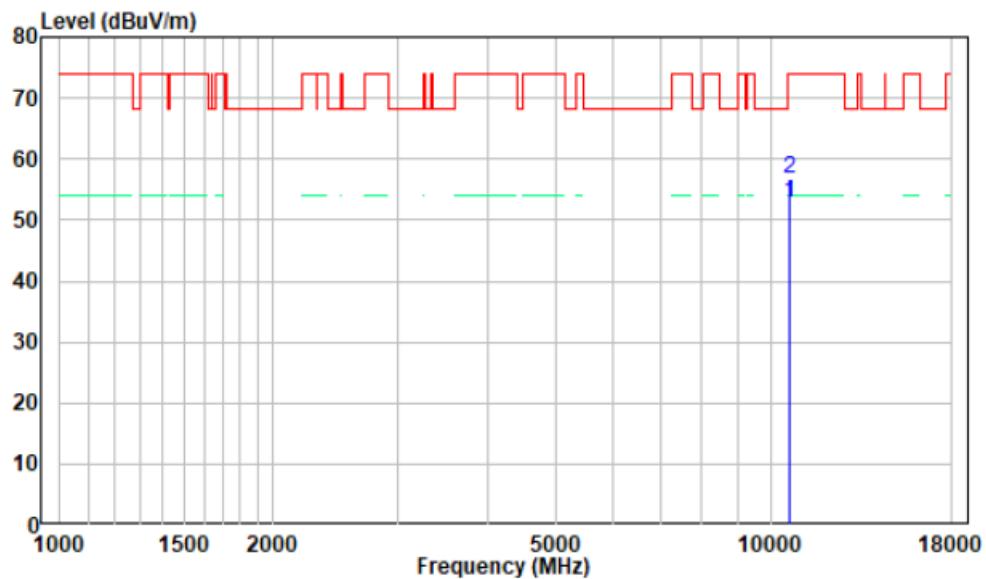
Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor

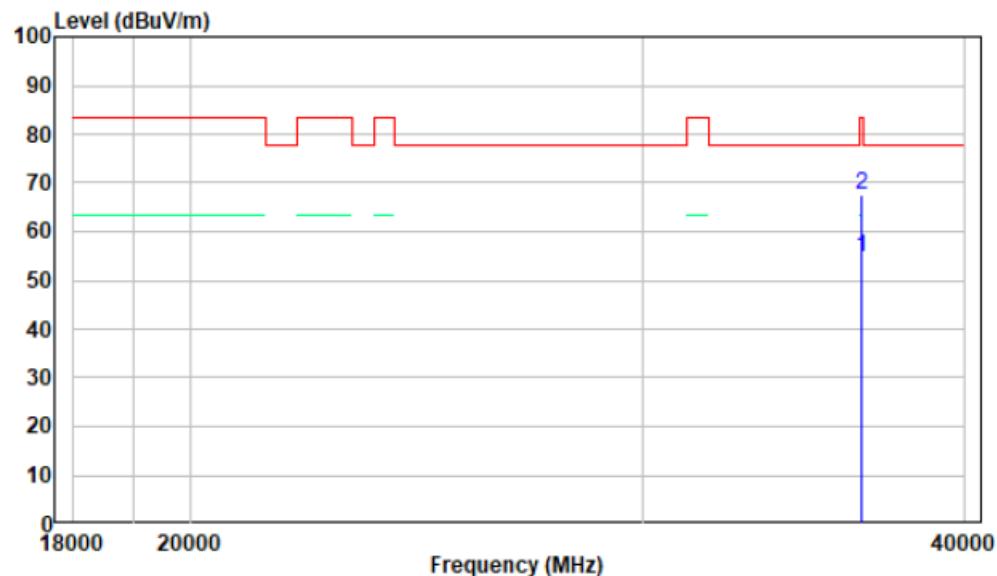
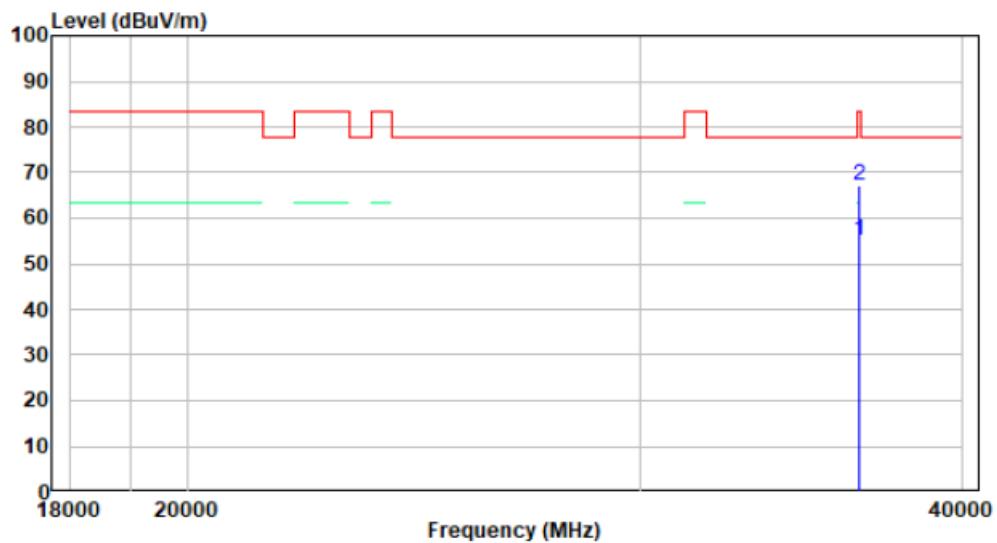
Absolute Level (Corrected Amplitude)= Factor + Reading

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:****802.11 a 5320MHz
Horizontal****Vertical**

18 -40GHz:**Pre-scan Plots:****802.11 a 5320MHz
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

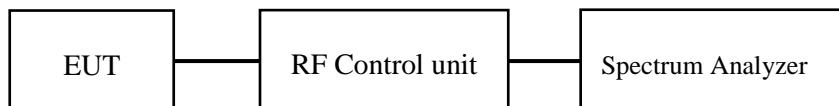
1. Emission Bandwidth (EBW)

- 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:	25.8~29 °C
Relative Humidity:	51~55 %
ATM Pressure:	101.0 kPa

The testing was performed by Kei Pei from 2022-04-03 to 2022-05-27.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the Appendix A.

Note: the worst case ANT 1 was tested.

FCC §15.407(a) – CONDUCTED TRANSMITTER OUTPUT POWER

Applicable Standard

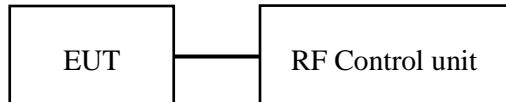
For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz 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 $11 \text{ dBm} + 10 \log B$, 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.



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

Test Data

Environmental Conditions

Temperature:	25.8~29 °C
Relative Humidity:	51~55 %
ATM Pressure:	101.0 kPa

The testing was performed by Kei Pei from 2022-04-03 to 2022-07-05.

EUT operation mode: Transmitting

Test Result: Pass

Test Mode	Antenna	Channel	Result [dBm]	Limit [dBm]	Elevation angle above 30° Max Gain[dBi]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11A-CDD	Ant1	5180	14.63	≤30.0	-2.2	12.43	<=21	PASS
	Ant2	5180	15.76	≤30.0	-2.2	13.56	<=21	PASS
	Ant3	5180	14.97	≤30.0	-2.2	12.77	<=21	PASS
	Ant4	5180	16.11	≤30.0	-2.2	13.91	<=21	PASS
	total	5180	21.43	≤30.0	-2.2	19.23	<=21	PASS
	Ant1	5200	15.23	≤30.0	-2.2	13.03	<=21	PASS
	Ant2	5200	15.78	≤30.0	-2.2	13.58	<=21	PASS
	Ant3	5200	15.41	≤30.0	-2.2	13.21	<=21	PASS
	Ant4	5200	16.71	≤30.0	-2.2	14.51	<=21	PASS
	total	5200	21.84	≤30.0	-2.2	19.64	<=21	PASS
	Ant1	5240	16.12	≤30.0	-2.2	13.92	<=21	PASS
	Ant2	5240	16.80	≤30.0	-2.2	14.60	<=21	PASS
	Ant3	5240	16.17	≤30.0	-2.2	13.97	<=21	PASS
	Ant4	5240	16.84	≤30.0	-2.2	14.64	<=21	PASS
	total	5240	22.52	≤30.0	-2.2	20.32	<=21	PASS
11N20MIMO	Ant1	5180	10.65	≤26.5	3.8	14.45	<=21	PASS
	Ant2	5180	10.51	≤26.5	3.8	14.31	<=21	PASS
	Ant3	5180	10.70	≤26.5	3.8	14.50	<=21	PASS
	Ant4	5180	11.07	≤26.5	3.8	14.87	<=21	PASS
	total	5180	16.76	≤26.5	3.8	20.56	<=21	PASS
	Ant1	5200	10.71	≤26.5	3.8	14.51	<=21	PASS
	Ant2	5200	10.72	≤26.5	3.8	14.52	<=21	PASS
	Ant3	5200	10.70	≤26.5	3.8	14.50	<=21	PASS
	Ant4	5200	11.15	≤26.5	3.8	14.95	<=21	PASS
	total	5200	16.84	≤26.5	3.8	20.64	<=21	PASS
	Ant1	5240	11.26	≤26.5	3.8	15.06	<=21	PASS
	Ant2	5240	11.04	≤26.5	3.8	14.84	<=21	PASS
	Ant3	5240	11.32	≤26.5	3.8	15.12	<=21	PASS
	Ant4	5240	10.69	≤26.5	3.8	14.49	<=21	PASS

	total	5240	17.11	≤ 26.5	3.8	20.91	≤ 21	PASS	
11N40MIMO	Ant1	5190	10.67	≤ 26.5	3.8	14.47	≤ 21	PASS	
	Ant2	5190	11.83	≤ 26.5	3.8	15.63	≤ 21	PASS	
	Ant3	5190	10.74	≤ 26.5	3.8	14.54	≤ 21	PASS	
	Ant4	5190	11.07	≤ 26.5	3.8	14.87	≤ 21	PASS	
	total	5190	17.12	≤ 26.5	3.8	20.92	≤ 21	PASS	
	Ant1	5230	11.26	≤ 26.5	3.8	15.06	≤ 21	PASS	
	Ant2	5230	11.89	≤ 26.5	3.8	15.69	≤ 21	PASS	
	Ant3	5230	10.39	≤ 26.5	3.8	14.19	≤ 21	PASS	
	Ant4	5230	10.78	≤ 26.5	3.8	14.58	≤ 21	PASS	
	total	5230	17.14	≤ 26.5	3.8	20.94	≤ 21	PASS	
11AC20MIMO	Ant1	5180	10.74	≤ 26.5	3.8	14.54	≤ 21	PASS	
	Ant2	5180	11.57	≤ 26.5	3.8	15.37	≤ 21	PASS	
	Ant3	5180	10.69	≤ 26.5	3.8	14.49	≤ 21	PASS	
	Ant4	5180	11.01	≤ 26.5	3.8	14.81	≤ 21	PASS	
	total	5180	17.04	≤ 26.5	3.8	20.84	≤ 21	PASS	
	Ant1	5200	10.88	≤ 26.5	3.8	14.68	≤ 21	PASS	
	Ant2	5200	11.51	≤ 26.5	3.8	15.31	≤ 21	PASS	
	Ant3	5200	10.86	≤ 26.5	3.8	14.66	≤ 21	PASS	
	Ant4	5200	11.20	≤ 26.5	3.8	15.00	≤ 21	PASS	
	total	5200	17.14	≤ 26.5	3.8	20.94	≤ 21	PASS	
	Ant1	5240	11.23	≤ 26.5	3.8	15.03	≤ 21	PASS	
	Ant2	5240	10.97	≤ 26.5	3.8	14.77	≤ 21	PASS	
	Ant3	5240	11.19	≤ 26.5	3.8	14.99	≤ 21	PASS	
	Ant4	5240	11.17	≤ 26.5	3.8	14.97	≤ 21	PASS	
	total	5240	17.16	≤ 26.5	3.8	20.96	≤ 21	PASS	
11AC40MIMO	Ant1	5190	10.31	≤ 26.5	3.8	14.11	≤ 21	PASS	
	Ant2	5190	11.35	≤ 26.5	3.8	15.15	≤ 21	PASS	
	Ant3	5190	10.26	≤ 26.5	3.8	14.06	≤ 21	PASS	
	Ant4	5190	10.67	≤ 26.5	3.8	14.47	≤ 21	PASS	
	total	5190	16.69	≤ 26.5	3.8	20.49	≤ 21	PASS	
	Ant1	5230	11.27	≤ 26.5	3.8	15.07	≤ 21	PASS	
	Ant2	5230	10.98	≤ 26.5	3.8	14.78	≤ 21	PASS	
	Ant3	5230	11.21	≤ 26.5	3.8	15.01	≤ 21	PASS	
	Ant4	5230	11.20	≤ 26.5	3.8	15.00	≤ 21	PASS	
	total	5230	17.19	≤ 26.5	3.8	20.99	≤ 21	PASS	
11AC80MIMO	Ant1	5210	11.22	≤ 26.5	3.8	15.02	≤ 21	PASS	
	Ant2	5210	11.04	≤ 26.5	3.8	14.84	≤ 21	PASS	
	Ant3	5210	11.27	≤ 26.5	3.8	15.07	≤ 21	PASS	
	Ant4	5210	11.16	≤ 26.5	3.8	14.96	≤ 21	PASS	
	total	5210	17.19	≤ 26.5	3.8	20.99	≤ 21	PASS	

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A-CDD	Ant1	5260	12.58	≤23.83	PASS
	Ant2	5260	12.82	≤23.83	PASS
	Ant3	5260	12.25	≤23.83	PASS
	Ant4	5260	12.59	≤23.83	PASS
	total	5260	18.59	≤23.83	PASS
	Ant1	5280	12.85	≤23.89	PASS
	Ant2	5280	12.37	≤23.89	PASS
	Ant3	5280	12.25	≤23.89	PASS
	Ant4	5280	12.88	≤23.89	PASS
	total	5280	18.62	≤23.89	PASS
	Ant1	5320	12.35	≤23.90	PASS
	Ant2	5320	12.42	≤23.90	PASS
	Ant3	5320	11.99	≤23.90	PASS
	Ant4	5320	12.31	≤23.90	PASS
	total	5320	18.29	≤23.90	PASS
	Ant1	5500	11.81	≤23.97	PASS
	Ant2	5500	12.58	≤23.97	PASS
	Ant3	5500	12.01	≤23.97	PASS
	Ant4	5500	12.82	≤23.97	PASS
	total	5500	18.34	≤23.97	PASS
	Ant1	5580	12.42	≤23.94	PASS
	Ant2	5580	13.12	≤23.94	PASS
	Ant3	5580	12.10	≤23.94	PASS
	Ant4	5580	13.67	≤23.94	PASS
	total	5580	18.89	≤23.94	PASS
	Ant1	5720_UNII-2C	12.55	≤22.69	PASS
	Ant2	5720_UNII-2C	12.13	≤22.69	PASS
	Ant3	5720_UNII-2C	12.21	≤22.69	PASS
	Ant4	5720_UNII-2C	11.82	≤22.69	PASS
	total	5720_UNII-2C	18.21	≤22.69	PASS
	Ant1	5720_UNII-3	3.22	≤30.00	PASS
	Ant2	5720_UNII-3	3.74	≤30.00	PASS
	Ant3	5720_UNII-3	3.96	≤30.00	PASS
	Ant4	5720_UNII-3	3.69	≤30.00	PASS
	total	5720_UNII-3	9.68	≤30.00	PASS
	Ant1	5745	17.89	≤30.00	PASS
	Ant2	5745	17.73	≤30.00	PASS
	Ant3	5745	16.39	≤30.00	PASS
	Ant4	5745	18.06	≤30.00	PASS
	total	5745	23.59	≤30.00	PASS
	Ant1	5785	17.57	≤30.00	PASS
	Ant2	5785	17.46	≤30.00	PASS
	Ant3	5785	16.48	≤30.00	PASS
	Ant4	5785	17.84	≤30.00	PASS
	total	5785	23.39	≤30.00	PASS
	Ant1	5825	17.64	≤30.00	PASS
	Ant2	5825	17.31	≤30.00	PASS
	Ant3	5825	17.02	≤30.00	PASS
	Ant4	5825	17.58	≤30.00	PASS
	total	5825	23.41	≤30.00	PASS

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11N20MIMO	Ant1	5260	11.36	≤20.48	PASS
	Ant2	5260	11.18	≤20.48	PASS
	Ant3	5260	11.05	≤20.48	PASS
	Ant4	5260	12.02	≤20.48	PASS
	total	5260	17.44	≤20.48	PASS
	Ant1	5280	11.03	≤20.48	PASS
	Ant2	5280	12.07	≤20.48	PASS
	Ant3	5280	11.49	≤20.48	PASS
	Ant4	5280	11.23	≤20.48	PASS
	total	5280	17.49	≤20.48	PASS
	Ant1	5320	11.03	≤20.48	PASS
	Ant2	5320	11.32	≤20.48	PASS
	Ant3	5320	11.63	≤20.48	PASS
	Ant4	5320	11.24	≤20.48	PASS
	total	5320	17.33	≤20.48	PASS
	Ant1	5500	11.05	≤20.48	PASS
	Ant2	5500	11.02	≤20.48	PASS
	Ant3	5500	11.13	≤20.48	PASS
	Ant4	5500	11.88	≤20.48	PASS
	total	5500	17.31	≤20.48	PASS
	Ant1	5580	11.83	≤20.48	PASS
	Ant2	5580	11.28	≤20.48	PASS
	Ant3	5580	11.03	≤20.48	PASS
	Ant4	5580	11.62	≤20.48	PASS
	total	5580	17.47	≤20.48	PASS
	Ant1	5720_UNII-2C	10.49	≤19.33	PASS
	Ant2	5720_UNII-2C	11.54	≤19.33	PASS
	Ant3	5720_UNII-2C	11.55	≤19.33	PASS
	Ant4	5720_UNII-2C	11.21	≤19.33	PASS
	total	5720_UNII-2C	17.24	≤19.33	PASS
	Ant1	5720_UNII-3	3.14	≤26.50	PASS
	Ant2	5720_UNII-3	1.14	≤26.50	PASS
	Ant3	5720_UNII-3	2.79	≤26.50	PASS
	Ant4	5720_UNII-3	3.34	≤26.50	PASS
	total	5720_UNII-3	8.70	≤26.50	PASS
	Ant1	5745	17.94	≤26.50	PASS
	Ant2	5745	17.82	≤26.50	PASS
	Ant3	5745	16.64	≤26.50	PASS
	Ant4	5745	17.38	≤26.50	PASS
	total	5745	23.49	≤26.50	PASS
	Ant1	5785	17.46	≤26.50	PASS
	Ant2	5785	17.61	≤26.50	PASS
	Ant3	5785	15.73	≤26.50	PASS
	Ant4	5785	17.44	≤26.50	PASS
	total	5785	23.14	≤26.50	PASS
	Ant1	5825	17.07	≤26.50	PASS
	Ant2	5825	18.03	≤26.50	PASS
	Ant3	5825	16.45	≤26.50	PASS
	Ant4	5825	17.45	≤26.50	PASS
	total	5825	23.31	≤26.50	PASS

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11N40MIMO	Ant1	5270	11.54	≤20.48	PASS
	Ant2	5270	12.03	≤20.48	PASS
	Ant3	5270	11.01	≤20.48	PASS
	Ant4	5270	11.22	≤20.48	PASS
	total	5270	17.49	≤20.48	PASS
	Ant1	5310	11.56	≤20.48	PASS
	Ant2	5310	11.83	≤20.48	PASS
	Ant3	5310	11.32	≤20.48	PASS
	Ant4	5310	11.09	≤20.48	PASS
	total	5310	17.48	≤20.48	PASS
	Ant1	5510	10.86	≤20.48	PASS
	Ant2	5510	10.15	≤20.48	PASS
	Ant3	5510	10.13	≤20.48	PASS
	Ant4	5510	10.63	≤20.48	PASS
	total	5510	16.47	≤20.48	PASS
	Ant1	5550	10.22	≤20.48	PASS
	Ant2	5550	10.25	≤20.48	PASS
	Ant3	5550	10.65	≤20.48	PASS
	Ant4	5550	10.72	≤20.48	PASS
	total	5550	16.49	≤20.48	PASS
	Ant1	5710_UNII-2C	11.83	≤20.48	PASS
	Ant2	5710_UNII-2C	11.23	≤20.48	PASS
	Ant3	5710_UNII-2C	11.28	≤20.48	PASS
	Ant4	5710_UNII-2C	11.23	≤20.48	PASS
	total	5710_UNII-2C	17.42	≤20.48	PASS
	Ant1	5710_UNII-3	1.89	≤26.50	PASS
	Ant2	5710_UNII-3	1.80	≤26.50	PASS
	Ant3	5710_UNII-3	1.30	≤26.50	PASS
	Ant4	5710_UNII-3	1.82	≤26.50	PASS
	total	5710_UNII-3	7.73	≤26.50	PASS
	Ant1	5755	18.37	≤26.50	PASS
	Ant2	5755	17.65	≤26.50	PASS
	Ant3	5755	16.40	≤26.50	PASS
	Ant4	5755	18.05	≤26.50	PASS
	total	5755	23.70	≤26.50	PASS
	Ant1	5795	18.22	≤26.50	PASS
	Ant2	5795	18.11	≤26.50	PASS
	Ant3	5795	16.58	≤26.50	PASS
	Ant4	5795	17.50	≤26.50	PASS
	total	5795	23.67	≤26.50	PASS

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11AC20MIMO	Ant1	5260	11.18	≤20.48	PASS
	Ant2	5260	11.77	≤20.48	PASS
	Ant3	5260	10.76	≤20.48	PASS
	Ant4	5260	12.05	≤20.48	PASS
	total	5260	17.49	≤20.48	PASS
	Ant1	5280	11.98	≤20.48	PASS
	Ant2	5280	11.16	≤20.48	PASS
	Ant3	5280	11.03	≤20.48	PASS
	Ant4	5280	11.53	≤20.48	PASS
	total	5280	17.46	≤20.48	PASS
	Ant1	5320	11.12	≤20.48	PASS
	Ant2	5320	11.56	≤20.48	PASS
	Ant3	5320	11.42	≤20.48	PASS
	Ant4	5320	11.21	≤20.48	PASS
	total	5320	17.35	≤20.48	PASS
	Ant1	5500	11.05	≤20.48	PASS
	Ant2	5500	11.41	≤20.48	PASS
	Ant3	5500	11.11	≤20.48	PASS
	Ant4	5500	11.53	≤20.48	PASS
	total	5500	17.30	≤20.48	PASS
	Ant1	5580	12.06	≤20.48	PASS
	Ant2	5580	11.23	≤20.48	PASS
	Ant3	5580	11.03	≤20.48	PASS
	Ant4	5580	11.43	≤20.48	PASS
	total	5580	17.48	≤20.48	PASS
	Ant1	5720_UNII-2C	11.01	≤19.30	PASS
	Ant2	5720_UNII-2C	11.26	≤19.30	PASS
	Ant3	5720_UNII-2C	11.48	≤19.30	PASS
	Ant4	5720_UNII-2C	11.05	≤19.30	PASS
	total	5720_UNII-2C	17.22	≤19.30	PASS
	Ant1	5720_UNII-3	4.13	≤26.50	PASS
	Ant2	5720_UNII-3	3.77	≤26.50	PASS
	Ant3	5720_UNII-3	4.70	≤26.50	PASS
	Ant4	5720_UNII-3	3.08	≤26.50	PASS
	total	5720_UNII-3	9.98	≤26.50	PASS
	Ant1	5745	17.76	≤26.50	PASS
	Ant2	5745	16.75	≤26.50	PASS
	Ant3	5745	16.11	≤26.50	PASS
	Ant4	5745	17.24	≤26.50	PASS
	total	5745	23.03	≤26.50	PASS
	Ant1	5785	17.79	≤26.50	PASS
	Ant2	5785	16.82	≤26.50	PASS
	Ant3	5785	17.24	≤26.50	PASS
	Ant4	5785	17.30	≤26.50	PASS
	total	5785	23.32	≤26.50	PASS
	Ant1	5825	17.95	≤26.50	PASS
	Ant2	5825	17.43	≤26.50	PASS
	Ant3	5825	17.26	≤26.50	PASS
	Ant4	5825	17.88	≤26.50	PASS
	total	5825	23.66	≤26.50	PASS

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11AC40MIMO	Ant1	5270	12.07	≤20.48	PASS
	Ant2	5270	11.32	≤20.48	PASS
	Ant3	5270	10.83	≤20.48	PASS
	Ant4	5270	11.56	≤20.48	PASS
	total	5270	17.49	≤20.48	PASS
	Ant1	5310	11.56	≤20.48	PASS
	Ant2	5310	11.71	≤20.48	PASS
	Ant3	5310	10.55	≤20.48	PASS
	Ant4	5310	11.68	≤20.48	PASS
	total	5310	17.42	≤20.48	PASS
	Ant1	5510	10.83	≤20.48	PASS
	Ant2	5510	11.02	≤20.48	PASS
	Ant3	5510	10.27	≤20.48	PASS
	Ant4	5510	11.33	≤20.48	PASS
	total	5510	16.90	≤20.48	PASS
	Ant1	5550	10.44	≤20.48	PASS
	Ant2	5550	10.58	≤20.48	PASS
	Ant3	5550	10.57	≤20.48	PASS
	Ant4	5550	11.29	≤20.48	PASS
	total	5550	16.75	≤20.48	PASS
	Ant1	5710_UNII-2C	11.71	≤20.48	PASS
	Ant2	5710_UNII-2C	11.40	≤20.48	PASS
	Ant3	5710_UNII-2C	11.32	≤20.48	PASS
	Ant4	5710_UNII-2C	11.19	≤20.48	PASS
	total	5710_UNII-2C	17.43	≤20.48	PASS
	Ant1	5710_UNII-3	1.84	≤26.50	PASS
	Ant2	5710_UNII-3	1.12	≤26.50	PASS
	Ant3	5710_UNII-3	0.85	≤26.50	PASS
	Ant4	5710_UNII-3	1.59	≤26.50	PASS
	total	5710_UNII-3	7.39	≤26.50	PASS
	Ant1	5755	18.38	≤26.50	PASS
	Ant2	5755	17.07	≤26.50	PASS
	Ant3	5755	16.26	≤26.50	PASS
	Ant4	5755	18.19	≤26.50	PASS
	total	5755	23.58	≤26.50	PASS
	Ant1	5795	18.01	≤26.50	PASS
	Ant2	5795	17.34	≤26.50	PASS
	Ant3	5795	17.06	≤26.50	PASS
	Ant4	5795	18.04	≤26.50	PASS
	total	5795	23.65	≤26.50	PASS

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11AC80MIMO	Ant1	5290	11.29	≤20.48	PASS
	Ant2	5290	11.64	≤20.48	PASS
	Ant3	5290	11.20	≤20.48	PASS
	Ant4	5290	11.74	≤20.48	PASS
	total	5290	17.49	≤20.48	PASS
	Ant1	5530	10.28	≤20.48	PASS
	Ant2	5530	10.46	≤20.48	PASS
	Ant3	5530	10.52	≤20.48	PASS
	Ant4	5530	10.63	≤20.48	PASS
	total	5530	16.49	≤20.48	PASS
	Ant1	5610	10.83	≤20.48	PASS
	Ant2	5610	10.92	≤20.48	PASS
	Ant3	5610	10.96	≤20.48	PASS
	Ant4	5610	11.03	≤20.48	PASS
	total	5610	16.96	≤20.48	PASS
	Ant1	5690_UNII-2C	11.72	≤20.48	PASS
	Ant2	5690_UNII-2C	10.50	≤20.48	PASS
	Ant3	5690_UNII-2C	10.86	≤20.48	PASS
	Ant4	5690_UNII-2C	11.19	≤20.48	PASS
	total	5690_UNII-2C	17.11	≤20.48	PASS
	Ant1	5690_UNII-3	-3.27	≤26.50	PASS
	Ant2	5690_UNII-3	-3.93	≤26.50	PASS
	Ant3	5690_UNII-3	-4.19	≤26.50	PASS
	Ant4	5690_UNII-3	-3.14	≤26.50	PASS
	total	5690_UNII-3	2.41	≤26.50	PASS
	Ant1	5775	17.84	≤26.50	PASS
	Ant2	5775	17.30	≤26.50	PASS
	Ant3	5775	16.13	≤26.50	PASS
	Ant4	5775	17.84	≤26.50	PASS
	total	5775	23.35	≤26.50	PASS

Test Mode	Antenna	Frequency [MHz]	Ru Size	Ru Index	Result [dBm]	Limit [dBm]	Elevation angle above 30 °Max Gain[dBi]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11AX20 MIMO	Ant1	5180	26Tone	RU0	10.12	≤26.50	3.8	13.92	21	PASS
			52Tone	RU37	10.06	≤26.50	3.8	13.86	21	PASS
			106Tone	RU53	10.81	≤26.50	3.8	14.61	21	PASS
			242Tone	RU61	10.41	≤26.50	3.8	14.21	21	PASS
	Ant2	5180	26Tone	RU0	10.24	≤26.50	3.8	14.04	21	PASS
			52Tone	RU37	11.06	≤26.50	3.8	14.86	21	PASS
			106Tone	RU53	10.50	≤26.50	3.8	14.30	21	PASS
			242Tone	RU61	10.95	≤26.50	3.8	14.75	21	PASS
	Ant3	5180	26Tone	RU0	11.19	≤26.50	3.8	14.99	21	PASS
			52Tone	RU37	11.38	≤26.50	3.8	15.18	21	PASS
			106Tone	RU53	10.63	≤26.50	3.8	14.43	21	PASS
			242Tone	RU61	11.01	≤26.50	3.8	14.81	21	PASS
	Ant4	5180	26Tone	RU0	11.60	≤26.50	3.8	15.40	21	PASS
			52Tone	RU37	11.37	≤26.50	3.8	15.17	21	PASS
			106Tone	RU53	11.38	≤26.50	3.8	15.18	21	PASS
			242Tone	RU61	11.47	≤26.50	3.8	15.27	21	PASS
	total	5180	26Tone	RU0	16.85	≤26.50	3.8	20.65	21	PASS
			52Tone	RU37	17.02	≤26.50	3.8	20.82	21	PASS
			106Tone	RU53	16.86	≤26.50	3.8	20.66	21	PASS
			242Tone	RU61	17.00	≤26.50	3.8	20.80	21	PASS
	Ant1	5200	26Tone	RU0	10.98	≤26.50	3.8	14.78	21	PASS
			52Tone	RU37	10.22	≤26.50	3.8	14.02	21	PASS
			106Tone	RU53	11.15	≤26.50	3.8	14.95	21	PASS
			242Tone	RU61	10.61	≤26.50	3.8	14.41	21	PASS
	Ant2	5200	26Tone	RU0	11.20	≤26.50	3.8	15.00	21	PASS
			52Tone	RU37	11.08	≤26.50	3.8	14.88	21	PASS
			106Tone	RU53	11.28	≤26.50	3.8	15.08	21	PASS
			242Tone	RU61	10.33	≤26.50	3.8	14.13	21	PASS
	Ant3	5200	26Tone	RU0	10.24	≤26.50	3.8	14.04	21	PASS
			52Tone	RU37	10.88	≤26.50	3.8	14.68	21	PASS
			106Tone	RU53	10.95	≤26.50	3.8	14.75	21	PASS
			242Tone	RU61	11.36	≤26.50	3.8	15.16	21	PASS
	Ant4	5200	26Tone	RU0	10.60	≤26.50	3.8	14.40	21	PASS
			52Tone	RU37	11.46	≤26.50	3.8	15.26	21	PASS
			106Tone	RU53	11.26	≤26.50	3.8	15.06	21	PASS
			242Tone	RU61	11.82	≤26.50	3.8	15.62	21	PASS
	total	5200	26Tone	RU0	16.79	≤26.50	3.8	20.59	21	PASS
			52Tone	RU37	16.95	≤26.50	3.8	20.75	21	PASS
			106Tone	RU53	17.18	≤26.50	3.8	20.98	21	PASS
			242Tone	RU61	17.09	≤26.50	3.8	20.89	21	PASS
	Ant1	5240	26Tone	RU0	11.07	≤26.50	3.8	14.87	21	PASS
			52Tone	RU37	10.77	≤26.50	3.8	14.57	21	PASS
			106Tone	RU53	10.55	≤26.50	3.8	14.35	21	PASS
			242Tone	RU61	9.76	≤26.50	3.8	13.56	21	PASS
	Ant2	5240	26Tone	RU0	10.49	≤26.50	3.8	14.29	21	PASS
			52Tone	RU37	10.27	≤26.50	3.8	14.07	21	PASS
			106Tone	RU53	10.79	≤26.50	3.8	14.59	21	PASS
			242Tone	RU61	10.01	≤26.50	3.8	13.81	21	PASS
	Ant3	5240	26Tone	RU0	10.10	≤26.50	3.8	13.90	21	PASS
			52Tone	RU37	10.15	≤26.50	3.8	13.95	21	PASS
			106Tone	RU53	10.51	≤26.50	3.8	14.31	21	PASS
			242Tone	RU61	10.24	≤26.50	3.8	14.04	21	PASS
	Ant4	5240	26Tone	RU0	10.37	≤26.50	3.8	14.17	21	PASS

11AX40 MIMO		5240	52Tone	RU37	10.14	≤ 26.50	3.8	13.94	21	PASS
			106Tone	RU53	11.34	≤ 26.50	3.8	15.14	21	PASS
			242Tone	RU61	10.62	≤ 26.50	3.8	14.42	21	PASS
		total	26Tone	RU0	16.54	≤ 26.50	3.8	20.34	21	PASS
			52Tone	RU37	16.36	≤ 26.50	3.8	20.16	21	PASS
			106Tone	RU53	16.83	≤ 26.50	3.8	20.63	21	PASS
			242Tone	RU61	16.19	≤ 26.50	3.8	19.99	21	PASS
			26Tone	RU0	8.68	≤ 26.50	3.8	12.48	21	PASS
	Ant1	5190	52Tone	RU37	9.78	≤ 26.50	3.8	13.58	21	PASS
			106Tone	RU53	9.77	≤ 26.50	3.8	13.57	21	PASS
			242Tone	RU61	10.23	≤ 26.50	3.8	14.03	21	PASS
			484Tone	RU65	10.74	≤ 26.50	3.8	14.54	21	PASS
			26Tone	RU0	8.50	≤ 26.50	3.8	12.30	21	PASS
	Ant2	5190	52Tone	RU37	11.03	≤ 26.50	3.8	14.83	21	PASS
			106Tone	RU53	9.56	≤ 26.50	3.8	13.36	21	PASS
			242Tone	RU61	11.34	≤ 26.50	3.8	15.14	21	PASS
			484Tone	RU65	11.63	≤ 26.50	3.8	15.43	21	PASS
			26Tone	RU0	8.84	≤ 26.50	3.8	12.64	21	PASS
	Ant3	5190	52Tone	RU37	10.38	≤ 26.50	3.8	14.18	21	PASS
			106Tone	RU53	10.36	≤ 26.50	3.8	14.16	21	PASS
			242Tone	RU61	10.41	≤ 26.50	3.8	14.21	21	PASS
			484Tone	RU65	10.57	≤ 26.50	3.8	14.37	21	PASS
			26Tone	RU0	9.46	≤ 26.50	3.8	13.26	21	PASS
	Ant4	5190	52Tone	RU37	10.10	≤ 26.50	3.8	13.90	21	PASS
			106Tone	RU53	10.60	≤ 26.50	3.8	14.40	21	PASS
			242Tone	RU61	10.95	≤ 26.50	3.8	14.75	21	PASS
			484Tone	RU65	10.96	≤ 26.50	3.8	14.76	21	PASS
			26Tone	RU0	14.91	≤ 26.50	3.8	18.71	21	PASS
	total	5190	52Tone	RU37	16.37	≤ 26.50	3.8	20.17	21	PASS
			106Tone	RU53	16.11	≤ 26.50	3.8	19.91	21	PASS
			242Tone	RU61	16.78	≤ 26.50	3.8	20.58	21	PASS
			484Tone	RU65	17.01	≤ 26.50	3.8	20.81	21	PASS
			26Tone	RU0	9.24	≤ 26.50	3.8	13.04	21	PASS
	Ant1	5230	52Tone	RU37	10.25	≤ 26.50	3.8	14.05	21	PASS
			106Tone	RU53	10.49	≤ 26.50	3.8	14.29	21	PASS
			242Tone	RU61	10.97	≤ 26.50	3.8	14.77	21	PASS
			484Tone	RU65	10.45	≤ 26.50	3.8	14.25	21	PASS
			26Tone	RU0	9.12	≤ 26.50	3.8	12.92	21	PASS
	Ant2	5230	52Tone	RU37	10.28	≤ 26.50	3.8	14.08	21	PASS
			106Tone	RU53	10.50	≤ 26.50	3.8	14.30	21	PASS
			242Tone	RU61	10.37	≤ 26.50	3.8	14.17	21	PASS
			484Tone	RU65	10.84	≤ 26.50	3.8	14.64	21	PASS
			26Tone	RU0	9.94	≤ 26.50	3.8	13.74	21	PASS
	Ant3	5230	52Tone	RU37	11.10	≤ 26.50	3.8	14.90	21	PASS
			106Tone	RU53	10.80	≤ 26.50	3.8	14.60	21	PASS
			242Tone	RU61	11.23	≤ 26.50	3.8	15.03	21	PASS
			484Tone	RU65	11.01	≤ 26.50	3.8	14.81	21	PASS
			26Tone	RU0	10.44	≤ 26.50	3.8	14.24	21	PASS
	Ant4	5230	52Tone	RU37	11.01	≤ 26.50	3.8	14.81	21	PASS
			106Tone	RU53	11.09	≤ 26.50	3.8	14.89	21	PASS
			242Tone	RU61	11.02	≤ 26.50	3.8	14.82	21	PASS
			484Tone	RU65	11.50	≤ 26.50	3.8	15.30	21	PASS
			26Tone	RU0	15.74	≤ 26.50	3.8	19.54	21	PASS
	total	5230	52Tone	RU37	16.70	≤ 26.50	3.8	20.50	21	PASS
			106Tone	RU53	16.75	≤ 26.50	3.8	20.55	21	PASS
			242Tone	RU61	16.93	≤ 26.50	3.8	20.73	21	PASS
			484Tone	RU65	16.99	≤ 26.50	3.8	20.79	21	PASS
11AX80	Ant1	5210	26Tone	RU0	9.20	≤ 26.50	3.8	13.00	21	PASS

MIMO			52Tone	RU37	10.27	≤ 26.50	3.8	14.07	21	PASS
			106Tone	RU53	10.85	≤ 26.50	3.8	14.65	21	PASS
			242Tone	RU61	10.86	≤ 26.50	3.8	14.66	21	PASS
			484Tone	RU65	10.64	≤ 26.50	3.8	14.44	21	PASS
			996Tone	RU67	10.67	≤ 26.50	3.8	14.47	21	PASS
	Ant2	5210	26Tone	RU0	10.13	≤ 26.50	3.8	13.93	21	PASS
			52Tone	RU37	10.78	≤ 26.50	3.8	14.58	21	PASS
			106Tone	RU53	11.75	≤ 26.50	3.8	15.55	21	PASS
			242Tone	RU61	10.40	≤ 26.50	3.8	14.20	21	PASS
			484Tone	RU65	10.39	≤ 26.50	3.8	14.19	21	PASS
			996Tone	RU67	11.03	≤ 26.50	3.8	14.83	21	PASS
	Ant3	5210	26Tone	RU0	9.54	≤ 26.50	3.8	13.34	21	PASS
			52Tone	RU37	10.64	≤ 26.50	3.8	14.44	21	PASS
			106Tone	RU53	10.71	≤ 26.50	3.8	14.51	21	PASS
			242Tone	RU61	11.10	≤ 26.50	3.8	14.90	21	PASS
			484Tone	RU65	11.21	≤ 26.50	3.8	15.01	21	PASS
			996Tone	RU67	10.64	≤ 26.50	3.8	14.44	21	PASS
	Ant4	5210	26Tone	RU0	9.93	≤ 26.50	3.8	13.73	21	PASS
			52Tone	RU37	10.59	≤ 26.50	3.8	14.39	21	PASS
			106Tone	RU53	10.57	≤ 26.50	3.8	14.37	21	PASS
			242Tone	RU61	11.28	≤ 26.50	3.8	15.08	21	PASS
			484Tone	RU65	11.01	≤ 26.50	3.8	14.81	21	PASS
			996Tone	RU67	10.89	≤ 26.50	3.8	14.69	21	PASS
	total	5210	26Tone	RU0	15.74	≤ 26.50	3.8	19.54	21	PASS
			52Tone	RU37	16.59	≤ 26.50	3.8	20.39	21	PASS
			106Tone	RU53	17.02	≤ 26.50	3.8	20.82	21	PASS
			242Tone	RU61	16.94	≤ 26.50	3.8	20.74	21	PASS
			484Tone	RU65	16.84	≤ 26.50	3.8	20.64	21	PASS
			996Tone	RU67	16.83	≤ 26.50	3.8	20.63	21	PASS

Test Mode	Antenna	Frequency[MHz]	Ru Size	Ru Index	Result [dBm]	Limit [dBm]	Verdict
11AX20MIMO	Ant1	5260	26Tone	RU0	7.25	\leq 20.48	PASS
			52Tone	RU37	9.76	\leq 20.48	PASS
	Ant2	5260	106Tone	RU53	10.33	\leq 20.48	PASS
			242Tone	RU61	11.12	\leq 20.48	PASS
	Ant3	5260	26Tone	RU0	7.18	\leq 20.48	PASS
			52Tone	RU37	9.71	\leq 20.48	PASS
			106Tone	RU53	10.73	\leq 20.48	PASS
			242Tone	RU61	11.76	\leq 20.48	PASS
	Ant4	5260	26Tone	RU0	7.51	\leq 20.48	PASS
			52Tone	RU37	9.92	\leq 20.48	PASS
			106Tone	RU53	10.55	\leq 20.48	PASS
			242Tone	RU61	11.13	\leq 20.48	PASS
	total	5260	26Tone	RU0	7.14	\leq 20.48	PASS
			52Tone	RU37	9.01	\leq 20.48	PASS
			106Tone	RU53	10.27	\leq 20.48	PASS
			242Tone	RU61	11.79	\leq 20.48	PASS
	Ant1	5280	26Tone	RU0	13.29	\leq 20.48	PASS
			52Tone	RU37	15.63	\leq 20.48	PASS
			106Tone	RU53	16.49	\leq 20.48	PASS
			242Tone	RU61	17.48	\leq 20.48	PASS
	Ant2	5280	26Tone	RU0	7.07	\leq 20.48	PASS
			52Tone	RU37	9.86	\leq 20.48	PASS
			106Tone	RU53	10.68	\leq 20.48	PASS
			242Tone	RU61	11.51	\leq 20.48	PASS
	Ant3	5280	26Tone	RU0	7.52	\leq 20.48	PASS
			52Tone	RU37	9.85	\leq 20.48	PASS
			106Tone	RU53	10.83	\leq 20.48	PASS
			242Tone	RU61	11.20	\leq 20.48	PASS
	Ant4	5280	26Tone	RU0	7.35	\leq 20.48	PASS
			52Tone	RU37	9.92	\leq 20.48	PASS
			106Tone	RU53	10.56	\leq 20.48	PASS
			242Tone	RU61	11.30	\leq 20.48	PASS
	total	5280	26Tone	RU0	7.20	\leq 20.48	PASS
			52Tone	RU37	10.40	\leq 20.48	PASS
			106Tone	RU53	10.90	\leq 20.48	PASS
			242Tone	RU61	11.44	\leq 20.48	PASS
	Ant1	5320	26Tone	RU0	13.31	\leq 20.48	PASS
			52Tone	RU37	16.03	\leq 20.48	PASS
			106Tone	RU53	16.77	\leq 20.48	PASS
			242Tone	RU61	17.38	\leq 20.48	PASS
	Ant2	5320	26Tone	RU0	7.75	\leq 20.48	PASS
			52Tone	RU37	9.77	\leq 20.48	PASS
			106Tone	RU53	10.63	\leq 20.48	PASS
			242Tone	RU61	11.66	\leq 20.48	PASS
	Ant3	5320	26Tone	RU0	7.26	\leq 20.48	PASS
			52Tone	RU37	9.97	\leq 20.48	PASS
			106Tone	RU53	10.50	\leq 20.48	PASS
			242Tone	RU61	11.04	\leq 20.48	PASS
	Ant4	5320	26Tone	RU0	7.52	\leq 20.48	PASS
			52Tone	RU37	9.83	\leq 20.48	PASS
			106Tone	RU53	10.74	\leq 20.48	PASS
			242Tone	RU61	11.17	\leq 20.48	PASS
	total	5320	26Tone	RU0	7.53	\leq 20.48	PASS
			52Tone	RU37	10.13	\leq 20.48	PASS
			106Tone	RU53	10.64	\leq 20.48	PASS
			242Tone	RU61	11.93	\leq 20.48	PASS

		106Tone	RU53	16.65	≤ 20.48	PASS
		242Tone	RU61	17.49	≤ 20.48	PASS
Ant1	5500	26Tone	RU0	7.11	≤ 20.48	PASS
		52Tone	RU37	10.07	≤ 20.48	PASS
		106Tone	RU53	10.73	≤ 20.48	PASS
		242Tone	RU61	11.78	≤ 20.48	PASS
		26Tone	RU0	7.24	≤ 20.48	PASS
Ant2	5500	52Tone	RU37	9.63	≤ 20.48	PASS
		106Tone	RU53	10.39	≤ 20.48	PASS
		242Tone	RU61	11.54	≤ 20.48	PASS
		26Tone	RU0	7.78	≤ 20.48	PASS
Ant3	5500	52Tone	RU37	9.37	≤ 20.48	PASS
		106Tone	RU53	10.24	≤ 20.48	PASS
		242Tone	RU61	11.09	≤ 20.48	PASS
		26Tone	RU0	7.11	≤ 20.48	PASS
Ant4	5500	52Tone	RU37	9.88	≤ 20.48	PASS
		106Tone	RU53	10.55	≤ 20.48	PASS
		242Tone	RU61	11.33	≤ 20.48	PASS
		26Tone	RU0	13.34	≤ 20.48	PASS
total	5500	52Tone	RU37	15.77	≤ 20.48	PASS
		106Tone	RU53	16.50	≤ 20.48	PASS
		242Tone	RU61	17.46	≤ 20.48	PASS
		26Tone	RU0	7.95	≤ 20.48	PASS
Ant1	5580	52Tone	RU37	9.56	≤ 20.48	PASS
		106Tone	RU53	11.06	≤ 20.48	PASS
		242Tone	RU61	11.16	≤ 20.48	PASS
		26Tone	RU0	7.36	≤ 20.48	PASS
Ant2	5580	52Tone	RU37	10.48	≤ 20.48	PASS
		106Tone	RU53	10.52	≤ 20.48	PASS
		242Tone	RU61	11.22	≤ 20.48	PASS
		26Tone	RU0	7.89	≤ 20.48	PASS
Ant3	5580	52Tone	RU37	10.44	≤ 20.48	PASS
		106Tone	RU53	10.97	≤ 20.48	PASS
		242Tone	RU61	11.67	≤ 20.48	PASS
		26Tone	RU0	7.18	≤ 20.48	PASS
Ant4	5580	52Tone	RU37	9.13	≤ 20.48	PASS
		106Tone	RU53	10.90	≤ 20.48	PASS
		242Tone	RU61	11.52	≤ 20.48	PASS
		26Tone	RU0	13.63	≤ 20.48	PASS
total	5580	52Tone	RU37	15.96	≤ 20.48	PASS
		106Tone	RU53	16.89	≤ 20.48	PASS
		242Tone	RU61	17.42	≤ 20.48	PASS
		26Tone	RU8	7.23	≤ 19.31	PASS
Ant1	5720_UNII-2C	52Tone	RU40	9.43	≤ 19.31	PASS
		106Tone	RU54	10.06	≤ 19.31	PASS
		242Tone	RU61	11.15	≤ 19.31	PASS
		26Tone	RU8	7.12	≤ 19.31	PASS
Ant2	5720_UNII-2C	52Tone	RU40	9.09	≤ 19.31	PASS
		106Tone	RU54	10.15	≤ 19.31	PASS
		242Tone	RU61	11.04	≤ 19.31	PASS
		26Tone	RU8	6.94	≤ 19.31	PASS
Ant3	5720_UNII-2C	52Tone	RU40	9.37	≤ 19.31	PASS
		106Tone	RU54	10.40	≤ 19.31	PASS
		242Tone	RU61	11.05	≤ 19.31	PASS
		26Tone	RU8	7.57	≤ 19.31	PASS
Ant4	5720_UNII-2C	52Tone	RU40	8.92	≤ 19.31	PASS
		106Tone	RU54	10.64	≤ 19.31	PASS
		242Tone	RU61	11.22	≤ 19.31	PASS
		26Tone	RU8	13.24	≤ 19.31	PASS
total	5720_UNII-2C	52Tone	RU40	15.23	≤ 19.31	PASS
		106Tone	RU54	16.34	≤ 19.31	PASS

		242Tone	RU61	17.14	≤ 19.31	PASS
Ant1	5720_UNII-3	26Tone	RU8	4.10	≤ 26.50	PASS
		52Tone	RU40	5.00	≤ 26.50	PASS
		106Tone	RU54	5.30	≤ 26.50	PASS
		242Tone	RU61	0.76	≤ 26.50	PASS
		26Tone	RU8	4.07	≤ 26.50	PASS
Ant2	5720_UNII-3	52Tone	RU40	5.18	≤ 26.50	PASS
		106Tone	RU54	5.80	≤ 26.50	PASS
		242Tone	RU61	1.81	≤ 26.50	PASS
		26Tone	RU8	3.62	≤ 26.50	PASS
Ant3	5720_UNII-3	52Tone	RU40	5.57	≤ 26.50	PASS
		106Tone	RU54	5.43	≤ 26.50	PASS
		242Tone	RU61	3.08	≤ 26.50	PASS
		26Tone	RU8	4.87	≤ 26.50	PASS
Ant4	5720_UNII-3	52Tone	RU40	6.54	≤ 26.50	PASS
		106Tone	RU54	6.36	≤ 26.50	PASS
		242Tone	RU61	2.17	≤ 26.50	PASS
		26Tone	RU8	10.21	≤ 26.50	PASS
total	5720_UNII-3	52Tone	RU40	11.64	≤ 26.50	PASS
		106Tone	RU54	11.76	≤ 26.50	PASS
		242Tone	RU61	8.05	≤ 26.50	PASS
		26Tone	RU0	17.15	≤ 26.50	PASS
Ant1	5745	52Tone	RU37	17.67	≤ 26.50	PASS
		106Tone	RU53	17.93	≤ 26.50	PASS
		242Tone	RU61	17.38	≤ 26.50	PASS
		26Tone	RU0	17.18	≤ 26.50	PASS
Ant2	5745	52Tone	RU37	17.84	≤ 26.50	PASS
		106Tone	RU53	17.36	≤ 26.50	PASS
		242Tone	RU61	17.22	≤ 26.50	PASS
		26Tone	RU0	17.21	≤ 26.50	PASS
Ant3	5745	52Tone	RU37	17.68	≤ 26.50	PASS
		106Tone	RU53	17.23	≤ 26.50	PASS
		242Tone	RU61	17.37	≤ 26.50	PASS
		26Tone	RU0	17.45	≤ 26.50	PASS
Ant4	5745	52Tone	RU37	17.92	≤ 26.50	PASS
		106Tone	RU53	18.65	≤ 26.50	PASS
		242Tone	RU61	18.29	≤ 26.50	PASS
		26Tone	RU0	23.27	≤ 26.50	PASS
total	5745	52Tone	RU37	23.80	≤ 26.50	PASS
		106Tone	RU53	23.85	≤ 26.50	PASS
		242Tone	RU61	23.61	≤ 26.50	PASS
		26Tone	RU0	17.09	≤ 26.50	PASS
Ant1	5785	52Tone	RU37	17.17	≤ 26.50	PASS
		106Tone	RU53	17.01	≤ 26.50	PASS
		242Tone	RU61	17.55	≤ 26.50	PASS
		26Tone	RU0	17.37	≤ 26.50	PASS
Ant2	5785	52Tone	RU37	17.02	≤ 26.50	PASS
		106Tone	RU53	17.72	≤ 26.50	PASS
		242Tone	RU61	17.25	≤ 26.50	PASS
		26Tone	RU0	17.13	≤ 26.50	PASS
Ant3	5785	52Tone	RU37	16.61	≤ 26.50	PASS
		106Tone	RU53	16.95	≤ 26.50	PASS
		242Tone	RU61	17.26	≤ 26.50	PASS
		26Tone	RU0	17.60	≤ 26.50	PASS
Ant4	5785	52Tone	RU37	17.72	≤ 26.50	PASS
		106Tone	RU53	17.46	≤ 26.50	PASS
		242Tone	RU61	18.36	≤ 26.50	PASS
		26Tone	RU0	23.32	≤ 26.50	PASS
total	5785	52Tone	RU37	23.17	≤ 26.50	PASS
		106Tone	RU53	23.32	≤ 26.50	PASS
		242Tone	RU61	23.65	≤ 26.50	PASS

			26Tone	RU0	17.21	≤ 26.50	PASS
			52Tone	RU37	17.62	≤ 26.50	PASS
			106Tone	RU53	17.17	≤ 26.50	PASS
			242Tone	RU61	17.78	≤ 26.50	PASS
	Ant1	5825	26Tone	RU0	17.73	≤ 26.50	PASS
	Ant2		52Tone	RU37	17.19	≤ 26.50	PASS
	Ant3		106Tone	RU53	17.78	≤ 26.50	PASS
	Ant4		242Tone	RU61	17.57	≤ 26.50	PASS
			26Tone	RU0	17.36	≤ 26.50	PASS
			52Tone	RU37	16.41	≤ 26.50	PASS
			106Tone	RU53	17.12	≤ 26.50	PASS
			242Tone	RU61	17.38	≤ 26.50	PASS
			26Tone	RU0	17.25	≤ 26.50	PASS
			52Tone	RU37	16.91	≤ 26.50	PASS
			106Tone	RU53	18.79	≤ 26.50	PASS
			242Tone	RU61	18.40	≤ 26.50	PASS
			26Tone	RU0	23.41	≤ 26.50	PASS
			52Tone	RU37	23.08	≤ 26.50	PASS
			106Tone	RU53	23.79	≤ 26.50	PASS
			242Tone	RU61	23.82	≤ 26.50	PASS
11AX40MIMO	Ant1	5270	26Tone	RU0	7.78	≤ 20.48	PASS
	Ant2		52Tone	RU37	9.41	≤ 20.48	PASS
	Ant3		106Tone	RU53	9.93	≤ 20.48	PASS
	Ant4		242Tone	RU61	11.22	≤ 20.48	PASS
			484Tone	RU65	11.57	≤ 20.48	PASS
	Ant1	5270	26Tone	RU0	7.40	≤ 20.48	PASS
	Ant2		52Tone	RU37	9.92	≤ 20.48	PASS
	Ant3		106Tone	RU53	9.89	≤ 20.48	PASS
	Ant4		242Tone	RU61	11.17	≤ 20.48	PASS
			484Tone	RU65	11.37	≤ 20.48	PASS
	Ant1	5270	26Tone	RU0	7.71	≤ 20.48	PASS
	Ant2		52Tone	RU37	9.24	≤ 20.48	PASS
	Ant3		106Tone	RU53	9.83	≤ 20.48	PASS
	Ant4		242Tone	RU61	11.09	≤ 20.48	PASS
			484Tone	RU65	11.39	≤ 20.48	PASS
	Ant1	5270	26Tone	RU0	7.01	≤ 20.48	PASS
	Ant2		52Tone	RU37	9.22	≤ 20.48	PASS
	Ant3		106Tone	RU53	10.24	≤ 20.48	PASS
	Ant4		242Tone	RU61	11.13	≤ 20.48	PASS
			484Tone	RU65	11.40	≤ 20.48	PASS
	total	5270	26Tone	RU0	13.51	≤ 20.48	PASS
	Ant1		52Tone	RU37	15.48	≤ 20.48	PASS
	Ant2		106Tone	RU53	16.00	≤ 20.48	PASS
	Ant3		242Tone	RU61	17.17	≤ 20.48	PASS
			484Tone	RU65	17.45	≤ 20.48	PASS
	Ant1	5310	26Tone	RU0	7.01	≤ 20.48	PASS
	Ant2		52Tone	RU37	9.24	≤ 20.48	PASS
	Ant3		106Tone	RU53	10.57	≤ 20.48	PASS
	Ant4		242Tone	RU61	11.11	≤ 20.48	PASS
			484Tone	RU65	11.17	≤ 20.48	PASS
	Ant1	5310	26Tone	RU0	7.42	≤ 20.48	PASS
	Ant2		52Tone	RU37	9.29	≤ 20.48	PASS
	Ant3		106Tone	RU53	10.71	≤ 20.48	PASS
	Ant4		242Tone	RU61	11.32	≤ 20.48	PASS
			484Tone	RU65	11.21	≤ 20.48	PASS
	Ant1	5310	26Tone	RU0	7.48	≤ 20.48	PASS
	Ant2		52Tone	RU37	9.51	≤ 20.48	PASS
	Ant3		106Tone	RU53	10.82	≤ 20.48	PASS
	Ant4		242Tone	RU61	11.01	≤ 20.48	PASS
			484Tone	RU65	11.32	≤ 20.48	PASS

			52Tone	RU37	9.39	≤ 20.48	PASS
			106Tone	RU53	10.61	≤ 20.48	PASS
			242Tone	RU61	11.09	≤ 20.48	PASS
			484Tone	RU65	11.18	≤ 20.48	PASS
total	5310	5310	26Tone	RU0	13.51	≤ 20.48	PASS
			52Tone	RU37	15.38	≤ 20.48	PASS
			106Tone	RU53	16.70	≤ 20.48	PASS
			242Tone	RU61	17.15	≤ 20.48	PASS
			484Tone	RU65	17.24	≤ 20.48	PASS
Ant1	5510	5510	26Tone	RU0	7.82	≤ 20.48	PASS
			52Tone	RU37	9.38	≤ 20.48	PASS
			106Tone	RU53	10.09	≤ 20.48	PASS
			242Tone	RU61	10.28	≤ 20.48	PASS
			484Tone	RU65	11.21	≤ 20.48	PASS
Ant2	5510	5510	26Tone	RU0	7.71	≤ 20.48	PASS
			52Tone	RU37	9.41	≤ 20.48	PASS
			106Tone	RU53	11.06	≤ 20.48	PASS
			242Tone	RU61	10.23	≤ 20.48	PASS
			484Tone	RU65	11.04	≤ 20.48	PASS
Ant3	5510	5510	26Tone	RU0	7.89	≤ 20.48	PASS
			52Tone	RU37	9.07	≤ 20.48	PASS
			106Tone	RU53	10.12	≤ 20.48	PASS
			242Tone	RU61	11.00	≤ 20.48	PASS
			484Tone	RU65	11.16	≤ 20.48	PASS
Ant4	5510	5510	26Tone	RU0	7.18	≤ 20.48	PASS
			52Tone	RU37	9.33	≤ 20.48	PASS
			106Tone	RU53	10.29	≤ 20.48	PASS
			242Tone	RU61	11.05	≤ 20.48	PASS
			484Tone	RU65	11.01	≤ 20.48	PASS
total	5510	5510	26Tone	RU0	13.68	≤ 20.48	PASS
			52Tone	RU37	15.32	≤ 20.48	PASS
			106Tone	RU53	16.43	≤ 20.48	PASS
			242Tone	RU61	16.68	≤ 20.48	PASS
			484Tone	RU65	17.13	≤ 20.48	PASS
Ant1	5550	5550	26Tone	RU0	7.48	≤ 20.48	PASS
			52Tone	RU37	9.59	≤ 20.48	PASS
			106Tone	RU53	10.24	≤ 20.48	PASS
			242Tone	RU61	11.24	≤ 20.48	PASS
			484Tone	RU65	11.09	≤ 20.48	PASS
Ant2	5550	5550	26Tone	RU0	7.23	≤ 20.48	PASS
			52Tone	RU37	10.39	≤ 20.48	PASS
			106Tone	RU53	10.42	≤ 20.48	PASS
			242Tone	RU61	11.50	≤ 20.48	PASS
			484Tone	RU65	11.48	≤ 20.48	PASS
Ant3	5550	5550	26Tone	RU0	7.57	≤ 20.48	PASS
			52Tone	RU37	9.31	≤ 20.48	PASS
			106Tone	RU53	10.30	≤ 20.48	PASS
			242Tone	RU61	11.00	≤ 20.48	PASS
			484Tone	RU65	11.41	≤ 20.48	PASS
Ant4	5550	5550	26Tone	RU0	7.11	≤ 20.48	PASS
			52Tone	RU37	9.38	≤ 20.48	PASS
			106Tone	RU53	10.25	≤ 20.48	PASS
			242Tone	RU61	11.56	≤ 20.48	PASS
			484Tone	RU65	11.30	≤ 20.48	PASS
total	5550	5550	26Tone	RU0	13.37	≤ 20.48	PASS
			52Tone	RU37	15.71	≤ 20.48	PASS
			106Tone	RU53	16.32	≤ 20.48	PASS
			242Tone	RU61	17.35	≤ 20.48	PASS
			484Tone	RU65	17.34	≤ 20.48	PASS
Ant1	5710_UNII-2C	5710_UNII-2C	26Tone	RU17	7.57	≤ 20.48	PASS
			52Tone	RU44	9.75	≤ 20.48	PASS

			106Tone	RU56	10.44	≤ 20.48	PASS
			242Tone	RU62	11.20	≤ 20.48	PASS
			484Tone	RU65	11.36	≤ 20.48	PASS
Ant2	5710_UNII-2C	26Tone	RU17	7.31	≤ 20.48	PASS	
		52Tone	RU44	9.59	≤ 20.48	PASS	
		106Tone	RU56	9.95	≤ 20.48	PASS	
		242Tone	RU62	11.33	≤ 20.48	PASS	
		484Tone	RU65	11.24	≤ 20.48	PASS	
Ant3	5710_UNII-2C	26Tone	RU17	7.12	≤ 20.48	PASS	
		52Tone	RU44	9.85	≤ 20.48	PASS	
		106Tone	RU56	10.02	≤ 20.48	PASS	
		242Tone	RU62	10.85	≤ 20.48	PASS	
		484Tone	RU65	11.18	≤ 20.48	PASS	
Ant4	5710_UNII-2C	26Tone	RU17	7.20	≤ 20.48	PASS	
		52Tone	RU44	9.12	≤ 20.48	PASS	
		106Tone	RU56	10.22	≤ 20.48	PASS	
		242Tone	RU62	10.56	≤ 20.48	PASS	
		484Tone	RU65	11.46	≤ 20.48	PASS	
total	5710_UNII-2C	26Tone	RU17	13.32	≤ 20.48	PASS	
		52Tone	RU44	15.61	≤ 20.48	PASS	
		106Tone	RU56	16.18	≤ 20.48	PASS	
		242Tone	RU62	17.02	≤ 20.48	PASS	
		484Tone	RU65	17.33	≤ 20.48	PASS	
Ant1	5710_UNII-3	26Tone	RU17	2.38	≤ 26.50	PASS	
		52Tone	RU44	4.36	≤ 26.50	PASS	
		106Tone	RU56	4.06	≤ 26.50	PASS	
		242Tone	RU62	1.16	≤ 26.50	PASS	
		484Tone	RU65	1.93	≤ 26.50	PASS	
Ant2	5710_UNII-3	26Tone	RU17	3.30	≤ 26.50	PASS	
		52Tone	RU44	6.63	≤ 26.50	PASS	
		106Tone	RU56	5.08	≤ 26.50	PASS	
		242Tone	RU62	1.88	≤ 26.50	PASS	
		484Tone	RU65	1.94	≤ 26.50	PASS	
Ant3	5710_UNII-3	26Tone	RU17	4.97	≤ 26.50	PASS	
		52Tone	RU44	6.88	≤ 26.50	PASS	
		106Tone	RU56	4.96	≤ 26.50	PASS	
		242Tone	RU62	0.37	≤ 26.50	PASS	
		484Tone	RU65	1.21	≤ 26.50	PASS	
Ant4	5710_UNII-3	26Tone	RU17	3.45	≤ 26.50	PASS	
		52Tone	RU44	5.78	≤ 26.50	PASS	
		106Tone	RU56	5.38	≤ 26.50	PASS	
		242Tone	RU62	1.75	≤ 26.50	PASS	
		484Tone	RU65	1.45	≤ 26.50	PASS	
total	5710_UNII-3	26Tone	RU17	9.65	≤ 26.50	PASS	
		52Tone	RU44	12.04	≤ 26.50	PASS	
		106Tone	RU56	10.92	≤ 26.50	PASS	
		242Tone	RU62	7.35	≤ 26.50	PASS	
		484Tone	RU65	7.66	≤ 26.50	PASS	
Ant1	5755	26Tone	RU0	15.84	≤ 26.50	PASS	
		52Tone	RU37	16.25	≤ 26.50	PASS	
		106Tone	RU53	15.12	≤ 26.50	PASS	
		242Tone	RU61	16.73	≤ 26.50	PASS	
		484Tone	RU65	16.28	≤ 26.50	PASS	
Ant2	5755	26Tone	RU0	15.89	≤ 26.50	PASS	
		52Tone	RU37	16.47	≤ 26.50	PASS	
		106Tone	RU53	15.35	≤ 26.50	PASS	
		242Tone	RU61	16.23	≤ 26.50	PASS	
		484Tone	RU65	16.31	≤ 26.50	PASS	
Ant3	5755	26Tone	RU0	16.28	≤ 26.50	PASS	
		52Tone	RU37	16.00	≤ 26.50	PASS	
		106Tone	RU53	15.31	≤ 26.50	PASS	

			242Tone	RU61	16.12	≤ 26.50	PASS
			484Tone	RU65	16.25	≤ 26.50	PASS
Ant4	5755	26Tone	RU0	15.93	≤ 26.50	PASS	
		52Tone	RU37	16.07	≤ 26.50	PASS	
		106Tone	RU53	15.92	≤ 26.50	PASS	
		242Tone	RU61	16.64	≤ 26.50	PASS	
		484Tone	RU65	16.89	≤ 26.50	PASS	
		26Tone	RU0	22.01	≤ 26.50	PASS	
		52Tone	RU37	22.22	≤ 26.50	PASS	
total	5755	106Tone	RU53	21.46	≤ 26.50	PASS	
		242Tone	RU61	22.46	≤ 26.50	PASS	
		484Tone	RU65	22.46	≤ 26.50	PASS	
		26Tone	RU0	16.11	≤ 26.50	PASS	
		52Tone	RU37	17.76	≤ 26.50	PASS	
Ant1	5795	106Tone	RU53	17.15	≤ 26.50	PASS	
		242Tone	RU61	16.87	≤ 26.50	PASS	
		484Tone	RU65	17.04	≤ 26.50	PASS	
		26Tone	RU0	16.23	≤ 26.50	PASS	
		52Tone	RU37	16.23	≤ 26.50	PASS	
Ant2	5795	106Tone	RU53	16.49	≤ 26.50	PASS	
		242Tone	RU61	16.28	≤ 26.50	PASS	
		484Tone	RU65	16.92	≤ 26.50	PASS	
		26Tone	RU0	16.66	≤ 26.50	PASS	
		52Tone	RU37	17.10	≤ 26.50	PASS	
Ant3	5795	106Tone	RU53	17.01	≤ 26.50	PASS	
		242Tone	RU61	16.87	≤ 26.50	PASS	
		484Tone	RU65	17.27	≤ 26.50	PASS	
		26Tone	RU0	16.04	≤ 26.50	PASS	
		52Tone	RU37	16.60	≤ 26.50	PASS	
Ant4	5795	106Tone	RU53	16.38	≤ 26.50	PASS	
		242Tone	RU61	16.57	≤ 26.50	PASS	
		484Tone	RU65	16.98	≤ 26.50	PASS	
		26Tone	RU0	22.29	≤ 26.50	PASS	
		52Tone	RU37	22.98	≤ 26.50	PASS	
total	5795	106Tone	RU53	22.79	≤ 26.50	PASS	
		242Tone	RU61	22.67	≤ 26.50	PASS	
		484Tone	RU65	23.08	≤ 26.50	PASS	
		26Tone	RU0	7.17	≤ 20.48	PASS	
		52Tone	RU37	9.16	≤ 20.48	PASS	
11AX80MIMO	5290	106Tone	RU53	10.96	≤ 20.48	PASS	
		242Tone	RU61	11.12	≤ 20.48	PASS	
		484Tone	RU65	11.62	≤ 20.48	PASS	
		996Tone	RU67	11.53	≤ 20.48	PASS	
		26Tone	RU0	7.12	≤ 20.48	PASS	
		52Tone	RU37	9.53	≤ 20.48	PASS	
Ant2	5290	106Tone	RU53	10.83	≤ 20.48	PASS	
		242Tone	RU61	11.18	≤ 20.48	PASS	
		484Tone	RU65	11.64	≤ 20.48	PASS	
		996Tone	RU67	11.47	≤ 20.48	PASS	
		26Tone	RU0	7.22	≤ 20.48	PASS	
		52Tone	RU37	9.48	≤ 20.48	PASS	
Ant3	5290	106Tone	RU53	11.09	≤ 20.48	PASS	
		242Tone	RU61	11.31	≤ 20.48	PASS	
		484Tone	RU65	11.34	≤ 20.48	PASS	
		996Tone	RU67	11.07	≤ 20.48	PASS	
		26Tone	RU0	7.61	≤ 20.48	PASS	
		52Tone	RU37	9.21	≤ 20.48	PASS	
Ant4	5290	106Tone	RU53	10.97	≤ 20.48	PASS	
		242Tone	RU61	11.25	≤ 20.48	PASS	
		484Tone	RU65	11.12	≤ 20.48	PASS	
		996Tone	RU67	11.20	≤ 20.48	PASS	

			26Tone	RU0	13.30	≤ 20.48	PASS
			52Tone	RU37	15.37	≤ 20.48	PASS
			106Tone	RU53	16.98	≤ 20.48	PASS
			242Tone	RU61	17.24	≤ 20.48	PASS
			484Tone	RU65	17.46	≤ 20.48	PASS
			996Tone	RU67	17.34	≤ 20.48	PASS
	total	5290	26Tone	RU0	7.20	≤ 20.48	PASS
			52Tone	RU37	9.46	≤ 20.48	PASS
			106Tone	RU53	10.71	≤ 20.48	PASS
			242Tone	RU61	11.44	≤ 20.48	PASS
			484Tone	RU65	11.19	≤ 20.48	PASS
			996Tone	RU67	11.24	≤ 20.48	PASS
	Ant1	5530	26Tone	RU0	7.43	≤ 20.48	PASS
			52Tone	RU37	9.16	≤ 20.48	PASS
			106Tone	RU53	10.55	≤ 20.48	PASS
			242Tone	RU61	11.40	≤ 20.48	PASS
			484Tone	RU65	11.44	≤ 20.48	PASS
			996Tone	RU67	11.36	≤ 20.48	PASS
	Ant2	5530	26Tone	RU0	7.29	≤ 20.48	PASS
			52Tone	RU37	9.44	≤ 20.48	PASS
			106Tone	RU53	10.29	≤ 20.48	PASS
			242Tone	RU61	11.63	≤ 20.48	PASS
			484Tone	RU65	11.73	≤ 20.48	PASS
			996Tone	RU67	11.26	≤ 20.48	PASS
	Ant3	5530	26Tone	RU0	7.41	≤ 20.48	PASS
			52Tone	RU37	9.28	≤ 20.48	PASS
			106Tone	RU53	10.64	≤ 20.48	PASS
			242Tone	RU61	11.30	≤ 20.48	PASS
			484Tone	RU65	11.45	≤ 20.48	PASS
			996Tone	RU67	11.50	≤ 20.48	PASS
	Ant4	5530	26Tone	RU0	13.35	≤ 20.48	PASS
			52Tone	RU37	15.36	≤ 20.48	PASS
			106Tone	RU53	16.57	≤ 20.48	PASS
			242Tone	RU61	17.46	≤ 20.48	PASS
			484Tone	RU65	17.48	≤ 20.48	PASS
			996Tone	RU67	17.36	≤ 20.48	PASS
	total	5530	26Tone	RU0	7.45	≤ 20.48	PASS
			52Tone	RU37	10.71	≤ 20.48	PASS
			106Tone	RU53	10.35	≤ 20.48	PASS
			242Tone	RU61	11.30	≤ 20.48	PASS
			484Tone	RU65	11.26	≤ 20.48	PASS
			996Tone	RU67	11.26	≤ 20.48	PASS
	Ant1	5610	26Tone	RU0	7.28	≤ 20.48	PASS
			52Tone	RU37	9.57	≤ 20.48	PASS
			106Tone	RU53	10.15	≤ 20.48	PASS
			242Tone	RU61	11.83	≤ 20.48	PASS
			484Tone	RU65	11.48	≤ 20.48	PASS
			996Tone	RU67	11.06	≤ 20.48	PASS
	Ant2	5610	26Tone	RU0	7.62	≤ 20.48	PASS
			52Tone	RU37	9.60	≤ 20.48	PASS
			106Tone	RU53	10.39	≤ 20.48	PASS
			242Tone	RU61	11.23	≤ 20.48	PASS
			484Tone	RU65	11.36	≤ 20.48	PASS
			996Tone	RU67	11.22	≤ 20.48	PASS
	Ant3	5610	26Tone	RU0	7.38	≤ 20.48	PASS
			52Tone	RU37	9.75	≤ 20.48	PASS
			106Tone	RU53	10.03	≤ 20.48	PASS
			242Tone	RU61	11.31	≤ 20.48	PASS
			484Tone	RU65	11.54	≤ 20.48	PASS
			996Tone	RU67	11.39	≤ 20.48	PASS
	Ant4	5610	26Tone	RU0	13.45	≤ 20.48	PASS
	total	5610	26Tone	RU0	13.45	≤ 20.48	PASS

			52Tone	RU37	15.95	≤ 20.48	PASS
			106Tone	RU53	16.25	≤ 20.48	PASS
			242Tone	RU61	17.44	≤ 20.48	PASS
			484Tone	RU65	17.43	≤ 20.48	PASS
			996Tone	RU67	17.25	≤ 20.48	PASS
			26Tone	RU36	6.35	≤ 20.48	PASS
			52Tone	RU52	8.61	≤ 20.48	PASS
			106Tone	RU60	10.68	≤ 20.48	PASS
			242Tone	RU64	11.44	≤ 20.48	PASS
			484Tone	RU66	11.34	≤ 20.48	PASS
			996Tone	RU67	11.78	≤ 20.48	PASS
			26Tone	RU36	6.78	≤ 20.48	PASS
			52Tone	RU52	8.99	≤ 20.48	PASS
			106Tone	RU60	10.27	≤ 20.48	PASS
			242Tone	RU64	11.41	≤ 20.48	PASS
			484Tone	RU66	11.16	≤ 20.48	PASS
			996Tone	RU67	11.12	≤ 20.48	PASS
			26Tone	RU36	6.41	≤ 20.48	PASS
			52Tone	RU52	9.52	≤ 20.48	PASS
			106Tone	RU60	10.16	≤ 20.48	PASS
			242Tone	RU64	10.21	≤ 20.48	PASS
			484Tone	RU66	11.43	≤ 20.48	PASS
			996Tone	RU67	10.16	≤ 20.48	PASS
			26Tone	RU36	6.69	≤ 20.48	PASS
			52Tone	RU52	8.68	≤ 20.48	PASS
			106Tone	RU60	9.23	≤ 20.48	PASS
			242Tone	RU64	11.19	≤ 20.48	PASS
			484Tone	RU66	11.85	≤ 20.48	PASS
			996Tone	RU67	11.25	≤ 20.48	PASS
			26Tone	RU36	12.58	≤ 20.48	PASS
			52Tone	RU52	14.99	≤ 20.48	PASS
			106Tone	RU60	16.14	≤ 20.48	PASS
			242Tone	RU64	17.11	≤ 20.48	PASS
			484Tone	RU66	17.47	≤ 20.48	PASS
			996Tone	RU67	17.14	≤ 20.48	PASS
			26Tone	RU36	2.59	≤ 20.48	PASS
			52Tone	RU52	3.84	≤ 20.48	PASS
			106Tone	RU60	1.46	≤ 20.48	PASS
			242Tone	RU64	2.57	≤ 20.48	PASS
			484Tone	RU66	-0.20	≤ 20.48	PASS
			996Tone	RU67	-4.35	≤ 20.48	PASS
			26Tone	RU36	4.39	≤ 20.48	PASS
			52Tone	RU52	4.63	≤ 20.48	PASS
			106Tone	RU60	0.88	≤ 20.48	PASS
			242Tone	RU64	3.30	≤ 20.48	PASS
			484Tone	RU66	-0.11	≤ 20.48	PASS
			996Tone	RU67	-5.40	≤ 20.48	PASS
			26Tone	RU36	3.85	≤ 26.50	PASS
			52Tone	RU52	6.49	≤ 26.50	PASS
			106Tone	RU60	3.67	≤ 26.50	PASS
			242Tone	RU64	4.65	≤ 26.50	PASS
			484Tone	RU66	0.55	≤ 26.50	PASS
			996Tone	RU67	-5.40	≤ 26.50	PASS
			26Tone	RU36	3.20	≤ 26.50	PASS
			52Tone	RU52	5.17	≤ 26.50	PASS
			106Tone	RU60	4.02	≤ 26.50	PASS
			242Tone	RU64	3.93	≤ 26.50	PASS
			484Tone	RU66	0.93	≤ 26.50	PASS
			996Tone	RU67	-4.39	≤ 26.50	PASS
			26Tone	RU36	9.58	≤ 26.50	PASS
			52Tone	RU52	11.16	≤ 26.50	PASS

			106Tone	RU60	8.74	≤ 26.50	PASS
			242Tone	RU64	9.70	≤ 26.50	PASS
			484Tone	RU66	6.34	≤ 26.50	PASS
			996Tone	RU67	1.17	≤ 26.50	PASS
Ant1	5775	26Tone	RU0	14.34	≤ 26.50	PASS	
		52Tone	RU37	14.35	≤ 26.50	PASS	
		106Tone	RU53	14.28	≤ 26.50	PASS	
		242Tone	RU61	14.87	≤ 26.50	PASS	
		484Tone	RU65	14.16	≤ 26.50	PASS	
		996Tone	RU67	14.58	≤ 26.50	PASS	
Ant2	5775	26Tone	RU0	14.08	≤ 26.50	PASS	
		52Tone	RU37	14.11	≤ 26.50	PASS	
		106Tone	RU53	13.97	≤ 26.50	PASS	
		242Tone	RU61	14.94	≤ 26.50	PASS	
		484Tone	RU65	14.31	≤ 26.50	PASS	
		996Tone	RU67	14.20	≤ 26.50	PASS	
Ant3	5775	26Tone	RU0	14.72	≤ 26.50	PASS	
		52Tone	RU37	14.82	≤ 26.50	PASS	
		106Tone	RU53	14.96	≤ 26.50	PASS	
		242Tone	RU61	15.53	≤ 26.50	PASS	
		484Tone	RU65	14.54	≤ 26.50	PASS	
		996Tone	RU67	15.44	≤ 26.50	PASS	
Ant4	5775	26Tone	RU0	14.21	≤ 26.50	PASS	
		52Tone	RU37	14.29	≤ 26.50	PASS	
		106Tone	RU53	13.55	≤ 26.50	PASS	
		242Tone	RU61	14.30	≤ 26.50	PASS	
		484Tone	RU65	14.35	≤ 26.50	PASS	
		996Tone	RU67	15.15	≤ 26.50	PASS	
total	5775	26Tone	RU0	20.36	≤ 26.50	PASS	
		52Tone	RU37	20.42	≤ 26.50	PASS	
		106Tone	RU53	20.24	≤ 26.50	PASS	
		242Tone	RU61	20.95	≤ 26.50	PASS	
		484Tone	RU65	20.36	≤ 26.50	PASS	
		996Tone	RU67	20.89	≤ 26.50	PASS	

Note:

EUT is an outdoor access point. The maximum antenna gain is 3.5dBi.

The maximum gain at elevation angle above 30 degrees measured from the horizon is -2.2dBi, which was provided by manufacturer

For 802.11a mode, the device employed cyclic delay diversity (CDD).

According to KDB 662911 D01 v02r01, for power measurement on IEEE 802.11 devices:

Array Gain = 0 dB (i.e., no array gain) for $N_{Ant} \leq 4$; So Directional gain = $G_{ANT} + \text{Array Gain} = 3.5\text{dBi} < 6\text{dBi}$

For Elevation angle above 30 ° of EIRP: Directional gain = $G_{ANT} + \text{Array Gain} = -2.2\text{dBi}$

For 802.11n/ac/ax mode, the device support beam-forming function.

The directional gain = $G_{ANT} + 10 * \log(4/1) = 9.5\text{dBi} > 6\text{dBi}$; So the limit should be reduce $(9.5 - 6)\text{dB} = 3.5\text{dB}$

For Elevation angle above 30 ° of EIRP: Directional gain = $G_{ANT} + 10 * \log(4/1) = 3.8\text{dBi}$

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.

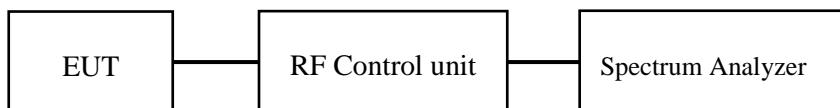
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not 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 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:

- a) Set RBW $\geq 1/T$, where T is defined in section II.B.1.a).
- b) Set 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 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 $10 \log (1\text{MHz}/\text{RBW})$ 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:	25.8~29 °C
Relative Humidity:	51~55 %
ATM Pressure:	101.0 kPa

The testing was performed by Kei Pei from 2022-04-03 to 2022-07-05.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the Appendix B.

******* END OF REPORT *******