TESTREPORT

Applicant Name :	AudioCodes Ltd.
Address :	1 Hayarden Street, Airport City, Lod, Israel.
Report Number:	RA230421-21249E-RF-00C
FCC ID:	XAK-RXPAD

Test Standard (s)

FCC PART 15.407

Sample Description

Product Type:	Touch Console device
Model No.:	RX-PAD
Multiple Model(s) No.:	N/A
Trade Mark:	audiocodes
Date Received:	2023/04/21
Report Date:	2023/05/30

Test Result:	Pass*

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

Prepared and Checked By:

Roger Ling
EMC Engineer

Approved By:

Candy Li
EMC Engineer

TABLE OF CONTENTS

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	RA230421-21249E-RF-00C	Original Report	2023-05-30

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Frequency Range	5G Wi-Fi: 5150-5350MHz; 5470-5725MHz; 5725-5850MHz
Mode	802.11a/n20/n40/ac20/ac40/ac80
Maximum Conducted Average Output Power	5150-5250MHz: 15.80dBm 5250-5350MHz: 15.77dBm 5470-5725MHz: 12.51dBm 5725-5850MHz: 14.36dBm
Modulation Technique	OFDM
Antenna Specification*	2.94dBi (It is provided by the applicant)
Voltage Range	DC12V from adapter or DC 48V from PoE
Sample serial number	24YB-1 (Assigned by ATC)
Sample/EUT Status	Good condition

Objective

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

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

Test Methodology

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

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

Each test item follows test standards and with no deviation.

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		5%
RF Frequency		$0.082*10^{-7}$
RF output power, conducted		0.71dB
Unwanted Emission, conducted		1.6dB
AC Power Lines Conducted Emissions		2.72dB
Audio Frequency Response		0.1dB
Low Pass Filter Response		1.2dB
Modulation Limiting		1%
Emissions, Radiated	9kHz - 30MHz	2.06dB
	30MHz - 1GHz	5.08dB
	1GHz - 18GHz	4.96dB
	18GHz - 26.5GHz	5.16dB
	26.5GHz - 40GHz	4.64dB
Temperature		1℃
Humidity		6%
Supply voltages		0.4%

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

Test Facility

The test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the Floor 1, KuMaKe Building, Dongzhou Community, Guangming Street, Guangming District, Shenzhen, Guangdong, 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 4297.01

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0016. The Registration Number is 30241.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

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

The device support 802.11a/n20/n40/ac20/ac40/ac80 mode, the 802.11n20/n40 mode were reduce test as it identical to 802.11a20/ac40 mode.

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/ac20 mode: channel 36, 40, 48 were tested; For 802.11ac40 mode: channel 38, 46 were tested; For 802.11ac80 mode, channel 42 was tested.

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

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

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

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

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

For 802.11a/ac20 mode: channel 100, 116, 140 were tested; For 802.11ac40 mode: channel 102, 110, 134 were tested. For 802.11ac80 mode, channel 106, 122was 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/ac20 mode: channel 149, 157, 165 were tested; For 802.11ac40 mode: channel 151, 159 were tested. For 802.11ac80 mode, channel 155 was tested.

EUT Exercise Software

"SecureCRT*" exercise software was used. The worst case was performed under and the power level was provided by the applicant.

U-NII	Mode	Data rate	Power Level		
			Low Channel	Middle Channel	High Channel
5150 – 5250MHz	802.11a	6Mbps	16	16	16
	802.11ac20	MCS0	16	16	16
	802.11ac40	MCS0	15	/	15
	802.11ac80	MCS0	/	12	/
5250 – 5350MHz	802.11a	6Mbps	16	16	16
	802.11ac20	MCS0	16	16	16
	802.11ac40	MCS0	15	/	15
	802.11ac80	MCS0	/	12	/
5470 – 5725MHz	802.11a	6Mbps	12	12	12
	802.11ac20	MCS0	12	12	12
	802.11ac40	MCS0	10	10	10
	802.11ac80	MCS0	10	/	10
5725 – 5850MHz	802.11a	6Mbps	16	16	16
	802.11ac20	MCS0	16	16	16
	802.11ac40	MCS0	16	/	16
	802.11ac80	MCS0	/	16	/

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

Duty cycle

Test Result: Pass. Please refer to the Appendix.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

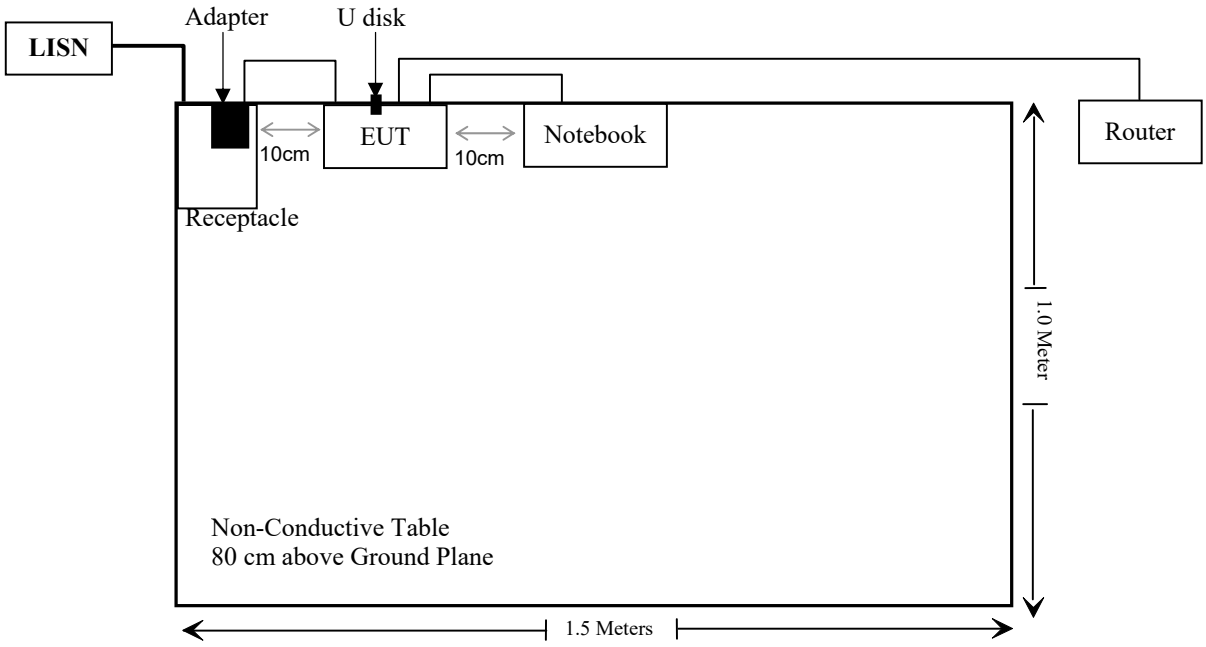
Manufacturer	Description	Model	Serial Number
Tenda	Router	F3	171263330120212106
GOSPELL	PoE	G0720-480	Unknown
Kuantech	Adapter	KSASB0241200200D5	KSASB0241200200D5NSK
DELL	Notebook	Latitude	11429208685
Unknown	U disk	Unknown	Unknown

External I/O Cable

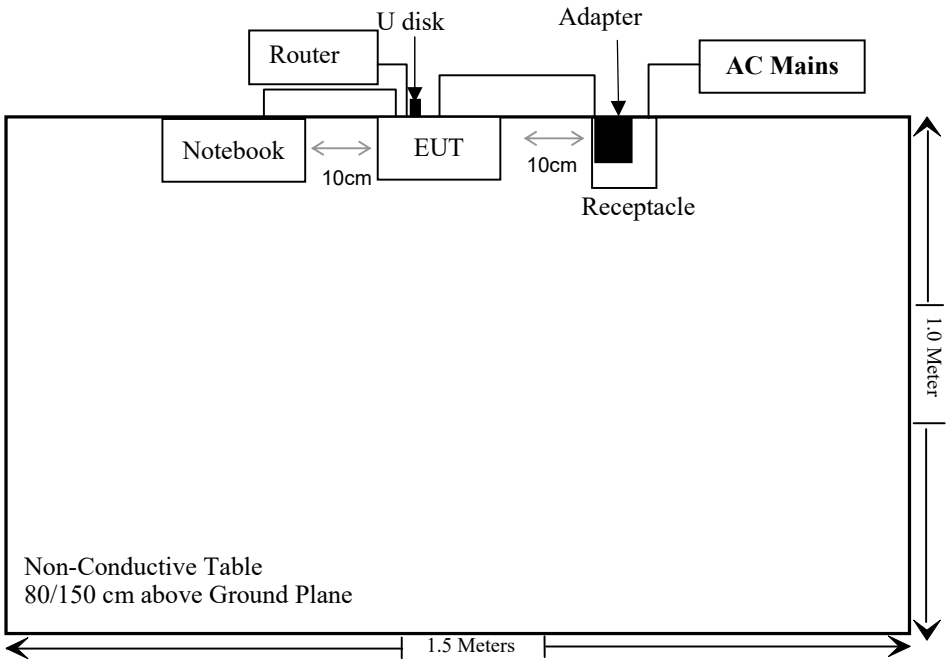
Cable Description	Length (m)	From/Port	To
Un-shielding Undetachable DC Cable	1.0	EUT	Adapter
Un-shielding Detachable RJ45 Cable	6.0	EUT	Router
Un-shielding Detachable RJ45 Cable	2.0	EUT	PoE
Un-shielding Detachable USB Cable	1.0	EUT	Notebook

Block Diagram of Test Setup

Adapter
For conducted emission

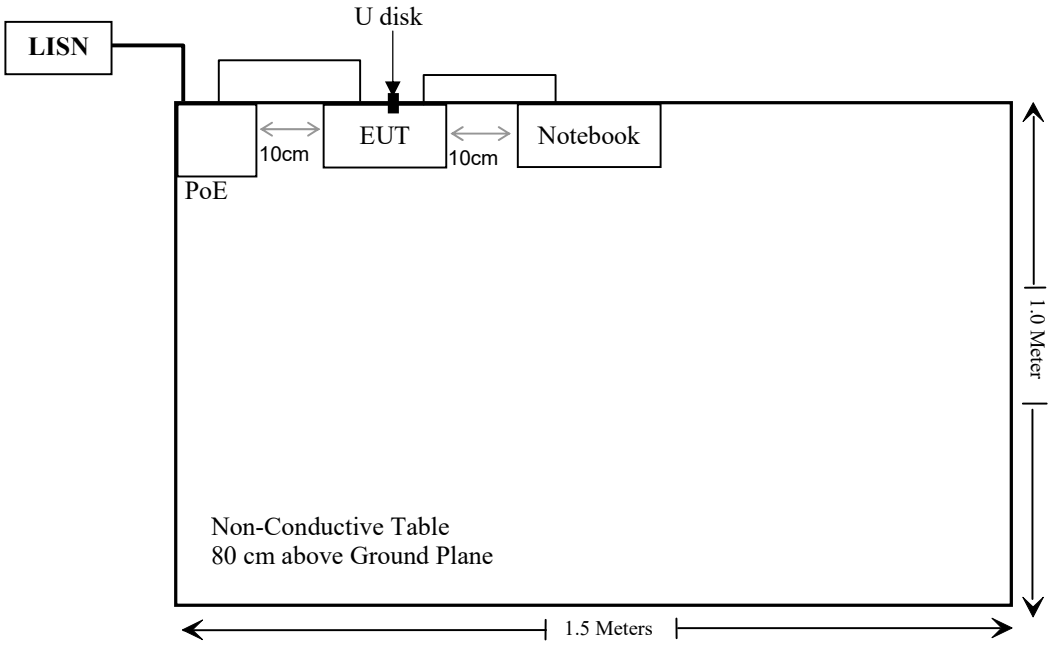


For Radiated Emissions:

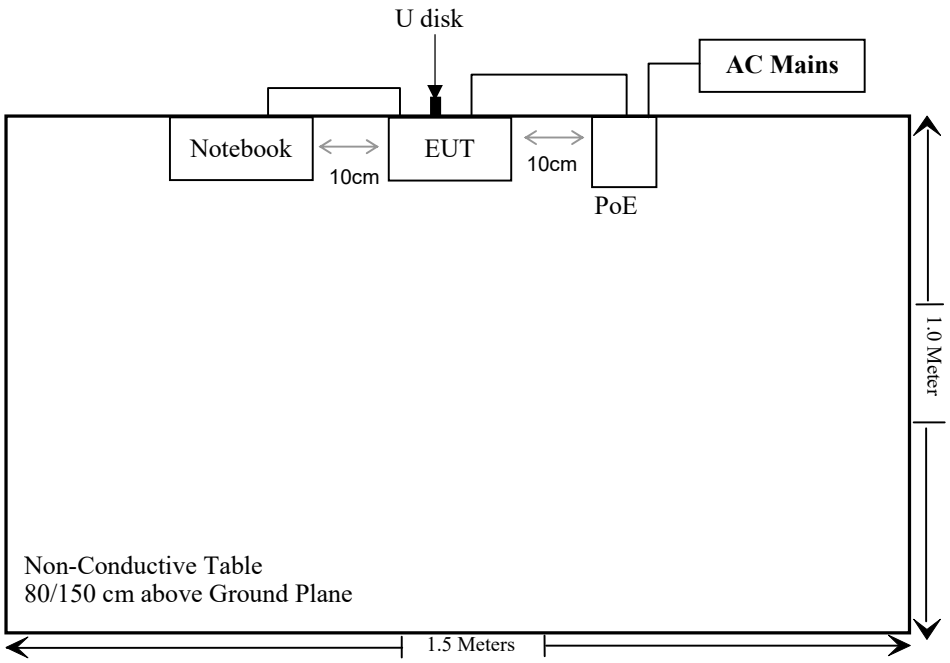


Note: the support table edge was flush with center of turntable

PoE
For conducted emission



For Radiated Emissions:



Note: the support table edge was flush with center of turntable

SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1307 (b) (3) & §2.1091	MPE-BASED EXEMPTION	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 this function.
Compliant*: Please refer to the report: RA230421-21249E-RF-00D.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted Emissions Test					
Rohde& Schwarz	EMI Test Receiver	ESCI	100784	2022/11/25	2023/11/24
Rohde & Schwarz	L.I.S.N.	ENV216	101314	2022/11/25	2023/11/24
Anritsu Corp	50 Coaxial Switch	MP59B	6100237248	2022/12/07	2023/12/06
Unknown	RF Coaxial Cable	No.17	N0350	2022/11/25	2023/11/24
Radiated Emissions Test					
Rohde& Schwarz	Test Receiver	ESR	102725	2022/11/25	2023/11/24
Rohde&Schwarz	Spectrum Analyzer	FSV40	101949	2022/11/25	2023/11/24
SONOMA INSTRUMENT	Amplifier	310 N	186131	2022/11/08	2023/11/07
A.H. Systems, inc.	Preamplifier	PAM-0118P	135	2022/11/08	2023/11/07
Quinstar	Amplifier	QLW-18405536-J0	15964001002	2022/11/08	2023/11/07
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2021/07/06	2024/07/05
Schwarzbeck	Horn Antenna	BBHA9120D	837	2023/02/22	2026/02/21
Schwarzbeck	HORN ANTENNA	BBHA9170	9170-359	2022/12/26	2025/12/25
Radiated Emission Test Software:e3 191218 (V9)					
Unknown	RF Coaxial Cable	No.10	N050	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.11	N1000	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.12	N040	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.13	N300	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.14	N800	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.15	N600	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.16	N650	2022/11/25	2023/11/24
CD	Band Reject Filter	BRM-5.15/5.35g-45	075	2022/11/25	2023/11/24
CD	Band Reject Filter	BRM-5.47/5.725G-45	055	2022/11/25	2023/11/24
CD	Band Reject Filter	BRM-5.725/5.875G-45	065	2022/11/25	2023/11/24

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Conducted Test					
Rohde&Schwarz	Spectrum Analyzer	FSV-40	101590	2022/11/25	2023/11/24
Tonscend	RF Control Unit	JS0806-2	19G8060182	2022/10/24	2023/10/23
Agilent	Power Sensor	U2021XA	MY5425003	2023/02/25	2024/02/24
HP	20dB Attenuator	8491A	53857	2022/11/25	2023/11/24

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

FCC §1.1307 (B) (3) & §2.1091- MPE-BASED EXEMPTION

Applicable Standard

According to subpart 1.1307 (b) (3) and subpart 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

According to KDB 447498 D04 Interim General RF Exposure Guidance

MPE-Based Exemption:

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

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

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

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

Result

Mode	Frequency (MHz)	Tune up conducted power	Antenna Gain		ERP		Evaluation Distance (m)	ERP Limit (W)
		(dBm)	(dBi)	(dBd)	(dBm)	(W)		
Bluetooth	2402-2480	3.0	2.46	0.31	3.31	0.002	0.2	0.768
BLE	2402-2480	1.0	2.46	0.31	1.31	0.001	0.2	0.768
2.4G Wi-Fi	2412-2462	21.0	2.46	0.31	21.31	0.135	0.2	0.768
5G Wi-Fi	5150-5250	16.0	2.94	0.79	16.79	0.048	0.2	0.768
	5250-5350	16.0	2.94	0.79	16.79	0.048	0.2	0.768
	5470-5725	13.0	2.94	0.79	13.79	0.024	0.2	0.768
	5725-5850	15.0	2.94	0.79	15.79	0.038	0.2	0.768

Note: 1. The tune up conducted power and antenna gain was declared by the applicant.
2. The Bluetooth/BLE/Wi-Fi can't simultaneous transmitting.
3. 0dBd=2.15dBi

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

Result: Compliant.

FCC §15.203 – ANTENNA REQUIREMENT

Applicable Standard

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

a. Antenna must be permanently attached to the unit.
b. Antenna must use a unique type of connector to attach to the EUT.
c. 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 one internal antenna which was permanently attached, and the maximum antenna gain is 2.94dBi, fulfill the requirement of this section. Please refer to the EUT photos.

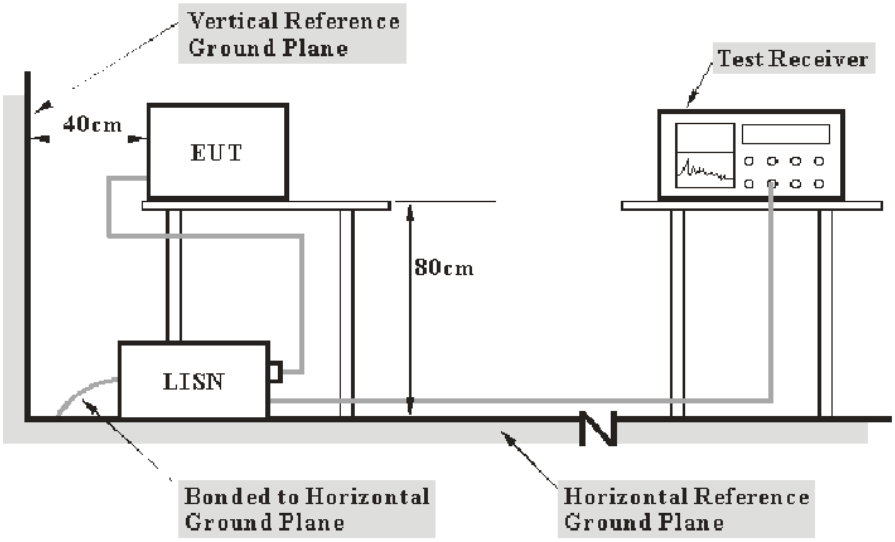
Result: Compliant.

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

Applicable Standard

FCC §15.207, §15.407(b) (6)

EUT Setup



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

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

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

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

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

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

Test Procedure

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

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

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

Factor & Margin Calculation

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

Factor = LISN VDF + Cable Loss

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

Over Limit = Level – Limit
Level = Read Level + Factor

Test Data

Environmental Conditions

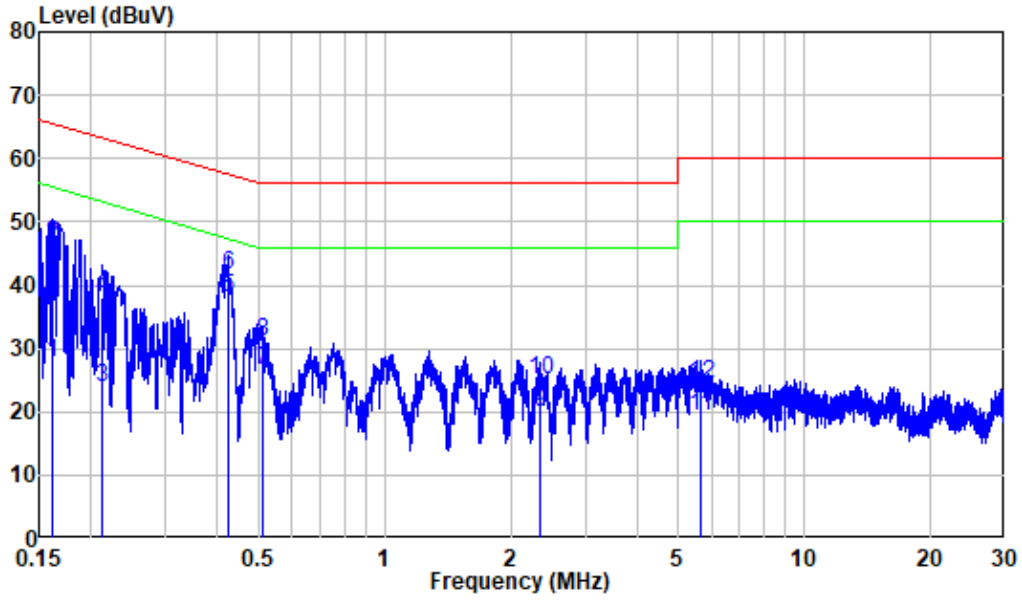
Temperature:	23 °C
Relative Humidity:	49 %
ATM Pressure:	101.0 kPa

The testing was performed by Jerry Wu on 2023-05-19.

EUT operation mode: Transmitting (worst case is 802.11a, 5180MHz)

Supply by Adapter

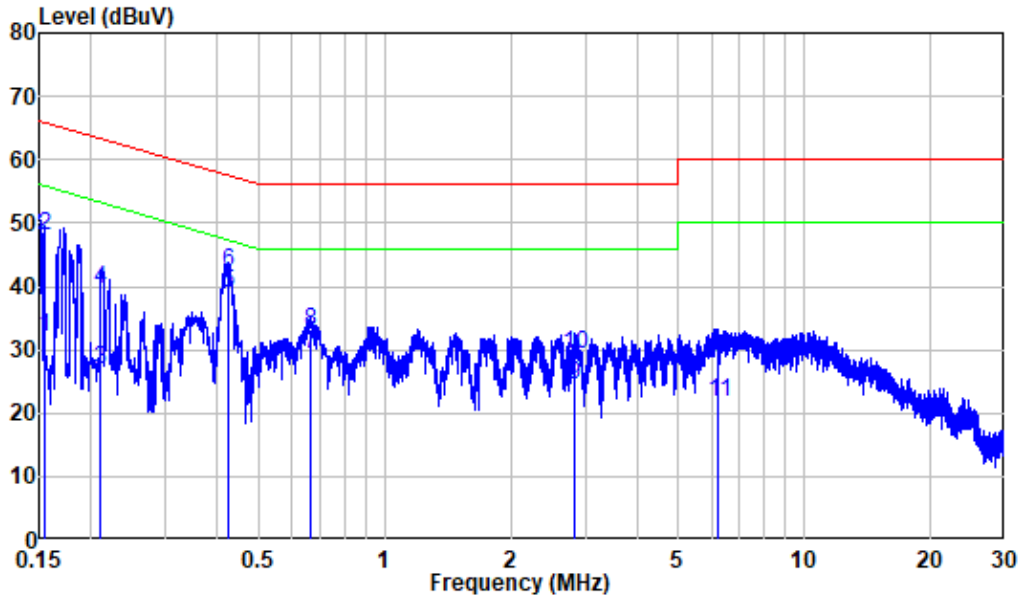
AC 120V/60 Hz, Line:



Site : Shielding Room
Condition: Line
Job No. : RA230421-21249E-RF
Mode : 5G WIFI Transmitting
Power : AC 120V 60Hz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.162	10.35	17.34	27.69	55.35	-27.66	Average
2	0.162	10.35	36.16	46.51	65.35	-18.84	QP
3	0.212	10.30	13.40	23.70	53.13	-29.43	Average
4	0.212	10.30	27.77	38.07	63.13	-25.06	QP
5	0.423	10.51	27.52	38.03	47.39	-9.36	Average
6	0.423	10.51	31.05	41.56	57.39	-15.83	QP
7	0.511	10.58	16.11	26.69	46.00	-19.31	Average
8	0.511	10.58	20.40	30.98	56.00	-25.02	QP
9	2.346	10.43	9.62	20.05	46.00	-25.95	Average
10	2.346	10.43	14.69	25.12	56.00	-30.88	QP
11	5.664	10.57	8.76	19.33	50.00	-30.67	Average
12	5.664	10.57	13.87	24.44	60.00	-35.56	QP

AC 120V/60 Hz, Neutral:

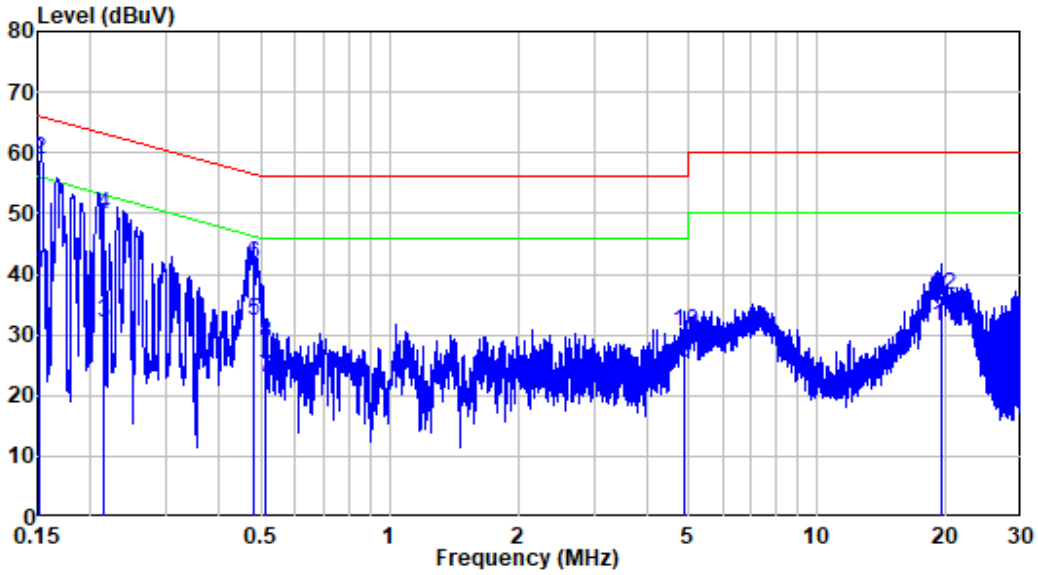


Site : Shielding Room
Condition: Neutral
Job No. : RA230421-21249E-RF
Mode : 5G WIFI Transmitting
Power : AC 120V 60Hz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.154	10.27	21.61	31.88	55.77	-23.89	Average
2	0.154	10.27	37.85	48.12	65.77	-17.65	QP
3	0.211	10.30	16.68	26.98	53.17	-26.19	Average
4	0.211	10.30	29.11	39.41	63.17	-23.76	QP
5	0.423	10.43	28.59	39.02	47.40	-8.38	Average
6	0.423	10.43	31.91	42.34	57.40	-15.06	QP
7	0.667	10.47	18.89	29.36	46.00	-16.64	Average
8	0.667	10.47	22.31	32.78	56.00	-23.22	QP
9	2.845	10.52	13.85	24.37	46.00	-21.63	Average
10	2.845	10.52	18.88	29.40	56.00	-26.60	QP
11	6.248	10.51	11.22	21.73	50.00	-28.27	Average
12	6.248	10.51	18.06	28.57	60.00	-31.43	QP

Supply by PoE

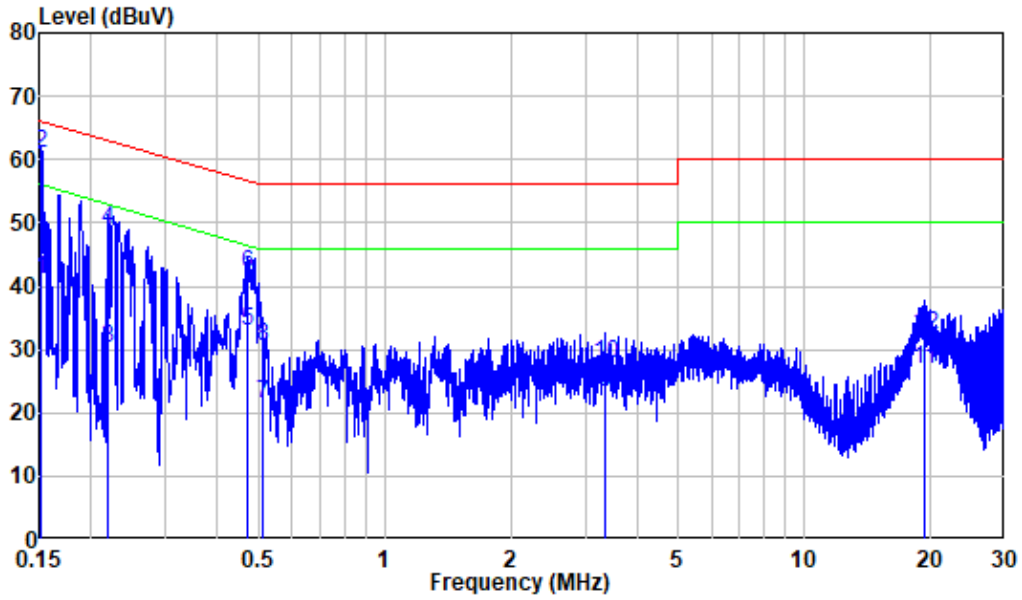
AC 120V/60 Hz, Line:



Site : Shielding Room
Condition: Line
Job No. : RA230421-21249E-RF
Mode : 5G WIFI Transmitting
Note : POE
Power : AC 120V 60Hz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.151	10.37	29.69	40.06	55.94	-15.88	Average
2	0.151	10.37	48.43	58.80	65.94	-7.14	QP
3	0.213	10.30	21.60	31.90	53.07	-21.17	Average
4	0.213	10.30	39.40	49.70	63.07	-13.37	QP
5	0.480	10.55	21.85	32.40	46.34	-13.94	Average
6	0.480	10.55	31.05	41.60	56.34	-14.74	QP
7	0.514	10.58	12.51	23.09	46.00	-22.91	Average
8	0.514	10.58	18.23	28.81	56.00	-27.19	QP
9	4.896	10.55	14.92	25.47	46.00	-20.53	Average
10	4.896	10.55	19.99	30.54	56.00	-25.46	QP
11	19.583	10.31	20.94	31.25	50.00	-18.75	Average
12	19.583	10.31	26.19	36.50	60.00	-23.50	QP

AC 120V/60 Hz, Neutral:



Site : Shielding Room
Condition: Neutral
Job No. : RA230421-21249E-RF
Mode : 5G WIFI Transmitting
Note : POE
Power : AC 120V 60Hz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.151	10.27	30.86	41.13	55.94	-14.81	Average
2	0.151	10.27	50.68	60.95	65.94	-4.99	QP
3	0.220	10.30	19.78	30.08	52.83	-22.75	Average
4	0.220	10.30	38.56	48.86	62.83	-13.97	QP
5	0.473	10.45	22.57	33.02	46.46	-13.44	Average
6	0.473	10.45	31.63	42.08	56.46	-14.38	QP
7	0.511	10.47	11.08	21.55	46.00	-24.45	Average
8	0.511	10.47	19.95	30.42	56.00	-25.58	QP
9	3.352	10.53	12.79	23.32	46.00	-22.68	Average
10	3.352	10.53	17.25	27.78	56.00	-28.22	QP
11	19.339	10.21	16.55	26.76	50.00	-23.24	Average
12	19.339	10.21	22.17	32.38	60.00	-27.62	QP

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

Applicable Standard

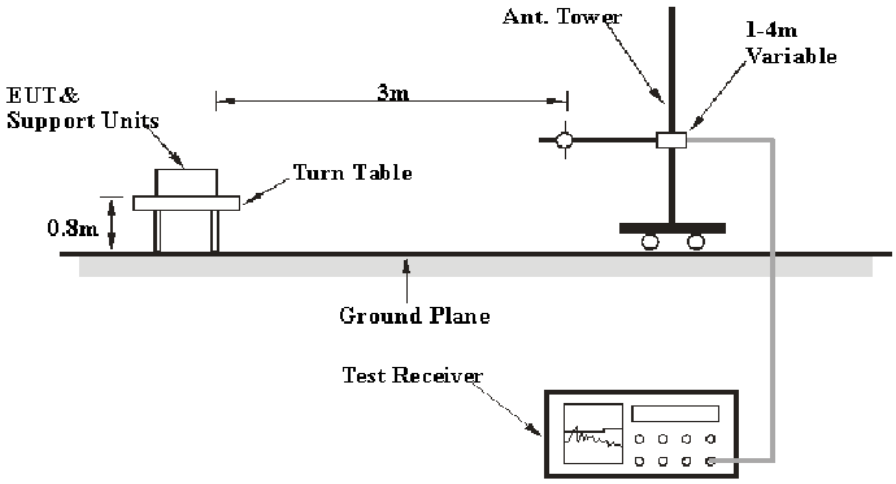
FCC §15.407 (b); §15.209; §15.205;

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

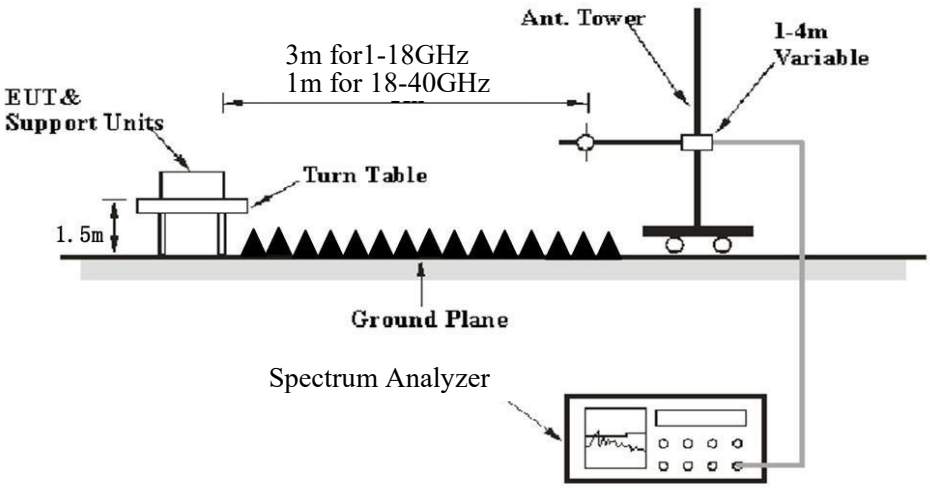
Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

EUT Setup

Below 1 GHz:



Above 1 GHz:



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

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

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 40 GHz.

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

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

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

Test Procedure

Radiated Spurious Emission

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

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

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

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

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

where

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

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

Factor & Margin Calculation

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

Factor = Antenna Factor + Cable Loss - Amplifier Gain

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

Over Limit/Margin = Level / Corrected Amplitude – Limit
Level / Corrected Amplitude = Read Level + Factor

Test Data

Environmental Conditions

Temperature:	23~25.6 ℃
Relative Humidity:	51~55 %
ATM Pressure:	101.0 kPa

The testing was performed by Jason Liu on 2023-05-20 for below 1GHz and Jimi Zheng from 2023-05-15 to 2023-05-16 for above 1GHz.

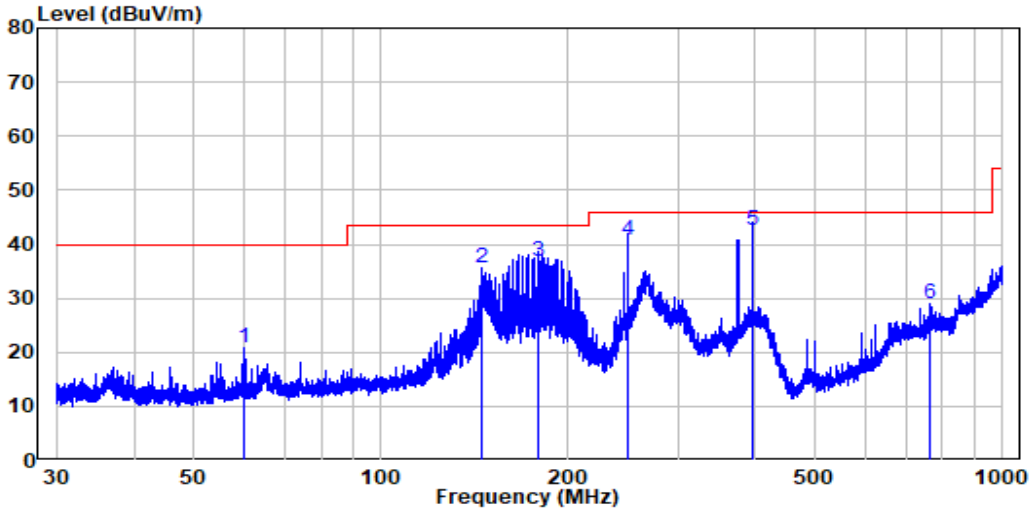
EUT operation mode: Transmitting (Pre-scan in the X,Y and Z axes of orientation, the worst case X-axes of orientation was recorded)

30 MHz – 1 GHz: *(worst case is 802.11a, 5180MHz)*

Note: When the test result of Peak was more than 6dB below the limit of QP, just the Peak value was recorded.

Supply by Adapter

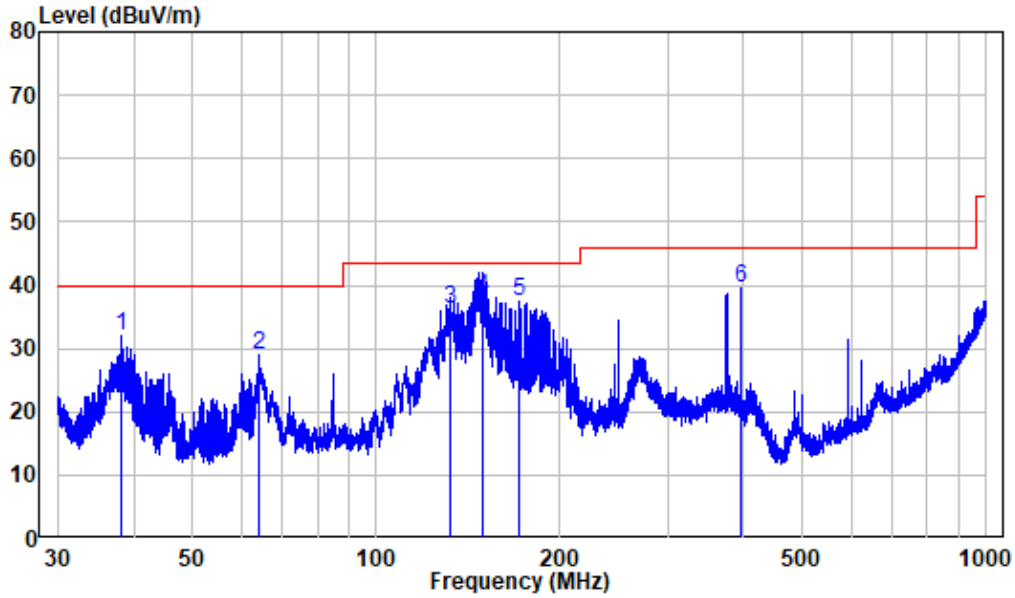
Horizontal



Site : chamber
Condition: 3m HORIZONTAL
Job No. : RA230421-21249E-RF
Test Mode: 5G WIFI Transmitting
Note : Adapter

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	59.990	-13.82	34.56	20.74	40.00	-19.26	Peak
2	145.032	-10.51	46.27	35.76	43.50	-7.74	Peak
3	178.915	-10.37	47.30	36.93	43.50	-6.57	QP
4	249.972	-12.54	53.43	40.89	46.00	-5.11	QP
5	396.068	-11.90	54.50	42.60	46.00	-3.40	QP
6	766.393	-5.21	34.15	28.94	46.00	-17.06	Peak

Vertical

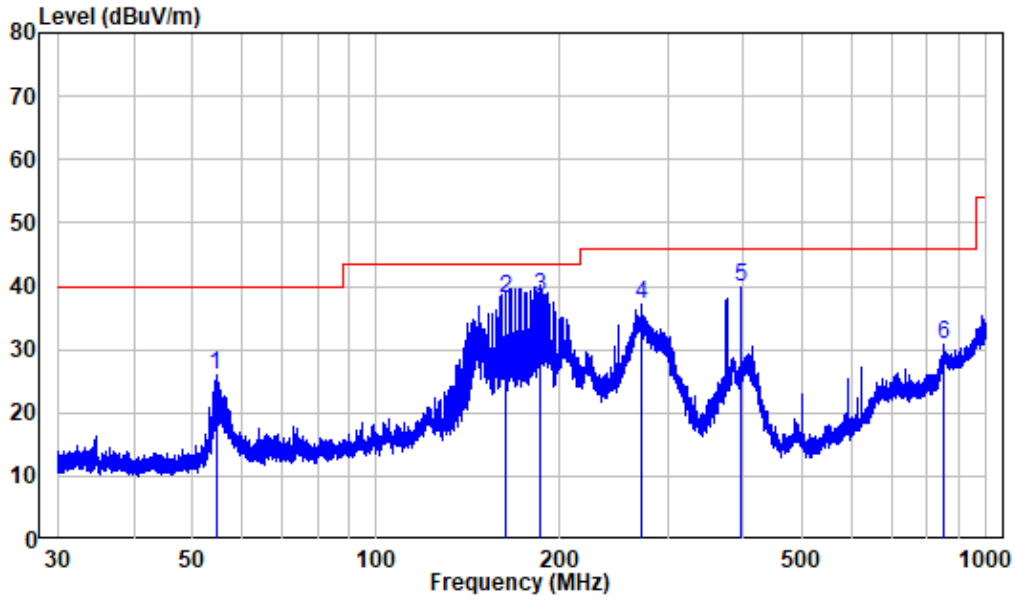


Site : chamber
Condition: 3m VERTICAL
Job No. : RA230421-21249E-RF
Test Mode: 5G WIFI Transmitting
Note : Adapter

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	38.212	-14.41	46.30	31.89	40.00	-8.11	Peak
2	64.377	-13.75	42.73	28.98	40.00	-11.02	Peak
3	132.453	-10.63	46.75	36.12	43.50	-7.38	QP
4	149.159	-10.38	48.40	38.02	43.50	-5.48	QP
5	170.868	-10.28	47.66	37.38	43.50	-6.12	Peak
6	396.068	-11.90	51.30	39.40	46.00	-6.60	Peak

Supply by PoE

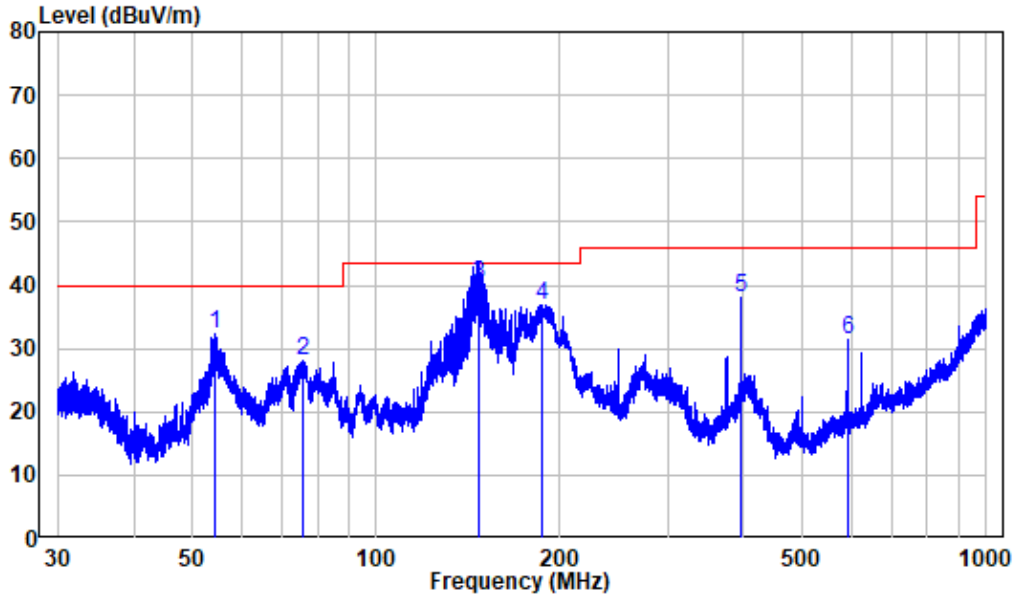
Horizontal



Site : chamber
Condition: 3m HORIZONTAL
Job No. : RA230421-21249E-RF
Test Mode: 5G WIFI Transmitting
Note : POE

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	54.547	-14.14	40.08	25.94	40.00	-14.06	Peak
2	162.896	-10.29	48.38	38.09	43.50	-5.41	QP
3	184.895	-10.28	48.50	38.22	43.50	-5.28	QP
4	271.325	-14.73	51.91	37.18	46.00	-8.82	Peak
5	396.068	-11.90	51.65	39.75	46.00	-6.25	Peak
6	851.408	-2.53	33.22	30.69	46.00	-15.31	Peak

Vertical



Site : chamber
Condition: 3m VERTICAL
Job No. : RA230421-21249E-RF
Test Mode: 5G WIFI Transmitting
Note : POE

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	54.309	-14.14	46.38	32.24	40.00	-7.76	Peak
2	75.977	-13.42	41.41	27.99	40.00	-12.01	Peak
3	146.952	-10.40	50.40	40.00	43.50	-3.50	QP
4	186.932	-10.34	47.22	36.88	43.50	-6.62	Peak
5	396.068	-11.90	49.85	37.95	46.00	-8.05	Peak
6	594.090	-10.04	41.52	31.48	46.00	-14.52	Peak

Above 1GHz: *(worst case is powered by adapter)*

5150-5250 MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11a									
5180 MHz									
4500	68.76	PK	214	2	H	-6.01	62.75	74	-11.25
4500	52.68	AV	214	2	H	-6.01	46.67	54	-7.33
4500	70.12	PK	291	1	V	-6.01	64.11	74	-9.89
4500	53.10	AV	291	1	V	-6.01	47.09	54	-6.91
5150	70.71	PK	98	1.6	H	-4.29	66.42	74	-7.58
5150	54.67	AV	98	1.6	H	-4.29	50.38	54	-3.62
5150	71.18	PK	254	2.5	V	-4.29	66.89	74	-7.11
5150	54.70	AV	254	2.5	V	-4.29	50.41	54	-3.59
10360	53.67	PK	9	2.2	H	6.04	59.71	68.2	-8.49
10360	53.54	PK	122	2.2	V	6.04	59.58	68.2	-8.62
5200 MHz									
10400	53.66	PK	180	1.4	H	6.30	59.96	68.2	-8.24
10400	53.47	PK	290	1.4	V	6.30	59.77	68.2	-8.43
5240 MHz									
5350	63.21	PK	206	2.1	H	-3.15	60.06	74	-13.94
5350	50.04	AV	206	2.1	H	-3.15	46.89	54	-7.11
5350	63.16	PK	12	2.2	V	-3.15	60.01	74	-13.99
5350	49.93	AV	12	2.2	V	-3.15	46.78	54	-7.22
5460	61.81	PK	278	1.5	H	-2.38	59.43	74	-14.57
5460	47.54	AV	278	1.5	H	-2.38	45.16	54	-8.84
5460	61.09	PK	60	2.2	V	-2.38	58.71	74	-15.29
5460	47.30	AV	60	2.2	V	-2.38	44.92	54	-9.08
10480	54.46	PK	182	1.5	H	6.00	60.46	68.2	-7.74
10480	54.39	PK	18	1.5	V	6.00	60.39	68.2	-7.81

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ac20									
5180 MHz									
4500	65.73	PK	282	2.2	H	-6.01	59.72	74	-14.28
4500	52.60	AV	282	2.2	H	-6.01	46.59	54	-7.41
4500	65.86	PK	148	2.3	V	-6.01	59.85	74	-14.15
4500	53.01	AV	148	2.3	V	-6.01	47.00	54	-7.00
5150	67.00	PK	224	1.9	H	-4.29	62.71	74	-11.29
5150	54.65	AV	224	1.9	H	-4.29	50.36	54	-3.64
5150	67.55	PK	62	2	V	-4.29	63.26	74	-10.74
5150	54.71	AV	62	2	V	-4.29	50.42	54	-3.58
10360	53.81	PK	267	1.7	H	6.04	59.85	68.2	-8.35
10360	54.09	PK	261	1.7	V	6.04	60.13	68.2	-8.07
5200MHz									
10400	53.67	PK	327	2	H	6.30	59.97	68.2	-8.23
10400	53.76	PK	183	2	V	6.30	60.06	68.2	-8.14
5240 MHz									
5350	63.13	PK	193	1.2	H	-3.15	59.98	74	-14.02
5350	50.04	AV	193	1.2	H	-3.15	46.89	54	-7.11
5350	63.55	PK	210	2.3	V	-3.15	60.40	74	-13.60
5350	50.41	AV	210	2.3	V	-3.15	47.26	54	-6.74
5460	61.11	PK	243	1.1	H	-2.38	58.73	74	-15.27
5460	48.08	AV	243	1.1	H	-2.38	45.70	54	-8.30
5460	61.48	PK	275	1.5	V	-2.38	59.10	74	-14.90
5460	48.42	AV	275	1.5	V	-2.38	46.04	54	-7.96
10480	54.22	PK	76	1.6	H	6.00	60.22	68.2	-7.98
10480	53.99	PK	237	1.6	V	6.00	59.99	68.2	-8.21

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ac40									
5190 MHz									
4500	69.07	PK	307	1.4	H	-6.01	63.06	74	-10.94
4500	53.97	AV	307	1.4	H	-6.01	47.96	54	-6.04
4500	68.74	PK	177	2.4	V	-6.01	62.73	74	-11.27
4500	53.54	AV	177	2.4	V	-6.01	47.53	54	-6.47
5150	70.87	PK	289	1.8	H	-4.29	66.58	74	-7.42
5150	55.20	AV	289	1.8	H	-4.29	50.91	54	-3.09
5150	70.41	PK	3	1.1	V	-4.29	66.12	74	-7.88
5150	55.06	AV	3	1.1	V	-4.29	50.77	54	-3.23
10380	53.22	PK	186	2.2	H	6.17	59.39	68.2	-8.81
10380	53.27	PK	199	2.2	V	6.17	59.44	68.2	-8.76
5230 MHz									
5350	63.36	PK	272	1.8	H	-3.15	60.21	74	-13.79
5350	50.07	AV	272	1.8	H	-3.15	46.92	54	-7.08
5350	62.91	PK	244	2.3	V	-3.15	59.76	74	-14.24
5350	49.85	AV	244	2.3	V	-3.15	46.70	54	-7.30
5460	61.45	PK	97	1.3	H	-2.38	59.07	74	-14.93
5460	48.44	AV	97	1.3	H	-2.38	46.06	54	-7.94
5460	60.44	PK	37	1.3	V	-2.38	58.06	74	-15.94
5460	47.29	AV	37	1.3	V	-2.38	44.91	54	-9.09
10460	54.22	PK	215	1.4	H	5.91	60.13	68.2	-8.07
10460	54.43	PK	105	1.4	V	5.91	60.34	68.2	-7.86

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ac80									
5210MHz									
4500	65.10	PK	327	1.2	H	-6.01	59.09	74	-14.91
4500	54.10	AV	327	1.2	H	-6.01	48.09	54	-5.91
4500	64.84	PK	189	1.8	V	-6.01	58.83	74	-15.17
4500	53.87	AV	189	1.8	V	-6.01	47.86	54	-6.14
5150	66.36	PK	89	1.5	H	-4.29	62.07	74	-11.93
5150	55.23	AV	89	1.5	H	-4.29	50.94	54	-3.06
5150	66.01	PK	37	1.9	V	-4.29	61.72	74	-12.28
5150	55.07	AV	37	1.9	V	-4.29	50.78	54	-3.22
5350	63.00	PK	290	1.3	H	-3.15	59.85	74	-14.15
5350	51.02	AV	290	1.3	H	-3.15	47.87	54	-6.13
5350	62.84	PK	316	2.3	V	-3.15	59.69	74	-14.31
5350	50.75	AV	316	2.3	V	-3.15	47.60	54	-6.40
5460	61.40	PK	132	2.2	H	-2.38	59.02	74	-14.98
5460	49.82	AV	132	2.2	H	-2.38	47.44	54	-6.56
5460	60.08	PK	130	2.4	V	-2.38	57.70	74	-16.30
5460	48.43	AV	130	2.4	V	-2.38	46.05	54	-7.95
10420	53.85	PK	111	1.1	H	6.12	59.97	68.2	-8.23
10420	53.96	PK	332	1.1	V	6.12	60.08	68.2	-8.12

5250 – 5350 MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11a									
5260MHz									
4500	64.80	PK	23	1.2	H	-6.01	58.79	74	-15.21
4500	52.51	AV	23	1.2	H	-6.01	46.50	54	-7.50
4500	64.91	PK	26	1.4	V	-6.01	58.90	74	-15.10
4500	52.91	AV	26	1.4	V	-6.01	46.90	54	-7.10
5150	66.25	PK	353	1.6	H	-4.29	61.96	74	-12.04
5150	54.21	AV	353	1.6	H	-4.29	49.92	54	-4.08
5150	66.83	PK	177	1.6	V	-4.29	62.54	74	-11.46
5150	54.44	AV	177	1.6	V	-4.29	50.15	54	-3.85
10520	53.73	PK	126	2.3	H	6.07	59.80	68.2	-8.40
10520	54.07	PK	273	2.3	V	6.07	60.14	68.2	-8.06
5280MHz									
10560	54.34	PK	332	1	H	6.11	60.45	68.2	-7.75
10560	54.73	PK	309	1	V	6.11	60.84	68.2	-7.36
5320MHz									
5350	66.24	PK	309	1.7	H	-3.15	63.09	74	-10.91
5350	51.58	AV	309	1.7	H	-3.15	48.43	54	-5.57
5350	67.98	PK	257	2.3	V	-3.15	64.83	74	-9.17
5350	52.42	AV	257	2.3	V	-3.15	49.27	54	-4.73
5460	64.10	PK	95	2	H	-2.38	61.72	74	-12.28
5460	49.03	AV	95	2	H	-2.38	46.65	54	-7.35
5460	65.54	PK	347	1.8	V	-2.38	63.16	74	-10.84
5460	50.42	AV	347	1.8	V	-2.38	48.04	54	-5.96
10640	54.61	PK	296	1.4	H	5.98	60.59	74	-13.41
10640	41.29	AV	61	1.4	H	5.98	47.27	54	-6.73
10640	55.05	PK	187	1.9	V	5.98	61.03	74	-12.97
10640	41.52	AV	157	1.9	V	5.98	47.50	54	-6.50

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ac20									
5260MHz									
4500	64.64	PK	69	1.4	H	-6.01	58.63	74	-15.37
4500	52.61	AV	69	1.4	H	-6.01	46.60	54	-7.40
4500	65.27	PK	82	2	V	-6.01	59.26	74	-14.74
4500	52.94	AV	82	2	V	-6.01	46.93	54	-7.07
5150	66.01	PK	346	1.2	H	-4.29	61.72	74	-12.28
5150	54.27	AV	346	1.2	H	-4.29	49.98	54	-4.02
5150	66.48	PK	50	1.8	V	-4.29	62.19	74	-11.81
5150	54.40	AV	50	1.8	V	-4.29	50.11	54	-3.89
10520	53.59	PK	93	2.1	H	6.07	59.66	68.2	-8.54
10520	54.14	PK	240	2.1	V	6.07	60.21	68.2	-7.99
5280MHz									
10560	54.29	PK	50	1.5	H	6.11	60.4	68.2	-7.80
10560	54.86	PK	145	1.5	V	6.11	60.97	68.2	-7.23
5320MHz									
5350	64.36	PK	35	2	H	-3.15	61.21	74	-12.79
5350	51.15	AV	35	2	H	-3.15	48.00	54	-6.00
5350	65.04	PK	44	2.3	V	-3.15	61.89	74	-12.11
5350	51.71	AV	44	2.3	V	-3.15	48.56	54	-5.44
5460	62.02	PK	203	1.6	H	-2.38	59.64	74	-14.36
5460	49.15	AV	203	1.6	H	-2.38	46.77	54	-7.23
5460	63.72	PK	100	1.2	V	-2.38	61.34	74	-12.66
5460	49.39	AV	100	1.2	V	-2.38	47.01	54	-6.99
10640	54.97	PK	232	1.9	H	5.98	60.95	74	-13.05
10640	41.52	AV	78	1.9	H	5.98	47.50	54	-6.50
10640	55.21	PK	150	1.2	V	5.98	61.19	74	-12.81
10640	41.68	AV	352	1.2	V	5.98	47.66	54	-6.34

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ac40									
5270MHz									
4500	65.99	PK	190	1.2	H	-6.01	59.98	74	-14.02
4500	52.91	AV	190	1.2	H	-6.01	46.90	54	-7.10
4500	66.38	PK	299	1.2	V	-6.01	60.37	74	-13.63
4500	53.23	AV	299	1.2	V	-6.01	47.22	54	-6.78
5150	62.95	PK	315	1.7	H	-4.29	58.66	74	-15.34
5150	49.90	AV	315	1.7	H	-4.29	45.61	54	-8.39
5150	63.46	PK	155	1.7	V	-4.29	59.17	74	-14.83
5150	50.33	AV	155	1.7	V	-4.29	46.04	54	-7.96
10540	54.28	PK	216	2.4	H	6.05	60.33	68.2	-7.87
10540	53.83	PK	30	2.4	V	6.05	59.88	68.2	-8.32
5310MHz									
5350	72.02	PK	161	1.9	H	-3.15	68.87	74	-5.13
5350	53.45	AV	161	1.9	H	-3.15	50.30	54	-3.70
5350	73.84	PK	322	2	V	-3.15	70.69	74	-3.31
5350	54.13	AV	322	2	V	-3.15	50.98	54	-3.02
5460	69.99	PK	82	1.4	H	-2.38	67.61	74	-6.39
5460	51.21	AV	82	1.4	H	-2.38	48.83	54	-5.17
5460	71.74	PK	202	1.4	V	-2.38	69.36	74	-4.64
5460	52.72	AV	202	1.4	V	-2.38	50.34	54	-3.66
10620	54.06	PK	218	1.8	H	6.18	60.24	74	-13.76
10620	41.25	AV	342	1.8	H	6.18	47.43	54	-6.57
10620	54.47	PK	292	1.6	V	6.18	60.65	74	-13.35
10620	41.52	AV	206	1.6	V	6.18	47.70	54	-6.30

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ac80									
5290MHz									
4500	65.75	PK	95	2.1	H	-6.01	59.74	74	-14.26
4500	53.48	AV	95	2.1	H	-6.01	47.47	54	-6.53
4500	66.00	PK	349	1.4	V	-6.01	59.99	74	-14.01
4500	53.99	AV	349	1.4	V	-6.01	47.98	54	-6.02
5150	67.42	PK	346	2.1	H	-4.29	63.13	74	-10.87
5150	54.91	AV	346	2.1	H	-4.29	50.62	54	-3.38
5150	67.84	PK	236	1.2	V	-4.29	63.55	74	-10.45
5150	55.25	AV	236	1.2	V	-4.29	50.96	54	-3.04
5350	64.64	PK	261	1.9	H	-3.15	61.49	74	-12.51
5350	52.75	AV	261	1.9	H	-3.15	49.60	54	-4.40
5350	65.92	PK	349	2.3	V	-3.15	62.77	74	-11.23
5350	53.51	AV	349	2.3	V	-3.15	50.36	54	-3.64
5460	62.23	PK	332	2	H	-2.38	59.85	74	-14.15
5460	50.11	AV	332	2	H	-2.38	47.73	54	-6.27
5460	63.43	PK	123	2.4	V	-2.38	61.05	74	-12.95
5460	51.79	AV	123	2.4	V	-2.38	49.41	54	-4.59
10580	55.21	PK	183	1.9	H	6.24	61.45	68.2	-6.75
10580	54.30	PK	219	1.9	V	6.24	60.54	68.2	-7.66

5470 – 5725 MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11a									
5500MHz									
5460	62.68	PK	59	1.1	H	-2.38	60.30	74	-13.70
5460	48.47	AV	59	1.1	H	-2.38	46.09	54	-7.91
5460	62.81	PK	158	1.6	V	-2.38	60.43	74	-13.57
5460	48.60	AV	158	1.6	V	-2.38	46.22	54	-7.78
5470	66.32	PK	189	2.3	H	-2.35	63.97	68.2	-4.23
5470	67.11	PK	294	1.7	V	-2.35	64.76	68.2	-3.44
11000	52.51	PK	103	2.4	H	7.29	59.80	74	-14.20
11000	39.29	AV	332	2.4	H	7.29	46.58	54	-7.42
11000	52.73	PK	262	2.3	V	7.29	60.02	74	-13.98
11000	39.44	AV	279	2.3	V	7.29	46.73	54	-7.27
5580MHz									
11160	53.38	PK	332	1.9	H	6.97	60.35	74	-13.65
11160	40.24	AV	68	1.9	H	6.97	47.21	54	-6.79
11160	53.61	PK	269	1.7	V	6.97	60.58	74	-13.42
11160	40.43	AV	124	1.7	V	6.97	47.40	54	-6.60
5700MHz									
5725	66.07	PK	34	2	H	-2.03	64.04	68.2	-4.16
5725	66.76	PK	347	1.8	V	-2.03	64.73	68.2	-3.47
5745	63.47	PK	184	1.5	H	-2.36	61.11	68.2	-7.09
5745	63.58	PK	168	2.1	V	-2.36	61.22	68.2	-6.98
11400	53.24	PK	19	1.4	H	7.63	60.87	74	-13.13
11400	39.88	AV	62	1.4	H	7.63	47.51	54	-6.49
11400	53.47	PK	269	2.1	V	7.63	61.10	74	-12.90
11400	40.05	AV	77	2.1	V	7.63	47.68	54	-6.32

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ac20									
5500MHz									
5460	62.94	PK	36	1.6	H	-2.38	60.56	74	-13.44
5460	48.71	AV	36	1.6	H	-2.38	46.33	54	-7.67
5460	63.08	PK	93	2.1	V	-2.38	60.70	74	-13.30
5460	48.83	AV	93	2.1	V	-2.38	46.45	54	-7.55
5470	66.57	PK	120	2.4	H	-2.35	64.22	68.2	-3.98
5470	67.32	PK	38	1.1	V	-2.35	64.97	68.2	-3.23
11000	52.62	PK	74	2.2	H	7.29	59.91	74	-14.09
11000	39.50	AV	231	2.2	H	7.29	46.79	54	-7.21
11000	52.85	PK	359	1.2	V	7.29	60.14	74	-13.86
11000	39.71	AV	22	1.2	V	7.29	47.00	54	-7.00
5580MHz									
11160	53.54	PK	98	2.1	H	6.97	60.51	74	-13.49
11160	40.37	AV	311	2.1	H	6.97	47.34	54	-6.66
11160	53.73	PK	31	2.3	V	6.97	60.70	74	-13.30
11160	40.58	AV	35	2.3	V	6.97	47.55	54	-6.45
5700MHz									
5725	66.34	PK	183	2	H	-2.03	64.31	68.2	-3.89
5725	66.95	PK	64	2.1	V	-2.03	64.92	68.2	-3.28
5745	63.60	PK	224	1.8	H	-2.36	61.24	68.2	-6.96
5745	63.75	PK	145	2.3	V	-2.36	61.39	68.2	-6.81
11400	53.38	PK	13	2.1	H	7.63	61.01	74	-12.99
11400	39.99	AV	293	2.1	H	7.63	47.62	54	-6.38
11400	53.57	PK	124	2.1	V	7.63	61.20	74	-12.80
11400	40.21	AV	47	2.1	V	7.63	47.84	54	-6.16

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ac40									
5510MHz									
5460	63.23	PK	316	2.1	H	-2.38	60.85	74	-13.15
5460	49.30	AV	316	2.1	H	-2.38	46.92	54	-7.08
5460	63.35	PK	153	2.1	V	-2.38	60.97	74	-13.03
5460	49.44	AV	153	2.1	V	-2.38	47.06	54	-6.94
5470	66.38	PK	328	1.2	H	-2.35	64.03	68.2	-4.17
5470	67.29	PK	137	1.4	V	-2.35	64.94	68.2	-3.26
11020	52.99	PK	82	2.1	H	7.11	60.10	74	-13.90
11020	39.90	AV	27	2.1	H	7.11	47.01	54	-6.99
11020	53.21	PK	235	1.6	V	7.11	60.32	74	-13.68
11020	40.13	AV	318	1.6	V	7.11	47.24	54	-6.76
5550MHz									
11100	53.53	PK	60	1.8	H	6.60	60.13	74	-13.87
11100	40.80	AV	130	1.8	H	6.60	47.40	54	-6.60
11100	53.77	PK	140	1.4	V	6.60	60.37	74	-13.63
11100	41.01	AV	155	1.4	V	6.60	47.61	54	-6.39
5670MHz									
5725	64.69	PK	246	2.4	H	-2.03	62.66	68.2	-5.54
5725	65.16	PK	141	1.9	V	-2.03	63.13	68.2	-5.07
5745	63.10	PK	118	2.1	H	-2.36	60.74	68.2	-7.46
5745	63.25	PK	27	2.2	V	-2.36	60.89	68.2	-7.31
11340	52.97	PK	355	1.6	H	7.55	60.52	74	-13.48
11340	40.22	AV	272	1.6	H	7.55	47.77	54	-6.23
11340	53.19	PK	7	2.3	V	7.55	60.74	74	-13.26
11340	40.43	AV	22	2.3	V	7.55	47.98	54	-6.02

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ac80									
5530MHz									
5460	63.82	PK	234	1	H	-2.38	61.44	74	-12.56
5460	51.39	AV	234	1	H	-2.38	49.01	54	-4.99
5460	64.04	PK	211	2.4	V	-2.38	61.66	74	-12.34
5460	51.53	AV	211	2.4	V	-2.38	49.15	54	-4.85
5470	66.25	PK	223	2.5	H	-2.35	63.90	68.2	-4.30
5470	67.08	PK	266	1.8	V	-2.35	64.73	68.2	-3.47
11060	52.86	PK	240	1.5	H	6.80	59.66	74	-14.34
11060	41.18	AV	264	1.5	H	6.80	47.98	54	-6.02
11060	53.09	PK	115	2	V	6.80	59.89	74	-14.11
11060	41.40	AV	21	2	V	6.80	48.20	54	-5.80
5610MHz									
5725	64.46	PK	224	2.5	H	-2.03	62.43	68.2	-5.77
5725	64.95	PK	180	1.7	V	-2.03	62.92	68.2	-5.28
5745	63.03	PK	211	1.6	H	-2.36	60.67	68.2	-7.53
5745	63.16	PK	214	1.1	V	-2.36	60.80	68.2	-7.40
11220	54.10	PK	209	1.3	H	7.05	61.15	74	-12.85
11220	41.85	AV	13	1.3	H	7.05	48.90	54	-5.10
11220	54.29	PK	286	1.4	V	7.05	61.34	74	-12.66
11220	42.06	AV	259	1.4	V	7.05	49.11	54	-4.89

5725 – 5850 MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11a									
5745MHz									
5650	65.19	PK	325	1.7	H	-2.80	62.39	68.2	-5.81
5700	66.86	PK	177	1.7	H	-1.62	65.24	105.2	-39.96
5720	74.83	PK	70	2.5	H	-1.95	72.88	110.8	-37.92
5725	79.83	PK	227	1.4	H	-2.03	77.80	122.2	-44.40
5650	65.34	PK	273	2.5	V	-2.80	62.54	68.2	-5.66
5700	67.35	PK	317	1.6	V	-1.62	65.73	105.2	-39.47
5720	76.36	PK	147	1.3	V	-1.95	74.41	110.8	-36.39
5725	81.55	PK	236	2.3	V	-2.03	79.52	122.2	-42.68
11490	52.38	PK	124	1.8	H	7.99	60.37	74	-13.63
11490	39.43	AV	317	1.8	H	7.99	47.42	54	-6.58
11490	52.57	PK	54	2.3	V	7.99	60.56	74	-13.44
11490	39.66	AV	42	2.3	V	7.99	47.65	54	-6.35
5785MHz									
11570	53.05	PK	105	1.7	H	7.69	60.74	74	-13.26
11570	40.12	AV	99	1.7	H	7.69	47.81	54	-6.19
11570	53.27	PK	176	1.6	V	7.69	60.96	74	-13.04
11570	40.33	AV	310	1.6	V	7.69	48.02	54	-5.98
5825MHz									
5850	72.29	PK	240	1.5	H	-0.60	71.69	122.2	-50.51
5855	69.06	PK	317	1.3	H	-0.50	68.56	110.8	-42.24
5875	65.92	PK	94	1.2	H	-0.09	65.83	105.2	-39.37
5925	63.49	PK	265	1.4	H	-0.12	63.37	68.2	-4.83
5850	74.33	PK	37	1.8	V	-0.60	73.73	122.2	-48.47
5855	71.20	PK	270	2.2	V	-0.50	70.70	110.8	-40.10
5875	66.64	PK	96	2.3	V	-0.09	66.55	105.2	-38.65
5925	63.60	PK	341	1.7	V	-0.12	63.48	68.2	-4.72
11650	53.77	PK	212	1.9	H	6.82	60.59	74	-13.41
11650	40.82	AV	259	1.9	H	6.82	47.64	54	-6.36
11650	53.95	PK	270	1.8	V	6.82	60.77	74	-13.23
11650	41.04	AV	156	1.8	V	6.82	47.86	54	-6.14

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ac20									
5745MHz									
5650	65.37	PK	149	1	H	-2.80	62.57	68.2	-5.63
5700	67.40	PK	324	2	H	-1.62	65.78	105.2	-39.42
5720	77.24	PK	30	1.6	H	-1.95	75.29	110.8	-35.51
5725	81.65	PK	142	1.3	H	-2.03	79.62	122.2	-42.58
5650	65.50	PK	206	2	V	-2.80	62.70	68.2	-5.50
5700	68.73	PK	240	2.2	V	-1.62	67.11	105.2	-38.09
5720	79.08	PK	225	1.3	V	-1.95	77.13	110.8	-33.67
5725	84.07	PK	298	2.2	V	-2.03	82.04	122.2	-40.16
11490	52.45	PK	31	2.3	H	7.99	60.44	74	-13.56
11490	39.48	AV	235	2.3	H	7.99	47.47	54	-6.53
11490	52.67	PK	106	1.4	V	7.99	60.66	74	-13.34
11490	39.70	AV	290	1.4	V	7.99	47.69	54	-6.31
5785MHz									
11570	53.14	PK	273	2.3	H	7.69	60.83	74	-13.17
11570	40.23	AV	50	2.3	H	7.69	47.92	54	-6.08
11570	53.35	PK	274	2.1	V	7.69	61.04	74	-12.96
11570	40.46	AV	44	2.1	V	7.69	48.15	54	-5.85
5825MHz									
5850	73.05	PK	91	1.2	H	-0.60	72.45	122.2	-49.75
5855	69.88	PK	214	1.6	H	-0.50	69.38	110.8	-41.42
5875	66.32	PK	28	1.8	H	-0.09	66.23	105.2	-38.97
5925	63.64	PK	100	2.5	H	-0.12	63.52	68.2	-4.68
5850	75.28	PK	358	2.1	V	-0.60	74.68	122.2	-47.52
5855	71.99	PK	90	1.5	V	-0.50	71.49	110.8	-39.31
5875	67.24	PK	63	1.8	V	-0.09	67.15	105.2	-38.05
5925	63.78	PK	206	2.3	V	-0.12	63.66	68.2	-4.54
11650	53.86	PK	6	1.1	H	6.82	60.68	74	-13.32
11650	40.92	AV	213	1.1	H	6.82	47.74	54	-6.26
11650	54.07	PK	84	2.2	V	6.82	60.89	74	-13.11
11650	41.14	AV	24	2.2	V	6.82	47.96	54	-6.04

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ac40									
5755MHz									
5650	65.58	PK	43	1.6	H	-2.80	62.78	68.2	-5.42
5700	68.32	PK	334	1.9	H	-1.62	66.70	105.2	-38.50
5720	76.54	PK	66	2.4	H	-1.95	74.59	110.8	-36.21
5725	79.10	PK	128	1.1	H	-2.03	77.07	122.2	-45.13
5650	65.73	PK	215	2.2	V	-2.80	62.93	68.2	-5.27
5700	69.64	PK	103	2.5	V	-1.62	68.02	105.2	-37.18
5720	77.69	PK	22	1	V	-1.95	75.74	110.8	-35.06
5725	80.23	PK	130	2.1	V	-2.03	78.20	122.2	-44.00
11510	52.56	PK	283	1.6	H	8.04	60.60	74	-13.40
11510	40.39	AV	332	1.6	H	8.04	48.43	54	-5.57
11510	52.82	PK	150	2	V	8.04	60.86	74	-13.14
11510	40.61	AV	263	2	V	8.04	48.65	54	-5.35
5795MHz									
5850	68.30	PK	297	1.3	H	-0.60	67.70	122.2	-54.50
5855	67.09	PK	350	1.8	H	-0.50	66.59	110.8	-44.21
5875	65.92	PK	181	1.2	H	-0.09	65.83	105.2	-39.37
5925	64.09	PK	104	1.6	H	-0.12	63.97	68.2	-4.23
5850	69.16	PK	9	1.7	V	-0.60	68.56	122.2	-53.64
5855	67.73	PK	84	1.4	V	-0.50	67.23	110.8	-43.57
5875	66.64	PK	188	1.4	V	-0.09	66.55	105.2	-38.65
5925	64.30	PK	33	1.5	V	-0.12	64.18	68.2	-4.02
11590	53.44	PK	114	2.1	H	7.60	61.04	74	-12.96
11590	41.23	AV	211	2.1	H	7.60	48.83	54	-5.17
11590	53.65	PK	168	2	V	7.60	61.25	74	-12.75
11590	41.47	AV	71	2	V	7.60	49.07	54	-4.93

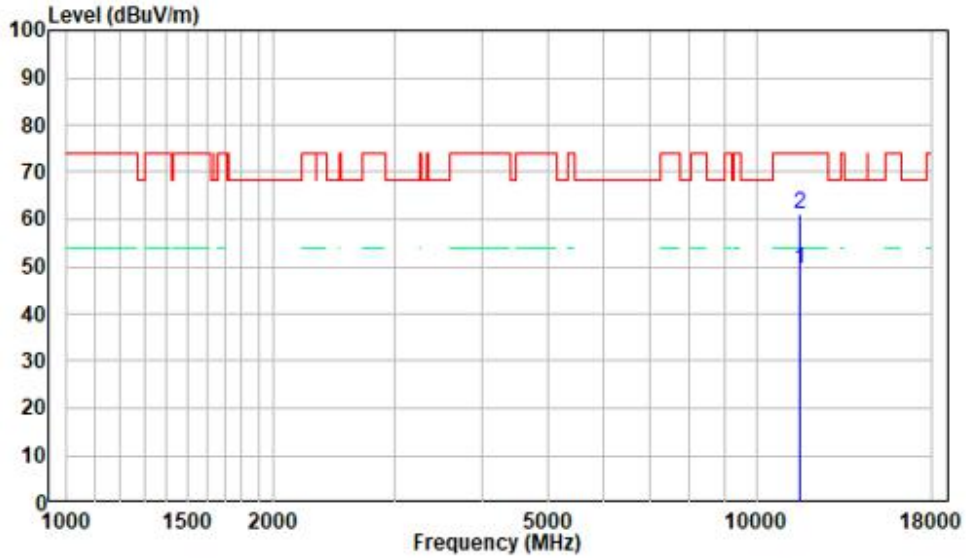
Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11ac80									
5775MHz									
5650	66.64	PK	109	1.3	H	-2.80	63.84	68.2	-4.36
5700	67.74	PK	32	1.6	H	-1.62	66.12	105.2	-39.08
5720	70.98	PK	215	2.3	H	-1.95	69.03	110.8	-41.77
5725	73.33	PK	236	2.4	H	-2.03	71.30	122.2	-50.90
5650	66.83	PK	98	1.5	V	-2.80	64.03	68.2	-4.17
5700	68.26	PK	242	1.6	V	-1.62	66.64	105.2	-38.56
5720	72.56	PK	269	1.1	V	-1.95	70.61	110.8	-40.19
5725	74.83	PK	314	1.4	V	-2.03	72.80	122.2	-49.40
5850	73.08	PK	124	2.3	H	-0.60	72.48	122.2	-49.72
5855	69.27	PK	345	2.1	H	-0.50	68.77	110.8	-42.03
5875	67.18	PK	211	1.1	H	-0.09	67.09	105.2	-38.11
5925	64.92	PK	92	1.3	H	-0.12	64.80	68.2	-3.40
5850	74.47	PK	339	2.3	V	-0.60	73.87	122.2	-48.33
5855	71.08	PK	257	1.8	V	-0.50	70.58	110.8	-40.22
5875	68.54	PK	156	1.7	V	-0.09	68.45	105.2	-36.75
5925	65.18	PK	306	1.8	V	-0.12	65.06	68.2	-3.14
11550	53.20	PK	246	2.4	H	7.77	60.97	74	-13.03
11550	41.79	AV	184	2.4	H	7.77	49.56	54	-4.44
11550	53.44	PK	137	1.7	V	7.77	61.21	74	-12.79
11550	42.03	AV	227	1.7	V	7.77	49.80	54	-4.20

Note:
Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Factor + Reading
Margin = Corrected. Amplitude - Limit
The other spurious emission which is in the noise floor level was not recorded.

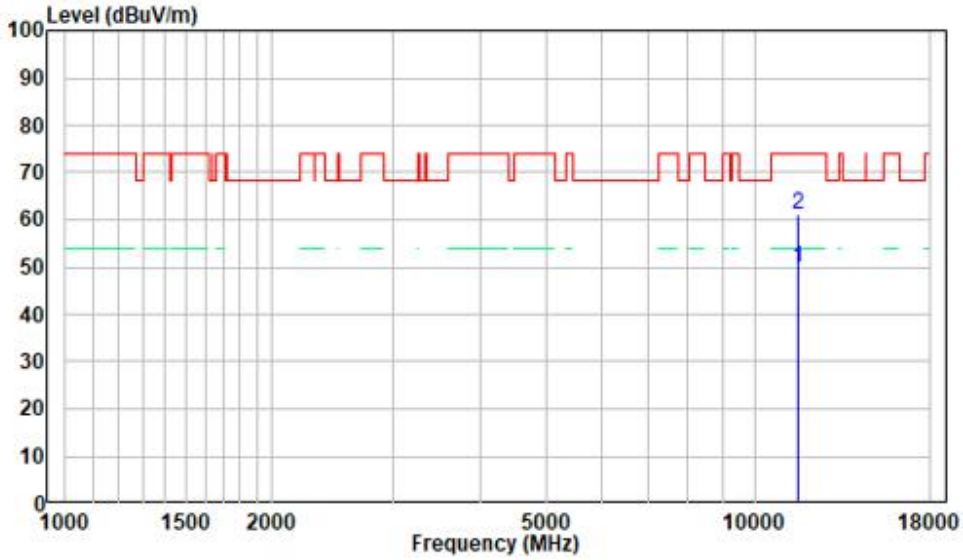
1 GHz - 18 GHz: (Pre-Scan plots)

802.11 ac80, 5775MHz

Horizontal



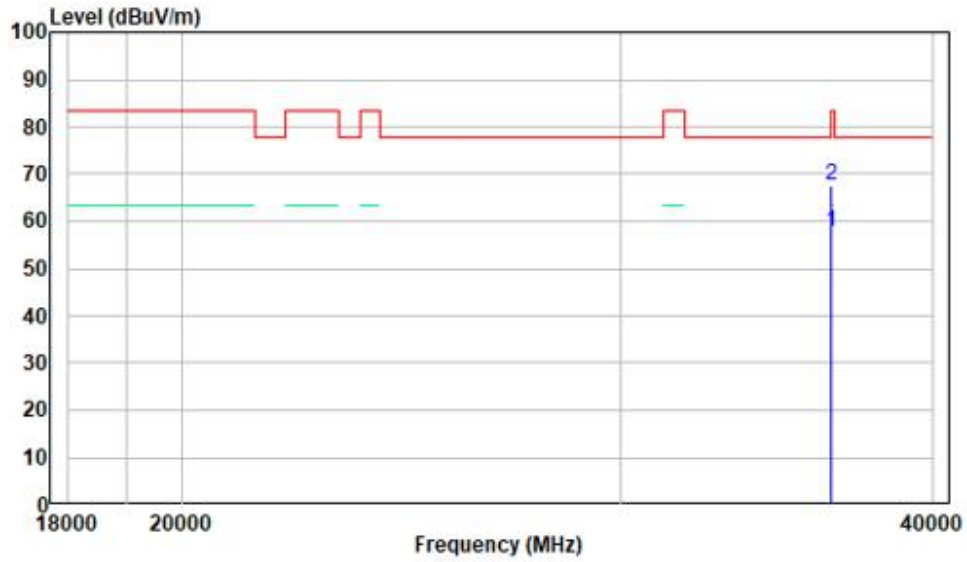
Vertical



18-40GHz: (Pre-Scan plots)

802.11 ac80, 5775MHz

Horizontal



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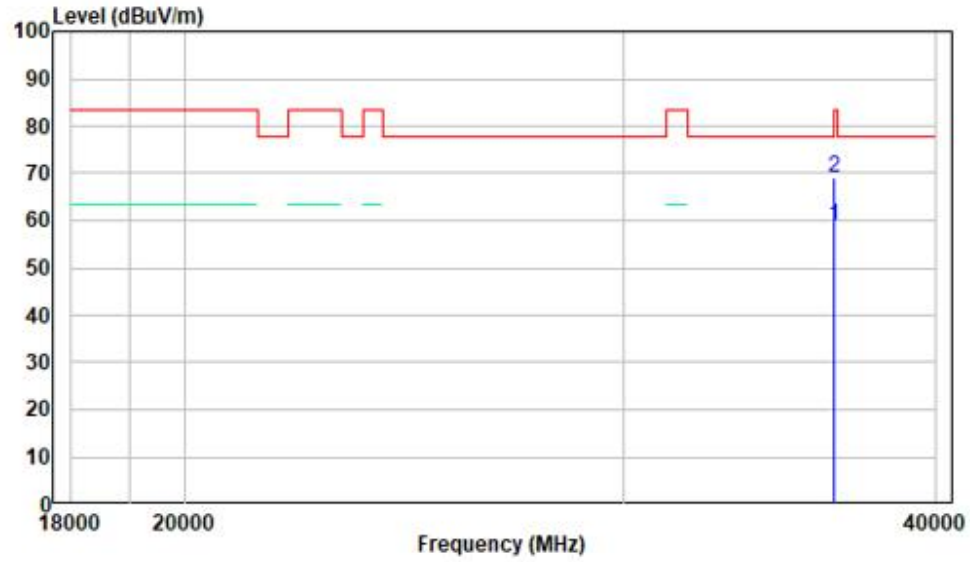


FCC §15.407(a),(e) – 26 dB & 6dB EMISSION BANDWIDTH

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.

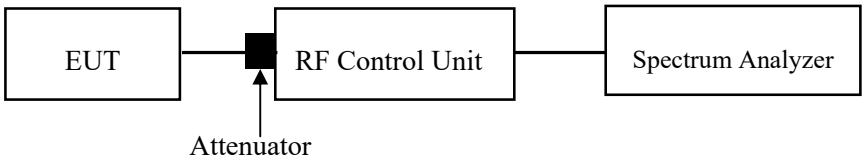
Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

Test Procedure

According to KDB789033 D02 section II.C and section II.D

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

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



Test Data

Environmental Conditions

Temperature:	26 ℃
Relative Humidity:	60 %
ATM Pressure:	101.0 kPa

The testing was performed by Jacob Huang on 2023-05-17.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the Appendix.

FCC §15.407(a) – CONDUCTED TRANSMITTER OUTPUT POWER

Applicable Standard

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

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 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.

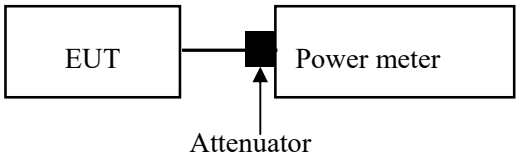
For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum 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

Refer to the ANSI C63.10 -2013, section 12.3.3.2.

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

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



Test Data

Environmental Conditions

Temperature:	26 ℃
Relative Humidity:	60 %
ATM Pressure:	101.0 kPa

The testing was performed by Jacob Huang on 2023-05-17.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the Appendix.

FCC §15.407(a) - POWER SPECTRAL DENSITY

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 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

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-2 should be applied

a) Set RBW=1MHz or 500 kHz. VBW>3 RBW

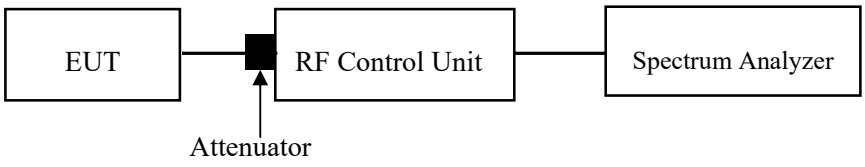
b) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10 10g (500 kHz RBW) to the measured result. Where as RBW (<500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.

c) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add 10 log (1MHz/RBW) to the measured result, whereas RBW (<1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement. f) Detector=power averaging(1ms)

d) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter. it is recommended to use reduced RBW of 100 kHz for the II.F.5.c) anc ILF 5.d. since RBW=100 kHz is available on nearly all spectrum analyzers.

h) Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.



Test Data

Environmental Conditions

Temperature:	26 ℃
Relative Humidity:	60 %
ATM Pressure:	101.0 kPa

The testing was performed by Jacob Huang on 2023-05-17.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the Appendix.

APPENDIX

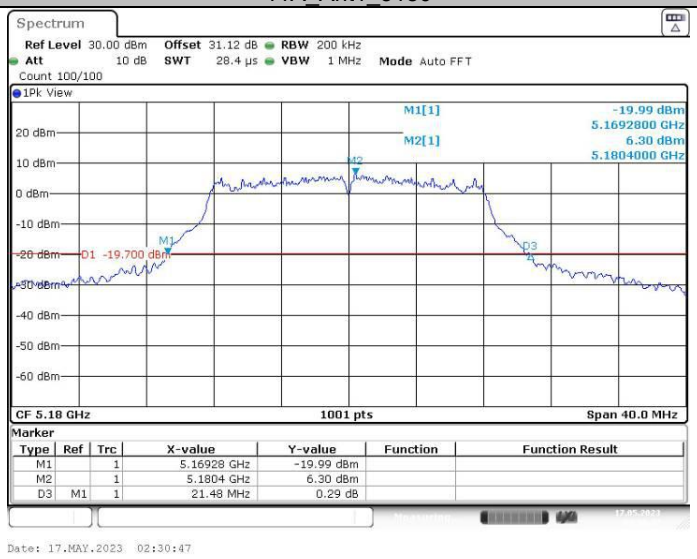
Appendix A1: Emission Bandwidth

Test Result

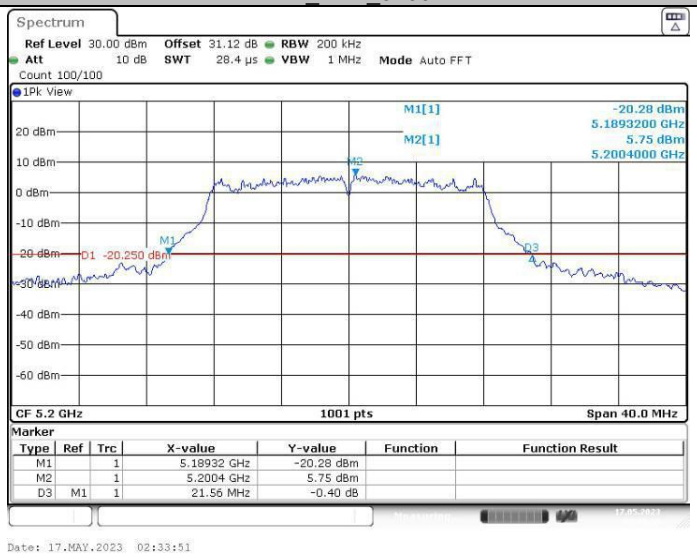
Test Mode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]
11A	Ant1	5180	21.48	5169.28	5190.76
		5200	21.56	5189.32	5210.88
		5240	21.60	5229.28	5250.88
		5260	21.60	5249.28	5270.88
		5280	21.32	5269.20	5290.52
		5320	21.32	5309.24	5330.56
		5500	21.36	5489.28	5510.64
		5580	21.40	5569.28	5590.68
		5700	21.40	5689.32	5710.72
11AC20SISO	Ant1	5180	21.64	5169.16	5190.80
		5200	21.72	5189.16	5210.88
		5240	22.40	5228.44	5250.84
		5260	21.52	5249.28	5270.80
		5280	21.52	5269.20	5290.72
		5320	21.56	5309.16	5330.72
		5500	21.56	5489.16	5510.72
		5580	21.68	5569.08	5590.76
		5700	21.40	5689.24	5710.64
11AC40SISO	Ant1	5190	40.56	5169.76	5210.32
		5230	40.00	5210.00	5250.00
		5270	40.32	5249.92	5290.24
		5310	40.24	5289.92	5330.16
		5510	40.16	5489.76	5529.92
		5550	39.92	5530.08	5570.00
		5670	40.48	5649.68	5690.16
11AC80SISO	Ant1	5210	81.60	5169.36	5250.96
		5290	81.76	5248.88	5330.64
		5530	81.28	5489.68	5570.96
		5610	81.76	5569.04	5650.80

Test Graphs

11A_Ant1_5180



11A_Ant1_5200



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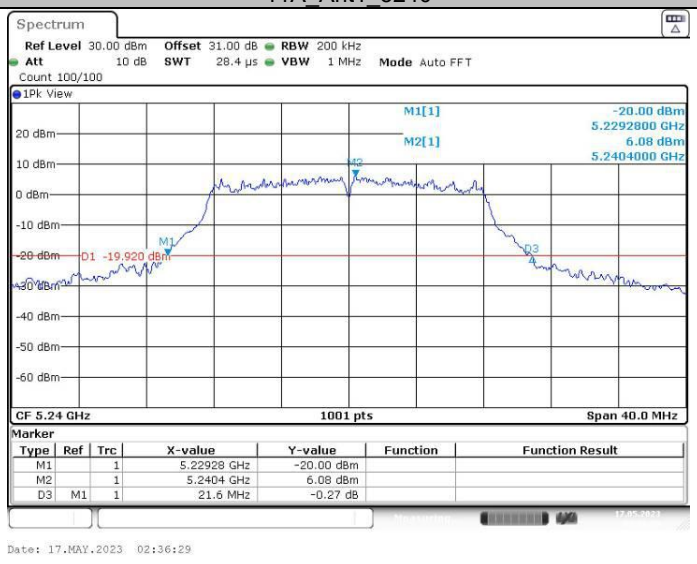

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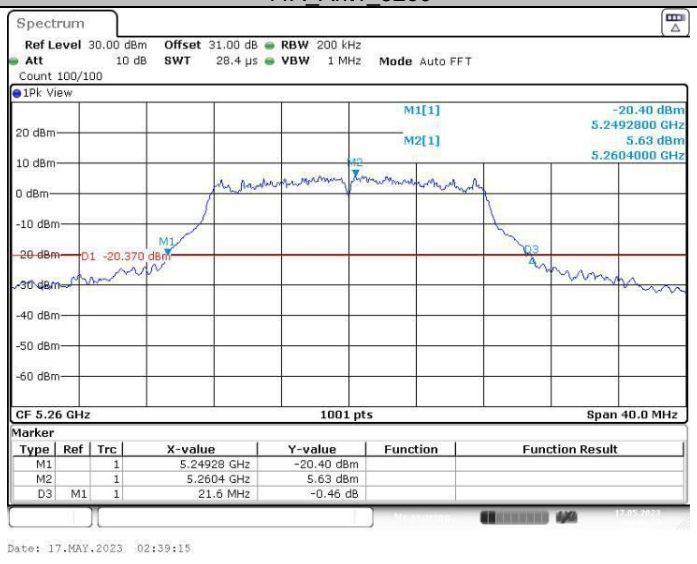

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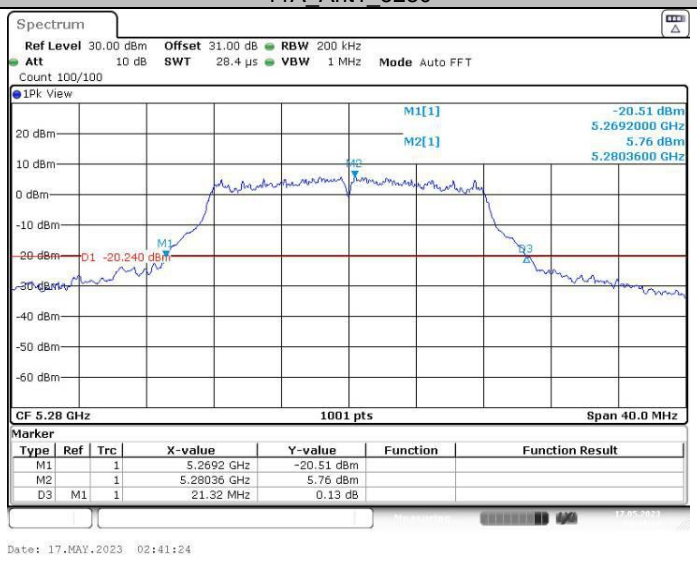

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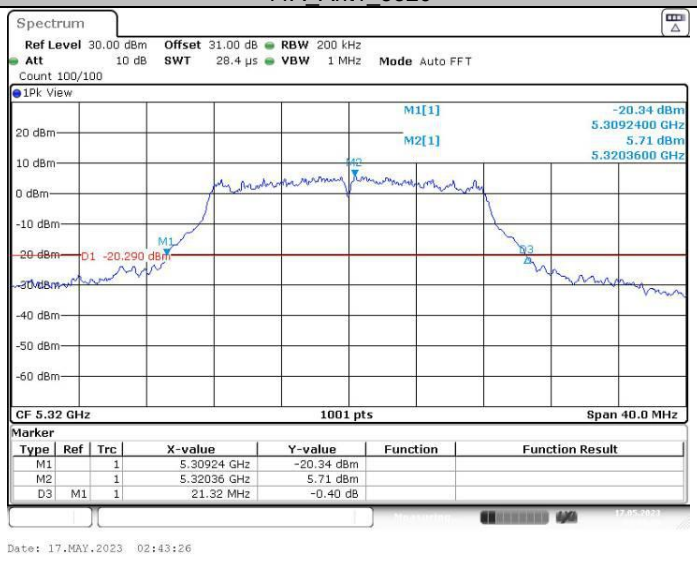

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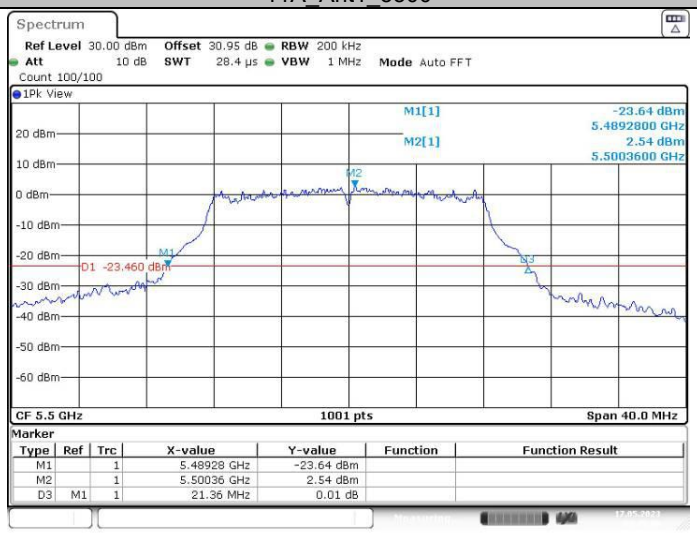

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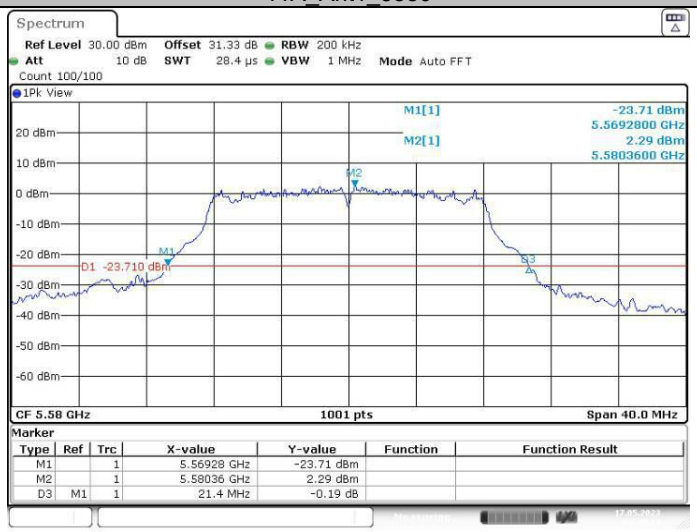
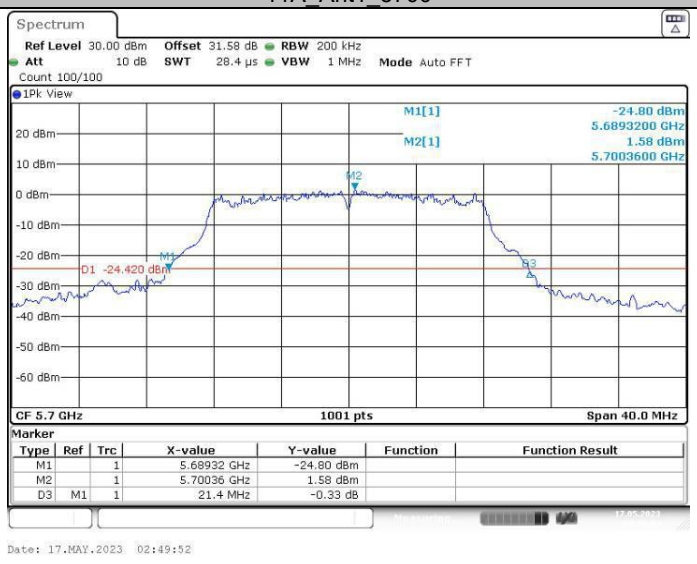


11A_Ant1_5700



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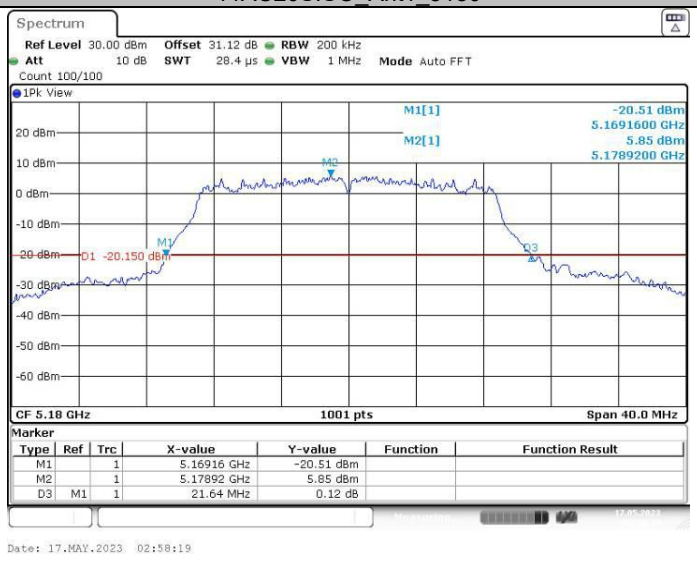

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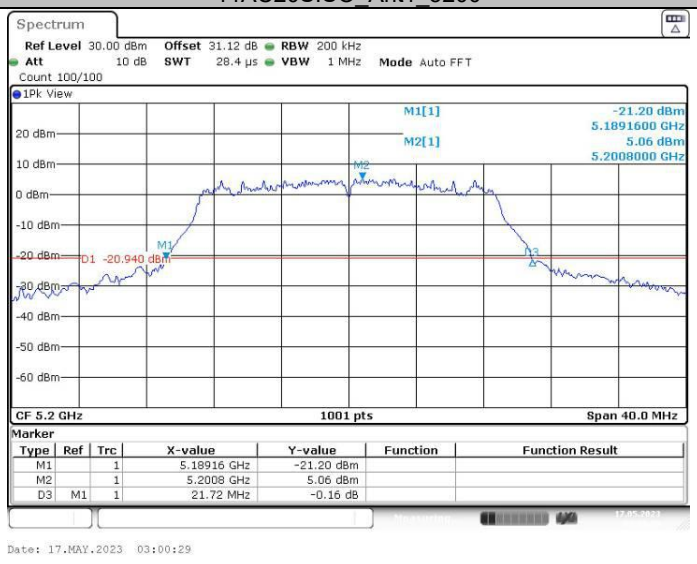

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