FCC Test Report

(Class II Permissive Change)

Product Name	AX3200 SMART ROUTER
Model No	R32
FCC ID.	KA2R32A1

Applicant	D-Link Corporation
Address	14420 Myford Road Suite 100 Irvine California 92606 United States

Date of Receipt	Nov. 15, 2021
Issued Date	May. 10, 2022
Report No.	21B0548R-RFUSWL5V01-B
Report Version	V1.0

Testing Laboratory
3023

Test Report

Issued Date: May. 10, 2022
Report No.: 21B0548R-RFUSWL5V01-B

Product Name	AX3200 SMART ROUTER
Applicant	D-Link Corporation
Address	14420 Myford Road Suite 100 Irvine California 92606 United States
Manufacturer	D-Link Corporation
Model No.	R32
FCC ID.	KA2R32A1
EUT Rated Voltage	AC 100-240V / 50-60Hz
EUT Test Voltage	AC 120V / 60Hz
Trade Name	D-Link
Applicable Standard	FCC CFR Title 47 Part 15 Subpart E ANSI C63.4: 2014, ANSI C63.10: 2013 KDB Publication 789033
Test Result	Complied

Documented By : April Chen

(Senior Project Specialist / April Chen)

Tested By : Ivan Chuang

(Senior Engineer / Ivan Chuang)

Approved By : Jack Hsu

(Senior Engineer / Jack Hsu)

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Revision History

Report No.	Version	Description	Issued Date
21B0548R-RFUSWL5V01-B	V1.0	Initial issue of report.	May. 10, 2022

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	AX3200 SMART ROUTER
Trade Name	D-Link
Model No.	R32
Frequency Range	802.11a/n/ac/ax-20: 5260-5320MHz, 5500-5700MHz 802.11n/ac/ax-40: 5270-5310MHz, 5510-5670MHz 802.11ac/ax-20: 5720MHz, 802.11ac/ax-40: 5710MHz 802.11ac/ax-80: 5290MHz, 5530-5690MHz
Number of Channels	802.11a/n/ac/ax-20: 12CH, 802.11n/ac/ax-40: 5CH 802.11ac/ax-20: 1CH, 802.11ac/ax-40: 1CH, 802.11ac/ax-80: 3CH
Data Rate	802.11a: 6 - 54Mbps 802.11n: up to 800Mbps 802.11ac: up to 1733.3 Mbps 802.11ax: up to 2402 Mbps
Type of Modulation	802.11a/n/ac/ax: OFDM, OFDMA, BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Channel Control	Auto
Antenna type	Router External antenna
Antenna Gain	Refer to the table “Antenna List”
LAN Cable	Non -shielded, 1.0m
Power Adapter#1	MFR: AMIGO, M/N: AMS200-1202000FU Input: AC 100-240V~50-60Hz 0.8A Output: 12V⎓2A Cable Out: Non-shielded, 1.2m
Power Adapter#2	MFR: AMIGO, M/N: AMS200-1202000F Input: AC 100-240V~50-60Hz 0.8A Output: 12V⎓2A Cable Out: Non-shielded, 1.2m

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain	Directional Gain
1.	LYNwave	AOX21X-221051-00	Dipole antenna	5.3dBi for 5GHz	11.32dBi for 5GHz
2.	LYNwave	AOX21X-221051-00	Dipole antenna	5.3dBi for 5GHz	
3.	LYNwave	AOX21X-221051-00	Dipole antenna	5.3dBi for 5GHz	
4.	LYNwave	AOX21X-221051-00	Dipole antenna	5.3dBi for 5GHz	

Note: The antenna of EUT is conform to FCC 15.203.

802.11a/n/ac/ax-20MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 52:	5260 MHz	Channel 56:	5280 MHz	Channel 60:	5300 MHz	Channel 64:	5320 MHz
Channel 100:	5500 MHz	Channel 104:	5520 MHz	Channel 108:	5540 MHz	Channel 112:	5560 MHz
Channel 116:	5580 MHz	Channel 132:	5660 MHz	Channel 136:	5680 MHz	Channel 140:	5700 MHz

802.11n/ac/ax-40MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 54:	5270 MHz	Channel 62:	5310 MHz	Channel 102:	5510 MHz	Channel 110:	5550 MHz
Channel 134:	5670 MHz						

802.11ac/ax-20MHz Center Working Frequency of Each Channel:

Channel	Frequency
Channel 144:	5720 MHz

802.11ac/ax-40MHz Center Working Frequency of Each Channel:

Channel	Frequency
Channel 142:	5710 MHz

802.11ac/ax-80MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 58:	5290 MHz	Channel 106:	5530 MHz	Channel 122:	5610 MHz	Channel 138:	5690 MHz

Note:

1. This device is a AX3200 SMART ROUTER with built-in WLAN(802.11a/b/g/n/ac/ax) transceiver, this report for 5GHz WLAN.
2. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance of 802.11a/n/ac transmitter with Part 15 Subpart E for Unlicensed National Information Infrastructure devices.
3. This is to request a Class II permissive change for FCC ID: KA2R32A1, originally granted on 05/05/2022. The major change filed under this application is:
   Change #1: Added U-NII-2A and U-NII-2C.

Test Mode	Mode 1: Transmit (802.11a-6Mbps) Mode 2: Transmit (802.11ax-20MBW 34.4Mbps) Mode 3: Transmit (802.11ax-40MBW 68.8Mbps) Mode 4: Transmit (802.11ax-80MBW 144Mbps)

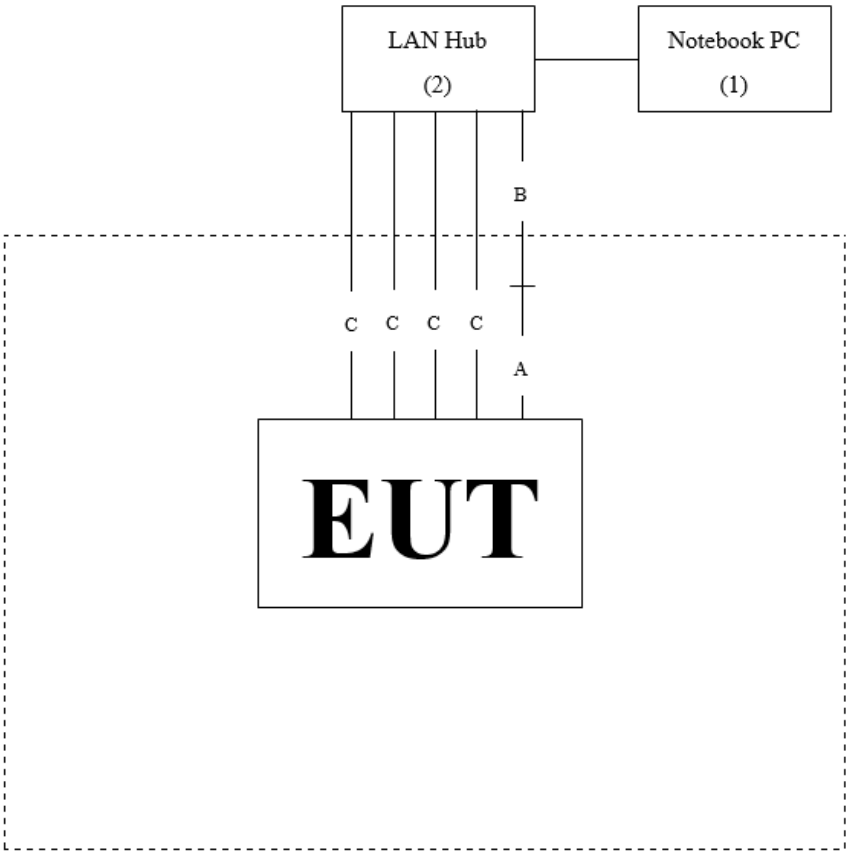
1.2. Tested System Datails

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	Power Cord
1.	Notebook PC	DELL	Latitude E5440	FS9TK32	N/A
2.	LAN Hub	TP-LINK	TL-SG108	2161597000480	Non-Shielded, 1.5m

Signal Cable Type		Signal cable Description
A	LAN Cable	Non-shielded, 1.0m
B	LAN Cable	Non-shielded, 2.0m
C	LAN Cable	Non-shielded, 3.0m

1.3. Configuration of Tested System



1.4. EUT Exercise Software

1. Setup the EUT as shown in Section 1.3.
2. Execute software “QA v0.0.2.33” on the EUT.
3. Configure the test mode, the test channel, and the data rate.
4. Press “OK” to start the continuous transmit.
5. Verify that the EUT works properly.

1.5. Test Facility

Ambient conditions in the laboratory:

Performed Item	Items	Required	Actual
Conducted Emission	Temperature (°C)	10~40 °C	22.3 °C
	Humidity (%RH)	10~90 %	59.9 %
Radiated Emission	Temperature (°C)	10~40 °C	25.1 °C
	Humidity (%RH)	10~90 %	66.7 %
Conductive	Temperature (°C)	10~40 °C	22 °C
	Humidity (%RH)	10~90 %	55 %

USA : FCC Registration Number: TW0033

Canada : IC Registration Number: 26930

Site Description : Accredited by TAF
Accredited Number: 3023

Test Laboratory : DEKRA Testing and Certification Co., Ltd
Address : No. 5-22, Ruishukeng Linkou District, New Taipei City, 24451, Taiwan
Performed Location : No. 26, Huaya 1st Rd., Guishan Dist.,Taoyuan City 333411, Taiwan, R.O.C.
Phone number : +886-3-275-7255
Fax number : +866-3-327-8031
Email address : info.tw@dekra.com
Website : http://www.dekra.com.tw

1.6. List of Test Equipment

For Conduction measurements /SH1

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	EMI Test Receiver	R&S	ESR7	101601	2021.06.19	2022.06.18
X	Two-Line V-Network	R&S	ENV216	101306	2021.04.08	2022.04.07
X	Two-Line V-Network	R&S	ENV216	101307	2021.05.04	2022.05.03
X	Coaxial Cable	SUHNER	RG400_BNC	RF001	2021.05.24	2022.05.23

Note:
1. All equipments are calibrated every one year.
2. The test instruments marked with "X" are used to measure the final test results.
3. Test Software version : AUDIX e3 V9

For Conducted measurements /SH2

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Spectrum Analyzer	R&S	FSV40	101149	2021.02.04	2022.02.03
X	Peak Power Analyzer	KEYSIGHT	8900B	MY51000539	2021.06.07	2022.06.06
X	Power Sensor	KEYSIGHT	N1923A	MY59240002	2021.05.17	2022.05.16
X	Power Sensor	KEYSIGHT	N1923A	MY59240003	2021.05.17	2022.05.16

Note:
1. All equipments are calibrated every one year.
2. The test instruments marked with "X" are used to measure the final test results.
3. Test Software version : DEKRA Conduction Test System V9.0.5

For Radiated measurements /966-3

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due. Date
X	Loop Antenna	AMETEK	HLA6121	56736	2021.04.14	2022.04.13
X	Bi-Log Antenna	SCHWARZBECK	VULB9168	9168-675	2021.08.11	2022.08.10
X	Horn Antenna	ETS-Lindgren	3117	00227700	2021.10.12	2022.10.11
X	Horn Antenna	Com-Power	AH-840	101100	2021.10.04	2022.10.03
X	Pre-Amplifier	EMCI	EMC001330	980254	2021.01.20	2022.01.19
X	Pre-Amplifier	SGH	PRAMP118	20200202	2021.03.25	2022.03.24
X	Pre-Amplifier	EMCI	EMC05820SE	980310	2021.07.07	2022.07.06
	Pre-Amplifier	EMCI	EMC184045SE	980369		
X	Coaxial Cable	EMCI	EMC102-KM-KM-600	1160314	2021.04.27	2022.04.26
	Coaxial Cable	EMCI	EMC102-KM-KM-7000	170242		
	Filter	MICRO TRONICS	BRM50702	G251	2021.09.16	2022.09.15
X	Filter	MICRO TRONICS	BRM50716	G188	2021.09.16	2022.09.15
X	EMI Test Receiver	R&S	ESR	102793	2021.12.15	2022.12.14
X	Spectrum Analyzer	R&S	FSV3044	101113	2021.02.03	2022.02.02
	Coaxial Cable	SGH	HA800	GD20110222-3		
X	Coaxial Cable	SGH	SGH18	20110223-1	2021.03.05	2022.03.04
	Coaxial Cable	SGH	SGH18	2021001-1		
	Coaxial Cable	SGH	SGH18	2021001-18		

Note:
1. Loop Antenna is calibrated every two year, the other equipments are calibrated every one year.
2. The test instruments marked with "X" are used to measure the final test results.
3. Test Software version : AUDIX e3 V9

1.7. Uncertainty

Uncertainties have been calculated according to the DEKRA internal document.

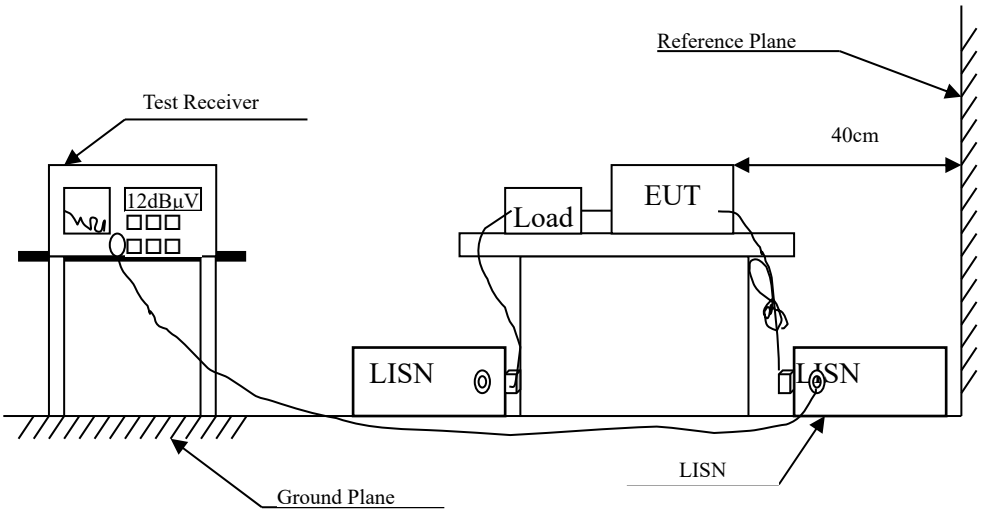
The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Test item	**Uncertainty**	
Conducted Emission	±3.42 dB	
Maximun conducted output power	Power Meter ±0.91 dB	Spectrum Analyzer ±2.53 dB
Peak Power Spectral Density	±2.53 dB	
Radiated Emission	Under 1GHz ±4.06 dB	Above 1GHz ±3.73 dB
Band Edge	Under 1GHz ±4.06 dB	Above 1GHz ±3.73 dB
Occupied Bandwidth	±682.83 Hz	
Duty Cycle	±2.31msec	

2. Conducted Emission

2.1. Test Setup



2.2. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBµV) Limit		
Frequency	Limits	
MHz	QP	AV
0.15 - 0.50	66-56	56-46
0.50-5.0	56	46
5.0 - 30	60	50

Remarks : In the above table, the tighter limit applies at the band edges.

2.3. Test Procedure

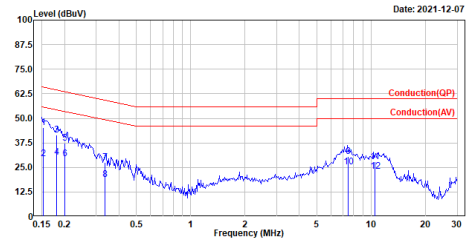
The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4:2014 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

2.4. Test Result of Conducted Emission

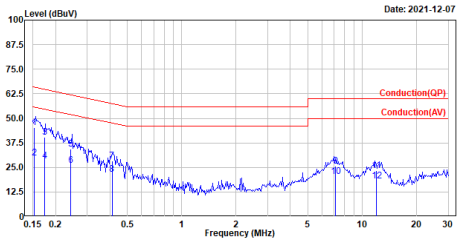
Site :SH1
Condition :Line
Mode :ax80_5775MHz_TX
test by :Gerry



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	0.152	45.40	65.89	-20.49	35.70	9.70	QP
2	0.152	29.33	55.89	-26.56	19.63	9.70	Average
3	0.181	41.36	64.44	-23.08	31.67	9.69	QP
4	0.181	30.34	54.44	-24.10	20.65	9.69	Average
5	0.201	37.45	63.56	-26.11	27.76	9.69	QP
6	0.201	29.54	53.56	-24.02	19.85	9.69	Average
7	0.336	27.57	59.29	-31.72	17.87	9.70	QP
8	0.336	18.87	49.29	-30.42	9.17	9.70	Average
9	7.473	30.47	60.00	-29.53	19.63	10.84	QP
10	7.473	25.35	50.00	-24.65	14.51	10.84	Average
11	10.494	28.08	60.00	-31.92	17.26	10.82	QP
12	10.494	22.95	50.00	-27.05	12.13	10.82	Average

Note:
1. Level = Read Level + Factor
2. Factor = LISN insertion loss + Cable loss
3. Over Limit = Level - Limit Line

Site :SH1
Condition :Neutral
Mode :ax80_5775MHz_TX
test by :Gerry



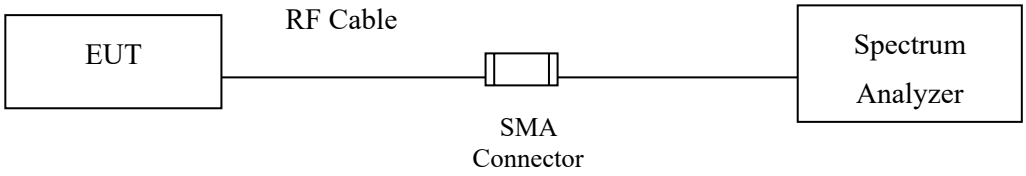
No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	0.153	45.22	65.85	-20.63	35.51	9.71	QP
2	0.153	29.67	55.85	-26.18	19.96	9.71	Average
3	0.175	40.35	64.73	-24.38	30.64	9.71	QP
4	0.175	28.16	54.73	-26.57	18.45	9.71	Average
5	0.242	34.24	62.01	-27.77	24.53	9.71	QP
6	0.242	26.15	52.01	-25.86	16.44	9.71	Average
7	0.411	28.38	57.62	-29.24	18.67	9.71	QP
8	0.411	21.61	47.62	-26.01	11.90	9.71	Average
9	7.112	25.54	60.00	-34.46	14.68	10.86	QP
10	7.112	20.47	50.00	-29.53	9.61	10.86	Average
11	11.939	23.31	60.00	-36.69	12.45	10.86	QP
12	11.939	18.01	50.00	-31.99	7.15	10.86	Average

Note:
1. Level = Read Level + Factor
2. Factor = LISN insertion loss + Cable loss
3. Over Limit = Level - Limit Line

3. Maximun conducted output power

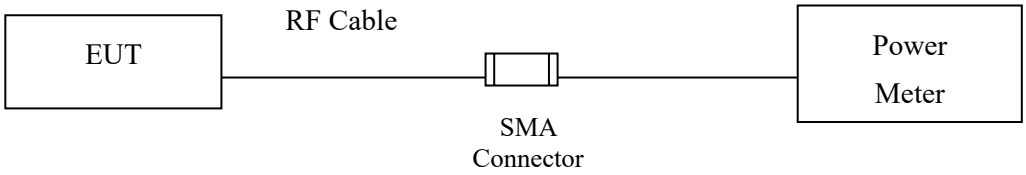
3.1. Test Setup

99% Occupied Bandwidth

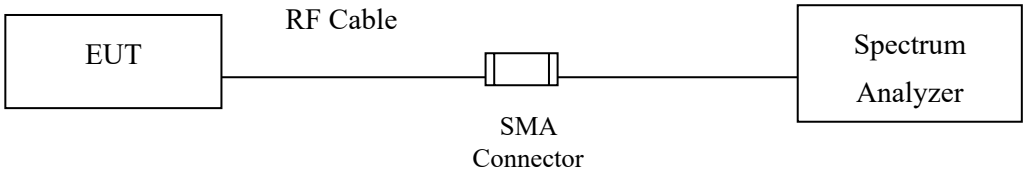


Conduction Power Measurement

Conduction Power Measurement (for 802.11an)



Conduction Power Measurement (for 802.11ac)



3.2. Limits

For the band 5.15-5.25 GHz,

(i) For an outdoor 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. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) 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. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points 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. Fixed point-topoint U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power is required for each 1 dB of antenna gain in excess of 23 dBi. 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.

(iv) For mobile and portable 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. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power 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 99% emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power 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. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point UNII 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.

The maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.3. Test Procedure

As an alternative to FCC KDB-789033, the EUT maximum conducted output power was measured with an average power meter employing a video bandwidth greater the 6dB BW of the emission under test. Maximum conducted output power was read directly from the meter across all data rates, and across three channels within each sub-band. Special care was used to make sure that the EUT was transmitting in continuous mode. This method exceeds the limitations of FCC KDB-789033, and provides more accurate measurements.

802.11an (BW≦40MHz) Maximum conducted output power using KDB 789033 section E)3)b) Method PM-G (Measurement using a gated RF average power meter)
Note: the power meter have a video bandwidth that is greater than or equal to the measurement bandwidth, (Anritsu/ MA2411B video bandwidth: 65MHz)

802.11ac (BW=80MHz) Maximum conducted output power using KDB 789033 section E)2)b) Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep).

When transmitted signals consist of two or more non-contiguous spectrum segments (e.g., 80+80 MHz mode) or when a single spectrum segment of a transmission crosses the boundary between two adjacent U-NII bands, KDB 644545 D03 section D) procedure is used for measurements.

3.4. Test Result of Maximum conducted output power

Product : AX3200 SMART ROUTER
Test Item : Maximum conducted output power
Test Mode : Mode 1: Transmit (802.11a-6Mbps) -CDD
Test Date : 2021/12/10

Chain A

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
		Measurement Level (dBm)							
52	5260	10.66	--	--	--	--	--	--	--
60	5300	10.11	10.06	9.97	9.87	9.82	9.73	9.7	9.64
64	5320	10.1	--	--	--	--	--	--	--
100	5500	10.12	--	--	--	--	--	--	--
116	5580	10.87	10.79	10.74	10.67	10.58	10.53	10.45	10.42
140	5700	11.48	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
		Measurement Level (dBm)							
52	5260	10.56	--	--	--	--	--	--	--
60	5300	10.58	10.52	10.45	10.4	10.34	10.26	10.22	10.18
64	5320	10.14	--	--	--	--	--	--	--
100	5500	10.41	--	--	--	--	--	--	--
116	5580	10.8	10.77	10.73	10.67	10.57	10.53	10.49	10.44
140	5700	11.23	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
		Measurement Level (dBm)							
52	5260	10.92	--	--	--	--	--	--	--
60	5300	11.12	11.04	10.95	10.9	10.85	10.78	10.71	10.65
64	5320	10.74	--	--	--	--	--	--	--
100	5500	10.58	--	--	--	--	--	--	--
116	5580	10.5	10.42	10.38	10.32	10.23	10.14	10.04	9.95
140	5700	11.41	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
		Measurement Level (dBm)							
52	5260	10.65	--	--	--	--	--	--	--
60	5300	11.27	11.18	11.12	11.02	10.93	10.83	10.73	10.69
64	5320	10.94	--	--	--	--	--	--	--
100	5500	10.47	--	--	--	--	--	--	--
116	5580	10.46	10.41	10.36	10.31	10.22	10.14	10.06	10.02
140	5700	11.43	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

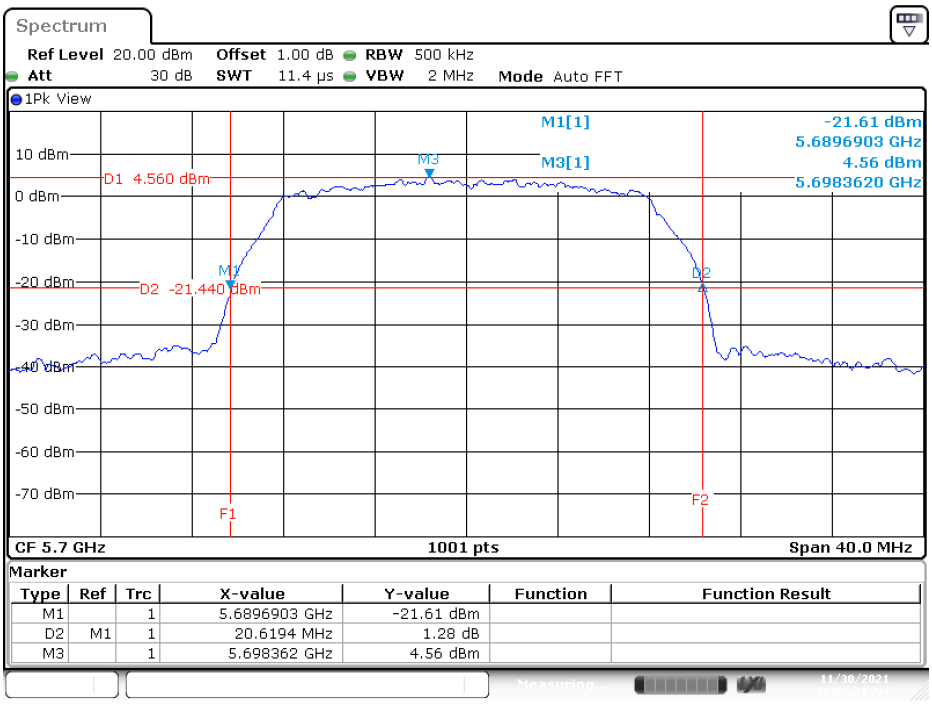
Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Duty factor (dB)	Output Power Limit	
									(dBm)	dBm+10log(BW)
52	5260	20.22	10.66	10.56	10.92	10.65	16.72	--	24	24.06
60	5300	20.18	10.11	10.58	11.12	11.27	16.81	--	24	24.05
64	5320	20.14	10.10	10.14	10.74	10.94	16.52	--	24	24.04
100	5500	20.26	10.12	10.41	10.58	10.47	16.42	--	24	24.07
116	5580	20.26	10.87	10.80	10.50	10.46	16.68	--	24	24.07
140	5700	20.18	11.48	11.23	11.41	11.43	17.41	--	24	24.05

Note:

1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 99% Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

26dB Occupied Bandwidth:

Channel 140:



Date: 30.NOV.2021 08:07:31

Product : AX3200 SMART ROUTER
Test Item : Maximum conducted output power
Test Mode : Mode 2: Transmit (802.11ax-20MBW 34.4Mbps) -CDD
Test Date : 2021/12/02

Chain A

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
52	5260	11.66	--	--	--	--	--	--	--	--	--	--	--
60	5300	11.73	11.65	11.58	11.53	11.5	11.42	11.37	11.3	11.27	11.23	11.17	11.07
64	5320	11.56	--	--	--	--	--	--	--	--	--	--	--
100	5500	11.63	--	--	--	--	--	--	--	--	--	--	--
116	5580	11.48	11.42	11.36	11.3	11.21	11.17	11.11	11.01	10.95	10.91	10.86	10.77
140	5700	11.07	--	--	--	--	--	--	--	--	--	--	--
144(U-NII-2C)	5720	10.18	10.1	10.04	9.99	9.94	9.87	9.78	9.72	9.62	9.55	9.51	9.41
144(U-NII-3)	5720	4.33	4.24	4.18	4.11	4.06	4.02	3.97	3.93	3.85	3.79	3.73	3.69

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
52	5260	11.63	--	--	--	--	--	--	--	--	--	--	--
60	5300	11.12	11.06	10.98	10.91	10.87	10.81	10.75	10.72	10.67	10.58	10.52	10.43
64	5320	11.24	--	--	--	--	--	--	--	--	--	--	--
100	5500	11.57	--	--	--	--	--	--	--	--	--	--	--
116	5580	11.37	11.28	11.24	11.2	11.13	11.07	11.02	10.92	10.86	10.83	10.78	10.72
140	5700	11.52	--	--	--	--	--	--	--	--	--	--	--
144(U-NII-2C)	5720	9.31	9.21	9.14	9.08	9.04	9.01	8.94	8.9	8.85	8.78	8.72	8.62
144(U-NII-3)	5720	3.39	3.35	3.25	3.16	3.12	3.02	2.95	2.85	2.8	2.72	2.68	2.58

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
52	5260	11.69	--	--	--	--	--	--	--	--	--	--	--
60	5300	11.43	11.34	11.3	11.26	11.23	11.15	11.05	11	10.96	10.91	10.84	10.8
64	5320	11.49	--	--	--	--	--	--	--	--	--	--	--
100	5500	11.71	--	--	--	--	--	--	--	--	--	--	--
116	5580	11.66	11.6	11.51	11.48	11.45	11.36	11.3	11.25	11.2	11.17	11.13	11.1
140	5700	11.43	--	--	--	--	--	--	--	--	--	--	--
144(U-NII-2C)	5720	10.21	10.16	10.06	9.99	9.91	9.87	9.8	9.77	9.68	9.65	9.62	9.53
144(U-NII-3)	5720	3.95	3.91	3.83	3.79	3.7	3.65	3.59	3.54	3.47	3.44	3.39	3.31

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
52	5260	11.65	--	--	--	--	--	--	--	--	--	--	--
60	5300	11.91	11.82	11.75	11.67	11.64	11.56	11.52	11.46	11.42	11.33	11.25	11.16
64	5320	11.67	--	--	--	--	--	--	--	--	--	--	--
100	5500	11.47	--	--	--	--	--	--	--	--	--	--	--
116	5580	11.68	11.63	11.57	11.47	11.39	11.29	11.21	11.13	11.06	10.98	10.91	10.87
140	5700	11.58	--	--	--	--	--	--	--	--	--	--	--
144(U-NII-2C)	5720	10.63	10.55	10.48	10.39	10.34	10.29	10.23	10.19	10.11	10.08	9.98	9.95
144(U-NII-3)	5720	4.99	4.94	4.85	4.78	4.74	4.67	4.58	4.53	4.5	4.47	4.41	4.31

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

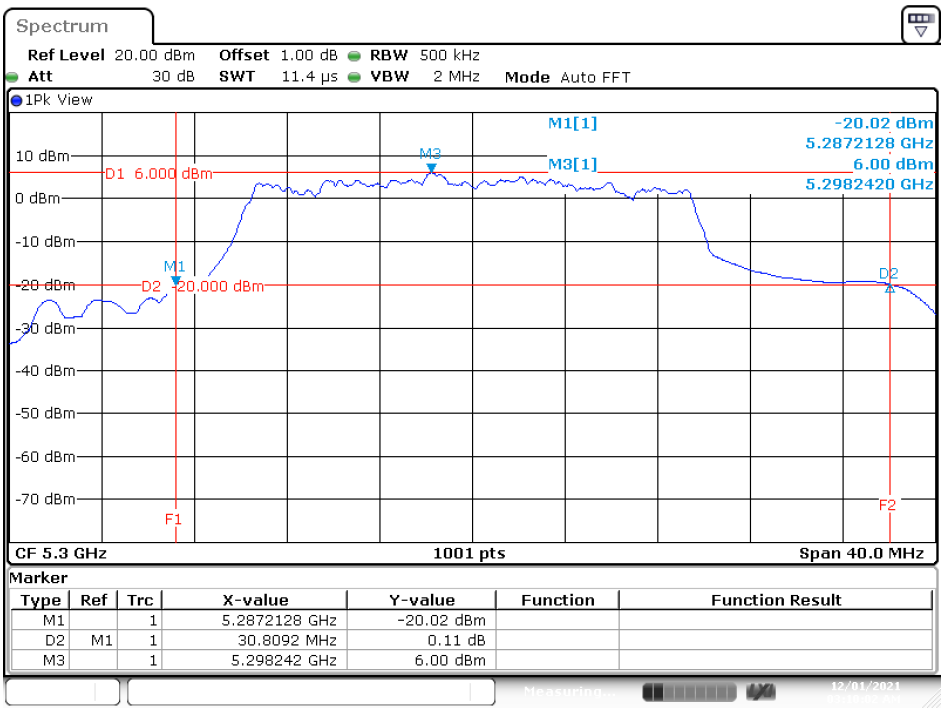
Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Duty factor (dBm)	Output Power Limit	
									(dBm)	dBm+10log(BW)
52	5260	22.26	11.66	11.63	11.69	11.65	17.68	--	24.00	24.47
60	5300	22.54	11.73	11.12	11.43	11.91	17.58	--	24.00	24.53
64	5320	22.86	11.56	11.24	11.49	11.67	17.51	--	24.00	24.59
100	5500	22.70	11.63	11.57	11.71	11.47	17.62	--	24.00	24.56
116	5580	23.06	11.48	11.37	11.66	11.68	17.57	--	24.00	24.63
140	5700	22.14	11.07	11.52	11.43	11.58	17.43	--	24.00	24.45
144(U-NII-2C)	5720	16.19	10.18	9.31	10.21	10.63	16.99	0.86	24.00	23.09
144(U-NII-3)	5720	--	4.33	3.39	3.95	4.99	11.09	0.86	30.00	--

Note:

1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 99% Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

26dB Occupied Bandwidth:

Channel 60:



Product : AX3200 SMART ROUTER
Test Item : Maximum conducted output power
Test Mode : Mode 3: Transmit (802.11ax-40MBW 68.8Mbps) -CDD
Test Date : 2021/12/02

Chain A

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
54	5270	13.55	--	--	--	--	--	--	--	--	--	--	--
62	5310	12.61	12.52	12.46	12.4	12.37	12.33	12.23	12.16	12.12	12.04	12	11.93
102	5510	13.34	--	--	--	--	--	--	--	--	--	--	--
110	5550	12.96	12.93	12.84	12.74	12.65	12.55	12.45	12.4	12.3	12.26	12.16	12.07
134	5670	13.24	--	--	--	--	--	--	--	--	--	--	--
142(U-NII-2C)	5710	12.73	12.63	12.56	12.5	12.47	12.38	12.32	12.28	12.22	12.18	12.13	12.06
142(U-NII-3)	5710	1.4	1.36	1.33	1.29	1.22	1.14	1.04	1.01	0.98	0.92	0.87	0.77

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
54	5270	13.28	--	--	--	--	--	--	--	--	--	--	--
62	5310	12.73	12.64	12.61	12.54	12.48	12.44	12.36	12.28	12.23	12.16	12.13	12.06
102	5510	13.76	--	--	--	--	--	--	--	--	--	--	--
110	5550	13.12	13.06	12.99	12.94	12.91	12.81	12.74	12.71	12.64	12.61	12.51	12.44
134	5670	13.32	--	--	--	--	--	--	--	--	--	--	--
142(U-NII-2C)	5710	12.53	12.43	12.36	12.3	12.2	12.15	12.12	12.04	12	11.96	11.92	11.88
142(U-NII-3)	5710	1.15	1.1	1.07	1.04	1.01	0.95	0.9	0.86	0.77	0.67	0.6	0.57

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
54	5270	13.34	--	--	--	--	--	--	--	--	--	--	--
62	5310	12.84	12.76	12.66	12.6	12.54	12.44	12.34	12.27	12.24	12.19	12.13	12.05
102	5510	13.88	--	--	--	--	--	--	--	--	--	--	--
110	5550	13.35	13.28	13.24	13.18	13.15	13.1	13.07	12.98	12.89	12.84	12.74	12.71
134	5670	13.17	--	--	--	--	--	--	--	--	--	--	--
142(U-NII-2C)	5710	12.89	12.82	12.74	12.71	12.62	12.57	12.48	12.44	12.39	12.34	12.27	12.24
142(U-NII-3)	5710	1.2	1.16	1.09	1.01	0.93	0.89	0.86	0.83	0.79	0.72	0.69	0.6

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
54	5270	13.22	--	--	--	--	--	--	--	--	--	--	--
62	5310	12.98	12.9	12.85	12.75	12.72	12.66	12.58	12.53	12.44	12.41	12.36	12.29
102	5510	13.52	--	--	--	--	--	--	--	--	--	--	--
110	5550	13.07	13.03	12.95	12.85	12.79	12.72	12.64	12.54	12.48	12.39	12.31	12.22
134	5670	13.5	--	--	--	--	--	--	--	--	--	--	--
142(U-NII-2C)	5710	13.3	13.22	13.16	13.07	12.97	12.91	12.85	12.79	12.69	12.66	12.57	12.53
142(U-NII-3)	5710	1.99	1.94	1.86	1.83	1.75	1.66	1.6	1.55	1.52	1.48	1.38	1.35

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

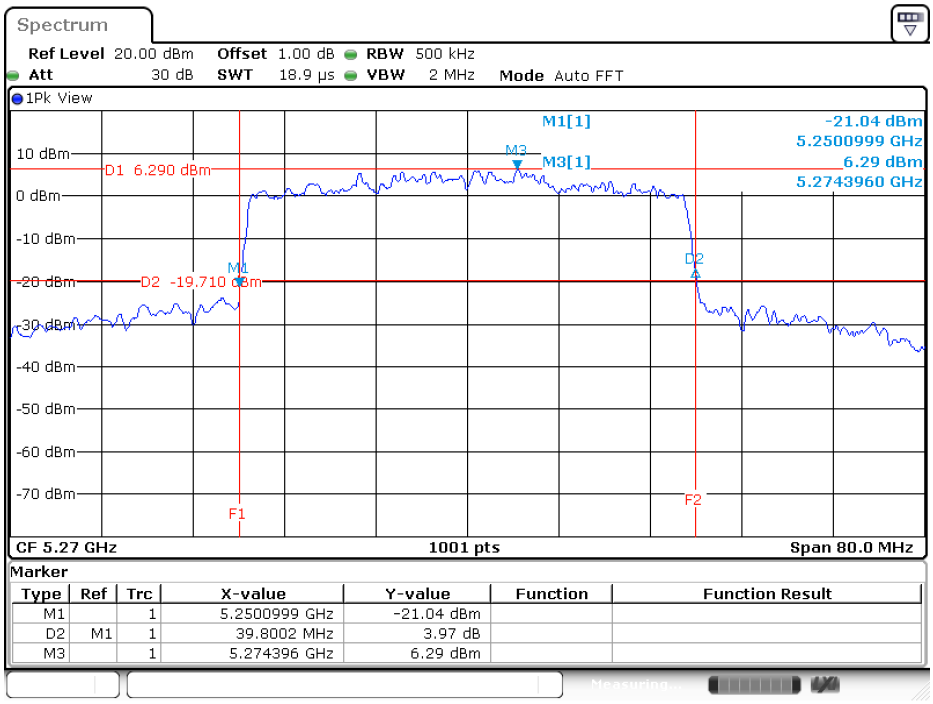
Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Duty factor (dBm)	Output Power Limit	
									(dBm)	dBm+10log(BW)
54	5270	39.56	13.55	13.28	13.34	13.22	19.37	--	30.00	26.97
62	5310	39.48	12.61	12.73	12.84	12.98	18.81	--	24.00	26.96
102	5510	39.56	13.34	13.76	13.88	13.52	19.65	--	24.00	26.97
110	5550	39.48	12.96	13.12	13.35	13.07	19.15	--	24.00	26.96
134	5670	39.48	13.24	13.32	13.17	13.50	19.33	--	24.00	26.96
142(U-NII-2C)	5710	34.74	12.73	12.53	12.89	13.30	20.29	1.40	24.00	26.41
142(U-NII-3)	5710	4.66	1.40	1.15	1.20	1.99	8.87	1.40	30.00	17.68

Note:

1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 99% Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

26dB Occupied Bandwidth:

Channel 54:



Product : AX3200 SMART ROUTER
Test Item : Maximum conducted output power
Test Mode : Mode 4: Transmit (802.11ax-80MBW 144Mbps) -CDD
Test Date : 2021/12/02

Chain A

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
58	5290	9.21	9.14	9.09	9.04	9	8.94	8.91	8.84	8.75	8.67	8.63	8.56
106	5530	12.94	--	--	--	--	--	--	--	--	--	--	--
122	5610	15.69	15.62	15.54	15.47	15.38	15.29	15.19	15.16	15.08	15.03	14.99	14.9
138(U-NII-2C)	5690	15.5	--	--	--	--	--	--	--	--	--	--	--
138(U-NII-3)	5690	0.83	0.73	0.69	0.62	0.58	0.48	0.45	0.35	0.32	0.22	0.12	0.06

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
58	5290	8.87	8.82	8.79	8.73	8.65	8.61	8.51	8.43	8.4	8.36	8.26	8.16
106	5530	12.89	--	--	--	--	--	--	--	--	--	--	--
122	5610	15.98	15.91	15.86	15.8	15.73	15.7	15.63	15.55	15.46	15.37	15.28	15.2
138(U-NII-2C)	5690	15.44	--	--	--	--	--	--	--	--	--	--	--
138(U-NII-3)	5690	-0.6	-0.69	-0.77	-0.8	-0.88	-0.96	-1.03	-1.12	-1.18	-1.24	-1.27	-1.31

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
58	5290	9.12	9.04	9	8.91	8.84	8.77	8.71	8.63	8.57	8.54	8.49	8.4
106	5530	12.91	--	--	--	--	--	--	--	--	--	--	--
122	5610	15.37	15.29	15.24	15.18	15.09	15.02	14.99	14.94	14.87	14.81	14.73	14.66
138(U-NII-2C)	5690	15.62	--	--	--	--	--	--	--	--	--	--	--
138(U-NII-3)	5690	-0.64	-0.7	-0.74	-0.77	-0.8	-0.87	-0.94	-1.03	-1.11	-1.14	-1.24	-1.29

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
58	5290	8.95	8.9	8.85	8.8	8.77	8.69	8.66	8.63	8.55	8.52	8.48	8.42
106	5530	12.67	--	--	--	--	--	--	--	--	--	--	--
122	5610	15.42	15.36	15.33	15.28	15.19	15.1	15.06	14.99	14.9	14.85	14.78	14.73
138(U-NII-2C)	5690	15.49	--	--	--	--	--	--	--	--	--	--	--
138(U-NII-3)	5690	0.54	0.47	0.43	0.39	0.3	0.23	0.14	0.05	0.02	-0.05	-0.12	-0.18

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

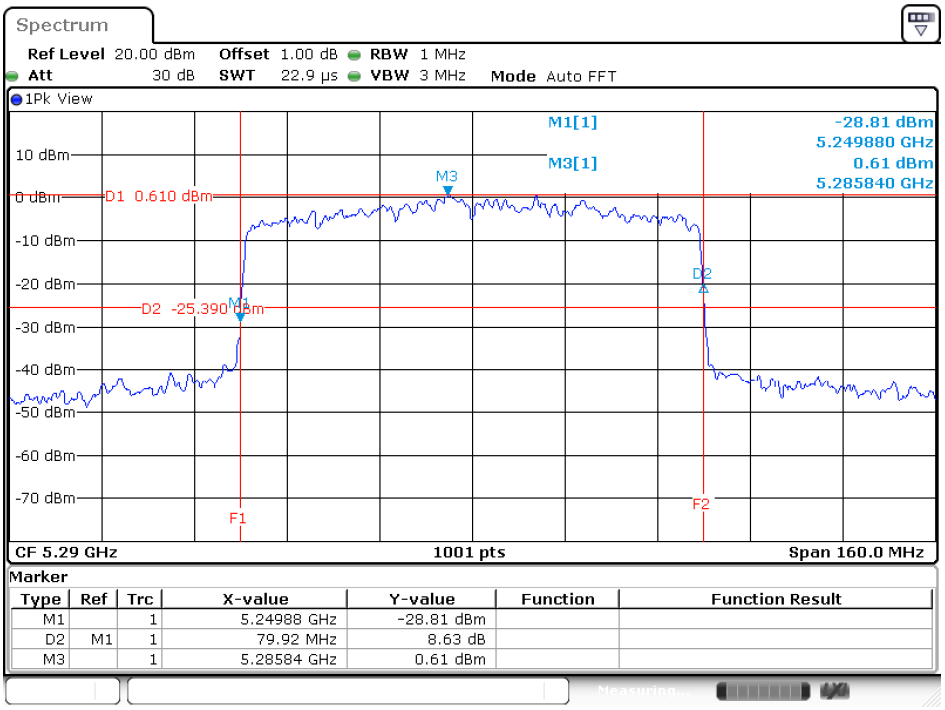
Maximum conducted output power Measurement

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Duty factor (dBm)	Output Power Limit	
									(dBm)	dBm+10log(BW)
58	5290	79.92	9.21	8.87	9.12	8.95	15.06	--	24.00	30.03
106	5530	79.76	12.94	12.89	12.91	12.67	18.87	--	24.00	30.02
122	5610	79.76	15.69	15.98	15.37	15.42	21.64	--	24.00	30.02
138(U-NII-2C)	5690	74.96	15.50	15.44	15.62	15.49	23.82	2.29	24.00	29.75
138(U-NII-3)	5690	--	0.83	-0.60	-0.64	0.54	8.39	2.29	30.00	--

Note:
1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 99% Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

26dB Occupied Bandwidth:

Channel 58:



Date: 13.DEC.2021 14:57:50

Product : AX3200 SMART ROUTER
Test Item : Maximum conducted output power
Test Mode : Mode 2: Transmit (802.11ax-20MBW 34.4Mbps) - Beamforming
Test Date : 2021/12/02

Chain A

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
52	5260	5.64	--	--	--	--	--	--	--	--	--	--	--
60	5300	5.71	5.66	5.56	5.53	5.44	5.39	5.35	5.31	5.21	5.16	5.12	5.07
64	5320	5.54	--	--	--	--	--	--	--	--	--	--	--
100	5500	5.61	--	--	--	--	--	--	--	--	--	--	--
116	5580	5.46	5.39	5.36	5.27	5.18	5.15	5.05	4.98	4.89	4.81	4.78	4.75
140	5700	5.05	--	--	--	--	--	--	--	--	--	--	--
144(U-NII-2C)	5720	4.16	4.12	4.09	3.99	3.92	3.83	3.73	3.7	3.65	3.58	3.52	3.47
144(U-NII-3)	5720	-1.69	-1.72	-1.78	-1.85	-1.94	-1.98	-2.06	-2.16	-2.26	-2.29	-2.35	-2.43

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
52	5260	5.61	--	--	--	--	--	--	--	--	--	--	--
60	5300	5.1	5.01	4.96	4.87	4.84	4.81	4.77	4.72	4.69	4.65	4.62	4.52
64	5320	5.22	--	--	--	--	--	--	--	--	--	--	--
100	5500	5.55	--	--	--	--	--	--	--	--	--	--	--
116	5580	5.35	5.29	5.22	5.16	5.12	5.04	5.01	4.95	4.92	4.84	4.79	4.72
140	5700	5.5	--	--	--	--	--	--	--	--	--	--	--
144(U-NII-2C)	5720	3.29	3.21	3.16	3.12	3.06	3	2.91	2.85	2.81	2.73	2.67	2.58
144(U-NII-3)	5720	-2.63	-2.67	-2.7	-2.76	-2.79	-2.89	-2.99	-3.02	-3.12	-3.19	-3.26	-3.34

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
52	5260	5.67	--	--	--	--	--	--	--	--	--	--	--
60	5300	5.41	5.31	5.26	5.21	5.17	5.07	5.01	4.98	4.92	4.88	4.8	4.73
64	5320	5.47	--	--	--	--	--	--	--	--	--	--	--
100	5500	5.69	--	--	--	--	--	--	--	--	--	--	--
116	5580	5.64	5.57	5.47	5.38	5.35	5.26	5.23	5.19	5.15	5.1	5.06	4.96
140	5700	5.41	--	--	--	--	--	--	--	--	--	--	--
144(U-NII-2C)	5720	4.19	4.11	4.06	3.99	3.89	3.85	3.78	3.73	3.64	3.58	3.49	3.45
144(U-NII-3)	5720	-2.07	-2.15	-2.22	-2.31	-2.39	-2.46	-2.51	-2.61	-2.66	-2.74	-2.82	-2.92

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
52	5260	5.63	--	--	--	--	--	--	--	--	--	--	--
60	5300	5.89	5.83	5.74	5.67	5.63	5.55	5.5	5.46	5.4	5.34	5.3	5.2
64	5320	5.65	--	--	--	--	--	--	--	--	--	--	--
100	5500	5.45	--	--	--	--	--	--	--	--	--	--	--
116	5580	5.66	5.59	5.5	5.41	5.34	5.31	5.24	5.15	5.11	5.02	4.96	4.89
140	5700	5.56	--	--	--	--	--	--	--	--	--	--	--
144(U-NII-2C)	5720	4.61	4.51	4.41	4.36	4.31	4.22	4.17	4.11	4.04	3.97	3.88	3.85
144(U-NII-3)	5720	-1.03	-1.08	-1.11	-1.15	-1.23	-1.28	-1.37	-1.43	-1.53	-1.58	-1.61	-1.67

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Duty factor (dBm)	Output Power Limit	
									(dBm)	dBm+10log(BW)
52	5260	22.26	5.64	5.61	5.67	5.63	11.66	--	18.68	24.47
60	5300	22.54	5.71	5.10	5.41	5.89	11.56	--	18.68	24.53
64	5320	22.86	5.54	5.22	5.47	5.65	11.49	--	18.68	24.59
100	5500	22.70	5.61	5.55	5.69	5.45	11.60	--	18.68	24.56
116	5580	23.06	5.46	5.35	5.64	5.66	11.55	--	18.68	24.63
140	5700	22.14	5.05	5.50	5.41	5.56	11.41	--	18.68	24.45
144(U-NII-2C)	5720	16.19	4.16	3.29	4.19	4.61	10.97	0.86	18.68	23.09
144(U-NII-3)	5720	--	-1.69	-2.63	-2.07	-1.03	5.07	0.86	24.68	--

Note:

3. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
4. 99% Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : AX3200 SMART ROUTER
Test Item : Maximum conducted output power
Test Mode : Mode 3: Transmit (802.11ax-40MBW 68.8Mbps) - Beamforming
Test Date : 2021/12/02

Chain A

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
54	5270	7.53	--	--	--	--	--	--	--	--	--	--	--
62	5310	6.59	6.52	6.46	6.36	6.32	6.26	6.18	6.08	5.99	5.95	5.89	5.79
102	5510	7.32	--	--	--	--	--	--	--	--	--	--	--
110	5550	6.94	6.85	6.82	6.73	6.64	6.59	6.5	6.4	6.33	6.23	6.16	6.13
134	5670	7.22	--	--	--	--	--	--	--	--	--	--	--
142(U-NII-2C)	5710	6.71	6.61	6.57	6.54	6.45	6.4	6.31	6.22	6.14	6.06	5.97	5.93
142(U-NII-3)	5710	-4.62	-4.65	-4.71	-4.79	-4.83	-4.89	-4.93	-4.96	-5	-5.04	-5.08	-5.12

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
54	5270	7.26	--	--	--	--	--	--	--	--	--	--	--
62	5310	6.71	6.64	6.58	6.53	6.43	6.36	6.32	6.27	6.21	6.11	6.04	5.97
102	5510	7.74	--	--	--	--	--	--	--	--	--	--	--
110	5550	7.1	7.06	7	6.95	6.89	6.83	6.76	6.67	6.62	6.53	6.45	6.36
134	5670	7.3	--	--	--	--	--	--	--	--	--	--	--
142(U-NII-2C)	5710	6.51	6.45	6.35	6.32	6.28	6.22	6.13	6.09	6.04	5.96	5.92	5.85
142(U-NII-3)	5710	-4.87	-4.94	-4.99	-5.05	-5.13	-5.16	-5.26	-5.32	-5.42	-5.51	-5.59	-5.62

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
54	5270	7.32	--	--	--	--	--	--	--	--	--	--	--
62	5310	6.82	6.75	6.72	6.69	6.63	6.54	6.48	6.42	6.36	6.31	6.27	6.24
102	5510	7.86	--	--	--	--	--	--	--	--	--	--	--
110	5550	7.33	7.23	7.2	7.12	7.02	6.92	6.84	6.76	6.67	6.63	6.57	6.49
134	5670	7.15	--	--	--	--	--	--	--	--	--	--	--
142(U-NII-2C)	5710	6.87	6.78	6.72	6.65	6.62	6.53	6.43	6.38	6.35	6.28	6.23	6.16
142(U-NII-3)	5710	-4.82	-4.86	-4.91	-4.97	-5	-5.08	-5.17	-5.2	-5.23	-5.31	-5.37	-5.44

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
54	5270	7.2	--	--	--	--	--	--	--	--	--	--	--
62	5310	6.96	6.89	6.86	6.76	6.72	6.64	6.54	6.5	6.46	6.36	6.26	6.21
102	5510	7.5	--	--	--	--	--	--	--	--	--	--	--
110	5550	7.05	7.02	6.94	6.87	6.81	6.73	6.63	6.55	6.49	6.43	6.35	6.3
134	5670	7.48	--	--	--	--	--	--	--	--	--	--	--
142(U-NII-2C)	5710	7.28	7.22	7.19	7.1	7.07	6.97	6.89	6.8	6.74	6.71	6.61	6.55
142(U-NII-3)	5710	-4.03	-4.1	-4.15	-4.23	-4.33	-4.36	-4.46	-4.49	-4.56	-4.6	-4.67	-4.75

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Duty factor (dBm)	Output Power Limit	
									(dBm)	dBm+10log(BW)
54	5270	39.56	7.53	7.26	7.32	7.20	13.35	--	18.68	26.97
62	5310	39.48	6.59	6.71	6.82	6.96	12.79	--	18.68	26.96
102	5510	39.56	7.32	7.74	7.86	7.50	13.63	--	18.68	26.97
110	5550	39.48	6.94	7.10	7.33	7.05	13.13	--	18.68	26.96
134	5670	39.48	7.22	7.30	7.15	7.48	13.31	--	18.68	26.96
142(U-NII-2C)	5710	34.74	6.71	6.51	6.87	7.28	14.27	1.40	18.68	26.41
142(U-NII-3)	5710	4.66	-4.62	-4.87	-4.82	-4.03	2.85	1.40	24.68	17.68

Note:

3. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
4. 99% Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : AX3200 SMART ROUTER
Test Item : Maximum conducted output power
Test Mode : Mode 4: Transmit (802.11ax-80MBW 144Mbps) - Beamforming
Test Date : 2021/12/02

Chain A

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
58	5290	3.19	3.13	3.04	2.99	2.89	2.8	2.71	2.66	2.58	2.53	2.46	2.41
106	5530	6.92	--	--	--	--	--	--	--	--	--	--	--
122	5610	9.67	9.63	9.56	9.49	9.42	9.34	9.28	9.2	9.11	9.03	8.97	8.93
138(U-NII-2C)	5690	9.48	--	--	--	--	--	--	--	--	--	--	--
138(U-NII-3)	5690	-5.19	-5.22	-5.26	-5.35	-5.41	-5.46	-5.51	-5.54	-5.57	-5.62	-5.67	-5.77

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
58	5290	2.85	2.81	2.78	2.74	2.65	2.61	2.53	2.43	2.33	2.28	2.25	2.15
106	5530	6.87	--	--	--	--	--	--	--	--	--	--	--
122	5610	9.96	9.89	9.83	9.78	9.72	9.63	9.56	9.53	9.44	9.41	9.33	9.28
138(U-NII-2C)	5690	9.42	--	--	--	--	--	--	--	--	--	--	--
138(U-NII-3)	5690	-6.62	-6.7	-6.73	-6.79	-6.88	-6.96	-7.01	-7.1	-7.18	-7.22	-7.26	-7.36

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
58	5290	3.1	3.02	2.99	2.89	2.82	2.72	2.64	2.6	2.56	2.52	2.49	2.41
106	5530	6.89	--	--	--	--	--	--	--	--	--	--	--
122	5610	9.35	9.3	9.27	9.19	9.15	9.07	9.04	8.95	8.89	8.83	8.74	8.71
138(U-NII-2C)	5690	9.6	--	--	--	--	--	--	--	--	--	--	--
138(U-NII-3)	5690	-6.66	-6.73	-6.76	-6.86	-6.89	-6.97	-7	-7.05	-7.15	-7.24	-7.32	-7.41

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		Measurement Level (dBm)											
58	5290	2.93	2.9	2.83	2.79	2.73	2.68	2.62	2.58	2.54	2.49	2.46	2.42
106	5530	6.65	--	--	--	--	--	--	--	--	--	--	--
122	5610	9.4	9.32	9.23	9.17	9.14	9.11	9.06	8.98	8.91	8.88	8.84	8.8
138(U-NII-2C)	5690	9.47	--	--	--	--	--	--	--	--	--	--	--
138(U-NII-3)	5690	-5.48	-5.51	-5.59	-5.68	-5.75	-5.78	-5.85	-5.91	-5.95	-6.01	-6.09	-6.14

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Maximum conducted output power Measurement

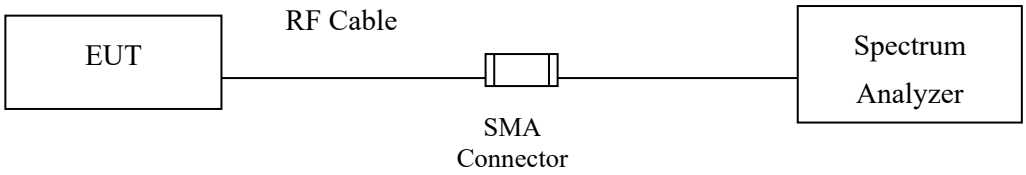
Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Duty factor (dBm)	Output Power Limit	
									(dBm)	dBm+10log(BW)
58	5290	79.92	3.19	2.85	3.10	2.93	9.04	--	18.68	30.03
106	5530	79.76	6.92	6.87	6.89	6.65	12.85	--	18.68	30.02
122	5610	79.76	9.67	9.96	9.35	9.40	15.62	--	18.68	30.02
138(U-NII-2C)	5690	74.96	9.48	9.42	9.60	9.47	17.80	2.29	18.68	29.75
138(U-NII-3)	5690	--	-5.19	-6.62	-6.66	-5.48	2.37	2.29	24.68	--

Note:

3. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
4. 99% Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

4. Peak Power Spectral Density

4.1. Test Setup



4.2. Limits

For the band 5.15-5.25 GHz,
(i) For an outdoor access point operating in the band 5.15-5.25 GHz, 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, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
(ii) For an indoor access point operating in the band 5.15-5.25 GHz, 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, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
(iii) For fixed point-to-point access points 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. Fixed point-topoint U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. 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.
(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, 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, 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 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, 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 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, 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 UNII 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.

The maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

4.3. Test Procedure

The EUT was setup to ANSI C63.10, 2013; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.
The Peak Power Spectral Density using KDB 789033 section F) procedure, Create an average power spectrum for the EUT operating mode being tested by following the instructions in section E)2) for measuring maximum conducted output power using a spectrum analyzer.
SA-1 method is selected to run the test.
For the band 5.725-5.85 GHz, Scale the observed power level to an equivalent value in 500 kHz by adjusting (increase) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log (500 kHz/100 kHz) = 6.98 dB.

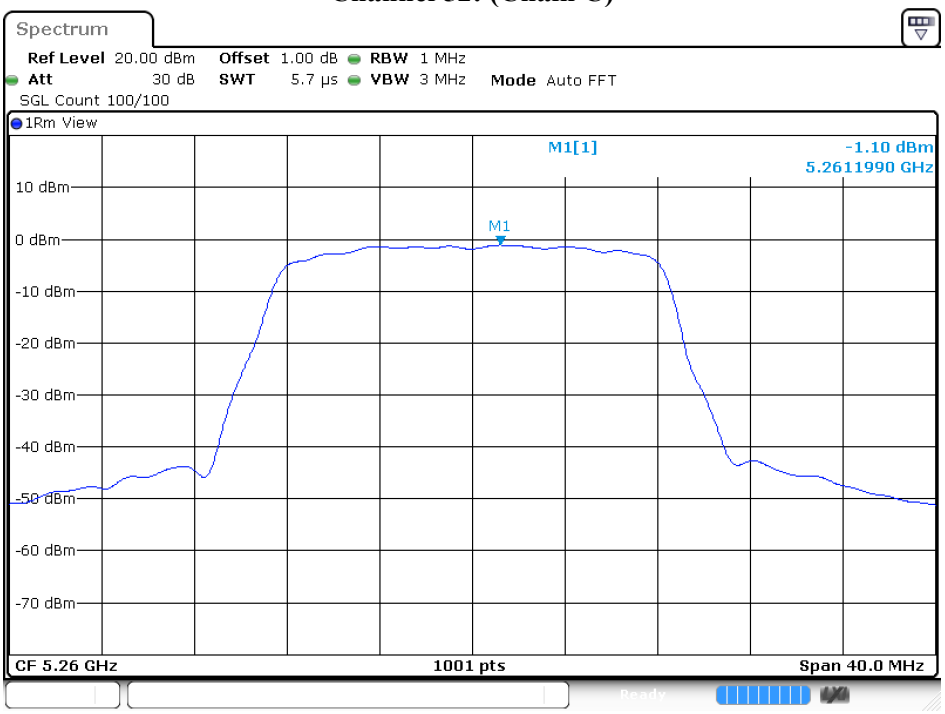
4.4. Test Result of Peak Power Spectral Density

Product : AX3200 SMART ROUTER
Test Item : Peak Power Spectral Density
Test Mode : Mode 1: Transmit (802.11a-6Mbps) -CDD

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	Duty factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
52	5260	A	-1.47	0.71	5.26	5.68	Pass
		B	-1.33	0.71	5.40		Pass
		C	-1.10	0.71	5.63		Pass
		D	-1.27	0.71	5.46		Pass
60	5300	A	-1.42	0.71	5.31	5.68	Pass
		B	-1.21	0.71	5.52		Pass
		C	-1.25	0.71	5.48		Pass
		D	-1.15	0.71	5.58		Pass
64	5320	A	-1.53	0.71	5.20	5.68	Pass
		B	-1.33	0.71	5.40		Pass
		C	-1.27	0.71	5.46		Pass
		D	-1.17	0.71	5.56		Pass
100	5500	A	-1.66	0.71	5.07	5.68	Pass
		B	-1.32	0.71	5.41		Pass
		C	-1.34	0.71	5.39		Pass
		D	-1.22	0.71	5.51		Pass
116	5580	A	-1.60	0.71	5.13	5.68	Pass
		B	-1.29	0.71	5.44		Pass
		C	-1.35	0.71	5.38		Pass
		D	-1.37	0.71	5.36		Pass
140	5700	A	-1.61	0.71	5.12	5.68	Pass
		B	-1.27	0.71	5.46		Pass
		C	-1.19	0.71	5.54		Pass
		D	-1.32	0.71	5.41		Pass

Note:
The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel 52: (Chain C)



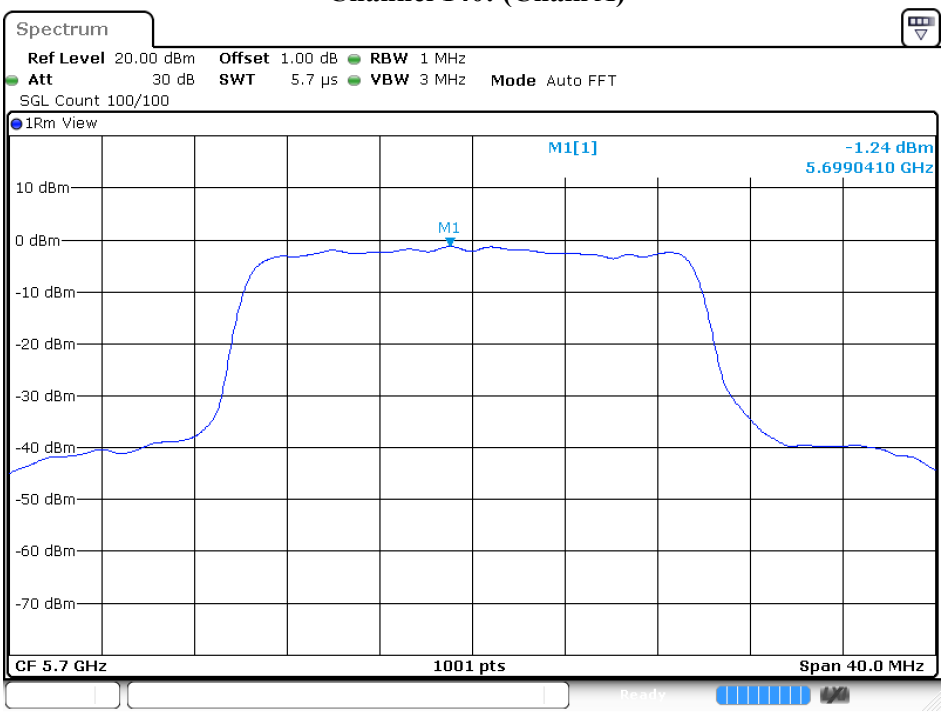
Date: 9.DEC.2021 10:21:57

Product : AX3200 SMART ROUTER
Test Item : Peak Power Spectral Density
Test Mode : Mode 2: Transmit (802.11ax-20MBW 34.4Mbps) -CDD

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	Duty factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
52	5260	A	-1.46	0.86	5.42	5.68	Pass
		B	-1.30	0.86	5.58		Pass
		C	-1.55	0.86	5.33		Pass
		D	-1.47	0.86	5.41		Pass
60	5300	A	-1.67	0.86	5.21	5.68	Pass
		B	-1.75	0.86	5.13		Pass
		C	-1.41	0.86	5.47		Pass
		D	-1.25	0.86	5.63		Pass
64	5320	A	-1.79	0.86	5.09	5.68	Pass
		B	-1.59	0.86	5.29		Pass
		C	-1.42	0.86	5.46		Pass
		D	-1.60	0.86	5.28		Pass
100	5500	A	-1.54	0.86	5.34	5.68	Pass
		B	-1.33	0.86	5.55		Pass
		C	-1.45	0.86	5.43		Pass
		D	-1.40	0.86	5.48		Pass
116	5580	A	-1.47	0.86	5.41	5.68	Pass
		B	-1.59	0.86	5.29		Pass
		C	-1.34	0.86	5.54		Pass
		D	-1.37	0.86	5.51		Pass
140	5700	A	-1.24	0.86	5.64	5.68	Pass
		B	-1.64	0.86	5.24		Pass
		C	-1.40	0.86	5.48		Pass
		D	-1.52	0.86	5.36		Pass
144(U-NII-2C)	5720	A	-1.34	0.86	5.54	5.68	Pass
		B	-1.44	0.86	5.44		Pass
		C	-1.28	0.86	5.60		Pass
		D	-1.38	0.86	5.50		Pass
144(U-NII-3)	5720	A	-4.75	0.86	2.13	24.68	Pass
		B	-5.89	0.86	0.99		Pass
		C	-5.75	0.86	1.13		Pass
		D	-4.51	0.86	2.37		Pass

Note:
The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel 140: (Chain A)



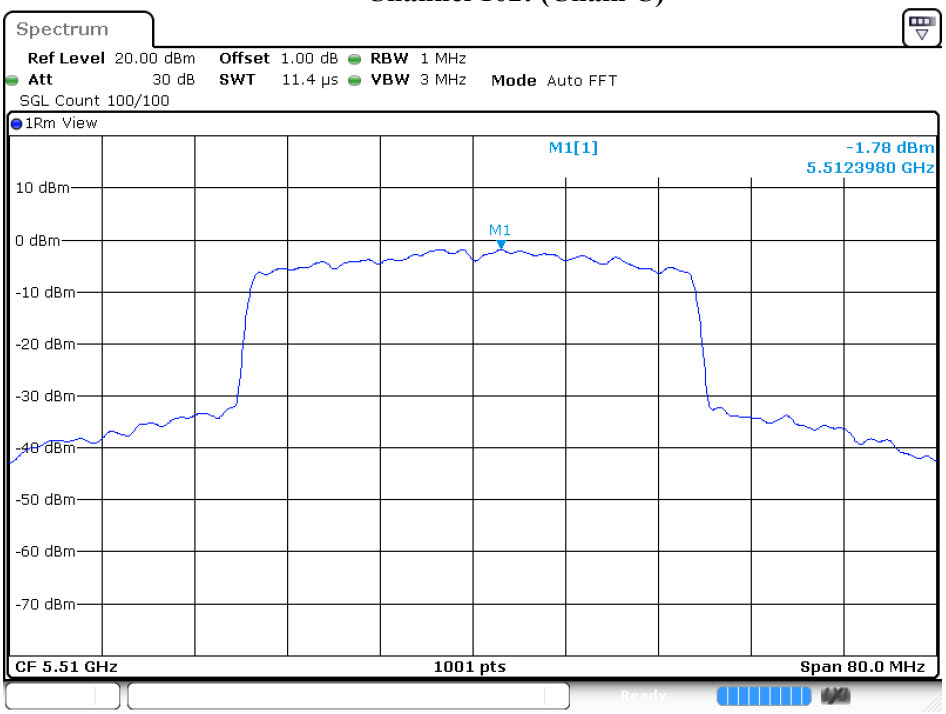
Date: 10.DEC.2021 15:22:05

Product : AX3200 SMART ROUTER
Test Item : Peak Power Spectral Density
Test Mode : Mode 3: Transmit (802.11ax-40MBW 68.8Mbps)

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	Duty factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
54	5270	A	-1.82	1.40	5.60	5.68	Pass
		B	-1.88	1.40	5.54		Pass
		C	-1.96	1.40	5.46		Pass
		D	-1.93	1.40	5.49		Pass
62	5310	A	-1.98	1.40	5.44	5.68	Pass
		B	-1.96	1.40	5.46		Pass
		C	-1.86	1.40	5.56		Pass
		D	-1.89	1.40	5.53		Pass
102	5510	A	-1.86	1.40	5.56	5.68	Pass
		B	-1.80	1.40	5.62		Pass
		C	-1.78	1.40	5.64		Pass
		D	-1.87	1.40	5.55		Pass
110	5550	A	-1.85	1.40	5.57	5.68	Pass
		B	-1.79	1.40	5.63		Pass
		C	-1.84	1.40	5.58		Pass
		D	-1.87	1.40	5.55		Pass
134	5670	A	-1.89	1.40	5.53	5.68	Pass
		B	-1.90	1.40	5.52		Pass
		C	-1.80	1.40	5.62		Pass
		D	-1.81	1.40	5.61		Pass
142(U-NII-2C)	5710	A	-2.00	1.40	5.42	5.68	Pass
		B	-1.92	1.40	5.50		Pass
		C	-1.81	1.40	5.61		Pass
		D	-1.91	1.40	5.51		Pass
142(U-NII-3)	5710	A	-8.73	1.40	-1.31	24.68	Pass
		B	-8.53	1.40	-1.11		Pass
		C	-9.36	1.40	-1.94		Pass
		D	-7.94	1.40	-0.52		Pass

Note:
The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel 102: (Chain C)



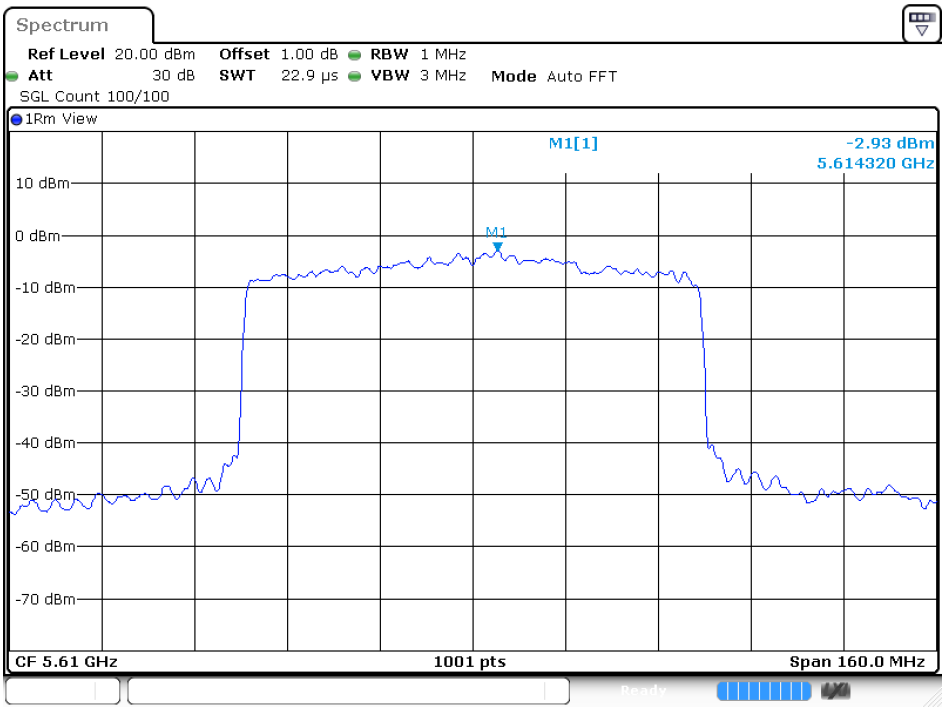
Date: 13.DEC.2021 10:08:35

Product : AX3200 SMART ROUTER
Test Item : Peak Power Spectral Density
Test Mode : Mode 4: Transmit (802.11ax-80MBW 144Mbps)
Test Date : 2018/01/02

Channel Number	Frequency (MHz)	Chain	PPSD (dBm)	Duty factor (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
58	5290	A	-9.93	2.29	-1.62	5.68	Pass
		B	-9.80	2.29	-1.49		Pass
		C	-9.21	2.29	-0.90		Pass
		D	-9.73	2.29	-1.42		Pass
106	5530	A	-5.82	2.29	2.49	5.68	Pass
		B	-6.35	2.29	1.96		Pass
		C	-5.60	2.29	2.71		Pass
		D	-6.44	2.29	1.87		Pass
122	5610	A	-3.08	2.29	5.23	5.68	Pass
		B	-3.01	2.29	5.30		Pass
		C	-2.94	2.29	5.37		Pass
		D	-2.93	2.29	5.38		Pass
138(U-NII-2C)	5690	A	-3.00	2.29	5.31	5.68	Pass
		B	-3.04	2.29	5.27		Pass
		C	-2.91	2.29	5.40		Pass
		D	-2.76	2.29	5.55		Pass
138(U-NII-3)	5690	A	-10.65	2.29	-2.34	24.68	Pass
		B	-10.13	2.29	-1.82		Pass
		C	-10.28	2.29	-1.97		Pass
		D	-8.75	2.29	-0.44		Pass

Note:
The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel 122: (Chain D)

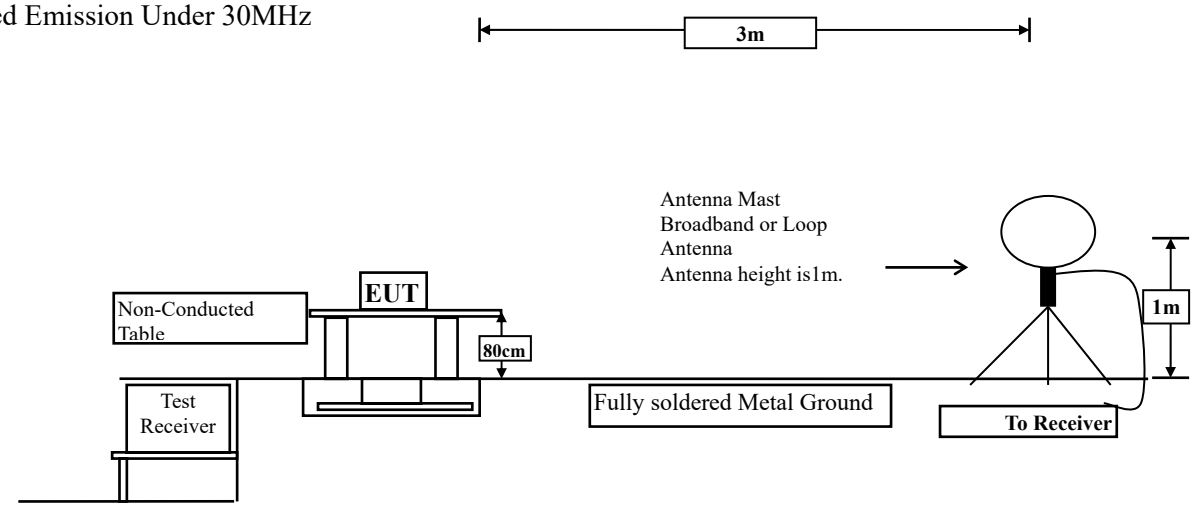


Date: 13.DEC.2021 16:23:44

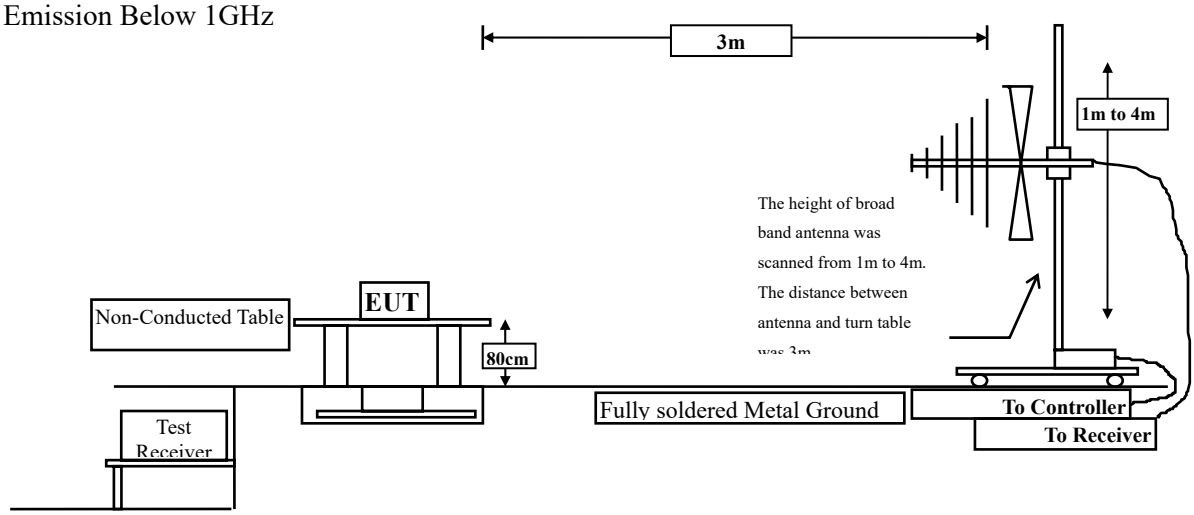
5. Radiated Emission

5.1. Test Setup

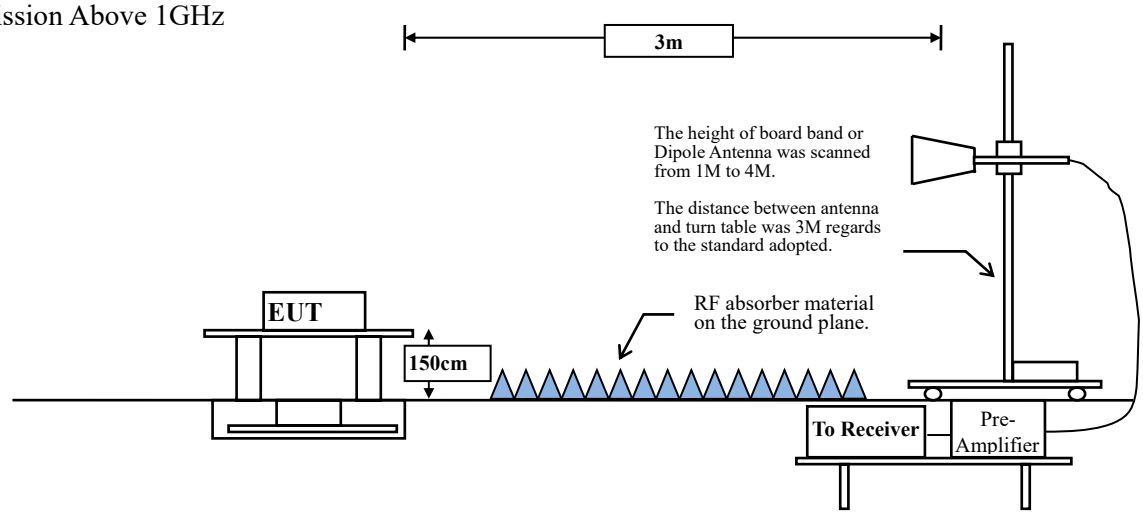
Radiated Emission Under 30MHz



Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



5.2. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209(a) Limits		
Frequency MHz	Field strength (microvolts/meter)	Measurement distance (meter)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remarks: E field strength (dBμV/m) = 20 log E field strength (uV/m)

5.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested according to FCC KDB-789033 test procedure for compliance to FCC 47CFR 15. 407 requirements.

Measuring the frequency range below 1GHz, the EUT is placed on a turn table which is 0.8 meter above ground,when measuring the frequency range above 1GHz, the EUT is placed on a turn table which is 1.5 meter above ground.

The turn table is rotated 360 degrees to determine the position of the maximum emission level.

The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned between 1 meter and 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10: 2013 on radiated measurement.

The resolution bandwidth below 30MHz setting on the field strength meter is 9kHz and 30MHz~1GHz is 120kHz and above 1GHz is 1MHz.

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna.

The measurement frequency range form 9kHz - 10th Harmonic of fundamental was investigated.

RBW and VBW Parameter setting:

According to KDB 789033 section II.G.5 Procedure for Unwanted Maximum Emissions Measurements above 1000 MHz.

RBW = 1MHz.

VBW ≥ 3MHz.

According to KDB 789033 section II.G.6 Procedures for Average Unwanted Emissions Measurements above 1000 MHz.

RBW = 1MHz.

VBW = 10Hz, when duty cycle ≥ 98 %

VBW ≥ 1/T, when duty cycle < 98 %

(T refers to the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.)

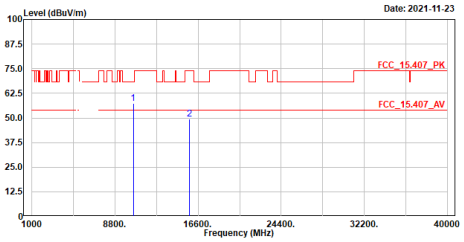
5GHz band	Duty Cycle (%)	T (ms)	1/T (Hz)	VBW (Hz)
802.11 a	85.00	1.3600	735	1000
802.11 ax20	81.97	1.0000	1000	2000
802.11 ax40	72.48	0.5400	1852	2000
802.11 ax80	59.04	0.2940	3401	5000

Note: Duty Cycle Refer to Section 8

5.4. Test Result of Radiated Emission

CDD:

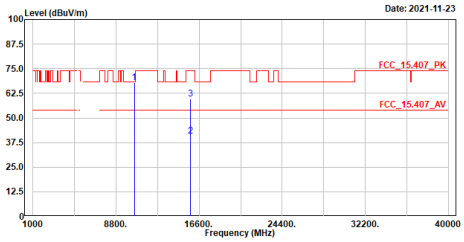
Site :966-3
Condition :3m ,Horizontal
Mode :TX_a_5260MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	10520.000	57.49	68.22	-10.73	60.34	-2.85	Peak
2	15780.000	49.47	74.00	-24.53	45.98	3.49	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

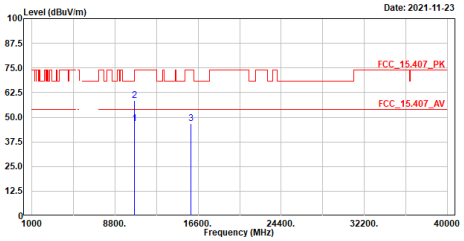
Site :966-3
Condition :3m ,Vertical
Mode :TX_a_5260MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	10520.000	67.86	68.22	-0.36	70.71	-2.85	Peak
2	15780.000	40.90	54.00	-13.10	37.41	3.49	Average
3	15780.000	59.54	74.00	-14.46	56.06	3.48	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

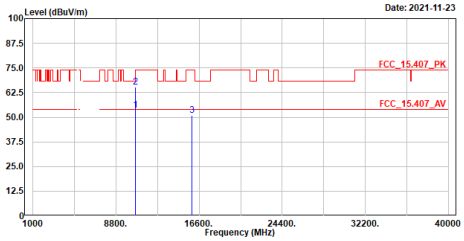
Site :966-3
Condition :3m ,Horizontal
Mode :TX_a_5300MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	10600.000	46.98	54.00	-7.02	49.58	-2.60	Average
2	10600.000	58.32	74.00	-15.68	60.91	-2.59	Peak
3	15900.000	46.82	74.00	-27.18	42.88	3.94	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

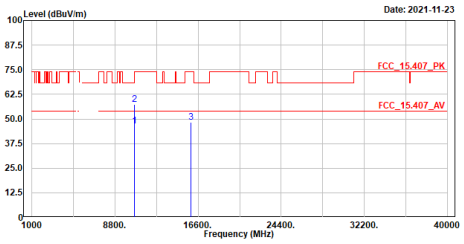
Site :966-3
Condition :3m ,Vertical
Mode :TX_a_5300MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	10600.000	53.64	54.00	-0.36	56.24	-2.60	Average
2	10600.000	65.17	74.00	-8.83	67.77	-2.60	Peak
3	15900.000	50.79	74.00	-23.21	46.98	3.81	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

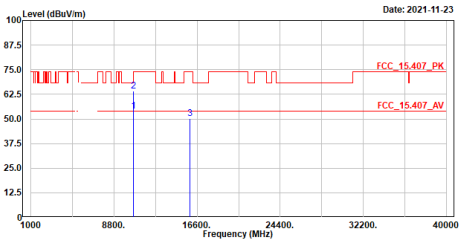
Site :966-3
Condition :3m ,Horizontal
Mode :TX_a_5320MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	10640.000	46.55	54.00	-7.45	49.13	-2.58	Average
2	10640.000	57.18	74.00	-16.82	59.76	-2.58	Peak
3	15960.000	48.15	74.00	-25.85	44.14	4.01	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

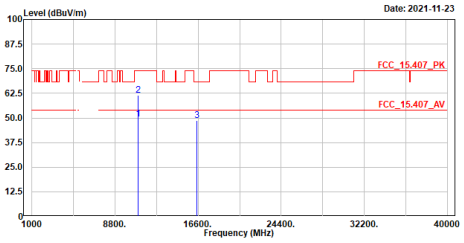
Site :966-3
Condition :3m ,Vertical
Mode :TX_a_5320MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	10640.000	53.83	54.00	-0.17	56.41	-2.58	Average
2	10640.000	64.18	74.00	-9.82	66.75	-2.57	Peak
3	15960.000	50.13	74.00	-23.87	46.08	4.05	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

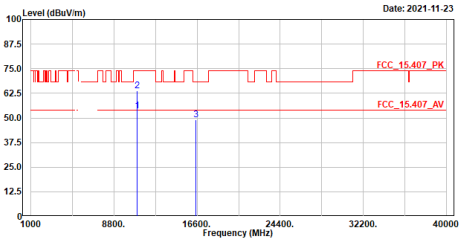
Site :966-3
Condition :3m ,Horizontal
Mode :TX_a_5500MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11000.000	49.49	54.00	-4.51	51.53	-2.04	Average
2	11000.000	61.54	74.00	-12.46	63.58	-2.04	Peak
3	16500.000	48.64	68.22	-19.58	42.85	5.79	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

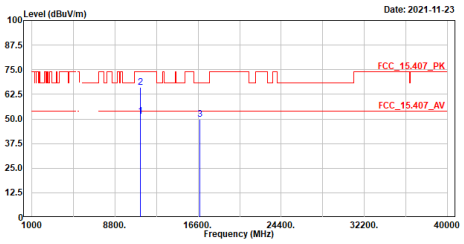
Site :966-3
Condition :3m ,Vertical
Mode :TX_a_5500MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11000.000	53.70	54.00	-0.30	55.74	-2.04	Average
2	11000.000	63.63	74.00	-10.37	65.67	-2.04	Peak
3	16500.000	48.87	68.22	-19.35	43.05	5.82	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

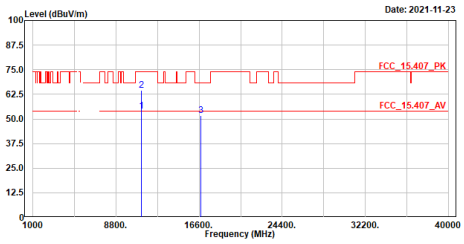
Site :966-3
Condition :3m ,Horizontal
Mode :TX_a_5580MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11160.000	51.46	54.00	-2.54	53.29	-1.83	Average
2	11160.000	65.96	74.00	-8.04	67.77	-1.81	Peak
3	16740.000	49.82	68.22	-18.40	43.14	6.68	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

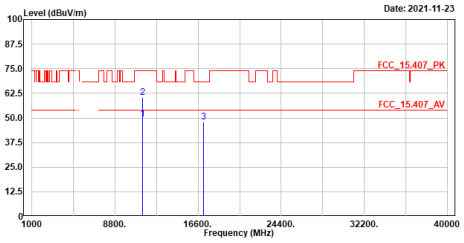
Site :966-3
Condition :3m ,Vertical
Mode :TX_a_5580MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11160.000	53.91	54.00	-0.09	55.74	-1.83	Average
2	11160.000	64.44	74.00	-9.56	66.27	-1.83	Peak
3	16740.000	51.74	68.22	-16.48	45.06	6.68	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

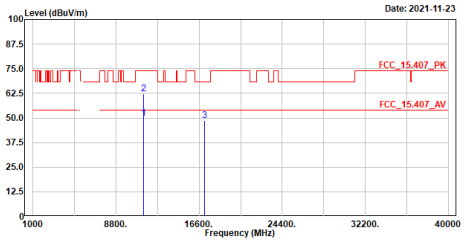
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_a_5700MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11400.000	49.43	54.00	-4.57	50.99	-1.56	Average
2	11400.000	60.28	74.00	-13.72	61.84	-1.56	Peak
3	17100.000	47.99	68.22	-20.23	41.45	6.54	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

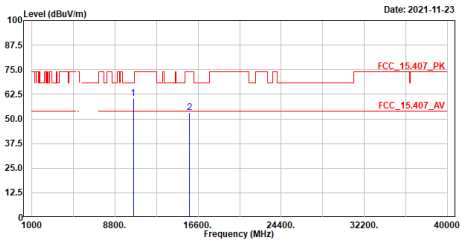
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_a_5700MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11400.000	49.75	54.00	-4.25	51.31	-1.56	Average
2	11400.000	62.25	74.00	-11.75	63.81	-1.56	Peak
3	17100.000	48.77	68.22	-19.45	42.07	6.70	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

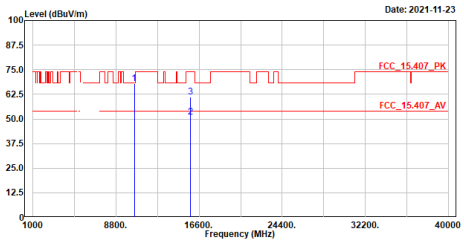
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax20_5260MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	10520.000	60.46	68.22	-7.76	63.30	-2.84	Peak
2	15780.000	53.39	74.00	-20.61	49.90	3.49	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

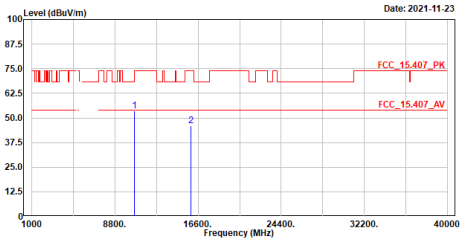
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax20_5260MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	10520.000	67.89	68.22	-0.33	70.74	-2.85	Peak
2	15780.000	50.95	54.00	-3.05	47.46	3.49	Average
3	15780.000	60.97	74.00	-13.03	57.48	3.49	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

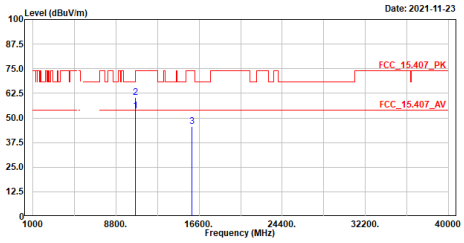
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax20_5300MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	10600.000	53.41	74.00	-20.59	56.01	-2.60	Peak
2	15900.000	45.97	74.00	-28.03	42.18	3.79	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

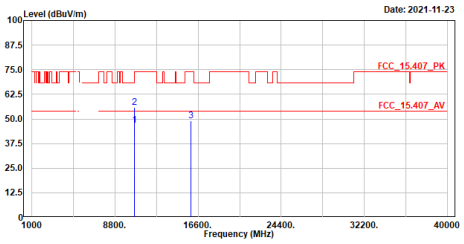
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax20_5300MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	10600.000	53.67	54.00	-0.33	56.27	-2.60	Average
2	10600.000	60.41	74.00	-13.59	63.02	-2.61	Peak
3	15900.000	45.74	74.00	-28.26	41.95	3.79	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

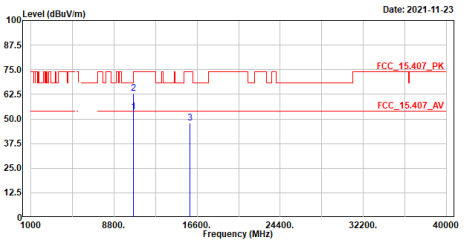
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax20_5320MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	10640.000	46.78	54.00	-7.22	49.36	-2.58	Average
2	10640.000	55.84	74.00	-18.16	58.42	-2.58	Peak
3	15960.000	48.90	74.00	-25.10	44.68	4.22	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

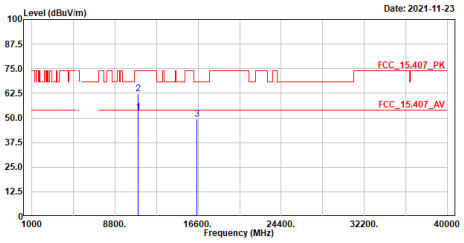
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax20_5320MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	10640.000	53.54	54.00	-0.46	56.12	-2.58	Average
2	10640.000	63.11	74.00	-10.89	65.68	-2.57	Peak
3	15960.000	48.00	74.00	-26.00	43.95	4.05	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

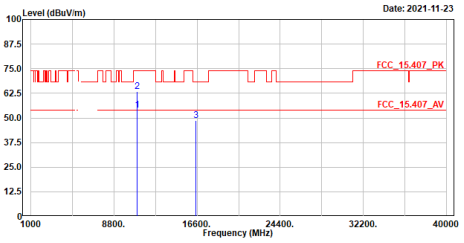
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax20_5500MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11000.000	52.91	54.00	-1.09	54.95	-2.04	Average
2	11000.000	62.25	74.00	-11.75	64.29	-2.04	Peak
3	16500.000	49.40	68.22	-18.82	43.57	5.83	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

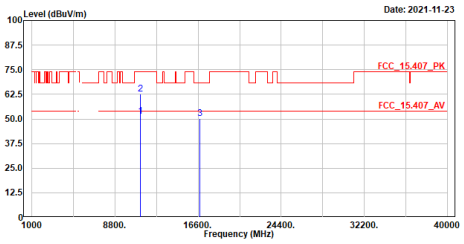
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax20_5500MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11000.000	53.98	54.00	-0.02	56.02	-2.04	Average
2	11000.000	63.27	74.00	-10.73	65.31	-2.04	Peak
3	16500.000	48.75	68.22	-19.47	42.89	5.86	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

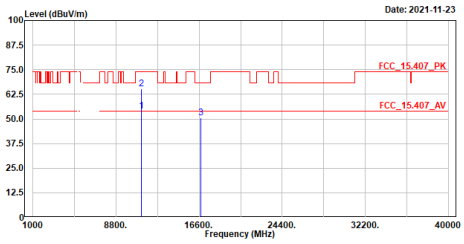
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax20_5580MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11160.000	51.46	54.00	-2.54	53.29	-1.83	Average
2	11160.000	62.63	74.00	-11.37	64.46	-1.83	Peak
3	16740.000	50.02	68.22	-18.20	43.33	6.69	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

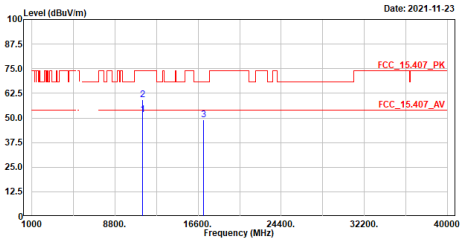
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax20_5580MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11160.000	53.95	54.00	-0.05	55.78	-1.83	Average
2	11160.000	65.41	74.00	-8.59	67.25	-1.84	Peak
3	16740.000	50.46	68.22	-17.76	43.75	6.71	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

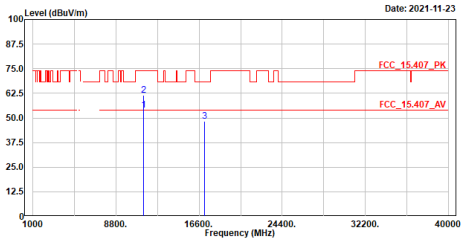
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax20_5700MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11400.000	51.62	54.00	-2.38	53.18	-1.56	Average
2	11400.000	59.22	74.00	-14.78	60.80	-1.58	Peak
3	17100.000	49.04	68.22	-19.18	42.64	6.40	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

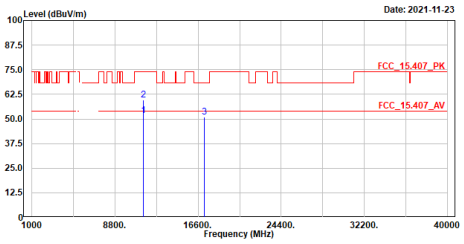
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax20_5700MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11400.000	53.89	54.00	-0.11	55.45	-1.56	Average
2	11400.000	61.42	74.00	-12.58	62.98	-1.56	Peak
3	17100.000	48.12	68.22	-20.10	41.40	6.72	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

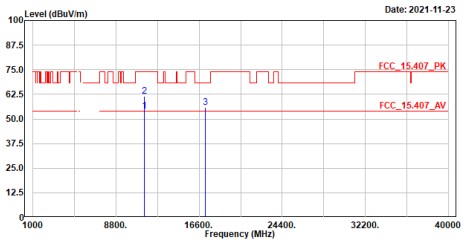
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax20_5720MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11440.000	51.55	54.00	-2.45	53.02	-1.47	Average
2	11440.000	59.71	74.00	-14.29	61.18	-1.47	Peak
3	17160.000	50.95	68.22	-17.27	44.47	6.48	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

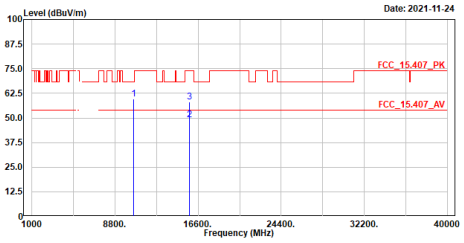
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax20_5720MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11440.000	53.94	54.00	-0.06	55.41	-1.47	Average
2	11440.000	61.47	74.00	-12.53	62.93	-1.46	Peak
3	17160.000	56.00	68.22	-12.22	49.59	6.41	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

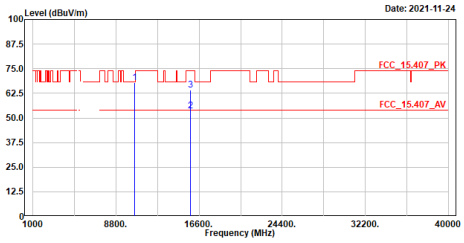
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax40_5270MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	10540.000	59.74	68.22	-8.48	62.50	-2.76	Peak
2	15810.000	49.10	54.00	-4.90	45.58	3.52	Average
3	15810.000	58.28	74.00	-15.72	54.74	3.54	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

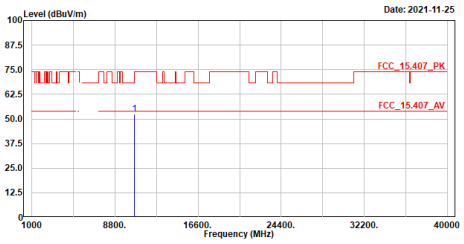
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax40_5270MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	10540.000	67.88	68.22	-0.34	70.67	-2.79	Peak
2	15810.000	53.74	54.00	-0.26	50.22	3.52	Average
3	15810.000	64.33	74.00	-9.67	60.82	3.51	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

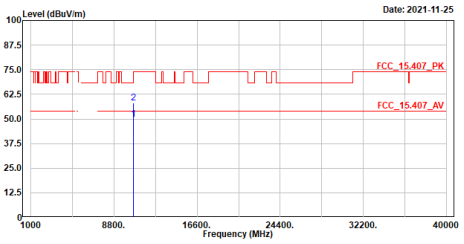
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax40_5310MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	10620.000	52.35	74.00	-21.65	54.93	-2.58	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

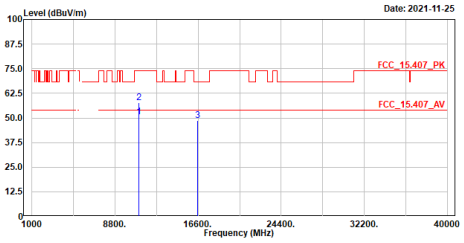
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax40_5310MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	10620.000	49.76	54.00	-4.24	52.35	-2.59	Average
2	10620.000	57.99	74.00	-16.01	60.58	-2.59	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

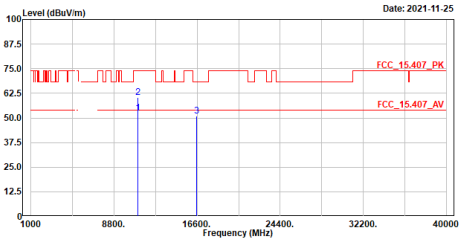
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax40_5510MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11020.000	50.46	54.00	-3.54	52.45	-1.99	Average
2	11020.000	57.68	74.00	-16.32	59.67	-1.99	Peak
3	16530.000	48.69	68.22	-19.53	42.81	5.88	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

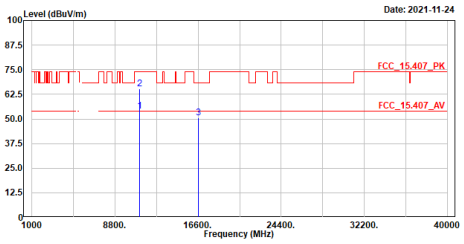
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax40_5510MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11020.000	52.59	54.00	-1.41	54.58	-1.99	Average
2	11020.000	60.36	74.00	-13.64	62.35	-1.99	Peak
3	16530.000	51.13	68.22	-17.09	45.30	5.83	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

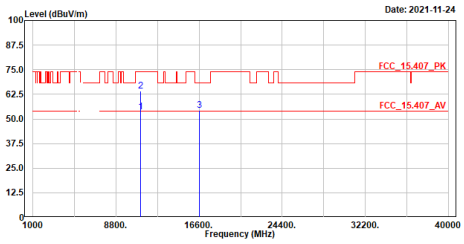
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax40_5550MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11100.000	53.80	54.00	-0.20	55.75	-1.95	Average
2	11100.000	65.12	74.00	-8.88	67.07	-1.95	Peak
3	16650.000	50.59	68.22	-17.63	44.75	5.84	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

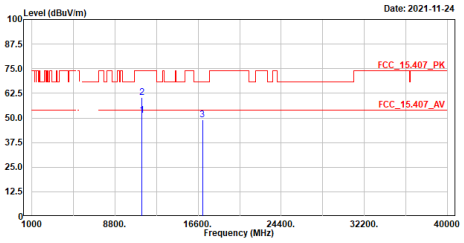
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax40_5550MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11100.000	53.67	54.00	-0.33	55.62	-1.95	Average
2	11100.000	64.00	74.00	-10.00	65.95	-1.95	Peak
3	16650.000	54.31	68.22	-13.91	48.03	6.28	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

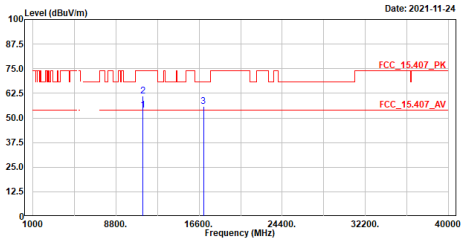
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax40_5670MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11340.000	51.15	54.00	-2.85	52.76	-1.61	Average
2	11340.000	60.29	74.00	-13.71	61.90	-1.61	Peak
3	17010.000	49.16	68.22	-19.06	42.94	6.22	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

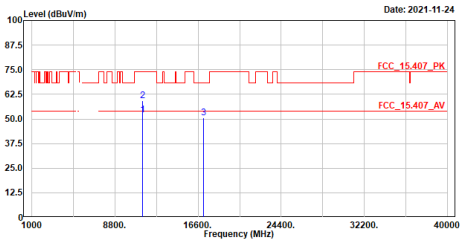
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax40_5670MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11340.000	53.86	54.00	-0.14	55.47	-1.61	Average
2	11340.000	61.05	74.00	-12.95	62.66	-1.61	Peak
3	17010.000	55.73	68.22	-12.49	49.47	6.26	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

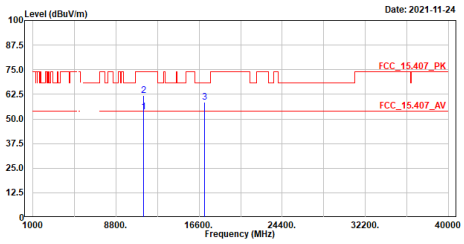
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax40_5710MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11420.000	52.06	54.00	-1.94	53.58	-1.52	Average
2	11420.000	59.24	74.00	-14.76	60.78	-1.54	Peak
3	17130.000	50.62	68.22	-17.60	44.01	6.61	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

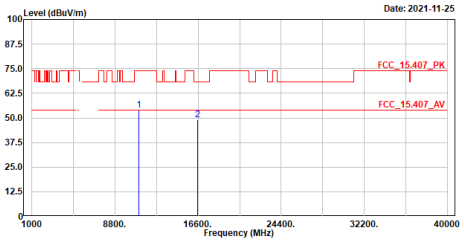
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax40_5710MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11420.000	53.64	54.00	-0.36	55.16	-1.52	Average
2	11420.000	62.00	74.00	-12.00	63.52	-1.52	Peak
3	17130.000	58.54	68.22	-9.68	51.94	6.60	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

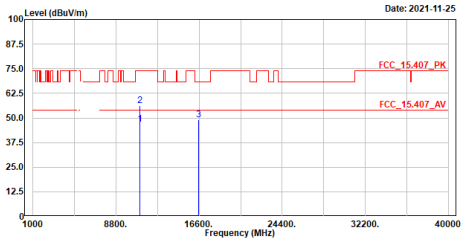
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax80_5530MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11060.000	53.92	74.00	-20.08	55.88	-1.96	Peak
2	16590.000	49.22	68.22	-19.00	43.34	5.88	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

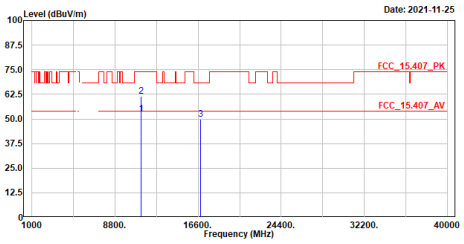
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax80_5530MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11060.000	46.89	54.00	-7.11	48.85	-1.96	Average
2	11060.000	56.24	74.00	-17.76	58.19	-1.95	Peak
3	16590.000	49.00	68.22	-19.22	43.15	5.85	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

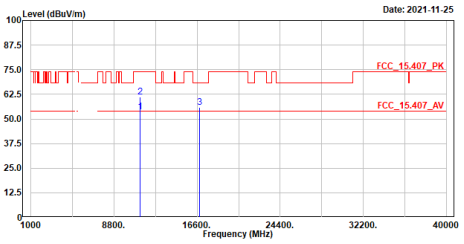
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax80_5610MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11220.000	52.58	54.00	-1.42	54.29	-1.71	Average
2	11220.000	61.57	74.00	-12.43	63.29	-1.72	Peak
3	16830.000	49.70	68.22	-18.52	43.05	6.65	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

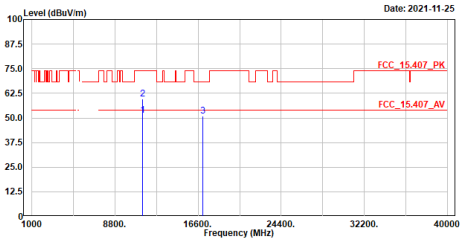
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax80_5610MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11220.000	53.64	54.00	-0.36	55.35	-1.71	Average
2	11220.000	61.23	74.00	-12.77	62.90	-1.67	Peak
3	16830.000	55.75	68.22	-12.47	48.95	6.80	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

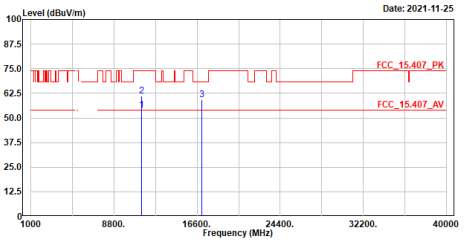
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax80_5690MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11380.000	51.38	54.00	-2.62	52.97	-1.59	Average
2	11380.000	59.61	74.00	-14.39	61.21	-1.60	Peak
3	17070.000	50.76	68.22	-17.46	44.21	6.55	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

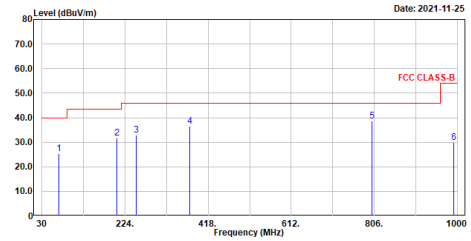
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax80_5690MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11380.000	53.98	54.00	-0.02	55.57	-1.59	Average
2	11380.000	61.20	74.00	-12.80	62.76	-1.56	Peak
3	17070.000	59.28	68.22	-8.94	52.66	6.62	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

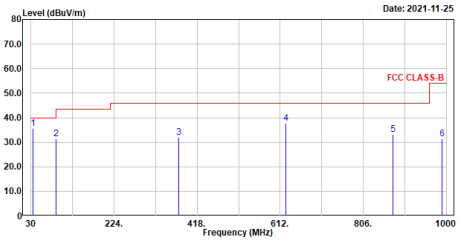
Site :966-1
Condition :3m ,Horizontal
Mode :TX_ax80_5775MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	69.770	25.23	40.00	-14.77	39.41	-14.18	QP
2	204.600	31.72	43.50	-11.78	46.19	-14.47	QP
3	250.190	32.80	46.00	-13.20	45.62	-12.82	QP
4	375.320	36.51	46.00	-9.49	45.92	-9.41	QP
5	800.180	38.77	46.00	-7.23	40.58	-1.81	QP
6	992.240	29.88	54.00	-24.12	29.69	0.19	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.

Site :966-1
Condition :3m ,Vertical
Mode :TX_ax80_5775MHz
TEST BY :Ashton Chiu



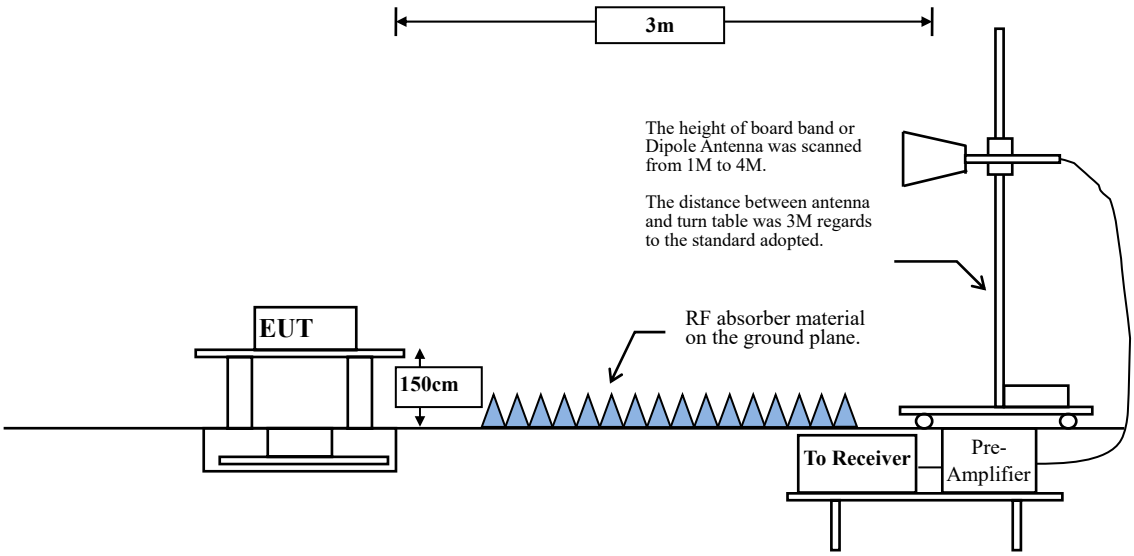
No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	34.850	35.73	40.00	-4.27	48.46	-12.73	QP
2	89.170	31.43	43.50	-12.07	49.27	-17.84	QP
3	375.320	32.00	46.00	-14.00	41.41	-9.41	QP
4	625.580	37.87	46.00	-8.13	42.09	-4.22	QP
5	875.840	33.35	46.00	-12.65	34.54	-1.19	QP
6	990.300	31.28	54.00	-22.72	31.06	0.22	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.

6. Band Edge

6.1. Test Setup

RF Radiated Measurement:



6.2. Limits

The provisions of Section 15.205 of this part apply to intentional radiators operating under this section.

Radiated emissions which fall in the restricted bands, as defined in Section 15.205, must also comply with the radiated emission limits specified in Section 15.209:

FCC Part 15 Subpart C Paragraph 15.209 Limits		
Frequency MHz	uV/m @3m	dBμV/m@3m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Remarks : 1. RF Voltage (dBμV) = 20 log RF Voltage (uV)

2. In the Above Table, the tighter limit applies at the band edges.

3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

6.3. Test Procedure

The EUT is placed on a turn table which is 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10:2013 on radiated measurement.
The bandwidth below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz.
The EUT was setup to ANSI C63.10, 2013; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

RBW and VBW Parameter setting:

According to KDB 789033 section II.G.5 Procedure for Unwanted Maximum Emissions Measurements above 1000 MHz.

RBW = 1MHz.

VBW ≥ 3MHz.

According to KDB 789033 section II.G.6 Procedures for Average Unwanted Emissions Measurements above 1000 MHz.

RBW = 1MHz.

VBW = 10Hz, when duty cycle ≥ 98 %

VBW ≥ 1/T, when duty cycle < 98 %

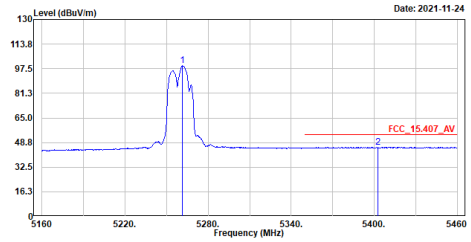
(T refers to the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.)

5GHz band	Duty Cycle (%)	T (ms)	1/T (Hz)	VBW (Hz)
802.11 a	85.00	1.3600	735	1000
802.11 ax20	81.97	1.0000	1000	2000
802.11 ax40	72.48	0.5400	1852	2000
802.11 ax80	59.04	0.2940	3401	5000

6.4. Test Result of Band Edge

CDD:

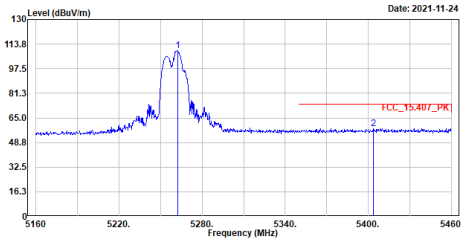
Site :966-3
Condition :3m ,Horizontal
Mode :TX_a_5260MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5261.400	99.36	------	------	78.44	20.92	Average
2	5402.700	45.68	54.00	-8.32	24.37	21.31	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

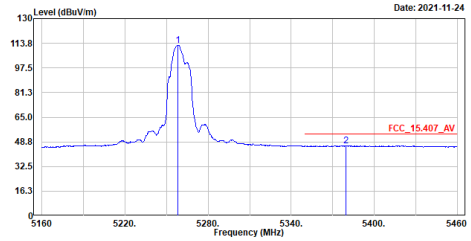
Site :966-3
Condition :3m ,Horizontal
Mode :TX_a_5260MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5262.300	109.20	------	------	88.28	20.92	Peak
2	5403.600	58.05	74.00	-15.95	36.74	21.31	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

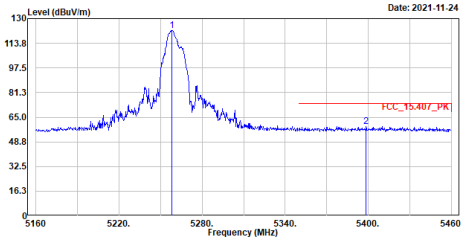
Site :966-3
Condition :3m ,Vertical
Mode :TX_a_5260MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5258.100	112.48	------	------	91.59	20.89	Average
2	5379.600	46.30	54.00	-7.70	25.10	21.20	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

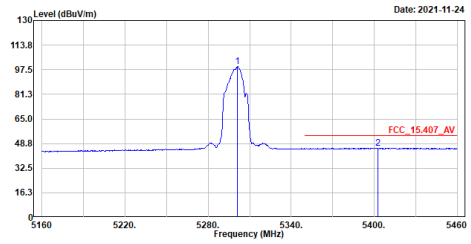
Site :966-3
Condition :3m ,Vertical
Mode :TX_a_5260MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5258.400	122.30	------	------	101.41	20.89	Peak
2	5398.500	58.97	74.00	-15.03	37.66	21.31	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

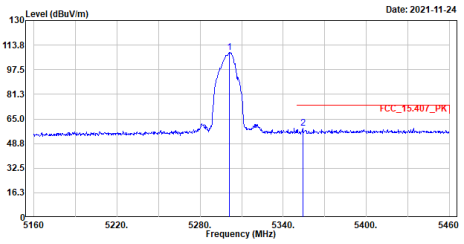
Site :966-3
Condition :3m ,Horizontal
Mode :TX_a_5300MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5301.300	99.53	------	------	78.41	21.12	Average
2	5402.400	45.84	54.00	-8.16	24.53	21.31	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

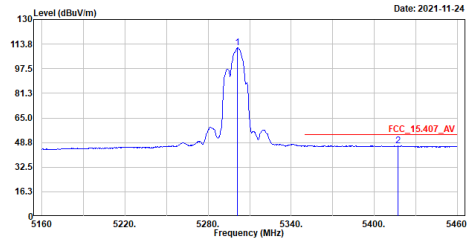
Site :966-3
Condition :3m ,Horizontal
Mode :TX_a_5300MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5301.300	109.05	------	------	87.93	21.12	Peak
2	5354.100	58.73	74.00	-15.27	37.68	21.05	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

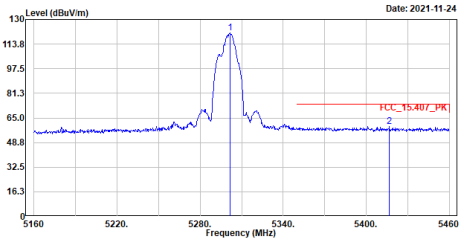
Site :966-3
Condition :3m ,Vertical
Mode :TX_a_5300MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5301.300	111.18	------	------	90.06	21.12	Average
2	5417.400	46.78	54.00	-7.22	25.49	21.29	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

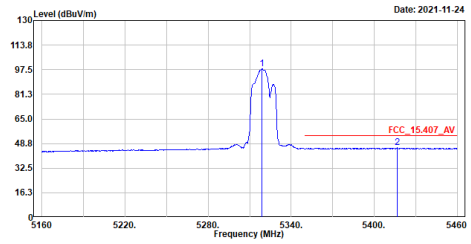
Site :966-3
Condition :3m ,Vertical
Mode :TX_a_5300MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5301.600	121.07	------	------	99.95	21.12	Peak
2	5416.800	59.56	74.00	-14.44	38.27	21.29	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

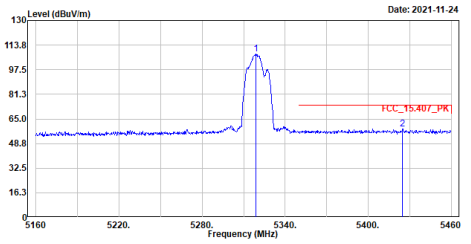
Site :966-3
Condition :3m ,Horizontal
Mode :TX_a_5320MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5319.000	98.13	------	------	77.04	21.09	Average
2	5416.500	45.96	54.00	-8.04	24.68	21.28	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

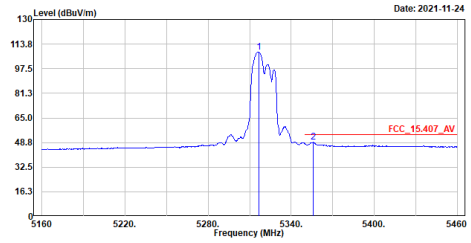
Site :966-3
Condition :3m ,Horizontal
Mode :TX_a_5320MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5319.000	107.85	------	------	86.76	21.09	Peak
2	5424.900	58.24	74.00	-15.76	36.98	21.26	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

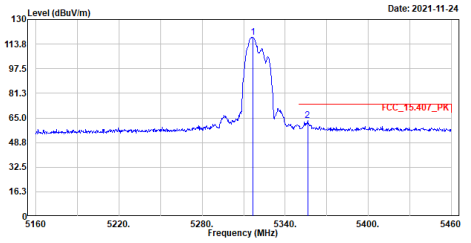
Site :966-3
Condition :3m ,Vertical
Mode :TX_a_5320MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5316.600	108.48	------	------	87.40	21.08	Average
2	5355.900	49.17	54.00	-4.83	28.12	21.05	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

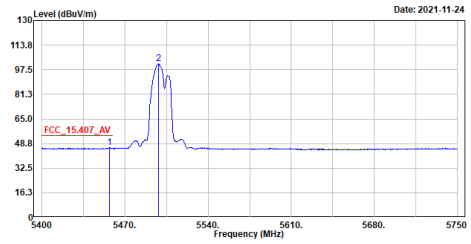
Site :966-3
Condition :3m ,Vertical
Mode :TX_a_5320MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5316.600	118.33	------	------	97.25	21.08	Peak
2	5356.200	63.09	74.00	-10.91	42.04	21.05	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

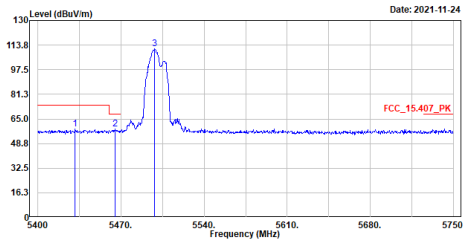
Site :966-3
Condition :3m ,Horizontal
Mode :TX_a_5500MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5456.700	45.92	54.00	-8.08	24.69	21.23	Average
2	5498.350	101.31	------	------	79.91	21.40	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

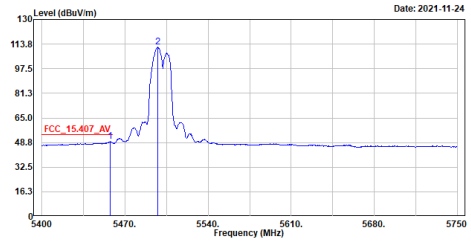
Site :966-3
Condition :3m ,Horizontal
Mode :TX_a_5500MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5431.500	58.28	74.00	-15.72	37.03	21.25	Peak
2	5465.100	58.62	68.22	-9.60	37.35	21.27	Peak
3	5498.350	111.14	------	------	89.74	21.40	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

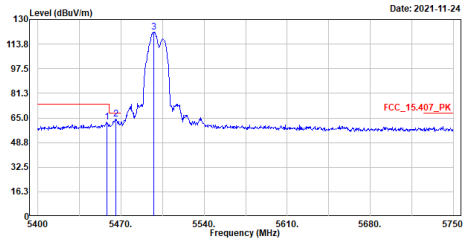
Site :966-3
Condition :3m ,Vertical
Mode :TX_a_5500MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5457.750	49.30	54.00	-4.70	28.05	21.25	Average
2	5497.650	111.78	------	------	90.38	21.40	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

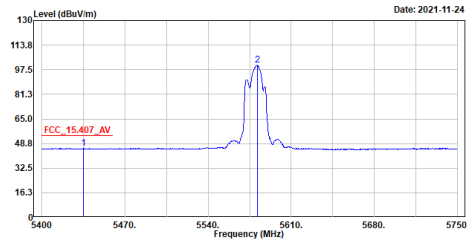
Site :966-3
Condition :3m ,Vertical
Mode :TX_a_5500MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5458.450	62.33	74.00	-11.67	41.08	21.25	Peak
2	5465.800	64.16	68.22	-4.06	42.89	21.27	Peak
3	5497.650	121.53	------	------	100.13	21.40	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

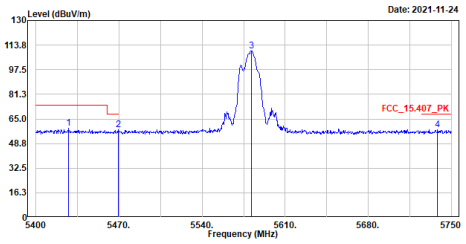
Site :966-3
Condition :3m ,Horizontal
Mode :TX_a_5580MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5435.000	45.80	54.00	-8.20	24.56	21.24	Average
2	5581.650	100.37	------	------	78.81	21.56	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

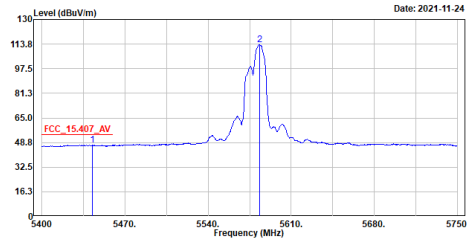
Site :966-3
Condition :3m ,Horizontal
Mode :TX_a_5580MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5427.650	58.69	74.00	-15.31	37.43	21.26	Peak
2	5469.300	57.64	68.22	-10.58	36.35	21.29	Peak
3	5581.650	110.13	------	------	88.57	21.56	Peak
4	5738.450	57.86	68.22	-10.36	36.05	21.81	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

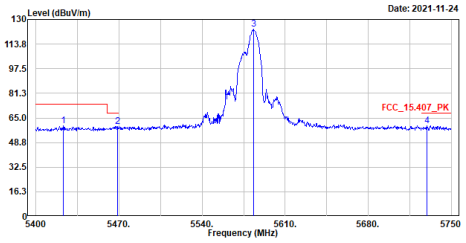
Site :966-3
Condition :3m ,Vertical
Mode :TX_a_5580MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5442.350	47.04	54.00	-6.96	25.81	21.23	Average
2	5583.400	113.53	------	------	91.95	21.58	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

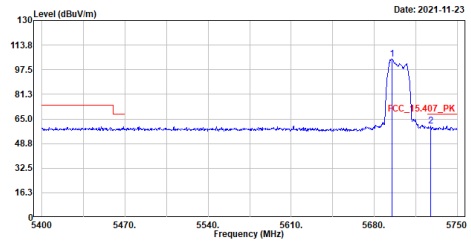
Site :966-3
Condition :3m ,Vertical
Mode :TX_a_5580MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5423.100	59.68	74.00	-14.32	38.41	21.27	Peak
2	5468.950	59.32	68.22	-8.90	38.03	21.29	Peak
3	5583.400	123.50	------	------	101.92	21.58	Peak
4	5729.700	59.79	68.22	-8.43	38.02	21.77	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

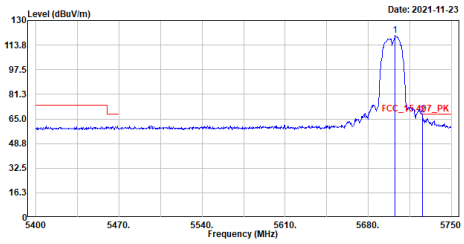
Site :966-3
Condition :3m ,Horizontal
Mode :TX_a_5700MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5694.700	104.55	------	------	82.97	21.58	Peak
2	5727.600	60.17	68.22	-8.05	38.41	21.76	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

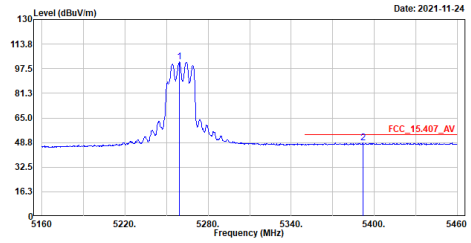
Site :966-3
Condition :3m ,Vertical
Mode :TX_a_5700MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5702.750	120.43	------	------	98.79	21.64	Peak
2	5725.850	67.88	68.22	-0.34	46.13	21.75	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

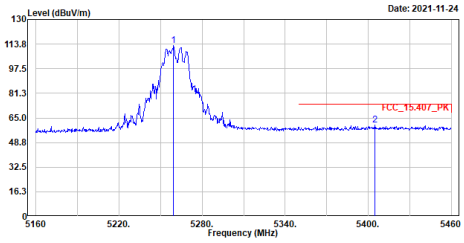
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax20_5260MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5259.300	102.15	------	------	81.25	20.90	Average
2	5391.900	48.39	54.00	-5.61	27.12	21.27	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

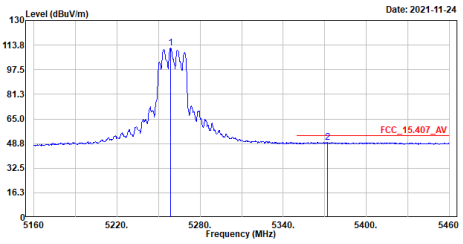
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax20_5260MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5259.300	112.82	------	------	91.92	20.90	Peak
2	5404.800	60.26	74.00	-13.74	38.96	21.30	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

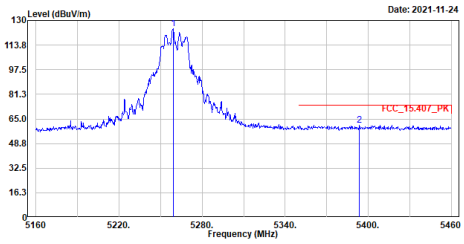
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax20_5260MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5258.700	111.92	------	------	91.03	20.89	Average
2	5371.800	49.53	54.00	-4.47	28.38	21.15	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

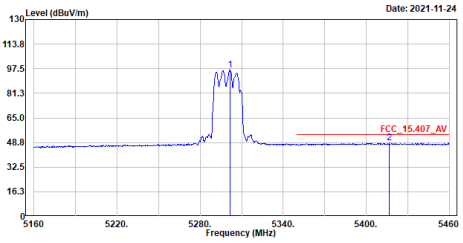
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax20_5260MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5259.300	124.39	------	------	103.49	20.90	Peak
2	5393.700	60.89	74.00	-13.11	39.62	21.27	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

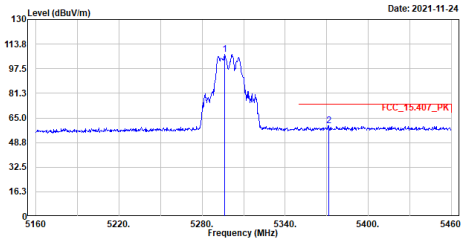
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax20_5300MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5301.600	96.82	------	------	75.70	21.12	Average
2	5416.800	48.38	54.00	-5.62	27.09	21.29	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

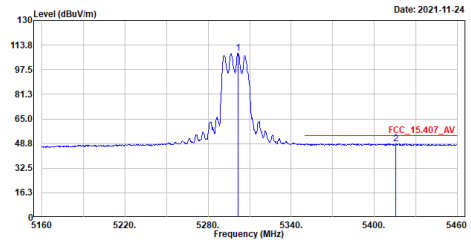
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax20_5300MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5296.500	107.01	------	------	85.89	21.12	Peak
2	5371.500	59.86	74.00	-14.14	38.71	21.15	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

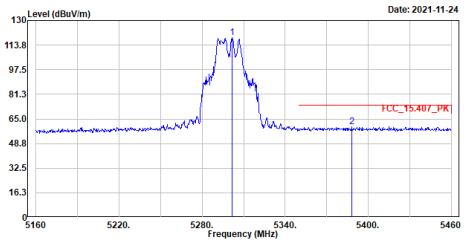
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax20_5300MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5301.900	108.52	------	------	87.40	21.12	Average
2	5415.600	48.79	54.00	-5.21	27.50	21.29	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

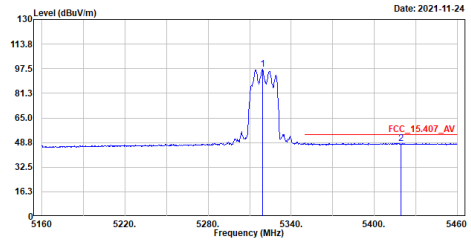
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax20_5300MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5301.600	118.71	------	------	97.59	21.12	Peak
2	5388.000	59.73	74.00	-14.27	38.48	21.25	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

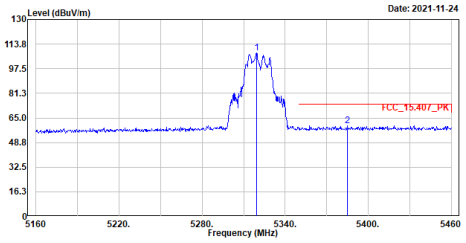
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax20_5320MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5319.300	97.26	------	------	76.17	21.09	Average
2	5419.500	48.22	54.00	-5.78	26.94	21.28	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

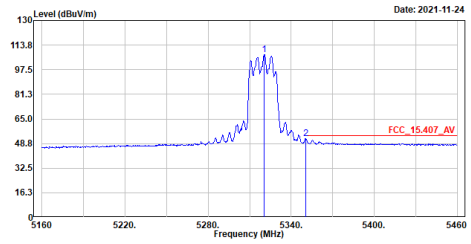
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax20_5320MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5319.600	107.68	------	------	86.59	21.09	Peak
2	5384.700	59.89	74.00	-14.11	38.66	21.23	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

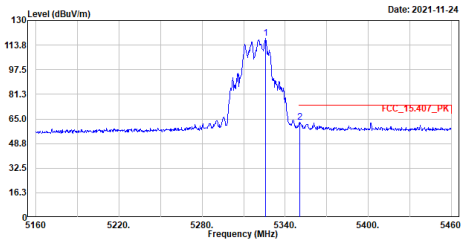
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax20_5320MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5320.500	107.28	------	------	86.19	21.09	Average
2	5350.500	52.11	54.00	-1.89	31.08	21.03	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

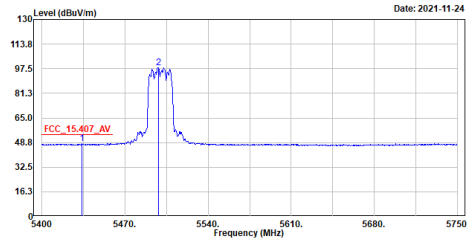
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax20_5320MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5325.600	118.15	------	------	97.08	21.07	Peak
2	5350.800	62.66	74.00	-11.34	41.63	21.03	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

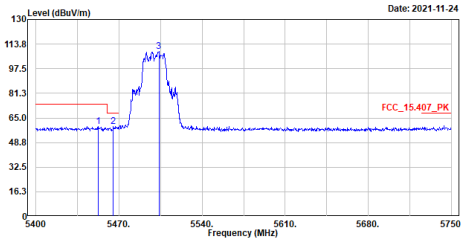
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax20_5500MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5433.950	48.10	54.00	-5.90	26.86	21.24	Average
2	5498.000	98.32	------	------	76.92	21.40	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

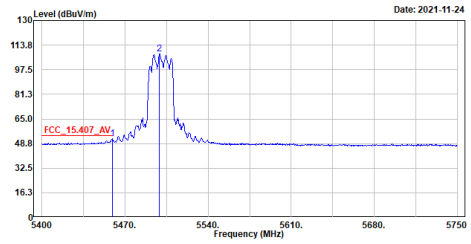
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax20_5500MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5452.500	59.22	74.00	-14.78	37.99	21.23	Peak
2	5465.100	59.43	68.22	-8.79	38.16	21.27	Peak
3	5503.600	109.12	------	------	87.71	21.41	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

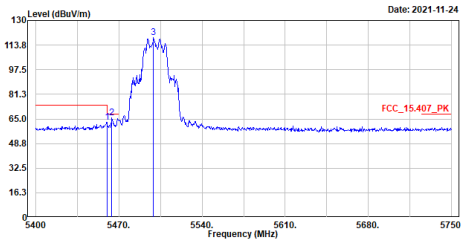
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax20_5500MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5459.500	51.90	54.00	-2.10	30.65	21.25	Average
2	5499.050	108.03	------	------	86.63	21.40	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

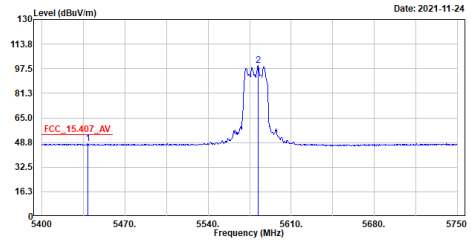
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax20_5500MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5459.850	63.00	74.00	-11.00	41.75	21.25	Peak
2	5464.050	65.70	68.22	-2.52	44.43	21.27	Peak
3	5499.050	118.52	------	------	97.12	21.40	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

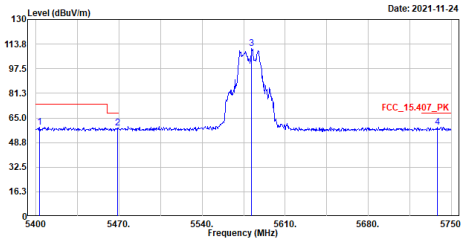
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax20_5580MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5438.500	47.97	54.00	-6.03	26.73	21.24	Average
2	5582.000	99.44	------	------	77.88	21.56	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

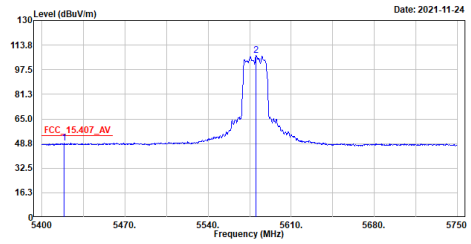
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax20_5580MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5402.800	58.96	74.00	-15.04	37.65	21.31	Peak
2	5468.950	58.50	68.22	-9.72	37.21	21.29	Peak
3	5581.650	110.71	------	------	89.15	21.56	Peak
4	5738.100	59.08	68.22	-9.14	37.27	21.81	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

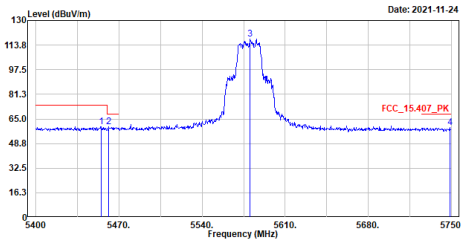
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax20_5580MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5418.900	48.91	54.00	-5.09	27.63	21.28	Average
2	5580.600	106.87	------	------	85.31	21.56	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

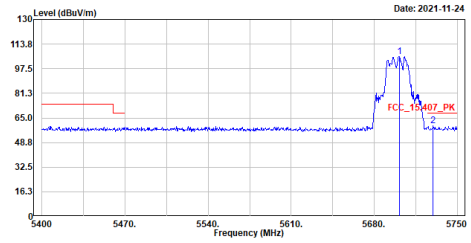
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax20_5580MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5454.950	59.99	74.00	-14.01	38.76	21.23	Peak
2	5461.600	59.71	68.22	-8.51	38.45	21.26	Peak
3	5580.600	117.89	------	------	96.33	21.56	Peak
4	5748.600	59.53	68.22	-8.69	37.67	21.86	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

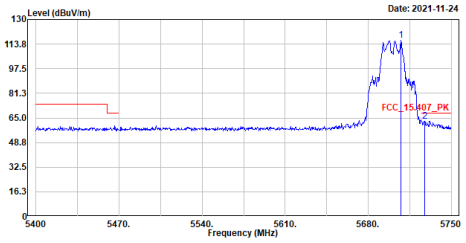
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax20_5700MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5701.000	105.47	------	------	83.84	21.63	Peak
2	5729.700	59.69	68.22	-8.53	37.92	21.77	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

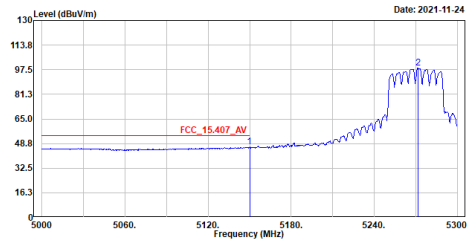
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax20_5700MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5707.650	116.07	------	------	94.41	21.66	Peak
2	5727.600	63.03	68.22	-5.19	41.27	21.76	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

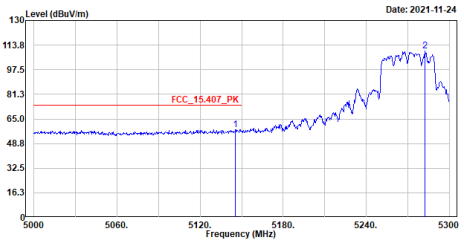
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax40_5270MHz_B1
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5150.000	46.52	54.00	-7.48	26.16	20.36	Average
2	5271.500	98.43	------	------	77.46	20.97	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

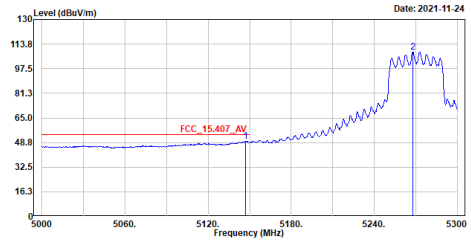
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax40_5270MHz_B1
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5145.500	57.92	74.00	-16.08	37.57	20.35	Peak
2	5282.600	109.75	------	------	88.72	21.03	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

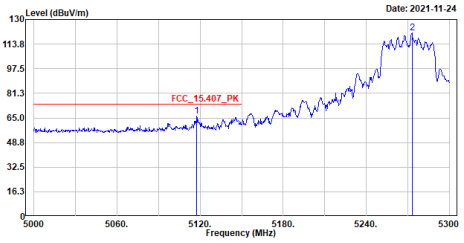
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax40_5270MHz_B1
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5147.300	49.66	54.00	-4.34	29.31	20.35	Average
2	5267.900	108.62	------	------	87.68	20.94	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

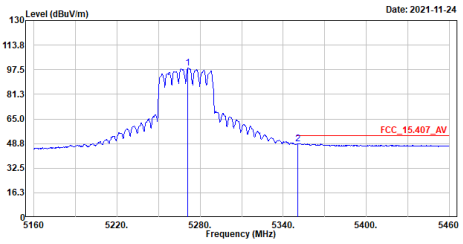
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax40_5270MHz_B1
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5117.600	66.43	74.00	-7.57	46.17	20.26	Peak
2	5273.000	120.96	------	------	99.98	20.98	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

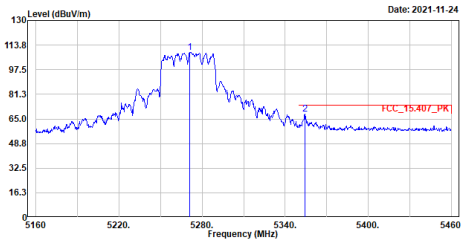
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax40_5270MHz_B2
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5271.300	98.67	------	------	77.70	20.97	Average
2	5350.800	48.76	54.00	-5.24	27.73	21.03	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

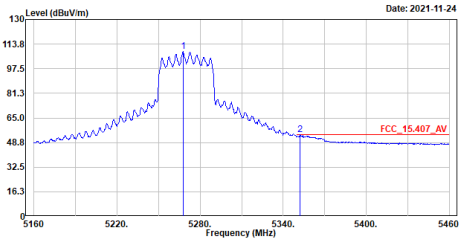
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax40_5270MHz_B2
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5271.000	108.96	------	------	88.00	20.96	Peak
2	5354.100	68.17	74.00	-5.83	47.12	21.05	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

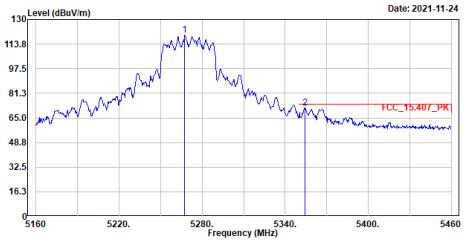
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax40_5270MHz_B2
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5267.700	108.67	------	------	87.73	20.94	Average
2	5352.300	53.74	54.00	-0.26	32.70	21.04	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

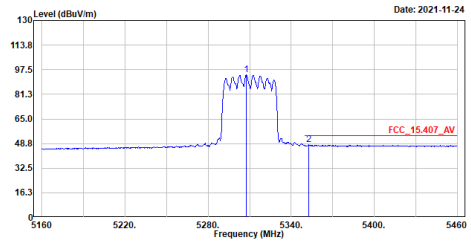
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax40_5270MHz_B2
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5267.400	119.73	------	------	98.79	20.94	Peak
2	5354.100	71.79	74.00	-2.21	50.74	21.05	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

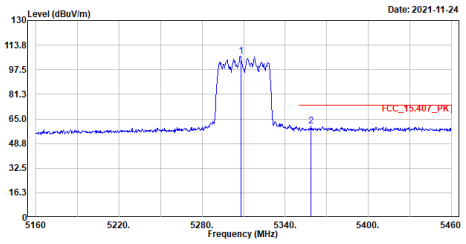
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax40_5310MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5307.600	94.12	------	------	73.00	21.12	Average
2	5352.600	47.85	54.00	-6.15	26.81	21.04	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

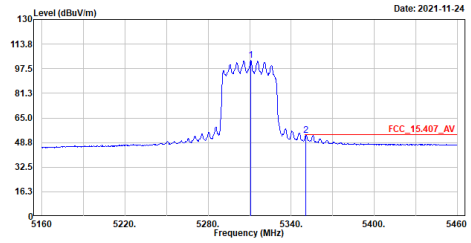
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax40_5310MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5307.900	106.50	------	------	85.38	21.12	Peak
2	5358.600	60.11	74.00	-13.89	39.05	21.06	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

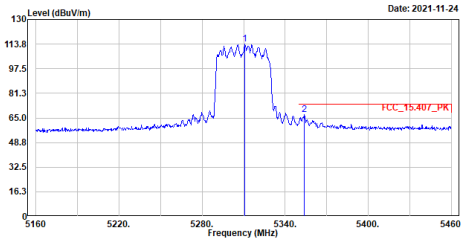
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax40_5310MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5310.900	102.99	------	------	81.88	21.11	Average
2	5350.800	53.55	54.00	-0.45	32.52	21.03	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

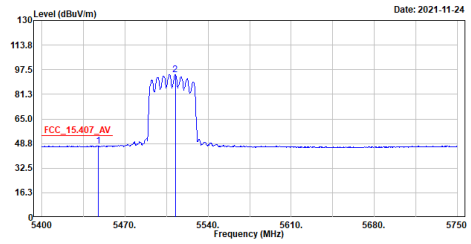
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax40_5310MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5310.900	113.65	------	------	92.54	21.11	Peak
2	5353.800	67.05	74.00	-6.95	46.00	21.05	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

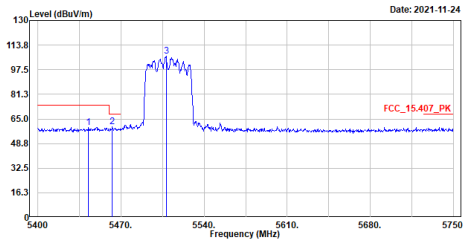
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax40_5510MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5447.600	47.25	54.00	-6.75	26.03	21.22	Average
2	5512.350	94.35	------	------	72.92	21.43	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

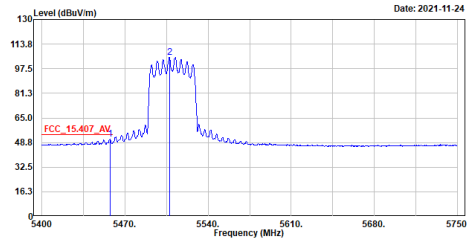
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax40_5510MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5442.700	59.54	74.00	-14.46	38.31	21.23	Peak
2	5462.650	59.61	68.22	-8.61	38.34	21.27	Peak
3	5508.150	106.21	------	------	84.80	21.41	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

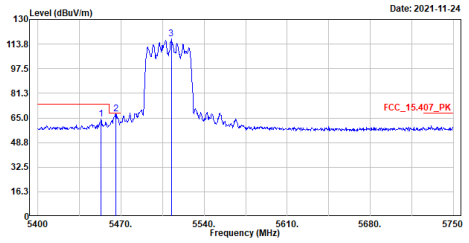
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax40_5510MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5457.400	51.22	54.00	-2.78	29.98	21.24	Average
2	5507.450	105.04	------	------	83.63	21.41	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

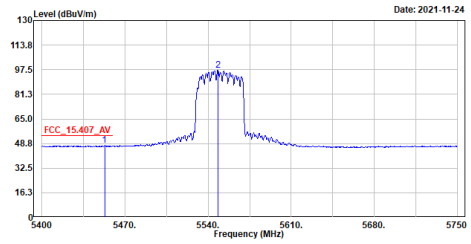
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax40_5510MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5453.200	64.13	74.00	-9.87	42.90	21.23	Peak
2	5465.450	67.80	68.22	-0.42	46.53	21.27	Peak
3	5512.350	117.16	------	------	95.73	21.43	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

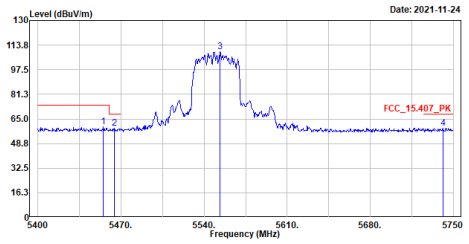
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax40_5550MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5452.850	47.49	54.00	-6.51	26.26	21.23	Average
2	5548.400	97.22	------	------	75.76	21.46	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

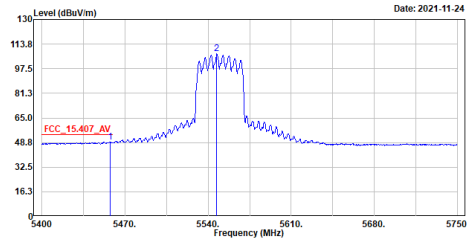
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax40_5550MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5455.300	59.63	74.00	-14.37	38.40	21.23	Peak
2	5464.400	58.88	68.22	-9.34	37.61	21.27	Peak
3	5553.650	109.22	------	------	87.74	21.48	Peak
4	5741.600	59.11	68.22	-9.11	37.27	21.84	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

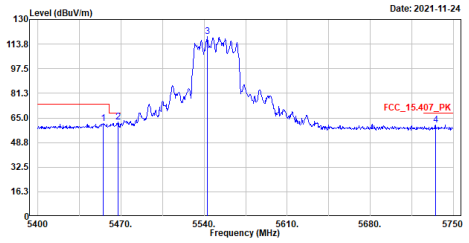
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax40_5550MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5457.400	49.25	54.00	-4.75	28.01	21.24	Average
2	5547.350	107.25	------	------	85.79	21.46	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

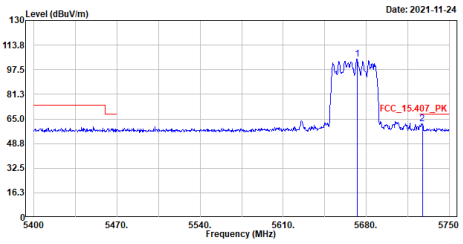
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax40_5550MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5454.950	61.41	74.00	-12.59	40.18	21.23	Peak
2	5467.550	62.49	68.22	-5.73	41.21	21.28	Peak
3	5542.450	118.54	------	------	97.08	21.46	Peak
4	5734.950	60.30	68.22	-7.92	38.50	21.80	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

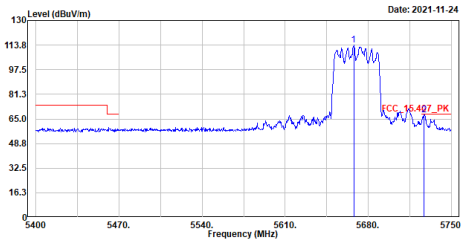
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax40_5670MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5672.300	104.61	------	------	83.19	21.42	Peak
2	5727.250	62.01	68.22	-6.21	40.25	21.76	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

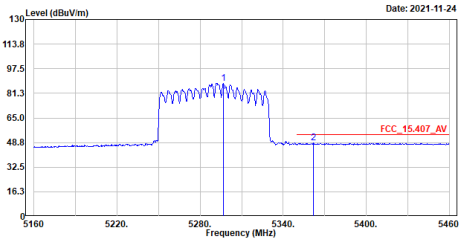
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax40_5670MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5667.750	114.04	------	------	92.64	21.40	Peak
2	5726.900	67.73	68.22	-0.49	45.97	21.76	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

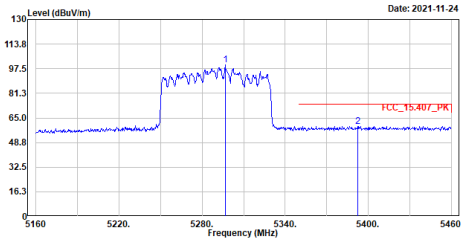
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax80_5290MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5297.100	87.99	------	------	66.87	21.12	Average
2	5361.600	48.33	54.00	-5.67	27.23	21.10	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

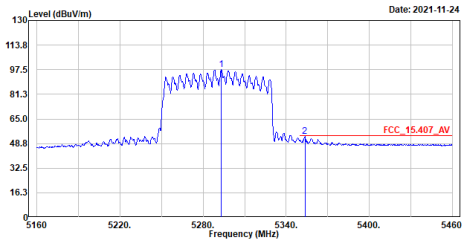
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax80_5290MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5296.800	99.93	------	------	78.81	21.12	Peak
2	5392.200	59.56	74.00	-14.44	38.29	21.27	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

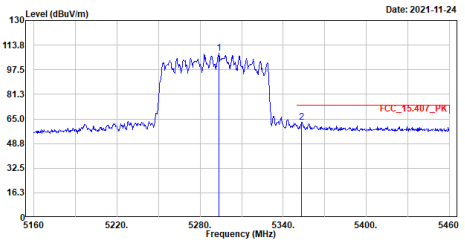
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax80_5290MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5293.200	97.61	------	------	76.52	21.09	Average
2	5353.500	53.56	54.00	-0.44	32.52	21.04	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

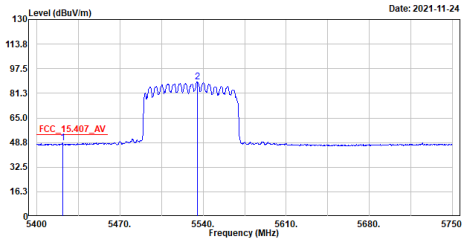
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax80_5290MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5293.800	108.56	------	------	87.46	21.10	Peak
2	5353.200	62.92	74.00	-11.08	41.88	21.04	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

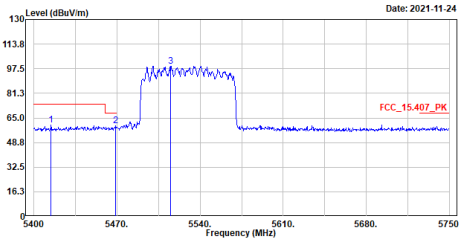
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax80_5530MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5421.700	48.50	54.00	-5.50	27.23	21.27	Average
2	5535.100	89.02	------	------	67.57	21.45	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

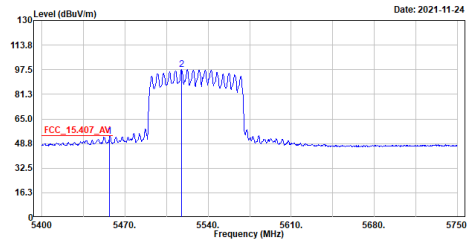
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax80_5530MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5414.350	60.20	74.00	-13.80	38.92	21.28	Peak
2	5468.600	59.82	68.22	-8.40	38.53	21.29	Peak
3	5515.150	99.27	------	------	77.84	21.43	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

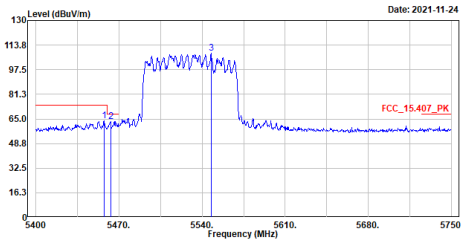
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax80_5530MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5457.050	53.54	54.00	-0.46	32.31	21.23	Average
2	5517.600	97.48	------	------	76.05	21.43	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

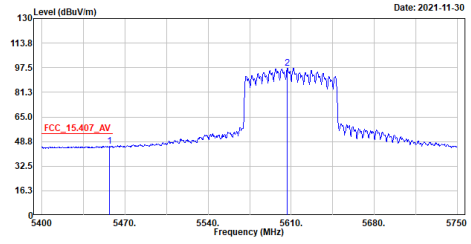
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax80_5530MHz
TEST BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5457.400	63.63	74.00	-10.37	42.39	21.24	Peak
2	5463.000	63.18	68.22	-5.04	41.91	21.27	Peak
3	5547.700	108.27	------	------	86.81	21.46	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

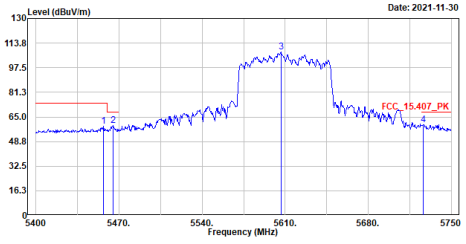
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax80_5610MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5456.700	45.69	54.00	-8.31	24.46	21.23	Average
2	5606.850	97.33	------	------	75.75	21.58	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

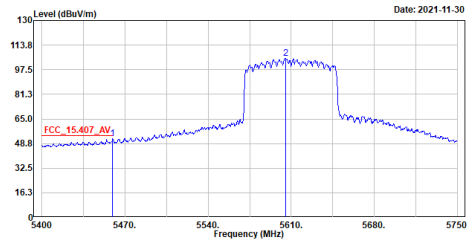
Site :966-3
Condition :3m ,Horizontal
Mode :TX_ax80_5610MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5457.050	58.66	74.00	-15.34	37.43	21.23	Peak
2	5465.100	59.36	68.22	-8.86	38.09	21.27	Peak
3	5606.500	107.71	------	------	86.13	21.58	Peak
4	5726.550	60.09	68.22	-8.13	38.33	21.76	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

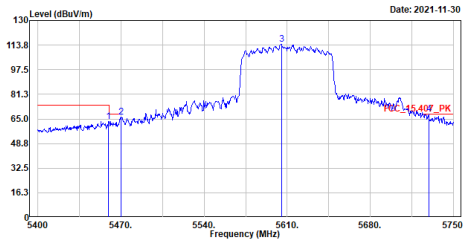
Site :966-3
Condition :3m ,Vertical
Mode :TX_ax80_5610MHz
TEST BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5459.500	51.87	54.00	-2.13	30.62	21.25	Average
2	5605.100	105.10	------	------	83.51	21.59	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

Site :966-3
Condition :3m ,Vertical
Mode :TX_ax80_5610MHz
TEST BY :Ashton Chiu

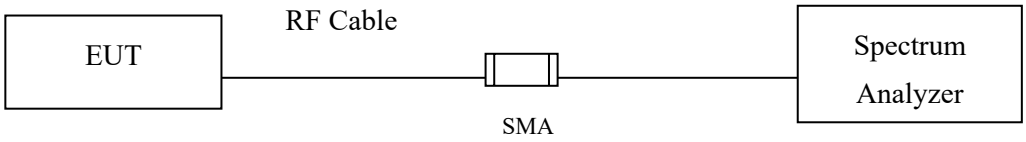


No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5459.500	63.36	74.00	-10.64	42.11	21.25	Peak
2	5470.000	66.17	68.22	-2.05	44.88	21.29	Peak
3	5605.100	114.20	------	------	92.61	21.59	Peak
4	5729.350	68.07	68.22	-0.15	46.30	21.77	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line

7. Duty Cycle

7.1. Test Setup



7.2. Test Procedure

The EUT was setup according to ANSI C63.10 2013; tested according to U-NII test procedure of KDB789033 for compliance to FCC 47CFR 15.407 requirements.

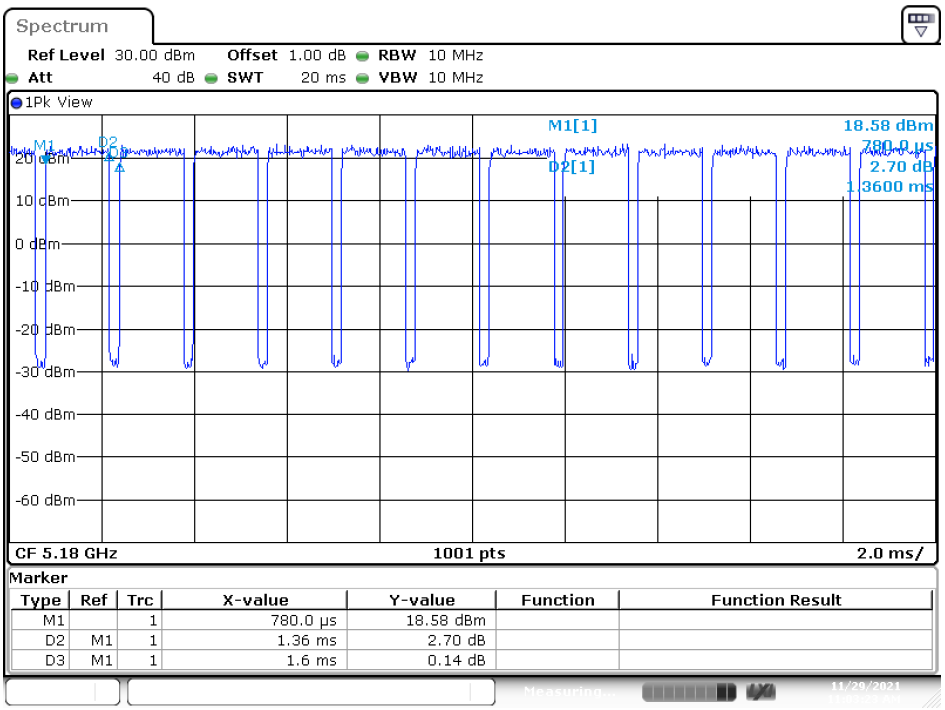
7.3. Test Result of Duty Cycle

Product : AX3200 SMART ROUTER
Test Item : Duty Cycle
Test Mode : Transmit -CDD

Duty Cycle Formula:
Duty Cycle = Ton / (Ton + Toff)
Duty Factor = 10 Log (1/Duty Cycle)
Results:

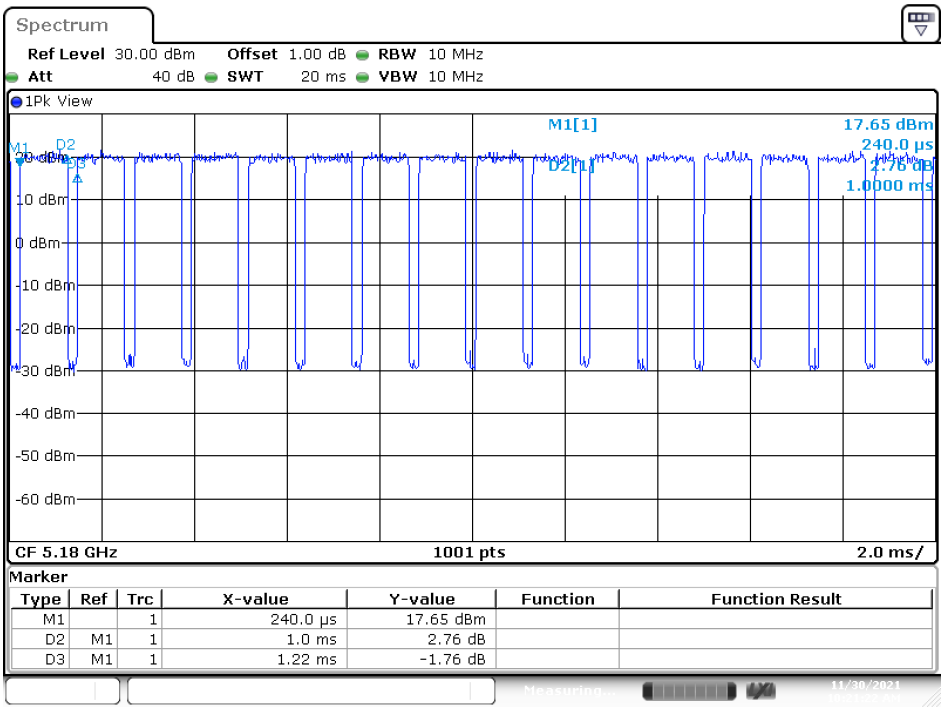
5GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11 a	1.3600	1.6000	85.00	0.71
802.11 ax20	1.0000	1.2200	81.97	0.86
802.11 ax40	0.5400	0.7450	72.48	1.40
802.11 ax80	0.2940	0.4980	59.04	2.29

802.11a



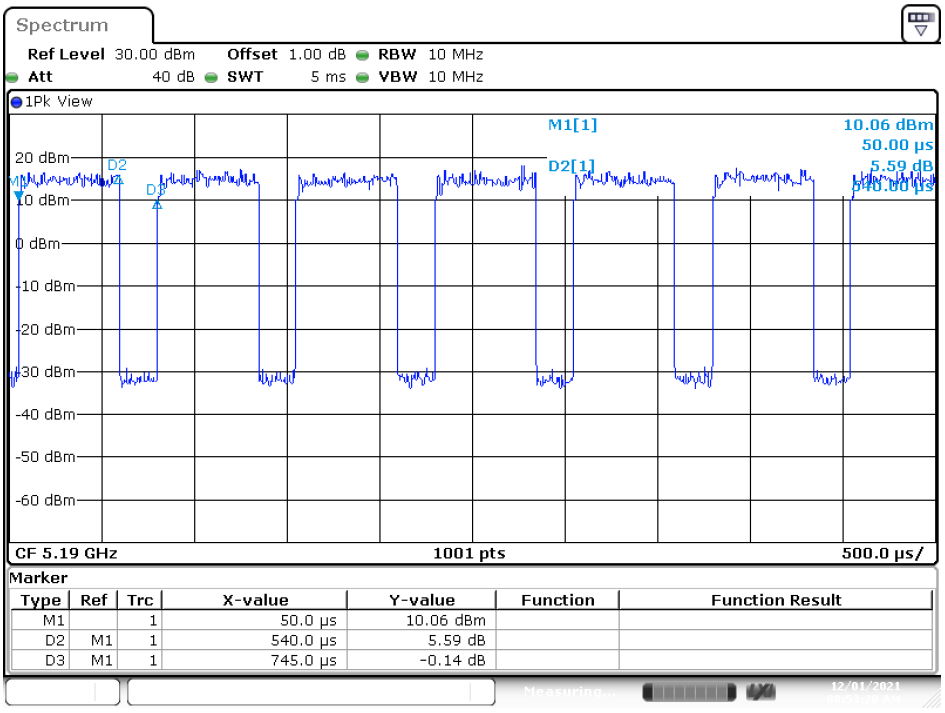
Date: 29.NOV.2021 11:03:24

802.11ax20



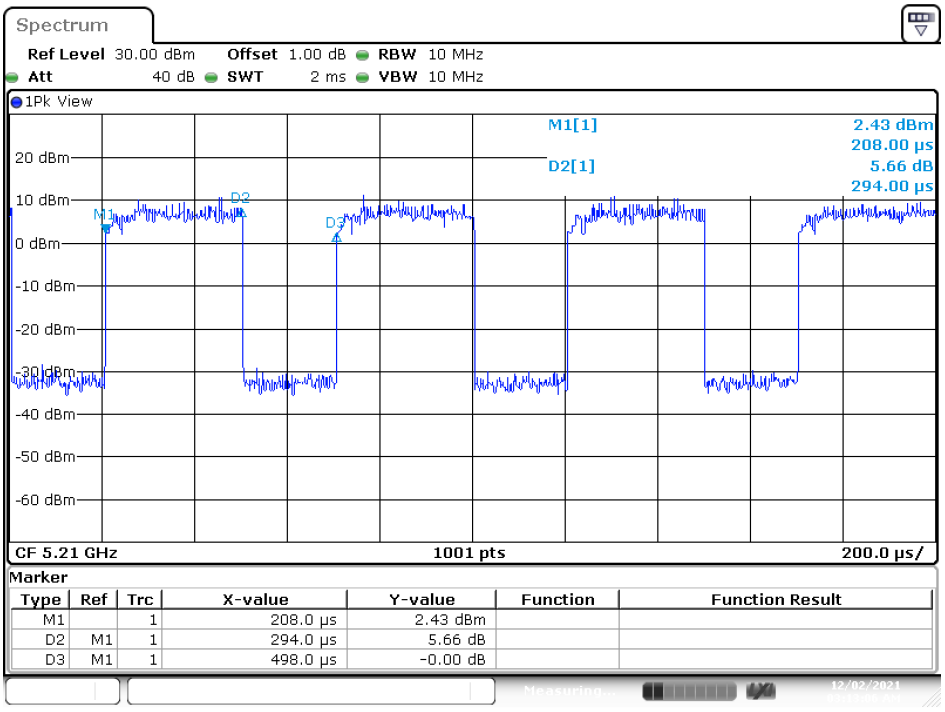
Date: 30.NOV.2021 10:21:22

802.11ax40



Date: 1.DEC.2021 08:53:20

802.11ax80



Date: 2.DEC.2021 03:13:06

8. EMI Reduction Method During Compliance Testing

No modification was made during testing.