FCC Test Report

Product Name	11ax Cloud Managed AP
Model No.	ECW336
FCC ID	A8J-ECW336

Applicant	EnGenius Technologies
Address	1580 Scenic Avenue, Costa Mesa, CA92626

Date of Receipt	Mar. 07, 2022
Issued Date	May 23, 2022
Report No.	2230212R-RFUSWL6V01-A
Report Version	V1.0

The test results relate only to the samples tested.
The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.
This report must not be used to claim product endorsement by TAF or any agency of the government.
The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd.
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 Report

Issued Date : May 23, 2022
Report No. : 2230212R-RFUSWL6V01-A

Product Name	11ax Cloud Managed AP
Applicant	EnGenius Technologies
Address	1580 Scenic Avenue, Costa Mesa, CA92626
Manufacturer	Senao Networks, Inc.
Model No.	ECW336
FCC ID	A8J-ECW336
EUT Rated Voltage	AC 100-240V, 50-60Hz
EUT Test Voltage	AC 120V/60Hz
Trade Name	EnGenius
Applicable Standard	FCC CFR Title 47 Part 15 Subpart E ANSI C63.4: 2014, ANSI C63.10: 2013
Test Result	Complied

Documented By : Genie Chang

(Senior Project Specialist / Genie Chang)

Tested By : Ivan Chuang

(Senior Engineer / Ivan Chuang)

Approved By : Alan Chen

(Senior Engineer / Alan Chen)

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Revision History

Report No.	Version	Description	Issued Date
2230212R-RFUSWL6V01-A	V1.0	Initial issue of report.	2022-05-23

1. General Information

1.1. EUT Description

Product Name	11ax Cloud Managed AP
Trade Name	EnGenius
FCC ID	A8J-ECW336
Model No.	ECW336
Frequency Range	802.11a/ax-20MHz: 5955~7095MHz 802.11ax-40MHz: 5965~7085MHz 802.11ax-80MHz: 5985~7025MHz 802.11ax-160MHz: 6025~6985Hz
Number of Channels	802.11a/ax-20MHz: 58 802.11ax-40MHz: 29 802.11ax-80MHz: 14 802.11ax-160MHz: 7
Data Speed	802.11a: 6 - 54Mbps 802.11ax: up to 4803.9Mbps
Channel Control	Auto
Type of Modulation	OFDM, BPSK, QPSK, 16QAM, 64QAM, 256QAM OFDM, OFDMA, BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Antenna type	Dipole Antenna
Antenna Gain	Refer to the table “Antenna List”

Note: The EUT can support beamforming function for 802.11ax mode.

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	Senao	ECW336	Dipole Antenna	5.30dBi for 5925~6425 MHz 3.71dBi for 6425~6525 MHz 3.71dBi for 6525~6875 MHz 5.06dBi for 6875~7125 MHz
2	Senao	ECW336	Dipole Antenna	4.66dBi for 5925~6425 MHz 4.74dBi for 6425~6525 MHz 4.74dBi for 6525~6875 MHz 3.96dBi for 6875~7125 MHz
3	Senao	ECW336	Dipole Antenna	4.68dBi for 5925~6425 MHz 4.44dBi for 6425~6525 MHz 4.44dBi for 6525~6875 MHz 5.43dBi for 6875~7125 MHz
4	Senao	ECW336	Dipole Antenna	5.44dBi for 5925~6425 MHz 5.38dBi for 6425~6525 MHz 5.38dBi for 6525~6875 MHz 5.48dBi for 6875~7125 MHz

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

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 01:	5955 MHz	Channel 05:	5795 MHz	Channel 09:	5995 MHz	Channel 13:	6016 MHz
Channel 17:	6035 MHz	Channel 21:	6055 MHz	Channel 25:	6075 MHz	Channel 29:	6095 MHz
Channel 33:	6115 MHz	Channel 37:	6135 MHz	Channel 41:	6155 MHz	Channel 45:	6175 MHz
Channel 49:	6195 MHz	Channel 53:	6215 MHz	Channel 57:	6235 MHz	Channel 61:	6255 MHz
Channel 65:	6275 MHz	Channel 69:	6295 MHz	Channel 73:	6315 MHz	Channel 77:	6335 MHz
Channel 81:	6355 MHz	Channel 85:	6375 MHz	Channel 89:	6395 MHz	Channel 93:	6415 MHz
Channel 97:	6435 MHz	Channel 101:	6455 MHz	Channel 105:	6475 MHz	Channel 109:	6495 MHz
Channel 113:	6515 MHz	Channel 117:	6535 MHz	Channel 121:	6555 MHz	Channel 125:	6575 MHz
Channel 129:	6595 MHz	Channel 133:	6615 MHz	Channel 137:	6635 MHz	Channel 141:	6655 MHz
Channel 145:	6675 MHz	Channel 149:	6695 MHz	Channel 153:	6715 MHz	Channel 157:	6735 MHz
Channel 161:	6755 MHz	Channel 165:	6775 MHz	Channel 169:	6795 MHz	Channel 173:	6815 MHz
Channel 177:	6835 MHz	Channel 181:	6855 MHz	Channel 185:	6875 MHz	Channel 189:	6895 MHz
Channel 193:	6915 MHz	Channel 197:	6935 MHz	Channel 201:	6955 MHz	Channel 205:	6975 MHz
Channel 209:	6995 MHz	Channel 213:	7015 MHz	Channel 217:	7035 MHz	Channel 221:	7055 MHz
Channel 225:	7075 MHz	Channel 229:	7095 MHz				

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

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 03:	5965 MHz	Channel 11:	6005 MHz	Channel 19:	6045 MHz	Channel 27:	6085 MHz
Channel 35:	6125 MHz	Channel 43:	6165 MHz	Channel 51:	6205 MHz	Channel 59:	6245 MHz
Channel 67:	6285 MHz	Channel 75:	6325 MHz	Channel 83:	6365 MHz	Channel 91:	6405 MHz
Channel 99:	6445 MHz	Channel 107:	6485 MHz	Channel 115:	6525 MHz	Channel 123:	6565 MHz
Channel 131:	6605 MHz	Channel 139:	6645 MHz	Channel 147:	6685 MHz	Channel 155:	6725 MHz
Channel 163:	6765 MHz	Channel 171:	6805 MHz	Channel 179:	6845 MHz	Channel 187:	6885 MHz
Channel 195:	6925 MHz	Channel 203:	6965 MHz	Channel 211:	7005 MHz	Channel 219:	7045 MHz
Channel 227:	7085 MHz						

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

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 07:	5985 MHz	Channel 23:	6055 MHz	Channel 39:	6145 MHz	Channel 55:	6225 MHz
Channel 71:	6305 MHz	Channel 87:	6385 MHz	Channel 103:	6465 MHz	Channel 119:	6545 MHz
Channel 135:	6625 MHz	Channel 151:	6705 MHz	Channel 167:	6785 MHz	Channel 183:	6865 MHz
Channel 199:	6945 MHz	Channel 215:	7025 MHz				

802.11ax-160MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 15:	6025 MHz	Channel 47:	6185 MHz	Channel 79:	6345 MHz	Channel 111:	6505 MHz
Channel 143:	6665 MHz	Channel 175:	6825 MHz	Channel 207:	6985 MHz		

Note:

1. This device is a 11ax Cloud Managed AP with built-in WLAN(802.11a/b/g/n/ac/ax) transceiver, this report for WLAN 6GHz.
2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
3. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report. (802.11a is 6Mbps、802.11ax-20BW/40BW/80BW/160BW is MCS0)
4. The CDD mode and Beamforming mode are presented in the power output test item. For other test items, CDD mode is the worst case for the final test and shown in this report.
5. These tests were conducted on a sample for the purpose of demonstrating compliance of 802.11a/ax transmitter with Part 15 Subpart E for Unlicensed National Information Infrastructure devices.

1.2. Test Mode

DEKRA has verified the construction and function in typical operation. The preliminary tests were performed in different data rate, and to find the worst condition, which was shown in this test report. The following table is the final test mode.

Test Items	Modulation	Antenna	Result
Conducted Emission	11ax (160MHz)	0+1+2+3	Pass
99% & 26dB Bandwidth	11a	0+1+2+3	Pass
	11ax (20MHz)	0+1+2+3	Pass
	11ax (40MHz)	0+1+2+3	Pass
	11ax (80MHz)	0+1+2+3	Pass
	11ax (160MHz)	0+1+2+3	Pass
Transmit Output	11a	0+1+2+3	Pass
	11ax (20MHz)	0+1+2+3	Pass
	11ax (40MHz)	0+1+2+3	Pass
	11ax (80MHz)	0+1+2+3	Pass
	11ax (160MHz)	0+1+2+3	Pass
Peak Power Spectral Density	11a	0+1+2+3	Pass
	11ax (20MHz)	0+1+2+3	Pass
	11ax (40MHz)	0+1+2+3	Pass
	11ax (80MHz)	0+1+2+3	Pass
	11ax (160MHz)	0+1+2+3	Pass
Radiated Emission	a	0+1+2+3	Pass
	11ax (20MHz)	0+1+2+3	Pass
	11ax (40MHz)	0+1+2+3	Pass
	11ax (80MHz)	0+1+2+3	Pass
	11ax (160MHz)	0+1+2+3	Pass
Band Edge	a	0+1+2+3	Pass
	11ax (20MHz)	0+1+2+3	Pass
	11ax (40MHz)	0+1+2+3	Pass
	11ax (80MHz)	0+1+2+3	Pass
	11ax (160MHz)	0+1+2+3	Pass
In-Ban Emission (Mask)	a	0+1+2+3	Pass
	11ax (20MHz)	0+1+2+3	Pass
	11ax (40MHz)	0+1+2+3	Pass
	11ax (80MHz)	0+1+2+3	Pass
	11ax (160MHz)	0+1+2+3	Pass
Contention-Based Protocol	11ax (20MHz)	0+1+2+3	Pass
	11ax (160MHz)	0+1+2+3	Pass

Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

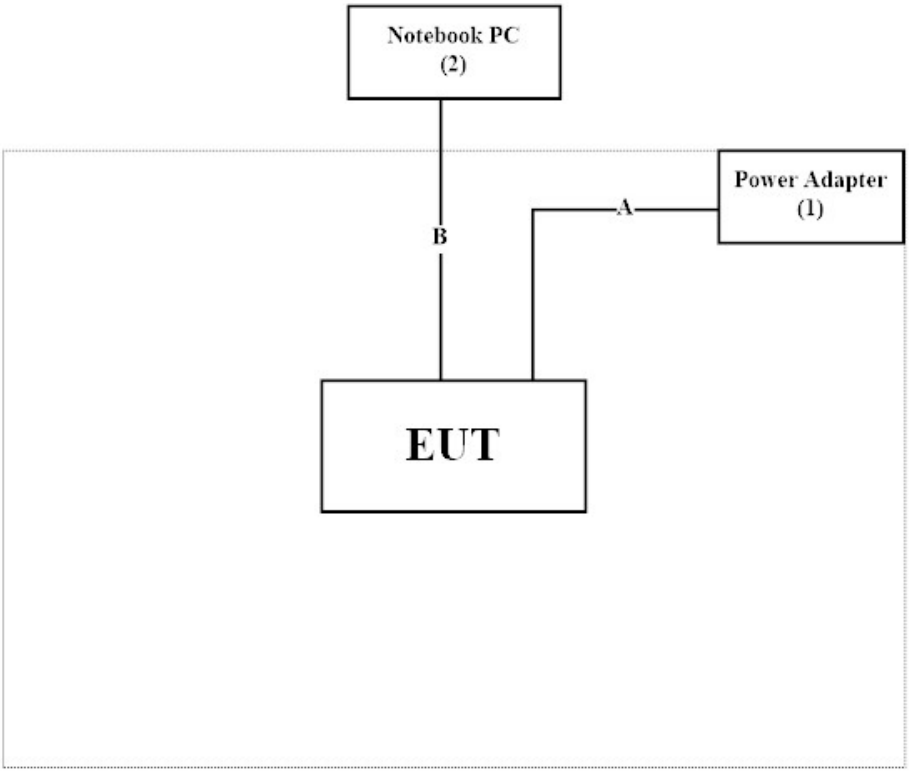
1.3. Tested System Details

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	Power Adapter	APD	WA-30J12R	N/A	N/A
2	Notebook PC	Lenovo	TP00067C	PF-0EW0C3	N/A

Signal Cable Type		Signal cable Description
A	Power Cable	Non-shielded, 1.5m
B	LAN Cable	Non-shielded, 3m

1.4. Configuration of tested System



1.5. EUT Exercise Software

1. Setup the EUT as shown in Section 1.4.
2. Execute software “QSPR Version V5.0-00199” on the Notebook PC.
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.

1.6. Test Facility

Ambient conditions in the laboratory:

Performed Item	Items	Required	Actual
Conducted Emission	Temperature (°C)	10~40 °C	24.4 °C
	Humidity (%RH)	10~90 %	60.1 %
Radiated Emission	Temperature (°C)	10~40 °C	24.8 °C
	Humidity (%RH)	10~90 %	65.8 %
Conductive	Temperature (°C)	10~40 °C	24.2 °C
	Humidity (%RH)	10~90 %	64.4 %

USA : FCC Registration Number: TW0033

Canada : CAB Identifier Number: TW3023 / Company 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

1.7. List of Test Equipment

For Conduction measurements /HY-SR01

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due. Date
X	EMI Test Receiver	R&S	ESR7	101601	2021/06/19	2022/06/18
X	Two-Line V-Network	R&S	ENV216	101306	2022/04/08	2023/04/07
X	Two-Line V-Network	R&S	ENV216	101307	2022/05/04	2023/05/03
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 /HY-SR02

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due. Date
X	Spectrum Analyzer	R&S	FSV40	101149	2022/03/25	2023/03/24
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 : RF Conducted Test Tools R3 V3.0.1.19 .

For Radiated measurements /HY-CB03

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due. Date
X	Loop Antenna	AMETEK	HLA6121	49611	2022/03/18	2023/03/17
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	SGH	0301	20211007-10	2022/02/22	2023/02/21
X	Pre-Amplifier	SGH	PRAMP118	20200202	2022/03/23	2023/03/22
X	Pre-Amplifier	EMCI	EMC05820SE	980310	2021/07/07	2022/07/06
X	Pre-Amplifier	EMCI	EMC184045SE	980369	2022/05/12	2023/05/11
	Coaxial Cable	EMCI	EMC102-KM-KM-600	1160314		
	Coaxial Cable	EMCI	EMC102-KM-KM-7000	170242		
	Filter	MICRO TRONICS	BRM50702	G251	2021/09/16	2022/09/15
	Filter	MICRO TRONICS	BRM50716	G188	2021/09/16	2022/09/15
X	WIFI 6E Filter	Marvelous Microwave Inc.	MFN-5850.5895.S1	A80006N	2022/03/17	2023/03/16
X	WIFI 6E Filter	Marvelous Microwave Inc.	MFN-5925.6425.S1	A80007N	2022/03/17	2023/03/16
X	WIFI 6E Filter	Marvelous Microwave Inc.	MFN-6425.6525.S1	A80008N	2022/03/17	2023/03/16
X	WIFI 6E Filter	Marvelous Microwave Inc.	MFN-6525.6875.S1	A80009N	2022/03/17	2023/03/16
X	WIFI 6E Filter	Marvelous Microwave Inc.	MFN-6875.7125.S1	A80010N	2022/03/17	2023/03/16
X	EMI Test Receiver	R&S	ESR	102793	2021/12/15	2022/12/14
X	Spectrum Analyzer	R&S	FSV3044	101114	2022/02/11	2023/02/10
X	Coaxial Cable	SGH	SGH18	2021005-3	2022/01/05	2023/01/04
	Coaxial Cable	SGH	SGH18	202108-4		
	Coaxial Cable	SGH	SGH18	202110223-1		
	Coaxial Cable	SGH	HA800	GD20110222-3		

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

1.8. Uncertainty

Uncertainties have been calculated according to the DEKRA internal document, and is described in each test chapter of this report.

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.

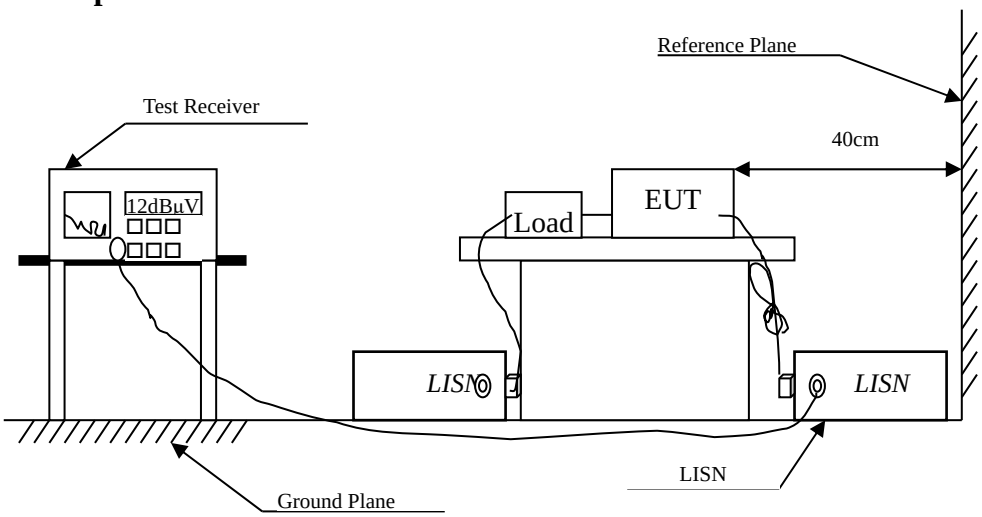
Test Item	Uncertainty
Conducted Emission	± 2.1 dB
99% & 26dB Bandwidth	± 637Hz
Transmit Output	± 1.16dB
Peak Power Spectrum Density	± 2.11dB
Radiated Emission	± 3.40 dB below 1GHz ± 3.46 dB above 1GHz
Band Edge	± 3.46 dB above 1GHz

2. Aetenna Requirements

According to FCC 47CFR 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

3. Conducted Emission

3.1. Test Setup



3.2. Limits

FCC CFR Title 47 Part 15 Subpart C Paragraph 15.207 Limits (dBuV)		
Frequency	QP	AV
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

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

3.3. Test Procedure

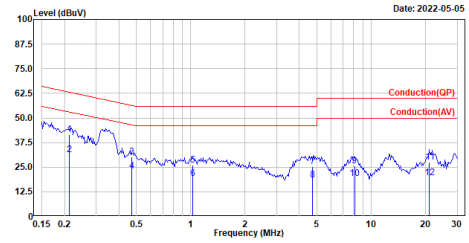
The EUT was setup according to ANSI C63.10: 2013. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs.)
Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

3.4. Test Specification

According to FCC CFR Title 47 Part 15 Subpart C Paragraph 15.207.

3.5. Test Result of Conducted Emission

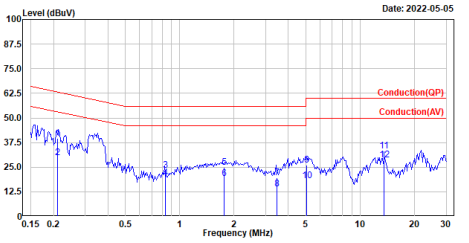
Site :HY-SR01
Condition :Line
Mode :ax160_6985MHz_TX
test by :Shane



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	0.214	41.54	63.06	-21.52	31.78	9.76	QP
2	0.214	31.33	53.06	-21.73	21.57	9.76	Average
3	0.470	30.05	56.51	-26.46	20.29	9.76	QP
4	0.470	23.15	46.51	-23.36	13.39	9.76	Average
5	1.031	25.86	56.00	-30.14	16.07	9.79	QP
6	1.031	19.21	46.00	-26.79	9.42	9.79	Average
7	4.728	25.46	56.00	-30.54	14.64	10.82	QP
8	4.728	18.55	46.00	-27.45	7.73	10.82	Average
9	8.080	25.63	60.00	-34.37	14.75	10.88	QP
10	8.080	19.37	50.00	-30.63	8.49	10.88	Average
11	21.040	27.49	60.00	-32.51	16.75	10.74	QP
12	21.040	19.73	50.00	-30.27	8.99	10.74	Average

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

Site :HY-SR01
Condition :Neutral
Mode :ax160_6985MHz_TX
test by :Shane



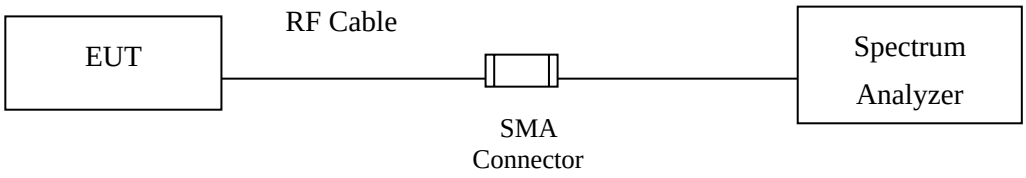
No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	0.210	39.63	63.20	-23.57	29.87	9.76	QP
2	0.210	29.70	53.20	-23.50	19.94	9.76	Average
3	0.831	23.47	56.00	-32.53	13.69	9.78	QP
4	0.831	19.77	46.00	-26.23	9.99	9.78	Average
5	1.756	24.99	56.00	-31.01	15.12	9.87	QP
6	1.756	19.36	46.00	-26.64	9.49	9.87	Average
7	3.465	19.54	56.00	-36.46	9.15	10.39	QP
8	3.465	13.84	46.00	-32.16	3.45	10.39	Average
9	5.073	26.05	60.00	-33.95	15.14	10.91	QP
10	5.073	18.26	50.00	-31.74	7.35	10.91	Average
11	13.561	33.22	60.00	-26.78	22.36	10.86	QP
12	13.561	28.80	50.00	-21.20	17.94	10.86	Average

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

4. 99% & 26dB Bandwidth

4.1. Test Setup

26dB Occupied Bandwidth



4.2. Limits

No Required

4.3. Test Procedure

The EUT was tested according to U-NII test procedure of KDB 789033.D02 V02r01

Set RBW 1% of the emission bandwidth, VBW equal to 3 times the RBW.

4.4. Test Result of 99% & 26dB Bandwidth

802.11a

Channel	Frequency (MHz)	26dB Bandwidth (MHz)				99% Occupied Bandwidth (MHz)			
		Ant. 0	Ant. 1	Ant. 2	Ant. 3	Ant. 0	Ant. 1	Ant. 2	Ant. 3
1	5955	20.98	21.02	21.02	20.94	16.86	16.86	16.90	17.02
45	6175	20.74	21.82	20.74	20.58	17.02	16.98	16.98	17.14
93	6415	20.66	20.94	20.86	20.74	17.14	17.06	16.94	16.86
97	6435	20.46	20.94	20.82	20.90	17.02	16.98	17.06	16.94
105	6475	20.38	20.78	20.90	21.02	16.90	16.98	17.02	16.94
113	6515	20.74	20.90	20.86	20.98	16.90	16.98	16.98	16.98
117	6535	20.58	20.78	20.98	20.70	16.86	17.02	16.94	16.94
149	6695	19.78	21.18	20.82	21.14	16.78	17.02	16.94	17.02
181	6855	19.90	20.82	20.90	21.26	16.78	16.98	16.94	17.14
185	6875	19.66	21.02	20.74	21.62	16.66	16.94	16.98	17.10
189	6895	19.54	20.82	21.42	21.34	16.58	16.98	16.94	17.06
213	7015	20.14	20.86	21.26	21.26	16.70	16.98	16.98	17.10
229	7095	20.42	21.26	20.90	21.14	16.78	16.98	17.02	17.06

802.11ax (20MHz)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)				99% Occupied Bandwidth (MHz)			
		Ant. 0	Ant. 1	Ant. 2	Ant. 3	Ant. 0	Ant. 1	Ant. 2	Ant. 3
1	5955	22.06	22.58	21.90	22.38	19.18	19.26	19.22	19.30
45	6175	21.54	22.26	22.42	22.26	19.14	19.18	19.18	19.26
93	6415	21.90	22.30	22.18	22.78	19.26	19.22	19.46	19.34
97	6435	21.78	21.90	22.10	22.10	19.14	19.26	19.34	19.26
105	6475	21.98	22.50	22.30	22.26	19.22	19.26	19.22	19.26
113	6515	22.34	21.58	22.46	22.14	19.34	19.22	19.26	19.34
117	6535	22.22	22.50	22.58	22.26	19.18	19.26	19.22	19.26
149	6695	22.02	21.86	22.22	22.30	19.34	19.22	19.34	19.22
181	6855	22.34	22.10	22.34	21.94	19.30	19.22	19.26	19.26
185	6875	21.94	22.26	21.94	21.86	19.58	19.26	19.14	19.14
189	6895	21.86	22.38	22.26	21.82	19.38	19.26	19.22	19.14
213	7015	22.46	22.54	22.62	22.14	19.34	19.18	19.26	19.22
229	7095	22.30	22.50	22.42	21.94	19.30	19.18	19.22	19.22

802.11ax (40MHz)

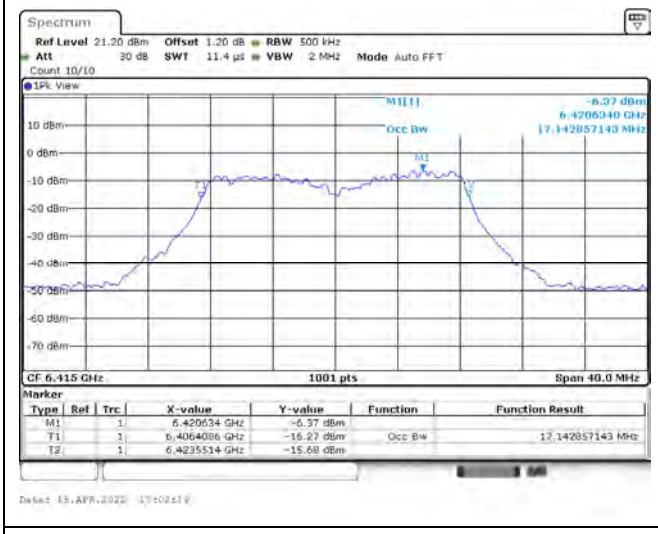
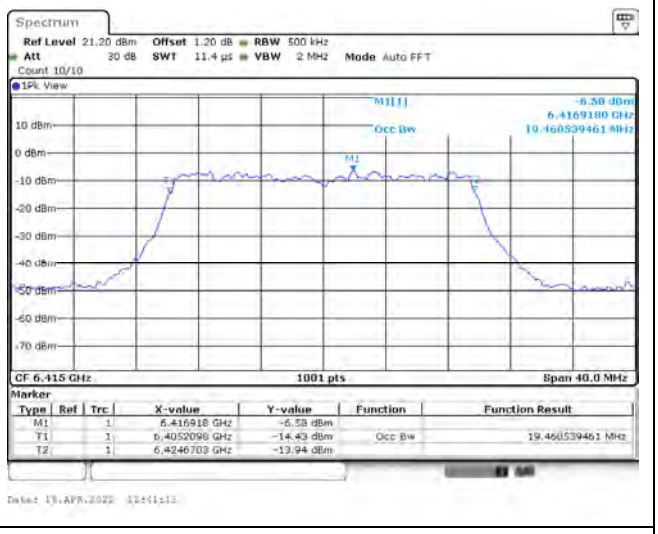
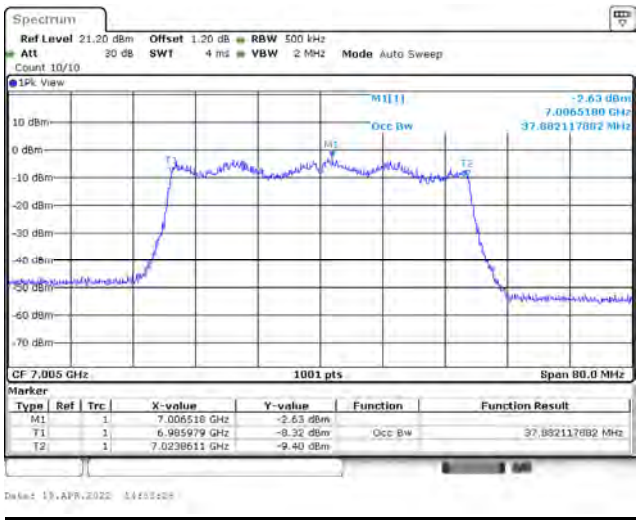
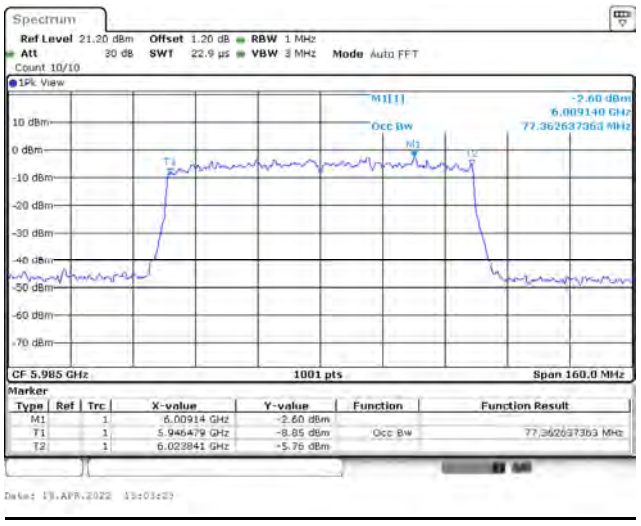
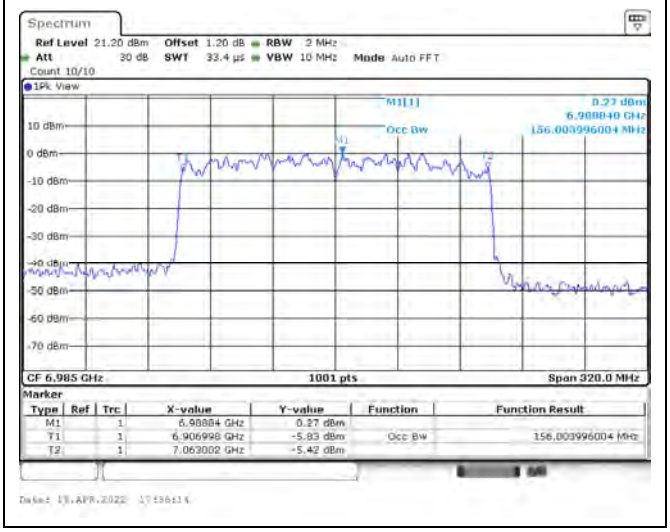
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				99% Occupied Bandwidth (MHz)			
		Ant. 0	Ant. 1	Ant. 2	Ant. 3	Ant. 0	Ant. 1	Ant. 2	Ant. 3
3	5965	40.44	40.20	40.12	40.20	37.72	37.64	37.72	37.64
51	6205	39.64	40.04	40.60	40.52	37.64	37.64	37.64	37.80
91	6405	39.72	40.12	40.52	40.44	37.24	37.56	37.72	37.72
99	6445	39.88	39.96	40.28	40.20	37.32	37.56	37.64	37.72
107	6485	39.96	40.04	40.20	40.20	37.40	37.72	37.64	37.72
115	6525	39.80	40.20	40.20	40.28	37.56	37.72	37.72	37.64
123	6565	39.96	40.28	40.12	39.88	37.40	37.64	37.64	37.64
155	6725	40.12	40.36	40.12	40.52	37.48	37.72	37.72	37.72
179	6845	40.20	40.36	40.12	39.96	37.40	37.80	37.56	37.48
187	6885	40.12	40.28	40.20	40.04	37.64	37.64	37.56	37.72
195	6925	40.04	40.20	40.36	40.20	37.72	37.80	37.64	37.56
211	7005	40.28	40.68	40.28	40.20	37.88	37.72	37.64	37.64
227	7085	40.36	40.36	40.44	40.44	37.80	37.64	37.56	37.56

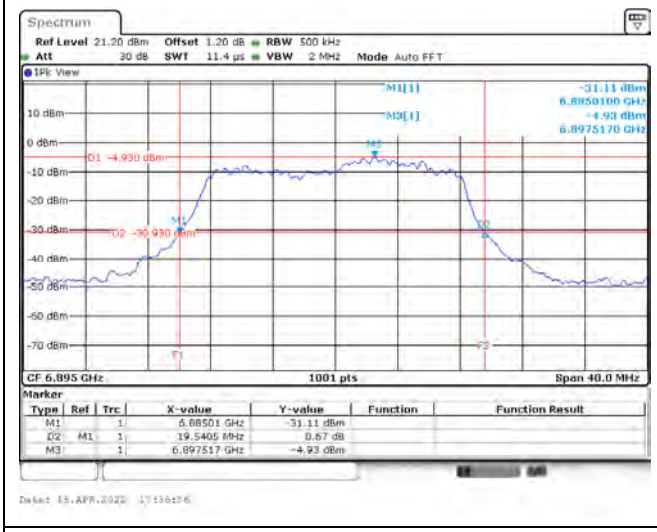
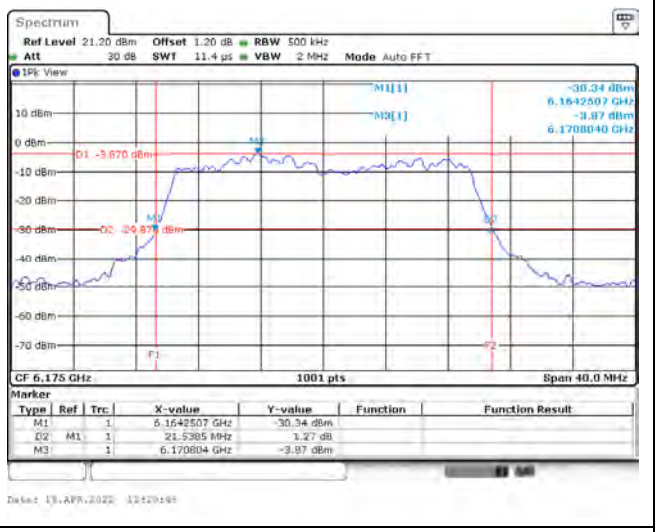
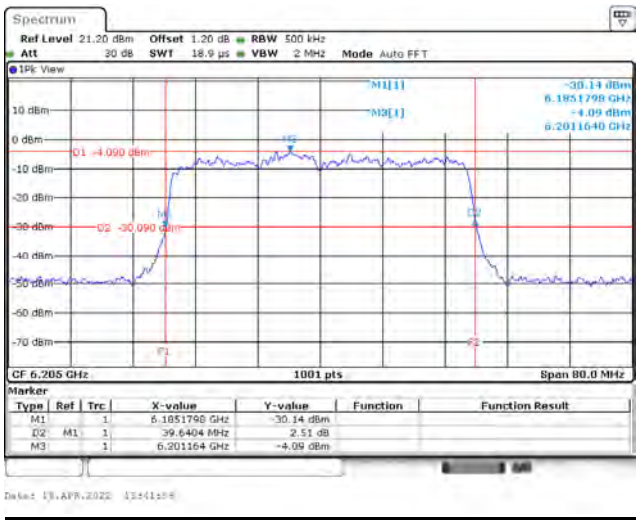
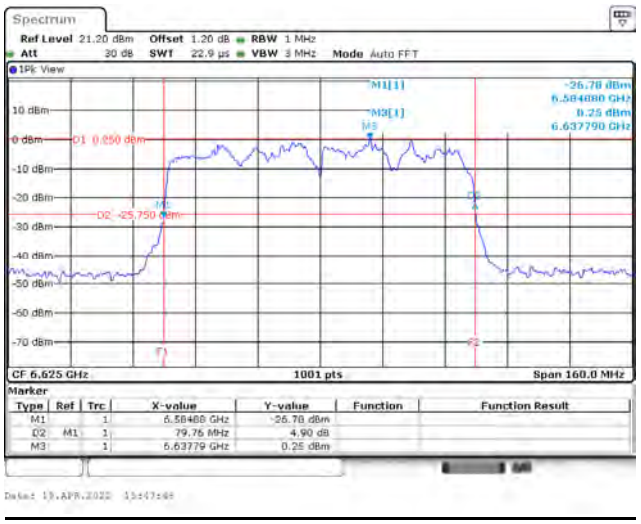
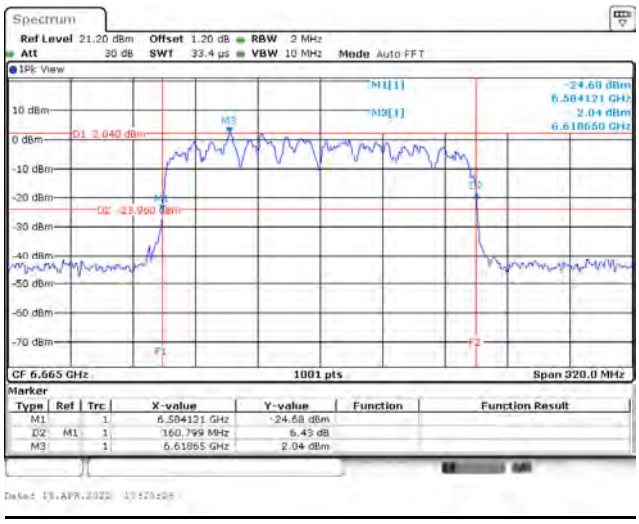
802.11ax (80MHz)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)				99% Occupied Bandwidth (MHz)			
		Ant. 0	Ant. 1	Ant. 2	Ant. 3	Ant. 0	Ant. 1	Ant. 2	Ant. 3
7	5985	82.16	81.84	81.84	81.84	77.04	77.04	77.36	76.88
55	6225	81.36	82.16	82.00	80.88	76.88	77.20	77.20	77.20
87	6385	80.40	80.08	81.04	81.84	76.40	77.04	77.04	77.20
103	6465	80.88	80.56	81.68	82.00	76.56	77.04	76.88	77.04
119	6545	80.24	81.84	82.00	81.36	76.56	77.36	77.52	77.20
135	6625	79.76	80.56	81.36	80.88	75.92	77.36	77.04	77.04
151	6705	80.72	82.48	81.68	81.52	76.08	77.20	77.20	76.88
167	6785	80.56	82.16	81.84	81.36	76.56	77.20	76.72	76.88
183	6865	81.84	82.32	80.72	81.52	76.88	77.20	76.88	77.04
199	6945	81.04	81.04	80.56	81.68	77.20	77.04	77.04	77.20
215	7025	81.36	80.24	81.52	81.04	77.36	77.04	76.56	76.72

802.11ax (160MHz)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)				99% Occupied Bandwidth (MHz)			
		Ant. 0	Ant. 1	Ant. 2	Ant. 3	Ant. 0	Ant. 1	Ant. 2	Ant. 3
15	6025	162.72	162.72	163.36	163.36	154.72	154.08	153.76	153.76
47	6185	162.72	164.32	164.00	162.40	154.40	155.36	153.76	153.76
79	6345	163.04	162.40	161.76	162.08	153.76	154.40	154.08	154.08
111	6505	162.72	161.44	161.76	162.72	154.08	154.08	154.08	153.76
143	6665	160.80	163.04	160.04	162.40	151.84	154.40	154.72	155.04
175	6825	163.04	1962.08	162.08	162.72	153.12	154.40	155.04	155.36
207	6985	162.08	162.40	161.76	162.72	155.36	154.40	154.72	156.00

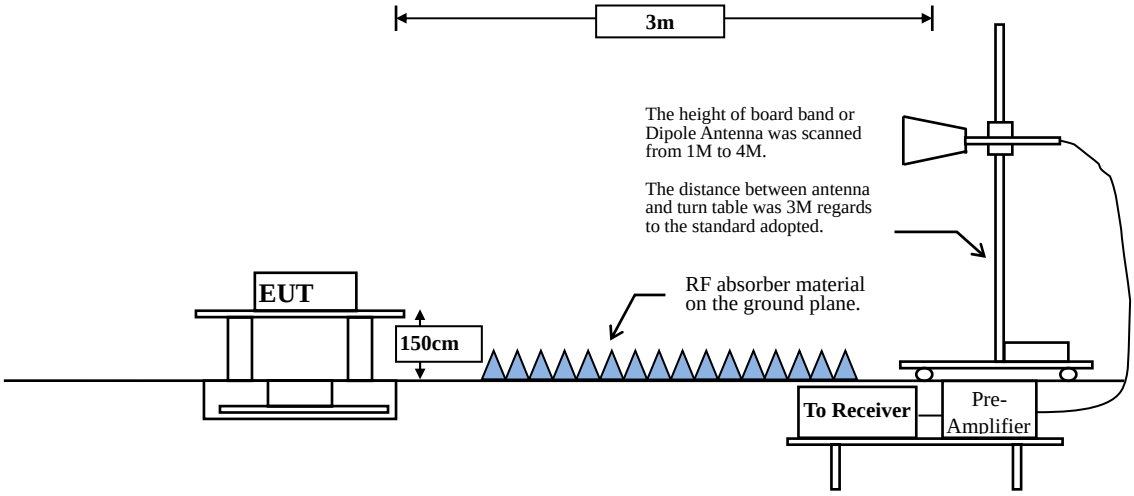
Spectrum plot of worst value (99% Occupied Bandwidth)	
802.11a / Ant. 0 / 6415 MHz (U-NII-5)	802.11ax (20MHz) / Ant. 2 / 6415 MHz (U-NII-5)
	
802.11ax (40MHz) / Ant. 0 / 7005 MHz (U-NII-8)	802.11ax (80MHz) / Ant. 2 / 5985 MHz (U-NII-5)
	
802.11ax (160MHz) / Ant. 3 / 6985 MHz (U-NII-8)	
	

Spectrum plot of worst value (26dB Bandwidth)	
802.11a / Ant. 0 / 6895 MHz (U-NII-8)	802.11ax (20MHz) / Ant. 0 / 6175 MHz (U-NII-5)
	
802.11ax (40MHz)/ Ant. 0 / 6205 MHz (U-NII-5)	802.11ax (80MHz) / Ant. 0 / 6625 MHz (U-NII-7)
	
802.11ax (160MHz) / Ant. 0 / 6665 MHz (U-NII-7)	
	

5. Transmit Output

5.1. Test Setup

Radiated Power Measurement (for 802.11a/ax)



5.2. Limits

1. For the 5.925~6.425 GHz band:
   For standard power access point and fixed client device : e.i.r.p < 36 dBm , For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees not exceed 125 mW (21 dBm).
   For indoor access point : e.i.r.p < 30 dBm.
   For subordinate device control of an indoor access point : e.i.r.p < 30 dBm.
   For client device control of a standard power access point : e.i.r.p < 30 dBm.
   For client device control of an indoor access point : e.i.r.p < 24 dBm.
2. For the 6.425~6.525 GHz band:
   For indoor access point : e.i.r.p < 30 dBm.
   For client device control of an indoor access point : e.i.r.p < 24 dBm.
3. For the 6.525~6.875 GHz band:
   For standard power access point and fixed client device : e.i.r.p < 36 dBm , For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees not exceed 125 mW (21 dBm).
   For indoor access point : e.i.r.p < 30 dBm.
   For subordinate device control of an indoor access point : e.i.r.p < 30 dBm.
   For client device control of a standard power access point : e.i.r.p < 30 dBm.
   For client device control of an indoor access point : e.i.r.p < 24 dBm.
4. For the 6.87~7.125 GHz band:
   For indoor access point : e.i.r.p < 30 dBm.
   For client device control of an indoor access point : e.i.r.p < 24 dBm.

5.3. Test Procedure

1. The EUT was setup to ANSI C63.10: 2013; tested to U-NII test procedure of KDB 789033 D02 v02r01 Method SA-2 for compliance to FCC CFR Title 47 Part 15 Subpart E requirements.
2. The EUT is placed on a turn table which is 1.5 meter above ground and 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.
3. Perform a field strength measuremrnt following ANSI C63.10 and record thr worse field strength value via spectrm reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then convert the measured field strength level to EIRP level.
4. Following ANSI C63.10 and KDB 412172 D01 v01r01,
   EIRP value (dBm) = Field strength value (dBuV/m) + Correction factor (dB) @3m
   Correction factor (dB) @3m = 20*log(3) -104.77 = -95.23dB

5.4. Test Result of Transmit Output

CDD mode

802.11a

Channel No	Frequency Range	Reading Level	Path Loss	Field Strength	Duty Factor	Correction Factor	EIRP	EIRP limit	Result
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)	(dB)	(dBm)	(dBm)	
1	5955	84.81	20.55	105.36	0.25	-95.23	10.38	30	Pass
45	6175	84.45	20.81	105.26	0.25	-95.23	10.28	30	Pass
93	6415	84.33	21.01	105.34	0.25	-95.23	10.36	30	Pass
97	6435	85.03	21.02	106.05	0.25	-95.23	11.07	30	Pass
105	6475	85.58	20.99	106.57	0.25	-95.23	11.59	30	Pass
113	6515	86.17	21.25	107.42	0.25	-95.23	12.44	30	Pass
117	6535	84.44	21.25	105.69	0.25	-95.23	10.71	30	Pass
149	6695	84.35	21.29	105.64	0.25	-95.23	10.66	30	Pass
181	6855	84.18	21.42	105.60	0.25	-95.23	10.62	30	Pass
185	6875	84.68	21.31	105.99	0.25	-95.23	11.01	30	Pass
189	6895	84.51	21.43	105.94	0.25	-95.23	10.96	30	Pass
213	7015	84.65	21.42	106.07	0.25	-95.23	11.09	30	Pass
229	7095	85.02	21.45	106.47	0.25	-95.23	11.49	30	Pass

802.11ax (20 MHz)

Channel No	Frequency Range	Reading Level	Path Loss	Field Strength	Duty Factor	Correction Factor	EIRP	EIRP limit	Result
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)	(dB)	(dBm)	(dBm)	
1	5955	84.64	21.20	105.84	0.33	-95.23	10.94	30	Pass
45	6175	84.88	20.81	105.69	0.33	-95.23	10.79	30	Pass
93	6415	84.79	21.01	105.80	0.33	-95.23	10.90	30	Pass
97	6435	85.51	21.02	106.53	0.33	-95.23	11.63	30	Pass
105	6475	85.45	20.99	106.44	0.33	-95.23	11.54	30	Pass
113	6515	85.76	21.01	106.77	0.33	-95.23	11.87	30	Pass
117	6535	84.55	21.19	105.74	0.33	-95.23	10.84	30	Pass
149	6695	84.57	21.28	105.85	0.33	-95.23	10.95	30	Pass
181	6855	84.41	21.42	105.83	0.33	-95.23	10.93	30	Pass
185	6875	84.12	21.44	105.56	0.33	-95.23	10.66	30	Pass
189	6895	84.29	21.43	105.72	0.33	-95.23	10.82	30	Pass
213	7015	84.58	21.42	106.00	0.33	-95.23	11.10	30	Pass
229	7095	84.71	21.46	106.17	0.33	-95.23	11.27	30	Pass

802.11ax (40MHz)

Channel No	Frequency Range	Reading Level	Path Loss	Field Strength	Duty Factor	Correction Factor	EIRP	EIRP limit	Result
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)	(dB)	(dBm)	(dBm)	
3	5965	88.09	20.56	108.65	0.27	-95.23	13.69	30	Pass
51	6205	87.77	20.79	108.56	0.27	-95.23	13.60	30	Pass
91	6405	87.59	21.00	108.59	0.27	-95.23	13.63	30	Pass
99	6445	88.13	21.02	109.15	0.27	-95.23	14.19	30	Pass
107	6485	88.14	20.98	109.12	0.27	-95.23	14.16	30	Pass
115	6525	88.16	21.07	109.23	0.27	-95.23	14.27	30	Pass
123	6565	86.92	21.21	108.13	0.27	-95.23	13.17	30	Pass
155	6725	86.75	21.26	108.01	0.27	-95.23	13.05	30	Pass
179	6845	86.74	21.43	108.17	0.27	-95.23	13.21	30	Pass
185	6885	86.71	21.44	108.15	0.27	-95.23	13.19	30	Pass
195	6925	88.49	21.32	109.81	0.27	-95.23	14.85	30	Pass
211	7005	87.52	21.43	108.95	0.27	-95.23	13.99	30	Pass
227	7085	88.95	21.43	110.38	0.27	-95.23	15.42	30	Pass

802.11ax (80MHz)

Channel No	Frequency Range	Reading Level	Path Loss	Field Strength	Duty Factor	Correction Factor	EIRP	EIRP limit	Result
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)	(dB)	(dBm)	(dBm)	
7	5985	90.63	20.56	111.19	0.29	-95.23	16.25	30	Pass
55	6225	90.25	20.91	111.16	0.29	-95.23	16.22	30	Pass
87	6385	90.14	21.00	111.14	0.29	-95.23	16.20	30	Pass
103	6465	91.86	20.99	112.85	0.29	-95.23	17.91	30	Pass
119	6545	91.51	21.25	112.76	0.29	-95.23	17.82	30	Pass
135	6625	91.85	21.13	112.98	0.29	-95.23	18.04	30	Pass
151	6705	91.87	21.28	113.15	0.29	-95.23	18.21	30	Pass
167	6785	91.84	21.34	113.18	0.29	-95.23	18.24	30	Pass
183	6865	90.81	21.44	112.25	0.29	-95.23	17.31	30	Pass
199	6945	90.64	21.33	111.97	0.29	-95.23	17.03	30	Pass
215	7025	90.91	21.41	112.32	0.29	-95.23	17.38	30	Pass

802.11ax (160MHz)

Channel No	Frequency Range	Reading Level	Path Loss	Field Strength	Duty Factor	Correction Factor	EIRP	EIRP limit	Result
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)	(dB)	(dBm)	(dBm)	
15	6025	93.75	21.19	114.94	0.31	-95.23	20.02	30	Pass
47	6185	94.08	20.79	114.87	0.31	-95.23	19.95	30	Pass
79	6345	93.94	20.97	114.91	0.31	-95.23	19.99	30	Pass
111	6505	94.14	21.19	115.33	0.31	-95.23	20.41	30	Pass
143	6665	93.59	21.24	114.83	0.31	-95.23	19.91	30	Pass
175	6825	93.41	21.45	114.86	0.31	-95.23	19.94	30	Pass
207	6985	93.46	21.24	114.70	0.31	-95.23	19.78	30	Pass

Beamforming mode

802.11ax (20 MHz)

Channel No	Frequency Range	EIRP	EIRP limit	Result
	(MHz)	(dBm)	(dBm)	
1	5955	10.94	30	Pass
45	6175	10.79	30	Pass
93	6415	10.90	30	Pass
97	6435	11.63	30	Pass
105	6475	11.54	30	Pass
113	6515	11.87	30	Pass
117	6535	10.84	30	Pass
149	6695	10.95	30	Pass
181	6855	10.93	30	Pass
185	6875	10.66	30	Pass
189	6895	10.82	30	Pass
213	7015	11.10	30	Pass
229	7095	11.27	30	Pass

802.11ax (40MHz)

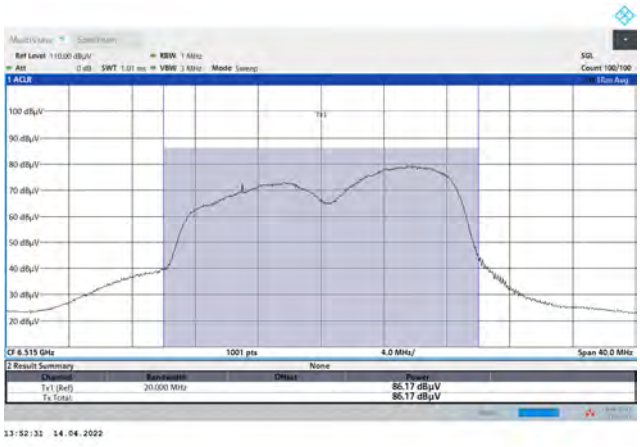
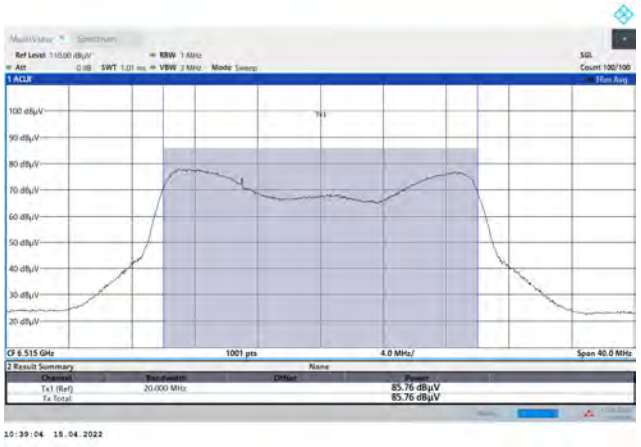
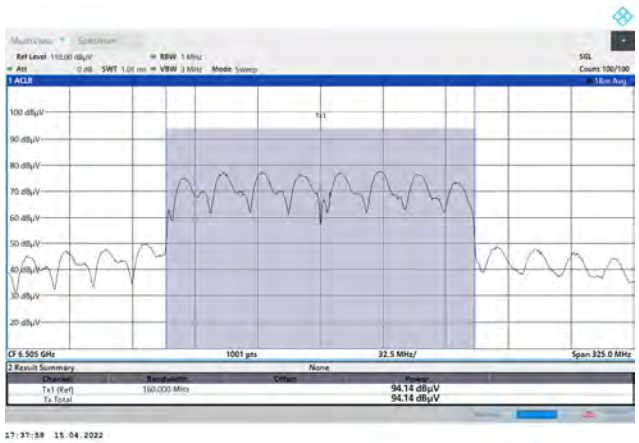
Channel No	Frequency Range	EIRP	EIRP limit	Result
	(MHz)	(dBm)	(dBm)	
3	5965	13.69	30	Pass
51	6205	13.60	30	Pass
91	6405	13.63	30	Pass
99	6445	14.19	30	Pass
107	6485	14.16	30	Pass
115	6525	14.27	30	Pass
123	6565	13.17	30	Pass
155	6725	13.05	30	Pass
179	6845	13.21	30	Pass
185	6885	13.19	30	Pass
195	6925	14.85	30	Pass
211	7005	13.99	30	Pass
227	7085	15.42	30	Pass

802.11ax (80MHz)

Channel No	Frequency Range	EIRP	EIRP limit	Result
	(MHz)	(dBm)	(dBm)	
7	5985	16.25	30	Pass
55	6225	16.22	30	Pass
87	6385	16.20	30	Pass
103	6465	17.91	30	Pass
119	6545	17.82	30	Pass
135	6625	18.04	30	Pass
151	6705	18.21	30	Pass
167	6785	18.24	30	Pass
183	6865	17.31	30	Pass
199	6945	17.03	30	Pass
215	7025	17.38	30	Pass

802.11ax (160MHz)

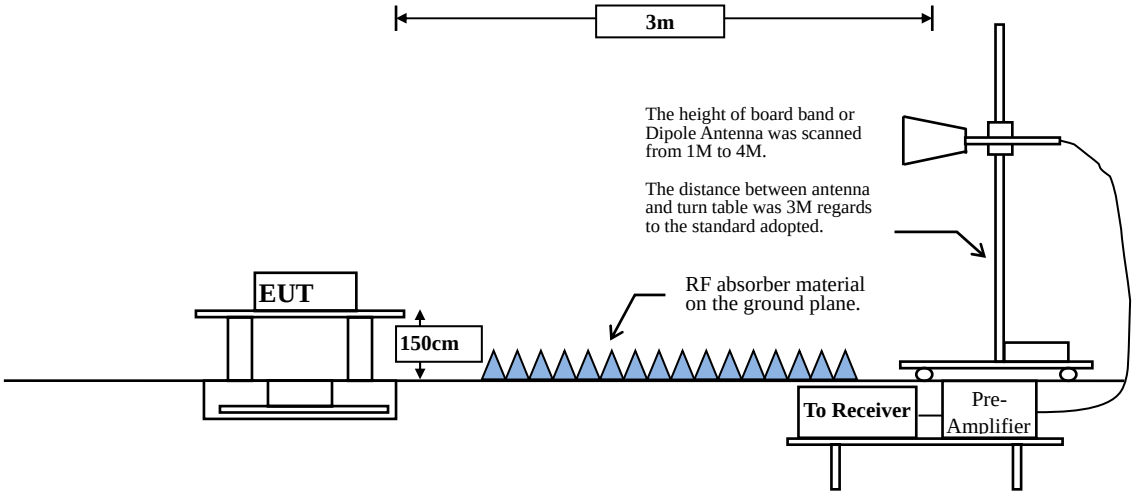
Channel No	Frequency Range	EIRP	EIRP limit	Result
	(MHz)	(dBm)	(dBm)	
15	6025	20.02	30	Pass
47	6185	19.95	30	Pass
79	6345	19.99	30	Pass
111	6505	20.41	30	Pass
143	6665	19.91	30	Pass
175	6825	19.94	30	Pass
207	6985	19.78	30	Pass

Spectrum plot of worst value	
802.11a / 6515 MHz	802.11 ax (20MHz) / 6515 MHz
	
802.11 ax (40MHz) / 7085 MHz	802.11a ax (80MHz) / 6785 MHz
	
802.11ax (160MHz) / 6505 MHz	
	

6. Peak Power Spectrum Density

6.1. Test Setup

Radiated PSD Measurement (for 802.11a/ax)



6.2. Limits

1. For the 5.925~6.425 GHz band:
   For standard power access point and fixed client device : e.i.r.p PSD < 23 dBm/MHz.
   For indoor access point : e.i.r.p PSD < 5 dBm/MHz.
   For subordinate device control of an indoor access point : e.i.r.p PSD < 5 dBm/MHz.
   For client device control of a standard power access point : e.i.r.p PSD < 17 dBm/MHz.
   For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.
2. For the 6.425~6.525 GHz band:
   For indoor access point : e.i.r.p PSD < 5 dBm/MHz.
   For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.
3. For the 6.525~6.875 GHz band:
   For standard power access point and fixed client device : e.i.r.p PSD < 23 dBm/MHz.
   For indoor access point : e.i.r.p PSD < 5 dBm/MHz.
   For subordinate device control of an indoor access point : e.i.r.p PSD < 5 dBm/MHz.
   For client device control of a standard power access point : e.i.r.p PSD < 17 dBm/MHz.
   For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.
4. For the 6.875~7.125 GHz band:
   For indoor access point : e.i.r.p PSD < 5 dBm/MHz.
   For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.

6.3. Test Procedure

1. The EUT was setup to ANSI C63.10: 2013; tested to U-NII test procedure of KDB 789033 D02 v02r01 Method SA-2 for compliance to FCC CFR Title 47 Part 15 Subpart E requirements.
2. The EUT is placed on a turn table which is 1.5 meter above ground and 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.
3. Perform a field strength measuremrnt following ANSI C63.10 and record thr worse field strength value via spectrm reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then convert the measured field strength level to EIRP level.
4. Following ANSI C63.10 and KDB 412172 D01 v01r01,
   EIRP value (dBm) = Field strength value (dBuV/m) + Correction factor (dB) @3m
   Correction factor (dB) @3m = 20*log(3) -104.77 = -95.23dB

6.4. Test Result of Peak Power Spectral Density

802.11a

Channel No	Frequency Range	Reading Level	Path Loss	Field Strength	Duty Factor	Correction Factor	EIRP	EIRP limit	Result
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)	(dB)	(dBm)	(dBm)	
1	5955	79.38	20.55	99.93	0.25	-95.23	4.95	5	Pass
45	6175	78.89	20.81	99.70	0.25	-95.23	4.72	5	Pass
93	6415	78.77	21.01	99.78	0.25	-95.23	4.80	5	Pass
97	6435	78.65	21.02	99.67	0.25	-95.23	4.69	5	Pass
105	6475	78.74	20.99	99.73	0.25	-95.23	4.75	5	Pass
113	6515	78.63	21.25	99.88	0.25	-95.23	4.90	5	Pass
117	6535	78.38	21.25	99.63	0.25	-95.23	4.65	5	Pass
149	6695	78.31	21.29	99.60	0.25	-95.23	4.62	5	Pass
181	6855	78.19	21.42	99.61	0.25	-95.23	4.63	5	Pass
185	6875	78.55	21.31	99.86	0.25	-95.23	4.88	5	Pass
189	6895	78.34	21.43	99.77	0.25	-95.23	4.79	5	Pass
213	7015	78.25	21.42	99.67	0.25	-95.23	4.69	5	Pass
229	7095	78.37	21.45	99.82	0.25	-95.23	4.84	5	Pass

802.11ax (20 MHz)

Channel No	Frequency Range	Reading Level	Path Loss	Field Strength	Duty Factor	Correction Factor	EIRP	EIRP limit	Result
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)	(dB)	(dBm)	(dBm)	
1	5955	78.42	21.20	99.62	0.33	-95.23	4.72	5	Pass
45	6175	78.71	20.81	99.52	0.33	-95.23	4.62	5	Pass
93	6415	78.55	21.01	99.56	0.33	-95.23	4.66	5	Pass
97	6435	78.59	21.02	99.61	0.33	-95.23	4.71	5	Pass
105	6475	78.67	20.99	99.66	0.33	-95.23	4.76	5	Pass
113	6515	78.68	21.01	99.69	0.33	-95.23	4.79	5	Pass
117	6535	78.49	21.19	99.68	0.33	-95.23	4.78	5	Pass
149	6695	78.45	21.28	99.73	0.33	-95.23	4.83	5	Pass
181	6855	78.18	21.42	99.60	0.33	-95.23	4.70	5	Pass
185	6875	78.14	21.44	99.58	0.33	-95.23	4.68	5	Pass
189	6895	78.29	21.43	99.72	0.33	-95.23	4.82	5	Pass
213	7015	78.24	21.42	99.66	0.33	-95.23	4.76	5	Pass
229	7095	78.42	21.46	99.88	0.33	-95.23	4.98	5	Pass

802.11ax (40MHz)

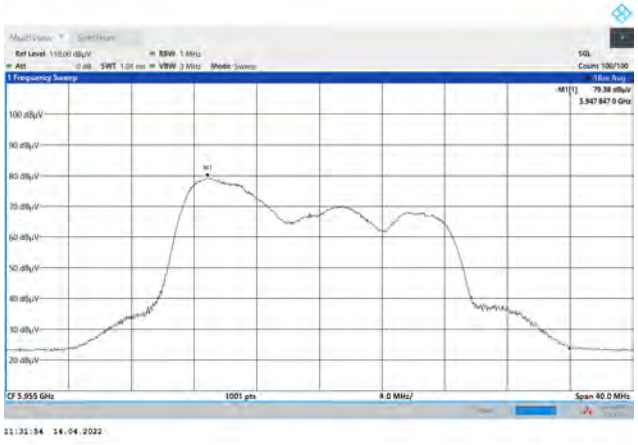
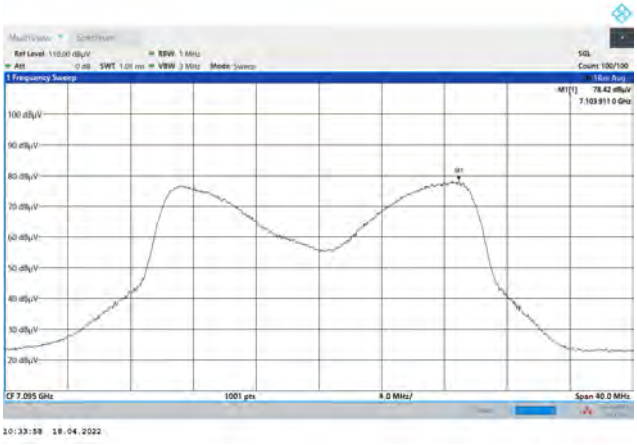
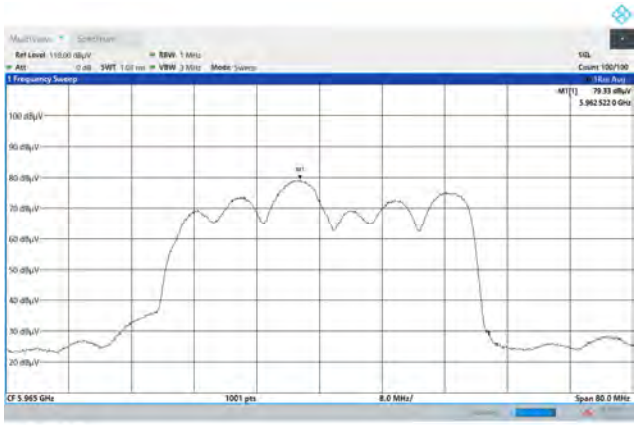
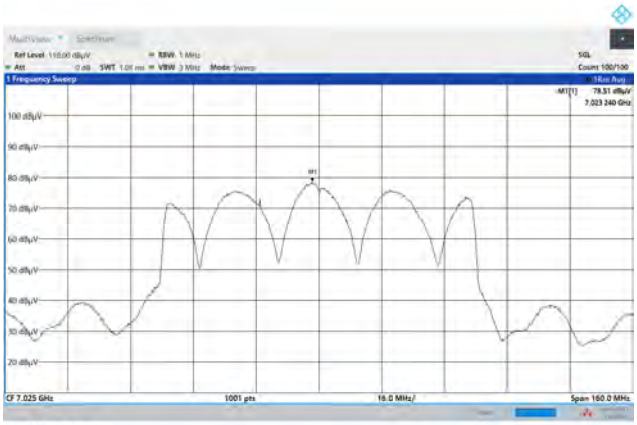
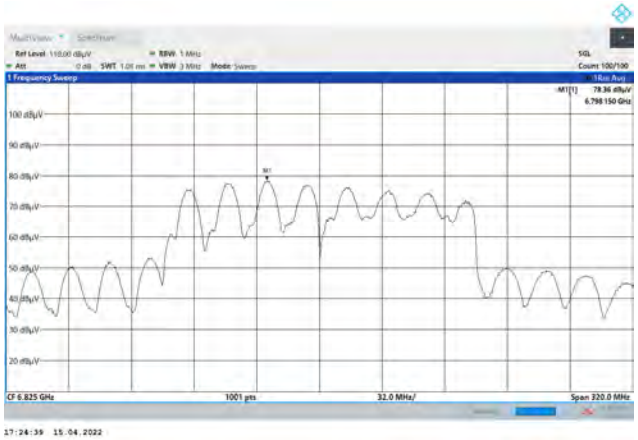
Channel No	Frequency Range	Reading Level	Path Loss	Field Strength	Duty Factor	Correction Factor	EIRP	EIRP limit	Result
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)	(dB)	(dBm)	(dBm)	
3	5965	79.33	20.56	99.89	0.27	-95.23	4.93	5	Pass
51	6205	79.04	20.79	99.83	0.27	-95.23	4.87	5	Pass
91	6405	78.87	21.00	99.87	0.27	-95.23	4.91	5	Pass
99	6445	78.57	21.02	99.59	0.27	-95.23	4.63	5	Pass
107	6485	78.61	20.98	99.59	0.27	-95.23	4.63	5	Pass
115	6525	78.54	21.07	99.61	0.27	-95.23	4.65	5	Pass
123	6565	78.42	21.21	99.63	0.27	-95.23	4.67	5	Pass
155	6725	78.34	21.26	99.60	0.27	-95.23	4.64	5	Pass
179	6845	78.25	21.43	99.68	0.27	-95.23	4.72	5	Pass
185	6885	78.29	21.44	99.73	0.27	-95.23	4.77	5	Pass
195	6925	78.38	21.32	99.70	0.27	-95.23	4.74	5	Pass
211	7005	78.20	21.43	99.63	0.27	-95.23	4.67	5	Pass
227	7085	78.45	21.43	99.88	0.27	-95.23	4.92	5	Pass

802.11ax (80MHz)

Channel No	Frequency Range	Reading Level	Path Loss	Field Strength	Duty Factor	Correction Factor	EIRP	EIRP limit	Result
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)	(dB)	(dBm)	(dBm)	
7	5985	79.27	20.56	99.83	0.29	-95.23	4.89	5	Pass
55	6225	78.87	20.91	99.78	0.29	-95.23	4.84	5	Pass
87	6385	78.75	21.00	99.75	0.29	-95.23	4.81	5	Pass
103	6465	78.78	20.99	99.77	0.29	-95.23	4.83	5	Pass
119	6545	78.39	21.25	99.64	0.29	-95.23	4.70	5	Pass
135	6625	78.55	21.13	99.68	0.29	-95.23	4.74	5	Pass
151	6705	78.31	21.28	99.59	0.29	-95.23	4.65	5	Pass
167	6785	78.36	21.34	99.70	0.29	-95.23	4.76	5	Pass
183	6865	78.24	21.44	99.68	0.29	-95.23	4.74	5	Pass
199	6945	78.59	21.33	99.92	0.29	-95.23	4.98	5	Pass
215	7025	78.51	21.41	99.92	0.29	-95.23	4.98	5	Pass

802.11ax (160MHz)

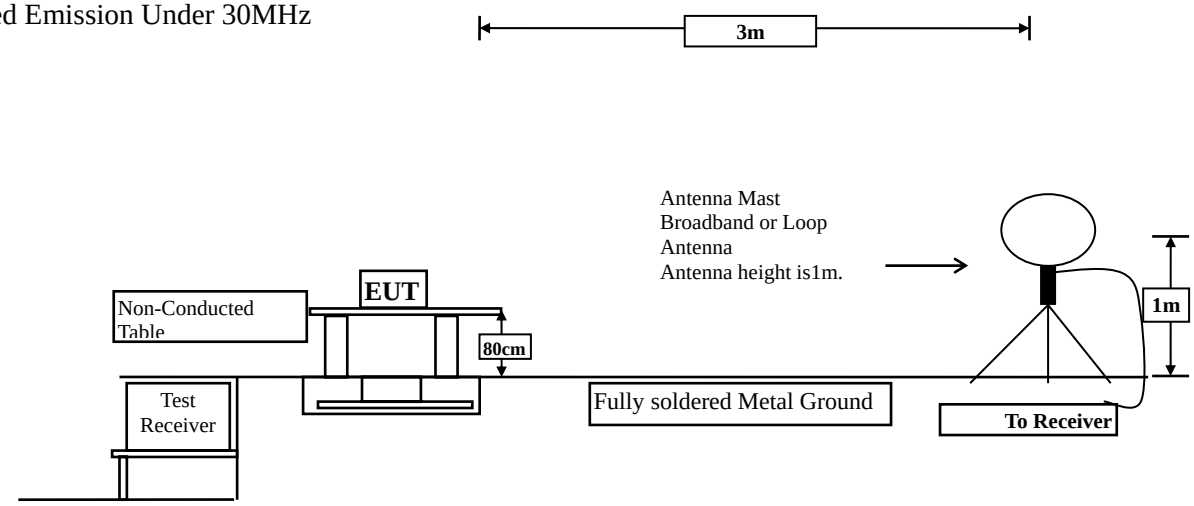
Channel No	Frequency Range	Reading Level	Path Loss	Field Strength	Duty Factor	Correction Factor	EIRP	EIRP limit	Result
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)	(dB)	(dBm)	(dBm)	
15	6025	78.36	21.19	99.55	0.31	-95.23	4.63	5	Pass
47	6185	78.71	20.79	99.50	0.31	-95.23	4.58	5	Pass
79	6345	78.55	20.97	99.52	0.31	-95.23	4.60	5	Pass
111	6505	78.36	21.19	99.55	0.31	-95.23	4.63	5	Pass
143	6665	78.42	21.24	99.66	0.31	-95.23	4.74	5	Pass
175	6825	78.36	21.45	99.81	0.31	-95.23	4.89	5	Pass
207	6985	78.53	21.24	99.77	0.31	-95.23	4.85	5	Pass

Spectrum plot of worst value	
802.11a / 5955 MHz	802.11 ax (20MHz) / 7095 MHz
	
802.11 ax (40MHz) / 5965 MHz	802.11a ax (80MHz) / 7025 MHz
	
802.11ax (160MHz) / 6825 MHz	
	

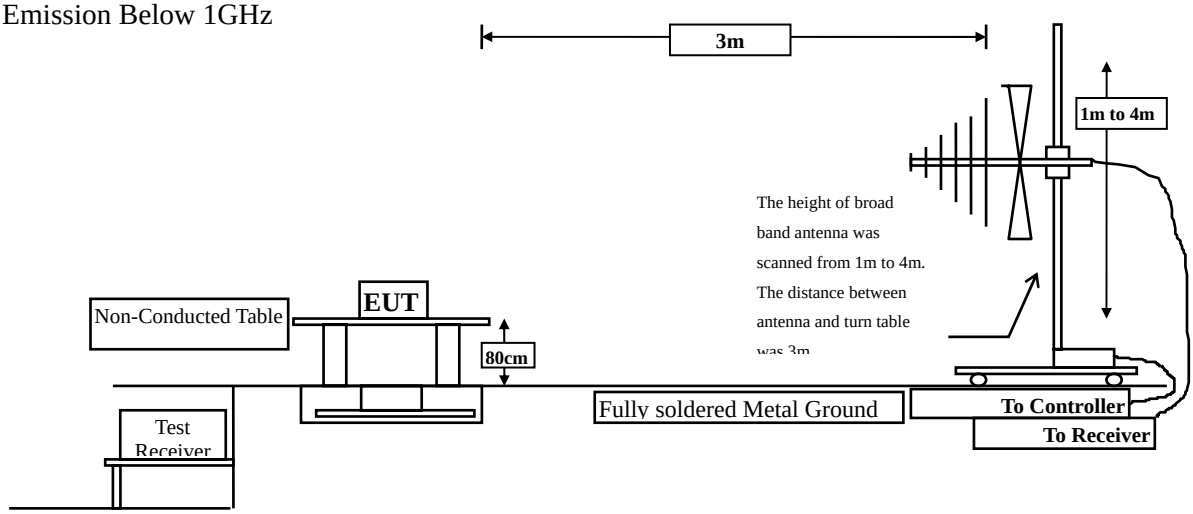
7. Radiated Emission

7.1. Test Setup

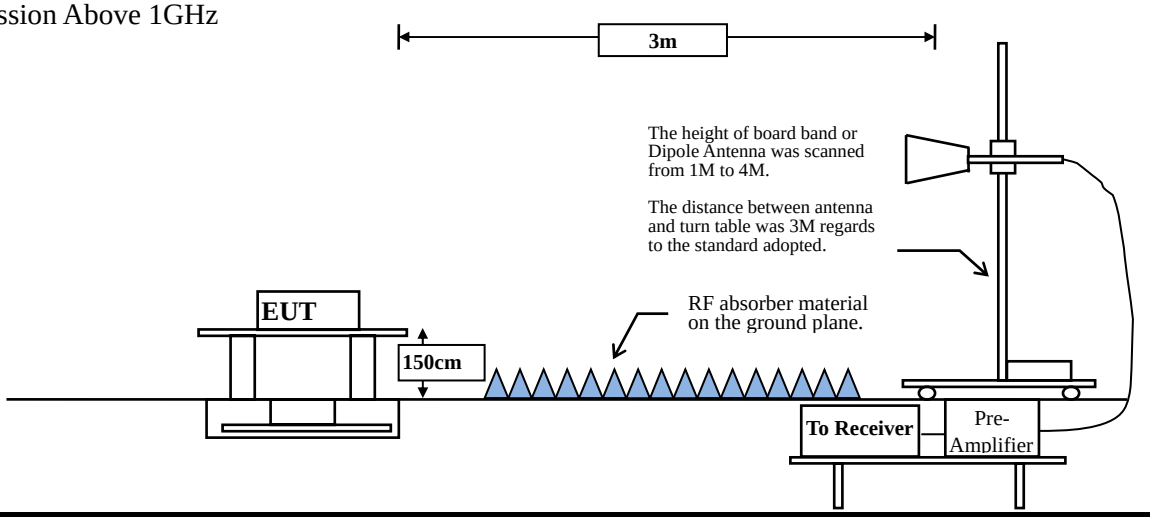
Radiated Emission Under 30MHz



Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



7.2. Limits

General Radiated Emission 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 CFR Title 47 Part 15 Subpart C Paragraph 15.209 Limits		
Frequency MHz	uV/m @3m	dBuV/m@3m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

Remark:

1. RF Voltage (dBuV) = 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.

Unwanted Emission out of the restricted bands Limits

FCC CFR Title 47 Part 15 Subpart E Paragraph 15.407(b) Limits		
Frequency (MHz)	EIRP Limit (dBm/MHz)	Equivalent Field Strength (dBuV/m@3m)
5925 MHz > F 7125 MHz	Peak: -7	88.2
	Average: -27	68.2

Remark:

The following for mula is used to convert the equipment isotropic radiated power (eirp) to field strength:

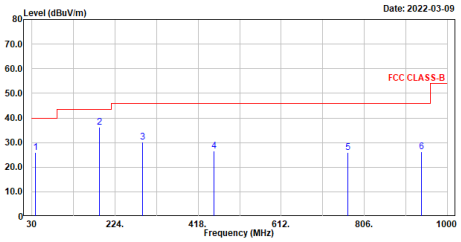
E = $\frac{1000000\sqrt{30P}}{3}$ uV/m, where P is the eirp (Watts).

7.3. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 or 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 additional latch filter below 1GHz was used to measure the level of harmonics radiated emission during field dtrength of harmonics measurement.
The bandwidth below 1GHz setting on the field strength meter is 120 KHz, above 1GHz are 1 MHz.
The frequency range from 30MHz to 10th harmonics and included The frequency range from the lowest oscillator frequency generated within the device up to the 10th harmonic was checked is checked.

7.4. Test Result of Radiated Emissions (30MHz~1GHz)

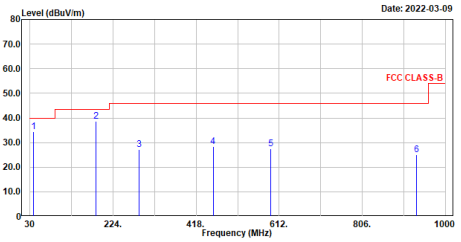
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax160_6985MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	38.730	25.98	40.00	-14.02	50.19	-24.21	QP
2	188.110	36.28	43.50	-7.22	62.67	-26.39	QP
3	288.990	30.11	46.00	-15.89	53.82	-23.71	QP
4	455.830	26.57	46.00	-19.43	45.71	-19.14	QP
5	767.200	25.98	46.00	-20.02	39.59	-13.61	QP
6	938.890	26.16	46.00	-19.84	37.88	-11.72	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 :966-3
Condition :3m ,VERTICAL
Mode :TX_ax160_6985MHz
Test BY :Jing Chang

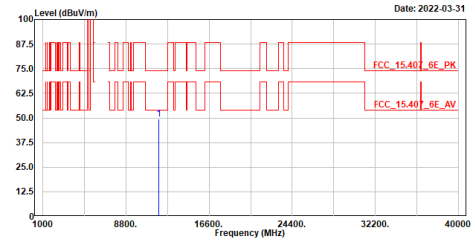


No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	38.730	34.49	40.00	-5.51	58.70	-24.21	QP
2	184.230	38.71	43.50	-4.79	64.56	-25.85	QP
3	285.110	27.26	46.00	-18.74	51.06	-23.80	QP
4	457.770	28.39	46.00	-17.61	47.53	-19.14	QP
5	592.600	27.61	46.00	-18.39	43.69	-16.08	QP
6	932.100	25.16	46.00	-20.84	36.98	-11.82	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.

7.5. Test Result of Radiated Emissions (1GHz~10th Harmonic)

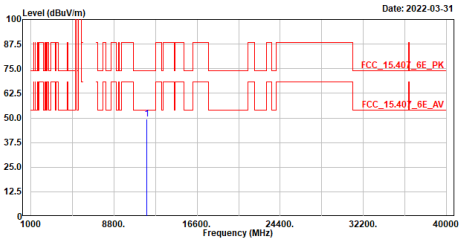
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_a_5955MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11910.000	49.35	74.00	-24.65	41.19	8.16	Peak

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

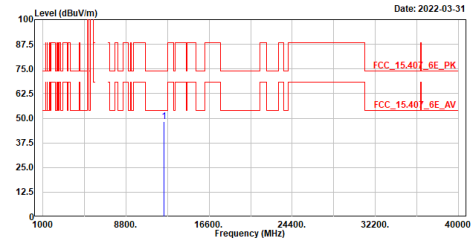
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_a_5955MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11910.000	49.57	74.00	-24.43	41.27	8.30	Peak

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

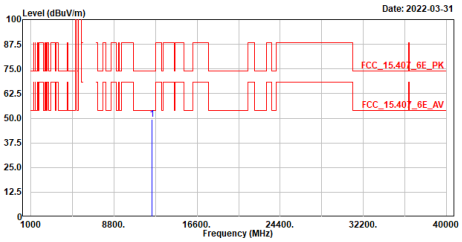
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_a_6175MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12350.000	48.24	74.00	-25.76	39.83	8.41	Peak

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

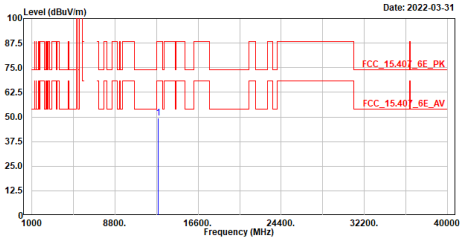
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_a_6175MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12350.000	49.47	74.00	-24.53	40.99	8.48	Peak

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

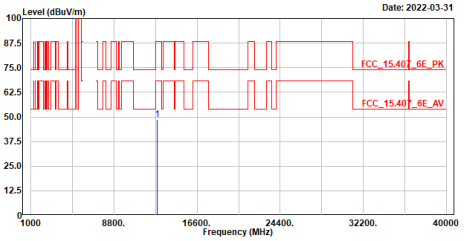
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_a_6415MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12830.000	49.26	88.22	-38.96	40.46	8.80	Peak

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

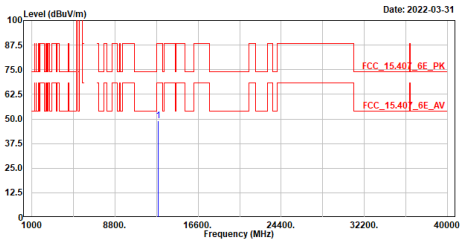
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_a_6415MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12830.000	48.82	88.22	-39.40	40.02	8.80	Peak

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

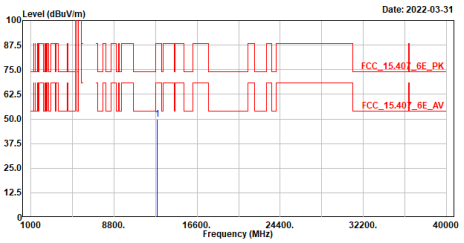
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_a_6435MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12870.000	48.89	88.22	-39.33	39.99	8.90	Peak

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

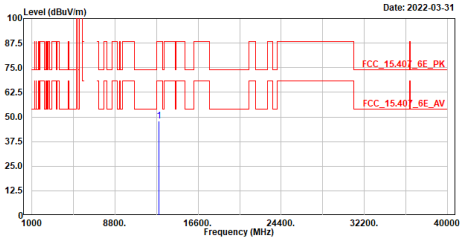
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_a_6435MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12870.000	49.63	88.22	-38.59	40.74	8.89	Peak

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

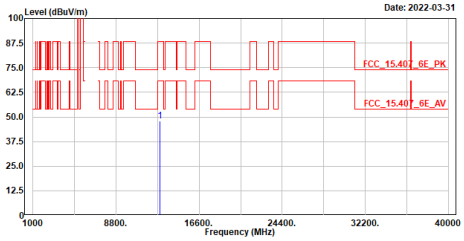
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_a_6475MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12950.000	47.74	88.22	-40.48	38.71	9.03	Peak

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

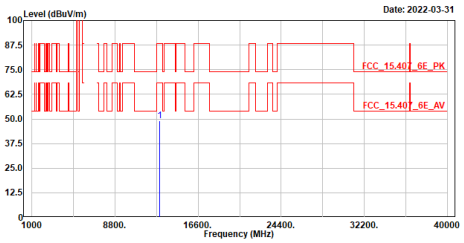
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_a_6475MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12950.000	48.06	88.22	-40.16	39.04	9.02	Peak

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

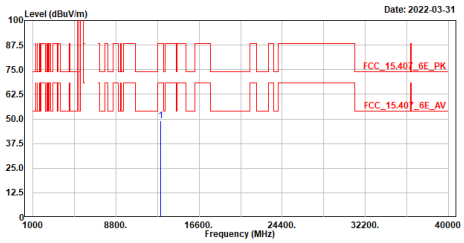
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_a_6515MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13030.000	49.14	88.22	-39.08	40.18	8.96	Peak

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

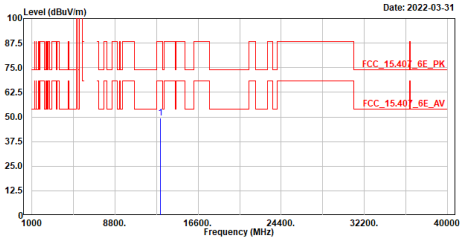
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_a_6515MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13030.000	49.05	88.22	-39.17	40.02	9.03	Peak

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

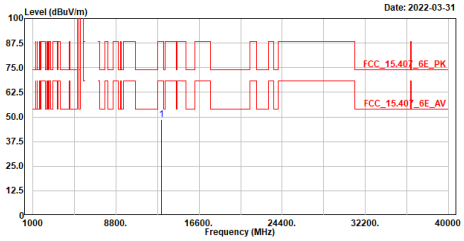
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_a_6535MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13070.000	49.26	88.22	-38.96	40.38	8.88	Peak

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

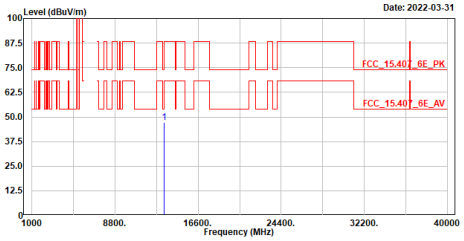
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_a_6535MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13070.000	48.67	88.22	-39.55	39.84	8.83	Peak

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

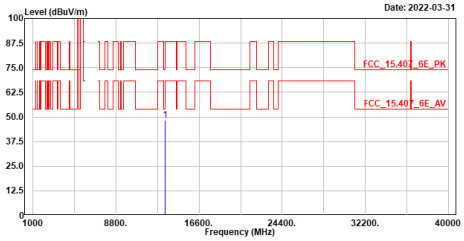
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_a_6695MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13390.000	47.29	74.00	-26.71	38.76	8.53	Peak

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

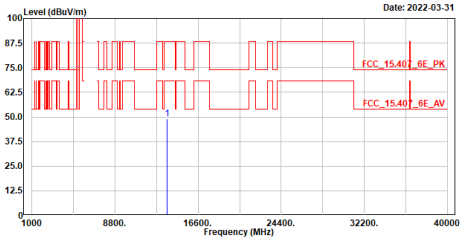
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_a_6695MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13390.000	48.36	74.00	-25.64	39.83	8.53	Peak

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

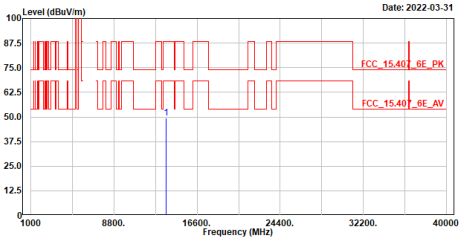
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_a_6855MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13710.000	48.95	88.22	-39.27	40.78	8.17	Peak

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

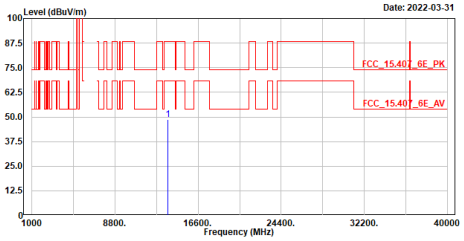
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_a_6855MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13710.000	49.43	88.22	-38.79	41.24	8.19	Peak

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

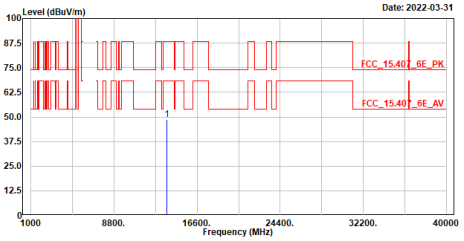
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_a_6875MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13750.000	48.70	88.22	-39.52	40.52	8.18	Peak

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

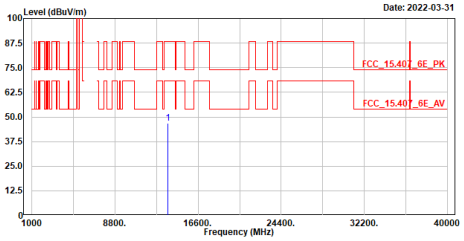
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_a_6875MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13750.000	48.86	88.22	-39.36	40.69	8.17	Peak

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

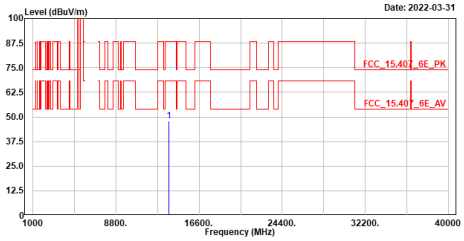
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_a_6895MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13790.000	46.77	88.22	-41.45	38.70	8.07	Peak

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

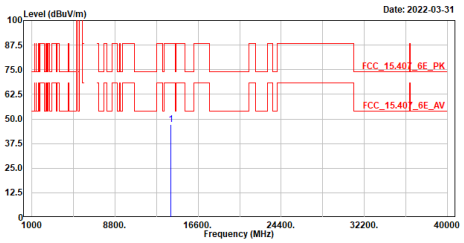
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_a_6895MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13790.000	47.74	88.22	-40.48	39.67	8.07	Peak

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

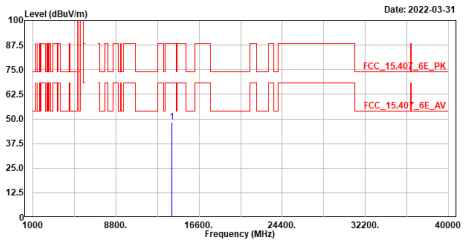
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_a_7015MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	14030.000	47.04	88.22	-41.18	39.00	8.04	Peak

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

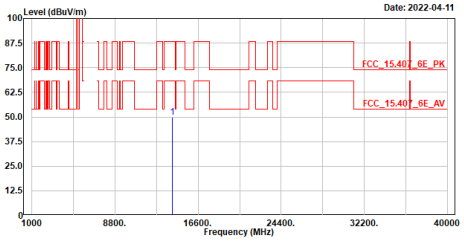
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_a_7015MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	14030.000	48.16	88.22	-40.06	40.12	8.04	Peak

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

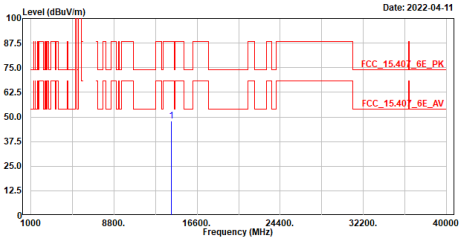
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_a_7095MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	14190.000	49.80	88.22	-38.42	41.58	8.22	Peak

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

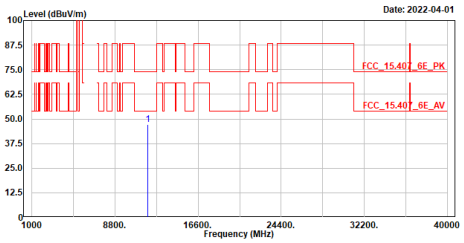
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_a_7095MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	14190.000	48.00	88.22	-40.22	39.75	8.25	Peak

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

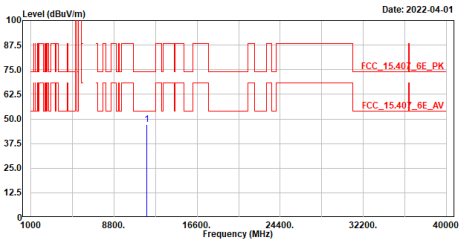
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax20_5955MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11910.000	47.04	74.00	-26.96	38.80	8.24	Peak

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

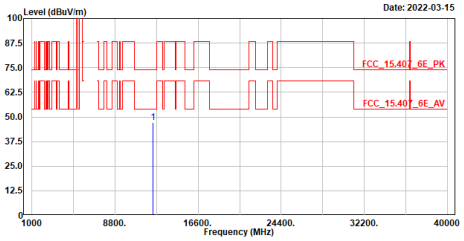
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax20_5955MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11910.000	47.22	74.00	-26.78	38.98	8.24	Peak

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

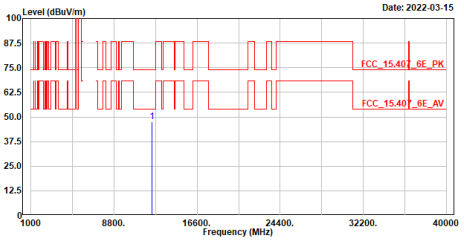
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax20_6175MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12350.000	47.21	74.00	-26.79	38.78	8.43	Peak

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

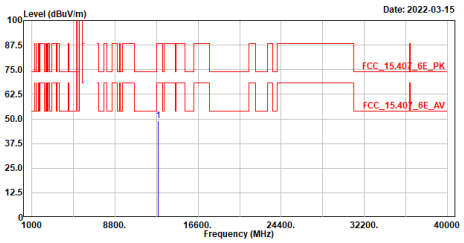
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax20_6175MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12350.000	47.71	74.00	-26.29	39.28	8.43	Peak

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

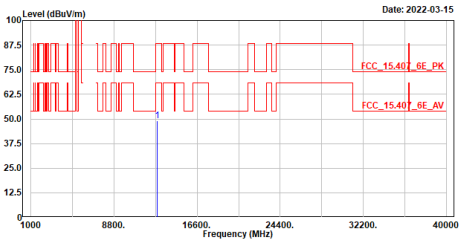
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax20_6415MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12830.000	49.24	88.22	-38.98	40.41	8.83	Peak

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

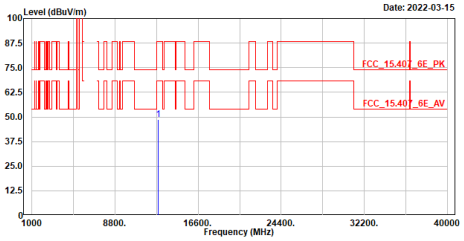
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax20_6415MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12830.000	49.23	88.22	-38.99	40.40	8.83	Peak

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

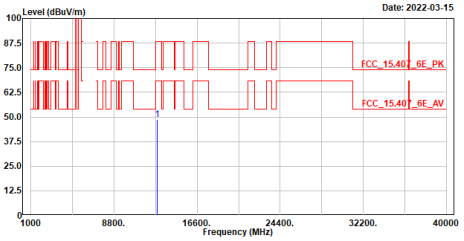
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax20_6435MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12870.000	48.52	88.22	-39.70	39.60	8.92	Peak

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

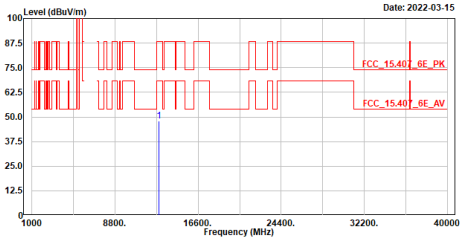
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax20_6435MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12870.000	48.76	88.22	-39.46	39.84	8.92	Peak

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

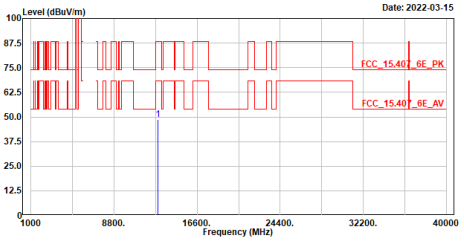
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax20_6475MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12950.000	47.97	88.22	-40.25	38.95	9.02	Peak

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

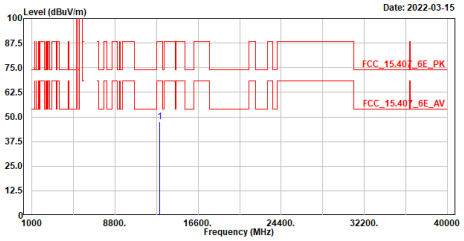
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax20_6475MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12950.000	48.54	88.22	-39.68	39.52	9.02	Peak

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

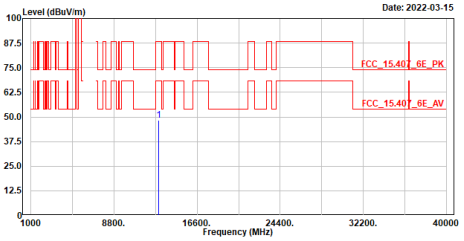
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax20_6515MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13030.000	47.49	88.22	-40.73	38.51	8.98	Peak

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

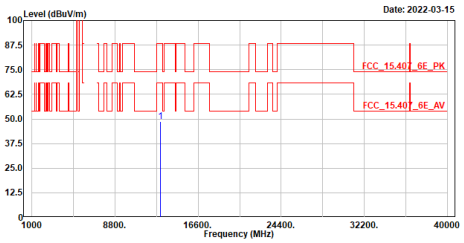
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax20_6515MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13030.000	48.26	88.22	-39.96	39.28	8.98	Peak

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

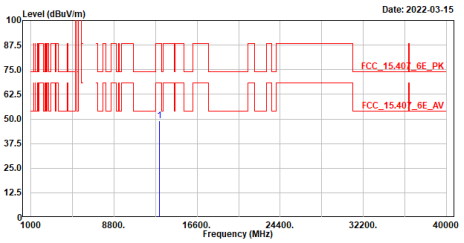
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax20_6535MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13070.000	48.68	88.22	-39.54	39.78	8.90	Peak

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

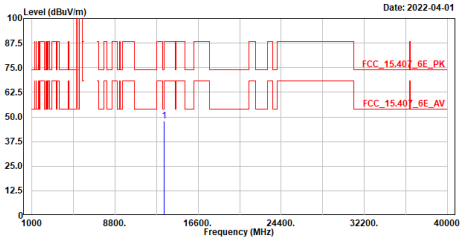
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax20_6535MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13070.000	49.09	88.22	-39.13	40.19	8.90	Peak

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

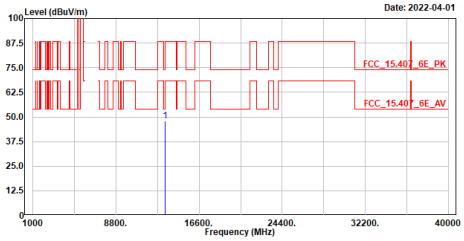
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax20_6695MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13390.000	48.09	74.00	-25.91	39.56	8.53	Peak

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

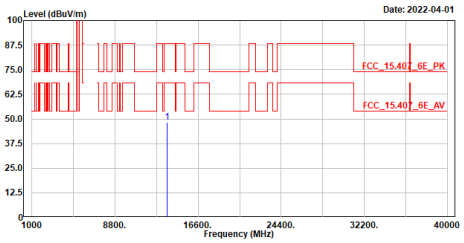
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax20_6695MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13390.000	47.85	74.00	-26.15	39.32	8.53	Peak

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

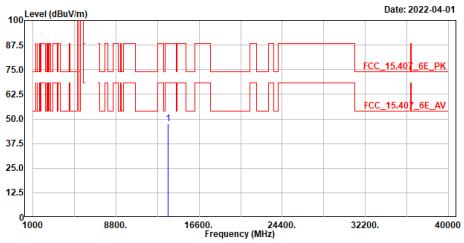
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax20_6855MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13710.000	48.14	88.22	-40.08	39.94	8.20	Peak

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

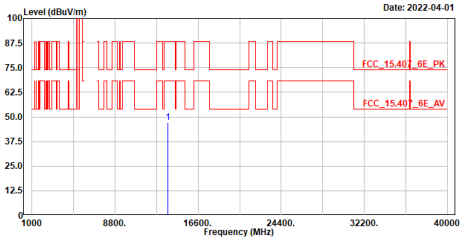
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax20_6855MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13710.000	47.50	88.22	-40.72	39.30	8.20	Peak

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

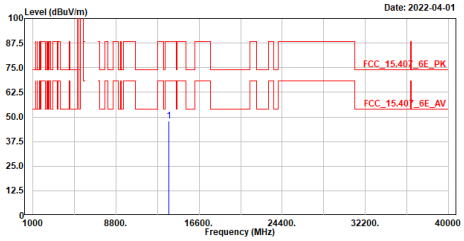
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax20_6875MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13750.000	47.13	88.22	-41.09	38.96	8.17	Peak

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

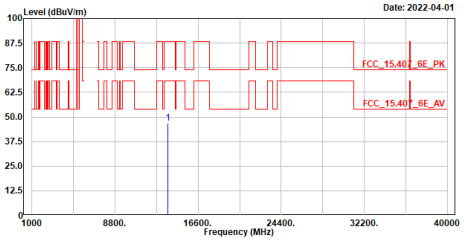
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax20_6875MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13750.000	47.76	88.22	-40.46	39.59	8.17	Peak

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

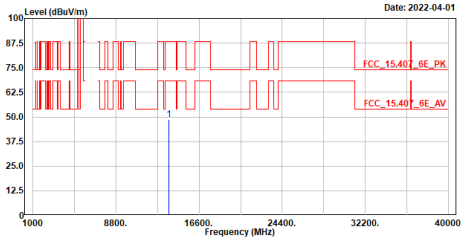
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax20_6895MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13790.000	46.97	88.22	-41.25	38.90	8.07	Peak

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

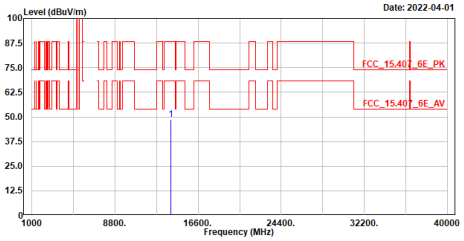
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax20_6895MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13790.000	48.75	88.22	-39.47	40.68	8.07	Peak

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

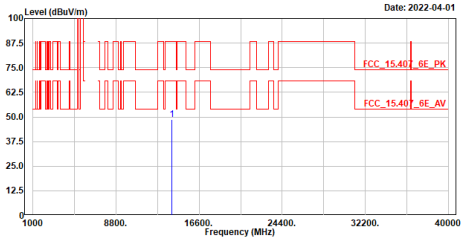
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax20_7015MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	14030.000	48.74	88.22	-39.48	40.70	8.04	Peak

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

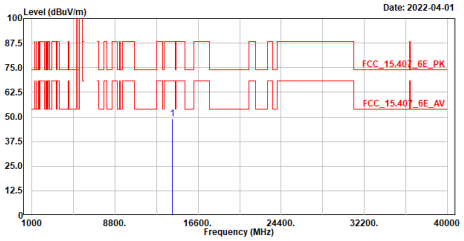
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax20_7015MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	14030.000	48.85	88.22	-39.37	40.81	8.04	Peak

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

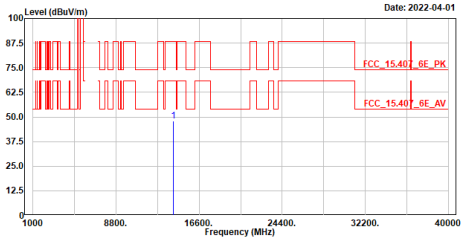
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax20_7095MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	14190.000	49.00	88.22	-39.22	40.66	8.34	Peak

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

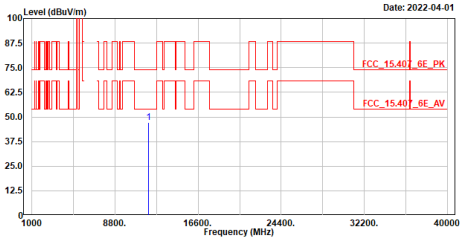
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax20_7095MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	14190.000	47.75	88.22	-40.47	39.41	8.34	Peak

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

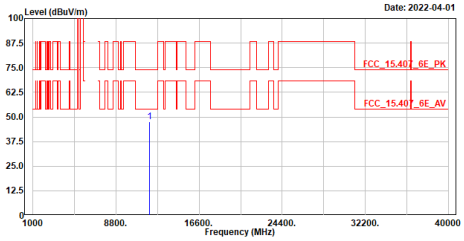
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax40_5965MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11930.000	47.05	74.00	-26.95	38.77	8.28	Peak

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

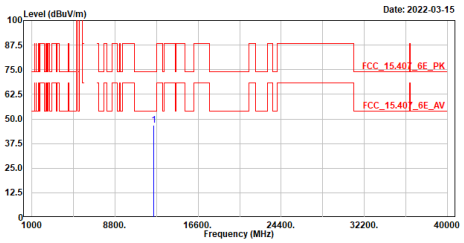
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax40_5965MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11930.000	47.65	74.00	-26.35	39.37	8.28	Peak

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

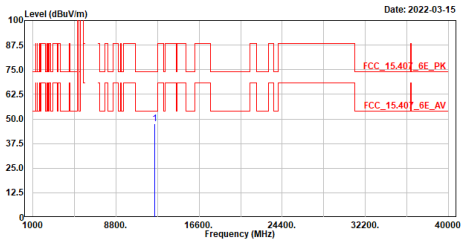
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax40_6205MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12410.000	46.66	74.00	-27.34	38.27	8.39	Peak

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

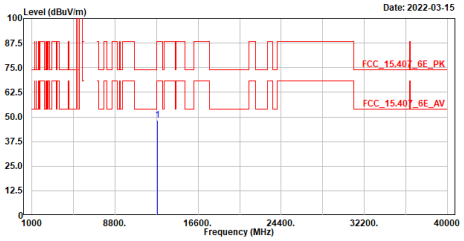
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax40_6205MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12410.000	47.59	74.00	-26.41	39.20	8.39	Peak

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

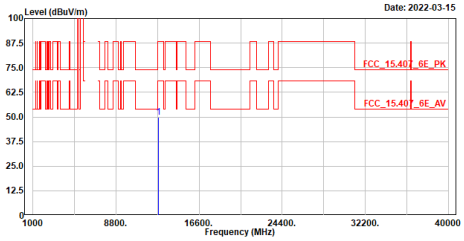
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax40_6405MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12810.000	48.28	88.22	-39.94	39.48	8.80	Peak

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

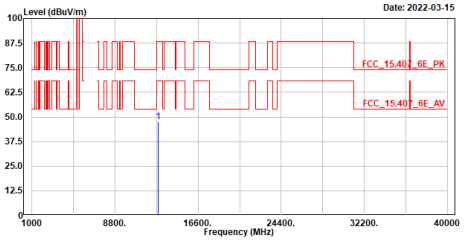
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax40_6405MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12810.000	49.79	88.22	-38.43	40.99	8.80	Peak

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

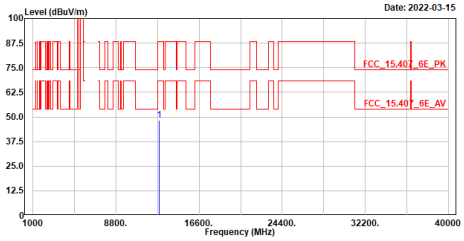
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax40_6445MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12890.000	47.37	88.22	-40.85	38.40	8.97	Peak

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

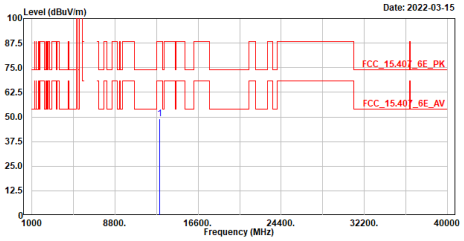
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax40_6445MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12890.000	48.35	88.22	-39.87	39.38	8.97	Peak

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

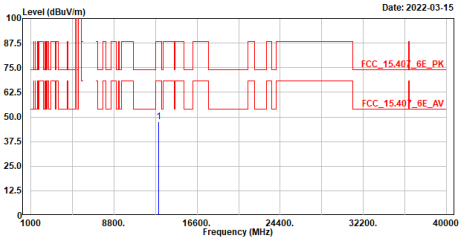
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax40_6485MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12970.000	49.12	88.22	-39.10	40.08	9.04	Peak

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

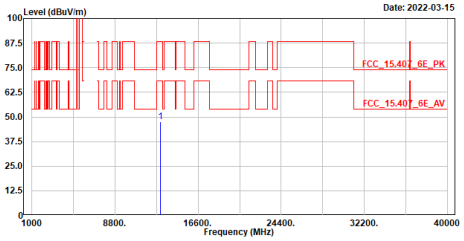
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax40_6485MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12970.000	47.68	88.22	-40.54	38.64	9.04	Peak

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

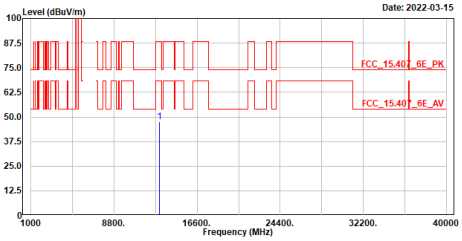
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax40_6525MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13050.000	47.67	88.22	-40.55	38.73	8.94	Peak

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

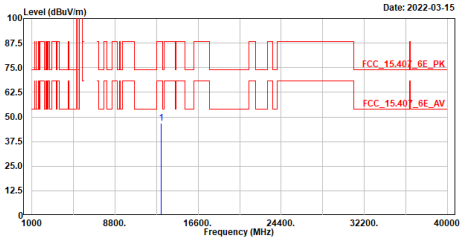
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax40_6525MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13050.000	47.48	88.22	-40.74	38.54	8.94	Peak

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

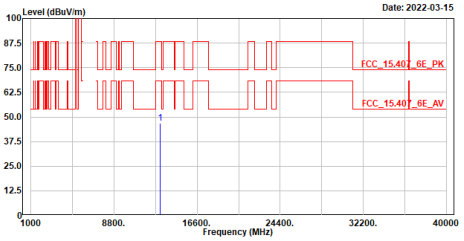
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax40_6565MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13130.000	46.94	88.22	-41.28	38.17	8.77	Peak

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

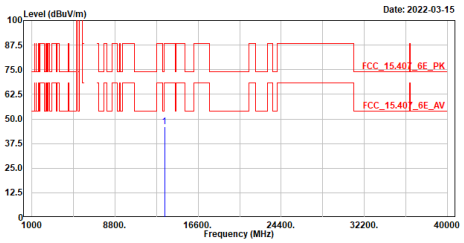
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax40_6565MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13130.000	46.76	88.22	-41.46	37.99	8.77	Peak

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

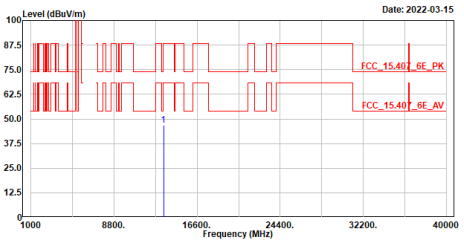
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax40_6725MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13450.000	46.05	88.22	-42.17	37.53	8.52	Peak

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

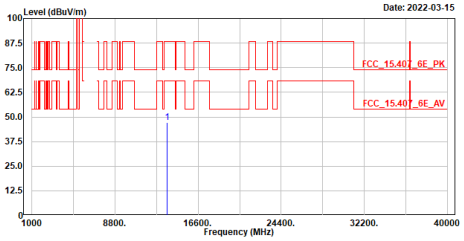
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax40_6725MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13450.000	46.95	88.22	-41.27	38.43	8.52	Peak

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

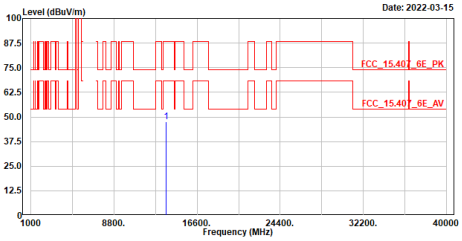
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax40_6845MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13690.000	47.18	88.22	-41.04	38.98	8.20	Peak

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

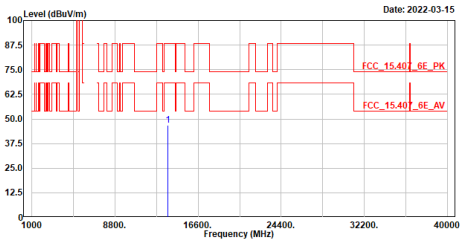
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax40_6845MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13690.000	47.38	88.22	-40.84	39.18	8.20	Peak

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

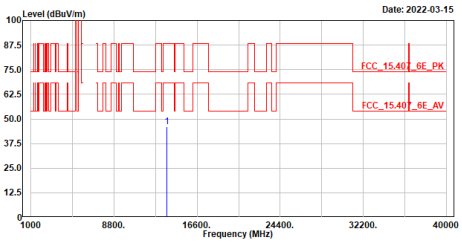
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax40_6885MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13770.000	46.75	88.22	-41.47	38.63	8.12	Peak

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

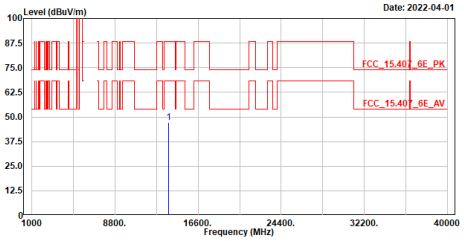
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax40_6885MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13770.000	46.00	88.22	-42.22	37.88	8.12	Peak

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

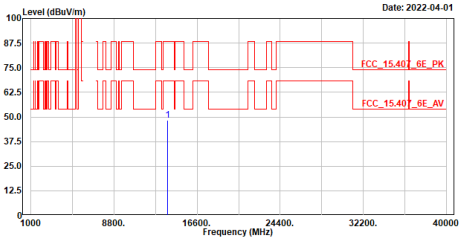
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax40_6925MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13850.000	47.26	88.22	-40.96	39.24	8.02	Peak

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

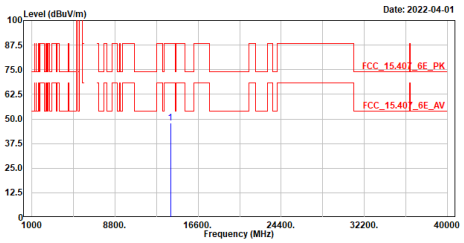
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax40_6925MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13850.000	48.36	88.22	-39.86	40.34	8.02	Peak

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

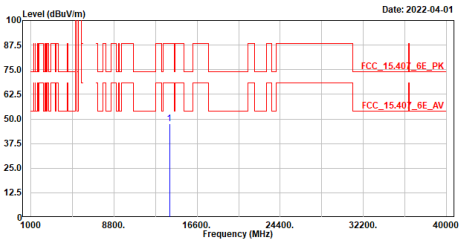
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax40_7005MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	14010.000	47.75	88.22	-40.47	39.66	8.09	Peak

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

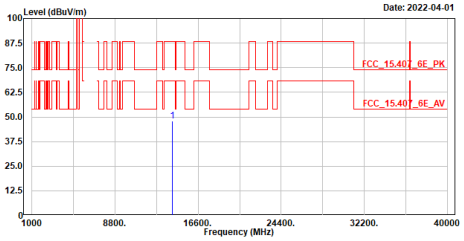
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax40_7005MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	14010.000	47.51	88.22	-40.71	39.42	8.09	Peak

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

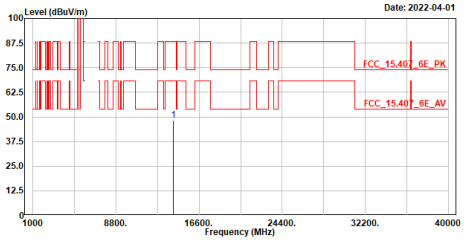
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax40_7085MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	14170.000	47.98	88.22	-40.24	39.80	8.18	Peak

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

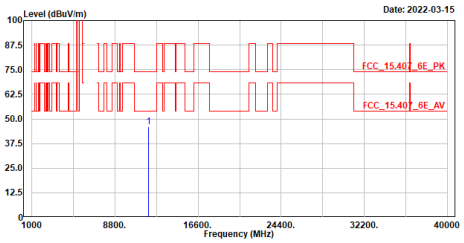
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax40_7085MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	14170.000	48.31	88.22	-39.91	40.13	8.18	Peak

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

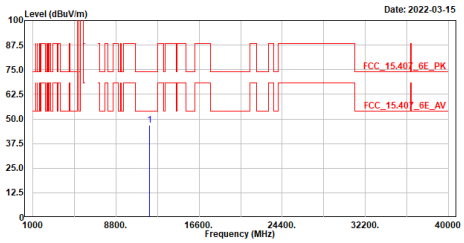
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax80_5985MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11970.000	46.16	74.00	-27.84	37.80	8.36	Peak

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

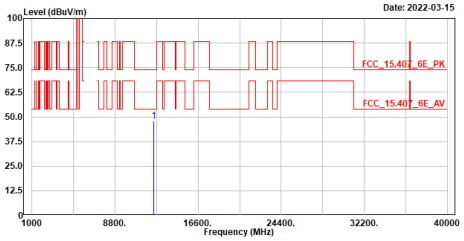
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax80_5985MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	11970.000	46.67	74.00	-27.33	38.31	8.36	Peak

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

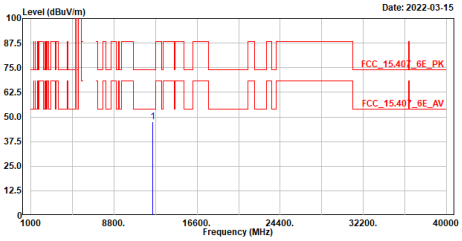
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax80_6225MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12450.000	47.80	74.00	-26.20	39.32	8.48	Peak

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

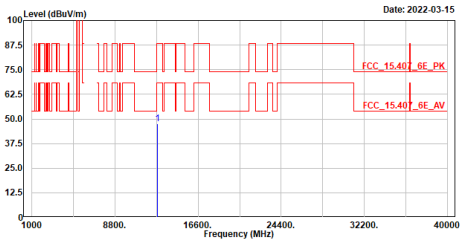
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax80_6225MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12450.000	47.40	74.00	-26.60	38.92	8.48	Peak

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

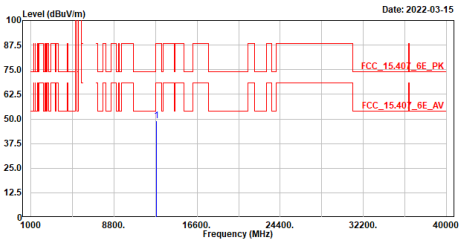
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax80_6385MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12770.000	47.63	88.22	-40.59	38.82	8.81	Peak

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

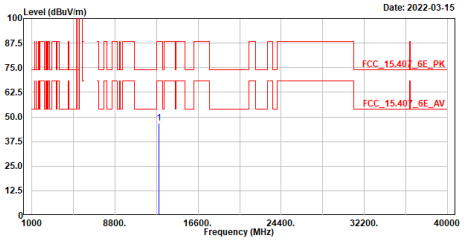
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax80_6385MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12770.000	49.13	88.22	-39.09	40.32	8.81	Peak

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

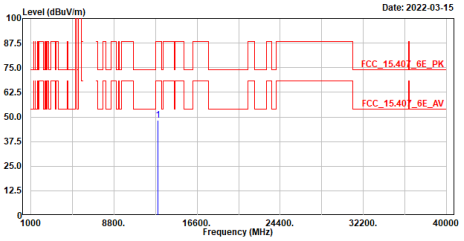
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax80_6465MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12930.000	46.96	88.22	-41.26	37.96	9.00	Peak

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

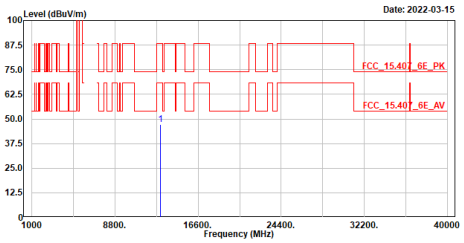
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax80_6465MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12930.000	48.45	88.22	-39.77	39.45	9.00	Peak

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

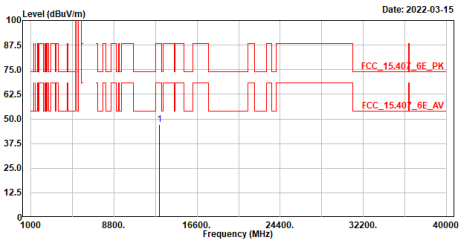
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax80_6545MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13090.000	47.18	88.22	-41.04	38.32	8.86	Peak

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

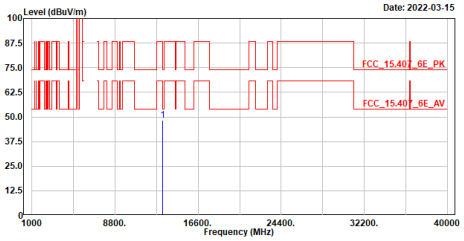
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax80_6545MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13090.000	47.28	88.22	-40.94	38.42	8.86	Peak

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

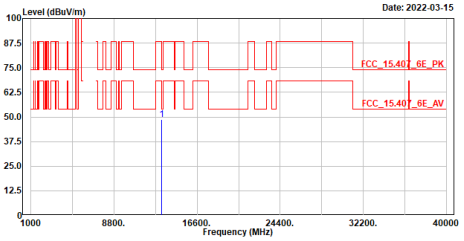
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax80_6625MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13250.000	48.34	74.00	-25.66	39.63	8.71	Peak

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

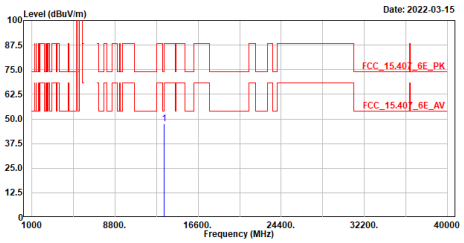
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax80_6625MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13250.000	48.57	74.00	-25.43	39.86	8.71	Peak

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

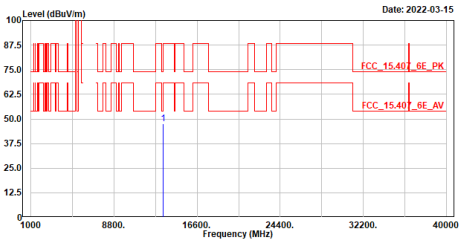
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax80_6705MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13410.000	47.71	88.22	-40.51	39.21	8.50	Peak

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

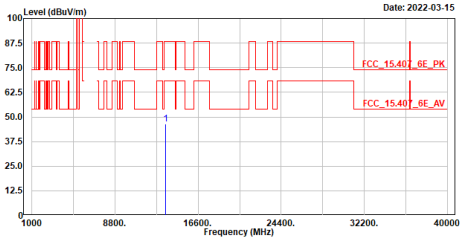
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax80_6705MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13410.000	47.42	88.22	-40.80	38.92	8.50	Peak

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

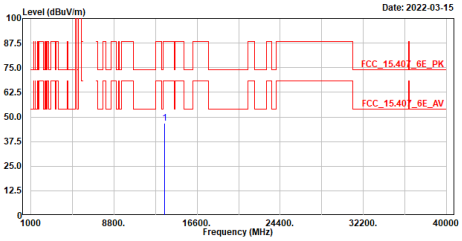
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax80_6785MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13570.000	46.33	88.22	-41.89	37.93	8.40	Peak

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

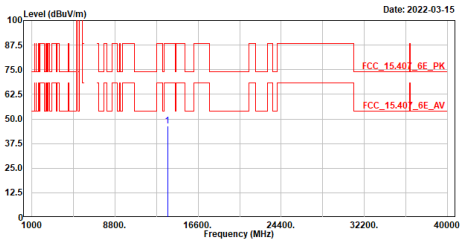
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax80_6785MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13570.000	46.78	88.22	-41.44	38.38	8.40	Peak

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

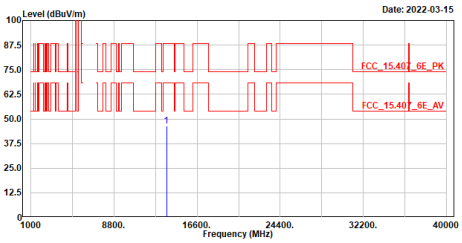
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax80_6865MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13730.000	46.26	88.22	-41.96	38.08	8.18	Peak

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

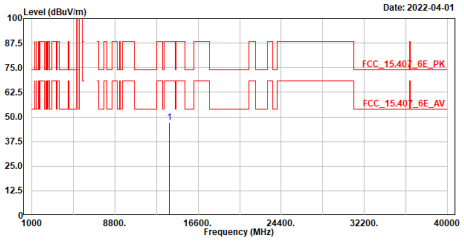
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax80_6865MHz
Test BY :Edward Wang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13730.000	46.38	88.22	-41.84	38.20	8.18	Peak

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

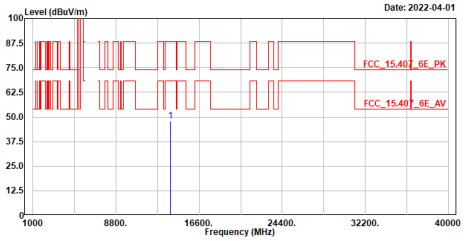
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax80_6945MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13890.000	47.03	88.22	-41.19	39.00	8.03	Peak

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

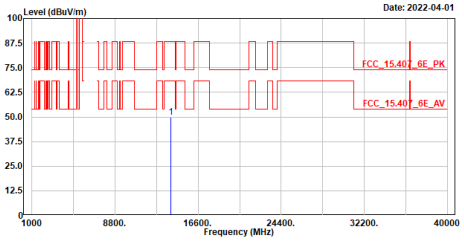
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax80_6945MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13890.000	47.97	88.22	-40.25	39.94	8.03	Peak

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

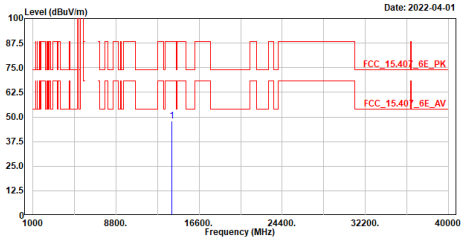
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax80_7025MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	14050.000	49.72	88.22	-38.50	41.72	8.00	Peak

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

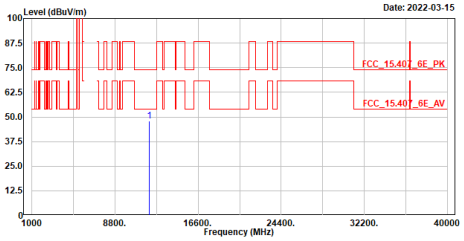
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax80_7025MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	14050.000	47.87	88.22	-40.35	39.87	8.00	Peak

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

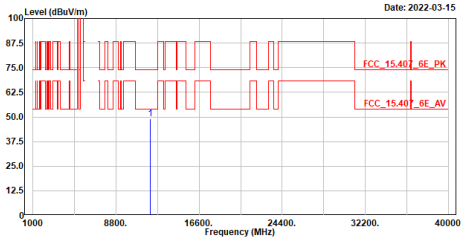
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax160_6025MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12050.000	47.89	74.00	-26.11	39.44	8.45	Peak

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

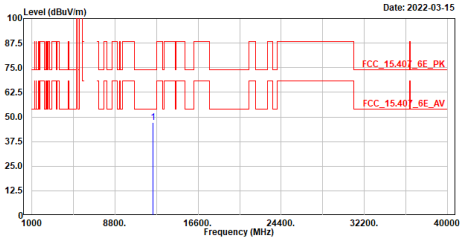
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax160_6025MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12050.000	48.88	74.00	-25.12	40.43	8.45	Peak

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

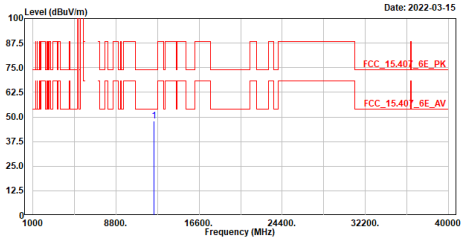
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax160_6185MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12370.000	47.13	74.00	-26.87	38.72	8.41	Peak

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

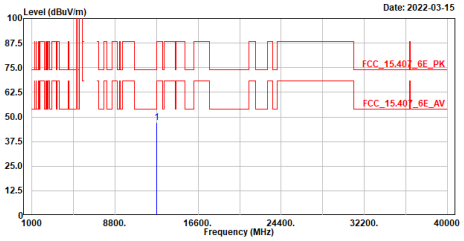
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax160_6185MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12370.000	48.07	74.00	-25.93	39.66	8.41	Peak

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

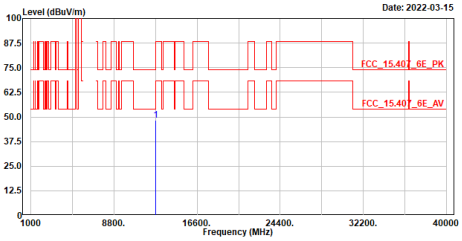
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax160_6345MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12690.000	47.29	74.00	-26.71	38.55	8.74	Peak

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

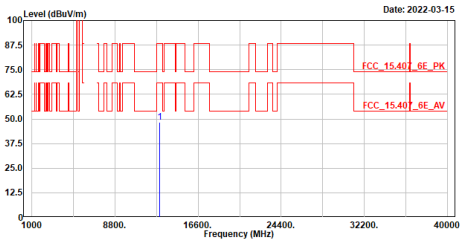
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax160_6345MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	12690.000	48.33	74.00	-25.67	39.59	8.74	Peak

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

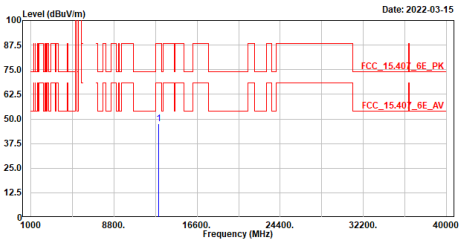
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax160_6505MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13010.000	48.15	88.22	-40.07	39.12	9.03	Peak

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

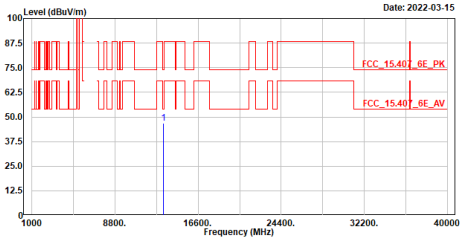
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax160_6505MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13010.000	47.47	88.22	-40.75	38.44	9.03	Peak

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

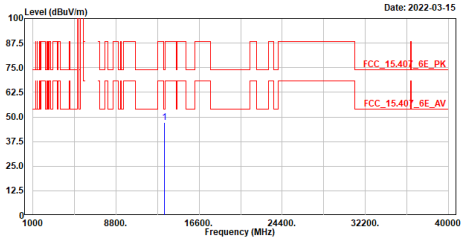
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax160_6665MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13330.000	46.80	74.00	-27.20	38.11	8.69	Peak

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

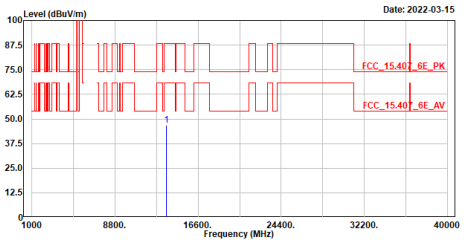
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax160_6665MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13330.000	47.06	74.00	-26.94	38.37	8.69	Peak

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

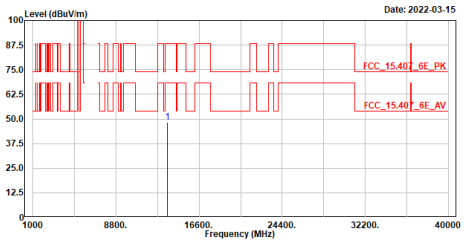
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax160_6825MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13650.000	46.92	88.22	-41.30	38.70	8.22	Peak

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

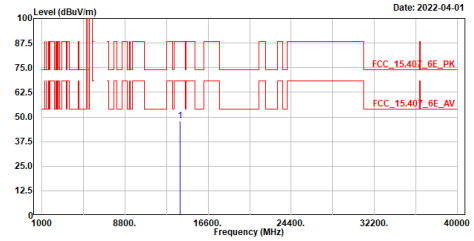
Site :966-3
Condition :3m ,VERTICAL
Mode :TX_ax160_6825MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13650.000	48.28	88.22	-39.94	40.06	8.22	Peak

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

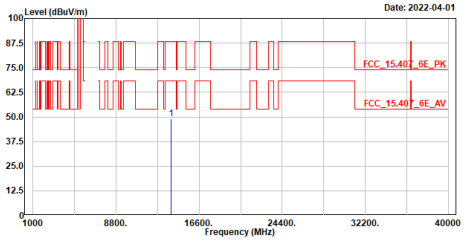
Site :966-3
Condition :3m ,HORIZONTAL
Mode :TX_ax160_6985MHz
Test BY :Jing Chang



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13970.000	47.77	88.22	-40.45	39.69	8.08	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_ax160_6985MHz
Test BY :Jing Chang



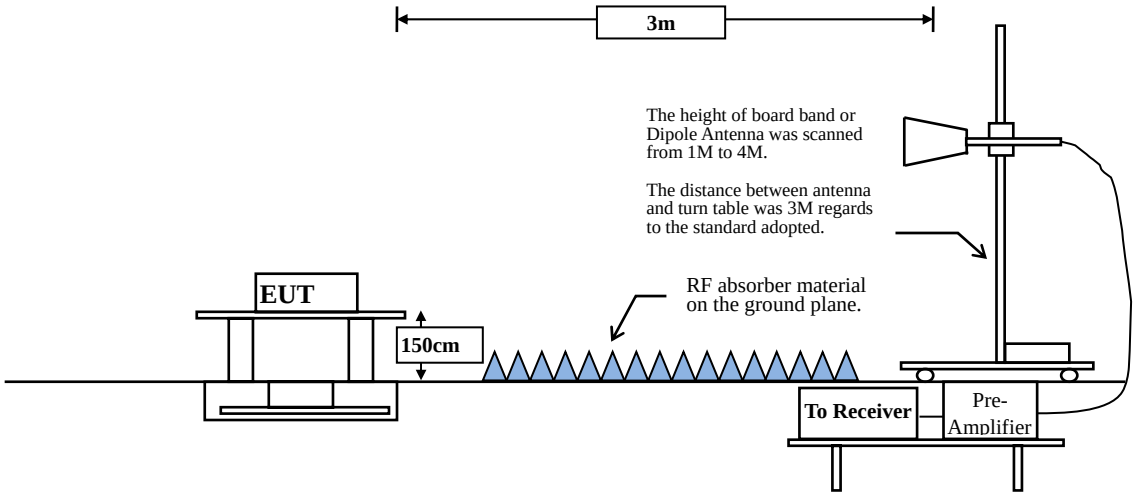
No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	13970.000	48.94	88.22	-39.28	40.86	8.08	Peak

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

8. Band Edge

8.1. Test Setup

Radiated Emission Above 1GHz



8.2. Limits

General Radiated Emission 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 CFR Title 47 Part 15 Subpart C Paragraph 15.209 Limits		
Frequency MHz	uV/m @3m	dBuV/m@3m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

Remark:

1. RF Voltage (dBuV) = 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.

Unwanted Emission out of the restricted bands Limits

FCC CFR Title 47 Part 15 Subpart E Paragraph 15.407(b) Limits		
Frequency (MHz)	EIRP Limit (dBm/MHz)	Equivalent Field Strength (dBuV/m@3m)
5925 MHz > F 7125 MHz	Peak: -7	88.2
	Average: -27	68.2

Remark:

The following for mula is used to convert the equipment isotropic radiated power (eirp) to field strength:

E = $\frac{1000000\sqrt{30P}}{3}$ uV/m, where P is the eirp (Watts).

8.3. Test Procedure

The EUT and its simulators are 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.

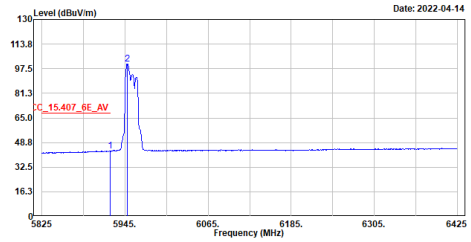
The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

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: 2013on radiated measurement.

The bandwidth below 1GHz setting on the field strength meter is 120 KHz, above 1GHz are 1 MHz.

8.4. Test Result of Band Edge

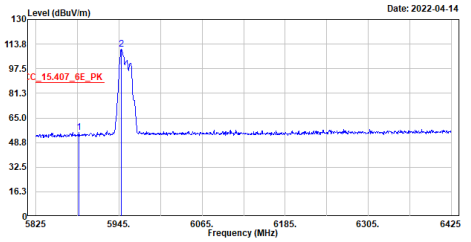
Site :HY-CB03
Condition :3m ,Horizontal
Mode :TX_a_5955MHz
Test BY :Gavin Wu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5924.000	43.24	68.22	-24.98	22.77	20.47	Average
2	5948.000	100.72	------	------	80.17	20.55	Average

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

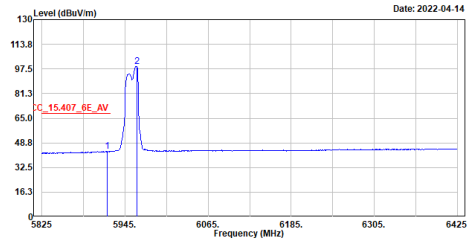
Site :HY-CB03
Condition :3m ,Horizontal
Mode :TX_a_5955MHz
Test BY :Gavin Wu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5886.800	55.54	88.22	-32.68	35.23	20.31	Peak
2	5948.000	110.14	------	------	89.59	20.55	Peak

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

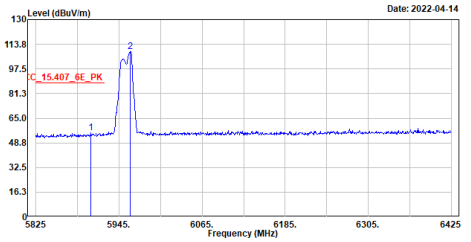
Site :HY-CB03
Condition :3m ,Vertical
Mode :TX_a_5955MHz
Test BY :Gavin Wu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5919.800	43.15	68.22	-25.07	22.69	20.46	Average
2	5961.800	99.29	------	------	78.73	20.56	Average

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

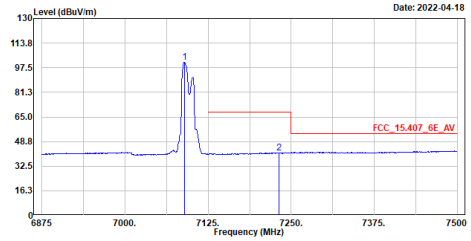
Site :HY-CB03
Condition :3m ,Vertical
Mode :TX_a_5955MHz
Test BY :Gavin Wu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5904.800	55.22	88.22	-33.00	34.81	20.41	Peak
2	5961.200	108.95	------	------	88.39	20.56	Peak

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

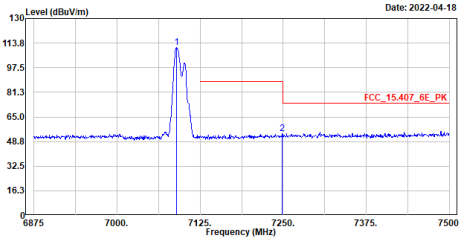
Site :HY-CB03
Condition :3m ,Horizontal
Mode :TX_a_7095MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	7089.375	101.28	------	------	79.83	21.45	Average
2	7231.250	41.37	68.22	-26.85	19.87	21.50	Average

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

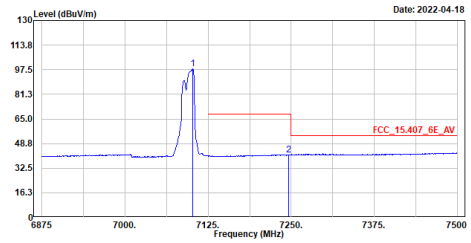
Site :HY-CB03
Condition :3m ,Horizontal
Mode :TX_a_7095MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	7090.000	110.72	------	------	89.27	21.45	Peak
2	7248.750	53.74	88.22	-34.48	32.21	21.53	Peak

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

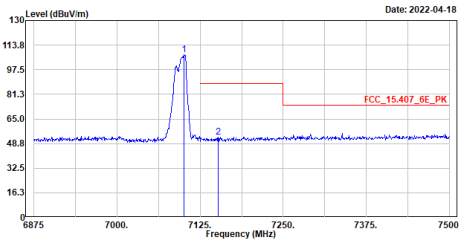
Site :HY-CB03
Condition :3m ,Vertical
Mode :TX_a_7095MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	7101.875	97.87	------	------	76.40	21.47	Average
2	7246.250	41.45	68.22	-26.77	19.93	21.52	Average

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

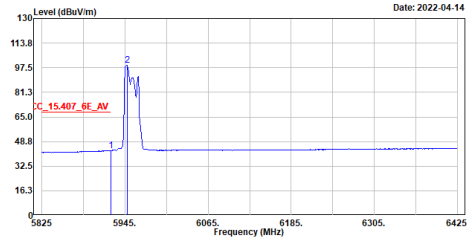
Site :HY-CB03
Condition :3m ,Vertical
Mode :TX_a_7095MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	7101.250	107.23	------	------	85.76	21.47	Peak
2	7152.500	53.15	88.22	-35.07	31.77	21.38	Peak

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

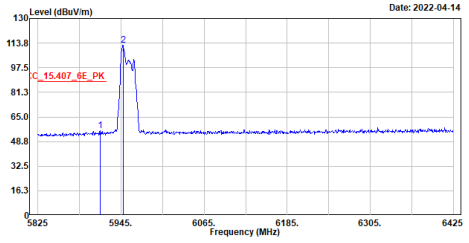
Site :HY-CB03
Condition :3m ,Horizontal
Mode :TX_ax20_5955MHz
Test BY :Gavin Wu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5924.600	42.68	68.22	-25.54	22.21	20.47	Average
2	5948.000	99.27	------	------	78.72	20.55	Average

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

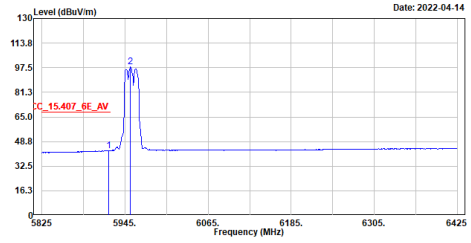
Site :HY-CB03
Condition :3m ,Horizontal
Mode :TX_ax20_5955MHz
Test BY :Gavin Wu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5915.000	55.76	88.22	-32.46	35.32	20.44	Peak
2	5948.000	112.43	------	------	91.88	20.55	Peak

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

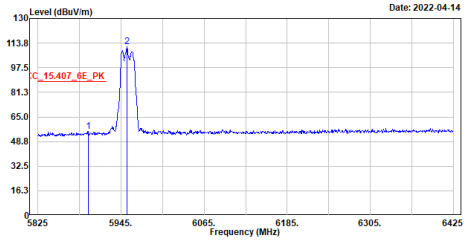
Site :HY-CB03
Condition :3m ,Vertical
Mode :TX_ax20_5955MHz
Test BY :Gavin Wu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5921.000	42.81	68.22	-25.41	22.35	20.46	Average
2	5952.800	97.90	------	------	77.35	20.55	Average

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

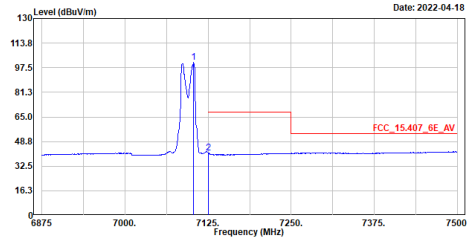
Site :HY-CB03
Condition :3m ,Vertical
Mode :TX_ax20_5955MHz
Test BY :Gavin Wu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5897.600	55.65	88.22	-32.57	35.26	20.39	Peak
2	5954.000	111.12	------	------	90.57	20.55	Peak

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

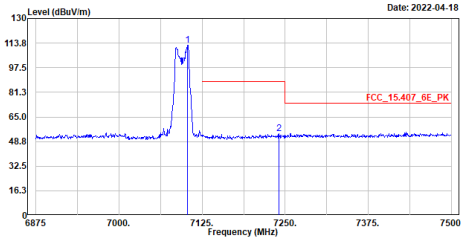
Site :HY-CB03
Condition :3m ,Horizontal
Mode :TX_ax20_7095MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	7103.125	101.30	------	------	79.84	21.46	Average
2	7125.000	41.36	68.22	-26.86	19.94	21.42	Average

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

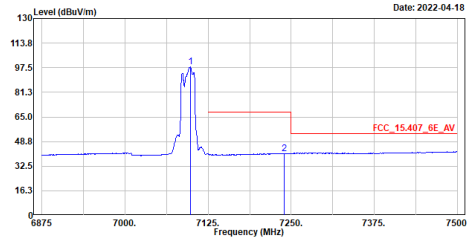
Site :HY-CB03
Condition :3m ,Horizontal
Mode :TX_ax20_7095MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	7103.125	112.39	------	------	90.93	21.46	Peak
2	7240.625	53.89	88.22	-34.33	32.37	21.52	Peak

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

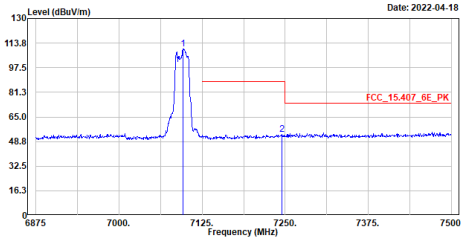
Site :HY-CB03
Condition :3m ,Vertical
Mode :TX_ax20_7095MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	7098.125	97.96	------	------	76.49	21.47	Average
2	7239.375	40.96	68.22	-27.26	19.45	21.51	Average

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

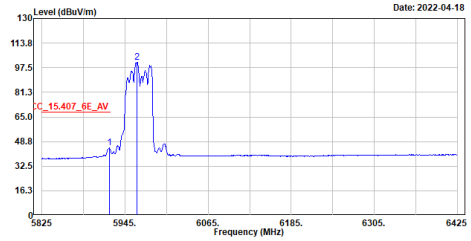
Site :HY-CB03
Condition :3m ,Vertical
Mode :TX_ax20_7095MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	7096.250	110.02	------	------	88.56	21.46	Peak
2	7245.625	53.45	88.22	-34.77	31.93	21.52	Peak

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

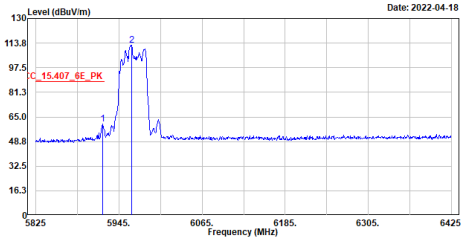
Site :HY-CB03
Condition :3m ,Horizontal
Mode :TX_ax40_5965MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5922.800	44.50	68.22	-23.72	24.03	20.47	Average
2	5962.400	101.09	------	------	80.53	20.56	Average

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

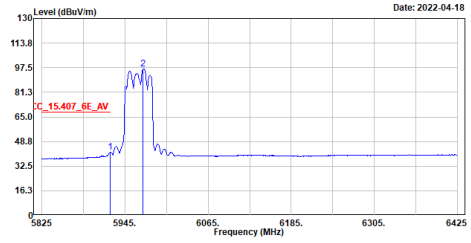
Site :HY-CB03
Condition :3m ,Horizontal
Mode :TX_ax40_5965MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5921.000	60.21	88.22	-28.01	39.75	20.46	Peak
2	5963.600	112.37	------	------	91.81	20.56	Peak

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

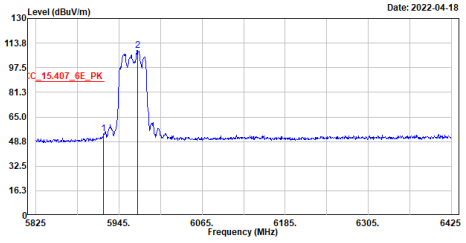
Site :HY-CB03
Condition :3m ,Vertical
Mode :TX_ax40_5965MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5924.000	41.93	68.22	-26.29	21.46	20.47	Average
2	5971.400	96.81	------	------	76.24	20.57	Average

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

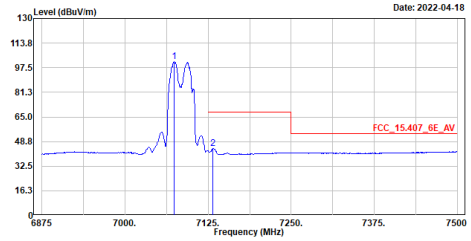
Site :HY-CB03
Condition :3m ,Vertical
Mode :TX_ax40_5965MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5922.800	53.78	88.22	-34.44	33.31	20.47	Peak
2	5972.000	109.06	------	------	88.49	20.57	Peak

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

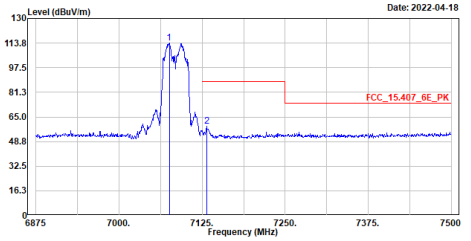
Site :HY-CB03
Condition :3m ,Horizontal
Mode :TX_ax40_7085MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	7074.375	101.49	------	------	80.06	21.43	Average
2	7132.500	44.06	68.22	-24.16	22.66	21.40	Average

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

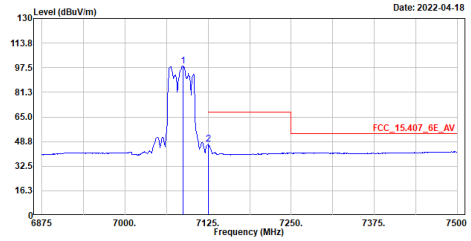
Site :HY-CB03
Condition :3m ,Horizontal
Mode :TX_ax40_7085MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	7075.625	113.76	------	------	92.33	21.43	Peak
2	7131.875	58.66	88.22	-29.56	37.25	21.41	Peak

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

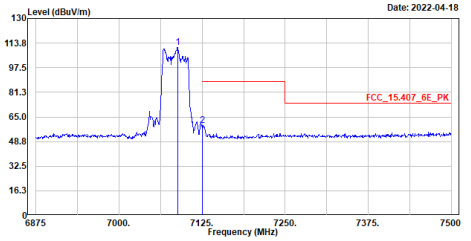
Site :HY-CB03
Condition :3m ,Vertical
Mode :TX_ax40_7085MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	7087.500	98.59	------	------	77.15	21.44	Average
2	7125.000	46.93	68.22	-21.29	25.51	21.42	Average

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

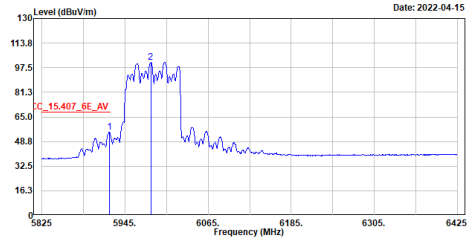
Site :HY-CB03
Condition :3m ,Vertical
Mode :TX_ax40_7085MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	7088.125	110.75	------	------	89.30	21.45	Peak
2	7125.625	59.24	88.22	-28.98	37.82	21.42	Peak

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

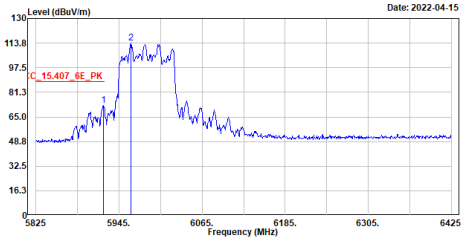
Site :HY-CB03
Condition :3m ,Horizontal
Mode :TX_ax80_5985MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5922.200	55.07	68.22	-13.15	34.61	20.46	Average
2	5982.200	101.07	------	------	80.49	20.58	Average

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

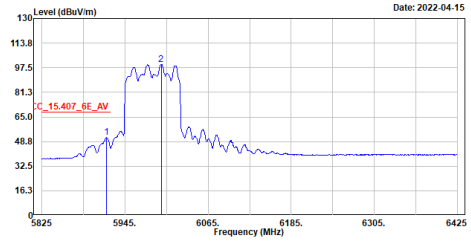
Site :HY-CB03
Condition :3m ,Horizontal
Mode :TX_ax80_5985MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5922.200	72.51	88.22	-15.71	52.05	20.46	Peak
2	5961.800	113.57	------	------	93.01	20.56	Peak

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

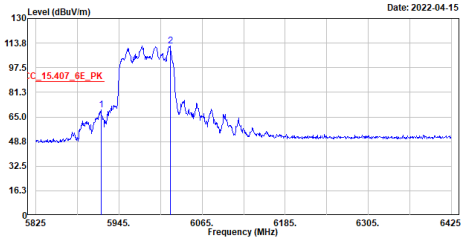
Site :HY-CB03
Condition :3m ,Vertical
Mode :TX_ax80_5985MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5918.600	51.26	68.22	-16.96	30.80	20.46	Average
2	5997.200	99.70	------	------	79.10	20.60	Average

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

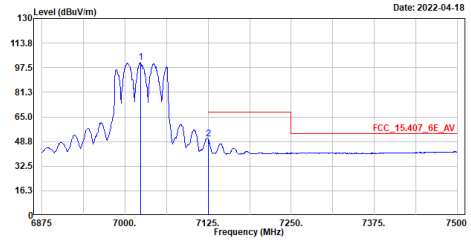
Site :HY-CB03
Condition :3m ,Vertical
Mode :TX_ax80_5985MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5919.200	69.66	88.22	-18.56	49.20	20.46	Peak
2	6018.800	112.04	------	------	91.35	20.69	Peak

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

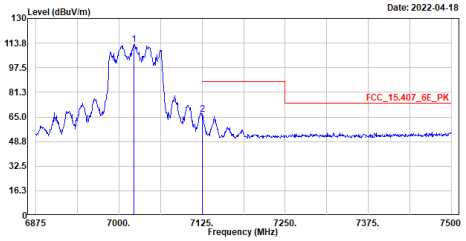
Site :HY-CB03
Condition :3m ,Horizontal
Mode :TX_ax80_7025MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	7023.125	100.87	------	------	79.46	21.41	Average
2	7125.000	50.77	68.22	-17.45	29.35	21.42	Average

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

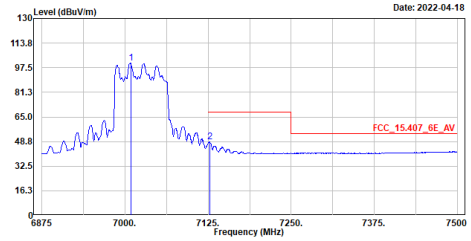
Site :HY-CB03
Condition :3m ,Horizontal
Mode :TX_ax80_7025MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	7022.500	112.93	------	------	91.52	21.41	Peak
2	7125.625	66.83	88.22	-21.39	45.41	21.42	Peak

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

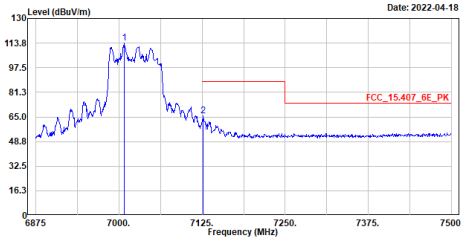
Site :HY-CB03
Condition :3m ,Vertical
Mode :TX_ax80_7025MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	7008.750	100.46	------	------	79.03	21.43	Average
2	7127.500	48.54	68.22	-19.68	27.12	21.42	Average

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

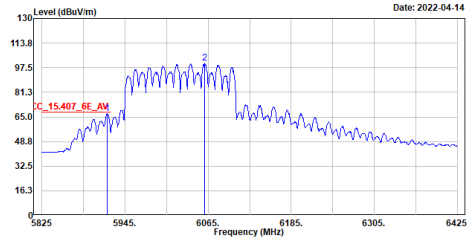
Site :HY-CB03
Condition :3m ,Vertical
Mode :TX_ax80_7025MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	7007.500	113.65	------	------	92.21	21.44	Peak
2	7126.875	65.56	88.22	-22.66	44.14	21.42	Peak

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

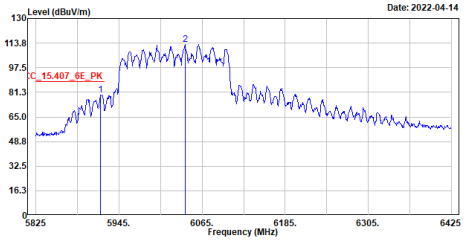
Site :HY-CB03
Condition :3m ,Horizontal
Mode :TX_ax160_6025MHz
Test BY :Gavin Wu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5919.200	66.98	68.22	-1.24	46.52	20.46	Average
2	6060.200	100.56	------	------	79.77	20.79	Average

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

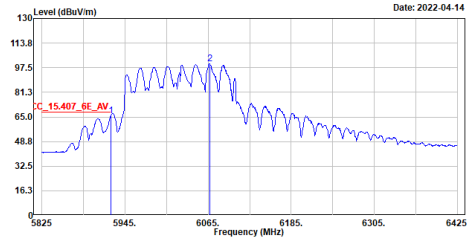
Site :HY-CB03
Condition :3m ,Horizontal
Mode :TX_ax160_6025MHz
Test BY :Gavin Wu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5918.600	79.29	88.22	-8.93	58.83	20.46	Peak
2	6040.400	112.93	------	------	92.16	20.77	Peak

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

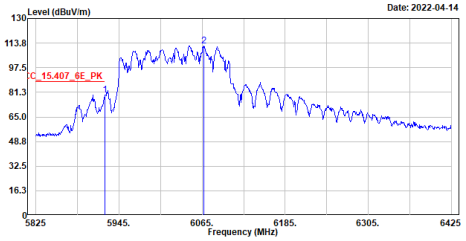
Site :HY-CB03
Condition :3m ,Vertical
Mode :TX_ax160_6025MHz
Test BY :Gavin Wu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5924.600	65.73	68.22	-2.49	45.26	20.47	Average
2	6067.400	100.30	------	------	79.52	20.78	Average

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

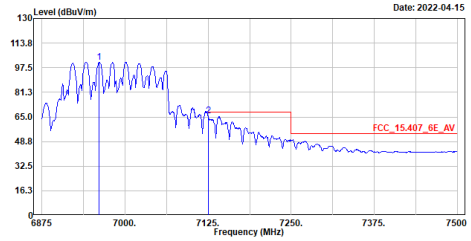
Site :HY-CB03
Condition :3m ,Vertical
Mode :TX_ax160_6025MHz
Test BY :Gavin Wu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	5924.600	79.36	88.22	-8.86	58.89	20.47	Peak
2	6068.000	111.80	------	------	91.03	20.77	Peak

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

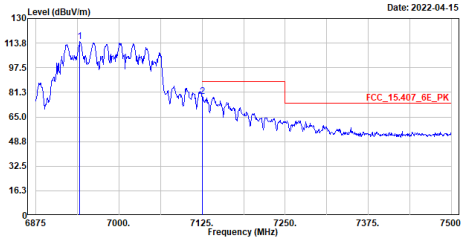
Site :HY-CB03
Condition :3m ,Horizontal
Mode :TX_ax160_6985MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	6961.250	101.25	------	------	79.98	21.27	Average
2	7125.000	65.65	68.22	-2.57	44.23	21.42	Average

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

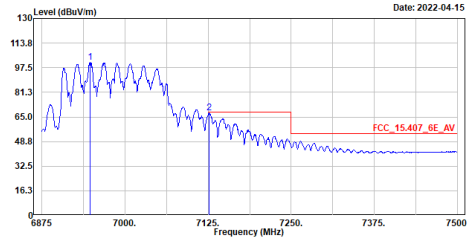
Site :HY-CB03
Condition :3m ,Horizontal
Mode :TX_ax160_6985MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	6941.250	114.87	------	------	93.63	21.24	Peak
2	7125.000	78.29	88.22	-9.93	56.87	21.42	Peak

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

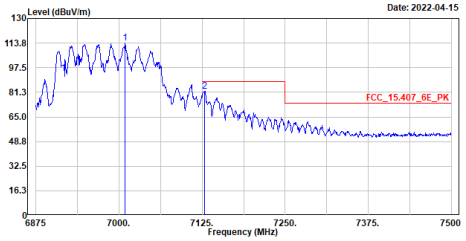
Site :HY-CB03
Condition :3m ,Vertical
Mode :TX_ax160_6985MHz
Test BY :Ashton Chiu



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	6947.500	100.97	------	------	79.75	21.22	Average
2	7126.875	67.64	68.22	-0.58	46.22	21.42	Average

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

Site :HY-CB03
Condition :3m ,Vertical
Mode :TX_ax160_6985MHz
Test BY :Ashton Chiu

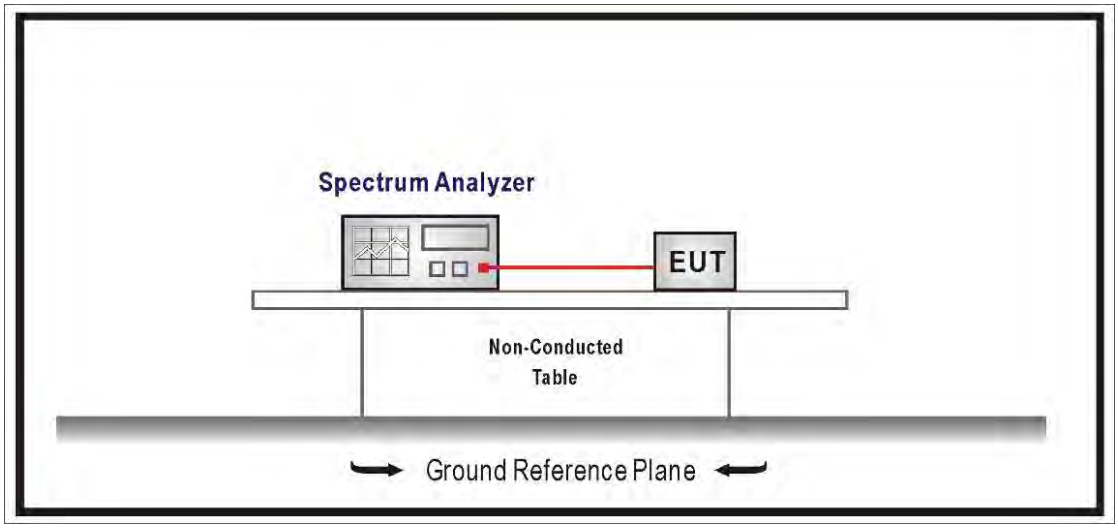


No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	7009.375	113.89	------	------	92.46	21.43	Peak
2	7128.750	82.04	88.22	-6.18	60.63	21.41	Peak

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

9. In-Band Emission (Mask)

9.1. Test Setup



9.2. Limits

Test Items	Frequencies (MHz)	(X) dBc*1
Emission Mask	At 1MHz outside of channel ege	20
	At one channel bandwidth from the channel center*2	28
	At one- and one-half times the channel bandwidth away from channek center*3	40
	More than one- and one-half times the channel bandwidth	40

Remark:

1. The power spectral density must be suppressed by “x” dB.
2. At frequencies between one megahertz outside an unlicensed device’s channek edge and one channel bandwidth from the center of the cannel, the limits must be linearly interpolated between 20dB and 28dB suppression.
3. At frequencies between one and one- and one-half times an unlicensed device’s channel bandwidth, the limits must be linearly interpolated between 28dB and 40dB suppression.

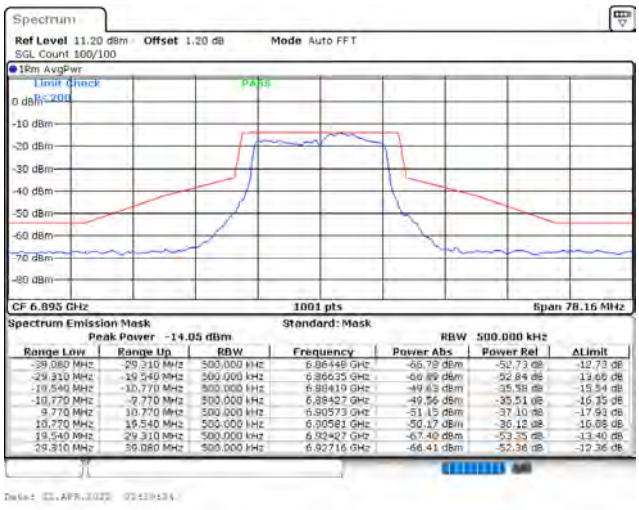
9.3. Test Procedure

1. Connect output of the antenna port to a spectrum analyzer and adjust appropriate attenuation.
2. Measure the 26 dB EBW using the test procedure 12.4.1 of ANSI C63.10-2013. (Determine the channel edge.)
3. Measure the power spectral density (for emissions mask reference) using the following procedure:
   (1) Set the span to encompass the entire 26 dB EBW of the signal.
   (2) Set RBW = same RBW used for 26 dB EBW measurement.
   (3) Set VBW ≥ 3 X RBW
   (4) Number of points in sweep ≥ [2 X span / RBW].
   (5) Sweep time = auto.
   (6) Detector = RMS (i.e., power averaging)
   (7) Trace average at least 100 traces in power averaging (rms) mode.
   (8) Use the peak search function on the instrument to find the peak of the spectrum.
4. Using the measuring equipment limit line function, develop the emissions mask based on the following requirements. The emissions power spectral density must be reduced below the peak power spectral density (in dB) as follows:
   (1) Suppressed by 20 dB at 1 MHz outside of the channel edge. (The channel edge is defined as the 26-dB point on either side of the carrier center frequency.)
   (2) Suppressed by 28 dB at one channel bandwidth from the channel center.
   (3) Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.
5. Adjust the span to encompass the entire mask as necessary and clear trace.
6. Trace average at least 100 traces in power averaging (rms) mode.
7. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask

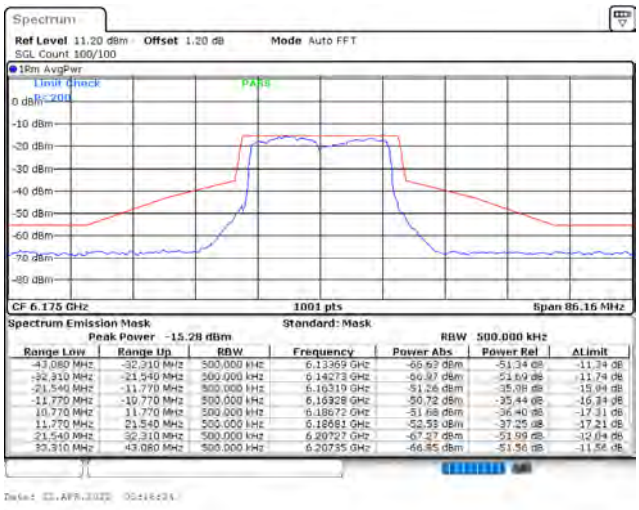
9.4. Test Result of In-Band Emission (Mask)

Spectrum Plot

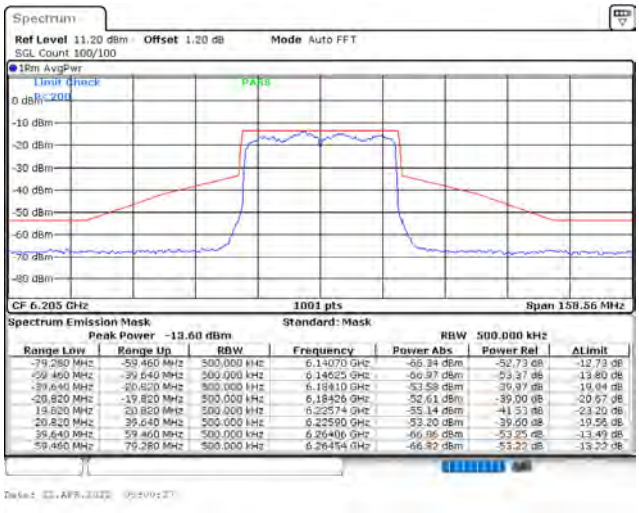
802.11a / Ant. 0 / 6895 MHz



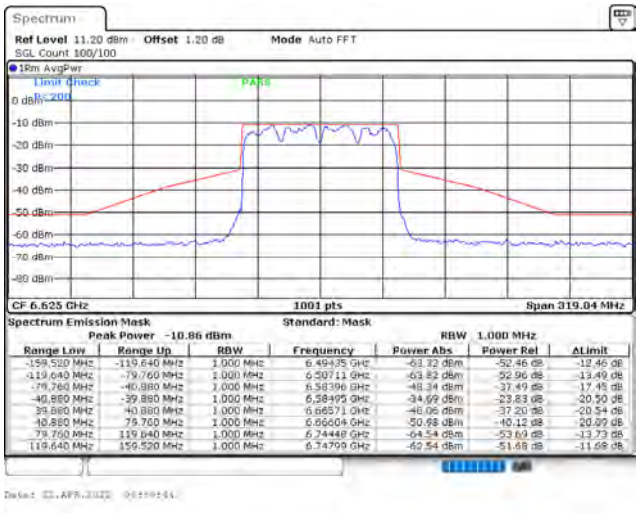
802.11ax (20MHz) / Ant. 0 / 6175 MHz



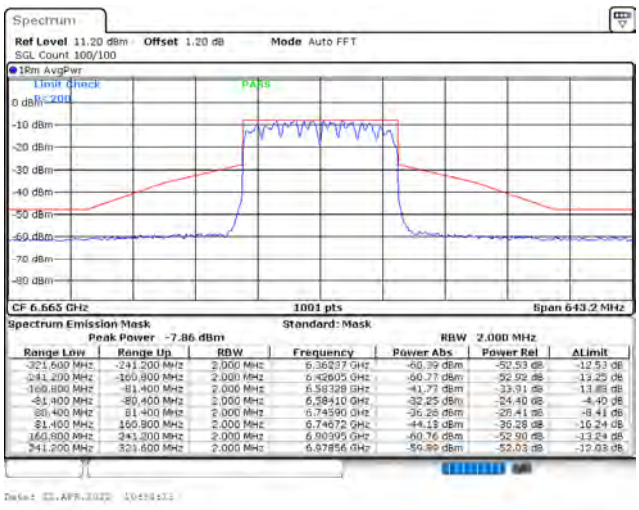
802.11 ax (40MHz) / Ant. 0 / 6205 MHz



802.11 ax (80MHz) / Ant. 0 / 6625 MHz

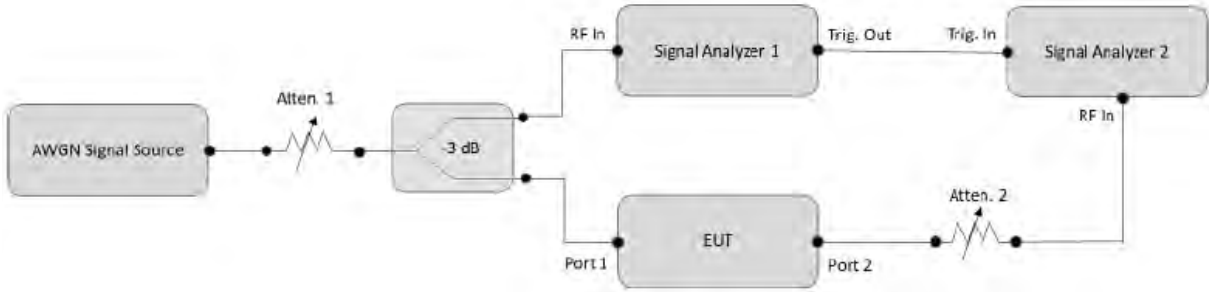


802.11 ax (160MHz) / Ant. 0 / 6655 MHz



10. Contention Based Protocol

10.1. Test Setup



10.2. Limits

Unlicensed indoor low-power devices must detect co-channe radio frequency power that is at least -62 dBm (The threshold is referenced to a 0dBi antenna gain.) or lower. Additionally, indoor low-power devices must detect co-channek energy with 90% or greater certainty.

10.3. Test Procedure

1. Set the signal analyzer center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT. Connect the output port of the EUT to the signal analyzer 2. Ensure that the attenuator 2 provides enough attenuation to not overload the signal analyzer 2 receiver.
2. Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters (set as following section 4.7.5 EUT operating condition).
3. Determine number of times detection threshold test as following table,

Test Items	Number of Tests	Placement of Incumbent Transmission
$BW_{EUT} \leqq BW_{Inc}$	Once	Same as EUT transmission
$BW_{Inc} < BW_{EUT} \leqq 2xBW_{Inc}$	Once	Contained within BWEUT
$2xBW_{Inc} < BW_{EUT} \leqq 4xBW_{Inc}$	Twice. (Incumbent transmission is contained within BWEUT)	Closely to the lower edge and upper edge of the EUT Channel
$BW_{EUT} > 4xBW_{Inc}$	Three times	Closely to the lower edge ,in the middle and upper edge of the EUT Channel

4. Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use step c table to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
5. Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT.
6. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
7. Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
8. (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
9. Refer to step c table to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step d, choose a different center frequency for the AWGN signal and repeat the process.

10.4. Test Result of Contention Based Protocol

For U-NII-5 band

Contention Based Protocol Measurement										
Measurement Mode		Conducted measurement			Device Type		Indoor AP			
The Incumbent Signal (AWGN) Level (dBm)		-62 dBm (at the antenna connector)								
Operation Band	Operation Mode	Channel Bandwidth (MHz)	Channel Number	Channel Frequency (MHz)	Test Result					
					AWGN Signals Frequency (MHz)	Number of Times	Number of Detected	Detection Rate	Limit	Pass/ Fail
U-NII 5	802.11ax	20MHz	1	5955	5955	10	10	100%	90%	Pass
		160MHz	15	6025	5950	10	10	100%	90%	Pass
					6025	10	10	100%	90%	Pass
					6100	10	10	100%	90%	Pass

Operation Band	Operation Mode	Channel Bandwidth	Channel Number	Channel Frequency	AWGN Signals Frequency (MHz)	Threshold Level	EUT Tx Status
U-NII 5	802.11ax	20MHz	1	5955	5955	-72	OFF
						-74	Minimal
						-81	ON
		160MHz	15	6025	5950	-73	OFF
						-74	Minimal
						-81	ON
					6025	-68	OFF
						-69	Minimal
						-77	ON
					6100	-71	OFF
						-72	Minimal
						-79	ON

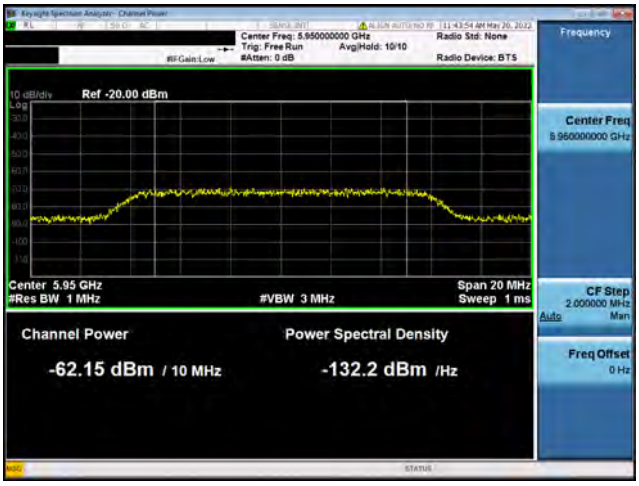
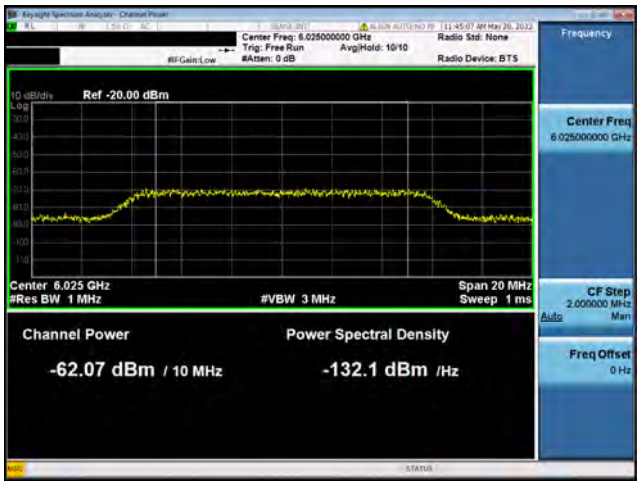
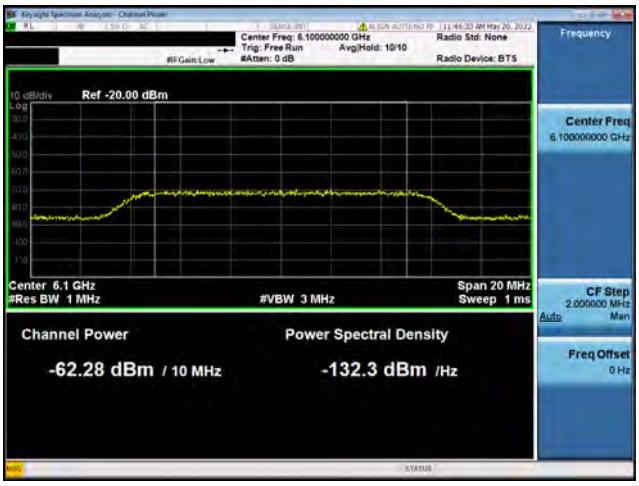
Note:

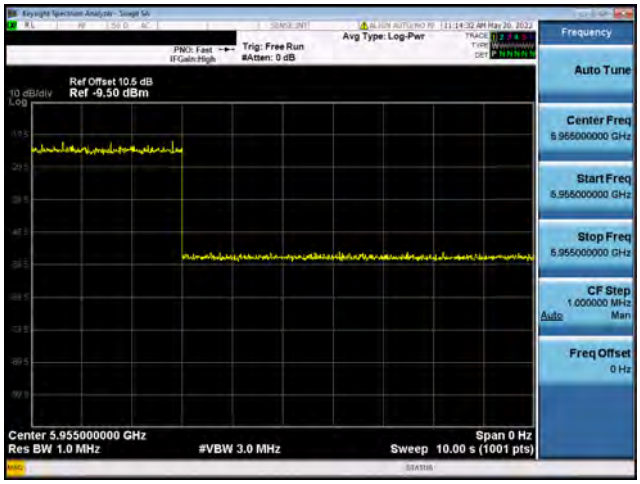
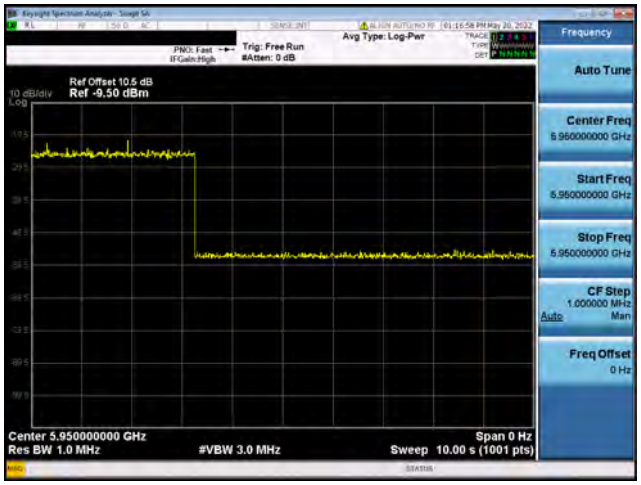
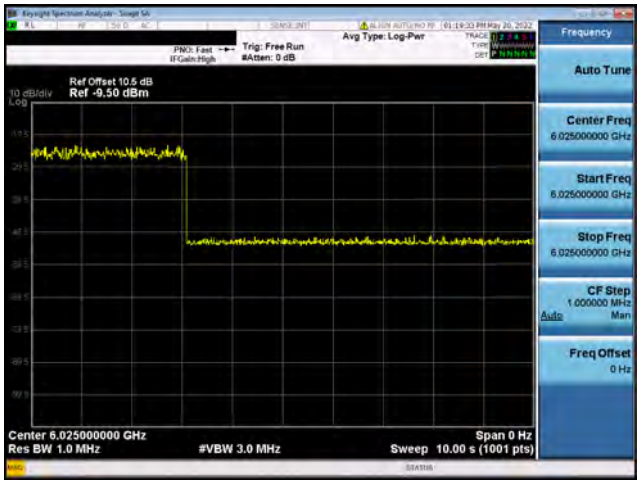
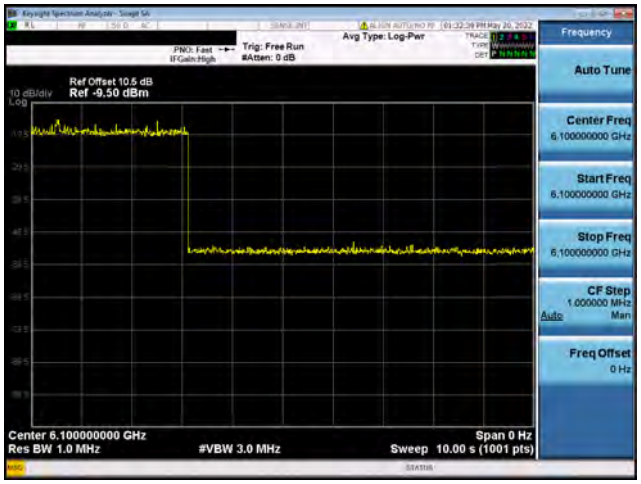
1. Injected (AWGN) POWER at the antenna connector (dBm) = S.G. (dBm) - Cable loss (dB) - Splitter loss (dB) - lowest antenna gain (dB)
2. Only one chain was performed for testing.
3. The AWGN level is reported for the following conditions:

   - OFF = AWGN level at which no transmission is detected, consistently for a minimum period of 10 seconds.

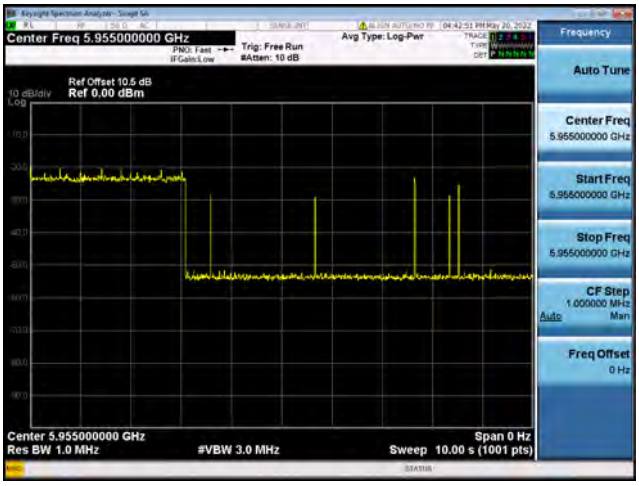
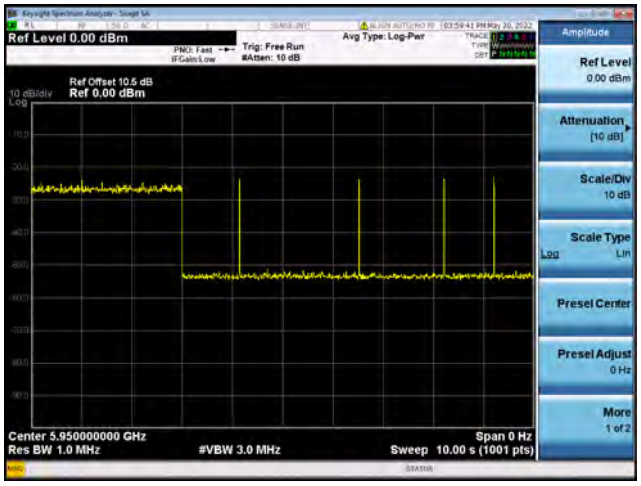
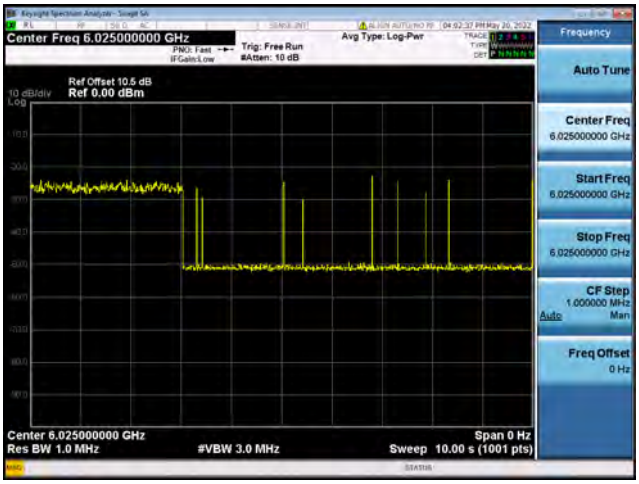
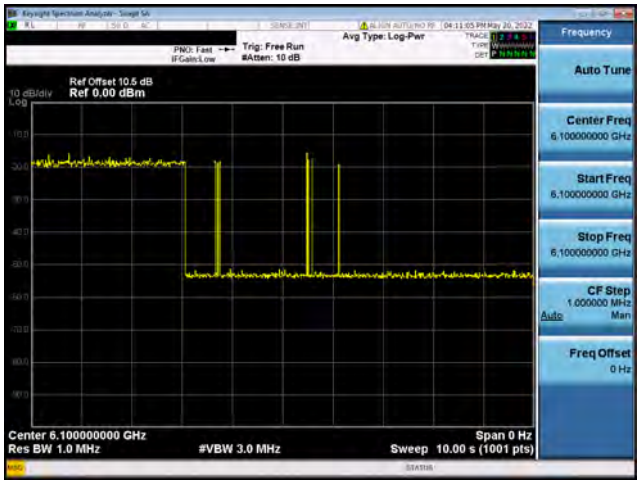
   - Minimal = AWGN level at which the system begins to trigger the transmission switch-off, albeit not being kept off consistently.

   - ON = AWGN level at which no impact on the transmission is detected, consistently for a minimum period of 10 seconds.

Plots of shows Incumbent signal level	
802.11ax (20MHz) / 5955 MHz	802.11ax (160MHz) / 5950 MHz (Lower Edge)
	
802.11ax (160MHz) / 6025 MHz (Middle)	802.11ax (160MHz) / 6100 MHz (Upper Edge)
	

Plots of EUT ceased transmission in the time domain	
802.11ax (20MHz) / 5955 MHz	802.11ax (160MHz) / 6025 MHz (Lower Edge - 5950 MHz)
	
802.11ax (160MHz) / 6025 MHz (Middle - 6025 MHz)	802.11ax (160MHz) / 6025 MHz (Upper Edge - 6100 MHz)
	

Note: Injected Interference signal at 2 sec.

Plots of Start transmitting	
802.11ax (20MHz) / 5955 MHz	802.11ax (160MHz) / 6025 MHz (Lower Edge - 5950 MHz)
	
802.11ax (160MHz) / 6025 MHz (Middle - 6025 MHz)	802.11ax (160MHz) / 6025 MHz (Upper Edge - 6100 MHz)
	

For U-NII-6 band

Contention Based Protocol Measurement										
Measurement Mode		Conducted measurement			Device Type		Indoor AP			
The Incumbent Signal (AWGN) Level (dBm)		-62 dBm (at the antenna connector)								
Operation Band	Operation Mode	Channel Bandwidth (MHz)	Channel Number	Channel Frequency (MHz)	Test Result					
					AWGN Signals Frequency (MHz)	Number of Times	Number of Detected	Detection Rate	Limit	Pass/ Fail
U-NII 6	802.11ax	20MHz	97	6435	6435	10	10	100%	90%	Pass
		160MHz	111	6505	6430	10	10	100%	90%	Pass
					6505	10	10	100%	90%	Pass
					6580	10	10	100%	90%	Pass

Operation Band	Operation Mode	Channel Bandwidth	Channel Number	Channel Frequency	AWGN Signals Frequency (MHz)	Threshold Level	EUT Tx Status
U-NII 6	802.11ax	20MHz	97	6435	6435	-73	OFF
						-75	Minimal
						-82	ON
		160MHz	111	6505	6430	-73	OFF
						-74	Minimal
						-81	ON
					6505	-67	OFF
						-68	Minimal
						-75	ON
					6580	-70	OFF
						-71	Minimal
						-79	ON

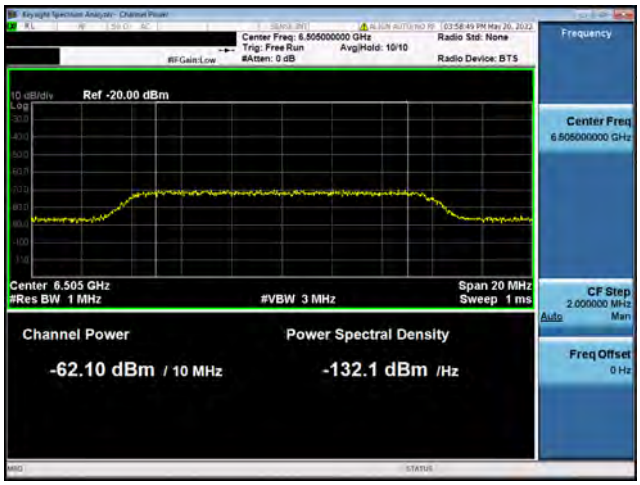
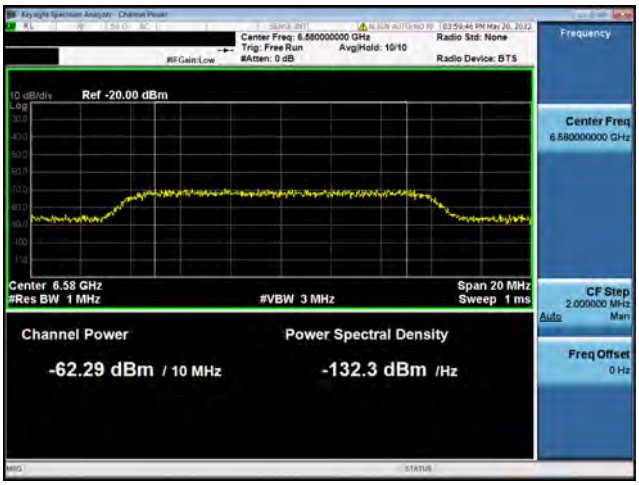
Note:

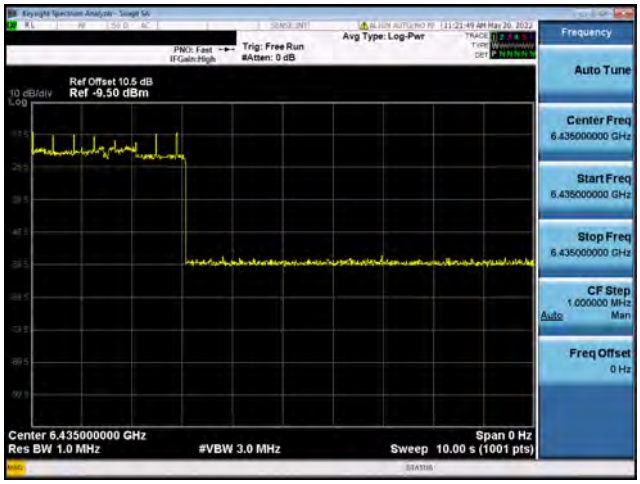
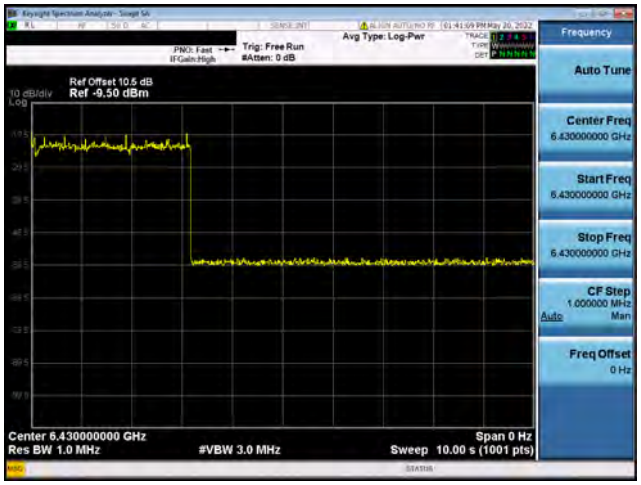
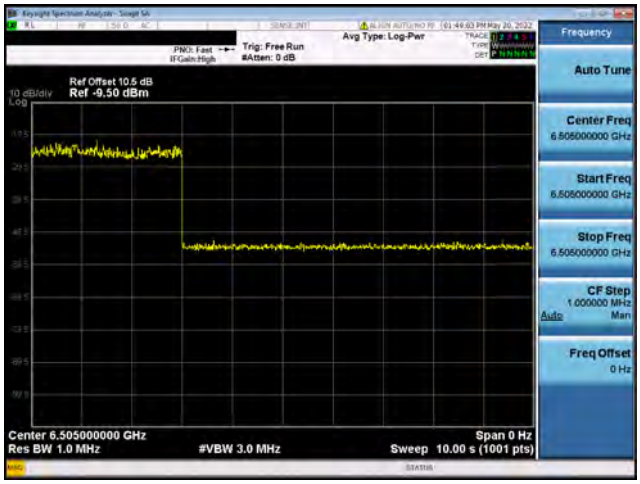
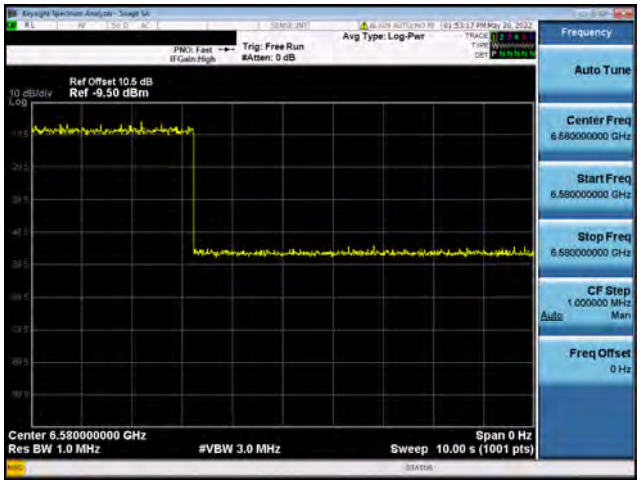
1. Injected (AWGN) POWER at the antenna connector (dBm) = S.G. (dBm) - Cable loss (dB) - Splitter loss (dB) - lowest antenna gain (dB)
2. Only one chain was performed for testing.
3. The AWGN level is reported for the following conditions:

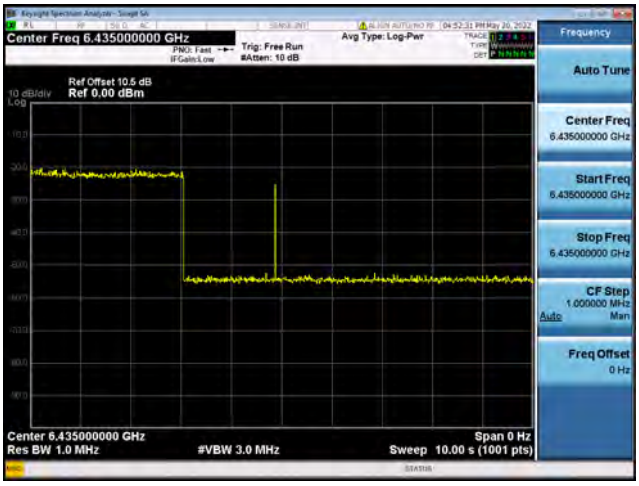
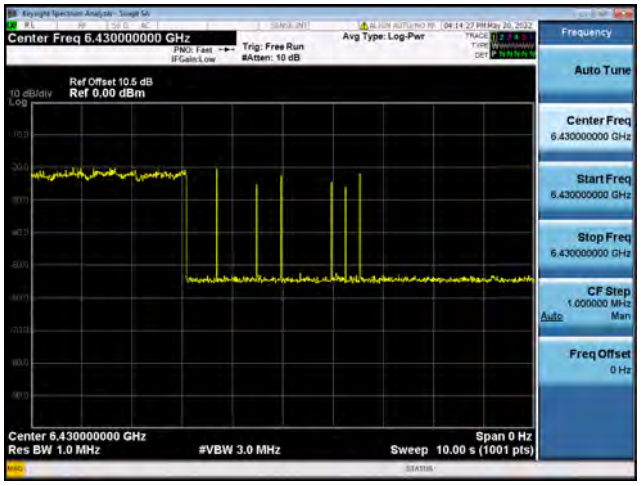
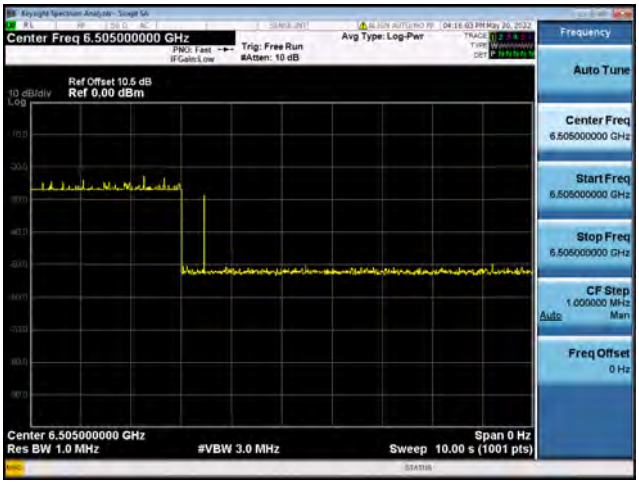
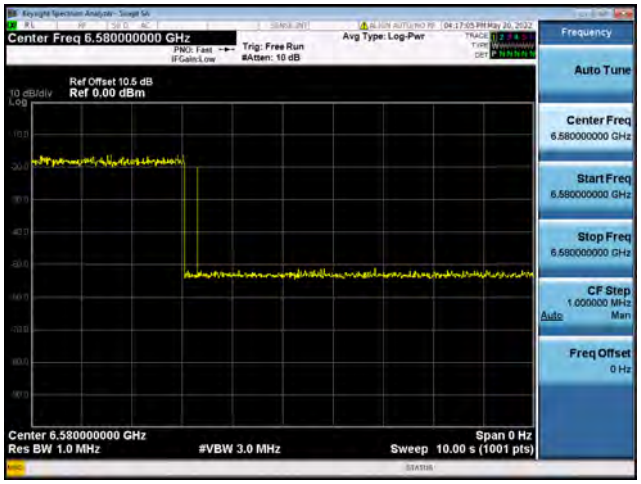
   - OFF = AWGN level at which no transmission is detected, consistently for a minimum period of 10 seconds.

   - Minimal = AWGN level at which the system begins to trigger the transmission switch-off, albeit not being kept off consistently.

   - ON = AWGN level at which no impact on the transmission is detected, consistently for a minimum period of 10 seconds.

Plots of shows Incumbent signal level	
802.11ax (20MHz) / 6435 MHz	802.11ax (160MHz) / 6430 MHz (Lower Edge)
	
802.11ax (160MHz) / 6505 MHz (Middle)	802.11ax (160MHz) / 6580 MHz (Upper Edge)
	

Plots of EUT ceased transmission in the time domain	
802.11ax (20MHz) / 6435 MHz	802.11ax (160MHz) / 6505 MHz (Lower Edge - 6430 MHz)
	
802.11ax (160MHz) / 6505 MHz (Middle - 6505 MHz)	802.11ax (160MHz) / 6505 MHz (Upper Edge - 6580 MHz)
	

Plots of Start transmitting	
802.11ax (20MHz) / 6435 MHz	802.11ax (160MHz) / 6505 MHz (Lower Edge - 6430 MHz)
	
802.11ax (160MHz) / 6505 MHz (Middle - 6505 MHz)	802.11ax (160MHz) / 6505 MHz (Upper Edge - 6580 MHz)
	

For U-NII-7 band

Contention Based Protocol Measurement										
Measurement Mode		Conducted measurement			Device Type		Indoor AP			
The Incumbent Signal (AWGN) Level (dBm)		-62 dBm (at the antenna connector)								
Operation Band	Operation Mode	Channel Bandwidth (MHz)	Channel Number	Channel Frequency (MHz)	Test Result					
					AWGN Signals Frequency (MHz)	Number of Times	Number of Detected	Detection Rate	Limit	Pass/ Fail
U-NII 7	802.11ax	20MHz	117	6535	6535	10	10	100%	90%	Pass
		160MHz	143	6665	6590	10	10	100%	90%	Pass
					6665	10	10	100%	90%	Pass
					6740	10	10	100%	90%	Pass

Operation Band	Operation Mode	Channel Bandwidth	Channel Number	Channel Frequency	AWGN Signals Frequency (MHz)	Threshold Level	EUT Tx Status
U-NII 7	802.11ax	20MHz	117	6535	6535	-73	OFF
						-75	Minimal
						-82	ON
		160MHz	143	6665	6590	-72	OFF
						-73	Minimal
						-80	ON
					6665	-67	OFF
						-68	Minimal
						-75	ON
					6740	-68	OFF
						-69	Minimal
						-77	ON

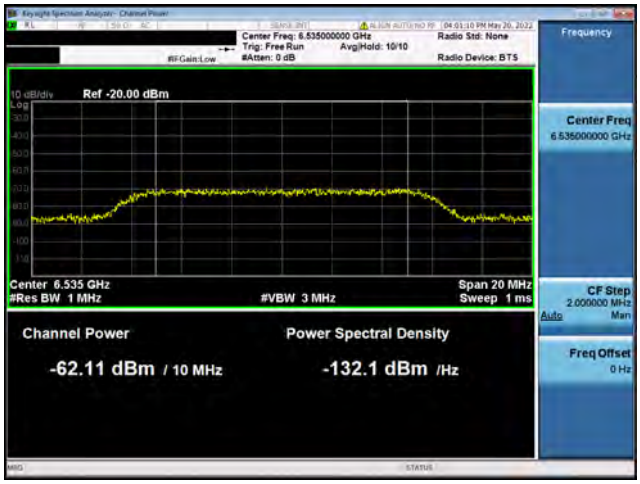
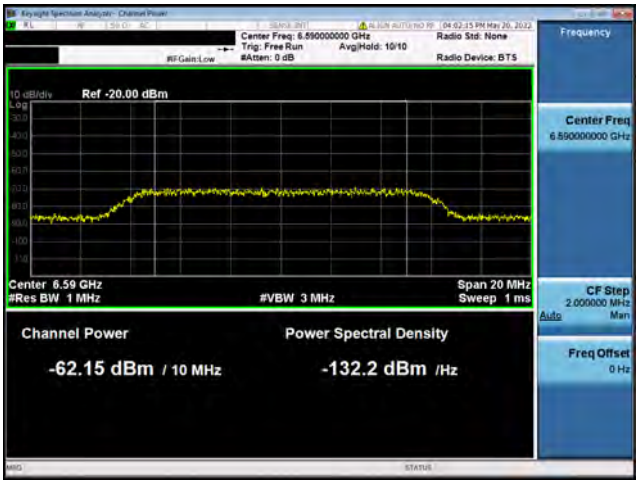
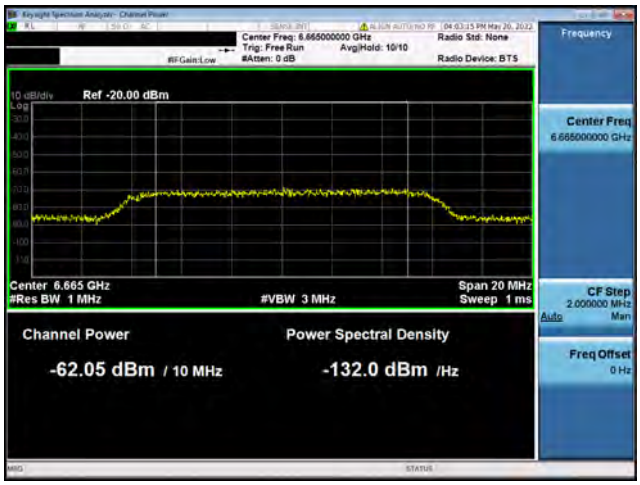
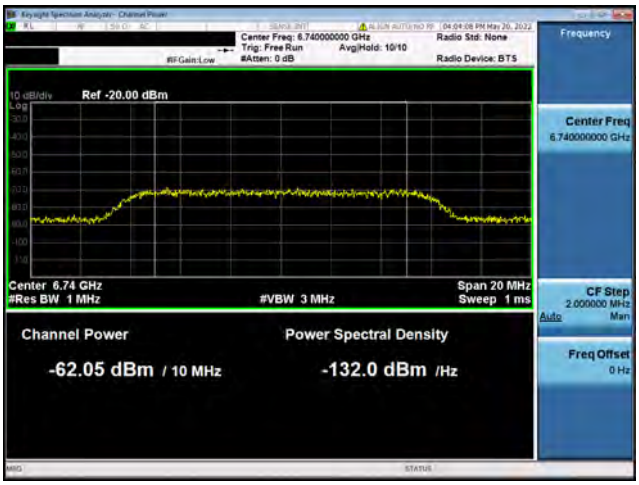
Note:

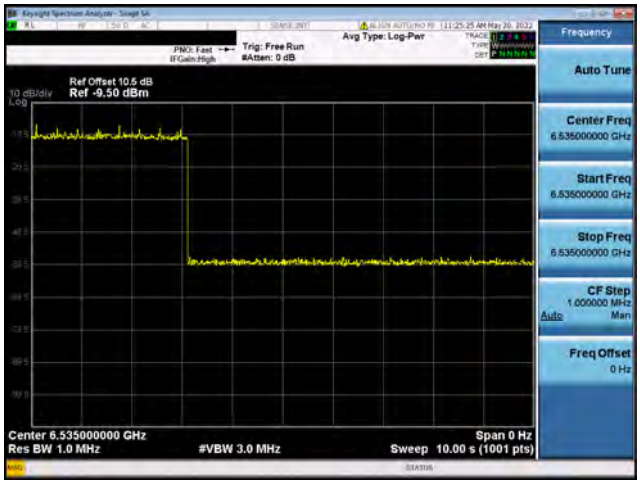
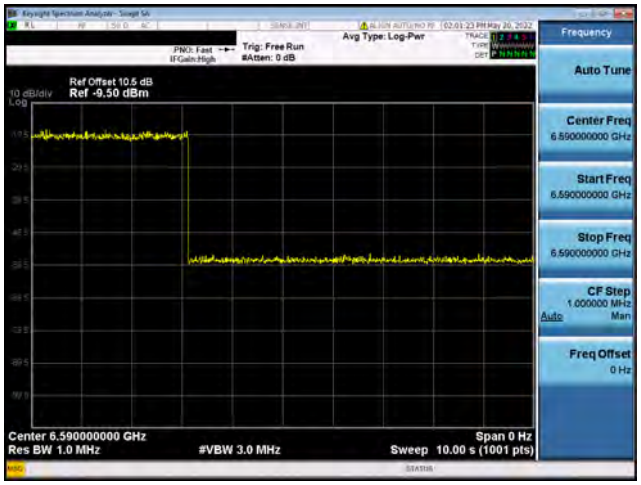
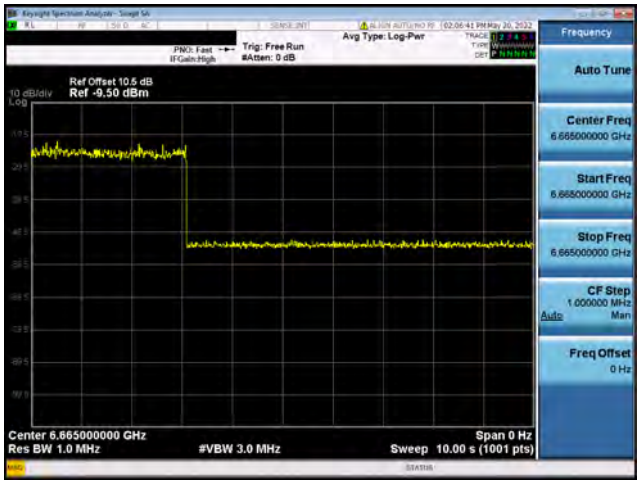
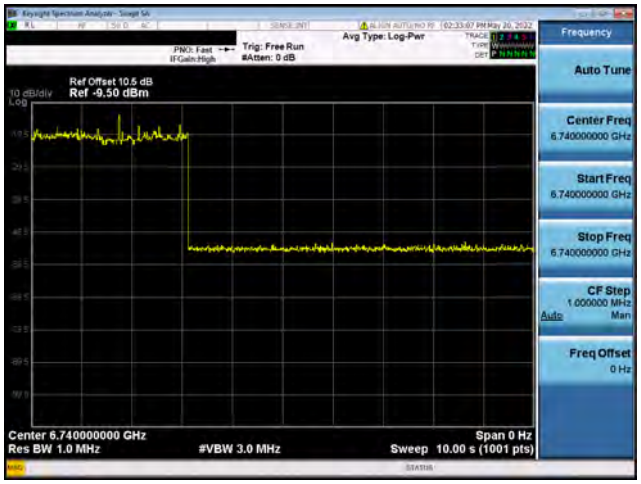
1. Injected (AWGN) POWER at the antenna connector (dBm) = S.G. (dBm) - Cable loss (dB) - Splitter loss (dB) - lowest antenna gain (dB)
2. Only one chain was performed for testing.
3. The AWGN level is reported for the following conditions:

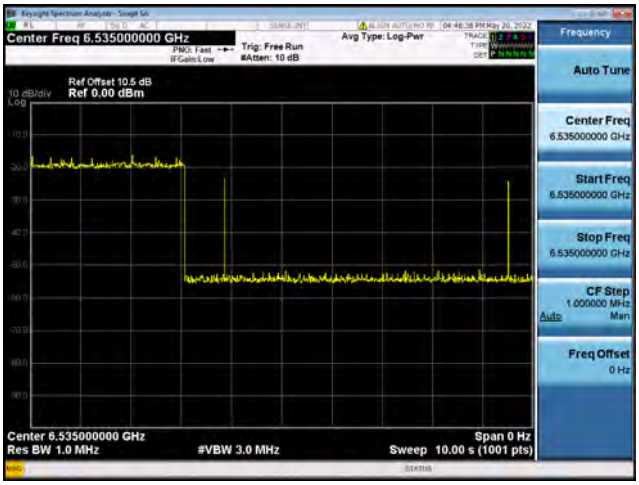
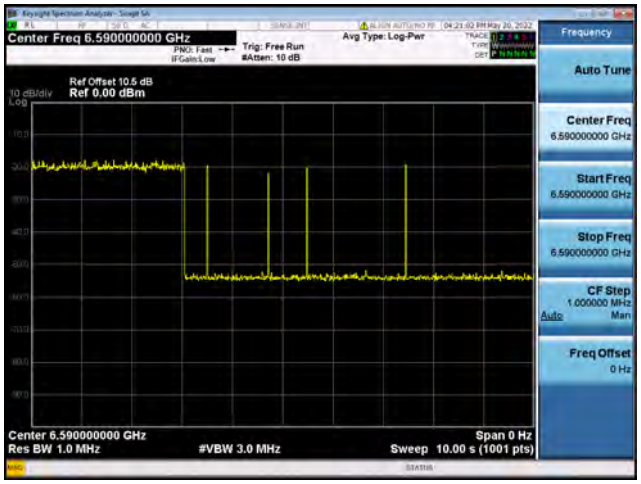
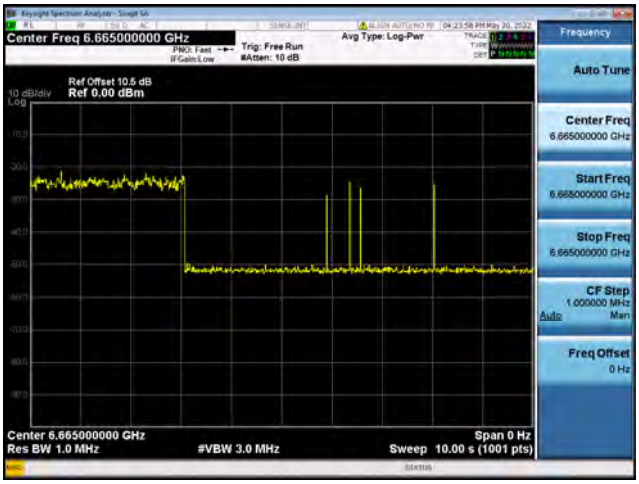
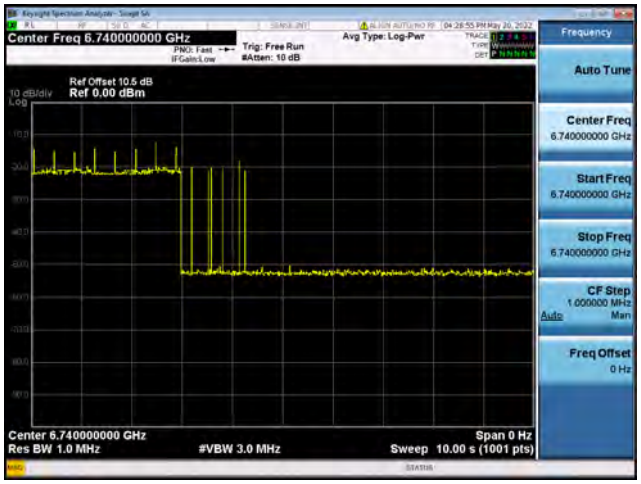
   - OFF = AWGN level at which no transmission is detected, consistently for a minimum period of 10 seconds.

   - Minimal = AWGN level at which the system begins to trigger the transmission switch-off, albeit not being kept off consistently.

   - ON = AWGN level at which no impact on the transmission is detected, consistently for a minimum period of 10 seconds.

Plots of shows Incumbent signal level	
802.11ax (20MHz) / 6535 MHz	802.11ax (160MHz) / 6590 MHz (Lower Edge)
	
802.11ax (160MHz) / 6665 MHz (Middle)	802.11ax (160MHz) / 6740 MHz (Upper Edge)
	

Plots of EUT ceased transmission in the time domain	
802.11ax (20MHz) / 6535 MHz	802.11ax (160MHz) / 6665 MHz (Lower Edge - 6590 MHz)
	
802.11ax (160MHz) / 6665 MHz (Middle - 6665 MHz)	802.11ax (160MHz) / 6665 MHz (Upper Edge - 6740 MHz)
	

Plots of Start transmitting	
802.11ax (20MHz) / 6535 MHz	802.11ax (160MHz) / 6665 MHz (Lower Edge - 6590 MHz)
	
802.11ax (160MHz) / 6665 MHz (Middle - 6665 MHz)	802.11ax (160MHz) / 6665 MHz (Upper Edge - 6740 MHz)
	

For U-NII-8 band

Contention Based Protocol Measurement											
Measurement Mode		Conducted measurement			Device Type		Indoor AP				
The Incumbent Signal (AWGN) Level (dBm)		-62 dBm (at the antenna connector)									
Operation Band	Operation Mode	Channel Bandwidth (MHz)	Channel Number	Channel Frequency (MHz)	Test Result						
					AWGN Signals Frequency (MHz)	Number of Times	Number of Detected	Detection Rate	Limit	Pass/ Fail	
U-NII 8	802.11ax	20MHz	189	6895	6895	10	10	100%	90%	Pass	
		160MHz	207	6985	6910	10	10	100%	90%	Pass	
					6985	10	10	100%	90%	Pass	
					7060	10	10	100%	90%	Pass	

Operation Band	Operation Mode	Channel Bandwidth	Channel Number	Channel Frequency	AWGN Signals Frequency (MHz)	Threshold Level	EUT Tx Status
U-NII 8	802.11ax	20MHz	189	6895	6895	-71	OFF
						-73	Minimal
						-80	ON
		160MHz	207	6985	6910	-70	OFF
						-71	Minimal
						-78	ON
					6985	-65	OFF
						-66	Minimal
						-73	ON
					7060	-66	OFF
						-67	Minimal
						-75	ON

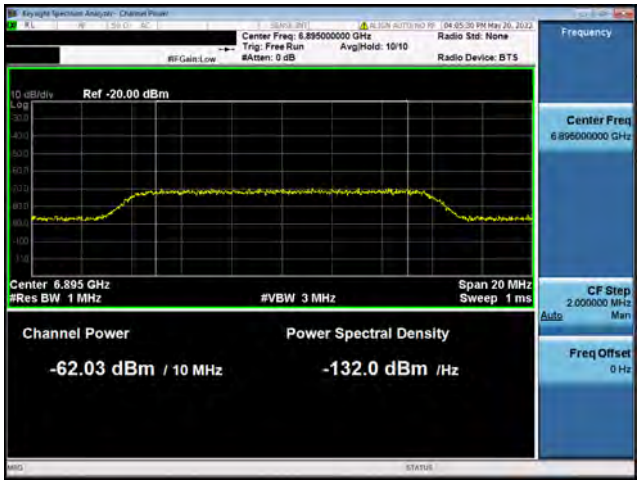
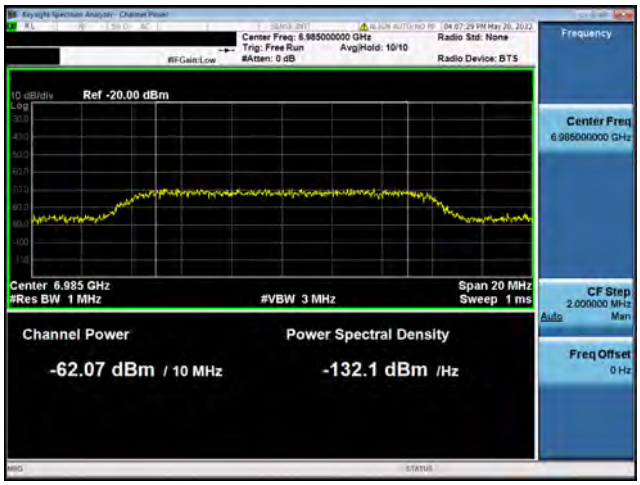
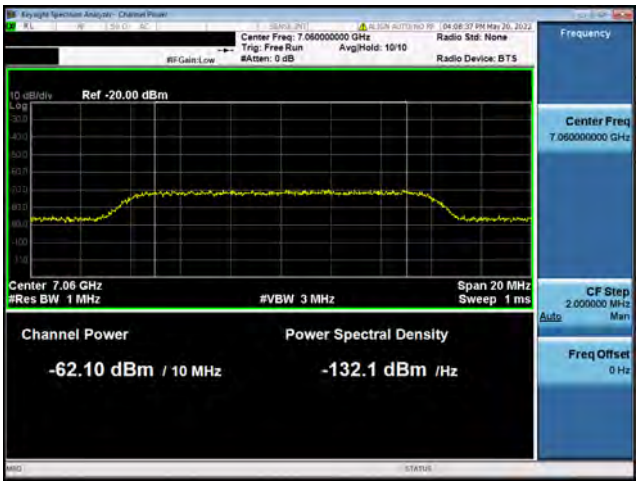
Note:

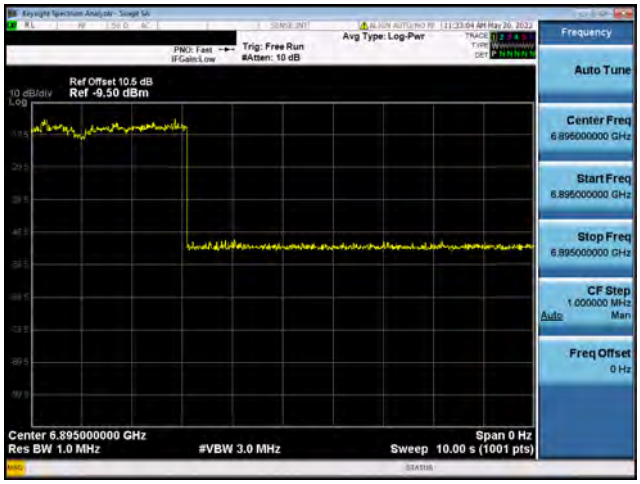
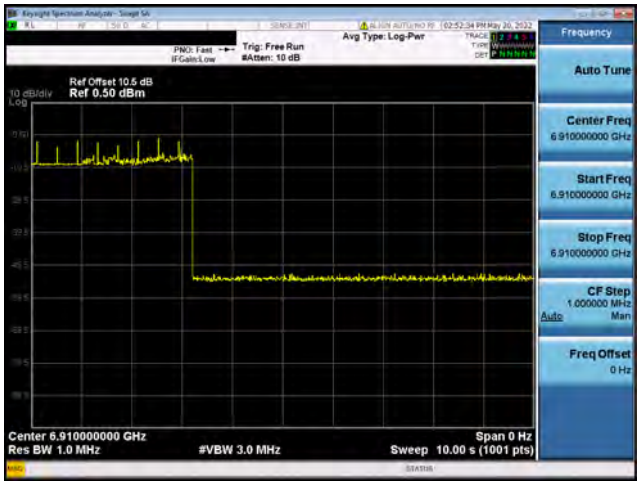
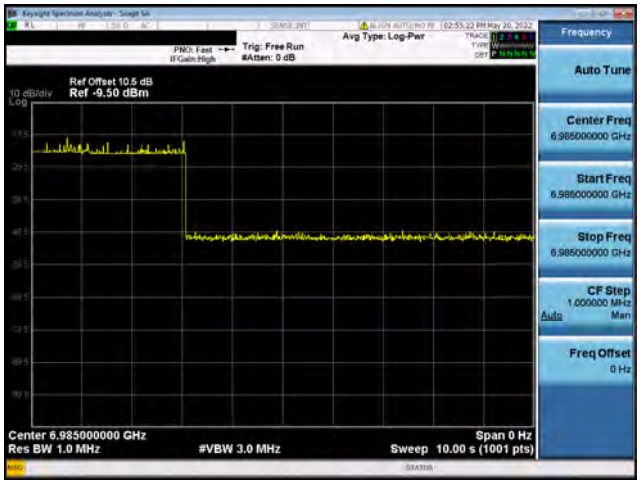
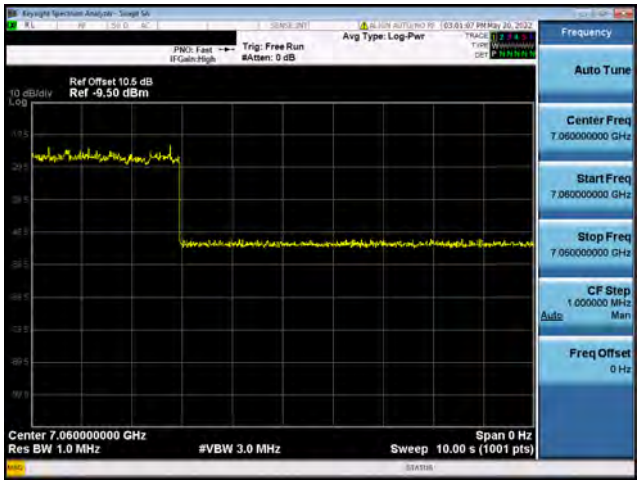
1. Injected (AWGN) POWER at the antenna connector (dBm) = S.G. (dBm) - Cable loss (dB) - Splitter loss (dB) - lowest antenna gain (dB)
2. Only one chain was performed for testing.
3. The AWGN level is reported for the following conditions:

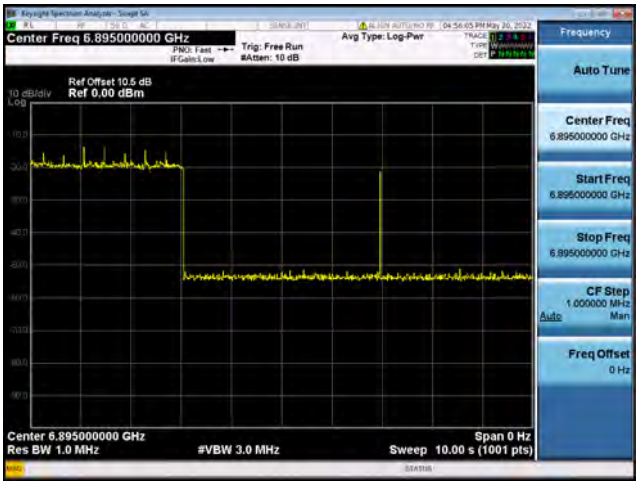
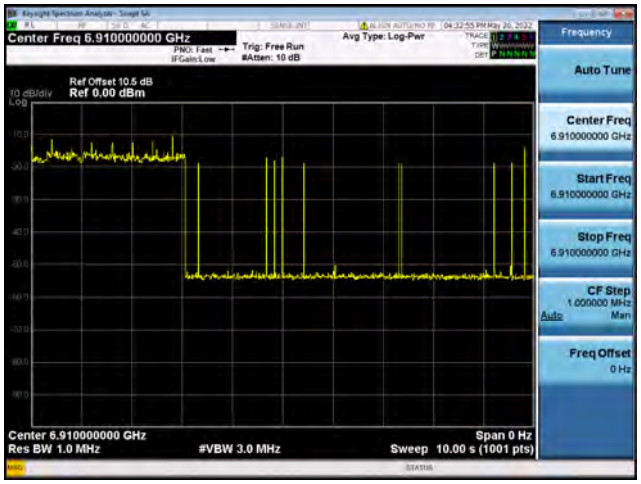
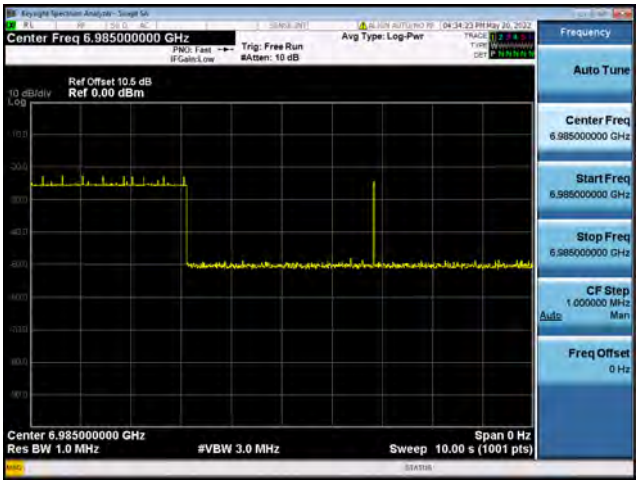
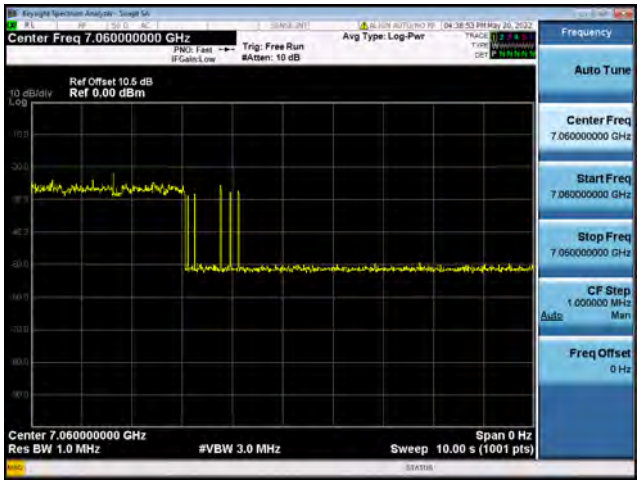
   - OFF = AWGN level at which no transmission is detected, consistently for a minimum period of 10 seconds.

   - Minimal = AWGN level at which the system begins to trigger the transmission switch-off, albeit not being kept off consistently.

   - ON = AWGN level at which no impact on the transmission is detected, consistently for a minimum period of 10 seconds.

Plots of shows Incumbent signal level	
802.11ax (20MHz) / 6895 MHz	802.11ax (160MHz) / 6910 MHz (Lower Edge)
	
802.11ax (160MHz) / 6985 MHz (Middle)	802.11ax (160MHz) / 7060 MHz (Upper Edge)
	

Plots of EUT ceased transmission in the time domain	
802.11ax (20MHz) / 6895 MHz	802.11ax (160MHz) / 6985 MHz (Lower Edge - 6910 MHz)
	
802.11ax (160MHz) / 6985 MHz (Middle - 6985 MHz)	802.11ax (160MHz) / 6985 MHz (Upper Edge - 7060 MHz)
	

Plots of Start transmitting	
802.11ax (20MHz) / 6895 MHz	802.11ax (160MHz) / 6985 MHz (Lower Edge - 6910 MHz)
	
802.11ax (160MHz) / 6985 MHz (Middle - 6985 MHz)	802.11ax (160MHz) / 6985 MHz (Upper Edge - 7060 MHz)
	

10.5. Duty Cycle

Mode	Time On (ms)	Time On + Time Off (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11a	1.9783	2.0942	94.46	0.25
802.11ax20	5.4420	5.8768	92.60	0.33
802.11ax40	5.4420	5.7899	93.99	0.27
802.11ax80	5.4420	5.8188	93.52	0.29
802.11ax160	5.4420	5.8478	93.06	0.31

Note:

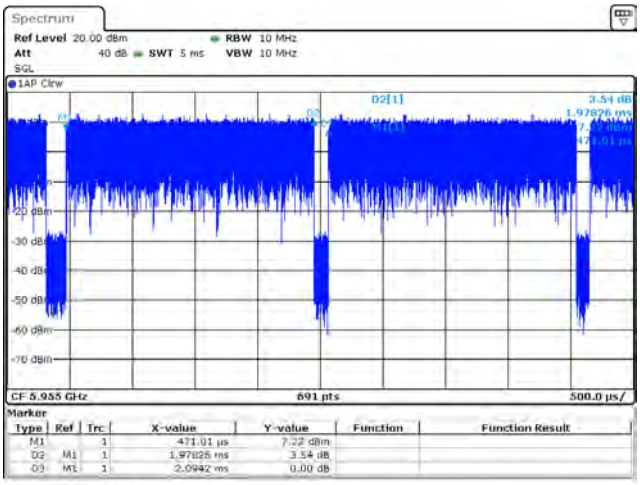
Offset = 20 log(1/duty cycle)

Accotding to KDB 789033

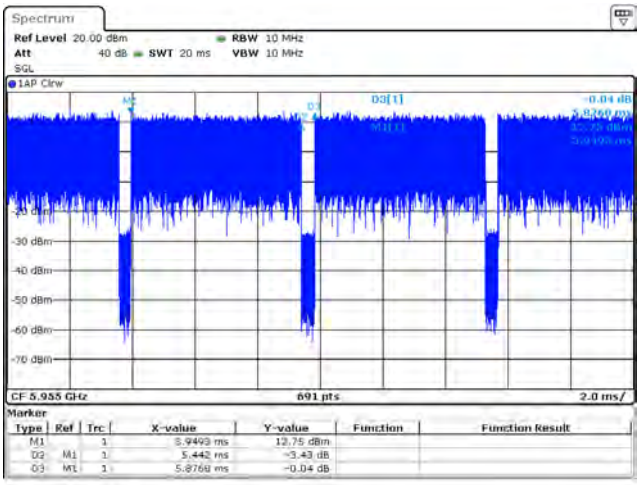
If power averaging (rms) mode was used in step (iv) above, the correction factor is 10 log (1/x), where x is the duty cycle. For example, if the transmit duty cycle was 50%, then 3 dB must be added to the measured emission levels.

If linear voltage averaging mode was used in step (iv) above, the correction factor is 20 log (1/x), where x is the duty cycle. For example, if the transmit duty cycle was 50%, then 6 dB must be added to the measured emission levels.

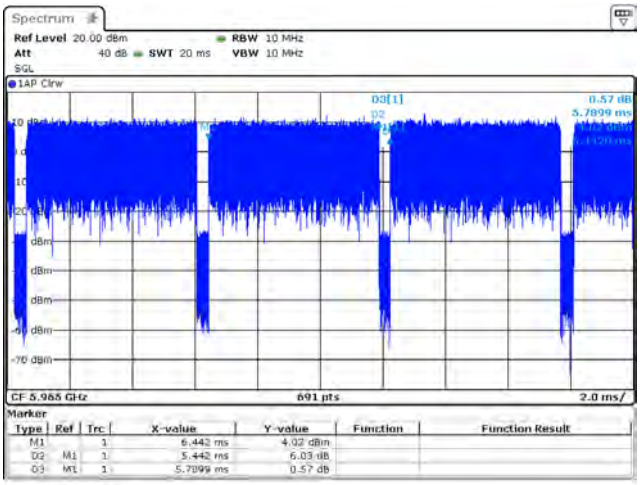
802.11a 5955MHz



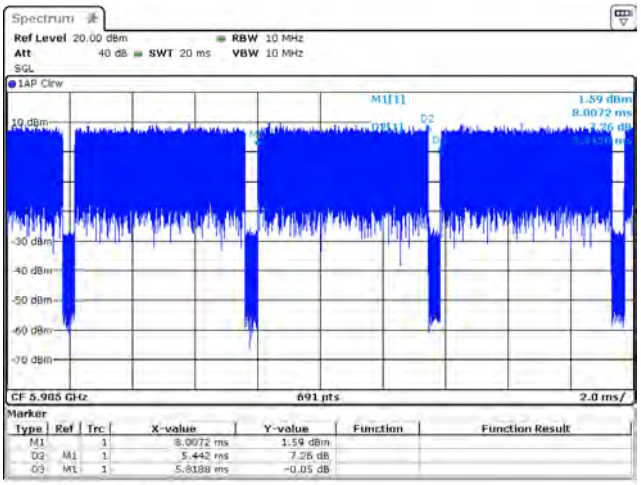
802.11ax (20MHz) 5955MHz



802.11ax (40MHz) 5965MHz



802.11ax (80MHz) 5985MHz



802.11ax (160MHz) 6025MHz