

FCC Test Report

Report No: WD-RF-R-220014-D0

Product Name : UST Outdoor LED Projector
Model Name : MG2U
Series Model Name : MG2U-xxxxxx(x can be 0~9 or A~Z or space)
FCC ID : 2AUGVMG2U
Applicant : Elite Screens Visual & Sound Co., Ltd.
Received Date : Aug. 18, 2021
Tested Date : Sep. 22, 2021 ~ Jan. 19, 2022
Applicable Standard : 47 CFR FCC Part 15, Subpart E (Section 15.407)
789033 D02 General U-NII Test Procedures New Rules v02r01
ANSI C63.10 : 2013



Wendell Industrial Co., Ltd
Wendell EMC & RF Laboratory

Caution:

This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted.

The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment.

Please note that the measurement uncertainty are provided for informational purpose only and are not used in determining the Pass/Fail results.

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 Wendell Industrial Co., Ltd..

Test Report

Issued Date: January 19, 2022

Project No.: 21Q081803

Product Name	UST Outdoor LED Projector
Trade Name	MosaicGO
Model Name	MG2U
Series Model Name	MG2U-xxxxxxx(x can be 0~9 or A~Z or space)
FCC ID	2AUGVMG2U
Applicant	Elite Screens Visual & Sound Co., Ltd.
Manufacturer	Elite Screens Visual & Sound Co., Ltd.
EUT Rated Voltage	AC 100 ~ 240V / 50 or 60Hz
EUT Test Voltage	AC 120V / 60Hz
EUT Supports Radios Application	WLAN 802.11a/b/g WLAN 802.11n (HT20/HT40) WLAN 802.11ac (VHT20/VHT40/VHT80) Bluetooth BR/EDR/LE
Applicable Standard	47 CFR FCC Part 15, Subpart E (Section 15.407) 789033 D02 General U-NII Test Procedures New Rules v02r01 ANSI C63.10 : 2013
Output Power	5.18 ~ 5.24 GHz: 11.09 dBm 5.745 ~ 5.825 GHz: 12.15 dBm
Test Result	Complied

Documented :



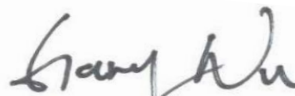
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(Project Manager / Gary Wu)

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Attachment 1: EUT Test Photographs		
Attachment 2: EUT Detailed Photographs		

Document Revision History

Report No.	Issue date	Description
WD-RF-R-220014-D0	January 19, 2022	Initial report

Summary of Test Result

Ref. Std. Clause	Test Items	Result
15.407(a)	26dB Bandwidth	Pass
15.407(e)	6dB Bandwidth	Pass
--	99% Occupied Bandwidth	Pass
15.407(a)	Maximum Conducted Output Power	Pass
15.407(a)	Power Spectral Density	Pass
15.407(b) 15.209	Unwanted Emissions	Pass
15.407(g)	Frequency Stability	Pass
15.207	AC Conducted Emission	Pass
15.203 15.407(a)	Antenna Requirement	Pass

1 Generation Information

1.1 Applicant

Elite Screens Visual & Sound Co., Ltd.
3F., No. 88, Wugong Rd., Xinzhuang Dist., New Taipei City 242, Taiwan (R.O.C.)

1.2 Manufacturer

Elite Screens Visual & Sound Co., Ltd.
3F., No. 88, Wugong Rd., Xinzhuang Dist., New Taipei City 242, Taiwan (R.O.C.)

1.3 Description of Equipment under Test

Product Name	UST Outdoor LED Projector
Model No.	MG2U
Series Model Name	MG2U-xxxxxx(x can be 0~9 or A~Z or space)
FCC ID	2AUGVMG2U
Frequency Range	802.11a/n/ac-20MHz: 5180-5240MHz, 5745-5825MHz 802.11n/ac-40MHz: 5190-5230MHz, 5755-5795MHz 802.11ac-80MHz: 5210MHz, 5775MHz
Number of Channels	802.11a/n/ac-20MHz: 9 ; 802.11n/ac-40MHz: 4 ; 802.11ac-80MHz: 2
Data Rate	802.11a: 6 - 54Mbps 802.11n-40MHz: up to 200Mbps 802.11ac-80MHz: up to 433.3Mbps
Type of Modulation	802.11a/n/ac: OFDM, BPSK, QPSK, 16QAM, 64QAM, 256QAM
Antenna Information	Refer to the table “Antenna List”
EUT Supports Radios Application	WLAN 802.11a/b/g WLAN 802.11n (HT20/HT40) WLAN 802.11ac (VHT20/VHT40/VHT80) Bluetooth BR/EDR/LE
EUT Rated Voltage	AC 100 ~ 240V / 50 or 60Hz
EUT Test Voltage	AC 120V / 60Hz

Note: Series model difference is market segmentation.

The EUT uses following adapter.

Trade Name	EDAC
Model No.	EA11703F-1900
Input Power	AC 100 ~ 240V / 50 or 60Hz
Output Power	DC 19V
Power Line	Non-shielded, 1 Core, 1.2m

Antenna List

No.	Manufacturer	Model No.	Antenna Type	Peak Gain
1	Passive System Alliance	PFPCA500815IMLB3G4	PCB Antenna	4 dBi for 5.15 ~ 5.25 GHz 4 dBi for 5.725 ~ 5.85 GHz

Remark: The antenna of EUT is conforming to FCC 15.203

Channel List

802.11a/n/ac HT20/VHT20		802.11n/ac HT40/VHT40		802.11ac VHT80	
Channel	Frequency(MHz)	Channel	Frequency(MHz)	Channel	Frequency(MHz)
36	5180	38	5190	42	5210
40	5200	46	5230	155	5775
44	5220	151	5755	--	--
48	5240	159	5795	--	--
149	5745	--	--	--	--
153	5765	--	--	--	--
157	5785	--	--	--	--
161	5805	--	--	--	--
165	5825	--	--	--	--

Test Frequencies in each operating band

Frequency range over which the device operates in each operating band (Note 1)	Number of test frequencies required	Location of test frequencies inside the operating frequency range (Note 1,2)
≤ 1 MHz	1	near center
> 1 MHz and ≤ 10 MHz	2	1 near high end, 1 near low end
> 10 MHz	3	1 near high end, 1 near center, and 1 near low end

Note 1: The frequency range over which the device operates in a given operating band is the difference between the highest and lowest frequencies on which the device can be tuned within that given operating band. The frequency range can be smaller than or equal to the operating band, but cannot be greater than the operating band.

Note 2: In the third column of table 1, “near” means as close as possible to or at the center / low end / high end of the frequency range over which the device operates.

Firmware / Software Version

1	Product Name	UST Outdoor LED Projector
2	Model No.	MG2U
3	Test SW Version	Ampak RFTest Tool Ver:5.8
4	RF power setting in TEST SW	☐ RF power setting was not able to alter during testing. ☒ RF power setting was able to alter during testing. (See the following table)

Parameters of test software setting

Type of Modulation	Channel	Frequency (MHz)	Set Value
802.11a	36	5180	Default
	44	5220	Default
	48	5240	Default
	149	5745	Default
	157	5785	Default
	165	5825	Default
802.11ac(VHT20)	36	5180	Default
	44	5220	Default
	48	5240	Default
	149	5745	Default
	157	5785	Default
	165	5825	Default
802.11ac(VHT40)	38	5190	30
	46	5230	Default
	151	5755	Default
	159	5795	Default
802.11ac(VHT80)	42	5210	30
	155	5775	Default

1.4 Test Mode Applicability And Tested Channel Detail

1. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports.
2. The worst case was found when positioned on X axis for radiated emission. Following test modes were selected for the final test, and the final worst case is recorded in the report:

EUT Configure Mode	RE < 1G	RE ≥ 1G	ACM	ACP	Description
--	☒	☒	☒	☐	Transmit WIFI
--	☐	☐	☐	☒	Normal Link

Note : RE<1G: Radiated Emission below 1GHz RE≥1G: Radiated Emission above 1GHz
ACM: Antenna Port Conducted Measurement ACP: AC Power Line Conducted Emission

Following channel(s) was (were) selected for the final test as listed below:

Radiated Spurious Emission Measurement(Below 1GHz):

Mode	Frequency (MHz)	Available Channel	Tested Channel	Modulation Type	Data Rate (Mbps)
--	802.11a	36 ~ 165	44, 157	OFDM	6

Radiated Spurious Emission Measurement(Above 1GHz):

Mode	Frequency (MHz)	Available Channel	Tested Channel	Modulation Type	Data Rate (Mbps)
802.11a	5180 ~ 5240	36 ~ 48	36, 44, 48	OFDM	6
802.11ac VHT20		36 ~ 48	36, 44, 48	OFDM	6.5
802.11ac VHT40		38 ~ 46	38, 46	OFDM	13.5
802.11ac VHT80		42	42	OFDM	29.3
802.11a	5745 ~ 5825	149 ~ 165	149, 157, 165	OFDM	6
802.11ac VHT20		149 ~ 165	149, 157, 165	OFDM	6.5
802.11ac VHT40		151 ~ 159	151, 159	OFDM	13.5
802.11ac VHT80		155	155	OFDM	29.3

Radiated Band Edge Emission Measurement(Above 1GHz):

Mode	Frequency (MHz)	Available Channel	Tested Channel	Modulation Type	Data Rate (Mbps)
802.11a	5180 ~ 5240	36 ~ 48	36, 48	OFDM	6
802.11ac VHT20		36 ~ 48	36, 48	OFDM	6.5
802.11ac VHT40		38 ~ 46	38, 46	OFDM	13.5
802.11ac VHT80		42	42	OFDM	29.3
802.11a	5745 ~ 5825	149 ~ 165	149, 165	OFDM	6
802.11ac VHT20		149 ~ 165	149, 165	OFDM	6.5
802.11ac VHT40		151 ~ 159	151, 159	OFDM	13.5
802.11ac VHT80		155	155	OFDM	29.3

Output Power, Power Spectral Density,

Mode	Frequency (MHz)	Available Channel	Tested Channel	Modulation Type	Data Rate (Mbps)
802.11a	5180 ~ 5240	36 ~ 48	36, 44, 48	OFDM	6
802.11ac VHT20		36 ~ 48	36, 44, 48	OFDM	6.5
802.11ac VHT40		38 ~ 46	38, 46	OFDM	13.5
802.11ac VHT80		42	42	OFDM	29.3
802.11a	5745 ~ 5825	149 ~ 165	149, 157, 165	OFDM	6
802.11ac VHT20		149 ~ 165	149, 157, 165	OFDM	6.5
802.11ac VHT40		151 ~ 159	151, 159	OFDM	13.5
802.11ac VHT80		155	155	OFDM	29.3

6dB Bandwidth:

Mode	Frequency (MHz)	Available Channel	Tested Channel	Modulation Type	Data Rate (Mbps)
802.11a	5745 ~ 5825	149 ~ 165	149, 157, 165	OFDM	6
802.11ac VHT20		149 ~ 165	149, 157, 165	OFDM	6.5
802.11ac VHT40		151 ~ 159	151, 159	OFDM	13.5
802.11ac VHT80		155	155	OFDM	29.3

26dB Bandwidth, 99% Occupied Bandwidth:

Mode	Frequency (MHz)	Available Channel	Tested Channel	Modulation Type	Data Rate (Mbps)
802.11a	5180 ~ 5240	36 ~ 48	36, 44, 48	OFDM	6
802.11n ac20		36 ~ 48	36, 44, 48	OFDM	6.5
802.11n ac40		38 ~ 46	38, 46	OFDM	13.5
802.11ac VHT80		42	42	OFDM	29.3

Frequency Stability:

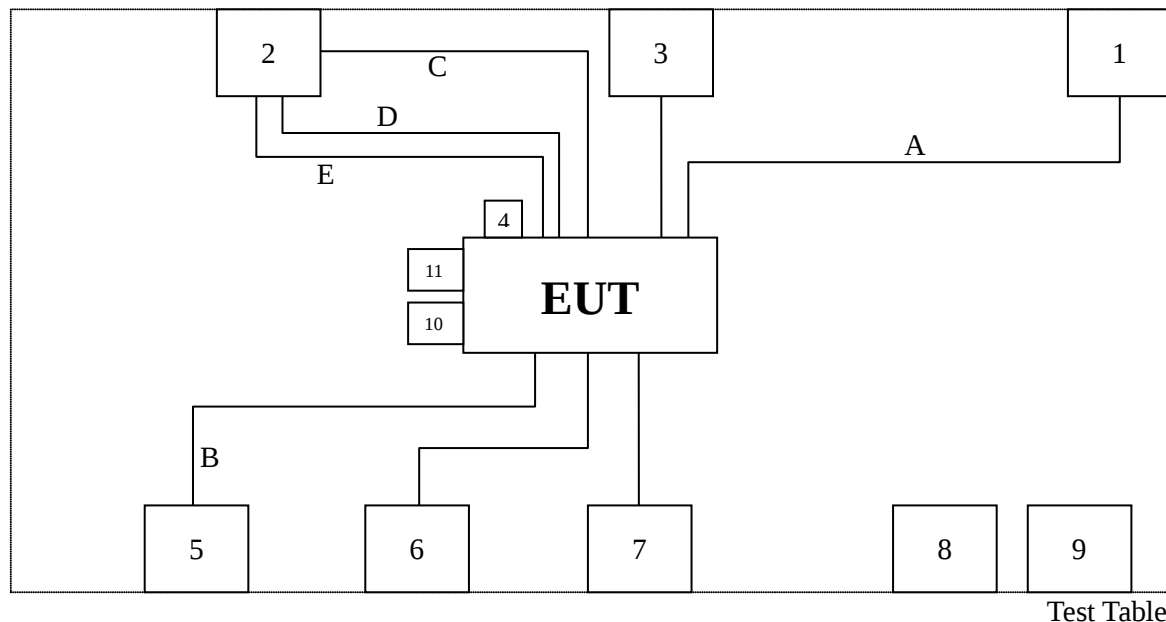
Mode	Frequency (MHz)	Available Channel	Tested Channel	Modulation Type	Data Rate (Mbps)
802.11a	5180 ~ 5240	36 ~ 48	44	OFDM	6
802.11a	5745 ~ 5825	149 ~ 165	157	OFDM	6

AC Conducted Emission:

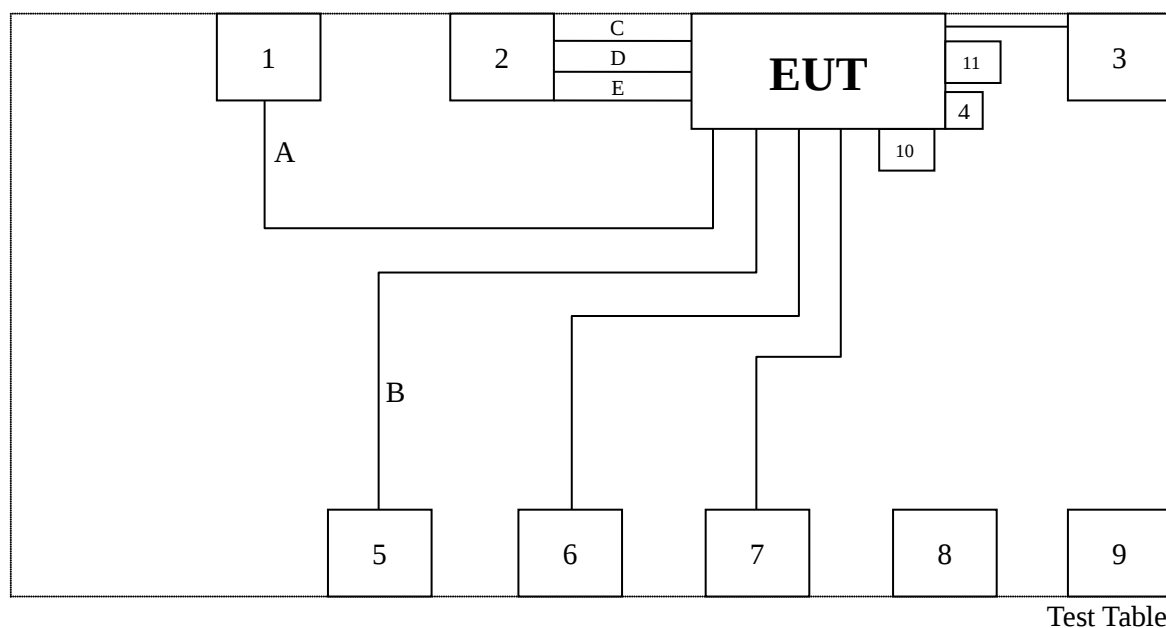
EUT Configure Mode	Mode	Available Channel	Tested Channel	Modulation Type	Data Rate (Mbps)
--	802.11a	36 ~ 165	44	OFDM	6

1.5 Configuration of Tested System

Radiation



AC Conduction



1.6 EUT Exercise Software

1. Setup the EUT as shown in Section 1.5
2. Execute software "Ampak RFTest Tool Ver:5.8".
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.

1.7 Tested System Details

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

No.	Product	Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook PC	acer	N16Q1	NXVD4TA023742254707600	Non-shielded, 1 Core, 0.8m
2	Notebook PC	acer	N17W3	NXVJ7TA00302301D496600	Non-shielded, 1 Core, 1.6m
3	Adapter	EDAC	EA11703F-1900	N/A	Non-shielded, 1 Core, 1.2m
4	USB Dongle	Tianzun Technology Co., Ltd	P3L	N/A	N/A
5	Cement Resistor	N/A	20W2ΩJ	N/A	N/A
6	USB Mouse	Lemel	M83	201707K31002387	Non-shielded, Non-Core, 1.5m
7	Earphone & Microphone	WD	EarMic-01	N/A	Non-shielded, Non-Core, 1m
8	Remote Control	Bontech Electronics Co., Ltd	90-578100B2702	N/A	N/A
9	Remote Control	Tianzun Technology Co., Ltd	P3L	N/A	N/A
10	TRS 3.5 Lord	Elite Screens Visual & Sound Co., Ltd.	TRS35	N/A	N/A
11	Micro SD Card	SanDisk	UHS-I 16GB	N/A	N/A

No.	Signal Cable Type	Signal cable Description
A	HDMI Cable	Non-shielded, Non-Core, 1.5m
B	USB Cable	Shielded, Non-Core, 1.2m
C	HDMI Cable	Non-shielded, Non-Core, 1.5m
D	USB Cable	Shielded, Non-Core, 0.8m
E	Audio Cable	Non-shielded, Non-Core, 3.4m
--	AC Power Cable	Non-shielded, Non-Core, 1.5m

1.8 Test Facility

Items	Required (IEC 60068-1)	Actual
Temperature (°C)	15-35	20~25
Humidity (% RH)	25-75	45~55
Barometric pressure (mbar)	860-1060	990~1020

Description: Accredited by TAF
Accredited Number: 2965

Issued by: Wendell Industrial Co., Ltd

Lab Address: 6F/6F-1, No.188, Baoqiao Rd., Xindian Dist.,
New Taipei City 23145, Taiwan R.O.C

Test Lab: Wendell EMC & RF Laboratory

Test Location: No. 119, Wugong 3rd Rd., Wugu Dist.,
New Taipei City 248, Taiwan (R.O.C.)

Designation Number: TW0025

Test Firm Registration Number: 665221

1.9 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence (level based on a coverage factor K=2)

Measurement Project	Condition	Expended Uncertainty
AC Conducted Emission	0.150 ~ 30 MHz	2.64 dB
Radiated Emission	0.009 ~ 30 MHz	± 4.2 dB
	30 ~ 1000 MHz	± 3.9 dB
	1000 ~ 18000 MHz	± 4.1 dB
	18000 ~ 40000 MHz	± 3.9 dB
RF Power, Conducted	Conducted Measuring	± 0.51 dB
Occupied Bandwidth	Conducted Measuring	± 2.4 %
Power Density	Conducted Measuring	± 1.7 dB
Duty Cycle	Conducted Measuring	± 1.3 %
Frequency Stability	Conducted Measuring	± 0.063 ppm
DC Power Supply	--	± 3.2 %
Temperature	--	± 1.1 °C
Humidity	--	± 3.4 %

Note: Please note that the measurement uncertainty are provided for informational purpose only and are not used in determining the Pass/Fail results.

1.10 List of Test Equipment

For Conducted measurements / W08-Conducted Measurement

Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due Date
✓ Spectrum analyzer	Keysight	N9010A	SG50420005	2021/08/09	2022/08/08
✓ Wideband Peak Power Meter	Anritsu	ML2495A	1733007	2021/09/07	2022/09/06
✓ Pulse Power Sensor + Precision Adaptor	Anritsu	MA2411B	1726022	2021/09/07	2022/09/06
Temperature Chamber	TAICHY	MHK-225LK	1061121	2021/4/27	2022/4/26
Wireless Connectivity Tester	R&S	CMW270	101307	2021/5/24	2022/5/23
✓ Attenuator	MVE	MVE2211-10	CT-9-056	2021/08/18	2022/08/17
Attenuator	MVE	MVE2211-20	CT-9-057	2021/08/18	2022/08/17
Attenuator	MVE	MVE2211-30	CT-9-058	2021/08/18	2022/08/17
Power Divider	MVE	MVE8546	170826003	2021/08/18	2022/08/17
Power Splitter	MVE	MVE8547	170302047	2021/08/18	2022/08/17
DC Power Supply	GW INSTEK	GPC-3060D	GER817636	2021/08/19	2022/08/18

Remark:

1. All equipments are calibrated every one year.
2. The test instruments marked with “✓” are used to measure the final test results.

For AC Conduction measurements / W08-CE

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due Date
✓	EMI Test Receiver	R&S	ESR3	102309	2021/6/8	2022/6/7
✓	2-Line V-Network LISN	R&S	ENV216	101185	2021/6/11	2022/6/10
✓	LISN	SCHWARZBECK	NSLK 8127RC	05028	2021/6/11	2022/6/10
✓	Transient Limiter	EM Electronics Corporation	EM-7600	857	2021/6/10	2022/6/9
✓	50ohm Cable	EMCI	EMCCFD300-BM-BM- 5000	170612	2021/6/10	2022/6/9
✓	50 ohm terminal impedance	HUBER+SUHNER	50 ohm terminal impedance	CT-1-109-1	2021/6/11	2022/6/10

Remark:

1. All equipments are calibrated every one year.
2. The test instruments marked with “✓” are used to measure the final test results.
3. Test Software version: FARAD EZ-EMC Ver.EMC-CON 3A1

For Radiated measurements / W08-996-2

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due Date
✓	EMI Receiver	Keysight	N9038A	MY51210173	2021/08/20	2022/08/19
✓	Spectrum Analyzer	Keysight	N9010A	MY52220228	2021/08/24	2022/08/23
✓	Loop Antenna	EMCI	LPA600	277	2021/09/02	2022/09/01
✓	TRILOG super broad Antenna	Schwarzbeck	VULB 9168	VULB 9168-700 & 1421	2021/08/11	2022/08/10
✓	Horn Antenna	Schwarzbeck	BBHA 9120D	01767	2021/08/11	2022/08/10
✓	Horn Antenna	Schwarzbeck	BBHA 9170	703	2021/12/17	2022/12/16
✓	Pre-Amplifier	EM	EMC330	060774	2021/08/24	2022/08/23
✓	Pre-Amplifier	EMEC	EM01G18G	060648	2021/08/24	2022/08/23
✓	Pre-Amplifier	JPT	JPA0118-55-303K	1910001800055003	2021/08/25	2022/08/24
✓	Pre-Amplifier	EMCI	EMC184045SE	980515	2021/08/24	2022/08/23
✓	Cable	EMEC	EM-CB400	105060103	2021/08/24	2022/08/23
✓	Cable	EMEC	EM-CB400	105060102	2021/08/24	2022/08/23
✓	Cable	EMEC	EM-CB400	105060101	2021/08/24	2022/08/23
✓	RF Cable	HUBER+SUHNER	SF102	MY2752/2	2021/08/24	2022/08/23
✓	Cable	MVE	280280.LL266.1200	B60028C	2021/08/24	2022/08/23
✓	RF Cable	HUBER+SUHNER	SF102	MY2751/2	2021/08/24	2022/08/23
✓	Cable	EMCI	EMC102-KM-KM-600	190646	2021/08/24	2022/08/23
	RF Filter	EMEC	BRF-2400-2500	002	2021/08/26	2022/08/25
✓	RF Filter	EMEC	BRF-5150-5350	104	2021/08/26	2022/08/25
✓	RF Filter	EMEC	BRF-5470-5725	092	2021/08/26	2022/08/25
✓	RF Filter	EMEC	BRF-5725-5875	091	2021/08/26	2022/08/25
	RF Filter	EMEC	HPF-2800	002	2021/08/26	2022/08/25
✓	RF Filter	EMEC	HPF-5850	059	2021/08/26	2022/08/25
	SMA Notch Filter	MVE	MFN-902.928.S1	190604001	2021/09/02	2022/09/01

Remark:

1. All equipments are calibrated every one year.
2. The test instruments marked with "✓" are used to measure the final test results.
3. Test Software version: FARAD EZ-EMC Ver.WD-03A1-1

2 Test Result

2.1 Antenna Requirement

2.1.1 Applicable Standard

For the band 5.15-5.25 GHz

- (1) For an outdoor access point operating:

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

- (2) For an indoor access point operating:

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

- (3) For fixed point-to-point access points operating:

For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi.

- (4) For client devices:

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

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands

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

For the band 5.725-5.85 GHz

If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information.

2.1.2 Antenna Connected Construction

Non-standard antenna connector is used.

2.1.3 Test Result

No.	Manufacturer	Model No.	Antenna Type	Peak Gain
1	Passive System Alliance	PFPCA500815IMLB3G4	PCB Antenna	4 dBi for 5.15~5.25GHz 4 dBi for 5.725~5.85GHz

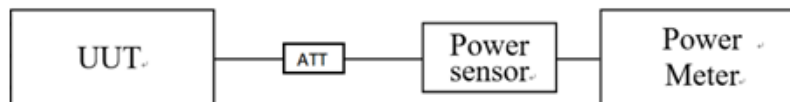
2.2 Output Power Measurement and Transmit Power Control

2.2.1 Limit

1. For frequency Band 5150~5250MHz:
 - (1) Outdoor access point : 1W (30 dBm)
 - (2) Indoor access point : 1W (30 dBm)
 - (3) Fixed point-to-point access point : 1W (30 dBm)
 - (4) Client device : 250mW (24 dBm)
 - (5) If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
2. For frequency Band 5250~5350MHz and 5470~5725MHz:
 - (1) 250mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth (MHz), whichever is lesser.
 - (2) If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
3. For frequency Band 5725~5850MHz:
 - (1) The maximum conducted output power over the frequency band of operation shall not exceed 1 W(30 dBm).
 - (2) If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Transmit power control (TPC). U-NII devices operating in the 5.25-5.35 GHz band and the 5.47-5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

2.2.2 Test Setup



2.2.3 Test Procedure

1. Enable the EUT transmit continuously.
2. Let EUT be connected to the power meter, and record the max. reading.
3. Measurement using a gated RF average power meter, since this measurement is made only during the ON time of the transmitter, no duty cycle correction is required.

2.2.4 Test Result

802.11a

Frequency (MHz)	Average power (dBm)			Limit (dBm)	Result
	Chain A	Chain B	Total		
5180	10.55	--	--	≤ 24	Pass
5220	11.09	--	--	≤ 24	Pass
5240	11.04	--	--	≤ 24	Pass
5745	11.67	--	--	≤ 30	Pass
5785	12.15	--	--	≤ 30	Pass
5825	12.02	--	--	≤ 30	Pass

Remark:

1. Average Power = Reading value on power meter + cable loss
2. $10 \log(X/\text{mW}) = \text{dBm}$, $X=1$ watt (Limit)
1 watt = 30 dBm

802.11ac VHT20

Frequency (MHz)	Average power (dBm)			Limit (dBm)	Result
	Chain A	Chain B	Total		
5180	10.46	--	--	≤ 24	Pass
5220	11.07	--	--	≤ 24	Pass
5240	11.02	--	--	≤ 24	Pass
5745	11.47	--	--	≤ 30	Pass
5785	11.90	--	--	≤ 30	Pass
5825	11.74	--	--	≤ 30	Pass

Remark:

1. Average Power = Reading value on power meter + cable loss
2. $10 \log(X/\text{mW}) = \text{dBm}$, $X=1$ watt (Limit)
1 watt = 30 dBm
3. Directional Gain > 6dB, Actual Limit = Original Limit - (Directional Gain - 6dB)

802.11ac VHT40

Frequency (MHz)	Average power (dBm)			Limit (dBm)	Result
	Chain A	Chain B	Total		
5190	2.79	--	--	≤ 24	Pass
5230	8.51	--	--	≤ 24	Pass
5755	11.12	--	--	≤ 30	Pass
5795	11.64	--	--	≤ 30	Pass

Remark:

1. Average Power = Reading value on power meter + cable loss
2. $10 \log(X/\text{mW}) = \text{dBm}$, $X=1$ watt (Limit)
1 watt = 30 dBm
3. Directional Gain > 6dB, Actual Limit = Original Limit - (Directional Gain - 6dB)

802.11ac VHT80

Frequency (MHz)	Average power (dBm)			Limit (dBm)	Result
	Chain A	Chain B	Total		
5210	2.54	--	--	≤ 24	Pass
5775	11.66	--	--	≤ 30	Pass

Remark:

1. Average Power = Reading value on power meter + cable loss
2. $10 \log(X/\text{mW}) = \text{dBm}$, $X=1$ watt (Limit)
1 watt = 30 dBm
3. Directional Gain > 6dB, Actual Limit = Original Limit - (Directional Gain - 6dB)

2.2.5 Transmit Power Control

EUT doesn't support TPC function.

2.3 26dB Bandwidth, 6dB Bandwidth and 99% Occupied Bandwidth Measurement

2.3.1 Limit

Within 5725~5850 MHz, the minimum 6 dB bandwidth shall be at least 500 kHz.

2.3.2 Test Setup



2.3.3 Test Procedure

1. The following procedure shall be used for measuring 6dB bandwidth:
 - (1) Enable the EUT transmit continuously.
 - (2) Set RBW = 100 kHz, VBW $\geq$ 3 RBW, Sweep = auto couple.
 - (3) Detector = Peak, Trace mode = max hold.
 - (4) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.
2. The following procedure shall be used for measuring 26 dB bandwidth:
 - (1) Set RBW = approximately 1% of the emission bandwidth.
 - (2) Set the VBW > RBW, Detector = Peak, Trace mode = max hold
 - (3) Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
3. The following procedure shall be used for measuring 99% power bandwidth:
 - (1) Set center frequency to the nominal EUT channel center frequency.
 - (2) Set span = 1.5 times to 5.0 times the OBW.
 - (3) Set RBW = 1% to 5% of the OBW.
 - (4) Set the VBW $\geq$ 3 RBW.
 - (5) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
 - (6) Use the 99% power bandwidth function of the instrument.

- (7) If the instrument does not have a 99% power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

2.3.4 Test Result

2.2.4.1 6dB Bandwidth

802.11a

Frequency (MHz)	6dB BW (MHz)		Limit (kHz)	Result
	Chain A	Chain B		
5745	16.04	--	> 500	Pass
5785	16.32	--	> 500	Pass
5825	16.33	--	> 500	Pass

802.11ac VHT20

Frequency (MHz)	6dB BW (MHz)		Limit (kHz)	Result
	Chain A	Chain B		
5745	17.28	--	> 500	Pass
5785	17.08	--	> 500	Pass
5825	17.32	--	> 500	Pass

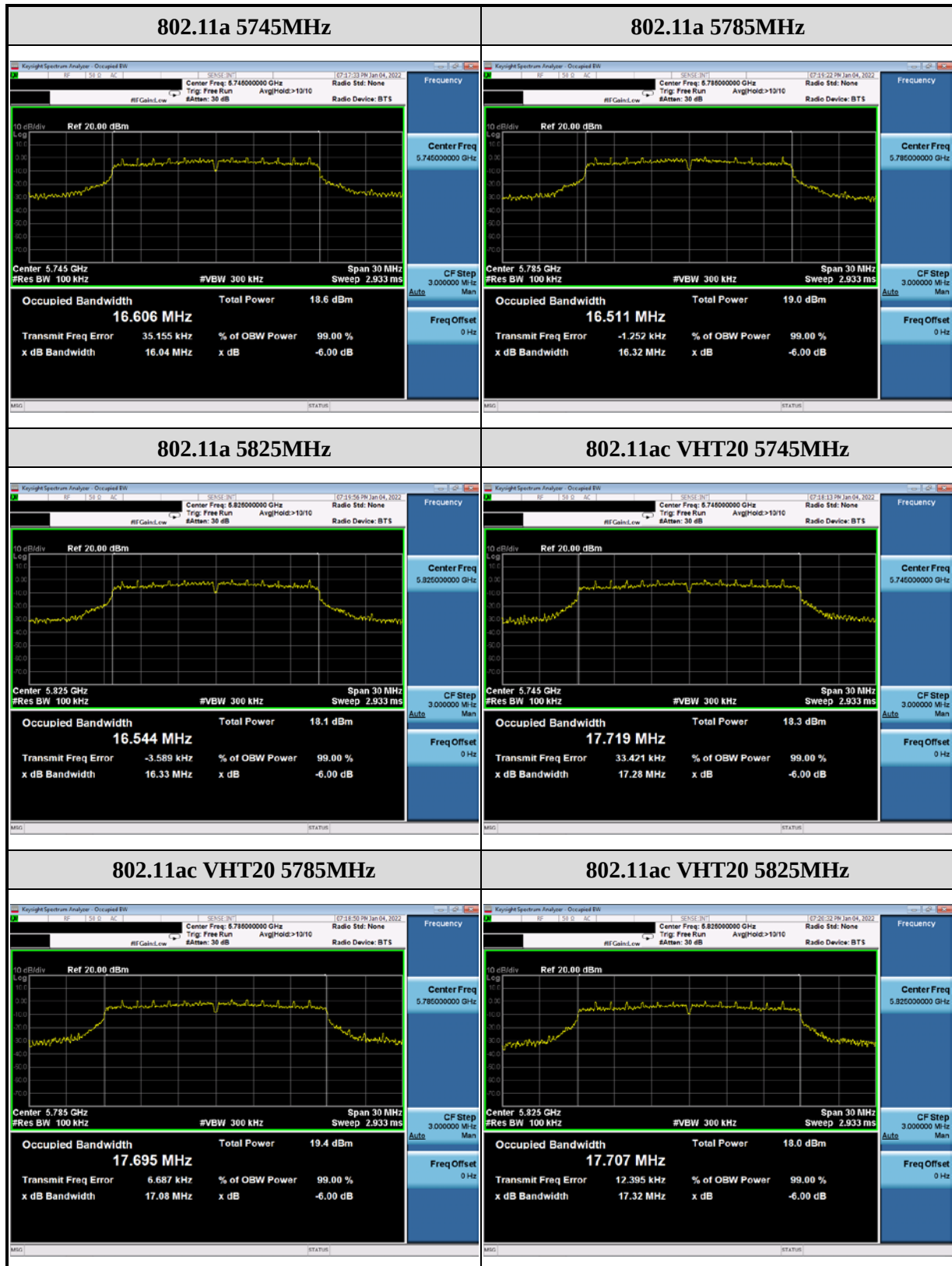
802.11ac VHT40

Frequency (MHz)	6dB BW (MHz)		Limit (kHz)	Result
	Chain A	Chain B		
5755	35.76	--	> 500	Pass
5795	35.51	--	> 500	Pass

802.11ac VHT80

Frequency (MHz)	6dB BW (MHz)		limit (kHz)	Result
	Chain A	Chain B		
5775	75.30	--	> 500	Pass

6dB spectrum plot of Chain A value:



6dB spectrum plot of Chain A value:



3.

2.2.4.1 26dB & 99% Bandwidth

802.11a

Frequency (MHz)	26dB BW (MHz)		99% OBW (MHz)		Limit (kHz)	Result
	Chain A	Chain B	Chain A	Chain B		
5180	30.500	--	--	--	--	--
5220	30.230	--	--	--	--	--
5240	29.400	--	17.779	--	--	--

802.11ac VHT20

Frequency (MHz)	26dB BW (MHz)		99% OBW (MHz)		Limit (kHz)	Result
	Chain A	Chain B	Chain A	Chain B		
5180	32.860	--	--	--	--	--
5220	30.830	--	--	--	--	--
5240	30.730	--	18.665	--	--	--

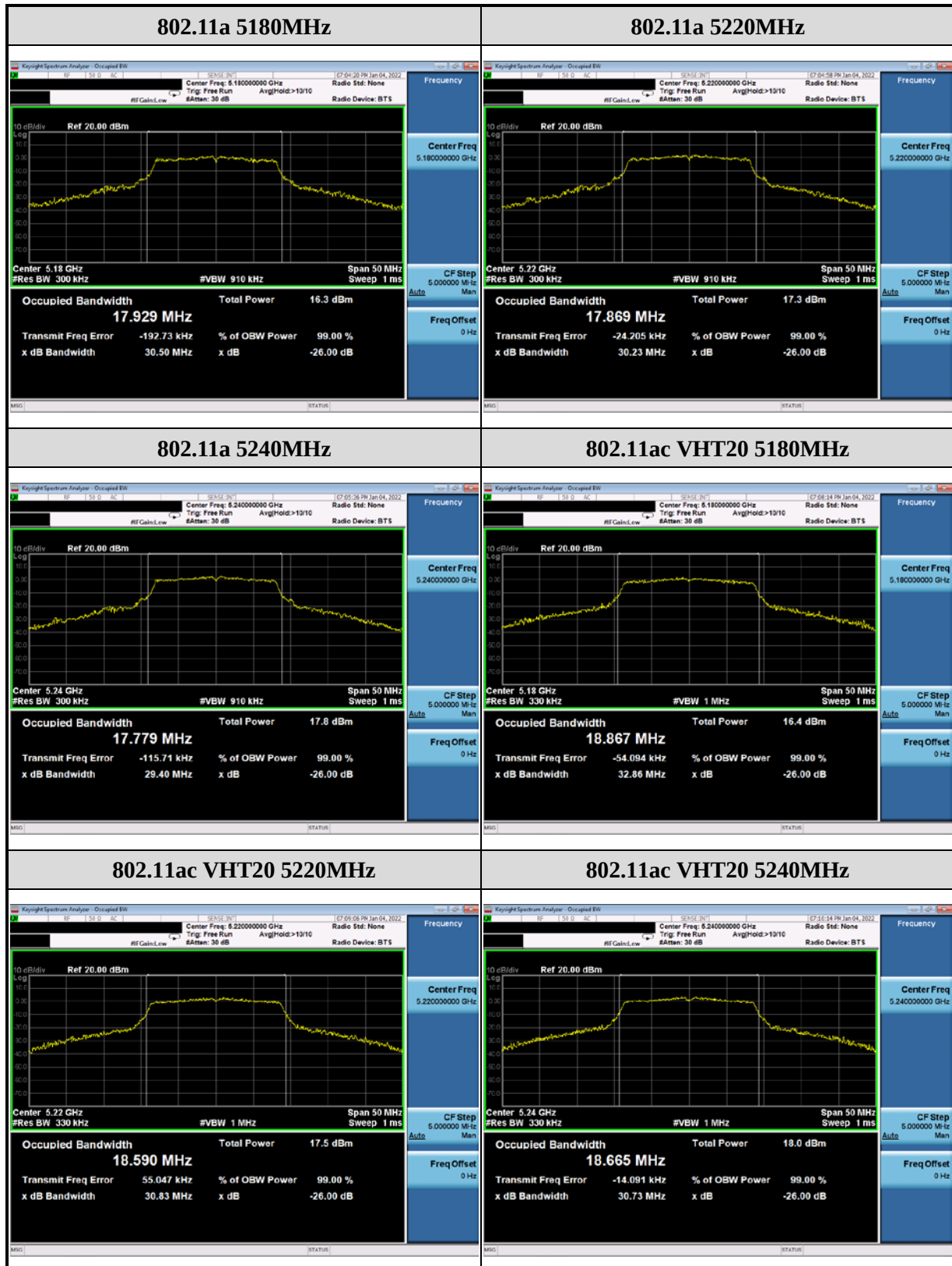
802.11ac VHT40

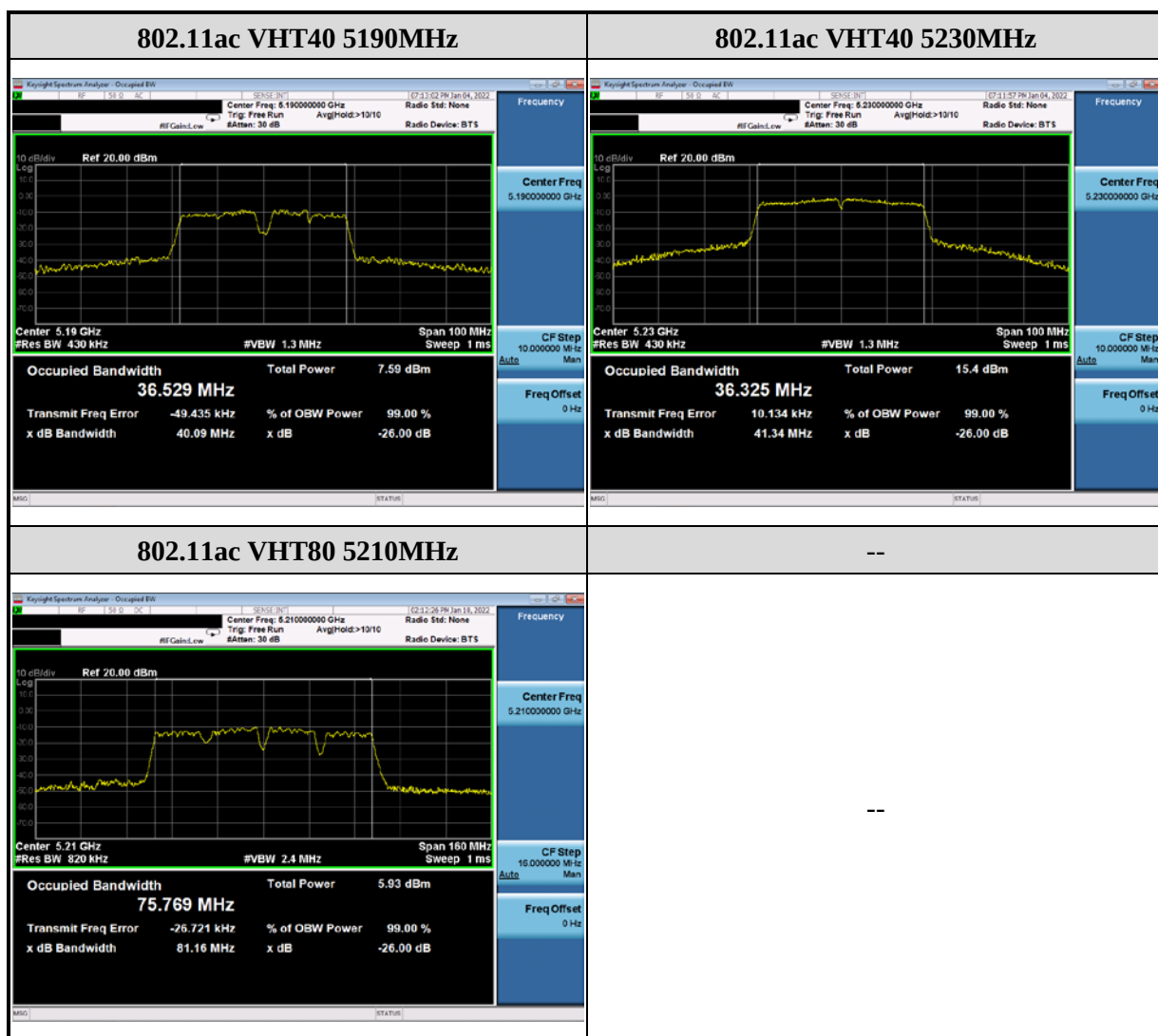
Frequency (MHz)	26dB BW (MHz)		99% OBW (MHz)		Limit (kHz)	Result
	Chain A	Chain B	Chain A	Chain B		
5190	40.090	--	--	--	--	--
5230	41.340	--	36.325	--	--	--

802.11ac VHT80

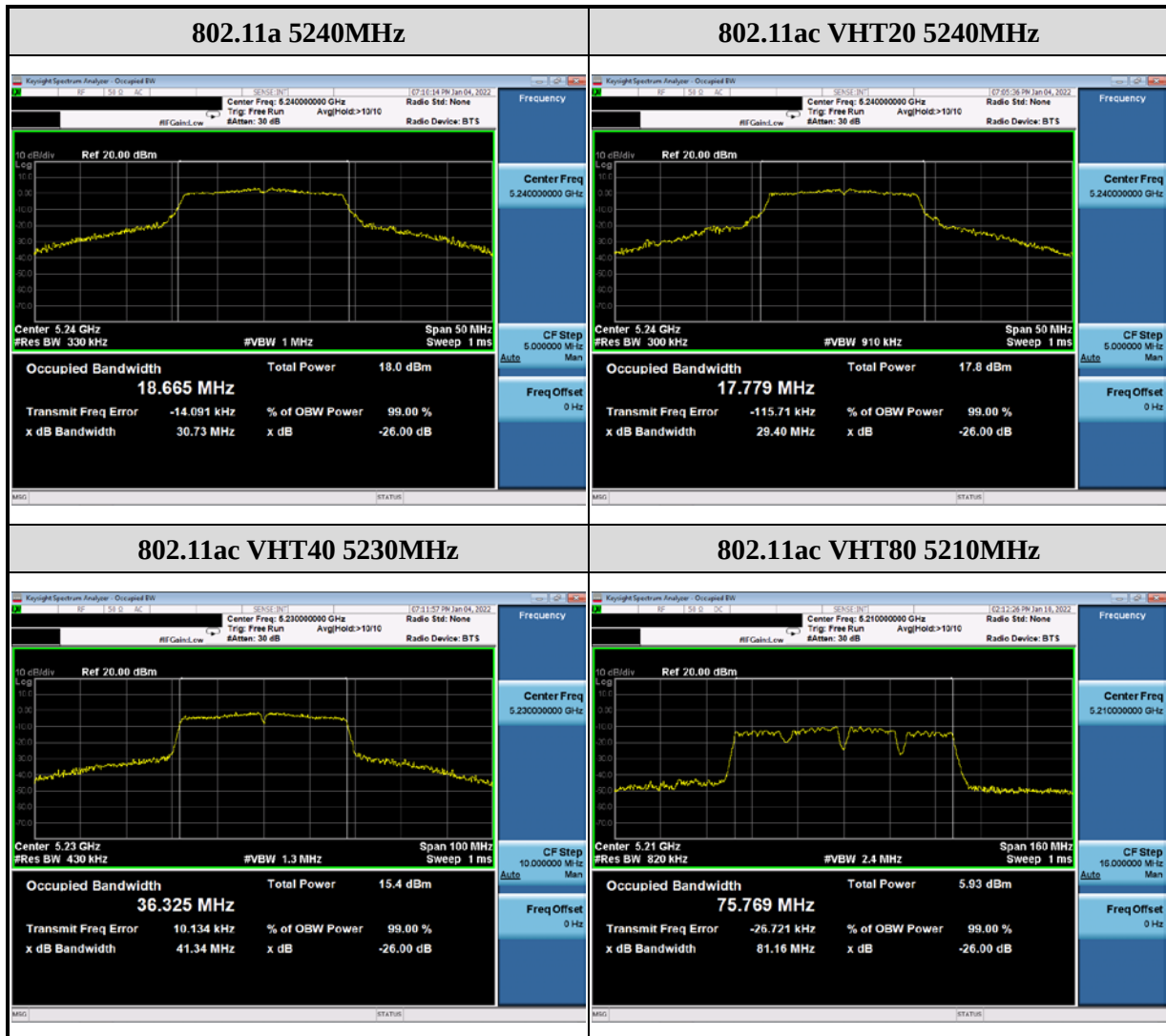
Frequency (MHz)	26dB BW (MHz)		99% OBW (MHz)		limit (kHz)	Result
	Chain A	Chain B	Chain A	Chain B		
5210	81.160	--	75.769	--	--	--

26dB Occupied Bandwidth spectrum plot of Chain A value:





99% Occupied Bandwidth spectrum plot of Chain A value :



2.4 Power Spectral Density Measurement

2.4.1 Limit

1. For frequency Band 5150~5250MHz:
 - (1) Outdoor access point : 17 dBm / MHz
 - (2) Indoor access point : 17 dBm / MHz
 - (3) Fixed point-to-point access point : 17 dBm / MHz
 - (4) Client device : 11 dBm / MHz
2. For frequency Band 5250~5350MHz:
11 dBm / MHz
3. For frequency Band 5470~5725MHz:
11 dBm / MHz
4. For frequency Band 5725~5850MHz:
30 dBm / 500kHz
5. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

2.4.2 Test Setup



2.4.3 Test Procedure

1. For frequency band 5150~5250, 5250~5350, 5470~5725MHz

Method SA-2

- (1) Measure the duty cycle D of the transmitter output signal.
- (2) Set span to encompass the entire 26 dB EBW or 99% OBW of the signal
- (3) Spectrum analyzer set:
 - a) RBW = 1 MHz
 - b) VBW = 3 MHz
 - c) Sweep time = auto
 - d) Detector = RMS
 - e) Number of points in sweep $\geq [2 \text{ span} / \text{RBW}]$.
(This gives bin-to-bin spacing $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.)
 - f) Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed such that the average accurately represents the true average over the ON and OFF periods of the transmitter.

2. For frequency band 5725~5850 MHz

Method SA-2

- (1) Measure the duty cycle D of the transmitter output signal.
- (2) Set span to encompass the entire 26 dB EBW or 99% OBW of the signal
- (3) Spectrum analyzer set:
 - a) RBW = 100 kHz
 - b) VBW = 300 kHz
 - c) Sweep time = auto
 - d) Detector = RMS
 - e) Number of points in sweep $\geq [2 \text{ span} / \text{RBW}]$.
(This gives bin-to-bin spacing $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.)
 - f) Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed such that the average accurately represents the true average over the ON and OFF periods of the transmitter.

2.4.4 Test Result

For 5150 MHz ~ 5250 MHz

802.11a

Frequency (MHz)	PSD (dBm)		Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
	Chain A	Chain B			
5180	-0.81	--	--	< 11	Pass
5220	0.19	--	--	< 11	Pass
5240	0.69	--	--	< 11	Pass

Remark: PSD = Reading value on a spectrum analyzer + cable loss + duty factor

802.11ac VHT20

Frequency (MHz)	PSD (dBm)		Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
	Chain A	Chain B			
5180	-1.23	--	--	< 11	Pass
5220	-0.31	--	--	< 11	Pass
5240	-0.08	--	--	< 11	Pass

Remark: PSD = Reading value on a spectrum analyzer + cable loss + duty factor

802.11ac VHT40

Frequency (MHz)	PSD (dBm)		Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
	Chain A	Chain B			
5190	-12.44	--	--	< 11	Pass
5230	-5.25	--	--	< 11	Pass

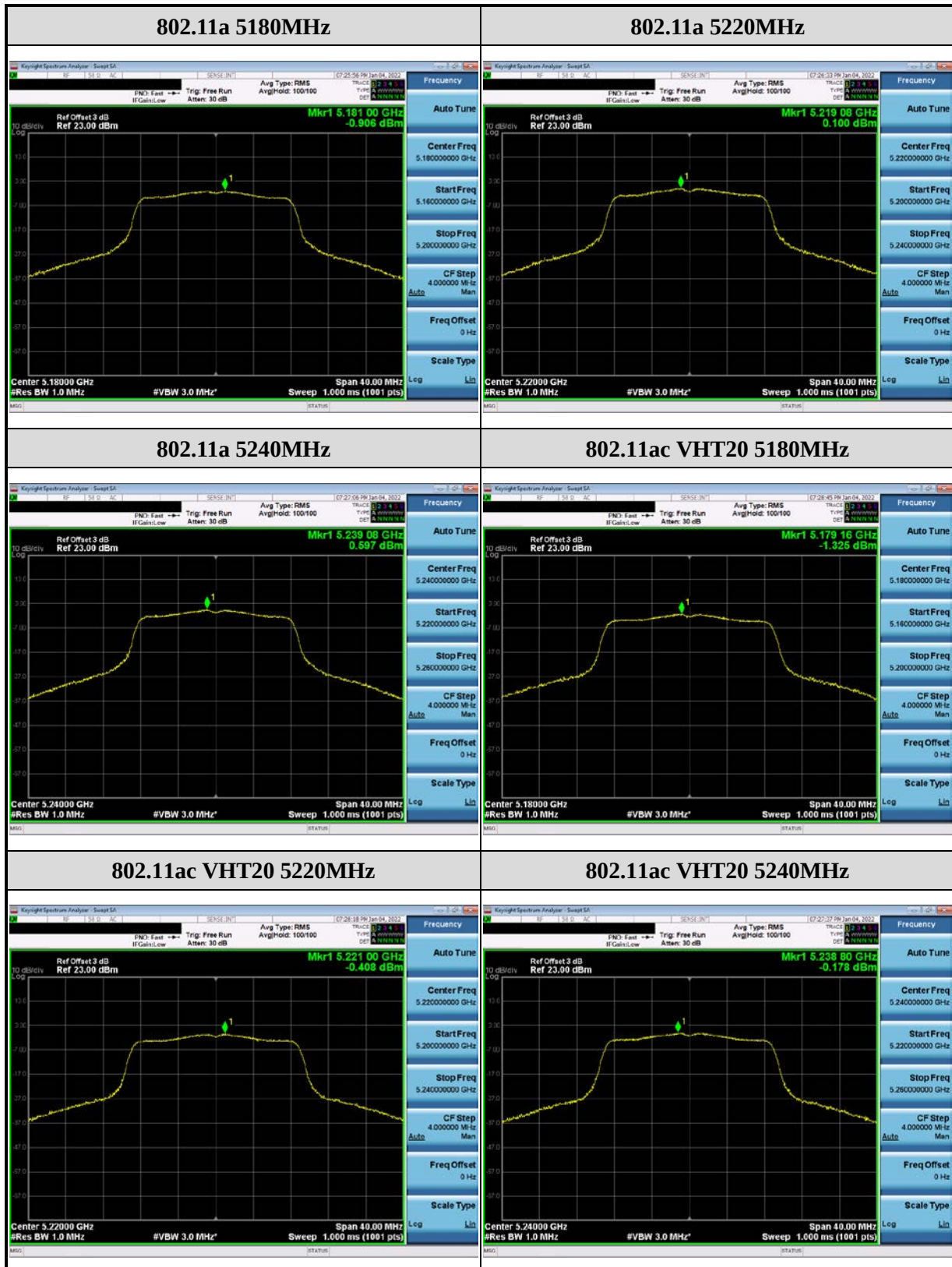
Remark: PSD = Reading value on a spectrum analyzer + cable loss + duty factor

802.11ac VHT80

Frequency (MHz)	PSD (dBm)		Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
	Chain A	Chain B			
5210	-14.54	--	--	< 11	Pass

Remark: PSD = Reading value on a spectrum analyzer + cable loss + duty factor

Power Spectral Density spectrum plot of Chain A value:



Power Spectral Density spectrum plot of Chain A value:



For 5725 MHz ~ 5850 MHz

802.11a

Frequency (MHz)	PSD (dBm)		Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
	Chain A	Chain B			
5745	-0.61	--	--	< 30	Pass
5785	0.43	--	--	< 30	Pass
5825	-0.59	--	--	< 30	Pass

Remark:

1. Measured value = Reading value on a spectrum analyzer + cable loss + duty factor
2. $\text{PSD(dBm/500kHz)} = \text{Measured value} + 10\log(500\text{kHz}/100\text{kHz})$

802.11ac VHT20

Frequency (MHz)	PSD (dBm)		Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
	Chain A	Chain B			
5745	-1.14	--	--	< 30	Pass
5785	-0.45	--	--	< 30	Pass
5825	-1.33	--	--	< 30	Pass

Remark:

1. Measured value = Reading value on a spectrum analyzer + cable loss + duty factor
2. $\text{PSD(dBm/500kHz)} = \text{Measured value} + 10\log(500\text{kHz}/100\text{kHz})$

802.11ac VHT40

Frequency (MHz)	PSD (dBm)		Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
	Chain A	Chain B			
5755	-4.03	--	--	< 30	Pass
5795	-3.76	--	--	< 30	Pass

Remark:

1. Measured value = Reading value on a spectrum analyzer + cable loss + duty factor
2. $\text{PSD(dBm/500kHz)} = \text{Measured value} + 10\log(500\text{kHz}/100\text{kHz})$

802.11ac VHT80

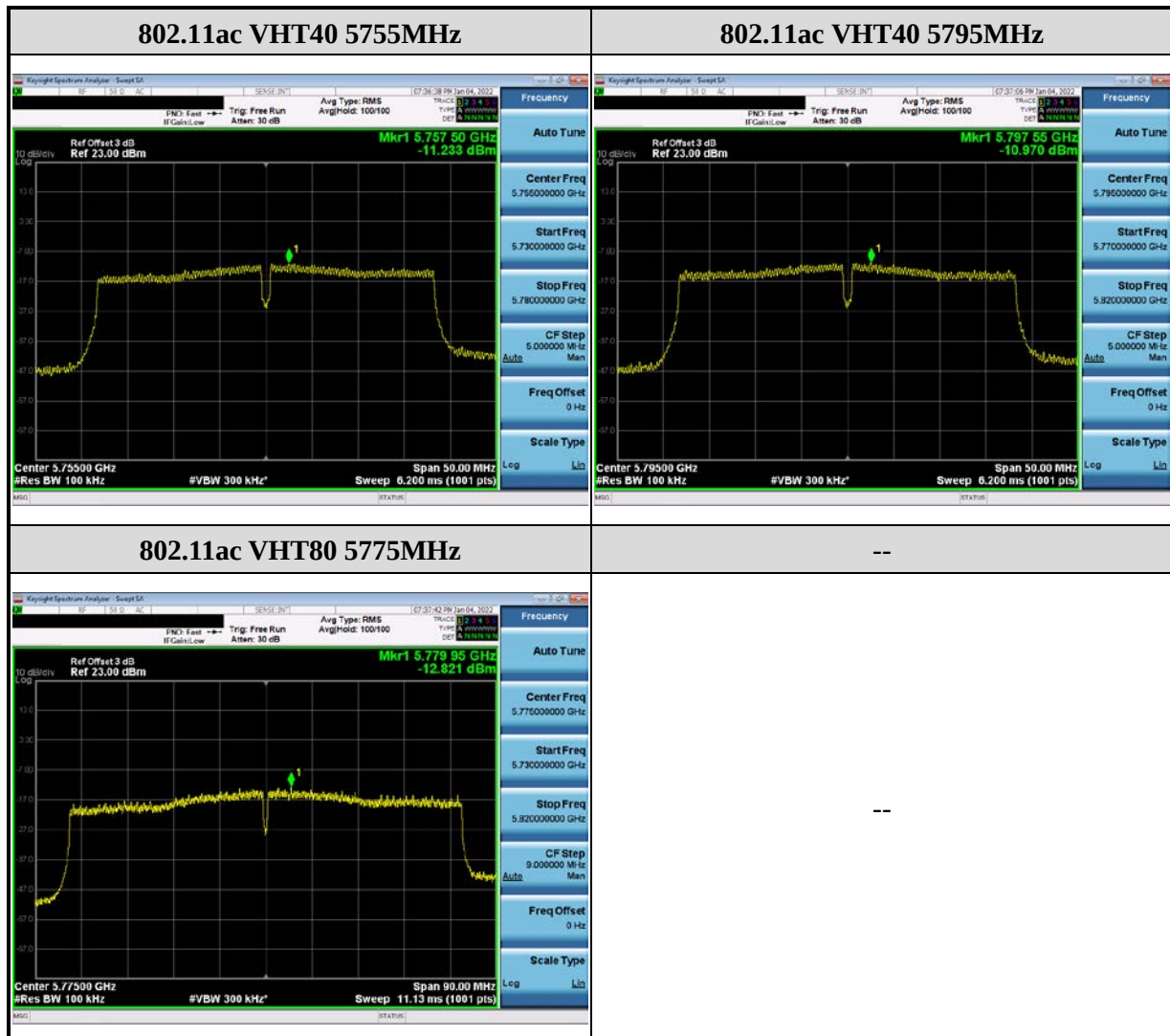
Frequency (MHz)	PSD (dBm)		Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
	Chain A	Chain B			
5775	-5.41	--	--	< 30	Pass

Remark:

1. Measured value = Reading value on a spectrum analyzer + cable loss + duty factor
2. $\text{PSD(dBm/500kHz)} = \text{Measured value} + 10\log(500\text{kHz}/100\text{kHz})$

Power Spectral Density spectrum plot of Chain A value:





2.5 Unwanted Emission Measurement

2.5.1 Limit

1. Un- restricted bands unwanted emission limit :

Operating Band (MHz)	Limit of all emissions outside of the operating band
5150 ~ 5250	-27dBm/MHz, EIRP
5250 ~ 5350	-27dBm/MHz, EIRP
5470 ~ 5725	-27dBm/MHz, EIRP
5725 ~ 5850	All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

EIRP (dBm)	Field Strength at 3m (dBμV/m)
- 27	68.2

2. Restricted bands unwanted emission limit :

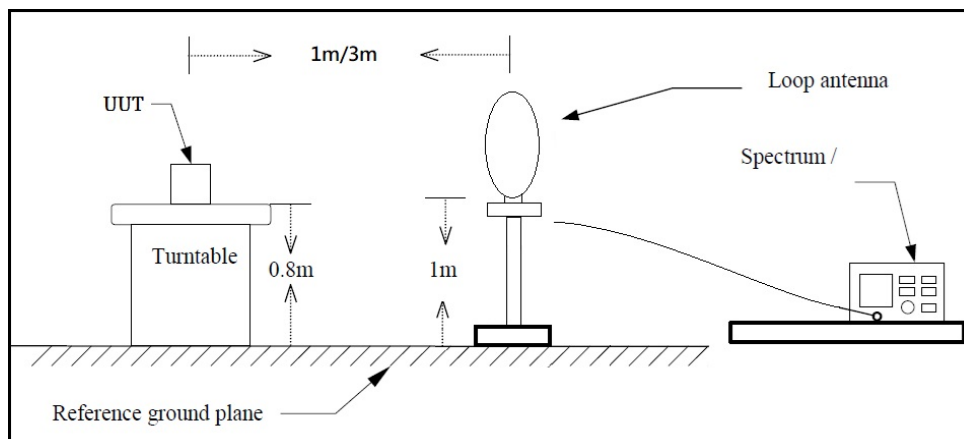
Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

Remarks:

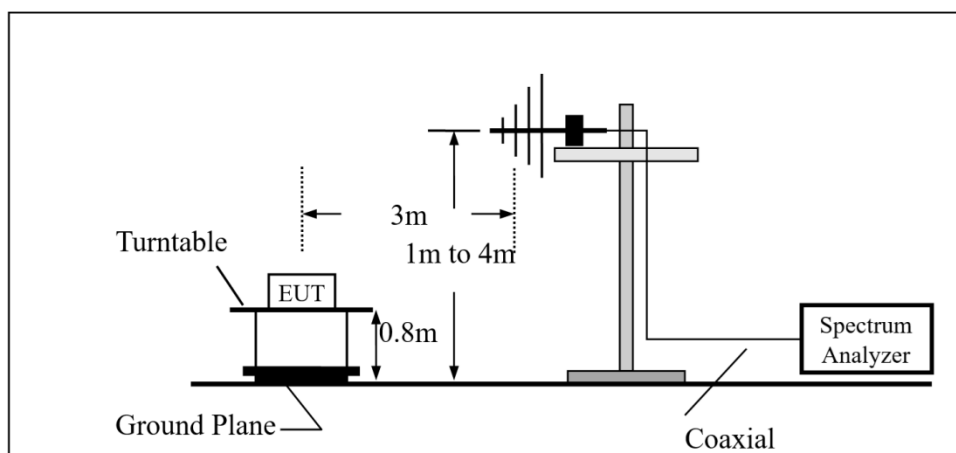
1. RF Voltage (dBuV) = 20 log RF Voltage(uV)
2. In the Above Table, the tighter limit applies at the band edges.
3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system

2.5.2 Test Setup

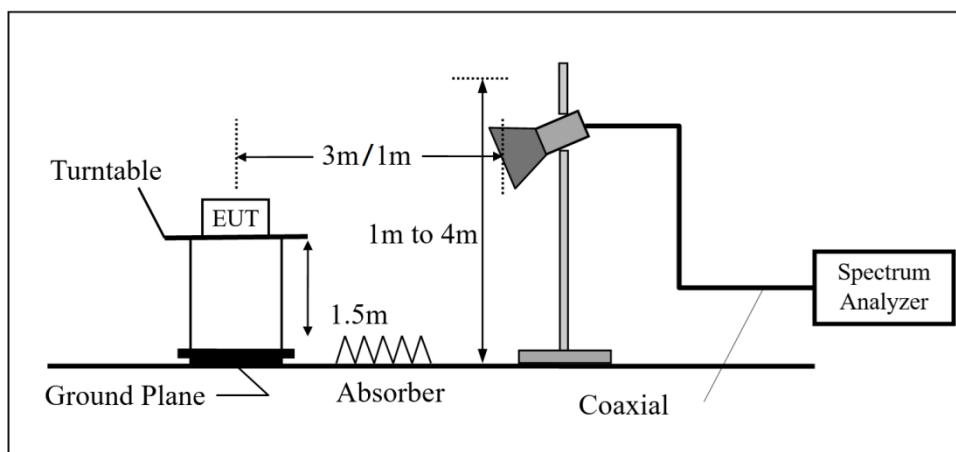
Below 30MHz



30MHz~1GHz



Above 1GHz



2.5.3 Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested according test procedure of KDB 789033 for compliance to FCC 47CFR 15.407 requirements.

For Radiated emission below 30MHz

- (1) The EUT was placed on the top of a rotating table 0.8 meters above the ground in a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- (2) The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- (3) Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- (4) For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- (5) The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

For Radiated emission Above 30MHz

- (1) The EUT was placed on the top of a rotating table 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for the test. The table was rotated 360 degrees to determine the position of the highest radiation.
- (2) The EUT was set 3 meters away from the interference-receiving antenna, the height of the antenna is varied from 1 meter to 4 meters above the ground to determine the maximum value of the field strength.
- (3) Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- (4) For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- (5) The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- (6) The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets the average limit, measurement with the average detector is unnecessary.

2.5.4 Duty Cycle

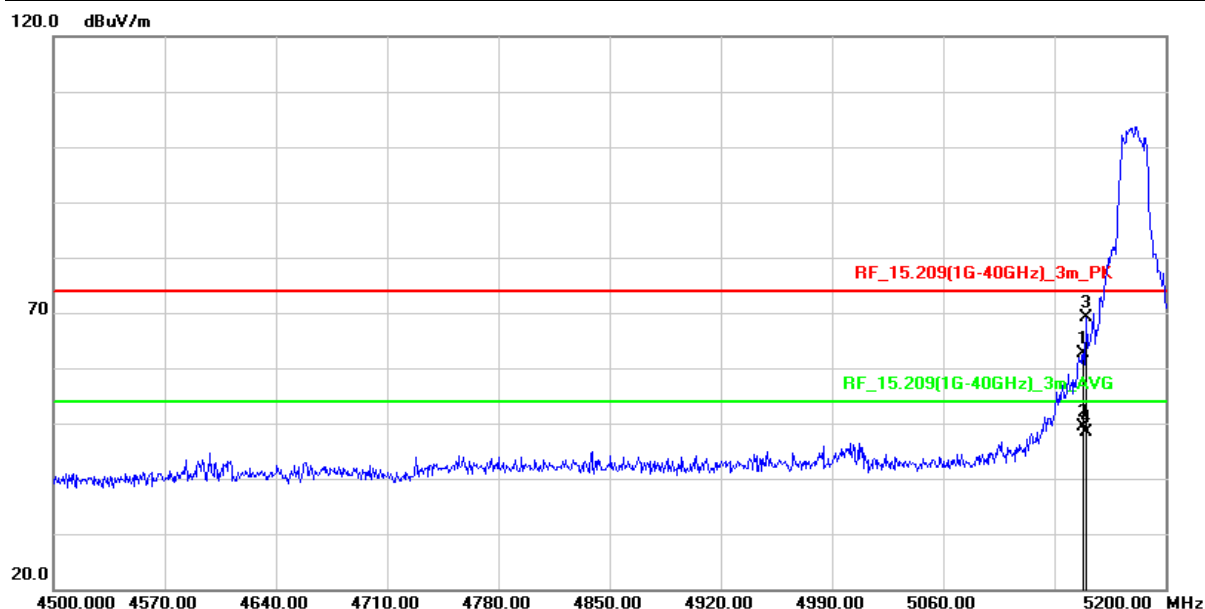
Type of Modulation	Frequency (MHz)	on time (ms)	on+off time (ms)	Duty cycle	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	5180	1.405	1.435	0.979	0.092	0.712
802.11ac VHT20	5180	1.325	1.355	0.978	0.097	0.755
802.11ac VHT40	5190	0.665	0.699	0.951	0.217	1.504
802.11ac VHT80	5210	0.332	0.366	0.907	0.423	3.012

2.5.5 Test Result of Radiated Band Edge Measurement

The following tables for radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X axis) were recorded in this report.

Test Frequency			
RF	802.11a / 802.11ac VHT20	802.11ac VHT40	802.11ac VHT80
Tx	CH36 (5180MHz) CH149 (5745MHz) CH165 (5825MHz)	CH38 (5190MHz) CH151 (5755MHz) CH159 (5795MHz)	CH42 (5210MHz) CH155 (5775MHz)

Test Mode :	Transmit(802.11a)	Test Date :	2021/10/05
Test Channel :	CH36(5180MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

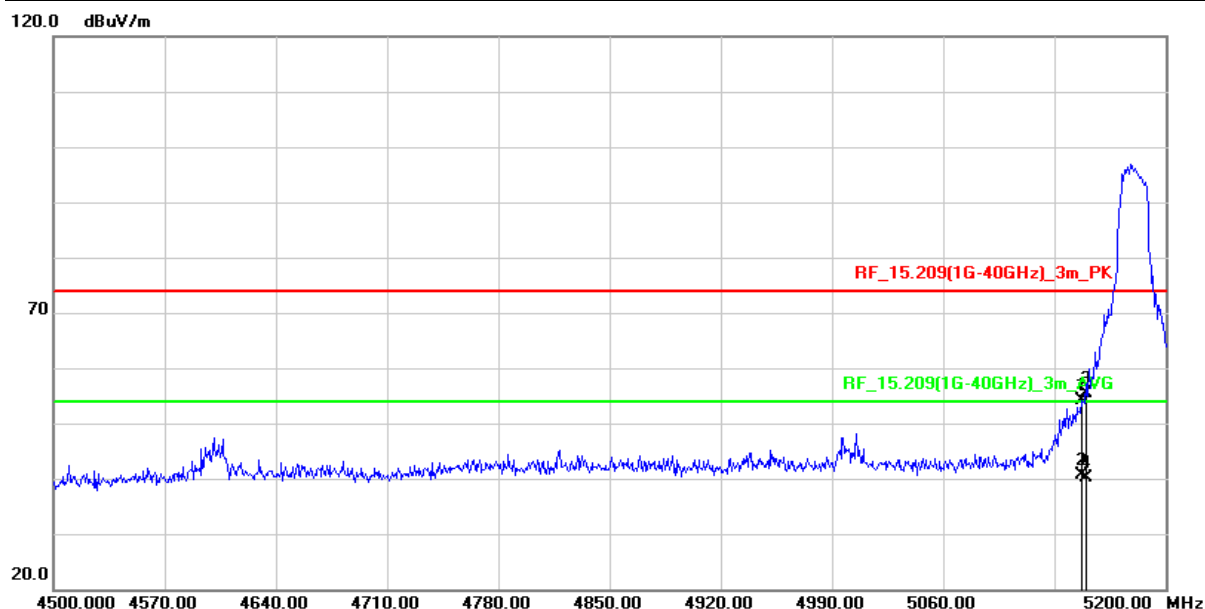


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5148.200	60.45	2.28	62.73	74.00	-11.27	peak
2	5148.200	47.04	2.28	49.32	54.00	-4.68	AVG
3	5150.000	66.85	2.28	69.13	74.00	-4.87	peak
4	5150.000	46.17	2.28	48.45	54.00	-5.55	AVG

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11a)	Test Date :	2021/10/05
Test Channel :	CH36(5180MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %

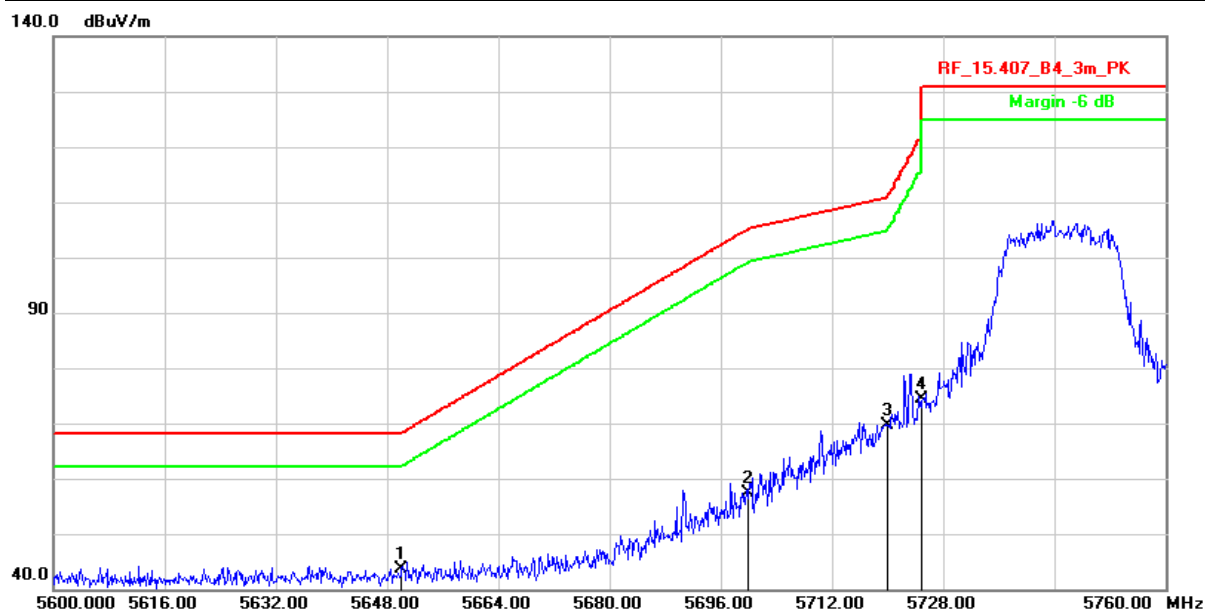


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5146.800	51.91	2.27	54.18	74.00	-19.82	peak
2	5146.800	38.30	2.27	40.57	54.00	-13.43	AVG
3	5150.000	53.01	2.28	55.29	74.00	-18.71	peak
4	5150.000	37.77	2.28	40.05	54.00	-13.95	AVG

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11a)	Test Date :	2021/10/05
Test Channel :	CH149(5745MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %



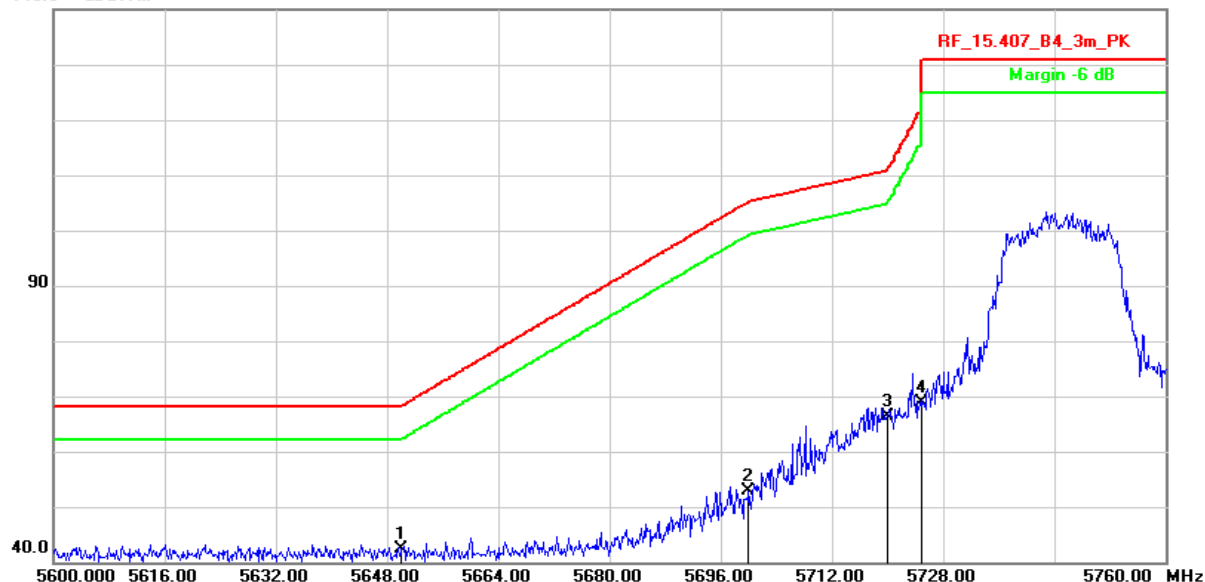
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	41.66	2.06	43.72	68.20	-24.48	peak
2	5700.000	55.28	2.11	57.39	105.20	-47.81	peak
3	5720.000	67.33	2.21	69.54	110.80	-41.26	peak
4	5725.000	72.18	2.23	74.41	122.20	-47.79	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11a)	Test Date :	2021/10/05
Test Channel :	CH149(5745MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %

140.0 dBuV/m

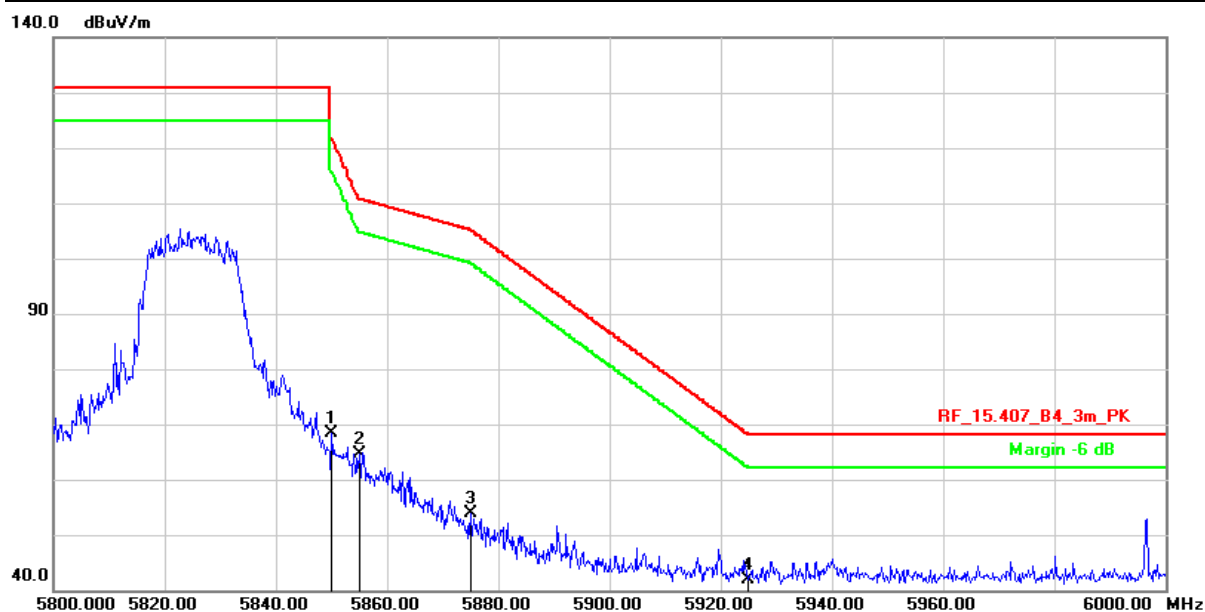


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	40.26	2.06	42.32	68.20	-25.88	peak
2	5700.000	50.84	2.11	52.95	105.20	-52.25	peak
3	5720.000	64.28	2.21	66.49	110.80	-44.31	peak
4	5725.000	66.62	2.23	68.85	122.20	-53.35	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11a)	Test Date :	2021/10/05
Test Channel :	CH165(5825MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	65.41	2.85	68.26	122.20	-53.94	peak
2	5855.000	61.69	2.86	64.55	110.80	-46.25	peak
3	5875.000	51.09	2.88	53.97	105.20	-51.23	peak
4	5925.000	38.84	2.93	41.77	68.20	-26.43	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11a)	Test Date :	2021/10/05
Test Channel :	CH165(5825MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %

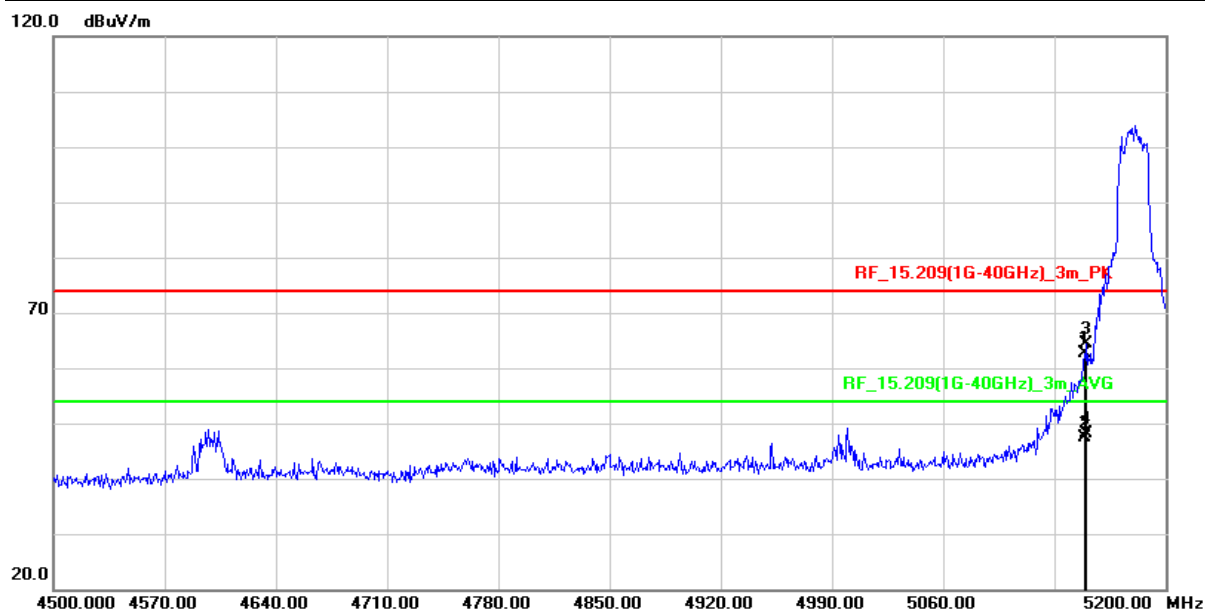


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	58.50	2.85	61.35	122.20	-60.85	peak
2	5855.000	54.63	2.86	57.49	110.80	-53.31	peak
3	5875.000	42.97	2.88	45.85	105.20	-59.35	peak
4	5925.000	39.32	2.93	42.25	68.20	-25.95	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT20)	Test Date :	2021/10/05
Test Channel :	CH36(5180MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

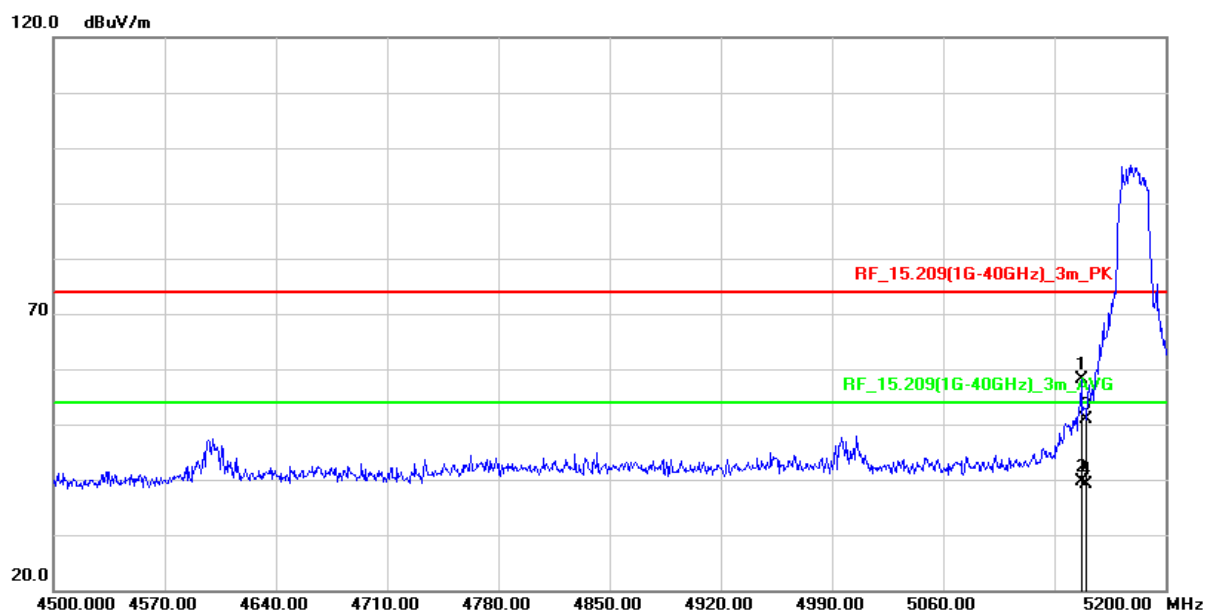


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5148.900	60.27	2.28	62.55	74.00	-11.45	peak
2	5148.900	45.14	2.28	47.42	54.00	-6.58	AVG
3	5150.000	62.07	2.28	64.35	74.00	-9.65	peak
4	5150.000	45.76	2.28	48.04	54.00	-5.96	AVG

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT20)	Test Date :	2021/10/05
Test Channel :	CH36(5180MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %

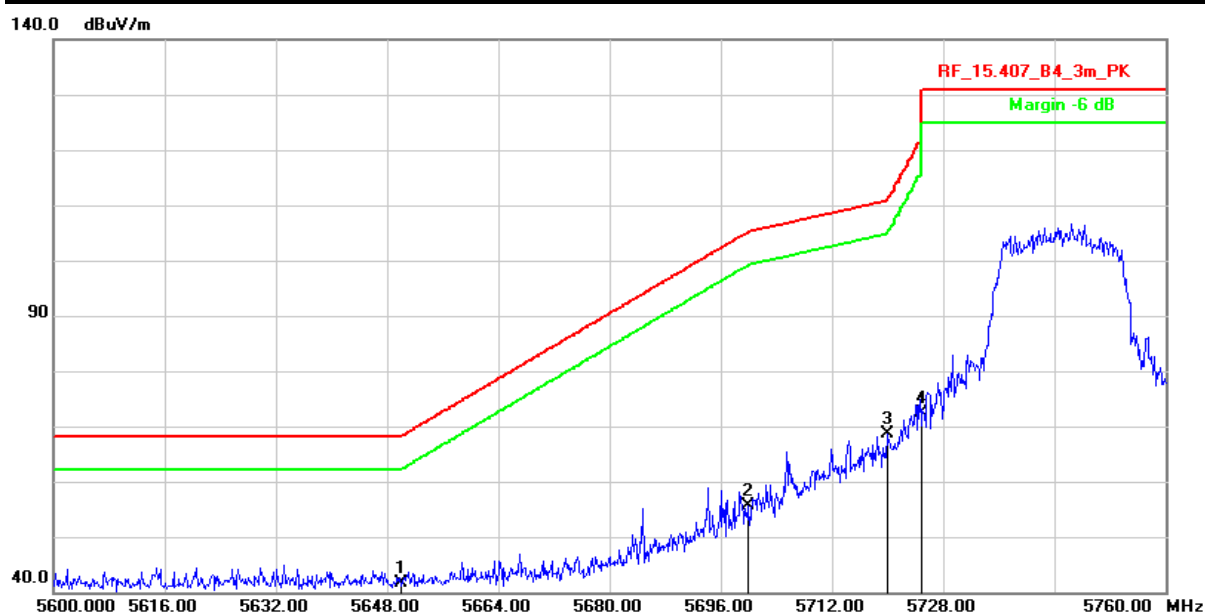


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5146.800	55.90	2.27	58.17	74.00	-15.83	peak
2	5146.800	37.40	2.27	39.67	54.00	-14.33	AVG
3	5150.000	48.50	2.28	50.78	74.00	-23.22	peak
4	5150.000	36.79	2.28	39.07	54.00	-14.93	AVG

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT20)	Test Date :	2021/10/05
Test Channel :	CH149(5745MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

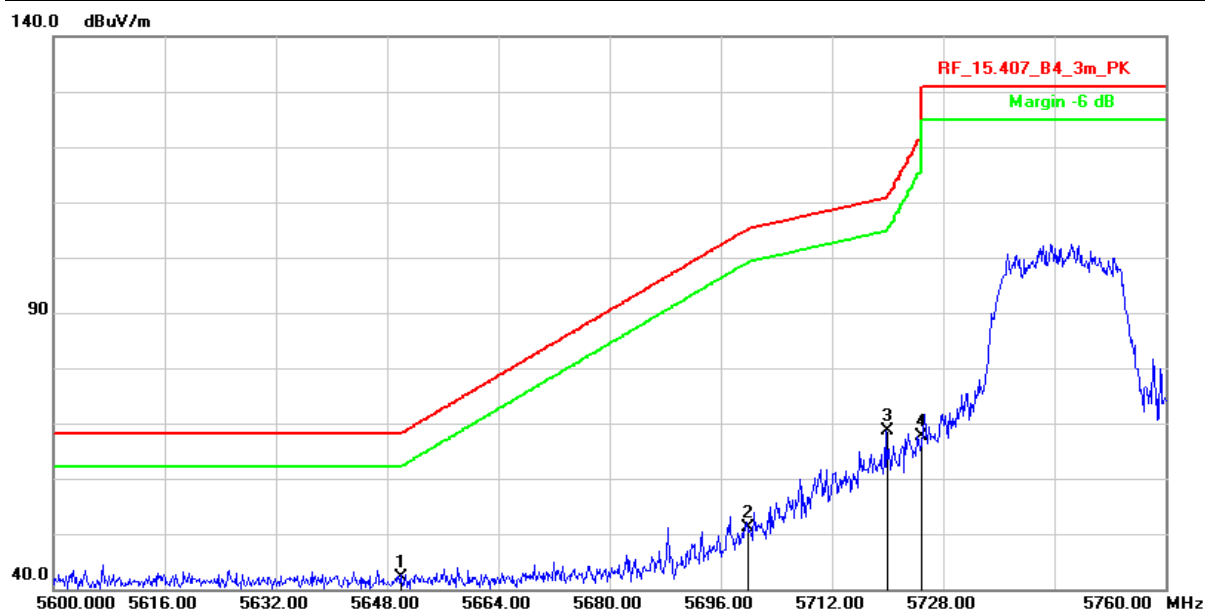


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	39.63	2.06	41.69	68.20	-26.51	peak
2	5700.000	53.47	2.11	55.58	105.20	-49.62	peak
3	5720.000	66.38	2.21	68.59	110.80	-42.21	peak
4	5725.000	70.10	2.23	72.33	122.20	-49.87	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT20)	Test Date :	2021/10/05
Test Channel :	CH149(5745MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	40.06	2.06	42.12	68.20	-26.08	peak
2	5700.000	49.00	2.11	51.11	105.20	-54.09	peak
3	5720.000	66.31	2.21	68.52	110.80	-42.28	peak
4	5725.000	65.39	2.23	67.62	122.20	-54.58	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT20)	Test Date :	2021/10/05
Test Channel :	CH165(5825MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

140.0 dBuV/m



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	60.50	2.85	63.35	122.20	-58.85	peak
2	5855.000	54.96	2.86	57.82	110.80	-52.98	peak
3	5875.000	45.83	2.88	48.71	105.20	-56.49	peak
4	5925.000	39.05	2.93	41.98	68.20	-26.22	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT20)	Test Date :	2021/10/05
Test Channel :	CH165(5825MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %

140.0 dBuV/m

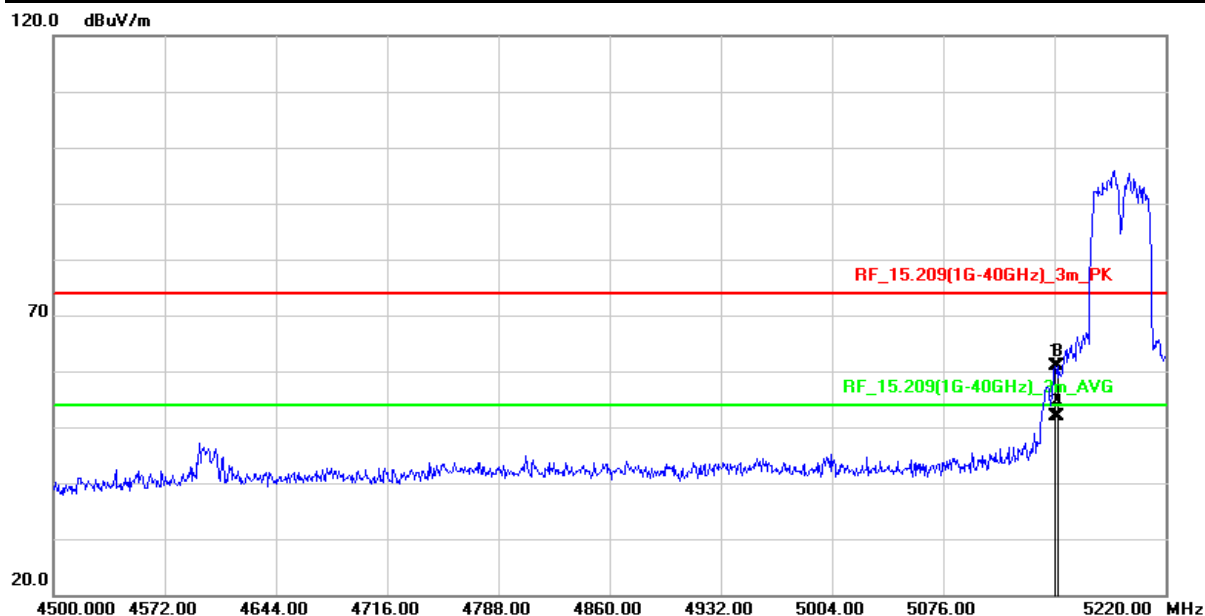


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	54.06	2.85	56.91	122.20	-65.29	peak
2	5855.000	52.82	2.86	55.68	110.80	-55.12	peak
3	5875.000	42.06	2.88	44.94	105.20	-60.26	peak
4	5925.000	39.50	2.93	42.43	68.20	-25.77	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT40)	Test Date :	2021/12/20
Test Channel :	CH38(5190MHz)	Temperature :	25 °C
Polarization :	Horizontal	Relative Humidity :	40 %

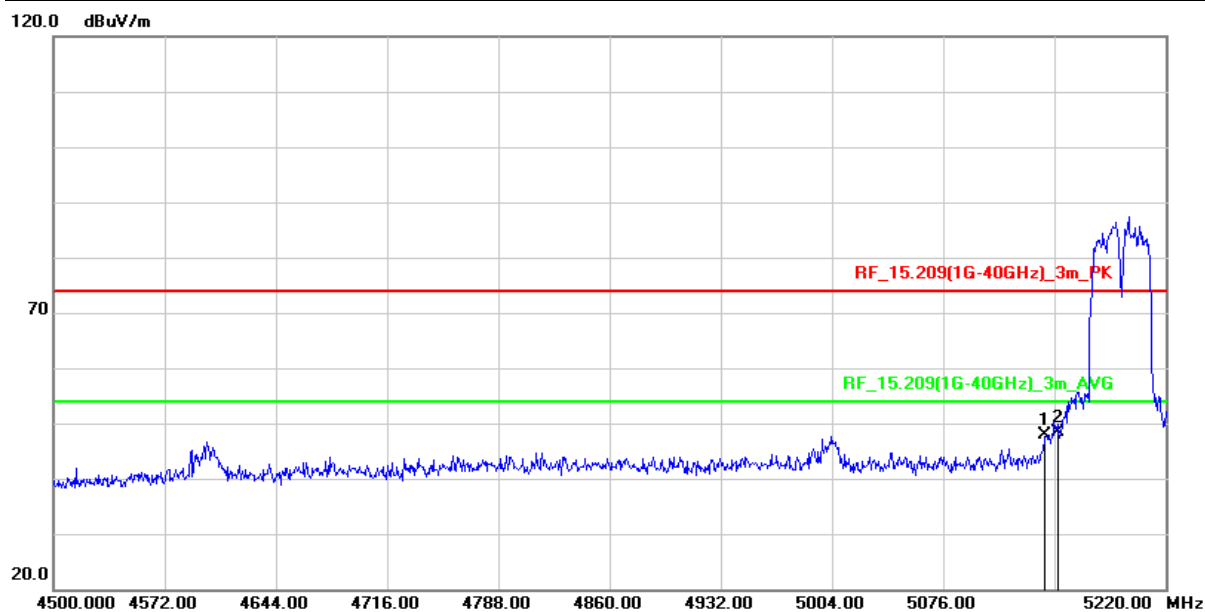


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5148.000	58.67	2.28	60.95	74.00	-13.05	peak
2	5148.000	49.64	2.28	51.92	54.00	-2.08	AVG
3	5150.000	58.62	2.28	60.90	74.00	-13.10	peak
4	5150.000	49.54	2.28	51.82	54.00	-2.18	AVG

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT40)	Test Date :	2021/12/20
Test Channel :	CH38(5190MHz)	Temperature :	25 °C
Polarization :	Vertical	Relative Humidity :	40 %



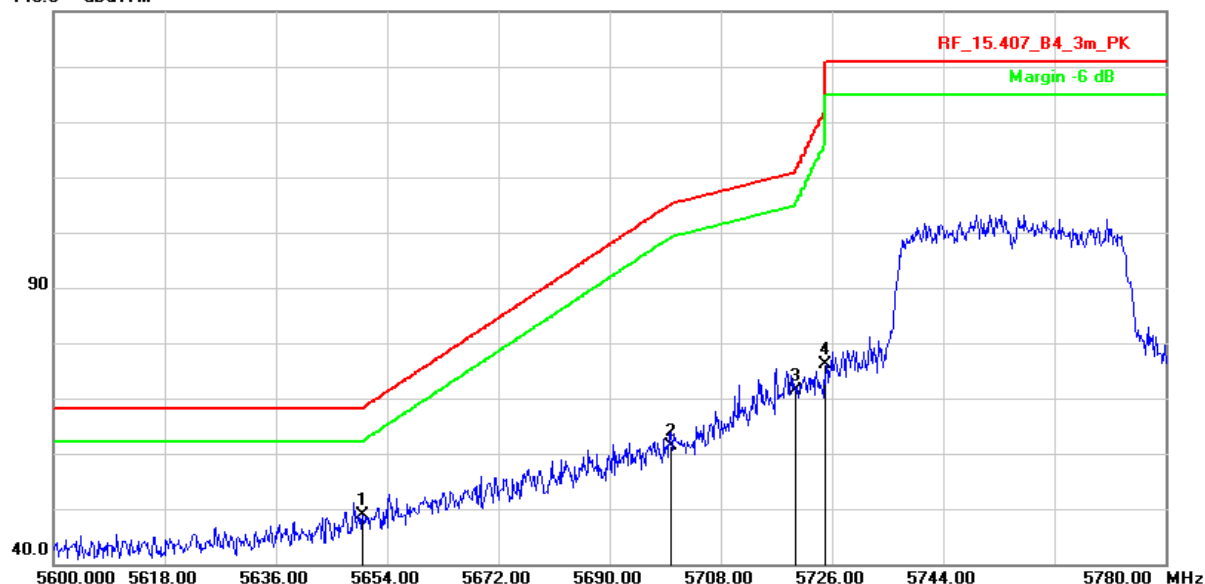
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5142.240	45.56	2.25	47.81	74.00	-26.19	peak
2	5150.000	46.21	2.28	48.49	74.00	-25.51	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT40)	Test Date :	2021/10/06
Test Channel :	CH151(5755MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

140.0 dBuV/m

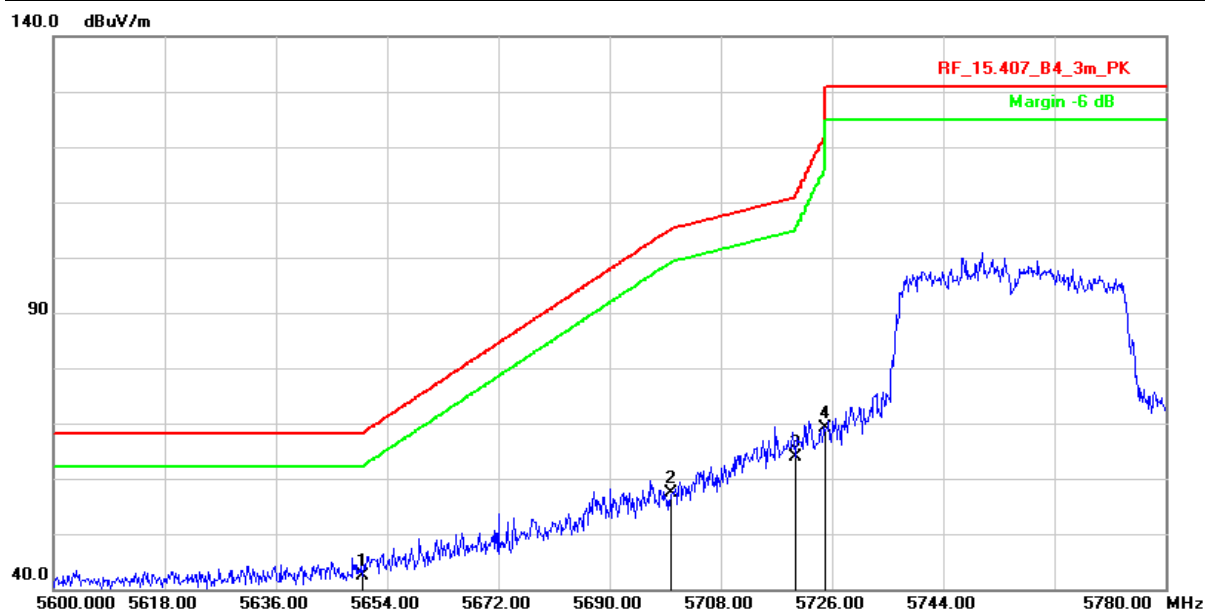


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	46.75	2.06	48.81	68.20	-19.39	peak
2	5700.000	59.34	2.11	61.45	105.20	-43.75	peak
3	5720.000	69.06	2.21	71.27	110.80	-39.53	peak
4	5725.000	73.93	2.23	76.16	122.20	-46.04	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT40)	Test Date :	2021/10/06
Test Channel :	CH151(5755MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %

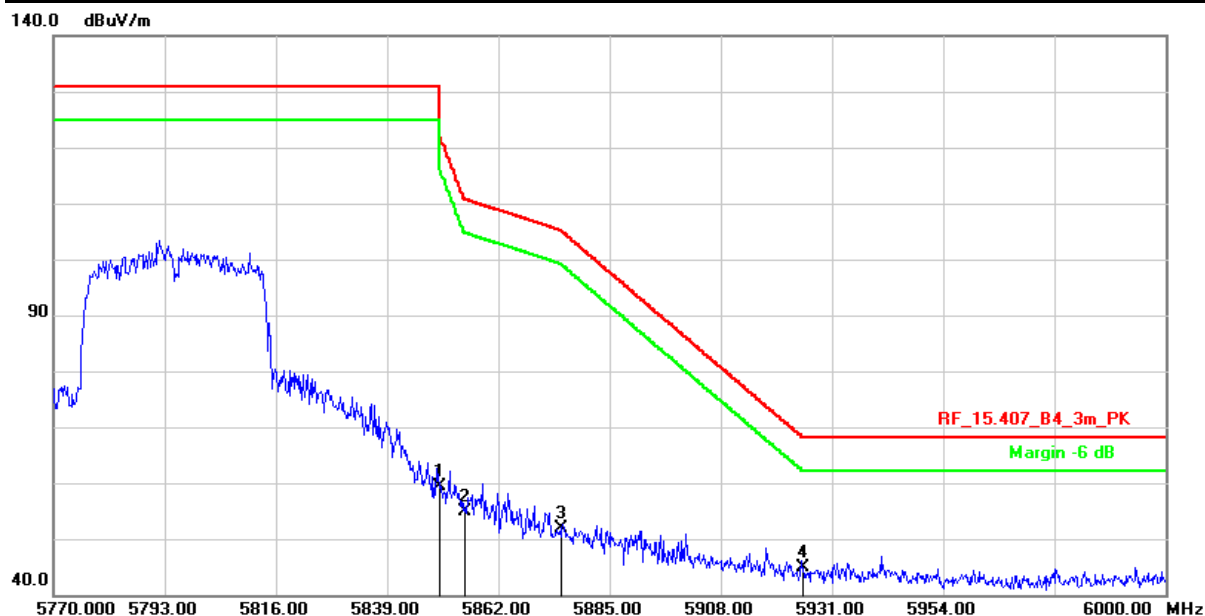


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	40.38	2.06	42.44	68.20	-25.76	peak
2	5700.000	55.32	2.11	57.43	105.20	-47.77	peak
3	5720.000	61.62	2.21	63.83	110.80	-46.97	peak
4	5725.000	66.91	2.23	69.14	122.20	-53.06	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT40)	Test Date :	2021/10/06
Test Channel :	CH159(5795MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %



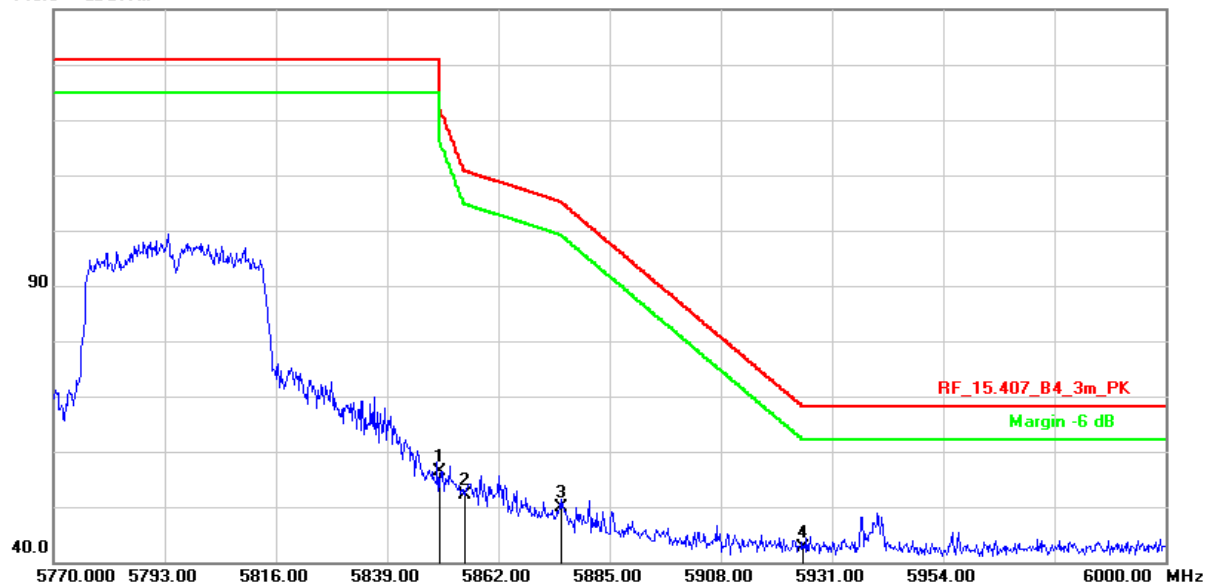
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	56.48	2.85	59.33	122.20	-62.87	peak
2	5855.000	52.10	2.86	54.96	110.80	-55.84	peak
3	5875.000	48.96	2.88	51.84	105.20	-53.36	peak
4	5925.000	41.87	2.93	44.80	68.20	-23.40	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT40)	Test Date :	2021/10/06
Test Channel :	CH159(5795MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %

140.0 dBuV/m

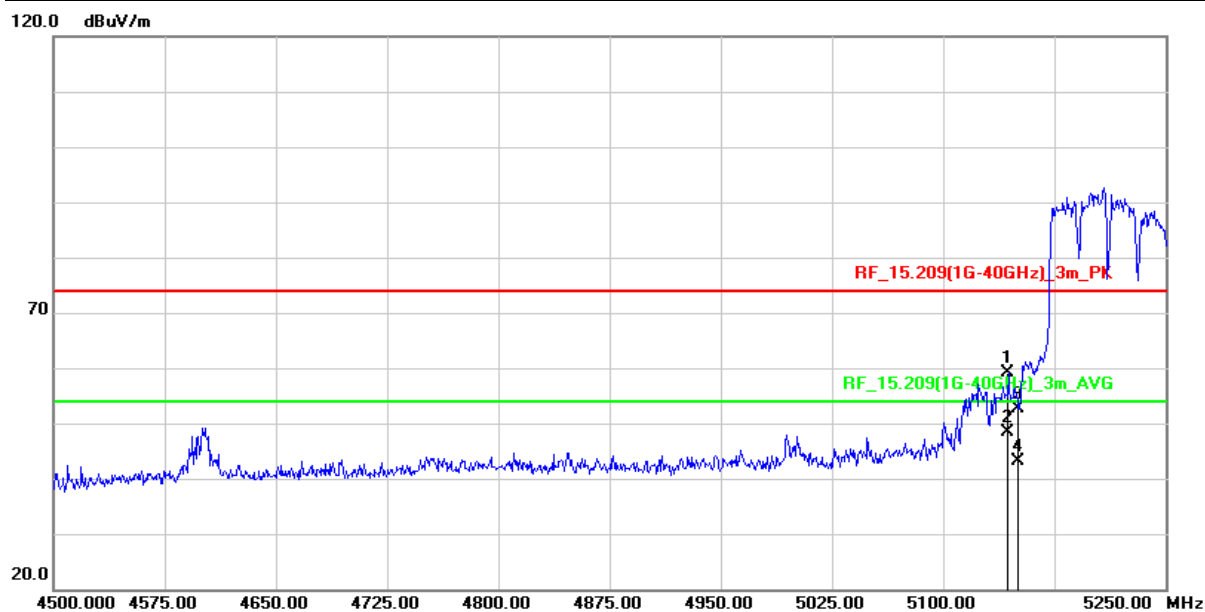


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	53.48	2.85	56.33	122.20	-65.87	peak
2	5855.000	49.16	2.86	52.02	110.80	-58.78	peak
3	5875.000	47.03	2.88	49.91	105.20	-55.29	peak
4	5925.000	39.78	2.93	42.71	68.20	-25.49	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT40)	Test Date :	2021/12/20
Test Channel :	CH42 (5210MHz)	Temperature :	25 °C
Polarization :	Horizontal	Relative Humidity :	40 %

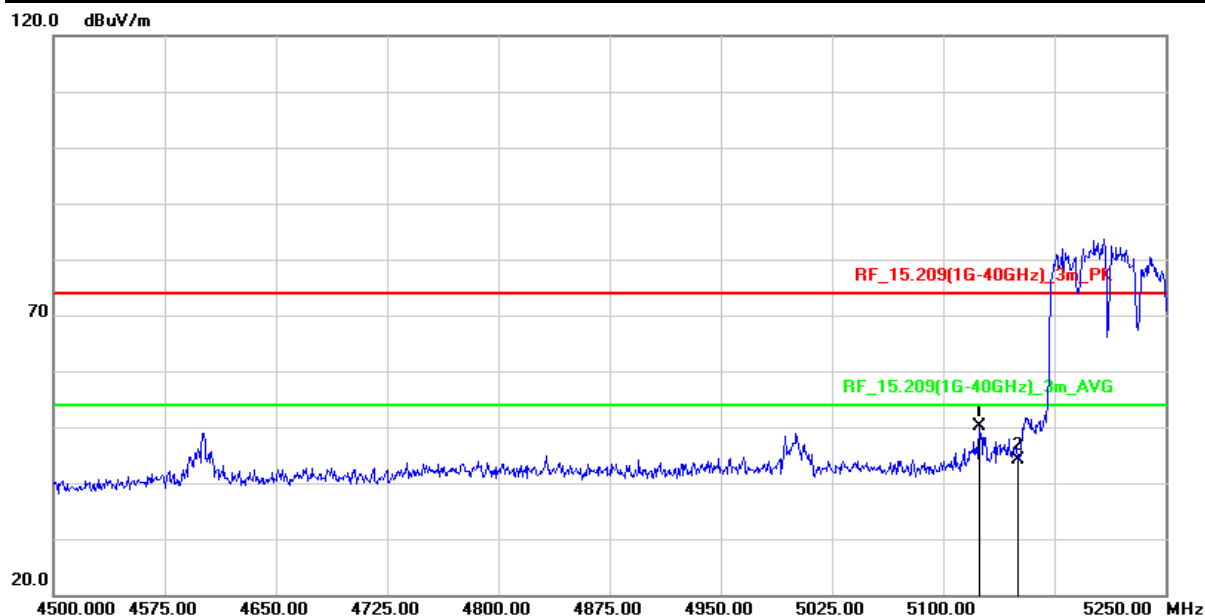


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5143.500	56.99	2.26	59.25	74.00	-14.75	peak
2	5143.500	46.16	2.26	48.42	54.00	-5.58	AVG
3	5150.000	50.28	2.28	52.56	74.00	-21.44	peak
4	5150.000	40.87	2.28	43.15	54.00	-10.85	AVG

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT80)	Test Date :	2021/12/20
Test Channel :	CH42 (5210MHz)	Temperature :	25 °C
Polarization :	Vertical	Relative Humidity :	40 %

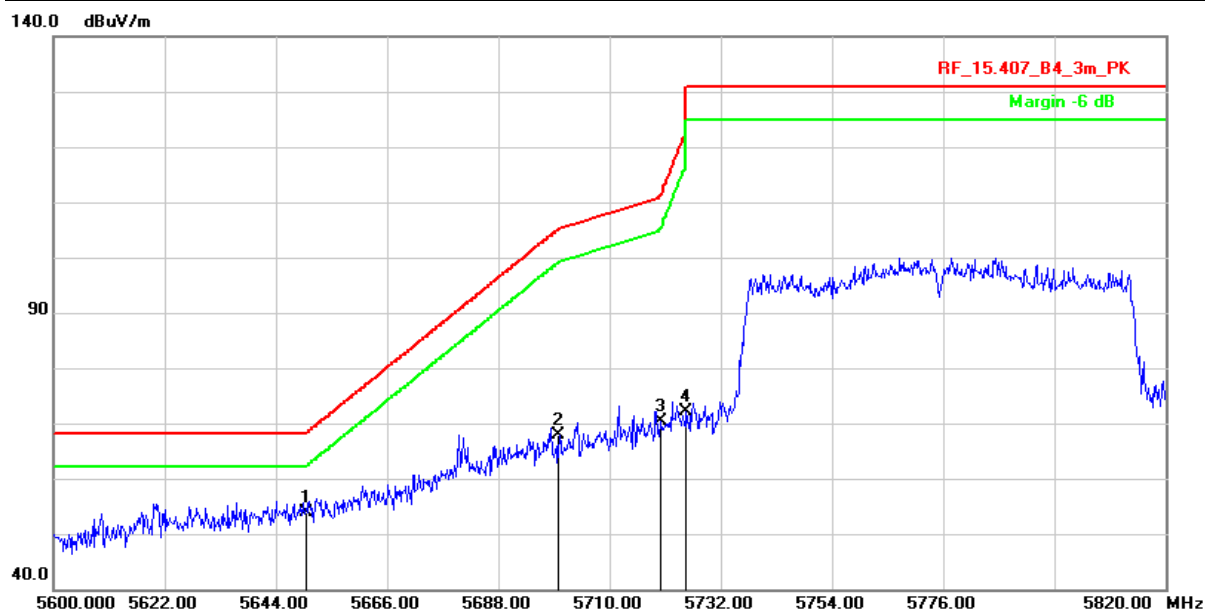


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5124.000	47.90	2.23	50.13	74.00	-23.87	peak
2	5150.000	41.82	2.28	44.10	74.00	-29.90	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT80)	Test Date :	2021/10/05
Test Channel :	CH155 (5775MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

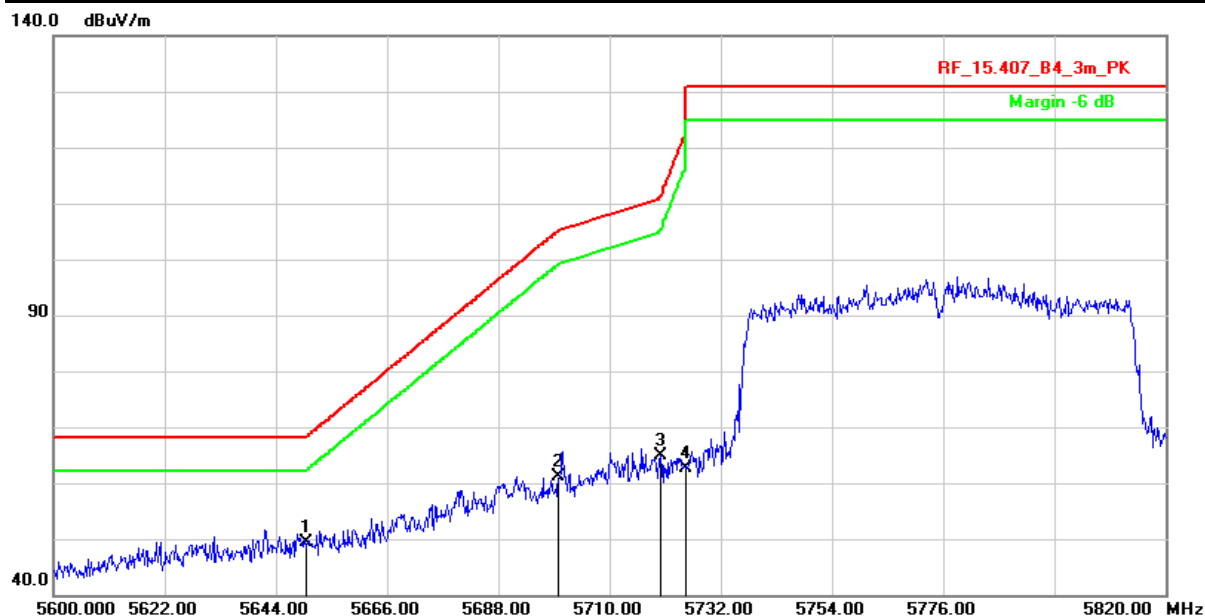


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	51.87	2.06	53.93	68.20	-14.27	peak
2	5700.000	65.80	2.11	67.91	105.20	-37.29	peak
3	5720.000	68.20	2.21	70.41	110.80	-40.39	peak
4	5725.000	69.87	2.23	72.10	122.20	-50.10	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT80)	Test Date :	2021/10/05
Test Channel :	CH155 (5775MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %

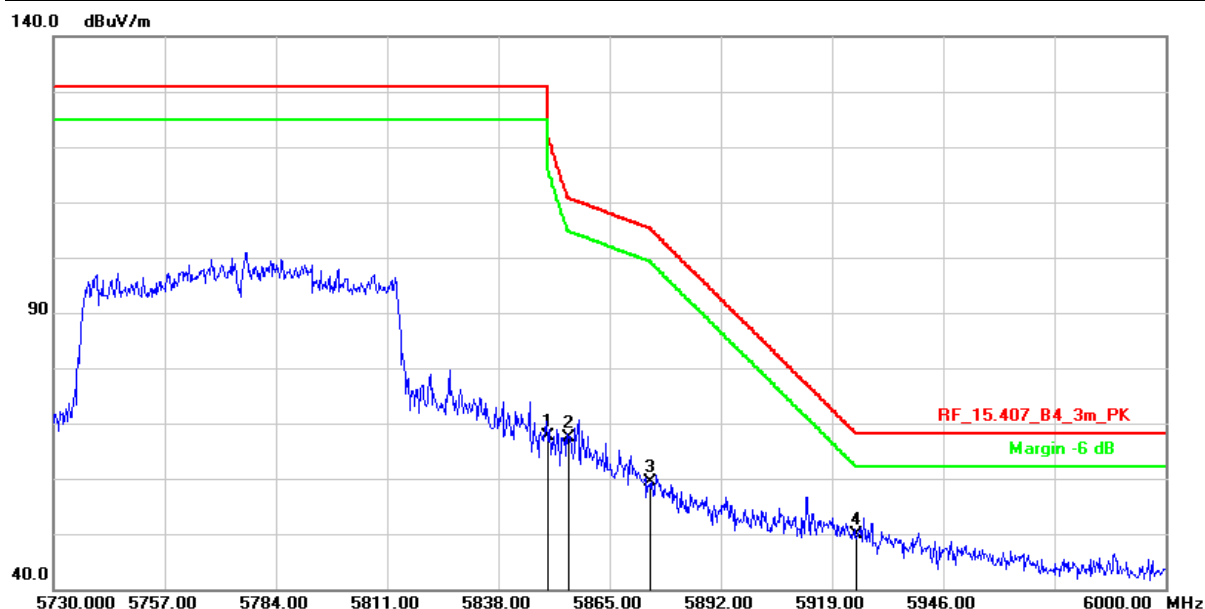


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	47.22	2.06	49.28	68.20	-18.92	peak
2	5700.000	58.94	2.11	61.05	105.20	-44.15	peak
3	5720.000	62.70	2.21	64.91	110.80	-45.89	peak
4	5725.000	60.45	2.23	62.68	122.20	-59.52	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT80)	Test Date :	2021/10/05
Test Channel :	CH155 (5775MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

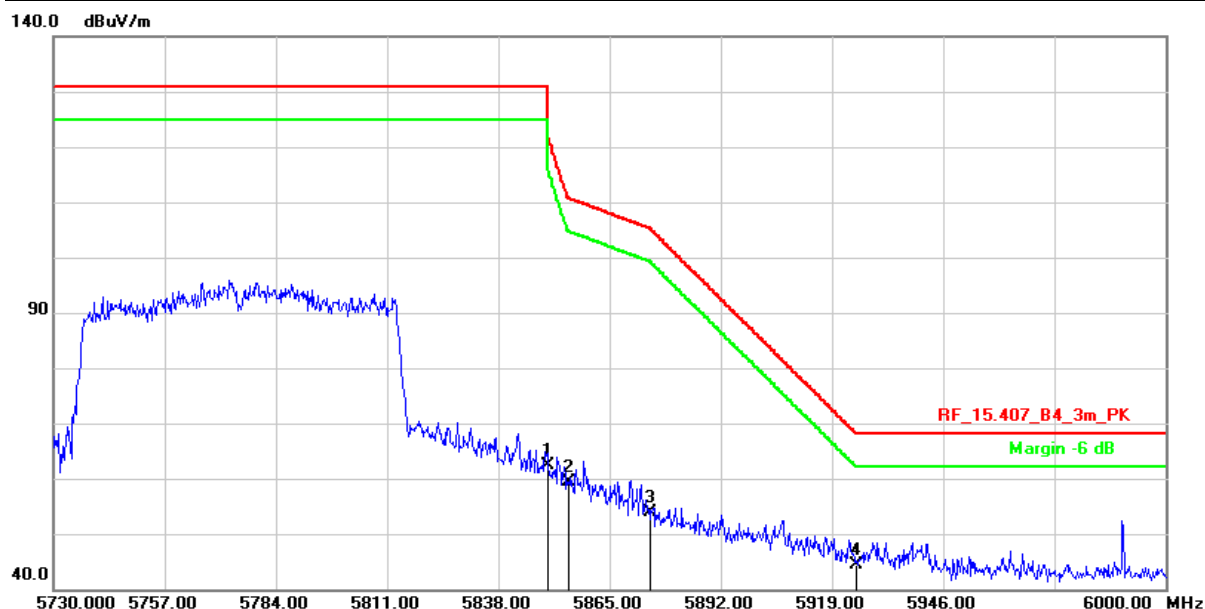


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	64.87	2.85	67.72	122.20	-54.48	peak
2	5855.000	64.45	2.86	67.31	110.80	-43.49	peak
3	5875.000	56.41	2.88	59.29	105.20	-45.91	peak
4	5925.000	46.98	2.93	49.91	68.20	-18.29	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT80)	Test Date :	2021/10/05
Test Channel :	CH155 (5775MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	59.63	2.85	62.48	122.20	-59.72	peak
2	5855.000	56.61	2.86	59.47	110.80	-51.33	peak
3	5875.000	51.01	2.88	53.89	105.20	-51.31	peak
4	5925.000	41.57	2.93	44.50	68.20	-23.70	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

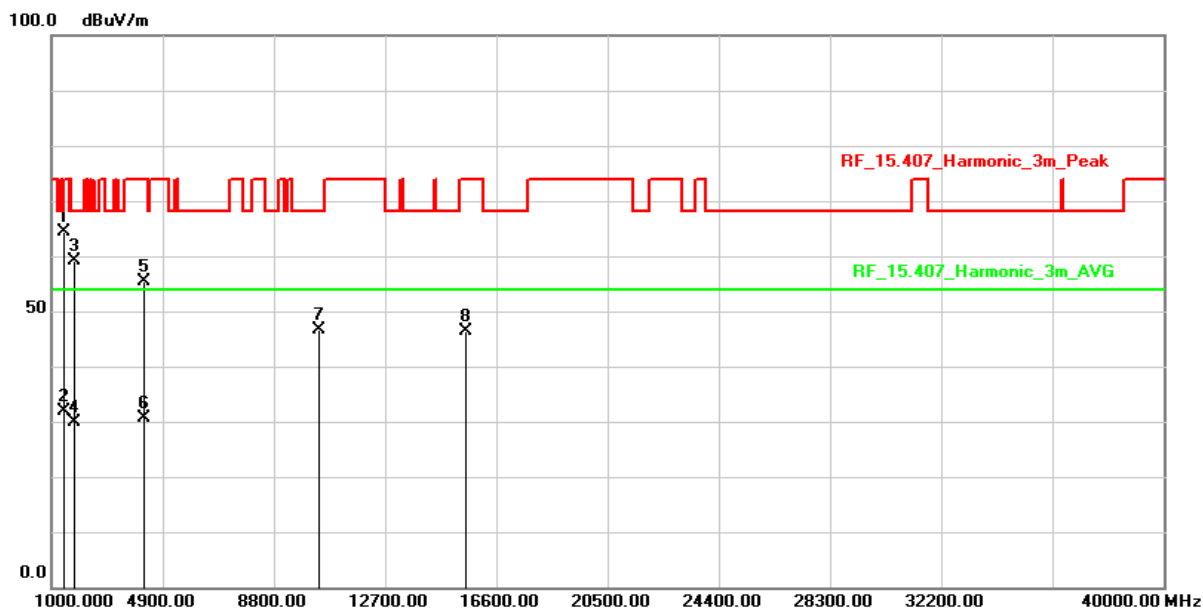
2.5.6 Test Result of Radiated Spurious Emission Measurement

- (1) The radiation measurement frequency is 9kHz ~ 30MHz. The interference value of this frequency range is less than the limit value of 20 dB. It is considered that the background noise value is not recorded.
- (2) The following table shows the radiation measurement frequency from 30MHz to 40GHz, pre-scanning in the X, Y and Z axes. The worst case (X-axis) is documented in this report.

Test Frequency			
RF	802.11a / 802.11ac VHT20	802.11ac VHT40	802.11ac VHT80
Tx	CH36 (5180MHz) CH44 (5220MHz) CH48 (5240MHz) CH149 (5745MHz) CH157 (5785MHz) CH165 (5825MHz)	CH38 (5190MHz) CH46 (5230MHz) CH151 (5755MHz) CH159 (5795MHz)	CH42 (5210MHz) CH155 (5775MHz)

Above 1GHz Data

Test Mode :	Transmit(802.11a)	Test Date :	2021/10/06
Test Channel :	CH36(5180MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

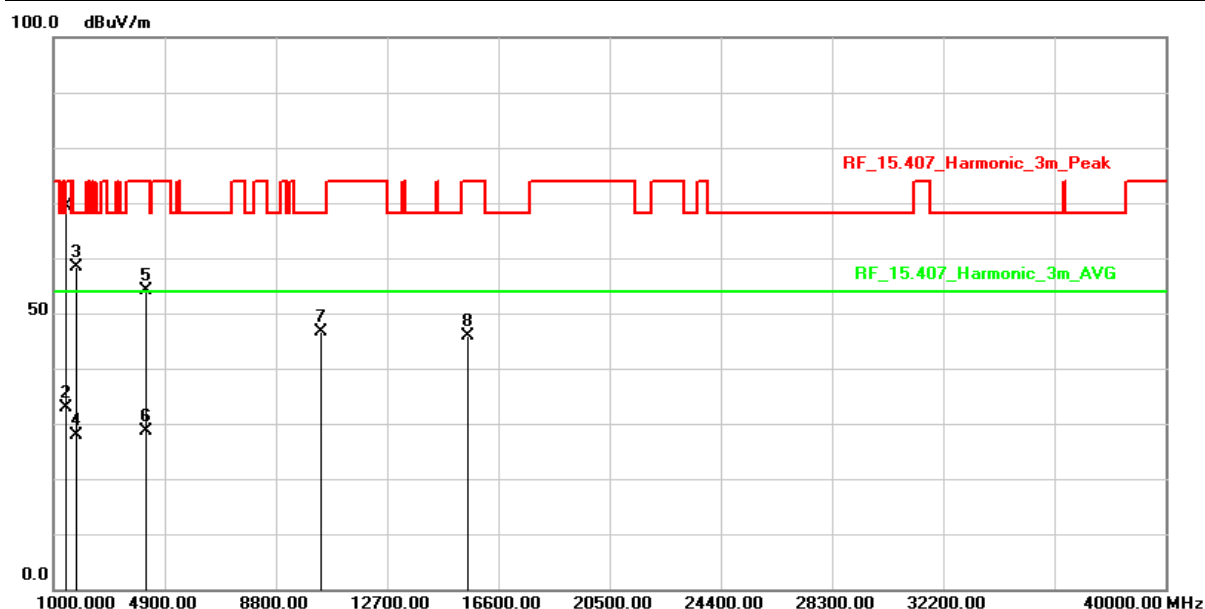


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	96.01	-31.64	64.37	74.00	-9.63	peak
2	1400.000	63.61	-31.64	31.97	54.00	-22.03	AVG
3	1800.000	92.14	-33.06	59.08	68.20	-9.12	peak
4	1800.000	63.05	-33.06	29.99	54.00	-24.01	AVG
5	4200.000	78.84	-23.38	55.46	74.00	-18.54	peak
6	4200.000	53.98	-23.38	30.60	54.00	-23.40	AVG
7	10360.000	58.29	-11.71	46.58	68.20	-21.62	peak
8	15540.000	56.30	-9.94	46.36	74.00	-27.64	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11a)	Test Date :	2021/10/06
Test Channel :	CH36(5180MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %

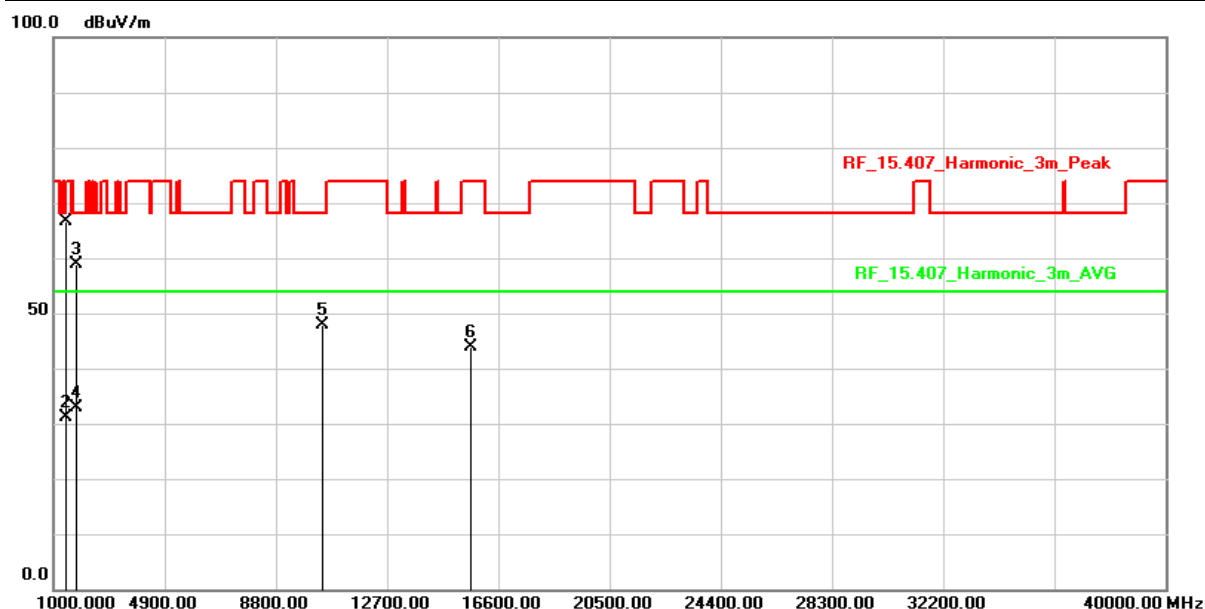


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	101.04	-31.64	69.40	74.00	-4.60	peak
2	1400.000	64.54	-31.64	32.90	54.00	-21.10	AVG
3	1800.000	91.38	-33.06	58.32	68.20	-9.88	peak
4	1800.000	60.82	-33.06	27.76	54.00	-26.24	AVG
5	4205.000	77.39	-23.34	54.05	74.00	-19.95	peak
6	4205.000	52.04	-23.34	28.70	54.00	-25.30	AVG
7	10360.000	58.36	-11.71	46.65	68.20	-21.55	peak
8	15540.000	55.89	-9.94	45.95	74.00	-28.05	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11a)	Test Date :	2021/10/06
Test Channel :	CH44(5220MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

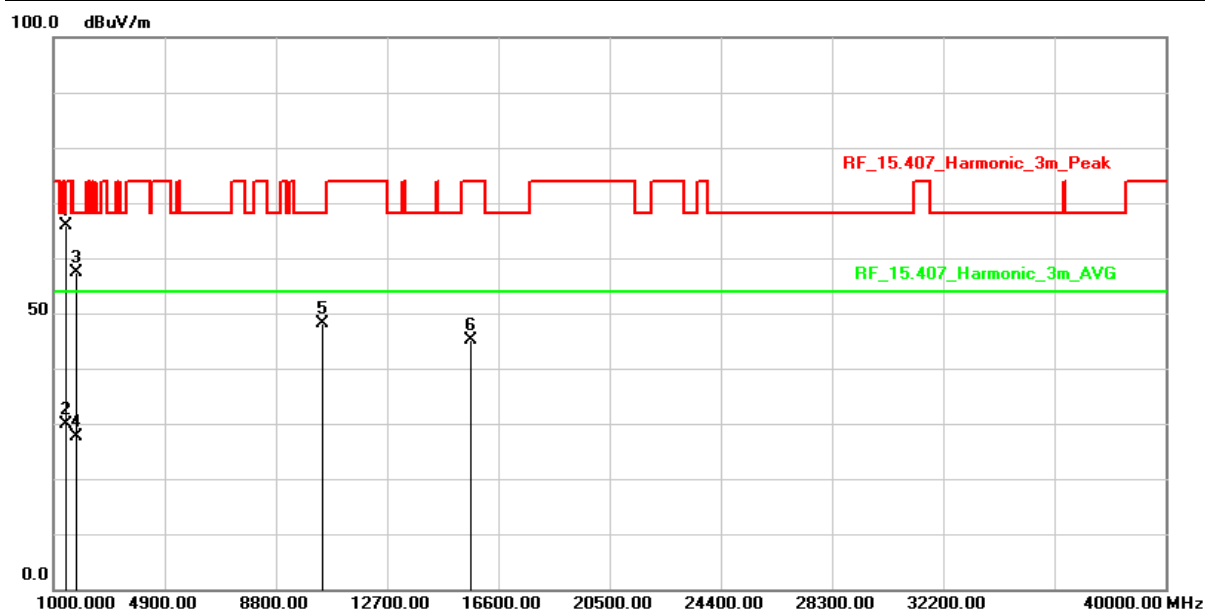


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	98.20	-31.64	66.56	74.00	-7.44	peak
2	1400.000	62.89	-31.64	31.25	54.00	-22.75	AVG
3	1800.000	91.98	-33.06	58.92	68.20	-9.28	peak
4	1800.000	65.94	-33.06	32.88	54.00	-21.12	AVG
5	10440.000	59.32	-11.53	47.79	68.20	-20.41	peak
6	15660.000	53.88	-9.90	43.98	74.00	-30.02	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11a)	Test Date :	2021/10/06
Test Channel :	CH44(5220MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %



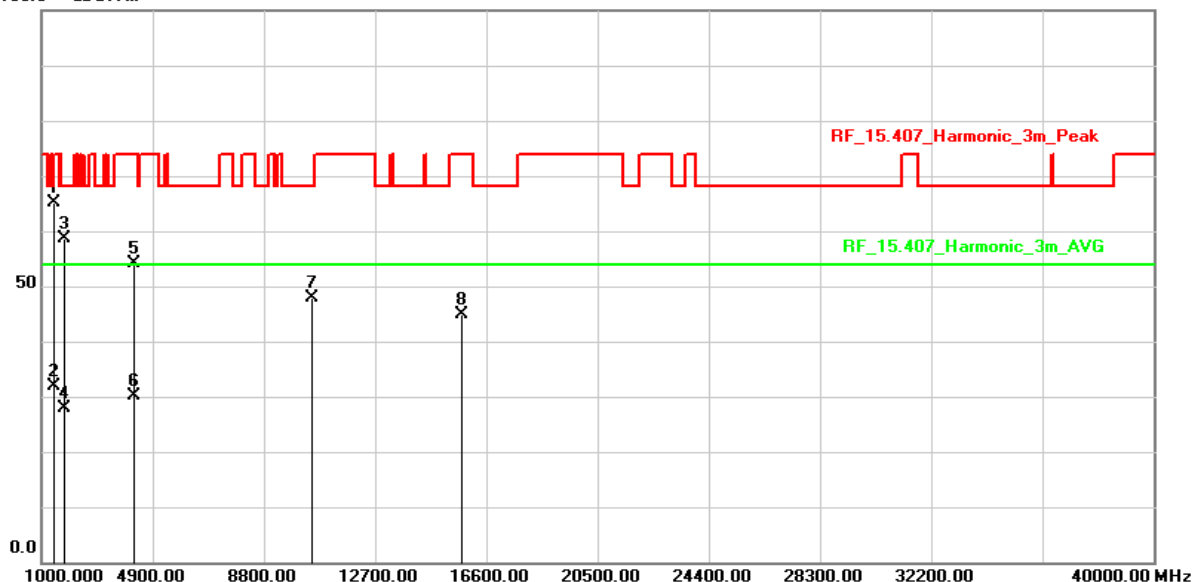
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	97.44	-31.64	65.80	74.00	-8.20	peak
2	1400.000	61.48	-31.64	29.84	54.00	-24.16	AVG
3	1800.000	90.51	-33.06	57.45	68.20	-10.75	peak
4	1800.000	60.61	-33.06	27.55	54.00	-26.45	AVG
5	10440.000	59.56	-11.53	48.03	68.20	-20.17	peak
6	15660.000	55.04	-9.90	45.14	74.00	-28.86	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11a)	Test Date :	2021/10/06
Test Channel :	CH48(5240MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

100.0 dBuV/m



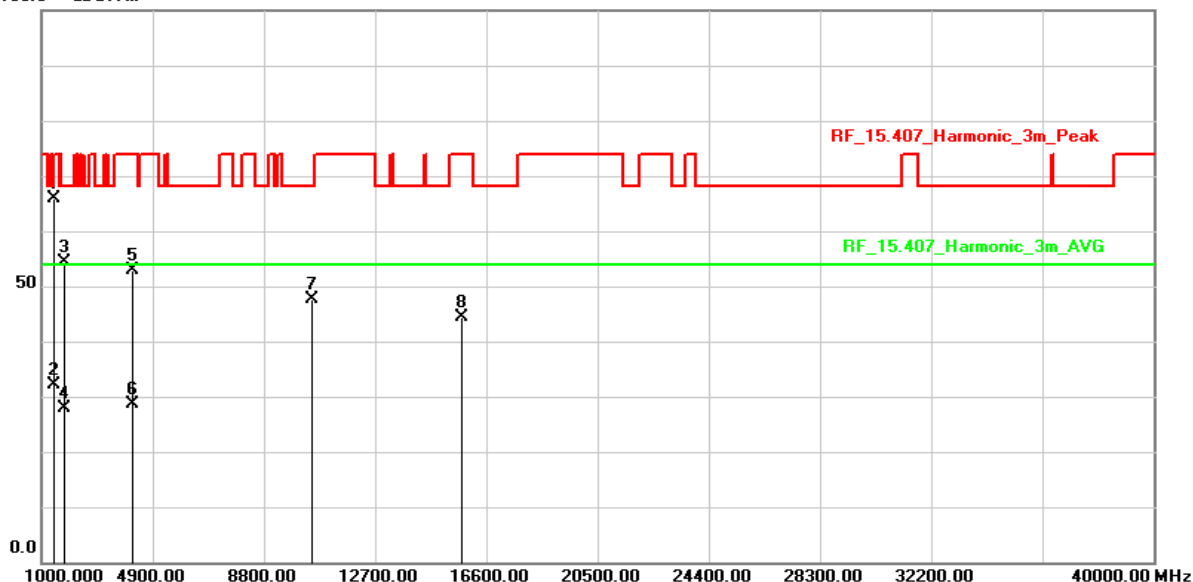
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	96.67	-31.64	65.03	74.00	-8.97	peak
2	1400.000	63.52	-31.64	31.88	54.00	-22.12	AVG
3	1800.000	91.75	-33.06	58.69	68.20	-9.51	peak
4	1800.000	61.00	-33.06	27.94	54.00	-26.06	AVG
5	4200.000	77.42	-23.38	54.04	74.00	-19.96	peak
6	4200.000	53.62	-23.38	30.24	54.00	-23.76	AVG
7	10480.000	59.10	-11.34	47.76	68.20	-20.44	peak
8	15720.000	54.53	-9.73	44.80	74.00	-29.20	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11a)	Test Date :	2021/10/06
Test Channel :	CH48(5240MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %

100.0 dBuV/m



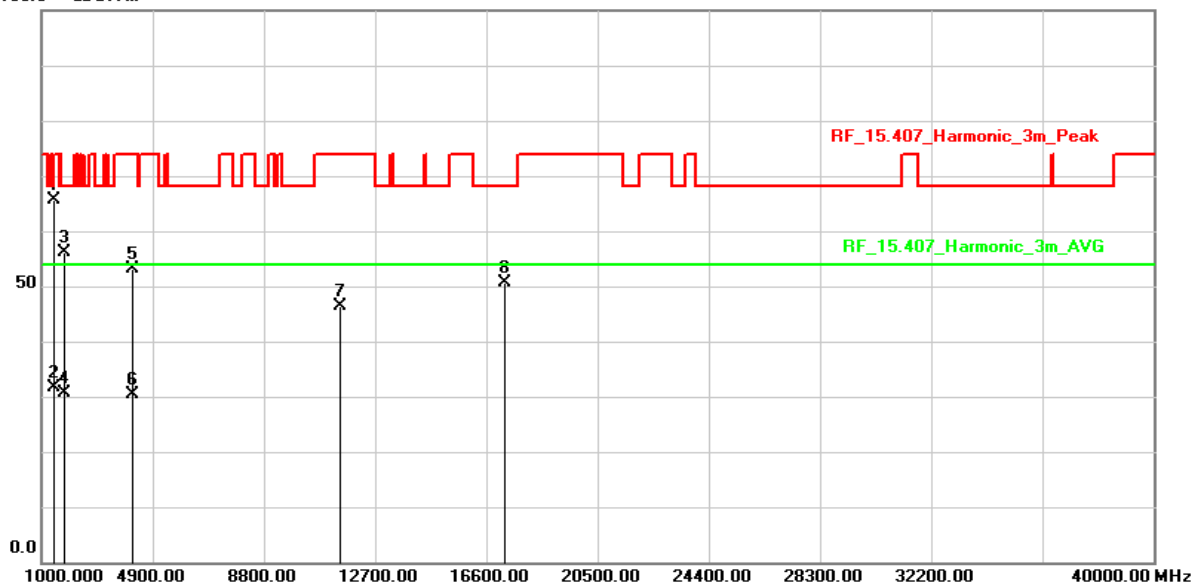
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	97.56	-31.64	65.92	74.00	-8.08	peak
2	1400.000	63.84	-31.64	32.20	54.00	-21.80	AVG
3	1800.000	87.44	-33.06	54.38	68.20	-13.82	peak
4	1800.000	60.89	-33.06	27.83	54.00	-26.17	AVG
5	4195.000	76.19	-23.38	52.81	74.00	-21.19	peak
6	4195.000	52.05	-23.38	28.67	54.00	-25.33	AVG
7	10480.000	58.89	-11.34	47.55	68.20	-20.65	peak
8	15720.000	54.03	-9.73	44.30	74.00	-29.70	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11a)	Test Date :	2021/10/06
Test Channel :	CH149(5745MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

100.0 dBuV/m

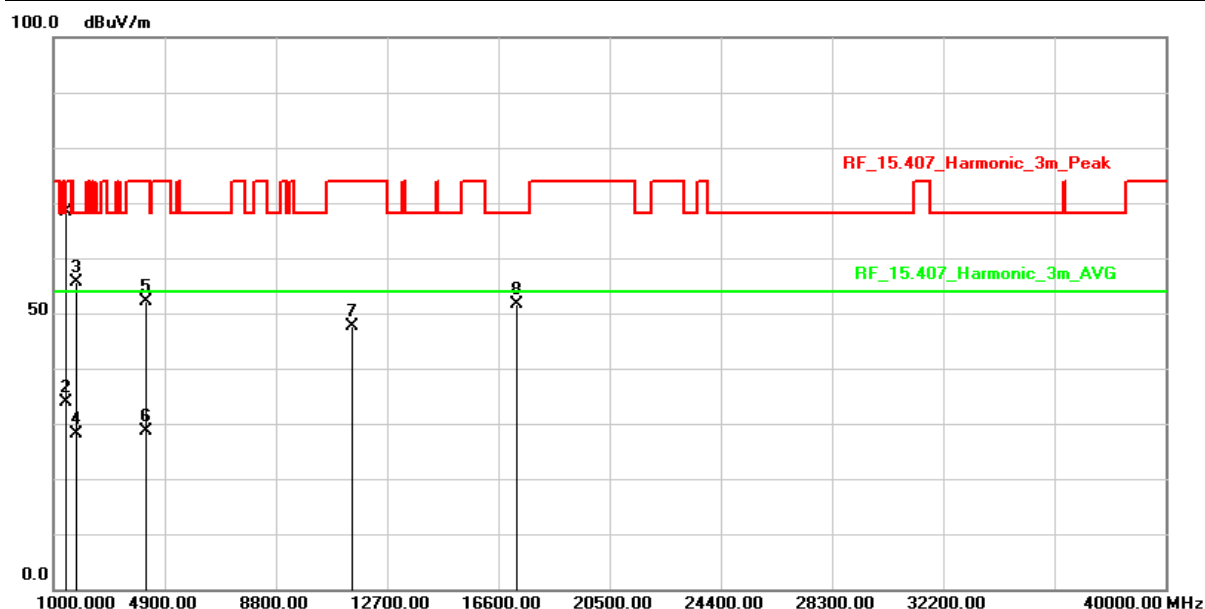


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	97.30	-31.64	65.66	74.00	-8.34	peak
2	1400.000	63.33	-31.64	31.69	54.00	-22.31	AVG
3	1800.000	89.17	-33.06	56.11	68.20	-12.09	peak
4	1800.000	63.64	-33.06	30.58	54.00	-23.42	AVG
5	4195.000	76.48	-23.38	53.10	74.00	-20.90	peak
6	4195.000	53.71	-23.38	30.33	54.00	-23.67	AVG
7	11490.000	58.07	-11.60	46.47	74.00	-27.53	peak
8	17235.000	54.70	-4.10	50.60	68.20	-17.60	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11a)	Test Date :	2021/10/06
Test Channel :	CH149(5745MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %

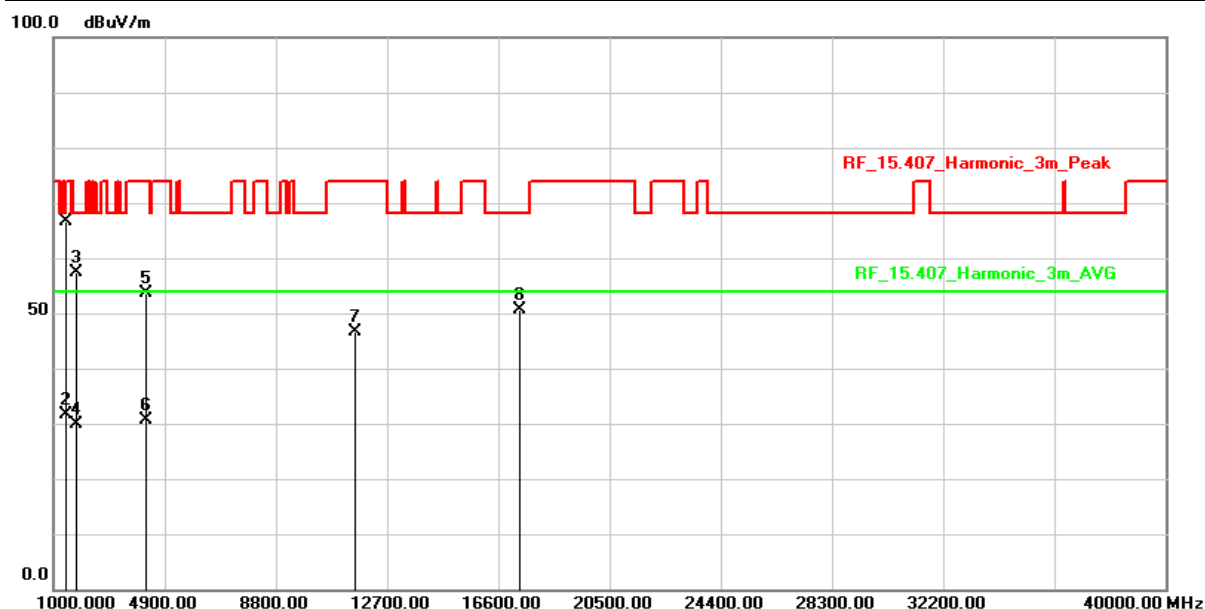


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	100.08	-31.64	68.44	74.00	-5.56	peak
2	1400.000	65.51	-31.64	33.87	54.00	-20.13	AVG
3	1800.000	88.65	-33.06	55.59	68.20	-12.61	peak
4	1800.000	61.19	-33.06	28.13	54.00	-25.87	AVG
5	4200.000	75.63	-23.38	52.25	74.00	-21.75	peak
6	4200.000	51.99	-23.38	28.61	54.00	-25.39	AVG
7	11490.000	59.20	-11.60	47.60	74.00	-26.40	peak
8	17235.000	55.65	-4.10	51.55	68.20	-16.65	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11a)	Test Date :	2021/10/06
Test Channel :	CH157(5785MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

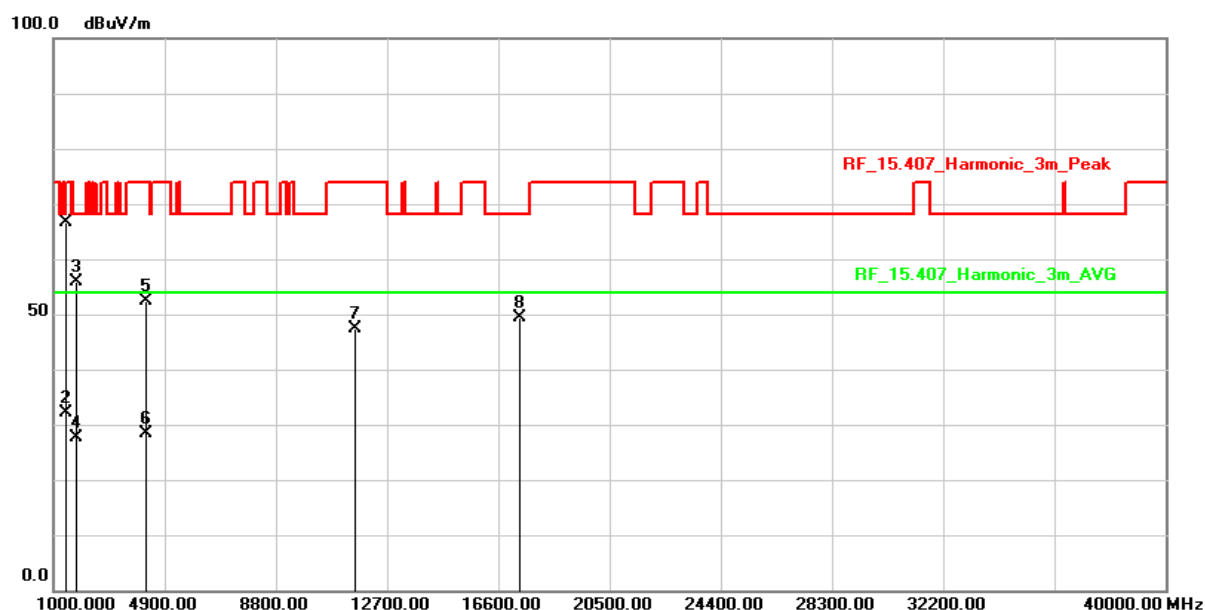


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	98.39	-31.64	66.75	74.00	-7.25	peak
2	1400.000	63.19	-31.64	31.55	54.00	-22.45	AVG
3	1800.000	90.45	-33.06	57.39	68.20	-10.81	peak
4	1800.000	63.02	-33.06	29.96	54.00	-24.04	AVG
5	4200.000	77.12	-23.38	53.74	74.00	-20.26	peak
6	4200.000	53.92	-23.38	30.54	54.00	-23.46	AVG
7	11570.000	58.34	-11.74	46.60	74.00	-27.40	peak
8	17355.000	54.13	-3.46	50.67	68.20	-17.53	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11a)	Test Date :	2021/10/06
Test Channel :	CH157(5785MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %



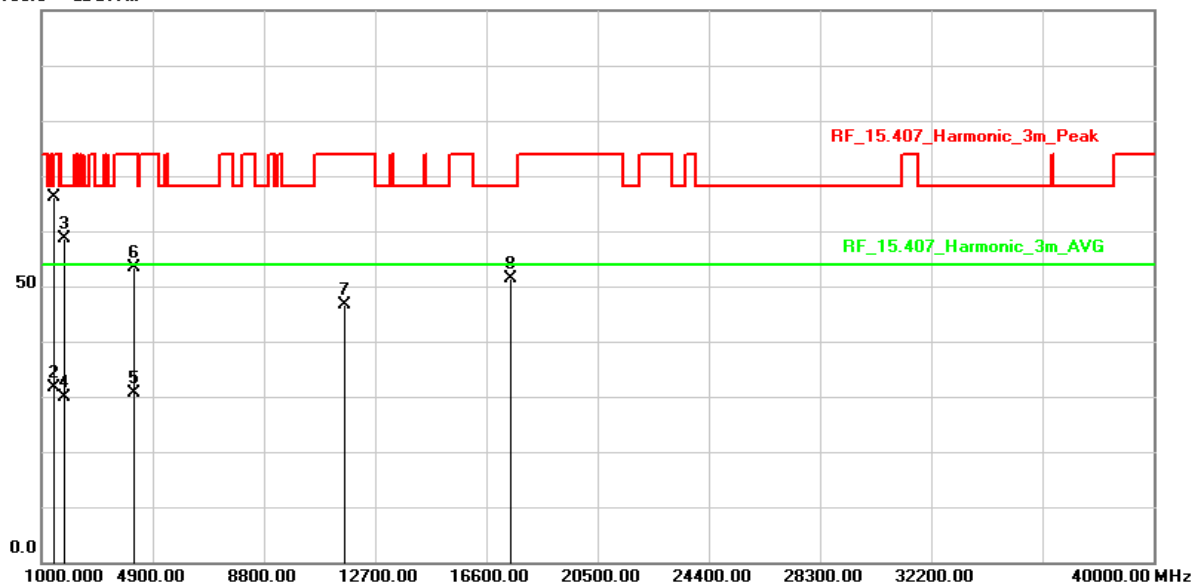
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	98.19	-31.64	66.55	74.00	-7.45	peak
2	1400.000	63.81	-31.64	32.17	54.00	-21.83	AVG
3	1800.000	88.86	-33.06	55.80	68.20	-12.40	peak
4	1800.000	60.60	-33.06	27.54	54.00	-26.46	AVG
5	4205.000	75.64	-23.34	52.30	74.00	-21.70	peak
6	4205.000	51.81	-23.34	28.47	54.00	-25.53	AVG
7	11570.000	59.07	-11.74	47.33	74.00	-26.67	peak
8	17355.000	52.80	-3.46	49.34	68.20	-18.86	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11a)	Test Date :	2021/10/06
Test Channel :	CH165(5825MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

100.0 dBuV/m

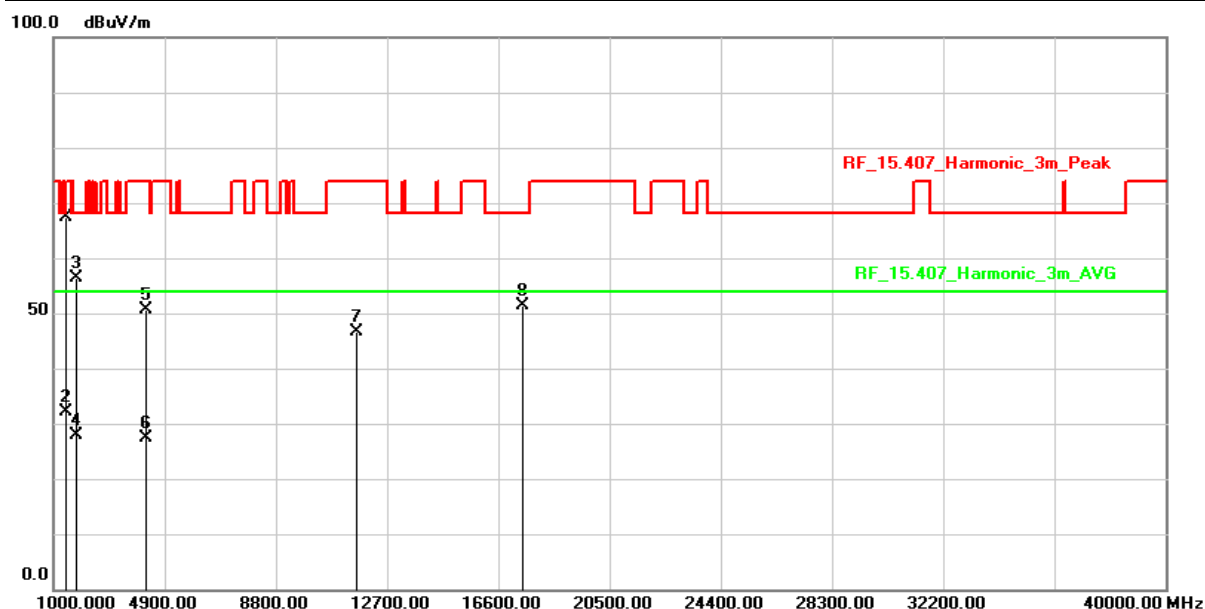


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	97.86	-31.64	66.22	74.00	-7.78	peak
2	1400.000	63.21	-31.64	31.57	54.00	-22.43	AVG
3	1800.000	91.57	-33.06	58.51	68.20	-9.69	peak
4	1800.000	63.04	-33.06	29.98	54.00	-24.02	AVG
5	4200.000	54.00	-23.38	30.62	74.00	-43.38	peak
6	4200.000	76.81	-23.38	53.43	54.00	-0.57	AVG
7	11650.000	58.76	-12.02	46.74	74.00	-27.26	peak
8	17475.000	53.81	-2.47	51.34	68.20	-16.86	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11a)	Test Date :	2021/10/06
Test Channel :	CH165(5825MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %

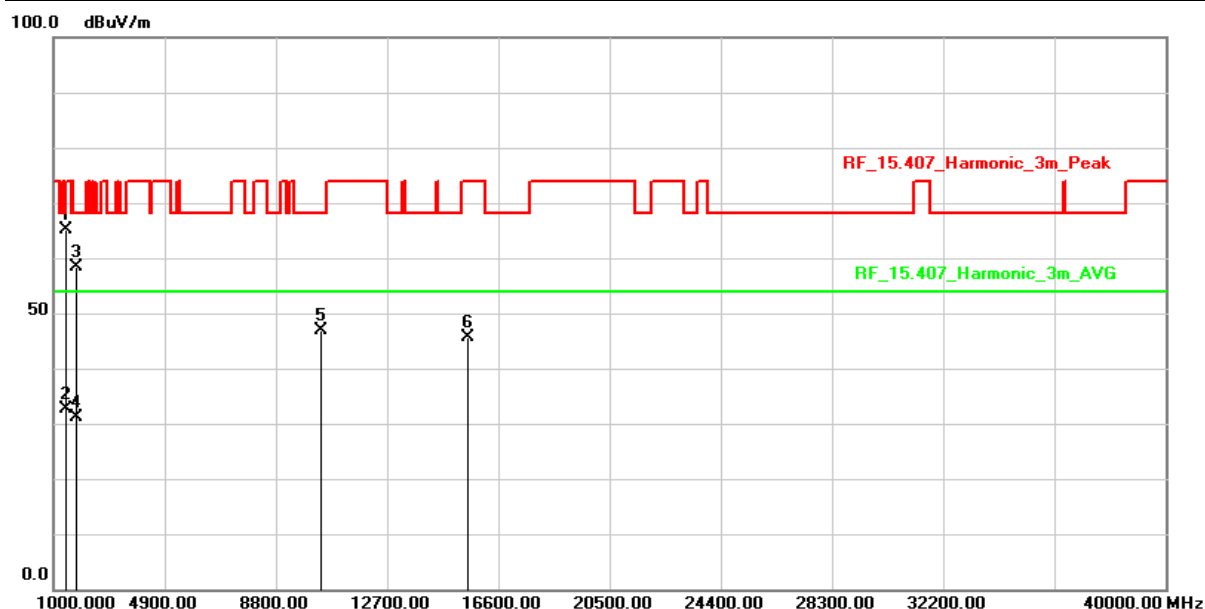


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	98.98	-31.64	67.34	74.00	-6.66	peak
2	1400.000	63.80	-31.64	32.16	54.00	-21.84	AVG
3	1800.000	89.36	-33.06	56.30	68.20	-11.90	peak
4	1800.000	60.86	-33.06	27.80	54.00	-26.20	AVG
5	4205.000	73.99	-23.34	50.65	74.00	-23.35	peak
6	4205.000	50.81	-23.34	27.47	54.00	-26.53	AVG
7	11650.000	58.69	-12.02	46.67	74.00	-27.33	peak
8	17475.000	53.80	-2.47	51.33	68.20	-16.87	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT20)	Test Date :	2021/10/06
Test Channel :	CH36(5180MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %



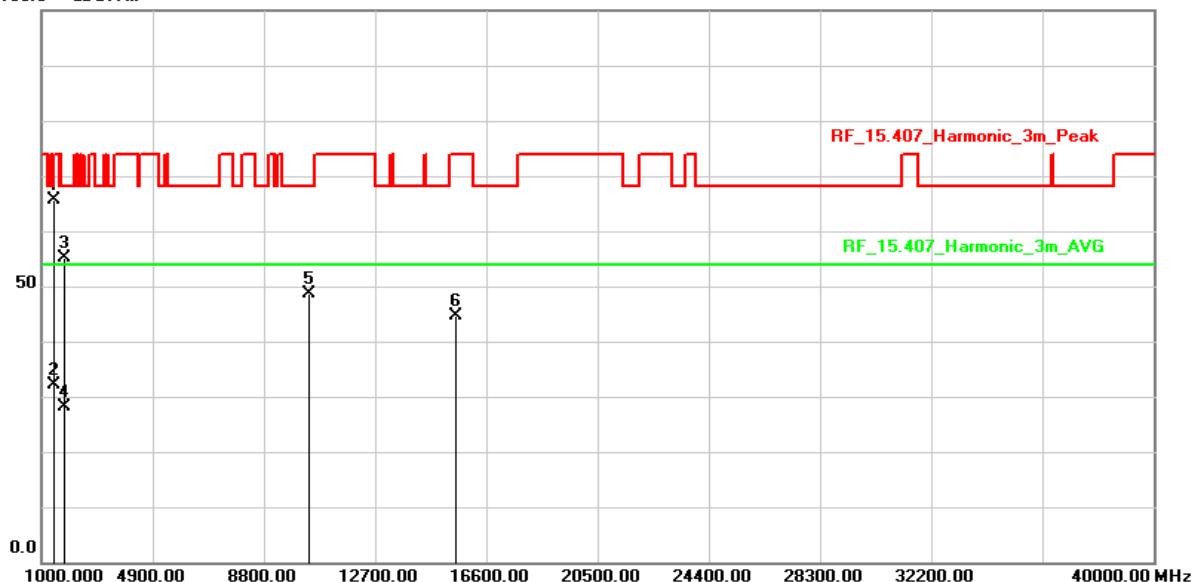
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	96.80	-31.64	65.16	74.00	-8.84	peak
2	1400.000	64.27	-31.64	32.63	54.00	-21.37	AVG
3	1800.000	91.48	-33.06	58.42	68.20	-9.78	peak
4	1800.000	64.07	-33.06	31.01	54.00	-22.99	AVG
5	10360.000	58.51	-11.71	46.80	68.20	-21.40	peak
6	15540.000	55.45	-9.94	45.51	74.00	-28.49	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT20)	Test Date :	2021/10/06
Test Channel :	CH36(5180MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %

100.0 dBuV/m

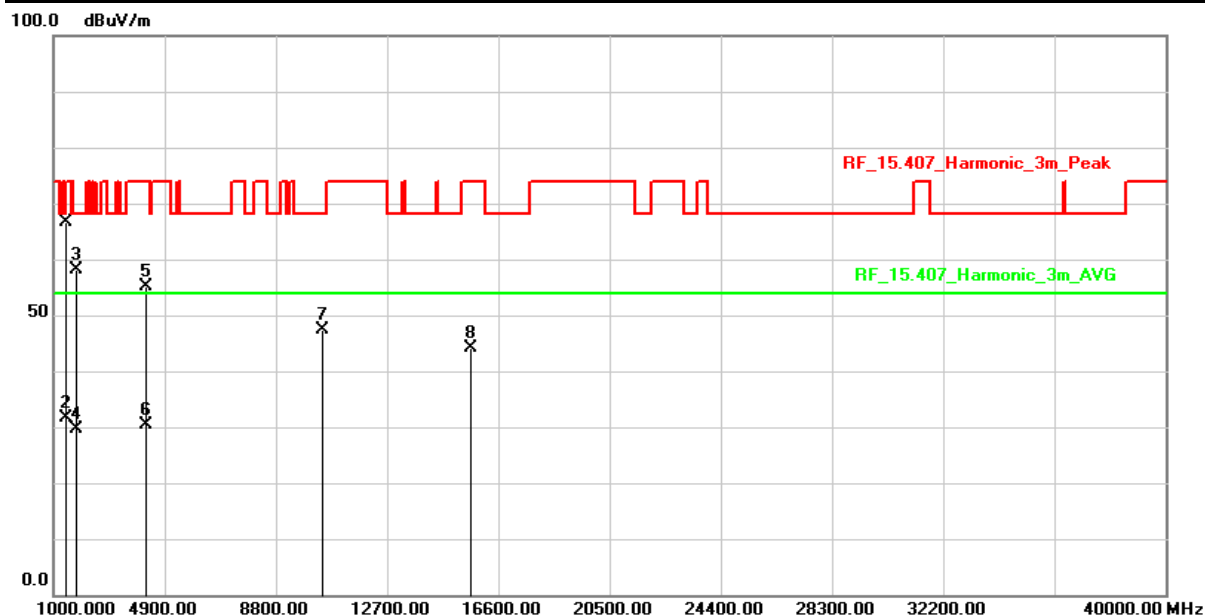


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	97.16	-31.64	65.52	74.00	-8.48	peak
2	1400.000	63.80	-31.64	32.16	54.00	-21.84	AVG
3	1800.000	88.22	-33.06	55.16	68.20	-13.04	peak
4	1800.000	61.26	-33.06	28.20	54.00	-25.80	AVG
5	10360.000	60.41	-11.71	48.70	68.20	-19.50	peak
6	15540.000	54.67	-9.94	44.73	74.00	-29.27	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT20)	Test Date :	2021/10/06
Test Channel :	CH44(5220MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

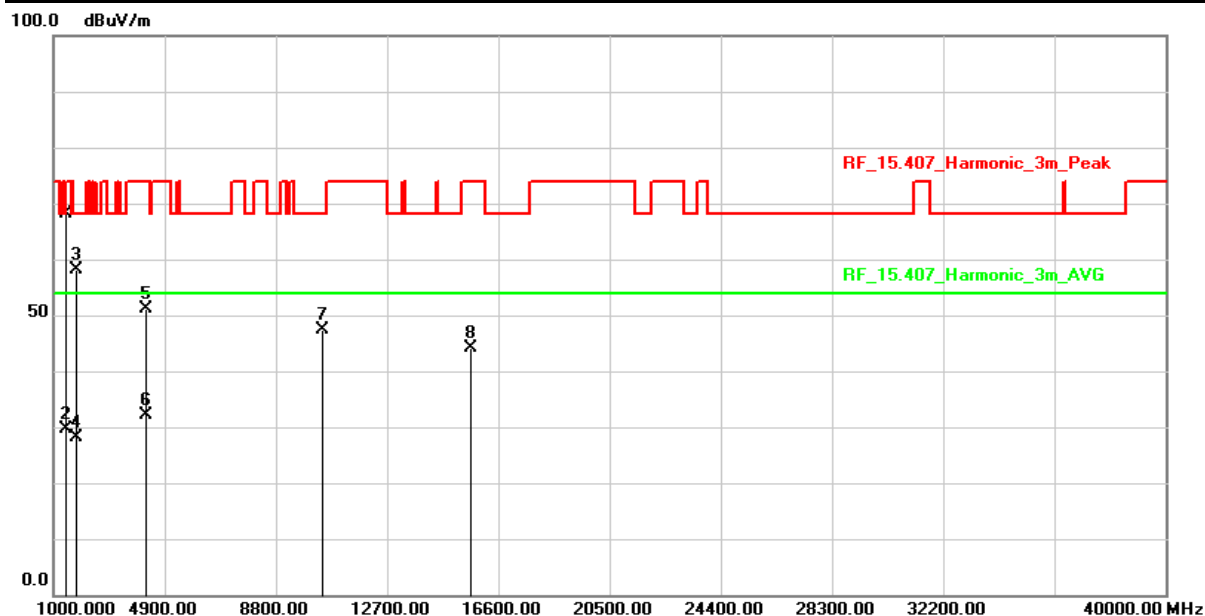


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	98.17	-31.64	66.53	74.00	-7.47	peak
2	1400.000	63.20	-31.64	31.56	54.00	-22.44	AVG
3	1800.000	91.19	-33.06	58.13	68.20	-10.07	peak
4	1800.000	62.77	-33.06	29.71	54.00	-24.29	AVG
5	4200.000	78.42	-23.38	55.04	74.00	-18.96	peak
6	4200.000	53.83	-23.38	30.45	54.00	-23.55	AVG
7	10440.000	58.85	-11.53	47.32	68.20	-20.88	peak
8	15660.000	54.15	-9.90	44.25	74.00	-29.75	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT20)	Test Date :	2021/10/06
Test Channel :	CH44(5220MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %



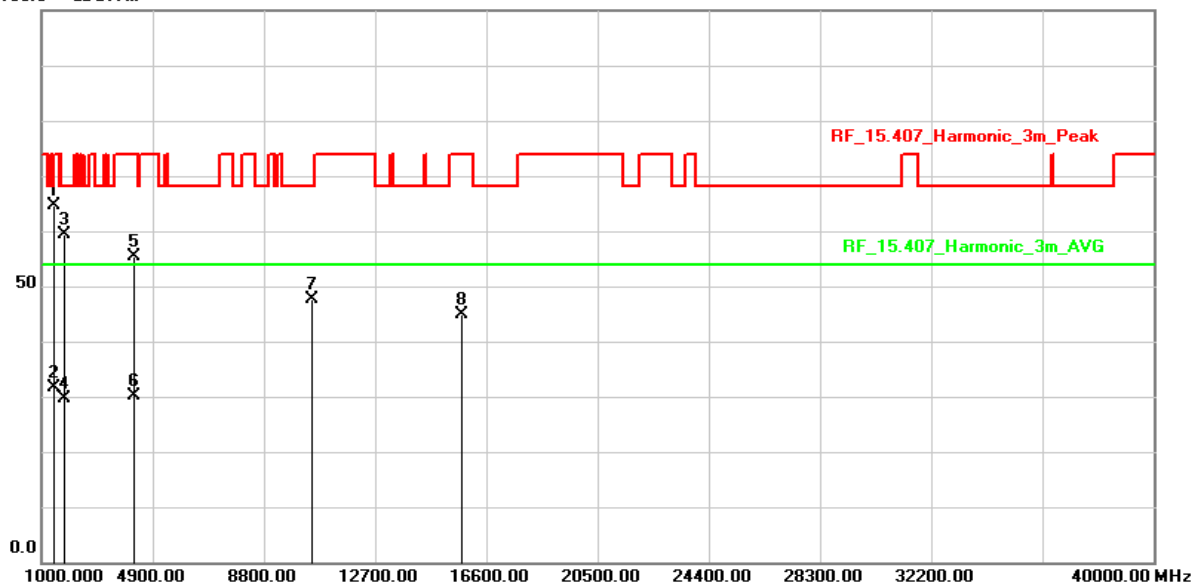
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	99.82	-31.64	68.18	74.00	-5.82	peak
2	1400.000	61.18	-31.64	29.54	54.00	-24.46	AVG
3	1800.000	91.10	-33.06	58.04	68.20	-10.16	peak
4	1800.000	61.20	-33.06	28.14	54.00	-25.86	AVG
5	4200.000	74.63	-23.38	51.25	74.00	-22.75	peak
6	4200.000	55.44	-23.38	32.06	54.00	-21.94	AVG
7	10440.000	58.85	-11.53	47.32	68.20	-20.88	peak
8	15660.000	54.15	-9.90	44.25	74.00	-29.75	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT20)	Test Date :	2021/10/06
Test Channel :	CH48(5240MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

100.0 dBuV/m

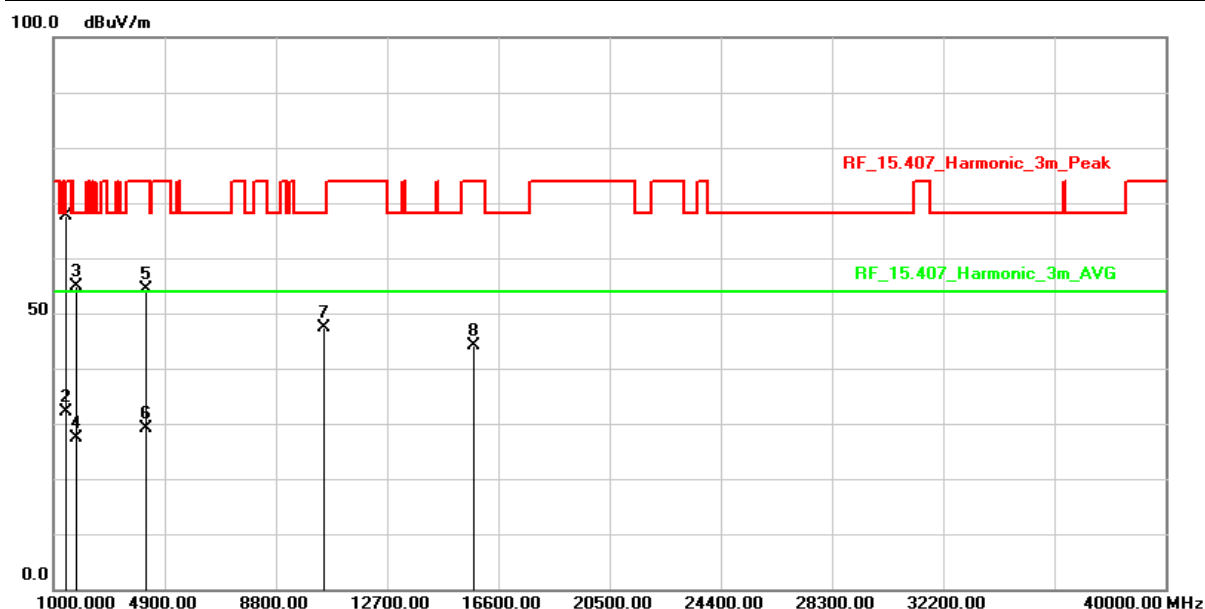


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	96.16	-31.64	64.52	74.00	-9.48	peak
2	1400.000	63.30	-31.64	31.66	54.00	-22.34	AVG
3	1800.000	92.42	-33.06	59.36	68.20	-8.84	peak
4	1800.000	62.63	-33.06	29.57	54.00	-24.43	AVG
5	4200.000	78.71	-23.38	55.33	74.00	-18.67	peak
6	4200.000	53.62	-23.38	30.24	54.00	-23.76	AVG
7	10480.000	58.93	-11.34	47.59	68.20	-20.61	peak
8	15720.000	54.60	-9.73	44.87	74.00	-29.13	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT20)	Test Date :	2021/10/06
Test Channel :	CH48(5240MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %

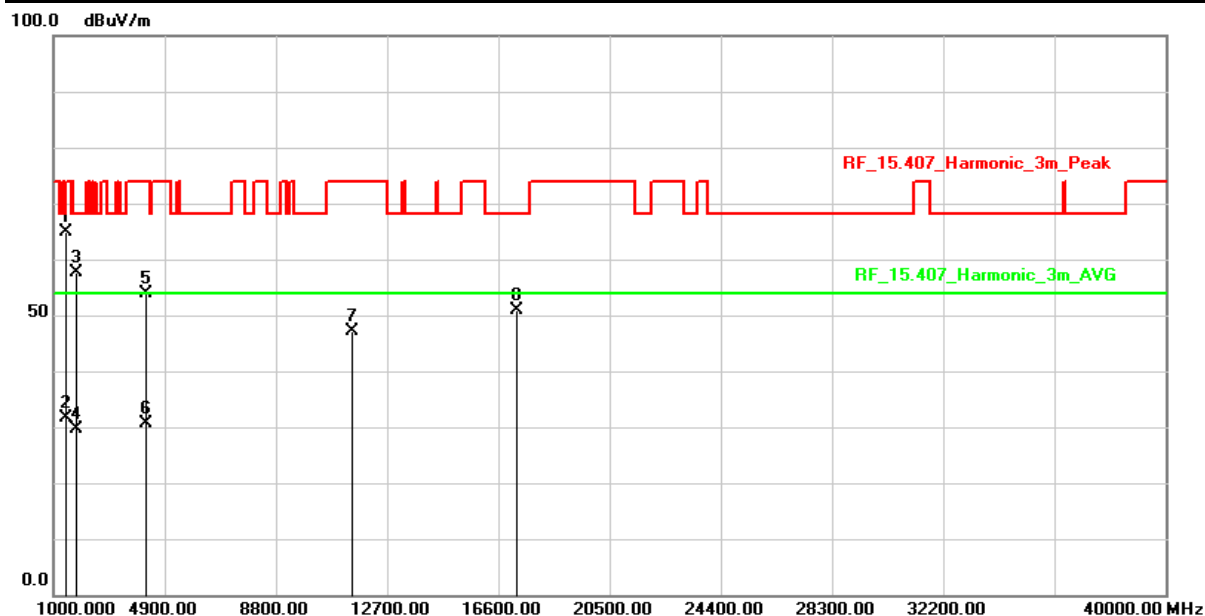


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	99.39	-31.64	67.75	74.00	-6.25	peak
2	1400.000	63.69	-31.64	32.05	54.00	-21.95	AVG
3	1800.000	87.82	-33.06	54.76	68.20	-13.44	peak
4	1800.000	60.53	-33.06	27.47	54.00	-26.53	AVG
5	4200.000	77.74	-23.38	54.36	74.00	-19.64	peak
6	4200.000	52.48	-23.38	29.10	54.00	-24.90	AVG
7	10480.000	58.80	-11.34	47.46	68.20	-20.74	peak
8	15720.000	53.94	-9.73	44.21	74.00	-29.79	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT20)	Test Date :	2021/10/06
Test Channel :	CH149(5745MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

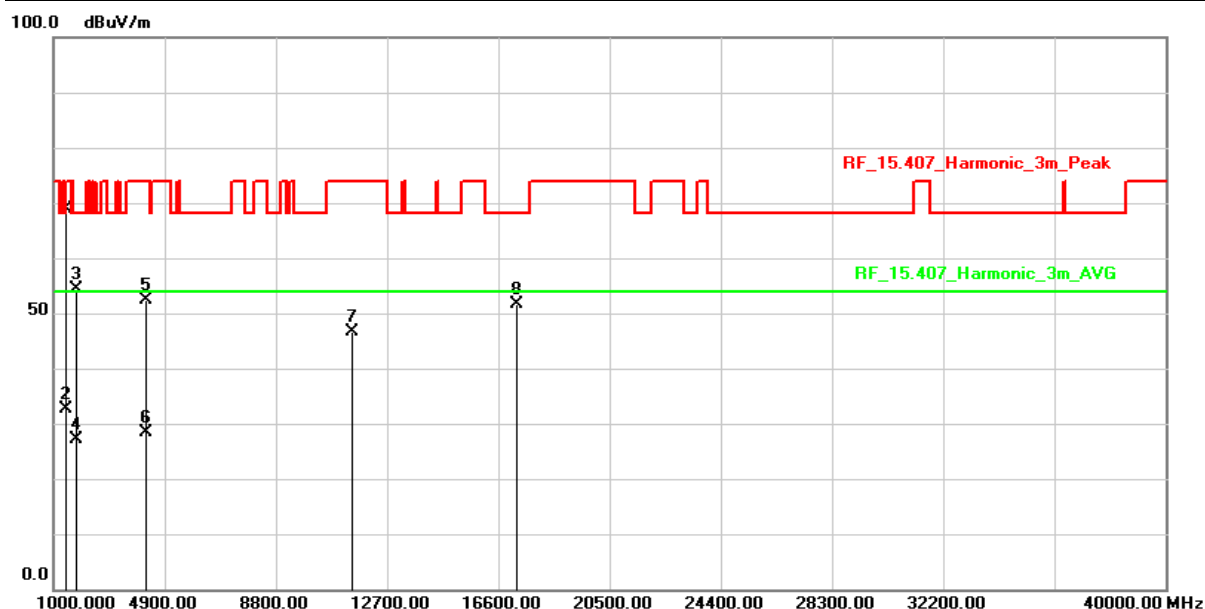


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	96.48	-31.64	64.84	74.00	-9.16	peak
2	1400.000	63.22	-31.64	31.58	54.00	-22.42	AVG
3	1800.000	90.69	-33.06	57.63	68.20	-10.57	peak
4	1800.000	62.64	-33.06	29.58	54.00	-24.42	AVG
5	4200.000	77.21	-23.38	53.83	74.00	-20.17	peak
6	4200.000	54.02	-23.38	30.64	54.00	-23.36	AVG
7	11490.000	58.72	-11.60	47.12	74.00	-26.88	peak
8	17235.000	54.87	-4.10	50.77	68.20	-17.43	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT20)	Test Date :	2021/10/06
Test Channel :	CH149(5745MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %



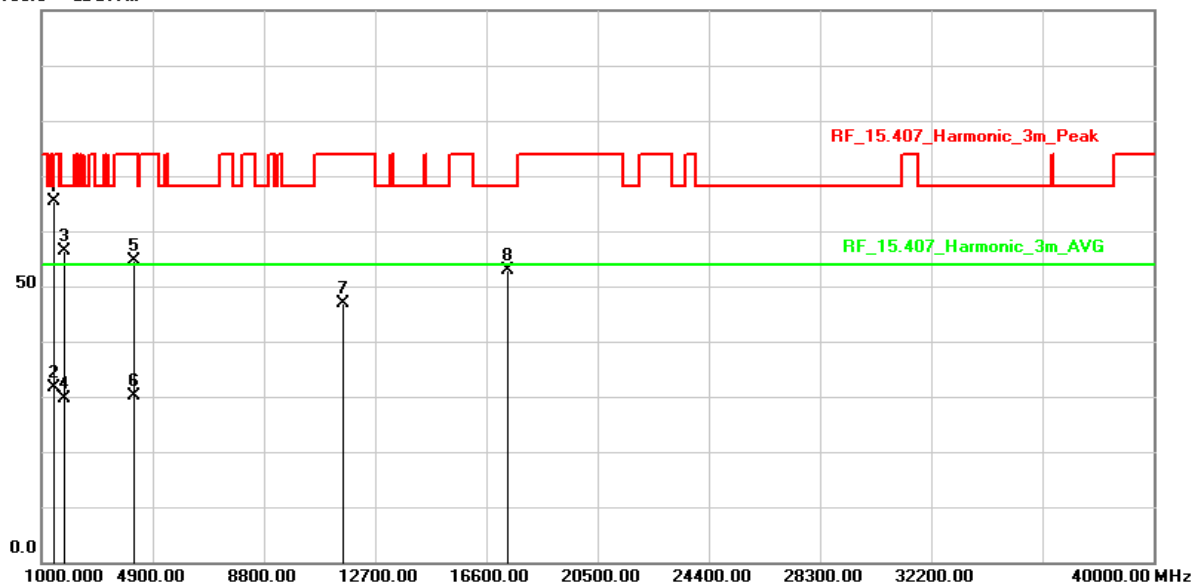
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	100.61	-31.64	68.97	74.00	-5.03	peak
2	1400.000	64.32	-31.64	32.68	54.00	-21.32	AVG
3	1800.000	87.52	-33.06	54.46	68.20	-13.74	peak
4	1800.000	60.30	-33.06	27.24	54.00	-26.76	AVG
5	4200.000	75.83	-23.38	52.45	74.00	-21.55	peak
6	4200.000	51.72	-23.38	28.34	54.00	-25.66	AVG
7	11490.000	58.33	-11.60	46.73	74.00	-27.27	peak
8	17235.000	55.72	-4.10	51.62	68.20	-16.58	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT20)	Test Date :	2021/10/06
Test Channel :	CH157(5785MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

100.0 dBuV/m

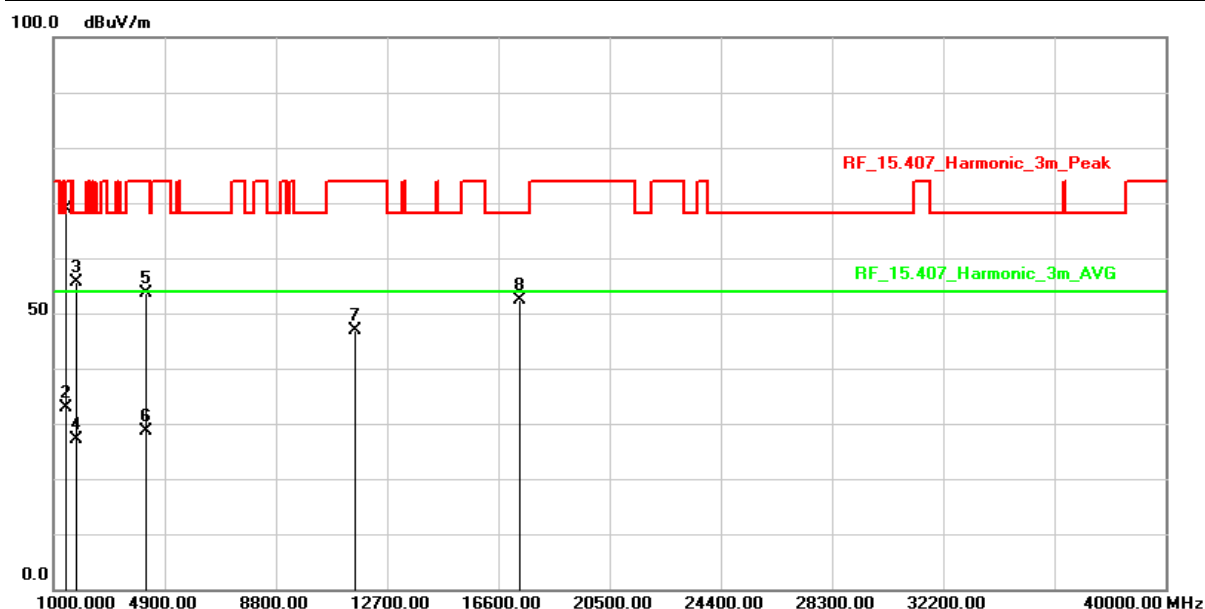


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	97.07	-31.64	65.43	74.00	-8.57	peak
2	1400.000	63.31	-31.64	31.67	54.00	-22.33	AVG
3	1800.000	89.46	-33.06	56.40	68.20	-11.80	peak
4	1800.000	62.61	-33.06	29.55	54.00	-24.45	AVG
5	4205.000	77.91	-23.34	54.57	74.00	-19.43	peak
6	4205.000	53.51	-23.34	30.17	54.00	-23.83	AVG
7	11570.000	58.65	-11.74	46.91	74.00	-27.09	peak
8	17355.000	55.31	-3.46	51.85	68.20	-16.35	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT20)	Test Date :	2021/10/06
Test Channel :	CH157(5785MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %

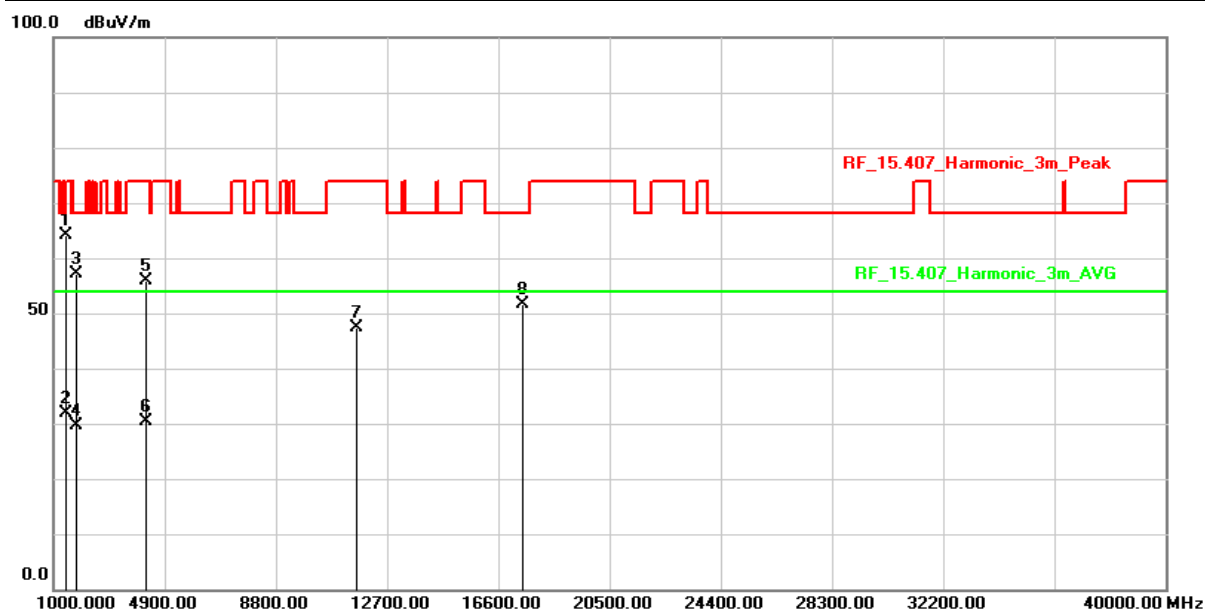


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	100.64	-31.64	69.00	74.00	-5.00	peak
2	1400.000	64.61	-31.64	32.97	54.00	-21.03	AVG
3	1800.000	88.75	-33.06	55.69	68.20	-12.51	peak
4	1800.000	60.20	-33.06	27.14	54.00	-26.86	AVG
5	4200.000	77.08	-23.38	53.70	74.00	-20.30	peak
6	4200.000	52.05	-23.38	28.67	54.00	-25.33	AVG
7	11570.000	58.65	-11.74	46.91	74.00	-27.09	peak
8	17355.000	54.86	-3.46	51.40	68.20	-16.80	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT20)	Test Date :	2021/10/06
Test Channel :	CH165(5825MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

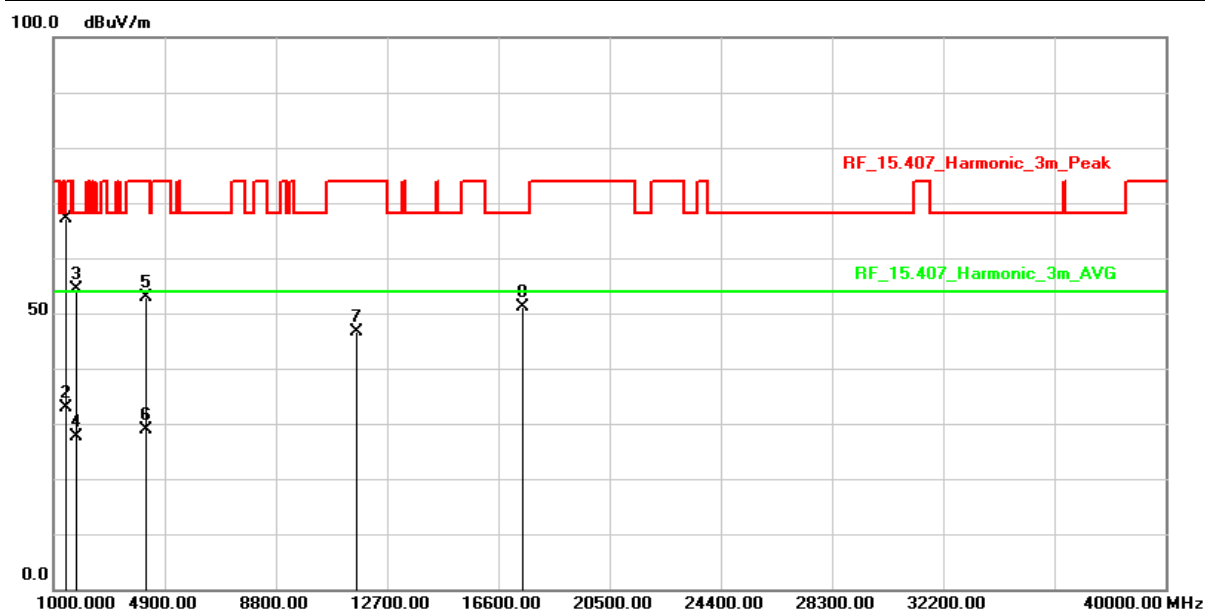


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	95.86	-31.64	64.22	74.00	-9.78	peak
2	1400.000	63.58	-31.64	31.94	54.00	-22.06	AVG
3	1800.000	90.20	-33.06	57.14	68.20	-11.06	peak
4	1800.000	62.57	-33.06	29.51	54.00	-24.49	AVG
5	4205.000	79.23	-23.34	55.89	74.00	-18.11	peak
6	4205.000	53.71	-23.34	30.37	54.00	-23.63	AVG
7	11650.000	59.35	-12.02	47.33	74.00	-26.67	peak
8	17475.000	54.20	-2.47	51.73	68.20	-16.47	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT20)	Test Date :	2021/10/06
Test Channel :	CH165(5825MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %



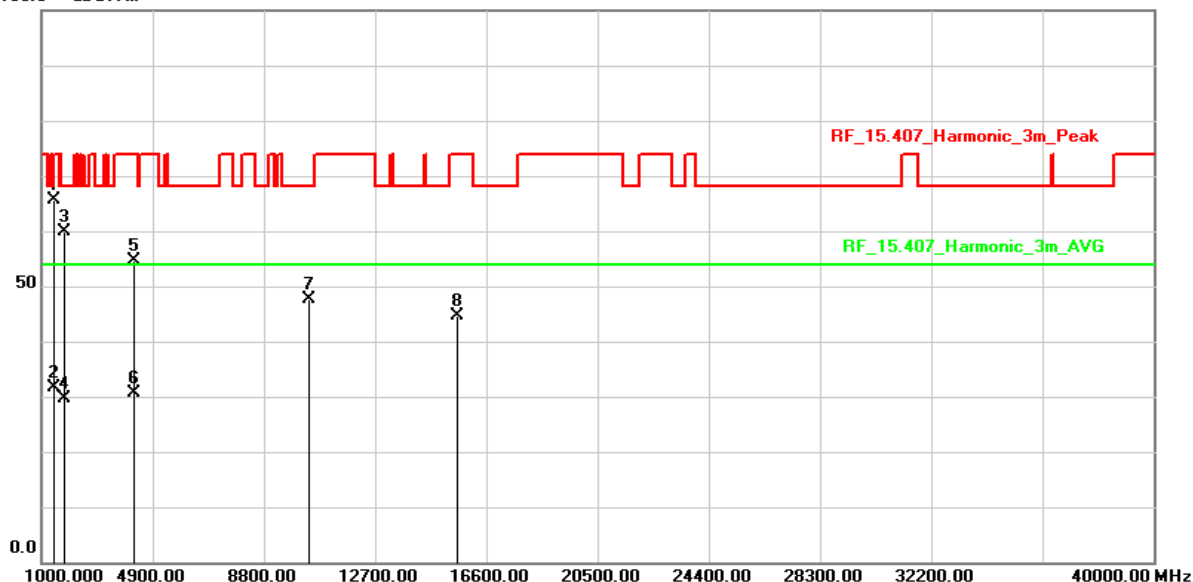
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	98.75	-31.64	67.11	74.00	-6.89	peak
2	1400.000	64.58	-31.64	32.94	54.00	-21.06	AVG
3	1800.000	87.45	-33.06	54.39	68.20	-13.81	peak
4	1800.000	60.80	-33.06	27.74	54.00	-26.26	AVG
5	4205.000	76.32	-23.34	52.98	74.00	-21.02	peak
6	4205.000	52.32	-23.34	28.98	54.00	-25.02	AVG
7	11650.000	58.74	-12.02	46.72	74.00	-27.28	peak
8	17475.000	53.53	-2.47	51.06	68.20	-17.14	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT40)	Test Date :	2021/10/06
Test Channel :	CH38(5190MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

100.0 dBuV/m

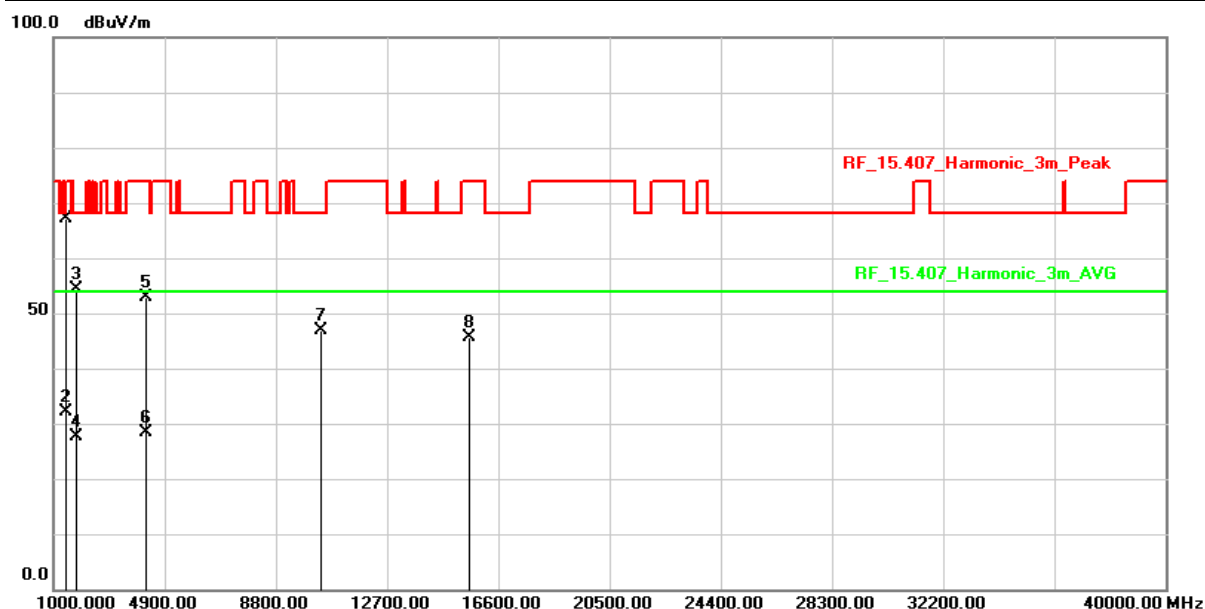


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	97.35	-31.64	65.71	74.00	-8.29	peak
2	1400.000	63.19	-31.64	31.55	54.00	-22.45	AVG
3	1800.000	92.96	-33.06	59.90	68.20	-8.30	peak
4	1800.000	62.63	-33.06	29.57	54.00	-24.43	AVG
5	4200.000	78.01	-23.38	54.63	74.00	-19.37	peak
6	4200.000	54.02	-23.38	30.64	54.00	-23.36	AVG
7	10380.000	59.25	-11.71	47.54	68.20	-20.66	peak
8	15570.000	54.64	-10.02	44.62	74.00	-29.38	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT40)	Test Date :	2021/10/06
Test Channel :	CH38(5190MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %

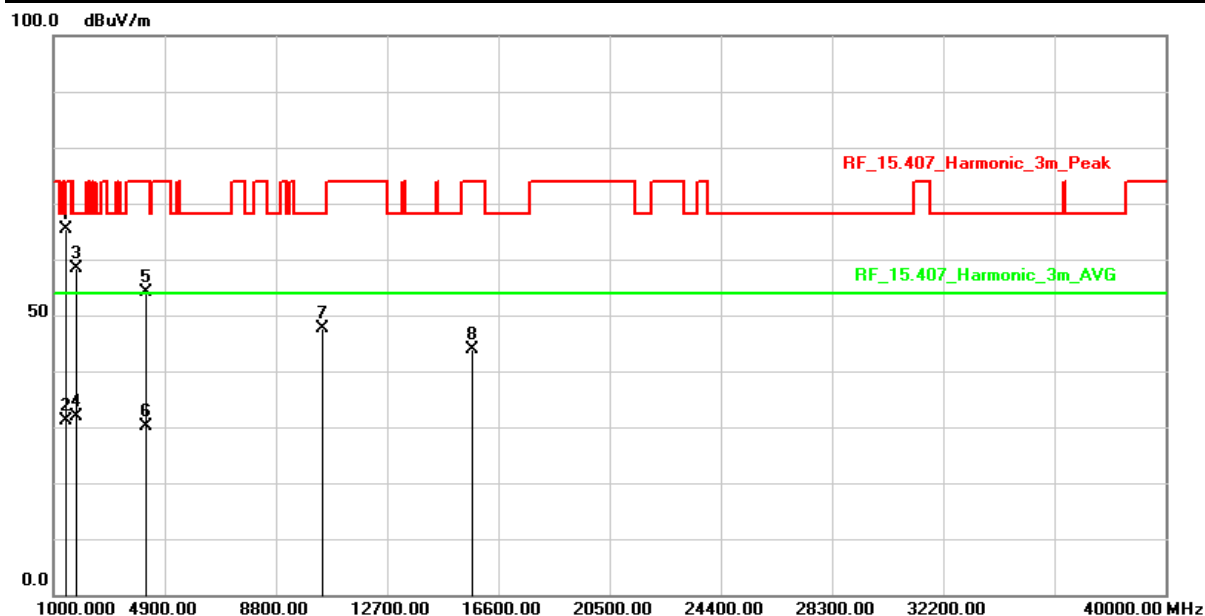


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	98.71	-31.64	67.07	74.00	-6.93	peak
2	1400.000	63.79	-31.64	32.15	54.00	-21.85	AVG
3	1800.000	87.53	-33.06	54.47	68.20	-13.73	peak
4	1800.000	60.62	-33.06	27.56	54.00	-26.44	AVG
5	4200.000	76.21	-23.38	52.83	74.00	-21.17	peak
6	4200.000	51.79	-23.38	28.41	54.00	-25.59	AVG
7	10380.000	58.58	-11.71	46.87	68.20	-21.33	peak
8	15570.000	55.64	-10.02	45.62	74.00	-28.38	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT40)	Test Date :	2021/10/06
Test Channel :	CH46(5230MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

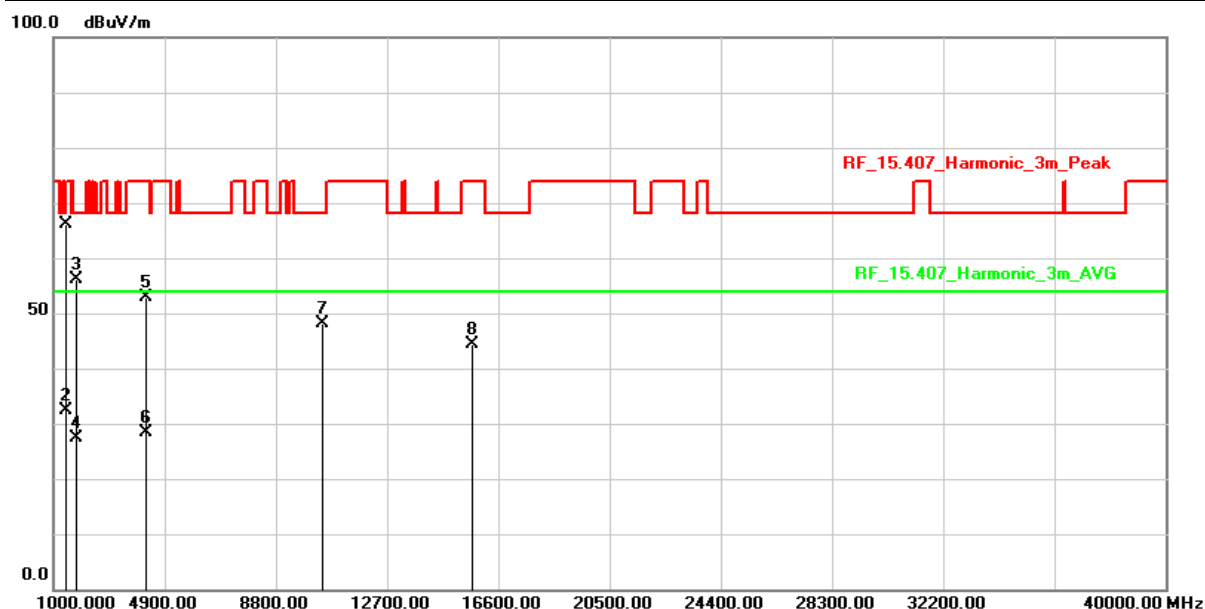


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	97.09	-31.64	65.45	74.00	-8.55	peak
2	1400.000	62.69	-31.64	31.05	54.00	-22.95	AVG
3	1800.000	91.37	-33.06	58.31	68.20	-9.89	peak
4	1800.000	64.83	-33.06	31.77	54.00	-22.23	AVG
5	4200.000	77.44	-23.38	54.06	74.00	-19.94	peak
6	4200.000	53.58	-23.38	30.20	54.00	-23.80	AVG
7	10460.000	58.95	-11.44	47.51	68.20	-20.69	peak
8	15690.000	53.76	-9.79	43.97	74.00	-30.03	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT40)	Test Date :	2021/10/06
Test Channel :	CH46(5230MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %

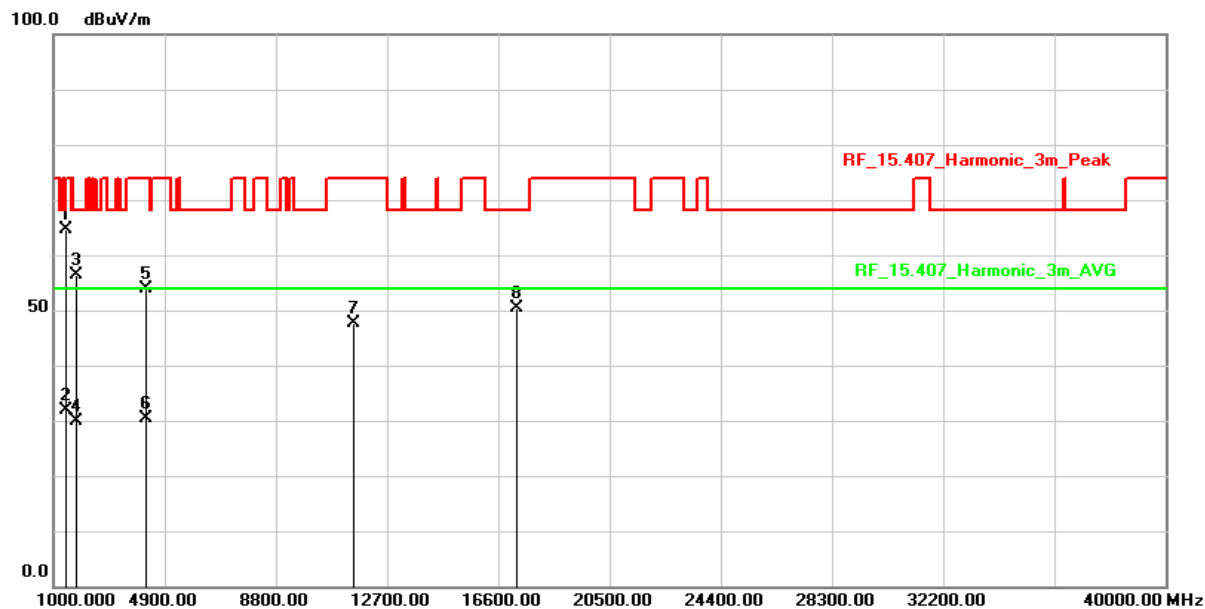


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	97.79	-31.64	66.15	74.00	-7.85	peak
2	1400.000	63.97	-31.64	32.33	54.00	-21.67	AVG
3	1800.000	89.31	-33.06	56.25	68.20	-11.95	peak
4	1800.000	60.41	-33.06	27.35	54.00	-26.65	AVG
5	4200.000	76.22	-23.38	52.84	74.00	-21.16	peak
6	4200.000	51.85	-23.38	28.47	54.00	-25.53	AVG
7	10460.000	59.49	-11.44	48.05	68.20	-20.15	peak
8	15690.000	54.13	-9.79	44.34	74.00	-29.66	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT40)	Test Date :	2021/10/06
Test Channel :	CH151(5755MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %



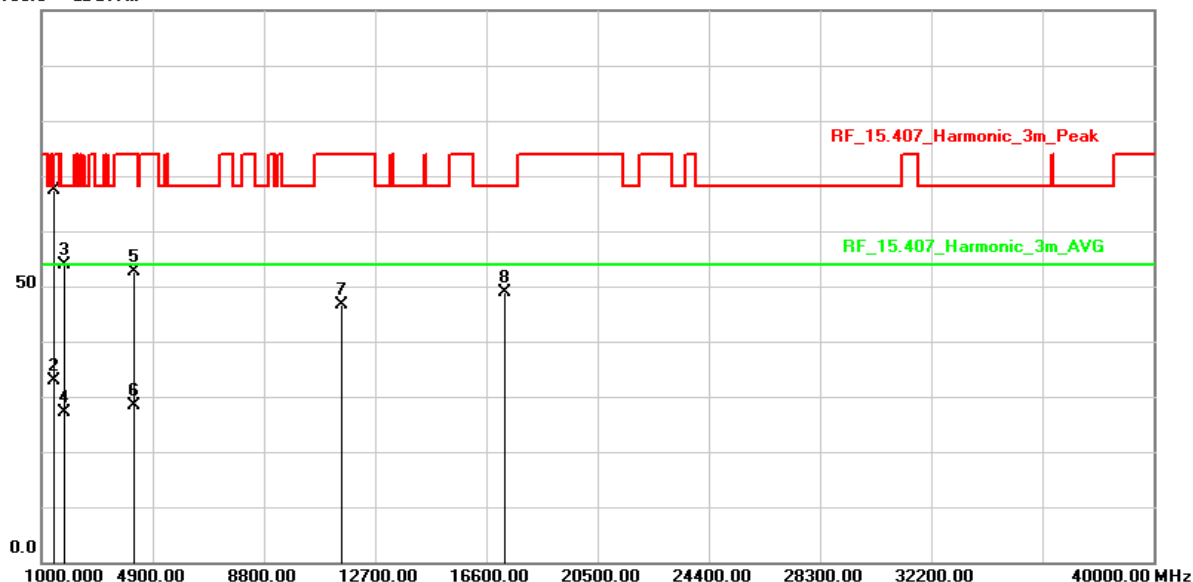
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	96.35	-31.64	64.71	74.00	-9.29	peak
2	1400.000	63.40	-31.64	31.76	54.00	-22.24	AVG
3	1800.000	89.55	-33.06	56.49	68.20	-11.71	peak
4	1800.000	63.00	-33.06	29.94	54.00	-24.06	AVG
5	4200.000	77.18	-23.38	53.80	74.00	-20.20	peak
6	4200.000	53.86	-23.38	30.48	54.00	-23.52	AVG
7	11510.000	59.32	-11.59	47.73	74.00	-26.27	peak
8	17265.000	54.24	-3.94	50.30	68.20	-17.90	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT40)	Test Date :	2021/10/06
Test Channel :	CH151(5755MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %

100.0 dBuV/m

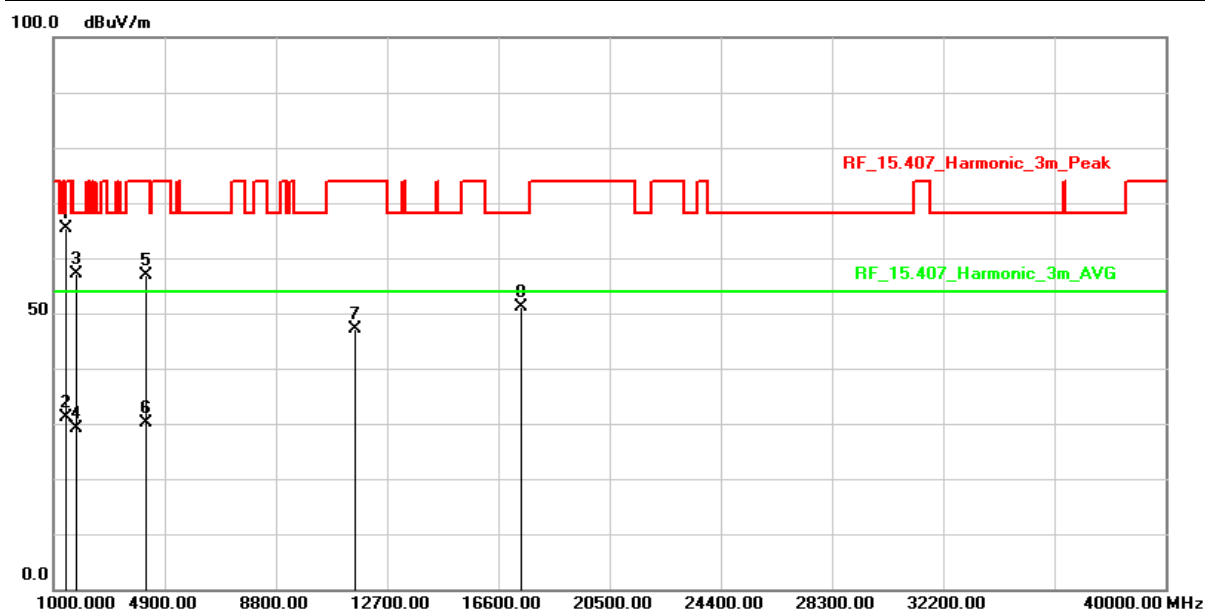


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	98.94	-31.64	67.30	74.00	-6.70	peak
2	1400.000	64.53	-31.64	32.89	54.00	-21.11	AVG
3	1800.000	86.94	-33.06	53.88	68.20	-14.32	peak
4	1800.000	60.23	-33.06	27.17	54.00	-26.83	AVG
5	4200.000	76.04	-23.38	52.66	74.00	-21.34	peak
6	4200.000	51.82	-23.38	28.44	54.00	-25.56	AVG
7	11510.000	58.16	-11.59	46.57	74.00	-27.43	peak
8	17265.000	52.91	-3.94	48.97	68.20	-19.23	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT40)	Test Date :	2021/10/06
Test Channel :	CH159(5795MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

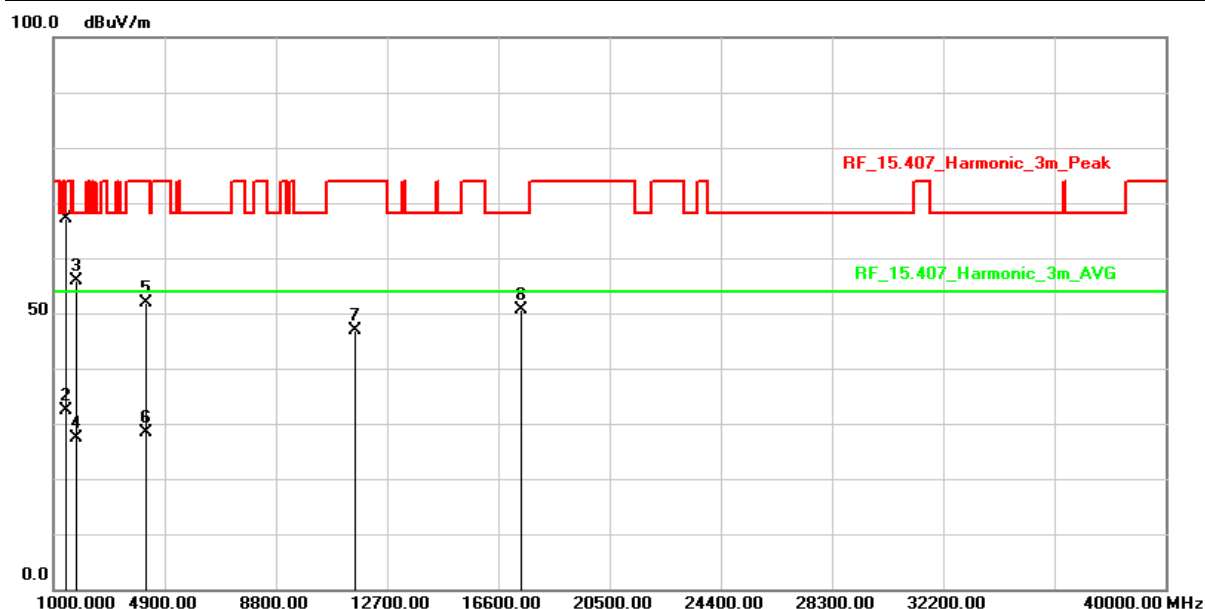


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	96.97	-31.64	65.33	74.00	-8.67	peak
2	1400.000	62.75	-31.64	31.11	54.00	-22.89	AVG
3	1800.000	90.17	-33.06	57.11	68.20	-11.09	peak
4	1800.000	62.30	-33.06	29.24	54.00	-24.76	AVG
5	4200.000	80.36	-23.38	56.98	74.00	-17.02	peak
6	4200.000	53.43	-23.38	30.05	54.00	-23.95	AVG
7	11590.000	58.96	-11.78	47.18	74.00	-26.82	peak
8	17385.000	54.48	-3.29	51.19	68.20	-17.01	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT40)	Test Date :	2021/10/06
Test Channel :	CH159(5795MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %



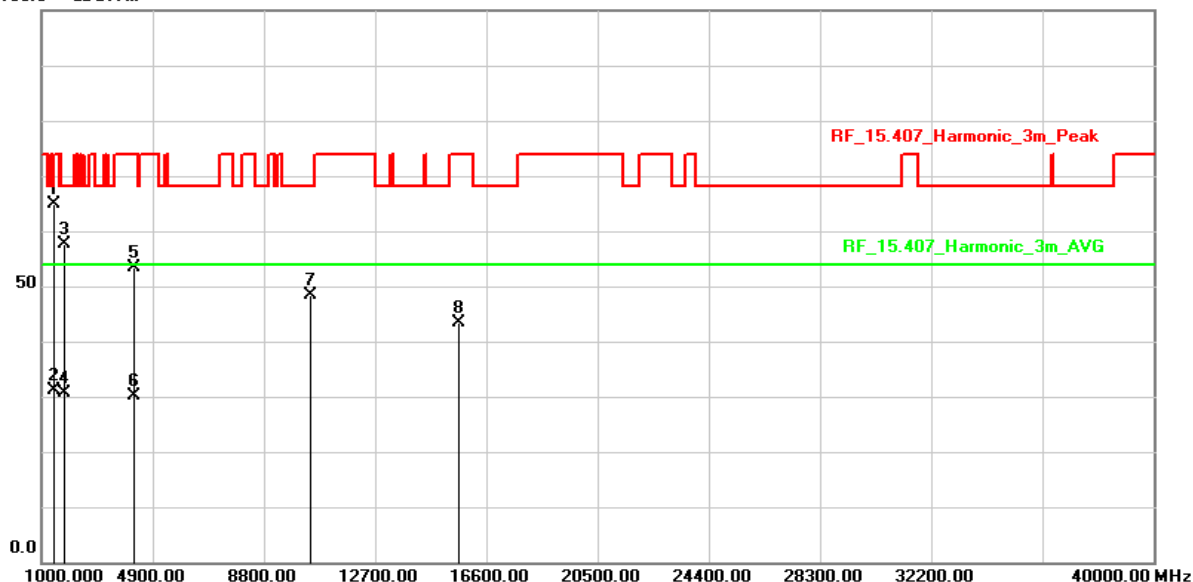
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	98.73	-31.64	67.09	74.00	-6.91	peak
2	1400.000	64.04	-31.64	32.40	54.00	-21.60	AVG
3	1800.000	88.92	-33.06	55.86	68.20	-12.34	peak
4	1800.000	60.44	-33.06	27.38	54.00	-26.62	AVG
5	4205.000	75.24	-23.34	51.90	74.00	-22.10	peak
6	4205.000	51.75	-23.34	28.41	54.00	-25.59	AVG
7	11590.000	58.55	-11.78	46.77	74.00	-27.23	peak
8	17385.000	53.92	-3.29	50.63	68.20	-17.57	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT80)	Test Date :	2021/10/06
Test Channel :	CH42 (5210MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

100.0 dBuV/m

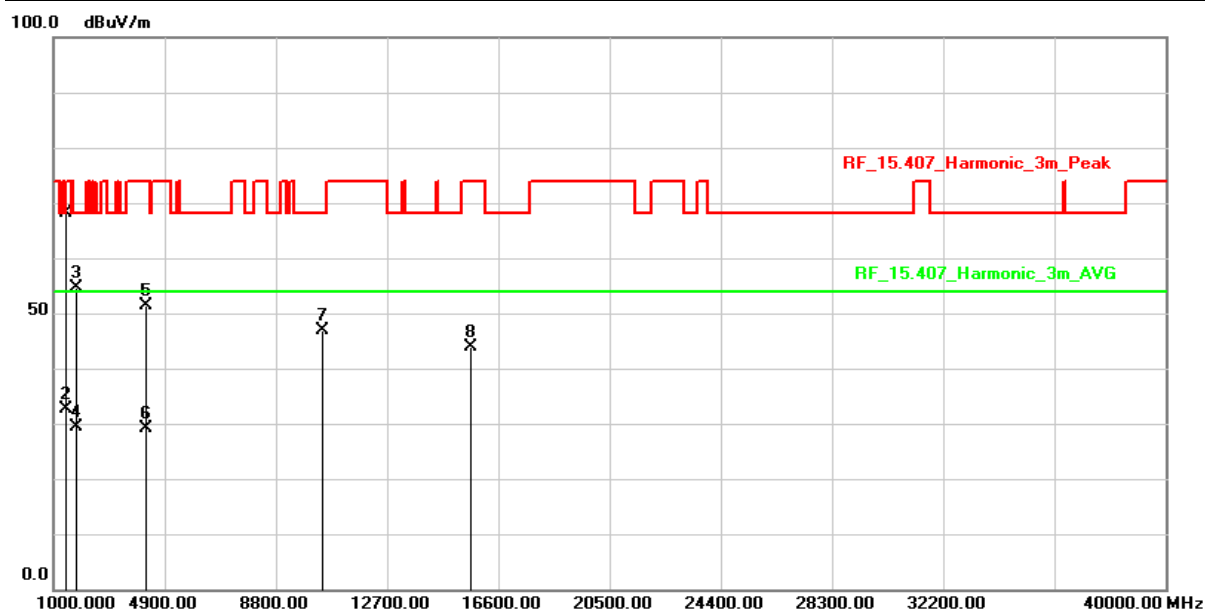


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	96.50	-31.64	64.86	74.00	-9.14	peak
2	1400.000	62.72	-31.64	31.08	54.00	-22.92	AVG
3	1800.000	90.72	-33.06	57.66	68.20	-10.54	peak
4	1800.000	63.60	-33.06	30.54	54.00	-23.46	AVG
5	4200.000	76.70	-23.38	53.32	74.00	-20.68	peak
6	4200.000	53.49	-23.38	30.11	54.00	-23.89	AVG
7	10420.000	59.98	-11.63	48.35	68.20	-19.85	peak
8	15630.000	53.41	-10.00	43.41	74.00	-30.59	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT80)	Test Date :	2021/10/06
Test Channel :	CH42 (5210MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %

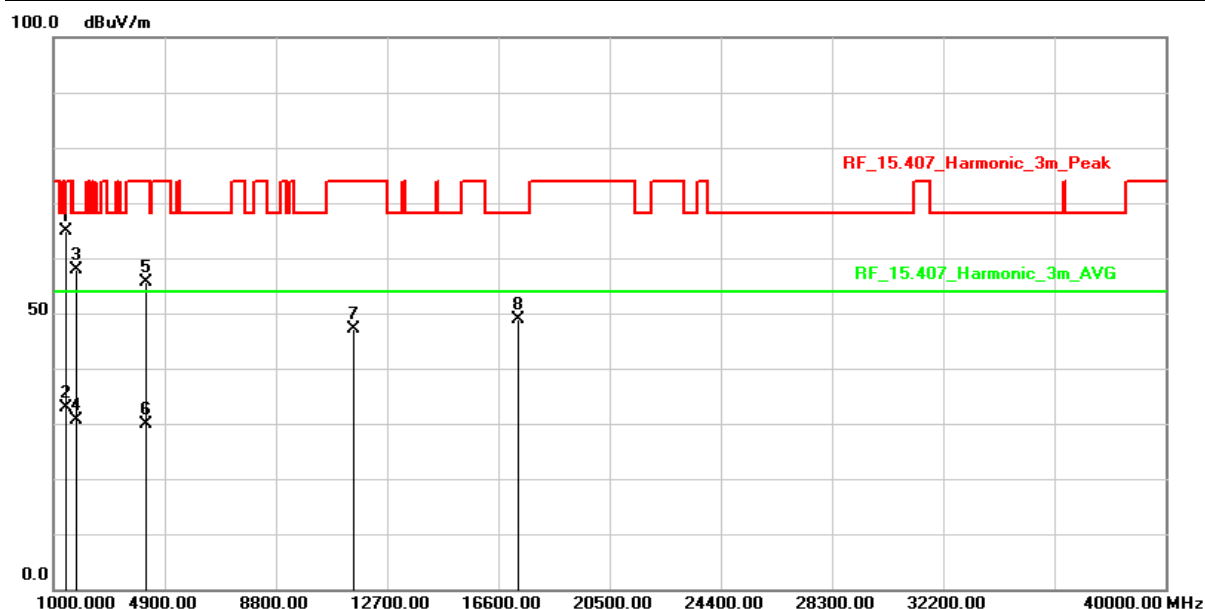


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	99.82	-31.64	68.18	74.00	-5.82	peak
2	1400.000	64.18	-31.64	32.54	54.00	-21.46	AVG
3	1800.000	87.64	-33.06	54.58	68.20	-13.62	peak
4	1800.000	62.47	-33.06	29.41	54.00	-24.59	AVG
5	4200.000	74.71	-23.38	51.33	74.00	-22.67	peak
6	4200.000	52.48	-23.38	29.10	54.00	-24.90	AVG
7	10420.000	58.55	-11.63	46.92	68.20	-21.28	peak
8	15630.000	53.96	-10.00	43.96	74.00	-30.04	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT80)	Test Date :	2021/10/06
Test Channel :	CH155 (5775MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

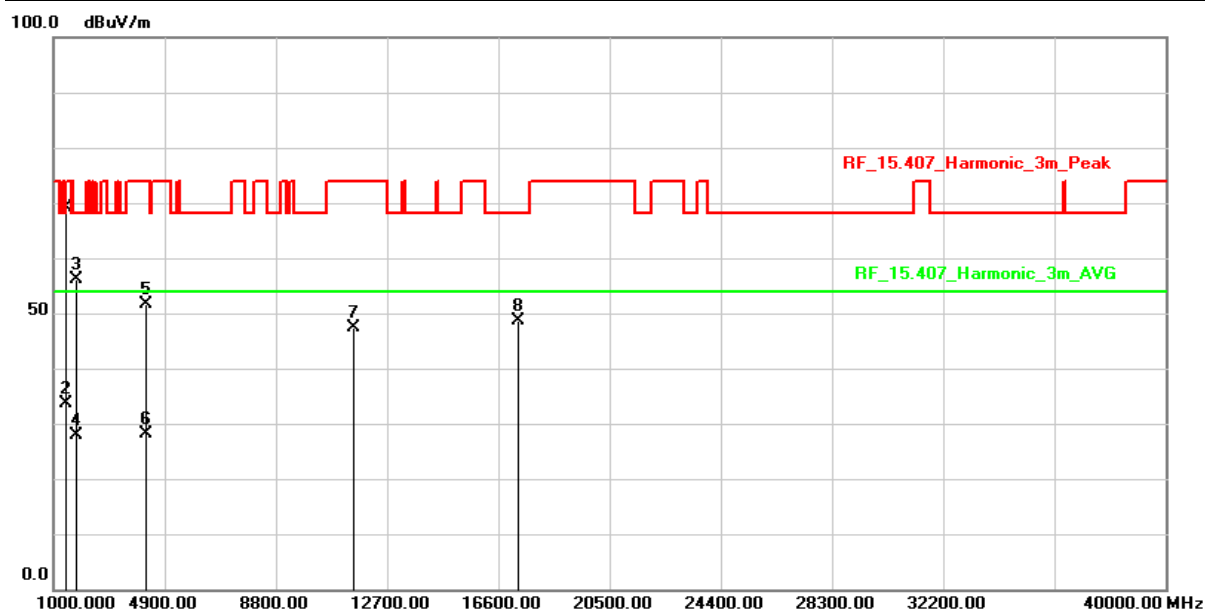


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	96.60	-31.64	64.96	74.00	-9.04	peak
2	1400.000	64.48	-31.64	32.84	54.00	-21.16	AVG
3	1800.000	90.89	-33.06	57.83	68.20	-10.37	peak
4	1800.000	63.66	-33.06	30.60	54.00	-23.40	AVG
5	4200.000	79.00	-23.38	55.62	74.00	-18.38	peak
6	4200.000	53.37	-23.38	29.99	54.00	-24.01	AVG
7	11550.000	58.73	-11.68	47.05	74.00	-26.95	peak
8	17325.000	52.54	-3.64	48.90	68.20	-19.30	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11ac VHT80)	Test Date :	2021/10/06
Test Channel :	CH155 (5775MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %



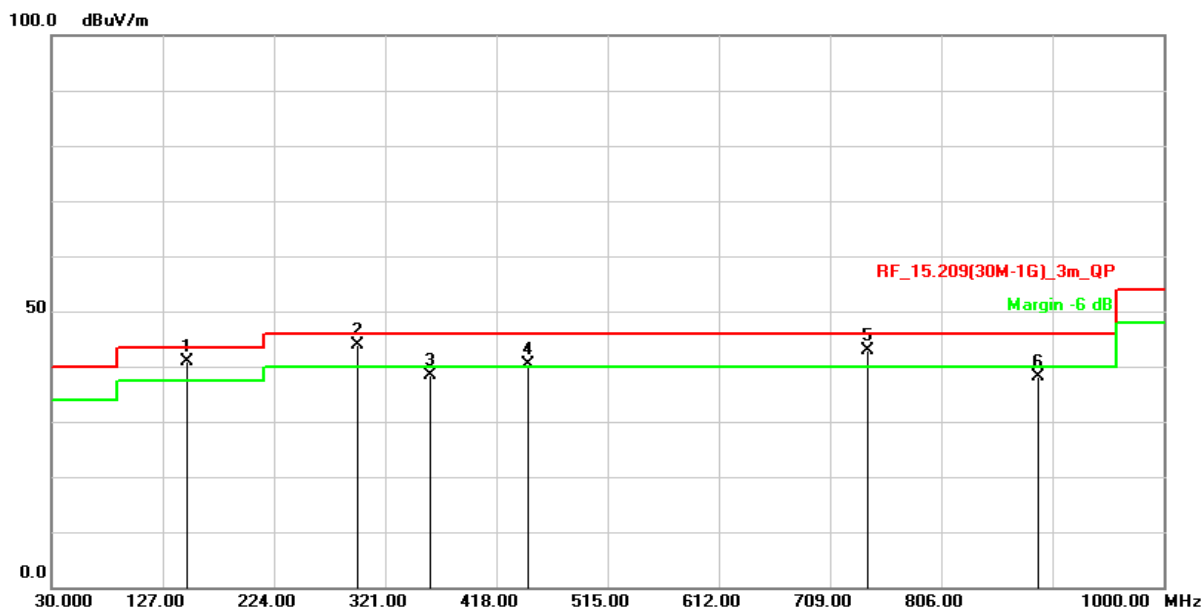
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1400.000	100.72	-31.64	69.08	74.00	-4.92	peak
2	1400.000	65.15	-31.64	33.51	54.00	-20.49	AVG
3	1800.000	89.22	-33.06	56.16	68.20	-12.04	peak
4	1800.000	61.05	-33.06	27.99	54.00	-26.01	AVG
5	4200.000	74.89	-23.38	51.51	74.00	-22.49	peak
6	4200.000	51.60	-23.38	28.22	54.00	-25.78	AVG
7	11550.000	59.06	-11.68	47.38	74.00	-26.62	peak
8	17325.000	52.15	-3.64	48.51	68.20	-19.69	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Below 1GHz Data

Test Mode :	Transmit(802.11a)	Test Date :	2021/10/05
Test Channel :	CH44(5220MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

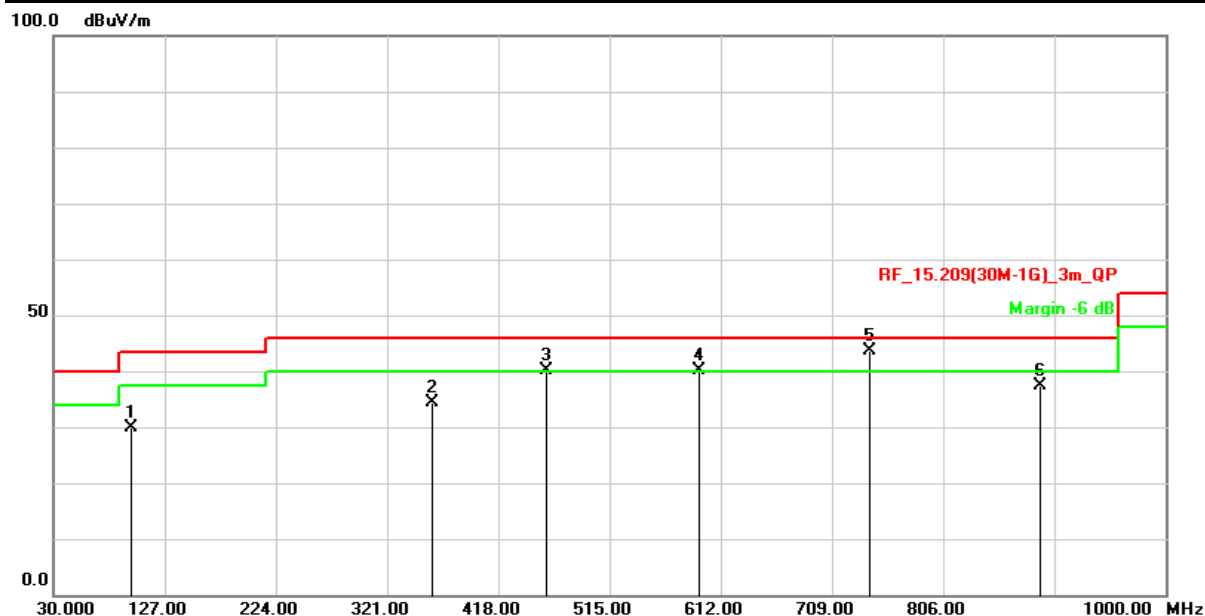


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	148.3400	52.54	-11.59	40.95	43.50	-2.55	QP
2	296.7500	54.73	-10.88	43.85	46.00	-2.15	QP
3	359.8000	47.44	-9.16	38.28	46.00	-7.72	QP
4	445.1600	46.95	-6.62	40.33	46.00	-5.67	QP
5	741.9800	43.45	-0.59	42.86	46.00	-3.14	QP
6	890.3900	37.09	1.00	38.09	46.00	-7.91	QP

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11a)	Test Date :	2021/10/05
Test Channel :	CH44(5220MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %



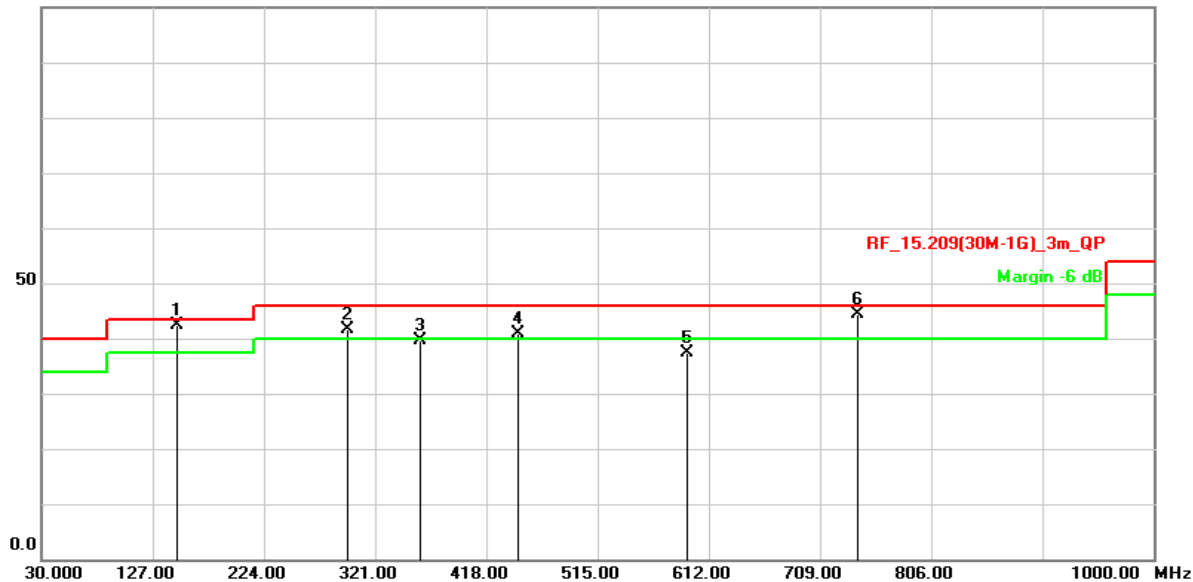
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	97.9000	46.66	-16.82	29.84	43.50	-13.66	QP
2	359.8000	43.60	-9.16	34.44	46.00	-11.56	QP
3	459.7100	46.47	-6.28	40.19	46.00	-5.81	QP
4	593.5700	43.45	-3.34	40.11	46.00	-5.89	QP
5	741.9800	44.21	-0.59	43.62	46.00	-2.38	QP
6	890.3900	36.41	1.00	37.41	46.00	-8.59	QP

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11a)	Test Date :	2021/10/05
Test Channel :	CH157 (5785MHz)	Temperature :	24 °C
Polarization :	Horizontal	Relative Humidity :	49 %

100.0 dBuV/m

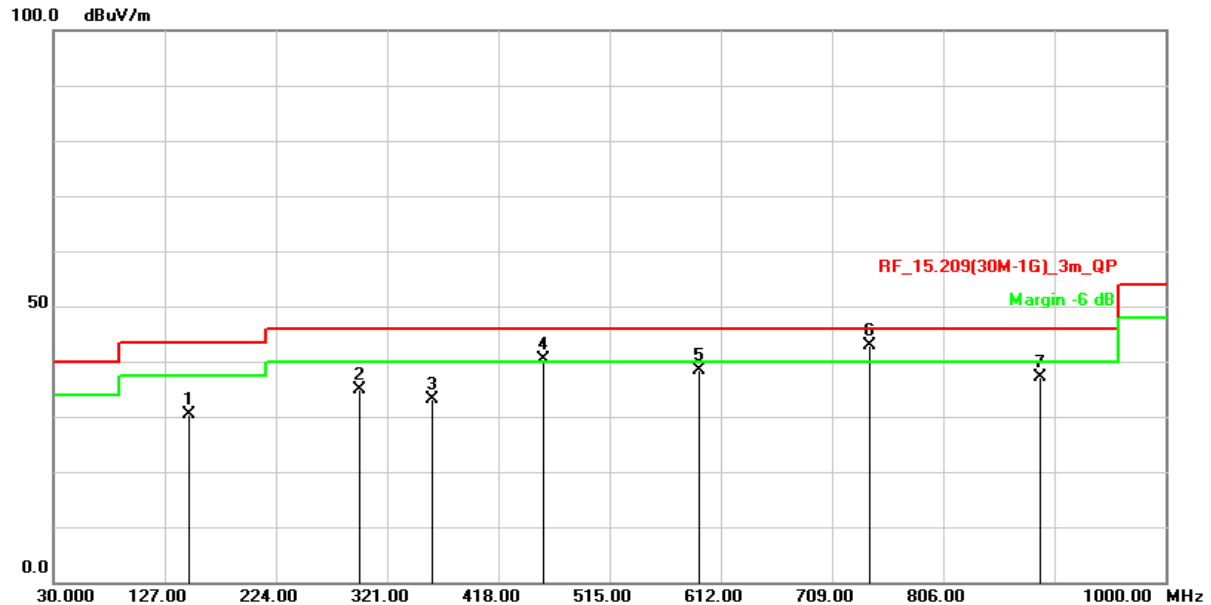


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	148.3400	53.96	-11.59	42.37	43.50	-1.13	QP
2	296.7500	52.49	-10.88	41.61	46.00	-4.39	QP
3	359.8000	48.75	-9.16	39.59	46.00	-6.41	QP
4	445.1600	47.51	-6.62	40.89	46.00	-5.11	QP
5	593.5700	40.81	-3.34	37.47	46.00	-8.53	QP
6	741.9800	44.86	-0.59	44.27	46.00	-1.73	QP

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Transmit(802.11a)	Test Date :	2021/10/05
Test Channel :	CH157 (5785MHz)	Temperature :	24 °C
Polarization :	Vertical	Relative Humidity :	49 %



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	148.3400	41.95	-11.59	30.36	43.50	-13.14	QP
2	296.7500	45.66	-10.88	34.78	46.00	-11.22	QP
3	359.8000	42.41	-9.16	33.25	46.00	-12.75	QP
4	456.8000	46.65	-6.34	40.31	46.00	-5.69	QP
5	593.5700	41.70	-3.34	38.36	46.00	-7.64	QP
6	741.9800	43.40	-0.59	42.81	46.00	-3.19	QP
7	890.3900	36.25	1.00	37.25	46.00	-8.75	QP

Remark :

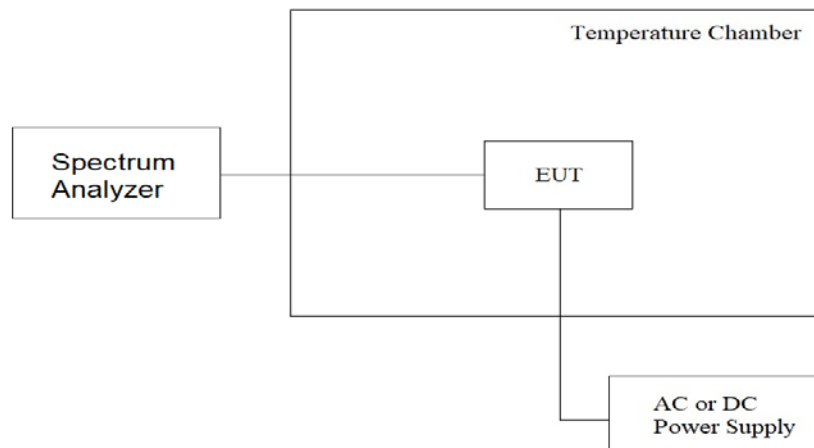
1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

2.6 Frequency Stability

2.6.1 Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

2.6.2 Test Setup



2.6.3 Test Procedure

1. The test shall be performed under 85% ~115% of the nominal voltage.
2. Set the temperature control on the chamber to the highest specified in the regulatory requirements for the type of device and allow the oscillator heater and the chamber temperature to stabilize.
3. The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

2.6.4 Test Result

Band I selected frequency: 5220MHz

Temperature (°C)	Voltage (V)	Tolerance (ppm)				Limit (ppm)	Result
		Start	2 min	5 min	10 min		
20	138	9.614	1.815	-4.324	7.239	20	Pass
	120	10.347	-17.664	13.726	12.896	20	Pass
	102	1.004	-14.421	-10.116	-18.398	20	Pass

Temperature (°C)	Voltage (V)	Tolerance (ppm)				Limit (ppm)	Result
		Start	2 min	5 min	10 min		
-30	120	6.139	-7.799	-6.158	-17.529	20	Pass
-20		7.664	13.919	18.436	11.371	20	Pass
-10		2.819	-3.649	-7.510	0.212	20	Pass
0		-10.367	-11.351	-11.776	-14.247	20	Pass
10		-8.224	0.695	-5.290	-5.946	20	Pass
20		8.842	6.332	16.873	-8.919	20	Pass
30		0.830	17.741	-15.502	-6.313	20	Pass
40		8.552	12.780	18.378	-7.683	20	Pass
50		-5.425	3.842	1.525	-13.861	20	Pass

Band III selected frequency: 5785MHz

Temperature (°C)	Voltage (V)	Tolerance (ppm)				Limit (ppm)	Result
		Start	2 min	5 min	10 min		
20	138	-1.793	-9.730	2.872	1.097	20	Pass
	120	-3.116	-4.056	-14.465	1.497	20	Pass
	102	10.879	-7.868	-1.062	-0.191	20	Pass

Temperature (°C)	Voltage (V)	Tolerance (ppm)				Limit (ppm)	Result
		Start	2 min	5 min	10 min		
-30	120	-9.539	-15.265	14.117	12.480	20	Pass
-20		15.474	-0.313	-5.674	1.706	20	Pass
-10		0.331	1.184	11.802	15.718	20	Pass
0		-5.222	-0.870	-6.023	-12.115	20	Pass
10		-5.814	3.986	0.296	-8.877	20	Pass
20		-14.813	14.447	14.987	2.019	20	Pass
30		-11.993	14.569	-13.734	7.363	20	Pass
40		-3.621	4.386	1.340	-10.461	20	Pass
50		-6.301	-1.654	-9.086	5.396	20	Pass

2.7 Antenna Requirement

2.7.1 Applicable Standard

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.

An intentional radiator shall be designed to ensure that no antenna other than as furnished by the responsible party shall be used with the device. If transmitting antennas of directional gain greater than 6dBi are using the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi, for compliance to FCC 47CFR 15.407 (a) requirements.

2.7.2 Antenna Connected Construction

Non-standard antenna connector is used.

2.7.3 Antenna Gain

No.	Manufacturer	Model No.	Antenna Type	Peak Gain
1	Passive System Alliance	PFPCA500815IMLB3G4	PCB Antenna	4 dBi for 5.15 ~ 5.25 GHz 4 dBi for 5.725 ~ 5.85 GHz

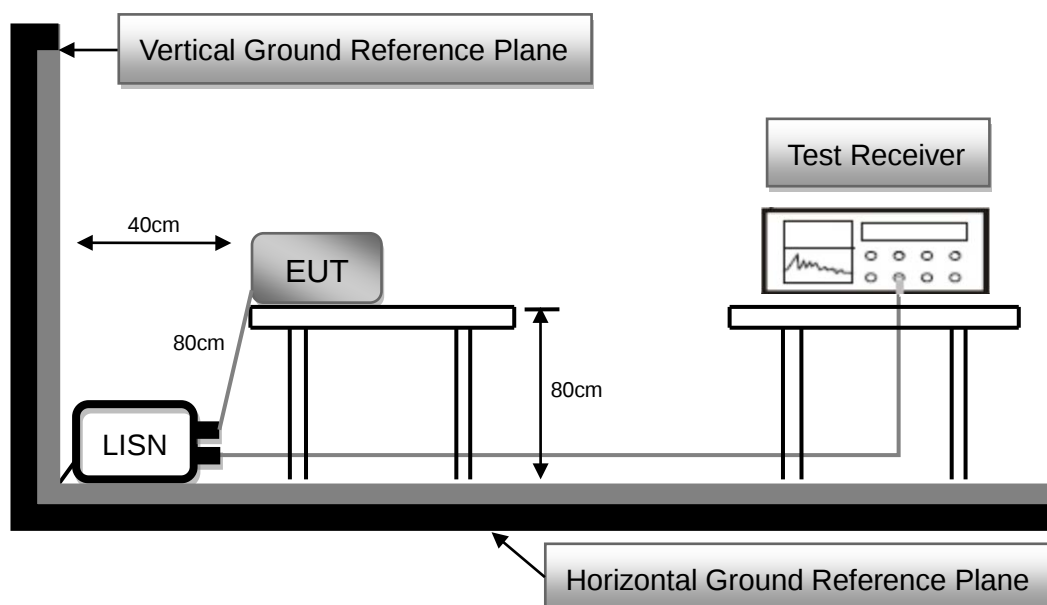
2.8 AC Conducted Emissions Measurement

2.8.1 Limit

Frequency (MHz)	FCC Part 15 Subpart C Paragraph 15.207 (dBμV) Limit	
	Quasi-peak	Average
0.15 to 0.5	66 to 56*	56 to 46*
0.50 to 5.0	56	46
5.0 to 30.0	60	50

*Decreases with the logarithm of the frequency

2.8.2 Test Setup

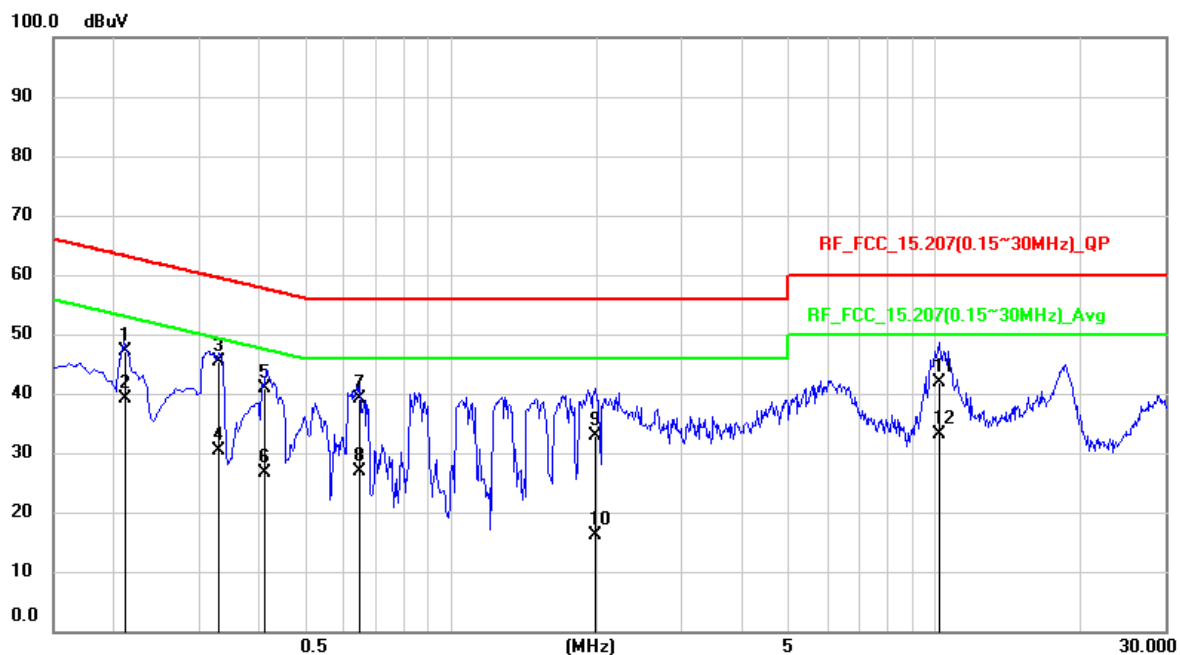


2.8.3 Test Procedure

1. The EUT was placed 0.8 meter height wooden table from the horizontal ground plane with EUT being connected to power source through a line impedance stabilization network (LISN). The LISN at least be 80 cm from nearest chassis of EUT.
2. The line impedance stabilization network (LISN) provides 50 ohm/50uH of coupling impedance for the measuring instrument. All other support equipments powered from additional LISN(s).
3. Interrelating cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle. All I/O cables were positioned to simulate typical usage.
4. All I/O cables that are not connected to a peripheral shall be bundle in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
5. The EMI test receiver connected to LISN powering the EUT. The actual test configuration, please refer to EUT test photos.
6. The receiver scanned from 150kHz to 30MHz for emissions in each of test modes. A scan was taken on both power lines, Line and Neutral, recording at least six highest emissions.
7. The EUT and cable configuration of the above highest emission levels were recorded. The Test Data of the worst case was recorded.

2.8.4 Test Result

Test Voltage :	120Vac, 60Hz	Frequency Range:	0.15-30 MHz
Test Mode :	Normal Link	6dB Bandwidth :	9 kHz
Test Date :	2021/12/29	Phase :	L
Temperature :	26°C	Humidity :	38 %

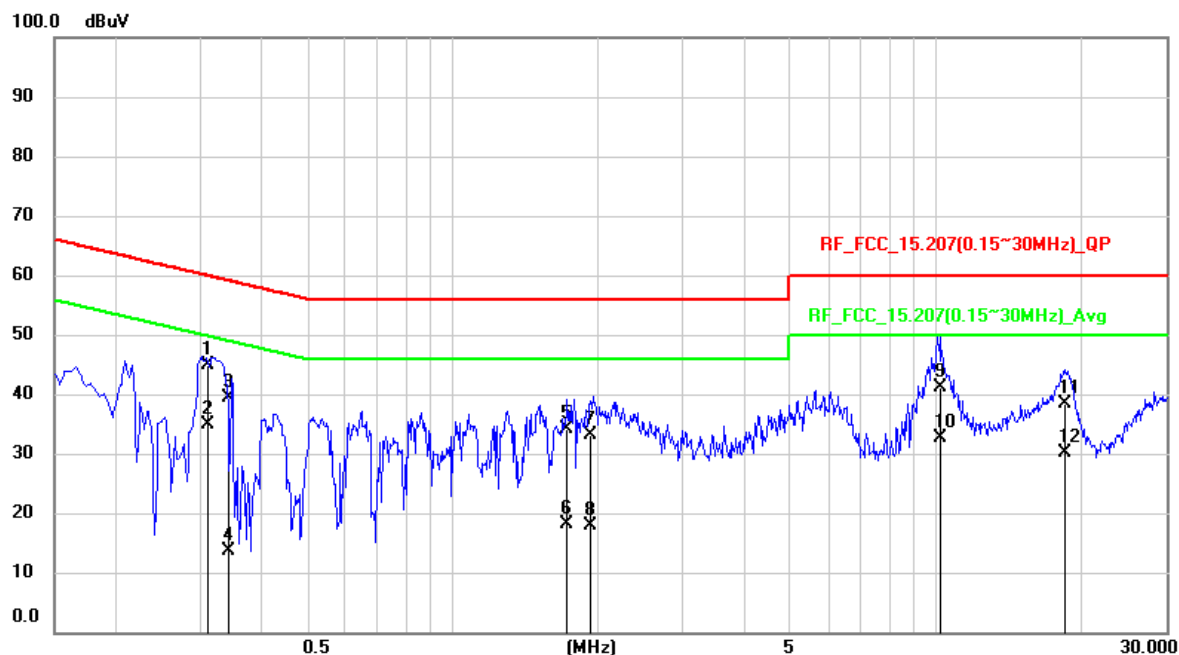


No.	Frequency (MHz)	Reading Level (dBuV)	Correct Factor (dB)	Measurement (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.2111	37.23	9.81	47.04	63.16	-16.12	QP
2	0.2111	29.38	9.81	39.19	53.16	-13.97	AVG
3	0.3299	35.61	9.81	45.42	59.45	-14.03	QP
4	0.3299	20.59	9.81	30.4	49.45	-19.05	AVG
5	0.4104	31.02	9.81	40.83	57.64	-16.81	QP
6	0.4104	16.81	9.81	26.62	47.64	-21.02	AVG
7	0.6447	29.37	9.82	39.19	56	-16.81	QP
8	0.6447	17.07	9.82	26.89	46	-19.11	AVG
9	1.9908	23.1	9.89	32.99	56	-23.01	QP
10	1.9908	6.28	9.89	16.17	46	-29.83	AVG
11	10.2377	31.87	10.04	41.91	60	-18.09	QP
12	10.2377	23.15	10.04	33.19	50	-16.81	AVG

Remark:

1. QP = Quasi Peak, AVG = Average
2. Correction Factor = Insertion loss of LISN + Cable loss
3. Measurement Value = Reading Level + Correct Factor
4. Margin Level = Measurement Value – Limit Value

Test Voltage :	120Vac, 60Hz	Frequency Range:	0.15-30 MHz
Test Mode :	Normal Link	6dB Bandwidth :	9 kHz
Test Date :	2021/12/29	Phase :	N
Temperature :	26°C	Humidity :	38 %



No.	Frequency (MHz)	Reading Level (dBuV)	Correct Factor (dB)	Measurement (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.3134	35.11	9.82	44.93	59.88	-14.95	QP
2	0.3134	24.95	9.82	34.77	49.88	-15.11	AVG
3	0.3454	29.62	9.82	39.44	59.07	-19.63	QP
4	0.3454	3.83	9.82	13.65	49.07	-35.42	AVG
5	1.7229	24.31	9.86	34.17	56	-21.83	QP
6	1.7229	8.24	9.86	18.1	46	-27.9	AVG
7	1.9392	23.34	9.89	33.23	56	-22.77	QP
8	1.9392	8.11	9.89	18	46	-28	AVG
9	10.1896	31.01	10.04	41.05	60	-18.95	QP
10	10.1896	22.58	10.04	32.62	50	-17.38	AVG
11	18.4785	28.05	10.22	38.27	60	-21.73	QP
12	18.4785	19.87	10.22	30.09	50	-19.91	AVG

Remark:

1. QP = Quasi Peak, AVG = Average
2. Correction Factor = Insertion loss of LISN + Cable loss
3. Measurement Value = Reading Level + Correct Factor
4. Margin Level = Measurement Value – Limit Value

--- END ---