

Prüfbericht-Nr.: <i>Test report no.:</i>	CN24O2RJ 002	Auftrags-Nr.: <i>Order no.:</i>	168485882	Seite 1 von 21 Page 1 of 21
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	2024-05-22	
Auftraggeber: <i>Client:</i>	Anhui Wenxiang Information Technology Co.,Ltd. Wenxiang Technology Park, South West Fengming Avenue, Wanjiang Jiangnan Emerging Industry Concentration Zone, Chizhou, Anhui, China			
Prüfgegenstand: <i>Test item:</i>	Classroom Recording and Broadcasting Host			
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	WX-AL600, WX-AL700, WX-AL800, WX-AL900, WX-***** (* = 0-9, A-Z, a-z, '-', '/' or blank)			
Auftrags-Inhalt: <i>Order content:</i>	Test Report			
Prüfgrundlage: <i>Test specification:</i>	CFR47 FCC Part 15: Subpart C Section 15.247 RSS-247 Issue 3 August 2023 RSS-Gen Issue 5 February 2021			
Wareneingangsdatum: <i>Date of sample receipt:</i>	2024-06-27	Please refer to Photo Document		
Prüfmuster-Nr.: <i>Test sample no.:</i>	A003726002-009			
Prüfzeitraum: <i>Testing period:</i>	2024-07-26 - 2024-10-18			
Ort der Prüfung: <i>Place of testing:</i>	Refer to section 2.1			
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: <i>Test result*:</i>	Pass			
geprüft von: <i>tested by:</i>	 Hardy Suo		genehmigt von: <i>authorized by:</i>	 Lin Lin
Datum: <i>Date:</i>	2025-07-08		Ausstellungsdatum: <i>Issue date:</i>	2025-07-08
Stellung / Position:	Sachverständige(r)/Expert		Stellung / Position:	Sachverständige(r)/Expert
Sonstiges / <i>Other:</i>	FCC ID: 2BLCSWX-AL, IC: 33002-WXAL, HVIN: WX-AL This report is for 2.4GHz Generic.			
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>	Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>			
* Legende:	P(ass) = entspricht o.g. Prüfgrundlage(n)	F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
* Legend:	P(ass) = passed a.m. test specification(s)	F(ail) = failed a.m. test specification(s)	N/A = not applicable	N/T = not tested
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

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Anmerkungen
Remarks

1	Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben. Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden. <i>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</i>
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3	Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben. Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt. <i>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report.</i> <i>Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i>
4	Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019. <i>The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.</i>

Test Summary

5.1.1 ANTENNA REQUIREMENT

RESULT: Pass

5.1.2 MAXIMUM PEAK CONDUCTED OUTPUT POWER

RESULT: Pass

5.1.3 CONDUCTED POWER SPECTRAL DENSITY

RESULT: Pass

5.1.4 6dB BANDWIDTH

RESULT: Pass

5.1.5 99% BANDWIDTH

RESULT: Pass

5.1.6 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 KHz BANDWIDTH

RESULT: Pass

5.1.7 RADIATED SPURIOUS EMISSION

RESULT: Pass

5.1.8 CONDUCTED EMISSION ON AC MAINS

RESULT: Pass

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1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Test Results of 2.4GHz Generic

Appendix B: Photographs of the Test Set-up

2 Test Sites

2.1 Test Facilities

SHANGHAI ATBL TECHNOLOGY CO., LTD.

5-6/F., Unit 1, No 8, Free Trade One Life Science and Sci-Tech Industrial Park, No. 160, Basheng Road, Pudong New District, Shanghai City, People's Republic of China

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Radio Spectrum Testing					
Equipment	Manufacturer	Model	Serial No.	Cal. Date	Cal. until
Spectrum Analyzer	Agilent	N9020A	MY51110027	2024.08.19	2025.08.18
Signal Generator	Agilent	N5182B	MY57301570	2024.08.19	2025.08.18
Signal Generator	Agilent	N5173B	MY61250105	2024.08.19	2025.08.18
WIDEBAND RADIO COMMUNICATION TESTER	RS	CMW500	109925	2024.08.19	2025.08.18
Power sensor	CESHEN	SMU-1003	DGATBL-W07	2024.08.19	2025.08.18
Temperature/ Humidity Meter	Ji Yu	MC501	/	/	/
Spreader	WCS	Cesheng	2021.11.04.01	2024.08.19	2025.08.18
DC POWER SUPPLY	LONGWEI	TPR3003-2D	170300313	2024.08.19	2025.08.18
DIGITAL multimeter	VICTOR	VC890D	092632592	2024.08.19	2025.08.18
Unwanted Emission Testing					
Equipment	Manufacturer	Model	Serial No.	Cal. Date	Cal. until
Spectrum Analyzer	Keysight	N9020A	MY51285460	2024-08-09	2025-08-08
Spectrum analyzer	R&S	FSV40-N	102126	2024-08-17	2025-08-16
BiLog Antenna	SCHAFFNER	CBL6112B	2740	2024-08-17	2025-08-16
Horn Antenna	Schwarzbeck	BBHA 9120D	2800	2024-08-12	2025-08-11
Amplifier (25MHz-1GHz)	Ce Shen	DLNA-20-1000	/	2024-09-02	2025-09-01
Amplifier (1-18GHz)	Ce Shen	DLNA-1000-18000	CSKJLNA230813B	2024-09-02	2025-09-01
Horn Antenna (18-40GHz)	SCHWA RZBECK	AH-1804	E064	202-08-25	2025-08-24
Receiver	R&S	ESPI3	100440	2024-09-02	2025-09-01
Conducted Emission on AC Mains					
Equipment	Manufacturer	Model	Serial No	Equipment Number	Cal. until
EMI Test Receiver	R&S	ESPI3	101163	DGATBL-E022	2025.01.03
LISN	R&S	ENV216	102282	DGATBL-E024	2025.08.18
LISN	/	NNB-111	13835240	DGATBL-E025	2025.08.18
CE Cable	RUIWEI	RW2350-3.8A-2M+10dB	N/A	DGATBL-E047	2025.08.15

ISN	SCHWA RZBECK	CAT 3	140	DGATBL-E056	2025.03.27
ISN	SCHWA RZBECK	CAT 6	247	DGATBL-E057	2025.03.27
Temperature & Humidity	Parkoo	JR-609	N/A	DGATBL-E028	2025.08.18
Testing Software	FALA	EZ-EMC		DGATBL-E052	N/A

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table.

Table 2: Measurement Uncertainty

Parameter	Uncertainty (k=2)
RF output power, conducted	± 0.99 dB
Occupied Channel Bandwidth	± 2.08 %
RF power density, conducted	± 0.99 dB
Unwanted Emissions, conducted	± 0.89 dB
All emissions, radiated	±4.17 dB
Conducted Emission, (9kHz to 150kHz)/(150kHz to 30MHz)	± 3.70 dB / ± 3.30 dB

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A & B of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) Co., Ltd. file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The SHANGHAI ATBL TECHNOLOGY CO., LTD. Test facility located at 5-6/F., Unit 1, No 8, Free Trade One Life Science and Sci-Tech Industrial Park, No. 160, Basheng Road, Pudong New District, Shanghai City, People's Republic of China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3 General Product Information

3.1 Product Function and Intended Use

The EUT is a Classroom Recording and Broadcasting Host which supports 2.4GHz Generic (for connecting with wireless MIC) wireless technology.

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 3: Technical Specification of EUT

General Information of EUT	Value
Kind of Equipment:	Classroom Recording and Broadcasting Host
Type Designation:	WX-AL600, WX-AL700, WX-AL800, WX-AL900, WX-***** (* = 0-9, A-Z, a-z, '-', '/' or blank) Remark: WX-AL700, WX-AL800, WX-AL900, WX-***** (* = 0-9, A-Z, a-z, '-', '/' or blank) are the same with the model: WX-AL600 in circuitry and electrical, mechanical and physical construction.
Operating Voltage:	AC 100-240V, 50Hz/60Hz
Testing Voltage:	AC 120V, 60Hz
Operating Temperature Range:	0 °C ~ +40 °C
Technical Specification of 2.4GHz Generic (for connecting with wireless MIC)	
Operating Frequency:	2402 MHz to 2480 MHz
Type of Modulation:	GFSK
Channel Number:	40 channels
Channel Separation:	2MHz
Data Rate:	1Mbps
Antenna Type:	External Antenna
Antenna Number:	1
Antenna Gain:	1.29 dBi (Provided by the Client)
The type of wideband data transmission equipment:	DTS

Table 4: RF Channel and Frequency of 2.4GHz SDR

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
0	2402	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472

6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	19	2440	29	2460	39	2480

3.3 Independent Operation Modes

The basic operation modes are:

A. On, 2.4GHz transmitting mode

- 1) Low Channel
- 2) Middle Channel
- 3) High Channel

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- Application Form
- ID Label and Location Info
- User Manual
- Operation Description

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All tests were performed according to the procedures in ANSI C63.10:2020.

According to clause 3.1, all tests were performed on model WX-AL600 in this report.

4.3 Special Accessories and Auxiliary Equipment

Table 5: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	Remark
Laptops	Redmi	JYU4371CN	/
Directional Mic	Wenxiang	WX-AMIC500	0924071615180317

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

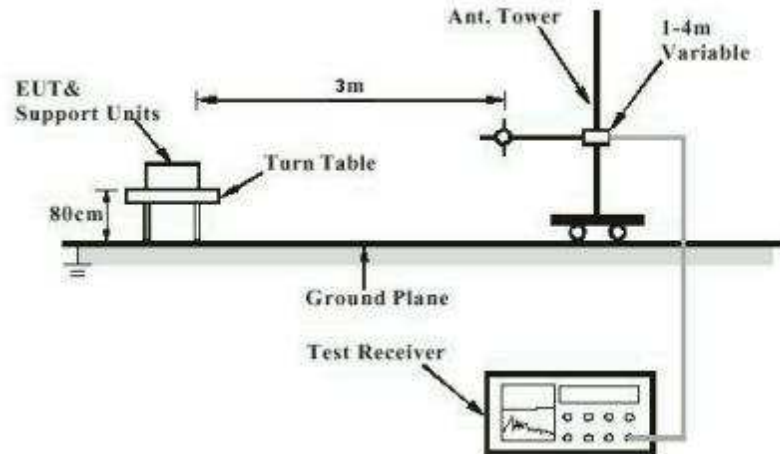


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

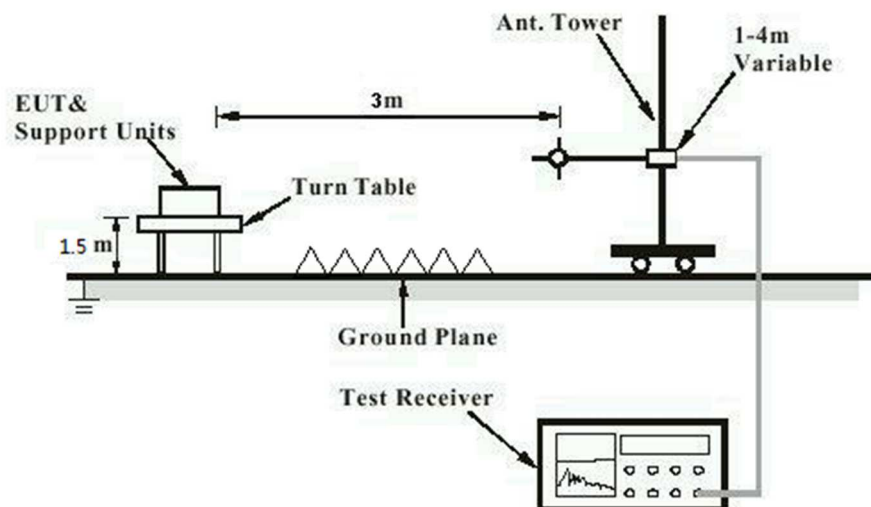


Diagram of Measurement Configuration for Mains Conduction Measurement

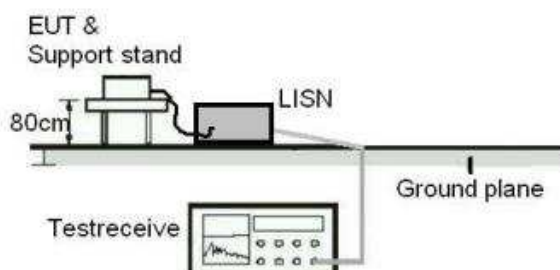
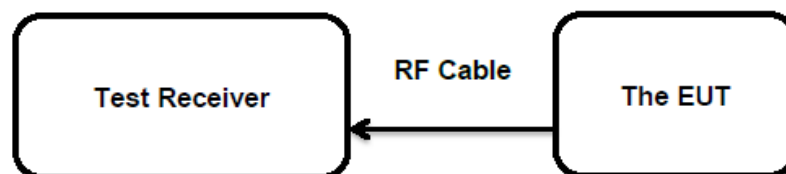


Diagram of Measurement Configuration for Conducted Transmitter Measurement



5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:**Pass****Test Specification**

Test standard : FCC Part 15.247(b)(4) and Part 15.203
RSS-Gen Clause 6.8

According to the manufacturer declared, the EUT has an external antenna, the directional gain of antenna is 1.29 dBi, and the antenna connector is designed unique, prefer to EUT photos for details. Therefore the EUT is considered sufficient to comply with the provision.

Therefore the EUT is considered sufficient to comply with the provision.

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5.1.2 Maximum Peak Conducted Output Power

RESULT:
Pass
Test Specification

Test standard : FCC Part 15.247(b)(1)&(3)
RSS-247 Clause 5.4(b)&(d)

Basic standard : ANSI C63.10:2020

Limits : FHSS < 0.125 Watts, DSSS < 1.0 Watts

Kind of test site : Shielded Room

Test Setup

Date of testing : 2024-07-26 - 2024-10-18

Input voltage : AC 120V, 60Hz

Operation mode : A

Test channel : Low / Middle / High

Ambient temperature : 24.3 °C

Relative humidity : 53 %

Atmospheric pressure : 101 kPa

For details refer to following test result.

Table 6: Test Result of Maximum Peak Conducted Output Power

Test Mode	Test Channel (MHz)	Measured Peak Power		Limit (W)
		(dBm)	(W)	
2.4GHz Generic	2402	8.42	0.0070	< 1.0
	2440	8.09	0.0064	
	2480	7.87	0.0061	
Maximum Measured Value		8.42	0.0070	
Max. e.i.r.p.=8.42dBm+1.29dBi=9.71dBm, which is less than 36dBm=4W.				

Note:

- 1) The cable loss is taken into account in results.
- 2) Antenna gain(G): 1.29 dBi max.

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5.1.3 Conducted Power Spectral Density

RESULT:**Pass****Test Specification**

Test standard	: FCC Part 15.247(e) RSS-247 Clause 5.2(b)
Basic standard	: ANSI C63.10:2020
Limits	: < 8 dBm / 3kHz
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2024-07-26 - 2024-10-18
Input voltage	: AC 120V, 60Hz
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 24.3 °C
Relative humidity	: 53 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A.

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5.1.4 6dB Bandwidth

RESULT:**Pass****Test Specification**

Test standard	: FCC Part 15.247(a)(2) RSS-247 Clause 5.2(a)
Basic standard	: ANSI C63.10:2020
Limits	: > 500 KHz
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2024-07-26 - 2024-10-18
Input voltage	: AC 120V, 60Hz
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 24.3 °C
Relative humidity	: 53 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A.

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5.1.5 99% Bandwidth

RESULT:**Pass****Test Specification**

Test standard	: FCC Part 15.247(a) RSS-Gen Clause 6.7
Basic standard	: ANSI C63.10:2020
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2024-07-26 - 2024-10-18
Input voltage	: AC 120V, 60Hz
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 24.3 °C
Relative humidity	: 53 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A.

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5.1.6 Conducted Spurious Emissions Measured in 100 kHz Bandwidth

RESULT:

Pass

Test Specification

Test standard	: FCC Part 15.247(d) RSS-247 Clause 5.5
Basic standard	: ANSI C63.10:2020
Limits	: 20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power); In addition, radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in 15.209(a)
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2024-07-26 - 2024-10-18
Input voltage	: AC 120V, 60Hz
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 24.3 °C
Relative humidity	: 53 %
Atmospheric pressure	: 101 kPa

Test results of 100kHz Bandwidth of Frequency Band Edge by Conducted method refer to test plots, and compliance is achieved as well.

For the measurement records, refer to the appendix A.

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5.1.7 Radiated Spurious Emission

RESULT:**Pass****Test Specification**

Test standard	: FCC Part 15.247(d) & FCC Part 15.205 RSS-247 Clause 3.3
Basic standard	: ANSI C63.10:2020
Limits	: Refer to 15.209(a) of FCC part 15.247(d) RSS-Gen Section 8.9 & 8.10
Kind of test site	: 3m Semi-anechoic Chamber

Test Setup

Date of testing	: 2024-07-26 - 2024-10-18
Input voltage	: AC 120V, 60Hz
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: Refer to test result
Relative humidity	: Refer to test result
Atmospheric pressure	: 101 kPa

Remark:

Testing was carried out within frequency range 9kHz to the tenth harmonics. Only the worst case spurious emissions configuration of the each mode were reported.

For the measurement records, refer to the appendix A.

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5.1.8 Conducted Emission on AC Mains

RESULT:**Pass****Test Specification**

Test standard	: FCC Part 15.207(a) RSS-Gen Section 8.8
Basic standard	: ANSI C63.10:2020
Frequency range	: 0.15 – 30MHz
Limits	: FCC Part 15.207(a) RSS-Gen Table 4
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2024-08-01
Input voltage	: AC 120V, 60Hz
Operation mode	: A
Earthing	: Not connected
Ambient temperature	: Refer to test result
Relative humidity	: Refer to test result
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A, B.

6 Photographs of the Test Set-Up

For photographs of the test set-up, refer to the appendix B.

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Appendix A: Test Results of 2.4GHz Generic

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Appendix A.1: Test Results of 99% Bandwidth

Test Result

Mode	Channel	Center Frequency (MHz)	99% BW (MHz)
2.4GHz Generic	0	2402	1.0126
2.4GHz Generic	19	2440	1.0284
2.4GHz Generic	39	2480	1.0293

Test Graphs

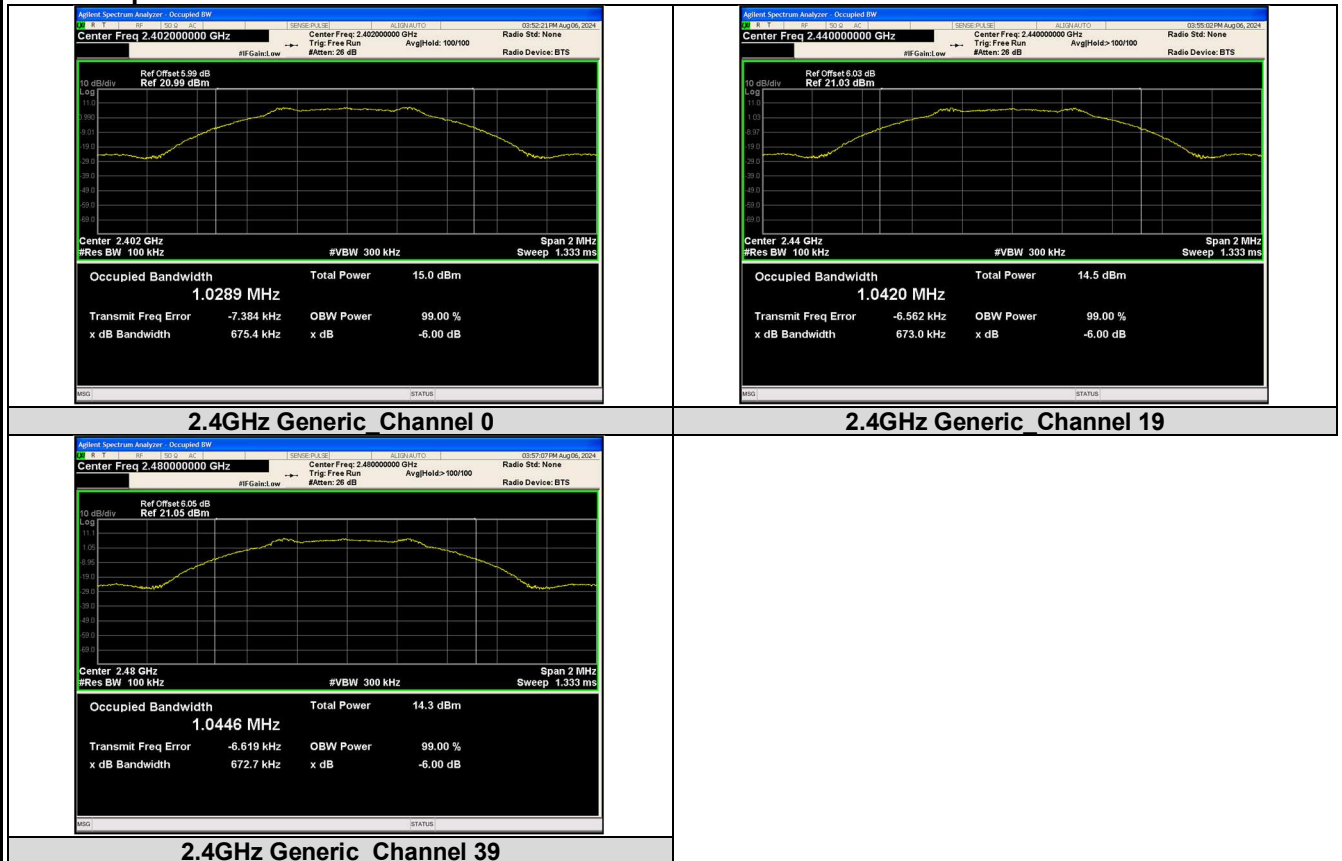


Appendix A.2: Test Results of 6dB Bandwidth

Test Result

Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
2.4GHz Generic	0	2402	0.6754	≥0.5	PASS
	19	2440	0.6730		PASS
	39	2480	0.6727		PASS

Test Graphs

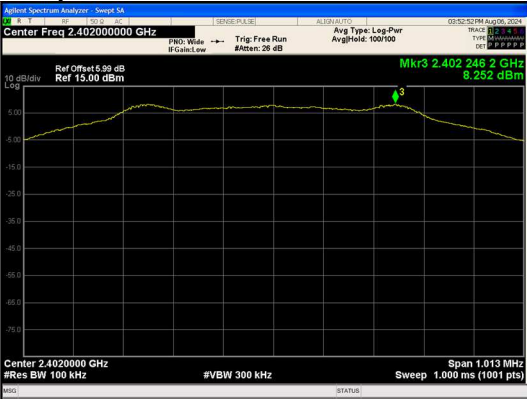
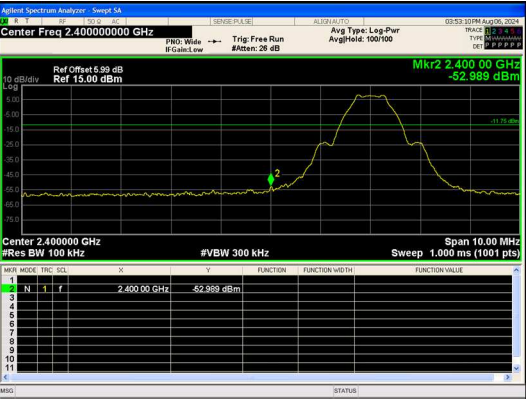
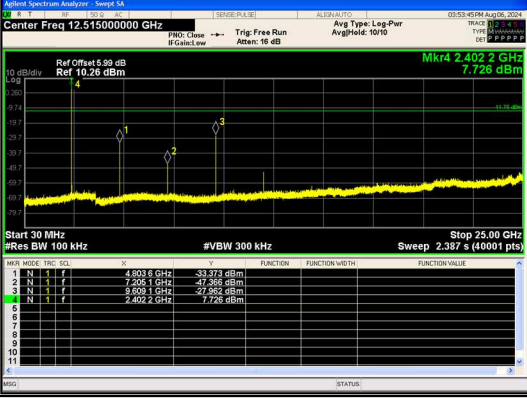


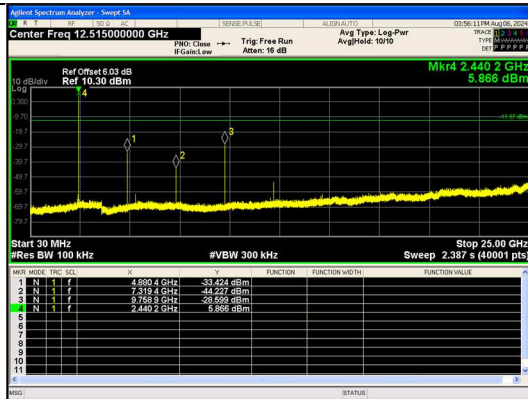
Appendix A.3: Test Results of Conducted Out of Band Emission

Test Result

Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
2.4GHz Generic	0	2400.00	-52.989	-11.75	-41.239	PASS
		4803.64	-33.373	-11.75	-21.623	PASS
		7205.13	-47.366	-11.75	-35.616	PASS
		9609.12	-27.962	-11.75	-16.212	PASS
	19	4880.42	-33.424	-11.97	-21.454	PASS
		7319.37	-44.227	-11.97	-32.257	PASS
		9758.94	-28.599	-11.97	-16.629	PASS
	39	2483.50	-56.702	-12.4	-44.302	PASS
		4960.33	-33.386	-12.4	-20.986	PASS
		7439.22	-44.607	-12.4	-32.207	PASS
		9921.24	-29.750	-12.4	-17.350	PASS

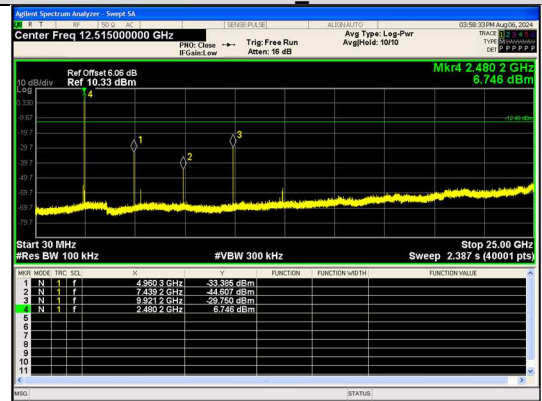
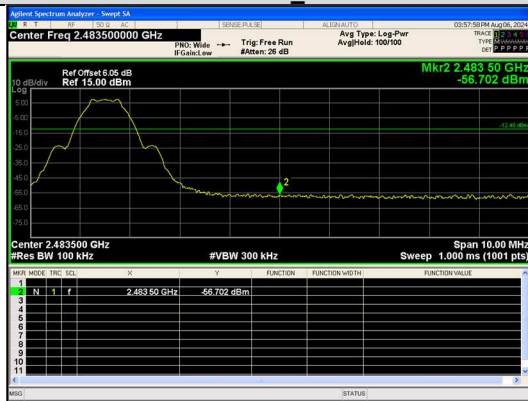
Test Graphs

	
In-Band Reference Level 2.4GHz Generic_Channel 0	Out Of Band Emission 2.4GHz Generic_Channel 0
	
30.0 MHz - 25000.0 MHz 2.4GHz Generic_Channel 0	In-Band Reference Level 2.4GHz Generic_Channel 19



30.0 MHz - 25000.0 MHz
2.4GHz Generic_Channel 19

In-Band Reference Level
2.4GHz Generic_Channel 39



Out Of Band Emission
2.4GHz Generic_Channel 39

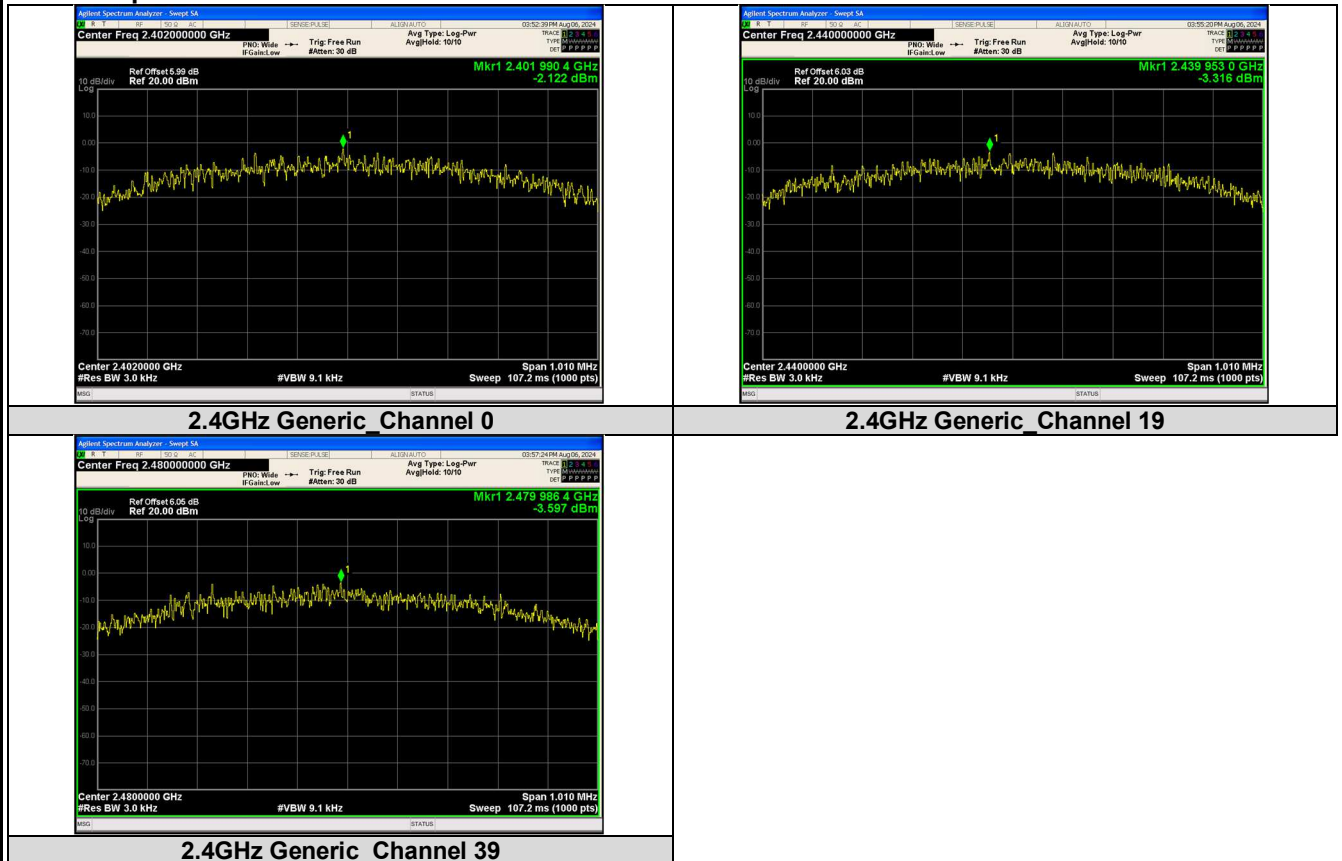
30.0 MHz - 25000.0 MHz
2.4GHz Generic_Channel 39

Appendix A.4: Test Results of Power Spectral Density

Test Result

Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2.4GHz Generic	0	-2.122	≤8	PASS
2.4GHz Generic	19	-3.316	≤8	PASS
2.4GHz Generic	39	-3.597	≤8	PASS

Test Graphs



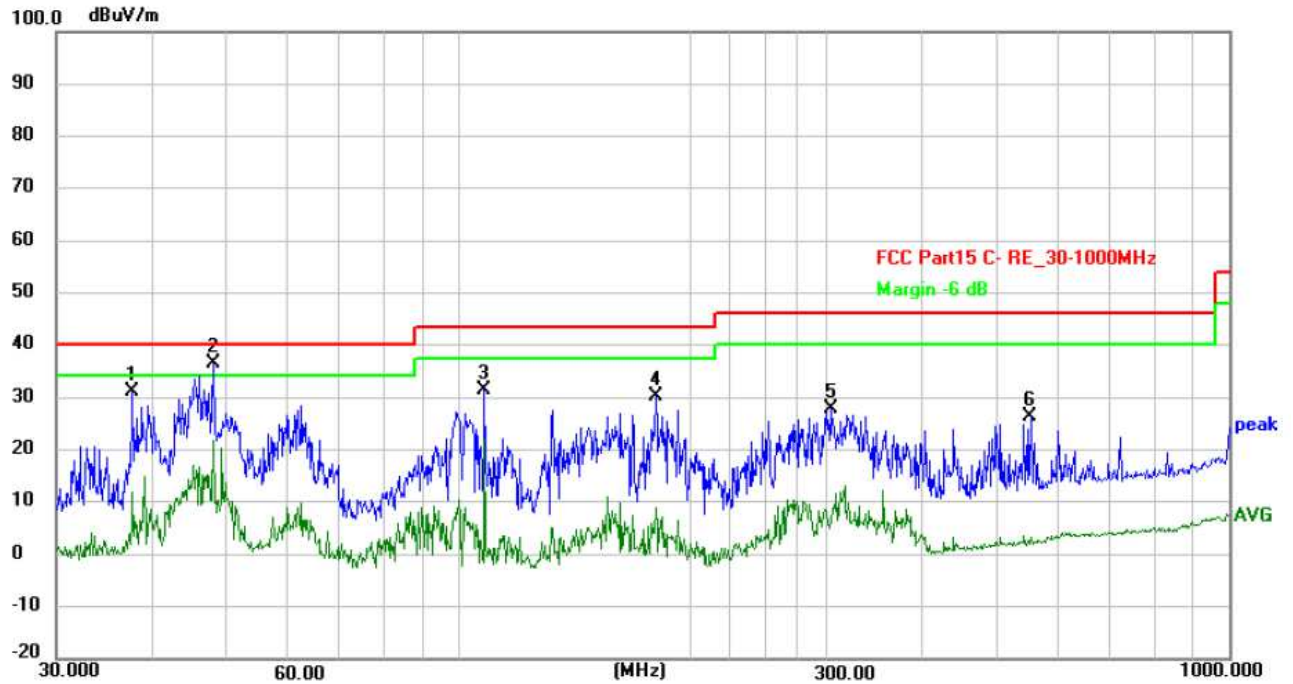
Appendix A.5: Test Results of Radiated Spurious Emissions

Note:

- 1) This testing was carried out on different modulations, but only the worst case was presented in this report.
- 2) Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

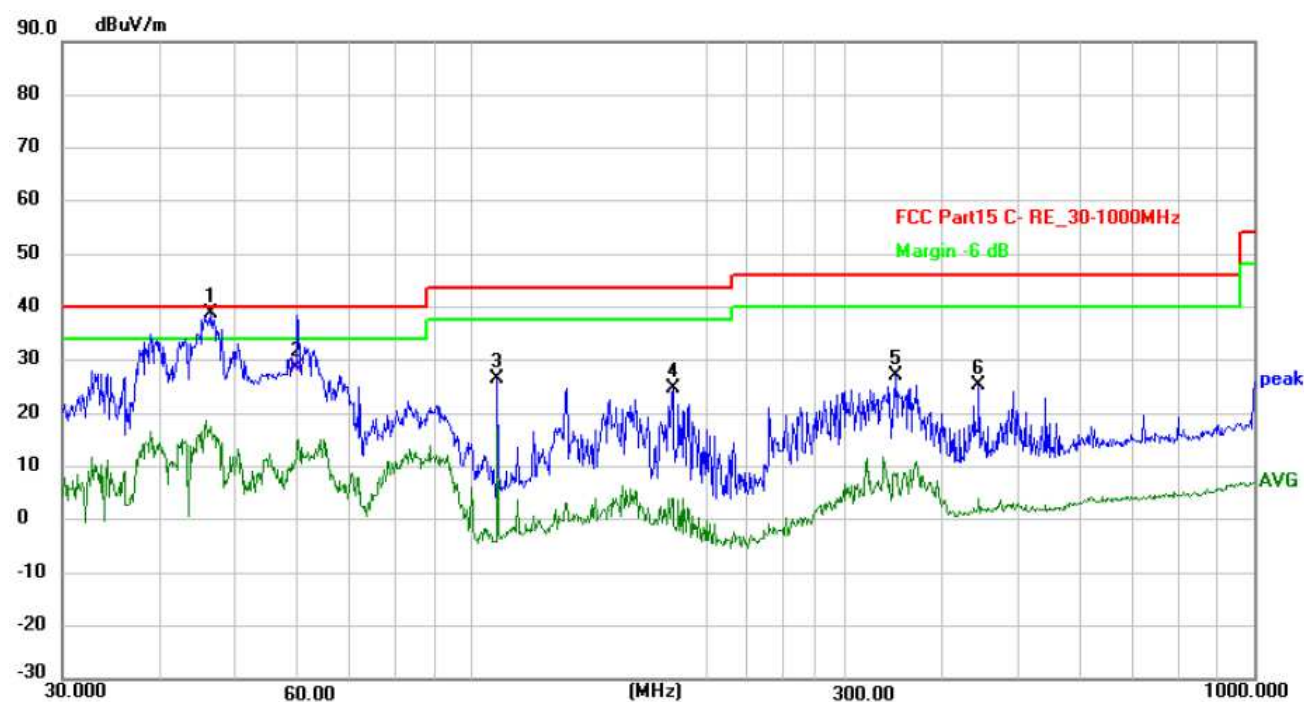
30 MHz - 1GHz

2402MHz, ANT Polarization: Horizontal



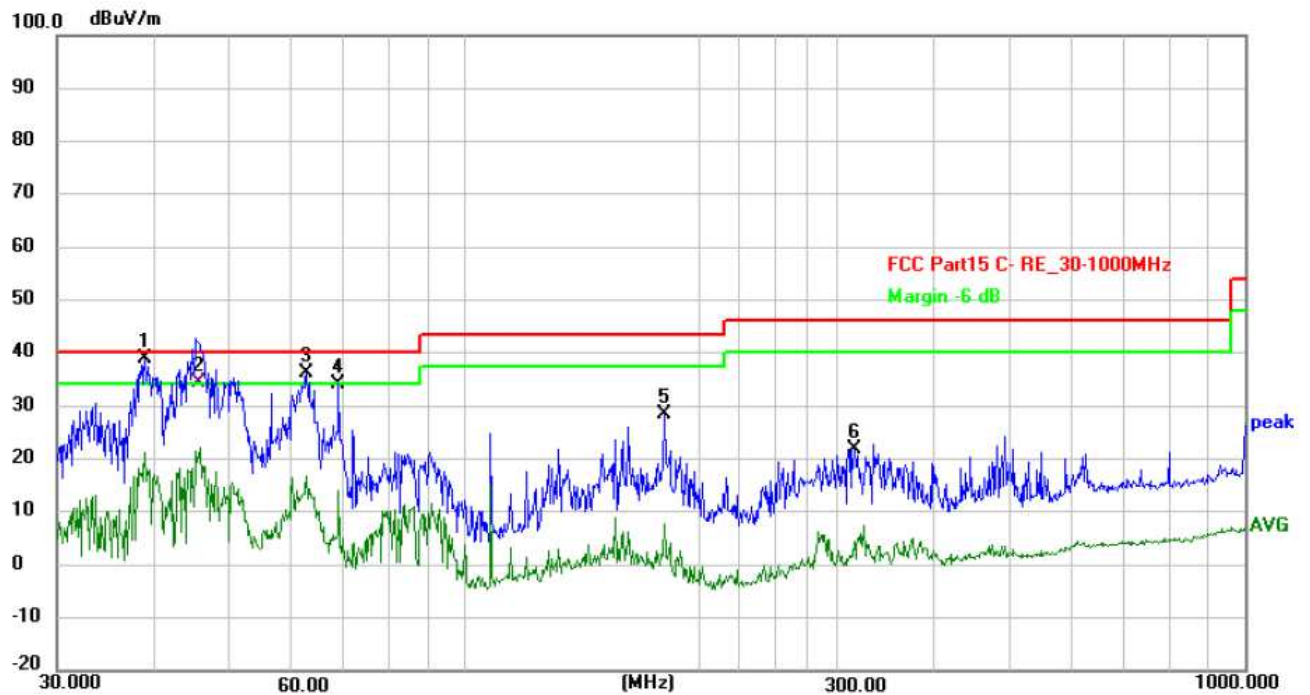
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	37.6798	60.76	-29.55	31.21	40.00	-8.79	peak	150	0	P	
2 *	47.9940	65.62	-28.94	36.68	40.00	-3.32	peak	150	0	P	
3	107.8877	64.10	-32.50	31.60	43.50	-11.90	peak	150	0	P	
4	180.0165	61.10	-30.94	30.16	43.50	-13.34	peak	150	0	P	
5	303.5437	56.33	-28.58	27.75	46.00	-18.25	peak	150	0	P	
6	552.8832	49.09	-22.61	26.48	46.00	-19.52	peak	150	0	P	

2402MHz, ANT Polarization: Vertical



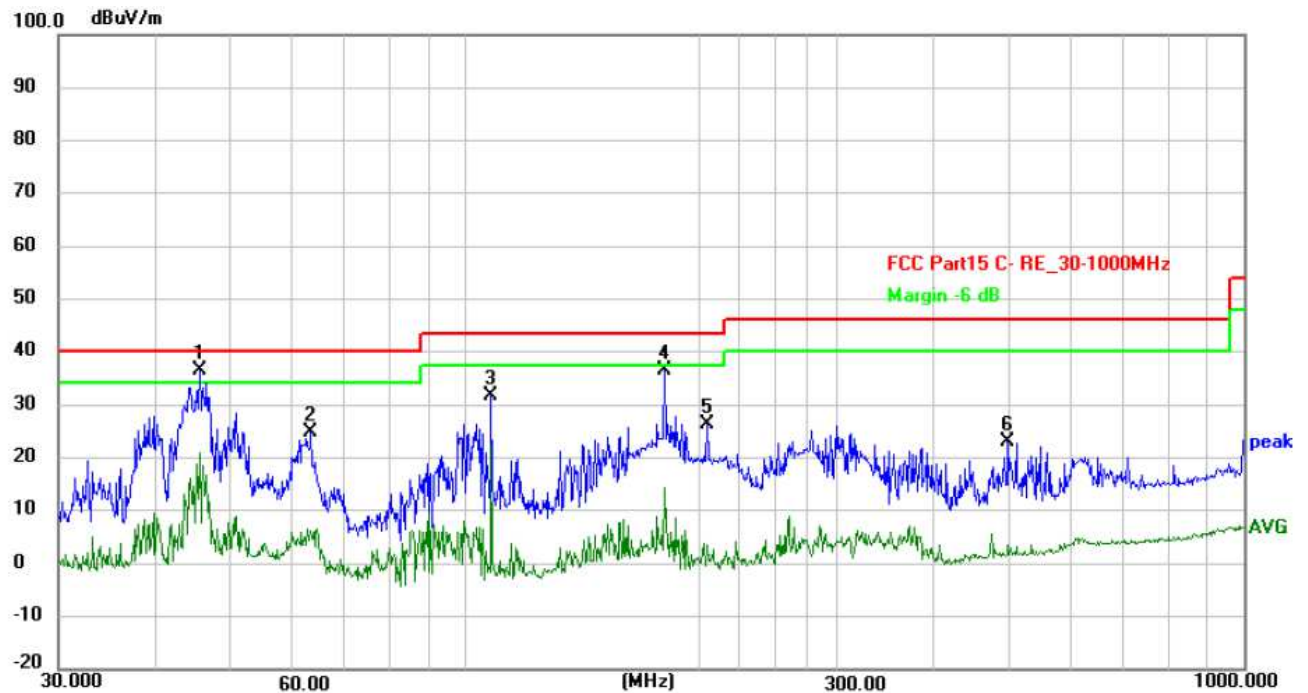
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	46.5030	67.77	-28.94	38.83	40.00	-1.17	peak	150	360	P	
2	60.0638	57.91	-29.38	28.53	40.00	-11.47	QP	150	108	P	
3	107.8877	59.13	-32.50	26.63	43.50	-16.87	peak	150	360	P	
4	180.6488	55.60	-30.99	24.61	43.50	-18.89	peak	150	360	P	
5	348.0274	54.78	-27.71	27.07	46.00	-18.93	peak	150	360	P	
6	444.8514	49.85	-24.60	25.25	46.00	-20.75	peak	150	360	P	

2440MHz, ANT Polarization: Horizontal



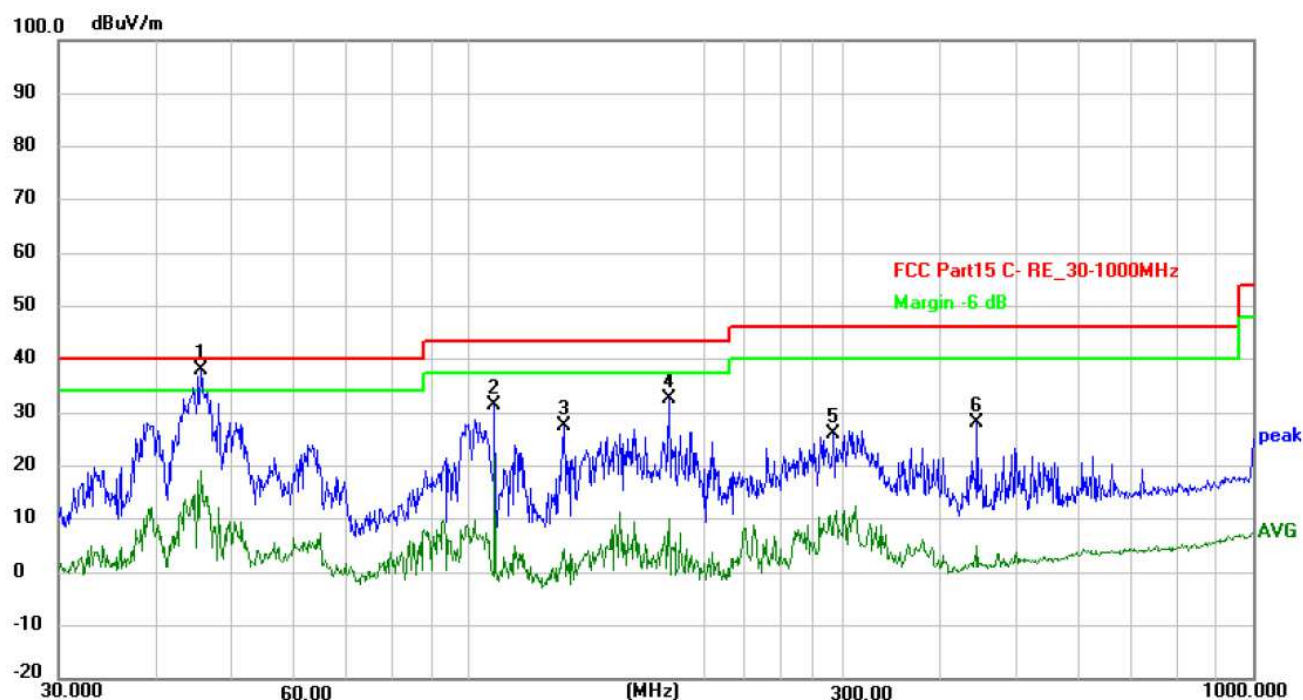
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	38.8878	68.53	-29.48	39.05	40.00	-0.95	peak	150	0	P	
2 !	45.6266	63.46	-28.96	34.50	40.00	-5.50	QP	150	82	P	
3 !	62.6507	65.96	-29.70	36.26	40.00	-3.74	peak	150	0	P	
4 !	68.8721	65.11	-30.89	34.22	40.00	-5.78	peak	150	0	P	
5	180.0165	59.46	-30.94	28.52	43.50	-14.98	peak	150	0	P	
6	315.4808	50.06	-28.13	21.93	46.00	-24.07	peak	150	0	P	

2440MHz, ANT Polarization: Vertical



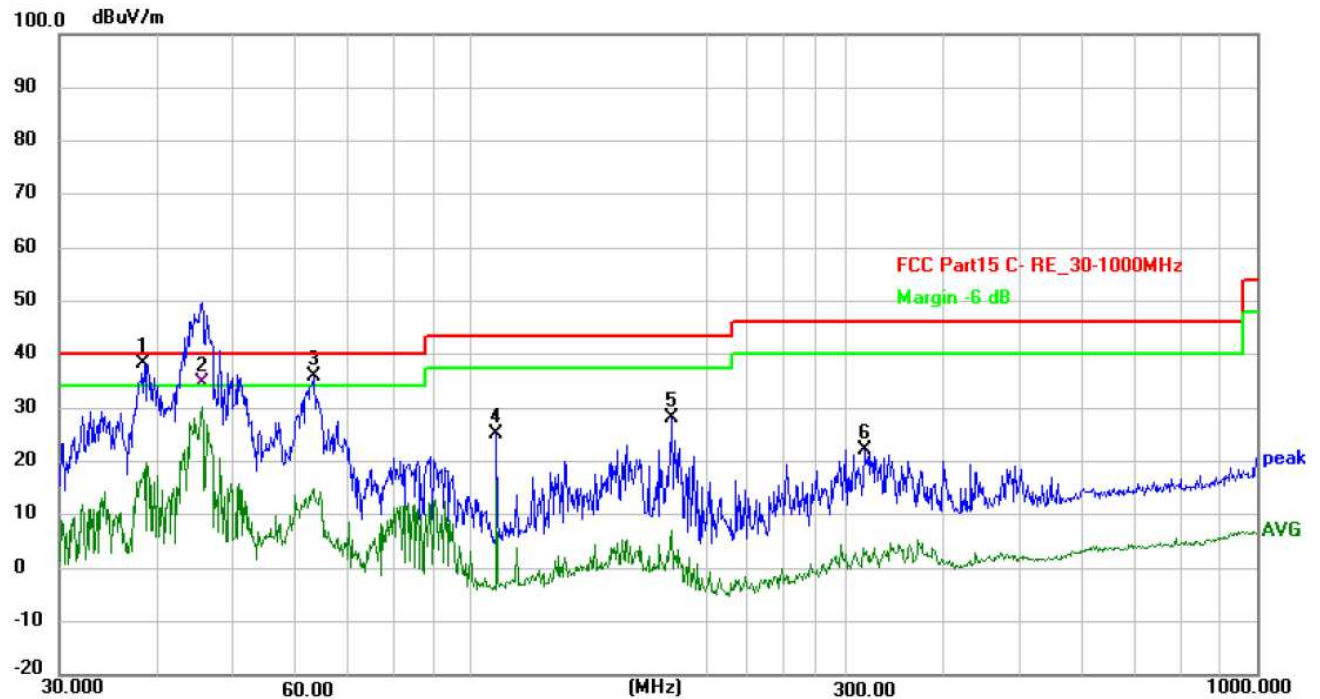
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	45.5348	65.49	-28.97	36.52	40.00	-3.48	peak	150	82	P	
2	63.3132	54.72	-29.74	24.98	40.00	-15.02	peak	150	82	P	
3	107.8877	64.25	-32.50	31.75	43.50	-11.75	peak	150	82	P	
4	180.0165	67.41	-30.94	36.47	43.50	-7.03	peak	150	82	P	
5	204.2377	59.08	-32.74	26.34	43.50	-17.16	peak	150	82	P	
6	497.6765	46.64	-23.60	23.04	46.00	-22.96	peak	150	82	P	

2480MHz, ANT Polarization: Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	45.5348	67.02	-28.97	38.05	40.00	-1.95	peak	150	360	P	
2	107.8877	63.92	-32.50	31.42	43.50	-12.08	peak	150	360	P	
3	132.2206	58.33	-30.88	27.45	43.50	-16.05	peak	150	360	P	
4	180.0165	63.45	-30.94	32.51	43.50	-10.99	peak	150	360	P	
5	292.0583	54.75	-28.77	25.98	46.00	-20.02	peak	150	360	P	
6	444.8514	52.85	-24.60	28.25	46.00	-17.75	peak	150	360	P	

2480MHz, ANT Polarization: Vertical

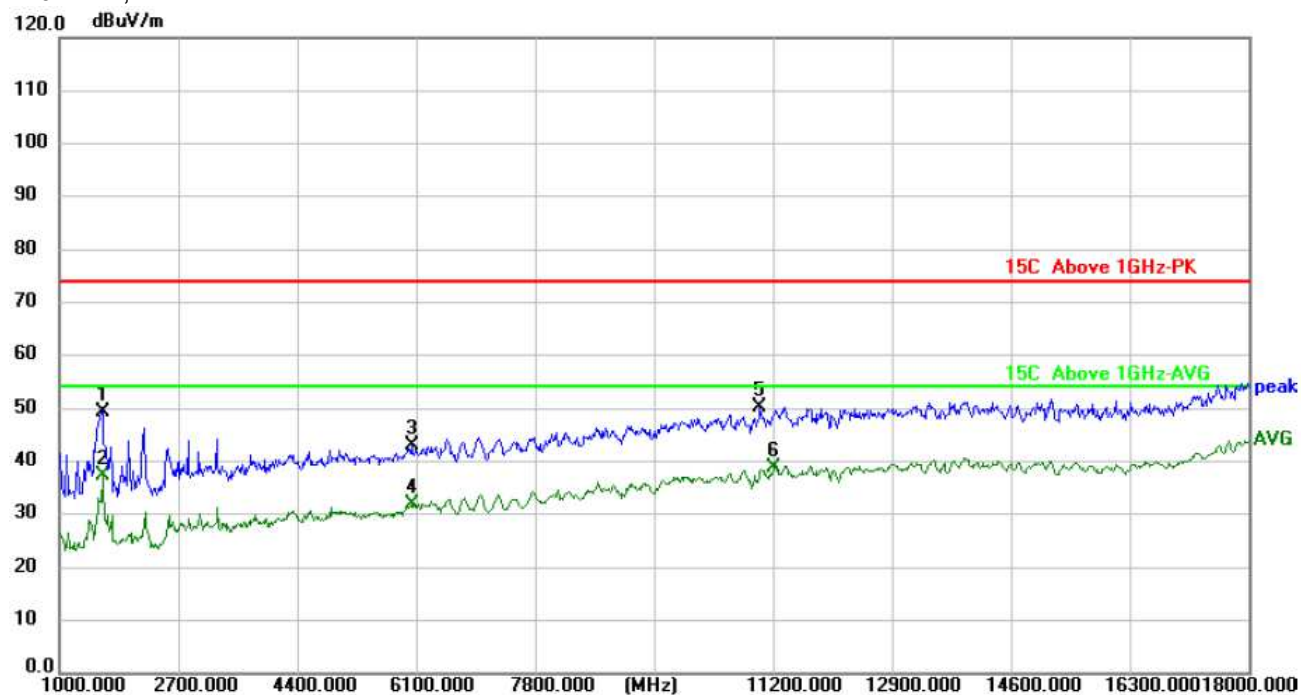


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	38.4809	67.99	-29.52	38.47	40.00	-1.53	peak	150	360	P	
2 !	45.6198	63.71	-28.96	34.75	40.00	-5.25	QP	150	0	P	
3 !	63.0916	65.78	-29.72	36.06	40.00	-3.94	peak	150	360	P	
4	107.8877	57.79	-32.50	25.29	43.50	-18.21	peak	150	360	P	
5	180.0165	59.16	-30.94	28.22	43.50	-15.28	peak	150	360	P	
6	316.5890	50.10	-28.09	22.01	46.00	-23.99	peak	150	360	P	

1GHz - 18GHz

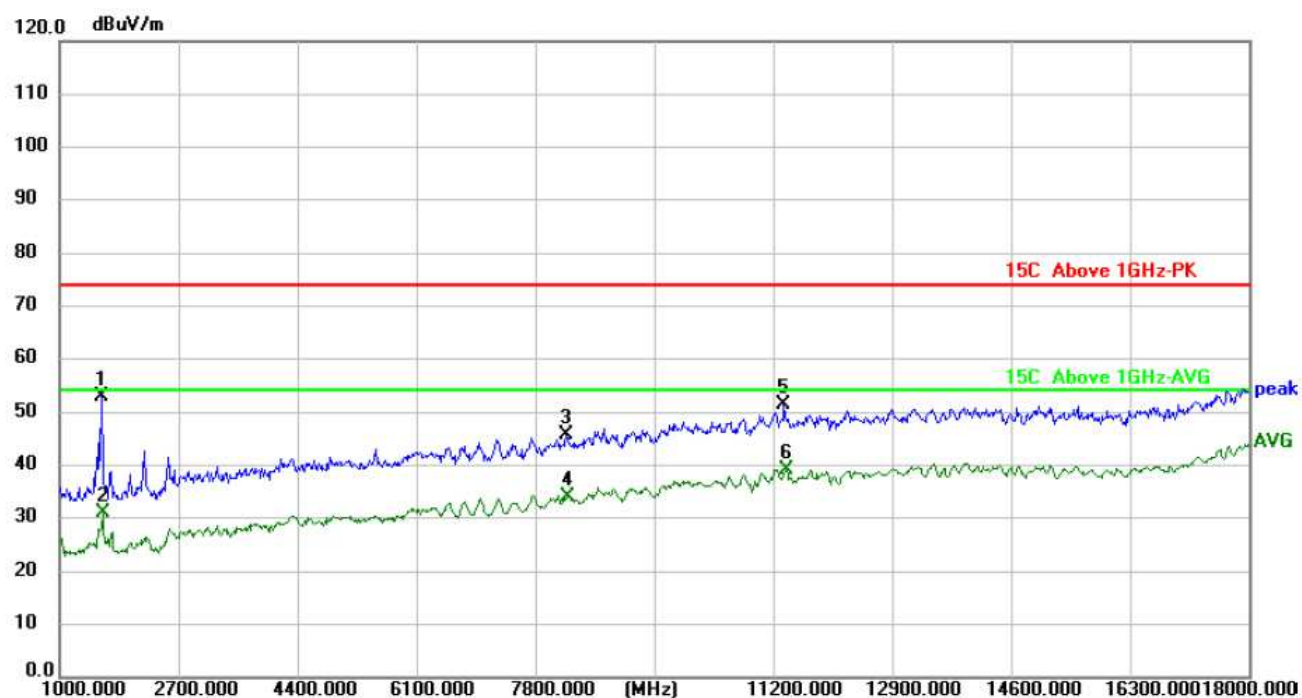
Note: The highest waveform in the figure is Fundamental.

2402MHz, ANT Polarization: Horizontal



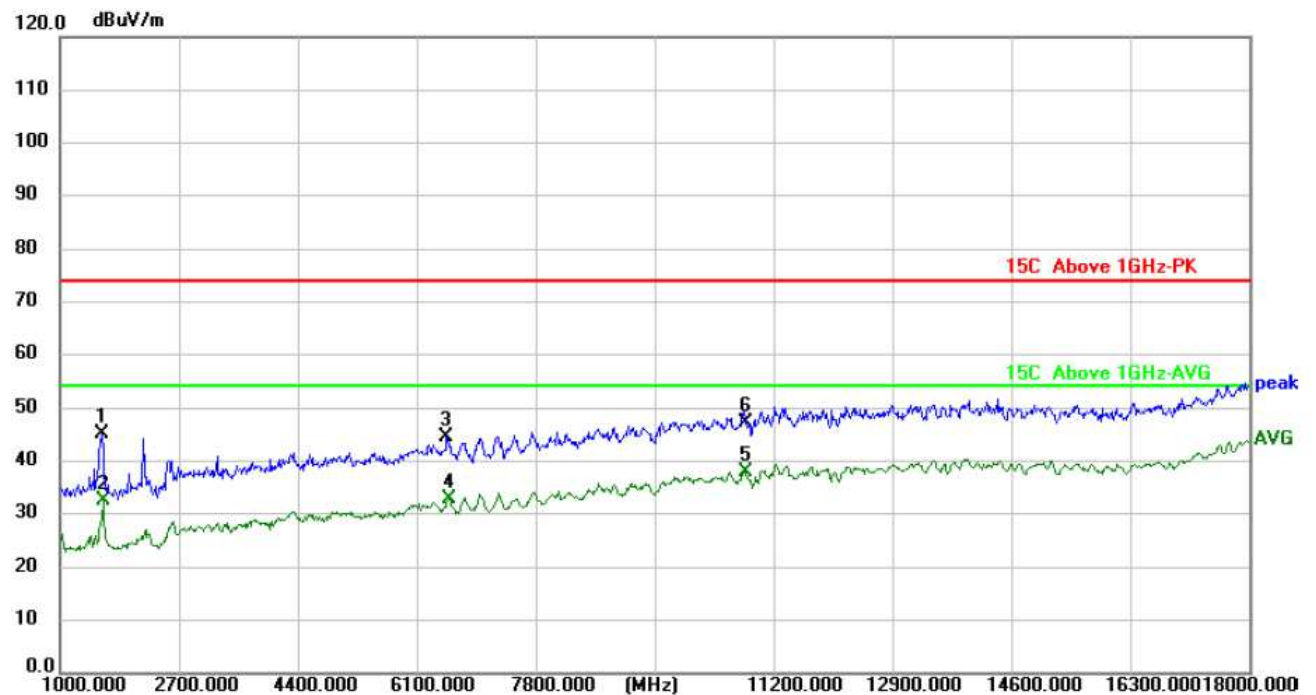
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	1612.000	68.14	-18.68	49.46	74.00	-24.54	peak	150	0	P	
2	1612.000	55.91	-18.68	37.23	54.00	-16.77	AVG	150	0	P	
3	6032.000	46.14	-3.12	43.02	74.00	-30.98	peak	150	0	P	
4	6049.000	35.07	-3.07	32.00	54.00	-22.00	AVG	150	0	P	
5	11013.000	42.40	7.92	50.32	74.00	-23.68	peak	150	0	P	
6 *	11217.000	30.64	8.20	38.84	54.00	-15.16	AVG	150	0	P	

2402MHz, ANT Polarization: Vertical



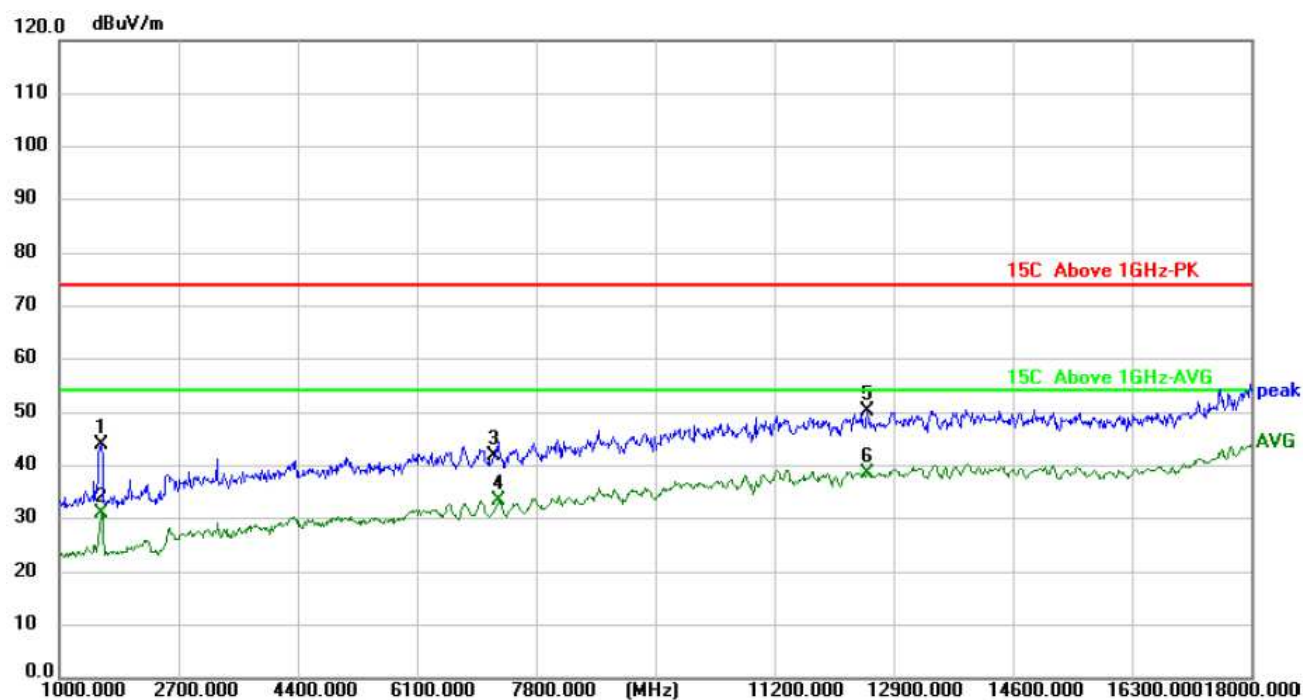
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	1595.000	71.58	-18.73	52.85	74.00	-21.15	peak	150	360	P	
2	1612.000	49.65	-18.68	30.97	54.00	-23.03	AVG	150	360	P	
3	8242.000	43.58	2.28	45.86	74.00	-28.14	peak	150	360	P	
4	8259.000	31.84	2.32	34.16	54.00	-19.84	AVG	150	360	P	
5	11353.000	42.97	8.39	51.36	74.00	-22.64	peak	150	360	P	
6 *	11387.000	30.81	8.44	39.25	54.00	-14.75	AVG	150	360	P	

2440MHz, ANT Polarization: Horizontal



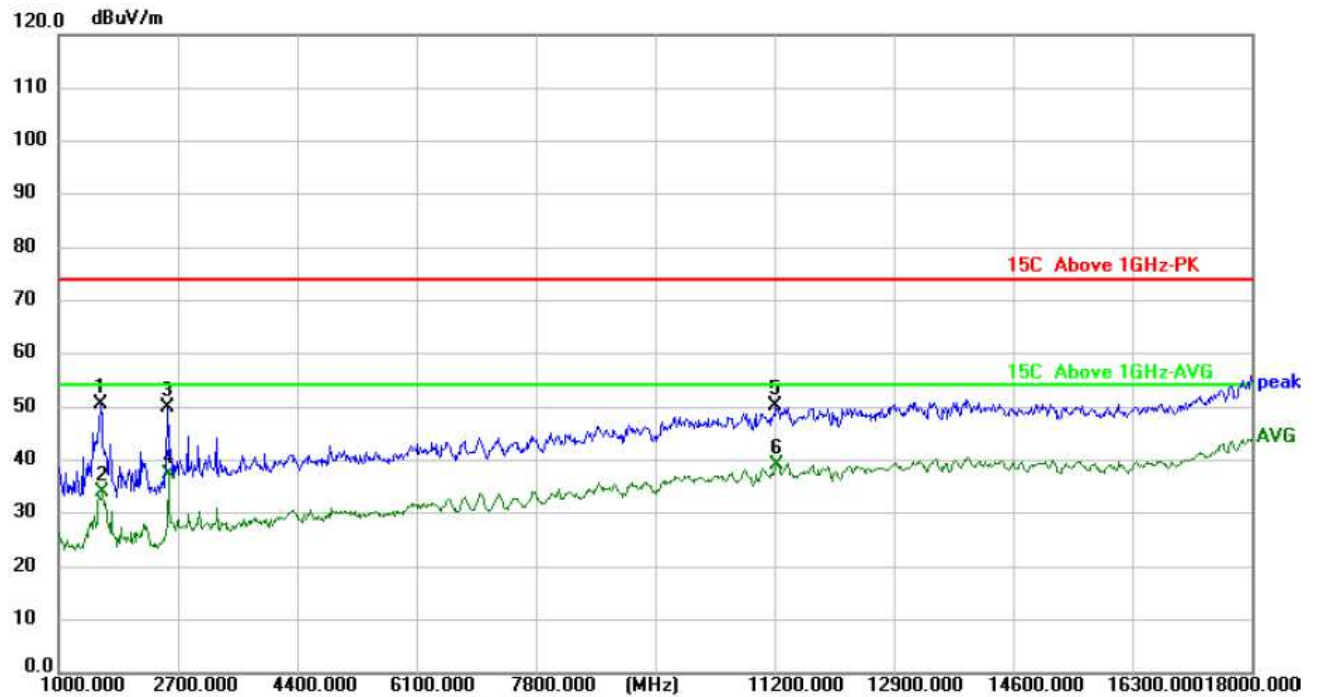
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	1595.000	64.00	-18.73	45.27	74.00	-28.73	peak	150	0	P	
2	1612.000	51.13	-18.68	32.45	54.00	-21.55	AVG	150	0	P	
3	6525.000	46.23	-1.81	44.42	74.00	-29.58	peak	150	0	P	
4	6559.000	34.52	-1.68	32.84	54.00	-21.16	AVG	150	0	P	
5 *	10792.000	30.41	7.57	37.98	54.00	-16.02	AVG	150	0	P	
6	10809.000	39.55	7.59	47.14	74.00	-26.86	peak	150	0	P	

2440MHz, ANT Polarization: Vertical



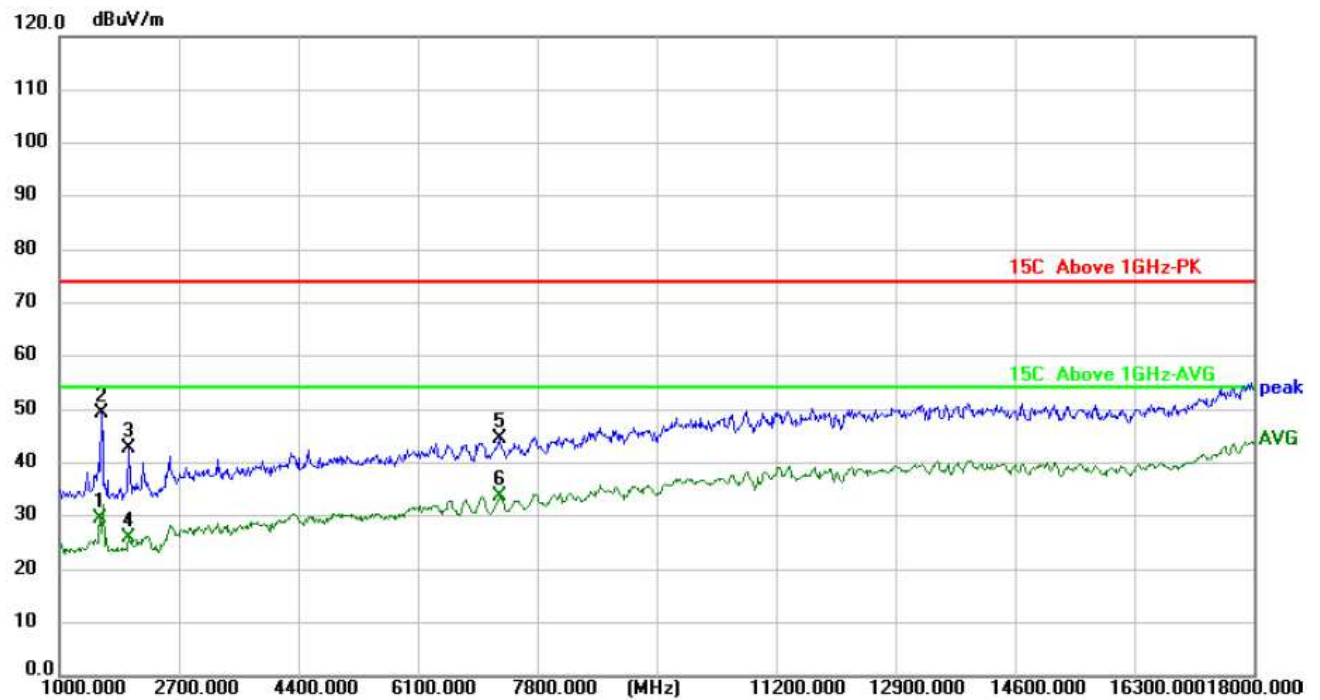
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	1595.000	62.67	-18.73	43.94	74.00	-30.06	peak	150	360	P	
2	1595.000	49.65	-18.73	30.92	54.00	-23.08	AVG	150	360	P	
3	7205.000	41.75	0.24	41.99	74.00	-32.01	peak	150	360	P	
4	7256.000	33.02	0.32	33.34	54.00	-20.66	AVG	150	360	P	
5	12526.000	41.30	9.06	50.36	74.00	-23.64	peak	150	360	P	
6 *	12526.000	29.37	9.06	38.43	54.00	-15.57	AVG	150	360	P	

2480MHz, ANT Polarization: Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	1595.000	69.33	-18.73	50.60	74.00	-23.40	peak	150	360	P	
2	1629.000	52.66	-18.64	34.02	54.00	-19.98	AVG	150	360	P	
3	2547.000	64.31	-14.37	49.94	74.00	-24.06	peak	150	360	P	
4	2564.000	51.49	-14.29	37.20	54.00	-16.80	AVG	150	360	P	
5	11217.000	42.15	8.20	50.35	74.00	-23.65	peak	150	360	P	
6 *	11234.000	30.98	8.23	39.21	54.00	-14.79	AVG	150	360	P	

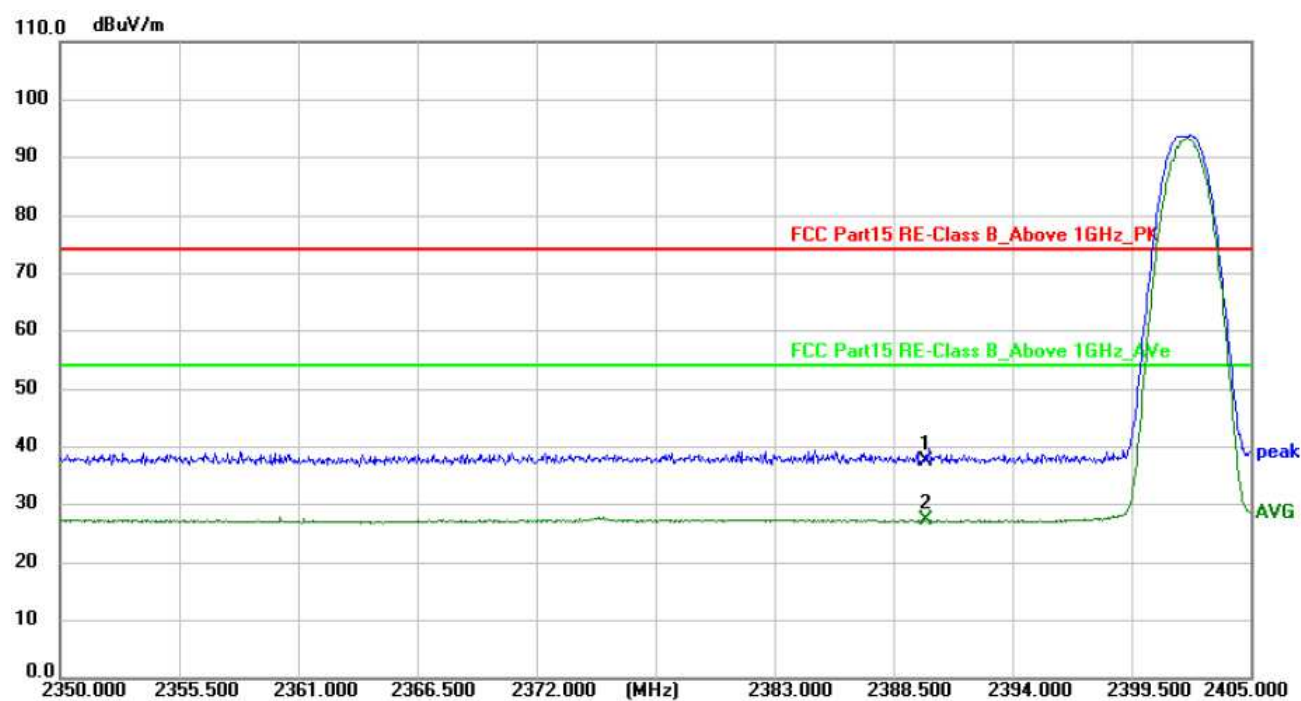
2480MHz, ANT Polarization: Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	1578.000	48.39	-18.74	29.65	54.00	-24.35	AVG	150	360	P	
2	1595.000	68.11	-18.73	49.38	74.00	-24.62	peak	150	360	P	
3	1986.000	59.82	-17.20	42.62	74.00	-31.38	peak	150	360	P	
4	1986.000	43.20	-17.20	26.00	54.00	-28.00	AVG	150	360	P	
5	7256.000	44.18	0.32	44.50	74.00	-29.50	peak	150	360	P	
6 *	7273.000	33.52	0.34	33.86	54.00	-20.14	AVG	150	360	P	

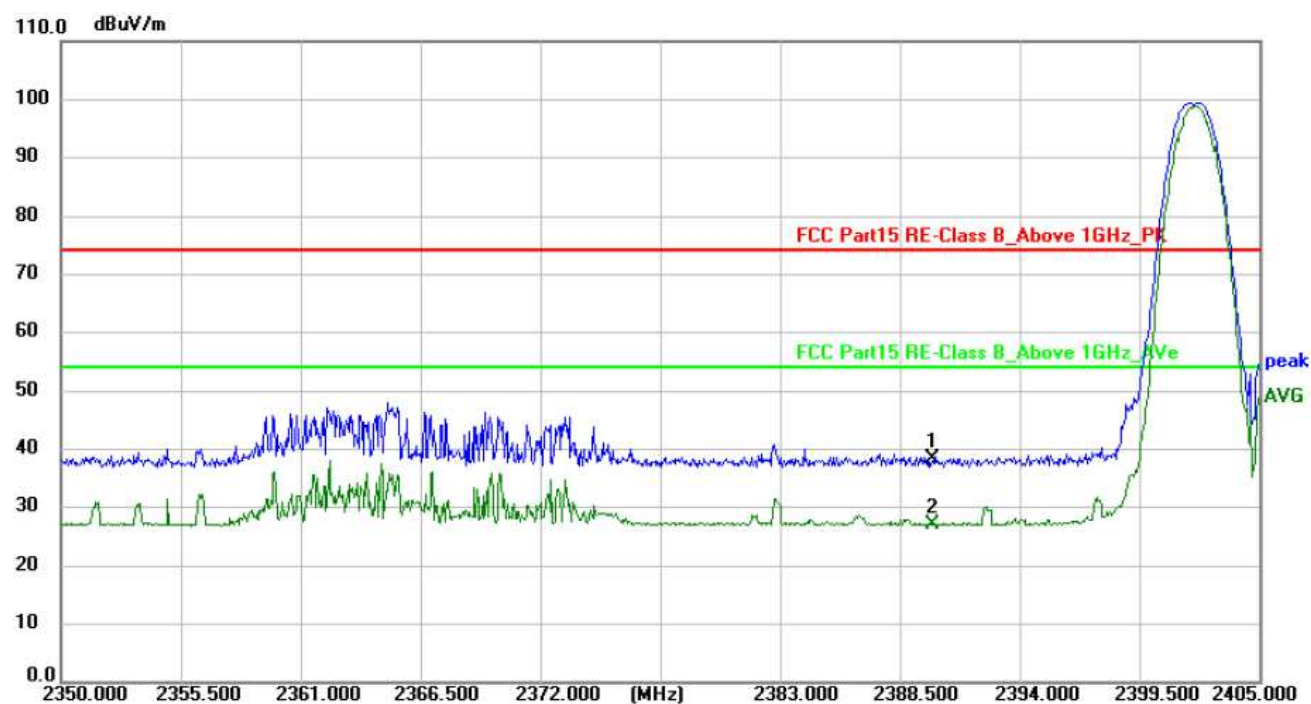
Appendix A.6: Test Results of Radiated Emissions in Restricted Bands

2402MHz, ANT Polarization: Horizontal



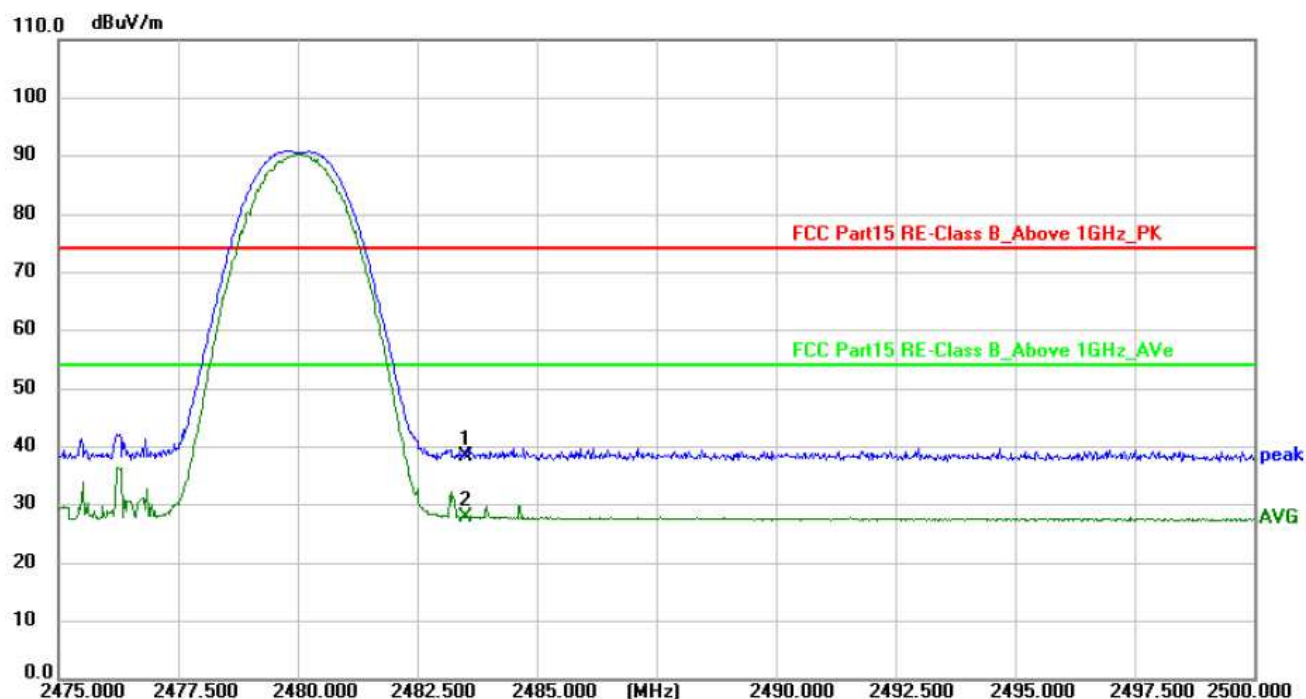
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2390.000	60.45	-22.81	37.64	74.00	-36.36	peak	150	360	P	
2 *	2390.000	50.06	-22.81	27.25	54.00	-26.75	RMS			P	

2402MHz, ANT Polarization: Vertical



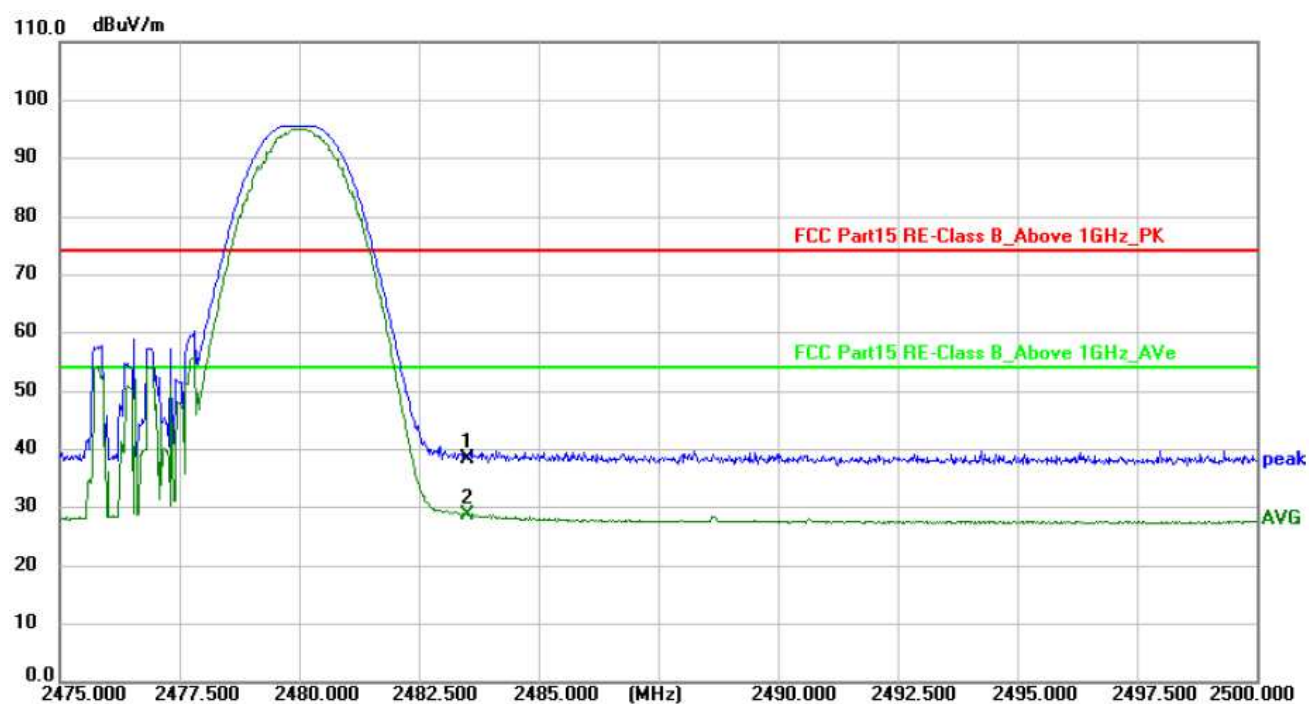
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2390.000	61.07	-22.81	38.26	74.00	-35.74	peak	150	0	P	
2 *	2389.985	50.02	-22.82	27.20	54.00	-26.80	AVG	150	0	P	

2480MHz, ANT Polarization: Horizontal



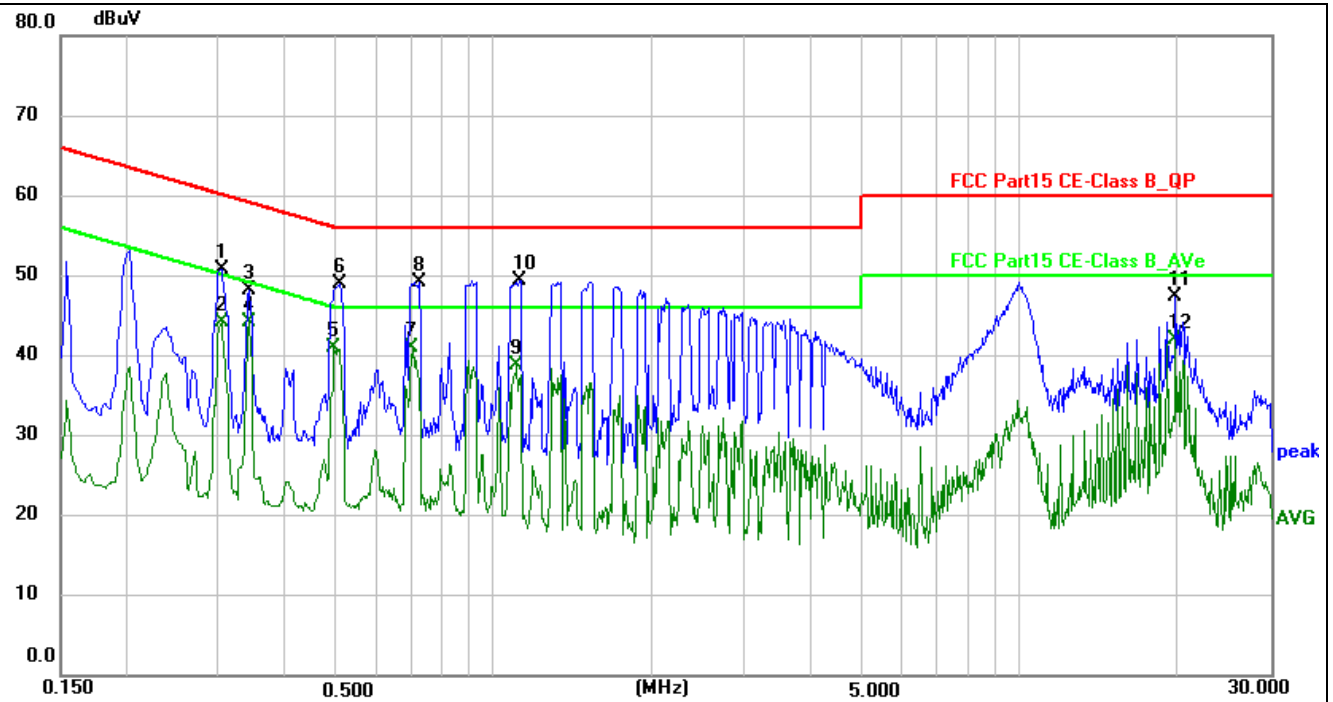
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2483.500	60.89	-22.59	38.30	74.00	-35.70	peak	150	360	P	
2 *	2483.500	50.56	-22.59	27.97	54.00	-26.03	AVG	150	360	P	

2480MHz, ANT Polarization: Vertical



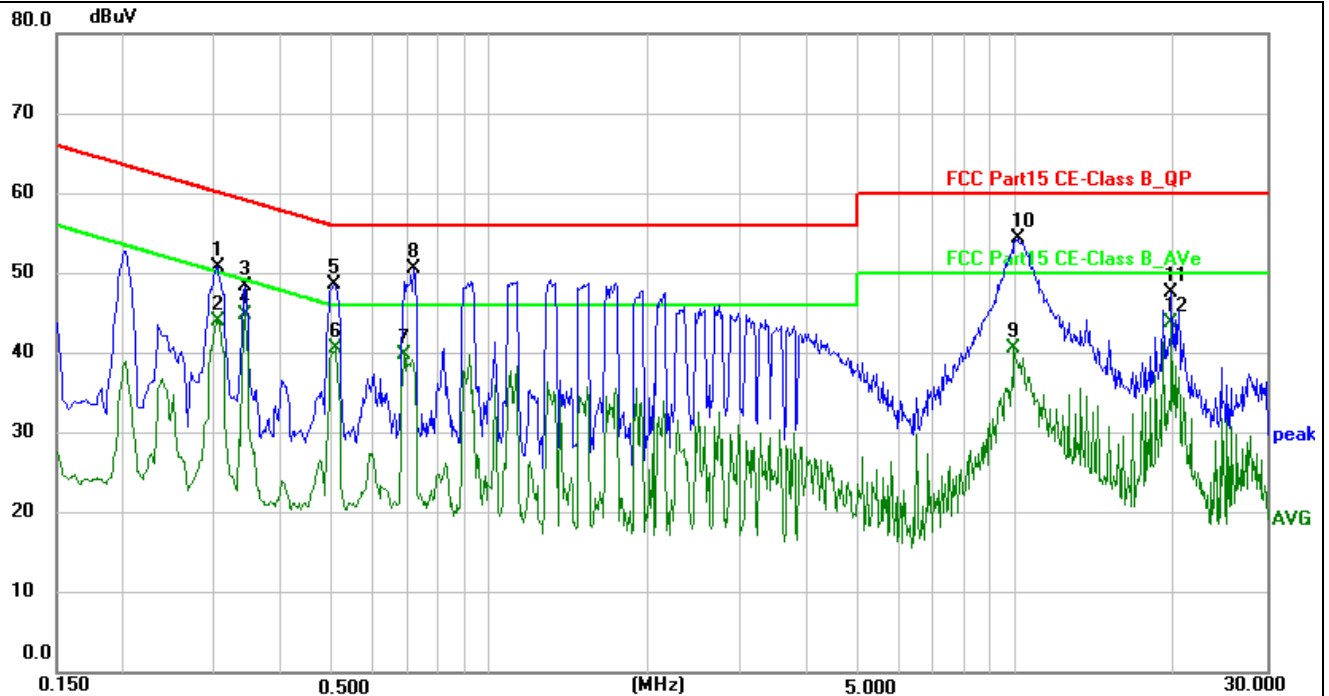
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2483.500	61.02	-22.59	38.43	74.00	-35.57	peak	150	0	P	
2 *	2483.500	51.33	-22.59	28.74	54.00	-25.26	AVG	150	0	P	

Appendix A.7: Test Plots of Conducted Emission on AC Mains



Site:		Phase:L1	Temperature(C):22(C)
Limit:	FCC Part15 CE-Class B_QP		Humidity(%):51%
EUT:	Classroom Recording and Broadcasting Host	Test Time:	2024/8/1 16:16:05
M/N.:	WX-AL600	Power Rating:	AC120V/60Hz
Mode:	On, Wireless Link	Test Engineer:	Neou
Note:			

No.	Frequency (MHz)	Reading Level(dBuV)	Factor (dB)	Measure- ment(dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.3020	31.38	19.37	50.75	60.19	-9.44	peak
2	0.3020	24.74	19.37	44.11	50.19	-6.08	AVG
3	0.3420	28.85	19.39	48.24	59.15	-10.91	peak
4 *	0.3420	24.88	19.39	44.27	49.15	-4.88	AVG
5	0.4980	21.60	19.36	40.96	46.03	-5.07	AVG
6	0.5100	29.58	19.37	48.95	56.00	-7.05	peak
7	0.7019	21.57	19.37	40.94	46.00	-5.06	AVG
8	0.7220	29.86	19.38	49.24	56.00	-6.76	peak
9	1.1060	19.46	19.40	38.86	46.00	-7.14	AVG
10	1.1220	29.93	19.40	49.33	56.00	-6.67	peak
11	19.7939	27.81	19.58	47.39	60.00	-12.61	peak
12	19.7939	22.48	19.58	42.06	50.00	-7.94	AVG



Site:		Phase:N	Temperature(C):22(C)
Limit:	FCC Part15 CE-Class B_QP	Test Time:	Humidity(%):51%
EUT:	Classroom Recording and Broadcasting Host		2024/8/1 16:23:54
M/N.:	WX-AL600	Power Rating:	AC120V/60Hz
Mode:	On, Wireless Link	Test Engineer:	Neou
Note:			

No.	Frequency (MHz)	Reading Level(dBuV)	Factor (dB)	Measure-ment(dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.3020	31.44	19.33	50.77	60.19	-9.42	peak
2	0.3020	24.65	19.33	43.98	50.19	-6.21	AVG
3	0.3420	29.12	19.35	48.47	59.15	-10.68	peak
4 *	0.3420	25.38	19.35	44.73	49.15	-4.42	AVG
5	0.5060	29.19	19.35	48.54	56.00	-7.46	peak
6	0.5100	21.19	19.36	40.55	46.00	-5.45	AVG
7	0.6860	20.38	19.38	39.76	46.00	-6.24	AVG
8	0.7180	31.17	19.38	50.55	56.00	-5.45	peak
9	9.9220	21.02	19.63	40.65	50.00	-9.35	AVG
10	10.0820	34.82	19.64	54.46	60.00	-5.54	peak
11	19.7979	28.07	19.61	47.68	60.00	-12.32	peak
12	19.7979	24.11	19.61	43.72	50.00	-6.28	AVG