

FCC PART 15C TEST REPORT FOR CERTIFICATION

On Behalf of

VIETNAM XINYAO LIGHTING TECHNOLOGY CO.,LTD

FCC ID: 2BRX2SUSLL3415RGBW**Report Type:**

Original report

Product Type:

Solar String Light

Test Engineer: Kelvin Liang*Kelvin Liang***Report Number:** STD-JDO260504F-001**Report Date:** 2026.05.29**Reviewed By:** Garman Mo*Garman Mo*

Prepared By: Bestway Compliance Co.,Ltd.
Unit 301,Building 3, No. 178, Fenggang Section,Dongshen
Road,Fenggang Town, Dongguan, Guangdong,China
Tel: +86-769-82699983
www.bestway-compliance.com



The device described above is tested by Bestway Compliance Co.,Ltd. to confirm comply with all the FCC Part 15 Subpart C requirements. The test results are contained in this test report and Bestway Compliance Co.,Ltd. is assumed full responsibility for the accuracy and completeness of these tests. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements. This Report is made under FCC Part 2.1074. No modifications were required during testing to bring this product into compliance. This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Bestway Compliance Co.,Ltd.

This report does not imply product certification, approval, or endorsement by A2LA or any agency of the Federal Government.

TABLE OF CONTENTS

Description	Page
1. SUMMARY OF STANDARDS AND RESULTS	3
1.1. Description of Standards and Results	3
2. GENERAL INFORMATION	4
2.1. Description of Equipment Under Test	4
2.2. Feature of Equipment Under Test	5
2.3. Tested Supporting System Details	5
2.4. Equipments Used during the Test	6
2.5. Test Facility	8
2.6. Measurement Uncertainty (95% confidence levels, k=2)	8
3. POWER LINE CONDUCTED EMISSION TEST	9
3.1. Block Diagram of Test Setup	9
3.2. Power Line Conducted Emission Test Limits	9
3.3. Test Procedure	9
3.4. Power Line Conducted Emission Test Result	9
4. RADIATED EMISSION TEST	10
4.1. Block Diagram of Test Setup	10
4.2. Radiated Emission Limit	11
4.3. Test Procedure	12
4.4. Radiated Emission Test Results	12
5. BAND EDGE COMPLIANCE TEST	31
5.1. Limit	31
5.2. Test Procedure	31
5.3. Test Results	31
6. 20dB Occupied Bandwidth	34
6.1. Block Diagram of Test Setup	34
6.2. Limit	34
6.3. Test Procedure	34
6.4. Test Results	34
7. ANTENNA REQUIREMENT	37
7.1. Standard Applicable	37
7.2. Antenna Connected Construction	37

1. SUMMARY OF STANDARDS AND RESULTS

1.1. Description of Standards and Results

The EUT has been tested according to the applicable standards as referenced below.

EMISSION		
Description of Test Item	Standard	Results
Power Line Conducted Emission	FCC Part 15: 15.207	N/A
Radiated Emission	FCC Part 15: 15.209 FCC Part 15: 15.249	PASS
Filed strength of the fundamental signal	FCC Part 15: 15.249 (a)	PASS
Band Edge Compliance	FCC Part 15: 15.249(d) FCC Part 15: 15.205	PASS
20dB Occupied Bandwidth	FCC Part 15: 15.215(c)	PASS
Antenna requirement	FCC Part 15: 15.203	PASS

Note: Decision rule is the rule that describes how measurement uncertainty is accounted for when stating conformity with a specified requirement.

When decision rule is applicable, please refer to the most updated version announced in our website:

<https://en.bestway-compliance.com/pages/decision-rule-of-compliance-with-specification>

2. GENERAL INFORMATION

2.1. Description of Equipment Under Test

Applicant	VIETNAM XINYAO LIGHTING TECHNOLOGY CO.,LTD
Address	Lot CN-GD1-3, Dong La Industrial Cluster, Dong Hung Commune, Hung Yen Province, Vietnam
Manufacturer	VIETNAM XINYAO LIGHTING TECHNOLOGY CO.,LTD
Address	Lot CN-GD1-3, Dong La Industrial Cluster, Dong Hung Commune, Hung Yen Province, Vietnam
Factory	VIETNAM XINYAO LIGHTING TECHNOLOGY CO.,LTD
Address	Lot CN-GD1-3, Dong La Industrial Cluster, Dong Hung Commune, Hung Yen Province, Vietnam
Product	Solar String Light
Model No.	SU-SL-L34-15RGBW; 91-979-0194(VSN#BH66028069827A6)
Remark: The models are only difference is model name for commercial purpose.	
Power Supply	DC 3V from battery
Sample Type	Prototype production
Date of Receipt	2026/05/11
Date of Test	2026/05/12-2026/05/26

2.2.Feature of Equipment Under Test

Product Feature & Specification	
Operating Frequency Range	2402MHz, 2426MHz, 2440MHz, 2480MHz
Modulation Type	GFSK

Antenna System

Type of Antenna	PCB Antenna
Antenna number	1
Antenna Peak Gain	Peak Gain: 1.68dBi

2.3.Tested Supporting System Details

RF Test connection instructions and tools:

The module is connected to the PC through a USB cable, and the PC provides DC 5V to make the module work normally

Manufacturer	Description	Model	Serial Number
Lenovo	Notebook	X220i	428632C
Lenovo	Adapter	42T4420	N322
N/A	USD Cable	/	/

External I/O Cable

Cable Description	Length (m)	From Port	To
Data Cable	0.1	EUT	Debug Board

2.4.Equipments Used during the Test

Conducted Emissions

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Shielding Room	AUDIX	N/A	N/A	2026/12/20	3 Year
2.	EMI Test Receiver	Rohde & Schwarz	ESR7	101487	2028/04/27	2 Year
3.	V-LISN	Rohde & Schwarz	NNLK 8122	8122-00128	2027/02/17	2 Year
4.	Coaxial cable CE	YuanDao	RG223	N/A	2027/04/27	1 Year
5.	Test Software	AUDIX	e3	V15922	N/A	N/A

Note: N/A means Not applicable.

For frequency range 30MHz~1000MHz (In 3m Anechoic Chamber)

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Until	Cal. Interval
1.	Semi-anechoic chamber	AUDIX	N/A	N/A	2026/12/20	3 Year
2.	EMI Test Receiver	R&S	ESR7	101487	2028/04/27	2 Year
3.	Biconical Logarithmic Antenna	SCHWARDZBEC K	VULB 9162	9162-104	2028/05/23	2 Year
4.	Coaxial cable RE	PEWC	CFD400NL	N/A	2027/04/27	1 Year
5.	Loop Antenna	Beijing Daze	ZN30900C	1062	2026/10/20	1 Year
6.	Test Software	AUDIX	e3	V15922	N/A	N/A

Note: N/A means Not applicable.

For frequency range above 1GHz (In 3m Anechoic Chamber)

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Until	Cal. Interval
1.	Semi-anechoic chamber	AUDIX	N/A	N/A	2026/12/20	3 Year
2.	Spectrum Analyzer	R&S	FSP	100615	2027/04/27	1 Year
3.	Horn Antenna	SCHWARDZBECK	BBHA 9170	895	2026/10/20	2 Year
4.	Horn Antenna	SCHWARDZBECK	BBHA 9120 D	9120D-1515	2026/10/20	2 Year
5.	Broadband Preamplifier	SCHWARDZBECK	BBV9718	9718-269	2028/04/27	2 Year
6.	Broadband Preamplifier	SKET	LNPA-1840	SK2019121201	2028/04/27	2 Year
7.	RF Cable	SKET	RC-40G-K-M /K-M-0.6M	N/A	2027/04/27	1 Year
8.	RF Cable	SKET	RC-40G-K-M /K-M-8M	N/A	2027/04/27	1 Year
9.	Test Software	AUDIX	e3	V15922	N/A	N/A

Note: N/A means Not applicable.

RF Conducted Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Until	Cal. Interval
1.	Spectrum Analyzer	R&S	FSP	100615	2027/04/27	2 Year
2.	RF Cable	STD	/	/	/	/

2.5. Test Facility

Site Description

Name of Firm : Bestway Compliance Co.,Ltd.
Unit 301,Building 3, No. 178, Fenggang
Section,Dongshen Road,Fenggang Town,
Dongguan, Guangdong,China

EMC Lab. : Certificated by Industry Canada
Registration Number: 34294
Valid Date: 2027/03/31

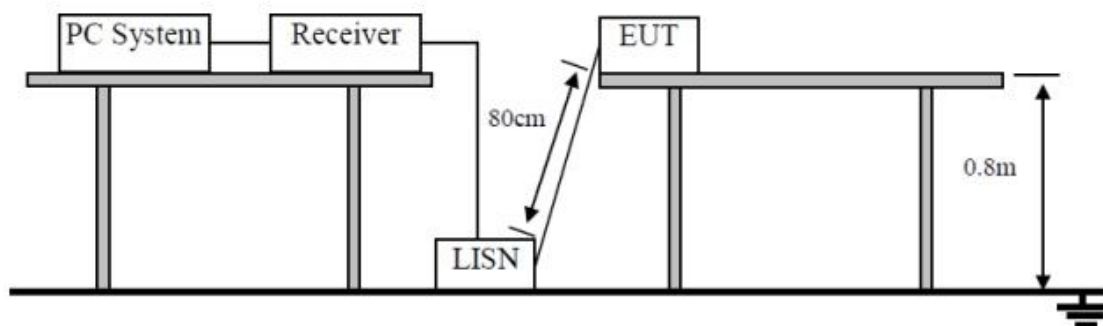
: Certificated by FCC USA.
Designation No.: CN1415
Valid Date: 2027/03/31

2.6.Measurement Uncertainty (95% confidence levels, k=2)

Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 1 Conduction	2.90dB(150KHz to 30MHz)
Uncertainty for Radiation Emission test in 3m chamber	5.34dB(30M~1GHz, Distance: 3m)
Uncertainty for Radiation Emission test in 3m chamber(1GHz-40GHz)	4.14dB(1~6GHz, Distance: 3m)
	4.60dB(6~18GHz, Distance: 3m)
	4.94dB(18~40GHz, Distance: 3m)
Uncertainty for Output power test	1.34dB
Uncertainty for Bandwidth test	92.3kHz

3. POWER LINE CONDUCTED EMISSION TEST

3.1. Block Diagram of Test Setup



3.2. Power Line Conducted Emission Test Limits

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μ V)	Average Level dB(μ V)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

3.3. Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power Via PC connected to the power mains through a line impedance stabilization network (V-LISN). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). The AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2013 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESR7) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

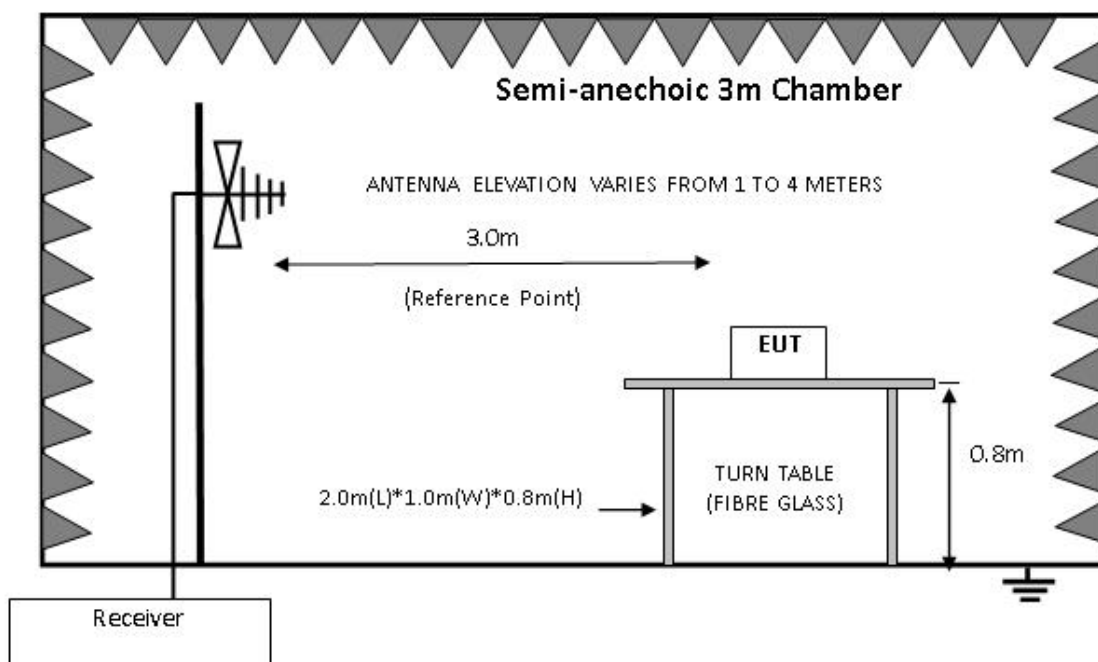
3.4. Power Line Conducted Emission Test Result

Note: This product is powered by battery and does not need to be tested.

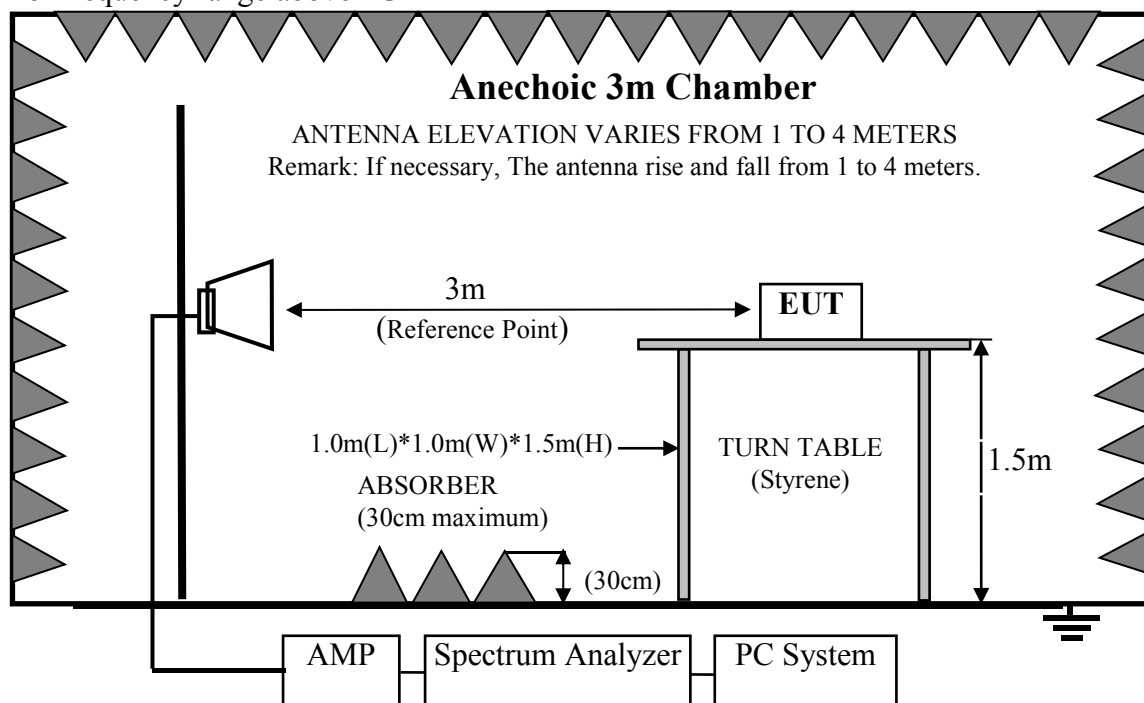
4. RADIATED EMISSION TEST

4.1. Block Diagram of Test Setup

For frequency range 30MHz-1000MHz



For frequency range above 1GHz



4.2.Radiated Emission Limit

15.247&209 limits

Field strength of the fundamental signal		
FREQUENCY	Limit (dBuV/m @3m)	Remark
2400MHz-2483.5MHz	94.00	Average Value
	114.00	Peak Value

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

- Remark: (1) Emission level dBμV = 20 log Emission level μV/m
 (2) The smaller limit shall apply at the cross point between two frequency bands.
 (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

4.3. Test Procedure

Frequency below 1GHz:

The EUT setup on the turn table which has 0.8m height to the ground. The turn table rotated 360 degrees and antenna fixed to 1 m to find the maximum emission level. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10-2013 regulation.

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground for frequency 30MHz~1000MHz, 1.5 meter high above ground for frequency above 1GHz and put the absorbing with 2.4m(L)*2.4m(W)*0.3m(H) on the ground . The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna for frequency 30MHz~1000MHz, and the Horn antenna is used as receiving antenna for frequency above 1GHz. Both horizontal and vertical polarization of the antenna is set on Test. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.10-2013 on radiated emission Test.

The bandwidth of the EMI test receiver (R&S ESR7) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's VBW is set at 3MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

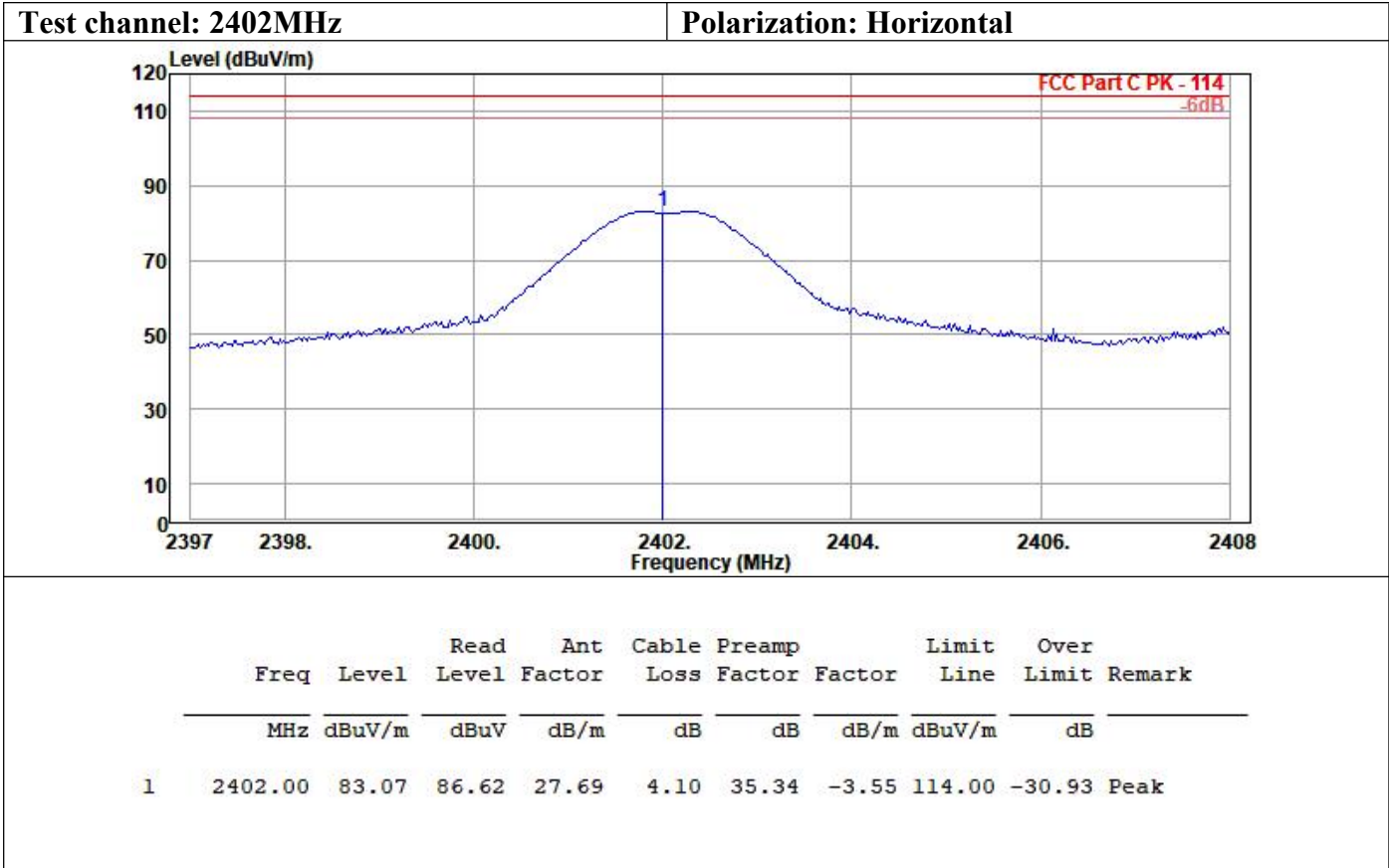
4.4. Radiated Emission Test Results

PASS.

Note 1: Final Level= Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

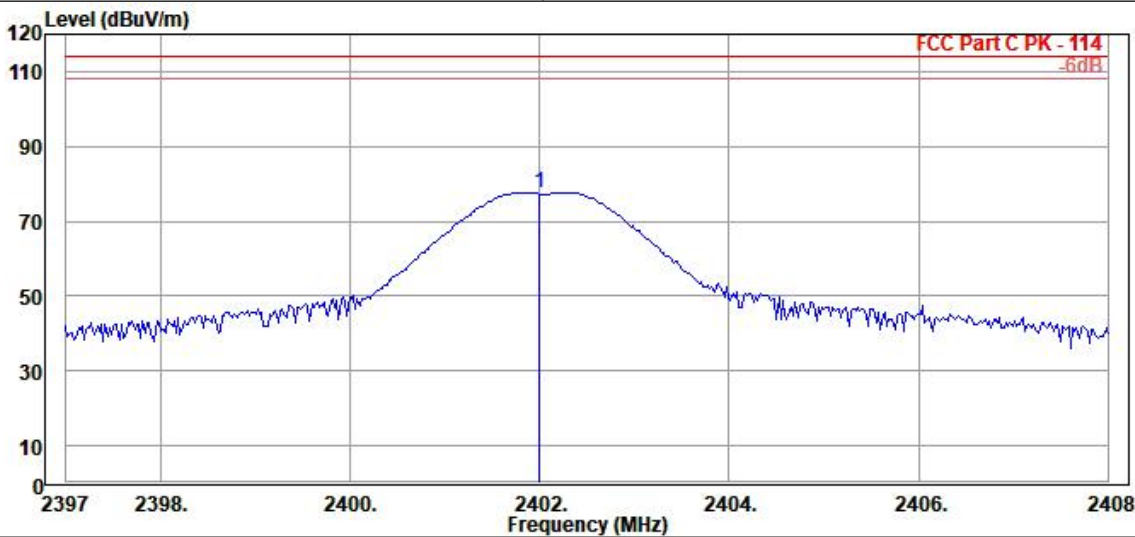
Note 2: The emissions (9kHz~30MHz) not reported for there is no emission be found.

Field Strength of The Fundamental Signal
Peak value



Test channel: 2402MHz

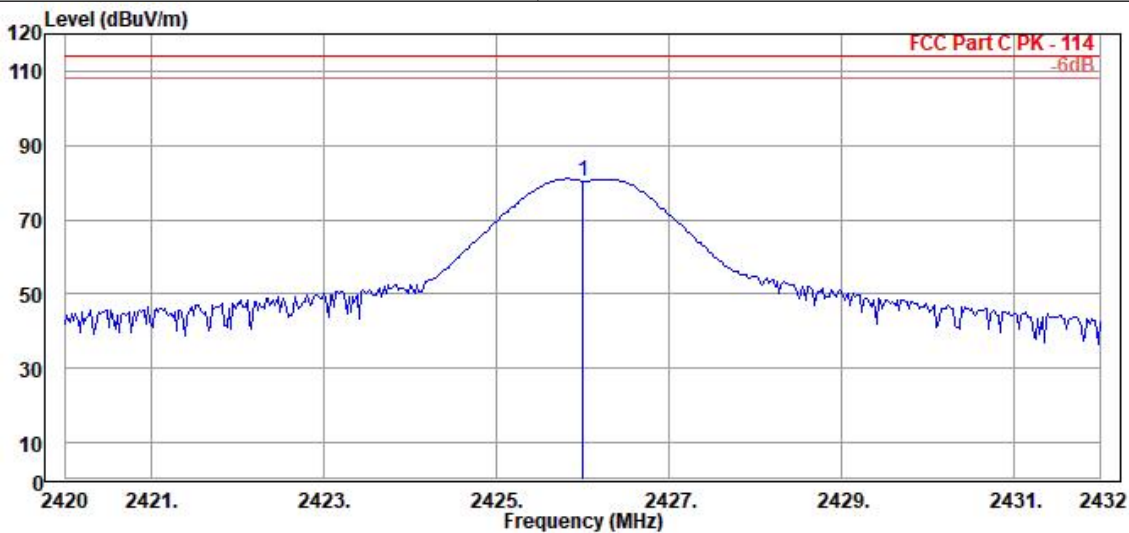
Polarization: Vertical



	Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Factor	Limit Line	Over Limit	Remark
	MHz	dBuV/m	dBuV	dB/m	dB	dB	dB/m	dBuV/m	dB	
1	2402.00	77.78	81.33	27.69	4.10	35.34	-3.55	114.00	-36.22	Peak

Test channel: 2426MHz

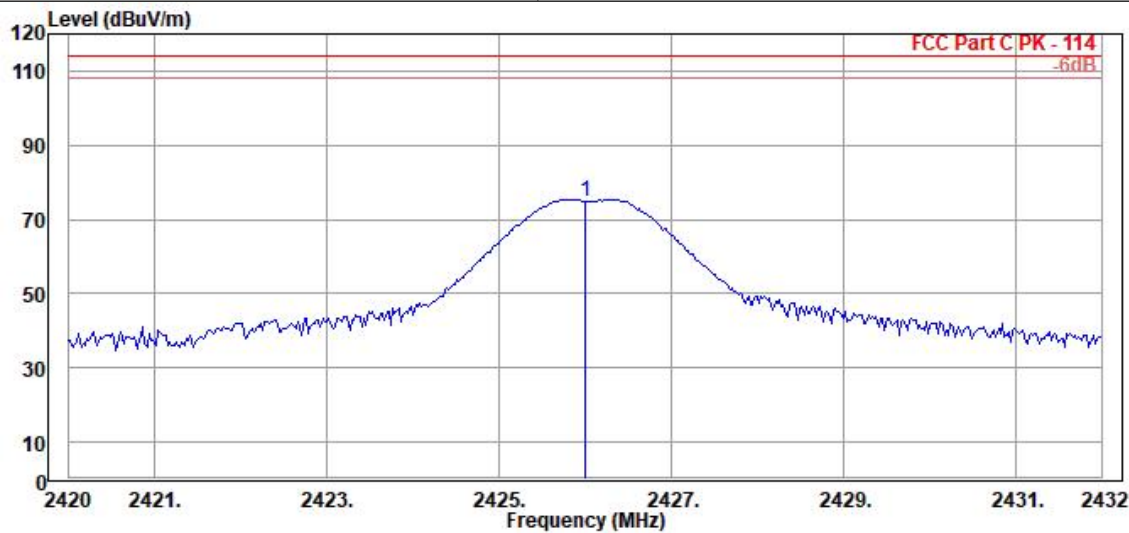
Polarization: Horizontal



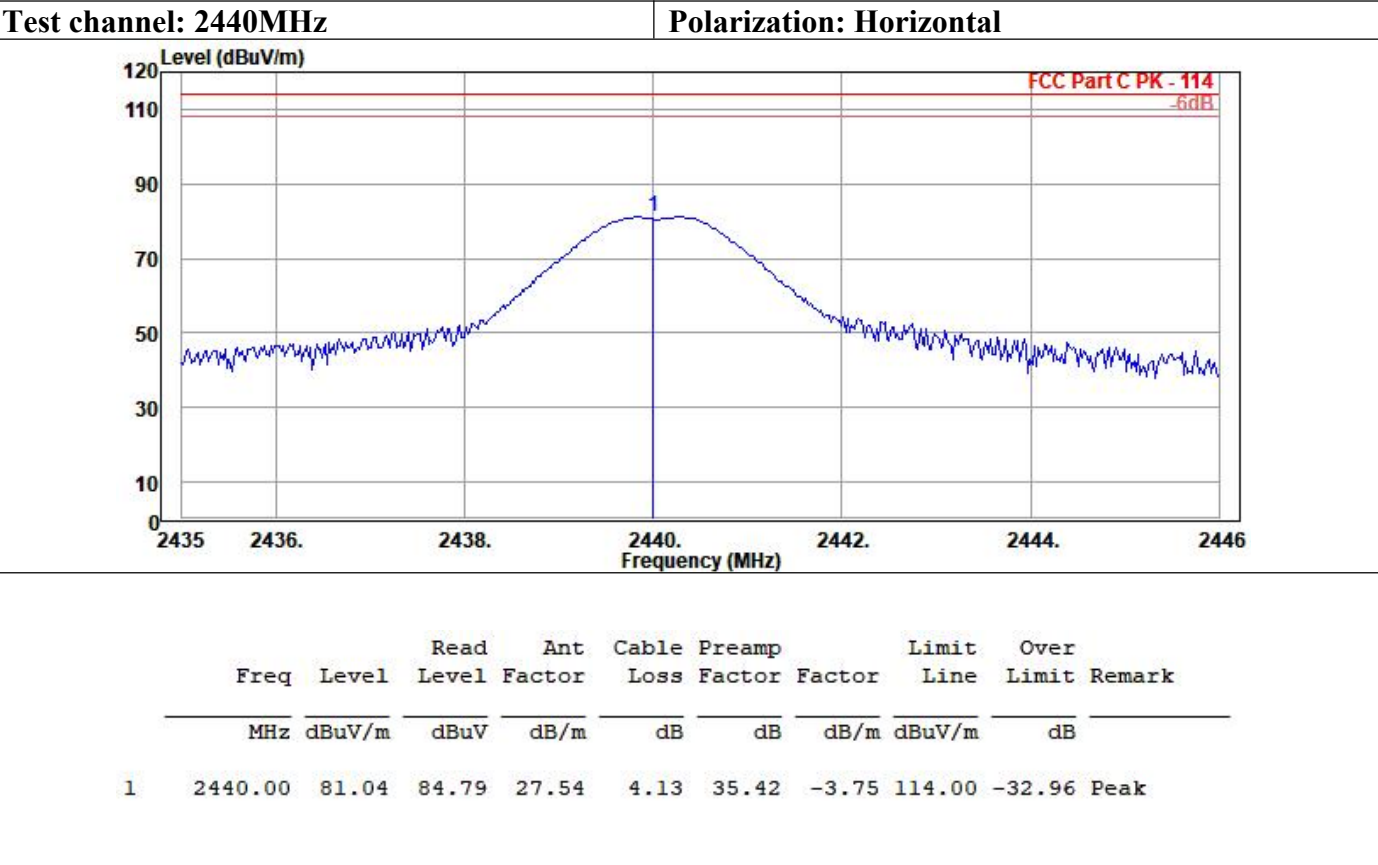
	Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Limit Line	Over Limit	Remark
	MHz	dBuV/m	dBuV	dB/m	dB	dB	dB/m	dBuV/m	dB
1	2426.00	80.34	84.01	27.60	4.12	35.39	-3.67	114.00	-33.66 Peak

Test channel: 2426MHz

Polarization: Vertical

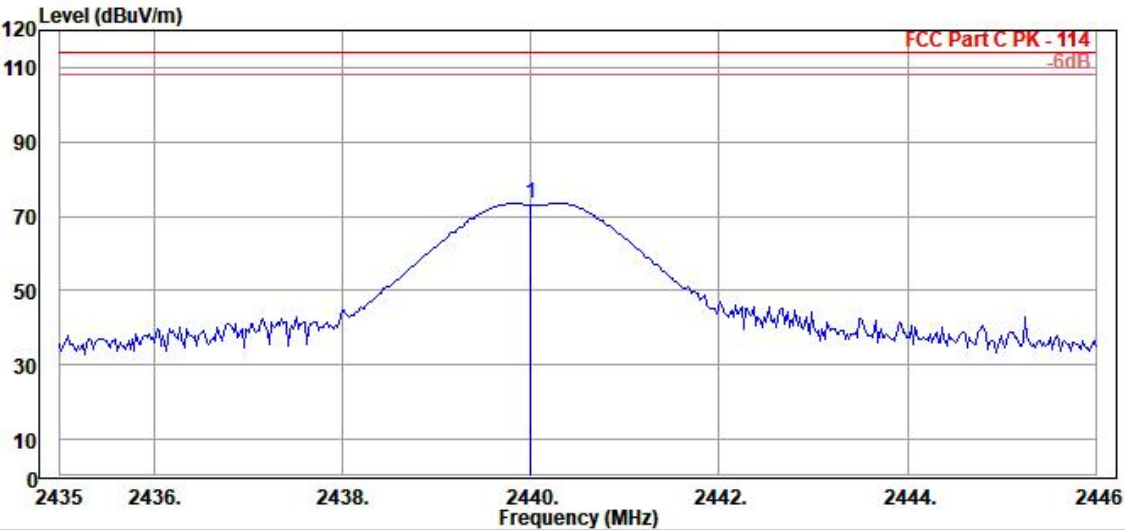


	Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Limit Line	Over Limit	Remark
	MHz	dBuV/m	dBuV	dB/m	dB	dB	dB/m	dBuV/m	dB
1	2426.00	74.77	78.44	27.60	4.12	35.39	-3.67	114.00	-39.23 Peak



Test channel: 2440MHz

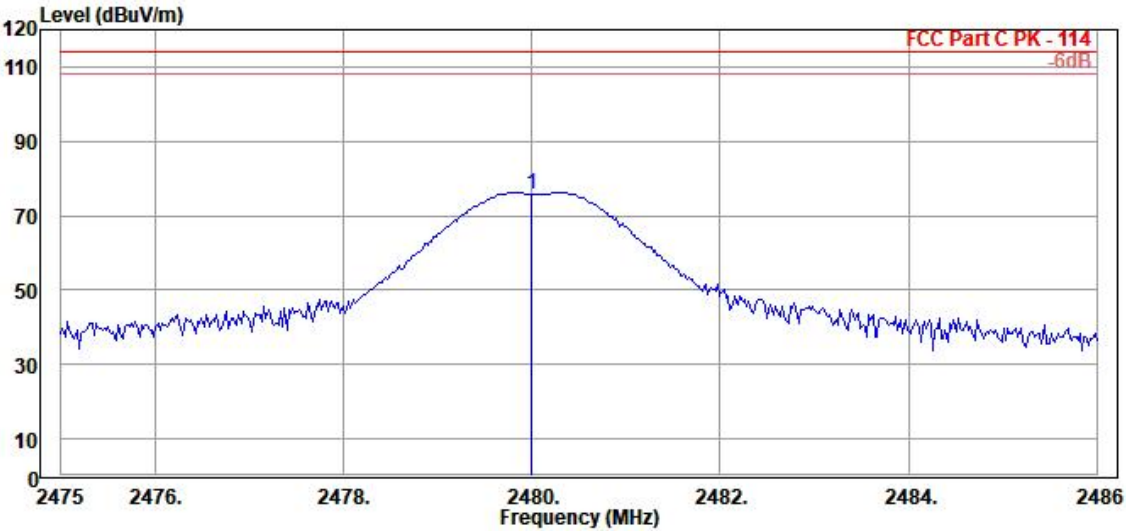
Polarization: Vertical



	Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Factor	Limit Line	Over Limit	Remark
	MHz	dBUV/m	dBuV	dB/m	dB	dB	dB/m	dBUV/m	dB	
1	2440.00	73.45	77.20	27.54	4.13	35.42	-3.75	114.00	-40.55	Peak

Test channel: 2480MHz

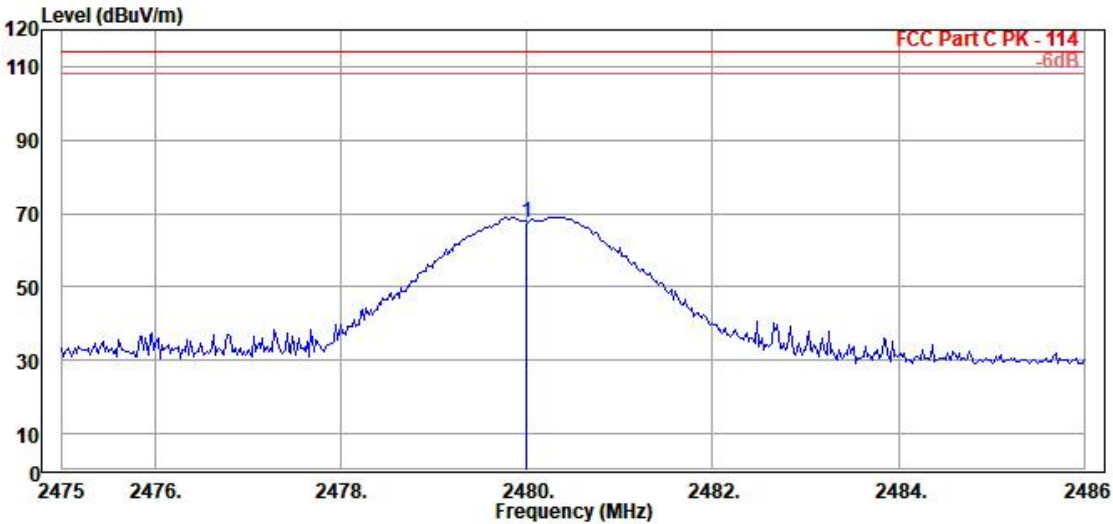
Polarization: Horizontal



	Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Limit Line	Over Limit	Remark
	MHz	dBuV/m	dBuV	dB/m	dB	dB	dB/m	dBuV/m	dB
1	2480.00	75.70	79.49	27.56	4.16	35.51	-3.79	114.00	-38.30 Peak

Test channel: 2480MHz

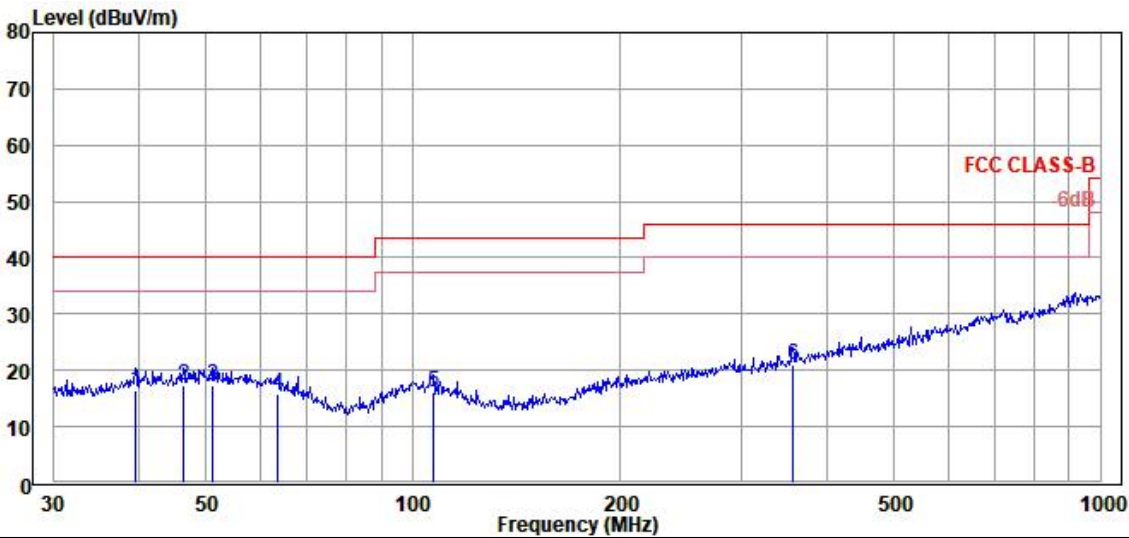
Polarization: Vertical



	Freq	Level	Read	Ant	Cable	Preamp	Limit	Over	Remark
			Level	Factor	Loss	Factor		Limit	
	MHz	dBuV/m	dBuV	dB/m	dB	dB	dB/m	dBuV/m	dB
1	2480.00	67.75	71.54	27.56	4.16	35.51	-3.79	114.00	-46.25 Peak

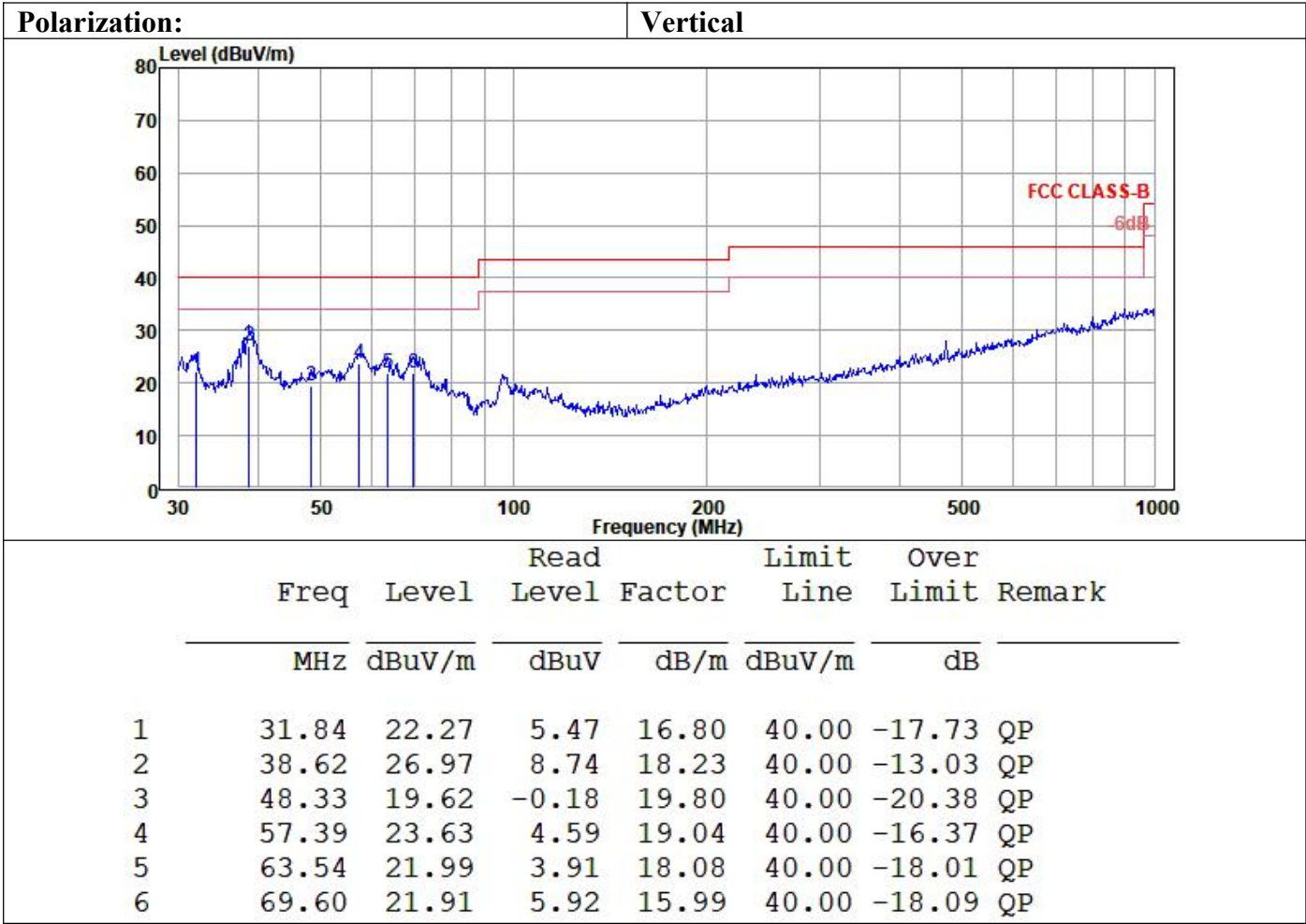
Frequency: 30MHz~1GHz

Polarization:	Horizontal
---------------	------------



	Freq	Level	Read	Limit	Over	
	MHz	dBuV/m	Level	Line	Limit	Remark
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB
1	39.44	16.42	-2.03	18.45	40.00	-23.58 QP
2	46.34	17.44	-2.23	19.67	40.00	-22.56 QP
3	51.12	17.42	-2.15	19.57	40.00	-22.58 QP
4	63.54	15.92	-2.16	18.08	40.00	-24.08 QP
5	106.76	16.02	-1.82	17.84	43.50	-27.48 QP
6	356.68	21.05	-1.20	22.25	46.00	-24.95 QP

Note:Pre-testing all test modes and channels, and find the channel 2402MHz is the worst case, so only the worst case is included in this test report.

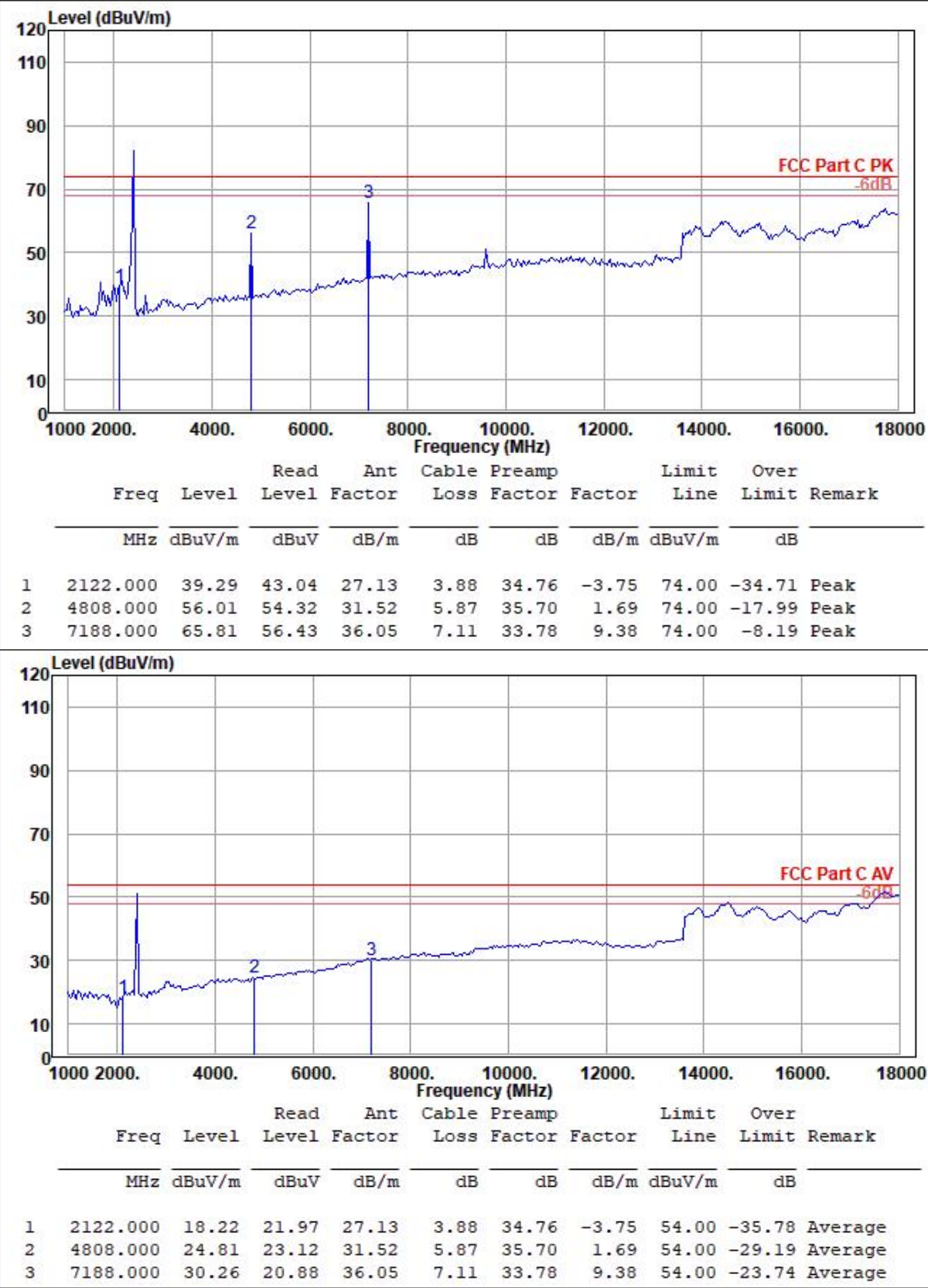


Note:Pre-testing all test modes and channels, and find the channel 2402MHz is the worst case, so only the worst case is included in this test report.

Frequency: Above 1GHz

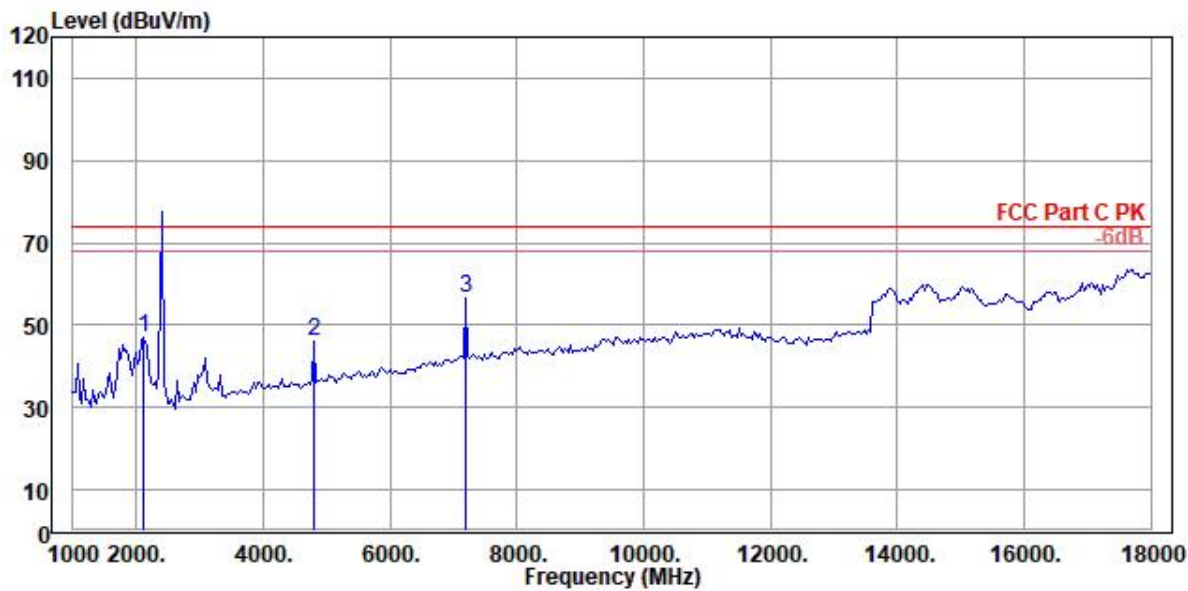
Test channel: 2402MHz

Horizontal

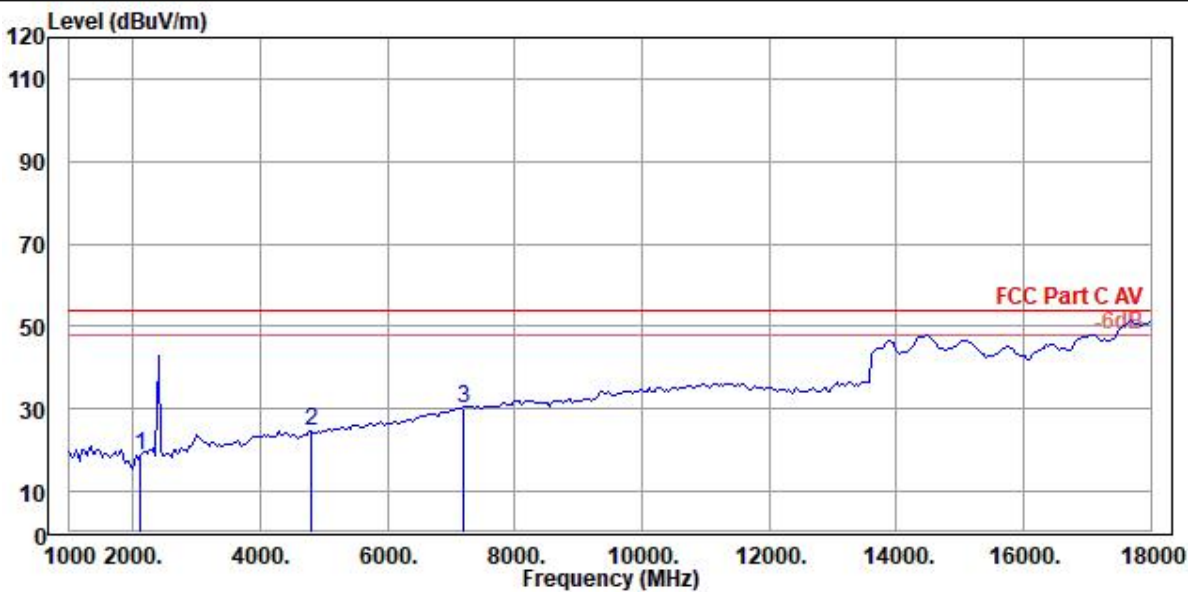


Test channel: 2402MHz

Vertical

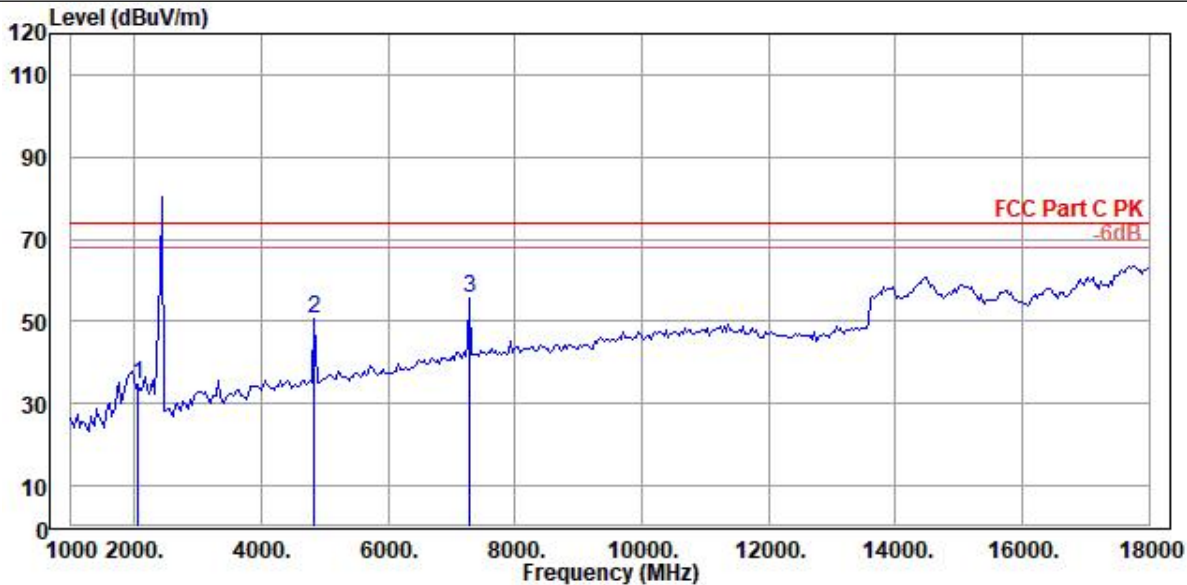


	Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Limit Line	Over Limit	Remark
	MHz	dBuV/m	dBuV	dB/m	dB	dB	dB/m	dBuV/m	dB
1	2122.000	47.08	50.83	27.13	3.88	34.76	-3.75	74.00	-26.92 Peak
2	4808.000	45.86	44.17	31.52	5.87	35.70	1.69	74.00	-28.14 Peak
3	7188.000	56.40	47.02	36.05	7.11	33.78	9.38	74.00	-17.60 Peak



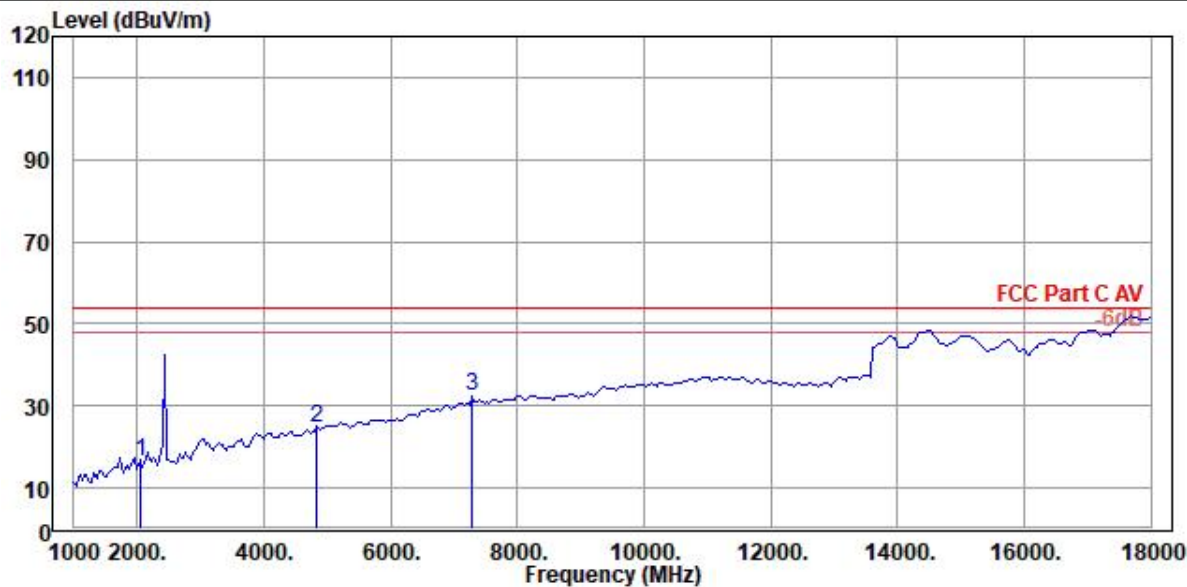
	Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Limit Line	Over Limit	Remark
	MHz	dBuV/m	dBuV	dB/m	dB	dB	dB/m	dBuV/m	dB
1	2122.000	18.71	22.46	27.13	3.88	34.76	-3.75	54.00	-35.29 Average
2	4808.000	24.42	22.73	31.52	5.87	35.70	1.69	54.00	-29.58 Average
3	7188.000	30.04	20.66	36.05	7.11	33.78	9.38	54.00	-23.96 Average

Test channel: 2426MHz



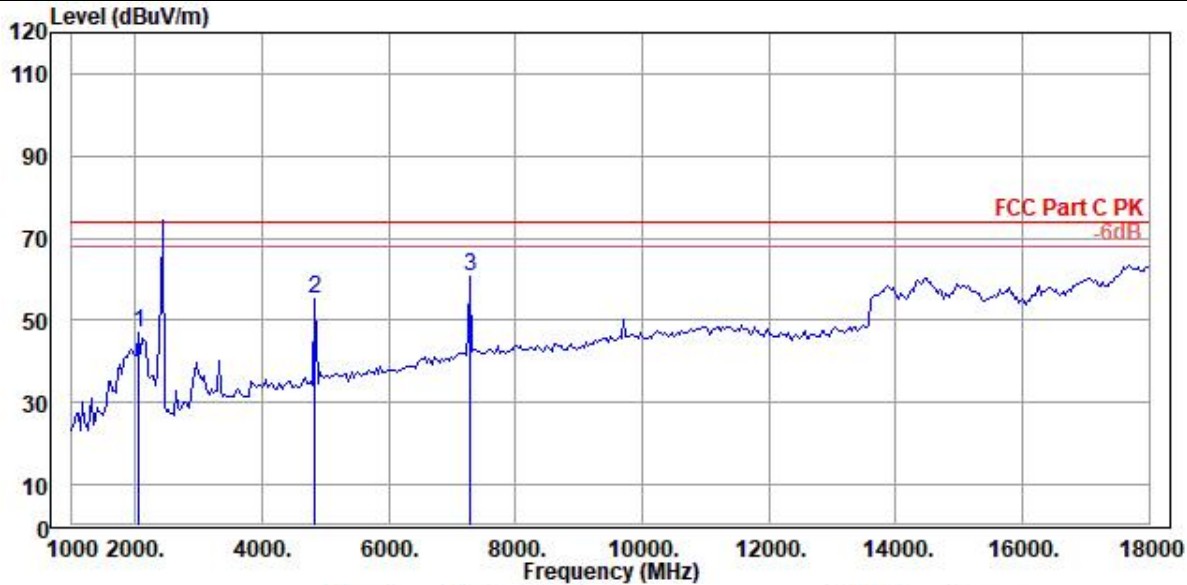
	Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Limit Line	Over Limit	Remark
	MHz	dBuV/m	dBuV	dB/m	dB	dB	dBuV/m	dB	
1	2054.000	34.82	38.79	26.82	3.82	34.61	74.00	-39.18	Peak
2	4842.000	50.72	48.93	31.58	5.89	35.68	74.00	-23.28	Peak
3	7290.000	55.77	46.19	36.24	7.16	33.82	74.00	-18.23	Peak

Horizontal



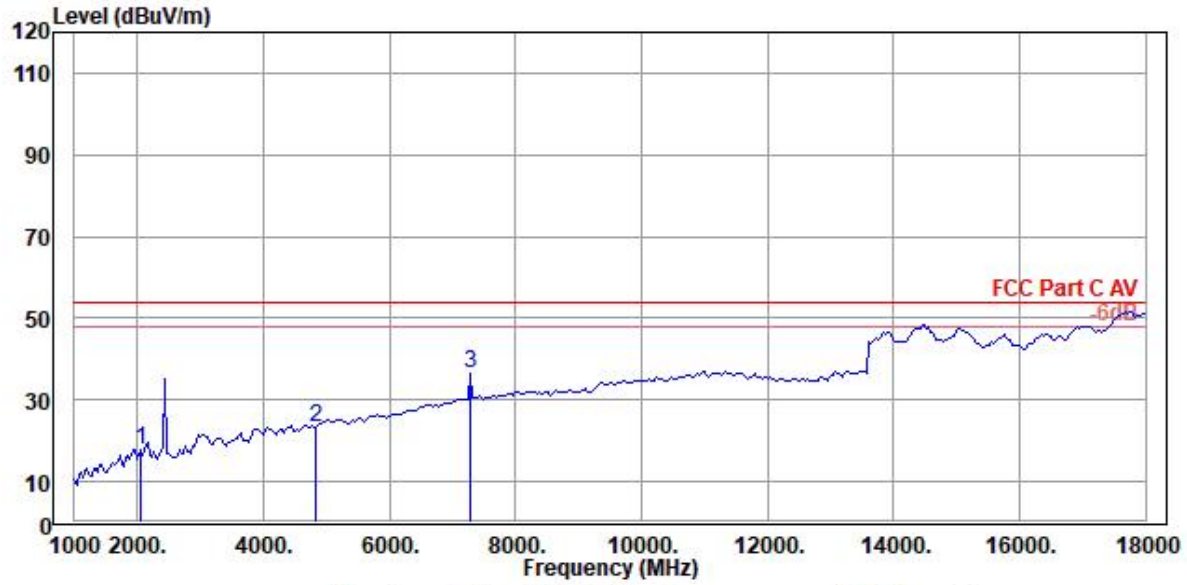
	Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Limit Line	Over Limit	Remark
	MHz	dBuV/m	dBuV	dB/m	dB	dB	dBuV/m	dB	
1	2054.000	16.36	20.33	26.82	3.82	34.61	54.00	-37.64	Average
2	4842.000	24.83	23.04	31.58	5.89	35.68	54.00	-29.17	Average
3	7290.000	32.21	22.63	36.24	7.16	33.82	54.00	-21.79	Average

Test channel: 2426MHz



	Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Limit Line	Over Limit	Remark
	MHz	dBuV/m	dBuV	dB/m	dB	dB	dBuV/m	dB	
1	2054.000	46.89	50.86	26.82	3.82	34.61	74.00	-27.11	Peak
2	4842.000	55.23	53.44	31.58	5.89	35.68	74.00	-18.77	Peak
3	7290.000	60.61	51.03	36.24	7.16	33.82	74.00	-13.39	Peak

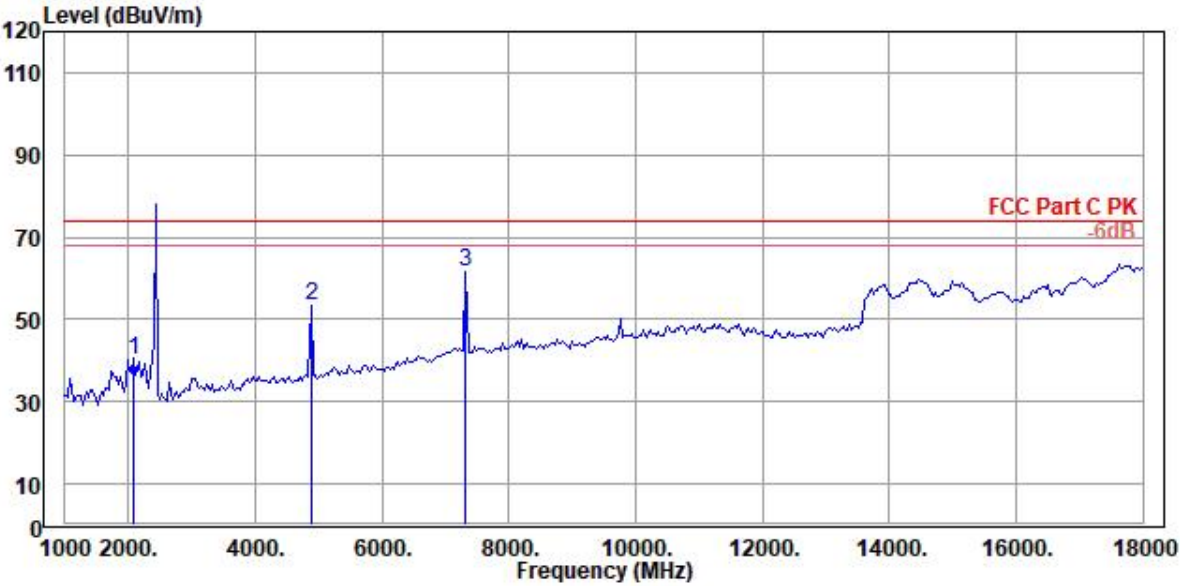
Vertical



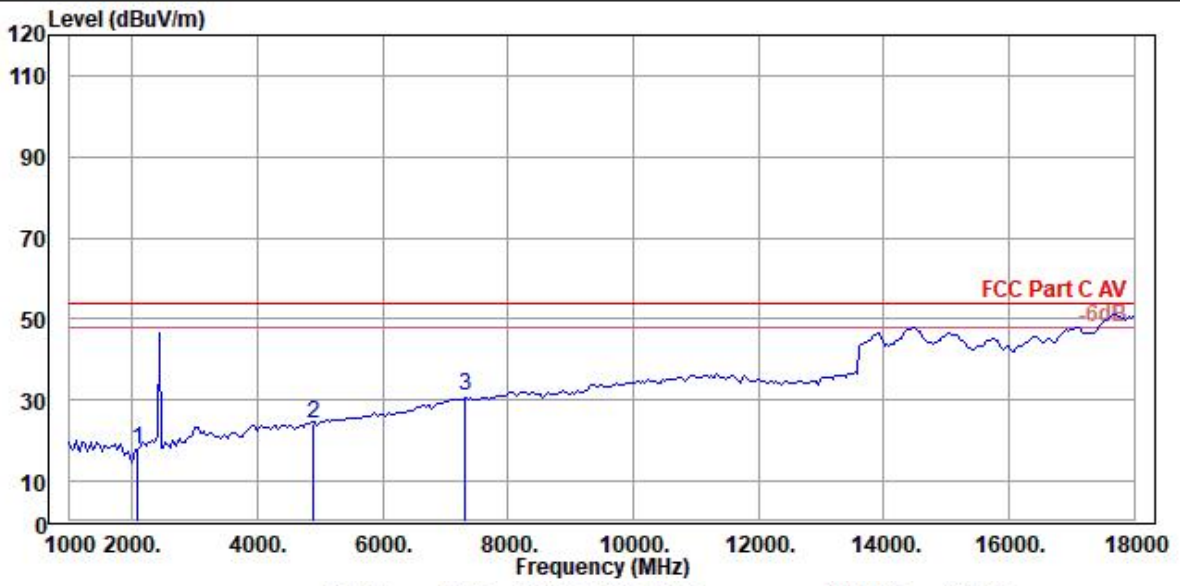
	Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Limit Line	Over Limit	Remark
	MHz	dBuV/m	dBuV	dB/m	dB	dB	dBuV/m	dB	
1	2054.000	17.61	21.58	26.82	3.82	34.61	54.00	-36.39	Average
2	4842.000	23.24	21.45	31.58	5.89	35.68	54.00	-30.76	Average
3	7290.000	36.57	26.99	36.24	7.16	33.82	54.00	-17.43	Average

Test channel: 2440MHz

Horizontal

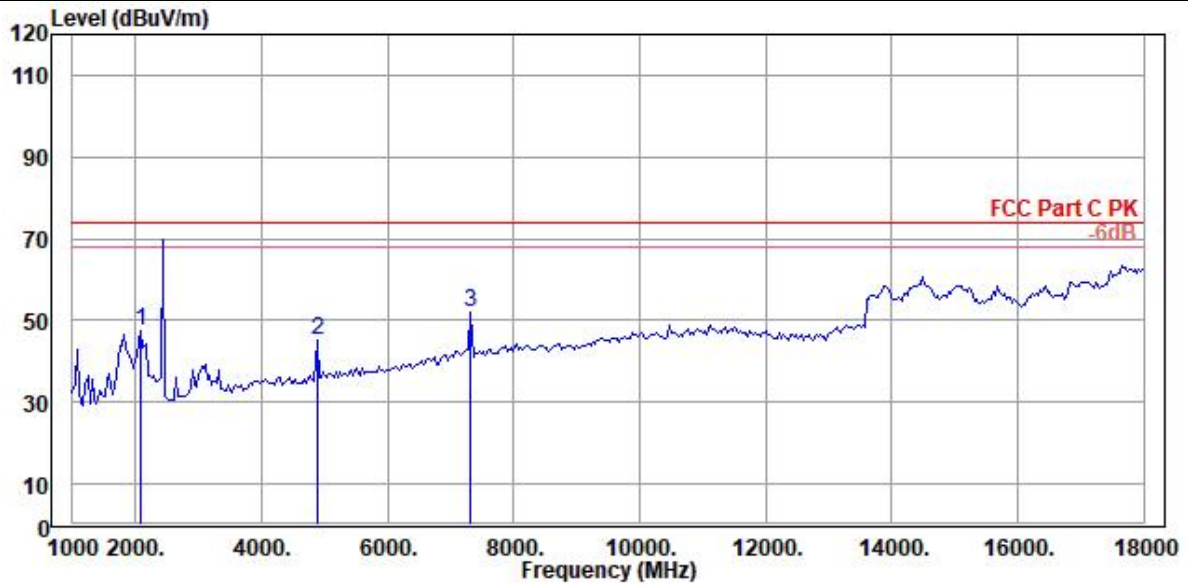


	Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Limit Line	Over Limit	Remark	
	MHz	dBuV/m	dBuV	dB/m	dB	dB	dB/m	dBuV/m	dB	
1	2088.000	40.09	43.97	26.95	3.85	34.68	-3.88	74.00	-33.91	Peak
2	4876.000	53.56	51.76	31.55	5.91	35.66	1.80	74.00	-20.44	Peak
3	7324.000	61.45	51.86	36.25	7.17	33.83	9.59	74.00	-12.55	Peak



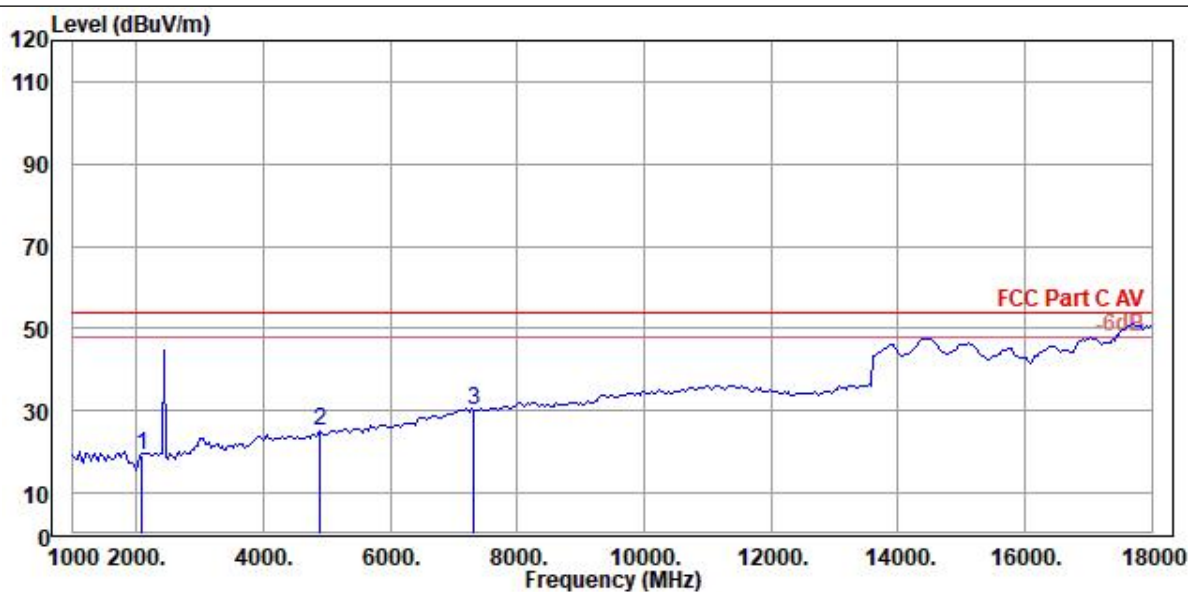
	Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Factor	Limit Line	Over Limit	Remark
	MHz	dBuV/m	dBuV	dB/m	dB	dB	dB/m	dBuV/m	dB	
1	2088.000	17.92	21.80	26.95	3.85	34.68	-3.88	54.00	-36.08	Average
2	4876.000	24.21	22.41	31.55	5.91	35.66	1.80	54.00	-29.79	Average
3	7324.000	30.84	21.25	36.25	7.17	33.83	9.59	54.00	-23.16	Average

Test channel: 2440MHz



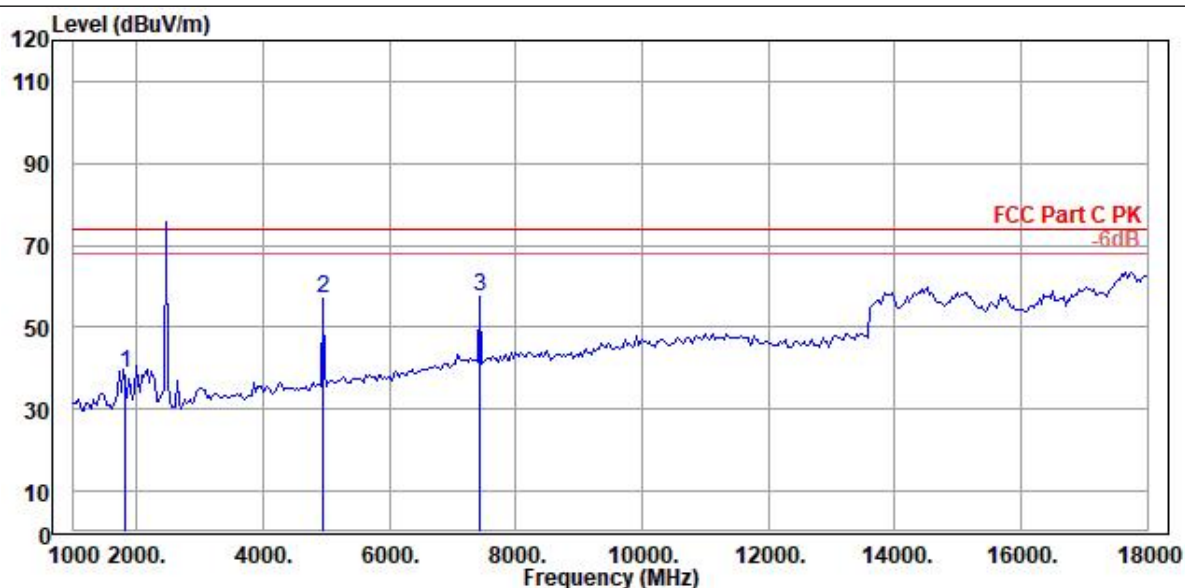
	Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Limit Line	Over Limit	Remark
	MHz	dBuV/m	dBuV	dB/m	dB	dB	dBuV/m	dB	
1	2088.000	47.46	51.34	26.95	3.85	34.68	74.00	-26.54	Peak
2	4876.000	45.26	43.46	31.55	5.91	35.66	74.00	-28.74	Peak
3	7324.000	51.89	42.30	36.25	7.17	33.83	74.00	-22.11	Peak

Vertical



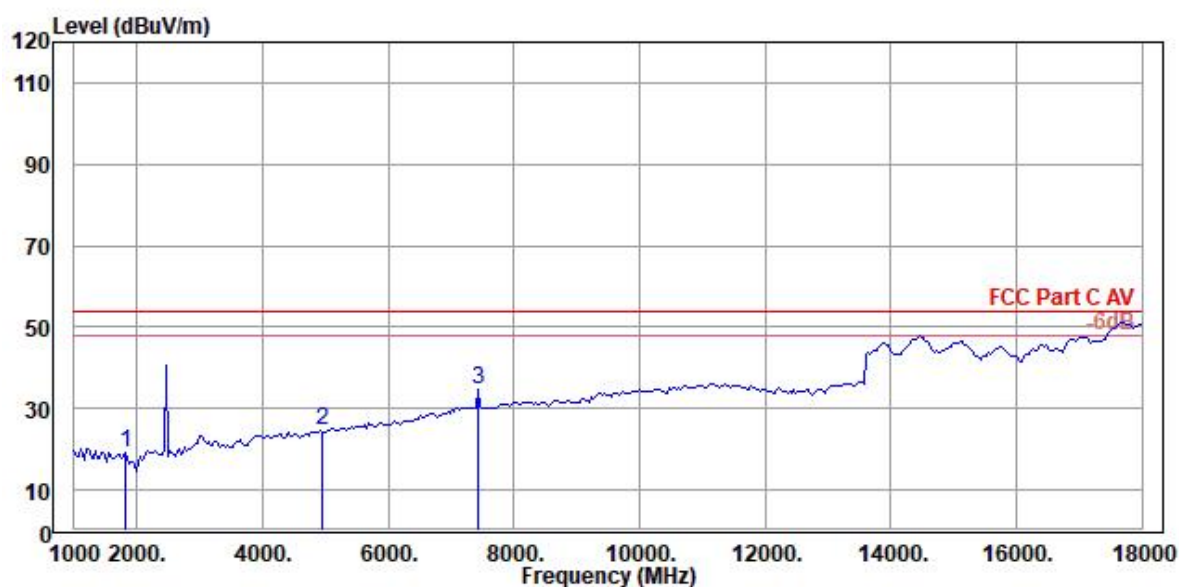
	Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Limit Line	Over Limit	Remark
	MHz	dBuV/m	dBuV	dB/m	dB	dB	dBuV/m	dB	
1	2088.000	19.34	23.22	26.95	3.85	34.68	54.00	-34.66	Average
2	4876.000	25.13	23.33	31.55	5.91	35.66	54.00	-28.87	Average
3	7324.000	29.99	20.40	36.25	7.17	33.83	54.00	-24.01	Average

Test channel: 2480MHz



	Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Limit Line	Over Limit	Remark
	MHz	dBuV/m	dBuV	dB/m	dB	dB	dB/m	dB	
1	1816.000	38.57	43.68	25.86	3.57	34.54	-5.11	74.00	-35.43 Peak
2	4944.000	56.90	54.82	31.76	5.95	35.63	2.08	74.00	-17.10 Peak
3	7426.000	57.62	47.87	36.40	7.22	33.87	9.75	74.00	-16.38 Peak

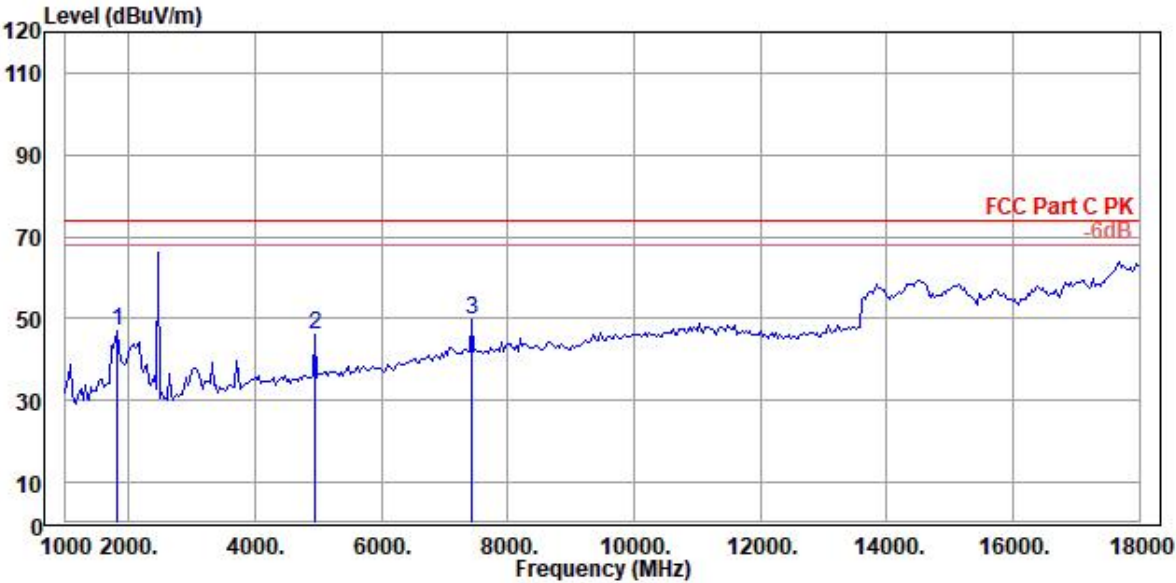
Horizontal



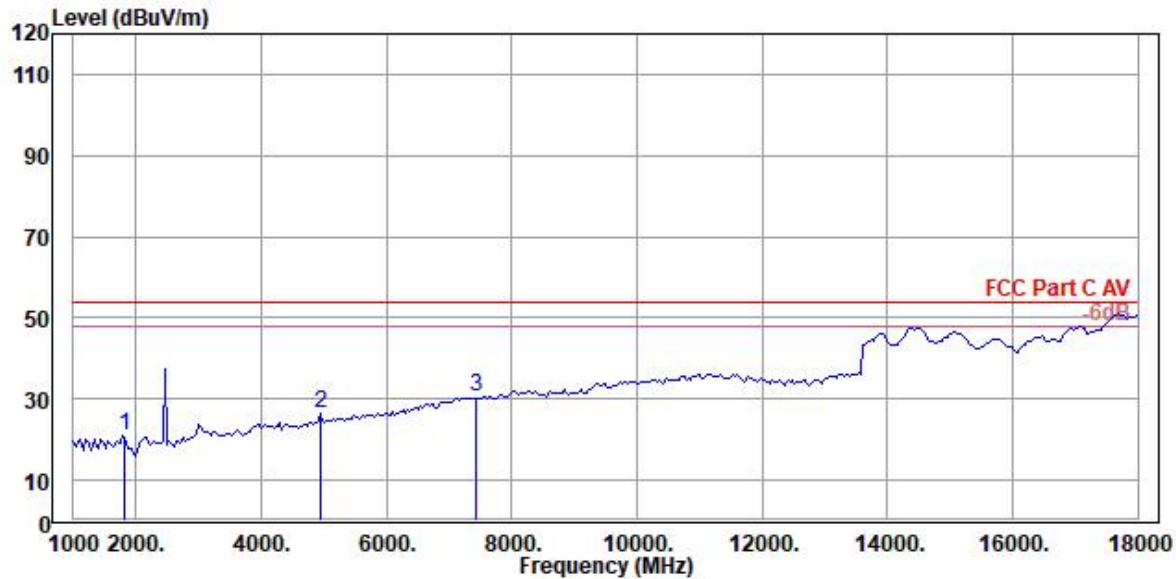
	Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Limit Line	Over Limit	Remark
	MHz	dBuV/m	dBuV	dB/m	dB	dB	dB/m	dB	
1	1816.000	19.16	24.27	25.86	3.57	34.54	-5.11	54.00	-34.84 Average
2	4944.000	24.59	22.51	31.76	5.95	35.63	2.08	54.00	-29.41 Average
3	7426.000	34.61	24.86	36.40	7.22	33.87	9.75	54.00	-19.39 Average

Test channel: 2480MHz

Vertical



	Freq	Level	Read	Ant	Cable	Preamp	Limit	Over	
	MHz	dBuV/m	Level	Factor	Loss	Factor	Line	Limit	Remark
			dBuV	dB/m	dB	dB	dB/m	dB	
1	1816.000	46.98	52.09	25.86	3.57	34.54	-5.11	74.00	-27.02 Peak
2	4944.000	46.19	44.11	31.76	5.95	35.63	2.08	74.00	-27.81 Peak
3	7426.000	49.93	40.18	36.40	7.22	33.87	9.75	74.00	-24.07 Peak



	Freq	Level	Read	Ant	Cable	Preamp	Limit	Over	
	MHz	dBuV/m	Level	Factor	Loss	Factor	Line	Limit	Remark
			dBuV	dB/m	dB	dB	dB/m	dB	
1	1816.000	21.11	26.22	25.86	3.57	34.54	-5.11	54.00	-32.89 Average
2	4944.000	26.58	24.50	31.76	5.95	35.63	2.08	54.00	-27.42 Average
3	7426.000	30.40	20.65	36.40	7.22	33.87	9.75	54.00	-23.60 Average

5. BAND EDGE COMPLIANCE TEST

5.1.Limit

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

5.2.Test Procedure

Use the test method described in ANSI C63.10 clause 6.10:

1. The EUT is placed on a turntable, which is 1.5m above the ground plane and worked at highest radiated power.
2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
 - (a) PEAK: RBW=1MHz; VBW=3MHz; Sweep=AUTO
 - (b) AVERAGE: RBW=1MHz; VBW=10Hz; Sweep=AUTO

5.3.Test Results

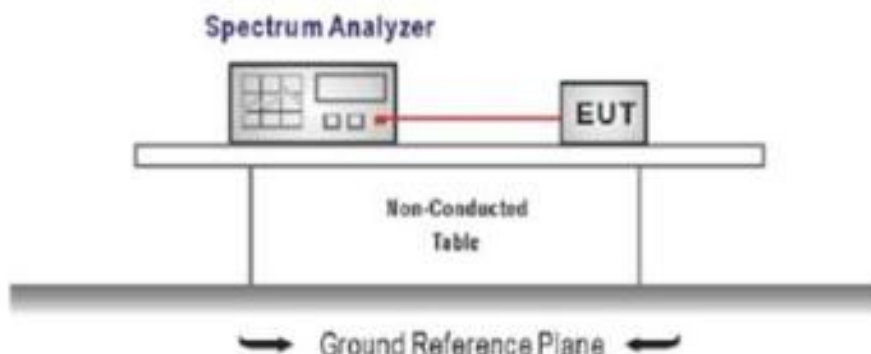
Pass (The testing data was attached in the next pages.)

Test channel					lowest						
Horizontal		Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Factor	Limit Line	Over Limit	Remark
		MHz	dBuV/m	dBuV	dB/m	dB	dB	dB/m	dBuV/m	dB	
	1	2310.000	33.00	36.46	27.66	4.03	35.15	-3.46	74.00	-41.00	Peak
	2	2390.000	39.34	42.91	27.66	4.09	35.32	-3.57	74.00	-34.66	Peak
	3	2400.000	53.07	56.61	27.70	4.10	35.34	-3.54	74.00	-20.93	Peak
		Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Factor	Limit Line	Over Limit	Remark
		MHz	dBuV/m	dBuV	dB/m	dB	dB	dB/m	dBuV/m	dB	
	1	2310.000	20.05	23.51	27.66	4.03	35.15	-3.46	54.00	-33.95	Average
	2	2390.000	17.46	21.03	27.66	4.09	35.32	-3.57	54.00	-36.54	Average
	3	2400.000	33.03	36.57	27.70	4.10	35.34	-3.54	54.00	-20.97	Average
Vertical		Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Factor	Limit Line	Over Limit	Remark
		MHz	dBuV/m	dBuV	dB/m	dB	dB	dB/m	dBuV/m	dB	
	1	2310.000	36.53	39.99	27.66	4.03	35.15	-3.46	74.00	-37.47	Peak
	2	2390.000	36.26	39.83	27.66	4.09	35.32	-3.57	74.00	-37.74	Peak
	3	2400.000	48.62	52.16	27.70	4.10	35.34	-3.54	74.00	-25.38	Peak
		Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Factor	Limit Line	Over Limit	Remark
		MHz	dBuV/m	dBuV	dB/m	dB	dB	dB/m	dBuV/m	dB	
	1	2310.000	18.73	22.19	27.66	4.03	35.15	-3.46	54.00	-35.27	Average
	2	2390.000	19.73	23.30	27.66	4.09	35.32	-3.57	54.00	-34.27	Average
	3	2400.000	19.72	23.26	27.70	4.10	35.34	-3.54	54.00	-34.28	Average

Test channel					highest						
Horizontal		Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Factor	Limit Line	Over Limit	Remark
		MHz	dBuV/m	dBuV	dB/m	dB	dB	dB/m	dBuV/m	dB	
	1	2483.50	41.28	45.06	27.57	4.17	35.52	-3.78	74.00	-32.72	Peak
	2	2500.00	29.67	33.44	27.60	4.18	35.55	-3.77	74.00	-44.33	Peak
		Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Factor	Limit Line	Over Limit	Remark
		MHz	dBuV/m	dBuV	dB/m	dB	dB	dB/m	dBuV/m	dB	
	1	2483.50	19.93	23.71	27.57	4.17	35.52	-3.78	54.00	-34.07	Average
	2	2500.00	17.40	21.17	27.60	4.18	35.55	-3.77	54.00	-36.60	Average
Vertical		Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Factor	Limit Line	Over Limit	Remark
		MHz	dBuV/m	dBuV	dB/m	dB	dB	dB/m	dBuV/m	dB	
	1	2483.50	33.09	36.87	27.57	4.17	35.52	-3.78	74.00	-40.91	Peak
	2	2500.00	29.86	33.63	27.60	4.18	35.55	-3.77	74.00	-44.14	Peak
		Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Factor	Limit Line	Over Limit	Remark
		MHz	dBuV/m	dBuV	dB/m	dB	dB	dB/m	dBuV/m	dB	
	1	2483.50	17.60	21.38	27.57	4.17	35.52	-3.78	54.00	-36.40	Average
	2	2500.00	17.30	21.07	27.60	4.18	35.55	-3.77	54.00	-36.70	Average

6. 20dB Occupied Bandwidth

6.1. Block Diagram of Test Setup



6.2. Limit

Intentional radiators must be designed to ensure that the 20dB bandwidth of the emission is contained within the allocated frequency band.

If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation

6.3. Test Procedure

The 20dB Bandwidth is measured using the Spectrum Analyzer.

Set Span = 2 to 3 times the 20dB bandwidth, RBW = approximately 1% of the 20dB bandwidth, VBW > RBW, Sweep = auto, Detector = peak, Trace = max hold.

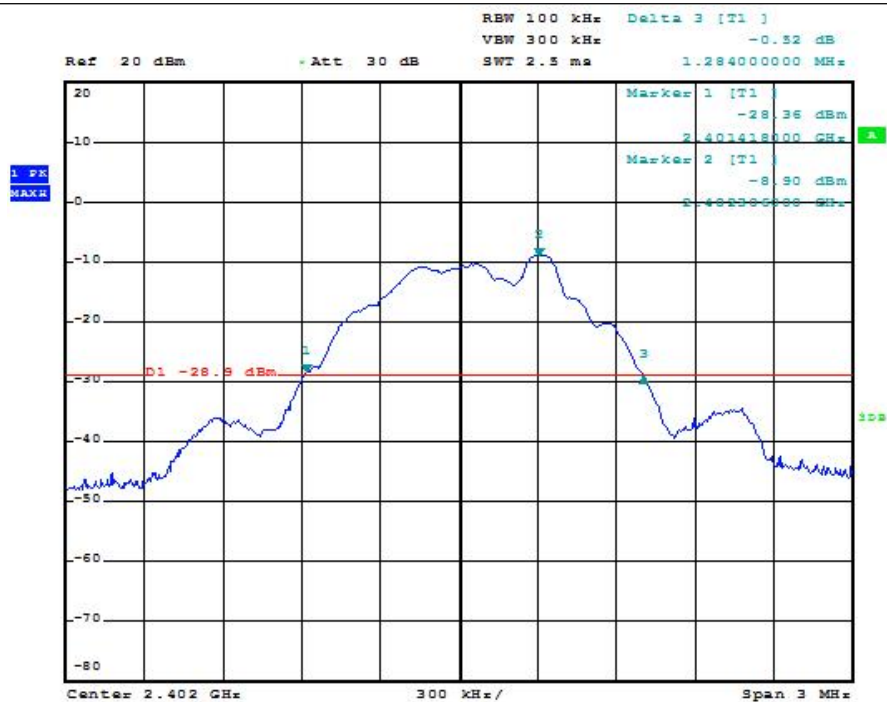
The test was performed at 2 channels (lowest and highest channel).

6.4. Test Results

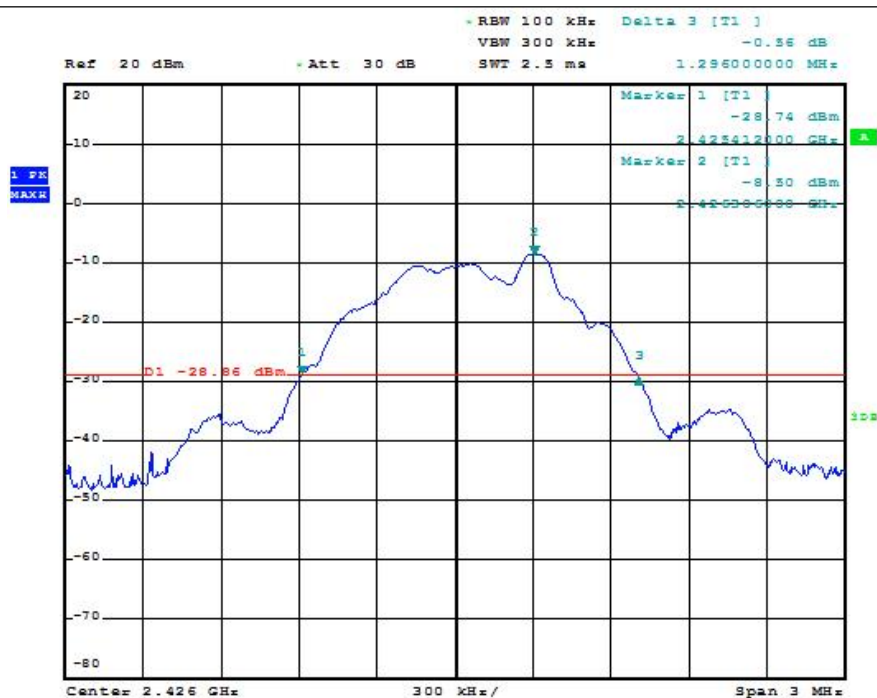
Pass

Test Frequency	20dB bandwidth(MHz)	Result
2402MHz	1.284	Pass
2426MHz	1.296	Pass
2440MHz	1.296	Pass
2480MHz	1.272	Pass

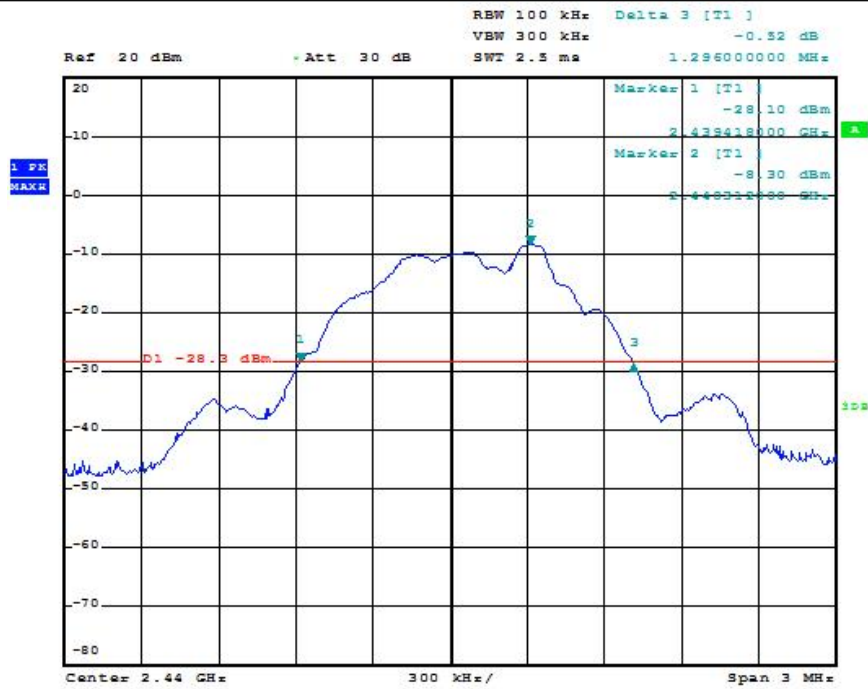
Test Frequency:2402MHz



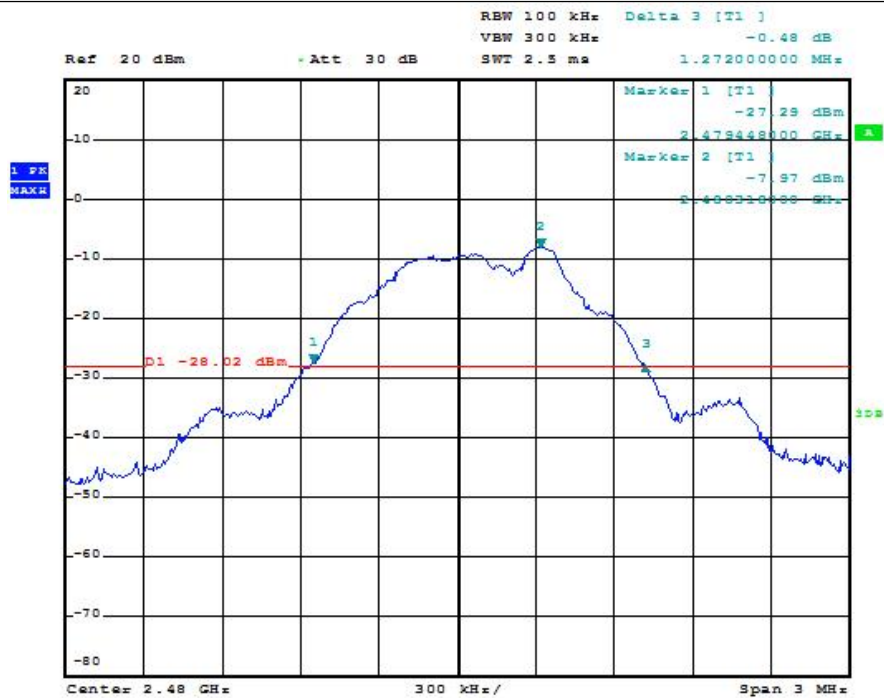
Test Frequency:2426MHz



Test Frequency:2440MHz



Test Frequency:2480MHz



7. ANTENNA REQUIREMENT

7.1. Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

7.2. Antenna Connected Construction

The antennas used for this product are PCB antenna that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 1.68dBi.

.....**End of Report**.....