

# RF TEST REPORT

**FCC ID: A5UWICH1201**

Test Report No.....: RF250305009-01-001

Product(s) Name.....: Indigo-2 WiFi Module

Model(s).....: WICH1201

Trade Mark.....: Whirlpool Corporation

Applicant.....: Whirlpool Corporation

Address.....: 2000 N M-63 Mail Drop 3005, Benton Harbor, MI, United States,  
49022


Receipt Date.....: 2025.04.01

Test Date.....: 2025.04.02~2025.05.06

Issued Date.....: 2025.05.06

Standards.....: 47 CFR FCC Part 15, Subpart C(Section 15.247);  
ANSI C63.10:2013

Testing Laboratory.....: Shenzhen Haiyun Standard Technical Co., Ltd.

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## History of this test report

Amendment Report Issue Date: 2025.05.06

☐ No additional attachment

☒ Additional attachments were issued following record

Attachment No.	Issue Date	Description
RF250305009-01-001	2025.05.06	Add three antenna types based on the original report. Therefore, the maximum conducted output power, radiated emission and band edge were tested with reference to the original report, while the rest remained unchanged.

# 1. General Information

## 1.1 Applicant

### Whirlpool Corporation

2000 N M-63 Mail Drop 3005, Benton Harbor, MI, United States, 49022

## 1.2 Manufacturer

### Whirlpool Corporation

2000 N M-63 Mail Drop 3005, Benton Harbor, MI, United States, 49022

## 1.3 Basic Description of Equipment Under Test

Sample No.	POC250305009-S001, POC250305009-S002, POC250305009-S003	
Equipment Name	Indigo-2 WiFi Module	
Model Name	WICH1201	
Trade Mark	Whirlpool Corporation	
Power Supply	12Vdc (adapter)	
EUT Stage	○ Product Unit	● Final-Sample
Operating Band	2400MHz ~ 2483.5MHz	
Product Type	IEEE 802.11b: WLAN (SISO) IEEE 802.11g: WLAN(SISO) IEEE 802.11n: WLAN(SISO)	
Nominal Bandwidth	20MHz	
Modulation	IEEE 802.11b: DSSS IEEE 802.11g: OFDM IEEE 802.11n: OFDM	
Data Rate (Mbps)	IEEE 802.11b mode: 1/2/5.5/11 IEEE 802.11g mode: 6/9/12/18/24/36/48/54 IEEE 802.11n mode: up to 72.2	
Antenna Information	Antenna type1: FPC antenna Model name: FXP830.07.0050C Antenna gain: 3.46 dBi	
	Antenna type2: FPC antenna Model name: FXP831.07.0050C Antenna gain: 3.28 dBi	
	Antenna type3: FPC antenna Model name: 2108792-2 Antenna gain: 4.9 dBi	

Eleven channels are provided for 802.11b, 802.11g, 802.11n (20MHz):

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
2400MHz ~ 2483.5 MHz	01	2412MHz	07	2442MHz
	02	2417MHz	08	2447MHz
	03	2422MHz	09	2452MHz
	04	2427MHz	10	2457MHz
	05	2432MHz	11	2462MHz
	06	2437MHz	/	/

## 1.4 Transmit Operating Mode

Transmit Operating Mode					Transmit Multiple Antennas					
<input checked="" type="radio"/>	Operating mode 1 (single antenna)				<input checked="" type="radio"/>	1TX				
<input type="radio"/>	Operating mode 2 (multiple antenna, no beam forming)				<input type="radio"/>	2TX	<input type="radio"/>	3TX	<input type="radio"/>	4TX
<input type="radio"/>	Operating mode 3 (multiple antenna, with beam forming)				<input type="radio"/>	2TX	<input type="radio"/>	3TX	<input type="radio"/>	4TX
<input checked="" type="radio"/>	802.11b	Operating mode	<input checked="" type="radio"/>	1TX	<input type="radio"/>	2TX	<input type="radio"/>	3TX		
<input checked="" type="radio"/>	802.11g	Operating mode	<input checked="" type="radio"/>	1TX	<input type="radio"/>	2TX	<input type="radio"/>	3TX		
<input checked="" type="radio"/>	802.11n(20MHz)	Operating mode	<input checked="" type="radio"/>	1TX	<input type="radio"/>	2TX	<input type="radio"/>	3TX		

## 2. Summary of Test Results

### 2.1 Summary of Test Items

47 CFR FCC Part 15, Subpart C (Section 15.247)			
Test item	FCC Clause	Results	Remarks
AC Power Conducted Emission	15.207	Note2	Meet the requirement of the limit
Radiated Emission and Band Edge Measurement	15.205/15.209 /15.247(d)	Pass	Meet the requirement of the limit
Spurious Emission at Antenna Port	15.247(d)	Note2	Meet the requirement of the limit
6dB Bandwidth	15.247(a)(2)	Note2	Meet the requirement of the limit
Maximum Conducted Power	15.247(b)	Pass	Meet the requirement of the limit
Power Spectral Density	15.247(e)	Note2	Meet the requirement of the limit
Antenna Requirements	15.203	Compliance	Note1
Note: 1. The EUT has a FPC antenna arrangement which was permanently attached. 2. For test data, please refer to the report RF191122C10.			

### 2.2 Application of Standard

47 CFR FCC Part 15, Subpart C (Section 15.247)

KDB 558074 D01 15.247 Meas Guidance v05r02

ANSI C63.10:2013

## 2.3 Test Instruments

Radiated Emission							
No.	Name of Equipment	Manufacturer	Model Number	Serial Number	Inventory No.	Last Calibration	Due Calibration
1	Test receiver	Rohde&Schwarz	ESU	100184	JLE011	2025/3/1	2026/2/28
2	Log periodic antenna	Schwarzbeck	VULB 9168	1151	JLE012	2025/4/12	2026/4/11
3	Low frequency amplifier	/	LNA 0920N	2014	JLE023	2025/3/1	2026/2/28
4	High frequency amplifier	Schwarzbeck	BBV 9718	9718-284	JLE024	2025/3/1	2026/2/28
5	Horn Antenna	SCHWARZBECK	BBHA 9120 D	02670	JLE028	2025/4/12	2026/4/11
6	Temp&Humidity Recorder	Meideshi	JR900	/	JLE021	2025/4/15	2026/4/14
7	Horn Antenna	SCHWARZBECK	BBHA 9170	9170#685	JLE029	2024/7/15	2025/7/14
8	Loop Antenna	SCHWARZBECK	FMZB1519B	00029	JLE030	2024/7/15	2025/7/14
9	Broadband preamplifier	Schwarzbeck	BBV9721	9721-019	JLE025	2025/3/1	2026/2/28
10	Test software	Farad Technology Co., Ltd	EZ-EMC Ver.TW-03A2				
Conducted Emission							
1	LISN	Rohde&Schwarz	ENV216	100075	JLE002	2025/3/1	2026/2/28
2	ISN	Schwarzbeck	CATE 5 8158	#171	JLE003	2025/2/21	2026/2/20
3	ISN	Schwarzbeck	CAT 3 8158	00187	JLE032	2025/2/21	2026/2/20
4	Test receiver	Rohde&Schwarz	ESCI	100718	JLE010	2025/3/1	2026/2/28
5	Pulse limiter	Rohde&Schwarz	ESH3-Z2	102299	JLE047	2025/3/1	2026/2/28
6	Temp&Humidity Recorder	Meideshi	JR900	/	JLE020	2025/4/15	2026/4/14
7	Test software	Farad Technology Co., Ltd	EZ-EMC Ver.TW-03A2				



## 2.4 Test Mode

Test Items	Mode	Data Rate	Channel
Radiated Emission and Band Edge Measurement	802.11B	1Mbps	01/06/11
	802.11G	6Mbps	01/06/11
	802.11N20	MCS0	01/06/11
Maximum Output Power	802.11B	1Mbps	01/06/11
	802.11G	6Mbps	01/06/11
	802.11N20	MCS0	01/06/11

Note: 1. For Radiated Emission below 1GHz, only worst case was recorded.

## 2.5 Test Condition

Applicable to	Environmental conditions	Input Power	Tested by
Radiated Emission and Band Edge Measurement	24.2°C, 49% RH	DC 12V	Freedom Zhuo
Maximum Output Power	23.4°C, 46% RH	DC 12V	Albert Fan

Note: The applicant declare the operating environment of EUT as below:

Normal conditions: 12V DC, 0~45°C

## 2.6 Duty Cycle of Test Signal

Test result: PASS

Note: For test data, please refer to the report RF191122C10.

## 2.7 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT.

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Uncertainty	
Parameter	Uncertainty
Occupied Channel Bandwidth	±102kHz
RF power conducted	±0.377dB
Power Spectral Density	±0.743dB
Conducted Spurious Emission	±1.328dB
Conducted emission(9kHz~30MHz) AC main	±2.68dB
Radiated emission(9kHz~30MHz)	±2.74dB
Radiated emission (30MHz~1GHz)	±4.22dB
Radiated emission (1GHz~18GHz)	±5.06dB
Radiated emission (18GHz~40GHz)	±4.98dB

## 2.8 Test Location

Company:	Shenzhen Haiyun Standard Technical CO., Ltd.
Address:	No. 110-113, 115, 116, Block B, Jinyuan Business Building, Bao'an District, Shenzhen, China
CNAS Registration Number:	CNAS L18252
CAB identifier	CN0145
A2LA Certificate Number	6823.01
Telephone:	0755-26024411

## 2.9 SUPPORT UNITS

Support Equipment				
No.	Equipment	Model Name	Manufacturer	Remarks
1	Adapter	WA-30J12FU	Asian Power Devices Inc.	/

## 2.10 Description of Support Units

None

## 2.11 Deviation from Standards

None

### 3. Test Procedure And Results

#### 3.1 AC Power Line Conducted Emission

##### 3.1.1 Limit

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB( $\mu$ V)	Average Level dB( $\mu$ 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.

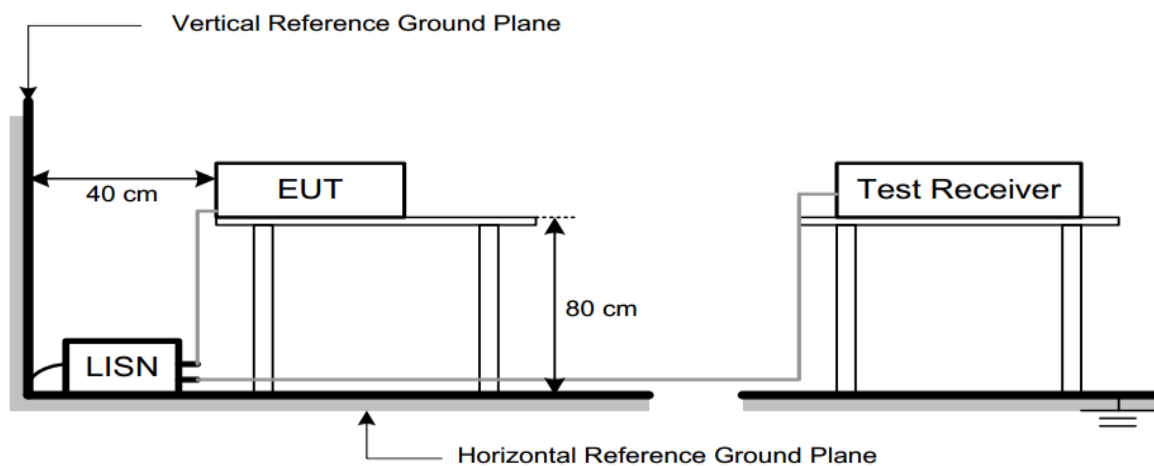
##### 3.1.2 Test Procedure

Test Method	
<input checked="" type="radio"/> Conducted Measurement	<input type="radio"/> Radiated Measurement
Test Channels	
<input type="radio"/> Lowest, Middle and Highest Channel	<input type="radio"/> Lowest and Highest Channel
Environmental conditions	
<input checked="" type="radio"/> Normal	<input type="radio"/> Normal and Extreme

Note: ● : Test    ○ : No Test

- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

### 3.1.3 Test Setup



### 3.1.4 Test Result

Test result: PASS

Note: For test data, please refer to the report RF191122C10.

## 3.2 Radiated Emission and Band Edge

### 3.2.1 Limit

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

Frequency (MHz)	Distance Meters(m)	Field Strength Limit	
		$\mu\text{V/m}$	$\text{dB}(\mu\text{V})/\text{m}$
0.009 – 0.49	300	2400/F(kHz)	-
0.490 – 1.705	30	24000/F(kHz)	-
1.705 – 30	30	30	-
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 $\text{dB}(\mu\text{V})/\text{m}$ (Peak) 54.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average)	

Note: (1) Emission level  $\text{dB}\mu\text{V} = 20 \log \text{Emission level } \mu\text{V/m}$

(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.

### 3.2.2 Test Procedure

Test Method	
<input type="radio"/> Conducted Measurement	<input checked="" type="radio"/> Radiated Measurement
Test Channels	
<input checked="" type="radio"/> Lowest, Middle and Highest Channel	<input type="radio"/> Lowest and Highest Channel
Environmental conditions	
<input checked="" type="radio"/> Normal	<input type="radio"/> Normal and Extreme
Note: <input checked="" type="radio"/> : Test <input type="radio"/> : No Test	

- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
- The measuring distance of 3 m or 1.5m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of

the antenna are set to make the measurement.

- d) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- e) The 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.
- f) The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g) All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1 GHz)
- h) All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1 GHz)
- i) For the actual test configuration, please refer to the related Item -EUT Test Photos.

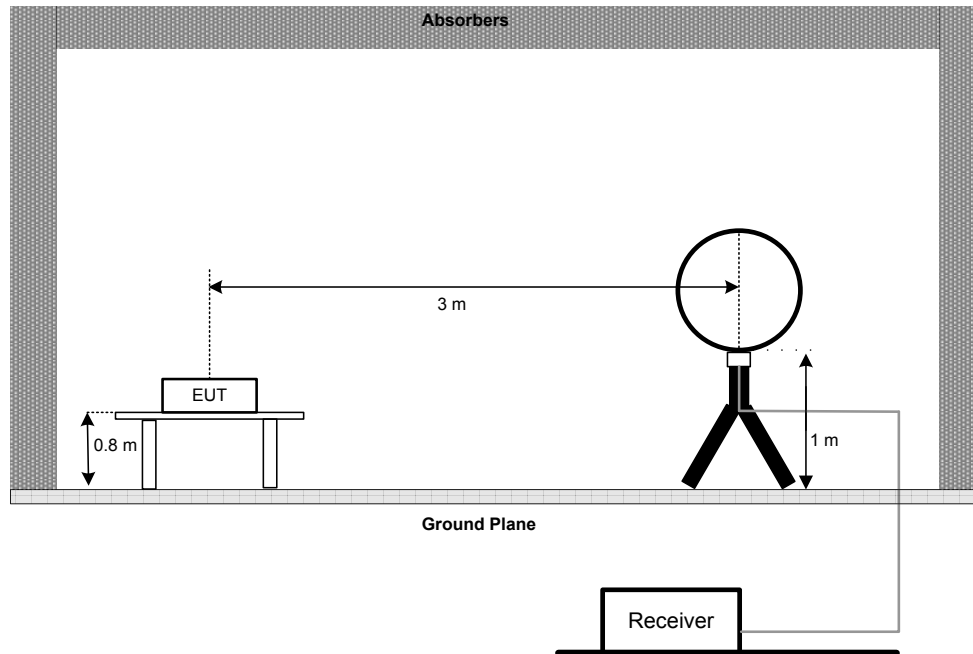
The following table is the setting of the receiver:

Spectrum Parameters	Setting
Start ~ Stop Frequency	9 kHz~150 kHz for RBW 200 Hz
Start ~ Stop Frequency	0.15 MHz~30 MHz for RBW 9 kHz
Start ~ Stop Frequency	30 MHz~1000 MHz for RBW 100 kHz

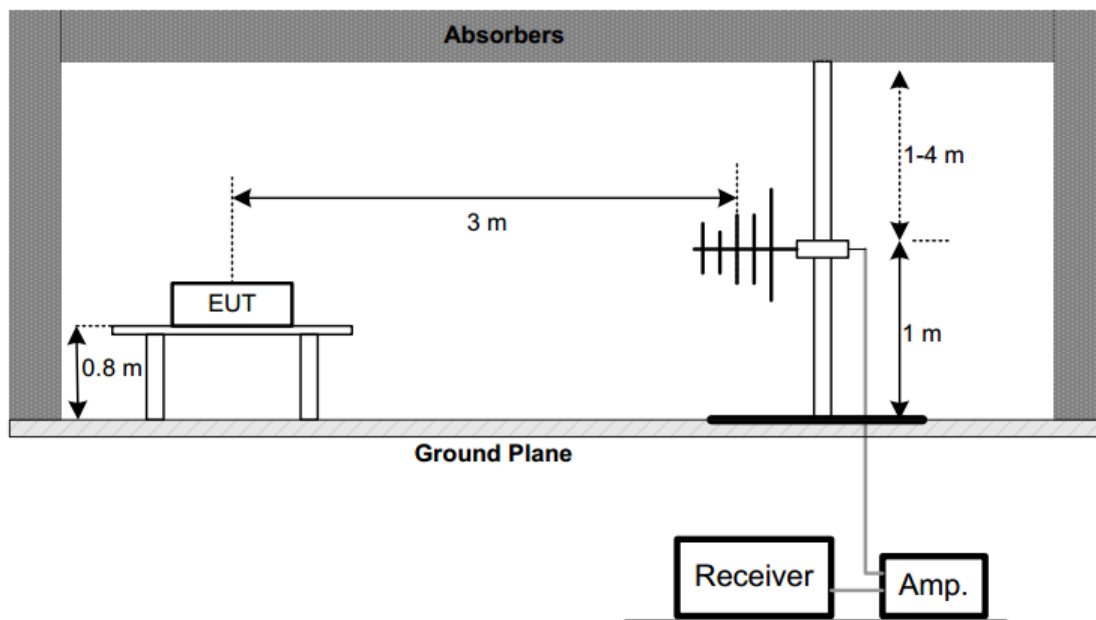
Spectrum Parameters	Setting
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW (Emission in restricted band)	1 MHz / 3 MHz for PK value 1 MHz / 1/T Hz for AVG value

### 3.2.3 Test Setup

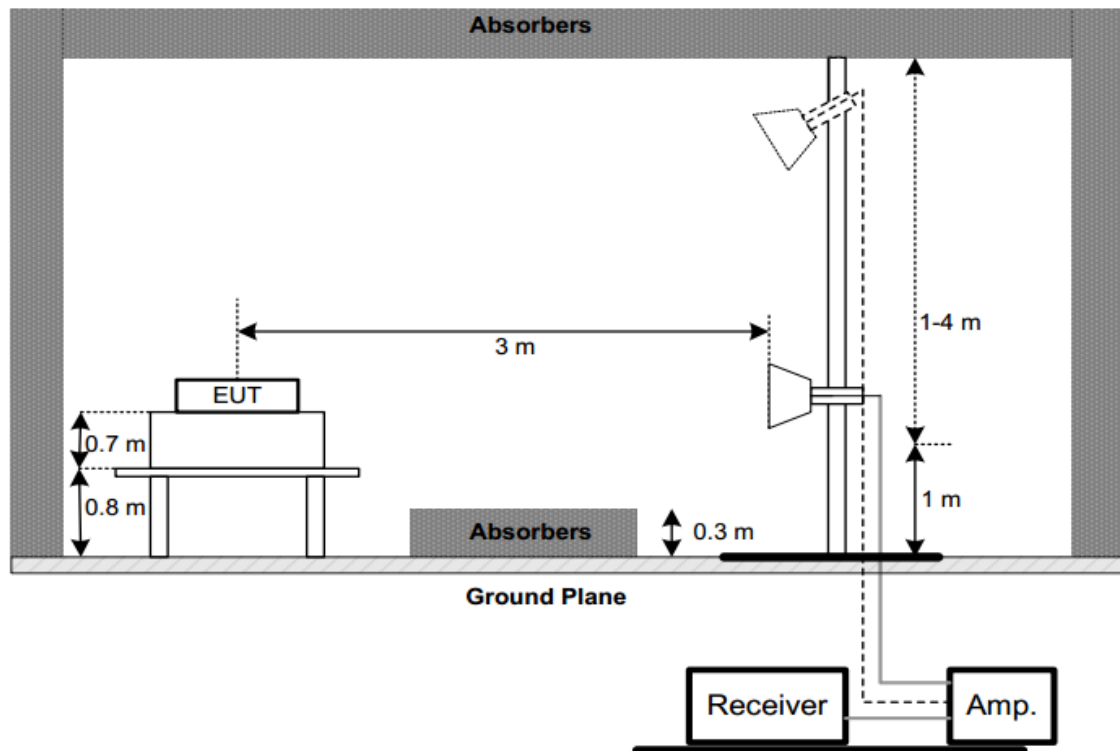
#### (A) Radiated Emission Test Set-Up Frequency Below 30MHz



#### (B) Radiated Emission Test Set-Up Frequency 30 MHz-1000 MHz



### (C) Radiated Emission Test Set-Up Frequency Above 1 GHz



### 3.2.4 Test Result

#### 1) Radiated emission: 9kHz-30MHz

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not recorded in this report.

#### 2) Radiated emission: 30MHz-1GHz

##### Note:

1. Measurement = Reading + Correct Factor.
2. Over = Measurement – Limit

We only recorded the data of the worst mode. Please see the following:

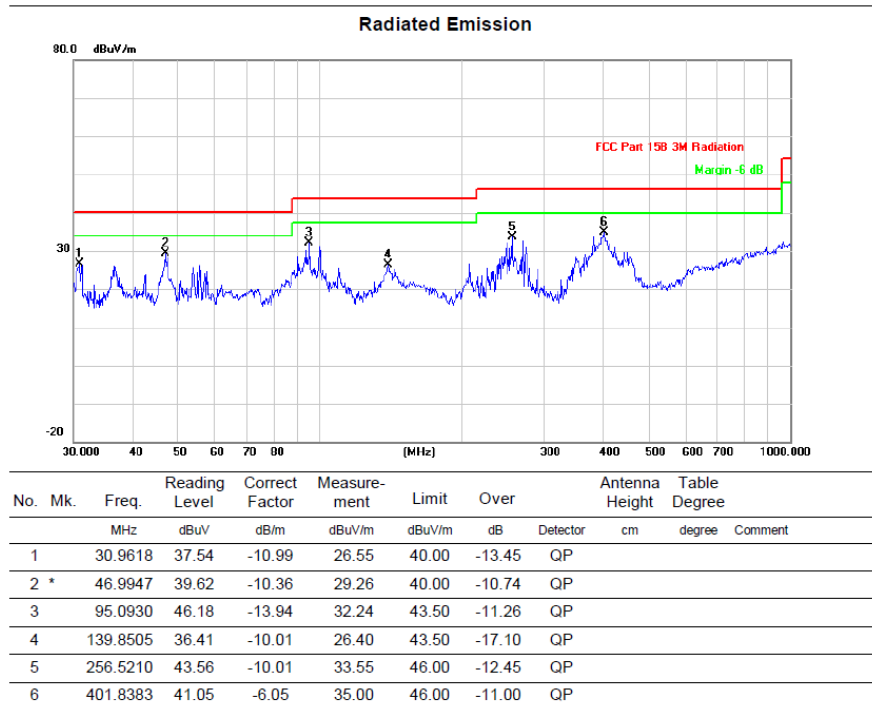


For antenna type1(Model name: FXP830.07.0050C)

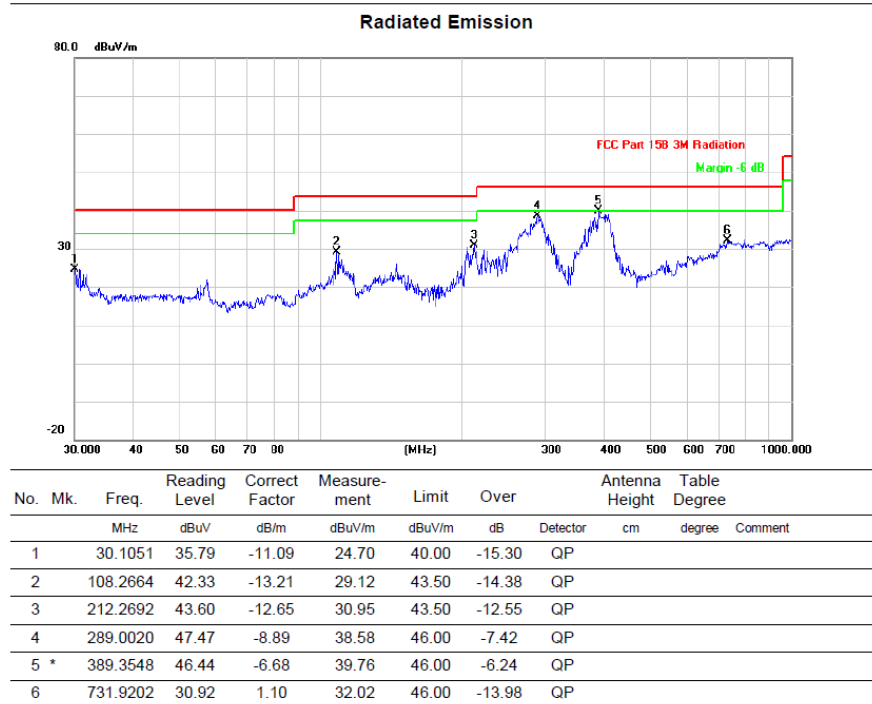
Below 1G (30MHz~1GHz)

Worst Case Operating Mode: 11B Channel 01

### VERTICAL



### HORIZONTAL

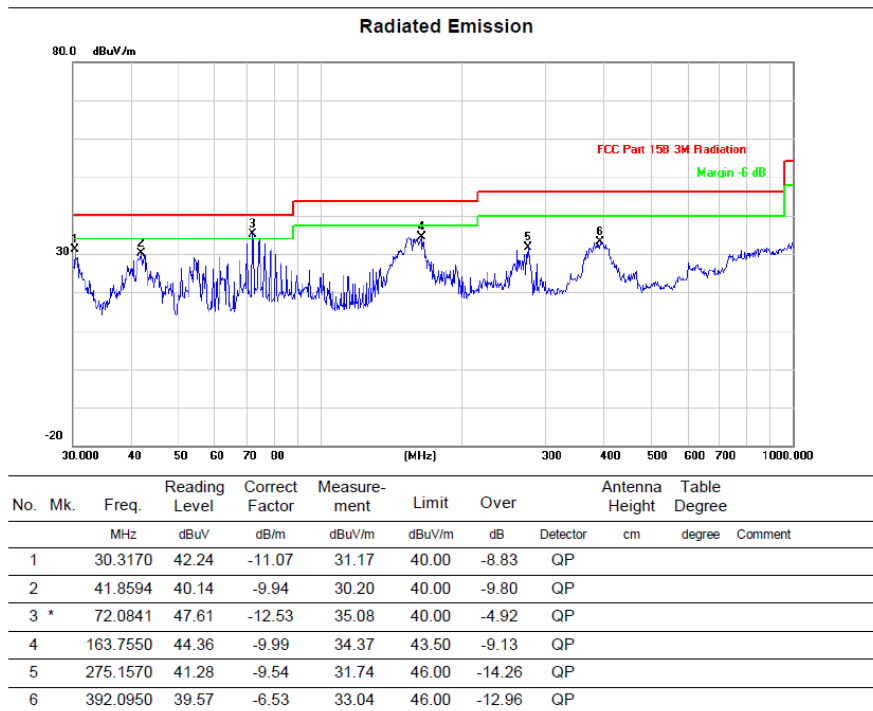


For antenna type2(Model name: FXP831.07.0050C)

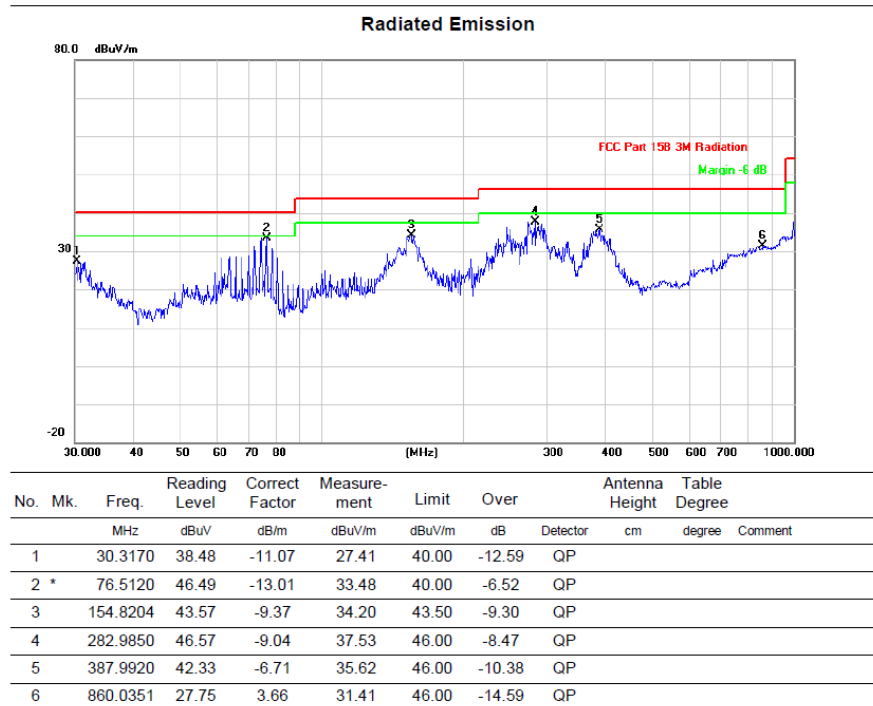
Below 1G (30MHz~1GHz)

Worst Case Operating Mode: 11B Channel 01

### VERTICAL



### HORIZONTAL

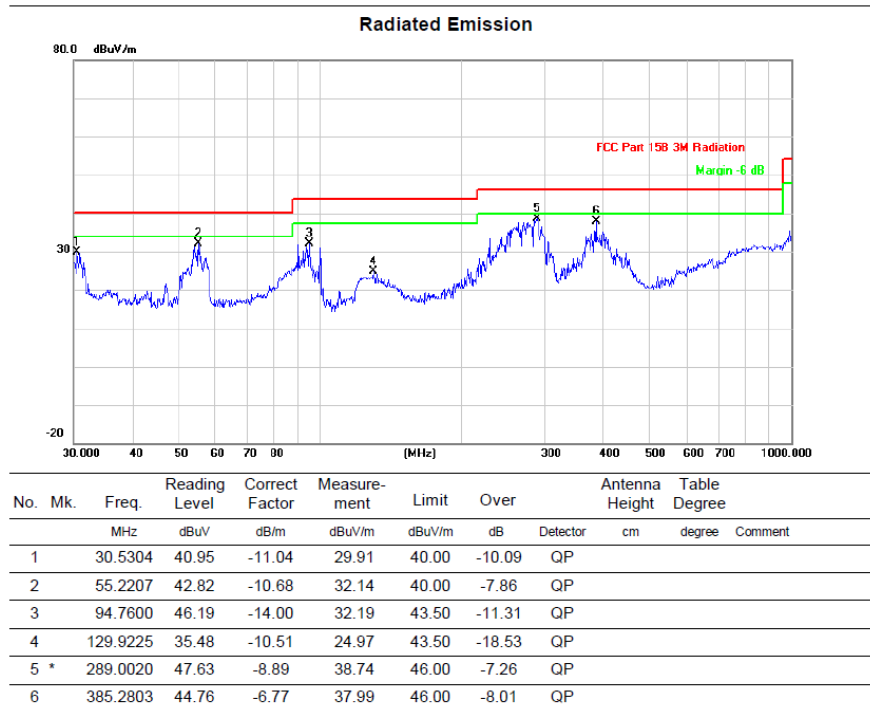


For antenna type3(Model name: 2108792-2)

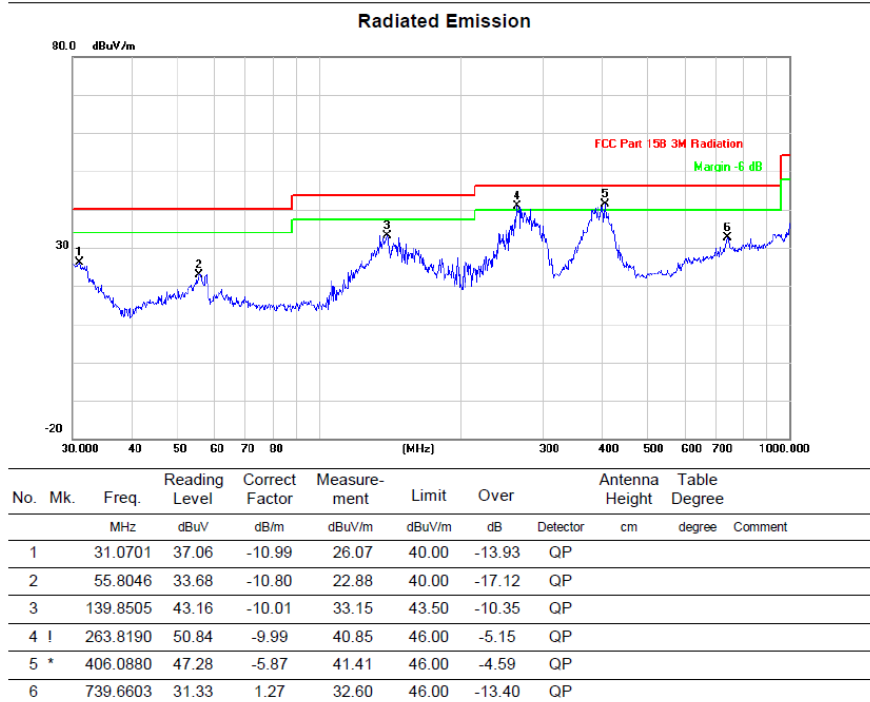
Below 1G (30MHz~1GHz)

Worst Case Operating Mode: 11B Channel 01

### VERTICAL



### HORIZONTAL



### 3) Radiated emission: Above 1GHz

#### Note:

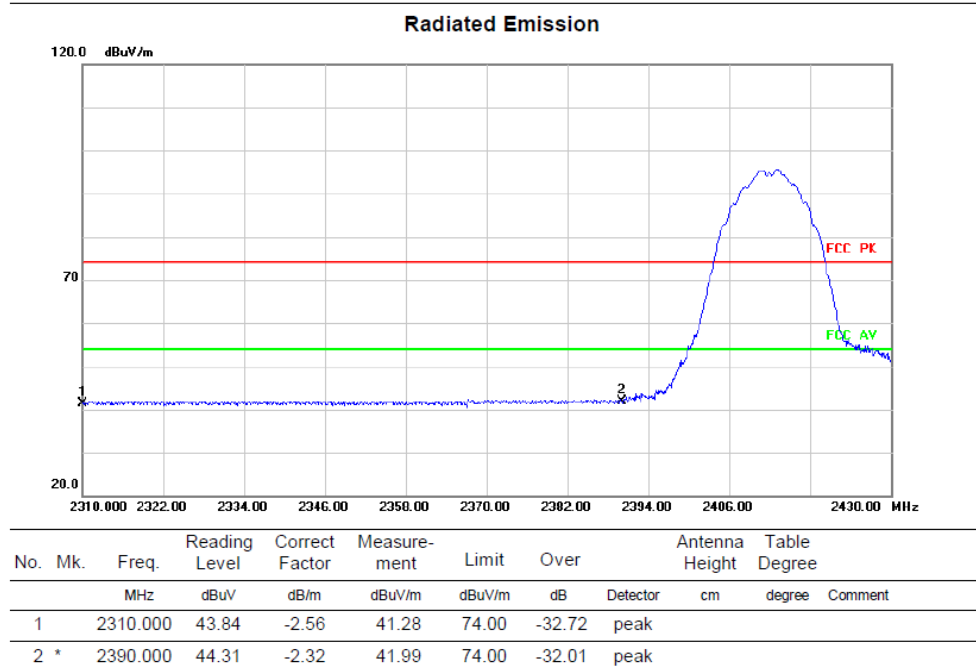
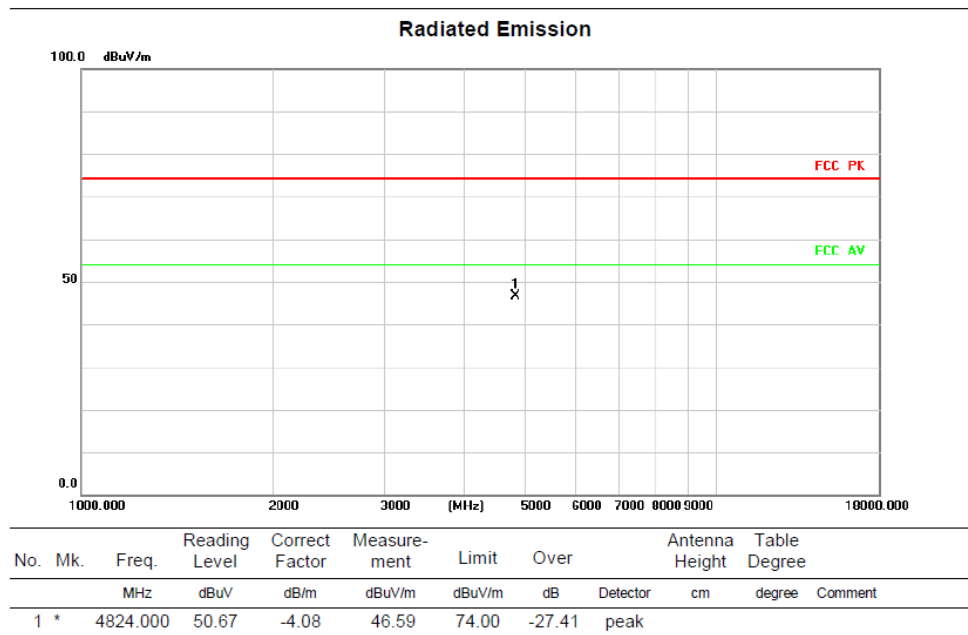
1. Measurement = Reading + Correct Factor.

2. Over = Measurement – Limit

For antenna type1(Model name: FXP830.07.0050C)

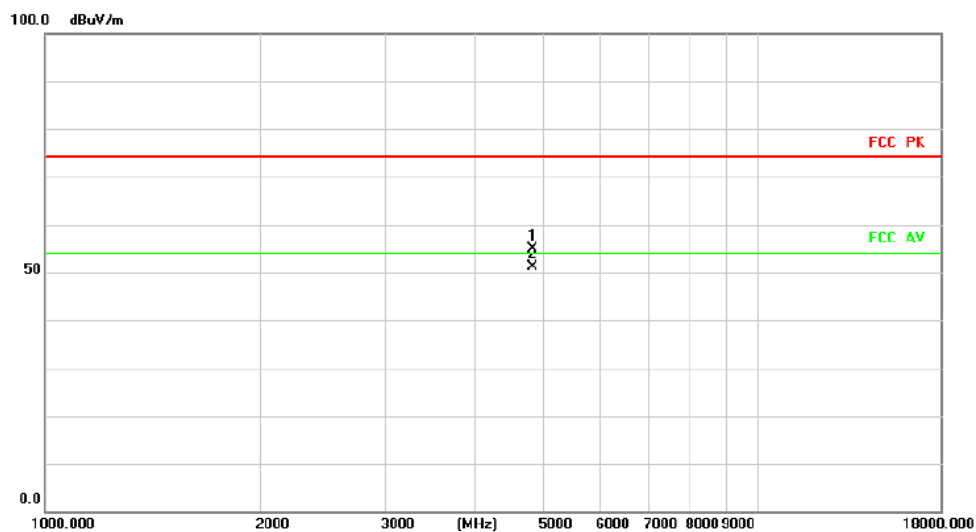
Above 1G (1GHz~18GHz)	Test mode:11B	Test Channel:1
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#### VERTICAL



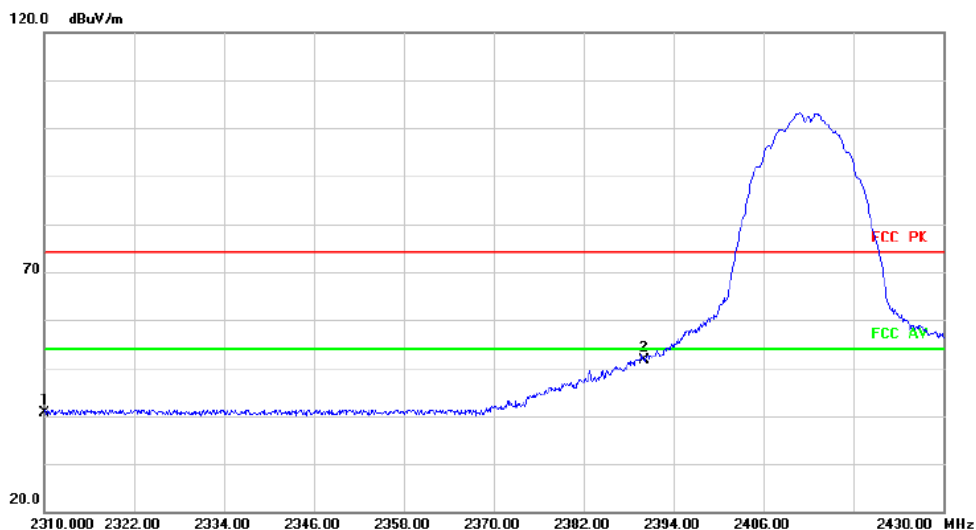
## HORIZONTALA

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		4824.000	58.91	-4.08	54.83	74.00	-19.17			peak
2	*	4824.000	55.18	-4.08	51.10	54.00	-2.90			AVG

### Radiated Emission



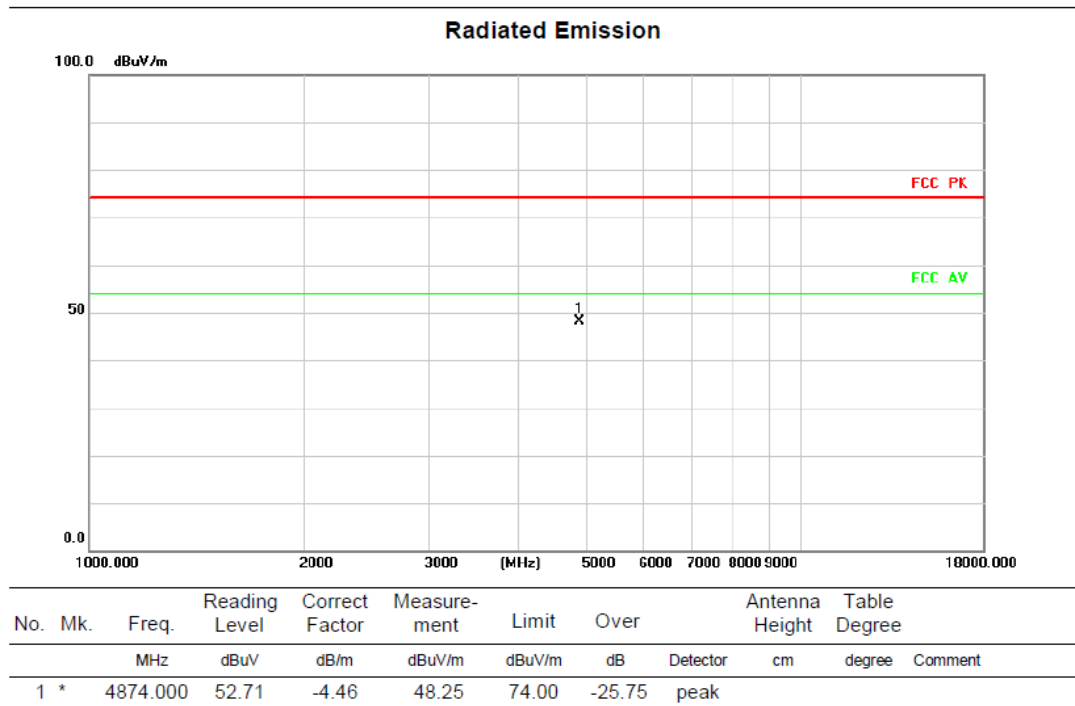
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	43.30	-2.56	40.74	74.00	-33.26			peak
2	*	2390.000	54.05	-2.32	51.73	74.00	-22.27			peak

Above 1G (1GHz~18GHz)

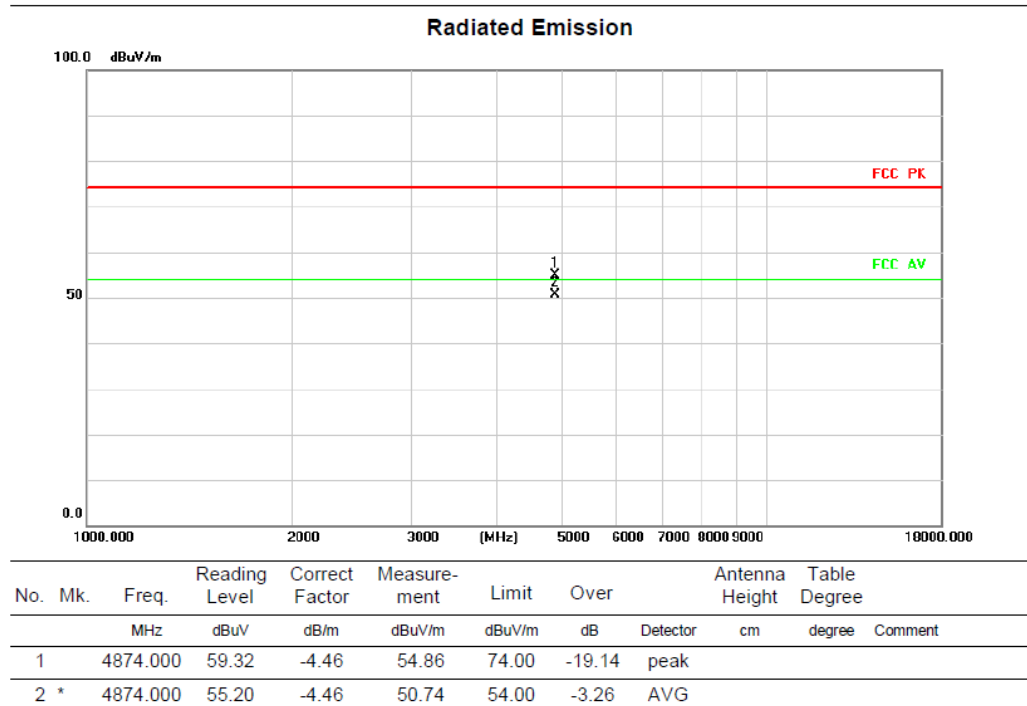
Test mode:11B

Test Channel:6

VERTICAL



HORIZONTAL



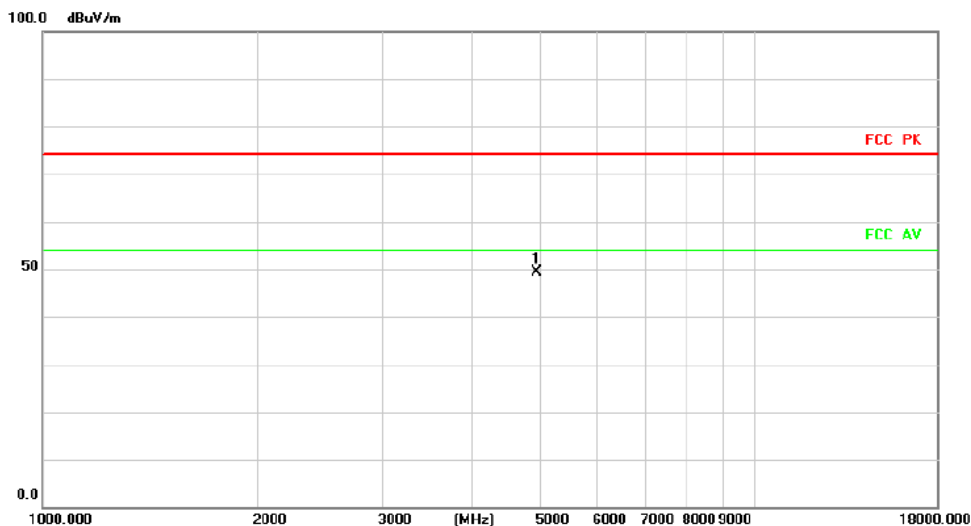
Above 1G (1GHz~18GHz)

Test mode: 11B

Test Channel:11

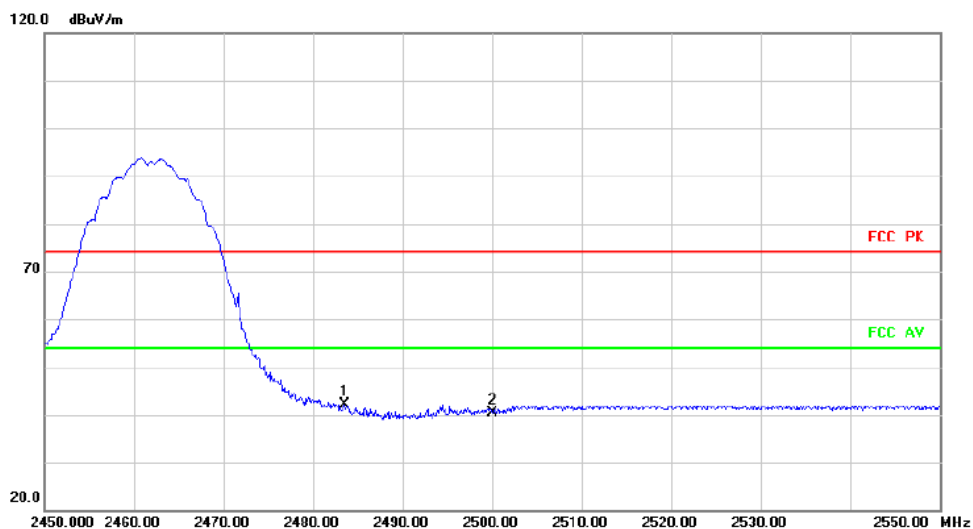
VERTICAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4924.000	54.03	-4.56	49.47	74.00	-24.53	peak	

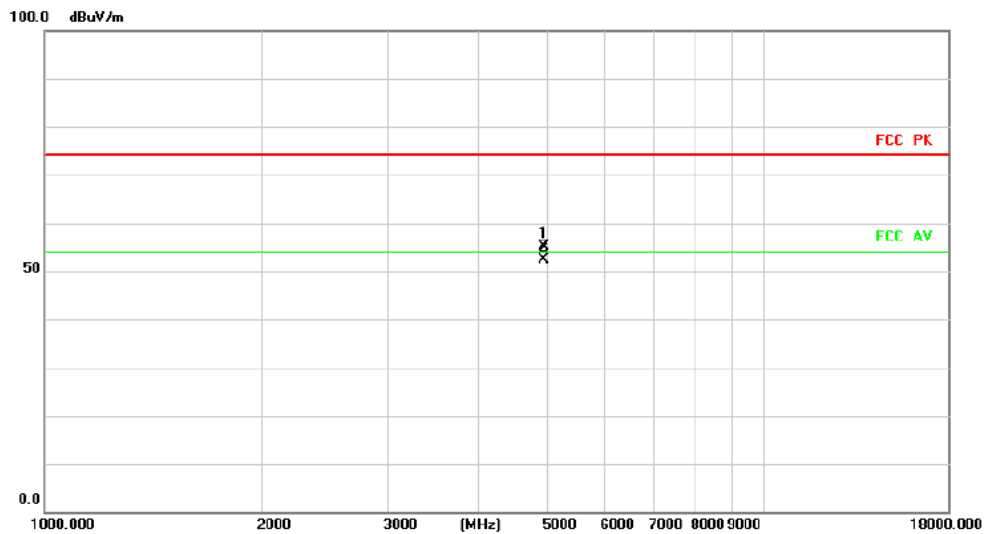
### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	2483.500	43.59	-1.50	42.09	74.00	-31.91	peak	
2		2500.000	41.63	-1.34	40.29	74.00	-33.71	peak	

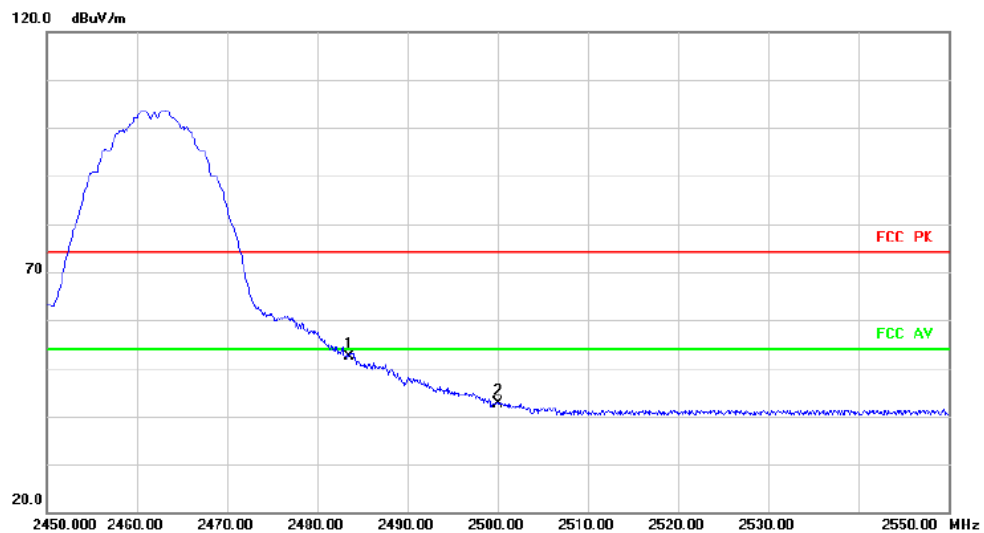
## HORIZONTAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		4924.000	59.66	-4.56	55.10	74.00	-18.90	peak		
2	*	4924.000	56.87	-4.56	52.31	54.00	-1.69	AVG		

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	2483.500	53.98	-1.50	52.48	74.00	-21.52	peak		
2		2500.000	43.99	-1.34	42.65	74.00	-31.35	peak		



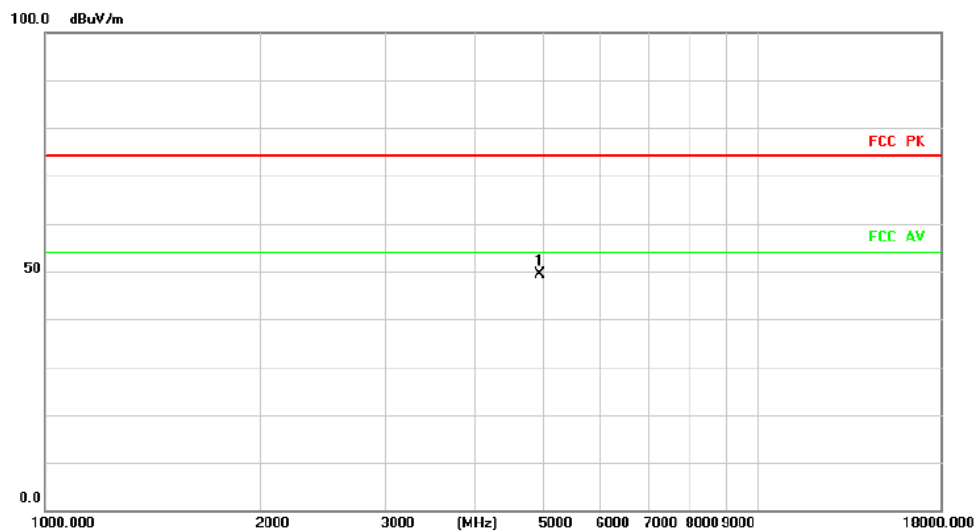
Above 1G (1GHz~18GHz)

Test mode:11G

Test Channel:1

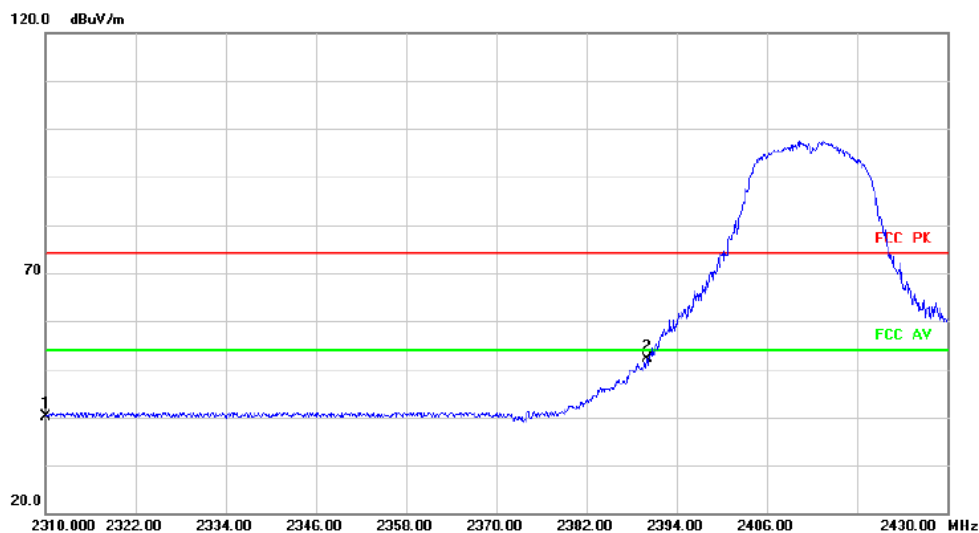
VERTICAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4824.000	53.35	-4.08	49.27	74.00	-24.73	peak	

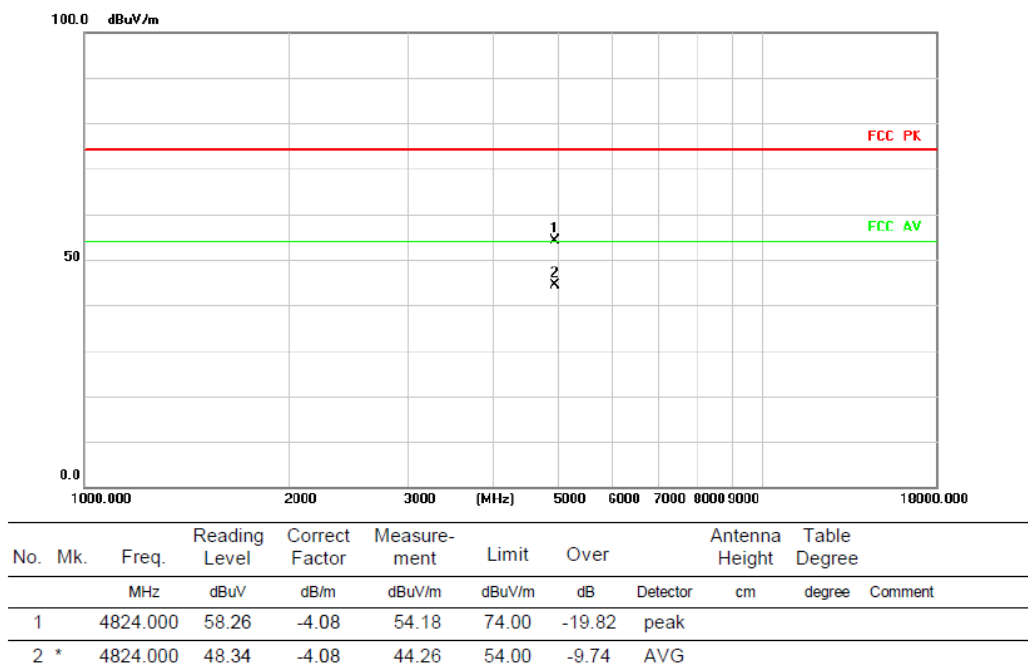
### Radiated Emission



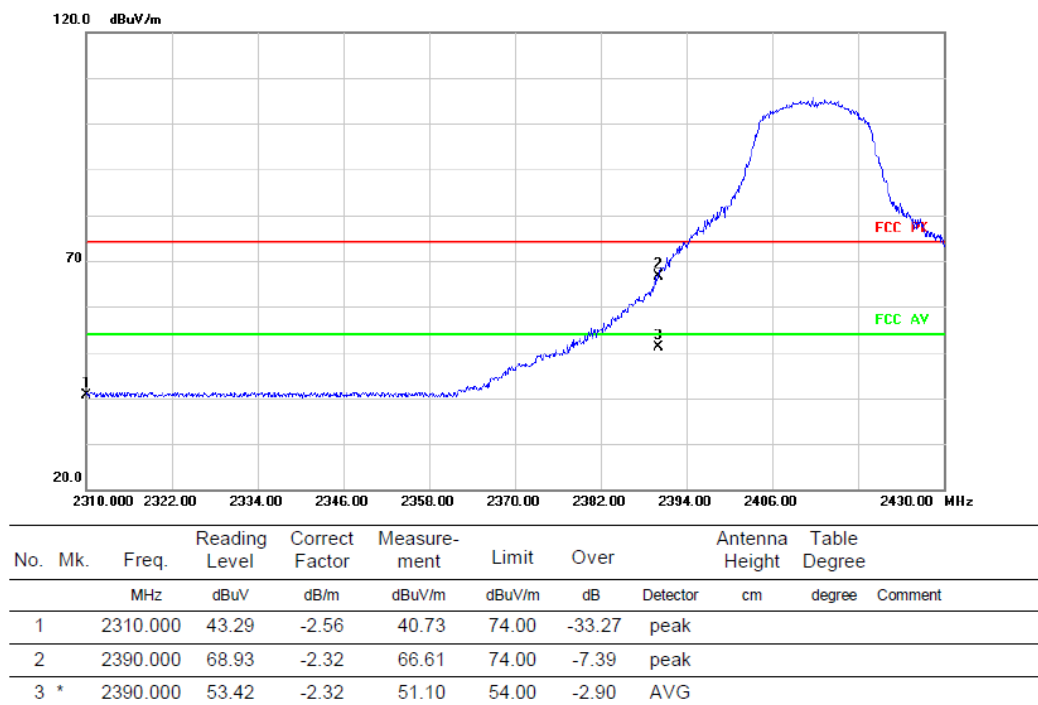
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2310.000	42.61	-2.56	40.05	74.00	-33.95	peak	
2	*	2390.000	54.56	-2.32	52.24	74.00	-21.76	peak	

## HORIZONTAL

### Radiated Emission



### Radiated Emission

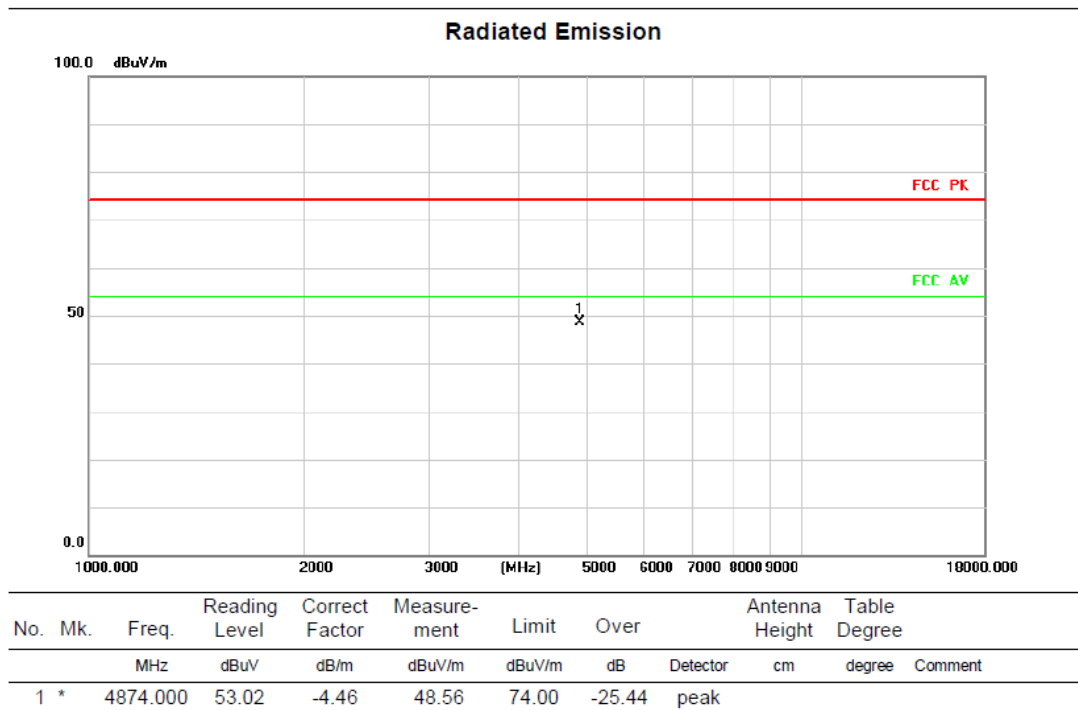


Above 1G (1GHz~18GHz)

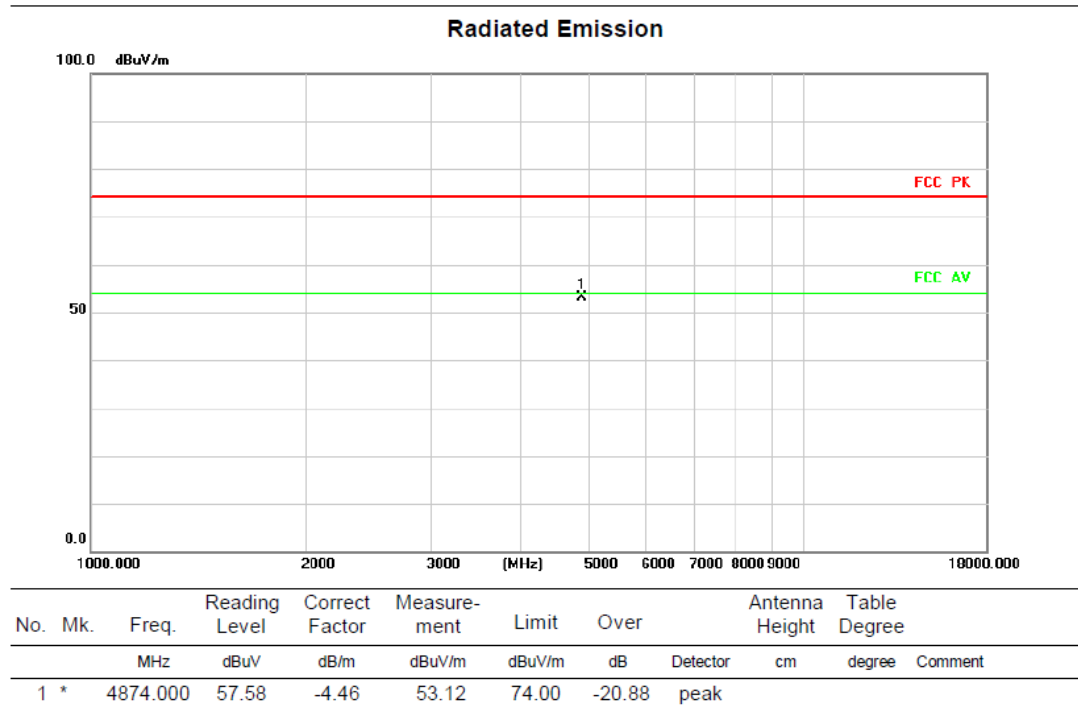
Test mode: 11G

Test Channel:6

VERTICAL



HORIZONTAL



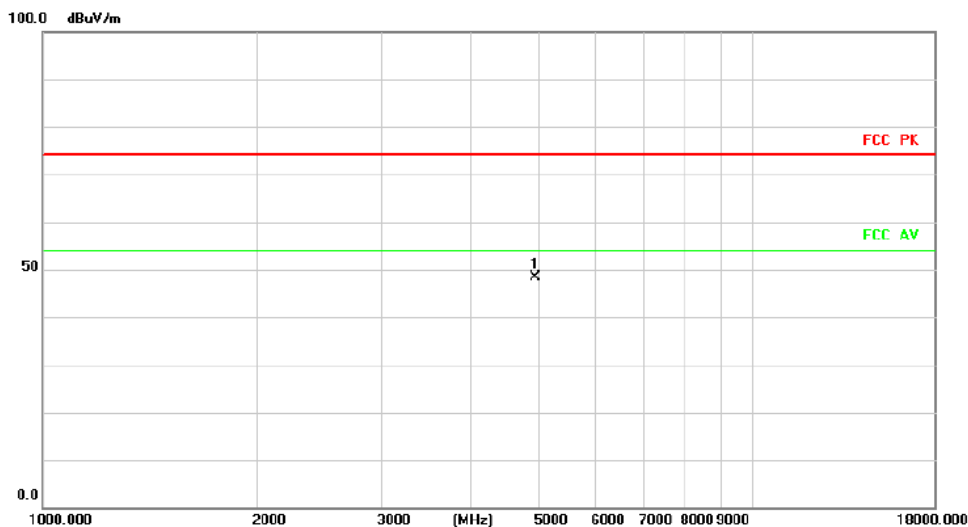
Above 1G (1GHz~18GHz)

Test mode: 11G

Test Channel:11

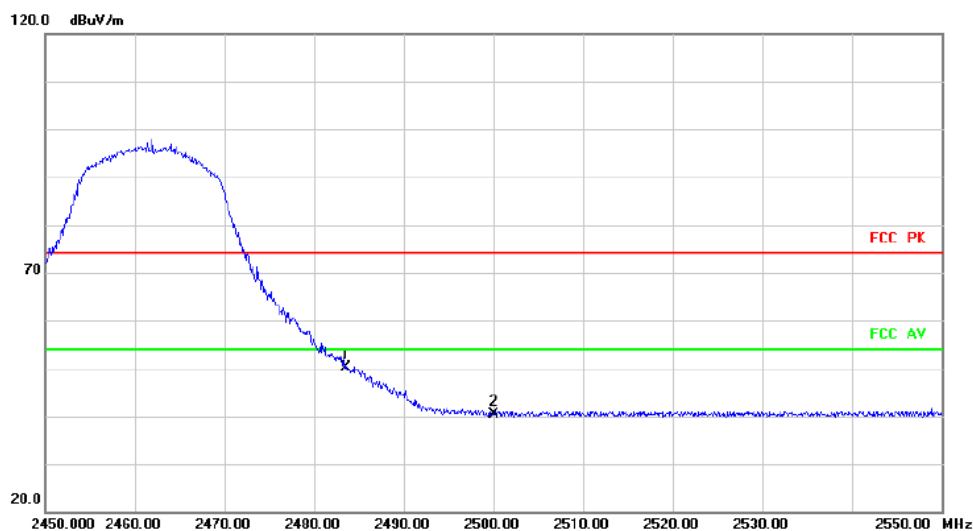
VERTICAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	4924.000	52.88	-4.56	48.32	74.00	-25.68	peak		

### Radiated Emission



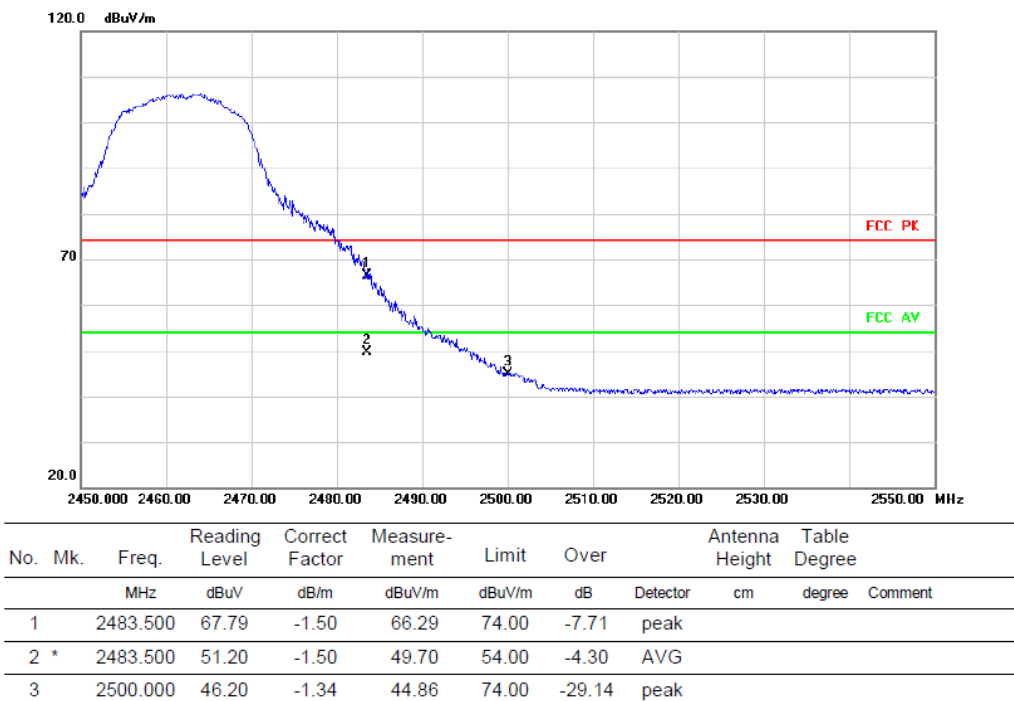
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	2483.500	51.60	-1.50	50.10	74.00	-23.90	peak		
2		2500.000	41.64	-1.34	40.30	74.00	-33.70	peak		

## HORIZONTAL

### Radiated Emission



### Radiated Emission

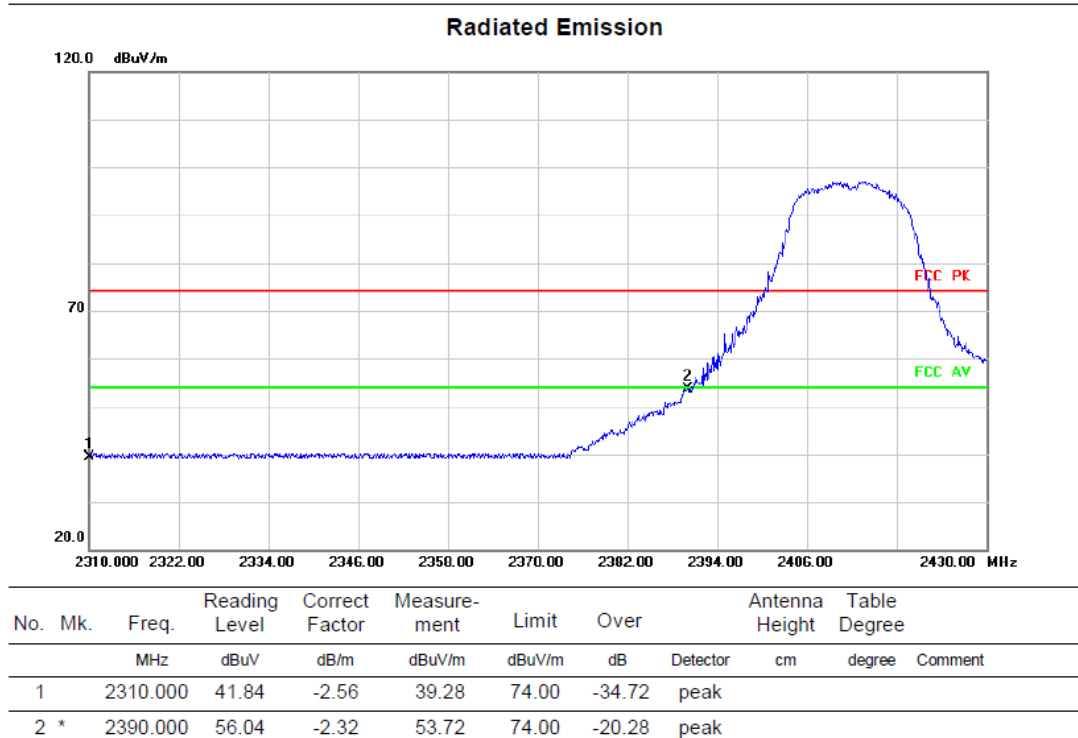
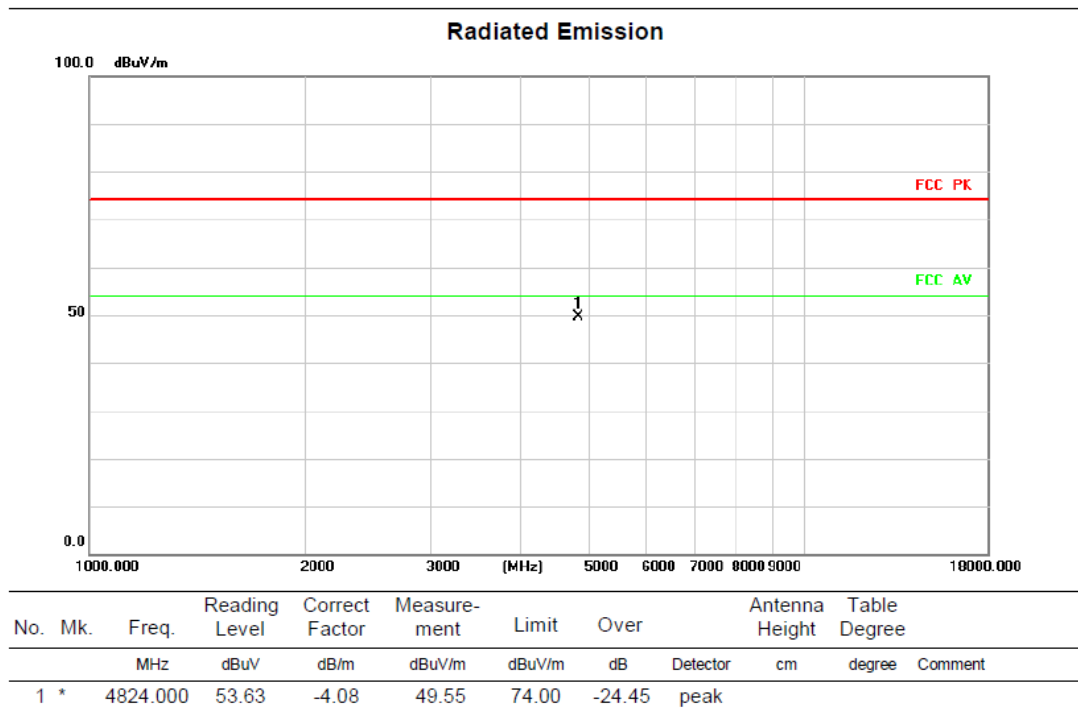


Above 1G (1GHz~18GHz)

Test mode: 11N20

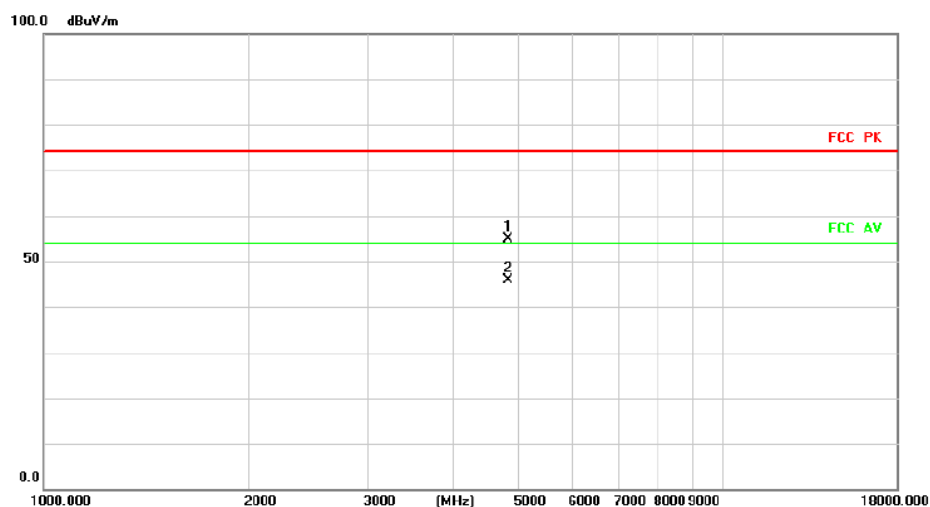
Test Channel:1

VERTICAL



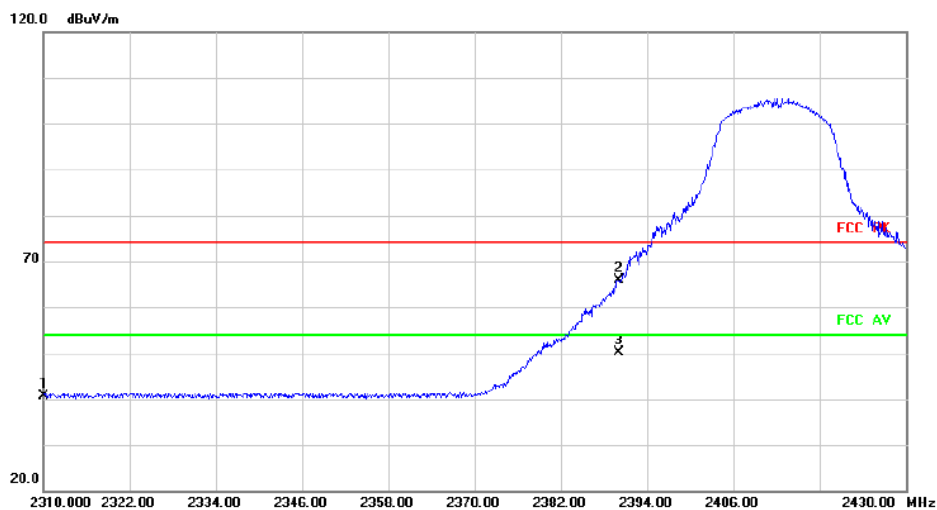
## HORIZONTAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		4824.000	58.99	-4.08	54.91	74.00	-19.09	peak		
2	*	4824.000	50.00	-4.08	45.92	54.00	-8.08	AVG		

### Radiated Emission



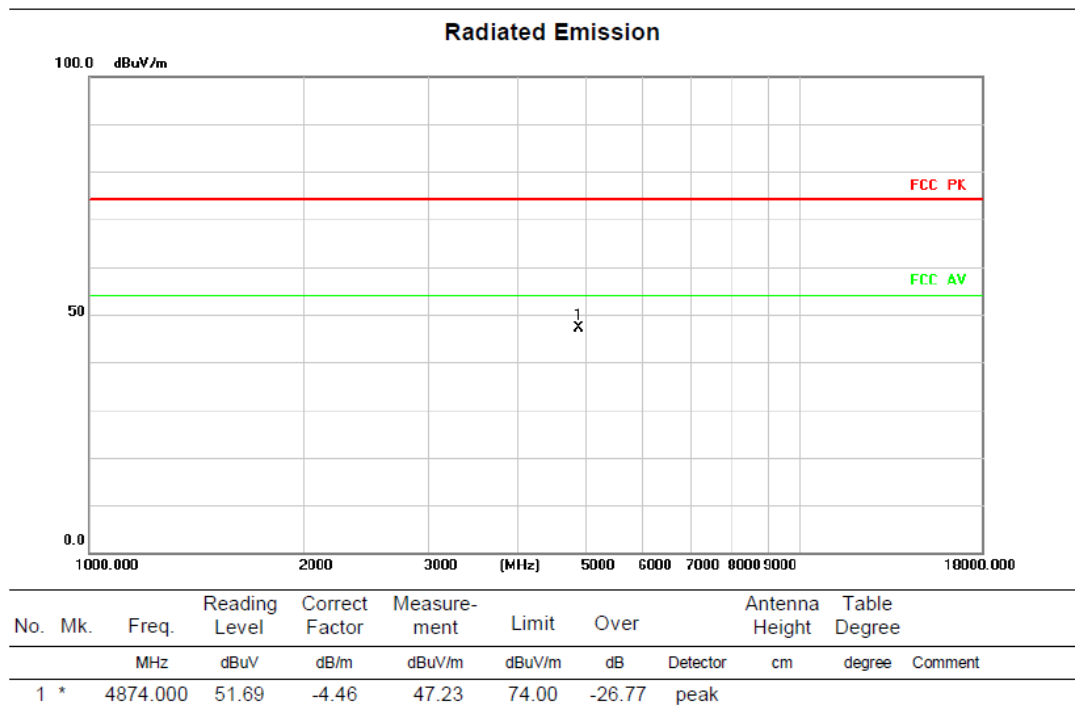
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	43.31	-2.56	40.75	74.00	-33.25	peak		
2		2390.000	68.26	-2.32	65.94	74.00	-8.06	peak		
3	*	2390.000	52.48	-2.32	50.16	54.00	-3.84	AVG		

Above 1G (1GHz~18GHz)

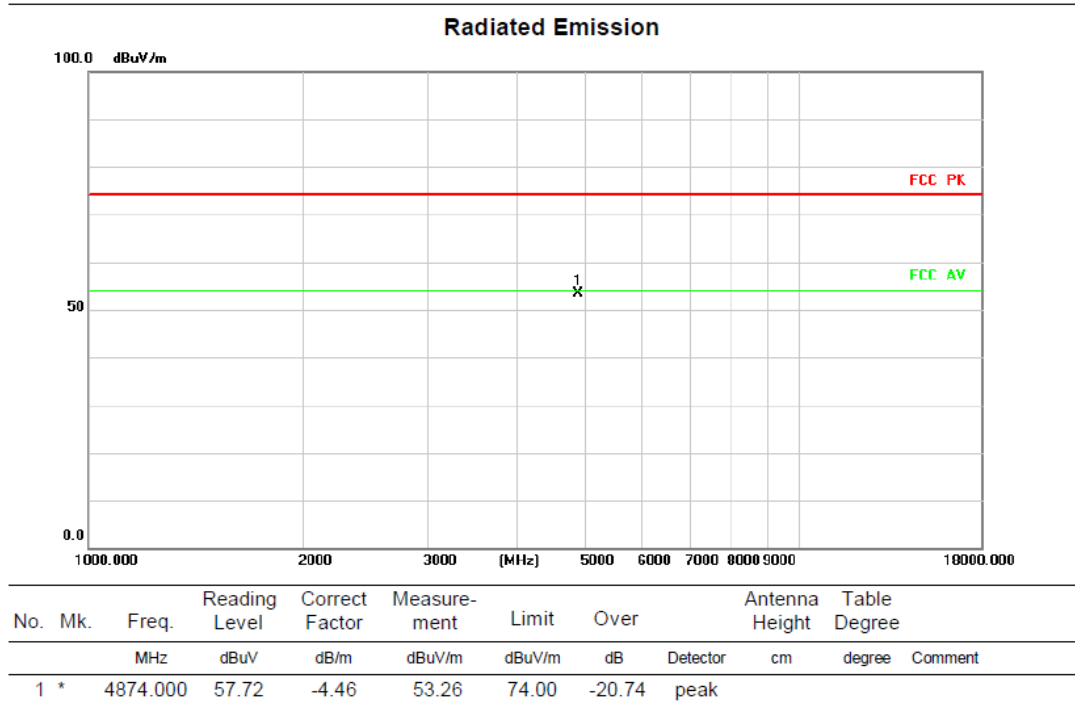
Test mode: 11N20

Test Channel:6

VERTICAL



HORIZONTAL





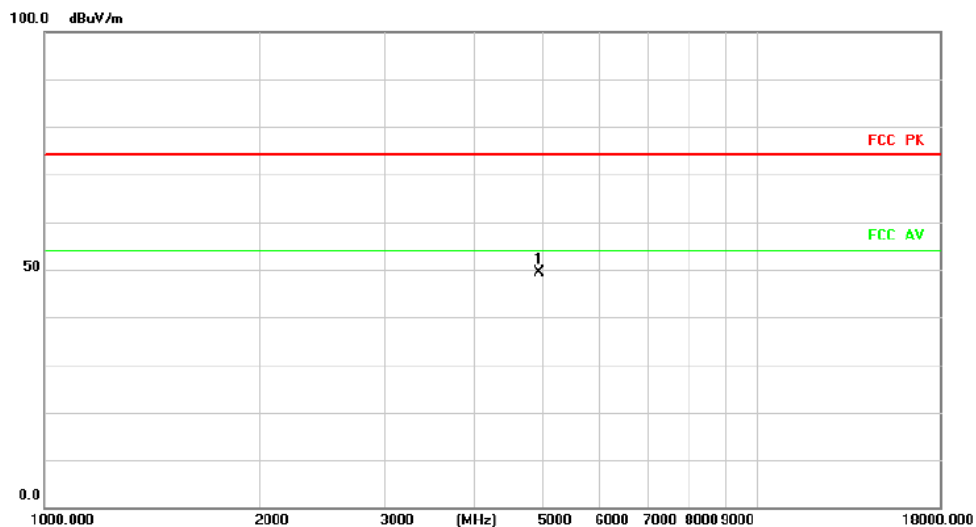
Above 1G (1GHz~18GHz)

Test mode: 11N20

Test Channel:11

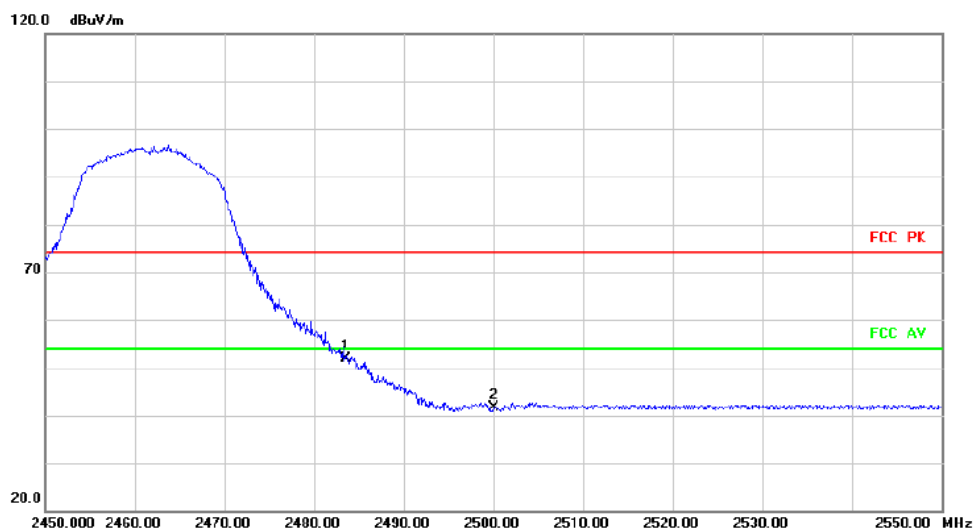
VERTICAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4924.000	53.90	-4.56	49.34	74.00	-24.66	peak	

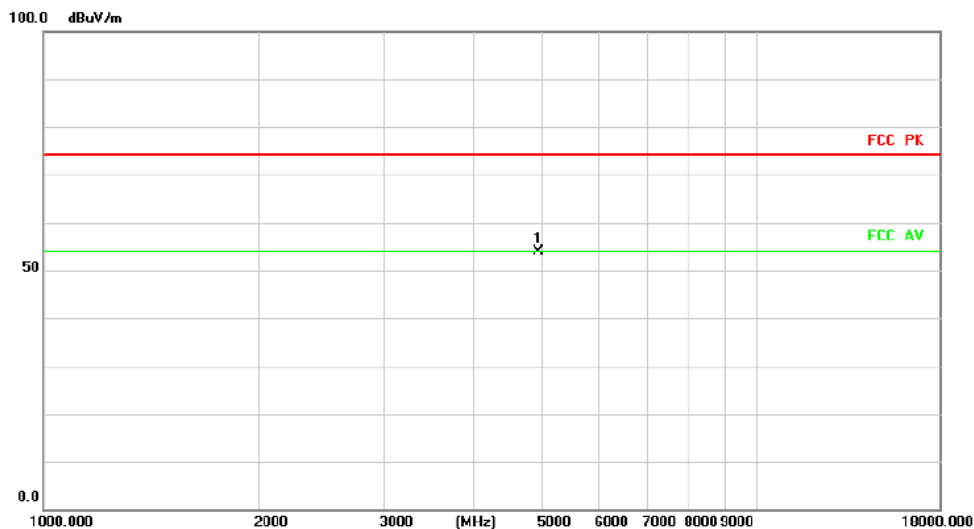
### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	2483.500	53.28	-1.50	51.78	74.00	-22.22	peak	
2		2500.000	43.09	-1.34	41.75	74.00	-32.25	peak	

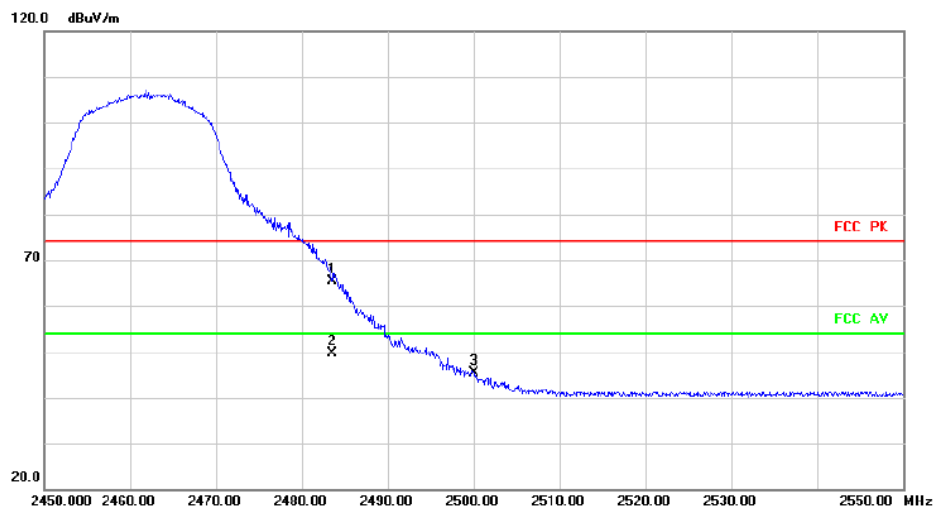
## HORIZONTALA

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4924.000	58.48	-4.56	53.92	74.00	-20.08	peak	

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2483.500	66.94	-1.50	65.44	74.00	-8.56	peak	
2	*	2483.500	51.12	-1.50	49.62	54.00	-4.38	AVG	
3		2500.000	46.77	-1.34	45.43	74.00	-28.57	peak	

For antenna type2(Model name: FXP831.07.0050C)

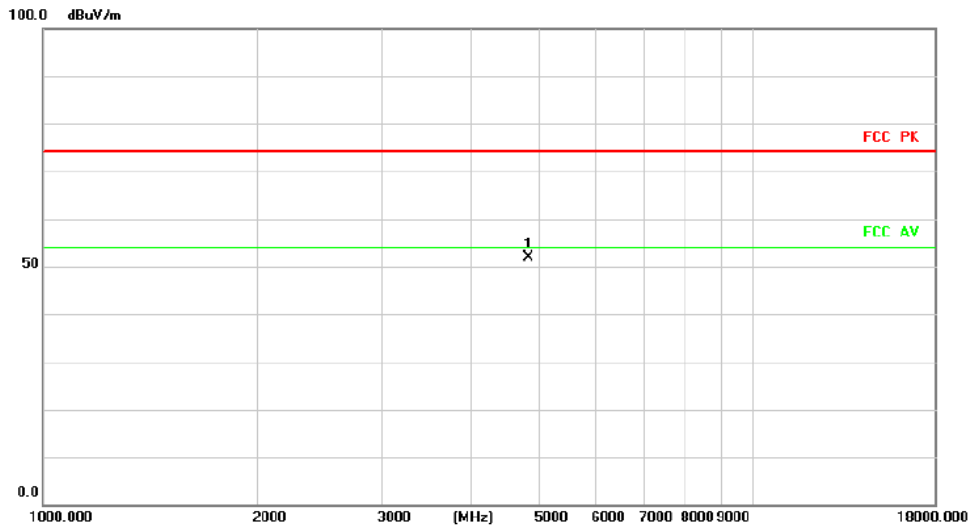
Above 1G (1GHz~18GHz)

Test mode:11B

Test Channel:1

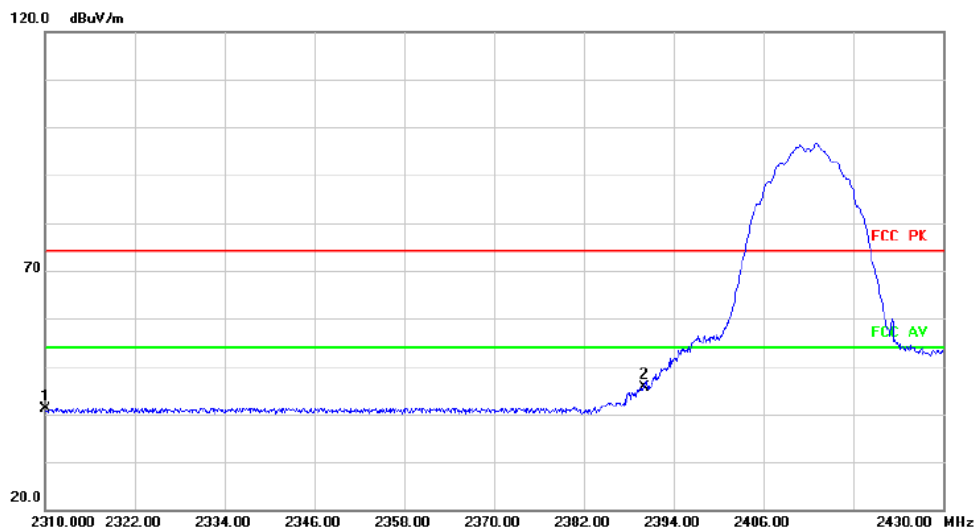
VERTICAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4824.000	55.93	-4.08	51.85	74.00	-22.15	peak		

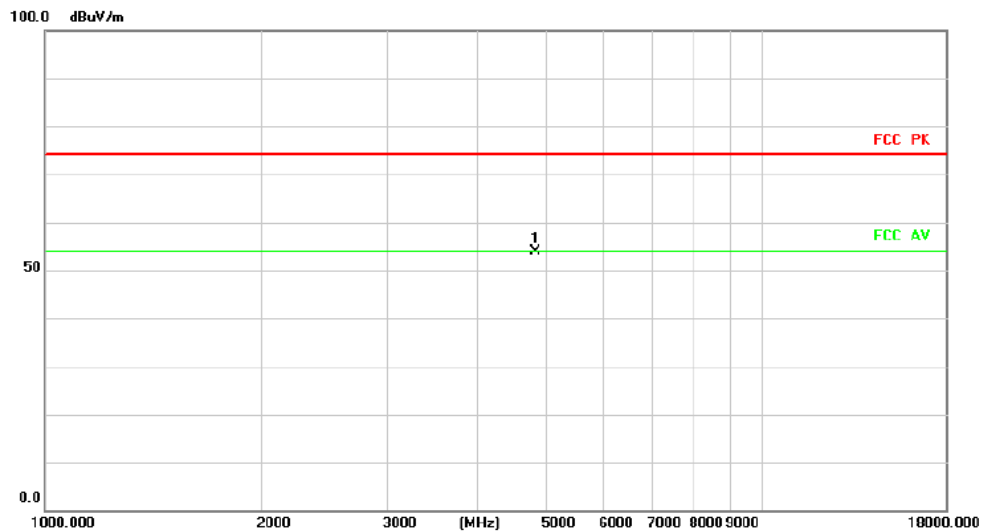
### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	43.58	-2.56	41.02	74.00	-32.98	peak		
2	*	2390.000	47.89	-2.32	45.57	74.00	-28.43	peak		

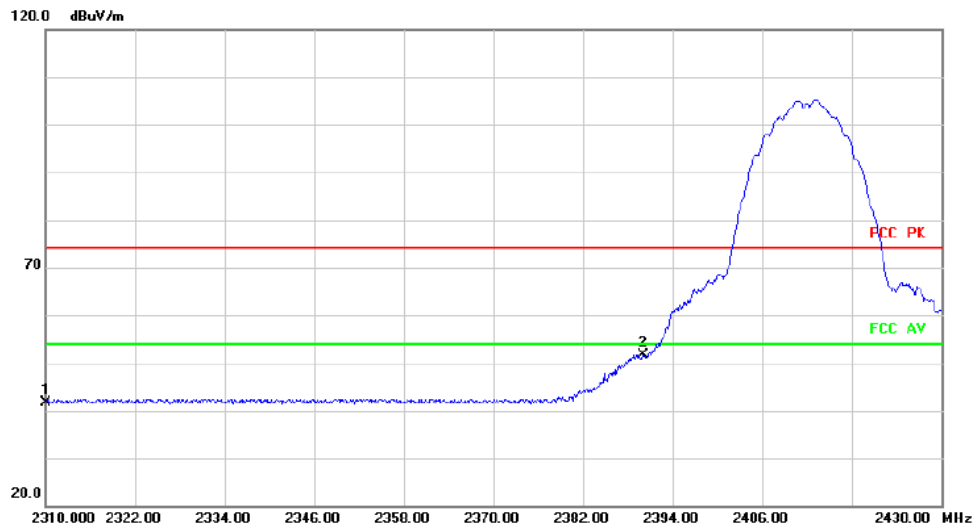
## HORIZONTAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	4824.000	57.98	-4.08	53.90	74.00	-20.10	peak		

### Radiated Emission



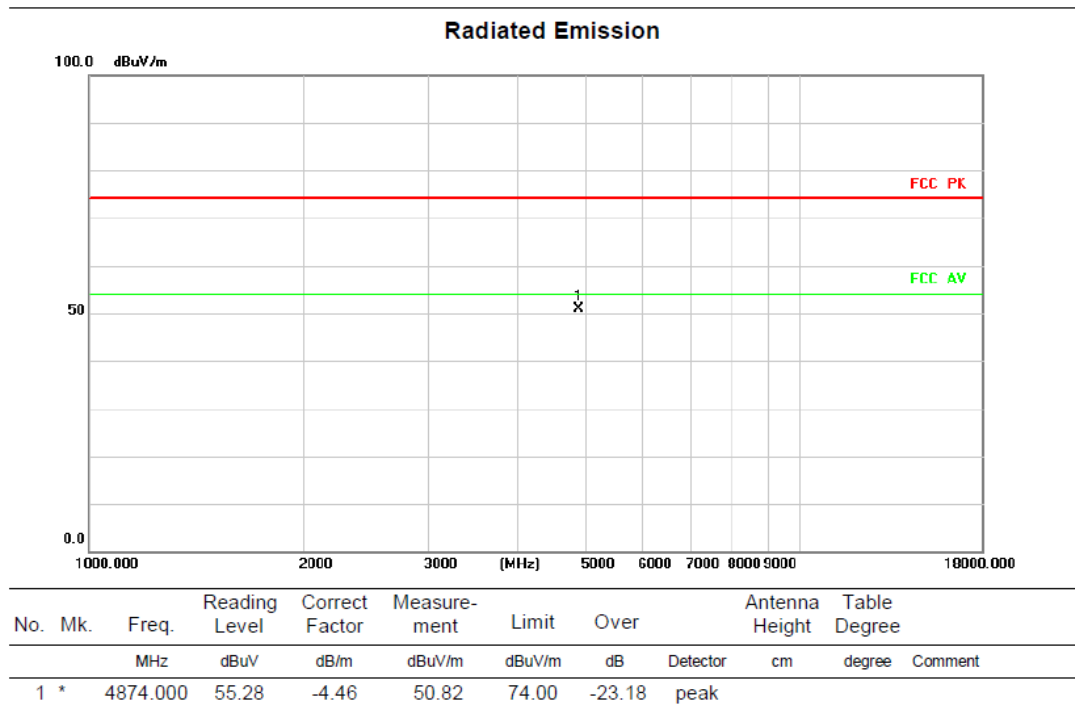
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		2310.000	44.15	-2.56	41.59	74.00	-32.41	peak		
2	*	2390.000	53.83	-2.32	51.51	74.00	-22.49	peak		

Above 1G (1GHz~18GHz)

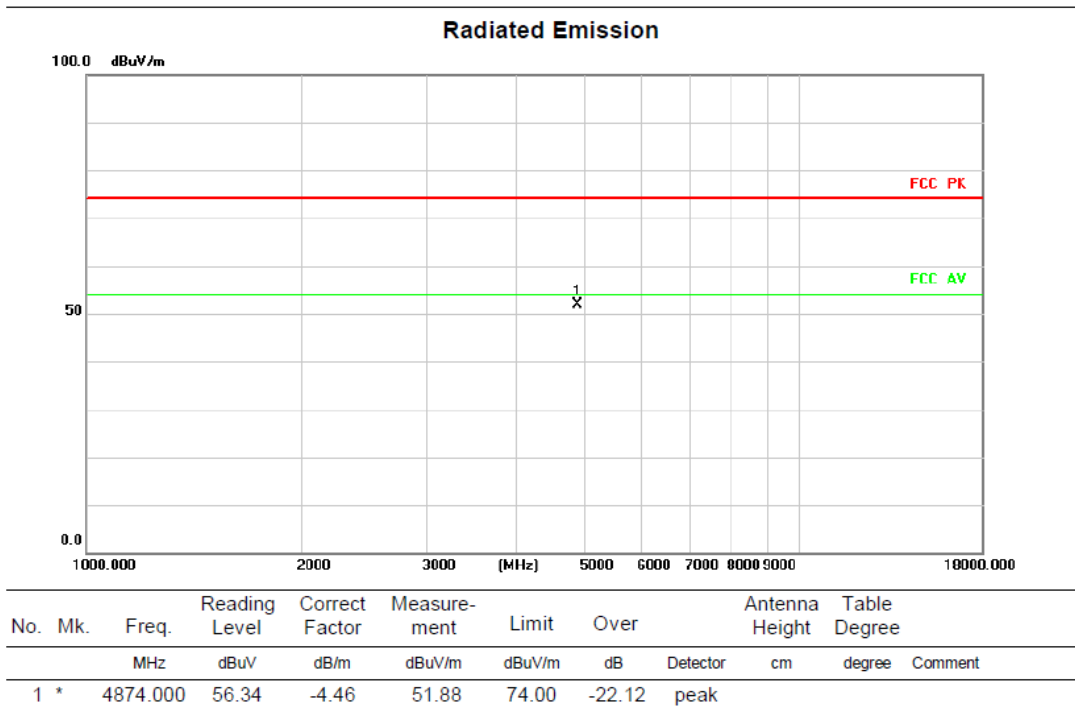
Test mode:11B

Test Channel:6

VERTICAL



HORIZONTAL



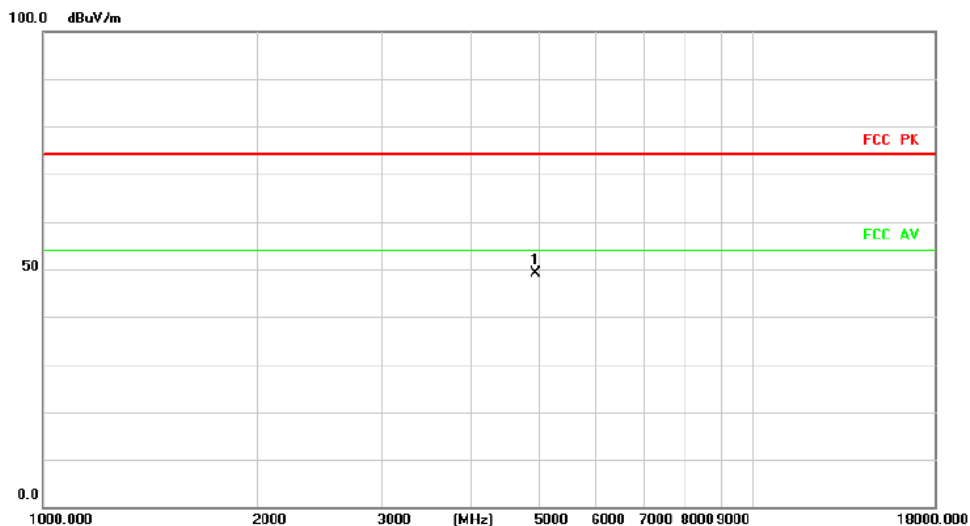
Above 1G (1GHz~18GHz)

Test mode: 11B

Test Channel:11

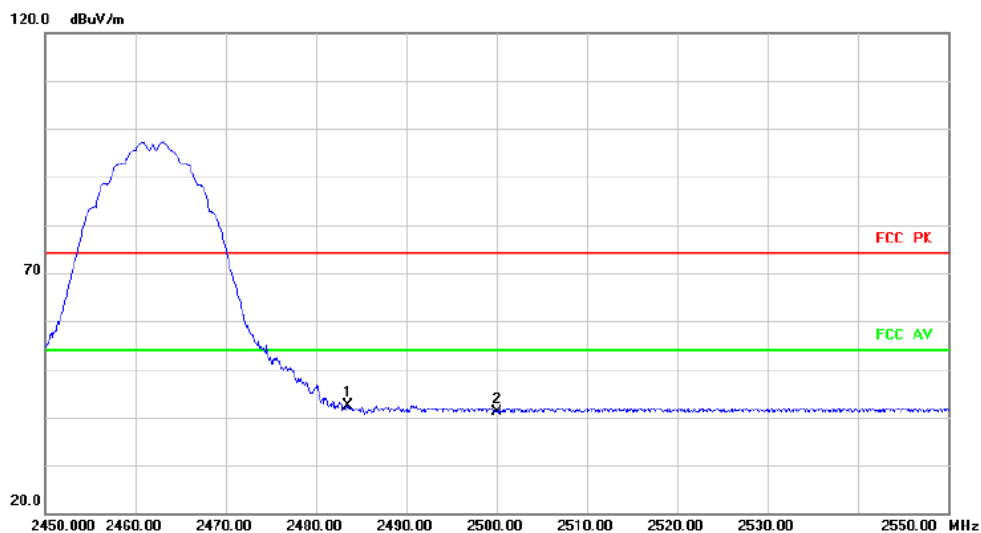
VERTICAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4924.000	53.73	-4.56	49.17	74.00	-24.83	peak		

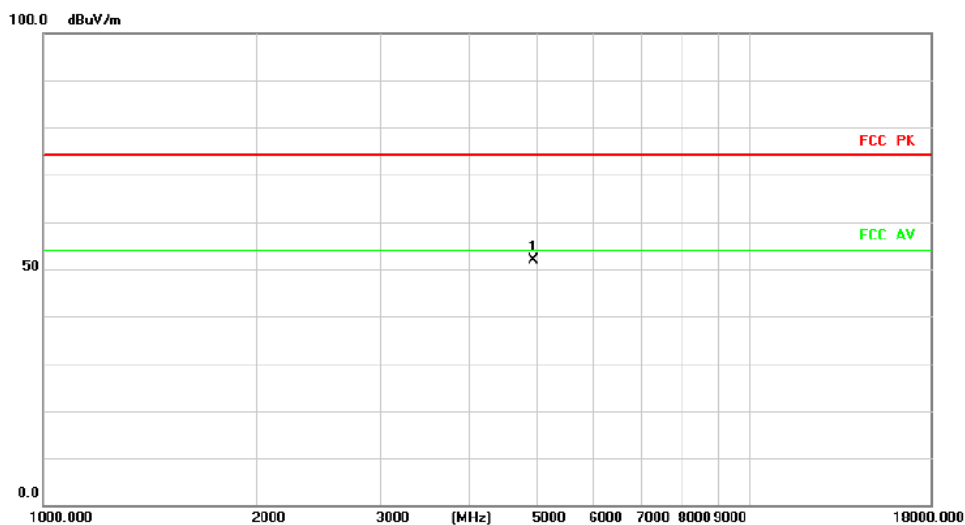
### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	2483.500	43.97	-1.50	42.47	74.00	-31.53	peak		
2		2500.000	42.59	-1.34	41.25	74.00	-32.75	peak		

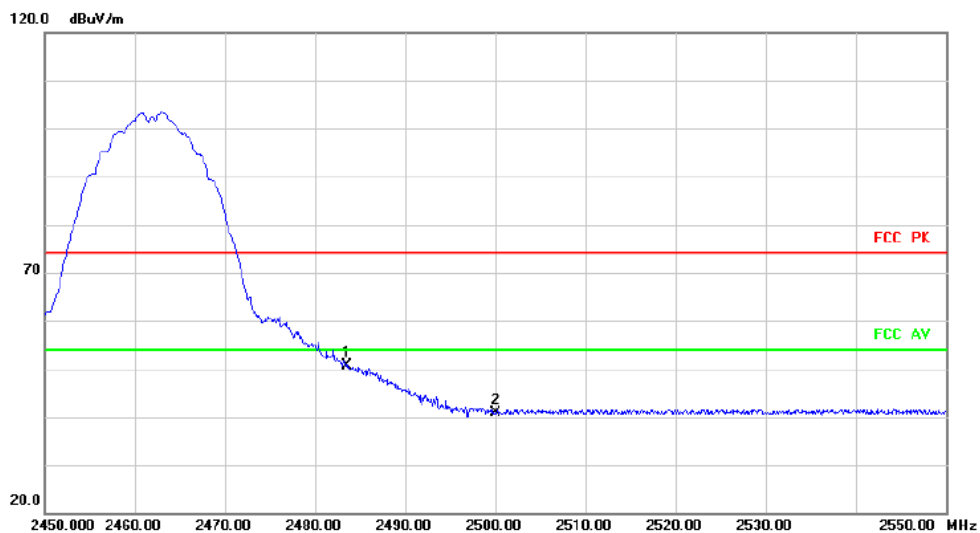
## HORIZONTAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	4924.000	56.50	-4.56	51.94	74.00	-22.06	peak		

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	2483.500	52.04	-1.50	50.54	74.00	-23.46	peak		
2		2500.000	42.10	-1.34	40.76	74.00	-33.24	peak		

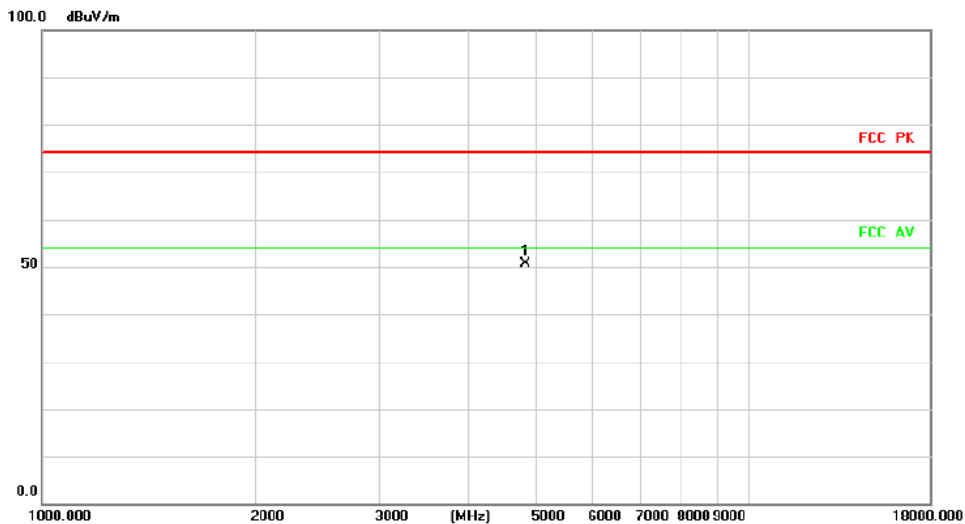
Above 1G (1GHz~18GHz)

Test mode:11G

Test Channel:1

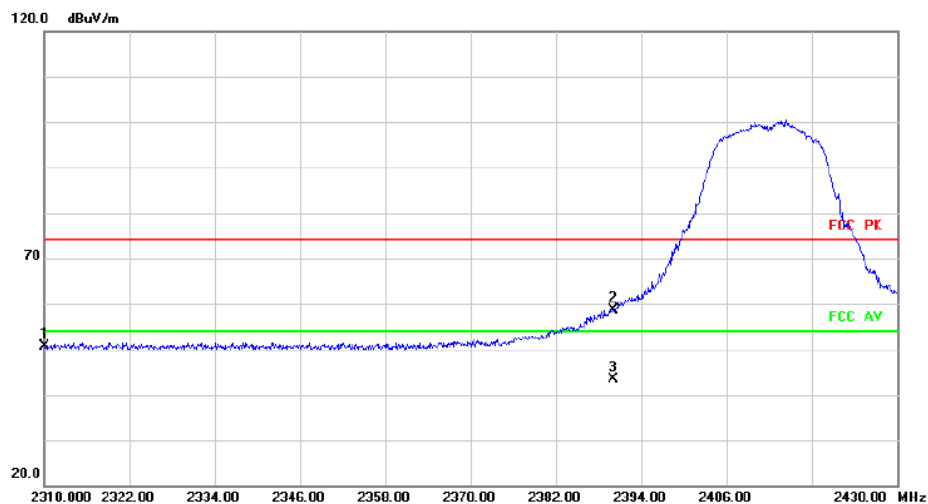
VERTICAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4824.000	54.70	-4.08	50.62	74.00	-23.38	peak		

### Radiated Emission

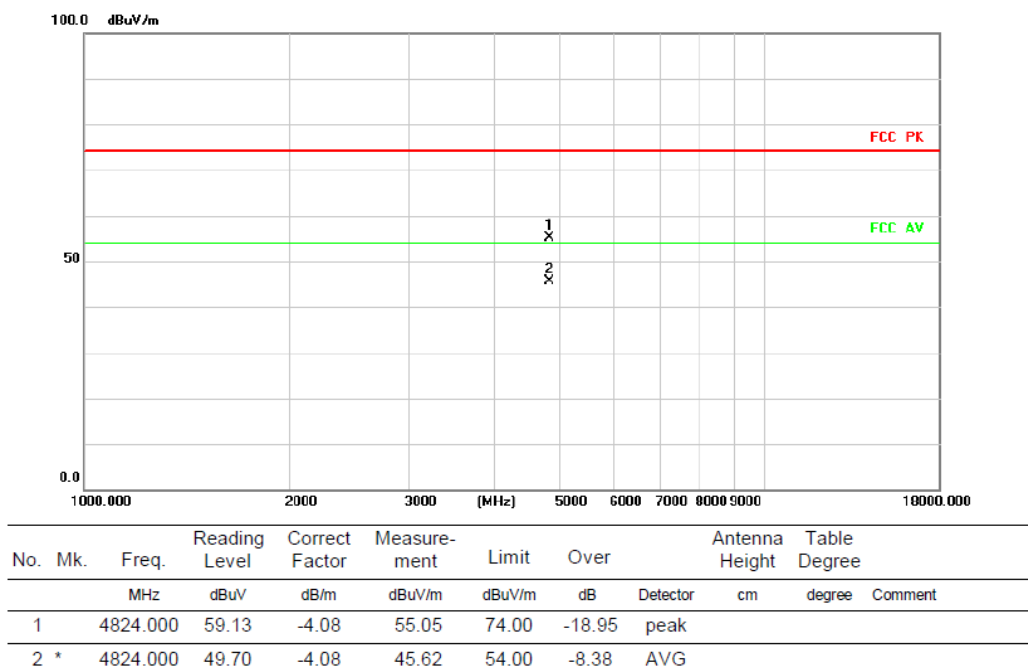


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	43.11	7.44	50.55	74.00	-23.45	peak		
2		2390.000	51.05	7.68	58.73	74.00	-15.27	peak		
3	*	2390.000	35.78	7.68	43.46	54.00	-10.54	AVG		

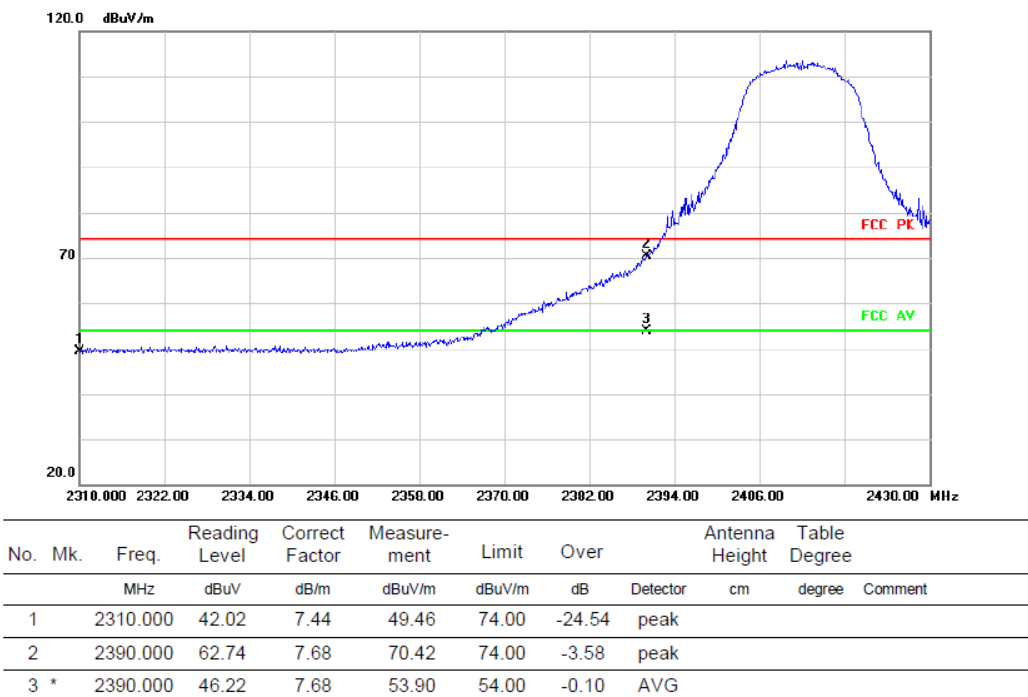


## HORIZONTAL

### Radiated Emission



### Radiated Emission



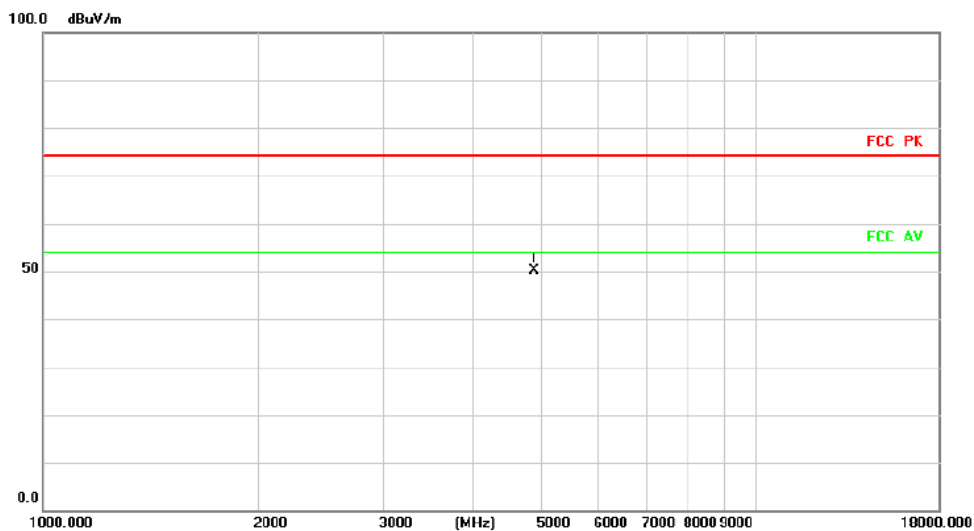
Above 1G (1GHz~18GHz)

Test mode: 11G

Test Channel:6

VERTICAL

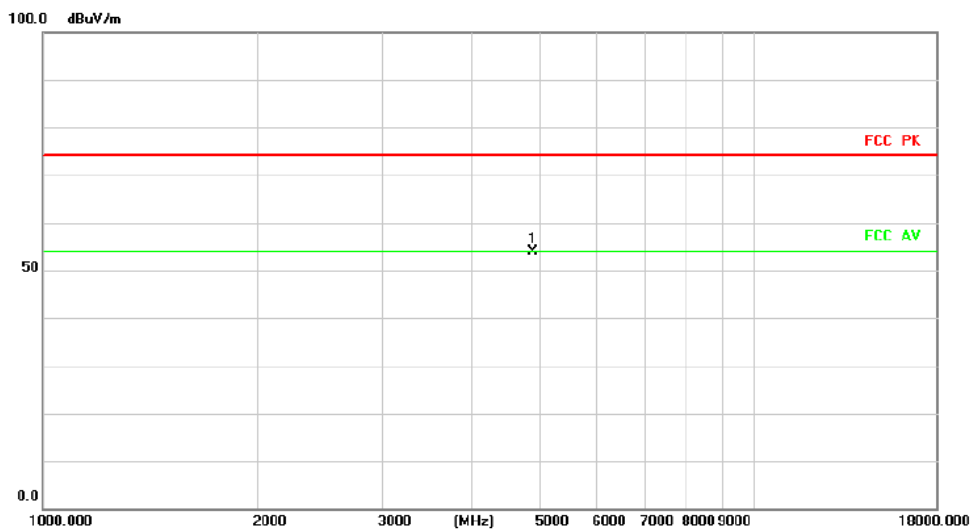
### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4874.000	54.70	-4.46	50.24	74.00	-23.76	peak	

HORIZONTAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4874.000	58.32	-4.46	53.86	74.00	-20.14	peak	

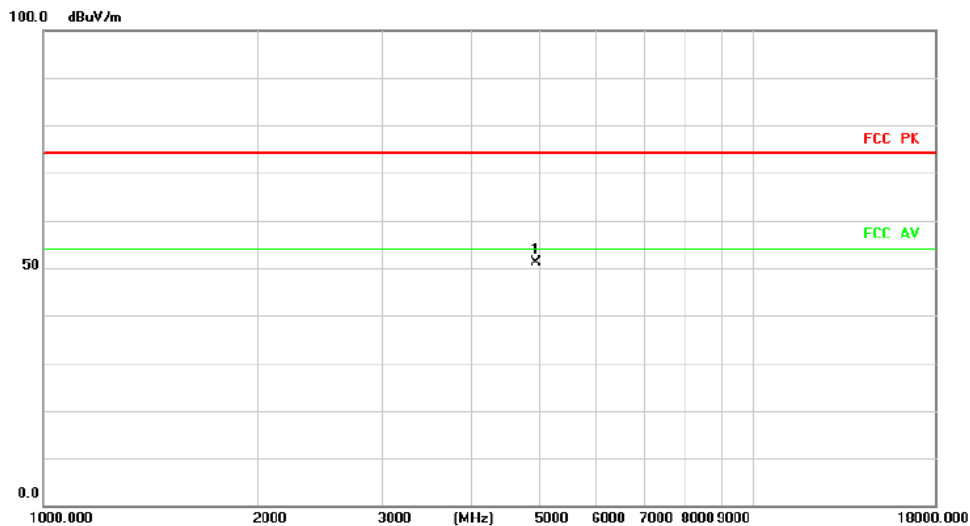
Above 1G (1GHz~18GHz)

Test mode: 11G

Test Channel:11

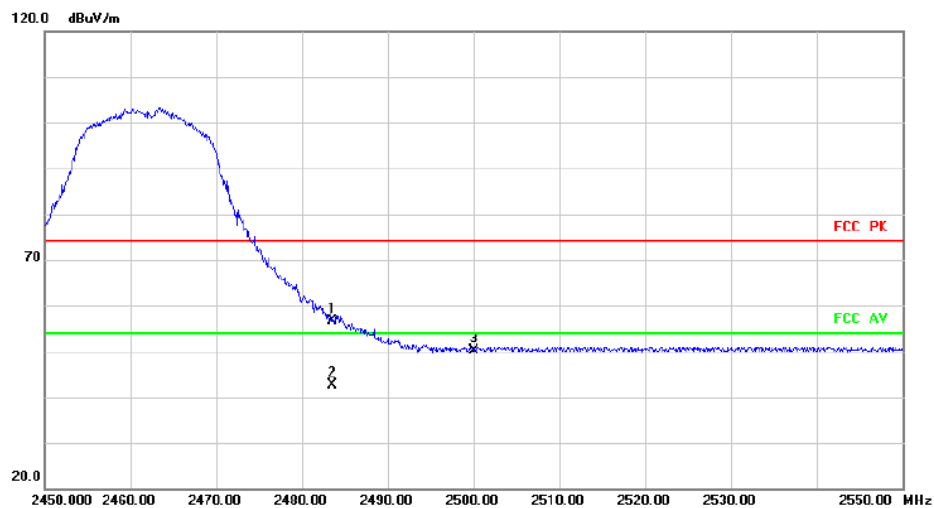
VERTICAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4924.000	55.75	-4.56	51.19	74.00	-22.81	peak	

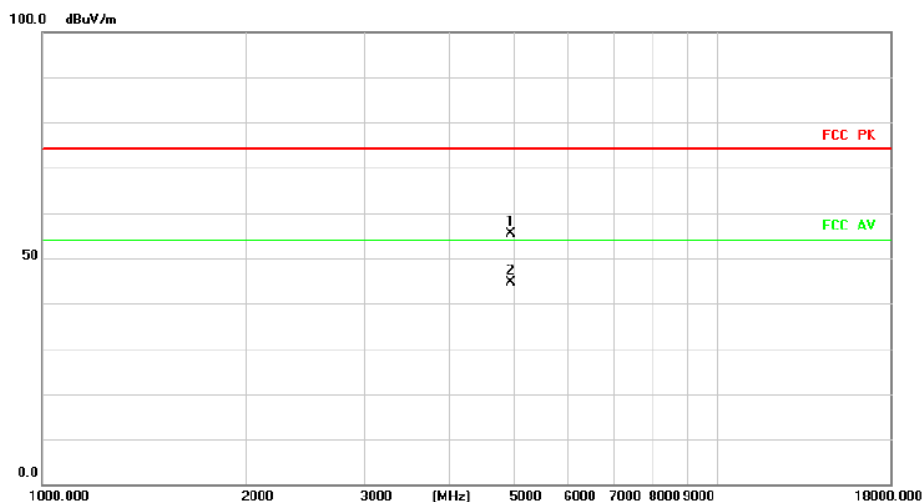
### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2483.500	48.01	8.50	56.51	74.00	-17.49	peak	
2	*	2483.500	34.21	8.50	42.71	54.00	-11.29	AVG	
3		2500.000	41.59	8.66	50.25	74.00	-23.75	peak	

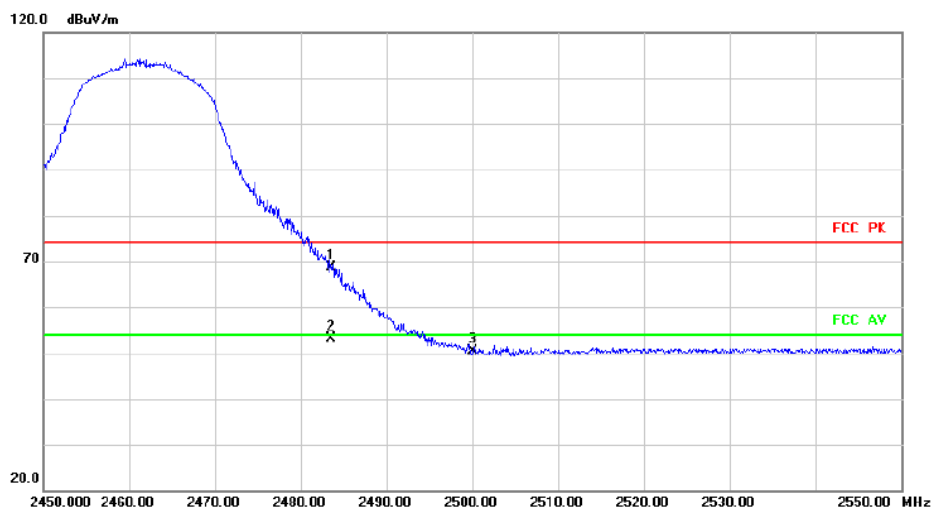
## HORIZONTAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		4924.000	60.00	-4.56	55.44	74.00	-18.56	peak		
2	*	4924.000	49.18	-4.56	44.62	54.00	-9.38	AVG		

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2483.500	60.20	8.50	68.70	74.00	-5.30	peak		
2	*	2483.500	44.51	8.50	53.01	54.00	-0.99	AVG		
3		2500.000	41.62	8.66	50.28	74.00	-23.72	peak		

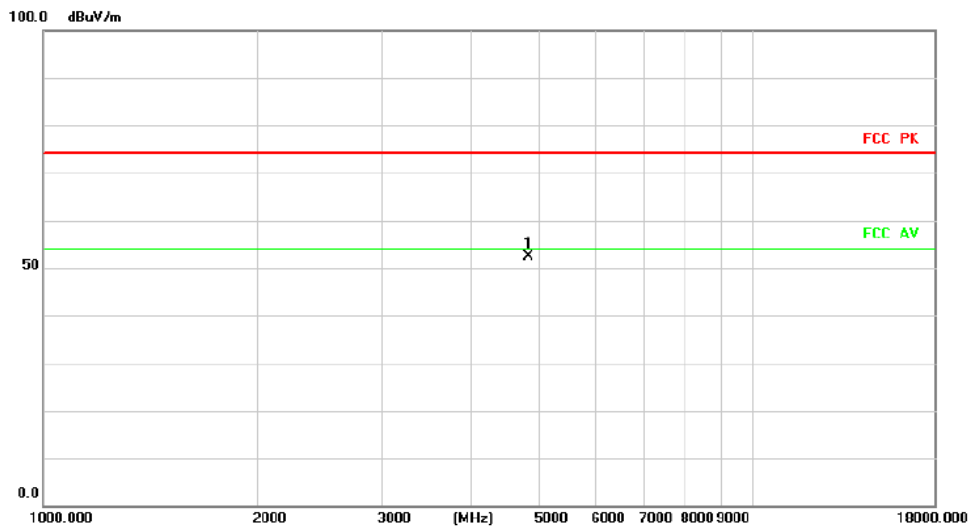
Above 1G (1GHz~18GHz)

Test mode: 11N20

Test Channel:1

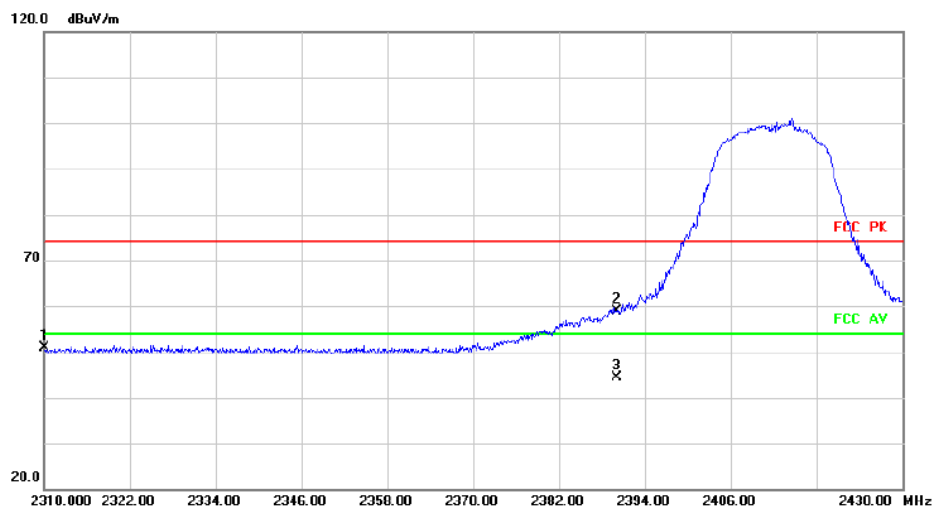
VERTICAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4824.000	56.38	-4.08	52.30	74.00	-21.70	peak		

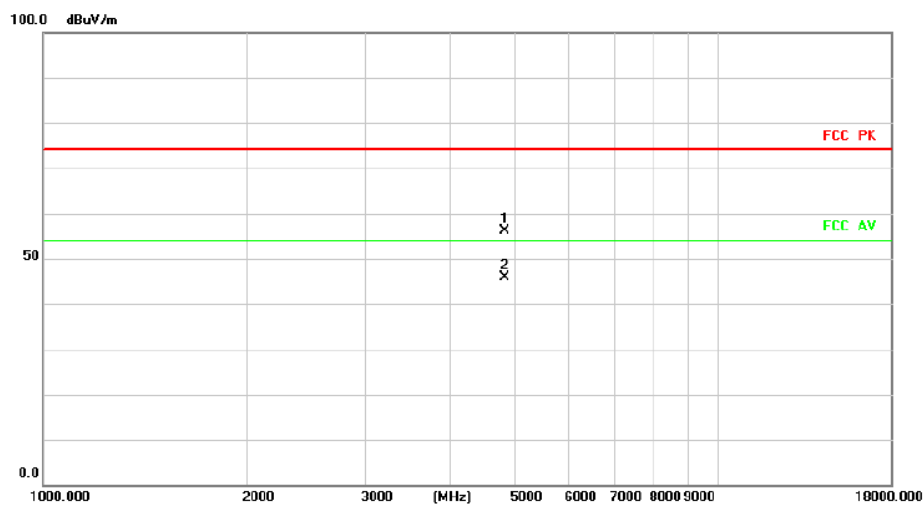
### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	43.32	7.44	50.76	74.00	-23.24	peak		
2		2390.000	51.16	7.68	58.84	74.00	-15.16	peak		
3	*	2390.000	36.68	7.68	44.36	54.00	-9.64	AVG		

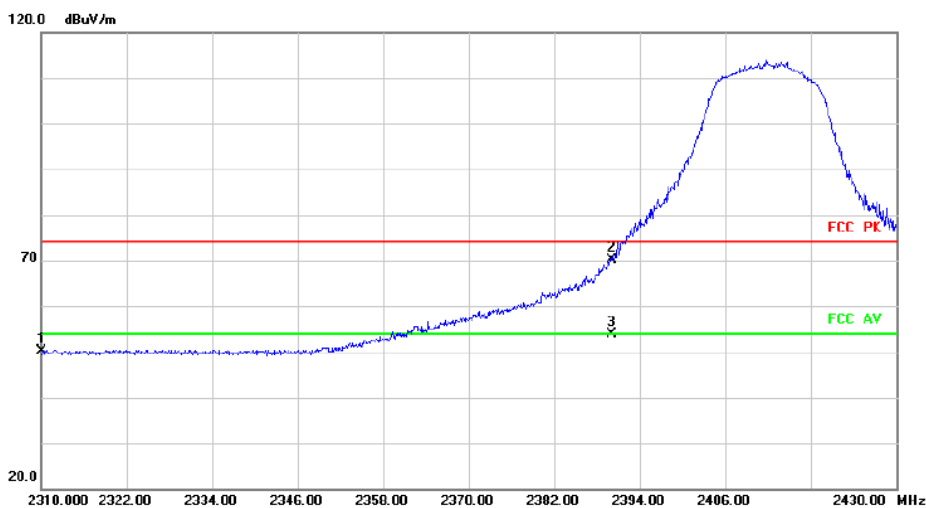
## HORIZONTAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		4824.000	60.24	-4.08	56.16	74.00	-17.84	peak		
2	*	4824.000	49.94	-4.08	45.86	54.00	-8.14	AVG		

### Radiated Emission



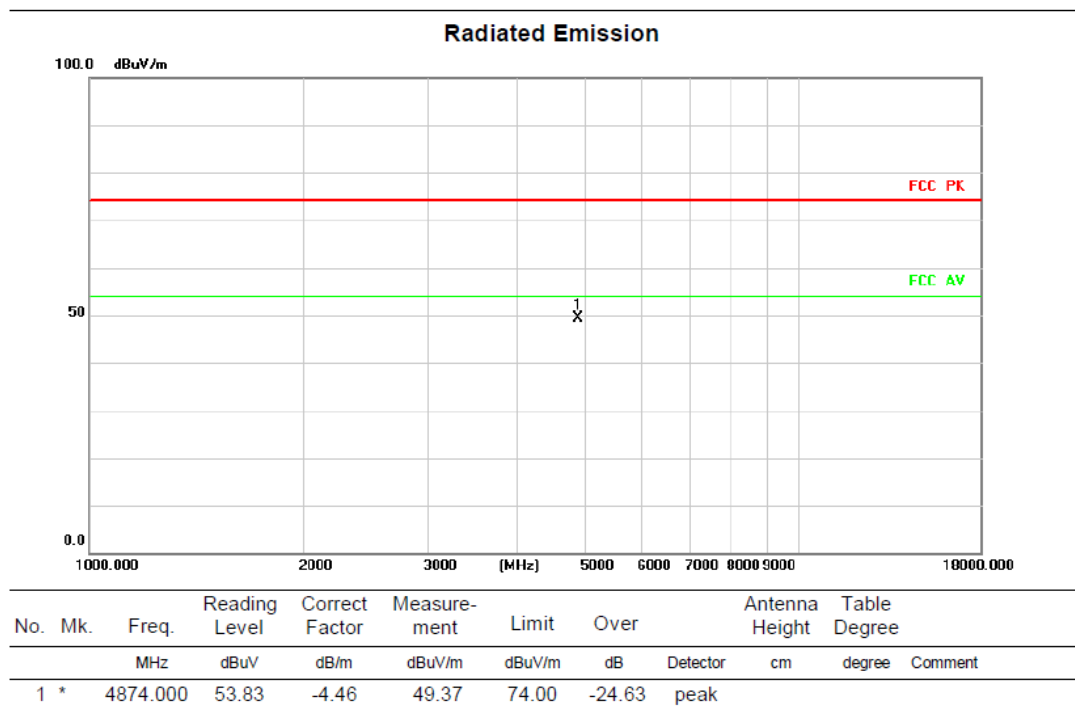
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	42.57	7.44	50.01	74.00	-23.99	peak		
2		2390.000	62.45	7.68	70.13	74.00	-3.87	peak		
3	*	2390.000	46.21	7.68	53.89	54.00	-0.11	AVG		

Above 1G (1GHz~18GHz)

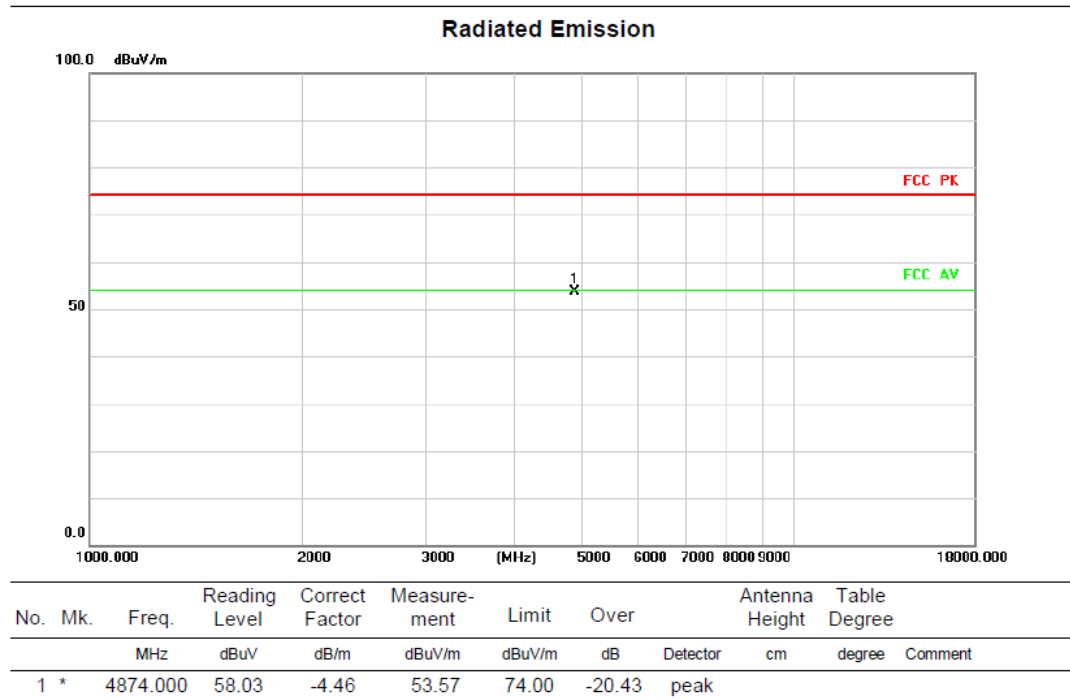
Test mode: 11N20

Test Channel:6

VERTICAL



HORIZONTAL



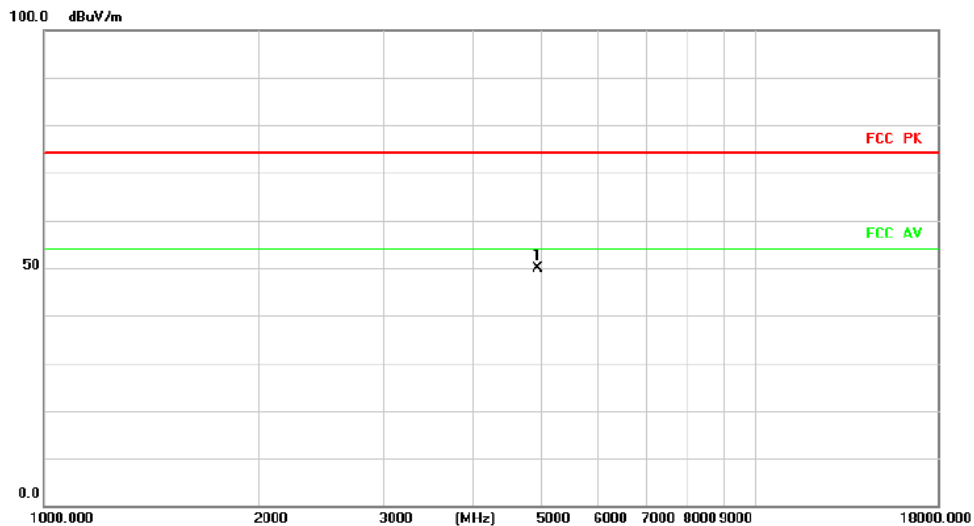
Above 1G (1GHz~18GHz)

Test mode: 11N20

Test Channel:11

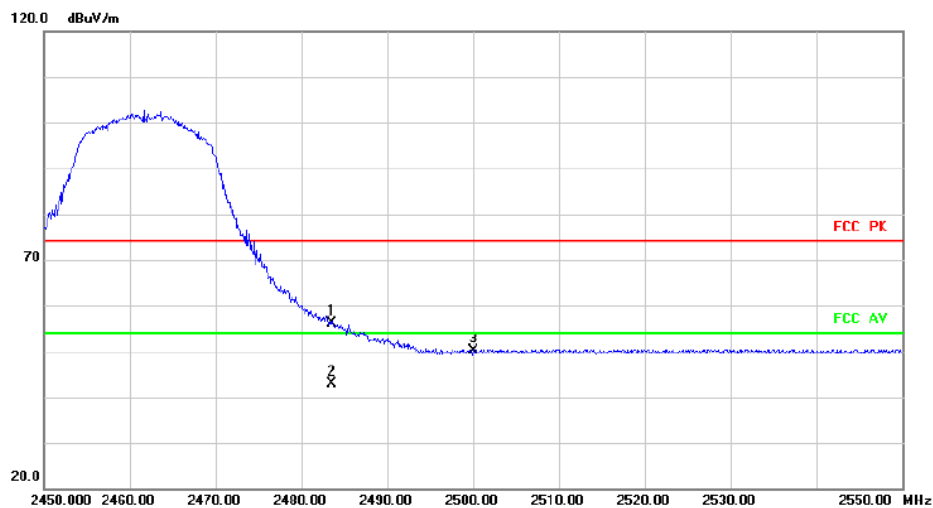
VERTICAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4924.000	54.48	-4.56	49.92	74.00	-24.08	peak	

### Radiated Emission

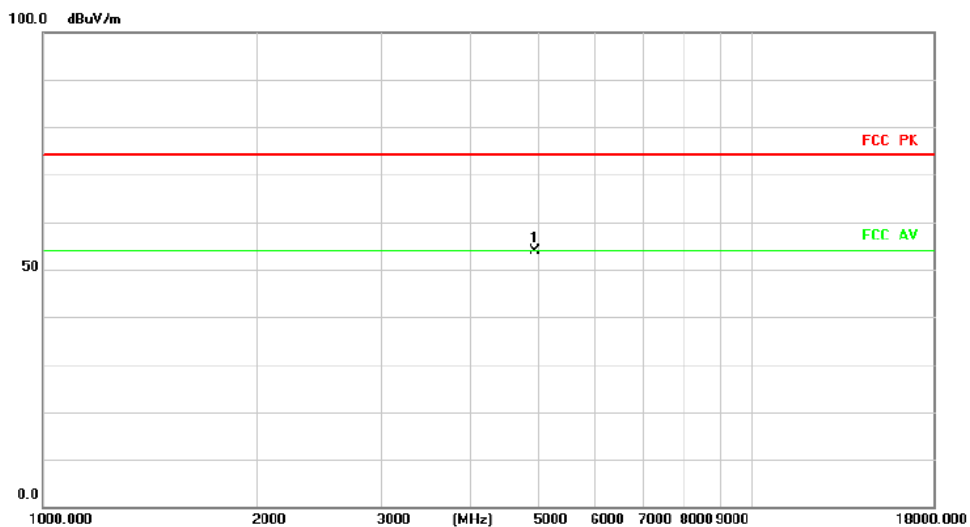


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2483.500	47.56	8.50	56.06	74.00	-17.94	peak	
2	*	2483.500	34.26	8.50	42.76	54.00	-11.24	AVG	
3		2500.000	41.50	8.66	50.16	74.00	-23.84	peak	



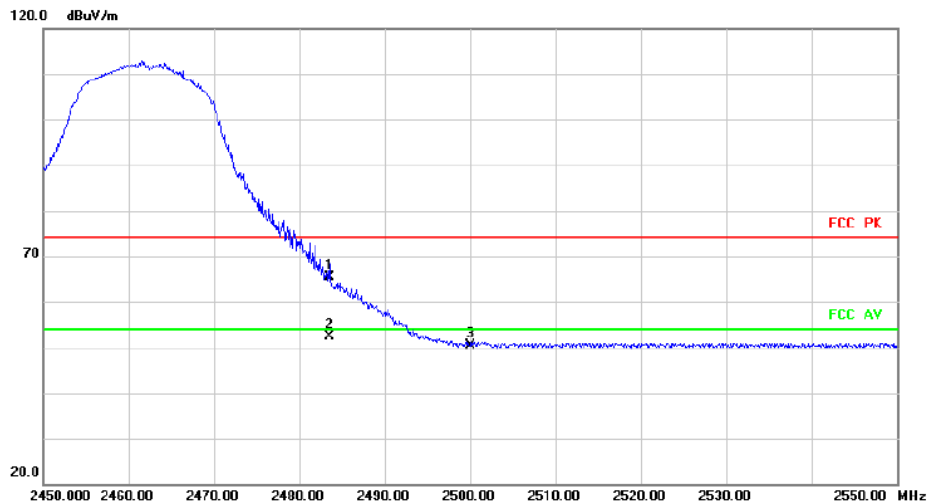
## HORIZONTALA

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4924.000	58.44	-4.56	53.88	74.00	-20.12	peak	

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2483.500	56.87	8.50	65.37	74.00	-8.63	peak	
2	*	2483.500	43.81	8.50	52.31	54.00	-1.69	AVG	
3		2500.000	41.71	8.66	50.37	74.00	-23.63	peak	

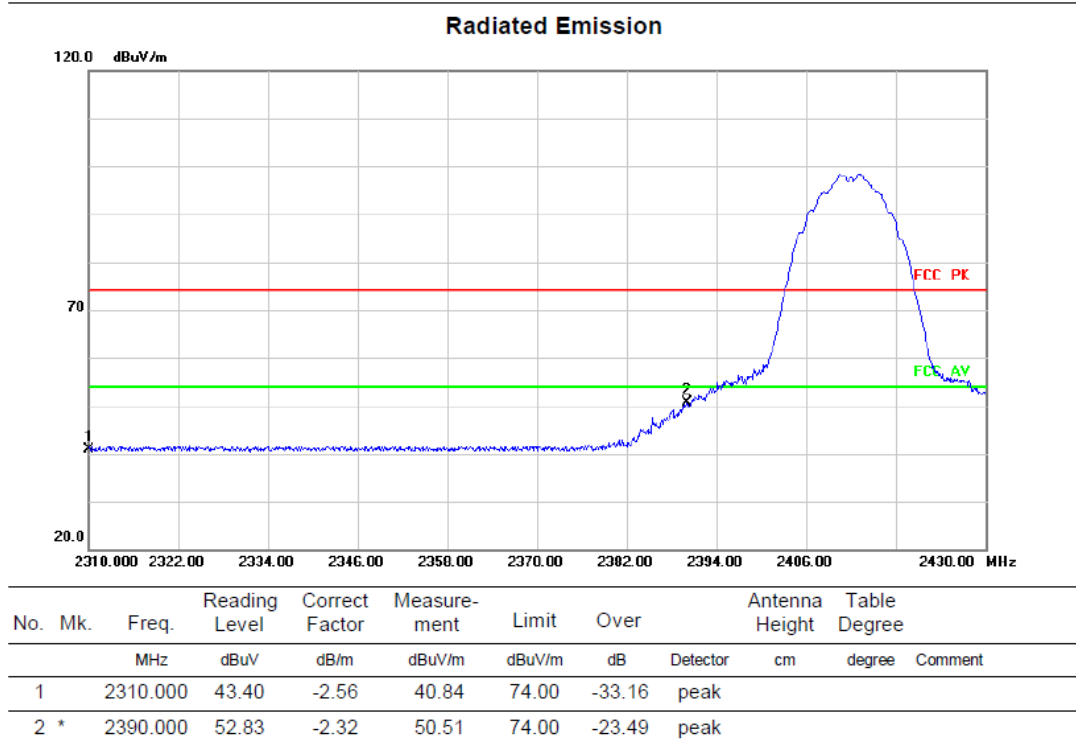
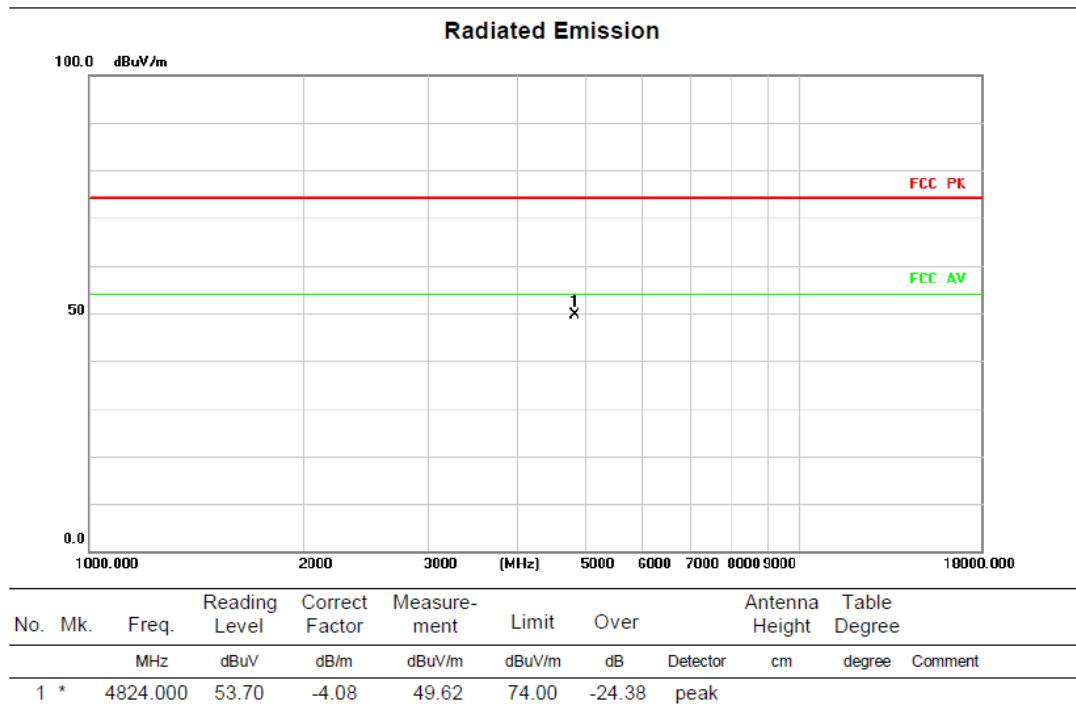
For antenna type3(Model name: 2108792-2)

Above 1G (1GHz~18GHz)

Test mode:11B

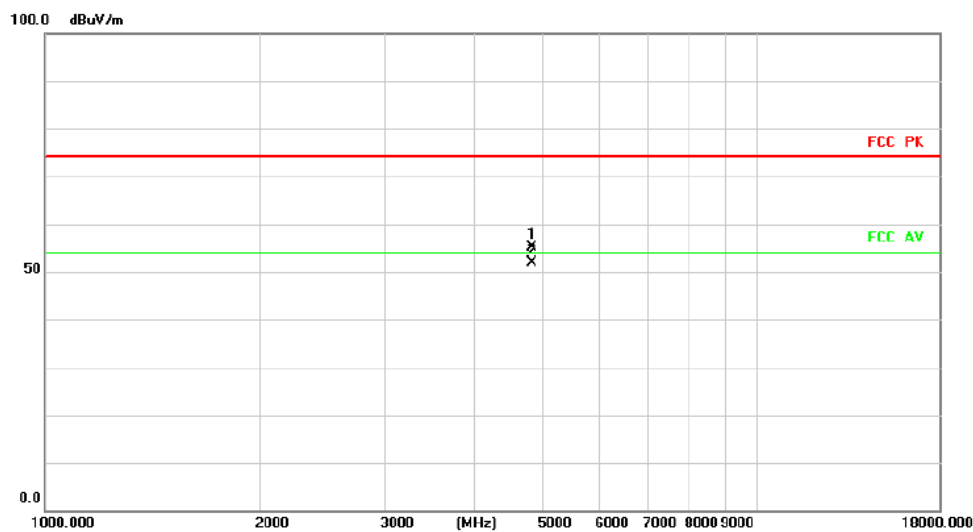
Test Channel:1

VERTICAL



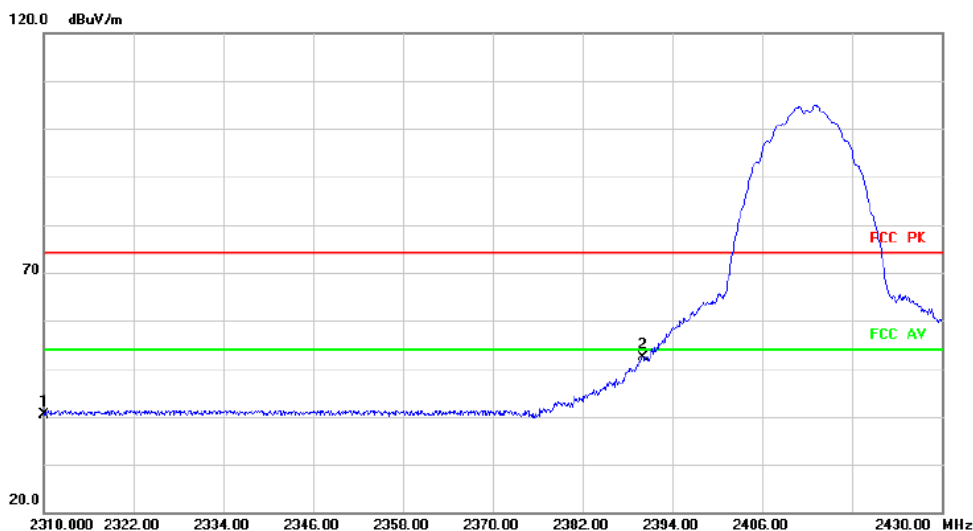
## HORIZONTALA

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		4824.000	59.29	-4.08	55.21	74.00	-18.79	peak		
2 *		4824.000	55.91	-4.08	51.83	54.00	-2.17	AVG		

### Radiated Emission



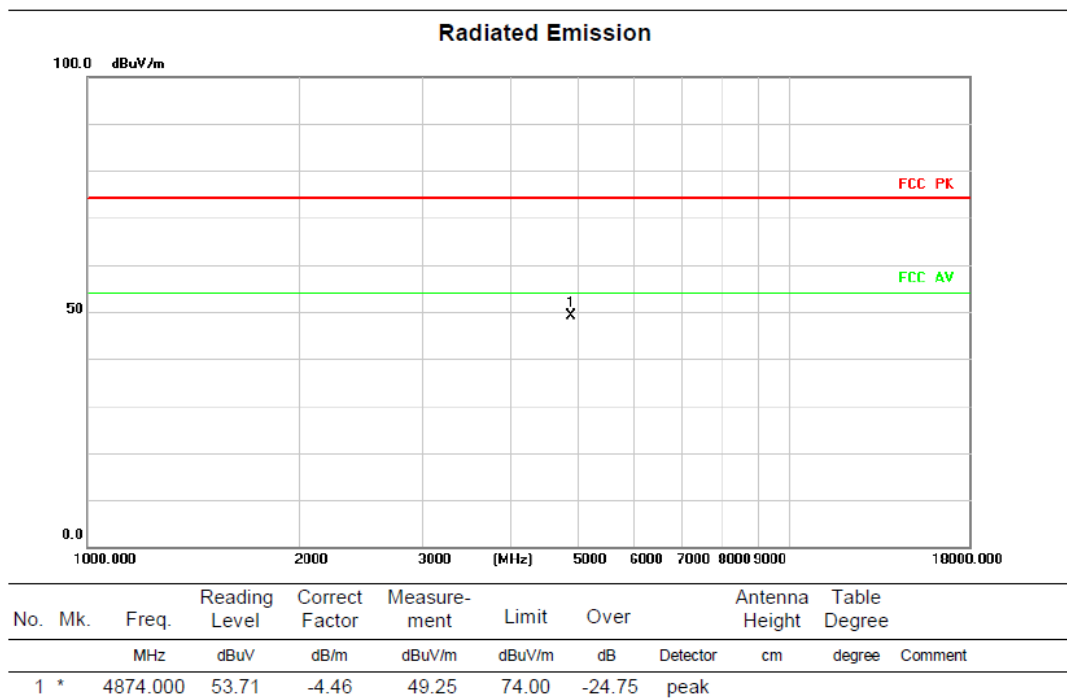
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	42.90	-2.56	40.34	74.00	-33.66	peak		
2 *		2390.000	54.74	-2.32	52.42	74.00	-21.58	peak		

Above 1G (1GHz~18GHz)

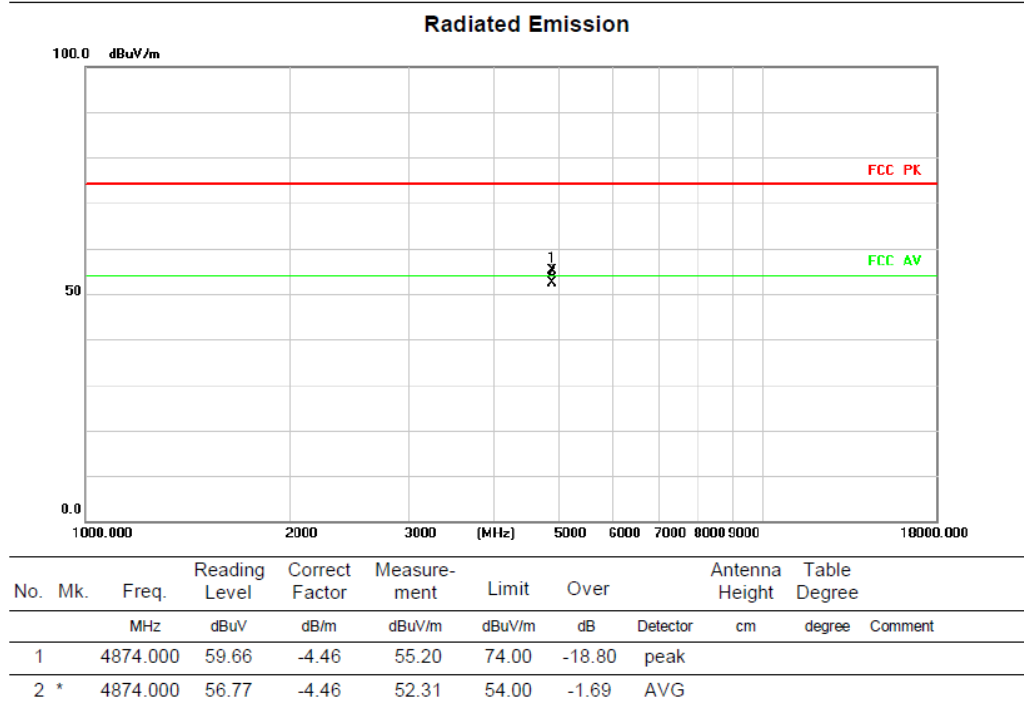
Test mode:11B

Test Channel:6

VERTICAL



HORIZONTAL



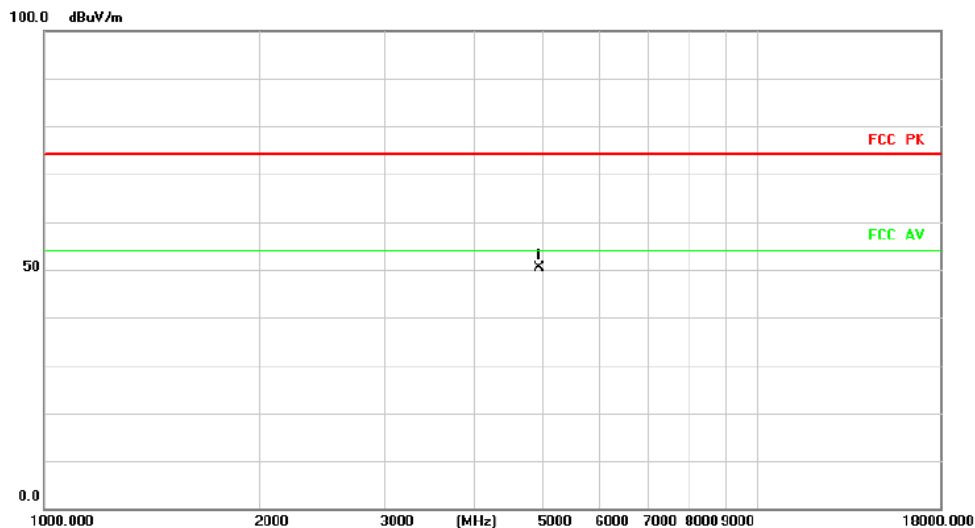
Above 1G (1GHz~18GHz)

Test mode: 11B

Test Channel:11

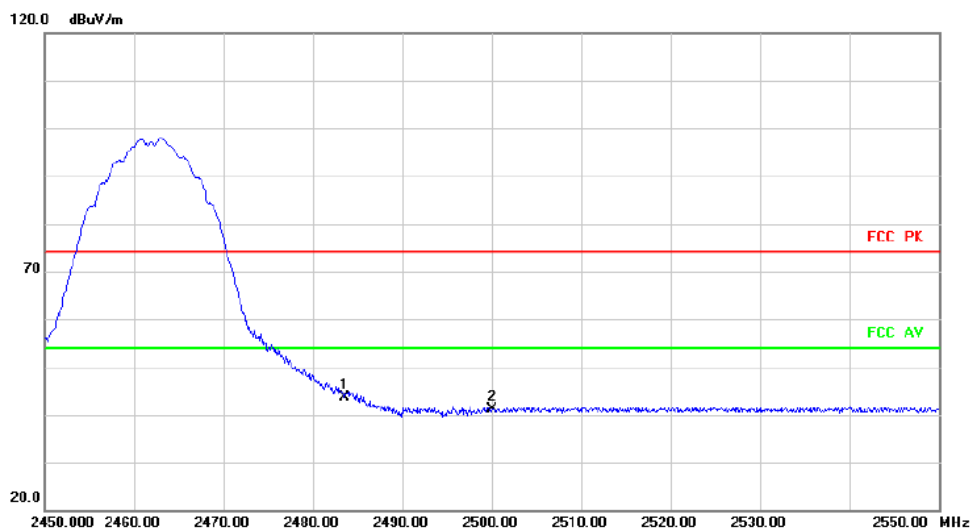
VERTICAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4924.000	54.83	-4.56	50.27	74.00	-23.73 peak		

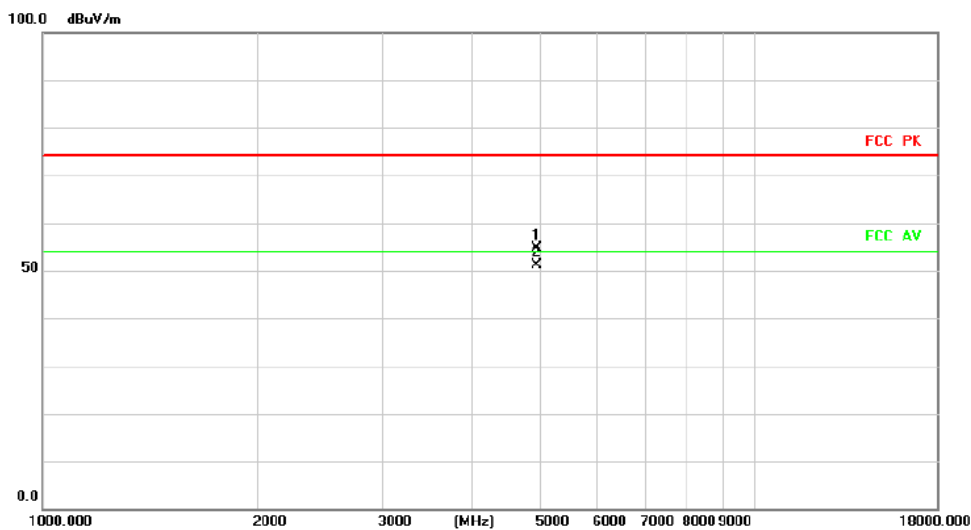
### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	2483.500	45.12	-1.50	43.62	74.00	-30.38 peak		
2		2500.000	42.54	-1.34	41.20	74.00	-32.80 peak		

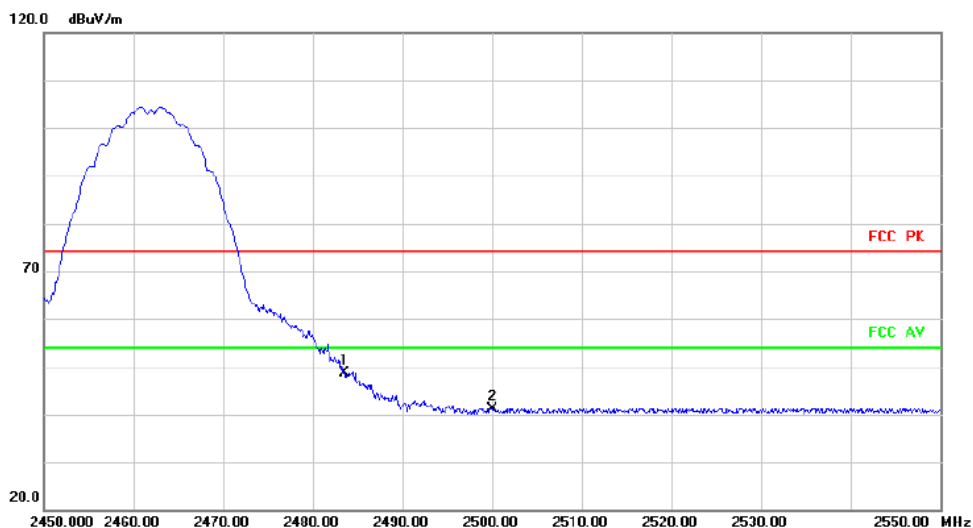
## HORIZONTAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		4924.000	59.07	-4.56	54.51	74.00	-19.49	peak	
2 *		4924.000	55.60	-4.56	51.04	54.00	-2.96	AVG	

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1 *		2483.500	50.02	-1.50	48.52	74.00	-25.48	peak	
2		2500.000	42.51	-1.34	41.17	74.00	-32.83	peak	

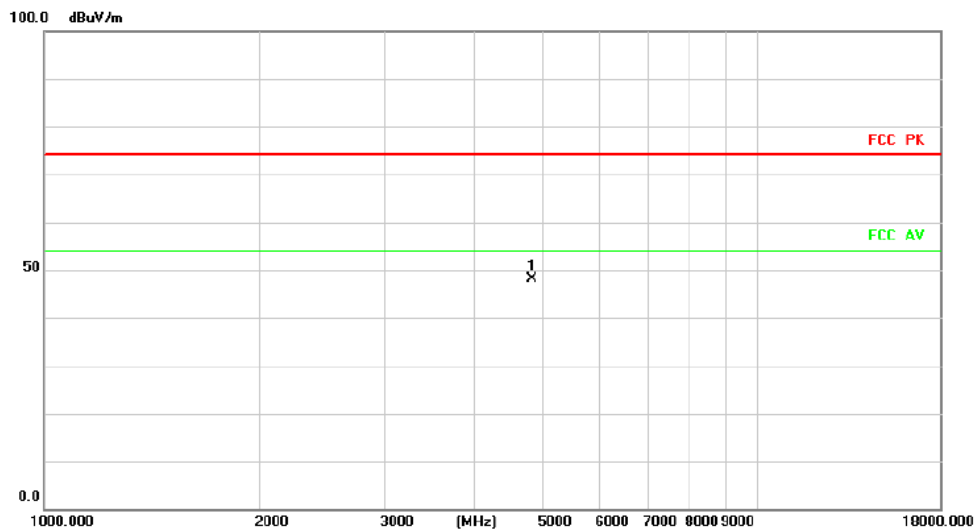
Above 1G (1GHz~18GHz)

Test mode:11G

Test Channel:1

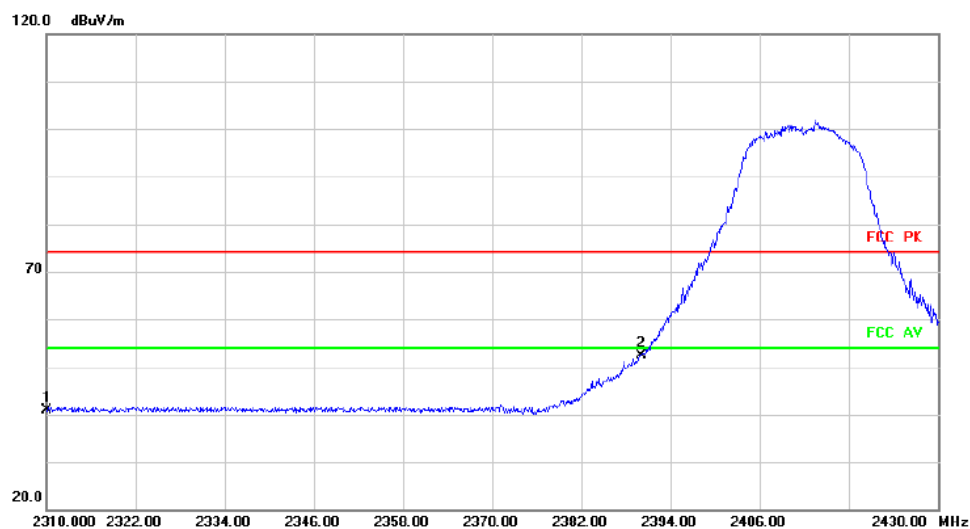
VERTICAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	4824.000	52.18	-4.08	48.10	74.00	-25.90	peak	

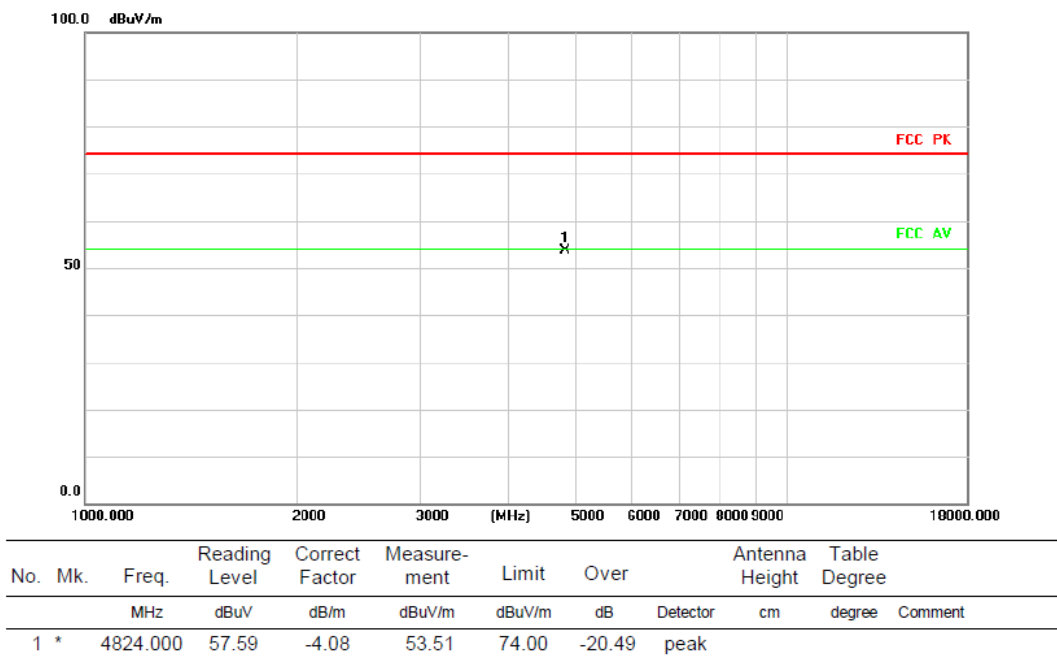
### Radiated Emission



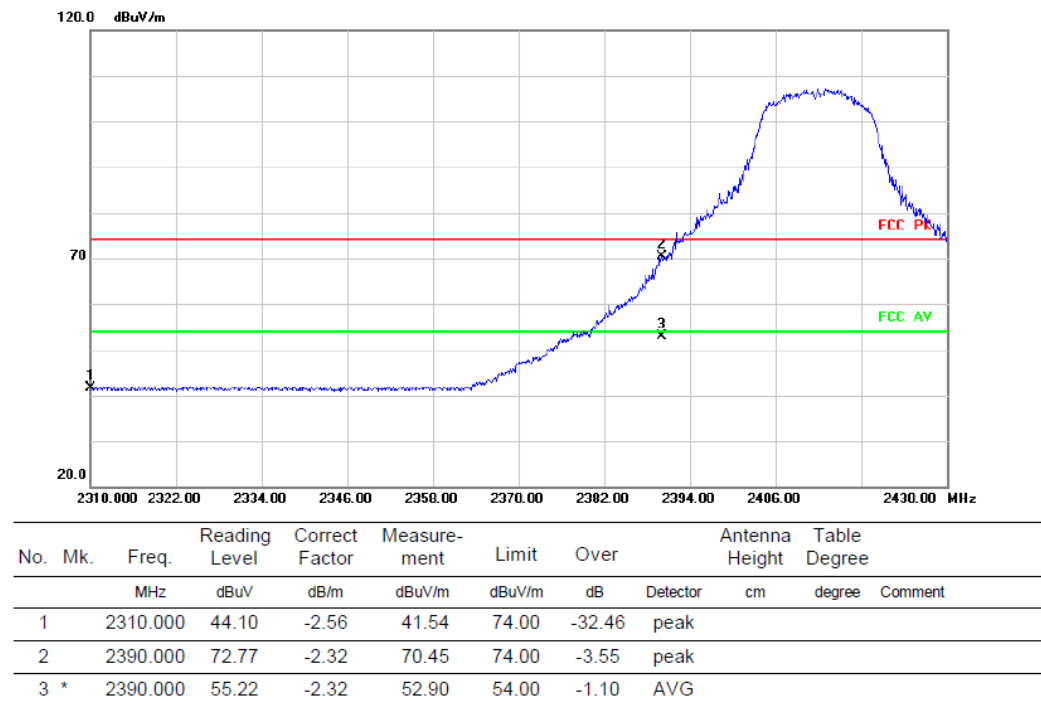
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		2310.000	43.50	-2.56	40.94	74.00	-33.06	peak	
2	*	2390.000	54.72	-2.32	52.40	74.00	-21.60	peak	

## HORIZONTALA

### Radiated Emission



### Radiated Emission



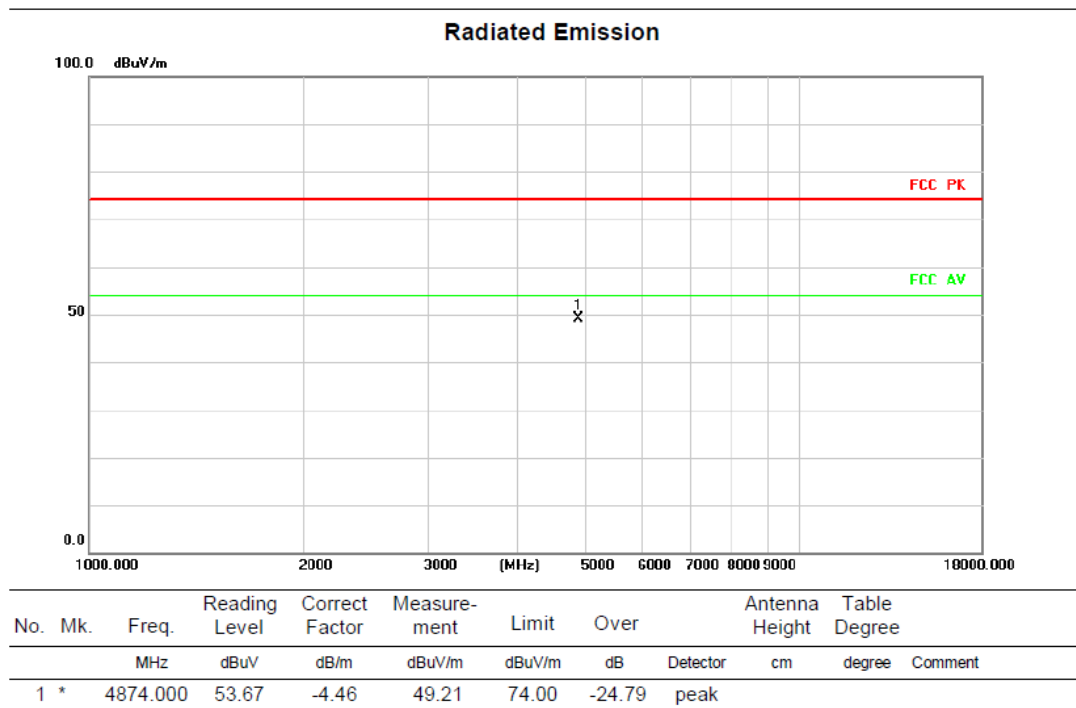


Above 1G (1GHz~18GHz)

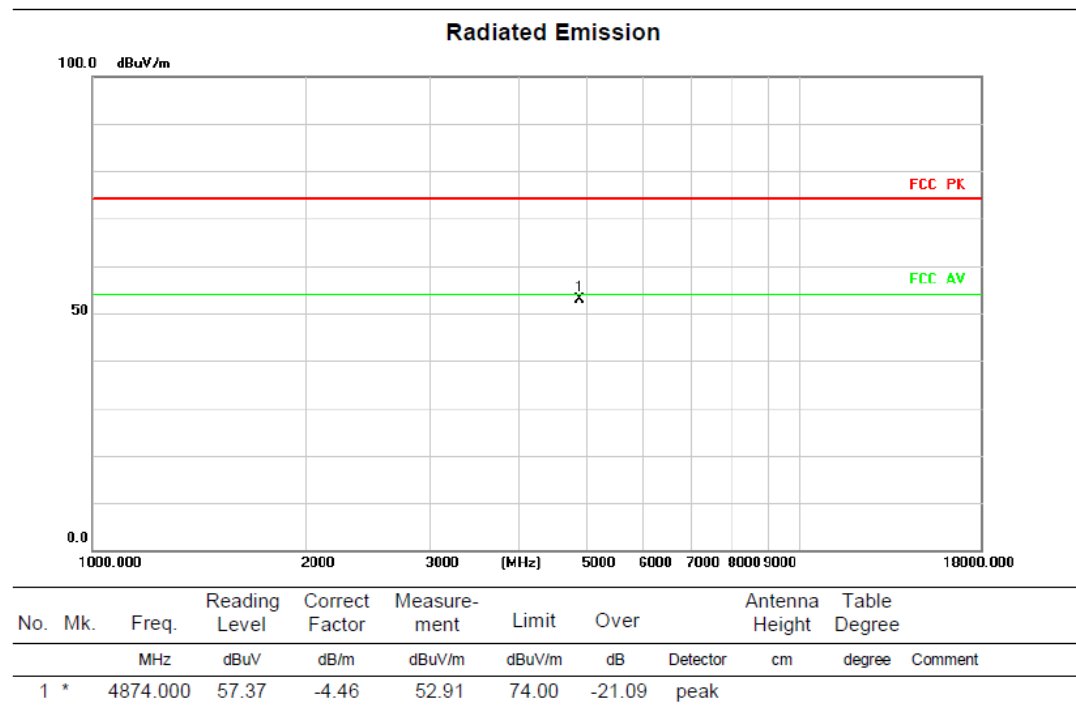
Test mode: 11G

Test Channel:6

VERTICAL



HORIZONTAL



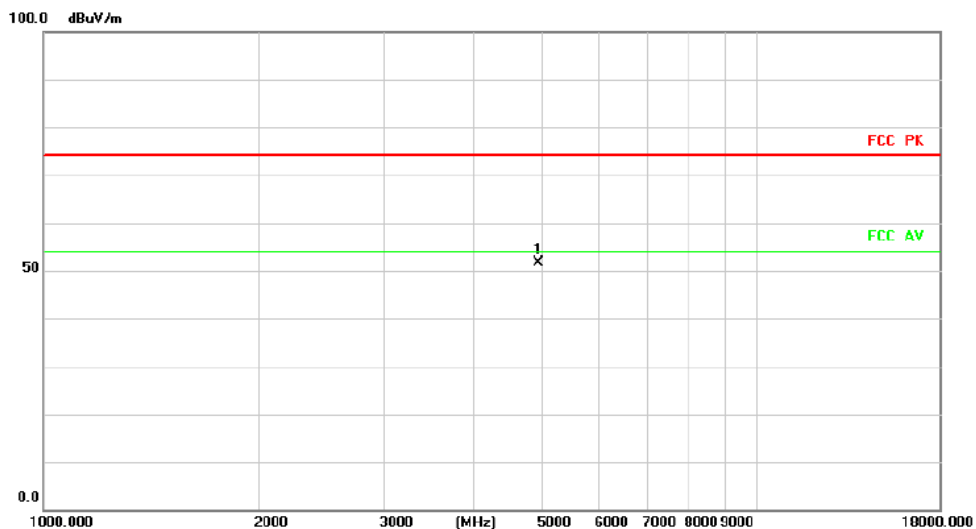
Above 1G (1GHz~18GHz)

Test mode: 11G

Test Channel:11

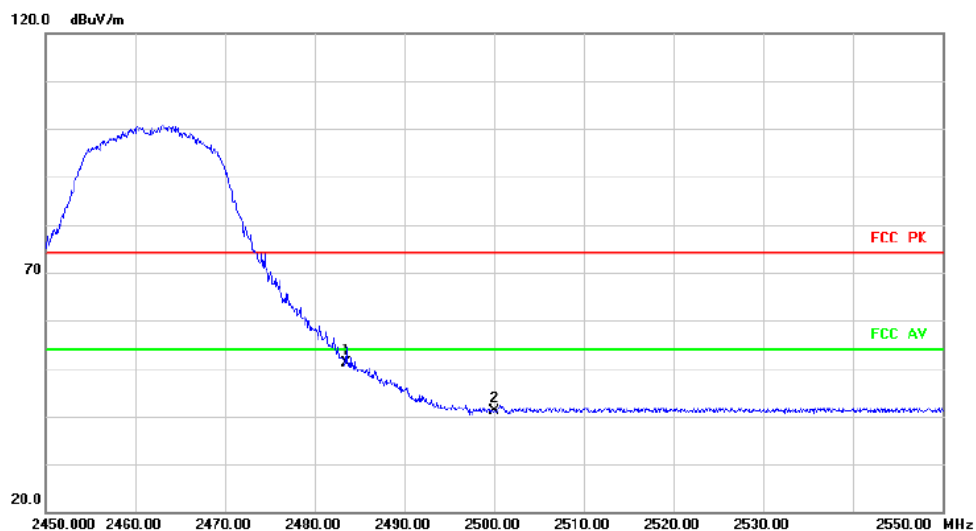
VERTICAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4924.000	56.27	-4.56	51.71	74.00	-22.29	peak		

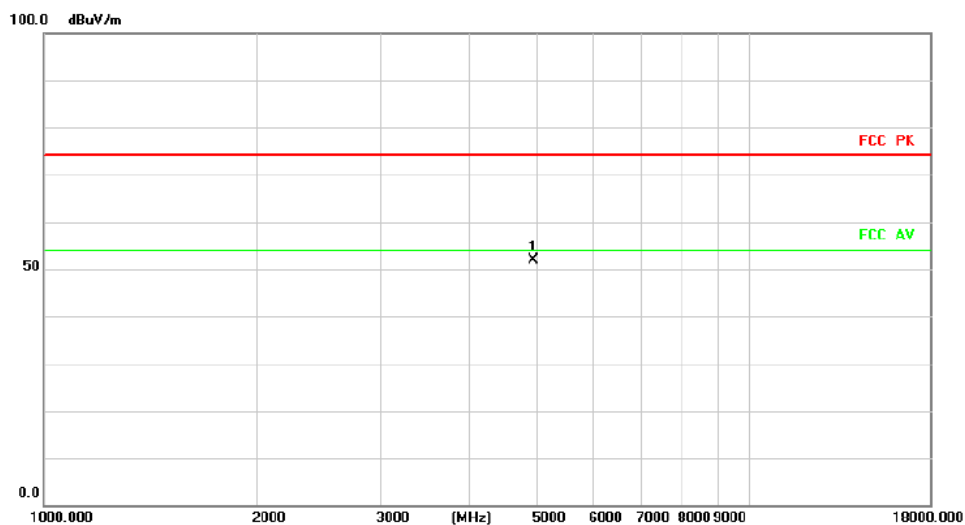
### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	2483.500	52.75	-1.50	51.25	74.00	-22.75	peak		
2		2500.000	42.53	-1.34	41.19	74.00	-32.81	peak		

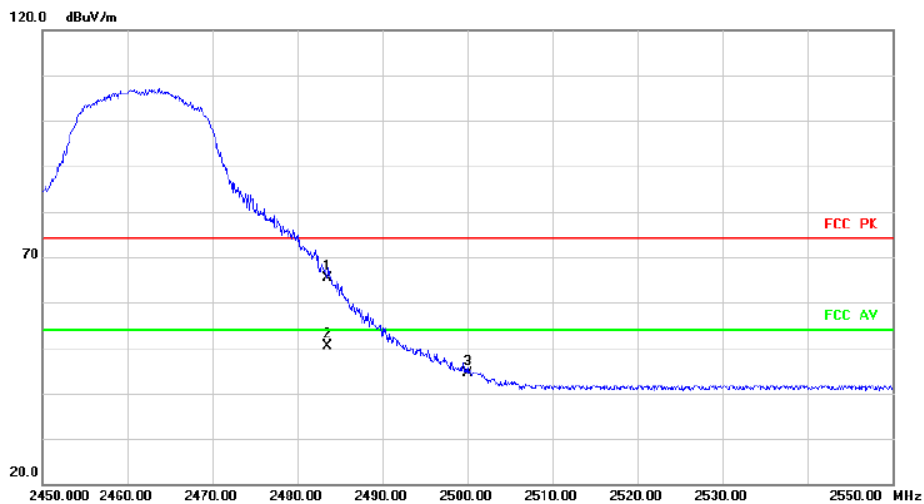
## HORIZONTALA

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4924.000	56.45	-4.56	51.89	74.00	-22.11	peak		

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2483.500	66.88	-1.50	65.38	74.00	-8.62	peak		
2	*	2483.500	51.84	-1.50	50.34	54.00	-3.66	AVG		
3		2500.000	45.68	-1.34	44.34	74.00	-29.66	peak		

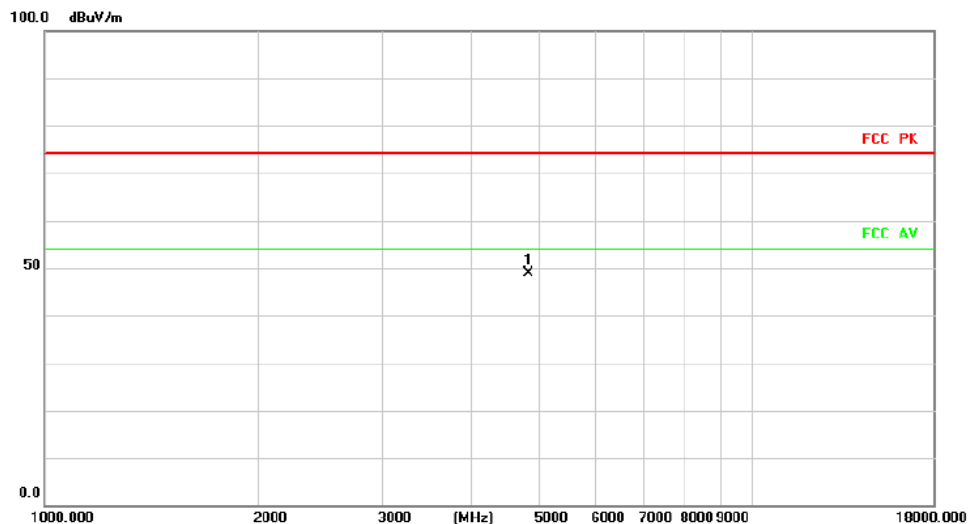
Above 1G (1GHz~18GHz)

Test mode: 11N20

Test Channel:1

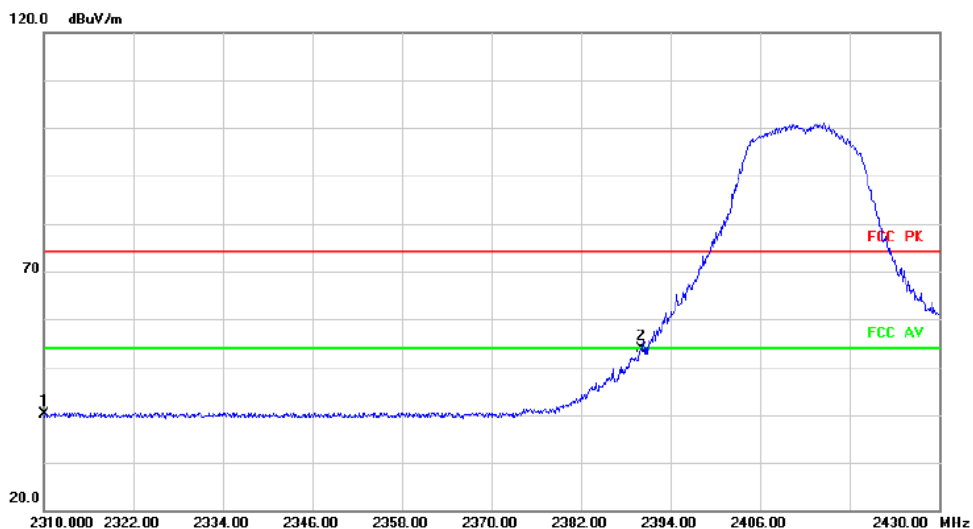
VERTICAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4824.000	53.05	-4.08	48.97	74.00	-25.03	peak		

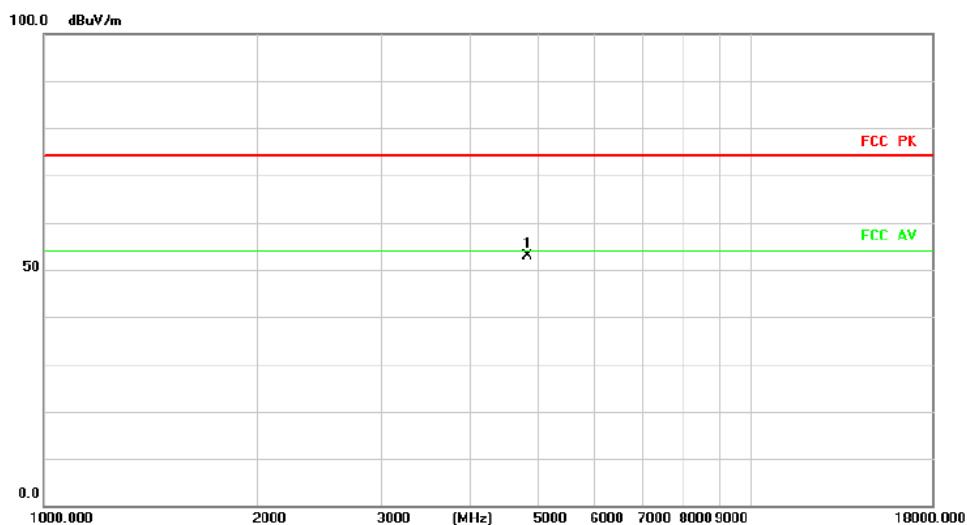
### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	42.80	-2.56	40.24	74.00	-33.76	peak		
2	*	2390.000	56.12	-2.32	53.80	74.00	-20.20	peak		

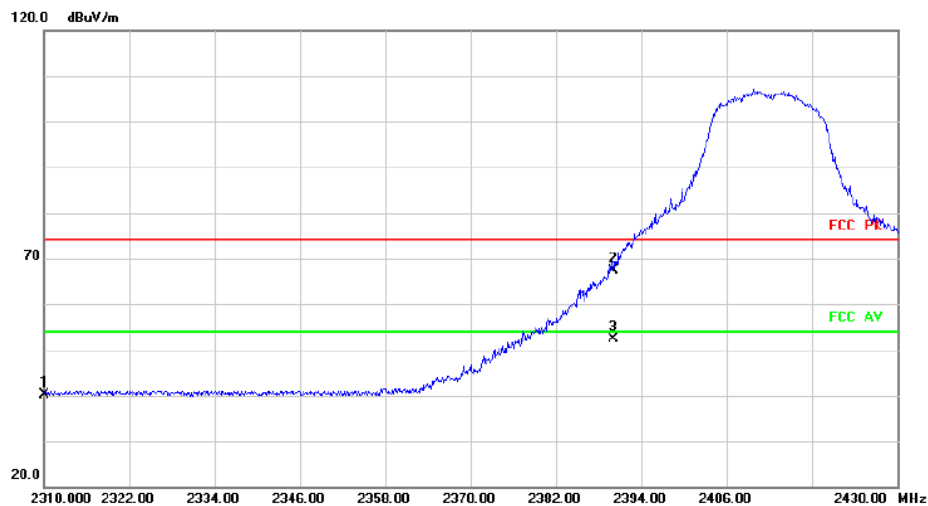
## HORIZONTAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4824.000	56.87	-4.08	52.79	74.00	-21.21	peak		

### Radiated Emission



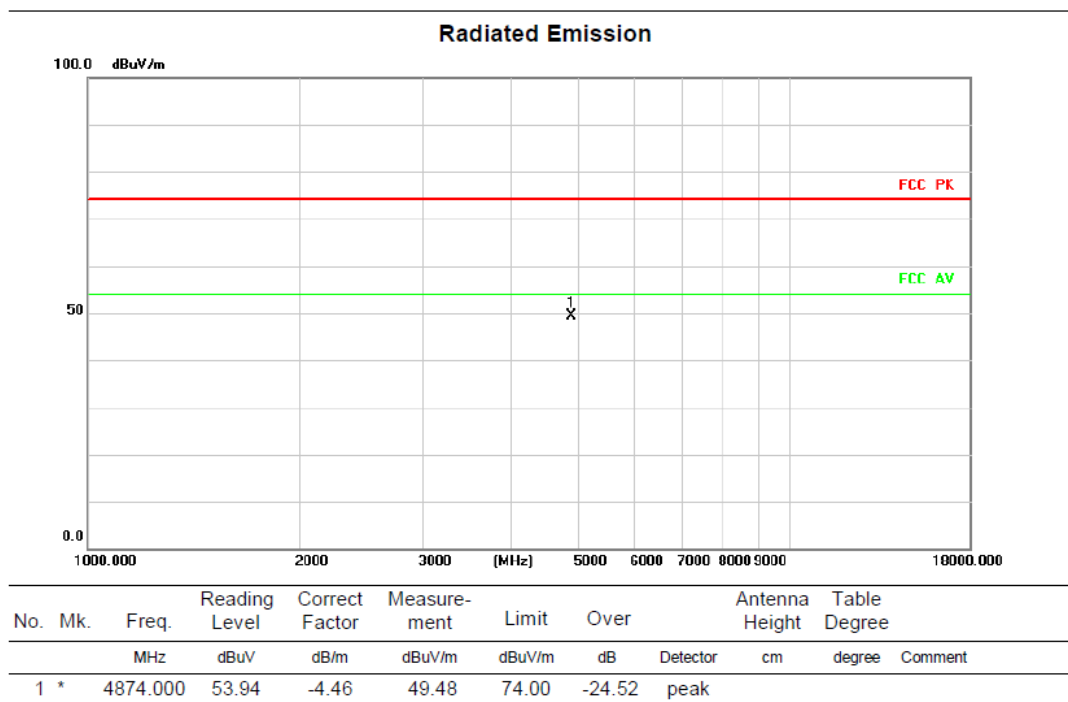
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	42.80	-2.56	40.24	74.00	-33.76	peak		
2		2390.000	69.69	-2.32	67.37	74.00	-6.63	peak		
3	*	2390.000	54.80	-2.32	52.48	54.00	-1.52	AVG		

Above 1G (1GHz~18GHz)

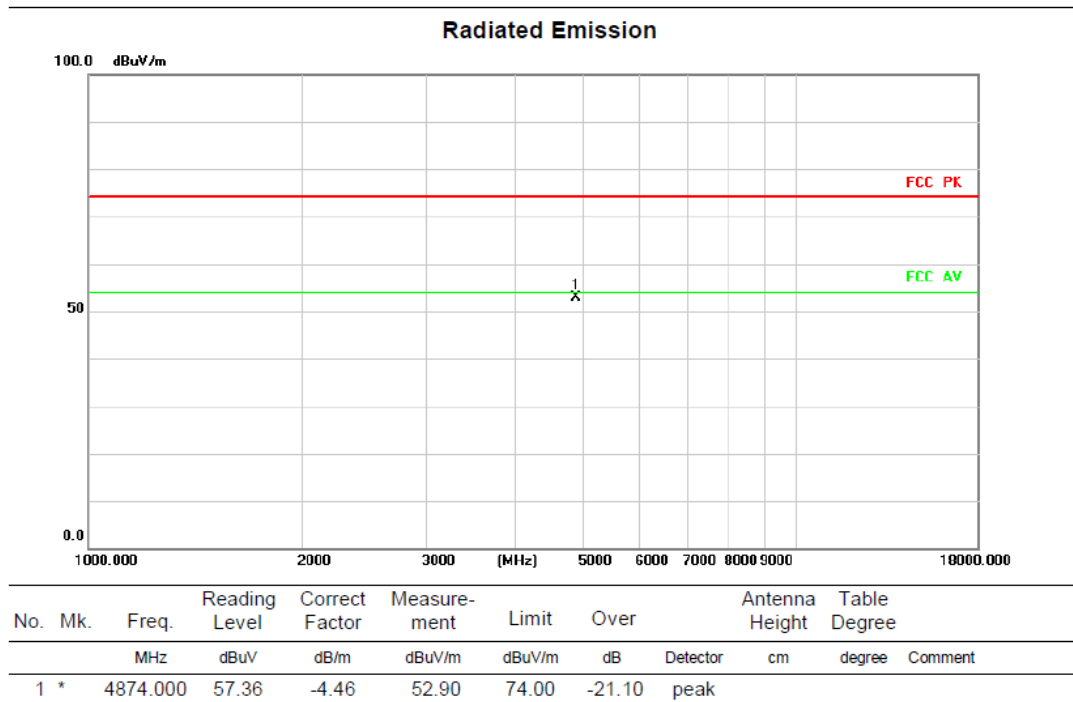
Test mode: 11N20

Test Channel:6

VERTICAL



HORIZONTAL



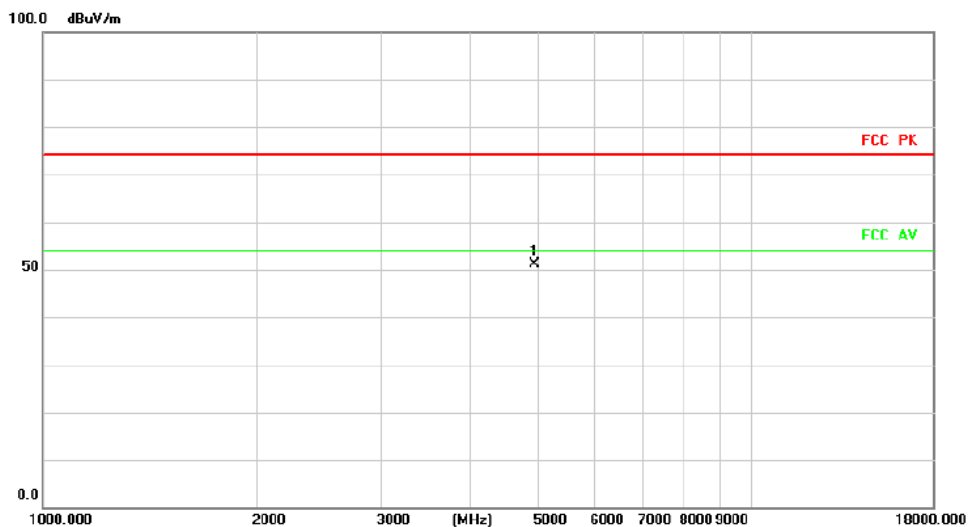
Above 1G (1GHz~18GHz)

Test mode: 11N20

Test Channel:11

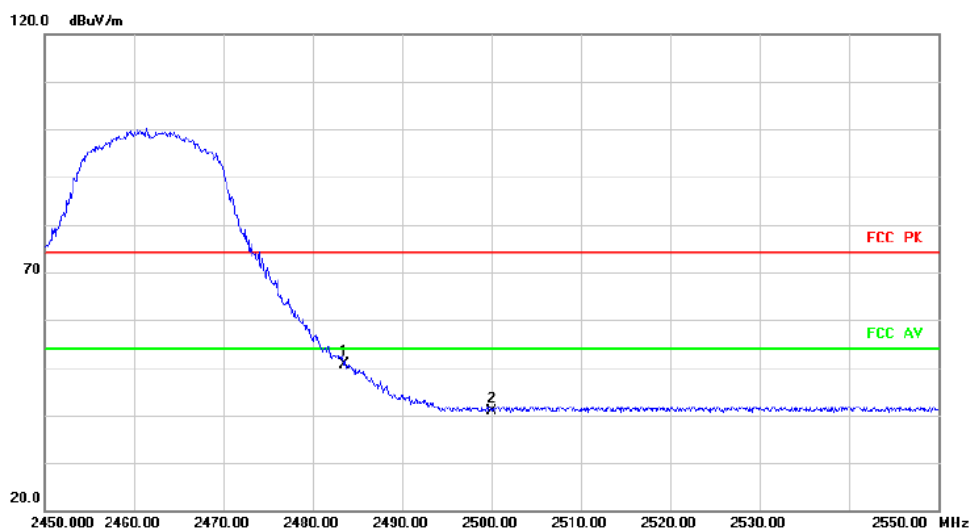
VERTICAL

### Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	4924.000	55.69	-4.56	51.13	74.00	-22.87	peak		

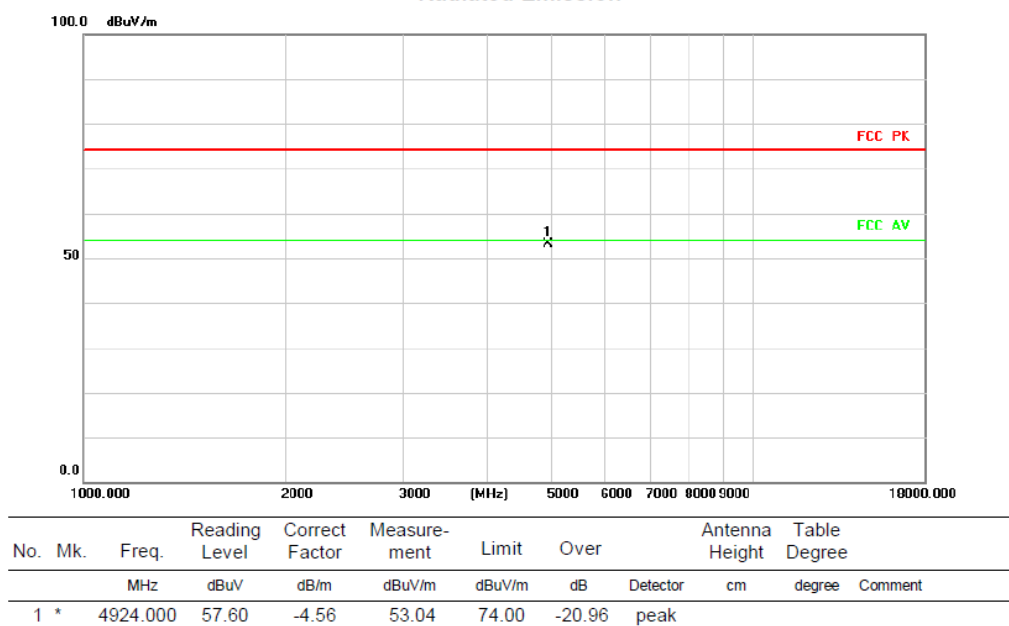
### Radiated Emission



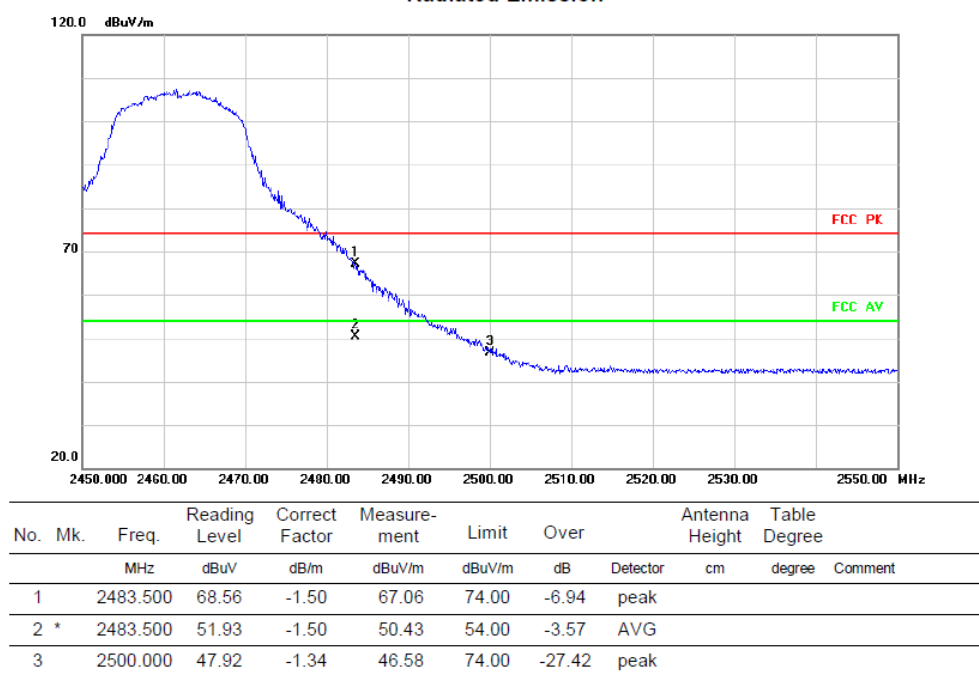
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	2483.500	52.01	-1.50	50.51	74.00	-23.49	peak		
2		2500.000	42.11	-1.34	40.77	74.00	-33.23	peak		

## HORIZONTAL

### Radiated Emission



### Radiated Emission



The high frequency, which started from 18GHz to 25GHz, was pre-scanned and the result which was 20dB lower than the limit line was not recorded in this report.



### 3.3 Spurious Emission at Antenna Port

#### 3.3.1 Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak Output Power limits. If the transmitter complies with the Output Power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

#### 3.3.2 Test Procedure

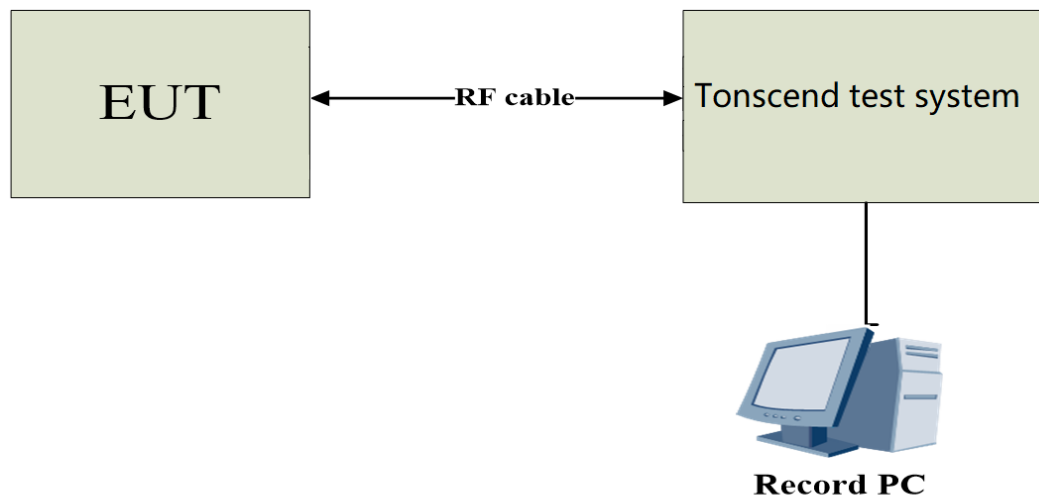
Test Method	
<input checked="" type="radio"/> Conducted Measurement	<input type="radio"/> Radiated Measurement
Test Channels	
<input checked="" type="radio"/> Lowest, Middle and Highest Channel	<input type="radio"/> Lowest and Highest Channel
Environmental conditions	
<input checked="" type="radio"/> Normal	<input type="radio"/> Normal and Extreme
Note: <input checked="" type="radio"/> : Test <input type="radio"/> : No Test	

a) The EUT was directly connected to the tonscond test system and antenna output port as show in the block diagram below.

b) Spectrum Setting as below:

Centre Frequency	The centre frequency of the channel under test
Spectrum Parameters	Setting
Start Frequency	30 MHz
Stop Frequency	26.5 GHz
RBW	100 kHz
VBW	300 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

### 3.3.3 Test Setup



### 3.3.4 The Result

#### 3.3.4.1 Conducted Spurious Emission

Test result: PASS

Note: For test data, please refer to the report RF191122C10.

#### 3.3.4.2 Band edge

Test result: PASS

Note: For test data, please refer to the report RF191122C10.

### 3.4 6dB Bandwidth

#### 3.4.1 Limit

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz

#### 3.4.2 Test Procedure

Test Method	
<input checked="" type="radio"/> Conducted Measurement	<input type="radio"/> Radiated Measurement
Test Channels	
<input checked="" type="radio"/> Lowest, Middle and Highest Channel	<input type="radio"/> Lowest and Highest Channel
Environmental conditions	
<input checked="" type="radio"/> Normal	<input type="radio"/> Normal and Extreme
Note: ● : Test    ○ : No Test	

a) The EUT was connected to the tonscond test system, and the spectrum analyser is set as follow:

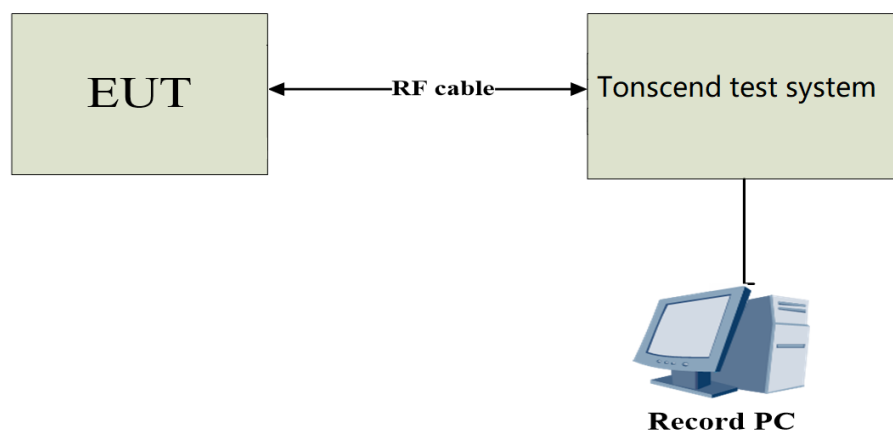
Centre Frequency	The centre frequency of the channel under test
RBW	100kHz
VBW	300kHz
Frequency span	2x Nominal Channel Bandwidth
Detector Mode	Peak
Trace Mode	Max Hold
Sweep Time	Auto Couple

b) Wait for the trace to stabilize then find the peak value of the trace and place the analyser marker on this peak.

c) Use the -6dB bandwidth function of the spectrum analyser to measure the 6dB Bandwidth of the EUT. This value shall be recorded.

d) Make sure that the power envelope is sufficiently above the noise floor of the analyser to avoid the noise signals left and right from the power envelope being taken into account by this measurement.

#### 3.4.3 Test Setup





#### 3.4.4 Test Result

Test result: PASS

Note: For test data, please refer to the report RF191122C10.

### 3.5 Maximum conducted output power

#### 3.5.1 Limit

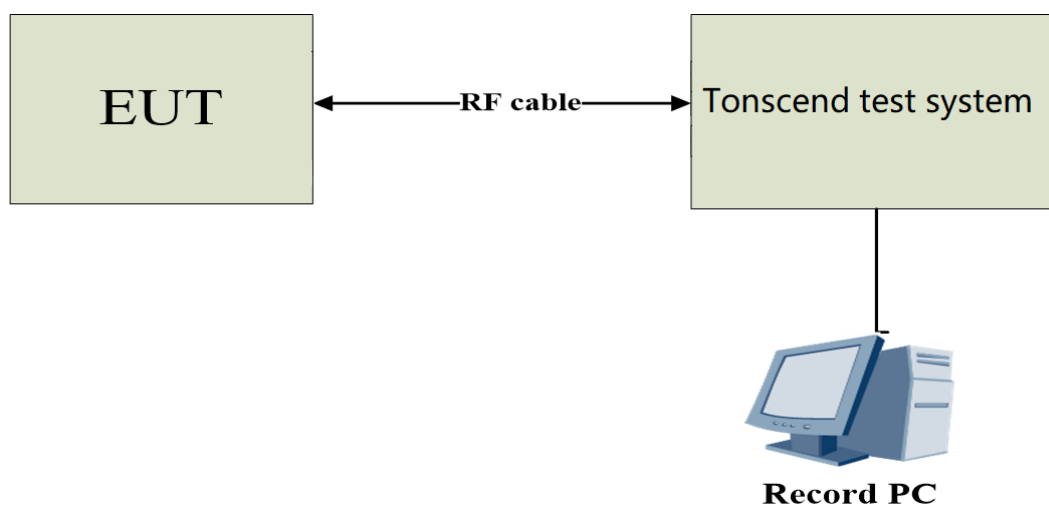
For systems using digital modulation in the 2400~2483.5MHz, The Maximum output Power shall not exceed 1W(30dBm)

#### 3.5.2 Test Procedure

Test Method	
<input checked="" type="radio"/> Conducted Measurement	<input type="radio"/> Radiated Measurement
Test Channels	
<input checked="" type="radio"/> Lowest, Middle and Highest Channel	<input type="radio"/> Lowest and Highest Channel
Environmental conditions	
<input checked="" type="radio"/> Normal	<input type="radio"/> Normal and Extreme
Note: ● : Test    ○ : No Test	

- The EUT was directly connected to the tonscend test system and antenna output port as show in the block diagram below.
- The maximum conducted output power was performed in accordance with method 11.9.2.3 (for average power) of ANSI C63.10-2013.

#### 3.5.3 Test Setup



### 3.5.4 Table of Parameters of Text Software Setting

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

For Power setting value

Test Mode	Power Level Setting defined by Manufacturer		
Test Software Version	cmd.exe		
Frequency (MHz)	2412	2437	2462
IEEE 802.11B	15.5	15.5	15.5
IEEE 802.11G	14.5	14.5	14.5
IEEE 802.11N20	14.5	14.5	14.5

### 3.5.5 The Result

Test Mode	Antenna	Frequency[MHz]	Maximum conducted output Power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	14.83	≤30.00	PASS
		2437	14.72	≤30.00	PASS
		2462	14.92	≤30.00	PASS
11G	Ant1	2412	14.75	≤30.00	PASS
		2437	14.84	≤30.00	PASS
		2462	14.93	≤30.00	PASS
11N20SISO	Ant1	2412	15.04	≤30.00	PASS
		2437	14.81	≤30.00	PASS
		2462	14.42	≤30.00	PASS

Note: The duty cycle factor and line loss are compensated in the average conducted output power.

### 3.6 Power Spectral Density

#### 3.6.1 Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmitting.

#### 3.6.2 Test Procedure

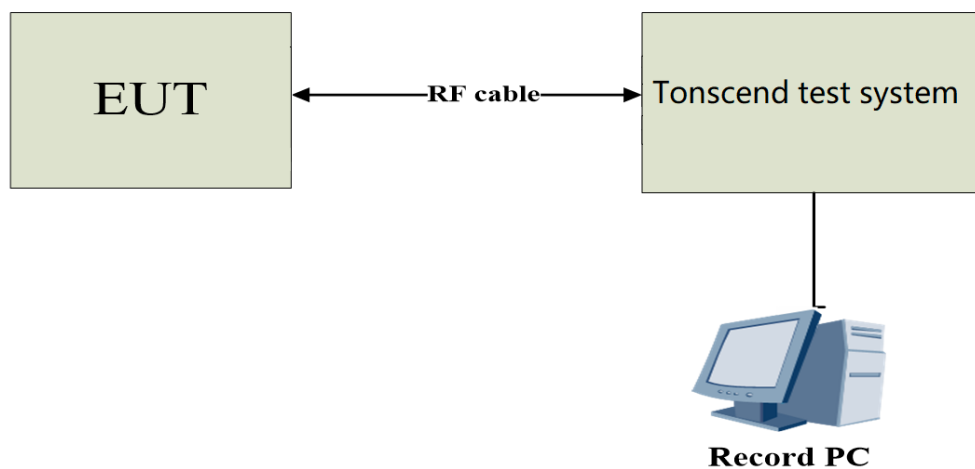
Test Method	
<input checked="" type="radio"/> Conducted Measurement	<input type="radio"/> Radiated Measurement
Test Channels	
<input checked="" type="radio"/> Lowest, Middle and Highest Channel	<input type="radio"/> Lowest and Highest Channel
Environmental conditions	
<input checked="" type="radio"/> Normal	<input type="radio"/> Normal and Extreme
Note: <input checked="" type="radio"/> : Test <input type="radio"/> : No Test	

a) The EUT was directly connected to the tonscond test system and antenna output port as show in the block diagram below.

b) Spectrum analyser settings as following:

Spectrum Parameters	Setting
Span Frequency	1.5 times the DTS bandwidth
RBW	3 kHz
VBW	10 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

#### 3.6.3 Test Setup





#### 3.6.4 The Result

Test result: PASS

Note: For test data, please refer to the report RF191122C10.



## Statement

1. The report is invalid without the official seal or special seal of Shenzhen Haiyun Standard Technology Co., Ltd. (hereinafter referred to as the unit).
2. The report is invalid without the signature of the approver.
3. The report is invalid if altered arbitrarily.
4. The report shall not be partially copied without the written approval of the unit.
5. The reported test results are only valid for the tested samples.
6. If there is any objection to the test report, it shall be submitted to the test unit within 15 days from the date of receiving the report, and the overdue shall not be accepted.

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**End of Test Report**