



Test report No: 4913207.56

## TEST REPORT

### Radio Spectrum Matters (RF)

Identification of item tested	Connected Baby Monitor	
Trademark	PHILIPS AVENT	
Model and /or type reference	SCD971/xx, SCD973/xx (xx=00, 01, ..... , 99)	
FCC/IC ID	FCC ID: 2AW4T-SCD97XBA; IC: 135T-SCD97XBA	
HVIN	SCD971BA, SCD973BA	
Features	Adaptor part (ASSA105A-050100): Input: 100-240 Vac, 50/60 Hz, 0,35 A, Output: 5.0 Vdc, 1.0 A, 5.0 W; BU part: Input: 5.0 Vdc, 1.0 A	
Applicant's name / address	Philips Electronics Hong Kong Limited Level 19, Tower I, Grand Century Place, 193 Prince Edward Road West, Mongkok, Kowloon, Hong Kong	
Test method requested, standard	FCC CFR Title 47 Part15 Subpart C Section 15.247; KDB558074 D01v05r02; RSS-Gen Issue 5; RSS-247 Issue 3	
Verdict Summary	COMPLIANCE	
Tested by (name & signature)	Harry Deng	
Approved by (name & signature)	Tim Yan	
Date of issue	2024-05-22	
Report template No	TRF_EMC 2017-06- FCC_Part15C_247	

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## GENERAL CONDITIONS

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or Competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA.
5. This report will not be used for social proof function in China market.

## UNCERTAINTY

For all measurements where guidance for the calculation of the instrumentation uncertainty of a measurement is specified in EN 55016-4-2 (CISPR 16-4-2), EN/IEC 61000-4 series or a product standard, the measurement instrumentation uncertainty has been calculated and applied in accordance with these standards.

Uncertainties have been calculated according to the DEKRA internal document. The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95%.

## ENVIRONMENTAL CONDITIONS

The climatic conditions during the tests are within the limits specified by the manufacturer for the operation of the EUT and the test equipment. The climatic conditions during the tests were within the following limits:

Ambient temperature	15 °C – 35 °C
Relative Humidity air	30% - 60%
Atmospheric pressure	86 kPa – 106 kPa

If explicitly required in the basic standard or applied product / product family standard the climatic values are recorded and documented separately in this test report.

## POSSIBLE TEST CASE VERDICTS

Test case does not apply to test object	N/A
Test object does meet requirement	P (Pass) / PASS
Test object does not meet requirement	F (Fail) / FAIL
Not measured	N/M

## DEFINITION OF SYMBOLS USED IN THIS TEST REPORT

<input checked="" type="checkbox"/> Indicates that the listed condition, standard or equipment is applicable for this report/test/EUT.			
<input type="checkbox"/> Indicates that the listed condition, standard or equipment is not applicable for this report/test/EUT.			
Decimal separator used in this report	<input type="checkbox"/>	Comma (,)	<input checked="" type="checkbox"/> Point (.)

## ABBREVIATIONS

For the purposes of the present document, the following abbreviations apply:

EUT	: Equipment Under Test
QP	: Quasi-Peak
CAV	: CISPR Average
AV	: Average
CDN	: Coupling Decoupling Network
SAC	: Semi-Anechoic Chamber
OATS	: Open Area Test Site
BW	: Bandwidth
AM	: Amplitude Modulation
PM	: Pulse Modulation
HCP	: Horizontal Coupling Plane
VCP	: Vertical Coupling Plane
$U_N$	: Nominal voltage
Tx	: Transmitter
Rx	: Receiver
N/A	: Not Applicable
N/M	: Not Measured

## DOCUMENT HISTORY

Report nr.	Date	Description
4913207.56	2024-05-22	First release.

## REMARKS AND COMMENTS

The equipment under test (EUT) does meet the essential requirements of the stated standard(s)/test(s).

## 1 GENERAL INFORMATION

### 1.1 General Description of the Item(s)

Description of the item .....	Connected Baby Monitor
Trademark.....	PHILIPS AVENT
Model / Type number .....	SCD971/xx, SCD973/xx (xx=00, 01, ..... , 99)
FCC/IC ID .....	FCC ID: 2AW4T-SCD97XBA; IC: 135T-SCD97XBA
HVIN .....	SCD971BA, SCD973BA
Ratings .....	Adaptor part (ASSA105A-050100): Input: 100-240 Vac, 50/60 Hz, 0,35 A, Output: 5.0 Vdc, 1.0 A, 5.0 W; BU: Input: 5.0 Vdc, 1.0 A
Manufacturer .....	Philips Consumer Lifestyle B.V. Tussendiepen 4, 9206 AD Drachten, The Netherlands
Factory .....	Sky Light Electronic (ShenZhen) Limited No. 8 Building 1F-5F & 9 Building 1F-2F, AnTuoShan High-tech Industrial Park, XinSha Road, ShaJing, Bao'An, 518104, Shenzhen, People's Republic of China

RF specification (base on client's declaration)

Operating frequency range(s) .....	2412-2462 MHz (802.11 b/g/n HT20)
Type of Modulation .....	802.11b:DSSS(DBPSK/DQPSK/CCK); 802.11g/n:OFDM(BPSK/QPSK/16QAM/64QAM)
Maximum RF output power (conducted) .....	15.80 dBm;
E.I.R.P. ....	18.09 dBm;
Antenna type.....	Integral Antenna
Antenna gain.....	2.29 dBi
Number of channel .....	11 (802.11 b/g/n HT20)
Operating Temperature Range.....	0 - 40 °C

Rated power supply .....	Voltage and Frequency		Reference poles				
			L1	L2	L3	N	PE
	<input checked="" type="checkbox"/>	AC: 100-240 V, 50/60 Hz	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	DC:					
	<input type="checkbox"/>	Battery:					
Mounting position.....:	<input type="checkbox"/>	Table top equipment					
	<input checked="" type="checkbox"/>	Wall/Ceiling mounted equipment					
	<input type="checkbox"/>	Floor standing equipment					
	<input type="checkbox"/>	Hand-held equipment					
	<input type="checkbox"/>	Other:					

Intended use of the Equipment Under Test (EUT)
<p>The apparatus as supplied for the test is Connected Baby Monitor which intended for residential use, the product contains electronic circuitry but without earth connection.</p> <p>According to manufacturer's declaration, models are identical except for the colour of appearance. Letters xx can be 00 to 99 specified the product code which would not affect the EMC test result.</p> <p>Hence, model SCD971/26 was chosen for full test and the corresponding test data are also representative of the other model as well.</p>

Copy of marking plate:
No provide.

## 1.2 Test data

Test Location	DEKRA Testing and Certification (Shanghai) Ltd. Guangzhou Branch Block 5, No.3, Qiyun Road, Huangpu District, Guangzhou, Guangdong, China FCC Designation Number: CN1324; ISED CAB identifier: CN0130
Test sample number	4913207-8 (conducted sample), 4913207-9 (radiated sample),
Date of receipt of test item	2023-12-18
Date (s) of performance of tests	2023-12-18 to 2024-02-29

### 1.3 The environment(s) in which the EUT is intended to be used

The equipment under test (EUT) is intended to be used in the following environment(s):

<input checked="" type="checkbox"/>	Residential (domestic) environment.
<input checked="" type="checkbox"/>	Commercial and light-industrial environment.
<input type="checkbox"/>	Industrial environment.

## 2 DESCRIPTION OF TEST SETUP

### 2.1 Operating mode(s) used for tests

During the tests the following operating mode(s) has(have) been used.

Operating mode	Operating mode description	Used for methods	
		Conducted	Radiated
1	Transmitting at 802.11b mode	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	Transmitting at 802.11g mode	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	Transmitting at 802.11n20 mode	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4		<input type="checkbox"/>	<input type="checkbox"/>
Supplemental information: ---			

### 2.2 Port(s) of the EUT

Port name and description	Connected to / Termination	Cable		
		Length used during test [m]	Attached during test	Shielded
AC input	AC mains	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
Supplemental information: ---				

### 2.3 Support / Auxiliary equipment / unit / software for the EUT

The EUT has been tested with the following auxiliary equipment / unit / software:

Auxiliary equipment / unit / software	Type / Version	Manufacturer	Supplied by
Laptop	Latitude 5488	DELL	DEKRA
Supplemental information: ---			

### 2.4 Test Configuration / Block diagram used for tests

Refer to Annex 3.



### 3 VERDICT SUMMARY SECTION

This chapter presents an overview of standards and results. Refer to the next chapters for details of measured test results and applied test levels.

#### 3.1 Standards

Standard	Year	Description
FCC CFR Title 47 Part 15 Subpart C Section 15.247	2024	Operation within the bands 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz.
KDB 558074 D01 v05r02	2019	Guidance for performing compliance measurements on Digital Transmission System (DTS) operating under section 15.247
RSS-Gen Issue 5 Amendment 1	2019	General Requirements for Compliance of Radio Apparatus
RSS-247 Issue 3	2023	Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices
ANSI C63.10	2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

#### 3.2 Deviation(s) from the Standard(s) / Test Specification(s)

The following deviation(s) was / were made from the published requirements of the listed standards: N/A.

#### 3.3 Overview of results

FCC measurement			
Requirement – Test case	Basic standard(s)	Verdict	Remark
AC Power Line Conducted Emission	FCC 15.207	PASS	---
Emissions in non-restricted frequency bands	FCC 15.247(d), FCC 15.209	PASS	---
Emissions in restricted frequency bands	FCC 15.247(b)(3)	PASS	---
Duty cycle	ANSI C63.10:2013	PASS	---
Band Edge	FCC 15.247(d)	PASS	---
Fundamental emission output power	FCC 15.247(d), FCC 15.209	PASS	---
DTS Bandwidth	FCC 15.247(a)(2)	PASS	---
Power Spectral Density	FCC 15.247(e)	PASS	---
Antenna Requirement	FCC 15.203	PASS	---
Supplementary information: ---			

ISED measurement			
Requirement – Test case	Basic standard(s)	Verdict	Remark
AC Power Line Conducted Emission	RSS-Gen Issue 5 Section 8.8	PASS	---
Emissions in restricted frequency bands	RSS-Gen Issue 5 Section 8.9	PASS	---
Emissions in non-restricted frequency bands	RSS-247 Issue 2 Section 5.5	PASS	---
Duty cycle	ANSI C63.10:2013	PASS	---
Band Edge	RSS-Gen Issue 5 Section 8.10	PASS	---
Fundamental emission output power	RSS-247 Issue 2 Section 5.4(d)	PASS	---
DTS Bandwidth	RSS-Gen Issue 5 Section 6.7	PASS	---
Power Spectral Density	RSS-247 Issue 2 Section 5.2(b)	PASS	---
Antenna Requirement	RSS-Gen Issue 5 Section 6.8	PASS	---
<u>Supplementary information:</u> ---			

The measurement result is considered in conformance with the requirement if it is within the prescribed limit, It is not necessary to calculate the uncertainty associated with the measurement result.

### 3.4 Measurement procedure

The EUT was controlled by laptop through the telnet port with USB-type C cable. After connected, run the software “SecureCRT” supplied by manufacturer to control the EUT work in required test mode as below table.

Mode	Frequency (MHz)	Power setting
WLAN b	2412	17 dBm
	2437	17 dBm
	2462	17 dBm
WLAN g	2412	17 dBm
	2437	17 dBm
	2462	17 dBm
WLAN n HT20	2412	17 dBm
	2437	17 dBm
	2462	17 dBm

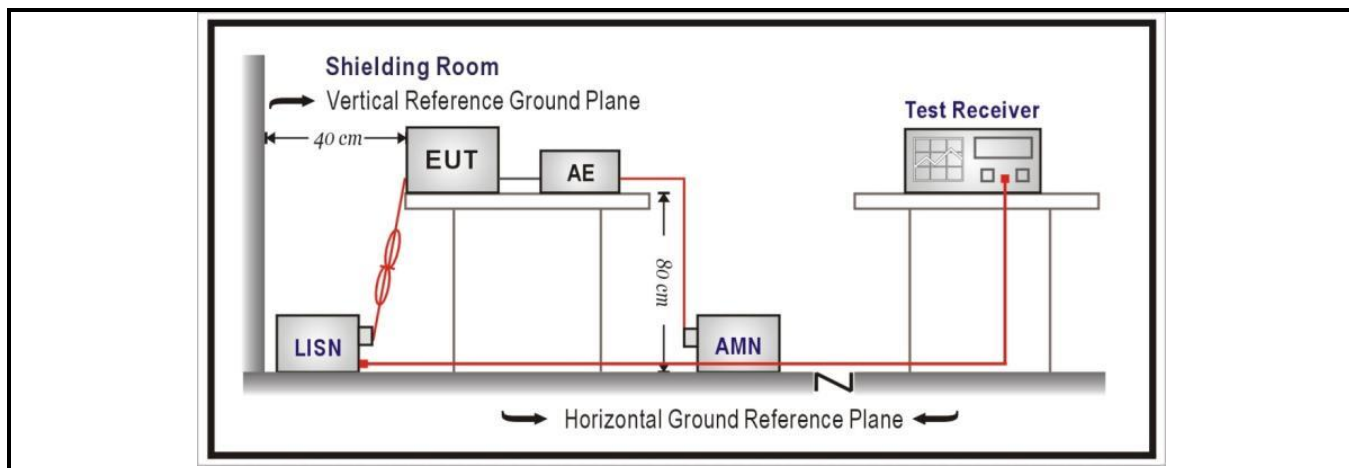
## 4 TRANSMITTER TEST RESULTS

<b>4.1 AC Power Line Conducted Emission</b>	<b>VERDICT: PASS</b>
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### Limits

FCC Part 15 Subpart C Paragraph 15.207				
Frequency range [MHz]	Limit: QP [dB(μV) <sup>1)</sup> ]	Limit: AV [dB(μV) <sup>1)</sup> ]	IF BW	Detector(s)
0,15 - 0,50	66 - 56 <sup>2)</sup>	56 - 46 <sup>2)</sup>	9 KHz	QP, AV
0,50 - 5,0	56	46	9 KHz	QP, AV
5,0 - 30	60	50	9 KHz	QP, AV
<sup>1)</sup> At the transition frequency, the lower limit applies.				
<sup>2)</sup> The limit decreases linearly with the logarithm of the frequency.				

### Test Configuration



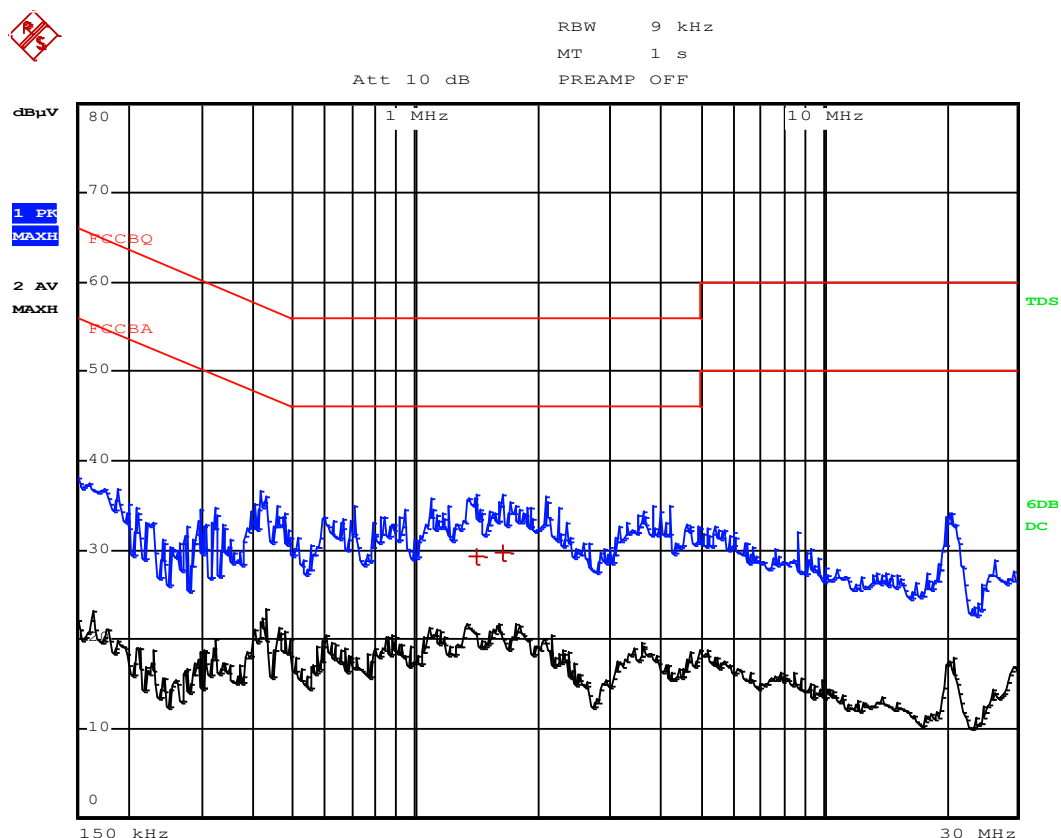
### Performed measurements

Port under test		Terminal							
<input checked="" type="checkbox"/>	AC mains input power	<input checked="" type="checkbox"/>	N	<input checked="" type="checkbox"/>	L1	<input type="checkbox"/>	L2	<input type="checkbox"/>	L3
<input type="checkbox"/>	DC input power	<input type="checkbox"/>	Positive (+)			<input type="checkbox"/>	Negative (-)		
Test method applied		<input checked="" type="checkbox"/>	Artificial mains network						
		<input type="checkbox"/>	Voltage probe						
Test setup		<input checked="" type="checkbox"/>	Table top	<input type="checkbox"/>	Artificial hand applied				
		<input type="checkbox"/>	Floor standing	<input type="checkbox"/>	Other:				
		Refer to the Annex 2 for test setup photo(s).							
Operating mode(s) used		Mode 1, Mode 2, Mode 3							
Envirment condition (temperature; humidiry)		22.0 °C; 52.0 %							
Remark		---							

Model	SCD971/26 (BU part)
Operation Mode	Mode 1
Test voltage	120 Vac, 60 Hz (worst case)

## Results

Live



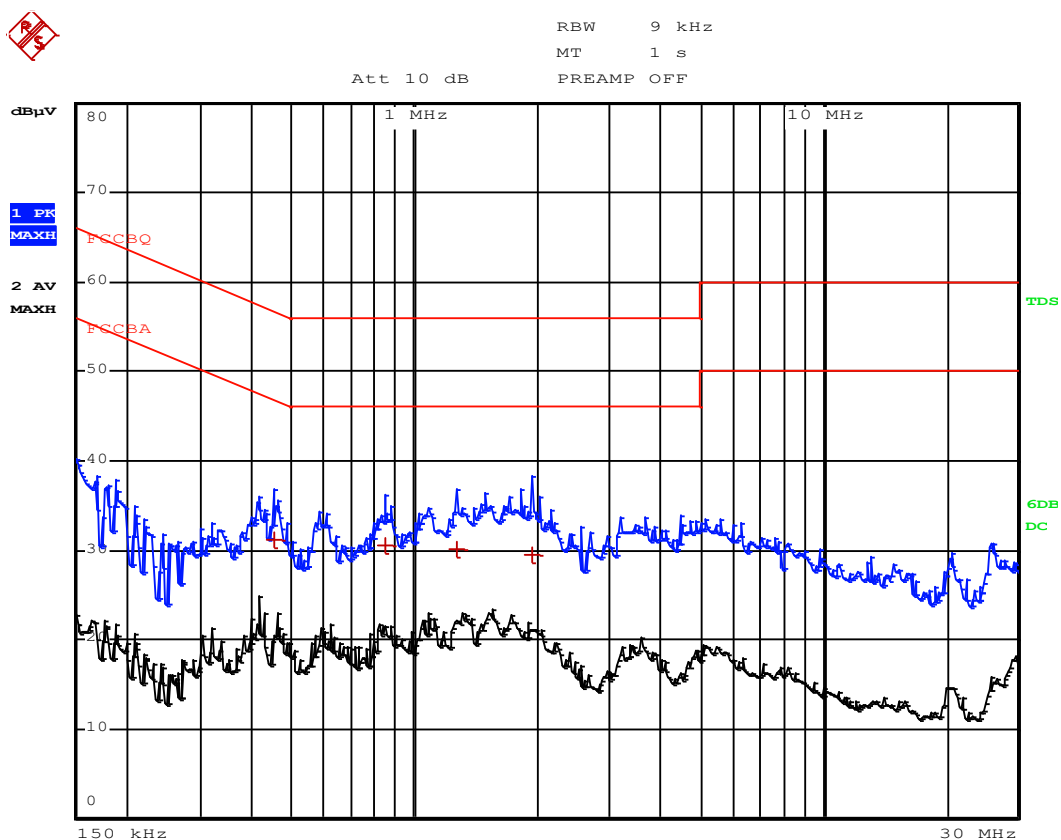
EDIT PEAK LIST (Final Measurement Results)			
Trace1:	FCCBQ		
Trace2:	FCCBA		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBμV	DELTA LIMIT dB
1 Quasi Peak	1.646 MHz	29.77	-26.22
1 Quasi Peak	1.41 MHz	29.38	-26.61

Remarks:

- 1) Level (final measurement) = received value + transducer (Lisn+cable)
- 2) Delta = Level – Limit

No other significant emissions were measured at the frequency range of interest employing both the QP and AV detectors.

## Neutral



EDIT PEAK LIST (Final Measurement Results)			
Trace1:	FCCBQ		
Trace2:	FCCBA		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBμV	DELTA LIMIT dB
1 Quasi Peak	850 kHz	30.54	-25.46
1 Quasi Peak	454 kHz	31.28	-25.51
1 Quasi Peak	1.278 MHz	30.14	-25.85
1 Quasi Peak	1.946 MHz	29.45	-26.54

### Remarks:

- 1) Level (final measurement) = received value + transducer (Lisn+cable)
- 2) Delta = Level – Limit

No other significant emissions were measured at the frequency range of interest employing both the QP and AV detectors.

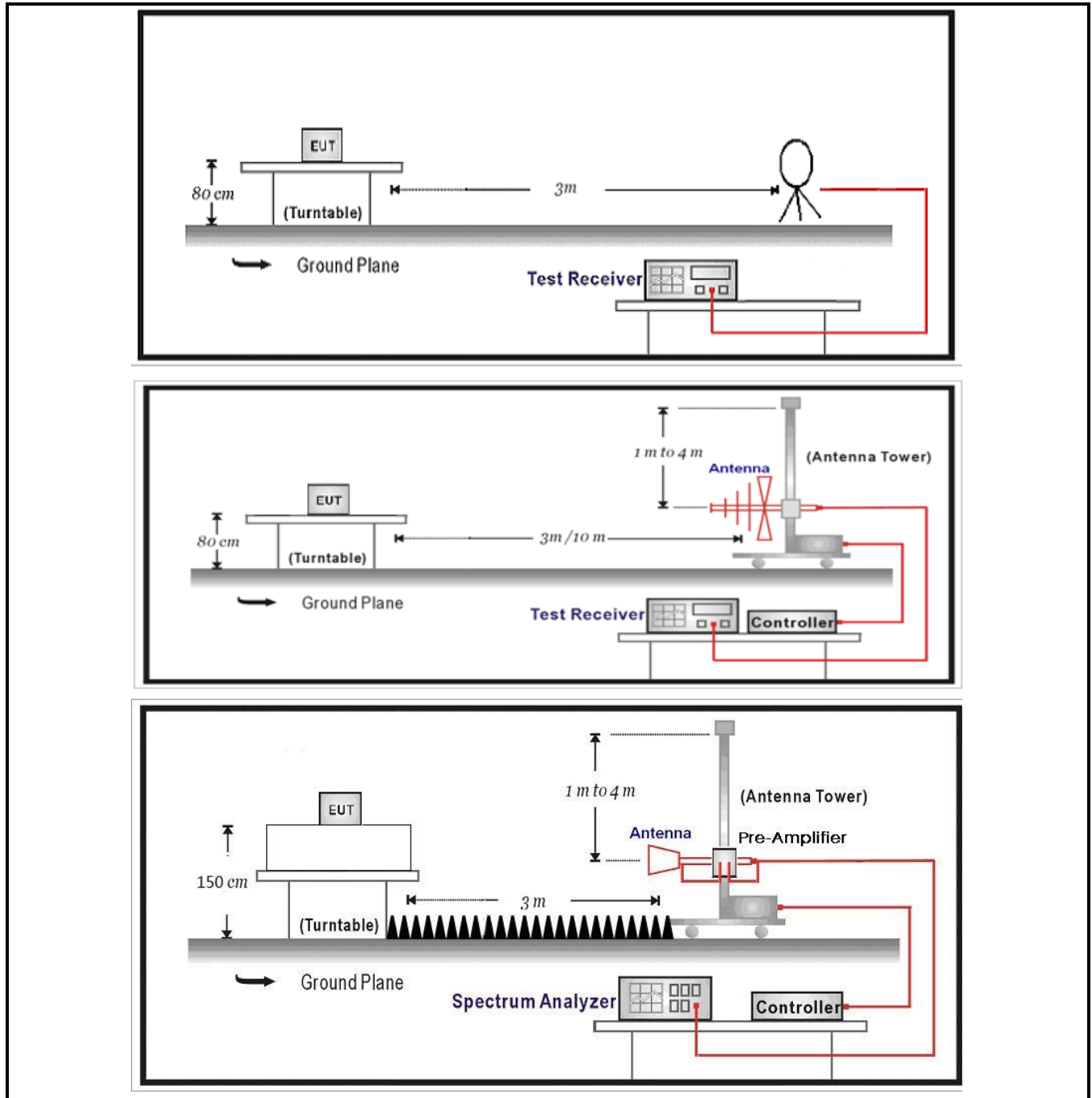
<b>4.2</b>	<b>Emissions in non-restricted frequency bands</b>	<b>VERDICT: PASS</b>
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Emissions Limit 15.209(a)			
Frequency (MHz)	Field strength ( $\mu$ V/m)	Field strength (dB $\mu$ V/m)	Measurement distance (m)
0.009 - 0.49	2400/F(kHz)	48.5 – 13.8	300 <sub>(Note 1)</sub>
0.49 - 1.705	24000/F(kHz)	33.8 - 23	30 <sub>(Note 1)</sub>
1.705 - 30	30	29.5	30 <sub>(Note 1)</sub>
30 - 88	100	40	3 <sub>(Note 2)</sub>
88 - 216	150	43.5	3 <sub>(Note 2)</sub>
216 - 960	200	46	3 <sub>(Note 2)</sub>
Above 960	500	54	3 <sub>(Note 2)</sub>

Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

## Test Configuration





## Performed measurements

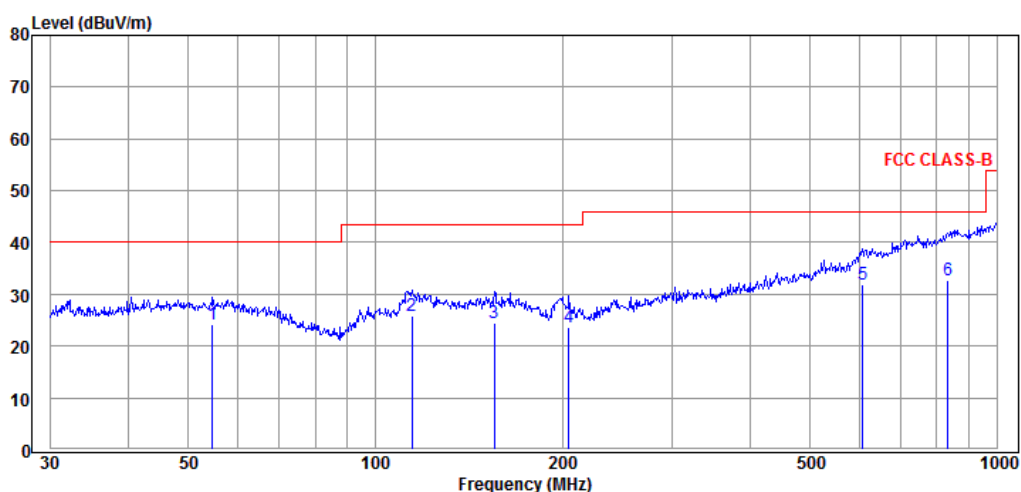
Port under test	Enclosure port	
Test method applied	<input type="checkbox"/>	Conducted measurement
	<input checked="" type="checkbox"/>	Radiated measurement
Test setup	Refer to the Annex 3 for test setup photo(s).	
Operating mode(s) used	Mode 1, Mode 2, Mode 3	
Remark	The test frequency range, 9kHz~30MHz, 18GHz~26GHz, both of the worst case are at least 20dB below the limits, therefore no data appear in the report.	

## Results of 30 – 1000 MHz

Model	SCD971/26 (BU part)
Operation Mode	Mode 1
Test voltage	120 Vac, 60 Hz

## Results

### Horizontal



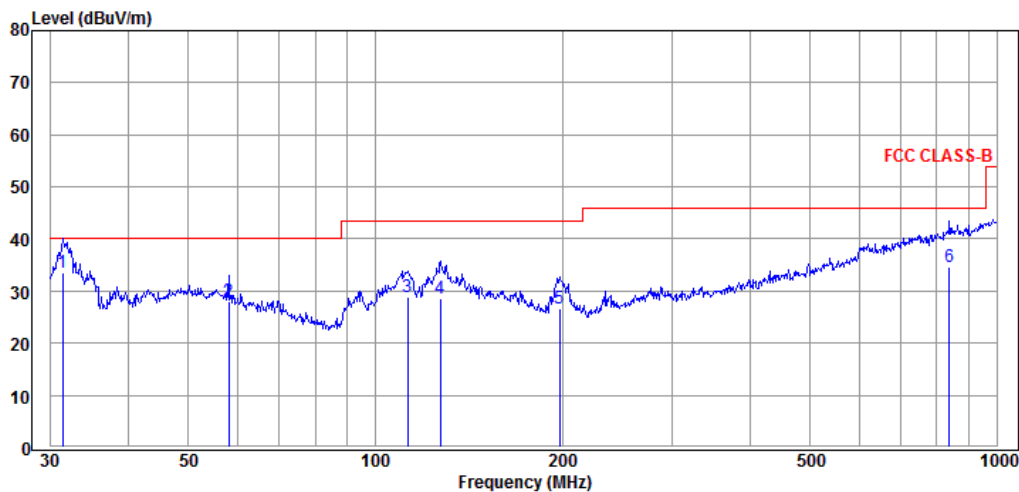
Freq (MHz)	Reading (dBuV)	C.F (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin=limit-result (dB)
54.64	9.93	14.40	24.33	40.00	15.67
114.52	13.87	11.88	25.75	43.50	17.75
155.36	9.55	14.87	24.42	43.50	19.08
204.96	12.25	11.39	23.64	43.50	19.86
607.79	8.31	23.55	31.86	46.00	14.14
833.32	6.01	26.69	32.70	46.00	13.30

Remarks:

- 1) C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
- 2) Result = Reading + C.F (Correction Factor)

No other significant emissions were measured at the frequency range of interest employing the QP detectors.

## Vertical



Freq (MHz)	Reading (dBuV)	C.F (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin=limit-result (dB)
31.40	20.50	13.04	33.54	40.00	6.46
58.00	13.85	14.18	28.03	40.00	11.97
112.52	17.21	11.67	28.88	43.50	14.62
127.22	15.69	13.01	28.70	43.50	14.80
197.89	14.90	11.75	26.65	43.50	16.85
839.18	7.67	26.85	34.52	46.00	11.48

### Remarks:

- 1) C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain
- 2) Result = Reading + C.F (Correction Factor)

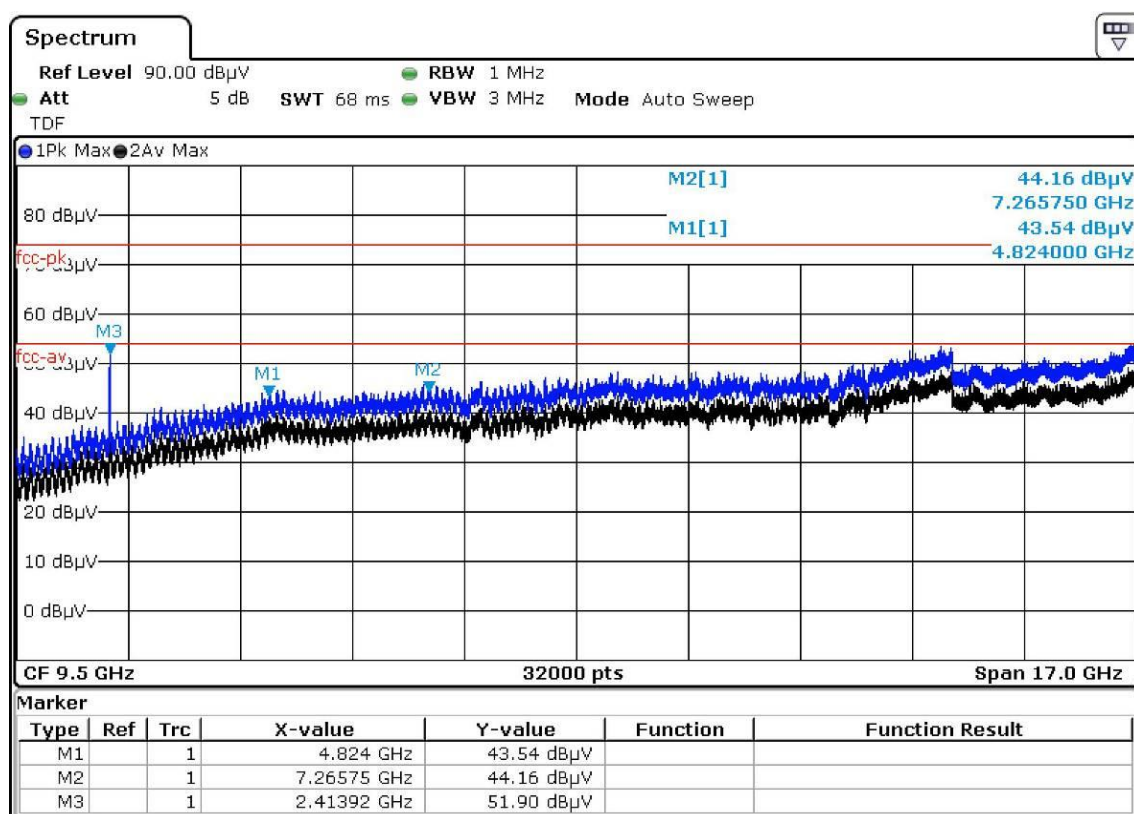
No other significant emissions were measured at the frequency range of interest employing the QP detectors.

## Results of 1 – 18 GHz

Model	SCD971/26 (BU part)
Operation Mode	Mode 1 @2412 MHz
Test voltage	120 Vac, 60 Hz

## Results

### Horizontal

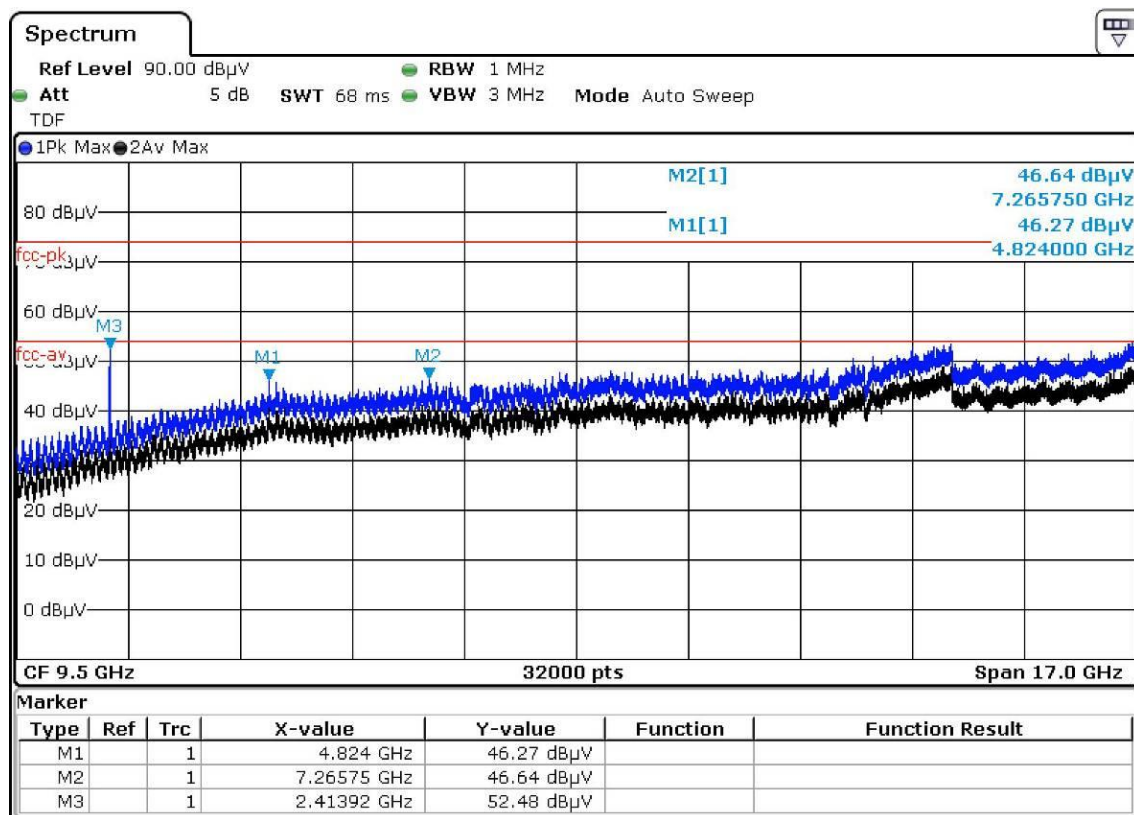


### Remarks:

- 1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.
- 2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))

No other significant emissions were measured at the frequency range of interest employing the PK and AV detectors.

## Vertical



### Remarks:

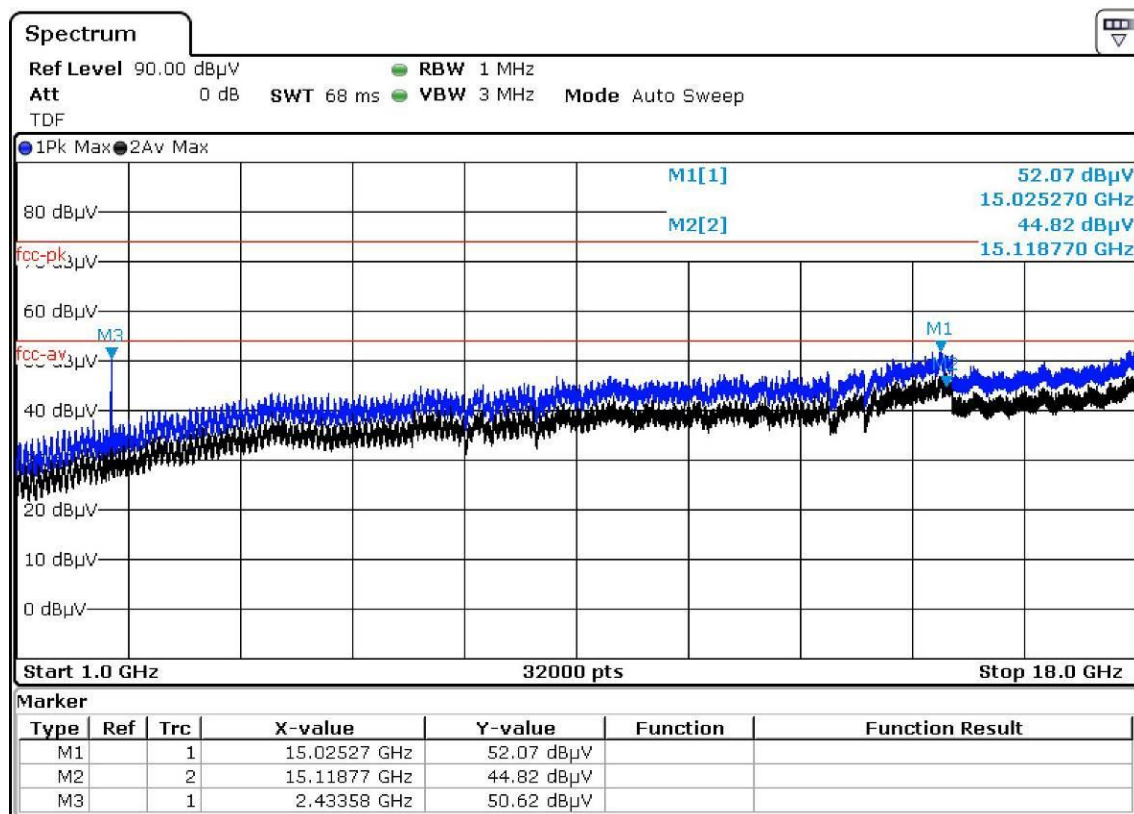
- 1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.
- 2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))

No other significant emissions were measured at the frequency range of interest employing the PK and AV detectors.

Model	SCD971/26 (BU part)
Operation Mode	Mode 1 @2437 MHz
Test voltage	120 Vac, 60 Hz

## Results

### Horizontal

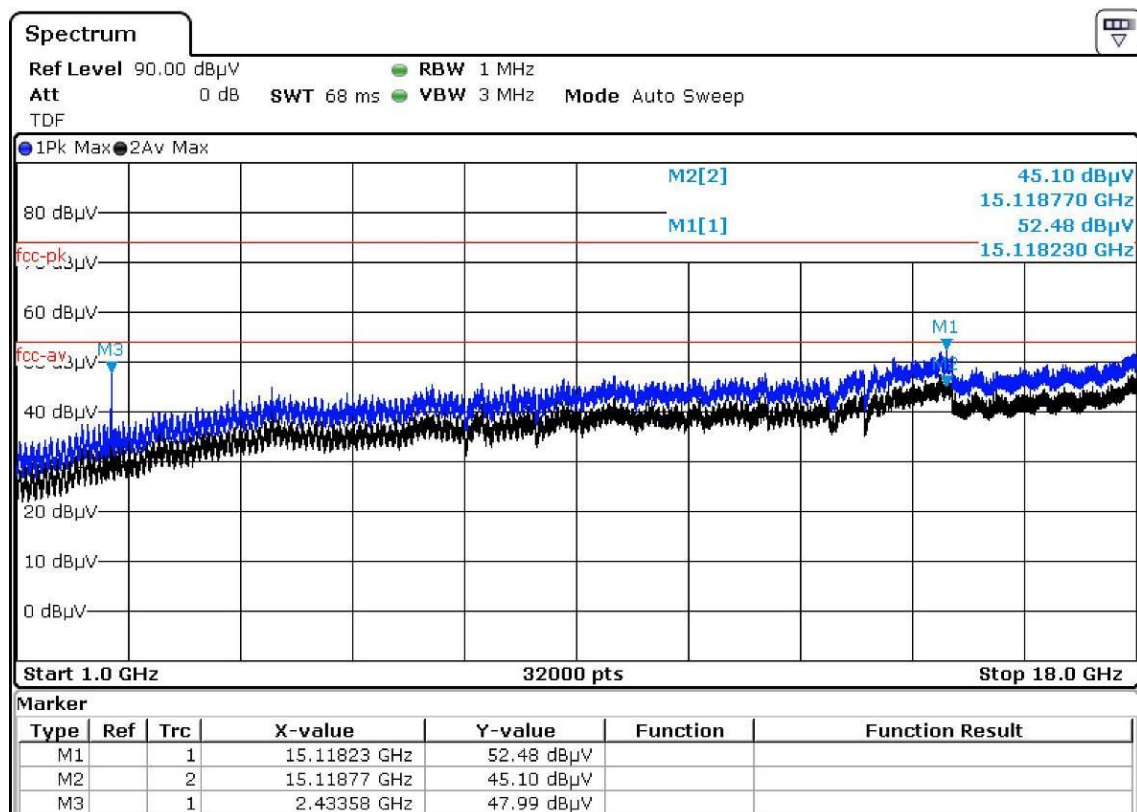


#### Remarks:

- 1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.
- 2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))

No other significant emissions were measured at the frequency range of interest employing the PK and AV detectors.

## Vertical



### Remarks:

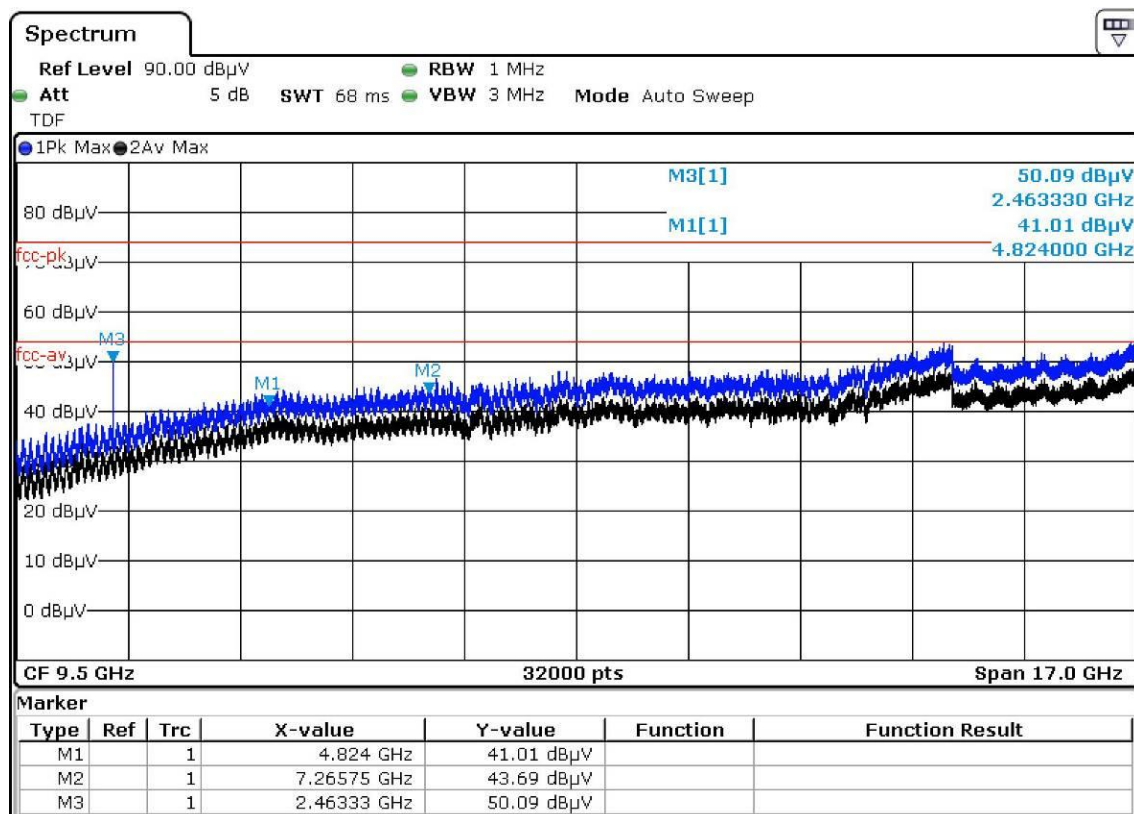
- 1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.
- 2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))

No other significant emissions were measured at the frequency range of interest employing the PK and AV detectors.

Model	SCD971/26 (BU part)
Operation Mode	Mode 1 @2462 MHz
Test voltage	120 Vac, 60 Hz

## Results

### Horizontal



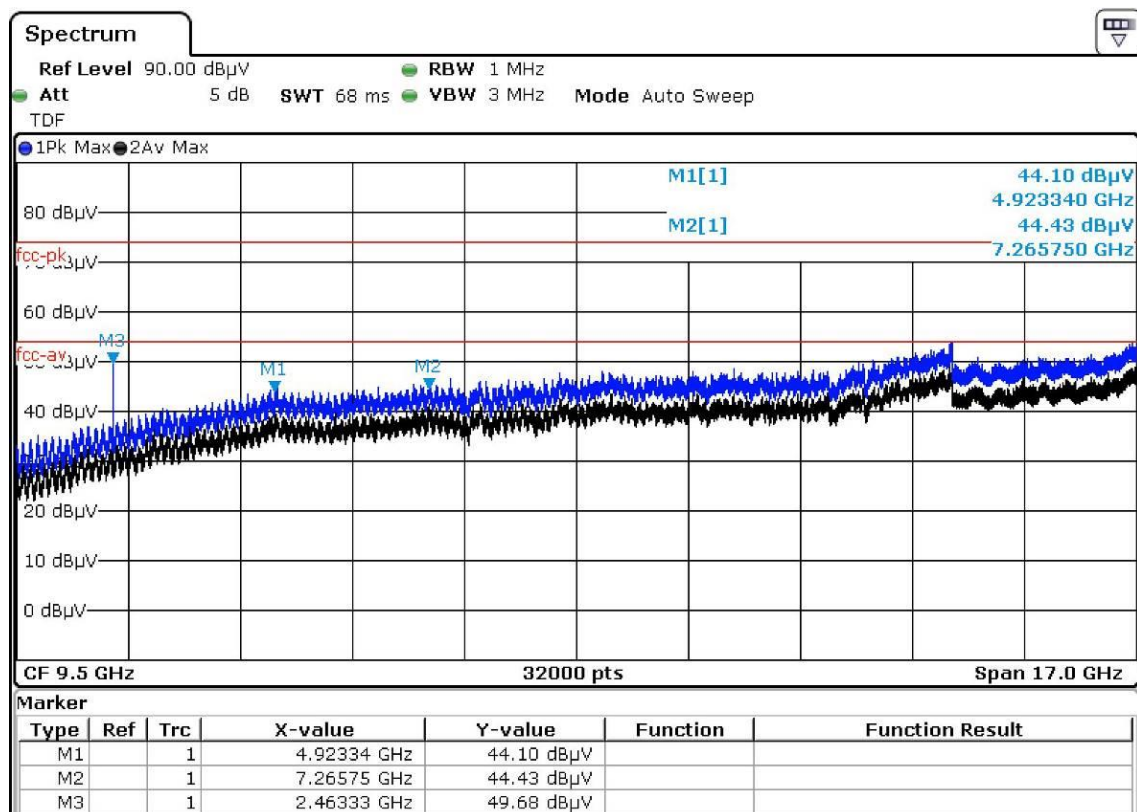
#### Remarks:

- 1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.
- 2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))

No other significant emissions were measured at the frequency range of interest employing the PK and AV detectors.



## Vertical



### Remarks:

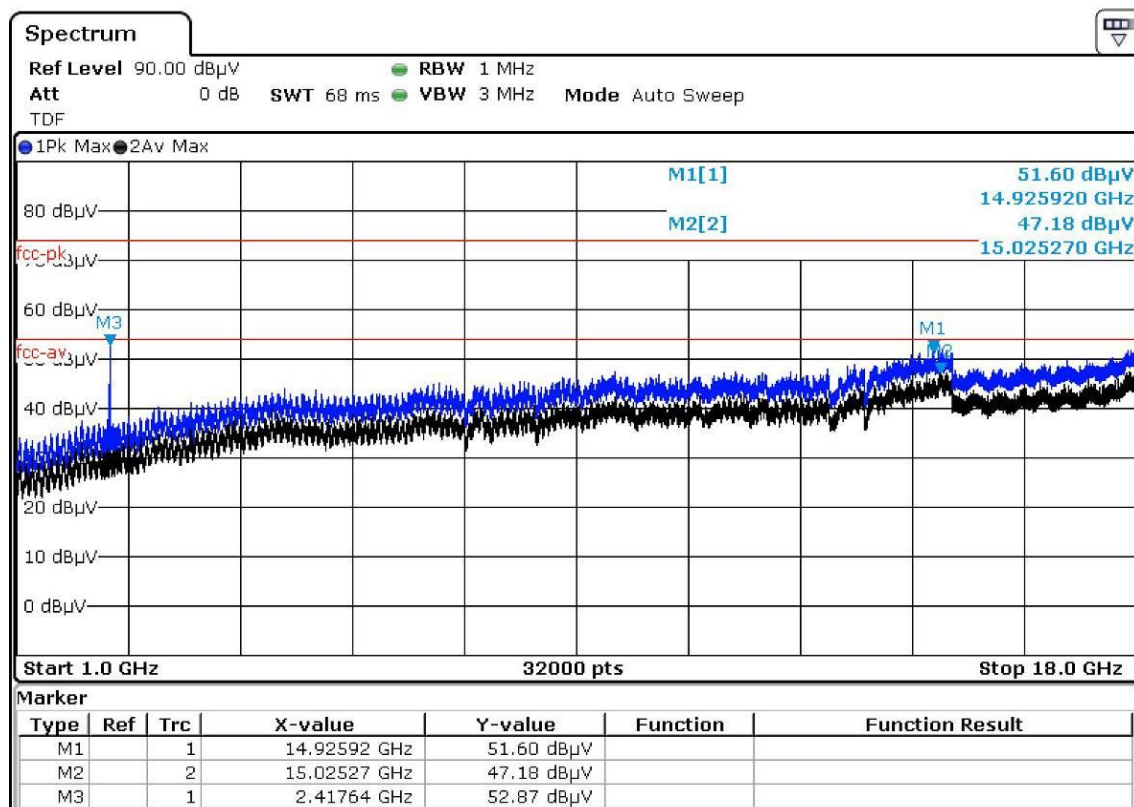
- 1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.
- 2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))

No other significant emissions were measured at the frequency range of interest employing the PK and AV detectors.

Model	SCD971/26 (BU part)
Operation Mode	Mode 2 @2412 MHz
Test voltage	120 Vac, 60 Hz

## Results

### Horizontal

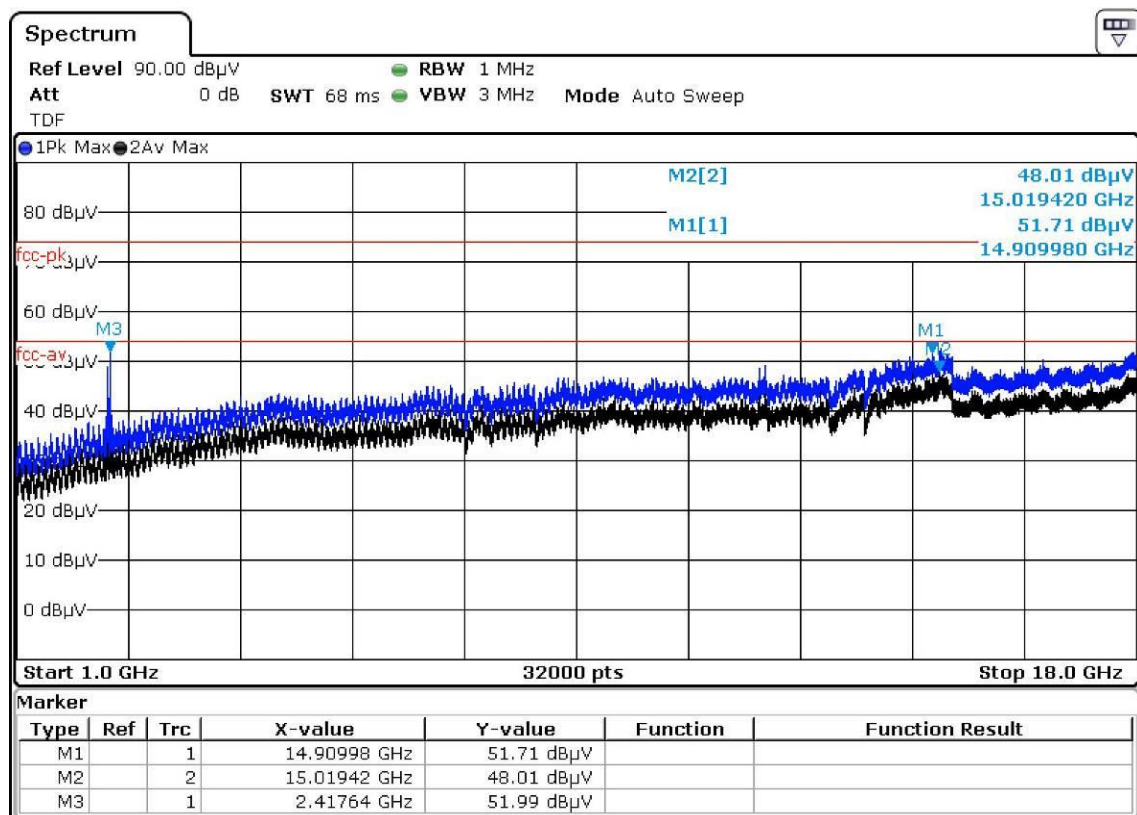


#### Remarks:

- 1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.
- 2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))

No other significant emissions were measured at the frequency range of interest employing the PK and AV detectors.

## Vertical



### Remarks:

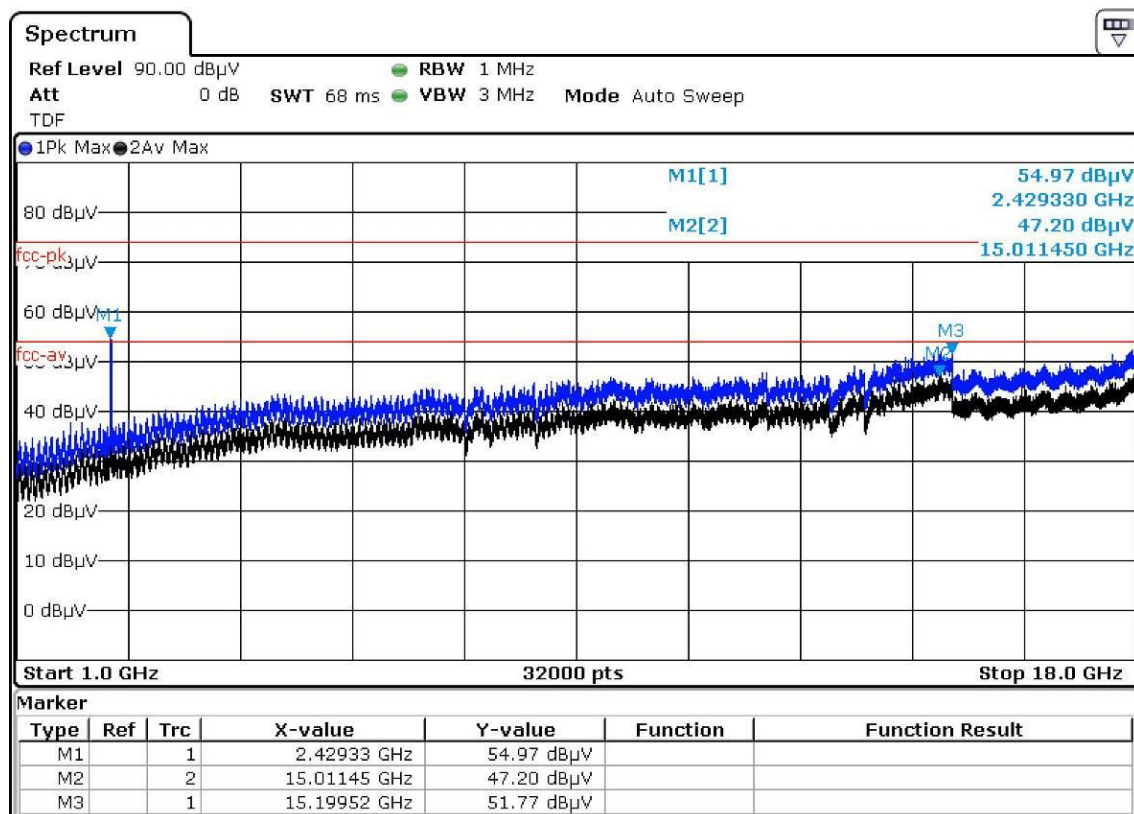
- 1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.
- 2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))

No other significant emissions were measured at the frequency range of interest employing the PK and AV detectors.

Model	SCD971/26 (BU part)
Operation Mode	Mode 2 @2437 MHz
Test voltage	120 Vac, 60 Hz

## Results

### Horizontal

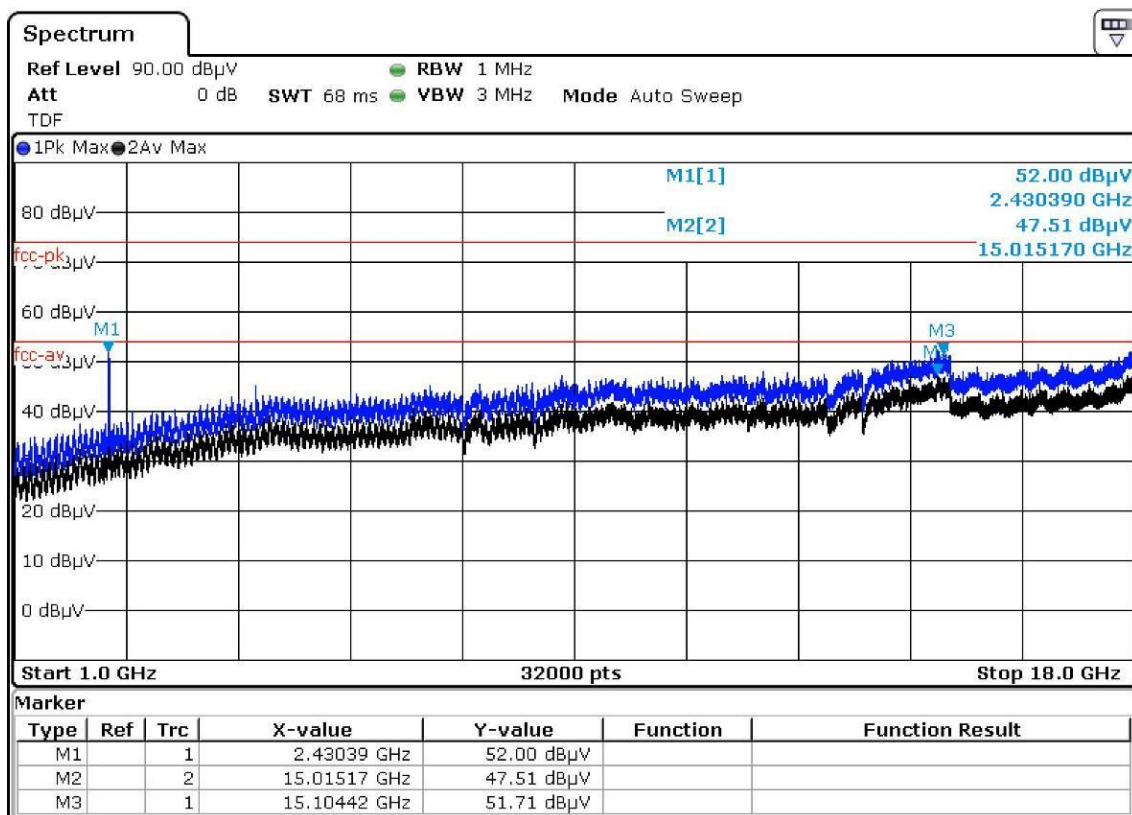


#### Remarks:

- 1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.
- 2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))

No other significant emissions were measured at the frequency range of interest employing the PK and AV detectors.

## Vertical



### Remarks:

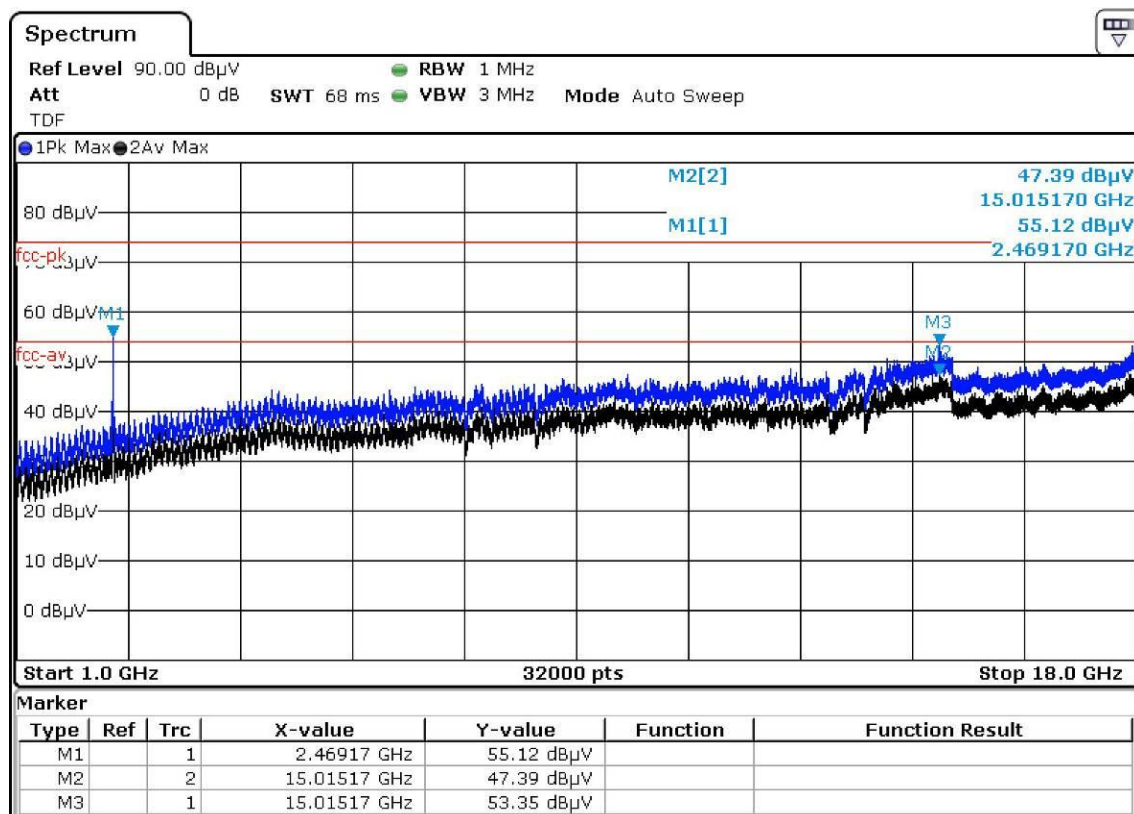
- 1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.
- 2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))

No other significant emissions were measured at the frequency range of interest employing the PK and AV detectors.

Model	SCD971/26 (BU part)
Operation Mode	Mode 2 @2462 MHz
Test voltage	120 Vac, 60 Hz

## Results

### Horizontal

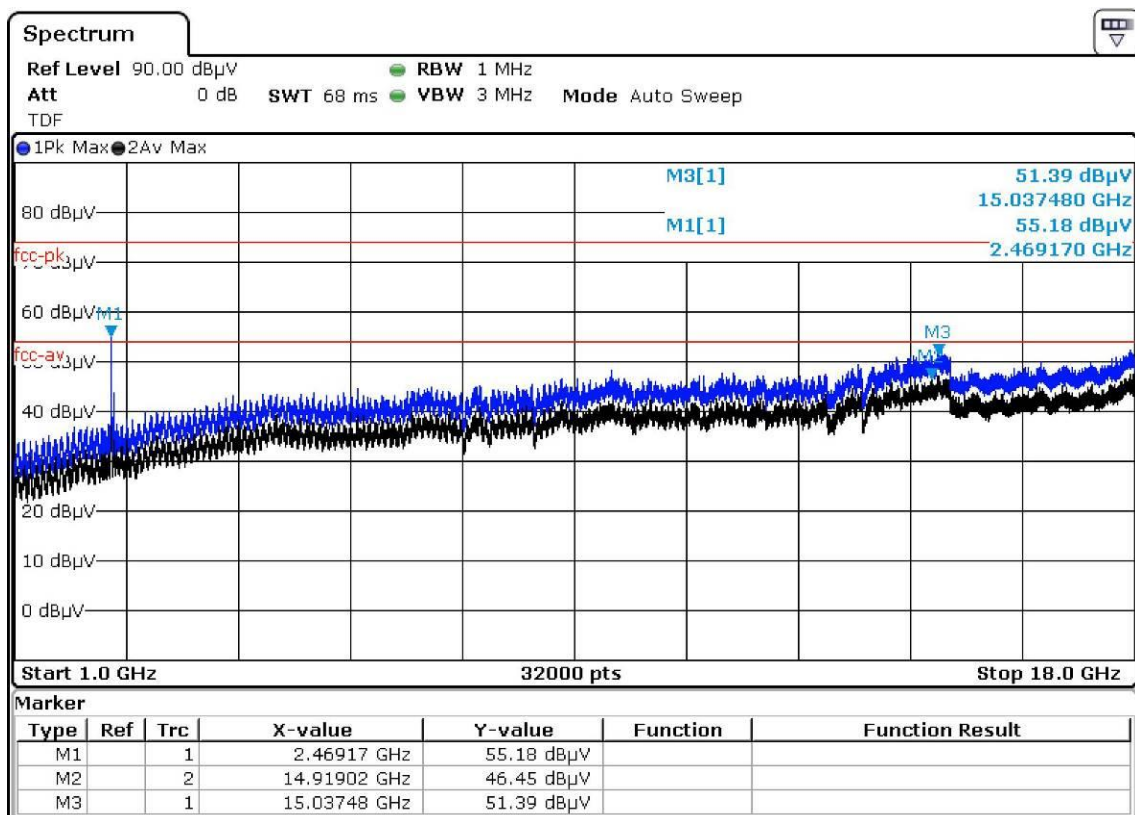


#### Remarks:

- 1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.
- 2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))

No other significant emissions were measured at the frequency range of interest employing the PK and AV detectors.

## Vertical



### Remarks:

- 1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.
- 2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))

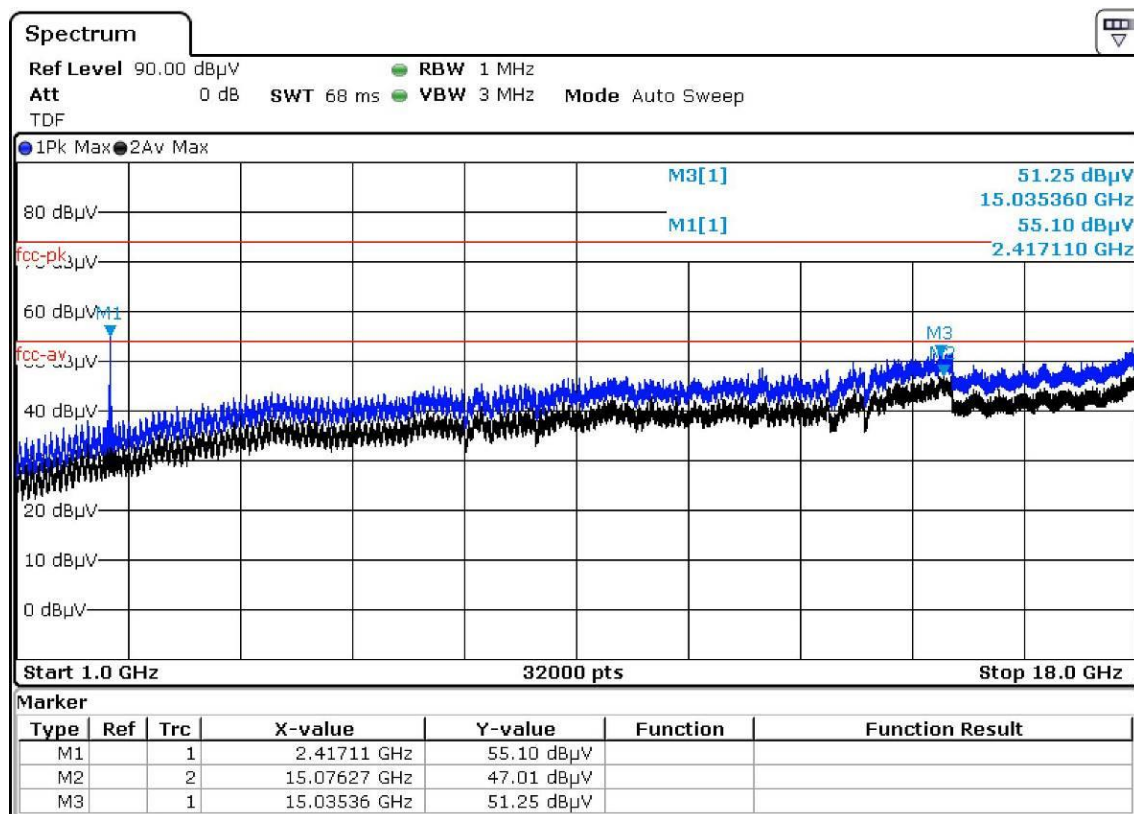
No other significant emissions were measured at the frequency range of interest employing the PK and AV detectors.



Model	SCD971/26 (BU part)
Operation Mode	Mode 3 @2412 MHz
Test voltage	120 Vac, 60 Hz

## Results

### Horizontal



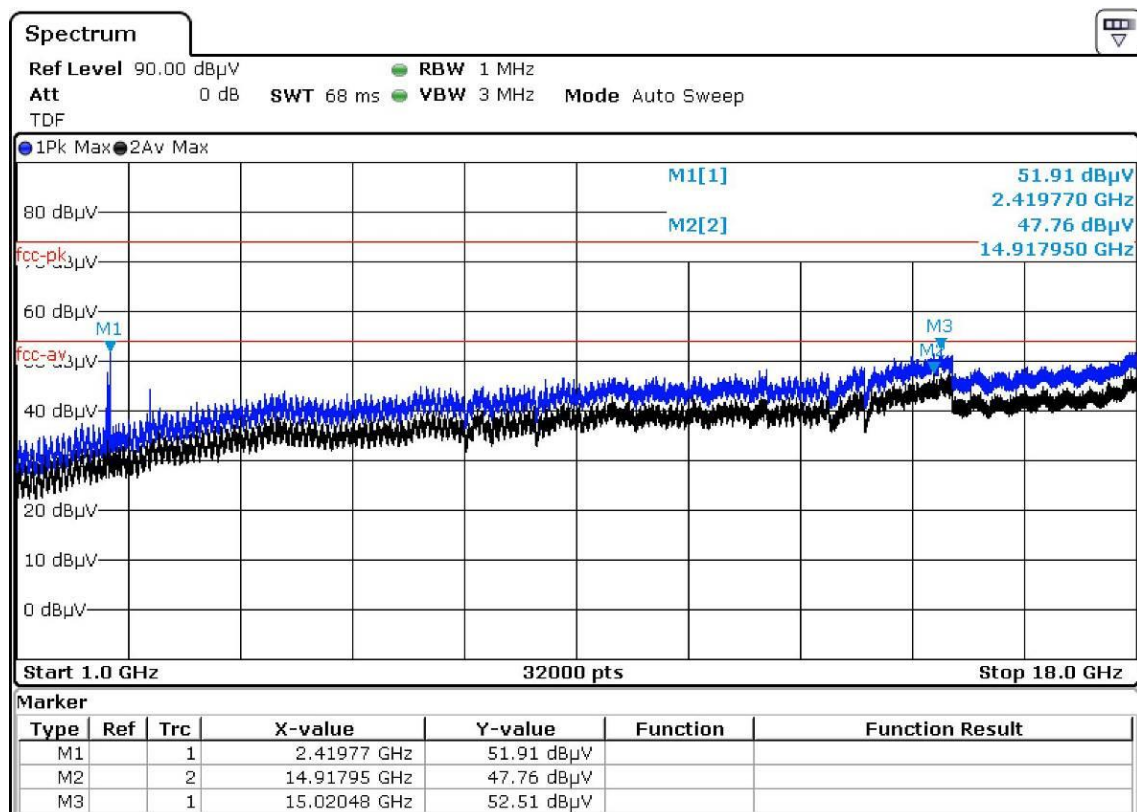
#### Remarks:

- 1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.
- 2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))

No other significant emissions were measured at the frequency range of interest employing the PK and AV detectors.



## Vertical



### Remarks:

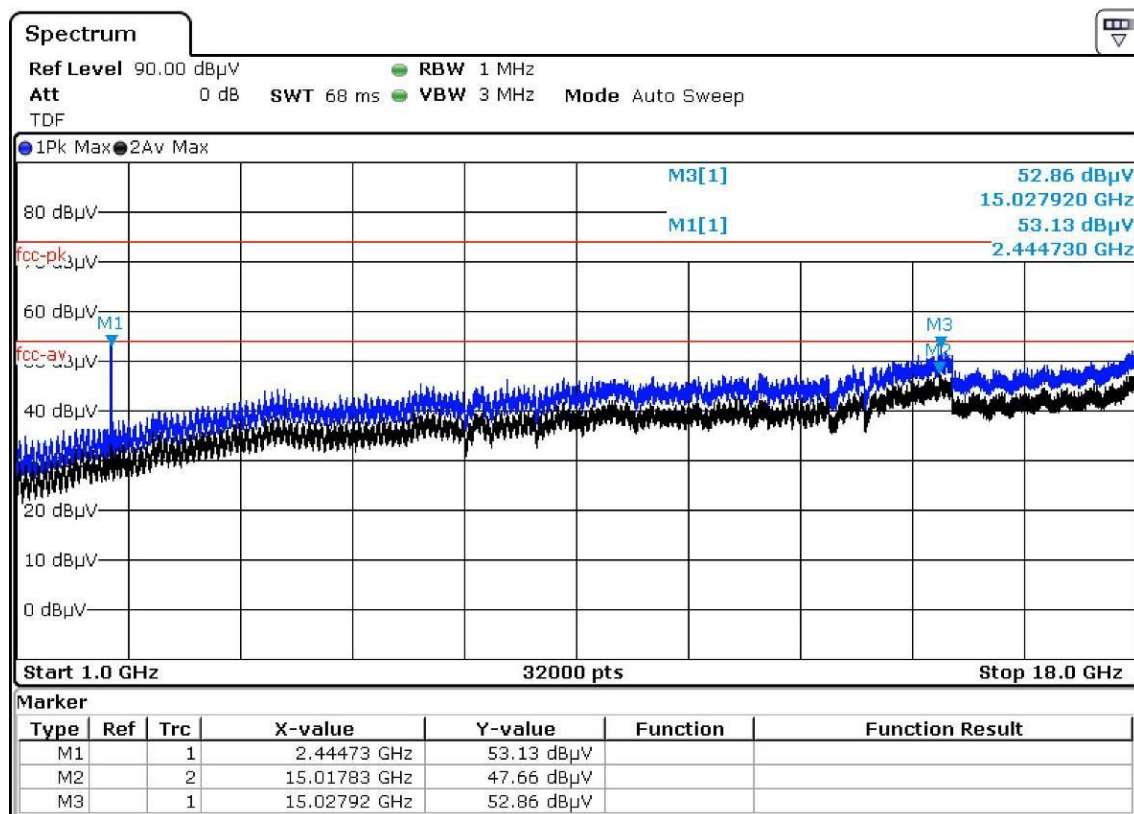
- 1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.
- 2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))

No other significant emissions were measured at the frequency range of interest employing the PK and AV detectors.

Model	SCD971/26 (BU part)
Operation Mode	Mode 3 @2437 MHz
Test voltage	120 Vac, 60 Hz

## Results

### Horizontal

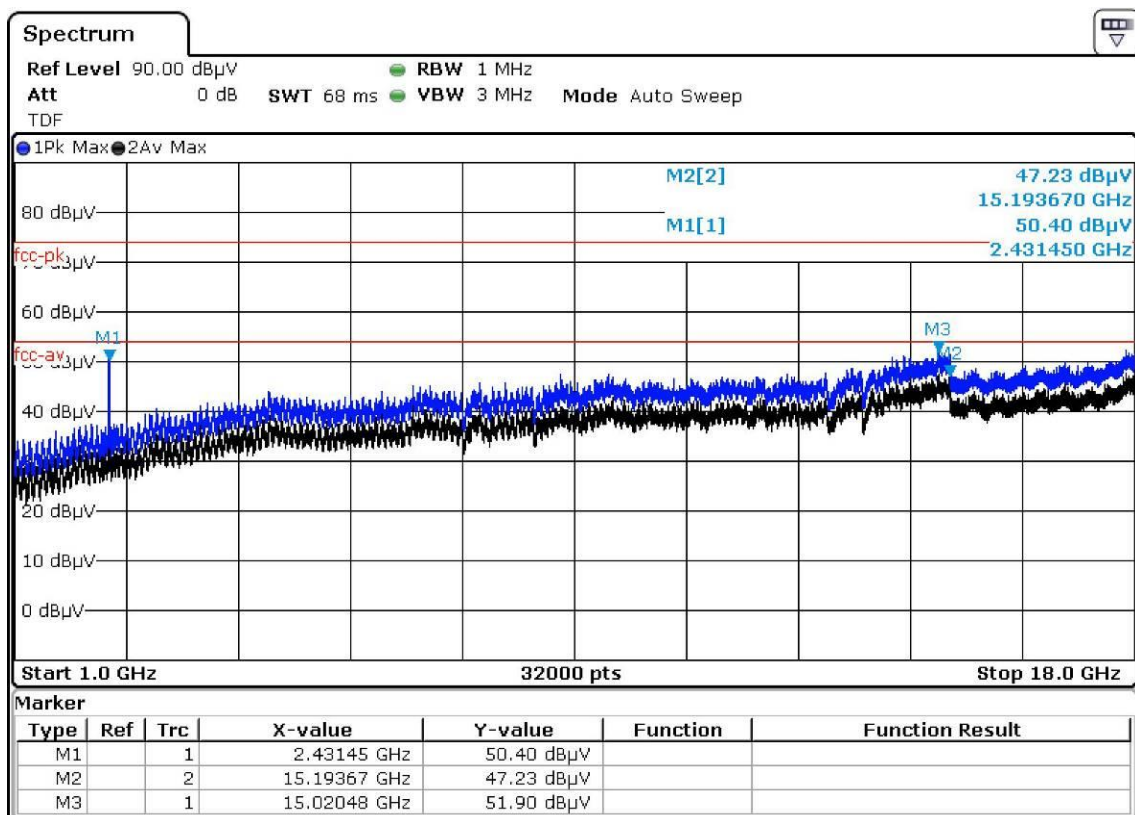


#### Remarks:

- 1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.
- 2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))

No other significant emissions were measured at the frequency range of interest employing the PK and AV detectors.

## Vertical



### Remarks:

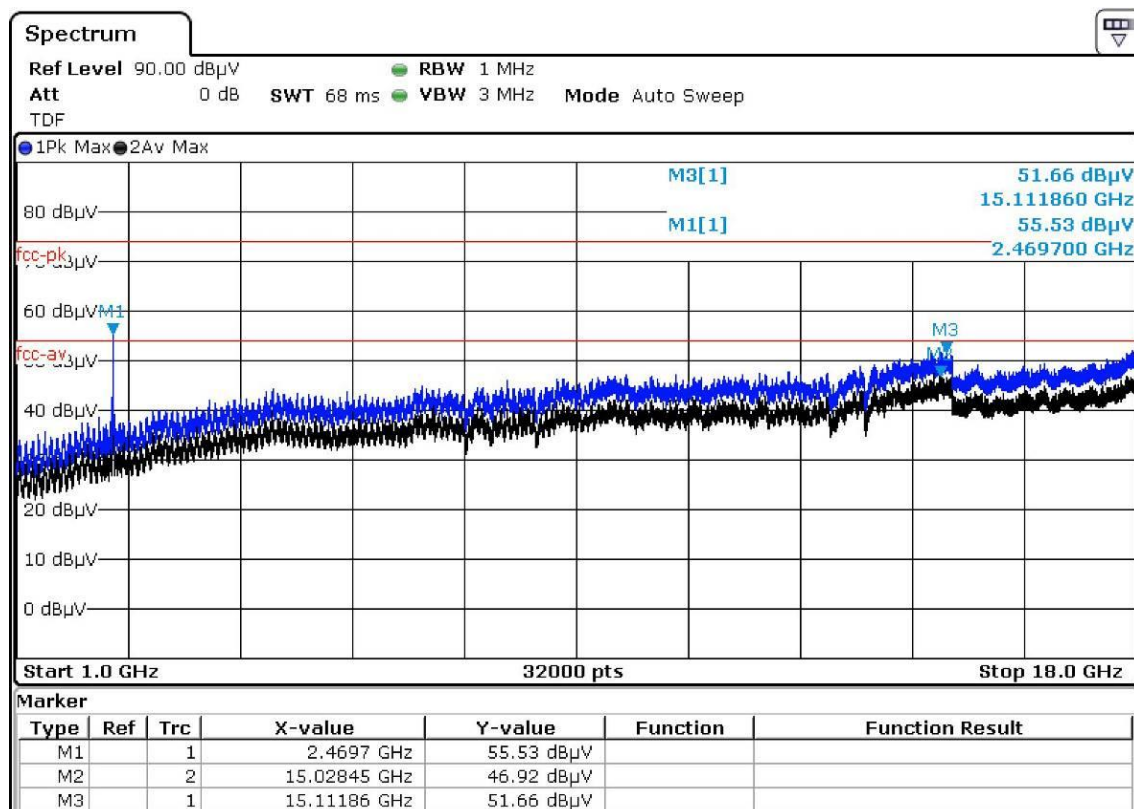
- 1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.
- 2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))

No other significant emissions were measured at the frequency range of interest employing the PK and AV detectors.

Model	SCD971/26 (BU part)
Operation Mode	Mode 3 @2462 MHz
Test voltage	120 Vac, 60 Hz

## Results

### Horizontal

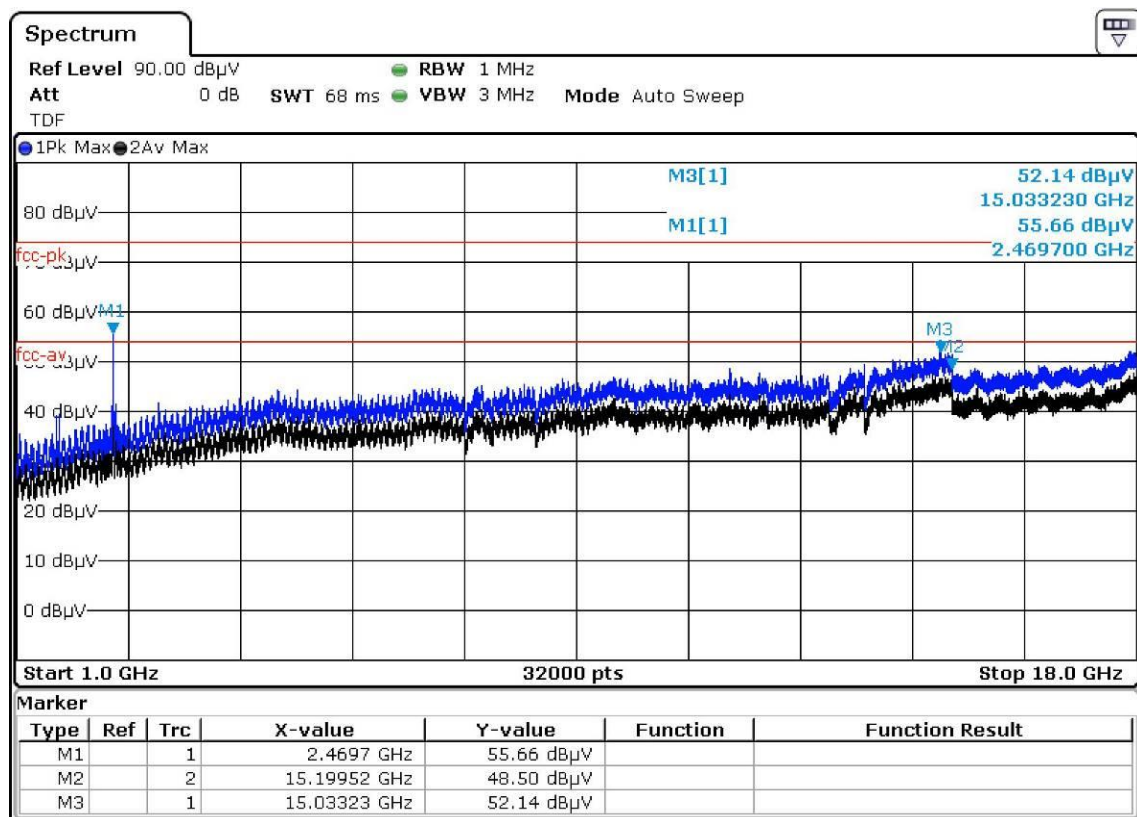


#### Remarks:

- 1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.
- 2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))

No other significant emissions were measured at the frequency range of interest employing the PK and AV detectors.

## Vertical



### Remarks:

- 1) Due to the spectrum display limitation, the unit dBuV in test figure is dBuV/m actually.
- 2) Y-Value (dBuV/m)= received value (dBuV)+ Correction Factor (Antenna factor (dBuV/m)+ Cable loss (dB)- Preamp gain (dB))

No other significant emissions were measured at the frequency range of interest employing the PK and AV detectors.

<b>4.3</b>	<b>Emissions in restricted frequency bands</b>	<b>VERDICT: PASS</b>
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Restricted Bands of operation of FCC			
Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 – 0.110	16.42 – 16.423	399.9 – 410	4.5 – 5.15
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
8.81425 – 8.81475	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	
13.36 – 13.41			
Restricted Bands of operation for IC			
0.090 - 0.110	13.36 - 13.41	960 - 1427	9.0 - 9.2
0.495 - 0.505	16.42 - 16.423	1435 - 1626.5	9.3 - 9.5
2.1735 - 2.1905	16.69475 - 16.69525	1645.5 - 1646.5	10.6 - 12.7
3.020 - 3.026	16.80425 - 16.80475	1660 - 1710	13.25 - 13.4
4.125 - 4.128	25.5 - 25.67	1718.8 - 1722.2	14.47 - 14.5
4.17725 - 4.17775	37.5 - 38.25	2200 - 2300	15.35 - 16.2
4.20725 - 4.20775	73 - 74.6	2310 - 2390	17.7 - 21.4
5.677 - 5.683	74.8 - 75.2	2483.5 - 2500	22.01 - 23.12
6.215 - 6.218	108 - 138	2655 - 2900	23.6 - 24.0
6.26775 - 6.26825	149.9 - 150.05	3260 - 3267	31.2 - 31.8
6.31175 - 6.31225	156.52475 - 156.52525	3332 - 3339	36.43 - 36.5
8.291 - 8.294	156.7 - 156.9	3345.8 - 3358	Above 38.6
8.362 - 8.366	162.0125 - 167.17	3500 - 4400	
8.37625 - 8.38675	167.72 - 173.2	4500 - 5150	
8.41425 - 8.41475	240 - 285	5350 - 5460	
12.29 - 12.293	322 - 335.4	7250 - 7750	
12.51975 - 12.52025	399.9 - 410	8025 - 8500	
12.57675 - 12.57725	608 - 614	--	

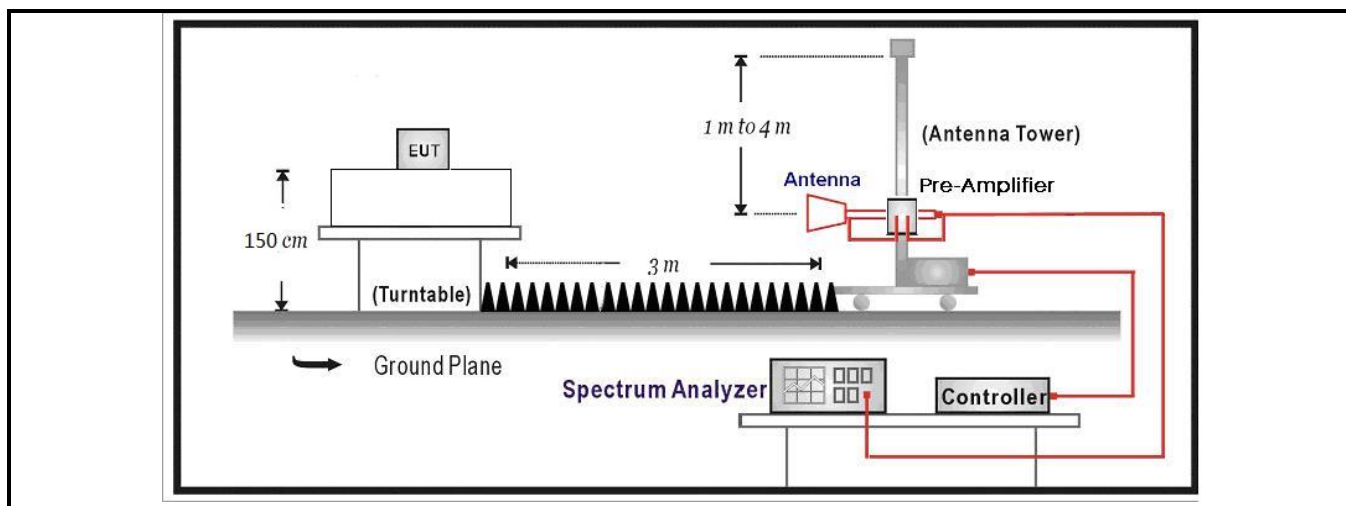
### Restricted Band Emissions Limit

Frequency (MHz)	Field strength ( $\mu\text{V/m}$ )	Field strength ( $\text{dB}\mu\text{V/m}$ )	Measurement distance (m)
0.009 - 0.49	2400/F(kHz)	48.5 – 13.8	300 <sub>(Note 1)</sub>
0.49 - 1.705	24000/F(kHz)	33.8 - 23	30 <sub>(Note 1)</sub>
1.705 - 30	30	29.5	30 <sub>(Note 1)</sub>
30 - 88	100	40	3 <sub>(Note 2)</sub>
88 - 216	150	43.5	3 <sub>(Note 2)</sub>
216 - 960	200	46	3 <sub>(Note 2)</sub>
Above 960	500	54	3 <sub>(Note 2)</sub>

Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

### Test Configuration



## Performed measurements

Port under test	Enclosure port	
Test method applied	<input type="checkbox"/>	Conducted measurement
	<input checked="" type="checkbox"/>	Radiated measurement
Test setup	Refer to the Annex 3 for test setup photo(s).	
Operating mode(s) used	Mode 1, Mode 2, Mode 3	
Remark	RBW: 1 MHz, VBW: 3 MHz	



For BU part

Mode 1

Operation channel (MHz)	Frequency (MHz)	Polar	Max Peak Value (dBuV/m)	Peak limit (dBuV/m)	Max AV Value (dBuV/m)	AV limit (dBuV/m)
2412	2346.89	H	60.05	74	---	---
	2313.77	H	---	---	50.88	54
	2388.29	V	60.81	74	---	---
	2386.94	V	---	---	52.52	54
2462	2484.06	H	60.03	74		
	2488.38	H	---	---	47.43	54
	2486.53	V	62.40	74	---	---
	2487.19	V	---	---	49.59	54

Mode 2

Operation channel (MHz)	Frequency (MHz)	Polar	Max Peak Value (dBuV/m)	Peak limit (dBuV/m)	Max AV Value (dBuV/m)	AV limit (dBuV/m)
2412	2389.64	H	61.24	74	---	---
	2386.55	H	---	---	47.29	54
	2389.46	V	69.96	74	---	---
	2390.00	V	---	---	50.47	54
2462	2483.64	H	61.81	74		
	2484.68	H	---	---	47.81	54
	2483.68	V	73.28	74	---	---
	2483.50	V	---	---	52.74	54

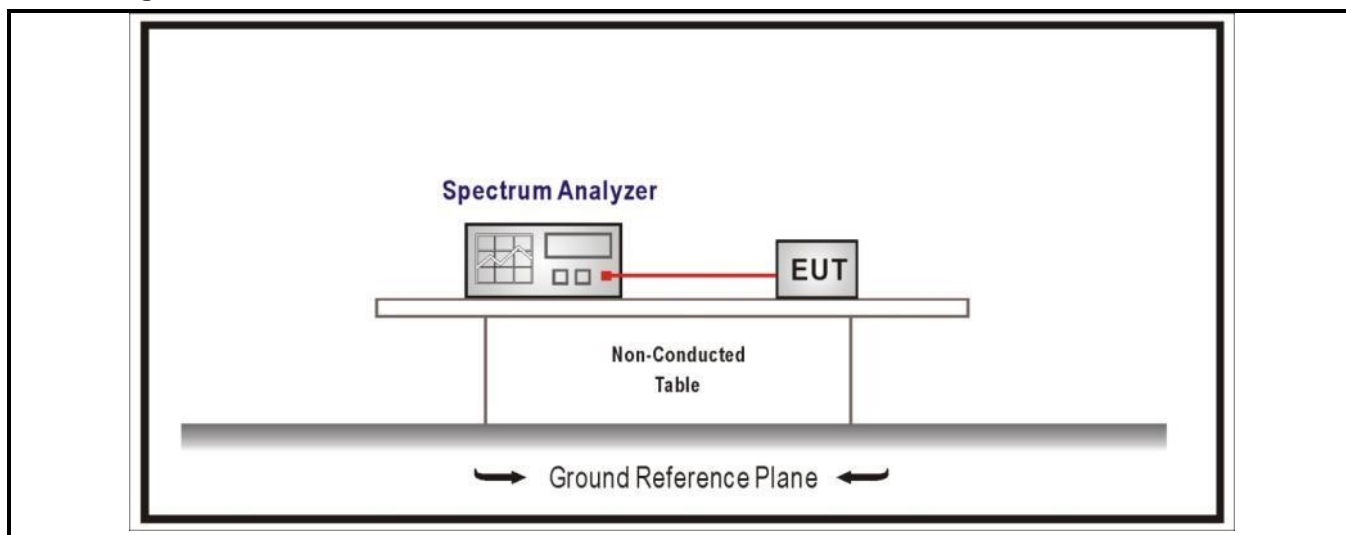
Mode 3

Operation channel (MHz)	Frequency (MHz)	Polar	Max Peak Value (dBuV/m)	Peak limit (dBuV/m)	Max AV Value (dBuV/m)	AV limit (dBuV/m)
2412	2389.82	H	61.73	74	---	---
	2389.73	H	---	---	47.44	54
	2388.92	V	68.63	74	---	---
	2390.00	V	---	---	50.15	54
2462	2486.47	H	61.56	74	---	---
	2485.39	H	---	---	47.50	54
	2484.17	V	72.42	74	---	---
	2482.61	V	---	---	42.69	54

<b>4.4 Band Edge</b>	<b>VERDICT: PASS</b>
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<b>Standard</b>	FCC Part 15 Subpart C Paragraph 15.247(d)
RF Output power (Detection methods)	Limit(dB)
RF Output power(Average detector)	30dBc(Note1)
RF Output power(PK detector)	20dBc(Note2)
<p>Note 1: If maximum conducted (average) output power was used to demonstrate compliance as described in 9.2, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD by level in 100 kHz (i.e., 30 dBc).</p> <p>Note 2: If the maximum peak conducted output power procedure was used, then the peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD by level in 100 kHz (i.e., 20 dBc).</p>	

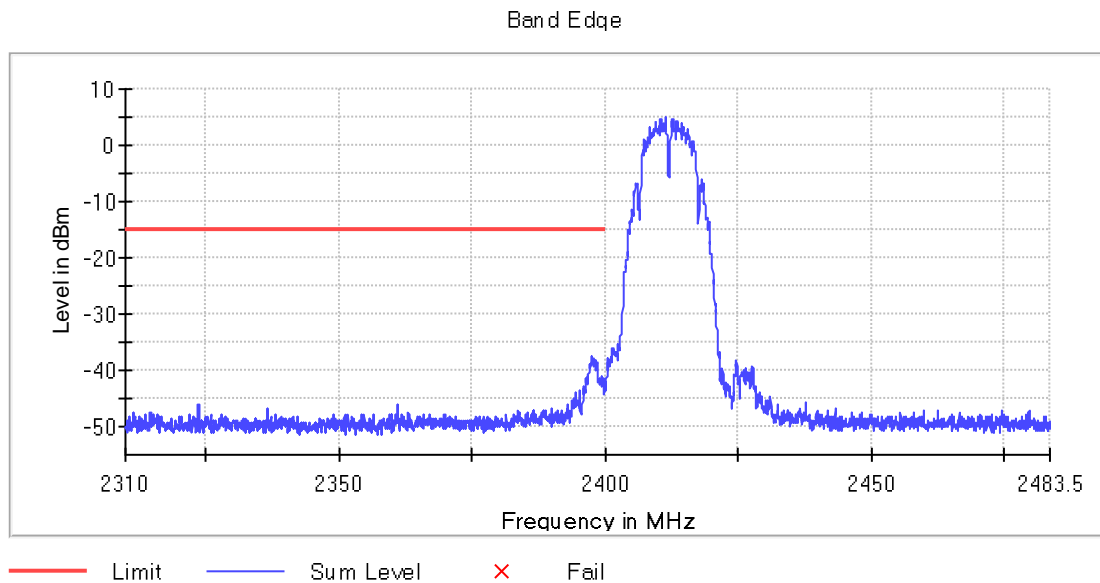
#### Test Configuration



#### Performed measurements

Port under test	Antenna port	
Test method applied	<input checked="" type="checkbox"/>	Conducted measurement
	<input type="checkbox"/>	Radiated measurement
Test setup	Refer to the Annex 3 for test setup photo(s).	
Operating mode(s) used	Mode 1, Mode 2, Mode 3	
Remark	RBW=100 kHz, VBW=300 kHz	

## BU part Results of mode 1 @2412 MHz



### Inband Peak

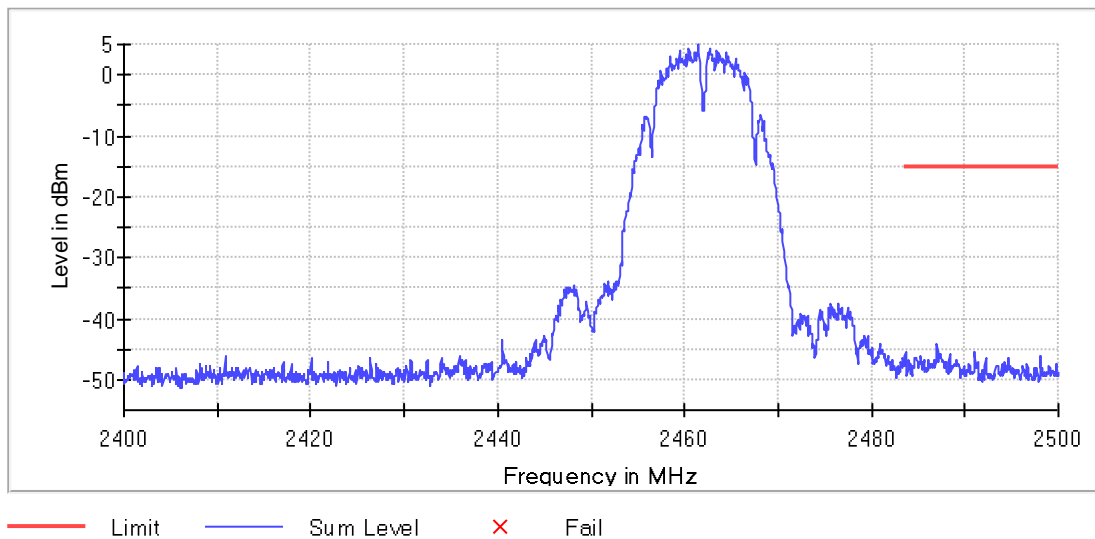
Frequency (MHz)	Level (dBm)
2412.0000	5.1

### Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2397.425000	-37.6	22.7	-14.9	PASS
2397.475000	-37.6	22.7	-14.9	PASS
2397.525000	-37.6	22.7	-14.9	PASS
2397.775000	-37.9	23.0	-14.9	PASS
2397.725000	-38.0	23.1	-14.9	PASS
2398.225000	-38.3	23.4	-14.9	PASS
2397.575000	-38.4	23.5	-14.9	PASS
2397.825000	-38.6	23.7	-14.9	PASS
2398.475000	-38.7	23.8	-14.9	PASS
2398.075000	-38.7	23.8	-14.9	PASS
2397.675000	-38.7	23.8	-14.9	PASS
2397.975000	-38.8	23.9	-14.9	PASS
2397.375000	-38.8	23.9	-14.9	PASS
2397.925000	-38.8	23.9	-14.9	PASS
2397.325000	-38.8	23.9	-14.9	PASS

## Results of mode 1 @2462 MHz

Band Edge



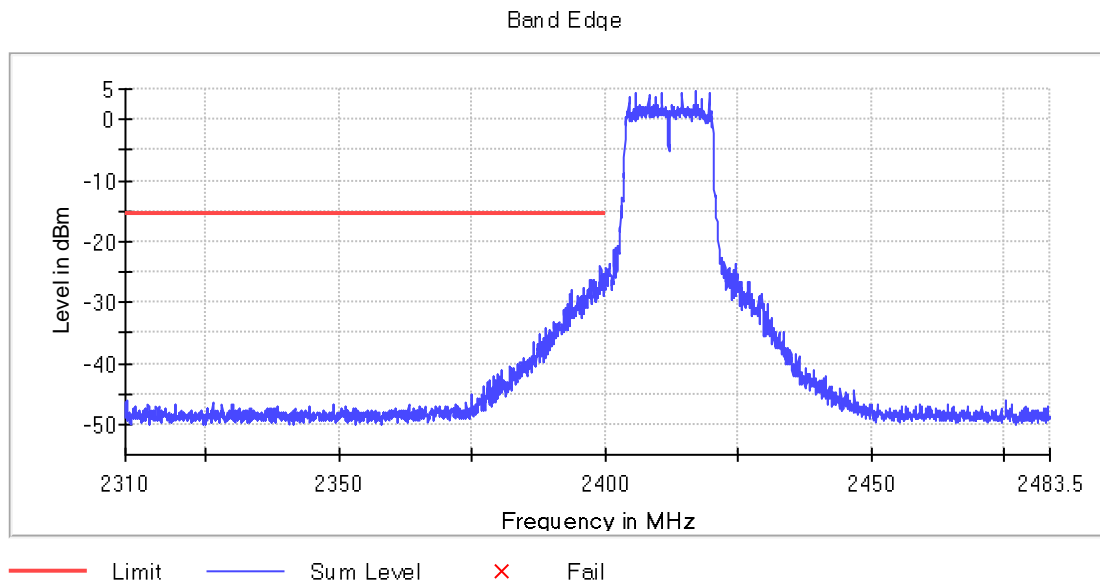
### Inband Peak

Frequency (MHz)	Level (dBm)
2462.0000	4.8

### Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2487.025000	-44.1	29.0	-15.2	PASS
2486.975000	-44.5	29.4	-15.2	PASS
2487.075000	-45.3	30.2	-15.2	PASS
2483.625000	-45.4	30.3	-15.2	PASS
2491.025000	-45.5	30.3	-15.2	PASS
2488.425000	-45.7	30.5	-15.2	PASS
2488.375000	-45.7	30.5	-15.2	PASS
2487.325000	-45.7	30.6	-15.2	PASS
2483.675000	-45.8	30.7	-15.2	PASS
2490.975000	-45.9	30.7	-15.2	PASS
2491.075000	-46.1	30.9	-15.2	PASS
2498.075000	-46.1	30.9	-15.2	PASS
2487.375000	-46.1	31.0	-15.2	PASS
2485.275000	-46.1	31.0	-15.2	PASS
2485.325000	-46.2	31.0	-15.2	PASS

## Results of mode 2 @2412 MHz



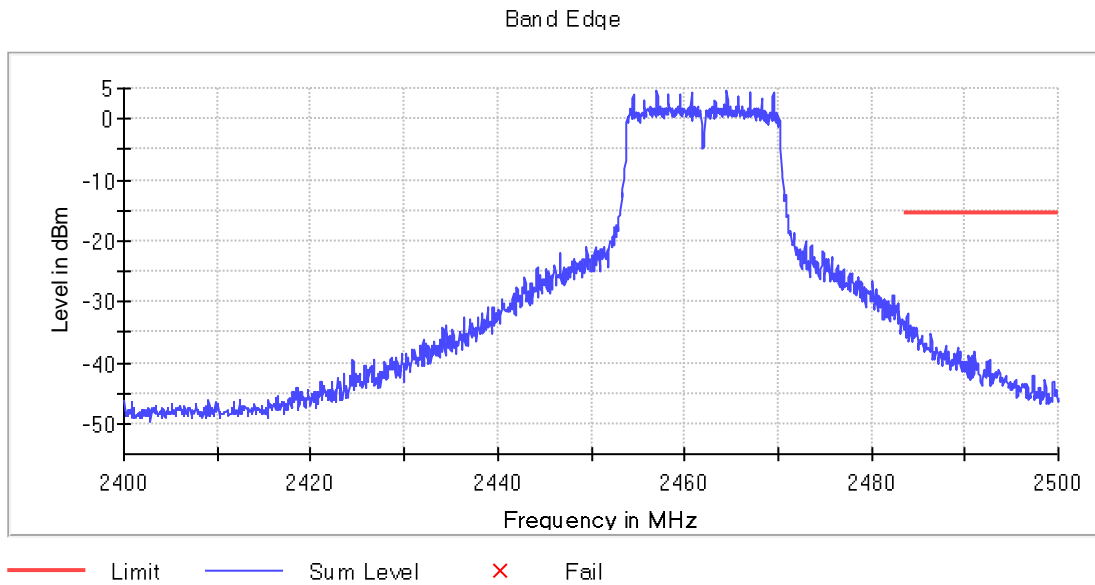
### Inband Peak

Frequency (MHz)	Level (dBm)
2412.0000	4.7

### Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2399.175000	-24.1	8.8	-15.3	PASS
2399.225000	-24.7	9.4	-15.3	PASS
2399.125000	-24.9	9.5	-15.3	PASS
2399.875000	-25.4	10.1	-15.3	PASS
2399.825000	-25.5	10.2	-15.3	PASS
2399.525000	-25.8	10.5	-15.3	PASS
2399.275000	-25.8	10.5	-15.3	PASS
2399.475000	-26.1	10.8	-15.3	PASS
2397.325000	-26.2	10.9	-15.3	PASS
2397.275000	-26.3	10.9	-15.3	PASS
2397.875000	-26.3	11.0	-15.3	PASS
2399.925000	-26.6	11.3	-15.3	PASS
2399.425000	-26.6	11.3	-15.3	PASS
2397.925000	-26.8	11.4	-15.3	PASS
2398.975000	-26.8	11.4	-15.3	PASS

## Results of mode 2 @2462 MHz



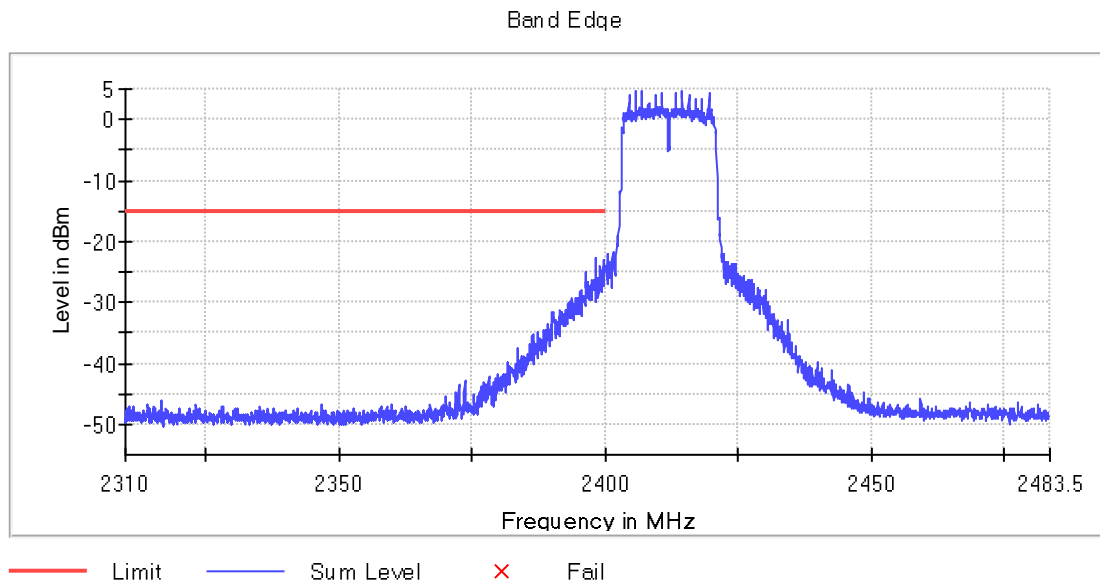
### Inband Peak

Frequency (MHz)	Level (dBm)
2462.0000	4.6

### Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2483.875000	-32.0	16.6	-15.4	PASS
2483.825000	-32.5	17.1	-15.4	PASS
2483.925000	-32.6	17.2	-15.4	PASS
2483.525000	-33.2	17.9	-15.4	PASS
2483.575000	-33.3	17.9	-15.4	PASS
2484.175000	-34.0	18.6	-15.4	PASS
2484.125000	-34.1	18.7	-15.4	PASS
2484.825000	-34.3	18.9	-15.4	PASS
2484.525000	-34.3	18.9	-15.4	PASS
2484.475000	-34.4	19.0	-15.4	PASS
2484.875000	-34.4	19.0	-15.4	PASS
2483.625000	-34.6	19.2	-15.4	PASS
2483.975000	-35.0	19.6	-15.4	PASS
2484.225000	-35.1	19.7	-15.4	PASS
2486.375000	-35.3	19.9	-15.4	PASS

## Results of mode 3 @2412 MHz



### Inband Peak

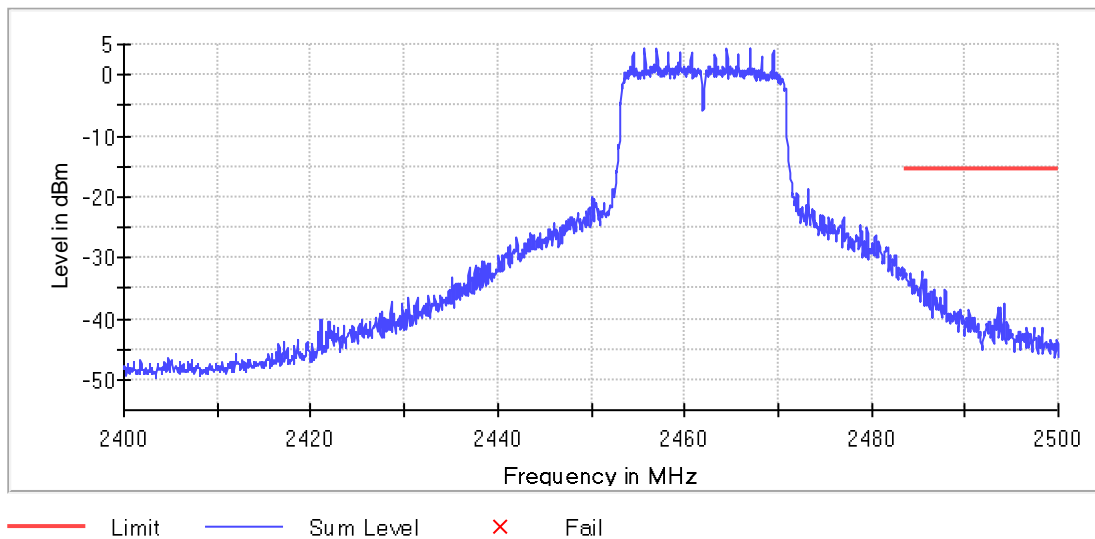
Frequency (MHz)	Level (dBm)
2412.0000	4.8

### Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2398.225000	-22.6	7.4	-15.2	PASS
2398.275000	-22.8	7.6	-15.2	PASS
2399.825000	-23.0	7.8	-15.2	PASS
2399.775000	-23.0	7.8	-15.2	PASS
2398.175000	-23.4	8.2	-15.2	PASS
2399.725000	-24.1	8.9	-15.2	PASS
2399.575000	-24.2	9.0	-15.2	PASS
2399.175000	-24.2	9.0	-15.2	PASS
2399.925000	-24.5	9.4	-15.2	PASS
2399.875000	-24.7	9.5	-15.2	PASS
2399.975000	-24.8	9.6	-15.2	PASS
2398.325000	-24.8	9.7	-15.2	PASS
2396.375000	-25.0	9.8	-15.2	PASS
2399.125000	-25.1	9.9	-15.2	PASS
2399.225000	-25.2	10.0	-15.2	PASS

## Results of mode 3 @2462 MHz

Band Edge



### Inband Peak

Frequency (MHz)	Level (dBm)
2462.0000	4.5

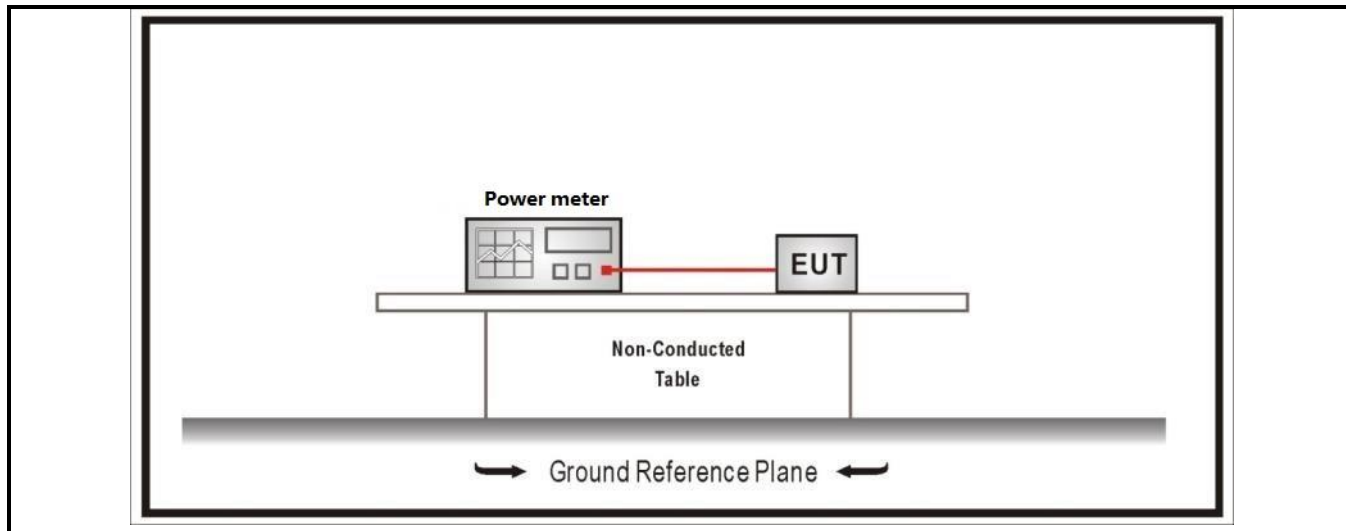
### Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2485.425000	-32.2	16.7	-15.5	PASS
2485.475000	-32.4	16.8	-15.5	PASS
2484.175000	-32.6	17.1	-15.5	PASS
2483.675000	-32.7	17.2	-15.5	PASS
2483.725000	-32.7	17.2	-15.5	PASS
2485.375000	-32.7	17.2	-15.5	PASS
2484.125000	-32.8	17.3	-15.5	PASS
2483.625000	-32.8	17.3	-15.5	PASS
2483.775000	-32.9	17.4	-15.5	PASS
2483.525000	-32.9	17.4	-15.5	PASS
2483.575000	-33.1	17.6	-15.5	PASS
2484.225000	-33.4	17.9	-15.5	PASS
2483.825000	-33.4	17.9	-15.5	PASS
2485.775000	-33.6	18.1	-15.5	PASS
2484.475000	-33.6	18.1	-15.5	PASS



<b>4.5</b>	<b>Duty cycle</b>	<b>VERDICT: PASS</b>
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#### Test Configuration



#### Performed measurements

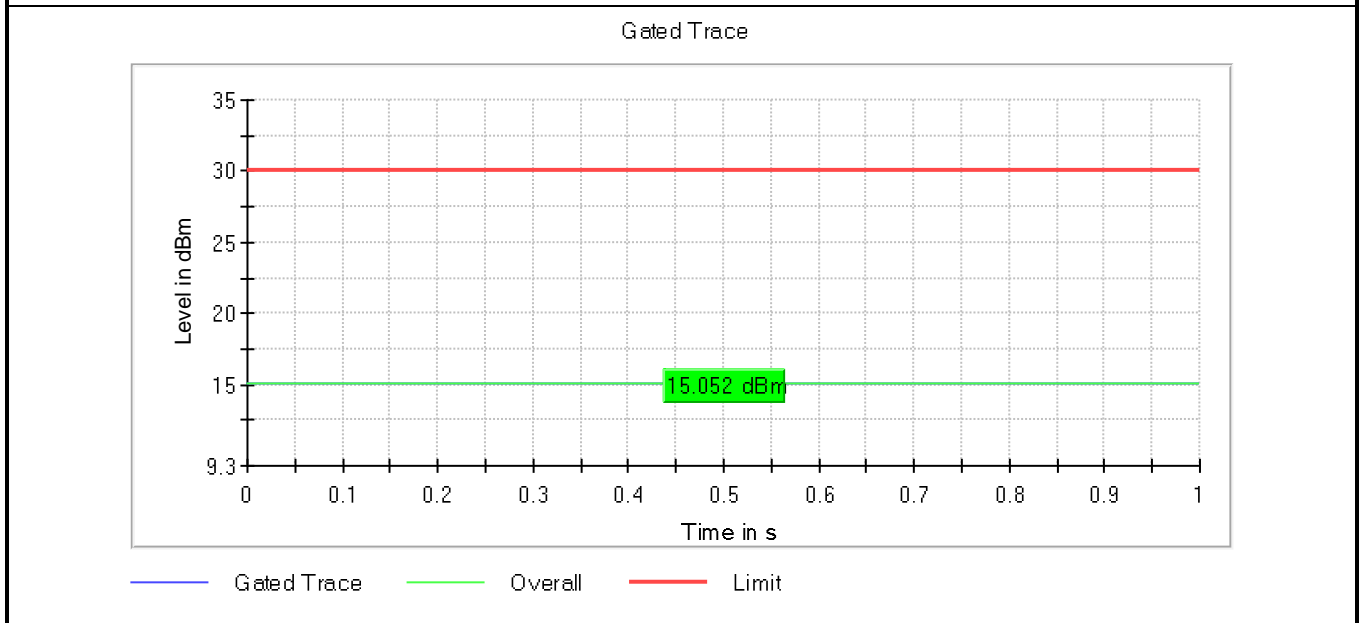
Port under test	Antenna port	
Test method applied	<input checked="" type="checkbox"/>	Conducted measurement
	<input type="checkbox"/>	Radiated measurement
Test setup	Refer to the Annex 3 for test setup photo(s).	
Operating mode(s) used	Mode 1, Mode 2, Mode 3	
Remark	---	

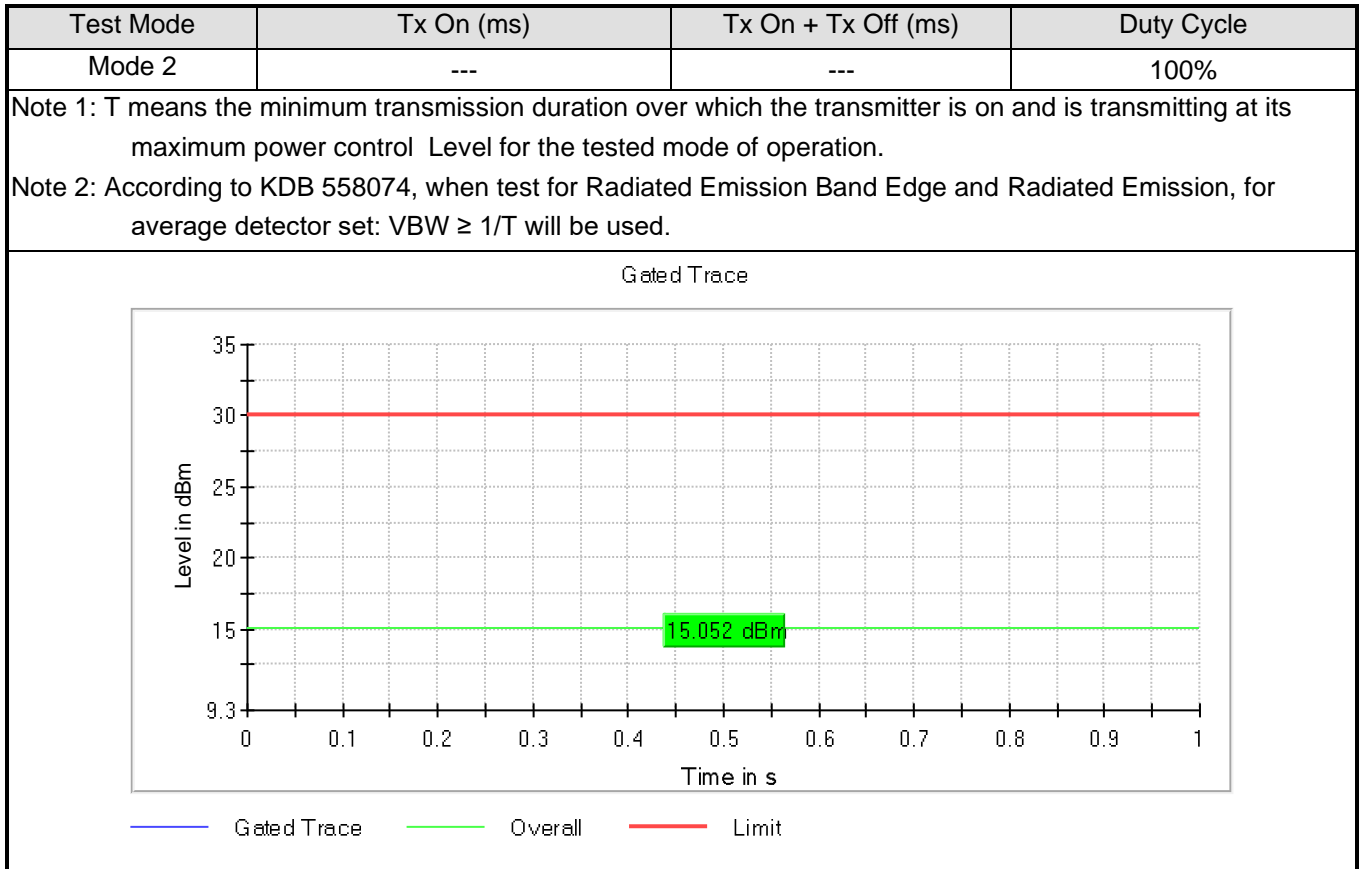
## Results for BU part

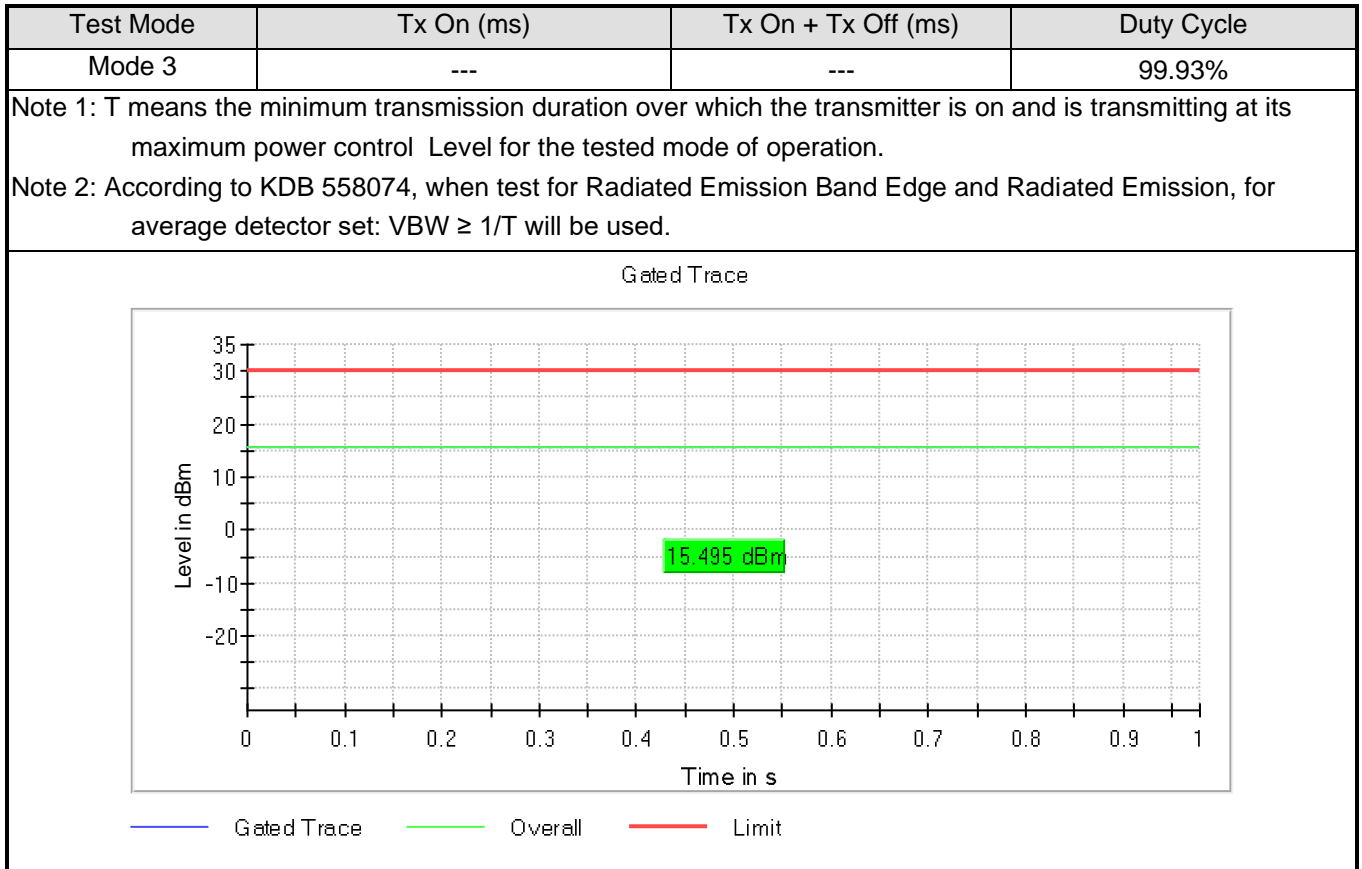
Test Mode	Tx On (ms)	Tx On + Tx Off (ms)	Duty Cycle
Mode 1	---	---	100%

Note 1: T means the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control Level for the tested mode of operation.

Note 2: According to KDB 558074, when test for Radiated Emission Band Edge and Radiated Emission, for average detector set: VBW  $\geq 1/T$  will be used.



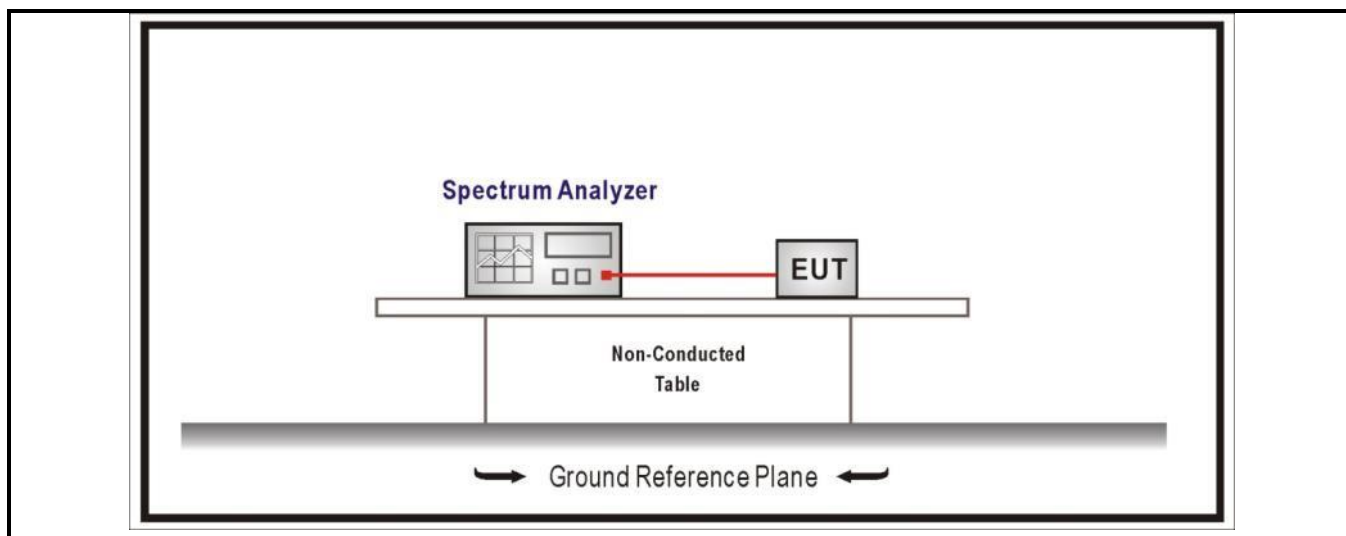




<b>4.6 DTS Bandwidth</b>	<b>VERDICT: PASS</b>
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<b>Standard</b>	FCC Part 15 Subpart C Paragraph 15.247 (a)(2)
Systems using digital modulation techniques operate in the 2400-2483.5 MHz .The minimum 6 dB bandwidth shall be at by least 500 kHz	

#### Test Configuration



#### Performed measurements

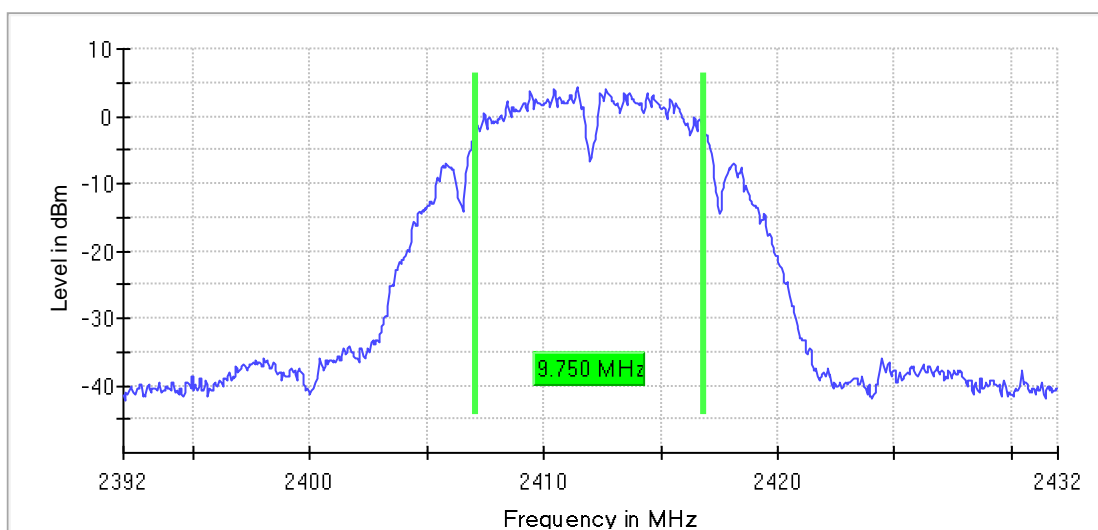
Port under test	Antenna port	
Test method applied	<input checked="" type="checkbox"/>	Conducted measurement
	<input type="checkbox"/>	Radiated measurement
Test setup	Refer to the Annex 3 for test setup photo(s).	
Operating mode(s) used	Mode 1, Mode 2, Mode 3	
Remark	RBW=100 kHz, VBW=300 kHz	

## Results for BU part

Mode	CH.	Test Freq. (MHz)	6dB Occupied Bandwidth (MHz)	Limit (kHz)	Result
1	1	2412	9.75	>500	Pass
	11	2462	9.35	>500	Pass

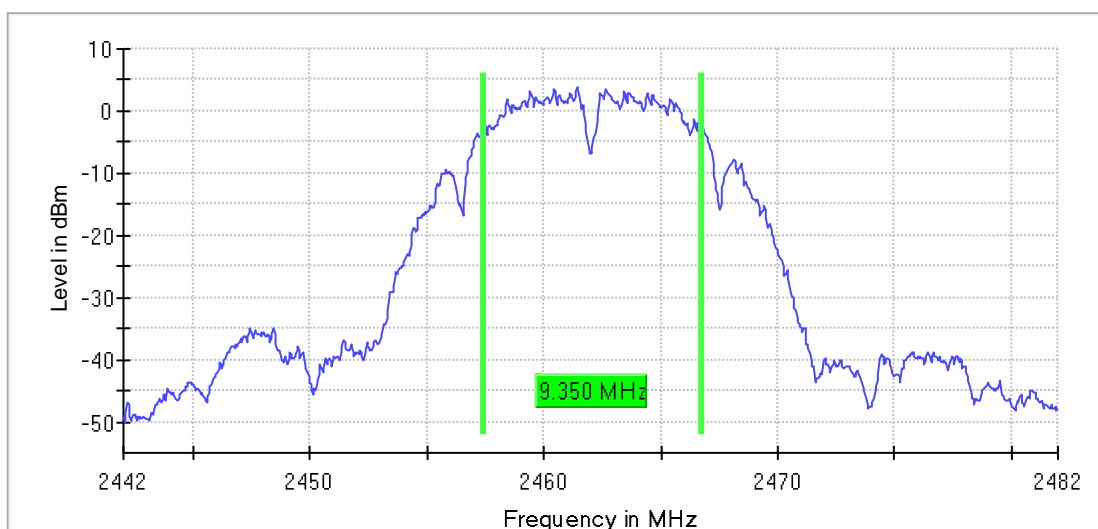
6dB Occupied Bandwidth  
 Mode 1 / CH1 (2412MHz)

6 dB Bandwidth



Mode 1 / CH11 (2462MHz)

6 dB Bandwidth

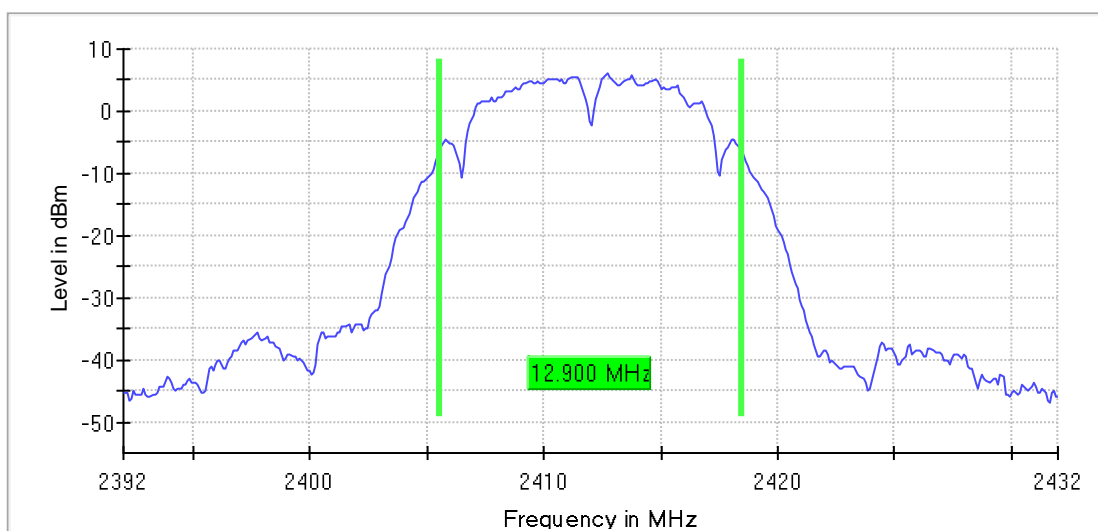


Mode	CH.	Test Freq. (MHz)	99% Occupied Bandwidth (MHz)	Limit	Result
1	1	2412	12.90	Within frequency range	Pass
	11	2462	12.70	Within frequency range	Pass

99% Occupied Bandwidth

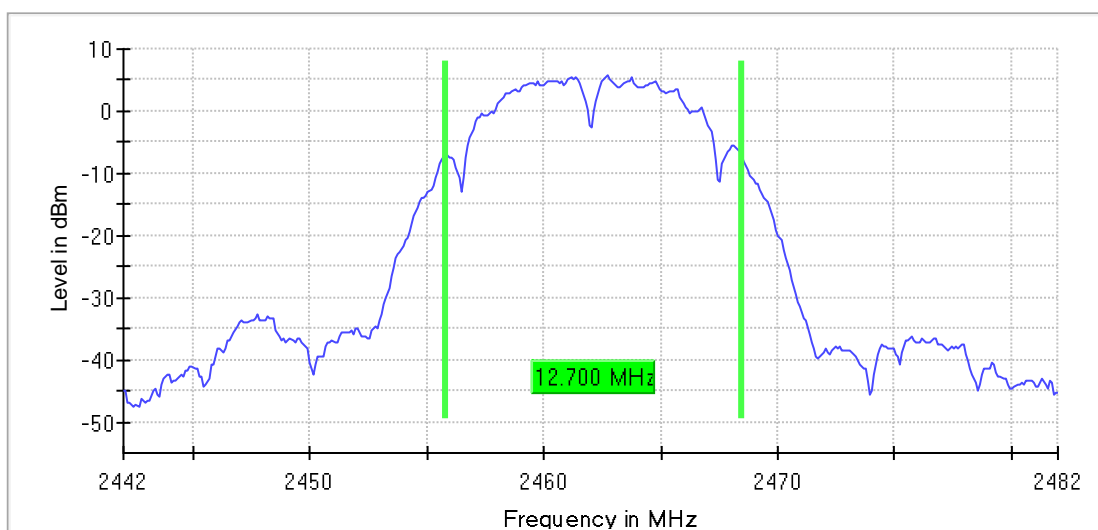
Mode 1 / CH1 (2412 MHz)

99 % Bandwidth



Mode 1 / CH11 (2462 MHz)

99 % Bandwidth

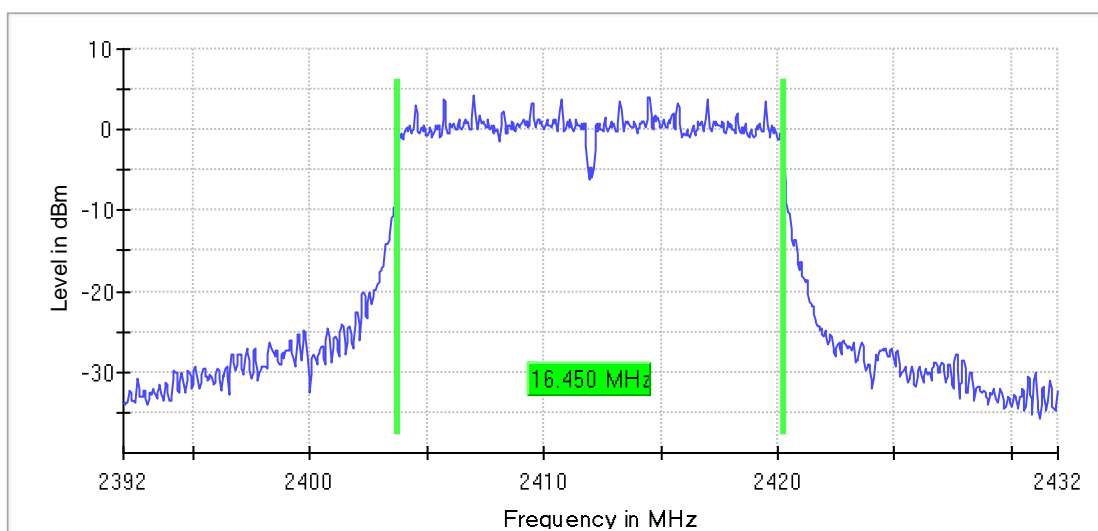


Mode	CH.	Test Freq. (MHz)	6dB Occupied Bandwidth (MHz)	Limit (kHz)	Result
2	1	2412	16.45	>500	Pass
	11	2462	16.15	>500	Pass

6dB Occupied Bandwidth

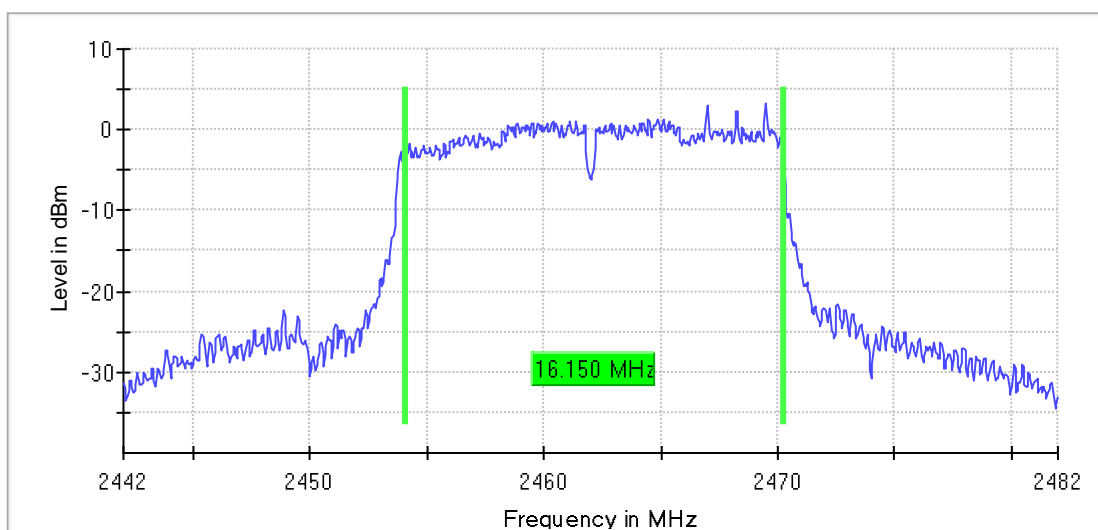
Mode 2 / CH1 (2412MHz)

6 dB Bandwidth



Mode 1 / CH11 (2462MHz)

6 dB Bandwidth



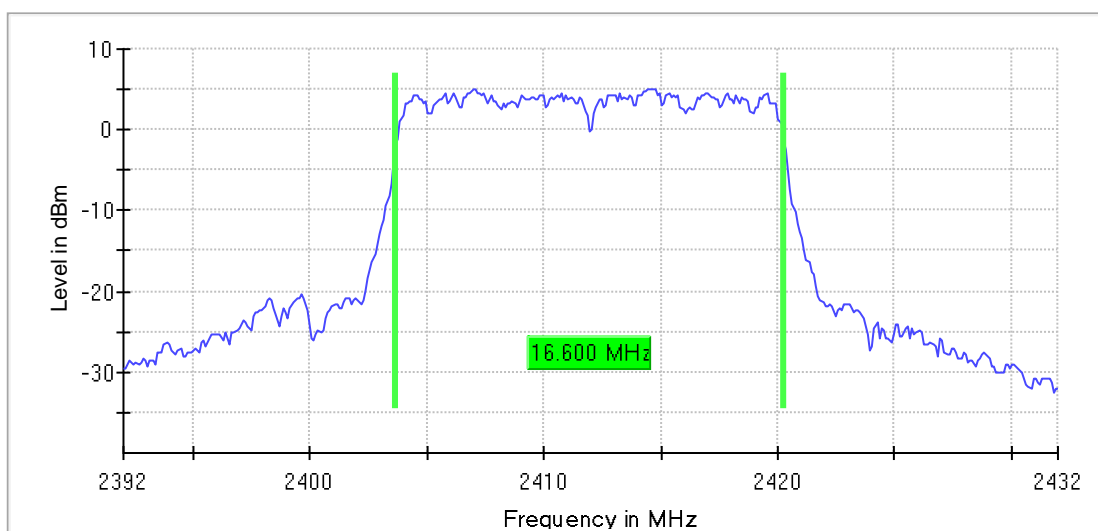


Mode	CH.	Test Freq. (MHz)	99% Occupied Bandwidth (MHz)	Limit	Result
2	1	2412	16.60	Within frequency range	Pass
	1	2462	16.70	Within frequency range	Pass

99% Occupied Bandwidth

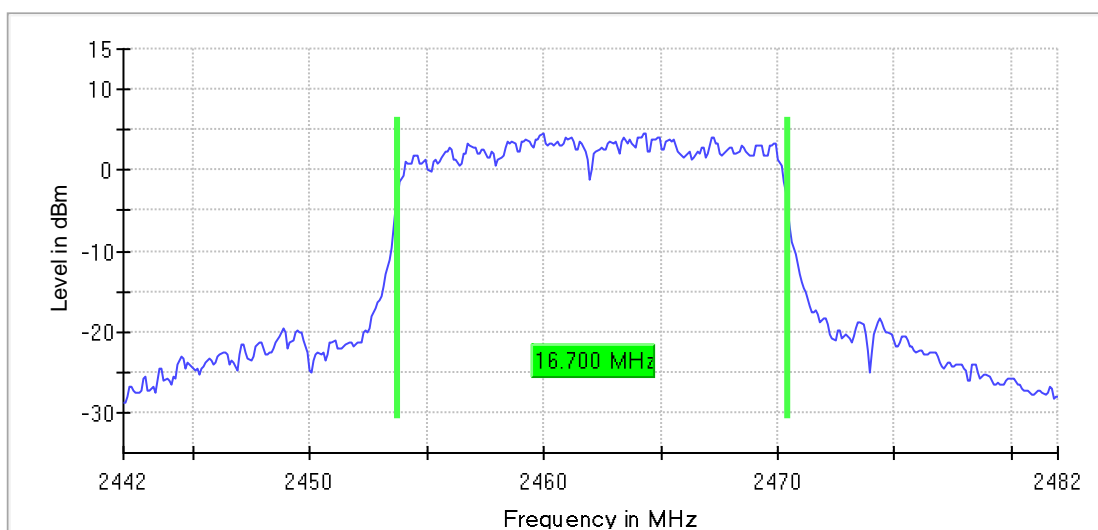
Mode 2 / CH1 (2412 MHz)

99 % Bandwidth



Mode 2 / CH11 (2462 MHz)

99 % Bandwidth

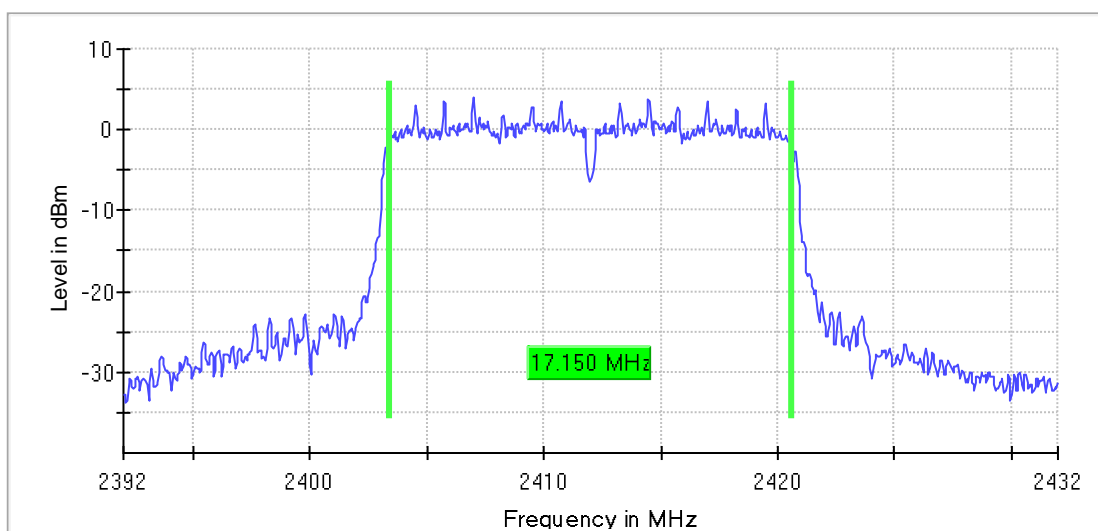


Mode	CH.	Test Freq. (MHz)	6dB Occupied Bandwidth (MHz)	Limit (kHz)	Result
3	1	2402	17.15	>500	Pass
	11	2480	16.50	>500	Pass

6dB Occupied Bandwidth

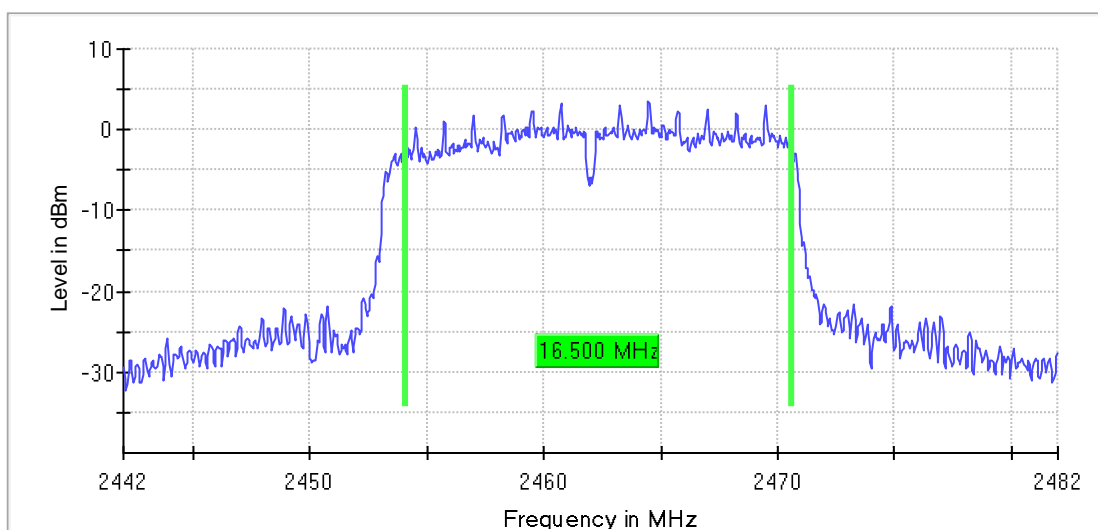
Mode 3 / CH1 (2412MHz)

6 dB Bandwidth



Mode 3 / CH11 (2462MHz)

6 dB Bandwidth

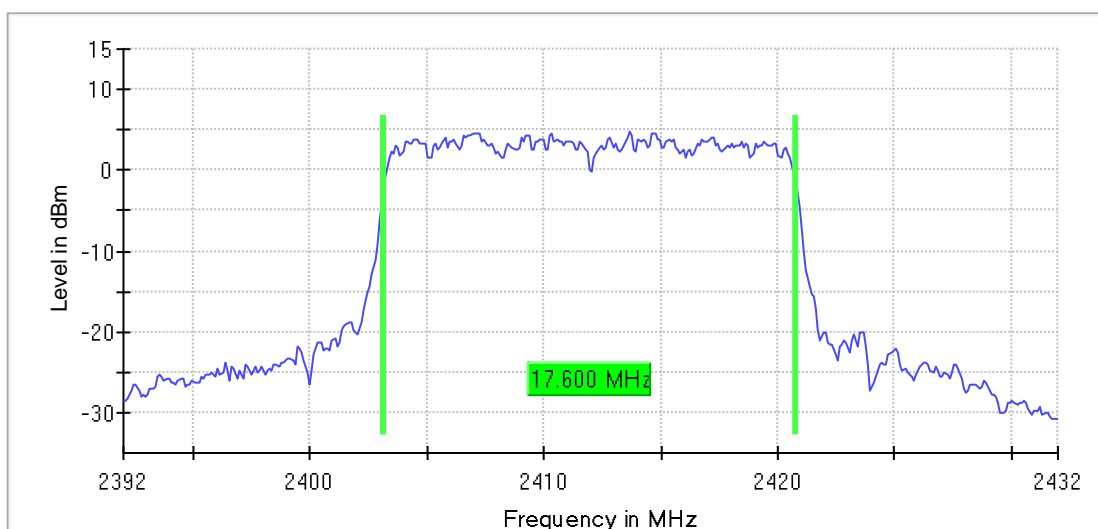


Mode	CH.	Test Freq. (MHz)	99% Occupied Bandwidth (MHz)	Limit	Result
3	1	2412	17.60	Within frequency range	Pass
	11	2462	17.80	Within frequency range	Pass

99% Occupied Bandwidth

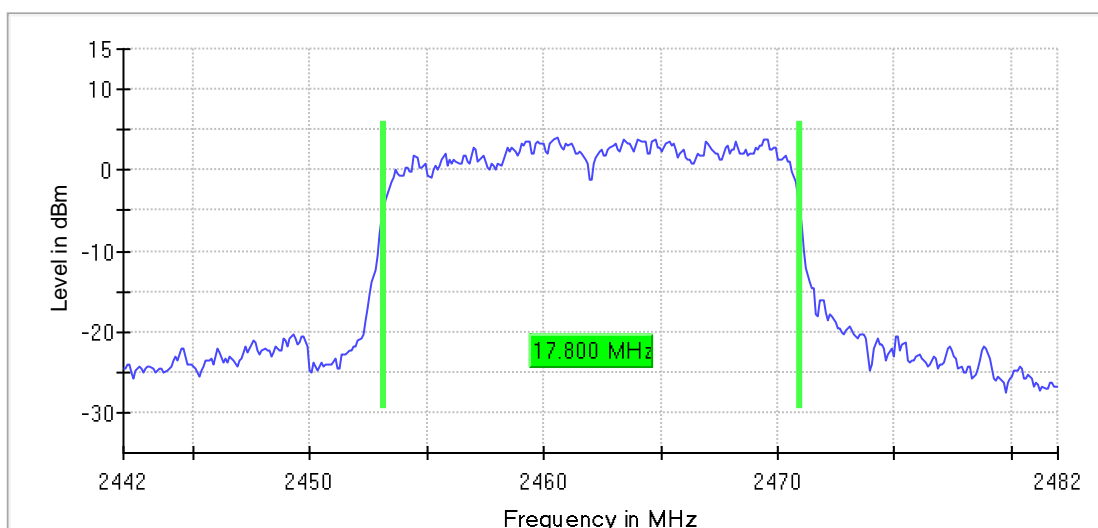
Mode 3 / CH1 (2412 MHz)

99 % Bandwidth



Mode 3 / CH11 (2462 MHz)

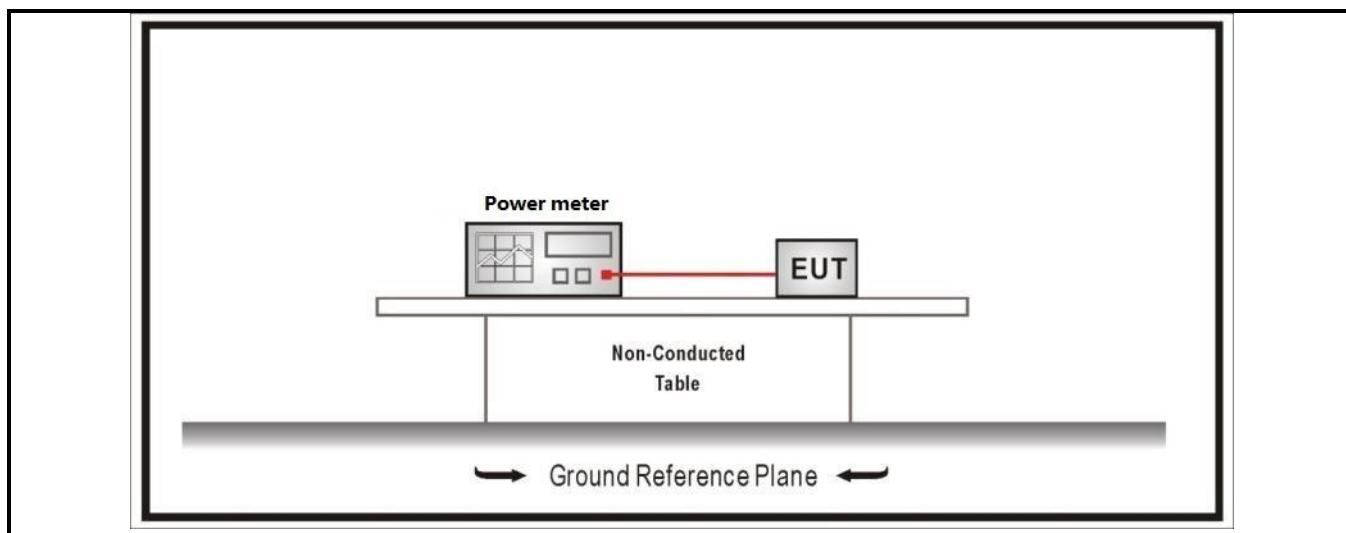
99 % Bandwidth



<b>4.7</b>	<b>Fundamental emission output power</b>	<b>VERDICT: PASS</b>
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Standard		FCC Part 15 Subpart C Paragraph 15.247 (b)(3); RSS-247 Issue 2 Section 5.4(d)
<input checked="" type="checkbox"/>	GTX < 6dBi	Pout≤30dBm
<input type="checkbox"/>	GTX > 6dBi	
<input type="checkbox"/>	Non-Fix point-point	Pout≤30-( GTX -6)
<input type="checkbox"/>	Fix point-point	Pout≤30-[(GTX-6)]/3
<input type="checkbox"/>	Point-to-multipoint	Pout≤30-(GTX-6)
<input type="checkbox"/>	Overlap Beams	Pout≤30-[(GTX-6)]/3
<input type="checkbox"/>	Aggregate power transmitted simultaneously on all beams	Pout≤30-[(GTX-6)]/3
<input type="checkbox"/>	single LE directional beam	Pout≤30-[(GTX-6)]/3+8dB
Note 1 : GTX directional gain of transmitting antennas.		
Note 2 : Pout is maximum peak conducted output power .		

#### Test Configuration



#### Performed measurements

Port under test	Antenna port	
Test method applied	<input checked="" type="checkbox"/>	Conducted measurement
	<input type="checkbox"/>	Radiated measurement
Test setup	Refer to the Annex 3 for test setup photo(s).	
Operating mode(s) used	Mode 1, Mode 2, Mode 3	
Remark	---	

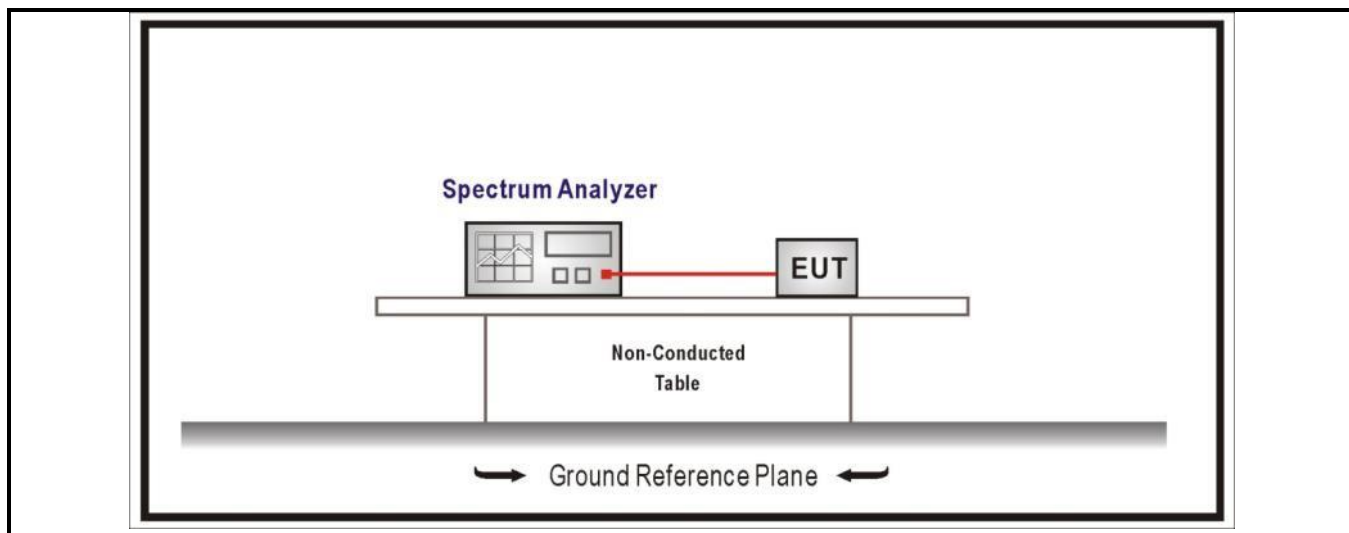
## Results for BU part

Mode	Channel	Test Frequency (MHz)	Power Output (dBm)	EIRP (dBm)	Limit (dBm)	Result
Mode 1	1	2412	15.05	17.34	≤30	Pass
	6	2437	15.34	17.63	≤30	Pass
	11	2462	15.15	17.44	≤30	Pass
Mode 2	1	2412	15.80	18.09	≤30	Pass
	6	2437	15.75	18.04	≤30	Pass
	11	2462	15.54	17.83	≤30	Pass
Mode 3	1	2412	15.49	17.78	≤30	Pass
	6	2437	15.62	17.91	≤30	Pass
	11	2462	15.49	17.78	≤30	Pass

<b>4.8 Power Density</b>	<b>VERDICT: PASS</b>
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<b>Standard</b>	FCC Part 15 Subpart C Paragraph 15.247 (b)(3)
Power Spectral Density ≤ 8 dBm/3 kHz	

#### Test Configuration



#### Performed measurements

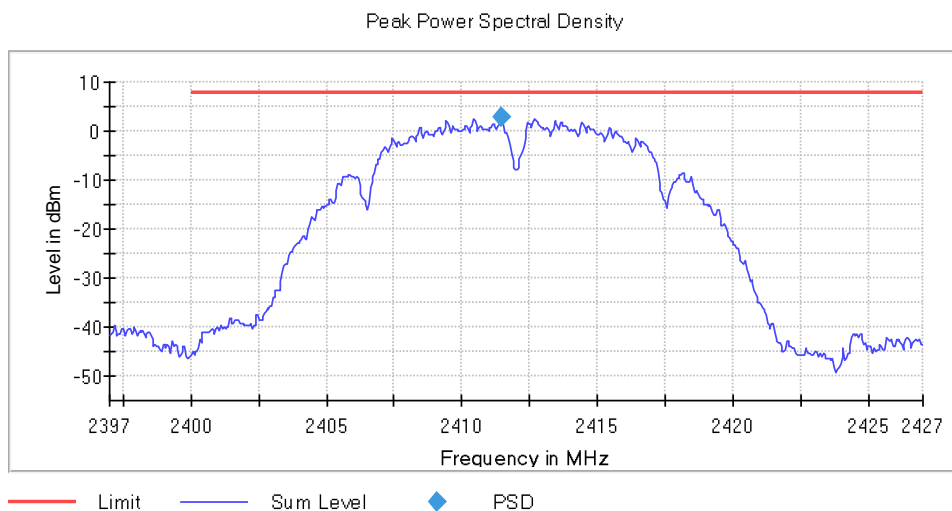
Port under test	Antenna port	
Test method applied	<input checked="" type="checkbox"/>	Conducted measurement
	<input type="checkbox"/>	Radiated measurement
Test setup	Refer to the Annex 3 for test setup photo(s).	
Operating mode(s) used	Mode 1, Mode 2, Mode 3	
Remark	RBW=100 kHz, VBW=300 kHz	

## Results for BU part

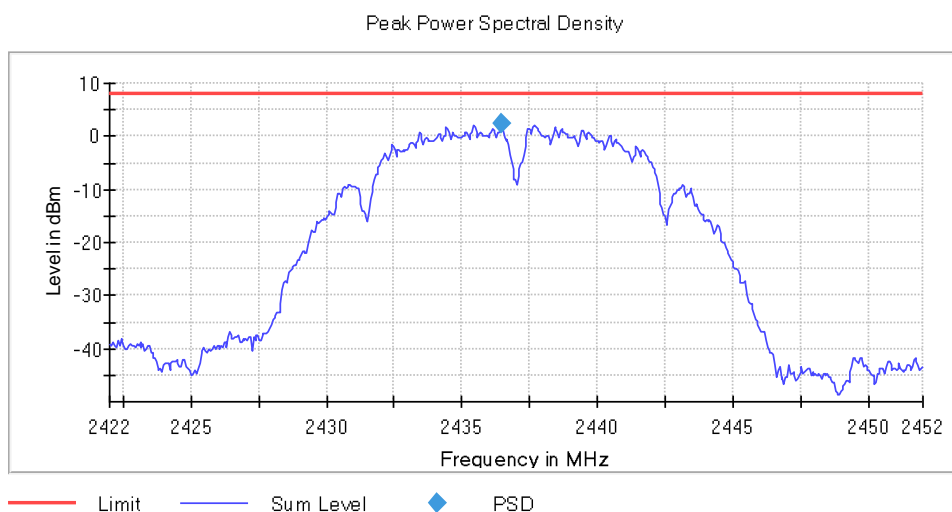
Mode	Channel	Test Frequency (MHz)	Power Output (dBm)	Limit (dBm/3kHz)	Result
Mode 1	1	2412	2.793	≤8	Pass
	6	2437	2.458	≤8	Pass
	11	2462	2.509	≤8	Pass
Mode 2	1	2412	2.623	≤8	Pass
	6	2437	2.768	≤8	Pass
	11	2462	2.321	≤8	Pass
Mode 3	1	2412	2.527	≤8	Pass
	6	2437	1.732	≤8	Pass
	11	2462	2.175	≤8	Pass

Test figure:

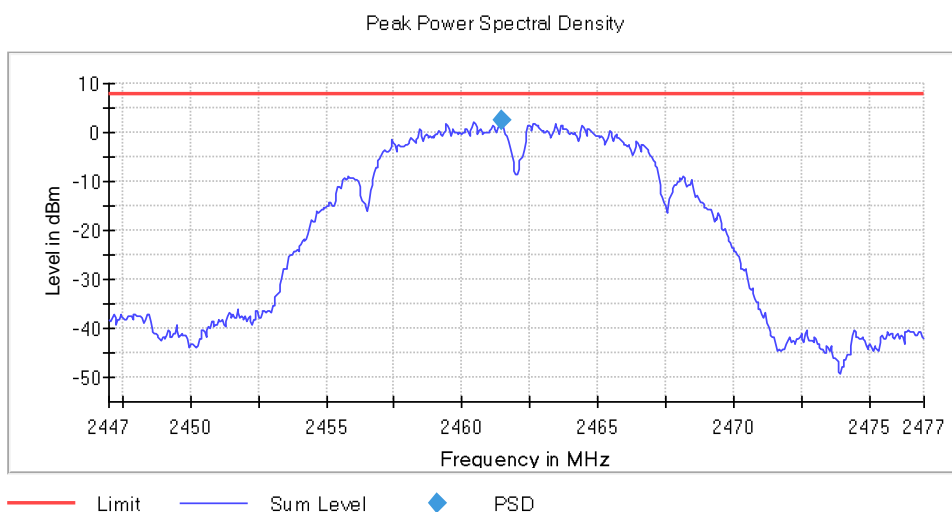
Mode 1 @channel 1



Mode 1 @channel 6

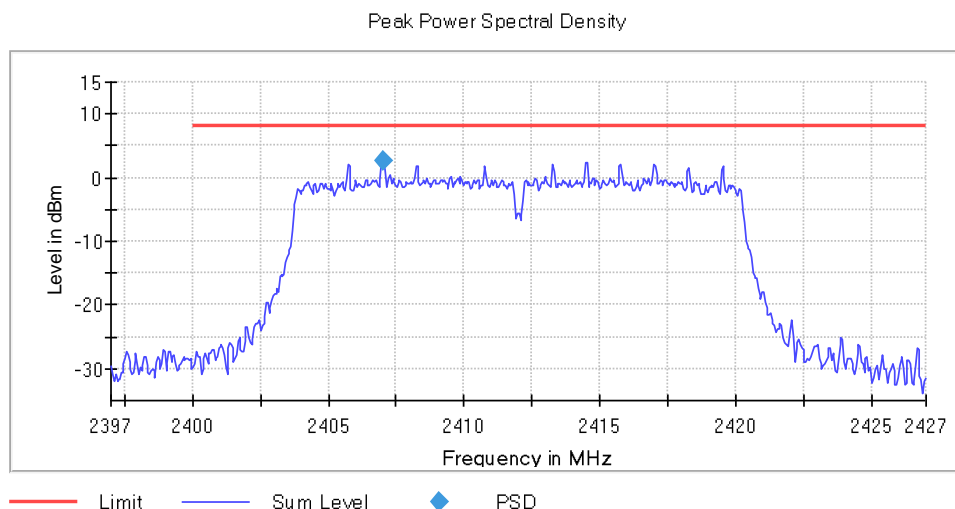


Mode 1 @channel 11

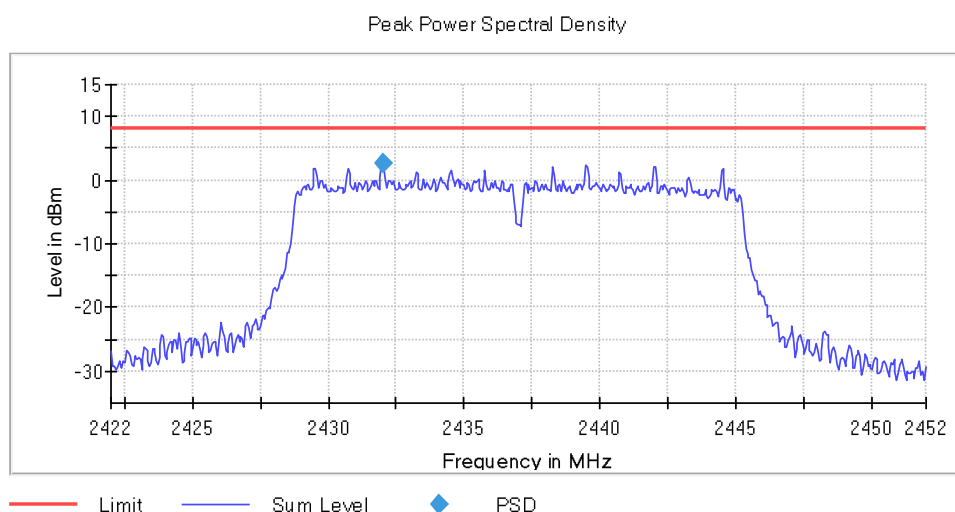




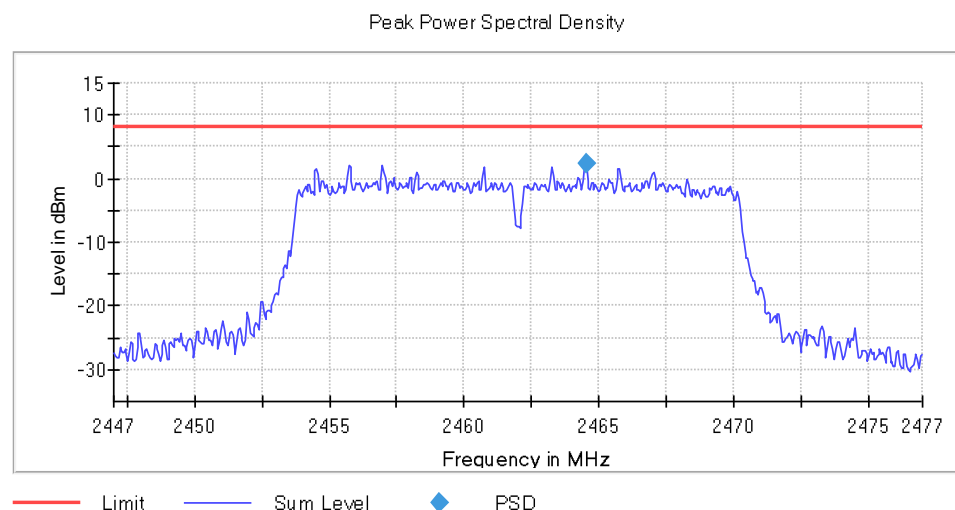
## Mode 2 @channel 1



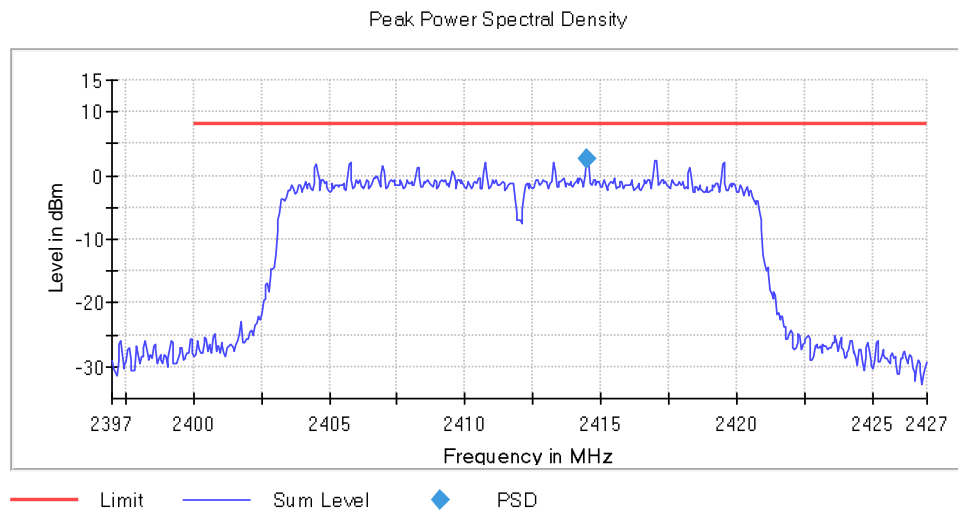
## Mode 2 @channel 6



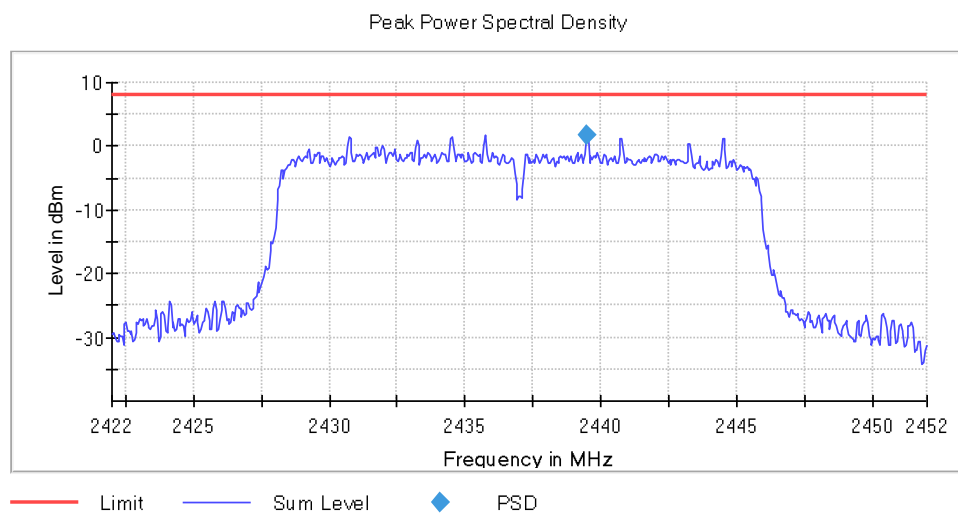
## Mode 2 @channel 11



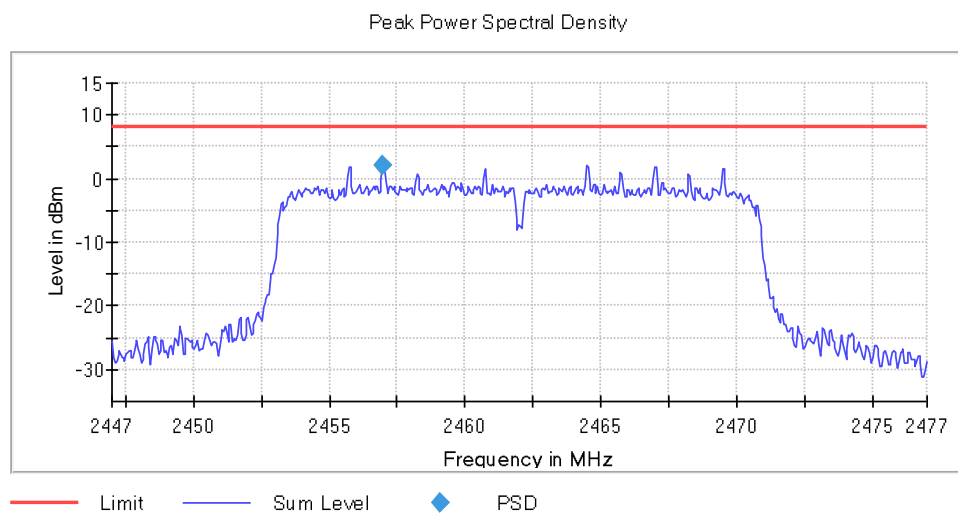
### Mode 3 @channel 1



### Mode 3 @channel 6



### Mode 3 @channel 11



## 5 IDENTIFICATION OF THE EQUIPMENT UNDER TEST

The photographs show the tested device.

Refer to documents 4913207\_BU\_External photo and 4913207\_BU\_Internal photo.

## ANNEX 1 – MEASUREMENT UNCERTAINTY

Test Item	Uncertainty
AC Power Lines Conducted Emission	±2.82dB
Occupied Channel Bandwidth	±0.7%
RF Output power, conducted	±0.6dB
Power Spectral Density, Conducted	±0.6dB
Unwanted Emissions, Conducted	±0.7dB
Radiated Emission (9kHz - 30MHz)	±3.58dB
Radiated Emission (30 - 300MHz)	±4.72dB
Radiated Emission (300 - 1000MHz)	±4.88dB
Radiated Emission (1 - 18GHz)	±4.66dB
Radiated Emission (18 - 26GHz)	±4.52dB
Radiated Emission (26 – 40 GHz)	±4.95dB
Temperature	1.0°C
Humidity	6%

## ANNEX 2 - USED EQUIPMENT

Continuous disturbances conducted (150 kHz to 30 MHz)

Item	Instrumentation	Manufacturer	Model No.	Serial No.	DEKRA No.	Cal. Due date
1	EMI Receiver	R&S	ESCI	101206	G/L858	2024/07/02
2	LISN	R&S	ENV216	101336	G/L859	2024/07/02
3	Shielding Room	Changzhou Feite	/	/	G/L861	2024/05/31

Emissions in non-restricted frequency bands/ Emissions in restricted frequency bands

Item	Instrumentation	Manufacturer	Model No.	Serial No.	DEKRA No.	Cal. Due date
1	EMI receiver	R&S	ESCI	101205	G/L857	2024/07/02
2	Antenna (30MHz-3GHz)	SCHWARZBECK	VULB9163	506	G/L864	2024/06/04
3	Chamber	ETS	/	/	G/L856	2024/06/10
4	Antenna (1GHz-18GHz)	R&S	HF907	102306	G/L1236	2024/04/10
5	Horn antenna preamplifier	Schwarzbeek	SCU-18	102234	G/L1236-1	2025/02/03
6	Spectrum analyzer	R&S	FSV	SN101012	G/L1235	2025/01/09
7	HF antenna (18 – 26.5 GHz)	ETS	3160-09	00164643	G/L1237	2025/02/28
8	High frequency antenna preamplifier (18 – 26.5 GHz)	Schwarzbeck	SCU-26	1879064	G/L1237-1	2025/01/24
9	Broadband horn antenna (15 – 40 GHz)	Schwarzbeck	BBHA9170	00908	GZ1901	2024/05/06
10	Annular magnetic field antenna	TESEQ	HLA6121	540045	GZ1905	2024/05/12

Duty cycle/Band Edge/Fundamental emission output power/DTS Bandwidth/Power Spectral Density

Item	Instrumentation	Manufacturer	Model	Serial no.	DEKRA No.	Cal Due date
1	Spectrum analyzer	R&S	FSV	SN101012	G/L1235	2025/01/09
2	Chamber	ETS	/	/	G/L856	2024/06/10
3	OSP	R&S	OSP 150	101907	GZ1894	2025/02/01

## ANNEX 3 - TEST PHOTOS

Refer to document 4913207\_BU\_Test setup.

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