

# FCC Test Report

Product Name : Tablet  
Brand Name : MiTAC  
Model No. : Cappuccino-Tablet  
FCC ID : 2ADL6-CAPPUCCINO

Applicant : MITAC COMPUTING TECHNOLOGY  
CORPORATION

Address : No. 200, Wen Hwa 2nd Rd., Kuei Shan Dist.,  
TAOYUAN, 33383 Taiwan

Date of Receipt : Apr. 06, 2020  
Issued Date : Mar. 17, 2022  
Report No. : 2040094R-E3032110108-A  
Report Version : V2.0



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by TAF or any agency of the government.

Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

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# Test Report Certification



Product Name : Tablet  
Applicant : MITAC COMPUTING TECHNOLOGY CORPORATION  
Address : No. 200, Wen Hwa 2nd Rd., Kuei Shan Dist., TAOYUAN, 33383  
Taiwan  
Manufacturer : MITAC COMPUTING TECHNOLOGY CORPORATION  
Address : No. 200, Wen Hwa 2nd Rd., Kuei Shan Dist., TAOYUAN, 33383  
Taiwan  
Brand Name : MITAC  
Model No. : Cappuccino-Tablet  
FCC ID : 2ADL6-CAPPUCCINO  
EUT Voltage : AC 120 ~ 240V, 50-60Hz (Adapter)  
DC 7.6V (Battery)  
Testing Voltage : AC 120V/60Hz  
Applicable Standard : FCC CFR Title 47 Part 15 Subpart C Section 15.247  
ANSI C63.10: 2013  
Laboratory Name : Hsin Chu Laboratory  
Address : No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu  
County 310, Taiwan, R.O.C.  
TEL: +886-3-582-8001 / FAX: +886-3-582-8958  
Test Result : Complied

Documented By :



(Amelia Wu / Project Specialist)

Approved By :



(Louis Hsu / Deputy Manager)

The test results relate only to the samples tested.  
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Testing and Certification Co., Ltd.

## Revision History

Version	Description	Issued Date
V1.0	Initial issue of report	Jul. 07, 2020
V2.0	1. Revising the antenna information. 2. Adding the power adapter and power cord (for docking station or extension cover). After evaluating, it was re-test for AC Power Line Conducted Emission and Radiated Emission Below 1 GHz.	Mar. 17, 2022

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## 1. General Information

### 1.1 EUT Description

Product Name	Tablet
Brand Name	MiTAC
Model No.	Cappuccino-Tablet
Frequency Range	1 Mbps: 2402 ~ 2480 MHz
Channel Number	1 Mbps: 40 Channels
Type of Modulation	GFSK

Accessories Information				
No.	Equipment Name	Brand Name	Model No.	Rating
1	Power Adapter with power cord (for EUT)	APD	NB65B19	INPUT: 100 ~ 240V,50/60Hz, 1.6A OUTPUT: 19V, 3.42A Cable In: Non-Shielded, 0.9 m Cable Out: Non-Shielded, 1.7m
2	Power Adapter (for Docking Station or Extension Cover)	DELTA	DPS-180AB-21	INPUT: 100 ~ 240V,50/60Hz, 3-1.5A OUTPUT: 24V, 7.5A Cable Out: Non-Shielded, 1.2m with 2 ferrite cores
3	Power cord (for Docking Station or Extension Cover)	DELTA	CCBL-0317	Cable In: Non-Shielded, 1.7 m
4	Battery	Getac	BP-CAP-21/2570 VKB	7.6V, 2570mAh, 19.532Wh
No.	Equipment Name	Brand Name		Model No.
5	Docking Station	Cappuccino		Cappuccino-Docking Station
6	Extension Cover	Cappuccino		Cappuccino-Extension Cover
7	Charging Cradle	Cappuccino		Cappuccino-Charging Cradle
No.	Equipment Name	Remark		
8	Strap	1Pcs		

Antenna Information				
Ant.	Brand Name	Model No.	Type	Antenna Gain (dBi)
1	ARISTOTLE	RFA-25-AP957-AUX	PIFA Antenna	4.63

## GFSK (1 Mbps)

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	10	2422 MHz	20	2442 MHz	30	2462 MHz
01	2404 MHz	11	2424 MHz	21	2444 MHz	31	2464 MHz
02	2406 MHz	12	2426 MHz	22	2446 MHz	32	2466 MHz
03	2408 MHz	13	2428 MHz	23	2448 MHz	33	2468 MHz
04	2410 MHz	14	2430 MHz	24	2450 MHz	34	2470 MHz
05	2412 MHz	15	2432 MHz	25	2452 MHz	35	2472 MHz
06	2414 MHz	16	2434 MHz	26	2454 MHz	36	2474 MHz
07	2416MHz	17	2436 MHz	27	2456 MHz	37	2476 MHz
08	2418 MHz	18	2438 MHz	28	2458 MHz	38	2478 MHz
09	2420 MHz	19	2440 MHz	29	2460 MHz	39	2480 MHz

## Note:

1. Regards to the frequency band operation; the lowest , middle and highest frequency of channel were selected to perform the test, and then shown on this report.
2. The above EUT information is declared by the manufacturer.

## 1.2 Test Mode

DEKRA has verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

Test Mode	Mode 1: Transmit_ Adapter Mode 2: Transmit_ Docking Station Mode 3: Transmit_ Extension Cover
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Test Items	Test Mode	Modulation	Channel	Result
AC Power Line Conducted Emission	Mode 1	GFSK (1 Mbps)	00	Pass
	Mode 2			
	Mode 3			
Maximum Conducted Output Power	Mode 1	GFSK (1 Mbps)	00/19/39	Pass
Radiated Emission Below 1 GHz	Mode 1	GFSK (1 Mbps)	00	Pass
	Mode 2			
	Mode 3			
Radiated Emission Above 1 GHz	Mode 3	GFSK (1 Mbps)	00/19/39	Pass
Antenna Port Conducted Emission	Mode 1	GFSK (1 Mbps)	00/19/39	Pass
Radiated Emission Band Edge	Mode 3	GFSK (1 Mbps)	00/19/39	Pass
Occupied Bandwidth & DTS Bandwidth	Mode 1	GFSK (1 Mbps)	00/19/39	Pass
Maximum Power Spectral Density	Mode 1	GFSK (1 Mbps)	00/19/39	Pass

Note:

- Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
- For radiated emission below 1 GHz and AC power line conducted emission have performed all modes of operation were investigated and the worst-case emissions are reported.
- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- The EUT was investigated in five modes X axis, Y axis, Z axis, docking station, and extension cover. Pre-scan radiated emission and radiated emission band edge has been determined by the extension cover mode (the worst-case).

## 1.3 Comments and Remarks

The product specification and testing instructions for the EUT declared in the report are provided by the manufacturer who will take all responsibilities for the accuracy.



### 1.4 Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system.

For Mode 1: Transmit\_ Adapter

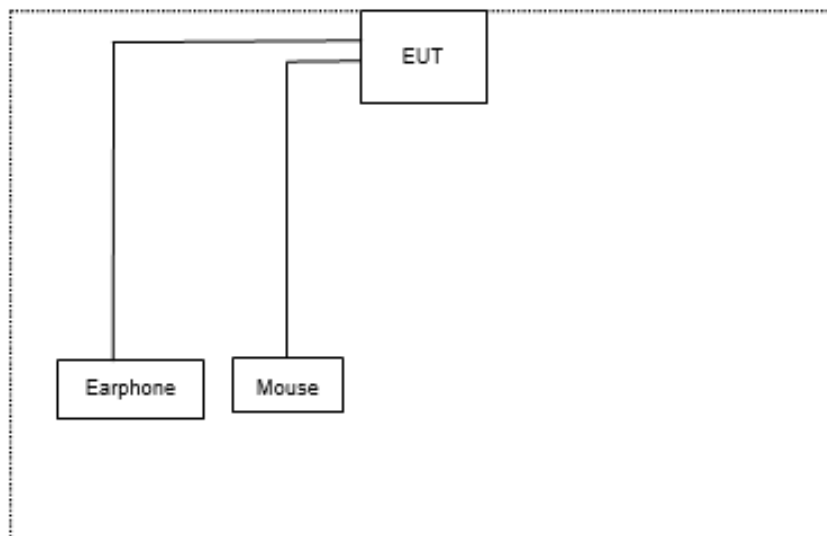
	Product	Manufacturer	Model No.	Serial No.
1	Mouse	HP	M150	B1M150210802968
2	Earphone	ASUS	3.5mm	N/A

For Mode 2: Transmit\_ Docking Station / Mode 3: Transmit\_ Extension Cover

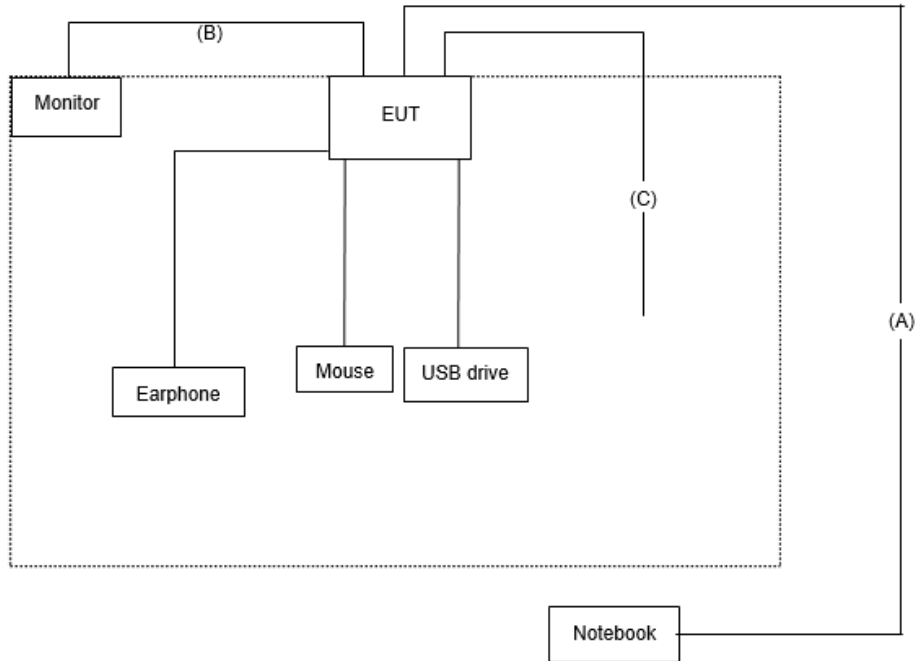
	Product	Manufacturer	Model No.	Serial No.
1	Mouse	HP	M150	B1M150210802968
2	Monitor	Philips	223V5LHSB2	QMZ081201587
3	USB drive	Verbatim	OTG Tiny	N/A
4	Earphone	ASUS	3.5mm	N/A
5	Notebook	DELL	Latitude E6320	8208580717

### 1.5 Configuration of tested System

Connection Diagram for Mode 1: Transmit\_ Adapter



Connection Diagram for Mode 2: Transmit\_ Docking Station / Mode 3: Transmit\_ Extension Cover



Signal Cable Type		Signal cable Description
A	Ethernet cable	Non-Shielded, 2m
B	HDMI cable	Shielded, 2m
C	RS232 cable	Shielded, 2m

### 1.6 EUT Operation of during Test

1	Set the EUT as shown.
2	Execute control command by software "QRCT v3.0.169.0".
3	Configure test mode, test channel and data rate.
4	Let the EUT start sending transmit and receive continuously.
5	Verify that device is working properly

## 1.7 Test Facility

Ambient conditions in the laboratory:

Items	Test Item	Actually	Tested by	Test Date	Test Site
Temperature (°C)	AC power Line Conducted Emission	19.4	Ling Chen	2022/02/21	SR2-H
Humidity (%RH)		59			
Temperature (°C)	Maximum Peak Conducted	24	Clemens Fang	2020/05/11	SR12-H
Humidity (%RH)	Output Power	62			
Temperature (°C)	Radiated Emission Below 1GHz	22.3	Ling Chen	2022/02/17	CB4-H
Humidity (%RH)		53			
Temperature (°C)	Radiated Emission Above 1GHz	25	Lion Wang	2020/04/21	CB4-H
Humidity (%RH)		51			
Temperature (°C)	Antenna Port Conducted Emission	24	Clemens Fang	2020/05/11	SR12-H
Humidity (%RH)		62			
Temperature (°C)	Radiated Emission Band Edge	24	Lion Wang	2020/04/17	CB4-H
Humidity (%RH)		53			
Temperature (°C)	Occupied Bandwidth &	24	Clemens Fang	2020/05/11	SR12-H
Humidity (%RH)	DTS Bandwidth	62			
Temperature (°C)	Maximum Power Spectral Density	24	Clemens Fang	2020/05/11	SR12-H
Humidity (%RH)		62			

Note: Test site information refers to Laboratory Information.

## Laboratory Information

**USA** : **FCC Registration Number: TW3024**  
**Canada** : **CAB identifier : TW3024**

The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site: <http://www.dekra.com.tw>

If you have any comments, please don't hesitate to contact us. Our test sites as below:

Test Laboratory	DEKRA Testing and Certification Co., Ltd.
Address	<ol style="list-style-type: none"> <li>No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan, R.O.C.</li> <li>No.372, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan, R.O.C.</li> </ol>
Phone number	<ol style="list-style-type: none"> <li>+886-3-582-8001</li> <li>+886-3-582-8001</li> </ol>
Fax number	<ol style="list-style-type: none"> <li>+886-3-582-8958</li> <li>+886-3-582-8958</li> </ol>
Email address	<a href="mailto:info.tw@dekra.com">info.tw@dekra.com</a>
Website	<a href="http://www.dekra.com.tw">http://www.dekra.com.tw</a>
<p>Note: Test site number for address 1 includes SR2-H. Test site number for address 2 includes CB2-H, CB3-H, CB4-H, SR10-H and SR12-H.</p>	

## 1.8 List of Test Equipment

### SR2-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Artificial Mains Network	R&S	ENV4200	848411/010	2021/12/27	2022/12/26
EMI Test Receiver	R&S	ESR3	102608	2021/06/03	2022/06/02
LISN	R&S	ENV216	100092	2021/06/08	2022/06/07
Coaxial Cable(9 m)	Harbour	RG-400	SR2-H	2021/08/15	2022/08/14
DEKRA Testing System	DEKRA	Version 2.0	SR2-H	N/A	N/A

### SR12-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
High Speed Peak Power Meter Dual Input	Anritsu	ML2496A	1602004	2019/12/02	2020/12/01
Pulse Power Sensor	Anritsu	MA2411B	1531043	2019/12/02	2020/12/01
Pulse Power Sensor	Anritsu	MA2411B	1531044	2019/12/02	2020/12/01
Power Meter	Keysight	8990B	MY51000248	2019/05/21	2020/05/20
Power Sensor	Keysight	N1923A	MY57240005	2019/05/21	2020/05/20
Spectrum Analyzer	Keysight	N9030B	MY57140404	2019/06/18	2020/06/17
Spectrum Analyzer	Keysight	N9010B	MY57110159	2020/04/15	2021/04/14
Spectrum Analyzer	Agilent	N9010A	US47140172	2019/06/28	2020/06/27
Signal & Spectrum Analyzer	R&S	FSV40	101049	2020/03/30	2021/03/29

## CB4-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2019/10/21	2020/10/20
Signal Analyzer	R&S	FSVA40	101455	2021/10/22	2022/10/21
Signal & Spectrum Analyzer	R&S	FSV40	101049	2020/03/30	2021/03/29
Signal & Spectrum Analyzer	R&S	FSV40	101049	2021/03/31	2022/03/30
Signal Analyzer	R&S	FSV40	101435	2019/07/08	2020/07/07
Signal Analyzer	R&S	FSVA40	101435	2021/06/04	2022/06/03
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2020/02/21	2021/02/20
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2022/01/07	2023/01/06
Trilog Broadband Antenna	Schwarzbeck	VULB 9168	1209	2021/05/28	2022/05/27
Horn Antenna	Schwarzbeck	BBHA 9120D	639	2019/05/28	2020/05/27
Horn Antenna	Schwarzbeck	BBHA 9170	202	2019/12/27	2020/12/26
Pre-Amplifier	DEKRA	AP-025C	12183122	2019/09/24	2020/09/23
Pre-Amplifier	EMCI	EMC01820I	980364	2021/08/27	2022/08/26
Pre-Amplifier	EMCI	EMC11830I	980366	2019/12/03	2020/12/02
Pre-Amplifier	EMEC	EM01G18GA	060835	2021/07/12	2022/07/11
Pre-Amplifier	DEKRA	AP-400C	201801231	2019/12/03	2020/12/02
Pre-Amplifier	DEKRA	AP-400C	201801231	2021/12/24	2022/12/23
Horn Antenna	Schwarzbeck	BBHA 9120D	01656	2019/10/25	2020/10/24
Band Reject Filter	Micro-Tronics	BRM50702	G192	2020/03/09	2021/03/08
Coaxial Cable(19m)	Suhner	SF102_SF104_ SF106	CB4_2	2019/07/25	2020/07/24
Coaxial Cable(10m)	Suhner	SF102_SF104	CB4-H	2021/08/09	2022/08/08
EMI system	DEKRA	Version 1.0	CB4-H	N/A	N/A
EMI Test Receiver	R&S	ESR7	102260	2021/12/22	2022/12/21
Magnetic Loop Antenna	Teseq	HLA 6121	44287	2021/09/06	2022/09/05
DEKRA Testing System	DEKRA	Version 2.0	CB4-H	N/A	N/A

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

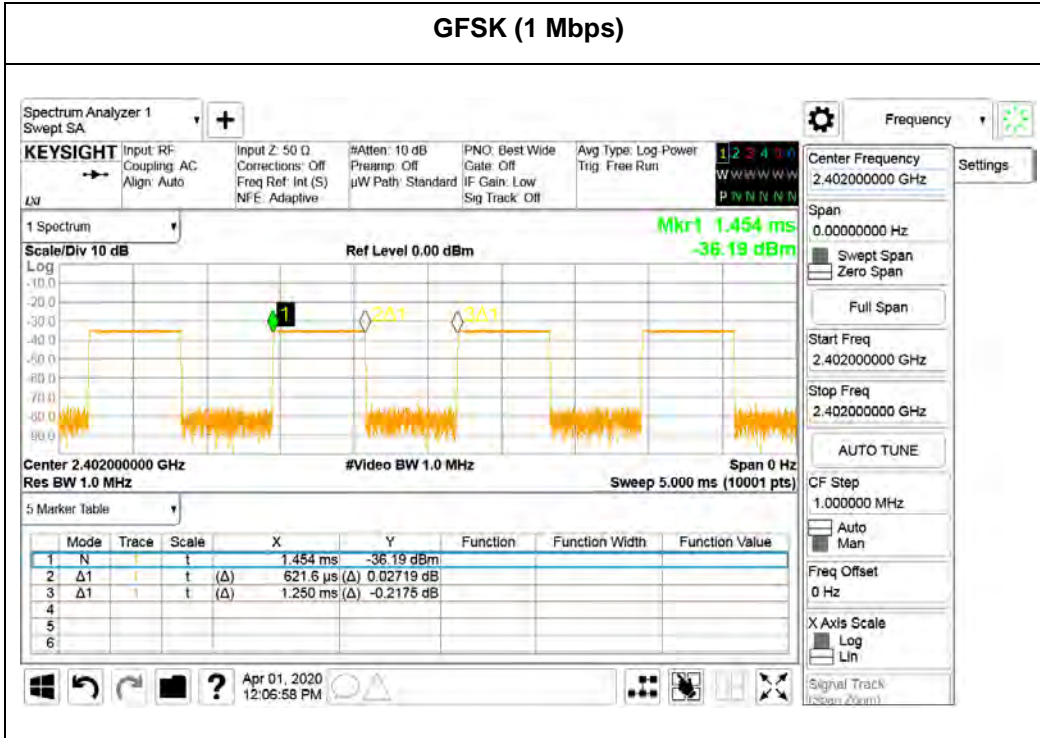
## 1.9 Measurement Uncertainty

Uncertainties have been calculated according to the DEKRA internal document with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor ( $k=2$ )).

Test item	Uncertainty
AC Power Line Conducted Emission	$\pm 2.10$ dB
Maximum Conducted Output Power	$\pm 1.27$ dB
Radiated Emission	$\pm 3.25$ dB below 1 GHz $\pm 3.65$ dB above 1 GHz
Antenna Port Conducted Emission	$\pm 1.27$ dB
Radiated Emission Band Edge	$\pm 3.65$ dB
Occupied Bandwidth & DTS Bandwidth	$\pm 50$ Hz
Maximum Power Spectral Density	$\pm 1.27$ dB

### 1.10 Duty Cycle

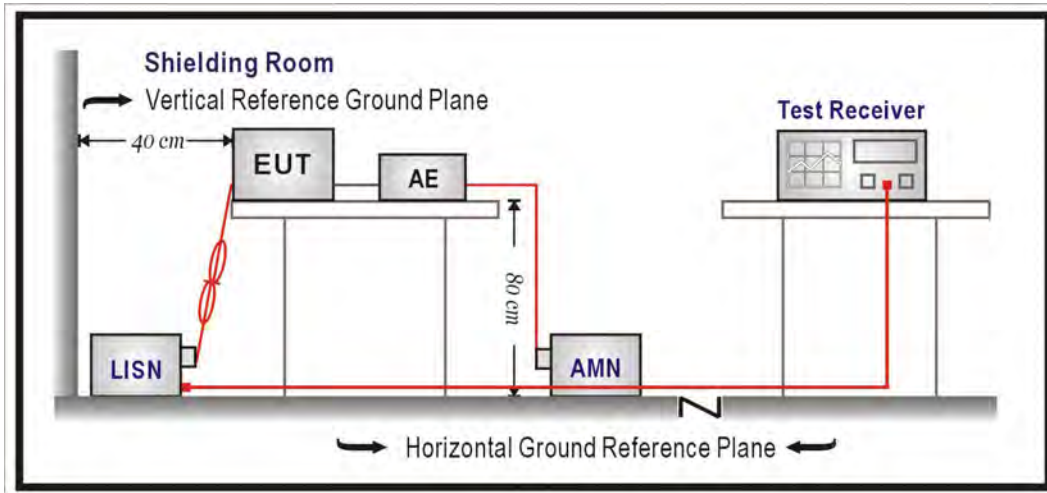
Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
GFSK (1 Mbps)	0.621	1.250	49.68	3.04	1.610





## 2. AC Power Line Conducted Emission

### 2.1 Test Setup



### 2.2 Test Limit

Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Remarks: In the above table, the tighter limit applies at the band edges.

### 2.3 Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50 uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50 ohm/50 uH coupling impedance with 50 ohm termination. (Please refer to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2013 on conducted measurement.

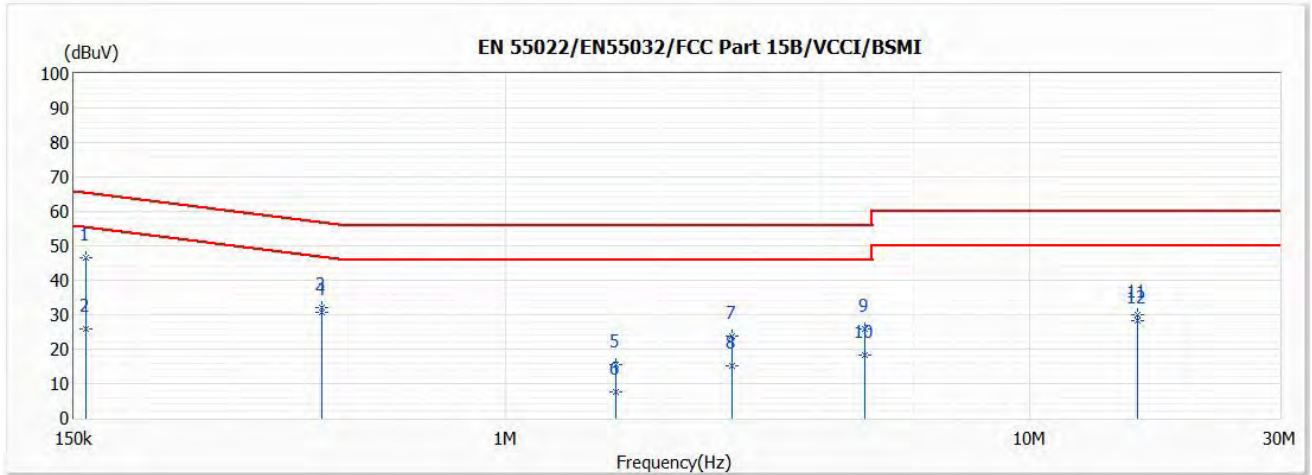
AC Power Line Conducted Emissions were investigated over the frequency range from 0.15 MHz to 30 MHz using a receiver bandwidth of 9 kHz.

### 2.4 Test Specification

According to FCC Part 15 Subpart C Paragraph 15.207.

## 2.5 Test Result of AC Power Line Conducted Emission

Test Mode	Mode 1: Transmit_Adapter	Phase	Line
Test Condition	GFSK (1 Mbps) / 2402 MHz		

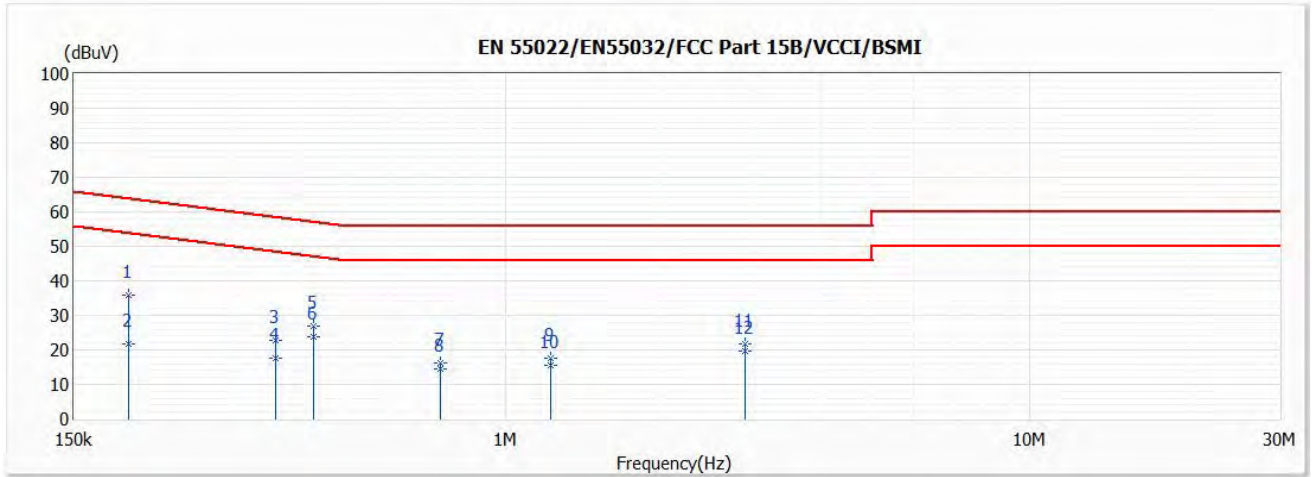


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.158	46.63	65.59	-18.96	37.00	9.63	QP
2	0.158	26.02	55.59	-29.57	16.39	9.63	AV
3	0.445	32.19	56.96	-24.77	22.53	9.66	QP
*4	0.445	30.84	46.96	-16.12	21.18	9.66	AV
5	1.624	15.52	56.00	-40.48	5.76	9.76	QP
6	1.624	7.73	46.00	-38.27	-2.03	9.76	AV
7	2.705	23.82	56.00	-32.18	14.00	9.82	QP
8	2.705	15.32	46.00	-30.68	5.50	9.82	AV
9	4.848	26.01	56.00	-29.99	16.09	9.92	QP
10	4.848	18.17	46.00	-27.83	8.25	9.92	AV
11	16.056	30.04	60.00	-29.96	19.77	10.27	QP
12	16.056	28.36	50.00	-21.64	18.09	10.27	AV

Remark:

1. "\*" means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level - Limit.

Test Mode	Mode 1: Transmit_Adapter	Phase	Neutral
Test Condition	GFSK (1 Mbps) / 2402 MHz		

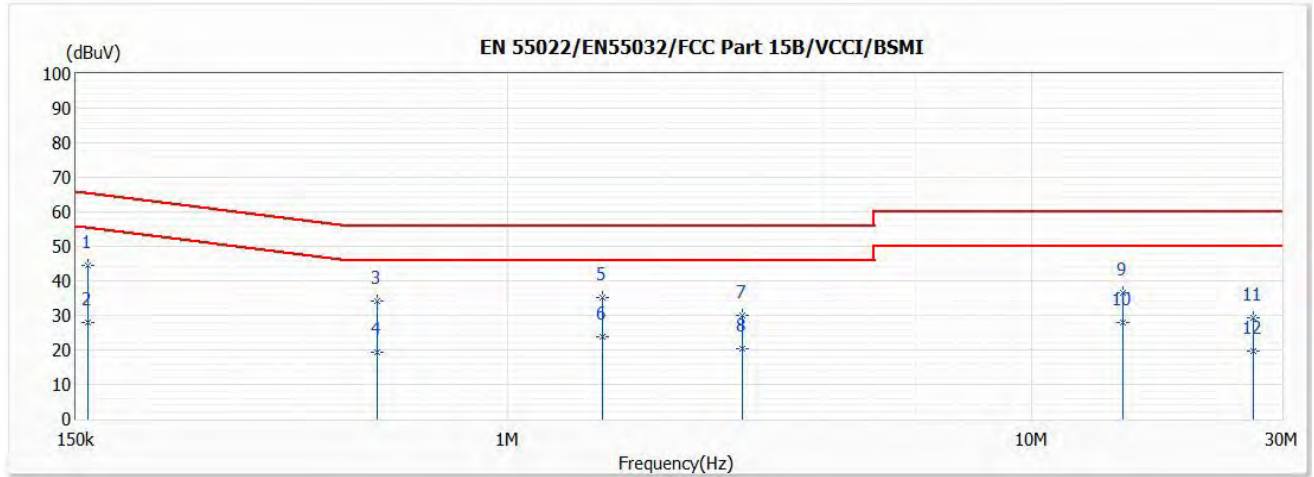


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.191	35.89	64.00	-28.11	26.27	9.62	QP
2	0.191	21.63	54.00	-32.37	12.01	9.62	AV
3	0.363	22.93	58.66	-35.73	13.28	9.65	QP
4	0.363	17.53	48.66	-31.13	7.88	9.65	AV
5	0.429	26.99	57.27	-30.28	17.33	9.66	QP
*6	0.429	23.95	47.27	-23.32	14.29	9.66	AV
7	0.749	16.10	56.00	-39.90	6.40	9.70	QP
8	0.749	14.46	46.00	-31.54	4.76	9.70	AV
9	1.219	17.42	56.00	-38.58	7.69	9.73	QP
10	1.219	15.51	46.00	-30.49	5.78	9.73	AV
11	2.867	21.59	56.00	-34.41	11.77	9.82	QP
12	2.867	19.62	46.00	-26.38	9.80	9.82	AV

Remark:

1. "\*" means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level - Limit.

Test Mode	Mode 2: Transmit_ Docking Station	Phase	Line
Test Condition	GFSK (1 Mbps) / 2402 MHz		

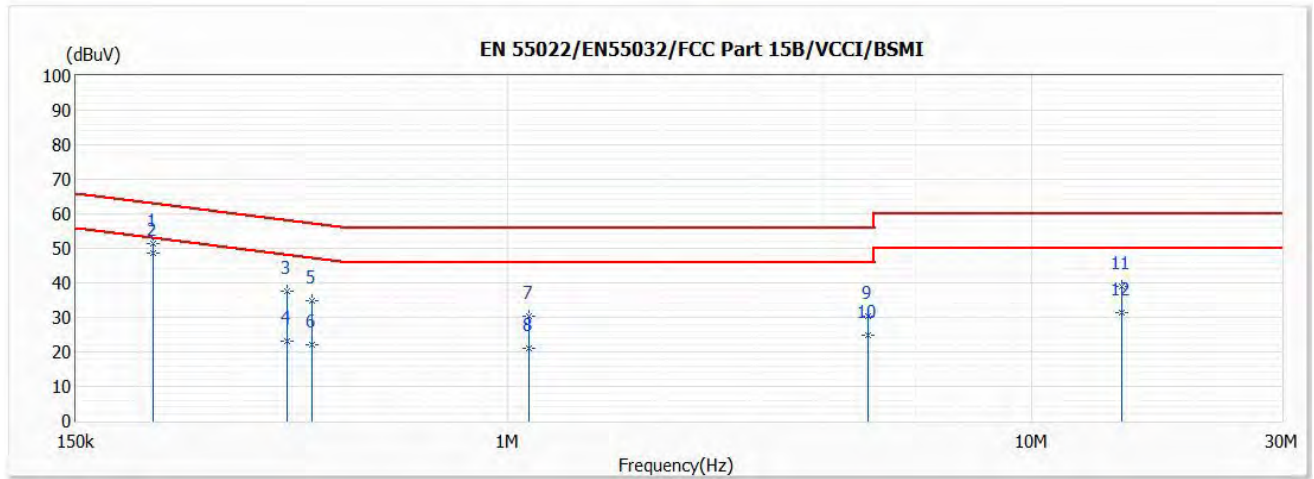


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.158	44.34	65.58	-21.24	34.71	9.63	QP
2	0.158	27.78	55.58	-27.80	18.15	9.63	AV
3	0.564	34.22	56.00	-21.78	24.54	9.68	QP
4	0.564	19.33	46.00	-26.67	9.65	9.68	AV
*5	1.516	35.28	56.00	-20.72	25.52	9.76	QP
6	1.516	23.92	46.00	-22.08	14.16	9.76	AV
7	2.808	29.87	56.00	-26.13	20.05	9.82	QP
8	2.808	20.29	46.00	-25.71	10.47	9.82	AV
9	14.913	36.68	60.00	-23.32	26.44	10.24	QP
10	14.913	27.88	50.00	-22.12	17.64	10.24	AV
11	26.413	29.38	60.00	-30.62	18.92	10.46	QP
12	26.413	19.64	50.00	-30.36	9.18	10.46	AV

Remark:

1. "\*" means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level - Limit.

Test Mode	Mode 2: Transmit_ Docking Station	Phase	Neutral
Test Condition	GFSK (1 Mbps) / 2402 MHz		

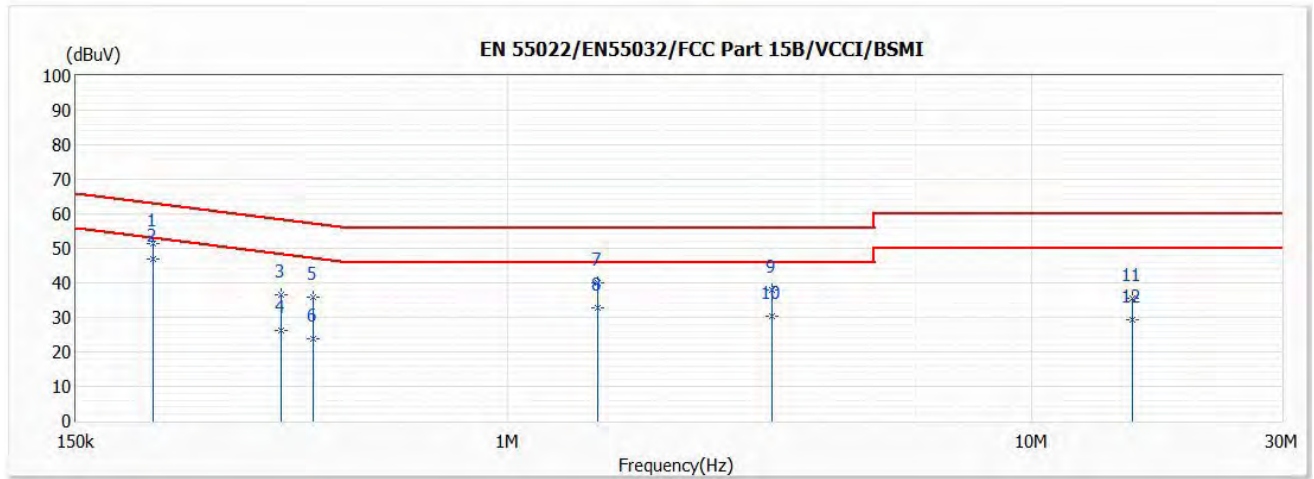


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.211	51.51	63.17	-11.66	41.88	9.63	QP
*2	0.211	48.79	53.17	-4.38	39.16	9.63	AV
3	0.378	37.63	58.31	-20.68	27.97	9.66	QP
4	0.378	22.99	48.31	-25.32	13.33	9.66	AV
5	0.423	34.82	57.39	-22.57	25.16	9.66	QP
6	0.423	21.92	47.39	-25.47	12.26	9.66	AV
7	1.096	30.35	56.00	-25.65	20.63	9.72	QP
8	1.096	21.09	46.00	-24.91	11.37	9.72	AV
9	4.881	30.50	56.00	-25.50	20.57	9.93	QP
10	4.881	24.68	46.00	-21.32	14.75	9.93	AV
11	14.857	38.92	60.00	-21.08	28.57	10.35	QP
12	14.857	31.32	50.00	-18.68	20.97	10.35	AV

Remark:

1. "\*" means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level - Limit.

Test Mode	Mode 3: Transmit_ Extension Cover	Phase	Line
Test Condition	GFSK (1 Mbps) / 2402 MHz		



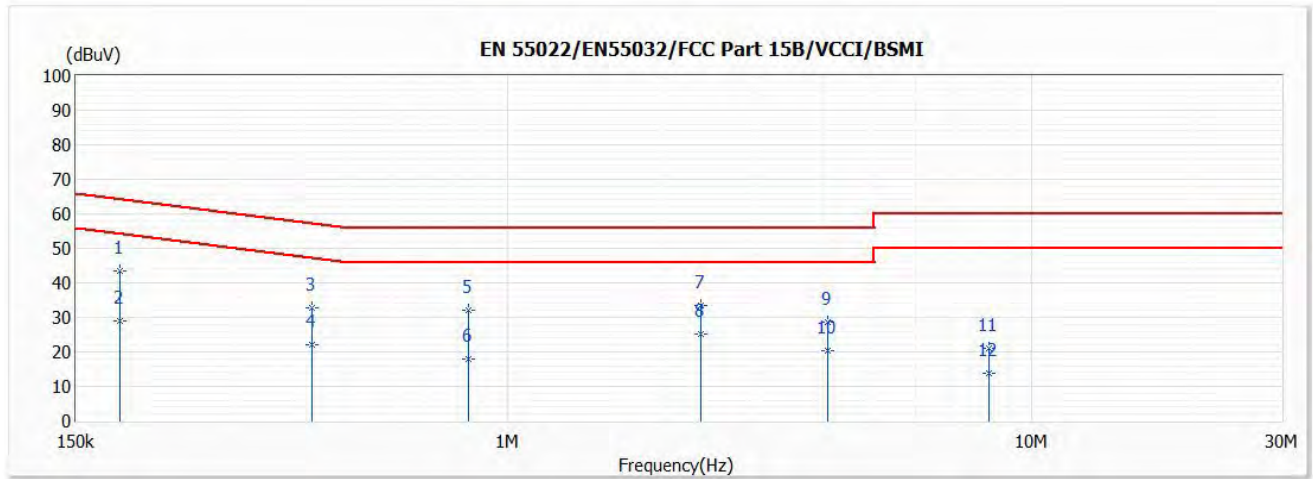
No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.211	51.46	63.17	-11.71	41.82	9.64	QP
*2	0.211	46.94	53.17	-6.23	37.30	9.64	AV
3	0.369	36.69	58.52	-21.83	27.03	9.66	QP
4	0.369	26.15	48.52	-22.37	16.49	9.66	AV
5	0.425	35.77	57.34	-21.57	26.11	9.66	QP
6	0.425	23.94	47.34	-23.40	14.28	9.66	AV
7	1.485	40.09	56.00	-15.91	30.35	9.74	QP
8	1.485	32.79	46.00	-13.21	23.05	9.74	AV
9	3.188	37.78	56.00	-18.22	27.94	9.84	QP
10	3.188	30.26	46.00	-15.74	20.42	9.84	AV
11	15.577	35.48	60.00	-24.52	25.22	10.26	QP
12	15.577	29.45	50.00	-20.55	19.19	10.26	AV

Remark:

1. "\*" means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level - Limit.



Test Mode	Mode 3: Transmit_ Extension Cover	Phase	Neutral
Test Condition	GFSK (1 Mbps) / 2402 MHz		



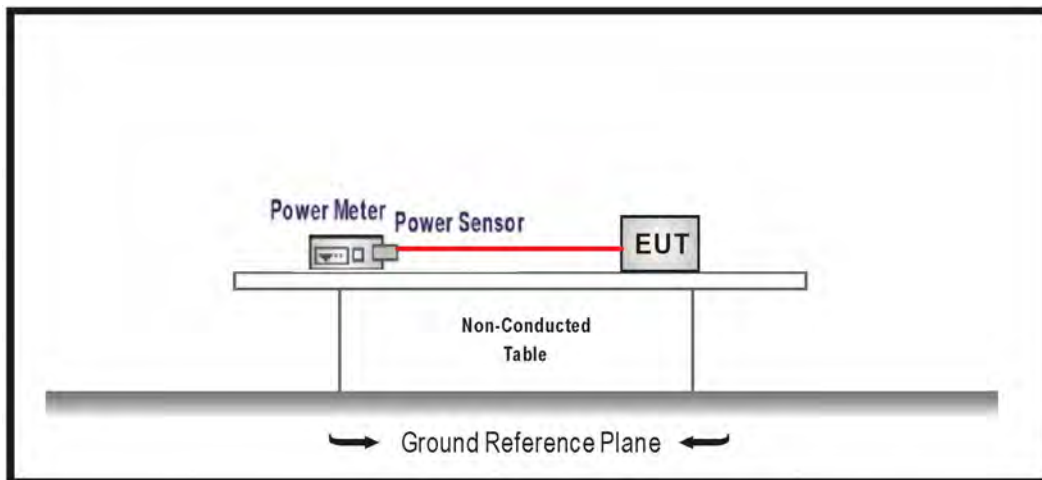
No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
*1	0.182	43.59	64.38	-20.79	33.97	9.62	QP
2	0.182	28.80	54.38	-25.58	19.18	9.62	AV
3	0.423	32.76	57.39	-24.63	23.10	9.66	QP
4	0.423	22.16	47.39	-25.23	12.50	9.66	AV
5	0.840	32.23	56.00	-23.77	22.52	9.71	QP
6	0.840	17.90	46.00	-28.10	8.19	9.71	AV
7	2.333	33.54	56.00	-22.46	23.75	9.79	QP
8	2.333	25.14	46.00	-20.86	15.35	9.79	AV
9	4.084	28.54	56.00	-27.46	18.66	9.88	QP
10	4.084	20.19	46.00	-25.81	10.31	9.88	AV
11	8.288	21.13	60.00	-38.87	11.06	10.07	QP
12	8.288	13.68	50.00	-36.32	3.61	10.07	AV

Remark:

1. "\*" means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level - Limit.

### 3. Maximum Conducted Output Power

#### 3.1 Test Setup



#### 3.2 Test Limit

The Maximum Conducted Output Power shall be less 1 Watt.

#### 3.3 Test procedures

The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB 558074 D01 v05r02 for compliance to FCC 47CFR 15.247 requirements.

#### 3.4 Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247.



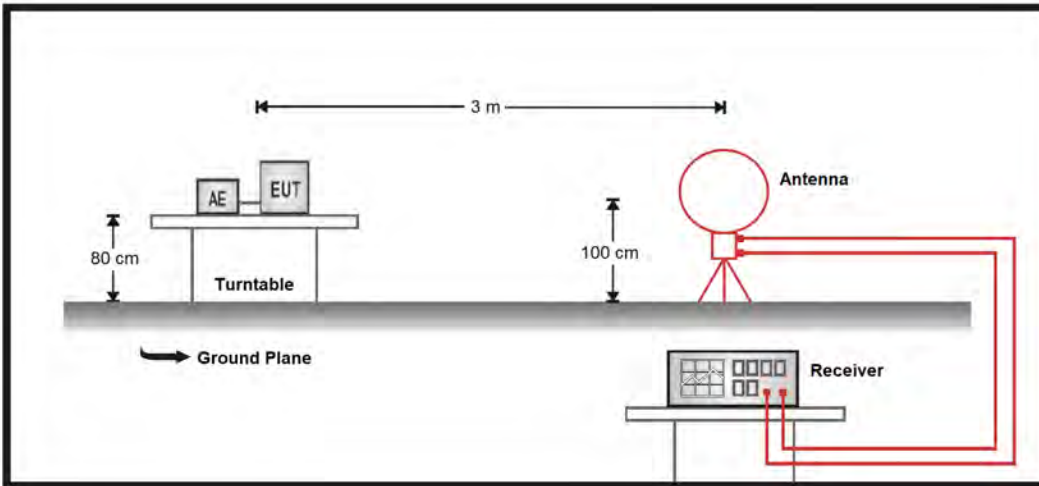
### 3.5 Test Result of Maximum Conducted Output Power

Modulation	Channel	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
GFSK (1 Mbps)	00	2402	1.670	$\leq 30.00$	Pass
	19	2440	1.960	$\leq 30.00$	Pass
	39	2480	1.980	$\leq 30.00$	Pass

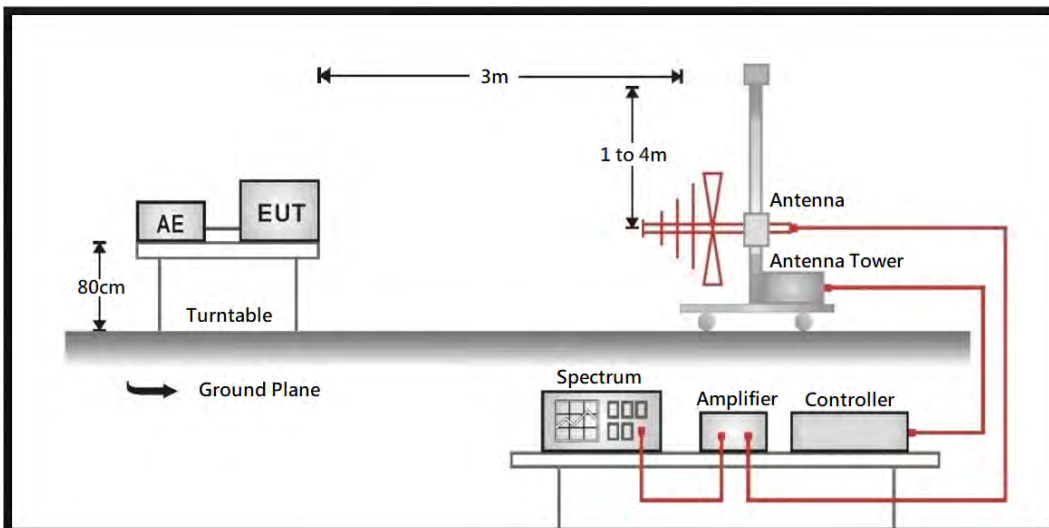
## 4. Radiated Emission

### 4.1 Test Setup

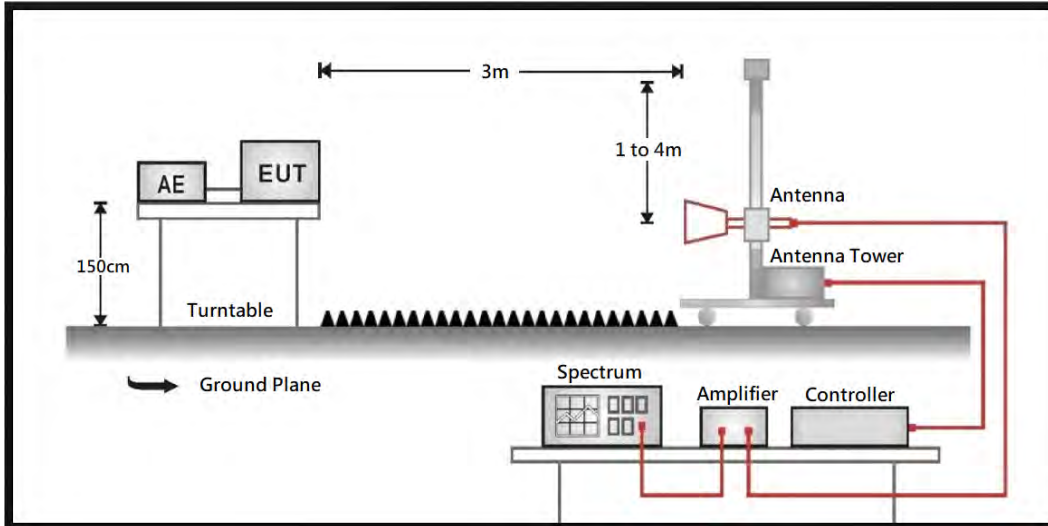
9 kHz ~ 30 MHz



30 MHz ~ 1 GHz



Above 1 GHz



### 4.2 Test Limit

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20 dB below the level of the fundamental or to the general radiated emission limit in paragraph 15.209, whichever is the lesser attenuation.

Frequency (MHz)	Field strength (uV/m)	Field strength (dBuV/m)	Measurement distance (m)
0.009 – 0.490	2400/F(kHz)	20 log (2400/F(kHz))	300
0.490 – 1.705	24000/F(kHz)	20 log (24000/F(kHz))	30
1.705 - 30	30	29.5	30
30 - 88	100	40	3
88 - 216	150	43.5	3
216 - 960	200	46	3
Above 960	500	54	3

Remarks:

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

### 4.3 Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to DTS test procedure of KDB 558074 D01V05r02 for compliance to FCC 47CFR 15.247 requirements.

The EUT and its simulators are placed on a turn table which is 0.8 or 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated measurement.

On any frequency or frequencies from 9 kHz (include The the lowest oscillator frequency generated within the device up to the 10th harmonic) to 1000 MHz, the limit shown are based on measuring equipment employing a quasi-peak detector function and on any frequency or frequencies above 1000 MHz the radiated limit shown are based upon the use of measurement instrumentation employing an average detector function. When average radiated emission measurement are included emission measurement below 1000 MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.

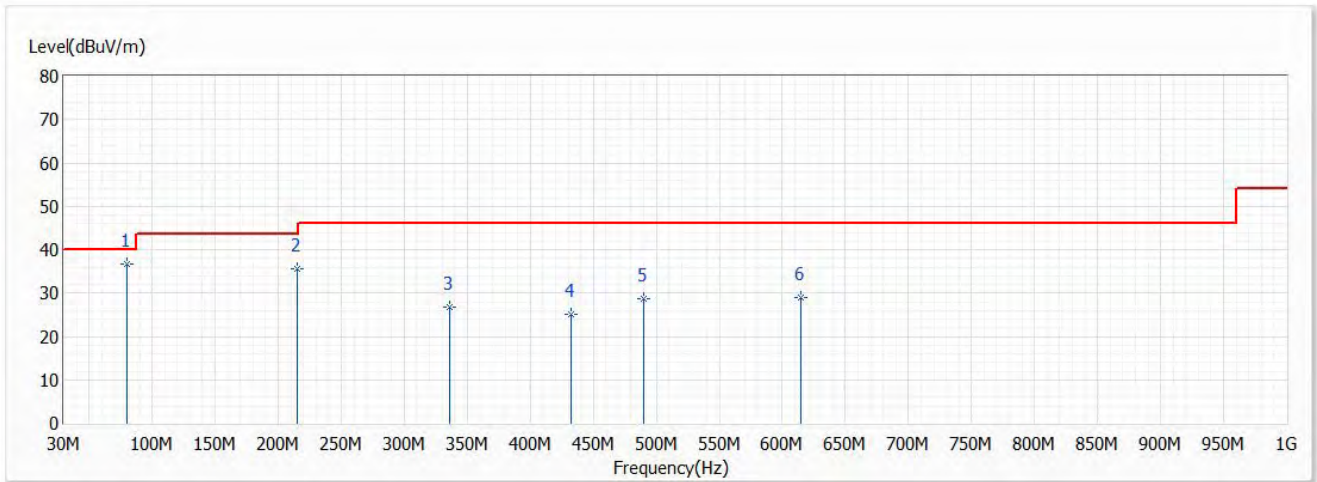
The bandwidth below 1 GHz setting on the field strength meter is 120 kHz and above 1 GHz is 1MHz.

### 4.4 Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247.

### 4.5 Test Result of Radiated Emissions (30 MHz ~ 1 GHz)

Test Mode	Mode 1: Transmit_Adapter	Polarity	Horizontal
Test Condition	GFSK (1 Mbps) / 2402 MHz		

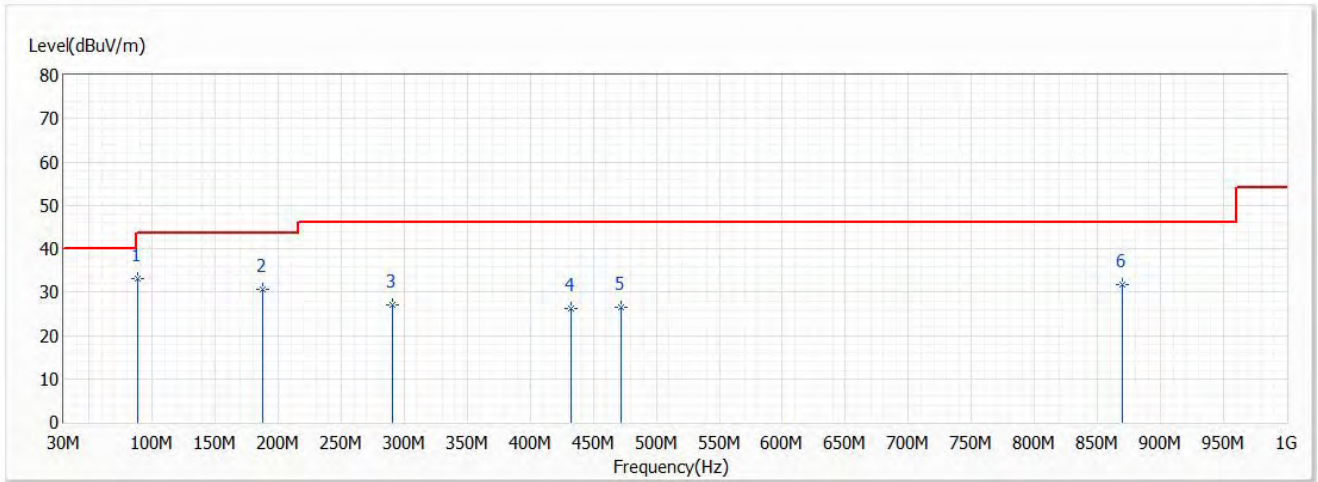


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	79.713	36.69	40.00	-3.31	43.86	-7.17	QP
2	214.785	35.70	43.50	-7.80	42.19	-6.49	QP
3	336.156	26.86	46.00	-19.14	28.28	-1.42	QP
4	432.186	24.98	46.00	-21.02	23.82	1.16	QP
5	490.144	28.72	46.00	-17.28	26.35	2.37	QP
6	614.546	28.92	46.00	-17.08	23.71	5.21	QP

Note:

1. All reading levels is Quasi-Peak value.
2. “ \* ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor
4. The emission under 30MHz were not included is because their levels are lower than 20dB from limit.

Test Mode	Mode1: Transmit_Adapter	Polarity	Vertical
Test Condition	GFSK (1 Mbps) / 2402 MHz		

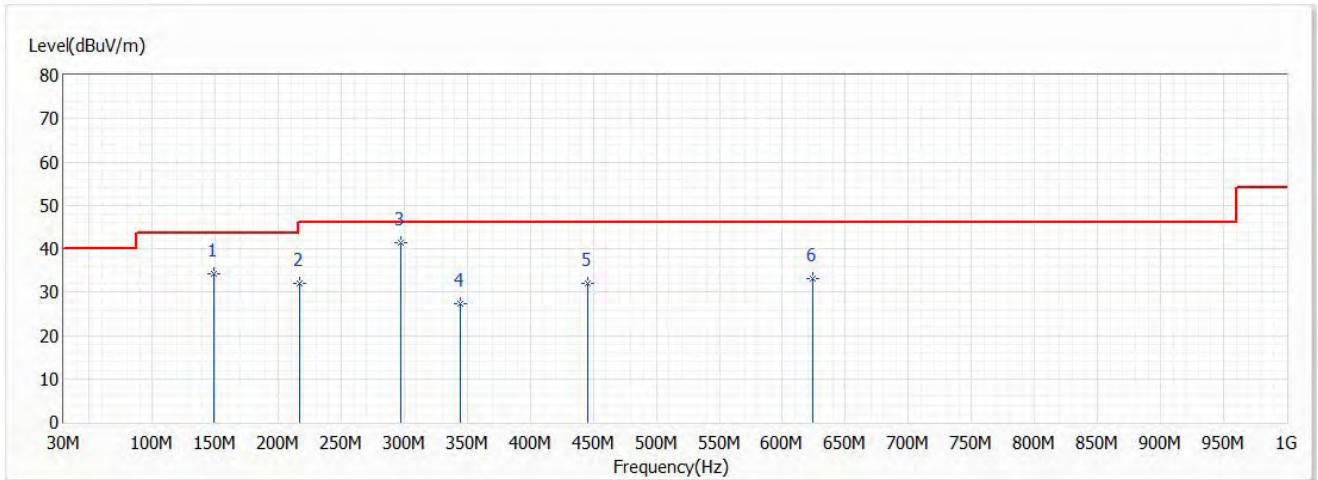


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	88.200	33.06	43.50	-10.44	41.78	-8.72	QP
2	187.625	30.52	43.50	-12.98	35.86	-5.34	QP
3	290.809	27.11	46.00	-18.89	29.61	-2.50	QP
4	432.186	26.20	46.00	-19.80	25.04	1.16	QP
5	472.320	26.46	46.00	-19.54	24.31	2.15	QP
6	869.656	31.78	46.00	-14.22	23.04	8.74	QP

Note:

1. All reading levels is Quasi-Peak value.
2. “ \* ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor
4. The emission under 30MHz were not included is because their levels are lower than 20dB from limit.

Test Mode	Mode 2: Transmit_ Docking Station	Polarity	Horizontal
Test Condition	GFSK (1 Mbps) / 2402 MHz		



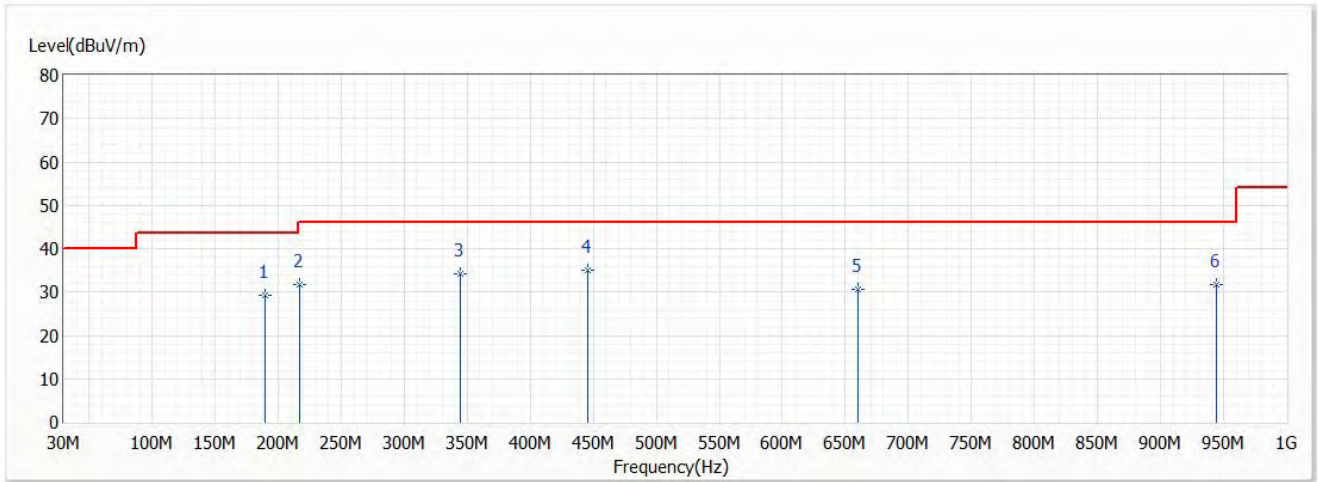
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	148.583	34.26	43.50	-9.24	37.51	-3.25	QP
2	216.846	31.96	46.00	-14.04	38.40	-6.44	QP
* 3	297.114	41.40	46.00	-4.60	43.88	-2.48	QP
4	344.886	27.20	46.00	-18.80	28.58	-1.38	QP
5	445.403	32.03	46.00	-13.97	30.50	1.53	QP
6	624.368	33.19	46.00	-12.81	27.85	5.34	QP

Note:

1. All reading levels is Quasi-Peak value.
2. “ \* ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor
4. The emission under 30MHz were not included is because their levels are lower than 20dB from limit.



Test Mode	Mode 2: Transmit_ Docking Station	Polarity	Vertical
Test Condition	GFSK (1 Mbps) / 2402 MHz		



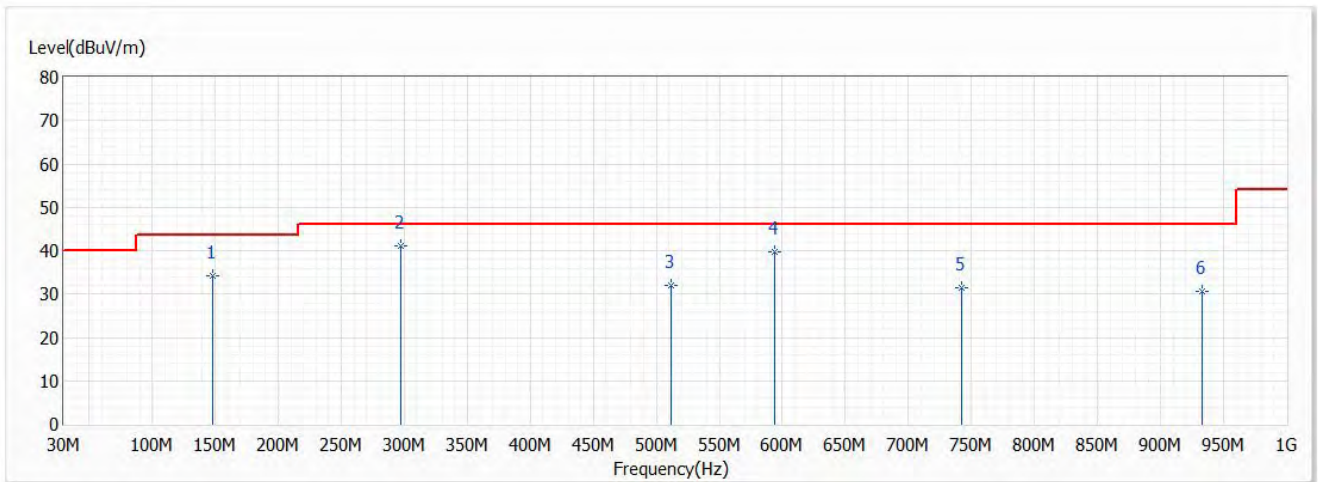
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	189.808	29.28	43.50	-14.22	34.83	-5.55	QP
2	216.846	31.70	46.00	-14.30	38.14	-6.44	QP
3	344.765	34.14	46.00	-11.86	35.52	-1.38	QP
* 4	445.524	34.91	46.00	-11.09	33.38	1.53	QP
5	660.015	30.59	46.00	-15.41	24.93	5.66	QP
6	944.710	31.67	46.00	-14.33	21.78	9.89	QP

Note:

1. All reading levels is Quasi-Peak value.
2. “ \* ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor
4. The emission under 30MHz were not included is because their levels are lower than 20dB from limit.



Test Mode	Mode 3: Transmit_ Extension Cover	Polarity	Horizontal
Test Condition	GFSK (1 Mbps) / 2402 MHz		

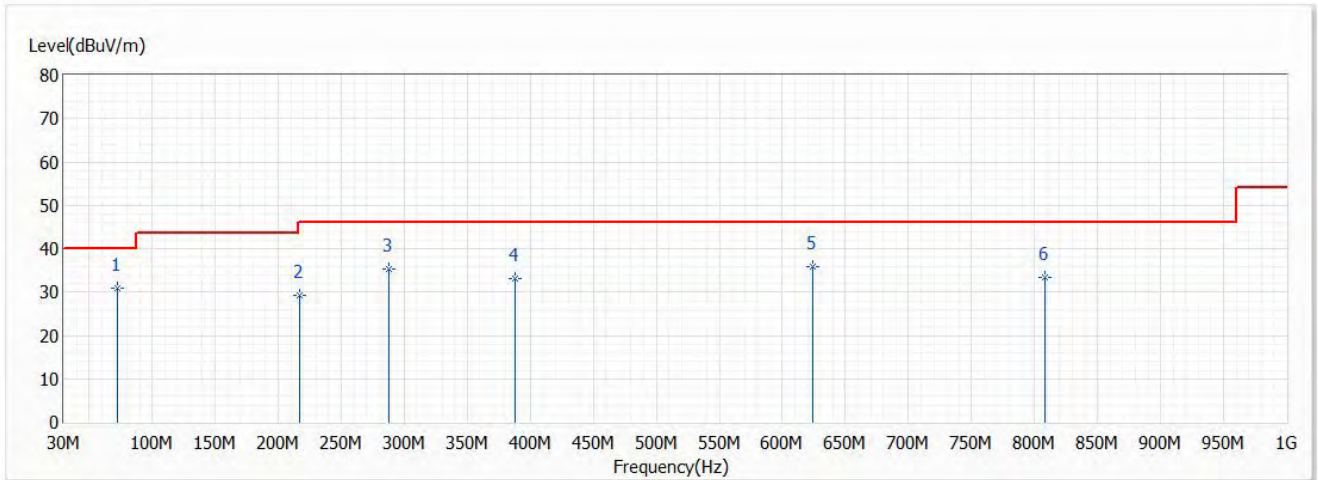


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	148.461	34.34	43.50	-9.16	37.56	-3.22	QP
* 2	297.114	41.09	46.00	-4.91	43.57	-2.48	QP
3	511.484	31.95	46.00	-14.05	29.01	2.94	QP
4	593.934	39.67	46.00	-6.33	34.78	4.89	QP
5	742.344	31.54	46.00	-14.46	24.05	7.49	QP
6	932.949	30.69	46.00	-15.31	21.08	9.61	QP

Note:

1. All reading levels is Quasi-Peak value.
2. “ \* ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor
4. The emission under 30MHz were not included is because their levels are lower than 20dB from limit.

Test Mode	Mode 3: Transmit_ Extension Cover	Polarity	Vertical
Test Condition	GFSK (1 Mbps) / 2402 MHz		



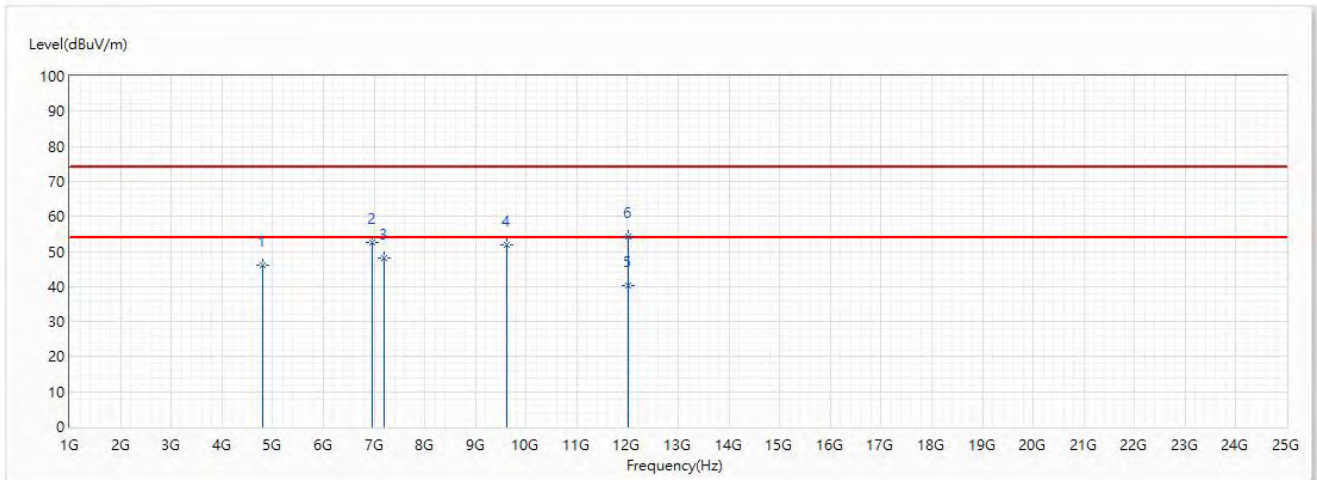
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	72.074	31.01	40.00	-8.99	35.92	-4.91	QP
2	216.968	29.25	46.00	-16.75	35.69	-6.44	QP
3	288.263	35.30	46.00	-10.70	37.84	-2.54	QP
4	387.688	33.20	46.00	-12.80	33.35	-0.15	QP
5	624.246	35.83	46.00	-10.17	30.49	5.34	QP
6	808.546	33.28	46.00	-12.72	25.33	7.95	QP

Note:

1. All reading levels is Quasi-Peak value.
2. “ \* ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor
4. The emission under 30MHz were not included is because their levels are lower than 20dB from limit.

### 4.6 Test Result of Radiated Emissions (1 GHz ~ 10<sup>th</sup> Harmonic)

Test Mode	Mode 3: Transmit_ Extension Cover	Polarity	Horizontal
Test Condition	GFSK (1 Mbps) / 2402 MHz		

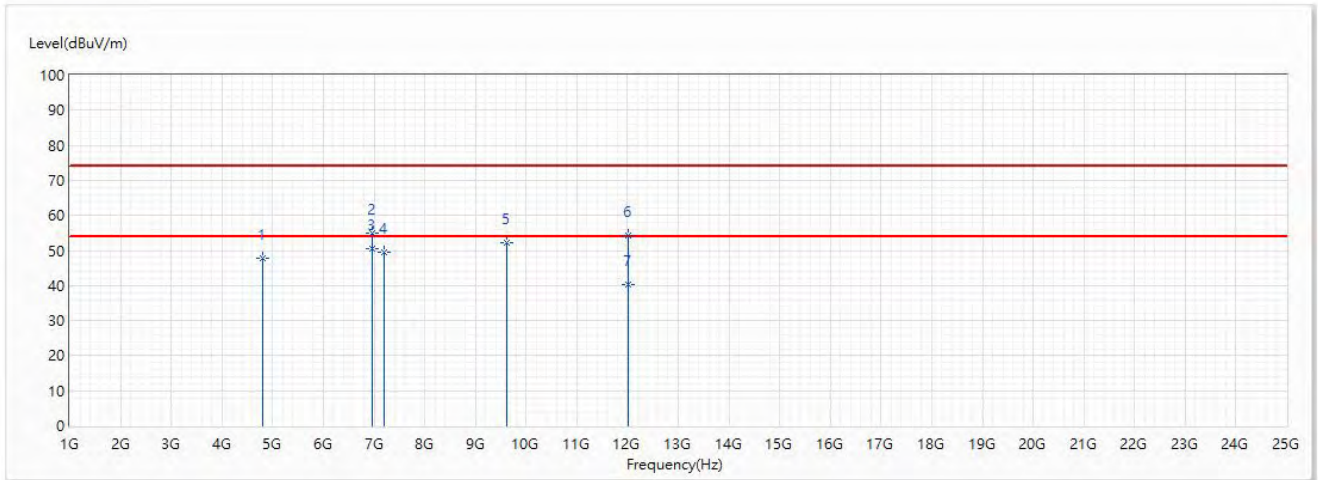


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4804	46.01	74.00	-27.99	47.62	-1.61	PK
2	6960	52.40	74.00	-21.60	47.21	5.19	PK
3	7206	48.10	74.00	-25.90	42.03	6.07	PK
4	9608	51.81	74.00	-22.19	40.49	11.32	PK
* 5	12010	40.25	54.00	-13.75	26.67	13.58	AV
6	12010	54.12	74.00	-19.88	40.54	13.58	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ \* ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Test Mode	Mode 3: Transmit_ Extension Cover	Polarity	Vertical
Test Condition	GFSK (1 Mbps) / 2402 MHz		

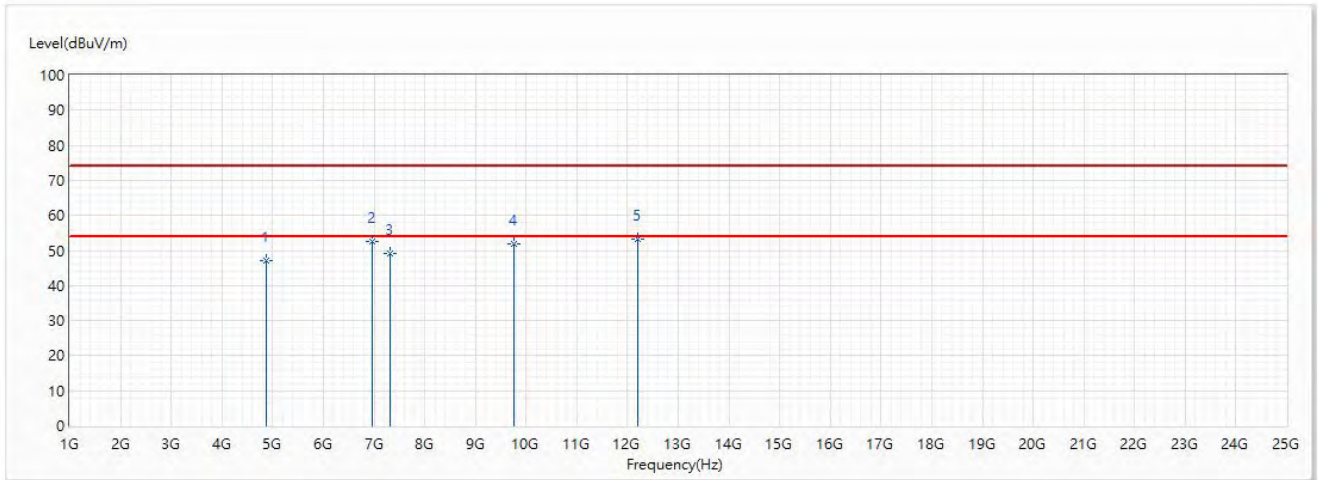


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4804	47.72	74.00	-26.28	49.33	-1.61	PK
2	6960	55.00	74.00	-19.00	49.81	5.19	PK
* 3	6960	50.67	54.00	-3.33	45.48	5.19	AV
4	7206	49.34	74.00	-24.66	43.27	6.07	PK
5	9608	52.08	74.00	-21.92	40.76	11.32	PK
6	12010	54.31	74.00	-19.69	40.73	13.58	PK
7	12010	40.38	54.00	-13.62	26.80	13.58	AV

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ \* ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Test Mode	Mode 3: Transmit_ Extension Cover	Polarity	Horizontal
Test Condition	GFSK (1 Mbps) / 2440 MHz		



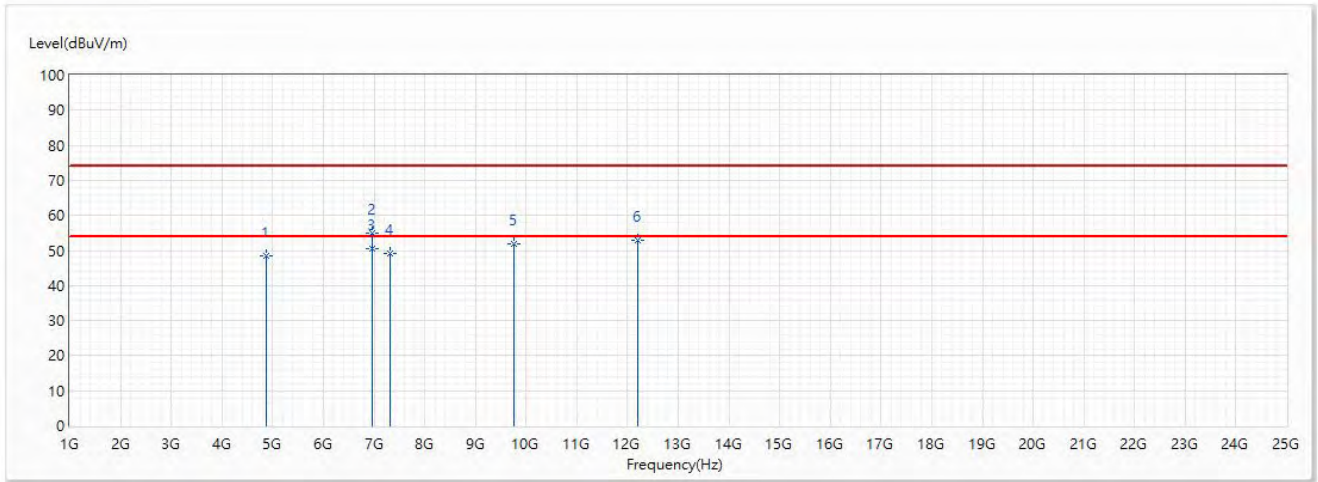
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4880	46.99	74.00	-27.01	48.28	-1.29	PK
2	6960	52.42	74.00	-21.58	47.23	5.19	PK
3	7320	49.21	74.00	-24.79	42.76	6.45	PK
4	9760	52.01	74.00	-21.99	40.51	11.50	PK
* 5	12200	53.39	74.00	-20.61	40.14	13.25	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ \* ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.



Test Mode	Mode 3: Transmit_ Extension Cover	Polarity	Vertical
Test Condition	GFSK (1 Mbps) / 2440 MHz		

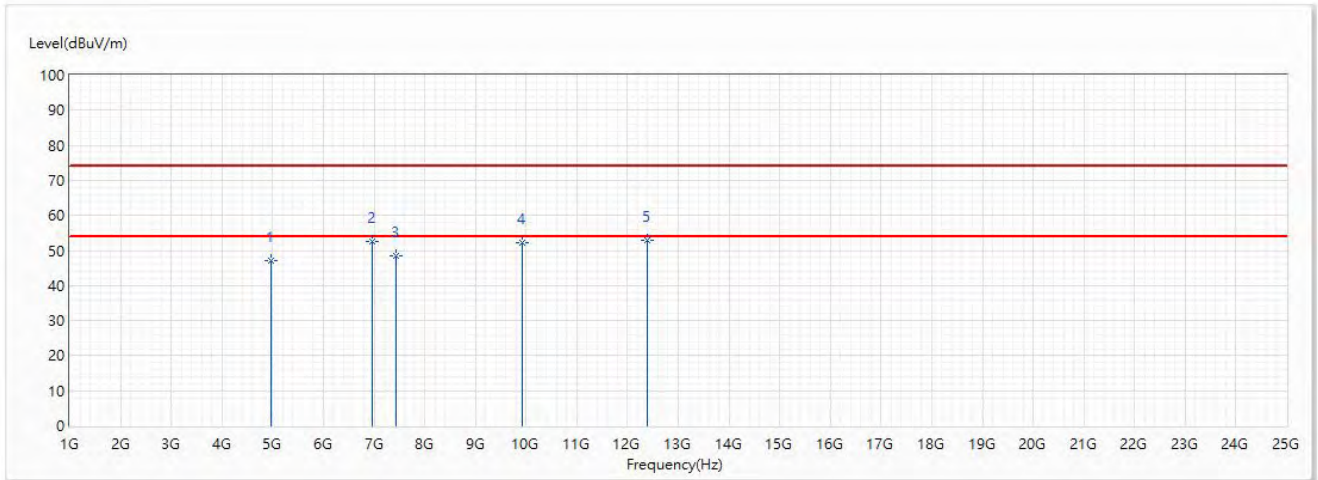


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4880	48.47	74.00	-25.53	49.76	-1.29	PK
2	6960	55.05	74.00	-18.95	49.86	5.19	PK
* 3	6960	50.65	54.00	-3.35	45.46	5.19	AV
4	7320	49.28	74.00	-24.72	42.83	6.45	PK
5	9760	51.89	74.00	-22.11	40.39	11.50	PK
6	12200	53.03	74.00	-20.97	39.78	13.25	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ \* ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Test Mode	Mode 3: Transmit_ Extension Cover	Polarity	Horizontal
Test Condition	GFSK (1 Mbps) / 2480 MHz		

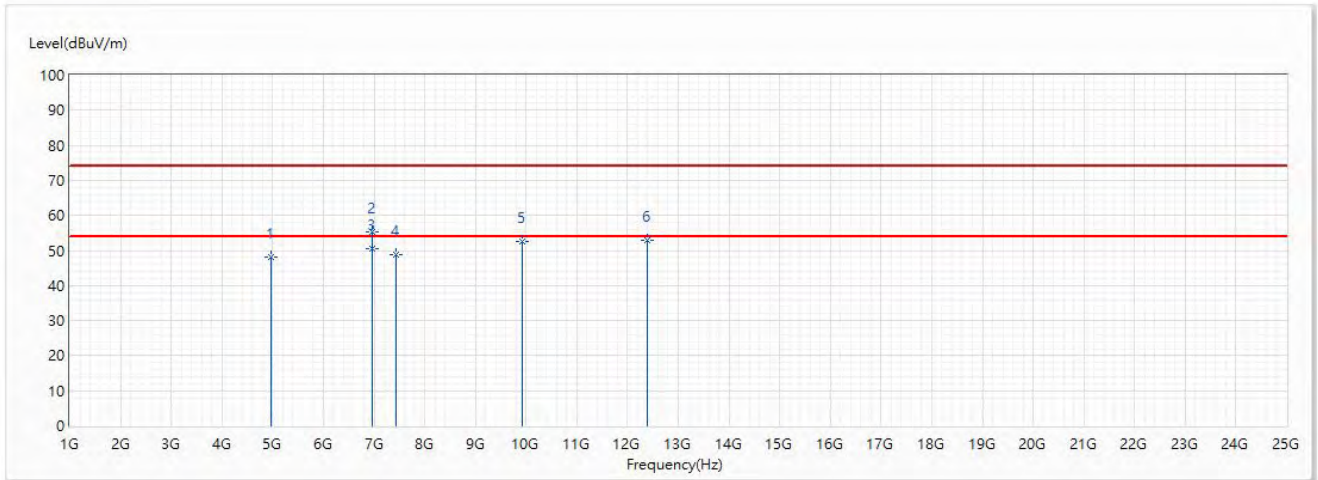


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4960	46.94	74.00	-27.06	47.92	-0.98	PK
2	6960	52.50	74.00	-21.50	47.31	5.19	PK
3	7440	48.44	74.00	-25.56	41.60	6.84	PK
4	9920	52.34	74.00	-21.66	40.74	11.60	PK
* 5	12400	52.77	74.00	-21.23	39.92	12.85	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ \* ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.

Test Mode	Mode 3: Transmit_ Extension Cover	Polarity	Vertical
Test Condition	GFSK (1 Mbps) / 2480 MHz		



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4960	48.28	74.00	-25.72	49.26	-0.98	PK
2	6960	55.12	74.00	-18.88	49.93	5.19	PK
* 3	6960	50.62	54.00	-3.38	45.43	5.19	AV
4	7440	48.93	74.00	-25.07	42.09	6.84	PK
5	9920	52.61	74.00	-21.39	41.01	11.60	PK
6	12400	52.89	74.00	-21.11	40.04	12.85	PK

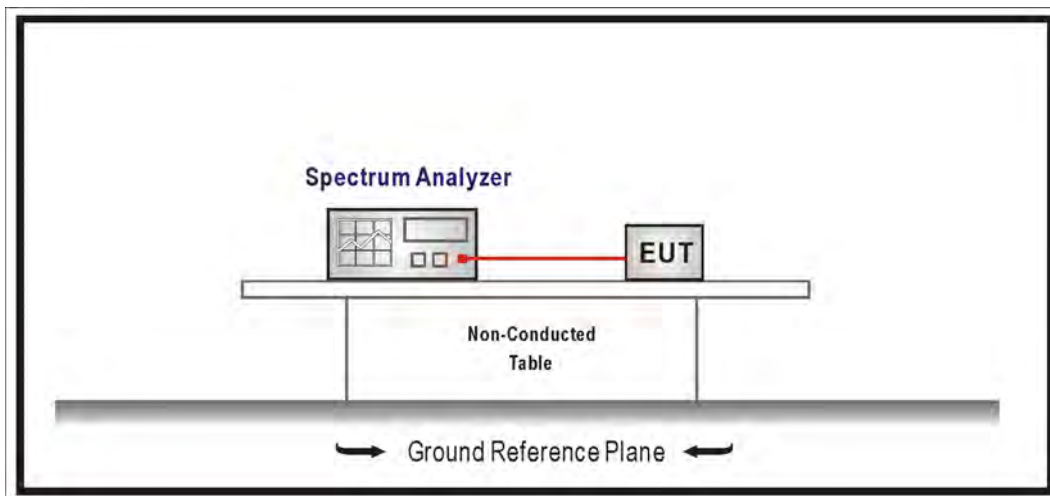
Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. “ \* ”, means this data is the worst value.
3. Emission Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission above 13GHz were not included is because their levels are lower than 20dB form limit.



## 5. Antenna Port Conducted Emission

### 5.1 Test Setup



### 5.2 Test 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 conducted power limit. If the transmitter complies with the conducted power limit based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limit specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limit specified in §15.209(a) (see §15.205(c)).

### 5.3 Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to DTS test procedure of KDB 558074 D01 V05r02 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Set VBW > RBW, scan up through 10th harmonic.

### 5.4 Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247.

### 5.5 Test Result of Antenna Port Conducted Emission

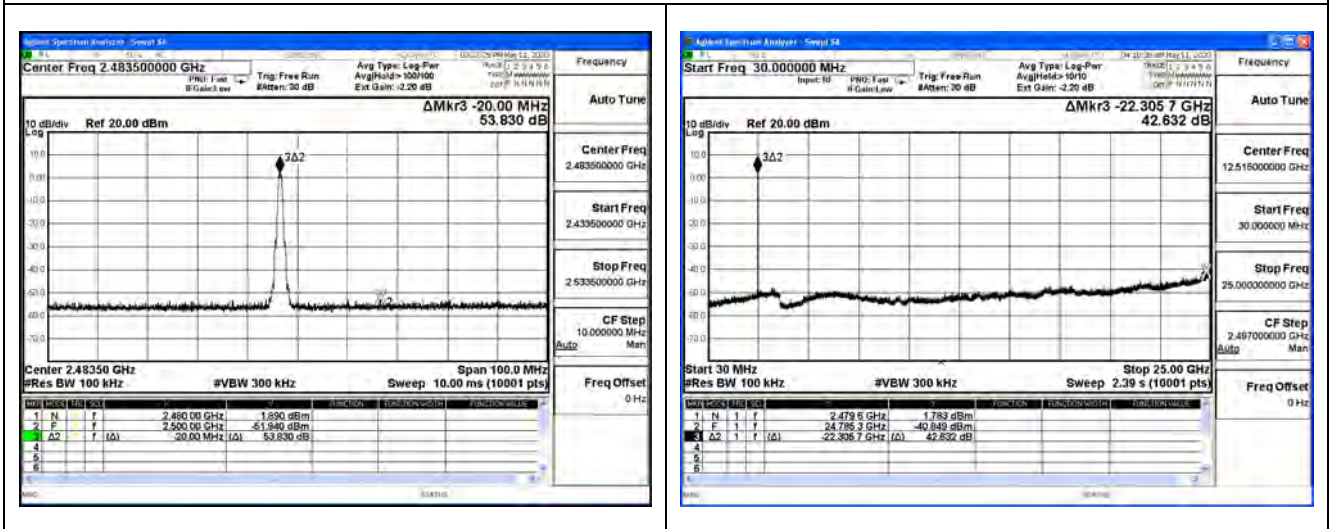
#### GFSK (1 Mbps) / 2402 MHz



#### GFSK (1 Mbps) / 2440 MHz

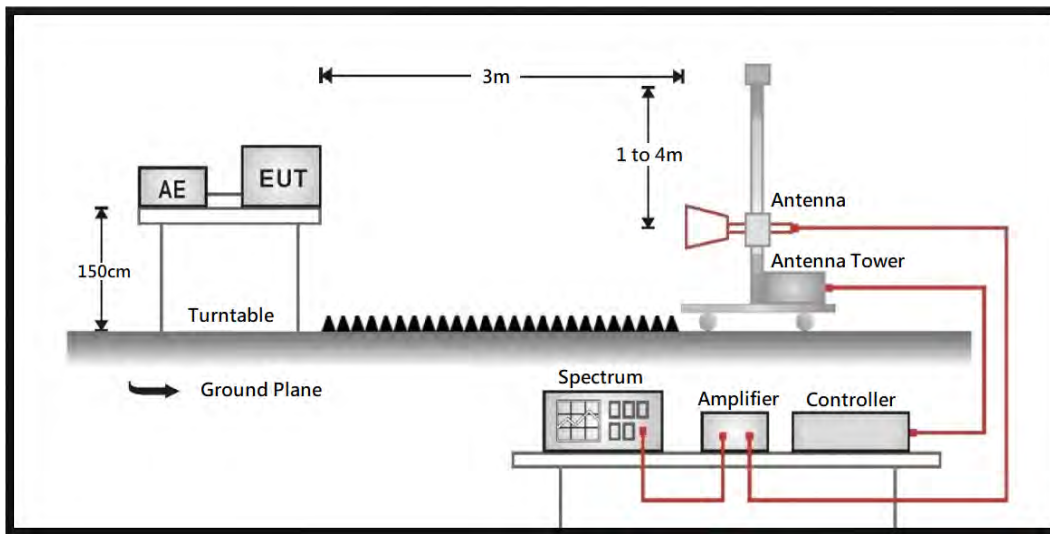


#### GFSK (1 Mbps) / 2480 MHz



## 6. Radiated Emission Band Edge

### 6.1 Test Setup



### 6.2 Test Limit

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20 dB below the level of the fundamental or to the general radiated emission limit in paragraph 15.209, whichever is the lesser attenuation.

Frequency (MHz)	Field strength (uV/m)	Field strength (dBuV/m)	Measurement distance (m)
30 - 88	100	40	3
88 - 216	150	43.5	3
216 - 960	200	46	3
Above 960	500	54	3

Remarks:

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

### **6.3 Test Procedure**

The EUT was setup according to ANSI C63.10: 2013 and tested according to FHSS test procedure of FCC KDB 558074 D01 v05r02 for compliance to FCC 47CFR 15.247 requirements.

The EUT and its simulators are placed on a turn table which is 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

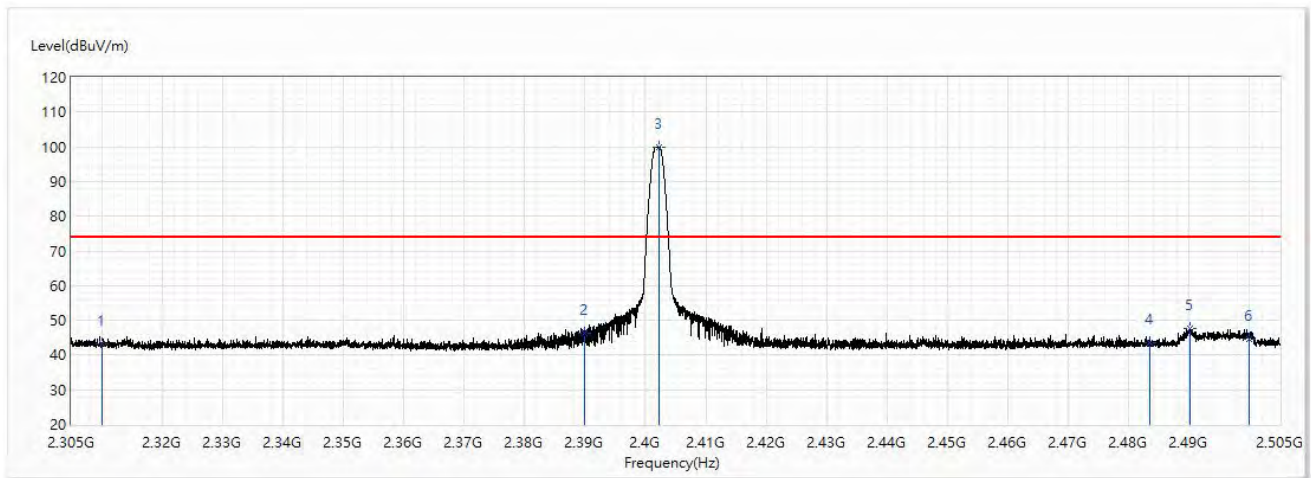
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated measurement.

### **6.4 Test Specification**

According to FCC Part 15 Subpart C Paragraph 15.247.

### 6.5 Test Result of Radiated Emission Band Edge

Test Mode	Mode 3: Transmit_ Extension Cover	Polarity	Horizontal
Test Condition	GFSK (1 Mbps) / 2402 MHz		



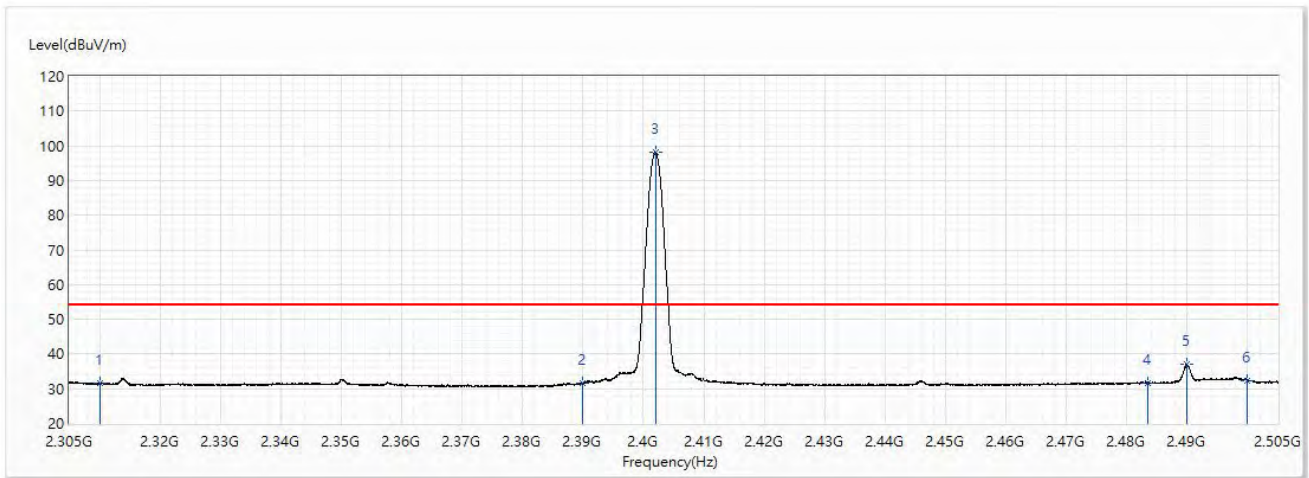
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	43.12	74.00	-30.88	31.58	11.54	PK
2	2390	46.12	74.00	-27.88	34.13	11.99	PK
! 3	2402.25	100.00	74.00	26.00	87.94	12.06	PK
4	2483.5	43.55	74.00	-30.45	31.05	12.50	PK
5	2490.175	47.80	74.00	-26.20	35.26	12.54	PK
6	2500	44.51	74.00	-29.49	31.92	12.59	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.



Test Mode	Mode 3: Transmit_ Extension Cover	Polarity	Horizontal
Test Condition	GFSK (1 Mbps) / 2402 MHz		

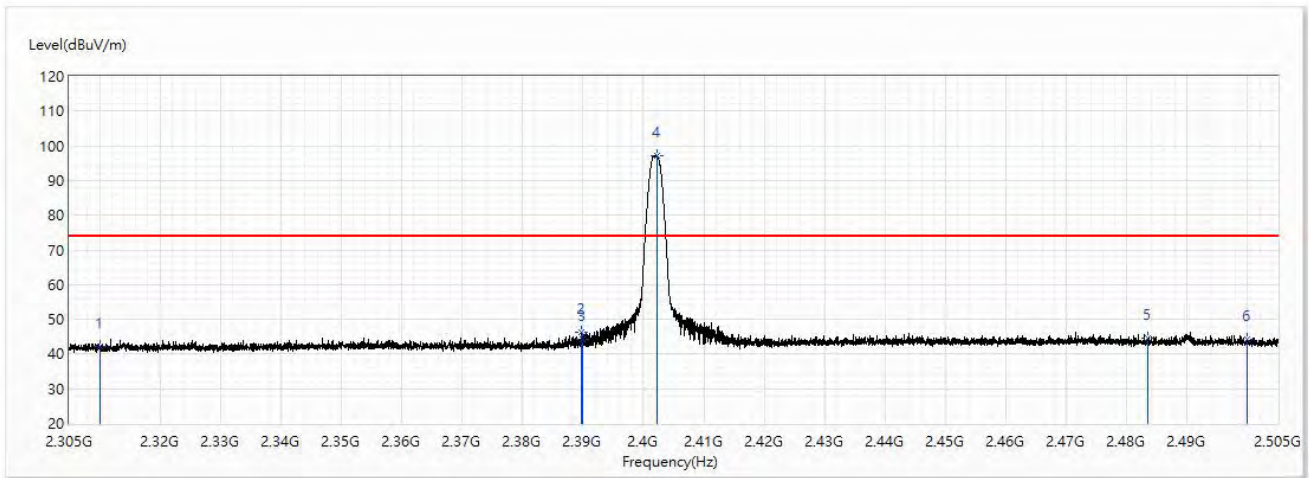


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	31.53	54.00	-22.47	19.99	11.54	AV
2	2390	31.53	54.00	-22.47	19.54	11.99	AV
! 3	2401.975	98.20	54.00	44.20	86.15	12.05	AV
4	2483.5	31.66	54.00	-22.34	19.16	12.50	AV
5	2489.85	36.99	54.00	-17.01	24.45	12.54	AV
6	2500	32.40	54.00	-21.60	19.81	12.59	AV

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.

Test Mode	Mode 3: Transmit_ Extension Cover	Polarity	Vertical
Test Condition	GFSK (1 Mbps) / 2402 MHz		

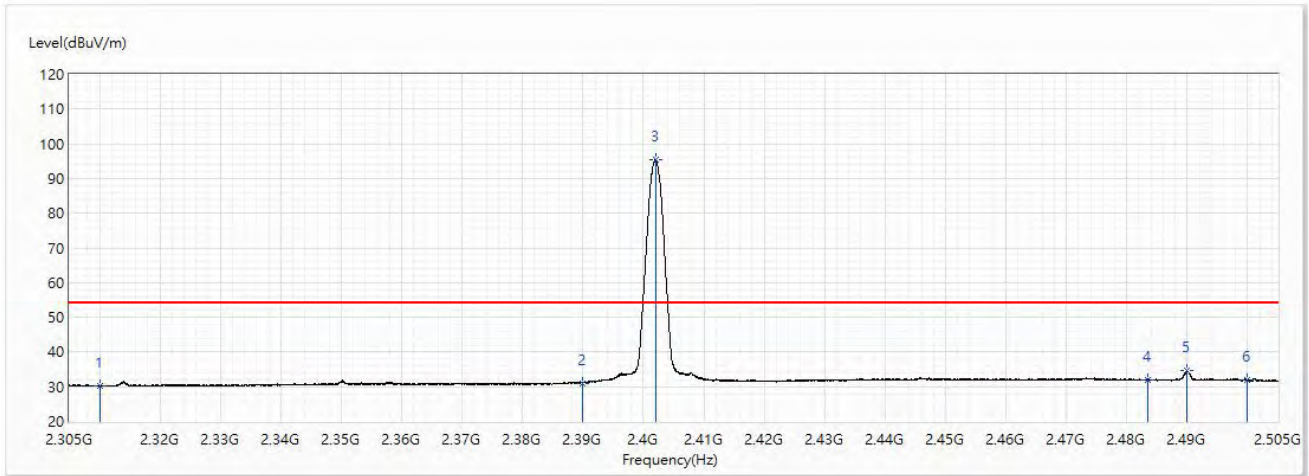


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	42.21	74.00	-31.79	30.67	11.54	PK
2	2389.725	46.20	74.00	-27.80	34.21	11.99	PK
3	2390	44.30	74.00	-29.70	32.31	11.99	PK
! 4	2402.225	97.08	74.00	23.08	85.02	12.06	PK
5	2483.5	44.48	74.00	-29.52	31.98	12.50	PK
6	2500	44.36	74.00	-29.64	31.77	12.59	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.

Test Mode	Mode 3: Transmit_ Extension Cover	Polarity	Vertical
Test Condition	GFSK (1 Mbps) / 2402 MHz		



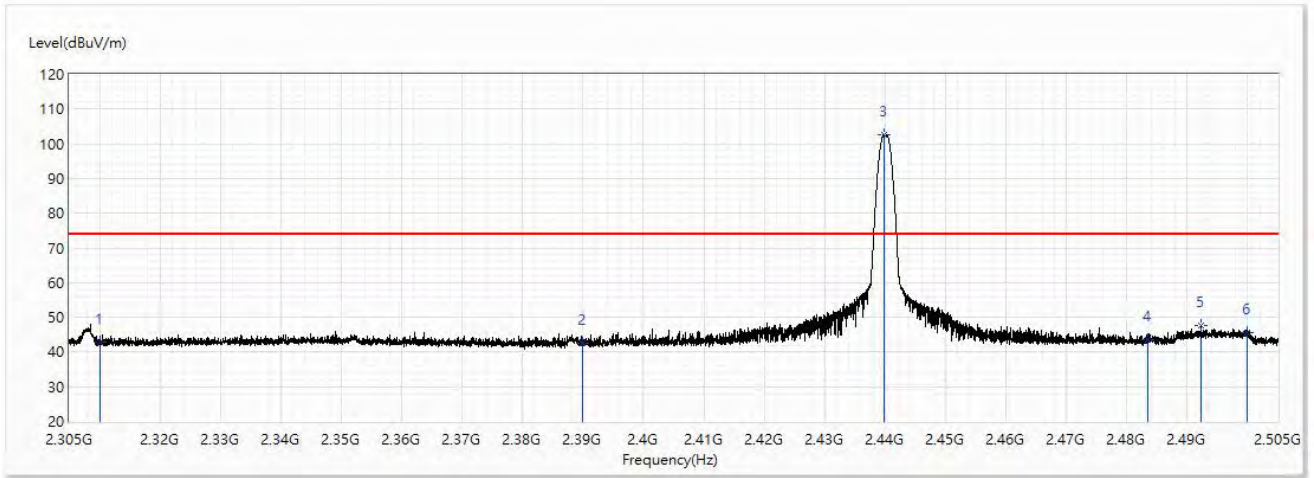
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	30.14	54.00	-23.86	18.60	11.54	AV
2	2390	31.06	54.00	-22.94	19.07	11.99	AV
! 3	2402	95.35	54.00	41.35	83.30	12.05	AV
4	2483.5	32.00	54.00	-22.00	19.50	12.50	AV
5	2489.875	34.60	54.00	-19.40	22.06	12.54	AV
6	2500	31.91	54.00	-22.09	19.32	12.59	AV

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.



Test Mode	Mode 3: Transmit_ Extension Cover	Polarity	Horizontal
Test Condition	GFSK (1 Mbps) / 2440 MHz		

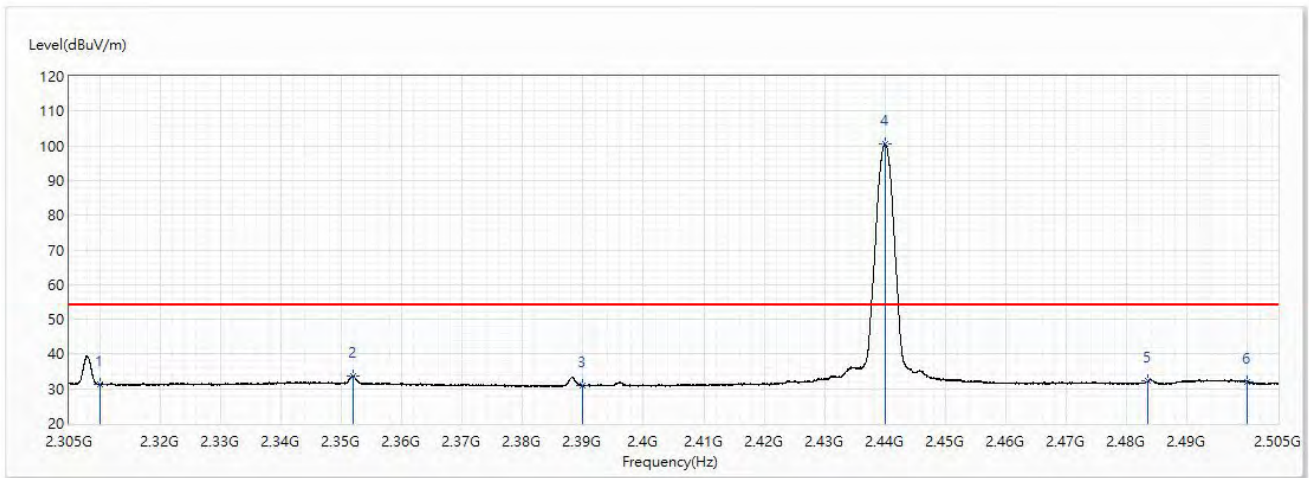


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	42.79	74.00	-31.21	31.25	11.54	PK
2	2390	42.44	74.00	-31.56	30.45	11.99	PK
! 3	2439.75	102.46	74.00	28.46	90.20	12.26	PK
4	2483.5	43.58	74.00	-30.42	31.08	12.50	PK
5	2492.35	47.74	74.00	-26.26	35.19	12.55	PK
6	2500	45.53	74.00	-28.47	32.94	12.59	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.

Test Mode	Mode 3: Transmit_ Extension Cover	Polarity	Horizontal
Test Condition	GFSK (1 Mbps) / 2440 MHz		

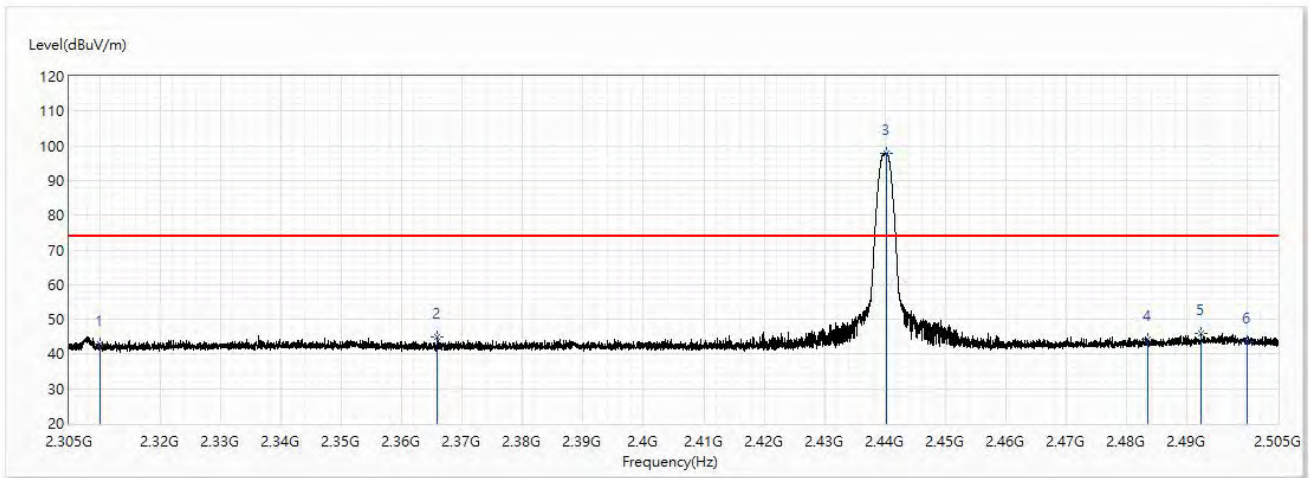


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	31.20	54.00	-22.80	19.66	11.54	AV
2	2351.875	33.71	54.00	-20.29	21.94	11.77	AV
3	2390	30.95	54.00	-23.05	18.96	11.99	AV
! 4	2440.025	100.62	54.00	46.62	88.36	12.26	AV
5	2483.5	32.20	54.00	-21.80	19.70	12.50	AV
6	2500	31.96	54.00	-22.04	19.37	12.59	AV

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.

Test Mode	Mode 3: Transmit_ Extension Cover	Polarity	Vertical
Test Condition	GFSK (1 Mbps) / 2440 MHz		

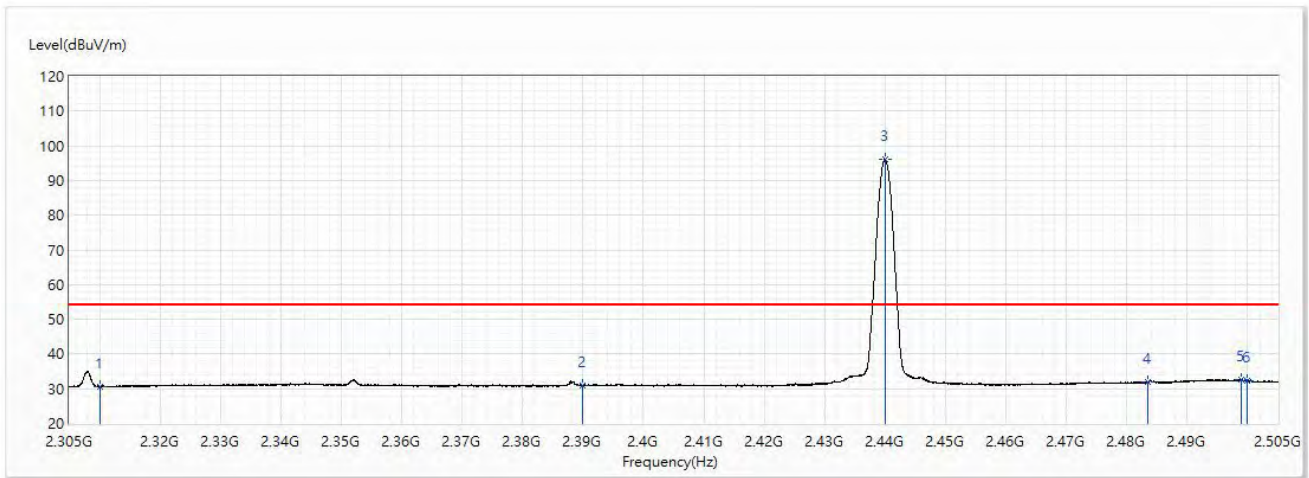


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	42.84	74.00	-31.16	31.30	11.54	PK
2	2365.875	45.02	74.00	-28.98	33.17	11.85	PK
! 3	2440.25	97.75	74.00	23.75	85.49	12.26	PK
4	2483.5	44.33	74.00	-29.67	31.83	12.50	PK
5	2492.3	45.78	74.00	-28.22	33.23	12.55	PK
6	2500	43.55	74.00	-30.45	30.96	12.59	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.

Test Mode	Mode 3: Transmit_ Extension Cover	Polarity	Vertical
Test Condition	GFSK (1 Mbps) / 2440 MHz		

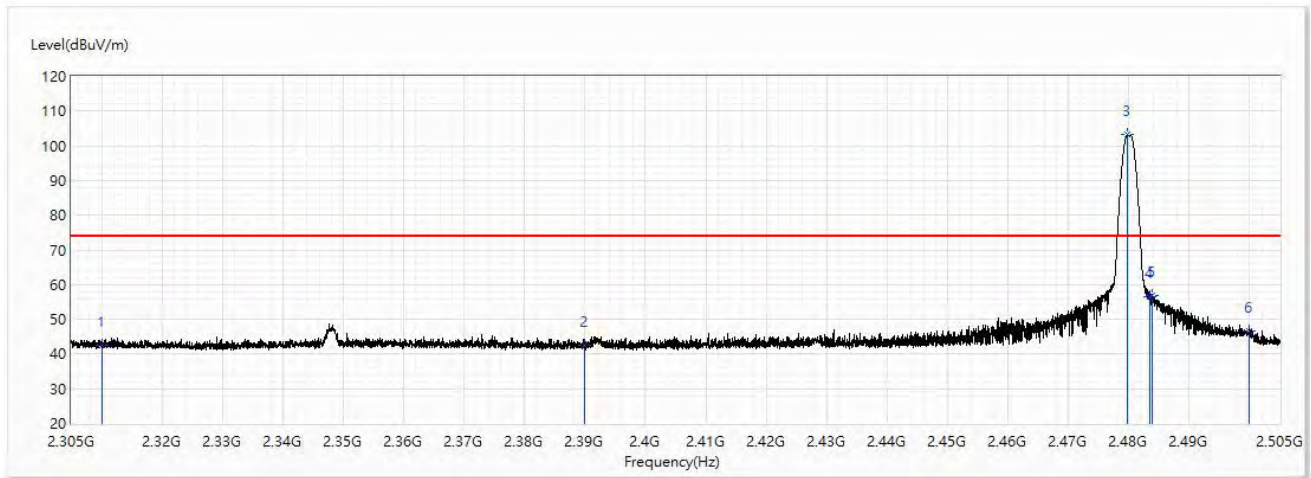


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	30.71	54.00	-23.29	19.17	11.54	AV
2	2390	30.92	54.00	-23.08	18.93	11.99	AV
! 3	2440	95.99	54.00	41.99	83.73	12.26	AV
4	2483.5	31.92	54.00	-22.08	19.42	12.50	AV
5	2498.95	32.65	54.00	-21.35	20.06	12.59	AV
6	2500	32.23	54.00	-21.77	19.64	12.59	AV

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.

Test Mode	Mode 3: Transmit_ Extension Cover	Polarity	Horizontal
Test Condition	GFSK (1 Mbps) / 2480 MHz		



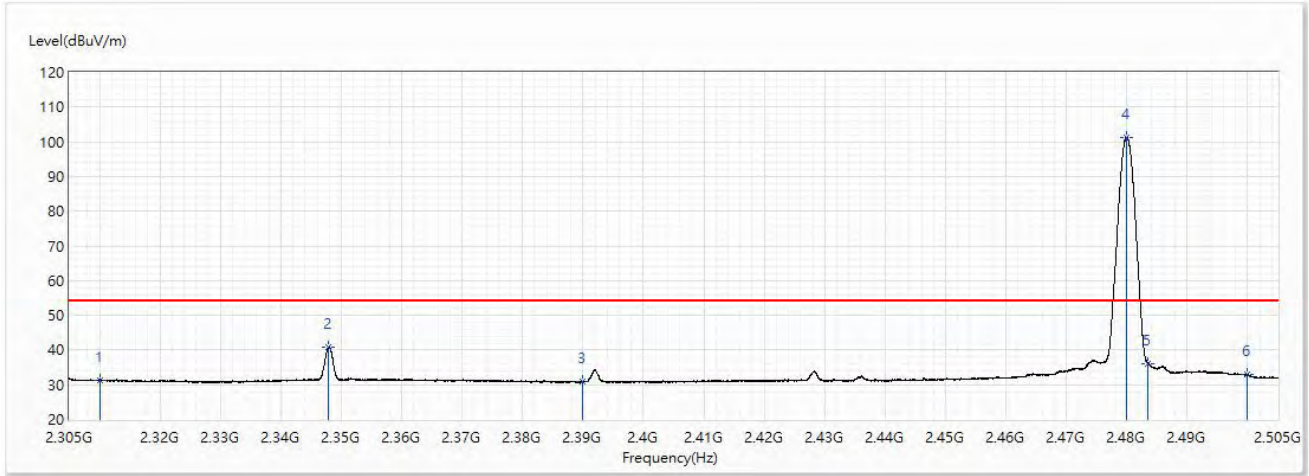
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	42.41	74.00	-31.59	30.87	11.54	PK
2	2390	42.63	74.00	-31.37	30.64	11.99	PK
! 3	2479.775	103.15	74.00	29.15	90.67	12.48	PK
4	2483.5	56.39	74.00	-17.61	43.89	12.50	PK
5	2483.875	56.91	74.00	-17.09	44.41	12.50	PK
6	2500	46.51	74.00	-27.49	33.92	12.59	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.



Test Mode	Mode 3: Transmit_ Extension Cover	Polarity	Horizontal
Test Condition	GFSK (1 Mbps) / 2480 MHz		

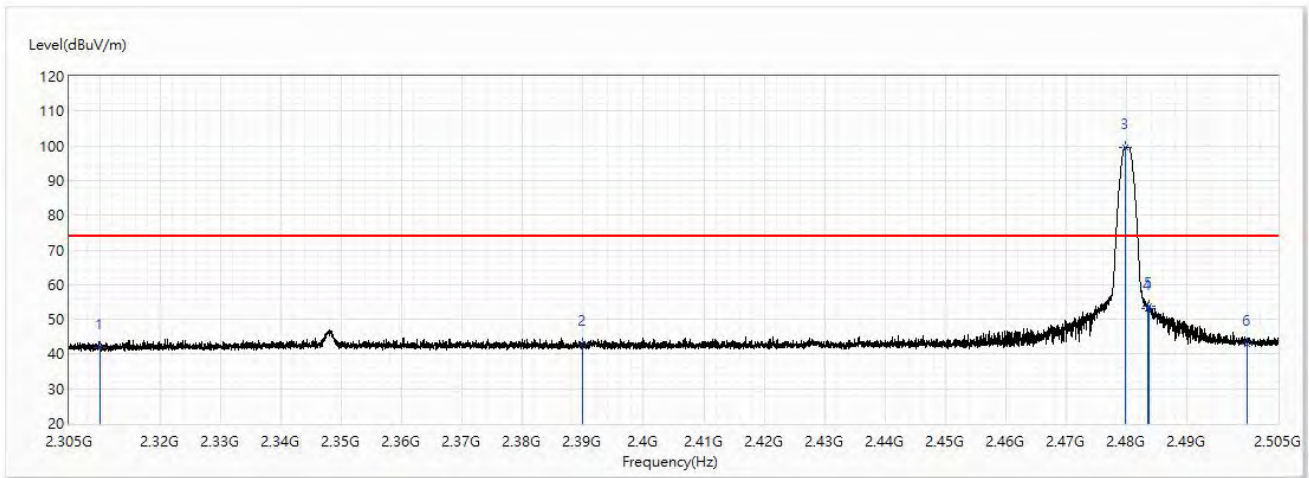


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	31.28	54.00	-22.72	19.74	11.54	AV
2	2347.95	40.86	54.00	-13.14	29.10	11.76	AV
3	2390	30.82	54.00	-23.18	18.83	11.99	AV
! 4	2479.975	101.33	54.00	47.33	88.85	12.48	AV
5	2483.5	36.10	54.00	-17.90	23.60	12.50	AV
6	2500	32.88	54.00	-21.12	20.29	12.59	AV

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.

Test Mode	Mode 3: Transmit_ Extension Cover	Polarity	Vertical
Test Condition	GFSK (1 Mbps) / 2480 MHz		

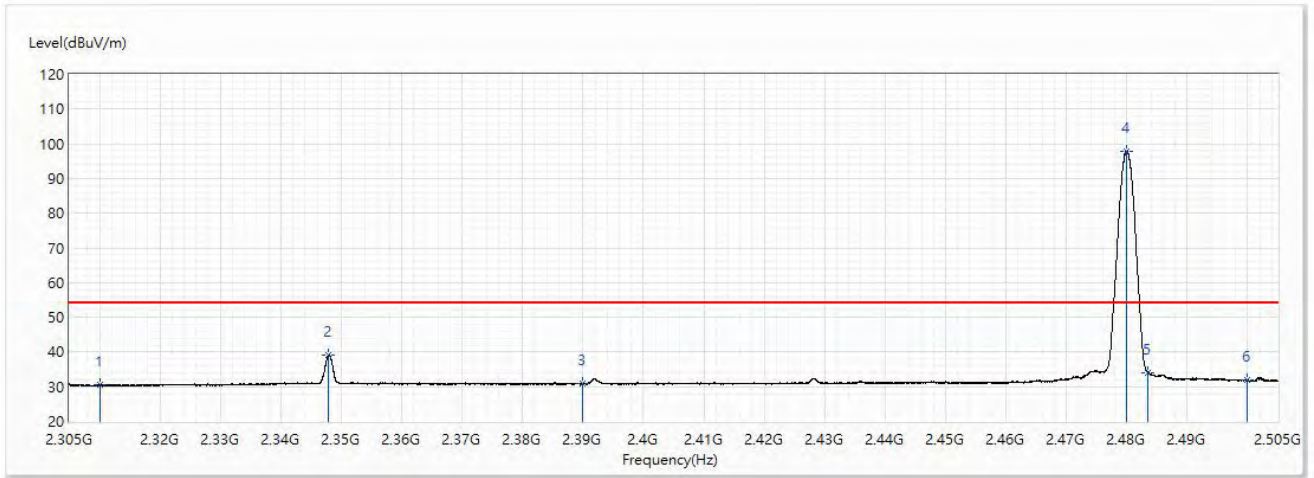


No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	41.73	74.00	-32.27	30.19	11.54	PK
2	2390	42.88	74.00	-31.12	30.89	11.99	PK
! 3	2479.775	99.68	74.00	25.68	87.20	12.48	PK
4	2483.5	53.25	74.00	-20.75	40.75	12.50	PK
5	2483.675	53.79	74.00	-20.21	41.29	12.50	PK
6	2500	43.00	74.00	-31.00	30.41	12.59	PK

Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.

Test Mode	Mode 3: Transmit_ Extension Cover	Polarity	Vertical
Test Condition	GFSK (1 Mbps) / 2480 MHz		



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2310	30.46	54.00	-23.54	18.92	11.54	AV
2	2347.95	39.10	54.00	-14.90	27.34	11.76	AV
3	2390	30.86	54.00	-23.14	18.87	11.99	AV
! 4	2479.975	97.90	54.00	43.90	85.42	12.48	AV
5	2483.5	34.14	54.00	-19.86	21.64	12.50	AV
6	2500	31.84	54.00	-22.16	19.25	12.59	AV

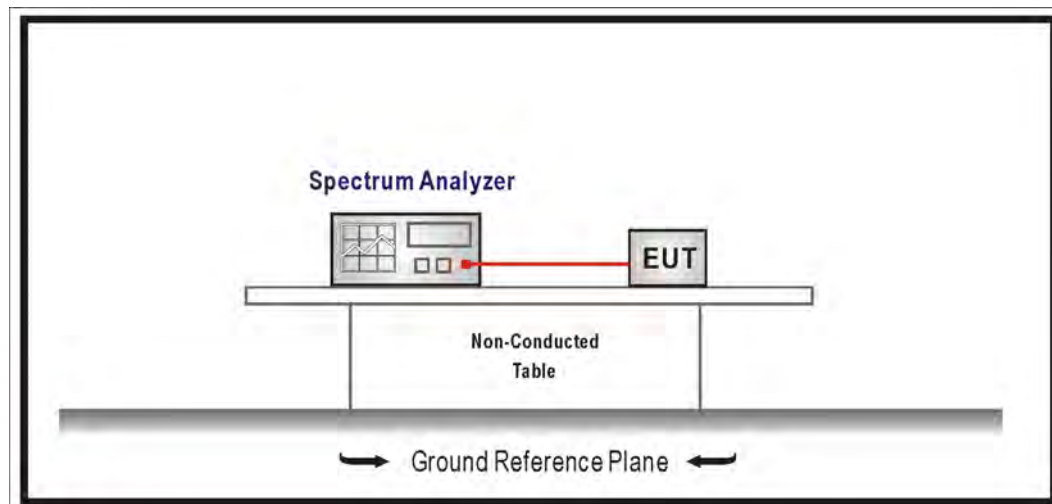
Note:

1. All reading above 1GHz is performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.
4. The fundamental for reference only, it's not restricted by unwanted emission limit.



## 7. Occupied Bandwidth & DTS Bandwidth

### 7.1 Test Setup



### 7.2 Test Limit

DTS bandwidth:  $\geq 500$  kHz.

Occupied Bandwidth: NA

### 7.3 Test Procedures

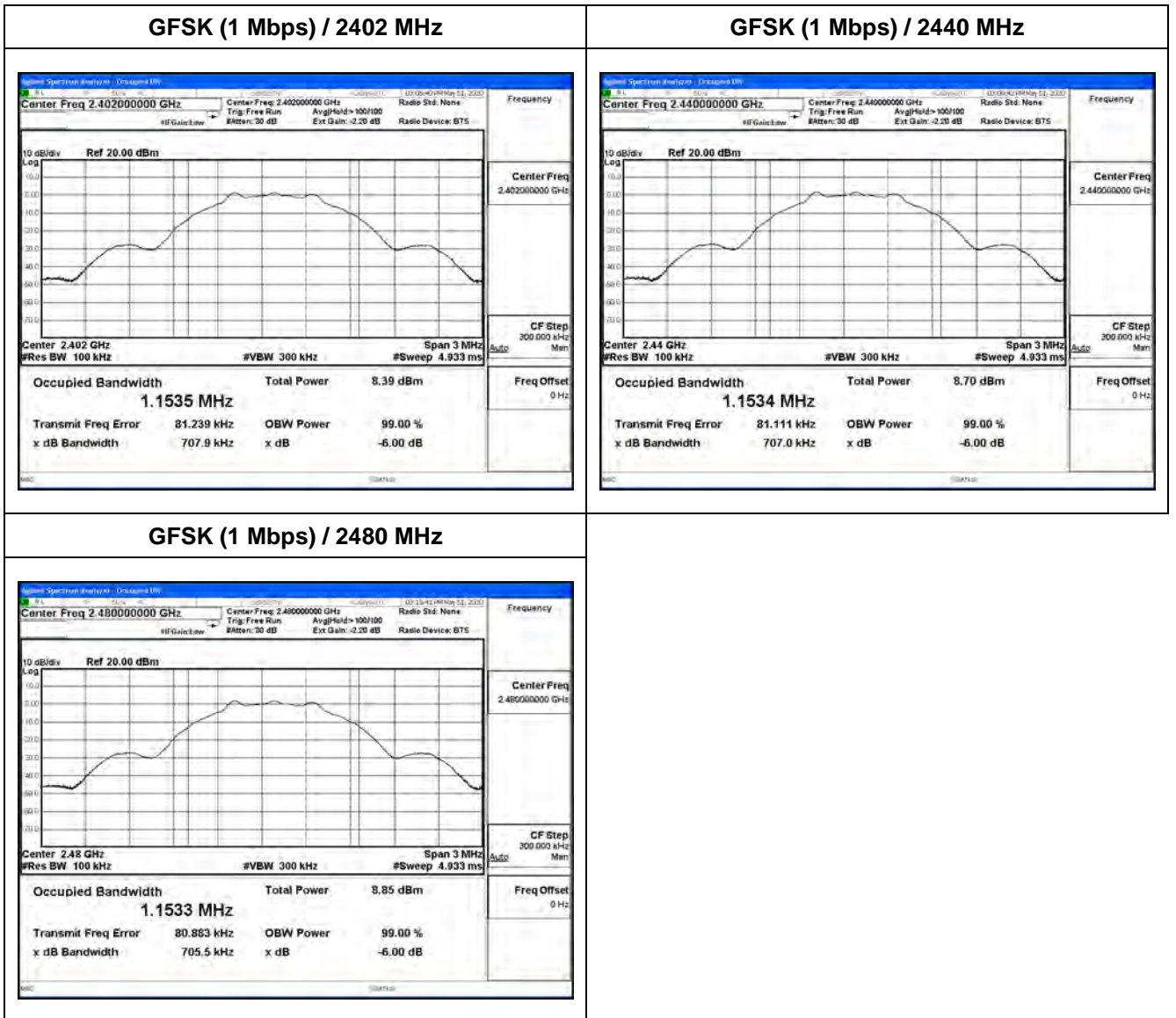
The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB 558074 D01 V05r02 for compliance to FCC 47CFR 15.247 requirements.

### 7.4 Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247.

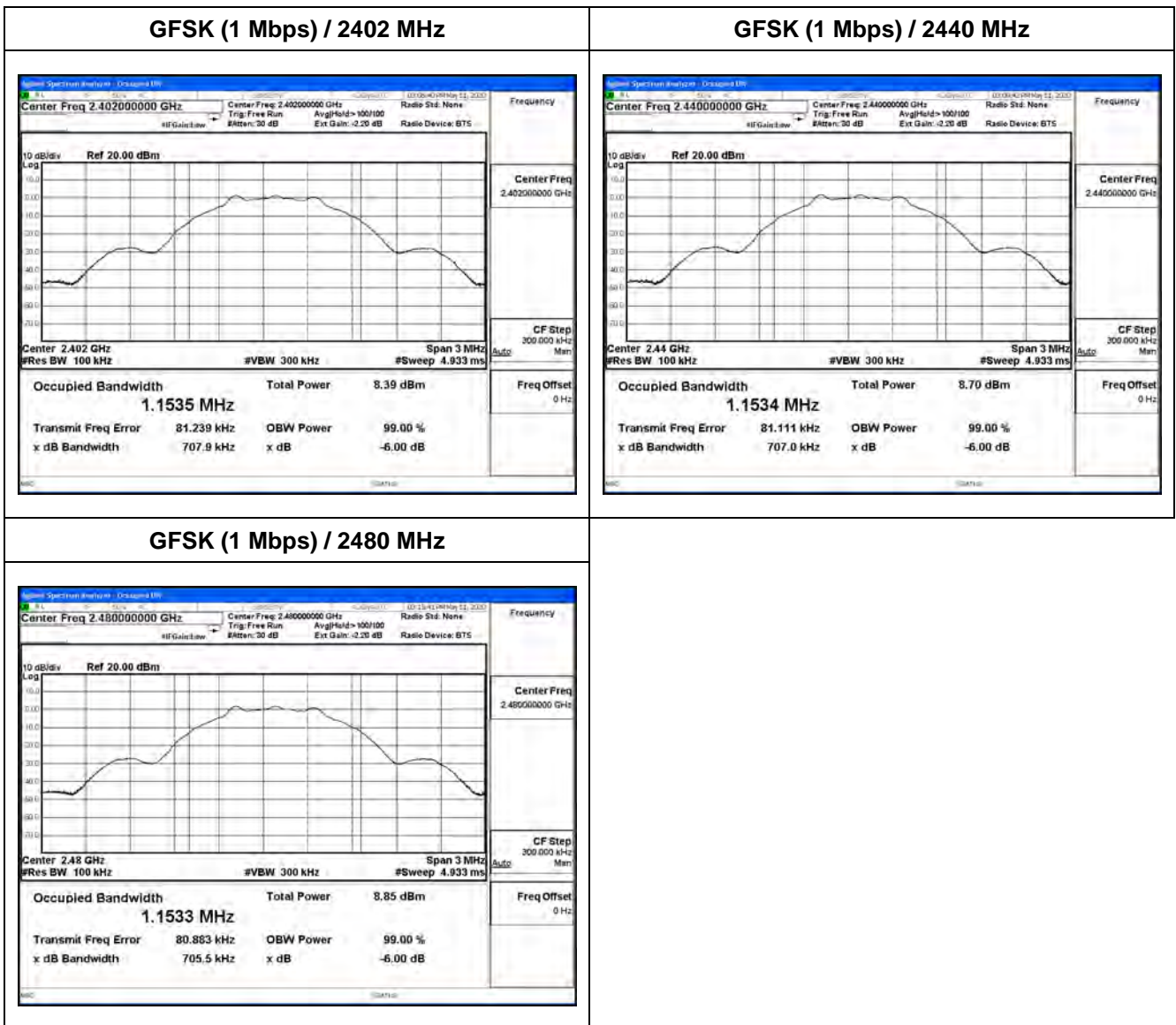
### 7.5 Test Result of Occupied Bandwidth

Modulation	Channel	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
GFSK (1 Mbps)	00	2402	1.153	-
	19	2440	1.153	-
	39	2480	1.153	-



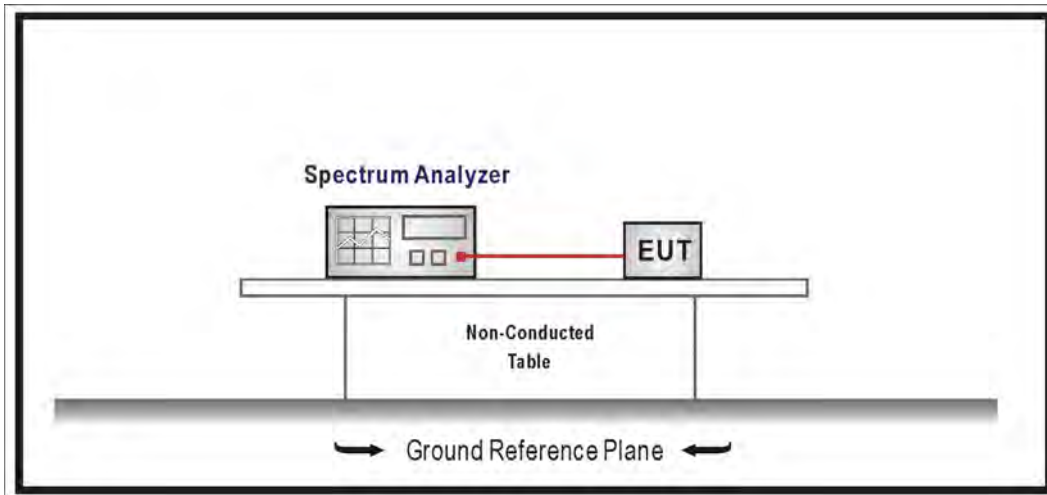
### 7.6 Test Result of DTS Bandwidth

Modulation	Channel	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
GFSK (1 Mbps)	00	2402	0.707	≥ 0.500	Pass
	19	2440	0.707	≥ 0.500	Pass
	39	2480	0.705	≥ 0.500	Pass



## 8. Maximum Power Spectral Density

### 8.1 Test Setup



### 8.2 Test Limit

The peak power spectral density conducted from the intentional radiated to the antenna shall not be greater than +8 dBm in any 3 kHz band during any time interval of continuous transmission.

### 8.3 Test Procedures

The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB 558074 D01 V05r02 for compliance to FCC 47CFR 15.247 requirements.

### 8.4 Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247

### 8.5 Test Result of Maximum Power Spectral Density

Modulation	Channel	Frequency (MHz)	Measure Value (dBm/3kHz)	Limit (dBm/3kHz)	Result
GFSK (1 Mbps)	00	2402	-5.194	≤ 8.000	Pass
	19	2440	-4.902	≤ 8.000	Pass
	39	2480	-4.719	≤ 8.000	Pass

