

# FCC RADIO TEST REPORT

## FCC 47 CFR PART 15 SUBPART C

### INDUSTRY CANADA RSS-210

<b>Test Standard</b>	<b>FCC Part 15.249 RSS-210 Issue 11 and IC RSS-GEN issue 5</b>
<b>Product name</b>	<b>Dongle</b>
<b>Brand Name</b>	<b>hp</b>
<b>Model No.</b>	<b>TPA-P010D</b>
<b>Test Result</b>	<b>Pass</b>
<b>Statements of Conformity</b>	<b>Determination of compliance is based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.</b>

The test Result was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were given in ANSI C63.10-2020+Cor.1-2023 and compliance standards.

The test results of this report relate only to the tested sample (EUT) identified in this report.

The test Report of full or partial shall not copy. Without written approval of Compliance Certification Services Inc. (Wugu Laboratory)

**Approved by:**



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Sehni Hu  
Supervisor

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.  
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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## Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	July 30, 2025	Initial Issue	ALL	Peggy Tsai
01	August 13, 2025	See the following Note Rev. (01)	P.4, 7, 12	Peggy Tsai

**Rev. (01)**

1. Added FVIN.
2. Modify date of test, instrument calibration and the worst mode of measurement.

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## 1. GENERAL INFORMATION

### 1.1 EUT INFORMATION

<b>Applicant</b>	Primax Electronics Ltd. No.669,Ruey Kuang Road,Neihu,Taipei,114, Taiwan, R.O.C.
<b>Manufacturer</b>	Primax Electronics Ltd. No.669,Ruey Kuang Road,Neihu,Taipei,114, Taiwan, R.O.C.
<b>Equipment</b>	Dongle
<b>Model Name / HVIN</b>	TPA-P010D
<b>Model Discrepancy</b>	N/A
<b>Trade name</b>	hp
<b>Received Date</b>	June 24, 2025
<b>Date of Test</b>	July 3 ~ August 8, 2025
<b>Power Operation</b>	Power by Host System (DC 5V)
<b>EUT Serial #</b>	9CP521Q0DB
<b>PMN</b>	HP USB receiver
<b>FVIN</b>	HV0004
<b>HW Version</b>	V01
<b>SW Version</b>	N/A

**Remark:**

1. For more details, please refer to the User's manual of the EUT.
2. Disclaimer: Antenna information is provided by the applicant, test results of this report are applicable to the sample EUT received.

## 1.2 EUT CHANNEL INFORMATION

<b>Frequency Range</b>	2405~2476MHz					
<b>Modulation Technique</b>	GFSK					
<b>Number of channels</b>	12 Channels					
<b>Channel</b>	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
	1	2405	2	2407	3	2408
	4	2422	5	2423	6	2427
	7	2447	8	2451	9	2452
	10	2473	11	2474	12	2476

## 1.3 ANTENNA INFORMATION

<b>Antenna Type</b>	<input checked="" type="checkbox"/> CHIP <input type="checkbox"/> PCB <input type="checkbox"/> Dipole Antenna
<b>Antenna Brand / Model</b>	Pulse / ANT3216LL00R2400A
<b>Antenna Gain</b>	Gain: 1.31 dBi

**Notes:**

1. The antenna(s) of the EUT are permanently attached and there are no provisions for connection to an external antenna. So the EUT complies with the requirements of §15.203 and RSS-GEN 6.8.

## 1.4 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
AC Powerline Conducted Emission	± 2.21 dB
Channel Bandwidth	± 2.79 dB
Radiated Emission_9kHz-30MHz	± 3.492 dB
Radiated Emission_30MHz-200MHz	± 3.683 dB
Radiated Emission_200MHz-1GHz	± 3.966 dB
Radiated Emission_1GHz-6GHz	± 5.063 dB
Radiated Emission_6GHz-18GHz	± 5.122 dB
Radiated Emission_18GHz-26GHz	± 3.032 dB
Radiated Emission_26GHz-40GHz	± 3.271 dB

**Remark:**

- 1.This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2
2. ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report.

## 1.5 FACILITIES AND TEST LOCATION

All measurement facilities used to collect the measurement data are located at

No.11, Wugong 6th Rd., Wugu Dist., New Taipei City, Taiwan.

CAB identifier: TW1309

Test site	Test Engineer	Remark
AC Conduction Room	David Li	--
Radiation	Tony Chao 、 Ben Yang	--
RF Conducted	Marco Chan	--

**Remark:** The lab has been recognized as the FCC accredited lab. under the KDB 974614 D01 and is listed in the FCC public Access Link (PAL) database, FCC Registration No. :444940, the FCC Designation No.:TW1309.

## 1.6 INSTRUMENT CALIBRATION

Conducted FCC/IC/NCC (All)					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
PXA Signal Analyzer	Keysight	N9030B	MY62291089	2024-10-04	2025-10-03
Power Sensor	Anritsu	MA2490A	032910	2025-03-28	2026-03-27
Power Meter	Anritsu	ML2487A	6K00003260	2025-03-28	2026-03-27
DC Blocks	Marvelous Microwave	MVE6411	MVE-001	2024-08-08	2025-08-07
Software	Radio Test Software Ver. 21				

966A_Radiated					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Signal Analyzer	KEYSIGHT	N9010A	MY52220817	2025-03-05	2026-03-04
Active Loop Antenna	COM-POWER	AL-130	121051	2025-02-18	2026-02-17
Thermo-Hygro Meter	HTC	HTC-1	HTC-D06	2025-05-26	2026-05-25
Bi-Log Antenna	Sunol Sciences	JB3	A030105&532	2025-06-26	2026-06-25
Preamplifier	EMEC	EM330	060609	2025-02-20	2026-02-19
Cable	Huber+Suhner	104PEA	20995+21000+1 82330	2024-08-07 2025-08-06	2025-08-06 2026-08-05
Horn Antenna	ETC	MCTD 1209	DRH13M02003	2024-12-20	2025-12-19
Preamplifier	HP	8449B	3008A00965	2024-12-18	2025-12-17
Cable	EMCI	EMC101G	221012+230205 +250412	2025-04-24	2026-04-23
Attenuator	Mini-Circuits	BW-S9W5	BWS9W5-09-966A-01	2025-02-06	2026-02-05
High Pass Filters	Titan Microwave	T04H300018000 70S01	22011402-4	2025-06-03	2026-06-02
Pre-Amplifier	EMCI	EMC184045SE	980860	2024-12-02	2025-12-01
Horn Antenna	SCHWARZBECK	BBHA9170	1047	2024-12-06	2025-12-05
Turn Table	CCS	CC-T-1F	N/A	N.C.R	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R	N.C.R
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R	N.C.R
Software	e3 V9-210616c				

**Remark:**

1. Each piece of equipment is scheduled for calibration once a year.
2. N.C.R. = No Calibration Required.

AC Mains Conduction					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
EMI Test Receiver	R&S	ESCI	100064	2025-06-02	2026-06-01
LISN	TESEQ	LN2-16N	22012	2025-02-23	2026-02-22
Cable	Woken	RFC-SMA-100-NMR-084SFL402	MFR-2Y194	2025-03-21	2026-03-20
Software	e3 V9-210616c				

**Remark:**

1. Each piece of equipment is scheduled for calibration once a year.
2. N.C.R. = No Calibration Required.

## 1.7 SUPPORT AND EUT ACCESSORIES EQUIPMENT

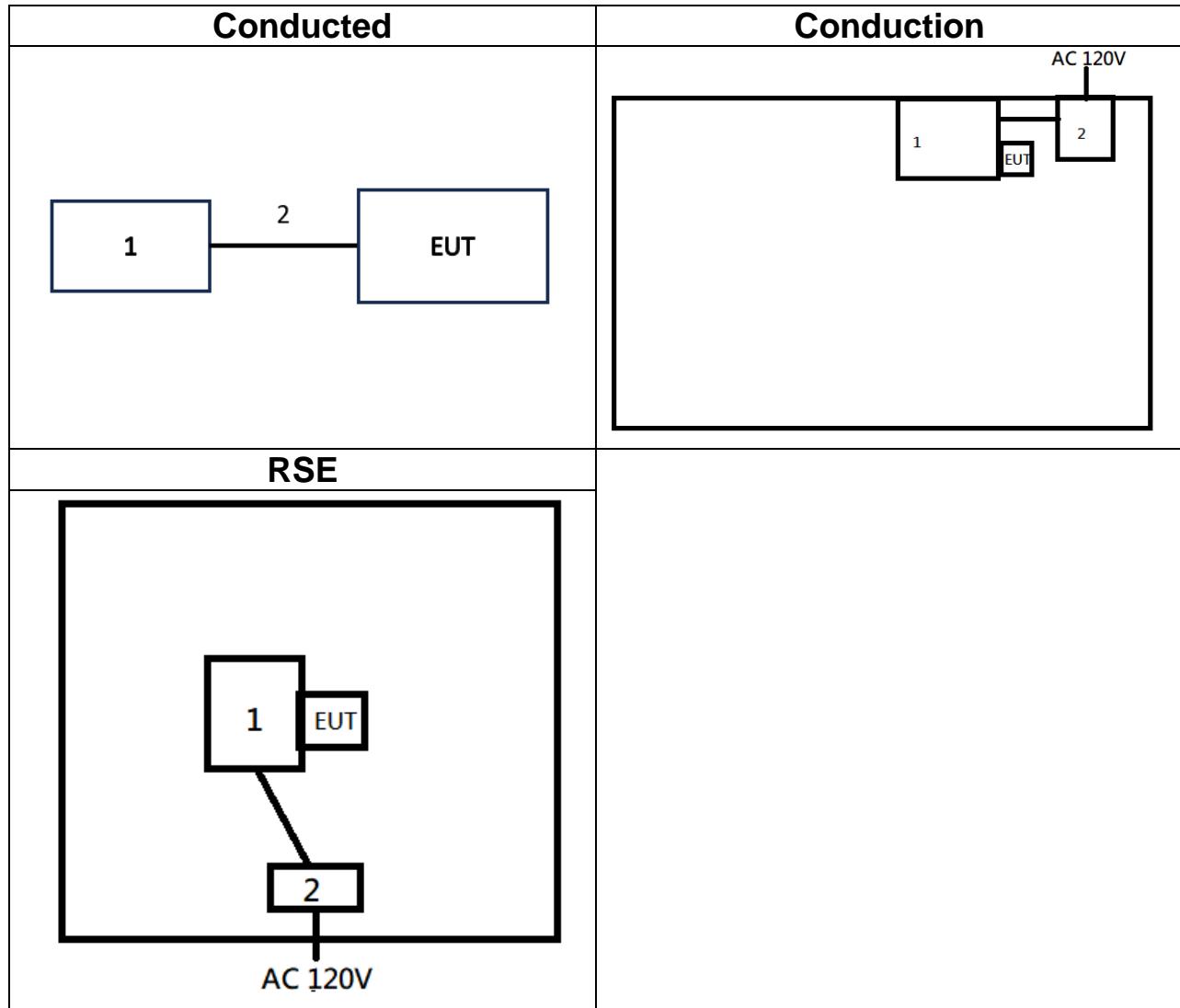
EUT Accessories Equipment					
No.	Equipment	Brand	Model	Series No.	FCC ID
	N/A				

Support Equipment (Conducted)					
No.	Equipment	Brand	Model	Series No.	FCC ID
1	NB(I)	Lenovo	X260	N/A	N/A
2	USB A extension cable	N/A	N/A	N/A	N/A

Support Equipment (Conduction)					
No.	Equipment	Brand	Model	Series No.	FCC ID
1	NB(I)	Lenovo	ThinkPad X260	N/A	N/A
2	Adapter	Lenovo	ADLX45DLC3A	N/A	N/A

Support Equipment (Radiated)					
No.	Equipment	Brand	Model	Series No.	FCC ID
1	NB(D)	Lenovo	ThinkPad X260	N/A	N/A
2	Adapter	Lenovo	ADLX45DLC3A	N/A	N/A

## 1.8 TEST SET UP DIAGRAM



## 1.9 TEST PROGRAM

This EUT uses "Pxi\_Link\_Emi\_Tool" software to set the frequency, modulation, and power to allow the sample to continuously transmit.

## 1.10 TEST METHODOLOGY AND APPLIED STANDARDS

The test methodology, setups and results comply with all requirements in accordance with ANSI C63.10-2020+Cor.1-2023, FCC Part 15.249, RSS-210 and RSS-Gen.

## 2. TEST SUMMARY

FCC Standard Sec.	IC Standard Sec.	Report Section	Test Item	Result
15.203	RSS-GEN Sec. 6.8	1.3	Antenna Requirement	Pass
15.207(a)	RSS-GEN Sec. 8.8	4.1	AC Conducted Emission	Pass
15.215	RSS-GEN 6.7	4.2	20dB Bandwidth and Occupied Bandwidth (99%)	Pass
15.249(a)	RSS-210 B.10 a	4.3	Filed strength of fundamental	Pass
15.249(d) 15.209 15.205	RSS-210 B.10 b, RSS-GEN Sec 8.9 / 8.10	4.3	Radiation Spurious Emission	Pass

### 3. DESCRIPTION OF TEST MODES

#### 3.1 THE WORST MODE OF MEASUREMENT

AC Power Line Conduction Emission	
<b>Test Condition</b>	<b>AC Power line conduction emission for line and neutral</b>
<b>Power supply Mode</b>	<b>Mode 1: EUT power by Host System</b>
<b>Worst Mode</b>	<input checked="" type="checkbox"/> Mode 1 <input type="checkbox"/> Mode 2 <input type="checkbox"/> Mode 3 <input type="checkbox"/> Mode 4

Radiated Emission Measurement Above 1G	
Test Condition	Radiated Emission Above 1G
<b>Power supply Mode</b>	<b>Mode 1: EUT power by Host System(Color: White)</b>
<b>Worst Mode</b>	<input checked="" type="checkbox"/> Mode 1 <input type="checkbox"/> Mode 2 <input type="checkbox"/> Mode 3 <input type="checkbox"/> Mode 4
<b>Worst Position</b>	<input type="checkbox"/> Placed in fixed position. <input checked="" type="checkbox"/> Placed in fixed position at X-Plane (E2-Plane) <input type="checkbox"/> Placed in fixed position at Y-Plane (E1-Plane) <input type="checkbox"/> Placed in fixed position at Z-Plane (H-Plane)

Radiated Emission Measurement Below 1G	
Test Condition	Radiated Emission Below 1G
<b>Power supply Mode</b>	<b>Mode 1: EUT power by Host System(Color: White)</b> <b>Mode 2: EUT power by Host System(Color: Black)</b>
<b>Worst Mode</b>	<input checked="" type="checkbox"/> Mode 1 <input type="checkbox"/> Mode 2 <input type="checkbox"/> Mode 3 <input type="checkbox"/> Mode 4

**Remark:**

1. The worst mode was record in this test report.
2. AC power line conducted emission were performed the EUT transmit at the highest output power channel as worse case.
3. EUT pre-scanned in three axis ,X,Y, Z and two polarity, for radiated measurement. The worst case(X-Plane) were recorded in this report

### 3.2 EUT DUTY CYCLE

Temperature: 25.2 ~ 25.4°C

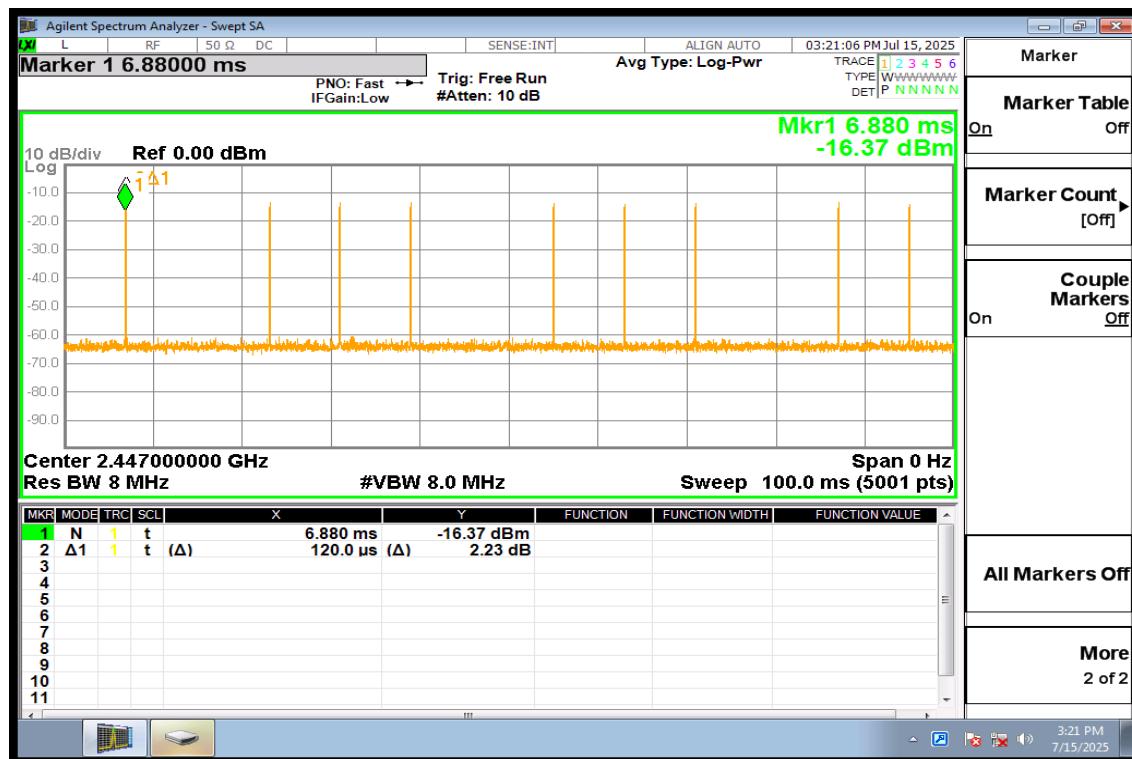
Test date: July 5 ~ 15, 2025

Humidity: 51 ~ 54% RH

Tested by: Jerry Chang

20log(D)			
Time On(ms)	Time On+Off(ms)	Duty cycle	20log(D)
1.08	100	0.0108	-39.33

Note: duty cycle= (0.12ms\*9)/100ms



## 4. TEST RESULT

### 4.1 AC POWER LINE CONDUCTED EMISSION

#### 4.1.1 Test Limit

According to §15.207(a) and RSS-Gen §8.8,

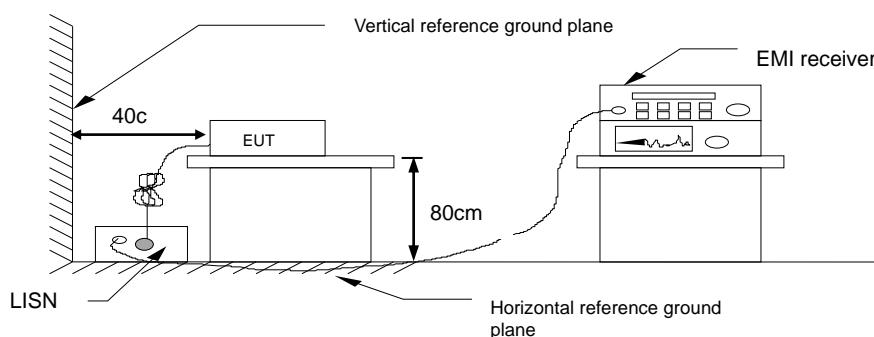
Frequency Range (MHz)	Limits(dB $\mu$ V)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56*	56 to 46*
0.50 to 5	56	46
5 to 30	60	50

\* Decreases with the logarithm of the frequency.

#### 4.1.2 Test Procedure

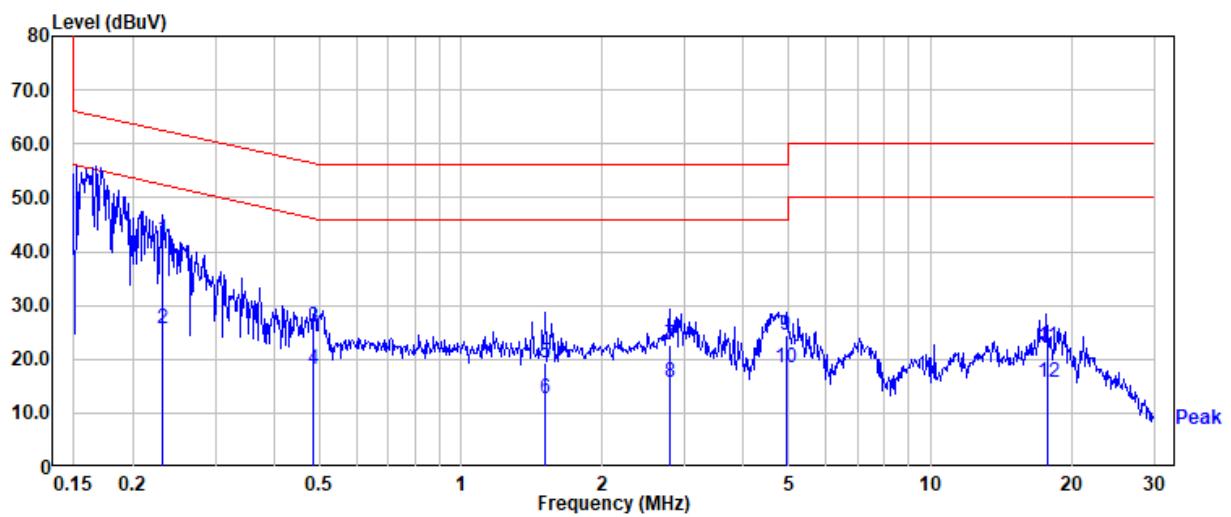
1. The EUT was placed on a non-conducted table, which is 0.8m above horizontal ground plane and 0.4m above vertical ground plane.
2. EUT connected to the line impedance stabilization network (LISN)
3. Receiver set RBW of 9kHz and Detector Peak, and note as quasi-peak and average.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. Recorded Line for Neutral and Line.

#### 4.1.3 Test Setup



#### 4.1.4 Test Result

Project No	:	TM-2506000257P	Test Date	:	2025-07-11
Operation Band	:	GFSK	Temp./Humi.	:	25°C / 65%
Test Chamber	:	Conduction	Engineer	:	David.Li
Probe	:	Line	Test Voltage	:	AC 120V/60Hz
Note	:				

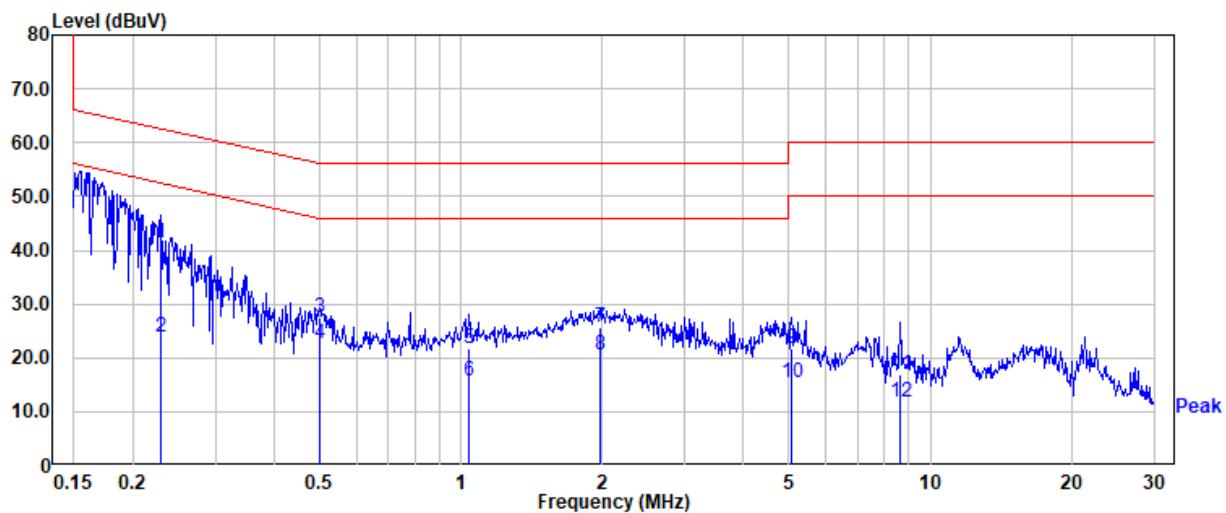


Freq	Read Level	Actual Factor	Actual FS	Limit	Margin	Detector Mode
MHz	dBuV	dB	dBuV	dBuV	dB	PK/QP/AV
0.233	42.14	0.08	42.22	62.36	-20.14	QP
0.233	25.64	0.08	25.72	52.36	-26.64	Average
0.487	25.96	0.06	26.02	56.22	-30.20	QP
0.487	17.96	0.06	18.02	46.22	-28.20	Average
1.512	19.07	0.10	19.17	56.00	-36.83	QP
1.512	12.52	0.10	12.62	46.00	-33.38	Average
2.796	22.67	0.12	22.79	56.00	-33.21	QP
2.796	15.47	0.12	15.59	46.00	-30.41	Average
4.929	24.22	0.16	24.38	56.00	-31.62	QP
4.929	18.27	0.16	18.43	46.00	-27.57	Average
17.767	21.93	0.33	22.26	60.00	-37.74	QP
17.767	15.36	0.33	15.69	50.00	-34.31	Average

Note: 1. Actual FS= Spectrum Read Level + Factor

Note: 2. Margin= Actual FS - Limit

Project No : TM-2506000257P      Test Date : 2025-07-11  
Operation Band : GFSK      Temp./Humi. : 25°C / 65%  
Test Chamber : Conduction      Engineer : David.Li  
Probe : Neutral      Test Voltage : AC 120V/60Hz  
Note :



Freq	Read Level	Actual Factor	Actual FS	Limit	Margin	Detector Mode
MHz	dBuV	dB	dBuV	dBuV	dB	PK/QP/AV
0.230	41.29	0.10	41.39	62.44	-21.05	QP
0.230	23.72	0.10	23.82	52.44	-28.62	Average
0.500	27.47	0.08	27.55	56.00	-28.45	QP
0.500	22.51	0.08	22.59	46.00	-23.41	Average
1.039	21.76	0.10	21.86	56.00	-34.14	QP
1.039	15.69	0.10	15.79	46.00	-30.21	Average
1.976	25.54	0.13	25.67	56.00	-30.33	QP
1.976	20.36	0.13	20.49	46.00	-25.51	Average
5.075	21.66	0.18	21.84	60.00	-38.16	QP
5.075	15.35	0.18	15.53	50.00	-34.47	Average
8.655	16.60	0.23	16.83	60.00	-43.17	QP
8.655	11.62	0.23	11.85	50.00	-38.15	Average

Note: 1. Actual FS= Spectrum Read Level + Factor

Note: 2. Margin= Actual FS - Limit

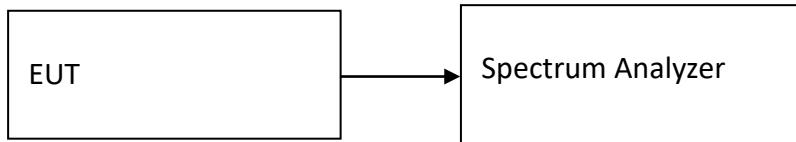
## 4.2 20dB BANDWIDTH AND OCCUPIED BANDWIDTH (99%)

### LIMIT

**20 dB Bandwidth** : For reporting purposes only.

**Occupied Bandwidth(99%)** : For reporting purposes only.

### Test Configuration



### TEST PROCEDURE

Test method Refer as ANSI C63.10-2020+Cor.1-2023.

1. The EUT RF output connected to the spectrum analyzer by RF cable.
2. Setting maximum power transmit of EUT
3. SA set RBW = 1% ~ 5% OBW, VBW = three times the RBW and Detector = Peak, to measurement 20 dB Bandwidth.
4. SA set RBW = 1% ~ 5% OBW, VBW = three times the RBW and Detector = Peak, to measurement 99% Bandwidth
5. Measure and record the result of 20 dB Bandwidth and 99% Bandwidth. in the test report.

**TEST RESULTS**

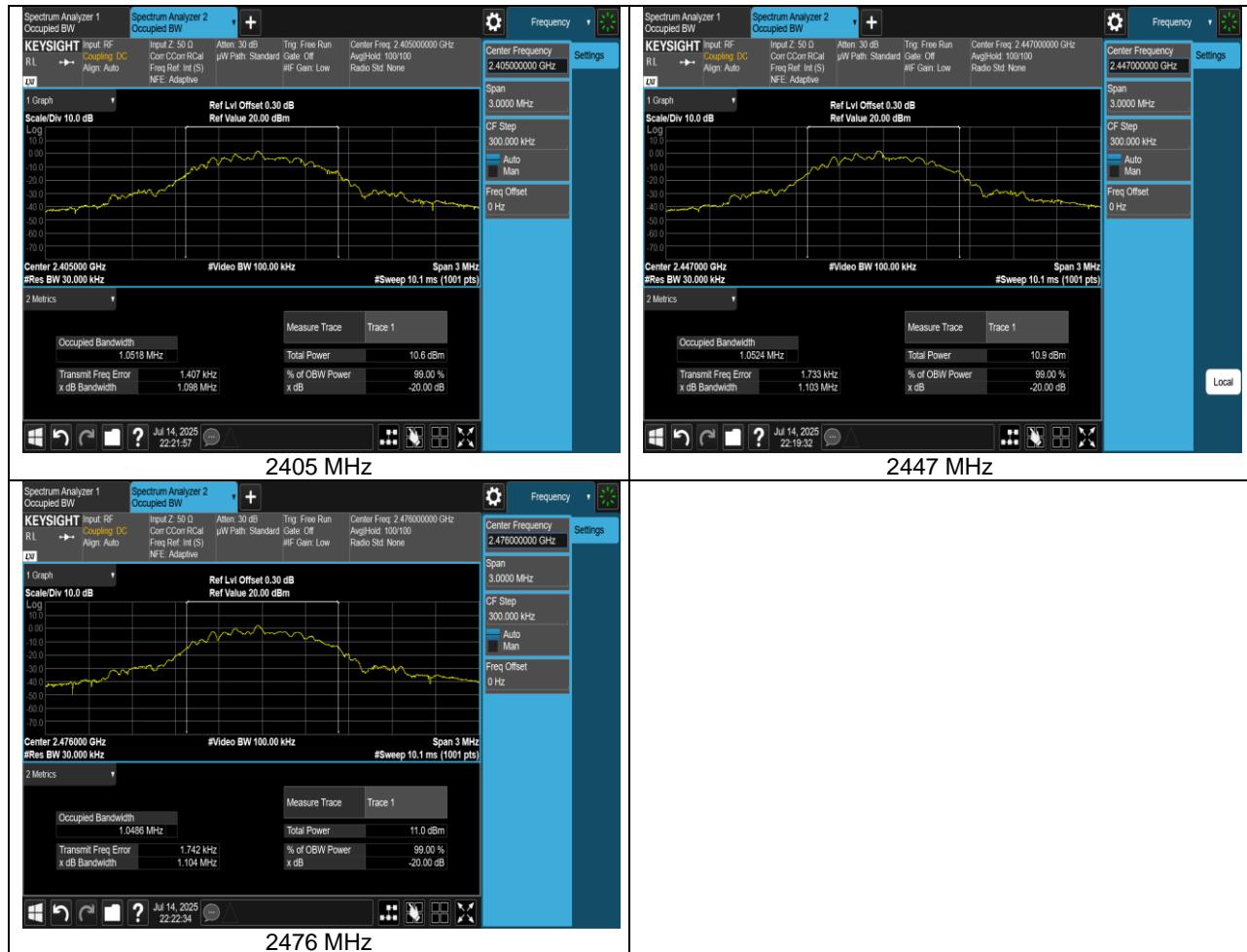
Compliance.

**Temperature:** 21.8 ~ 25°C**Test date:** July 3 ~ 14, 2025**Humidity:** 49 ~ 62% RH**Tested by:** Marco Chan

Frequency (MHz)	Occupied Bandwidth 99% (MHz)	20 dB Bandwidth (MHz)
2405	1.0518	1.098
2447	1.0524	1.103
2476	1.0486	1.104

## Test Plot

### 20dB Bandwidth & BANDWIDTH (99%)



## 4.3 FIELD STRENGTH OF FUNDAMENTAL AND SPURIOUS EMISSION

### 4.3.1 Test Limit

According to FCC Part 15.249(a)(d) and RSS-210 B.10 a./b.

(1) The field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
902–928 MHz	50	500
2400–2483.5 MHz	50	500
5725–5875 MHz	50	500
24.0–24.25 GHz	250	2500

\* Field strength limits are specified at a distance of 3 meters

Fundamental Limit Conversion		
Average (mV/m) at 3M	Average (dBuV/m) at 3M	Peak (dBuV/m) at 3M
50	93.98	113.98

\*(Limit=20LOG(50\*1000)=93.98 dBuV/m)

Harmonic Limit Conversion		
Average (uV/m) at 3M	Average (dBuV/m) at 3M	Peak (dBuV/m) at 1M
500	53.97	73.97

\*(Limit=20LOG(500)=53.79 dBuV/m)

According to FCC Part 15.249, 15.209, 15.205 and RSS-210, RSS-Gen sec 8.9 / 8.10

(2) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209(follow the table), whichever is the lesser attenuation

**Below 30 MHz**

Frequency	Field Strength (microvolts/m)	Measurement Distance (metres)
9-490 kHz	2,400/F (F in kHz)	300
490-1,705 kHz	24,000/F (F in kHz)	30
1.705-30 MHz	30	30

**Above 30 MHz**

Frequency	Field Strength (microvolts/m)	Measurement Distance (metres)
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

### 4.3.2 Test Procedure

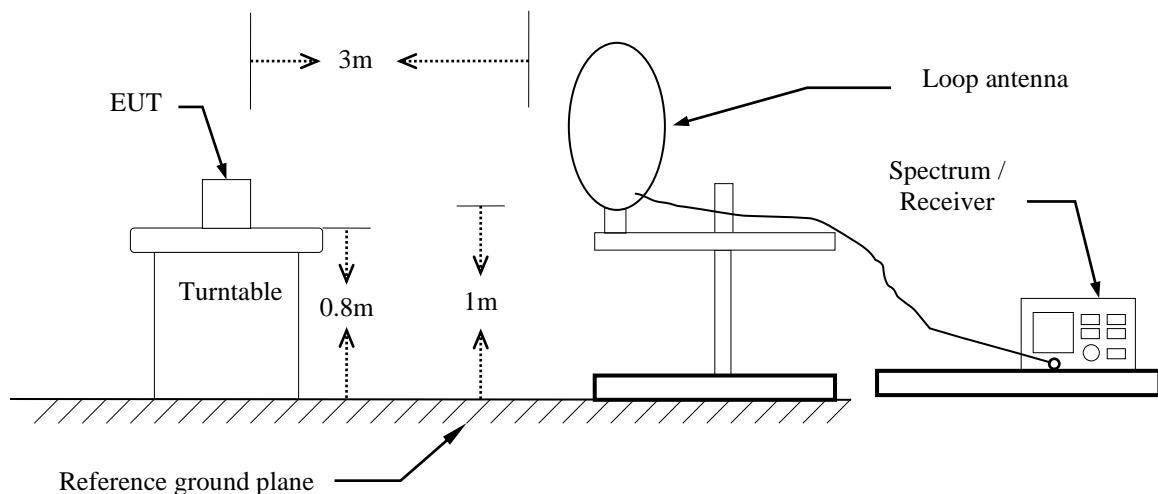
1. The EUT is placed on a turntable, Above 1 GHz is 1.5m high and below 1 GHz is 0.8m high above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. No emission found between lowest internal used/generated frequency to 30MHz (9kHz~30MHz).

Radiated emission below 30MHz is measured in a 9m\*6m\*6m semi-anechoic chamber, the measurements correspond to those obtained at an open-field test site. There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

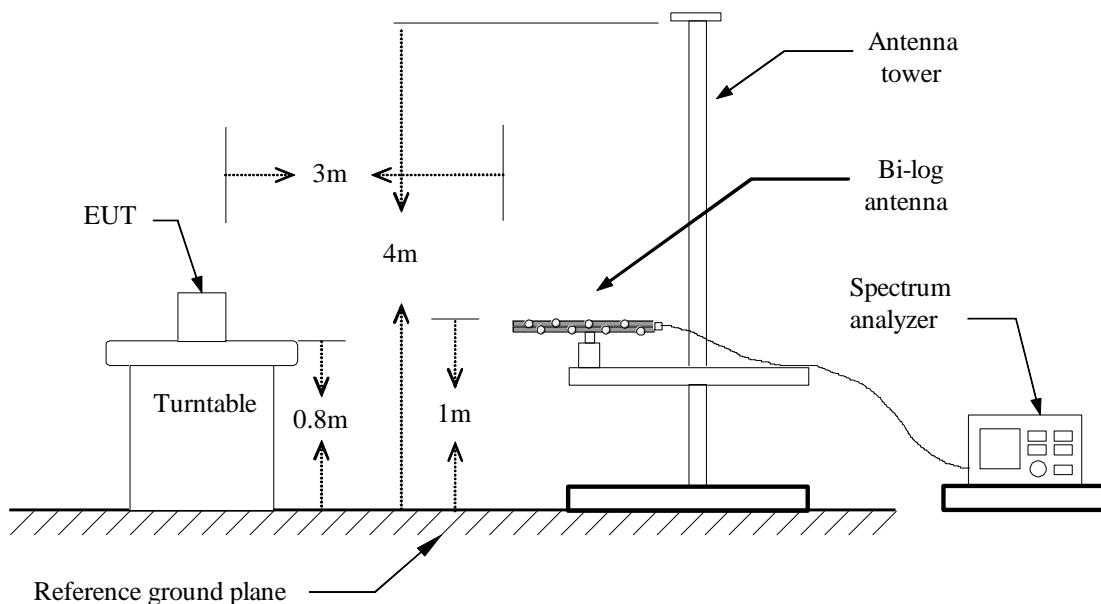
7. The SA setting following:
  - (1) Below 30MHz:
    - (1.1) 9KHz-490KHz : RBW=200Hz / VBW=1kHz / Sweep=AUTO
    - (1.2) 490KHz-30MHz : RBW=10kHz / VBW=30kHz / Sweep=AUTO
  - (2) 30MHz to 1GHz : RBW = 100kHz, VBW  $\geq$  3\*RBW, Sweep = Auto, Detector = Peak, Trace = Max hold.
  - (3) Above 1GHz :
    - (3.1) For Peak measurement : RBW = 1MHz, VBW  $\geq$  3 RBW, Sweep = Auto, Detector = Peak, Trace = Max hold.
    - (3.2) For Average measurement : RBW = 1MHz, VBW  
If Duty Cycle  $\geq$  98%, VBW=10Hz.  
If Duty Cycle < 98%, VBW=1/T.
8. Data result  
Actual FS=Spectrum Reading Level+Factor  
Margin=Actual FS- Limit

### 4.3.3 Test Setup

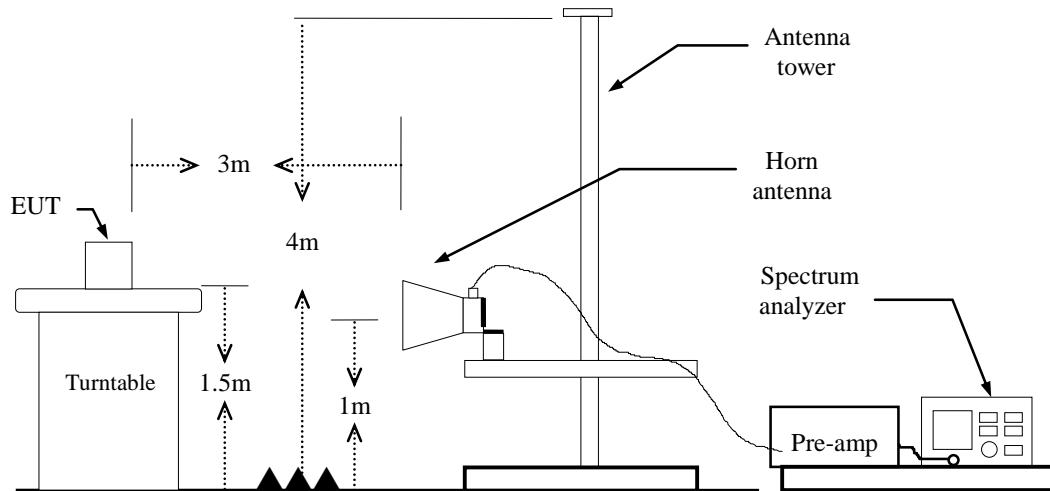
#### 9kHz ~ 30MHz



#### 30MHz ~ 1GHz



## Above 1 GHz

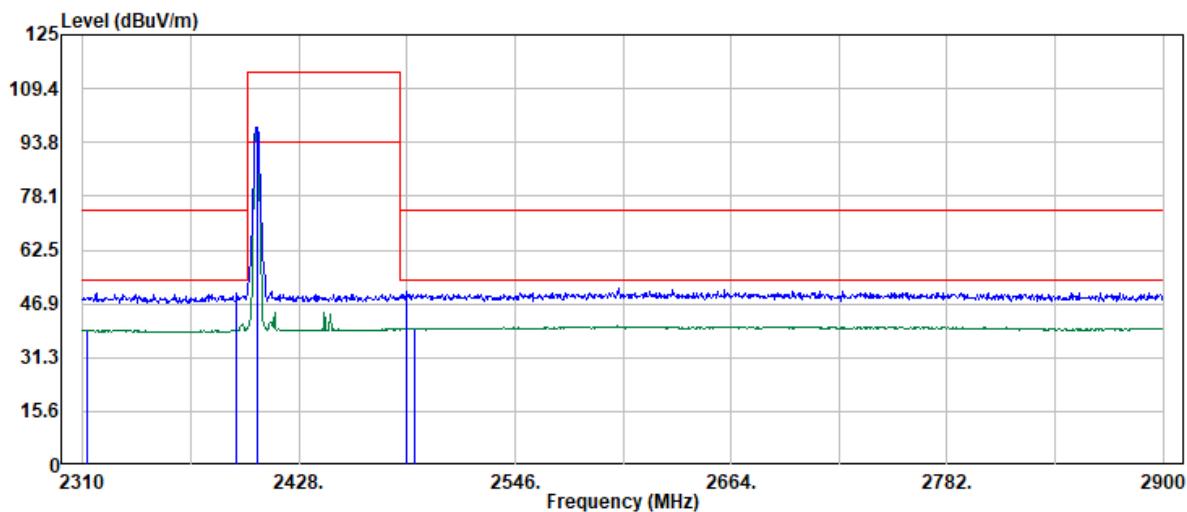


### 4.3.4 Test Result

#### Band Edge Test Data

Project No : TM-2506000257P  
Operation Band : GFSK  
Frequency : 2405 MHz  
Operation Mode : Bandedge  
EUT Pol : E2  
Setting : 2

Test Date : 2025-07-15  
Temp./Humi. : 25.4/51  
Antenna Pol. : Vertical  
Engineer : Tony.Chao  
Test Chamber : 966A

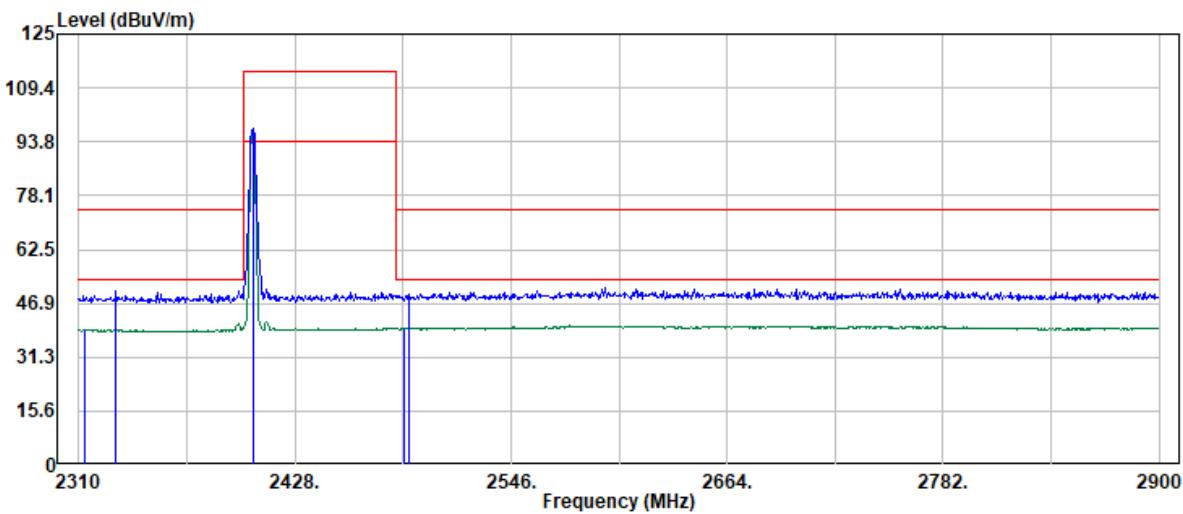


Note:

For Average measurement(when 7.3.2 cannot meet the requirements) : PK Results+ 20 log(Duty cycle)  
where the duty cycle correction factor is calculated from follow formula:  $20 * \log((0.12ms * 9)/100ms)$

Project No : TM-2506000257P  
Operation Band : GFSK  
Frequency : 2405 MHz  
Operation Mode : Bandedge  
EUT Pol : E2  
Setting : 2

Test Date : 2025-07-15  
Temp./Humi. : 25.4/51  
Antenna Pol. : HORIZONTAL  
Engineer : Tony.Chao  
Test Chamber : 966A

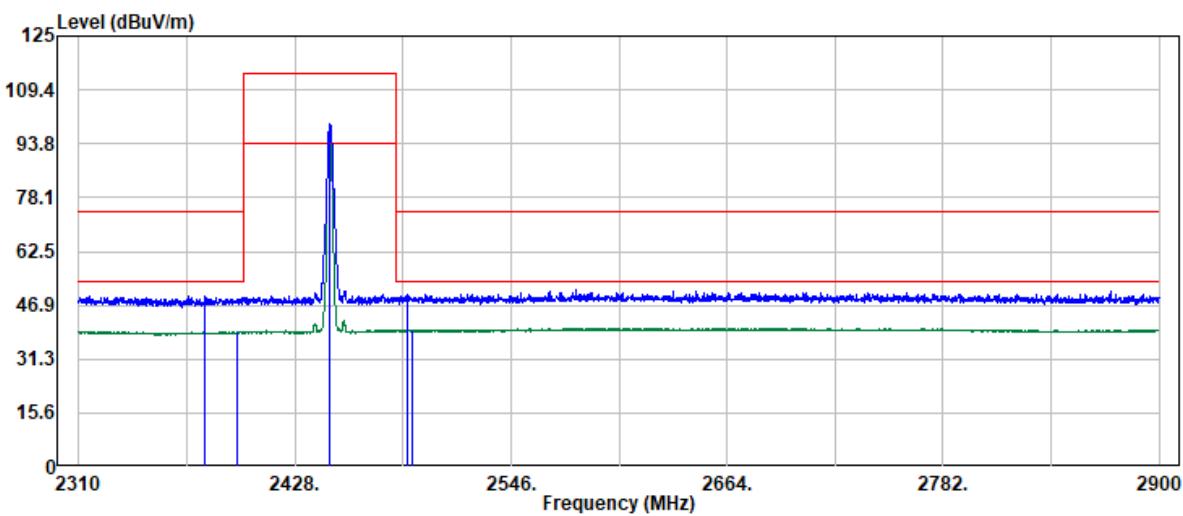


Trace: 1						
Freq	Read Level	Actual Factor	Limit FS	Limit @3m	Margin	Detector Mode
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
2313.50	32.93	6.36	39.29	54.00	-14.71	Average
2330.48	44.15	6.24	50.39	74.00	-23.61	Peak
2404.92	91.06	6.37	97.43	114.00	-16.57	Peak
2404.92	97.43	-39.33	58.10	94.00	-35.90	Average
2487.85	32.98	6.81	39.79	54.00	-14.21	Average
2490.35	42.81	6.82	49.63	74.00	-24.37	Peak

Note:

For Average measurement(when 7.3.2 cannot meet the requirements) : PK Results+ 20 log(Duty cycle)  
where the duty cycle correction factor is calculated from follow formula:  $20 * \log((0.12ms * 9)/100ms)$

Project No : TM-2506000257P      Test Date : 2025-07-15  
Operation Band : GFSK      Temp./Humi. : 25.4/51  
Frequency : 2447 MHz      Antenna Pol. : Vertical  
Operation Mode : Bandedge      Engineer : Tony.Chao  
EUT Pol : E2      Test Chamber : 966A  
Setting : 2



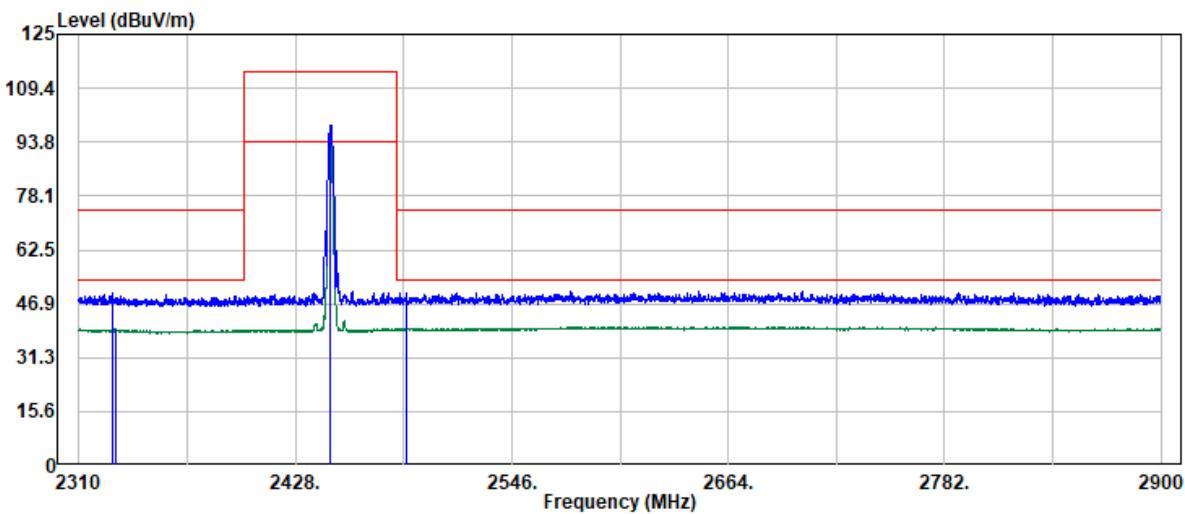
Trace: 1						
Freq	Read Level	Actual Factor	Limit FS	Limit @3m	Margin	Detector Mode
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
2379.15	43.48	6.25	49.73	74.00	-24.27	Peak
2396.85	32.90	6.36	39.26	54.00	-14.74	Average
2447.23	92.77	6.53	99.30	114.00	-14.70	Peak
2447.23	99.30	-39.33	59.97	94.00	-34.03	Average
2489.36	43.05	6.81	49.86	74.00	-24.14	Peak
2492.31	32.92	6.82	39.74	54.00	-14.26	Average

Note:

For Average measurement(when 7.3.2 cannot meet the requirements) : PK Results+ 20 log(Duty cycle)  
where the duty cycle correction factor is calculated from follow formula:  $20 * \log((0.12ms * 9)/100ms)$

Project No : TM-2506000257P  
Operation Band : GFSK  
Frequency : 2447 MHz  
Operation Mode : Bandedge  
EUT Pol : E2  
Setting : 2

Test Date : 2025-07-15  
Temp./Humi. : 25.4/51  
Antenna Pol. : HORIZONTAL  
Engineer : Tony.Chao  
Test Chamber : 966A



Trace: 1

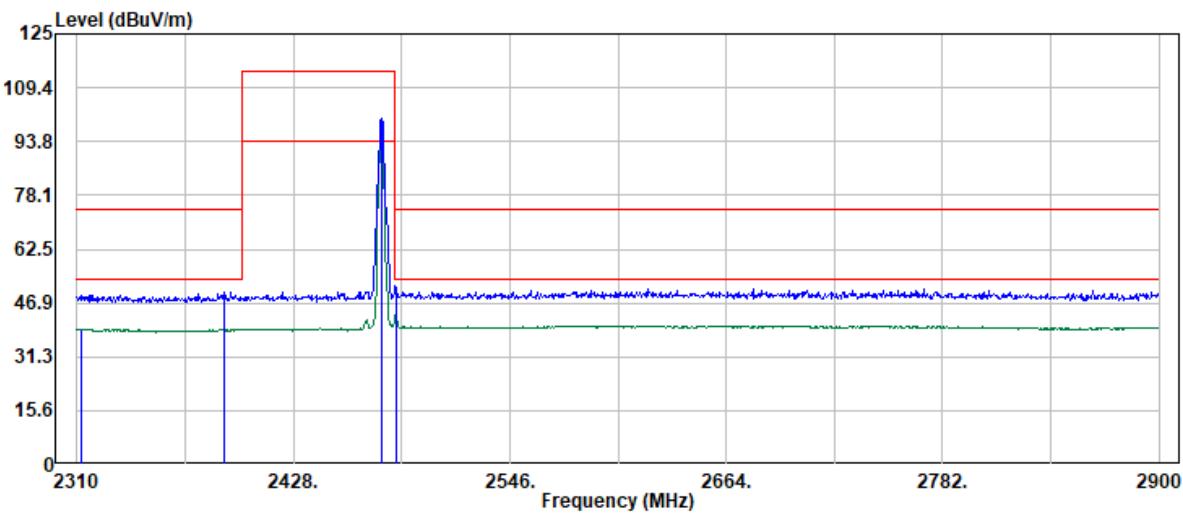
Freq	Read Level	Actual Factor	Limit FS	Margin @3m	Detector	Mode
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
2328.53	43.70	6.23	49.93	74.00	-24.07	Peak
2329.71	33.20	6.24	39.44	54.00	-14.56	Average
2447.23	91.98	6.53	98.51	114.00	-15.49	Peak
2447.23	98.51	-39.33	59.18	94.00	-34.82	Average
2488.53	43.38	6.82	50.20	74.00	-23.80	Peak
2488.53	33.03	6.82	39.85	54.00	-14.15	Average

Note:

For Average measurement(when 7.3.2 cannot meet the requirements) : PK Results+ 20 log(Duty cycle)  
where the duty cycle correction factor is calculated from follow formula:  $20 * \log((0.12ms * 9)/100ms)$

Project No : TM-2506000257P  
Operation Band : GFSK  
Frequency : 2476 MHz  
Operation Mode : Bandedge  
EUT Pol : E2  
Setting : 2

Test Date : 2025-07-15  
Temp./Humi. : 25.4/51  
Antenna Pol. : VERTICAL  
Engineer : Tony.Chao  
Test Chamber : 966A



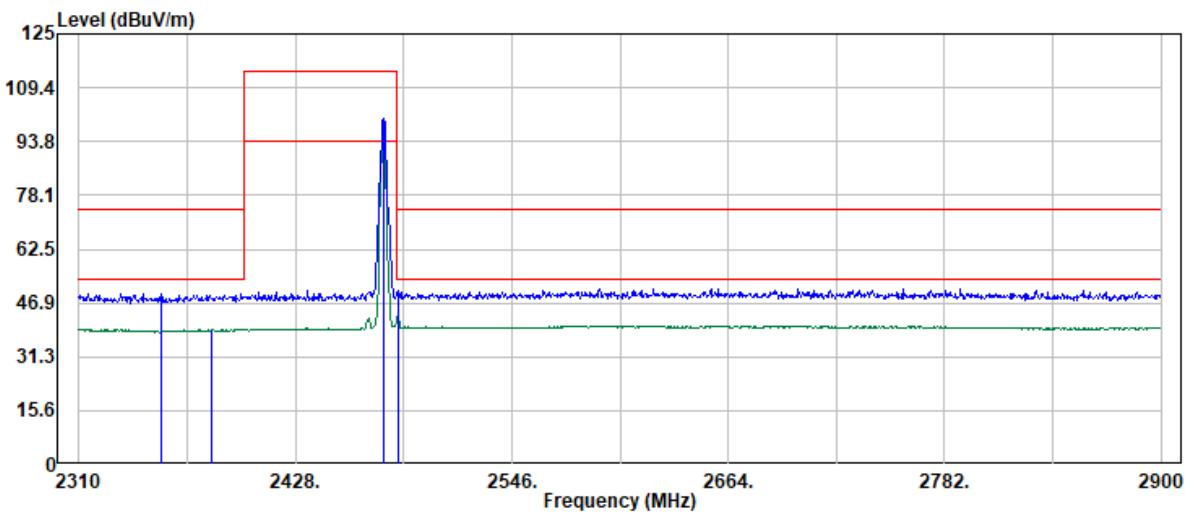
Trace: 1						
Freq	Read Level	Actual Factor	Limit FS	Limit @3m	Margin	Detector Mode
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
2312.00	32.86	6.37	39.23	54.00	-14.77	Average
2389.93	43.64	6.32	49.96	74.00	-24.04	Peak
2476.36	93.68	6.67	100.35	114.00	-13.65	Peak
2476.36	100.35	-39.33	61.02	94.00	-32.98	Average
2483.85	44.62	6.77	51.39	74.00	-22.61	Peak
2483.85	36.45	6.77	43.22	54.00	-10.78	Average

Note:

For Average measurement(when 7.3.2 cannot meet the requirements) : PK Results+ 20 log(Duty cycle)  
where the duty cycle correction factor is calculated from follow formula:  $20 * \log((0.12ms * 9)/100ms)$

Project No : TM-2506000257P  
Operation Band : GFSK  
Frequency : 2476 MHz  
Operation Mode : Bandedge  
EUT Pol : E2  
Setting : 2

Test Date : 2025-07-15  
Temp./Humi. : 25.4/51  
Antenna Pol. : HORIZONTAL  
Engineer : Tony.Chao  
Test Chamber : 966A



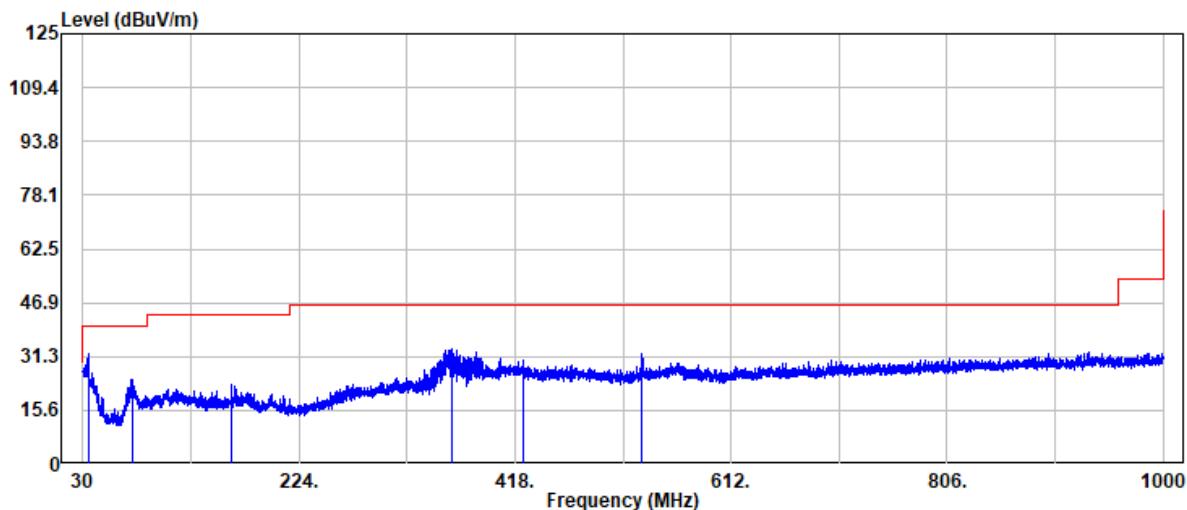
Trace: 1						
Freq	Read Level	Actual Factor	Limit FS	Limit @3m	Margin	Detector Mode
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
2354.46	43.47	6.10	49.57	74.00	-24.43	Peak
2382.44	32.91	6.28	39.19	54.00	-14.81	Average
2476.36	93.82	6.67	100.49	114.00	-13.51	Peak
2476.36	100.49	-39.33	61.16	94.00	-32.84	Average
2483.85	43.89	6.77	50.66	74.00	-23.34	Peak
2483.85	36.46	6.77	43.23	54.00	-10.77	Average

Note:

For Average measurement(when 7.3.2 cannot meet the requirements) : PK Results+ 20 log(Duty cycle)  
where the duty cycle correction factor is calculated from follow formula:  $20 * \log((0.12ms * 9)/100ms)$

**TX Test Data**

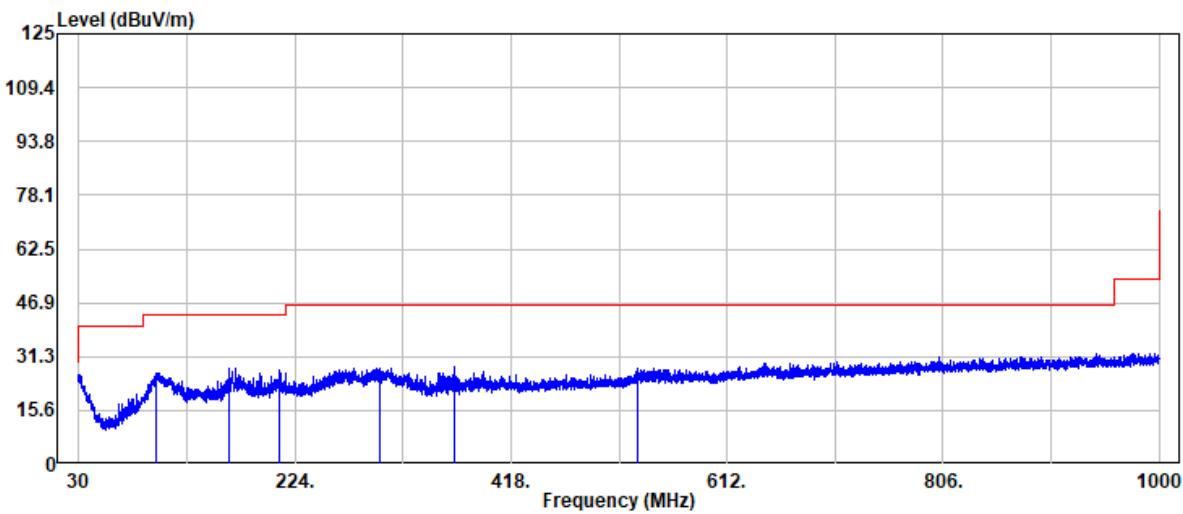
Project No	:	TM-2506000257P	Test Date	:	2025-07-06
Operation Band	:	GFSK	Temp./Humi.	:	25.4/52
Frequency	:	2476 MHz	Antenna Pol.	:	VERTICAL
Operation Mode	:	TX	Engineer	:	Ben.Yang
EUT Pol	:	E2	Test Chamber	:	966A
Setting	:				



Freq	Read Level	Actual Factor	Limit FS	Limit @3m	Margin	Detector Mode
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
35.09	38.61	-6.43	32.18	40.00	-7.82	Peak
74.50	40.59	-15.84	24.75	40.00	-15.25	Peak
163.01	34.47	-11.23	23.24	43.50	-20.26	Peak
361.26	41.52	-7.97	33.55	46.00	-12.45	Peak
425.28	36.04	-6.08	29.96	46.00	-16.04	Peak
532.22	36.01	-3.97	32.04	46.00	-13.96	Peak

Note: PK results to meet QP and AVG limit value.

Project No	:	TM-2506000257P	Test Date	:	2025-07-06
Operation Band	:	GFSK	Temp./Humi.	:	25.4/52
Frequency	:	2476 MHz	Antenna Pol.	:	HORIZONTAL
Operation Mode	:	TX	Engineer	:	Ben.Yang
EUT Pol	:	E2	Test Chamber	:	966A
Setting	:				

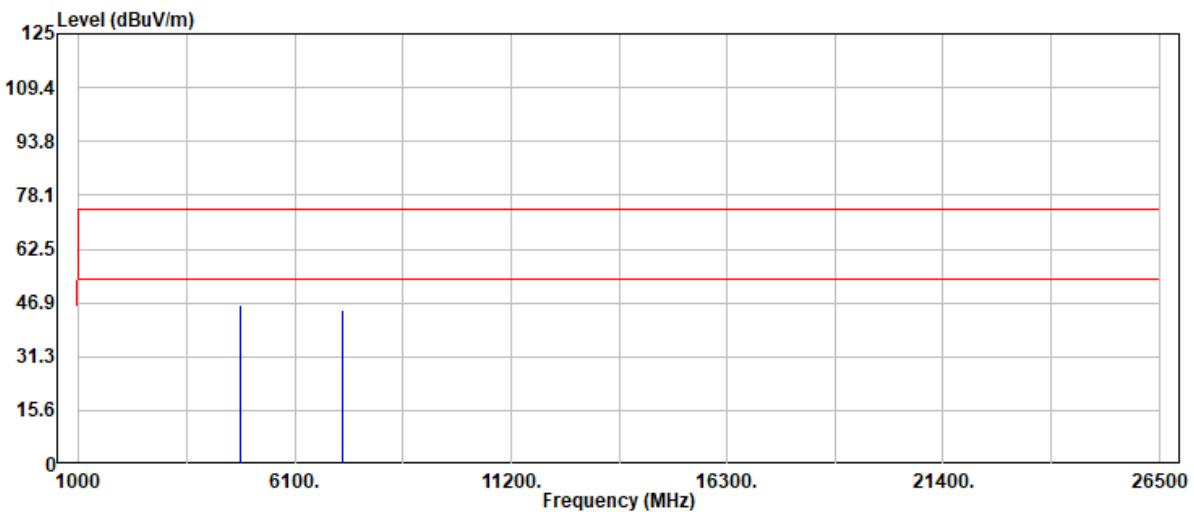


Freq	Read Level	Actual Factor	Limit FS	Limit @3m	Margin	Detector Mode
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
99.72	39.85	-13.47	26.38	43.50	-17.12	Peak
164.47	39.37	-11.38	27.99	43.50	-15.51	Peak
210.06	40.16	-12.75	27.41	43.50	-16.09	Peak
300.15	37.29	-9.29	28.00	46.00	-18.00	Peak
366.59	35.96	-7.82	28.14	46.00	-17.86	Peak
531.85	31.72	-3.97	27.75	46.00	-18.25	Peak

Note: PK results to meet QP and AVG limit value.

Project No : TM-2506000257P  
Operation Band : GFSK  
Frequency : 2405 MHz  
Operation Mode : TX  
EUT Pol : E2  
Setting : 2

Test Date : 2025-07-05  
Temp./Humi. : 25.2/54  
Antenna Pol. : VERTICAL  
Engineer : Ben.Yang  
Test Chamber : 966A

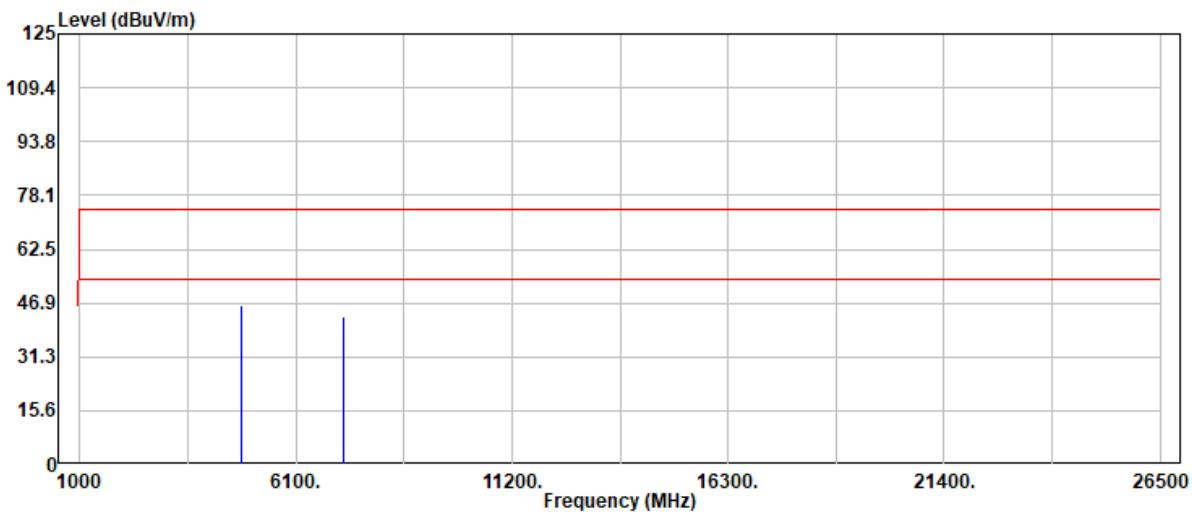


Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4810.00	43.74	2.41	46.15	74.00	-27.85	Peak
7215.00	35.67	9.02	44.69	74.00	-29.31	Peak

Note: PK results to meet AVG limit value.

Project No : TM-2506000257P  
Operation Band : GFSK  
Frequency : 2405 MHz  
Operation Mode : TX  
EUT Pol : E2  
Setting : 2

Test Date : 2025-07-05  
Temp./Humi. : 25.2/54  
Antenna Pol. : HORIZONTAL  
Engineer : Ben.Yang  
Test Chamber : 966A

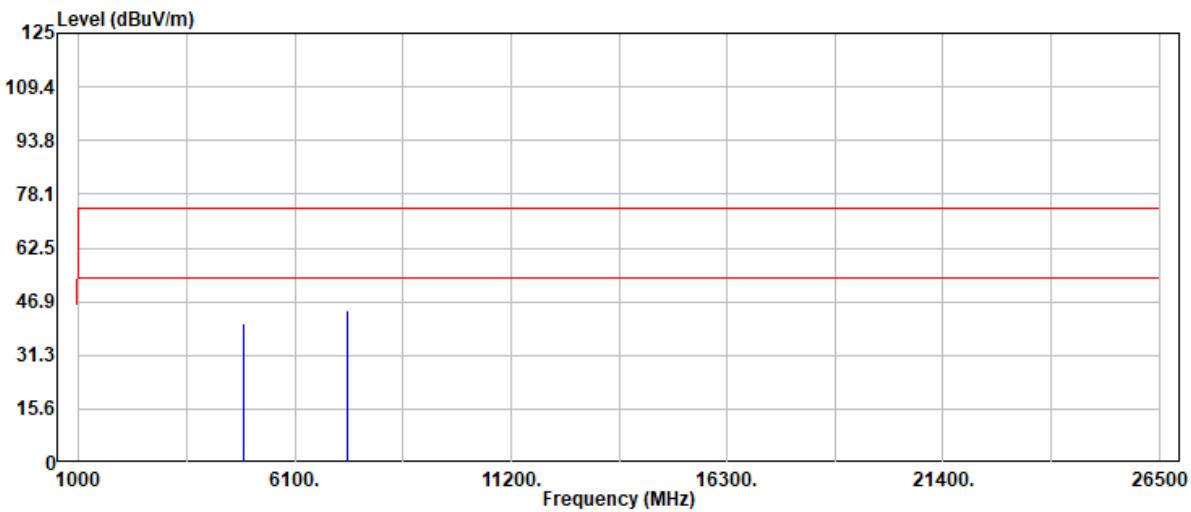


Freq	Read Level	Actual Factor	Limit FS	Limit @3m	Margin	Detector Mode
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
4810.00	43.73	2.41	46.14	74.00	-27.86	Peak
7215.00	34.05	9.02	43.07	74.00	-30.93	Peak

Note: PK results to meet AVG limit value.

Project No : TM-2506000257P  
Operation Band : GFSK  
Frequency : 2447 MHz  
Operation Mode : TX  
EUT Pol : E2  
Setting : 2

Test Date : 2025-07-05  
Temp./Humi. : 25.2/54  
Antenna Pol. : VERTICAL  
Engineer : Ben.Yang  
Test Chamber : 966A

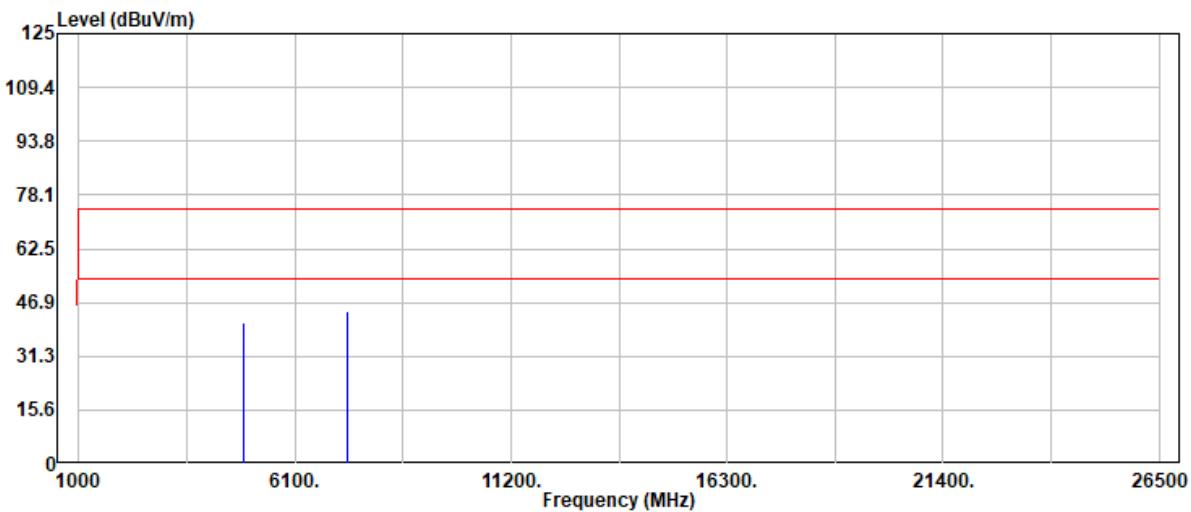


Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4894.00	37.85	2.81	40.66	74.00	-33.34	Peak
7341.00	35.04	9.47	44.51	74.00	-29.49	Peak

Note: PK results to meet AVG limit value.

Project No : TM-2506000257P  
Operation Band : GFSK  
Frequency : 2447 MHz  
Operation Mode : TX  
EUT Pol : E2  
Setting : 2

Test Date : 2025-07-05  
Temp./Humi. : 25.2/54  
Antenna Pol. : HORIZONTAL  
Engineer : Ben.Yang  
Test Chamber : 966A

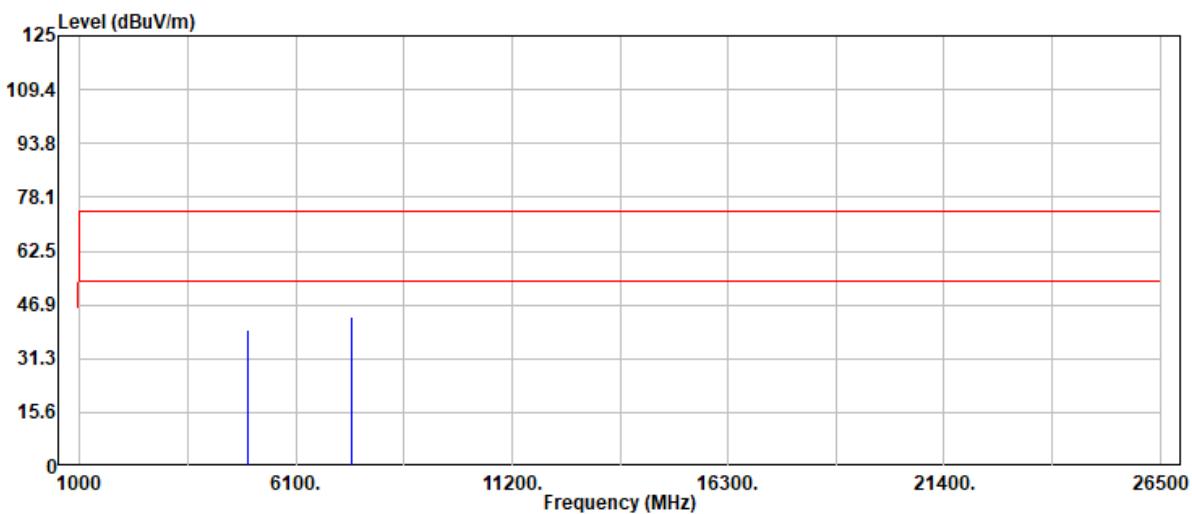


Freq	Read Level	Factor	Actual FS	Limit @3m	Margin	Detector Mode
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
4894.00	38.04	2.81	40.85	74.00	-33.15	Peak
7341.00	34.98	9.47	44.45	74.00	-29.55	Peak

Note: PK results to meet AVG limit value.

Project No : TM-2506000257P  
Operation Band : GFSK  
Frequency : 2476 MHz  
Operation Mode : TX  
EUT Pol : E2  
Setting : 2

Test Date : 2025-07-05  
Temp./Humi. : 25.2/54  
Antenna Pol. : VERTICAL  
Engineer : Ben.Yang  
Test Chamber : 966A

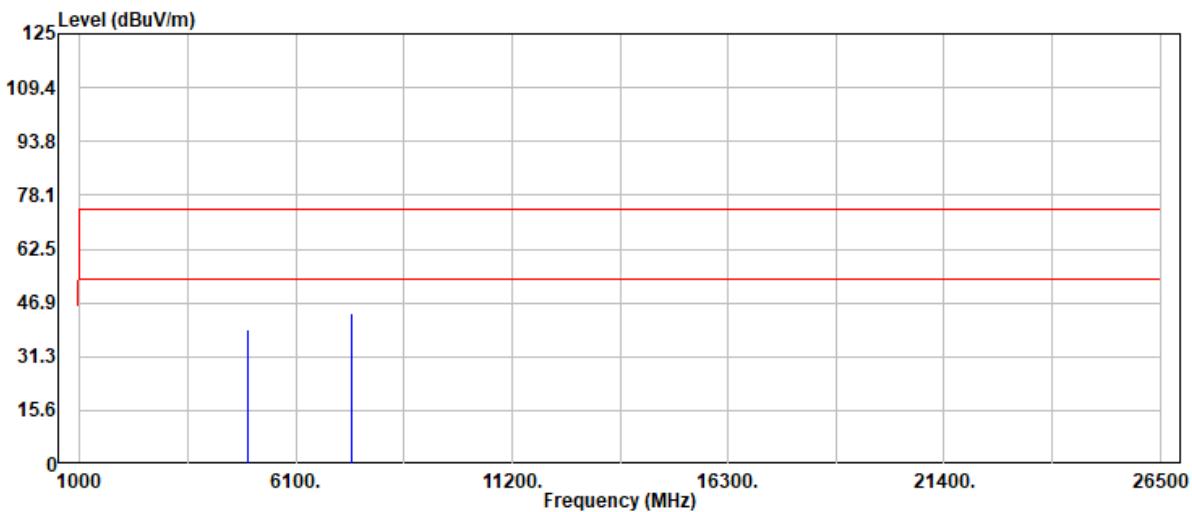


Freq	Read Level	Actual Factor	Limit FS	Margin @3m	Detector Margin	Detector Mode
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
4952.00	36.14	3.48	39.62	74.00	-34.38	Peak
7428.00	33.67	9.49	43.16	74.00	-30.84	Peak

Note: PK results to meet AVG limit value.

Project No : TM-2506000257P  
Operation Band : GFSK  
Frequency : 2476 MHz  
Operation Mode : TX  
EUT Pol : E2  
Setting : 2

Test Date : 2025-07-05  
Temp./Humi. : 25.2/54  
Antenna Pol. : HORIZONTAL  
Engineer : Ben.Yang  
Test Chamber : 966A



Freq MHz	Read Level dBuV	Read Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB	Detector Mode
4952.00	35.74	3.48	39.22	74.00	-34.78	Peak
7428.00	34.52	9.49	44.01	74.00	-29.99	Peak

Note: PK results to meet AVG limit value.

**- End of Test Report -**