



REPORT No.: SZ24070300W02

# TEST REPORT

**APPLICANT** : Linkplay Technology Inc.

**PRODUCT NAME** : WiiM CI MOD A80 Stereo Streaming Amplifier

**MODEL NAME** : AMP011

**BRAND NAME** : WiiM

**FCC ID** : 2BABF-AMP011

**STANDARD(S)** : 47 CFR Part 15 Subpart C

**RECEIPT DATE** : 2024-07-31

**TEST DATE** : 2024-09-05 to 2024-09-12

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Change History		
Version	Date	Reason for change
1.0	2024-09-23	First edition



# 1. Summary of Test Result

No.	Section	Description	Test Date	Test Engineer	Result	Method Determination /Remark
1	15.203	Antenna Requirement	N/A	N/A	N/A <sub>Note1</sub>	N/A
2	15.247(a) 15.247(h)	Hopping Mechanism	N/A	N/A	N/A <sub>Note1</sub>	N/A
3	15.247(a)	Number of Hopping Frequency	N/A	N/A	N/A <sub>Note1</sub>	N/A
4	ANSI C63.10	Duty Cycle	N/A	N/A	N/A <sub>Note1</sub>	N/A
5	15.247(b)	Maximum Peak Conducted Output Power	N/A	N/A	N/A <sub>Note1</sub>	N/A
6	15.247(b)	Maximum Average Conducted Output Power	N/A	N/A	N/A <sub>Note1</sub>	N/A
7	15.247(a)	20dB Bandwidth	N/A	N/A	N/A <sub>Note1</sub>	N/A
8	15.247(a)	Carrier Frequency Separation	N/A	N/A	N/A <sub>Note1</sub>	N/A
9	15.247(a)	Time of Occupancy (Dwell time)	N/A	N/A	N/A <sub>Note1</sub>	N/A
10	15.247(d)	Conducted Spurious Emission	N/A	N/A	N/A <sub>Note1</sub>	N/A
11	15.207	Conducted Emission	Aug. 16, 2024	Fan Shengquan	PASS	No deviation
12	15.247(d)	Restricted Frequency Bands	Sep. 09, 2024	Gao Jianrou	PASS	No deviation
13	15.209,	Radiated	Sep. 09, 2024	Gao Jianrou	PASS	No deviation



	15.247(d)	Emission				
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**Note 1:** The test results of all conducted test items please refer to the module FCC test report (Report No.: SZ24040154W02), which issued on Jul. 26, 2024.

**Note 2:** The tests were performed according to the method of measurements prescribed in ANSI C63.10-2013, KDB 558074 D01 v05r02 and DA 00-075.

**Note 3:** Additions to, deviation, or exclusions from the method shall be judged in the "method determination" column of add, deviate or exclude from the specific method shall be explained in the "Remark" of the above table.

**Note 4:** When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% confidence intervals.

### 1.1. Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR Part 15 Subpart C Radio Frequency Devices



## 1.2. Test Equipment List

### 1.2.1 Conducted Emission Test Equipment

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Receiver	MY56400093	N9038A	KEYSIGHT	2024.01.25	2025.01.24
LISN	8127449	NSLK 8127	Schwarzbeck	2024.02.02	2025.02.01
Pulse Limiter (10dB)	VTSD 9561 F-B #206	VTSD 9561-F	Schwarzbeck	2024.05.30	2025.05.29
RF Coaxial Cable (DC-100MHz)	BNC	MRE04	Qualwave	2024.07.02	2025.07.01

### 1.2.2 List of Software Used

Description	Manufacturer	Software Version
Morlab EMCR	Morlab	V1.2
TS+ -[JS32-CE]	Tonscend	V2.5.0.0

**1.2.3 Radiated Test Equipment**

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Signal Analyzer	MY56060145	N9020A	Agilent	2024.05.30	2025.05.29
Test Antenna - Bi-Log	9163-519	VULB 9163	Schwarzbeck	2024.06.22	2025.06.21
Test Antenna - Loop	1519-022	FMZB1519	Schwarzbeck	2024.06.03	2025.06.02
Test Antenna - Horn	01774	BBHA 9120D	Schwarzbeck	2024.06.22	2025.06.21
Test Antenna - Horn	BBHA9170 #773	BBHA9170	Schwarzbeck	2024.06.22	2025.06.21
Preamplifier (10MHz-6GHz)	46732	S10M100L38 02	LUCIX CORP.	2024.05.30	2025.05.29
Preamplifier (2GHz-18GHz)	61171/61172	S020180L32 03	LUCIX CORP.	2024.05.30	2025.05.29
Preamplifier (18GHz-40GHz)	DS77209	DCLNA0118-40C-S	Decentest	2024.05.30	2025.05.29
RF Coaxial Cable (DC-18GHz)	MRE001	PE330	Pasternack	2024.05.30	2025.05.29
RF Coaxial Cable (DC-18GHz)	MRE002	CLU18	Pasternack	2024.05.30	2025.05.29
RF Coaxial Cable (DC-18GHz)	MRE003	CLU18	Pasternack	2024.05.30	2025.05.29
RF Coaxial Cable (DC-40GHz)	22290045	QA360-40-KK-0.5	Qualwave	2024.07.03	2025.07.02
RF Coaxial Cable (DC-40GHz)	22290046	QA360-40-KKF-2	Qualwave	2024.07.03	2025.07.02
RF Coaxial Cable (DC-18GHz)	22120181	QA500-18-NN-5	Qualwave	2024.07.03	2025.07.02
Notch Filter	N/A	WRCG-2400-2483.5-60SS	Wainwright	N/A	N/A
Anechoic Chamber	N/A	9m*6m*6m	CRT	2022.05.10	2025.05.09



### 1.3. Measurement Uncertainty

Test Items	Uncertainty	Remark
Restricted Frequency Bands	±5%	Confidence levels of 95%
Radiated Emission	±2.95dB	Confidence levels of 95%
Conducted Emission	±2.44dB	Confidence levels of 95%

### 1.4. Testing Laboratory

Laboratory Name	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Telephone	+86 755 36698555
Facsimile	+86 755 36698525
FCC Designation Number	CN1192
FCC Test Firm Registration Number	226174



## 2. General Description

### 2.1. Information of Applicant and Manufacturer

<b>Applicant</b>	Linkplay Technology Inc.
<b>Applicant Address</b>	8000 Jarvis Avenue Suite #130, Newark, CA 94560
<b>Manufacturer</b>	Linkplay Technology Inc.
<b>Manufacturer Address</b>	8000 Jarvis Avenue Suite #130, Newark, CA 94560

### 2.2. Information of EUT

<b>Product Name:</b>	WiiM CI MOD A80 Stereo Streaming Amplifier
<b>Sample No.:</b>	1#
<b>Hardware Version:</b>	A98D V02+Main Board V03
<b>Software Version:</b>	Linkplay.5.2.623957
<b>Equipment Type:</b>	Bluetooth classic
<b>Bluetooth Version:</b>	5.3
<b>Modulation Type:</b>	FHSS (GFSK(1Mbps), $\pi/4$ -DQPSK(EDR 2Mbps), 8-DPSK(EDR 3Mbps))
<b>Operating Frequency Range:</b>	2402MHz-2480MHz
<b>Antenna Type:</b>	PIFA Antenna
<b>Antenna Gain:</b>	ANT1: 3.46dBi; ANT2: 3.46dBi

**Note 1:** The test results of all conducted test items please refer to the module FCC test report (Report No.: SZ24040154W02), which issued on Jul. 26, 2024. We only recorded the radiated test result in this report.

**Note 2:** The EUT has two antennas and it operates in single antenna. Both of the two antennas were evaluated separately, only the worst test result (ANT2) were recorded in the test report.

**Note 3:** We use the dedicated software to control the EUT continuous transmission.

**Note 4:** For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.





### 2.3. Channel List of EUT

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
<b>0</b>	<b>2402</b>	20	2422	40	2442	60	2462
1	2403	21	2423	41	2443	61	2463
2	2404	22	2424	42	2444	62	2464
3	2405	23	2425	43	2445	63	2465
4	2406	24	2426	44	2446	64	2466
5	2407	25	2427	45	2447	65	2467
6	2408	26	2428	46	2448	66	2468
7	2409	27	2429	47	2449	67	2469
8	2410	28	2430	48	2450	68	2470
9	2411	29	2431	49	2451	69	2471
10	2412	30	2432	50	2452	70	2472
11	2413	31	2433	51	2453	71	2473
12	2414	32	2434	52	2454	72	2474
13	2415	33	2435	53	2455	73	2475
14	2416	34	2436	54	2456	74	2476
15	2417	35	2437	55	2457	75	2477
16	2418	36	2438	56	2458	76	2478
17	2419	37	2439	57	2459	77	2479
18	2420	38	2440	58	2460	<b>78</b>	<b>2480</b>
19	2421	<b>39</b>	<b>2441</b>	59	2461		

**Note 1:** The black bold channels were selected for test.

## 2.4. Test Configuration of EUT

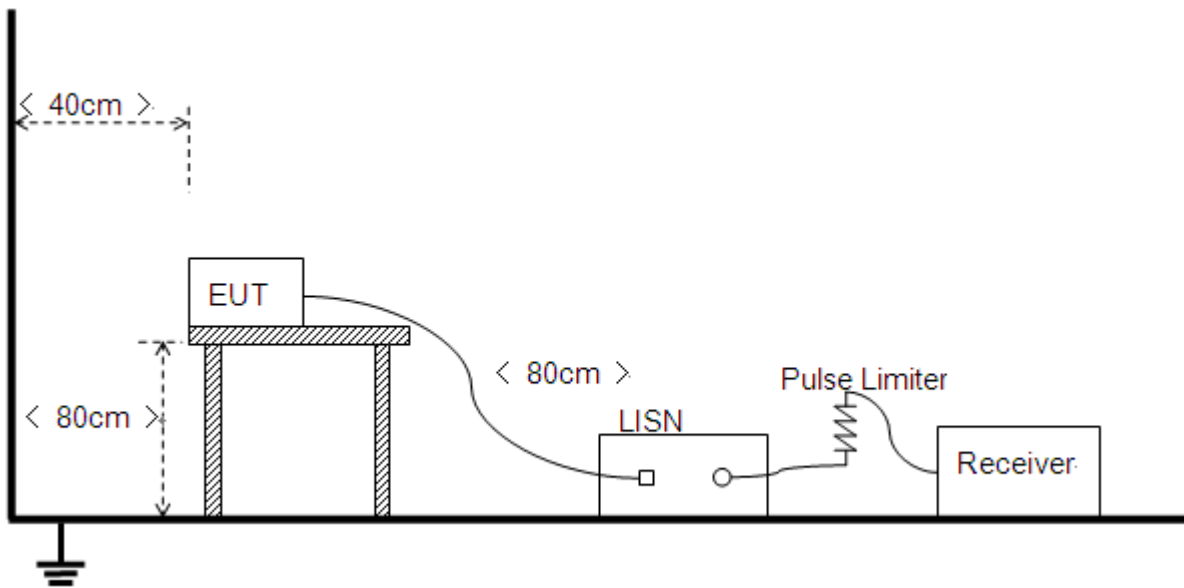
Test mode is used to control the EUT under the maximum power level during test.

## 2.5. Test Conditions

Temperature (°C)	15–35
Relative Humidity (%)	30–60
Atmospheric Pressure (kPa)	86–106

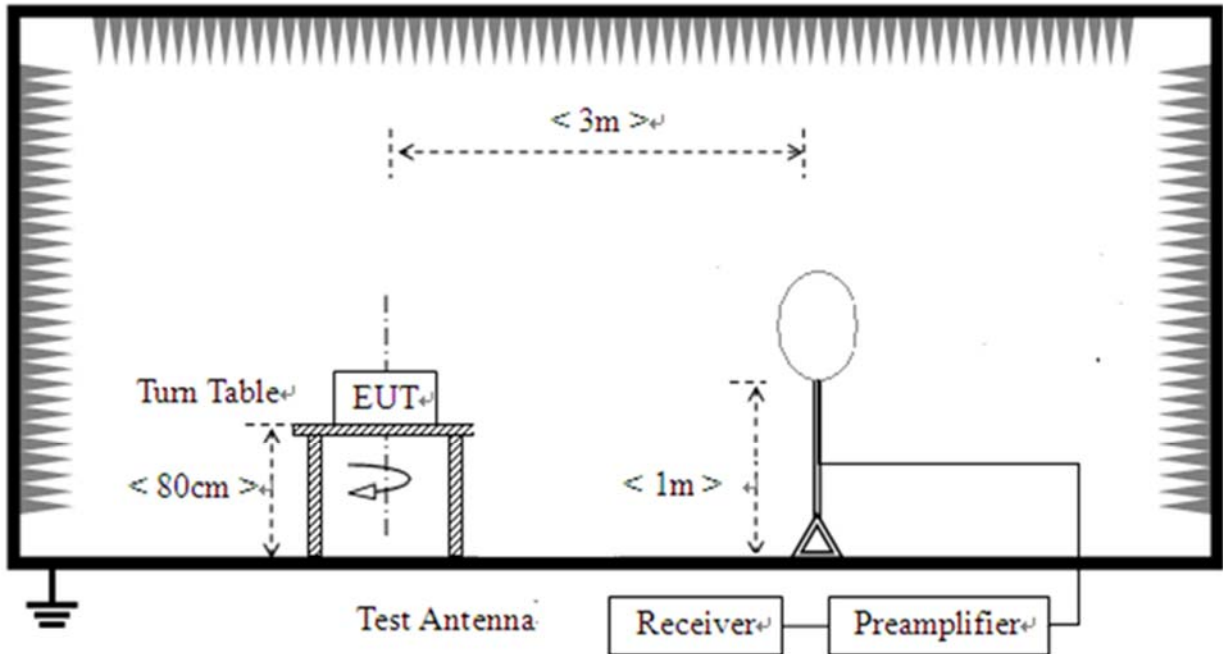
## 2.6. Test Setup Layout Diagram

### 2.6.1. Conducted Emission Measurement

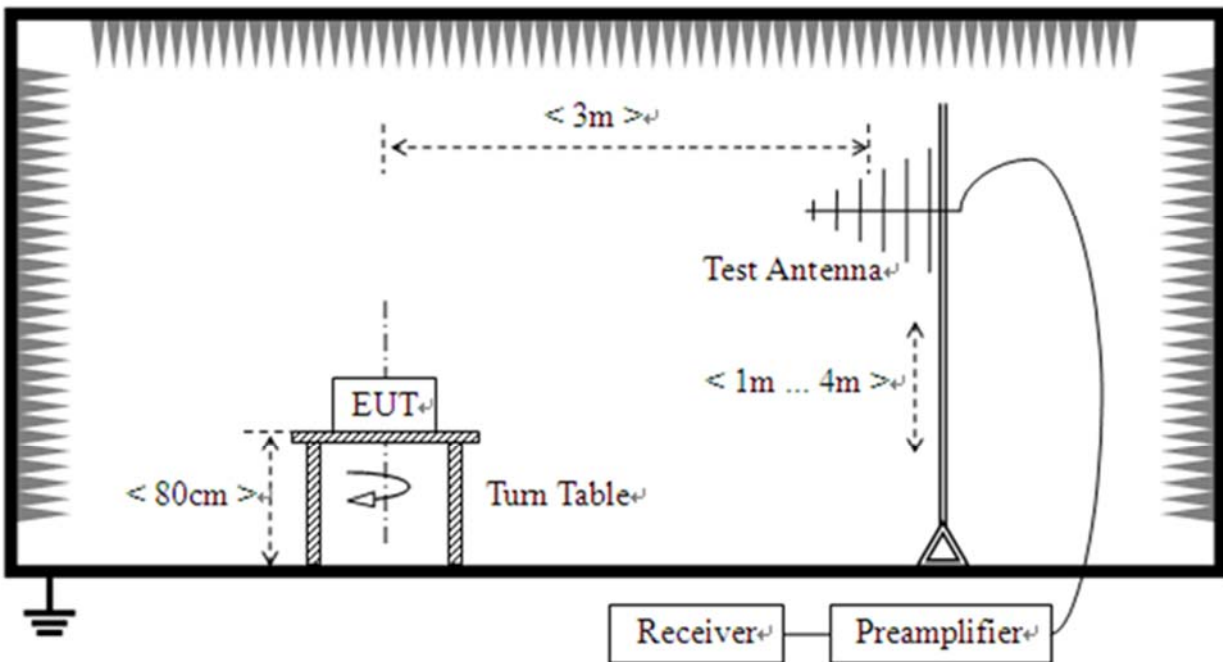


**2.6.2.Radiation Measurement**

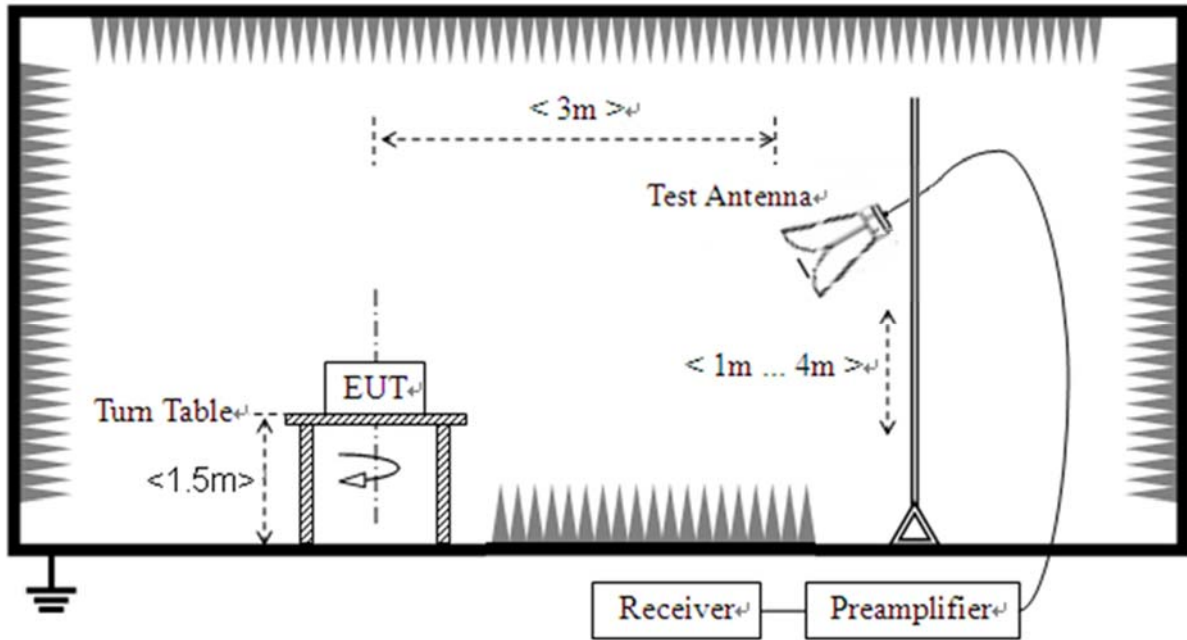
1) For radiated emissions from 9kHz to 30MHz



2) For radiated emissions from 30MHz to 1GHz



3) For radiated emissions above 1GHz



## 3. Test Results

### 3.1. Conducted Emission

#### 3.1.1. Requirement

According to FCC section 15.207, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a 50 $\mu$ H/50 $\Omega$  line impedance stabilization network (LISN).

Frequency Range (MHz)	Conducted Limit (dB $\mu$ V)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5 - 30	60	50

Note:

- (a) The lower limit shall apply at the band edges.
- (b) The limit decreases linearly with the logarithm of the frequency in the range 0.15 - 0.50MHz.

#### 3.1.2. Test Procedures

The Table-top EUT was placed upon a non-metallic table 0.8m above the horizontal metal reference ground plane. EUT was connected to LISN and LISN was connected to reference Ground Plane. EUT was 80cm from LISN. The set-up and test methods were according to ANSI C63.10: 2013.

#### 3.1.3. Test Setup Layout

Refer to chapter 2.6.2 in this report.

#### 3.1.4. Test Result

Refer to Annex A.1 in this report.



## 3.2. Restricted Frequency Bands

### 3.2.1. Requirement

According to FCC section 15.247(d), in any 100kHz 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 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, In addition, radiated emissions which fall in the restricted bands, as defined in 15.205(a), must also comply with the radiated emission limits specified in 15.209(a).

### 3.2.2. Test Procedures

The EUT is located in a 3m Semi-Anechoic Chamber; the antenna factors, cable loss and so on of the site as factors are calculated to correct the reading.

For the Test Antenna:

Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength.

Span = wide enough to fully capture the emission being measured

RBW = 1 MHz for  $f \geq 1\text{GHz}$ , 100 kHz for  $f < 1\text{GHz}$

VBW = 3 MHz

Sweep = auto

Detector function = peak/average

Trace = max hold

Allow the trace to stabilize

### 3.2.3. Test Setup Layout

Refer to chapter 2.6.3 in this report.

### 3.2.4. Test Result

Refer to Annex A.2 in this report.



### 3.3. Radiated Emission

#### 3.3.1. Requirement

According to FCC section 15.247(d), radiated emission outside the frequency band attenuation below the general limits specified in FCC section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in FCC section 15.205(a), must also comply with the radiated emission limits specified in FCC section 15.209(a).

According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength ( $\mu\text{V}/\text{m}$ )	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

**Note1:** For above 1000MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit.

**Note2:** For above 1000MHz, limit field strength of harmonics: 54dBuV/m@3m (AV) and 74dBuV/m@3m (PK). In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), also should comply with the radiated emission limits specified in Section 15.209(a)(above table).



### 3.3.2. Test Procedures

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 30MHz, the emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9kHz-90 kHz, 110kHz-490 kHz. Radiated emission limits in these two bands are based on measurements employing an average detector.

For measurements below 1GHz the resolution bandwidth is set to 100kHz for peak detection measurements or 120kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1GHz the resolution bandwidth is set to 1MHz, the video band width is set to 3MHz for peak measurements and as applicable for average measurements.

The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions. For measurements above 1 GHz, keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response.

### 3.3.3. Test Setup Layout

Refer to chapter 2.6.3 in this report.

### 3.3.4. Test Result

Refer to Annex A.3 in this report.





## Annex A Test Data and Result

### A.1. Conducted Emission

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Set RBW=9kHz, VBW=30kHz. Refer to recorded points and plots below.

**Note:** Both of the test voltage AC 120V/60Hz and AC 230V/50Hz were considered and tested respectively, only the results of the worst case AC 120V/60Hz were recorded in this report.

#### A. Test Setup:

Test Mode: EUT + PC +PC Adapter + BT TX

Test voltage: AC 120V/60Hz

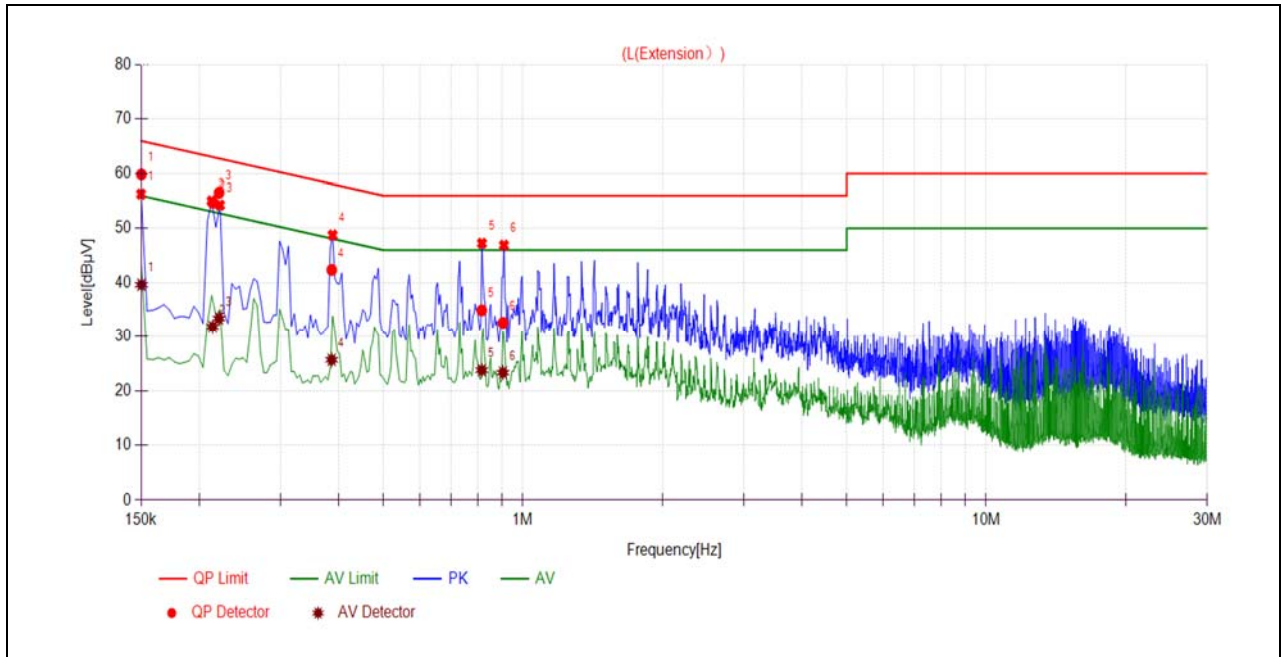
The measurement results are obtained as below:

$E \text{ [dB}\mu\text{V]} = U_R + L_{\text{Cable loss}} \text{ [dB]} + A_{\text{Factor}}$

$U_R$ : Receiver Reading

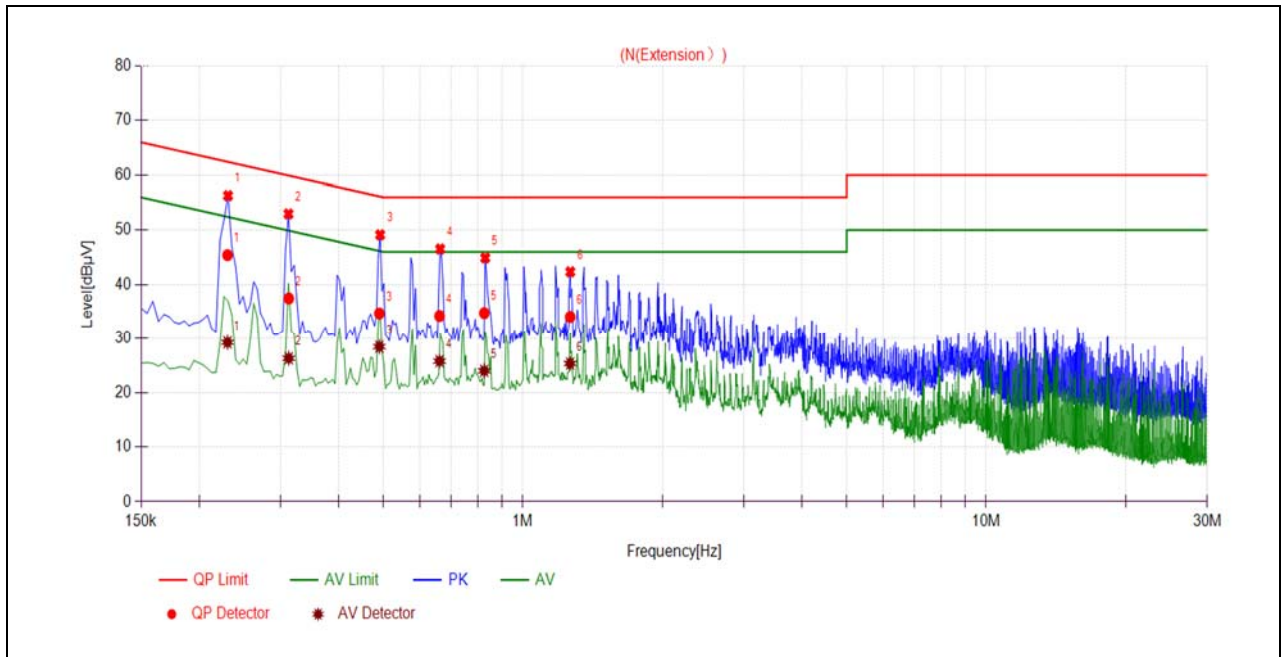
$A_{\text{Factor}}$ : Voltage division factor of LISN

**B. Test Plot:**



(L Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1502	59.84	39.63	65.99	55.99	Line	PASS
2	0.2140	54.71	31.84	63.05	53.05		PASS
3	0.2209	56.54	33.39	62.79	52.79		PASS
4	0.3867	42.36	25.67	58.13	48.13		PASS
5	0.8152	34.90	23.75	56.00	46.00		PASS
6	0.9059	32.57	23.29	56.00	46.00		PASS



(N Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.2304	45.42	29.25	62.43	52.43	Neutral	PASS
2	0.3124	37.46	26.31	59.91	49.91		PASS
3	0.4901	34.70	28.45	56.17	46.17		PASS
4	0.6608	34.24	25.78	56.00	46.00		PASS
5	0.8254	34.76	23.99	56.00	46.00		PASS
6	1.2651	34.07	25.34	56.00	46.00		PASS

**A.2. Restricted Frequency Bands**

The lowest and highest channels are tested to verify the Restricted Frequency Bands.

The measurement results are obtained as below:

$$E \text{ [dB}\mu\text{V/m]} = U_R + A_T + A_{\text{Factor}} \text{ [dB]}; A_T = L_{\text{Cable loss}} \text{ [dB]} - G_{\text{preamp}} \text{ [dB]}$$

$A_T$ : Total correction Factor except Antenna

$U_R$ : Receiver Reading

$G_{\text{preamp}}$ : Preamplifier Gain

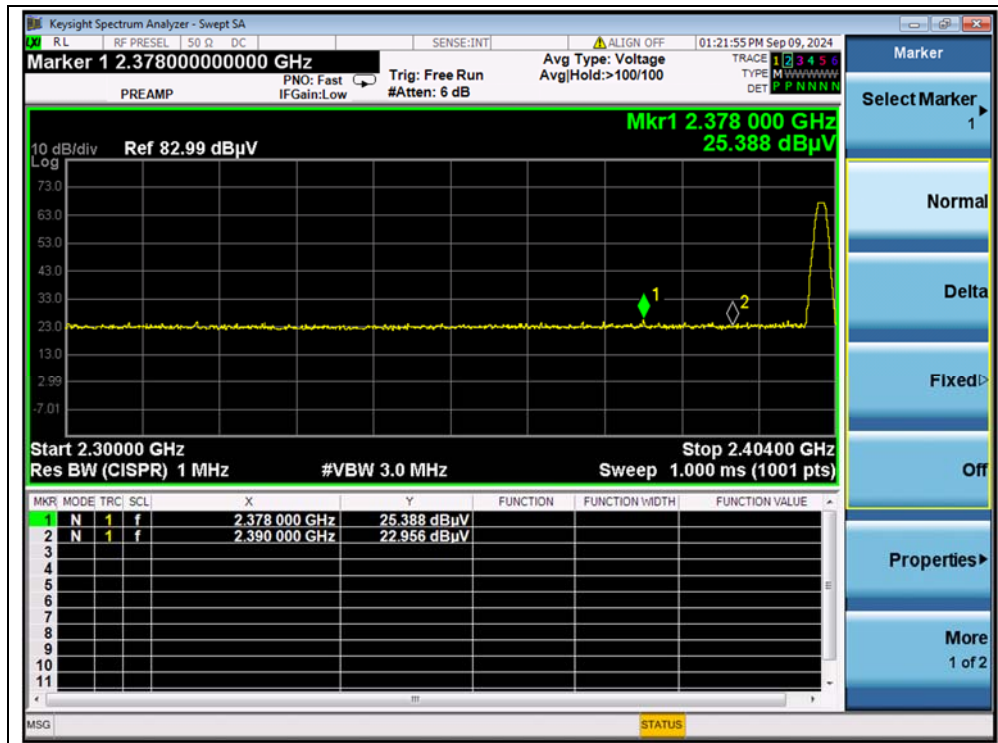
$A_{\text{Factor}}$ : Antenna Factor at 3m

**Note 1:** Restricted Frequency Bands were performed when antenna was at vertical and horizontal polarity, and only the worse test condition (Horizontal) was recorded in this test report.

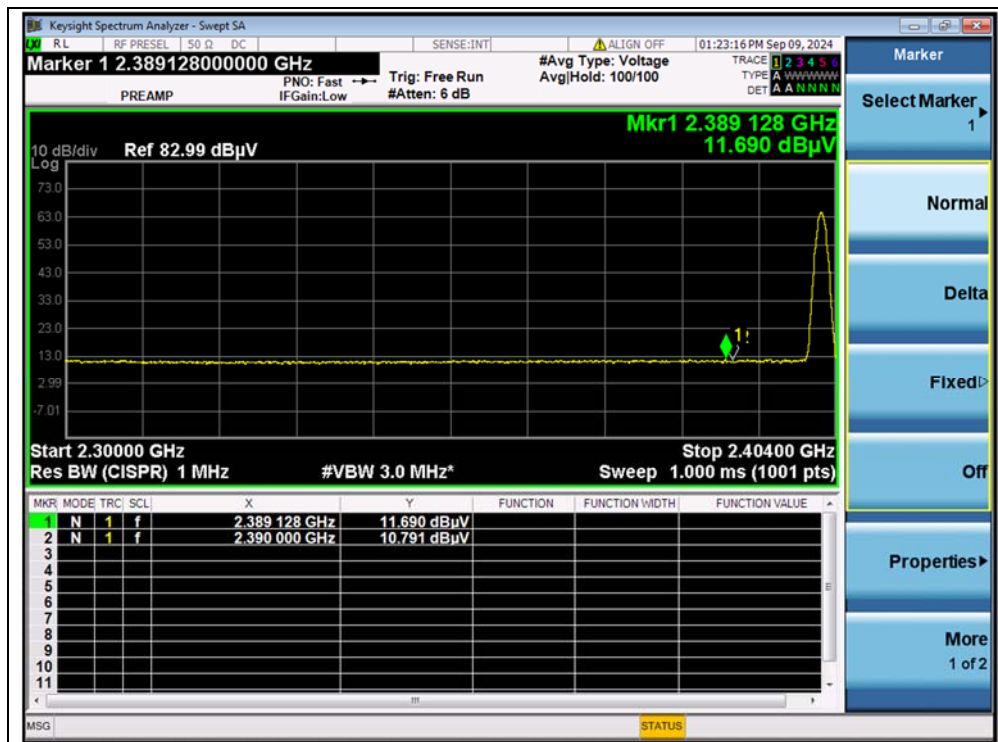
**Note 2:** All test modes were considered and evaluated respectively by performing full test, only the worst data were recorded.

**GFSK Mode**

Channel	Frequency (MHz)	Detector	Receiver Reading $U_R$ (dB $\mu$ V)	$A_T$ (dB)	$A_{\text{Factor}}$ (dB@3m)	Max. Emission E (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Verdict
		PK/ AV						
0	2378.00	PK	25.39	6.74	27.20	59.33	74	PASS
0	2389.13	AV	11.69	6.74	27.20	45.63	54	PASS
78	2484.34	PK	24.17	6.74	27.20	58.11	74	PASS
78	2483.79	AV	11.67	6.74	27.20	45.61	54	PASS



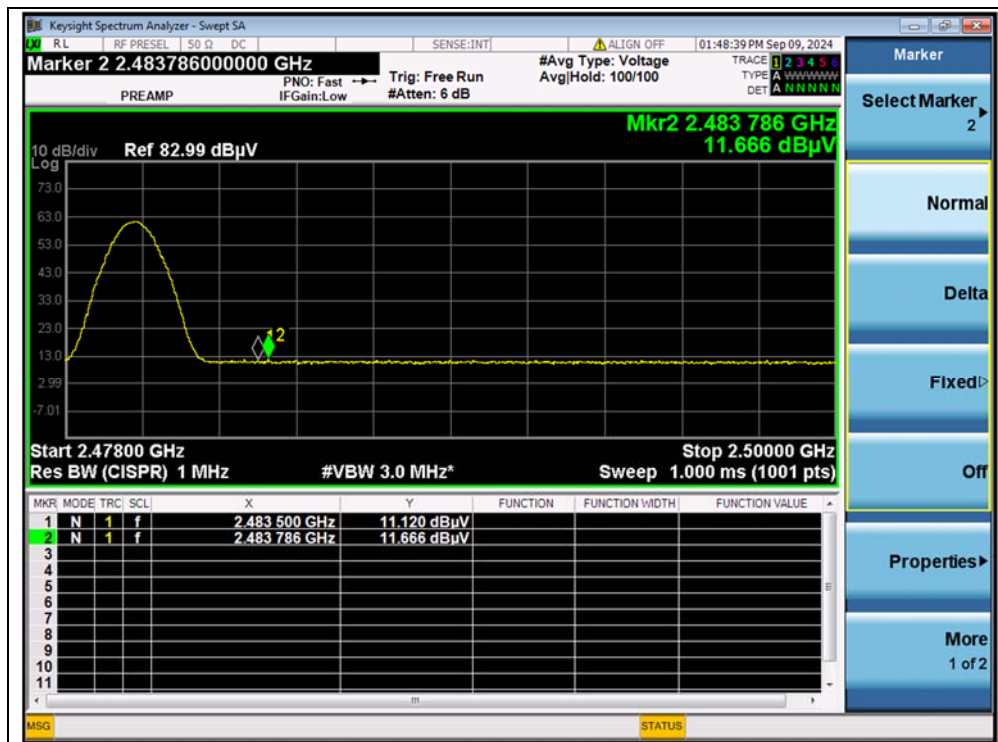
(PEAK, Channel 0, GFSK)



(AVERAGE, Channel 0, GFSK)



(PEAK, Channel 78, GFSK)

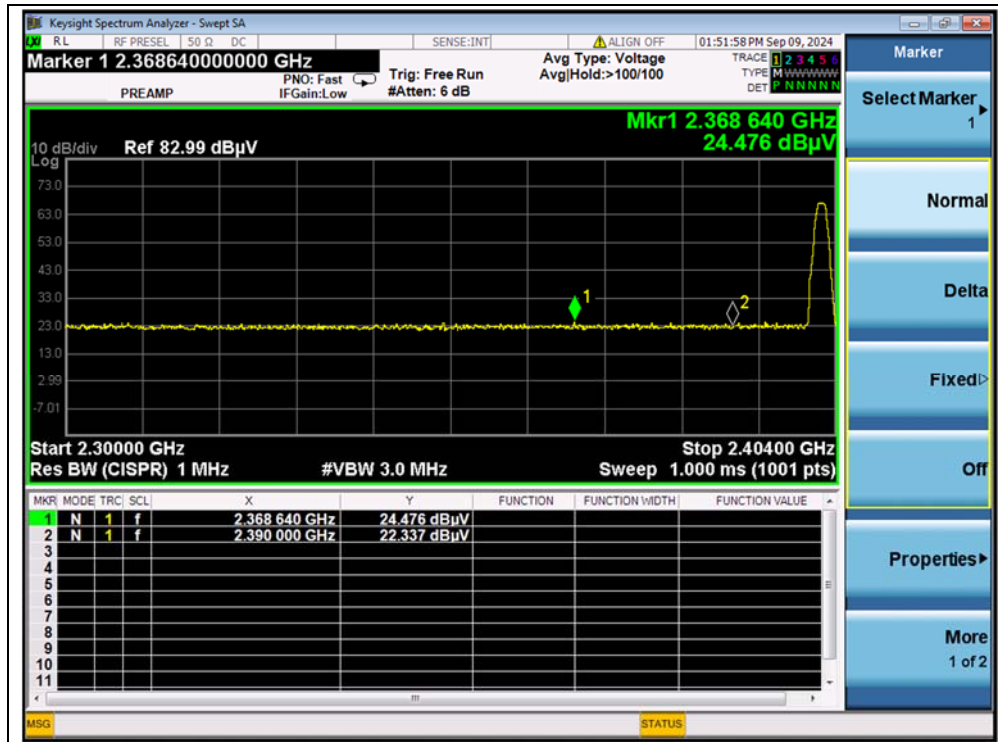


(AVERAGE, Channel 78, GFSK)



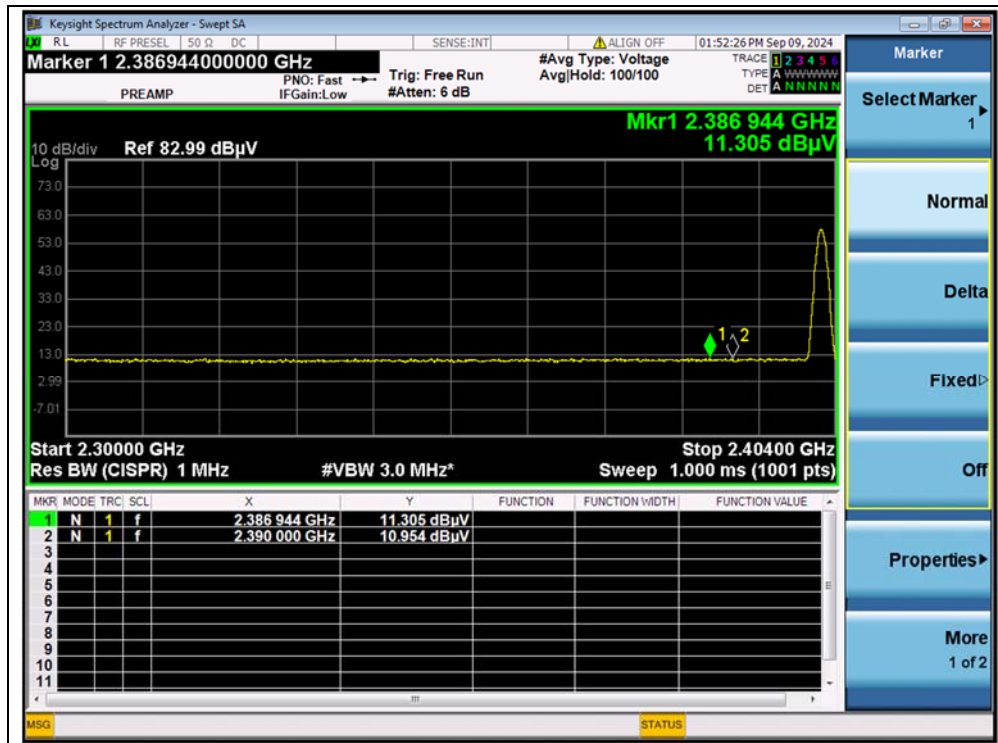
**8-DPSK Mode**

Channel	Frequency (MHz)	Detector	Receiver Reading $U_R$ (dB $\mu$ V)	$A_T$ (dB)	$A_{Factor}$ (dB@3m)	Max. Emission E (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Verdict
		PK/ AV						
0	2368.64	PK	24.48	6.74	27.20	58.42	74	PASS
0	2386.94	AV	11.31	6.74	27.20	45.25	54	PASS
78	2490.34	PK	23.80	6.74	27.20	57.74	74	PASS
78	2488.45	AV	11.39	6.74	27.20	45.33	54	PASS

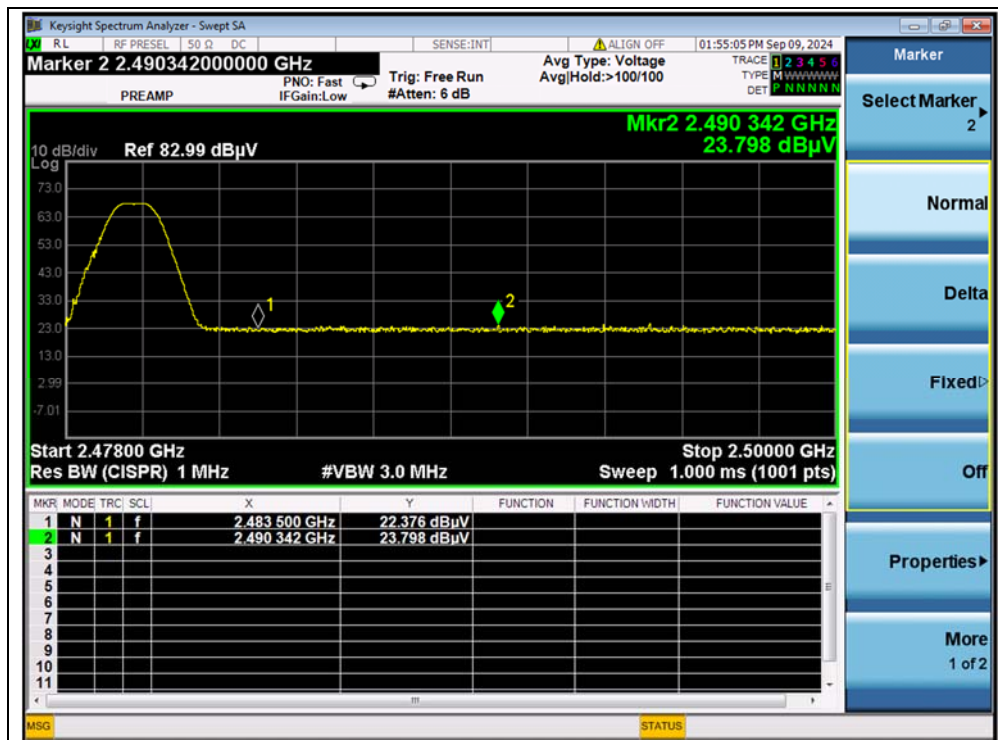


(PEAK, Channel 0, 8-DPSK)



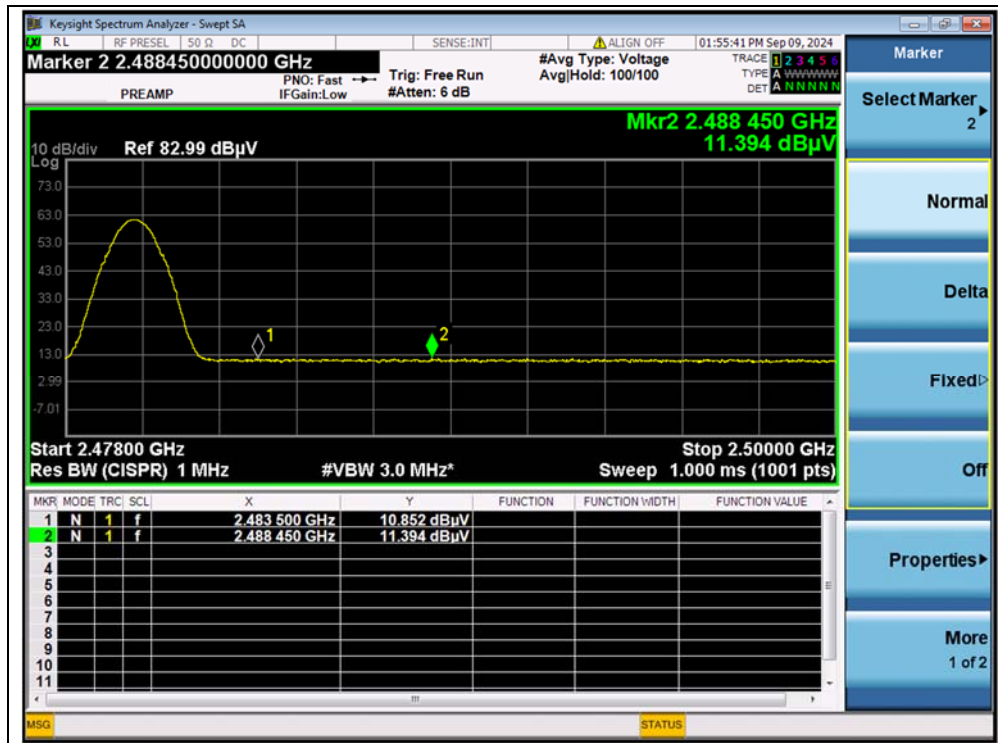


(AVERAGE, Channel 0, 8-DPSK)



(PEAK, Channel 78, 8-DPSK)





(AVERAGE, Channel 78, 8-DPSK)



**A.3. Radiated Emission**

According to ANSI C63.10, because of peak detection will yield amplitudes equal to or greater than amplitudes measured with the quasi-peak (or average) detector, the measurement data from a spectrum analyzer peak detector will represent the worst-case results, if the peak measured value complies with the quasi-peak (or average) limit, it is unnecessary to perform an quasi-peak measurement (or average).

The measurement results are obtained as below:

$$E \text{ [dB}\mu\text{V/m]} = U_R + A_T + A_{\text{Factor}} \text{ [dB]}; A_T = L_{\text{Cable loss}} \text{ [dB]} - G_{\text{preamp}} \text{ [dB]}$$

A<sub>T</sub>: Total correction Factor except Antenna

U<sub>R</sub>: Receiver Reading

G<sub>preamp</sub>: Preamplifier Gain

A<sub>Factor</sub>: Antenna Factor at 3m

During the test, the total correction Factor A<sub>T</sub> and A<sub>Factor</sub> were built in test software.

**Note1:** All radiated emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

**Note2:** For the frequency, which started from 9kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

**Note3:** For the frequency, which started from 18GHz to 10th harmonic of the highest frequency, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

**Note 4:** All test modes were considered and evaluated respectively by performing full test, only the worst data were recorded.

Field strength of fundamental:

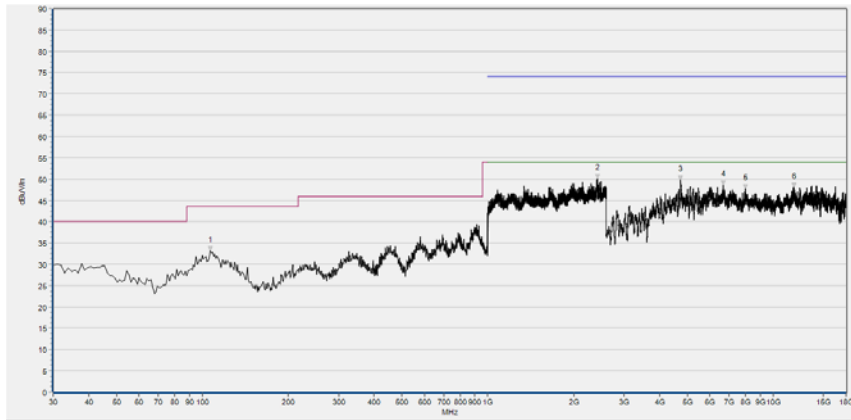
Frequency (MHz)	Reading_Peak (dBμV/m)	Antenna Factor (dB)	Path Loss (dB)	Final_Peak (dBμV/m)	Antenna Polarity
2402.27	62.17	27.20	6.74	96.11	Horizontal

The field strength (the lowest) of fundamenta is more than 20dB higher than the unwanted emissions, in accordance with FCC part 15.215(b).



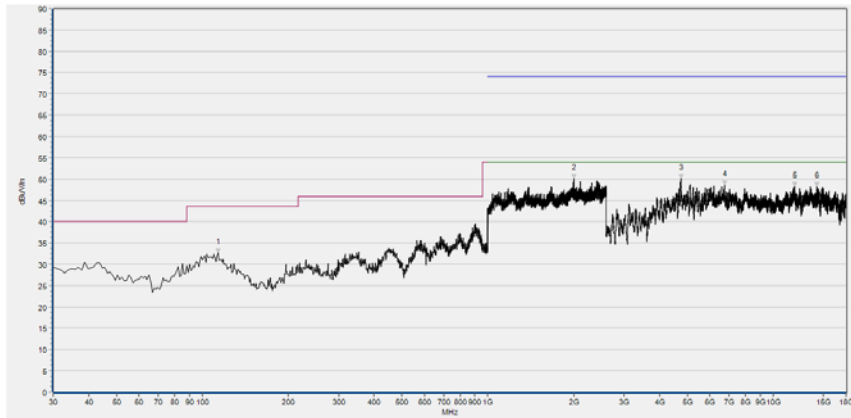
**GFSK Mode**

Plots for Channel 0



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
106.630	33.19	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2416.533	50.04	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4740.600	49.73	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
6684.080	48.59	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8005.400	47.80	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
11821.520	48.08	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

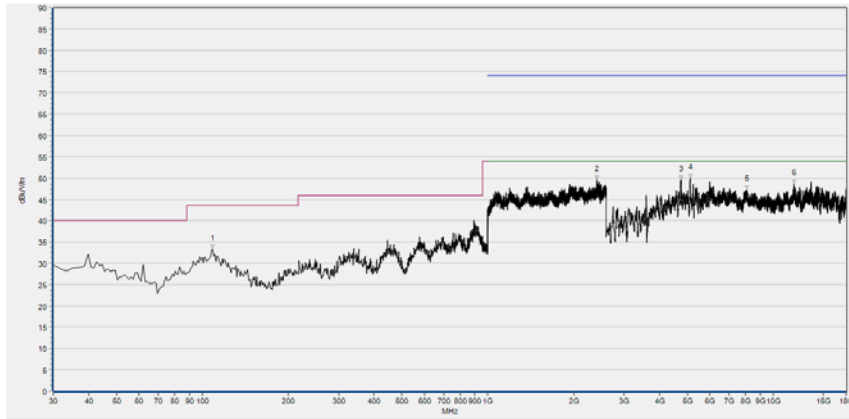
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
113.420	32.70	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2001.600	50.08	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4743.680	50.09	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
6739.520	48.60	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
11855.400	48.23	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14248.560	48.31	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

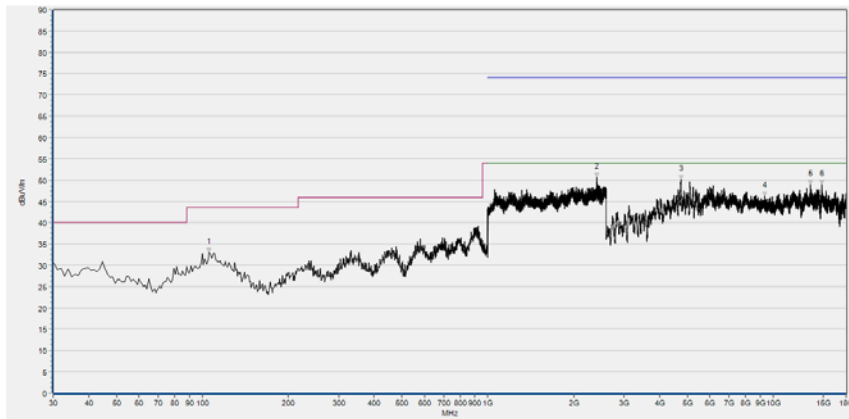
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 39



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
108.570	33.40	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2411.733	49.62	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4749.840	49.65	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5110.200	50.00	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8079.320	47.32	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
11790.720	48.54	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

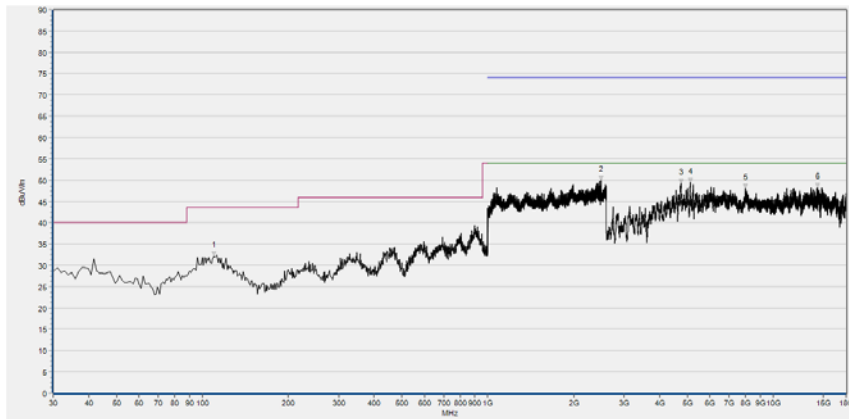
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
105.660	33.06	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2411.733	50.59	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4743.680	50.03	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9317.480	46.18	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
13469.320	48.94	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14824.520	48.98	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

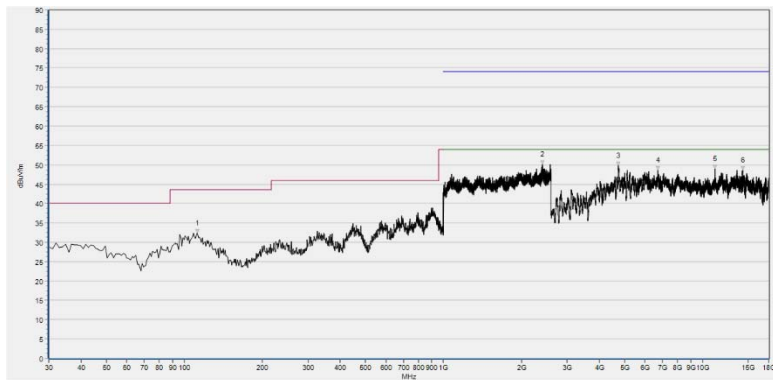
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 78



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
109.540	32.19	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2489.067	49.88	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4743.680	49.33	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5113.280	49.41	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
7971.520	48.08	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14257.800	48.21	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
112.450	32.42	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2412.267	50.03	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4731.360	49.78	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
6727.200	48.58	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
11180.880	49.01	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14254.720	48.61	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

————— END OF REPORT —————