

# FCC REPORT

**Applicant:** Jiangmen Todaair Electronics Co., Ltd

**Address of Applicant:** F.6 Electronic Building NO.1 Guangdeli Street, PengJiang District, JiangMen City, GuangDong China 52900

**Equipment Under Test (EUT)**

**Product Name:** MESH ROUTER

**Model No.:** TD-MRT43, TD-MRT20, TD-MRT40, TD-MRT42, TD-MRT43, TD-MRT44, TD-MRT45, TD-MRT46, TD-MRT47, TD-MRT48, TD-4G-1MW

**Trade mark:** TODAAIR

**FCC ID:** 2AJ6DTD-MRT43

**Applicable standards:** FCC CFR Title 47 Part 15 Subpart B

**Date of sample receipt:** 06 May, 2021

**Date of Test:** 07 May, to 20 Aug., 2021

**Date of report issued:** 20 Aug., 2021

**Test Result:** PASS \*

\* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Bruce Zhang  
Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the JYT product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. 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.

**2 Version**

Version No.	Date	Description
00	20 Aug., 2021	Original

**Tested by:**Janet Wei  
Test Engineer**Date:** 20 Aug., 2021**Reviewed by:**Winner Zhang  
Project Engineer**Date:** 20 Aug., 2021

### 3 Contents

	Page
<b>1 COVER PAGE.....</b>	<b>1</b>
<b>2 VERSION.....</b>	<b>2</b>
<b>3 CONTENTS.....</b>	<b>3</b>
<b>4 TEST SUMMARY.....</b>	<b>4</b>
<b>5 GENERAL INFORMATION.....</b>	<b>5</b>
5.1 CLIENT INFORMATION .....	5
5.2 GENERAL DESCRIPTION OF E.U.T. ....	5
5.3 TEST MODE AND TEST SAMPLES PLANS .....	5
5.4 MEASUREMENT UNCERTAINTY.....	5
5.5 DESCRIPTION OF SUPPORT UNITS .....	5
5.6 RELATED SUBMITTAL(S) / GRANT (s).....	6
5.7 DESCRIPTION OF CABLE USED .....	6
5.8 ADDITIONS TO, DEVIATIONS, OR EXCLUSIONS FROM THE METHOD .....	6
5.9 LABORATORY FACILITY.....	6
5.10 LABORATORY LOCATION.....	6
5.11 TEST INSTRUMENTS LIST.....	7
<b>6 TEST RESULTS AND MEASUREMENT DATA.....</b>	<b>8</b>
6.1 CONDUCTED EMISSION.....	8
6.2 RADIATED EMISSION .....	13
<b>7 TEST SETUP PHOTO .....</b>	<b>21</b>
<b>8 EUT CONSTRUCTIONAL DETAILS .....</b>	<b>25</b>

## 4 Test Summary

Test Item	Section in CFR 47	Result
Conducted Emission	Part 15.107	Pass
Radiated Emission	Part 15.109	Pass
<b>Remark:</b>		
1. Pass: The EUT complies with the essential requirements in the standard. 2. N/A: The EUT not applicable of the test item.		
Test Method:	ANSI C63.4:2014	

## 5 General Information

### 5.1 Client Information

Applicant:	Jiangmen Todaair Electronics Co., Ltd
Address:	F.6 Electronic Building NO.1 Guangdeli Street, PengJiang District, JiangMen City, GuangDong China 52900
Manufacturer/ Factory:	Jiangmen Todaair Electronics Co., Ltd
Address:	F.6 Electronic Building NO.1 Guangdeli Street, PengJiang District, JiangMen City, GuangDong China 52900

### 5.2 General Description of E.U.T.

Product Name:	MESH ROUTER
Model No.:	TD-MRT43, TD-MRT20, TD-MRT40, TD-MRT42, TD-MRT43, TD-MRT44, TD-MRT45, TD-MRT46, TD-MRT47, TD-MRT48, TD-4G-1MW
Power supply:	POE 48V, AC adapter
Remark:	Model No.: TD-MRT43, TD-MRT20, TD-MRT40, TD-MRT42, TD-MRT43, TD-MRT44, TD-MRT45, TD-MRT46, TD-MRT47, TD-MRT48, TD-4G-1MW were identical inside, the electrical circuit design, layout, components used and internal wiring, with only difference being model name.
Test Sample Condition:	The test samples were provided in good working order with no visible defects.

### 5.3 Test Mode and test samples plans

Operating mode	Detail description
Working mode	Keep the EUT in Working mode

The sample was placed 0.8m above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

### 5.4 Measurement Uncertainty

Parameters	Expanded Uncertainty
Conducted Emission (9kHz ~ 30MHz)	±1.60 dB (k=2)
Radiated Emission (9kHz ~ 30MHz)	±3.12 dB (k=2)
Radiated Emission (30MHz ~ 1000MHz)	±4.32 dB (k=2)
Radiated Emission (1GHz ~ 18GHz)	±5.16 dB (k=2)
Radiated Emission (18GHz ~ 40GHz)	±3.20 dB (k=2)

### 5.5 Description of Support Units

Manufacturer	Description	Model	Serial Number	FCC ID/DoC
DELL	PC	OPTIPLEX7070	2J8XSZ2	DoC
DELL	MONITOR	SE2018HR	3M7QPY2	DoC
DELL	KEYBOARD	KB216d	N/A	DoC
DELL	MOUSE	MS116t1	N/A	DoC
HP	Printer	HP LaserJet P1007	VNFP409729	DoC

## 5.6 Related Submittal(s) / Grant (s)

This is an original grant, no related submittals and grants.

## 5.7 Description of Cable Used

CableType	Description	Length	From	To
		N/A		

## 5.8 Additions to, deviations, or exclusions from the method

No

## 5.9 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

● **FCC - Designation No.: CN1211**

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

● **ISED – CAB identifier.: CN0021**

The 3m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

● **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: <https://portal.a2la.org/scopepdf/4346-01.pdf>

## 5.10 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.

Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

Tel: +86-755-23118282, Fax: +86-755-23116366

Email: info-JYTee@lets.com, Website: <http://www.ccis-cb.com>

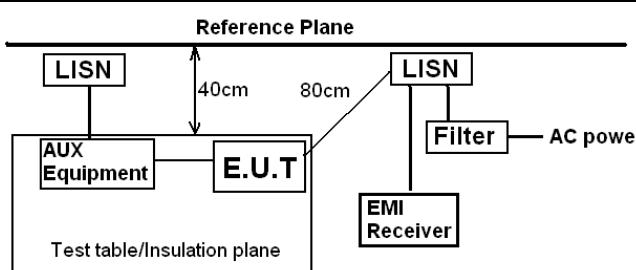
## 5.11 Test Instruments list

Radiated Emission:					
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
3m SAC	ETS	9m*6m*6m	966	01-19-2021	01-18-2024
Loop Antenna	SCHWARZBECK	FMZB1519B	00044	03-07-2020	03-06-2021
BiConiLog Antenna	SCHWARZBECK	VULB9163	497	03-03-2021	03-02-2022
Horn Antenna	SCHWARZBECK	BBHA9120D	916	03-03-2021	03-02-2022
Horn Antenna	SCHWARZBECK	BBHA9120D	1805	06-18-2020	06-17-2021
Horn Antenna	SCHWARZBECK	BBHA 9170		06-18-2021	06-17-2022
EMI Test Software	AUDIX	E3	Version: 6.110919b		
Pre-amplifier	HP	8447D	2944A09358	03-03-2021	03-02-2022
Pre-amplifier	CD	PAP-1G18	11804	03-03-2021	03-02-2022
Spectrum analyzer	Rohde & Schwarz	FSP30	101454	03-03-2021	03-02-2022
Spectrum analyzer	Rohde & Schwarz	FSP40	100363	11-18-2020	11-17-2021
EMI Test Receiver	Rohde & Schwarz	ESRP7	101070	03-03-2021	03-02-2022
Cable	ZDECL	Z108-NJ-NJ-81	1608458	03-03-2021	03-02-2022
Cable	MICRO-COAX	MFR64639	K10742-5	03-03-2021	03-02-2022
Cable	SUHNER	SUCOFLEX100	58193/4PE	03-03-2021	03-02-2022
10m SAC	ETS	RFSD-100-F/A	Q2005	03-31-2021	04-01-2024
BiConiLog Antenna	SCHWARZBECK	VULB 9168	1249	03-31-2021	04-01-2022
BiConiLog Antenna	SCHWARZBECK	VULB 9168	1250	03-31-2021	04-01-2022
EMI Test Receiver	R&S	ESR 3	102800	04-06-2021	04-07-2022
EMI Test Receiver	R&S	ESR 3	102802	04-06-2021	04-07-2022
Pre-amplifier	Bost	LNA 0920N	2016	04-06-2021	04-07-2022
Pre-amplifier	Bost	LNA 0920N	2019	04-06-2021	04-07-2022
Test Software	R&S	EMC32	Version: 10.50.40		

Conducted Emission:					
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
EMI Test Receiver	Rohde & Schwarz	ESCI	101189	03-03-2021	03-02-2022
Pulse Limiter	SCHWARZBECK	OSRAM 2306	9731	03-03-2021	03-02-2022
LISN	CHASE	MN2050D	1447	03-03-2021	03-02-2022
LISN	Rohde & Schwarz	ESH3-Z5	8438621/010	06-18-2020	06-17-2021
Cable	HP	10503A		06-18-2021	06-17-2022
EMI Test Software	AUDIX	E3	Version: 6.110919b		

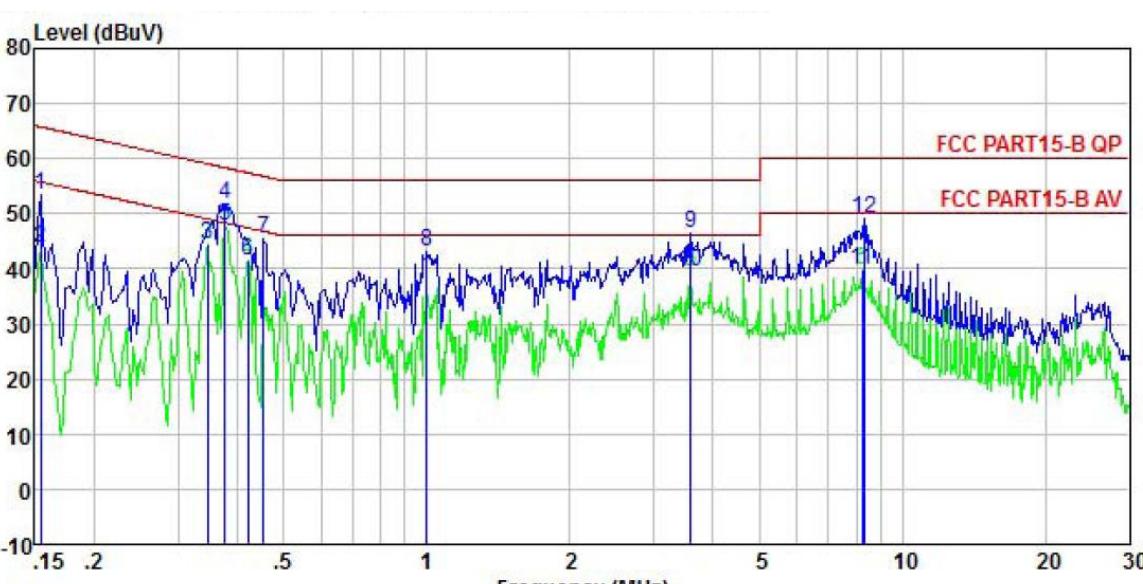
## 6 Test results and Measurement Data

### 6.1 Conducted Emission

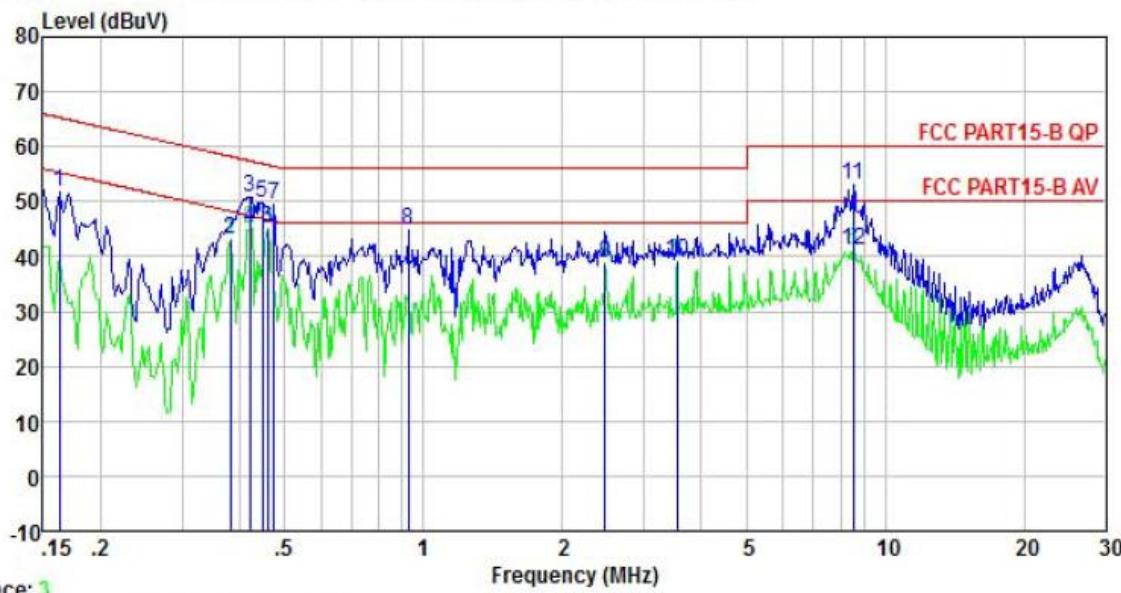
Test Requirement:	FCC Part 15 B Section 15.107		
Test Frequency Range:	150kHz to 30MHz		
Class / Severity:	Class B		
Receiver setup:	RBW=9kHz, VBW=30kHz		
Limit:	Frequency range (MHz)		Limit (dB $\mu$ V)
		Quasi-peak	Average
	0.15-0.5	66 to 56*	56 to 46*
	0.5-5	56	46
	0.5-30	60	50
* Decreases with the logarithm of the frequency.			
Test setup:	 <p><i>Remark:</i>  <i>E.U.T. Equipment Under Test</i>  <i>LISN: Line Impedance Stabilization Network</i>  <i>Test table height=0.8m</i></p>		
Test procedure	<ol style="list-style-type: none"> <li>1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). They provide a 50ohm/50uH coupling impedance for the measuring equipment.</li> <li>2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).</li> <li>3. 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 C63.4(latest version) on conducted measurement.</li> </ol>		
Test Instruments:	Refer to section 5.11 for details		
Test mode:	Refer to section 5.3 for details		
Test results:	Pass		

## Measurement data:

## POE power supply:

Product name:	MESH ROUTER			Product model:	TD-MRT43																																																																																																																																
Test by:	Janet			Test mode:	Working mode																																																																																																																																
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<table border="1"> <thead> <tr> <th>Freq</th> <th>Read Level</th> <th>LISM Factor</th> <th>Aux Factor</th> <th>Cable Loss</th> <th>Level</th> <th>Limit Line</th> <th>Over Limit</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>MHz</td> <td>dBuV</td> <td>dB</td> <td>dB</td> <td>dB</td> <td>dBuV</td> <td>dBuV</td> <td>dB</td> <td></td> </tr> <tr> <td>1</td> <td>0.154</td> <td>43.34</td> <td>10.12</td> <td>-0.06</td> <td>0.01</td> <td>53.41</td> <td>65.78</td> <td>-12.37 QP</td> </tr> <tr> <td>2</td> <td>0.154</td> <td>33.77</td> <td>10.12</td> <td>-0.06</td> <td>0.01</td> <td>43.84</td> <td>55.78</td> <td>-11.94 Average</td> </tr> <tr> <td>3</td> <td>0.346</td> <td>34.12</td> <td>10.25</td> <td>0.08</td> <td>0.02</td> <td>44.47</td> <td>49.05</td> <td>-4.58 Average</td> </tr> <tr> <td>4</td> <td>0.377</td> <td>41.10</td> <td>10.27</td> <td>0.27</td> <td>0.03</td> <td>51.67</td> <td>58.34</td> <td>-6.67 QP</td> </tr> <tr> <td>5</td> <td>0.377</td> <td>37.16</td> <td>10.27</td> <td>0.27</td> <td>0.03</td> <td>47.73</td> <td>48.34</td> <td>-0.61 Average</td> </tr> <tr> <td>6</td> <td>0.421</td> <td>30.86</td> <td>10.30</td> <td>0.25</td> <td>0.04</td> <td>41.45</td> <td>47.42</td> <td>-5.97 Average</td> </tr> <tr> <td>7</td> <td>0.454</td> <td>35.02</td> <td>10.32</td> <td>-0.01</td> <td>0.03</td> <td>45.36</td> <td>56.80</td> <td>-11.44 QP</td> </tr> <tr> <td>8</td> <td>1.000</td> <td>32.17</td> <td>10.48</td> <td>0.46</td> <td>0.05</td> <td>43.16</td> <td>56.00</td> <td>-12.84 QP</td> </tr> <tr> <td>9</td> <td>3.584</td> <td>35.92</td> <td>10.61</td> <td>-0.11</td> <td>0.08</td> <td>46.50</td> <td>56.00</td> <td>-9.50 QP</td> </tr> <tr> <td>10</td> <td>3.584</td> <td>28.90</td> <td>10.61</td> <td>-0.11</td> <td>0.08</td> <td>39.48</td> <td>46.00</td> <td>-6.52 Average</td> </tr> <tr> <td>11</td> <td>8.235</td> <td>27.37</td> <td>10.78</td> <td>1.61</td> <td>0.10</td> <td>39.86</td> <td>50.00</td> <td>-10.14 Average</td> </tr> <tr> <td>12</td> <td>8.323</td> <td>36.61</td> <td>10.78</td> <td>1.63</td> <td>0.10</td> <td>49.12</td> <td>60.00</td> <td>-10.88 QP</td> </tr> </tbody> </table>								Freq	Read Level	LISM Factor	Aux Factor	Cable Loss	Level	Limit Line	Over Limit	Remark	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB		1	0.154	43.34	10.12	-0.06	0.01	53.41	65.78	-12.37 QP	2	0.154	33.77	10.12	-0.06	0.01	43.84	55.78	-11.94 Average	3	0.346	34.12	10.25	0.08	0.02	44.47	49.05	-4.58 Average	4	0.377	41.10	10.27	0.27	0.03	51.67	58.34	-6.67 QP	5	0.377	37.16	10.27	0.27	0.03	47.73	48.34	-0.61 Average	6	0.421	30.86	10.30	0.25	0.04	41.45	47.42	-5.97 Average	7	0.454	35.02	10.32	-0.01	0.03	45.36	56.80	-11.44 QP	8	1.000	32.17	10.48	0.46	0.05	43.16	56.00	-12.84 QP	9	3.584	35.92	10.61	-0.11	0.08	46.50	56.00	-9.50 QP	10	3.584	28.90	10.61	-0.11	0.08	39.48	46.00	-6.52 Average	11	8.235	27.37	10.78	1.61	0.10	39.86	50.00	-10.14 Average	12	8.323	36.61	10.78	1.63	0.10	49.12	60.00	-10.88 QP
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<b>Product name:</b>	MESH ROUTER	<b>Product model:</b>	TD-MRT43
<b>Test by:</b>	Janet	<b>Test mode:</b>	Working mode
<b>Test frequency:</b>	150 kHz ~ 30 MHz	<b>Phase:</b>	Neutral
<b>Test voltage:</b>	AC 120 V/60 Hz	<b>Environment:</b>	Temp: 22.5°C Huni: 55%



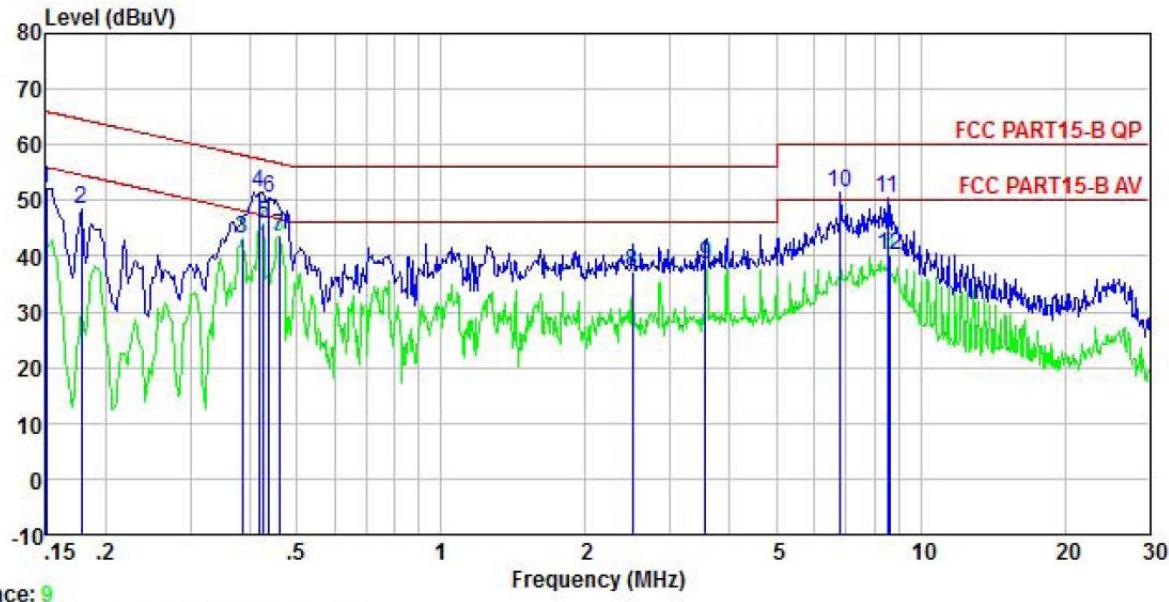
Freq MHz	Read Level	LISN Factor	Aux Factor	Cable Loss	Level dBuV	Limit Line	Over Limit	Remark
	dBuV			dB		dBuV	dBuV	
1	0.162	41.91	9.90	0.01	0.01	51.83	65.34	-13.51 QP
2	0.381	33.08	10.10	-0.05	0.03	43.16	48.25	-5.09 Average
3	0.421	40.79	10.14	-0.04	0.04	50.93	57.42	-6.49 QP
4	0.421	34.91	10.14	-0.04	0.04	45.05	47.42	-2.37 Average
5	0.447	39.50	10.16	-0.02	0.03	49.67	56.93	-7.26 QP
6	0.459	34.81	10.17	0.00	0.03	45.01	46.71	-1.70 Average
7	0.474	39.18	10.18	0.01	0.03	49.40	56.45	-7.05 QP
8	0.928	34.15	10.52	0.07	0.04	44.78	56.00	-11.22 QP
9	2.474	27.72	10.85	0.24	0.14	38.95	46.00	-7.05 Average
10	3.547	27.56	10.94	0.43	0.08	39.01	46.00	-6.99 Average
11	8.546	40.74	11.17	1.15	0.11	53.17	60.00	-6.83 QP
12	8.546	28.77	11.17	1.15	0.11	41.20	50.00	-8.80 Average

Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level = Receiver Read level + LISN Factor + Cable Loss.

## Adapter power supply:

Product name:	MESH ROUTER	Product model:	TD-MRT43
Test by:	Janet	Test mode:	Working mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Line
Test voltage:	AC 120 V/60 Hz	Environment:	Temp: 22.5°C Huni: 55%



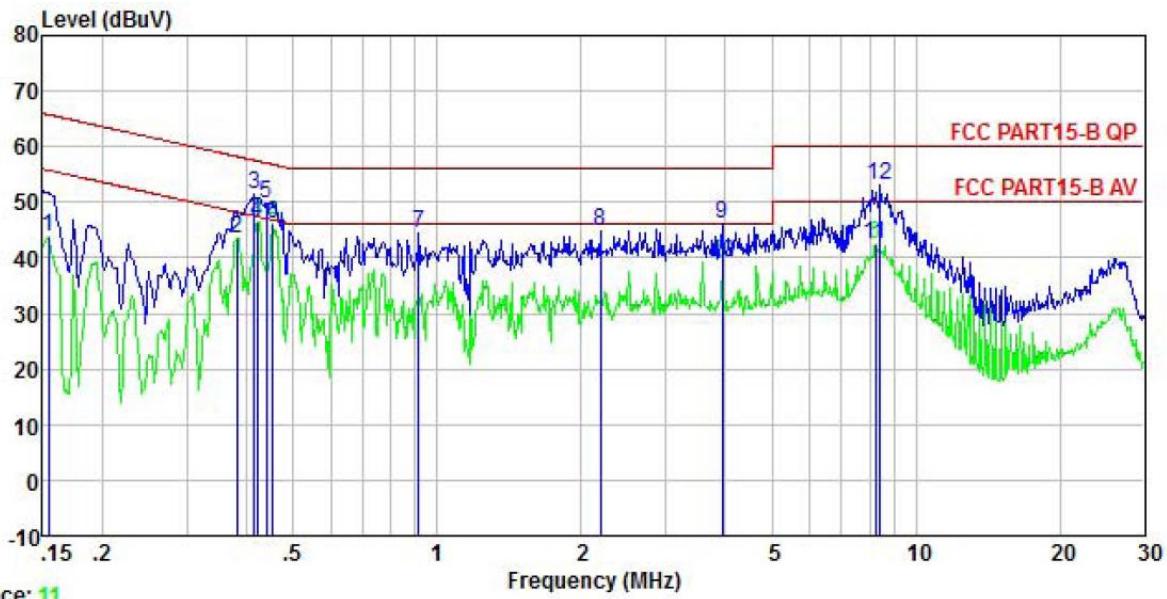
Trace: 9

Freq	Read	LISN	Aux	Cable	Limit	Over	Remark
	MHz	dBuV	Factor	Factor			
1	0.150	42.17	10.12	-0.05	0.01	52.25	66.00 -13.75 QP
2	0.178	38.51	10.13	-0.12	0.01	48.53	64.59 -16.06 QP
3	0.385	32.62	10.27	0.33	0.03	43.25	48.17 -4.92 Average
4	0.417	40.80	10.29	0.28	0.04	51.41	57.51 -6.10 QP
5	0.426	35.33	10.30	0.19	0.03	45.85	47.33 -1.48 Average
6	0.437	40.12	10.31	0.11	0.03	50.57	57.11 -6.54 QP
7	0.459	33.32	10.32	-0.06	0.03	43.61	46.71 -3.10 Average
8	2.500	26.78	10.56	-0.26	0.13	37.21	46.00 -8.79 Average
9	3.565	27.90	10.61	-0.11	0.08	38.48	46.00 -7.52 Average
10	6.805	39.52	10.72	1.21	0.10	51.55	60.00 -8.45 QP
11	8.546	37.88	10.78	1.67	0.11	50.44	60.00 -9.56 QP
12	8.592	27.65	10.79	1.68	0.11	40.23	50.00 -9.77 Average

## Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level =Receiver Read level + LISN Factor + Cable Loss.

<b>Product name:</b>	MESH ROUTER	<b>Product model:</b>	TD-MRT43
<b>Test by:</b>	Janet	<b>Test mode:</b>	Working mode
<b>Test frequency:</b>	150 kHz ~ 30 MHz	<b>Phase:</b>	Neutral
<b>Test voltage:</b>	AC 120 V/60 Hz	<b>Environment:</b>	Temp: 22.5°C Huni: 55%



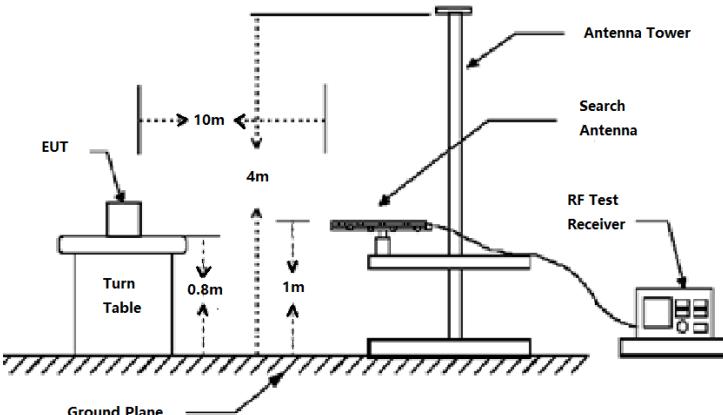
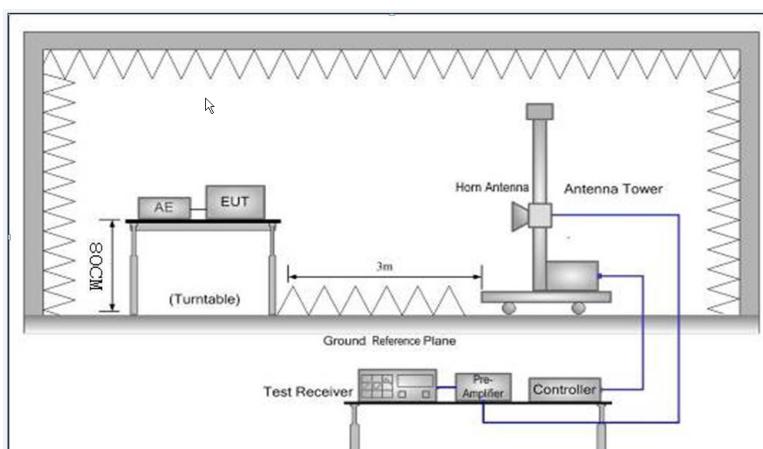
Trace: 11

Freq	Read	LISN	Aux	Cable	Limit	Over	Over	Remark
	MHz	dBuV	dB	dB				
1	0.154	33.74	9.89	0.01	0.01	43.65	55.78	-12.13 Average
2	0.381	33.55	10.10	-0.05	0.03	43.63	48.25	-4.62 Average
3	0.415	41.29	10.13	-0.05	0.04	51.41	57.55	-6.14 QP
4	0.421	36.24	10.14	-0.04	0.04	46.38	47.42	-1.04 Average
5	0.440	39.74	10.15	-0.02	0.03	49.90	57.07	-7.17 QP
6	0.454	35.82	10.16	-0.01	0.03	46.00	46.80	-0.80 Average
7	0.914	33.96	10.51	0.07	0.04	44.58	56.00	-11.42 QP
8	2.190	33.69	10.82	0.20	0.18	44.89	56.00	-11.11 QP
9	3.943	34.58	10.96	0.50	0.08	46.12	56.00	-9.88 QP
10	3.943	27.54	10.96	0.50	0.08	39.08	46.00	-6.92 Average
11	8.235	30.05	11.16	1.09	0.10	42.40	50.00	-7.60 Average
12	8.412	40.82	11.16	1.12	0.10	53.20	60.00	-6.80 QP

## Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level = Receiver Read level + LISN Factor + Cable Loss.

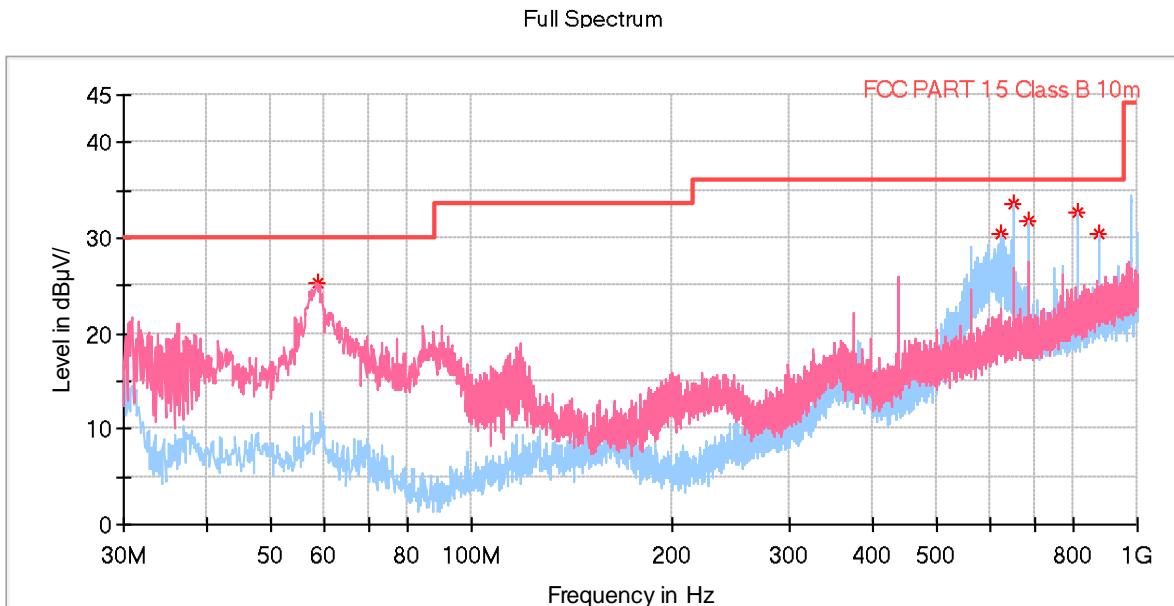
## 6.2 Radiated Emission

Test Requirement:	FCC Part 15 B Section 15.109									
Test Frequency Range:	30MHz to 6000MHz									
Test site:	Measurement Distance: 3m or 10m (Semi-Anechoic Chamber)									
Receiver setup:	Frequency	Detector	RBW	VBW	Remark					
	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak Value					
	Above 1GHz	Peak	1MHz	3MHz	Peak Value					
Limit:	RMS	1MHz	3MHz		Average Value					
	Frequency	Limit (dBuV/m @10m)		Remark						
	30MHz-88MHz	30.0		Quasi-peak Value						
Test setup:	88MHz-216MHz	33.5		Quasi-peak Value						
	216MHz-960MHz	36.0		Quasi-peak Value						
	960MHz-1GHz	44.0		Quasi-peak Value						
Test setup:	Frequency	Limit (dBuV/m @3m)		Remark						
	Above 1GHz	54.0		Average Value						
		74.0		Peak Value						
										
										
Test Procedure:	<ol style="list-style-type: none"> <li>The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter chamber (below 1GHz) or 3 meter chamber(above 1GHz). The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>The EUT was set 10 meters(below 1GHz) or 3 meters(above 1GHz) away from the interference-receiving antenna, which was mounted on</li> </ol>									

	<p>the top of a variable-height antenna tower.</p> <p>3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</p> <p>4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.</p> <p>5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</p> <p>6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</p>
Test Instruments:	Refer to section 5.11 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed
Remark:	All of the observed value above 6GHz were the noise floor , which were not recorded

**Measurement Data:****POE power supply:****Below 1GHz:**

<b>Product Name:</b>	MESH ROUTER	<b>Product Model:</b>	TD-MRT43
<b>Test By:</b>	Janet	<b>Test mode:</b>	Working mode
<b>Test Frequency:</b>	30 MHz ~ 1 GHz	<b>Polarization:</b>	Vertical & Horizontal
<b>Test Voltage:</b>	AC 120/60Hz	<b>Environment:</b>	Temp: 24°C Huni: 57%



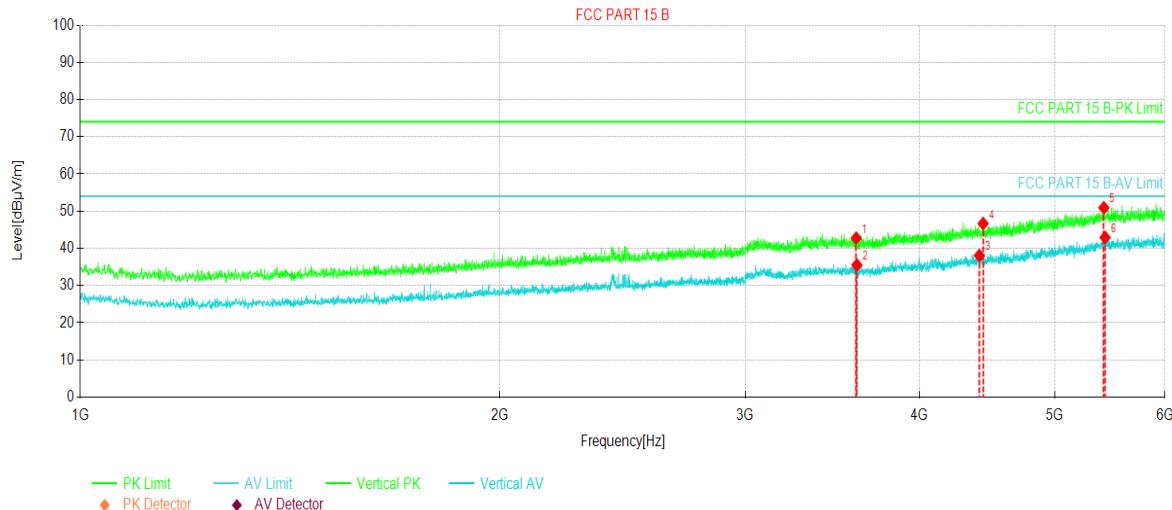
Frequency ↓ (MHz)	MaxPeak ↓ (dB μV/m)	Limit ↓ (dB μ)	Margin ↓ (dB)	Height ↓ (cm)	Pol	Azimuth ↓ (deg)	Corr. ↓ (dB/m)
58.518000	25.37	30.00	4.63	100.0	V	88.0	-16.3
622.379000	30.43	36.00	5.57	100.0	H	218.0	-6.2
650.024000	33.49	36.00	2.51	100.0	H	129.0	-5.8
687.563000	31.75	36.00	4.25	100.0	H	150.0	-5.3
812.499000	32.61	36.00	3.39	100.0	H	197.0	-3.0
875.064000	30.45	36.00	5.55	100.0	H	202.0	-1.7

**Remark:**

- Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.
- The emission levels of other frequencies are very lower than the limit and not show in test report.
- The Aux Factor is a notch filter switch box loss, this item is not used.

## Above 1GHz:

<b>Product Name:</b>	MESH ROUTER	<b>Product Model:</b>	TD-MRT43
<b>Test By:</b>	Janet	<b>Test mode:</b>	Working mode
<b>Test Frequency:</b>	1 GHz ~ 6 GHz	<b>Polarization:</b>	Vertical
<b>Test Voltage:</b>	AC 120/60Hz	<b>Environment:</b>	Temp: 24°C Huni: 57%

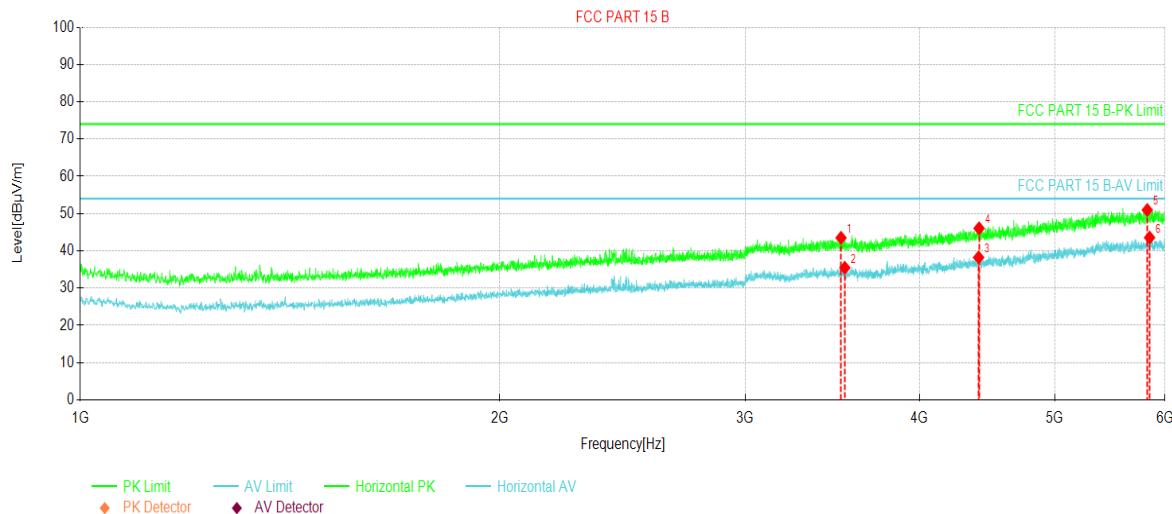


NO.	Freq. [MHz]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Factor [dB]	Limit [dB $\mu$ V/m]	Margin [dB]	Trace	Polarity
1	3603.12	57.64	42.74	-14.90	74.00	31.26	PK	Vertical
2	3606.87	50.40	35.52	-14.88	54.00	18.48	AV	Vertical
3	4415.62	49.19	38.07	-11.12	54.00	15.93	AV	Vertical
4	4443.12	57.68	46.66	-11.02	74.00	27.34	PK	Vertical
5	5423.75	56.88	50.91	-5.97	74.00	23.09	PK	Vertical
6	5434.37	48.90	42.92	-5.98	54.00	11.08	AV	Vertical

## Remark:

- Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.
- The emission levels of other frequencies are very lower than the limit and not show in test report.

<b>Product Name:</b>	MESH ROUTER	<b>Product Model:</b>	TD-MRT43
<b>Test By:</b>	Janet	<b>Test mode:</b>	Working mode
<b>Test Frequency:</b>	1 GHz ~ 6 GHz	<b>Polarization:</b>	Horizontal
<b>Test Voltage:</b>	AC 120/60Hz	<b>Environment:</b>	Temp: 24°C Huni: 57%



NO.	Freq. [MHz]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Factor [dB]	Limit [dB $\mu$ V/m]	Margin [dB]	Trace	Polarity
1	3513.75	58.33	43.48	-14.85	74.00	30.52	PK	Horizontal
2	3535.62	50.31	35.45	-14.86	54.00	18.55	AV	Horizontal
3	4410.00	49.35	38.21	-11.14	54.00	15.79	AV	Horizontal
4	4413.75	57.15	46.02	-11.13	74.00	27.98	PK	Horizontal
5	5826.87	56.05	50.96	-5.09	74.00	23.04	PK	Horizontal
6	5849.37	48.55	43.55	-5.00	54.00	10.45	AV	Horizontal

Remark:

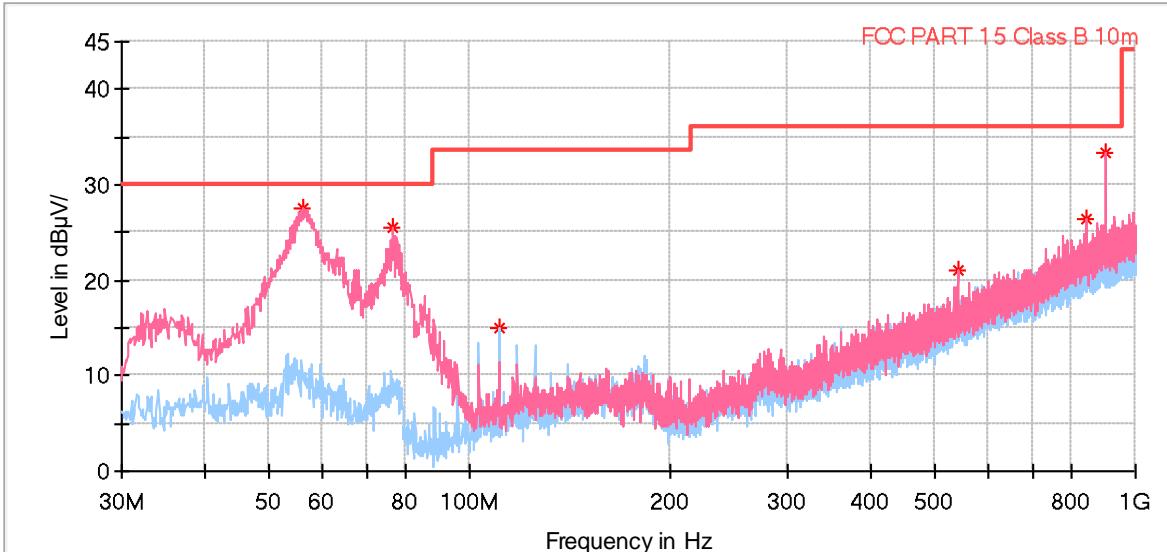
- Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.
- The emission levels of other frequencies are very lower than the limit and not show in test report.

## Adapter power supply:

Below 1GHz:

Product Name:	MESH ROUTER	Product Model:	TD-MRT43
Test By:	Janet	Test mode:	Working mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Vertical & Horizontal
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%

Full Spectrum



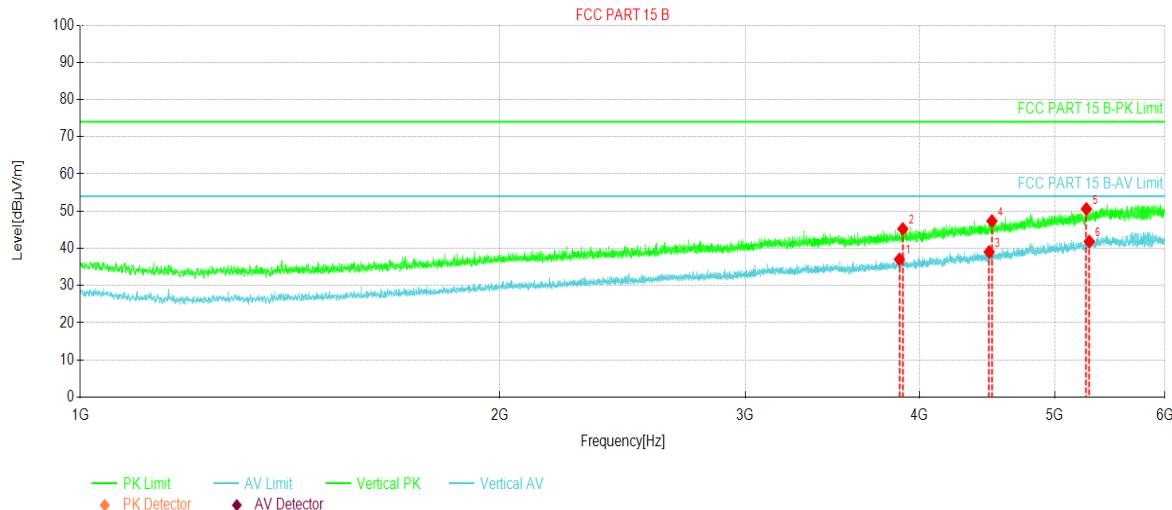
Frequency ↓ (MHz)	MaxPeak ↓ (dBµV/m)	Limit ↓ (dBµV/m)	Margin ↓ (dB)	Height ↓ (cm)	Pol	Azimuth ↓ (deg)	Corr. ↓ (dB/m)
56.287000	27.50	30.00	2.50	100.0	V	264.0	-16.1
76.657000	25.42	30.00	4.58	100.0	V	152.0	-19.5
110.510000	14.96	33.50	18.54	100.0	H	19.0	-18.0
540.026000	21.04	36.00	14.96	100.0	V	108.0	-8.0
845.188000	26.40	36.00	9.60	100.0	V	168.0	-1.7
902.903000	33.32	36.00	2.68	100.0	V	156.0	-0.7

## Remark:

- Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.
- The emission levels of other frequencies are very lower than the limit and not show in test report.
- The Aux Factor is a notch filter switch box loss, this item is not used.

## Above 1GHz:

<b>Product Name:</b>	MESH ROUTER	<b>Product Model:</b>	TD-MRT43
<b>Test By:</b>	Janet	<b>Test mode:</b>	Working mode
<b>Test Frequency:</b>	1 GHz ~ 6 GHz	<b>Polarization:</b>	Vertical
<b>Test Voltage:</b>	AC 120/60Hz	<b>Environment:</b>	Temp: 24°C Huni: 57%

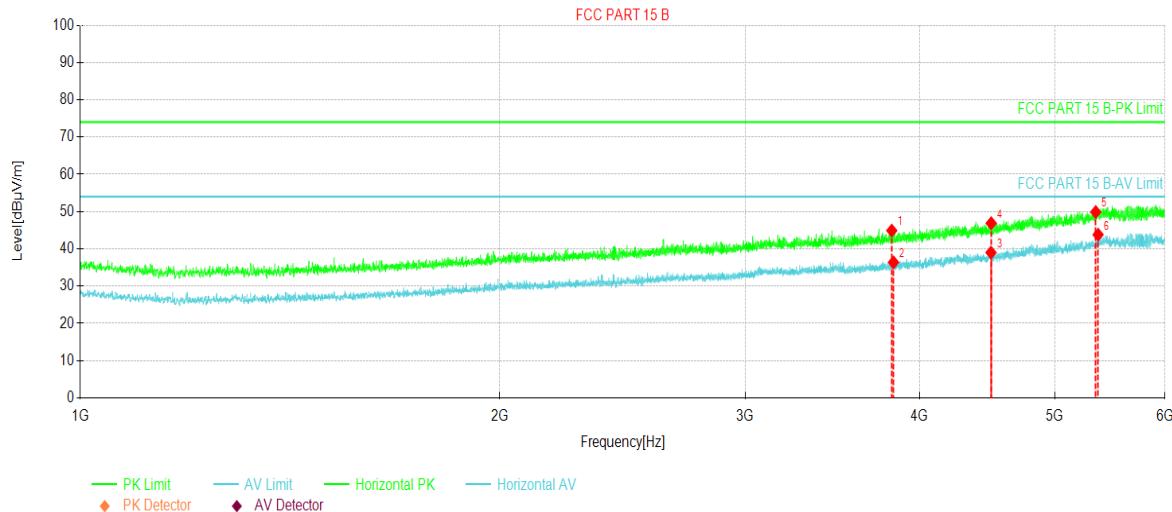


NO.	Freq. [MHz]	Reading [dBuV/m]	Level [dBuV/m]	Factor [dB]	Limit [dBuV/m]	Margin [dB]	Trace	Polarity
1	3869.28	50.67	37.05	-13.62	54.00	16.95	AV	Vertical
2	3890.78	58.75	45.21	-13.54	74.00	28.79	PK	Vertical
3	4487.34	49.90	39.04	-10.86	54.00	14.96	AV	Vertical
4	4507.85	58.10	47.33	-10.77	74.00	26.67	PK	Vertical
5	5269.42	57.46	50.59	-6.87	74.00	23.41	PK	Vertical
6	5294.42	48.53	41.84	-6.69	54.00	12.16	AV	Vertical

## Remark:

- Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.
- The emission levels of other frequencies are very lower than the limit and not show in test report.

<b>Product Name:</b>	MESH ROUTER	<b>Product Model:</b>	TD-MRT43
<b>Test By:</b>	Janet	<b>Test mode:</b>	Working mode
<b>Test Frequency:</b>	1 GHz ~ 6 GHz	<b>Polarization:</b>	Horizontal
<b>Test Voltage:</b>	AC 120/60Hz	<b>Environment:</b>	Temp: 24°C Huni: 57%



NO.	Freq. [MHz]	Reading [dB $\mu$ V/m]	Level [dB $\mu$ V/m]	Factor [dB]	Limit [dB $\mu$ V/m]	Margin [dB]	Trace	Polarity
1	3820.78	58.70	44.90	-13.80	74.00	29.10	PK	Horizontal
2	3831.78	50.12	36.36	-13.76	54.00	17.64	AV	Horizontal
3	4501.35	49.79	38.99	-10.80	54.00	15.01	AV	Horizontal
4	4502.85	57.67	46.87	-10.80	74.00	27.13	PK	Horizontal
5	5351.43	56.16	49.88	-6.28	74.00	24.12	PK	Horizontal
6	5372.43	49.93	43.80	-6.13	54.00	10.20	AV	Horizontal

*Remark:*

- Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.
- The emission levels of other frequencies are very lower than the limit and not show in test report.

## **8 EUT Constructional Details**

Reference to the test report No.: JYTSZB-R12-2100690.

-----End of report-----