

FCC&IC TEST REPORT

No. HMN211605075-11

Applicant: VOGTEC (H.K.) CO., LIMITED

Product: 3G DESKTOP PHONE

Model: D379H

FCC ID: 2AKD7D379H

IC: 22169-D379H

Issued Date: 2017-01-06

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of Shenzhen Hua Mei Na Testing Technology Co., Ltd.

Test Lab:

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Revision Version

Rev.	Issue Date	Revisions	Revised By
00	2017-01-16	Initial Issue	

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1 General Information

1.1 Summary of Test Result

FCC Rules	IC Rules	Description of Test	Result	Remark
FCC § 15.107	ICES-003 § 6.1	AC Line Conducted Emissions	PASS	Meet Class B limit
FCC § 15.109	ICES-003 § 6.2	Radiated Emission	PASS	Meet Class B limit

Remark: The test results of this report relate only to the tested sample(s) identified in this report. Manufacturer or whom it may concern should recognize the pass or fail of the test result.

1.2 Test Methodology Reference

C63.4-2014: American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

1.3 Measurement Uncertainty

Conducted Emission

The measurement uncertainty is evaluated as ± 2.26 dB.

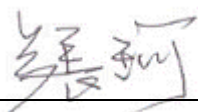
Radiated Emission

The measurement uncertainty is evaluated as ± 3.19 dB.

1.4 Details about the Test Laboratory

Test site Telecommunication Technology Labs
Address TCL International E city No. 1001, Zhongshanyuan Road, Nanshan District,, Shenzhen Guangdong Province PR, 518048 China
Registration Number 342690

Report Issued by: Shenzhen Hua Mei Na Testing Technology Co., Ltd
Address: C1-B Building,TCL Intenational E Industry Park, No.1001 Zhongshanyuan Road, Nanshan District, Shenzhen, China. 518055



Zhang Ke/ Hua Mei Na Lab Supervisor
(Approved this Test Report)

2 EUT Description

Product	3G DESKTOP PHONE
Model Number	D379H
FCC ID	2AKD7D379H
IC	22169-D379H
Applicant	VOGTEC (H.K.) CO., LIMITED 12/F., AT Tower, No.180 Electric Road, North Point, H.K
Manufacturer	VOGTEC Technology Co.,Ltd RM 222,2F,Kanghesheng Building,No.1 ChuangSheng Rd,NanShan District,Shenzhen,GuangDong

I/O Port Description:

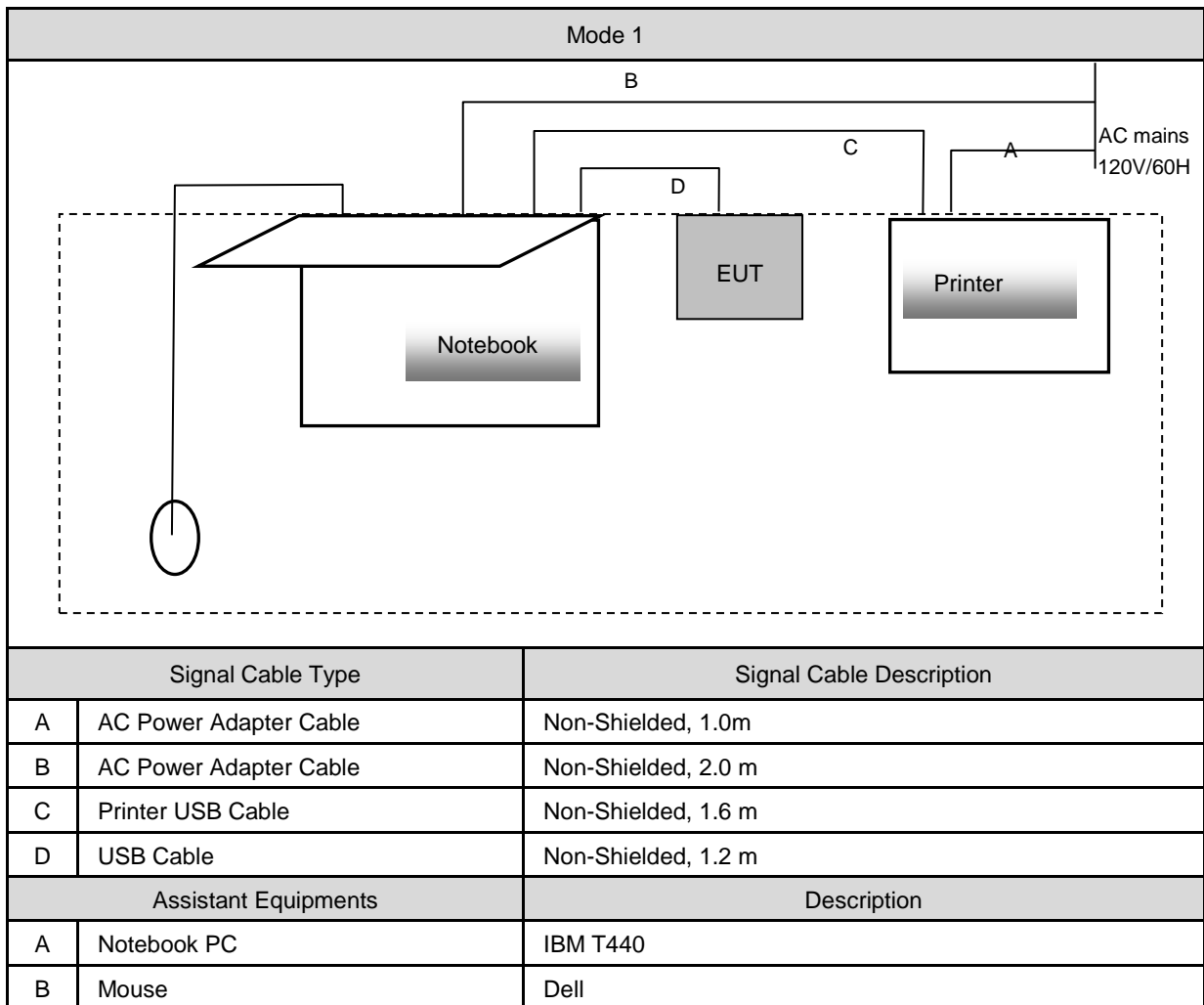
I/O Port Types	Q'TY	Test Description
1). USB port	1	Connected to Personal Computer

3 Test Methodology

3.1 Decision of Test Mode

Pre-Test Mode	
EMC	Mode 1: Normal working

3.2 Configuration of Test System Details



3.3 Test Site Environment

Items	Test Item	Actual
Temperature (°C)	Conducted Emission	25
Humidity (%RH)		66
Barometric pressure (mbar)		1004
Temperature (°C)	Radiated Emission	25
Humidity (%RH)		62
Barometric pressure (mbar)		1004

4 Emission Test

4.1 Conducted Emission Measurement

4.1.1 Limit

A.C. Mains Conducted Interference Limit

Frequency (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

Note: (1) The lower limit shall apply at the transition frequencies.

(2) The limit decreases in line with the logarithm of the frequency in the range 0.15 to 0.50 MHz.

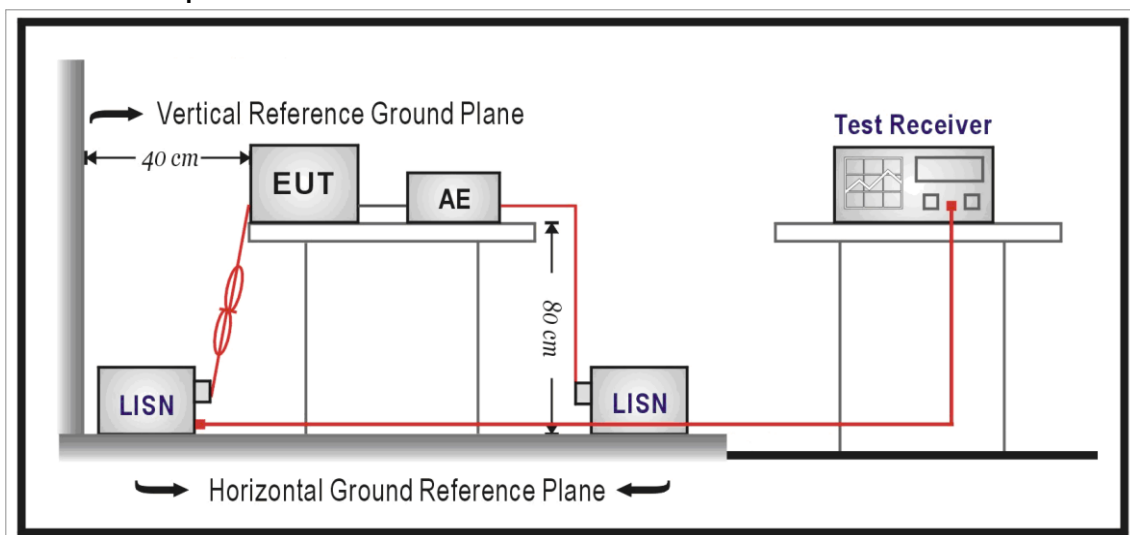
4.1.2 Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Test Receiver	R&S	ESCI	100701	08/08/2016	(1)
LISN	R&S	ESH2-Z5	100196	01/11/2016	(1)
LISN	R&S	ESH2-Z6	100501	01/11/2016	(1)
Cable	N/A	N/A	C1004	07/15/2016	(2)

Remark: ⁽¹⁾ Calibration period 1 year. ⁽²⁾ Calibration period 2 years.

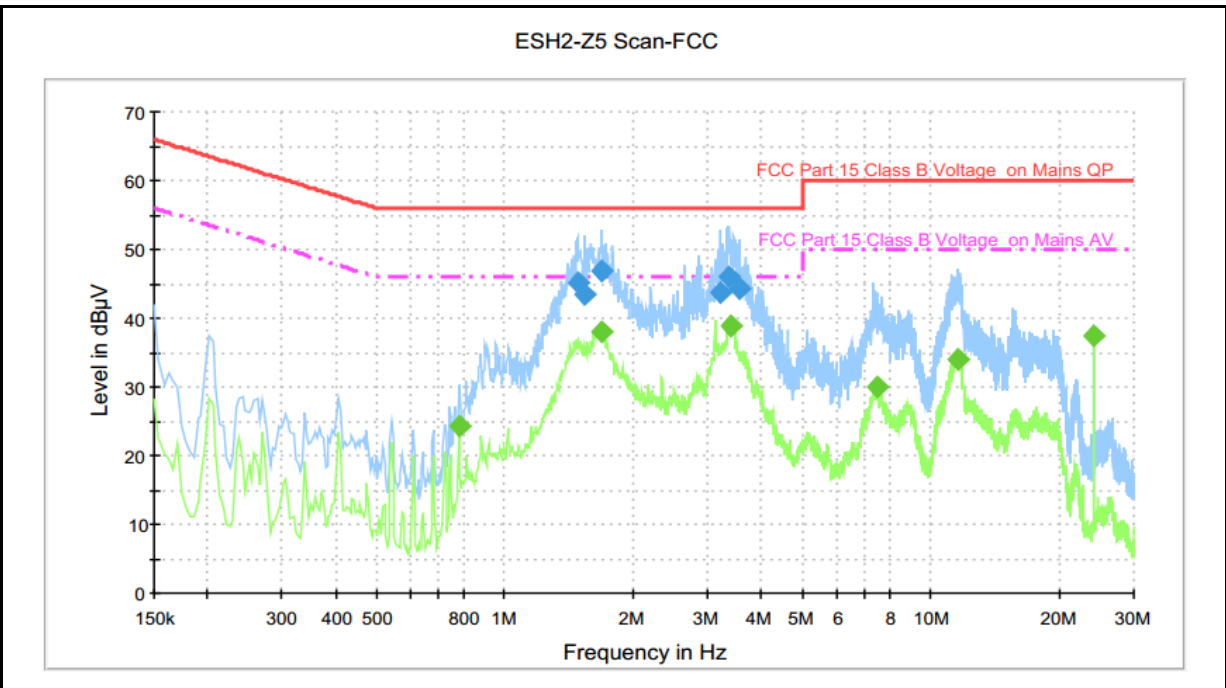
4.1.3 Test Setup

A.C. mains setup



4.1.4 Test Result

Standard:	FCC 15.107	Line:	L
Test item:	Conducted Emission	Power:	AC120V 60Hz
Model Number:		Date:	01/05/2017
Mode:	1	Test By:	
Description:			



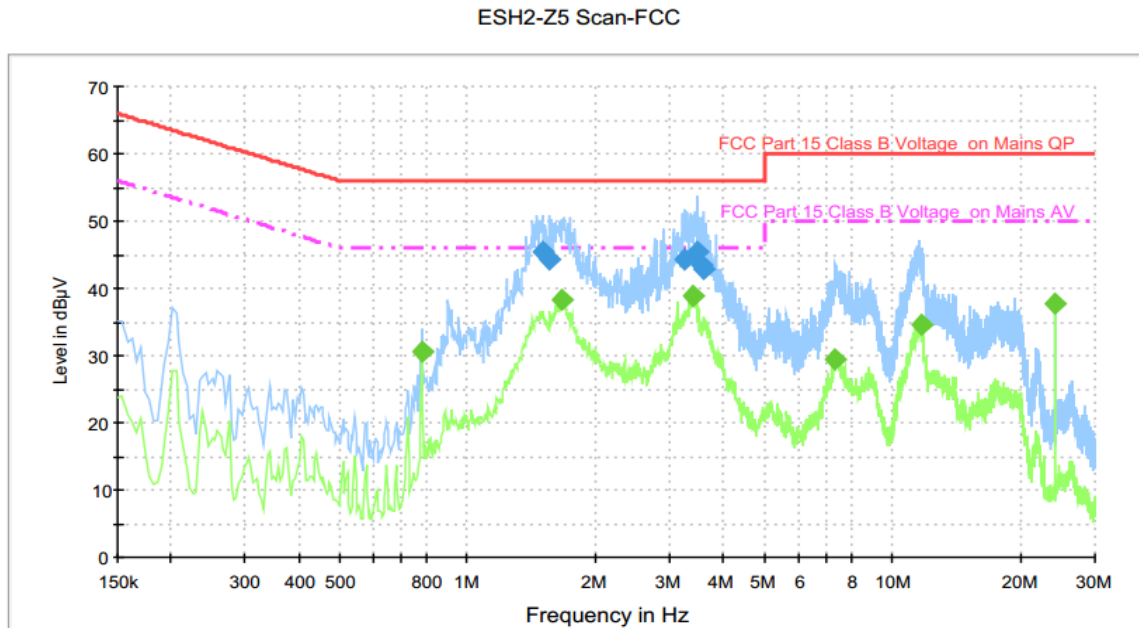
Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
1.482000	45.2	FLO	L1	10.1	10.8	56.0
1.546000	43.5	FLO	L1	10.1	12.5	56.0
1.686000	46.9	FLO	L1	10.1	9.1	56.0
3.218000	43.7	FLO	L1	10.2	12.3	56.0
3.374000	46.0	FLO	L1	10.2	10.0	56.0
3.562000	44.2	FLO	L1	10.2	11.8	56.0

Final Result 2

Frequency (MHz)	CAverage (dBμV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.782000	24.2	FLO	L1	10.1	21.8	46.0
1.690000	37.9	FLO	L1	10.1	8.1	46.0
3.382000	39.0	FLO	L1	10.2	7.0	46.0
7.474000	30.1	FLO	L1	10.3	19.9	50.0
11.590000	34.0	FLO	L1	10.3	16.0	50.0
24.002000	37.5	FLO	L1	10.6	12.5	50.0

Standard:	FCC 15.107	Line:	N
Test item:	Conducted Emission	Power:	AC120V 60Hz
Model Number:		Date:	01/05/2017
Mode:	1	Test By:	
Description:			



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
1.498000	45.4	FLO	N	10.1	10.6	56.0
1.558000	44.4	FLO	N	10.1	11.6	56.0
3.242000	44.3	FLO	N	10.2	11.7	56.0
3.466000	45.6	FLO	N	10.2	10.4	56.0
3.554000	43.3	FLO	N	10.2	12.7	56.0
3.582000	42.9	FLO	N	10.2	13.1	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.782000	30.6	FLO	N	10.1	15.4	46.0
1.666000	38.2	FLO	N	10.1	7.8	46.0
3.390000	38.9	FLO	N	10.2	7.1	46.0
7.362000	29.5	FLO	N	10.3	20.5	50.0
11.690000	34.6	FLO	N	10.4	15.4	50.0
24.002000	37.6	FLO	N	10.6	12.4	50.0

4.1.5 Test Photograph

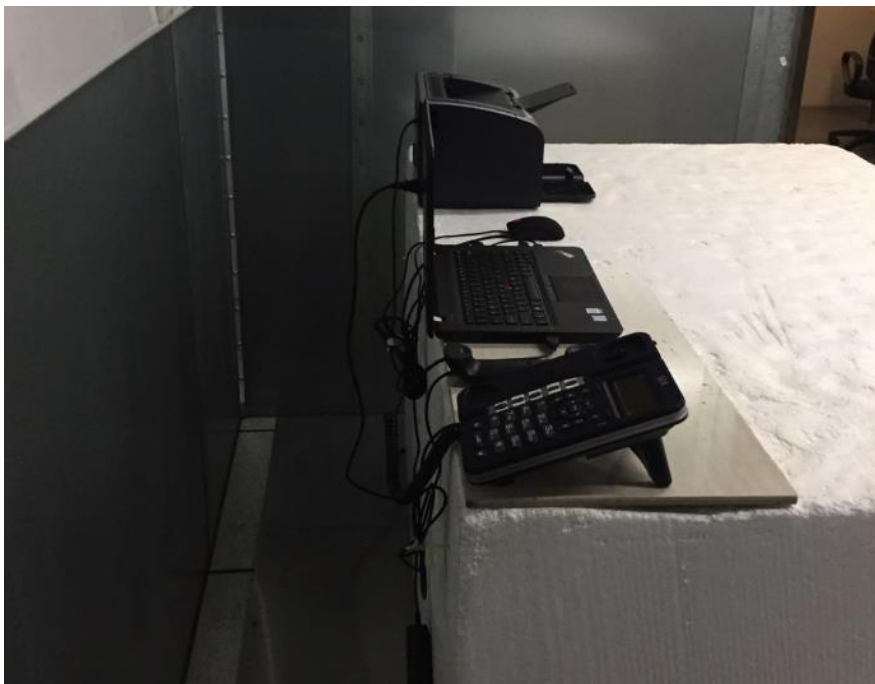
Test Mode: Mode 1

Description: Front View of Conducted Test



Test Mode: Mode 1

Description: Back View of Conducted Test



4.2 Radiated Interference Measurement

4.2.1 Limit

Under 1GHz test shall not exceed following value

FCC 47 CFR PART 15 SUBPART B				
Frequency range (MHz)	Class A		Class B	
	Distance(m)	dBuV/m	Distance(m)	dBuV/m
30 to 88	10	39	3	40
88 to 216	10	43.5	3	43.5
216 to 960	10	46.4	3	46
Above 960	10	49.5	3	54

Remark:1. The tighter limit shall apply at the edge between two frequency bands.

2.Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

3. RF Voltage (dBuV/m) = 20 log RF Voltage (uV/m)

4. Peak detector limit is corresponding to 20 dB above the maximum permitted average limit.

According to FCC Part 15.33 (b), for an unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a radiated emission limit is specified, up to the frequency shown in the following table:

Highest frequency generated or used in the device or in which the device operated or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.75	30
1.75-108	1000
108-500	2000
500-1000	5000
Above 1000	5th harmonic of the highest frequency or 40GHz, whichever is lower

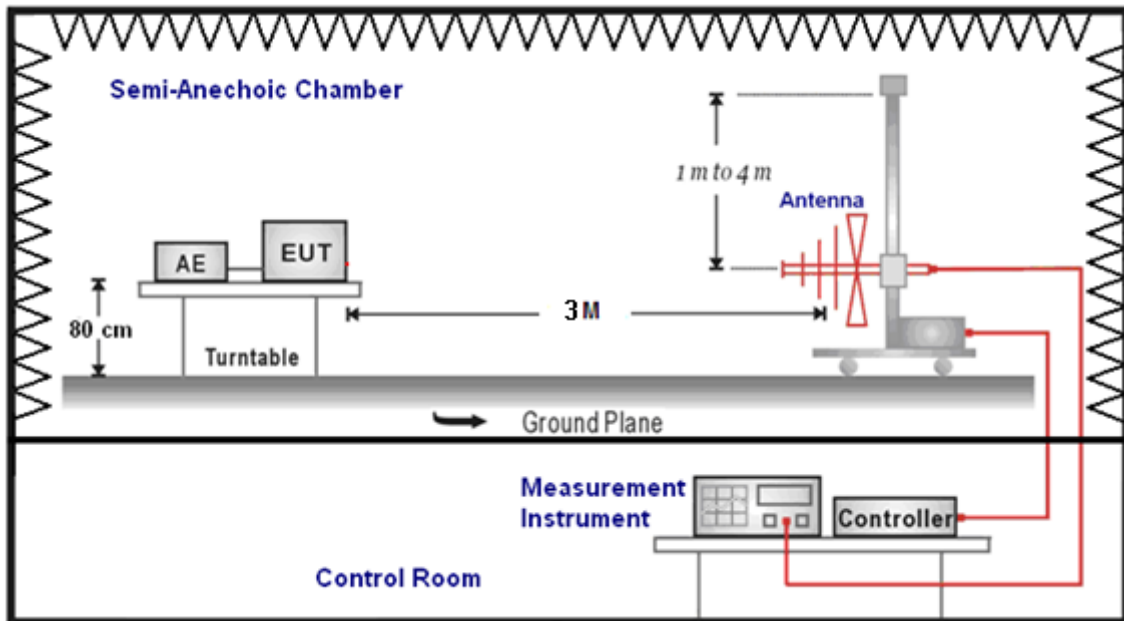
4.2.2 Test Instruments

3 Meter Chamber					
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Test Receiver	R&S	ESCI	100702	06/25/2016	(1)
Spectrum Analyzer	R&S	FSP 40	100378	12/16/2016	(1)
BiLog Antenna	Schwarzbeck	VULB9163	9163 329	01/19/2016	(2)
Horn Antenna	ETS-Lindgren	3117	00066585	03/04/2016	(2)
Cable	N/A	N/A	C1005	07/15/2016	(2)
Cable	N/A	N/A	C1012	07/15/2016	(2)

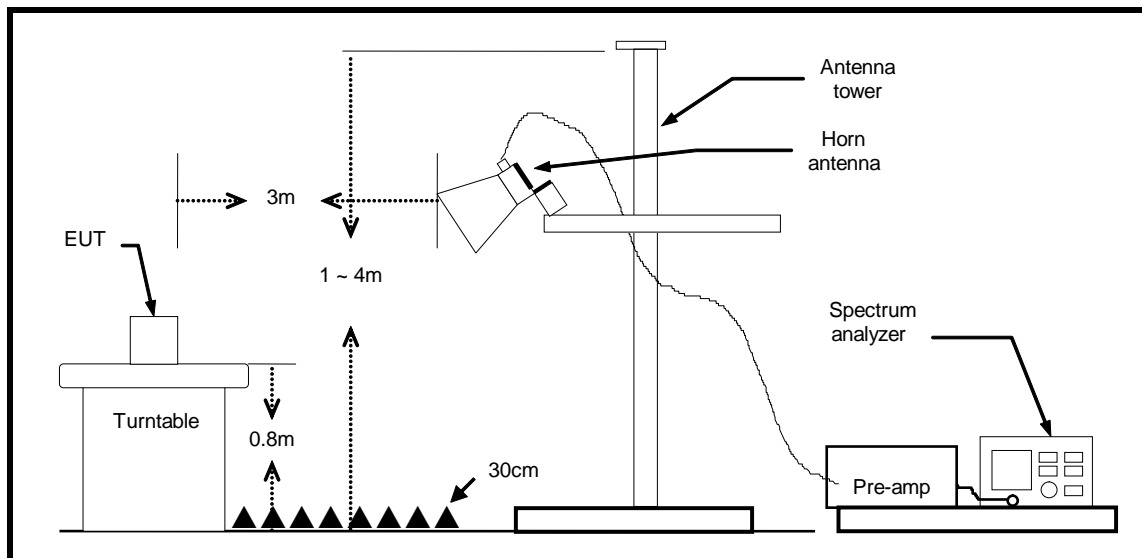
Remark: ⁽¹⁾Calibration period 1 year. ⁽²⁾Calibration period 2 years.

4.2.3 Setup

Below 1GHz

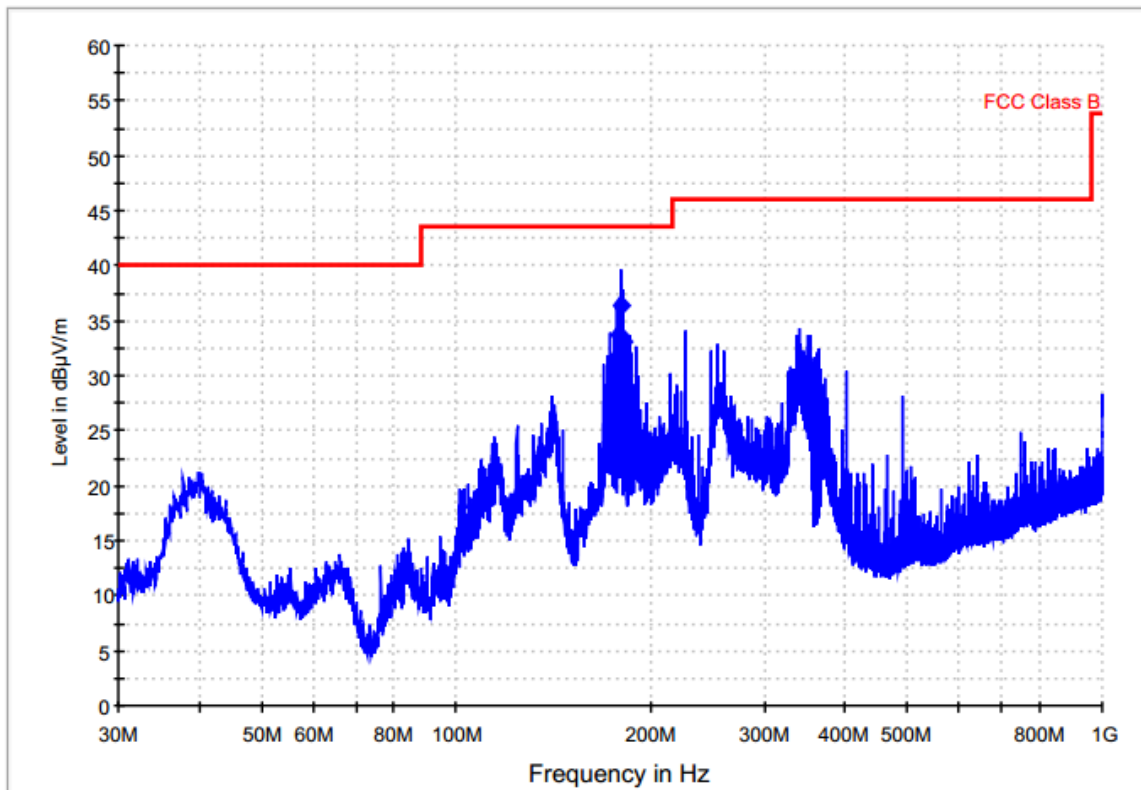


Above 1GHz



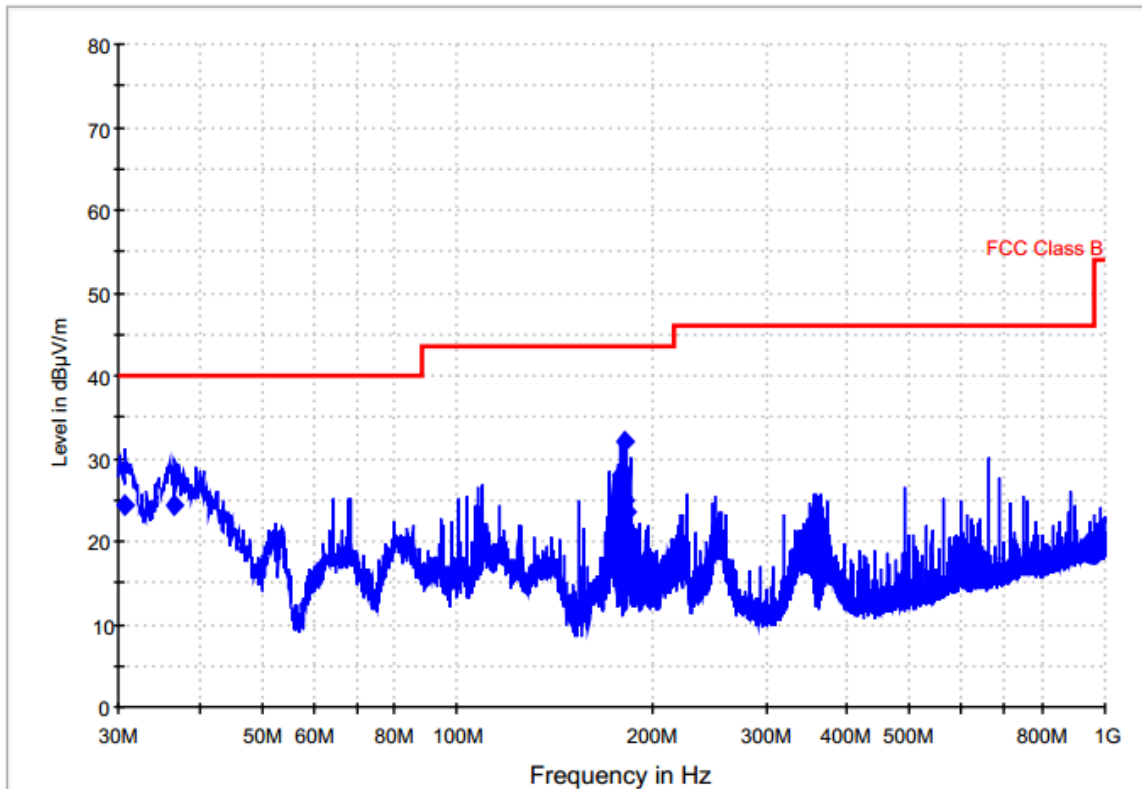
4.2.4 Test Result

Standard:	FCC 15.109	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC120/60Hz
Model Number:	D379H	Temp.(°C)/Hum.(%RH):	22(°C)/54%RH
Mode:	1	Date:	01/05/2017
Range:	30MHz-1GHz	Ant.polarity	H



Frequency (MHz)	QuasiPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
178.560000	33.8	1000.000	120.000	100.0	H	6.0	-38.9	9.7	43.5
179.580000	36.3	1000.000	120.000	206.0	H	1.0	-38.8	7.2	43.5
179.940000	30.9	1000.000	120.000	144.0	H	15.0	-38.8	12.6	43.5
180.300000	27.7	1000.000	120.000	137.0	H	1.0	-38.7	15.8	43.5
180.660000	24.7	1000.000	120.000	100.0	H	29.0	-38.7	18.8	43.5
181.320000	33.1	1000.000	120.000	150.0	H	4.0	-38.5	10.4	43.5

Standard:	FCC 15.109	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC120/60Hz
Model Number:	D379H	Temp.(°C)/Hum. (%RH):	22(°C)/54%RH
Mode:	1	Date:	01/05/2017
Range:	30MHz-1GHz	Ant.polarity	V



Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
30.780000	24.3	1000.000	120.000	100.0	V	109.0	-37.5	15.7	40.0
36.720000	24.4	1000.000	120.000	138.0	V	265.0	-36.3	15.6	40.0
178.560000	28.1	1000.000	120.000	100.0	V	94.0	-38.8	15.4	43.5
180.660000	31.9	1000.000	120.000	100.0	V	79.0	-38.6	11.6	43.5
181.320000	24.9	1000.000	120.000	100.0	V	110.0	-38.5	18.6	43.5
182.760000	23.7	1000.000	120.000	150.0	V	282.0	-38.3	19.8	43.5

Standard:	FCC 15.109	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC120/60Hz
Model Number:	D379H	Temp.(°C)/Hum. (%RH):	22(°C)/54%RH
Mode:	1	Date:	01/05/2017
Range:	1GHz-10GHz	Ant.polarity	H&V

Ferquency (MHz)	Corr.Amp. (dBμV/m)	Detector (PK/Ave.)	Polarity (H/V)	Corr. (dB)	Limit (dBμV/m)	Margin (dB)
1924	42.8	PK	H	0.4	74.0	31.2
1924	31.9	Ave.	H	0.4	54.0	22.1
3218	47.5	PK	H	3.3	74.0	26.5
3218	33.9	Ave.	H	3.3	54.0	20.1
4252	46.7	PK	H	5.2	74.0	27.3
4252	33.2	Ave.	H	5.2	54.0	20.8
6985	49.6	PK	H	6.8	74.0	24.4
6985	32.1	Ave.	H	6.8	54.0	21.9

Ferquency (MHz)	Corr.Amp. (dBμV/m)	Detector (PK/Ave.)	Polarity (H/V)	Corr. (dB)	Limit (dBμV/m)	Margin (dB)
2058	43.2	PK	V	1.1	74.0	30.8
2058	32.8	Ave.	V	1.1	54.0	21.2
3218	46.7	PK	V	3.3	74.0	27.3
3218	33.1	Ave.	V	3.3	54.0	20.9
3604	47.3	PK	V	3.8	74.0	26.7
3604	33.9	Ave.	V	3.8	54.0	20.1
6346	46.8	PK	V	7.2	74.0	27.2
6346	33.2	Ave.	V	7.2	54.0	20.8

4.2.5 Test Photograph

Test Mode: Mode 1
Below 1 GHz



Test Mode: Mode 1
Above 1 GHz



Test Mode: Mode 1
Rear View



-- END OF REPORT--