FCC TEST REPORT
FCC ID: 2A323-W82S

Report Number:	**ZKT-230605L4152**
Date of Test:	May 23, 2023 to June 03,2023
Date of issue:	June 03,2023
Total number of pages:	19
Test Result :	PASS
Testing Laboratory:	**Shenzhen ZKT Technology Co., Ltd.**
Address :	1/F, No. 101, Building B, No. 6, Tangwei Community Industrial Avenue, Fuhai Street, Bao'an District, Shenzhen, China
Applicant's name :	**Shenzhen Meskey Technology co., ltd**
Address :	Room 401, Yuanshuo Science Park, Guihua Community, Guanlan, Longhua, Shenzhen, China
Manufacturer's name :	**Shenzhen Meskey Technology co., ltd**
Address :	Room 401, Yuanshuo Science Park, Guihua Community, Guanlan, Longhua, Shenzhen, China
Test specification:	
Standard:	FCC CFR Title 47 Part 15 Subpart C
Test procedure:	/
Non-standard test method :	N/A
Test Report Form No.:	TRF-EL-107_V0
Test Report Form(s) Originator.:	ZKT Testing
Master TRF :	Dated: 2020-01-06

This device described above has been tested by ZKT, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.
This report shall not be reproduced except in full, without the written approval of ZKT, this document may be altered or revised by ZKT, personal only, and shall be noted in the revision of the document.

Product name:	**Wireless Charger**
Trademark :	N/A
Model/Type reference:	W82S, W31, W32, W33Pro, W33, W34, W35, W36 , W37, W40, W55, W56, W57, W58, W66, W68, W69, W70, W71, W72, W73, W75, W75Pro, W78, W78Pro, W79, W80, W81, W82, W82Pro, W82SPro, W83, W83Pro, W84, W85, W86, W87, W88, W89, W90, MOKCA027, GBECA027, CA027
Ratings:	Input: DC 9V/3A; 5V/3A Output1: Phone 5W/7.5W/10W/15W (Max) Output2: TWS 5W (Max) Output3: Watch 3W (Max)

Testing procedure and testing location:

Testing Laboratory.....:	**Shenzhen ZKT Technology Co., Ltd.**
Address.....:	1/F, No. 101, Building B, No. 6, Tangwei Community Industrial Avenue, Fuhai Street, Bao'an District, Shenzhen, China
Tested by (name + signature).....:	Alen He
Reviewer (name + signature).....:	Joe Liu
Approved (name + signature).....:	Lake Xie

TABLE OF CONTENTS

1. VERSION

Report No.	Version	Description	Approved
ZKT-230605L4152	Rev.01	Initial issue of report	June 03,2023

2. TEST SUMMARY

Test Item	Section in CFR 47	Result
Antenna requirement	15.203	Pass
AC Power Line Conducted Emission	15.207	Pass
Spurious Emission	15.209(a)(f)	Pass

NOTE:

(1)" N/A" denotes test is not applicable in this Test Report

2.1 TEST FACILITY

Shenzhen ZKT Technology Co., Ltd.
Add. : 1/F, No. 101, Building B, No. 6, Tangwei Community Industrial Avenue, Fuhai Street, Bao'an District, Shenzhen, China

FCC Test Firm Registration Number: 692225
Designation Number: CN1299
IC Registered No.: 27033

2.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement y ± U，where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2，providing a level of confidence of approximately 95 %。

No.	Item	Uncertainty
1	3m camber Radiated spurious emission(30MHz-1GHz)	U=4.3dB
2	3m chamber Radiated spurious emission(1GHz-18GHz)	U=4.5dB
3	3m chamber Radiated spurious emission(18GHz-40GHz)	U=3.34dB
4	Conducted Adjacent channel power	U=1.38dB
5	Conducted output power uncertainty Above 1G	U=1.576dB
6	Conducted output power uncertainty below 1G	U=1.28dB
7	humidity uncertainty	U=5.3%
8	Temperature uncertainty	U=0.59℃
9	Radiated disturbance(30MHz-1000MHz)	U=4.8dB
10	Radiated disturbance(1GHz-6GHz)	U=4.9dB
11	Radiated disturbance(1GHz-18GHz)	U=5.0dB

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

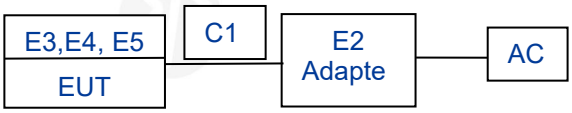
Product Name:	Wireless Charger
Model No.:	W82S
Model Difference:	W31, W32, W33Pro, W33, W34, W35, W36 , W37, W40, W55, W56, W57, W58, W66, W68, W69, W70, W71, W72, W73, W75, W75Pro, W78, W78Pro, W79, W80, W81, W82, W82Pro, W82SPro, W83, W83Pro, W84, W85, W86, W87, W88, W89, W90, MOKCA027, GBECA027, CA027 (All models have same circuits diagram, PCB Layout, construction and rated power, only different was the model name.)
Sample No.	ZKT-230605L4152#
Serial No.:	N/A
Operation Frequency:	110kHz ~ 205KHz
Modulation type:	MSK
Antenna Type:	Inductive loop coil Antenna
Antenna gain:	0dBi
Power supply:	Input: DC 9V/3A; 5V/3A Output1: Phone 5W/7.5W/10W/15W (Max) Output2: TWS 5W (Max) Output3: Watch 3W (Max)

3.2 Test mode

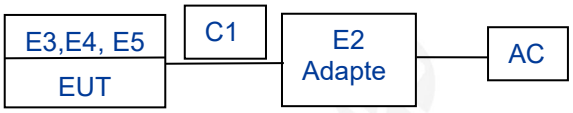
Mode 1	Charging+Wireless (Phone 15W)
Mode 2	Charging+Wireless (Phone 10W)
Mode 3	Charging+Wireless (Phone 7.5W)
Mode 4	Charging+Wireless (Phone 5W)
Mode 5	Charging+Wireless (Watch 3W)
Mode 6	Charging+Wireless (TWS 5W)
Mode 7	Charging+Wireless (Phone 5W+TWS 5W+ Watch 3W)
Mode 8	Charging+Wireless (Phone 7.5W+TWS 5W)
Mode 9	Charging+Wireless (Phone 7.5W+Watch 3W)
Mode 10	Charging+Wireless (Phone 10W+ TWS 5W)
Mode 11	Charging+Wireless (Phone 10W+ Watch 3W)
Mode 12	Charging+Wireless (Watch 3W+TWS 5W)
Mode 13	Charging+Wireless (Phone 15W+TWS 5W+ Watch 3W)
Mode 14	Charging+Wireless (Phone 10W+TWS 5W+ Watch 3W)
Mode 15	Charging+Wireless (Phone 7.5W+TWS 5W+ Watch 3W)
Mode 16	Charging+Wireless (Phone 5W+TWS 5W+ Watch 3W)
Note:All test modes were pre-tested, but we only recorded the worst Mode 13 case in this report.	

3.3 Block Diagram of EUT Configuration

Conducted Emission



Radiated Emission



3.4 Test Conditions

Temperature: 23~26℃

Relative Humidity: 54~63 %

3.5 Description Of Support Units (Conducted Mode)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E1	Wireless Charger	N/A	W82S	N/A	EUT
E2	Adapter	OPPO	VCB7CACH	N/A	Auxiliary
E3	Mobile Phone	OPPO	OPPO A96	N/A	Auxiliary
E4	Watch	Apple	Iwatch Ultra	N/A	Auxiliary
E5	TWS headphones	Redmi	AirDots3 Pro	N/A	Auxiliary

Item	Shielded Type	Ferrite Core	Length	Note
C1	NO	NO	0.5m	DC cable unshielded

Note:

(1) The support equipment was authorized by Declaration of Confirmation.
(2) For detachable type I/O cable should be specified the length in cm in『Length』column.
(3) “YES” is means “shielded” “with core”; “NO” is means “unshielded” “without core”.

3.6 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	Bilog Antenna	Schwarzbeck	VULB9168	N/A	Oct. 17, 2022	Oct. 16, 2023
2	Loop Antenna	TESEQ	HLA6121	58357	Oct. 17, 2022	Oct. 16, 2023
3	Test Cable	N/A	R-01	N/A	Oct. 18, 2022	Oct. 17, 2023
4	Test Cable	N/A	R-02	N/A	Oct. 18, 2022	Oct. 17, 2023
5	EMI Test Receiver (9kHz-7GHz)	R&S	ESCI7	101169	Oct. 18, 2022	Oct. 17, 2023
6	Antenna Mast	EM	SC100_1	N/A	N/A	N/A
7	Turn Table	EM	SC100	N/A	N/A	N/A
8	Spectrum Analyzer	KEYSIGHT	9020A	MY553708335	Oct. 18, 2022	Oct. 17, 2023
9	Amplifier (30-1000MHz)	EM Electronics	EM330 Amplifier	060747	Oct. 18, 2022	Oct. 17, 2023
10	D.C. Power Supply	LongWei	TPR-6405D	N/A	\	\
11	EMC Software	Frad	EZ-EMC	Ver.EMC-CON 3A1.1	\	\
12	Turntable	MF	MF-7802BS	N/A	\	\
13	Antenna tower	MF	MF-7802BS	N/A	\	\

Conduction Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	LISN	R&S	ENV216	101471	Oct. 22, 2022	Oct. 21, 2023
2	LISN	CYBERTEK	EM5040A	E1850400149	Oct. 22, 2022	Oct. 21, 2023
3	Test Cable	N/A	C01	N/A	Oct. 18, 2022	Oct. 17, 2023
4	Test Cable	N/A	C02	N/A	Oct. 18, 2022	Oct. 17, 2023
5	EMI Test Receiver	R&S	ESCI3	101393	Oct. 17, 2022	Oct. 16, 2023
6	EMC Software	Frad	EZ-EMC	Ver.EMC-CON 3A1.1	\	\

4. CONDUCTED EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

Test Requirement:	FCC Part15 C Section 15.207
Test Method:	ANSI C63.10:2013
Test Frequency Range:	150KHz to 30MHz
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto

4.2 POWER LINE CONDUCTED EMISSION Limits

FREQUENCY (MHz)	Limit (dBuV)		Standard
	Quas-peak	Average	
0.15 -0.5	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	56.00	46.00	FCC
5.0 -30.0	60.00	50.00	FCC

Note:

(1) *Decreases with the logarithm of the frequency.

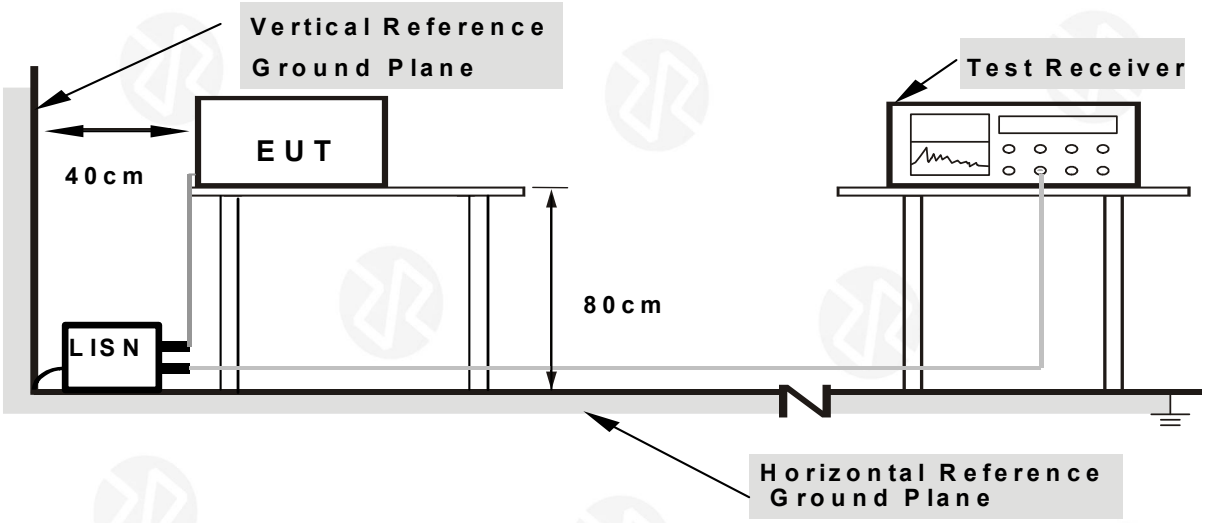
4.3 TEST PROCEDURE

a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
d. LISN at least 80 cm from nearest part of EUT chassis.
e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.4 DEVIATION FROM TEST STANDARD

No deviation

4.5 TEST SETUP

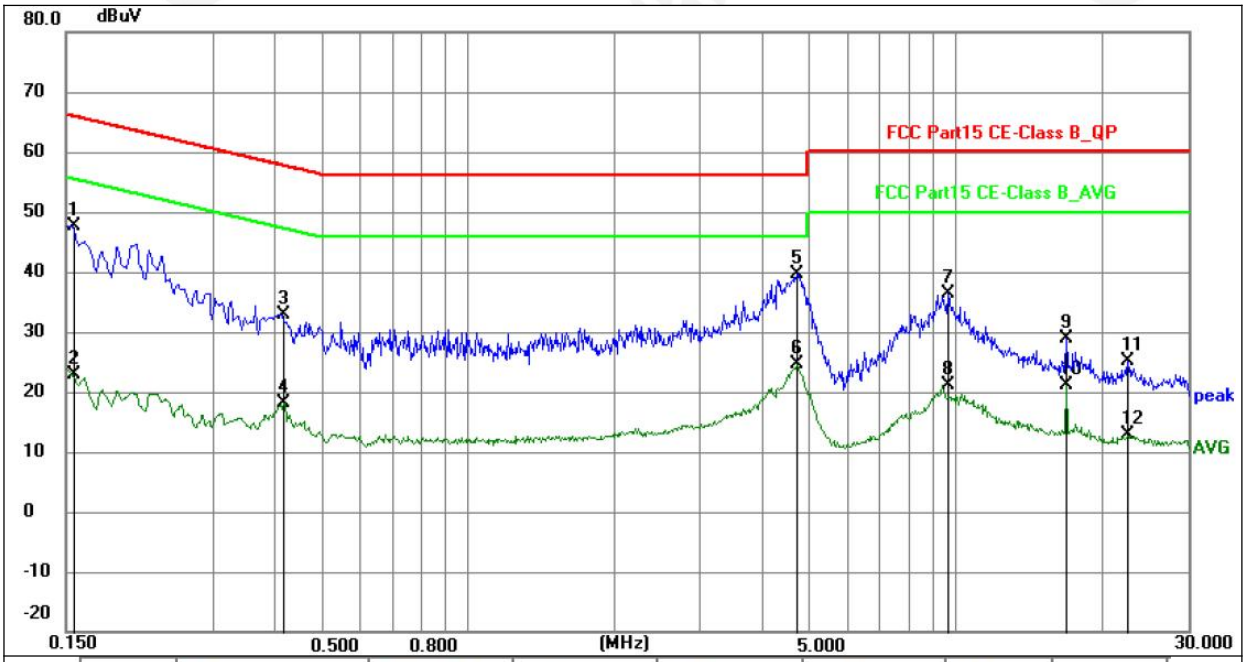


Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80
from other units and other metal planes

4.6 Test Result

We pretest AC 120V and AC 230V, the worst voltage was AC 120V and the data recording in the report.

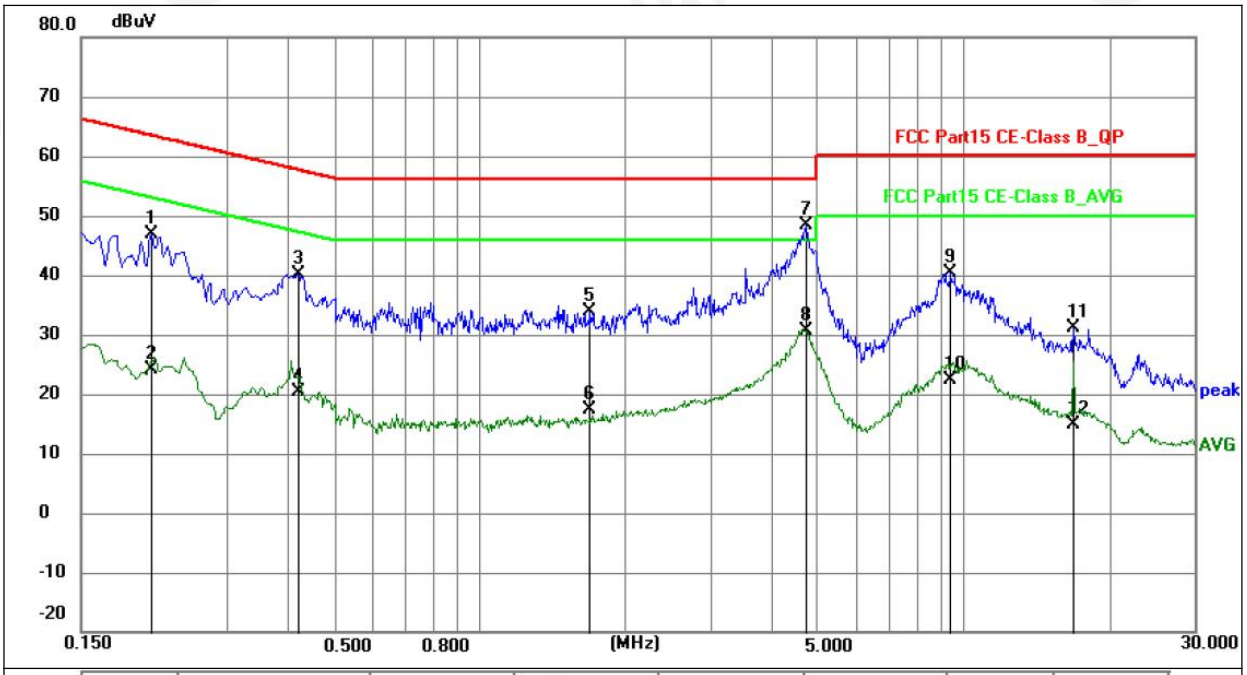
Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Phase:	N
Test Voltage:	AC 120V/60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1545	37.26	10.32	47.58	65.75	18.17	QP
2	0.1545	12.47	10.32	22.79	55.75	32.96	AVG
3	0.4155	22.60	10.34	32.94	57.54	24.60	QP
4	0.4155	7.87	10.34	18.21	47.54	29.33	AVG
5 *	4.7220	29.24	10.47	39.71	56.00	16.29	QP
6	4.7220	14.05	10.47	24.52	46.00	21.48	AVG
7	9.7025	25.77	10.57	36.34	60.00	23.66	QP
8	9.7025	10.60	10.57	21.17	50.00	28.83	AVG
9	16.8759	18.10	10.69	28.79	60.00	31.21	QP
10	16.8759	10.53	10.69	21.22	50.00	28.78	AVG
11	22.5820	14.40	10.76	25.16	60.00	34.84	QP
12	22.5820	2.15	10.76	12.91	50.00	37.09	AVG

Note:
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. Mesurement Level = Reading level + Correct Factor

Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Phase:	L
Test Voltage:	AC 120V/60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.2084	36.55	10.29	46.84	63.27	16.43	QP
2	0.2084	13.90	10.29	24.19	53.27	29.08	AVG
3	0.4200	29.77	10.32	40.09	57.45	17.36	QP
4	0.4200	10.04	10.32	20.36	47.45	27.09	AVG
5	1.6935	23.52	10.37	33.89	56.00	22.11	QP
6	1.6935	7.11	10.37	17.48	46.00	28.52	AVG
7 *	4.7309	37.88	10.45	48.33	56.00	7.67	QP
8	4.7309	20.28	10.45	30.73	46.00	15.27	AVG
9	9.4458	29.94	10.54	40.48	60.00	19.52	QP
10	9.4458	11.94	10.54	22.48	50.00	27.52	AVG
11	16.8759	20.62	10.62	31.24	60.00	28.76	QP
12	16.8759	4.26	10.62	14.88	50.00	35.12	AVG

Note:
4. An initial pre-scan was performed on the line and neutral lines with peak detector.
5. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
6. Mesurement Level = Reading level + Correct Factor

5. RADIATED EMISSION MEASUREMENT

Test Requirement:	FCC Part15 C Section 15.209
Test Method:	ANSI C63.10:2013
Test Frequency Range:	9kHz to 1GHz
Test site:	Measurement Distance: 3m
Receiver setup:	

Frequency	Detector	RBW	VBW	Value
9KHz-150KHz	Quasi-peak	200Hz	600Hz	Quasi-peak
150KHz-30MHz	Quasi-peak	9KHz	30KHz	Quasi-peak
30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak
Above 1GHz	Peak	1MHz	3MHz	Peak
	Peak	1MHz	10Hz	Average

5.1 Radiated Emission Limits

Limits for frequency below 30MHz

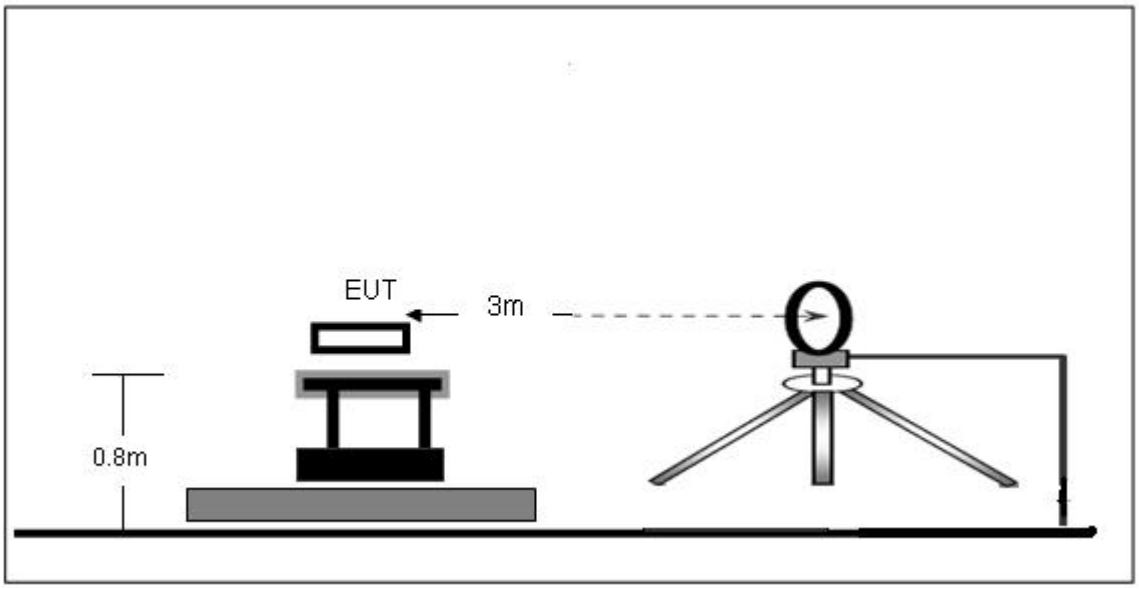
Frequency	Limit (uV/m)	Measurement Distance(m)	Remark
0.009-0.490	2400/F(kHz)	300	Quasi-peak Value
0.490-1.705	24000/F(kHz)	30	Quasi-peak Value
1.705-30	30	30	Quasi-peak Value

Limits for frequency Above 30MHz

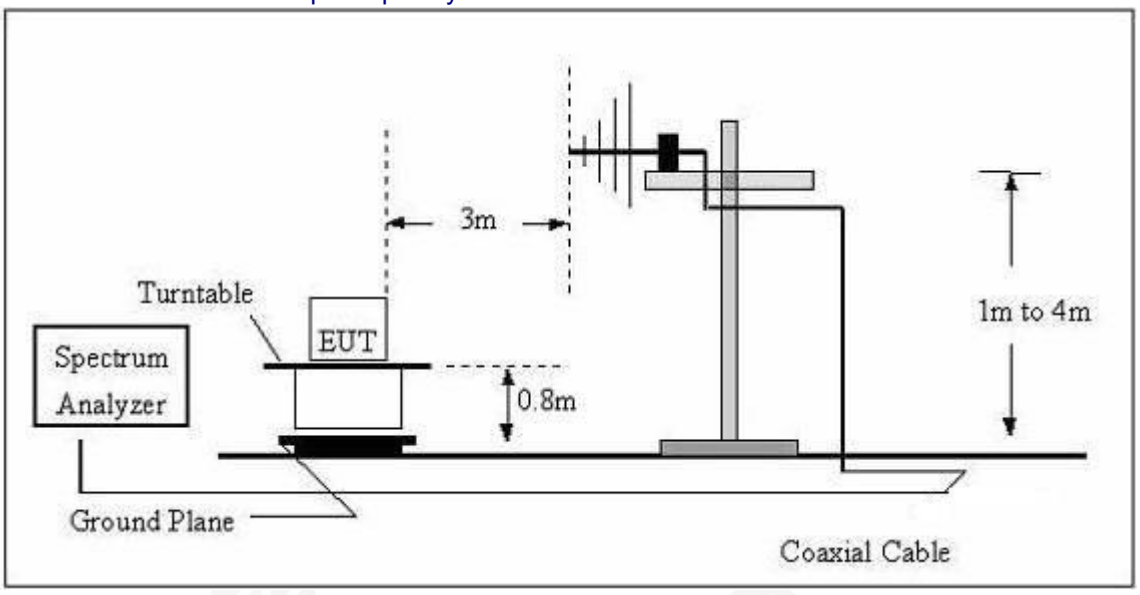
Frequency	Limit (dBuV/m @3m)	Remark
30MHz-88MHz	40.00	Quasi-peak Value
88MHz-216MHz	43.50	Quasi-peak Value
216MHz-960MHz	46.00	Quasi-peak Value
960MHz-1GHz	54.00	Quasi-peak Value
Above 1GHz	54.00	Average Value
	74.00	Peak Value

5.2 Anechoic Chamber Test Setup Diagram

（A）Radiated Emission Test-Up Frequency Below 30MHz



（B）Radiated Emission Test-Up Frequency 30MHz~1GHz



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209 and FCC 15.205 limits.

5.3 Test Procedure

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can move up and down between 1 to 4 meters to find out the maximum emission level. Broadband antenna (calibrated by dipole antenna) are used as a receiving antenna. Both horizontal and vertical polarization of the antenna are set on measurement.

5.4 DEVIATION FROM TEST STANDARD

No deviation

5.5 Test Result

Measurement data:

Note: Limit dBuV/m @3m = Limit dBuV/m @300m+ 80
Limit dBuV/m @3m = Limit dBuV/m @30m + 40

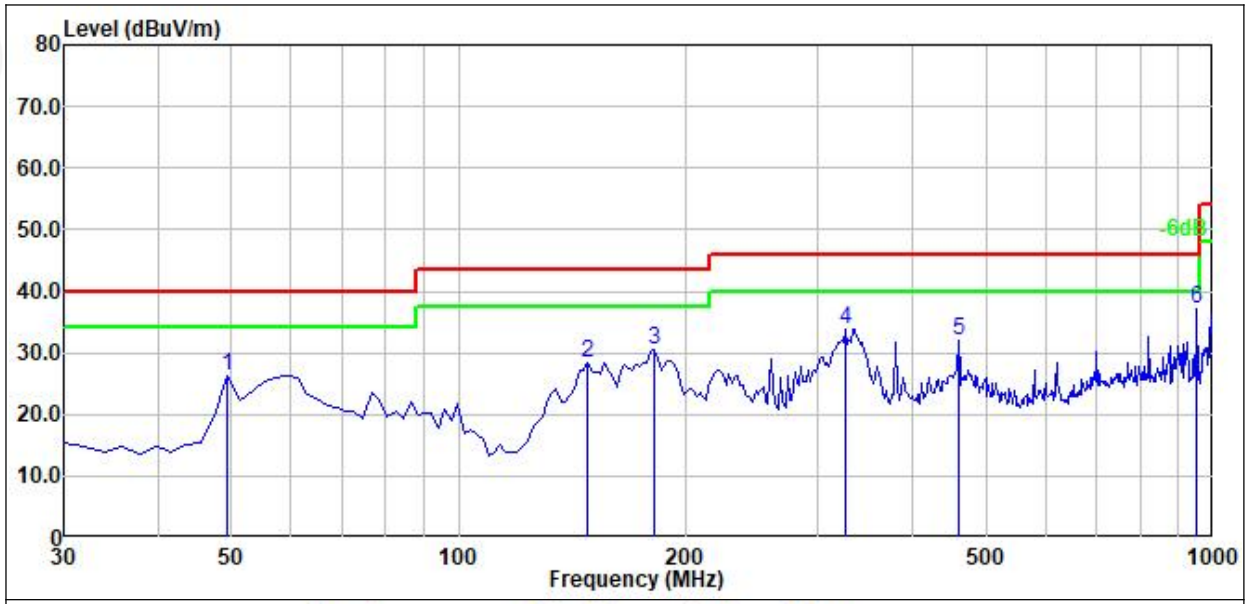
9 kHz~30 MHz

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(kHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
25.9	75.33	20.15	95.48	139.34	-43.86	PK
25.9	66.76	20.15	86.91	119.34	-32.43	AV
70.6	76.98	20.33	97.31	130.63	-33.32	PK
70.6	67.09	20.33	87.42	110.63	-23.21	AV
125.8	95.23	20.55	115.78	145.61	-29.83	PK
125.8	76.34	20.55	96.89	125.61	-28.72	AV
700.2	30.23	20.64	50.87	70.70	-19.83	QP
965.61	35.54	21.26	56.80	67.91	-11.11	QP
1215.45	25.55	22.32	47.87	65.91	-18.04	QP

Note:
Pre-scan in the all of mode, the worst case in of was recorded.
Factor = antenna factor + cable loss – pre-amplifier.
Margin = Emission Level- Limit.

30MHz-1GHz

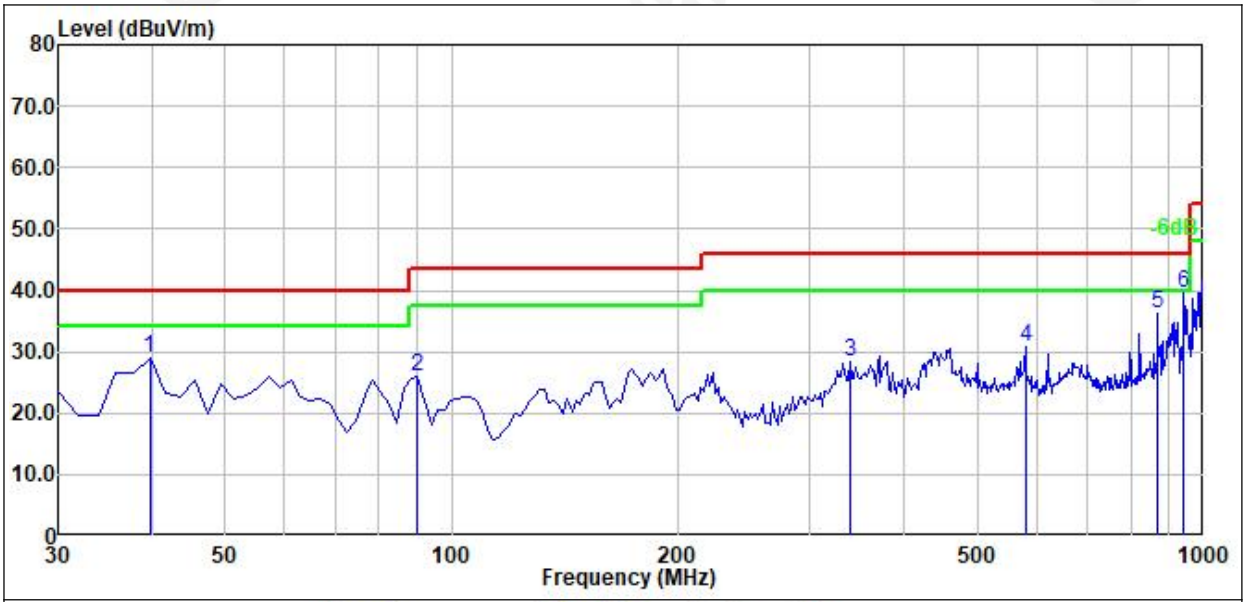
Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Polarization:	Horizontal
Test Voltage:	AC 120V/60Hz		



	Freq	Read Level	Limit Level	Limit Line	Ant Factor	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dBuV/m	dBuV/m	dB/m	dB		
1	49.439	47.08	26.37	40.00	12.45	-13.63	Horizontal	QP
2	148.577	47.69	28.49	43.50	12.97	-15.01	Horizontal	QP
3	181.623	51.99	30.39	43.50	10.39	-13.11	Horizontal	QP
4	325.471	50.94	33.86	46.00	13.35	-12.14	Horizontal	QP
5	459.599	46.26	32.02	46.00	16.37	-13.98	Horizontal	QP
6	951.403	43.06	37.23	46.00	22.98	-8.77	Horizontal	QP

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

Temperature:	26℃	Relative Humidity:	54%
Pressure:	101kPa	Polarization:	Vertical
Test Voltage:	AC 120V/60Hz		



	Freq	Read Level	Level	Limit Line	Ant Factor	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dBuV/m	dBuV/m	dB/m	dB		
1	39.719	49.26	28.94	40.00	12.93	-11.06	Vertical	QP
2	90.261	50.17	25.82	43.50	8.36	-17.68	Vertical	QP
3	339.078	45.11	28.34	46.00	13.62	-17.66	Vertical	QP
4	580.120	42.86	30.88	46.00	18.45	-15.12	Vertical	QP
5	867.816	43.32	36.34	46.00	22.04	-9.66	Vertical	QP
6	941.683	45.49	39.58	46.00	22.92	-6.42	Vertical	QP

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

6. TEST SETUP PHOTO

Reference to the appendix I for details.

7. EUT CONSTRUCTIONAL DETAILS

Reference to the appendix II for details.

※※※※※ END OF REPORT ※※※※※