FCC Radio Test Report

FCC ID: 2BBLE-UGB-260W

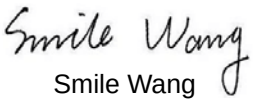
The report concerns: Original Grant

Report Reference No.....:	23EFSS05050 04041
Date Sample(s) Received.....:	2023-05-15
Date of Tested.....:	From 2023-05-15 to 2023-06-06
Date of issue.....:	2023-06-06
Testing Laboratory .....:	DongGuanShuoXin Electronic Technology Co., Ltd.
Address.....:	Zone A, 1F, No. 6, XinGang Road YuanGang Street, XinAn District, ChangAn Town, DongGuan City, GuangDong, China
Applicant's name .....:	ShenZhen Ugoodbuy Technology limited
Address.....:	Floor 4 , Trade Plaza NO.1, China South CityPinghu Town, Longgang District, Shenzhen China
Manufacturer.....:	ShenZhen Ugoodbuy Technology limited
Equipment.....:	power supply
Trade Mark.....:	Ugoodbuy
Model .....:	868D,818H,UGB-260W,UGB-160W
Ratings.....:	Input: AC 100V-240V 3A Max Wireless Output: 15W max

Test Engineer:

Blue Qiu

Responsible Engineer :



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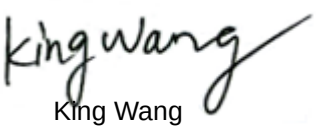
Authorized Signatory:



King Wang

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1. TEST REPORT DECLARE

Applicant	ShenZhen Ugoodbuy Technology limited
Address	Floor 4 , Trade Plaza NO.1, China South CityPinghu Town, Longgang District, Shenzhen China
Manufacturer	ShenZhen Ugoodbuy Technology limited
Address	Floor 4 , Trade Plaza NO.1, China South CityPinghu Town, Longgang District, Shenzhen China
Factory	ShenZhen Ugoodbuy Technology limited
Address	Floor 4 , Trade Plaza NO.1, China South CityPinghu Town, Longgang District, Shenzhen China
Equipment Name	power supply
Model No.	868D,818H,UGB-260W,UGB-160W
Trade Mark	Ugoodbuy
Standard	FCC Part15, Subpart C

We Declare:

The equipment described above is tested by DongGuan ShuoXin Electronic Technology Co., Ltd(ATT). and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and DongGuan ShuoXin Electronic Technology Co., Ltd.(ATT) is assumed of full responsibility for the accuracy and completeness of these tests.

ATT is not responsible for the sampling stage, so the results only apply to the sample as received.

ATT's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. ATT shall have no liability for any declarations, inferences or generalizations drawn by the client or others from ATT issued reports.

2. SUMMARY OF TEST RESULTS

The EUT have been tested according to the applicable standards as referenced below:

Standard(s) Section		Test Item	Judgment	Remark
FCC	ISED			
15.207	-	AC Power Line Conducted Emissions	PASS	------
15.209(a)	-	Radiated Emissions	PASS	------
15.203	-	Antenna Requirement	PASS	Note(2)
15.215	-	20dB Bandwidth	PASS	

Note:

(1) “N/A” denotes test is not applicable to this device.

(2) The device what use a permanently attached antenna were considered sufficient tocomply with the provisions of 15.203.

2.1MEASUREMENT UNCERTAINTY

Test Item	Uncertainty
Uncertainty for Conductionemission test (9kHz-150kHz)	3.7 dB
Uncertainty for Conduction emission test (150kHz-30MHz)	3.3 dB
Uncertainty for Radiation Emission test (30MHz-200MHz)	4.60 dB (Polarize: V)
	4.60 dB (Polarize: H)
Uncertainty for Radiation Emission test (200MHz-1GHz)	6.10 dB (Polarize: V)
	5.08 dB (Polarize: H)
Uncertainty for Radiation Emission test (1GHz-6GHz)	5.01 dB (Polarize: V)
	5.01 dB (Polarize: H)
Uncertainty for Radiation Emission test (6GHz-18GHz)	5.26 dB (Polarize: V)
	5.26 dB (Polarize: H)
Uncertainty for Radiation Emission test (18GHz-40GHz)	5.06 dB (Polarize: V)
	5.06 dB (Polarize: H)
Uncertainty for radio frequency	±0.048kHz
Uncertainty for conducted RF Power	±0.32dB

Note:

This uncertainty represents an expanded uncertainty expressed at approximately the 95%confidence level using a coverage factor of k=2.

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	power supply	
Test Model	UGB-260W	
Brand Name	Ugoodbuy	
Series Model	868D,818H,UGB-260W,UGB-160W	
Model Difference(s)	The differences between models are the same except for the differences in model name.	
Hardware Version	V1.0	
Software Version	V1.0	
PowerSource	Input: AC 100V-240V 3A Max	
Operation Frequency	110.5kHz-205kHz	
Modulation Technology	FSK	
Antenna Information	Antenna Type:Coil	Maximum Peak Gain: 0dBi

Note:

1. For a more detailed features description, please refer to the manufacturer’s specifications or the user's manual.

3.2DESCRIPTION OF TEST MODES

The test system was pre-tested based on the consideration of all possible combinations of EUT operation mode.

Pretest Mode	Description
Mode 1	Wireless Charging

Following mode(s) as (were) found to be the worst case(s) and selected for the final test.

AC power line conducted emissions test	
Final Test Mode	Description
Mode 1	Wireless Charging

Radiated emissions test - Below 1GHz	
Final Test Mode	Description
Mode 1	Wireless Charging

Conducted test	
Final Test Mode	Description
Mode 1	Wireless Charging

Note:The test was performed at a maximum wireless output of 15W.

3.3BLOCKDIAGRAMSHOWINGTHECONFIGURATIONOFSYSTEMTESTED

3.4SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.
AE1	Intelligent wireless charging full function test module	YBZ	QI TI 1000MA	/

Item	Cable Type	Shielded Type	Ferrite Core	Length
/	/	/	/	/

3.5TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage
AC Power Line Conducted Emissions	24.2°C	63%	AC 120V/60Hz
Radiated Emissions-9K-30MHz	23.6°C	61%	AC 120V/60Hz
Radiated Emissions-30 MHz to 1GHz	23.6°C	61%	AC 120V/60Hz
Bandwidth	23.4°C	57%	AC 120V/60Hz

4.AC POWER LINE CONDUCTED EMISSIONS TEST

4.1LIMIT

Frequency of Emission (MHz)	Limit (dBμV)	
	Quasi-peak	Average
0.15 -0.50	66 to 56*	56 to 46*
0.50 -5.0	56	46
5.0 -30.0	60	50

Note:

(1) The tighter limit applies at the band edges.
(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

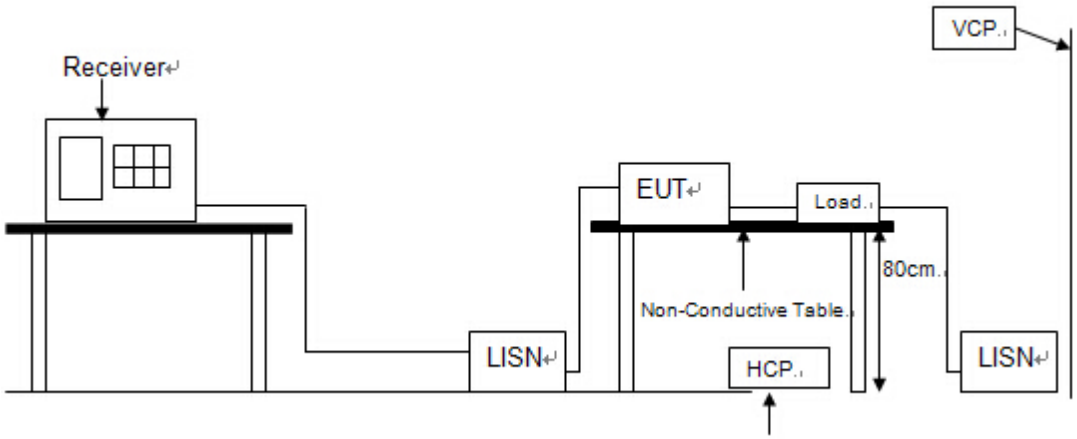
4.2TEST PROCEDURE

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 equipmentpowered 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 groundplane 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.

4.3MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Pulse Limiter	MTS-systemtechnik	MTS-IMP-136	261115-010-0024	12/12/2023
2	EMI Test Receiver	R&S	ESCI	101308	12/18/2023
3	LISN	AFJ	LS16	16011103219	08/15/2023
4	LISN	Schwarzbeck	NSLK 8127	8127-432	08/15/2023
5	Measurement Software	Farad	EZ-EMC (Ver.ATT-03A)	N/A	N/A

4.4TESTSETUP



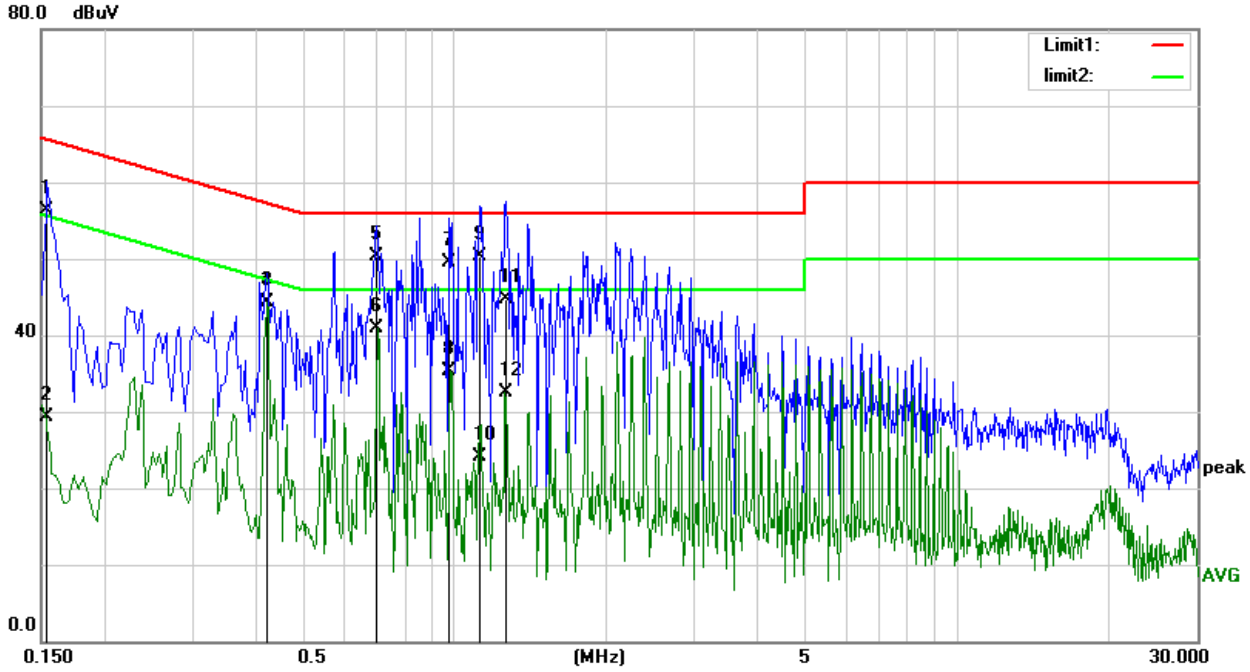
4.5EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it).The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

4.6 TEST RESULTS

Test Mode:	Wireless Charging

Line

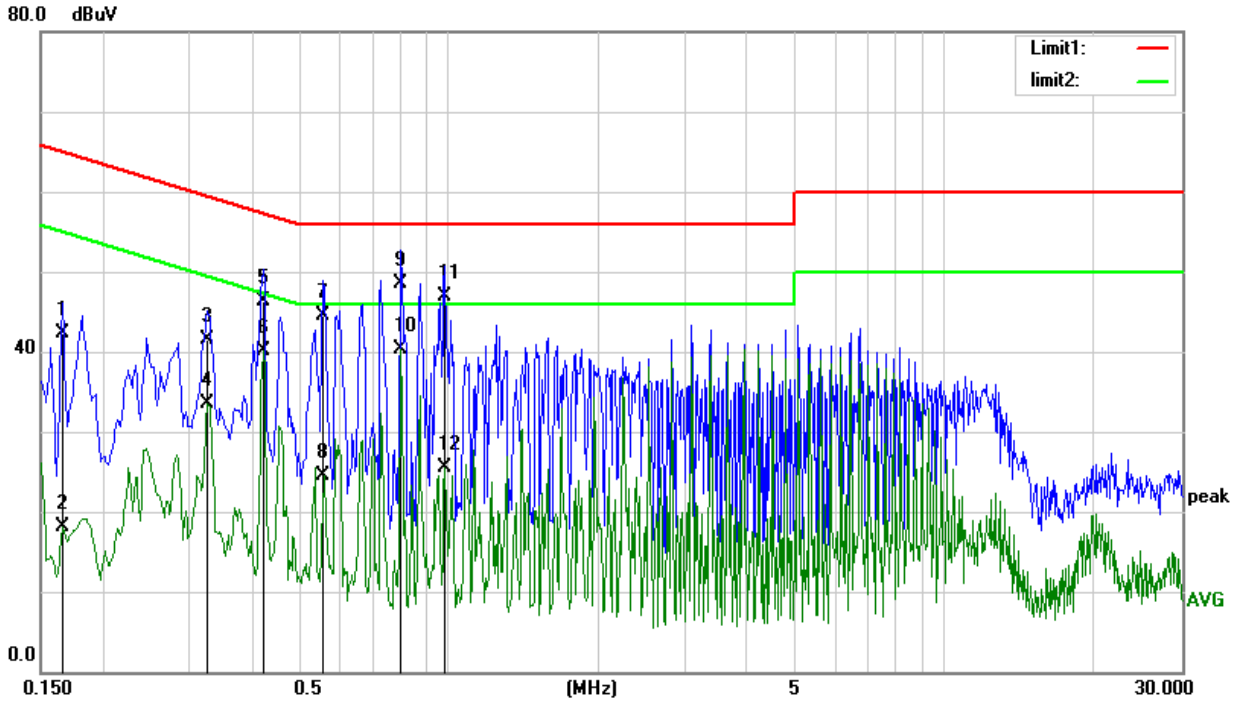


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1539	44.73	11.50	56.23	65.78	-9.55	QP
2	0.1539	17.71	11.50	29.21	55.78	-26.57	AVG
3	0.4220	33.85	10.36	44.21	57.41	-13.20	QP
4	0.4220	33.88	10.36	44.24	47.41	-3.17	AVG
5	0.6980	40.00	10.21	50.21	56.00	-5.79	QP
6	0.6980	30.69	10.21	40.90	46.00	-5.10	AVG
7	0.9700	39.40	10.16	49.56	56.00	-6.44	QP
8	0.9700	25.18	10.16	35.34	46.00	-10.66	AVG
9	1.1220	40.10	10.16	50.26	56.00	-5.74	QP
10	1.1220	13.99	10.16	24.15	46.00	-21.85	AVG
11	1.2660	34.48	10.17	44.65	56.00	-11.35	QP
12	1.2660	22.24	10.17	32.41	46.00	-13.59	AVG

Remarks:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.
(3) Power by AC 120V 60Hz.

Test Mode:	Wireless Charging

Neutral



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1660	30.83	11.42	42.25	65.15	-22.90	QP
2	0.1660	6.71	11.42	18.13	55.15	-37.02	AVG
3	0.3260	31.10	10.49	41.59	59.55	-17.96	QP
4	0.3260	22.97	10.49	33.46	49.55	-16.09	AVG
5	0.4220	35.96	10.36	46.32	57.41	-11.09	QP
6	0.4220	29.72	10.36	40.08	47.41	-7.33	AVG
7	0.5580	34.33	10.25	44.58	56.00	-11.42	QP
8	0.5580	14.26	10.25	24.51	46.00	-21.49	AVG
9	0.7980	38.39	10.18	48.57	56.00	-7.43	QP
10	0.7980	30.16	10.18	40.34	46.00	-5.66	AVG
11	0.9820	36.73	10.16	46.89	56.00	-9.11	QP
12	0.9820	15.34	10.16	25.50	46.00	-20.50	AVG

Remarks:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.
(3) Power by AC 120V 60Hz.

5. RADIATED EMISSION TEST

5.1LIMIT

In case the emission fall within the restricted band specified onn the 15.209(a) in the table below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT (9 kHz-1000MHz)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
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

LIMITS OF RADIATED EMISSION MEASUREMENT (9 kHz-30 MHz)

Frequency (MHz)	Magnetic field strength (H-Field) (μA/m)	Measurement Distance (meters)
0.009-0.490	6.37/F(kHz)	300
0.490-1.705	6.37/F(kHz)	30
1.705-30.0	0.08	30

LIMITS OF RADIATED EMISSION MEASUREMENT (30 MHz-1000MHz)

Frequency (MHz)	Field Strength (μV/m at 3m)
30-88	100
88-216	150
216-960	200
Above 960	500

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

Frequency (MHz)	(dBuV/m at 3 m)	
	Peak	Average
Above 1000	74	54

Note:

(1) The limit for radiated test was performed according to FCC PART 15C

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

5.2TEST PROCEDURE

a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
b. The measuring distance of 3 m or 1.5m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
c. The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn‘t perform. (below 1GHz)
h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn‘t perform. (above 1GHz)
i. Measurement Value = Reading Level + Correct Factor.
Margin Level = Measurement Value - Limit Value.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW (Emission in restricted band)	RBW 1MHz VBW 3MHz peak detector for Pk value RMS detector for AV value

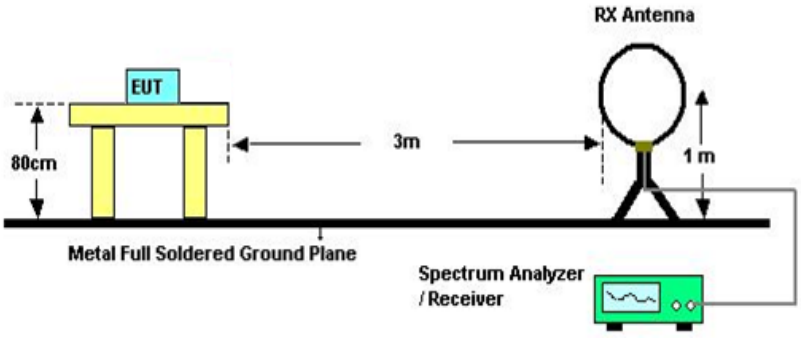
Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9 kHz~90 kHz for PK/AVG detector
Start ~ Stop Frequency	90 kHz~110 kHz for QP detector
Start ~ Stop Frequency	110 kHz~490 kHz for PK/AVG detector
Start ~ Stop Frequency	490 kHz~30 MHz for QP detector
Start ~ Stop Frequency	30MHz~1000MHz for QP detector

5.3MEASUREMENT INSTRUMENTS LIST

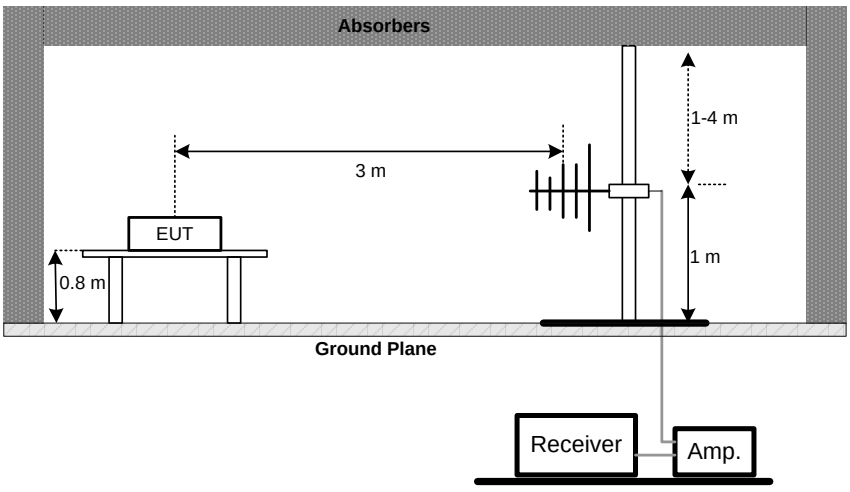
Item	Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	EMI Test Receiver	R&S	ESCI	101307	12/18/2023
2	Spectrum Analyzer	Agilent	E4407B	US40240708	11/10/2023
3	Loop antenna	SCHWARZBECK K	FMZB1519	1519-062	01/15/2024
4	Broadband antenna	SCHWARZBECK	VULB9168	VULB9168-192	07/04/2023
5	HORN ANTENNA	SCHWARZBECK	BBHA9120D	9120D 1065	04/09/2024
6	Preamplifier Amplifier	HP	8447F	3113A05680	12/12/2023
7	PRE-AMPLIFIER	EMEC	EM01G26G	60679	04/05/2024
8	RF Cable	R&S	Test Cable 4	4	12/12/2023
9	RF Cable	R&S	Test Cable 5	5	12/12/2023
10	RF Cable	R&S	Test Cable 9	9	04/18/2024
11	RF Cable	R&S	Test Cable 10	10	12/12/2023
12	Measurement Software	Farad	EZ-EMC (Ver.ATT-03A)	N/A	N/A

5.4TESTSETUP

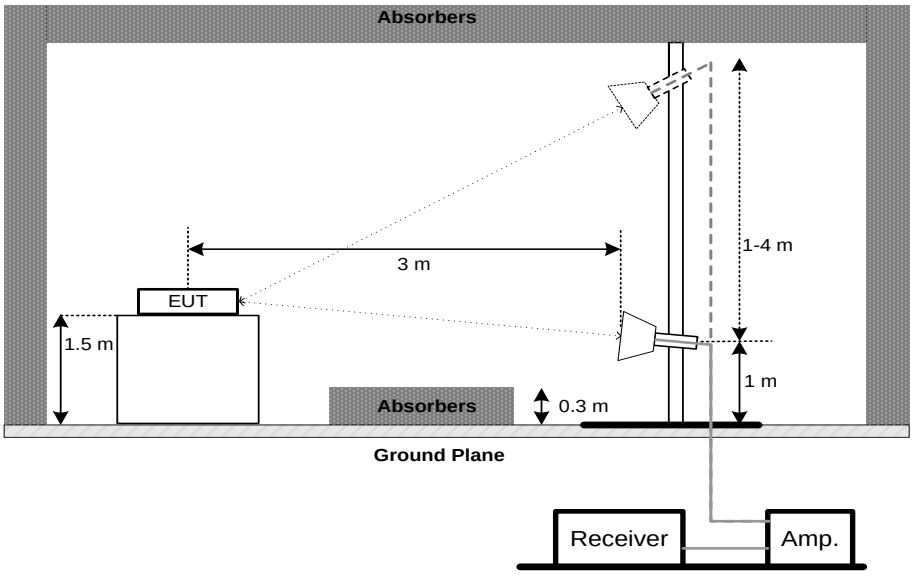
9 kHz-30 MHz



30 MHz to 1 GHz



Above 1 GHz



5.5EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

Remark: The test result is calculated as the following:

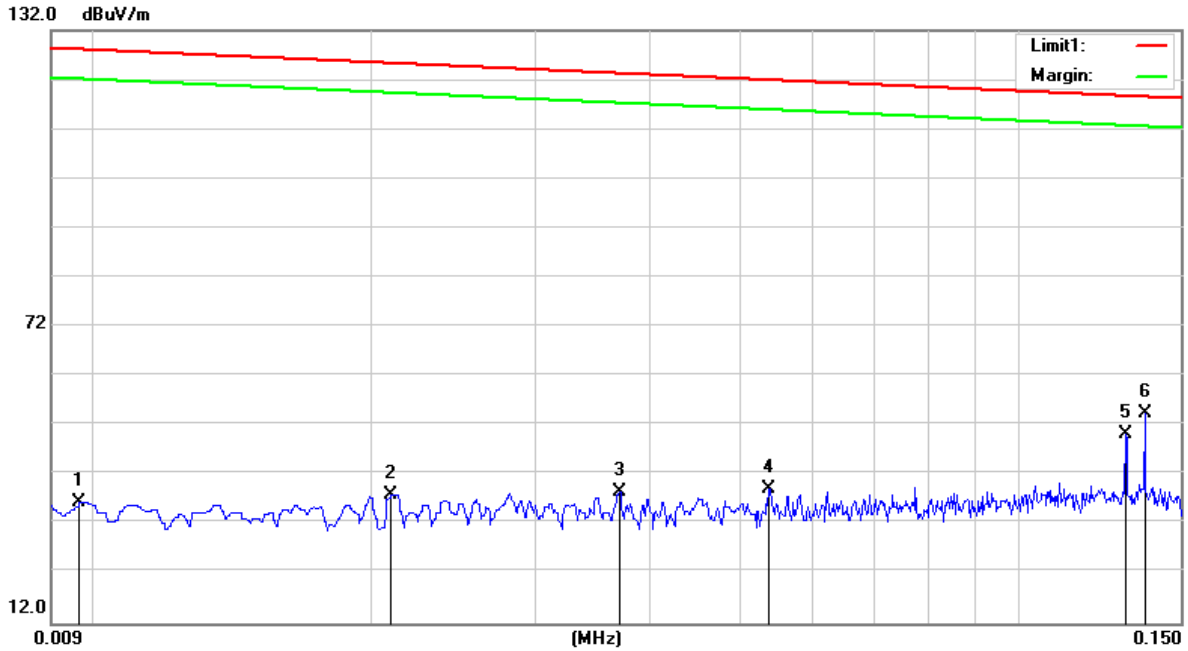
(1) Result = Reading + Correct Factor

(2) Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain + Attenuator

(3) Margin = Result - Limit

5.6 TEST RESULT- 9kHz TO 30MHz

Test Mode :	Wireless Charging



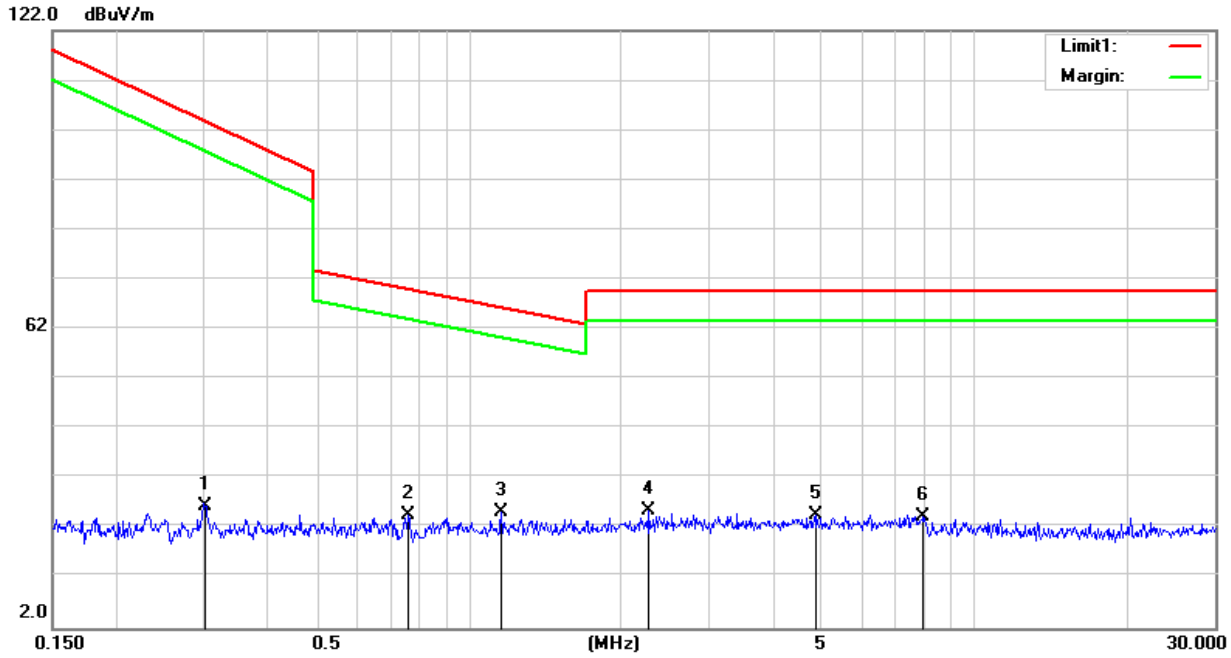
No.	Frequency (KHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0097	15.69	20.78	36.47	128.44	-91.97	peak
2	0.0210	17.41	20.51	37.92	127.62	-89.70	peak
3	0.0371	18.12	20.34	38.46	126.46	-88.00	peak
4	0.0538	18.79	20.48	39.27	125.25	-85.98	peak
5	0.1310	30.38	19.93	50.31	119.69	-69.38	peak
6	0.1373	34.37	20.02	54.39	119.23	-64.84	peak

Note:

Distance extrapolation factor =40 log (specific distance/test distance)(dB);

Limit line = specific limits(dBuv) + distance extrapolation factor

Test Mode :	Wireless Charging



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.3003	5.81	20.73	26.54	107.48	-80.94	peak
2	0.7589	3.92	20.80	24.72	71.40	-46.68	peak
3	1.1592	4.41	20.89	25.30	67.83	-42.53	peak
4	2.2726	4.43	21.03	25.46	69.50	-44.04	peak
5	4.8738	3.69	21.10	24.79	69.50	-44.71	peak
6	7.9352	3.51	20.94	24.45	69.50	-45.05	peak

Note:

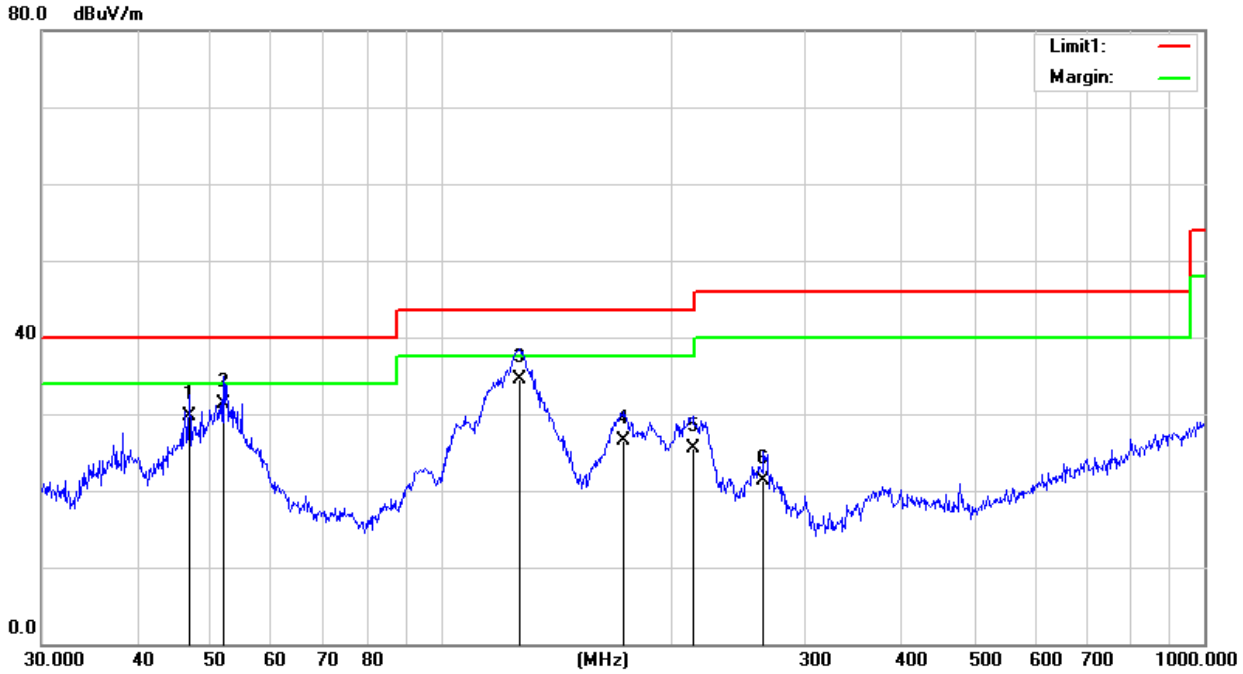
Distance extrapolation factor =40 log (specific distance/test distance)(dB);

Limit line = specific limits(dBuv) + distance extrapolation factor

5.7 TEST RESULT- 30MHz TO 1000MHz

Test Mode :	Wireless Charging

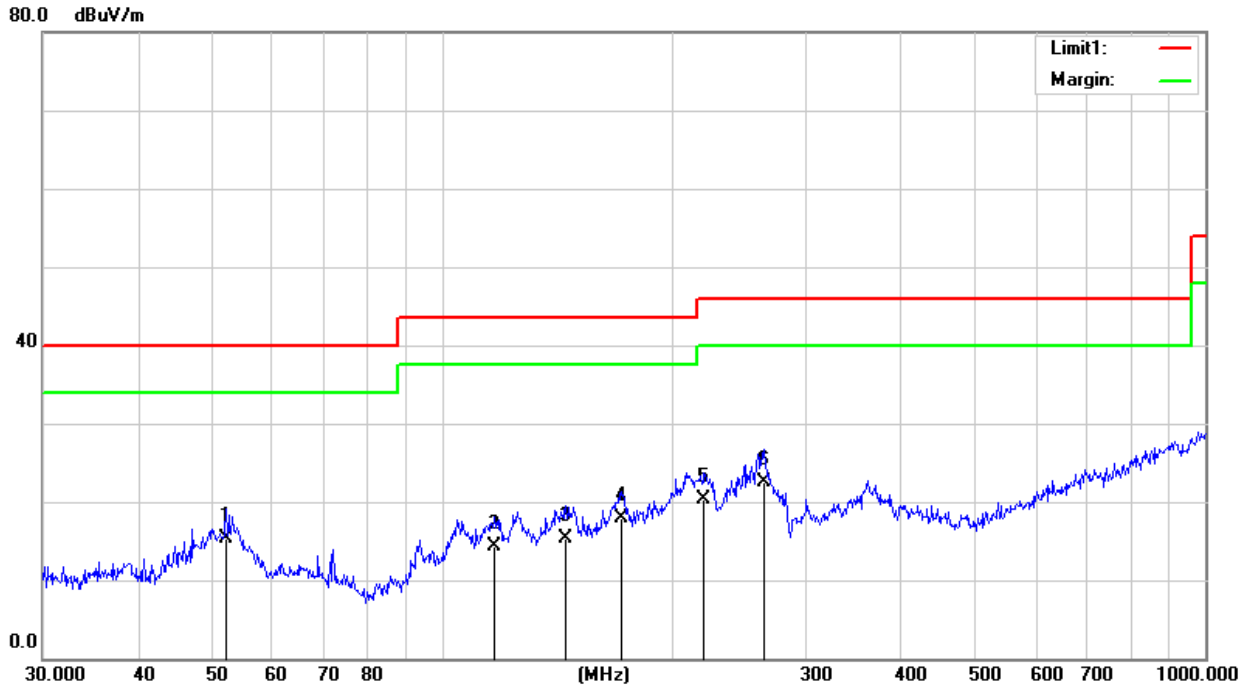
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	46.8303	43.85	-14.20	29.65	40.00	-10.35	QP
2	51.8430	43.99	-12.75	31.24	40.00	-8.76	QP
3	126.7723	48.23	-13.72	34.51	43.50	-8.99	QP
4	173.8135	40.18	-13.60	26.58	43.50	-16.92	QP
5	213.7634	37.62	-12.05	25.57	43.50	-17.93	QP
6	264.7457	31.15	-9.91	21.24	46.00	-24.76	QP

Test Mode :	Wireless Charging

Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	52.2079	30.49	-15.17	15.32	40.00	-24.68	QP
2	117.3603	29.62	-15.38	14.24	43.50	-29.26	QP
3	145.3506	29.72	-14.40	15.32	43.50	-28.18	QP
4	171.9946	30.04	-12.19	17.85	43.50	-25.65	QP
5	220.6171	29.94	-9.62	20.32	46.00	-25.68	QP
6	263.8190	28.57	-6.01	22.56	46.00	-23.44	QP

6.20DB BANDWIDTH TEST

6.1LIMIT

The field strength of any emission appearing between the band edges and out of band shall be attenuated at least 20DdB below the level of the unmodulated carrier or to the general limits in
Section 15.209

6.2TEST PROCEDURE AND SETTING

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.

b. Spectrum Setting : RBW= 300Hz, VBW=1 kHz, Sweep time = Auto.

6.3MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum analyzer	KEYSIGHT	N9010A	MY55150427	2024/05/23
2	Attenuator	Mini-Circuits	BW-S10W2	101109	N/A
3	RF Cable	Mi-cable	C10-01-01-1	100309	N/A

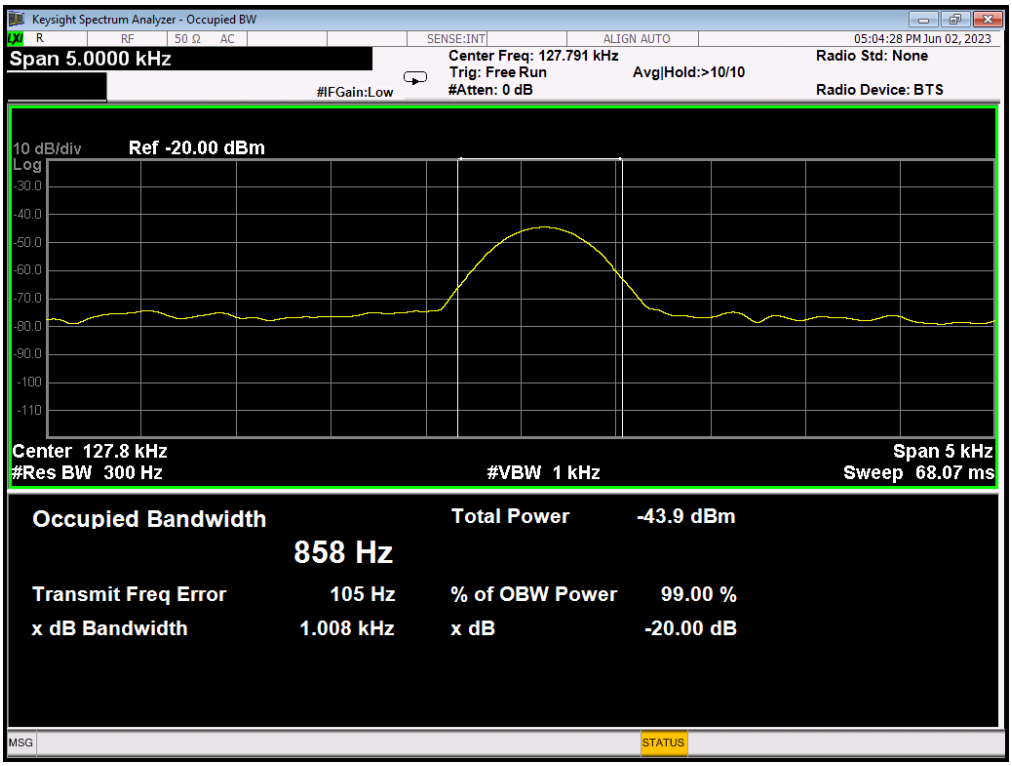
6.4TEST SETUP

6.5EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.5 unless otherwise a special operating condition is specified in the follows during the testing.

6.6TESTRESULTS

WIRLESS CHARGING MODE			
Frequency (kHz)	20 dB bandwidth (kHz)	99%OBW (kHz)	Result
127.8	1.008	0.858	PASS



END OF TEST REPORT