

APPLICATION FOR VERIFICATION
On Behalf of
Shenzhen Bluetimes Technology Co., Ltd.

Wireless Charger
Model No.: Q12, Q8, Q9, Q10, Q11, Q13, Q15, Q16, Q18, Q20

FCC ID: 2ADI9-BT-Q

Prepared for : Shenzhen Bluetimes Technology Co., Ltd.
Address : 5-7F, Block B, Taixinglong Industrial Zone, Hezhou, Xixiang
Town, Baoan district, Shenzhen, China

Prepared by : Shenzhen Accurate Technology Co., Ltd.
Address : 1/F., Building A, Changyuan New Material Port, Science &
Industry Park, Nanshan District, Shenzhen, Guangdong, P.R.
China

Tel: +86-755-26503290

Fax: +86-755-26503396

Report No. : ATE20180826
Date of Test : May 21, 2018
Date of Report : May 23, 2018

TABLE OF CONTENTS

Description	Page
Test Report Declaration	
1. TEST RESULTS SUMMARY	4
2. GENERAL INFORMATION	5
2.1. Description of Device (EUT).....	5
2.2. Special Accessory and Auxiliary Equipment	5
2.3. Description of Test Facility	6
2.4. Measurement Uncertainty.....	6
3. MEASURING DEVICE AND TEST EQUIPMENT	7
3.1. The Equipment Used to Measure Conducted Disturbance	7
3.2. The Equipment Used to Measure Radiated Emission.....	7
4. POWER LINE CONDUCTED MEASUREMENT	8
4.1. Block Diagram of Test Setup.....	8
4.2. Power Line Conducted Emission Measurement Limits.....	8
4.3. Configuration of EUT on Measurement	8
4.4. Operating Condition of EUT	8
4.5. Test Procedure	9
4.6. Data Sample.....	9
4.7. Power Line Conducted Emission Measurement Results	9
5. RADIATED EMISSION MEASUREMENT.....	14
5.1. Block Diagram of Test.....	14
5.2. Radiated Emission Limit (Class B).....	15
5.3. EUT Configuration on Measurement	15
5.4. Operating Condition of EUT	15
5.5. Test Procedure	16
5.6. Data Sample.....	17
5.7. Radiated Emission Measurement Result	18
6. ANTENNA REQUIREMENT.....	21
6.1. The Requirement	21
6.2. Antenna Construction	21

Test Report Declaration

Applicant : Shenzhen Bluetimes Technology Co., Ltd.
 Address : 5-7F, Block B, Taixinglong Industrial Zone, Hezhou, Xixiang Town, Baoan district, Shenzhen, China

Manufacturer : Shenzhen Bluetimes Technology Co., Ltd.
 Address : 5-7F, Block B, Taixinglong Industrial Zone, Hezhou, Xixiang Town, Baoan district, Shenzhen, China

Product : Wireless Charger

Model No. : Q12, Q8, Q9, Q10, Q11, Q13, Q15, Q16, Q18, Q20
 (Note: These samples are same except their model name is different. So we prepare Q12 for test.)

Trade name : Bluetimes

Measurement Procedure Used:

**FCC CFR47 Part 15 Subpart C Section 15.207 and 15.209
 ANSI C63.10: 2013**

The device described above is tested by Shenzhen Accurate Technology Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C limits both radiated and conducted emissions. The measurement results are contained in this test report and Shenzhen Accurate Technology Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Shenzhen Accurate Technology Co., Ltd.

Date of Test : May 21, 2018
 Date of Report : May 23, 2018

Prepared by : Star Yang
 (Star Yang, Engineer)

Approved & Authorized Signer : Sean Liu
 (Sean Liu, Manager)



1. TEST RESULTS SUMMARY

Test Items	Test Standard	Test Results
Power Line Conducted Emission	FCC Part 15.207	Pass
Radiated Emission	FCC Part 15.209	Pass

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

		Wireless Charger
Frequency	:	110-205kHz
Modulation Type	:	ASK
Type of Antenna	:	Coil Antenna
Rating	:	Input: 5V/2A; 9V/2A (MAX) Output: 5W; 7.5W; 10W

2.2. Special Accessory and Auxiliary Equipment

AC/DC Power Adapter (provided by laboratory)	:	Model: TEKA006-0502000UKU
		Input: 100-240V~50/60Hz 0.3A
		Output: DC 5V/2A

2.3. Description of Test Facility

- EMC Lab : Recognition of accreditation by Federal Communications Commission (FCC)
The Designation Number is CN1189
The Registration Number is 708358
- Listed by Innovation, Science and Economic Development Canada (ISED)
The Registration Number is 5077A-2
- Accredited by China National Accreditation Service for Conformity Assessment (CNAS)
The Registration Number is CNAS L3193
- Accredited by American Association for Laboratory Accreditation (A2LA)
The Certificate Number is 4297.01
- Name of Firm : Shenzhen Accurate Technology Co., Ltd
Site Location : 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China

2.4. Measurement Uncertainty

- Conducted emission expanded uncertainty : U=2.23dB, k=2
- Radiated emission expanded uncertainty (9kHz-30MHz) : U=3.08dB, k=2
- Radiated emission expanded uncertainty (30MHz-1000MHz) : U=4.42dB, k=2
- Radiated emission expanded uncertainty (Above 1GHz) : U=4.06dB, k=2

3. MEASURING DEVICE AND TEST EQUIPMENT

3.1. The Equipment Used to Measure Conducted Disturbance

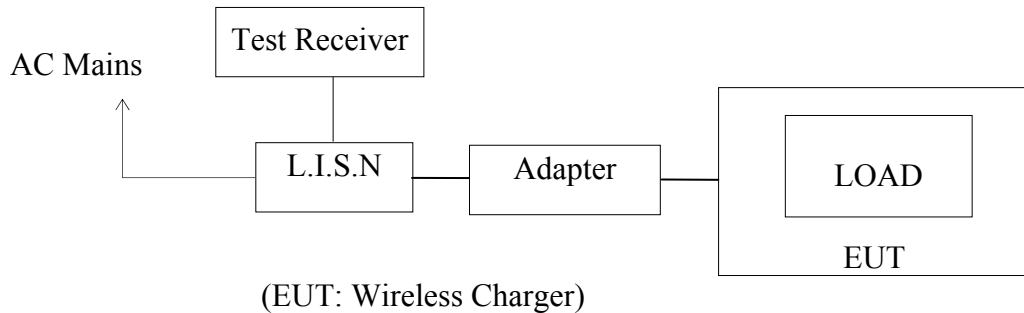
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCS30	100307	Jan. 06, 2018	1 Year
4.	L.I.S.N.	Schwarzbeck	NLSK8126	8126431	Jan. 06, 2018	1 Year
8.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100305	Jan. 06, 2018	1 Year
12.	50Ω Coaxial Switch	Anritsu Corp	MP59B	6200283933	Jan. 06, 2018	1 Year
17.	RF Coaxial Cable	SUHNER	N-2m	No.2	Jan. 06, 2018	1 Year

3.2. The Equipment Used to Measure Radiated Emission

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
2.	Spectrum Analyzer	Rohde&Schwarz	FSV40	101495	Jan. 06, 2018	1 Year
6.	Test Receiver	Rohde& Schwarz	ESR	101817	Jan. 06, 2018	1 Year
7.	Bilog Antenna	Schwarzbeck	VULB9163	9163-194	Jan. 06, 2018	1 Year
11.	Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 06, 2018	1 Year
12.	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 06, 2018	1 Year
15.	RF Switching Unit+PreAMP	Compliance Direction	RSU-M2	38322	Jan. 06, 2018	1 Year
16.	Pre-Amplifier	Agilent	8447D	294A10619	Jan. 06, 2018	1 Year
17.	Pre-Amplifier	Rohde&Schwarz	CBLU11835 40-01	3791	Jan. 06, 2018	1 Year
19.	50 Coaxial Switch	Anritsu Corp	MP59B	6200506474	Jan. 06, 2018	1 Year
24.	RF Coaxial Cable	RESENBERGER	N-3.5m	No.9	Jan. 06, 2018	1 Year
25.	RF Coaxial Cable	SUHNER	N-6m	No.10	Jan. 06, 2018	1 Year
26.	RF Coaxial Cable	RESENBERGER	N-12m	No.11	Jan. 06, 2018	1 Year
27.	RF Coaxial Cable	RESENBERGER	N-0.5m	No.12	Jan. 06, 2018	1 Year
28.	RF Coaxial Cable	SUHNER	N-2m	No.13	Jan. 06, 2018	1 Year
29.	RF Coaxial Cable	SUHNER	N-0.5m	No.15	Jan. 06, 2018	1 Year
30.	RF Coaxial Cable	SUHNER	N-2m	No.16	Jan. 06, 2018	1 Year
31.	RF Coaxial Cable	RESENBERGER	N-6m	No.17	Jan. 06, 2018	1 Year

4. POWER LINE CONDUCTED MEASUREMENT

4.1. Block Diagram of Test Setup



4.2. Power Line Conducted Emission Measurement Limits

Frequency (MHz)	Limit dB(μ V)	
	Quasi-peak Level	Average Level
0.15 - 0.50	66.0 – 56.0 *	56.0 – 46.0 *
0.50 - 5.00	56.0	46.0
5.00 - 30.00	60.0	50.0

NOTE1: The lower limit shall apply at the transition frequencies.
 NOTE2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.

4.3. Configuration of EUT on Measurement

The equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner, which tends to maximize its emission characteristics in a normal application.

4.4. Operating Condition of EUT

- 4.4.1. Setup the EUT and simulator as shown as Section 4.1.
- 4.4.2. Turn on the power of all equipment.
- 4.4.3. Let the EUT work in test mode and measure it.

4.5. Test Procedure

The EUT is put on the plane 0.8 m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2013 on Conducted Emission Measurement.

The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

4.6. Data Sample

Frequency (MHz)	Transducer value (dB)	QuasiPeak Level (dBμV)	Average Level (dBμV)	QuasiPeak Limit (dBμV)	Average Limit (dBμV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
X.XX	10.6	25.3	17.0	59.0	49.0	33.7	32.0	Pass

Transducer value = Insertion loss of LISN + Cable Loss
 Result = Quasi-peak Level/Average Level + Transducer value
 Limit = Limit stated in standard

Calculation Formula:

Margin = Limit – Reading level value – Transducer value

4.7. Power Line Conducted Emission Measurement Results

PASS.

The frequency range from 150kHz to 30MHz is checked.

Emissions attenuated more than 20 dB below the permissible value are not reported.

The spectral diagrams are attached as below.

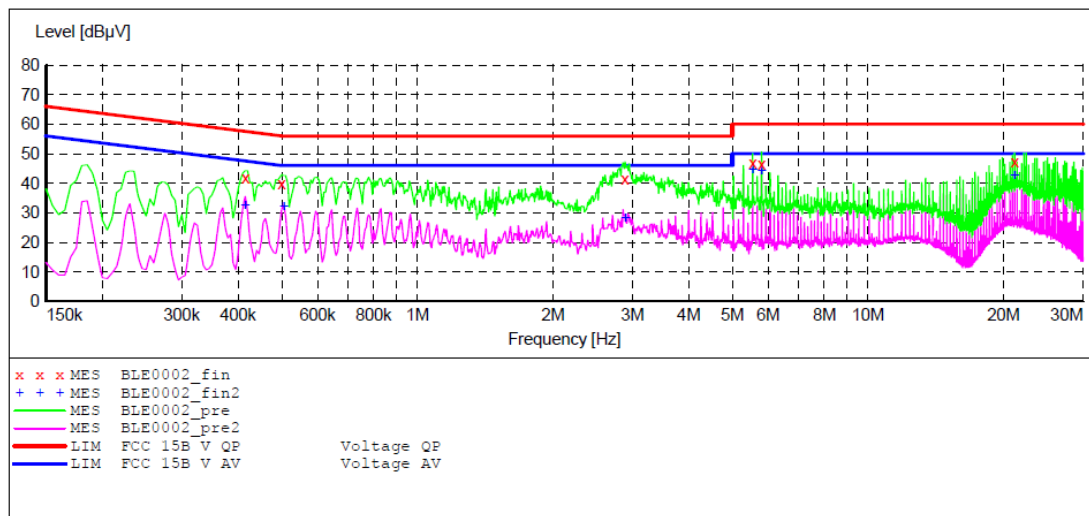
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15C

EUT: Wireless Charger M/N:Q12
 Manufacturer: Bluetimes
 Operating Condition: Max load
 Test Site: 1#Shielding Room
 Operator: Star
 Test Specification: N 240V/60Hz
 Comment: Rerport No.:ATE20180826
 Start of Test: 5/21/2018 / 9:18:09AM

SCAN TABLE: "V 9K-30MHz fin"

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	NSLK8126 2008
150.0 kHz	30.0 MHz	5.0 kHz	Average			
			QuasiPeak	1.0 s	9 kHz	NSLK8126 2008
			Average			



MEASUREMENT RESULT: "BLE0002_fin"

5/21/2018 9:22AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.415000	41.60	10.7	58	15.9	QP	N	GND
0.500000	39.90	10.7	56	16.1	QP	N	GND
2.890000	41.20	11.0	56	14.8	QP	N	GND
5.550000	47.00	11.2	60	13.0	QP	N	GND
5.810000	46.50	11.2	60	13.5	QP	N	GND
21.160000	47.20	11.4	60	12.8	QP	N	GND

MEASUREMENT RESULT: "BLE0002_fin2"

5/21/2018 9:22AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.415000	32.40	10.7	48	15.1	AV	N	GND
0.505000	31.90	10.7	46	14.1	AV	N	GND
2.890000	28.10	11.0	46	17.9	AV	N	GND
5.550000	44.60	11.2	50	5.4	AV	N	GND
5.810000	44.30	11.2	50	5.7	AV	N	GND
21.160000	42.50	11.4	50	7.5	AV	N	GND

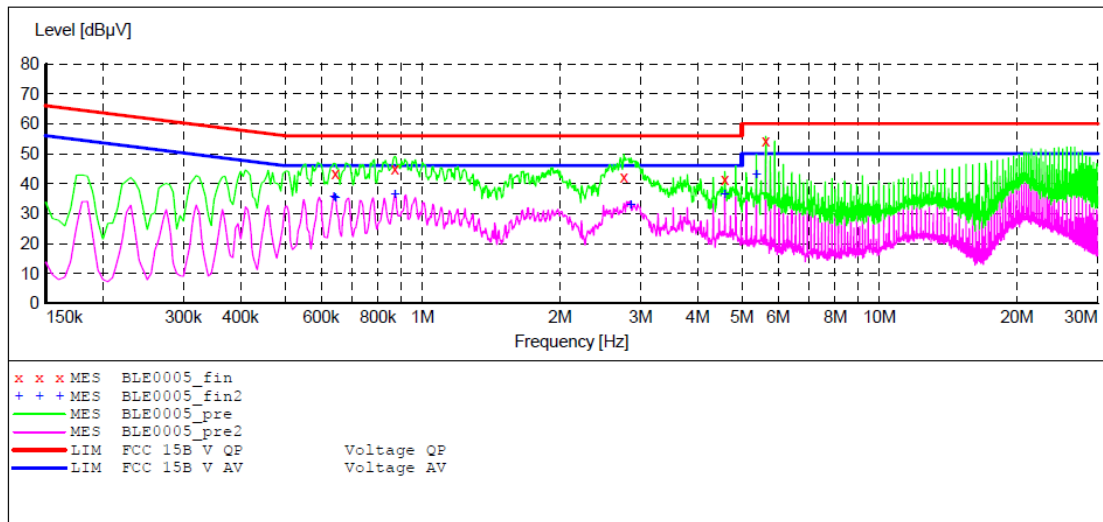
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15C

EUT: Wireless Charger M/N:Q12
 Manufacturer: Bluetimes
 Operating Condition: Max load
 Test Site: 1#Shielding Room
 Operator: Star
 Test Specification: L 240V/60Hz
 Comment: Rerport No.:ATE20180826
 Start of Test: 5/21/2018 / 9:37:45AM

SCAN TABLE: "V 9K-30MHz fin"

Start	Stop	Step	_SUB_STD_VTERM2	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	1.70	QuasiPeak	1.0 s	200 Hz	NSLK8126 2008
150.0 kHz	30.0 MHz	5.0 kHz		Average			
				QuasiPeak	1.0 s	9 kHz	NSLK8126 2008
				Average			



MEASUREMENT RESULT: "BLE0005_fin"

5/21/2018 9:39AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.645000	43.40	10.8	56	12.6	QP	L1	GND
0.870000	44.90	10.8	56	11.1	QP	L1	GND
2.760000	42.30	11.0	56	13.7	QP	L1	GND
4.590000	41.50	11.1	56	14.5	QP	L1	GND
5.640000	54.20	11.2	60	5.8	QP	L1	GND

MEASUREMENT RESULT: "BLE0005_fin2"

5/21/2018 9:39AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.640000	35.60	10.8	46	10.4	AV	L1	GND
0.645000	35.30	10.8	46	10.7	AV	L1	GND
0.870000	36.30	10.8	46	9.7	AV	L1	GND
2.850000	33.00	11.0	46	13.0	AV	L1	GND
4.590000	36.20	11.1	46	9.8	AV	L1	GND
5.380000	43.10	11.2	50	6.9	AV	L1	GND

ACCURATE TECHNOLOGY CO.,LTD

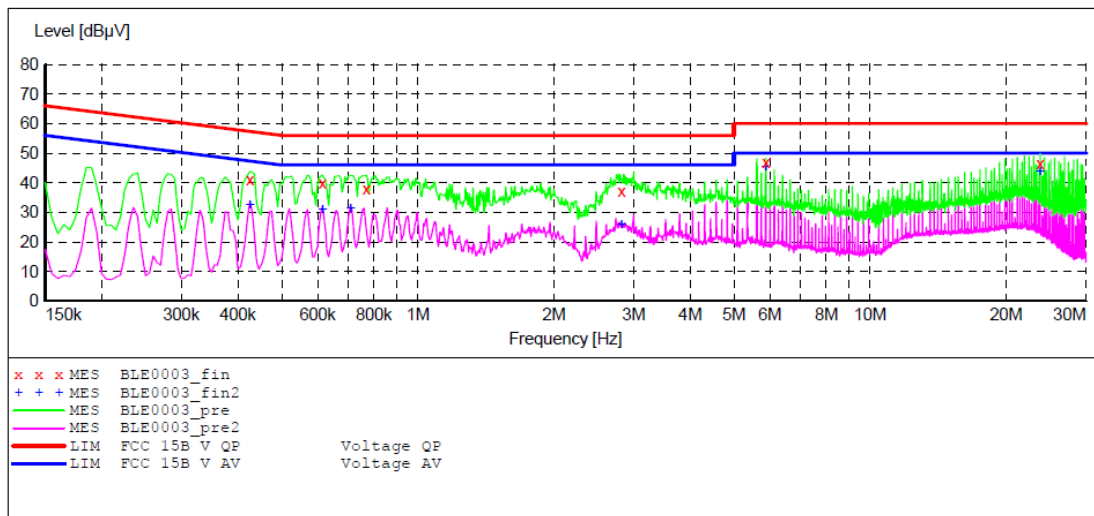
CONDUCTED EMISSION STANDARD FCC PART 15C

EUT: Wireless Charger M/N:Q12
 Manufacturer: Bluetimes
 Operating Condition: Max load
 Test Site: 1#Shielding Room
 Operator: Star
 Test Specification: N 120V/60Hz
 Comment: Rerport No.:ATE20180826
 Start of Test: 5/21/2018 / 9:22:48AM

SCAN TABLE: "V 9K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak Average	1.0 s	200 Hz	NSLK8126 2008
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak Average	1.0 s	9 kHz	NSLK8126 2008



MEASUREMENT RESULT: "BLE0003_fin"

5/21/2018 9:27AM

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.425000	41.10	10.7	57	16.2	QP	N	GND
0.615000	39.70	10.7	56	16.3	QP	N	GND
0.770000	38.00	10.8	56	18.0	QP	N	GND
2.820000	37.20	11.0	56	18.8	QP	N	GND
5.880000	46.80	11.2	60	13.2	QP	N	GND
23.770000	46.40	11.5	60	13.6	QP	N	GND

MEASUREMENT RESULT: "BLE0003_fin2"

5/21/2018 9:27AM

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.425000	32.50	10.7	47	14.8	AV	N	GND
0.615000	30.90	10.7	46	15.1	AV	N	GND
0.710000	31.30	10.8	46	14.7	AV	N	GND
2.820000	25.70	11.0	46	20.3	AV	N	GND
5.880000	45.20	11.2	50	4.8	AV	N	GND
23.770000	43.70	11.5	50	6.3	AV	N	GND

ACCURATE TECHNOLOGY CO.,LTD

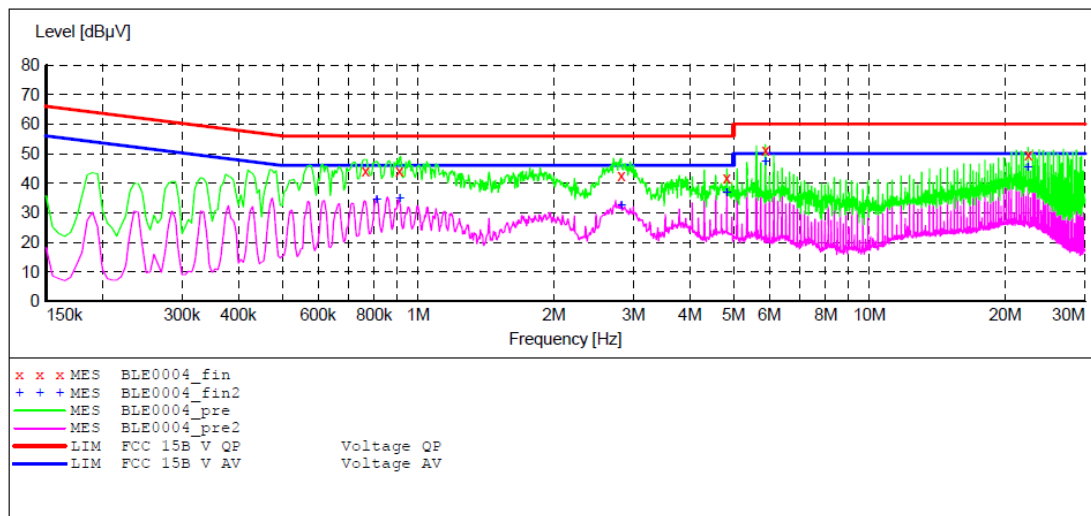
CONDUCTED EMISSION STANDARD FCC PART 15C

EUT: Wireless Charger M/N:Q12
 Manufacturer: Bluetimes
 Operating Condition: Max load
 Test Site: 1#Shielding Room
 Operator: Star
 Test Specification: L 120V/60Hz
 Comment: Rerport No.:ATE20180826
 Start of Test: 5/21/2018 / 9:27:42AM

SCAN TABLE: "V 9K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	NSLK8126 2008
150.0 kHz	30.0 MHz	5.0 kHz	Average			
			QuasiPeak	1.0 s	9 kHz	NSLK8126 2008
			Average			



MEASUREMENT RESULT: "BLE0004_fin"

5/21/2018 9:31AM

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.765000	44.00	10.8	56	12.0	QP	L1	GND
0.910000	44.00	10.8	56	12.0	QP	L1	GND
2.820000	42.70	11.0	56	13.3	QP	L1	GND
4.830000	41.70	11.1	56	14.3	QP	L1	GND
5.880000	51.10	11.2	60	8.9	QP	L1	GND
22.465000	49.40	11.4	60	10.6	QP	L1	GND

MEASUREMENT RESULT: "BLE0004_fin2"

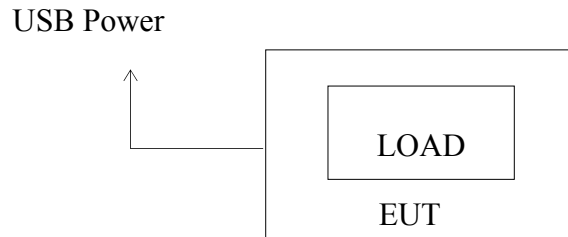
5/21/2018 9:31AM

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Detector	Line	PE
0.810000	34.20	10.8	46	11.8	AV	L1	GND
0.910000	34.60	10.8	46	11.4	AV	L1	GND
2.820000	32.30	11.0	46	13.7	AV	L1	GND
4.830000	36.70	11.1	46	9.3	AV	L1	GND
5.880000	47.20	11.2	50	2.8	AV	L1	GND
22.465000	45.20	11.4	50	4.8	AV	L1	GND

5. RADIATED EMISSION MEASUREMENT

5.1. Block Diagram of Test

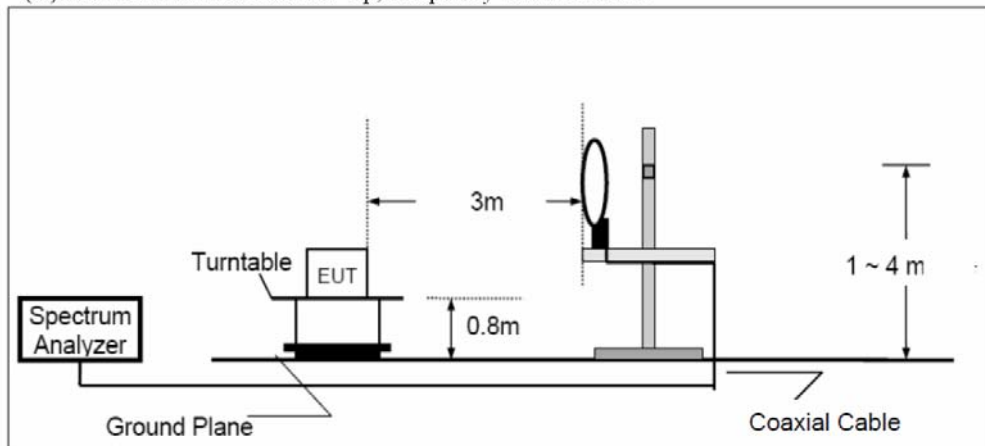
5.1.1. Block diagram of connection between the EUT and simulators



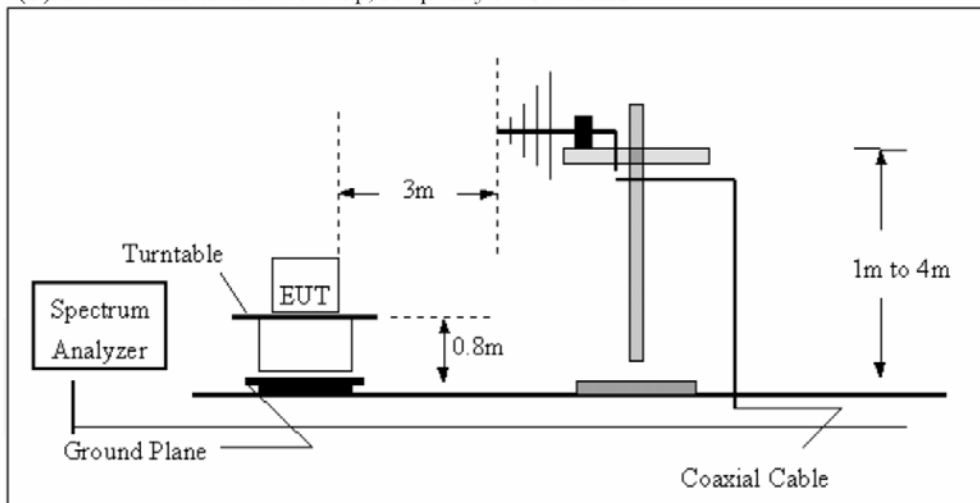
(EUT: Wireless Charger)

5.1.2. Block diagram of test setup (In chamber)

(A) Radiated Emission Test Set-Up, Frequency below 30MHz



(B) Radiated Emission Test Set-Up, Frequency 30-1000MHz



5.2. Radiated Emission Limit (Class B)

Frequency (MHz)	Field Strength Limitation		Field Strength Limitation at 3m Measurement Dist	
	(uV/m)	Dist	(uV/m)	(dBuV/m)
0.009 – 0.490	2400 / F(KHz)	300m	10000 * 2400/F(KHz)	20log 2400/F(KHz) + 80
0.490 – 1.705	24000 / F(KHz)	30m	100 * 24000/F(KHz)	20log 24000/F(KHz) + 40
1.705 – 30.00	30	30m	100* 30	20log 30 + 40
30.0 – 88.0	100	3m	100	20log 100
88.0 – 216.0	150	3m	150	20log 150
216.0 – 960.0	200	3m	200	20log 200
Above 960.0	500	3m	500	20log 500

Limit: $2400/125=19.2\mu\text{V/m}@300\text{m}$

Distance Correction Factor= $40\log(\text{test distance}/\text{specific distance})$

5.3. EUT Configuration on Measurement

The following equipments are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

5.3.1. Wireless Charger (EUT)

Model Number : Q12

Manufacturer : Shenzhen Bluetimes Technology Co., Ltd.

5.4. Operating Condition of EUT

5.4.1. Setup the EUT and simulator as shown as Section 5.1.

5.4.2. Turn on the power of all equipment.

5.4.3. Let the EUT work in test mode and measure it.

5.5. Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated emission measurement.

From 9kHz to 30MHz at distance 3m The EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity.

From 30MHz to 1000MHz at distance 3m The measuring antenna height varied between 1 and 4m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity. The measurements were performed for both vertical and horizontal antenna polarization.

The final measurement will be performed with an EMI Receiver set to Quasi Peak detector for the frequency bands 9kHz to 90kHz and 110 to 490 kHz where an average detector will be used according to Section 15.209(d)(2).

The final level, expressed in dBuV/m, is arrived at by taking the reading from the EMI receiver(Level dBuV) and adding the antenna correction factor and cable loss factor(Factor dB) to it. This result then has to be compared with the relevant FCC limit. The resolution bandwidth during the measurement is as follows:

9kHz – 150kHz: ResBW: 200Hz
150kHz – 30MHz: ResBW: 9kHz

The bandwidth of the EMI test receiver (R&S ESCS30) is set at 120kHz from 30MHz to 1000MHz.

5.6.Data Sample

Frequency(MHz)	Reading (dBμv)	Factor (dB/m)	Result (dBμv/m)	Limit (dBμv/m)	Margin (dB)	Remark
X.XX	49.83	-22.03	27.80	43.50	-15.70	QP

Frequency(MHz) = Emission frequency in MHz

Reading(dBμv) = Uncorrected Analyzer/Receiver reading

Factor (dB/m)= Antenna factor + Cable Loss – Amplifier gain

Result(dBμv/m) = Reading + Factor

Limit (dBμv/m)= Limit stated in standard

Calculation Formula:

Margin(dB) = Result (dBμv/m)–Limit(dBμv/m)

Result(dBμv/m)= Reading(dBμv)+ Factor(dB/m)

The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB means the emission is 7dB below the limit.

5.7. Radiated Emission Measurement Result

PASS.

From 9kHz to 30MHz: TX Mode

Polarization: X

Frequency (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit @3m (dBμV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)
*0.184	50.20	11.77	61.97	102.32	-40.35	QP	124	176
0.552	40.93	3.54	44.47	72.76	-28.29	QP	150	355
0.920	35.04	0.66	35.67	68.32	-32.65	QP	202	228
1.288	29.43	-0.28	29.15	65.41	-36.26	QP	145	208
18.516	29.76	-4.86	24.90	69.54	-44.64	QP	154	35
29.594	27.60	-7.02	20.58	69.54	-48.96	QP	148	38

Polarization: Y

Frequency (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit @3m (dBμV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)
*0.184	46.19	11.77	57.96	102.32	-44.36	QP	112	201
0.368	34.28	6.13	40.41	96.29	-55.88	QP	139	138
0.552	34.25	3.54	37.79	72.76	-34.97	QP	120	323
0.920	32.41	0.66	33.07	68.33	-35.26	QP	150	230
1.288	25.71	-0.28	25.43	65.41	-39.98	QP	154	193
18.802	35.22	-4.95	30.27	69.54	-39.27	QP	135	330

Polarization: Z

Frequency (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit @3m (dBμV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)
*0.184	45.22	11.77	56.99	102.32	-45.33	QP	130	146
0.588	34.49	3.54	38.03	72.21	-34.18	QP	201	301
0.920	30.19	0.66	30.85	68.33	-37.48	QP	156	258
1.288	27.85	-0.28	27.57	65.41	-37.84	QP	200	322
18.147	23.92	-4.86	19.06	69.54	-50.48	QP	236	146
29.361	25.36	-7.02	18.34	69.54	-51.20	QP	145	198

“ * ” : Fundamental frequency

Part 15 Section 15.31(f)(2) (9kHz-30MHz)

Limit at 3m=Limit@300m-40*log(3(m)/300(m))

Limit at 3m=Limit@30m-40*log(3(m)/30(m))

From 30MHz to 1000MHz: TX Mode



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: STAR2016 #2531
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: Wireless Charger
Mode: TX
Model: Q12
Manufacturer: Bluetimes

Polarization: Horizontal
Power Source: DC 5V
Date: 2018-5-21
Time: 10:00:24
Engineer Signature: star
Distance: 3m

Note: Report No.:ATE20180826



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	60.2800	44.16	-14.01	30.15	40.00	-9.85	QP	200	114	
2	124.1329	42.33	-13.54	28.79	43.50	-14.71	QP	200	252	
3	195.1365	45.09	-12.30	32.79	43.50	-10.71	QP	200	130	
4	219.8447	44.44	-11.51	32.93	46.00	-13.07	QP	200	88	
5	262.8955	53.02	-10.31	42.71	46.00	-3.29	QP	200	301	
6	362.9844	47.12	-7.24	39.88	46.00	-6.12	QP	200	256	

Job No.: STAR2016 #2532
 Standard: FCC Class B 3M Radiated
 Test item: Radiation Test
 Temp.(C)/Hum.(%) 23 C / 48 %
 EUT: Wireless Charger
 Mode: TX
 Model: Q12
 Manufacturer: Bluetimes

Polarization: Vertical
 Power Source: DC 5V
 Date: 2018-5-21
 Time: 10:01:27
 Engineer Signature: star
 Distance: 3m

Note: Report No.:ATE20180826



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	36.8952	43.12	-10.84	32.28	40.00	-7.72	QP	100	102	
2	60.7043	50.30	-14.17	36.13	40.00	-3.87	QP	100	145	
3	73.1025	48.13	-16.48	31.65	40.00	-8.35	QP	100	32	
4	121.9754	44.62	-13.29	31.33	43.50	-12.17	QP	100	211	
5	269.4284	50.31	-9.96	40.35	46.00	-5.65	QP	100	195	
6	366.8231	48.00	-7.19	40.81	46.00	-5.19	QP	100	122	

6. ANTENNA REQUIREMENT

6.1.The Requirement

According to Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

6.2.Antenna Construction

Device is equipped with permanent attached antenna, which isn't displaced by other antenna. The max Antenna gain of EUT is 0dBi. Therefore, the equipment complies with the antenna requirement of Section 15.203.



Antenna

***** End of Test Report *****