

FCC Part 15C Test Report

Report No.: BCTC- 160505464E

FCC ID: 2AFK9-LBXXY

Product Name:	YoSmart LED Bulb
Trademark:	N/A
Model Name :	KT-LB-U01W KT-LB-UXXY('XX' is 2 digit numbers which represents the software version, for example, 01 represents the software version 0.1. 'Y' is 1 character which represents the color of product, for example 'B' represents black.)
Prepared For :	KingTing Tech. Corporation
Address :	17165 Von Karman Avenue, Suite 105, Irvine CA, United States
Prepared By :	Shenzhen BCTC Technology Co., Ltd.
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Test Date:	May 12 -May 24, 2016
Date of Report :	May 24, 2016
Report No.:	BCTC-160505464E



TEST RESULT CERTIFICATION

Report No.: BCTC- 160505464E

Applicant's name	King ling Tech. Corporation
Address:	17165 Von Karman Avenue, Suite 105, Irvine CA, United States
Manufacture's Name:	Guangdong KingTing Technology Co., Ltd.
Address:	RM503 XiaGu MeiShengChuangGu, LiuXian 2 Road, Baoan District, Shenzhen, Guangdong, China
Product description	
Product name:	YoSmart LED Bulb
Trademark:	N/A
Model and/or type reference :	KT-LB-U01W
	KT-LB-UXXY('XX' is 2 digit numbers which represents the software version, for example, 01 represents the software version 0.1.
	'Y' is 1 character which represents the color of product, for example 'B' represents black.)
Standards:	FCC Part15.249
	ANSI C63.10:2013

This device described above has been tested by BCTC, 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.

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Signer(Manager)		Carson Zhang



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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.249) , Subpart C			
Standard Test Item		Judgment	Remark
15.207	Conducted Emission	N/A	
15.249 20dB Bandwidth		PASS	
15.249	Radiated Spurious Emission	PASS	
15.205	Band Edge Emission	PASS	
15.203	Antenna Requirement	PASS	

NOTE:

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



1.1 TEST FACILITY

Shenzhen BCTC Technology Co., Ltd.

Add.: No.101, Yousong Road, Longhua New District, Shenzhen, China

FCC Registered No.: 187086

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $\mathbf{y} \pm \mathbf{U}$, where expended uncertainty \mathbf{U} is based on a standard uncertainty multiplied by a coverage factor of $\mathbf{k=2}$, providing a level of confidence of approximately $\mathbf{95}$ %.

No.	Item	Uncertainty
1	Conducted Emission Test	±1.38dB
2	RF power,conducted	±0.16dB
3	Spurious emissions,conducted	±0.21dB
4	All emissions,radiated(<1G)	±4.68dB
5	All emissions,radiated(>1G)	±4.89dB
6	Temperature	±0.5°C
7	Humidity	±2%



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	YoSmart LED Bulb		
Trade Name	N/A		
Model Name KT-LB-U01W KT-LB-UXXY('XX' is 2 digit numbers which represent software version, for example, 01 represents the software version 0.1. 'Y' is 1 character which represents the color of production of production of the color of the color of production of the color of production of the color o			
Model Difference	The product different for model names, outlook color.		
Product Description	The EUT is a YoSmart LED Bulb Operation Frequency: 915 MHz Modulation Type: GFSK Number Of Channel 1 CH Antenna Designation: Please see Note 2. Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an Lighting Device. More details of EUT technical specification, please refer to the User's Manual.		
Channel List	Please refer to the Note 2.		
Power	AC 120V/60Hz		
hardware version			
Software version			
Serial number			
Connecting I/O Port(s) Please refer to the User's Manual			

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

Shenzhen BCTC Technology Co., Ltd.

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Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Gain (dBi)	NOTE
1	N/A	N/A	Internal Antenna	1.5	

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2.2 DESCRIPTION OF TEST MODES

Pretest Mode	Description
Mode 1	TX Mode

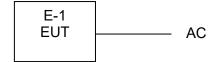
For Radiated Emission		
Final Test Mode	Description	
Mode 1	TX Mode	

EMC Report Tel: 400-788-9558 0755-33019988 Web:Http://www.bctc-lab.com.cn Page 8 of 33



2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Emission Test



2.4 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
E-1	YoSmart LED Bulb	N/A	KT-LB-U01W	N/A	EUT

Item	Shielded Type	Ferrite Core	Length	Note
C1	NO	NO	0.8M	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 <code>FLength_</code> column.



2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

Item	Kind of	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
110111	Equipment	Marialaotaror	1900110.	Contai 110.	Last salistation	Odilbratod dritti
1	Spectrum Analyzer	Agilent	E4407B	MY4510957 2	2015.08.25	2016.08.24
2	Test Receiver	R&S	ESPI	101396	2015.08.25	2016.08.24
3	Bilog Antenna	SCHWARZB ECK	VULB9160	VULB9160- 3369	2015.08.25	2016.08.24
4	50Ω Coaxial Switch	Anritsu	MP59B	620026441 6	2015.07.06	2016.07.05
5	Spectrum Analyzer	Agilent	N9020A	MY5051041	2015.07.06	2016.07.05
6	Horn Antenna	SCHWARZB ECK	9120D	9120D-1275	2015.08.25	2016.08.24
7	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2015.07.06	2016.07.05
8	Amplifier	SCHWARZB ECK	BBV9718	9718-270	2015.08.25	2016.08.24
9	Amplifier	SCHWARZB ECK	BBV9743	9743-119	2015.08.25	2016.08.24
10	Loop Antenna	ARA	PLKT-LB-U 01W30/B	1029	2015.07.06	2016.07.05
11	Power Meter	R&S	NRVS	100696	2015.07.06	2016.07.05
12	Power Sensor	R&S	URV5-Z4	0395.1619. 05	2015.07.06	2016.07.05
13	RF cables	R&S	N/A	N/A	2015.07.06	2016.07.05

Conduction Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	Test Receiver	st Receiver R&S ESCI		1166.5950K 03-101165- ha	2015.08.25	2016.08.24
2	LISN	R&S	NSLK81 26	812646 6	2015.08.24	2016.08.23
3	LISN	R&S	NSLK81 26	812648 7	2015.08.24	2016.08.23
4	50Ω Coaxial Switch	I Anrifell I MIPSUR		620026441 7	2015.08.25	2016.08.24
5	RF cables	R&S	R204	R20X	2015.07.06	2016.07.05



3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

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	Class A	(dBuV)	Class B	(dBuV)	Ctondord
FREQUENCY (MHz)	Quasi-peak	Average	Quasi-peak	Average	Standard
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	73.00	60.00	56.00	46.00	FCC
5.0 -30.0	73.00	60.00	60.00	50.00	FCC

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

3.1.2 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.

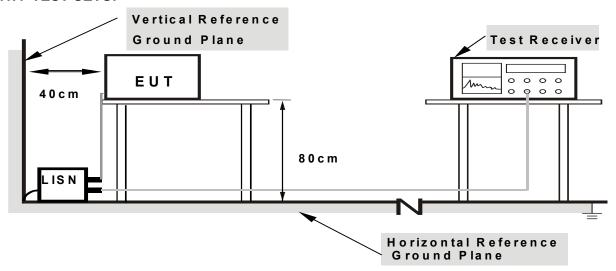
3.1.3 DEVIATION FROM TEST STANDARD

No deviation



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3.1.4 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

3.1.5 EUT OPERATING CONDITIONS

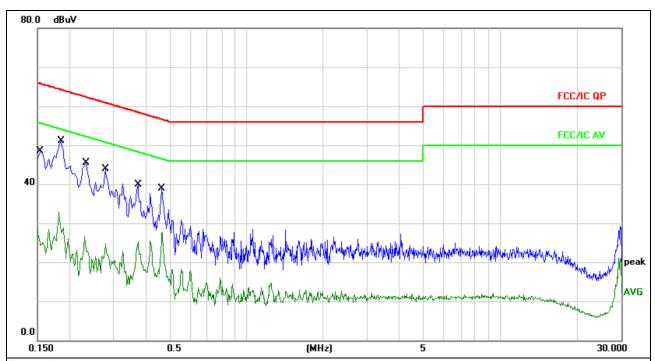
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.



3.1.6 TEST RESULTS

Temperature :	26℃	Relative Humidity :	54%
Pressure :	1010hPa	Phase :	L
Test Voltage :	AC 120V/60Hz	Test Mode :	Mode 1

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Remark:

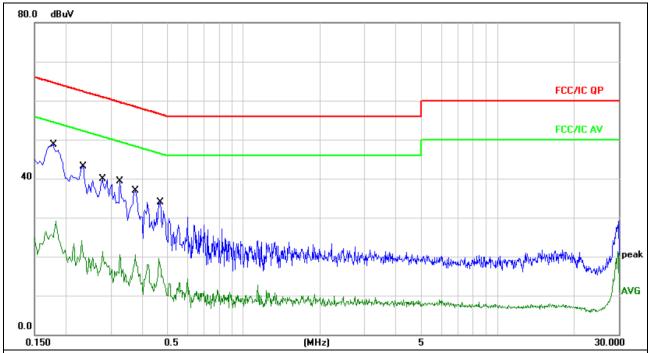
- All readings are Quasi-Peak and Average values.
 Factor = Insertion Loss + Cable Loss.

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
		MHz	dBu∀	dB	dBu∀	dBu∀	dB	Detector	Comment	
1		0.1539	38.53	10.05	48.58	65.78	-17.20	QP		
2		0.1539	14.21	10.05	24.26	55.78	-31.52	AVG		
3	*	0.1860	41.04	10.06	51.10	64.21	-13.11	QP		
4		0.1864	17.53	10.06	27.59	54.19	-26.60	AVG		
5		0.2340	35.42	10.07	45.49	62.30	-16.81	QP		
6		0.2340	12.80	10.07	22.87	52.30	-29.43	AVG		
7		0.2779	33.78	10.09	43.87	60.88	-17.01	QP		
8		0.2787	14.05	10.09	24.14	50.85	-26.71	AVG		
9		0.3740	29.72	10.10	39.82	58.41	-18.59	QP		
10		0.3750	14.38	10.10	24.48	48.39	-23.91	AVG		
11		0.4660	28.86	10.11	38.97	56.58	-17.61	QP		
12		0.4660	17.60	10.11	27.71	46.58	-18.87	AVG		



Temperature :	26 ℃	Relative Humidity :	54%
Pressure :	1010hPa	Phase :	N
Test Voltage :	AC 120V/60Hz	Test Mode :	Mode 1

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Remark:

- 1. All readings are Quasi-Peak and Average values.
- 2. Factor = Insertion Loss + Cable Loss.

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
		MHz	dBu∀	dB	dBu∀	dBu∀	dB	Detector	Comment	
1	*	0.1780	38.57	10.06	48.63	64.57	-15.94	QP		
2		0.1785	15.63	10.06	25.69	54.55	-28.86	AVG		
3		0.2316	12.35	10.07	22.42	52.39	-29.97	AVG		
4		0.2340	33.13	10.07	43.20	62.30	-19.10	QP		
5		0.2779	29.87	10.09	39.96	60.88	-20.92	QP		
6		0.2787	10.54	10.09	20.63	50.85	-30.22	AVG		
7		0.3260	29.14	10.10	39.24	59.55	-20.31	QP		
8		0.3260	10.32	10.10	20.42	49.55	-29.13	AVG		
9		0.3740	26.86	10.10	36.96	58.41	-21.45	QP		
10		0.3750	9.71	10.10	19.81	48.39	-28.58	AVG		
11		0.4661	8.53	10.11	18.64	46.58	-27.94	AVG		
12		0.4700	23.73	10.11	33.84	56.51	-22.67	QP		



3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

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in the table below has to be followed.							
Frequencies	Field Strength	Measurement Distance					
(MHz)	(micorvolts/meter)	(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 (Above 1000MHz)

	Class B (dBuV/m) (at 3M)				
FREQUENCY (MHz)	PEAK	AVERAGE			
Above 1000	74	54			

	Frequencies	Field strength of fundamental	Field strength of harmonics		
	(MHz)	(millivolts/meter)	(microvolts/meter)		
Ī	900-928	50	500		

Notes:

- (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).

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	25GHz
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / <i>10Hz</i> for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP



Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP
------------------------	----------------------------------

3.2.2 TEST PROCEDURE

Below 1GHz test procedure as below:

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. 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.
- d. 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 (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. 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.

Above 1GHz test procedure as below:

- g. Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 metre to 1.5 metre.
- h. Test the EUT in the TX mode.

Note:

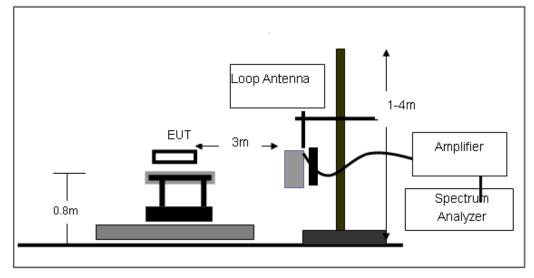
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

3.2.3 DEVIATION FROM TEST STANDARD

No deviation

3.2.4 TEST SETUP

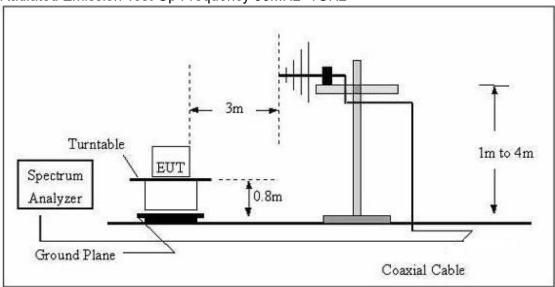
(A) Radiated Emission Test-Up Frequency Below 30MHz



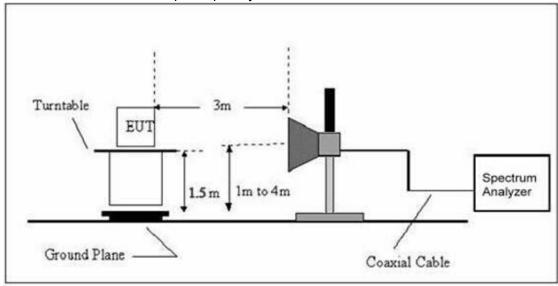


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(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz



3.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.



3.2.6 TEST RESULTS (BETWEEN 9KHZ - 30 MHZ)

Temperature:	20℃	Relative Humidtity:	48%
Pressure:	1010 hPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 2	Polarization :	

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Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
				PASS
				PASS

NOTE:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

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

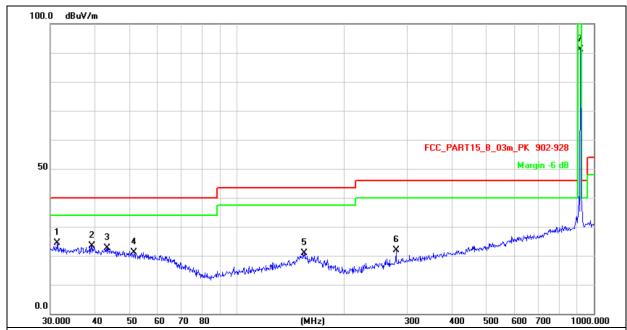
Limit line = specific limits(dBuv) + distance extrapolation factor.



3.2.7 TEST RESULTS (BETWEEN 30MHZ - 1GHZ)

Temperature :	26℃	Relative Humidity :	54%
Pressure :	1010 hPa	Polarization :	Horizontal
Test Voltage :	AC 120V/60Hz		
Test Mode :	Mode 2		

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Remark:

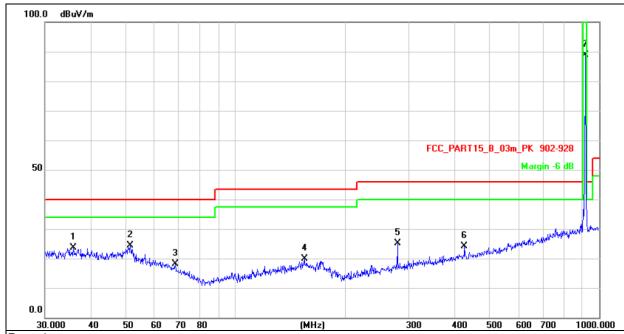
Correct Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Measurement=Reading Level+ Correct Factor

Margin=Measurement - Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		31.3992	32.56	-8.22	24.34	40.00	-15.66	QP			
2		39.2991	32.29	-8.82	23.47	40.00	-16.53	QP			
3		43.3534	31.89	-9.27	22.62	40.00	-17.38	QP			
4		51.4807	31.64	-10.54	21.10	40.00	-18.90	QP			
5		154.2786	33.84	-12.86	20.98	43.50	-22.52	QP			
6		279.0436	35.08	-13.13	21.95	46.00	-24.05	QP			
7	*	915.0000	103.53	-1.18	102.35	114.00	-11.65	peak			
8		915.0000	92.39	-1.18	91.21	94.00	-2.79	AVG			



Temperature :	26 ℃	Relative Humidity:	54%
Pressure :	1010 hPa	Polarization :	Vertical
Test Voltage :	AC 120V/60Hz		
Test Mode :	Mode 2		



Remark:
Correct Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Measurement=Reading Level+ Correct Factor
Margin=Measurement - Limit

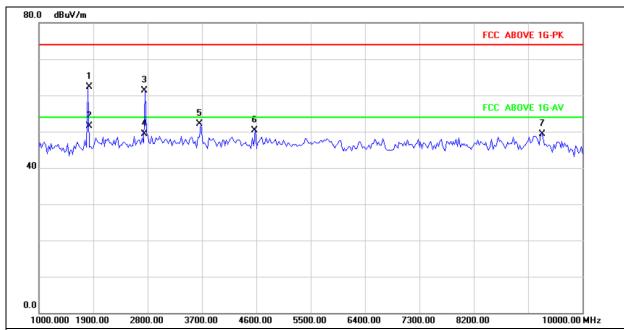
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		35.8746	32.20	-8.58	23.62	40.00	-16.38	QP			
2		51.4807	35.04	-10.54	24.50	40.00	-15.50	QP			
3		68.3908	31.92	-13.89	18.03	40.00	-21.97	QP			
4		154.8204	32.78	-12.86	19.92	43.50	-23.58	QP			
5		279.0436	38.29	-13.13	25.16	46.00	-20.84	QP			
6		426.5210	33.59	-9.57	24.02	46.00	-21.98	QP			
7	*	915.0000	102.42	-1.18	101.24	114.00	-12.76	peak			
8		915.0000	89.98	-1.18	88.80	94.00	-5.20	AVG			



3.2.8 TEST RESULTS (1GHZ~10GHZ)

Temperature :	26℃	Relative Humidity :	54%
Pressure :	1010 hPa	Polarization :	Horizontal
Test Voltage :	AC 120V/60Hz		
Test Mode :	Mode 2		

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Remark:

Correct Factor = Antenna Factor + Cable Loss – Pre-amplifier.

Measurement=Reading Level+ Correct Factor

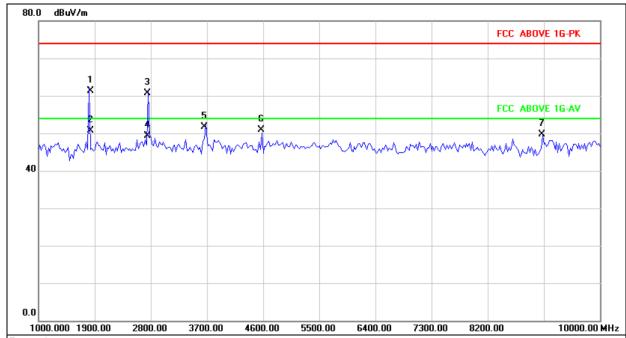
Margin=Measurement - Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		1830.000	49.44	12.88	62.32	74.00	-11.68	peak			
2	*	1830.000	38.59	12.88	51.47	54.00	-2.53	AVG			
3		2745.000	46.71	14.56	61.27	74.00	-12.73	peak			
4		2745.000	34.79	14.56	49.35	54.00	-4.65	AVG			
5		3660.000	34.84	17.28	52.12	74.00	-21.88	peak			
6		4575.000	31.28	19.07	50.35	74.00	-23.65	peak			
7		9330.000	32.37	16.99	49.36	74.00	-24.64	peak			



Relative Humidity: 54% Temperature: **26**℃ 1010 hPa Vertical Polarization: Pressure: AC 120V/60Hz Test Voltage : Test Mode : Mode 2

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Remark:

Correct Factor = Antenna Factor + Cable Loss – Pre-amplifier.
Measurement=Reading Level+ Correct Factor

Margin=Measurement - Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		1830.000	48.47	12.88	61.35	74.00	-12.65	peak			
2	*	1830.000	37.86	12.88	50.74	54.00	-3.26	AVG			
3		2745.000	46.11	14.56	60.67	74.00	-13.33	peak			
4		2745.000	34.66	14.56	49.22	54.00	-4.78	AVG			
5		3660.000	34.49	17.28	51.77	74.00	-22.23	peak			
6		4575.000	31.74	19.07	50.81	74.00	-23.19	peak			
7		9075.000	33.32	16.38	49.70	74.00	-24.30	peak			



3.3 RADIATED BAND EMISSION MEASUREMENT 3.3.1 TEST REQUIREMENT:

FCC Part15 C Section 15,209 and 15,205

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

EDEOLIENCY (MHz)	Class B (dBuV/m) (at 3M)
FREQUENCY (MHz)	QP
Below 1000	43.5

Notes:

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

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- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

Spectrum Parameter	Setting		
Attenuation	Auto		
Start Frequency	900MHz		
Stop Frequency	940MHz		
RB / VB (emission in restricted	100kHz /300kHz		
band)			

3.3.2 TEST PROCEDURE

test procedure as below:

- a. 1. The EUT was placed on the top of a rotating table 0.8meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. 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.
- d. 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 rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. 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.
- g. Test the EUT in theTX Mode

Note:

Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported If Peak Emission below the QP limit, No QP emission was recording.

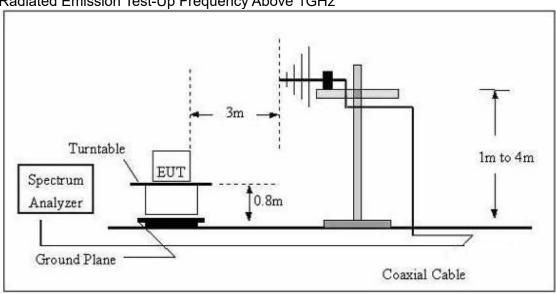


3.3.3 DEVIATION FROM TEST STANDARD

No deviation

3.3.4 TEST SETUP

Radiated Emission Test-Up Frequency Above 1GHz



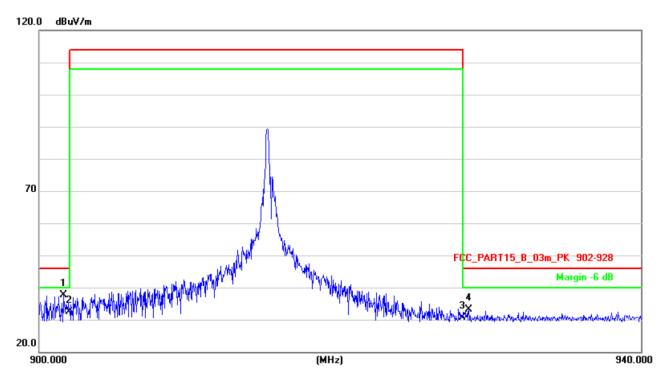
3.3.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

3.3.6 TEST RESULT



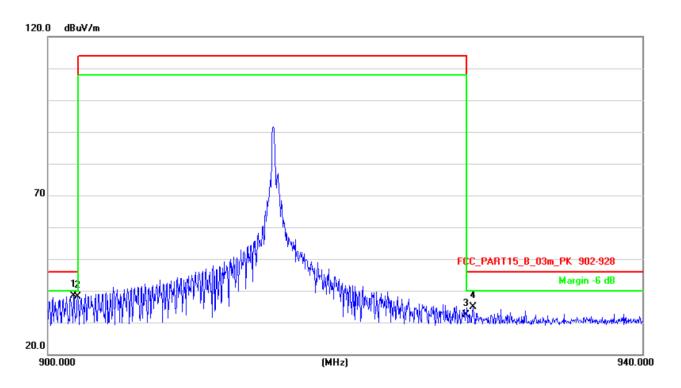
Vertical



No	. Mk	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBu∀	dB/m	dBu∀/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	901.6000	39.10	-1.43	37.67	46.00	-8.33	QP			
2		901.9600	33.75	-1.42	32.33	46.00	-13.67	QP			
3		927.9600	31.64	-0.93	30.71	114.00	-83.29	QP			
4		928.4000	34.09	-0.92	33.17	46.00	-12.83	QP			
		320.4000	34.03	-0.52	33.17	+0.00	-12.00	Qi			



Horizontal



No.	. Mł	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	901.7200	39.81	-1.42	38.39	46.00	-7.61	QP			
2		901.9600	39.57	-1.42	38.15	46.00	-7.85	QP			
3		927.9600	33.39	-0.93	32.46	114.00	-81.54	QP			
4		928.4400	35.71	-0.92	34.79	46.00	-11.21	QP			



4. BANDWIDTH TEST

4.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.249) , Subpart C				
Section	Test Item	Frequency Range (MHz)	Result	
15.249	Bandwidth	902~928	PASS	

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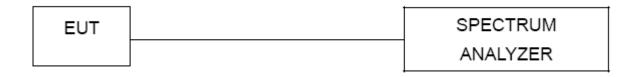
4.1.1 TEST PROCEDURE

- 1. Set RBW = 30 kHz.
- 2. Set the video bandwidth (VBW) \geq 3 x RBW.
- 3. Detector = Peak.
- 4. Trace mode = max hold.
- 5. Sweep = auto couple.
- 6. Allow the trace to stabilize.
- 7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

4.1.2 DEVIATION FROM STANDARD

No deviation.

4.1.3 TEST SETUP



4.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

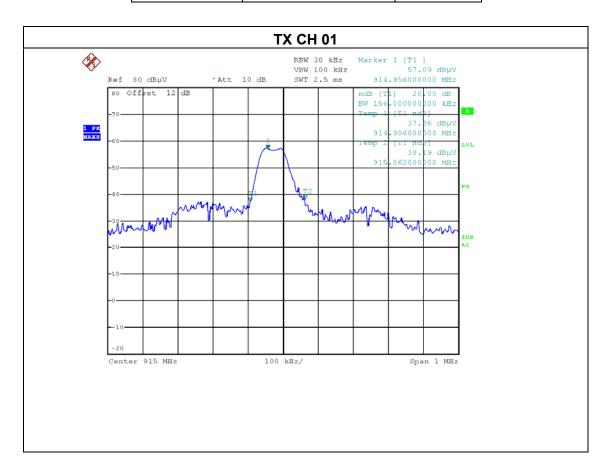


4.1.5 TEST RESULTS

Temperature :	25℃	Relative Humidity:	60%
Pressure :	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX Mode		

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Frequency (MHz)	20dB bandwidth (MHz)	Result
915	0.156	Pass



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5. ANTENNA REQUIREMENT

5.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 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.

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5.2 EUT ANTENNA

The EUT antenna is internal antenna, use of anti thread antenna, It comply with the standard requirement.

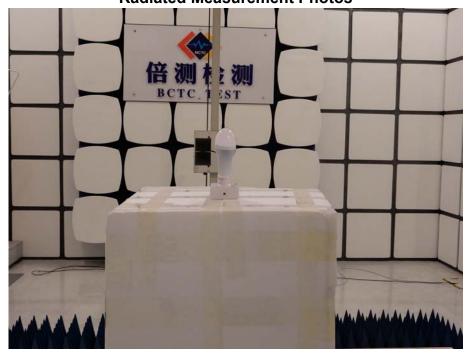


6. EUT TEST PHOTO





Radiated Measurement Photos









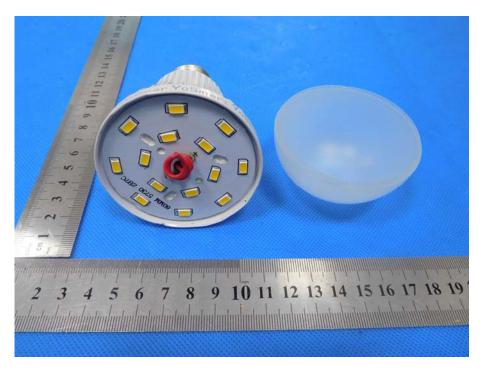


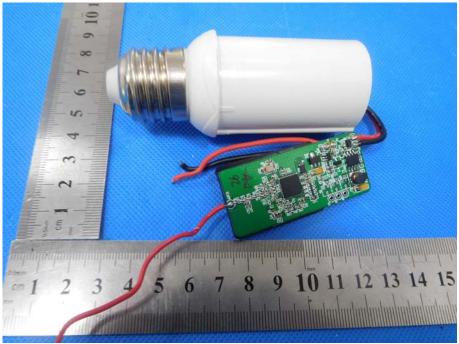
7. EUT PHOTO











* * * * * END OF REPORT * * * * *