

FCC

RF

TEST REPORT

ISSUED BY
Shenzhen BALUN Technology Co., Ltd.



FOR
**HEATHER 12" LED MW SENSOR CEILING
LIGHT**

ISSUED TO
Luminex International Co., Ltd

5F, NO. 30, Yee Shien Rd., Taipei City, Taiwan



Tested by:

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(Engineer)

Date *Jun. 13, 2016*

Approved by:

Wei Yanqian
Wei Yanqian

(Chief Engineer)

Date *Jun. 13, 2016*



Report No.: BL-SZ1650007-601

EUT Type: HEATHER 12" LED MW SENSOR
CEILING LIGHT

Model Name: C5560(352-8543)

Brand Name: Patriot Lighting

Test Standard: 47 CFR Part 15 Subpart C

FCC ID: 2AENY8543

Test conclusion: Pass

Test Date: Jun. 1, 2016 ~ Jun. 5, 2016

Date of Issue: Jun. 13, 2016

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Revision History

<u>Version</u>	<u>Issue Date</u>	<u>Revisions Content</u>
<u>Rev. 01</u>	<u>Jun. 13, 2016</u>	<u>Initial Issue</u>

TABLE OF CONTENTS

1	ADMINISTRATIVE DATA (GENERAL INFORMATION)	5
1.1	Identification of the Testing Laboratory	5
1.2	Identification of the Responsible Testing Location	5
1.3	Laboratory Condition	5
1.4	Announce	6
2	PRODUCT INFORMATION	7
2.1	Applicant Information	7
2.2	Manufacturer Information	7
2.3	Factory Information	7
2.4	General Description for Equipment under Test (EUT)	7
2.5	Ancillary Equipment	7
2.6	Technical Information	8
2.7	Additional Instructions	8
3	SUMMARY OF TEST RESULTS	9
3.1	Test Standards	9
3.2	Verdict	9
4	GENERAL TEST CONFIGURATIONS	10
4.1	Test Environments	10
4.2	Test Equipment List	10
4.3	Description of Test Setup	11
4.3.1	For Antenna Port Test	11
4.3.2	For AC Power Supply Port Test	11
4.3.3	For Radiated Test (Below 30 MHz)	12
4.3.4	For Radiated Test (30 MHz-1 GHz)	12

4.3.5	For Radiated Test (Above 1 GHz).....	13
5	TEST ITEMS.....	14
5.1	Antenna Requirements	14
5.1.1	Standard Applicable	14
5.1.2	Antenna Anti-Replacement Construction	14
5.1.3	Antenna Gain	14
5.2	20 dB Bandwidth	15
5.2.1	Limit.....	15
5.2.2	Test Setups	15
5.2.3	Test Procedure.....	15
5.2.4	Test Result	15
5.3	AC Conducted Emission	16
5.3.1	Limit.....	16
5.3.2	Test Setups	16
5.3.3	Test Procedure.....	16
5.3.4	Test Result	16
5.4	Radiated Spurious Emission	17
5.4.1	Limit.....	17
5.4.2	Test Setups	17
5.4.3	Test Procedure.....	17
5.4.4	Test Result	18
5.5	Band Edge	19
5.5.1	Limit.....	19
5.5.2	Test Setups	19
5.5.3	Test Procedure.....	19
5.5.4	Test Result	19
ANNEX A	TEST RESULT	20
A.1	20dB bandwidth	20
A.2	AC Conducted Emission	22
A.3	Radiated Emission	24

A.4 Band Edge28

ANNEX B TEST SETUP PHOTOS29

ANNEX C EUT EXTERNAL PHOTOS29

ANNEX D EUT INTERNAL PHOTOS29

1 ADMINISTRATIVE DATA (GENERAL INFORMATION)

1.1 Identification of the Testing Laboratory

Company Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Phone Number	+86 755 6685 0100
Fax Number	+86 755 6182 4271

1.2 Identification of the Responsible Testing Location

Test Location	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	<p>The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 11524A-1.</p> <p>The laboratory has been listed by US Federal Communications Commission to perform electromagnetic emission measurements. The recognition numbers of test site are 832625.</p> <p>The laboratory is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L6791.</p>
Description	All measurement facilities used to collect the measurement data are located at Block B, FL 1, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China 518055

1.3 Laboratory Condition

Ambient Temperature	20 to 25°C
Ambient Relative Humidity	45% - 55%
Ambient Pressure	100 kPa - 102 kPa

1.4 Announce

- (1) The test report reference to the report template version v4.1.
- (2) The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.
- (3) The test report is invalid if there is any evidence and/or falsification.
- (4) The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.
- (5) This document may not be altered or revised in any way unless done so by BALUN and all revisions are duly noted in the revisions section.
- (6) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Luminex International Co., Ltd
Address	5F, NO. 30, Yee Shien Rd., Taipei City, Taiwan

2.2 Manufacturer Information

Manufacturer	Dongguan Bonteck Hardware Co., LTD
Address	Shuxin Village, Changping Town, Dongguan City, Guangdong Province, China

2.3 Factory Information

Factory	Dongguan Bonteck Hardware Co., LTD
Address	Shuxin Village, Changping Town, Dongguan City, Guangdong Province, China

2.4 General Description for Equipment under Test (EUT)

EUT Type	HEATHER 12" LED MW SENSOR CEILING LIGHT
Model Name Under Test	C5560(352-8543)
Hardware Version	N/A
Software Version	1.0
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A
Network and Wireless connectivity	Microwave Model 5.725-5.875Ghz
Input Voltage	AC 120 V/ 60 Hz
Input Rated Current	0.2 A
Input Frequency	50/60 MHz

2.5 Ancillary Equipment

Ancillary Equipment 1	Charger	
	Brand Name	N/A
	Model No.	EM-17W-LED
	Rated Input	120 V~, 50/60 Hz, 200 mA
	Rated Output	29 V=, 550 mA

2.6 Technical Information

The requirement for the following technical information of the EUT was tested in this report:

Modulation Technology	Microwave Model
Modulation Type	Pulsating Signal
Product Type	HEATHER 12" LED MW SENSOR CEILING LIGHT
Transfer Rate	N/A
Frequency Range	5725 MHz to 5875 MHz.
Antenna Type	Integrated Antenna
Antenna Gain	0 dBi (All involve the antenna gain test item, has been included in the final results)
About the Product	Only the Pulsating Signal (5725MHz~5875MHz) was tested in this report.

2.7 Additional Instructions

EUT Software Settings:

Mode	<input checked="" type="checkbox"/> The frequency can be transmitted when the EUT power on. The frequency (low channel, middle channel, high channel) was provided by client.
------	--

All channel list

Channel	Frequency (MHz)
Low channel	5730
Middle channel	5800
High channel	5870

Test channel list

Channel	Frequency (MHz)	Soft Set
Low channel	5730	TX LEVEL is built-in set parameters and cannot be changed and selected.
Middle channel	5800	
High channel	5870	

3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 15, Subpart C (10-1-14 Edition)	Intentional Radiators
2	ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices

3.2 Verdict

No.	Description	FCC Part No.	Test Result	Verdict	Remark
1	Antenna Requirement	15.203	--	Pass	Note1
2	20 dB Bandwidth	15.215(c)	ANNEX A.1	Pass	
3	AC Conducted Emission	15.207	ANNEX A.2	Pass	
4	Radiated Spurious Emission	15.249(a)	ANNEX A.3	Pass	
5	Band Edge	15.249(a)	ANNEX A.4	Pass	

Note 1: The EUT has a permanently and irreplaceable attached antenna, which complies with the requirement FCC 15.203.

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments

During the measurement, the normal environmental conditions were within the listed ranges:

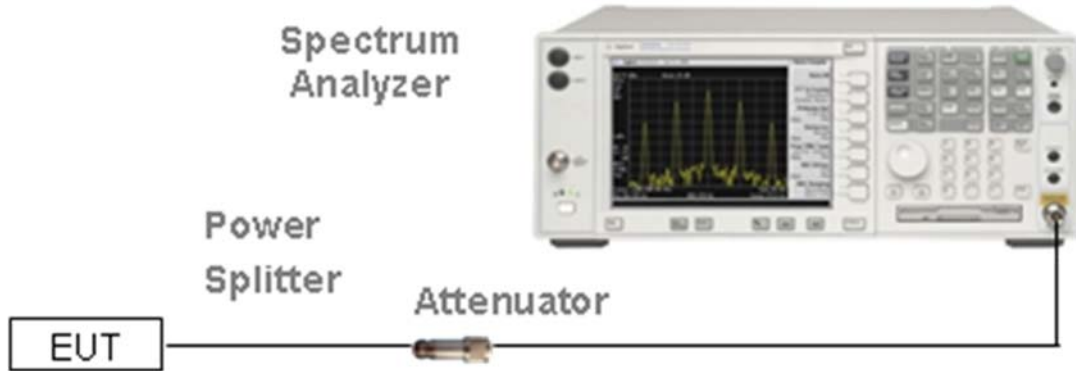
Relative Humidity	45% - 55%	
Atmospheric Pressure	100 kPa - 102 kPa	
Temperature	NT (Normal Temperature)	+22°C to +25°C
Working Voltage of the EUT	NV (Normal Voltage)	AC 120 V/ 60 Hz

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	ROHDE&SCHWARZ	FSV-30	103118	2015.07.16	2016.07.15
Vector Signal Generator	ROHDE&SCHWARZ	SMBV100A	177746	2015.07.16	2016.07.15
Signal Generator	ROHDE&SCHWARZ	SMB100A	260592	2015.07.01	2016.06.30
Switch Unit with OSP-B157	ROHDE&SCHWARZ	OSP120	101270	2015.07.16	2016.07.15
Spectrum Analyzer	AGILENT	E4440A	MY45304434	2015.10.18	2016.10.17
EMI Receiver	ROHDE&SCHWARZ	ESRP	101036	2015.07.14	2016.07.13
LISN	SCHWARZBECK	NSLK 8127	8127-687	2015.07.14	2016.07.13
Bluetooth Tester	ROHDE&SCHWARZ	CBT	101005	2015.07.16	2016.07.15
Power Splitter	KMW	DCPD-LDC	1305003215	2015.07.01	2016.06.30
Power Sensor	ROHDE&SCHWARZ	NRP-Z21	103971	2015.07.21	2016.07.20
Attenuator (20 dB)	KMW	ZA-S1-201	110617091	--	--
Attenuator (6 dB)	KMW	ZA-S1-61	1305003189	--	--
DC Power Supply	ROHDE&SCHWARZ	HMP2020	018141664	2015.07.17	2016.07.16
Temperature Chamber	ANGELANTIONI SCIENCE	NTH64-40A	1310	2015.08.07	2016.08.06
Test Antenna-Loop(9 kHz-30 MHz)	SCHWARZBECK	FMZB 1519	1519-037	2015.07.22	2017.07.21
Test Antenna-Bi-Log(30 MHz-3 GHz)	SCHWARZBECK	VULB 9163	9163-624	2015.07.22	2017.07.21
Test Antenna-Horn(1-18 GHz)	SCHWARZBECK	BBHA 9120D	9120D-1148	2015.07.22	2017.07.21
Test Antenna-Horn(15-26.5 GHz)	SCHWARZBECK	BBHA 9170	9170-305	2015.07.22	2017.07.21
Anechoic Chamber	RAINFORD	9m*6m*6m	N/A	2015.02.28	2017.02.27
Shielded Enclosure	ChangNing	CN-130701	130703	--	--

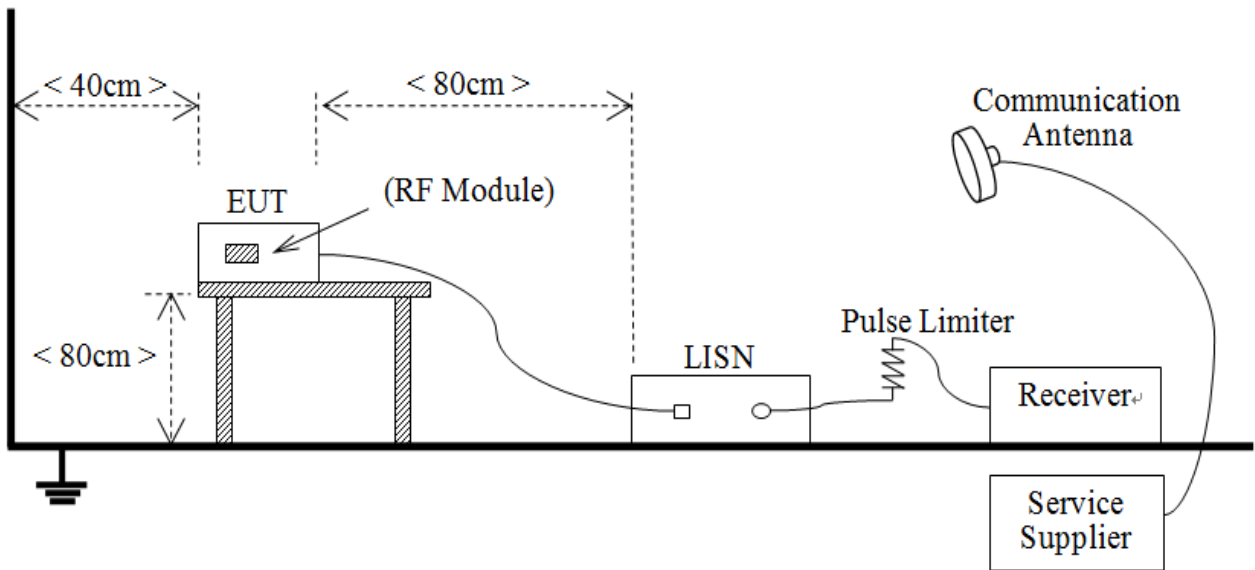
4.3 Description of Test Setup

4.3.1 For Antenna Port Test



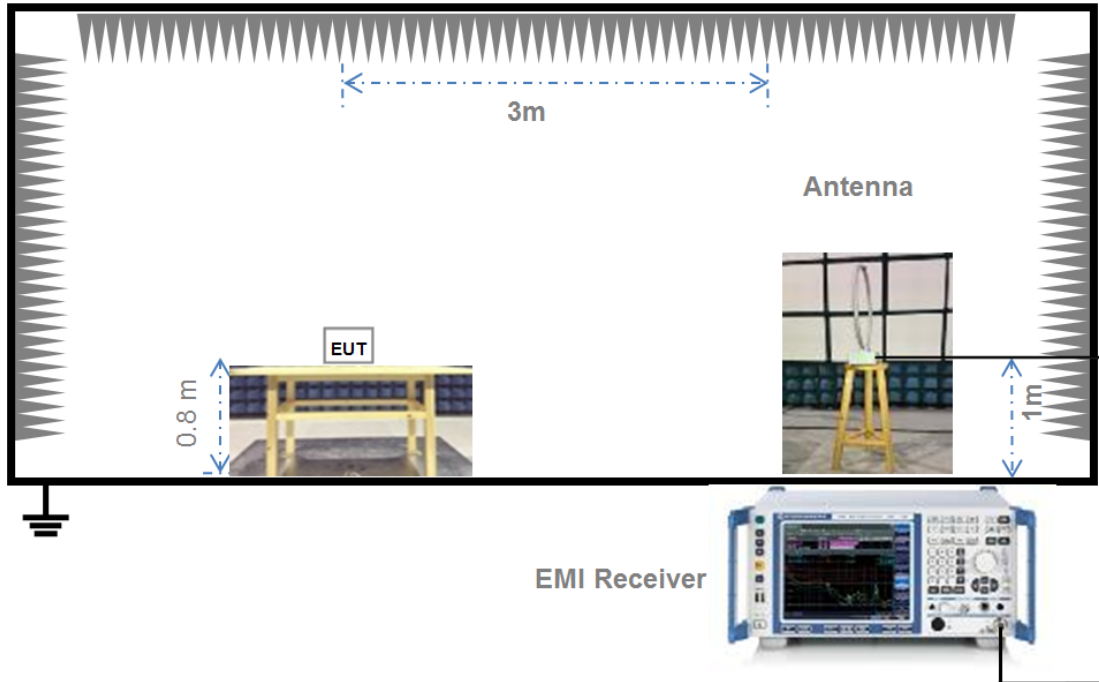
(Diagram 1)

4.3.2 For AC Power Supply Port Test



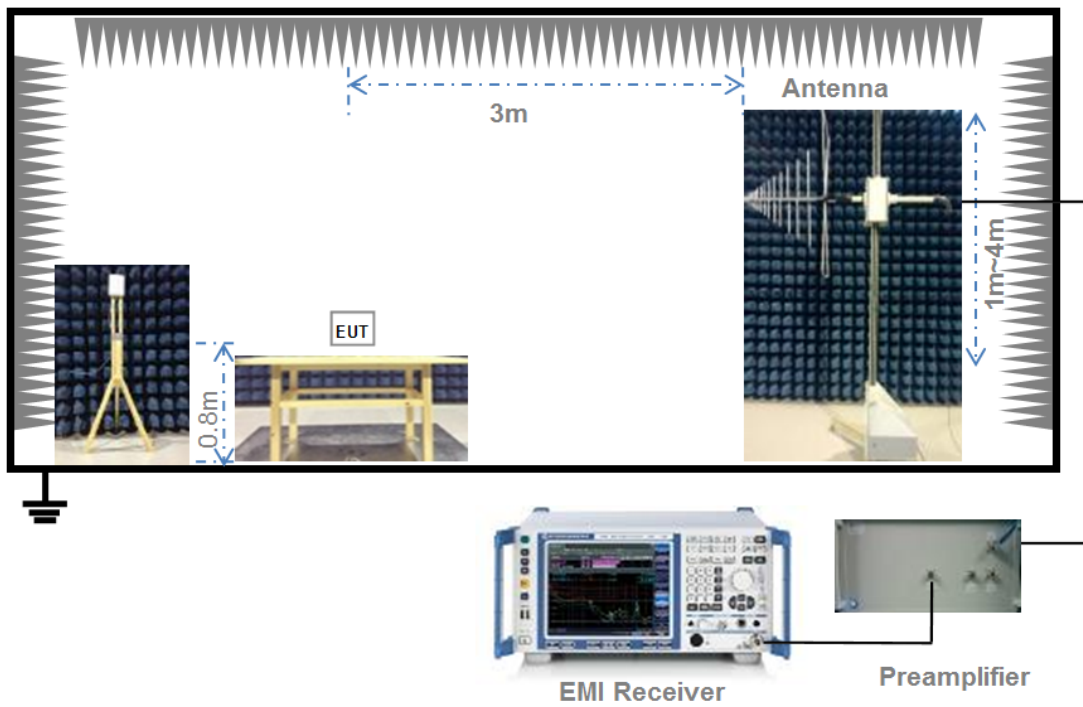
(Diagram 2)

4.3.3 For Radiated Test (Below 30 MHz)



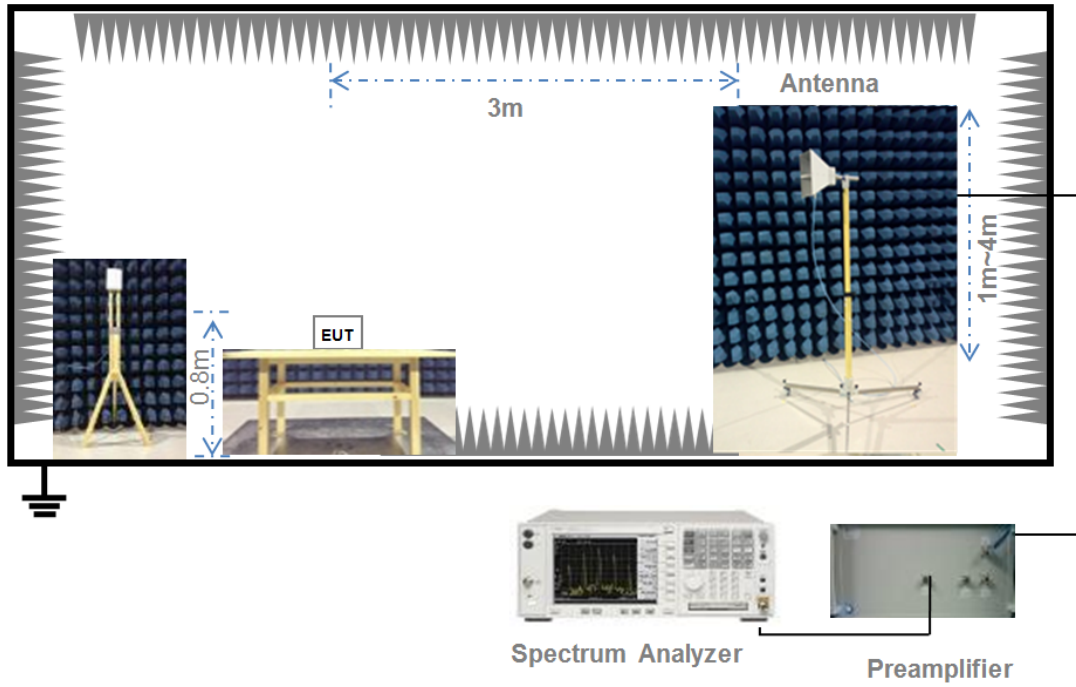
(Diagram 3)

4.3.4 For Radiated Test (30 MHz-1 GHz)



(Diagram 4)

4.3.5 For Radiated Test (Above 1 GHz)



(Diagram 5)

5 TEST ITEMS

5.1 Antenna Requirements

5.1.1 Standard Applicable

FCC §15.203 & 15.247(b)

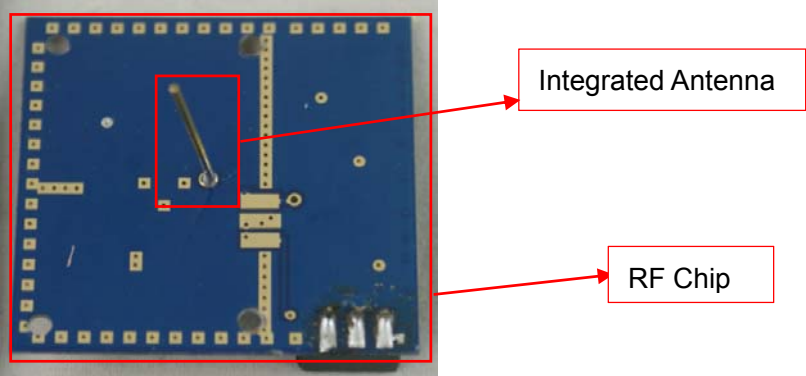
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of § 15.211, § 15.213, § 15.217, § 15.219, or § 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

If directional gain of transmitting antennas is greater than 6 dBi, the power shall be reduced by the same level in dB comparing to gain minus 6 dBi. For the fixed point-to-point operation, the power shall be reduced by one dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the FCC rule.

5.1.2 Antenna Anti-Replacement Construction

The Antenna Anti-Replacement as following method:

Protected Method	Description
The antenna is An embedded-in	An embedded-in antenna design is used.

Reference Documents	Item
Photo	

5.1.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

5.2 20 dB Bandwidth

5.2.1 Limit

FCC §15.215(c)

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in § 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

5.2.2 Test Setups

See section 4.3.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.2.3 Test Procedure

Use the following spectrum analyzer settings:

Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel

RBW \geq 1% of the 20 dB bandwidth

VBW \geq RBW

Sweep = auto

Detector function = peak

Trace = max hold

5.2.4 Test Result

Please refer to ANNEX A.1.

5.3 AC Conducted Emission

5.3.1 Limit

FCC §15.207

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 Ω line impedance stabilization network (LISN).

Frequency range (MHz)	Conducted Limit (dB μ V)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
0.50 - 30	60	50

5.3.2 Test Setups

See section 4.3.2 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.3.3 Test Procedure

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed.

Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 50/60 Hz and 240 VAC, 50/60 Hz) for which the device is capable of operation. A device rated for 50/60 Hz operation need not be tested at both frequencies provided the radiated and line conducted emissions are the same at both frequencies.

5.3.4 Test Result

Please refer to ANNEX A.2.

5.4 Radiated Spurious Emission

5.4.1 Limit

FCC §15.249(a)

Except as provided in paragraph (a) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Frequency (MHz)	Field Strength of Fundamental (mV/m)	Field Strength of Harmonics (μV/m)
902-928	50	500
2400-2483.5	50	500
5725-5875	50	500
24000-24250	250	2500

According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
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

Note:

- For Above 1000 MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.
- For above 1000 MHz, limit field strength of harmonics: 54dBuV/m@3m (AV) and 74dBuV/m@3m (PK).

5.4.2 Test Setups

See section 4.3.3-4.3.5 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.4.3 Test Procedure

The measurement frequency range is from 9 kHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented. The power of the EUT transmitting frequency should be ignored.

All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured

RBW = 1 MHz for $f \geq 1$ GHz, 100 kHz for $f < 1$ GHz

VBW \geq RBW

Sweep = auto

Detector function = peak

Trace = max hold

5.4.4 Test Result

Please refer to ANNEX A.3.

5.5 Band Edge

5.5.1 Limit

FCC §15.249(a)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

5.5.2 Test Setups

See section 4.3.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.5.3 Test Procedure

Span = wide enough to capture the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products which fall outside of the authorized band of operation

RBW \geq 1% of the span

VBW \geq RBW

Sweep = auto

Detector function = peak /AV

Trace = max hold

Allow the trace to stabilize.

E [dB μ V/m] =UR + AT + AFactor [dB]; AT =LCable loss [dB]-Gpreamp [dB]

AT: Total correction Factor except Antenna

UR: Receiver Reading

Gpreamp: Preamplifier Gain

AFactor: Antenna Factor at 3m

5.5.4 Test Result

Please refer to ANNEX A.4.

ANNEX A TEST RESULT

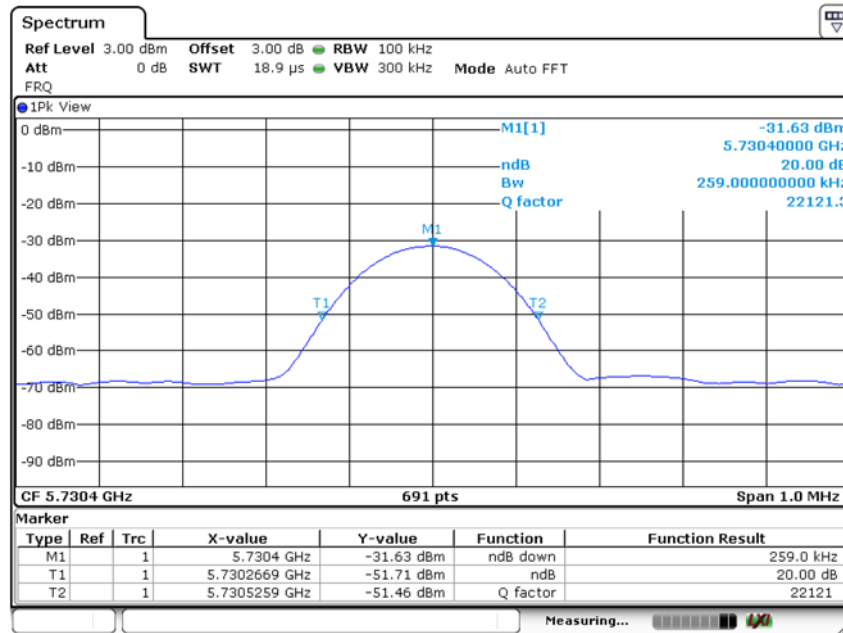
A.1 20dB bandwidth

Test Data

Frequency (MHz)	20 dB Bandwidth (MHz)
5730	0.259
5800	0.259
5870	0.263

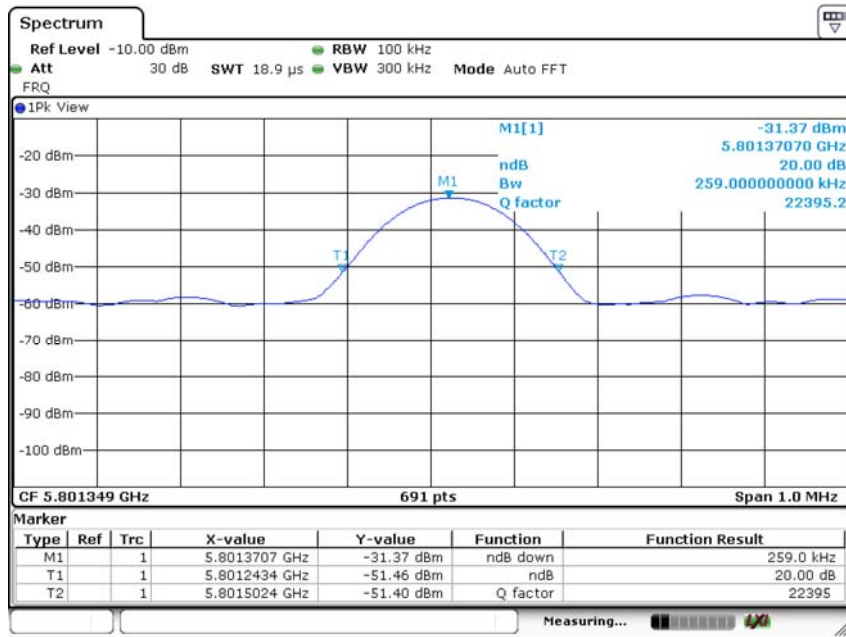
Test plots

Low channel 5730MHz



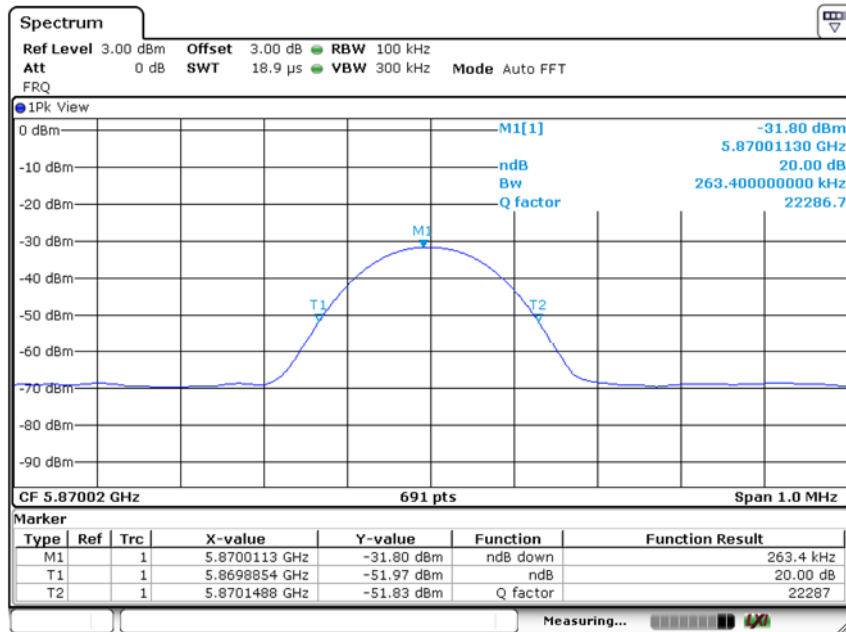
Date: 2 JUN 2016 12:42:31

Middle channel 5800MHz



Date: 2 JUN 2016 12:19:30

High channel 5870MHz

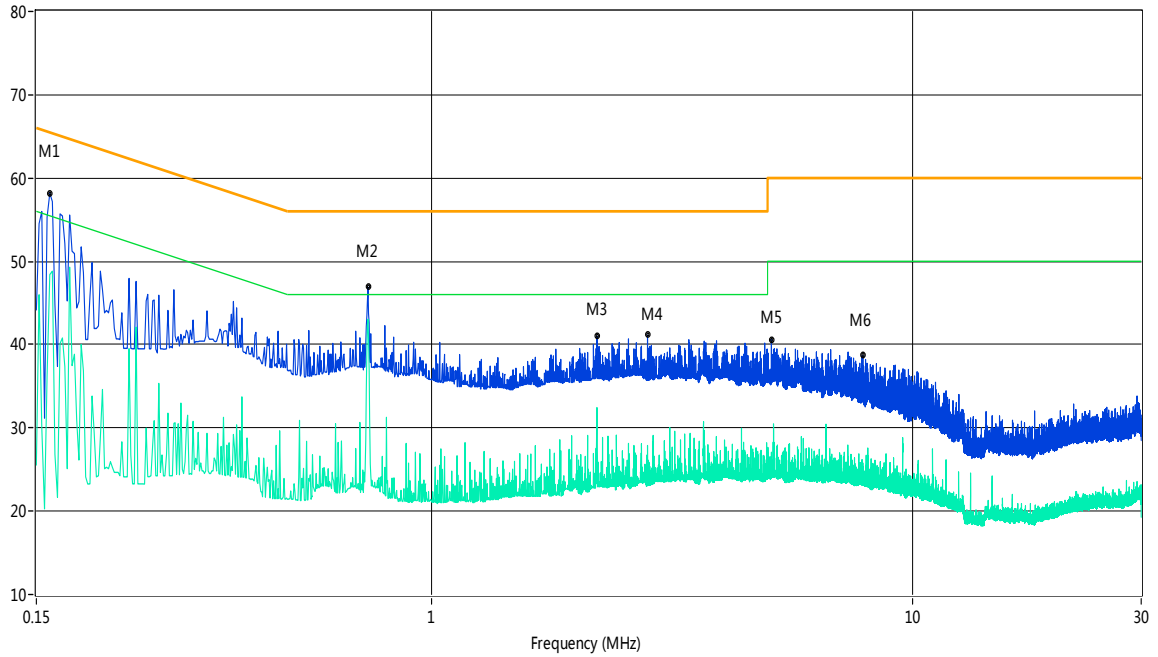


Date: 2 JUN 2016 12:40:42

A.2 AC Conducted Emission

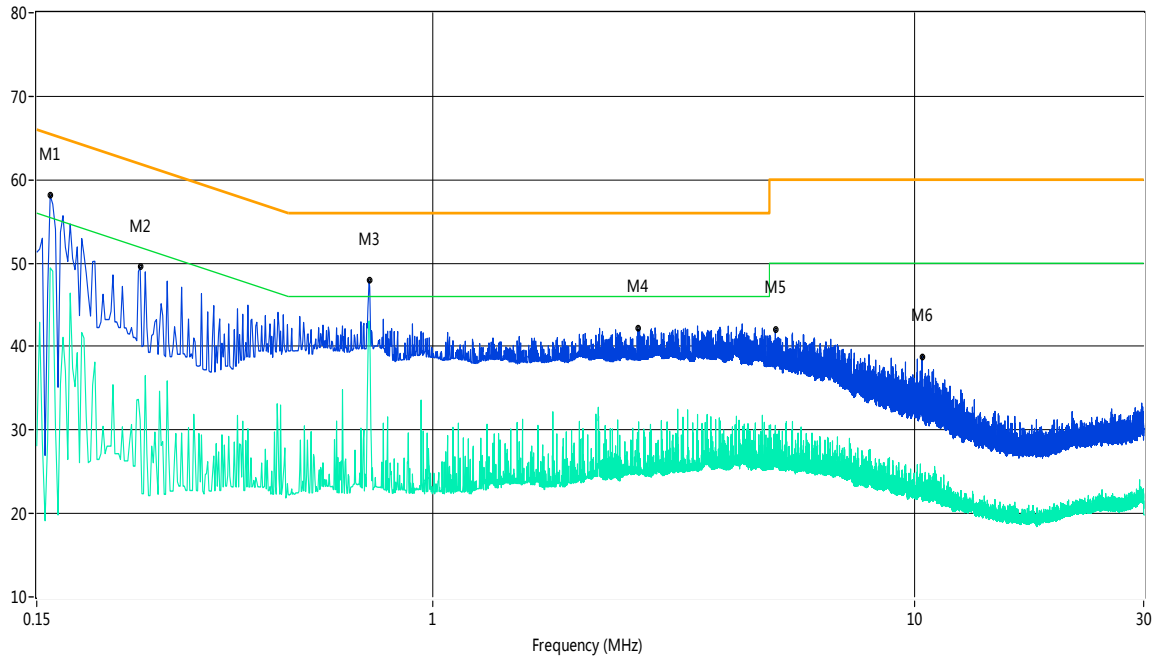
Note 1: The EUT only support voltage AC 120V/60Hz.

PHASE L



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.16	58.2	11.00	65.7	7.50	Peak	L Line	Pass
1**	0.16	48.4	11.00	55.7	7.30	AV	L Line	Pass
2	0.74	46.9	11.00	56.0	9.10	Peak	L Line	Pass
2**	0.74	43.0	11.00	46.0	3.00	AV	L Line	Pass
3	2.21	41.0	11.00	56.0	15.00	Peak	L Line	Pass
3**	2.21	32.4	11.00	46.0	13.60	AV	L Line	Pass
4	2.81	41.2	11.00	56.0	14.80	Peak	L Line	Pass
4**	2.81	27.9	11.00	46.0	18.10	AV	L Line	Pass
5	5.09	40.6	11.00	60.0	19.40	Peak	L Line	Pass
5**	5.09	27.1	11.00	50.0	22.90	AV	L Line	Pass
6	7.90	38.7	11.00	60.0	21.30	Peak	L Line	Pass
6**	7.90	25.8	11.00	50.0	24.20	AV	L Line	Pass

PHASE N

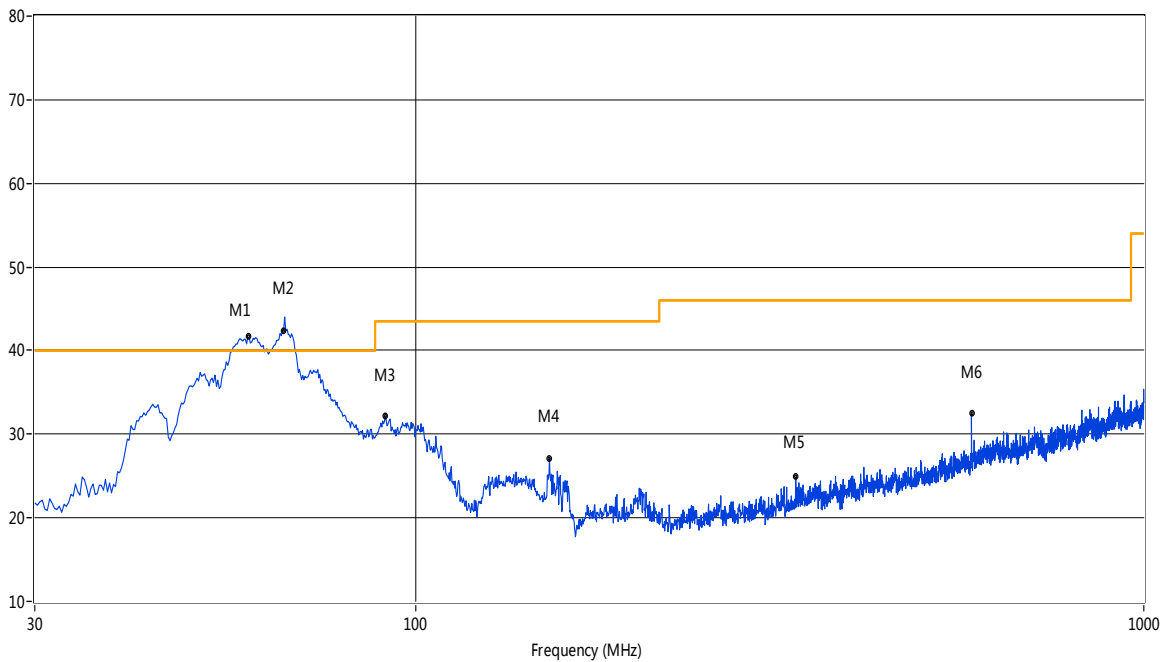


No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.16	58.1	11.00	65.7	7.60	Peak	N Line	Pass
1**	0.16	49.4	11.00	55.7	6.30	AV	N Line	Pass
2	0.25	49.5	11.00	63.3	13.80	Peak	N Line	Pass
2**	0.25	31.2	11.00	53.3	22.10	AV	N Line	Pass
3	0.74	47.9	11.00	56.0	8.10	Peak	N Line	Pass
3**	0.74	43.1	11.00	46.0	2.90	AV	N Line	Pass
4	2.67	42.1	11.00	56.0	13.90	Peak	N Line	Pass
4**	2.67	28.1	11.00	46.0	17.90	AV	N Line	Pass
5	5.15	42.0	11.00	60.0	18.00	Peak	N Line	Pass
5**	5.15	30.6	11.00	50.0	19.40	AV	N Line	Pass
6	10.38	38.8	11.00	60.0	21.20	Peak	N Line	Pass
6**	10.38	24.8	11.00	50.0	25.20	AV	N Line	Pass

A.3 Radiated Emission

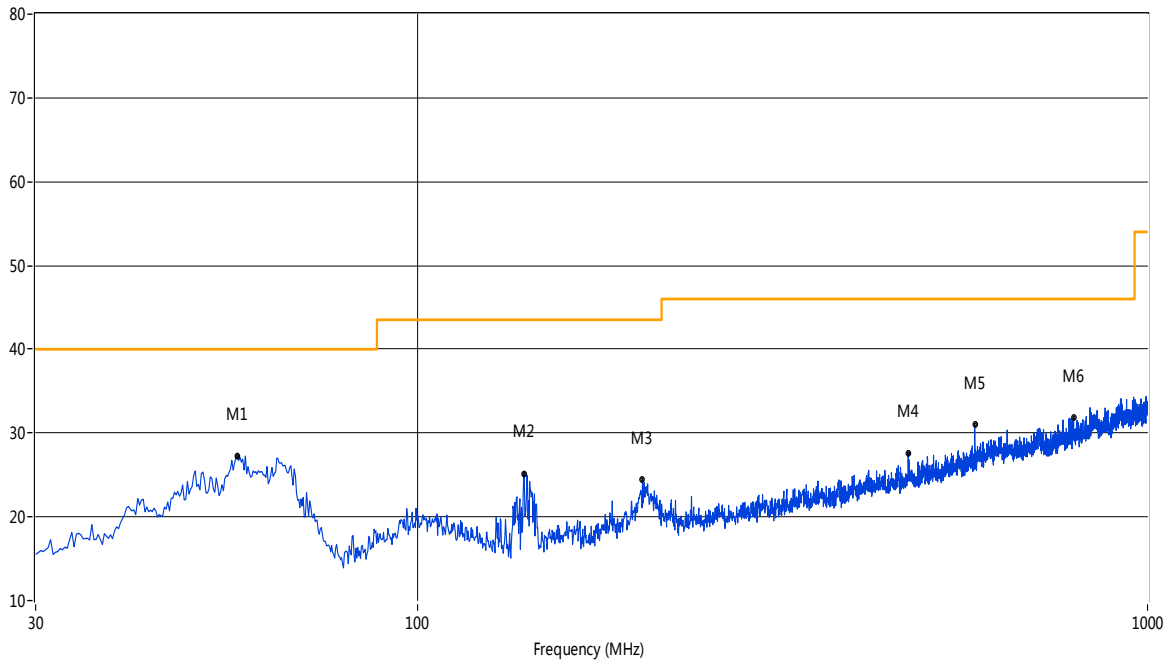
Note: The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

30 MHz to 1 GHz, ANT V



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	58.81	37.69	-19.96	40.0	2.31	QP	349.50	113.80	Vertical	Pass
2	65.82	38.71	-21.03	40.0	1.29	QP	349.50	102.60	Vertical	Pass
3	90.85	32.12	-21.73	43.5	11.38	QP	155.60	100	Vertical	Pass
4	152.67	27.14	-23.43	43.5	16.36	QP	339.50	100	Vertical	Pass
5	332.81	24.89	-16.50	46.0	21.11	QP	31.50	100	Vertical	Pass
6	579.85	32.43	-11.47	46.0	13.57	QP	0.30	100	Vertical	Pass

30 MHz to 1 GHz, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	56.67	27.30	-19.40	40.0	12.70	QP	15.30	100	Horizontal	Pass
2	139.83	25.17	-23.63	43.5	18.33	QP	219.20	100	Horizontal	Pass
3	203.34	24.42	-20.09	43.5	19.08	QP	322.90	100	Horizontal	Pass
4	470.03	27.59	-13.94	46.0	18.41	QP	115.90	100	Horizontal	Pass
5	579.85	31.03	-11.47	46.0	14.97	QP	-0.00	100	Horizontal	Pass
6	791.99	31.86	-7.44	46.0	14.14	QP	346.30	100	Horizontal	Pass

Test Data (1 GHz ~ 10th Harmonic)

Note 1: The High frequency, which started from 25 GHz to 40 GHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

Note 2: The marked spikes near (5830MHz/5800 MHz/5870MHz) is the fundamental signal.

Note 3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Note 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20 dB from the applicable limit) and considered that's already beyond the background noise floor.

Note 5. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.

LOW CHANNEL 5730 GHz, ANT V

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	5730.60	82.02	15.43	74.0	-8.02	Peak	145.00	150	Vertical	N/A
2	7329.80	54.57	16.40	74.0	19.43	Peak	216.00	150	Vertical	Pass
3	9955.74	56.54	19.22	74.0	17.46	Peak	171.00	150	Vertical	Pass
4	11461.20	59.53	20.14	74.0	14.47	Peak	108.00	150	Vertical	Pass
5	15516.22	44.45	9.04	74.0	29.55	Peak	277.1	150	Vertical	Pass
6	20447.59	48.45	13.30	74.0	25.55	Peak	227.5	150	Vertical	Pass

LOW CHANNEL 5730 GHz, ANT H

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	2476.31	51.47	-0.61	74.0	22.53	Peak	1.00	150	Horizontal	Pass
2	2875.31	50.29	2.18	74.0	23.71	Peak	261.00	150	Horizontal	Pass
3	5730.490	80.02	15.43	74.0	-6.02	Peak	174.00	150	Horizontal	N/A
4	11462.90	55.32	20.36	74.0	18.68	Peak	19.00	150	Horizontal	Pass
5	17814.48	45.59	11.00	74.0	28.41	Peak	115.9	150	Horizontal	Pass
6	23851.91	45.28	9.26	74.0	28.72	Peak	231.9	150	Horizontal	Pass

MIDDLE CHANNEL 5800 GHz, ANT V

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	2421.45	51.44	-0.27	74.0	22.56	Peak	120.00	150	Vertical	Pass
2	5800.41	81.09	15.35	74.0	-7.09	Peak	281.40	150	Vertical	N/A
3	9925.44	55.51	19.12	74.0	18.49	Peak	171.00	150	Vertical	Pass
4	11601.51	58.21	20.64	74.0	15.79	Peak	53.40	150	Vertical	Pass
5	16691.35	45.40	9.49	74.0	28.60	Peak	173.2	150	Vertical	Pass
6	21096.51	43.48	8.25	74.0	30.52	Peak	172.8	150	Vertical	Pass

MIDDLE CHANNEL 5800 GHz, ANT H

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	2122.20	47.95	-1.25	74.0	26.05	Peak	190.00	150	Horizontal	Pass
2	2815.46	50.17	2.07	74.0	23.83	Peak	92.00	150	Horizontal	Pass
3	5800.34	81.42	15.48	74.0	-7.42	Peak	168.00	150	Horizontal	N/A
4	11602.04	56.09	20.20	74.0	17.91	Peak	308.00	150	Horizontal	Pass
5	13051.58	44.01	20.64	74.0	29.99	Peak	16.8	150	Horizontal	Pass
6	24830.28	45.66	12.76	74.0	28.34	Peak	97	150	Horizontal	Pass

HIGH CHANNEL 5870 GHz, ANT V

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	2815.46	50.17	2.07	74.0	23.83	Peak	202.20	150	Vertical	Pass
2	5870.34	83.41	15.48	74.0	-9.41	Peak	335.20	150	Vertical	N/A
3	7423.52	55.87	16.8	74.0	18.13	Peak	171.00	150	Vertical	Pass
4	11740.02	58.25	20.47	74.0	15.75	Peak	229.80	150	Vertical	Pass
5	17804.08	43.58	9.55	74.0	30.42	Peak	218.5	150	Vertical	Pass
6	22883.53	44.58	9.07	74.0	29.42	Peak	101.9	150	Vertical	Pass

HIGH CHANNEL 5870 GHz, ANT H

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	2446.38	54.81	-0.67	74.0	19.19	Peak	229.90	150	Horizontal	Pass
2	2895.26	49.30	2.43	74.0	24.70	Peak	32.00	150	Horizontal	Pass
3	5870.52	82.06	15.12	74.0	-8.06	Peak	163.00	150	Horizontal	N/A
4	11741.51	57.05	20.66	74.0	16.95	Peak	37.00	150	Horizontal	Pass
5	17876.87	45.88	9.69	74.0	28.13	Peak	109.8	150	Horizontal	Pass
6	21106.49	46.81	10.32	74.0	27.19	Peak	181.9	150	Horizontal	Pass

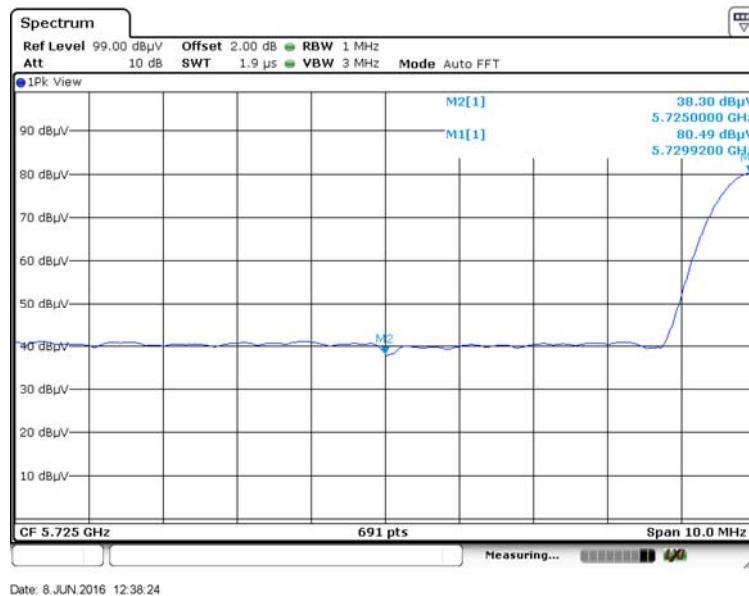
A.4 Band Edge

Test data

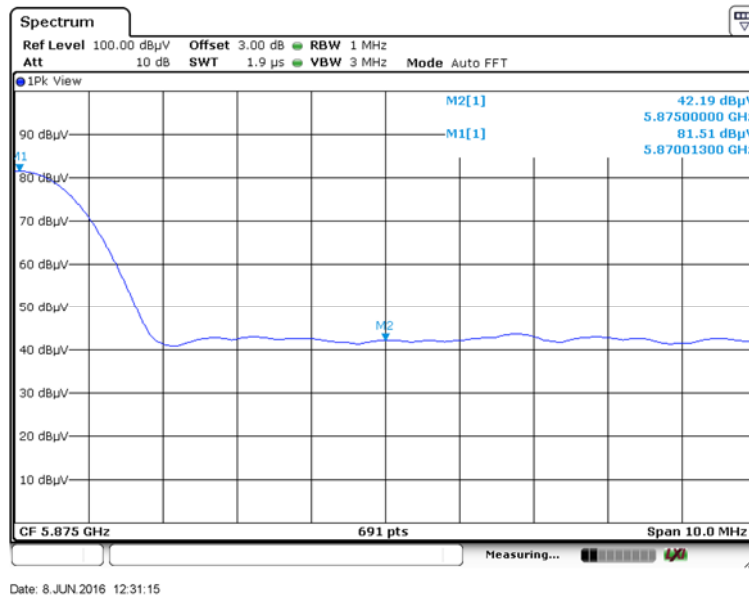
Channel	Measured Max. Band Edge Emission (dBuV/m)	Limit (dBuV/m)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	38.30	80.49	60.49	Pass
High Channel	42.19	81.51	61.51	Pass

Test plots

LOW CHANNEL



HIGH CHANNEL



ANNEX B TEST SETUP PHOTOS

Please refer the document "BL-SZ1650007-AR.PDF".

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document "BL-SZ1650007-AW.PDF".

ANNEX D EUT INTERNAL PHOTOS

Please refer the document "BL-SZ1650007-AI.PDF".

--END OF REPORT--