

FCC  
EMC  
TEST REPORT

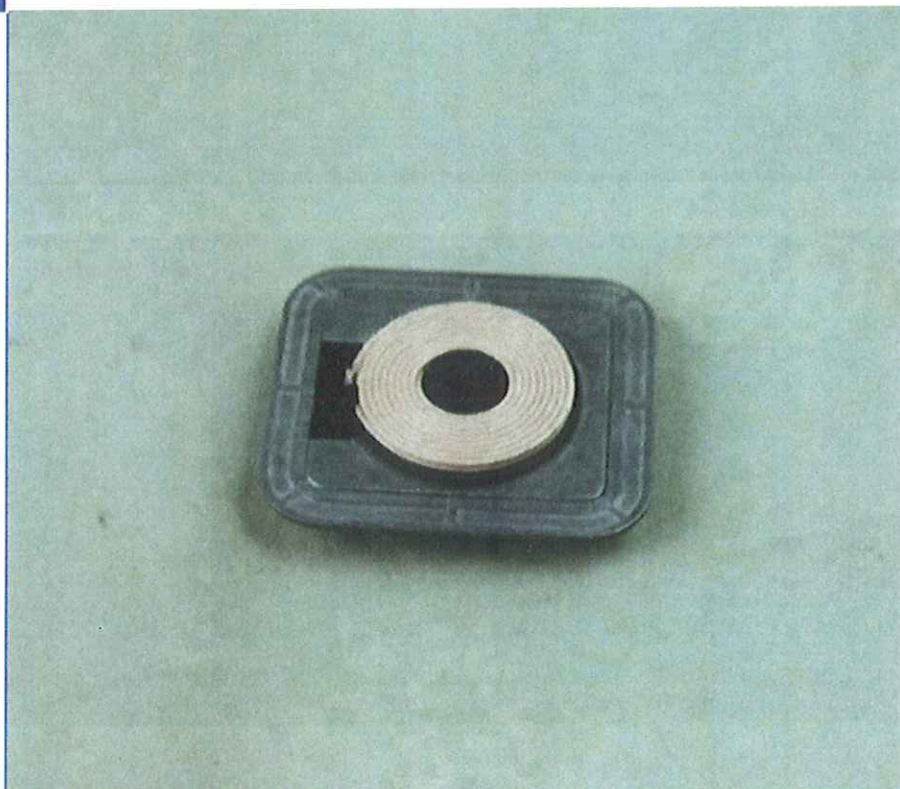
ISSUED BY  
Shenzhen BALUN Technology Co., Ltd.



FOR  
**OEM Module(Wireless Charging)**

ISSUED TO  
Neosen Energy LLC

1506 Capital Ave., Suite 150, Plano, TX, 75074



Tested by:

Cao Shaocong  
(Engineer)

Date Nov. 12, 2015

Approved by:

Wei Yanguan  
(Chief Engineer)

Date Nov. 12, 2015

Report No.: BL-SZ1570123-601

EUT Type: OEM Module(Wireless Charging)

Model Name: NEO-020-1-3-1-3-2-DUP

Brand Name: Dupont

Test Standard: FCC Part 15 C

FCC ID: 2AF63DUPONT

Test conclusion: Pass

Test Date: Nov. 2, 2015 ~ Nov. 11, 2015

Date of Issue: Nov. 12, 2015

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**Revision History**

Version	Issue Date	Revisions
<u>Rev. 01</u>	<u>Nov. 12, 2015</u>	<u>Initial Issue</u>

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## 1 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 has met the requirements of the IAS Accreditation Criteria for Testing Laboratories (AC89), has demonstrated compliance with ISO/IEC Standard 17025:2005. The accreditation certificate number is TL-588.</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°C~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 v1.2.
- (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	Neosen Energy LLC
Address	1506 Capital Ave., Suite 150, Plano, TX, 75074

### 2.2 Manufacturer Information

Manufacturer	Dongguan Superior Manufacturing Technology Co., Ltd
Address	14 Hongye Road North, Hongye Industrial Zone, Tangxia Town, Dongguan, Guangdong, PRC.

### 2.3 Factory Information

Factory	Dongguan Superior Manufacturing Technology Co., Ltd
Address	14 Hongye Road North, Hongye Industrial Zone, Tangxia Town, Dongguan, Guangdong, PRC.

### 2.4 General Description for Equipment under Test (EUT)

EUT Type	OEM Module(Wireless Charging)
Model Name	NEO-020-1-3-1-3-2-DUP
Hardware Version	01
Software Version	1508a_TX1Coil_Qi_DuPont_FOD_enc.bin
Network and Wireless connectivity	Wireless charging

### 2.5 Ancillary Equipment

Ancillary Equipment 1	Charger	
	Brand Name	Helms-man
	Model No.	SND1901350P2
	Serial No.	N/A
	Rated Input	100-240 V~, 2.5 A, 50/60 Hz
	Rated Output	19 V=, 1.35 A

### 2.6 Technical Information

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

Operating Frequency	110~205 kHz
Antenna Type	Coil Antenna
Antenna Gain	0 dBi
About Product	The EUT support the Qi and PMA technology, and they have the same operating frequency.

### 3 SUMMARY OF TEST RESULTS

#### 3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 15, Subpart C	Intentional Radiators
2	ANSI C63.4-2014	American National Standard for Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz
3	ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices

#### 3.2 Verdict

No.	Description	FCC Rule	Test Verdict	Result
1	Radiated Emission	15.209,15.215(b)	Pass	Annex A .1
2	Conducted Emission, AC Ports	15.207	Pass	Annex A .2
3	20 dB Bandwidth	15.215(c)	Pass	Annex A .3

#### 3.3 Test Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Measurement	Value
Conducted emissions (9 kHz-30 MHz)	2.79 dB
Radiated emissions (30 MHz-1 GHz)	3.45 dB
Radiated emissions (1 GHz-18 GHz)	3.67 dB



## 4 GENERAL TEST CONFIGURATIONS

### 4.1 Test Environments

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)	19 V

### 4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
EMI Receiver	ROHDE&SCHWARZ	ESRP	101036	2015.07.14	2016.07.13
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	9 m*6 m*6 m	N/A	2015.02.28	2016.02.27
EMI Receiver	ROHDE&SCHWARZ	ESRP	101036	2015.07.14	2016.07.13
LISN	SCHWARZBECK	NSLK 8127	8127-687	2015.07.14	2016.07.13
AMN	SCHWARZBECK	NNBM8124	8124-509	2015.07.14	2016.07.13
AMN	SCHWARZBECK	NNBM8124	8124-510	2015.07.14	2016.07.13
ISN	TESEQ	ISN T800	34449	2015.07.14	2016.07.13
Shielded Enclosure	ChangNing	CN-130701	130703	N/A	N/A



### 4.3 Test Enclosure list

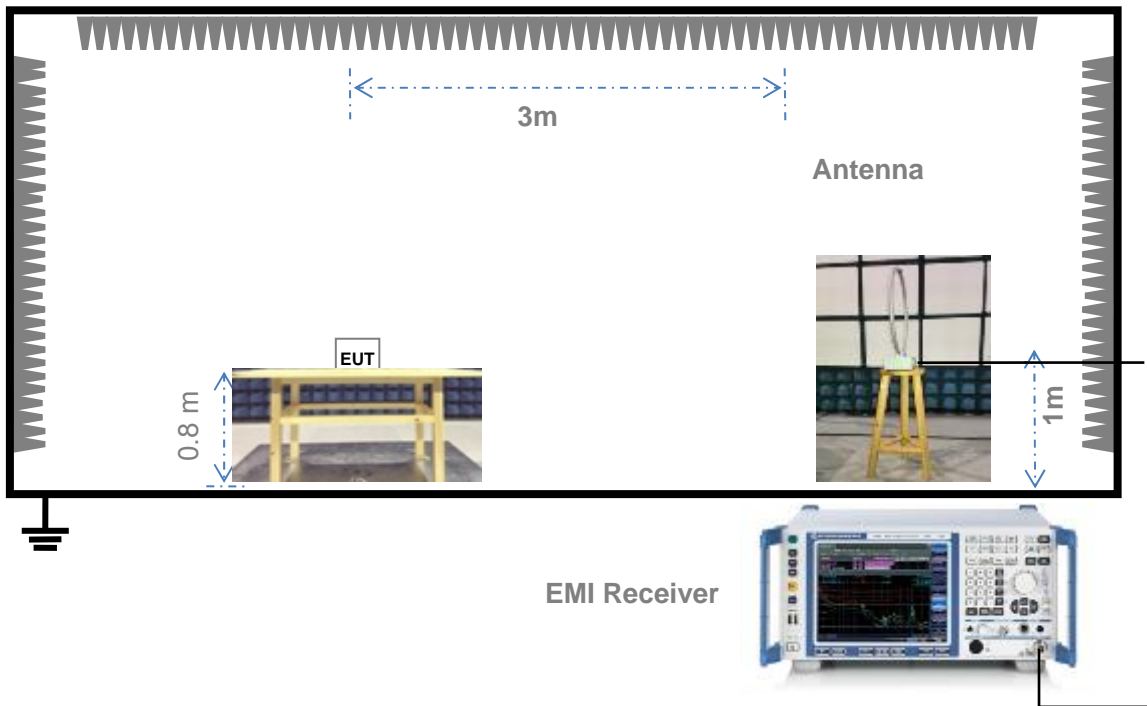
Description	Manufacturer	Model	Serial No.	Length	Description	Use
PC	N/A	N/A	N/A	N/A	Special Handled	<input type="checkbox"/>
Printer	HP	DESKJET 1000	N/A	N/A	N/A	<input type="checkbox"/>
Keyboard	Logitech	Y-BP62a	N/A	N/A	N/A	<input type="checkbox"/>
Mouse	Logitech	M100	N/A	N/A	N/A	<input type="checkbox"/>
USB disk	Kingston	N/A	N/A	N/A	N/A	<input type="checkbox"/>
TF Card	Kingston	N/A	N/A	N/A	N/A	<input type="checkbox"/>
VGA Cable	N/A	N/A	N/A	1.5 m	Shielded with core	<input type="checkbox"/>
HDMI Cable	N/A	N/A	N/A	1.5 m	Shielded with core	<input type="checkbox"/>
DVI Cable	N/A	N/A	N/A	1.5 m	Shielded with core	<input type="checkbox"/>
QI Load	N/A	N/A	N/A	N/A	5W	<input checked="" type="checkbox"/>
PMA Load	N/A	N/A	N/A	N/A	N/A	<input checked="" type="checkbox"/>
Phone	N/A	M.T.T	N/A	N/A	N/A	<input checked="" type="checkbox"/>

### 4.4 Test Configurations

Test Configurations (TC) No.	Description
TC01	<u>The QI Test Mode</u> The EUT configuration of the emission tests is EUT + QI Load + Charger. During the measurement, the EUT is connected with the QI load and recharge for the QI load. The EUT is also connected with the charger and working normally.
TC02	<u>The PMA Test Mode</u> The EUT configuration of the emission tests is EUT + RMA Load + Charger + Phone. During the measurement, a communication link was established between the EUT and phone, and the phone is connected with the PMA. The EUT is recharging for the phone during the test.

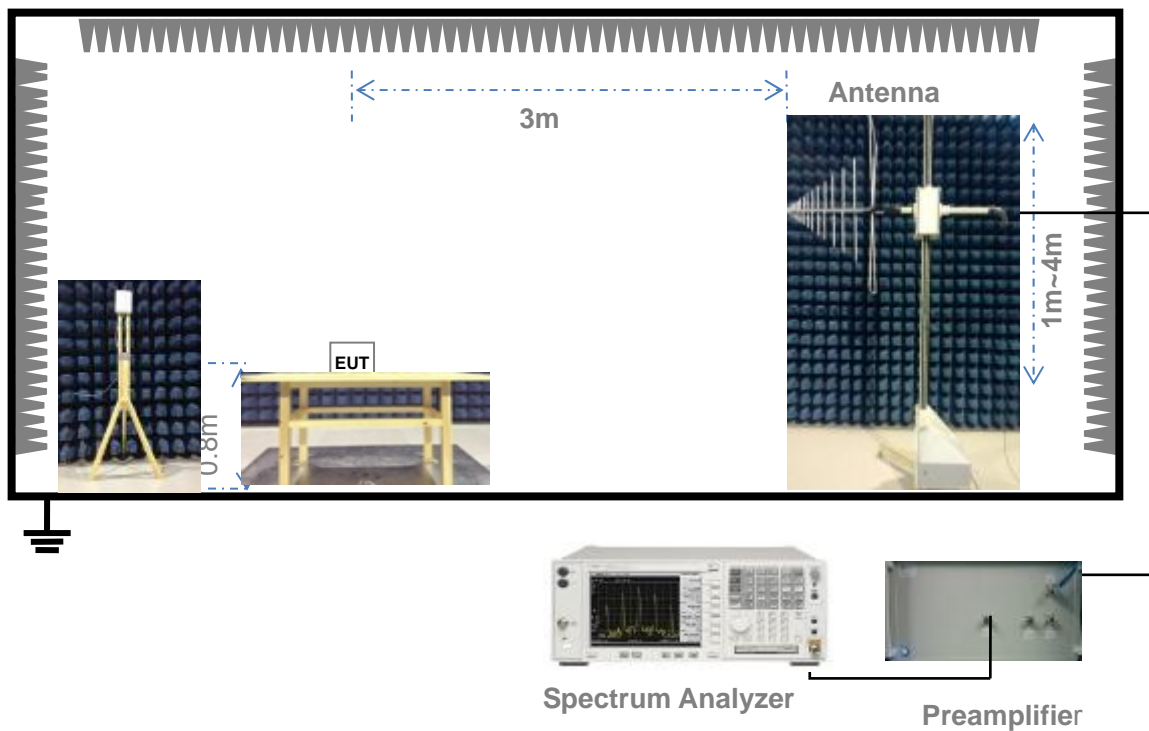
## 4.5 Test Setups

### Test Setup 1



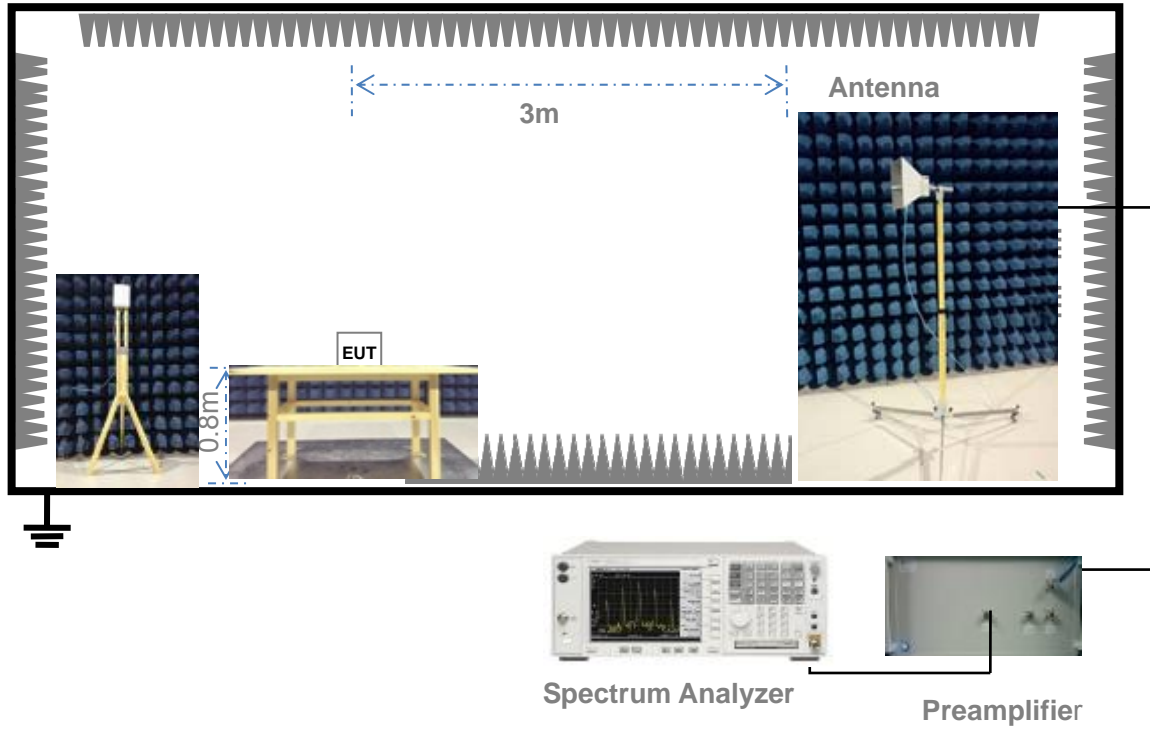
For Radiated Emission Test (Below 30 MHz))

### Test Setup 2



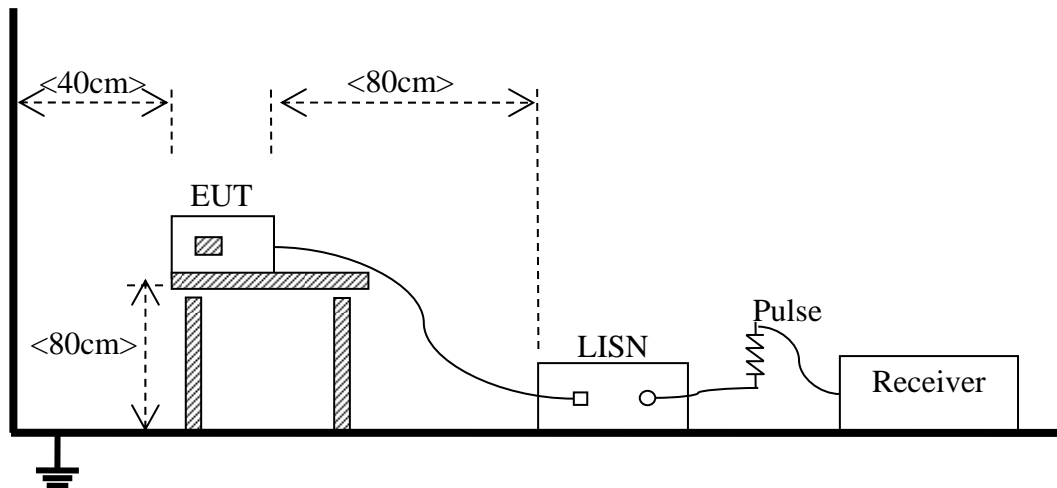
(For Radiated Emission Test (30 MHz-1 GHz))

### Test Setup 3



(For Radiated Emission Test (above 1 GHz))

### Test Setup 4



(For Conducted Emission, AC Ports Test)

## 4.6 Test Conditions

Test Case	Test Conditions	
Radiated Emission	Test Env.	NTNV
	Test Setup	Test Setup 1&3
	Test Configuration	TC01~TC02 <sup>Note</sup>
Conducted Emission, AC Ports	Test Env.	NTNV
	Test Setup	Test Setup 4
	Test Configuration	TC01~TC02 <sup>Note</sup>
20 dB Bandwidth	Test Env.	NTNV
	Test Setup	Test Setup 1
	Test Configuration	TC01~TC02 <sup>Note</sup>

Note: Based on client request, all normal using modes of the normal function were tested, but only the worst test data of test mode is reported in this report. And the QI test mode and PMA test mode are the worst mode this report.

## 5 TEST ITEMS

### 5.1 Emission Tests

#### 5.1.1 Radiated Emission

##### 5.1.1.1 Limit

Frequency (MHz)	Field Strength ( $\mu\text{V/m}$ )	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:

- 1) Field Strength (dB $\mu\text{V/m}$ ) = 20\*log [Field Strength ( $\mu\text{V/m}$ )].
- 2) In the emission tables above, the tighter limit applies at the band edges.
- 3) For above 1000 MHz, limit field strength of harmonics: 54 dB $\mu\text{V/m}$ @3 m (AV) and 74 dB $\mu\text{V/m}$ @3 m (PK)

##### 5.1.1.2 Test Setup

Refer to 4.5 section (test setups1 to test setups3) for radiated emission test, The photo of test setup please refer to ANNEX B.

##### 5.1.1.3 Test Procedure

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.

An initial pre-scan was performed in the chamber using the EMI Receiver in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by Bi-Log antenna with 2 orthogonal polarities.

##### 5.1.1.4 Test Result

Please refer to ANNEX A.1.

## 5.1.2 Conducted Emission

### 5.1.2.1 Test Limit

Frequency range (MHz)	Conducted Limit (dB $\mu$ V)	
	Quasi-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5 - 30	60	50

NOTE:

- 1) The limit is applicable to Class B ITE.
- 2) The lower limit shall apply at the band edges.
- 3) The limit decreases linearly with the logarithm of the frequency in the range 0.15 - 0.50 MHz.

### 5.1.2.2 Test Setup

Refer to 4.5 section test (test setup 4) for conducted emission, the photo of test setup please refer to ANNEX B.

### 5.1.2.3 Test Procedure

The EUT is connected to the power mains through a LISN which provides 50  $\Omega$ /50  $\mu$ H of coupling impedance for the measuring instrument. The test frequency range is from 150 kHz to 30 MHz. The maximum conducted interference is searched using Peak (PK), Quasi-peak (QP) and Average (AV) detectors; the emission levels that are 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.

### 5.1.2.4 Test Result

Please refer to ANNEX A.2.

### 5.1.3 20 dB Bandwidth

#### 5.1.3.1 Limit

FCC §15.215(c)

The 20 dB bandwidth is known as the 99% emission bandwidth, or 20 dB bandwidth ( $10 \cdot \log 1\% = 20$  dB) taking the total RF output power.

#### 5.1.3.2 Test Setup

Refer to 4.5 section test (test setup 5) for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

#### 5.1.3.3 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

The EUT should be transmitting at its maximum data rate, Allow the trace to stabilize.

#### 5.1.3.4 Test Result

Please refer to ANNEX A.3.



## ANNEX A TEST RESULTS

### A.1 Radiated Emission

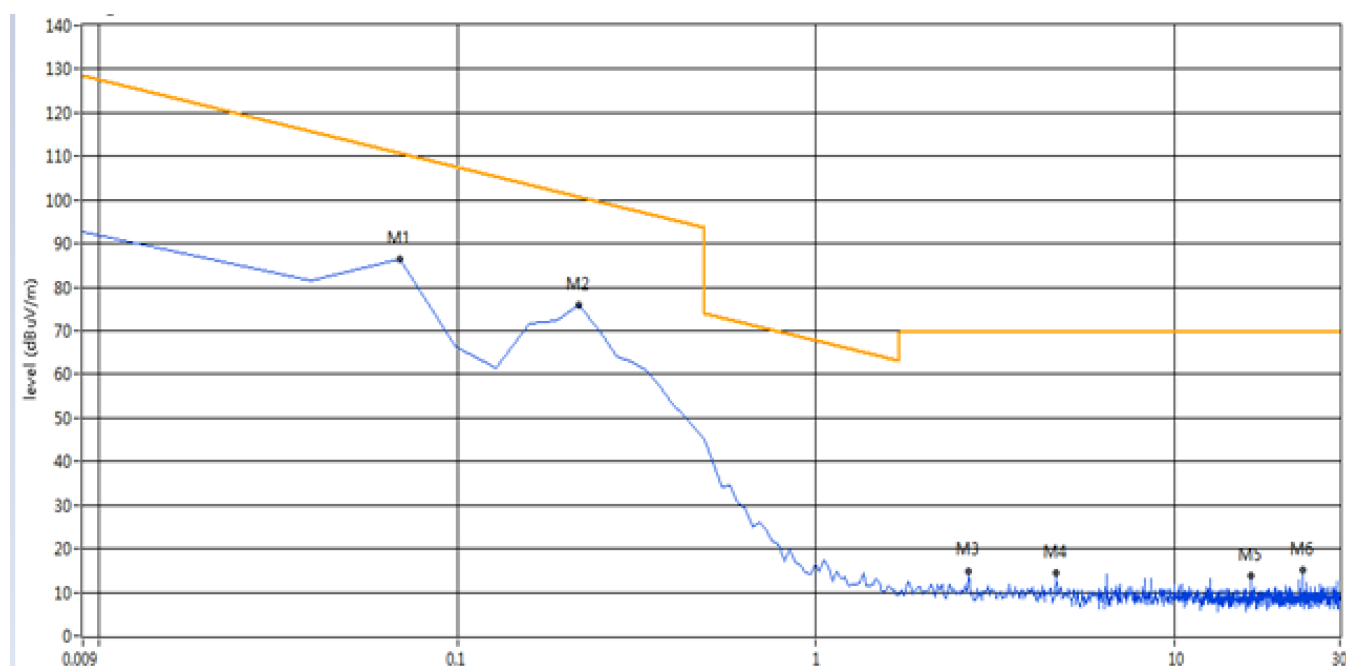
Note 1: The symbol of "--" in the table which means not application.

Note 2: For the test data above 1 GHz, according the ANSI C63.4-2014, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

#### Test Data and Plots

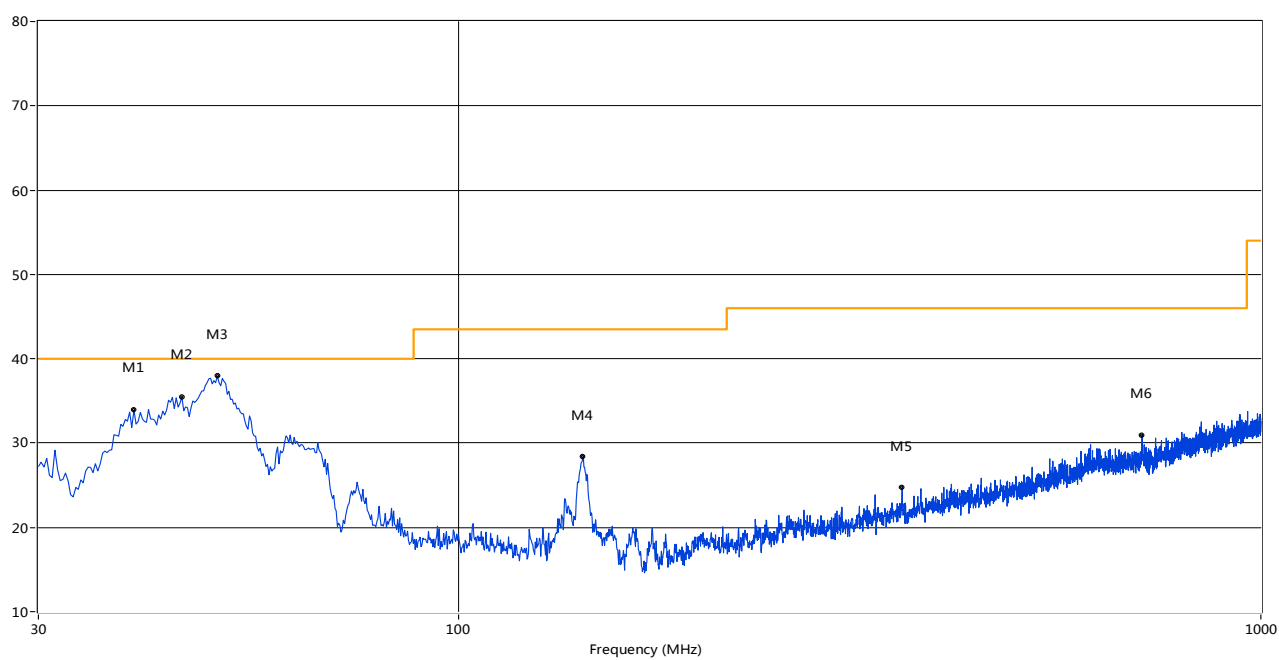
##### QI TEST MODE

##### A.1.1 9 kHz –30 MHz



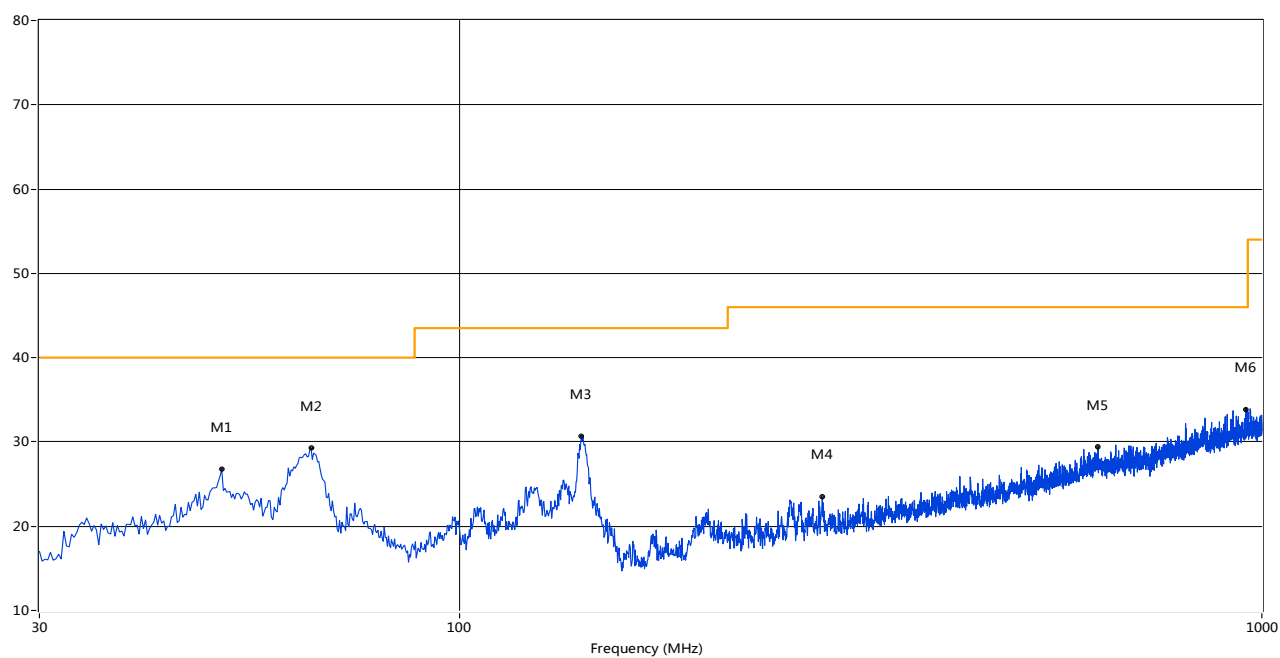
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	0.07	86.40	28.56	124.2	37.80	Peak	258.00	100	Vertical	Pass
2	0.22	75.96	38.29	113.4	37.44	Peak	129.00	100	Vertical	Pass
3	2.67	14.69	-34.84	69.5	54.81	Peak	59.00	100	Vertical	Pass
4	4.67	14.33	-34.55	69.5	55.17	Peak	192.00	100	Vertical	Pass
5	16.33	13.86	-33.61	69.5	55.64	Peak	251.00	100	Vertical	Pass
6	22.82	15.03	-33.61	69.5	54.47	Peak	283.00	100	Vertical	Pass

## A.1.2 Test Antenna Vertical, 30 MHz – 1 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	39.46	33.91	-19.91	40.0	6.09	Peak	359.90	100	Vertical	Pass
2	45.27	35.47	-18.79	40.0	4.53	Peak	355.80	100	Vertical	N/A
2*	45.27	34.35	-18.79	40.0	5.65	QP	355.80	100	Vertical	Pass
3	50.12	37.94	-18.66	40.0	2.06	Peak	353.50	100	Vertical	Pass
4	142.98	28.37	-23.54	43.5	15.13	Peak	55.10	100	Vertical	Pass
5	357.29	24.72	-16.17	46.0	21.28	Peak	174.90	100	Vertical	Pass
6	711.01	30.92	-8.88	46.0	15.08	Peak	24.70	100	Vertical	Pass

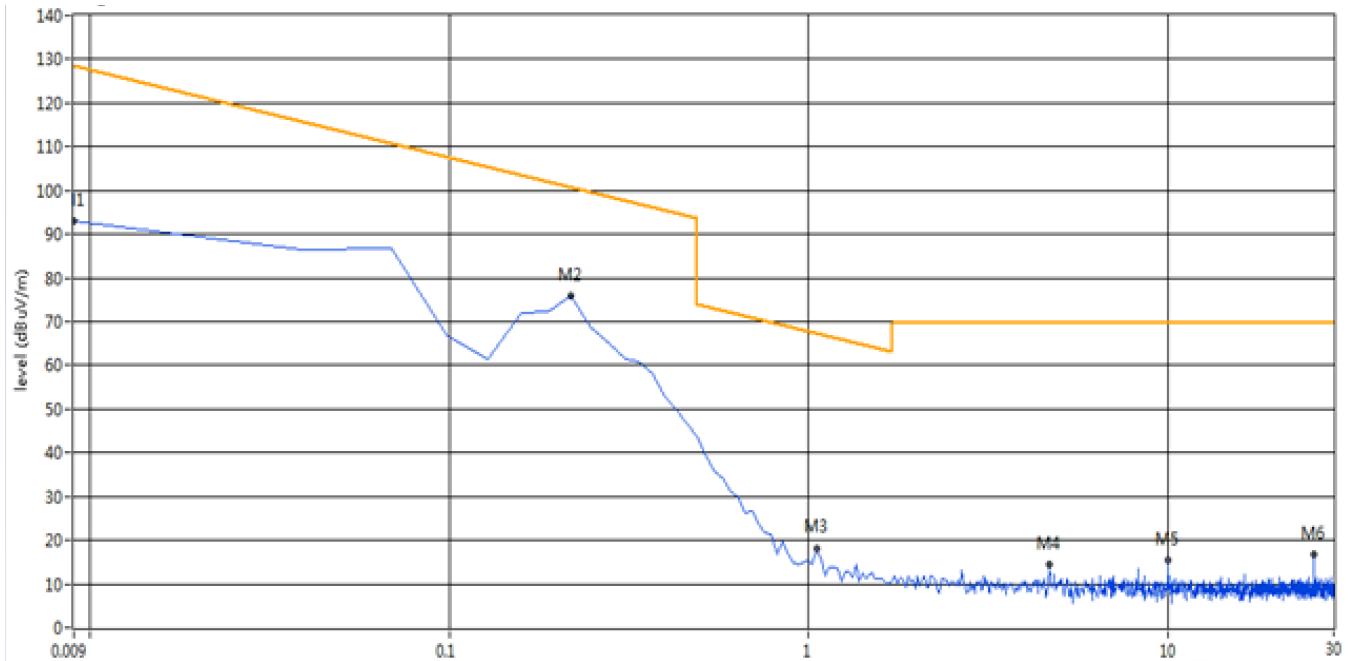
### A.1.3 Test Antenna Horizontal, 30 MHz – 1 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	50.61	26.78	-18.67	40.0	13.22	Peak	2.20	100	Horizontal	Pass
2	65.40	29.28	-20.84	40.0	10.72	Peak	62.40	100	Horizontal	Pass
3	142.01	30.71	-23.64	43.5	12.79	Peak	72.80	100	Horizontal	Pass
4	283.35	23.44	-18.28	46.0	22.56	Peak	263.60	100	Horizontal	Pass
5	624.95	29.40	-10.27	46.0	16.60	Peak	358.60	100	Horizontal	Pass
6	954.66	33.88	-5.12	46.0	12.12	Peak	2.20	100	Horizontal	Pass

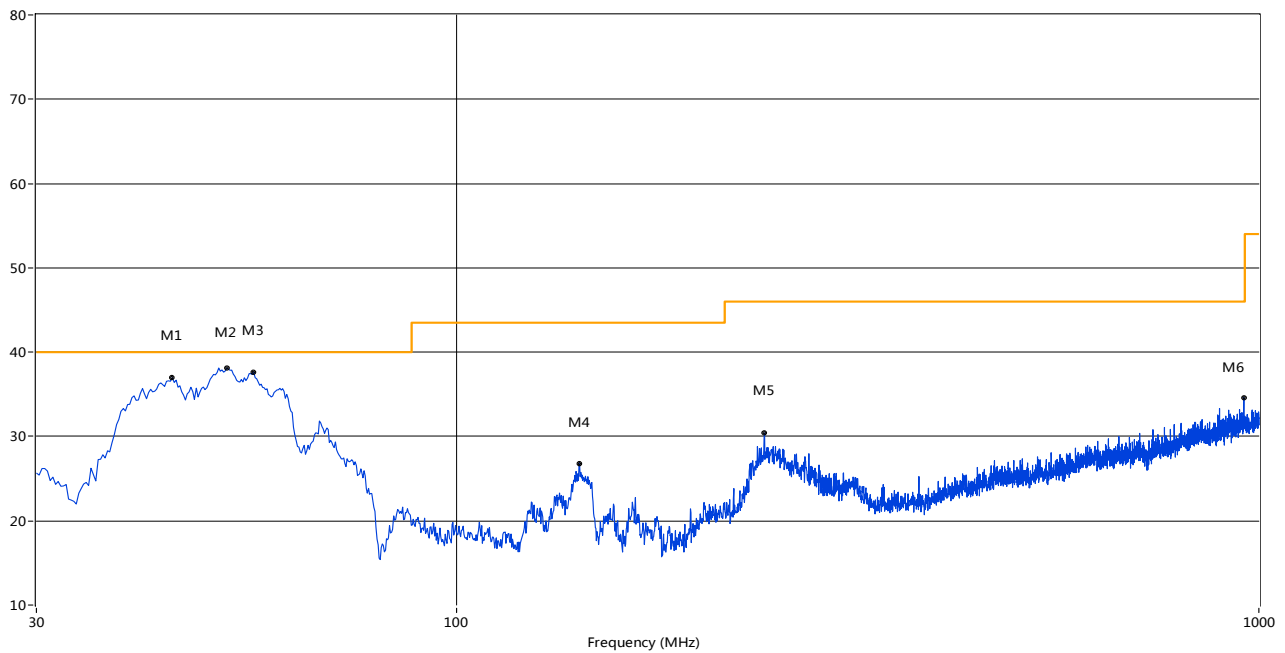
## PMA TEST MODE

### A.1.4 9 kHz –30 MHz



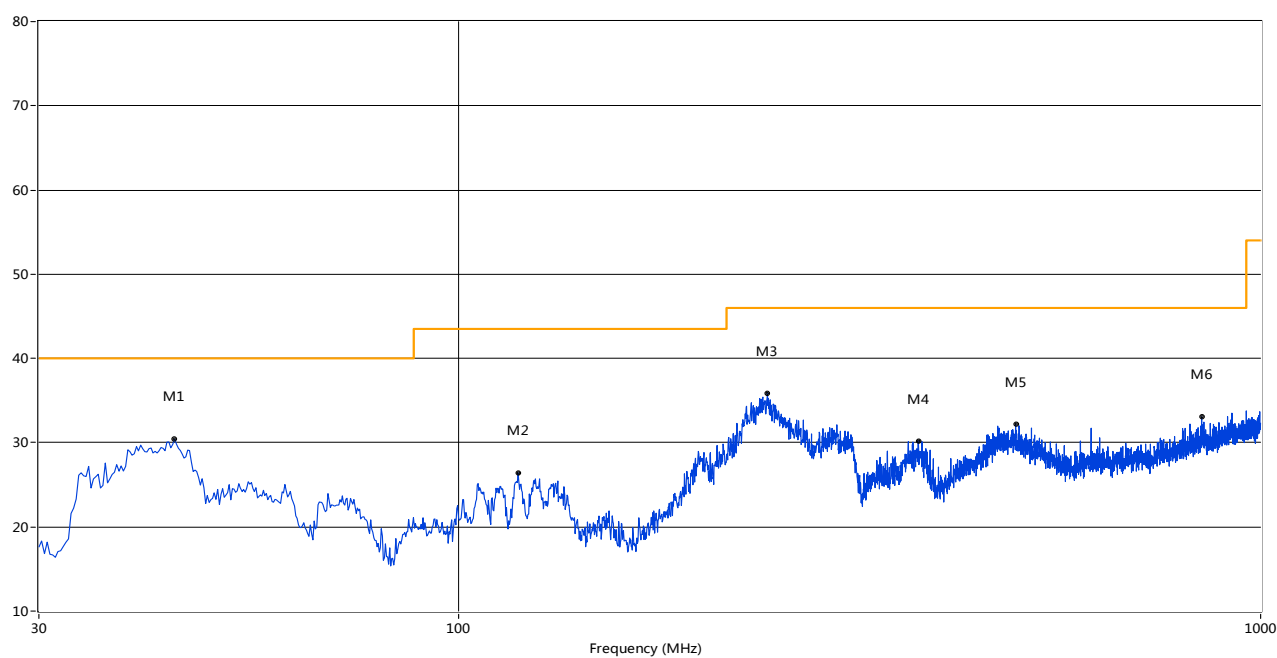
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	0.01	92.88	29.54	128.5	35.62	Peak	314.00	100	Vertical	Pass
2	0.22	75.80	38.29	113.4	37.60	Peak	302.00	100	Vertical	Pass
3	1.06	18.02	-26.86	68.8	50.78	Peak	249.00	100	Vertical	Pass
4	4.67	14.55	-34.55	69.5	54.95	Peak	164.00	100	Vertical	Pass
5	10.06	15.46	-33.80	69.5	54.04	Peak	231.00	100	Vertical	Pass
6	25.51	16.63	-33.56	69.5	52.87	Peak	241.00	100	Vertical	Pass

### A.1.5 Test Antenna Vertical, 30 MHz – 1 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	44.30	36.98	-18.82	40.0	3.02	Peak	272.70	100	Vertical	Pass
2	51.82	38.11	-18.64	40.0	1.89	Peak	297.00	100	Vertical	N/A
2*	51.82	36.26	-18.64	40.0	3.75	QP	297.00	100	Vertical	Pass
3	55.94	37.61	-19.30	40.0	2.39	Peak	178.40	100	Vertical	N/A
3*	55.94	35.84	-19.30	40.0	4.16	QP	178.40	100	Vertical	Pass
4	142.25	26.73	-23.62	43.5	16.77	Peak	27.40	100	Vertical	Pass
5	242.13	30.42	-19.13	46.0	15.58	Peak	359.20	100	Vertical	Pass
6	957.33	34.63	-5.11	46.0	11.37	Peak	128.00	100	Vertical	Pass

# A.1.6 Test Antenna Horizontal, 30 MHz – 1 GHz



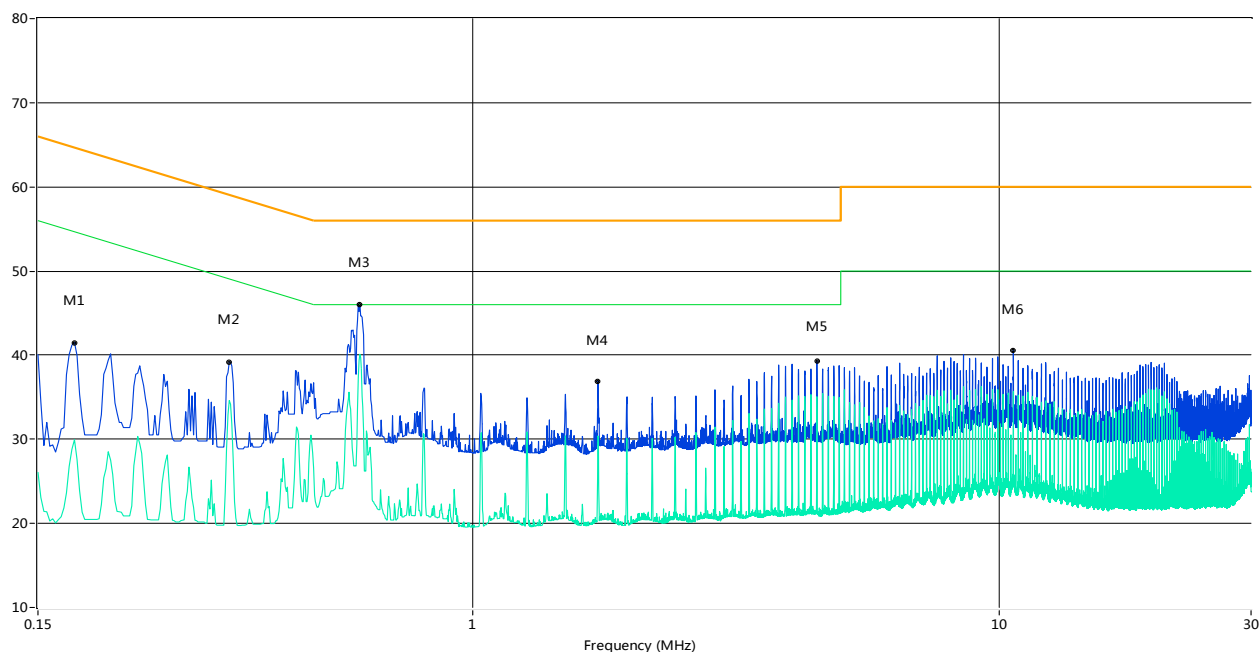
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	44.30	30.42	-18.82	40.0	9.58	Peak	320.80	100	Horizontal	Pass
2	118.73	26.42	-21.55	43.5	17.08	Peak	360.00	100	Horizontal	Pass
3	242.86	35.89	-19.03	46.0	10.11	Peak	88.60	100	Horizontal	Pass
4	374.51	30.21	-15.88	46.0	15.79	Peak	285.50	100	Horizontal	Pass
5	495.24	32.21	-13.20	46.0	13.79	Peak	270.40	100	Horizontal	Pass
6	844.60	33.07	-6.52	46.0	12.93	Peak	189.70	100	Horizontal	Pass

## A.2 Conducted Emission

### Test Data and Plots

#### QI TEST MODE

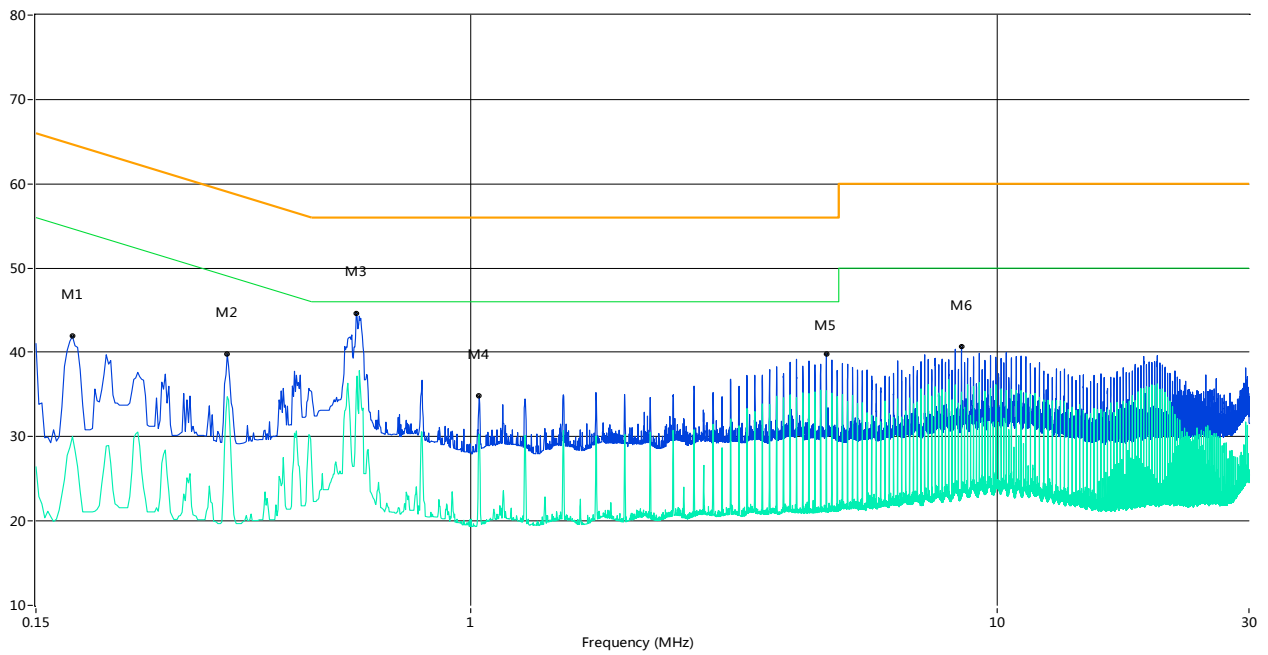
##### A.2.1 L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.18	41.5	13.00	65.3	23.80	Peak	L Line	Pass
1**	0.18	30.0	13.00	55.3	25.30	AV	L Line	Pass
2	0.35	39.2	13.00	60.4	21.20	Peak	L Line	Pass
2**	0.35	34.6	13.00	50.4	15.80	AV	L Line	Pass
3	0.61	46.1	13.00	56.0	9.90	Peak	L Line	Pass
3**	0.61	40.1	13.00	46.0	5.90	AV	L Line	Pass
4	1.73	36.9	13.00	56.0	19.10	Peak	L Line	Pass
4**	1.73	30.4	13.00	46.0	15.60	AV	L Line	Pass
5	4.51	39.4	13.00	56.0	16.60	Peak	L Line	Pass
5**	4.51	35.1	13.00	46.0	10.90	AV	L Line	Pass
6	10.62	40.6	13.00	60.0	19.40	Peak	L Line	Pass
6**	10.62	35.5	13.00	50.0	14.50	AV	L Line	Pass



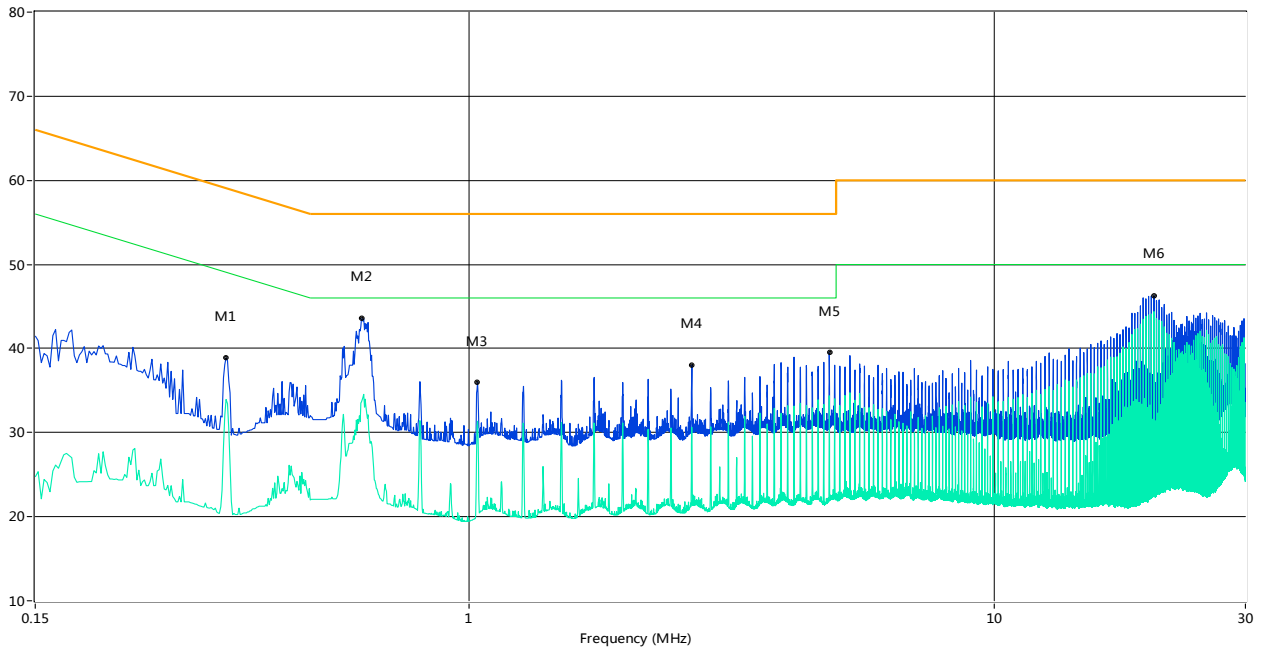
## A.2.2 N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.18	41.9	13.00	65.3	23.40	Peak	N Line	Pass
1**	0.18	30.0	13.00	55.3	25.30	AV	N Line	Pass
2	0.35	39.8	13.00	60.4	20.60	Peak	N Line	Pass
2**	0.35	34.7	13.00	50.4	15.70	AV	N Line	Pass
3	0.61	44.6	13.00	56.0	11.40	Peak	N Line	Pass
3**	0.61	35.3	13.00	46.0	10.70	AV	N Line	Pass
4	1.04	34.8	13.00	56.0	21.20	Peak	N Line	Pass
4**	1.04	30.3	13.00	46.0	15.70	AV	N Line	Pass
5	4.74	39.8	13.00	56.0	16.20	Peak	N Line	Pass
5**	4.74	35.4	13.00	46.0	10.60	AV	N Line	Pass
6	8.55	40.6	13.00	60.0	19.40	Peak	N Line	Pass
6**	8.55	35.3	13.00	50.0	14.70	AV	N Line	Pass

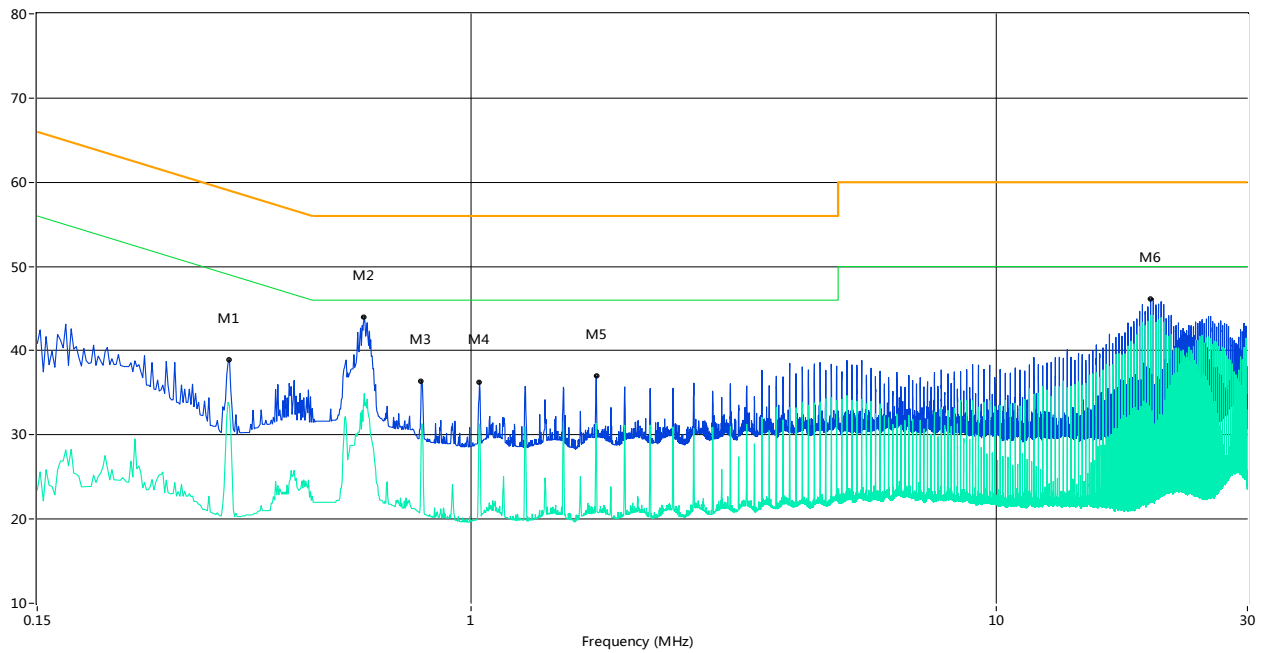
## PMA TEST MODE

### A.2.3 L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.35	38.9	13.00	60.4	21.50	Peak	L Line	Pass
1**	0.35	33.9	13.00	50.4	16.50	AV	L Line	Pass
2	0.63	43.5	13.00	56.0	12.50	Peak	L Line	Pass
2**	0.63	33.7	13.00	46.0	12.30	AV	L Line	Pass
3	1.04	36.0	13.00	56.0	20.00	Peak	L Line	Pass
3**	1.04	31.4	13.00	46.0	14.60	AV	L Line	Pass
4	2.66	38.0	13.00	56.0	18.00	Peak	L Line	Pass
4**	2.66	30.1	13.00	46.0	15.90	AV	L Line	Pass
5	4.85	39.5	13.00	56.0	16.50	Peak	L Line	Pass
5**	4.85	34.4	13.00	46.0	11.60	AV	L Line	Pass
6	20.10	46.3	13.00	60.0	13.70	Peak	L Line	Pass
6**	20.10	44.4	13.00	50.0	5.60	AV	L Line	Pass

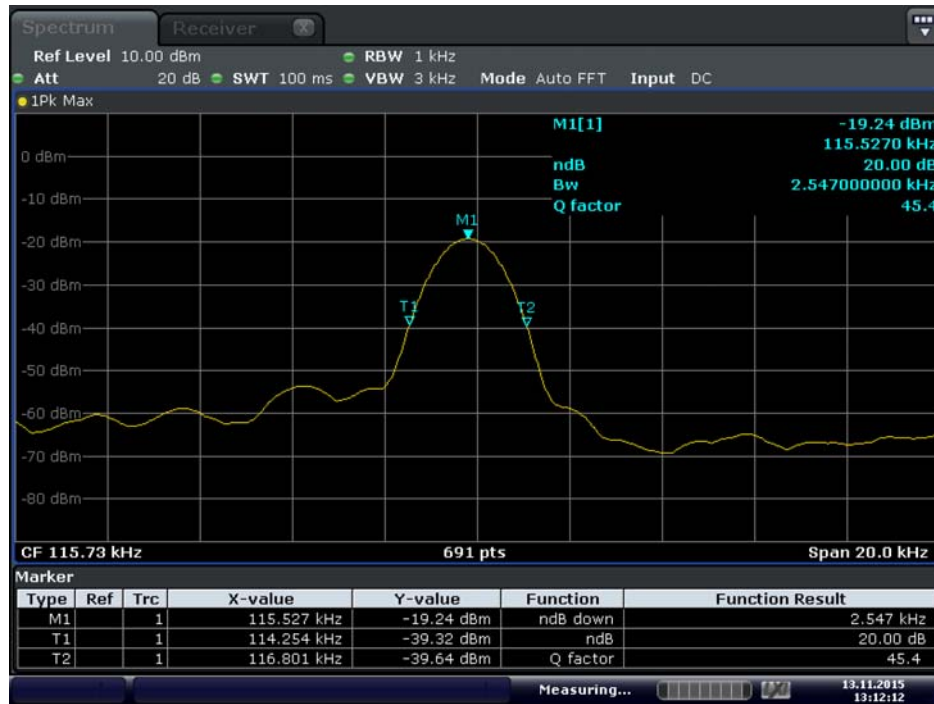
## A.2.4 N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.35	38.9	13.00	60.3	21.40	Peak	N Line	Pass
1**	0.35	33.5	13.00	50.3	16.80	AV	N Line	Pass
2	0.63	44.0	13.00	56.0	12.00	Peak	N Line	Pass
2**	0.63	34.9	13.00	46.0	11.10	AV	N Line	Pass
3	0.81	36.3	13.00	56.0	19.70	Peak	N Line	Pass
3**	0.81	29.9	13.00	46.0	16.10	AV	N Line	Pass
4	1.04	36.3	13.00	56.0	19.70	Peak	N Line	Pass
4**	1.04	31.3	13.00	46.0	14.70	AV	N Line	Pass
5	1.73	37.0	13.00	56.0	19.00	Peak	N Line	Pass
5**	1.73	30.4	13.00	46.0	15.60	AV	N Line	Pass
6	19.64	46.1	13.00	60.0	13.90	Peak	N Line	Pass
6**	19.64	44.2	13.00	50.0	5.80	AV	N Line	Pass

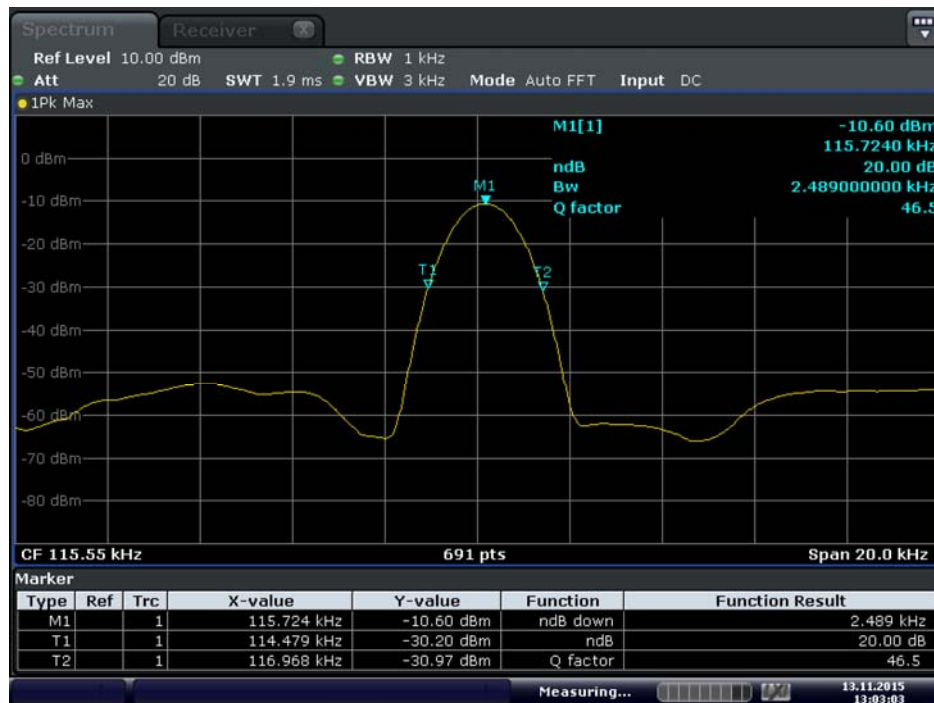
### A.3 20 dB Bandwidth

#### QI TEST MODE



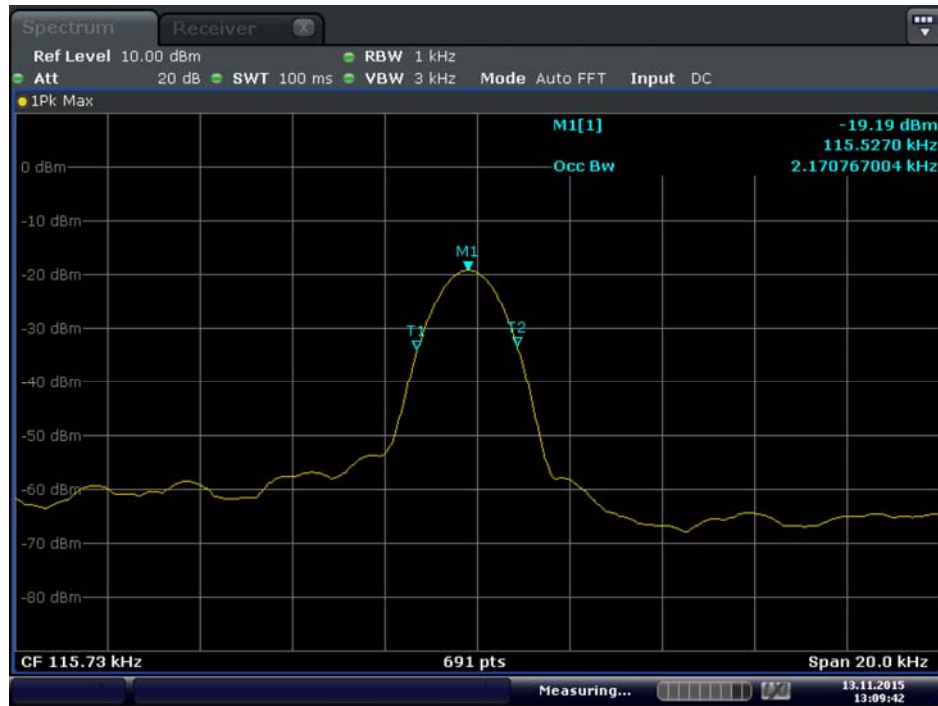
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#### PMA TEST MODE



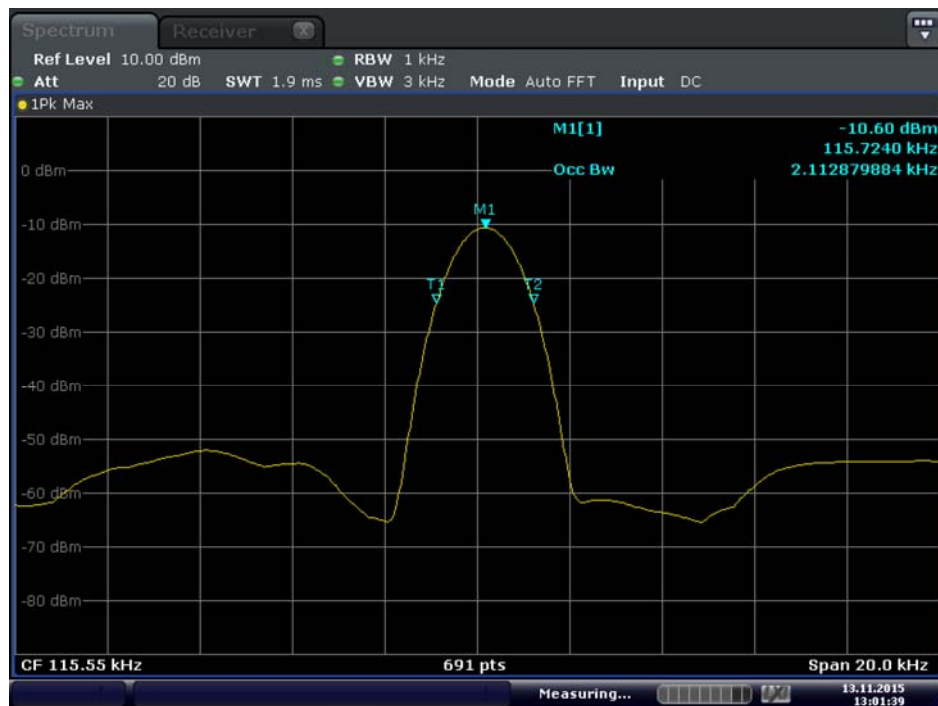
Date: 13.NOV.2015 13:03:04

99% Occupied Bandwidth  
QI TEST MODE



Date: 13.NOV.2015 13:09:42

PMA TEST MODE



Date: 13.NOV.2015 13:01:39

## **ANNEX B TEST SETUP PHOTOS**

Please refer the document “BL-SZ1570123-AR.PDF”.

## **ANNEX C EUT EXTERNAL PHOTOS**

Please refer the document “BL-SZ1570123-AW.PDF”.

## **ANNEX D EUT INTERNAL PHOTOS**

Please refer the document “BL-SZ1570123-AI.PDF”.

--END OF REPORT--