FCC&ISED
RF Test Report

Product Name: Smart Phone

Model Number: LYA-L0C

Report No.: SYBH(Z-RF)20180808003001--2006

FCC ID: QISLYA-L0C
IC：6369A-LYAL0C

Reliability Laboratory of Huawei Technologies Co., Ltd.

(Global Compliance and Testing Center of Huawei Technologies Co., Ltd)

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Notice

1. The laboratory has passed the accreditation by China National Accreditation Service for Conformity Assessment (CNAS). The accreditation number is L0310.
2. The laboratory has passed the accreditation by The American Association for Laboratory Accreditation (A2LA). The accreditation number is 2174.01.
3. The laboratory has been recognized by the US Federal Communications Commission (FCC) to perform compliance testing subject to the Commission's Certification rules. The Designation Number is CN1173, and the Test Firm Registration Number is 294140.
4. The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 6369A-1.
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Applicant:	Huawei Technologies Co., Ltd.
Address:	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C

Date of Receipt Sample:	2018-09-01
Start Date of Test:	2018-09-01
End Date of Test:	2018-09-19

Test Result:	Pass

Approved by Senior Engineer:	2018-09-19	He Hao	He Hao
	Date	Name	Signature

Prepared by:	2018-09-19	zhoulingbo	Zhou Ling bo
	Date	Name	Signature

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1 General Information

1.1 Applied Standard	
Applied Rules:	47 CFR FCC Part 02 47 CFR FCC Part 15 Subpart C (15.225)
	ISED RSS-Gen (Issue 5, April 2018) ISED RSS-210 (Issue 9, August 2016)
1.2 Test Location	
Test Location 1:	Reliability Laboratory of Huawei Technologies Co., Ltd.
Address:	No.2 New City Avenue Songshan Lake Sci. &Tech. Industry Park, Dongguan, Guangdong, P.R.C
1.3 Test Environmental Condition	
Ambient Temperature:	20 – 25 °C
Ambient Relative Humidity:	45 – 55 %
Atmospheric Pressure:	101 kPa

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2 Summary

FCC Rule No.	ISED Rule No.	Test Description	Test Limit	Test Condition	Test Result	Reference
TRANSMITTER MODE						
15.225 (a)	RSS-210, B6(a)	In-Band Emissions	15,848μV/m @ 30m 13.553 – 13.567 MHz	RADIATED	Refer to No. SYBH(Z-RF)20180706013002-2006 of LYA-L29,LYA-L09	Section 5.2
2.1049	RSS-Gen, 6.7	Bandwidth	N/A		Refer to No. SYBH(Z-RF)20180706013002-2006 of LYA-L29,LYA-L09	Section 5.1
15.225(b)	RSS-210, B6(b)	In-Band Emissions	334μV/m @ 30m 13.410 – 13.553 MHz 13.567 – 13.710 MHz		Refer to No. SYBH(Z-RF)20180706013002-2006 of LYA-L29,LYA-L09	Section 5.2
15.225(c)	RSS-210, B6(c)	In-Band Emissions	106μV/m @ 30m 13.110 – 13.410 MHz 13.710 – 14.010 MHz		Refer to No. SYBH(Z-RF)20180706013002-2006 of LYA-L29,LYA-L09	Section 5.2
15.225(d) 15.209	RSS-210, B6(d)	Out-of-Band Emissions	FCC: Emissions outside of the specified band (13.110 – 14.010 MHz) must meet the radiated limits detailed in 15.209 ISED: Emissions outside of the specified band (13.110 – 14.010 MHz) must meet the radiated limits detailed in RSS-Gen 8.9		Refer to No. SYBH(Z-RF)20180706013002-2006 of LYA-L29,LYA-L09	Section 5.3
15.225(e)	RSS-210, B6(d)	Frequency Stability Tolerance	± 0.01% of Operating Frequency	Temperature Chamber	Refer to No. SYBH(Z-RF)20180706013002-2006 of LYA-L29,LYA-L09	Section 5.4
15.207	RSS-Gen, 8.8	AC Conducted Emissions 150kHz – 30MHz	FCC: < FCC 15.207 limits ISED: < RSS-Gen, 8.8 limits.	LINE CONDUCTED	Refer to No. SYBH(Z-RF)20180706013002-2006 of LYA-L29,LYA-L09	Section 5.5

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3 Product Description

3.1 Product Information

3.1.1 General Description

LYA-L0C is a subscriber equipment in the GSM/WCDMA/LTE system. The GSM frequency band includes GSM850 and GSM900 and DCS1800 and PCS1900.The UMTS frequency band is B1 and B2 and B4 and B5 and B6 and B8 and B19. The LTE frequency band is B1 and B2 and B3 and B4 and B5 and B6 and B7 and B8 and B9 and B12 and B17and B18 and B19 and B20 and B26 and B28 and B34 and B38 and B39 and B40 and B41 and B66. The Mobile Phone implements such functions as RF signal receiving/transmitting, LTE/HSPA/UMTS and GSM/GPRS/EDGE protocol processing, voice, video MMS service, GPS, Bluetooth, NFC, Wi-Fi and Wirelessly Charging etc. LYA-L0C provides one USIM card interface and one HUAWEI Nano SD card interface. Externally it provides type C USB charging port, and the port could be used as the earphone port or data-transfer port.

Below is the difference between LYA-L29 and LYA-L0C

<table>
<tr><td>Model</td><td>LYA-L29</td><td>LYA-L0C</td></tr>
<tr><td>PCB</td><td>The same</td><td>The same</td></tr>
<tr><td>Frequency-GSM</td><td>The same</td><td>The same</td></tr>
<tr><td>Frequency-WCDMA</td><td>The same</td><td>The same</td></tr>
<tr><td>Frequency-LTE</td><td>Different
B2/4/5/7/12/17/38/40/41(2545~2655MHz，support AXGP)</td><td>Different
B2/4/5/7/12/17/38/40/41(2545~2655MHz，support AXGP)/B66</td></tr>
<tr><td>4*4 Mimo</td><td>Different
Support B3、B7、B1</td><td>Different
Support B2、B7、B66(B4)
Replace TRI SAW filters of B1/B3/B7 with SAW filters of B2/B66/B7.
Replace</td></tr>
<tr><td>SIM Card</td><td>Dual</td><td>Single</td></tr>
<tr><td>RF NV parameters</td><td>Different</td><td>Different
The power of LYA-L0C is different from LYA-L29 by change RF NV parameters.
• Down antenna（Primary）
① 0mm body Scenario
<table><tr><td></td><td>WB2</td><td>WB4</td><td>LTEB2</td><td>LTEB4</td></tr><tr><td>reduce</td><td>0.5dB</td><td>0.5dB</td><td>0.5dB</td><td>1.5dB</td></tr></table>② 10mm hotspot Scenario
<table><tr><td></td><td>LTEB4</td></tr><tr><td>reduce</td><td>0.5dB</td></tr></table>• Up antenna (Secondary)
Head Scenario</td></tr>
</table>

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		<table><tr><td></td><td>WB2</td><td>WB4</td><td>LTEB2</td></tr><tr><td>rise</td><td>1dB</td><td>1dB</td><td>1dB</td></tr></table>
Hardware	Different Location ID: Z4102, Z4302, Z4401 Description:B1/3/7 Tri saw filter,2140MHz. Location ID: Z4103 Description: SAW filter -1960MHz	Different 1) Replace TRI SAW filters of B1/B3/B7 with SAW filters of B2/B66/B7. Replace Location ID: Z4102,Z4302,Z4401 Description:B2/B66/B7 Tri saw filter ,2655MHz. 2)Delete some chip inductors in Peripheral RF Matching circuits of the diversity circuit, MIMO main circuit, and MIMO diversity circuit. Delete Location ID: L4126 L4127 L4130 L3506 Description: Chip inductor 0.018uH/0.001uH/0.0022uH/0.0039uH 3) Delete The circuits related to the B32 frequency band. Delete: Location ID: Z3502,Z4104 Description: B32 saw filter 1474MHz Location ID: C3512,C5401,C5405 Description: Ceramic capacitor 0.033nF Location ID: Z5403 Description: Ceramic filter -1710MHz Location ID: U3503,U4101 Description: RF low noise amplifier -1559~1610MHz 4)Replace B3 SAW filter with B2 SAW filter and slight change of Peripheral RF matching circuits. Replace: Location ID: Z4103 Description: SAW filter -1842.5MHz Delete: Location ID:L3502 L3516 L4129 Description: Chip inductor 0.0056uH/0.002uH/0.0075uH Location ID:C3514,C4110 Description: Ceramic capacitor 0.018nF
Software	Different	Different
Dimensions	The same	The same
Appearance	The same	The same
main antenna	The same	The same
BT/Wi-Fi antenna	The same	The same
DIV antenna	The same	The same
Supported CA configurations for DL CA	Different support:CA_1A-3A CA_1C-3A CA_1A-3C CA_1A-3A-3A CA_1C-3C CA_1A-3D CA_1C-3D CA_1A-7A-7A CA_1A-32A CA_1A-38A CA_1A-38C CA_1A-40A CA_1A-40C CA_1A-41A CA_1A-41C CA_3A-3A-7A CA_3A-7A-7A CA_3A-3A-7A-7A CA_3A-3A-8A CA_3A-32A CA_3C-32A	Different unsupport:CA_1A-3A CA_1C-3A CA_1A-3C CA_1A-3A-3A CA_1C-3C CA_1A-3D CA_1C-3D CA_1A-7A-7A CA_1A-32A CA_1A-38A CA_1A-38C CA_1A-40A CA_1A-40C CA_1A-41A CA_1A-41C CA_3A-3A-7A CA_3A-7A-7A CA_3A-3A-7A-7A CA_3A-3A-8A CA_3A-32A CA_3C-32A

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	CA_3A-38A CA_3C-38A CA_3A-38C CA_3C-38C CA_3A-40A CA_3A-40C CA_3A-40D CA_3A-41A CA_7A-7A-8A CA_7A-32A CA_8A-32A CA_20A-32A CA_1A-3A-5A CA_1A-3C-5A CA_1A-3A-7A CA_1C-3A-7A CA_1A-3C-7A CA_1A-3A-3A-7A CA_1A-3A-7C CA_1A-3A-7A-7A CA_1C-3C-7A CA_1A-3A-3A-7A-7A CA_1A-3A-8A CA_1A-3C-8A CA_1A-3A-19A CA_1A-3A-20A CA_1A-3C-20A CA_1A-3A-26A CA_1A-3A-28A CA_1A-3C-28A CA_1A-3A-32A CA_1A-3A-38A CA_1A-3C-38A CA_1A-3A-38C CA_1A-3C-38C CA_1A-28A-40C CA_3A-3A-7A-8A CA_3A-7A-7A-8A CA_3A-3A-7A-7A-8A CA_3A-3A-7A-20A CA_3A-7A-32A CA_3C-7A-32A CA_3A-8A-38A CA_3C-8A-38A CA_3A-20A-32A CA_3A-28A-40A CA_3A-28A-40C CA_3A-28A-40D CA_7A-8A-32A CA_7A-20A-32A CA_1A-3A-7A-8A CA_1A-3C-7A-8A CA_1A-3A-7A-20A CA_1A-3C-7A-20A CA_1A-3A-7A-28A CA_1A-3A-7C-28A CA_1A-3A-7A-32A CA_1A-3A-8A-38A CA_1A-3A-20A-32A CA_1A-3A-28A-40A CA_1A-3A-28A-40C CA_1A-7A-20A-32A CA_3A-7A-20A-32A CA_1A-3A-7A-20A-32A unsupport:CA_66B CA_66C CA_66D CA_2A-2A CA_4A-4A CA_12A-12A CA_66A-66A CA_2A-4A CA_2C-4A CA_2A-4A-4A CA_2A-5A CA_2A-7A CA_2A-7C CA_2A-7A-7A CA_2A-12A CA_2A-2A-12A CA_2A-12B CA_2A-12A-12A CA_2A-17A CA_2A-28A CA_2A-66A CA_2A-2A-66A CA_4A-5A CA_4A-4A-5A CA_4A-7A CA_4A-4A-7A CA_4A-7C CA_4A-7A-7A CA_4A-12A CA_4A-4A-12A CA_4A-12B CA_4A-12A-12A CA_4A-17A CA_4A-28A CA_7A-12A CA_7A-12B CA_7A-12A-12A CA_7A-66A CA_7C-66A CA_7A-66A-66A CA_7C-66A-66A CA_12A-66A CA_12B-66A CA_12A-66A-66A CA_2A-4A-5A CA_2A-4A-7A CA_2A-4A-7C CA_2A-4A-7A-7A CA_2A-4A-12A CA_2A-4A-12A-12A CA_2A-4A-28A CA_2A-7A-12A CA_2A-7A-12B CA_2A-7A-12A-12A CA_2A-7A-66A CA_2A-12A-66A CA_2A-2A-12A-66A CA_2A-12B-66A CA_4A-5A-7A CA_4A-7A-12A CA_4A-7A-12B CA_4A-7A-12A-12A CA_7A-12A-66A CA_7A-12B-66A CA_2A-4A-7A-12A CA_2A-7A-12A-66A CA_2A-7A-12B-66A	CA_3A-38A CA_3C-38A CA_3A-38C CA_3C-38C CA_3A-40A CA_3A-40C CA_3A-40D CA_3A-41A CA_7A-7A-8A CA_7A-32A CA_8A-32A CA_20A-32A CA_1A-3A-5A CA_1A-3C-5A CA_1A-3A-7A CA_1C-3A-7A CA_1A-3C-7A CA_1A-3A-3A-7A CA_1A-3A-7C CA_1A-3A-7A-7A CA_1C-3C-7A CA_1A-3A-3A-7A-7A CA_1A-3A-8A CA_1A-3C-8A CA_1A-3A-19A CA_1A-3A-20A CA_1A-3C-20A CA_1A-3A-26A CA_1A-3A-28A CA_1A-3C-28A CA_1A-3A-32A CA_1A-3A-38A CA_1A-3C-38A CA_1A-3A-38C CA_1A-3C-38C CA_1A-28A-40C CA_3A-3A-7A-8A CA_3A-7A-7A-8A CA_3A-3A-7A-7A-8A CA_3A-3A-7A-20A CA_3A-7A-32A CA_3C-7A-32A CA_3A-8A-38A CA_3C-8A-38A CA_3A-20A-32A CA_3A-28A-40A CA_3A-28A-40C CA_3A-28A-40D CA_7A-8A-32A CA_7A-20A-32A CA_1A-3A-7A-8A CA_1A-3C-7A-8A CA_1A-3A-7A-20A CA_1A-3C-7A-20A CA_1A-3A-7A-28A CA_1A-3A-7C-28A CA_1A-3A-7A-32A CA_1A-3A-8A-38A CA_1A-3A-20A-32A CA_1A-3A-28A-40A CA_1A-3A-28A-40C CA_1A-7A-20A-32A CA_3A-7A-20A-32A CA_1A-3A-7A-20A-32A support:CA_66B CA_66C CA_66D CA_2A-2A CA_4A-4A CA_12A-12A CA_66A-66A CA_2A-4A CA_2C-4A CA_2A-4A-4A CA_2A-5A CA_2A-7A CA_2A-7C CA_2A-7A-7A CA_2A-12A CA_2A-2A-12A CA_2A-12B CA_2A-12A-12A CA_2A-17A CA_2A-28A CA_2A-66A CA_2A-2A-66A CA_4A-5A CA_4A-4A-5A CA_4A-7A CA_4A-4A-7A CA_4A-7C CA_4A-7A-7A CA_4A-12A CA_4A-4A-12A CA_4A-12B CA_4A-12A-12A CA_4A-17A CA_4A-28A CA_7A-12A CA_7A-12B CA_7A-12A-12A CA_7A-66A CA_7C-66A CA_7A-66A-66A CA_7C-66A-66A CA_12A-66A CA_12B-66A CA_12A-66A-66A CA_2A-4A-5A CA_2A-4A-7A CA_2A-4A-7C CA_2A-4A-7A-7A CA_2A-4A-12A CA_2A-4A-12A-12A CA_2A-4A-28A CA_2A-7A-12A CA_2A-7A-12B CA_2A-7A-12A-12A CA_2A-7A-66A CA_2A-12A-66A CA_2A-2A-12A-66A CA_2A-12B-66A CA_4A-5A-7A CA_4A-7A-12A CA_4A-7A-12B CA_4A-7A-12A-12A CA_7A-12A-66A CA_7A-12B-66A CA_2A-4A-7A-12A CA_2A-7A-12A-66A CA_2A-7A-12B-66A CA_2A-7A-7A-66A-66A CA_2A-7A-7A-66A CA_2A-7A-66A-66A CA_7A-7A-66A CA_7A-7A-66A-66A CA_2A-66A-66A

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Supported CA configurations for UL CA	Different support:CA_3A-20A CA_7A-20A	Different Unsupport:CA_3A-20A CA_7A-20A
Others	NA	NA

NOTE: For NFC of LYA-L0C, it is the same as LYA-L29, so all data refer to No. SYBH(Z-RF)20180706013002-2006 of LYA-L29,LYA-L09

3.2 EUT Identity

NOTE: Unless otherwise noted in the report, the functional boards installed in the units shall be selected from the below list, but not means all the functional boards listed below shall be installed in one unit.

3.2.1 Board

Board		
Description	Software version	Hardware version
Main Board	5.0.1.82(C792E4R1P9log)	HL2LAYAM

3.2.2 Sub-Assembly

Sub-Assembly			
Sub-Assembly Name	Model	Manufacturer	Description
Adapter	HW-100400A00	Huawei Technologies Co.,Ltd.	Input Voltage:100V-240V~50/60Hz, 1.2A Output Voltage: 5V ⎓ 2A OR9V ⎓ 2A OR 10V ⎓ 4A
Adapter	HW-100400U00	Huawei Technologies Co.,Ltd.	nput Voltage:100V-240V~50/60Hz, 1.2A Output Voltage: 5V ⎓ 2A OR9V ⎓ 2A OR 10V ⎓ 4A
Adapter	HW-100400E00	Huawei Technologies Co.,Ltd.	nput Voltage:100V-240V~50/60Hz, 1.2A Output Voltage: 5V ⎓ 2A OR9V ⎓ 2A OR 10V ⎓ 4A
Adapter	HW-100400B00	Huawei Technologies Co.,Ltd.	Input Voltage:100V-240V~50/60Hz, 1.2A Output Voltage: 5V ⎓ 2A OR9V ⎓ 2A OR 10V ⎓ 4A
Li-ion Polymer Battery	HB486486ECW	Huawei Technologies Co.,Ltd.	Rated capacity: 4100mAh Nominal Voltage: +3.82V Charging Voltage: +4.4V

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4 Main Test Instruments

Main Test Equipments					
Equipment Name	Manufacturer	Model	Serial Number	Cal Date	Cal- Due
Test receiver	R&S	ESU26	100387	2018/1/20	2019/1/19
Test receiver	R&S	ESU26	100387	2018/1/20	2019/1/19
Test receiver	R&S	ESCI	101163	2018/1/20	2019/1/19
Spectrum analyzer	R&S	FSU3	200474	2018/1/20	2019/1/19
Spectrum analyzer	R&S	FSU43	100144	2018/1/20	2019/1/19
LOOP Antennas(9kHz-30MHz)	R&S	HFH2-Z2	100262	2017/4/25	2019/4/25
LOOP Antennas(9kHz-30MHz)	R&S	HFH2-Z2	100263	2017/4/25	2019/4/25
Trilog Broadband Antenna (30M~3GHz)	SCHWARZBECK	VULB 9163	9163-357	2017/4/21	2019/4/20
Double-Ridged Waveguide Horn Antenna (1G~18GHz)	R&S	HF907	100304	2017/5/27	2019/5/27
Pyramidal Horn Antenna(18GHz-26.5GHz)	ETS-Lindgren	3160-09	5140299	2017/7/20	2019/7/19
Artificial Main Network	R&S	ENV4200	100134	2018/5/8	2019/5/7
Line Impedance Stabilization Network	R&S	ENV216	100382	2018/5/8	2019/5/7
Software Information					
Test Item	Software Name		Manufacturer		Version
RE	EMC32		R&S		V9.25.0
CE	EMC32		R&S		V9.25.0

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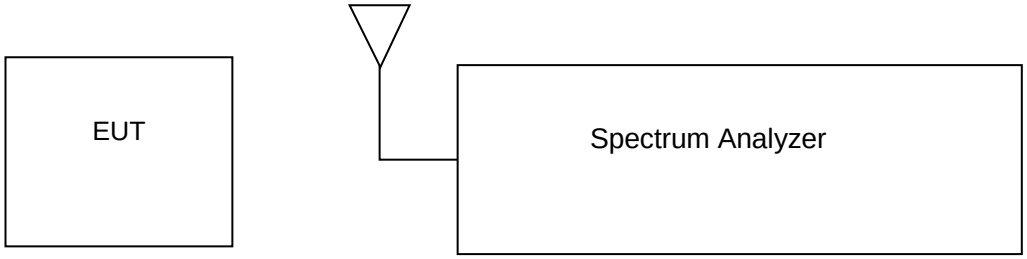
5 Test Results

5.1 Bandwidth

The 99% emission bandwidth is measured with a spectrum analyzer connected via a receive antenna placed near the EUT while the EUT is operating in transmission mode.

5.1.1 Test Set-up



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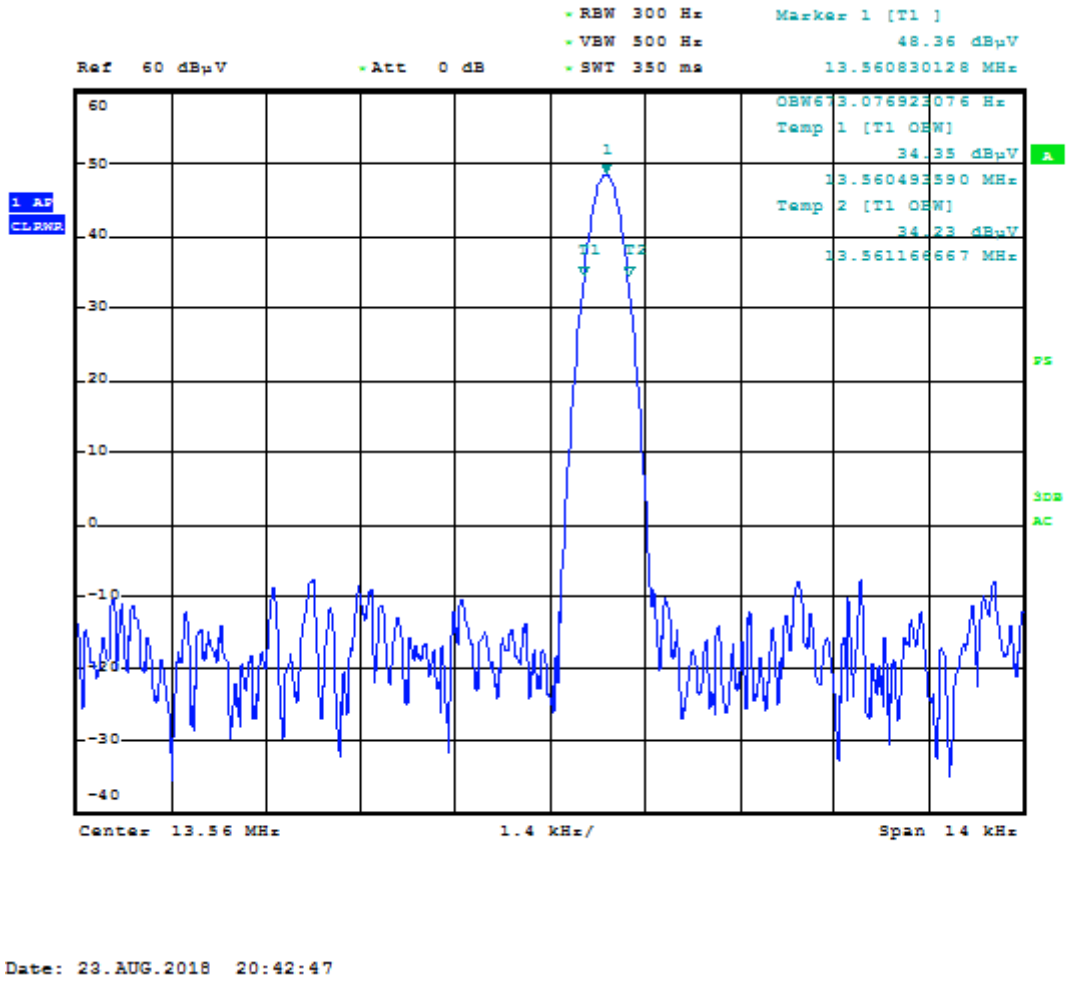
5.1.2 Test Result



Result: **The result of the measurement is passed.**

Test Environment	OBW (Hz)	FL@OBW (MHz)	FH@OBW (MHz)	Verdict
TN/VN	673.078	13.560493590	13.561166667	PASS

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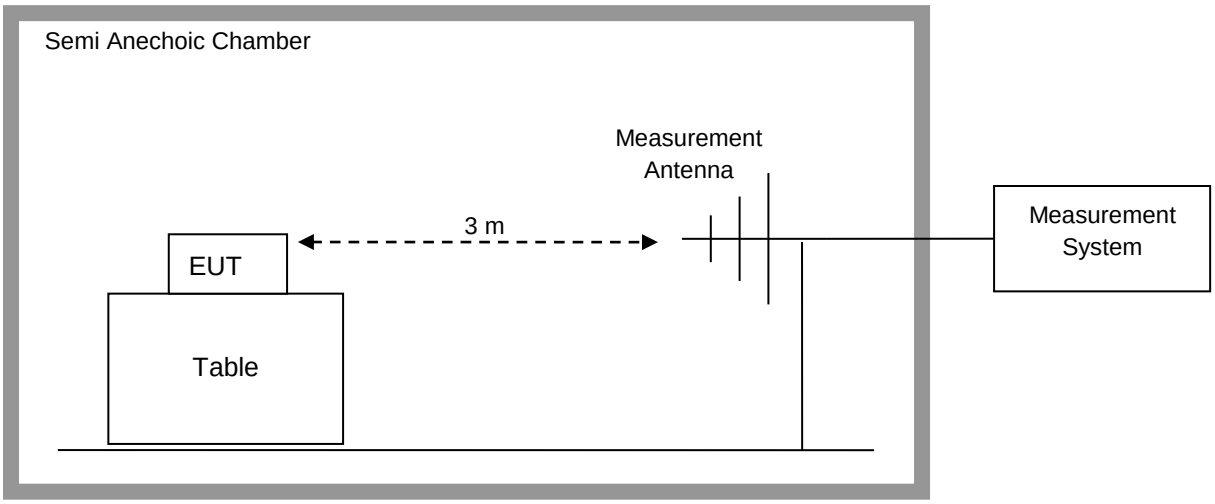
5.2 In-Band Radiated Spurious Emission Measurements

5.2.1 Test Setup



Measurement parameters	
Detector:	Quasi Peak
Sweep time:	-/-
Resolution bandwidth:	10 kHz
Video bandwidth:	10 kHz
Span:	-/-
Trace-Mode:	Max Hold

5.2.2 Test Result

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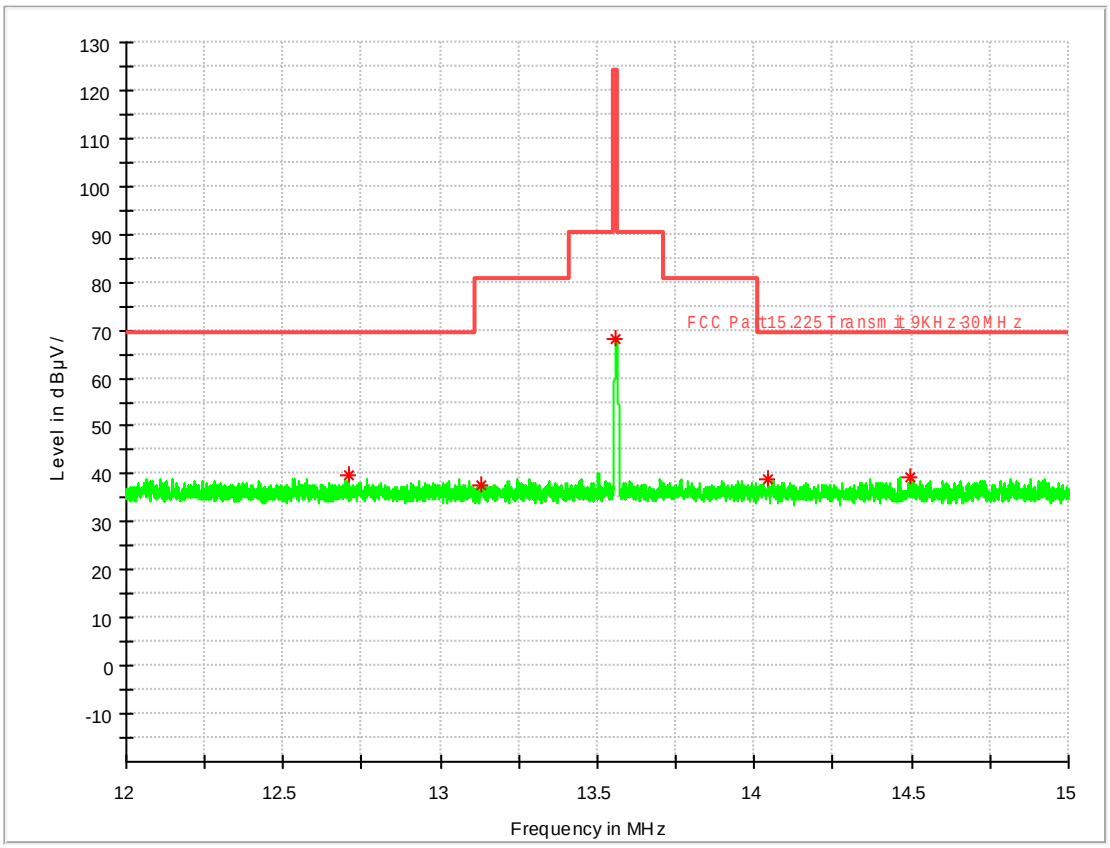

MEASUREMENT RESULT: QP Detector

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Azimuth (deg)	Transd (dB)
12.708375	39.61	69.50	29.89	V	0.0	21.1
13.132500	37.80	80.50	42.70	V	0.0	21.1
13.559438	68.22	124.00	55.78	V	0.0	21.1
14.040563	38.87	69.50	30.63	V	90.0	21.1
14.494125	39.50	69.50	30.01	V	0.0	21.1

NOTES:

1. All measurements were performed using a loop antenna. The antenna was positioned in three orthogonal positions (X front, Y side, Z top) and the position with the highest emission level was recorded.

2. When using other measurement distance, according to the standard C63.10, If that point is closer to the EUT than λ/2π and the limit distance is greater than λ/2π, the data was extrapolated to the specified measurement distance of 30m using extrapolation factor as specified in

§6.4.4.2. Extrapolation Factor = $40\log(\frac{d_{near\ field}}{d_{measure}})+20\log(\frac{d_{limit}}{d_{near\ field}})$.

3. All measurements were recorded using a spectrum analyzer employing a quasi-peak detector.

4. Level =Reading level by receiver + Transd (Antenna factor + cable loss – preamplifier gain). The

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reading level is calculated by software which is not shown in the sheet.

The result of the measurement is passed.

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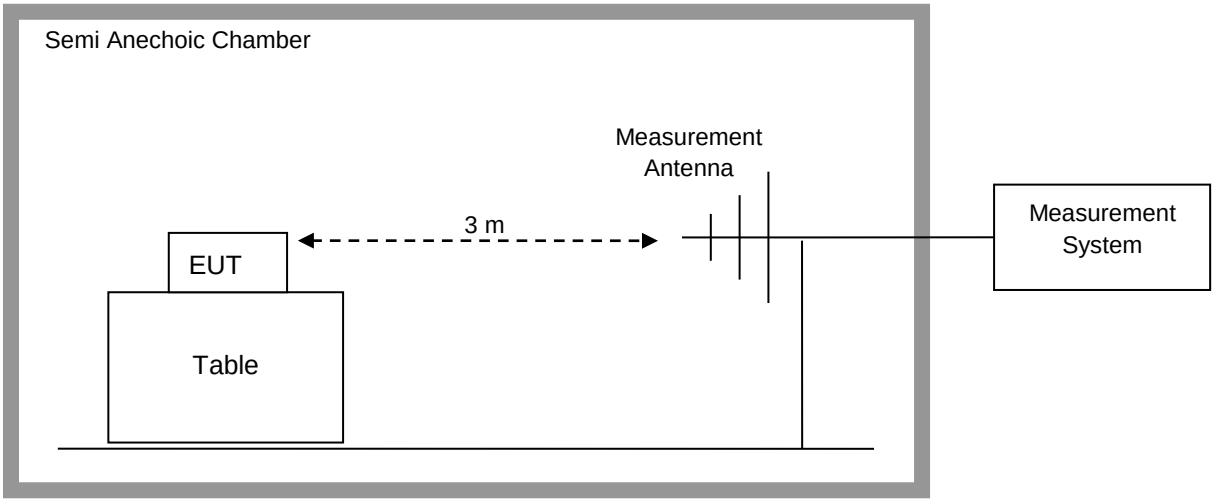
5.3 Radiated Spurious Emission Measurements, Out-of-Band

5.3.1 Test Setup



Measurement parameters	
Detector:	Quasi Peak
Sweep time:	Auto
Resolution bandwidth:	9 kHz – 150 kHz: 200 Hz 150 kHz – 30 MHz: 9 kHz 30 MHz – 1000 MHz: 100 kHz
Video bandwidth:	9 kHz – 150 kHz: 200 Hz 150 kHz – 30 MHz: 9 kHz 30 MHz – 1000 MHz: 100 kHz
Span:	See Plots
Trace-Mode:	Max Hold

5.3.2 Test Result

9k~30MHz

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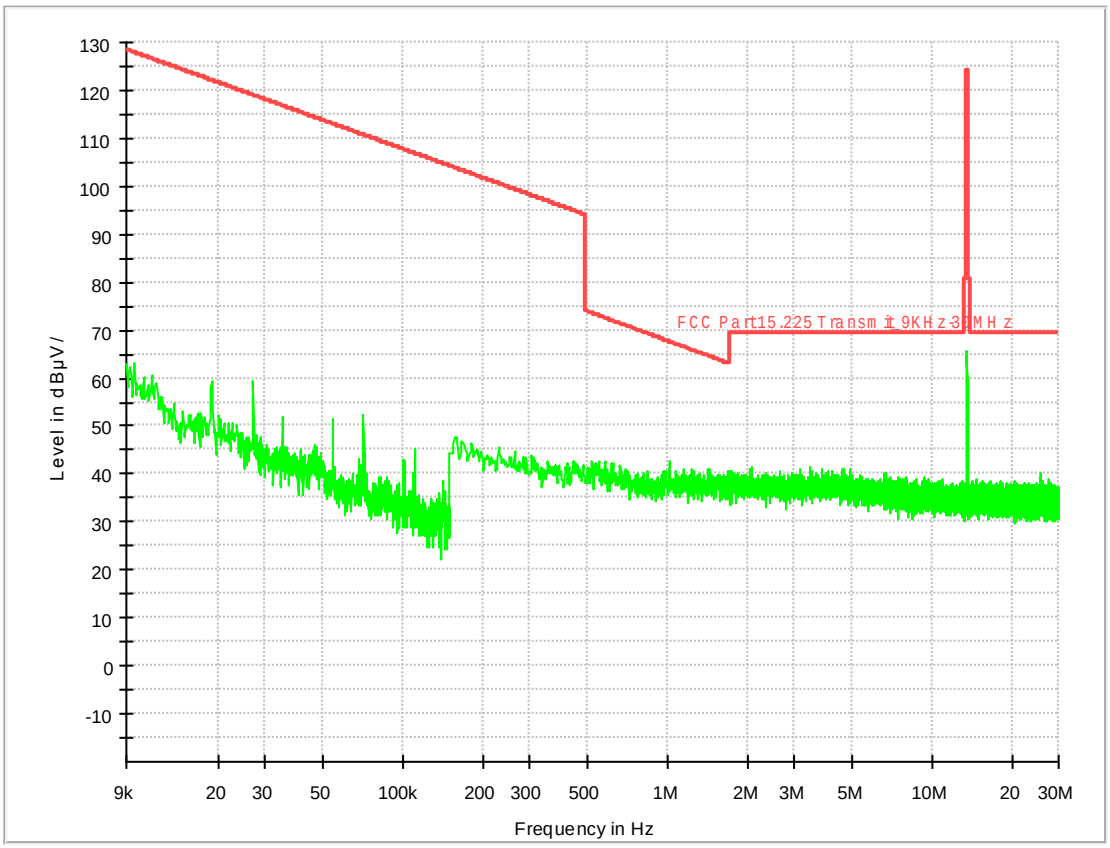

30M~1GHz

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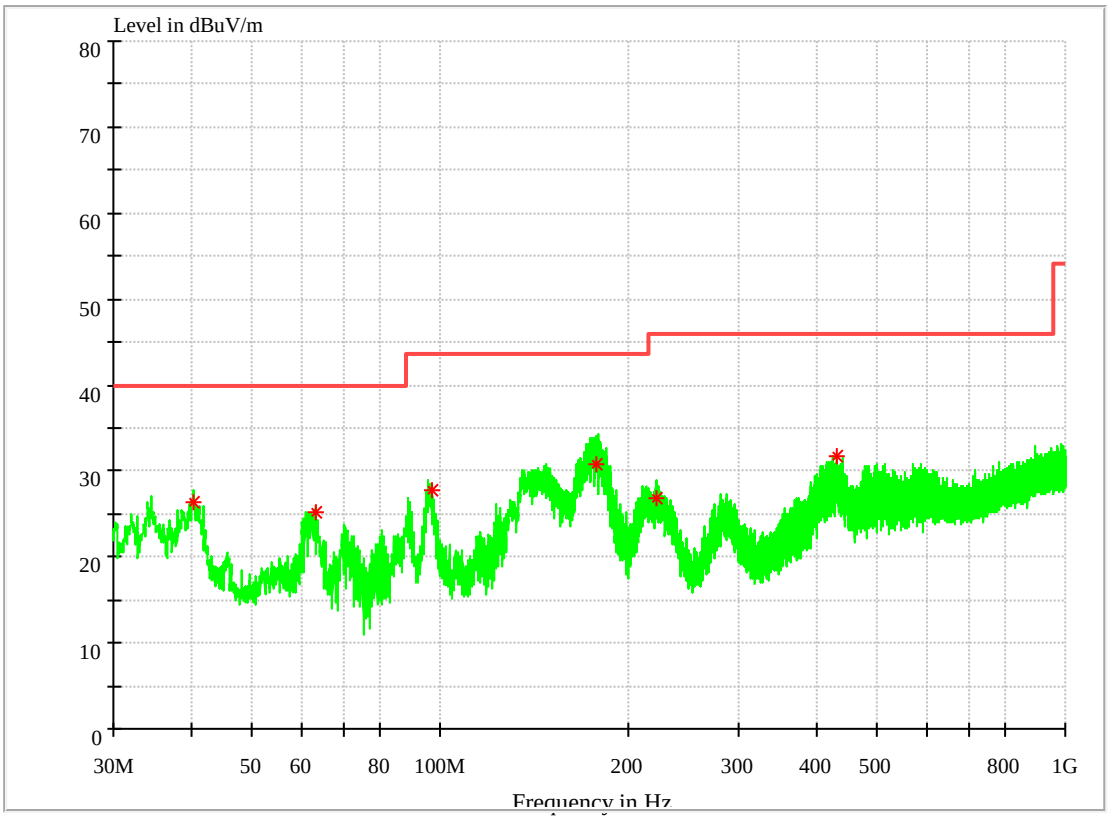

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Polarisation	Azimuth (deg)	Transd (dB)
40.301660	26.38	40.00	13.82	101.0	V	69.0	14.3
63.136440	25.12	40.00	14.66	101.0	V	192.0	12.6
96.934140	27.78	43.50	15.84	101.0	V	236.0	14.3
178.044820	30.77	43.50	9.96	102.0	V	128.0	11.3
222.022240	26.94	46.00	17.64	100.0	H	25.0	13.3
430.736120	31.79	46.00	14.34	100.0	V	27.0	18.4

NOTES:

1. All measurements were recorded using a spectrum analyzer employing a quasi-peak detector for emissions below 960MHz.
2. Both Vertical and Horizontal polarities of the receive antenna were evaluated with the worst case emissions being reported. Below 30MHz the Loop antenna was positioned in 3 separate radials.
3. The EUT is supplied with nominal AC voltage and/or a new/fully-recharged battery.
4. The spectrum is measured from 9kHz to the 10th harmonic and the worst-case emissions are reported.
5. Level =Reading level by receiver + Transd (Antenna factor + cable loss – preamplifier gain). The reading level is calculated by software which is not shown in the sheet.

The result of the measurement is passed.

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5.4 Frequency Stability

5.4.1 Test Setup

The EUT was placed in a Climatic Chamber. A small whip antenna was placed close to the EUT, and connected to the measuring Spectrum Analyzer. Measurement performed without modulation on TX.

5.4.2 Test Result

VOLTAGE (%)	POWER Battery	TEMP (ºC)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100%		-20	13559982	-18	-0.00013274336
100%		-10	13559985	-15	-0.00011061947
100%		0	13560017	17	0.00000125369
100%		10	13560012	12	0.000000884956
100%		20	13560009	9	0.00006637168
100%		30	13560019	19	0.00000140118
100%		40	13560011	11	0.000000811209
100%		50	13559981	-19	-0.00000140118
Battery End Point	3.6	20	13560015	15	0.00011061947
115%	4.35	20	13559986	-14	-0.00010324484

The result of the measurement is passed.

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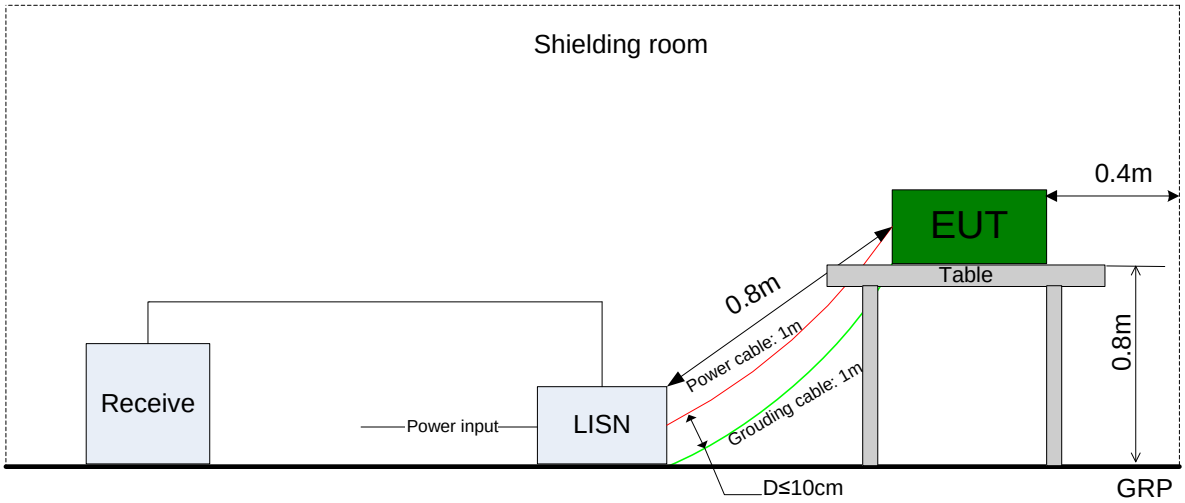
5.5 AC Power Line Conducted Emissions

5.5.1 Test Setup

The mains cable of the EUT (maybe per AC/DC Adapter) must be connected to LISN. The LISN shall be placed 0.8 m from the boundary of EUT and bonded to a ground reference plane for LISN mounted on top of the ground reference plane. This distance is between the closest points of the LISN and the EUT. All other units of the EUT and associated equipment shall be at least 0.8m from the LISN.

Ground connections, where required for safety purposes, shall be connected to the reference ground point of the LISN and, where not otherwise provided or specified by the manufacturer, shall be of same length as the mains cable and run parallel to the mains connection at a separation distance of not more than 0.1 m.



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5.5.2 Test Result

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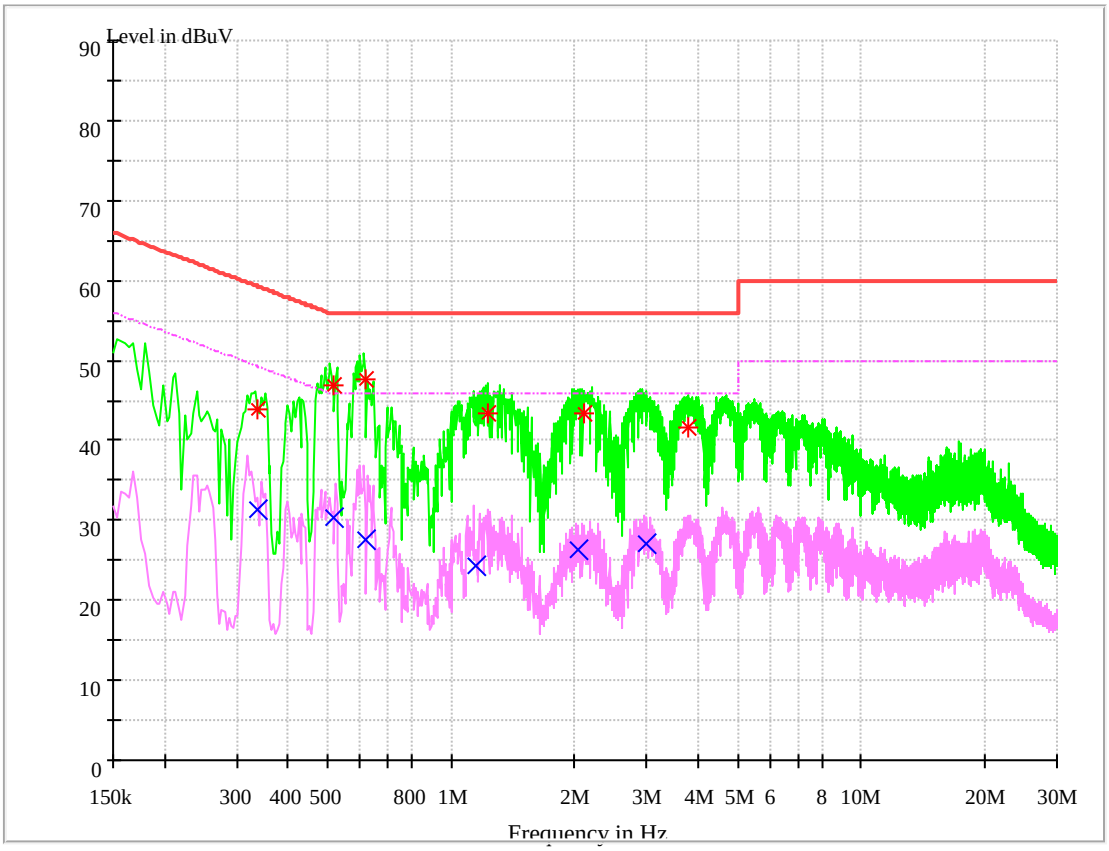

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MEASUREMENT RESULT: QP Detector

Frequency MHz	Level dBµV	Limit dBµV	Transd dB	Margin dB	Line	PE
0.336272	43.76	N	9.7	15.54	59.30	FLO
0.517978	46.82	L1	9.7	9.18	56.00	FLO
0.615686	47.71	L1	9.7	8.29	56.00	FLO
1.229777	43.28	L1	9.7	12.72	56.00	FLO
2.101718	43.38	L1	9.7	12.62	56.00	FLO
3.769949	41.69	L1	9.7	14.31	56.00	FLO

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV	Limit dBµV	Transd dB	Margin dB	Line dBµV	PE
0.337662	31.29	L1	9.7	17.97	49.26	FLO
0.517042	30.28	L1	9.7	15.72	46.00	FLO
0.618527	27.51	L1	9.7	18.49	46.00	FLO
1.148974	24.28	L1	9.7	21.72	46.00	FLO
2.032836	26.25	L1	9.7	19.75	46.00	FLO
0.337662	31.29	L1	9.7	17.97	49.26	FLO

Note:

1, Level =Reading level by receiver + Transd (Antenna factor + cable loss – preamplifier gain)

The reading level is calculated by software which is not shown in the sheet.

2, Margin=Limit - Level

The result of the measurement is passed.

6 System Measurement Uncertainty

For a 95% confidence level (k = 2), the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 as following:

Test Item		Extended Uncertainty
All Emissions, Radiated	Field Strength [dBµV/m]	For 3 m Chamber: U = 5.90 dB (30 MHz-1 GHz) U = 4.94 dB (1 GHz-18 GHz) U = 4.24 dB (18 GHz-26.5 GHz)
AC Power Line Conducted Emissions	Disturbance Voltage[dBµV]	U=2.3 dB

----------The END----------

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