



CMA Testing and Certification Laboratories

廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2) Date : 13 Mar 2017

Application No. : LV003751(5)

Applicant : Kid Galaxy Inc
150 Dow Street,
Unit 425B Manchester, NH03101, U.S.A.

Sample Description : One(1) item of submitted sample stated to be :

Sample Description	Model number
Cycle of R/C Motercycle - Green	10198
Cycle of R/C Motercycle - Red	10197
Cycle of Cyber Cycle - Red	10180
Cycle of Cyber Cycle - Silver	10181

Sample registration no. : RV011565-001
 Radio Frequency : 2418MHz – 2472MHz Transceiver
 Rating : 5 x 1.5V AA size batteries
 No. of submitted sample : Three (3) piece (s)

Date Received : 21 Feb 2017

Test Period : 19 Jan 2017 to 28 Feb 2017

Test Requested : FCC Part 15 Certification, FCC Part 15 Verification Procedure

Test Method : 47 CFR Part 15 (10-1-15 Edition), ANSI C63.4 – 2014, ANSI C63.10 – 2013
KDB 558074 D01 DTS Meas Guidance v03r05

Test Engineer : Mr. LEUNG Shu-kan, Ken


Test Result : See attached sheet(s) from page 2 to 61.

Conclusion : The submitted sample was found to comply with requirement of FCC Subpart B and C.

Remark : All Four models are the same in circuitry and components and construction, and therefore model 10198 was chosen to be the representative of the test sample. The difference(s) between the tested model and the declared model(s) is/are outlook.

For and on behalf of
CMA Industrial Development Foundation Limited

Authorized Signature : _____


Mr. WONG Lap-pong, Andrew
Manager
Electrical Division

Page 1 of 61

FCC ID: QEACYCLE2G4R

CMA Industrial Development Foundation Limited

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CMA Testing and Certification Laboratories

廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

Table of Contents

1	General Information	3
1.1	General Description	3
1.2	Location of the test site	4
1.3	List of measuring equipment.....	5
1.4	Measurement Uncertainty.....	6
2	Description of the emission test	7
2.1	Test Procedure	7
2.2	Conducted Emission Measurement Data	8
2.3	Radiated Emission Measurement Data	37
3	Description of the Line-conducted Test	48
3.1	Test Procedure	48
3.2	Test Result	48
4	Photograph	49
4.1	Photographs of the Test Setup for Radiated Emission and Conducted Emission.....	49
4.2	Photographs of the External and Internal Configurations of the EUT.....	49
4.3	Antenna requirement.....	49
5	Appendices.....	50



CMA Testing and Certification Laboratories

廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

1 General Information

1.1 General Description

The equipment under test (EUT) is a remote cycle. The EUT is power by 5 x 1.5V AA size batteries. It operates at 2418MHz – 2472MHz. When the EUT received the radio signal from controller, it will take the corresponding action.

The brief circuit description is listed as follows:

- U2 and its associated circuit act as MCU with RF circuit
- U1 and its associated circuit act as power regulator
- X1 and its associated circuit act as oscillator
- M1, M2 and its associated circuit act as Motor



CMA Testing and Certification Laboratories

廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

1.2 Location of the test site

FCC Registered Test Site Number: 416666

Radiated emissions measurements are investigated and taken pursuant to the procedures of ANSI C63.10 – 2013. A Semi-Anechoic Chamber Testing Site is set up for investigation and located at:

Ground Floor, Yan Hing Centre,
9 – 13 Wong Chuk Yeung Street,
Fo Tan, Shatin,
New Territories,
Hong Kong.

Conducted emissions measurements are investigated and also taken pursuant to the procedures of ANSI C63.10 – 2013. A shielded room is located at :

Ground Floor, Yan Hing Centre,
9 – 13 Wong Chuk Yeung Street,
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CMA Testing and Certification Laboratories

廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

1.3 List of measuring equipment

Equipment	Manufacturer	Model No.	Serial No.	Calibration Due Date	Calibration Period
EMI Test Receiver	R&S	ESCI	100152	15 Nov 2017	1Year
Spectrum Analyzer	R&S	FSV40	100964	08 Feb 2018	1Year
Broadband Antenna	Schaffner	CBL6112B	2718	15 Mar 2017	2Years
Loop Antenna	EMCO	6502	00056620	25 Jan 2018	2Years
Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-531	19 Dec 2018	2Years
Broadband Pre-Amplifier	Schwarzbeck	BBV 9718	9718-119	21 Dec 2018	2Years
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170442	02 Aug 2017	2Years
Broadband Pre-Amplifier	Schwarzbeck	BBV 9719	9719-010	02 Aug 2017	2Years
Coaxial Cable	Schaffner	RG 213/U	N/A	18 May 2017	1Year
Coaxial Cable	Suhner	RG 214/U	N/A	18 May 2017	1Year
Coaxial Cable	Suhner	Sucoflex_104	N/A	20 Dec 2017	1Year
TS8997 Testing System					
Spectrum Analyzer	R&S	FSV 40	101190	12 May 2017	1Year
Vector Generator	R&S	SMBV100A	262024	04 May 2017	1Year
Generator	R&S	SMB100A	103230	24 May 2017	1Year
OSP	R&S	OSP	OSP120 V02	06 Jun 2017	1Year



CMA Testing and Certification Laboratories

廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

1.4 Measurement Uncertainty

The reported uncertainty is based on a standard uncertainty multiplied by a coverage factor $k=2$, providing a level of confidence of approximately 95%.

Radiated emissions

Frequency	Uncertainty (U_{lab})
30MHz ~ 200MHz (Horizontal)	4.83dB
30MHz ~ 200MHz (Vertical)	4.84dB
200MHz ~1000MHz (Horizontal)	4.87dB
200MHz ~1000MHz (Vertical)	5.94dB
1GHz ~6GHz	4.41dB
6GHz ~18GHz	4.64dB

Line-conducted emissions

Frequency	Uncertainty (U_{lab})
150kHz~30MHz	2.64dB



CMA Testing and Certification Laboratories

廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

2 Description of the emission test

2.1 Test Procedure

Radiated emissions measurements are investigated and taken pursuant to the procedures of ANSI C63.10 – 2013.

The equipment under test (EUT) was placed on a non-conductive turntable with dimensions of 1.5m x 1m and 0.8m high above the ground for below 1GHz measurement and 1.5m high above the ground for above 1GHz measurement. 3m from the EUT, a broadband antenna mounting on the mast received the signal strength. The turntable was rotated to maximize the emission level. The antenna was then moving along the mast from 1m up to 4m until no more higher value was found. Both horizontal and vertical polarization of the antenna were placed and investigated.

For below 30MHz, a loop antenna with its vertical plane is placed 3m from the EUT and rotated about its vertical axis for maximum response at each azimuth about the EUT. And the centre of the loop shall be 1 m above the ground.

For 30MHz to 1GHz, broadband antenna with its vertical and horizontal plane is placed 3m from the EUT and rotated about its vertical and horizontal axis for maximum response at each azimuth about the EUT. And the reference point of antenna shall be 1 m above the ground.

For above 1GHz, horn antenna with its vertical and horizontal plane is placed 3m from the EUT and rotated about its vertical and horizontal axis for maximum response at each azimuth about the EUT. Preamplifier and High Pass filter was used for measurements. The reference point of antenna shall be 1 m above the ground.

The device was rotated through three orthogonal to determine which attitude and configuration produce the highest emission during measurement for Radiated Emission measurement.

The EUT will connect to TS 8997 testing system for direct conducted measurement.



CMA Testing and Certification Laboratories

廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

2.2 Conducted Emission Measurement Data

Environmental conditions:

Parameter	Recorded value
Ambient temperature:	27 °C
Relative humidity:	60 %

Summary

Test	Frequency (MHz)	Nominal Power (dBm)	Nominal Bandwidth (MHz)	Result
RF output power	2418.000	0.0	1.000000	PASS
Power Spectral Density	2418.000	0.0	1.000000	PASS
Minimum Emission Bandwidth 6 dB	2418.000	0.0	1.000000	PASS
Band Edge low	2418.000	0.0	1.000000	PASS
Tx Spurious Emission	2418.000	0.0	1.000000	PASS
Rx Spurious Emission	2418.000	0.0	1.000000	PASS
RF output power	2450.000	0.0	1.000000	PASS
Power Spectral Density	2450.000	0.0	1.000000	PASS
Minimum Emission Bandwidth 6 dB	2450.000	0.0	1.000000	PASS
Tx Spurious Emission	2450.000	0.0	1.000000	PASS
Rx Spurious Emission	2450.000	0.0	1.000000	PASS
RF output power	2472.000	0.0	1.000000	PASS
Power Spectral Density	2472.000	0.0	1.000000	PASS
Minimum Emission Bandwidth 6 dB	2472.000	0.0	1.000000	PASS
Band Edge high	2472.000	0.0	1.000000	PASS
Tx Spurious Emission	2472.000	0.0	1.000000	PASS
Rx Spurious Emission	2472.000	0.0	1.000000	PASS



CMA Testing and Certification Laboratories

廠商會檢定中心

TEST REPORT

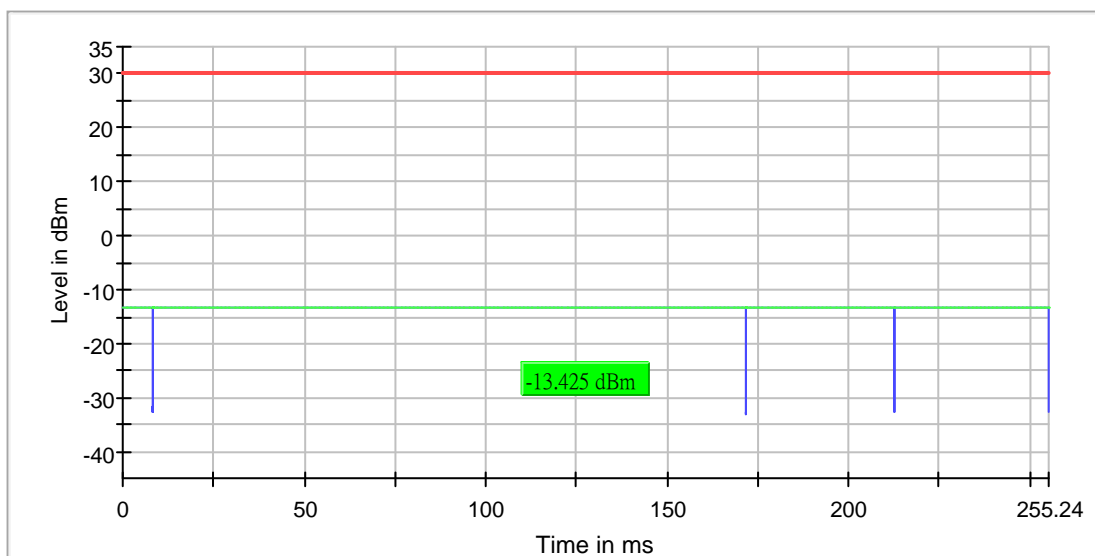
Report No. : AV0013875(2)

Date : 13 Mar 2017

RF output power (2418 MHz)

Result

DUT Frequency (MHz)	Gated EIRP (dBm)	Limit Max (dBm)	DutyCycle (%)	Result
2418.000000	-13.4	30.0	25.579	PASS





CMA Testing and Certification Laboratories

廠商會檢定中心

TEST REPORT

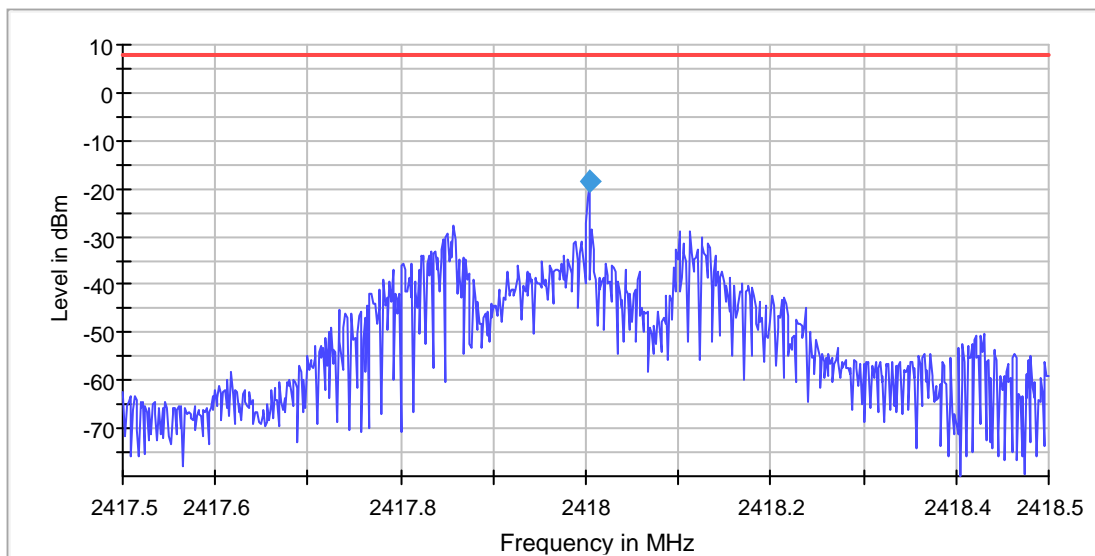
Report No. : AV0013875(2)

Date : 13 Mar 2017

Power Spectral Density (2412 MHz, 802.11b)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2418.000000	2418.003743	-18.498	8.0	PASS



Measurement

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
Start Frequency	2.41750 GHz	2.41750 GHz	Stablemode	Trace	Trace
Stop Frequency	2.41850 GHz	2.41850 GHz	Stablevalue	0.30	0.30
Span	1.000 MHz	1.000 MHz	Run	3 / max. 150	max. 150
RBW	3.000 kHz	<= 3.000 kHz	Stable	3 / 3	3
VBW	10.000 kHz	>= 9.000 kHz			
SweepPoints	667	~ 667			
SweepTime	667.000 ms	667.000 ms			
Reference Level	-20.000 dBm	-20.000 dBm			
Attenuation	0.000 dB	AUTO			
Detector	RMS	RMS			
SweepCount	1	1			
Filter	3 dB	3 dB			
Trace Mode	Max Hold	Max Hold			
SweepType	Sweep	AUTO			
Preamp	off	off			



CMA Testing and Certification Laboratories

廠商會檢定中心

TEST REPORT

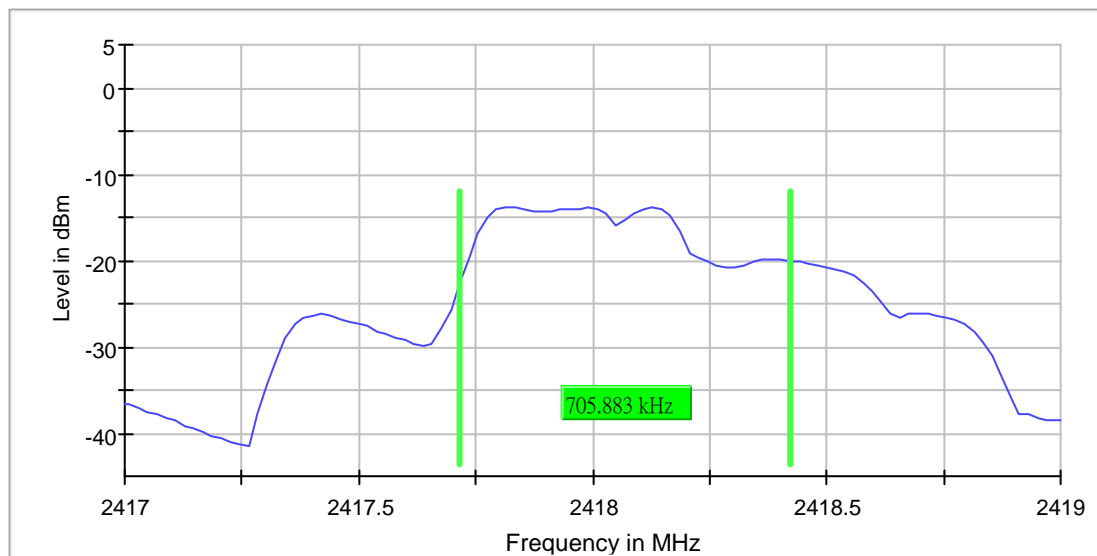
Report No. : AV0013875(2)

Date : 13 Mar 2017

Minimum Emission Bandwidth 6 dB (2418 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
2418.000000	0.705883	0.500000	---	2417.715686	2418.421569	-13.9	PASS



Measurement

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
Start Frequency	2.41700 GHz	2.41700 GHz	Stablemode	Trace	Trace
Stop Frequency	2.41900 GHz	2.41900 GHz	Stablevalue	0.30	0.30
Span	2.000 MHz	2.000 MHz	Run	68 / max. 150	max. 150
RBW	100.000 kHz	~ 100.000 kHz	Stable	15 / 15	15
VBW	300.000 kHz	~ 300.000 kHz			
SweepPoints	101	~ 20			
SweepTime	18.938 μs	AUTO			
Reference Level	-20.000 dBm	-20.000 dBm			
Attenuation	0.000 dB	AUTO			
Detector	MaxPeak	MaxPeak			
SweepCount	100	100			
Filter	3 dB	3 dB			
Trace Mode	Max Hold	Max Hold			
SweepType	FFT	AUTO			
Preamp	off	off			



CMA Testing and Certification Laboratories

廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

Band Edge low (2418 MHz)

Result

DUT Frequency (MHz)	Result
2418.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2418.014213	-16.7

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2385.982787	-78.9	42.2	-36.7	PASS
2385.932815	-80.5	43.8	-36.7	PASS
2386.032760	-81.4	44.6	-36.7	PASS
2353.950583	-83.8	47.1	-36.7	PASS
2385.782898	-84.6	47.8	-36.7	PASS
2385.832871	-84.6	47.9	-36.7	PASS
2342.506941	-85.6	48.9	-36.7	PASS
2385.732926	-86.0	49.3	-36.7	PASS
2369.941699	-86.2	49.5	-36.7	PASS
2383.983898	-86.5	49.8	-36.7	PASS
2354.150472	-86.6	49.8	-36.7	PASS
2353.900611	-86.8	50.0	-36.7	PASS
2337.959467	-86.8	50.1	-36.7	PASS
2353.750694	-86.9	50.2	-36.7	PASS
2354.000555	-86.9	50.2	-36.7	PASS



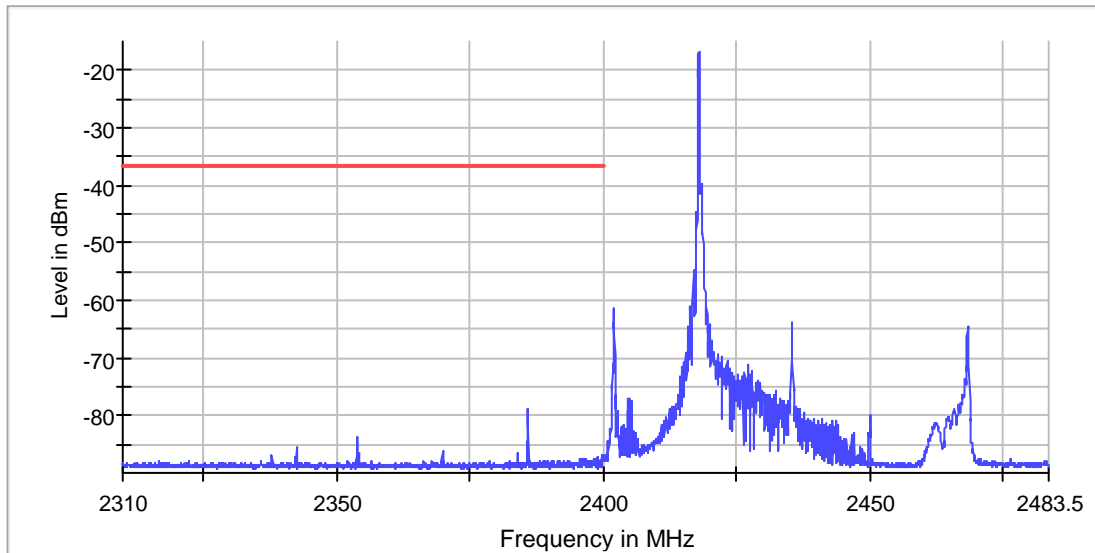
CMA Testing and Certification Laboratories

廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017



Measurement 1

Measurement 2

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz	RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz	VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670	SweepPoints	1800	~ 1800
SweepTime	1.670 s	1.670 s	SweepTime	1.800 s	1.800 s
Reference Level	-20.000 dBm	-20.000 dBm	Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO	Attenuation	0.000 dB	AUTO
Detector	RMS	RMS	Detector	RMS	RMS
SweepCount	3	3	SweepCount	3	3
Filter	3 dB	3 dB	Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO	Sweeptype	Sweep	AUTO
Preamp	off	off	Preamp	off	off
Stablemode	Trace	Trace	Stablemode	Trace	Trace
Stablevalue	0.30	0.30	Stablevalue	0.30	0.30
Run	3 / max. 15	max. 15	Run	3 / max. 15	max. 15
Stable	3 / 3	3	Stable	3 / 3	3



CMA Testing and Certification Laboratories

廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

Tx Spurious Emission (2418 MHz)

Result

DUT Frequency (MHz)	Result
2418.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
4835.989567	-43.8	-50.5	-41.2	9.3	PASS

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4835.989567	-43.8	2.6	-41.2
4836.489512	-43.9	2.6	-41.2
4835.489623	-44.0	2.7	-41.2
4834.989678	-45.7	4.5	-41.2
4836.989456	-46.6	5.4	-41.2
4837.489401	-47.4	6.2	-41.2
4837.989346	-49.6	8.3	-41.2
4834.489733	-54.2	13.0	-41.2
4838.489290	-59.6	18.4	-41.2
19749.093807	-60.8	19.5	-41.2
19729.501281	-60.8	19.5	-41.2
19744.344103	-60.9	19.7	-41.2
19769.873758	-61.0	19.7	-41.2
19705.159053	-61.1	19.9	-41.2
19726.532717	-61.2	19.9	-41.2

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2



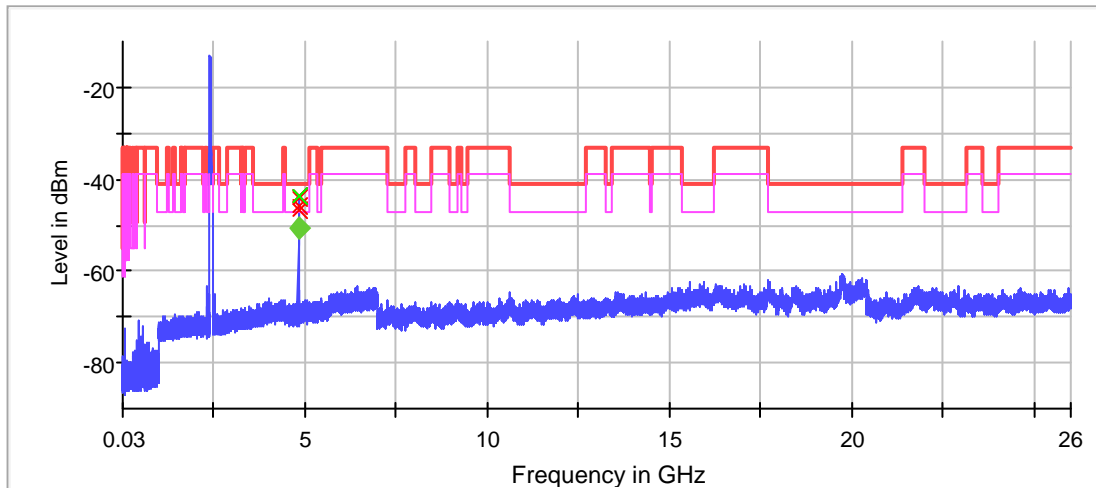
CMA Testing and Certification Laboratories

廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017



- ✗ Limit [limit.Result:1]
- ✗ Sum Level [trace.Result:1]
- ◆ Threshold [limit.2.Result:1]
- ◆ Critical [Over Limit.Result:1]

Pre Measurement 1

Pre Measurement 2

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz	RBW	1.000 MHz	<= 1.000 MHz
VBW	300.000 kHz	>= 300.000 kHz	VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	19400	~ 19400	SweepPoints	2800	~ 2800
SweepTime	19.400 ms	AUTO	SweepTime	2.800 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm	Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO	Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak	Detector	MaxPeak	MaxPeak
SweepCount	30	30	SweepCount	30	30
Filter	3 dB	3 dB	Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO	Sweeptype	Sweep	AUTO
Preamp	off	off	Preamp	off	off
Stablemode	Trace	Trace	Stablemode	Trace	Trace
Stablevalue	0.30	0.30	Stablevalue	0.30	0.30
Run	3 / max. 150	max. 150	Run	3 / max. 150	max. 150
Stable	3 / 3	3	Stable	3 / 3	3



CMA Testing and Certification Laboratories

廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

Final Measurement 2

Setting	Instrument Value	Target Value
Span	ZeroSpan	ZeroSpan
RBW	1.000 MHz	~ 1.000 MHz
VBW	3.000 MHz	~ 3.000 MHz
SweepPoints	10001	~ 10001
SweepTime	1.000 s	1.000 s
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	0.000 dB	0.000 dB
Detector	RMS	RMS
SweepCount	1	1
Filter	3 dB	3 dB
Trace Mode	Clear Write	Clear Write
SweepType	Sweep	AUTO
Preamp	off	off



CMA Testing and Certification Laboratories

廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

Rx Spurious Emission (2418 MHz)

Result

DUT Frequency (MHz)	Result
2418.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
20374.796063	-60.1	18.9	-41.2
19720.830483	-60.4	19.2	-41.2
19744.829220	-60.4	19.2	-41.2
20290.800484	-60.4	19.2	-41.2
19728.830062	-60.4	19.2	-41.2
19747.829062	-60.6	19.3	-41.2
19760.828377	-60.6	19.4	-41.2
19750.828904	-60.6	19.4	-41.2
19723.830325	-60.7	19.5	-41.2
19704.831325	-60.7	19.5	-41.2
19759.828430	-60.9	19.7	-41.2
19696.831746	-61.0	19.7	-41.2
19735.829693	-61.0	19.8	-41.2
19721.830430	-61.1	19.9	-41.2
19706.831219	-61.1	19.9	-41.2

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	7000.000000	2	2
7000.000000	26000.000000	2	2



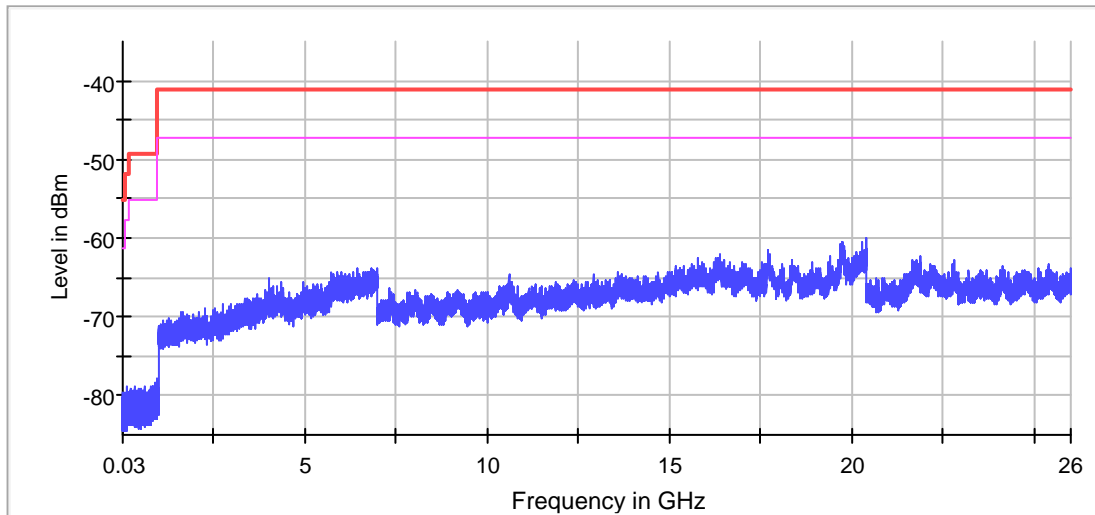
CMA Testing and Certification Laboratories

廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017



— Limit [limit.Result:1] X Threshold [limit.2.Result:1]

Pre Measurement 1

Pre Measurement 2

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz	RBW	1.000 MHz	<= 1.000 MHz
VBW	300.000 kHz	>= 300.000 kHz	VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	9700	~ 9700	SweepPoints	6000	~ 6000
SweepTime	9.700 ms	AUTO	SweepTime	6.000 ms	AUTO
Reference Level	-67.000 dBm	-67.000 dBm	Reference Level	-67.000 dBm	-67.000 dBm
Attenuation	0.000 dB	AUTO	Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak	Detector	MaxPeak	MaxPeak
SweepCount	100	100	SweepCount	100	100
Filter	3 dB	3 dB	Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO	Sweeptype	Sweep	AUTO
Preamp	off	off	Preamp	off	off
Stablemode	Trace	Trace	Stablemode	Trace	Trace
Stablevalue	0.30	0.30	Stablevalue	0.30	0.30
Run	3 / max. 150	max. 150	Run	3 / max. 150	max. 150
Stable	3 / 3	3	Stable	3 / 3	3



CMA Testing and Certification Laboratories

廠商會檢定中心

TEST REPORT

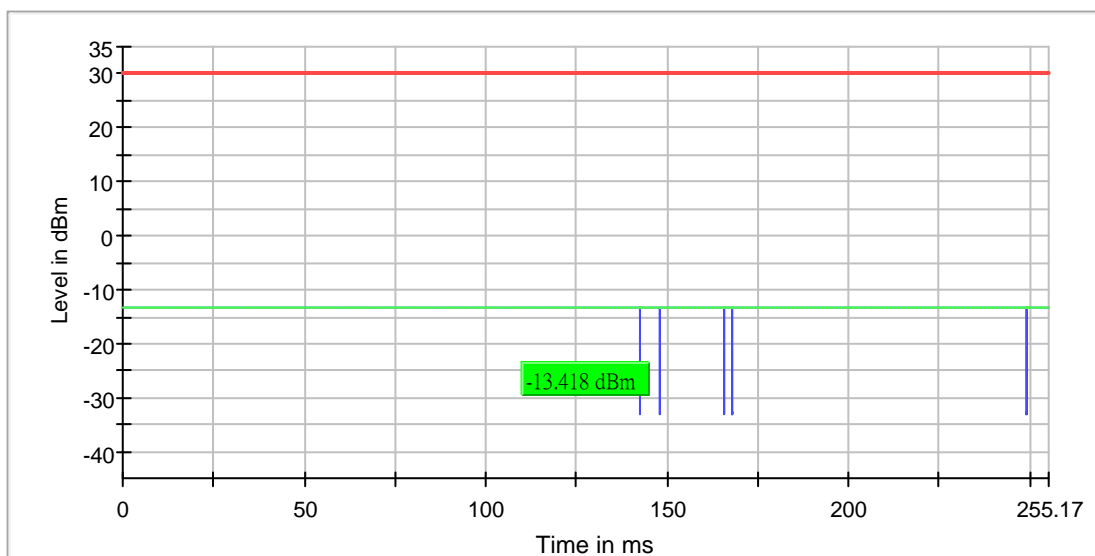
Report No. : AV0013875(2)

Date : 13 Mar 2017

RF output power (2450 MHz)

Result

DUT Frequency (MHz)	Gated EIRP (dBm)	Limit Max (dBm)	DutyCycle (%)	Result
2450.000000	-13.4	30.0	25.570	PASS





CMA Testing and Certification Laboratories

廠商會檢定中心

TEST REPORT

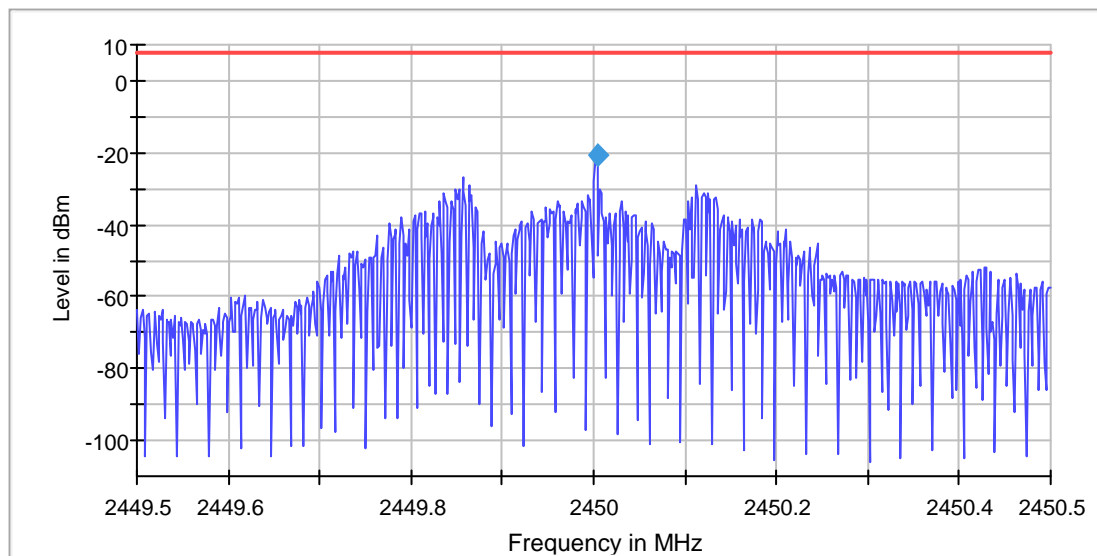
Report No. : AV0013875(2)

Date : 13 Mar 2017

Power Spectral Density (2450 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2450.000000	2450.003743	-20.472	8.0	PASS



Measurement

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
Start Frequency	2.44950 GHz	2.44950 GHz	Stablemode	Trace	Trace
Stop Frequency	2.45050 GHz	2.45050 GHz	Stablevalue	0.30	0.30
Span	1.000 MHz	1.000 MHz	Run	3 / max. 150	max. 150
RBW	3.000 kHz	<= 3.000 kHz	Stable	3 / 3	3
VBW	10.000 kHz	>= 9.000 kHz			
SweepPoints	667	~ 667			
SweepTime	667.000 ms	667.000 ms			
Reference Level	-20.000 dBm	-20.000 dBm			
Attenuation	0.000 dB	AUTO			
Detector	RMS	RMS			
SweepCount	1	1			
Filter	3 dB	3 dB			
Trace Mode	Max Hold	Max Hold			
SweepType	Sweep	AUTO			
Preamp	off	off			



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TEST REPORT

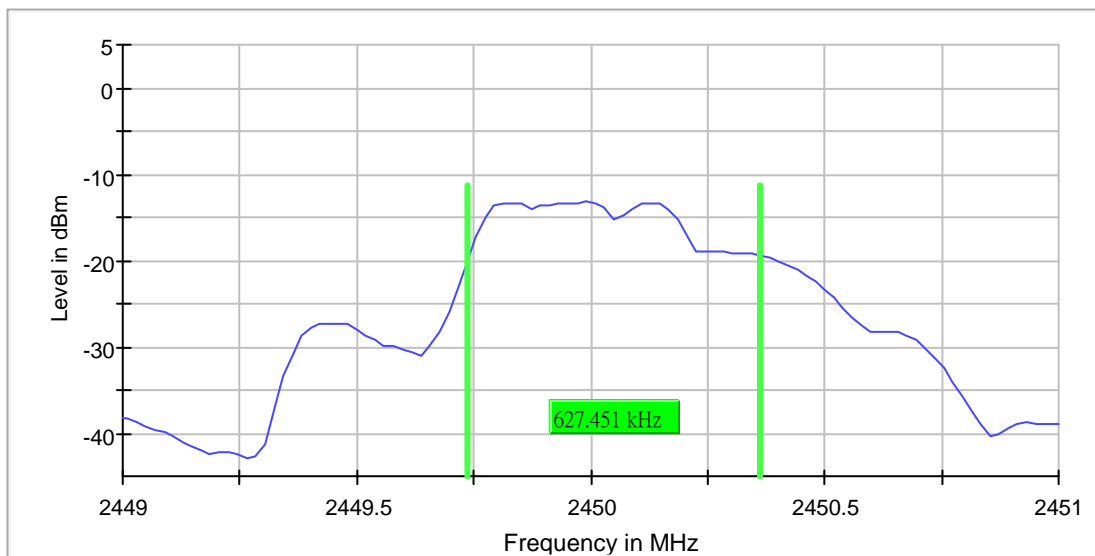
Report No. : AV0013875(2)

Date : 13 Mar 2017

Minimum Emission Bandwidth 6 dB (2450 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
2450.000000	0.627451	0.500000	---	2449.735294	2450.362745	-13.3	PASS



Measurement

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
Start Frequency	2.44900 GHz	2.44900 GHz	Stablemode	Trace	Trace
Stop Frequency	2.45100 GHz	2.45100 GHz	Stablevalue	0.30	0.30
Span	2.000 MHz	2.000 MHz	Run	42 / max. 150	max. 150
RBW	100.000 kHz	~ 100.000 kHz	Stable	15 / 15	15
VBW	300.000 kHz	~ 300.000 kHz			
SweepPoints	101	~ 20			
Sweeptime	18.938 μ s	AUTO			
Reference Level	-20.000 dBm	-20.000 dBm			
Attenuation	0.000 dB	AUTO			
Detector	MaxPeak	MaxPeak			
SweepCount	100	100			
Filter	3 dB	3 dB			
Trace Mode	Max Hold	Max Hold			
SweepType	FFT	AUTO			
Preamp	off	off			



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廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

Tx Spurious Emission (2450 MHz)

Result

DUT Frequency (MHz)	Result
2450.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
4899.982483	-44.5	-51.0	-41.2	9.8	PASS

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4899.982483	-44.5	3.2	-41.2
4899.482538	-44.5	3.3	-41.2
4900.482427	-44.6	3.4	-41.2
4900.982372	-46.9	5.7	-41.2
4898.982594	-47.2	6.0	-41.2
4901.482317	-53.6	12.4	-41.2
4898.482649	-55.8	14.5	-41.2
19698.628211	-59.8	18.6	-41.2
19698.034498	-59.9	18.6	-41.2
19810.839948	-60.6	19.3	-41.2
19811.433660	-60.6	19.4	-41.2
19759.780639	-60.7	19.5	-41.2
19776.404600	-60.8	19.5	-41.2
19712.283607	-60.8	19.6	-41.2
19783.529154	-60.9	19.6	-41.2

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2



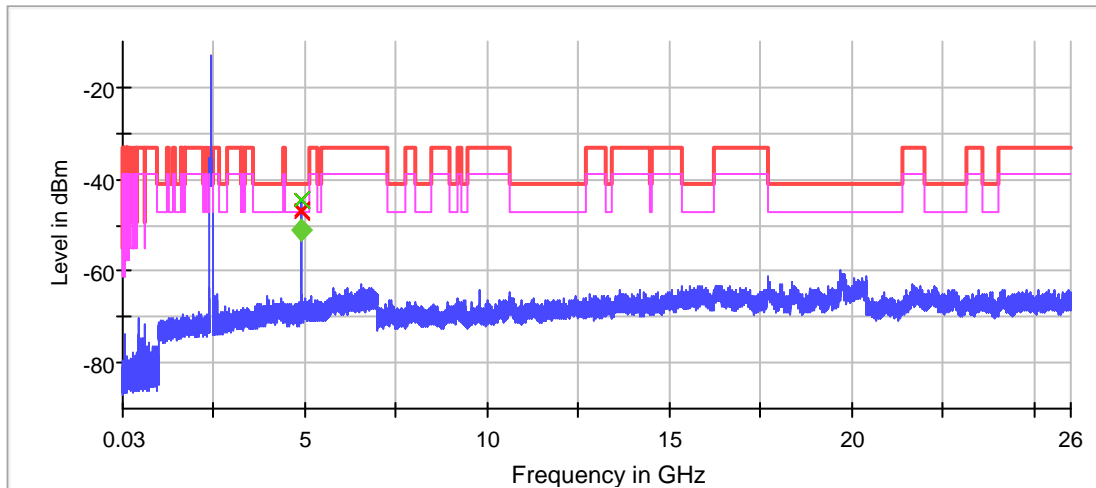
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廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017



- ✗ Limit [limit.Result:1]
- ✗ Sum Level [trace.Result:1]
- ◆ Threshold [limit.2.Result:1]
- ◆ Critical [Over Limit.Result:1]

Pre Measurement 1

Pre Measurement 2

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz	RBW	1.000 MHz	<= 1.000 MHz
VBW	300.000 kHz	>= 300.000 kHz	VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	19400	~ 19400	SweepPoints	2800	~ 2800
SweepTime	19.400 ms	AUTO	SweepTime	2.800 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm	Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO	Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak	Detector	MaxPeak	MaxPeak
SweepCount	30	30	SweepCount	30	30
Filter	3 dB	3 dB	Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO	Sweeptype	Sweep	AUTO
Preamp	off	off	Preamp	off	off
Stablemode	Trace	Trace	Stablemode	Trace	Trace
Stablevalue	0.30	0.30	Stablevalue	0.30	0.30
Run	3 / max. 150	max. 150	Run	3 / max. 150	max. 150
Stable	3 / 3	3	Stable	3 / 3	3



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廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

Final Measurement 2

Setting	Instrument Value	Target Value
Span	ZeroSpan	ZeroSpan
RBW	1.000 MHz	~ 1.000 MHz
VBW	3.000 MHz	~ 3.000 MHz
SweepPoints	10001	~ 10001
SweepTime	1.000 s	1.000 s
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	0.000 dB	0.000 dB
Detector	RMS	RMS
SweepCount	1	1
Filter	3 dB	3 dB
Trace Mode	Clear Write	Clear Write
SweepType	Sweep	AUTO
Preamp	off	off



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廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

Rx Spurious Emission (2450 MHz)

Result

DUT Frequency (MHz)	Result
2450.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
19766.828062	-60.0	18.7	-41.2
19756.828588	-60.2	18.9	-41.2
19704.831325	-60.3	19.1	-41.2
19753.828746	-60.3	19.1	-41.2
19730.829956	-60.3	19.1	-41.2
16380.006315	-60.4	19.2	-41.2
19720.830483	-60.4	19.2	-41.2
19740.829430	-60.4	19.2	-41.2
19742.829325	-60.5	19.3	-41.2
20262.801958	-60.8	19.5	-41.2
19718.830588	-60.8	19.6	-41.2
19725.830219	-60.9	19.7	-41.2
19710.831009	-61.0	19.8	-41.2
19761.828325	-61.0	19.8	-41.2
19723.830325	-61.1	19.9	-41.2

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	7000.000000	2	2
7000.000000	26000.000000	2	2



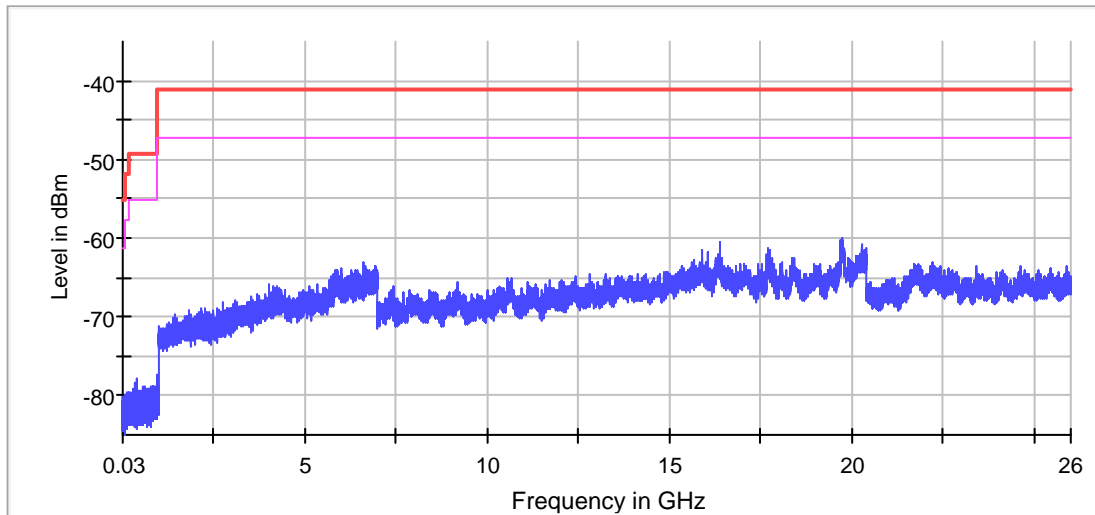
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廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017



— Limit [limit.Result:1] × Threshold [limit.2.Result:1]

Pre Measurement 1

Pre Measurement 2

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz	RBW	1.000 MHz	<= 1.000 MHz
VBW	300.000 kHz	>= 300.000 kHz	VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	9700	~ 9700	SweepPoints	6000	~ 6000
SweepTime	9.700 ms	AUTO	SweepTime	6.000 ms	AUTO
Reference Level	-67.000 dBm	-67.000 dBm	Reference Level	-67.000 dBm	-67.000 dBm
Attenuation	0.000 dB	AUTO	Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak	Detector	MaxPeak	MaxPeak
SweepCount	100	100	SweepCount	100	100
Filter	3 dB	3 dB	Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO	Sweeptype	Sweep	AUTO
Preamp	off	off	Preamp	off	off
Stablemode	Trace	Trace	Stablemode	Trace	Trace
Stablevalue	0.30	0.30	Stablevalue	0.30	0.30
Run	3 / max. 150	max. 150	Run	3 / max. 150	max. 150
Stable	3 / 3	3	Stable	3 / 3	3



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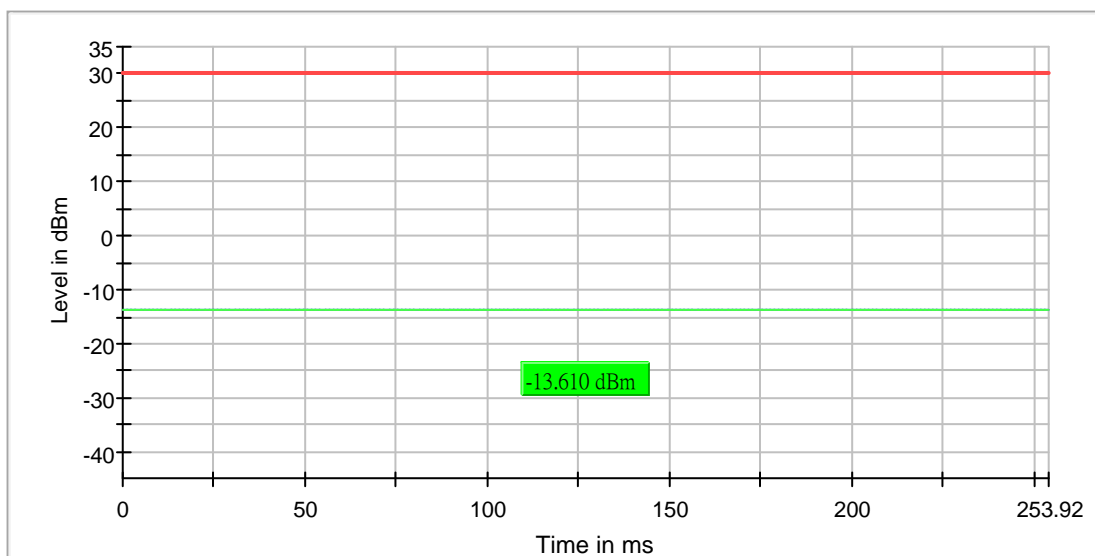
Report No. : AV0013875(2)

Date : 13 Mar 2017

RF output power (2472 MHz)

Result

DUT Frequency (MHz)	Gated EIRP (dBm)	Limit Max (dBm)	DutyCycle (%)	Result
2472.000000	-13.6	30.0	25.561	PASS





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TEST REPORT

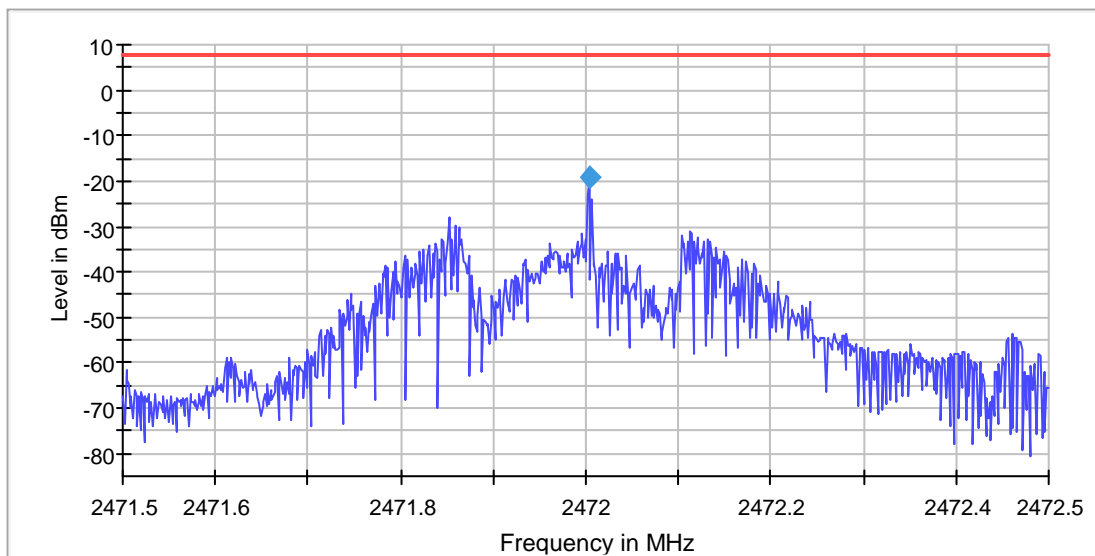
Report No. : AV0013875(2)

Date : 13 Mar 2017

Power Spectral Density (2472 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2472.000000	2472.003743	-18.999	8.0	PASS



Measurement

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
Start Frequency	2.47150 GHz	2.47150 GHz	Stablemode	Trace	Trace
Stop Frequency	2.47250 GHz	2.47250 GHz	Stablevalue	0.30	0.30
Span	1.000 MHz	1.000 MHz	Run	3 / max. 150	max. 150
RBW	3.000 kHz	<= 3.000 kHz	Stable	3 / 3	3
VBW	10.000 kHz	>= 9.000 kHz			
SweepPoints	667	~ 667			
SweepTime	667.000 ms	667.000 ms			
Reference Level	-20.000 dBm	-20.000 dBm			
Attenuation	0.000 dB	AUTO			
Detector	RMS	RMS			
SweepCount	1	1			
Filter	3 dB	3 dB			
Trace Mode	Max Hold	Max Hold			
SweepType	Sweep	AUTO			
Preamp	off	off			



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TEST REPORT

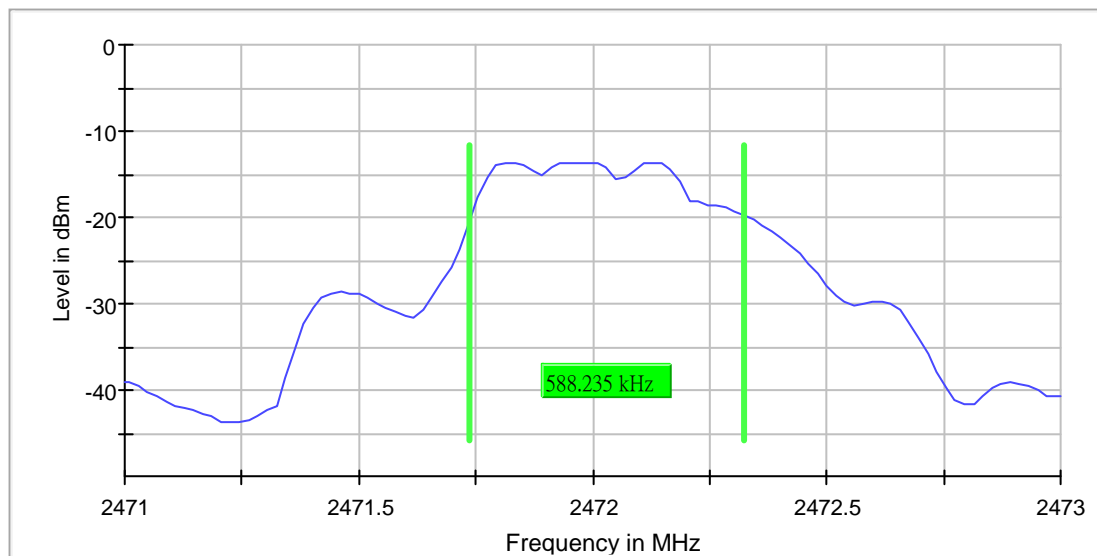
Report No. : AV0013875(2)

Date : 13 Mar 2017

Minimum Emission Bandwidth 6 dB (2472 MHz)

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
2472.000000	0.588235	0.500000	---	2471.735294	2472.323529	-13.6	PASS



Measurement

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
Start Frequency	2.47100 GHz	2.47100 GHz	Stablemode	Trace	Trace
Stop Frequency	2.47300 GHz	2.47300 GHz	Stablevalue	0.30	0.30
Span	2.000 MHz	2.000 MHz	Run	36 / max. 150	max. 150
RBW	100.000 kHz	~ 100.000 kHz	Stable	15 / 15	15
VBW	300.000 kHz	~ 300.000 kHz			
SweepPoints	101	~ 20			
SweepTime	18.938 μs	AUTO			
Reference Level	-20.000 dBm	-20.000 dBm			
Attenuation	0.000 dB	AUTO			
Detector	MaxPeak	MaxPeak			
SweepCount	100	100			
Filter	3 dB	3 dB			
Trace Mode	Max Hold	Max Hold			
SweepType	FFT	AUTO			
Preamp	off	off			



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廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

Band Edge high (2472 MHz)

Result

DUT Frequency (MHz)	Result
2472.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2471.981897	-16.6

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2485.668429	-63.6	27.0	-36.6	PASS
2485.618580	-64.0	27.3	-36.6	PASS
2485.718278	-64.2	27.6	-36.6	PASS
2485.568731	-64.6	28.0	-36.6	PASS
2485.518882	-68.1	31.5	-36.6	PASS
2485.817976	-69.0	32.4	-36.6	PASS
2485.469033	-69.1	32.5	-36.6	PASS
2485.269637	-74.1	37.5	-36.6	PASS
2485.917674	-74.5	37.9	-36.6	PASS
2485.867825	-74.7	38.1	-36.6	PASS
2485.967523	-74.9	38.3	-36.6	PASS
2486.814955	-75.6	39.0	-36.6	PASS
2485.419184	-75.9	39.3	-36.6	PASS
2486.615559	-75.9	39.3	-36.6	PASS
2485.219789	-75.9	39.3	-36.6	PASS



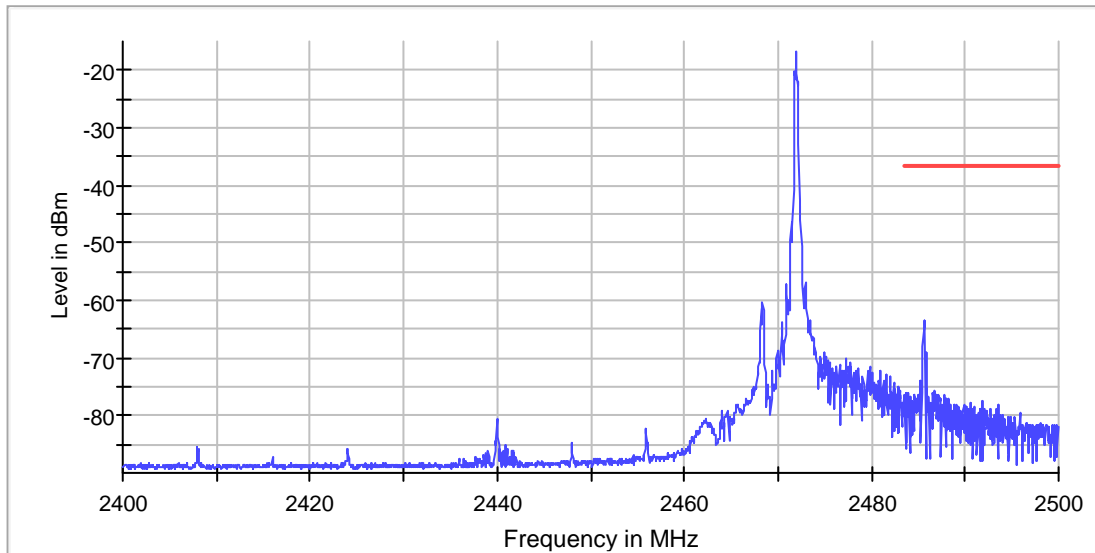
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廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017



Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
SweepTime	1.670 s	1.670 s
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	RMS	RMS
SweepCount	3	3
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30	0.30
Run	3 / max. 15	max. 15
Stable	3 / 3	3

Measurement 2

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	330	~ 330
SweepTime	330.000 ms	330.000 ms
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	0.000 dB	AUTO
Detector	RMS	RMS
SweepCount	3	3
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30	0.30
Run	3 / max. 15	max. 15
Stable	3 / 3	3



CMA Testing and Certification Laboratories

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TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

Tx Spurious Emission (2472 MHz)

Result

DUT Frequency (MHz)	Result
2472.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
4943.977612	-44.9	-51.6	-41.2	10.4	PASS

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4943.977612	-44.9	3.6	-41.2
4944.477557	-45.0	3.8	-41.2
4943.477668	-45.4	4.2	-41.2
4944.977502	-45.6	4.3	-41.2
4942.977723	-50.3	9.1	-41.2
4945.477446	-52.8	11.5	-41.2
4942.477778	-58.7	17.5	-41.2
2499.748201	-60.2	19.0	-41.2
19718.220736	-61.0	19.7	-41.2
19716.439598	-61.0	19.8	-41.2
19703.971627	-61.1	19.9	-41.2
4971.974513	-61.1	19.9	-41.2
19785.904006	-61.2	20.0	-41.2
19731.876133	-61.3	20.0	-41.2
17723.939129	-61.3	20.1	-41.2

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	2400.000000	2	2
2400.000000	2483.500000	2	2
2483.500000	7000.000000	2	2
7000.000000	26000.000000	2	2



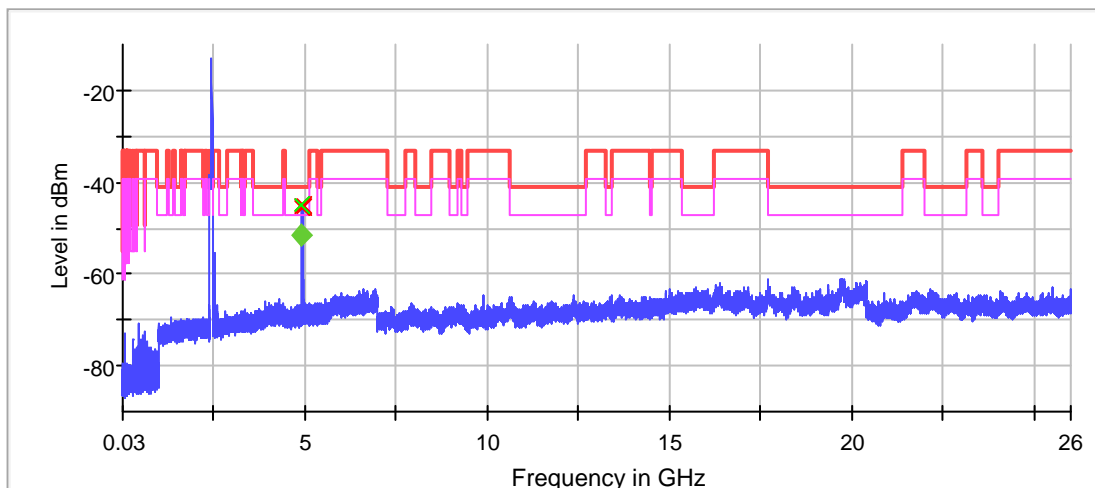
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廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017



- X Limit [limit.Result:1]
- ◆ Threshold [limit.2.Result:1]
- X Sum Level [trace.Result:1]
- ◆ Critical [Over Limit.Result:1]

Pre Measurement 1

Pre Measurement 2

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz	RBW	1.000 MHz	<= 1.000 MHz
VBW	300.000 kHz	>= 300.000 kHz	VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	19400	~ 19400	SweepPoints	2800	~ 2800
SweepTime	19.400 ms	AUTO	SweepTime	2.800 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm	Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO	Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak	Detector	MaxPeak	MaxPeak
SweepCount	30	30	SweepCount	30	30
Filter	3 dB	3 dB	Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO	Sweeptype	Sweep	AUTO
Preamp	off	off	Preamp	off	off
Stablemode	Trace	Trace	Stablemode	Trace	Trace
Stablevalue	0.30	0.30	Stablevalue	0.30	0.30
Run	3 / max. 150	max. 150	Run	3 / max. 150	max. 150
Stable	3 / 3	3	Stable	3 / 3	3



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TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

Final Measurement 2

Setting	Instrument Value	Target Value
Span	ZeroSpan	ZeroSpan
RBW	1.000 MHz	~ 1.000 MHz
VBW	3.000 MHz	~ 3.000 MHz
SweepPoints	10001	~ 10001
SweepTime	1.000 s	1.000 s
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	0.000 dB	0.000 dB
Detector	RMS	RMS
SweepCount	1	1
Filter	3 dB	3 dB
Trace Mode	Clear Write	Clear Write
SweepType	Sweep	AUTO
Preamp	off	off



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廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

Rx Spurious Emission (2472 MHz)

Result

DUT Frequency (MHz)	Result
2472.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
19747.829062	-59.8	18.5	-41.2
19748.829009	-60.0	18.8	-41.2
19723.830325	-60.1	18.9	-41.2
19729.830009	-60.3	19.0	-41.2
19739.829483	-60.4	19.2	-41.2
19744.829220	-60.5	19.2	-41.2
19807.825904	-60.5	19.3	-41.2
19757.828535	-60.5	19.3	-41.2
19711.830956	-60.7	19.5	-41.2
19758.828483	-60.8	19.6	-41.2
19703.831377	-60.8	19.6	-41.2
19695.831798	-60.9	19.7	-41.2
19797.826430	-61.0	19.7	-41.2
19705.831272	-61.0	19.7	-41.2
19715.830746	-61.0	19.7	-41.2

Measurement Settings

Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	1000.000000	1	1
1000.000000	7000.000000	2	2
7000.000000	26000.000000	2	2



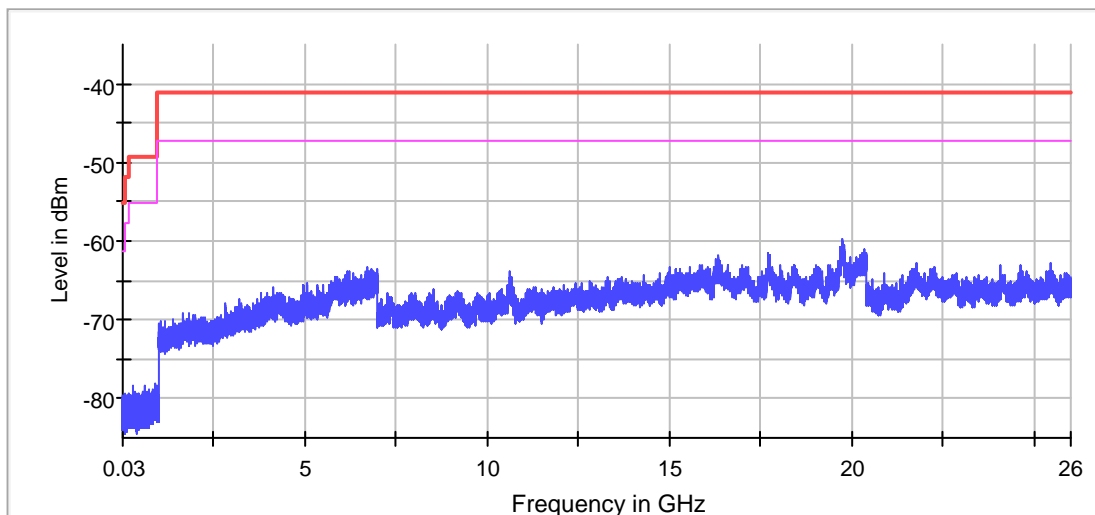
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廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017



— Limit [limit.Result:1] × Threshold [limit.2.Result:1]

Pre Measurement 1

Pre Measurement 2

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz	RBW	1.000 MHz	<= 1.000 MHz
VBW	300.000 kHz	>= 300.000 kHz	VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	9700	~ 9700	SweepPoints	6000	~ 6000
SweepTime	9.700 ms	AUTO	SweepTime	6.000 ms	AUTO
Reference Level	-67.000 dBm	-67.000 dBm	Reference Level	-67.000 dBm	-67.000 dBm
Attenuation	0.000 dB	AUTO	Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak	Detector	MaxPeak	MaxPeak
SweepCount	100	100	SweepCount	100	100
Filter	3 dB	3 dB	Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO	Sweeptype	Sweep	AUTO
Preamp	off	off	Preamp	off	off
Stablemode	Trace	Trace	Stablemode	Trace	Trace
Stablevalue	0.30	0.30	Stablevalue	0.30	0.30
Run	3 / max. 150	max. 150	Run	3 / max. 150	max. 150
Stable	3 / 3	3	Stable	3 / 3	3



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廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

2.3 Radiated Emission Measurement Data

Environmental conditions:

Parameter	Recorded value	
Ambient temperature:	21	°C
Relative humidity:	61	%

Testing frequency range: 9kHz to 26GHz Mode: Transmission

Measurement: Quasi-peak (9kHz – 1GHz), Peak and Average(above 1GHz)

RBW: 9kHz (below 30MHz), 120kHz (30MHz – 1GHz), 1MHz (above 1GHz)

VBW: 30kHz (below 30MHz), 300kHz (30MHz – 1GHz.), 3MHz (above 1GHz, Peak measurement), 10Hz (above 1GHz, Average measurement)

Frequency (MHz)	Polarity (H/V)	Reading at 3m (dBµV)	Transducer Factor (dB/m)	Field Strength at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)	Measurement (Peak/Average)
2418.153	H	85.8	- 4.2	81.6	114.0	- 32.4	Peak
2418.003	V	78.7	- 4.2	74.5	114.0	- 39.5	Peak
2450.144	H	85.7	- 4.3	81.4	114.0	- 32.6	Peak
2450.141	V	77.6	- 4.3	73.3	114.0	- 40.7	Peak
2472.145	H	87.0	- 4.3	82.7	114.0	- 31.3	Peak
2471.849	V	77.3	- 4.3	73.0	114.0	- 41.0	Peak
4836.043	H	54.5	3.7	58.2	74.0	- 15.8	Peak
4836.022	H	30.8	3.7	34.5	54.0	- 19.5	Average
4836.048	V	55.6	3.7	59.3	74.0	- 14.7	Peak
4836.049	V	31.2	3.7	34.9	54.0	- 19.1	Average
4900.028	H	54.1	4.0	58.1	74.0	- 15.9	Peak
4900.019	H	30.0	4.0	34.0	54.0	- 20.0	Average
4900.008	V	54.7	4.0	57.7	74.0	- 16.3	Peak
4899.975	V	30.2	3.7	33.9	54.0	- 20.1	Average
4944.006	H	55.9	4.0	59.9	74.0	- 14.1	Peak
4943.980	H	30.9	4.0	34.9	54.0	- 19.1	Average
4944.239	V	55.8	4.0	59.8	74.0	- 14.2	Peak
4943.941	V	30.3	4.0	34.3	54.0	- 19.7	Average

Remark: Other emissions more than 20dB below the limit are not reported.

If Peak measurement values are lower than average limit, average measurement is not necessary.



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廠商會檢定中心

TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

2.3 Radiated Emission Measurement Data (Con't)

Frequency (MHz)	Polarity (H/V)	Reading at 3m (dB μ V)	Transducer Factor (dB/m)	Field Strength at 3m (dB μ V/m)	Limit at 3m (dB μ V/m)	Margin (dB)	Measurement (Peak/Average)
7254.348	H	43.7	10.8	54.5	74.0	- 19.5	Peak
7253.977	H	26.5	10.8	37.3	54.0	- 16.7	Average
7350.362	H	43.9	10.8	54.7	74.0	- 19.3	Peak
7349.967	H	26.3	10.8	37.1	54.0	- 16.9	Average
7415.610	H	43.2	10.8	54.0	74.0	- 20.0	Peak
7415.954	H	26.3	10.8	37.1	54.0	- 16.9	Average
9672.526	H	39.5	14.6	54.1	74.0	- 19.9	Peak
9671.972	H	22.5	14.6	37.1	54.0	- 16.9	Average
9672.188	V	39.3	14.6	53.9	74.0	- 20.1	Peak
9671.960	V	22.7	14.6	37.3	54.0	- 16.7	Average
9799.836	H	40.6	14.6	55.2	74.0	- 18.8	Peak
9799.999	H	23.8	14.6	38.4	54.0	- 15.6	Average
9800.066	V	39.7	14.6	54.3	74.0	- 19.7	Peak
9800.002	V	23.4	14.6	38.0	54.0	- 16.0	Average
9887.412	H	39.3	14.6	53.9	74.0	- 20.1	Peak
9887.984	H	22.9	14.6	37.5	54.0	- 16.5	Average
9888.550	V	40.2	14.6	54.8	74.0	- 19.2	Peak
9887.948	V	23.5	14.6	38.1	54.0	- 15.9	Average

Remark: Other emissions more than 20dB below the limit are not reported.

If Peak measurement values are lower than average limit, average measurement is not necessary.



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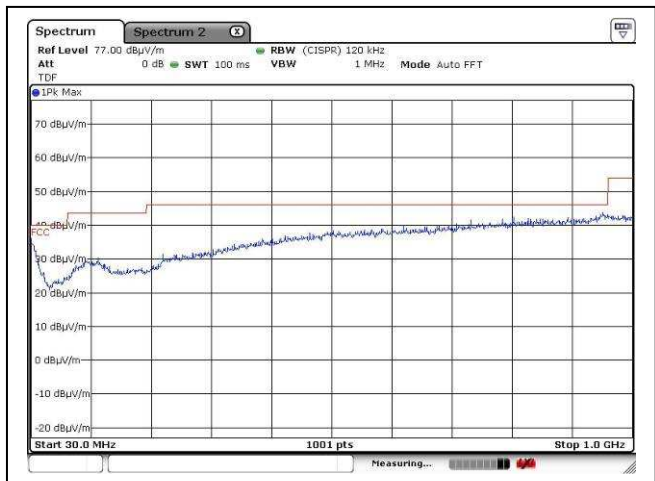
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TEST REPORT

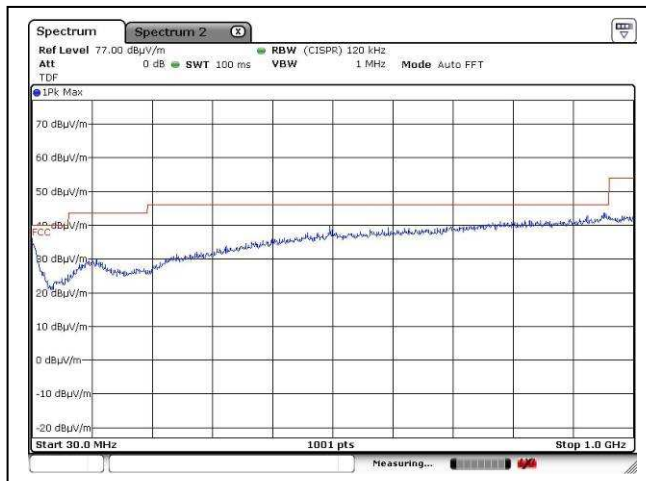
Report No. : AV0013875(2)

Date : 13 Mar 2017

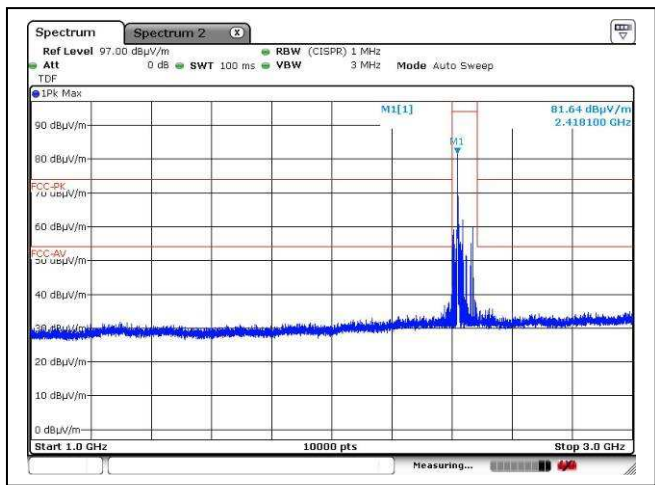
2.3 Radiated Emission Measurement Data (Con't)



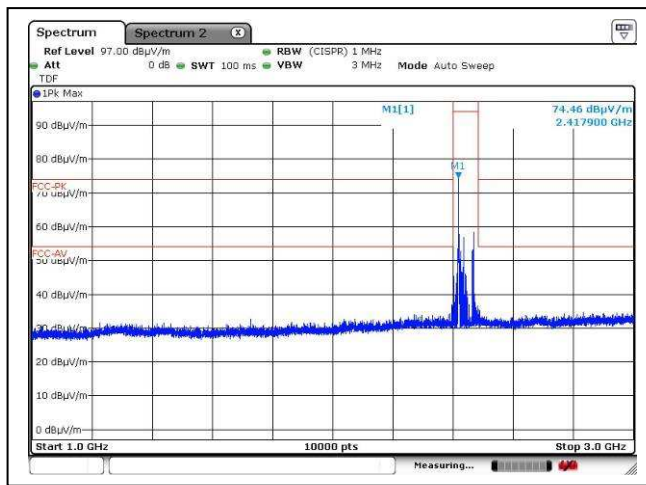
Lower channel, 30MHz – 1GHz, Horizontal



Lower channel, 30MHz – 1GHz, Vertical



Lower channel, 1GHz – 3GHz, Horizontal



Lower channel, 1GHz – 3GHz, Vertical



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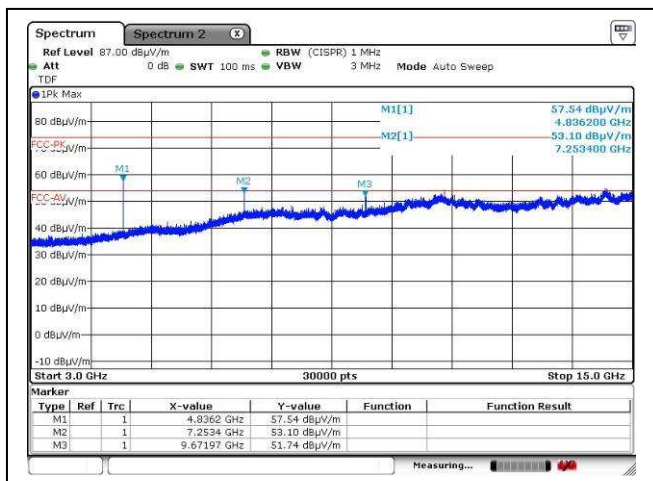
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TEST REPORT

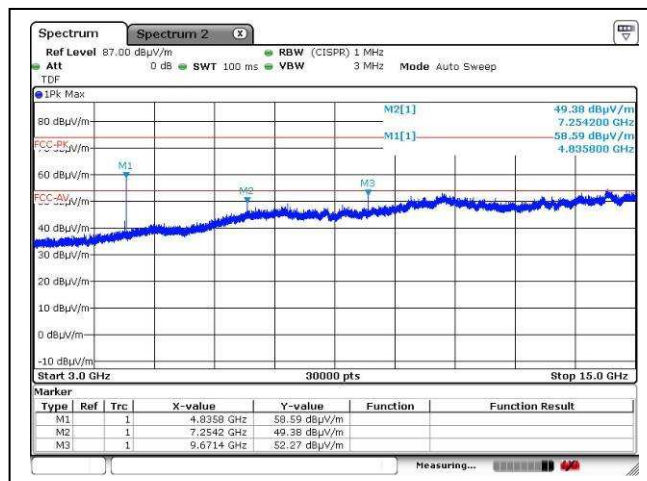
Report No. : AV0013875(2)

Date : 13 Mar 2017

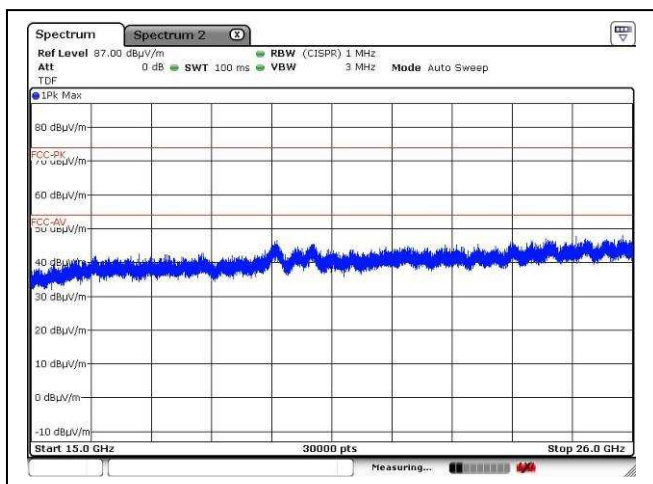
2.3 Radiated Emission Measurement Data (Con't)



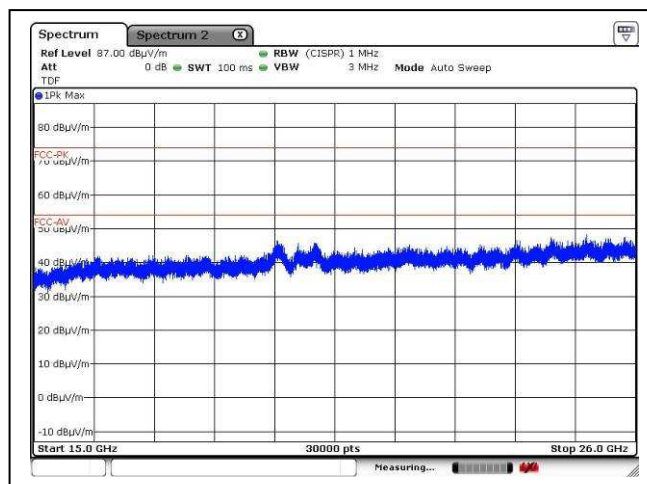
Lower channel, 3GHz – 15GHz, Horizontal



Lower channel, 3GHz – 15GHz, Vertical



Lower channel, 15GHz – 26GHz, Horizontal



Lower channel, 15GHz – 26GHz, Vertical



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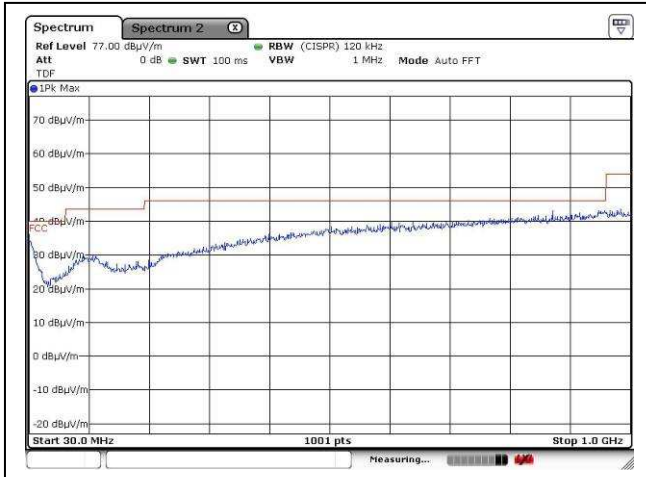
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TEST REPORT

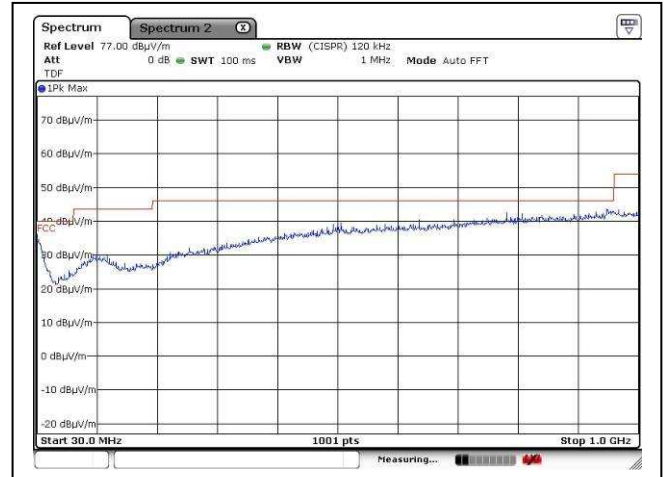
Report No. : AV0013875(2)

Date : 13 Mar 2017

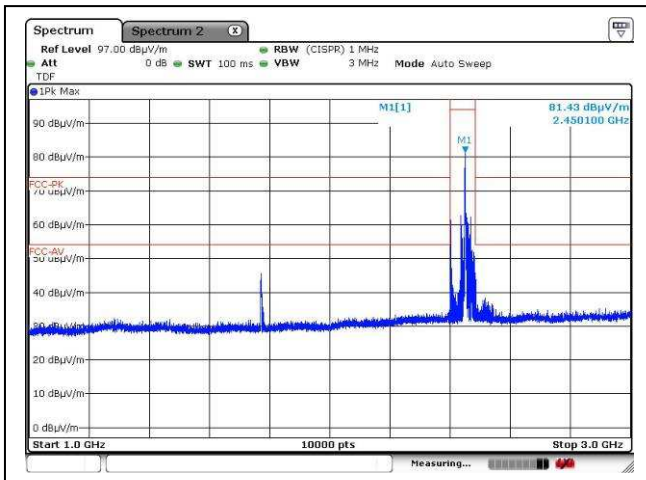
2.3 Radiated Emission Measurement Data (Con't)



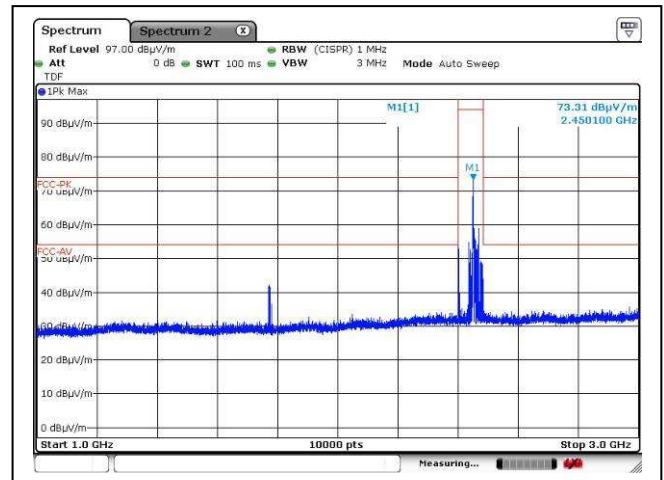
Middle channel, 30MHz – 1GHz, Horizontal



Middle channel, 30MHz – 1GHz, Vertical



Middle channel, 1GHz – 3GHz, Horizontal



Middle channel, 1GHz – 3GHz, Vertical



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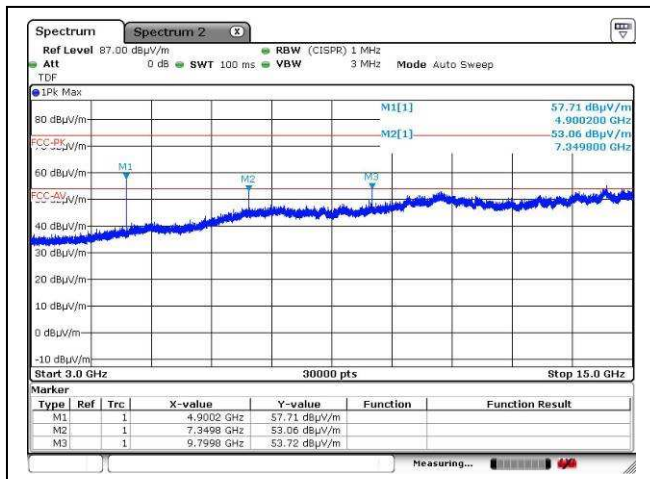
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TEST REPORT

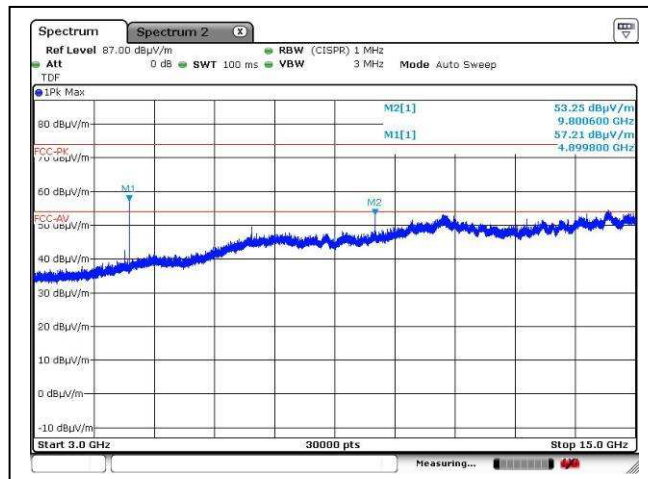
Report No. : AV0013875(2)

Date : 13 Mar 2017

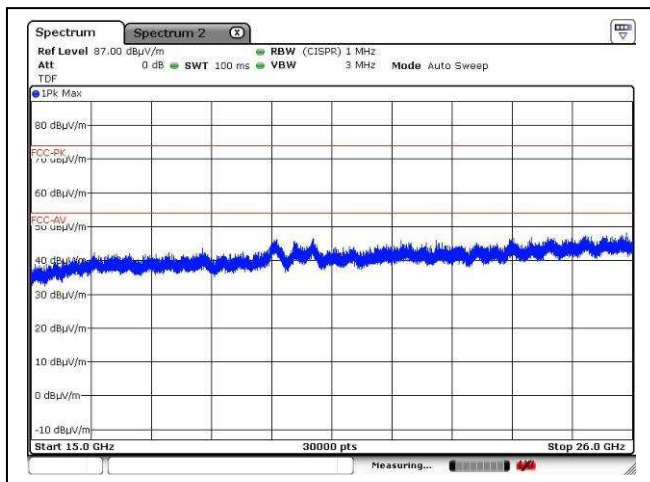
2.3 Radiated Emission Measurement Data (Con't)



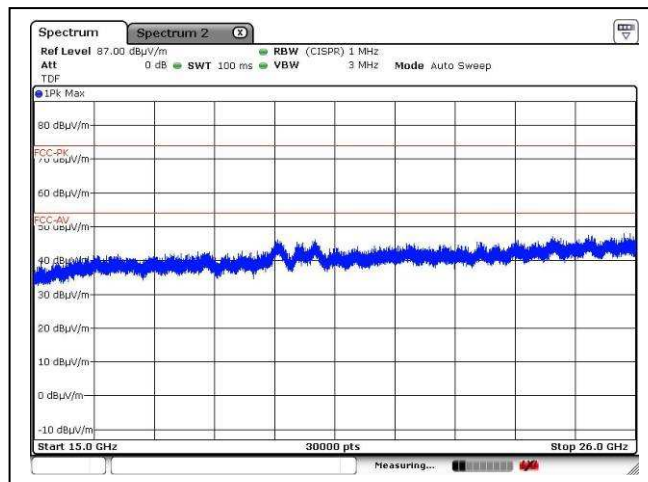
Middle channel, 3GHz – 15GHz, Horizontal



Middle channel, 3GHz – 15GHz, Vertical



Middle channel, 15GHz – 26GHz, Horizontal



Middle channel, 15GHz – 26GHz, Vertical



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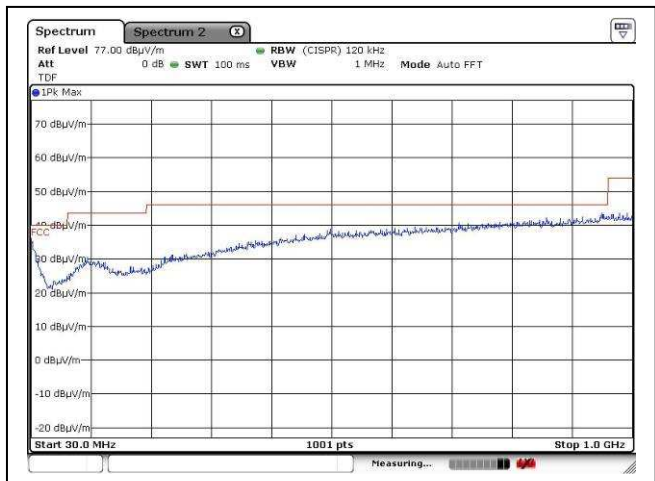
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TEST REPORT

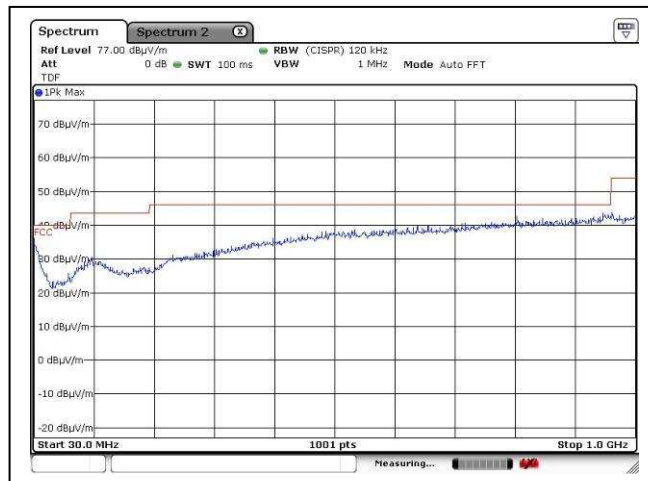
Report No. : AV0013875(2)

Date : 13 Mar 2017

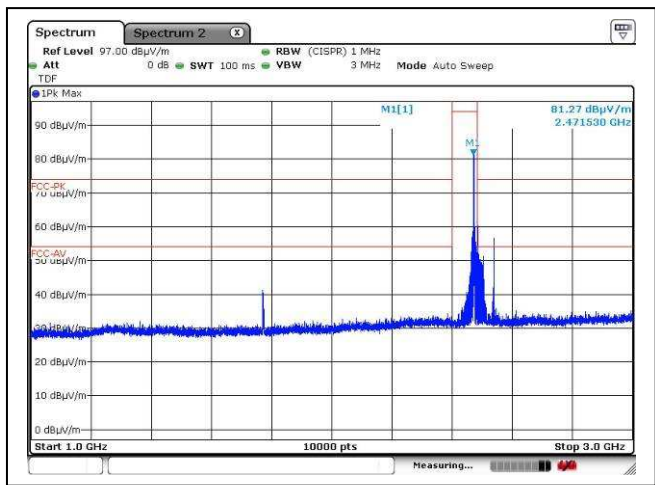
2.3 Radiated Emission Measurement Data (Con't)



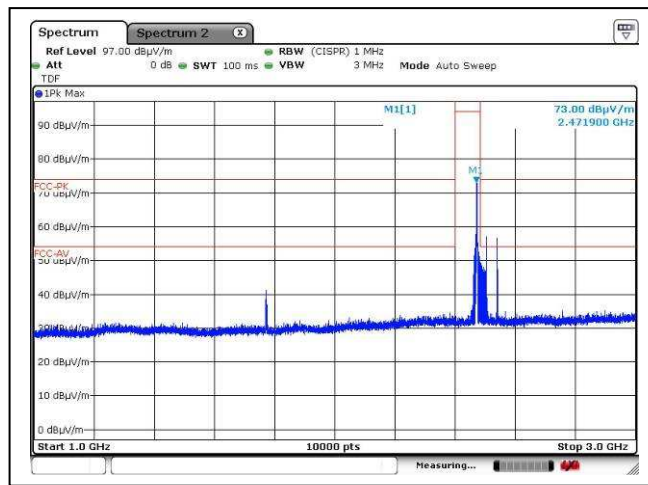
Higher channel, 30MHz – 1GHz, Horizontal



Higher channel, 30MHz – 1GHz, Vertical



Higher channel, 1GHz – 3GHz, Horizontal



Higher channel, 1GHz – 3GHz, Vertical



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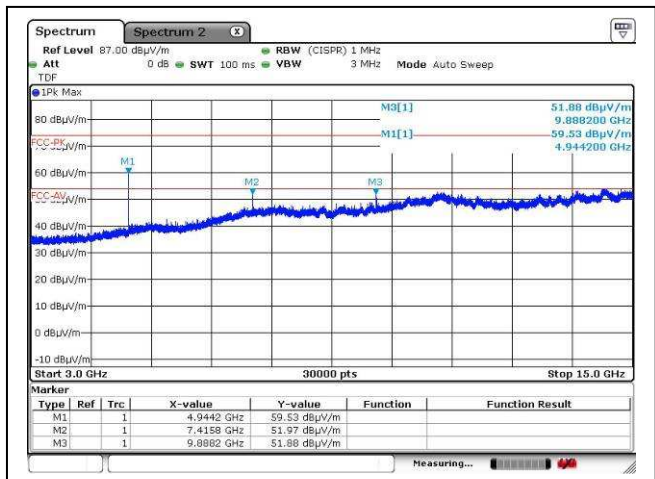
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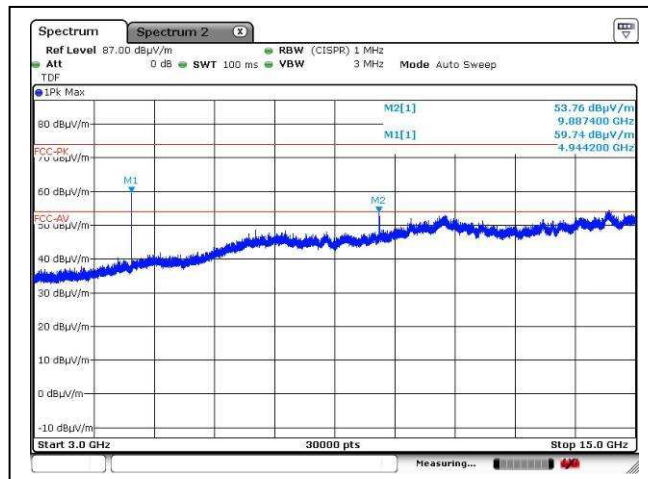
Report No. : AV0013875(2)

Date : 13 Mar 2017

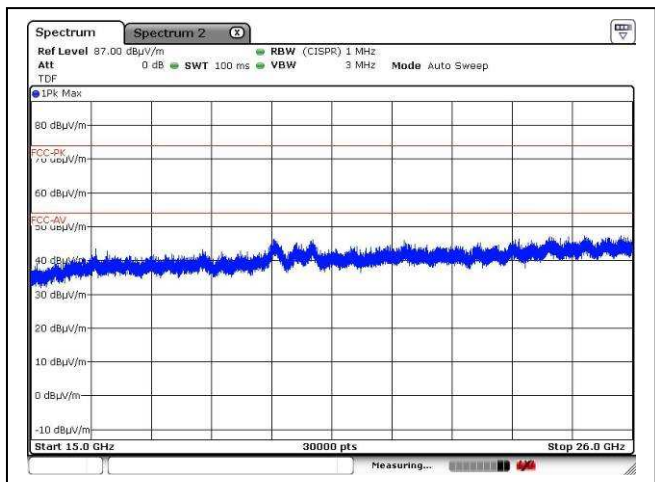
2.3 Radiated Emission Measurement Data (Con't)



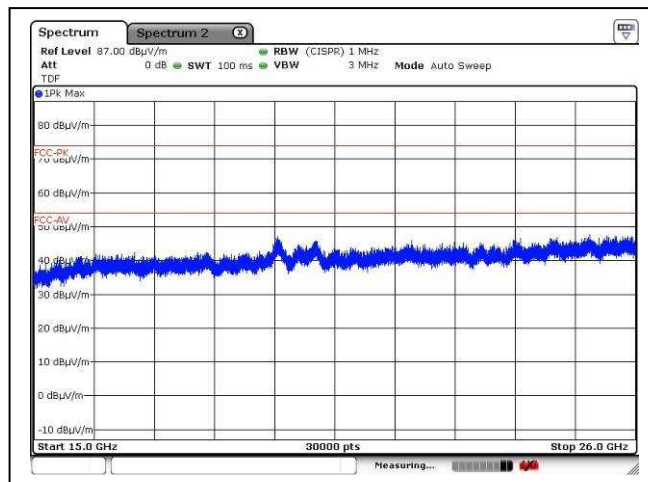
Higher channel, 3GHz – 15GHz, Horizontal



Higher channel, 3GHz – 15GHz, Vertical



Higher channel, 15GHz – 26GHz, Horizontal



Higher channel, 15GHz – 26GHz, Vertical



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TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

2.3 Radiated Emission Measurement Data (Con't)

Environmental conditions:

Parameter	Recorded value	
Ambient temperature:	21	° C
Relative humidity:	61	%

Testing frequency range: 9kHz to 26GHz Mode: Receiving

Measurement: Quasi-peak (9kHz – 1GHz), Peak (above 1GHz)

RBW: 9kHz (below 30MHz), 120KHz (30MHz – 1GHz), 1MHz (above 1GHz)

VBW: 30kHz (below 30MHz), 300kHz (30MHz – 1GHz), 3MHz (above 1GHz)

Frequency (MHz)	Polarity (H/V)	Reading at 3m (dBµV)	Transducer Factor (dB/m)	Field Strength at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)

Remark: No specified emission found



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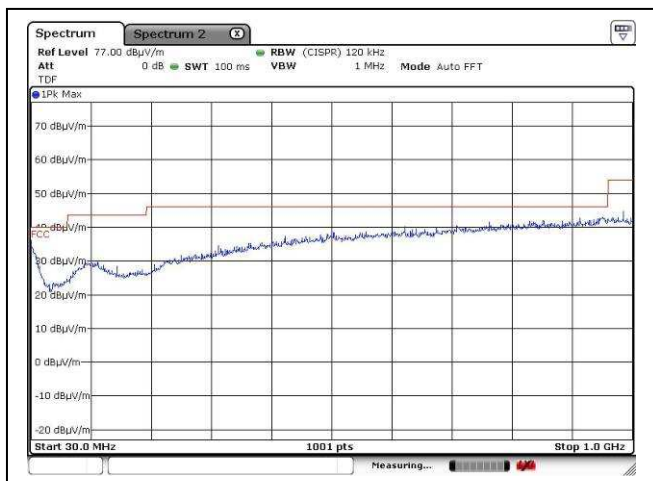
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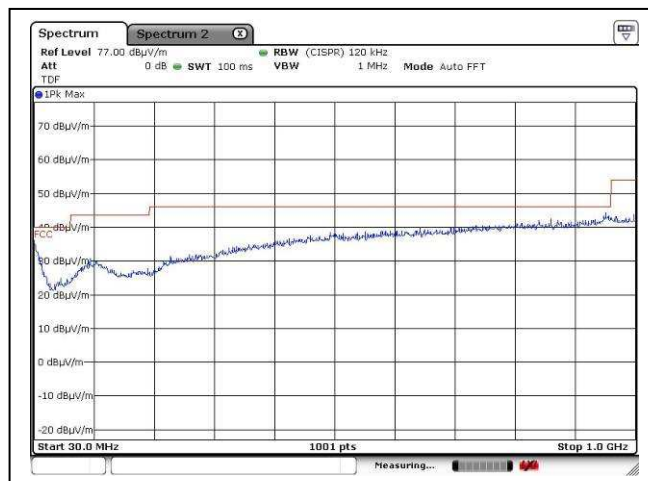
Report No. : AV0013875(2)

Date : 13 Mar 2017

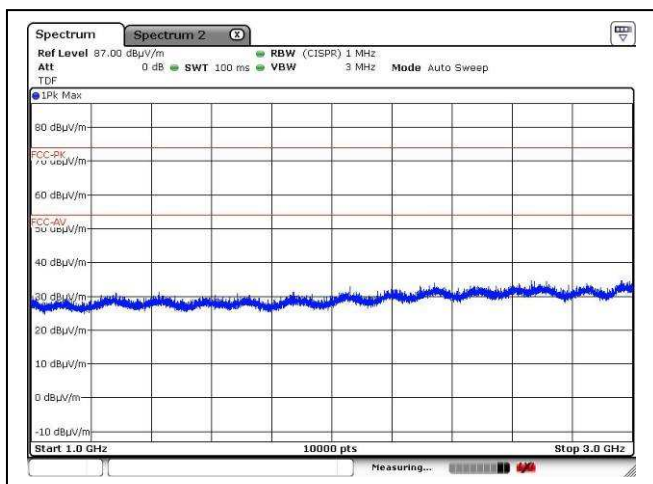
2.3 Radiated Emission Measurement Data (Con't)



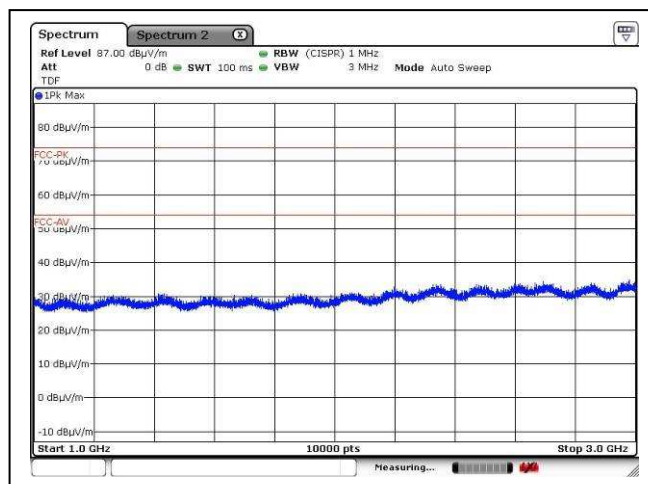
Receiving mode, 30MHz – 1GHz, Horizontal



Receiving mode, 30MHz – 1GHz, Vertical



Receiving mode, 1GHz – 3GHz, Horizontal



Receiving mode, 1GHz – 3GHz, Vertical



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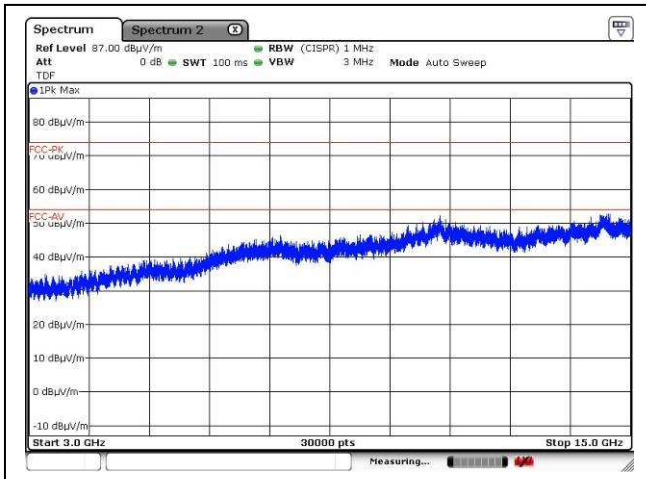
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TEST REPORT

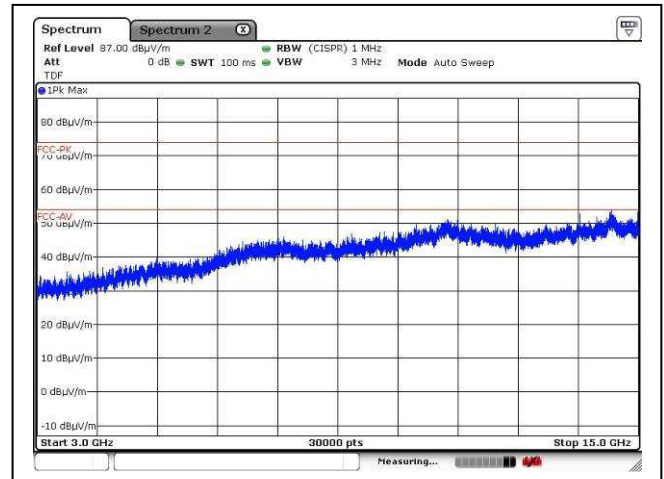
Report No. : AV0013875(2)

Date : 13 Mar 2017

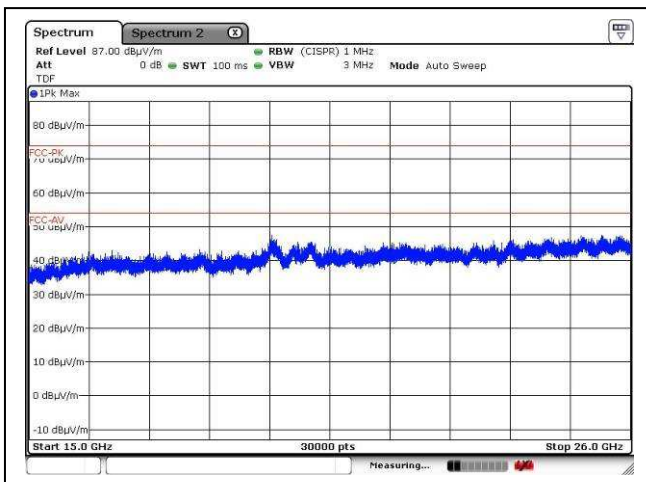
2.3 Radiated Emission Measurement Data (Con't)



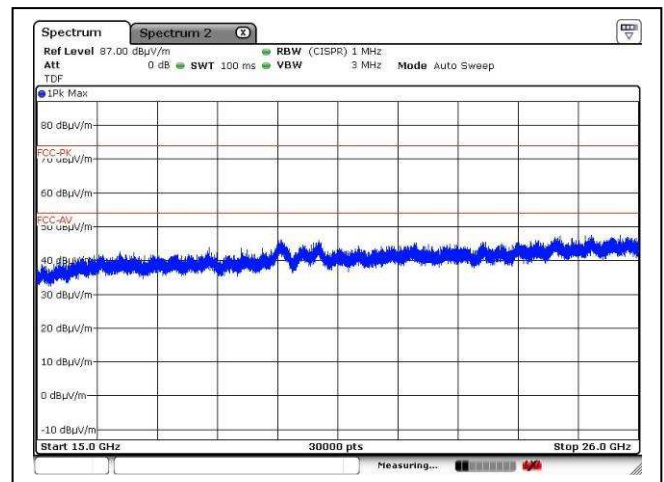
Receiving mode, 3GHz – 15GHz, Horizontal



Receiving mode, 3GHz – 15GHz, Vertical



Receiving mode, 15GHz – 26GHz, Horizontal



Receiving mode, 15GHz – 26GHz, Vertical



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TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

3 Description of the Line-conducted Test

3.1 Test Procedure

Conducted emissions measurements are investigated and also taken pursuant to the procedures of ANSI C63.10 – 2013. The EUT was setup as described in the procedures, and both lines were measured.

3.2 Test Result

No measurement is required as the EUT is a battery-operated product



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TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

4 Photograph

4.1 Photographs of the Test Setup for Radiated Emission and Conducted Emission

For electronic filing, the photos are saved with filename QEACYCLE2G4R TSup.pdf.

4.2 Photographs of the External and Internal Configurations of the EUT

For electronic filing, the photos are saved with filename QEACYCLE2G4R ExPho.pdf and QEACYCLE2G4R InPho.pdf.

4.3 Antenna requirement

Appendices A4 shows the antenna is permanently attached and cannot be changed. Therefore it fulfils the section 15.203 requirement



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TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

5 Appendices

A1	Photos of the set-up of Radiated Emissions	2	pages
A2	Photos of the set-up of Conducted Emissions	1	page
A3	Photos of External Configurations	5	pages
A4	Photos of Internal Configurations	2	pages
A5	ID Label/Location	1	page



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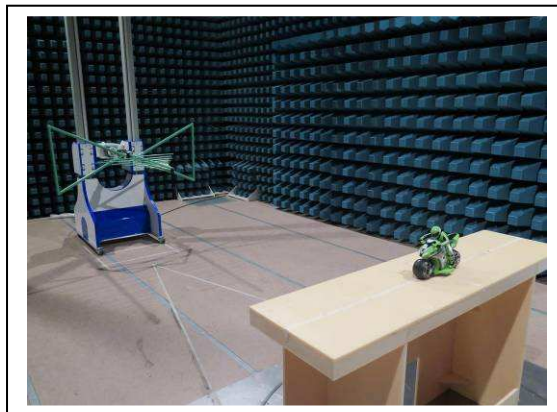
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TEST REPORT

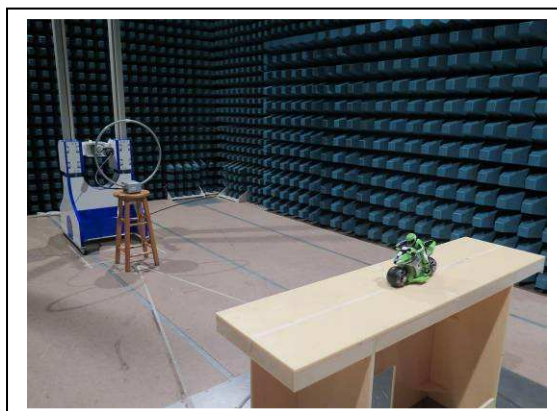
Report No. : AV0013875(2)

Date : 13 Mar 2017

A1. Photos of the set-up of Radiated Emissions



30MHz – 1GHz



9kHz – 30MHz

Tested by:

Mr. LEUNG Shu-kan, Ken

Reviewed by:

Mr. WONG Lap-pong, Andrew

FCC ID: QEACYLE2G4R

Page 51 of 61

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Date : 13 Mar 2017

A1. Photos of the set-up of Radiated Emissions



1GHz – 26GHz

Tested by:

Mr. LEUNG Shu-kan, Ken

Reviewed by:

Mr. WONG Lap-pong, Andrew

FCC ID: QEACYLE2G4R

Page 52 of 61

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TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

A2. Photos of the set-up of Conducted Emissions



Tested by:

Mr. LEUNG Shu-kan, Ken

Reviewed by:

Mr. WONG Lap-pong, Andrew

FCC ID: QEACYLE2G4R

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TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

A3 Photos of External Configurations



External Configuration 1



External Configuration 2

Tested by:

Handwritten signature of Mr. LEUNG Shu-kan, Ken.

Mr. LEUNG Shu-kan, Ken

Reviewed by:

Handwritten signature of Mr. WONG Lap-pong, Andrew.

Mr. WONG Lap-pong, Andrew

FCC ID: QEACYSLE2G4R

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TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

A3 Photos of External Configurations



External Configuration 3



External Configuration 4

Tested by:

Handwritten signature of Mr. LEUNG Shu-kan, Ken.

Mr. LEUNG Shu-kan, Ken

Reviewed by:

Handwritten signature of Mr. WONG Lap-pong, Andrew.

Mr. WONG Lap-pong, Andrew

FCC ID: QEACYCLE2G4R

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TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

A3 Photos of External Configurations



External Configuration 5



External Configuration 6

Tested by:

Handwritten signature of Mr. LEUNG Shu-kan, Ken.

Mr. LEUNG Shu-kan, Ken

Reviewed by:

Handwritten signature of Mr. WONG Lap-pong, Andrew.

Mr. WONG Lap-pong, Andrew

FCC ID: QEACYSLE2G4R

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Report No. : AV0013875(2)

Date : 13 Mar 2017

A3 Photos of External Configurations



External Configuration 7



External Configuration 8

Tested by:

A handwritten signature in black ink, appearing to read 'Ken'.

Mr. LEUNG Shu-kan, Ken

Reviewed by:

A handwritten signature in black ink, appearing to read 'Andrew'.

Mr. WONG Lap-pong, Andrew

FCC ID: QEACYLE2G4R

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Report No. : AV0013875(2)

Date : 13 Mar 2017

A3 Photos of External Configurations



External Configuration 9



External Configuration 10

Tested by:

Handwritten signature of Mr. LEUNG Shu-kan, Ken.

Mr. LEUNG Shu-kan, Ken

Reviewed by:

Handwritten signature of Mr. WONG Lap-pong, Andrew.

Mr. WONG Lap-pong, Andrew

FCC ID: QEACYCLE2G4R

Page 58 of 61

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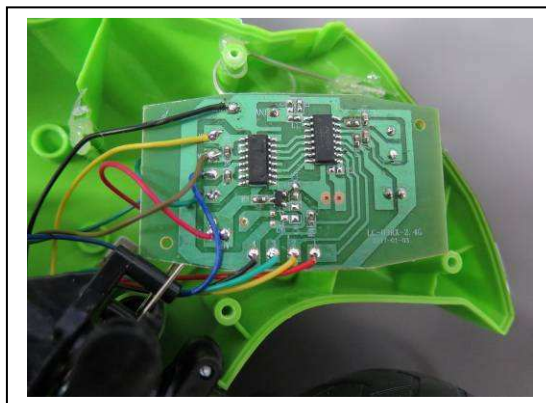
廠商會檢定中心

TEST REPORT

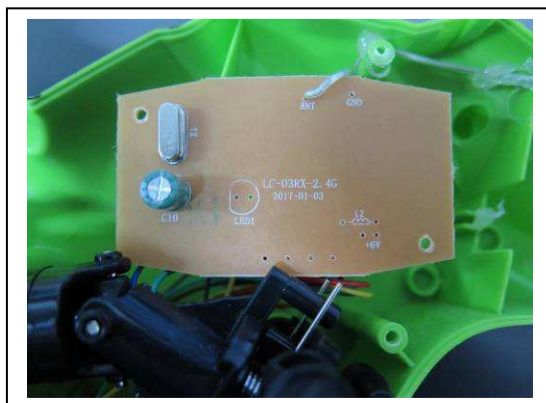
Report No. : AV0013875(2)

Date : 13 Mar 2017

A4 Photos of Internal Configurations



Internal Configuration 1



Internal Configuration 2

Tested by:

Mr. LEUNG Shu-kan, Ken

Reviewed by:

Mr. WONG Lap-pong, Andrew

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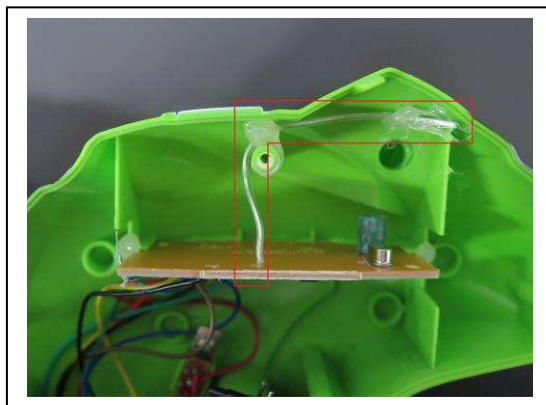
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TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

A4 Photos of Internal Configurations



EUT antenna

Tested by:

Mr. LEUNG Shu-kan, Ken

Reviewed by:

Mr. WONG Lap-pong, Andrew



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TEST REPORT

Report No. : AV0013875(2)

Date : 13 Mar 2017

A5 ID Label / Location



ID Label 1



ID Label 2

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

Tested by:

Mr. LEUNG Shu-kan, Ken

Reviewed by:

Mr. WONG Lap-pong, Andrew

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