**CMA Testing
and Certification
Laboratories**

廠商會檢定中心

TEST REPORT

Report No.	:	AU0058337(4)	Date :	30 Sep 2016

Application No. : LU032100(6)

Applicant : Asian Express Holdings Limited
Room 1702 Sino Centre,
582 - 592 Nathan Road Mongkok Kowloon

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

Sample Description	Model No.
Sky Raider, Battling Drones	PL-1580, PL-1581, PL-1582, PL-1583, PL-1584, PL-1585, PL-1586, PL-1587, PL-1588, PL-1589, HS-1956, HS-1957, HS-1958

Sample registration No. : RU0039734-001
Radio Frequency : 2453MHz – 2475MHz Transceiver
Rating : 3 x 1.5V AA size batteries
No. of submitted sample : Two (2) piece (s)

Date Received : 23 Sep 2016

Test Period : 12 Sep 2016 to 27 Sep 2016

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

Test Engineer : Mr. LEUNG Shu-kan, Ken

Test Result : See attached sheet(s) from page 2 to 58.

Conclusion : The submitted sample was found to comply with requirement of FCC Part 15 Subpart B and C.

Remark : All thirteen models are the same in circuitry and components and construction, and therefore model PL-1580 was chosen to be the representative of the test sample. The difference(s) between the tested model and the declared model(s) is outlook

For and on behalf of
CMA Industrial Development Foundation Limited

Authorized Signature : _____ Page 1 of 58

Mr. WONG Lap-pong, Andrew
Manager
Electrical Division

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1　General Information

1.1　General Description

The equipment under test (EUT) is a controller for Battling Drones. The EUT is power by 3 x 1.5V AA size batteries. It operates at 2453MHz – 2475MHz. There are buttons and joysticks on the EUT. When the buttons are pressed or the joysticks are moved, the EUT will transmit radio control signal to receiver.

The brief circuit description is listed as follows:

- U1	and its associated circuit act as MCU and RF circuit
- U1_1	and its associated circuit act as power supply circuit
- Y1	and its associated circuit act as oscillator
- K1, K2, K3, K4, K5, K6, K7, K8, K9, K10, K11	and its associated circuit act as copter control

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1.2　　Location of the test site

FCC Registered Test Site Number: 552221

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:

<div align="center">

Ground Floor, Yan Hing Centre,

9 – 13 Wong Chuk Yeung Street,

Fo Tan, Shatin,

New Territories,

Hong Kong.

</div>

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

<div align="center">

Ground Floor, Yan Hing Centre,

9 – 13 Wong Chuk Yeung Street,

Fo Tan, Shatin,

New Territories,

Hong Kong.

</div>

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1.3   List of measuring equipment

Equipment	Manufacturer	Model No.	Serial No.	Calibration Due Date	Calibration Period
EMI Test Receiver	R&S	ESCI	100152	27 Sep 2016	1Year
Spectrum Analyzer	R&S	FSV40	100964	09 Feb 2017	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	24 Nov 2016	2Years
Broadband Pre-Amplifier	Schwarzbeck	BBV 9718	9718-119	24 Nov 2016	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	13 Dec 2016	1Year
LISN	R&S	ENV216	101323	21 Oct 2016	1Year
Coaxial Cable	Tyco Electronics	RG 58C/U	N/A	01 Nov 2016	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

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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

Conducted emissions

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

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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.

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2.2 Conducted Emission Measurement Data

Environmental conditions:

Parameter	Recorded value	
Ambient temperature:	26	° C
Relative humidity:	61	%

Summary

Test	Frequency (MHz)	Nominal Power (dBm)	Nominal Bandwidth (MHz)	Result
RF output power	2453.000	0.0	5.000000	PASS
Power Spectral Density	2453.000	0.0	5.000000	PASS
Minimum Emission Bandwidth 6 dB	2453.000	0.0	5.000000	PASS
Band Edge low	2453.000	0.0	5.000000	PASS
Tx Spurious Emission	2453.000	0.0	5.000000	PASS
Rx Spurious Emission	2453.000	0.0	5.000000	PASS
RF output power	2465.000	0.0	5.000000	PASS
Power Spectral Density	2465.000	0.0	5.000000	PASS
Minimum Emission Bandwidth 6 dB	2465.000	0.0	5.000000	PASS
Tx Spurious Emission	2465.000	0.0	5.000000	PASS
Rx Spurious Emission	2465.000	0.0	5.000000	PASS
RF output power	2475.000	0.0	5.000000	PASS
Power Spectral Density	2475.000	0.0	5.000000	PASS
Minimum Emission Bandwidth 6 dB	2475.000	0.0	5.000000	PASS
Band Edge high	2475.000	0.0	5.000000	PASS
Tx Spurious Emission	2475.000	0.0	5.000000	PASS
Rx Spurious Emission	2475.000	0.0	5.000000	PASS

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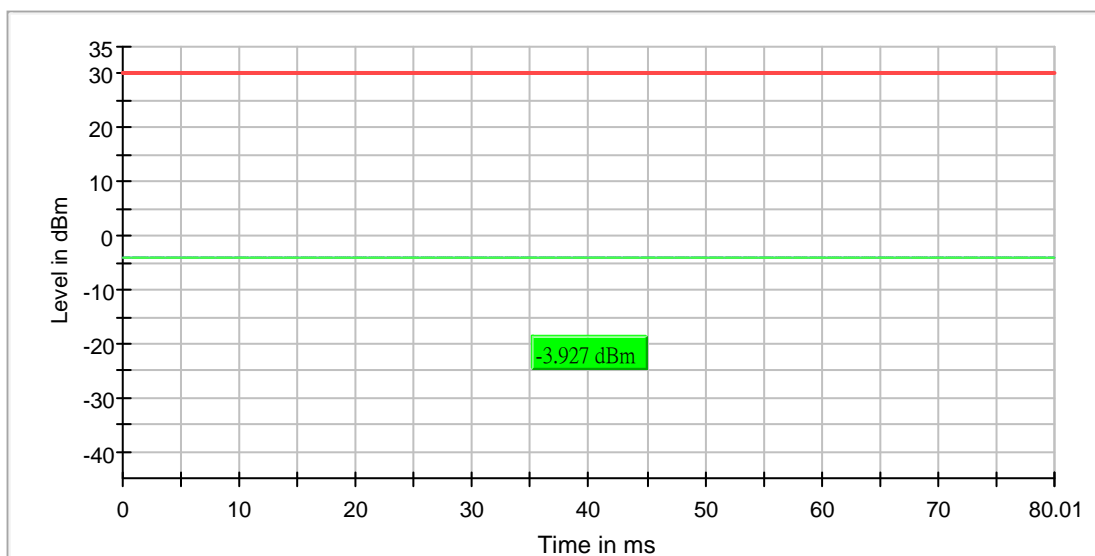## TEST REPORT

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RF output power (2453 MHz)

Result

DUT Frequency (MHz)	Gated EIRP (dBm)	Limit Max (dBm)	DutyCycle (%)	Result
2453.000000	-3.9	30.0	8.036	PASS

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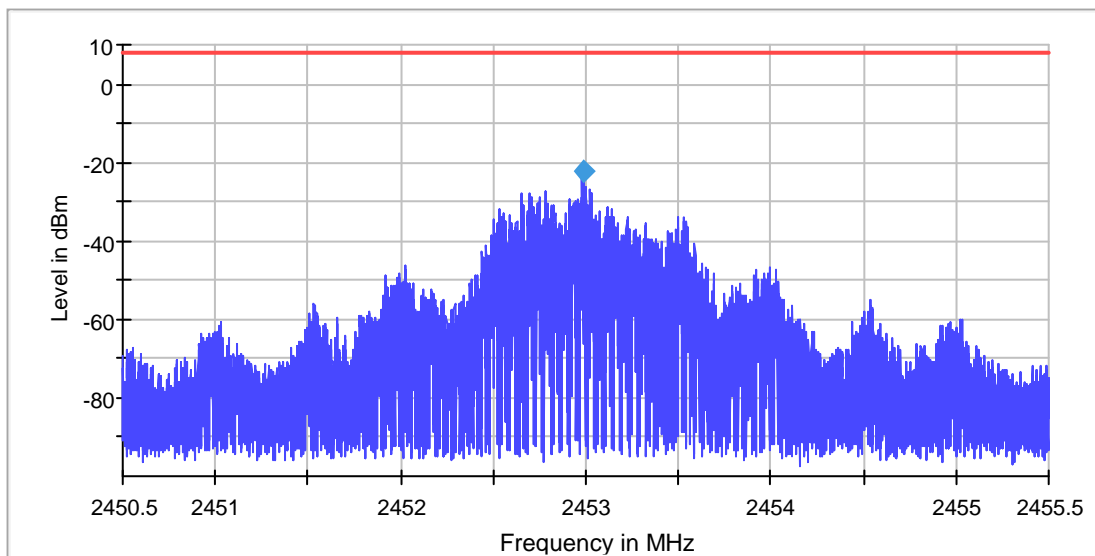廠商會檢定中心

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Power Spectral Density (2453 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2453.000000	2452.993251	-22.053	8.0	PASS

Measurement

Setting	Instrument Value	Target Value		Setting	Instrument Value	Target Value
Start Frequency	2.45050 GHz	2.45050 GHz		Stablemode	Trace	Trace
Stop Frequency	2.45550 GHz	2.45550 GHz		Stablevalue	0.30	0.30
Span	5.000 MHz	5.000 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	3333	~ 3333				
Sweeptime	3.340 s	3.333 s				
Reference Level	-10.000 dBm	-10.000 dBm				
Attenuation	10.000 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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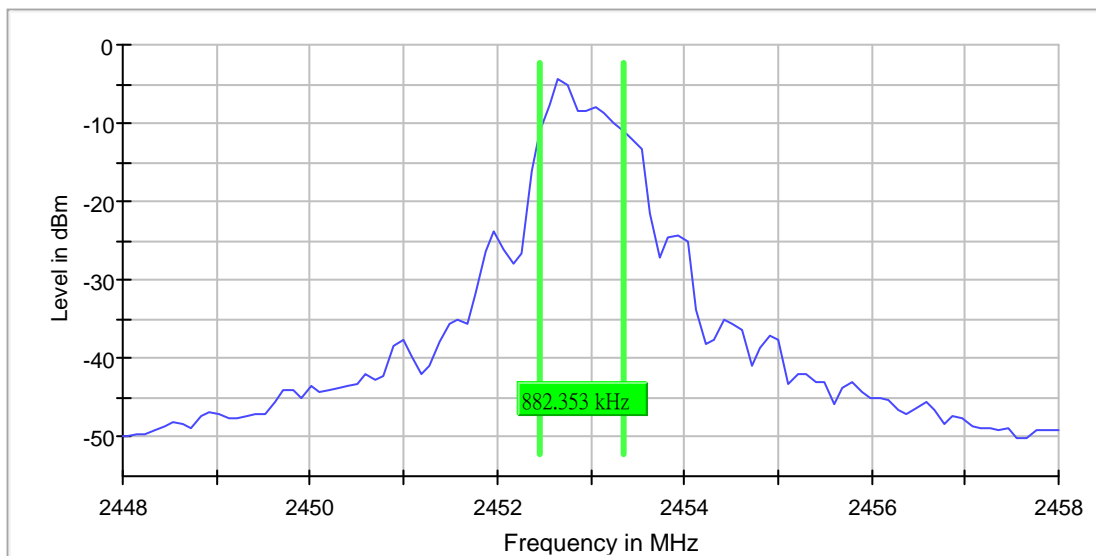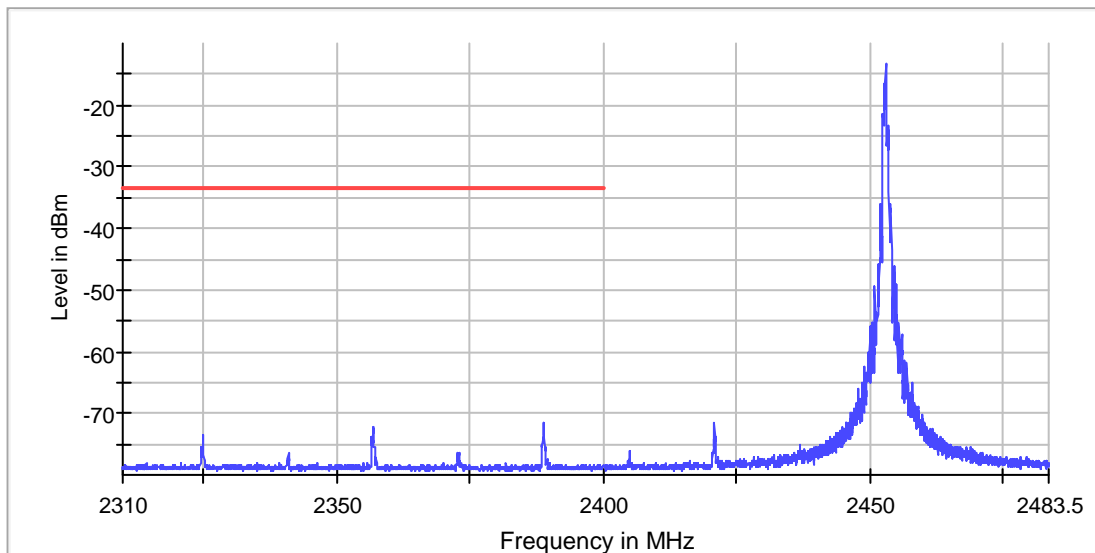# CMA Testing and Certification Laboratories
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Minimum Emission Bandwidth 6 dB (2453 MHz)

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
2453.000000	0.882353	0.500000	---	2452.460784	2453.343137	-4.4	PASS

882.353 kHz

Measurement

Setting	Instrument Value	Target Value		Setting	Instrument Value	Target Value
Start Frequency	2.44800 GHz	2.44800 GHz		Stablemode	Trace	Trace
Stop Frequency	2.45800 GHz	2.45800 GHz		Stablevalue	0.30	0.30
Span	10.000 MHz	10.000 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	~ 100				
Sweeptime	37.924 µs	AUTO				
Reference Level	-10.000 dBm	-10.000 dBm				
Attenuation	10.000 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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Band Edge low (2453 MHz)

Result

DUT Frequency (MHz)	Result
2453.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2452.943297	-13.4

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2388.931149	-71.4	38.1	-33.4	PASS
2388.981122	-71.9	38.6	-33.4	PASS
2356.898945	-72.3	38.9	-33.4	PASS
2356.998890	-72.4	39.0	-33.4	PASS
2388.881177	-73.0	39.6	-33.4	PASS
2356.948917	-73.3	39.9	-33.4	PASS
2324.966685	-73.4	40.0	-33.4	PASS
2389.031094	-73.6	40.2	-33.4	PASS
2356.649084	-73.7	40.3	-33.4	PASS
2388.681288	-73.7	40.3	-33.4	PASS
2356.749028	-73.8	40.4	-33.4	PASS
2357.048862	-73.9	40.5	-33.4	PASS
2388.831205	-74.2	40.8	-33.4	PASS
2356.799001	-74.3	40.9	-33.4	PASS
2388.731260	-74.4	41.0	-33.4	PASS

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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	-10.000 dBm	-10.000 dBm
Attenuation	10.000 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	1800	~ 1800
Sweeptime	1.800 s	1.800 s
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 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

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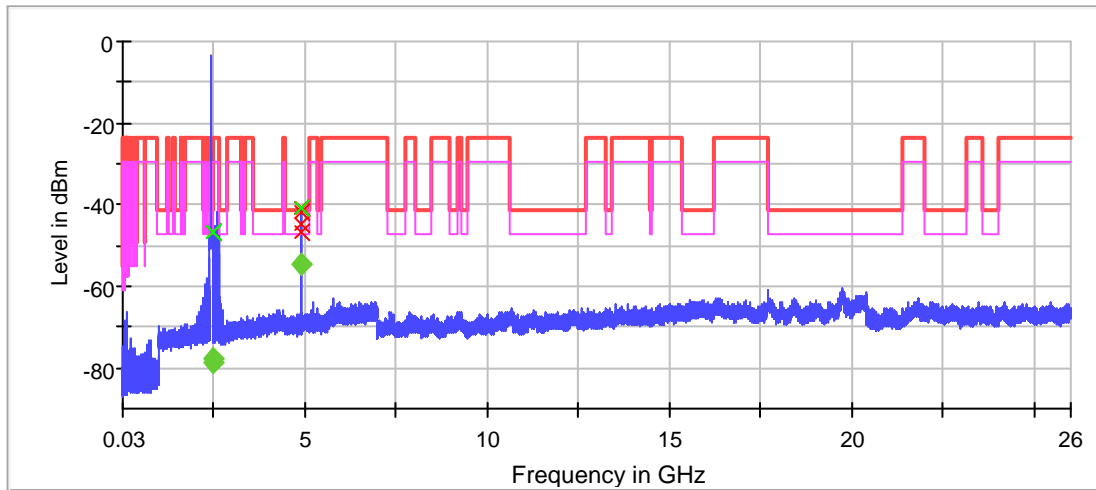## CMA Testing and Certification Laboratories

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Tx Spurious Emission (2453 MHz)

Result

DUT Frequency (MHz)	Result
2453.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
2485.749751	-46.7	-77.9	-41.2	36.6	PASS
2487.749530	-47.0	-78.6	-41.2	37.4	PASS
4905.981819	-40.7	-54.4	-41.2	13.2	PASS

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4905.981819	-40.7	-0.5	-41.2
4906.481763	-40.7	-0.5	-41.2
4905.481874	-40.8	-0.5	-41.2
4906.981708	-40.8	-0.5	-41.2
4904.981929	-41.8	0.6	-41.2
4907.481653	-44.7	3.5	-41.2
2485.749751	-46.7	5.5	-41.2
4904.481985	-46.8	5.6	-41.2
2487.749530	-47.0	5.7	-41.2
2494.248810	-48.3	7.1	-41.2
2379.757230	-53.2	11.9	-41.2
2380.257051	-53.4	12.2	-41.2
4907.981597	-55.2	14.0	-41.2
128.019947	-66.2	14.5	-51.7
127.969950	-67.4	15.6	-51.7

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

Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	19.400 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
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. 150	max. 150
Stable	3 / 3	3

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	2800	~ 2800
Sweeptime	2.800 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
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. 150	max. 150
Stable	3 / 3	3

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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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Rx Spurious Emission (2453 MHz)

Result

DUT Frequency (MHz)	Result
2453.000000	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)
19722.830377	-59.9	18.6	-41.2
19720.830483	-60.3	19.1	-41.2
19746.829114	-60.6	19.4	-41.2
19716.830693	-60.6	19.4	-41.2
19734.829746	-60.8	19.6	-41.2
19745.829167	-60.8	19.6	-41.2
19711.830956	-60.9	19.7	-41.2
19761.828325	-61.0	19.7	-41.2
19705.831272	-61.0	19.8	-41.2
19753.828746	-61.0	19.8	-41.2
19764.828167	-61.1	19.8	-41.2
19741.829377	-61.1	19.9	-41.2
19710.831009	-61.1	19.9	-41.2
19755.828641	-61.1	19.9	-41.2
19732.829851	-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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Limit [limit.Result:1]　　　×　　Threshold [limit 2.Result:1]

Pre Measurement 1

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

Pre Measurement 2

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

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RF output power (2465 MHz)

Result

DUT Frequency (MHz)	Gated EIRP (dBm)	Limit Max (dBm)	DutyCycle (%)	Result
2465.000000	-4.0	30.0	8.055	PASS
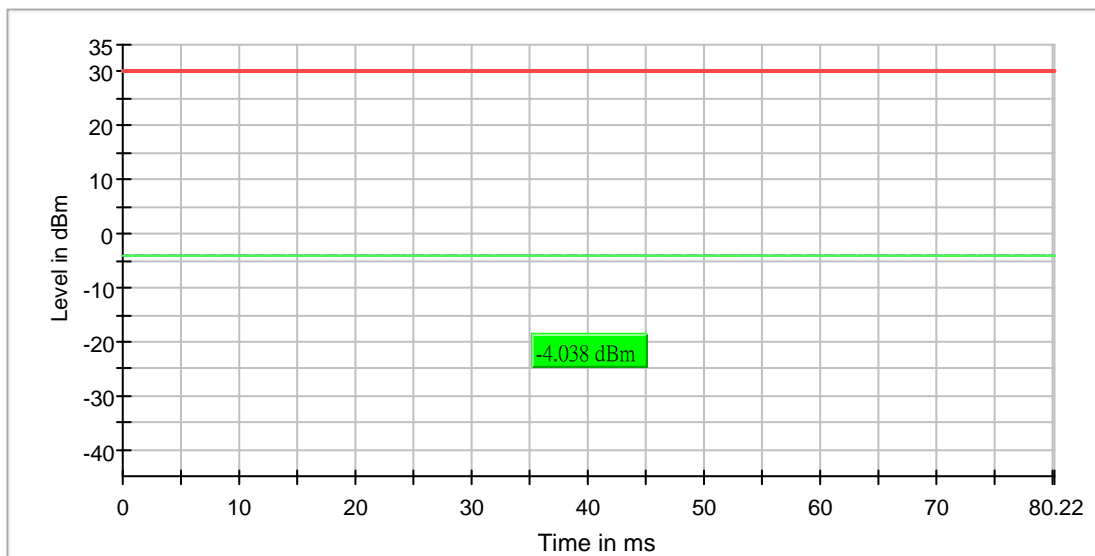
Graph: Level in dBm vs Time in ms. -4.038 dBm

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Power Spectral Density (2465 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2465.000000	2465.000750	-23.815	8.0	PASS
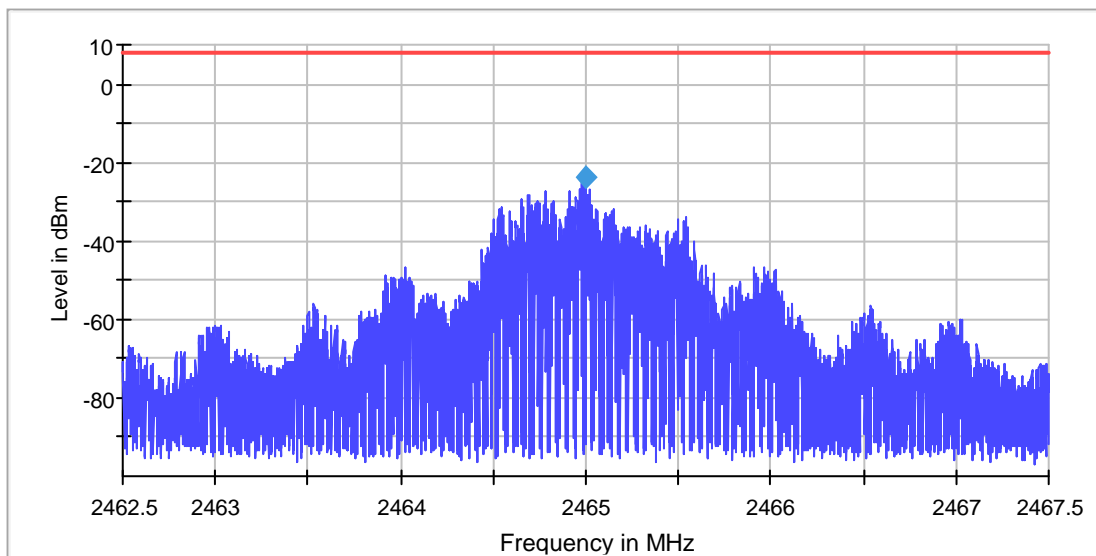
Measurement

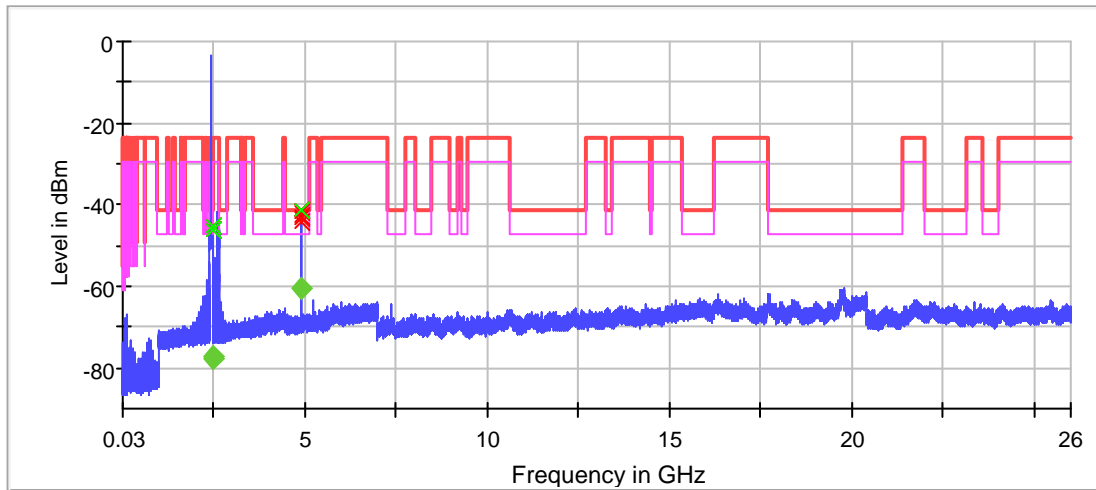| Setting	Instrument Value	Target Value		Setting	Instrument Value	Target Value
Start Frequency	2.46250 GHz	2.46250 GHz		Stablemode	Trace	Trace
Stop Frequency	2.46750 GHz	2.46750 GHz		Stablevalue	0.30	0.30
Span	5.000 MHz	5.000 MHz		Run	3 / max. 150	max. 150
RBW	3.000 kHz	<= 3.000 kHz		Stable	3 / 3	3
VBW	10.000 kHz	>= 9.000 kHz				
SweepPoints	3333	~ 3333				
Sweeptime	3.340 s	3.333 s				
Reference Level	-10.000 dBm	-10.000 dBm				
Attenuation	10.000 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				

FCC ID: VLEHS-1956TC

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TEST REPORT

Report No.   :   AU0058337(4)   Date :   30 Sep 2016

Minimum Emission Bandwidth 6 dB (2465 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
2465.000000	0.784314	0.500000	---	2464.460784	2465.245098	-4.5	PASS
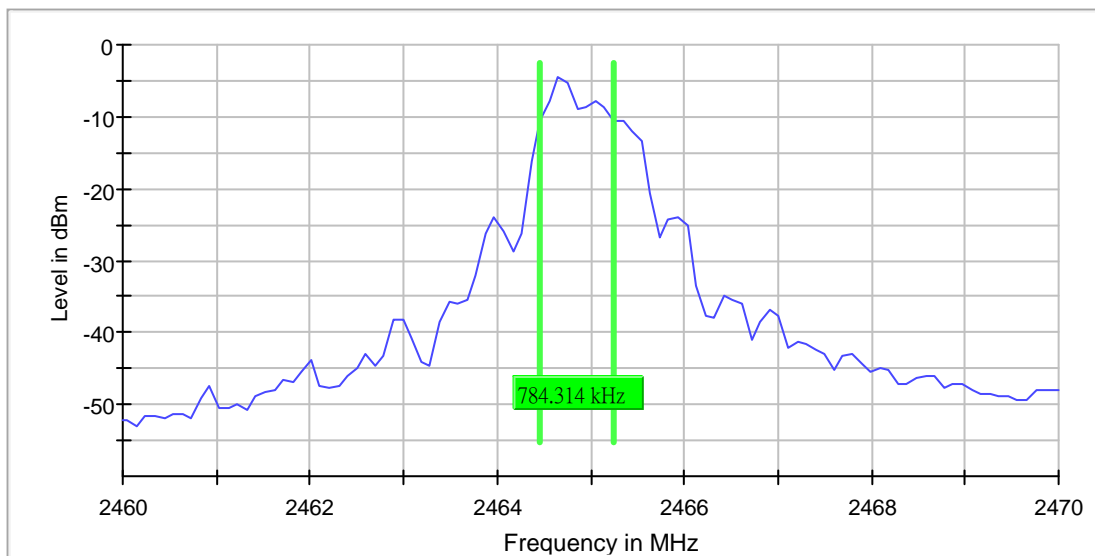
Measurement

Setting	Instrument Value	Target Value		Setting	Instrument Value	Target Value
Start Frequency	2.46000 GHz	2.46000 GHz		Stablemode	Trace	Trace
Stop Frequency	2.47000 GHz	2.47000 GHz		Stablevalue	0.30	0.30
Span	10.000 MHz	10.000 MHz		Run	20 / max. 150	max. 150
RBW	100.000 kHz	~ 100.000 kHz		Stable	15 / 15	15
VBW	300.000 kHz	~ 300.000 kHz				
SweepPoints	101	~ 100				
Sweeptime	37.924 µs	AUTO				
Reference Level	-10.000 dBm	-10.000 dBm				
Attenuation	10.000 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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TEST REPORT

Report No. : AU0058337(4) Date : 30 Sep 2016

Tx Spurious Emission (2465 MHz)

Result

DUT Frequency (MHz)	Result
2465.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
2493.748865	-45.3	-77.9	-41.2	36.7	PASS
2496.248589	-46.1	-77.4	-41.2	36.2	PASS
4930.979051	-41.4	-60.6	-41.2	19.4	PASS

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4930.979051	-41.4	0.2	-41.2
4930.479107	-41.4	0.2	-41.2
4929.479217	-42.0	0.8	-41.2
4929.979162	-42.9	1.7	-41.2
4928.979273	-43.4	2.1	-41.2
4931.478996	-44.3	3.1	-41.2
2493.748865	-45.3	4.1	-41.2
2496.248589	-46.1	4.9	-41.2
4928.479328	-47.9	6.7	-41.2
2496.748533	-48.1	6.9	-41.2
2493.248921	-50.2	9.0	-41.2
2389.253838	-54.0	12.8	-41.2
4931.978941	-54.3	13.1	-41.2
2382.756159	-54.8	13.5	-41.2
2382.256337	-54.9	13.7	-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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TEST REPORT

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

Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	19.400 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
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. 150	max. 150
Stable	3 / 3	3

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	2800	~ 2800
Sweeptime	2.800 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
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. 150	max. 150
Stable	3 / 3	3

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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

FCC ID: VLEHS-1956TC

TEST REPORT

Report No.   :   AU0058337(4)   Date :   30 Sep 2016

Rx Spurious Emission (2465 MHz)

Result

DUT Frequency (MHz)	Result
2465.000000	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)
19731.829904	-59.9	18.7	-41.2
19708.831114	-60.2	18.9	-41.2
19727.830114	-60.5	19.2	-41.2
19754.828693	-60.5	19.3	-41.2
19694.831851	-60.6	19.4	-41.2
19761.828325	-60.7	19.4	-41.2
19733.829798	-60.7	19.4	-41.2
19745.829167	-60.7	19.5	-41.2
19768.827956	-60.9	19.7	-41.2
19728.830062	-61.0	19.8	-41.2
19714.830798	-61.0	19.8	-41.2
19736.829641	-61.1	19.9	-41.2
19722.830377	-61.1	19.9	-41.2
19747.829062	-61.1	19.9	-41.2
19711.830956	-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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——— Limit   [limit.Result:1]   ✕   Threshold   [limit 2.Result:1]

Pre Measurement 1

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

Pre Measurement 2

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

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TEST REPORT

Report No.   :   AU0058337(4)   Date :   30 Sep 2016

RF output power (2475 MHz)

Result

DUT Frequency (MHz)	Gated EIRP (dBm)	Limit Max (dBm)	DutyCycle (%)	Result
2475.000000	-4.1	30.0	8.052	PASS
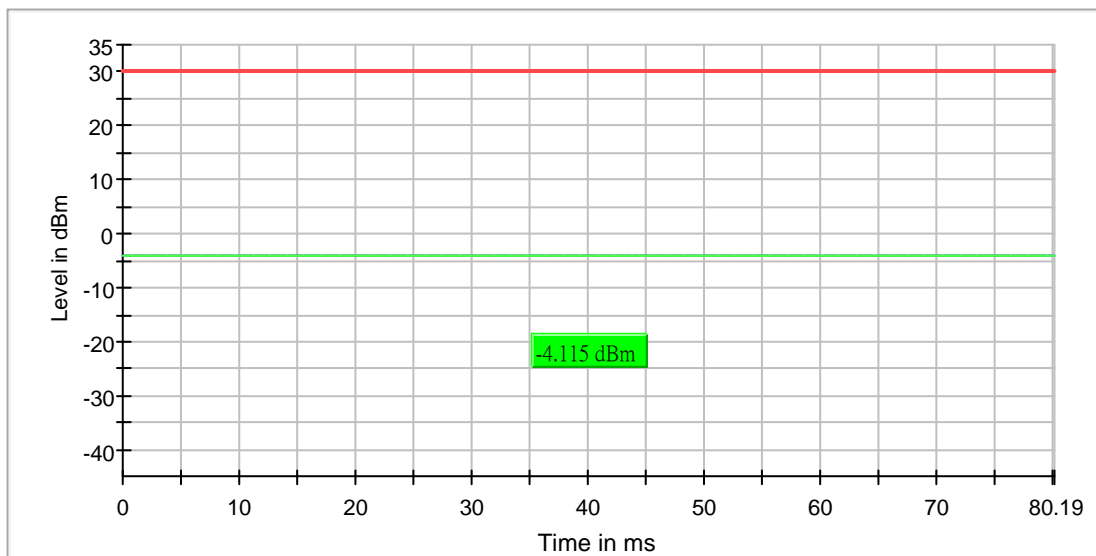
Graph: Level in dBm vs Time in ms. Marker shows -4.115 dBm.

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CMA Industrial Development Foundation Limited
Room 1302, Yan Hing Centre, 9-13 Wong Chuk Yeung St., Fo Tan, Shatin, N.T., Hong Kong.
Tel: (852) 2698 8198   Fax: (852) 2695 4177   E-mail: info@cmatcl.com   Web Site: http://www.cmatcl.com

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TEST REPORT

Report No.   :   AU0058337(4)   Date :   30 Sep 2016

Power Spectral Density (2475 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2475.000000	2474.991752	-22.766	8.0	PASS
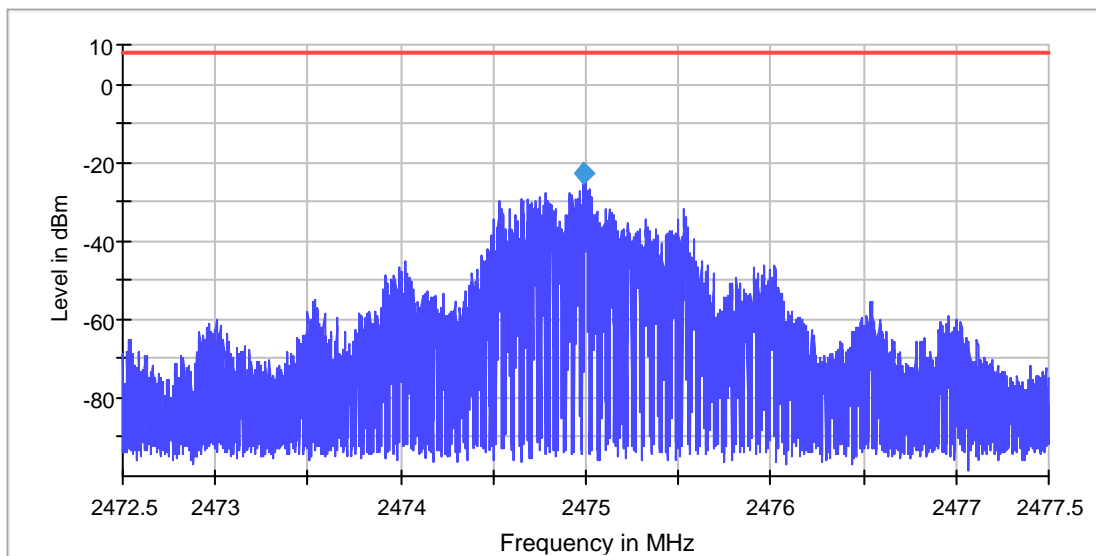
Measurement

Setting	Instrument Value	Target Value		Setting	Instrument Value	Target Value
Start Frequency	2.47250 GHz	2.47250 GHz		Stablemode	Trace	Trace
Stop Frequency	2.47750 GHz	2.47750 GHz		Stablevalue	0.30	0.30
Span	5.000 MHz	5.000 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	3333	~ 3333				
Sweeptime	3.340 s	3.333 s				
Reference Level	-10.000 dBm	-10.000 dBm				
Attenuation	10.000 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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Report No.   :   AU0058337(4)   Date :   30 Sep 2016

Minimum Emission Bandwidth 6 dB (2475 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
2475.000000	0.882353	0.500000	---	2474.460784	2475.343137	-4.5	PASS
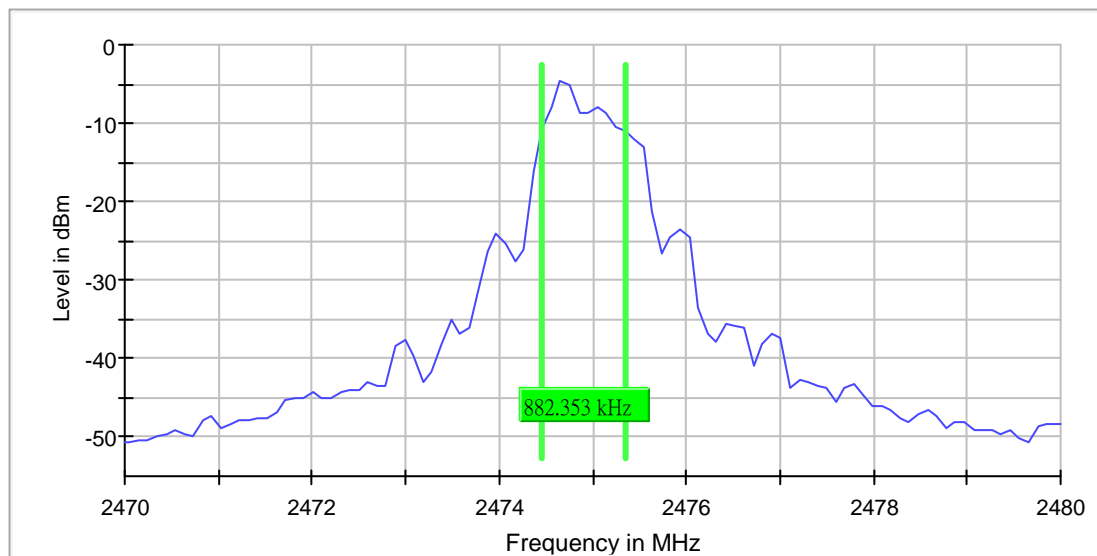
Measurement

Setting	Instrument Value	Target Value		Setting	Instrument Value	Target Value
Start Frequency	2.47000 GHz	2.47000 GHz		Stablemode	Trace	Trace
Stop Frequency	2.48000 GHz	2.48000 GHz		Stablevalue	0.30	0.30
Span	10.000 MHz	10.000 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	~ 100				
Sweeptime	37.924 µs	AUTO				
Reference Level	-10.000 dBm	-10.000 dBm				
Attenuation	10.000 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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Report No.　　　　:　　AU0058337(4)　　　　　　　　　Date :　　　30 Sep 2016

Band Edge high (2475 MHz)

Result

DUT Frequency (MHz)	Result
2475.000000	PASS

Inband Peak

Frequency (MHz)	Level (dBm)
2474.980102	-13.8

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2483.824018	-72.8	38.9	-33.8	PASS
2483.674471	-73.3	39.4	-33.8	PASS
2483.724320	-73.3	39.5	-33.8	PASS
2483.624622	-73.4	39.5	-33.8	PASS
2483.973565	-73.4	39.6	-33.8	PASS
2484.222810	-73.4	39.6	-33.8	PASS
2483.574773	-73.5	39.7	-33.8	PASS
2484.422205	-73.5	39.7	-33.8	PASS
2484.820997	-73.6	39.7	-33.8	PASS
2484.123112	-73.6	39.7	-33.8	PASS
2483.873867	-73.7	39.8	-33.8	PASS
2484.521903	-73.7	39.8	-33.8	PASS
2485.469033	-73.8	39.9	-33.8	PASS
2483.524924	-73.8	39.9	-33.8	PASS
2485.269637	-73.8	40.0	-33.8	PASS

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TEST REPORT

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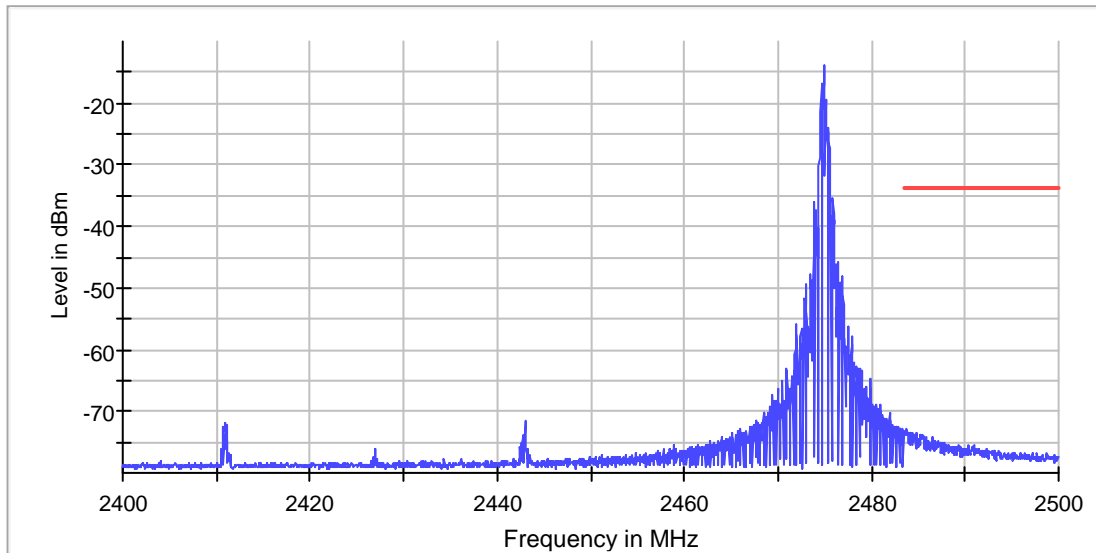
Measurement 1   Measurement 2

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	330	~ 330
Sweeptime	1.670 s	1.670 s		Sweeptime	330.000 ms	330.000 ms
Reference Level	-10.000 dBm	-10.000 dBm		Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO		Attenuation	10.000 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

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CMA Industrial Development Foundation Limited
Room 1302, Yan Hing Centre, 9-13 Wong Chuk Yeung St., Fo Tan, Shatin, N.T., Hong Kong.
Tel: (852) 2698 8198   Fax: (852) 2695 4177   E-mail: info@cmatcl.com   Web Site: http://www.cmatcl.com

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TEST REPORT

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Tx Spurious Emission (2475 MHz)

Result

DUT Frequency (MHz)	Result
2475.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
2491.749087	-40.7	-75.6	-41.2	34.3	PASS
4949.976948	-42.2	-55.9	-41.2	14.7	PASS

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2491.749087	-40.7	-0.5	-41.2
4949.976948	-42.2	1.0	-41.2
4950.476893	-42.3	1.1	-41.2
4950.976838	-42.8	1.6	-41.2
4949.477004	-43.1	1.9	-41.2
4948.977059	-44.0	2.8	-41.2
4948.477114	-47.5	6.3	-41.2
4951.476782	-48.4	7.2	-41.2
2492.249031	-50.1	8.9	-41.2
2483.749972	-53.7	12.5	-41.2
2387.254552	-54.7	13.5	-41.2
2491.249142	-55.0	13.8	-41.2
2387.754373	-55.2	13.9	-41.2
128.019947	-66.0	14.3	-51.7
127.969950	-67.1	15.3	-51.7

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

Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	19400	~ 19400
Sweeptime	19.400 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
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. 150	max. 150
Stable	3 / 3	3

Pre Measurement 2

Setting	Instrument Value	Target Value
RBW	1.000 MHz	<= 1.000 MHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	2800	~ 2800
Sweeptime	2.800 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	30	30
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. 150	max. 150
Stable	3 / 3	3

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TEST REPORT

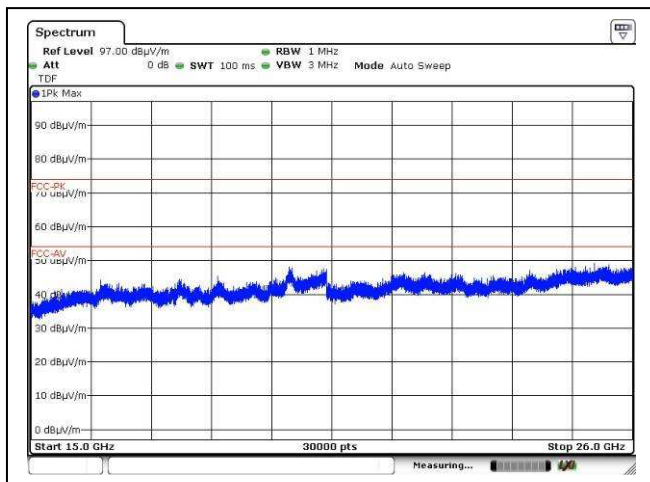Report No.   :   AU0058337(4)   Date :   30 Sep 2016
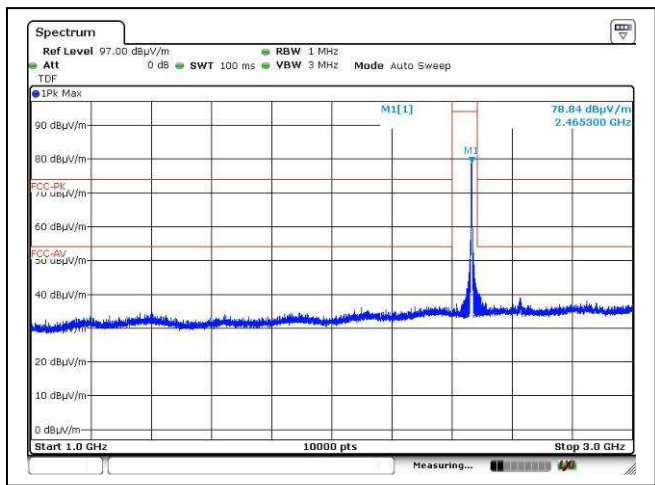
Final Measurement 2

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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TEST REPORT

Report No. : AU0058337(4) Date : 30 Sep 2016

Rx Spurious Emission (2475 MHz)

Result

DUT Frequency (MHz)	Result
2475.000000	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)
19721.830430	-59.3	18.1	-41.2
19699.831588	-60.0	18.7	-41.2
19757.828535	-60.1	18.9	-41.2
19758.828483	-60.3	19.1	-41.2
19700.831535	-60.8	19.5	-41.2
19703.831377	-60.9	19.7	-41.2
19689.832114	-61.0	19.8	-41.2
19769.827904	-61.1	19.9	-41.2
19770.827851	-61.1	19.9	-41.2
20160.807326	-61.1	19.9	-41.2
19710.831009	-61.2	19.9	-41.2
19787.826956	-61.2	20.0	-41.2
19717.830640	-61.2	20.0	-41.2
17709.936319	-61.2	20.0	-41.2
20395.794958	-61.2	20.0	-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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Limit　[limit.Result:1]　　×　　Threshold　[limit 2.Result:1]

Pre Measurement 1

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

Pre Measurement 2

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

FCC ID: VLEHS-1956TC

TEST REPORT

Report No.   :   AU0058337(4)   Date :   30 Sep 2016
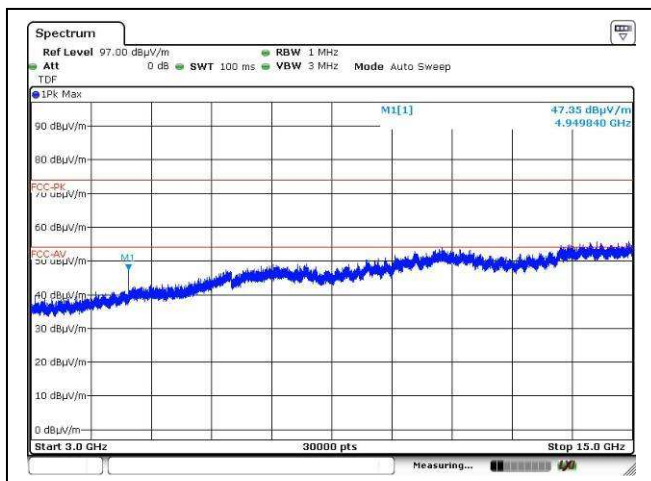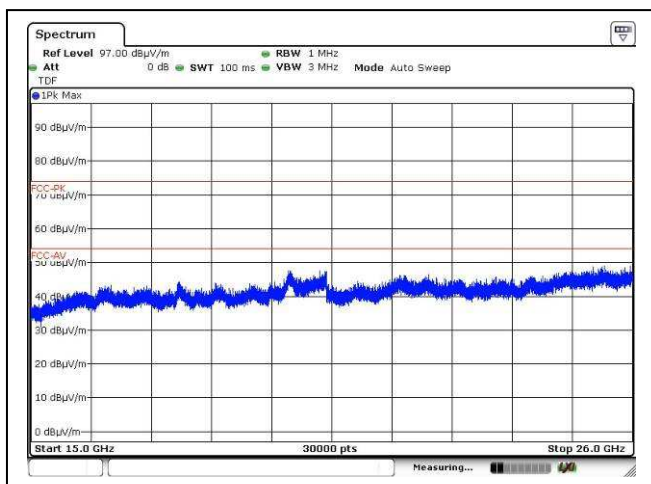
2.3   Radiated Emission Measurement Data

Environmental conditions:

Parameter	Recorded value	
Ambient temperature:	26	° 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)
2452.984	H	83.7	- 4.2	79.5	114.0	- 34.5	Peak
2452.935	V	83.8	- 4.2	79.6	114.0	- 34.4	Peak
2646.940	H	83.2	- 4.2	79.0	114.0	- 35.0	Peak
2465.005	V	85.1	- 4.2	80.9	114.0	- 33.1	Peak
2474.970	H	83.6	- 4.3	79.3	114.0	- 34.7	Peak
2475.001	V	83.2	- 4.3	78.9	114.0	- 35.1	Peak
4905.430	H	46.1	4.0	50.1	74.0	- 23.9	Peak
4906.039	V	53.4	4.0	57.4	74.0	- 16.6	Peak
4905.874	V	25.6	4.0	29.6	54.0	- 24.4	Average
4929.530	H	45.6	4.0	49.6	74.0	- 24.4	Peak
4929.595	V	52.4	4.0	56.4	74.0	- 17.6	Peak
4929.840	V	25.3	4.0	29.3	54.0	- 24.7	Average
4949.440	H	44.6	4.0	48.6	74.0	- 25.4	Peak
4949.950	V	52.8	4.0	56.8	74.0	- 17.2	Peak
4949.925	V	26.1	4.0	30.1	54.0	- 23.9	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.

FCC ID: VLEHS-1956TC

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Tel: (852) 2698 8198 Fax: (852) 2695 4177 E-mail: info@cmatcl.com Web Site: http://www.cmatcl.com

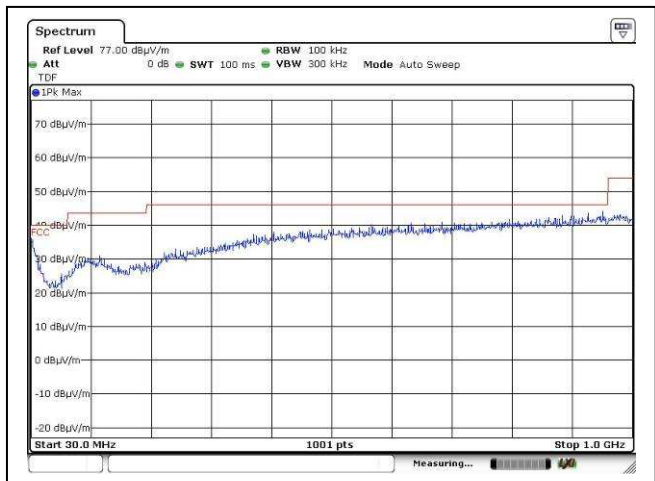# CMA Testing and Certification Laboratories
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TEST REPORT

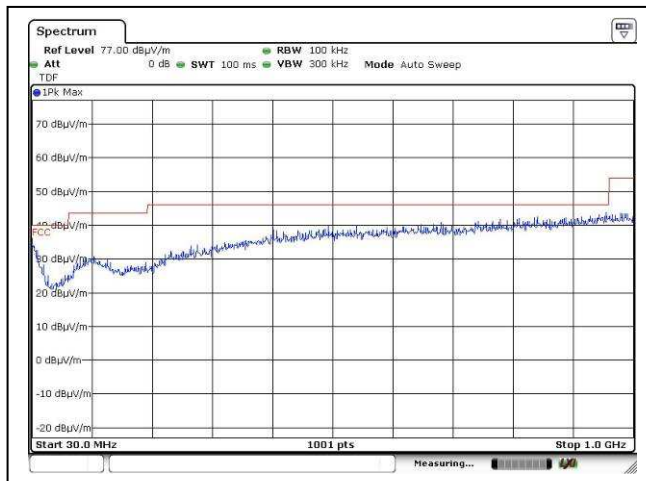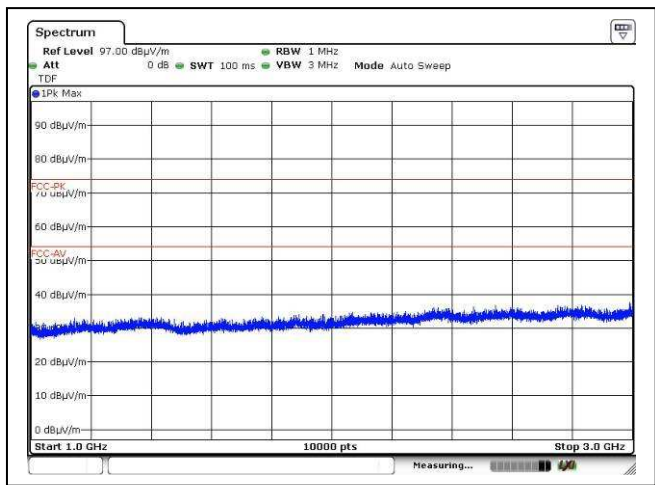Report No.　　　:　　AU0058337(4)　　　　　　　　　　Date :　　　30 Sep 2016

2.3　　Radiated Emission Measurement Data (Con't)
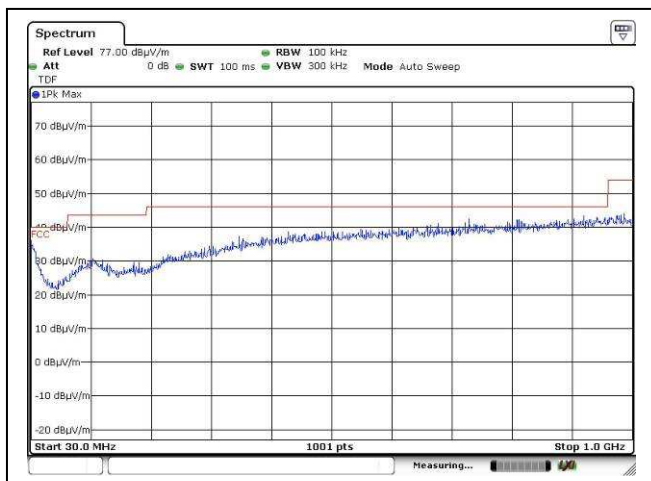
Lower channel, 30MHz – 1GHz, Horizontal
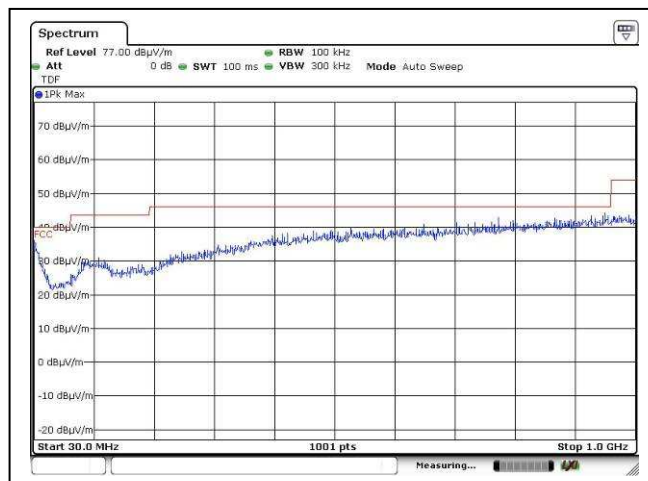
Lower channel, 30MHz – 1GHz, Vertical
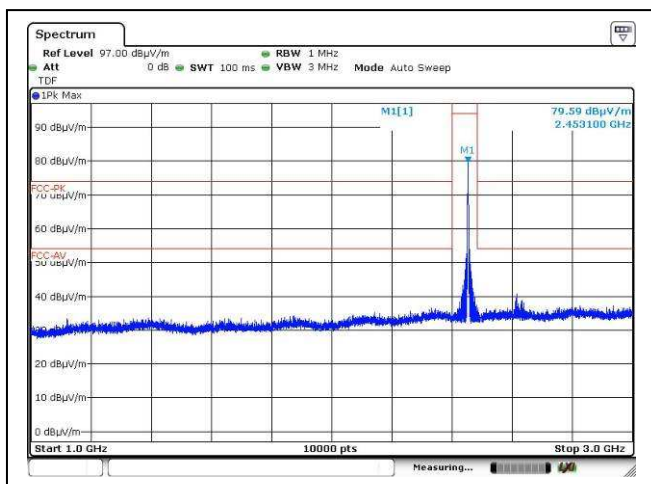
Lower channel, 1GHz – 3GHz, Horizontal
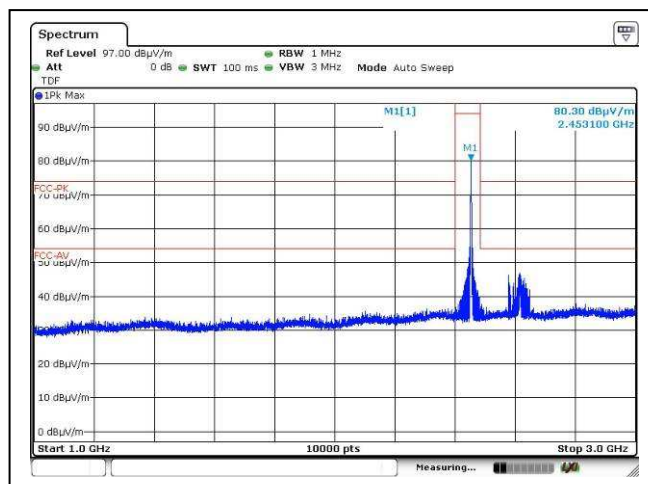
Lower channel, 1GHz – 3GHz, Vertical

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2.3   Radiated Emission Measurement Data (Con't)
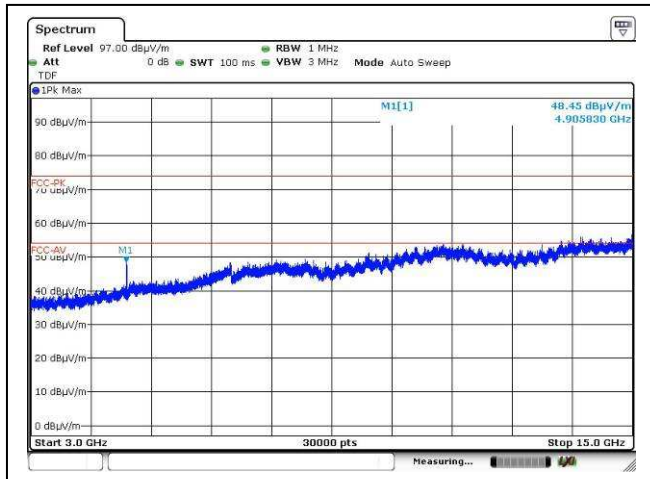
Lower channel, 3GHz – 15GHz, Horizontal
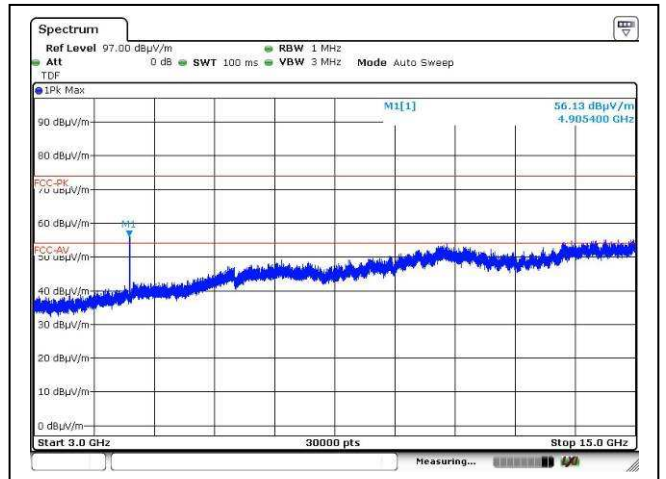
Lower channel, 3GHz – 15GHz, Vertical

Lower channel, 15GHz – 26GHz, Horizontal
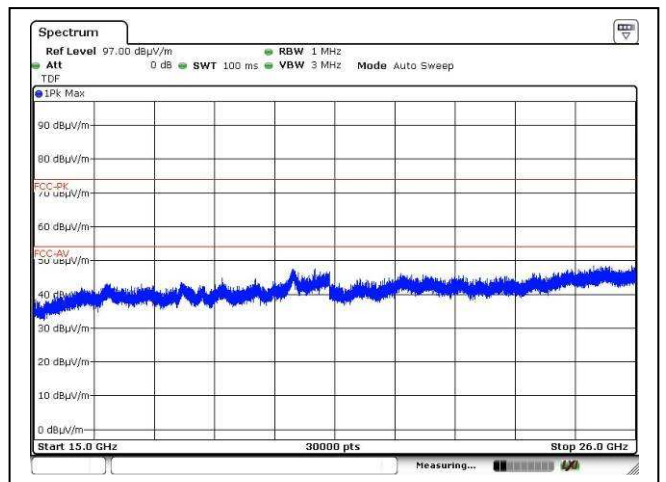
Lower channel, 15GHz – 26GHz, Vertical

FCC ID: VLEHS-1956TC

Report No.　　　　:　　AU0058337(4)　　　　　　　　　　Date :　　　30 Sep 2016

2.3　　Radiated Emission Measurement Data (Con't)
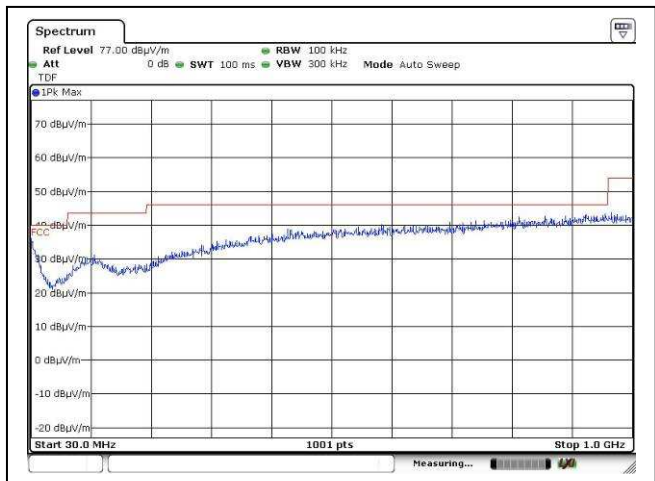
Middle channel, 30MHz – 1GHz, Horizontal
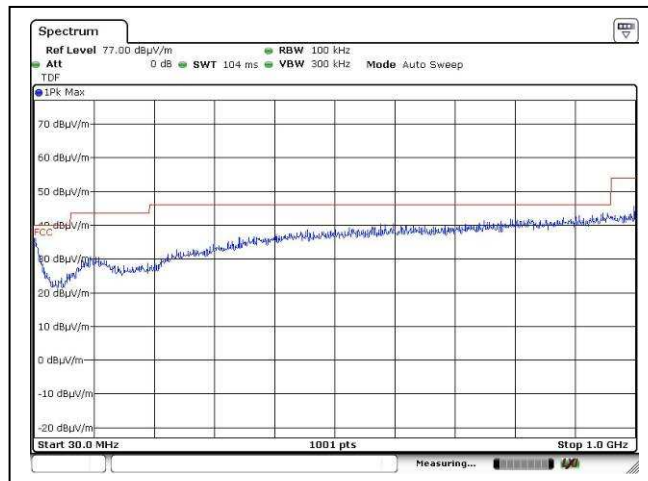
Middle channel, 30MHz – 1GHz, Vertical

Middle channel, 1GHz – 3GHz, Horizontal
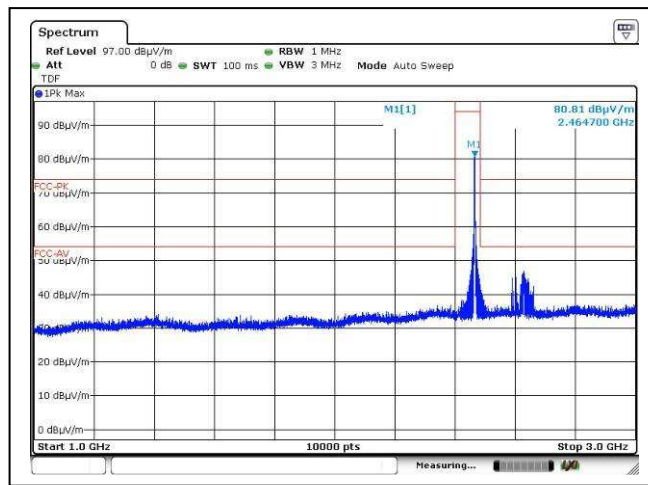
Middle channel, 1GHz – 3GHz, Vertical

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2.3   Radiated Emission Measurement Data (Con't)
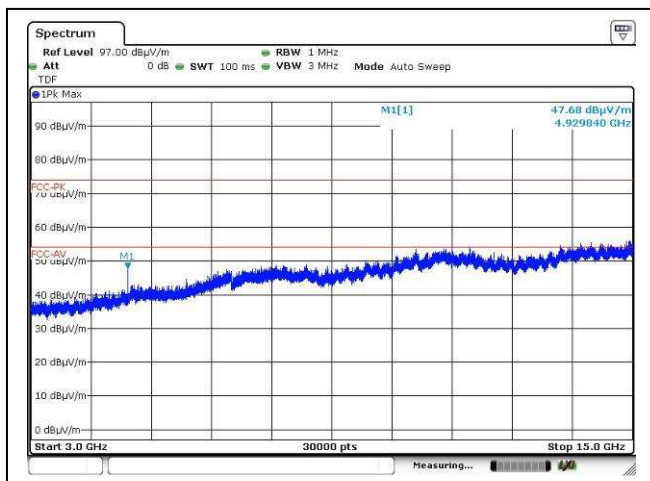
Middle channel, 3GHz – 15GHz, Horizontal
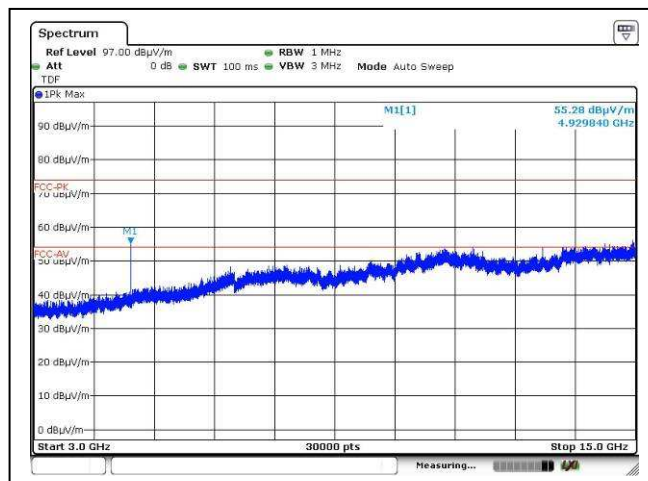
Middle channel, 3GHz – 15GHz, Vertical
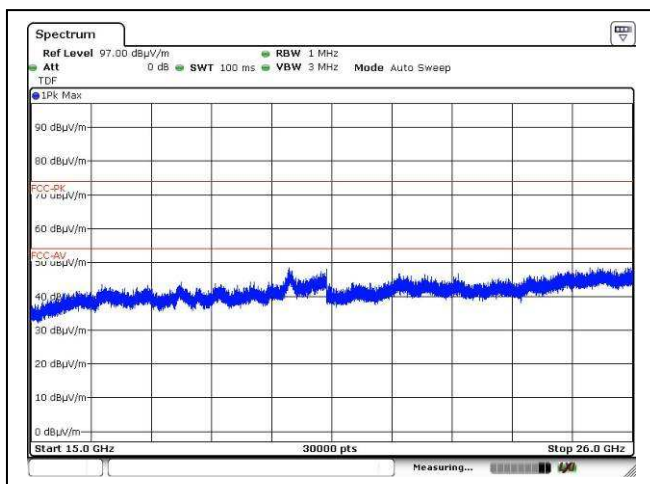
Middle channel, 15GHz – 26GHz, Horizontal
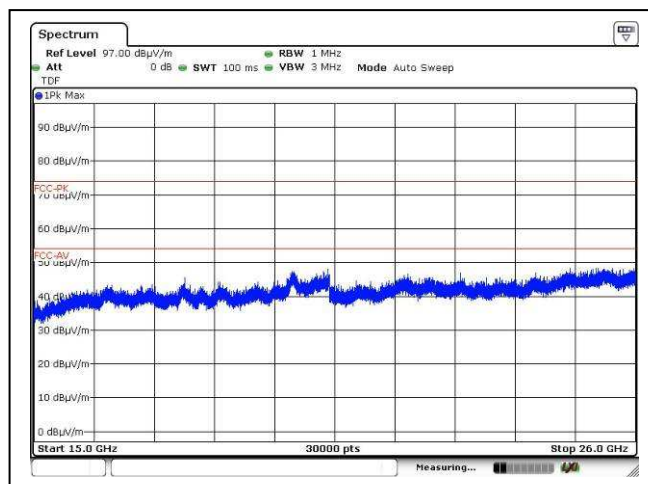
Middle channel, 15GHz – 26GHz, Vertical

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Report No.   :   AU0058337(4)   Date :   30 Sep 2016

2.3   **Radiated Emission Measurement Data (Con't)**
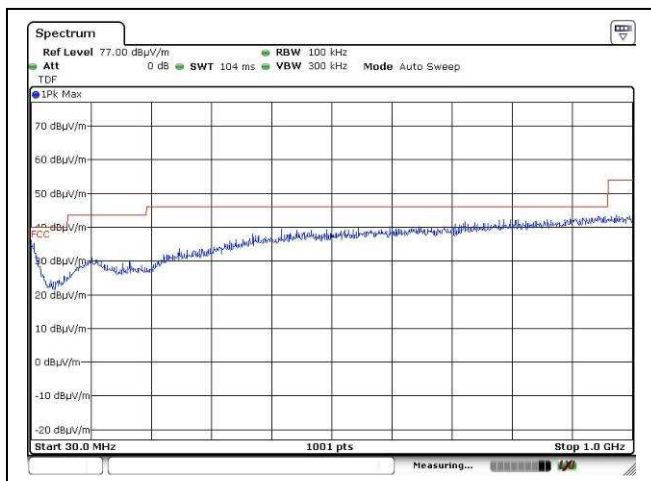
Higher channel, 30MHz – 1GHz, Horizontal
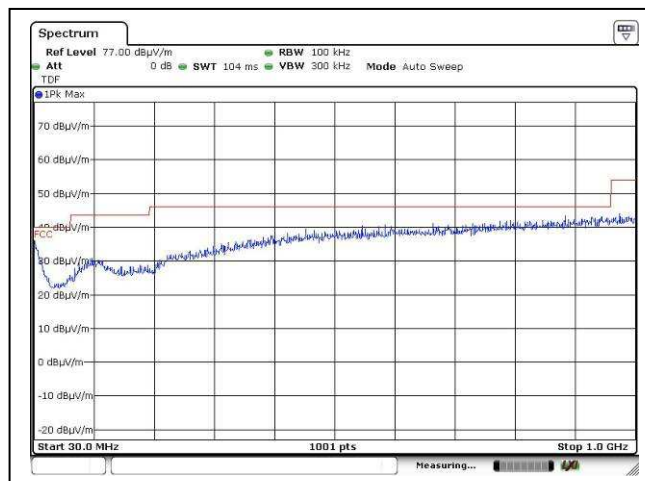
Higher channel, 30MHz – 1GHz, Vertical
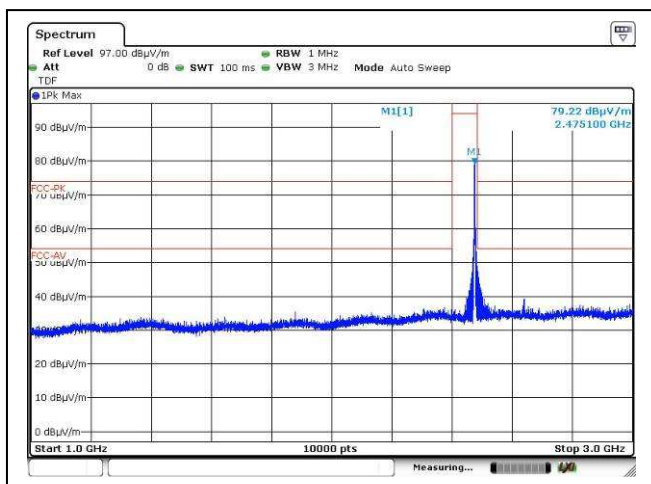
Higher channel, 1GHz – 3GHz, Horizontal
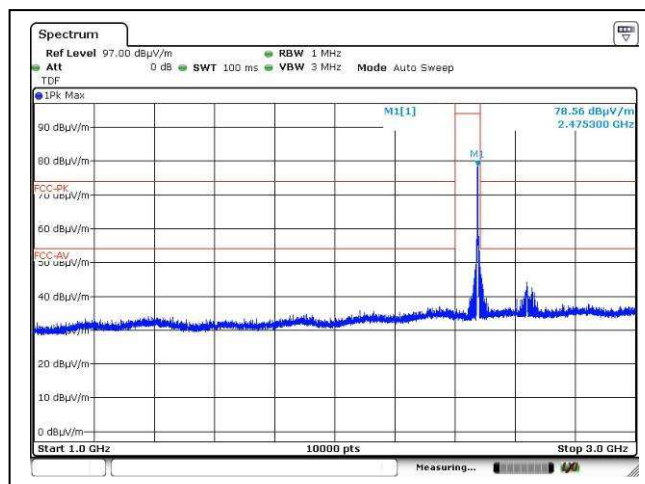
Higher channel, 1GHz – 3GHz, Vertical

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2.3　　Radiated Emission Measurement Data (Con't)

Higher channel, 3GHz – 15GHz, Horizontal
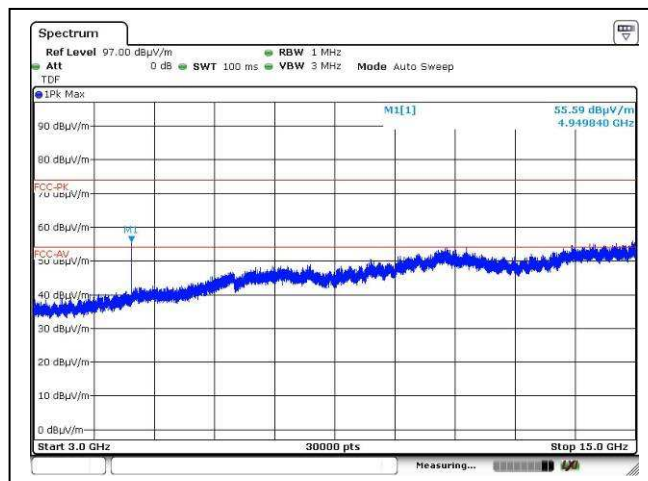
Higher channel, 3GHz – 15GHz, Vertical

Higher channel, 15GHz – 26GHz, Horizontal
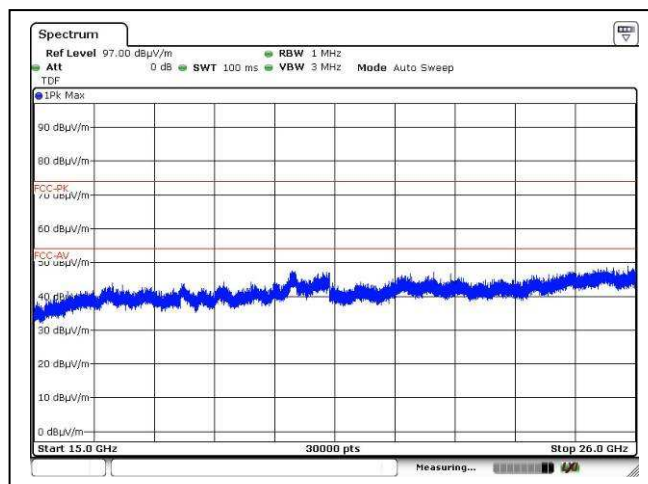
Higher channel, 15GHz – 26GHz, Vertical

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2.3   Radiated Emission Measurement Data (Con't)

Environmental conditions:

Parameter	Recorded value	
Ambient temperature:	26	° 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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2.3   Radiated Emission Measurement Data (Con't)

Receiving mode, 30MHz – 1GHz, Horizontal

Receiving mode, 30MHz – 1GHz, Vertical

Receiving mode, 1GHz – 3GHz, Horizontal
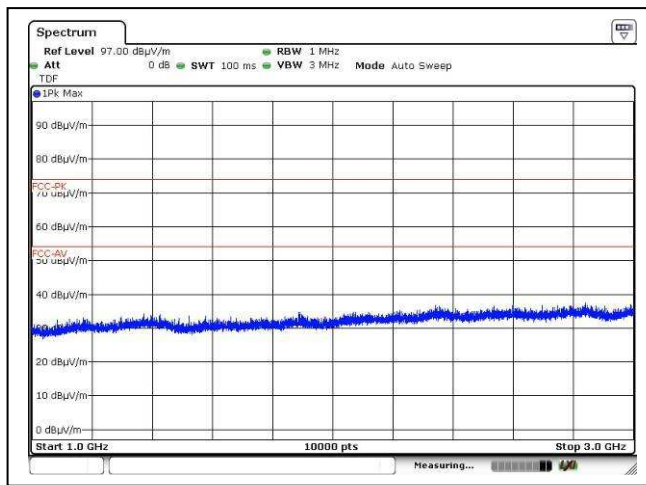
Receiving mode, 1GHz – 3GHz, Vertical

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2.3　　Radiated Emission Measurement Data (Con't)
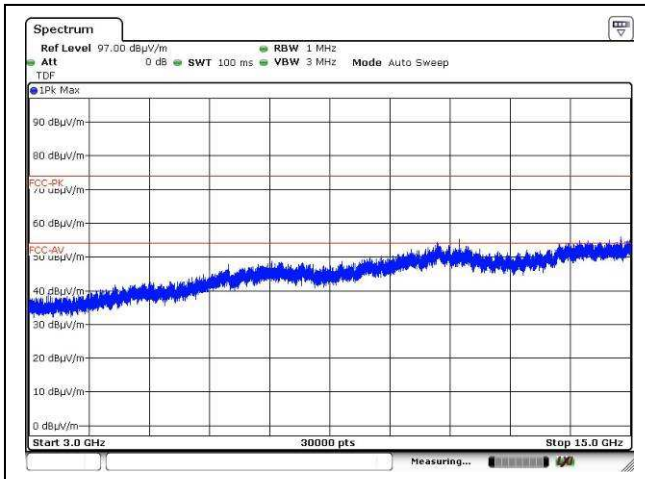
Receiving mode, 3GHz – 15GHz, Horizontal
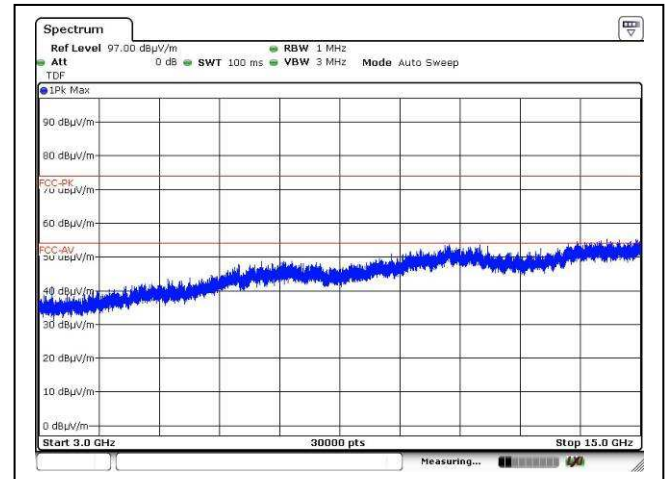
Receiving mode, 3GHz – 15GHz, Vertical
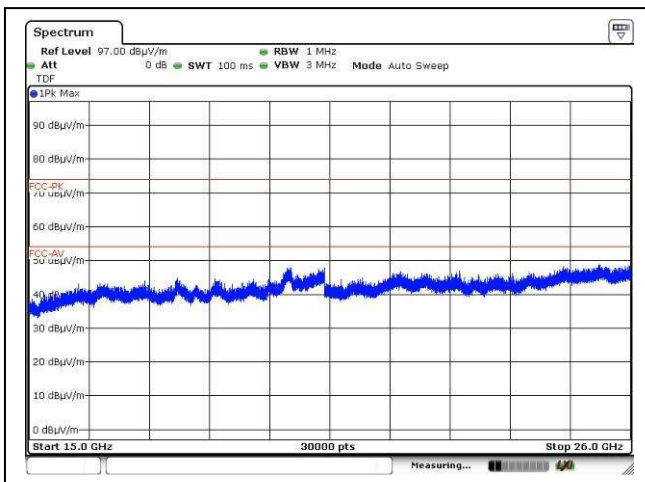
Receiving mode, 15GHz – 26GHz, Horizontal
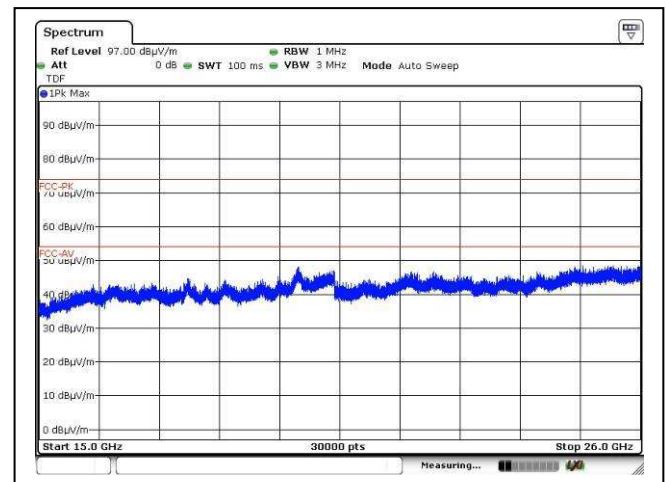
Receiving mode, 15GHz – 26GHz, Vertical

FCC ID: VLEHS-1956TC

TEST REPORT

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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4   Photograph

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

For electronic filing, the photos are saved with filename VLEHS-1956TC TSup.pdf.

4.2   Photographs of the External and Internal Configurations of the EUT

For electronic filing, the photos are saved with filename VLEHS-1956TC ExPho.pdf and VLEHS-1956TC 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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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	2	pages
A4	Photos of Internal Configurations	3	pages
A5	ID Label/Location	1	page

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TEST REPORT

Report No.   :   AU0058337(4)   Date :   30 Sep 2016

A1.   Photos of the set-up of Radiated Emissions

30MHz – 1GHz

9kHz – 30MHz

Tested by: Reviewed by:

Mr. LEUNG Shu-kan, Ken   Mr. WONG Lap-pong, Andrew

FCC ID: VLEHS-1956TC

Report No.   :   AU0058337(4)   Date :   30 Sep 2016

A1.   Photos of the set-up of Radiated Emissions

1GHz – 26GHz

Tested by: Reviewed by:

Mr. LEUNG Shu-kan, Ken   Mr. WONG Lap-pong, Andrew

FCC ID: VLEHS-1956TC

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Report No.   :   AU0058337(4)   Date :   30 Sep 2016

A2.   Photos of the set-up of Conducted Emissions

Tested by: Reviewed by:

Mr. LEUNG Shu-kan, Ken   Mr. WONG Lap-pong, Andrew

FCC ID: VLEHS-1956TC

A3   Photos of External Configurations

External Configuration 1

External Configuration 2

Tested by: Reviewed by:

Mr. LEUNG Shu-kan, Ken   Mr. WONG Lap-pong, Andrew

FCC ID: VLEHS-1956TC

TEST REPORT

Report No.　　　：　　AU0058337(4)　　　　　　　　Date :　　　30 Sep 2016

A3　　　Photos of External Configurations

External Configuration 3

External Configuration 4

Tested by:　　　　　　　　　　　　　　　　　　　Reviewed by:

Mr. LEUNG Shu-kan, Ken　　　　　　　　　　　　　　Mr. WONG Lap-pong, Andrew

FCC ID: VLEHS-1956TC

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TEST REPORT

A4   Photos of Internal Configurations

Internal Configuration 1

Internal Configuration 2

Tested by: Reviewed by:

Mr. LEUNG Shu-kan, Ken   Mr. WONG Lap-pong, Andrew

FCC ID: VLEHS-1956TC

Report No. : AU0058337(4) Date : 30 Sep 2016

A4 Photos of Internal Configurations

Internal Configuration 3

Internal Configuration 4

Tested by: _Ken_

Mr. LEUNG Shu-kan, Ken

Reviewed by:

Mr. WONG Lap-pong, Andrew

FCC ID: VLEHS-1956TC

Report No.   :   AU0058337(4)   Date :   30 Sep 2016

A4   Photos of Internal Configurations

EUT Antenna

Tested by: Reviewed by:

Mr. LEUNG Shu-kan, Ken   Mr. WONG Lap-pong, Andrew

FCC ID: VLEHS-1956TC

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Report No.　　　:　AU0058337(4)　　　　　　　　Date :　　30 Sep 2016

A5　　ID Label / Location

ID Label 1
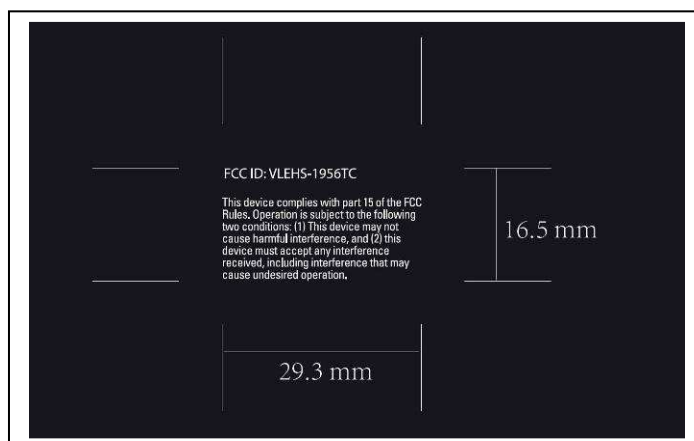
ID Label 2

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

Tested by:　　　　　　　　　　　　　　　　Reviewed by:

　Mr. LEUNG Shu-kan, Ken　　　　　　　　　　　Mr. WONG Lap-pong, Andrew

FCC ID: VLEHS-1956TC