

廠商會檢定中心

TEST REPORT

Report No. : AU0055298(7) Date : 22 Sep 2016

Application No. : LU031841(6)

Applicant : Zego Electronic Company Limited

Room 703, Kowloon Building, 555 Nathan Road, Kowloon, HK

Sample Description : One(1) item of submitted sample stated to be <u>Controller of Stunt Drone</u>

of Model No. 317889

Sample registration No. : RU038082-001

Radio Frequency : 2402MHz – 2475MHz Transceiver

Rating : 4 x 1.5V AAA size batteries

No. of submitted sample : Two (2) set (s)

Date Received : 06 Sep 2016

Test Period : 06 Sep 2016 to 09 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.

For and on behalf of

CMA Industrial Development Foundation Limited

Authorized Signature : Page 1 of 58

Mr. WONG Lap-pone Andrew

Manager Electrical Division



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1 General Information

1.1 General Description

The equipment under test (EUT) is a controller for Stunt Drone. The EUT is power by $4 \times 1.5 \text{V}$ AAA size batteries. It operates at 2402 MHz - 2475 MHz. 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:

- U3 and its associated circuit act as MCU
- U1 (module) and its associated circuit act as RF circuit
- U1 and its associated circuit act as power supply circuit

- Y1 and its associated circuit act as oscillator

- S1, S2, S3, S4, S5, S6, S7, S9, and its associated circuit act as copter control

VR1, VR2

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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:

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, Fo Tan, Shatin, New Territories, Hong Kong.

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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 Testin	g 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:

ParameterRecorded valueAmbient temperature:26° CRelative humidity:61%

Summary

Test	Frequency	Nominal	Nominal	Result
	(MHz)	Power	Bandwidth	
		(dBm)	(MHz)	
RF output power	2402.000	0.0	1.000000	PASS
Power Spectral Density	2402.000	0.0	1.000000	PASS
Minimum Emission Bandwidth 6 dB	2402.000	0.0	1.000000	PASS
Band Edge low	2402.000	0.0	1.000000	PASS
Tx Spurious Emission	2402.000	0.0	1.000000	PASS
Rx Spurious Emission	2402.000	0.0	1.000000	PASS
RF output power	2433.000	0.0	1.000000	PASS
Power Spectral Density	2433.000	0.0	1.000000	PASS
Minimum Emission Bandwidth 6 dB	2433.000	0.0	1.000000	PASS
Tx Spurious Emission	2433.000	0.0	1.000000	PASS
Rx Spurious Emission	2433.000	0.0	1.000000	PASS
RF output power	2475.000	0.0	1.000000	PASS
Power Spectral Density	2475.000	0.0	1.000000	PASS
Minimum Emission Bandwidth 6 dB	2475.000	0.0	1.000000	PASS
Band Edge high	2475.000	0.0	1.000000	PASS
Tx Spurious Emission	2475.000	0.0	1.000000	PASS
Rx Spurious Emission	2475.000	0.0	1.000000	PASS

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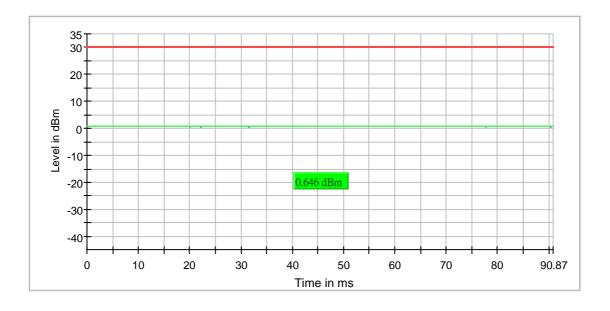
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RF output power (2402 MHz)

Result

DUT Frequency (MHz)	Gated EIRP (dBm)	Limit Max (dBm)	DutyCycle (%)	Result
2402.000000	0.6	30.0	9.113	PASS



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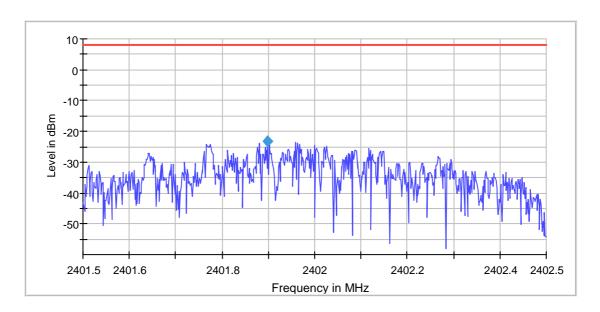
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Power Spectral Density (2402 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2402.000000	2401.898952	-23.260	8.0	PASS



Measurement

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
Start Frequency	2.40150 GHz	2.40150 GHz	Stablemode	Trace	Trace
Stop Frequency	2.40250 GHz	2.40250 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	0.000 dBm	0.000 dBm			
Attenuation	20.000 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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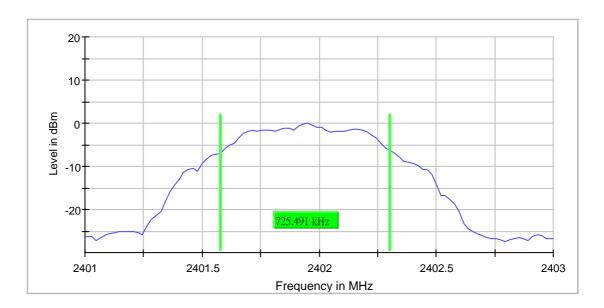
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Minimum Emission Bandwidth 6 dB (2402 MHz)

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
2402.000000	0.725491	0.500000		2401.578431	2402.303922	-0.1	PASS



Measurement

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz	Stablemode	Trace	Trace
Stop Frequency	2.40300 GHz	2.40300 GHz	Stablevalue	0.30	0.30
Span	2.000 MHz	2.000 MHz	Run	28 / 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	0.000 dBm	0.000 dBm			
Attenuation	20.000 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 (2402 MHz)

Result

DUT	Result
Frequency	
(MHz)	
2402.000000	PASS

Inband Peak

Frequency	Level
(MHz)	(dBm)
2401.973818	-13.7

Measurements

Mododici				
Frequency	Level	Margin	Limit	Result
(MHz)	(dBm)	(dB)	(dBm)	
2399.925042	-54.4	20.8	-33.7	PASS
2399.875069	-54.7	21.1	-33.7	PASS
2399.825097	-56.3	22.7	-33.7	PASS
2399.775125	-56.7	23.0	-33.7	PASS
2399.425319	-58.3	24.7	-33.7	PASS
2399.525264	-58.8	25.1	-33.7	PASS
2399.475292	-58.8	25.1	-33.7	PASS
2399.375347	-58.9	25.3	-33.7	PASS
2399.575236	-59.1	25.4	-33.7	PASS
2399.725153	-59.8	26.1	-33.7	PASS
2399.325375	-60.0	26.4	-33.7	PASS
2399.675180	-60.2	26.5	-33.7	PASS
2399.275403	-60.7	27.0	-33.7	PASS
2399.625208	-60.9	27.3	-33.7	PASS
2399.075514	-61.3	27.6	-33.7	PASS

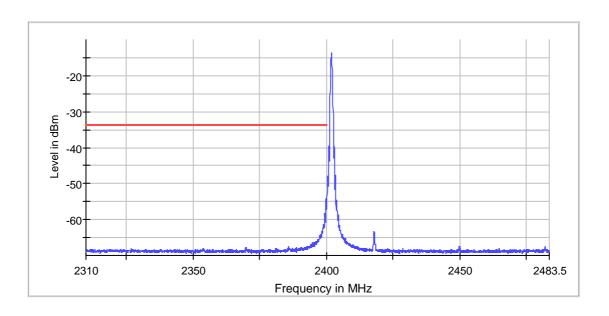
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Measurement 1

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	1800	~ 1800
Sweeptime	1.670 s	1.670 s	Sweeptime	1.800 s	1.800 s
Reference Level	0.000 dBm	0.000 dBm	Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO	Attenuation	20.000 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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Tx Spurious Emission (2402 MHz)

Result

DUT	Result
Frequency (MHz)	
(
2402.000000	PASS

Final measurements

Frequency	Level Pre	level	Limit	Margin	Result		
(MHz)	Measurement	(dBm)	(dBm)	(dB)			
	(dBm)						
2352.267047	-47.1	-78.6	-41.2	37.4	PASS		
2365.262406	-44.3	-77.3	-41.2	36.1	PASS		
2367.261692	-43.7	-77.0	-41.2	35.8	PASS		
2381.756516	-38.7	-73.7	-41.2	32.5	PASS		
2383.755801	-37.8	-72.8	-41.2	31.5	PASS		

Pre Measurements

i io moadai dilidillo						
Frequency	Level	Margin	Limit			
(MHz)	(dBm)	(dB)	(dBm)			
2383.755801	-37.8	-3.4	-41.2			
2381.756516	-38.7	-2.5	-41.2			
2382.256337	-38.8	-2.4	-41.2			
2367.261692	-43.7	2.5	-41.2			
2365.262406	-44.3	3.1	-41.2			
2384.255623	-44.9	3.7	-41.2			
2364.762585	-44.9	3.7	-41.2			
2352.267047	-47.1	5.9	-41.2			
2348.268476	-47.5	6.3	-41.2			
2366.761871	-48.5	7.3	-41.2			
2336.272760	-49.8	8.5	-41.2			
2336.772581	-49.8	8.6	-41.2			
2329.275259	-50.1	8.9	-41.2			
2329.775080	-50.3	9.0	-41.2			
2330.274902	-50.3	9.0	-41.2			

Measurement Settings

modean emem eetiinge							
Start	Stop	Pre	Final				
Frequency (MHz)	Frequency (MHz)	Measurement	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				

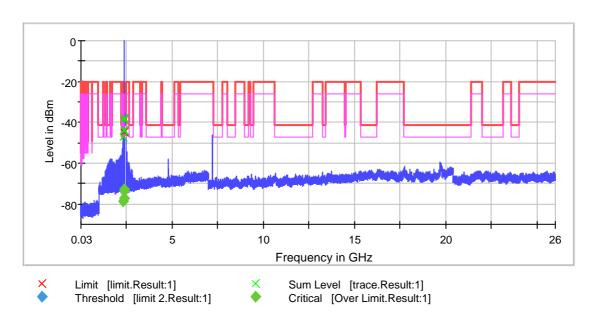
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Pre Measurement 1

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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Final Measurement 2

Setting	Instrument	Target Value
	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 (2402 MHz)

Result

DUT Frequency (MHz)	Result
2402.000000	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	-60.2	19.0	-41.2
19691.832009	-60.3	19.0	-41.2
19728.830062	-60.3	19.1	-41.2
19715.830746	-60.5	19.3	-41.2
19746.829114	-60.7	19.5	-41.2
19688.832167	-61.0	19.8	-41.2
19735.829693	-61.0	19.8	-41.2
19740.829430	-61.2	19.9	-41.2
20389.795274	-61.2	19.9	-41.2
19734.829746	-61.2	20.0	-41.2
19708.831114	-61.3	20.0	-41.2
19730.829956	-61.3	20.0	-41.2
19705.831272	-61.4	20.1	-41.2
19753.828746	-61.4	20.2	-41.2
19769.827904	-61.4	20.2	-41.2

Measurement Settings

<u> </u>							
Start	Stop	Pre	Final				
Frequency	Frequency	Measurement	Measurement				
(MHz)	(MHz)						
30.000000	1000.000000	1	1				
1000.000000	7000.000000	2	2				
7000.000000	26000.000000	2	2				

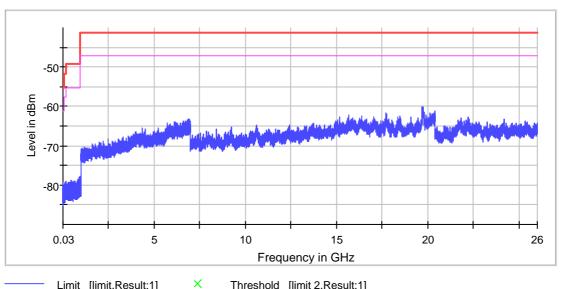
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Limit [limit.Result:1]

Threshold [limit 2.Result:1]

Pre Measurement 1

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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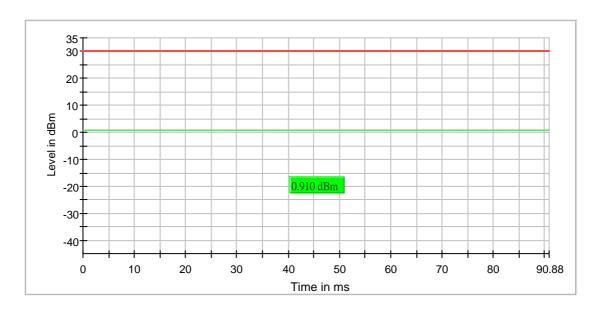
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RF output power (2433 MHz)

Result

DUT Frequency (MHz)	Gated EIRP (dBm)	Limit Max (dBm)	DutyCycle (%)	Result
2433.000000	0.9	30.0	9.108	PASS



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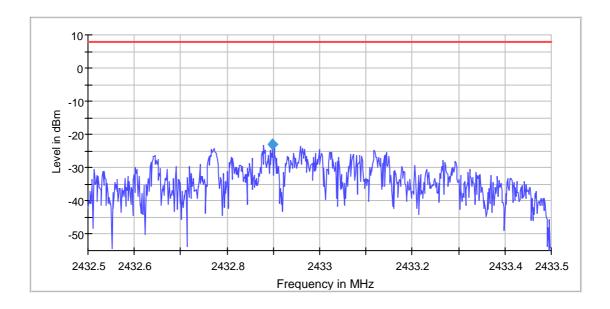
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Power Spectral Density (2433 MHz)

Result

	DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
ſ	2433.000000	2432.898952	-22.892	8.0	PASS



Measurement

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
Start Frequency	2.43250 GHz	2.43250 GHz	Stablemode	Trace	Trace
Stop Frequency	2.43350 GHz	2.43350 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	0.000 dBm	0.000 dBm			
Attenuation	20.000 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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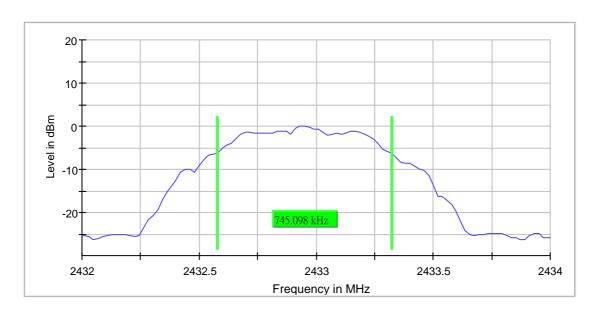
TEST REPORT

Report No. : AU0055298(7) Date : 22 Sep 2016

Minimum Emission Bandwidth 6 dB (2433 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
2433.000000	0.745098	0.500000	-	2432.578431	2433.323529	0.1	PASS



Measurement

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
Start Frequency	2.43200 GHz	2.43200 GHz	Stablemode	Trace	Trace
Stop Frequency	2.43400 GHz	2.43400 GHz	Stablevalue	0.30	0.30
Span	2.000 MHz	2.000 MHz	Run	28 / 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	0.000 dBm	0.000 dBm			
Attenuation	20.000 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. : AU0055298(7) Date : 22 Sep 2016

Tx Spurious Emission (2433 MHz)

Result

DUT	Result
Frequency (MHz)	
2433.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
2381.256694	-47.1	-78.6	-41.2	37.3	PASS
7298.340729	-46.9	-60.8	-41.2	19.5	PASS

Pre Measurements

Frequency	Level	Margin	Limit		
(MHz)	(dBm)	(dB)	(dBm)		
7298.340729	-46.9	5.7	-41.2		
7299.528154	-47.0	5.8	-41.2		
7300.121867	-47.1	5.8	-41.2		
2381.256694	-47.1	5.9	-41.2		
2490.749197	-47.4	6.1	-41.2		
2389.753659	-47.6	6.4	-41.2		
2374.259193	-47.6	6.4	-41.2		
2374.759015	-47.9	6.7	-41.2		
7298.934442	-48.1	6.8	-41.2		
7297.747016	-48.1	6.9	-41.2		
2380.756873	-48.3	7.1	-41.2		
2355.765798	-50.5	9.3	-41.2		
2352.267047	-50.6	9.4	-41.2		
2353.766512	-50.9	9.6	-41.2		
2340.771153	-51.4	10.2	-41.2		

Measurement Settings

<u> </u>					
Start	Stop	Pre	Final		
Frequency (MHz)	Frequency (MHz)	Measurement	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		

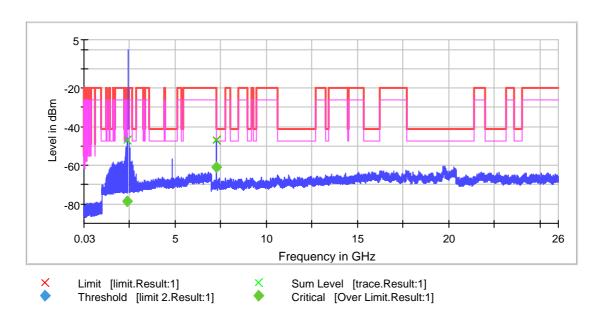
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TEST REPORT

Report No. : AU0055298(7) Date : 22 Sep 2016



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. : AU0055298(7) Date : 22 Sep 2016

Final Measurement 2

i iliai Measulellielle 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. : AU0055298(7) Date : 22 Sep 2016

Rx Spurious Emission (2433 MHz)

Result

DUT	Result
	Result
Frequency	
(MHz)	
2433.000000	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)
19744.829220	-60.3	19.1	-41.2
19727.830114	-60.4	19.1	-41.2
19708.831114	-60.4	19.2	-41.2
19730.829956	-60.5	19.2	-41.2
19703.831377	-60.5	19.3	-41.2
19756.828588	-60.6	19.3	-41.2
19734.829746	-60.6	19.4	-41.2
19735.829693	-60.6	19.4	-41.2
19733.829798	-60.6	19.4	-41.2
19743.829272	-60.7	19.5	-41.2
19718.830588	-60.9	19.6	-41.2
20253.802431	-60.9	19.6	-41.2
19737.829588	-61.0	19.8	-41.2
19753.828746	-61.0	19.8	-41.2
19726.830167	-61.0	19.8	-41.2

Measurement Settings

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

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TEST REPORT

Report No. : AU0055298(7) Date : 22 Sep 2016



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

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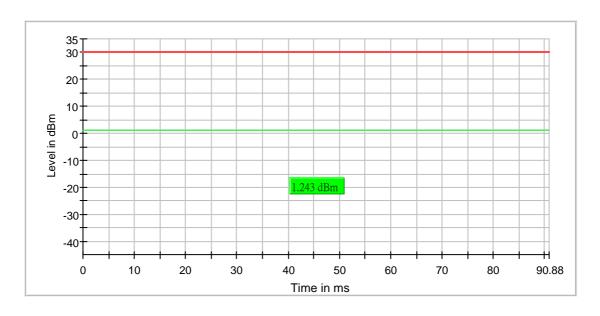
TEST REPORT

Report No. : AU0055298(7) Date : 22 Sep 2016

RF output power (2475 MHz)

Result

DUT Frequency (MHz)	Gated EIRP (dBm)	Limit Max (dBm)	DutyCycle (%)	Result
2475.000000	1.2	30.0	9.116	PASS



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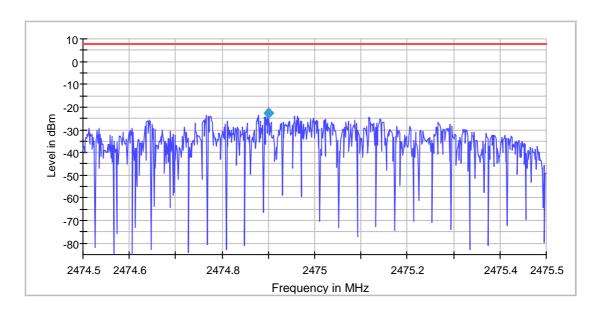
TEST REPORT

Report No. : AU0055298(7) Date : 22 Sep 2016

Power Spectral Density (2475 MHz)

Result

	DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
Г	2475.000000	2474.900449	-22.918	8.0	PASS



Measurement

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
Start Frequency	2.47450 GHz	2.47450 GHz	Stablemode	Trace	Trace
Stop Frequency	2.47550 GHz	2.47550 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	0.000 dBm	0.000 dBm			
Attenuation	20.000 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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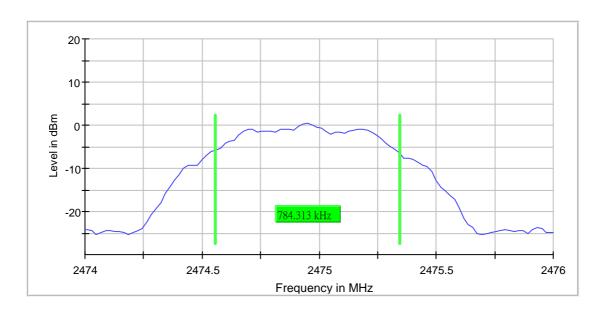
TEST REPORT

Report No. : AU0055298(7) Date : 22 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	0.784313	0.500000		2474.558824	2475.343137	0.4	PASS



Measurement

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
Start Frequency	2.47400 GHz	2.47400 GHz	Stablemode	Trace	Trace
Stop Frequency	2.47600 GHz	2.47600 GHz	Stablevalue	0.30	0.30
Span	2.000 MHz	2.000 MHz	Run	39 / 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	0.000 dBm	0.000 dBm			
Attenuation	20.000 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. : AU0055298(7) Date : 22 Sep 2016

Band Edge high (2475 MHz)

Result

Result
PASS

Inband Peak

Frequency	Level
(MHz)	(dBm)
2474.930132	-13.4

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
` '	,	` '	. ,	
2490.952417	-61.9	28.5	-33.4	PASS
2490.902568	-62.4	29.0	-33.4	PASS
2491.002266	-63.1	29.7	-33.4	PASS
2490.852719	-63.1	29.7	-33.4	PASS
2490.753021	-63.6	30.2	-33.4	PASS
2490.802870	-63.6	30.2	-33.4	PASS
2491.101964	-63.9	30.4	-33.4	PASS
2491.052115	-63.9	30.5	-33.4	PASS
2490.703172	-64.5	31.1	-33.4	PASS
2491.151813	-64.8	31.4	-33.4	PASS
2491.251511	-65.0	31.5	-33.4	PASS
2490.603474	-65.1	31.7	-33.4	PASS
2490.653323	-65.5	32.1	-33.4	PASS
2491.201662	-65.5	32.1	-33.4	PASS
2491.301360	-66.2	32.8	-33.4	PASS

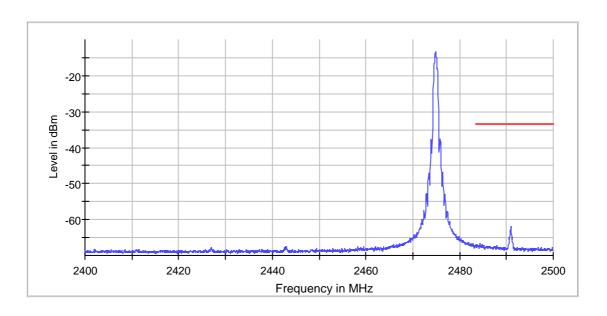
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TEST REPORT

Report No. : AU0055298(7) Date : 22 Sep 2016



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	0.000 dBm	0.000 dBm	Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO	Attenuation	20.000 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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TEST REPORT

Report No. : AU0055298(7) Date : 22 Sep 2016

Tx Spurious Emission (2475 MHz)

Result

DUT	Danult
DUT	Result
Frequency	
(MHz)	
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)
7425.989001	-47.9	6.6	-41.2
7424.207862	-47.9	6.6	-41.2
7425.395288	-48.1	6.9	-41.2
7424.801575	-48.5	7.3	-41.2
2491.249142	-48.7	7.4	-41.2
2490.749197	-48.8	7.6	-41.2
2491.749087	-49.0	7.7	-41.2
7423.614149	-49.2	8.0	-41.2
7426.582714	-50.5	9.3	-41.2
2361.263834	-52.3	11.1	-41.2
2492.249031	-52.9	11.6	-41.2
2360.764013	-53.2	11.9	-41.2
2365.262406	-53.6	12.3	-41.2
2354.766155	-53.7	12.5	-41.2
2484.749862	-54.5	13.3	-41.2

Measurement Settings

Start	Stop	Pre	Final			
Frequency	Frequency	Measurement	Measurement			
(MHz)	(MHz)					
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

Report No. : AU0055298(7) Date : 22 Sep 2016



★ Limit [limit.Result:1]

★ Sum Level [trace.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. : AU0055298(7) Date : 22 Sep 2016

Rx Spurious Emission (2475 MHz)

Result

DUT	Result
Frequency (MHz)	
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)
19725.830219	-58.8	17.6	-41.2
19732.829851	-60.5	19.3	-41.2
19735.829693	-60.6	19.4	-41.2
19714.830798	-60.6	19.4	-41.2
19733.829798	-60.7	19.5	-41.2
19784.827114	-60.8	19.6	-41.2
19738.829535	-60.9	19.6	-41.2
19758.828483	-60.9	19.7	-41.2
19755.828641	-60.9	19.7	-41.2
19754.828693	-60.9	19.7	-41.2
19739.829483	-61.0	19.7	-41.2
19774.827641	-61.0	19.7	-41.2
19785.827062	-61.0	19.8	-41.2
19701.831483	-61.3	20.0	-41.2
19757.828535	-61.3	20.1	-41.2

Measurement Settings

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

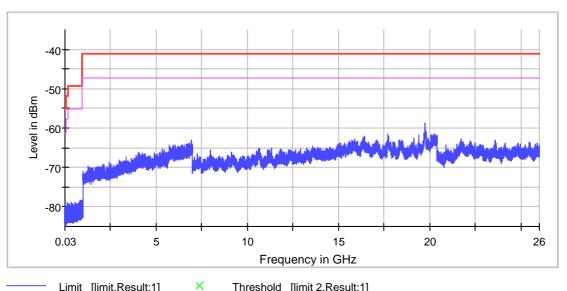
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TEST REPORT

Report No. Date: 22 Sep 2016 AU0055298(7)



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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TEST REPORT

Report No. : AU0055298(7) Date : 22 Sep 2016

2.3 Radiated Emission Measurement Data

Environmental conditions:

ParameterRecorded valueAmbient temperature:26° CRelative 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)
2402.199	Н	87.9	- 4.2	83.7	114.0	- 30.3	Peak
2401.714	V	92.5	- 4.2	88.3	114.0	- 25.7	Peak
2432.713	Н	87.3	- 4.2	83.1	114.0	- 30.9	Peak
2432.689	V	92.1	- 4.2	87.9	114.0	- 26.1	Peak
2475.195	Н	89.4	- 4.3	85.1	114.0	- 28.9	Peak
2475.215	V	92.2	- 4.3	87.9	114.0	- 26.1	Peak
7205.070	Н	43.5	11.5	55.0	74.0	- 19.0	Peak
7205.735	Н	21.3	11.5	32.8	54.0	- 21.2	Average
7205.261	V	42.8	11.5	54.3	74.0	- 19.7	Peak
7205.615	V	21.2	11.5	32.7	54.0	- 21.3	Average
7299.672	Н	43.7	11.5	55.2	74.0	- 18.8	Peak
7299.298	Н	21.5	11.5	33.0	54.0	- 21.0	Average
7298.070	V	44.8	11.5	56.3	74.0	- 17.7	Peak
7298.276	V	21.5	11.5	33.0	54.0	- 21.0	Average
7425.631	Н	43.2	11.5	54.7	74.0	- 19.3	Peak
7424.157	Н	21.8	11.5	33.3	54.0	- 20.7	Average
7424.149	V	44.9	11.5	56.4	74.0	- 17.6	Peak
7424.325	V	22.0	11.5	33.5	54.0	- 20.5	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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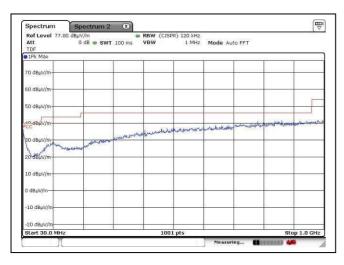


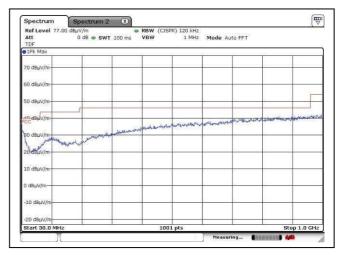
廠商會檢定中心

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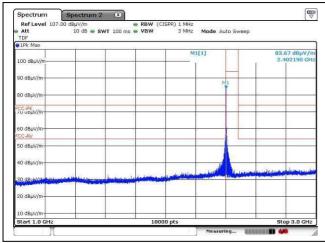
2.3 Radiated Emission Measurement Data (Con't)



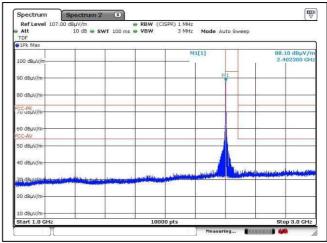


Lower channel, 30MHz - 1GHz, Horizontal

Lower channel, 30MHz – 1GHz, Vertical



Lower channel, 1GHz – 3GHz, Horizontal



Lower channel, 1GHz – 3GHz, Vertical

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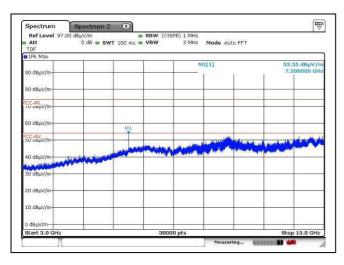


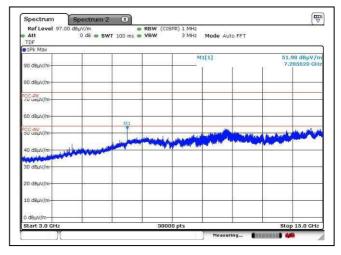
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Report No. : AU0055298(7) Date : 22 Sep 2016

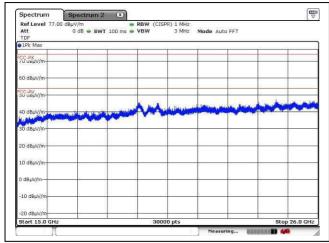
2.3 Radiated Emission Measurement Data (Con't)



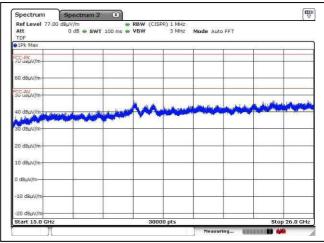


Lower channel, 3GHz - 15GHz, Horizontal

Lower channel, 3GHz - 15GHz, Vertical



Lower channel, 15GHz - 26GHz, Horizontal



Lower channel, 15GHz – 26GHz, Vertical

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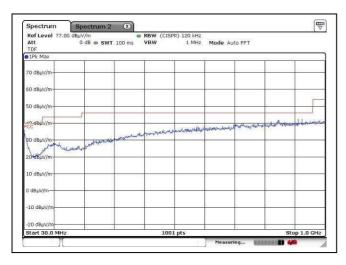


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TEST REPORT

Report No. : AU0055298(7) Date : 22 Sep 2016

2.3 Radiated Emission Measurement Data (Con't)



Att 0 dB • SWT 100 ms VBW 1 MHz Mode Auto FFT

TOF

• IPk Max

70 dBuV/m

50 dBuV/m

20 dBuV/m

10 dBuV/m

-10 dBuV/m

-20 dBuV/m

-20 dBuV/m

Start 30.0 MHz

1001 pts

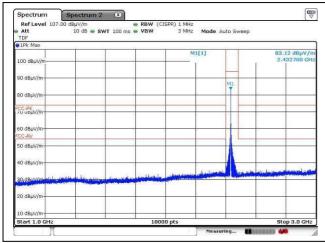
Stop 1.0 GHz

Heasuring...

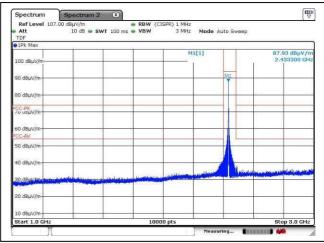
™

Middle channel, 30MHz - 1GHz, Horizontal

Middle channel, 30MHz – 1GHz, Vertical







Middle channel, 1GHz – 3GHz, Vertical

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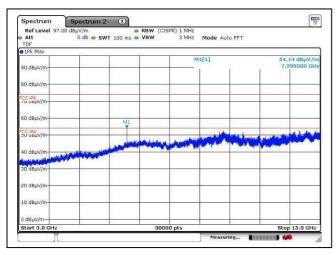


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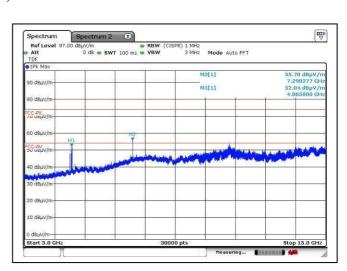
TEST REPORT

Report No. : AU0055298(7) Date : 22 Sep 2016

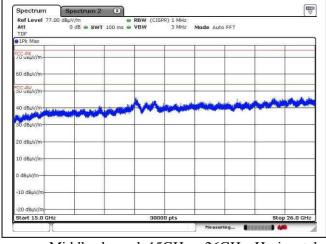
2.3 Radiated Emission Measurement Data (Con't)



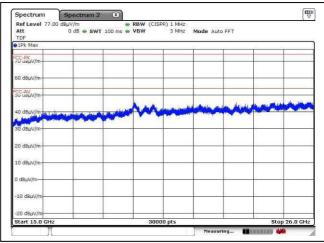
Middle channel, 3GHz - 15GHz, Horizontal



Middle channel, 3GHz – 15GHz, Vertical



Middle channel, 15GHz - 26GHz, Horizontal



Middle channel, 15GHz - 26GHz, Vertical

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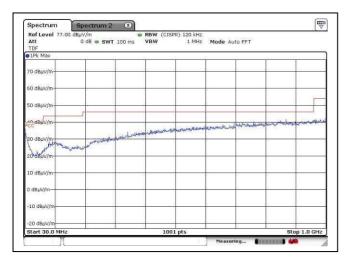


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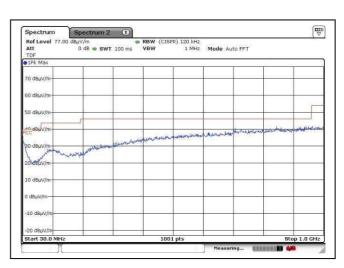
TEST REPORT

Report No. : AU0055298(7) Date : 22 Sep 2016

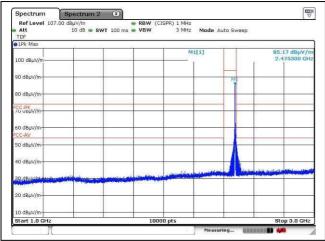
2.3 Radiated Emission Measurement Data (Con't)



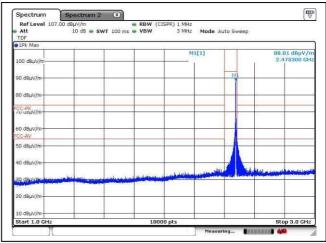
Higher channel, 30MHz - 1GHz, Horizontal



Higher channel, 30MHz – 1GHz, Vertical



Higher channel, 1GHz - 3GHz, Horizontal



Higher channel, 1GHz – 3GHz, Vertical

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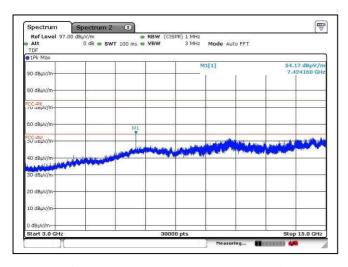


廠商會檢定中心

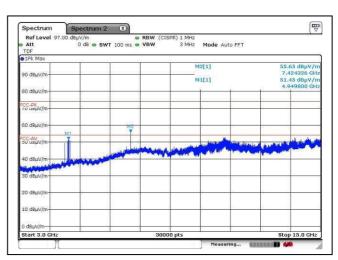
TEST REPORT

Report No. : AU0055298(7) Date : 22 Sep 2016

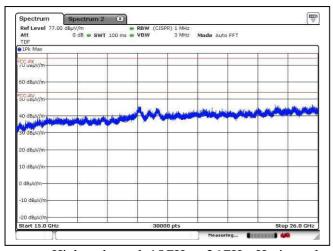
2.3 Radiated Emission Measurement Data (Con't)



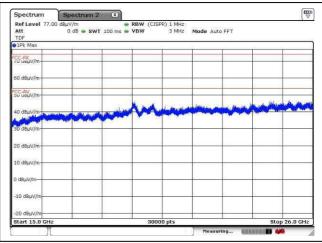
Higher channel, 3GHz - 15GHz, Horizontal



Higher channel, 3GHz – 15GHz, Vertical



Higher channel, 15GHz – 26GHz, Horizontal



Higher channel, 15GHz - 26GHz, Vertical

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TEST REPORT

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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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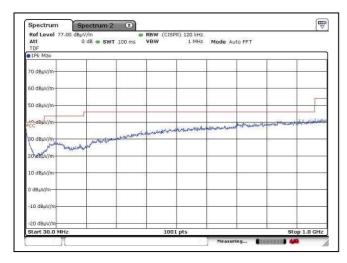


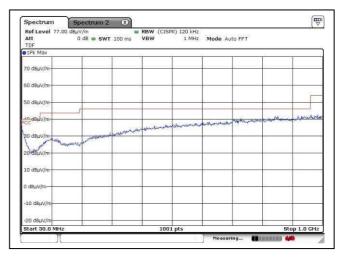
廠商會檢定中心

TEST REPORT

Report No. : AU0055298(7) Date : 22 Sep 2016

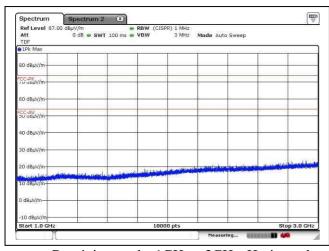
2.3 Radiated Emission Measurement Data (Con't)



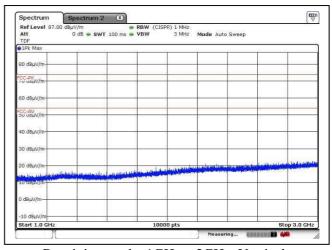


Receiving mode, 30MHz - 1GHz, Horizontal

Receiving mode, 30MHz – 1GHz, Vertical



Receiving mode, 1GHz - 3GHz, Horizontal



Receiving mode, 1GHz – 3GHz, Vertical

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TEST REPORT

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2.3 Radiated Emission Measurement Data (Con't)



Att 0 dB SWT 100 ms VBW 3 MHz Mode Auto FFT
TOP

© IPK Max

80 dBµV/m

FGC GW /m

SO dBµV/m

30 dBµV/m

10 dBµV/m

10 dBµV/m

10 dBµV/m

10 dBµV/m

10 dBµV/m

Start 3.0 GHz

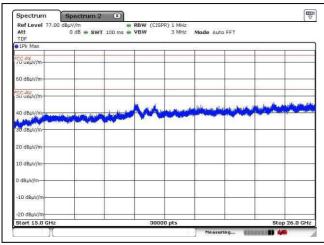
Start 3.0 GHz

Neasuring...

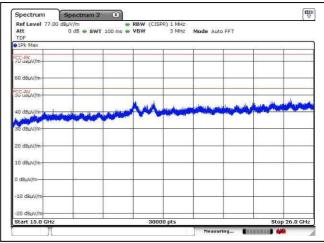
™

Receiving mode, 3GHz - 15GHz, Horizontal

Receiving mode, 3GHz – 15GHz, Vertical



Receiving mode, 15GHz - 26GHz, Horizontal



Receiving mode, 15GHz - 26GHz, Vertical

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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 2ACS619TX TSup.pdf.

4.2 Photographs of the External and Internal Configurations of the EUT

For electronic filing, the photos are saved with filename 2ACS619TX ExPho.pdf and 2ACS619TX 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	2	pages

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TEST REPORT

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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

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FCC ID: 2ACS619TX

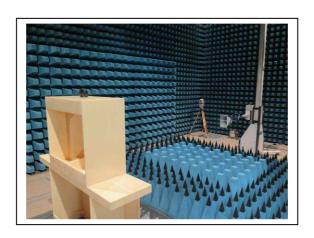


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TEST REPORT

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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

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FCC ID: 2ACS619TX



廠商會檢定中心

TEST REPORT

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A2. Photos of the set-up of Conducted Emissions



Tested by:

Mr. LEUNG Shu-kan, Ken

Reviewed by:

Mr. WONG Lap-pong, Andrew

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FCC ID: 2ACS619TX



廠商會檢定中心

TEST REPORT

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A3 Photos of External Configurations



External Configuration 1



External Configuration 2

Tested by:

Mr. LEUNG Shu-kan, Ken

Reviewed by:

Mr. WONG Lap-pong, Andrew

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FCC ID: 2ACS619TX



廠商會檢定中心

TEST REPORT

Report No. : AU0055298(7) Date : 22 Sep 2016

A3 Photos of External Configurations



External Configuration 3



External Configuration 4

Tested by:

Mr. LEUNG Shu-kan, Ken

Reviewed by:

Mr. WONG Lap-pong, Andrew

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FCC ID: 2ACS619TX

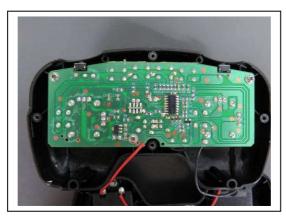


廠商會檢定中心

TEST REPORT

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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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FCC ID: 2ACS619TX

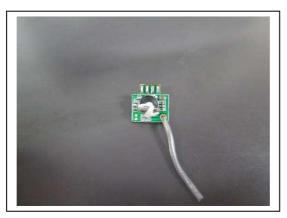


廠商會檢定中心

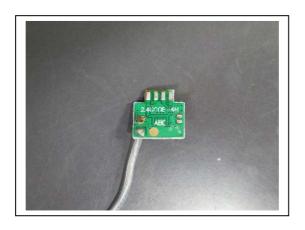
TEST REPORT

Report No. : AU0055298(7) Date : 22 Sep 2016

A4 Photos of Internal Configurations



Internal Configuration 3



Internal Configuration 4

Tested by:

Mr. LEUNG Shu-kan, Ken

Reviewed by:

Mr. WONG Lap-pong, Andrew

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FCC ID: 2ACS619TX

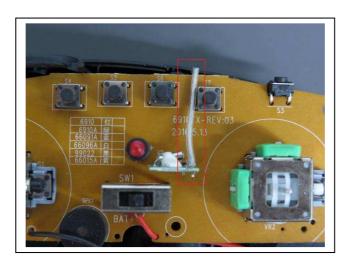


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TEST REPORT

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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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FCC ID: 2ACS619TX

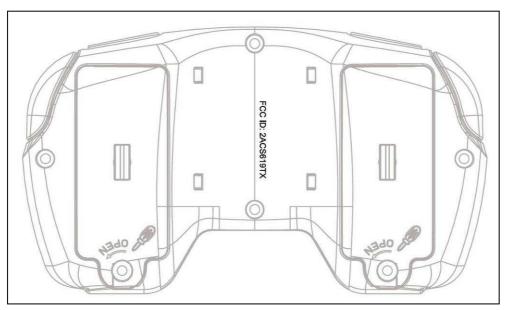


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TEST REPORT

Report No. : AU0055298(7) Date : 22 Sep 2016

A5 ID Label / Location



ID Label 1

ECC ID: 2ACS619TX I.7mm

ID Label 2

Tested by:

Mr. LEUNG Shu-kan, Ken

Reviewed by:

Mr. WONG Lap-pong, Andrew

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FCC ID: 2ACS619TX



廠商會檢定中心

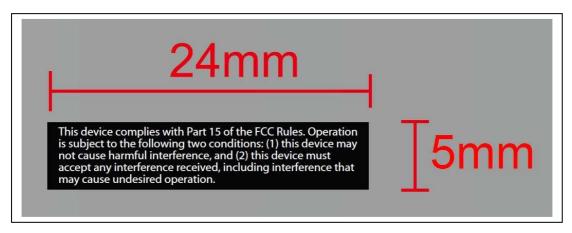
TEST REPORT

Report No. : AU0055298(7) Date : 22 Sep 2016

A5 ID Label / Location



ID Label 3



ID Label 4

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

Tested by:

Mr. LEUNG Shu-kan, Ken

Reviewed by:

Mr. WONG Lap-pong, Andrew

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FCC ID: 2ACS619TX