

廠商會檢定中心

TEST REPORT

	Rep	ort No.	:	AV0062940(0)	Date:	30 Oct 2017
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Application No. : LV035800(5)

Applicant : Blue Maestro Limited

Cheltnam Place Broom Way,

Weybridge, United Kingdom

Sample Description : One(1) item of submitted sample stated to be <u>Bluetooth Sensor and Logger</u> of

Model No. Tempo Disc

Sample registration no. : RV044940-001

Radio Frequency : 2402MHz – 2480MHz Transceiver

Rating : DC 3V

No. of submitted sample : Four (4) piece (s)

Date Received : 04 Oct 2017

Test Period : 06 Oct 2017 to 13 Oct 2017

Test Requested : FCC Part 15 Certification (15.247), FCC Part 15 Verification Procedure

Test Method : 47 CFR Part 15 (10-1-15 Edition), ANSI C63.4 – 2014, ANSI C63.10 – 2013

KDB 558074 D01 DTS Meas Guidance v04

Test Engineer : Mr. LEUNG Shu-kan, Ken

Test Result : See attached sheet(s) from page 2 to 59.

Conclusion : The submitted sample was found to comply with requirement of FCC 47CFR Part

15 Subpart B and C.

For and on behalf of

CMA Industrial Development Foundation Limited

Authorized Signature : _____ Page 1 of 59

Mr. WONG Lap-pone Andrew

Manager Electrical Division



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1 General Information

1.1 General Description

The transmitter device uses one 3v CR2032 coin cell battery. Please refer to the block diagram and the schematics. It is designed to operate as a Bluetooth Low Energy transmitter/receiver on the 2.4GHz band. The transmitter is using an nRF52832 integrated Bluetooth chip with ARM Cortex M4 microprocessor. The integrated Bluetooth chip connects to sensors via I2C placed on the board. The most common are the MPU6500 accelerometer and SI7020 environment sensor.

When the button is pushed, the LED blinks and the NRF52832 will transmit Bluetooth advertisement packets representing the sensor data from the I2C sensor. A connection can be established via another Bluetooth device (such as a smartphone) where settings can be changed in the device (advertising rate, calibration, name etc). On a long button push the LED blinks and the NRF52832 will stop transmitting data until the button is pushed once more.

The brief circuit description is listed as follows:

- XT1 and its associated circuit act as oscillator
- IC3 and its associated circuit act as RF control
- IC1 and its associated circuit act as MCU
- A1 and its associated circuit act as chip antenna
- L1, C3 and its associated circuit act as antenna matching
- IC4 and its associated circuit act as flash memory

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1.2 Location of the test site

FCC Accredited Lab Designation Number: HK0004

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

	1				1
Equipment	Manufacturer	Model No.	Serial No.	Calibration Due Date	Calibration Period
EMI Test Receiver	R&S	ESCI	100152	15 Nov 2017	1Year
Spectrum Analyzer	R&S	FSV40	100964	08 Feb 2018	1Year
Biconical Antenna	Rohde & Schwarz	HK116	837414/004	17 Aug 2018	1Year
Log Periodic Antenna	Teseq	UPA6109	43666	27 Jul 2018	1Year
Loop Antenna	EMCO	6502	00056620	25 Jan 2018	2Years
Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-531	19 Dec 2018	2Years
Broadband Pre-Amplifier	Schwarzbeck	BBV 9718	9718-119	21 Dec 2018	2Years
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170442	02 Aug 2018	2Years
Broadband Pre-Amplifier	Schwarzbeck	BBV 9719	9719-010	02 Aug 2018	2Years
Horn Antenna	Schwarzbeck	BBHA 9120C	9120C 594	26 Jul 2018	2Years
Pre-amplifier	Schwarzbeck	BBV9718	BBV9718 297	24 Jul 2018	2Years
Coaxial Cable	Schaffner	RG 213/U	N/A	18 May 2018	1Year
Coaxial Cable	Suhner	RG 214/U	N/A	18 May 2018	1Year
Coaxial Cable	Suhner	Sucoflex_104	N/A	20 Dec 2017	1Year
LISN	R&S	ESH3-Z5	100038	16 Jan 2018	1Year
Coaxial Cable	Tyco Electronics	RG 58C/U	N/A	12 Feb 2018	1Year
		TS8997 Testing	g System		
Spectrum Analyzer	R&S	FSV 40	101190	09 Aug 2018	1Year
Vector Generator	R&S	SMBV100A	262024	09 Aug 2018	1Year
Generator	R&S	SMB100A	103230	09 Aug 2018	1Year
OSP	R&S	OSP	OSP120 V02	09 Aug 2018	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)	4.59dB
30MHz ~ 200MHz (Vertical)	4.49dB
200MHz ~1000MHz (Horizontal)	4.94dB
200MHz ~1000MHz (Vertical)	4.97dB
1GHz ~6GHz	4.52dB
6GHz ~18GHz	4.58dB

Line-conducted emissions

Frequency	Uncertainty (U _{lab})
150kHz~30MHz	2.80dB

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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:65%

Summary

Test	Frequency (MHz)	Nominal Power (dBm)	Nominal Bandwidth (MHz)	Result
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	2440.000	0.0	1.000000	PASS
Power Spectral Density	2440.000	0.0	1.000000	PASS
Minimum Emission Bandwidth 6 dB	2440.000	0.0	1.000000	PASS
Tx Spurious Emission	2440.000	0.0	1.000000	PASS
Rx Spurious Emission	2440.000	0.0	1.000000	PASS
RF output power	2480.000	0.0	1.000000	PASS
Power Spectral Density	2480.000	0.0	1.000000	PASS
Minimum Emission Bandwidth 6 dB	2480.000	0.0	1.000000	PASS
Band Edge high	2480.000	0.0	1.000000	PASS
Tx Spurious Emission	2480.000	0.0	1.000000	PASS
Rx Spurious Emission	2480.000	0.0	1.000000	PASS

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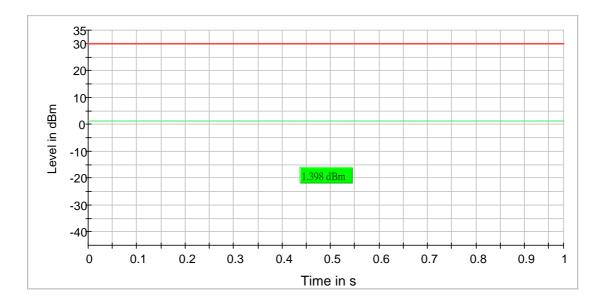
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RF output power (2402 MHz)

Result

DUT Frequency (MHz)	Gated EIRP (dBm)	Limit Max (dBm)	DutyCycle (%)	Result
2402.000000	1.4	30.0	98.649	PASS



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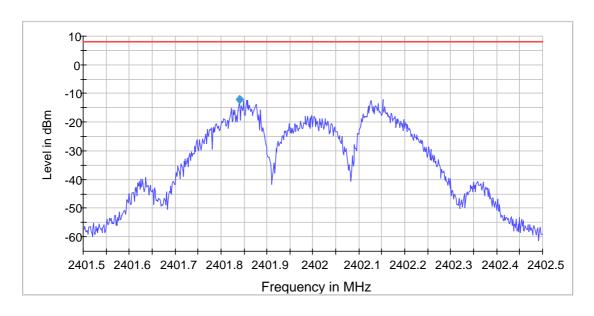
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Power Spectral Density (2402 MHz)

Result

	DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
Ī	2402.000000	2401.840569	-12.157	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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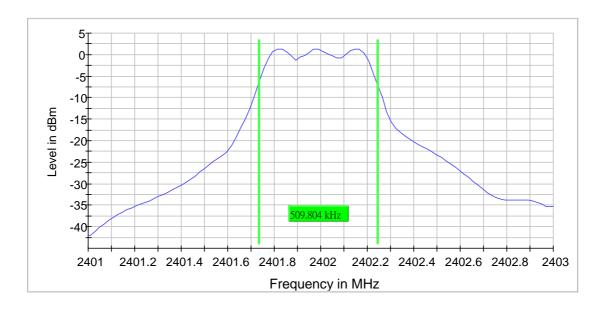
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Minimum Emission Bandwidth 6 dB (2402 MHz)

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	0.509804	0.500000		2401.735294	2402.245098	1.3	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	34 / 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)
2402.123728	-3.1

Measurements

moacaioi		•		
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2399.925042	-56.9	33.8	-23.1	PASS
2330.063853	-56.9	33.8	-23.1	PASS
2330.363687	-57.0	33.9	-23.1	PASS
2330.413659	-57.4	34.3	-23.1	PASS
2330.113826	-57.5	34.4	-23.1	PASS
2399.875069	-58.4	35.3	-23.1	PASS
2330.313715	-58.9	35.9	-23.1	PASS
2330.013881	-59.2	36.1	-23.1	PASS
2313.622987	-59.4	36.3	-23.1	PASS
2313.872848	-59.5	36.4	-23.1	PASS
2345.605219	-59.6	36.5	-23.1	PASS
2313.922821	-59.7	36.6	-23.1	PASS
2345.855081	-59.9	36.8	-23.1	PASS
2345.905053	-59.9	36.8	-23.1	PASS
2345.555247	-59.9	36.8	-23.1	PASS

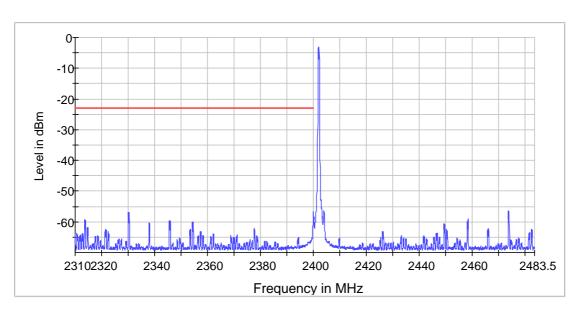
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Measurement 1

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

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2273.795073	-47.5	6.3	-41.2
2274.294895	-47.6	6.4	-41.2
2273.295252	-47.8	6.5	-41.2
2265.797929	-49.0	7.7	-41.2
2281.792217	-49.0	7.7	-41.2
2266.297751	-49.0	7.8	-41.2
2281.292396	-49.1	7.8	-41.2
2274.794716	-49.5	8.3	-41.2
2282.292039	-49.5	8.3	-41.2
2265.298108	-49.8	8.5	-41.2
2266.797572	-50.3	9.0	-41.2
2257.800785	-50.4	9.1	-41.2
2288.289896	-50.4	9.1	-41.2
2257.300964	-50.4	9.2	-41.2
2290.289182	-50.5	9.2	-41.2

Measurement Settings

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-	meacarement county							
	Start	Stop	Pre	Final				
	Frequency (MHz)	Frequency (MHz)	Measurement	Measurement				
	· ,	,						
	30.000000	1000.000000	1	1				
Ī	1000.000000	2400.000000	2	2				
	2400.000000	2483.500000	2	2				
	2483.500000	7000.000000	2	2				
Ī	7000.000000	26000.000000	2	2				

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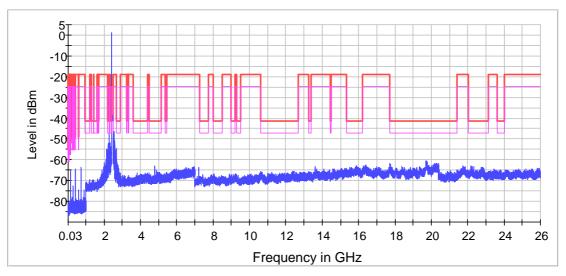
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Limit [limit.Result:1] ×

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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Rx Spurious Emission (2402 MHz)

Result

DUT	Result
Frequency	
(MHz)	
2402.000000	PASS

Final measurements

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

Pre Measurements

Frequency	Level	Margin	Limit				
(MHz)	(dBm)	(dB)	(dBm)				
19748.829009	-60.5	19.3	-41.2				
19717.830640	-60.7	19.5	-41.2				
19732.829851	-60.8	19.5	-41.2				
19699.831588	-60.8	19.6	-41.2				
19789.826851	-60.9	19.7	-41.2				
19696.831746	-60.9	19.7	-41.2				
19747.829062	-61.1	19.8	-41.2				
19712.830904	-61.1	19.9	-41.2				
19749.828956	-61.1	19.9	-41.2				
19721.830430	-61.1	19.9	-41.2				
19745.829167	-61.1	19.9	-41.2				
19766.828062	-61.2	20.0	-41.2				
19690.832061	-61.3	20.0	-41.2				
19738.829535	-61.3	20.1	-41.2				
19714.830798	-61.3	20.1	-41.2				

Measurement Settings

	modear official collinge							
	Start	Stop	Pre	Final				
	Frequency	Frequency	Measurement	Measurement				
	(MHz)	(MHz)						
Ī	30.000000	1000.000000	1	1				
Ī	1000.000000	7000.000000	2	2				
Ī	7000.000000	26000.000000	2	2				

FCC ID: 2AC2Y2

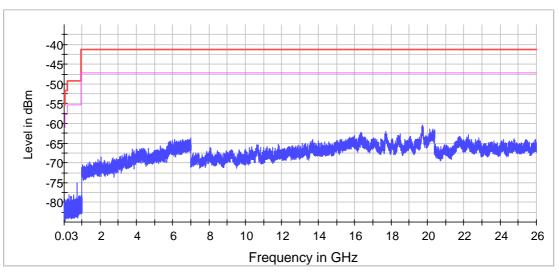
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Limit [limit.Result:1]

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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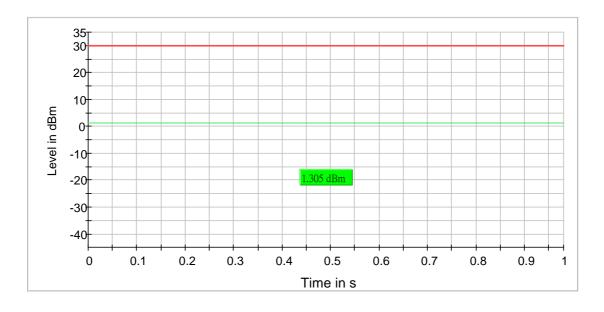
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RF output power (2440 MHz)

Result

DUT Frequency (MHz)	Gated EIRP (dBm)	Limit Max (dBm)	DutyCycle (%)	Result
2440.000000	1.3	30.0	98.649	PASS



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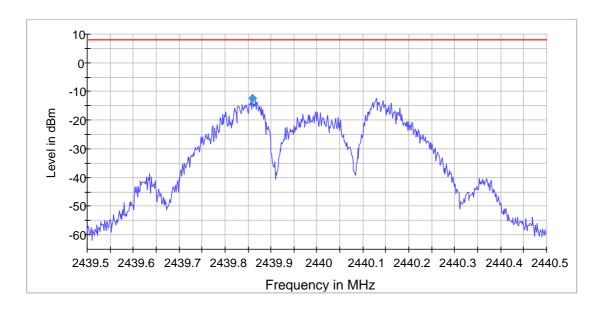
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Power Spectral Density (2440 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2440.000000	2439.860030	-12.255	8.0	PASS



Measurement

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
Start Frequency	2.43950 GHz	2.43950 GHz	Stablemode	Trace	Trace
Stop Frequency	2.44050 GHz	2.44050 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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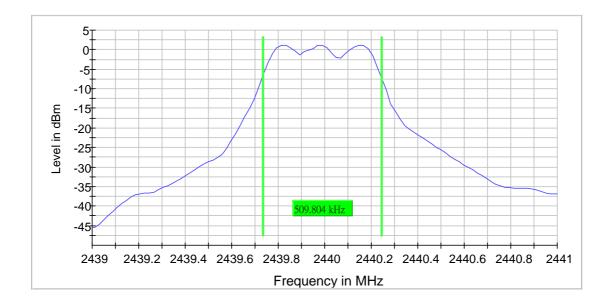
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Minimum Emission Bandwidth 6 dB (2440 MHz)

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
2440.000000	0.509804	0.500000		2439.735294	2440.245098	1.2	PASS



Measurement

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
Start Frequency	2.43900 GHz	2.43900 GHz	Stablemode	Trace	Trace
Stop Frequency	2.44100 GHz	2.44100 GHz	Stablevalue	0.30	0.30
Span	2.000 MHz	2.000 MHz	Run	25 / 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. : AV0062940(0) Date : 30 Oct 2017

Tx Spurious Emission (2440 MHz)

Result

DUT	Result
Frequency	
(MHz)	
2440.000000	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)			
2311.781507	-47.8	6.6	-41.2			
2312.281328	-48.0	6.8	-41.2			
2311.281685	-48.3	7.0	-41.2			
2319.778650	-49.1	7.9	-41.2			
2319.278829	-49.2	7.9	-41.2			
2320.278472	-49.9	8.6	-41.2			
2295.287397	-50.3	9.1	-41.2			
2295.787219	-50.4	9.2	-41.2			
2296.287040	-50.4	9.2	-41.2			
2312.781150	-50.6	9.4	-41.2			
2328.275616	-50.7	9.5	-41.2			
2327.775794	-50.9	9.6	-41.2			
2368.261335	-51.2	9.9	-41.2			
2318.779007	-51.2	10.0	-41.2			
2294.787576	-51.4	10.2	-41.2			

Measurement Settings

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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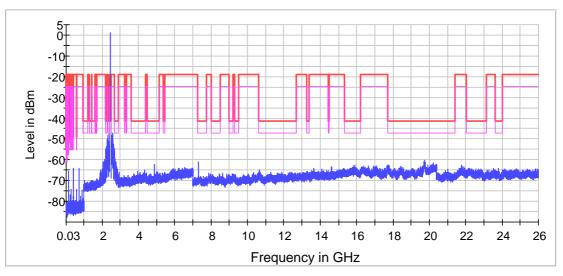
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TEST REPORT

Report No. : AV0062940(0) Date : 30 Oct 2017



★ Limit [limit.Result:1]

★ Sultinum

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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TEST REPORT

Report No. : AV0062940(0) Date : 30 Oct 2017

Rx Spurious Emission (2440 MHz)

Result

DUT	Result
Frequency	
(MHz)	
2440.000000	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)					
• •	` '	• •	•					
19726.830167	-60.1	18.9	-41.2					
19741.829377	-60.4	19.2	-41.2					
19710.831009	-60.6	19.4	-41.2					
19752.828798	-60.7	19.5	-41.2					
20126.809115	-60.8	19.5	-41.2					
19717.830640	-60.8	19.5	-41.2					
19708.831114	-60.9	19.6	-41.2					
19715.830746	-61.1	19.8	-41.2					
19698.831640	-61.1	19.8	-41.2					
19778.827430	-61.1	19.9	-41.2					
19732.829851	-61.1	19.9	-41.2					
20135.808642	-61.2	19.9	-41.2					
19747.829062	-61.2	19.9	-41.2					
19701.831483	-61.2	20.0	-41.2					
19780.827325	-61.2	20.0	-41.2					

Measurement Settings

moacaioi	modear ement cettinge							
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					

FCC ID: 2AC2Y2

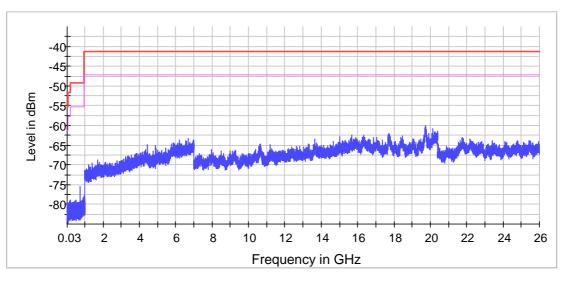
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TEST REPORT

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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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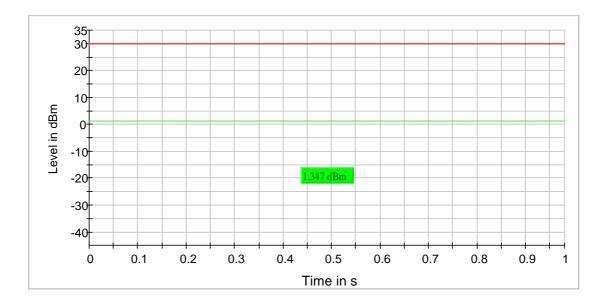
TEST REPORT

Report No. : AV0062940(0) Date : 30 Oct 2017

RF output power (2480 MHz)

Result

DUT Frequency (MHz)	Gated EIRP (dBm)	Limit Max (dBm)	DutyCycle (%)	Result
2480.000000	1.3	30.0	98.649	PASS



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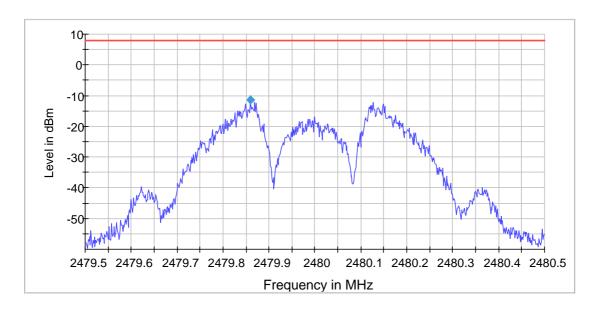
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Report No. : AV0062940(0) Date : 30 Oct 2017

Power Spectral Density (2480 MHz)

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2480.000000	2479.860030	-11.515	8.0	PASS



Measurement

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
Start Frequency	2.47950 GHz	2.47950 GHz	Stablemode	Trace	Trace
Stop Frequency	2.48050 GHz	2.48050 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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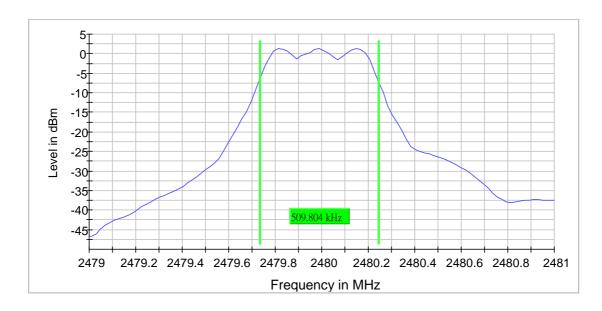
TEST REPORT

Report No. : AV0062940(0) Date : 30 Oct 2017

Minimum Emission Bandwidth 6 dB (2480 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
2480.000000	0.509804	0.500000		2479.735294	2480.245098	1.2	PASS



Measurement

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
Start Frequency	2.47900 GHz	2.47900 GHz	Stablemode	Trace	Trace
Stop Frequency	2.48100 GHz	2.48100 GHz	Stablevalue	0.30	0.30
Span	2.000 MHz	2.000 MHz	Run	42 / max. 150	max. 150
RBW	100.000 kHz	~ 100.000 kHz	Stable	15 / 15	15
VBW	300.000 kHz	~ 300.000 kHz			
SweepPoints	101	~ 20			
Sweeptime	18.938 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. : AV0062940(0) Date : 30 Oct 2017

Band Edge high (2480 MHz)

Result

DUT Frequency (MHz)	Result
• • •	DASS
2480.000000	PASS

Inband Peak

Frequency	Level
(MHz)	(dBm)
2479.827199	-3.6

Measurements

moacaioi		•		
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2487.612538	-64.5	40.9	-23.6	PASS
2487.562689	-65.0	41.4	-23.6	PASS
2487.861782	-65.2	41.5	-23.6	PASS
2487.911631	-65.2	41.6	-23.6	PASS
2487.712236	-65.8	42.2	-23.6	PASS
2487.662387	-65.8	42.2	-23.6	PASS
2487.961480	-66.0	42.3	-23.6	PASS
2487.811934	-66.2	42.5	-23.6	PASS
2487.512840	-66.2	42.6	-23.6	PASS
2483.824018	-66.3	42.7	-23.6	PASS
2483.724320	-66.4	42.7	-23.6	PASS
2484.023414	-66.4	42.7	-23.6	PASS
2483.674471	-66.4	42.7	-23.6	PASS
2483.973565	-66.4	42.7	-23.6	PASS
2483.774169	-66.4	42.8	-23.6	PASS
2483.973565	-66.4	42.7	-23.6	PASS

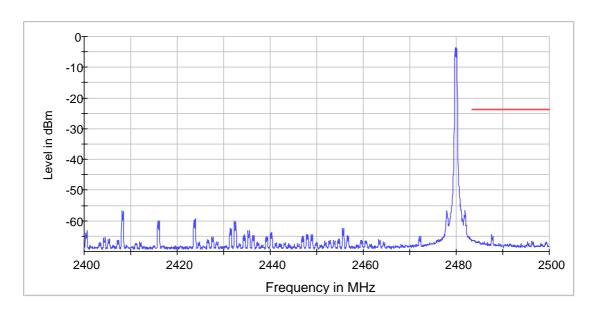
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TEST REPORT

Report No. : AV0062940(0) Date : 30 Oct 2017



Measurement 1

Measurement 2

Setting	Instrument Value	Target Value	Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz	RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz	VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670	SweepPoints	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. : AV0062940(0) Date : 30 Oct 2017

Tx Spurious Emission (2480 MHz)

Result

DUT	Result
Frequency	
(MHz)	
2480.000000	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)
2351.767226	-47.7	6.4	-41.2
2352.267047	-47.8	6.5	-41.2
2351.267404	-48.0	6.8	-41.2
2343.770082	-48.7	7.5	-41.2
2344.269904	-48.9	7.7	-41.2
2359.764370	-49.1	7.9	-41.2
2360.264191	-49.2	8.0	-41.2
2359.264548	-49.4	8.2	-41.2
2343.270261	-49.9	8.7	-41.2
2344.769725	-49.9	8.7	-41.2
2367.761514	-50.4	9.1	-41.2
2368.261335	-50.4	9.2	-41.2
2352.766869	-50.5	9.2	-41.2
2335.273117	-50.6	9.3	-41.2
2335.772938	-50.6	9.4	-41.2

Measurement Settings

modean ormanic octurings					
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. : AV0062940(0) Date : 30 Oct 2017



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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TEST REPORT

Report No. : AV0062940(0) Date : 30 Oct 2017

Rx Spurious Emission (2480 MHz)

Result

DUT	Result
Frequency (MHz)	
2480.000000	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)				
19702.831430	-60.0	18.8	-41.2				
19735.829693	-60.1	18.9	-41.2				
19723.830325	-60.4	19.1	-41.2				
19756.828588	-60.4	19.2	-41.2				
19736.829641	-60.7	19.5	-41.2				
19725.830219	-60.9	19.6	-41.2				
19710.831009	-60.9	19.7	-41.2				
19749.828956	-61.0	19.7	-41.2				
19720.830483	-61.0	19.7	-41.2				
19738.829535	-61.0	19.7	-41.2				
19755.828641	-61.2	19.9	-41.2				
19690.832061	-61.2	20.0	-41.2				
19731.829904	-61.3	20.0	-41.2				
19713.830851	-61.3	20.1	-41.2				
19767.828009	-61.3	20.1	-41.2				

Measurement Settings

mode di cinoni comme					
Start	Stop	Pre	Final		
Frequency	Frequency	Measurement	Measurement		
(MHz)	(MHz)				
30.00000	1000.000000	1	1		
1000.00000	7000.000000	2	2		
7000.00000	26000.000000	2	2		

FCC ID: 2AC2Y2

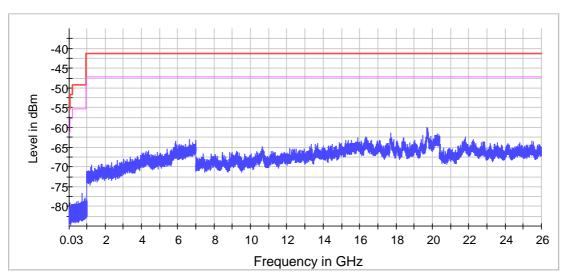
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TEST REPORT

Report No. : AV0062940(0) Date : 30 Oct 2017



Limit [limit.Result:1]

Threshold [limit 2.Result:1]

Pre Measurement 1

Pre Measurement 2

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

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TEST REPORT

Report No. : AV0062940(0) Date : 30 Oct 2017

2.3 Radiated Emission Measurement Data

Environmental conditions:

Parameter	Recorded value	
Ambient temperature:	28	° C
Relative humidity:	60	%

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

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

RBW: 200Hz (below 150kHz), 9kHz (150kHz – 30MHz), 120kHz (30MHz – 1GHz), 1MHz (above 1GHz) VBW: 1kHz (below 150kHz), 30kHz (150kHz – 30MHz), 300kHz (30MHz – 1GHz,), 3MHz (above 1GHz, Peak measurement), 10Hz (above 1GHz, Average measurement)

Reading at Field Strength Transducer Measurement Frequency Polarity Limit at 3m Margin at 3m 3m Factor (Peak/ (MHz) (H/V)(dB) $(dB\mu V/m)$ (dB/m)(dBµV) $(dB\mu V/m)$ Average) 2402.154 - 4.7 Η 85.9 81.2 114.0 -32.8Peak V 93.9 89.2 2402.155 - 4.7 114.0 - 24.8 Peak 2440.163 Η - 4.7 81.8 114.0 - 32.2 86.5 Peak 2440.164 V 93.9 - 4.7 89.2 114.0 - 24.8 Peak 2480.161 Η 85.3 - 4.7 80.6 114.0 - 33.4 Peak 2480.171 V 94.8 - 4.7 114.0 - 23.9 90.1 Peak 7206.312 Η 41.0 9.6 50.6 74.0 - 23.4 Peak V 7206.443 40.8 9.6 50.4 74.0 - 23.6 Peak 74.0 7319.364 Η 44.9 9.6 54.5 - 19.5 Peak 9.6 7319.985 Η 36.8 46.4 54.0 - 7.6 Average 7319.434 V 74.0 43.5 9.6 53.1 -20.9Peak 7439.484 Η 47.1 9.6 56.7 74.0 - 17.3 Peak 7439.997 Η 40.1 9.6 49.7 54.0 - 4.3 Average 7439.552 V 44.5 9.6 54.1 74.0 - 19.9 Peak 9.6 7439,999 V 54.0 - 7.7 36.7 46.3 Average

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

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

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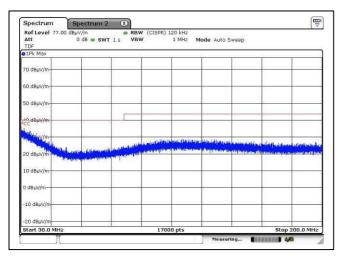


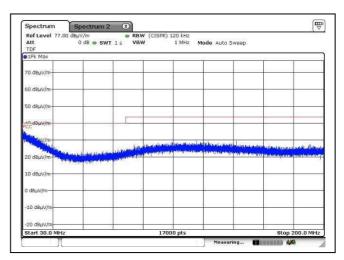
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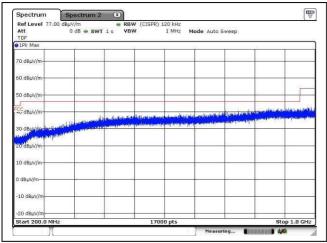
2.3 Radiated Emission Measurement Data (Con't)



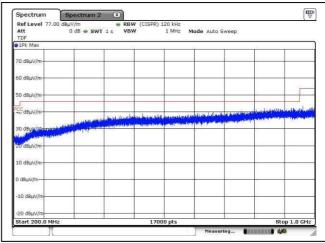


Lower channel, 30MHz - 200MHz, Horizontal

Lower channel, 30MHz - 200MHz, Vertical



Lower channel, 200MHz – 1GHz, Horizontal



Lower channel, 200MHz – 1GHz, Vertical

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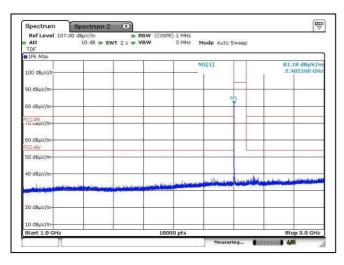


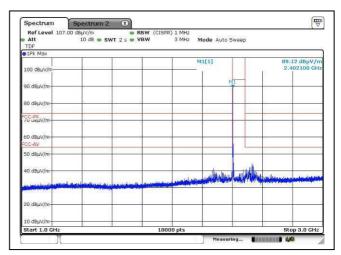
廠商會檢定中心

TEST REPORT

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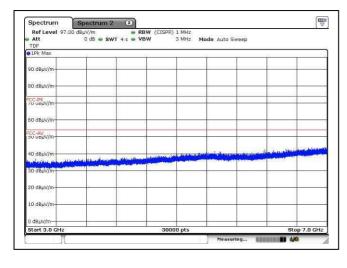
2.3 Radiated Emission Measurement Data (Con't)

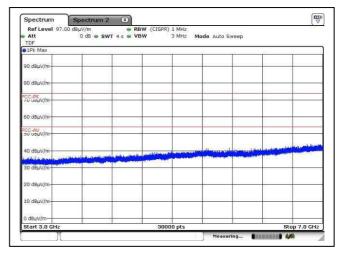




Lower channel, 1GHz - 3GHz, Horizontal

Lower channel, 1GHz – 3GHz, Vertical





Lower channel, 3GHz – 7GHz, Horizontal

Lower channel, 3GHz - 7GHz, Vertical

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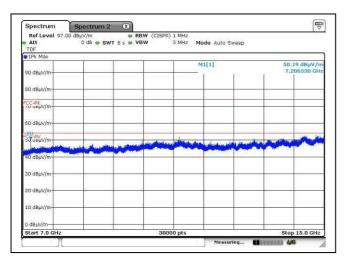


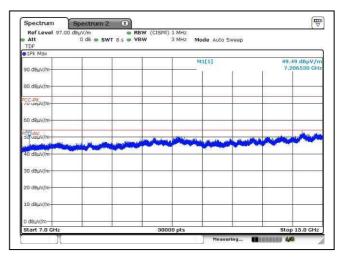
廠商會檢定中心

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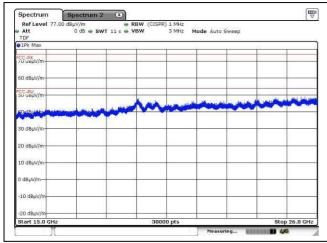
2.3 Radiated Emission Measurement Data (Con't)



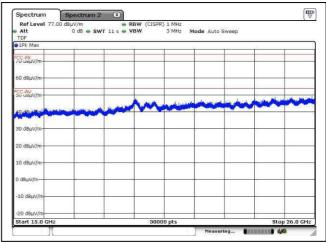


Lower channel, 7GHz - 15GHz, Horizontal

Lower channel, 7GHz - 15GHz, Vertical



Lower channel, above 15GHz, Horizontal



Lower channel, above 15GHz, Vertical

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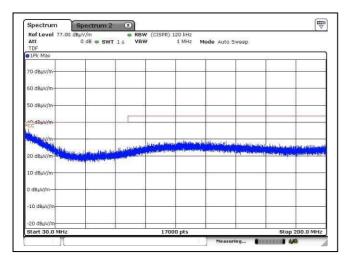


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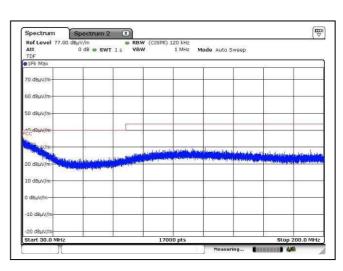
TEST REPORT

Report No. : AV0062940(0) Date : 30 Oct 2017

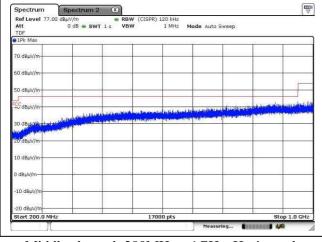
2.3 Radiated Emission Measurement Data (Con't)



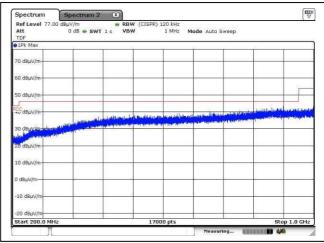
Middle channel, 30MHz - 200MHz, Horizontal



Middle channel, 30MHz – 200MHz, Vertical



Middle channel, 200MHz – 1GHz, Horizontal



Middle channel, 200MHz - 1GHz, Vertical

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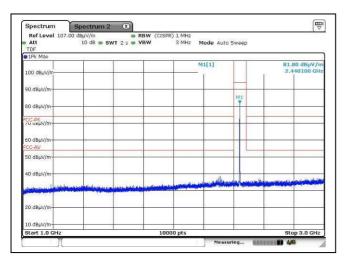


廠商會檢定中心

TEST REPORT

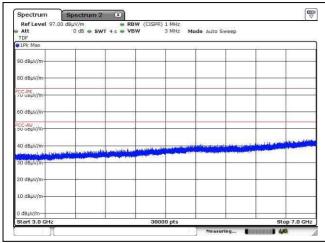
Report No. : AV0062940(0) Date : 30 Oct 2017

2.3 Radiated Emission Measurement Data (Con't)

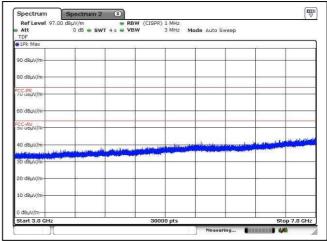


Middle channel, 1GHz - 3GHz, Horizontal

Middle channel, 1GHz – 3GHz, Vertical



Middle channel, 3GHz - 7GHz, Horizontal



Middle channel, 3GHz - 7GHz, Vertical

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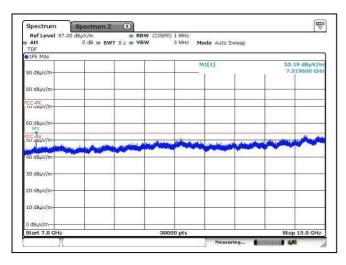


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TEST REPORT

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2.3 Radiated Emission Measurement Data (Con't)



Ref Level 97.00 dbµV/m

Att
TOF

IPK Max

M1[1]

S1.00 dbµV/m

7.319600 GHz

S0 dbµV/m

S0 dbµV/m

S0 dbµV/m

10 dbµV/m

10 dbµV/m

10 dbµV/m

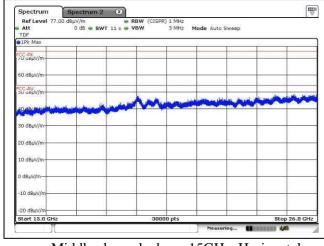
30 dbµV/m

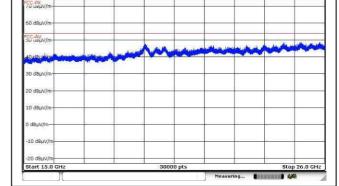
Start 7.0 GHz

Neasuring...

Middle channel, 7GHz - 15GHz, Horizontal

Middle channel, 7GHz – 15GHz, Vertical





Middle channel, above 15GHz, Horizontal

Middle channel, above 15GHz, Vertical

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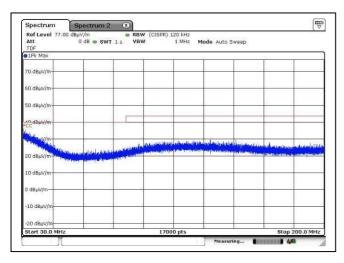


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2.3 Radiated Emission Measurement Data (Con't)



Spectrum

Spectrum

Ref Level 77.00 dbyV/m

Ref Level 77.00 dbyV/m

O db SWT 1s

Ref Level 77.00 dbyV/m

First Max

Top

O dbyV/m

So dbyV/m

So dbyV/m

O dbyV/m

O dbyV/m

O dbyV/m

Start 30.0 MHz

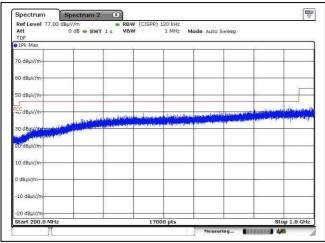
17000 pts

Stop 200.0 MHz

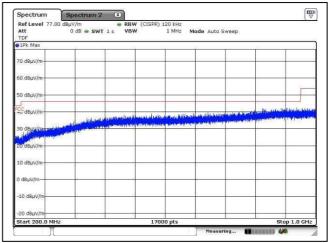
Measuring...

Higher channel, 30MHz - 200MHz, Horizontal

Higher channel, 30MHz – 200MHz, Vertical



Higher channel, 200MHz – 1GHz, Horizontal



Higher channel, 200MHz - 1GHz, Vertical

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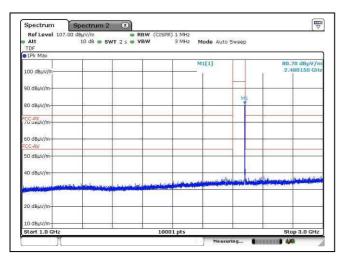


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TEST REPORT

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2.3 Radiated Emission Measurement Data (Con't)



● IPK Max

● IPK Max

100 dBuV/m

90 dBuV/m

80 dBuV/m

80 dBuV/m

50 dBuV/m

CC-AV

50 dBuV/m

10 dBuV/m

10 dBuV/m

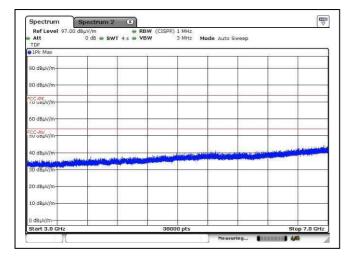
20 dBuV/m

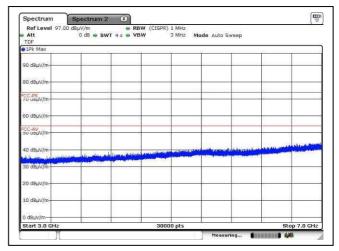
10 dBuV/m

□

Higher channel, 1GHz - 3GHz, Horizontal

Higher channel, 1GHz – 3GHz, Vertical





Higher channel, 3GHz - 7GHz, Horizontal

Higher channel, 3GHz – 7GHz, Vertical

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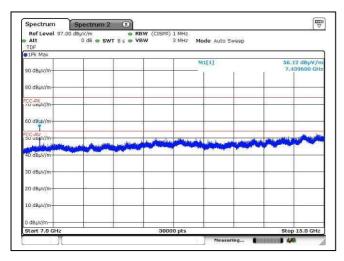


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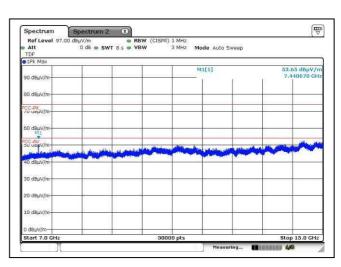
TEST REPORT

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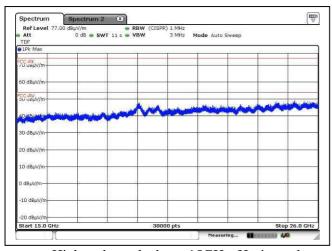
2.3 Radiated Emission Measurement Data (Con't)



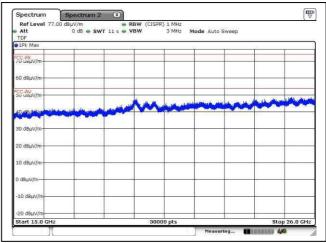
Higher channel, 7GHz - 15GHz, Horizontal



Higher channel, 7GHz – 15GHz, Vertical



Higher channel, above 15GHz, Horizontal



Higher channel, above 15GHz, 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:	28	° C	
Relative humidity:	60	%	

Testing frequency range: 9kHz to 26GHz Mode: Receiving Measurement: Quasi-peak (9kHz – 1GHz), Peak (above 1GHz)

RBW: 200Hz (below 150kHz), 9kHz (150kHz – 30MHz), 120kHz (30MHz – 1GHz), 1MHz (above 1GHz) VBW: 1kHz (below 150kHz), 30kHz (150kHz – 30MHz), 300kHz (30MHz – 1GHz), 3MHz (above 1GHz)

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

Remark: No specified emission found

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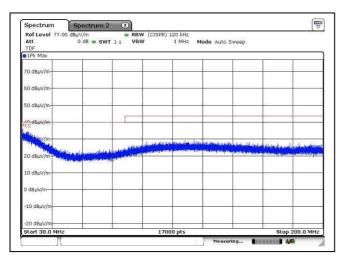


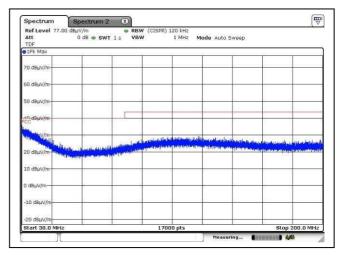
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Report No. : AV0062940(0) Date : 30 Oct 2017

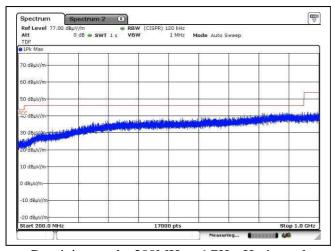
2.3 Radiated Emission Measurement Data (Con't)



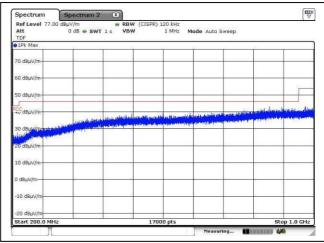


Receiving mode, 30MHz - 200MHz, Horizontal

Receiving mode, 30MHz – 200MHz, Vertical



Receiving mode, 200MHz - 1GHz, Horizontal



Receiving mode, 200MHz - 1GHz, Vertical

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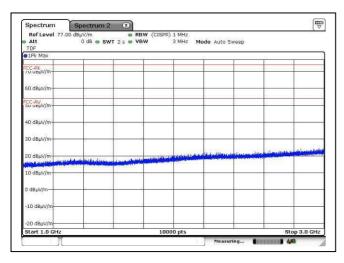


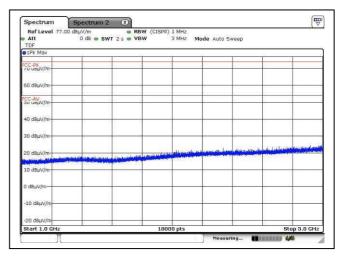
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Report No. : AV0062940(0) Date : 30 Oct 2017

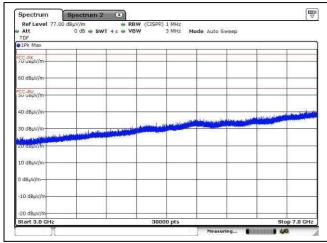
2.3 Radiated Emission Measurement Data (Con't)



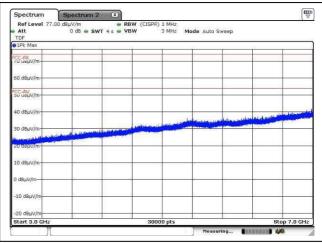


Receiving mode, 1GHz - 3GHz, Horizontal

Receiving mode, 1GHz – 3GHz, Vertical



Receiving mode, 3GHz - 7GHz, Horizontal



Receiving mode, 3GHz - 7GHz, Vertical

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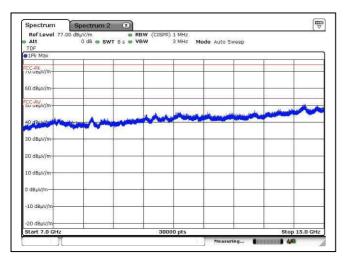


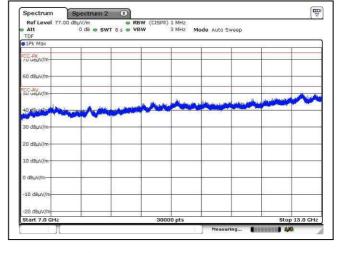
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TEST REPORT

Report No. : AV0062940(0) Date : 30 Oct 2017

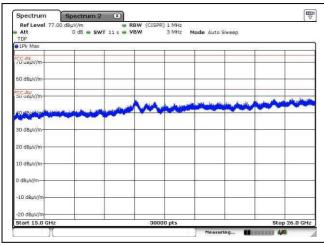
2.3 Radiated Emission Measurement Data (Con't)



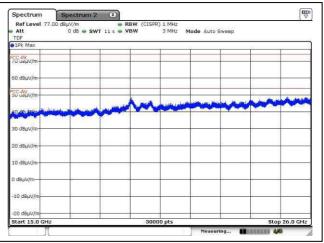


Receiving mode, 7GHz - 15GHz, Horizontal

Receiving mode, 7GHz – 15GHz, Vertical



Receiving mode, above 15GHz, Horizontal



Receiving mode, above 15GHz, 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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TEST REPORT

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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 2AC2Y2 TSup.pdf.

4.2 Photographs of the External and Internal Configurations of the EUT

For electronic filing, the photos are saved with filename 2AC2Y2 ExPho.pdf and 2AC2Y2 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

FCC ID: 2AC2Y2

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TEST REPORT

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5 Appendices

A1	Photos of the set-up of Radiated Emissions	3	pages
A2	Photos of the set-up of Conducted Emissions	1	page
A3	Photos of External Configurations	2	pages
A4	Photos of Internal Configurations	2	pages
A5	ID Label/Location	1	page

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TEST REPORT

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A1. Photos of the set-up of Radiated Emissions



30MHz - 200MHz



200MHz - 1GHz

Tested by:

Mr. LEUNG Shu-kan, Ken

Reviewed by:

Mr. WONG Lap-pong, Andrew

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FCC ID: 2AC2Y2



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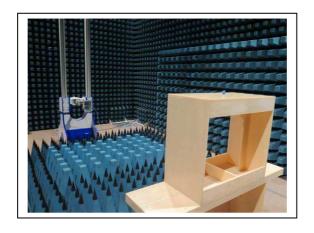
TEST REPORT

Report No. : AV0062940(0) Date : 30 Oct 2017

A1. Photos of the set-up of Radiated Emissions



9kHz - 30MHz



Above 1GHz

Tested by:

Mr. LEUNG Shu-kan, Ken

Reviewed by:

Mr. WONG Lap-pong, Andrew

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廠商會檢定中心

TEST REPORT

Report No. : AV0062940(0) Date : 30 Oct 2017

A1. Photos of the set-up of Radiated Emissions



EUT Position

Tested by:

Mr. LEUNG Shu-kan, Ken

Reviewed by:

Mr. WONG Lap-pong, Andrew

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FCC ID: 2AC2Y2



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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: 2AC2Y2



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: 2AC2Y2



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TEST REPORT

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A3 Photos of External Configurations



External Configuration 3

Tested by:

Mr. LEUNG Shu-kan, Ken

Reviewed by:

Mr. WONG Lap-pong, Andrew

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FCC ID: 2AC2Y2



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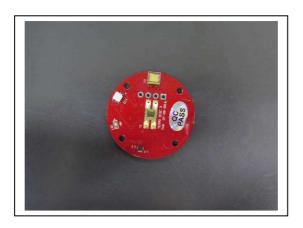
TEST REPORT

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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: 2AC2Y2

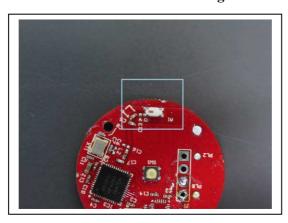


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TEST REPORT

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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: 2AC2Y2



廠商會檢定中心

TEST REPORT

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A5 ID Label / Location



ID Label 1

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

Tested by:

Mr. LEUNG Shu-kan, Ken

Reviewed by:

Mr. WONG Lap-pong, Andrew

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FCC ID: 2AC2Y2