



# RF TEST REPORT



Report No.: FCC\_IC\_RF\_SL18112001-DME-006 REV 1.0  
Supersede Report No.: None





Applicant (FCC)	:	Digital Matter Embedded
Applicant (IC)	:	Digital Matter
Product Name	:	Digital Matter LWAN 915
Model No.	:	DM-LWAN-915
Host Models	:	Yabby LWAN 915
Test Standard	:	47 CFR 15.247 RSS 247 Iss 2: Feb 2017
Test Method	:	ANSI C63.10: 2013 RSS Gen Iss 5: April 2018
FCC ID	:	POJDMLWAN915
IC	:	23950-DMLWAN915
Dates of test	:	2/ 16/ 2019
Issue Date	:	4/ 01/ 2019
Test Result	:	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
Equipment complied with the specification [X] Equipment did not comply with the specification [ ]		

This Test Report is Issued Under the Authority of:	
	
<b>Gary Chou</b> Compliance Engineer	<b>Chen Ge</b> Engineer Reviewer

Issued By:  
SIEMIC Laboratories  
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## Laboratory Introduction

SIEMIC, headquartered in the heart of Silicon Valley, with superior facilities in US and Asia, is one of the leading independent testing and certification facilities providing customers with one-stop shop services for Compliance Testing and Global Certifications.



In addition to testing and certification, SIEMIC provides initial design reviews and compliance management throughout a project. Our extensive experience with China, Asia Pacific, North America, European, and International compliance requirements, assures the fastest, most cost effective way to attain regulatory compliance for the global markets.

### Accreditations for Conformity Assessment

Country/Region	Accreditation Body	Scope
USA	FCC, A2LA	EMC, RF/Wireless, Telecom
Canada	IC, A2LA, NIST	EMC, RF/Wireless, Telecom
Taiwan	BSMI, NCC, NIST	EMC, RF, Telecom, Safety
Hong Kong	OFTA, NIST	RF/Wireless, Telecom
Australia	NATA, NIST	EMC, RF, Telecom, Safety
Korea	KCC/RRA, NIST	EMI, EMS, RF, Telecom, Safety
Japan	VCCI, JATE, TELEC, RFT	EMI, RF/Wireless, Telecom
Mexico	NOM, COFETEL, Caniety	Safety, EMC, RF/Wireless, Telecom
Europe	A2LA, NIST	EMC, RF, Telecom, Safety
Israel	MOC, NIST	EMC, RF, Telecom, Safety

### Accreditations for Product Certifications

Country	Accreditation Body	Scope
USA	FCC TCB, NIST	EMC, RF, Telecom
Canada	IC FCB, NIST	EMC, RF, Telecom
Singapore	iDA, NIST	EMC, RF, Telecom
EU	NB	EMC & Radio Equipment Directive (RED)
Japan	MIC (RCB 208)	RF, Telecom
Hong Kong	OFTA (US002)	RF, Telecom

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## 1 Report Revision History

Report No.	Report Version	Description	Issue Date
FCC_IC_RF_SL18112001-DME-006	None	Original	2/28/2019
FCC_IC_RF_SL18112001-DME-006 REV 1.0	1.0	Change Antenna TYPE and add 125KHz Test Data	4/01/2019

## 2 Executive Summary

The purpose of this test program was to demonstrate compliance of following product

Company: Digital Matter  
Product: Digital Matter LWAN 915  
Model No.: DM-LWAN-915  
Host Model No.: Yabby LWAN 915

against the current Stipulated Standards. The specified model product stated above has demonstrated compliance with the Stipulated Standard listed on 1st page. This test report covers the radiated emissions requirements of the standards referenced in the report to allow system level approval of the modules in specified Hosts.

## 3 Customer information

Applicant Name	Digital Matter
Applicant Address	The Oval, Kingsmead Building, CNR Meadowbrook and Sloane Rd, Bryanston Johannesburg, 2021, South Africa
Manufacturer Name	Digital Matter
Manufacturer Address	The Oval, Kingsmead Building, CNR Meadowbrook and Sloane Rd, Bryanston Johannesburg, 2021, South Africa

## 4 Test site information

Lab performing tests	SIEMIC Laboratories
Lab Address	775 Montague Expressway, Milpitas, CA 95035
FCC Test Site No.	540430
IC Test Site No.	4842D-2
VCCI Test Site No.	A0133

## 5 Modification

Index	Item	Description	Note
-	-	-	-

## 6 EUT Information

### 6.1 EUT Description

Host Model No.	Yabby LWAN 915
Module Model No.	DM-LWAN-915
Trade Name	Digital Matter
Serial No.	N/A
Input Power	3 VDC (3x AA Batteries)
Date of EUT received	02/16/2019
Equipment Class/ Category	DTS

### 6.2 Spec for LoRaWan Radio

Radio Type	LoRaWan
Operating Frequency	902.3-914.9MHz
Modulation	FSK
Channel Spacing	125kHz, 500kHz
Antenna Type	PCB Antenna
Antenna Gain (Peak)	-1 dBi
Antenna Connector Type	N/A

Type	Channel No.	Frequency (MHz)	Power Setting
LoRaWAN 125 KHz Bandwidth	01	902.3	20
	32	908.5	20
	64	914.9	20
LoRaWAN 500 KHz Bandwidth	65	903	20
	68	907.8	20
	72	914.2	20

### 6.3 EUT test modes/configuration Description

Mode	Note
LoRaWAN	LoRaWAN (FSK)

## 7 Supporting Equipment/Software and cabling Description

### 7.1 Supporting Equipment

Item	Supporting Equipment Description	Model	Serial Number	Manufacturer	Note
1	Laptop	PP01L Latitude E5440	F1WPF12	Dell	-

### 7.2 Cabling Description

Name	Connection Start		Connection Stop		Length / shielding Info		Note
	From	I/O Port	To	I/O Port	Length (m)	Shielding	
USB to 3-pin cable	EUT	3-pin	Laptop	USB	10	Unshielded	-

### 7.3 Test Software Description

Test Item	Software	Description
Spurious emission	TeraTerm	Set the EUT to transmit continuously in diferent test mode

## 8 Test Summary

### DTS Band Requirement

Test Item	Test standard		Test Method/Procedure		Pass / Fail
Radiated Spurious Emissions	FCC	15.247, 15.209	FCC	ANSI C63.10:2013	<input checked="" type="checkbox"/> Pass
	IC	RSS 247, RSS-GEN	IC		<input type="checkbox"/> N/A
Remark	<ol style="list-style-type: none"> <li>All measurement uncertainties do not take into consideration for all presented test results.</li> <li>The applicant shall ensure frequency stability by showing that an emission is maintained within the band of operation under all normal operating conditions as specified in the user's manual.</li> <li>Only Radiated Spurious Emission was testing for Host configuration.</li> <li>All other test items have been evaluated under the original limited modular approval certified under FCC ID: VPYCMABZ, IC: 772C-CMABZ, SGS test report no. SHEM160900621801.</li> </ol>				



## 9 Measurement Uncertainty

### 9.1 Radiated Emissions (30MHz to 1GHz)

The test is to measure the radiated emissions of the EUT.

Some error sources that can contribute to the total uncertainty:

- Uncertainty of the receiver
- Uncertainty of the antenna
- Uncertainty of cables
- Uncertainty due to the mismatches
- NSA Calibration
- Etc., details see the below table

Source of Uncertainty	Value (dB)	Probability Distribution	Division	Sensitivity Coefficient	Expanded Uncertainty
Receiver Reading	0.12	Rectangular	1.732	1	0.069284
Cable Insertion Loss	0.21	Normal	2	1	0.105
Filter Insertion Loss	0.25	Normal	2	1	0.125
Antenna Factor	0.65	Normal	2	1	0.325
Receiver CW accuracy	0.5	Rectangular	1.732	1	0.2886836
Pulse Amplitude Response	1.5	Rectangular	1.732	1	0.86605081
PRF Response	1.5	Rectangular	1.732	1	0.86605081
Mismatch Filter - Receiver	0.25	U-Shape	1.414	1	0.1768033
NSA Calibration	4.0	U-Shape	1.414	1	2.8288543
Combined Standard Uncertainty					3.0059131
<b>Expanded Uncertainty (K=2)</b>					<b>6.0118262</b>

The total derived measurement uncertainty is +/- 6.00 dB.

### 9.2 Radiated Emissions (1GHz to 40GHz)

The test is to measure the radiated emissions of the EUT.

Some error sources that can contribute to the total uncertainty:

- Uncertainty of the receiver
- Uncertainty of the antenna
- Uncertainty of cables
- Uncertainty due to the mismatches
- VSWR Calibration
- Etc., details see the below table

Source of Uncertainty	Value (dB)	Probability Distribution	Division	Sensitivity Coefficient	Expanded Uncertainty
Receiver Reading	0.12	Rectangular	1.732	1	0.0692840
Cable Insertion Loss	0.21	Normal	2	1	0.1050000
Filter Insertion Loss	0.25	Normal	2	1	0.1250000
Antenna Factor	0.65	Normal	2	1	0.3250000
Receiver CW accuracy	0.5	Rectangular	1.732	1	0.2886836
Pulse Amplitude Response	1.5	Rectangular	1.732	1	0.8660508
PRF Response	1.5	Rectangular	1.732	1	0.8660508
Mismatch Filter - Receiver	0.25	U-Shape	1.414	1	0.1768033
VSWR Calibration	2.0	U-Shape	1.414	1	1.4144272
Combined Standard Uncertainty					4.2363
<b>Expanded Uncertainty (K=2)</b>					<b>8.4726</b>

The total derived measurement uncertainty is +/- 8.47 dB.

### 9.3 RF conducted measurement

The test is to measure the RF output power from the EUT.

Some error sources that can contribute to the total uncertainty:

- Uncertainty of the Reference Level Uncertainty
- Uncertainty of variable attenuators
- Uncertainty of cables
- Uncertainty due to the mismatches

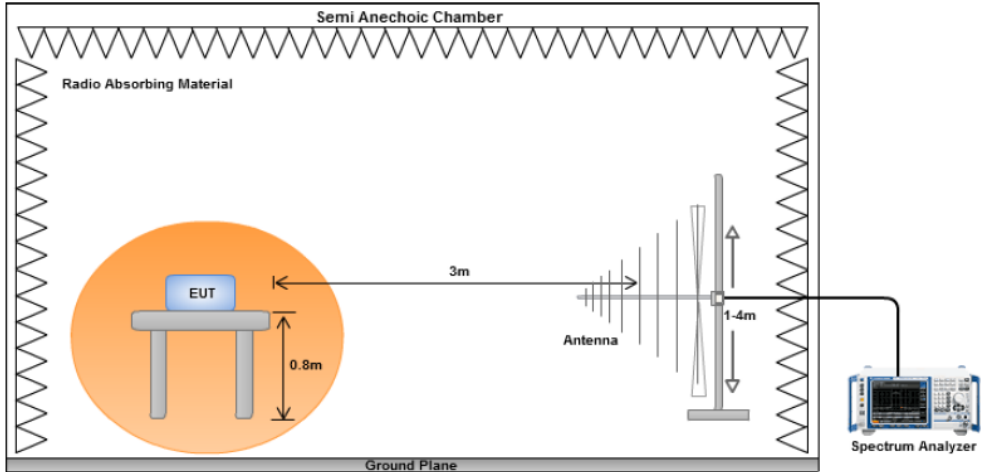
Source of Uncertainty	Value (dB)	Probability Distribution	Division	Sensitivity Coefficient	Expanded Uncertainty
Reference Level	0.12	Rectangular	1.732	1	0.069284
Cable Insertion Loss	0.21	Normal	2	1	0.105
Attenuator	0.25	Normal	2	1	0.125
Mismatch	0.25	U-Shape	1.414	1	0.1768033
Combined Standard Uncertainty					0.476087
<b>Expanded Uncertainty (K=2)</b>					<b>0.952174</b>

The total derived measurement uncertainty is +/- 0.95 dB.

## 10 Measurements, Examination and Derived Results

### 10.1 Radiated Spurious Emissions below 1GHz

Requirement(s):

Spec	Item	Requirement	Applicable										
47CFR§15.247(d) RSS247 (5.5)	a)	<p>Except higher limit as specified elsewhere in other section, the emissions from the low-power radio-frequency devices shall not exceed the field strength levels specified in the following table and the level of any unwanted emissions shall not exceed the level of the fundamental emission. The tighter limit applies at the band edges</p> <table border="1"> <thead> <tr> <th>Frequency range (MHz)</th> <th>Field Strength (uV/m)</th> </tr> </thead> <tbody> <tr> <td>30 – 88</td> <td>100</td> </tr> <tr> <td>88 – 216</td> <td>150</td> </tr> <tr> <td>216 960</td> <td>200</td> </tr> <tr> <td>Above 960</td> <td>500</td> </tr> </tbody> </table>	Frequency range (MHz)	Field Strength (uV/m)	30 – 88	100	88 – 216	150	216 960	200	Above 960	500	☒
Frequency range (MHz)	Field Strength (uV/m)												
30 – 88	100												
88 – 216	150												
216 960	200												
Above 960	500												
Test Setup													
Procedure	<ol style="list-style-type: none"> <li>The EUT was switched on and allowed to warm up to its normal operating condition.</li> <li>The test was carried out at the selected frequency points obtained from the EUT characterisation. Maximization of the emissions, was carried out by rotating the EUT, changing the antenna polarization, and adjusting the antenna height in the following manner: <ol style="list-style-type: none"> <li>Vertical or horizontal polarisation (whichever gave the higher emission level over a full rotation of the EUT) was chosen.</li> <li>The EUT was then rotated to the direction that gave the maximum emission.</li> <li>Finally, the antenna height was adjusted to the height that gave the maximum emission.</li> </ol> </li> <li>A Quasi-peak measurement was then made for that frequency point.</li> <li>Steps 2 and 3 were repeated for the next frequency point, until all selected frequency points were measured.</li> </ol>												
Remark	<ol style="list-style-type: none"> <li>The EUT was scanned up to 1GHz. Both horizontal and vertical polarities were investigated. The results show only the worst case.</li> <li>Testing was done on Yabby Host.</li> </ol>												
Result	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail												

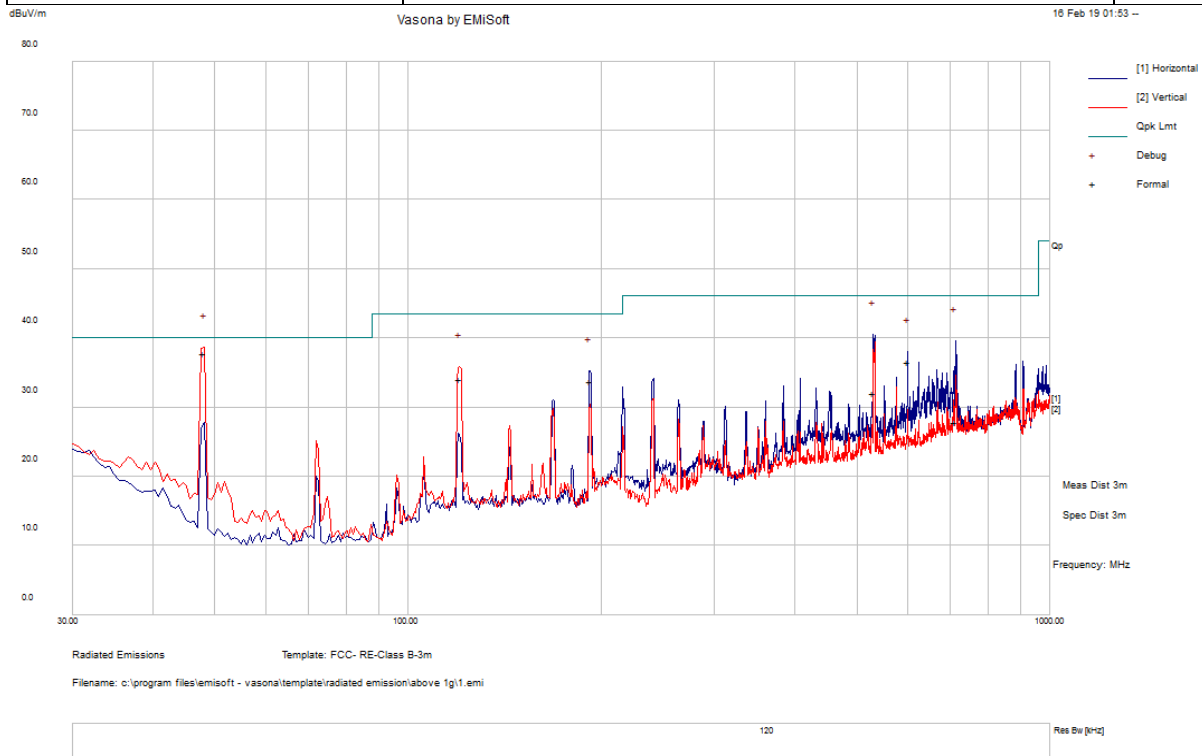
Test Data     Yes (See below)       N/A

Test Plot     Yes (See below)       N/A

Test was done by Gary Chou at 10m chamber.

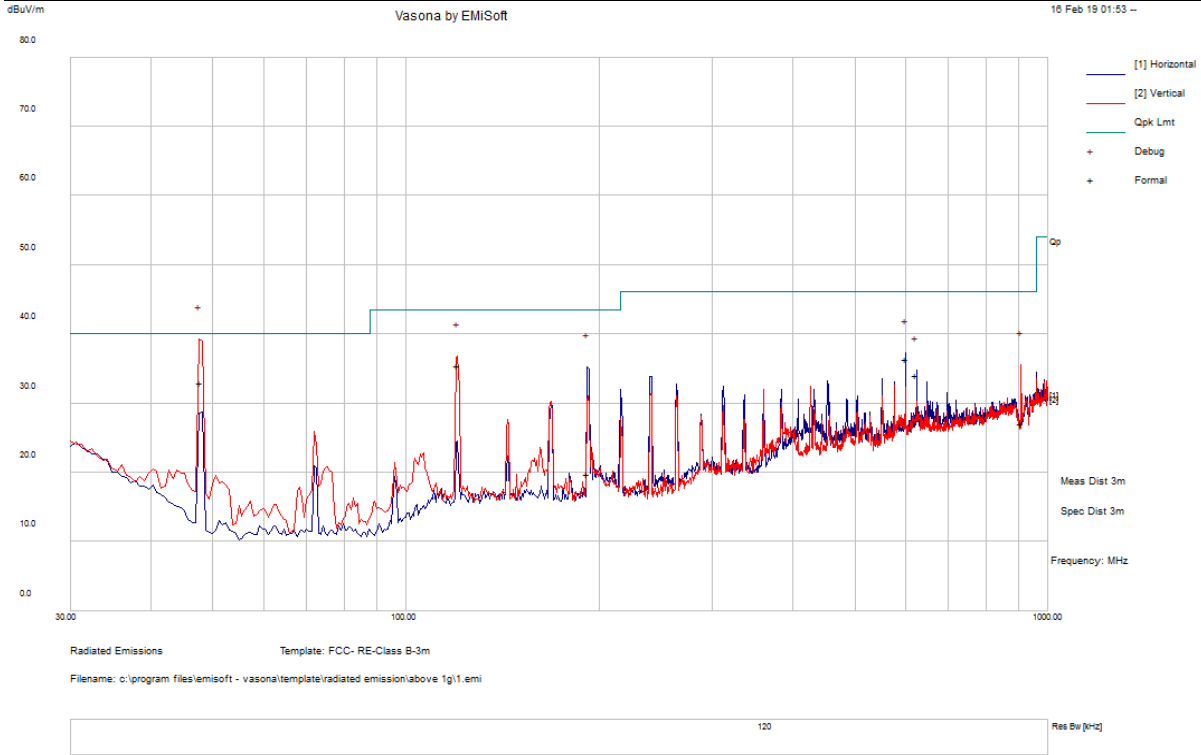
### Radiated Emission Test Results (Below 1GHz)

Test specification	Below 1GHz			Result	Pass
Environmental Conditions:	Temp (°C):	22			
	Humidity (%)	47.5			
	Atmospheric (mbar):	1020			
Mains Power:	3V DC				
Tested by:	Gary Chou				
Test Date:	02/16/2018				
Remarks:	Middle Channel, 125kHz				



Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
48.014375	51.78	11.43	-25.42	37.79	Quasi Max	V	101	262	40	-2.22	Pass
530.991875	35.4	14.46	-17.82	32.04	Quasi Max	H	116	86	46	-13.96	Pass
711.6325	27.89	15.19	-15.14	27.95	Quasi Max	H	110	211	46	-18.05	Pass
120.169063	44.54	12.07	-22.58	34.02	Quasi Max	V	102	103	43.5	-9.48	Pass
599.983125	38.4	14.69	-16.53	36.56	Quasi Max	H	130	163	46	-9.44	Pass
191.999375	46.11	12.54	-24.92	33.73	Quasi Max	H	190	86	43.5	-9.77	Pass

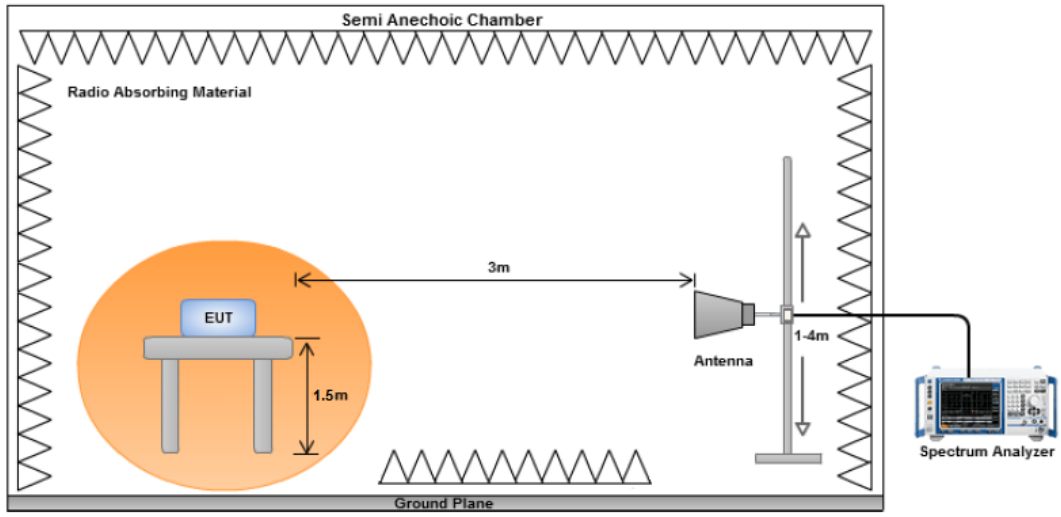
Test specification	Below 1GHz			Result	Pass
Environmental Conditions:	Temp (°C):	22			
	Humidity (%)	47.5			
	Atmospheric (mbar):	1020			
Mains Power:	3V DC				
Tested by:	Gary Chou				
Test Date:	02/16/2018				
Remarks:	Middle Channel, 500KHz				



Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
47.82375	46.88	11.43	-25.31	33	Quasi Max	V	194	156	40	-7	Pass
120.1888	46.09	12.07	-22.58	35.57	Quasi Max	V	101	260	43.5	-7.93	Pass
191.4428	32.24	12.54	-25.01	19.77	Quasi Max	H	263	172	43.5	-23.73	Pass
599.9863	38.25	14.69	-16.53	36.41	Quasi Max	H	101	148	46	-9.59	Pass
908.5863	23.99	15.92	-12.79	27.13	Quasi Max	V	340	22	46	-18.87	Pass
623.9966	36.01	14.58	-16.55	34.04	Quasi Max	H	148	149	46	-11.96	Pass

## 10.2 Radiated Spurious Emissions between 1GHz – 25GHz

### Requirement(s):

Spec	Item	Requirement	Applicable
47CFR§15.247(d), RSS247(A8.5)	a)	For non-restricted band, In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB or 30dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, determined by the measurement method on output power to be used. Attenuation below the general limits specified in § 15.209(a) is not required  <input type="checkbox"/> 20 dB down <input checked="" type="checkbox"/> 30 dB down	<input checked="" type="checkbox"/>
	b)	or restricted band, emission must also comply with the radiated emission limits specified in 15.209	<input checked="" type="checkbox"/>
Test Setup			
Procedure	<ol style="list-style-type: none"> <li>The EUT was switched on and allowed to warm up to its normal operating condition.</li> <li>The test was carried out at the selected frequency points obtained from the EUT characterisation. Maximization of the emissions, was carried out by rotating the EUT, changing the antenna polarization, and adjusting the antenna height in the following manner: <ol style="list-style-type: none"> <li>Vertical or horizontal polarisation (whichever gave the higher emission level over a full rotation of the EUT) was chosen.</li> <li>The EUT was then rotated to the direction that gave the maximum emission.</li> <li>Finally, the antenna height was adjusted to the height that gave the maximum emission.</li> </ol> </li> <li>An average measurement was then made for that frequency point.</li> <li>Steps 2 and 3 were repeated for the next frequency point, until all selected frequency points were measured.</li> </ol>		
Remark	<ol style="list-style-type: none"> <li>The EUT was scanned up to 25GHz. Both horizontal and vertical polarities were investigated. The results show only the worst case.</li> <li>Testing was done on Yabby Host.</li> </ol>		
Result	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail		

**Test Data**     Yes (See below)     N/A

**Test Plot**     Yes (See below)     N/A

**Test was done by Gary Chou at 10m chamber.**

### Radiated Emission Test Results (Above 1GHz)

Test specification	Above 1GHz			Result	Pass
Environmental Conditions:	Temp (°C):	22			
	Humidity (%)	47.5			
	Atmospheric (mbar):	1020			
Mains Power:	3V DC				
Tested by:	Gary Chou				
Test Date:	02/16/2018				
Remarks:	Middle Channel, 125KHz				

#### Low channel

Frequency (MHz)	Raw (dBuV)	Factor (dB)	Level (dBuV/m)	Measurement Type	Pol (V/H)	Hgt (cm)	Azt (Deg)	Limit (dBuV/m)	Margin (dB)	Pass /Fail
8119.42	47.23	4.64	51.87	Peak Max	H	180	266	74	-22.13	Pass
1944.159	47.51	-0.07	47.44	Peak Max	V	151	61	74	-26.56	Pass
3293.971	42.35	1.09	43.44	Peak Max	H	134	116	74	-30.56	Pass
8119.42	34.12	4.64	38.76	Average Max	H	180	266	54	-15.24	Pass
1944.154	30.32	-0.07	30.25	Average Max	V	151	61	54	-23.75	Pass
3293.977	30.23	1.09	31.32	Average Max	H	134	116	54	-22.68	Pass

#### Middle channel

Frequency (MHz)	Raw (dBuV)	Factor (dB)	Level (dBuV/m)	Measurement Type	Pol (V/H)	Hgt (cm)	Azt (Deg)	Limit (dBuV/m)	Margin (dB)	Pass /Fail
8170.5	47.14	4.66	51.8	Peak Max	H	180	266	74	-22.2	Pass
1944.156	47.13	-0.07	47.06	Peak Max	V	151	61	74	-26.94	Pass
3293.916	42.46	1.09	43.55	Peak Max	H	134	116	74	-30.45	Pass
8170.19	34.45	4.66	39.11	Average Max	H	180	266	54	-14.89	Pass
1944.126	30.28	-0.07	30.21	Average Max	V	151	61	54	-23.79	Pass
3293.946	30.61	1.09	31.7	Average Max	H	134	116	54	-22.3	Pass

#### High channel

Frequency (MHz)	Raw (dBuV)	Factor (dB)	Level (dBuV/m)	Measurement Type	Pol (V/H)	Hgt (cm)	Azt (Deg)	Limit (dBuV/m)	Margin (dB)	Pass /Fail
8227.84	47.41	4.63	52.04	Peak Max	H	180	266	74	-21.96	Pass
1944.163	47.26	-0.07	47.19	Peak Max	V	151	61	74	-26.81	Pass
3293.942	42.65	1.09	43.74	Peak Max	H	134	116	74	-30.26	Pass
8227.73	34.34	4.64	38.98	Average Max	H	180	266	54	-15.02	Pass
1944.161	30.23	-0.07	30.16	Average Max	V	151	61	54	-23.84	Pass
3293.984	30.41	1.09	31.5	Average Max	H	134	116	54	-22.5	Pass

**Note: The testing was based on highest power setting with 125KHz bandwidth.**

Test specification	Above 1GHz			Result	Pass
Environmental Conditions:	Temp (°C):	22			
	Humidity (%)	47.5			
	Atmospheric (mbar):	1020			
Mains Power:	3V DC				
Tested by:	Gary Chou				
Test Date:	02/16/2018				
Remarks:	Middle Channel, 500KHz				

**Low channel**

Frequency (MHz)	Raw (dBuV)	Factor (dB)	Level (dBuV/m)	Measurement Type	Pol (V/H)	Hgt (cm)	Azt (Deg)	Limit (dBuV/m)	Margin (dB)	Pass /Fail
8119.44	47.27	4.64	51.91	Peak Max	H	180	266	74	-22.09	Pass
1944.153	47.52	-0.07	47.45	Peak Max	V	151	61	74	-26.55	Pass
3293.975	42.39	1.09	43.48	Peak Max	H	134	116	74	-30.52	Pass
8119.44	34.14	4.64	38.78	Average Max	H	180	266	54	-15.22	Pass
1944.153	30.36	-0.07	30.29	Average Max	V	151	61	54	-23.71	Pass
3293.975	30.2	1.09	31.29	Average Max	H	134	116	54	-22.71	Pass

**Middle channel**

Frequency (MHz)	Raw (dBuV)	Factor (dB)	Level (dBuV/m)	Measurement Type	Pol (V/H)	Hgt (cm)	Azt (Deg)	Limit (dBuV/m)	Margin (dB)	Pass /Fail
8170.2	47.18	4.66	51.84	Peak Max	H	180	266	74	-22.16	Pass
1944.153	47.17	-0.07	47.1	Peak Max	V	151	61	74	-26.9	Pass
3293.975	42.42	1.09	43.51	Peak Max	H	134	116	74	-30.49	Pass
8170.2	34.53	4.66	39.19	Average Max	H	180	266	54	-14.81	Pass
1944.153	30.24	-0.07	30.17	Average Max	V	151	61	54	-23.83	Pass
3293.975	30.67	1.09	31.76	Average Max	H	134	116	54	-22.24	Pass

**High channel**

Frequency (MHz)	Raw (dBuV)	Factor (dB)	Level (dBuV/m)	Measurement Type	Pol (V/H)	Hgt (cm)	Azt (Deg)	Limit (dBuV/m)	Margin (dB)	Pass /Fail
8227.8	47.43	4.63	52.06	Peak Max	H	180	266	74	-21.94	Pass
1944.153	47.22	-0.07	47.15	Peak Max	V	151	61	74	-26.85	Pass
3293.975	42.67	1.09	43.76	Peak Max	H	134	116	74	-30.24	Pass
8227.8	34.37	4.64	39.01	Average Max	H	180	266	54	-14.99	Pass
1944.153	30.25	-0.07	30.18	Average Max	V	151	61	54	-23.82	Pass
3293.975	30.43	1.09	31.52	Average Max	H	134	116	54	-22.48	Pass
















**Note: The testing was based on highest power setting with 500KHz bandwidth.**










**Annex A. TEST INSTRUMENT**

Instrument	Model	Serial #	Cal Date	Cal Cycle	Cal Due	In use
<b>Radiated Emissions</b>						
50GHz Spectrum Analyzer	N9030B (PXA)	MY57140374	01/25/2019	1 Year	01/25/2020	<input checked="" type="checkbox"/>
Bi-Log antenna (30MHz~2GHz)	JB1	A030702	03/09/2018	2 Year	03/09/2020	<input checked="" type="checkbox"/>
Horn Antenna (1-18GHz)	3115	10SL0059	01/26/2018	2 Year	01/26/2020	<input checked="" type="checkbox"/>
RF Pre-Amplifier (9kHz - 6.5GHz)	LPA-6-30	11170601	07/23/2018	1 Year	07/23/2019	<input checked="" type="checkbox"/>
Pre-Amplifier (1-26.5GHz)	8449B	3008A00715	05/16/2018	1 Year	05/16/2019	<input checked="" type="checkbox"/>

## Annex B. SIEMIC Accreditation

Accreditations	Document	Scope / Remark
ISO 17025 (A2LA)		Please see the documents for the detailed scope
ISO Guide 65 (A2LA)		Please see the documents for the detailed scope
TCB Designation		<a href="#">A1</a> , <a href="#">A2</a> , <a href="#">A3</a> , <a href="#">A4</a> , <a href="#">B1</a> , <a href="#">B2</a> , <a href="#">B3</a> , <a href="#">B4</a> , C
FCC DoC Accreditation		FCC Declaration of Conformity Accreditation
FCC Site Registration		3 meter site
FCC Site Registration		10 meter site
IC Site Registration		3 meter site
IC Site Registration		10 meter site
EU NB		<b>Radio &amp; Telecommunications Terminal Equipment:</b> EN45001 – EN ISO/IEC 17025
		<b>Electromagnetic Compatibility:</b> EN45001 – EN ISO/IEC 17025
Singapore iDA CB(Certification Body)		<a href="#">Phase I</a> , <a href="#">Phase II</a>
Vietnam MIC CAB Accreditation		Please see the document for the detailed scope
Hong Kong OFCA		<b>(Phase II)</b> OFCA Foreign Certification Body for Radio and Telecom
		<b>(Phase I)</b> Conformity Assessment Body for Radio and Telecom
Industry Canada CAB		<b>Radio:</b> Scope A – All Radio Standard Specification in Category I
		<b>Telecom:</b> CS-03 Part I, II, V, VI, VII, VIII

Japan Recognized Certification Body Designation		<p><b>Radio:</b> A1. Terminal equipment for purpose of calling</p> <p><b>Telecom:</b> B1. Specified radio equipment specified in Article 38-2, Paragraph 1, Item 1 of the Radio Law</p>
Korea CAB Accreditation		<p><b>EMI:</b> KCC Notice 2008-39, RRL Notice 2008-3: CA Procedures for EMI KN22: Test Method for EMI</p> <p><b>EMS:</b> KCC Notice 2008-38, RRL Notice 2008-4: CA Procedures for EMS KN24, KN61000-4-2, -4-3, -4-4, -4-5, -4-6, -4-8, -4-11: Test Method for EMS</p>
		<p><b>Radio:</b> RRL Notice 2008-26, RRL Notice 2008-2, RRL Notice 2008-10, RRL Notice 2007-49, RRL Notice 2007-20, RRL Notice 2007-21, RRL Notice 2007-80, RRL Notice 2004-68</p> <p><b>Telecom:</b> President Notice 20664, RRL Notice 2007-30, RRL Notice 2008-7 with attachments 1, 3, 5, 6; President Notice 20664, RRL Notice 2008-7 with attachment 4</p>
Taiwan NCC CAB Recognition		LP0002, PSTN01, ADSL01, ID0002, IS6100, CNS14336, PLMN07, PLMN01, PLMN08
Taiwan BSMI CAB Recognition		CNS 13438
Japan VCCI		<p>R-3083: Radiation 3 meter site</p> <p>C-3421: Main Ports Conducted Interference Measurement</p> <p>T-1597: Telecommunication Ports Conducted Interference Measurement</p>
Australia CAB Recognition		<p><b>EMC:</b> AS/NZS CISPR 11, AS/NZS CISPR 14.1, AS/NZS CISPR22, AS/NZS 61000.6.3, AS/NZS 61000.6.4</p>
		<p><b>Radio communications:</b> AS/NZS 4281, AS/NZS 4268, AS/NZS 4280.1, AS/NZS 4280.2, AS/NZS 4295, AS/NZS 4582, AS/NZS 4583, AS/NZS 4769.1, AS/NZS 4769.2, AS/NZS 4770, AS/NZS 4771</p>
		<p><b>Telecommunications:</b> AS/ACIF S002:05, AS/ACIF S003:06, AS/ACIF S004:06 AS/ACIF S006:01, AS/ACIF S016:01, AS/ACIF S031:01, AS/ACIF S038:01, AS/ACIF S040:01, AS/ACIF S041:05, AS/ACIF S043.2:06, AS/ACIF S60950.1</p>
Australia NATA Recognition		AS/ACIF S002, AS/ACIF S003, AS/ACIF S004, AS/ACIF S006, AS/ACIF S016, AS/ACIF S031, AS/ACIF S038, AS/ACIF S040, AS/ACIF S041, AS/ACIF S043.2