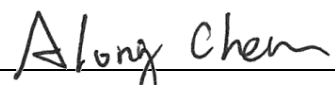


FCC C2PC Test Report

FCC ID : O6ZHXQX1AP0S
Equipment : 8-Channel LoRa Module
Model No. : HXQX1AP0S
Brand Name : machineQ
Applicant : Humax Co., Ltd.
Address : HUMAX BLDG., 2, HUMAX BLDG., 2,
Yeongmun-ro, Cheoin-gu, Yongin-si,
Gyeonggi-do, South Korea, 17040
Standard : 47 CFR FCC Part 15.247
Received Date : Nov. 30, 2018
Tested Date : Nov. 13 ~ Dec. 11, 2018

We, International Certification Corp., would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by:


Along Chen / Assistant Manager

Approved by:


Gary Chang / Manager



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Release Record

Report No.	Version	Description	Issued Date
FR782401-08	Rev. 01	Initial issue	Dec. 26, 2018

Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.291MHz 41.09 (Margin -9.41dB) - AV	Pass
15.247(d) 15.209	Radiated Emissions	[dBuV/m at 3m]: 140.67MHz 39.51 (Margin -3.99dB) - PK	Pass

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared values of gain for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of the gain.

1 General Description

1.1 Information

This report is issued as a supplementary report to original report no. FR782401-04.
FR782401-04 is to add a host as section 1.1.2.

The report is prepared for FCC Class II change to modification of this host. The modification is concerned with following

✧ Surface oxidation of PCB board

Conducted emission and radiated emission tests had been re-tested and presented in following sections.

1.1.1 Specification of the Equipment under Test (EUT)

RF General Information					
Frequency Range (MHz)	Ch. Freq. (MHz)	Channel Number	Data Rate (bit/sec)	Spread Factor	Channel Bandwidth (kHz)
902 ~ 928	923.3 ~ 927.5	1 ~ 8 [8]	980 ~ 21900	12 ~ 7	500
Note 1: RF output power specifies that Maximum Conducted (Average) Output Power.					
Note 2: The device uses CSS modulation.					

1.1.2 Information of Host

Brand Name	machineQ
Product name	8-Channel LoRa Gateway
Model name	HXQX1AP0S
Certified module (installed in the system)	FCC ID: XMR201605EC25A

1.1.2.1 Antenna of Host

For LoRa

Ant. No.	Brand	Type	Gain (dBi)	Connector	Remark
1	LoRa antenna (External)	Dipole	0.96	SMA	Lora Antenna
2	LoRa antenna (Internal)	Monopole	-1.65	UFL	Lora Antenna

For LTE / WCDMA

Ant. No.	Type	Connector	Gain (dBi)	Operating Band
1	PIFA	UFL	4.49	LTE Band 2 / WCDMA Band II
			3.59	LTE Band 4 / WCDMA Band IV
			2.05	LTE Band 12 / WCDMA Band V

1.1.2.2 Power Supply Type of Host

Power Supply Type	12Vdc from adapter
-------------------	--------------------

1.1.2.3 Accessories of Host

Accessories		
No.	Equipment	Description
1	AC adapter	Brand: machineQ Model: WB-24J12FU Power Rating: I/P: 100-240Vac, 50-60Hz, 0.7A Max O/P: 12Vdc, 2A Power Line: 1.2m non-shielded without core
2	AC adapter	Brand: PHIHONG Model: PSAC24A-120L6 Power Rating: I/P: 100-240Vac, 50-60Hz, 51-73VA O/P: 12Vdc, 2A Power Line: 1.2m non-shielded without core
3	RJ45 cable	1m shielded without core

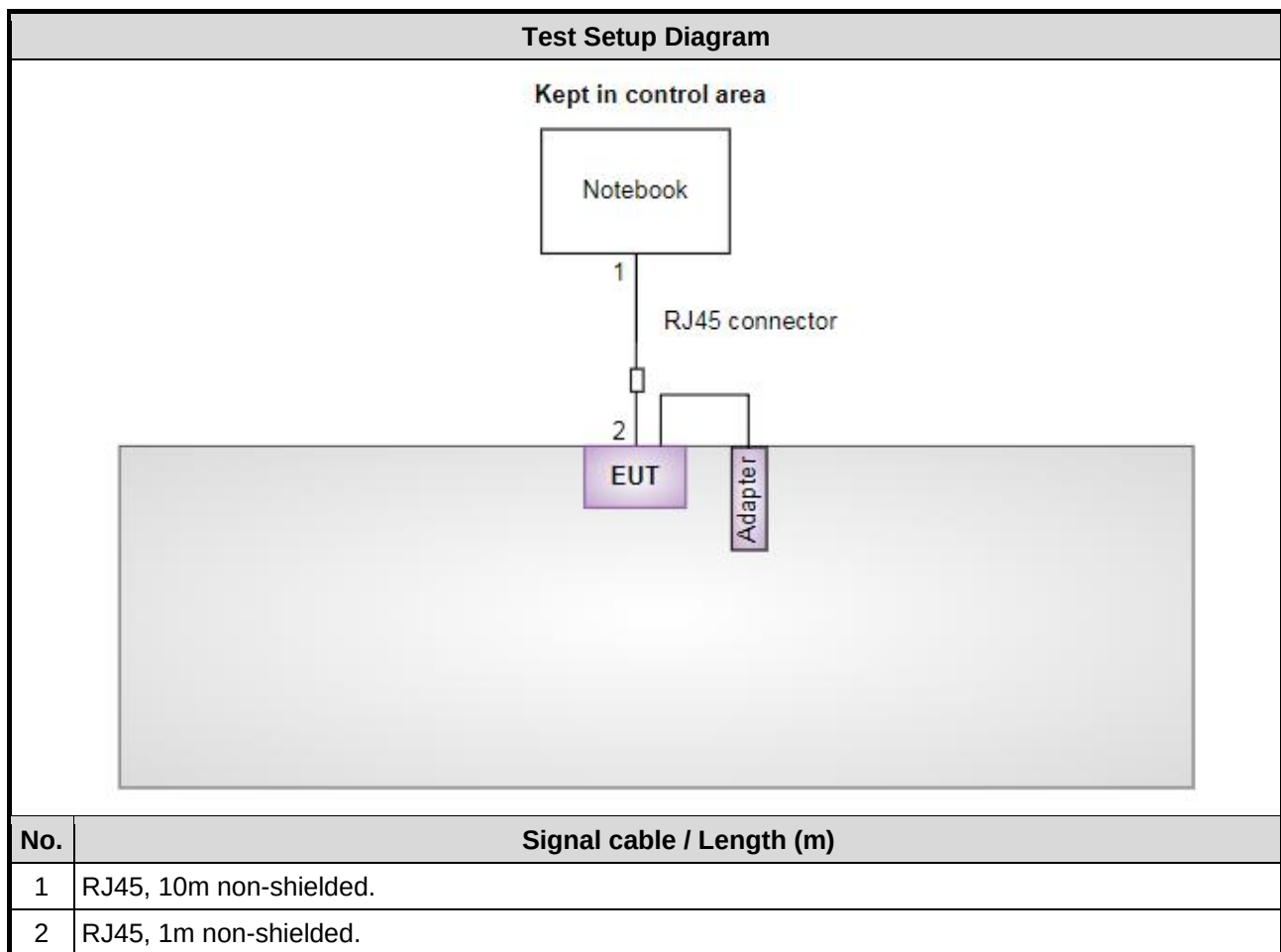
1.1.3 Channel List

Channel	Frequency(MHz)
1	923.3
2	923.9
3	924.5
4	925.1
5	925.7
6	926.3
7	926.9
8	927.5

1.2 Local Support Equipment List

Support Equipment List					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Notebook	DELL	Latitude E6430	DoC	---

1.3 Test Setup Chart



1.4 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Tested Date	Nov. 13, 2018				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Receiver	R&S	ESR3	101657	Jan. 05, 2018	Jan. 04, 2019
LISN	SCHWARZBECK	Schwarzbeck 8127	8127-667	Nov. 05, 2018	Nov. 04, 2019
RF Cable-CON	EMC	EMCCFD300-BM-B M-6000	50821	Dec. 18, 2017	Dec. 17, 2018
Measurement Software	AUDIX	e3	6.120210k	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber3 / (03CH03-WS)				
Tested Date	Dec. 10 ~ Dec. 11, 2018				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101499	Jan. 03, 2018	Jan. 02, 2019
Receiver	R&S	ESR3	101657	Jan. 05, 2018	Jan. 04, 2019
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-685	Apr. 19, 2018	Apr. 18, 2019
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1206	Jan. 18, 2018	Jan. 17, 2019
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 15, 2018	Nov. 14, 2019
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 09, 2018	Nov. 08, 2019
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 08, 2018	Oct. 07, 2019
Preamplifier	EMC	EMC02325	980187	Aug. 24, 2018	Aug. 23, 2019
Preamplifier	Agilent	83017A	MY53270014	Aug. 09, 2018	Aug. 08, 2019
Preamplifier	EMC	EMC184045B	980192	Aug. 09, 2018	Aug. 08, 2019
RF cable-3M	EMC	EMC104-SM-SM-80 00	181107	Oct. 30, 2018	Oct. 29, 2019
RF cable-8M	HUBER+SUHNER	SUCOFLEX104	MY32487/4	Oct. 30, 2018	Oct. 29, 2019
RF cable-1M	HUBER+SUHNER	SUCOFLEX104	MY22624/4	Oct. 30, 2018	Oct. 29, 2019
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800 -001	Oct. 30, 2018	Oct. 29, 2019
LF cable-3M	EMC	EMC8D-NM-NM-300 0	131103	Oct. 30, 2018	Oct. 29, 2019
LF cable-13M	EMC	EMC8D-NM-NM-130 00	131104	Oct. 30, 2018	Oct. 29, 2019
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

1.5 Test Standards

According to the specification of EUT, the EUT must comply with following standards and KDB documents.

47 CFR FCC Part 15.247

ANSI C63.10-2013

FCC KDB 558074 D01 15.247 Meas Guidance v05

1.6 Deviation from Test Standard and Measurement Procedure

None

1.7 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor ($k=2$))

Measurement Uncertainty	
Parameters	Uncertainty
Bandwidth	± 34.134 Hz
Conducted power	± 0.808 dB
Power density	± 0.463 dB
Conducted emission	± 2.670 dB
AC conducted emission	± 2.90 dB
Radiated emission ≤ 1 GHz	± 3.66 dB
Radiated emission > 1 GHz	± 5.37 dB

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	25°C / 57%	Steve Chin
Radiated Emissions	03CH03-WS	24-25°C / 61-65%	Roger Lu Aska Huang

- FCC Designation No.: TW0009
- FCC site registration No.: 207696
- IC site registration No.: 10807C-1

2.2 The Worst Test Modes and Channel Details

Test item	Test Frequency (MHz)	Channel Bandwidth (kHz)	Modulation / SF	Test Configuration
Conducted Emissions	923.3 / 927.5	500	CSS / 12	---
Radiated emission ≤ 1GHz	923.3 / 927.5	500	CSS / 12	---
Radiated emission > 1GHz	927.5	500	CSS / 12	---

NOTE:

- The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **X-plane** results were found as the worst case and were shown in this report.
- Two adapters (machineQ and PHIHONG) had been covered during the pretest, and found that **PHIHONG adapter** was the worst case and was selected for final test.

3 Transmitter Test Results

3.1 Conducted Emissions

3.1.1 Limit of Conducted Emissions

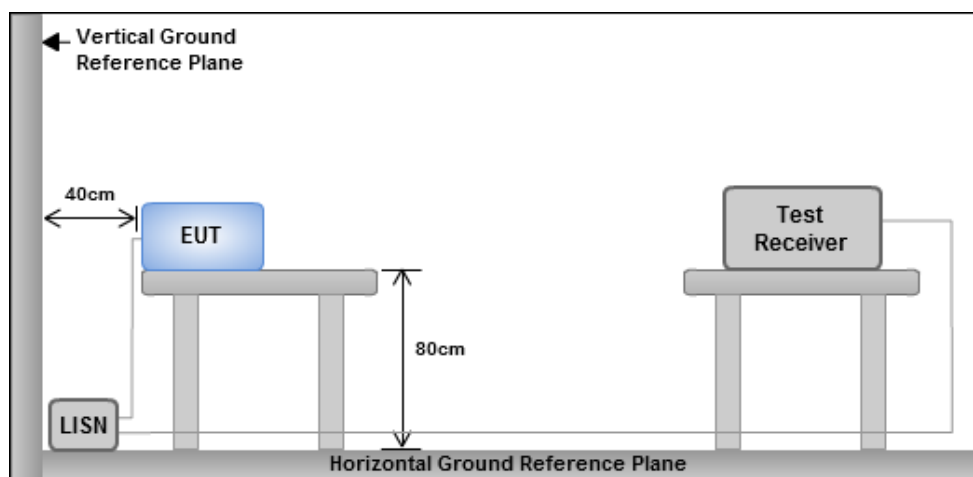
Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

3.1.2 Test Procedures

1. The device is placed on a test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rear of the device.
2. The device is connected to line impedance stabilization network (LISN) and other accessories are connected to other LISN. Measured levels of AC power line conducted emission are across the 50 Ω LISN port.
3. AC conducted emission measurements is made over frequency range from 150 kHz to 30 MHz.
4. This measurement was performed with AC 120V / 60Hz.

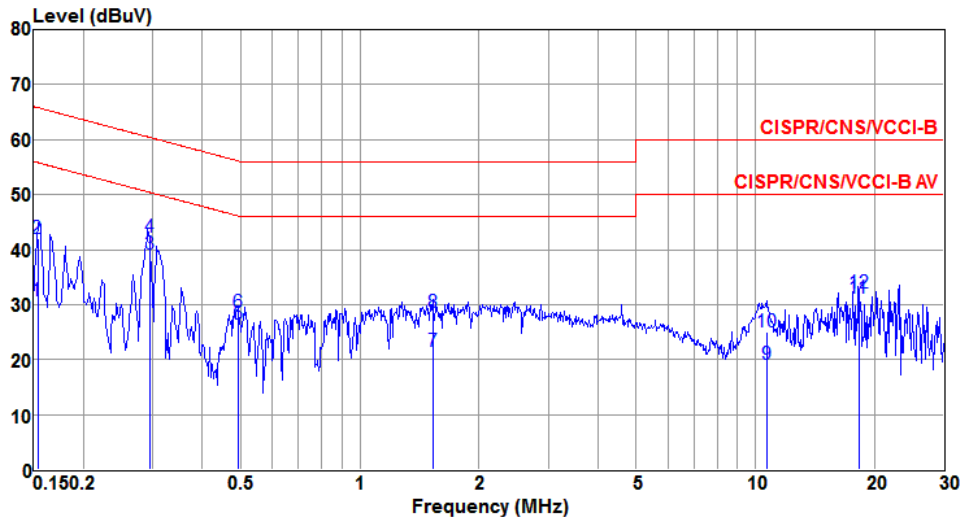
3.1.3 Test Setup



- Note: 1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

3.1.4 Test Result of Conducted Emissions

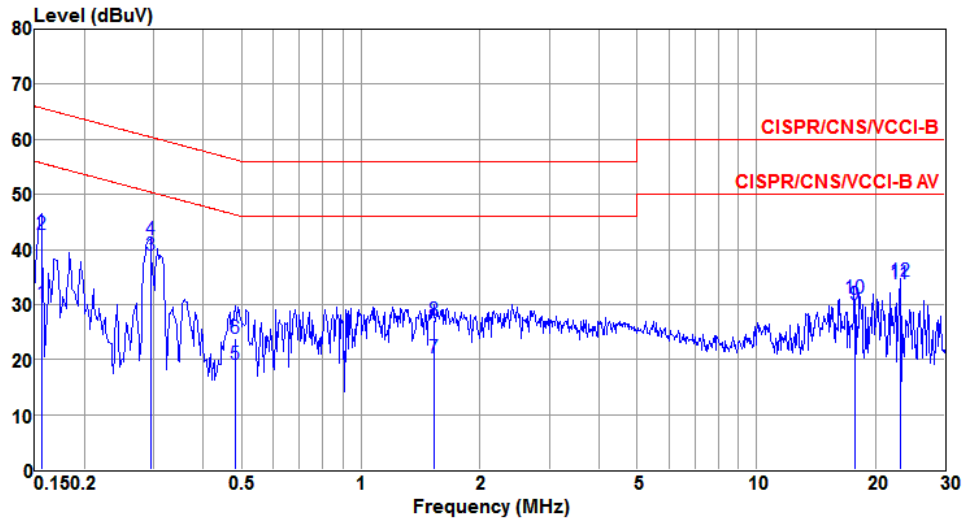
Modulation / SF	CSS / 12	Test Freq. (MHz)	923.3
Power Phase	Line		



	Freq MHz	Level dBUV	Limit Line dBUV	Over Limit dB	Read Level dBUV	LISN factor dB	cable loss dB	Remark
1	0.153	30.60	55.82	-25.22	30.42	0.07	0.01	Average
2	0.153	41.91	65.82	-23.91	41.73	0.07	0.01	QP
3*	0.294	39.24	50.41	-11.17	39.03	0.06	0.02	Average
4	0.294	42.23	60.41	-18.18	42.02	0.06	0.02	QP
5	0.491	26.33	46.14	-19.81	26.09	0.06	0.02	Average
6	0.491	28.46	56.14	-27.68	28.22	0.06	0.02	QP
7	1.527	21.51	46.00	-24.49	21.12	0.09	0.07	Average
8	1.527	28.47	56.00	-27.53	28.08	0.09	0.07	QP
9	10.676	19.15	50.00	-30.85	18.34	0.19	0.32	Average
10	10.676	24.93	60.00	-35.07	24.12	0.19	0.32	QP
11	18.242	31.27	50.00	-18.73	30.27	0.23	0.33	Average
12	18.242	32.14	60.00	-27.86	31.14	0.23	0.33	QP

Note 1: Level (dBUV) = Read Level (dBUV) + LISN Factor (dB) + Cable Loss (dB).
 Note 2: Over Limit (dB) = Level (dBUV) – Limit Line (dBUV).

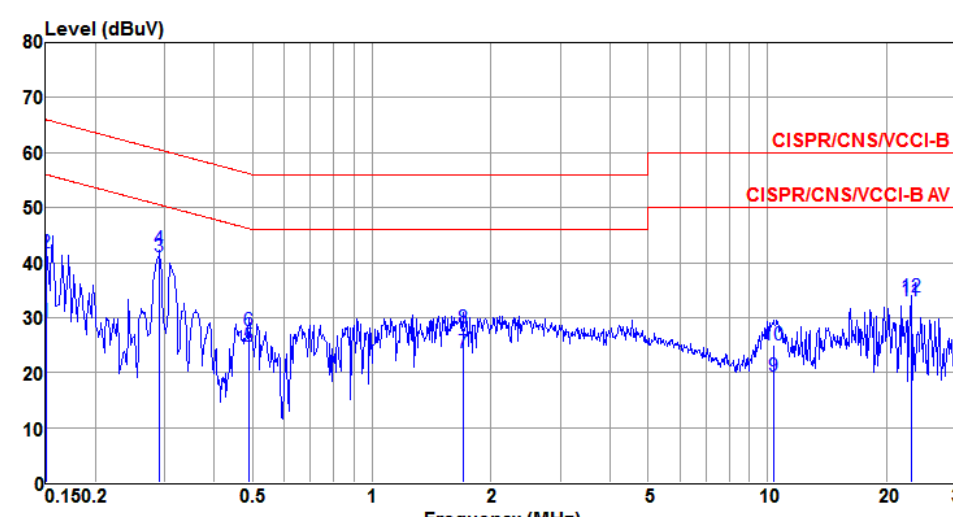
Modulation / SF	CSS / 12	Test Freq. (MHz)	923.3
Power Phase	Neutral		



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.156	30.32	55.69	-25.37	30.06	0.05	0.01	Average
2	0.156	42.80	65.69	-22.89	42.54	0.05	0.01	QP
3*	0.294	38.97	50.41	-11.44	38.66	0.05	0.02	Average
4	0.294	41.69	60.41	-18.72	41.38	0.05	0.02	QP
5	0.481	19.23	46.32	-27.09	18.89	0.05	0.02	Average
6	0.481	23.87	56.32	-32.45	23.53	0.05	0.02	QP
7	1.527	20.26	46.00	-25.74	19.81	0.07	0.07	Average
8	1.527	27.22	56.00	-28.78	26.77	0.07	0.07	QP
9	17.694	30.04	50.00	-19.96	28.93	0.25	0.33	Average
10	17.694	31.14	60.00	-28.86	30.03	0.25	0.33	QP
11	23.128	33.73	50.00	-16.27	32.42	0.29	0.37	Average
12	23.128	34.23	60.00	-25.77	32.92	0.29	0.37	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).
 2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

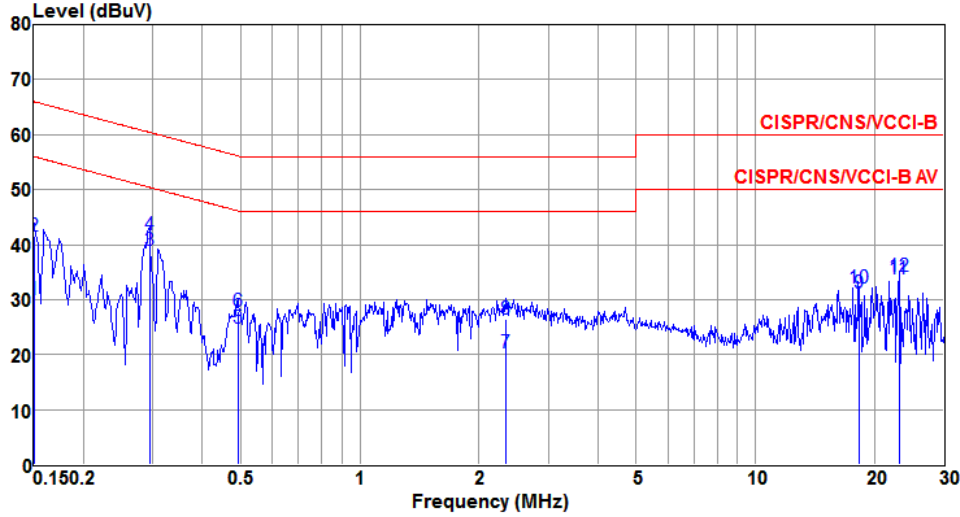
Modulation / SF	CSS / 12	Test Freq. (MHz)	927.5
Power Phase	Line		



	Freq MHz	Level dBUV	Limit Line dBUV	Over Limit dB	Read Level dBUV	LISN factor dB	cable loss dB	Remark
1	0.150	29.25	56.00	-26.75	29.07	0.07	0.01	Average
2	0.150	41.74	66.00	-24.26	41.56	0.07	0.01	QP
3*	0.291	41.09	50.50	-9.41	40.88	0.06	0.02	Average
4	0.291	42.57	60.50	-17.93	42.36	0.06	0.02	QP
5	0.489	24.70	46.19	-21.49	24.46	0.06	0.02	Average
6	0.489	27.64	56.19	-28.55	27.40	0.06	0.02	QP
7	1.698	23.68	46.00	-22.32	23.28	0.09	0.08	Average
8	1.698	28.12	56.00	-27.88	27.72	0.09	0.08	QP
9	10.342	19.33	50.00	-30.67	18.54	0.18	0.32	Average
10	10.342	25.04	60.00	-34.96	24.25	0.18	0.32	QP
11	23.128	33.06	50.00	-16.94	31.91	0.25	0.37	Average
12	23.128	33.73	60.00	-26.27	32.58	0.25	0.37	QP

Note 1: Level (dBUV) = Read Level (dBUV) + LISN Factor (dB) + Cable Loss (dB).
 2: Over Limit (dB) = Level (dBUV) – Limit Line (dBUV).

Modulation / SF	CSS / 12	Test Freq. (MHz)	927.5
Power Phase	Neutral		



	Freq MHz	Level dBUV	Limit Line dBUV	Over Limit dB	Read Level dBUV	LISN factor dB	cable loss dB	Remark
1	0.150	29.92	56.00	-26.08	29.66	0.05	0.01	Average
2	0.150	41.51	66.00	-24.49	41.25	0.05	0.01	QP
3*	0.294	38.99	50.42	-11.43	38.68	0.05	0.02	Average
4	0.294	41.83	60.42	-18.59	41.52	0.05	0.02	QP
5	0.491	24.72	46.14	-21.42	24.38	0.05	0.02	Average
6	0.491	27.97	56.14	-28.17	27.63	0.05	0.02	QP
7	2.334	20.28	46.00	-25.72	19.76	0.07	0.13	Average
8	2.334	26.49	56.00	-29.51	25.97	0.07	0.13	QP
9	18.243	31.13	50.00	-18.87	30.00	0.25	0.33	Average
10	18.243	31.99	60.00	-28.01	30.86	0.25	0.33	QP
11	23.128	33.66	50.00	-16.34	32.35	0.29	0.37	Average
12	23.128	34.27	60.00	-25.73	32.96	0.29	0.37	QP

Note 1: Level (dBUV) = Read Level (dBUV) + LISN Factor (dB) + Cable Loss (dB).
 2: Over Limit (dB) = Level (dBUV) – Limit Line (dBUV).

3.2 Unwanted Emissions into Restricted Frequency Bands

3.2.1 Limit of Unwanted Emissions into Restricted Frequency Bands

Restricted Band Emissions Limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1:
Quasi-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit

Note 2:
Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

3.2.2 Test Procedures

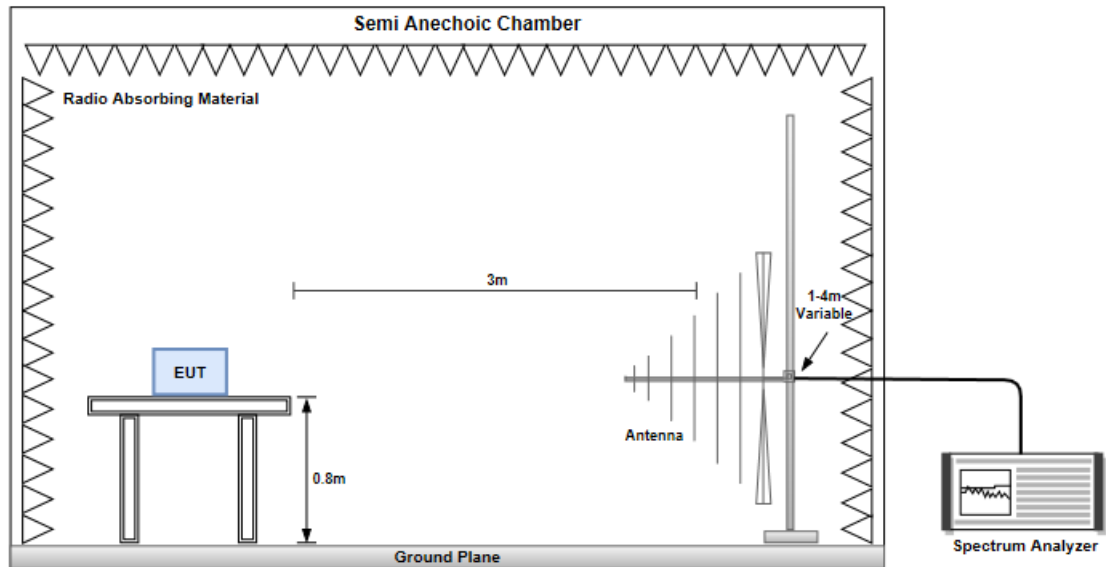
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at test table. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.

Note:

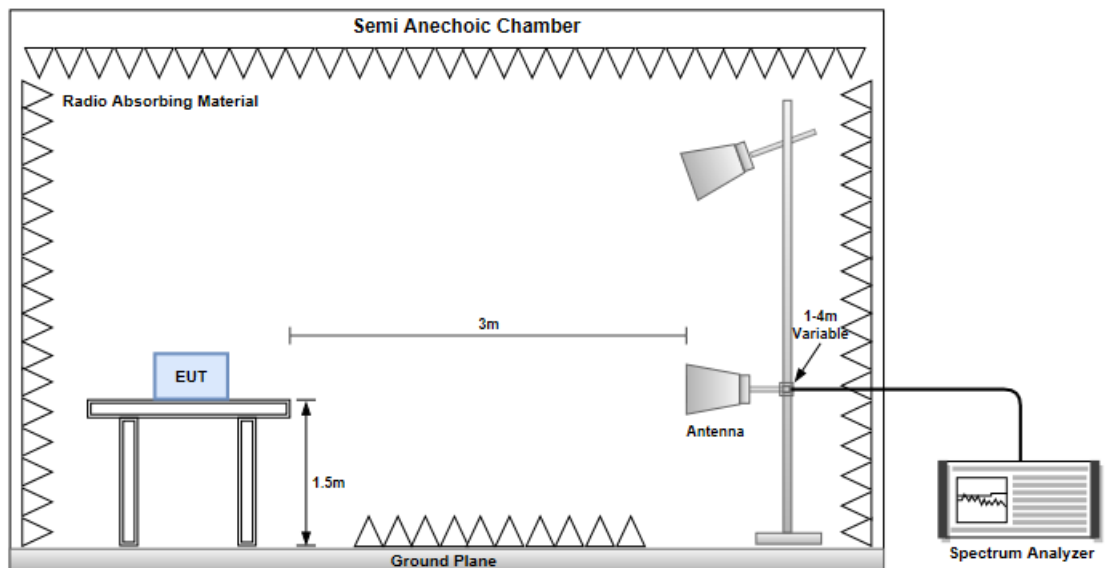
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above 1GHz.

3.2.3 Test Setup

Radiated Emissions below 1 GHz



Radiated Emissions above 1 GHz

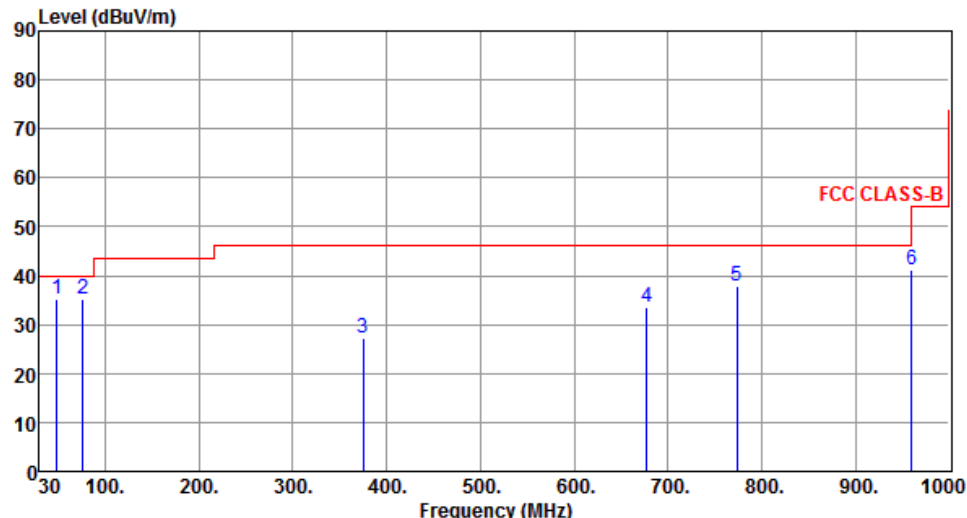


3.2.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation / SF	CSS / 12	Test Freq. (MHz)	923.3
Polarization	Horizontal		
Level (dBuV/m)			

Modulation / SF	CSS / 12	Test Freq. (MHz)	923.3
Polarization	Vertical		
Level (dBuV/m)			

Modulation / SF	CSS / 12	Test Freq. (MHz)	927.5
Polarization	Horizontal		



The graph displays the emission level in dBUV/m on the y-axis (0 to 90) against frequency in MHz on the x-axis (30 to 1000). A red line represents the FCC CLASS-B limit, which is a step function: 40 dBUV/m from 30 to 100 MHz, 43 dBUV/m from 100 to 200 MHz, and 46 dBUV/m from 200 to 1000 MHz. Six blue vertical lines indicate measured peaks at the following frequencies: 48.54 MHz (labeled 1), 76.50 MHz (labeled 2), 375.20 MHz (labeled 3), 677.60 MHz (labeled 4), 773.60 MHz (labeled 5), and 960.00 MHz (labeled 6). The peak at 960.00 MHz is the highest, reaching approximately 41.33 dBUV/m.

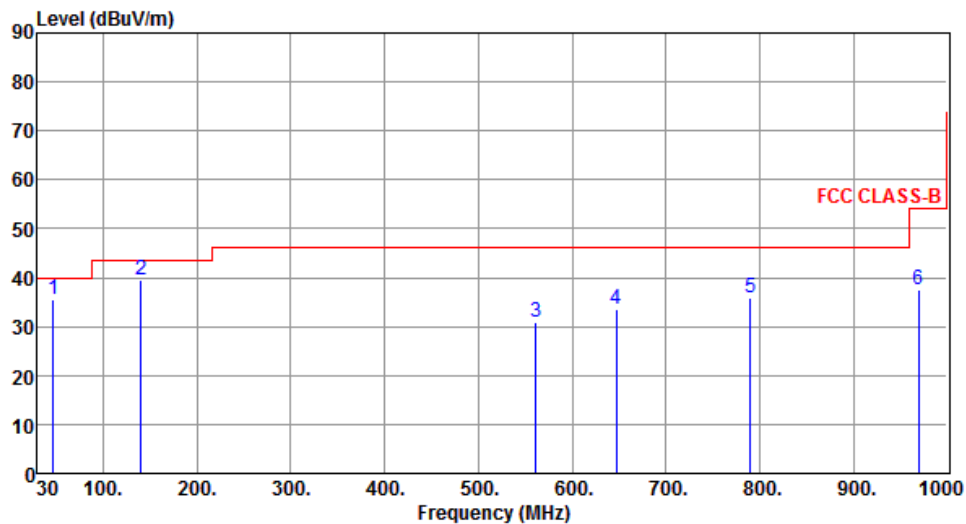
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	48.54	35.23	40.00	-4.77	43.17	-7.94	QP	100	242
2	76.50	35.08	40.00	-4.92	47.13	-12.05	QP	170	349
3	375.20	27.26	46.00	-18.74	32.88	-5.62	Peak	---	---
4	677.60	33.65	46.00	-12.35	32.80	0.85	Peak	---	---
5	773.60	37.72	46.00	-8.28	34.77	2.95	Peak	---	---
6	960.00	41.33	46.00	-4.67	35.38	5.95	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

Modulation / SF	CSS / 12	Test Freq. (MHz)	927.5
Polarization	Vertical		



	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	46.51	35.57	40.00	-4.43	43.61	-8.04	QP	100	350
2	140.67	39.51	43.50	-3.99	20.01	19.50	Peak	---	---
3	561.60	30.87	46.00	-15.13	32.32	-1.45	Peak	---	---
4	647.20	33.51	46.00	-12.49	33.14	0.37	Peak	---	---
5	790.40	36.02	46.00	-9.98	32.86	3.16	Peak	---	---
6	969.60	37.60	54.00	-16.40	31.54	6.06	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

3.2.5 Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation / SF	CSS / 12	Test Freq. (MHz)	927.5
Polarization	Horizontal		
Level (dBUV/m) </			

Modulation / SF	CSS / 12	Test Freq. (MHz)	927.5																																																																						
Polarization	Vertical																																																																								
Level (dBUV/m) 90 80 70 60 50 40 30 20 10 0 1000 6000 10000 14000 18000 22000 26000 30000 34000 40000 Frequency (MHz) 1 2 3 4 5 6 2782.50 2782.50 3710.00 3710.00 7420.00 7420.00 29.40 40.06 35.81 43.55 44.85 54.28 54.00 74.00 54.00 74.00 54.00 74.00 -24.60 -33.94 -18.19 -30.45 -9.15 -19.72 29.60 40.26 34.12 41.86 34.73 44.16 -0.20 -0.20 1.69 1.69 10.12 10.12 Average Peak Average Peak Average Peak 167 167 295 295 101 101 44 44 43 43 245 245 FCC CLASS-B FCC CLASS-B (AVG) <table><tr><th></th><th>Freq. MHz</th><th>Emission level dBuV/m</th><th>Limit dBuV/m</th><th>Margin dB</th><th>SA reading dBuV</th><th>Factor dB</th><th>Remark</th><th>ANT High cm</th><th>Turn Table deg</th></tr><tr><td>1</td><td>2782.50</td><td>29.40</td><td>54.00</td><td>-24.60</td><td>29.60</td><td>-0.20</td><td>Average</td><td>167</td><td>44</td></tr><tr><td>2</td><td>2782.50</td><td>40.06</td><td>74.00</td><td>-33.94</td><td>40.26</td><td>-0.20</td><td>Peak</td><td>167</td><td>44</td></tr><tr><td>3</td><td>3710.00</td><td>35.81</td><td>54.00</td><td>-18.19</td><td>34.12</td><td>1.69</td><td>Average</td><td>295</td><td>43</td></tr><tr><td>4</td><td>3710.00</td><td>43.55</td><td>74.00</td><td>-30.45</td><td>41.86</td><td>1.69</td><td>Peak</td><td>295</td><td>43</td></tr><tr><td>5</td><td>7420.00</td><td>44.85</td><td>54.00</td><td>-9.15</td><td>34.73</td><td>10.12</td><td>Average</td><td>101</td><td>245</td></tr><tr><td>6</td><td>7420.00</td><td>54.28</td><td>74.00</td><td>-19.72</td><td>44.16</td><td>10.12</td><td>Peak</td><td>101</td><td>245</td></tr></table>					Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg	1	2782.50	29.40	54.00	-24.60	29.60	-0.20	Average	167	44	2	2782.50	40.06	74.00	-33.94	40.26	-0.20	Peak	167	44	3	3710.00	35.81	54.00	-18.19	34.12	1.69	Average	295	43	4	3710.00	43.55	74.00	-30.45	41.86	1.69	Peak	295	43	5	7420.00	44.85	54.00	-9.15	34.73	10.12	Average	101	245	6	7420.00	54.28	74.00	-19.72	44.16	10.12	Peak	101	245
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Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB) *Factor includes antenna factor , cable loss and amplifier gain Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).																																																																									

4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corp (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website <http://www.icertifi.com.tw>.

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Kwei Shan

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Kwei Shan Site II

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If you have any suggestion, please feel free to contact us as below information.

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