

FCC REPORT

Applicant: Hulu Robotics Technology Company Limited

Address of Applicant: Unit A, 3/F, Cheong Sun Tower, 116-118 Wing Lok Street,
Sheung Wan, Hong Kong

Equipment Under Test (EUT)

Product Name: 2.4G Wireless Serial-USB

Model No.: MBK-2.4G-USB

FCC ID: 2ACWW1300303U

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.249

Date of sample receipt: 15 May 2015

Date of Test: 15 May to 16 Jun., 2015

Date of report issued: 16 Jun., 2015

Test Result: PASS*

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

A blue circular stamp with the text "SHENZHEN ZHONGJIAN NANFANG TESTING CO., LTD." around the perimeter and "CCIS" in the center. A handwritten signature in black ink is written over the stamp.

Bruce Zhang
Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the CCIS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

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2 Version

Version No.	Date	Description
00	16 Jun., 2015	Original

Prepared By:

Sera Xiang

Project Engineer

Date:

16 Jun., 2015

Check By:

Gaven Liu

Reviewer

Date:

16 Jun., 2015

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4 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203	Pass
Conducted Emission	15.207	Pass
Field strength of the fundamental signal	15.249 (a)	Pass
Spurious emissions	15.249 (a) (d)/15.209	Pass
Band edge	15.249 (d)/15.205	Pass
20dB Occupied Bandwidth	15.215 (c)	Pass

Pass: The EUT comply with the essential requirements in the standard.

5 General Information

5.1 Client Information

Applicant:	Hulu Robotics Technology Company Limited
Address of Applicant:	Unit A, 3/F, Cheong Sun Tower, 116-118 Wing Lok Street, Sheung Wan, Hong Kong
Manufacturer/Factory:	Maker Works Technology INC
Address of Manufacturer/Factory:	Building C3, Floor 4th, Zhiyuan, Xili, Nanshan District, ShenZhen 518057 China

5.2 General Description of E.U.T.

Product Name:	2.4G Wireless Serial-USB
Model No.:	MBK-2.4G-USB
Operation Frequency:	2404MHz to 2480MHz
Channel numbers:	47
Modulation type:	GFSK
Antenna Type:	PCB antenna
Antenna gain:	-3dBi
Power supply:	DC 5V

5.3 Test mode

Transmitting mode:	Keep the EUT in transmitting mode with modulation.		
Pre-Test Mode: (lowest channel=2440MHz)			
CCIS has verified the construction and function in typical operation, The EUT was placed on three different polar directions; i.e. X axis, Y axis, Z axis. which was shown in this test report and defined as follows:			
Axis	X	Y	Z
Field Strength(dBuV/m)	89.66	90.58	92.19
Final Test Mode:			
According to ANSI C63.4 standards, the test results are both the “worst case” and “worst setup”: Z axis (see the test setup photo)			

5.4 Description of Support Units

Manufacturer	Description	Model	Serial Number	FCC ID/DoC
DELL	PC	OPTIPLEX745	N/A	DoC
DELL	MONITOR	E178FPC	N/A	DoC
DELL	KEYBOARD	SK-8115	N/A	DoC
DELL	MOUSE	MOC5UO	N/A	DoC
HP	Printer	CB495A	05257893	DoC

5.5 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

● **FCC - Registration No.: 817957**

Shenzhen Zhongjian Nanfang Testing Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 817957, February 27, 2012.

● **IC - Registration No.: 10106A-1**

The 3m Semi-anechoic chamber of Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

● **CNAS - Registration No.: CNAS L6048**

Shenzhen Zhongjian Nanfang Testing Co., Ltd. is accredited to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L6048.

5.6 Laboratory Location

Shenzhen Zhongjian Nanfang Testing Co., Ltd.

Address: No. B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road,
Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755-23118282

Fax: +86-755-23116366

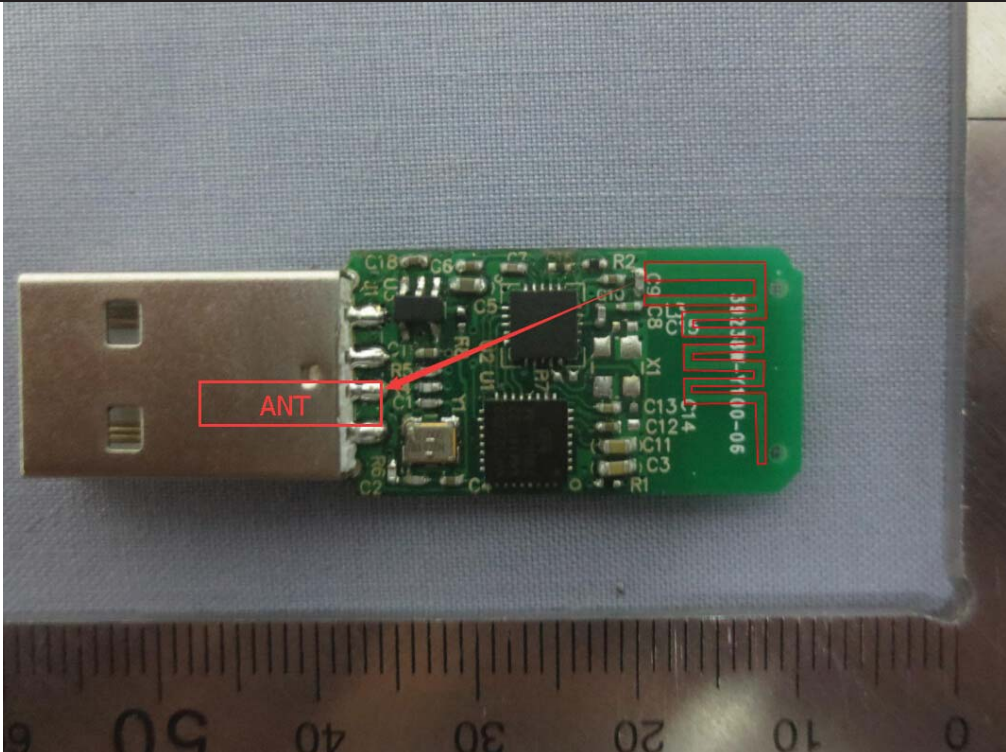
5.7 Test Instruments list

Radiated Emission:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	CCIS0005	03-28-2015	03-28-2016
2	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	CCIS0006	03-28-2015	03-28-2016
3	Amplifier (10KHz-1.3GHz)	HP	8447D	CCIS0003	04-01-2015	03-31-2016
4	Amplifier (1GHz-18GHz)	Compliance Direction Systems Inc.	PAP-1G18	CCIS0011	04-01-2015	03-31-2016
5	Spectrum analyzer	Rohde & Schwarz	FSP	CCIS0023	03-28-2015	03-28-2016
6	EMI Test Receiver	Rohde & Schwarz	ECSI	CCIS0002	03-28-2015	03-28-2016
7	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	04-01-2015	03-31-2016
8	Horn Antenna	ETS-LINDGREN	3160	GTS217	04-01-2015	03-31-2016

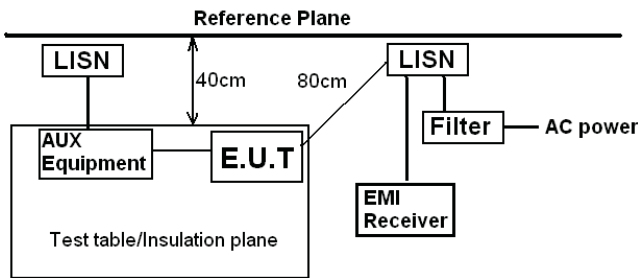
Conducted Emission:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	EMI Test Receiver	Rohde & Schwarz	ESCI	CCIS0002	03-28-2015	03-28-2016
2	LISN	CHASE	MN2050D	CCIS0074	03-28-2015	03-28-2016
3	Coaxial Cable	CCIS	N/A	CCIS0086	04-01-2015	03-31-2016
4	EMI Test Software	AUDIX	E3	N/A	N/A	N/A

6 Test results and Measurement Data

6.1 Antenna requirement:

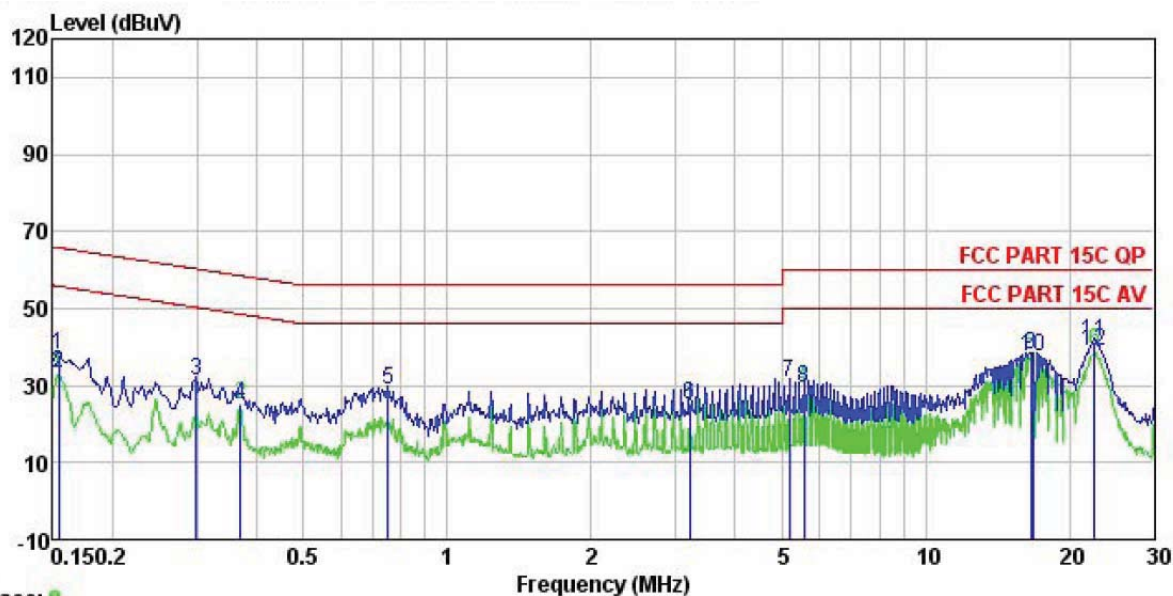
Standard requirement:	FCC Part15 C Section 15.203
15.203 requirement: <i>An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.</i>	
E.U.T Antenna:	
<i>The antenna is monopole antenna which cannot detachable . The best case gain of the antenna is -3dBi.</i>	
	

6.2 Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.249 and 15.209		
Test Method:	ANSI C63.4:2009		
Test Frequency Range:	150 kHz to 30 MHz		
Class / Severity:	Class B		
Receiver setup:	RBW=9 kHz, VBW=30 kHz, Sweep time=auto		
Limit:	Frequency range (MHz)	Limit (dBuV)	
		Quasi-peak	Average
	0.15-0.5	66 to 56*	56 to 46*
	0.5-5	56	46
	5-30	60	50
* Decreases with the logarithm of the frequency.			
Test setup:	 Remark E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m		
Test procedure:	1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2009 on conducted measurement.		
Test Instruments:	Refer to section 5.7 for details		
Test mode:	Transmitting mode		
Test results:	Pass		

Measurement Data

Line:

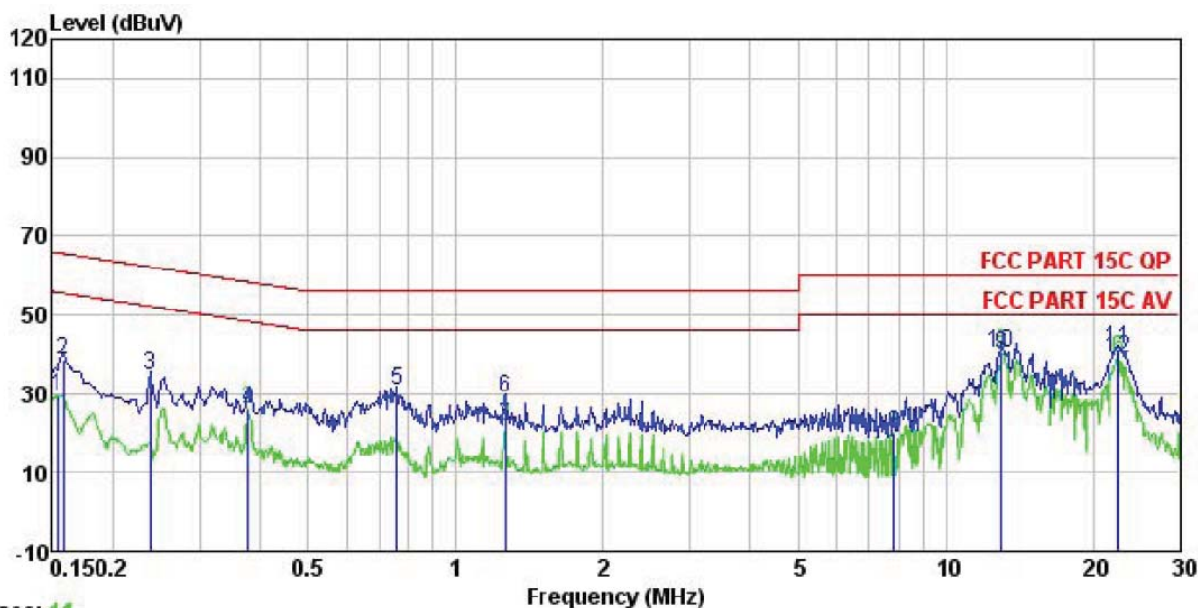


Trace: 9

Site : CCIS Shielding Room
 Condition : FCC PART 15C QP LISN LINE
 EUT : 2.4G Wireless Serial-USB
 Model : MBK-2.4G-USB
 Test Mode : ON mode
 Power Rating : AC 120V/60Hz
 Environment : Temp: 23 °C Humi:56% Atmos:101KPa
 Test Engineer: GAREN
 Remark :

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.154	27.11	0.27	10.78	38.16	65.78	-27.62	QP
2	0.154	22.21	0.27	10.78	33.26	55.78	-22.52	Average
3	0.299	20.42	0.26	10.74	31.42	60.28	-28.86	QP
4	0.369	13.99	0.27	10.73	24.99	48.52	-23.53	Average
5	0.751	18.01	0.23	10.79	29.03	56.00	-26.97	QP
6	3.207	13.97	0.27	10.91	25.15	46.00	-20.85	Average
7	5.194	19.68	0.30	10.84	30.82	60.00	-29.18	QP
8	5.564	18.21	0.30	10.83	29.34	50.00	-20.66	Average
9	16.573	26.59	0.33	10.91	37.83	50.00	-12.17	Average
10	16.750	26.39	0.33	10.91	37.63	60.00	-22.37	QP
11	22.416	29.77	0.43	10.90	41.10	60.00	-18.90	QP
12	22.535	27.63	0.44	10.89	38.96	50.00	-11.04	Average

Neutral:



Trace: 11

Site : CCIS Shielding Room
 Condition : FCC PART 15C QP LISN NEUTRAL
 EUT : 2.4G Wireless Serial-USB
 Model : MBK-2.4G-USB
 Test Mode : ON mode
 Power Rating : AC 120V/60Hz
 Environment : Temp: 23 °C Humi:56% Atmos:101KPa
 Test Engineer: GAREN
 Remark :

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.154	18.52	0.25	10.78	29.55	55.78	-26.23	Average
2	0.158	27.44	0.25	10.78	38.47	65.56	-27.09	QP
3	0.238	23.38	0.25	10.75	34.38	62.17	-27.79	QP
4	0.377	15.17	0.25	10.72	26.14	48.34	-22.20	Average
5	0.759	19.71	0.19	10.80	30.70	56.00	-25.30	QP
6	1.262	17.83	0.24	10.90	28.97	56.00	-27.03	QP
7	1.262	10.46	0.24	10.90	21.60	46.00	-24.40	Average
8	7.852	8.75	0.26	10.84	19.85	50.00	-30.15	Average
9	12.988	28.87	0.25	10.91	40.03	60.00	-19.97	QP
10	12.988	29.10	0.25	10.91	40.26	50.00	-9.74	Average
11	22.416	29.88	0.37	10.90	41.15	60.00	-18.85	QP
12	22.535	27.84	0.38	10.89	39.11	50.00	-10.89	Average

Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level = Receiver Read level + LISN Factor + Cable Loss

6.3 Radiated Emission

Test Requirement:	FCC Part15 C Section 15.249 and 15.209				
Test Method:	ANSI C63.4:2009				
Test Frequency Range:	30MHz to 25000MHz				
Test site:	Measurement Distance: 3m				
Receiver setup:	Frequency	Detector	RBW	VBW	Remark
	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
		Peak	1MHz	10Hz	Average Value
Limit: (Field strength of the fundamental signal)	Frequency		Limit (dBuV/m @3m)		Remark
	2400MHz-2483.5MHz		94.00		Average Value
			114.00		Peak Value
Limit: (Spurious Emissions)	Frequency		Limit (dBuV/m @3m)		Remark
	30MHz-88MHz		40.00		Quasi-peak Value
	88MHz-216MHz		43.50		Quasi-peak Value
	216MHz-960MHz		46.00		Quasi-peak Value
	960MHz-1GHz		54.00		Quasi-peak Value
	Above 1GHz		54.00		Average Value
			74.00		Peak Value
Limit: (band edge)	Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.				
Test Procedure:	1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.				

Test setup:	Below 1GHz Above 1GHz Test Instruments: Refer to section 5.7 Test mode: Refer to section 5.3 Test results: Passed
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6.3.1 Field Strength Of The Fundamental Signal

Peak value							
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2404.00	57.15	27.54	6.66	91.35	114.00	-22.65	Horizontal
2404.00	53.15	27.54	6.66	87.35	114.00	-26.65	Vertical
2440.00	56.47	27.46	6.76	90.69	114.00	-23.31	Horizontal
2440.00	52.30	27.46	6.76	86.52	114.00	-27.48	Vertical
2480.00	57.84	27.52	6.83	92.19	114.00	-21.81	Horizontal
2480.00	54.82	27.52	6.83	89.17	114.00	-24.83	Vertical

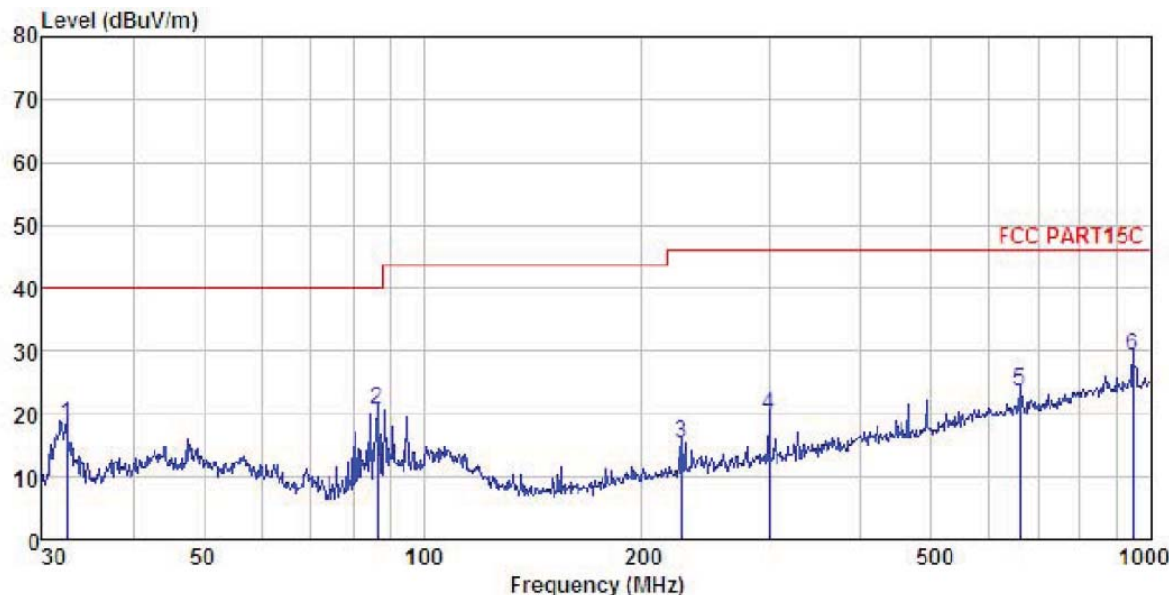
Average value							
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2404.00	50.24	27.54	6.66	84.44	94.00	-9.56	Horizontal
2404.00	46.55	27.54	6.66	80.75	94.00	-13.25	Vertical
2440.00	49.96	27.46	6.76	84.18	94.00	-9.82	Horizontal
2440.00	44.65	27.46	6.76	78.87	94.00	-15.13	Vertical
2480.00	50.36	27.52	6.83	84.71	94.00	-9.29	Horizontal
2480.00	47.58	27.52	6.83	81.93	94.00	-12.07	Vertical

Remark : RBW =3MHz VBW=10MHz Peak detector for PK value ; RMS detector for AV value

6.3.2 Spurious Emissions

Below 1GHz

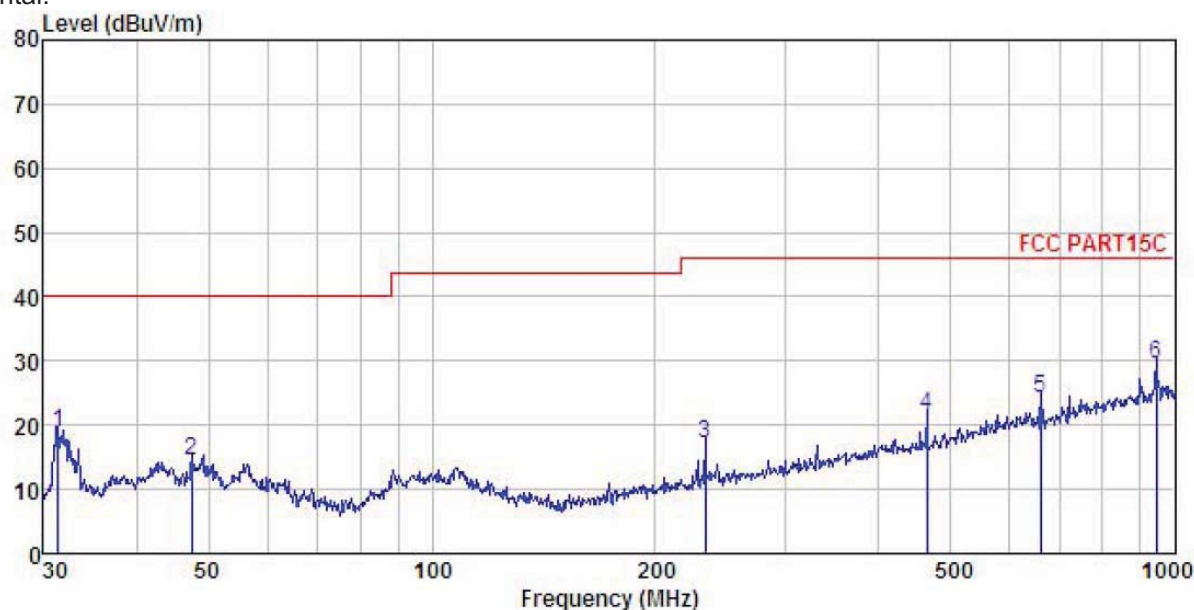
Vertical:



Site : 3m chamber
 Condition : FCC PART15C 3m VULB9163(30M1G) VERTICAL
 EUT : 2.4G Wireless Serial-USB
 Model : MEK-2.4G-USB
 Test mode : ON Mode
 Power Rating : AC 120V/60Hz
 Environment : Temp:25.5°C Humi:55%
 Test Engineer: Garen
 REMARK :

	Freq	ReadAntenna	Cable	Preamp	Limit	Over	
	Level	Factor	Loss	Factor	Line	Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dB
1	32.406	35.65	12.32	0.45	29.97	18.45	40.00 -21.55 QP
2	86.503	38.49	10.89	0.89	29.59	20.68	40.00 -19.32 QP
3	226.894	31.11	11.51	1.51	28.67	15.46	46.00 -30.54 QP
4	298.268	33.49	13.00	1.76	28.45	19.80	46.00 -26.20 QP
5	661.151	30.84	18.67	2.82	28.75	23.58	46.00 -22.42 QP
6	945.440	32.14	21.40	3.44	27.74	29.24	46.00 -16.76 QP

Horizontal:



Site : 3m chamber
 Condition : FCC PART15C 3m VULB9163(30M1G) HORIZONTAL
 EUT : 2.4G Wireless Serial-USB
 Model : MBK-2.4G-USB
 Test mode : ON Mode
 Power Rating : AC 120V/60Hz
 Environment : Temp:25.5°C Humi:55%
 Test Engineer: Garen
 REMARK :

	Freq	ReadAntenna	Cable Preamp		Limit	Over	
		Level	Factor	Loss Factor	Level	Line	Limit
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m
							dB
1	31.399	36.12	12.32	0.44	29.97	18.91	40.00
2	47.492	30.42	13.41	0.59	29.84	14.58	40.00
3	233.349	32.38	11.78	1.54	28.63	17.07	46.00
4	463.970	32.39	15.71	2.30	28.89	21.51	46.00
5	661.151	31.47	18.67	2.82	28.75	24.21	46.00
6	945.440	32.47	21.40	3.44	27.74	29.57	46.00

Above 1GHz

Test channel:			Lowest		Level:		Peak	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4808.00	45.44	31.53	8.90	40.24	45.63	74.00	-28.37	Vertical
4808.00	46.28	31.53	8.90	40.24	46.47	74.00	-27.53	Horizontal

Test channel:			Lowest		Level:		Average	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4808.00	36.38	31.53	8.90	40.24	36.57	54.00	-17.43	Vertical
4808.00	36.87	31.53	8.90	40.24	37.06	54.00	-16.94	Horizontal

Test channel:			Middle		Level:		Peak	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4880.00	42.64	31.58	8.98	40.15	43.05	74.00	-30.95	Vertical
4880.00	44.28	31.58	8.98	40.15	44.69	74.00	-29.31	Horizontal

Test channel:			Middle		Level:		Average	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4880.00	34.34	31.58	8.98	40.15	34.75	54.00	-19.25	Vertical
4880.00	35.12	31.58	8.98	40.15	35.53	54.00	-18.47	Horizontal

Test channel:			Highest		Level:		Peak	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4960.00	45.69	31.69	9.08	40.03	46.43	74.00	-27.57	Vertical
4960.00	45.20	31.69	9.08	40.03	45.94	74.00	-28.06	Horizontal

Test channel:			Highest		Level:		Average	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4960.00	35.25	31.69	9.08	40.03	35.99	54.00	-18.01	Vertical
4960.00	36.33	31.69	9.08	40.03	37.07	54.00	-16.93	Horizontal

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

6.3.3 Band edge (Radiated Emission)

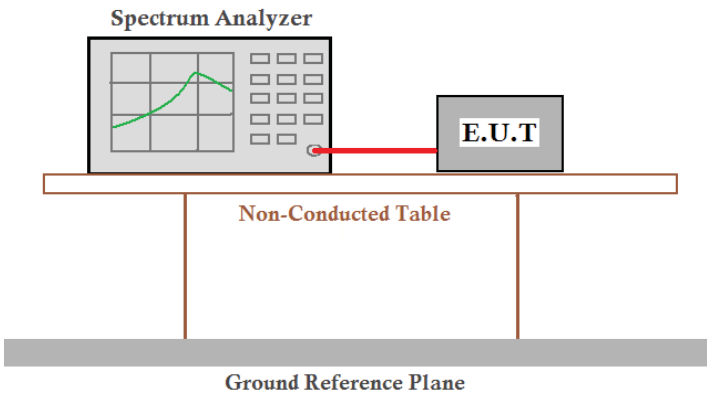
Test channel:			Lowest		Level:		Peak	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2400.00	29.77	27.58	6.66	0.00	64.01	74.00	-9.99	Horizontal
2400.00	29.75	27.58	6.66	0.00	63.99	74.00	-10.01	Vertical

Test channel:			Lowest		Level:		Average	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2400.00	17.59	27.58	6.66	0.00	51.83	54.00	-2.17	Horizontal
2400.00	17.25	27.58	6.66	0.00	51.49	54.00	-2.51	Vertical

Test channel:			Highest		Level:		Peak	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	32.82	27.52	6.85	0.00	67.19	74.00	-6.81	Horizontal
2483.50	30.95	27.52	6.85	0.00	65.32	74.00	-8.68	Vertical

Test channel:			Highest		Level:		Average	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	17.82	27.52	6.85	0.00	52.19	54.00	-1.81	Horizontal
2483.50	17.12	27.52	6.85	0.00	51.49	54.00	-2.51	Vertical

6.4 20dB Bandwidth

Test Requirement:	FCC Part15 C Section 15.249/15.215
Test Method:	ANSI C63.4:2009
Receiver setup:	RBW $\geq 1\%$ of the 20 dB bandwidth, VBW $\geq$ VBW, detector: Peak
Limit:	Operation Frequency range 2400MHz-2483.5MHz
Test Procedure:	1. According to the follow Test-setup, keep the relative position between the artificial antenna and the EUT. 2. Set the EUT to proper test channel. 3. Max hold the radiated emissions, mark the peak power frequency point and the -20dB upper and lower frequency points. 4. Read 20dB bandwidth.
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T. are placed on a Non-Conducted Table. The table is supported by a Ground Reference Plane.
Test Instruments:	Refer to section 4.7 for details
Test mode:	Refer to section 4.3 for details
Test results:	Passed

Measurement Data

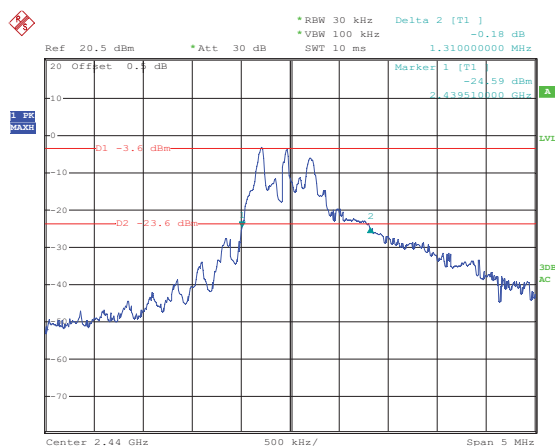
Test channel	20dB bandwidth (MHz)	Results
Lowest	1.66	Pass
Middle	1.31	Pass
Highest	1.21	Pass

Test plot as follows:



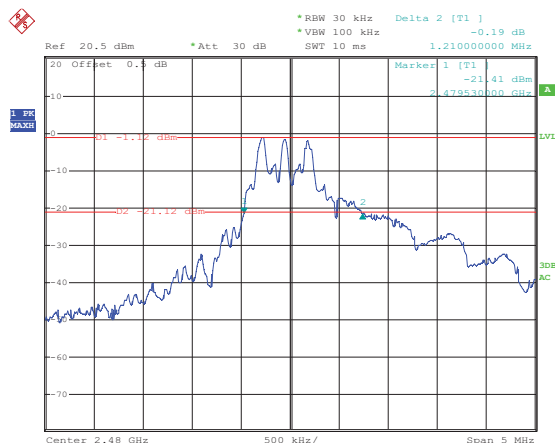
Date: 16.JUN.2015 16:35:41

Lowest channel



Date: 16.JUN.2015 16:41:14

Middle channel



Date: 16.JUN.2015 16:33:21

Highest channel