FCC PART 15C TEST REPORT FOR CERTIFICATION
On Behalf of

Winspeed Co., Ltd.

TORID GAMEPAD-WIRELESS

SL-6576-BK-02

FCC ID: 2AEDNA34

Prepared for : Winspeed Co., Ltd.
14F-1, No.2, Jian-Ba Rd., Chung-Ho Dist., New Taipei City, Taiwan

Prepared By : Audix Technology (Shenzhen) Co., Ltd.
No. 6, Ke Feng Rd., 52 Block,
Shenzhen Science & Industrial Park,
Nantou, Shenzhen, Guangdong, China

Tel: (0755) 26639496

Report Number	:	ACS-F16105
Date of Test	:	May.08~14, 2016
Date of Report	:	May.23, 2016

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TEST REPORT CERTIFICATION

Applicant	:	Winspeed Co., Ltd.
Manufacturer	:	Winspeed Co., Ltd.
Product	:	TORID GAMEPAD-WIRELESS
FCC ID	:	2AEDNA34

(A) Model No. : SL-6576-BK-02
(B) Brand Name : SPEEDLINK
(C) Power Supply : DC 3.7V
(D) Test Voltage : DC 3.7V

Tested for comply with:
FCC Rules and Regulations Part 15 Subpart C: 2014

Test procedure used:
ANSI C63.10:2013

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to confirm comply with all the FCC Part 15 Subpart C requirements.

The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these tests. This report contains data that are not covered by the NVLAP accreditation. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This Report is made under FCC Part 2.1075. No modifications were required during testing to bring this product into compliance.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test : May.08~14, 2016 Report of date: May.23, 2016

Prepared by : Kayli He
Kayli He / Assistant

Reviewed by :
Sunny Lu / Assistant Manager

AUDIX® 信華科技（深圳）有限公司
Audix Technology (Shenzhen) Co., Ltd.
EMC 部門報告專用章
Stamp only for EMC Dept. Report

Approved & Authorized Signer : Signature: David Jin
David Jin / Manager

1. SUMMARY OF STANDARDS AND RESULTS

1.1.Description of Standards and Results

The EUT has been tested according to the applicable standards as referenced below.

EMISSION		
Description of Test Item	**Standard**	**Results**
Power Line Conducted Emission Test	FCC Part 15C: 15.207 ANSI C63.10-2013	N/A
Radiated Emission Test	FCC Part 15C: 15.209 FCC Part 15C: 15.249 ANSI C63.10-2013	PASS
Band Edge Compliance Test	FCC Part 15: 15.249 ANSI C63.10-2013	PASS
20dB Bandwidth Test	FCC Part 15: 15.215 ANSI C63.10-2013	PASS
N/A is an abbreviation for Not Applicable.		

2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Product	:	TORID GAMEPAD-WIRELESS
Model No.	:	SL-6576-BK-02
Additional Model No.	:	SL-6576-XX-02 ("XX" is product color)
Brand Name	:	SPEEDLINK
FCC ID	:	2AEDNA34
Operation frequency	:	2412-2475MHz
Antenna	:	PIFA Antenna, -1dBi gain
Modulation	:	GFSK
Applicant	:	Winspeed Co., Ltd. 14F-1, No.2, Jian-Ba Rd., Chung-Ho Dist., New Taipei City, Taiwan
Manufacturer	:	Winspeed Co., Ltd. 14F-1, No.2, Jian-Ba Rd., Chung-Ho Dist., New Taipei City, Taiwan
Date of Test	:	May.08~14, 2016
Date of Receipt	:	May.06, 2016
Sample Type	:	Prototype production

2.2.EUT Configuration and operation conditions for test.

EUT

(EUT: TORID GAMEPAD-WIRELESS)

2.3.Test Facility

Site Description

Name of Firm	:	Audix Technology (Shenzhen) Co., Ltd. No. 6, Ke Feng Rd., 52 Block, Shenzhen Science & Industrial Park,Nantou, Shenzhen, Guangdong, China
3m Anechoic Chamber	:	Certificated by FCC, USA Registration Number: 90454 Valid Date: Dec.30, 2017
3m & 10m Anechoic Chamber	:	Certificated by FCC, USA Registration Number: 794232 Valid Date: Jul.12, 2016
EMC Lab.	:	Certificated by Industry Canada Registration Number: IC 5183A-1 Valid Date: May.14, 2017
	:	Certificated by DAkkS, Germany Registration No: D-PL-12151-01-00 Valid Date: Dec.15, 2016
	:	Accredited by NVLAP, USA NVLAP Code: 200372-0 Valid Date: Mar.31, 2017

2.4.Measurement Uncertainty (95% confidence levels, k=2)

Test Item	Uncertainty
Uncertainty for Radiation Emission test in 3m chamber	2.6dB(30~200MHz, Polarization: H)
	2.6dB(30~200MHz, Polarization: V)
	3.0dB(200M~1GHz, Polarization: H)
	2.8dB(200M~1GHz, Polarization: V)
Uncertainty for Radiation Emission test in 3m chamber (1GHz-18GHz)	6.3dB (1~6GHz, Distance: 3m)
	5.7dB (6~18GHz, Distance: 3m)
Uncertainty for Radiated Spurious Emission test in RF chamber	3.6dB
Uncertainty for Conduction Spurious emission test	2.0dB
Uncertainty for Output power test	0.8dB
Uncertainty for Bandwidth test	83kHz
Uncertainty for DC power test	0.1 %
Uncertainty for test site temperature and humidity	0.6℃
	3%

3. POWER LINE CONDUCTED EMISSION TEST

According to Paragraph (c) of FCC Part 15 section 15.207, Tests to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines.

4. RADIATED EMISSION TEST

4.1.Test Equipments

Frequency range: 30~1000MHz

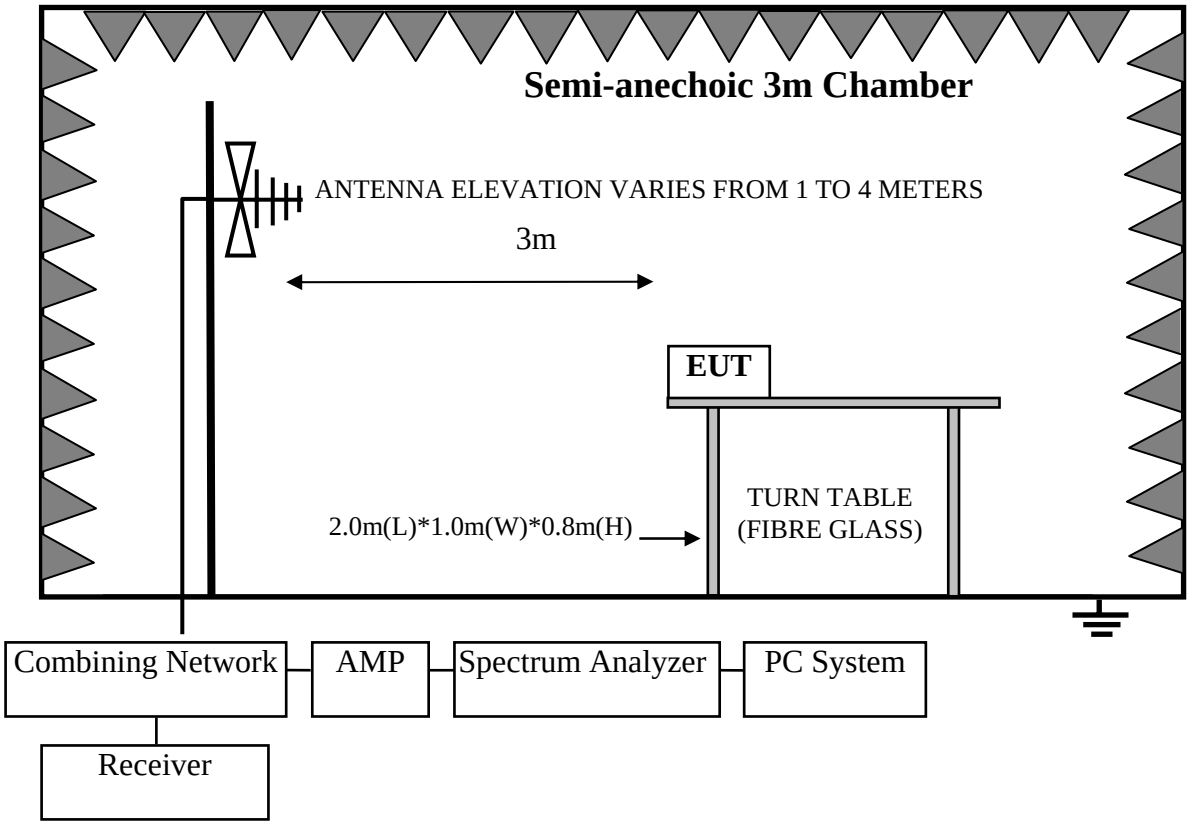
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3#Chamber	AUDIX	N/A	N/A	Mar.28,16	1 Year
2.	EMI Spectrum	Agilent	E4407B	MY41440292	Apr.24,16	1 Year
3.	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	Apr.24,16	1 Year
4.	Amplifier	HP	8447D	2648A04738	Apr.24,16	1 Year
5.	Bi-log Antenna	TESEQ	CBL6112D	35375	Jun.30,15	1 Year
6.	RF Cable	MIYAZAKI	CFD400-NW(3.5M)	No.3	Apr.24,16	1 Year
7.	RF Cable	MIYAZAKI	CFD400-LW(22M)	No.7	Apr.24,16	1 Year
8.	Coaxial Switch	Anritsu	MP59B	6201397222	Apr.23,16	1 Year
9.	Test Software	AUDIX	e3	6.2009-5-21a(n)	N/A	N/A
Note: N/A means Not applicable.						

Frequency range: above 1000MHz

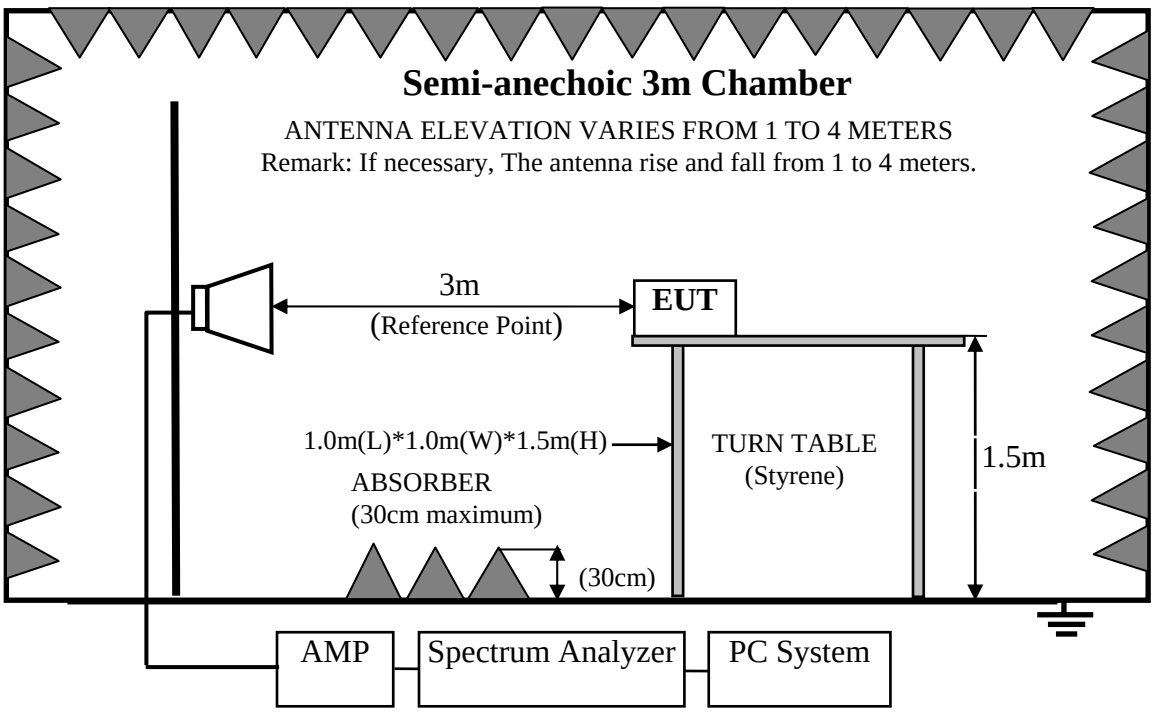
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	Apr.24,16	1 Year
2.	Horn Antenna	ETS	3115	9510-4877	Oct.15,15	1 Year
3.	Amplifier	Agilent	8449B	3008A02495	Apr.24,16	1 Year
4.	RF Cable	Hubersuhner	SUCOFLEX104	274094/4	Apr.24,16	1 Year
5.	Horn Antenna	ETS	3116	00060089	Oct.15,15	1 Year
6.	Test Software	AUDIX	e3	6.2009-5-21a(n)	N/A	N/A
Note: N/A means Not applicable.						

4.2.Block Diagram of Test Setup

For frequency range 30MHz-1000MHz



For frequency range above 1GHz



4.3. Radiated Emission Limit Standard: FCC 15.209 and 15.249

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000MHz	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	
Field Strength of fundamental emissions for 2.4GHz-2.4835GHz	3	114.0 dB(μV)/m (Peak) 94.0 dB(μV)/m (Average)	

Remarks： (1) Emission level dBμV = 20 log Emission level μV/m

(2) The smaller limit shall apply at the cross point between two frequency bands.

(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

(4) The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

4.4.EUT Configuration on Test

The following equipment are installed on Radiated Emission Test to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

4.4.1.TORID GAMEPAD-WIRELESS (EUT)

Model No. : SL-6576-BK-02
Serial No. : N/A

4.4.2.Support Equipment: As Tested Supporting System Details, in Section 2.2.

4.5.Operating Condition of EUT

4.5.1.Setup the EUT and simulator as shown as Section 4.2.

4.5.2.Turn on the power of all equipments.

4.5.3.Let EUT work in Tx mode.

4.6. Test Procedure

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground for frequency 30MHz~1000MHz, 1.5 meter high above ground for frequency above 1GHz and put the absorbing with 2.4m(L)*2.4m(W)*0.3m(H) on the ground . The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it.EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna for frequency 30MHz~1000MHz, and the Horm antenna is used as receiving antenna for frequency above 1GHz. Both horizontal and vertical polarization of the antenna is set on Test. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.10-2013 on radiated emission Test.

This test was performed with EUT in X, Y, Z position, and the worse case was found when EUT in X position as the test photo indicated.

The bandwidth of the EMI test receiver (R&S ESVS10) is set at 120kHz for frequency range from 30MHz to 1000MHz.

The bandwidth of the Spectrum's RBW is set at 1MHz and VBW is set at 3MHz for peak emissions measurement above 1GHz

This device is pulse modulated, a duty cycle factor was used to calculate average level based measured peak level.

The frequency range from 30MHz to 10th harmonic (25GHz) are checked. and no any emissions were found from 18GHz to 25 GHz, So the radiated emissions from 18GHz to 25GHz were not record.

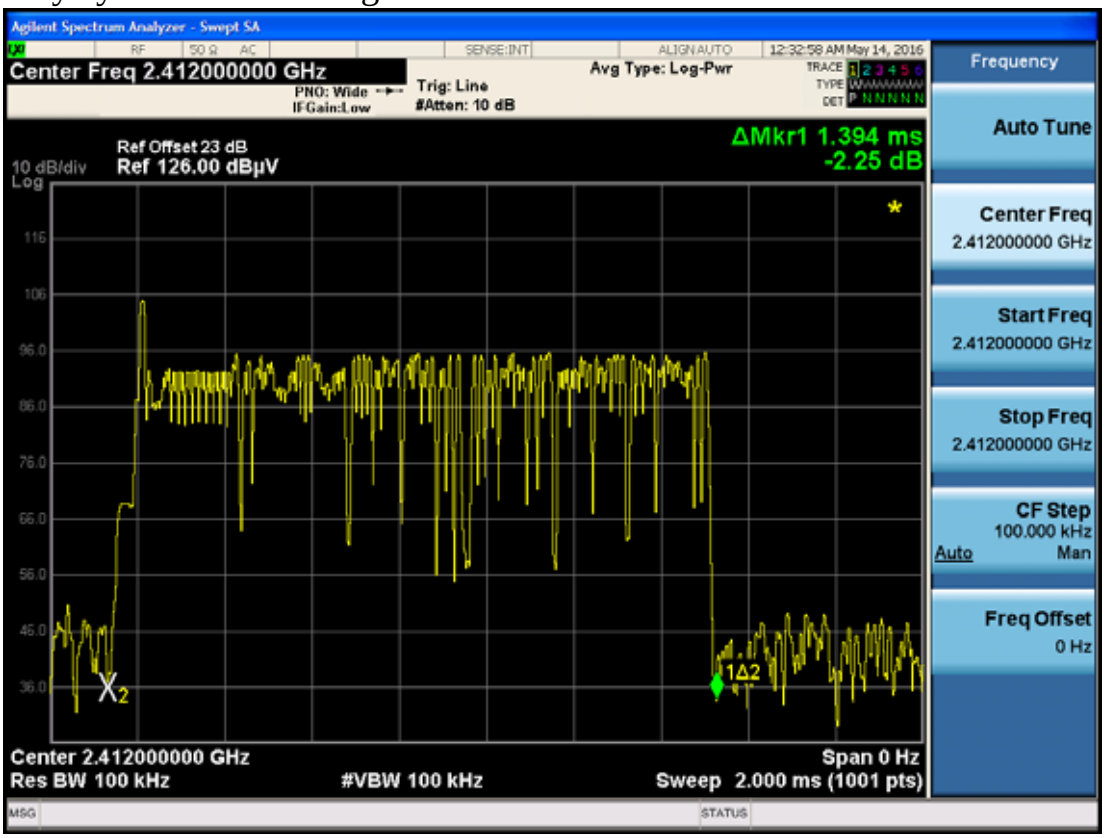
4.7. Radiated Emission Test Results

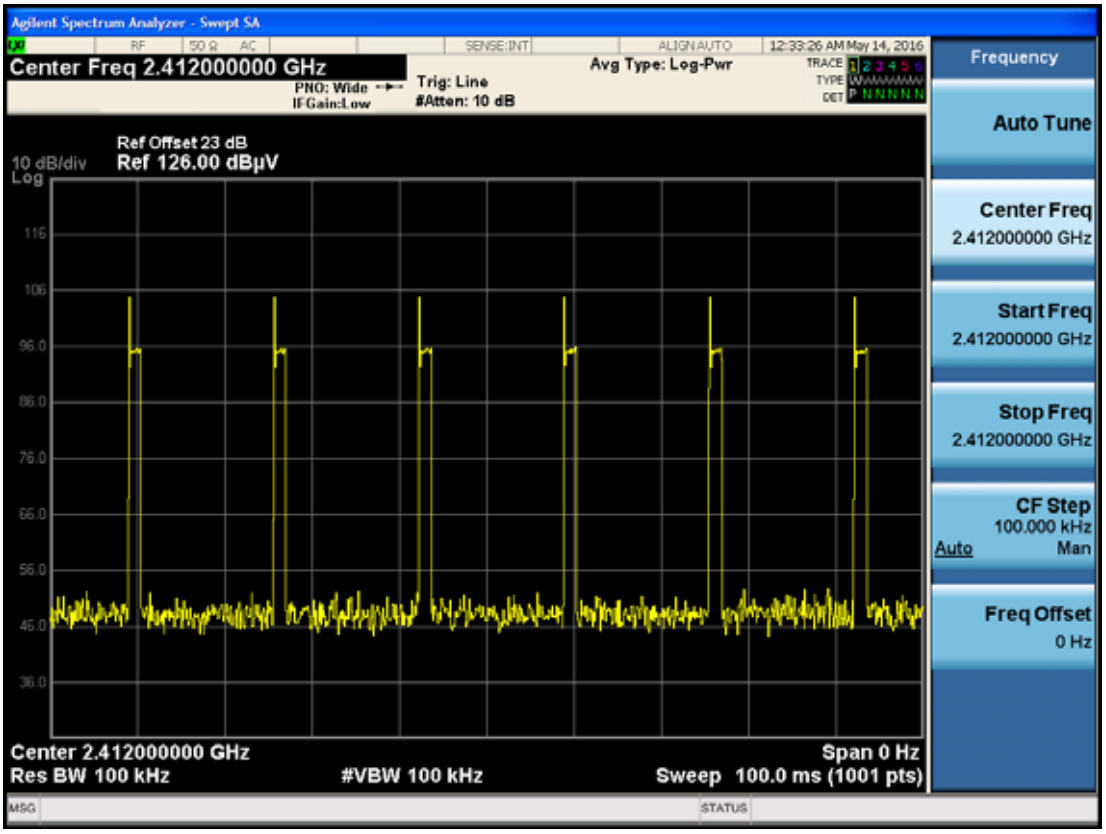
PASS.

All the emissions from 30MHz to 25GHz were comply with the 15.209 Limit.

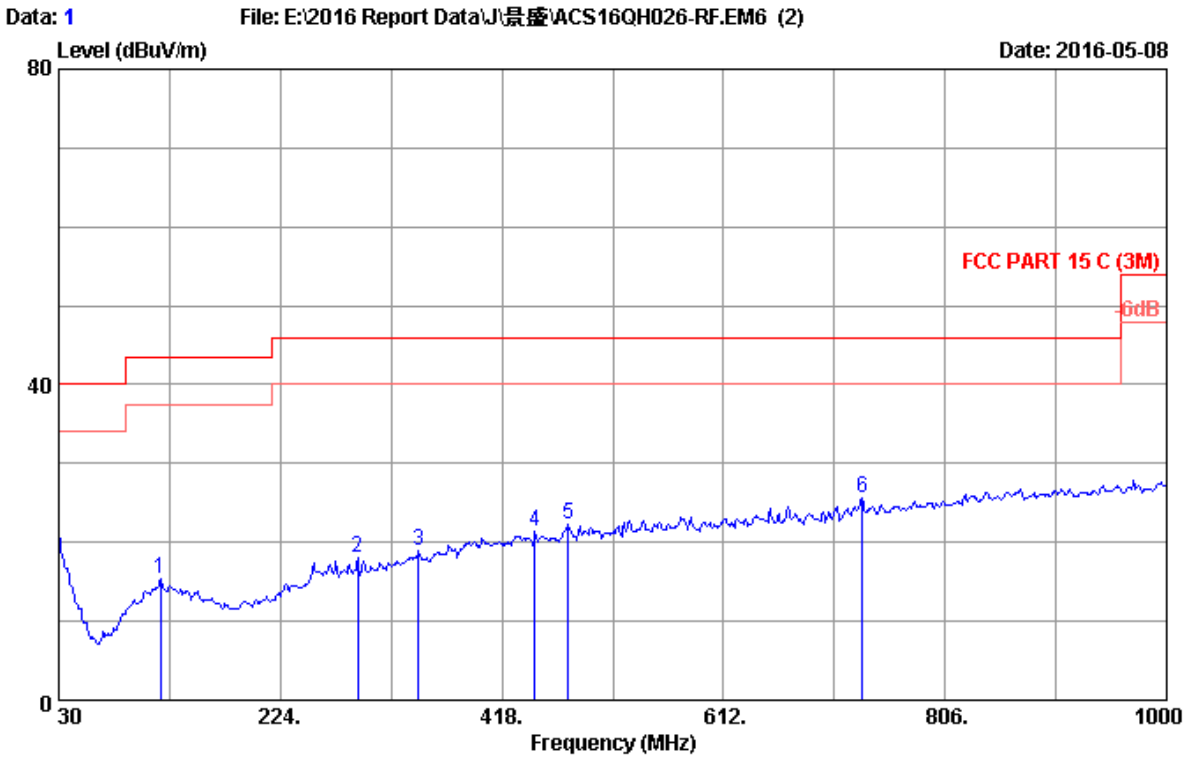
Note: The duty cycle factor for calculate average level is -21.55 dB, and average limit is 20dB below peak limit, so if peak measured level comply with average limit, the average level was deemed to comply with average limit.

Duty cycle factor = 20log（Dwell time/100ms）= -21.55dB





Frequency: 30MHz~1GHz

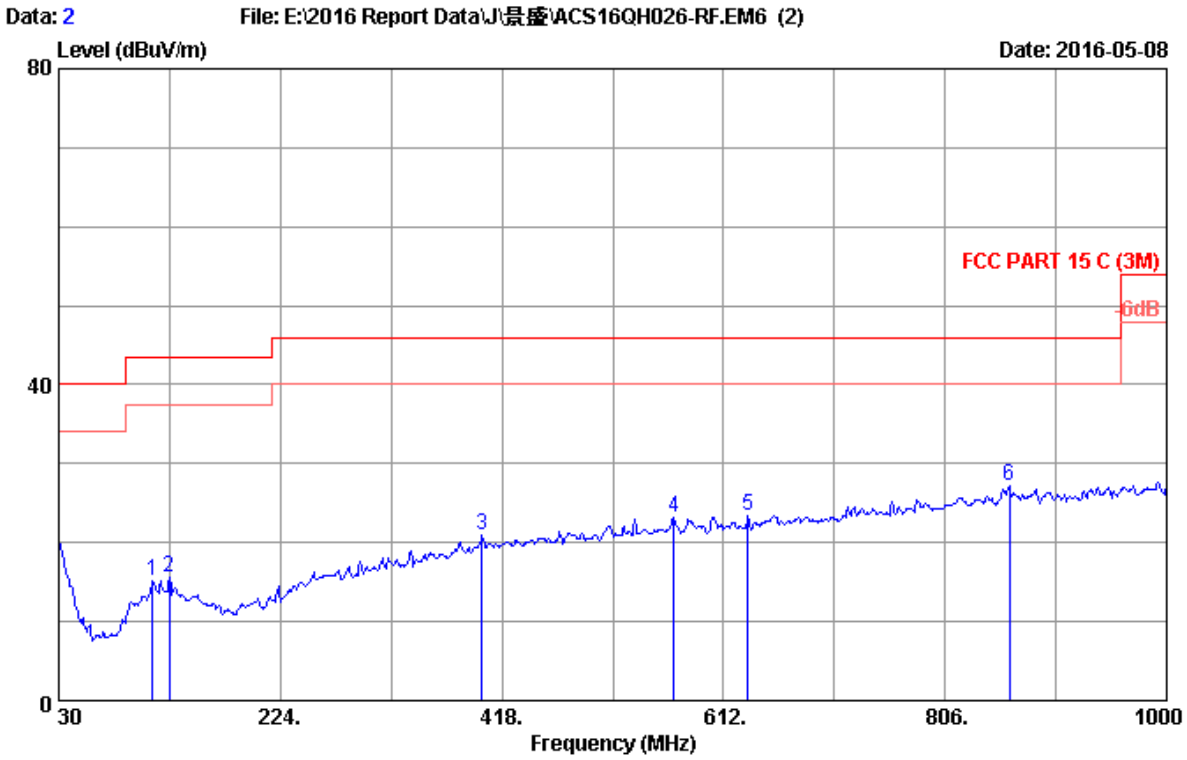


Site no. : 3m Chamber
Dis. / Ant. : 3m 2015 CBL6112D 35375
Limit : FCC PART 15 C (3M)
Env. / Ins. : 22.2*C/47%
EUT : TORID GAMEPAD-WIRELESS
Power rating : DC 3.7V
Test Mode : Tx Mode
M/N: SL-6576-BK-02

Data no. : 1
Ant. pol. : HORIZONTAL
Engineer : Brown

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	119.240	13.21	1.18	1.01	15.40	43.50	28.10	QP
2	291.900	14.08	1.87	2.11	18.06	46.00	27.94	QP
3	345.250	15.43	2.03	1.38	18.84	46.00	27.16	QP
4	447.100	17.61	2.36	1.37	21.34	46.00	24.66	QP
5	476.200	18.04	2.44	1.85	22.33	46.00	23.67	QP
6	733.250	20.43	3.10	2.00	25.53	46.00	20.47	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



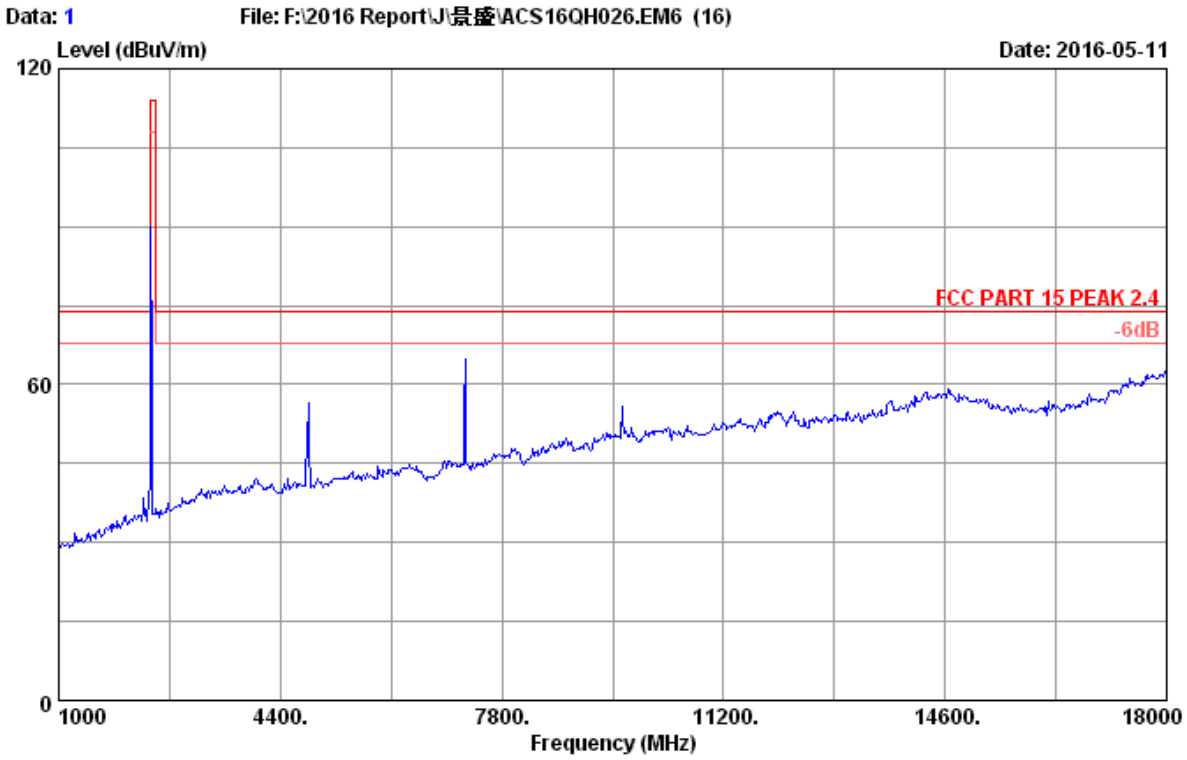
Site no. : 3m Chamber
Dis. / Ant. : 3m 2015 CBL6112D 35375
Limit : FCC PART 15 C (3M)
Env. / Ins. : 22.2*C/47%
EUT : TORID GAMEPAD-WIRELESS
Power rating : DC 3.7V
Test Mode : Tx Mode
M/N: SL-6576-BK-02

Data no. : 2
Ant. pol. : VERTICAL
Engineer : Brown

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	112.450	12.61	1.16	1.49	15.26	43.50	28.24	QP
2	127.000	12.88	1.21	1.50	15.59	43.50	27.91	QP
3	400.540	16.91	2.20	1.85	20.96	46.00	25.04	QP
4	568.350	19.01	2.68	1.52	23.21	46.00	22.79	QP
5	633.340	19.56	2.84	1.07	23.47	46.00	22.53	QP
6	862.260	21.66	3.40	2.14	27.20	46.00	18.80	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Frequency: 1GHz~18GHz

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Dis. / Ant.   : 3m   2015 3115-4877       Ant. pol. : HORIZONTAL
Limit         : FCC PART 15 PEAK 2.4
Env. / Ins.   : 23*C/54%
Engineer      : Leo-Li
EUT           : TORID GAMEPAD-WIRELESS
Power rating  : DC 3.7V
Test Mode     : GFSK 2412MHz  Tx Mode
M/N           : SL-6576-BK-02
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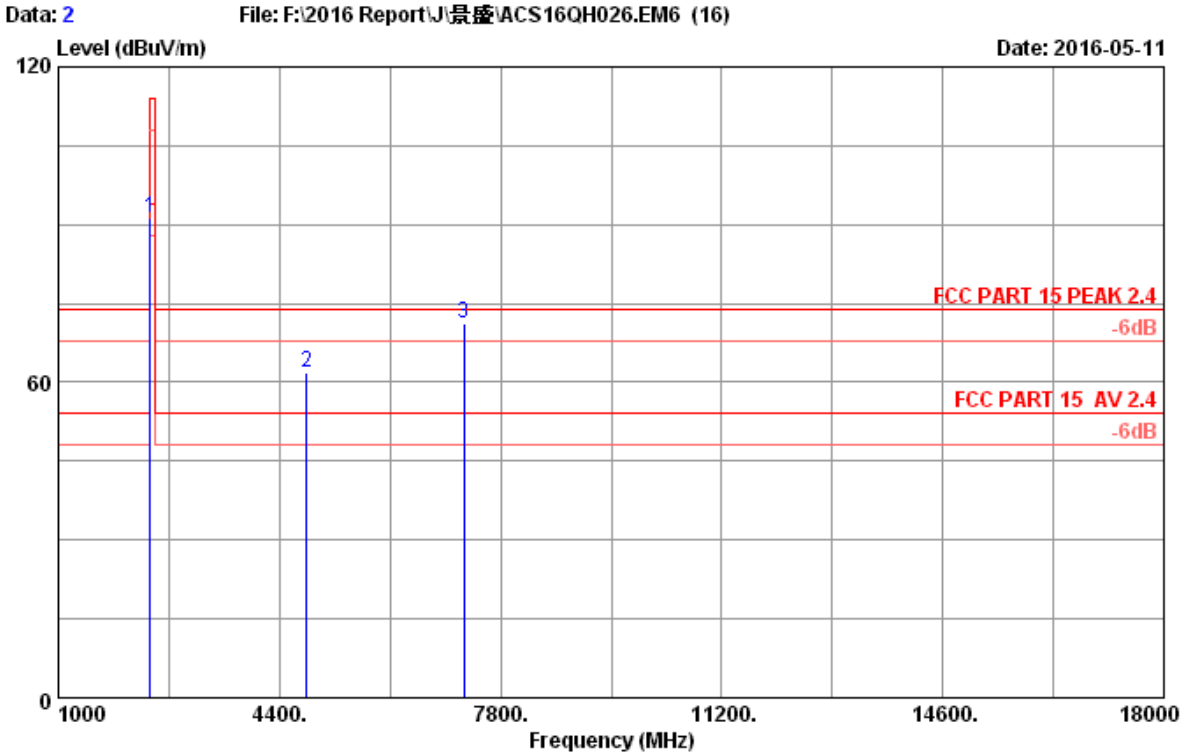
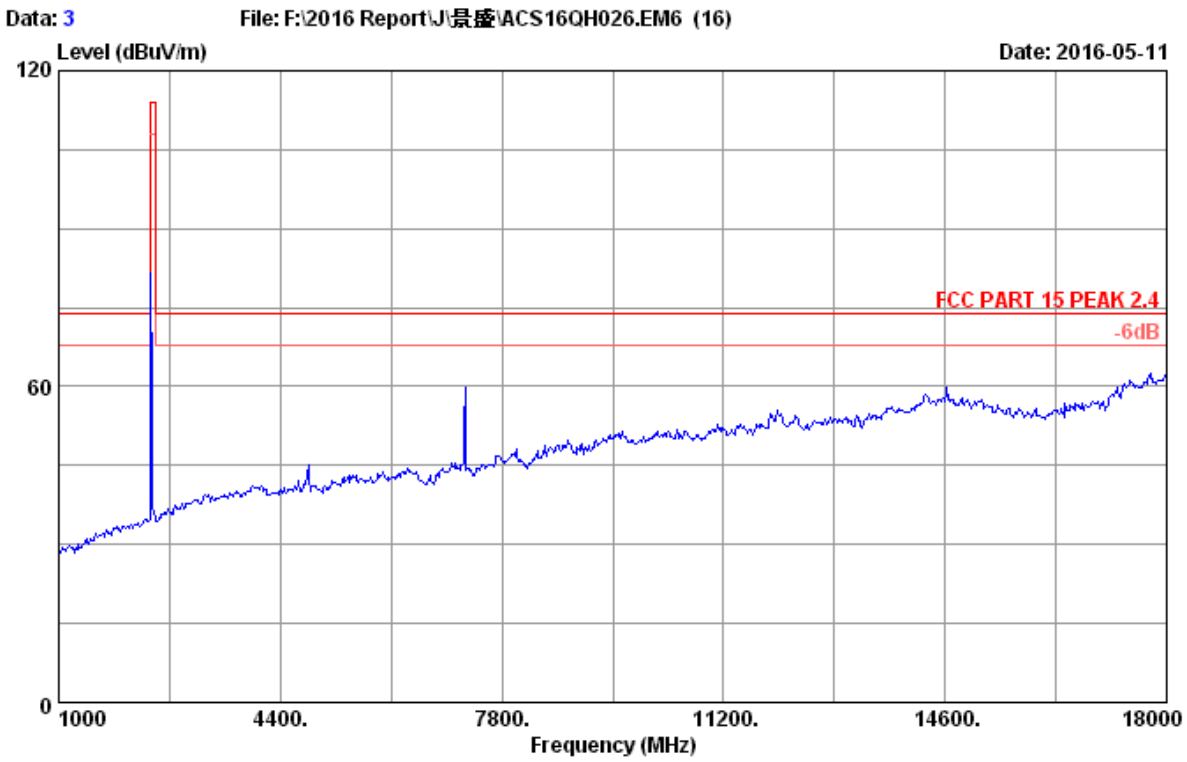


Site no. : 3m Chamber Data no. : 2
Dis. / Ant. : 3m 2015 3115-4877 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54%
Engineer : Leo-Li
EUT : TORID GAMEPAD-WIRELESS
Power rating : DC 3.7V
Test Mode : GFSK 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.000	28.29	7.35	36.62	92.31	91.33	114.00	22.67	Peak
2	4824.000	33.15	9.46	35.53	54.76	61.84	74.00	12.16	Peak
3	7236.000	36.07	10.72	35.49	59.85	71.15	74.00	2.85	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

Frequency (MHz)	Peak level (dBuv/m)	Duty cycle factor (dB)	AV level (dBuv/m)	Limit (dBuv/m)	Conclusion
4824.000	61.84	21.55	40.29	54	Pass
7236.000	71.15	21.55	49.60	54	Pass

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Dis. / Ant.   : 3m   2015 3115-4877       Ant. pol. : VERTICAL
Limit         : FCC PART 15 PEAK 2.4
Env. / Ins.   : 23*C/54%
Engineer      : Leo-Li
EUT           : TORID GAMEPAD-WIRELESS
Power rating  : DC 3.7V
Test Mode     : GFSK 2412MHz  Tx Mode
M/N           : SL-6576-BK-02
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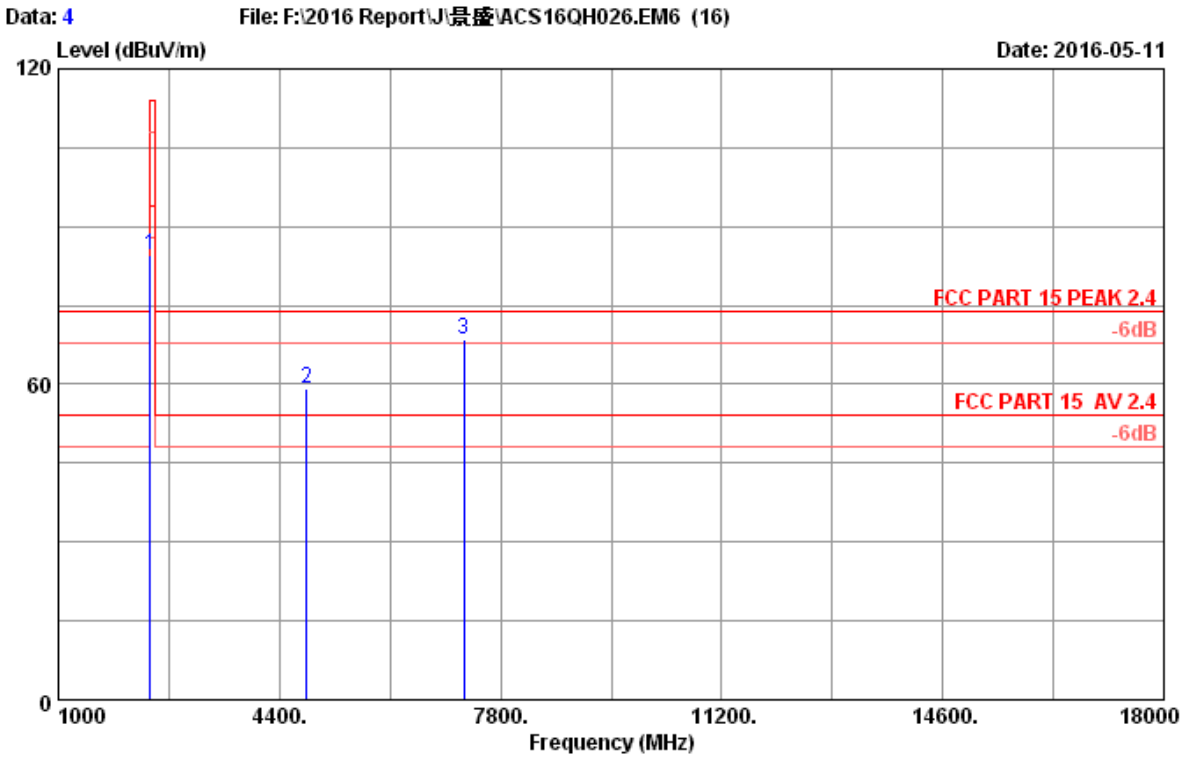
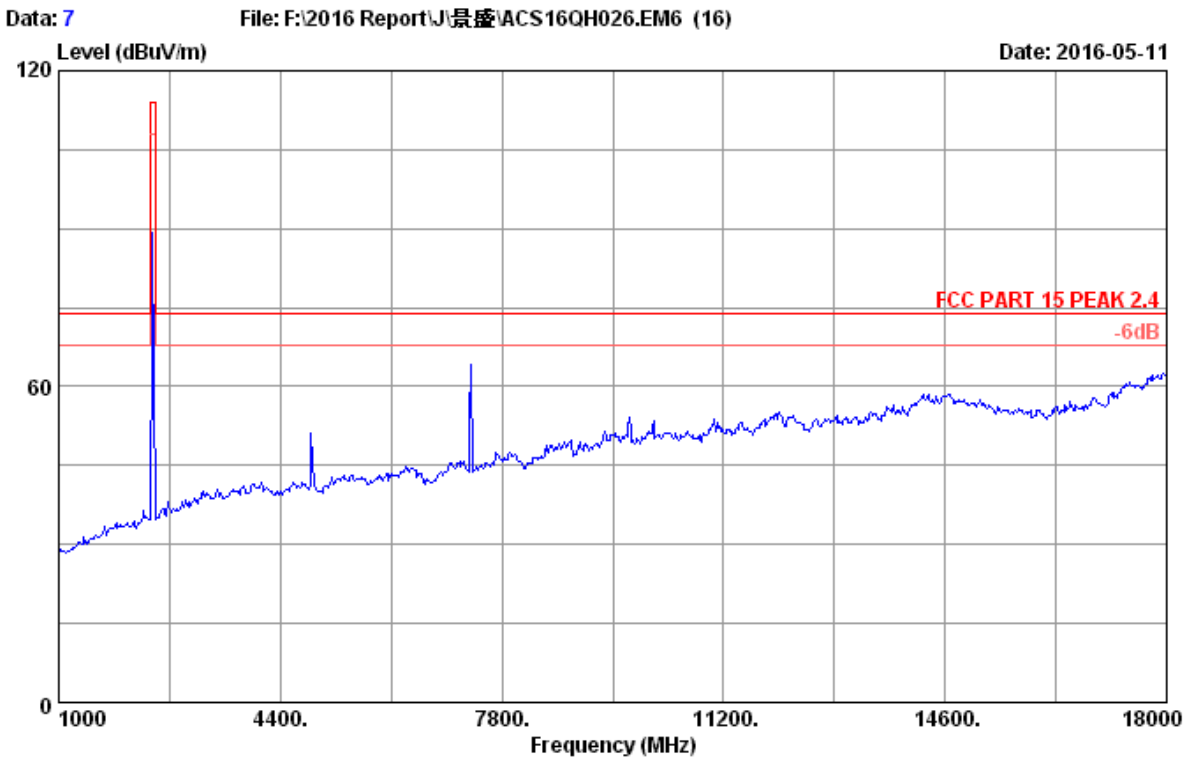


Site no. : 3m Chamber Data no. : 4
Dis. / Ant. : 3m 2015 3115-4877 Ant. pol. : VERTICAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54%
Engineer : Leo-Li
EUT : TORID GAMEPAD-WIRELESS
Power rating : DC 3.7V
Test Mode : GFSK 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.000	28.29	7.35	36.62	85.41	84.43	114.00	29.57	Peak
2	4824.000	33.15	9.46	35.53	52.23	59.31	74.00	14.69	Peak
3	7236.000	36.07	10.72	35.49	57.36	68.66	74.00	5.34	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

Frequency (MHz)	Peak level (dBuv/m)	Duty cycle factor (dB)	AV level (dBuv/m)	Limit (dBuv/m)	Conclusion
4824.000	59.31	21.55	37.76	54	Pass
7236.000	68.66	21.55	47.11	54	Pass

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Dis. / Ant.   : 3m   2015 3115-4877      Ant. pol. : HORIZONTAL
Limit         : FCC PART 15 PEAK 2.4
Env. / Ins.   : 23*C/54%
Engineer      : Leo-Li
EUT           : TORID GAMEPAD-WIRELESS
Power rating  : DC 3.7V
Test Mode     : GFSK 2440MHz  Tx Mode
M/N           : SL-6576-BK-02
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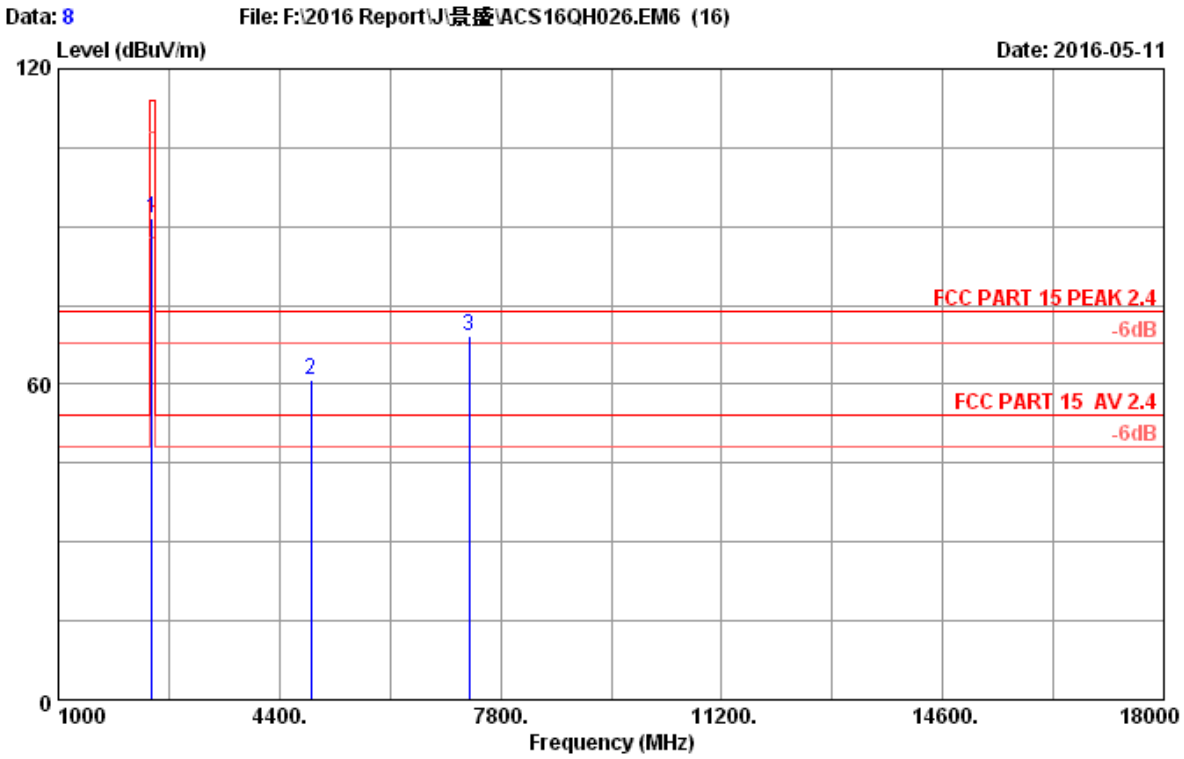

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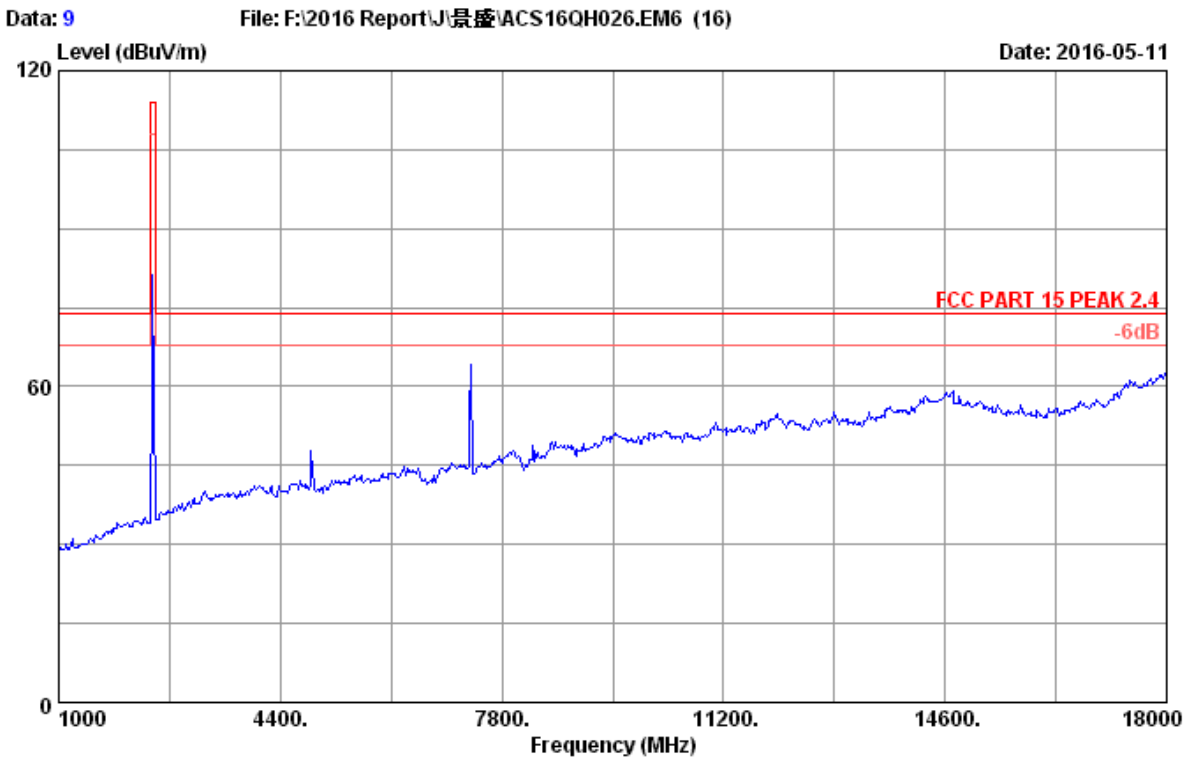
Dis. / Ant. : 3m 2015 3115-4877 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54%
Engineer : Leo-Li
EUT : TORID GAMEPAD-WIRELESS
Power rating : DC 3.7V
Test Mode : GFSK 2440MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2440.000	28.33	7.39	36.60	92.56	91.68	114.00	22.32	Peak
2	4880.000	33.26	9.49	35.51	53.71	60.95	74.00	13.05	Peak
3	7320.000	36.27	10.81	35.53	57.59	69.14	74.00	4.86	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

Frequency (MHz)	Peak level (dBuv/m)	Duty cycle factor (dB)	AV level (dBuv/m)	Limit (dBuv/m)	Conclusion
4880.000	60.95	21.55	39.40	54	Pass
7320.000	69.14	21.55	47.59	54	Pass

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Dis. / Ant.   : 3m   2015 3115-4877       Ant. pol. : VERTICAL
Limit         : FCC PART 15 PEAK 2.4
Env. / Ins.   : 23*C/54%
Engineer      : Leo-Li
EUT           : TORID GAMEPAD-WIRELESS
Power rating  : DC 3.7V
Test Mode     : GFSK 2440MHz  Tx Mode
M/N           : SL-6576-BK-02
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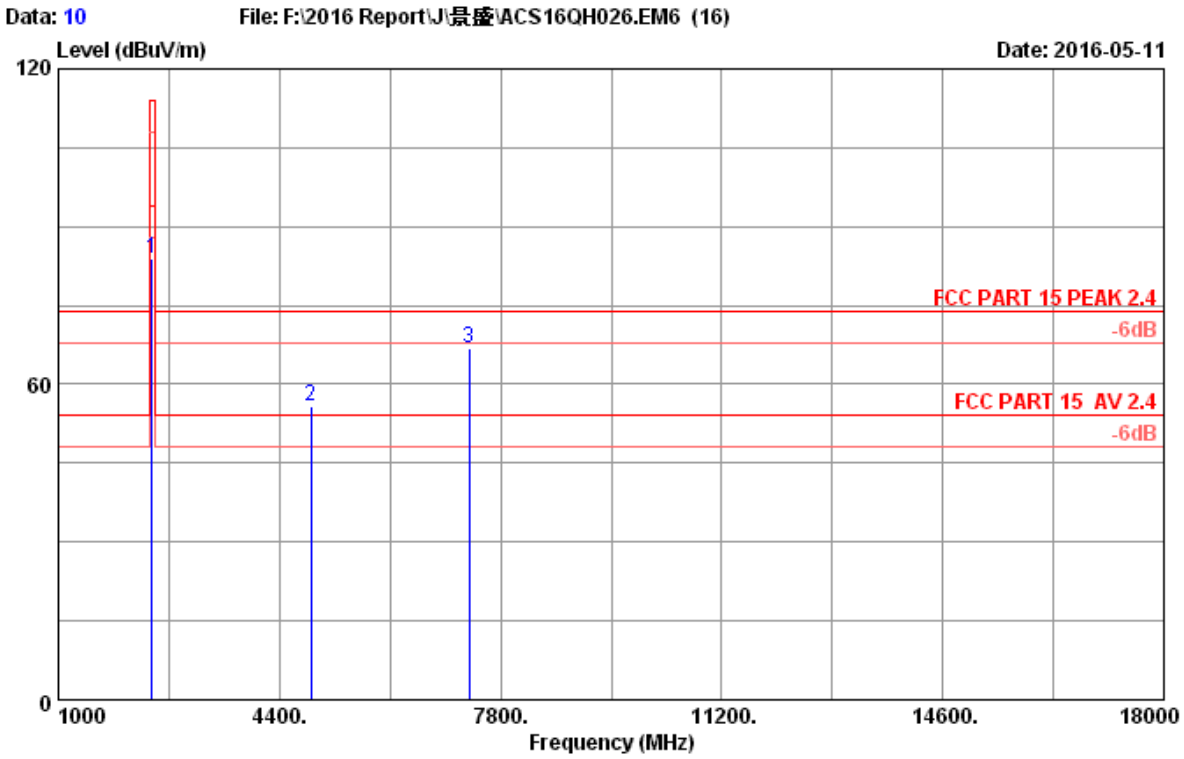
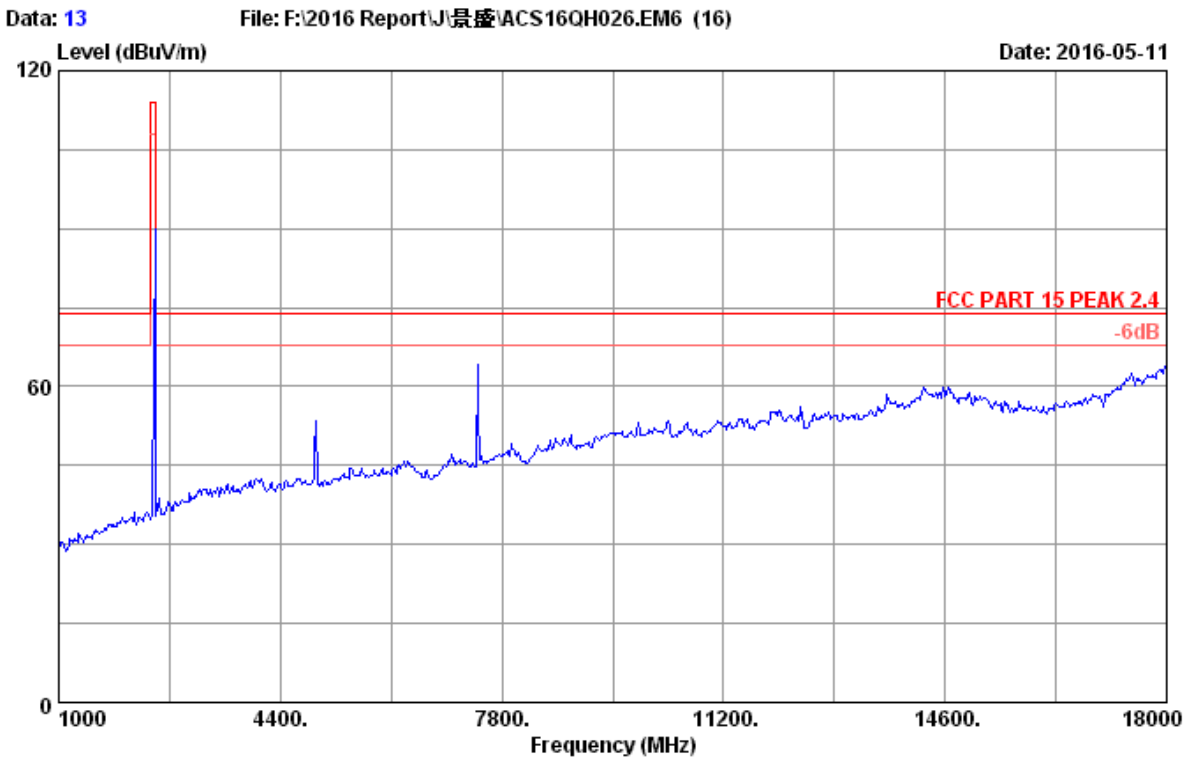


Site no. : 3m Chamber Data no. : 10
Dis. / Ant. : 3m 2015 3115-4877 Ant. pol. : VERTICAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54%
Engineer : Leo-Li
EUT : TORID GAMEPAD-WIRELESS
Power rating : DC 3.7V
Test Mode : GFSK 2440MHz Tx Mode

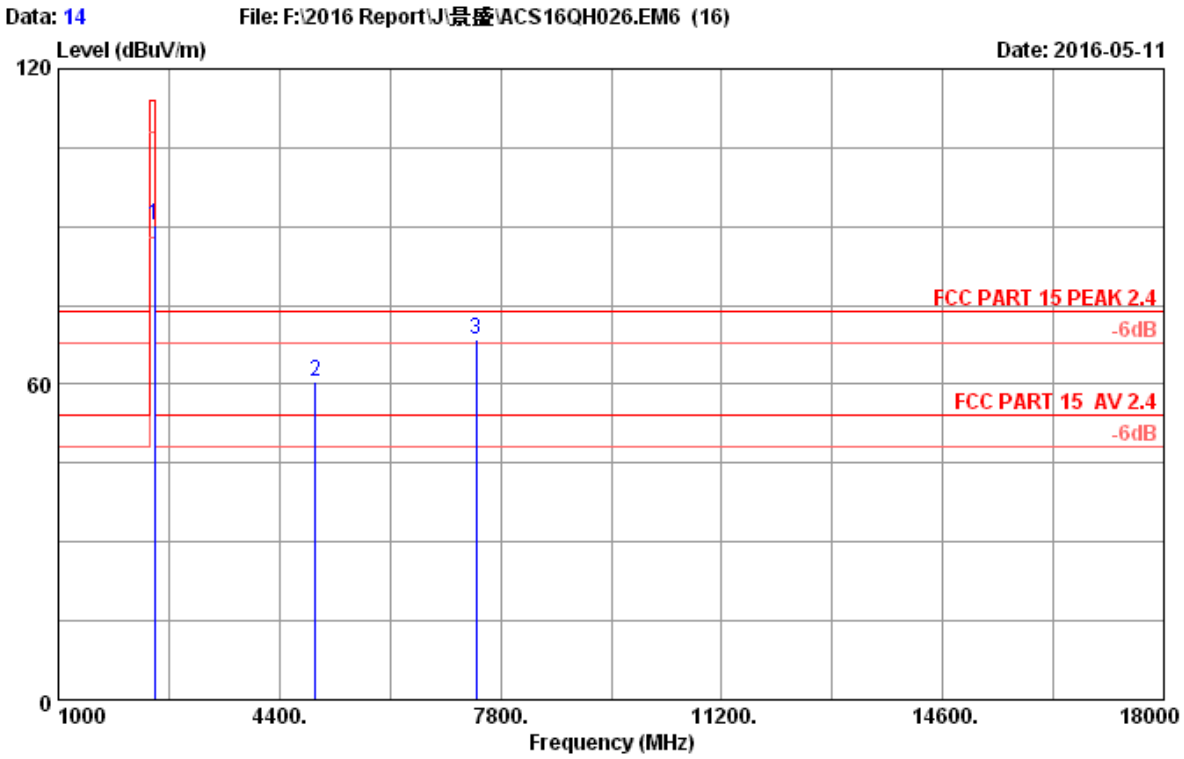
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2440.000	28.33	7.39	36.60	84.70	83.82	114.00	30.18	Peak
2	4880.000	33.26	9.49	35.51	48.59	55.83	74.00	18.17	Peak
3	7320.000	36.27	10.81	35.53	55.34	66.89	74.00	7.11	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

Frequency (MHz)	Peak level (dBuv/m)	Duty cycle factor (dB)	AV level (dBuv/m)	Limit (dBuv/m)	Conclusion
4824.000	55.83	21.55	34.28	54	Pass
7236.000	66.89	21.55	45.34	54	Pass




```
Site no.      : 3m Chamber                    Data no.  : 13
Dis. / Ant.   : 3m   2015 3115-4877      Ant. pol. : HORIZONTAL
Limit         : FCC PART 15 PEAK 2.4
Env. / Ins.   : 23*C/54%
Engineer      : Leo-Li
EUT           : TORID GAMEPAD-WIRELESS
Power rating  : DC 3.7V
Test Mode     : GFSK 2475MHz  Tx Mode
M/N           : SL-6576-BK-02
```

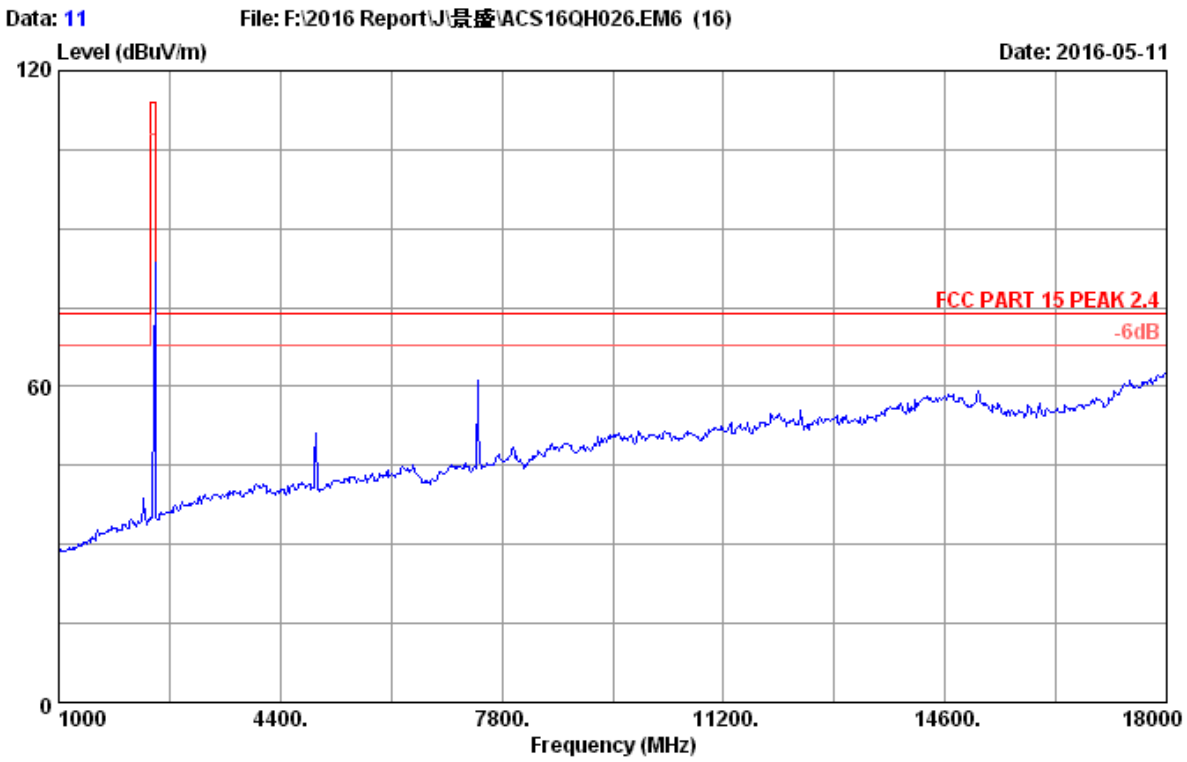


Site no. : 3m Chamber Data no. : 14
Dis. / Ant. : 3m 2015 3115-4877 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54%
Engineer : Leo-Li
EUT : TORID GAMEPAD-WIRELESS
Power rating : DC 3.7V
Test Mode : GFSK 2475MHz Tx Mode

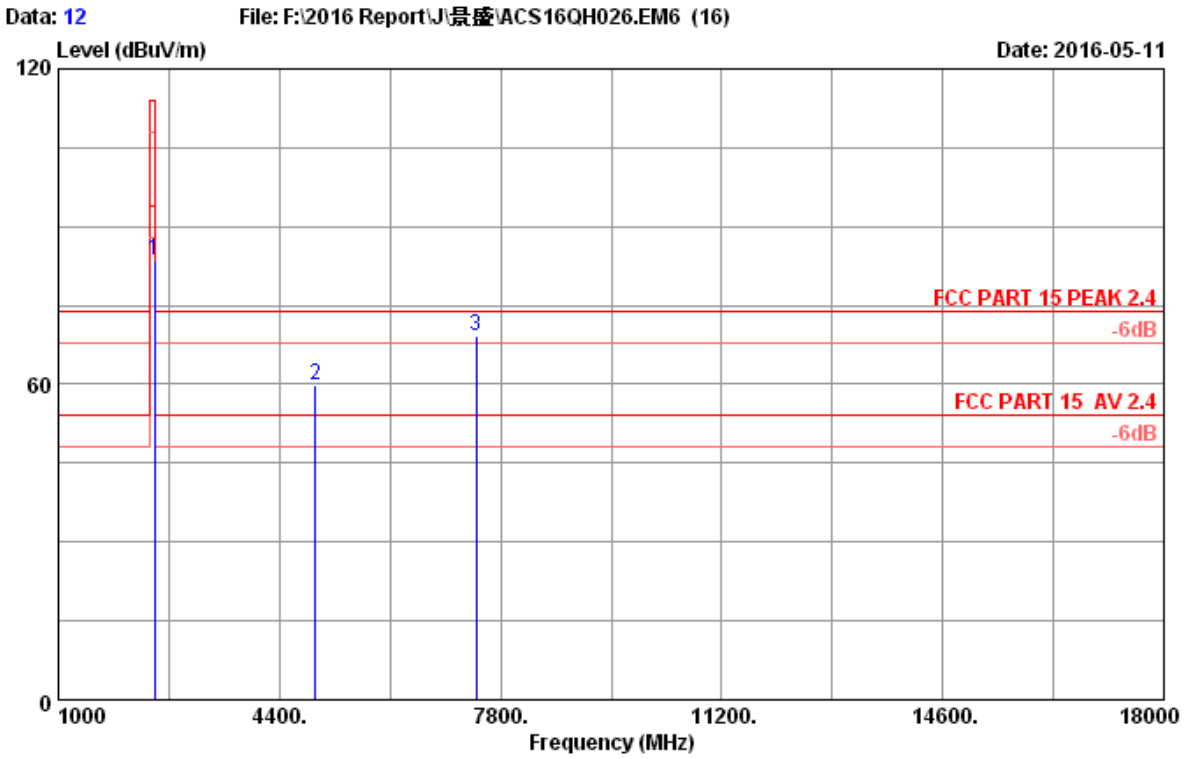
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2475.000	28.37	7.47	36.59	90.84	90.09	114.00	23.91	Peak
2	4950.000	33.40	9.52	35.47	53.13	60.58	74.00	13.42	Peak
3	7425.000	36.52	10.92	35.57	56.77	68.64	74.00	5.36	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

Frequency (MHz)	Peak level (dBuv/m)	Duty cycle factor (dB)	AV level (dBuv/m)	Limit (dBuv/m)	Conclusion
4950.000	60.58	21.55	39.03	54	Pass
7425.000	68.64	21.55	47.09	54	Pass




```
Site no.      : 3m Chamber                    Data no.  : 11
Dis. / Ant.   : 3m   2015 3115-4877       Ant. pol. : VERTICAL
Limit         : FCC PART 15 PEAK 2.4
Env. / Ins.   : 23*C/54%
Engineer      : Leo-Li
EUT           : TORID GAMEPAD-WIRELESS
Power rating  : DC 3.7V
Test Mode     : GFSK 2475MHz  Tx Mode
M/N           : SL-6576-BK-02
```



Site no. : 3m Chamber Data no. : 12
Dis. / Ant. : 3m 2015 3115-4877 Ant. pol. : VERTICAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54%
Engineer : Leo-Li
EUT : TORID GAMEPAD-WIRELESS
Power rating : DC 3.7V
Test Mode : GFSK 2475MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2475.000	28.37	7.47	36.59	84.36	83.61	114.00	30.39	Peak
2	4950.000	33.40	9.52	35.47	52.36	59.81	74.00	14.19	Peak
3	7425.000	36.52	10.92	35.57	57.37	69.24	74.00	4.76	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

Frequency (MHz)	Peak level (dBuv/m)	Duty cycle factor (dB)	AV level (dBuv/m)	Limit (dBuv/m)	Conclusion
4950.000	59.81	21.55	38.26	54	Pass
7425.000	69.24	21.55	47.69	54	Pass

5. 20 DB BANDWIDTH TEST

5.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	N9030A	MY51380221	Oct.18,15	1Year
2.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr.23,16	1 Year
3.	RF Cable	Marvelous Microwave Inc	SFL402105FLEX	NO.1	Oct.17.15	1 Year

5.2. Limit

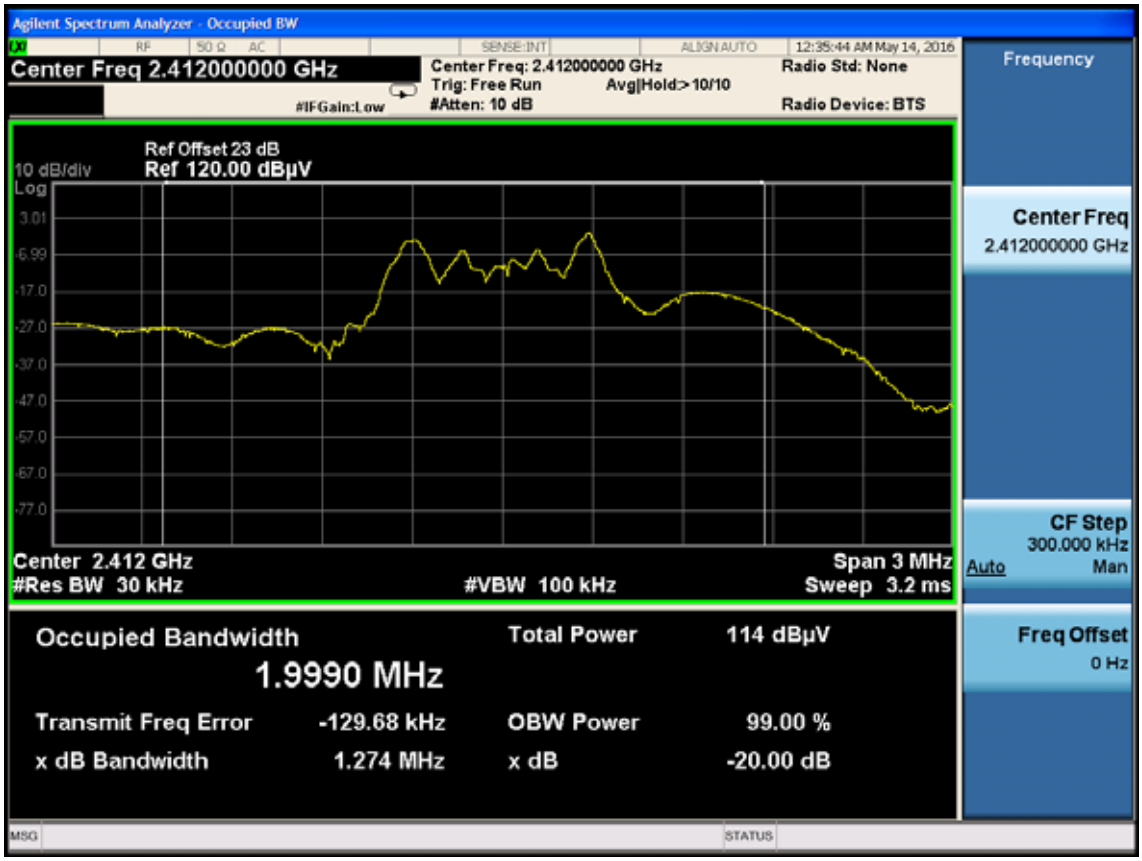
Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

5.3. Test Results

EUT: TORID GAMEPAD-WIRELESS		
M/N: SL-6576-BK-02		
Test date: 2016-05-14	Pressure: 104.1±1.0kPa	Humidity: 56.7±3.0%
Tested by: Donjon_Huang	Test site: RF Site	Temperature：24.3±0.6℃

Frequency	20dB Bandwidth （KHz）	Limit (MHz)
2412MHz	1.274	N/A
2440MHz	1.277	N/A
2475MHz	1.229	N/A
Conclusion：PASS		

2412MHz



2440MHz

2475MHz


Agilent Spectrum Analyzer - Occupied BW
Center Freq 2.475000000 GHz
Center Freq: 2.475000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#IFGain:Low
#Atten: 10 dB
Radio Std: None
Radio Device: BTS
12:37:44 AM May 14, 2016
Ref Offset 23 dB
10 dB/div
Ref 120.00 dBµV
Log
3.01
-6.99
-17.0
-27.0
-37.0
-47.0
-57.0
-67.0
-77.0
Center 2.475 GHz
#Res BW 30 kHz
#VBW 100 kHz
Span 3 MHz
Sweep 3.2 ms
Occupied Bandwidth
2.0631 MHz
Total Power
113 dBµV
Transmit Freq Error
-199.54 kHz
OBW Power
99.00 %
x dB Bandwidth
1.229 MHz
x dB
-20.00 dB
MSG
STATUS
Frequency
Center Freq
2.475000000 GHz
CF Step
300.000 kHz
Auto
Man
Freq Offset
0 Hz

6. BAND EDGE COMPLIANCE TEST

6.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4446A	US44300459	Apr.24,16	1 Year
2.	Amp	HP	8449B	3008A02495	Apr.24,16	1 Year
3.	Horn Antenna	ETS	3115	9510-4877	Oct.15,15	1 Year
4.	HF Cable	Hubersuhner	Sucoflex104	274094/4	Apr.24,16	1 Year

6.2. Limit

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

6.3. Test Produce

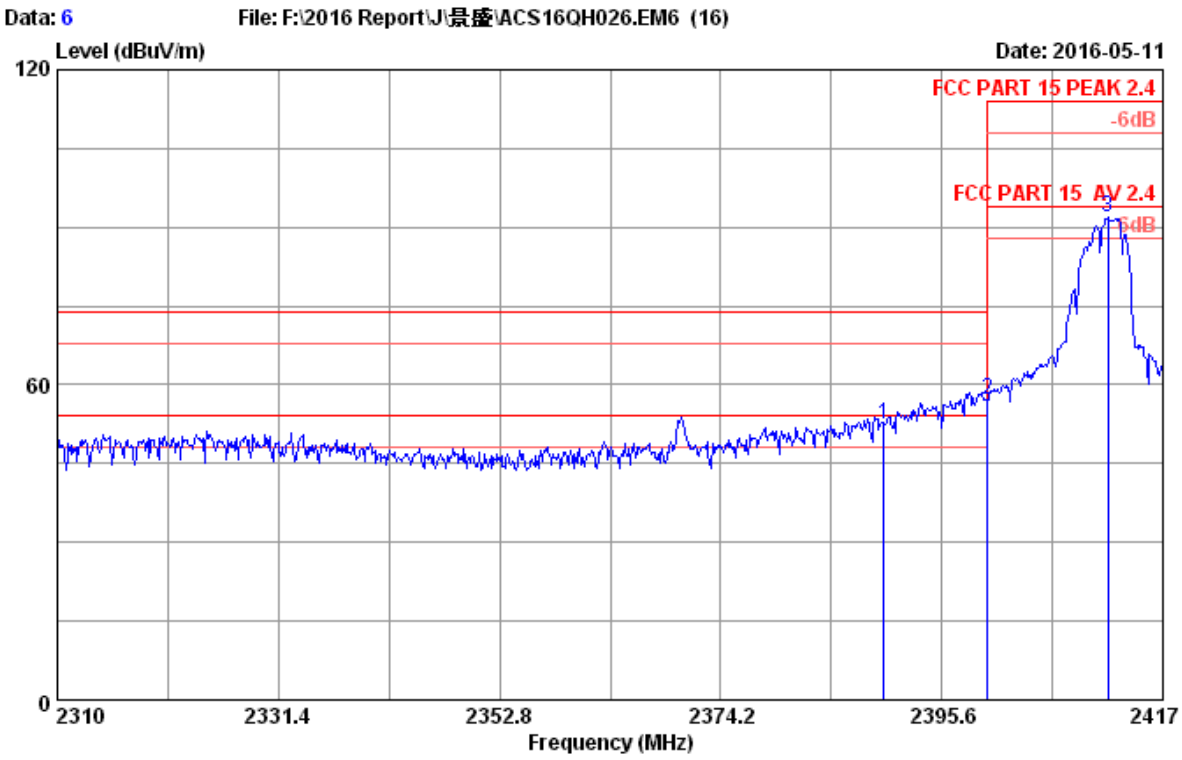
1. The EUT is placed on a turntable, which is 1.5m above the ground plane and worked at highest radiated power.
2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upperband-edges of the emission:
   (a) PEAK: RBW=1MHz ;VBW=3MHz, PK detector, Sweep=AUTO
   (b)This device is pulse modulated, a duty cycle factor was used to calculate average level based measured peak level

6.4. Test Results

Pass (The testing data was attached in the next pages.)

Note: If the PK measured levels comply with average limit, then the average level were deemed to comply with average limit.

Note: The duty cycle factor for calculate average level is -21.55dB, and average limit is 20dB below peak limit, so if peak measured level comply with average limit, the average level was deemed to comply with average limit.

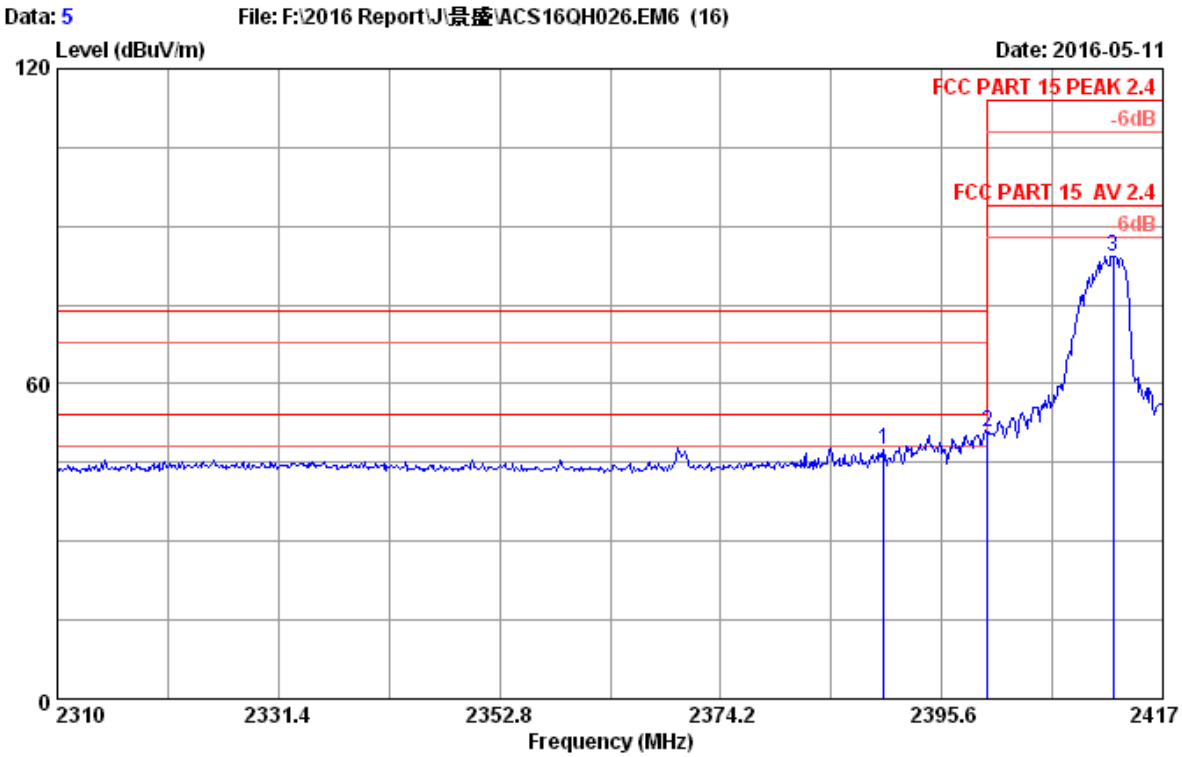



```
Site no.      : 3m Chamber                    Data no.  : 6
Dis. / Ant.   : 3m   2015 3115-4877      Ant. pol. : HORIZONTAL
Limit         : FCC PART 15 PEAK 2.4
Env. / Ins.   : 23*C/54%
Engineer      : Leo-Li
EUT           : TORID GAMEPAD-WIRELESS
Power rating  : DC 3.7V
Test Mode     : GFSK 2412MHz  Tx Mode
```

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	28.27	7.28	36.62	53.55	52.48	74.00	21.52	Peak
2	2400.000	28.28	7.32	36.62	58.05	57.03	74.00	16.97	Peak
3	2411.650	28.29	7.35	36.62	92.80	91.82	114.00	22.18	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

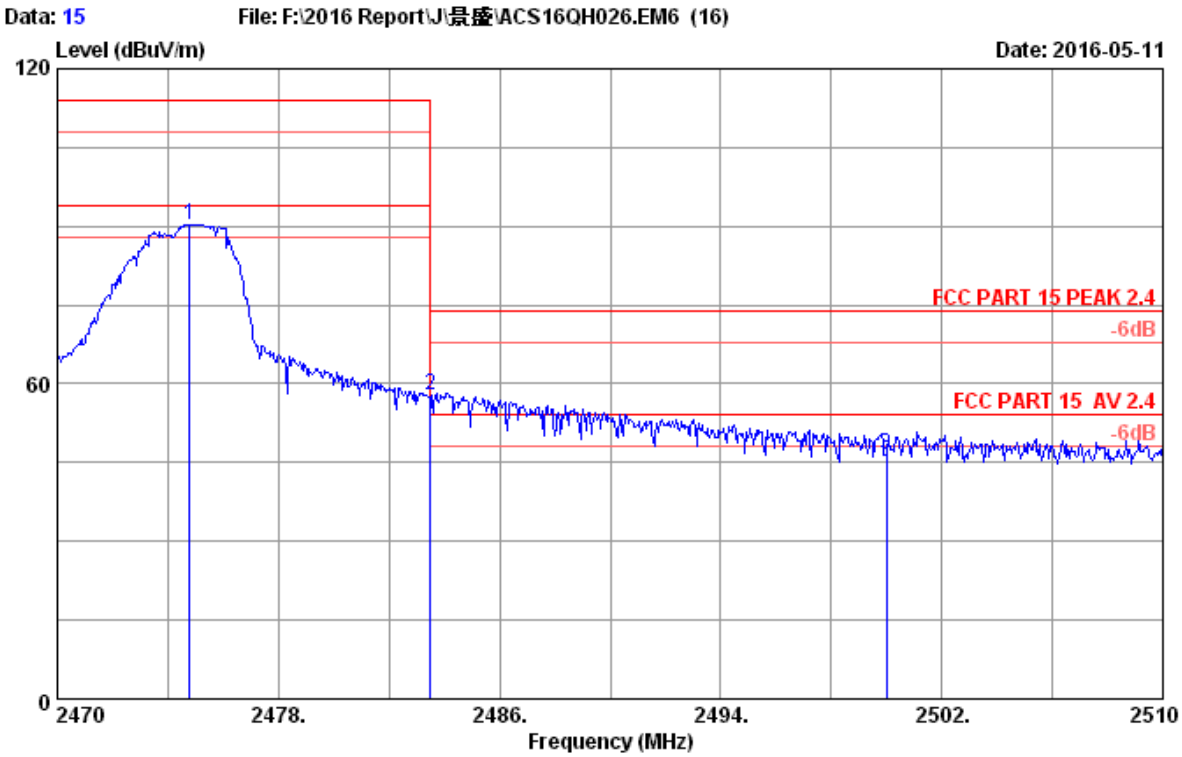
Frequency (MHz)	Peak level (dBuv/m)	Duty cycle factor (dB)	AV level (dBuv/m)	Limit (dBuv/m)	Conclusion
2400.000	57.03	21.55	35.48	54	Pass



Site no. : 3m Chamber Data no. : 5
Dis. / Ant. : 3m 2015 3115-4877 Ant. pol. : VERTICAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54%
Engineer : Leo-Li
EUT : TORID GAMEPAD-WIRELESS
Power rating : DC 3.7V
Test Mode : GFSK 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	28.27	7.28	36.62	48.64	47.57	74.00	26.43	Peak
2	2400.000	28.28	7.32	36.62	51.84	50.82	74.00	23.18	Peak
3	2412.185	28.29	7.35	36.62	85.31	84.33	114.00	29.67	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

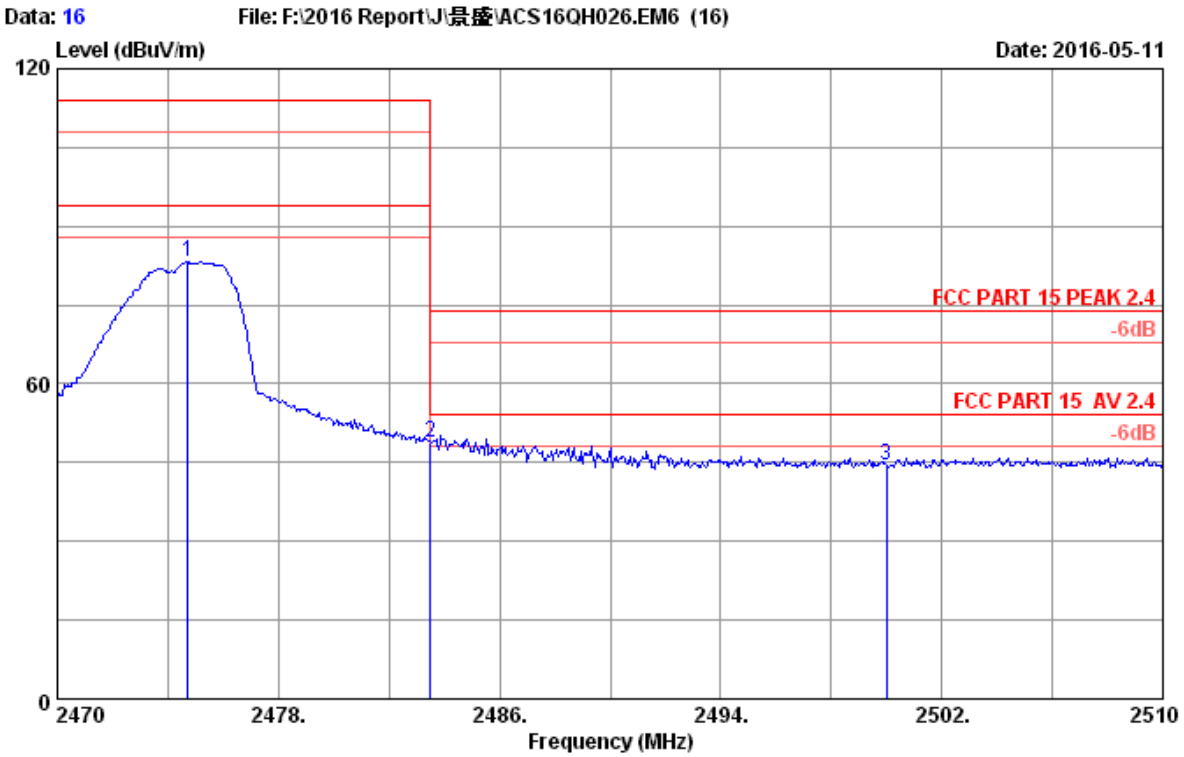


Site no. : 3m Chamber Data no. : 15
Dis. / Ant. : 3m 2015 3115-4877 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54%
Engineer : Leo-Li
EUT : TORID GAMEPAD-WIRELESS
Power rating : DC 3.7V
Test Mode : GFSK 2475MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2474.800	28.37	7.47	36.59	90.97	90.22	114.00	23.78	Peak
2	2483.500	28.38	7.51	36.59	58.66	57.96	74.00	16.04	Peak
3	2500.000	28.40	7.51	36.58	47.13	46.46	74.00	27.54	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

Frequency (MHz)	Peak level (dBuv/m)	Duty cycle factor (dB)	AV level (dBuv/m)	Limit (dBuv/m)	Conclusion
2483.500	57.96	21.55	36.41	54	Pass



Site no. : 3m Chamber Data no. : 16
Dis. / Ant. : 3m 2015 3115-4877 Ant. pol. : VERTICAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23*C/54%
Engineer : Leo-Li
EUT : TORID GAMEPAD-WIRELESS
Power rating : DC 3.7V
Test Mode : GFSK 2475MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2474.720	28.37	7.47	36.59	84.10	83.35	114.00	30.65	Peak
2	2483.500	28.38	7.51	36.59	49.43	48.73	74.00	25.27	Peak
3	2500.000	28.40	7.51	36.58	45.03	44.36	74.00	29.64	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

7. ANTENNA REQUIREMENT

RESULT : PASS

Test Date : May.08~14, 2016

Test standard : FCC Part 15.203

Limit : 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

According to the manufacturer declared, the EUT has an PIFA Antenna, the directional gain of antenna is -1dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply the provision.

8. RADIO FRREQUENCY EXPOSURE COMPLIANCE

RESULT : PASS

Test standard : FCC KDB Publication 447498 D01 V05

Since maximum peak output power of the transmitter is<10mW, i.e.0.009346mW<10mW, hence the EUT is excluded from SAR evaluation according to FCC KDB Publication 447498 D01:General RF Exposure Guidance V05.

9. DEVIATION TO TEST SPECIFICATIONS

[NONE]