

Report Reference No.:

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FCC PART 15 SUBPART C TEST REPORT

CTL1609264201-WF

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Product Name	wireless game controller	
Model/Type reference	G600	
Trade Mark	欣柠檬	
FCC ID	2AJ78-G600	
Applicant's name:	Shenzhen New Lemon Science&Te	echnology Co., Ltd
Address of applicant	9 Floor, South Tower Of YuanXing Te District, Shenzhen, China	echnology Building, Nanshan
Test Firm	Shenzhen CTL Testing Technology	Co., Ltd.
Address of Test Firm	Floor 1-A, Baisha Technology Park, District, Shenzhen, China 518055	No.3011, Shahexi Road, Nanshan
Test specification:		0
Standard	FCC Part 15.249: Operation within 2483.5 MHz, 5725-5850 MHz and 24	

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Date of Test Date...... Sept. 26, 2016-Oct. 31, 2016

Master TRF...... Dated 2011-01

Date of Receipt...... Sept. 26, 2016

Data of Issue...... Oct. 31, 2016

Result..... PASS

TRF Originator...... Shenzhen CTL Testing Technology Co., Ltd.

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TEST REPORT

Test Report No. :	CTL1609264201-WF	Oct. 31, 2016
	C1L1009204201-VVI	Date of issue

Equipment under Test : wireless game controller

Model /Type : G600

Applicant : Shenzhen New Lemon Science&Technology Co., Ltd

Address : 9 Floor, South Tower Of YuanXing Technology Building,

Nanshan District, Shenzhen, China

Manufacturer : Shenzhen New Lemon Science&Technology Co., Ltd

Address : 9 Floor, South Tower Of YuanXing Technology Building,

Nanshan District, Shenzhen, China

Test Result according to the standards on page 4:	PASS

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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1. TEST STANDARDS

The tests were performed according to following standards:

FCC Rules Part 15.249: Operation within the bands 902 - 928 MHz, 2400 - 2483.5 MHz, 5725 - 5875 MHz, and 24.0 - 24.25 GHz.

ANSI C63.10-2013

ANSI C63.4-2014



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2. SUMMARY

2.1. Equipment Under Test

Power supply system utilised

Power supply voltage : o 120V / 60 Hz o 115V / 60Hz o 24 V DC

o Other (USB in)

DC 3.7V from battery

2.2. Description of the Equipment under Test (EUT)

The **EUT** (wireless game controller) support 2.4G wireless function.

Name of EUT	wireless game controller
Model Number	G600
Antenna Type	Integral
Operation frequency	2405MHz-2478MHz
Modulation Type	GFSK
Antenna Gain	0dBi

Channel List:

Channel List:					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2405	26	2430	51	2455
02	2406	27	2431	52	2456
03	2407	28	2432	53	2457
04	2408	29	2433	54	2458
05	2409	30	2434	55	2459
06	2410	31	2435	56	2460
07	2411	32	2436	57	2461
08	2412	33	2437	58	2462
09	2413	34	2438	59	2463
10	2414	35	2439	60	2464
11	2415	36	2440	61	2465
12	2416	37	2441	62	2466
13	2417	38	2442	63	2467
14	2418	39	2443	64	2468
15	2419	40	2444	65	2469
16	2420	/41	2445	66	2470
17	2421	42	2446	67	2471
18	2422	43	2447	68	2472
19	2423	44	2448	69	2473
20	2424	45	2449	70	2474
21	2425	46	2450	71	2475
22	2426	47	2451	72	2476
23	2427	48	2452	73	2477
24	2428	49	2453	74	2478
25	2429	50	2454		
-	-		•	-	-

For more details, refer to the user's manual of the EUT.

Serial number: Prototype

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2.3. EUT operation mode

Test Mode(TM)	Description	Remark
TM1	Bottom Channel Transmitting	/
TM2	Middle Channel Transmitting	/
TM3	Top Channel Transmitting	/
TM4	Charging and keeping TX	power by battery

The field strength of radiation emission was measured in the following position: EUT stand-up position (Y axis), lie-down position (X, Z axis).

The following data show only with the worst case setup.

The worst case of X axis was reported.

Based on client request, all normal using modes of the normal function were tested but only the worst test data of the worst mode is reported by this report.

2.4. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

- o supplied by the manufacturer
- supplied by the lab
- Notebook PC (FCC DOC approved)

Manufacturer: DELL Model No.: PP18L

2.5. Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: 2AJ78-G600 filing to comply with Section 15.249 of the FCC Part 15, Subpart C Rules.

2.6. Modifications

No modifications were implemented to meet testing criteria.

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3. TEST ENVIRONMENT

3.1. Address of the test laboratory

Shenzhen CTL Testing Technology Co., Ltd. Floor 1-A, Baisha Technology Park, No. 3011, Shahexi Road, Nanshan, Shenzhen 518055 China

There is one 3m semi-anechoic chamber and two line conducted labs for final test. The Test Sites meet the requirements in documents ANSI C63.4 and CISPR 22/EN 55022 requirements.

3.2. Test Facility

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

IC Registration No.: 9618B

The 3m alternate test site of Shenzhen CTL Testing Technology Co., Ltd. EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration No.: 9618B on November 13, 2013.

FCC-Registration No.: 970318

Shenzhen CTL Testing Technology 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 970318, December 19, 2013.

3.3. Environmental conditions

During the measurement the envir	onmental conditions were within	the listed ranges:
Temperature:	15-35 ° C	0
Humidity:	30-60 %	
Atmospheric pressure:	950-1050mbar	

3.4. Configuration of Tested System

Fig. 2-1 Configuration of Tested System

EUT	

3.5. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 "Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements" and is documented in the Shenzhen CTL Testing Technology Co., Ltd. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for CTL laboratory is reported:

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	30~1000MHz	4.10dB	(1)
Radiated Emission	1~26.5GHz	4.32dB	(1)
Conducted Disturbance	0.15~30MHz	3.20dB	(1)

(1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.



3.6. Equipments Used during the Test

Test Equipment	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Due Date
ULTRA-ROADBAND ANTENNA	Sunol Sciences Corp.	JB1	A061713	2016/06/02	2017/06/01
EMI Test Receiver	R&S	ESCI	103710	2016/06/02	2017/06/01
Spectrum Analyzer	Agilent	E4407B	MY41440676	2016/05/21	2017/05/20
Controller	EM Electronics	Controller EM 1000	N/A	2016/05/21	2017/05/20
Horn Antenna	Sunol Sciences Corp.	DRH-118	A062013	2016/05/19	2017/05/18
Active Loop Antenna	Daze	ZN30900A	N/A	2016/05/19	2017/05/18
LISN	R&S	ENV216	3560.6550.12	2016/06/02	2017/06/01
LISN	R&S	ESH2-Z5	860014/010	2016/06/02	2017/06/01
ISN	FCC	F-071115- 1057-1-09	11229	2016/05/19	2017/05/18
Amplifier	Agilent	8349B	3008A02306	2016/05/19	2017/05/18
Amplifier	Agilent	8447D	2944A10176	2016/05/19	2017/05/18
Transient Limiter	SCHWARZCECK	VTSD 9561F	9666	2016/06/02	2017/06/01
Radio Communication Tester	R&S	CMU200	115419	2016/05/22	2017/05/21
Temperature/Humidity Meter	Gangxing	CTH-608	02	2016/05/20	2017/05/19
SIGNAL GENERATOR	Agilent	E4421B	US40051744	2016/05/20	2017/05/19
Power Meter	Agilent	U2531A	TW53323507	2016/05/21	2017/05/20
Power Sensor	Agilent	U2021XA	MY5365004	2016/05/21	2017/05/20
Climate Chamber	ESPEC	EL-10KA	A20120523	2016/05/20	2017/05/19
High-Pass Filter	K&L	9SH10- 2700/X12750 -O/O	N/A	2016/05/20	2017/05/19
High-Pass Filter	K&L	41H10- 1375/U12750 -O/O	N/A	2016/05/20	2017/05/19
RF Cable	HUBER+SUHNER	RG214	N/A	2016/05/20	2017/05/19

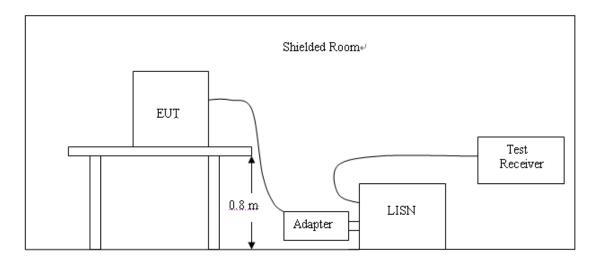
Note:The temporary antenna connector is soldered on the PCB board in order to perform conducted tests and this temporary antenna connector is listed in the equipment list.

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4. TEST CONDITIONS AND RESULTS

4.1. Conducted Emissions Test

TEST CONFIGURATION



TEST PROCEDURE

- 1 The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10.
- 2 Support equipment, if needed, was placed as per ANSI C63.10.
- 3 All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
- 4 If a EUT received DC power from the USB Port of Notebook PC, the PC's adapter received AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
- 5 All support equipments received AC power from a second LISN, if any.
- 6 The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7 Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes.
- 8 During the above scans, the emissions were maximized by cable manipulation.

The RBW/VBW for 150KHz to 30MHz: 9KHz

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CONDUCTED POWER LINE EMISSION LIMIT

For unintentional device, according to § 15.207(a) Line Conducted Emission Limits is as following:

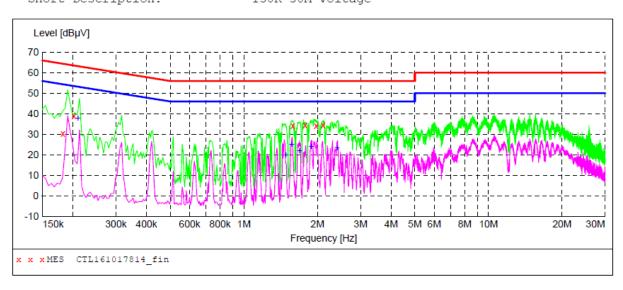
Francis and s	Maximum RF Line Voltage (dBμV)			
Frequency (MHz)	CLASS A		CLASS B	
(111112)	Q.P.	Ave.	Q.P.	Ave.
0.15 - 0.50	79	66	66-56*	56-46*
0.50 - 5.00	73	60	56	46
5.00 - 30.0	73	60	60	50

^{*} Decreasing linearly with the logarithm of the frequency

For intentional device, according to §15.207(a) Line Conducted Emission Limit is same as above table.

TEST RESULTS

SCAN TABLE: "Voltage (9K-30M)FIN"
Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "CTL161017814_fin"

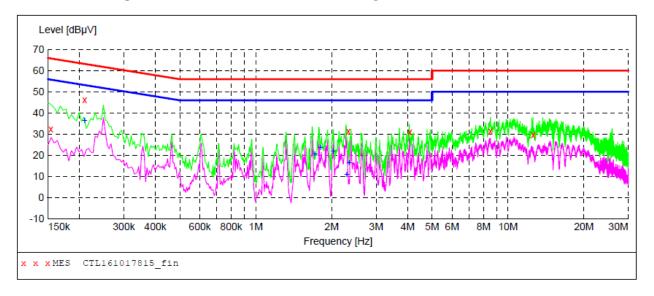
10/17/2016 3: Frequency MHz	40PM Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.182000	30.20	10.2	64	34.2	QP	N	GND
0.202000	39.00	10.2	64	24.5	QP	N	GND
1.586000	34.20	10.3	56	21.8	QP	N	GND
1.778000	34.30	10.3	56	21.7	QP	N	GND
1.976000	34.20	10.3	56	21.8	QP	N	GND
2.108000	34.40	10.4	56	21.6	QP	N	GND

MEASUREMENT RESULT: "CTL161017814 fin2"

10/17/2016 3: Frequency MHz	40PM Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.210000	38.00	10.2	53	15.2		N	GND
1.484000	20.10	10.3	46	25.9	AV	N	GND
1.568000	25.20	10.3	46	20.8	AV	N	GND
1.688000	22.00	10.3	46	24.0	AV	N	GND
1.886000	24.00	10.3	46	22.0	AV	N	GND
2.408000	23.50	10.4	46	22.5	AV	N	GND

SCAN TABLE: "Voltage (9K-30M)FIN"

Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "CTL161017815_fin"

10/17/2 Freq	016 3:4 uency MHz	3PM Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.1	54000	32.30	10.2	66	33.5	QP	L1	GND
0.2	10000	46.20	10.2	63	17.0	QP	L1	GND
2.3	30000	31.30	10.4	56	24.7	QP	L1	GND
4.0	82000	31.00	10.4	56	25.0	QP	L1	GND
8.5	28000	31.50	10.6	60	28.5	QP	L1	GND
12.5	78000	29.70	10.6	60	30.3	QP	L1	GND

MEASUREMENT RESULT: "CTL161017815 fin2"

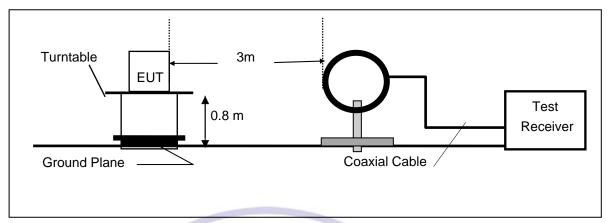
 7/2016 3:4 requency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.210000	36.60	10.2	53	16.6	AV	L1	GND
1.712000	20.80	10.3	46	25.2	AV	L1	GND
1.808000	23.80	10.3	46	22.2	AV	L1	GND
2.024000	22.10	10.4	46	23.9	AV	L1	GND
2.294000	11.10	10.4	46	34.9	AV	L1	GND
2.342000	16.50	10.4	46	29.5	AV	L1	GND

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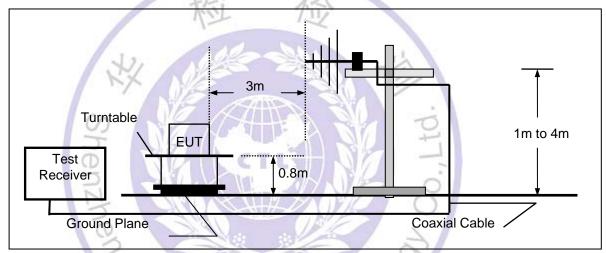
4.2. Transmitter Radiated Unwanted Emissions and Bandedge

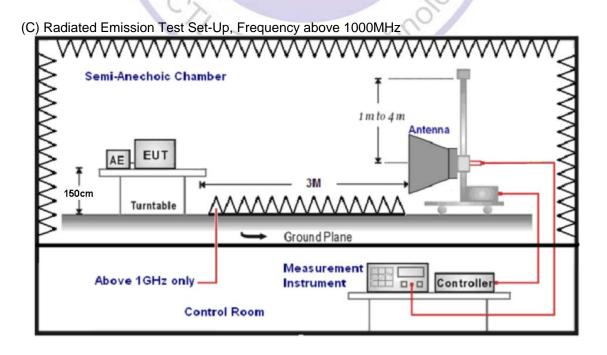
TEST CONFIGURATION

(A) Radiated Emission Test Set-Up, Frequency Below 30MHz



(B) Radiated Emission Test Set-Up, Frequency below 1000MHz





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FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor(if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS = RA + AF + CL - AG

Where FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
RA = Reading Amplitude	AG = Amplifier Gain
AF = Antenna Factor	

RADIATION LIMIT

For unintentional device, according to § 15.209(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency (MHz)	Distance (Meters)	Radiated (dBµV/m)	Radiated (μV/m)
30-88	3	40.0	100
88-216	3/1	43.5	150
216-960	3	46.0	200
Above 960	371	54.0	500

For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table.

TEST PROCEDURE

- 1. The EUT is placed on a turntable, which is 0.8m above ground plane below 1GHz and 1.5m above ground plane above 1GHz.
- 2. The turntable shall be 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 emissions.
- 4. For the radiated emission test above 1GHz: Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- 5. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 6. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 7. Repeat above procedures until the measurements for all frequencies are complete.
- 8. Based on the Frequency Generator in the device include 16MHz. The test frequency range from 9KHz to 25GHz per FCC PART 15.33(a).

Note:

Three axes are chosen for pretest, the X axis is the worst mode for final test. For battery operated equipment, the equipment tests shall be performed using a fully-charged battery.

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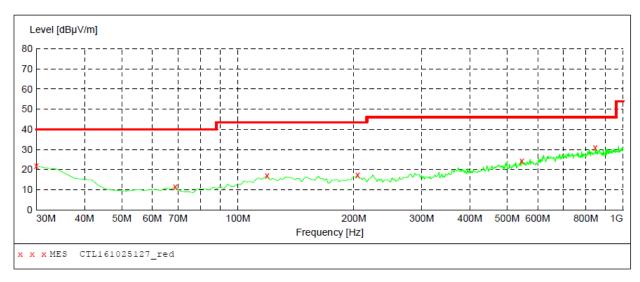
TEST RESULTS

All the test modes (TM1, TM2, TM3 and TM4) completed for test. The worst case of Radiated Emission is TM1; the test data of this mode was reported.

Below 1GHz Test Results:

SWEEP TABLE: "test (30M-1G)"

Short Description: Field Strength
Start Stop Detector Meas. IF Transducer
Frequency Frequency Time Bandw.
30.0 MHz 1.0 GHz MaxPeak 300.0 ms 120 kHz JB1



MEASUREMENT RESULT: "CTL161025127 red"

10/25/2016 3: Frequency MHz	49PM Level dBuV/m	Transd dB	Limit dBuV/m	Margin dB	Det.	_	Azimuth dea	Polarization
MHZ	авµу/ш	ав	αβμν/πι	ав		cm	aeg	
30.000000	21.80	20.8	40.0	18.2		0.0	0.00	VERTICAL
68.800000	11.50	8.2	40.0	28.5		0.0	0.00	VERTICAL
119.240000	17.00	14.7	43.5	26.5		0.0	0.00	VERTICAL
204.600000	17.50	14.1	43.5	26.0		0.0	0.00	VERTICAL
546.040000	24.40	20.8	46.0	21.6		0.0	0.00	VERTICAL
846.740000	31.00	25.1	46.0	15.0		0.0	0.00	VERTICAL

Remark:

(1) Measuring frequencies from 9 KHz to the 1 GHz, Radiated emission test from 9KHz to 30MHz was verified, and no any emission was found except system noise floor.

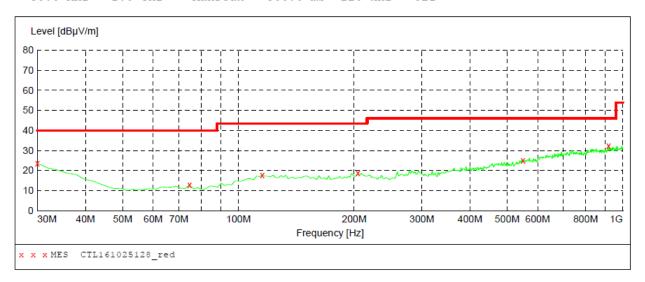
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- * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (3) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.

Field Strength Short Description:

Stop Detector Meas. Transducer Start IF Time

Bandw. Frequency Frequency 30.0 MHz 1.0 GHz 300.0 ms 120 kHz JB1 MaxPeak



MEASUREMENT RESULT: "CTL161025128 red"

10/25/2016 3: Frequency MHz	50PM Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
30.000000 74.620000 115.360000 204.600000 549.920000 918.520000	23.60 12.80 17.80 18.70 25.10	20.8 8.3 14.3 14.1 21.0 26.2	40.0 40.0 43.5 43.5 46.0	20.9		0.0 0.0 0.0 0.0 0.0	0.00 0.00 0.00 0.00 0.00	HORIZONTAL HORIZONTAL HORIZONTAL HORIZONTAL HORIZONTAL HORIZONTAL

Remark:

- (1) Measuring frequencies from 9 KHz to the 1 GHz, Radiated emission test from 9KHz to 30MHz was verified, and no any emission was found except system noise floor.
- (2)* denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz (3)for measuring above 1 GHz, below 30MHz was 10KHz.

Above 1 GHz Test Results:

Note: H and V all have been tested, only worse case Vertical is reported.

Frequency	Emis	sion	Limit	Margin	Raw	Antenna Factor	Cable	Pre- amplifier	Correction
(MHz)	Lev	⁄el	(dBuV/m)	(dB)	Value	(dB/m)	Factor	(dB)	Factor
	(dBuV/m)				(dBuV)		(dB)		(dB/m)
2405.00	94.31	PK	114	19.69	96.26	28.79	4.62	35.36	-1.95
2405.00	86.18	AV	94	7.82	88.13	28.79	4.62	35.36	-1.95
2390.00	68.05	PK	74	5.95	70.09	28.72	4.60	35.36	-2.04
2390.00	49.87	AV	54	4.13	51.91	28.72	4.60	35.36	-2.04
2400.00	70.29	PK	74	3.71	72.26	28.78	4.61	35.36	-1.97
2400.00	50.42	AV	54	3.58	52.39	28.78	4.61	35.36	-1.97
4810.00	68.96	PK	74	5.04	64.44	33.50	6.92	35.89	4.52
4810.00	49.41	AV	54	4.59	44.89	33.50	6.92	35.89	4.52
6025.00	64.76	PK	74	9.24	56.59	35.14	7.63	34.60	8.17
6025.00	45.98	AV	54	8.02	37.81	35.14	7.63	34.60	8.17
7215.00	63.02	PK	74	10.98	51.86	36.99	9.19	35.02	11.16
7215.00	46.48	AV	54	7.52	35.32	36.99	9.19	35.02	11.16

Frequency	Emis	sion	Limit	Margin	Raw	Antenna Factor	Cable	Pre- amplifier	Correction
(MHz)	Lev	/el	(dBuV/m)	(dB)	Value	(dB/m)	Factor	(dB)	Factor
	(dBuV/m)				(dBuV)		(dB)		(dB/m)
2438.00	93.87	PK	114	20.13	95.74	28.85	4.65	35.37	-1.87
2438.00	85.74	AV	94	8.26	87.61	28.85	4.65	35.37	-1.87
3200.00	63.21	PK	74	10.79	61.85	31.24	5.47	35.35	1.36
3200.00	45.65	AV	54	8.35	44.29	31.24	5.47	35.35	1.36
3651.00	62.89	PK	74	11.11	59.59	32.34	6.00	35.04	3.30
3651.00	46.42	AV	54	7.58	43.12	32.34	6.00	35.04	3.30
4876.00	67.76	PK	74	6.24	61.41	33.59	6.95	34.20	6.35
4876.00	46.35	AV	54	7.65	40.00	33.59	6.95	34.20	6.35
6283.00	63.09	PK	74	10.91	54.60	35.19	8.02	34.73	8.49
6283.00	45.14	AV	54	8.86	36.65	35.19	8.02	34.73	8.49
7314.00	64.46	PK	74	9.54	52.79	37.44	9.23	35.00	11.67
7314.00	46.71	AV	54	7.29	35.04	37.44	9.23	35.00	11.67

Frequency	Emis	sion	Limit	Margin	Raw	Antenna Factor	Cable	Pre- amplifier	Correction
(MHz)	Level		(dBuV/m)	(dB)	Value	(dB/m)	Factor	(dB)	Factor
	(dBuV/m)				(dBuV)		(dB)		(dB/m)
2478.00	94.21	PK	114	19.79	95.97	28.92	4.70	35.38	-1.76
2478.00	86.02	AV	94	7.98	87.78	28.92	4.70	35.38	-1.76
2483.50	63.85	PK	74	10.15	65.59	28.93	4.70	35.38	-1.74
2483.50	42.36	AV	54	11.64	44.10	28.93	4.70	35.38	-1.74
3720.00	63.79	PK	74	10.21	60.59	32.77	6.08	35.65	3.20
3720.00	45.22	AV	54	8.78	42.02	32.77	6.08	35.65	3.20
4956.00	67.74	PK	74	6.26	61.06	33.83	7.00	34.14	6.68
4956.00	50.08	AV	54	3.92	43.40	33.83	7.00	34.14	6.68
6200.00	63.64	PK	74	10.36	55.24	35.19	7.90	34.69	8.40
6200.00	45.05	AV	54	8.95	36.65	35.19	7.90	34.69	8.40
7434.00	66.91	PK	74	7.09	54.96	37.64	9.27	34.97	11.95
7434.00	46.13	AV	54	7.87	34.18	37.64	9.27	34.97	11.95

Note: above 10GHz up to 25GHz was verified, and no any emission was found except system noise floor.

Remark: For fundamental frequency, RBW=3MHz VBW =3MHz peak detector for PK value, RMS

detector for AV value



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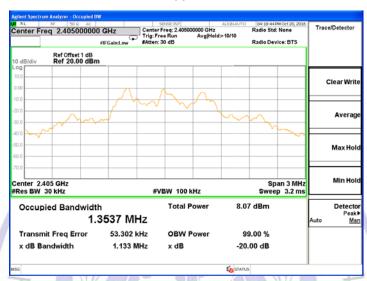
4.3. Occupied Bandwidth Measurement

Measurement Procedure

- 1. Set EUT as normal operation.
- 2. RBW \geq 1% of the 20 dB bandwidth, VBW \geq RBW.
- 3. The useful conducted emission from the EUT was detected by the spectrum analyser with peak detector.

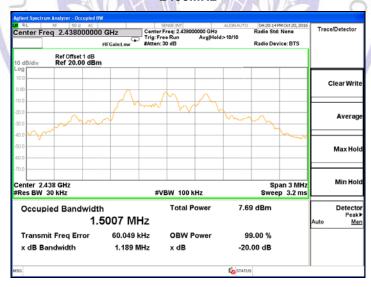
Measurement Results

2405MHz



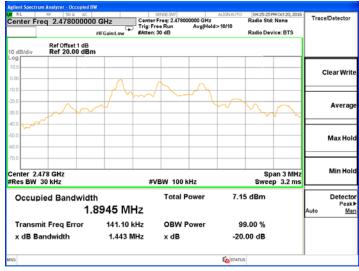
20dB Bandwidth: 1133 KHz

2438MHz



20dB Bandwidth: 1189 KHz

2478MHz





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5. Antenna Requirement

Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, 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.

And according to FCC 47 CFR Section 15.247 (c), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

Refer to statement below for compliance.

The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

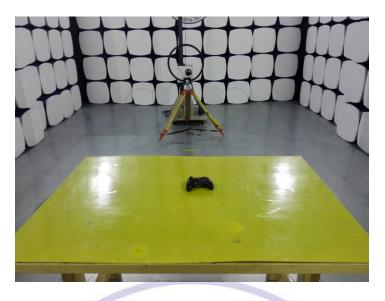
Antenna Connected Construction

The antenna used in this product is an internal Antenna, The directional gains of antenna used for transmitting is 0 dBi.

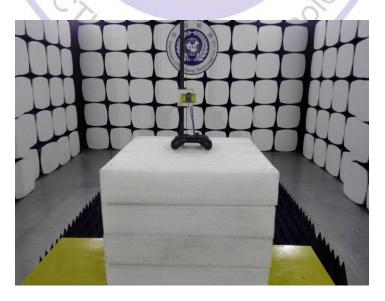


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6. Test Setup Photos of the EUT











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7. External and Internal Photos of the EUT

External Photos of EUT





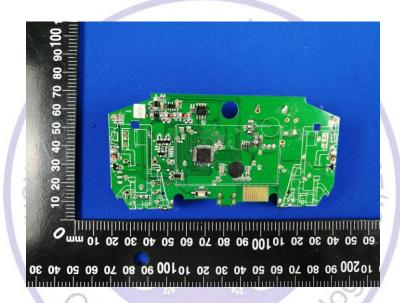






Internal Photos of EUT







V1.0

