

Global United Technology Services Co., Ltd.

Report No.: GTSE15050069505

FCC REPORT

Skyrocket Toys, LLC Applicant:

12910 Culver Blvd, Suite F, Los Angeles, CA 90066, U.S.A. **Address of Applicant:**

Equipment Under Test (EUT)

Product Name: Sky Viper Streaming Drone

Model No.: 01526

O5301526RX24G FCC ID:

FCC CFR Title 47 Part 15 Subpart C Section 15.247: 2014 **Applicable standards:**

May 21, 2015 Date of sample receipt:

Date of Test: June 15 – June 19, 2015

Date of report issued: June 19, 2015

PASS * Test Result:

Authorized Signature:



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 GTS 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. Any mention of GTS International Electrical Approvals or testing done by GTS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by GTS International Electrical Approvals in writing.

This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."

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



2 Version

Version No.	Date	Description
00	June 19, 2015	Original

Prepared By:	Edward. Parl	Date:	June 19, 2015	
	Project Engineer	-		_
Check By:	hank. yan	Date:	June 19, 2015	
	Reviewer	_		



3 Contents

			Page
1	COV	ER PAGE	1
2	VER	SION	2
3	CON	ITENTS	3
4	TES	T SUMMARY	4
5	GEN	ERAL INFORMATION	5
	5.1	CLIENT INFORMATION	
	5.2	GENERAL DESCRIPTION OF E.U.T.	
	5.3	TEST MODE	
	5.4	DESCRIPTION OF SUPPORT UNITS	
	5.5	TEST FACILITY	
	5.6	TEST LOCATION	6
6	TES	T INSTRUMENTS LIST	7
7	TES	T RESULTS AND MEASUREMENT DATA	8
	7.1	ANTENNA REQUIREMENT:	8
	7.2	CONDUCTED PEAK OUTPUT POWER	
	7.3	CHANNEL BANDWIDTH	
	7.4	Power Spectral Density	
	7.5	BAND EDGES	
	7.5.1		
	7.5.2		
	7.6	SPURIOUS EMISSION	
	7.6.1 7.6.2		
8	TES	T SETUP PHOTO	26
9	FUT	CONSTRUCTIONAL DETAILS	27

Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960



4 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203/15.247 (c)	Pass
Conducted Peak Output Power	15.247 (b)(3)	Pass
Channel Bandwidth	15.247 (a)(2)	Pass
Power Spectral Density	15.247 (e)	Pass
Band Edge	15.247(d)	Pass
Spurious Emission	15.205/15.209	Pass

Pass: The EUT complies with the essential requirements in the standard. Remark: Test according to ANSI C63.10:2013 and ANSI C63.4: 2014

Measurement Uncertainty

Test item	Frequency Range	Measurement Uncertainty	Notes			
Radiated Emission	9KHz~30MHz	±4.34dB	(1)			
Radiated Emission	30MHz~1000MHz	±4.24dB	(1)			
Radiated Emission	1GHz~26.5GHz	±4.68dB	(1)			
AC Power Line Conducted Emission 0.15MHz~30MHz ±3.45dB (1)						
Note (1): the measurement uncertainty is for coverage factor of K=2 and level of confidence of 95%.						



5 General Information

5.1 Client Information

Applicant:	Skyrocket Toys, LLC	
Address of Applicant:	12910 Culver Blvd, Suite F, Los Angeles, CA 90066, U.S.A.	
Manufacturer:	Skyrocket Toys, LLC	
Address of Manufacturer:	12910 Culver Blvd, Suite F, Los Angeles, CA 90066, U.S.A.	
Factory:	Guangzhou Spinmark Electronics Technology Co., Ltd	
Address of factory:	1/F & 2/F, Block A, 64 Songshan Road, Shilou Town, Panyu District, Guangzhou, China	

5.2 General Description of E.U.T.

Product Name:	Sky Viper Streaming Drone		
Model No.:	01526		
Support Version:	802.11g		
Operation Frequency:	2412MHz~2462MHz		
Channel numbers:	11		
Channel separation:	5MHz		
Modulation technology:	Orthogonal Frequency Division Multiplexing (OFDM)		
Data rate:	6Mbps, 9Mbps, 12Mbps, 18Mbps, 24Mbps, 36Mbps, 48Mbps, 54Mbps		
Antenna Type:	Integral Antenna		
Antenna gain:	1.0 dBi (declare by Applicant)		
Power supply:	DC 3.7V (Lithium Battery)		

Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz
2	2417MHz	5	2432MHz	8	2447MHz	11	2462MHz
3	2422MHz	6	2437MHz	9	2452MHz		

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Test channel	Frequency (MHz)
Lowest channel	2412MHz
Middle channel	2437MHz
Highest channel	2462MHz



5.3 Test mode

Transmitting mode Keep the EUT in continuously transmitting mode (dutycycle >98%)	Transmitting mode	Keep the EUT in continuously transmitting mode	(dutycycle >98%)
---	-------------------	--	------------------

Per-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

Mode 802.11g

Data rate 6Mbps

5.4 Description of Support Units

N/A

5.5 Test Facility

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

• CNAS —Registration No.: CNAS L5775

CNAS has accredited Global United Technology Services Co., Ltd. To ISO/IEC 17025 General Requirements for the competence of testing and calibration laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

• FCC —Registration No.: 600491

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fuly described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files. Registration 600491

• Industry Canada (IC)

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. Has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A-2.

5.6 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.

Address: 2nd Floor, Block No.2, Laodong Industrial Zone, Xixiang Road Baoan District, Shenzhen,

China

Tel: 0755-27798480 Fax: 0755-27798960

Global United Technology Services Co., Ltd.

2nd Floor, Block No.2, Laodong Industrial Zone, Xixiang Road Baoan District,

Shenzhen, China 518102

Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960



6 Test Instruments list

Rad	Radiated Emission:							
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)		
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	Mar. 27 2015	Mar. 26 2016		
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A		
3	Spectrum Analyzer	Agilent	E4440A	GTS533	Dec. 4 2014	Dec. 3 2015		
4	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	July 01 2014	June 30 2015		
5	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	July 01 2014	June 30 2015		
6	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	9120D-829	GTS208	June 27 2014	June 26 2015		
7	Horn Antenna	ETS-LINDGREN	3160	GTS217	Mar. 27 2015	Mar. 26 2016		
8	EMI Test Software	AUDIX	E3	N/A	N/A	N/A		
9	Coaxial Cable	GTS	N/A	GTS213	Mar. 28 2015	Mar. 27 2016		
10	Coaxial Cable	GTS	N/A	GTS211	Mar. 28 2015	Mar. 27 2016		
11	Coaxial cable	GTS	N/A	GTS210	Mar. 28 2015	Mar. 27 2016		
12	Coaxial Cable	GTS	N/A	GTS212	Mar. 28 2015	Mar. 27 2016		
13	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	July 01 2014	June 30 2015		
14	Amplifier(2GHz-20GHz)	HP	8349B	GTS206	July 01 2014	June 30 2015		
15	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June 27 2014	June 26 2015		
16	Band filter	Amindeon	82346	GTS219	Mar. 28 2015	Mar. 27 2016		
17	Power Meter	Anritsu	ML2495A	GTS540	July 01 2014	June 30 2015		
18	Power Sensor	Anritsu	MA2411B	GTS541	July 01 2014	June 30 2015		

Con	Conducted Emission:							
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)		
1	Shielding Room	ZhongYu Electron	7.0(L)x3.0(W)x3.0(H)	GTS264	Sep. 07 2013	Sep. 06 2015		
2	EMI Test Receiver	Rohde & Schwarz	ESCS30	GTS223	July 01 2014	June 30 2015		
3	10dB Pulse Limita	Rohde & Schwarz	N/A	GTS224	July 01 2014	June 30 2015		
4	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	July 01 2014	June 30 2015		
5	LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	GTS226	July 01 2014	June 30 2015		
6	Coaxial Cable	GTS	N/A	GTS227	July 01 2014	June 30 2015		
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A		

Gen	General used equipment:									
Item	em Test Equipment Manufacturer		Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)				
1	Barometer	ChangChun	DYM3	GTS257	July 08 2014	July 07 2015				



7 Test results and Measurement Data

7.1 Antenna requirement:

Standard requirement: FCC Part15 C Section 15.203 /247(c)

15.203 requirement:

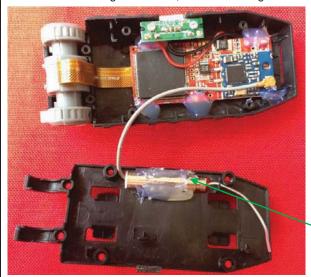
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(c) (1)(i) requirement:

(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

E.U.T Antenna:

The antenna is Integral antenna, the best case gain of the antenna is 1.0dBi



Antenna

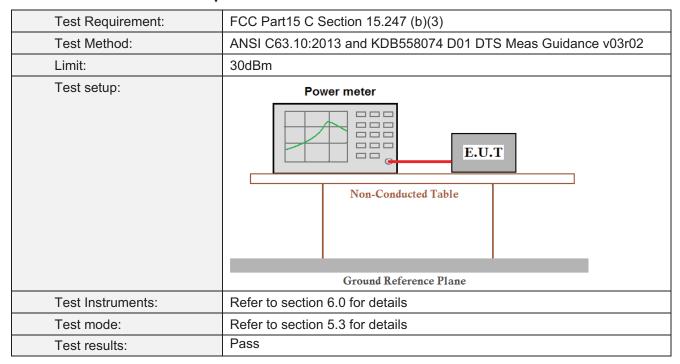
Project No.: GTSE150500695RF

Global United Technology Services Co., Ltd.
2nd Floor, Block No.2, Laodong Industrial Zone, Xixiang Road Baoan District,
Shenzhen, China 518102

Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960 Page 8 of 31



7.2 Conducted Peak Output Power



Measurement Data

Test CH	Output Power (dBm)	Limit(dBm)	Result	
Lowest	7.41			
Middle	7.46	30.00	Pass	
Highest	7.44			



7.3 Channel Bandwidth

Test Requirement:	FCC Part15 C Section 15.247 (a)(2)			
Test Method:	ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance v03r02			
Limit:	>500KHz			
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane			
Test Instruments:	Refer to section 6.0 for details			
Test mode:	Refer to section 5.3 for details			
Test results:	Pass			

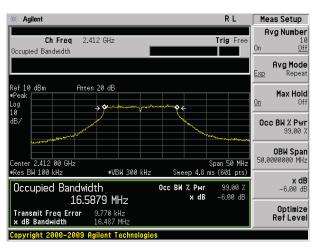
Measurement Data

Test CH	Channel Bandwidth (MHz)	Limit(KHz)	Result
Lowest	16.487		
Middle	16.453	>500	Pass
Highest	16.412		

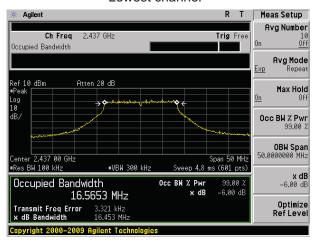
Test plot as follows:

Shenzhen, China 518102

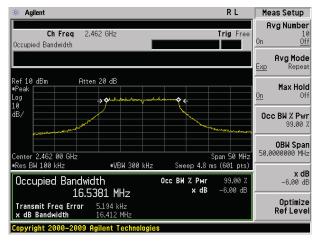




Lowest channel



Middle channel



Highest channel

Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960 Page 11 of 31



7.4 Power Spectral Density

Test Requirement:	FCC Part15 C Section 15.247 (e)				
Test Method:	ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance v03r02				
Limit:	8dBm				
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane				
Test Instruments:	Refer to section 6.0 for details				
Test mode:	Refer to section 5.3 for details				
Test results:	Pass				

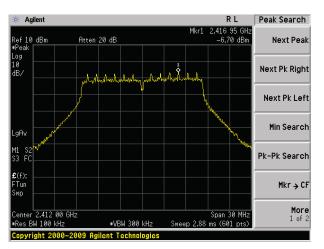
Measurement Data

Test CH	Power Spectral Density(dBm/100K)	Limit (dBm/3K)	Result	
Lowest	Lowest -6.70			
Middle	-7.39	8.00	Pass	
Highest	-7.34			

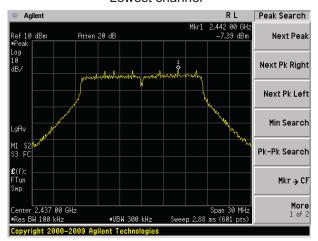
Test plot as follows:

Shenzhen, China 518102

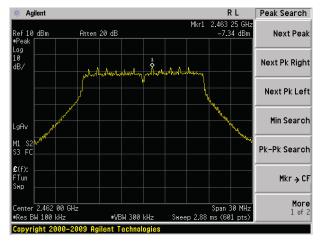




Lowest channel



Middle channel



Highest channel

Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960



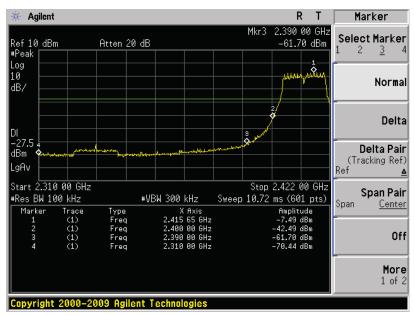
7.5 Band edges

7.5.1 Conducted Emission Method

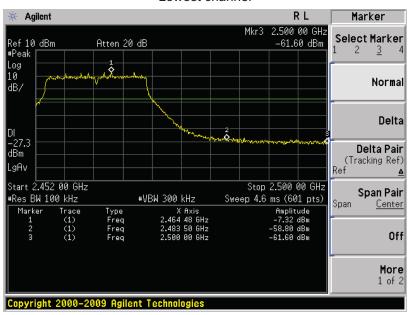
Test Requirement:	FCC Part15 C Section 15.247 (d)				
Test Method:	ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance v03r02				
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.				
Test setup:	·				
Test Instruments:	Refer to section 6.0 for details				
Test mode:	Refer to section 5.3 for details				
Test results:	Pass				



Test plot as follows:



Lowest channel



Highest channel

Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960

Page 15 of 31



7.5.2 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209 and 15.205					
Test Method:	ANSI C63.4:20	14				
Test Frequency Range:	2310MHz to 250	00MHz				
Test site:	Measurement D	istance: 3m				
Receiver setup:	Frequency	Detector	RBW	VBW	Value	
	Above 1GHz	Peak	1MHz	3MHz	Peak	
		RMS	1MHz	3MHz	Average	
Limit:	Freque	ency	Limit (dBuV/		Value	
	Above 1	GHz	54.0 74.0		Average Peak	
Test setup:	Antenna Tower Horn Antenna Spectrum Analyzer Turn Table Amplifier					
Test Procedure:	 The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 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. 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 rota table was turned from 0 degrees to 360 degrees to find the maximum reading. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 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, quasipeak or average method as specified and then reported in a data 					
Test Instruments:	Refer to section	6.0 for details	3			
Test mode:	Refer to section 5.3 for details					
Test results:	Pass					

Global United Technology Services Co., Ltd.

2nd Floor, Block No.2, Laodong Industrial Zone, Xixiang Road Baoan District,

Shenzhen, China 518102



Lowest

Measurement data:

Test mode:

Peak value:								
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
2390.00	47.29	27.38	3.91	34.83	43.75	74.00	-30.25	Horizontal
2400.00	50.57	27.38	3.93	34.83	47.05	74.00	-26.95	Horizontal
2390.00	49.49	27.38	3.91	34.83	45.95	74.00	-28.05	Vertical
2400.00	51.30	27.38	3.93	34.83	47.78	74.00	-26.22	Vertical

Test channel:

802.11g

Average value:

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
2390.00	37.81	27.38	3.91	34.83	34.27	54.00	-19.73	Horizontal
2400.00	40.67	27.38	3.93	34.83	37.15	54.00	-16.85	Horizontal
2390.00	38.62	27.38	3.91	34.83	35.08	54.00	-18.92	Vertical
2400.00	42.10	27.38	3.93	34.83	38.58	54.00	-15.42	Vertical

Test mode:	802.11g	Test channel:	Highest	
------------	---------	---------------	---------	--

Peak value:

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	48.62	27.32	3.99	34.86	45.07	74.00	-28.93	Horizontal
2500.00	46.38	27.35	4.00	34.87	42.86	74.00	-31.14	Horizontal
2483.50	49.72	27.32	3.99	34.86	46.17	74.00	-27.83	Vertical
2500.00	48.06	27.35	4.00	34.87	44.54	74.00	-29.46	Vertical

Average value:

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	36.06	27.32	3.99	34.86	32.51	54.00	-21.49	Horizontal
2500.00	32.63	27.35	4.00	34.87	29.11	54.00	-24.89	Horizontal
2483.50	37.80	27.32	3.99	34.86	34.25	54.00	-19.75	Vertical
2500.00	33.79	27.35	4.00	34.87	30.27	54.00	-23.73	Vertical

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.

Global United Technology Services Co., Ltd.

2nd Floor, Block No.2, Laodong Industrial Zone, Xixiang Road Baoan District,

Shenzhen, China 518102



7.6 Spurious Emission

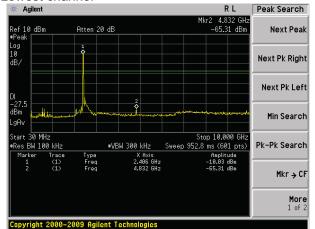
7.6.1 Conducted Emission Method

Test Requirement:	FCC Part15 C Section 15.247 (d)					
Test Method:	ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance v03r02					
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.					
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane					
Test Instruments:	Refer to section 6.0 for details					
Test mode:	Refer to section 5.3 for details					
Test results:	Pass					



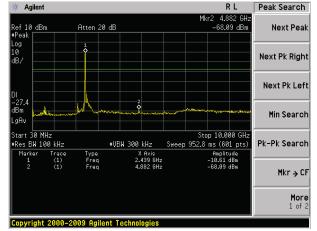
Test plot as follows:

Lowest channel



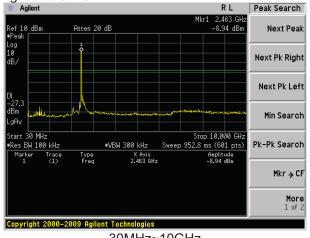
30MHz~10GHz



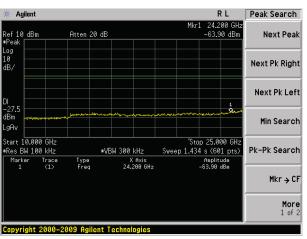


30MHz~10GHz

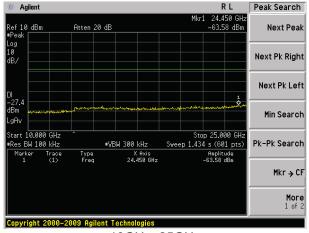
Highest channel



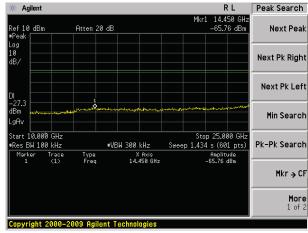
30MHz~10GHz



10GHz~25GHz



10GHz~25GHz



10GHz~25GHz



7.6.2 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209										
Test Method:	ANSI C63.4: 201										
Test Frequency Range:	30MHz to 25GHz	<u>'</u>									
Test site:	Measurement Di	stance: 3m									
Receiver setup:	Frequency	Detector	RBW	VBW	Value						
	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak						
	Above 1011	Peak	1MHz	3MHz	Peak						
	Above 1GHz	RMS	1MHz	3MHz	Average						
Limit:	Frequer	ісу	Limit (dBuV/	(m @3m)	Value						
	30MHz-88	MHz	40.0)	Quasi-peak						
	88MHz-210	6MHz	43.5	5	Quasi-peak						
	216MHz-96	0MHz	46.0)	Quasi-peak						
	960MHz-1	GHz	54.0)	Quasi-peak						
	A la 2 4.6	211-	54.0)	Average						
	Above 10	HZ	74.0)	Peak						
				Antenna Tower							
	Tum Table 0.8m	4m		Search Antenna RF Test Receiver							



Test Procedure:	1. The EUT was placed on the top of a rotating table 0.8 or 1.5m 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 rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
	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, quasipeak or average method as specified and then reported in a data sheet.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

Remark:

Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.



Measurement Data

■ Below 1GHz

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
66.36	53.86	11.24	0.39	31.89	33.60	40.00	-6.40	Vertical
85.37	55.09	10.50	0.43	31.81	34.21	40.00	-5.79	Vertical
143.24	58.69	7.05	0.61	32.00	34.35	43.50	-9.15	Vertical
254.35	56.79	10.83	0.89	32.28	36.23	46.00	-9.77	Vertical
383.60	52.73	13.47	1.20	32.31	35.09	46.00	-10.91	Vertical
62.31	50.07	14.94	0.34	31.99	33.36	40.00	-6.64	Horizontal
78.35	51.60	10.50	0.43	31.81	30.72	40.00	-9.28	Horizontal
168.30	57.98	7.21	0.62	32.01	33.80	43.50	-9.70	Horizontal
255.35	59.84	10.83	0.89	32.28	39.28	46.00	-6.72	Horizontal
363.58	54.82	13.56	1.21	32.32	37.27	46.00	-8.73	Horizontal

Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960



■ Above 1GHz

Test mode:		802.11g			Test channel:		lowest			
Peak value:										
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Fac	amp ctor B)	Level (dBuV/m)	Limit (dBu\		Over Limit (dB)	polarization
4824.00	39.20	31.28	8.62	24	.17	54.93	74.00		-19.07	Vertical
7236.00	32.78	35.36	11.68	26	.52	53.30	74.	00	-20.70	Vertical
9648.00	30.31	37.44	14.16	25	.44	56.47	74.	00	-17.53	Vertical
12060.00	*						74.	00		Vertical
14472.00	*						74.	00		Vertical
16884.00	*						74.	00		Vertical
4824.00	35.38	31.28	8.62	24	.17	51.11	74.	00	-22.89	Horizontal
7236.00	30.89	35.36	11.68	26	.52	51.41	74.	00	-22.59	Horizontal
9648.00	32.82	37.44	14.16	25	.44	58.98	74.	00	-15.02	Horizontal
12060.00	*						74.	00		Horizontal
14472.00	*						74.	00		Horizontal
16884.00	*						74.	00		Horizontal
Average val	ue:									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Fac	amp ctor B)	Level (dBuV/m)	Limit (dBu\		Over Limit (dB)	polarization
4824.00	27.41	31.28	8.62	24	.17	43.14	54.	00	-10.86	Vertical
7236.00	24.71	35.36	11.68	26	.52	45.23	54.	00	-8.77	Vertical
9648.00	18.00	37.44	14.16	25	.44	44.16	54.	00	-9.84	Vertical
12060.00	*						54.	00		Vertical
14472.00	*						54.	00		Vertical
16884.00	*						54.	00		Vertica
4824.00	24.36	31.28	8.62	24	.17	40.09	54.	00	-13.91	Horizontal
7236.00	22.80	35.36	11.68	26	.52	43.32	54.	00	-10.68	Horizontal
9648.00	17.88	37.44	14.16	25	.44	44.04	54.	00	-9.96	Horizontal
12060.00	*						54.	00		Horizontal
14472.00	*						54.	00		Horizontal

Remark:

16884.00

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "*", means this data is the too weak instrument of signal is unable to test.

Project No.: GTSE150500695RF

Horizontal

54.00



Test mode:		802.11g		Test	Test channel:		Middle	
Peak value:								
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
4874.00	38.53	32.02	8.66	24.12	55.09	74.00	-18.91	Vertical
7311.00	31.03	36.64	11.71	26.71	52.67	74.00	-21.33	Vertical
9748.00	29.18	38.54	14.25	25.38	56.59	74.00	-17.41	Vertical
12185.00	*					74.00		Vertical
14622.00	*					74.00		Vertical
17059.00	*					74.00		Vertical
4874.00	34.75	32.02	8.66	24.12	51.31	74.00	-22.69	Horizontal
7311.00	30.32	36.64	11.71	26.71	51.96	74.00	-22.04	Horizontal
9748.00	28.89	38.54	14.25	25.38	56.30	74.00	-17.70	Horizontal
12185.00	*					74.00		Horizontal
14622.00	*					74.00		Horizontal
17059.00	*					74.00		Horizontal
Average val								
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
4874.00	27.41	32.02	8.66	24.12	43.97	54.00	-10.03	Vertical
7311.00	21.89	36.64	11.71	26.71	43.53	54.00	-10.47	Vertical
9748.00	18.60	38.54	14.25	25.38	46.01	54.00	-7.99	Vertical
12185.00	*					54.00		Vertical
14622.00	*					54.00		Vertical
17059.00	*					54.00		Vertical
4874.00	24.68	32.02	8.66	24.12	41.24	54.00	-12.76	Horizontal
7311.00	20.62	36.64	11.71	26.71	42.26	54.00	-11.74	Horizontal
9748.00	17.85	38.54	14.25	25.38	45.26	54.00	-8.74	Horizontal
12185.00	*					54.00		Horizontal
14622.00	*					54.00		Horizontal
17059.00	*					54.00		Horizontal

Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "*", means this data is the too weak instrument of signal is unable to test.

Shenzhen, China 518102



Test mode:		802.11g		Test	Test channel:		Highest		
Peak value:									
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	
4924.00	40.20	32.14	8.70	24.05	56.99	74.00	-17.01	Vertical	
7386.00	31.78	36.75	11.76	26.90	53.39	74.00	-20.61	Vertical	
9848.00	30.49	38.79	14.31	25.30	58.29	74.00	-15.71	Vertical	
12310.00	*					74.00		Vertical	
14772.00	*					74.00		Vertical	
17234.00	*					74.00		Vertical	
4924.00	37.40	32.14	8.70	24.05	54.19	74.00	-19.81	Horizontal	
7386.00	30.61	36.75	11.76	26.90	52.22	74.00	-21.78	Horizontal	
9848.00	29.46	38.79	14.31	25.30	57.26	74.00	-16.74	Horizontal	
12310.00	*					74.00		Horizontal	
14772.00	*					74.00		Horizontal	
17234.00	*					74.00		Horizontal	
Average val	ue:								
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	
4924.00	27.32	32.14	8.70	24.05	44.11	54.00	-9.89	Vertical	
7386.00	22.71	36.75	11.76	26.90	44.32	54.00	-9.68	Vertical	
9848.00	17.67	38.79	14.31	25.30	45.47	54.00	-8.53	Vertical	
12310.00	*					54.00		Vertical	
14772.00	*					54.00		Vertical	
17234.00	*					54.00		Vertical	
4924.00	24.68	32.14	8.70	24.05	41.47	54.00	-12.53	Horizontal	
7386.00	21.49	36.75	11.76	26.90	43.10	54.00	-10.90	Horizontal	
9848.00	17.31	38.79	14.31	25.30	45.11	54.00	-8.89	Horizontal	
12310.00	*					54.00		Horizontal	
14772.00	*					54.00		Horizontal	
17234.00	*					54.00		Horizontal	

Remark:

Shenzhen, China 518102

^{1.} Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

^{2. &}quot;*", means this data is the too weak instrument of signal is unable to test.