

Global United Technology Services Co., Ltd.

Report No.: GTS201609000109E01

FCC Report

Applicant: FLYSKY RC MODEL TECHNOLOGY CO..LTD

Address of Applicant: West building3, Huangjianyuan Ind, Park QIAOLI North Gate

Changping Town, Dongguan, China

Equipment Under Test (EUT)

Product Name: digital proportional radio control system

Model No.: Evolution, HK-MT6

FCC ID: N4ZMT600

FCC CFR Title 47 Part 15 Subpart C Section 15.247:2015 Applicable standards:

Date of sample receipt: September 14, 2016

September 19-28, 2016 Date of Test:

Date of report issued: September 30, 2016

Test Result: PASS *

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

Authorized Signature:

Robinson Lo 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 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 or testing done by GTS in connection with, distribution or use of the product described in this report must be approved by GTS 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.



2 Version

Version No.	Date	Description
00	September 30, 2016	Original

Prepared By:	_ Bill. yvon _	Date:	September 30, 2016
	Project Engineer		
Check By:	Andy wa	Date:	September 30, 2016
	Reviewer		



3 Contents

			Page
1	COVE	ER PAGE	1
2	VERS	SION	2
3	CONT	TENTS	3
•			
4	TEST	SUMMARY	4
	4.1	MEASUREMENT UNCERTAINTY	4
5	GENE	ERAL INFORMATION	5
	5.1	CLIENT INFORMATION	5
	5.2	GENERAL DESCRIPTION OF EUT	5
		Test mode	
	5.4	TEST FACILITY	8
	5.5	TEST LOCATION	8
	5.6	OTHER INFORMATION REQUESTED BY THE CUSTOMER	8
		DESCRIPTION OF SUPPORT UNITS	
	5.8	Test Instruments List	9
6	TEST	RESULTS AND MEASUREMENT DATA	10
	6.1	ANTENNA REQUIREMENT	10
		CONDUCTED EMISSIONS	
		CONDUCTED PEAK OUTPUT POWER	
		20dB Emission Bandwidth	
		CARRIER FREQUENCIES SEPARATION	_
		HOPPING CHANNEL NUMBER	
		DWELL TIME	
		PSEUDORANDOM FREQUENCY HOPPING SEQUENCE	
		BAND EDGE	
	6.9.1	Conducted Emission Method	
	6.9.2	Radiated Emission Method	
		SPURIOUS EMISSION	
	6.10.1 6.10.2		_
7	TEST	SETUP PHOTO	50
8	ELIT 4	CONSTRUCTIONAL DETAILS	5 2
J	יוטב	OUND I NOO I IONAL DE LAILS	.



4 Test Summary

Test Item	Section	Result
Antenna Requirement	15.203/15.247 (c)	Pass
AC Power Line Conducted Emission	15.207	Pass
Conducted Peak Output Power	15.247 (b)(1)	Pass
20dB Occupied Bandwidth	15.247 (a)(1)	Pass
Carrier Frequencies Separation	15.247 (a)(1)	Pass
Hopping Channel Number	15.247 (a)(1)	Pass
Dwell Time	15.247 (a)(1)	Pass
Pseudorandom Frequency Hopping Sequence	15.247(b)(4)	Pass
Radiated Emission	15.205/15.209	Pass
Band Edge	15.247(d)	Pass

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

Remark: Test according to ANSI C63.10: 2013.

4.1 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)
Conducted Peak Output Power	2.4GHz ~ 2.4835GHz	±1.5dB	(1)
20dB Emission Bandwidth	2.4GHz ~ 2.4835GHz	±5 %	(1)
Carrier Frequencies Separation	2.4GHz ~ 2.4835GHz	±5 %	(1)
Dwell Time	2.4GHz ~ 2.4835GHz	±5 %	(1)
Band Edge	2.31GHz ~ 2.5GHz	± 3.5dB	(1)
Hopping Channel Number	2.4GHz ~ 2.4835GHz	N/A	(1)
Pseudorandom Frequency Hopping Sequence	2.4GHz ~ 2.4835GHz	N/A	(1)
Note (1): The measurement u	ncertainty is for coverage factor o	of k=2 and a level of confidence	of 95%.



5 General Information

5.1 Client Information

Applicant:	FLYSKY RC MODEL TECHNOLOGY CO.,LTD
Address of Applicant:	West building3, Huangjianyuan Ind, Park QIAOLI North Gate Changping Town, Dongguan, China
Manufacturer/Factory:	FLYSKY RC MODEL TECHNOLOGY CO.,LTD
Address of Manufacturer/ Factory:	West building3, Huangjianyuan Ind, Park QIAOLI North Gate Changping Town, Dongguan, China

5.2 General Description of EUT

Product Name: digital proportional radio control system	
Model No.:	Evolution, HK-MT6
Operation Frequency:	2408.0MHz~2475.0MHz
Channel numbers:	135
Modulation technology:	GFSK
Antenna Type:	Integral Antenna
Antenna gain:	2dBi
Power supply:	DC 2* (3.7V 2.4Wh) Li-ion Battery

Remark: The system works in the frequency range of 2408.0MHz to 2475MHz. This band has been divided to 135 independent channels. Each radio system uses 16 different channels, the minimum channel separation is ≥1MHz. By using various switch-on times, hopping scheme and channel frequencies, the system can guarantee a jamming free radio transmission. The channel list is below.



Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2408.00	36	2425.50	71	2443.00	106	2460.50
2	2408.50	37	2426.00	72	2443.50	107	2461.00
3	2409.00	38	2426.50	73	2444.00	108	2461.50
4	2409.50	39	2427.00	74	2444.50	109	2462.00
5	2410.00	40	2427.50	75	2445.00	110	2462.50
6	2410.50	41	2428.00	76	2445.50	111	2463.00
7	2411.00	42	2428.50	77	2446.00	112	2463.50
8	2411.50	43	2429.00	78	2446.50	113	2464.00
9	2412.00	44	2429.50	79	2447.00	114	2464.50
10	2412.50	45	2430.00	80	2447.50	115	2465.00
11	2413.00	46	2430.50	81	2448.00	116	2465.50
12	2413.50	47	2431.00	82	2448.50	117	2466.00
13	2414.00	48	2431.50	83	2449.00	118	2466.50
14	2414.50	49	2432.00	84	2449.50	119	2467.00
15	2415.00	50	2432.50	85	2450.00	120	2467.50
16	2415.50	51	2433.00	86	2450.50	121	2468.00
17	2416.00	52	2433.50	87	2451.00	122	2468.50
18	2416.50	53	2434.00	88	2451.50	123	2469.00
19	2417.00	54	2434.50	89	2452.00	124	2469.50
20	2417.50	55	2435.00	90	2452.50	125	2470.00
21	2418.00	56	2435.50	91	2453.00	126	2470.50
22	2418.50	57	2436.00	92	2453.50	127	2471.00
23	2419.00	58	2436.50	93	2454.00	128	2471.50
24	2419.50	59	2437.00	94	2454.50	129	2472.00
25	2420.00	60	2437.50	95	2455.00	130	2472.50
26	2420.50	61	2438.00	96	2455.50	131	2473.00
27	2421.00	62	2438.50	97	2456.00	132	2473.50
28	2421.50	63	2439.00	98	2456.50	133	2474.00
29	2422.00	64	2439.50	99	2457.00	134	2474.50
30	2422.50	65	2440.00	100	2457.50	135	2475.00
31	2423.00	66	2440.50	101	2458.00		
32	2423.50	67	2441.00	102	2458.50		
33	2424.00	68	2441.50	103	2459.00		
34	2424.50	69	2442.00	104	2459.50		
35	2425.00	70	2442.50	105	2460.00		



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:

Channel	Frequency
The lowest channel	2408.0MHz
The middle channel	2440.0MHz
The Highest channel	2475.0MHz



5.3 Test mode

Transmitting mode Keep the EUT in transmitting mode.

5.4 Test Facility

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

• 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, June 22, 2016.

• Industry Canada (IC) —Registration No.: 9079A-2

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, August 15, 2016.

5.5 Test Location

All other tests were performed at:

Global United Technology Services Co., Ltd.

Address: No. 301-309, 3/F., Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102

Tel: 0755-27798480 Fax: 0755-27798960

5.6 Other Information Requested by the Customer

None.

5.7 Description of Support Units

None.



5.8 Test Instruments list

Radi	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	9.0(L)*6.0(W)* 6.0(H)	GTS250	July. 03 2015	July. 02 2020		
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	June 29 2016	June 28 2017		
4	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	June 29 2016	June 28 2017		
5	Loop Antenna	ZHINAN	ZN30900A	GTS534	Feb. 29 2016	Feb. 28 2017		
6	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	June 29 2016	June 28 2017		
7	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	9120D-829	GTS208	June 29 2016	June 28 2017		
8	Horn Antenna	ETS-LINDGREN	3160	GTS217	June 29 2016	June 28 2017		
9	EMI Test Software	AUDIX	E3	N/A	N/A	N/A		
10	Coaxial Cable	GTS	N/A	GTS213	June 29 2016	June 28 2017		
11	Coaxial Cable	GTS	N/A	GTS211	June 29 2016	June 28 2017		
12	Coaxial cable	GTS	N/A	GTS210	June 29 2016	June 28 2017		
13	Coaxial Cable	GTS	N/A	GTS212	June 29 2016	June 28 2017		
14	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	June 29 2016	June 28 2017		
15	Amplifier(2GHz-20GHz)	HP	8349B	GTS206	June 29 2016	June 28 2017		
16	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June 29 2016	June 28 2017		
17	Band filter	Amindeon	82346	GTS219	June 29 2016	June 28 2017		

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	June 29 2016	June 28 2017		
2	EMI Test Receiver	Rohde & Schwarz	ESCS30	GTS223	June 29 2016	June 28 2017		
3	10dB Pulse Limita	Rohde & Schwarz	N/A	GTS224	June 29 2016	June 28 2017		
4	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	June 29 2016	June 28 2017		
5	LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	GTS226	June 29 2016	June 28 2017		
6	Coaxial Cable	GTS	N/A	GTS227	June 29 2016	June 28 2017		
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A		

	General used equipment:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)	
1	Barometer	ChangChun	DYM3	GTS257	June 29 2016	June 28 2017	



6 Test results and Measurement Data

6.1 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.

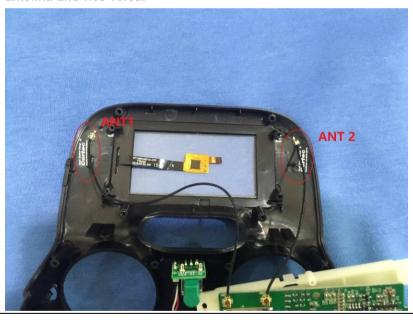
15.247(c) (1)(i) requirement:

(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.

EUT Antenna:

The antenna is integral Antenna, the best case gain of the antenna is 2dBi

Two antenna can't transmit at the same time. While the ANT1 transmitting, the ANT2 act as a receiver antenna and vice versa.



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



6.2 Conducted Emissions

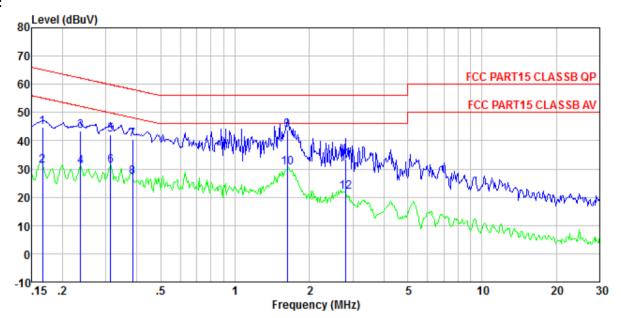
Test Requirement:	FCC Part15 C Section 15.207			
Test Method:	ANSI C63.10:2013			
Test Frequency Range:	150KHz to 30MHz			
Class / Severity:	Class B			
Receiver setup:	RBW=9KHz, VBW=30KHz, St		1	
Limit:	Frequency range (MHz)	Limit (d		
	, , , ,	Quasi-peak	Average	
	0.15-0.5 0.5-5	66 to 56* 56	56 to 46* 46	
	5-30	60	50	
	* Decreases with the logarithm		30	
Test setup:	Reference Plane	•		
	AUX Equipment Test table/Insulation plane Remark E.U.T. Equipment Under Test LISN: Line Impedence Stabilization Network Test table height=0.8m			
Test procedure:	 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. 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). 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 C63.10:2013 on conducted measurement. 			
Test Instruments:	Refer to section 6.0 for details			
Test mode:	Refer to section 5.3 for details			
Test results:	Pass			

Measurement data:

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



Line:



Site : Shielded room

Condition : FCC PART15 CLASSB QP LISN-2013 LINE

Job No. : 109

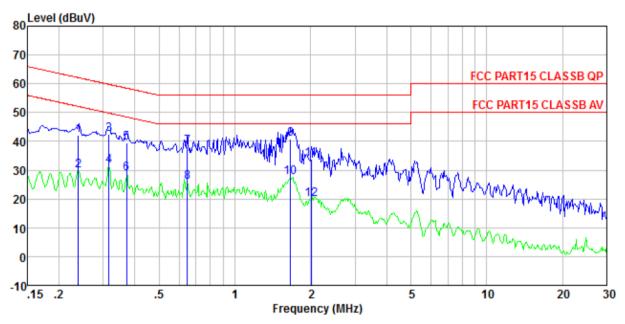
Test mode : Transmitting mode

Test Engineer: Boy

	Freq	Read Leve1	LISN Factor	Cable Loss	Leve1	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	d₿	dBuV	dBuV	dB	
1 2 3 4 5 6 7 8 9	0. 166 0. 166 0. 237 0. 237 0. 313 0. 313 0. 385 0. 385 1. 628	44. 68 30. 90 43. 15 30. 60 41. 90 30. 88 40. 42 26. 82 43. 40	0. 15 0. 15 0. 12 0. 12 0. 11 0. 11 0. 11 0. 12	0. 12 0. 12 0. 12 0. 12 0. 10 0. 10 0. 10 0. 10 0. 14	44. 95 31. 17 43. 39 30. 84 42. 11 31. 09 40. 63 27. 03 43. 66	55. 16 62. 22 52. 22 59. 88 49. 88 58. 17 48. 17 56. 00	-18.83 -21.38 -17.77 -18.79 -17.54 -21.14 -12.34	Average QP Average QP Average QP Average QP
10 11 12	1. 628 2. 794 2. 794	30. 15 33. 30 21. 60	0. 12 0. 14 0. 14	0. 14 0. 15 0. 15	30. 41 33. 59 21. 89	56.00	-22.41	Average QP Average



Neutral:



Site : Shielded room

Condition : FCC PART15 CLASSB QP LISN-2013 NEUTRAL

Job No. : 109

Test mode : Transmitting mode

Test Engineer: Boy

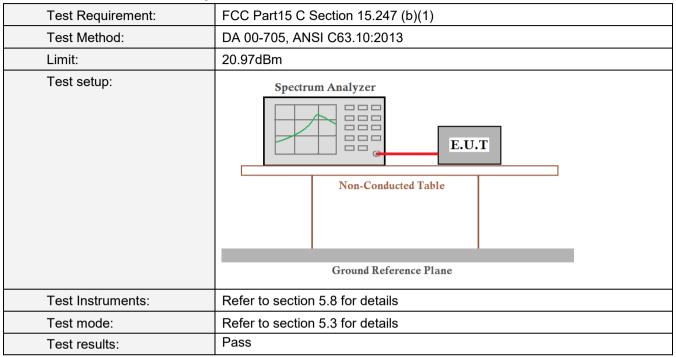
	Freq	Read Leve1	LISN Factor	Cable Loss	Leve1	Limit Line	Over Limit	Remark
	MHz	dBuV	d₿	dB	dBuV	dBuV	dB	
1 2 3 4 5 6 7 8 9 10 11	0. 239 0. 239 0. 317 0. 317 0. 371 0. 371 0. 647 1. 662 1. 662 2. 012	42. 06 29. 78 42. 44 31. 21 39. 48 28. 66 37. 97 25. 66 40. 57 27. 19 33. 45	0.06 0.06 0.06 0.06 0.06 0.07 0.07 0.09 0.09	0. 12 0. 12 0. 10 0. 10 0. 10 0. 10 0. 13 0. 13 0. 14 0. 14 0. 15	42. 24 29. 96 42. 60 31. 37 39. 64 28. 82 38. 17 25. 86 40. 80 27. 42 33. 69	52. 13 59. 80 49. 80 58. 47 48. 47 56. 00 46. 00 56. 00	-17. 20 -18. 43 -18. 83 -19. 65 -17. 83 -20. 14 -15. 20	Average QP Average QP Average QP Average QP Average
12	2.012	19.79	0.09	0.15	20.03			Äverage

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
- 4. If the average limit is met when using a quasi-peak detector receiver, the EUT shall be deemed to meet both limits and measurement with the average detector receiver is unnecessary.



6.3 Conducted Peak Output Power



Measurement Data

Antenna 1:

Test channel	Peak Output Power (dBm)	Limit (dBm)	Result
Lowest	14.35		
Middle	13.66	20.97	Pass
Highest	11.42		

Antenna 2:

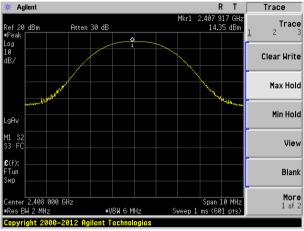
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result
Lowest	14.03		
Middle	13.53	20.97	Pass
Highest	11.30		

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

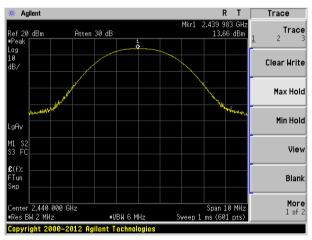


Test plot as follows:

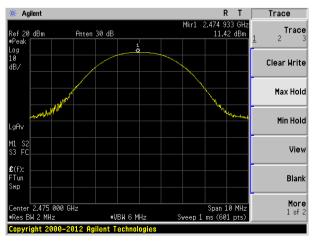




Lowest channel



Middle channel



Highest channel

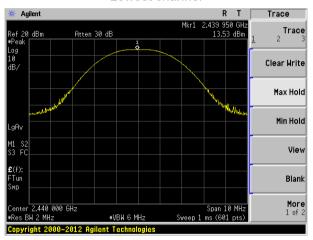


Antenna:

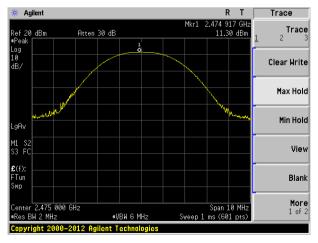
Antenna 2



Lowest channel



Middle channel



Highest channel



6.4 20dB Emission Bandwidth

Test Requirement:	FCC Part15 C Section 15.247 (a)(1)	
Test Method:	DA 00-705, ANSI C63.10:2013	
Limit:	N/A	
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane	
Test Instruments:	Refer to section 5.8 for details	
Test mode:	Refer to section 5.3 for details	
Test results:	Pass	

Measurement Data

Antenna 1:

Test channel	20dB Emission Bandwidth (MHz)	Result
Lowest	1.052	
Middle	1.050	Pass
Highest	1.048	

Antenna 2:

Test channel	20dB Emission Bandwidth (MHz)	Result
Lowest	1.050	
Middle	1.046	Pass
Highest	1.049	

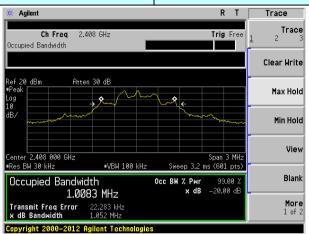
Project No.: GTS201609000109

Page 17 of 62

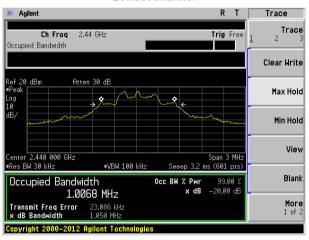


Test plot as follows:

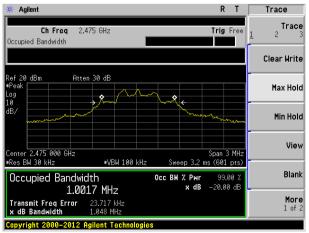




Lowest channel



Middle channel

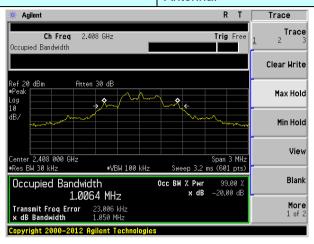


Highest channel

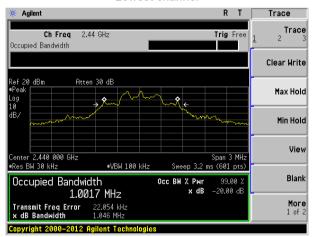


Antenna:

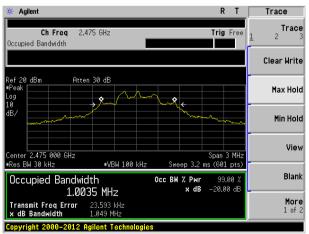
Antenna 2



Lowest channel



Middle channel



Highest channel

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



6.5 Carrier Frequencies Separation

Test Requirement:	FCC Part15 C Section 15.247 (a)(1)	
Test Method:	DA 00-705, ANSI C63.10:2013	
Receiver setup:	RBW=100KHz, VBW=300KHz, detector=Peak	
Limit:	0.025MHz or 2/3 of the 20dB bandwidth (whichever is greater)	
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane	
Test Instruments:	Refer to section 5.8 for details	
Test mode:	Refer to section 5.3 for details	
Test results:	Pass	



Measurement Data

Antenna 1:

Test channel	Carrier Frequencies Separation (kHz)	Limit (kHz)	Result
Lowest	2000	701	Pass
Middle	2025	701	Pass
Highest	2508	701	Pass

Note: According to section 6.3

Mode	20dB bandwidth (kHz)	Limit (kHz)
Mode	(worse case)	(Carrier Frequencies Separation)
GFSK	1052	701

Antenna 2:

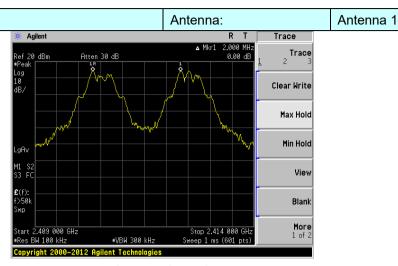
7 11.001			
Test channel	Carrier Frequencies Separation (kHz)	Limit (kHz)	Result
Lowest	2008	700	Pass
Middle	2000	700	Pass
Highest	2500	700	Pass

Note: According to section 6.3

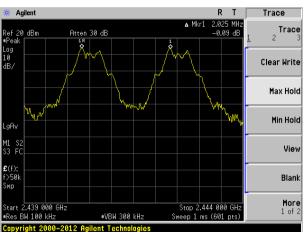
Mode	20dB bandwidth (kHz)	Limit (kHz)	
	(worse case)	(Carrier Frequencies Separation)	
GFSK	1050	700	



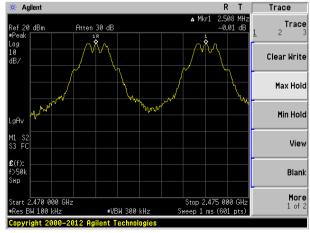
Test plot as follows:



Lowest channel



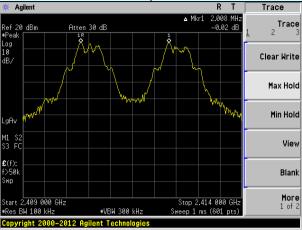
Middle channel



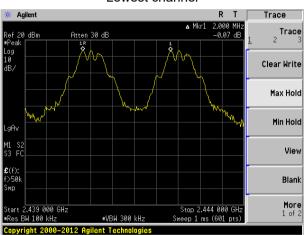
Highest channel



Antenna: Antenna 2



Lowest channel



Middle channel



Highest channel



6.6 Hopping Channel Number

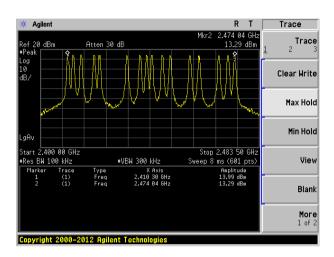
Test Requirement:	FCC Part15 C Section 15.247 (a)(1)(iii)	
Test Method:	DA 00-705, ANSI C63.10:2013	
Receiver setup:	RBW=100kHz, VBW=300kHz, Frequency range=2400MHz-2483.5MHz, Detector=Peak	
Limit:	15 channels	
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane	
Test Instruments:	Refer to section 5.8 for details	
Test mode:	Refer to section 5.3 for details	
Test results:	Pass	



Measurement Data:

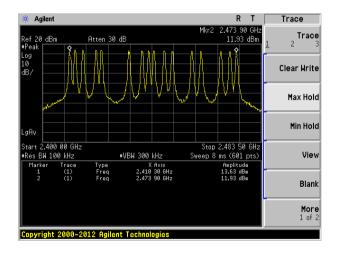
Antenna 1:

Hopping channel numbers	Limit	Result
16	15	Pass



Antenna 2:

Hopping channel numbers	Limit	Result
16	15	Pass





6.7 Dwell Time

Test Requirement:	FCC Part15 C Section 15.247 (a)(1)(iii)	
Test Method:	DA 00-705, ANSI C63.10:2013	
Receiver setup:	RBW=1MHz, VBW=1MHz, Span=0Hz, Detector=Peak	
Limit:	0.4 Second	
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane	
Test Instruments:	Refer to section 5.8 for details	
Test mode:	Refer to section 5.3 for details	
Test results:	Pass	



Measurement Data

Antenna 1:

Frequency	Ton (ms)	Dwell time(ms)	Limit(ms)	Result
2.408GHz	1.295	66.30	400	Pass
2.440GHz	1.295	66.30	400	Pass
2.475GHz	1.295	66.30	400	Pass

The formula as below:

2408MHz: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=1.295ms*8*0.4*16=66.30ms 2440MHz: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=1.295ms*8*0.4*16=66.30ms 2475MHz: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=1.295ms*8*0.4*16=66.30ms

Antenna 2:

Frequency	Ton (ms)	Dwell time(ms)	Limit(ms)	Result
2.408GHz	1.290	66.04	400	Pass
2.440GHz	1.295	66.30	400	Pass
2.475GHz	1.295	66.30	400	Pass

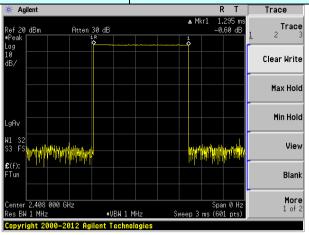
The formula as below:

2408MHz: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=1.290ms*8*0.4*16=66.04ms 2440MHz: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=1.295ms*8*0.4*16=66.30ms 2475MHz: Dwell time = Ton * Ton times in 1s * 0.4s * channel numbers=1.295ms*8*0.4*16=66.30ms

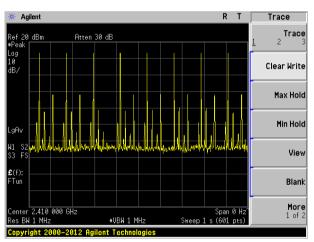
Test plot as follows:



Frequency: 2408MHz Antenna: Antenna 1



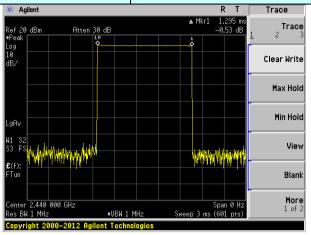
Ton



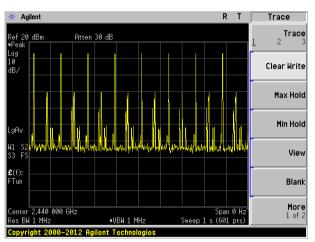
Ton times in 1s



Frequency: 2440MHz Antenna: Antenna 1



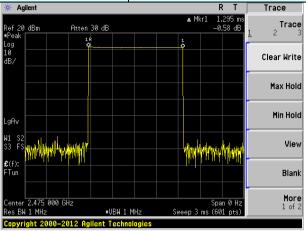
Ton



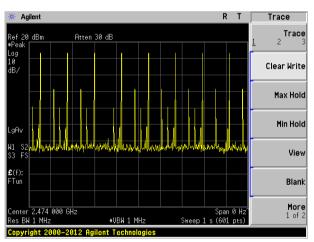
Ton times in 1s



Frequency: 2475MHz Antenna: Antenna 1



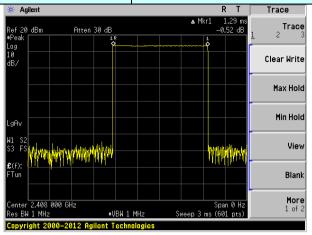
Ton



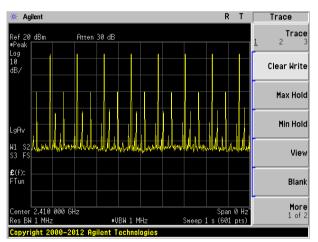
Ton times in 1s



Frequency: 2408MHz Antenna: Antenna 2



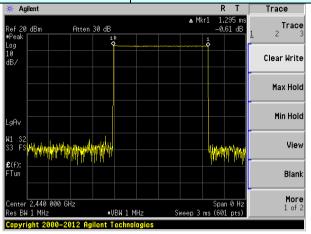
Ton



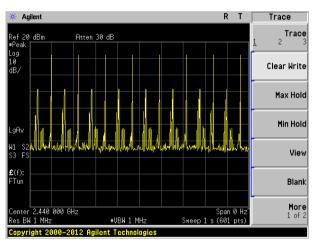
Ton times in 1s



Frequency: 2440MHz Antenna: Antenna 2



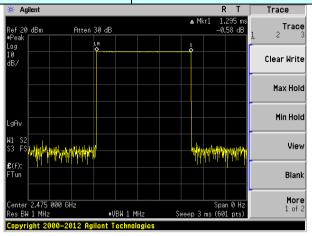
Ton



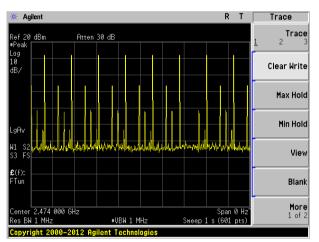
Ton times in 1s



Frequency: 2475MHz Antenna: Antenna 2



Ton



Ton times in 1s



6.8 Pseudorandom Frequency Hopping Sequence

Test Requirement: FCC Part15 C Section 15.247 (a)(1) requirement:

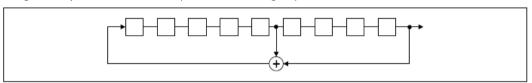
Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

Alternatively. Frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW. The system shall hop to channel frequencies that are selected at the system hopping rate from a Pseudorandom ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

EUT Pseudorandom Frequency Hopping Sequence

The pseudorandom sequence may be generated in a nine-stage shift register whose 5th and 9th stage outputs are added in a modulo-two addition stage. And the result is fed back to the input of the first stage. The sequence begins with the first ONE of 9 consecutive ONEs; i.e. the shift register is initialized with nine ones.

- Number of shift register stages: 9
- Length of pseudo-random sequence: 2⁹-1 = 511 bits
- Longest sequence of zeros: 8 (non-inverted signal)



Linear Feedback Shift Register for Generation of the PRBS sequence

Each frequency used equally on the average by each transmitter.

The system receivers have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shift frequencies in synchronization with the transmitted signals.



6.9 Band Edge

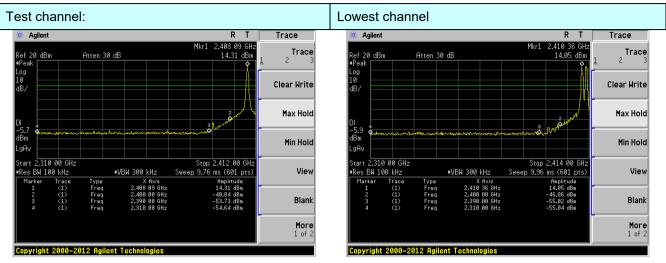
6.9.1 Conducted Emission Method

Test Requirement:	FCC Part15 C Section 15.247 (d)	
Test Method:	DA 00-705, ANSI C63.10:2013	
Receiver setup:	RBW=100kHz, VBW=300kHz, Detector=Peak	
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 5.8 for details	
Test mode:	Refer to section 5.3 for details	
Test results:	Pass	

Test plot as follows:



Antenna 1:



No-hopping mode

Hopping mode

Test channel: Highest channel Trace Trace 2.475 00 GHz 11.63 dBm Trace Trace Atten 30 dB Clear Write Clear Write Max Hold Max Hold Min Hold Min Hold Start 2.474 00 GHz Res BW 100 kHz Stop 2.500 00 GHz Sweep 2.52 ms (601 pts) Stop 2.500 00 GHz Sweep 2.88 ms (601 pts) .470 00 GHz View View #VBW 300 kHz #VBW 300 kHz Res BW 100 kHz

Blank

More 1 of 2

No-hopping mode

Copyright 2000-2012 Agilent Technologies

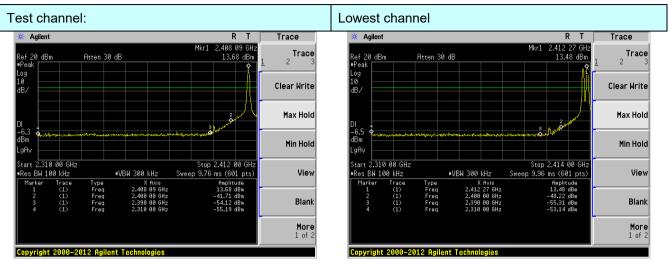
Hopping mode

Blank

More 1 of 2

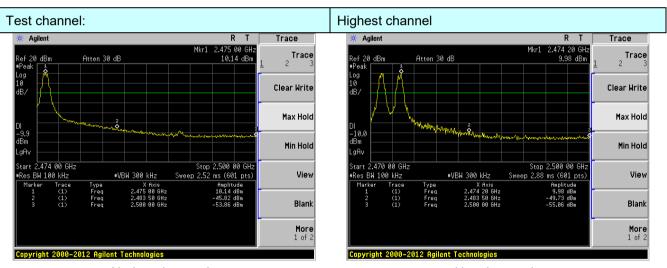


Antenna 2:



No-hopping mode

Hopping mode



No-hopping mode

Hopping mode



6.9.2 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209 and 15.205						
Test Method:	ANSI C63.10:20)13					
Test Frequency Range:	All restriction ba	and have bee	n tested, and	2.3GHz to	2.5GHz band is the		
Test site:	Measurement D	istance: 3m					
Receiver setup:	Frequency	Detector	RBW	VBW	Remark		
	Above 1GHz	Peak	1MHz	3MHz	Peak Value		
	Peak 1MHz 10Hz Average Val						
Limit:	Freque	ency	Limit (dBuV/	/m @3m)	Remark		
	Above 1	GH ₇	54.0	0	Average Value		
	74.00 Peak Value						
Test setup:	Tum Table EUT: < lm 4m > <						
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, quasi-peak or 						
Test Instruments:	Refer to section		ied and then r	oportou iii e	a data siloot.		
Test mode:	Refer to section 5.3 for details						
Test results:	Pass						

Remark:

- 1. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.
- 2. Two antenna were tested and found the antenna2 is worse. So only the data of antenna2 is reported.



Antenna 2:

	Test channel:	Lowest
--	---------------	--------

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	50.89	27.59	5.38	30.18	53.68	74.00	-20.32	Vertical
2400.00	52.15	27.58	5.39	30.18	54.94	74.00	-19.06	Vertical
2390.00	60.21	27.59	5.38	30.18	63.00	74.00	-11.00	Horizontal
2400.00	61.17	27.58	5.39	30.18	63.96	74.00	-10.04	Horizontal

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	37.15	27.59	5.38	30.18	39.94	54.00	-14.06	Vertical
2400.00	37.46	27.58	5.39	30.18	40.25	54.00	-13.75	Vertical
2390.00	41.25	27.59	5.38	30.18	44.04	54.00	-9.96	Horizontal
2400.00	42.48	27.58	5.39	30.18	45.27	54.00	-8.73	Horizontal

Test channel:	Highest
	1

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	50.13	27.53	5.47	29.93	53.20	74.00	-20.80	Vertical
2500.00	46.14	27.55	5.49	29.93	49.25	74.00	-24.75	Vertical
2483.50	60.87	27.53	5.47	29.93	63.94	74.00	-10.06	Horizontal
2500.00	46.59	27.55	5.49	29.93	49.70	74.00	-24.30	Horizontal

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	35.71	27.53	5.47	29.93	38.78	54.00	-15.22	Vertical
2500.00	33.49	27.55	5.49	29.93	36.60	54.00	-17.40	Vertical
2483.50	38.29	27.53	5.47	29.93	41.36	54.00	-12.64	Horizontal
2500.00	37.18	27.55	5.49	29.93	40.29	54.00	-13.71	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.



6.10 Spurious Emission

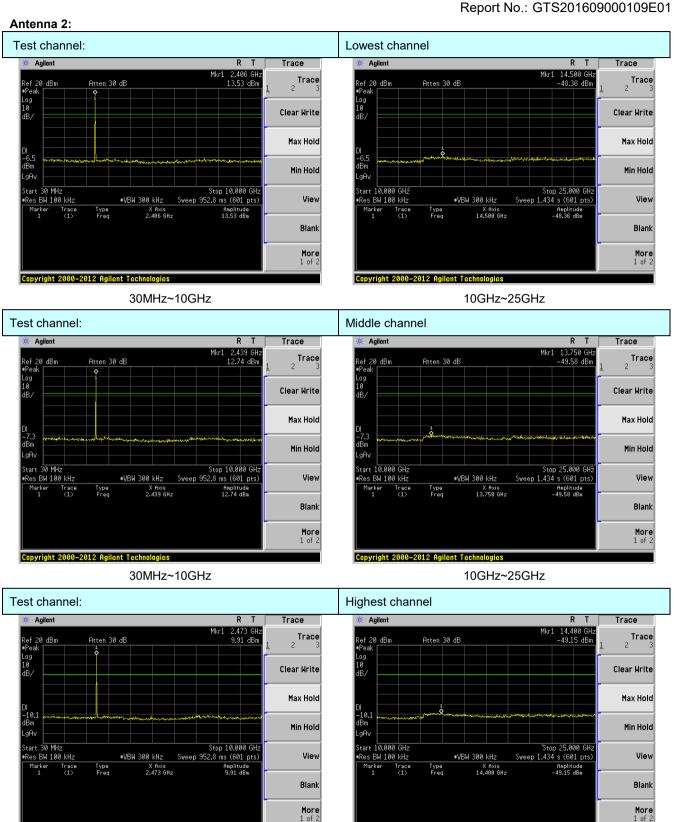
6.10.1 Conducted Emission Method

Test Requirement:	FCC Part15 C Section 15.247 (d)						
Test Method:	ANSI C63.10:2013						
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 5.8 for details						
Test mode:	Refer to section 5.3 for details						
Test results:	Pass						









30MHz~10GHz 10GHz~25GHz

Copyright 2000-2012 Agilent Technologies

Copyright 2000-2012 Agilent Technologies



6.10.2 Radiated Emission Method

9KHz-10KHz Quasi-peak 200Hz 600Hz Quasi-150KHz-30MHz Quasi-peak 9KHz 30KHz Quasi-16Hz Quasi-peak 100KHz 300KHz Ave 2400VHz 300KHz 30	15.209	.209	ction 15	FCC Part15 C Sect	Test Requirement:	Part15 C Sectio	n 15.209			
Test site: Measurement Distance: 3m Receiver setup: Frequency Detector RBW VBW Va 9KHz-10KHz Quasi-peak 200Hz 600Hz Quasi-peak 9KHz 30KHz Quasi-peak 100KHz 300KHz			3	ANSI C63.10:2013	Test Method:	I C63.10:2013				
Frequency				9kHz to 25GHz	Test Frequency Range:	to 25GHz				
9KHz-10KHz Quasi-peak 200Hz 600Hz Quasi-150KHz-30MHz Quasi-peak 9KHz 30KHz Quasi-16Hz Quasi-peak 100KHz 300KHz Quasi-16Hz Peak 1MHz 3MHz Peak 1MHz 10Hz Aveology Above 1GHz Peak 1MHz 10Hz Aveology 10.009MHz-0.490MHz 2400/F(KHz) QP 3000 0.490MHz-1.705MHz 2400/F(KHz) QP 3000 1.705MHz-30MHz 30 QP 3000 1.705MHz-88MHz 1000 QP 88MHz-216MHz 1500 QP 216MHz-960MHz 2000 QP 960MHz-1GHz 5000 QP Above 1GHz 5000 Peak Peak Test setup: Below 1GHz Sound Peak	e: 3m	Bm	tance:	Measurement Dista	Test site:	surement Distan	ce: 3m			
150KHz-30MHz	Detector RBW VBW	etector RBV		Frequency	Receiver setup:	Frequency	Detector	RBW	VBW	Value
30MHz-1GHz	Quasi-peak 200Hz 600Hz Q	asi-peak	Qı	9KHz-10KHz		KHz-10KHz	Quasi-peak	200Hz	600Hz	Quasi-peak
Above 1GHz	Quasi-peak 9KHz 30KHz Q	asi-peak	z Qı	150KHz-30MHz		0KHz-30MHz	Quasi-peak	9KHz	30KHz	z Quasi-peak
Above 1GHz	Quasi-peak 100KHz 300KHz Q	asi-peak	30MHz-1GHz Qua			0MHz-1GHz	Quasi-peak	100KHz	300KH	z Quasi-peak
Peak 1MHz 10Hz Ave	Peak 1MHz 3MHz	Peak		Above 1GHz		bove 1GHz	Peak	1MHz	3MHz	Peak
Spurious Emissions Spuriou	Peak 1MHz 10Hz	Peak		Above 10112		bove 1GHz	Peak	1MHz	10Hz	Average
0.490MHz-1.705MHz 24000/F(KHz) QP 300 1.705MHz-30MHz 30 QP 30r 30MHz-88MHz 100 QP 88MHz-216MHz 150 QP 216MHz-960MHz 200 QP 960MHz-1GHz 500 QP Above 1GHz 500 Average 5000 Peak Test setup: Below 1GHz Tun Table Test Antenna Company		Limit (uV	/	Frequency		Frequency	Limit (uV	//m) \	/alue	Measurement Distance
1.705MHz-30MHz 30 QP 30r 30MHz-88MHz 100 QP 88MHz-216MHz 150 QP 216MHz-960MHz 200 QP 960MHz-1GHz 500 QP Above 1GHz 500 Average Above 1GHz Test setup: Below 1GHz Test Antenna Test Antenna Test	, ,	2400/F(K			·		,	(Hz)	QP	300m
30MHz-88MHz	z 24000/F(KHz) QP	24000/F(I	5MHz	0.490MHz-1.705N		90MHz-1.705MI	Hz 24000/F(F	(Hz)	QP	300m
88MHz-216MHz 150 QP 216MHz-960MHz 200 QP 960MHz-1GHz 500 QP Above 1GHz 5000 Peak Test setup: Below 1GHz Test Antenna Test	30 QP	30		1.705MHz-30MI		.705MHz-30MH	z 30		QP	30m
216MHz-960MHz 200 QP 960MHz-1GHz 500 QP Above 1GHz 500 Average 5000 Peak				30MHz-88MHz		30MHz-88MHz	100			
960MHz-1GHz 500 QP Above 1GHz 500 Average 5000 Peak Test setup: Below 1GHz Som > 1 Test Antenna 1 Test										
Peak Test setup: Below 1GHz Below 1GHz Test Antenna Test Antenna Test Antenna Tum Table										3m
Above 1GHz Test setup: Below 1GHz Sound Peak Test Antenna Calm 4m > 0 Turn Table			Hz	960MHz-1GHz		960MHz-1GHz				
Test setup: Below 1GHz South				Above 1GHz		Above 1GHz	-	-	_	
Test Antenna. Company Company	5000 Peak	5000				-	5000	F	Peak	
Above 1GHz	Test Antenna.	a Turn Table+		< 80cm > 1	i est setup:	< 80cm >	Turn Table	< lm 4m >-	amplifier	



	Neport No.: 319201009000109E01
	Tum Tables Clm 4m > 150cm > 150cm > 100 Preamplifiers
Test Procedure:	The EUT was placed on the top of a rotating table (0.8 meters for below 1GHz and 1.5meters for above 1GHz) 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.
	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, quasi-peak or average method as specified and then reported in a data sheet.
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

Remark:

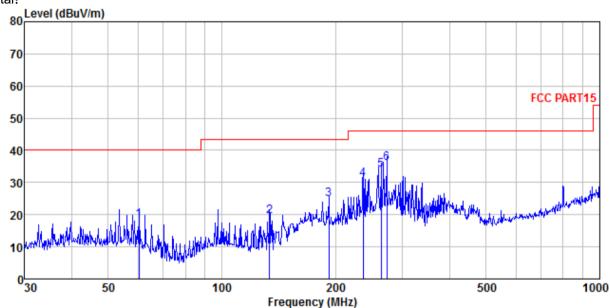
- 1. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.
- 2. The measured filed strength at frequencies below 30MHz are lower than the limit over 30dB. So the data isn't reported.
- 3. Two antenna were tested and found the antenna2 is worse. So only the data of antenna2 is reported.



Measurement data:

30MHz ~ 1GHz

ANT 2: Horizontal:



Site

3m chamber FCC PART15 3m HORIZONTAL Condition

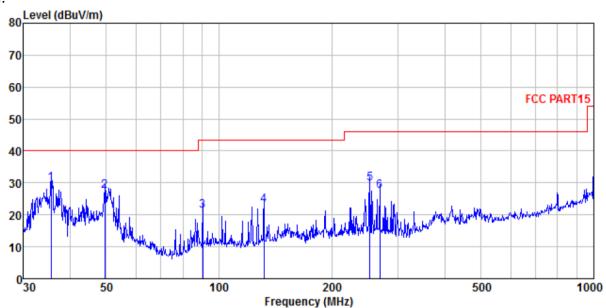
109 Job No.

Test Mode Test Engineer Transmitting mode Sky

est	Engineer.				_				
		Read	Antenna	Cable	Preamp		Limit	Over	
	Frea	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
			357-			3577	3577		
	MHz	dBu∀	ab/m	d₿	aв	dBuV/m	abuv/m	dВ	
1	60.280	32.68	14.69	0.86	29.92	18.31	40.00	-21.69	QP
2	133.619	36.80	10.67	1.46	29, 49	19.44	43, 50	-24.06	ΩP
3	191.745			1.80				-18.74	
_									
4	236.645	44.60	13.93	2.05	29.54	31.04	46.00	-14.96	QP
5	263.819	47, 30	14.17	2, 19	29.75	33, 91	46, 00	-12.09	ΩP
									-
6	273.234	49.14	14.46	2.24	29.82	36.02	40.00	-9.98	Ų٢



Vertical:



Site

3m chamber FCC PART15 3m VERTICAL 109 Condition

Job No. Test Mode Transmitting mode

est	Engineer:	эку							
		Read	Antenna	Cable	Preamp		Limit	Over	
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
						-=	-=		
	MHz	dBu∀	dB/m	d₿	dB	dBu∀/m	dBuV/m	dB	
1	35.624	44.66	14.49	0.62	30.07	29.70	40.00	-10.30	QP
2	49.533	41.48	15.28	0.77	30.00	27.53	40.00	-12.47	QP
2 3	90.537	35.90	14.07	1.11	29.74	21.34	43.50	-22.16	QP
4	131.758	40.12	10.82	1.45	29.50	22.89	43.50	-20.61	QP
5	252.948	43.25	14.06	2.14	29.66	29.79	46.00	-16.21	QP
6	268.485	40.69	14.34	2.21	29.79	27.45	46.00	-18.55	QP



■ Above 1GHz

Test channel:	Lowest
---------------	--------

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
4816.00	32.81	31.78	8.60	32.09	41.10	74.00	-32.90	Vertical
7224.00	32.03	36.15	11.66	31.99	47.85	74.00	-26.15	Vertical
9632.00	33.85	38.01	14.14	31.60	54.40	74.00	-19.60	Vertical
12040.00	*					74.00		Vertical
14440.00	*					74.00		Vertical
4816.00	37.24	31.78	8.60	32.09	45.53	74.00	-28.47	Horizontal
7224.00	30.57	36.15	11.66	31.99	46.39	74.00	-27.61	Horizontal
9632.00	30.34	38.01	14.14	31.60	50.89	74.00	-23.11	Horizontal
12040.00	*					74.00		Horizontal
14440.00	*					74.00		Horizontal

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
4816.00	27.11	31.78	8.60	32.09	35.40	54.00	-18.60	Vertical
7224.00	22.51	36.15	11.66	31.99	38.33	54.00	-15.67	Vertical
9632.00	22.06	38.01	14.14	31.60	42.61	54.00	-11.39	Vertical
12040.00	*					54.00		Vertical
14440.00	*					54.00		Vertical
4816.00	32.01	31.78	8.60	32.09	40.30	54.00	-13.70	Horizontal
7224.00	20.94	36.15	11.66	31.99	36.76	54.00	-17.24	Horizontal
9632.00	18.60	38.01	14.14	31.60	39.15	54.00	-14.85	Horizontal
12040.00	*					54.00		Horizontal
14440.00	*					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.
- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.



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
4880.00	31.59	31.85	8.66	32.12	39.98	74.00	-34.02	Vertical
7320.00	32.72	36.37	11.72	31.89	48.92	74.00	-25.08	Vertical
9760.00	32.71	38.35	14.25	31.59	53.72	74.00	-20.28	Vertical
12200.00	*					74.00		Vertical
14640.00	*					74.00		Vertical
4880.00	37.55	31.85	8.66	32.12	45.94	74.00	-28.06	Horizontal
7425.00	31.33	36.56	11.79	31.80	47.88	74.00	-26.12	Horizontal
9900.00	28.41	38.81	14.35	31.85	49.72	74.00	-24.28	Horizontal
12200.00	*					74.00		Horizontal
14640.00	*					74.00		Horizontal

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
4880.00	27.01	31.85	8.66	32.12	35.40	54.00	-18.60	Vertical
7320.00	21.41	36.37	11.72	31.89	37.61	54.00	-16.39	Vertical
9760.00	21.43	38.35	14.25	31.59	42.44	54.00	-11.56	Vertical
12200.00	*					54.00		Vertical
14640.00	*					54.00		Vertical
4880.00	31.18	31.85	8.66	32.12	39.57	54.00	-14.43	Horizontal
7320.00	22.35	36.37	11.72	31.89	38.55	54.00	-15.45	Horizontal
9760.00	19.65	38.35	14.25	31.59	40.66	54.00	-13.34	Horizontal
12200.00	*					54.00		Horizontal
14640.00	*					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.
- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test channel: Highes	est
----------------------	-----

Peak value:

		1			1	1		
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
4950.00	33.22	31.91	8.71	32.16	41.68	74.00	-32.32	Vertical
7425.00	31.47	36.56	11.79	31.80	48.02	74.00	-25.98	Vertical
9900.00	30.48	38.81	14.35	31.85	51.79	74.00	-22.21	Vertical
12375.00	*					74.00		Vertical
14850.00	*					74.00		Vertical
4950.00	38.21	31.91	8.71	32.16	46.67	74.00	-27.33	Horizontal
7425.00	29.34	36.56	11.79	31.80	45.89	74.00	-28.11	Horizontal
9900.00	30.23	38.81	14.35	31.85	51.54	74.00	-22.46	Horizontal
12375.00	*					74.00		Horizontal
14850.00	*					74.00		Horizontal

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
4950.00	28.51	31.91	8.71	32.16	36.97	54.00	-17.03	Vertical
7425.00	22.99	36.56	11.79	31.80	39.54	54.00	-14.46	Vertical
9900.00	21.17	38.81	14.35	31.85	42.48	54.00	-11.52	Vertical
12375.00	*					54.00		Vertical
14850.00	*					54.00		Vertical
4950.00	32.89	31.91	8.71	32.16	41.35	54.00	-12.65	Horizontal
7425.00	21.88	36.56	11.79	31.80	38.43	54.00	-15.57	Horizontal
9900.00	19.17	38.81	14.35	31.85	40.48	54.00	-13.52	Horizontal
12375.00	*					54.00		Horizontal
14850.00	*					54.00		Horizontal

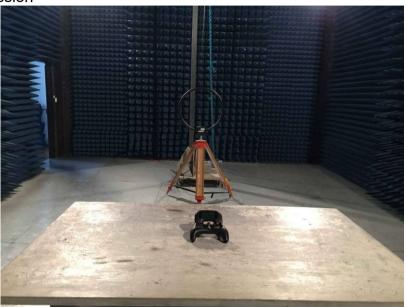
Remark:

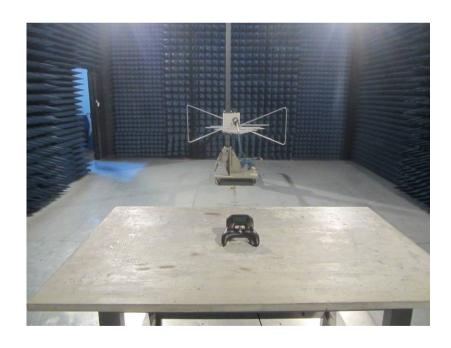
- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "*", means this data is the too weak instrument of signal is unable to test.
- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.



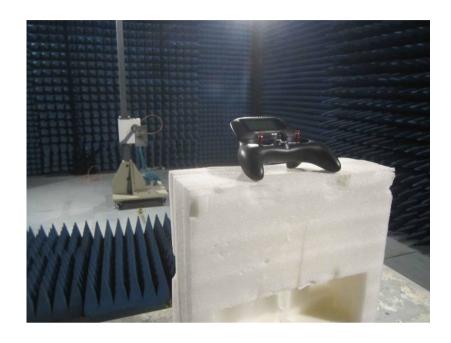
7 Test Setup Photo

Radiated Emission









Conducted Emission





RF tests

Report No.: GTS201609000109E01





8 EUT Constructional Details















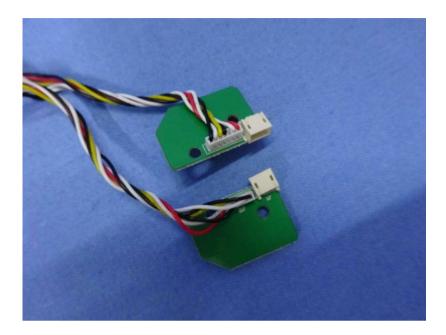








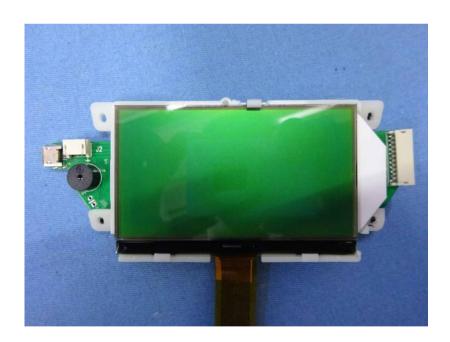






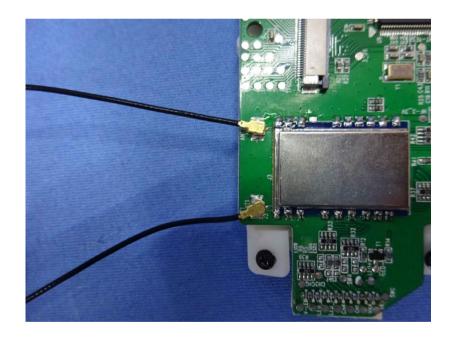






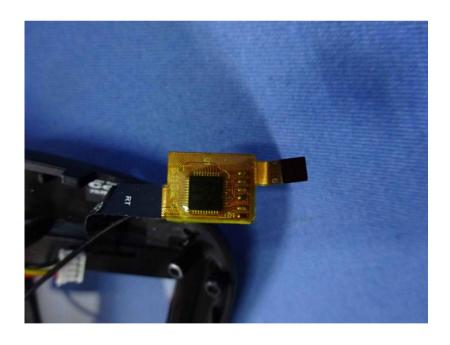




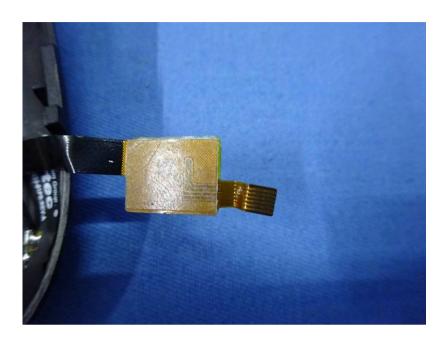


















---End---