

Global United Technology Services Co., Ltd.

Report No.: GTS2025040543F01

TEST REPORT

Applicant: FLYSKY RC MODEL TECHNOLOGY CO., LTD

Address of Applicant: West building 3, Huangjinyuan Ind Park, Qiaoli North Gate,

Changping Town, Dongguan, China

Manufacturer: ShenZhen FLYSKY Technology Co.,Ltd

Address of 16F, Huafeng Building, No. 6006 Shennan Road, Futian

Manufacturer: District, Shenzhen, Guangdong, China

Factory: Dongguan Flysky RC Model technology Co.,Ltd

Address of Factory: West building 3, HuangjinyuanInd Park, Qiaoli North Gate,

Changping Town, Dongguan, China

Equipment Under Test (EUT)

Product Name: Automatic Frequency Hopping Digital System

Model No.: FS-G7P+, G7P+

Trade Mark: FLYSKY

FCC ID: N4ZG7P00

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

Date of sample receipt: April 23, 2025

Date of Test: April 24, 2025-May 09, 2025

Date of report issued: May 09, 2025

Test Result : PASS *

Authorized Signature:

Robinson Luo Laboratory Manager

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



2 Version

Report No.	Version No.	Date	Description
GTS202111000233F01	00	December 07, 2021	Original
GTS2025040543F01	01	May 09, 2025	Class II permissive change

Prepared By:	Joseph Du	Date:	May 09, 2025	
	Project Engineer			
Check By:	Johnson Lux	Date:	May 09, 2025	
	Reviewer			



3 Contents

		Pa	age
1	COV	/ER PAGE	1
2	VER	SION	2
3	CON	NTENTS	3
4	TES	T SUMMARY	4
	4.1	MEASUREMENT UNCERTAINTY	4
5	GEN	VERAL INFORMATION	
•	5.1	GENERAL DESCRIPTION OF EUT	
	5.1	TEST MODE	
	5.3	TEST FACILITY	
	5.4	TEST LOCATION	
	5.5	DESCRIPTION OF SUPPORT UNITS	
	5.6	DEVIATION FROM STANDARDS	
	5.7	ABNORMALITIES FROM STANDARD CONDITIONS	
	5.8	ADDITIONAL INSTRUCTIONS	7
6	TES	T INSTRUMENTS LIST	8
		T RESULTS AND MEASUREMENT DATA	
7	IES		
	7.1	ANTENNA REQUIREMENT	10
	7.2	CONDUCTED EMISSIONS	
	7.3	Spurious Emission in Non-restricted & restricted Bands	
	7.3.		
8	TES	T SETUP PHOTO	32
9	EUT	CONSTRUCTIONAL DETAILS	32



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)	N/A *
20dB Occupied Bandwidth	15.247 (a)(1)	N/A *
Carrier Frequencies Separation	15.247 (a)(1)	N/A *
Hopping Channel Number	15.247 (a)(1)(iii)	N/A *
Dwell Time	15.247 (a)(1)(iii)	N/A *
Radiated Emission	15.205/15.209	Pass
Band Edge	15.247(d)	Pass

Remarks:

- 1. Pass: The EUT complies with the essential requirements in the standard.
- 2. N/A*: Not applicable. This's a Class II permissive change report, all of the changes are not effect to the RF performance, function and power. So the RF conducted test data directly reference the original report number GTS202111000233F01.
- 3. Test according to ANSI C63.10:2013

4.1 Measurement Uncertainty

in modern one of containty							
Test Item	Frequency Range	Measurement Uncertainty	Notes				
Radiated Emission	9kHz-30MHz	3.1dB	(1)				
Radiated Emission	30MHz-200MHz	3.8039dB	(1)				
Radiated Emission	200MHz-1GHz	3.9679dB	(1)				
Radiated Emission	1GHz-18GHz	4.29dB	(1)				
Radiated Emission	18GHz-40GHz	3.30dB	(1)				
AC Power Line Conducted Emission 0.15MHz ~ 30MHz 3.44dB (1)							
Note (1): The measurement unce	ertainty is for coverage factor of ka	=2 and a level of confidence of	95%.				



5 General Information

5.1 General Description of EUT

Product Name:	Automatic Frequency Hopping Digital System
Model No.:	FS-G7P+, G7P+
Test Model No.:	FS-G7P+
Remark: All above models are	identical in the same PCB layout, interior structure and electrical circuits.
The difference is model number	er and flash memery.
Serial No.:	RD1001684
Test sample(s) ID:	GTS2025040543-1
Sample(s) Status	Engineer sample
Operation Frequency:	2406MHz~2472MHz
Channel numbers:	133
Modulation method:	FHSS
Modulation technology:	GMSK
Antenna Type:	Integral Antenna
Antenna gain:	2.5dBi
Power supply:	DC 6V(4*1.5V Size"AA" Battery)
	Or
	Input: 5VDC

Note:

- 1. Antenna gain information provided by the customer.
- 2. The relevant information of the sample is provided by the entrusting company, and the laboratory is not responsible for its authenticity.
- 3. The system works in the frequency range of 2406MHz to 2472MHz. This band has been divided to 133 independent channels. Each radio system uses 20 different channels; the minimum channel separation is ≥3MHz. 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.

The test frequencies are below:

Channel	Frequency
The lowest channel	2406MHz
The middle channel	2440MHz
The Highest channel	2472MHz



Operation Frequency each of channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2406	36	2423.5	71	2441	106	2458.5
2	2406.5	37	2424	72	2441.5	107	2459
3	2407	38	2424.5	73	2442	108	2459.5
4	2407.5	39	2425	74	2442.5	109	2460
5	2408	40	2425.5	75	2443	110	2460.5
6	2408.5	41	2426	76	2443.5	111	2461
7	2409	42	2426.5	77	2444	112	2461.5
8	2409.5	43	2427	78	2444.5	113	2462
9	2410	44	2427.5	79	2445	114	2462.5
10	2410.5	45	2428	80	2445.5	115	2463
11	2411	46	2428.5	81	2446	116	2463.5
12	2411.5	47	2429	82	2446.5	117	2464
13	2412	48	2429.5	83	2447	118	2464.5
14	2412.5	49	2430	84	2447.5	119	2465
15	2413	50	2430.5	85	2448	120	2465.5
16	2413.5	51	2431	86	2448.5	121	2466
17	2414	52	2431.5	87	2449	122	2466.5
18	2414.5	53	2432	88	2449.5	123	2467
19	2415	54	2432.5	89	2450	124	2467.5
20	2415.5	55	2433	90	2450.5	125	2468
21	2416	56	2433.5	91	2451	126	2468.5
22	2416.5	57	2434	92	2451.5	127	2469
23	2417	58	2434.5	93	2452	128	2469.5
24	2417.5	59	2435	94	2452.5	129	2470
25	2418	60	2435.5	95	2453	130	2470.5
26	2418.5	61	2436	96	2453.5	131	2471
27	2419	62	2436.5	97	2454	132	2471.5
28	2419.5	63	2437	98	2454.5	133	2472
29	2420	64	2437.5	99	2455		
30	2420.5	65	2438	100	2455.5		
31	2421	66	2438.5	101	2456		
32	2421.5	67	2439	102	2456.5		
33	2422	68	2439.5	103	2457		
34	2422.5	69	2440	104	2457.5		
35	2423	70	2440.5	105	2458		



5.2 Test mode

Transmitting mode Keep the EUT in transmitting mode.

Remark: During the test, the duty cycle >98%, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data. New battery is used during all test.

5.3 Test Facility

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

FCC —Registration No.: 381383

Designation Number: CN5029

Global United Technology Services Co., Ltd., Shenzhen 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 files.

• ISED —Registration No.: 9079A

CAB identifier: CN0091

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of ISED for radio equipment testing.

NVLAP (LAB CODE:600179-0)

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP).

5.4 Test Location

All other tests were performed at:

Global United Technology Services Co., Ltd.

Address: No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang

Road, Baoan District, Shenzhen, Guangdong, China 518102

Tel: 0755-27798480 Fax: 0755-27798960

Description of Support Units

None.

5.6 Deviation from Standards

5.7 Abnormalities from Standard Conditions

None.

5.8 Additional Instructions

Software (Used for test) from client

Built-in by manufacturer, power set default.

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



6 Test Instruments list

Radia	ated 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	Apr. 11, 2025	Apr. 10, 2026
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	Apr. 12, 2025	Apr. 11, 2026
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9168	GTS640	Apr. 12, 2025	Apr. 11, 2026
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	Apr. 11, 2025	Apr. 10, 2026
6	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	Jul. 02, 2024	Jul. 01, 2025
7	Loop Antenna	ZHINAN	ZN30900A	GTS534	Nov.16, 2024	Nov.15, 2025
8	Broadband Preamplifier	SCHWARZBECK	BBV9718	GTS535	Apr. 11, 2025	Apr. 10, 2026
9	Amplifier(1GHz-26.5GHz)	HP	8449B	GTS601	Apr. 11, 2025	Apr. 10, 2026
10	Horn Antenna (18GH-40GHz)	Schwarzbeck	BBHA 9170	GTS691	Apr. 11, 2025	Apr. 10, 2026
11	FSV·Signal Analyzer (10Hz-40GHz)	Keysight	FSV-40-N	GTS666	Mar. 11, 2025	Mar. 10, 2026
12	Amplifier	1	LNA-1000-30S	GTS650	Apr. 11, 2025	Apr. 10, 2026
13	CDNE M2+M3-16A	HCT	30MHz-300MHz	GTS692	Nov. 13, 2024	Nov. 12, 2025
14	Wideband Amplifier	1	WDA-01004000-15P35	GTS602	Apr. 11, 2025	Apr. 10, 2026
15	Thermo meter	JINCHUANG	GSP-8A	GTS643	Apr. 15, 2025	Apr. 14, 2026
16	RE cable 1	GTS	N/A	GTS675	Jul. 02, 2024	Jul. 01, 2025
17	RE cable 2	GTS	N/A	GTS676	Jul. 02, 2024	Jul. 01, 2025
18	RE cable 3	GTS	N/A	GTS677	Jul. 02, 2024	Jul. 01, 2025
19	RE cable 4	GTS	N/A	GTS678	Jul. 02, 2024	Jul. 01, 2025
20	RE cable 5	GTS	N/A	GTS679	Jul. 02, 2024	Jul. 01, 2025
21	RE cable 6	GTS	N/A	GTS680	Jul. 02, 2024	Jul. 01, 2025
22	RE cable 7	GTS	N/A	GTS681	Jul. 05, 2024	Jul. 04, 2025
23	RE cable 8	GTS	N/A	GTS682	Jul. 05, 2024	Jul. 04, 2025
24	EMI Test Software	AUDIX	E3-6.100614a	GTS725	N/A	N/A



Cond	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	7.3(L)x3.1(W)x2.9(H)	GTS252	Jul. 12, 2022	Jul. 11, 2027	
2	EMI Test Receiver	R&S	ESCI 7	GTS552	Apr. 12, 2025	Apr. 11, 2026	
3	LISN	ROHDE & SCHWARZ	ENV216	GTS226	Apr. 11, 2025	Apr. 10, 2026	
4	Coaxial Cable	GTS	N/A	GTS227	N/A	N/A	
5	Thermo meter	JINCHUANG	GSP-8A	GTS642	Apr. 15, 2025	Apr. 14, 2026	
6	Absorbing clamp	Elektronik- Feinmechanik	MDS21	GTS229	Apr. 12, 2025	Apr. 11, 2026	
7	ISN	SCHWARZBECK	NTFM 8158	GTS565	Apr. 11, 2025	Apr. 10, 2026	
8	High voltage probe	SCHWARZBECK	TK9420	GTS537	Apr. 11, 2025	Apr. 10, 2026	
9	Antenna end assembly	Weinschel	1870A	GTS560	Apr. 11, 2025	Apr. 10, 2026	
10	EMI Test Software	AUDIX	E3-6.100622	GTS726	N/A	N/A	
11	Current probe	CYBERTEK	EM5011	GTS698	Jan. 13, 2025	Jan. 12, 2026	

Gen	General used equipment:					
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Barometer	KUMAO	SF132	GTS647	Aug. 17, 2024	Aug. 16, 2025



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.

EUT Antenna:

The antenna is integral antenna, the best case gain of the antenna is 2.5dBi, reference to the appendix II for details.



7.2 Conducted Emissions

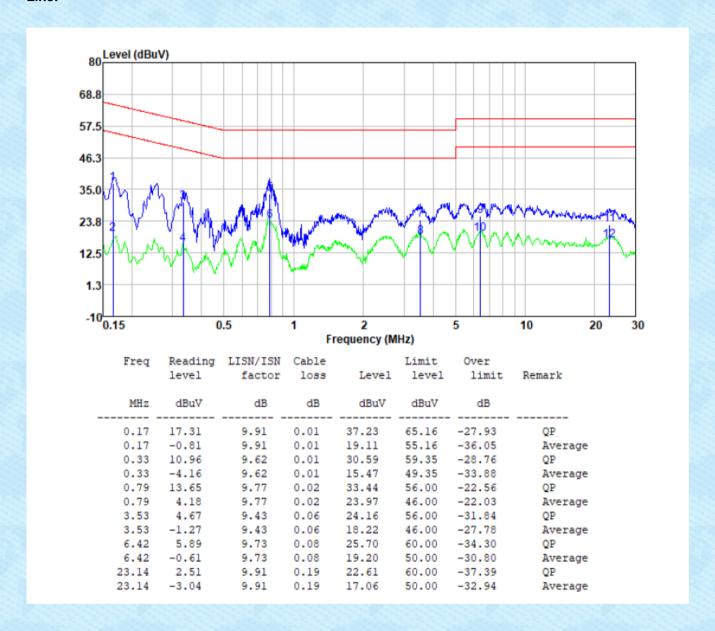
712 Conducted Enfoctorie	7.2 Conducted Emissions				
Test Requirement:	FCC Part15 C Section 15.207	FCC Part15 C Section 15.207			
Test Method:	ANSI C63.10:2013				
Test Frequency Range:	150KHz to 30MHz				
Receiver setup:	RBW=9KHz, VBW=30KHz, S	weep time=auto			
Limit:	Frequency range (MHz)	Limit	(dBuV)		
		Quasi-peak	Average		
	0.15-0.5	66 to 56*	56 to 46*		
	0.5-5 56 46 5-30 60 50				
	* Decreases with the logarithr	n of the frequency.			
Test setup:	Reference PI				
	AUX Equipment E.U.T Filter AC power Test table/Insulation plane EMI Receiver Remark E.U.T. Equipment Under Test LISN: Line Impedence Stabilization Network				
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 500hm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 500hm/50uH coupling impedance with 500hm 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 5.2 for details				
Test environment:	Temp.: 25 °C Humid.: 52% Press.: 1012mbar				
Test voltage:	AC 120V, 60Hz				
Test results:	Pass				



Measurement data

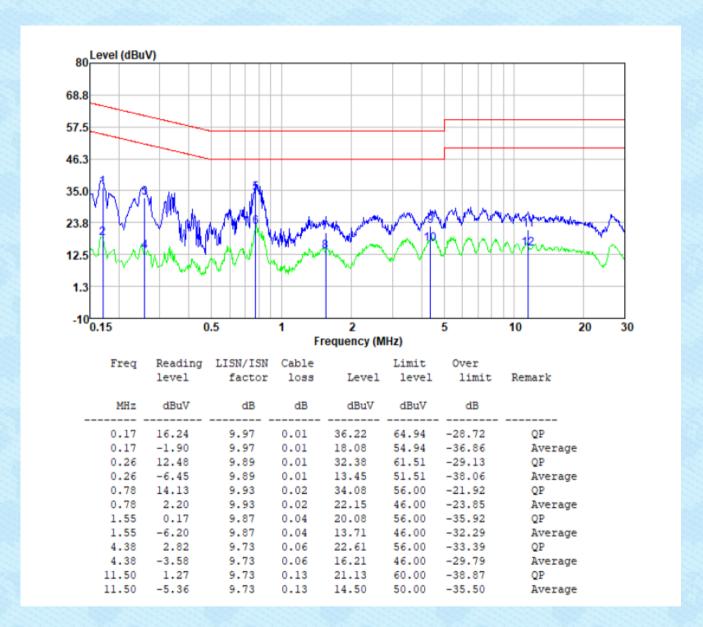
Pre-scan all test modes, found worst case at 2406MHz, and so only show the test result of it.

Line:





Neutral:



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.



7.3 Spurious Emission in Non-restricted & restricted Bands

7.3.1 Radiated Emission Method

Test Requirement:	FCC Part15 C Section	on 15	5 200 and 1	5 205	100		
Test Method:	ANSI C63.10:2013	511 10	7.203 and 1	0.200			
Test Frequency Range:	9kHz to 25GHz						
	Measurement Distar		200				
Test site:				DDI	Λ/	\/D\\/	Value
Receiver setup:	Frequency		Detector	RB		VBW	
	9KHz-150KHz		uasi-peak	2001		600Hz	
	150KHz-30MHz		uasi-peak	9KF		30KHz	
	30MHz-1GHz	Qı	uasi-peak	120K		300KH	
	Above 1GHz		Peak	1MH		3MHz	
			Peak	1MF	IZ	10Hz	
Limit: (Spurious Emissions)	Frequency		Limit (u\	//m)	٧	'alue	Measurement Distance
	0.009MHz-0.490M	Hz	2400/F(K	(Hz)		QP	300m
	0.490MHz-1.705M	Hz	24000/F(I	KHz)		QP	300m
	1.705MHz-30MH	lz	30			QP	30m
	30MHz-88MHz		100			QP	
	88MHz-216MHz	2	150			QP	
	216MHz-960MH	Z	200			QP	3m
	960MHz-1GHz		500			QP	Sili
	Above 1GHz		500		Av	erage	
	Above 1GHz 5000 Peak						
Test setup:	Below 30MHz	111111	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	11111111	111111	***********	
	Tum Table Tum Ta						



Report No.: GTS2025040543F01 Test Antenna EUT. Turn Table < 80cm Turn Tables Receiver« Preamplifier+ Above 1GHz Test Antenna+ < 1m ... 4m > FUT. Tum Table <150cm> Receiver-Preamplifier+ 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. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna 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. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. Test Instruments: Refer to section 5.8 for details Test mode: Refer to section 5.2 for details Temp. / Hum. Temp.: 25 °C Humid.: 52% Press.: 1 012mbar

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ŝ		Report No.: GTS2025040543F01
	Test results:	Pass
	Test voltage:	AC 120V, 60Hz

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.

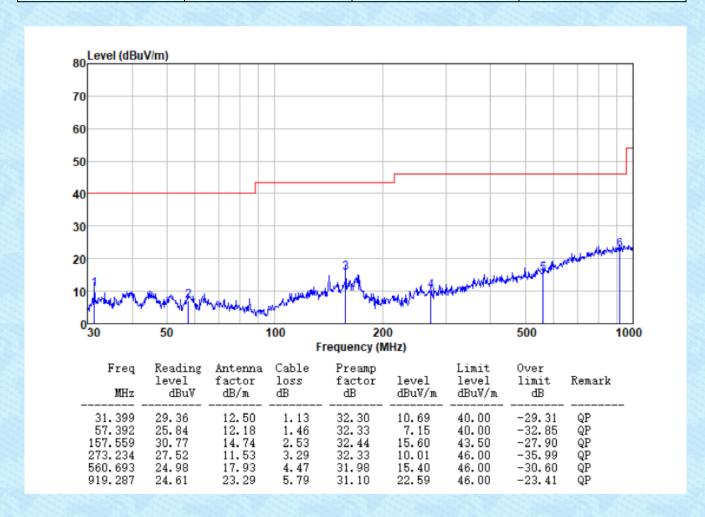
Measurement data:

■ Below 30MHz

The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

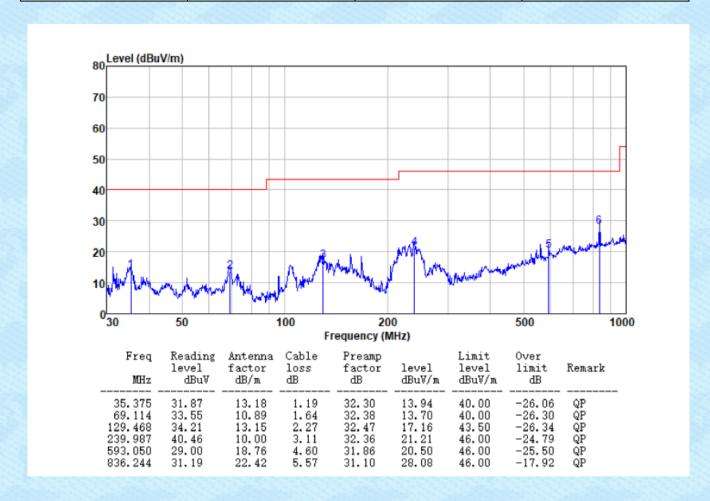
■ 30MHz ~ 1GHz

ś	Test channel:	Lowest	Polarization:	Horizontal	
	1 oot onarmor.	LOWGOL	i dianzation.	1 10112011tai	



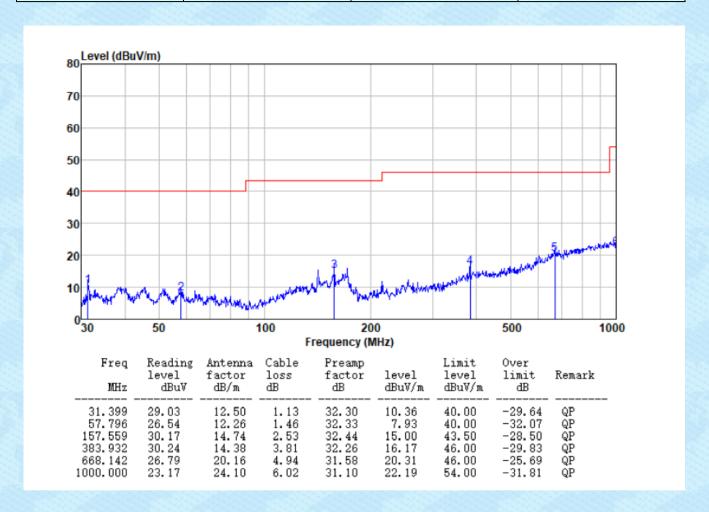


Test channel:	Lowest	Polarization:	Vertical
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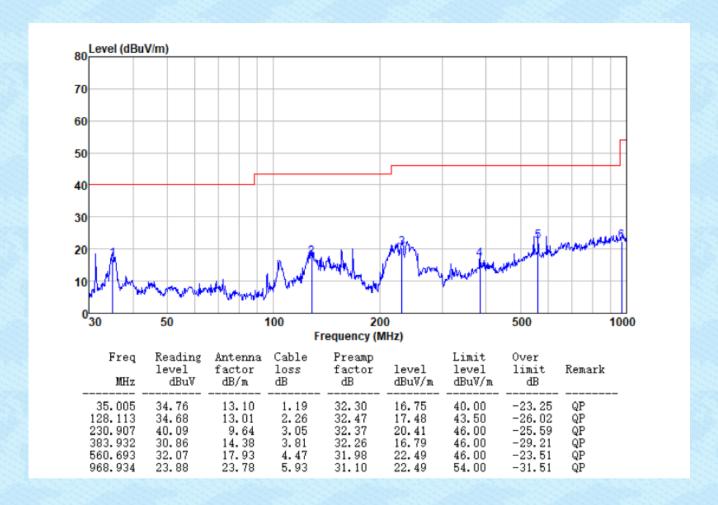


est channel:	Middle	Polarization:	Horizontal
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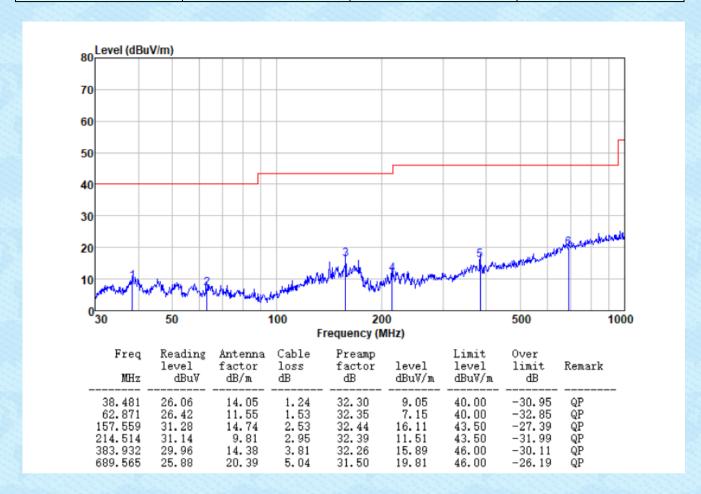


Test channel:	Middle	Polarization:	Vertical
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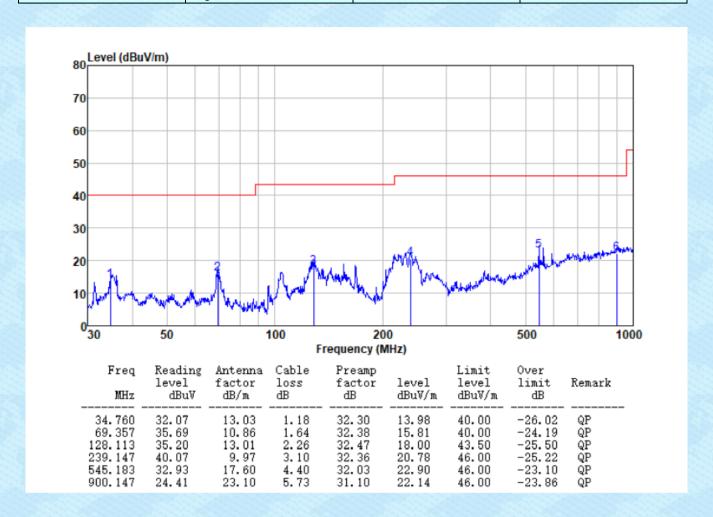
Test channel:	Highest	Polarization:	Horizontal
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Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102 Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960



Test channel:	Highest	Polarization:	Vertical
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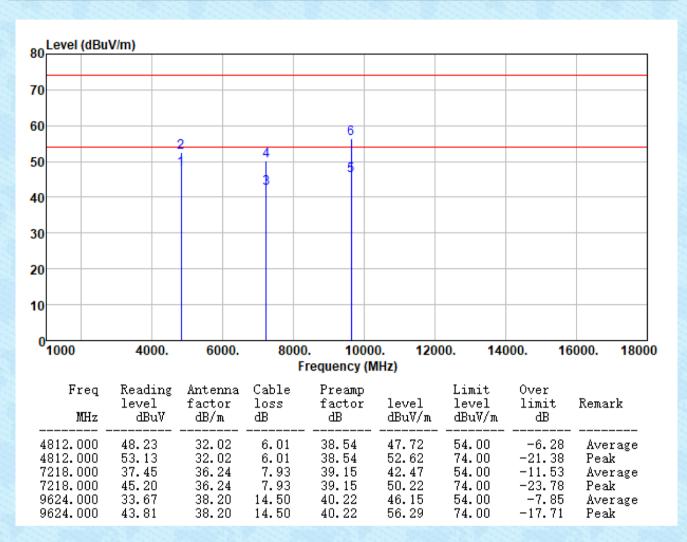




■ Above 1GHz

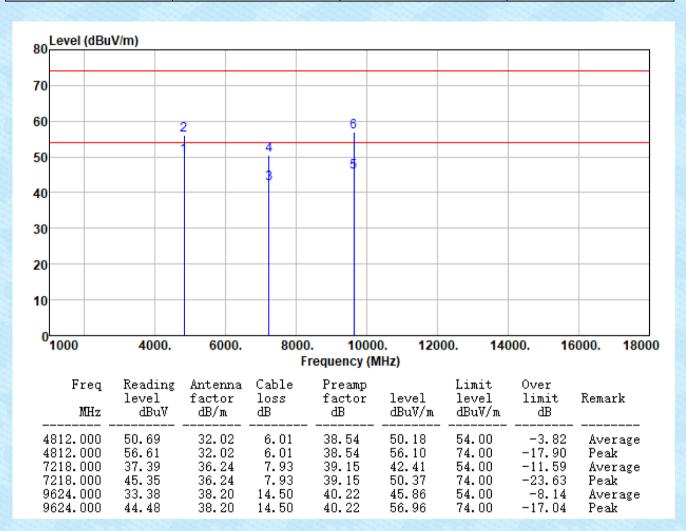
Unwanted Emissions in Non-restricted Frequency Bands

Test channel:	Lowest	Polarization:	Horizontal
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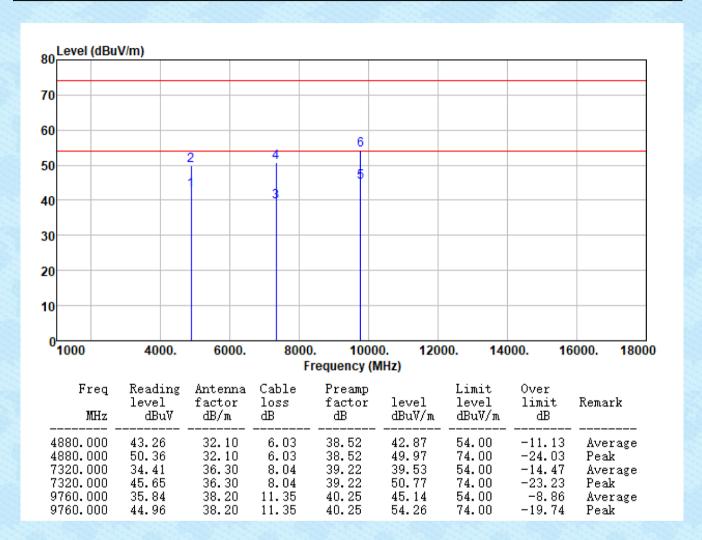


Test channel:	Lowest	Polarization:	Vertical
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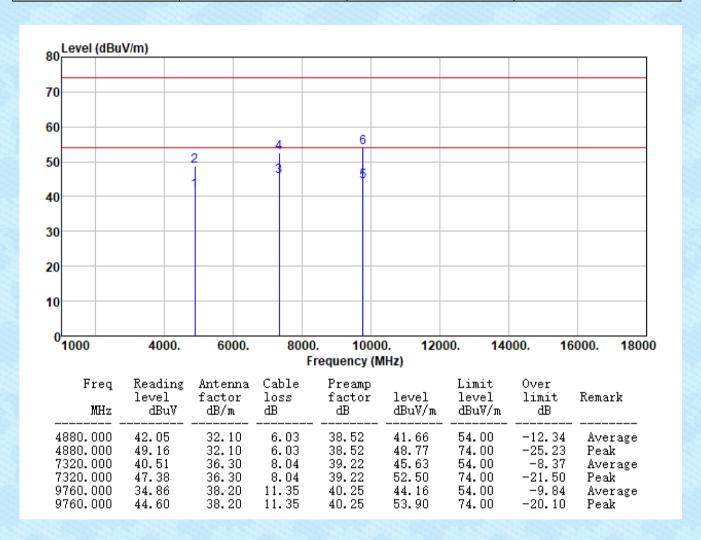


Test channel:	Middle	Polarization:	Horizontal
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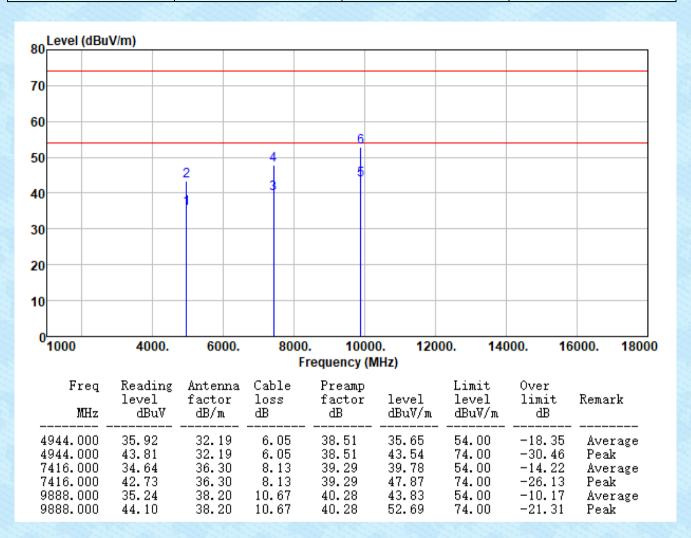


Test channel:	Middle	Polarization:	Vertical
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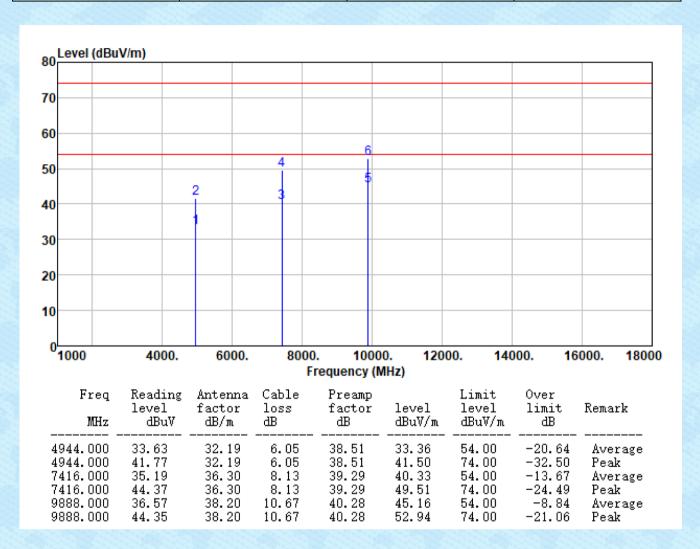


Test channel:	Highest	Polarization:	Horizontal
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Test channel:	Highest	Polarization:	Vertical
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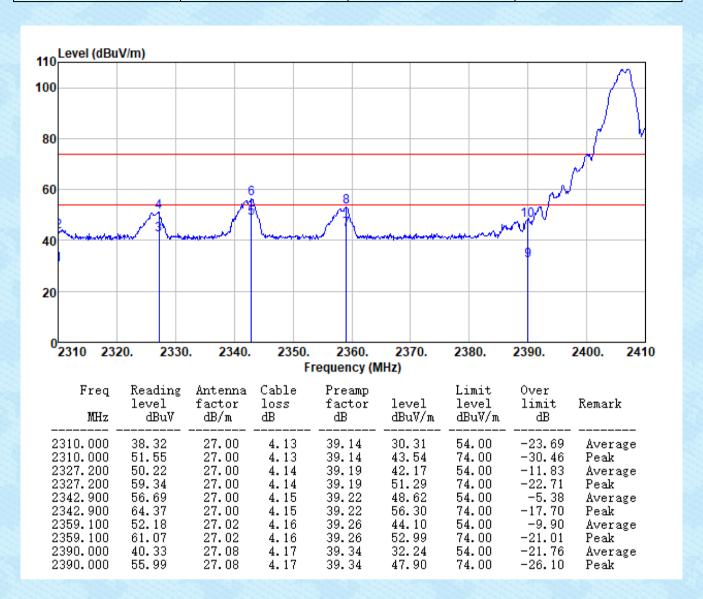
Remark:

- 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.
- 3. For above 18GHz, no emission found.



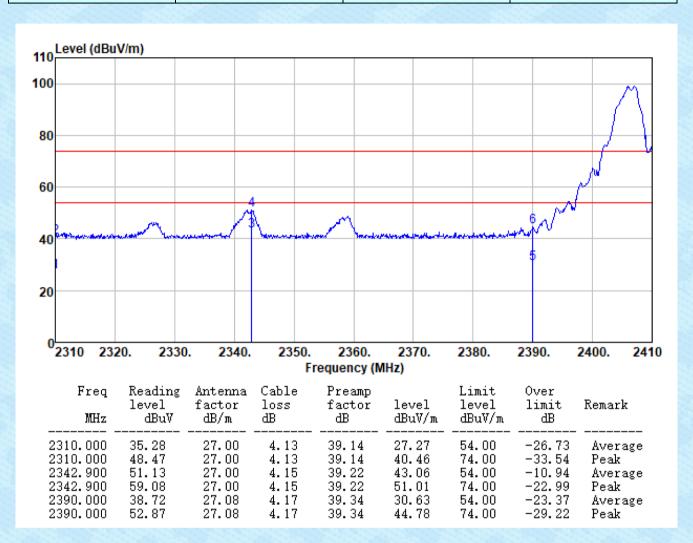
Unwanted Emissions in Restricted Frequency Bands

Test channel: Lowest Polarization: Horizontal





Test channel: Low	west	Polarization:	Vertical
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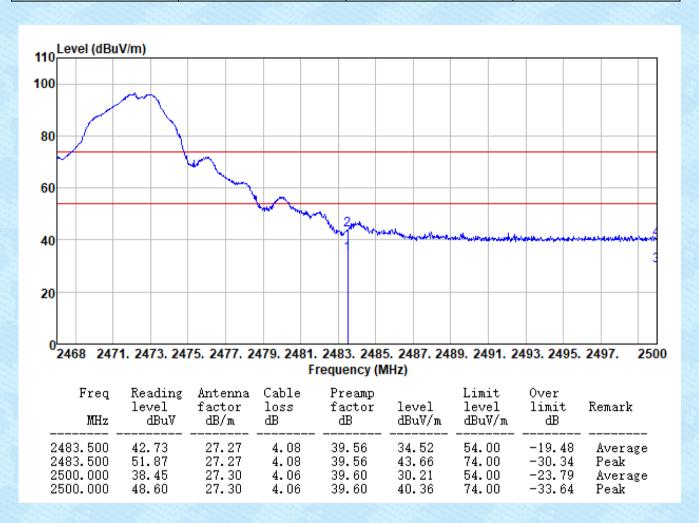
Test channel: Highest Horizontal Polarization:



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2483.500	54.42	27.27	4.08	39.56	46.21	54.00	-7.79	Average
2483.500	64.67	27.27	4.08	39.56	56.46	74.00	-17.54	Peak
2484.064	57.68	27.27	4.08	39.56	49.47	54.00	-4.53	Average
2484.064	67.74	27.27	4.08	39.56	59.53	74.00	-14.47	Peak
2500.000	37.17	27.30	4.06	39.60	28.93	54.00	-25.07	Average
2500.000	49.09	27.30	4.06	39.60	40.85	74.00	-33.15	Peak -



Test channel:	Highest	Polarziation:	Vertical
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Remarks:

- 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.



8 Test Setup Photo

Reference to the appendix I for details.

9 EUT Constructional Details

Reference to the appendix II for details.

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