

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 Manufacturer: ADD 16F, Huafeng Building, No. 6006 Shennan Road, FutianDistrict, Shenzhen, Guangdong, China

Factory: Dongguan Flysky RC Model technology Co.,Ltd

Address of Factory: West building 3, Huangjinyuan Ind Park, Qiaoli North Gate, Changping Town, Dongguan ,China

Equipment Under Test (EUT)

Product Name: 8-Channel Receiver

Model No.: FBr8

Trade Mark: FLYSKY

FCC ID: N4ZFGR8B

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

Date of sample receipt: October 23, 2023

Date of Test: October 24, 2023-November 02, 2023

Date of report issued: November 02, 2023

Test Result : PASS *

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

Authorized Signature:



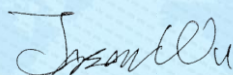
Robinson Luo
Laboratory Manager

This results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

2 Version

Version No.	Date	Description
00	November 02, 2023	Original

Prepared By:

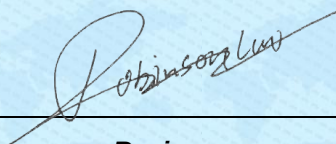


Date:

November 02, 2023

Project Engineer

Check By:



Date:

November 02, 2023

Reviewer

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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

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	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 uncertainty is for coverage factor of k=2 and a level of confidence of 95%.

5 General Information

5.1 General Description of EUT

Product Name:	8-Channel Receiver
Model No.:	FBr8
Serial No.:	N/A
Test sample(s) ID:	GTS2023100170-1
Sample(s) Status	Engineer sample
Operation Frequency:	2402.6MHz~2479.4MHz
Channel numbers:	43
Modulation technology:	GMSK, CSS
Antenna Type:	Integral Antenna
Antenna gain:	2dBi
Power supply:	DC 3.5~9V

Remark:

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 2402.6MHz to 2479.4MHz. This band has been divided to 43 independent channels. Each radio system uses 32 different channels; the minimum channel separation is ≥ 1 MHz. By using various switch-on times, hopping scheme and channel frequencies, the system can guarantee a jamming free radio transmission. Pre-testing all radio systems, this radio system recorded in the report is the worst mode. The channel list is below.

Operation Frequency each of channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2402.6	12	2422.4	23	2442.2	34	2463.2
2	2404.4	13	2424.2	24	2445.2	35	2465.0
3	2406.2	14	2426.0	25	2447.0	36	2466.8
4	2408.0	15	2427.8	26	2448.8	37	2468.6
5	2409.8	16	2429.6	27	2450.6	38	2470.4
6	2411.6	17	2431.4	28	2452.4	39	2472.2
7	2413.4	18	2433.2	29	2454.2	40	2474.0
8	2415.2	19	2435.0	30	2456.0	41	2475.8
9	2417.0	20	2436.8	31	2457.8	42	2477.6
10	2418.8	21	2438.6	32	2459.6	43	2479.4
11	2420.6	22	2440.4	33	2461.4		

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	2402.6MHz
The middle channel	2440.4MHz
The Highest channel	2479.4MHz

5.2 Test mode

Transmitting mode	Keep the EUT in transmitting mode.
Remark: During the test, the test voltage was tuned from DC3.5 to DC9.0V, and found that the worst case was the DC9.0V. So the report just shows that condition's data.	

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

5.5 Description of Support Units

Manufacturer	Description	Model	Serial Number
ShenZhen FLYSKY Technology Co.,Ltd	Remote control	FG4	N/A
MEILI	DC POWER SUPPLY	MCH-305A	011121168

5.6 Deviation from Standards

None.

5.7 Abnormalities from Standard Conditions

None.

5.8 Additional Instructions

Software (Used for test) from client
Built-in by manufacturer, power set default.

6 Test Instruments list

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	June 23, 2021	June 22, 2024
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	April 14, 2023	April 13, 2024
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9168	GTS640	March 19, 2023	March 18, 2025
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	April 17, 2023	April 16, 2025
6	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
7	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	April 14, 2023	April 13, 2024
8	Loop Antenna	ZHINAN	ZN30900A	GTS534	Nov. 29, 2022	Nov. 28, 2023
9	Broadband Preamplifier	SCHWARZBECK	BBV9718	GTS535	April 14, 2023	April 13, 2024
10	Amplifier(1GHz-26.5GHz)	HP	8449B	GTS601	April 14, 2023	April 13, 2024
11	Horn Antenna (18-26.5GHz)	/	UG-598A/U	GTS664	Oct. 29, 2023	Oct. 28, 2024
12	Horn Antenna (26.5-40GHz)	A.H Systems	SAS-573	GTS665	Oct. 29, 2023	Oct. 28, 2024
13	FSV·Signal Analyzer (10Hz-40GHz)	Keysight	FSV-40-N	GTS666	March 13, 2023	March 12, 2024
14	Amplifier	/	LNA-1000-30S	GTS650	April 14, 2023	April 13, 2024
15	CDNE M2+M3-16A	HCT	30MHz-300MHz	GTS668	Dec. 20, 2022	Dec.19, 2023
16	Wideband Amplifier	/	WDA-01004000-15P35	GTS602	April 14, 2023	April 13, 2024
17	Thermo meter	JINCHUANG	GSP-8A	GTS643	April 19, 2023	April 18, 2024
18	RE cable 1	GTS	N/A	GTS675	July 31. 2023	July 30. 2024
19	RE cable 2	GTS	N/A	GTS676	July 31. 2023	July 30. 2024
20	RE cable 3	GTS	N/A	GTS677	July 31. 2023	July 30. 2024
21	RE cable 4	GTS	N/A	GTS678	July 31. 2023	July 30. 2024
22	RE cable 5	GTS	N/A	GTS679	July 31. 2023	July 30. 2024
23	RE cable 6	GTS	N/A	GTS680	July 31. 2023	July 30. 2024
24	RE cable 7	GTS	N/A	GTS681	July 31. 2023	July 30. 2024
25	RE cable 8	GTS	N/A	GTS682	July 31. 2023	July 30. 2024

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	July 12, 2022	July 11, 2027
2	EMI Test Receiver	R&S	ESCI 7	GTS552	April 14, 2023	April 13, 2024
3	LISN	ROHDE & SCHWARZ	ENV216	GTS226	April 14, 2023	April 13, 2024
4	Coaxial Cable	GTS	N/A	GTS227	N/A	N/A
5	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
6	Thermo meter	JINCHUANG	GSP-8A	GTS642	April 19, 2023	April 18, 2024
7	Absorbing clamp	Elektronik-Feinmechanik	MDS21	GTS229	April 14, 2023	April 13, 2024
8	ISN	SCHWARZBECK	NTFM 8158	GTS565	April 14, 2023	April 13, 2024
9	High voltage probe	SCHWARZBECK	TK9420	GTS537	April 14, 2023	April 13, 2024
10	Antenna end assembly	Weinschel	1870A	GTS560	April 14, 2023	April 13, 2024

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	April 19, 2023	April 18, 2024

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:	
<i>The antenna is integral antenna, the best case gain of the antenna is 2dBi, reference to the appendix II for details.</i>	

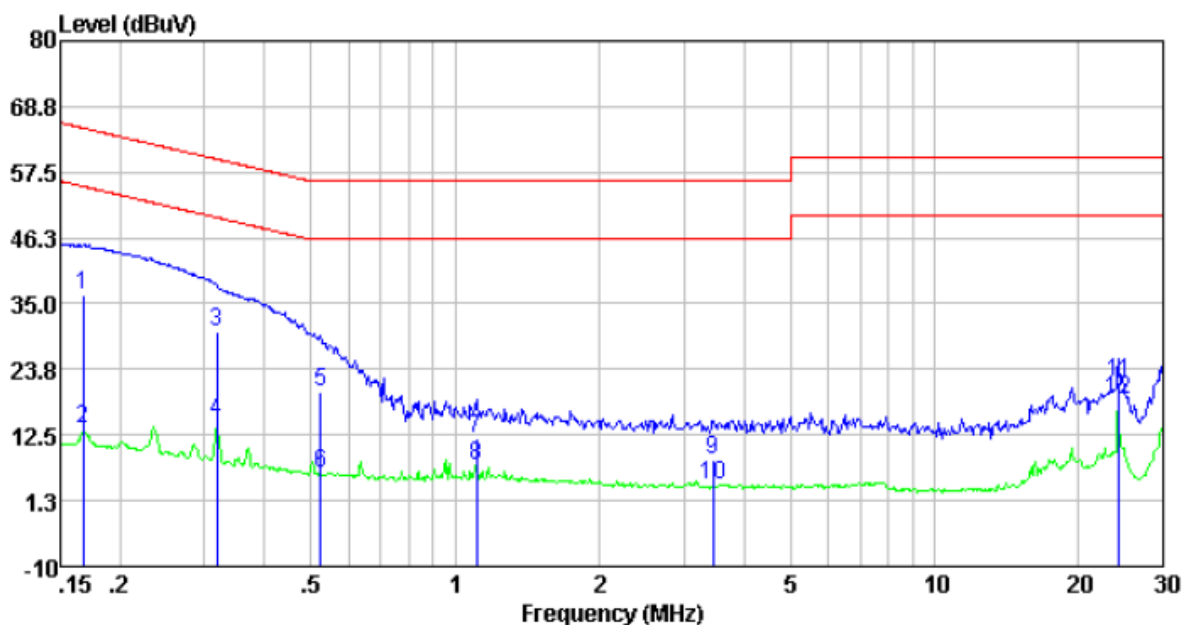
7.2 Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.207						
Test Method:	ANSI C63.10:2013						
Test Frequency Range:	150KHz to 30MHz						
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep 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 logarithm of the frequency.							
Test setup:	Reference Plane Remark: E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m						
Test procedure:	1. 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. 2. 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). 3. 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:

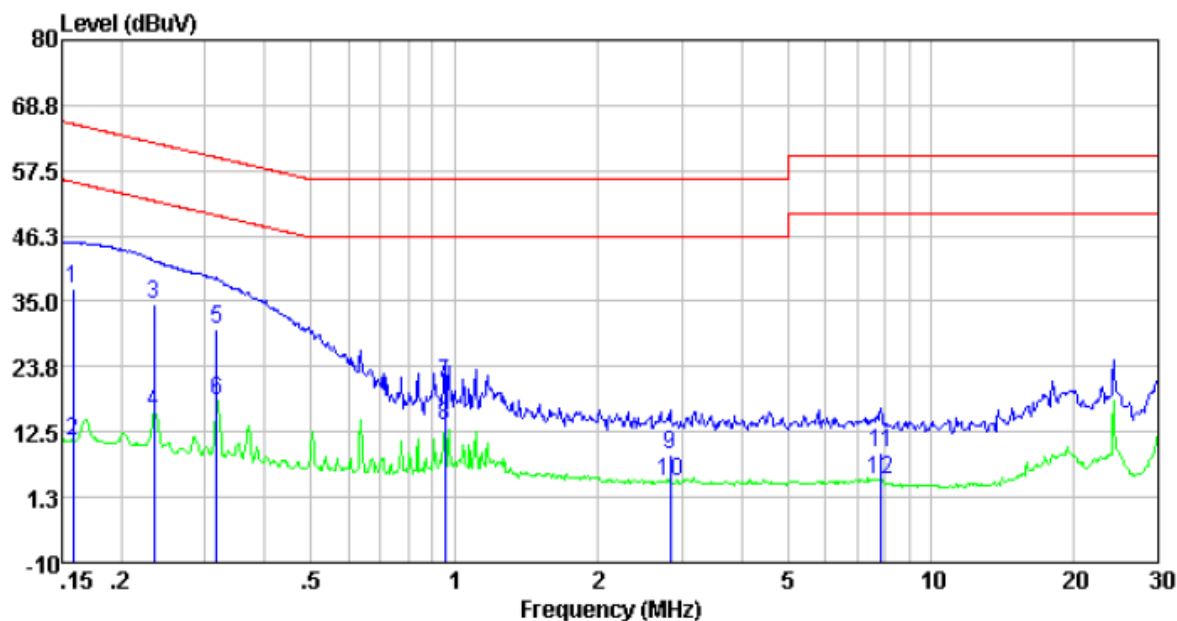
Pre-scan all test modes, found worst case at 2402.6MHz, and so only show the test result of it

Line:



Freq	Reading	LISN/ISN	Cable	Level	Limit	Over	Remark
MHz	dBuV	dB	dB	dBuV	dBuV	dB	
0.17	27.04	9.54	0.01	36.59	65.08	-28.49	QP
0.17	3.87	9.54	0.01	13.42	55.08	-41.66	Average
0.32	20.60	9.49	0.01	30.10	59.75	-29.65	QP
0.32	5.38	9.49	0.01	14.88	49.75	-34.87	Average
0.52	10.49	9.49	0.01	19.99	56.00	-36.01	QP
0.52	-3.59	9.49	0.01	5.91	46.00	-40.09	Average
1.11	2.27	9.51	0.03	11.81	56.00	-44.19	QP
1.11	-2.11	9.51	0.03	7.43	46.00	-38.57	Average
3.45	-1.22	9.52	0.06	8.36	56.00	-47.64	QP
3.45	-5.76	9.52	0.06	3.82	46.00	-42.18	Average
24.23	11.48	10.00	0.19	21.67	60.00	-38.33	QP
24.23	8.53	10.00	0.19	18.72	50.00	-31.28	Average

Neutral:



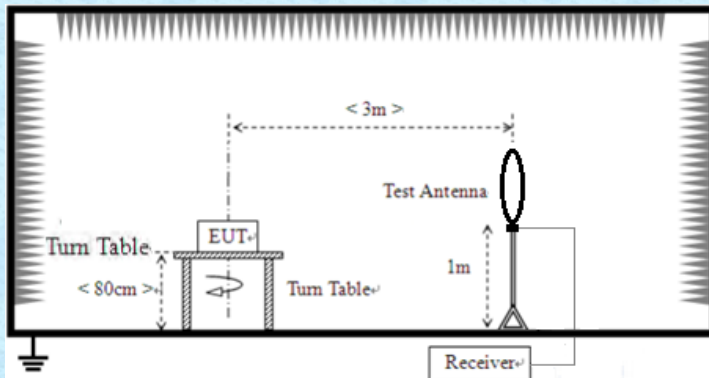
Freq	Reading	LISN/ISN	Cable	Level	Limit	Over	Remark
MHz	dBuV	factor	loss	dBuV	dBuV	limit	
0.16	27.49	9.55	0.01	37.05	65.56	-28.51	QP
0.16	1.44	9.55	0.01	11.00	55.56	-44.56	Average
0.23	24.93	9.56	0.01	34.50	62.30	-27.80	QP
0.23	6.36	9.56	0.01	15.93	52.30	-36.37	Average
0.32	20.69	9.56	0.01	30.26	59.80	-29.54	QP
0.32	8.17	9.56	0.01	17.74	49.80	-32.06	Average
0.95	11.37	9.55	0.03	20.95	56.00	-35.05	QP
0.95	3.88	9.55	0.03	13.46	46.00	-32.54	Average
2.84	-1.02	9.56	0.05	8.59	56.00	-47.41	QP
2.84	-5.58	9.56	0.05	4.03	46.00	-41.97	Average
7.85	-0.63	9.52	0.09	8.98	60.00	-51.02	QP
7.85	-5.24	9.52	0.09	4.37	50.00	-45.63	Average

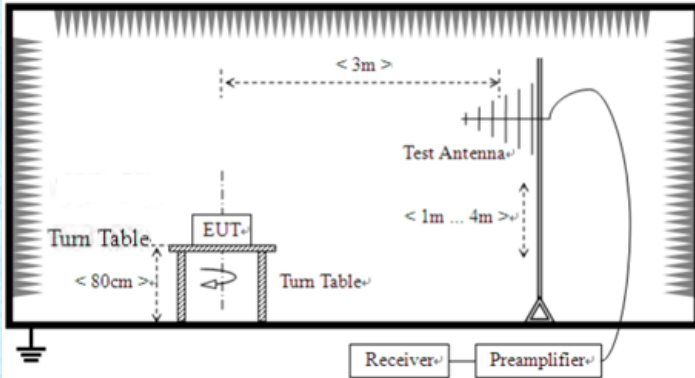
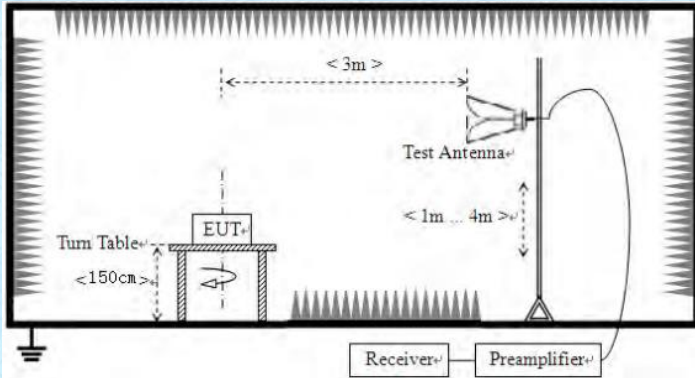
Notes:

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

7.3 Spurious Emission in Non-restricted & restricted Bands

7.3.1 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209 and 15.205				
Test Method:	ANSI C63.10:2013				
Test Frequency Range:	9kHz to 25GHz				
Test site:	Measurement Distance: 3m				
Receiver setup:	Frequency	Detector	RBW	VBW	Value
	9KHz-150KHz	Quasi-peak	200Hz	600Hz	Quasi-peak
	150KHz-30MHz	Quasi-peak	9KHz	30KHz	Quasi-peak
	30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
		Peak	1MHz	10Hz	Average
	Note: For Duty cycle ≥ 98%, average detector set as above For Duty cycle < 98%, average detector set as below: VBW ≥ 1 / T				
Limit: (Spurious Emissions)	Frequency	Limit (uV/m)	Value	Measurement Distance	
	0.009MHz-0.490MHz	2400/F(KHz)	QP	300m	
	0.490MHz-1.705MHz	24000/F(KHz)	QP	300m	
	1.705MHz-30MHz	30	QP	30m	
	30MHz-88MHz	100	QP	3m	
	88MHz-216MHz	150	QP		
	216MHz-960MHz	200	QP		
	960MHz-1GHz	500	QP		
	Above 1GHz	500	Average		
		5000	Peak		
Test setup:	Below 30MHz				
					
	Below 1GHz				

	Report No.: C/20201001707  Above 1GHz 					
Test Procedure:	1. 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 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. 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

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.

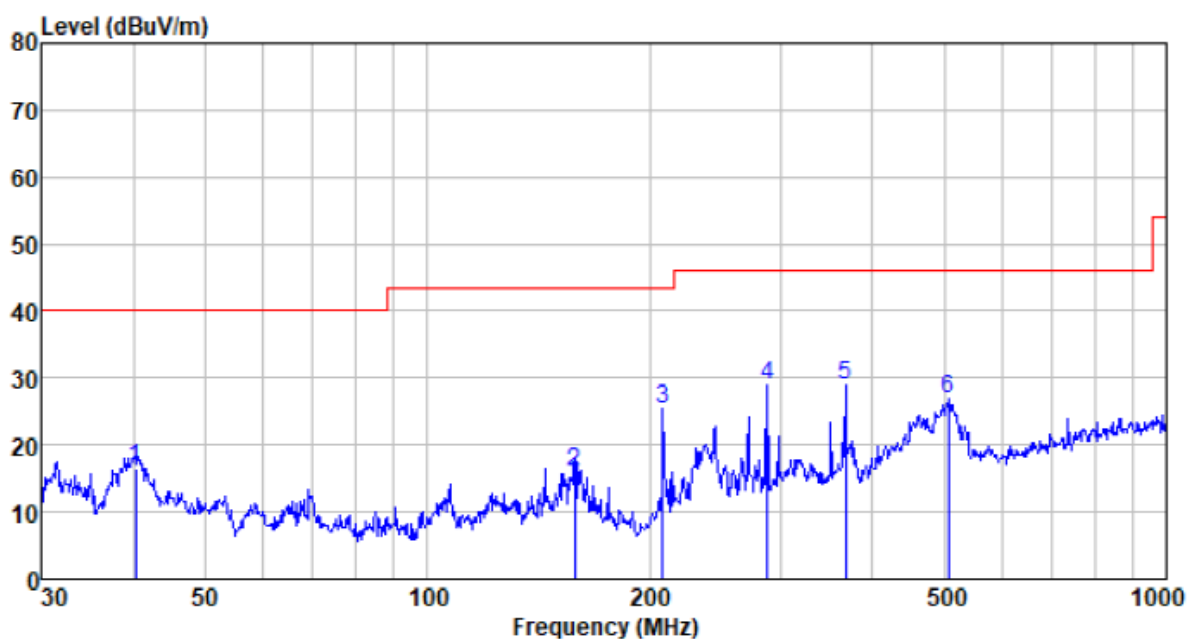
Measurement data:

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.

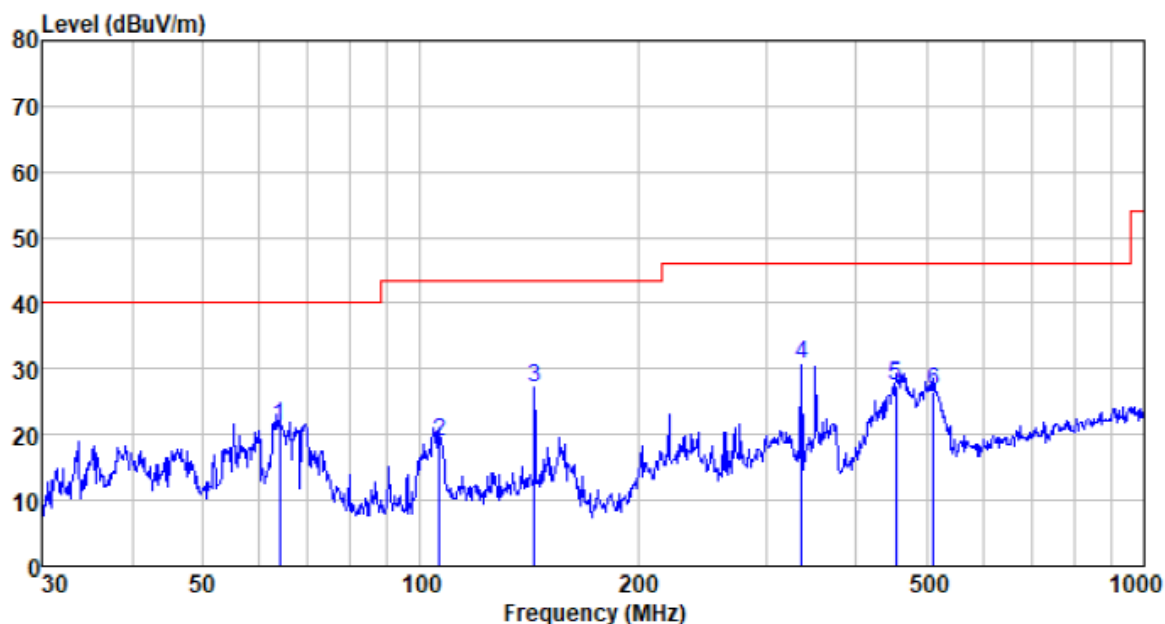
30MHz ~ 1GHz

Test channel:	Lowest	Polarization:	Horizontal
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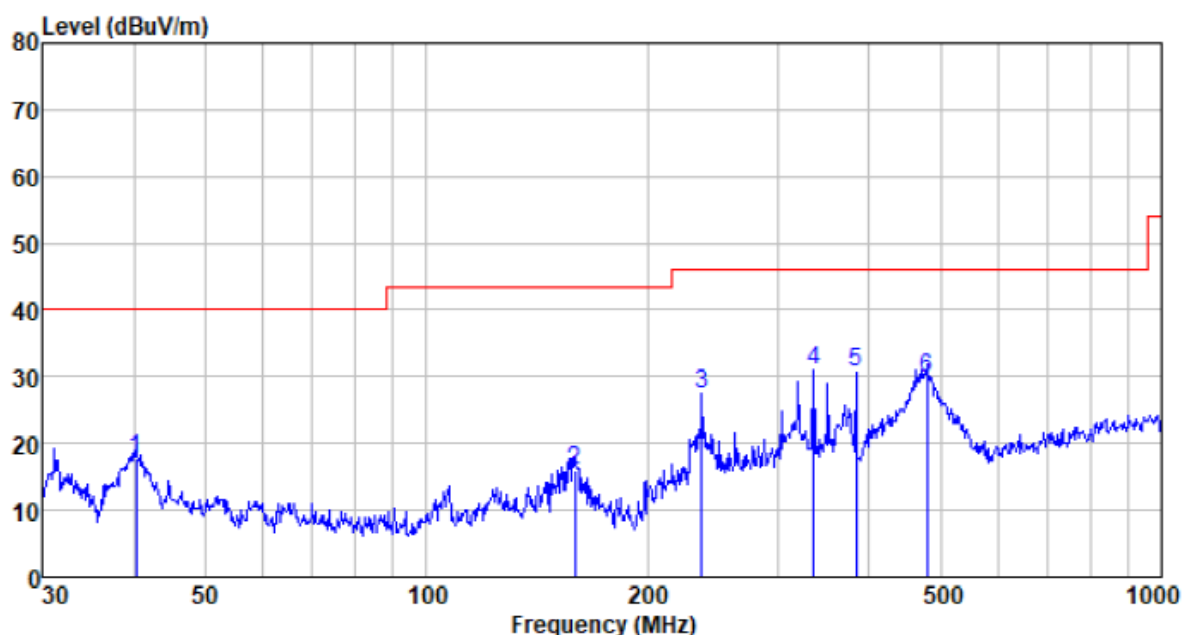
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
40.276	32.31	13.49	0.66	30.00	16.46	40.00	-23.54	QP
158.112	31.87	12.58	1.62	30.00	16.07	43.50	-27.43	QP
207.850	43.89	9.64	1.89	30.00	25.42	43.50	-18.08	QP
287.990	43.88	12.70	2.31	30.00	28.89	46.00	-17.11	QP
368.112	41.40	14.75	2.71	30.00	28.86	46.00	-17.14	QP
506.479	35.80	17.72	3.33	30.00	26.85	46.00	-19.15	QP

Test channel:	Lowest	Polarization:	Vertical
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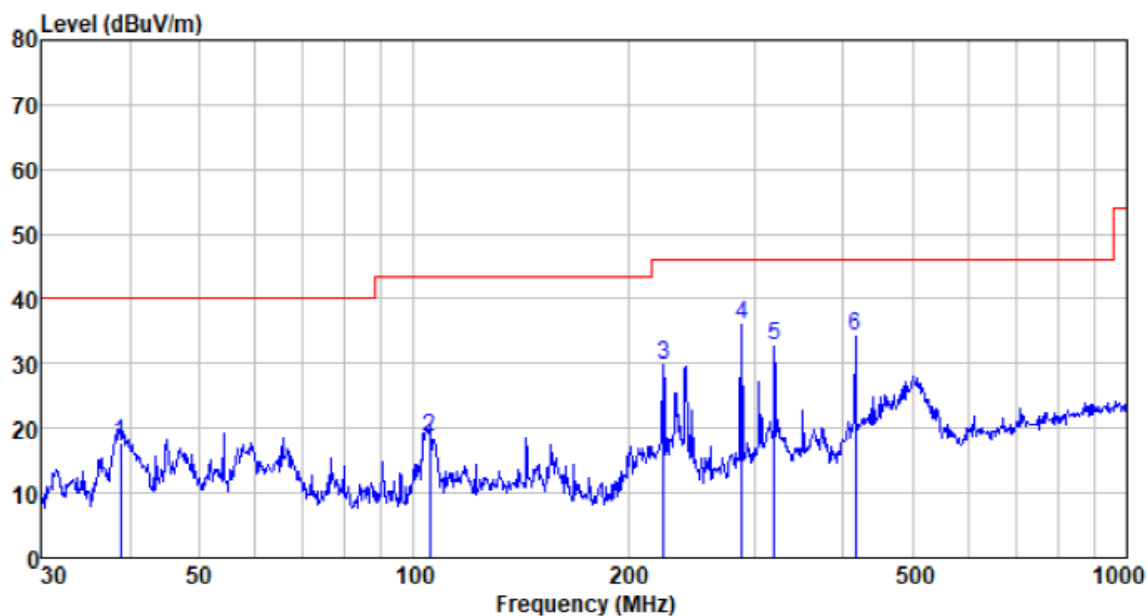
Freq MHz	Reading level dBUV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBUV/m	Limit level dBUV/m	Over limit dB	Remark
63.983	38.50	11.72	0.89	30.00	21.11	40.00	-18.89	QP
106.385	37.43	10.21	1.25	30.00	18.89	43.50	-24.61	QP
143.830	43.05	12.44	1.53	30.00	27.02	43.50	-16.48	QP
336.035	44.50	13.70	2.55	30.00	30.75	46.00	-15.25	QP
454.310	37.46	16.78	3.11	30.00	27.35	46.00	-18.65	QP
511.835	35.40	17.82	3.36	30.00	26.58	46.00	-19.42	QP

Test channel:	Middle	Polarization:	Horizontal
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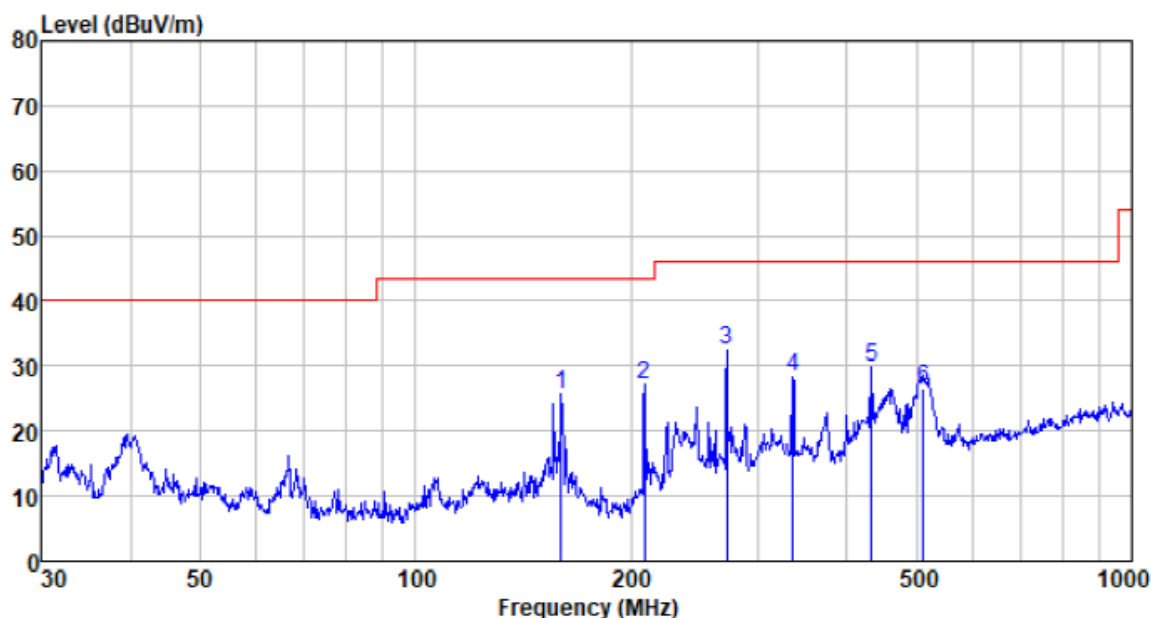
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
40.276	33.61	13.49	0.66	30.00	17.76	40.00	-22.24	QP
159.225	31.67	12.59	1.62	30.00	15.88	43.50	-27.62	QP
236.645	44.15	11.39	2.05	30.00	27.59	46.00	-18.41	QP
336.035	44.64	13.70	2.55	30.00	30.89	46.00	-15.11	QP
383.932	42.70	15.23	2.78	30.00	30.71	46.00	-15.29	QP
478.846	39.38	17.23	3.22	30.00	29.83	46.00	-16.17	QP

Test channel:	Middle	Polarization:	Vertical
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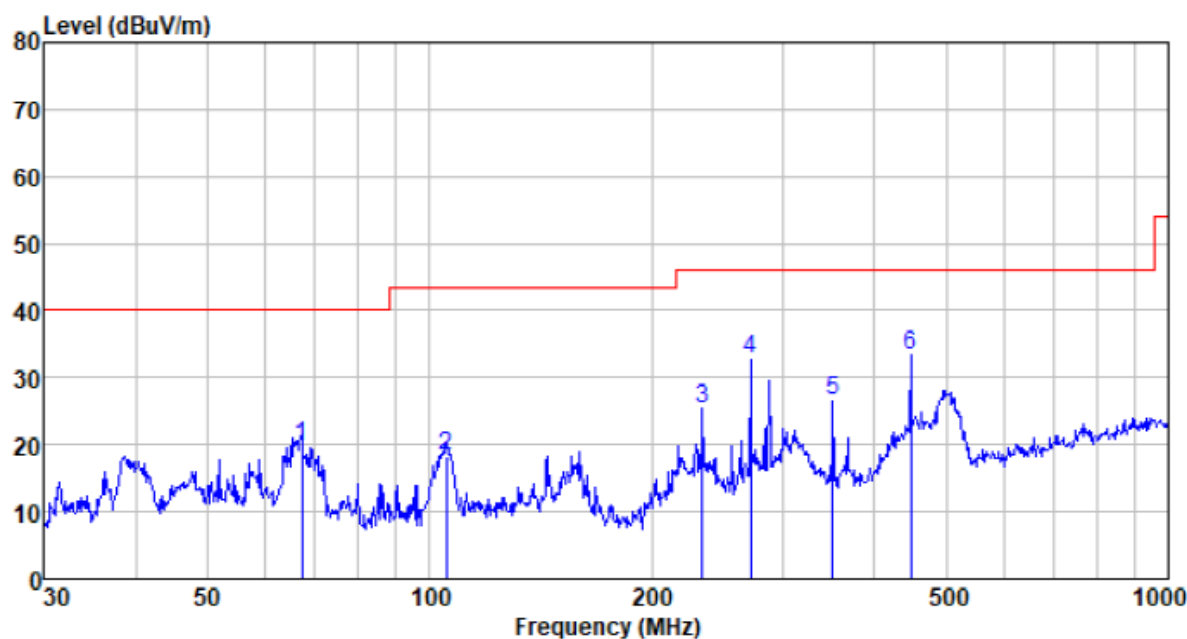
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
38.752	33.88	13.31	0.65	30.00	17.84	40.00	-22.16	QP
105.272	37.24	10.12	1.24	30.00	18.60	43.50	-24.90	QP
223.733	47.43	10.55	1.98	30.00	29.96	46.00	-16.04	QP
287.990	50.94	12.70	2.31	30.00	35.95	46.00	-10.05	QP
319.937	47.15	13.14	2.47	30.00	32.76	46.00	-13.24	QP
416.179	45.30	16.04	2.93	30.00	34.27	46.00	-11.73	QP

Test channel:	Highest	Polarization:	Horizontal
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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
159.784	41.57	12.60	1.63	30.00	25.80	43.50	-17.70	QP
208.580	45.68	9.68	1.89	30.00	27.25	43.50	-16.25	QP
272.278	48.04	12.30	2.24	30.00	32.58	46.00	-13.42	QP
336.035	42.08	13.70	2.55	30.00	28.33	46.00	-17.67	QP
432.546	40.40	16.37	3.01	30.00	29.78	46.00	-16.22	QP
511.835	35.48	17.82	3.36	30.00	26.66	46.00	-19.34	QP

Test channel:	Highest	Polarization:	Vertical
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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
67.202	37.70	11.06	0.92	30.00	19.68	40.00	-20.32	QP
105.272	37.04	10.12	1.24	30.00	18.40	43.50	-25.10	QP
234.168	42.07	11.23	2.04	30.00	25.34	46.00	-20.66	QP
272.278	48.12	12.30	2.24	30.00	32.66	46.00	-13.34	QP
351.708	39.67	14.22	2.63	30.00	26.52	46.00	-19.48	QP
447.982	43.67	16.66	3.08	30.00	33.41	46.00	-12.59	QP

■ Above 1GHz

Test channel:	Lowest channel
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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
4805.20	45.37	31.22	4.63	37.68	43.54	74.00	-30.46	Vertical
7207.80	37.18	36.25	6.52	37.81	42.14	74.00	-31.86	Vertical
9610.40	36.23	37.97	7.98	37.93	44.25	74.00	-29.75	Vertical
4805.20	51.30	31.22	4.63	37.68	49.47	74.00	-24.53	Horizontal
7207.80	39.65	36.25	6.52	37.81	44.61	74.00	-29.39	Horizontal
9610.40	36.42	37.97	7.98	37.93	44.44	74.00	-29.56	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
4805.20	32.66	31.22	4.63	37.68	30.83	54.00	-23.17	Vertical
7207.80	24.95	36.25	6.52	37.81	29.91	54.00	-24.09	Vertical
9610.40	23.53	37.97	7.98	37.93	31.55	54.00	-22.45	Vertical
4805.20	37.78	31.22	4.63	37.68	35.95	54.00	-18.05	Horizontal
7207.80	27.66	36.25	6.52	37.81	32.62	54.00	-21.38	Horizontal
9610.40	23.92	37.97	7.98	37.93	31.94	54.00	-22.06	Horizontal

Test channel:	Middle
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Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4880.80	46.60	31.33	4.69	37.62	45.00	74.00	-29.00	Vertical
7321.20	38.00	36.43	6.63	37.77	43.29	74.00	-30.71	Vertical
9761.60	36.96	38.10	8.03	37.95	45.14	74.00	-28.86	Vertical
4880.80	52.79	31.33	4.69	37.62	51.19	74.00	-22.81	Horizontal
7321.20	40.57	36.43	6.63	37.77	45.86	74.00	-28.14	Horizontal
9761.60	37.26	38.10	8.03	37.95	45.44	74.00	-28.56	Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4880.80	33.71	31.33	4.69	37.62	32.11	54.00	-21.89	Vertical
7321.20	25.67	36.43	6.63	37.77	30.96	54.00	-23.04	Vertical
9761.60	24.16	38.10	8.03	37.95	32.34	54.00	-21.66	Vertical
4880.80	38.98	31.33	4.69	37.62	37.38	54.00	-16.62	Horizontal
7321.20	28.46	36.43	6.63	37.77	33.75	54.00	-20.25	Horizontal
9761.60	24.67	38.10	8.03	37.95	32.85	54.00	-21.15	Horizontal

Test channel:	Highest
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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
4958.80	45.65	31.41	4.77	37.56	44.27	74.00	-29.73	Vertical
7438.20	37.37	36.62	6.73	37.73	42.99	74.00	-31.01	Vertical
9917.60	36.40	38.27	8.08	37.98	44.77	74.00	-29.23	Vertical
4958.80	51.64	31.41	4.77	37.56	50.26	74.00	-23.74	Horizontal
7438.20	39.86	36.62	6.73	37.73	45.48	74.00	-28.52	Horizontal
9917.60	36.61	38.27	8.08	37.98	44.98	74.00	-29.02	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
4958.80	33.24	31.41	4.77	37.56	31.86	54.00	-22.14	Vertical
7438.20	25.35	36.62	6.73	37.73	30.97	54.00	-23.03	Vertical
9917.60	23.88	38.27	8.08	37.98	32.25	54.00	-21.75	Vertical
4958.80	38.44	31.41	4.77	37.56	37.06	54.00	-16.94	Horizontal
7438.20	28.10	36.62	6.73	37.73	33.72	54.00	-20.28	Horizontal
9917.60	24.33	38.27	8.08	37.98	32.70	54.00	-21.30	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.
4. For above 18GHz, no emission found.

■ Unwanted Emissions in Restricted Frequency Bands

Test channel:	Lowest channel
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Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	59.52	27.14	2.81	38.64	50.83	74.00	-23.17	Horizontal
2390.00	65.69	27.37	2.91	38.84	57.13	74.00	-16.87	Horizontal
2310.00	61.66	27.14	2.81	38.64	52.97	74.00	-21.03	Vertical
2390.00	68.51	27.37	2.91	38.84	59.95	74.00	-14.05	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	46.31	27.14	2.81	38.64	37.62	54.00	-16.38	Horizontal
2390.00	48.54	27.37	2.91	38.84	39.98	54.00	-14.03	Horizontal
2310.00	47.44	27.14	2.81	38.64	38.75	54.00	-15.25	Vertical
2390.00	50.77	27.37	2.91	38.84	42.21	54.00	-11.79	Vertical

Test channel:	Highest channel
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Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	63.61	27.82	2.99	39.05	55.37	74.00	-18.63	Horizontal
2500.00	59.61	27.70	3.01	39.10	51.22	74.00	-22.78	Horizontal
2483.50	67.22	27.82	2.99	39.05	58.98	74.00	-15.02	Vertical
2500.00	62.19	27.70	3.01	39.10	53.80	74.00	-20.20	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	47.33	27.82	2.99	39.05	39.09	54.00	-14.91	Horizontal
2500.00	44.96	27.70	3.01	39.10	36.57	54.00	-17.43	Horizontal
2483.50	43.47	27.82	2.99	39.05	35.23	54.00	-18.77	Vertical
2500.00	46.27	27.70	3.01	39.10	37.88	54.00	-16.12	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.

8 Test Setup Photo

Reference to the **appendix I** for details.

9 EUT Constructional Details

Reference to the **appendix II** for details.

---End---