

FCC Test Report

Report No.: AGC15920230801FR01

FCC ID	:	S34-DFD848
APPLICATION PURPOSE	:	Original Equipment
PRODUCT DESIGNATION	:	REMOTE CONTROL PRODUCTS
BRAND NAME	:	N/A
MODEL NAME	:	F08, F05, F06, 1886, 1888, 1889, K101, K102, K103, K104, K105, K106, K107, K108, K109, K181, K182, K183, K185, K186
APPLICANT	:	SHANTOU DFD TOYS CO., LTD.
DATE OF ISSUE	:	Aug. 31, 2023
STANDARD(S) TEST PROCEDURE(S)	:	FCC Part 15 Subpart C §15.249
REPORT VERSION	:	V1.0







REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Aug. 31, 2023	Valid	Initial Release



TABLE OF CONTENTS

1. VERIFICATION OF CONFORMITY	4
2. GENERAL INFORMATION	5
2.1. PRODUCT DESCRIPTION	5
2.2. TABLE OF CARRIER FREQUENCY	6
3. MEASUREMENT UNCERTAINTY	7
4. DESCRIPTION OF TEST MODES	8
5. SYSTEM TEST CONFIGURATION	9
5.1. CONFIGURATION OF EUT SYSTEM	9
5.2 EQUIPMENT USED IN TESTED SYSTEM	9
5.3. SUMMARY OF TEST RESULTS	9
6. TEST FACILITY	10
7. RADIATED EMISSION	11
7.1TEST LIMIT	11
7.2. MEASUREMENT PROCEDURE	12
7.3. TEST SETUP	14
7.4. TEST RESULT	16
8. BAND EDGE EMISSION	22
8.1. MEASUREMENT PROCEDURE	22
8.2 TEST SETUP	22
8.3 TEST RESULT	22
9. 20DB BANDWIDTH	27
9.1. MEASUREMENT PROCEDURE	27
9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	27
9.3. MEASUREMENT RESULTS	28
APPENDIX A: PHOTOGRAPHS OF TEST SETUP	30
APPENDIX B: PHOTOGRAPHS OF THE EUT	30



1. VERIFICATION OF CONFORMITY

Applicant	SHANTOU DFD TOYS CO., LTD.			
Address	Meixin Area, Zhenxing Road, Guangyi Street, Pumei Tow Shantou City, Guangdong Provine, China			
Manufacturer	SHANTOU DFD TOYS CO., LTD.			
Address	Meixin Area, Zhenxing Road, Guangyi Street, Pumei Tow Shantou City, Guangdong Provine, China			
Factory	SHANTOU DFD TOYS CO., LTD.			
Address	Meixin Area, Zhenxing Road, Guangyi Street, Pumei Tow Shantou City, Guangdong Provine, China			
Product Designation	REMOTE CONTROL PRODUCTS			
Brand Name	N/A			
Test Model	F08			
Series Model	F05, F06, 1886, 1888, 1889, K101, K102, K103, K104, K105, K106, K107, K108, K109, K181, K182, K183, K185, K186			
Difference Description	All the series models are the same as the test model except for the model names.			
Date of receipt of test item	Aug. 17, 2023			
Date of test	Aug. 17, 2023 to Aug. 29, 2023			
Deviation	No any deviation from the test method			
Condition of Test Sample	Normal			
Test Result	Pass			
Report Template	AGCRT-US-2.4G/RF			

We hereby certify that:

The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC Rules Part 15.249.

ましう Prepared By Cici Li Aug. 31, 2023 (Project Engineer) **Reviewed By** Calvin Liu Aug. 31, 2023 (Reviewer) Max Zhan Approved By Max Zhang

(Authorized Officer)

Aug. 31, 2023



2. GENERAL INFORMATION

2.1. PRODUCT DESCRIPTION

A major technical description of EUT is described as following

Operation Frequency	2402MHz to 2479MHz	
Maximum field strength	84.74dBµV/m(Peak)@3m	
	74.56dBµV/m(Average)@3m	
Modulation	GFSK	
Number of channels	78	
Antenna Gain	2.20dBi	
Antenna Designation	Wire Antenna (Met 15.203 Antenna requirement)	
Hardware Version	CD-F08	
Software Version	CD-F08	
Power Supply	DC 4.5V by battery	



2.2. TABLE OF CARRIER FREQUENCY

Channel	Frequency	Channel	Frequency	Channel	Frequency
Number	(MHZ)	Number	(MHZ)	Number	(MHZ)
01	2402	27	2428	53	2454
02	2403	28	2429	54	2455
03	2404	29	2430	55	2456
04	2405	30	2431	56	2457
05	2406	31	2432	57	2458
06	2407	32	2433	58	2459
07	2408	33	2434	59	2460
08	2409	34	2435	60	2461
09	2410	35	2436	61	2462
10	2411	36	2437	62	2463
11	2412	37	2438	63	2464
12	2413	38	2439	64	2465
13	2414	39	2440	65	2466
14	2415	40	2441	66	2467
15	2416	41	2442	67	2468
16	2417	42	2443	68	2469
17	2418	43	2444	69	2470
18	2419	44	2445	70	2471
19	2420	45	2446	71	2472
20	2421	46	2447	72	2473
21	2422	47	2448	73	2474
22	2423	48	2449	74	2475
23	2424	49	2450	75	2476
24	2425	50	2451	76	2477
25	2426	51	2452	77	2478
26	2427	52	2453	78	2479



3. MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement y ±U, where expended uncertainty U is based on a standard

uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

- Uncertainty of Conducted Emission, Uc = ±2.9 dB
- Uncertainty of Radiated Emission below 1GHz, Uc = ±3.9 dB
- Uncertainty of Radiated Emission above 1GHz, Uc = ±4.9 dB
- Uncertainty of Occupied Channel Bandwidth: $Uc = \pm 2 \%$



4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION				
1	Low channel TX_2402MHz_GFSK				
2	Middle channel TX_2442MHz_GFSK				
3	High channel TX_2479MHz_GFSK				
Note:	Note:				
1. O	1. Only the result of the worst case was recorded in the report, if no other cases.				
2. F	2. For Radiated Emission, 3axis were chosen for testing for each applicable mode.				

3. The EUT adjusts the frequency through the button.

4. For battery operated equipment, the equipment tests are performed using a new battery.



5. SYSTEM TEST CONFIGURATION

5.1. CONFIGURATION OF EUT SYSTEM

Configure:



5.2 EQUIPMENT USED IN TESTED SYSTEM

Item	Equipment	Model No.	ID or Specification	Remark
1	REMOTE CONTROL PRODUCTS	F08	S34-DFD848	EUT

5.3. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
§15.249&15.209	Radiated Emission	Compliant
§15.249	Band Edges	Compliant
§15.215	20dB bandwidth	Compliant
§15.207	Conducted Emission	Not applicable

Note: The conducted emission tests at AC port are not required for devices which only employ battery power for operation.



6. TEST FACILITY

Test Site	Attestation of Global Compliance (Shenzhen) Co., Ltd		
Location	1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China		
Designation Number	CN1259		
FCC Test Firm Registration Number	975832		
A2LA Cert. No.	5054.02		
Description	Attestation of Global Compliance(Shenzhen) Co., Ltd is accredited by A2LA		

TEST EQUIPMENT OF RADIATED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
Test Receiver	R&S	ESCI	10096	Feb. 18, 2023	Feb. 17, 2024
Signal Analyzer	Aglient	N9020A	MY52090123	Jun. 01, 2023	May 31, 2024
EXA Signal Analyzer	Agilent	N9010A	MY53470504	Jun. 01, 2023	May 31, 2024
2.4GHz Filter	EM Electronics	N/A	N/A	Mar. 18, 2022	Mar. 19, 2024
Horn Antenna	SCHWARZBEC	BBHA9170	768	Oct. 31, 2021	Oct. 30, 2023
Active Loop Antenna (9K-30Mhz)	ZHINAN	ZN30900C	18051	Mar. 12, 2022	Mar. 11, 2024
Double-Ridged Waveguide Horn	ETS	3117	00034609	Mar. 23, 2023	Mar. 22, 2024
Preamplifer	ETS	3117-PA	00246148	Aug. 04, 2022	Aug. 03, 2024
Wideband Antenna	SCHWARZBECK	VULB9168	VULB9168-494	Jan. 05, 2023	Jan. 04, 2024
Test Software	Tonscend	4.0.0.0	N/A	N/A	N/A



7. RADIATED EMISSION

7.1TEST LIMIT

Standard FCC15.249

Fundamental Frequency	Field Strength of Fundamental	Field Strength of Harmonics	
	(millivolts/meter)	(microvolts/meter)	
900-928MHz	50	500	
2400-2483.5MHz	50	500	
5725-5875MHz	50	500	
24.0-24.25GHz	250	2500	

Standard FCC 15.209

Frequency	Distance	Field Strengths Limit				
(MHz)	Meters	μ V/m	dB(µV)/m			
0.009 ~ 0.490	300	2400/F(kHz)				
0.490 ~ 1.705	30	24000/F(kHz)				
1.705 ~ 30	30	30				
30 ~ 88	3	100	40.0			
88 ~ 216	3	150	43.5			
216 ~ 960	3	200	46.0			
960 ~ 1000	3	500	54.0			
Above 1000 3 Other:74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)						
Remark: (1) Emission level dB μ V = 20 log Emission level μ V/m						
(2) The smalle	(2) The smaller limit shall apply at the cross point between two frequency bands.					

(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

7.2. MEASUREMENT PROCEDURE

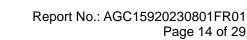
- 1. The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
- 4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
- 5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
- 6. For emissions above 1GHz, use minimum resolution bandwidth of 1 MHz. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- 7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
- 8.If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High Low scan is not required in this case.



The following table is the setting of spectrum analyzer and receiver.

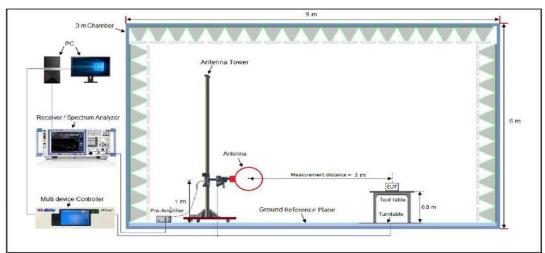
Spectrum Parameter	Setting		
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP		
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP		
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP		
	1GHz~26.5GHz		
Start ~Stop Frequency	RBW 2.4MHz/ VBW 8MHz for Peak,		
	RBW 2.4MHz/10Hz for Average		

Receiver Parameter	Setting
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP



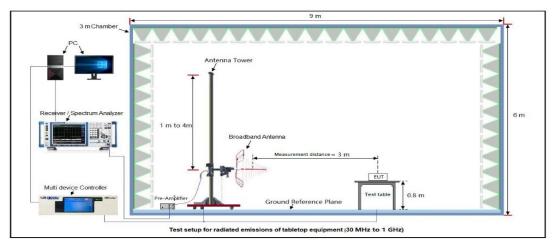


7.3. TEST SETUP

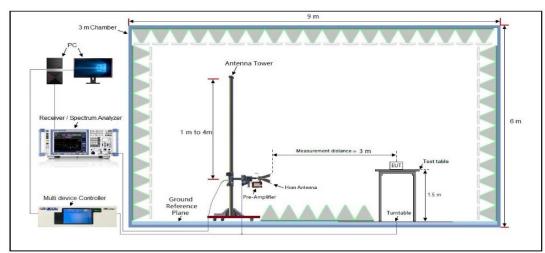


Radiated Emission Test-Setup Frequency Below 30MHz

RADIATED EMISSION TEST SETUP 30MHz-1000MHz



RADIATED EMISSION TEST SETUP ABOVE 1000MHz



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

 Attestation of Global Compliance(Shenzhen)Co., Ltd

 Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

 Tel: +86-755 2523 4088
 E-mail: agc@agccert.com



Report No.: AGC15920230801FR01 Page 15 of 29

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Attestation of Global Compliance(Shenzhen)Co., Ltd Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/

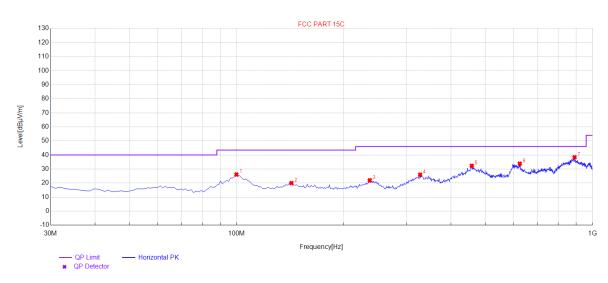


7.4. TEST RESULT

RADIATED EMISSION BELOW 30MHZ

The amplitude of spurious emissions from 9kHz to 30MHz which are attenuated more than 20 dB below the permissible value need not be reported.

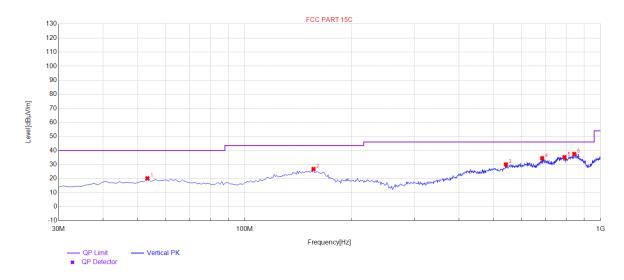
RADIATED EMISSION 30MHz- 1GHZ						
	REMOTE CONTROL PRODUCTS	Model Name	F08			
Temperature	23.5°C	Relative Humidity	59.8%			
Pressure	985kPa	Test Voltage	Normal Voltage			
Test Mode	Mode 3	Polarization	Horizontal			



NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	99.84	26.10	21.38	43.50	17.40	100	250	Horizontal
2	142.52	20.00	14.76	43.50	23.50	100	190	Horizontal
3	236.61	21.99	16.96	46.00	24.01	100	310	Horizontal
4	327.79	25.99	21.14	46.00	20.01	100	240	Horizontal
5	457.77	32.32	27.30	46.00	13.68	100	320	Horizontal
6	624.61	33.81	27.42	46.00	12.19	100	50	Horizontal
7	890.39	38.37	32.46	46.00	7.63	100	110	Horizontal



	REMOTE CONTROL PRODUCTS	Model Name	F08
Temperature	23.5°C	Relative Humidity	59.8%
Pressure	985kPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Polarization	Vertical



NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	53.28	20.13	13.84	40.00	19.87	100	20	Vertical
2	156.1	26.78	21.54	43.50	16.72	100	280	Vertical
3	542.16	30.05	24.40	46.00	15.95	100	280	Vertical
4	685.72	34.50	28.22	46.00	11.50	100	350	Vertical
5	792.42	35.21	30.10	46.00	10.79	100	230	Vertical
6	843.83	37.47	32.43	46.00	8.53	100	200	Vertical

RESULT: PASS

Note:

Factor=Antenna Factor + Cable loss, Margin=Limit-Level.

The "Factor" value can be calculated automatically by software of measurement system.

The mode 3 is the worst case, and only the data of the worst case recorded in this test report.



EUT	REMOTE CONTROL PRODUCTS	Model Name	F08
Temperature	23.5°C	Relative Humidity	59.8%
Pressure	985kPa	Test Voltage	Normal Voltage
Test Modulation	GFSK	Polarization	Horizontal

FIELD STRENGTH OF FUNDAMENTAL

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
2402	35.30	49.05	84.35	114.00	-29.65	peak
2402	25.51	49.05	74.56	94.00	-19.44	AVG
2442	34.79	49.12	83.91	114.00	-30.09	peak
2442	23.50	49.12	72.62	94.00	-21.38	AVG
2479	35.49	49.25	84.74	114.00	-29.26	peak
2479	24.05	49.25	73.30	94.00	-20.70	AVG
Remark:						
Factor = Ante	enna Factor + C	able Loss – Pr	e-amplifier.			

EUT	REMOTE CONTROL PRODUCTS	Model Name	F08
Temperature	23.5°C	Relative Humidity	59.8%
Pressure	985kPa	Test Voltage	Normal Voltage
Test Modulation	GFSK	Polarization	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type	
2402	44.37	49.05	82.38	114.00	-31.62	peak	
2402	29.51	49.05	72.05	94.00	-21.95	AVG	
2442	45.31	49.12	80.57	114.00	-33.43	peak	
2442	30.11	49.12	70.94	94.00	-23.07	AVG	
2479	40.78	49.25	80.79	114.00	-33.22	peak	
2479	30.48	49.25	69.86	94.00	-24.14	AVG	
Remark:							
Factor = Anter	Factor = Antenna Factor + Cable Loss – Pre-amplifier.						



RADIATED EMISSION ABOVE 1GHZ

EUT	REMOTE CONTROL PRODUCTS	Model Name	F08
Temperature	23.5°C	Relative Humidity	59.8%
Pressure	985kPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Polarization	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type	
4804	49.64	3.76	53.40	74.00	-20.60	peak	
4804	44.57	3.76	48.33	54.00	-5.67	AVG	
7206	43.81	8.17	51.98	74.00	-22.02	peak	
7206	7206 42.72 8.17 50.89 54.00 -3.11 AVG						
Remark:							
Factor = Antenna Factor + Cable Loss – Pre-amplifier.							

EUT	REMOTE CONTROL PRODUCTS	Model Name	F08
Temperature	23.0° C	Relative Humidity	51.8%
Pressure	985kPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Polarization	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4804	47.52	3.76	51.28	74.00	-22.72	peak
4804	43.61	3.76	47.37	54.00	-6.63	AVG
7206	42.83	8.17	51.00	74.00	-23.00	peak
7206	37.76	8.17	45.93	54.00	-8.07	AVG
Remark:			-			
actor = Anter	nna Factor + Cable	e Loss – Pre-a	amplifier.			



EUT	REMOTE CONTROL PRODUCTS	Model Name	F08
Temperature	23.5°C	Relative Humidity	59.8%
Pressure	985kPa	Test Voltage	Normal Voltage
Test Mode	Mode 2	Polarization	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type	
4884	47.69	3.78	51.47	74.00	-22.53	peak	
4884	43.27	3.78	47.05	54.00	-6.95	AVG	
7326	43.85	8.23	52.08	74.00	-21.92	peak	
7326	7326 39.62 8.23 47.85 54.00 -6.15 AVG						
Remark:							
Factor = Antenna Factor + Cable Loss – Pre-amplifier.							

EUT	REMOTE CONTROL PRODUCTS	Model Name	F08
Temperature	23.5°C	Relative Humidity	59.8%
Pressure	985kPa	Test Voltage	Normal Voltage
Test Mode	Mode 2	Polarization	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4884	48.37	3.78	52.15	74.00	-21.85	peak
4884	42.66	3.78	46.44	54.00	-7.56	AVG
7326	44.89	8.23	53.12	74.00	-20.88	peak
7326 39.72 8.23 47.95 54.00 -6.05 AVG						
Remark:						
actor = Anter	nna Factor + Cabl	e Loss – Pre-	amplifier.			



EUT	REMOTE CONTROL PRODUCTS	Model Name	F08
Temperature	23.5°C	Relative Humidity	59.8%
Pressure	985kPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Polarization	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4958	47.38	3.81	51.19	74.00	-22.81	peak
4958	44.52	3.81	48.33	54.00	-5.67	AVG
7437	42.63	8.27	50.90	74.00	-23.10	peak
7437 38.71 8.27 46.98 54.00 -7.02 AVG						
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT REMOTE CONTROL PRODUCTS Model Name F08 23.5°C Temperature **Relative Humidity** 59.8% Pressure 985kPa **Test Voltage** Normal Voltage Polarization **Test Mode** Mode 3 Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Value Type
4958	48.91	3.81	52.72	74.00	-21.28	peak
4958	43.52	3.81	47.33	54.00	-6.67	AVG
7437	44.57	8.27	52.84	74.00	-21.16	peak
7437	40.49	8.27	48.76	54.00	-5.24	AVG
emark:						
	na Factor + Cable	e Loss – Pre-	amplifier			

RESULT: PASS

Note: The amplitude of other spurious emissions from 1G to 25 GHz which are attenuated more than 20 dB below the permissible value need not be reported.

Factor=Antenna Factor + Cable loss - Amplifier gain, Margin=Emission Level-Limit.

The "Factor" value can be calculated automatically by software of measurement system.



8. BAND EDGE EMISSION

8.1. MEASUREMENT PROCEDURE

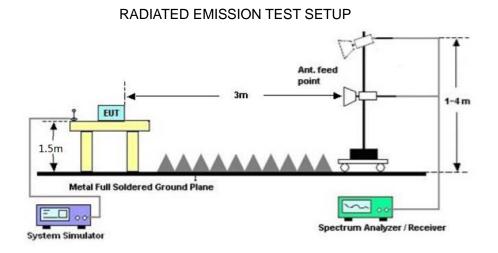
1. The EUT operates at transmitting mode. The operate channel is tested to verify the largest transmission and spurious emissions power at the continuous transmission mode.

2. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission: (a) PEAK: RBW=1MHz, VBW=3MHz / Sweep=AUTO

(b) AVERAGE: RBW=1MHz ; VBW=1/on time(1KHz) / Sweep=AUTO

3. Other procedures refer to clause 7.2.

8.2 TEST SETUP



8.3 TEST RESULT

Note:

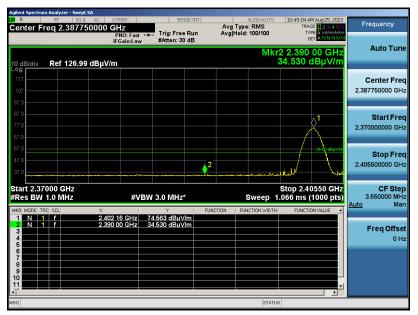
1. Factor=Antenna Factor + Cable loss - Amplifier gain. Field Strength=Factor + Reading level 2. The factor had been edited in the "Input Correction" of the Spectrum Analyzer. So the Amplitude of test plots is equal to Reading level plus the Factor in dB. Use the A dB(μ V) to represent the Amplitude. Use the F dB(μ V/m) to represent the Field Strength. So A=F.

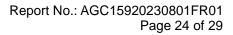


	REMOTE CONTROL PRODUCTS	Model Name	F08
Temperature	23.5°C	Relative Humidity	59.8%
Pressure	985kPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Polarization	Horizontal



Average Value



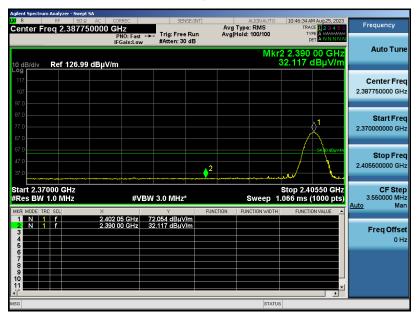




	REMOTE CONTROL PRODUCTS	Model Name	F08
Temperature	23.5°C	Relative Humidity	59.8%
Pressure	985kPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Polarization	Vertical



Average Value





	REMOTE CONTROL PRODUCTS	Model Name	F08
Temperature	23.5°C	Relative Humidity	59.8%
Pressure	985kPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Polarization	Horizontal



Average Value





	REMOTE CONTROL PRODUCTS	Model Name	F08
Temperature	23.5°C	Relative Humidity	59.8%
Pressure	985kPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Polarization	Vertical



Average Value



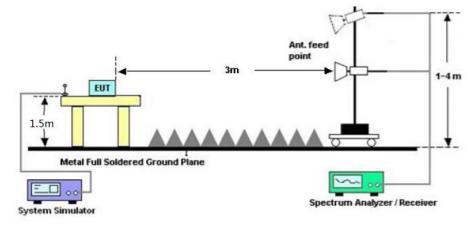


9. 20DB BANDWIDTH

9.1. MEASUREMENT PROCEDURE

- 1. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 2. Set SPA Centre Frequency = Operation Frequency, RBW= 30 KHz, VBW≥ 1×RBW.
- 3. Set SPA Trace 1 Max hold, then View.

9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)





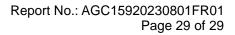
9.3. MEASUREMENT RESULTS

TEST ITEM	20DB BANDWIDTH
TEST MODULATION	GFSK

Test Channel (MHz)	20DB BANDWIDTH (MHz)	99% BANDWIDTH (MHz)	Criteria
2402	1.380	1.1659	PASS
2442	1.375	1.1650	PASS
2479	1.327	1.1383	PASS

TEST PLOT OF BANDWIDTH FOR LOW CHANNEL









TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL

TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL





APPENDIX A: PHOTOGRAPHS OF TEST SETUP

Refer to the Report No.: AGC15920230801AP01

APPENDIX B: PHOTOGRAPHS OF THE EUT

Refer to the Report No.: AGC15920230801AP02

----END OF REPORT----



Conditions of Issuance of Test Reports

1. All samples and goods are accepted by the Attestation of Global Compliance (Shenzhen) Co., Ltd (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the company and any person, firm or company requesting its services (the "Clients").

2. Any report issued by Company as a result of this application for testing services (the "Report") shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to its customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.

3. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.

4. In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.

5. Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.

6. The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.

7. Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.

8. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.

9. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.