

FCC Part 15C Test Report FCC ID: 2BCP2-C8815

Report No.: DLE-250315002R

Applicant: GUANGDONG JIANJIAN INTELLIGENT TECHNOLOGY CO., LTD

Address: 115, GUANGFENG INDUSTRIAL ZONE, FENGXIA COMMUNIY, GUANGYI STREET,

CHENGHAI DISTRICT, SHANTOU, GUANGDONG

Manufacturer: GUANGDONG JIANJIAN INTELLIGENT TECHNOLOGY CO., LTD

Address: 115, GUANGFENG INDUSTRIAL ZONE, FENGXIA COMMUNIY, GUANGYI STREET,

CHENGHAI DISTRICT, SHANTOU, GUANGDONG

EUT: RC Toys

Trade Mark: N/A

Model Number: C8815, C8812, Q193, Q183, Q179

Date of Receipt: Mar. 06, 2025

Test Date: Mar. 06, 2025 - Mar. 19, 2025

Date of Report: Mar. 19, 2025

Prepared By: Shenzhen DL Testing Technology Co., Ltd.

101-201, Comprehensive Building, Tongzhou Electronics Longgang Factory Area, No.1

Address: Baolong Fifth Road, Baolong Community, Baolong Street, Longgang District, Shenzhen,

China

Applicable FCC PART 15 C 15.249 Standards: ANSI C63.10:2013

Test Result: Pass

Report Number: DLE-250315002R

Prepared by(Engineer): Ken Tan

Reviewer(Supervisor): Jack Bu

Approved(Manager): Jade Yang

This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Shenzhen DL Testing Technology Co., Ltd.

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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.249) , Subpart C							
Standard Section	I I I I I I I I I I I I I I I I I I I						
15.207	Conducted Emission	N/A	2°				
15.205(a), 15.209(a) 15.249(a), 15.249(c)	PASS						
15.249(d)	Band Edge Emission	PASS					
15.215(c)	20dB Bandwidth	PASS	. 01.				
15.203	Antenna Requirement	PASS	- 0 ¹ C				

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NOTE:

(1)" N/A" denotes test is not applicable in this Test Report

Test lab: Shenzhen DL Testing Technology Co., Ltd.

101-201, Comprehensive Building, Tongzhou Electronics Longgang Factory Area, No.1

Address: Baolong Fifth Road, Baolong Community, Baolong Street, Longgang District, Shenzhen,

China

FCC Test Firm Registration Number: 854456

Designation Number: CN1307 IC Registered No.: 27485

CAB ID.: CN0118

1.1 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $\mathbf{y} \pm \mathbf{U}$, where expended uncertainty \mathbf{U} is based on a standard uncertainty multiplied by a coverage factor of $\mathbf{k}=2$, providing a level of confidence of approximately $\mathbf{95}$ %.

No.	Item	Uncertainty
1	Conducted Emission Test	±2.56dB
2	RF power,conducted	±0.42dB
3	Spurious emissions,conducted	±2.76dB
4	All emissions,radiated(<1G)	±3.65dB
500	All emissions,radiated(>1G)	±4.89dB
6	Temperature	±0.5°C
7	Humidity	±2%
8	20dB Bandwidth	±0.2MHz

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2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Product Name:	RC Toys
Trademark	N/A
Model No.:	C8815, C8812, Q193, Q183, Q179
Model Difference	All models have same Power circuits diagram, RF Chip and PCB Layout, Internal construction and rated power. Only the model name and appearance color were different.
Sample No.:	DLE-250315002-001#
Operation Frequency:	2405~2475MHz
Channel numbers:	66 Channels
Modulation technology:	GFSK
Antenna Type:	Cable Antenna
Antenna gain:	0.59 dBi
Power supply:	DC 3V from Battery

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2. The EUT's all information provided by client.

0			0		X V
	0	Channe	el List)
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
00 0	2405	23	2432	46	2455
.01	2410	24	2433	47	2456
02	2411	25	2434	9 48 x	2457
. 03	2412	26	2435	49	2458
04	2413	27	2436	50	2459
05	2414	28	2437	♥ 51 ₆	2460
<u></u> 06	2415	29	2438	52	2461
07	2416	30	2439	53	2462
08	2417	31	2440	54	2463
09	2418	32	2441	55	2464
10	2419	33	2442	56	2465
11	2420	34	2443	57	2466
12	2421	35	2444	∑ 58 ×	2467
x 13	2422	36	2445	59_0	2468
-0 14	2423	37	2446	60	2469
15	2424	38	2447	61	2470
_16	2425	₹ 39	2448	62	2471
17 💍	2426	40	2449	63	2472
18 🗸	2427	41	2450	64	2473
19	2428	42	2451	65	2475
20	2429	43	2452	0 / 1	M
21	2430	44	2453	100	//
22	2431	45	2454	9 ,	. 10

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2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

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Pretest Mode	Description				
Mode 1	2405	01			
Mode 2	2442	GFSK			
Mode 3	2475	CO'N			

	Radiated Emission						
Final Test Mode	Final Test Mode Description						
Mode 1	2405	0, 6					
Mode 2	2442	GFSK					
Mode 3	2475						

Note:

- (1) The measurements are performed at the highest, middle, lowest available channels.
- (2) A new fully charged battery was used for testing during the test.

2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Radiated Spurious Emission Test

EUT

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2.4 8 ESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

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V				<u> </u>
Item	Equipment Model/Type No. Series No.		Note	
1	RC Toys	C8815	N/A	ĒUT
	D. Co.	colt.	Cox x	OV. Cert
, N	Or Col		Col	art of the second

Item	Shielded Type	Ferrite Core	Length	Note	
0),	ceit (), Co, X	O ^V	×	OVÍ

Note:

(1) For detachable type I/O cable should be specified the length in cm in Length column.

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2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation test, Band-edge test and 20db bandwidth test equipment

	tion test, Band-edge		<u> </u>			<u> </u>
Item	Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
7	Spectrum Analyzer (9kHz-26.5GHz)	Agilent	E4408B	MY50140780	Nov. 01, 2024	Oct. 31, 2025
2	Test Receiver (9kHz-7GHz)	R&S	ESRP7	101393	Nov. 01, 2024	Oct. 31, 2025
3	Bilog Antenna (30MHz-1GHz)	R&S	VULB9162	00306	Nov. 01, 2024	Oct. 31, 2025
4	Horn Antenna (1GHz-18GHz)	Schwarzbeck	BBHA9120D	02139	Nov. 01, 2024	Oct. 31, 2025
5	Horn Antenna (18GHz-40GHz)	A.H. Systems	SAS-574	588	Nov. 01, 2024	Oct. 31, 2025
6	Amplifier (9KHz-6GHz)	Schwarzbeck	BBV9743B	00153	Nov. 01, 2024	Oct. 31, 2025
7 <	Amplifier (1GHz-18GHz)	EMEC	EM01G8GA	00270	Nov. 01, 2024	Oct. 31, 2025
8	Amplifier (18GHz-40GHz)	Quanjuda	DLE-161	97	Nov. 01, 2024	Oct. 31, 2025
9	Loop Antenna (9KHz-30MHz)	Schwarzbeck	FMZB1519B	00014	Nov. 01, 2024	Oct. 31, 2025
10	RF cables1 (9kHz-1GHz)	ChengYu	966	004	Nov. 01, 2024	Oct. 31, 2025
11	RF cables2 (1GHz-40GHz)	ChengYu	966	003	Nov. 01, 2024	Oct. 31, 2025
12	Antenna connector	Florida RF Labs	N/A	RF 01#	Nov. 01, 2024	Oct. 31, 2025
13	Power probe	KEYSIGHT	U2021XA	MY55210018	Nov. 01, 2024	Oct. 31, 2025
14	Signal Analyzer 9kHz-26.5GHz	Agilent	N9020A	MY55370280	Nov. 01, 2024	Oct. 31, 2025
15	Test Receiver 20kHz-40GHz	R&S	ESU 40	100376	Nov. 01, 2024	Oct. 31, 2025
16	D.C. Power Supply	LongWei	PS-305D	010964729	Nov. 01, 2024	Oct. 31, 2025

Conduction Test equipment

	Item	Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
2	1	843 Shielded Room	YIHENG	843 Room	843	Nov. 05, 2023	Nov. 04, 2026
Ī	2	EMI Receiver	R&S	ESR	101421	Nov. 01, 2024	Oct. 31, 2025
Ī	3	LISN	R&S	ENV216	102417	Nov. 01, 2024	Oct. 31, 2025
	4	843 Cable 1#	ChengYu	CE Cable	001	Nov. 01, 2024	Oct. 31, 2025

Other

It	tem	Name	Manufacturer	Model	Software version
	1	EMC Conduction Test System	FALA	EZ_EMC	EMC-CON 3A1.1
	2	EMC radiation test system	FALA	EZ_EMC	FA-03A2
<u> </u>	3	RF test system	MAIWEI	MTS8310	2.0.0.0
	4_	RF communication test system	MAIWEI	MTS8200	2.0.0.0

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3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1POWER LINE CONDUCTED EMISSION Limits

(Frequency Range 150KHz-30MHz)

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	Limit (dE	BuV)	Ctondord	
FREQUENCY (MHz)	Quasi-peak	Average	Standard	
0.15 -0.5	66 - 56 *	56 - 46 *	FCC	
0.50 -5.0	56.00	46.00	FCC	
5.0 -30.0	60.00	50.00	FCC	

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting			
Attenuation	10 dB			
Start Frequency	0.15 MHz			
Stop Frequency	30 MHz			
IF Bandwidth	9 kHz			

3.1.2 TEST PROCEDURE

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item -EUT Test Photos

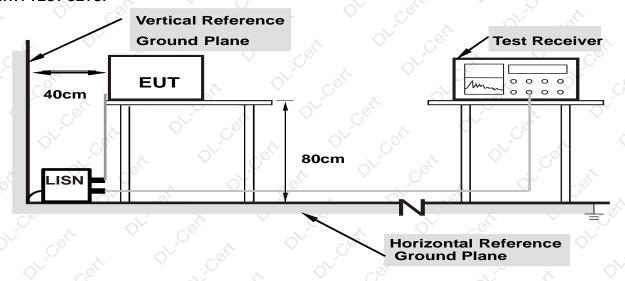
3.1.3 DEVIATION FROM TEST STANDARD

No deviation

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3.1.4 TEST SETUP



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Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

3.1.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

We pretest AC 120V and AC 230V, the worst voltage was AC 120V and the data recording in the report. All the test modes completed for test. Only the worst result that is Low channel mode was reported as below.

3.1.6 TEST RESULTS

The EUT is powered by a battery, This item is not applicable.

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3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

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table below has to be followed.		- (/) · · · · · · · · · · · · · · · · · · ·		
Frequency (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)		
0.009~0.490	2400/F(KHz)	300		
0.490~1.705	24000/F(KHz)	30		
1.705~30.0	30	30		
30~88	0 100	× 03 00°		
88~216	150	3 0 60		
216~960	200	3 0		
Above 960	500	Q 3		

The field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental	Field Strength of Fundamental	Field Strength of Harmonics
Frequency	(millivolts/meter)	(microvolts/meter)
902 - 928 MHz	50	500
2400 - 2483.5 MHz	50	500
5725 - 5875 MHz	50	500
24.0 - 24.25 GHz	250	2500

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	Limit (dBuV/m) (at 3M)				
PREQUENCT (IVIDZ)	PEAK	AVERAGE			
Above 1000	74	54			

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

Receiver setup:

corver cotap.		_ (/)		
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	100KHz	300KHz	Quasi-peak
Albana 4CH=	Peak	1MHz	3MHz	Peak
Above 1GHz	Peak	1MHz	10Hz	Average

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3.2.2 TEST PROCEDURE

Below 1GHz test procedure as below:

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

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- c. 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.
- d. 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 (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode
- f. 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.

Above 1GHz test procedure as below:

- g. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic camber. (Above 18GHz the distance is 3 meter and table is 1.5 metre).
- h. Test the EUT in the lowest channel ,the middle channel ,the Highest channel

Note

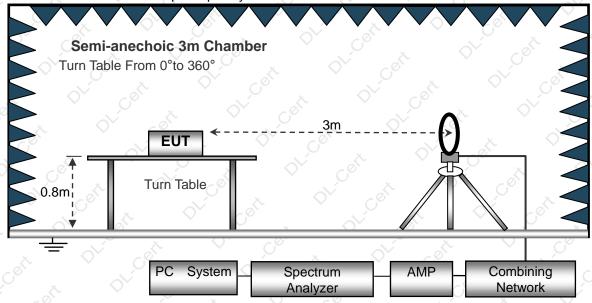
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

3.2.3 DEVIATION FROM TEST STANDARD

No deviation

3.2.4 TEST SETUP

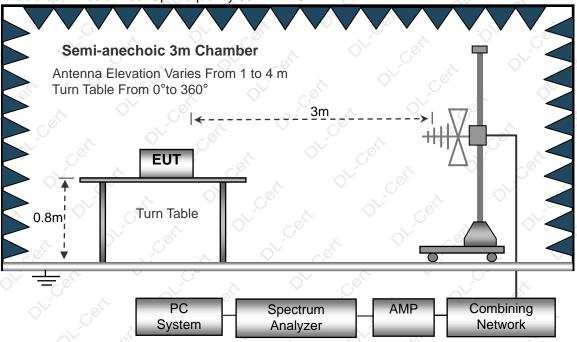
(A) Radiated Emission Test-Up Frequency Below 30MHz



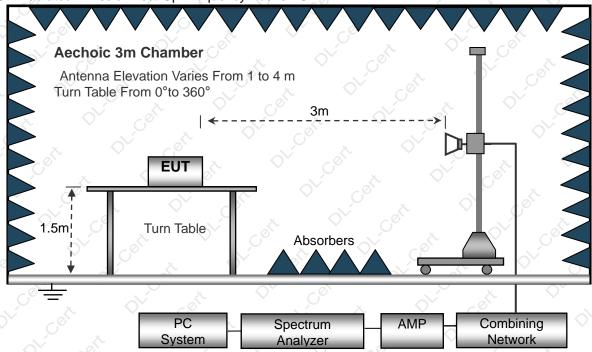
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(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz



3.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

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3.2.6 TEST RESULTS (BETWEEN 9KHZ - 30 MHZ)

Temperature:	20℃	Relative Humidtity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 3V
Test Mode :	Mode 1	Polarization :	<u>.</u> , , , , , , , , , , , , , , , , , , ,

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	Freq.	Reading	Limit	Margin	State
	(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
×	⊕	· · ·)	Cer.	PASS
	× 0×	V	×	0 Ook	PASS

NOTE:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor =40 log (specific distance/test distance)(dB);

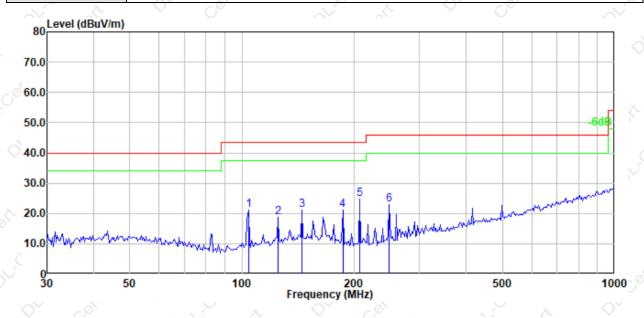
Limit line = specific limits(dBuv) + distance extrapolation factor.

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3.2.7 TEST RESULTS (BETWEEN 30MHZ – 1GHZ)

Temperature:	26℃	C.O.C.	Relative Humidity:	54%	COL
Pressure:	1010 hPa		Polarization:	Horizontal	OV. GIL
Test Voltage:	DC 3V	, , , o	x. 0	- er	V , Co
Test Mode :	Mode 1	\Diamond_{λ}	Co		O' G



	Freq	Read Level		Factor		Over Limit	Pol/Phase	Remark	
-	MHz	dBuV	dBuV/m	dB/m	dBuV/m	dB		\- <u>-</u>	
1	104.064	38.31	21.07	-17.24	43.50	-22.43	Horizontal	QP	
2	124.925	34.22	18.75	-15.47	43.50	-24.75	Horizontal	QP	
3	144.790	35.21	21.03	-14.18	43.50	-22.47	Horizontal	QP	
4	186.468	36.85	21.05	-15.80	43.50	-22.45	Horizontal	QP	
5	207.197	41.19	24.62	-16.57	43.50	-18.88	Horizontal	QP	
6	248.732	37.83	22.93	-14.90	46.00	-23.07	Horizontal	QP	

Remark:

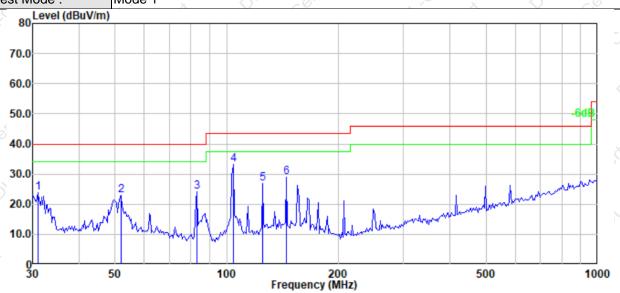
Correct Factor = Cable loss + Antenna factor - Preamplifier;

Level = Reading Level + Correct Factor; Margin = Level - Limit;

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		7 1			
Temperature:	26℃		Relative Humidity	: 54%	
Pressure:	1010 hPa	, C x	Polarization:	Vertical	
Test Voltage :	DC 3V	O, Co,			Co.
Test Mode :	Mode 1	OV.		Ò	01 -01



	Freq	Read Level	Level	Factor	Limit Line	On the Party of th	Pol/Phase	Remark	
	MHz	dBuV	dBuV/m	dB/m	dBuV/m	dB	-	-	
1	31.073	39.07	23.99	-15.08	40.00	-16.01	Vertical	QP	
2	51.900	37.27	22.94	-14.33	40.00	-17.06	Vertical	QP	
3	83.108	42.39	24.01	-18.38	40.00	-15.99	Vertical	QP	
4	104.064	50.42	33.18	-17.24	43.50	-10.32	Vertical	QP	
5	124.925	42.20	26.73	-15.47	43.50	-16.77	Vertical	QP	
6	144.790	43.10	28.92	-14.18	43.50	-14.58	Vertical	QP	

Remark:

Correct Factor = Cable loss + Antenna factor – Preamplifier;

Level = Reading Level + Correct Factor; Margin = Level - Limit;

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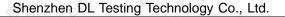
3.2.8 TEST RESULTS (1GHZ~25GHZ)

Polar	Frequency	Meter	Pre-	Cable	Antenna	Emission	Limits	Margin	Detector
(H/V)		Reading	amplifier	Loss (dB)	Factor	Level			Туре
O	(MHz)	(dBuV)	(dB)		(dB/m) requency:	(dBuV/m)	(dBuV/m)	(dB)	0
V	2405.00	114.78	52.17	2.79	27.42	92.82	114.00	-21.18	PK-Ø
V	2405.00	106.75	52.17	2.79	27.42	84.79	94.00	-9.21	AV
V	4810.00	77.67	51.74	3.08	31.25	60.26	74.00	-13.74	PK
V	4810.00	60.99	51.74	3.08	31.25	43.58	54.00	-10.42	AV
V	16132.00	54.57	51.56	7.36	41.57	51.94	74.00	-22.06	PK
- H	2405.00	113.34	52.17	2.79	27.42	91.38	114.00	-22.62	PK
Н	2405.00	104.77	52.17	2.79	27.42	82.81	94.00	-11.19	AV
ΗО	4810.00	76.57	51.74	3.08	31.25	59.16	74.00	-14.84	PK
H	4810.00	59.29	51.74	3.08	31.25	41.88	54.00	-12.12	AV
Н	16132.00	55.88	51.56	7.36	41.57	53.25	74.00	-20.75	PK
	Ò, Čo,	6	op	eration f	requency:	2442	0	-01	
χV	2442.00	113.99	52.15	2.82	27.47	92.13	114.00	-21.87	PK
V	2442.00	105.78	52.15	2.82	27.47	83.92	94.00	-10.08	AV
V	4884.00	77.45	_× 51.77 <	3.03	31.34	60.05	74.00	-13.95	PK
٧	4884.00	60.82	51.77	3.03	31.34	43.42	54.00	-10.58	AV
V	16132.00	54.67	51.56	7.36	41.57	52.04	74.00	-21.96	PK
Н	2442.00	112.48	52.15	2.82	27.47	90.62	114.00	-23.38	PK
Н	2442.00	104.63	52.15	2.82	27.47	82.77	94.00	-11.23	AV
Н	4884.00	76.47	51.77	3.03	31.34	59.07	74.00	-14.93	PK
H	4884.00	59.83	51.77	3.03	31.34	42.43	54.00	-11.57	. AV
Ĥ	16132.00	55.78	51.56	7.36	41.57	53.15	74.00	-20.85	PK
_	O. C.	, ,O	х ор	eration f	requency:2	2475	X.	0	- OC
V	2475.00	113.98	52.23	2.86	27.44	92.05	114.00	-21.95	PK
V	2475.00	106.94	52.23	2.86	27.44	85.01	94.00	-8.99	AV 🤇
V <	4950.00	78.28	51.69	3.05	31.39	61.03	74.00	-12.97	PK
V	4950.00	60.28	51.69	3.05	31.39	43.03	54.00	-10.97	AV
٧	16132.00	54.63	51.56	7.36	41.57	52.00	74.00	-22.00	PK
Ηδ	2475.00	113.71	52.23	2.86	27.44	91.78	114.00	-22.22	PK
Ho	2475.00	105.84	52.23	2.86	27.44	83.91	94.00	-10.09	C AV
H	4950.00	77.57	51.69	3.05	31.39	60.32	74.00	-13.68	PK Ø
Н	4950.00	59.73	51.69	3.05	31.39	42.48	54.00	-11.52	AV
Н	16132.00	54.82	51.56	7.36	41.57	52.19	74.00	-21.81	PK

Remark:

- Emission Level = Meter Reading + Antenna Factor + Cable Loss Pre-amplifier, Margin= Emission Level - Limit
- 2. If peak below the average limit, the average emission was no test.
- 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

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3.3 RADIATED BAND EMISSION MEASUREMENT 3.3.1 TEST REQUIREMENT:

FCC Part15 C Section 15.209 and 15.205

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

	Limit (dBuV/m) (at 3M)					
FREQUENCY (MHz)	PEAK	AVERAGE				
Above 1000	74	54				

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	2300MHz
Stop Frequency	2520MHz
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average

3.3.2 TEST PROCEDURE

Above 1GHz test procedure as below:

- a. 1. 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.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. 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.
- d. 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.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. 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.
- g. Test the EUT in the lowest channel, the Highest channel

Note:

Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

3.3.3 DEVIATION FROM TEST STANDARD

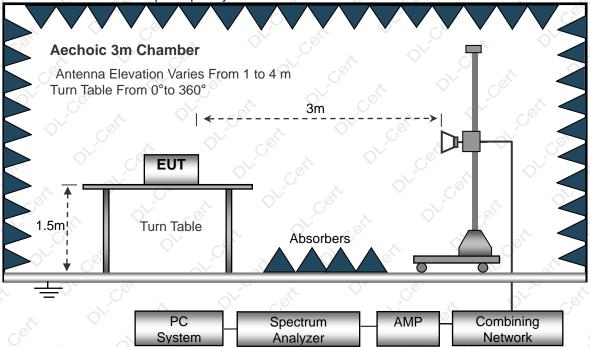
No deviation

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3.3.4 TEST SETUP

Radiated Emission Test-Up Frequency Above 1GHz



3.3.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

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3.3.6 TEST RESULT

Polar (H/V)	Frequency	Meter Reading	Pre- amplifier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detector
(n/v)	(MHz)	(dBuV)	(dB)	(dB)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Туре
	~	D. C	ор	eration f	requency:2	2405	C		V d
V	2390.00	76.47	52.12	2.73	27.38	54.46	74.00	-19.54	PK
V	2390.00	65.97	52.12	2.73	27.38	43.96	54.00	-10.04	AV
, V	2400.00	77.75	52.16	2.78	27.41	55.78	74.00	-18.22	PK
V	2400.00	65.40	52.16	2.78	27.41	43.43	54.00	-10.57	AV
H	2390.00	77.26	52.12	2.73	27.38	55.25	74.00	-18.75	PK
Н	2390.00	65.38	52.12	2.73	27.38	43.37	54.00	-10.63	AV
H/	2400.00	76.97	52.16	2.78	27.41	55.00	74.00	-19.00	PK
Н	2400.00	66.05	52.16	2.78	27.41	44.08	54.00	-9.92	AV

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Polar (H/V)	Frequency	Meter Reading	Pre- amplifier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detector Type
(11/4)	(MHz)	(dBuV)	(dB)	(dB)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	турс
,O°		0	ор	eration	requency:	2475	-05		, O ,
V	2483.50	75.97	52.23	2.86	27.44	54.04	74.00	-19.96	PK O
V	2483.50	66.46	52.23	2.86	27.44	44.53	54.00	-9.47	AV
V	2500.00	75.75	52.26	2.88	27.49	53.86	74.00	-20.14	PK
V	2500.00	65.33	52.26	2.88	27.49	43.44	54.00	-10.56	AV
Ä	2483.50	75.95	52.23	2.86	27.44	54.02	74.00	-19.98	PK
Н	2483.50	64.97	52.23	2.86	27.44	43.04	54.00	-10.96	AV
H,C	2500.00	75.77	52.26	2.88	27.49	53.88	74.00	-20.12	PK
H	2500.00	66.75	52.26	2.88	27.49	44.86	54.00	9.14	AV C

Remark:

- Emission Level = Meter Reading + Antenna Factor + Cable Loss Pre-amplifier, Margin= Emission Level Limit
- 2. If peak below the average limit, the average emission was no test.3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

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4. BANDWIDTH TEST

4.1 APPLIED PROCEDURES / LIMIT

	F	CC Part15 (15.215) , Subpart C		
Section	O COL	Test Item	Con	QY, G8
15.215	Q, 'Co,	Bandwidth	O, Co	x OV

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4.1.1 TEST PROCEDURE

- 1. Set RBW = 30 kHz.
- 2. Set the video bandwidth (VBW) ≥RBW.
- 3. Detector = Peak.
- 4. Trace mode = max hold.
- 5. Sweep = auto couple.
- 6. Allow the trace to stabilize.
- 7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 20 dB relative to the maximum level measured in the fundamental emission.

4.1.2 DEVIATION FROM STANDARD

No deviation.

3.2.2 TEST SETUP

EUT	SPECTRUM
	ANALYZER

4.1.3 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

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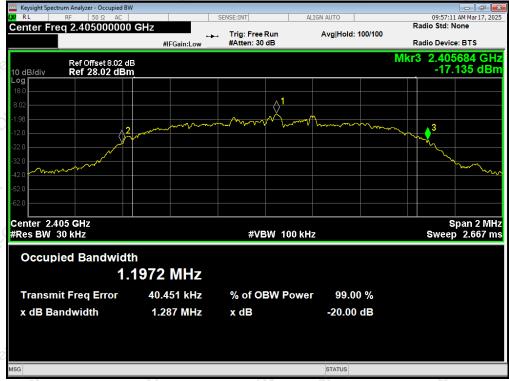


4.1.4 TEST RESULTS

	Frequency (MHz)	20dB Bandwidth (MHz)	Result
	2405	1.287	Pass
GFSK	2442	1.300	^{©™} Pass
ǰ ,	2475	1.299	Pass

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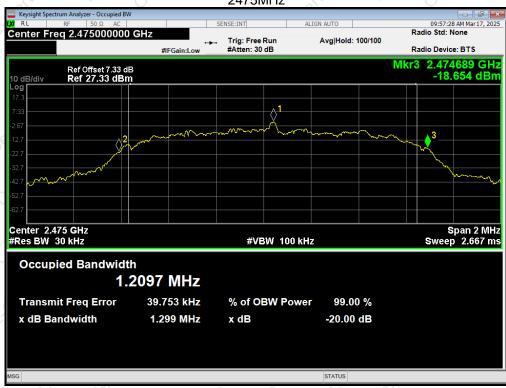


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2442MHz



2475MHz



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) "ANTENNA REQUIREMENT

5.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 15.203: 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.

5.2 EUT ANTENNA

The EUT antenna is Cable Antenna, It comply with the standard requirement.

6. TEST SEUUP PHOTO

Reference to the appendix I for details.

7. EUT PHOTO

Reference to the appendix II for details.

**** END OF REPORT ****

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