

Test Report

No.: AJT240606039E-1

Applicant Name: GUANGDONG HENGDI TECHNOLOGY CORP., LTD.
Applicant Address: BUILDING C, JINHUI INDUSTRIAL BUILDING, SOUTH OF YUTING ROAD, EAST OF TAIAN ROAD, CHENGHAI DISTRICT, SHANTOU CITY, GUANGDONG PROVINCE, CHINA
Manufacturer: GUANGDONG HENGDI TECHNOLOGY CORP., LTD.
Manufacturer Address: BUILDING C, JINHUI INDUSTRIAL BUILDING, SOUTH OF YUTING ROAD, EAST OF TAIAN ROAD, CHENGHAI DISTRICT, SHANTOU CITY, GUANGDONG PROVINCE, CHINA

The following samples were submitted and identified by/on behalf of the client as:

Sample Description: RC TOYS
Model No.: K12(54021)
Additional Model: T01, T01B, T02, T02B, T03, T03B, T05, T05B, T06, T06B, T10, T10B, T105, T106, T107, T108, T109, T110, T111, T112, T113, T114, T115, T116, T117, T118, T119, T120, DMF01, P01A, K22, K22-1, K22-3, K22-4, K22-5, K18, K18-1, K18-2, K18-3, K18-4, K18-5, K14-1, K14-2, K14-3, K14-4, K14-5, K24-1, K24-2, K24-3, K24-4, K24-5, G20, G20-1, G20-2, G20-3, G16, G16-1, G16-2, G16-3, K16, K16-1, K16-2, K16-3, K20-1, K20-2, K20-3, K20-4, K20-5, K20-9, K28, K28-1, K28-2, K28-3, K28-4, K28-5, K12, K12-1, K12-2, K12-3, K10, K10-1, K10-2, K10-3, K26, K26-1, K26-2, K26-3, K30, K30-1, K30-2, K30-3, 101, 102, 106, 54021, 8156, 81520, 81521, 1802, 1802-4, OWI-41802, OWI-4004, 1802, 1802-4, OWI-41802, OWI-4004, 2409-1, 2409-2, 2409-3, 2409-4, 2409-5, 2409-6, 2409-7, 2409-8
FCC ID : 2AWZK-K12
Sample Received Date: 06 June, 2024
Testing Completed Date: 21 June, 2024

Tests conducted: For compliance with application, refer to attached page(s) for details.

Assess standard used:	Conclusion
FCC Part 15, Subpart C, Section 15.249 & ANSI C63,10-2013	PASS

Tested by:

Glory

Reviewed by:

Fly Liang

Approved by:

Position: Technical Supervisor
Date: 2024-07-26



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1 Test Standards

The tests were performed according to following standards:
FCC Part 15, Subpart C, Section 15.249: Operation within the bands 902-928 MHz, 2400-2483.5 MHz, 5725-5875 MHz, and 24.0-24.25 GHz
ANSI C63,10-2013: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

2 Summary

2.1 General Remarks

Date of receipt of test sample	06 June, 2024
Testing commenced on	06 June, 2024 ---- 21 June, 2024
Testing concluded on	21 June, 2024

2.2 Final Assessment

Test Content:	Assessment
The RF requirements pertaining to the technical standards and tested operation modes are	Fulfilled
The equipment under test	Fulfilled the RF requirements

3 Equipment Under Test

3.1 Short description of the Equipment Under Test (EUT)

EUT Name	RC TOYS
Model No.	K12(54021)
FCC ID	2AWZK-K12
Number of Tested Samples	1
Power Supply Voltage	DC 3.0V(AA*2)
Operating Mode	TX Mode
Operation Frequency	2415MHz~2465MHz
Number of Channel	51
Modulation	GFSK
Antenna Type	Wire antenna
Antenna Gain	0dBi
NOTE: 1. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual. The laboratory is not responsible for the accuracy of the information provided by manufacturer.	

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3.2 EUT Configuration

(The CDF filled by the applicant can be viewed at the test laboratory.)

The following peripheral devices and interface cables were connected during the measurement:



3.3 Description of Test Modes

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and packet type. The worst case was found when the EUT was positioned on Y axis for radiated emission. The EUT was tested under the following mode.

EUT Configure Mode	Applicable to				Description
	RE < 1G	RE ≥ 1G	PLC	BW	DC 3.0V(AA*2)
A	√	√	N/A	√	

Where RE<1G: Radiated Emission below 1GHz

RE ≥ 1G: Radiated Emission above 1GHz

PLC: Power Line Conducted Emission

BW: 20dB bandwidth

Following channel(s) was (were) selected for the test as listed below.

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2415	14	2428	27	2441	40	2454
2	2416	15	2429	28	2442	41	2455
3	2417	16	2430	29	2443	42	2456
4	2418	17	2431	30	2444	43	2457
5	2419	18	2432	31	2445	44	2458
6	2420	19	2433	32	2446	45	2459
7	2421	20	2434	33	2447	46	2460
8	2422	21	2435	34	2448	47	2461
9	2423	22	2436	35	2449	48	2462
10	2424	23	2437	36	2450	49	2463
11	2425	24	2438	37	2451	50	2464
12	2426	25	2439	38	2452	51	2465
13	2427	26	2440	39	2453		

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Channel List

Channel	Frequency (MHz)
The lowest channel	2415
The middle channel	2440
The highest channel	2465

Note: The more detailed channel, please refer to the product specifications

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4 Test Environment

4.1 Address of the test Laboratory

Test Laboratory:	AJT Testing Services Limited
Test Site:	1-2/F., NO.1, WENHUA SOUTH ROAD, CHENGHUA INDUSTRIAL ZONE, CHENGHAI DISTRICT, SHANTOU, GUANGDONG, CHINA
Tel:	86-754-85860999
Fax:	86-754-86984098

4.2 Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:	
Temperature	15~35°C
Humidity	30~75%

4.3 Statement of the Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report. Furthermore, component and process variability of devices are similar to that tested. There is no additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Measurement Uncertainty (Standard: ETSI TR 100 028)	
Conducted Emission (CE)	±2.14dB
Radiated Emission below 1GHz	±4.44dB
Radiated Emission above 1GHz	±5.26dB
Occupied bandwidth	55.4kHz

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

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4.4 Test Types and Results

Standard: FCC PART 15, SUBPART C (SECTION 15.249)		
Standard section	Test Type	Result
§15.209 & §15.249(a)	Radiated Emission (RE)	PASS
§15.215(c)	20dB Bandwidth	PASS
§15.207(a)	Conducted Emission (CE)	N/A
§15.203	Antenna Requirement	PASS
§15.205	Restricted Band Around Fundamental Frequency	PASS

5 Test Conditions and Results

5.1 Radiated Emission (RE)

For test instruments and accessories used see section 6

5.1.1 Test Procedures

- (1) The EUT was placed on the top of a rotating table 1.5 meters (above 1GHz) and 0.8 meters (below 1GHz) above the ground at a 3 meters semi-anechoic chamber. 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 is a broadband antenna, and its 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 rotatable 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) For below 30MHz, a loop antenna with its vertical plane is place 3m from the EUT and rotated about its vertical axis for maximum response at each azimuth about the EUT. And the centre of the loop shall be 1m above the ground.
- (7) If the emission level of the EUT in peak mode was lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. All modes of operation were investigated and the worst-case emissions are reported

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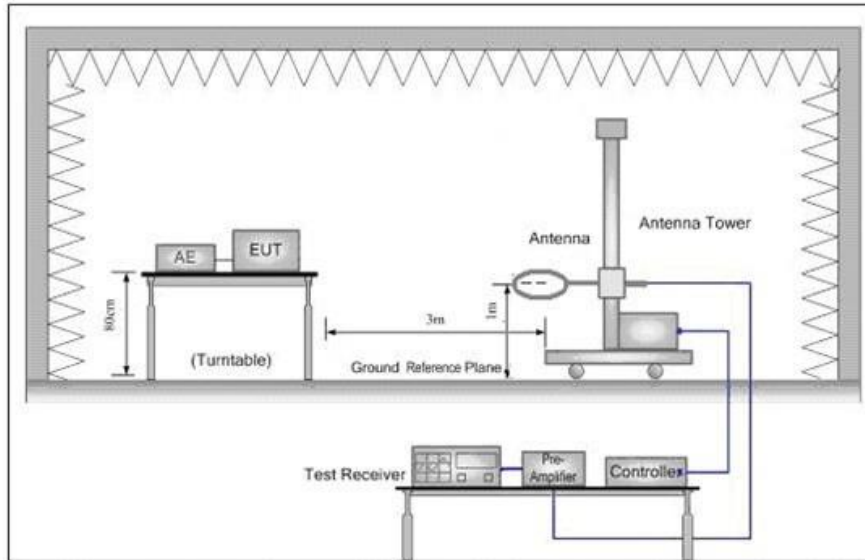
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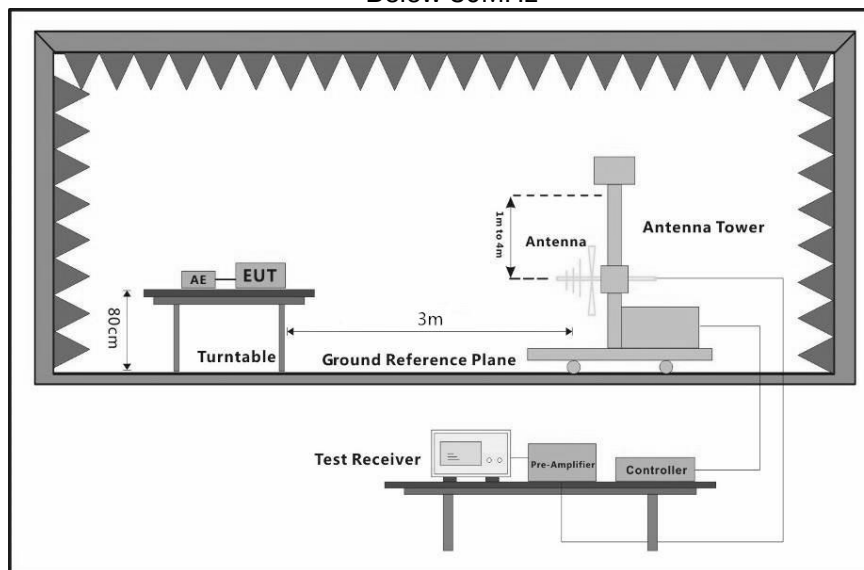
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4. The testing of the EUT was performed on all 3 orthogonal axes; the worst-case test configuration was reported on the file test setup photo.

5.1.2 Test Setup



Below 30MHz



30MHz-1000MHz

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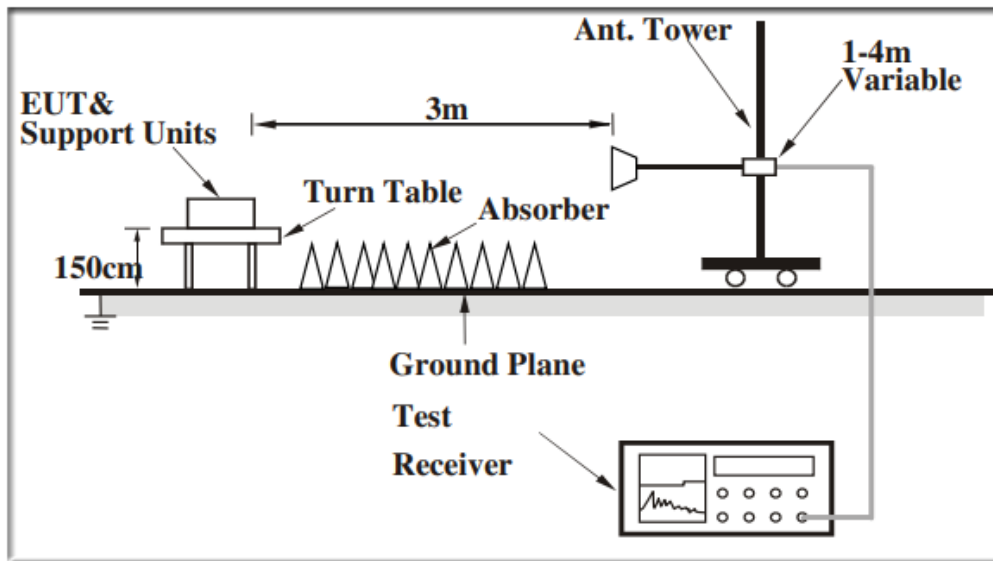
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Above 1GHz

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5.1.3 Test Limits

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

Frequencies (MHz)	Field Strength (microvolts/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	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

According to §15.249(a), the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental Frequency	Filed Strength of Fundamental (milli-volts/meter)	Field Strength of Harmonics (micro-volts/meter)
902 ~ 928 MHz	50	500
2400 ~ 2483.5 MHz	50	500
5725 ~5875 MHz	50	500
24.0 ~24.25 GHz	250	2500

The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in §15.35 for limiting peak emissions apply.

Note:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBμV/m) = 20 log Emission level (μV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.
4. Emission from 9kHz to 30MHz is more than 20dB below the limit.

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5.1.4 Test Results

The disturbance below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

5.1.4.1 Radiated Emissions Test (Below 1GHz)

Operation Mode	TX mode
Channel	The Lowest Channel (2415MHz)
Test Condition	Ambient Temperature: 24°C Humidity: 57%RH

Frequency (MHz)	Peak (dBμV/m)	QP (dBμV/m)	QP Lim. (dBμV/m)	Margin (dB)	Angle (°)	Height (m)	Polarization
46.199	17.59	/	40.00	-22.41	149.00	1.99	Horizontal
105.757	16.00	/	43.50	-27.50	113.00	1.99	Horizontal
243.497	18.76	/	46.00	-27.24	124.00	1.00	Horizontal
431.677	22.69	/	46.00	-23.31	271.00	1.00	Horizontal
729.273	28.12	/	46.00	-17.88	92.00	1.99	Horizontal
875.064	29.56	/	46.00	-16.44	314.00	1.00	Horizontal
47.557	17.57	/	40.00	-22.43	292.00	2.00	Vertical
104.399	15.34	/	43.50	-28.16	265.00	2.00	Vertical
346.22	20.01	/	46.00	-25.99	312.00	2.00	Vertical
454.375	23.74	/	46.00	-22.26	231.00	2.00	Vertical
729.37	28.81	/	46.00	-17.19	265.00	2.00	Vertical
920.072	30.09	/	46.00	-15.91	0.00	2.00	Vertical

1.QP is abbreviation of Quasi-Peak

2.Margin = Emission Level - Limit Value

3.The emission levels of other frequencies were more than 20dB margin against the limit

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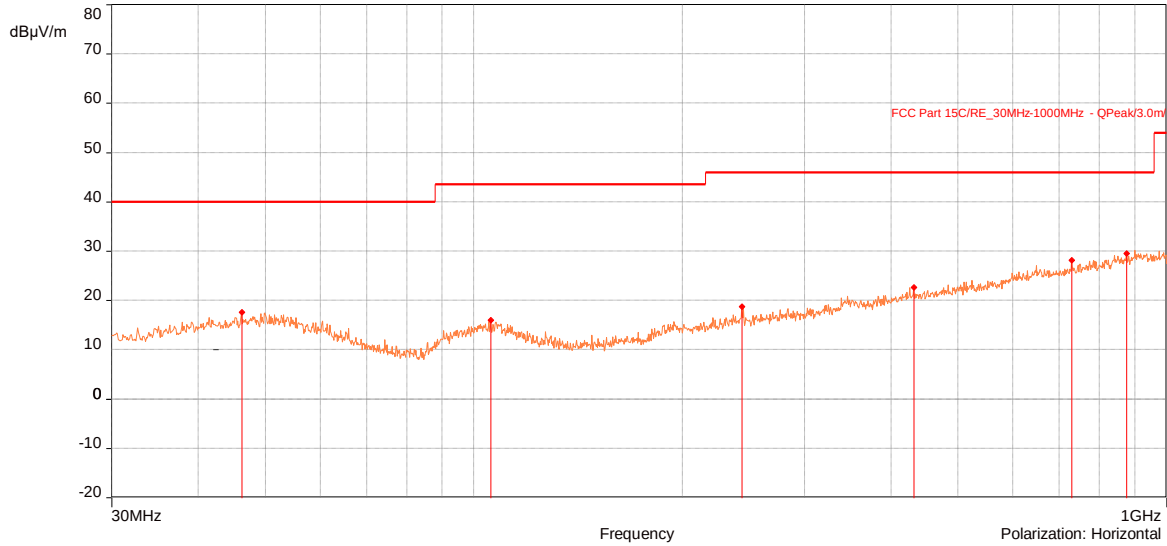
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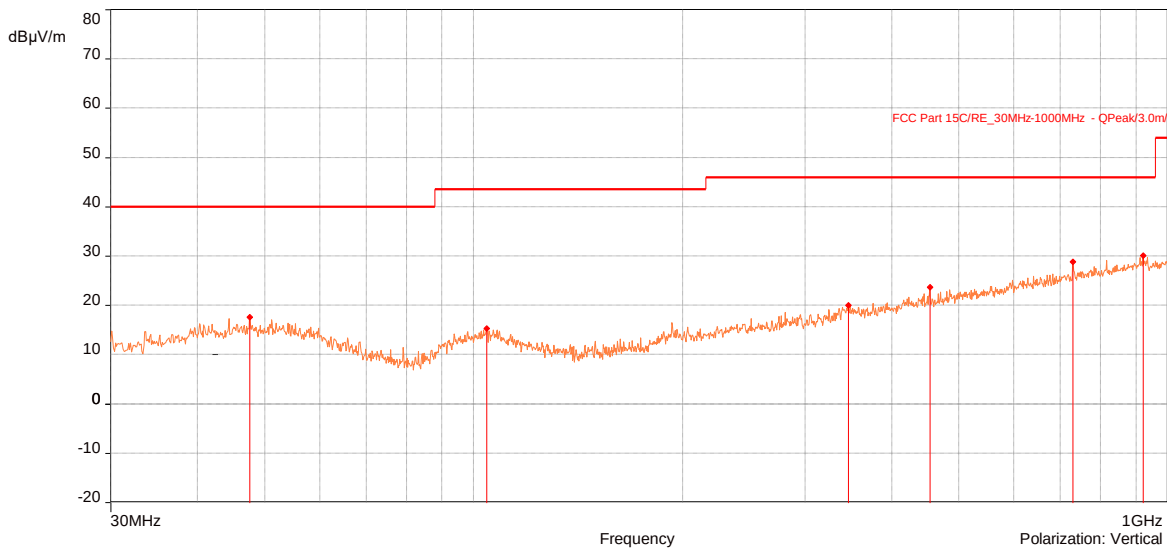
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Test Graph:



Horizontal



Vertical

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5.1.4.2 Radiated Emissions Test (Above 1GHz)

Channel	The Lowest Channel (2415MHz)	Detector Function	Peak (PK) Average (AV)
Frequency Range	Above 1GHz	Result	PASS

Antenna Polarity & Test Distance: Horizontal At 3m								
Frequency (MHz)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (m)	Angle (°)	Polarization	Correction (dB)	Detector
2390.04	47.08	54.00	-6.92	1.52	265.00	Horizontal	-11.39	Average
#2400	51.39	54.00	-2.61	1.52	130.00	Horizontal	-11.39	Average
*2415	86.13	94.00	-7.87	1.52	133.00	Horizontal	-11.39	Average
4830.65	47.18	54.00	-6.82	1.99	63.00	Horizontal	-11.39	Average
7246.8	47.29	54.00	-6.71	1.00	231.00	Horizontal	-11.39	Average
2390.04	58.47	74.00	-15.53	1.52	265.00	Horizontal	-2.86	Peak
2400	62.78	74.00	-11.22	1.52	130.00	Horizontal	-2.83	Peak
*2415	97.52	114.00	-16.48	1.52	133.00	Horizontal	-2.70	Peak
4830.65	58.57	74.00	-15.43	1.99	63.00	Horizontal	2.65	Peak
7246.8	58.68	74.00	-15.32	1.00	231.00	Horizontal	9.25	Peak
Antenna Polarity & Test Distance: Vertical At 3m								
Frequency (MHz)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (m)	Angle (°)	Polarization	Correction (dB)	Detector
2390.04	46.92	54.00	-7.08	1.48	100.00	Vertical	-11.39	Average
2400	50.86	54.00	-3.14	1.48	92.00	Vertical	-11.39	Average
*2415	86.35	94.00	-7.65	1.48	89.00	Vertical	-11.39	Average
4831.8	41.95	54.00	-12.05	1.00	76.00	Vertical	-11.39	Average
7245.65	43.52	54.00	-10.48	1.00	113.00	Vertical	-11.39	Average
2390.04	58.31	74.00	-15.69	1.48	100.00	Vertical	-2.86	Peak
2400	62.25	74.00	-11.75	1.48	92.00	Vertical	-2.83	Peak
*2415	97.74	114.00	-16.26	1.48	89.00	Vertical	-2.70	Peak
4831.8	53.34	74.00	-20.66	1.00	76.00	Vertical	2.63	Peak
7245.65	54.91	74.00	-19.09	1.00	113.00	Vertical	9.25	Peak
Remarks: 1. Emission level (dBμV/m) = Raw Value (dBμV) + Correction Factor (dB/m) 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) 3. The emission levels of other frequencies were more than 20dB margin against the limit. 4. Margin = Emission level - Limit value 5. " * ": Fundamental frequency. 6. The average value of fundamental frequency is: Average value = Peak value +AV factor, where the AV factor is calculated from following formula: AV factor=20 log (Duty cycle) = 20 log (26.95%) = -11.39dB, please see 5.1.4.3. 7. #Marginal pass.								

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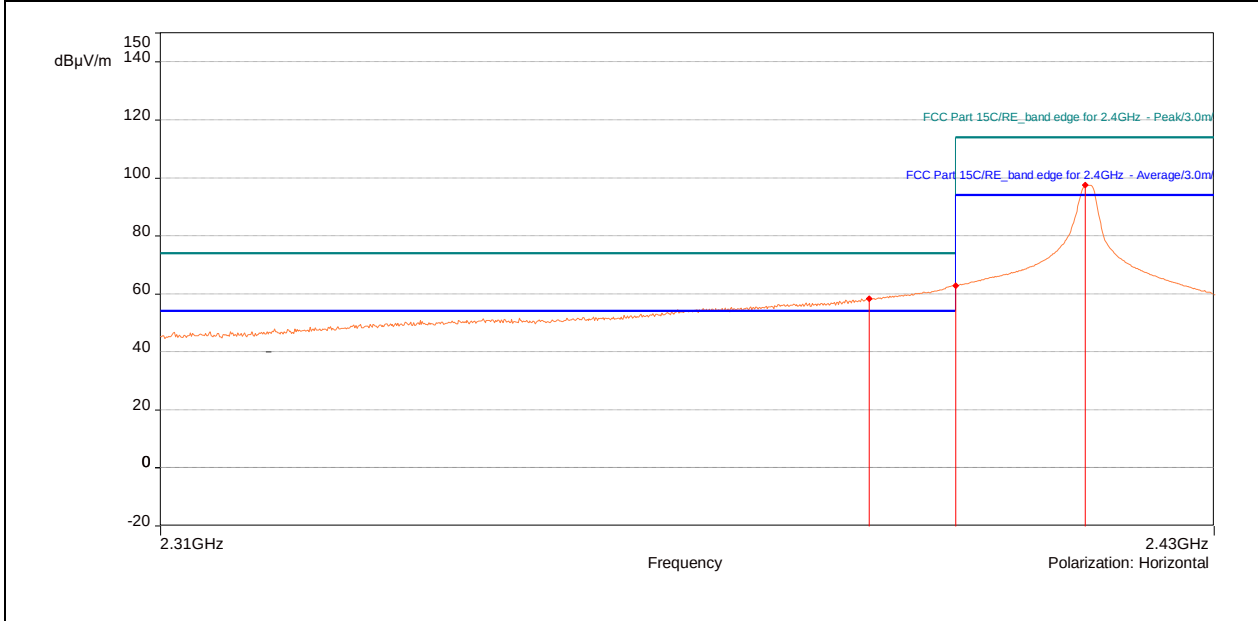
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: www.ajtesting.com Email: info@ajtesting.com

Test Report

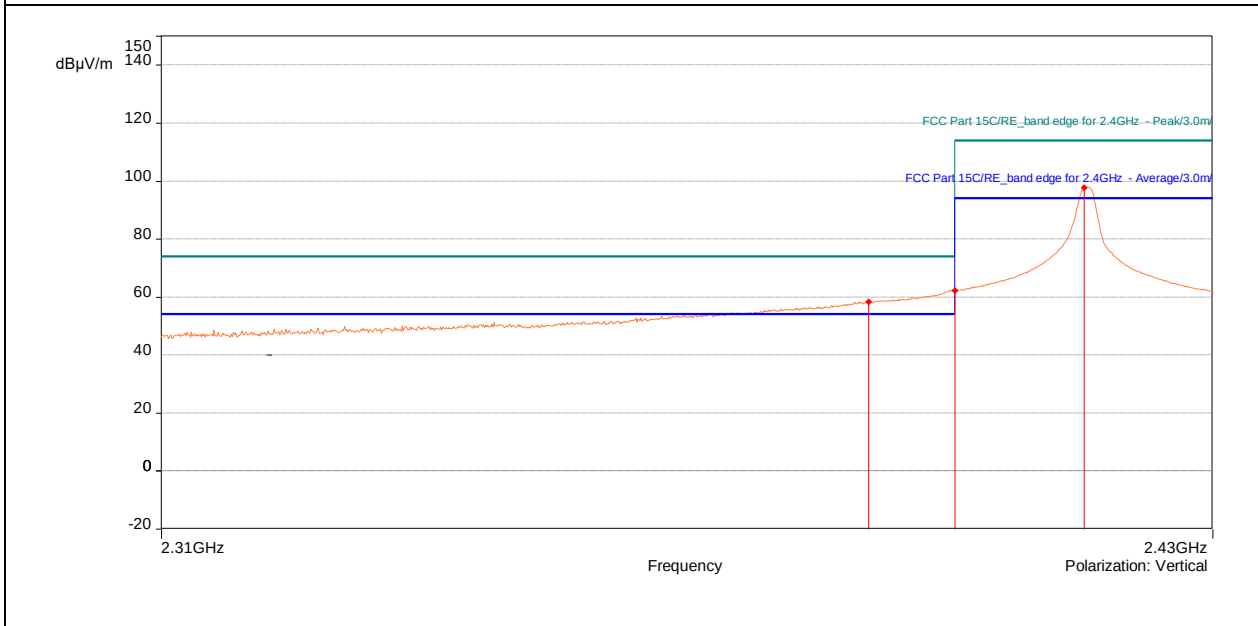
No.: AJT240606039E-1

Band Edge Plot

2415MHz Horizontal



2415MHz Vertical



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Test Report

No.: AJT240606039E-1

Channel	The Middle Channel (2440MHz)	Detector Function	Peak (PK) Average (AV)
Frequency Range	Above 1GHz	Result	PASS

Antenna Polarity & Test Distance: Horizontal At 3m								
Frequency (MHz)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (m)	Angle (°)	Polarization	Correction (dB)	Detector
*2439.9965	86.58	94.00	-7.42	1.52	81.00	Horizontal	-11.39	Average
4881.25	44.56	54.00	-9.44	1.98	72.00	Horizontal	-11.39	Average
7320.4	46.99	54.00	-7.01	1.01	230.00	Horizontal	-11.39	Average
*2439.9965	97.97	114.00	-16.03	1.52	81.00	Horizontal	-2.97	Peak
4881.25	55.95	74.00	-18.05	1.98	72.00	Horizontal	2.08	Peak
7320.4	58.38	74.00	-15.62	1.01	230.00	Horizontal	9.20	Peak
Antenna Polarity & Test Distance: Vertical At 3m								
Frequency (MHz)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (m)	Angle (°)	Polarization	Correction (dB)	Detector
*2439.9965	85.77	94.00	-8.23	1.50	163.00	Vertical	-11.39	Average
4881.25	41.37	54.00	-12.63	1.00	90.00	Vertical	-11.39	Average
7320.4	43.92	54.00	-10.08	1.99	73.00	Vertical	-11.39	Average
*2439.9965	97.16	114.00	-16.84	1.50	163.00	Vertical	-2.97	Peak
4881.25	52.76	74.00	-21.24	1.00	90.00	Vertical	2.08	Peak
7320.4	55.31	74.00	-18.69	1.99	73.00	Vertical	9.20	Peak
Remarks: 1. Emission level (dBμV/m) = Raw Value (dBμV) + Correction Factor (dB/m) 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) 3. The emission levels of other frequencies were more than 20dB margin against the limit. 4. Margin = Emission level - Limit value 5. " * ": Fundamental frequency. 6. The average value of fundamental frequency is: Average value = Peak value +AV factor, where the AV factor is calculated from following formula: AV factor=20 log (Duty cycle) = 20 log (26.95%) = -11.39dB, please see 5.1.4.3.								

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Test Report

No.: AJT240606039E-1

Channel	The Highest Channel (2465MHz)	Detector Function	Peak (PK) Average (AV)
Frequency Range	Above 1GHz	Result	PASS

Antenna Polarity & Test Distance: Horizontal At 3m								
Frequency (MHz)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (m)	Angle (°)	Polarization	Correction (dB)	Detector
*2465	83.90	94.00	-10.10	1.52	142.00	Horizontal	-11.39	Average
2483.5	46.27	54.00	-7.73	1.52	47.00	Horizontal	-11.39	Average
4931.85	40.10	54.00	-13.90	1.01	68.00	Horizontal	-11.39	Average
7395.15	46.19	54.00	-7.81	1.01	224.00	Horizontal	-11.39	Average
*2465	95.29	114.00	-18.71	1.52	142.00	Horizontal	-2.87	Peak
2483.5	57.66	74.00	-16.34	1.52	47.00	Horizontal	-3.03	Peak
4931.85	51.49	74.00	-22.51	1.01	68.00	Horizontal	2.28	Peak
7395.15	57.58	74.00	-16.42	1.01	224.00	Horizontal	9.40	Peak
Antenna Polarity & Test Distance: Vertical At 3m								
Frequency (MHz)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (m)	Angle (°)	Polarization	Correction (dB)	Detector
*2465	86.44	94.00	-7.56	1.50	134.00	Vertical	-11.39	Average
2483.5	49.83	54.00	-4.17	1.50	107.00	Vertical	-11.39	Average
4930.7	40.64	54.00	-13.36	1.99	133.00	Vertical	-11.39	Average
7397.45	43.13	54.00	-10.87	1.00	41.00	Vertical	-11.39	Average
*2465	97.83	114.00	-16.17	1.50	134.00	Vertical	-2.87	Peak
2483.5	61.22	74.00	-12.78	1.50	107.00	Vertical	-3.03	Peak
4930.7	52.03	74.00	-21.97	1.99	133.00	Vertical	2.27	Peak
7397.45	54.52	74.00	-19.48	1.00	41.00	Vertical	9.40	Peak
Remarks: 1. Emission level (dBμV/m) = Raw Value (dBμV) + Correction Factor (dB/m) 2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) 3. The emission levels of other frequencies were more than 20dB margin against the limit. 4. Margin = Emission level - Limit value 5. " * ": Fundamental frequency. 6. The average value of fundamental frequency is: Average value = Peak value +AV factor, where the AV factor is calculated from following formula: AV factor=20 log (Duty cycle) = 20 log (26.95%) = -11.39dB, please see 5.1.4.3.								

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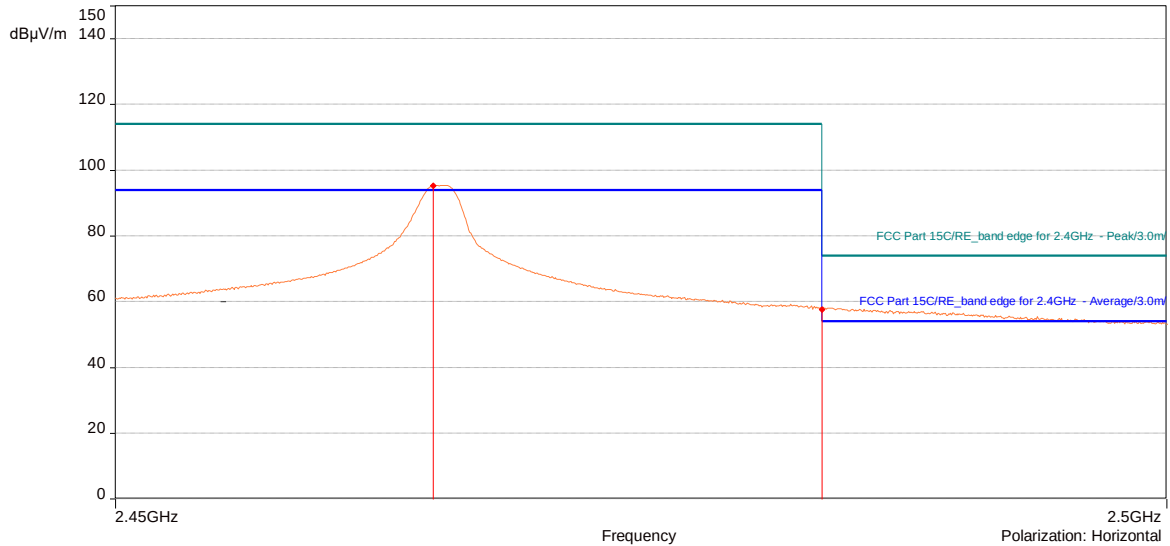
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Test Report

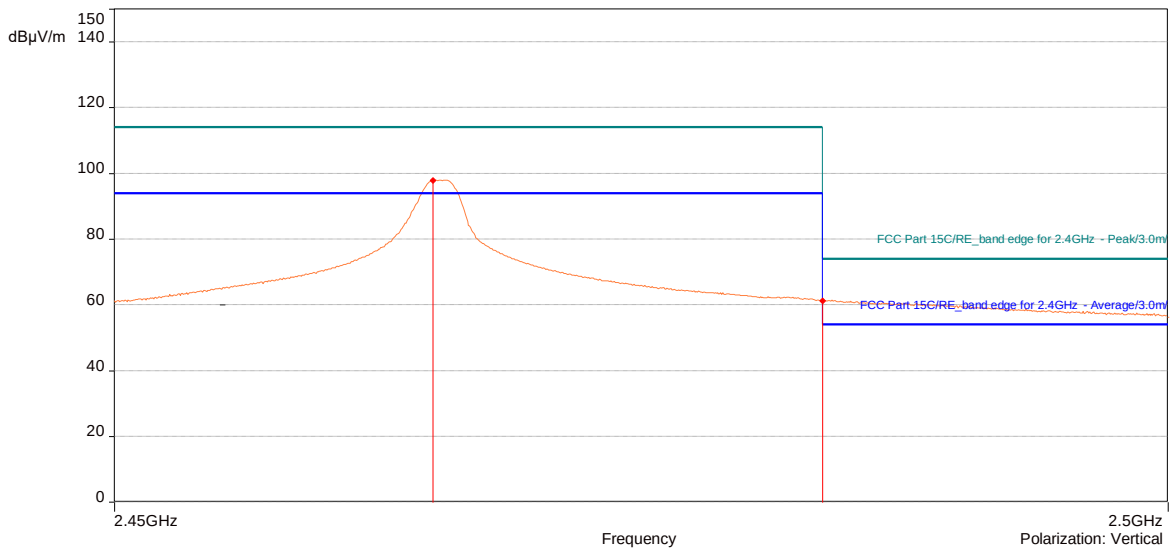
No.: AJT240606039E-1

Band Edge Plot

2465MHz Horizontal



2465MHz Vertical



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Test Report

No.: AJT240606039E-1

5.1.4.3 Calculation of Average Factor

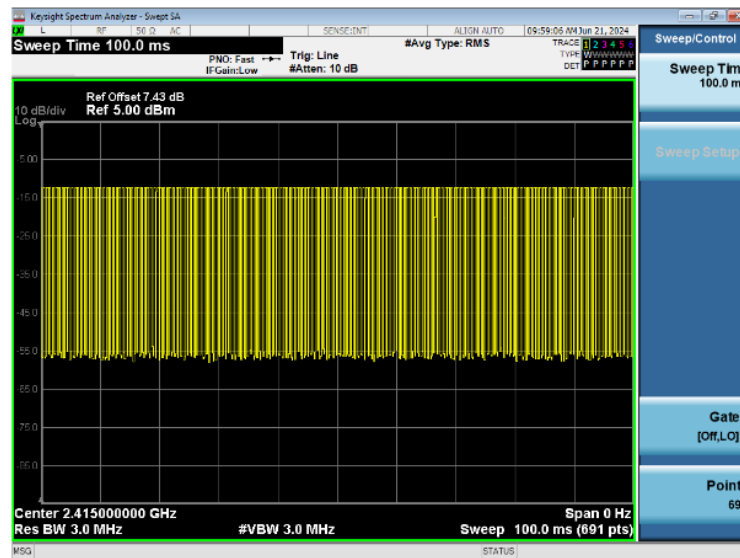
Effective period of the cycle = 0.145ms

The duration of one cycle = 0.538ms

Duty Cycle = $0.145\text{ms} / 0.538\text{ms} = 26.95\%$

Averaging factor in dB = $20 \log (\text{duty cycle}) = 20 \log (26.95\%) = -11.39\text{dB}$

100ms Duty Cycle



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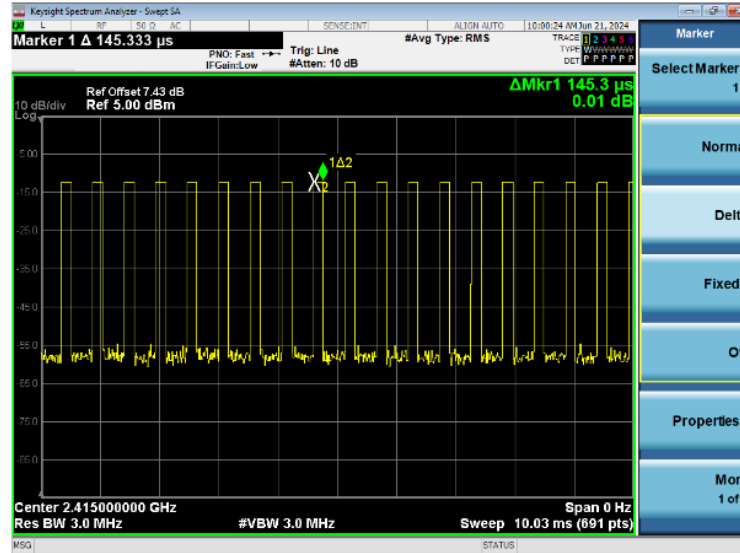
Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China

Tel: 86-754-85860999 Fax: 86-754-86984098 Website: www.ajtesting.com Email: info@ajtesting.com

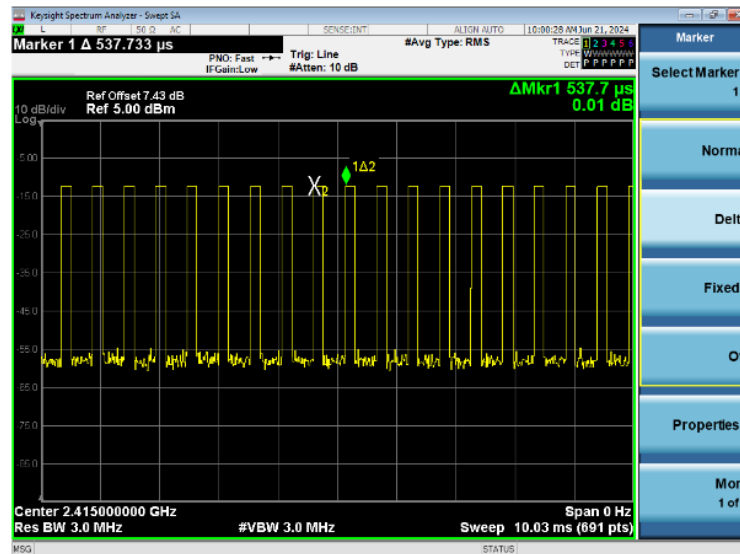
Test Report

No.: AJT240606039E-1

Ton of one cycle



The duration of one cycle



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Test Report

No.: AJT240606039E-1

5.2 20dB Bandwidth

For test instruments and accessories used see section 6

5.2.1 Test Procedures

- (1) Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- (2) Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
- (3) Measure the frequency difference of two frequencies that were attenuated 20dB from the reference level. Record the frequency difference as the emission bandwidth.
- (4) Repeat above procedures until all frequencies measured were complete.

5.2.2 Test Setup



5.2.3 Test Limits

According to FCC 15.215(c), must be designed to ensure that the 20dB bandwidth of the emission, or whatever bandwidth June otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

5.2.4 Test Results

Channel	Frequency (MHz)	20dB Bandwidth (MHz)
The lowest channel	2415	1.195
The middle channel	2440	1.205
The highest channel	2465	1.202

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Test Report

No.: AJT240606039E-1



2415MHz



2440MHz

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Test Report

No.: AJT240606039E-1



2465MHz

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Test Report

No.: AJT240606039E-1

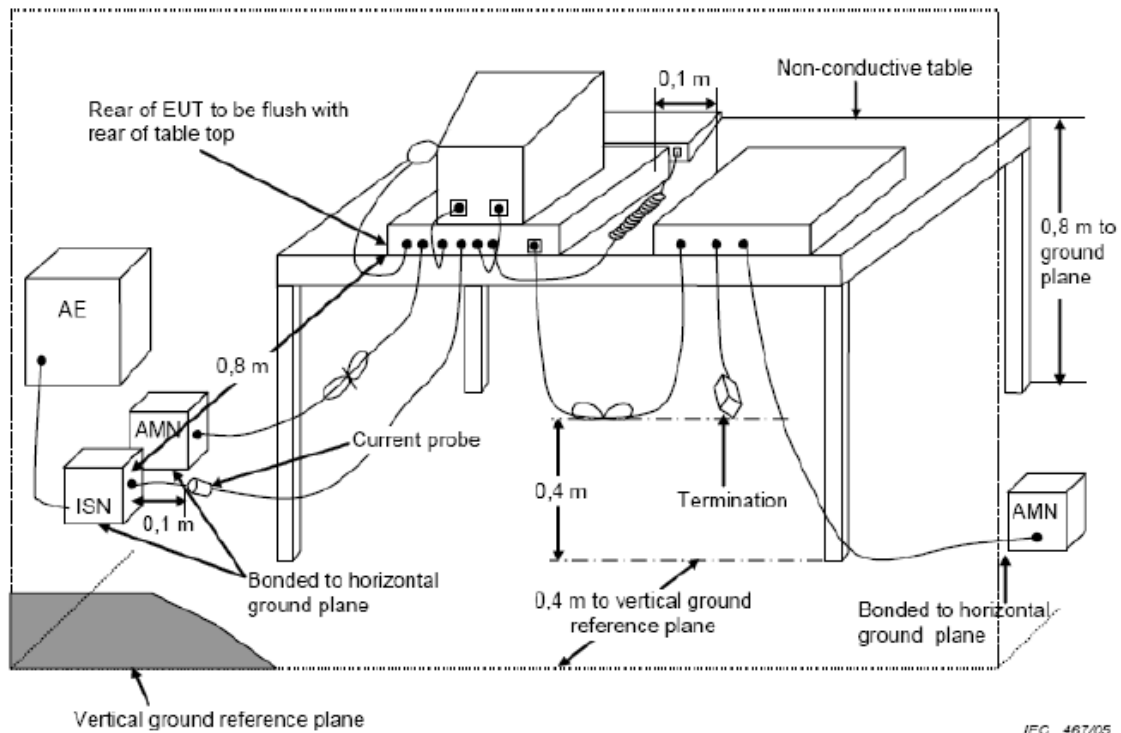
5.3 Conducted Emission (CE)

For test instruments and accessories used see section 6

5.3.1 Test Procedures

The PC Power connected to the power mains through a line impedance stabilization network (L.I.S.N.#2). This provides a 50 ohm coupling impedance for the EUT. Please refer the block diagram of the test setup and photographs. The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.#1). Power on the PC and let it work normally, we use a keyboard test software, let EUT working in test mode, then test it. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10-2013 on Conducted Emission Test.

5.3.2 Test Setup



IEC 467/05

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Test Report

No.: AJT240606039E-1

5.3.3 Test Limits

Standard: FCC Part 15 §15.207(a)		
Frequency of emission (MHz)	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

5.3.4 Test Results

Not Applicable

Note: The device is a DC power supply and does not apply to conducted emissions.

5.4 Antenna Requirements

5.4.1 Test Standard:

FCC Part 15, Subpart C 15.203

5.4.2 Standard 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 June 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.

5.4.3 EUT Antenna:

The antenna is Wire antenna and no consideration of replacement. The best case gain of the antenna is 0dBi. Antenna location: Refer to Internal Photos.

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Test Report

No.: AJT240606039E-1

6 Test Equipment

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1	Spectrum Analyzer	Keysight	N9010A	MY51120099	2024/03/02	2025/03/02
2	JS0806-2 RF Control Unit	Tonscend	JS0806-2	188060124	2023/07/14	2024/07/14
3	Broadband Preamplifier	SCHWARZBECK	BBV 9743B	00067	2023/03/14	2024/03/14
4	Broadband Preamplifier	SCHWARZBECK	BBV 9718B	00002	2024/03/02	2025/03/02
5	EMI Test Receiver	ROHDE & SCHWARZ	ESR3	102452	2024/03/02	2025/03/02
6	Trilog Broadband Antenna	SCHWARZBECK	VULB 9163	01127	2024/03/11	2025/03/11
7	Horn Antenna	SCHWARZBECK	BBHA 9120D	01829	2024/03/11	2025/03/11
8	DC Power Supply	MAISEN	MP5030D	2018121557	2023/07/24	2024/07/24
9	Vector Signal Generator	Keysight	N5172B	MY53052255	2024/03/02	2025/03/02
10	Analog Signal Generator	Keysight	N5171B	MY53051692	2024/03/02	2025/03/02
11	Temperature Humidity Chamber	Yiheng	BPS-50CB	191005684	2024/03/02	2025/03/02
12	Temperature and Humidity Indicator	JianDaRenKe	Cos-03	612058	2023/07/07	2024/07/07
13	BAT-EMC Testing (Test Software)	NEXIO	Version: 3.19.1.20	N/A	N/A	N/A
14	JS1120-3 Test System (Test Software)	Tonscend	JS1120-3	Version: 2.6.88.0341	N/A	N/A
15	Active Loop Antenna	HRTY	HR8913A	6933132206023	2023/07/20	2024/07/20

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Test Report

No.: AJT240606039E-1

7 Test Photographs

Referring to – “Test Setup Photos of RC TOYS(K12(54021))”.

8 Photos of the EUT

Referring to – “External Photos of RC TOYS(K12(54021))” and “Internal Photos of RC TOYS(K12(54021))”.

9 Manufacturer/ Approval Holder Declaration

The following identical model(s):

T01, T01B, T02, T02B, T03, T03B, T05, T05B, T06, T06B, T10, T10B, T105, T106, T107, T108, T109, T110, T111, T112, T113, T114, T115, T116, T117, T118, T119, T120, DMF01, P01A, K22, K22-1, K22-3, K22-4, K22-5, K18, K18-1, K18-2, K18-3, K18-4, K18-5, K14-1, K14-2, K14-3, K14-4, K14-5, K24-1, K24-2, K24-3, K24-4, K24-5, G20, G20-1, G20-2, G20-3, G16, G16-1, G16-2, G16-3, K16, K16-1, K16-2, K16-3, K20-1, K20-2, K20-3, K20-4, K20-5, K20-9, K28, K28-1, K28-2, K28-3, K28-4, K28-5, K12, K12-1, K12-2, K12-3, K10, K10-1, K10-2, K10-3, K26, K26-1, K26-2, K26-3, K30, K30-1, K30-2, K30-3, 101, 102, 106, 54021, 8156, 81520, 81521, 1802, 1802-4, OWI-41802, OWI-4004, 1802, 1802-4, OWI-41802, OWI-4004, 2409-1, 2409-2, 2409-3, 2409-4, 2409-5, 2409-6, 2409-7, 2409-8

Belong to the tested device:

Product Description:	RC TOYS
Model No.:	K12(54021)

END OF TEST REPORT

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