FCC Test Report

Report No: FCS202404167W01

Issued for

Applicant:	BADI TOYS FACTORY
Address:	No.1, Lane 13, Longtian Community, Guangyi Street, Chenghai District, Shantou, China
Product Name:	Remote control toy car
Brand Name:	N/A
Model Name:	BD002
Series Model:	BDXXX (XXX indicates a range from '001' to '100') SL888-Y (Y indicates a range from '1' to '10')
FCC ID:	2BF7L-BD002

Issued By: Flux Compliance Service Laboratory
Add: Room 105 Floor Bao hao Technology Building 1 NO.15 Gong ye West Road Hi-Tech Industrial, Song shan lake Dongguan
Tel: 769-27280901 Fax:769-27280901 http://www.fcs-lab.com

TEST RESULT CERTIFICATION

Applicant's Name ..... :	BADI TOYS FACTORY
Address..... :	No.1, Lane 13, Longtian Community, Guangyi Street, Chenghai District, Shantou, China
Manufacture's Name ..... :	BADI TOYS FACTORY
Address..... :	No.1, Lane 13, Longtian Community, Guangyi Street, Chenghai District, Shantou, China

Product Description

Product Name ..... :	Remote control toy car
Brand Name ..... :	N/A
Model Name ..... :	BD002
Series Model..... :	BDXXX (XXX indicates a range from '001' to '100') SL888-Y (Y indicates a range from '1' to '10')
Test Standards..... :	FCC Rules and Regulations Part 15 Subpart C, Section 249
Test Procedure..... :	ANSI C63.10:2013

This device described above has been tested FCS, the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.
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Date of Test ..... :

Date (s) of performance of tests :	24 Apr., 2024 ~ 29 Apr., 2024
Date of Issue ..... :	29 Apr., 2024
Test Result ..... :	Pass

Tested by : Scott shen

(Scott Shen)

Reviewed by : Duke Qian

(Duke Qian)

Approved by : Jack Wang

(Jack Wang)

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Revision History

Rev.	Issue Date	Effect Page	Contents
00	29 Apr., 2024	ALL	Initial Issue

1. SUMMARY OF TEST RESULTS

FCC Part 15.249, Subpart C			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	PASS	--
15.205(a), 15.209(a), 15.249(a), 15.249(c)	Radiated Spurious Emission	PASS	--
15.249	Field strength of fundamental	PASS	
15.249(d)	Band Edge Emission	PASS	--
15.215(c)	20dB Bandwidth	PASS	--
15.203	Antenna Requirement	PASS	--

NOTE:

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

(2) All tests are according to ANSI C63.10-2013

1.1 TEST FACTORY

Company Name:	Flux Compliance Service Laboratory
Address:	Room 105 Floor Bao hao Technology Building 1 NO.15 Gong ye West Road Hi-Tech Industrial, Song shan lake Dongguan
Telephone:	+86-769-27280901
Fax:	+86-769-27280901
FCC Test Firm Registration Number: 514908 Designation number: CN0127 A2LA accreditation number：5545.01 CNAS: L15566	

1.2 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** %.

No.	Item	Uncertainty
1	RF output power, conducted	±0.71dB
2	Unwanted Emissions, conducted	±2.98 dB
3	Conducted Emission (9KHz-150KHz)	±4.13 dB
4	Conducted Emission (150KHz-30MHz)	±4.74 dB
5	All emissions, radiated(<1G) 30MHz-1000MHz	±3.2 dB
6	All emissions, radiated (1GHz -18GHz)	±3.66 dB
7	All emissions, radiated (18GHz -40GHz)	±4.31 dB
8	Occupied Channel Bandwidth	±3.5%

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Product Name	Remote control toy car
Trade Name	N/A
Model Name	BD002
Series Model	BDXXX (XXX indicates a range from ‘001’ to ‘100’) SL888-Y (Y indicates a range from ‘1’ to ‘10’)
Model Difference	Only different of the appearance and color.
Channel	2405 MHz, 2440 MHz, 2475 MHz
Wireless function	Modulation: GFSK Channel number: 3CH
Battery	DC 1.5V * 2 AAA battery
Hardware version number	V1.0
Software version number	V1.0
Connecting I/O Port(s)	Please refer to the User's Manual

Note:

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

2. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
1	N/A	BD002	PCB Antenna	N/A	0.17	SRD Antenna

2.2 DESCRIPTION OF THE 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.

Test software: Press the button to transmit after power-on

No.	Test model descrption
1	2405 MHz GFSK
2	2440 MHz GFSK
3	2475 MHz GFSK

Note:

1. All the test modes can be supply by battery, only the result of the worst case recorded in the report.
2. For radiated emission, 3 axis were chosen for testing for each applicable mode.
3. The EUT used fully charge battery when tested.
4. During the test, the dutycycle>98%, the test voltage was tuned from 85% to 115% of the Nominal rate supply votage, and found that the worst case was the nominal rated supply condition, So the report just shows that condition's data

BT LE: 1 Mbps, GFSK.

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:

Transmitting mode	Keep the EUT in continuously transmitting mode.		
Test software:	AC3347-FCC_assist_1.0.		
Frequency	2405 MHz	2440 MHz	2475 MHz
Parameters(1 Mbps)	Default	Default	Default

2.3 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS

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.

Necessary accessories

Item	Equipment	Mfr/Brand	Model/Type No.	Serial No.	Note
N/A	N/A	N/A	N/A	N/A	N/A

Support units

No.	Equipment	Mfr/Brand	Model No.	Serial No.	Power cord	Signal cord
1	Notebook	DELL	VOSTRO .3800	N/A	N/A	N/A
2	USB Cable	N/A	100cm	N/A	N/A	N/A

Note:

(1) The support equipment was authorized by Declaration of Confirmation.

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

(3) “YES” is means “shielded” “with core”; “NO” is means “unshielded” “without core”.

2.4 EQUIPMENTS LIST

Radiation Test equipment

Kind of Equipment	Manufacturer	Type No.	Company No.	Last calibration	Calibrated until
EMI Test Receiver	R&S	ESRP 3	FCS-E001	2024.02.08	2025.02.07
Signal Analyzer	R&S	FSV40-N	FCS-E012	2024.02.08	2025.02.07
Active loop Antenna	ZHINAN	ZN30900C	FCS-E013	2024.02.08	2025.02.07
Bilog Antenna	SCHWARZBECK	VULB 9168	FCS-E002	2024.02.08	2025.02.07
Horn Antenna	SCHWARZBECK	BBHA 9120D	FCS-E003	2024.02.08	2025.02.07
SHF-EHF Horn Antenna (18G-40GHz)	A-INFO	LB-180400-KF	FCS-E018	2024.02.08	2025.02.07
Pre-Amplifier(0.1M-3GHz)	EMCI	EM330N	FCS-E004	2024.02.08	2025.02.07
Pre-Amplifier (1G-18GHz)	N/A	TSAMP-0518SE	FCS-E014	2024.02.08	2025.02.07
Pre-Amplifier (18G-40GHz)	TERA-MW	TRLA-0400	FCS-E019	2024.02.08	2025.02.07
Temperature & Humidity	HTC-1	victor	FCS-E005	2024.02.08	2025.02.07

Conduction Test equipment

Kind of Equipment	Manufacturer	Type No.	Company No.	Last calibration	Calibrated until
EMI Test Receiver	R&S	ESPI	FCS-E020	2024.02.08	2025.02.07
LISN	R&S	ENV216	FCS-E007	2024.02.08	2025.02.07
LISN	ETS	3810/2NM	FCS-E009	2024.02.08	2025.02.07
Temperature & Humidity	HTC-1	victor	FCS-E008	2024.02.08	2025.02.07

RF Connected Test

Kind of Equipment	Manufacturer	Type No.	Company No.	Last calibration	Calibrated until
Spectrum Analyzer	Keysight	N9020A	FCS-E015	2024.02.08	2025.02.07
Spectrum Analyzer	Agilent	E4447A	MY50180039	2024.02.08	2025.02.07
Spectrum Analyzer	R&S	FSV-40	101499	2024.02.08	2025.02.07

3. CONDUCTED EMISSION MEASUREMENT

3.1 LIMIT

Operating frequency band. In case the emission fall within the restricted band specified on Part 207(a) limit in the table below has to be followed.

FREQUENCY (MHz)	Conducted Emissionlimit (dBuV)	
	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

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.

3.2 TEST PROCEDURE

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

a. The EUT was 0.8 meters from the horizontal ground plane and 0.4 meters from the vertical 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.

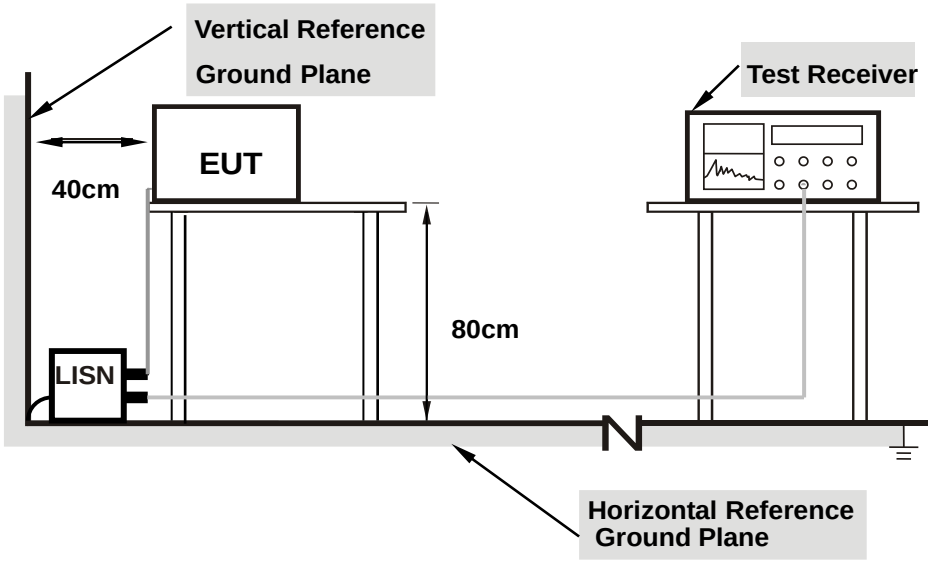
b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

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.

3.3 TEST SETUP



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

3.4 TEST RESULTS

Not Applicable.

The EUT is powered by Battery.

4. RADIATED EMISSION MEASUREMENT

4.1 LIMIT

In any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the Restricted band specified on Part15.205(a)&209(a) limit in the table and according to ANSI C63.10-2013 below has to be followed

LIMITS OF RADIATED EMISSION MEASUREMENT (0.009mhz - 1000mhz)

Frequencies (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	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (1GHz-25 GHz)

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

LIMITS OF FIELD STRENGTH OF THE FUNDAMENTAL SIGNAL

FREQUENCY (MHz)	(dBuV/m) (at 3M)	
	PEAK	AVERAGE
2400-2483.5	114	94

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

Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (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

Band-edge Measurements

According to §15.249 (d)Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation

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).

4.2 TEST PROCEDURE

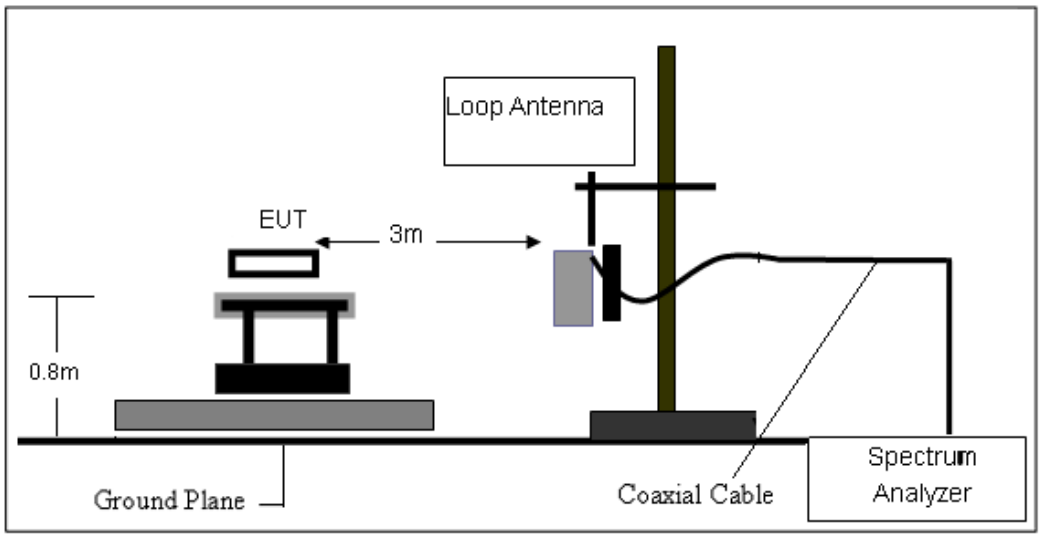
Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak/AV
Start Frequency	1000 MHz(Peak/AV)
Stop Frequency	10th carrier hamonic(Peak/AV)
RB / VB (emission in restricted band)	PK=1MHz / 1MHz, AV=1 MHz /10 Hz (Peak detector is for Both)

a. The measuring distance of at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz,and above 1GHz.
b. The EUT was placed on the top of a rotating table 0.8 meters (above 1GHz is 1.5 m) above the ground at a 3 meter anechoic chamber test site. The table was rotated 360 degrees to determine the position of the highest radiation.
c. The height of the equipment shall be 0.8 m(above 1GHz is 1.5 m); the height of the test antenna shall vary between 1 m to 4 m. horizontal and vertical polarizations of the antenna are set to make the measurement.
d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then QuasiPeak detector mode re-measured.
e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

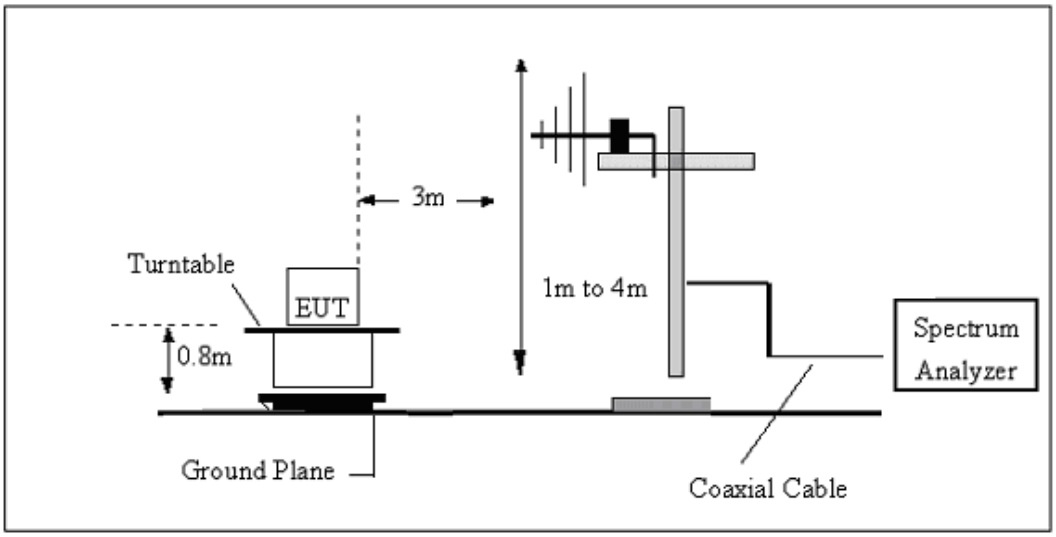
Note:
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported
For fundamental frequency ,RBW>20dB BW ,VBW>RBW,PK detector for PK value, RMS detector for AV value.

4.3 TEST SETUP

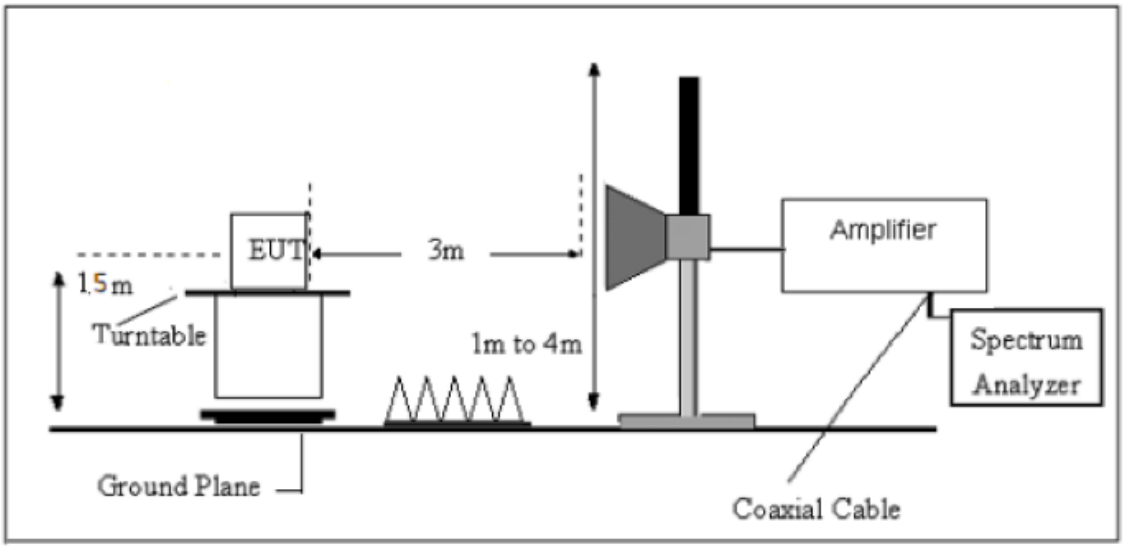
（A）Radiated Emission Test-Up Frequency Below 30MHz



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



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



4.4 TEST RESULTS

For spurious emission

(9KHz-30MHz)

Freq.	Reading	Limit	Margin	State	Test Result
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F	
--	--	--	--	--	PASS
--	--	--	--	--	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);

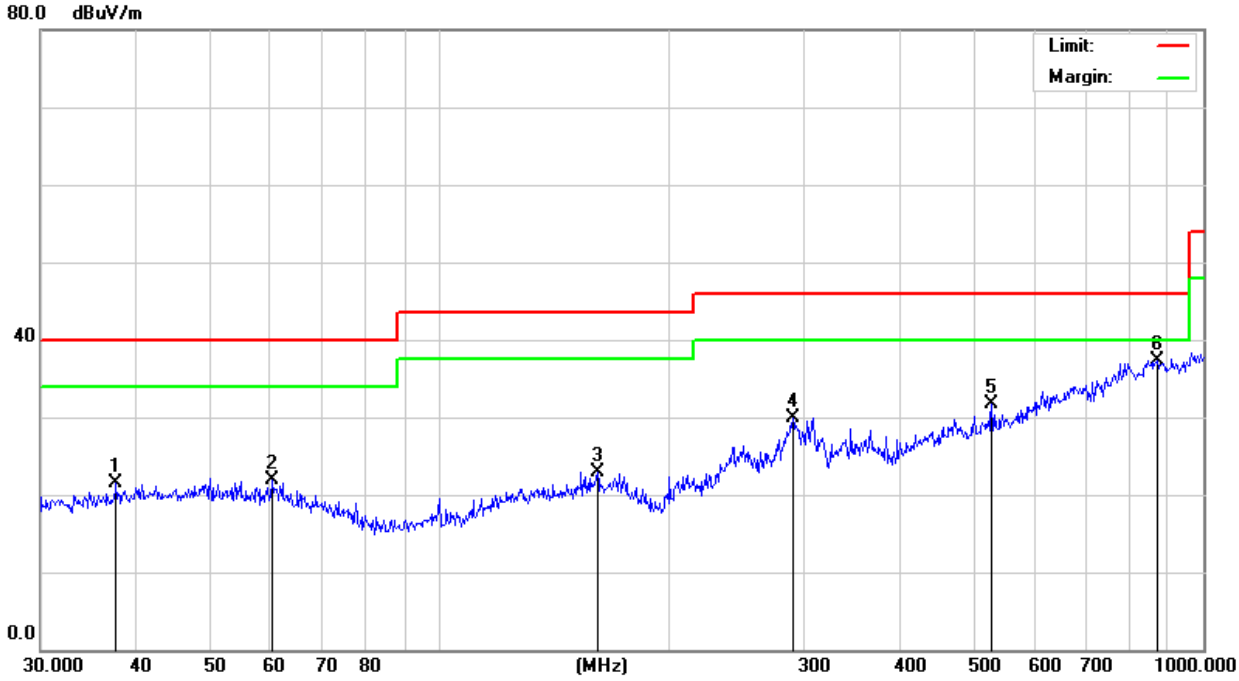
Limit line = specific limits (dBuv) + distance extrapolation factor.

Between 30MHz – 1000 MHz Radiation Spurious

Temperature:	23.1(C)	Relative Humidity:	60%RH
Test Voltage:	DC 3.7V	Phase:	Horizontal
Test Mode:	Mode 1		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		37.6798	22.70	-1.24	21.46	40.00	-18.54	QP
2		60.2801	23.83	-2.00	21.83	40.00	-18.17	QP
3		160.9089	23.16	-0.29	22.87	43.50	-20.63	QP
4		290.0172	28.94	1.05	29.99	46.00	-16.01	QP
5		528.2458	24.76	6.94	31.70	46.00	-14.30	QP
6	*	872.1832	23.65	13.61	37.26	46.00	-8.74	QP

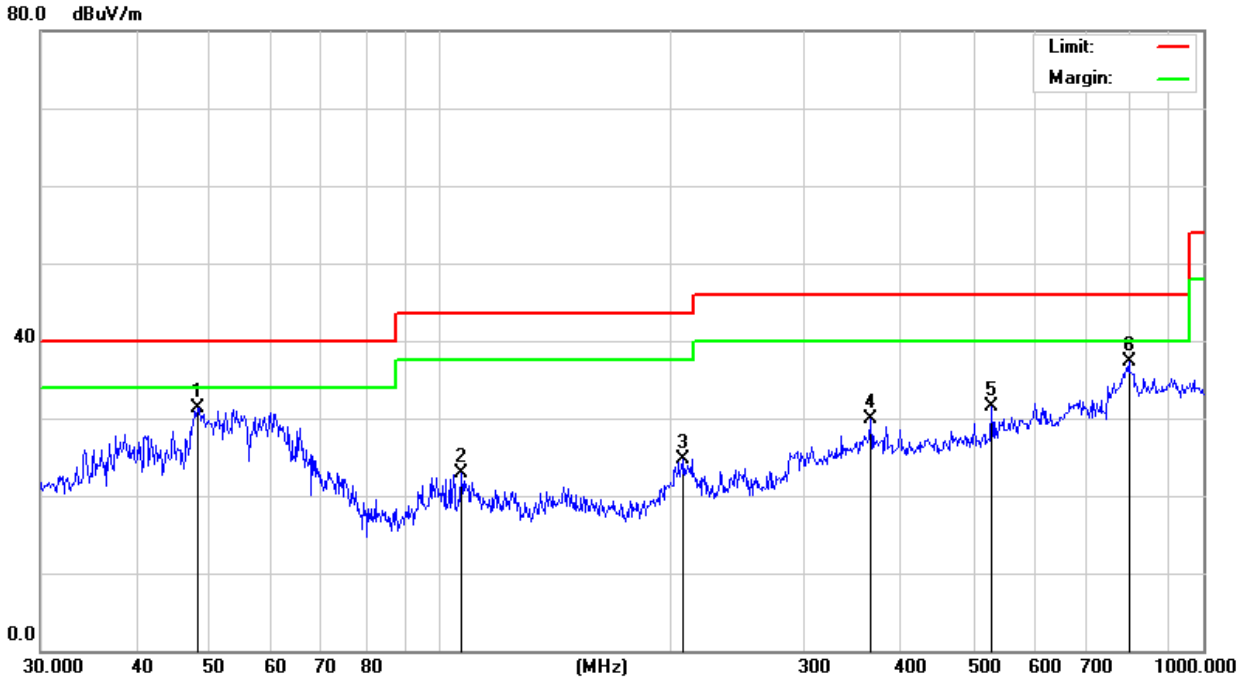
Remark:
1. 1. Margin = Result (Result =Reading + Factor)–Limit
2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain



Temperature:	23.1(C)	Relative Humidity:	60%RH
Test Voltage:	DC 3.7V	Phase:	Vertical
Test Mode:	Mode 1		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1	*	48.1626	31.05	0.33	31.38	40.00	-8.62	QP
2		106.7587	24.83	-1.87	22.96	43.50	-20.54	QP
3		208.5803	22.93	1.72	24.65	43.50	-18.85	QP
4		366.8231	24.51	5.44	29.95	46.00	-16.05	QP
5		528.2458	25.56	5.85	31.41	46.00	-14.59	QP
6		798.9797	24.47	12.90	37.37	46.00	-8.63	QP

Remark:
1. Margin = Result (Result =Reading + Factor)–Limit
2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain



Above 1G Radiation Spurious

Low channel_2405 MHz

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4810	41.31	5.06	46.37	74	-27.63	Vertical
7215	43.86	7.03	50.89	74	-23.11	Vertical
4810	43.37	5.06	48.43	74	-25.57	Horizontal
7215	44.85	7.03	51.88	74	-22.12	Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4810	33.66	5.06	38.72	54	-15.28	Vertical
7215	35.18	7.03	42.21	54	-11.79	Vertical
4810	34.91	5.06	39.97	54	-14.03	Horizontal
7215	36.77	7.03	43.8	54	-10.2	Horizontal

Middle channel_2440 MHz

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4880	42.42	5.18	47.6	74	-26.4	Vertical
7320	42.89	7.59	50.48	74	-23.52	Vertical
4916	44.18	5.18	49.36	74	-24.64	Horizontal
7374	45.01	7.59	52.6	74	-21.4	Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4880	33.88	5.18	39.06	54	-14.94	Vertical
7320	35.15	7.59	42.74	54	-11.26	Vertical
4880	34.67	5.18	39.85	54	-14.15	Horizontal
7320	36.03	7.59	43.62	54	-10.38	Horizontal

High channel_2475 MHz

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4950	42.12	5.25	47.37	74	-26.63	Vertical
7250	44.32	7.76	52.08	74	-21.92	Vertical
4950	44.09	5.25	49.34	74	-24.66	Horizontal
7250	45.78	7.76	53.54	74	-20.46	Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4950	34.67	5.25	39.92	54	-14.08	Vertical
7250	37.28	7.76	45.04	54	-8.96	Vertical
4950	33.98	5.25	39.23	54	-14.77	Horizontal
7250	35.49	7.76	43.25	54	-10.75	Horizontal

Remarks:

1). Measuring frequencies from 9 KHz - 10th harmonic or 26.5GHz (which is less), No emission found between lowest internal used/generated frequency to 30MHz.
2). Radiated emissions *measured in frequency range from 9 KHz~10th harmonic or 26.5GHz (which is less) were made with an instrument using Peak detector mode.*
3). Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
4). Margin= Final Level – Limit
5).Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
6). All the modes have been tested and the only shows the worst case GFSK mode

Band-edge Measurements

Low channel_2405 MHz

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2310	38.77	3.43	42.2	74	-31.8	Vertical
2390	39.02	4.34	43.36	74	-30.64	Vertical
2400	40.18	4.41	44.59	74	-29.41	Vertical
2310	40.11	3.43	43.54	74	-30.46	Horizontal
2390	39.98	4.34	44.32	74	-29.68	Horizontal
2400	41.78	4.41	46.19	74	-27.81	Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2310	31.56	3.43	34.99	54	-19.01	Vertical
2390	30.69	4.34	35.03	54	-18.97	Vertical
2400	32.65	4.41	37.06	54	-16.94	Vertical
2310	29.64	3.43	33.07	54	-20.93	Horizontal
2390	29.88	4.34	34.22	54	-19.78	Horizontal
2400	30.98	4.41	35.39	54	-18.61	Horizontal

High channel_2475 MHz

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2483.5	40.76	4.6	45.36	74	-28.64	Vertical
2500	41.56	4.61	46.17	74	-27.83	Vertical
2483.5	39.08	4.6	43.68	74	-30.32	Horizontal
2500	40.34	4.61	44.95	74	-29.05	Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2483.5	30.21	4.6	34.81	54	-19.19	Vertical
2500	31.45	4.61	36.06	54	-17.94	Vertical
2483.5	31.56	4.6	36.16	54	-17.84	Horizontal
2500	33.79	4.61	38.4	54	-15.6	Horizontal

Remark:

1. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*

Field Strength Of The Fundamental Signal:

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2405	84.15	4.42	88.57	114	-25.43	Vertical
2405	86.45	4.42	90.87	114	-23.13	Horizontal
2440	83.62	4.47	88.09	114	-25.91	Vertical
2440	85.79	4.47	90.26	114	-23.74	Horizontal
2475	84.03	4.51	88.54	114	-25.46	Vertical
2475	85.69	4.51	90.2	114	-23.8	Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2405	71.08	4.42	75.5	94	-18.5	Vertical
2405	74.38	4.42	78.8	94	-15.2	Horizontal
2440	70.45	4.47	74.92	94	-19.08	Vertical
2440	73.69	4.47	78.16	94	-15.84	Horizontal
2475	72.37	4.51	76.88	94	-17.12	Vertical
2475	73.15	4.51	77.66	94	-16.34	Horizontal

Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

6. 20 dB BANDWIDTH TEST

6.1 LIMIT

According to 15.215 (c) Intentional radiators operating under the alternative provisions to the general emission limits, as contained in § 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may 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. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation

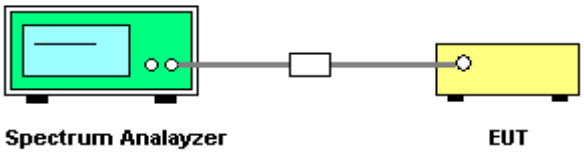
6.2 TEST PROCEDURE

a. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator

b. Position the EUT without connection to measurement instrument. 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.

c. Measure the frequency difference of two frequencies that were attenuated 20 dB from the reference level. Record the frequency difference as the emission bandwidth.

6.3 TEST SETUP

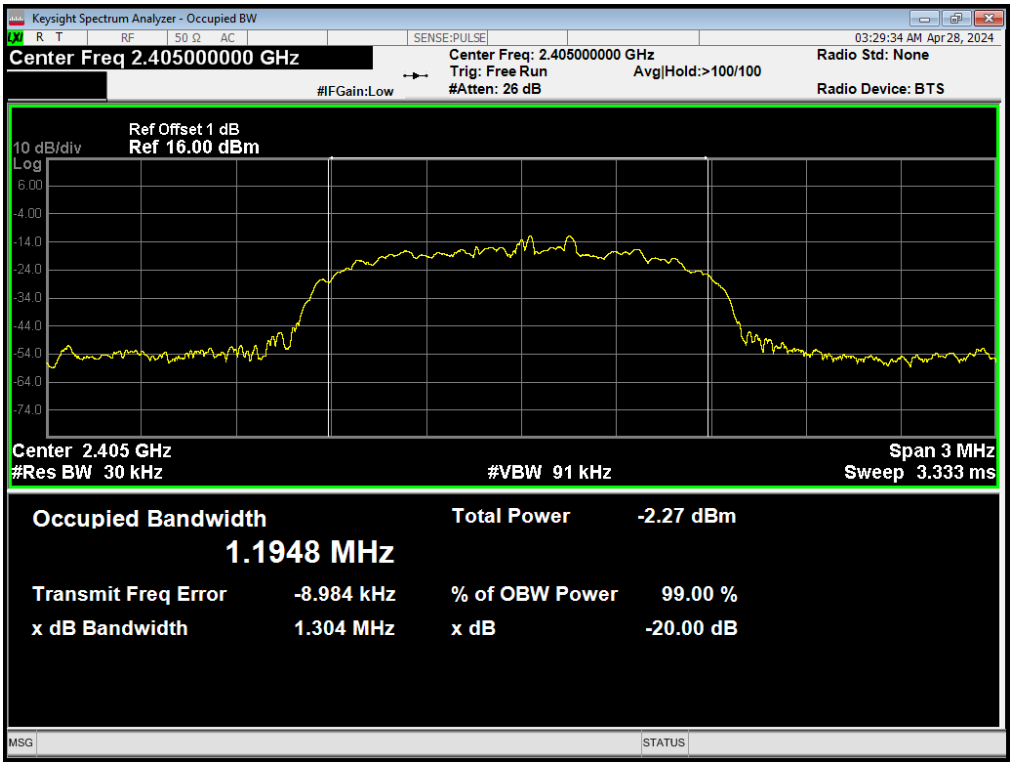


6.4 TEST RESULTS

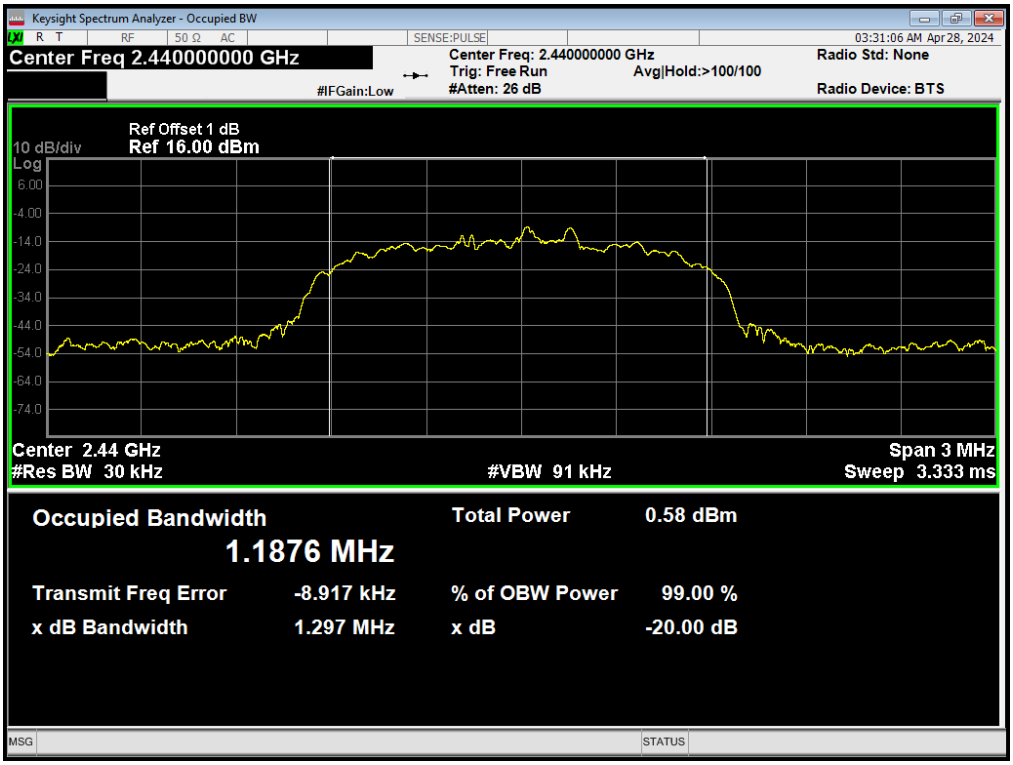
Temperature:	25℃	Relative Humidity:	50%
Test Mode:	GFSK	Test Voltage:	DC 3.7V

Test Channel	Frequency(MHz)	20 dB Bandwidth(KHz)	99% Bandwidth(KHz)
CH01	2405	1304	1194.8
CH02	2440	1297	1187.6
CH03	2475	1297	1189.4

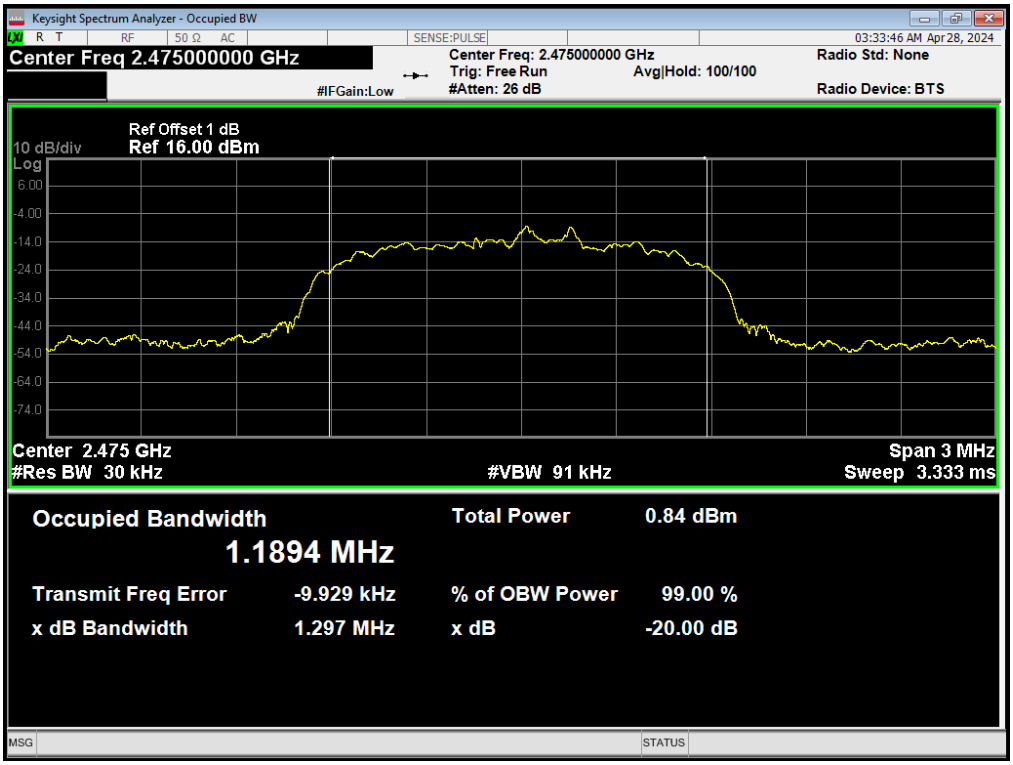
2405 MHz



2440 MHz



2475 MHz



7. ANTENNA REQUIREMENT

7.1 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.

7.2 EUT ANTENNA

The antennas used for this product are PCB antenna and other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 0.17 dBi.

※※※※※END OF THE REPORT※※※※※