TEST REPORT

Application No.:	DNT2506050071R5913-07151
Applicant:	Shantou City Chenghai District Hengda Toys Factory
Address of Applicant:	No. 668, Liannan Road, Nanwan, Lianxia Town, Chenghai District, Shantou City, Guangdong Province, China
EUT Description:	R/C CAR SERIES
Model No.:	YQ082-10,SKU 2752060,YQ080-1,YQ080-7,YQ080-10,YQ080-13,YQ080-15,YQ080-19,YQ080-25,YQ081-1,YQ081-3,YQ081-4,YQ081-5,YQ081-7,YQ081-9,YQ081-10,YQ081-11,YQ082-1,YQ082-4,YQ082-5,YQ082-10,YQ082-11,YQ082-12,YQ082-13,YQ082-15,YQ082-16,YQ082-17,YQ082-18,YQ083-1,YQ083-2,YQ083-3,YQ083-4,YQ083-5,YQ083-6,YQ083-7,YQ083-8,YQ083-9,YQ083-10,YQ083-11,YQ083-12,YQ085-1,YQ085-2,YQ085-3,YQ085-5,YQ085-6,YQ085-7,YQ085-9,YQ085-10,YQ085-11,YQ085-13,YQ085-16,YQ086-1,YQ086-4,YQ086-5,YQ086-9,YQ086-11,YQ086-13,YQ088-1,YQ088-4,YQ088-7,YQ088-11,YQ088-15,YQ088-17,YQ010A-1,YQ010A-2,YQ010A-3,YQ070-1,YQ070-5,YQ070-12,YQ070-28,US-18501,US-18508,US-18513,US-18520,US-22003,US-22008,US-220014,US-22018,US-31002,US-310008,US-31015,US-31016
FCC ID:	2BPYD-YQ082-10
Power Supply	Remote control:DC 3V From AA Battery Toys:DC 6V From AA Battery
Trade Mark:	/
Standards:	47 CFR FCC Part 2, Subpart J 47 CFR Part 15, Subpart C ANSI C63.10: 2013
Date of Receipt:	2025/6/8
Date of Test:	2025/6/10 to 2025/6/17
Date of Issue:	2025/6/18
Test Result:	**PASS**

Dongguan DN Testing Co., Ltd.
Add: No. 1, West Fourth Street, Xingfa South Road, Wusha Community, Chang 'an Town, Dongguan City, Guangdong P.R.China
Web: www.dn-testing.com Tel:+86-769-88087383 E-mail: service@dn-testing.com

Prepared By: Wayne.Lin (Testing Engineer)

Reviewed By: Pencils.Chen (Project Engineer)

Approved By: Peise Chen (Manager)

Note: If there is any objection to the results in this report, please submit a written inquiry to the company within 15 days from the date of receiving the report. The test report is effective only with both signature and specialized stamp, and is issued by the company in accordance with the requirements of the "Conditions of Issuance of Test Reports" printed in the attached page. Unless otherwise stated, the results presented in this report only apply to the samples tested this time. Partial reproduction of this report is not allowed unless approved by the company in writing.

Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Jun.17, 2025	Valid	Original Report

1 Test Summary

Test Item	Standard Section	Test Result	Result
Antenna Requirement	15.203	Clause 3.1	PASS
20 dB Bandwidth	15.215(c)	Clause 3.2	PASS
Field Strength	15.227; 15.35	Clause 3.3	PASS
Radiated Spurious Emissions	15.209	Clause 3.4	PASS

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2 General Information

2.1 Test Location

Company:	Dongguan DN Testing Co., Ltd
Address:	No. 1, West Fourth Street, South Xinfa Road, Wusha Liwu, Chang ' an Town, Dongguan City, Guangdong P.R.China
Test engineer:	Wayne Lin

2.2 General Description of EUT

Manufacturer:	Shantou City Chenghai District Hengda Toys Factory
Address of Manufacturer:	No. 668, Liannan Road, Nanwan, Lianxia Town, Chenghai District, Shantou City, Guangdong Province, China
EUT Description:	R/C CAR SERIES
Test Model No.:	YQ082-10
Additional Model(s):	SKU 2752060,YQ080-1,YQ080-7,YQ080-10,YQ080-13,YQ080-15,YQ080-19,YQ080-25,YQ081-1,YQ081-3,YQ081-4,YQ081-5,YQ081-7,YQ081-9,YQ081-10,YQ081-11,YQ082-1,YQ082-4,YQ082-5,YQ082-10,YQ082-11,YQ082-12,YQ082-13,YQ082-15,YQ082-16,YQ082-17,YQ082-18,YQ083-1,YQ083-2,YQ083-3,YQ083-4,YQ083-5,YQ083-6,YQ083-7,YQ083-8,YQ083-9,YQ083-10,YQ083-11,YQ083-12,YQ085-1,YQ085-2,YQ085-3,YQ085-5,YQ085-6,YQ085-7,YQ085-9,YQ085-10,YQ085-11,YQ085-13,YQ085-16,YQ086-1,YQ086-4,YQ086-5,YQ086-9,YQ086-11,YQ086-13,YQ088-1,YQ088-4,YQ088-7,YQ088-11,YQ088-15,YQ088-17,YQ010A-1,YQ010A-2,YQ010A-3,YQ070-1,YQ070-5,YQ070-12,YQ070-28,US-18501,US-18508,US-18513,US-18520,US-22003,US-22008,US-220014,US-22018,US-31002,US-310008,US-31015,US-31016
Power Supply	Remote control:DC 3V From AA Battery Toys:DC 6V From AA Battery
Chip Type:	TX-2
Serial number:	PR2506050071R5913
Trade Mark:	/
Hardware Version:	V1.0
Software Version:	V1.0
Operation Frequency:	27.145MHz
Type of Modulation:	ASK
Sample Type:	Prototype production
Antenna Type:	☐ External, ☒ Integrated
Antenna Ports	☒ Ant 1, ☐ Ant 2, ☐ Ant 3
Antenna Gain*:	☒ Provided by applicant
	0.17dBi
RF Cable*:	☒ Provided by applicant
	0.5dB(0.6~1GHz); 0.8dB(1.4~2GHz); 1.0dB(2.1~2.7GHz); 1.5dB(3~4GHz); 1.8dB(4.4~6GHz);

Remark:

*All models are just color differences, motherboard, PCB circuit board, chip, electronic components, appearance is all the same.

*Since the above data and/or information is provided by the applicant relevant results or conclusions of this report are only made for these data and/or information , DNT is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.

2.3 Power Setting of Test Software

Software Name	N/A
Frequency(MHz)	27.145
Setting	Default

2.4 Test Environment and Mode

Operating Environment:	
Temperature:	20~25.0 ˚C
Humidity:	45~56 % RH
Atmospheric Pressure:	101.0~101.30 KPa
Test mode:	
Transmitting mode:	Keep the EUT in transmitting mode with all kind of modulation and all kind of data rate.

2.5 Channel List

Operation Frequency of each channel (SRD)							
Channel	**Frequency**	**Channel**	**Frequency**	**Channel**	**Frequency**	**Channel**	**Frequency**
1	27.145MHz						

2.6 Description of Support Units

The EUT has been tested independent unit.

2.7 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

Lab A:

• FCC, USA

Designation Number: CN1348

• A2LA (Certificate No. 7050.01)

DONGGUAN DN TESTING CO., LTD.

• Innovation, Science and Economic Development Canada

DONGGUAN DN TESTING CO., LTD. EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

IC#: 31026.

2.8 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Total RF power, conducted	±0.41dB
2	RF power density, conducted	±1.96dB

No.	Item	Measurement Uncertainty
1	Conduction Emission	± 3.0dB (150kHz to 30MHz)
2	Radiated Emission	± 4.8dB (Below 1GHz)
		± 4.8dB (1GHz to 6GHz)
		± 4.5dB (6GHz to 18GHz)
		± 5.02dB (Above 18GHz)

2.9 Equipment List

Test Equipment for Radiated Emission(below 1000MHz)					
Description	Manufacturer	Model	Serial Number	Cal Date	Due Date
Receiver	R&S	ESR7	102497	2024-10-24	2025-10-23
Test Software	ETS-LINDGREN	TiLE-FULL	NA	NA	NA
RF Cable	ETS-LINDGREN	RFC-NMS-100-NMS-350-IN	NA	2024-10-24	2025-10-23
Log periodic antenna	ETS-LINDGREN	VULB 9168	01475	2024-10-24	2025-10-23
Pre-amplifier	Schwarzbeck	BBV9743B	00423	2024-10-24	2025-10-23
Single ring magnetic field ring antenna	ETS-LINDGREN	6502	6502	2024-10-24	2025-10-23
Attenuator 1	Shanghai Huaxiang	TS2-6-18-A	22061803	2025-5-6	2026-5-5
Attenuator 2	Shanghai Huaxiang	TS2-6-6-A	230927163	2025-5-6	2026-5-5

2.10 Assistant equipment used for test

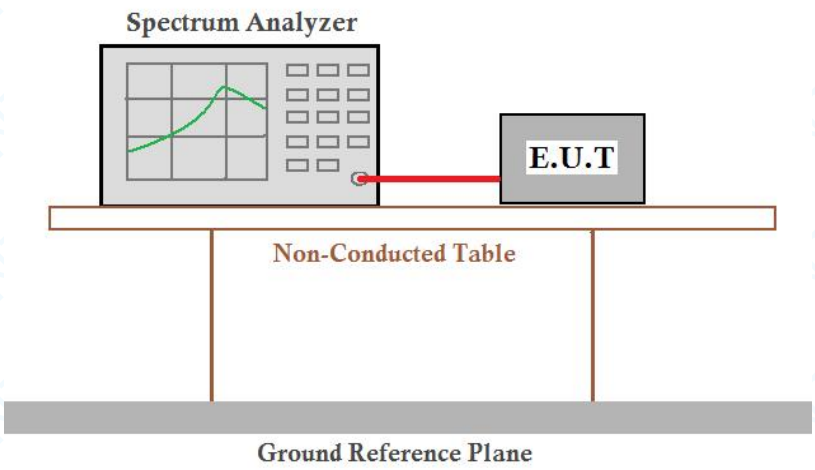
Code	Equipment	Manufacturer	Model No.	Equipment No.
/	/	/	/	/

3 Test results and Measurement Data

3.1 Antenna requirements

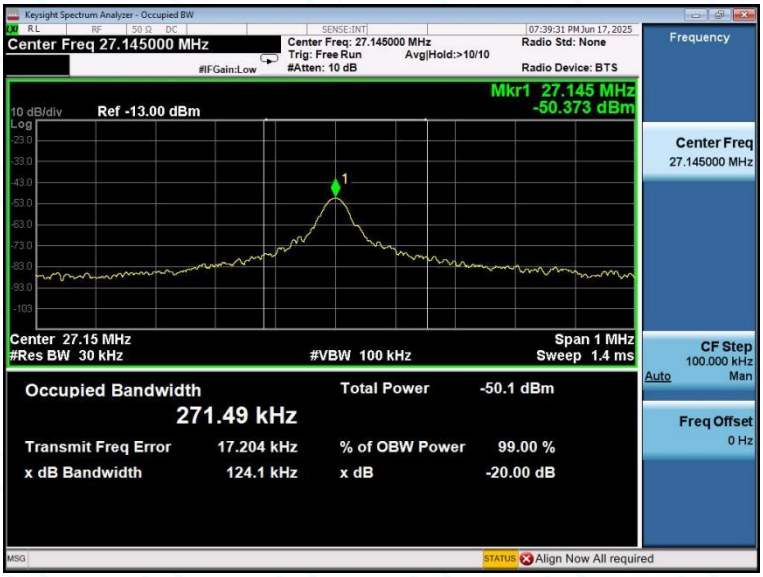
Standard requirement:	47 CFR Part 15C Section 15.203 /247(c)
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §§15.211, 15.213, 15.217, 15.219, 15.221, or §15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.	
The antenna is a rod antenna and no consideration of replacement. The best case gain of the antenna is 0.17dBi.	

3.2 20dB Occupied Bandwidth

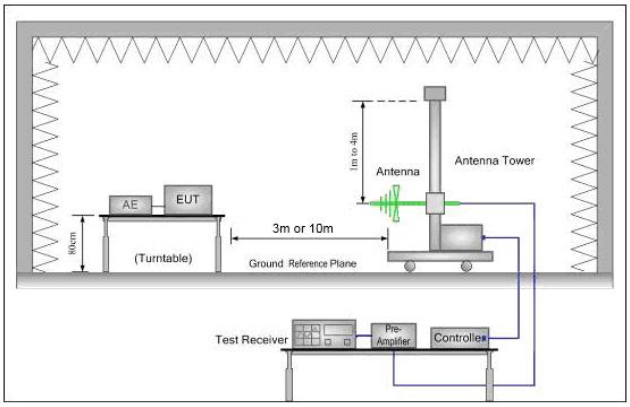
Test Requirement:	47 CFR Part 15C Section 15.215
Test Method:	ANSI C63.10:2013 Section 7.8.7
Test Setup:	
Instruments Used:	Refer to section 2.9 for details
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Through Pre-scan, find the worst case
Limit:	No least the central 80% of the permitted band
Test Results:	Pass

Test Data:

Test Frequency (MHz)	20dB Bandwidth (KHz)	Result
27.145	124.1	Pass

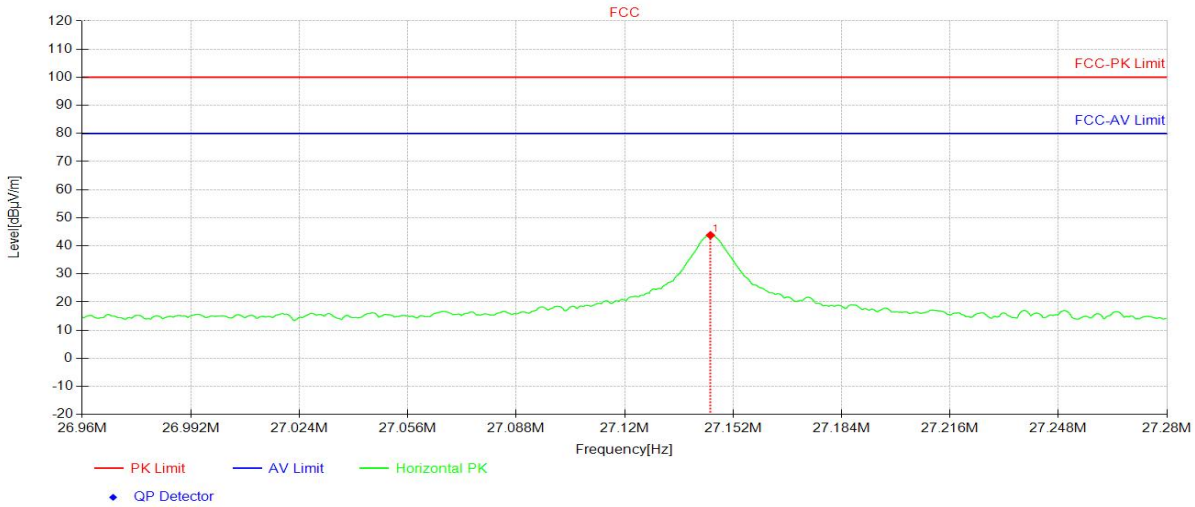


3.3 Field Strength

Test Requirement:	47 CFR Part 15C Section 15.227
Test Method:	ANSI C63.10 :2020 Section 11.12
Test Setup:	
Test Instruments:	Refer to section 2.9 for details
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates
Final Test Mode:	Through Pre-scan, find the worst case
Limit:	Frequency(MHz): 26.96-27.28 Limit(dBuV/m) Peak: 100 Limit(dBuV/m) AV: 80
Test Configuration:	RBW: ⩾OBW VBW: 3XRBW Start frequency: 26.96MHz Stop frequency: 27.28MHz Sweep Time: Auto Detector: PEAK/AVG Trace Mode: Max Hold
Test Procedure:	a. the EUT was placed on the top of a rotating table 1 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. 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. g. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case.

	r. Repeat above procedures until all frequencies measured was complete.
Test Results:	Pass

Test Data



NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
1	27.145	35.70	8.09	43.79	100.00	56.21	100	93	PK	PASS

Note

1. The Measurement (Result Level) is calculated by Reading Level adding the Correct Factor(maybe including LISN Factor and the Cable Factor etc.), The basic equation is as follows:

Result Level= Reading Level + Correct Factor(including Ant.Factor ,Cable Factor etc.)

2.The amplitude spurious emission that is attenuated by more than 20dB below the permissible limit has no need to be reported.

3.4 Radiated Spurious Emissions

Test Requirement:	47 CFR Part 15C Section 15.209				
Test Method:	ANSI C63.10 :2020 Section 11.12				
Test Site:	Measurement Distance: 3m or 10m (Semi-Anechoic Chamber)				
Receiver Setup:	Frequency	Detector	RBW	VBW	Remark
	0.009MHz-0.090MHz	Peak	300Hz	300Hz	Peak
	0.009MHz-0.090MHz	Average	300Hz	300Hz	Average
	0.090MHz-0.110MHz	Quasi-peak	300Hz	300Hz	Quasi-peak
	0.110MHz-0.150MHz	Peak	300Hz	300Hz	Peak
	0.110MHz-0.150MHz	Average	300Hz	300Hz	Average
	0.150MHz -30MHz	Quasi-peak	300Hz	300Hz	Quasi-peak
	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
Limit:	15.209 **Radiated emission limits**				
	Frequency	Field strength (microvolt/meter)	Limit (dBuV/m)	Remark	Measurement distance (m)
	0.009MHz-0.490MHz	2400/F(kHz)	-	-	300
	0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
	1.705MHz-30MHz	30	-	-	30
	30MHz-88MHz	100	40.0	Quasi-peak	3
	88MHz-216MHz	150	43.5	Quasi-peak	3
	216MHz-960MHz	200	46.0	Quasi-peak	3
	960MHz-1GHz	500	54.0	Quasi-peak	3
	Above 1GHz	500	54.0	Average	3
	Remark:Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device. The limits on the field strength of the spurious emissions in the below table are based on the fundamental frequency of the intentional radiator. Spurious emissions shall be attenuated to the average (or, alternatively, CISPR quasi-peak) limits shown in this table or to the general limits shown in §15.209, whichever limit permits a higher field strength.				

Test Setup:	

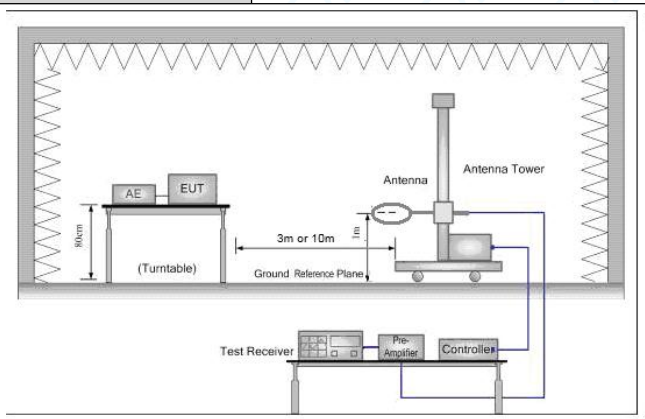


Figure 1. Below 30MHz

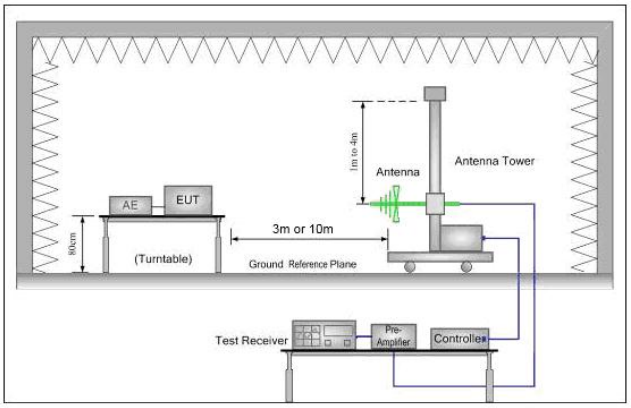


Figure 2. 30MHz to 1GHz

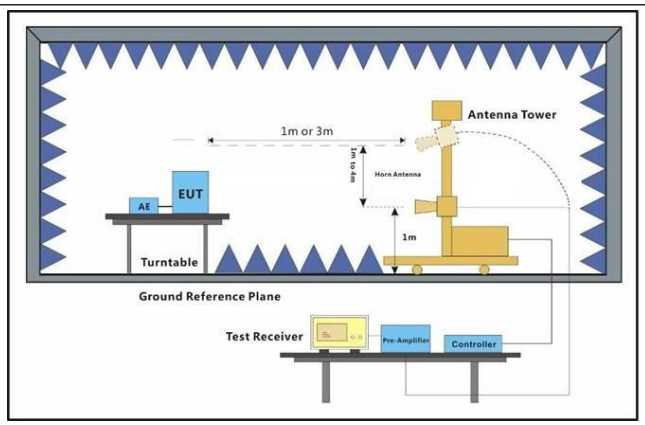


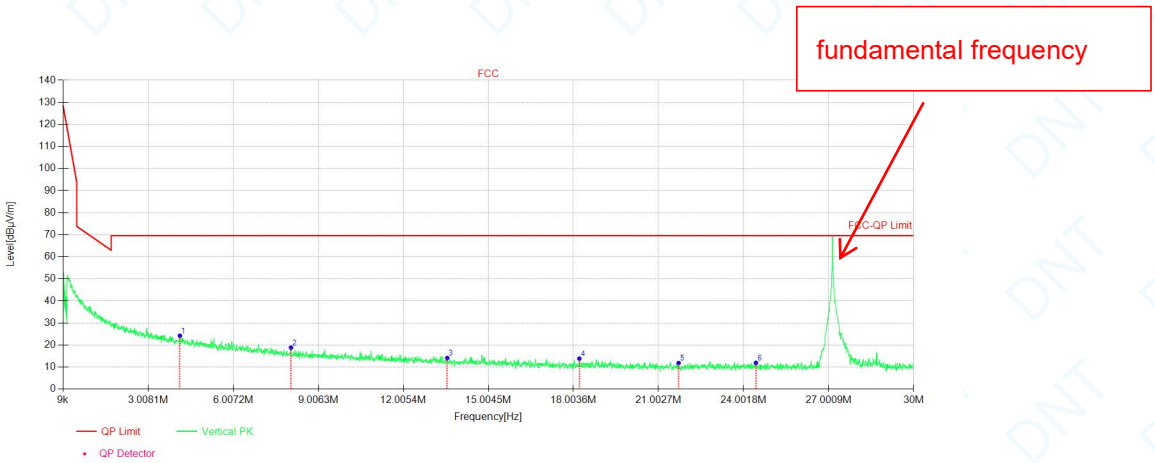
Figure 3. Above 1 GHz

Test Procedure:	
	h. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. i. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 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 j. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. k. 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. l. 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. m. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. n. 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. o. Test the EUT in the lowest channel, the middle channel ,the Highest channel. p. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case. q. Repeat above procedures until all frequencies measured was complete.

Exploratory Test Mode:	Transmitting with all kind of modulations, data rates. Transmitting mode.
Final Test Mode:	Pretest the EUT at Transmitting mode. Through Pre-scan, find the worst case.
Instruments Used:	Refer to section 2.9 for details
Test Results:	Pass

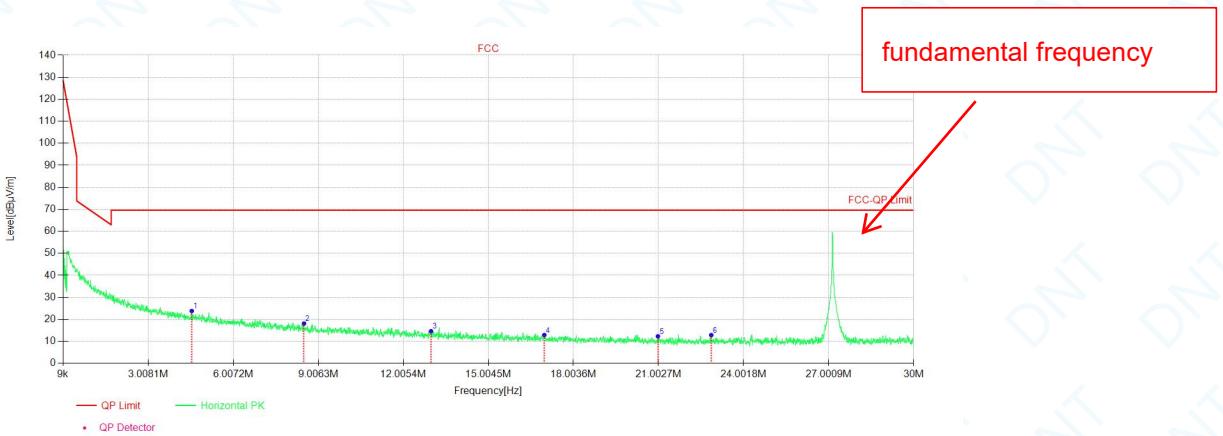
For 9k-30MHz TX

Vertical:



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	4.126	14.65	9.60	24.25	69.54	45.29	100	0	QP
2	8.043	9.28	9.57	18.85	69.54	50.69	100	60	QP
3	13.55	4.96	9.19	14.15	69.54	55.39	100	140	QP
4	18.21	5.19	8.68	13.87	69.54	55.67	100	70	QP
5	21.71	3.70	8.15	11.85	69.54	57.69	100	160	QP
6	24.440	4.29	7.65	11.94	69.54	57.60	100	10	QP

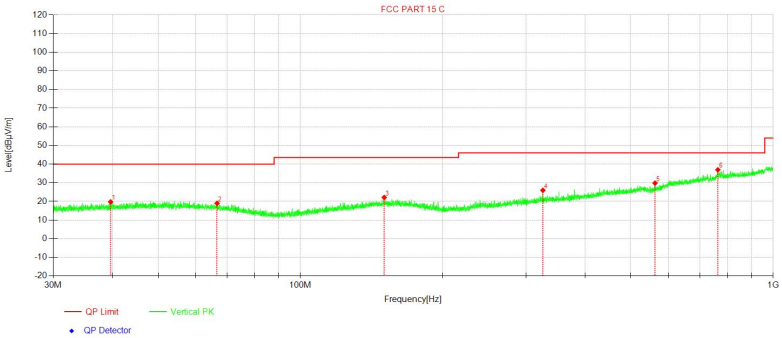
Horizontal:



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	4.544	14.17	9.62	23.79	69.54	45.75	100	40	QP
2	8.503	8.57	9.55	18.12	69.54	51.42	100	340	QP
3	12.982	5.37	9.23	14.60	69.54	54.94	100	290	QP
4	16.97	4.03	8.85	12.88	69.54	56.66	100	50	QP
5	20.983	4.03	8.26	12.29	69.54	57.25	100	120	QP
6	22.864	4.90	7.96	12.86	69.54	56.68	100	340	QP

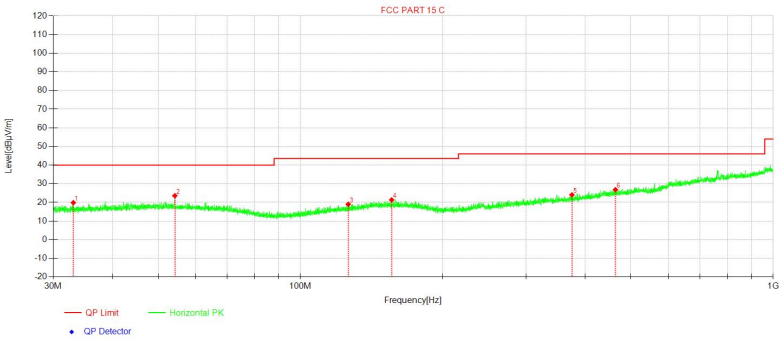
For 30-1000MHz TX

Vertical:



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	39.69	28.54	-8.81	19.73	40.00	20.27	100	157	QP
2	66.64	28.51	-9.55	18.96	40.00	21.04	100	5	QP
3	150.43	29.99	-7.86	22.13	43.50	21.37	100	84	QP
4	325.71	32.06	-6.10	25.96	46.00	20.04	100	254	QP
5	562.47	31.36	-1.56	29.80	46.00	16.20	100	360	QP
6	763.91	33.32	3.63	36.95	46.00	9.05	100	19	QP

Horizontal



NO.	Freq. [MHz]	Reading Level [dBμV]	Correct Factor [dB/m]	Result Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Remark
1	33.09	29.41	-9.57	19.84	40.00	20.16	100	343	QP
2	54.26	31.79	-8.22	23.57	40.00	16.43	100	2	QP
3	126.28	28.77	-9.77	19.00	43.50	24.50	100	120	QP
4	155.96	29.12	-7.79	21.33	43.50	22.17	100	186	QP
5	375.28	29.01	-4.97	24.04	46.00	21.96	100	120	QP
6	463.81	29.26	-2.45	26.81	46.00	19.19	100	1	QP

Note:

1. The Measurement (Result Level) is calculated by Reading Level adding the Correct Factor(maybe including Ant.Factor and the Cable Factor etc.), The basic equation is as follows:

Measurement Level= Reading Level + Correct Factor(including LISN Factor ,Cable Factor etc.)

---END REPORT---