ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT
INTENTIONAL RADIATOR CERTIFICATION TO
FCC PART15C:2007 REQUIREMENT (TX)

Product Name	**:**	07159 Remote control
Model Number	**:**	85003(07159)
FCC ID	**:**	PKG07159RC27
Report Number	**:**	SZEE081023108808
Date	**:**	Oct. 30, 2008

Prepared for:

MAY CHEONG TOY PRODUCT FTY. LTD

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Prepared by:

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1. VERIFICATION OF CONFORMITY

Applicant & Address:	MAY CHEONG TOY PRODUCT FTY. LTD 7/F,EAST WING, TSIMSHATSUI CENTRE, 66 MODY ROAD,TSIMSHATSUI EAST,KOWLOON,HONG KONG
Type of Test:	FCC Part 15C (Certification)
Equipment Under Test:	07159 Remote Control
Trade Name:	N/A
Model Number:	85003(07159)
Serial Number:	N/A
Date of test:	Oct. 23,2008 to Oct. 30, 2008
Condition of Test Sample:	Normal

The above equipment was tested by Centre Testing International for compliance with the requirements set forth in the FCC Rules and Regulations Part 15, Subpart B and the measurement procedure according to ANSI C63.4.
The test results of this report relate only to the tested sample identified in this report.

Prepared by : Lily Yan

Reviewed by : Christy Chen

Approved by : Jim Zhang
Manager

Date : Oct. 30, 2008

2. TEST SUMMARY

The EUT has been tested according to the following specifications:

EMISSION				
Standard	**Test Type**	**Rule**	**Result**	**Remark**
FCC Part 15	Conducted emission at AC power port	15.207	**N/A**	EUT is powered by battery.
	Radiated emission	15.209 15.227	**PASS**	See clause 7 in this report

3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Measurement items	Value
Conducted emission	2.6 dB
Radiated emission	3.4 dB

4. PRODUCT INFORMATION

The TRANSMITTER. Model: 85003(07159)
The EUT is an short range, lower power, 85003(07159) Remote control designed as an “ Input Device”. It is designed by way of utilizing the FSK modulation achieves the system operating.

A major technical descriptions of EUT is described as following:

A). Operation Frequency: 27.145 MHz ,one channel.
B). Modulation: FSK
C). Antenna Designation: integral antenna (it can’t be moved during the test)
D). Power Supply: DC3 V by battery.

5. FACILITIES AND ACCREDITATIONS

5.1 TEST FACILITY

All measurement facilities used to collect the measurement data are located at Building C, Hongwei Industrial Zone, Baoan 70 District, Shenzhen, Guangdong, China. The sites are constructed in conformance with the requirements of ANSI C63.4, and CISPR 16-1-1.

5.2 TEST EQUIPMENT LIST

Instrumentation: The following list contains equipments used at CTI for testing.
The calibrations of the measuring instruments, including any accessories that may effect such calibration, are checked frequently to assure their accuracy. Adjustments are made and correction factors applied in accordance with instructions contained in the manual for the measuring instrument.

Equipment used during the tests:

3M Semi-anechoic Chamber — Radiation Test Site					
Equipment Type	**Manufacturer**	**Model Number**	**CN**	**Serial Number**	**Calibration Date**
Spectrum Analyzer	Agilent	E4443A	ASZTTEE E00001-6	MY45300910	09/07/2008
Biconilog Antenna	ETS-LINDGREN	3142C	ASZTTEE E00001-4	920250	01/18/2008
Horn Antenna	ETS-LINDGREN	3117	ASZTTEE E00001-5	00057407	2008-06-27
Loop Antenna	ETS-LINDGREN	6502	BSZTTEE E00005	00071730	2008-09-22
3M Chamber& Accessory Equipments	ETS-LINDGREN	FACT-3	ASZTTEE E00001-1	N/A	05/11/2008

5.3 LABORATORY ACCREDITATIONS AND LISTINGS

The test facilities used to perform radiated and conducted emissions tests are accredited by China National Accreditation Board for Laboratories (CNAS). Electromagnetic Interference tests according to ANSI C63.4 and CISPR 16 requirements.

6. SETUP OF EQUIPMENT UNDER TEST

6.1 SETUP CONFIGURATION OF EUT

1. See test photographs attached in Appendix 1.
2. Make sure EUT work normally during the whole test.

6.2 SUPPORT EQUIPMENT

No.	Device Type	Brand	Model	Series No.	Data Cable	Power Cord
1.	---	---	---	---	---	---
2.	---	---	---	---	---	---
3.	---	---	---	---	---	---

Notes:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.

2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

7. FCC RADIATED EMISSION TEST

7.1 LIMITS OF FCC RADIATED EMISSION TEST

a. Rule: FCC Part15.227(a)

The field strength of any emission within this band (frequency between 26.96 – 27.28 MHz) shall not exceed 10000 μV/m at 3 meters. (80dBμV at 3m) The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in section 15.35 for limiting peak emissions apply.

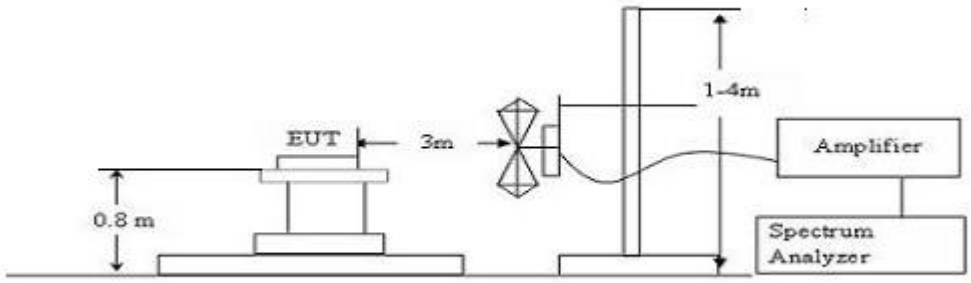
b. Rule: FCC Part15.227(b) (15.209)

The field strength of any emissions which appear outside of this band shall not exceed the general radiated emission limits in section 3.9 (Intentional Radiators general limit).as below.

Frequency (MHz)	Field strength μV/m	Distance(m)	Field strength at 3m dBμV/m
1.705-30	30	30	29.54
30-88	100	3	40
88-216	150	3	43.5
216-960	200	3	46
Above 960	500	3	54

Note: the tighter limit applies at the band edges.

7.2 BLOCK DIAGRAM OF TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

7.3 PROCEDURE OF RADIATED EMISSION TEST

a. The EUT was placed on the top of a turntable 0.8 meters above the ground in the chamber, 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. The table was rotated 360 degrees and the broadband antenna is varied from one to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna were set to make the measurement.

b. 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 turn table was turned from 0 degrees to 360 degrees to find the maximum reading.

c. The test frequency analyzer system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

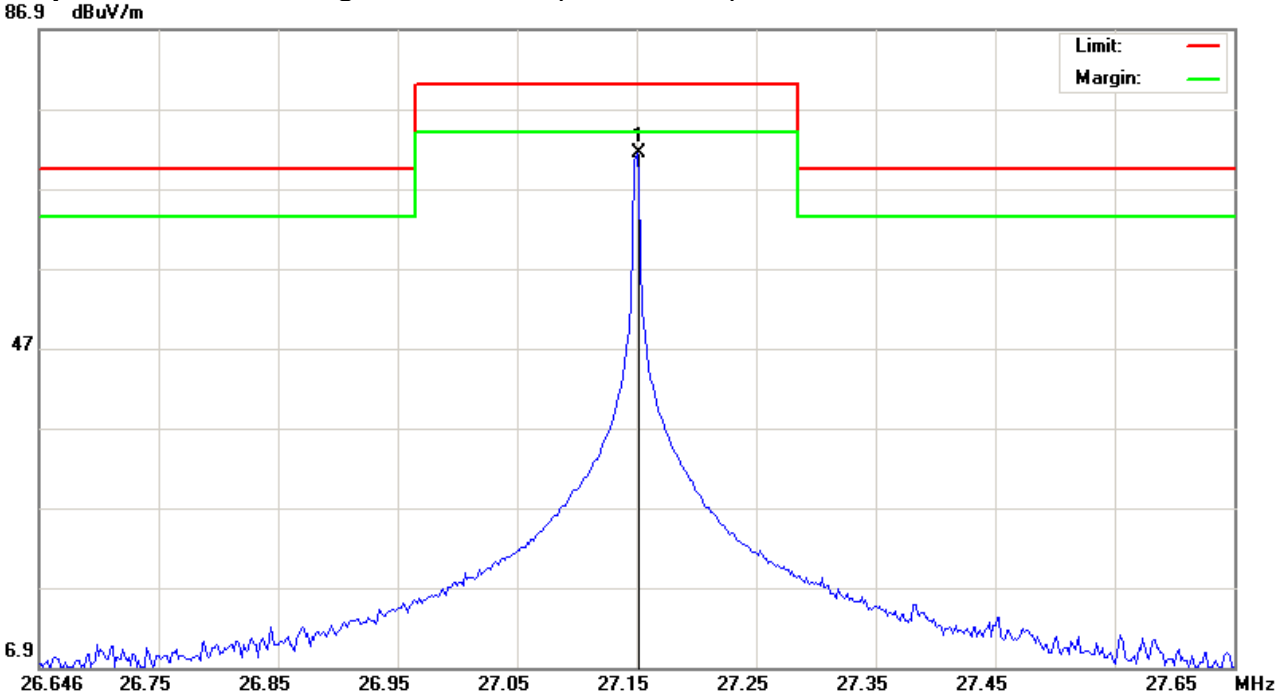
7.4 TEST RESULT OF RADIATED EMISSION TEST

EUT	:	07159 Remote Control	**Voltage**	:	DC 3V
M/N	:	85003(07159)	**Temperature**	:	26℃
Mode	:	Continuous working	**Humidity**	:	60%

a. at fundament frequency- for FCC Part15.227(a)

FCC Radiated Emission Test Result								
Frequency (MHz)	**Reading Level (dBuv)**	**Detector Mode (Peak/AVG)**	**Correct Factor (dB)**	**Measurement (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Result (P/F)**	**Remarks (H/V)**
27.1450	54.24	Peak	18.61	72.85	80.00	-7.15	P	H
27.1450	54.05	Peak	18.61	72.66	80.00	-7.34	P	V

Graphs of the band edge Emissions:(RBW=1kHz)



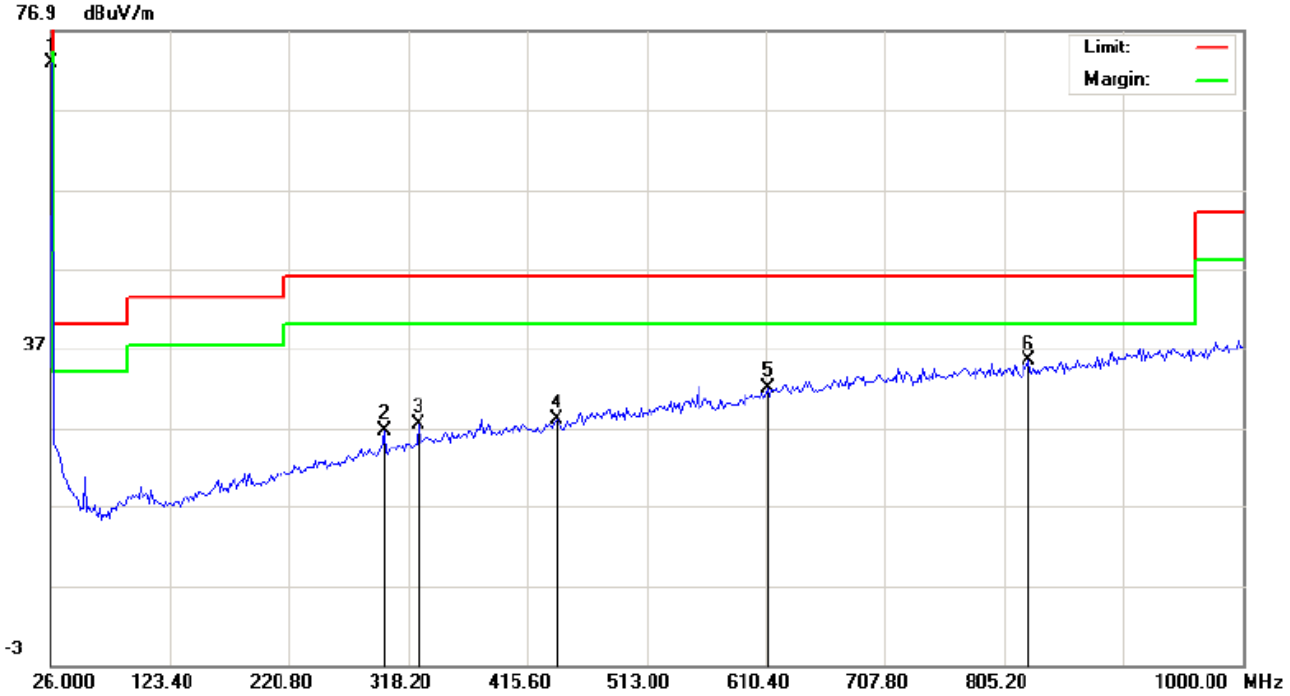
b. at spurious and band edge frequency - for FCC Part15.227(b)

FCC Radiated Emission Test Result								
Frequency (MHz)	Reading Level (dBuv)	Detector Mode (Peak/AVG)	Correct Factor (dB)	Measurement (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Result (P/F)	Remarks (H/V)
298.7200	10.81	Peak	15.78	26.59	46.00	-19.41	P	H
326.3167	10.60	Peak	16.90	27.50	46.00	-18.50	P	H
439.9499	9.14	Peak	18.85	27.99	46.00	-18.01	P	H
612.0232	9.30	Peak	22.70	32.00	46.00	-14.00	P	H
824.6799	9.89	Peak	25.55	35.44	46.00	-10.56	P	H
53.5967	26.70	Peak	8.84	35.54	40.00	-4.46	P	V
298.7200	15.69	Peak	9.14	24.83	46.00	-21.17	P	V
326.3167	14.31	Peak	16.90	31.21	46.00	-14.79	P	V
548.7133	9.30	Peak	21.44	30.74	46.00	-15.26	P	V
771.1100	9.60	Peak	24.85	34.45	46.00	-11.55	P	V

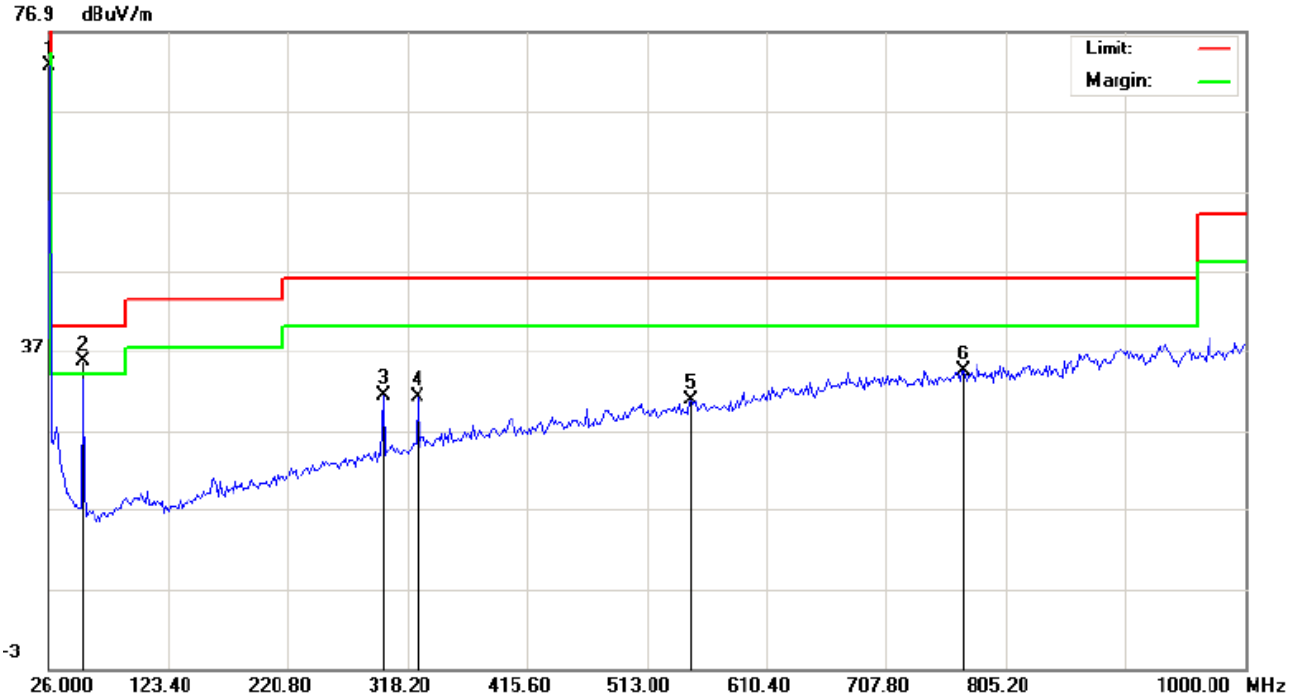
Frequency = Emission frequency in MHz
Reading level = Uncorrected frequency analyzer reading
Correct Factor = Correction factors of antenna factor and cable loss
Measurement = Reading level + Correct factor
Limit (dBuV/m) = Limit stated in standard
Margin (dB) = Reading in reference to limit
PK = Peak
QP = Quasi-peak

Graphs of Radiated Emissions:(RBW=120kHz)

H:

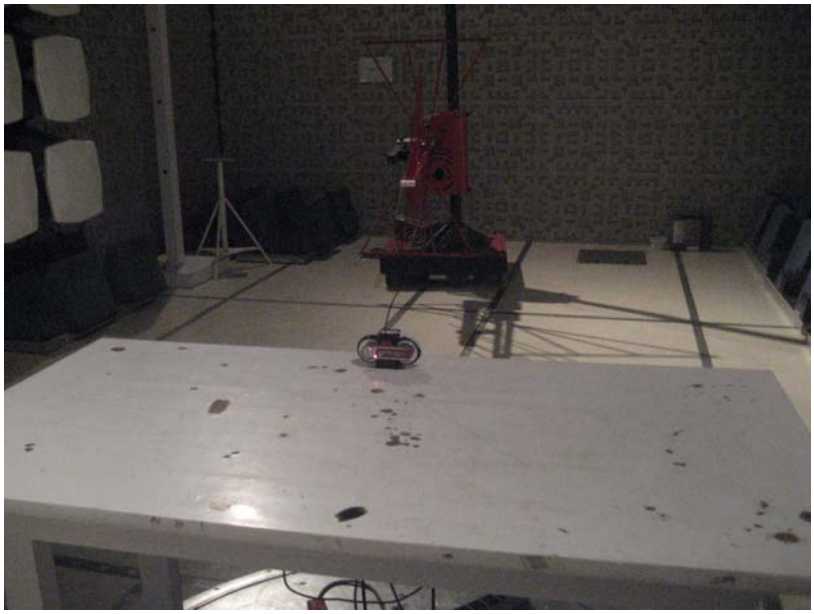


V:



APPENDIX 1 PHOTOGRAPHS OF TEST SETUP

TEST SETUP OF RADIATED EMISSION

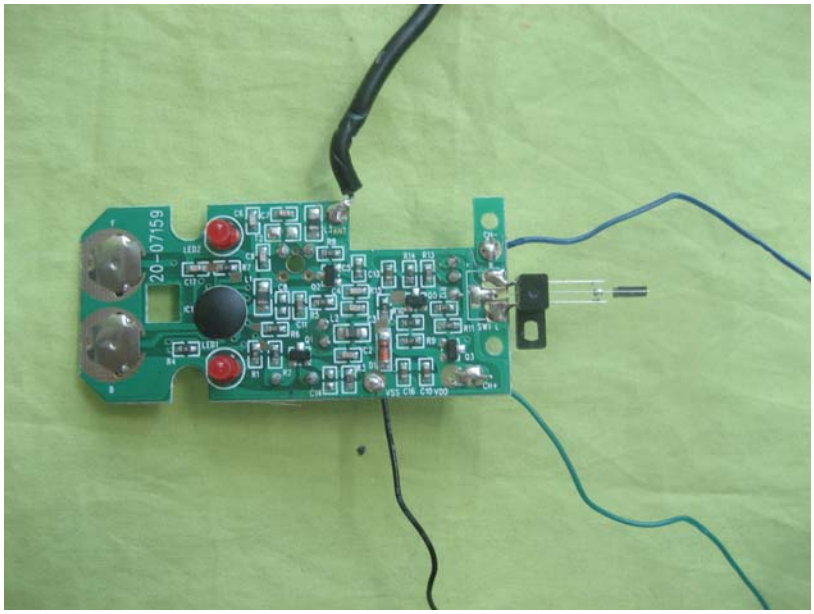


APPENDIX 2 EXTERNAL PHOTOGRAPHS OF EUT

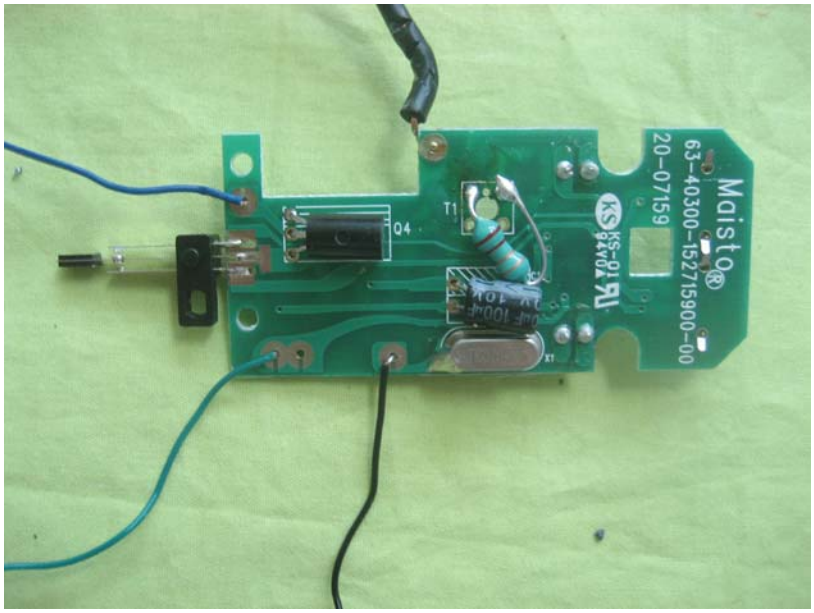
View of EUT-1

View of EUT-2

APPENDIX 3 INTERNAL PHOTOGRAPHS OF EUT



View of PCB-1



View of PCB-2

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