FCC TEST REPORT

CATEGORY	:	Portable End Product
PRODUCT NAME	:	Wireless Presenter
FCC ID.	:	OR7GP102T
FILING TYPE	:	Certification
MODEL NAME	:	AMP01, GP102T
BRAND NAME	:	Targus, Globlink, Trust, Centrios, Nexxtec, RadioShack
APPLICANT	:	**Globlink Technology Inc.** 2Fl., 101 Rui-hu Street Nei-hu, Taipei , Taiwan
MANUFACTURER	:	Same as Applicant
ISSUED BY	:	**SPORTON INTERNATIONAL INC.** 6F, No. 106, Sec. 1, Hsin Tai Wu Rd., His Chih, Taipei Hsien, Taiwan, R.O.C.

Statements:

The test result in this report refers exclusively to the presented test model / sample.

Without written approval of SPORTON International Inc., the test report shall not be reproduced except in full.

Certificate or Test Report could not be used by the applicant to claim the product endorsement by CNLA, NVLAP or any agency of U.S. government.

The test equipment used to perform the test are calibrated and traceable to NML/ROC or NIST/USA.

NVLAP®
Lab Code: 200079-0

Dr. Alan Lane
Vice General Manager
SPORTON International Inc.

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Appendix A. Photographs of EUT ..... A1 ~ A12

History of this test report

■ No additional attachment.

☐ Additional attachment were issued as following record:

Attachment No.	Issue Date	Description

1. General Description of Equipment under Test

1.1 Applicant

Globlink Technology Inc.

2Fl., 101 Rui-hu Street Nei-hu, Taipei , Taiwan

1.2 Manufacturer

Same as 1.1

1.3 Basic Description of Equipment under Test

This product is a wireless presenter. The technical data has been listed on section " Feature of Equipment under Test ". This product is used to wirelessly control the present material in the PC. It is produced to replace the function of the mouse and part of the keyboard. The transmitter is battery powered.

1.4 Features of Equipment under Test

ITEMS	DESCRIPTION
Type of Modulation	GFSK
Number of Channels	8
Operating Frequency Band	2423 ~ 2477MHz
Function Type	Transmitter
Power Rating (DC/AC, Voltage)	3 VDC from battery
Duty Cycle	N.A.
Humidity Range	60% ~ 95%
Temperature Range (Operating)	0 ~ 55°C

TEL : 886-2-2696-2468
FAX : 886-2-2696-2255

2. Test Configuration of the Equipment under Test

2.1 Description of the Tes

a. The EUT has been programmed to continuously transmit or receive during testing. The used peripherals as well as the configuration fulfill the requirements of ANSI C63.4:2001.
b. The spurious above 1GHz, the following 3 modes for EUT placement was tested for ch1, ch4 and ch8.
   Mode 1: X axis
   Mode 2: Y axis
   Mode 3: Z axis
c. For spurious emission below 1GHz, they are independent of channel selection, so only channel 8 was tested.
d. The configuration is operated in a manner which tends to maximize its emission characteristics in a typical application.
e. 3 meters measurement distance in semi-anechoic chamber was used in this test.

2.1 Frequency Range Investigated

Radiated emission test: from 30 MHz to 10th harmonic of the highest operating frequency or 40GHz whichever is lower.

2.2 Description of Test Supporting Units

Support Unit 1. – P.C. (HP)

FCC ID	: N/A
Model No.	: DC579AV
Power Supply Type	: Switching
Power Cord	: Non-Shielded
Remark	: This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

Support Unit 2. -- Printer (EPSON)

FCC ID	: N/A
Model No.	: Stylus Color 680
Power Supply Type	: Switching
Power Cord	: Non-Shielded
Serial No.	: SP0016
Data Cable	: Shielded, 360 degree via metal backshells, 1.35m
Remark	: This support device was tested to comply with FCC standards and authorized under a declaration of conformity.

TEL : 886-2-2696-2468
FAX : 886-2-2696-2255

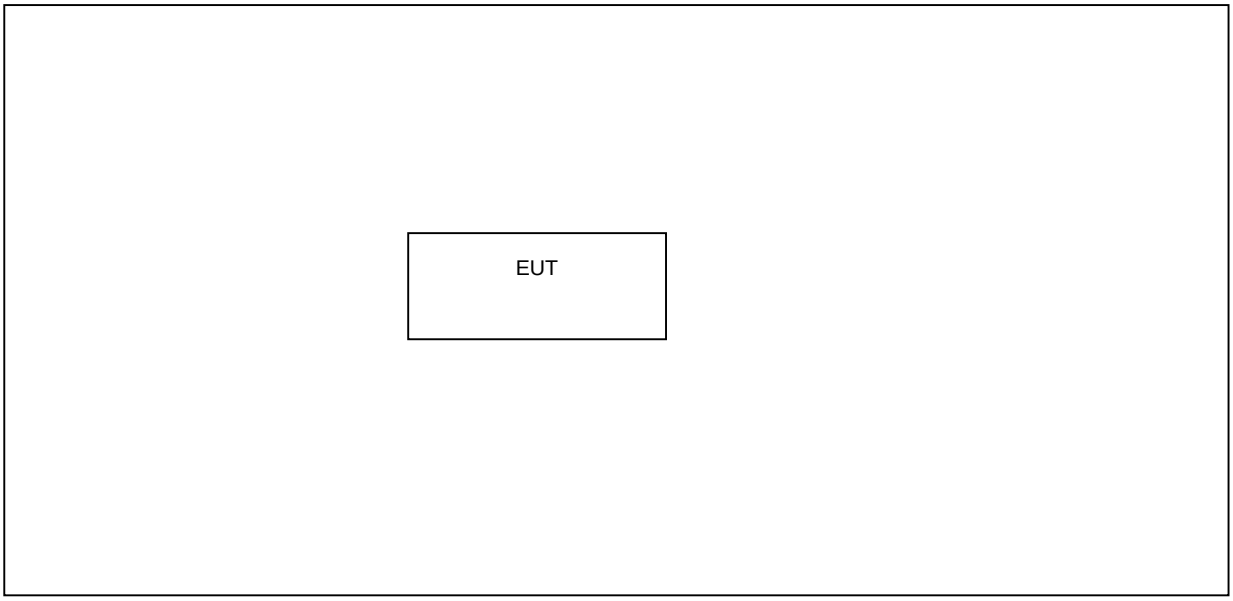
Support Unit 3. – Modem (ACEEX)

FCC ID	: IFAXDM141
Model No.	: OM141
Serial No.	: N/A
Remark	: This support device was tested to comply with FCC standards and authorized under Declaration of Conformity.

TEL : 886-2-2696-2468
FAX : 886-2-2696-2255

2.3 Connection Diagram of Test System

<Tx>



TEL : 886-2-2696-2468
FAX : 886-2-2696-2255

2.4 Test Software

There is an reset button on the transmitter, we can change the channel from this reset button.

An executive programs, EMCTEST.EXE under WIN XP, which generate a complete line of continuously repeating " H " pattern was used as the test software.

The program was executed as follows:
a. Turn on the power of all equipment.
b. The PC reads the test program from the hard disk drive and runs it.
c. The PC sends " H" messages to the monitor, and the monitor displays " H " patterns on the screen.
d. The PC sends " H " messages to the printer, then the printer prints them on the paper.
e. The PC sends " H " messages to the internal Hard Disk, and the Hard Disk reads and writes the message.
f. Repeat the steps from c to e.

At the same time, "Press Key " was executed to keep transmitting signals and the receiver reads message in EUT.

TEL : 886-2-2696-2468
FAX : 886-2-2696-2255

3. Test Location and Standards

3.1 Test Location

Test Location	**:**	Sporton Hwa Ya Testing Building
Address	**:**	No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. Tel: +886 3 327 3456 Fax: +886 3 318 0055
Test Site No.	**:**	03CH03-HY

3.2 Test Conditions

Normal Voltage	: 3VDC
Extreme Voltages	: 2.55VDC and 3.45VDC
Normal Temperature	: 0 ℃
Extreme Temperature	: 0 ℃ and 55 ℃

3.3 Standards for Methods of Measurement

Here is the list of the standards followed in this test report.

ANSI C63.4-2001

47 CFR Part 15 Subpart C (Section 15.249)

3.4 DoC Statement

This EUT is also classified as a device of computer peripheral Class B which DoC has to be followed. It has been verified according to the rule of 47 CFR part 15 Subpart B, and found that all the requirements has been fulfilled.

4. List of Measurements

4.1 Summary of the Test Results

Applied Standard: 47 CFR Part 15 and Part 2			
Paragraph	**FCC Rule**	**Description of Test**	**Result**
5.1	15.249(a)	Carrier field strength	Pass
5.2	15.107/15.207	AC Power Line Conducted Emission	NA
5.3	15.249(a)/ 15.249(d)	Spurious Radiated Emission	Pass
5.4	15.235(c)(3)	Antenna Requirement	Pass

5. Test Result

5.1 Carrier Field Strength

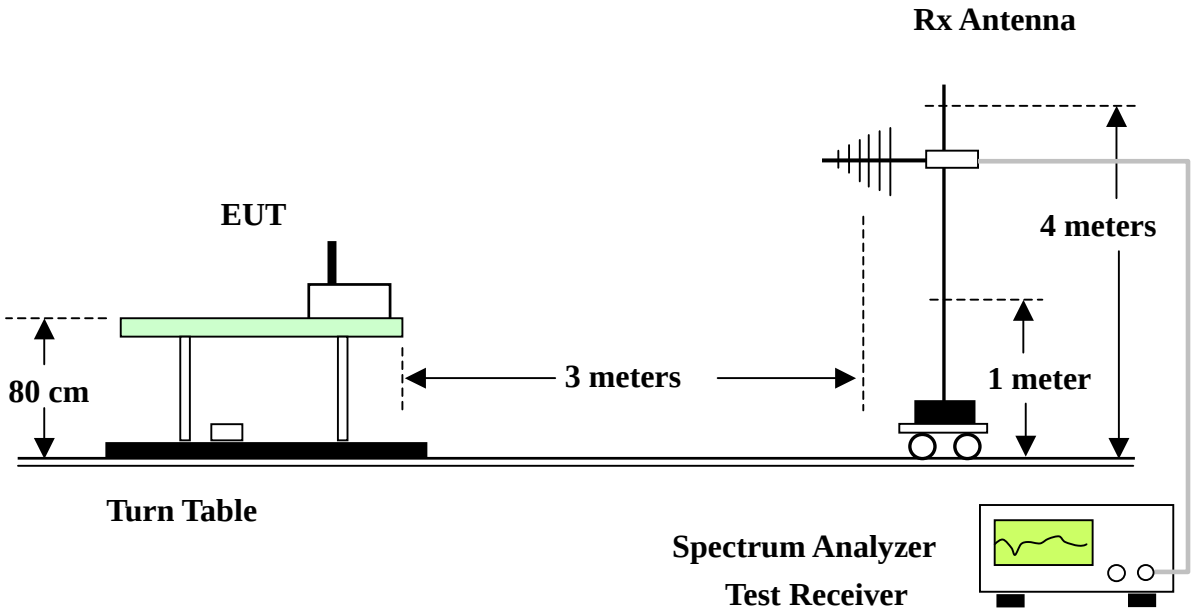
5.1.1 Measuring Instruments

Item 1~9 of the table on section 7.

5.1.2 Test Procedures

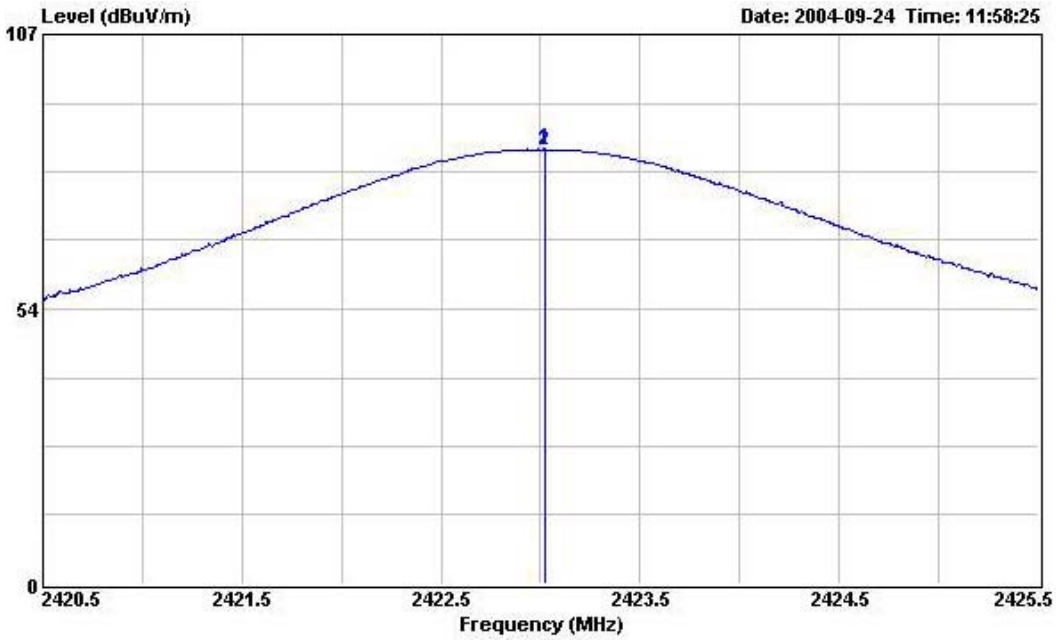
1. Configure the EUT according to ANSI C63.4.
2. The EUT was placed on the top of the turn table 0.8 meter above ground.
3. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turn table.
4. Power on the EUT and all the supporting units.
5. The turn table was rotated by 360 degrees to determine the position of the highest radiation.
6. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emission field strength of both horizontal and vertical polarization.
7. For each suspected emission, the antenna tower was scan (from 1 M to 4 M) and then the turn table was rotated (from 0 degree to 360 degrees) to find the maximum reading.
8. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
9. For emission above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer.
10. If the emission level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz and average method for above the 1GHz. the reported.
11. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB higher than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

5.1.3 Test Setup Layout



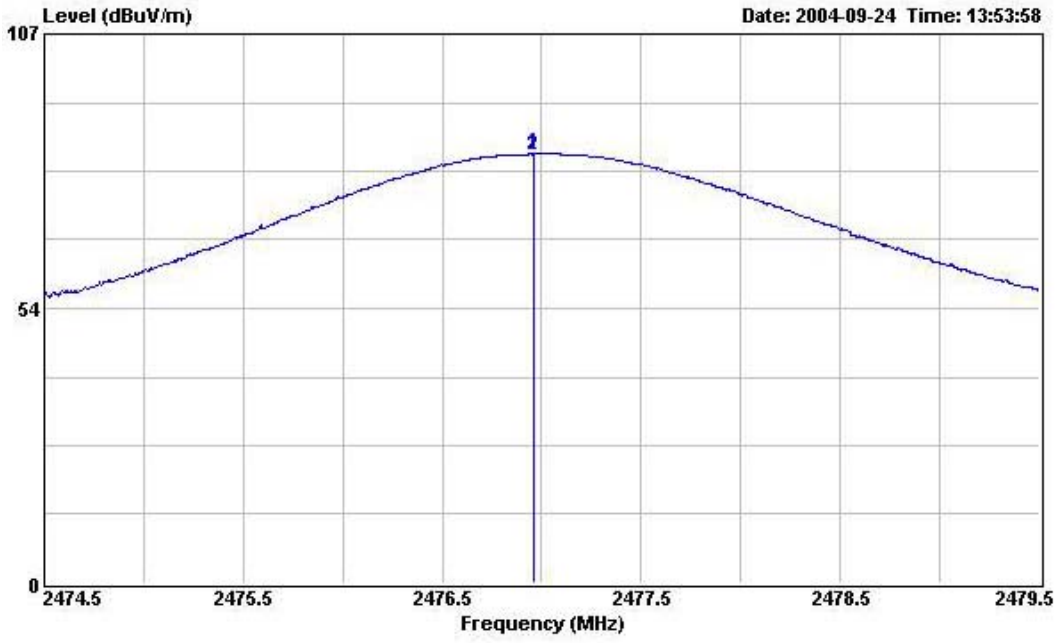
5.1.4 Test Result

Test Channel	CH 01	Temperature	23 deg. C	Tested By	Steve Chen
Frequency	2423MHz	Humidity	61%		



Frequency (MHz)	Level (dBuV/m)	Read Level (dBuV)	Probe Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Limit Line (dBuV/m)	Detect Mode
2423.020	84.68	54.58	28.35	1.75	0.00	114	Peak
2423.020	84.31	54.21	28.35	1.75	0.00	94	AV

Test Channel	CH 08	Temperature	23 deg. C	Tested By	Steve Chen
Frequency	2477MHz	Humidity	61%		



Frequency (MHz)	Level (dBuV/m)	Read Level (dBuV)	Probe Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Limit Line (dBuV/m)	Detect Mode
2476.960	83.61	53.36	28.46	1.79	0.00	114	Peak
2476.960	83.28	53.03	28.46	1.79	0.00	94	AV

5.2 AC Power Line Conducted Emission

The transmitter is battery powered, there is no need to do this testing.

5.3 Test of Radiated Emission

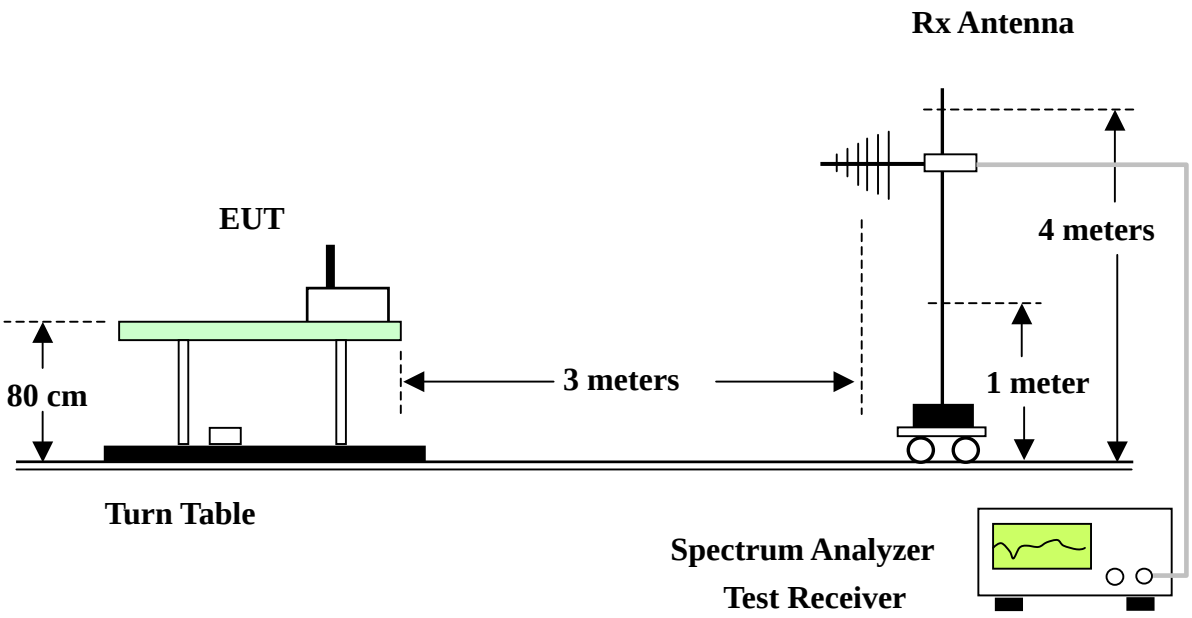
5.3.1 Measuring Instruments

Item 1~9 of the table on section 7.

5.5.2 Test Procedures

1. Configure the EUT according to ANSI C63.4.
2. The EUT was placed on the top of the turn table 0.8 meter above ground.
3. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turn table.
4. Power on the EUT and all the supporting units.
5. The turn table was rotated by 360 degrees to determine the position of the highest radiation.
6. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emission field strength of both horizontal and vertical polarization.
7. For each suspected emission, the antenna tower was scan (from 1 M to 4 M) and then the turn table was rotated (from 0 degree to 360 degrees) to find the maximum reading.
8. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
9. For emission above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer.
10. If the emission level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz and average method for above the 1GHz. the reported.
11. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB higher than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

5.4.3. Test Setup Layout



5.5.4 Test Results and Limit

Note:
Emission level (dBuV/m) = 20 log Emission level (uV/m)
Corrected Reading: Probe Factor + Cable Loss + Read Level - Preamp Factor = Level

Test Mode	Mode 1 (CH08)	**Temperature**	23 deg. C	**Tested By**	Steve Chen
Freq. Range	30MHz~1GHz	**Humidity**	61%		

(A) Polarization: Horizontal

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	67.060	20.32	-19.68	40.00	37.95	10.01	0.32	27.96	Peak	---	---
2	133.020	24.55	-18.95	43.50	39.31	12.41	0.66	27.83	Peak	---	---
3	161.750	15.34	-28.16	43.50	29.62	12.79	0.71	27.78	Peak	---	---
1	205.600	14.19	-29.31	43.50	25.24	15.75	0.88	27.68	Peak	---	---
2	835.200	21.47	-24.53	46.00	26.53	21.83	1.73	28.62	Peak	---	---
3	960.000	22.76	-23.24	46.00	26.48	23.02	1.50	28.24	Peak	---	---

(B) Polarization: Vertical

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	36.630	21.79	-18.21	40.00	37.47	12.12	0.23	28.03	Peak	172	189
2	46.660	16.87	-23.13	40.00	32.56	12.06	0.26	28.01	Peak	---	---
3	62.470	18.20	-21.80	40.00	35.53	10.33	0.31	27.97	Peak	---	---
1	298.400	14.79	-31.21	46.00	27.32	13.75	1.03	27.31	Peak	---	---
2	596.000	17.77	-28.23	46.00	24.82	20.22	1.53	28.80	Peak	---	---
3	953.600	22.03	-23.97	46.00	25.49	22.87	1.92	28.25	Peak	---	---

Test Mode	Mode 2 (CH08)	Temperature	23 deg. C	Tested By	Steve Chen
Freq. Range	30MHz~1GHz	Humidity	61%		

(A) Polarization: Horizontal

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	70.460	12.29	-27.71	40.00	30.09	9.78	0.38	27.96	Peak	---	---
2	151.550	13.54	-29.96	43.50	28.74	12.01	0.59	27.80	Peak	---	---
3	177.390	15.29	-28.21	43.50	28.13	14.20	0.70	27.74	Peak	---	---
1	646.400	16.90	-29.10	46.00	23.63	20.54	1.48	28.75	Peak	---	---
2	803.200	20.23	-25.77	46.00	25.46	21.89	1.66	28.78	Peak	---	---
3	944.800	21.14	-24.86	46.00	24.98	22.69	1.72	28.25	Peak	---	---

(B) Polarization: Vertical

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	32.380	19.83	-20.17	40.00	35.19	12.49	0.19	28.04	Peak	175	48
2	46.660	19.59	-20.41	40.00	35.28	12.06	0.26	28.01	Peak	---	---
3	142.030	20.25	-23.25	43.50	34.90	12.45	0.72	27.82	Peak	---	---
1	592.800	17.49	-28.51	46.00	24.53	20.08	1.67	28.79	Peak	---	---
2	714.400	19.78	-26.22	46.00	26.00	20.88	1.62	28.72	Peak	---	---
3	912.800	23.37	-22.63	46.00	27.86	21.99	1.81	28.29	Peak	---	---

Test Mode	Mode 3 (CH08)	Temperature	23 deg. C	Tested By	Steve Chen
Freq. Range	30MHz~1GHz	Humidity	61%		

(A) Polarization: Horizontal

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	48.870	11.97	-28.03	40.00	28.05	11.64	0.28	28.00	Peak	---	---
2	128.940	19.91	-23.59	43.50	34.78	12.30	0.67	27.84	Peak	---	---
3	181.980	15.89	-27.61	43.50	28.49	14.35	0.79	27.74	Peak	---	---
1	288.000	11.59	-34.41	46.00	24.34	13.46	1.14	27.35	Peak	---	---
2	598.400	17.55	-28.45	46.00	24.31	20.33	1.71	28.80	Peak	---	---
3	803.200	20.15	-25.85	46.00	25.38	21.89	1.66	28.78	Peak	---	---

(B) Polarization: Vertical

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	46.660	18.77	-21.23	40.00	34.46	12.06	0.26	28.01	Peak	157	3
2	53.290	17.88	-22.12	40.00	34.42	11.10	0.35	27.99	Peak	---	---
3	61.110	17.34	-22.66	40.00	34.51	10.43	0.38	27.98	Peak	---	---
1	292.000	14.41	-31.59	46.00	27.11	13.58	1.05	27.33	Peak	---	---
2	800.000	19.50	-26.50	46.00	24.79	21.90	1.61	28.80	Peak	---	---
3	928.000	21.23	-24.77	46.00	25.26	22.31	1.93	28.27	Peak	---	---

Test Mode	Mode 1 (CH 01)	Temperature	23 deg. C	Tested By	Steve Chen
Freq. Range	1GHz~25GHz	Humidity	61%		

(A) Polarization: Horizontal

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	4846.000	46.16	-7.84	54.00	54.97	33.04	2.54	44.39	Average	---	---

(B) Polarization: Vertical

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	4846.000	47.44	-6.56	54.00	56.25	33.04	2.54	44.39	Average	111	49

Test Mode	Mode 2 (CH 01)	Temperature	23 deg. C	Tested By	Steve Chen
Freq. Range	1GHz~25GHz	Humidity	61%		

(A) Polarization: Horizontal

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	4846.000	49.45	-4.55	54.00	58.26	33.04	2.54	44.39	Average	121	21

(B) Polarization: Vertical

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	4846.000	47.74	-6.26	54.00	56.55	33.04	2.54	44.39	Average	---	---

Test Mode	Mode 3 (CH 01)	Temperature	23 deg. C	Tested By	Steve Chen
Freq. Range	1GHz~25GHz	Humidity	61%		

(A) Polarization: Horizontal

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	4846.000	48.41	-5.59	54.00	57.22	33.04	2.54	44.39	Average	---	---

(B) Polarization: Vertical

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	4846.000	52.19	-1.81	54.00	61.00	33.04	2.54	44.39	Average	181	2

Test Mode	Mode 1 (CH 04)	Temperature	23 deg. C	Tested By	Steve Chen
Freq. Range	1GHz~25GHz	Humidity	61%		

(A) Polarization: Horizontal

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	4710.000	41.02	-12.98	54.00	50.03	32.79	2.48	44.28	Average	---	---
2	4894.000	48.54	-5.46	54.00	57.33	33.13	2.50	44.42	Average	---	---

(B) Polarization: Vertical

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	4894.000	50.73	-3.27	54.00	59.52	33.13	2.50	44.42	Average	166	70

Test Mode	Mode 2 (CH 04)	Temperature	23 deg. C	Tested By	Steve Chen
Freq. Range	1GHz~25GHz	Humidity	61%		

(A) Polarization: Horizontal

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	4894.000	51.82	-2.18	54.00	60.61	33.13	2.50	44.42	Average	185	39

(B) Polarization: Vertical

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	4894.000	50.80	-3.20	54.00	59.59	33.13	2.50	44.42	Average	---	---

Test Mode	Mode 3 (CH 04)	Temperature	23 deg. C	Tested By	Steve Chen
Freq. Range	1GHz~25GHz	Humidity	61%		

(A) Polarization: Horizontal

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	4894.000	51.66	-2.34	54.00	60.45	33.13	2.50	44.42	Average	179	59

(B) Polarization: Vertical

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	4956.000	56.40	-17.60	74.00	65.19	33.24	2.44	44.47	Peak	---	---
2	4956.000	51.63	-2.37	54.00	60.42	33.24	2.44	44.47	Average	---	---

Test Mode	Mode 1 (CH 08)	Temperature	23 deg. C	Tested By	Steve Chen
Freq. Range	1GHz~25GHz	Humidity	61%		

(A) Polarization: Horizontal

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	4956.000	49.65	-4.35	54.00	58.44	33.24	2.44	44.47	Average	---	---

(B) Polarization: Vertical

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	4956.000	52.21	-1.79	54.00	61.00	33.24	2.44	44.47	Average	126	88

Test Mode	Mode 2 (CH 08)	Temperature	23 deg. C	Tested By	Steve Chen
Freq. Range	1GHz~25GHz	Humidity	61%		

(A) Polarization: Horizontal

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	4846.000	50.24	-3.76	54.00	59.05	33.04	2.54	44.39	Average	123	3

(B) Polarization: Vertical

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	4846.000	47.13	-6.87	54.00	55.94	33.04	2.54	44.39	Average	---	---

Test Mode	Mode 3 (CH 08)	Temperature	23 deg. C	Tested By	Steve Chen
Freq. Range	1GHz~25GHz	Humidity	61%		

(A) Polarization: Horizontal

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	4956.000	49.04	-4.96	54.00	57.83	33.24	2.44	44.47	Average	---	---
2	4956.000	49.04	-24.96	74.00	57.83	33.24	2.44	44.47	Peak	---	---

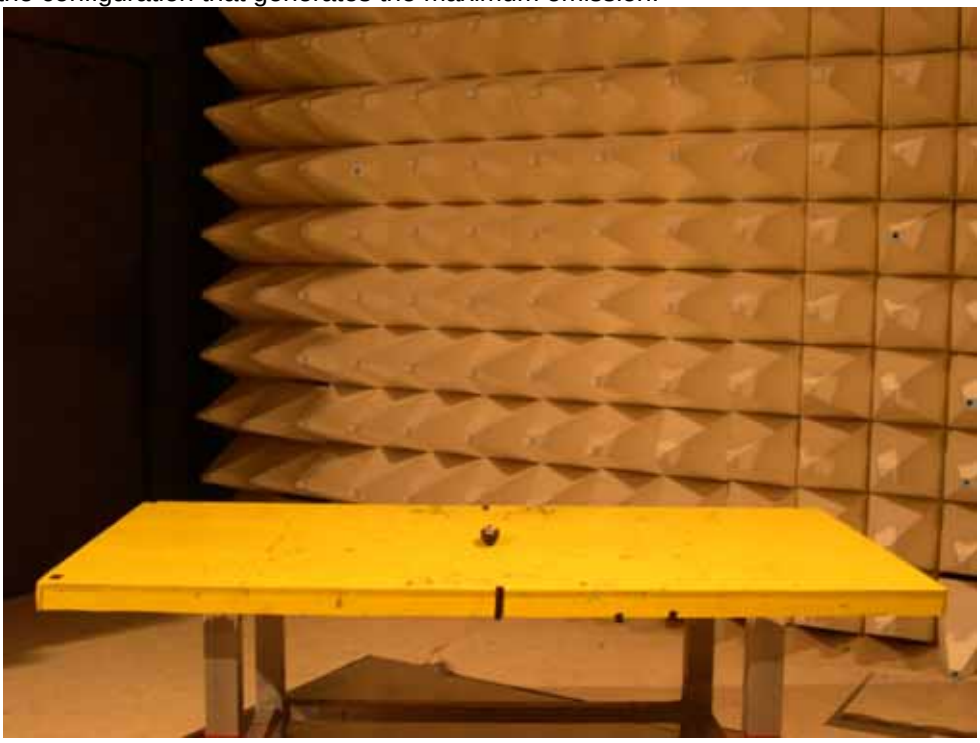
(B) Polarization: Vertical

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	4956.000	51.66	-2.34	54.00	60.45	33.24	2.44	44.47	Average	148	4
2	4956.000	51.66	-22.34	74.00	60.45	33.24	2.44	44.47	Peak	---	---

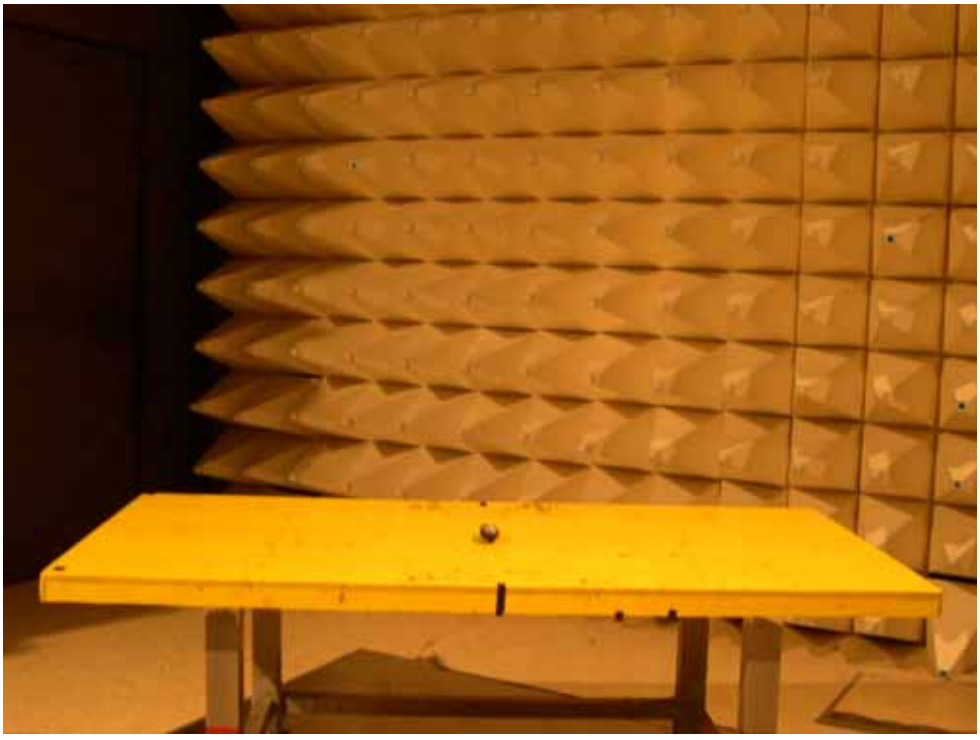
5.5.5 Photographs of Radiated Emission Test Configuration

- The photographs show the configuration that generates the maximum emission.

FRONT VIEW



REAR VIEW



6 Antenna Requirements

6.1 Standard Applicable

47 CFR Part15 Section 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.

47 CFR Part15 Section 15.235 (c):
The antenna shall be a single element, one meter or less in length, permanently mounted on the enclosure containing the device.

6.2 Antenna Construction

The antenna used in this device is printed antenna, there is no antenna connector.

7 List of Measuring Equipments Used

Items	Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
1	3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz~1GHz 3m	Jun. 21, 2004	Radiation (03CH03-HY)
2	Spectrum analyzer	R&S	FSP40	100004	9KHZ~40GHz	Aug. 31, 2004	Radiation (03CH03-HY)
3	Amplifier	HP	8447D	2944A09072	100KHz – 1.3GHz	Nov. 05, 2003	Radiation (03CH03-HY)
4	Biconical Antenna	SCHWARZBECK	VHBB 9124	301	30MHz –200MHz	Jul. 28, 2004	Radiation (03CH03-HY)
5	Log Antenna	SCHWARZBECK	VUSLP 9111	221	200MHz -1GHz	Jul. 28, 2004	Radiation (03CH03-HY)
6	RF Cable-R03m	Jye Bao	RG142	CB021	30MHz~1GHz	Dec. 03, 2003	Radiation (03CH03-HY)
7	Amplifier	MITEQ	AFS44	849984	100MHz~26.5GHz	Mar. 26, 2004	Radiation (03CH03-HY)
8	Horn Antenna	EMCO	3115	6821	1GHz – 18GHz	Sep. 11, 2004	Radiation (03CH03-HY)
9	Turn Table	HD	DS 420	420/650/00	0 ~ 360 degree	N/A	Radiation (03CH03-HY)
10	Antenna Mast	HD	MA 240	240/560/00	1 m - 4 m	N/A	Radiation (03CH03-HY)
11	Horn Antenna	Schwarzbeck	BBHA9170	154	18GHz~40GHz	Jun. 09, 2004	Radiation (03CH03-HY)
12	RF Cable-HIGH	Jye Bao	RG142	CB030-HIGH	1GHz~29.5GHz	Dec. 05, 2003	Radiation (03CH03-HY)

※ Calibration Interval of instruments listed above is one year.

APPENDIX A. Photographs of EUT

SPORTON International Inc.
TEL : 886-2-2696-2468
FAX : 886-2-2696-2255

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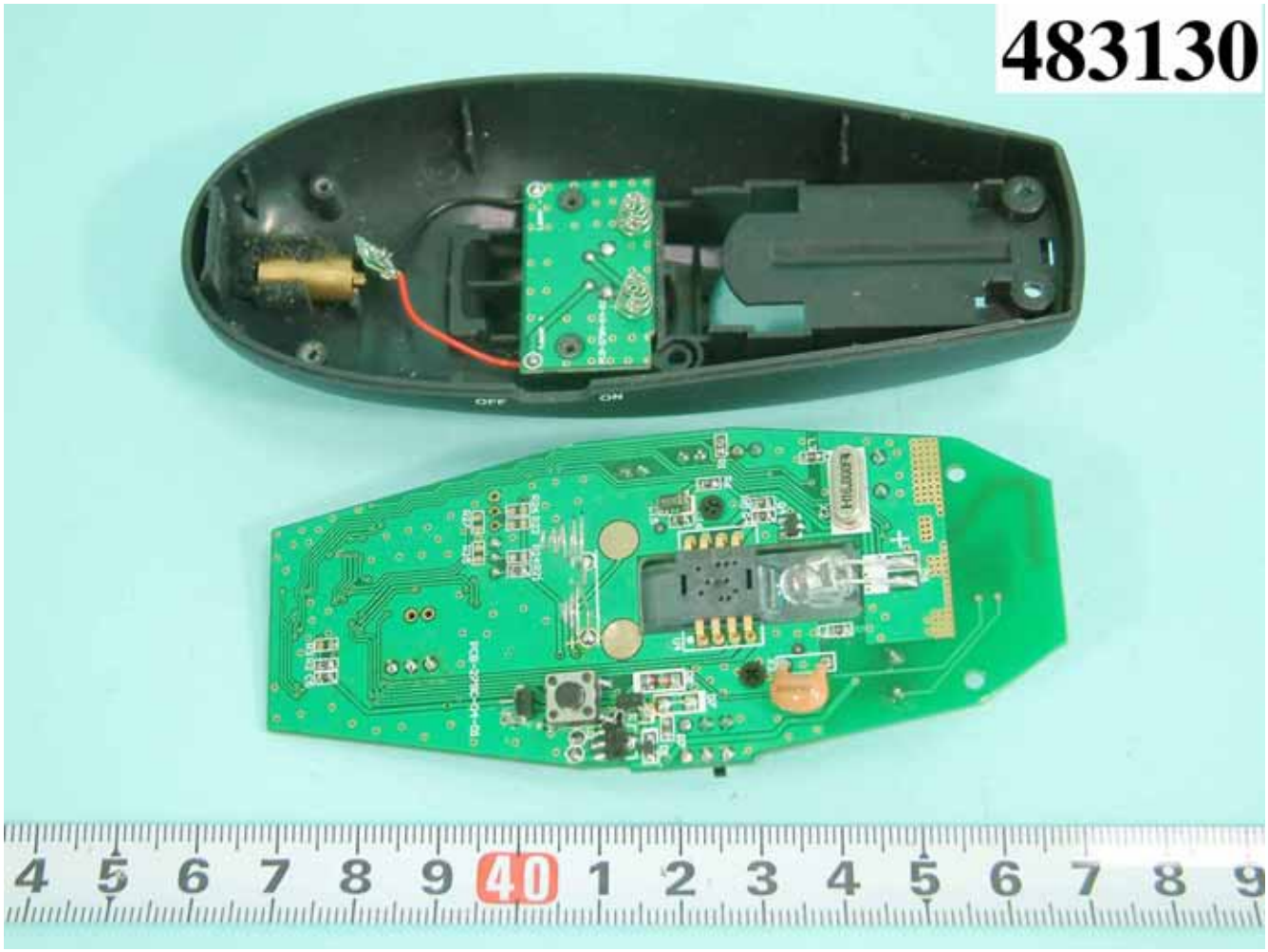

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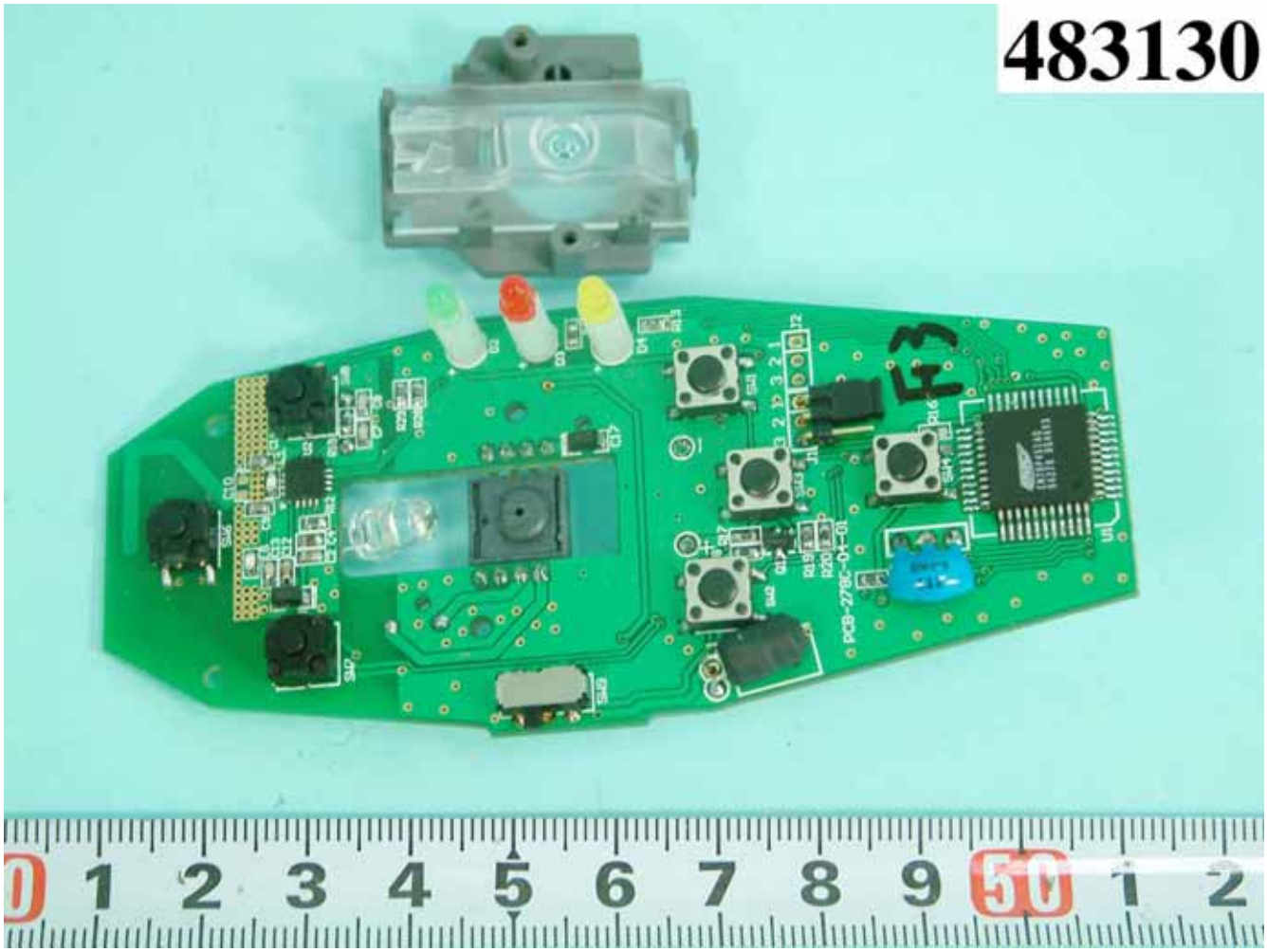

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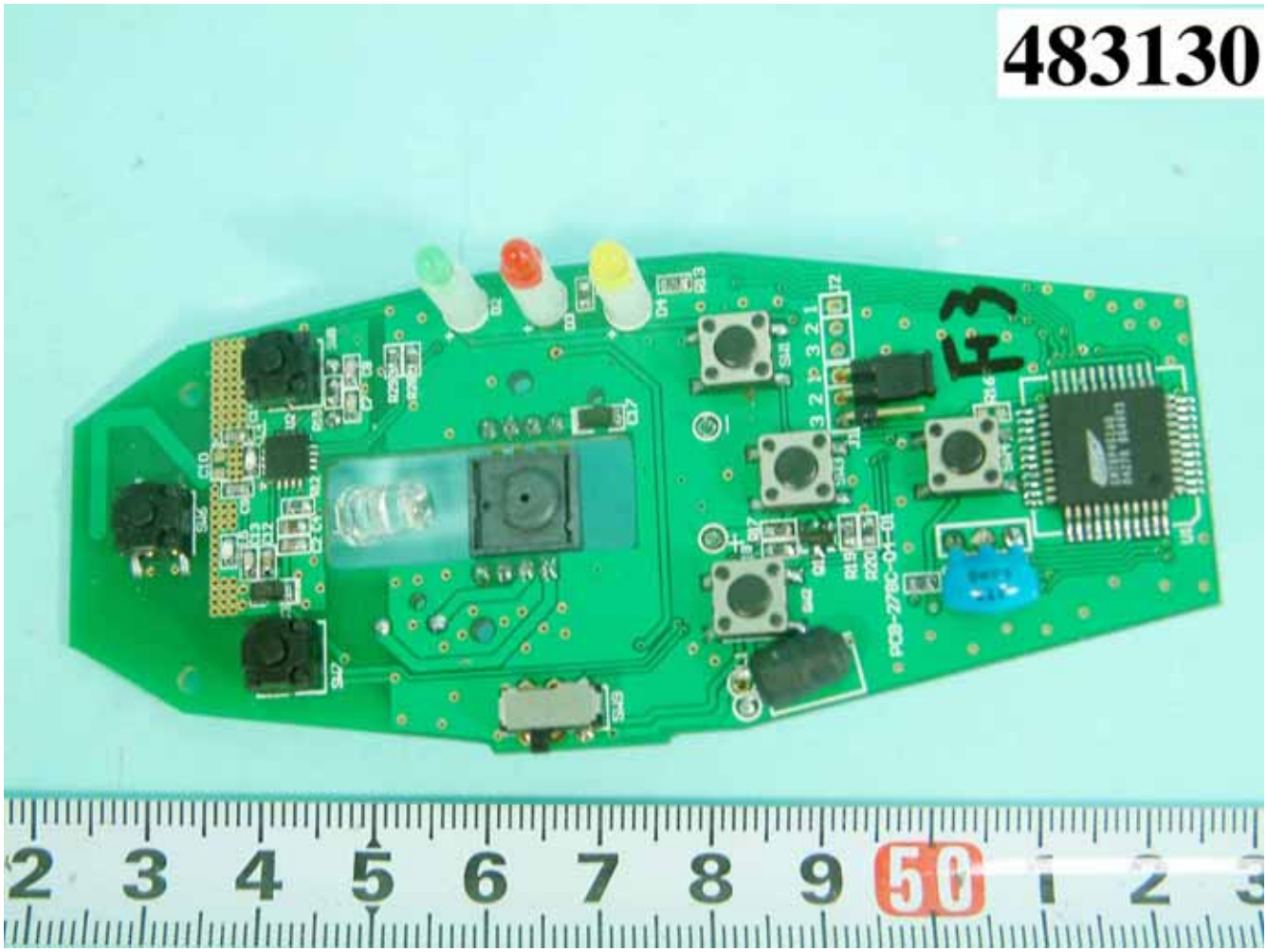

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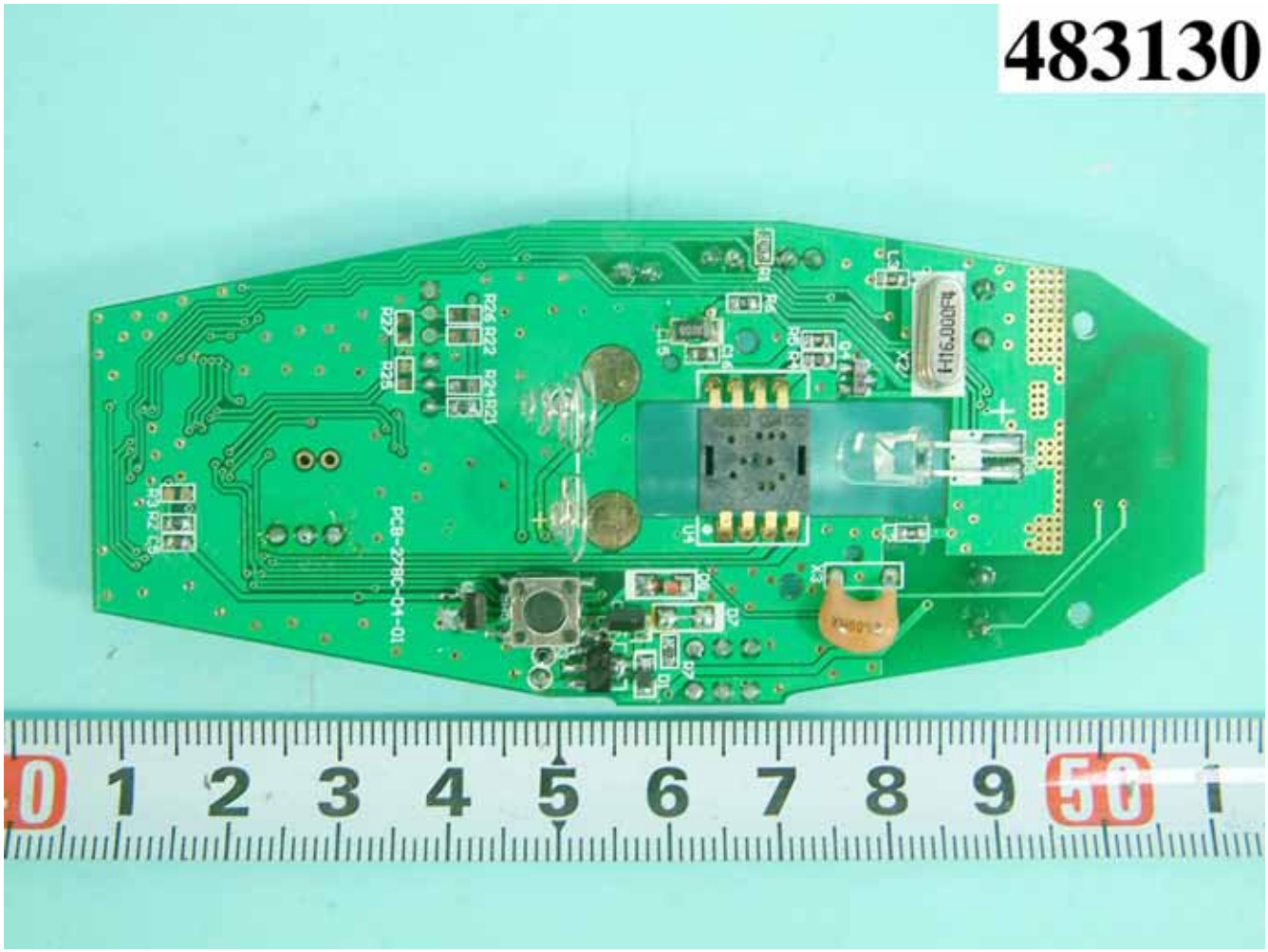

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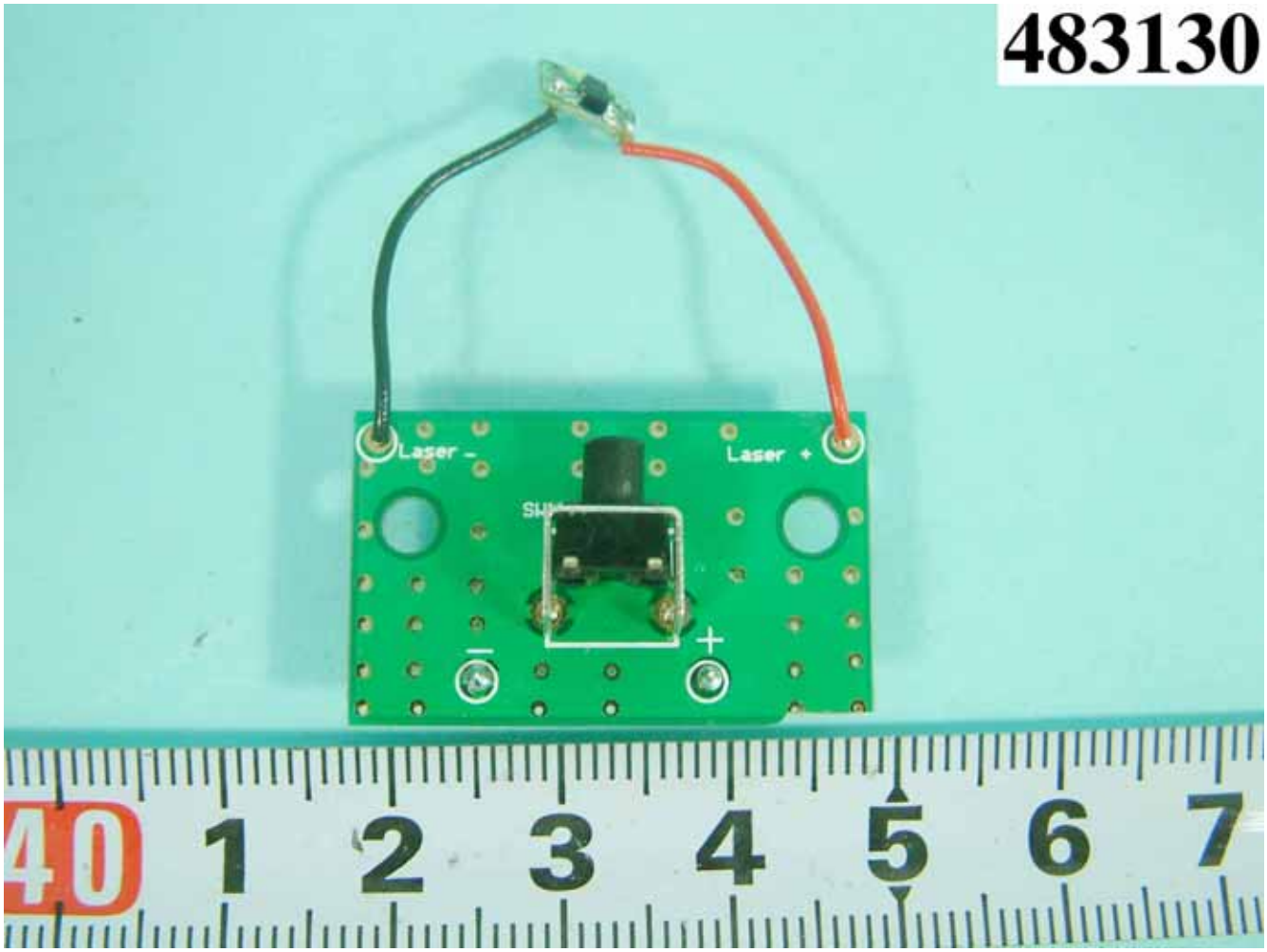

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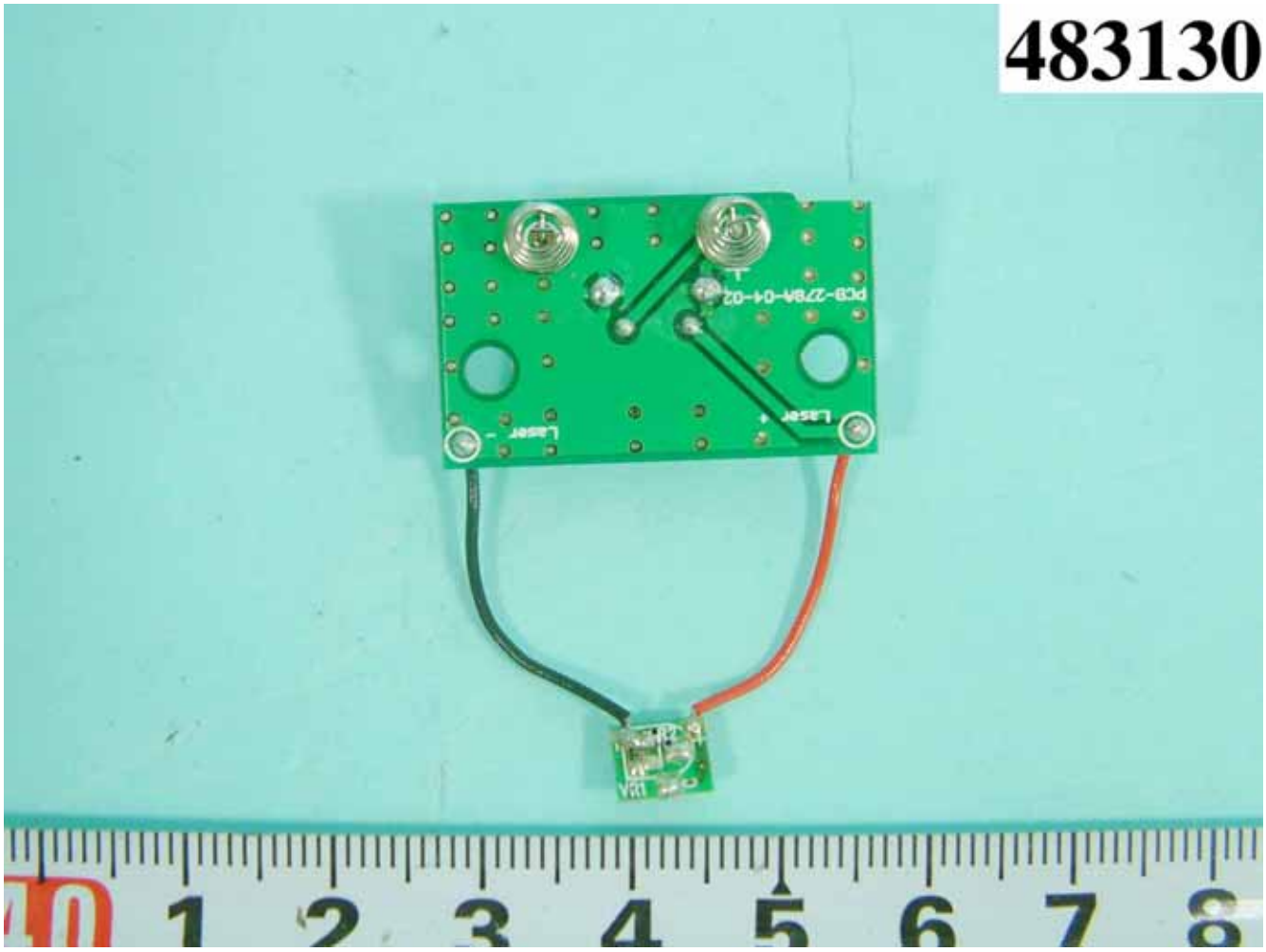

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