FCC Part 15B Test Report

Application No.	:	HX2009099057
Applicant	:	Shenzhen Rongyangsheng Electronic Technology Co., Ltd.
Equipment Under Test (EUT)		
EUT Name	:	Webcam
Model No.	:	RYS1080
Serial No.	:	See Page 3
Brand Name	:	荣扬盛（RYS）
Receipt Date	:	2020-09-03
Test Date	:	2020-09-03 to 2020-09-14
Issue Date	:	2020-09-14
Standards	:	FCC Part 15: 2019 Subpart B
Conclusions	:	**PASS**

In the configuration tested, the EUT complied with the standards specified above. The EUT technically complies with the FCC requirements

Test/Witness Engineer : Tim Chen

Approved & Authorized : Andy Zhang

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

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1. General Information

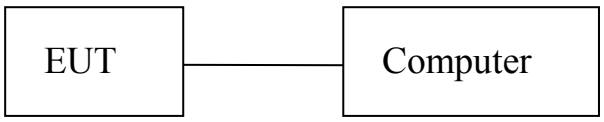
1.1 Client Information

Applicant	:	Shenzhen Rongyangsheng Electronic Technology Co., Ltd.
Address	:	6F, No. 242 Guangtian Road, Tangxiachong, Yanluo Street, Bao 'An District, Shenzhen
Manufacturer	:	Shenzhen Rongyangsheng Electronic Technology Co., Ltd.
Address	:	6F, No. 242 Guangtian Road, Tangxiachong, Yanluo Street, Bao 'An District, Shenzhen

1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	Webcam
Model No.	:	RYS1080
Serial No.	:	RYS1308, RYS1411, RYS1421, RYS1313, RYS0130, RYS1080, RYS2291, SPC02, RYS500AF6209, RYS500AF32, RYS800AF32, RYS120FPS, RYS330fps ATM1080, RYS5M-2EYE, RYS3350, RYS0713
Brand Name	:	荣扬盛（RYS）
Power Supply	:	DC 5.0V, 0.5A
Remark: All above models are identical in schematic, structure and critical components except for only different appearance; therefore, EMI testing was performed with RYS1080 only.		

1.3 Block Diagram Showing The Configuration of System Tested



1.4 Test standards

The objective is to determine compliance with FCC Part 15, Subpart B, and section 15.107, 15.109 rules.
Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which result in lowering the emission, should be checked to ensure compliance has been maintained.

1.5 Test Facility

The testing report were performed by the Shenzhen HX Detect Certification Co., Ltd., in their facilities located at 5/F, Building B15, Zongtai Cultural and Creative Industrial Park, Yintian Creative Park, Xixiang Town, Bao 'an District, Shenzhen.

1.6 Equipment Used Test

1.6.1 Test Equipment Used to Measure Conducted Emission

No.	Equipment	Manufacturer	Model No.	Last Cal.	Cal. Interval
HX-EMC001	EMI Test Receiver	Rohde & Schwarz	ESCS30	Jan.02, 2020	1 Year
HX-EMC002	AMN	Rohde & Schwarz	ENV216	Jan.02, 2020	1 Year
HX-EMC003	AMN	SCHWARZBECK	NNBL 8226-2	Jan.02, 2020	1 Year

1.6.2 Test Equipment Used to Measure Radiated Emission

No.	Equipment	Manufacturer	Model No.	Last Cal.	Cal. Interval
HX-EMC004	EMI Test Receiver	Rohde & Schwarz	ESI26	Jan.02, 2020	1 Year
HX-EMC005	Bilog Antenna	SCHWARZBECK	VULB9163	Jan.02, 2020	1 Year
HX-EMC006	Positioning Controller	C&C	CC-C-1F	N/A	N/A

2. Test Summary

Test Items	Test Requirement	Test Method	Result
Conducted Emission	FCC Part 15: 2019 Subpart B	ANSI C63.4	N/A
Radiated Emission	FCC Part 15: 2019 Subpart B	ANSI C63.4	Pass
Note: N/A is an abbreviation for Not Applicable.			

3. Conducted Emission Test

3.1 Test Standard and Limit

3.1.1Test Standard

FCC Part 15 B: 2019

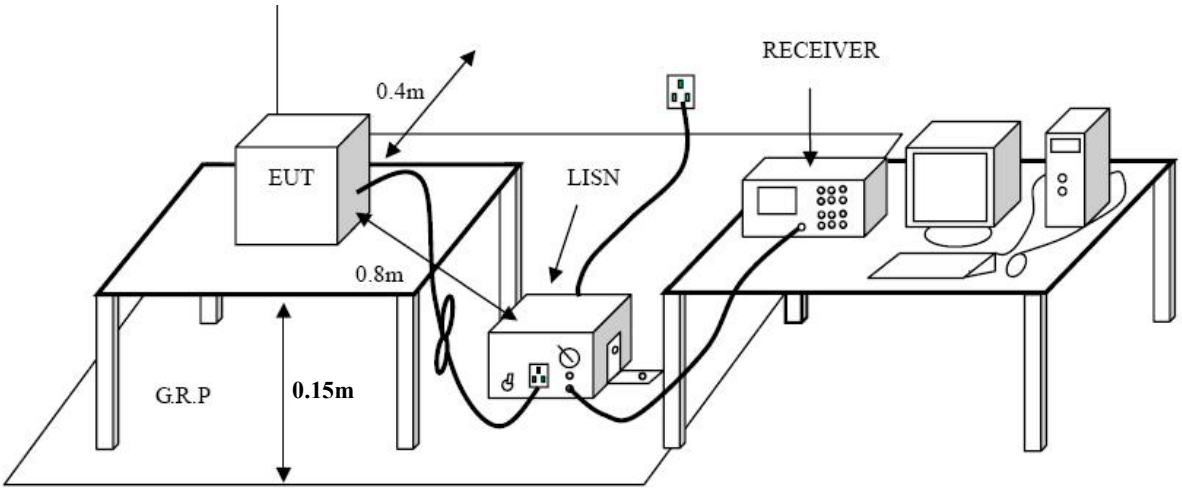
3.1.2 Test Limit

Conducted Emission Test Limit (Class B)

Frequency	Maximum RF Line Voltage (dBμV)	
	Quasi-peak Level	Average Level
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *
500kHz~5MHz	56	46
5MHz~30MHz	60	50

*decreasing linearly with logarithm of the frequency

3.2 Test Setup



3.3 Test Procedure

The EUT was placed 0.15 meters from the horizontal 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.

The cables shall be insulated (by up to 15 cm) from the horizontal ground reference plane, and shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

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.

LISN at least 80 cm from nearest part of EUT chassis.

The bandwidth of EMI test receiver is set at 9kHz, and the test frequency band is from 0.15MHz to 30MHz.

3.4 Test Data

This test is not applicable.

4. Radiated Emission Test

4.1 Test Standard and Limit

4.1.1 Test Standard

FCC Part 15 B: 2019

4.1.2 Test Limit

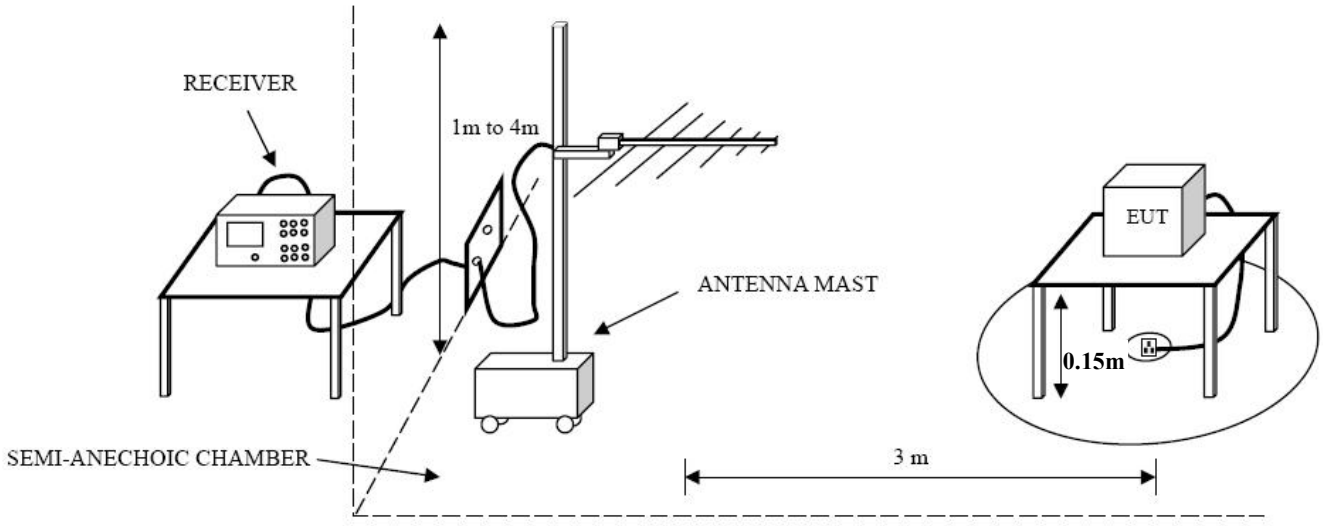
Radiated Emission Test Limit (Class B)

Frequency MHz	Field Strengths Limits dB(μV/m)
30 ~ 88	40.0
88 ~ 216	43.5
216 ~ 960	46.0
960 ~ 1000	54.0

* The lower limit shall apply at the transition frequency.

* The test distance is 3m.

4.2 Test Setup



4.3 Test Procedure

The EUT was placed on the top of a rotating table which is 0.15 meters above the ground. EUT is set 3.0 meters away from the receiving antenna that mounted on a antenna tower. The table was rotated 360 degrees to determine the position of the highest radiation, the antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

Measurements shall be made with a quasi-peak measuring receiver in the frequency range 30MHz to 1000MHz. 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.

4.4 Test Condition

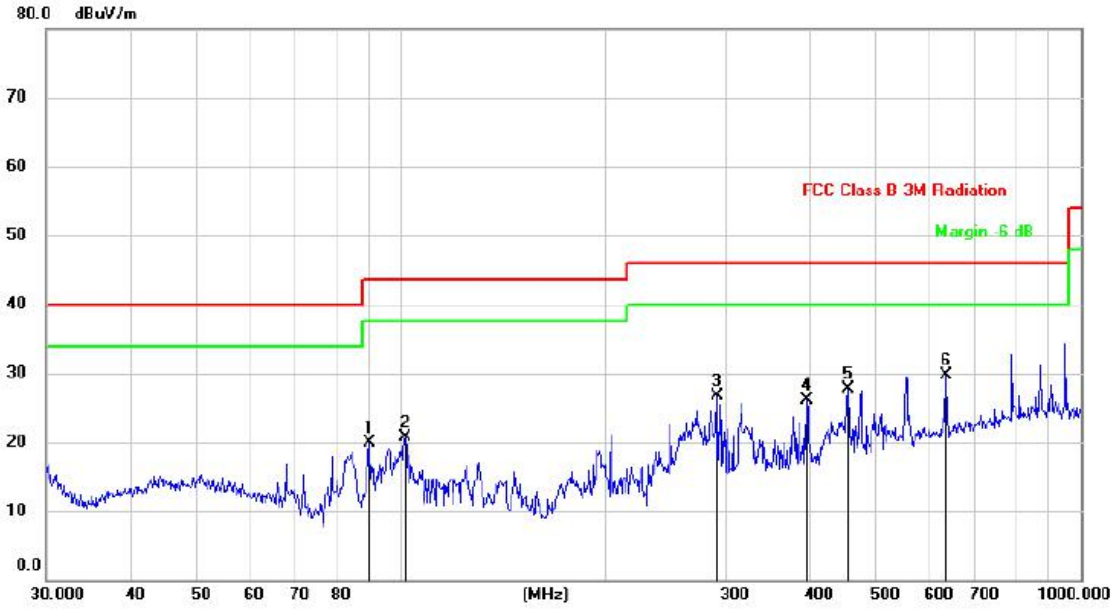
Temperature	:	25 ℃
Relative Humidity	:	48 %
Pressure	:	1010 hPa
Test Power	:	DC 5V

4.5 Test Data

Please refer to the following pages.

Operating Condition: Normal

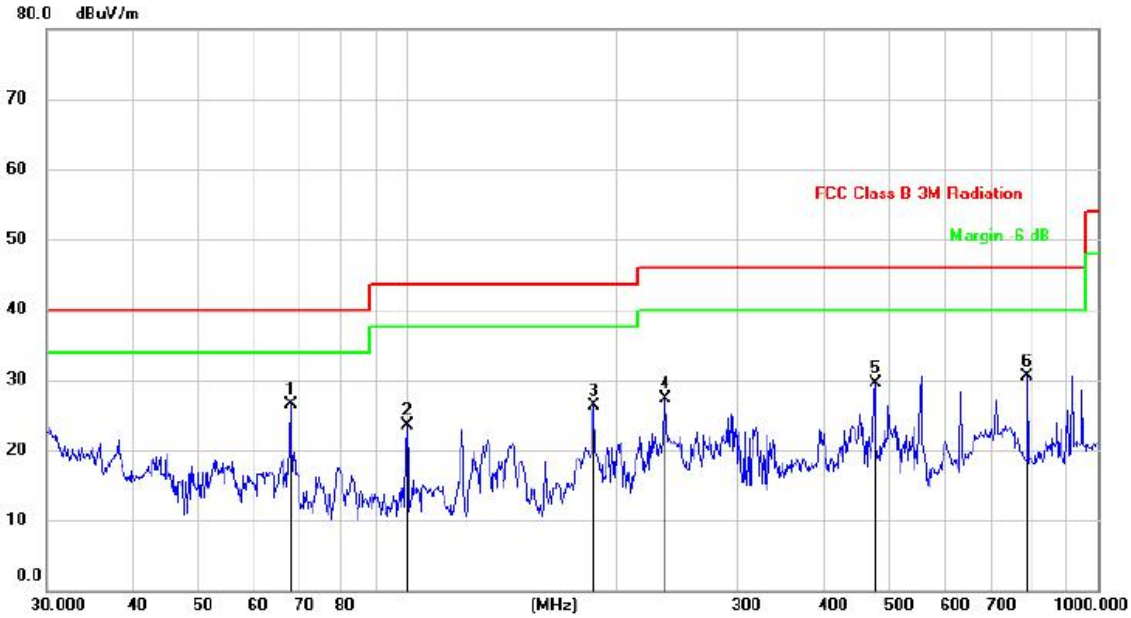
Test Specification: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dBuV/m	dBuV/m	dBuV/m	dB	Detector
1		89.5899	35.39	-15.45	19.94	43.50	-23.56	peak
2		101.2883	34.46	-13.82	20.64	43.50	-22.86	peak
3		291.0360	38.26	-11.63	26.63	46.00	-19.37	peak
4		394.8543	35.46	-9.27	26.19	46.00	-19.81	peak
5		454.3100	35.99	-8.25	27.74	46.00	-18.26	peak
6	*	633.9071	34.97	-5.21	29.76	46.00	-16.24	peak

Operating Condition: Normal

Test Specification: Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dBuV/m	dBuV/m	dBuV/m	dB	Detector
1	*	67.6751	41.63	-15.06	26.57	40.00	-13.43	peak
2		99.8777	37.43	-13.83	23.60	43.50	-19.90	peak
3		186.4404	41.53	-15.13	26.40	43.50	-17.10	peak
4		236.6447	40.23	-12.85	27.38	46.00	-18.62	peak
5		475.4990	37.34	-7.89	29.45	46.00	-16.55	peak
6		790.6186	34.19	-3.67	30.52	46.00	-15.48	peak

5. Photographs - Constructional Details

Photo 1 Appearance of EUT

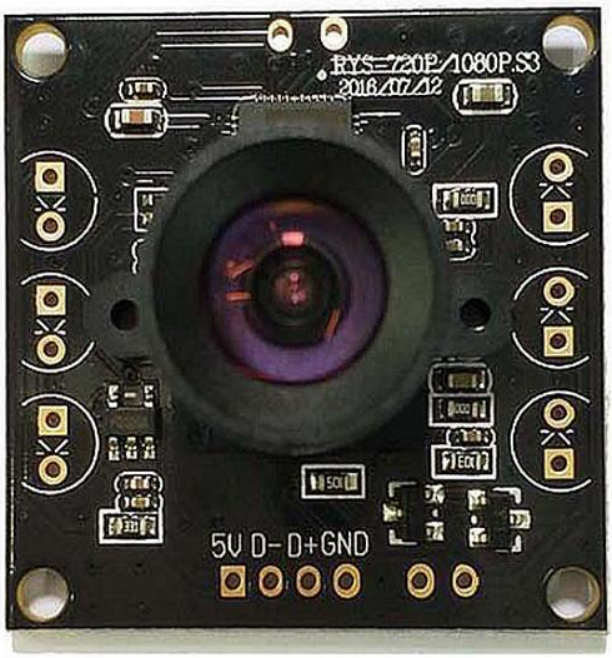


Photo 2 Appearance of EUT

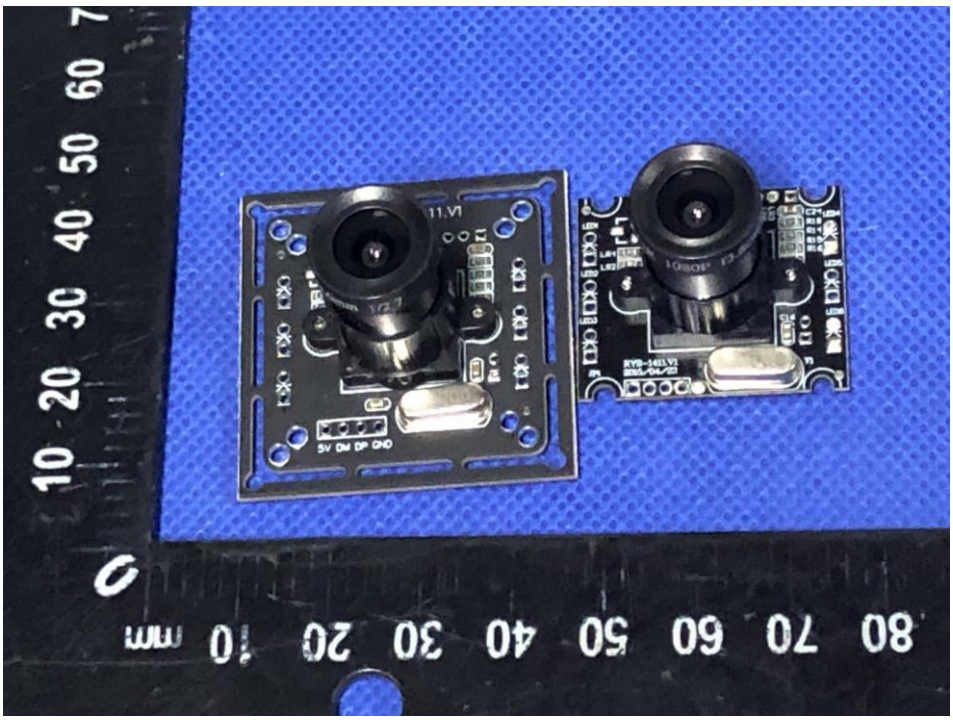
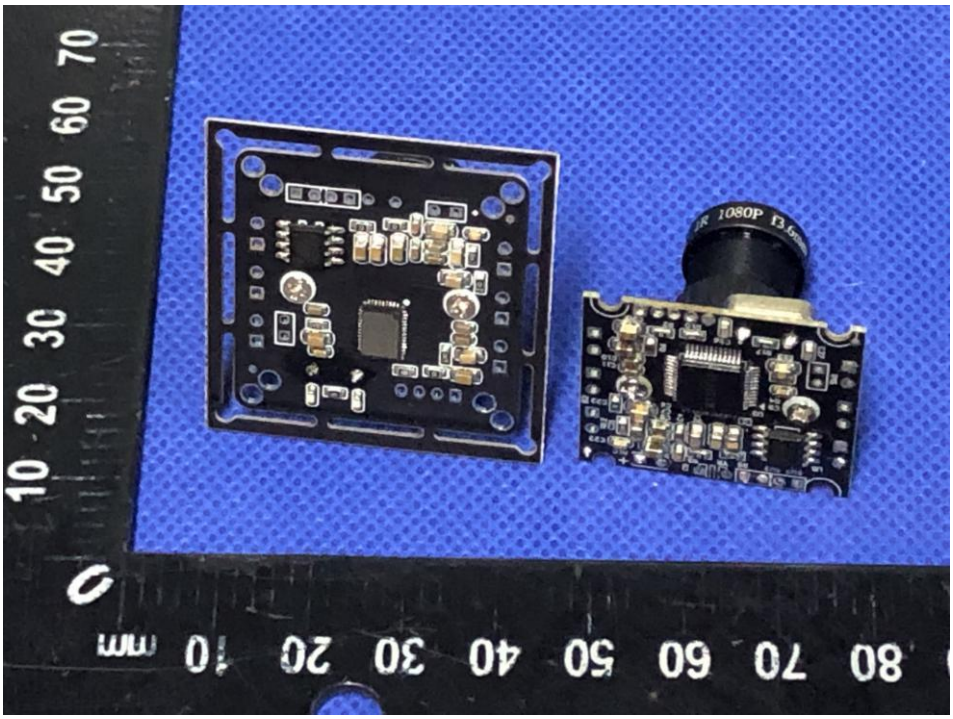


Photo 3 Appearance of EUT



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