Product Name:	Wireless Optical Mouse
Model No.:	AXM-700A, EL-993162
Brand Name:	Sysgration, Easy Line
Applicant:	SYSGRATION LTD. 10Fl., No. 868, Chung Cheng Rd., Chung Ho, Taipei (235), Taiwan, R.O.C.
Date of Receipt:	Nov. 19, 2008
Finished date of Test:	Nov. 28, 2008
Applicable Standards:	47 CFR Part 15, Subpart C ANSI C63.4:2003

We, **Spectrum Research & Testing Laboratory Inc.**, hereby certify that one sample of the above was tested in our laboratory with positive results according to the above-mentioned standards. The records in the report are an accurate account of the results. Details of the results are given in the subsequent pages of this report.

Tested By : Marvin Chang , Date: Nov. 28. 2008
(Marvin Chang)

Approved By : , Date: 11/28/2008
(Johnson Ho, Director)

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1. DOCUMENT POLICY AND TEST STATEMENT

1.1 DOCUMENT POLICY

- The report shall not be reproduced except in full, without the written approval of SRT Lab, Inc.
- The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

1.2 TEST STATEMENT

- The test results in the report apply only to the unit tested by SRT Lab.
- There was no deviation from the requirements of test standards during the test.

1.3 EUT MODIFICATION

- No modification in SRT Lab.

2. DESCRIPTION OF EUT AND TEST MODE

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Wireless Optical Mouse
BRAND NAME	Sysgration, Easy Line
MODEL NO.	AXM-700A, EL-993162

RF Mouse Transmitter

WORKING FREQUENCY	27.045MHz
CHANNEL NUMBER	1
ID NUMBERS	256
RF OUTPUT POWER	-4dBm±2dBm
DEVIATION	6KHz±2KHz
MODULATION METHOD	FSK
POWER REQUIREMENTS	3.0V, AAA size batteries x2
CURRENT DISSIPATION	<60mA
STANDBY MODE CURRENT	5±1mA
SLEEPING MODE CURRENT	0.63mA
TRANSMITTING ANGLE	360°
WORKING DISTANCE	1.0 meter (Min.)
LOW BATTERY	2.0V

2.2 DESCRIPTION OF EUT INTERNAL DEVICE

DEVICE	BRAND / MAKER	MODEL #	FCC ID/DOC	REMARK
N/A				

2.3 DESCRIPTION OF TEST MODE

The EUT was tested for emission measurement under the following situations:

Mode	EUT collocation
1	Tx

2.4 DESCRIPTION OF SUPPORT UNIT

The EUT was configured by the requirement of ANSI C63.4:2003 and CISRP22:2003. All interface ports were connected to the appropriate support units via specific cables. The support units and cables are listed below.

NO	DEVICE	BRAND	MODEL #	FCC ID/DOC	CABLE
	N/A				

NOTE : For the actual test configuration, please refer to the photos of testing.

3. DESCRIPTION OF APPLIED STANDARDS

The EUT is a kind of wireless product and to be connected with a PC system for normal use. According to the specifications provided by the applicant, it must comply with the requirements of the following standards:

47 CFR Part 15, Subpart C

ANSI C63.4:2003

All tests have been performed and recorded as per the above standards.

4. RADIATED EMISSION TEST

4.1 RADIATED EMISSION LIMIT

FCC Part 15, Subpart C Section 15.227.

FREQUENCY (MHz)	DISTANCE (m)	FIELD STRENGTH (dBμV/m)	
		PEAK	AVERAGE
26.96 - 27.28	3	100.0	80.0

FCC Part 15, Subpart B Section 15.209.

FREQUENCY (MHz)	DISTANCE (m)	FIELD STRENGTH (dBμV/m)
30 - 88	3	40.0
88 - 216	3	43.5
216 - 960	3	46.0
Above 960	3	54.0

NOTE :

1. In the emission tables above , the tighter limit applies at the band edges.
2. Distance refers to the distance between measuring instrument, antemma, and the closest point of any part of the device or system.

CISPR 22:2003 limits of radiated emission measurement for frequency below 1000 MHz

FREQUENCY (MHz)	Class A (at 10m)	Class B (at 10m)
	dBμV/m	dBμV/m
30 – 230	40	30
230 - 1000	47	37

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBμV/m) = 20 log Emission level (μV/m).

4.2 TEST EQUIPMENT

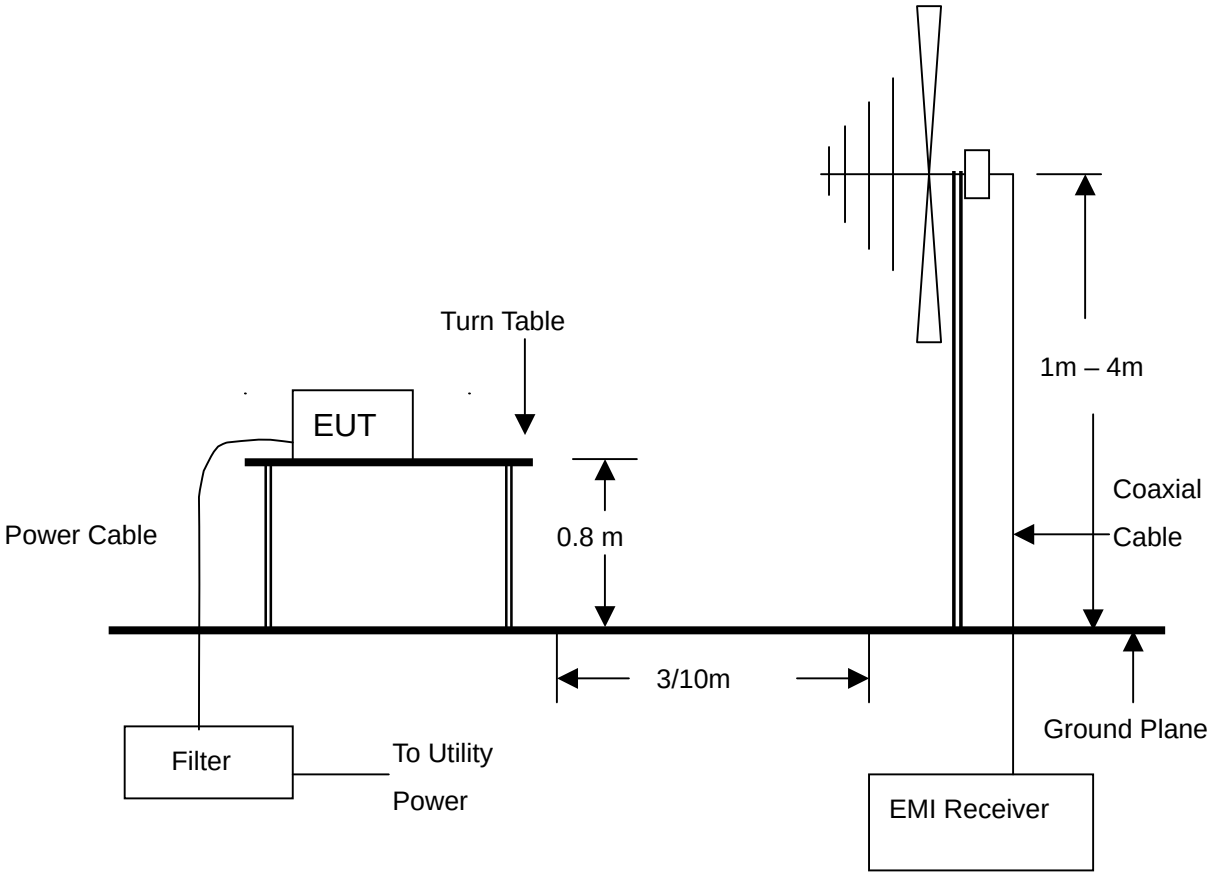
The following test equipment was used during the radiated emission test:

EQUIPMENT/ FACILITIES	SPECIFICATIONS	MANUFACTURER	MODEL#/ SERIAL#	DUE DATE OF CAL. & CAL. CENTER
EMI TEST RECEIVER	9kHz TO 2.75 GHz	ROHDE & SCHWARZ	ESCS30/ 830245/012	OCT. 2009 ETC
SPECTRUM ANALYZER	9K-40GHz	ROHDE & SCHWARZ	FSP40/ 100093	SEP 2009 ETC
BI-LOG ANTENNA	25 MHz TO 2 GHz	EMCO	3142B/ 0005-1534	NOV. 2008 ETC
OATS	3 – 10 M MEASUREMENT	SRT	SRT-1	NOV. 2008 SRT
COAXIAL CABLE	25M	TIMES	J400/ #25M	AUG. 2009 ETC
FILTER	2 LINE, 30A	FIL.COIL	FC-943/ 869	NCR

NOTE:

1. The calibration interval of the above test equipment is one year and the calibrations are traceable to NML/ROC and NIST/USA.

4.3 TEST SET-UP



NOTE :

1. The EUT system was put on a wooden table with 0.8m heights above a ground plane.
2. For the actual test configuration, please refer to the photos of testing.

4.4 TEST PROCEDURE

The EUT was tested according to the requirement of ANSI C63.4:2003 and CISPR 22:2003. The measurements were made at an open area test site with 3 meter measurement distance under 1 GHz and with 3m distance above 1GHz. The frequency spectrum measured started from 30 MHz. Under 1 GHz, all readings were quasi-peak values with 120 kHz resolution bandwidth of the test receiver. Above 1 GHz, the measurements were made at an open area test site with 3 meter measurement distance and all readings were peak or average values with 1 MHz resolution bandwidth of the test receiver. The EUT system was operated in all typical methods by users. The cables connected to EUT and support units were moved to find the maximum emission levels for each frequency.
First, find the margin or higher points at least 6 points by software, then use manual to find the maximum data. The procedure is referred on the test procedure of SRT LAB.

4.5 EUT OPERATING CONDITION

The EUT sent singnal continuously thought the manufacturer provide firmware.

4.6 RADIATED EMISSION TEST RESULT

Temperature:	24°C	Humidity:	62 %RH
Ferquency Range:	20 - 1000 MHz	Measured Distance:	3m
Receiver Detector:	AV.	Tested Mode:	TX (Fundamental
Tested By:	Marvin Chang		Frequency)
Tested Date:	Nov. 24, 2008		

Frequency (MHz)	Antenna Polarization	Cable Loss (dB)	Antenna Factor (dB/m)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
27.045(F)	H	1.02	15.16	26.9	43.08	80.0	-36.9
27.045(F)	V	1.02	15.16	28.8	46.3	80.0	-34.9

NOTE :

1. Measurement uncertainty is less than +/- 3.7dB
2. "*": Measurement does not apply for this frequency.
3. Emissiom Level = Reading Value + Ant. Factor + Cable Loss
4. The field strength of other emission frequencies were very low against the limit.
5. (F) : Fundamental frequency of transmitter.

Temperature:	24°C	Humidity:	62 %RH
Ferquency Range:	30 – 1000 MHz	Measured Distance:	3m
Receiver Detector:	Q.P.	Tested Mode:	TX
Tested Date:	Nov. 24, 2008	Tested By:	Marvin Chang

Antenna Polarization:Horizontal

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	AZ(°)	EL(m)
53.2274	1.33	6.17	24.7	32.2	40.0	-7.8	0.0	4.0
80.4630	1.60	7.50	15.1	24.2	40.0	-15.8	33.2	3.2
132.8164	2.12	8.14	12.8	23.1	43.5	-20.4	268.5	1.9
159.9670	2.37	8.96	11.4	22.7	43.5	-20.8	341.0	2.6
268.6742	3.24	12.62	15.6	31.5	46.0	-14.5	174.4	1.1
348.1575	3.79	15.75	13.8	33.3	46.0	-12.7	276.9	2.4

Antenna Polarization:Vertical

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	AZ(°)	EL(m)
53.7610	1.33	6.17	21.2	28.7	40.0	-11.3	3.5	1.9
67.2630	1.47	6.52	20.1	28.1	40.0	-11.9	323.7	1.2
80.4400	1.60	7.50	13.7	22.8	40.0	-17.2	18.5	2.6
134.7952	2.14	8.46	11.9	22.5	43.5	-21.0	310.7	1.3
295.7461	3.46	13.67	14.2	31.3	46.0	-14.7	194.6	2.1
377.1820	4.02	16.24	12.6	32.9	46.0	-13.1	300.1	2.9

NOTE :

1. Measurement uncertainty is +/-3.7dB.
2. "*": Measurement does not apply for this frequency.
3. Emissiom Level = Reading Value + Ant. Factor + Cable Loss.
4. The field strength of other emission frequencies were very low against the limit.

5. BAND EDGE

5.1 BAND EDGE LIMIT

The limit is less than 26dB with respect to the amplitude of fundamental frequency.

5.2 TEST EQUIPMENT

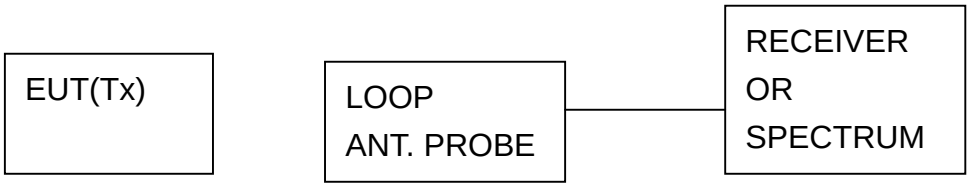
The following test equipment was used during the radiated emission test:

EQUIPMENT/ FACILITIES	SPECIFICATIONS	MANUFACTURER	MODEL#/ SERIAL#	DUE DATE OF CAL. & CAL. CENTER
SPECTRUM	9kHz-40GHz	ROHDE & SCHWARZ	FSP40/ 100093	SEP. 2009 ETC

NOTE:

The calibration interval of the above test equipment is one year and the calibrations are traceable to NML/ROC and NIST/USA.

5.3 TEST SET-UP



5.4 TEST PROCEDURE

A specific loop antenna was connected to receiver to detect the EUT's power level. The Receiver displayed the EUT's power level and printed out the plot of measurement.

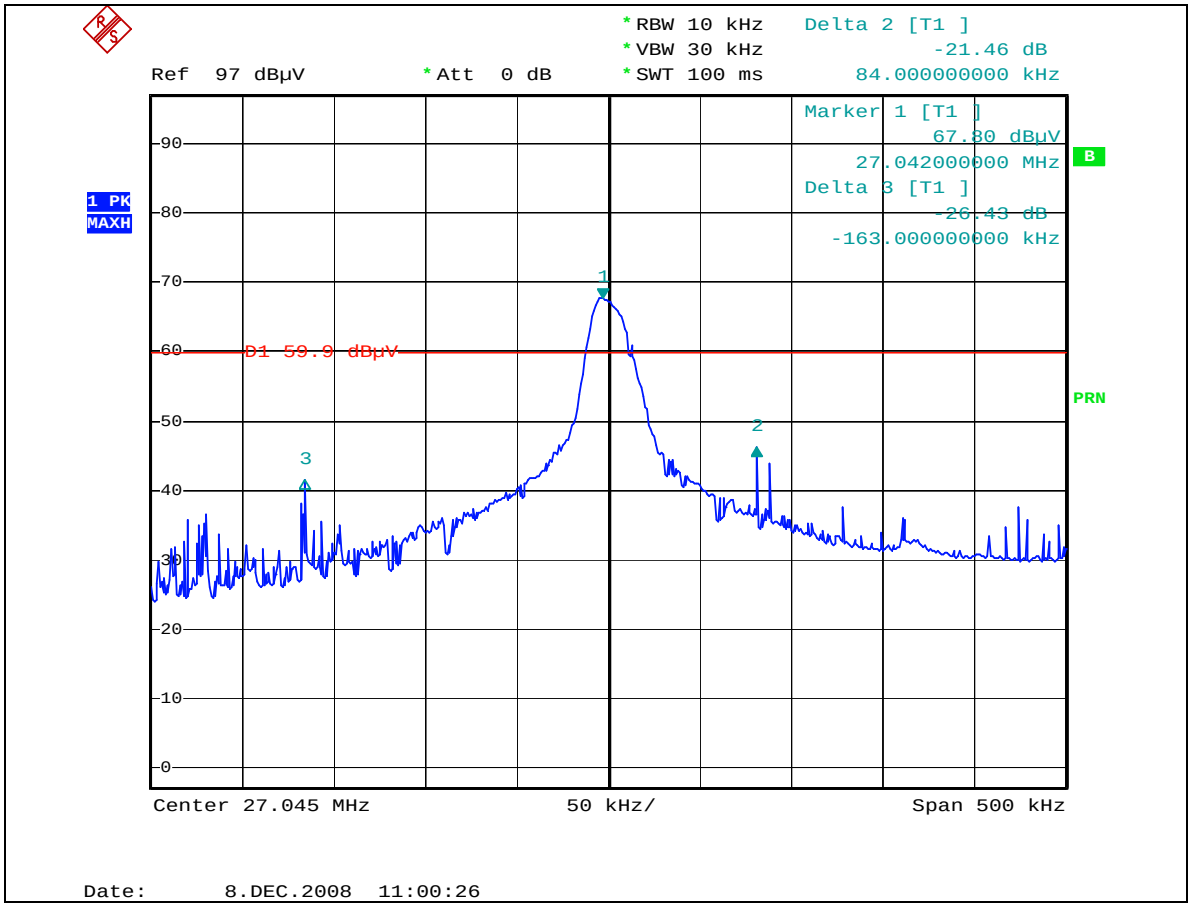
5.5 EUT OPERATING CONDITION

Set the EUT under transmission condition continuously at specific channel frequency.

5.6 BAND EDGE TEST RESULT

Temperature:	23 °C	Humidity:	53 %RH
Receiver Detector:	Peak	Tested By:	Marvin Chang
Test Result:	Pass	Measured Distance:	3m

FREQUENCY (MHZ)	RF LEVEL 10kHz BW (dB μV)	LIMIT (dB μV)	MARGIN (dB)
27.13	46.34	69.54	-23.20
26.87	41.37	69.54	-28.17



7. TERMS OF ABRIVATION

AV.	Average detection
AZ(°)	Turn table azimuth
Correct.	Correction
EL(m)	Antenna height (meter)
EUT	Equipment Under Test
Horiz.	Horizontal direction
LISN	Line Impedance Stabilization Network
NSA	Normalized Site Attenuation
Q.P.	Quasi-peak detection
SRT Lab	Spectrum Research & Testing Laboratory, Inc.
Vert.	Vertical direction