



NVLAP LAB CODE 200707-0



FCC PART 15.249 MEASUREMENT AND TEST REPORT

For

AURUM ELECTRONICS CORP.

No.160, Dayong Rd, Yongkang City, Tainan Hsien, 710 Taiwan

FCC ID: VQXAEC-9339B

Report Type: Original Report	Product Type: The Intelligent Motion Sensor Tracking Light (Transmitter)
Test Engineer:	Phoenix Liu <i>Phoenix Liu</i>
Report Number:	RSZ08071102-249
Report Date:	2008-12-19
Reviewed By:	Green Xu <i>Green Xu</i> EMC Manager
Prepared By:	Bay Area Compliance Laboratories Corp. (Shenzhen) 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China Tel: +86-755-33320018 Fax: +86-755-33320008

Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. This report **must not** be used by the customer to claim product certification, approval, or endorsement by NVLAP*, NIST, or any agency of the Federal Government.

* This report may contain data that are not covered by the NVLAP accreditation and are marked with an asterisk "*" sec-2

TABLE OF CONTENTS

GENERAL INFORMATION.....	3
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	3
MECHANICAL DESCRIPTION OF EUT	3
EUT PHOTOGRAPH	3
OBJECTIVE	3
RELATED SUBMITTAL(S)/GRANT(S).....	3
TEST METHODOLOGY	4
TEST FACILITY	4
SYSTEM TEST CONFIGURATION.....	5
JUSTIFICATION	5
SPECIAL ACCESSORIES	5
EQUIPMENT MODIFICATIONS	5
CONFIGURATION OF TEST SETUP	5
BLOCK DIAGRAM OF TEST SETUP	5
SUMMARY OF TEST RESULTS	6
§15.203 - ANTENNA REQUIREMENT.....	7
APPLICABLE STANDARD	7
ANTENNA CONNECTOR CONSTRUCTION	7
§15.207(A) - CONDUCTED EMISSIONS.....	8
MEASUREMENT UNCERTAINTY	8
EUT SETUP	8
EMI TEST RECEIVER SETUP.....	9
TEST EQUIPMENT LIST AND DETAILS.....	9
TEST PROCEDURE	9
TEST RESULTS SUMMARY	9
TEST DATA	10
PLOT(S) OF TEST DATA	11
§15.205(A) §15.209(A) §15.249(A) §15.249(D) - RADIATED EMISSIONS.....	16
APPLICABLE STANDARD	16
MEASUREMENT UNCERTAINTY	16
TEST EQUIPMENT SETUP	16
EUT SETUP	17
TEST EQUIPMENT LIST AND DETAILS.....	17
TEST PROCEDURE	18
CORRECTED AMPLITUDE & MARGIN CALCULATION	18
TEST RESULTS SUMMARY	18
TEST DATA	19
§15.249(D) – OUT OF BAND EMISSIONS	21
APPLICABLE STANDARD	21
TEST PROCEDURE	21
TEST EQUIPMENT LIST AND DETAILS.....	21
TEST DATA	22
PRODUCT SIMILAR DECLARATION LETTER	23

GENERAL INFORMATION

Product Description for Equipment Under Test (EUT)

The AURUM ELECTRONICS Corp.'s product, model: AEC-9339B /AEC-9336B or the "EUT" as referred to in this report is a *The Intelligent Motion Sensor Tracking Light (Transmitter)* rated input voltage: 120V/60Hz.

Mechanical Description of EUT

The AURUM ELECTRONICS Corp.'s product, model number: AEC-9339B /AEC-9336B, AEC-9339B measures approximately 19.0 cm L x 18.0 cm W x 25.8 cm H, and AEC-9336B measures approximately 16.2 cm L x 18.0 cm W x 24.8 cm H.

* All measurement and test data in this report was gathered from production sample serial number: 0807034(Assigned by BACL, Shenzhen). The EUT was received on 2008-07-11.

EUT Photograph



Model: AEC-9339B



Model: AEC-9336B

Objective

This Type approval report is prepared on behalf of AURUM ELECTRONICS CORP. in accordance with Part 2, Subpart J, and Part 15, Subparts A, B and C of the Federal Communication Commissions rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.249 rules.

Related Submittal(s)/Grant(s)

Part 15.231 submission with same FCC ID.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2003, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

All radiated and conducted emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located in the 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China.

Test site at Bay Area Compliance Laboratories Corp. (Shenzhen) has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on November 04, 2004. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2003.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 382179. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, Bay Area Compliance Laboratories Corp. (Shenzhen) is a National Institute of Standards and Technology (NIST) accredited laboratory, under the National Voluntary Laboratory Accredited Program (Lab Code 200707-0).



NVLAP LAB CODE 200707-0

The current scope of accreditations can be found at <http://ts.nist.gov/Standards/scopes/2007070.htm>

SYSTEM TEST CONFIGURATION

Justification

The system was configured for testing in a typical fashion (as normally used by a typical user).

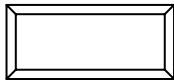
Special Accessories

N/A

Equipment Modifications

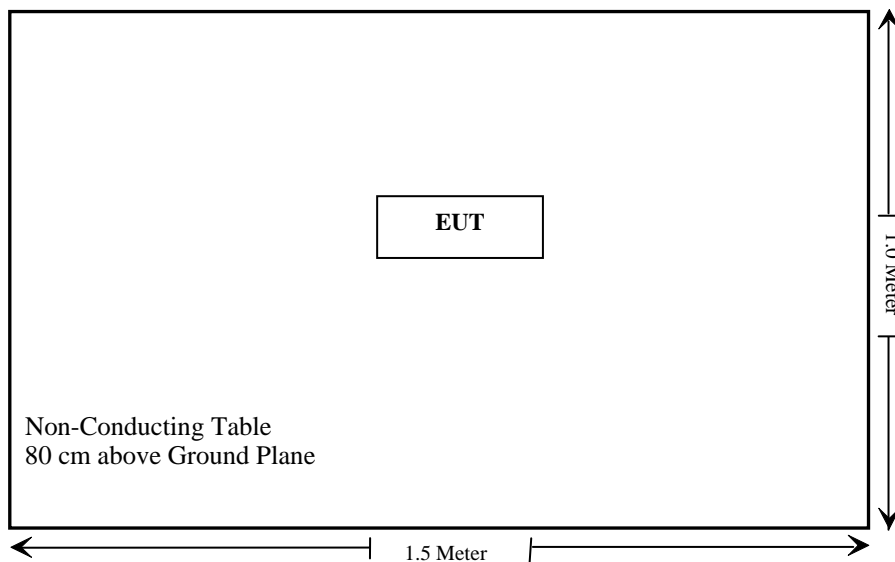
No modifications were made to the unit tested.

Configuration of Test Setup



EUT

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.203	Antenna Requirement	Compliant
§15.207(a)	Conduction Emissions	Compliant
§15.205(a), §15.209(a), 15.249(a), §15.249(c)	Radiated Emissions	Compliant*
§15.249(d)	Out of Band Emissions	Compliant

* Within measurement uncertainty.

§15.203 - ANTENNA REQUIREMENT

Applicable Standard

For intentional device, according to §15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used.

Antenna Connector Construction

The EUT antenna is a permanently attached antenna, the maximum of antenna gain is -2dBi, which in accordance to section 15.203, is considered sufficient to comply with the provisions of this section.

Result: Compliant.

Please refer to the EUT photos.

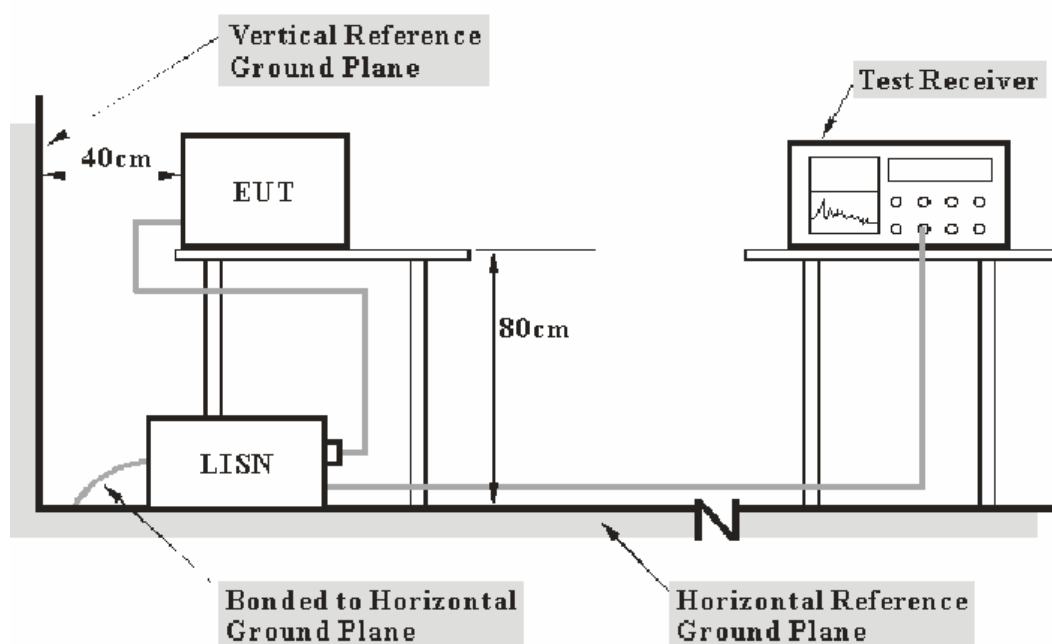
§15.207(a) - CONDUCTED EMISSIONS

Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, and LISN.

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement at Bay Area Compliance Laboratories Corp. (Shenzhen) is ± 2.4 dB.

EUT Setup



- Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.4-2003 measurement procedure. The specification used was with the FCC Part 15 .207 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The EUT was connected to a 120 VAC/60 Hz power source.

EMI Test Receiver Setup

The test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

<i>Frequency Range</i>	<i>IFBW</i>
150 kHz – 30 MHz	9 kHz

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Com-Power	L.I.S.N.	LI-200	12005	N/A	N/A
Com-Power	L.I.S.N.	LI-200	12208	N/A	N/A
Rohde & Schwarz	EMI Test Receiver	ESCS30	DE25330	2008-03-25	2009-03-25
Rohde & Schwarz	L.I.S.N.	ESH2-Z5	892107/021	2008-03-25	2009-03-25

* Com-Power's LISN were used as the supporting equipment.

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

During the conducted emission test, the EUT was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15.207(a), with the worst margin reading of:

7.00 dB at 17.920 MHz in the **Neutral** conductor mode for 9339B.
4.30 dB at 1.170 MHz in the **Neutral** conductor mode for 9336B.

Test Data**Environmental Conditions**

Temperature:	25 °C
Relative Humidity:	56 %
ATM Pressure:	100.0 kPa

The testing was performed by Phoenix Liu on 2008-07-22.

Test Mode: Operating

Model: 9339B

Line Conducted Emissions				FCC Part 15.207	
Frequency (MHz)	Amplitude (dBμV)	Detector (QP/AV)	Conductor (Line/Neutral)	Limit (dBμV)	Margin (dB)
17.920	43.00	AV	Neutral	50.00	7.00
17.900	42.90	AV	Line	50.00	7.10
0.180	45.30	AV	Neutral	54.00	8.70
0.230	53.10	QP	Line	62.40	9.30
0.360	37.90	AV	Neutral	49.00	11.10
0.575	44.70	QP	Line	56.00	11.30
27.920	37.80	AV	Neutral	50.00	12.20
0.180	51.10	QP	Neutral	64.00	12.90
0.350	43.80	QP	Neutral	59.00	15.20
27.600	34.70	AV	Line	50.00	15.30
17.920	43.80	QP	Neutral	60.00	16.20
17.900	43.60	QP	Line	60.00	16.40
12.900	32.40	AV	Neutral	50.00	17.60
0.730	37.90	QP	Neutral	56.00	18.10
27.200	41.70	QP	Line	60.00	18.30
27.210	41.60	QP	Neutral	60.00	18.40
12.750	28.90	AV	Line	50.00	21.10
0.730	24.30	AV	Neutral	46.00	21.70
0.230	30.40	AV	Line	52.40	22.00
0.575	23.10	AV	Line	46.00	22.90
12.900	33.20	QP	Neutral	60.00	26.80
12.750	31.70	QP	Line	60.00	28.30
4.620	27.20	QP	Line	56.00	28.80
4.620	4.60	AV	Line	46.00	41.40

Model: 9336B

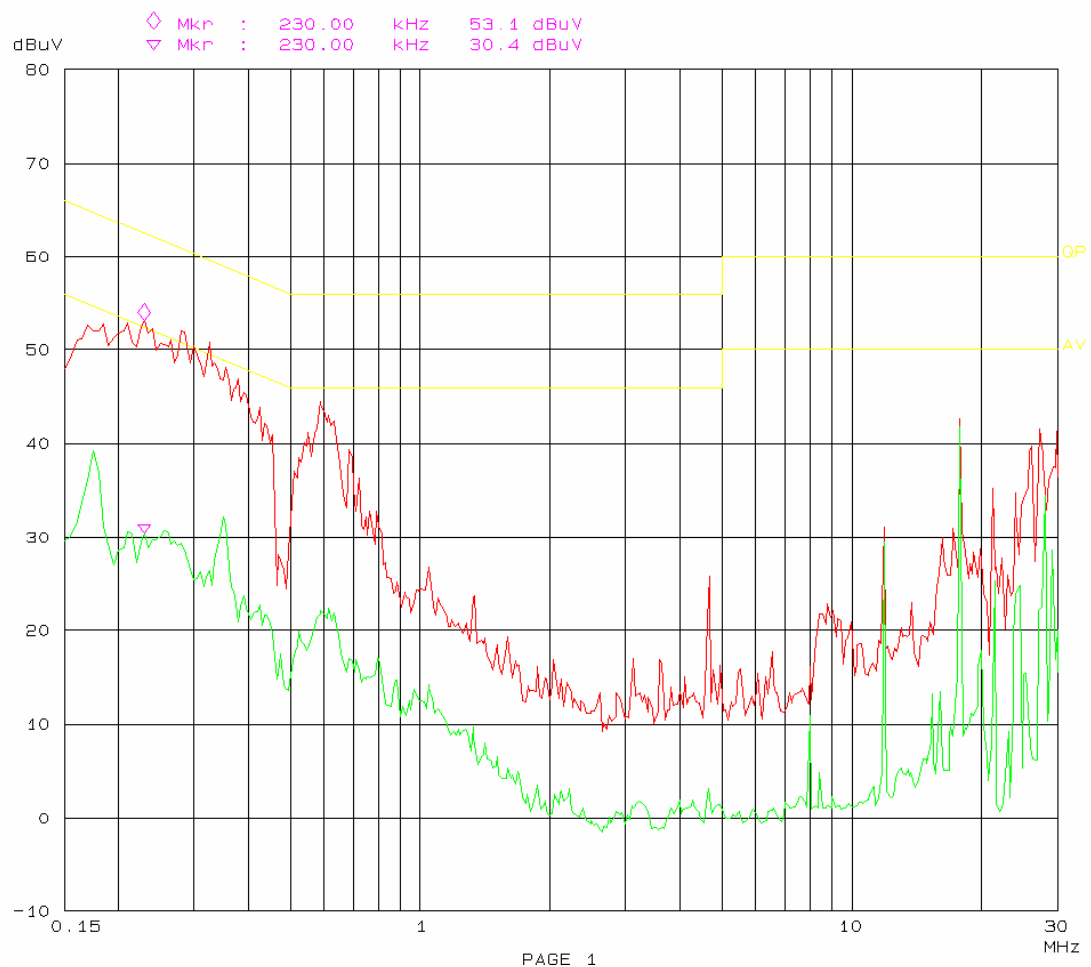
Line Conducted Emissions				FCC Part 15.207	
Frequency (MHz)	Amplitude (dBμV)	Detector (QP/AV)	Conductor (Line/Neutral)	Limit (dBμV)	Margin (dB)
1.170	51.70	QP	Neutral	56.00	4.30
0.370	53.90	QP	Neutral	58.50	4.60
1.260	50.40	QP	Neutral	56.00	5.60
17.810	42.10	AV	Line	50.00	7.90
27.820	41.60	AV	Neutral	50.00	8.40
27.830	40.30	AV	Line	50.00	9.70
17.950	38.70	AV	Neutral	50.00	11.30
0.215	40.90	AV	Line	53.00	12.10
27.830	45.20	QP	Line	60.00	14.80
17.810	43.90	QP	Line	60.00	16.10
0.215	46.80	QP	Line	63.00	16.20
27.820	42.20	QP	Neutral	60.00	17.80
17.950	41.70	QP	Neutral	60.00	18.30
0.370	28.50	AV	Neutral	48.50	20.00
12.630	29.40	AV	Line	50.00	20.60
0.375	37.10	QP	Line	58.40	21.30
0.375	26.40	AV	Line	48.40	22.00
1.170	22.50	AV	Neutral	46.00	23.50
12.610	25.40	AV	Neutral	50.00	24.60
1.260	20.80	AV	Neutral	46.00	25.20
12.630	30.40	QP	Line	60.00	29.60
12.610	28.00	QP	Neutral	60.00	32.00
5.210	26.20	QP	Line	60.00	33.80
5.210	4.70	AV	Line	50.00	45.30

Plot(s) of Test Data

Plot(s) of Test Data is presented hereinafter as reference.

Model: 9339BConduction Emission
FCC 15.207

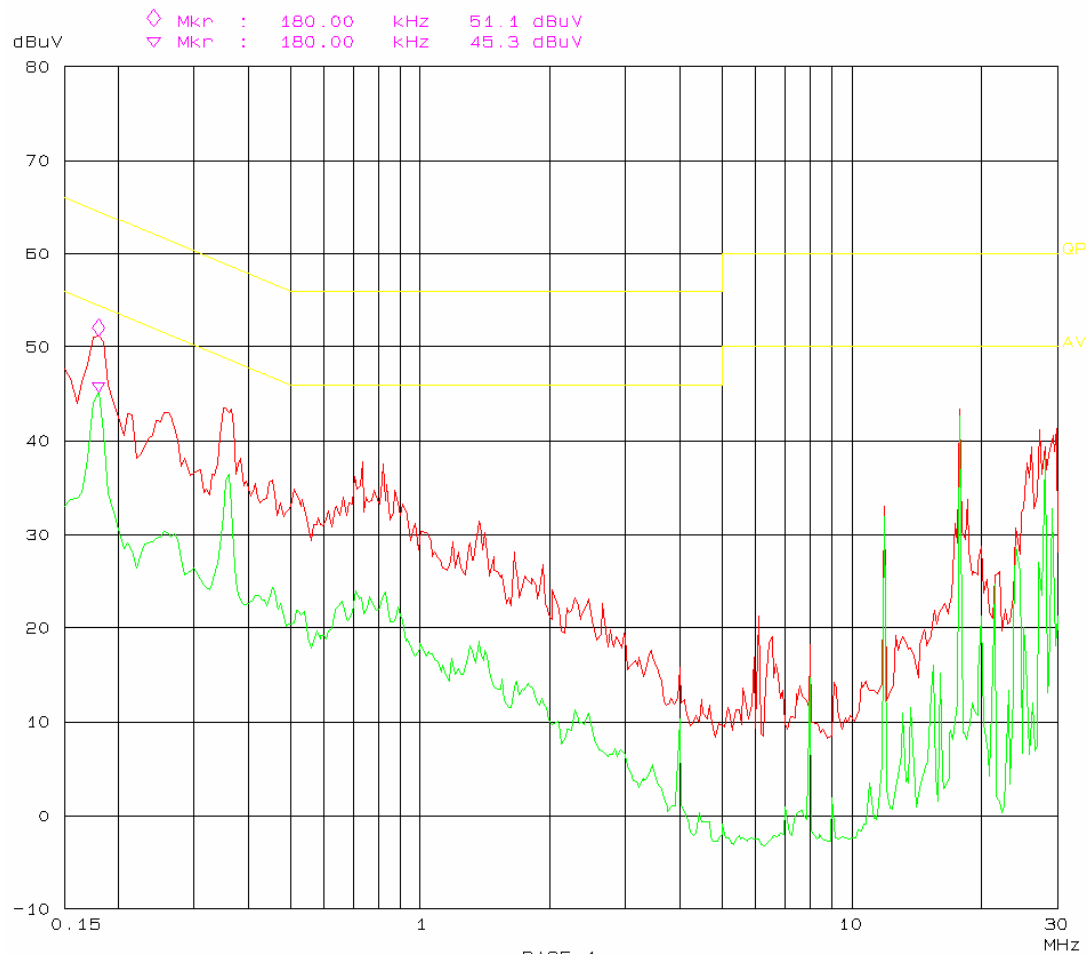
EUT: THE INTELLIGENT MOTION..LIGHT M/N: 9339B
Manuf: AURUM
Op Cond: OPERATING
Operator: PHOENIX
Test Spec: AC 120V/60Hz L
Comment: Temp: 25 Hum: 56%



Conduction Emission FCC 15.207

EUT: THE INTELLIGENT MOTION..LIGHT M/N: 9339B
Manuf: AURUM
Op Cond: OPERATING
Operator: PHOENIX
Test Spec: AC 120V/60Hz N
Comment: Temp: 25 Hum: 56%

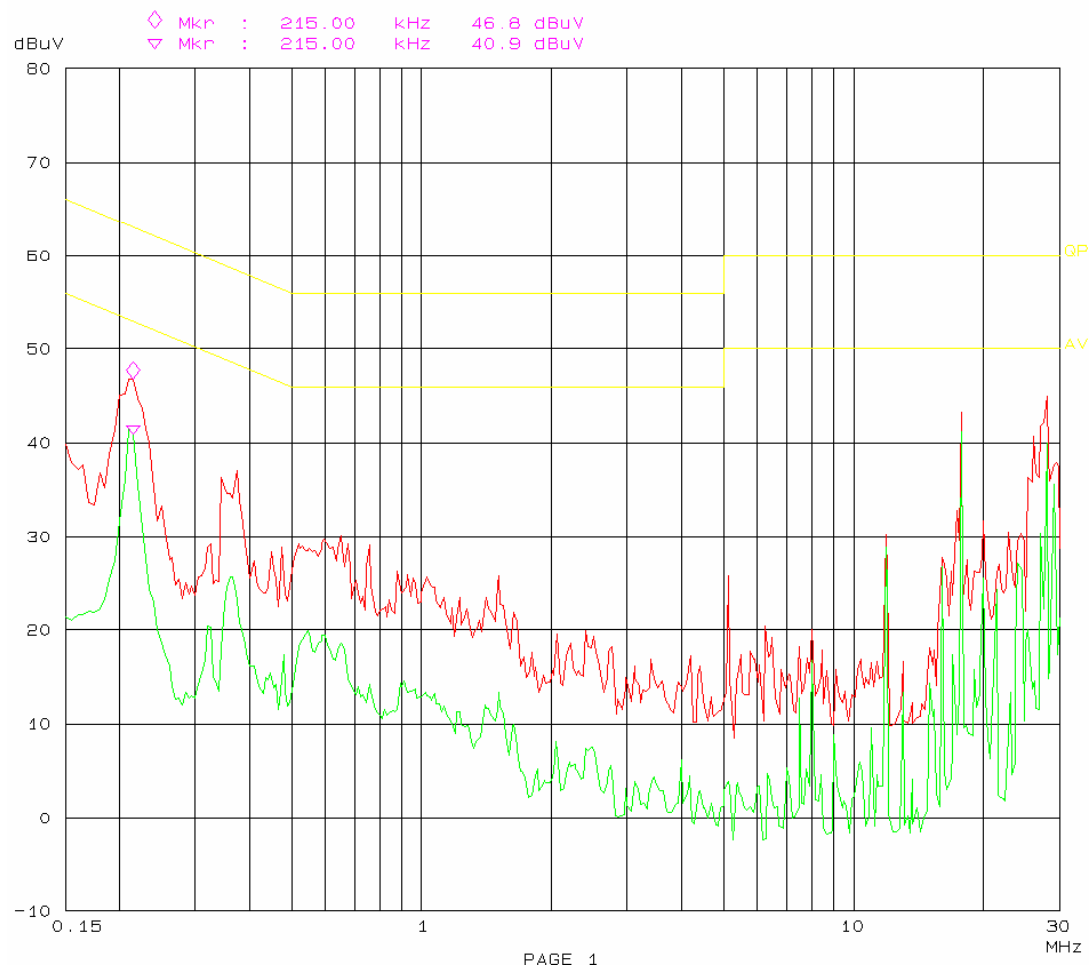
:
|



Model: 9336BConduction Emission
FCC 15.207

EUT: THE INTELLIGENT MOTION..LIGHT M/N: 9336B
Manuf: AURUM
Op Cond: OPERATING
Operator: PHOENIX
Test Spec: AC 120V/60Hz L
Comment: Temp: 25 Hum: 56%

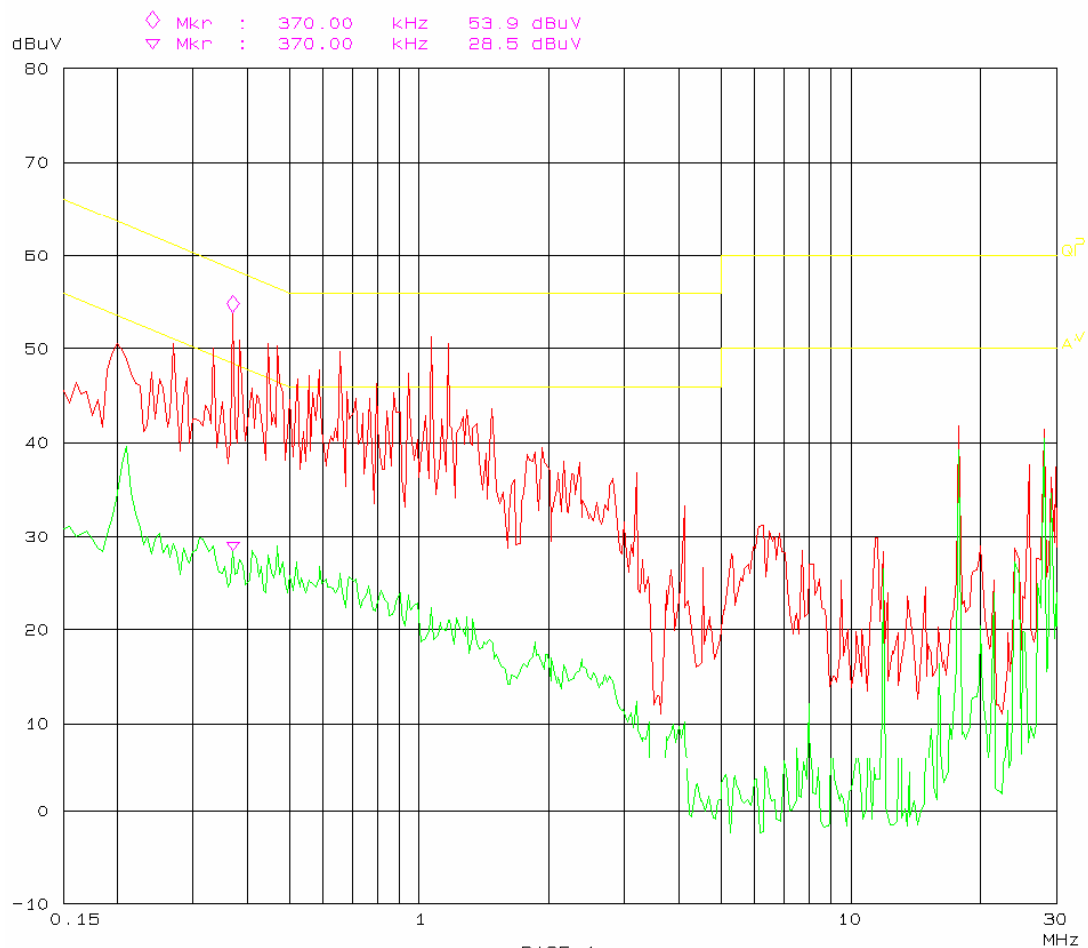
:
|



Conduction Emission FCC 15.207

EUT: THE INTELLIGENT MOTION..LIGHT M/N: 9336B
Manuf: AURUM
Op Cond: OPERATING
Operator: PHOENIX
Test Spec: AC 120V/60Hz N
Comment: Temp: 25 Hum: 56%

:
|



§15.205(a) §15.209(a) §15.249(a) §15.249(d) - RADIATED EMISSIONS

Applicable Standard

As per §15.249 (a), except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
902–928 MHz	50	500
2400–2483.5 MHz	50	500
5725–5875 MHz	50	500
24.0–24.25 GHz	250	2500

As per §15.249 (c), Field strength limits are specified at a distance of 3 meters.

(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of a radiation emissions measurement at Bay Area Compliance Laboratories Corp. (Shenzhen) is ± 4.0 dB.

Test Equipment Setup

The spectrum analyzer or receiver is set as:

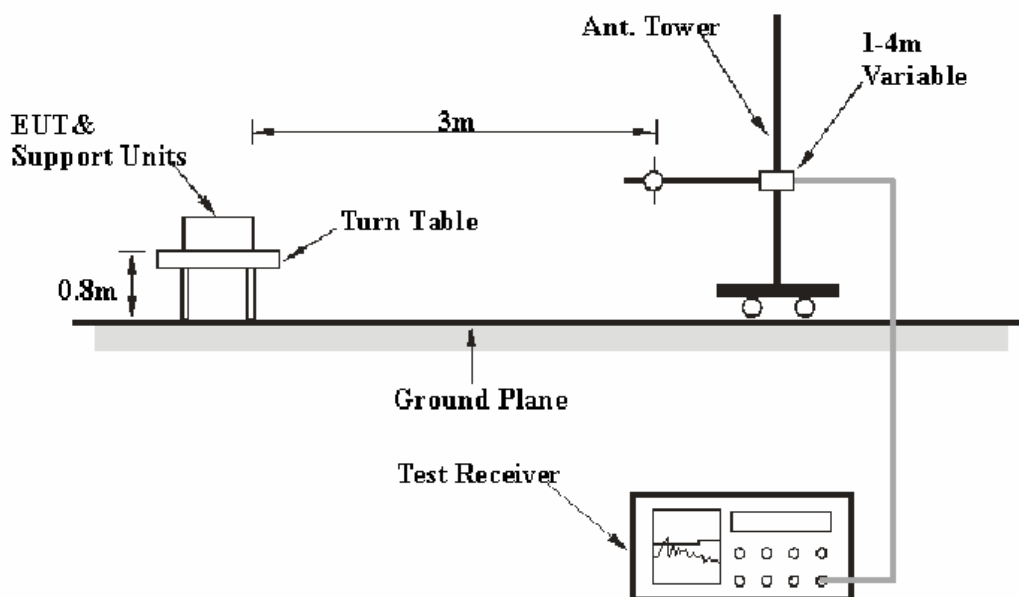
Below 1000MHz:

$$\text{RBW} = 100 \text{ kHz} / \text{VBW} = 300 \text{ kHz} / \text{Sweep} = \text{Auto}$$

Above 1000MHz:

- (1) Peak: $\text{RBW} = 1\text{MHz} / \text{VBW} = 1\text{MHz} / \text{Sweep} = \text{Auto}$
- (2) Average: $\text{RBW} = 1\text{MHz} / \text{VBW} = 10\text{Hz} / \text{Sweep} = \text{Auto}$

EUT Setup



The radiated emission and out of band emission tests were performed in the 3 meters chamber B, using the setup accordance with the ANSI C63.4-2003. The specification used was the FCC 15.209 and FCC 15.249 limits.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
HP	Amplifier	8447E	1937A01046	2008-11-15	2009-11-15
Rohde & Schwarz	EMI Test Receiver	ESCI	100224	2008-10-16	2009-10-16
Sunol Sciences	Bilog Antenna	JB1	A040904-2	2008-08-14	2009-08-14
HP	Amplifier	8449B	3008A00277	2008-09-29	2009-09-29
Sunol Sciences	Horn Antenna	DRH-118	A052604	2008-09-25	2009-09-25
Rohde & Schwarz	Spectrum Analyzer	FSEM30	849720/019	2008-05-09	2009-05-09

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

For the radiated emissions test, the EUT, and all support equipment power cords was connected to the AC floor outlet.

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

The EUT is set 3 meter away from the testing antenna, which is varied from 1-4 mete, and the EUT is placed on a turntable, which is 0.8 meter above ground plane, the table shall be rotated for 360 degrees to find out the highest emission. The receiving antenna should be changed the polarization both of horizontal and vertical.

Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

$$\text{Corrected Amplitude} = \text{Meter Reading} + \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

Test Results Summary

According to the data in the following table, the EUT complied with the FCC Part 15.209 & 15.249, with the worst margin reading of:

Below 1GHz: 9.4 dB at 733.003900 MHz in the Horizontal polarization.

Above 1GHz:

2.07 dB at 7242 MHz in the Vertical polarization for Low Channel.

2.92 dB at 7296 MHz in the Horizontal polarization for Middle Channel.

2.14 dB at 7404 MHz in the Horizontal polarization for High Channel.

Test Data

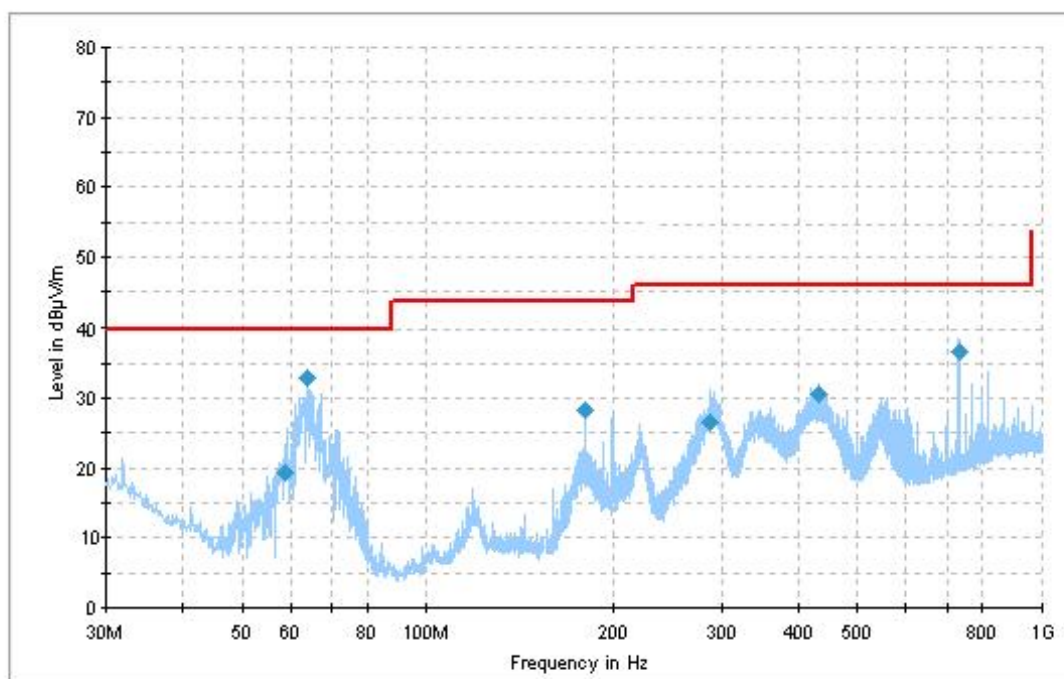
Environmental Conditions

Temperature:	25 ° C
Relative Humidity:	56%
ATM Pressure:	100.0 kPa

The testing was performed by Phoenix Liu on 2008-11-18.

Test Mode: Transmitting

Below 1 GHz:



Frequency (MHz)	Corrected Amplitude (dBμV/m)	Ant. Height (cm)	Ant. Polarity (H/V)	Turntable Position (deg)	Correction Factor (dB)	Limit (dBμV/m)	Margin (dB)
733.003900	36.6	202.0	H	319.0	-6.2	46.0	9.4
432.036825	30.7	206.0	H	33.0	-11.8	46.0	15.3
64.013425	32.9	120.0	V	182.0	-21.9	40.0	16.2
288.310175	26.5	125.0	H	93.0	-14.7	46.0	19.5
180.011025	28.2	121.0	V	209.0	-17.2	43.5	22.0
58.925150	19.3	107.0	V	257.0	-21.6	40.0	26.4

Above 1 GHz:

Freq. (MHz)	Meter Reading (dBμV)	Detector PK/QP/AV	Table Direction Degree	Antenna			Cable Loss (dB)	Pre- Amp. Gain (dB)	Corr. Amp. (dBμV/m)	FCC Part 15.249/209		
				Height (m)	Polar (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	Remarks
Low Channel (2414 MHz)												
7242	38.41	AV	90	1.4	V	38	9.12	33.6	51.93	54	2.07*	Harmonic
7242	38.32	AV	90	1.4	H	38	9.12	33.6	51.84	54	2.16*	Harmonic
4828	42.52	AV	90	1.4	H	35	7.56	33.7	51.38	54	2.62*	Harmonic
4828	42.36	AV	90	1.4	V	35	7.56	33.7	51.22	54	2.78*	Harmonic
4828	54.7	PK	270	1.4	V	35	7.56	33.7	63.56	74	10.44	Harmonic
4828	54.62	PK	270	1.4	H	35	7.56	33.7	63.48	74	10.52	Harmonic
7242	45.97	PK	270	1.4	H	38	9.12	33.6	59.49	74	14.51	Harmonic
7242	45.9	PK	270	1.4	V	38	9.12	33.6	59.42	74	14.58	Harmonic
2414	59.26	AV	60	1.4	V	30.3	7.9	33.9	63.56	94	30.44	Fund.
2414	57.17	AV	60	1.4	H	30.3	7.9	33.9	61.47	94	32.53	Fund.
2414	73.52	PK	270	1.4	H	30.3	7.9	33.9	77.82	114	36.18	Fund.
2414	71.24	PK	270	1.4	V	30.3	7.9	33.9	75.54	114	38.46	Fund.
Middle Channel (2432 MHz)												
7296	37.56	AV	90	1.4	H	38	9.12	33.6	51.08	54	2.92*	Harmonic
7296	37.45	AV	90	1.4	V	38	9.12	33.6	50.97	54	3.03*	Harmonic
4864	41.26	AV	230	1.4	H	35	7.56	33.7	50.12	54	3.88*	Harmonic
4864	40.52	AV	230	1.4	V	35	7.56	33.7	49.38	54	4.62	Harmonic
4864	53.78	PK	90	1.4	V	35	7.56	33.7	62.64	74	11.36	Harmonic
4864	53.62	PK	90	1.4	H	35	7.56	33.7	62.48	74	11.52	Harmonic
7296	43.61	PK	90	1.4	H	38	9.12	33.6	57.13	74	16.87	Harmonic
7296	43.52	PK	90	1.4	V	38	9.12	33.6	57.04	74	16.96	Harmonic
2432	58.41	AV	120	1.4	V	30.3	7.9	33.9	62.71	94	31.29	Fund.
2432	56.14	AV	120	1.4	H	30.3	7.9	33.9	60.44	94	33.56	Fund.
2432	73.51	PK	0	1.4	H	30.3	7.9	33.9	77.81	114	36.19	Fund.
2432	70.34	PK	0	1.4	V	30.3	7.9	33.9	74.64	114	39.36	Fund.
High Channel (2468 MHz)												
7404	38.34	AV	90	1.4	H	38	9.12	33.6	51.86	54	2.14*	Harmonic
7404	38.23	AV	90	1.4	V	38	9.12	33.6	51.75	54	2.25*	Harmonic
4936	42.04	AV	230	1.4	H	35	7.56	33.7	50.90	54	3.10*	Harmonic
4936	41.30	AV	230	1.4	V	35	7.56	33.7	50.16	54	3.84*	Harmonic
4936	54.56	PK	90	1.4	V	35	7.56	33.7	63.42	74	10.58	Harmonic
4936	54.40	PK	90	1.4	H	35	7.56	33.7	63.26	74	10.74	Harmonic
7404	44.39	PK	90	1.4	H	38	9.12	33.6	57.91	74	16.09	Harmonic
7404	44.30	PK	90	1.4	V	38	9.12	33.6	57.82	74	16.18	Harmonic
2468	59.19	AV	120	1.4	V	30.3	7.9	33.9	63.49	94	30.51	Fund.
2468	56.92	AV	120	1.4	H	30.3	7.9	33.9	61.22	94	32.78	Fund.
2468	74.29	PK	0	1.4	H	30.3	7.9	33.9	78.59	114	35.41	Fund.
2468	71.12	PK	0	1.4	V	30.3	7.9	33.9	75.42	114	38.58	Fund.

* Within measurement uncertainty.

§15.249(d) – OUT OF BAND EMISSIONS

Applicable Standard

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

Test Procedure

The EUT is set 3 meter away from the testing antenna, which is varied from 1-4 mete, and the EUT is placed on a turntable, which is 0.8 meter above ground plane, the table shall be rotated for 360 degrees to find out the highest emission at the band edge. The receiving antenna should be changed the polarization both of horizontal and vertical.

$$\text{Corrected Amplitude} = \text{Meter Reading} + \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
HP	Amplifier	8447E	1937A01046	2008-11-15	2009-11-15
Rohde & Schwarz	EMI Test Receiver	ESCI	100224	2008-10-16	2009-10-16
Sunol Sciences	Bilog Antenna	JB1	A040904-2	2008-08-14	2009-08-14
HP	Amplifier	8449B	3008A00277	2008-09-29	2009-09-29
Sunol Sciences	Horn Antenna	DRH-118	A052604	2008-09-25	2009-09-25

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) Corp. attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Data**Environmental Conditions**

Temperature:	25 ° C
Relative Humidity:	56 %
ATM Pressure:	100.0 kPa

The testing was performed by Phoenix Liu on 2008-11-18.

Test Mode: Transmitting

Test Result: Pass

Freq. (MHz)	S.A. Reading (dBμV/m)	Detector (PK//AV)	Direction Degree	Ant. Height (m)	Ant. Polar (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre- Amp. Gain (dB)	Cord. Amp. (dBμV/m)	FCC 15.249/209	
										Limit (dBμV/m)	Margin (dB)
2327.7	34.19	AV	49	1.2	V	30.3	7.9	33.9	38.49	54	15.51
2345.3	34.15	AV	20	1.2	H	30.3	7.9	33.9	38.45	54	15.55
2488.8	32.74	AV	230	1.8	V	30.3	7.9	33.9	37.04	54	16.96
2489.2	32.34	AV	168	1.6	H	30.3	7.9	33.9	36.64	54	17.36
2343.3	39.79	PK	270	1.6	V	30.3	7.9	33.9	44.09	74	29.91
2345.4	39.30	PK	263	1.4	H	30.3	7.9	33.9	43.60	74	30.40
2488.2	38.15	PK	230	1.8	V	30.3	7.9	33.9	42.45	74	31.55
2489.2	36.69	PK	268	1.6	H	30.3	7.9	33.9	40.99	74	33.01

PRODUCT SIMILAR DECLARATION LETTER



AURUM ELECTRONICS CORP

No.160.Dayong Rd, Yongkang City, Tainan Hsien, 710 Taiwan

Tel:00886-6-2720116 Fax:00886-6-2711890

E-mail:aurum@aurum.com.tw Website: www.aurum.com.tw

To:Bay Area Compliance Laboratories Corp.

Declaration of Similarity

To:whom it may concern,

We, AURUM ELECTRONICS CORP;

Address: No.160, Dayong Rd, Yongkang City ,Tainan Hsien ,710 Taiwan

Hereby declare that

Product name: THE INTELLIGENT MOTION SENSOR TRACKING LIGHT

Model No:AEC-9339B(AEC-9336B)

For our business issue and market requirement,we would like to list two photos on certificates and reports.We declare that there is no electrical change has made to the equipment that alters the compliance charaterristic,except that the power consumption!

While the power consumption for testing product AEC-9339B is 300W,For AEC-9336B IS 150W

Please kindly handle on the project.

Sincerely Yours,

Signature:

A handwritten signature in black ink, appearing to read "Eugene Huang", with a date "SEP 18, 2008" written below it.

Typed or Printed Name: Eugene Huang

Title: Vice General Manager

Company Name: AURUM ELECTRONICS CORP.

******* END OF REPORT *******