

FCC PART 15.231
MEASUREMENT AND TEST REPORT
For
AURUM ELECTRONICS CORP.

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

FCC ID: VQXAEC-9339A

Report Type: Original Report	Product Type: The Intelligent Motion Sensor Tracking Light (Transmitter)
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* This report may contain data that are not covered by the NVLAP accreditation and are marked with an asterisk "*" (see 2)

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1 GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

The AURUM ELECTRONICS Corp.'s product, model: AEC-9339A /AEC-9336A or the "EUT" as referred to in this report is a THE INTELLIGENT MOTION SENSOR TRACKING LIGHT (TRANSMITTER), rated input voltage: AC 120V/60Hz.

1.2 Mechanical Description of EUT

The AURUM ELECTRONICS Corp.'s product, model number: AEC-9339A /AEC-9336A, measures approximately 26.0 cm L x 18.0 cm W x 21.0 cm H

Note: The two models AEC-9339A /AEC-9336A, which were explained in declaration. The models have the same RF module, circuit diagram and PCB. Only use different lamp. .

** All measurement and test data in this report was gathered from production sample serial number: 0807053 (Assigned by BACL, Shenzhen). The EUT was received on 2008-07-11.*

1.3 EUT Photograph



Model: AEC-9339A



Model: AEC-9336A

1.4 Objective

This document is a test report based on the Electromagnetic Interference (EMI) tests performed on the EUT. The EMI measurements were performed according to the measurement procedure described in ANSI C63.4 - 2003.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, and section 15.203,15.205,15.209 and 15.231 rules.

1.5 Related Submittal(s)/Grant(s)

No Related Submittals

1.6 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.

1.7 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>

2 SYSTEM TEST CONFIGURATION

2.1 Justification

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

2.2 EUT Exercise Software

N/A.

2.3 Special Accessories

The special accessories were provided by Bay Area Compliance Laboratories Corp. (Shenzhen).

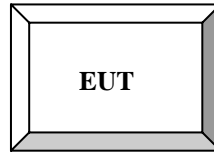
2.4 Equipment Modifications

No modifications were made to the unit tested.

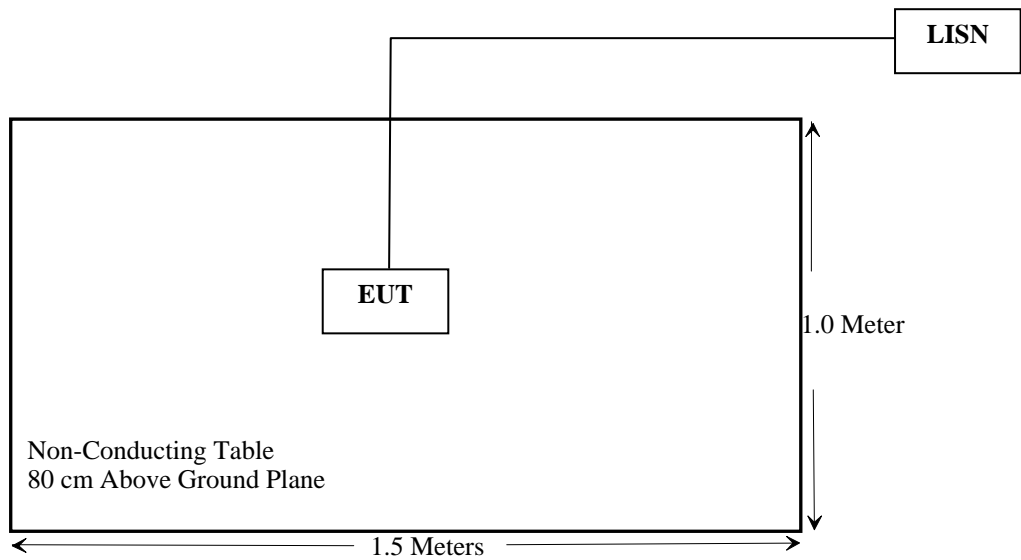
2.5 External I/O Cable

Cable Description	Length (m)	From/Port	To
Unshielded Detachable AC Cable	1.20	EUT	LISN

2.6 Configuration of Test Setup



2.7 Block Diagram of Test Setup



3 SUMMARY OF TEST RESULTS

FCC Rules	Description of test	Result
§15.203	Antenna Requirement	Compliant
§15.205	Restricted Band	Compliant
§15.209	General Requirement	Compliant
§15.207 (a)	Conducted Emissions	Compliant
§15.231 (b)	Radiated Emissions	Compliant
§15.231 (c)	20dB Band Width Testing	Compliant
§15.231 (a)(1)	Deactivation Testing	Compliant

4 §15.203 - ANTENNA REQUIREMENT

4.1 Standard Applicable

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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

The antenna of the EUT was built on PCB board.

Result: Compliant.

Please refer to the EUT photos.

5 §15.207 (a) - CONDUCTED EMISSIONS

5.1 Standard Applicable

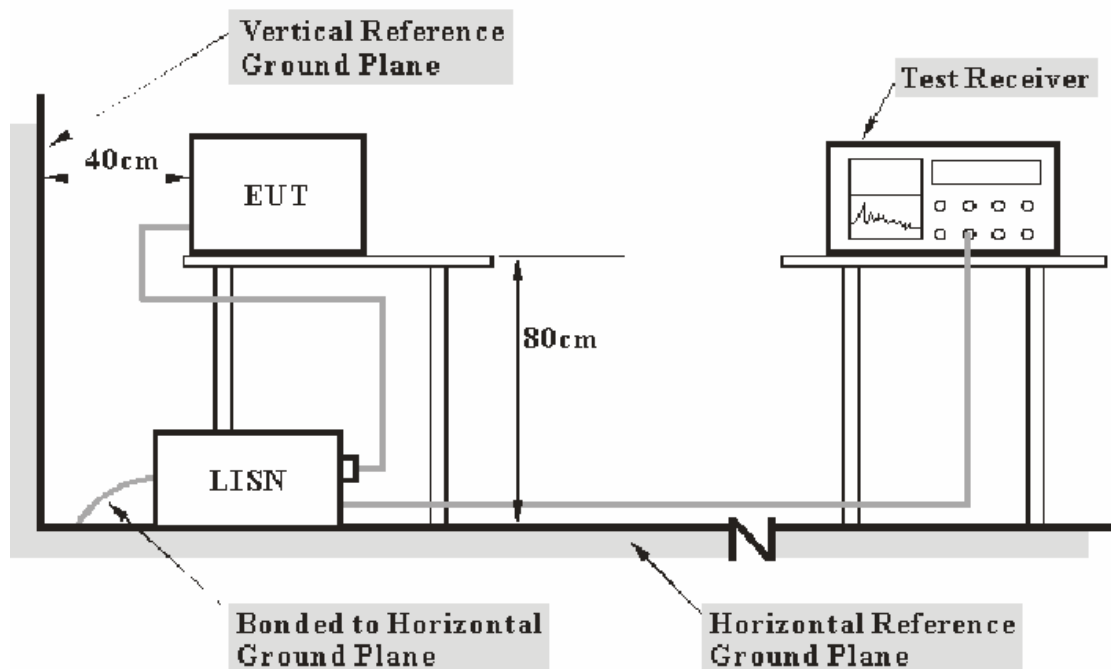
CFR47 Part 15.207.

5.2 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.

5.3 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 Class B 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.

5.4 EMI Test Receiver Setup

The EMI 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>IF B/W</i>
150 kHz – 30 MHz	9 kHz

5.5 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	12008	N/A	N/A
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2007-10-16	2008-10-16
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.

5.6 Test Procedure

During the conducted emission test, the adapter 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.

5.7 Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15.107 and FCC Part 15.207, with the worst margin reading of:

12.60 dB at 28.000 MHz in the Neutral conductor mode (Model: AEC-9339A)
4.31 dB at 0.165 MHz in the Neutral conductor mode (Model: AEC-9336A)

5.8 Test Data

Environmental Conditions

Temperature:	22 °C
Relative Humidity:	55 %
ATM Pressure:	100.0 kPa

The testing was performed by Alvin Huang on 2008-08-09.

Test Mode: Transmitting

Model: AEC-9339A

Line Conducted Emissions				FCC PART 15.207	
Frequency (MHz)	Amplitude (dBμV)	Detector (QP/AV)	Phase (Line/Neutral)	Limit (dBμV)	Margin (dB)
28.000	37.40	AV	Neutral	50.00	12.60
28.000	37.00	AV	Line	50.00	13.00
21.505	29.20	AV	Line	50.00	20.80
24.000	28.00	AV	Line	50.00	22.00
21.505	27.80	AV	Neutral	50.00	22.20
28.000	37.70	QP	Neutral	60.00	22.30
28.000	37.50	QP	Line	60.00	22.50
24.000	27.00	AV	Neutral	50.00	23.00
0.505	21.20	AV	Line	46.00	24.80
1.810	31.10	QP	Neutral	56.00	24.90
1.080	19.30	AV	Line	46.00	26.70
1.040	17.60	AV	Neutral	46.00	28.40
1.080	27.40	QP	Line	56.00	28.60
0.505	26.90	QP	Line	56.00	29.10
17.540	20.90	AV	Line	50.00	29.10
21.505	29.90	QP	Line	60.00	30.10
24.000	29.80	QP	Line	60.00	30.20
1.040	25.30	QP	Neutral	56.00	30.70
17.540	19.10	AV	Neutral	50.00	30.90
21.505	28.60	QP	Neutral	60.00	31.40
24.000	28.30	QP	Neutral	60.00	31.70
17.540	26.70	QP	Line	60.00	33.30
17.540	25.30	QP	Neutral	60.00	34.70
1.820	11.00	AV	Neutral	46.00	35.00

Model: AEC-9336A

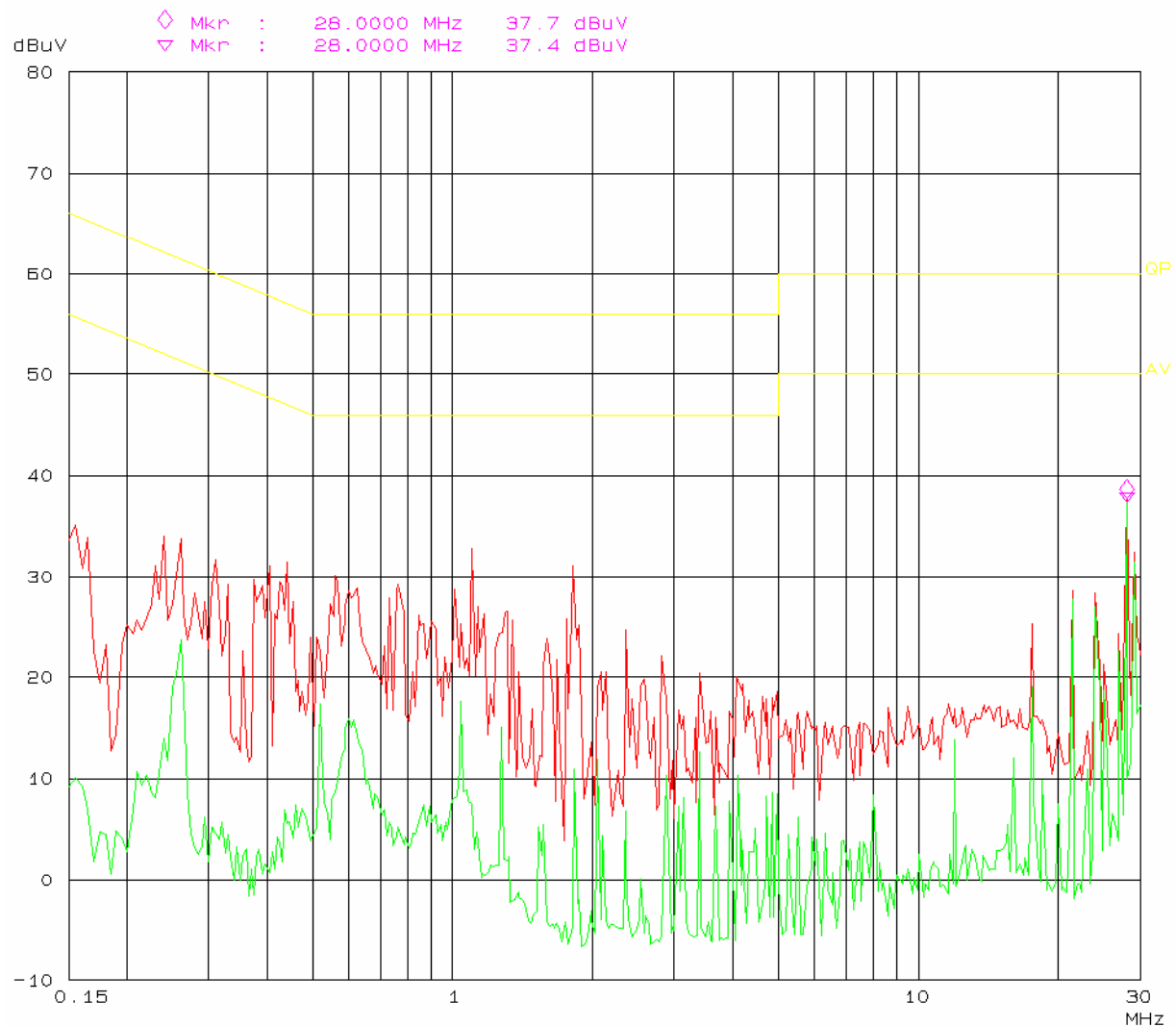
Line Conducted Emissions				FCC PART 15.207	
Frequency (MHz)	Amplitude (dBμV)	Detector (QP/AV)	Phase (Line/Neutral)	Limit (dBμV)	Margin (dB)
0.165	60.90	QP	Neutral	65.21	4.31
0.155	60.50	QP	Line	65.73	5.23
0.440	48.80	QP	Line	57.06	8.26
1.705	47.60	QP	Line	56.00	8.40
28.000	37.10	AV	Neutral	50.00	12.90
28.000	36.80	AV	Line	50.00	13.20
0.480	38.80	QP	Neutral	56.34	17.54
0.440	29.40	AV	Line	47.06	17.66
0.155	36.60	AV	Line	55.73	19.13
21.505	30.40	AV	Neutral	50.00	19.60
21.505	29.60	AV	Line	50.00	20.40
28.000	38.10	QP	Neutral	60.00	21.90
28.000	37.40	QP	Line	60.00	22.60
24.000	27.30	AV	Neutral	50.00	22.70
1.695	23.20	AV	Line	46.00	22.80
0.165	30.90	AV	Neutral	55.21	24.31
0.480	21.40	AV	Neutral	46.34	24.94
17.540	22.60	AV	Line	50.00	27.40
21.505	30.90	QP	Neutral	60.00	29.10
21.505	30.10	QP	Line	60.00	29.90
24.000	28.90	QP	Neutral	60.00	31.10
17.540	27.50	QP	Line	60.00	32.50
12.000	14.50	AV	Neutral	50.00	35.50
12.000	18.70	QP	Neutral	60.00	41.30

5.9 Plot(s) of Test Data

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

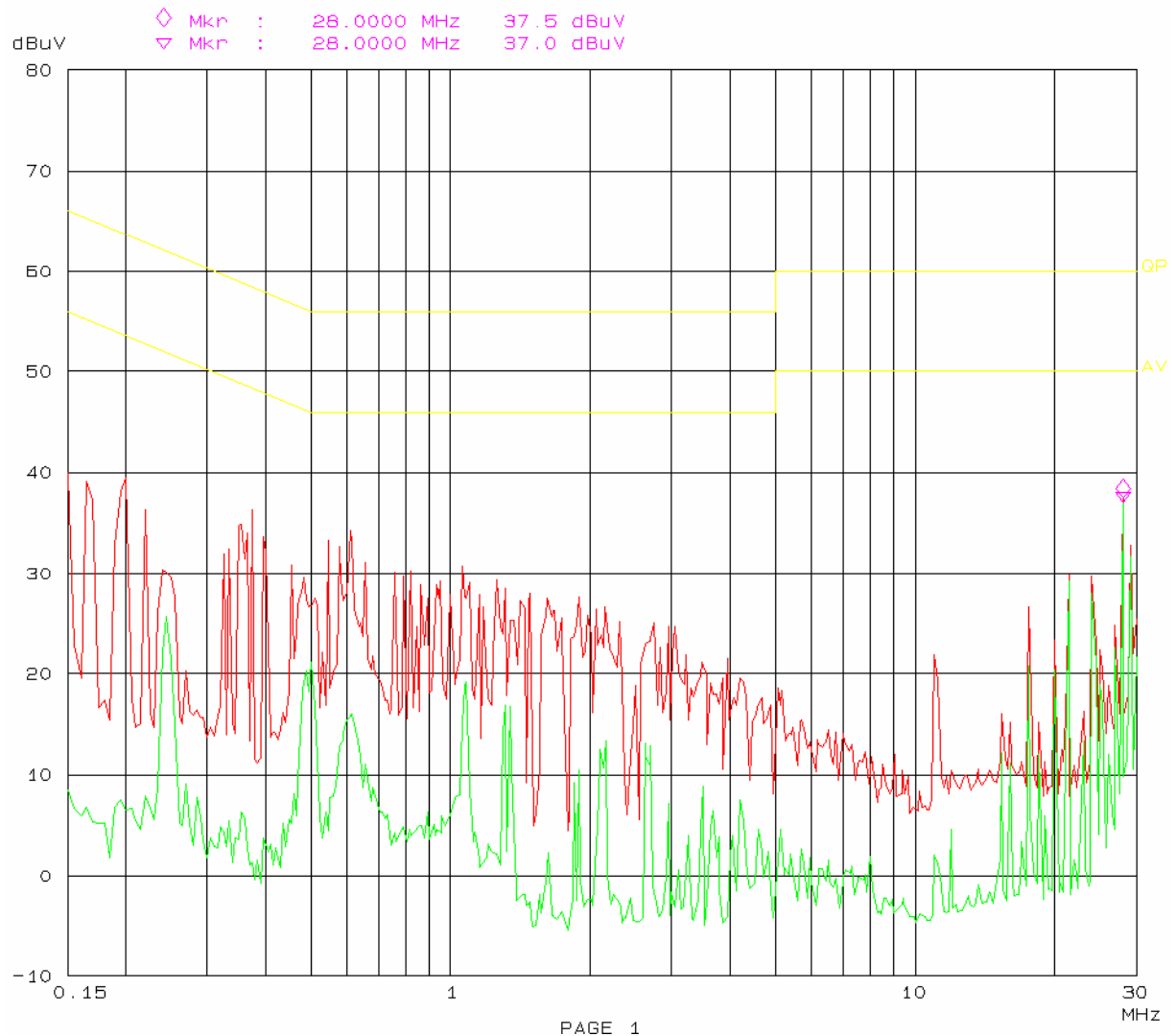
Conducted Emission FCC 15

EUT: THE INTELLIGENT MOTION SENSOR TRACKING L
Manuf: AURUM M/N: AEC9339A
Op Cond: Transmitting
Operator: Alvin
Test Spec: AC 120V/60Hz Neutral
Comment: Temp: 25 Hum: 56%



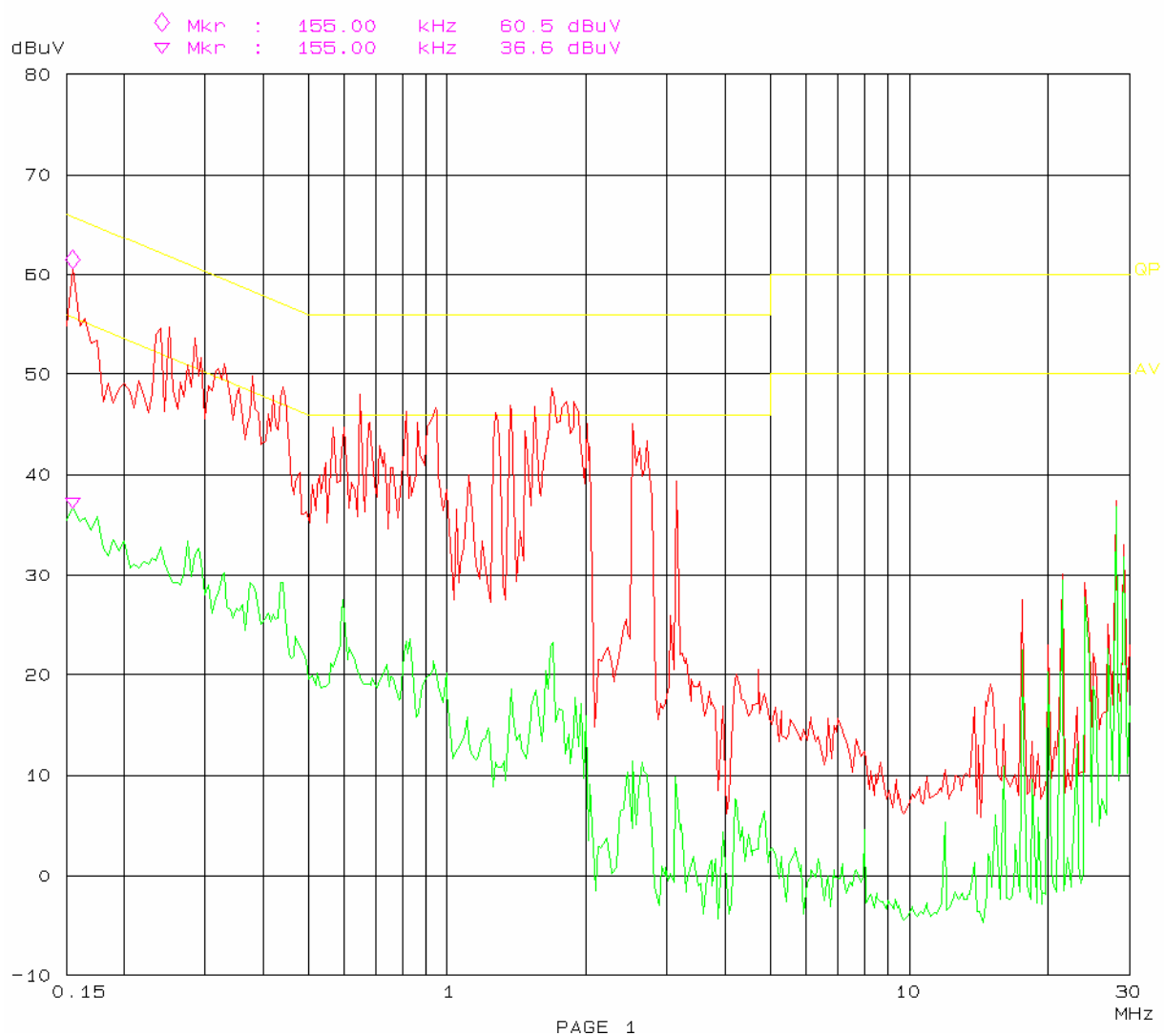
Conducted Emission FCC 15

EUT: THE INTELLIGENT MOTION SENSOR TRACKING L
Manuf: AURUM M/N: AEC9339A
Op Cond: Transmitting
Operator: Alvin
Test Spec: AC 120V/60Hz Line
Comment: Temp: 25 Hum: 56%



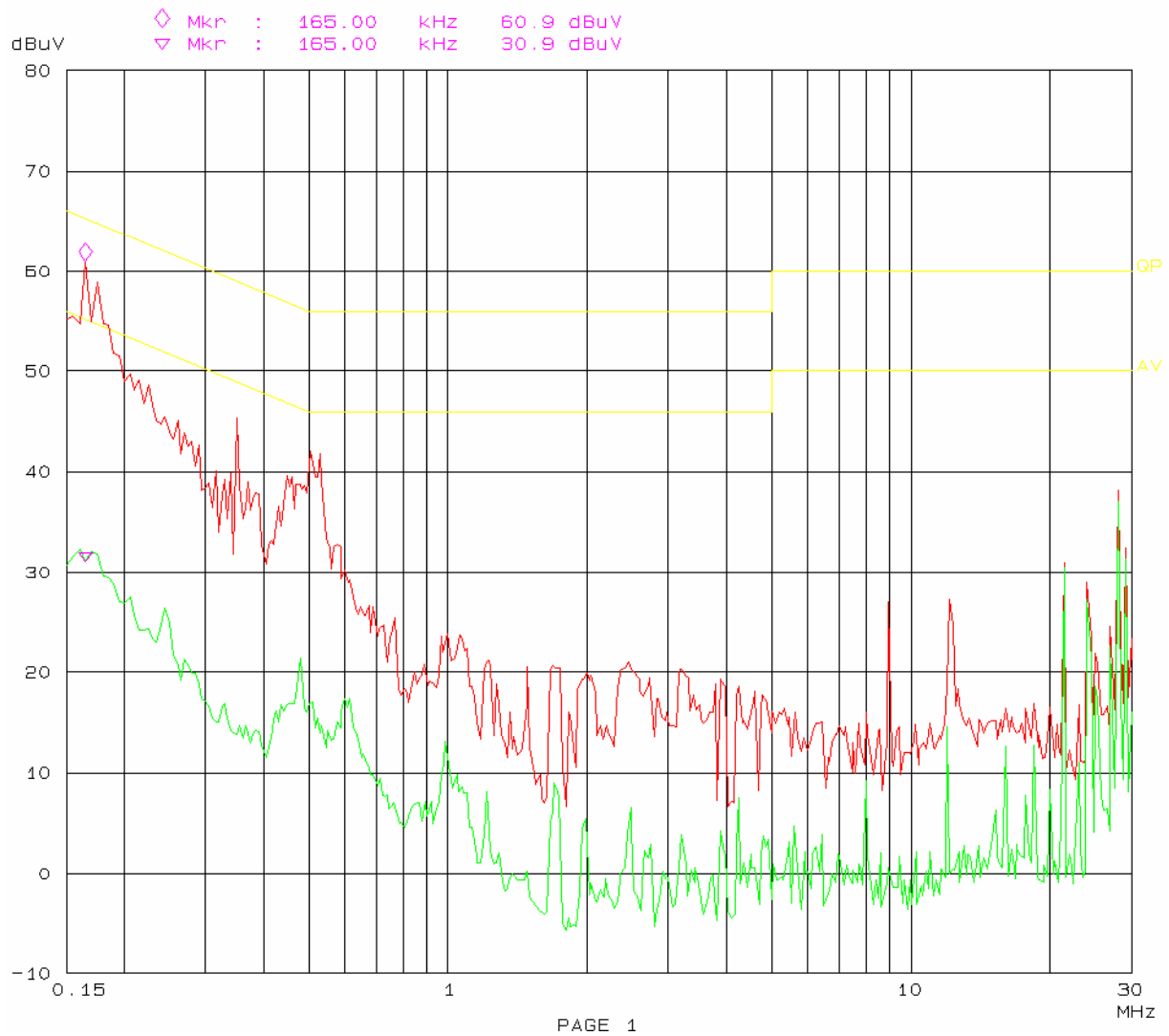
Conducted Emission FCC 15

EUT: THE INTELLIGENT MOTION SENSOR TRACKING L
Manuf: AURUM M/N: AEC9336A
Op Cond: Transmitting
Operator: Alvin
Test Spec: AC 120V/60Hz Line
Comment: Temp: 25 Hum: 56%



Conducted Emission FCC 15

EUT: THE INTELLIGENT MOTION SENSOR TRACKING L
Manuf: AURUM M/N: AEC9336A
Op Cond: Transmitting
Operator: Alvin
Test Spec: AC 120V/60Hz neutral
Comment: Temp: 25 Hum: 56%



6 §15.205, §15.209, §15.231 (b) - RADIATED EMISSIONS

6.1 Standard Applicable

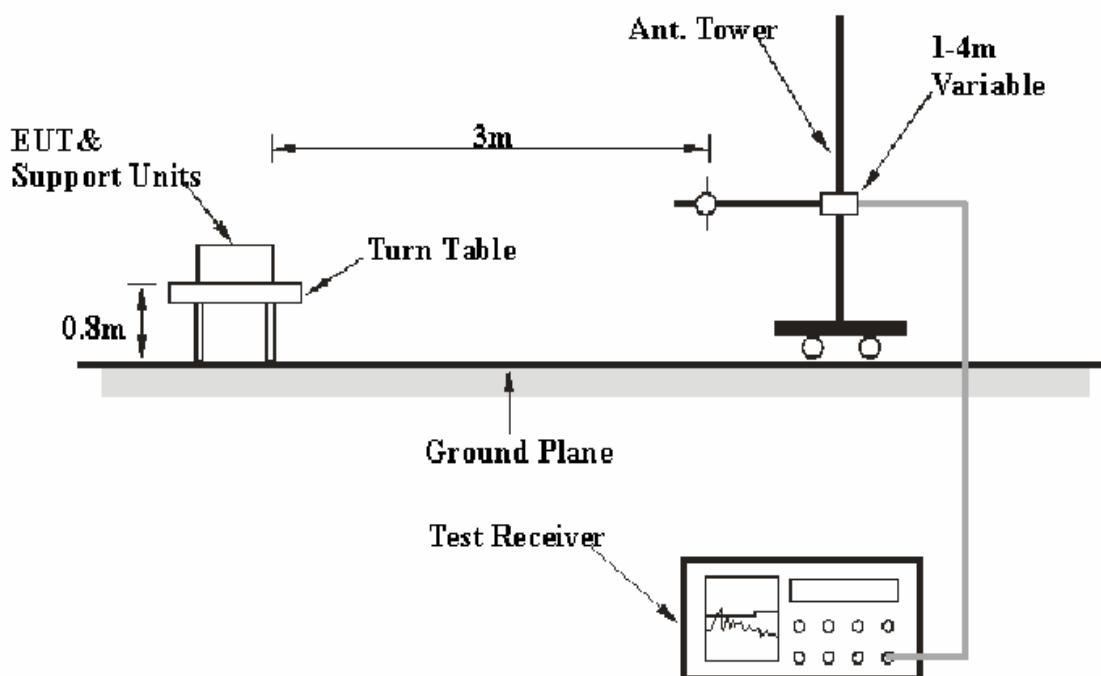
CFR47 Part15.231, 15.205 and 15.209

6.2 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 emission measurement at Bay Area Compliance Laboratories Corp. (Shenzhen) is ± 4.0 dB.

6.3 EUT Setup



The radiated emission tests were performed in the 3 meters chamber B test site, using the setup accordance with the ANSI C63.4 - 2003. The specification used was the FCC 15 § 15.209 and 15.231.

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.

6.4 EMI Test Receiver Setup

The system was investigated from 30 MHz to 5 GHz.

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

<i>Frequency Range</i>	<i>RBW</i>	<i>VBW</i>
30 – 1000 MHz	100 kHz	300 kHz
1000 MHz – 5 GHz	1 MHz	3 MHz

6.5 Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
HP	Amplifier	HP8447D	2944A09795	2007-11-15	2008-11-15
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2007-10-16	2008-10-16
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2007-08-14	2008-08-14
HP	Amplifier	8449B	3008A00277	2007-09-29	2008-09-29
Sunol Sciences	Horn Antenna	DRH-118	A052604	2007-09-25	2008-09-25

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

6.6 Test Procedure

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

All data was recorded in the Peak and Average detection mode.

6.7 Standard Applicable

According to §15.231(b), the field strength of emissions from intentional radiators operated under this section shall not exceed the following:

Fundamental frequency (MHz)	Field Strength of Fundamental (Microvolts /meter)	Field Strength of spurious emissions ((Microvolts /meter)
40.66-40.70	2,250	225
70-130	1,250	125
130-174	1,250 to 3,370 *	125 to 375 *
174-260	3,750	375
260-470	3,750 to 12,500 *	375 to 1,250 *
Above 470	12,500	1,250

Note: * Linear interpolations for frequency ranges 130 - 174 MHz and 260 - 470 MHz.

The above field strength limits are specified at a distance of 3-meters the tighter limits apply at the band edges.

6.8 Corrected Amplitude & Margin Calculation

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

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

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 5.8dB means the emission is 5.8dB below the limit. The equation for margin calculation is as follows:

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

6.9 Test Data

6.9.1 Environmental Conditions

Temperature:	25 ° C
Relative Humidity:	52%
ATM Pressure:	100.9 kPa

The testing was performed by Alvin Huang on 2008-08-09.

Test Mode: Transmitting

Model: AEC-9339A

Freq. (MHz)	Meter Reading (dBμV)	Detector PK/QP/AV	Direction (Degree)	Antenna			Cable Loss (dB)	Pre- Amp. Gain (dB)	Duty Cycle Factor (dB)	FCC Part 15.231/209		
				Height (m)	Polar (H/V)	Factor (dB/m)				Cord. Amp. (dBμV/m)	Limit (dBμV/m)	Margin (dB)
1301.76	68.67	*	360	1.8	V	24.8	5.11	34.8	-10.51	53.27	54.00	0.73
433.92	74.03	*	274	1.3	H	14.5	1.73	0.0	-10.51	79.75	80.83	1.08
1301.76	67.59	*	35	1.5	H	24.8	5.11	34.8	-10.51	52.19	54.00	1.81
2603.52	63.57	*	96	1.0	H	30.6	8.09	33.9	-10.51	57.85	60.83	2.98
867.84	44.18	*	187	1.2	H	19.9	3.86	0.0	-10.51	57.43	60.83	3.40
2169.60	64.66	*	12	1.0	H	29.8	6.32	34.0	-10.51	56.27	60.83	4.56
2169.60	64.53	*	274	1.2	V	29.8	6.32	34.0	-10.51	56.14	60.83	4.69
2603.52	61.86	*	264	1.2	V	30.6	8.09	33.9	-10.51	56.14	60.83	4.69
867.84	42.57	*	0	1.5	V	19.9	3.86	0.0	-10.51	55.82	60.83	5.01
433.92	69.02	*	123	1.2	V	14.5	1.73	0.0	-10.51	74.74	80.83	6.09
1735.68	64.22	*	187	1.3	V	27.8	5.62	34.4	-10.51	52.73	60.83	8.10
1735.68	64.19	*	80	1.5	H	27.8	5.62	34.4	-10.51	52.70	60.83	8.13
1301.76	68.67	PK	360	1.8	V	24.8	5.11	34.8	/	63.78	74.00	10.22
433.92	74.03	PK	274	1.3	H	14.5	1.73	0.0	/	90.26	100.83	10.57
1301.76	67.59	PK	35	1.5	H	24.8	5.11	34.8	/	62.70	74.00	11.3
2603.52	63.57	PK	96	1.0	H	30.6	8.09	33.9	/	68.36	80.83	12.47
867.84	44.18	PK	187	1.2	H	19.9	3.86	0.0	/	67.94	80.83	12.89
2169.60	64.66	PK	12	1.0	H	29.8	6.32	34.0	/	66.78	80.83	14.05
2169.60	64.53	PK	274	1.2	V	29.8	6.32	34.0	/	66.65	80.83	14.18
2603.52	61.86	PK	264	1.2	V	30.6	8.09	33.9	/	66.65	80.83	14.18
867.84	42.57	PK	0	1.5	V	19.9	3.86	0.0	/	66.33	80.83	14.50
433.92	69.02	PK	123	1.2	V	14.5	1.73	0.0	/	85.25	100.83	15.58
1735.68	64.22	PK	187	1.3	V	27.8	5.62	34.4	/	63.24	80.83	17.59
1735.68	64.19	PK	80	1.5	H	27.8	5.62	34.4	/	63.21	80.83	17.62

Note: *: Average= Peak-Duty Cycle Factor

Model: AEC-9336A

Freq. (MHz)	Meter Reading (dBμV)	Detector PK/QP/AV	Direction (Degree)	Antenna			Cable Loss (dB)	Pre- Amp. Gain (dB)	Duty Cycle Factor (dB)	FCC Part 15.231/209		
				Height (m)	Polar (H/V)	Factor (dB/m)				Cord. Amp. (dBμV/m)	Limit (dBμV/m)	Margin (dB)
1301.76	68.70	*	0	1.4	V	24.8	5.11	34.8	-10.51	53.3	54.00	0.70
433.92	74.03	*	186	1.3	H	14.5	1.73	0.0	-10.51	79.75	80.83	1.08
1301.76	67.50	*	12	1.1	H	24.8	5.11	34.8	-10.51	52.1	54.00	1.90
2603.52	63.57	*	187	1.2	H	30.6	8.09	33.9	-10.51	57.85	60.83	2.98
867.84	44.18	*	256	1.2	H	19.9	3.86	0.0	-10.51	57.43	60.83	3.40
2169.60	64.66	*	360	1.1	H	29.8	6.32	34	-10.51	56.27	60.83	4.56
2169.60	64.53	*	278	1.1	V	29.8	6.32	34	-10.51	56.14	60.83	4.69
2603.52	61.86	*	6	1.4	V	30.6	8.09	33.9	-10.51	56.14	60.83	4.69
867.84	42.57	*	276	1.5	V	19.9	3.86	0.0	-10.51	55.82	60.83	5.01
433.92	69.02	*	360	1.4	V	14.5	1.73	0.0	-10.51	74.74	80.83	6.09
1735.68	64.22	*	187	1.3	V	27.8	5.62	34.4	-10.51	52.73	60.83	8.10
1735.68	64.19	*	180	1.5	H	27.8	5.62	34.4	-10.51	52.7	60.83	8.13
1301.76	68.70	PK	0	1.4	V	24.8	5.11	34.8	/	63.81	74.00	10.19
433.92	74.03	PK	186	1.3	H	14.5	1.73	0.0	/	90.26	100.83	10.57
1301.76	67.50	PK	12	1.1	H	24.8	5.11	34.8	/	62.61	74.00	11.39
2603.52	63.57	PK	187	1.2	H	30.6	8.09	33.9	/	68.36	80.83	12.47
867.84	44.18	PK	256	1.2	H	19.9	3.86	0.0	/	67.94	80.83	12.89
2169.60	64.66	PK	360	1.1	H	29.8	6.32	34	/	66.78	80.83	14.05
2169.60	64.53	PK	278	1.1	V	29.8	6.32	34	/	66.65	80.83	14.18
2603.52	61.86	PK	6	1.4	V	30.6	8.09	33.9	/	66.65	80.83	14.18
867.84	42.57	PK	276	1.5	V	19.9	3.86	0.0	/	66.33	80.83	14.50
433.92	69.02	PK	360	1.4	V	14.5	1.73	0.0	/	85.25	100.83	15.58
1735.68	64.22	PK	187	1.3	V	27.8	5.62	34.4	/	63.24	80.83	17.59
1735.68	64.19	PK	180	1.5	H	27.8	5.62	34.4	/	63.21	80.83	17.62

Note: *: Average= Peak-Duty Cycle Factor

7 §15.231(c) - 20dB BANDWIDTH

7.1 Standard Applicable

Per 15.231(c), The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. Bandwidth is determined at the points 20 dB down from the modulated carrier.

7.2 Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2007-10-16	2008-10-16
HP	Amplifier	8447E	1937A01046	2007-11-15	2008-11-15
Sunol Sciences	Bilog Antenna	JB1	A040904-2	2007-08-14	2008-08-14

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

7.3 Test Procedure

With the EUT's antenna attached, the EUT's 20dB Bandwidth power was received by the test antenna which was connected to the spectrum analyzer with the START and STOP frequencies set to the EUT's operation band.

7.4 Test Data

Environmental Conditions

Temperature:	25 ° C
Relative Humidity:	50%
ATM Pressure:	100.9 kPa

The testing was performed by Alvin Huang on 2008-08-04.

Test Mode: Transmitting

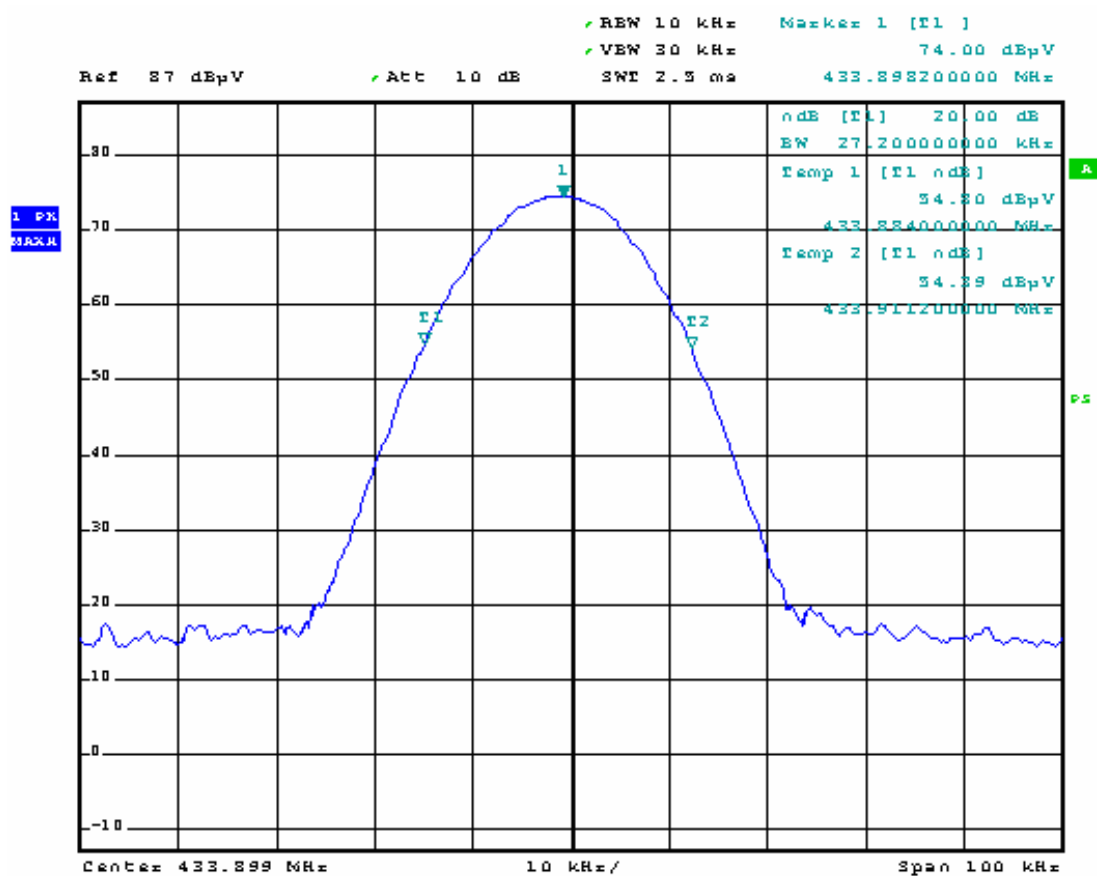
Test Result: Compliant.

Please refer to following table and plot.

20 dB Bandwidth Limit = 433.92 MHz *0.25% =1.0848 MHz

Channel Frequency (MHz)	20dB Bandwidth (kHz)	Limit (kHz)
433.92	27.2	1084.8

20 dB Bandwidth



20db bandwidth

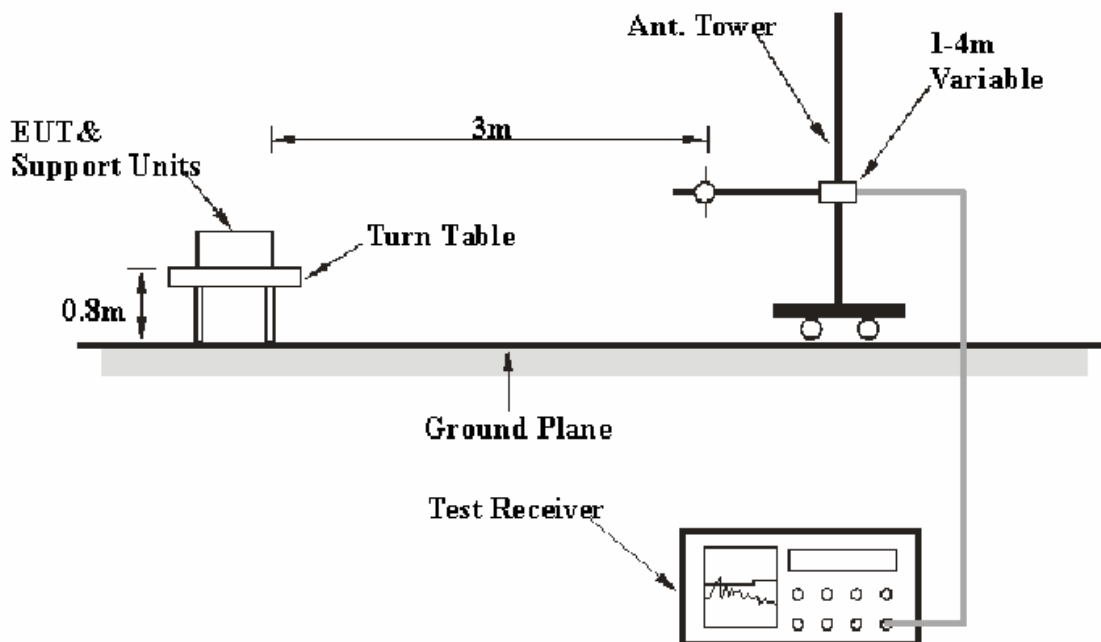
Date: 4.AUG.2008 20:30:29

8 §15.231(a) - DEACTIVATION TESTING

8.1 Standard Applicable

Per 15.231(a) (1), a manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released.

8.2 EUT Setup



The deactivation test was performed in the 3 meters chamber B test site, using the setup accordance with the ANSI C63.4 - 2003. The specification used was the FCC 15.231(a) 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.

8.3 Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100035	2007-10-16	2008-10-16
HP	Amplifier	8447E	1937A01046	2007-11-15	2008-11-15
Sunol Sciences	Bilog Antenna	JB1	A040904-2	2007-08-14	2008-08-14

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

8.4 Test Procedure

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

8.5 Test Data

Environmental Conditions

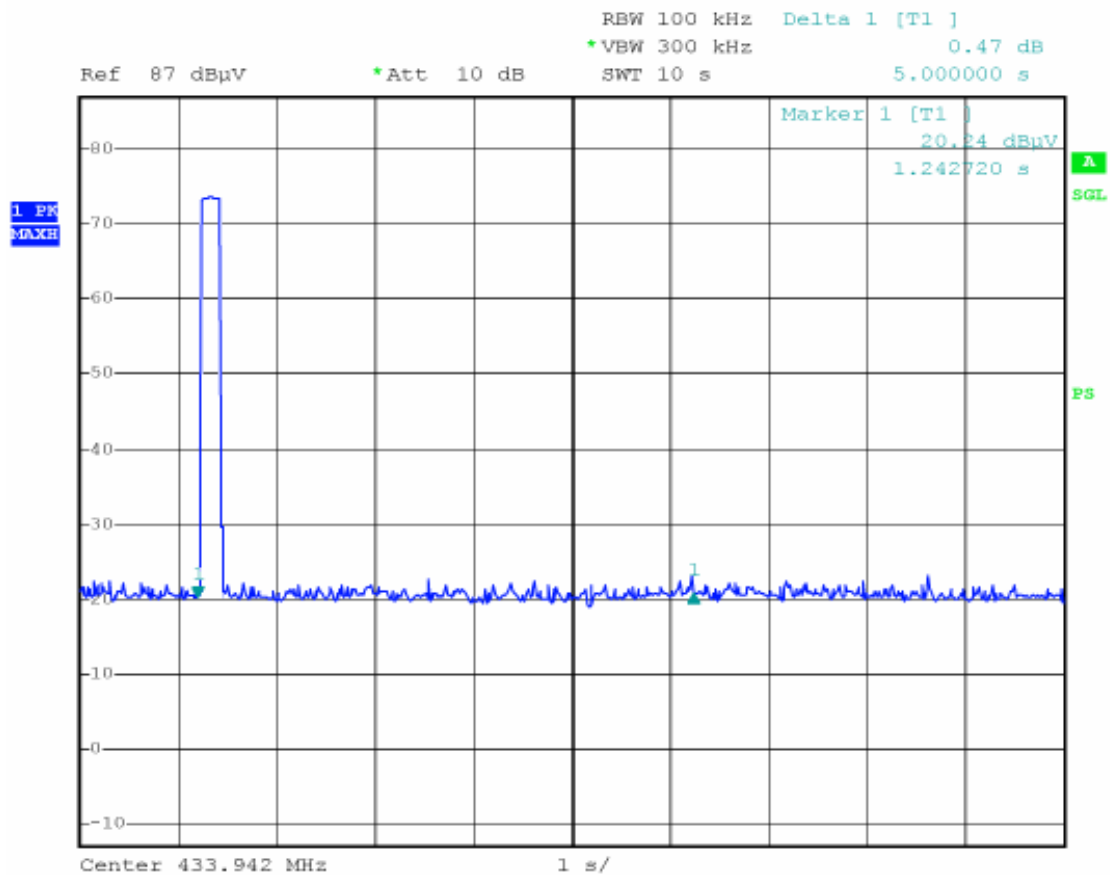
Temperature:	25 ° C
Relative Humidity:	50%
ATM Pressure:	103.2 kPa

The testing was performed by Alvin Huang on 2008-08-09

Test Mode: Transmitting

Test Result: Compliant. The device ceases transmission within 5 seconds after activation.

Please refer to following plot



Deactivation-time

Date: 4.AUG.2008 20:23:27

Note: The deactivation time less than 5s.

9 §15.231- DUTY CYCLE

9.1 Standard Applicable

Nil (No dedicated limit specified in the Rules).

9.2 Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100224	2007-10-16	2008-10-16

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

9.3 Test Procedure

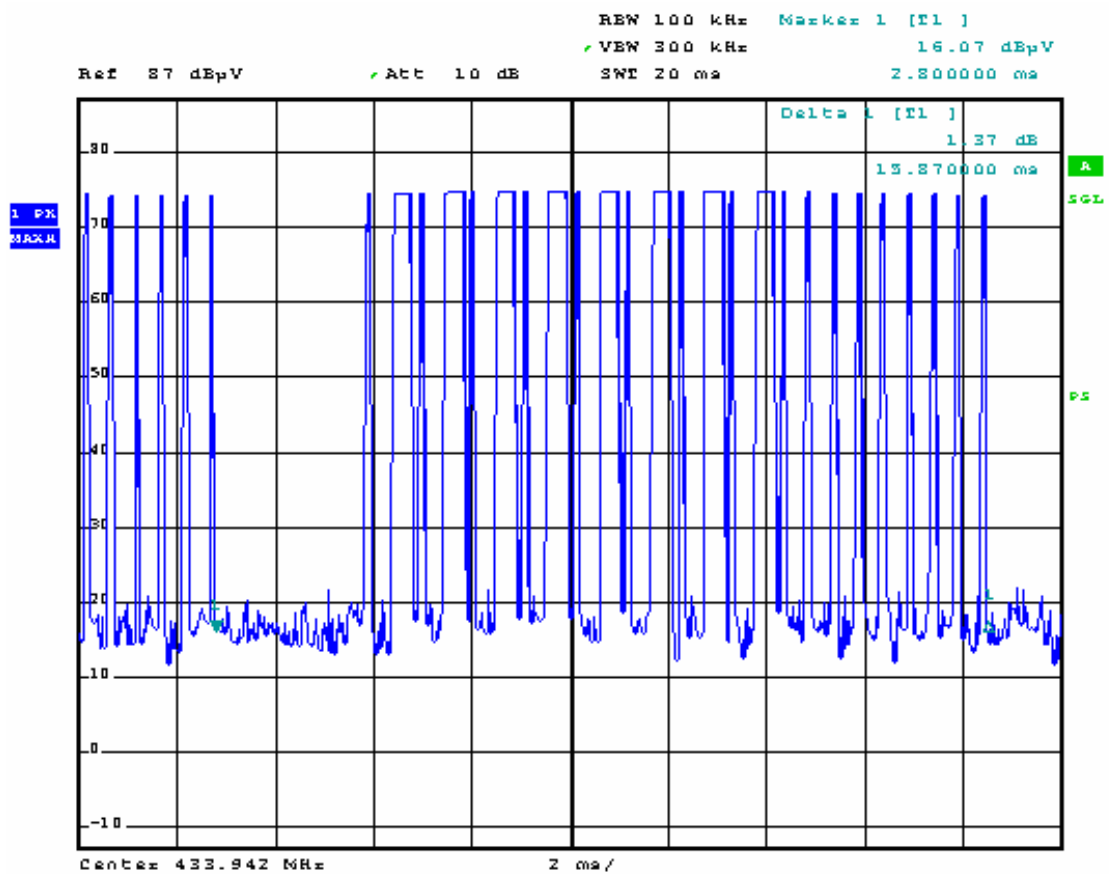
1. Place the EUT on the table and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
3. Set center frequency of spectrum analyzer=operating frequency.
4. Set the spectrum analyzer as RBW=100 kHz, VBW=300 kHz, Span=0Hz.
5. Repeat above procedures until all frequency measured was complete.

9.4 Test Data

$T_p = 15.87 \text{ ms}$

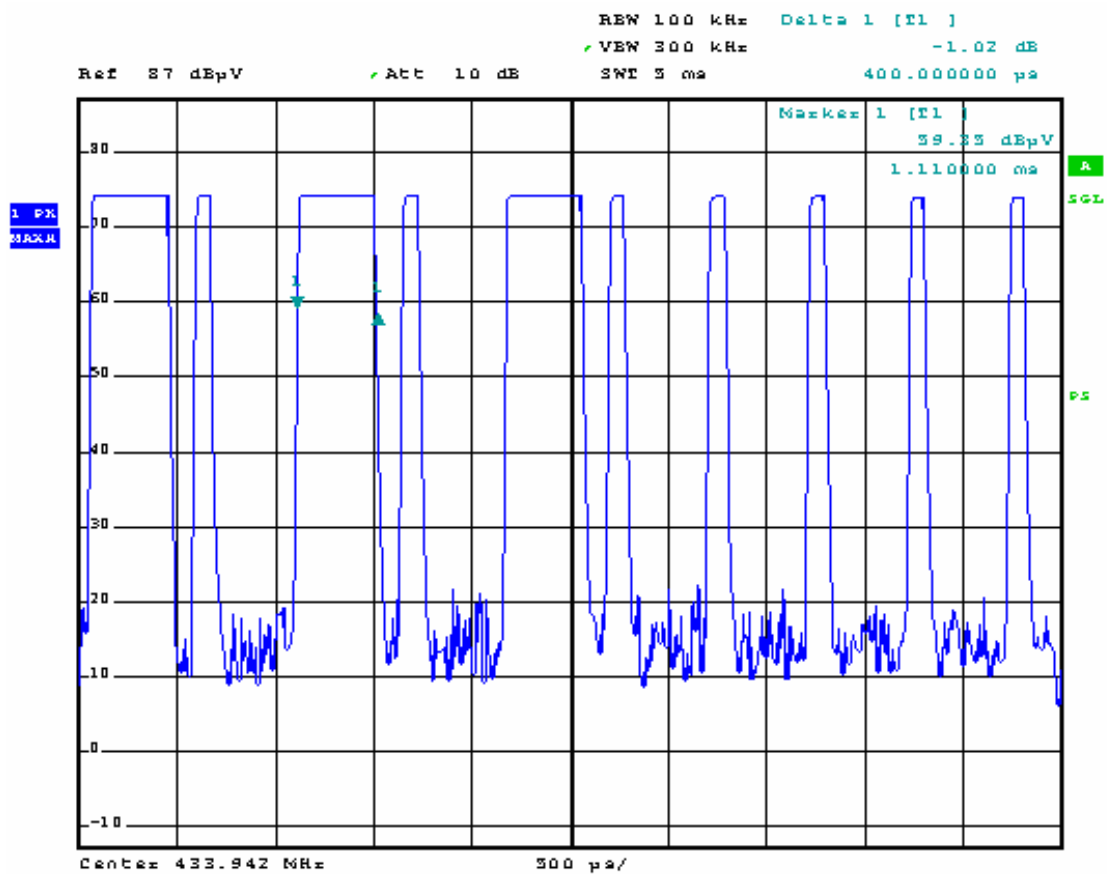
$T_{on} = 8 \times 0.4 + 17 \times 0.09 = 4.73 \text{ ms}$

Duty Cycle Factor $= 20 \log(T_{on}/T_p) = 20 \times \log(4.73/15.87) = -10.51$



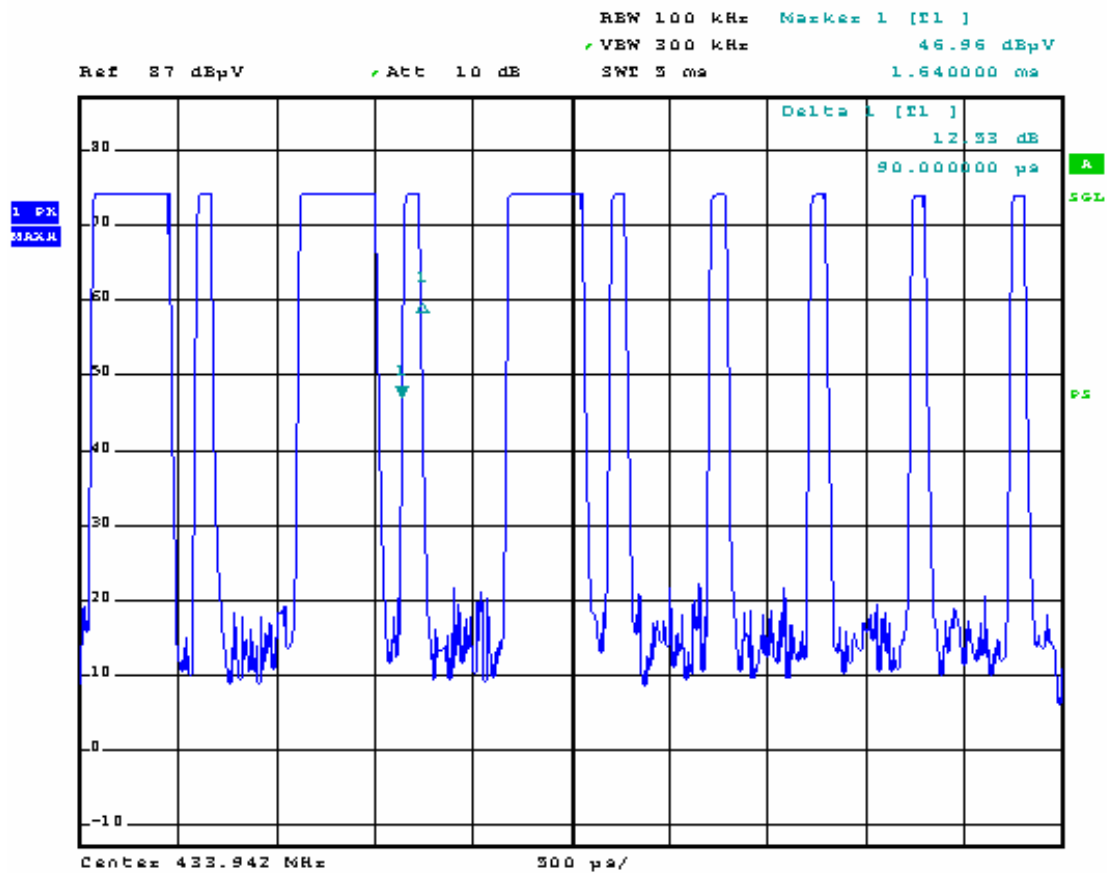
T-OFF

Date: 4.AUG.2008 20:12:10



T0-1

Date: 4.AUG.2008 20:08:31



T0-2

Date: 4.AUG.2008 20:09:27

10 Declaration Letters

**AURUM ELECTRONICS CORP**

No.180,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

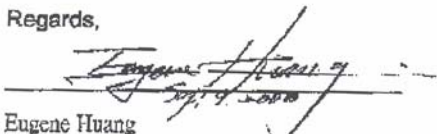
Model No. AEC-9339A (AEC-9336A)

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 characteristics, except that the power consumption!

While the power consumption for testing product AEC-9339A is 300W; For AEC-9336 is 150W

Please kindly handle on the project.

Regards,


Eugene Huang

2008-09-04

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