

TEST REPORT

Applicant: ARTIKA FOR LIVING INC

Address: 1756 50th avenue, Lachine, Quebec, Canada, H8T 2V5

Product Name: LED flush mount light

FCC ID: 2AUHG-FM-EMIC

Standard(s): FCC PART 15B
ANSI C63.4-2014

Report Number: 2502S52666E-00

Report Date: 2025/4/19

The above device has been tested and found compliant with the requirement of the relative standards by Bay Area Compliance Laboratories Corp. (Dongguan).

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CONTENTS

DOCUMENT REVISION HISTORY	3
1. GENERAL INFORMATION	4
1.1 GENERAL DESCRIPTION OF EQUIPMENT UNDER TEST	4
1.2 ACCESSORY INFORMATION	4
1.3 EQUIPMENT MODIFICATIONS	4
2. SUMMARY OF TEST RESULTS	5
3. DESCRIPTION OF TEST CONFIGURATION	6
3.1 DESCRIPTION OF TEST CONFIGURATION	6
3.2 EUT EXERCISE SOFTWARE	6
3.3 SUPPORT EQUIPMENT LIST AND DETAILS	6
3.4 SUPPORT CABLE LIST AND DETAILS	6
3.5 BLOCK DIAGRAM OF TEST SETUP	7
3.6 TEST FACILITY	8
3.7 MEASUREMENT UNCERTAINTY	8
4. REQUIREMENTS AND TEST PROCEDURES	9
4.1 CONDUCTED EMISSIONS	9
4.1.1 Applicable Standard	9
4.1.2 EUT Setup	9
4.1.3 EMI Test Receiver Setup	10
4.1.4 Test Procedure	10
4.1.5 Corrected Amplitude & Margin Calculation	10
4.1.6 Test Data and Result	11
4.2 RADIATION EMISSIONS	14
4.2.1 Applicable Standard	14
4.2.2 Test System Setup	14
4.2.3 EMI Test Receiver Setup	15
4.2.4 Test Procedure	15
4.2.5 Corrected Result & Margin Calculation	15
4.2.6 Test Data and Result	16
EXHIBIT A - EUT PHOTOGRAPHS	19
EXHIBIT B - TEST SETUP PHOTOGRAPHS	20

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	2502S52666E-00	Original Report	2025/4/19

1. GENERAL INFORMATION

1.1 General Description Of Equipment under Test

EUT Name:	LED flush mount light
EUT Model:	FM-EMIC-WH
Highest Operation Frequency [▲] :	Below 108MHz
Rated Input Voltage:	AC 120V/60Hz, 24W
Serial Number:	316D-1
EUT Received Date:	2025/4/10
EUT Received Status:	Good

1.2 Accessory Information

Accessory Description	Manufacturer	Model	Parameters
/	/	/	/

1.3 Equipment Modifications

No modifications are made to the EUT during all test items.

2. SUMMARY OF TEST RESULTS

Standard Clause	Description of Test	Test Result
FCC§15.107	Conducted emissions	Compliant
FCC§15.109	Radiated emissions	Compliant

3. DESCRIPTION OF TEST CONFIGURATION

3.1 Description of Test Configuration

The system was configured for testing in a typical fashion (as normally used by a typical user). The following summary table is showing all test modes to demonstrate in compliance with the standard:

Test Items	Test Modes
Radiated Emission:	M1: Lighting
Conducted Emission:	M1: Lighting

3.2 EUT Exercise Software

No software was used in test.

3.3 Support Equipment List and Details

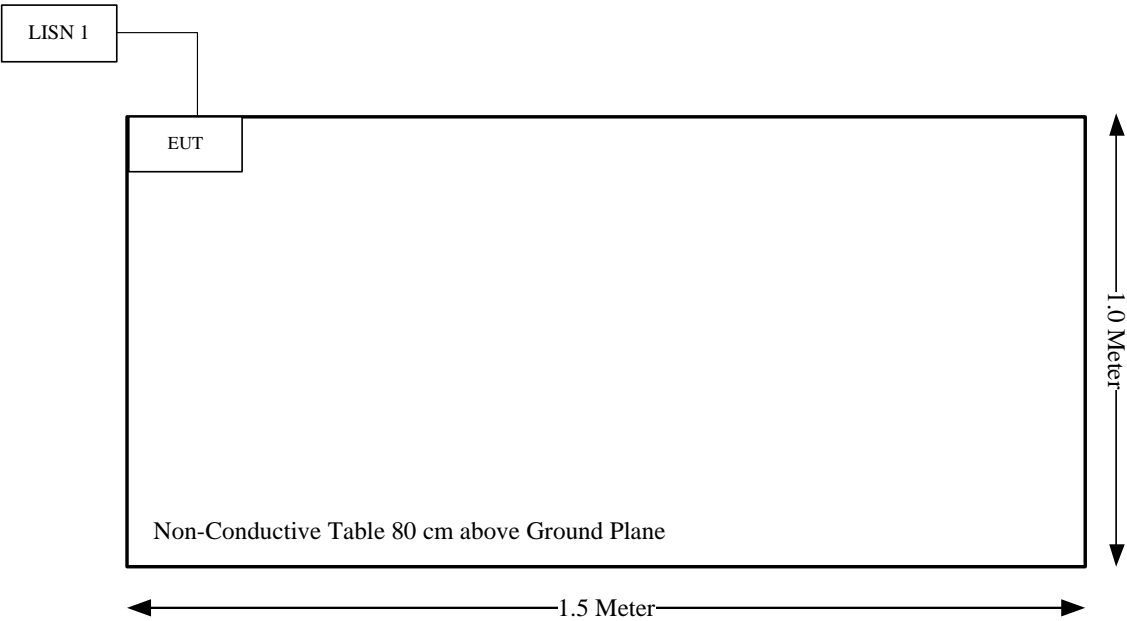
Manufacturer	Description	Model	Serial Number
/	/	/	/

3.4 Support Cable List and Details

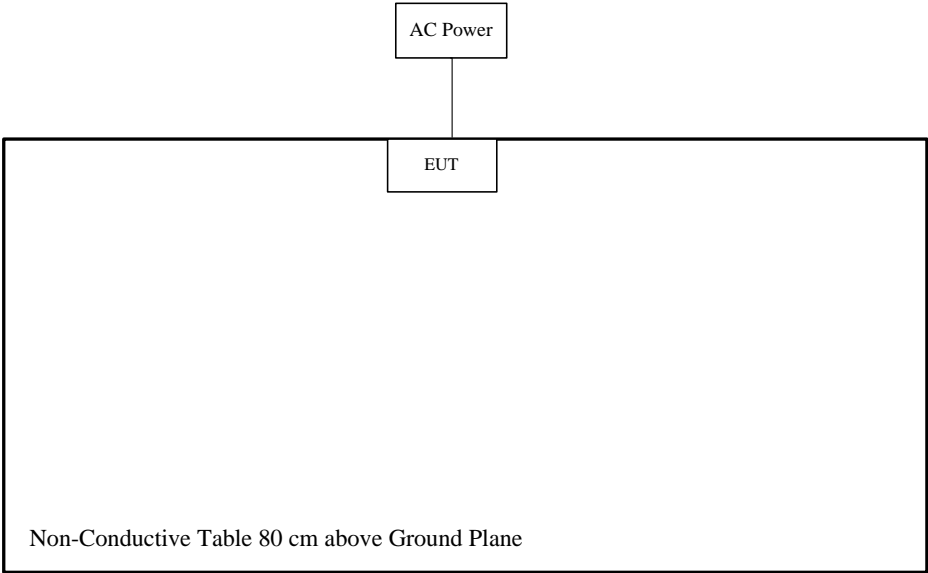
Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
AC Cable	No	No	1	EUT	LISN 1

3.5 Block Diagram of Test Setup

CE:



RE:



3.6 Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.12, Pulong East 1st Road, Tangxia Town, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 829273, the FCC Designation No. : CN5044.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0022.

3.7 Measurement Uncertainty

Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

Parameter	Measurement Uncertainty
Unwanted Emissions, radiated	9kHz~30MHz: 3.3dB, 30MHz~200MHz: 4.55 dB, 200MHz~1GHz: 5.92 dB, 1GHz~6GHz: 4.98 dB, 6GHz~18GHz: 5.89 dB, 18GHz~26.5GHz:5.47 dB, 26.5GHz~40GHz:5.63 dB
Temperature	$\pm 1^{\circ}\text{C}$
Humidity	$\pm 5\%$
AC Power Lines Conducted Emission	3.11 dB (150 kHz to 30 MHz)

4. REQUIREMENTS AND TEST PROCEDURES

4.1 Conducted Emissions

4.1.1 Applicable Standard

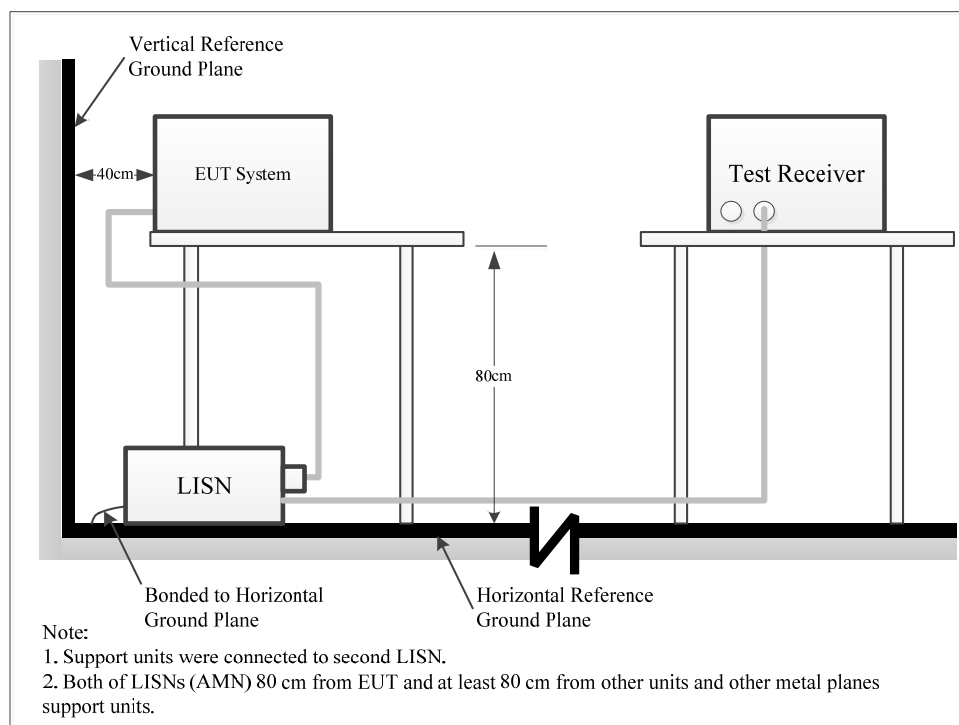
FCC§15.107

(a) Except for Class A digital devices, for equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the band edges

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15–0.5	66 to 56*	56 to 46*
0.5–5	56	46
5–30	60	50

*Decreases with the logarithm of the frequency.

4.1.2 EUT Setup



The setup of EUT is according with per ANSI C63.4-2014 measurement procedure. The specification used was with the FCC Part 15 B 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.

4.1.3 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:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

4.1.4 Test Procedure

The frequency and amplitude of the six highest ac power-line conducted emissions relative to the limit, measured over all the current-carrying conductors of the EUT power cords, and the operating frequency or frequency to which the EUT is tuned (if appropriate), should be reported, unless such emissions are more than 20 dB below the limit. AC power-line conducted emissions measurements are to be separately carried out only on each of the phase (“hot”) line(s) and (if used) on the neutral line(s), but not on the ground [protective earth] line(s). If less than six emission frequencies are within 20 dB of the limit, then the noise level of the measuring instrument at representative frequencies should be reported. The specific conductor of the power-line cord for each of the reported emissions should be identified. Measure the six highest emissions with respect to the limit on each current-carrying conductor of each power cord associated with the EUT (but not the power cords of associated or peripheral equipment that are part of the test configuration). Then, report the six highest emissions with respect to the limit from among all the measurements identifying the frequency and specific current-carrying conductor identified with the emission. The six highest emissions should be reported for each of the current-carrying conductors, or the six highest emissions may be reported over all the current-carrying conductors.

4.1.5 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor

Factor = attenuation caused by cable loss + voltage division factor of AMN

The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

4.1.6 Test Data and Result

Serial Number:	316D-1	Test Date:	2025/4/14
Test Site:	CE	Test Mode:	M1
Tester:	Yukin Qiu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	21.6	Relative Humidity: (%)	44	ATM Pressure: (kPa)	100.8
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Test Equipment List and Details:

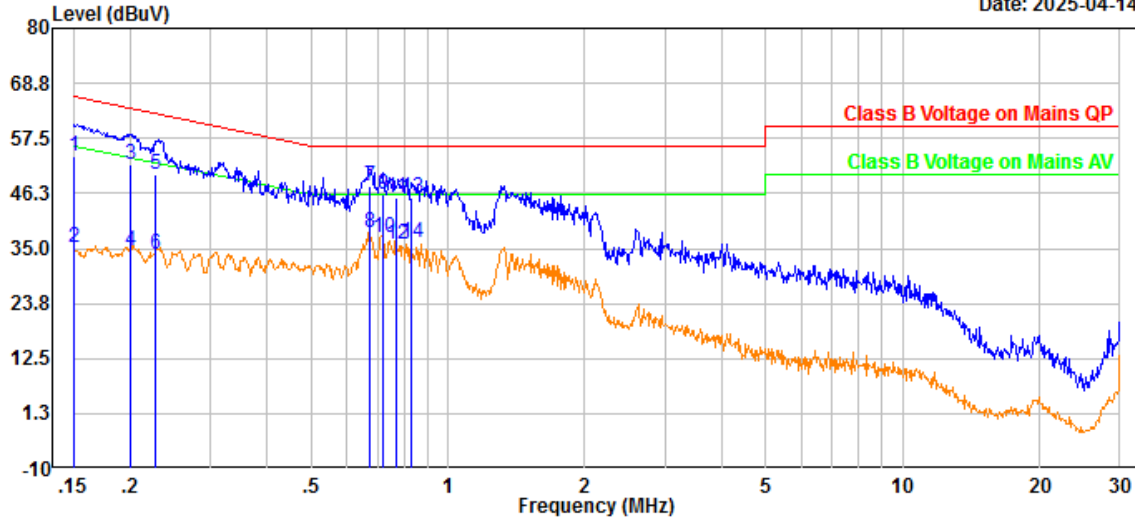
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101614	2024/9/5	2025/9/4
MICRO-COAX	Coaxial Cable	C-NJNJ-50	C-0200-01	2024/9/5	2025/9/4
R&S	EMI Test Receiver	ESCI	101121	2024/9/5	2025/9/4
Audix	Test Software	E3	191218 V9	N/A	N/A

** Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Project No.: 2502S52666E-EM
 Port: Line
 Test Mode: M1
 IF B/W 9kHz PK/AV

Serial No.: 316D-1
 Tester: Yukin Qiu
 Note:

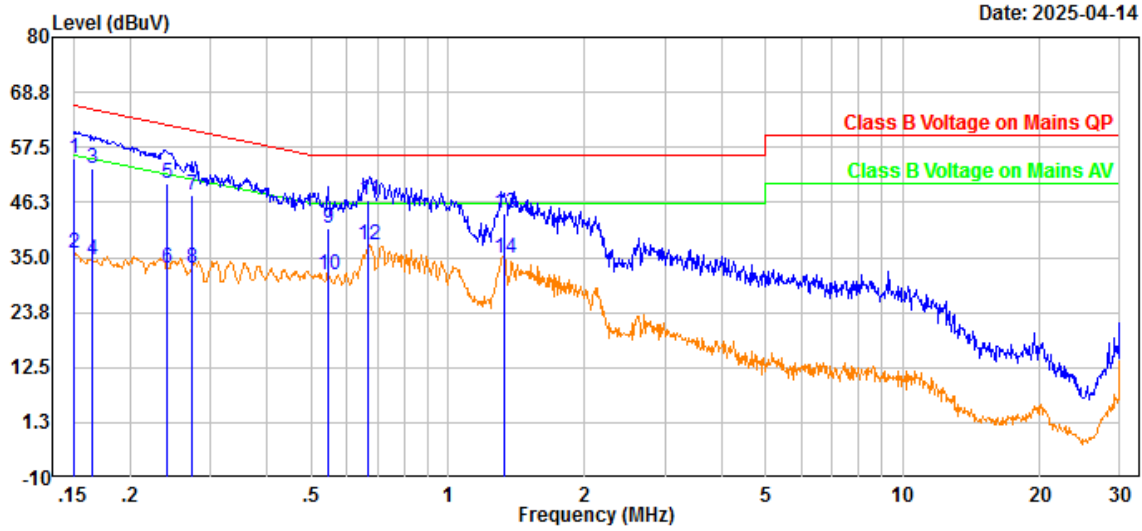
Date: 2025-04-14



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Measurement
1	0.151	43.19	10.75	53.94	65.96	12.02	QP
2	0.151	24.25	10.75	35.00	55.96	20.96	Average
3	0.201	41.43	10.85	52.28	63.59	11.31	QP
4	0.201	23.69	10.85	34.54	53.59	19.05	Average
5	0.228	39.25	10.84	50.09	62.54	12.45	QP
6	0.228	23.09	10.84	33.93	52.54	18.61	Average
7	0.671	36.72	10.85	47.57	56.00	8.43	QP
8	0.671	27.35	10.85	38.20	46.00	7.80	Average
9	0.723	35.31	10.86	46.17	56.00	9.83	QP
10	0.723	26.26	10.86	37.12	46.00	8.88	Average
11	0.769	34.43	10.85	45.28	56.00	10.72	QP
12	0.769	24.94	10.85	35.79	46.00	10.21	Average
13	0.831	34.64	10.85	45.49	56.00	10.51	QP
14	0.831	25.24	10.85	36.09	46.00	9.91	Average

Project No.: 2502S52666E-EM
 Port: neutral
 Test Mode: M1
 IF B/W 9kHz PK/AV

Serial No.: 316D-1
 Tester: Yukin Qiu
 Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Measurement
1	0.151	44.24	10.85	55.09	65.95	10.86	QP
2	0.151	24.92	10.85	35.77	55.95	20.18	Average
3	0.165	42.19	10.85	53.04	65.19	12.15	QP
4	0.165	23.52	10.85	34.37	55.19	20.82	Average
5	0.240	39.40	10.83	50.23	62.08	11.85	QP
6	0.240	22.04	10.83	32.87	52.08	19.21	Average
7	0.273	36.96	10.81	47.77	61.02	13.25	QP
8	0.273	21.96	10.81	32.77	51.02	18.25	Average
9	0.547	30.07	10.73	40.80	56.00	15.20	QP
10	0.547	20.57	10.73	31.30	46.00	14.70	Average
11	0.668	35.97	10.75	46.72	56.00	9.28	QP
12	0.668	26.73	10.75	37.48	46.00	8.52	Average
13	1.333	33.14	10.87	44.01	56.00	11.99	QP
14	1.333	24.06	10.87	34.93	46.00	11.07	Average

4.2 Radiation Emissions

4.2.1 Applicable Standard

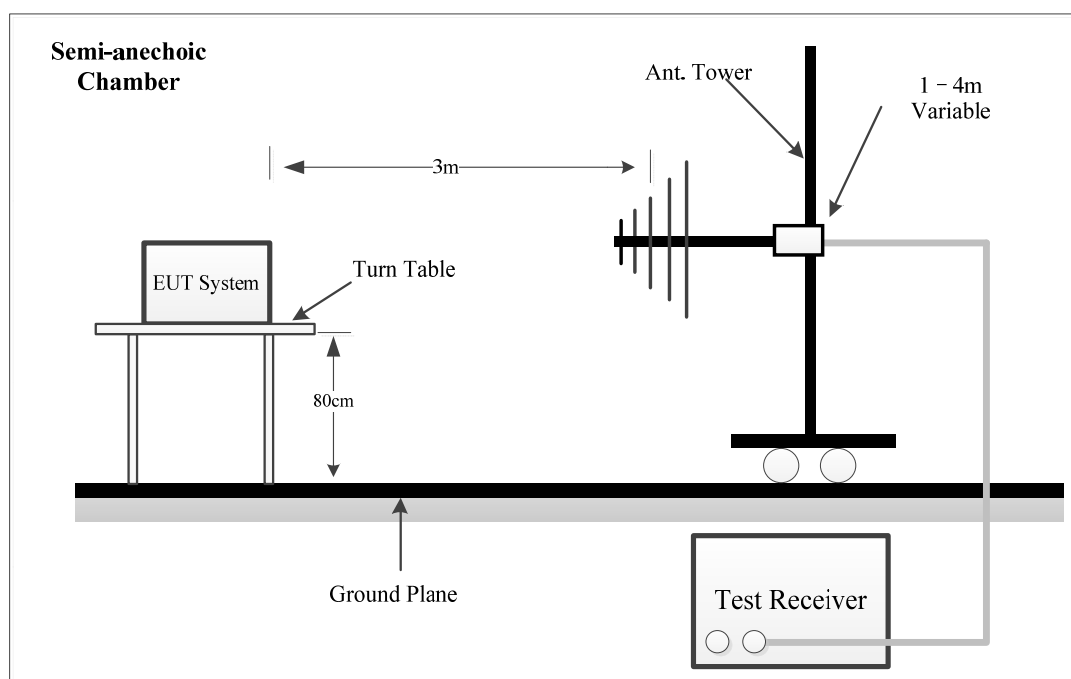
FCC§15.109

(a) Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency of emission (MHz)	Field strength (microvolts/meter)
30-88	100
88-216	150
216-960	200
Above 960	500

4.2.2 Test System Setup

Below 1GHz:



The radiated emission tests were performed at the 3 meters distance, using the setup accordance with the ANSI C63.4-2014. The specification used was the FCC Part 15B Class B limits.

4.2.3 EMI Test Receiver Setup

The system was investigated from 30 MHz to 1 GHz.

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

Frequency Range	RBW	Video B/W	IF B/W	Measurement
30MHz – 1000 MHz	100 kHz	300 kHz	/	Peak
	/	/	120kHz	QP

4.2.4 Test Procedure

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

The data was recorded in the Quasi-peak detection mode for below 1 GHz.

If the maximized peak measured value complies with under the QP limit more than 6dB, then it is unnecessary to perform an QP measurement.

4.2.5 Corrected Result & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor

Factor = Antenna Factor + Cable Loss- Amplifier Gain

The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

4.2.6 Test Data and Result

Serial Number:	316D-1	Test Date:	2025/4/11
Test Site:	Chamber10m	Test Mode:	M1
Tester:	Willem Qiu	Test Result:	Pass

Environmental Conditions:					
Temperature: (°C)	24	Relative Humidity: (%)	49	ATM Pressure: (kPa)	100.1

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Hybrid Antenna	JB3	A060611-1	2023/9/6	2026/9/5
Narda	Coaxial Attenuator	779-6dB	04269	2023/9/6	2026/9/5
Unknown	Coaxial Cable	C-NJNJ-50	C-1000-01	2024/7/1	2025/6/30
Unknown	Coaxial Cable	C-NJNJ-50	C-0400-04	2024/7/1	2025/6/30
Unknown	Coaxial Cable	C-NJNJ-50	C-0530-01	2024/7/1	2025/6/30
Sonoma	Amplifier	310N	185914	2024/8/26	2025/8/25
R&S	EMI Test Receiver	ESCI	100224	2024/8/26	2025/8/25
Audix	Test Software	E3	191218 V9	N/A	N/A

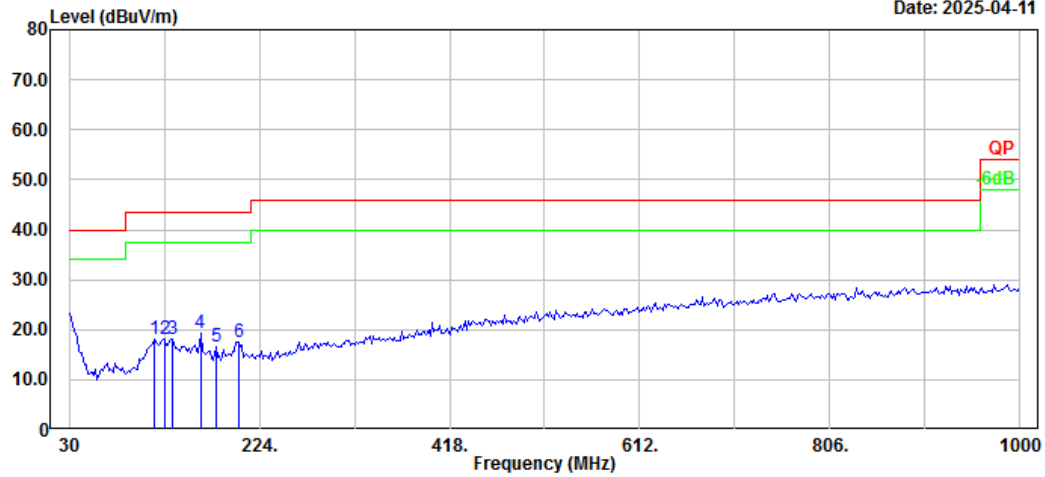
* Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

1) 30MHz-1GHz:

Project No.: 2502S52666E-EM
Polarization: Horizontal
Test Mode: M1
Note:
RBW:100kHz VBW:300kHz

Serial No.: 316D-1
Tester: Willem Qiu

Date: 2025-04-11



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Measurement
1	117.30	28.42	-10.33	18.09	43.50	25.41	Peak
2	127.00	27.96	-9.89	18.07	43.50	25.43	Peak
3	134.76	28.23	-10.14	18.09	43.50	25.41	Peak
4	163.86	30.76	-11.39	19.37	43.50	24.13	Peak
5	179.38	28.81	-12.32	16.49	43.50	27.01	Peak
6	202.66	29.31	-11.80	17.51	43.50	25.99	Peak

Project No.: 2502S52666E-EM

Serial No.: 316D-1

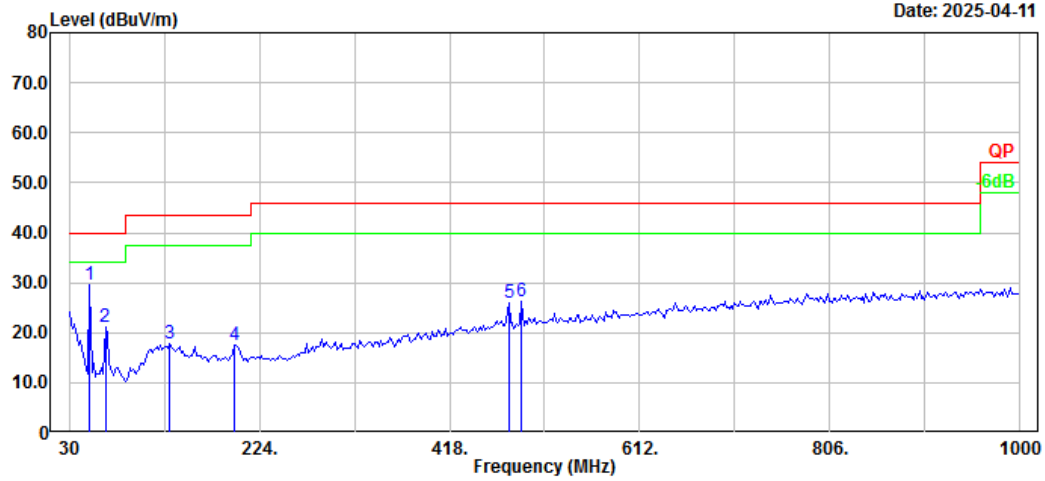
Polarization: Vertical

Tester: Willem Qiu

Test Mode: M1

Note:

RBW:100kHz VBW:300kHz



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Measurement
1	51.34	46.16	-16.49	29.67	40.00	10.33	Peak
2	66.86	37.47	-16.42	21.05	40.00	18.95	Peak
3	132.82	27.84	-10.03	17.81	43.50	25.69	Peak
4	198.78	29.14	-11.60	17.54	43.50	25.96	Peak
5	478.14	30.59	-4.75	25.84	46.00	20.16	Peak
6	491.72	30.66	-4.46	26.20	46.00	19.80	Peak

EXHIBIT A - EUT PHOTOGRAPHS

Please refer to the attachment 2502S52666E-RF-EXP EUT external photographs and 2502S52666E-RF-INP EUT internal photographs.

EXHIBIT B - TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2502S52666E-00-TSP TEST SETUP PHOTOGRAPHS.

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