

FCC Part15 Subpart B

TEST REPORT

For

Delta 36in wall light

MODEL NUMBER: 36OUT-DE-xxxxxxxx (x can be any character or blank for commercial use only)

FCC ID: 2AUHG-36OUT-DE

REPORT NUMBER: 4790500108-F01-00

ISSUE DATE: August 10, 2022

Prepared for

ARTIKA FOR LIVING INC. 1756, 50th Avenue Montreal (Lachine), Quebec Canada, H8T 2V5

Prepared by

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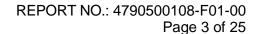


REPORT NO.: 4790500108-F01-00

Page 2 of 25

Revision History

Rev.	Issue Date	Revisions	Revised By
	08/10/2022	Initial Issue	





Summary of Test Results							
Standard	Test Item	Limit Result		Remark			
	Conducted Disturbance	Class B	PASS				
FCC PART 15, Subpart B (October 01, 2020)	Radiated Disturbance below 1 GHz	Class B	PASS				
(October 01, 2020)	Radiated Disturbance above 1 GHz	Class B	N/A	NOTE (1) NOTE (2)			

Note:

- (1) "N/A" denotes test is not applicable in this Test Report
- (2) If the highest frequency of the internal sources of the EUT is less than 108 MHz, the measurement shall only be made up to 1 GHz. If the highest frequency of the internal sources of the EUT is between 108 MHz and 500 MHz, the measurement shall only be made up to 2 GHz. If the highest frequency of the internal sources of the EUT is between 500 MHz and 1 GHz, measurement shall only be made up to 5 GHz. If the highest frequency of the internal sources of the EUT is above 1 GHz, the measurement shall be made up to 5 times the highest frequency or 40 GHz, whichever is less.
- (2) The highest frequency of the internal sources of the EUT is less than 108 MHz.



CONTENTS

1. ATTES	STATION OF TEST RESULTS	5
2. TEST	METHODOLOGY	6
3. FACIL	ITIES AND ACCREDITATION	6
4. CALIB	RATION AND UNCERTAINTY	6
4.1.	Measuring Instrument Calibration	6
4.2.	Measurement Uncertainty	6
5. EQUIF	PMENT UNDER TEST	7
5.1.	Description of EUT	7
5.2.	Test Mode	7
5.3.	EUT Accessory	
<i>5.4.</i>	Block Diagram Showing the Configuration of System Tested	
6. MEAS	URING EQUIPMENT AND SOFTWARE USED	9
7. EMISS	SION TEST	10
7.1.	Conducted Disturbance Measurement	10
7.1.1.	Limits of conducted disturbance voltage	
7.1.2. 7.1.3.	Test Procedure Test Setup	
7.1.3. 7.1.4.	Test Environment	
7.1.5.	Test Mode	
7.1.6.	Test Results	12
7.2.	Radiated Disturbance Measurement	14
7.2.1.	Limits of radiated disturbance measurement	14
7.2.2.	Test Procedure	
7.2.3.	Test Setup	
7.2.4.	Test Environment	
7.2.5.	Test Mode	
7.2.6.	Test Results – below 1GHz	
Appendix	I: Photographs of Test Configuration	19
Appendix	II: Photographs of the EUT	20
Appendix	III : FCC Compliance Statement	25



REPORT NO.: 4790500108-F01-00

Page 5 of 25

1. ATTESTATION OF TEST RESULTS

Applicant Informa	tion
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Company Name: ARTIKA FOR LIVING INC.

Address: 1756, 50th Avenue Montreal (Lachine), Quebec Canada, H8T 2V5

Manufacturer Information

Company Name: DongGuan City Rising Stars Lighting Co., LTD

Address: YuanQuan Road No.6, BaiHao Village, HouJie town, DongGuan

City, GuangDong Province, China

EUT Information

Product Name: Delta 36in wall light Model Name: 36OUT-DE-xxxxxxxx

(x can be any character or blank for commercial use only)

Brand Name: Artika Sample Status: Normal Sample ID: 18007501 Sample Received Date: July 22, 2022

Date of Tested: July 23, 2022~ July 28, 2022

APPLICABLE STANDARDS				
STANDARDS TEST RESULTS				
FCC PART 15, Subpart B	PASS*			

^{&#}x27;*'=Decision rule for statement(s) of conformity is based on IEC Guide 115:2007 Clause 4.4.3 Procedure 2" Accuracy Method"

Prepared By:	Approved By:		
Ryan Pay	Ean Than		
Ryan Pang Project Engineer	Yam Shan Project Engineer		



2. TEST METHODOLOGY

All tests were performed in accordance with the standard FCC Part15 Subpart B and ANSI C63.4-2014.

3. FACILITIES AND ACCREDITATION

	A2LA (Certificate No.: 3870.01)
	Dongguan Dongdian Testing Service Co., Ltd.
Accreditation	has been assessed and proved to be in compliance with A2LA.
Certificate	CNAS (Registration No.: L6451)
	Dongguan Dongdian Testing Service Co., Ltd.
	has been assessed and proved to be in compliance with CNAS.

Note: All tests measurement facilities use to collect the measurement data are located at Dongguan Dongdian Testing Service Co., Ltd.

4. CALIBRATION AND UNCERTAINTY

4.1. Measuring Instrument Calibration

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Measurement Frequency Range	K	U(dB)
Conducted disturbance at mains terminals ports	0.15MHz ~ 30MHz	2	3.32 dB
Radiated disturbance Test	Below 1GHz(10m)	2	4.48 dB (Antenna Polarize: V)
Radiated disturbance rest	Below (Griz(Tolli)	2	4.64 dB (Antenna Polarize: H)
Radiated disturbance Test	1GHz-18GHz	2	4.10dB (1-6GHz)
Radiated disturbance rest	IGHZ-10GHZ	2	4.40dB (6GHz-18Gz)

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.



5. EQUIPMENT UNDER TEST

5.1. Description of EUT

EUT Name	Delta 36in wall light	
EUT Description	This devices are LED fixed luminaires for indoor use.	
Model	36OUT-DE-xxxxxxxx	
Model Difference	 x can be any character or blank for commercial use only. All models are identical except for the model name. All models use same built-in LED driver NE024120045-2G. 	
Rated Input	AC 120V,60Hz,18W	
Test Model	36OUT-DE-BLJ	
Test Power Supply	AC 120V 60Hz	

5.2. Test Mode

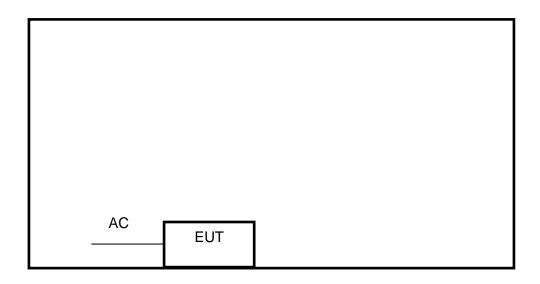
Test Mode	Description
Mode 1	Lighting mode.

5.3. EUT Accessory

Item	Accessory	Brand Name Model Name		Description
1	N/A	N/A	N/A	N/A



5.4. Block Diagram Showing the Configuration of System Tested

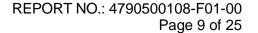


The EUT has been tested without other necessary accessories or support units.

Item	Equipment	Mfr/Brand	Model/Type No.	Length	Note
N/A	N/A	N/A	N/A	N/A	N/A

Support units

Item	Equipment	Mfr/Brand	Model/Type No.	Length	Note
N/A	N/A	N/A	N/A	N/A	N/A





6. MEASURING EQUIPMENT AND SOFTWARE USED

Conducted Disturbance									
Used	Equipment	Manufacturer	No.	Serial No.	Last Cal.	Next Cal.			
	Test Receiver	R&S	ESC	:I	100551	2021.09.02	2022.09.01		
	LISN 1	R&S	ENV2	:16	101109	2021.09.07	2022.09.06		
	Software								
Used	Des	scription		Man	ufacturer	Name	Version		
	Test Software for	Conducted Emis	sions	Audix		E3	V 6.11111b		
		Rad	iated Dis	turba	nce				
Used	Equipment	Manufacturer	Model	No.	Serial No.	Last Cal.	Next Cal.		
	Test Receiver	R&S	ESU	8	100316	2022.04.08	2023.04.07		
	Trilog Broadband Antenna	Schwarzbeck	VULB9	VULB9163 01426		2022.08.05	2023.08.04		
Software									
Used	Des	scription		Man	ufacturer	Name	Version		
V	Test Software for	r Radiated Emiss	sions		Audix	E3	V 6.11111b		



7. EMISSION TEST

7.1. Conducted Disturbance Measurement

7.1.1. Limits of conducted disturbance voltage

FREQUENCY	□Class /	A (dBμV)	⊠Class B (dBμV)		
(MHz)	Quasi-peak	Average	Quasi-peak	Average	
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	
0.50 -5.0	73.00	60.00	56.00	46.00	
5.0 -30.0	73.00	60.00	60.00	50.00	

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.
- (3) The test result calculated as following: Measurement Value = Reading Level + Correct Factor Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor Margin Level = Measurement Value - Limit Value

The following table is the setting of the receiver

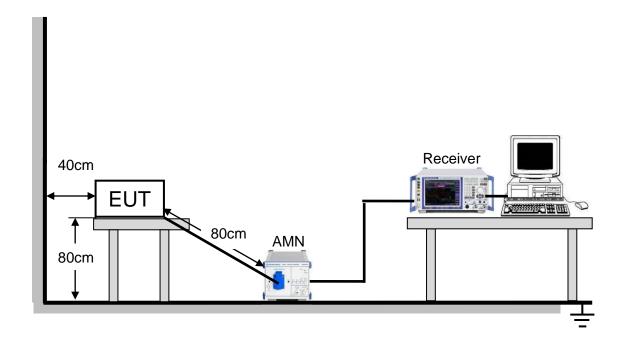
Setting						
10 dB						
0.15 MHz						
30 MHz						
9 kHz						

7.1.2. Test Procedure

- a. The EUT was placed 0.8 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.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. 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.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item:EUT Test Photos.



7.1.3. Test Setup



For the actual test configuration, please refer to Appendix I: Photographs of the Test Configuration.

7.1.4. Test Environment

Temperature:	23.9°C
Humidity:	55.8%
ATM pressure:	101.4kPa

7.1.5. Test Mode

Pre-test Mode:	Mode 1
Final Test Mode:	Mode 1

Note: According to pre-test results, the final test mode is each independent function's worst case and only shown in the report.



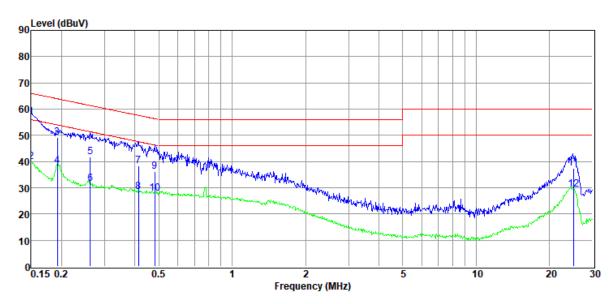
7.1.6. Test Results

EUT : Delta 36in wall light Model Number : 36OUT-DE-BLJ

Power Supply : AC 120V/60Hz Test Mode : Mode 1

Condition : Temp:23.9°C,Humi:55.8%,Press:101.4kPa LISN : ENV216 2#/LINE

Data: 14



Item	Freq.	Read Level	LISN Factor	Cable Loss	Pulse Limiter	Result Level	Limit Line	Over Limit	Detector	Phase
					Factor					
(Mark)	(MHz)	(dBµV)	(dB)	(dB)	(dB)	(dBµV)	(dBµV)	(dB)		
1	0.15	36.43	9.40	0.03	10.90	56.76	66.00	-9.24	QP	LINE
2	0.15	19.68	9.40	0.03	10.90	40.01	56.00	-15.99	Average	LINE
3	0.19	28.73	9.57	0.03	10.87	49.20	63.93	-14.73	QP	LINE
4	0.19	17.89	9.57	0.03	10.87	38.36	53.93	-15.57	Average	LINE
5	0.26	21.50	9.51	0.03	10.81	41.85	61.38	-19.53	QP	LINE
6	0.26	11.28	9.51	0.03	10.81	31.63	51.38	-19.75	Average	LINE
7	0.41	18.12	9.36	0.03	10.72	38.23	57.59	-19.36	QP	LINE
8	0.41	8.28	9.36	0.03	10.72	28.39	47.59	-19.20	Average	LINE
9	0.48	16.08	9.31	0.04	10.69	36.12	56.32	-20.20	QP	LINE
10	0.48	7.74	9.31	0.04	10.69	27.78	46.32	-18.54	Average	LINE
11	25.06	17.59	9.46	0.33	10.03	37.41	60.00	-22.59	QP	LINE
12	25.06	9.53	9.46	0.33	10.03	29.35	50.00	-20.65	Average	LINE

Note: 1. Result Level = Read Level +LISN Factor + Pulse Limiter Factor + Cable loss.

^{2.} If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.

^{3.} Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).

^{4.} Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.

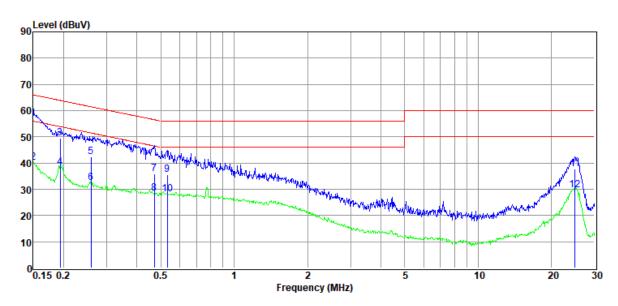


EUT : Delta 36in wall light Model Number : 36OUT-DE-BLJ

Power Supply : AC 120V/60Hz Test Mode : Mode 1

Condition : Temp:23.9°C,Humi:55.8%,Press:101.4kPa LISN : ENV216 2#/LINE

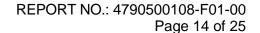
Data: 16



Item	Freq.	Read Level	LISN Factor	Cable Loss	Pulse Limiter	Result Level	Limit Line	Over Limit	Detector	Phase
					Factor					
(Mark)	(MHz)	(dBµV)	(dB)	(dB)	(dB)	(dBµV)	(dBµV)	(dB)		
1	0.15	36.51	9.60	0.03	10.90	57.04	66.00	-8.96	QP	NEUTRAL
2	0.15	19.76	9.60	0.03	10.90	40.29	56.00	-15.71	Average	NEUTRAL
3	0.19	29.12	9.51	0.03	10.87	49.53	63.89	-14.36	QP	NEUTRAL
4	0.19	18.08	9.51	0.03	10.87	38.49	53.89	-15.40	Average	NEUTRAL
5	0.26	22.06	9.44	0.03	10.82	42.35	61.47	-19.12	QP	NEUTRAL
6	0.26	12.21	9.44	0.03	10.82	32.50	51.47	-18.97	Average	NEUTRAL
7	0.47	15.84	9.31	0.04	10.69	35.88	56.49	-20.61	QP	NEUTRAL
8	0.47	8.34	9.31	0.04	10.69	28.38	46.49	-18.11	Average	NEUTRAL
9	0.53	15.54	9.34	0.04	10.65	35.57	56.00	-20.43	QP	NEUTRAL
10	0.53	8.18	9.34	0.04	10.65	28.21	46.00	-17.79	Average	NEUTRAL
11	24.92	17.77	9.65	0.33	10.03	37.78	60.00	-22.22	QP	NEUTRAL
12	24.92	9.66	9.65	0.33	10.03	29.67	50.00	-20.33	Average	NEUTRAL

Note: 1. Result Level = Read Level +LISN Factor + Pulse Limiter Factor + Cable loss.

- 2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
 - 4. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.





7.2. Radiated Disturbance Measurement

7.2.1. Limits of radiated disturbance measurement

Below 1 GHz

Measurement Method and Applied Limits:

ANSI C63.4:

	□Clas	s A	⊠Class B		
Frequency (MHz)	Field strength (dBuV/m) (at 10m)	Field strength (dBuV/m) (at 3m)	Field strength (dBuV/m) (at 10m)	Field strength (dBuV/m) (at 3m)	
30 - 88	39	49.5	29.5	40	
88 - 216	43.5	54	33.0	43.5	
216 - 960	46.4	56.9	35.5	46	
Above 960	49.5	60	43.5	54	

Above 1 GHz

Measurement Method and Applied Limits:

ANSI C63.4:

Fraguanay		□Cla	□Class B			
Frequency (MHz)	(dBuV/m) (at 3m)		(dBuV/m) (at 10m)		(dBuV/m) (at 3m)	
(IVITIZ)	Peak	Average	Peak	Average	Peak	Average
Above 1000	80	60	69.5	49.5	74	54

Frequency Range of Radiated Disturbance Measurement

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 1.705	30
1.705 - 108	1000
108 - 500	2000
500 - 1000	5000
Above 1000	5 th harmonic of the highest frequency or 40 GHz, whichever is lower

NOTE:

- (1) The limit for radiated test was performed according to FCC Part 15, Subpart B;
- (2) The tighter limit applies at the band edges;
- (3) Emission level (dBuV/m) = 20log Emission level (uV/m), 3m Emission level = 10m Emission level + 20log(10m/3m);
- (4) The test result calculated as following:

Measurement Value = Reading Level + Correct Factor,

Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use),

Margin Level = Measurement Value - Limit Value.

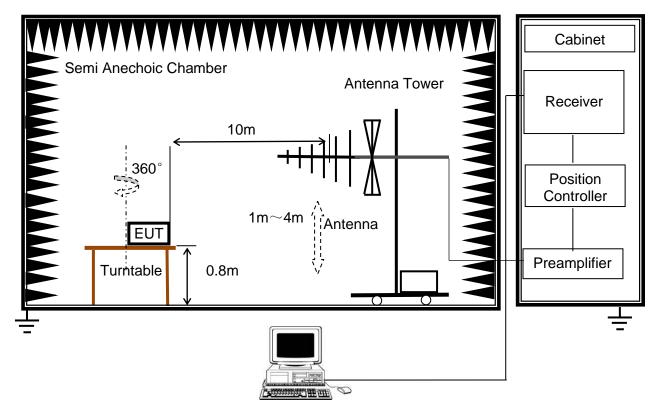


7.2.2. Test Procedure

- a. The measuring distance of at 10m shall be used for measurements at frequency up to 1GHz.
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For the actual test configuration, please refer to the related Item:EUT Test Photos.

7.2.3. Test Setup

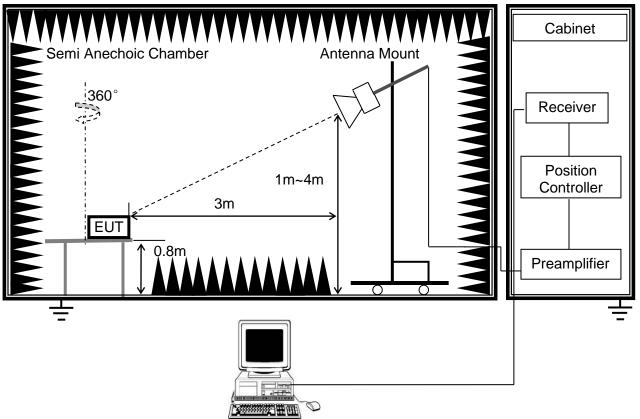
(a) Radiated Disturbance Test Set-Up Frequency 30MHz - 1GHz



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(b) Radiated Disturbance Test Set-Up Frequency above 1GHz



For the actual test configuration, please refer to Appendix I: Photographs of the Test Configuration.

Test Environment 7.2.4.

Radiated Dist	urbance - below 1 GHz	Radiated Disturbance - above 1 GHz		
Temperature:	24.5°C	Temperature:	N/A	
Humidity:	55%	Humidity:	N/A	
ATM pressure:	100.1kPa	ATM pressure:	N/A	

7.2.5. **Test Mode**

Radiated Dist	urbance - below 1 GHz	Radiated Disturbance - above 1 GHz		
Pre-test Mode:	Mode 1	Pre-test Mode:	N/A	
Final Test Mode:	Mode 1	Final Test Mode:	N/A	

Note: According to pre-test results, the final test mode is each independent function's worst case and only shown in the report.



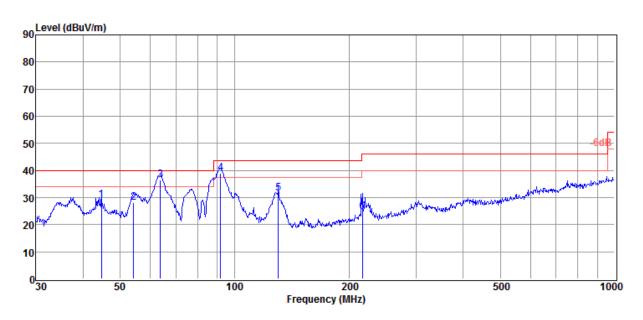
7.2.6. Test Results – below 1GHz

EUT : Delta 36in wall light **Model Number** : 36OUT-DE-BLJ

Power Supply : AC 120V/60Hz Test Mode : Mode 1

Memo :

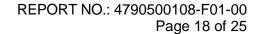
Data: 3 Data:



Item (Mark)	Freq.	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	44.59	11.07	14.12	3.96	29.15	40.00	-10.85	QP	VERTICAL
2	54.26	10.45	13.47	4.08	28.00	40.00	-12.00	QP	VERTICAL
3	63.76	20.35	11.97	4.17	36.49	40.00	-3.51	QP	VERTICAL
4	91.82	22.30	12.20	4.42	38.92	43.50	-4.58	QP	VERTICAL
5	130.38	17.06	9.86	4.76	31.68	43.50	-11.82	QP	VERTICAL
6	216.78	7.92	11.37	5.37	24.66	46.00	-21.34	QP	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

- 2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
- 3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.



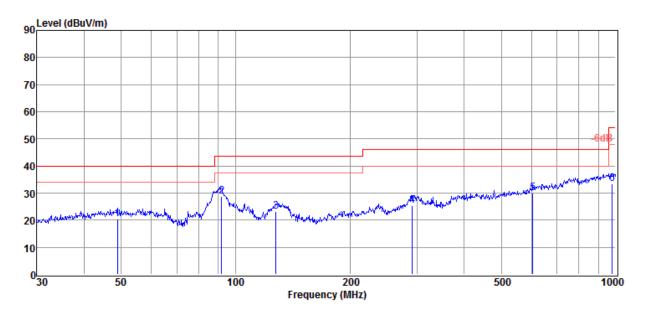


EUT : Delta 36in wall light Model Number : 36OUT-DE-BLJ

Power Supply : AC 120V/60Hz Test Mode : Mode 1

Memo :

Data: 4 Data:



Item (Mark)	Freq.	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	48.84	2.42	14.00	4.01	20.43	40.00	-19.57	QP	HORIZONTAL
2	91.82	12.29	12.20	4.42	28.91	43.50	-14.59	QP	HORIZONTAL
3	127.66	8.09	10.23	4.74	23.06	43.50	-20.44	QP	HORIZONTAL
4	292.06	6.28	13.14	5.80	25.22	46.00	-20.78	QP	HORIZONTAL
5	605.66	3.59	19.11	7.42	30.12	46.00	-15.88	QP	HORIZONTAL
6	979.18	2.39	21.90	8.96	33.25	54.00	-20.75	QP	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

- 2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
- 3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

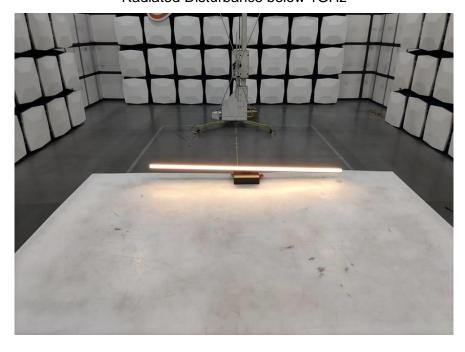


Appendix I: Photographs of Test Configuration

Conducted Disturbance



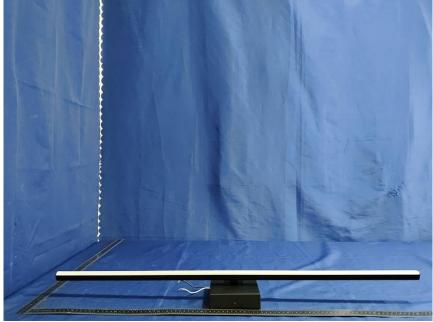
Radiated Disturbance below 1GHz

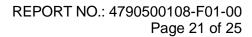




Appendix II: Photographs of the EUT

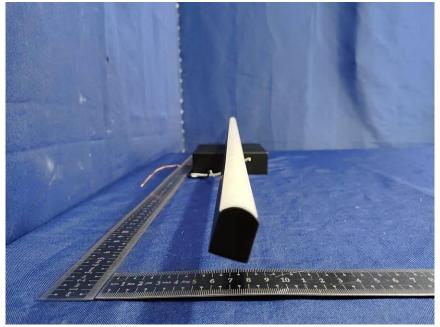


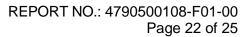




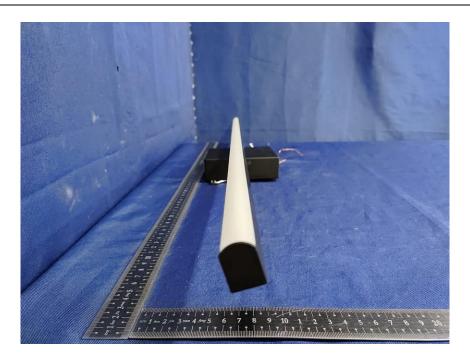


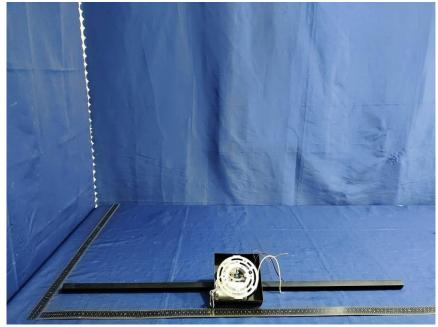


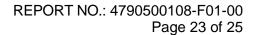








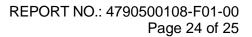






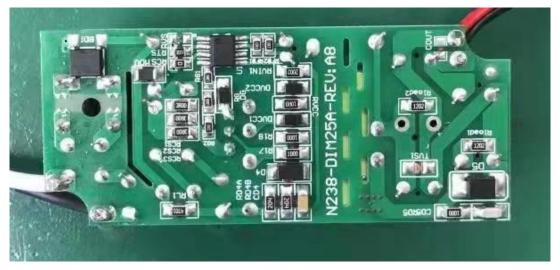














Appendix III : FCC Compliance Statement

1. Labeling requirements

Devices shall bear the following statement in a conspicuous location on the device. When the device is so small, and the device does not have a display that can show electronic labeling, then the information required by this paragraph shall be placed in the user manual and must also either be placed on the device packaging or on a removable label attached to the device:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1)This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

2. User manual or instruction manual requirements

The user manual or instruction manual shall caution the user the following statement:

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -- Reorient or relocate the receiving antenna.
- -- Increase the separation between the equipment and receiver.
- -- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

3. FCC logo

Devices authorized under the SDoC procedure have the option to use the FCC logo to indicate compliance with the FCC rules, and the logo may be included in the instruction materials or as part of an e-label.



The FCC logo shall only be used on a product that has been tested, evaluated, and found to be compliant in accordance with the SDoC procedures.

End	of	Report	