

TEST REPORT

Test Report No	22.11.23.05
Page No.	Page 1 of 6
Date of Receipt	23.11.2022
Date(s) of Performance	24.11.2022
Date of issue	24.11.2022
Test Location	At Lab
Name of Customer	Leo Lights
Address of Customer	Om Industrial Estate, Vadolgaon, Behind Gnp Galaxy Mall, Near Reliance Petrol Pump Ambernath(W)
Name of Manufacturer	Leo Lights
Brand Name	--
Name of Sample/ Model No./ Sample No.	200W LED Flood Light
Product Rating	230Vac, 50Hz, 200W
No. of Sample Tested	1
Sample Condition	Good

Declaration,

1. The results of testing in this report apply only to the sample product/item, which was tested.
2. EAMP Laboratories has not participated in the sample selection.
3. This Test Report shall not be reproduced wholly or in part without the prior written approval of the EAMP Laboratories.
4. Client has to make arrangement for taking back the sample **within one week** after the issue of the test report. After this period EAMP Laboratories reserves the right to dispose the Item.

Additional Info

Test Report No	22.11.23.04	
Issue Date	24.11.2022	Page 2 of 6

Name of Test: Photometry & Colorimetry Test Report

Applicable Test Standards or Test Methods	IES LM 79: 2008, Cl. No.9, 10 & 11
	IS 16106: 2012, Cl. No. 11, 12 & 13

Test Date(s)	24.11.2022
---------------------	------------

Equipment and Calibration Details

Sr. No.	Name of Instruments	Lab ID No.	Due Date	Traceable to
1	Moving Mirror Type C Goniophotometer GMS 3000	EAMP-E-001	11.02.2023	CSIR-NPL, New Delhi
2	Halolux Ceram Standard Lamp 230Vac, 150W E27	EAMP-SL-001	27.06.2023	ERDA, Vadodara
3	Spectral Standard Lamp 30Vdc, 6A E-27	EAMP-SL-002	27.06.2023	ERDA, Vadodara

Possible Test Case Verdicts

Test case does not applied to SUT	NA
Test case does meet the requirements	P (Pass)
Test case does not meet the requirements	F (Fail)
SUT	Sample under Test

Environmental Contions

Ambient Temperature (°C)	Relative Humidity (%RH)	Air Pressure (hPa)
25.4°C	47.0%	--

Marking Label:

NA

Test Report No	22.11.23.04	
Issue Date	24.11.2022	Page 3 of 6

1.1. Test Details:

No. of Hours operated prior to measurement	0 Hrs
Total Operating time of product for measurement including stabilization	78 Minutes
Orientation (burning position) of SSL product during test	Normal Burning Position
Photometric Distance of Goniophotometer	20.80m

Rated Electrical Values and Nominal CCT				
Voltage	Current	Power	Frequency	CCT
230Vac	--	200W	50Hz	--
Light Source			Driver / Ballast	
Make/Specifications	Quantity	Make/Specifications	Quantity	
--	--	--	--	

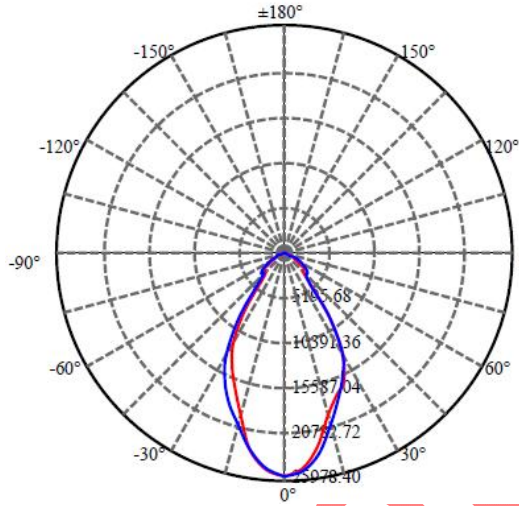
1.2. Test Observation

S. No	Parameters	Units	Results	
Electrical Parameters				
1	Voltage	Vac	230.82	
2	Current	A	0.8950	
3	Power	W	204.89	
4	Power Factor		0.9921	
5	Frequency	Hz	50	
Photometric Parameter				
1	Luminous Flux	lm	24872.01	
2	Luminous Efficacy	lm/W	121.39	
3	Luminous Intensity (Central)	cd	25978.400	
4	Luminous Intensity (Maximum)	cd	25490.990	
5	Beam Angle	°	Vert. Spread	Horiz. Spread
			58.5	61.0

Test Report No	22.11.23.04	
Issue Date	24.11.2022	Page 4 of 6

Photometric Graphs

Light Distribution Curve



Lux distance Curve

Illuminance at a Distance

	Center Beam LUX	Beam Width	
		V	H
2m	6372.75 LUX	2.2m	2.4m
4m	1593.19 LUX	4.5m	4.7m
6m	708.08 LUX	6.7m	7.1m
8m	398.30 LUX	9.0m	9.4m
10m	254.91 LUX	11.2m	11.8m
12m	177.02 LUX	13.4m	14.1m

Vert. Spread: 58.5

Horiz. Spread: 61.0

Test Report No	22.11.23.04
Issue Date	24.11.2022

Intensity Data													
C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	55.0	
0.0	25490.99	24557.16	22337.30	19210.29	17193.21	16019.25	13276.45	8827.13	4273.22	2950.38	2929.57	2452.51	
22.5	25490.99	24600.46	22565.71	19278.81	16796.10	14874.69	12467.54	8518.41	4647.53	2582.02	2140.53	2041.22	
45.0	25490.99	24572.50	22503.18	19396.50	15538.81	12848.15	10770.19	9081.77	6338.71	3677.23	2283.82	1585.22	
67.5	25490.99	24725.94	22778.03	19864.31	17107.94	14367.85	10798.68	7906.11	4520.88	2846.44	2480.19	2468.80	
90.0	25490.99	24886.27	23132.03	20299.09	17852.96	15760.94	13102.34	8935.19	4707.58	3455.09	3502.49	3054.67	
112.5	25491.00	24840.60	22933.15	19932.60	16729.83	14068.14	10879.04	8159.96	4520.50	2742.58	2345.78	2309.71	
135.0	25490.99	24913.28	23020.57	19999.95	15851.40	12803.27	10551.28	8736.70	6015.94	3343.05	2214.57	1579.64	
157.5	25491.00	24904.49	22873.84	19343.72	16101.32	13024.92	11030.24	7303.69	4094.49	2483.26	2110.32	1983.62	
180.0	25490.99	24797.29	22662.81	19108.91	16414.13	14204.95	11712.94	7812.19	3970.13	2966.92	2918.90	2182.50	
202.5	25490.99	24827.14	22646.67	19241.03	16137.64	13055.84	10907.75	7205.27	3799.63	2417.95	2196.66	2048.78	
225.0	25490.99	24577.90	22260.05	19201.99	15247.05	12626.63	10287.17	8839.18	5732.50	3171.52	2137.40	1477.70	
247.5	25490.99	24546.88	22387.37	19772.07	17308.70	14807.35	11589.78	7997.81	4324.46	2718.39	2152.46	2125.88	
270.0	25490.99	24662.90	22619.92	20211.92	18228.87	16120.51	13303.91	8803.90	4598.08	3339.60	3486.69	2854.73	
292.5	25491.00	24720.36	22665.34	19621.07	16817.28	14155.59	11253.42	7963.20	4279.47	2710.88	2397.16	2388.96	
315.0	25490.99	24616.17	22503.38	19323.20	15669.84	13133.39	11268.20	9298.46	6371.37	3565.33	2168.36	1496.01	
337.5	25491.00	24672.10	22464.39	18884.47	16117.92	14043.01	11741.24	8349.45	4703.14	2755.48	2081.55	2021.80	
360.0	25490.99	24557.16	22337.30	19210.29	17193.21	16019.25	13276.45	8827.13	4273.22	2950.38	2929.57	2452.51	
C/γ(°)	60.0	65.0	70.0	75.0	80.0	85.0	90.0	95.0	100.0	105.0	110.0	115.0	
0.0	1422.63	903.42	427.96	175.56	27.21	7.47	2.13	1.60	2.13	2.13	2.67	3.74	
22.5	1539.28	836.57	419.36	186.20	31.84	8.10	2.16	1.62	1.62	2.16	2.70	3.24	
45.0	1069.24	835.29	619.18	308.51	68.62	9.18	2.16	1.62	2.16	1.62	2.70	3.24	
67.5	1956.59	1079.76	590.34	316.87	104.18	11.39	2.17	2.17	2.17	2.17	2.71	3.80	
90.0	2051.16	1212.72	763.80	367.19	110.59	12.53	2.72	2.18	2.18	2.72	3.27	3.81	
112.5	1770.82	1002.37	559.12	289.12	112.04	12.57	2.73	2.19	2.19	2.19	2.73	3.83	
135.0	1054.19	754.33	599.72	326.27	86.38	12.10	2.20	2.20	2.20	2.20	2.20	3.30	
157.5	1418.13	868.70	434.35	201.96	43.71	11.62	2.21	2.21	1.66	2.21	2.77	3.32	
180.0	1390.08	870.87	416.76	178.23	40.02	10.14	2.13	1.60	2.13	1.60	2.67	3.20	
202.5	1360.10	783.67	417.74	173.25	39.94	10.25	1.62	1.62	1.62	2.16	2.16	3.24	
225.0	955.24	721.83	554.88	287.44	68.62	10.27	2.16	1.62	1.62	2.16	2.70	3.24	
247.5	1508.41	884.43	489.96	262.61	80.30	10.85	2.17	2.17	2.17	2.71	2.71	3.26	
270.0	1776.03	1110.84	699.52	337.77	91.53	10.90	1.63	1.63	2.18	2.72	3.27	3.81	
292.5	1710.70	920.39	514.85	269.99	78.70	9.84	1.64	1.64	1.64	2.19	2.73	3.28	
315.0	1012.38	749.38	573.86	299.86	58.32	7.70	2.20	1.65	1.65	2.20	2.75	3.30	
337.5	1535.44	818.90	422.73	180.93	31.54	7.75	1.66	1.66	1.66	2.77	2.77	3.32	
360.0	1422.63	903.42	427.96	175.56	27.21	7.47	2.13	1.60	2.13	2.13	2.67	3.74	
C/γ(°)	120.0	125.0	130.0	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0	180.0
0.0	4.80	5.87	8.54	11.21	13.87	17.61	21.34	25.08	28.28	31.48	33.62	36.29	37.89
22.5	4.32	5.94	8.10	10.79	14.03	17.81	21.05	24.83	28.61	31.30	33.46	35.62	36.70
45.0	4.32	6.48	8.10	10.81	14.05	17.83	21.61	25.39	28.64	31.34	33.50	35.66	36.74
67.5	4.34	6.51	9.22	11.94	15.19	18.45	22.25	26.04	28.76	31.47	33.64	35.81	36.35
90.0	4.36	6.54	8.72	11.44	14.71	18.52	21.79	25.06	28.87	31.60	33.78	35.41	35.96
112.5	4.92	6.56	8.74	12.02	15.30	18.04	22.41	25.69	28.97	31.70	33.34	35.53	36.62
135.0	4.40	6.05	8.25	11.55	14.86	18.16	22.01	25.31	29.16	31.91	33.56	35.76	36.86
157.5	4.43	6.09	8.85	11.62	14.39	18.26	22.13	25.45	28.77	31.54	33.75	35.97	37.07
180.0	3.74	5.87	8.00	11.21	13.87	17.08	20.28	24.01	27.21	30.95	33.62	34.69	37.89
202.5	3.78	5.94	8.64	11.33	14.03	17.27	21.05	24.29	28.07	30.76	33.46	34.00	36.70
225.0	4.32	5.94	8.10	10.81	13.51	17.29	21.07	24.85	28.10	30.80	33.50	34.58	36.74
247.5	4.34	6.51	8.14	11.39	14.11	17.36	21.70	24.96	28.21	31.47	33.64	34.18	36.35
270.0	4.90	5.99	8.72	11.44	14.16	17.43	21.25	24.52	27.78	31.05	33.78	34.32	35.96
292.5	4.37	6.01	8.74	11.48	14.21	17.49	21.32	24.59	27.87	30.61	33.34	34.43	36.62
315.0	4.95	6.05	8.25	11.00	13.20	17.06	20.91	24.76	28.06	30.81	33.56	34.66	36.86
337.5	4.43	6.09	7.75	10.51	13.28	16.60	20.47	24.35	28.22	30.99	33.75	34.31	37.07
360.0	4.80	5.87	8.54	11.21	13.87	17.61	21.34	25.08	28.28	31.48	33.62	36.29	37.89

1.3.Conclusion: NA

Test Report No	22.11.23.04	
Issue Date	24.11.2022	Page 6 of 6

Photographs



End of Report

Draft Report