

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P208805

Luminaire Tested: **LDSQA6A30830D010TE LAR35FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208805
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29057)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA6A30830D010TE LAR35FL 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3201.4 lumens
Efficiency: N/A
Efficacy: 71.7 lumens/watt
Spacing Criteria (0/90/45): 0.6 / 0.59 / 0.55
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

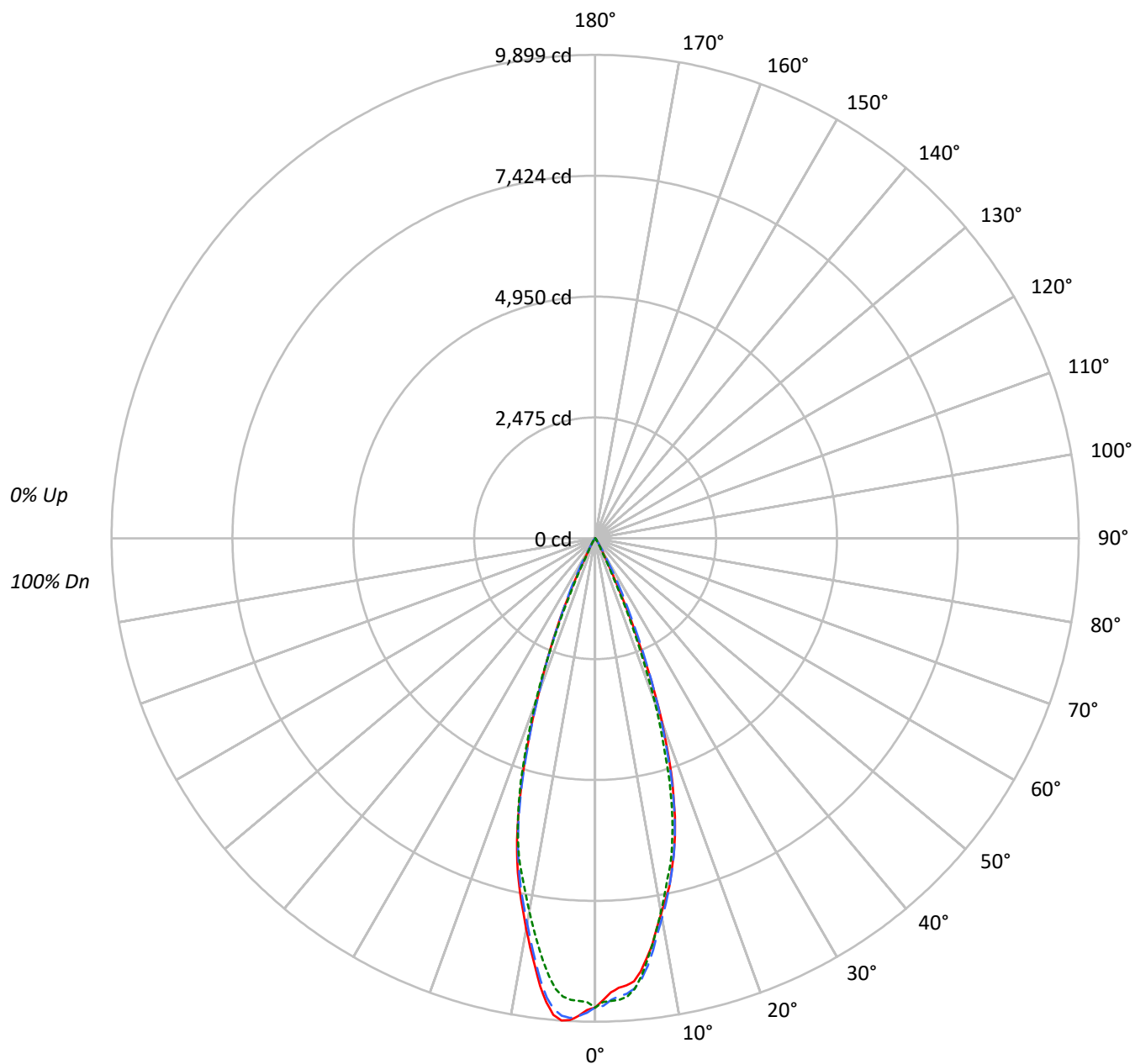
Input Watts (W): 44.62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	96	96
2	111	107	104	102	109	106	103	101	103	100	98	100	98	96	97	96	94	93	93	93
3	107	103	99	96	106	101	98	95	99	96	94	96	94	92	94	92	91	90	90	90
4	104	98	94	91	102	97	93	91	95	92	90	93	91	89	92	89	88	86	86	86
5	101	94	90	87	99	94	90	87	92	89	86	90	88	85	89	87	85	83	83	83
6	97	91	87	84	96	90	86	83	89	85	83	88	85	82	87	84	82	81	81	81
7	94	88	83	80	93	87	83	80	86	82	80	85	82	79	84	81	79	78	78	78
8	92	85	80	77	91	84	80	77	83	80	77	82	79	77	82	79	76	75	75	75
9	89	82	78	75	88	82	78	75	81	77	75	80	77	74	79	76	74	73	73	73
10	86	79	75	72	86	79	75	72	78	75	72	78	74	72	77	74	72	71	71	71

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	413860	413860	413860
5°	393705	400538	423376
10°	341107	339262	355018
15°	281671	272827	273964
20°	183198	163216	155564
25°	55055	42086	56034
30°	12011	8740	9277
35°	4284	2633	2891
40°	1270	826	995
45°	359	237	298
50°	67	67	134
55°	75	0	150
60°	86	0	0
65°	102	0	0
70°	126	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	846.7	26.4
10°-20°	1643.5	51.3
20°-30°	649.4	20.3
30°-40°	53.4	1.7
40°-50°	7.3	0.2
50°-60°	0.9	0.0
60°-70°	0.2	0.0
70°-80°	0.1	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	3139.6	98.1
0°-40°	3193.0	99.7
0°-60°	3201.2	100.0
0°-90°	3201.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3201.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9612	9612	9612	9612	9612	
5°	9109	9255	9267	9684	9796	824
15°	6319	6302	6121	6071	6146	1689
25°	1159	1566	886	1298	1180	651
35°	82	82	50	70	55	61
45°	6	14	4	11	5	6
55°	1	1	0	1	2	1
65°	1	0	0	0	0	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	9612.2	9612.2	9612.2	9612.2	9612.2	9612.2	9612.2	9612.2	9612.2
1°	9457.0	9348.9	9574.8	9566.0	9495.3	9694.7	9715.3	9843.9	9661.3
2°	9304.8	9219.3	9457.0	9481.5	9481.5	9730.0	9794.8	9955.9	9788.0
3°	9216.4	9145.6	9393.1	9458.0	9464.8	9741.8	9837.1	10017.8	9880.3
4°	9178.1	9113.2	9348.0	9398.1	9407.9	9700.6	9800.7	10007.0	9898.9
5°	9109.3	9036.6	9254.7	9262.5	9267.4	9567.0	9683.9	9888.1	9795.8
6°	8914.8	8876.5	9075.9	9032.7	9018.9	9339.1	9458.0	9648.5	9555.2
7°	8660.5	8634.9	8822.5	8756.7	8722.3	9020.9	9130.9	9311.6	9238.0
8°	8400.2	8338.3	8517.1	8460.1	8402.2	8659.5	8755.7	8922.7	8854.0
9°	8075.1	8043.7	8176.3	8157.6	8079.0	8343.2	8378.6	8541.6	8485.7
10°	7802.1	7763.8	7897.4	7862.0	7759.9	7990.7	8015.2	8171.4	8120.3
11°	7536.9	7486.8	7600.7	7555.6	7440.7	7647.9	7664.6	7809.9	7757.9
12°	7293.3	7211.8	7301.2	7247.2	7125.4	7308.1	7315.9	7452.4	7404.3
13°	6971.2	6917.2	6987.9	6929.9	6852.4	6955.5	6939.8	7069.4	7025.2
14°	6660.8	6593.1	6657.9	6588.2	6506.6	6575.4	6530.2	6643.2	6608.8
15°	6319.1	6251.3	6302.4	6216.9	6120.7	6146.2	6070.6	6175.7	6146.2
16°	5921.3	5853.5	5897.7	5793.6	5679.7	5665.0	5564.8	5657.1	5626.7
17°	5472.5	5423.4	5453.8	5323.2	5203.4	5152.3	5019.7	5101.2	5070.8
18°	5045.2	4949.0	4961.7	4816.4	4633.7	4602.3	4453.0	4530.6	4500.1
19°	4485.4	4440.2	4447.1	4283.1	4098.5	4040.5	3892.2	3961.0	3926.6
20°	3998.3	3929.5	3923.6	3745.9	3562.2	3501.3	3357.9	3428.6	3395.2
21°	3441.4	3483.6	3410.0	3222.4	2995.5	3001.4	2874.7	2881.6	2904.2
22°	2814.8	2969.0	2906.1	2684.2	2400.3	2531.0	2417.0	2424.9	2444.5
23°	2195.1	2355.2	2412.1	2143.0	1834.6	2094.9	2004.5	2010.4	2023.2
24°	1629.4	1855.3	1957.4	1649.0	1321.0	1685.3	1634.3	1641.1	1627.4
25°	1158.9	1424.1	1566.5	1217.8	885.9	1309.2	1298.4	1309.2	1179.5
26°	782.8	1073.5	1235.5	854.5	548.0	967.4	1033.2	1009.6	765.1
27°	500.9	816.2	949.7	558.8	347.7	665.9	771.0	764.1	439.0
28°	352.6	566.7	701.2	343.7	268.1	418.4	551.0	502.9	280.9
29°	297.6	368.3	489.1	244.6	218.0	247.5	369.3	293.7	229.8
30°	241.6	244.6	321.2	197.4	175.8	176.8	235.7	192.5	186.6
32.5°	147.3	146.3	138.5	115.9	103.1	103.1	114.9	111.0	110.0
35°	81.5	89.4	82.5	69.7	50.1	61.9	69.7	65.8	55.0
37.5°	44.2	52.1	57.0	38.3	27.5	36.3	47.1	38.3	31.4
40°	22.6	28.5	40.3	21.6	14.7	20.6	32.4	21.6	17.7
42.5°	11.8	15.7	25.5	11.8	6.9	11.8	20.6	11.8	8.8
45°	5.9	7.9	13.7	5.9	3.9	5.9	10.8	6.9	4.9
47.5°	2.9	3.9	6.9	2.9	1.0	2.9	5.9	2.9	2.9
50°	1.0	2.0	3.9	1.0	1.0	1.0	2.9	2.0	2.0
52.5°	1.0	1.0	2.0	1.0	0.0	1.0	2.0	1.0	2.0
55°	1.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	2.0
57.5°	1.0	1.0	1.0	0.0	0.0	0.0	1.0	1.0	2.0
60°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - 90°-270°







62.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)