

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: P208807

Luminaire Tested: **LDSQA6A30840D010TE LAR35FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208807
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: LDSQA6A30840D010TE LAR35FL 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3417.6 lumens
Efficiency: N/A
Efficacy: 76.6 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

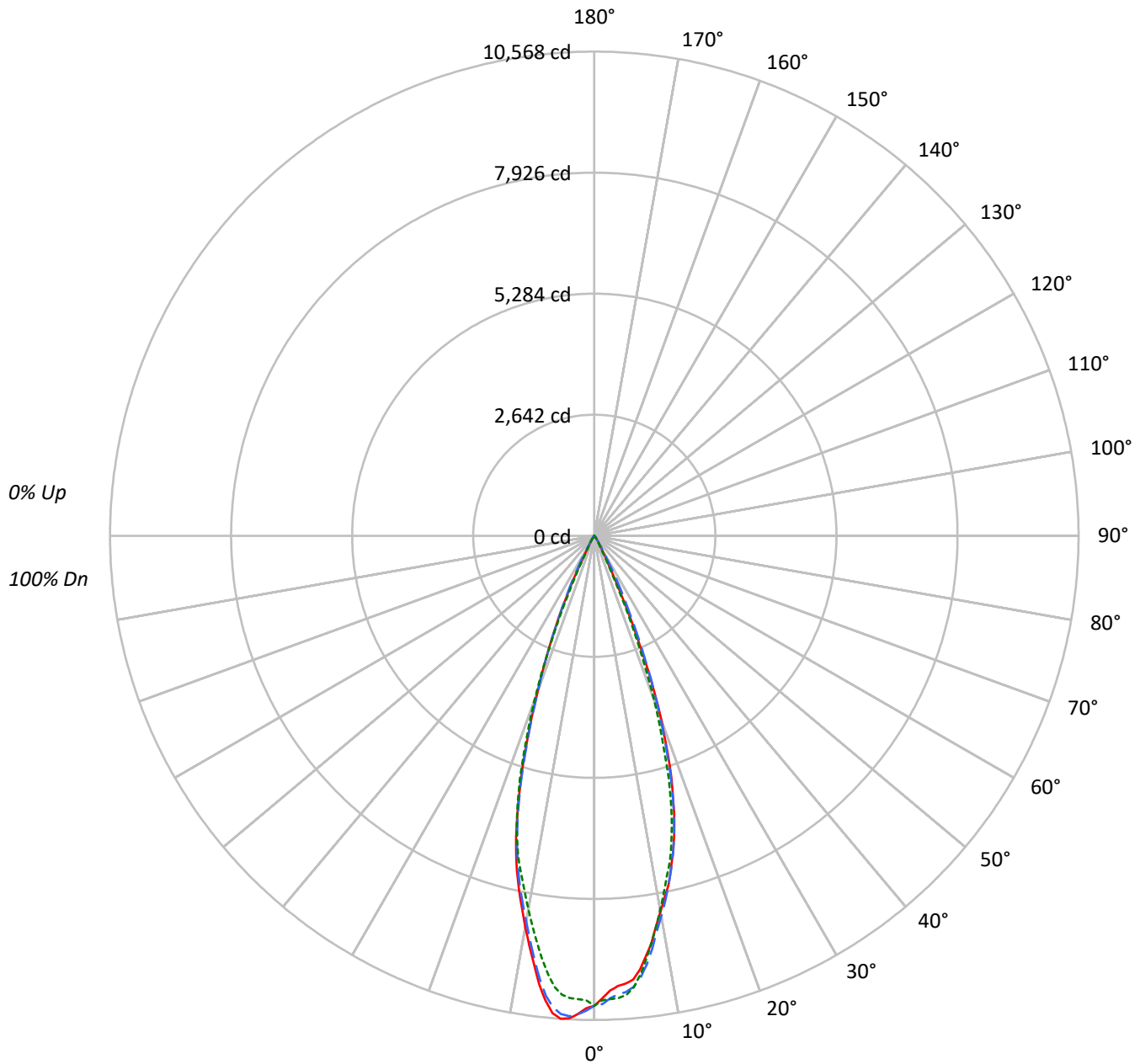
Input Watts (W): 44.62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	441811	441811	441811
5°	420298	427594	451974
10°	364147	362175	378999
15°	300695	291254	292467
20°	195569	174240	166075
25°	58775	44927	59820
30°	12822	9332	9904
35°	4573	2812	3085
40°	1355	882	1062
45°	384	256	317
50°	67	67	141
55°	75	0	158
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°	903.9	26.4
10°-20°	1754.5	51.3
20°-30°	693.3	20.3
30°-40°	57.0	1.7
40°-50°	7.8	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°	3351.7	98.1
0°-40°	3408.7	99.7
0°-60°	3417.3	100.0
0°-90°	3417.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3417.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	10261	10261	10261	10261	10261	
5°	9725	9880	9893	10338	10458	879
15°	6746	6728	6534	6481	6561	1803
25°	1237	1672	946	1386	1259	695
35°	87	88	54	74	59	65
45°	6	15	4	12	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	10261.4	10261.4	10261.4	10261.4	10261.4	10261.4	10261.4	10261.4	10261.4
1°	10095.7	9980.4	10221.6	10212.1	10136.6	10349.5	10371.5	10508.8	10313.8
2°	9933.2	9842.0	10095.7	10122.0	10122.0	10387.2	10456.4	10628.4	10449.1
3°	9838.9	9763.4	10027.6	10096.8	10104.1	10399.8	10501.5	10694.4	10547.6
4°	9798.0	9728.8	9979.4	10032.8	10043.3	10355.8	10462.7	10682.9	10567.6
5°	9724.6	9647.0	9879.8	9888.1	9893.4	10213.2	10337.9	10556.0	10457.5
6°	9517.0	9476.1	9688.9	9642.8	9628.1	9969.9	10096.8	10300.2	10200.6
7°	9245.4	9218.2	9418.4	9348.2	9311.5	9630.2	9747.7	9940.6	9861.9
8°	8967.6	8901.5	9092.4	9031.5	8969.7	9244.4	9347.1	9525.4	9452.0
9°	8620.5	8587.0	8728.5	8708.6	8624.7	8906.8	8944.5	9118.6	9058.8
10°	8329.1	8288.2	8430.8	8393.0	8284.0	8530.4	8556.6	8723.3	8668.8
11°	8046.0	7992.5	8114.1	8065.9	7943.2	8164.5	8182.3	8337.5	8281.9
12°	7786.0	7698.9	7794.3	7736.7	7606.7	7801.7	7810.1	7955.8	7904.4
13°	7442.1	7384.4	7459.9	7398.0	7315.2	7425.3	7408.5	7546.9	7499.7
14°	7110.7	7038.4	7107.6	7033.2	6946.1	7019.5	6971.3	7091.9	7055.2
15°	6745.9	6673.5	6728.1	6636.8	6534.1	6561.3	6480.6	6592.8	6561.3
16°	6321.2	6248.9	6296.1	6184.9	6063.3	6047.6	5940.6	6039.2	6006.7
17°	5842.1	5789.7	5822.2	5682.7	5554.8	5500.3	5358.7	5445.8	5413.3
18°	5386.0	5283.3	5296.9	5141.7	4946.7	4913.1	4753.8	4836.6	4804.1
19°	4788.4	4740.1	4747.5	4572.4	4375.3	4313.4	4155.1	4228.5	4191.8
20°	4268.3	4194.9	4188.6	3998.9	3802.8	3737.8	3584.7	3660.2	3624.6
21°	3673.8	3718.9	3640.3	3440.0	3197.8	3204.1	3068.9	3076.2	3100.3
22°	3004.9	3169.5	3102.4	2865.5	2562.5	2701.9	2580.3	2588.7	2609.6
23°	2343.3	2514.2	2575.0	2287.8	1958.5	2236.4	2139.9	2146.2	2159.9
24°	1739.4	1980.6	2089.6	1760.4	1410.2	1799.2	1744.7	1752.0	1737.3
25°	1237.2	1520.3	1672.3	1300.1	945.7	1397.6	1386.1	1397.6	1259.2
26°	835.6	1146.0	1319.0	912.2	585.0	1032.7	1103.0	1077.8	816.8
27°	534.7	871.3	1013.9	596.6	371.2	710.9	823.1	815.7	468.7
28°	376.4	605.0	748.6	367.0	286.2	446.6	588.2	536.8	299.9
29°	317.7	393.2	522.1	261.1	232.8	264.2	394.2	313.5	245.3
30°	257.9	261.1	342.9	210.7	187.7	188.7	251.6	205.5	199.2
32.5°	157.3	156.2	147.8	123.7	110.1	110.1	122.7	118.5	117.4
35°	87.0	95.4	88.1	74.4	53.5	66.1	74.4	70.2	58.7
37.5°	47.2	55.6	60.8	40.9	29.4	38.8	50.3	40.9	33.6
40°	24.1	30.4	43.0	23.1	15.7	22.0	34.6	23.1	18.9
42.5°	12.6	16.8	27.3	12.6	7.3	12.6	22.0	12.6	9.4
45°	6.3	8.4	14.7	6.3	4.2	6.3	11.5	7.3	5.2
47.5°	3.1	4.2	7.3	3.1	1.0	3.1	6.3	3.1	3.1
50°	1.0	2.1	4.2	1.0	1.0	1.0	3.1	2.1	2.1
52.5°	1.0	1.0	2.1	1.0	0.0	1.0	2.1	1.0	2.1
55°	1.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	2.1
57.5°	1.0	1.0	1.0	0.0	0.0	0.0	1.0	1.0	2.1
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)