

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: P208780

Luminaire Tested: **LDSQA6A10827D010TE LAR35FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208780
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: LDSQA6A10827D010TE LAR35FL 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1244.1 lumens
Efficiency: N/A
Efficacy: 90.6 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

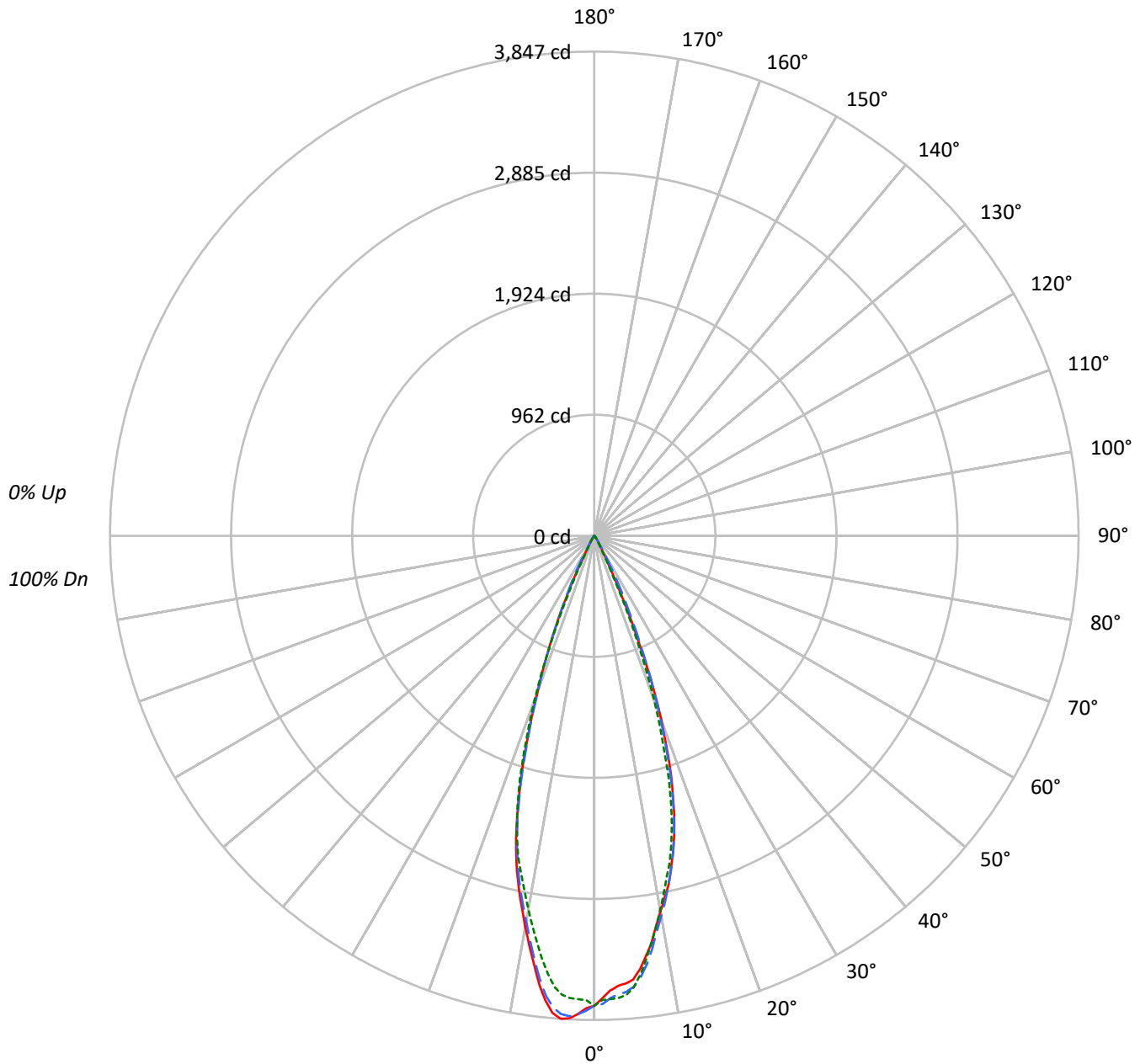
Input Watts (W): 13.73
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	93	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°	160826	160826	160826
5°	152995	155649	164522
10°	132554	131837	137958
15°	109457	106020	106462
20°	71189	63427	60453
25°	21397	16357	21777
30°	4668	3396	3604
35°	1666	1025	1125
40°	495	320	388
45°	140	91	116
50°	27	27	54
55°	30	0	60
60°	34	0	0
65°	41	0	0
70°	50	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°	329.0	26.4
10°-20°	638.7	51.3
20°-30°	252.3	20.3
30°-40°	20.7	1.7
40°-50°	2.8	0.2
50°-60°	0.3	0.0
60°-70°	0.1	0.0
70°-80°	0.0	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°	1220.0	98.1
0°-40°	1240.8	99.7
0°-60°	1244.0	100.0
0°-90°	1244.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1244.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3735	3735	3735	3735	3735	
5°	3540	3596	3601	3763	3807	320
15°	2456	2449	2378	2359	2388	656
25°	450	609	344	504	458	253
35°	32	32	20	27	21	24
45°	2	5	2	4	2	2
55°	0	0	0	0	1	0
65°	0	0	0	0	0	0
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°	3735.3	3735.3	3735.3	3735.3	3735.3	3735.3	3735.3	3735.3	3735.3
1°	3675.0	3633.0	3720.8	3717.3	3689.8	3767.3	3775.3	3825.3	3754.3
2°	3615.8	3582.6	3675.0	3684.5	3684.5	3781.1	3806.3	3868.8	3803.6
3°	3581.5	3554.0	3650.2	3675.3	3678.0	3785.6	3822.7	3892.9	3839.5
4°	3566.6	3541.4	3632.6	3652.1	3655.9	3769.6	3808.5	3888.7	3846.7
5°	3539.9	3511.6	3596.3	3599.4	3601.3	3717.7	3763.1	3842.5	3806.6
6°	3464.3	3449.4	3526.9	3510.1	3504.7	3629.2	3675.3	3749.4	3713.1
7°	3365.4	3355.5	3428.4	3402.8	3389.5	3505.5	3548.3	3618.5	3589.9
8°	3264.3	3240.3	3309.7	3287.6	3265.1	3365.1	3402.5	3467.3	3440.6
9°	3138.0	3125.8	3177.3	3170.0	3139.5	3242.2	3255.9	3319.3	3297.5
10°	3031.9	3017.0	3068.9	3055.2	3015.5	3105.2	3114.7	3175.4	3155.5
11°	2928.8	2909.4	2953.6	2936.1	2891.4	2972.0	2978.4	3034.9	3014.7
12°	2834.2	2802.5	2837.2	2816.2	2768.9	2839.9	2843.0	2896.0	2877.3
13°	2709.0	2688.0	2715.5	2693.0	2662.8	2702.9	2696.8	2747.2	2730.0
14°	2588.4	2562.1	2587.2	2560.1	2528.5	2555.2	2537.6	2581.5	2568.2
15°	2455.6	2429.2	2449.1	2415.9	2378.5	2388.4	2359.0	2399.9	2388.4
16°	2301.0	2274.7	2291.8	2251.4	2207.1	2201.4	2162.5	2198.3	2186.5
17°	2126.6	2107.5	2119.3	2068.6	2022.0	2002.2	1950.6	1982.3	1970.5
18°	1960.6	1923.2	1928.1	1871.6	1800.7	1788.4	1730.4	1760.6	1748.7
19°	1743.0	1725.5	1728.1	1664.4	1592.6	1570.1	1512.5	1539.2	1525.9
20°	1553.7	1527.0	1524.7	1455.6	1384.3	1360.6	1304.9	1332.4	1319.4
21°	1337.3	1353.7	1325.1	1252.2	1164.0	1166.3	1117.1	1119.8	1128.6
22°	1093.8	1153.7	1129.3	1043.1	932.8	983.5	939.3	942.3	949.9
23°	853.0	915.2	937.3	832.8	712.9	814.1	779.0	781.2	786.2
24°	633.2	720.9	760.6	640.8	513.3	654.9	635.1	637.7	632.4
25°	450.4	553.4	608.7	473.3	344.3	508.7	504.5	508.7	458.4
26°	304.2	417.1	480.1	332.0	213.0	375.9	401.5	392.3	297.3
27°	194.6	317.2	369.1	217.2	135.1	258.8	299.6	296.9	170.6
28°	137.0	220.2	272.5	133.6	104.2	162.6	214.1	195.4	109.2
29°	115.6	143.1	190.1	95.0	84.7	96.2	143.5	114.1	89.3
30°	93.9	95.0	124.8	76.7	68.3	68.7	91.6	74.8	72.5
32.5°	57.2	56.9	53.8	45.0	40.1	40.1	44.7	43.1	42.7
35°	31.7	34.7	32.1	27.1	19.5	24.0	27.1	25.6	21.4
37.5°	17.2	20.2	22.1	14.9	10.7	14.1	18.3	14.9	12.2
40°	8.8	11.1	15.6	8.4	5.7	8.0	12.6	8.4	6.9
42.5°	4.6	6.1	9.9	4.6	2.7	4.6	8.0	4.6	3.4
45°	2.3	3.1	5.3	2.3	1.5	2.3	4.2	2.7	1.9
47.5°	1.1	1.5	2.7	1.1	0.4	1.1	2.3	1.1	1.1
50°	0.4	0.8	1.5	0.4	0.4	0.4	1.1	0.8	0.8
52.5°	0.4	0.4	0.8	0.4	0.0	0.4	0.8	0.4	0.8
55°	0.4	0.4	0.4	0.0	0.0	0.4	0.4	0.4	0.8
57.5°	0.4	0.4	0.4	0.0	0.0	0.0	0.4	0.4	0.8
60°	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.4	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.4	0.4	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



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— 0°-180° - - 45°-225° - - - 90°-270°







62.5°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)