

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: P208811

Luminaire Tested: **LDSQA6A30940D010TE LAR35FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208811
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: LDSQA6A30940D010TE LAR35FL 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2871.5 lumens
Efficiency: N/A
Efficacy: 64.4 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

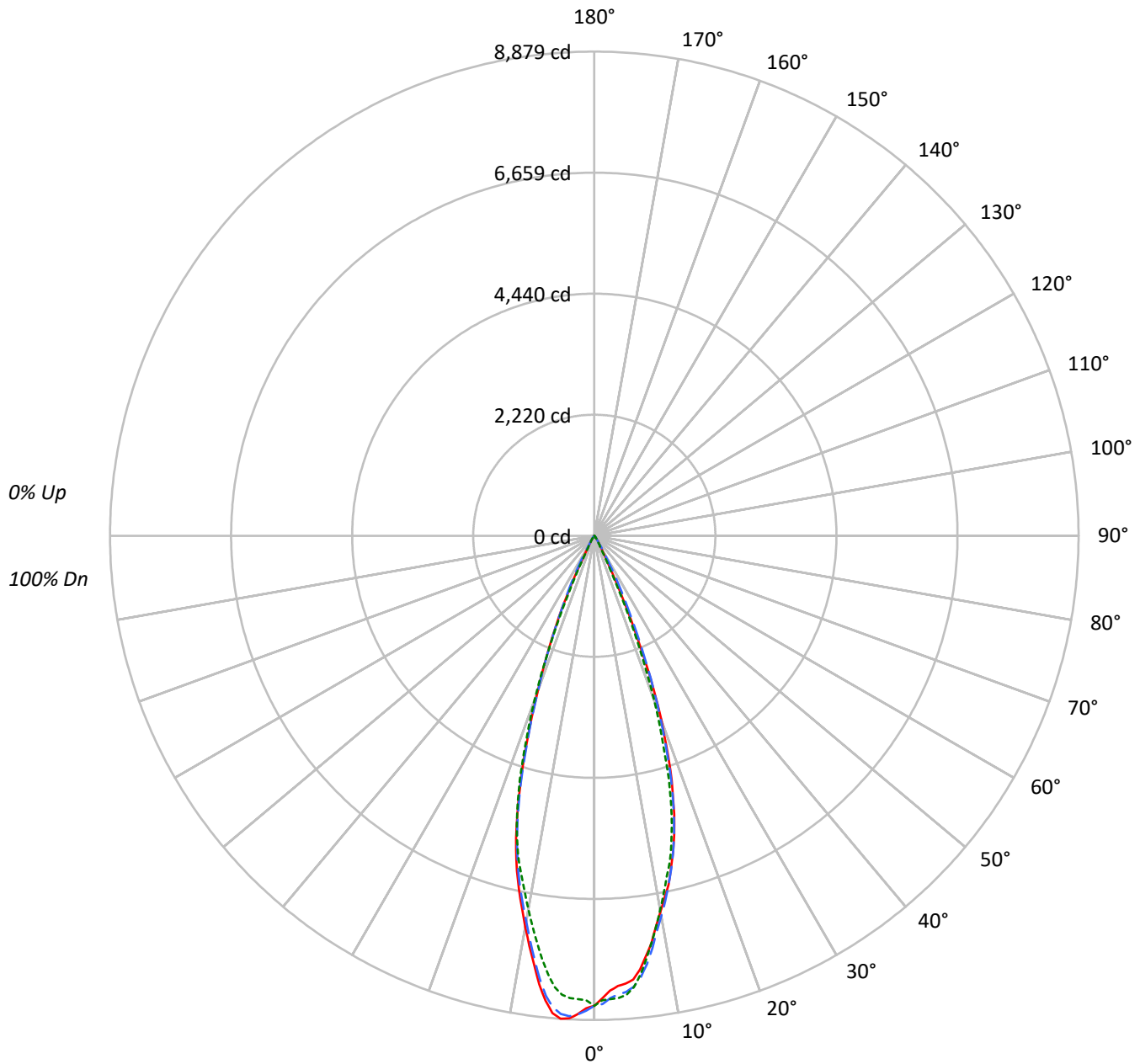
Input Watts (W): 44.62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	371204	371204	371204
5°	353126	359259	379741
10°	305952	304295	318429
15°	252639	244705	245726
20°	164316	146396	139532
25°	49383	37749	50262
30°	10774	7840	8323
35°	3842	2360	2591
40°	1141	742	894
45°	323	213	268
50°	60	60	121
55°	68	0	135
60°	78	0	0
65°	92	0	0
70°	113	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°	759.4	26.4
10°-20°	1474.1	51.3
20°-30°	582.5	20.3
30°-40°	47.9	1.7
40°-50°	6.6	0.2
50°-60°	0.8	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°	2816.0	98.1
0°-40°	2863.9	99.7
0°-60°	2871.2	100.0
0°-90°	2871.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2871.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8622	8622	8622	8622	8622	
5°	8170	8301	8312	8686	8786	739
15°	5668	5653	5490	5445	5513	1515
25°	1040	1405	795	1165	1058	584
35°	73	74	45	62	49	55
45°	5	12	4	10	4	5
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°	8621.5	8621.5	8621.5	8621.5	8621.5	8621.5	8621.5	8621.5	8621.5
1°	8482.3	8385.4	8588.0	8580.1	8516.6	8695.5	8714.0	8829.4	8665.5
2°	8345.8	8269.1	8482.3	8504.3	8504.3	8727.2	8785.3	8929.8	8779.2
3°	8266.5	8203.0	8425.0	8483.2	8489.3	8737.8	8823.2	8985.3	8862.0
4°	8232.1	8174.0	8384.5	8429.4	8438.2	8700.8	8790.6	8975.6	8878.7
5°	8170.4	8105.3	8300.8	8307.9	8312.3	8581.0	8685.8	8869.0	8786.2
6°	7996.0	7961.7	8140.5	8101.7	8089.4	8376.6	8483.2	8654.1	8570.4
7°	7767.9	7745.0	7913.2	7854.2	7823.4	8091.2	8189.8	8351.9	8285.8
8°	7534.4	7478.9	7639.3	7588.2	7536.2	7767.0	7853.3	8003.1	7941.4
9°	7242.9	7214.7	7333.6	7316.8	7246.4	7483.3	7515.1	7661.3	7611.1
10°	6998.0	6963.6	7083.4	7051.7	6960.1	7167.1	7189.1	7329.2	7283.4
11°	6760.1	6715.2	6817.4	6776.8	6673.8	6859.7	6874.6	7005.0	6958.3
12°	6541.6	6468.5	6548.7	6500.2	6391.0	6554.9	6561.9	6684.4	6641.2
13°	6252.7	6204.3	6267.7	6215.7	6146.1	6238.6	6224.5	6340.8	6301.2
14°	5974.3	5913.6	5971.7	5909.2	5836.0	5897.7	5857.2	5958.5	5927.7
15°	5667.8	5607.0	5652.8	5576.2	5489.8	5512.7	5444.9	5539.2	5512.7
16°	5311.0	5250.2	5289.9	5196.5	5094.3	5081.1	4991.2	5074.0	5046.7
17°	4908.4	4864.4	4891.7	4774.5	4667.1	4621.3	4502.3	4575.5	4548.1
18°	4525.2	4438.9	4450.4	4320.0	4156.1	4127.9	3994.1	4063.6	4036.3
19°	4023.1	3982.6	3988.8	3841.7	3676.0	3624.1	3491.1	3552.7	3521.9
20°	3586.2	3524.5	3519.2	3359.8	3195.1	3140.4	3011.8	3075.3	3045.3
21°	3086.7	3124.6	3058.5	2890.3	2686.8	2692.1	2578.4	2584.6	2604.9
22°	2524.7	2663.0	2606.6	2407.5	2152.9	2270.1	2167.9	2175.0	2192.6
23°	1968.8	2112.4	2163.5	1922.1	1645.5	1879.0	1797.9	1803.2	1814.7
24°	1461.4	1664.0	1755.7	1479.0	1184.8	1511.6	1465.8	1472.0	1459.7
25°	1039.5	1277.3	1405.1	1092.3	794.6	1174.3	1164.6	1174.3	1058.0
26°	702.1	962.8	1108.2	766.4	491.5	867.7	926.7	905.6	686.2
27°	449.3	732.0	851.8	501.2	311.8	597.3	691.5	685.3	393.8
28°	316.2	508.3	629.0	308.3	240.5	375.3	494.2	451.0	251.9
29°	266.9	330.3	438.7	219.3	195.6	222.0	331.2	263.4	206.1
30°	216.7	219.3	288.1	177.1	157.7	158.6	211.4	172.7	167.4
32.5°	132.1	131.3	124.2	103.9	92.5	92.5	103.1	99.5	98.7
35°	73.1	80.2	74.0	62.5	44.9	55.5	62.5	59.0	49.3
37.5°	39.6	46.7	51.1	34.4	24.7	32.6	42.3	34.4	28.2
40°	20.3	25.5	36.1	19.4	13.2	18.5	29.1	19.4	15.9
42.5°	10.6	14.1	22.9	10.6	6.2	10.6	18.5	10.6	7.9
45°	5.3	7.0	12.3	5.3	3.5	5.3	9.7	6.2	4.4
47.5°	2.6	3.5	6.2	2.6	0.9	2.6	5.3	2.6	2.6
50°	0.9	1.8	3.5	0.9	0.9	0.9	2.6	1.8	1.8
52.5°	0.9	0.9	1.8	0.9	0.0	0.9	1.8	0.9	1.8
55°	0.9	0.9	0.9	0.0	0.0	0.9	0.9	0.9	1.8
57.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.9	0.9	1.8
60°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.9	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.9	0.9	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°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)