

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: P1219586

Luminaire Tested: **LDSQA6A10950D010TE LARL15SP 6LSQA1H**

Issue Date: 3/3/2020

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

**Test Information**

Test Method: LM-41-14
Report Number: P1219586
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29053)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA6A10950D010TE LARL15SP 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

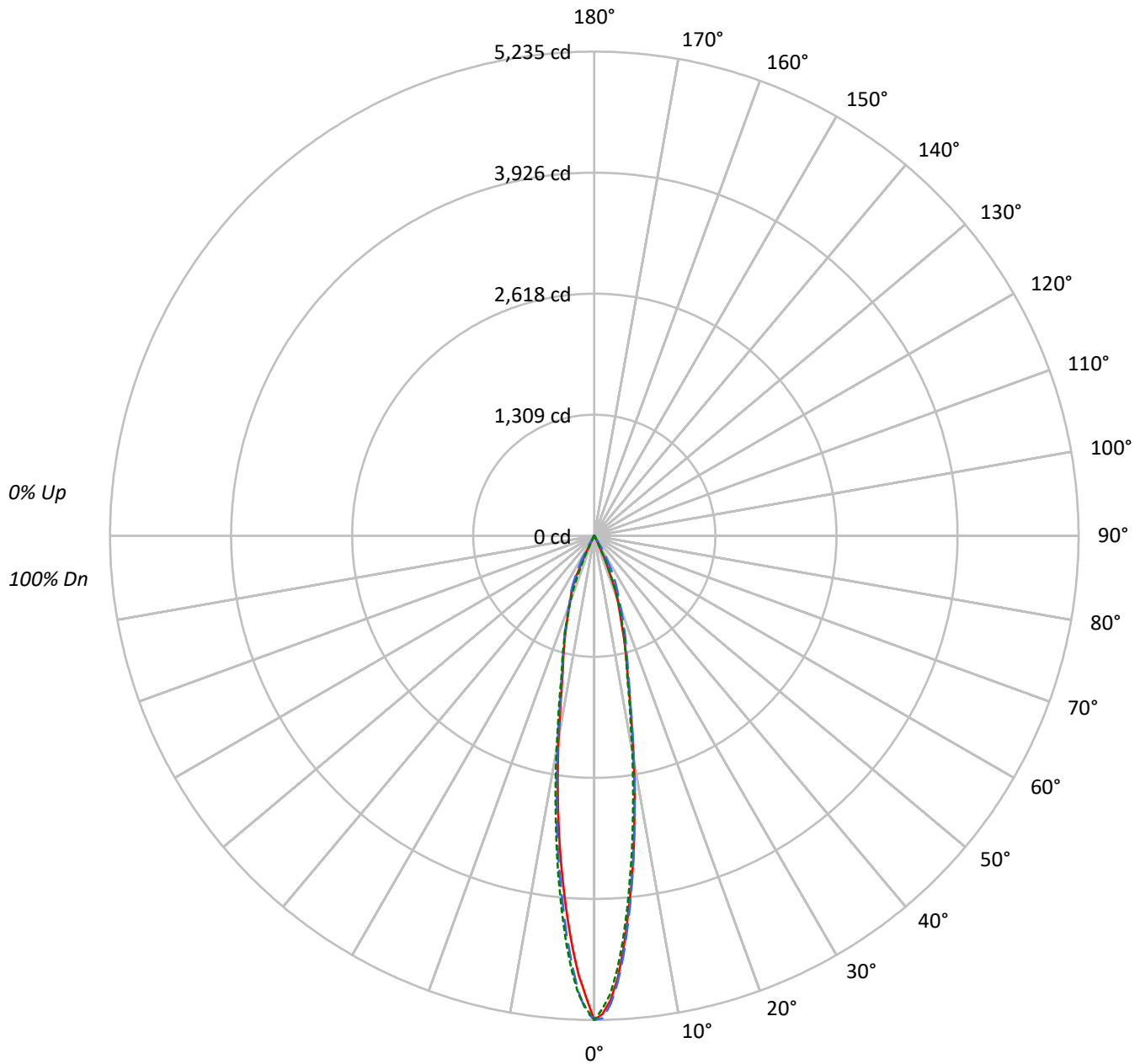
Lumens per Lamp: N/A
Luminaire Lumens: 885.3 lumens
Efficiency: N/A
Efficacy: 71.4 lumens/watt
Spacing Criteria (0/90/45): 0.31 / 0.31 / 0.36
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 12.4
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		
1	115	113	111	110	113	111	109	108	107	106	105	103	102	101	100	99	99	97		
2	112	108	105	103	109	106	104	102	103	101	99	100	99	97	98	96	95	94		
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91		
4	105	100	96	93	103	99	95	93	97	94	91	95	92	90	93	91	90	88		
5	102	96	92	89	101	95	92	89	94	91	88	92	90	88	91	89	87	86		
6	99	93	89	86	98	92	89	86	91	88	85	90	87	85	89	86	84	83		
7	97	90	86	83	95	90	86	83	89	85	83	88	85	82	87	84	82	81		
8	94	88	84	81	93	87	83	81	86	83	80	85	82	80	85	82	80	79		
9	92	85	81	79	91	85	81	79	84	81	78	83	80	78	83	80	78	77		
10	89	83	79	77	89	83	79	76	82	79	76	81	78	76	81	78	76	75		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	225388	225388	225388
5°	179186	175353	164963
10°	106751	102825	96743
15°	58330	58428	56596
20°	33420	34341	35299
25°	8822	9169	16475
30°	1203	1114	1074
35°	484	463	442
40°	180	180	180
45°	91	61	91
50°	47	20	67
55°	23	0	53
60°	26	0	0
65°	31	0	0
70°	38	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°	332.4	37.6
10°-20°	374.1	42.3
20°-30°	166.6	18.8
30°-40°	10.2	1.1
40°-50°	1.6	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°	873.1	98.6
0°-40°	883.3	99.8
0°-60°	885.2	100.0
0°-90°	885.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	885.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5235	5235	5235	5235	5235	
5°	4146	4194	4057	3962	3817	341
15°	1309	1366	1311	1302	1270	369
25°	186	496	193	479	347	109
35°	9	15	9	15	8	7
45°	2	2	1	2	2	1
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°	5234.8	5234.8	5234.8	5234.8	5234.8	5234.8	5234.8	5234.8	5234.8
1°	5170.7	5218.1	5218.1	5206.7	5112.3	5182.4	5142.8	5100.3	4989.3
2°	5022.0	5070.1	5065.3	5022.0	4953.7	4982.7	4928.4	4875.5	4759.1
3°	4792.5	4844.3	4834.8	4789.6	4698.6	4716.2	4638.5	4598.5	4464.8
4°	4484.3	4549.9	4538.6	4488.6	4397.3	4396.2	4314.6	4272.4	4148.8
5°	4145.9	4214.4	4194.2	4153.1	4057.2	4040.1	3962.2	3932.1	3816.8
6°	3820.5	3863.5	3842.6	3808.5	3705.0	3694.3	3620.6	3594.8	3488.4
7°	3474.0	3503.9	3483.3	3456.8	3352.1	3338.2	3278.0	3257.8	3153.9
8°	3108.8	3151.4	3122.0	3105.5	3006.7	2987.6	2927.1	2913.5	2830.2
9°	2796.8	2811.1	2779.9	2730.3	2673.0	2653.7	2589.4	2576.2	2517.8
10°	2441.7	2486.2	2462.0	2419.4	2351.9	2366.5	2273.2	2262.3	2212.8
11°	2133.0	2179.7	2154.0	2115.8	2054.9	2063.3	1987.0	1940.7	1933.0
12°	1878.3	1899.7	1891.9	1861.1	1811.9	1814.5	1746.6	1709.6	1701.8
13°	1630.2	1668.4	1672.0	1646.7	1587.6	1614.8	1564.2	1534.0	1521.9
14°	1462.0	1491.0	1502.8	1502.1	1438.2	1462.0	1422.0	1397.9	1385.7
15°	1308.6	1346.4	1365.5	1364.5	1310.8	1335.0	1301.7	1282.5	1269.7
16°	1164.8	1216.5	1247.7	1242.5	1192.7	1217.6	1184.6	1165.8	1151.6
17°	1020.1	1091.4	1137.1	1127.3	1075.2	1106.7	1075.2	1059.0	1044.0
18°	909.0	967.2	1031.8	1010.6	952.6	1001.7	974.6	961.8	947.8
19°	809.0	849.1	933.1	895.2	842.8	898.7	878.5	868.2	854.9
20°	729.4	763.9	838.8	794.0	749.5	795.1	789.6	781.5	770.4
21°	627.3	693.1	753.3	711.8	653.3	717.6	724.6	720.3	712.2
22°	496.6	615.0	691.2	615.7	539.2	661.1	675.4	672.2	666.2
23°	386.6	522.7	633.9	527.1	420.0	598.3	619.6	617.4	598.0
24°	281.9	428.1	562.0	423.2	302.1	512.8	553.6	549.8	479.4
25°	185.7	333.3	496.3	317.5	193.0	414.8	479.4	473.2	346.8
26°	119.3	243.7	437.2	216.9	102.9	309.7	400.8	383.1	215.1
27°	57.2	169.9	364.9	127.7	49.9	206.6	321.6	282.3	103.9
28°	35.9	89.1	290.1	63.5	33.8	114.9	246.3	179.1	40.8
29°	29.4	44.0	214.7	35.9	27.6	52.8	176.6	87.4	28.3
30°	24.2	29.4	146.4	27.6	22.4	29.4	116.0	34.1	21.6
32.5°	15.4	18.4	33.8	17.3	14.7	17.0	27.6	16.5	13.5
35°	9.2	11.8	14.7	11.3	8.8	11.0	15.0	10.6	8.4
37.5°	5.5	7.0	9.6	7.0	5.5	7.0	9.6	7.0	5.1
40°	3.2	4.4	6.7	4.4	3.2	4.4	6.7	4.4	3.2
42.5°	2.2	2.5	4.4	2.5	1.8	2.5	4.4	2.9	2.2
45°	1.5	1.8	2.5	1.5	1.0	1.5	2.5	1.8	1.5
47.5°	1.0	1.0	1.5	0.7	0.7	1.0	1.8	1.5	1.0
50°	0.7	0.7	1.0	0.3	0.3	0.3	1.0	1.0	1.0
52.5°	0.3	0.3	0.3	0.0	0.0	0.0	0.7	0.7	0.7
55°	0.3	0.3	0.3	0.0	0.0	0.0	0.3	0.7	0.7
57.5°	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.7	0.7
60°	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.7	0.0

Classified

Scaled Data Report

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.3	0.3	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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Scaled Data Report





— 0°-180° - - 45°-225° - - - 90°-270°

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62.5°	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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