

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: P1212539

Luminaire Tested: **LDSQA6A35940D010TE 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: P1212539
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: LDSQA6A35940D010TE LARL15SP 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

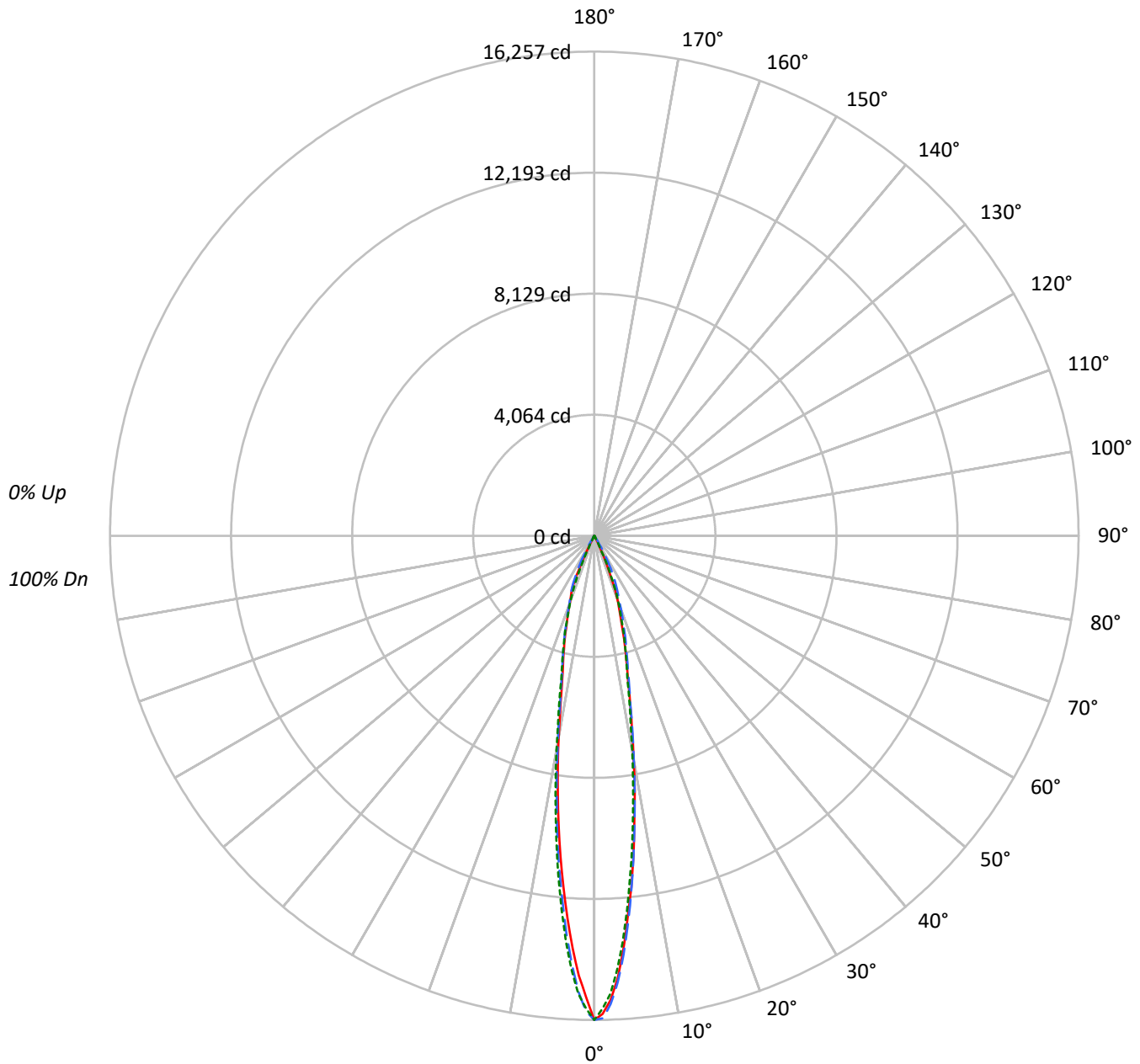
Lumens per Lamp: N/A
Luminaire Lumens: 2749.4 lumens
Efficiency: N/A
Efficacy: 57.6 lumens/watt
Spacing Criteria (0/90/45): 0.31 / 0.31 / 0.36
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 47.7
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	110	113	111	109	108	107	106	105		103	102	101		100
2	112	108	105	103	109	106	104	102	103	101	99		100	99	97		98
3	108	104	100	97	106	102	99	97	100	97	95		98	95	94		96
4	105	100	96	93	103	99	95	93	97	94	91		95	92	90		93
5	102	96	92	89	101	95	92	89	94	91	88		92	90	88		91
6	99	93	89	86	98	92	89	86	91	88	85		90	87	85		89
7	97	90	86	83	95	90	86	83	89	85	83		88	85	82		87
8	94	88	84	81	93	87	83	81	86	83	80		85	82	80		85
9	92	85	81	79	91	85	81	79	84	81	78		83	80	78		83
10	89	83	79	77	89	83	79	76	82	79	76		81	78	76		81

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	699973	699973	699973
5°	556459	544591	512318
10°	331536	319330	300439
15°	181151	181458	175771
20°	103784	106662	109640
25°	27407	28485	51179
30°	3739	3455	3346
35°	1493	1440	1382
40°	579	579	579
45°	274	207	274
50°	154	74	228
55°	83	0	173
60°	95	0	0
65°	112	0	0
70°	138	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°	1032.4	37.6
10°-20°	1161.8	42.3
20°-30°	517.4	18.8
30°-40°	31.6	1.1
40°-50°	5.1	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°	2711.6	98.6
0°-40°	2743.2	99.8
0°-60°	2749.1	100.0
0°-90°	2749.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2749.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	16257	16257	16257	16257	16257	
5°	12875	13026	12600	12305	11854	1058
15°	4064	4241	4071	4042	3943	1146
25°	577	1541	600	1489	1077	340
35°	28	46	27	47	26	21
45°	4	8	3	8	4	4
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°	16257.4	16257.4	16257.4	16257.4	16257.4	16257.4	16257.4	16257.4	16257.4
1°	16058.0	16205.0	16205.0	16169.8	15876.7	16094.5	15971.4	15839.1	15494.8
2°	15596.3	15745.7	15730.7	15596.3	15384.2	15474.2	15305.6	15141.4	14780.0
3°	14883.8	15044.6	15014.9	14874.7	14591.9	14646.6	14405.0	14280.7	13865.8
4°	13926.2	14130.2	14094.9	13939.9	13656.1	13652.6	13399.6	13268.3	12884.2
5°	12875.0	13088.3	13025.5	12897.9	12600.4	12546.7	12305.2	12211.6	11853.7
6°	11865.1	11998.4	11933.5	11827.4	11506.0	11472.8	11243.7	11164.0	10833.3
7°	10788.8	10881.2	10817.5	10735.4	10410.5	10367.1	10180.1	10117.4	9794.9
8°	9654.7	9786.8	9695.7	9644.4	9337.7	9278.5	9090.4	9048.2	8789.4
9°	8685.7	8730.2	8633.2	8479.3	8301.4	8241.1	8041.5	8000.5	7819.2
10°	7583.2	7721.3	7646.0	7513.7	7304.0	7349.6	7060.0	7025.8	6871.9
11°	6624.5	6769.3	6689.5	6570.9	6381.7	6408.0	6170.8	6027.1	6003.2
12°	5833.4	5899.5	5875.6	5779.8	5627.0	5635.1	5424.1	5308.9	5285.0
13°	5062.7	5181.3	5192.6	5114.0	4930.6	5014.8	4857.5	4764.1	4726.4
14°	4540.7	4630.7	4667.2	4664.9	4466.5	4540.7	4416.3	4341.1	4303.4
15°	4064.0	4181.6	4240.8	4237.4	4070.9	4146.1	4042.4	3983.2	3943.3
16°	3617.3	3778.0	3874.9	3858.8	3703.9	3781.4	3678.8	3620.7	3576.2
17°	3168.0	3389.2	3531.8	3501.0	3339.0	3437.1	3339.0	3289.0	3242.2
18°	2822.6	3003.8	3204.5	3138.5	2958.3	3111.1	3026.7	2986.7	2943.5
19°	2512.6	2636.8	2897.8	2780.5	2617.4	2790.7	2728.1	2696.0	2655.0
20°	2265.1	2372.4	2605.0	2465.8	2327.9	2469.2	2452.1	2427.1	2392.9
21°	1948.3	2152.3	2339.3	2210.4	2029.1	2228.8	2250.4	2236.7	2211.7
22°	1542.4	1909.4	2146.7	1911.8	1674.7	2053.1	2097.5	2087.3	2069.1
23°	1200.4	1623.4	1968.8	1637.1	1304.1	1858.1	1924.4	1917.5	1857.1
24°	875.5	1329.3	1745.3	1314.4	938.2	1592.6	1719.2	1707.7	1488.8
25°	576.9	1035.2	1541.3	986.0	599.6	1288.3	1488.8	1469.5	1077.3
26°	370.4	756.9	1357.7	673.7	319.1	962.1	1244.9	1190.2	668.0
27°	177.8	527.8	1133.1	396.7	155.0	641.9	998.6	876.6	322.6
28°	111.8	277.0	900.5	197.3	104.9	356.8	765.0	556.4	126.5
29°	91.3	136.8	666.9	111.8	85.5	164.2	548.3	271.3	87.8
30°	75.2	91.3	454.9	85.5	69.5	91.3	360.2	106.0	67.3
32.5°	47.9	57.1	104.9	53.6	45.5	52.4	85.5	51.3	42.1
35°	28.4	36.5	45.5	35.3	27.4	34.2	46.8	33.1	26.3
37.5°	17.1	21.6	29.7	21.6	17.1	21.6	29.7	21.6	16.0
40°	10.3	13.7	20.5	13.7	10.3	13.7	20.5	13.7	10.3
42.5°	6.8	7.9	13.7	7.9	5.8	7.9	13.7	9.2	6.8
45°	4.5	5.8	7.9	4.5	3.4	4.5	7.9	5.8	4.5
47.5°	3.4	3.4	4.5	2.3	2.3	3.4	5.8	4.5	3.4
50°	2.3	2.3	3.4	1.1	1.1	1.1	3.4	3.4	3.4
52.5°	1.1	1.1	1.1	0.0	0.0	0.0	2.3	2.3	2.3
55°	1.1	1.1	1.1	0.0	0.0	0.0	1.1	2.3	2.3
57.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	2.3	2.3
60°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	2.3	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°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	1.1	1.1	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°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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