

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: P1212533

Luminaire Tested: **LDSQA6A35935D010TE 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: P1212533
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: LDSQA6A35935D010TE LARL15SP 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

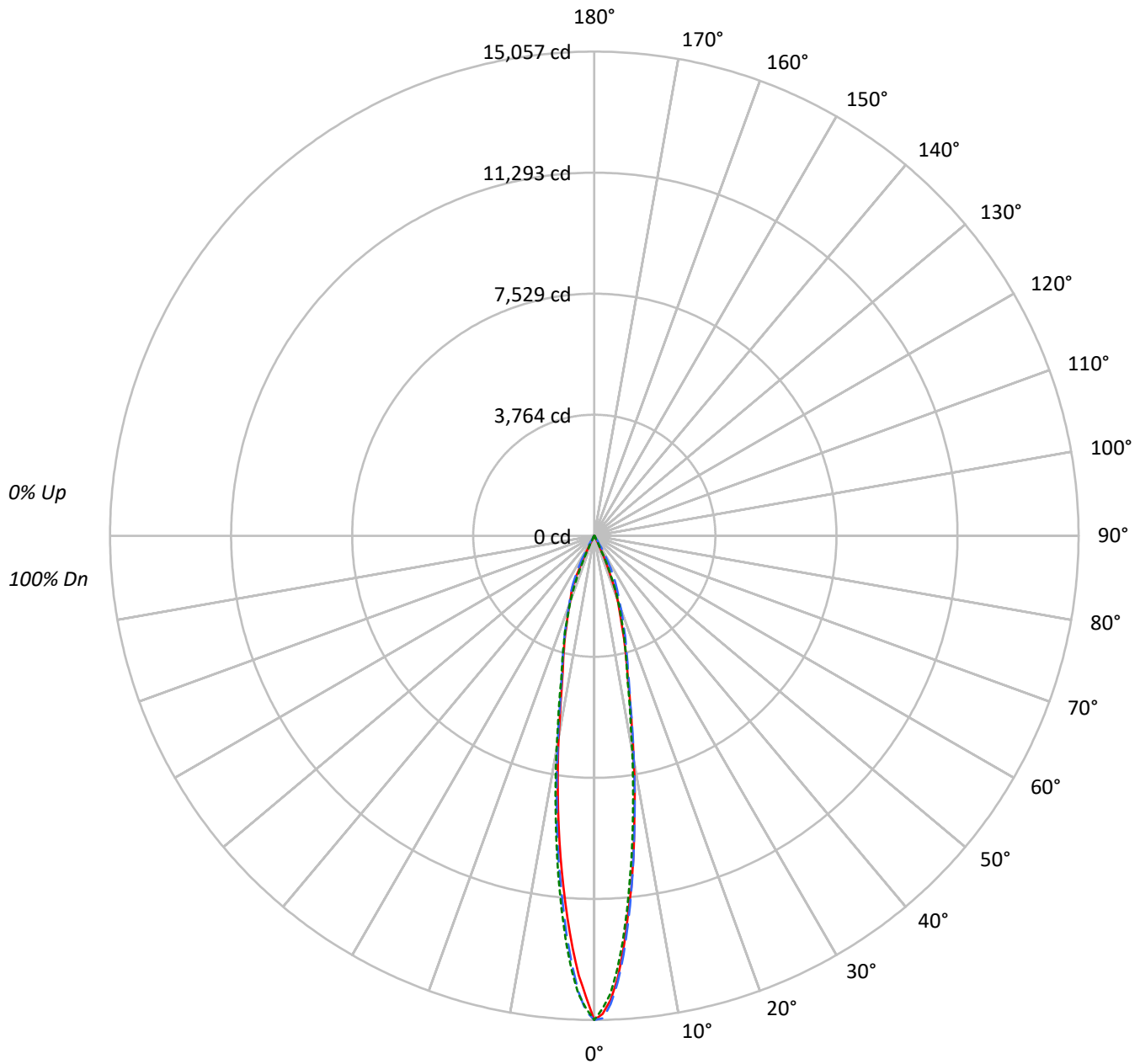
Lumens per Lamp: N/A
Luminaire Lumens: 2546.5 lumens
Efficiency: N/A
Efficacy: 53.4 lumens/watt
Spacing Criteria (0/90/45): 0.31 / 0.31 / 0.36
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	648289	648289	648289
5°	515378	504375	474488
10°	307053	295747	278251
15°	167778	168059	162786
20°	96123	98785	101544
25°	25378	26380	47397
30°	3465	3202	3097
35°	1393	1335	1277
40°	534	534	534
45°	250	195	250
50°	147	74	214
55°	83	0	165
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°	956.2	37.5
10°-20°	1076.0	42.3
20°-30°	479.2	18.8
30°-40°	29.2	1.1
40°-50°	4.7	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°	2511.4	98.6
0°-40°	2540.6	99.8
0°-60°	2546.1	100.0
0°-90°	2546.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2546.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	15057	15057	15057	15057	15057	
5°	11924	12064	11670	11396	10978	980
15°	3764	3928	3770	3744	3652	1061
25°	534	1427	555	1379	998	315
35°	26	42	25	43	24	19
45°	4	7	3	7	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	0

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	15057.0	15057.0	15057.0	15057.0	15057.0	15057.0	15057.0	15057.0	15057.0
1°	14872.1	15008.4	15008.4	14975.6	14704.4	14906.0	14792.0	14669.5	14350.7
2°	14444.6	14582.9	14569.2	14444.6	14248.3	14331.6	14175.4	14023.3	13688.6
3°	13784.8	13933.6	13906.1	13776.3	13514.4	13565.2	13341.2	13226.2	12841.9
4°	12897.9	13086.9	13054.1	12910.5	12647.7	12644.5	12410.1	12288.6	11932.9
5°	11924.5	12121.7	12063.8	11945.5	11669.9	11620.3	11396.5	11309.9	10978.4
6°	10989.0	11112.5	11052.4	10954.1	10656.4	10625.8	10413.5	10339.6	10033.4
7°	9992.2	10077.8	10018.6	9942.7	9641.7	9601.6	9428.4	9370.4	9071.6
8°	8941.7	9064.3	8979.7	8932.1	8648.1	8593.2	8419.1	8380.1	8140.3
9°	8044.2	8085.4	7995.8	7853.2	7688.5	7632.5	7447.7	7409.7	7241.8
10°	7023.2	7151.0	7081.4	6958.8	6764.6	6806.9	6538.7	6507.0	6364.4
11°	6135.3	6269.4	6195.6	6085.8	5910.5	5934.8	5715.2	5582.2	5559.8
12°	5402.7	5463.9	5441.8	5353.0	5211.5	5218.9	5023.6	4916.9	4894.7
13°	4688.8	4798.6	4809.2	4736.3	4566.4	4644.5	4498.9	4412.3	4377.4
14°	4205.3	4288.7	4322.5	4320.4	4136.8	4205.3	4090.3	4020.5	3985.7
15°	3764.0	3872.7	3927.6	3924.5	3770.3	3839.9	3744.0	3689.1	3652.0
16°	3350.2	3499.0	3588.7	3573.9	3430.3	3502.1	3407.0	3353.2	3312.2
17°	2934.2	3139.0	3271.0	3242.3	3092.4	3183.3	3092.4	3046.0	3002.8
18°	2614.1	2782.1	2967.8	2906.6	2739.8	2881.3	2803.1	2766.2	2726.1
19°	2327.0	2442.1	2683.8	2575.1	2424.2	2584.6	2526.5	2497.0	2459.0
20°	2097.9	2197.1	2412.5	2283.7	2156.0	2286.9	2271.1	2247.8	2216.2
21°	1804.3	1993.3	2166.5	2047.1	1879.4	2064.1	2084.2	2071.4	2048.2
22°	1428.5	1768.5	1988.1	1770.7	1551.1	1901.5	1942.7	1933.2	1916.3
23°	1111.9	1503.5	1823.4	1516.1	1207.8	1721.0	1782.2	1775.9	1719.9
24°	810.9	1231.0	1616.4	1217.3	868.9	1474.9	1592.1	1581.7	1379.0
25°	534.2	958.7	1427.4	913.3	555.3	1193.0	1379.0	1361.0	997.7
26°	343.1	701.1	1257.5	624.1	295.6	891.2	1152.9	1102.3	618.7
27°	164.7	488.9	1049.4	367.4	143.6	594.4	924.8	812.0	298.8
28°	103.5	256.5	834.1	182.7	97.2	330.5	708.5	515.2	117.2
29°	84.4	126.7	617.6	103.5	79.2	152.1	507.8	251.3	81.4
30°	69.7	84.4	421.2	79.2	64.4	84.4	333.7	98.3	62.3
32.5°	44.3	52.7	97.2	49.7	42.3	48.6	79.2	47.5	39.1
35°	26.5	33.8	42.3	32.8	25.4	31.7	43.2	30.6	24.3
37.5°	15.8	20.0	27.5	20.0	15.8	20.0	27.5	20.0	14.8
40°	9.5	12.6	19.1	12.6	9.5	12.6	19.1	12.6	9.5
42.5°	6.3	7.4	12.6	7.4	5.2	7.4	12.6	8.5	6.3
45°	4.1	5.2	7.4	4.1	3.2	4.1	7.4	5.2	4.1
47.5°	3.2	3.2	4.1	2.2	2.2	3.2	5.2	4.1	3.2
50°	2.2	2.2	3.2	1.1	1.1	1.1	3.2	3.2	3.2
52.5°	1.1	1.1	1.1	0.0	0.0	0.0	2.2	2.2	2.2
55°	1.1	1.1	1.1	0.0	0.0	0.0	1.1	2.2	2.2
57.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	2.2	2.2
60°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	2.2	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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