

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: P208740

Luminaire Tested: **LDSQA6A30827D010TE LARL15SP 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208740
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: LDSQA6A30827D010TE LARL15SP 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2321.6 lumens
Efficiency: N/A
Efficacy: 52.0 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

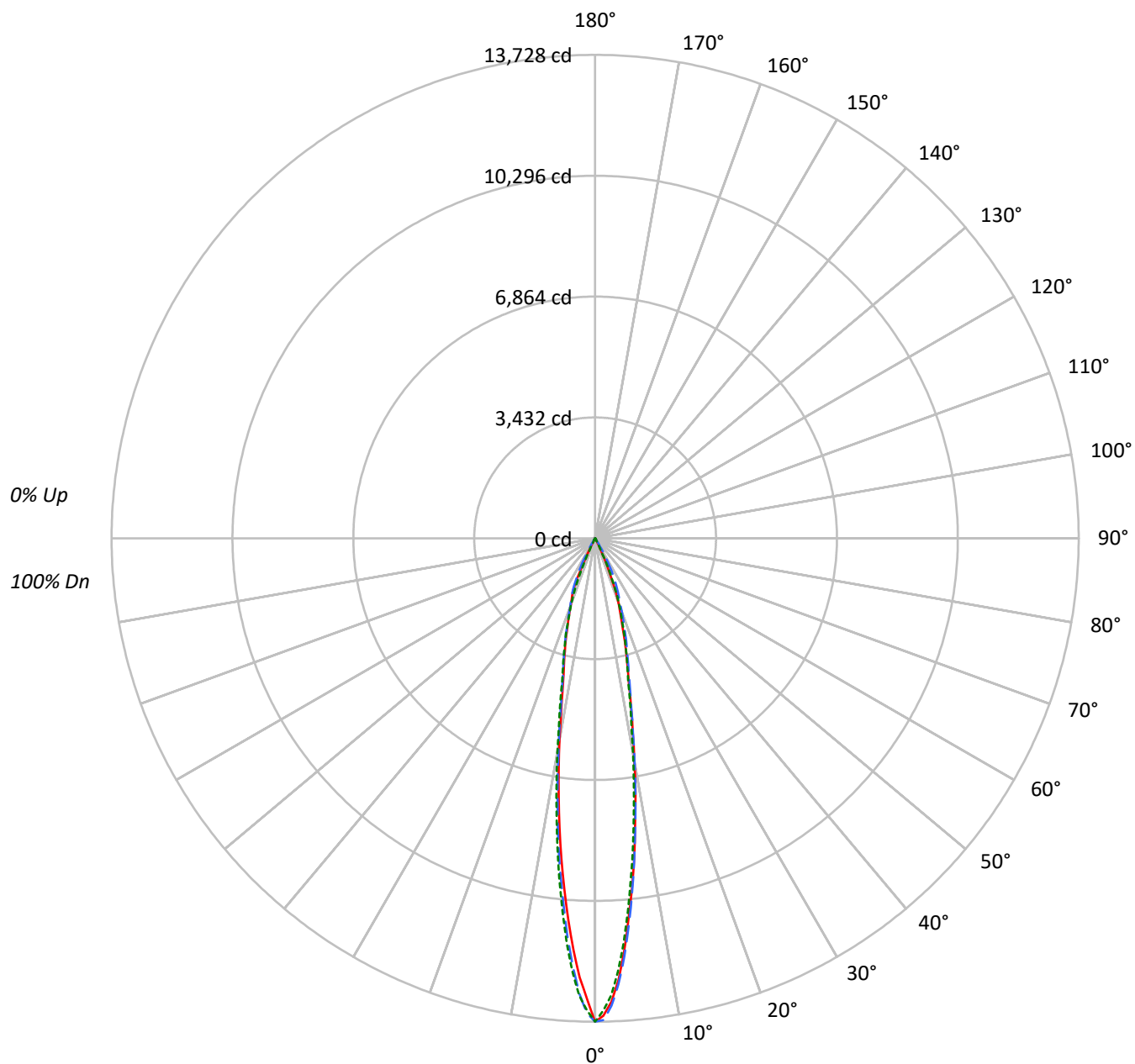
Input Watts (W): 44.62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P208740

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	591047	591047	591047
5°	469868	459841	432590
10°	279943	269634	253685
15°	152962	153220	148415
20°	87638	90062	92577
25°	23140	24053	43212
30°	3157	2918	2824
35°	1267	1214	1162
40°	489	489	489
45°	237	177	237
50°	127	67	194
55°	75	0	143
60°	86	0	0
65°	102	0	0
70°	126	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°	871.8	37.5
10°-20°	981.0	42.3
20°-30°	436.8	18.8
30°-40°	26.6	1.1
40°-50°	4.3	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°	2289.6	98.6
0°-40°	2316.3	99.8
0°-60°	2321.3	100.0
0°-90°	2321.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2321.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	13728	13728	13728	13728	13728	
5°	10872	10998	10640	10390	10009	894
15°	3432	3581	3437	3413	3330	967
25°	487	1301	506	1257	910	287
35°	24	38	23	40	22	17
45°	4	7	3	7	4	3
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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CATALOG NUMBER: LDSQA6A30827D010TE LARL15SP 6LSQA1H

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	13727.5	13727.5	13727.5	13727.5	13727.5	13727.5	13727.5	13727.5	13727.5
1°	13559.0	13683.2	13683.2	13653.4	13406.0	13589.8	13485.9	13374.2	13083.5
2°	13169.2	13295.3	13282.8	13169.2	12990.1	13066.2	12923.7	12785.1	12480.0
3°	12567.6	12703.3	12678.3	12559.9	12321.1	12367.3	12163.3	12058.4	11708.0
4°	11759.0	11931.3	11901.5	11770.5	11530.9	11528.0	11314.3	11203.6	10879.2
5°	10871.5	11051.5	10998.5	10890.7	10639.5	10594.3	10390.2	10311.3	10009.0
6°	10018.6	10131.2	10076.4	9986.9	9715.4	9687.5	9494.0	9426.6	9147.5
7°	9109.9	9187.9	9134.0	9064.7	8790.4	8753.8	8595.9	8543.0	8270.6
8°	8152.2	8263.8	8186.8	8143.5	7884.6	7834.5	7675.7	7640.1	7421.6
9°	7334.0	7371.5	7289.7	7159.7	7009.6	6958.6	6790.1	6755.4	6602.4
10°	6403.1	6519.6	6456.1	6344.4	6167.3	6205.8	5961.3	5932.4	5802.5
11°	5593.6	5715.9	5648.5	5548.4	5388.6	5410.7	5210.5	5089.2	5069.0
12°	4925.6	4981.4	4961.2	4880.3	4751.3	4758.1	4580.0	4482.8	4462.6
13°	4274.9	4375.0	4384.6	4318.2	4163.2	4234.4	4101.6	4022.7	3990.9
14°	3834.0	3910.0	3940.8	3938.9	3771.4	3834.0	3729.1	3665.5	3633.8
15°	3431.6	3530.8	3580.8	3577.9	3437.4	3500.9	3413.3	3363.3	3329.6
16°	3054.3	3190.0	3271.8	3258.4	3127.5	3192.9	3106.3	3057.2	3019.6
17°	2675.0	2861.8	2982.1	2956.1	2819.4	2902.2	2819.4	2777.1	2737.6
18°	2383.4	2536.4	2705.8	2650.0	2497.9	2626.9	2555.7	2522.0	2485.4
19°	2121.5	2226.5	2446.9	2347.8	2210.1	2356.4	2303.5	2276.5	2241.9
20°	1912.7	2003.1	2199.5	2082.1	1965.6	2085.0	2070.5	2049.4	2020.5
21°	1645.1	1817.4	1975.2	1866.5	1713.4	1881.9	1900.2	1888.6	1867.4
22°	1302.4	1612.3	1812.6	1614.3	1414.0	1733.6	1771.2	1762.5	1747.1
23°	1013.6	1370.7	1662.4	1382.3	1101.2	1569.0	1624.9	1619.1	1568.1
24°	739.3	1122.4	1473.7	1109.9	792.2	1344.7	1451.6	1442.0	1257.1
25°	487.1	874.0	1301.4	832.6	506.3	1087.7	1257.1	1240.8	909.6
26°	312.8	639.2	1146.4	568.9	269.5	812.4	1051.1	1004.9	564.1
27°	150.2	445.7	956.8	335.0	130.9	541.9	843.2	740.2	272.4
28°	94.3	233.9	760.4	166.5	88.6	301.3	645.9	469.7	106.8
29°	77.0	115.5	563.1	94.3	72.2	138.6	463.0	229.1	74.1
30°	63.5	77.0	384.1	72.2	58.7	77.0	304.2	89.5	56.8
32.5°	40.4	48.1	88.6	45.2	38.5	44.3	72.2	43.3	35.6
35°	24.1	30.8	38.5	29.8	23.1	28.9	39.5	27.9	22.1
37.5°	14.4	18.3	25.0	18.3	14.4	18.3	25.0	18.3	13.5
40°	8.7	11.6	17.3	11.6	8.7	11.6	17.3	11.6	8.7
42.5°	5.8	6.7	11.6	6.7	4.8	6.7	11.6	7.7	5.8
45°	3.9	4.8	6.7	3.9	2.9	3.9	6.7	4.8	3.9
47.5°	2.9	2.9	3.9	1.9	1.9	2.9	4.8	3.9	2.9
50°	1.9	1.9	2.9	1.0	1.0	1.0	2.9	2.9	2.9
52.5°	1.0	1.0	1.0	0.0	0.0	0.0	1.9	1.9	1.9
55°	1.0	1.0	1.0	0.0	0.0	0.0	1.0	1.9	1.9
57.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9
60°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	1.0	1.0	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°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)