

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: P1212481

Luminaire Tested: **LDSQA6A25930D010TE LARL20NF 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: P1212481
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29055)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA6A25930D010TE LARL20NF 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 20° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

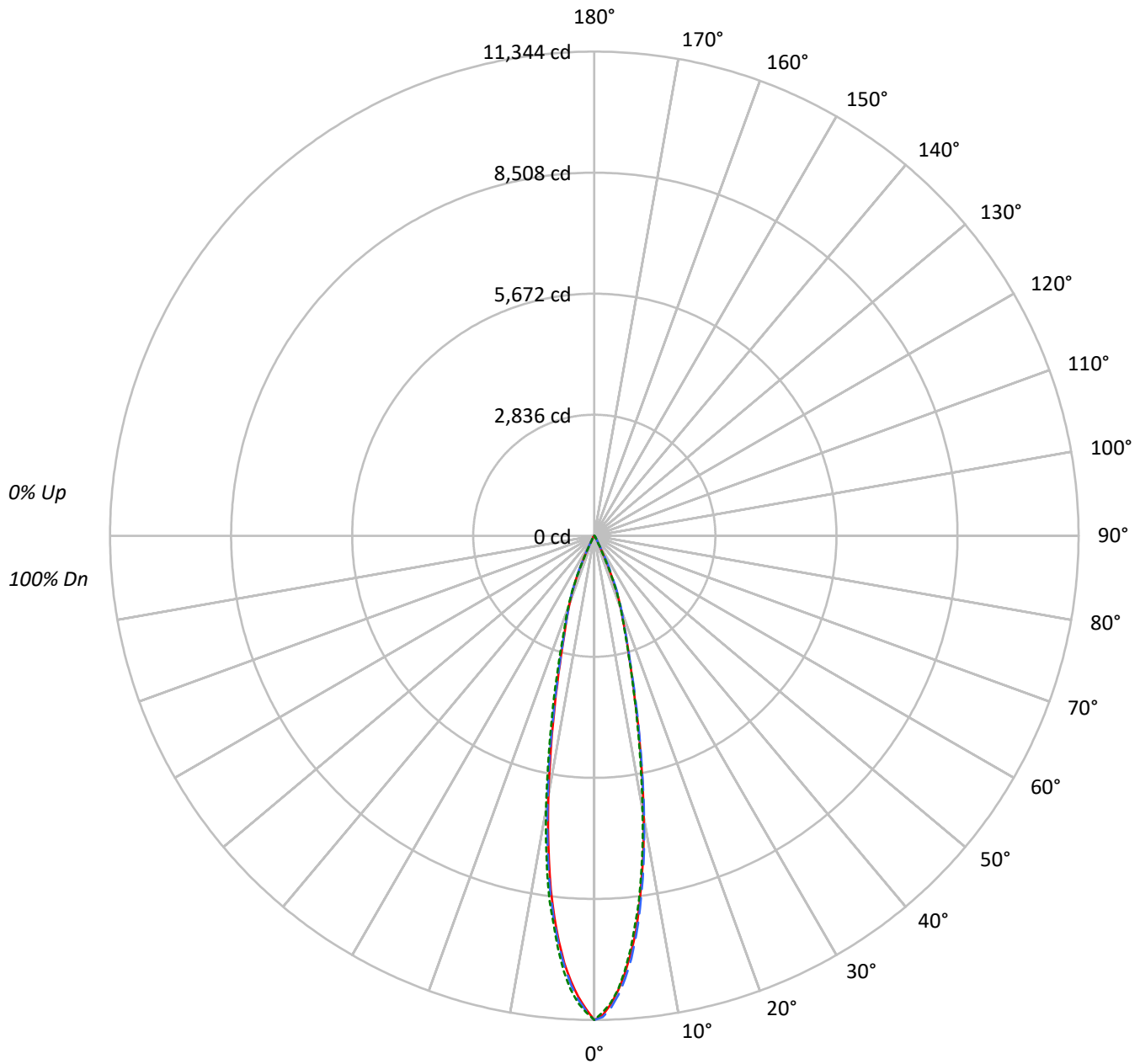
Lumens per Lamp: N/A
Luminaire Lumens: 2165.8 lumens
Efficiency: N/A
Efficacy: 69.4 lumens/watt
Spacing Criteria (0/90/45): 0.37 / 0.38 / 0.39
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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	102		100
2	112	108	105	103	110	107	104	102	103	101	100		101	99	97		98
3	108	104	100	98	107	103	99	97	100	98	95		98	96	94		96
4	105	100	96	93	104	99	96	93	97	94	92		95	93	91		94
5	102	97	93	90	101	96	92	89	94	91	89		93	90	88		91
6	99	94	90	87	98	93	89	86	92	88	86		90	88	85		89
7	97	91	87	84	96	90	86	84	89	86	83		88	85	83		87
8	94	88	84	82	93	88	84	81	87	83	81		86	83	81		85
9	92	86	82	79	91	85	82	79	85	81	79		84	81	79		83
10	90	84	80	77	89	83	80	77	83	79	77		82	79	77		81

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	488432	488432	488432
5°	424478	420130	412553
10°	291616	284520	270263
15°	151861	150515	138636
20°	84444	82634	78172
25°	27934	25882	30362
30°	6185	5727	5111
35°	2313	2271	2029
40°	911	866	821
45°	286	286	286
50°	54	54	107
55°	60	0	60
60°	0	0	0
65°	0	0	0
70°	0	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°	828.6	38.3
10°-20°	960.4	44.3
20°-30°	333.7	15.4
30°-40°	35.5	1.6
40°-50°	6.8	0.3
50°-60°	0.7	0.0
60°-70°	0.0	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°	2122.7	98.0
0°-40°	2158.2	99.7
0°-60°	2165.8	100.0
0°-90°	2165.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2165.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	11344	11344	11344	11344	11344	
5°	9821	9940	9721	9601	9545	835
15°	3407	3481	3377	3181	3110	980
25°	588	764	545	668	639	318
35°	44	62	43	56	39	33
45°	5	12	5	12	5	5
55°	1	1	0	1	1	1
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	0

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	11344.2	11344.2	11344.2	11344.2	11344.2	11344.2	11344.2	11344.2	11344.2
1°	11240.0	11238.4	11278.5	11289.4	11167.3	11334.3	11135.6	11338.8	11093.9
2°	10987.3	11001.1	11070.0	11060.7	10954.0	11100.8	10867.4	11027.4	10807.2
3°	10666.6	10691.3	10770.9	10764.8	10640.3	10766.2	10519.0	10661.9	10454.9
4°	10274.0	10332.0	10398.5	10416.2	10226.9	10340.5	10100.2	10233.8	10036.8
5°	9821.3	9897.7	9940.3	9916.2	9720.7	9825.1	9601.0	9791.1	9545.4
6°	9309.7	9369.2	9400.8	9358.4	9142.0	9260.3	9050.8	9212.4	8972.0
7°	8700.7	8768.0	8793.6	8751.8	8601.9	8649.8	8440.3	8575.6	8350.8
8°	8024.7	8125.9	8129.8	8091.9	7936.5	7884.0	7764.3	7863.2	7649.9
9°	7360.9	7436.6	7435.1	7407.3	7235.7	7159.3	7042.5	7112.8	6923.6
10°	6670.1	6738.0	6714.9	6689.4	6507.8	6422.8	6310.7	6347.8	6181.7
11°	5938.3	6024.9	5987.8	5963.1	5782.2	5698.8	5586.8	5596.8	5450.7
12°	5198.8	5321.7	5277.7	5261.5	5094.6	5013.4	4912.2	4901.3	4763.0
13°	4578.4	4654.1	4610.8	4602.3	4455.5	4385.1	4222.1	4265.4	4139.5
14°	3916.2	4048.3	4009.7	4005.8	3885.2	3819.5	3668.8	3702.9	3593.1
15°	3406.9	3512.0	3481.1	3479.5	3376.7	3314.2	3180.6	3208.4	3110.2
16°	2943.3	3042.2	3019.8	3023.6	2932.5	2877.6	2761.7	2784.9	2706.0
17°	2620.2	2655.9	2635.0	2635.0	2559.2	2525.3	2425.5	2448.0	2386.2
18°	2298.8	2311.9	2325.1	2327.4	2261.0	2237.7	2154.3	2174.4	2123.5
19°	2035.3	2067.0	2074.8	2076.3	2017.6	2004.4	1932.6	1948.1	1906.3
20°	1843.0	1861.5	1863.7	1859.9	1803.5	1792.7	1728.6	1742.4	1706.1
21°	1620.3	1652.8	1645.9	1639.8	1581.0	1572.5	1518.3	1520.7	1485.2
22°	1372.3	1430.3	1422.6	1411.8	1332.1	1320.6	1306.7	1301.3	1267.2
23°	1068.7	1203.9	1197.0	1181.4	1065.6	1100.3	1091.8	1081.8	1050.2
24°	819.8	979.0	975.2	951.2	797.5	884.1	874.7	866.2	841.5
25°	588.0	763.4	764.2	727.1	544.8	700.1	667.7	661.4	639.1
26°	420.4	567.9	571.8	518.4	334.6	505.4	482.1	473.6	455.9
27°	255.8	395.7	403.4	339.9	208.7	339.3	324.5	315.2	264.3
28°	176.2	258.2	267.3	210.1	163.1	226.4	208.7	197.8	153.7
29°	150.7	168.5	175.4	148.4	137.5	150.7	142.2	137.5	124.4
30°	124.4	128.2	131.4	122.9	115.2	119.0	115.2	111.3	102.8
32.5°	78.9	85.8	88.0	81.9	75.0	77.3	77.3	71.8	64.9
35°	44.0	54.9	61.8	54.1	43.2	51.7	55.6	47.9	38.6
37.5°	27.0	34.0	43.2	34.0	26.3	33.2	40.2	30.2	24.7
40°	16.2	20.9	30.9	20.9	15.4	20.1	27.8	18.5	14.6
42.5°	9.3	12.4	20.1	12.4	8.5	11.6	18.5	10.8	8.5
45°	4.7	6.9	12.4	6.9	4.7	6.9	11.6	6.1	4.7
47.5°	2.3	3.9	6.9	3.9	2.3	3.9	6.1	3.9	2.3
50°	0.8	1.6	3.9	1.6	0.8	1.6	3.9	1.6	1.6
52.5°	0.8	0.8	2.3	0.8	0.8	0.8	1.6	0.8	0.8
55°	0.8	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8
57.5°	0.8	0.0	0.8	0.0	0.0	0.0	0.8	0.8	0.8
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	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°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	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°

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

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