

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: P208777

Luminaire Tested: **LDSQA6A30930D010TE LARL20NF 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208777
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: LDSQA6A30930D010TE 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: 2265.6 lumens
Efficiency: N/A
Efficacy: 50.8 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

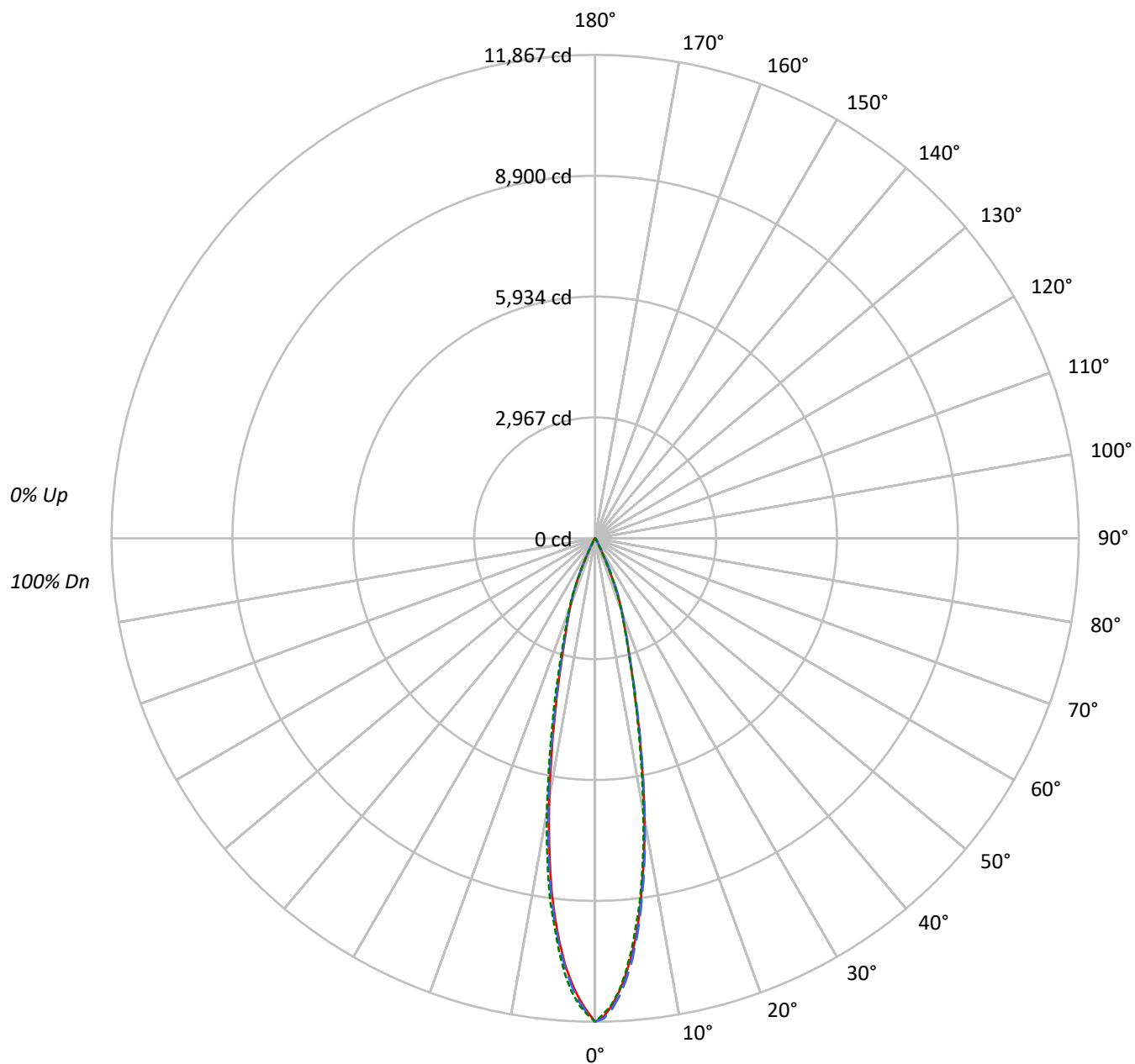
Input Watts (W): 44.62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0			
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	102	100	99	99	97			
2	112	108	105	103	110	107	104	102	103	101	100	101	99	97	98	97	95	94			
3	108	104	100	98	107	103	99	97	100	98	95	98	96	94	96	94	93	91			
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	94	92	90	89			
5	102	97	93	90	101	96	92	89	94	91	89	93	90	88	91	89	87	86			
6	99	94	90	87	98	93	89	86	92	88	86	90	88	85	89	87	85	84			
7	97	91	87	84	96	90	86	84	89	86	83	88	85	83	87	85	83	82			
8	94	88	84	82	93	88	84	81	87	83	81	86	83	81	85	82	80	80			
9	92	86	82	79	91	85	82	79	85	81	79	84	81	79	83	80	78	78			
10	90	84	80	77	89	83	80	77	83	79	77	82	79	77	81	79	77	76			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	510946	510946	510946
5°	444039	439497	431566
10°	305055	297636	282723
15°	158859	157455	145023
20°	88334	86446	81778
25°	29221	27074	31758
30°	6468	5986	5345
35°	2423	2381	2123
40°	955	911	866
45°	298	298	298
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°	866.8	38.3
10°-20°	1004.6	44.3
20°-30°	349.1	15.4
30°-40°	37.2	1.6
40°-50°	7.1	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°	2220.5	98.0
0°-40°	2257.7	99.7
0°-60°	2265.6	100.0
0°-90°	2265.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2265.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	11867	11867	11867	11867	11867	
5°	10274	10398	10169	10044	9985	873
15°	3564	3642	3532	3327	3254	1025
25°	615	799	570	698	668	333
35°	46	65	45	58	40	35
45°	5	13	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°	11867.1	11867.1	11867.1	11867.1	11867.1	11867.1	11867.1	11867.1	11867.1
1°	11758.0	11756.4	11798.4	11809.8	11682.0	11856.6	11648.9	11861.5	11605.2
2°	11493.7	11508.2	11580.2	11570.5	11458.9	11612.5	11368.4	11535.7	11305.4
3°	11158.2	11184.1	11267.4	11260.9	11130.8	11262.5	11003.8	11153.4	10936.8
4°	10747.6	10808.2	10877.7	10896.3	10698.3	10817.1	10565.7	10705.6	10499.4
5°	10273.9	10353.9	10398.4	10373.3	10168.8	10278.0	10043.5	10242.4	9985.3
6°	9738.8	9801.0	9834.2	9789.7	9563.4	9687.1	9468.0	9637.0	9385.6
7°	9101.8	9172.2	9198.8	9155.2	8998.4	9048.5	8829.4	8970.9	8735.7
8°	8394.5	8500.4	8504.5	8464.9	8302.4	8247.4	8122.1	8225.6	8002.5
9°	7700.2	7779.4	7777.8	7748.7	7569.2	7489.2	7367.2	7440.7	7242.7
10°	6977.5	7048.7	7024.4	6997.7	6807.8	6718.9	6601.7	6640.5	6466.7
11°	6212.0	6302.6	6263.8	6237.9	6048.8	5961.5	5844.3	5854.8	5702.0
12°	5438.5	5567.0	5520.9	5503.9	5329.3	5244.5	5138.6	5127.3	4982.6
13°	4789.4	4868.6	4823.3	4814.4	4660.9	4587.3	4416.7	4462.0	4330.2
14°	4096.6	4234.9	4194.4	4190.4	4064.3	3995.6	3838.0	3873.5	3758.8
15°	3563.9	3673.9	3641.5	3639.9	3532.4	3466.9	3327.1	3356.2	3253.5
16°	3078.9	3182.4	3159.0	3163.0	3067.6	3010.2	2889.0	2913.2	2830.8
17°	2741.1	2778.2	2756.4	2756.4	2677.2	2641.6	2537.4	2560.8	2496.1
18°	2404.8	2418.5	2432.3	2434.7	2365.2	2340.9	2253.6	2274.7	2221.3
19°	2129.2	2162.3	2170.4	2172.0	2110.6	2096.8	2021.6	2037.8	1994.2
20°	1927.9	1947.3	1949.7	1945.7	1886.7	1875.3	1808.2	1822.8	1784.8
21°	1695.1	1729.0	1721.8	1715.3	1653.9	1645.0	1588.4	1590.8	1553.6
22°	1435.6	1496.2	1488.1	1476.8	1393.6	1381.4	1366.9	1361.2	1325.7
23°	1117.9	1259.4	1252.1	1235.9	1114.7	1151.1	1142.2	1131.7	1098.5
24°	857.6	1024.2	1020.1	995.1	834.2	924.7	915.0	906.1	880.3
25°	615.1	798.6	799.4	760.6	569.9	732.4	698.4	691.9	668.5
26°	439.7	594.1	598.2	542.4	350.0	528.7	504.4	495.5	476.9
27°	267.6	413.9	422.0	355.7	218.3	354.9	339.5	329.8	276.5
28°	184.3	270.0	279.7	219.9	170.6	236.8	218.3	206.9	160.9
29°	157.6	176.2	183.5	155.2	143.9	157.6	148.7	143.9	130.1
30°	130.1	134.2	137.4	128.5	120.4	124.5	120.4	116.4	107.5
32.5°	82.5	89.7	92.2	85.7	78.4	80.8	80.8	75.2	67.9
35°	46.1	57.4	64.7	56.6	45.3	54.2	58.2	50.1	40.4
37.5°	28.3	35.6	45.3	35.6	27.5	34.8	42.0	31.5	25.9
40°	17.0	21.8	32.3	21.8	16.2	21.0	29.1	19.4	15.4
42.5°	9.7	12.9	21.0	12.9	8.9	12.1	19.4	11.3	8.9
45°	4.9	7.3	12.9	7.3	4.9	7.3	12.1	6.5	4.9
47.5°	2.4	4.0	7.3	4.0	2.4	4.0	6.5	4.0	2.4
50°	0.8	1.6	4.0	1.6	0.8	1.6	4.0	1.6	1.6
52.5°	0.8	0.8	2.4	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



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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°







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



(END OF REPORT)