

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: P208717

Luminaire Tested: **LDSQA6A10830D010TE LARL15SP 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208717
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: LDSQA6A10830D010TE LARL15SP 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 939.7 lumens
Efficiency: N/A
Efficacy: 68.4 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

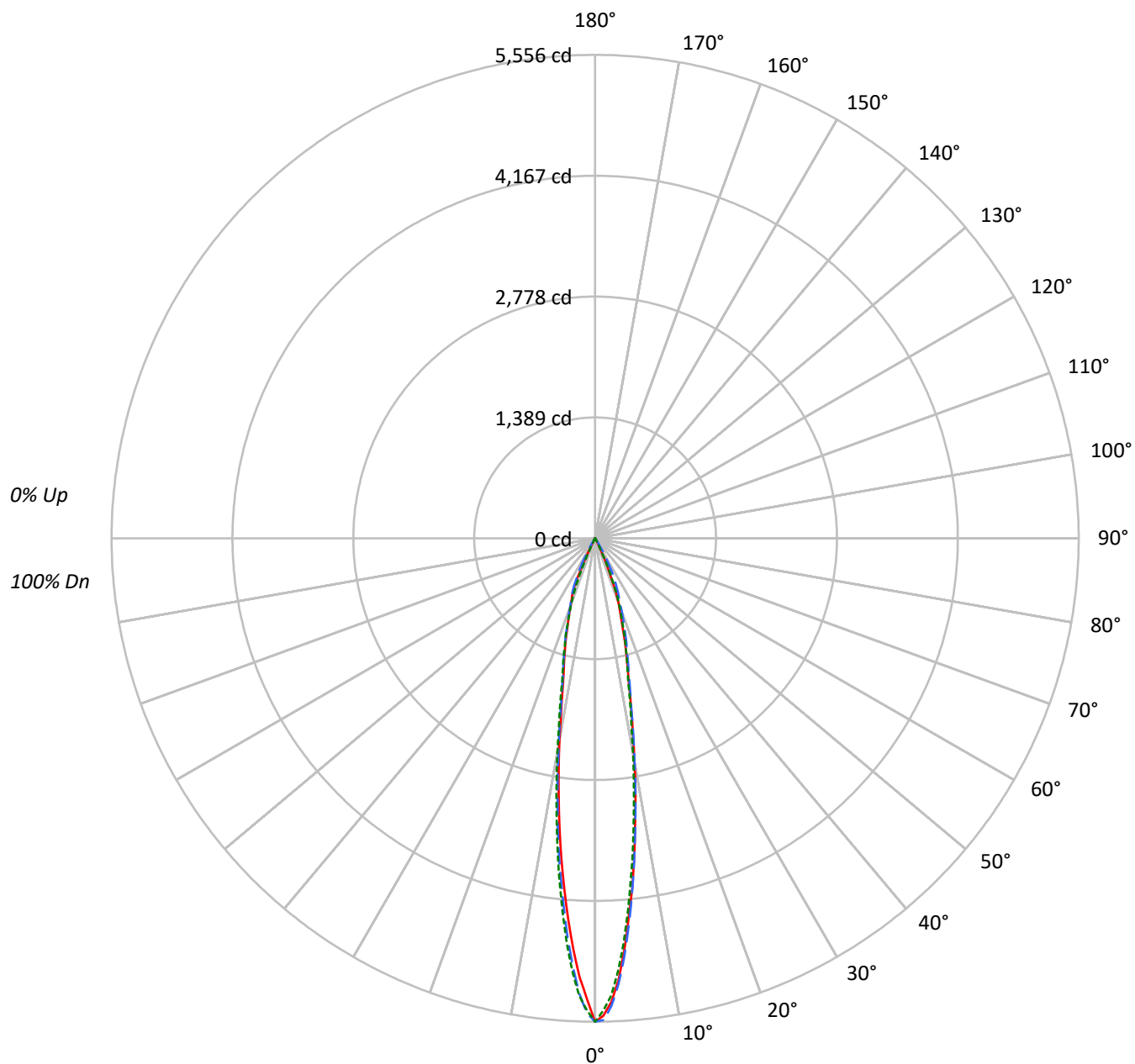
Input Watts (W): 13.73
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	239234	239234	239234
5°	190186	186127	175098
10°	113313	109138	102680
15°	61914	62017	60073
20°	35473	36453	37471
25°	9364	9734	17492
30°	1278	1183	1143
35°	510	494	473
40°	197	197	197
45°	97	73	97
50°	54	27	80
55°	30	0	60
60°	34	0	0
65°	41	0	0
70°	50	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°	352.9	37.5
10°-20°	397.1	42.3
20°-30°	176.8	18.8
30°-40°	10.8	1.1
40°-50°	1.7	0.2
50°-60°	0.3	0.0
60°-70°	0.1	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°	926.8	98.6
0°-40°	937.5	99.8
0°-60°	939.6	100.0
0°-90°	939.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	939.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5556	5556	5556	5556	5556	
5°	4400	4452	4306	4206	4051	362
15°	1389	1449	1391	1382	1348	392
25°	197	527	205	509	368	116
35°	10	16	9	16	9	7
45°	2	3	1	3	2	1
55°	0	0	0	0	1	0
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	5556.4	5556.4	5556.4	5556.4	5556.4	5556.4	5556.4	5556.4	5556.4
1°	5488.2	5538.5	5538.5	5526.4	5426.3	5500.7	5458.6	5413.4	5295.8
2°	5330.4	5381.5	5376.4	5330.4	5258.0	5288.7	5231.1	5175.0	5051.5
3°	5086.9	5141.9	5131.7	5083.8	4987.2	5005.9	4923.3	4880.8	4739.0
4°	4759.6	4829.4	4817.3	4764.3	4667.3	4666.1	4579.6	4534.8	4403.5
5°	4400.4	4473.3	4451.8	4408.2	4306.5	4288.2	4205.6	4173.6	4051.3
6°	4055.2	4100.8	4078.6	4042.3	3932.5	3921.2	3842.8	3815.6	3702.6
7°	3687.4	3718.9	3697.1	3669.1	3558.0	3543.2	3479.3	3457.9	3347.6
8°	3299.7	3344.9	3313.7	3296.2	3191.4	3171.1	3106.9	3092.4	3004.0
9°	2968.5	2983.7	2950.6	2898.0	2837.2	2816.6	2748.4	2734.4	2672.4
10°	2591.8	2638.9	2613.2	2568.0	2496.3	2511.9	2412.9	2401.2	2348.6
11°	2264.1	2313.6	2286.3	2245.8	2181.1	2190.1	2109.0	2059.9	2051.8
12°	1993.7	2016.3	2008.1	1975.4	1923.2	1925.9	1853.8	1814.5	1806.3
13°	1730.3	1770.8	1774.7	1747.8	1685.1	1714.0	1660.2	1628.2	1615.4
14°	1551.9	1582.6	1595.1	1594.3	1526.5	1551.9	1509.4	1483.7	1470.8
15°	1389.0	1429.1	1449.4	1448.2	1391.3	1417.1	1381.6	1361.3	1347.7
16°	1236.3	1291.2	1324.3	1318.9	1265.9	1292.4	1257.3	1237.4	1222.2
17°	1082.8	1158.3	1207.1	1196.5	1141.2	1174.7	1141.2	1124.1	1108.1
18°	964.7	1026.7	1095.2	1072.6	1011.1	1063.3	1034.4	1020.8	1006.0
19°	858.7	901.2	990.4	950.3	894.6	953.8	932.4	921.5	907.4
20°	774.2	810.8	890.3	842.8	795.6	843.9	838.1	829.5	817.8
21°	665.9	735.6	799.5	755.5	693.5	761.7	769.1	764.4	755.9
22°	527.2	652.6	733.7	653.4	572.4	701.7	716.9	713.4	707.2
23°	410.3	554.8	672.9	559.5	445.7	635.1	657.7	655.3	634.7
24°	299.2	454.3	596.5	449.2	320.7	544.3	587.6	583.7	508.8
25°	197.1	353.8	526.8	337.0	204.9	440.3	508.8	502.2	368.2
26°	126.6	258.7	464.0	230.3	109.1	328.8	425.5	406.8	228.3
27°	60.8	180.4	387.3	135.6	53.0	219.4	341.3	299.6	110.3
28°	38.2	94.7	307.8	67.4	35.8	122.0	261.4	190.1	43.2
29°	31.2	46.8	227.9	38.2	29.2	56.1	187.4	92.7	30.0
30°	25.7	31.2	155.5	29.2	23.8	31.2	123.1	36.2	23.0
32.5°	16.4	19.5	35.8	18.3	15.6	17.9	29.2	17.5	14.4
35°	9.7	12.5	15.6	12.1	9.4	11.7	16.0	11.3	9.0
37.5°	5.8	7.4	10.1	7.4	5.8	7.4	10.1	7.4	5.5
40°	3.5	4.7	7.0	4.7	3.5	4.7	7.0	4.7	3.5
42.5°	2.3	2.7	4.7	2.7	1.9	2.7	4.7	3.1	2.3
45°	1.6	1.9	2.7	1.6	1.2	1.6	2.7	1.9	1.6
47.5°	1.2	1.2	1.6	0.8	0.8	1.2	1.9	1.6	1.2
50°	0.8	0.8	1.2	0.4	0.4	0.4	1.2	1.2	1.2
52.5°	0.4	0.4	0.4	0.0	0.0	0.0	0.8	0.8	0.8
55°	0.4	0.4	0.4	0.0	0.0	0.0	0.4	0.8	0.8
57.5°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.8	0.8
60°	0.4	0.4	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°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.4	0.4	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°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)