

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: P1219598

Luminaire Tested: **LDSQA6A20950D010TE 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: P1219598
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: LDSQA6A20950D010TE LARL15SP 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

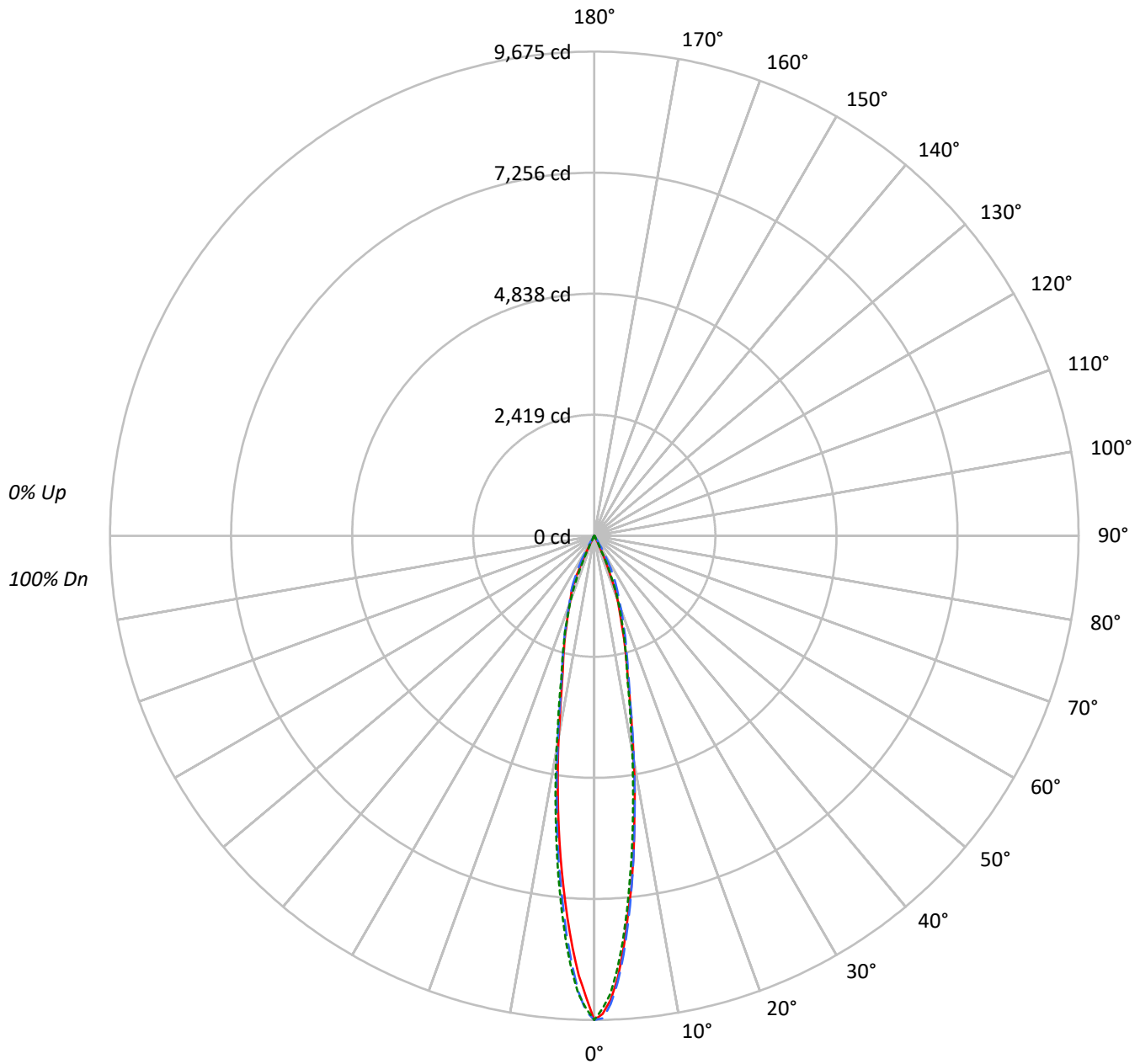
Lumens per Lamp: N/A
Luminaire Lumens: 1636.2 lumens
Efficiency: N/A
Efficacy: 66.0 lumens/watt
Spacing Criteria (0/90/45): 0.31 / 0.31 / 0.36
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 24.8
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°	416564	416564	416564
5°	331157	324090	304888
10°	197303	190037	178792
15°	107803	107986	104603
20°	61764	63477	65251
25°	16309	16950	30461
30°	2227	2058	1989
35°	894	857	820
40°	343	343	343
45°	164	128	164
50°	94	40	141
55°	45	0	105
60°	52	0	0
65°	61	0	0
70°	76	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°	614.4	37.6
10°-20°	691.4	42.3
20°-30°	307.9	18.8
30°-40°	18.8	1.1
40°-50°	3.0	0.2
50°-60°	0.5	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°	1613.7	98.6
0°-40°	1632.5	99.8
0°-60°	1636.0	100.0
0°-90°	1636.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1636.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9675	9675	9675	9675	9675	
5°	7662	7752	7499	7323	7054	630
15°	2418	2524	2423	2406	2347	682
25°	343	917	357	886	641	202
35°	17	27	16	28	16	12
45°	3	5	2	5	3	2
55°	1	1	0	1	1	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°	9675.0	9675.0	9675.0	9675.0	9675.0	9675.0	9675.0	9675.0	9675.0
1°	9556.2	9643.8	9643.8	9622.8	9448.4	9578.0	9504.8	9426.0	9221.1
2°	9281.5	9370.4	9361.6	9281.5	9155.3	9208.9	9108.5	9010.9	8795.7
3°	8857.6	8953.2	8935.5	8852.1	8683.8	8716.3	8572.6	8498.6	8251.7
4°	8287.7	8409.0	8388.0	8295.8	8126.9	8124.8	7974.2	7896.1	7667.5
5°	7662.1	7789.0	7751.6	7675.7	7498.6	7466.7	7323.0	7267.2	7054.3
6°	7061.1	7140.4	7101.7	7038.6	6847.4	6827.6	6691.3	6643.8	6447.1
7°	6420.5	6475.6	6437.6	6388.7	6195.4	6169.6	6058.3	6021.0	5829.0
8°	5745.6	5824.2	5770.0	5739.4	5556.9	5521.7	5409.8	5384.7	5230.7
9°	5169.0	5195.4	5137.7	5046.1	4940.3	4904.4	4785.6	4761.1	4653.3
10°	4512.9	4595.0	4550.2	4471.5	4346.7	4373.8	4201.5	4181.1	4089.5
11°	3942.3	4028.4	3981.0	3910.4	3797.9	3813.5	3672.2	3586.9	3572.6
12°	3471.5	3510.8	3496.6	3439.6	3348.7	3353.5	3228.0	3159.4	3145.2
13°	3012.9	3083.5	3090.2	3043.4	2934.3	2984.4	2890.8	2835.1	2812.8
14°	2702.2	2755.8	2777.5	2776.1	2658.0	2702.2	2628.2	2583.5	2561.0
15°	2418.5	2488.5	2523.8	2521.7	2422.6	2467.4	2405.7	2370.5	2346.7
16°	2152.7	2248.4	2306.0	2296.4	2204.2	2250.4	2189.3	2154.7	2128.3
17°	1885.3	2017.0	2101.8	2083.5	1987.0	2045.5	1987.0	1957.3	1929.4
18°	1679.7	1787.7	1907.0	1867.7	1760.5	1851.5	1801.2	1777.5	1751.8
19°	1495.3	1569.2	1724.5	1654.6	1557.6	1660.8	1623.5	1604.4	1580.0
20°	1348.0	1411.8	1550.2	1467.4	1385.4	1469.5	1459.3	1444.5	1424.1
21°	1159.5	1280.9	1392.1	1315.4	1207.5	1326.3	1339.2	1331.1	1316.2
22°	917.9	1136.3	1277.5	1137.8	996.6	1221.8	1248.3	1242.2	1231.4
23°	714.4	966.2	1171.7	974.3	776.0	1105.8	1145.2	1141.2	1105.2
24°	521.0	791.1	1038.6	782.2	558.3	947.8	1023.2	1016.3	886.0
25°	343.3	616.1	917.3	586.8	356.8	766.7	886.0	874.5	641.2
26°	220.5	450.4	808.0	400.9	189.9	572.5	740.8	708.2	397.5
27°	105.9	314.1	674.3	236.1	92.2	382.0	594.3	521.7	192.0
28°	66.6	164.8	535.9	117.4	62.4	212.3	455.3	331.1	75.3
29°	54.3	81.4	396.9	66.6	50.9	97.7	326.2	161.4	52.3
30°	44.8	54.3	270.7	50.9	41.4	54.3	214.3	63.1	40.0
32.5°	28.5	34.0	62.4	31.9	27.1	31.2	50.9	30.6	25.1
35°	17.0	21.7	27.1	21.0	16.3	20.4	27.9	19.8	15.6
37.5°	10.2	12.9	17.7	12.9	10.2	12.9	17.7	12.9	9.6
40°	6.1	8.1	12.2	8.1	6.1	8.1	12.2	8.1	6.1
42.5°	4.1	4.7	8.1	4.7	3.4	4.7	8.1	5.5	4.1
45°	2.7	3.4	4.7	2.7	2.1	2.7	4.7	3.4	2.7
47.5°	2.1	2.1	2.7	1.4	1.4	2.1	3.4	2.7	2.1
50°	1.4	1.4	2.1	0.6	0.6	0.6	2.1	2.1	2.1
52.5°	0.6	0.6	0.6	0.0	0.0	0.0	1.4	1.4	1.4
55°	0.6	0.6	0.6	0.0	0.0	0.0	0.6	1.4	1.4
57.5°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	1.4	1.4
60°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	1.4	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°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.6	0.6	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°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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