

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: P208796

Luminaire Tested: **LDSQA6A20827D010TE LAR35FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208796
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29057)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA6A20827D010TE LAR35FL 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2254.6 lumens
Efficiency: N/A
Efficacy: 78.3 lumens/watt
Spacing Criteria (0/90/45): 0.6 / 0.59 / 0.55
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

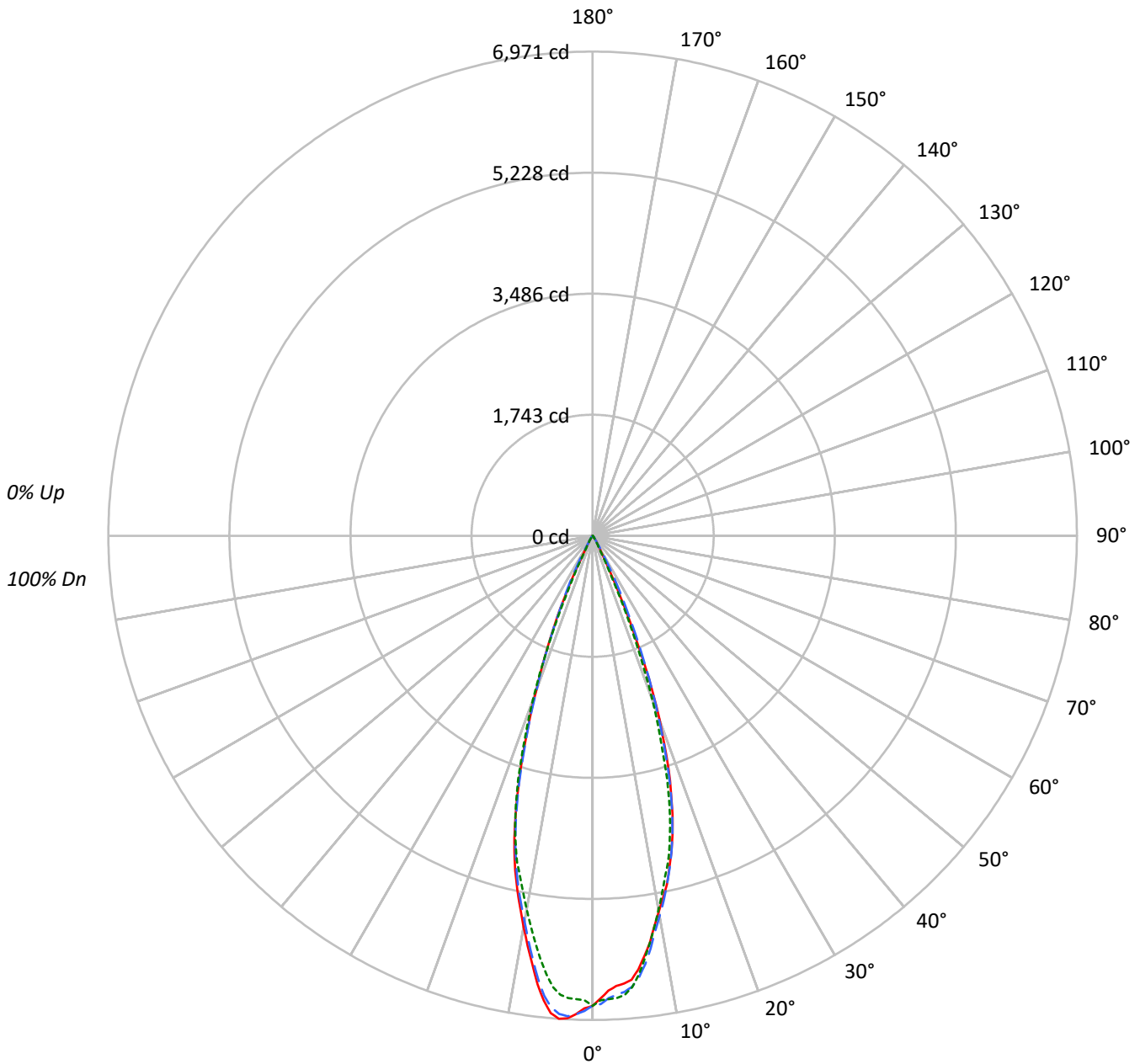
Input Watts (W): 28.81
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96					96			
2	111	107	104	102	109	106	103	101	103	100	98	100	98	96	97	96	94	93					93			
3	107	103	99	96	106	101	98	95	99	96	94	96	94	92	94	92	91	90					90			
4	104	98	94	91	102	97	93	91	95	92	90	93	91	89	92	89	88	86					86			
5	101	94	90	87	99	94	90	87	92	89	86	90	88	85	89	87	85	83					83			
6	97	91	87	84	96	90	86	83	89	85	83	88	85	82	87	84	82	81					81			
7	94	88	83	80	93	87	83	80	86	82	80	85	82	79	84	81	79	78					78			
8	92	85	80	77	91	84	80	77	83	80	77	82	79	77	82	79	76	75					75			
9	89	82	78	75	88	82	78	75	81	77	75	80	77	74	79	76	74	73					73			
10	86	79	75	72	86	79	75	72	78	75	72	78	74	72	77	74	72	71					71			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	291461	291461	291461
5°	277266	282080	298163
10°	240223	238925	250021
15°	198365	192138	192941
20°	129017	114946	109558
25°	38775	29639	39464
30°	8462	6155	6533
35°	3017	1855	2034
40°	894	585	703
45°	256	170	213
50°	47	47	94
55°	53	0	105
60°	60	0	0
65°	71	0	0
70°	88	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°	596.3	26.4
10°-20°	1157.4	51.3
20°-30°	457.3	20.3
30°-40°	37.6	1.7
40°-50°	5.2	0.2
50°-60°	0.6	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°	2211.1	98.1
0°-40°	2248.7	99.7
0°-60°	2254.4	100.0
0°-90°	2254.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2254.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6769	6769	6769	6769	6769	
5°	6415	6518	6527	6820	6899	580
15°	4450	4438	4310	4275	4328	1189
25°	816	1103	624	914	831	459
35°	57	58	35	49	39	43
45°	4	10	3	8	4	4
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°	6769.4	6769.4	6769.4	6769.4	6769.4	6769.4	6769.4	6769.4	6769.4
1°	6660.1	6584.0	6743.1	6736.8	6687.0	6827.5	6842.0	6932.6	6803.9
2°	6552.9	6492.7	6660.1	6677.4	6677.4	6852.4	6898.0	7011.4	6893.2
3°	6490.6	6440.8	6615.1	6660.8	6665.6	6860.7	6927.7	7055.0	6958.2
4°	6463.6	6418.0	6583.3	6618.6	6625.5	6831.6	6902.2	7047.4	6971.3
5°	6415.2	6364.0	6517.6	6523.1	6526.6	6737.5	6819.8	6963.7	6898.7
6°	6278.3	6251.3	6391.7	6361.3	6351.6	6577.1	6660.8	6794.9	6729.2
7°	6099.1	6081.1	6213.3	6166.9	6142.7	6353.0	6430.4	6557.7	6505.8
8°	5915.8	5872.3	5998.1	5958.0	5917.2	6098.4	6166.2	6283.8	6235.4
9°	5686.9	5664.8	5758.1	5745.0	5689.7	5875.7	5900.6	6015.4	5976.0
10°	5494.6	5467.6	5561.7	5536.8	5464.9	5627.4	5644.7	5754.7	5718.7
11°	5307.9	5272.6	5352.8	5321.0	5240.1	5386.0	5397.8	5500.1	5463.5
12°	5136.3	5078.9	5141.9	5103.8	5018.1	5146.7	5152.2	5248.4	5214.5
13°	4909.5	4871.4	4921.2	4880.4	4825.8	4898.4	4887.3	4978.6	4947.5
14°	4690.9	4643.2	4688.8	4639.7	4582.3	4630.7	4598.9	4678.4	4654.2
15°	4450.2	4402.5	4438.4	4378.3	4310.5	4328.5	4275.2	4349.2	4328.5
16°	4170.1	4122.3	4153.5	4080.1	3999.9	3989.5	3919.0	3984.0	3962.6
17°	3854.0	3819.4	3840.8	3748.8	3664.5	3628.5	3535.1	3592.5	3571.1
18°	3553.1	3485.3	3494.3	3391.9	3263.3	3241.2	3136.0	3190.7	3169.2
19°	3158.8	3127.0	3131.9	3016.4	2886.3	2845.5	2741.1	2789.5	2765.3
20°	2815.8	2767.4	2763.2	2638.0	2508.7	2465.8	2364.8	2414.6	2391.1
21°	2423.6	2453.3	2401.5	2269.4	2109.6	2113.7	2024.5	2029.4	2045.3
22°	1982.3	2090.9	2046.6	1890.3	1690.4	1782.4	1702.2	1707.7	1721.6
23°	1545.9	1658.6	1698.7	1509.2	1292.0	1475.3	1411.7	1415.8	1424.8
24°	1147.5	1306.6	1378.5	1161.3	930.3	1186.9	1150.9	1155.8	1146.1
25°	816.2	1002.9	1103.2	857.7	623.9	922.0	914.4	922.0	830.7
26°	551.3	756.0	870.1	601.8	386.0	681.3	727.6	711.0	538.8
27°	352.8	574.8	668.8	393.6	244.9	469.0	543.0	538.1	309.2
28°	248.3	399.1	493.9	242.1	188.8	294.7	388.0	354.1	197.8
29°	209.6	259.4	344.5	172.2	153.6	174.3	260.1	206.8	161.9
30°	170.2	172.2	226.2	139.0	123.8	124.5	166.0	135.6	131.4
32.5°	103.8	103.1	97.5	81.6	72.6	72.6	80.9	78.2	77.5
35°	57.4	62.9	58.1	49.1	35.3	43.6	49.1	46.3	38.7
37.5°	31.1	36.7	40.1	27.0	19.4	25.6	33.2	27.0	22.1
40°	15.9	20.1	28.4	15.2	10.4	14.5	22.8	15.2	12.5
42.5°	8.3	11.1	18.0	8.3	4.8	8.3	14.5	8.3	6.2
45°	4.2	5.5	9.7	4.2	2.8	4.2	7.6	4.8	3.5
47.5°	2.1	2.8	4.8	2.1	0.7	2.1	4.2	2.1	2.1
50°	0.7	1.4	2.8	0.7	0.7	0.7	2.1	1.4	1.4
52.5°	0.7	0.7	1.4	0.7	0.0	0.7	1.4	0.7	1.4
55°	0.7	0.7	0.7	0.0	0.0	0.7	0.7	0.7	1.4
57.5°	0.7	0.7	0.7	0.0	0.0	0.0	0.7	0.7	1.4
60°	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.7	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.7	0.7	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°	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)