

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: P182503

Luminaire Tested: **LDSQA4A28830D010TE LAR35FL 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182503
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26795)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A28830D010TE LAR35FL 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3164.5 lumens
Efficiency: N/A
Efficacy: 71.1 lumens/watt
Spacing Criteria (0/90/45): 0.62 / 0.63 / 0.57
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

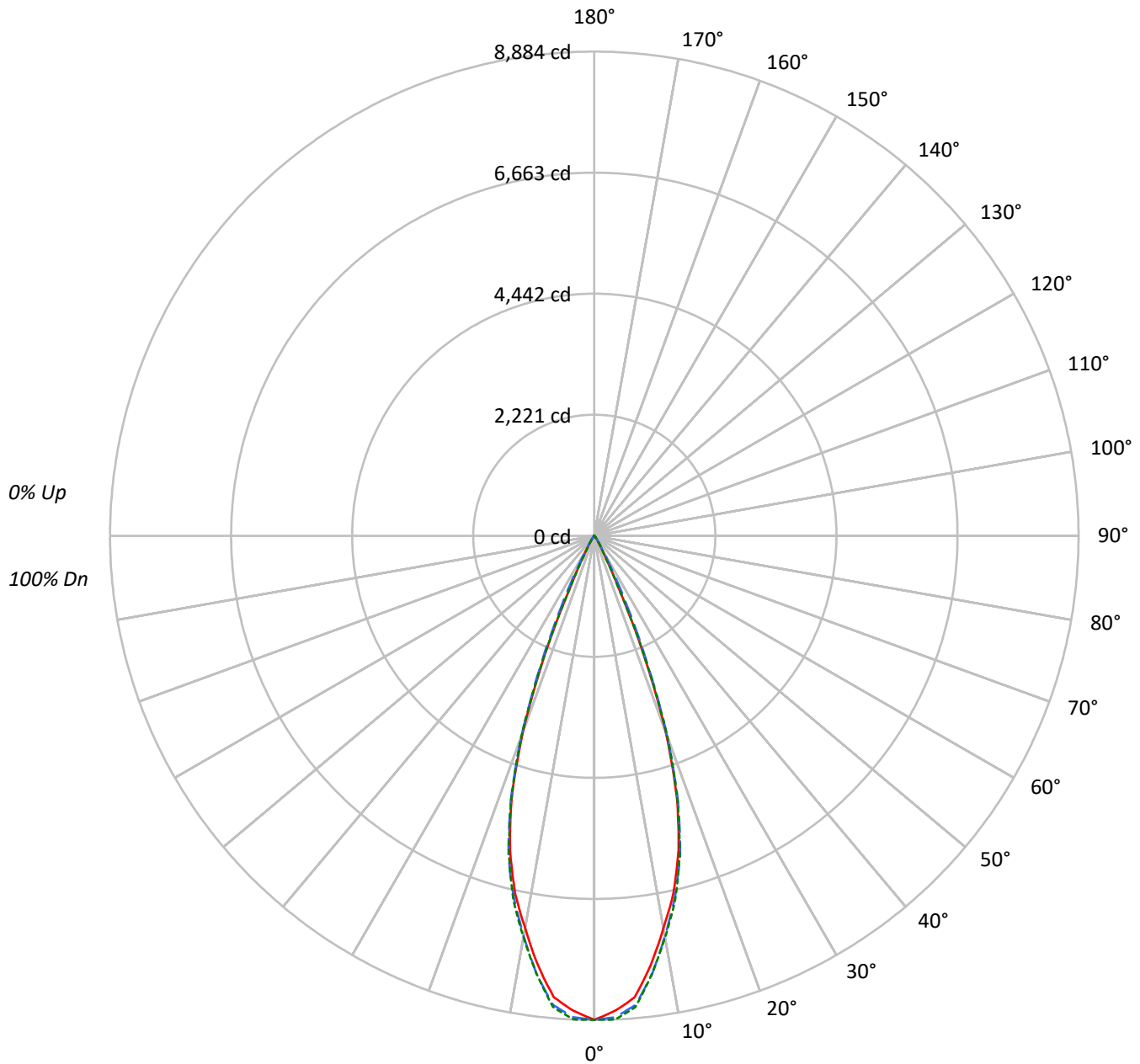
Input Watts (W): 44.49
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
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	109	112	110	109	107	107	105	104	103	102	101	99	99	98	96		
2	111	107	104	101	109	105	103	100	102	100	98	99	98	96	97	95	94	93		
3	107	102	98	95	105	101	97	95	98	96	93	96	94	92	94	92	90	89		
4	103	98	94	91	102	97	93	90	95	92	89	93	90	88	91	89	87	86		
5	100	94	90	86	99	93	89	86	91	88	85	90	87	85	88	86	84	83		
6	97	90	86	83	96	90	85	82	88	85	82	87	84	81	86	83	81	80		
7	94	87	83	79	93	86	82	79	85	82	79	84	81	79	83	80	78	77		
8	91	84	80	77	90	83	79	76	82	79	76	82	78	76	81	78	76	74		
9	88	81	77	74	87	81	77	74	80	76	73	79	76	73	78	75	73	72		
10	86	78	74	71	85	78	74	71	77	74	71	77	73	71	76	73	71	70		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	860351	860351	860351
5°	826742	840609	844013
10°	718907	733603	735718
15°	598838	610041	607343
20°	393494	402371	402927
25°	109156	153441	107425
30°	26187	33257	26634
35°	7001	12098	6847
40°	2555	4591	2377
45°	1288	1658	1110
50°	814	814	603
55°	456	456	220
60°	523	252	252
65°	298	298	298
70°	368	368	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	780.5	24.7
10°-20°	1618.3	51.1
20°-30°	691.1	21.8
30°-40°	61.0	1.9
40°-50°	9.1	0.3
50°-60°	2.6	0.1
60°-70°	1.3	0.0
70°-80°	0.6	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°	3089.9	97.6
0°-40°	3150.9	99.6
0°-60°	3162.6	99.9
0°-90°	3164.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3164.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8881	8881	8881	8881	8881	
5°	8502	8572	8644	8631	8679	771
15°	5971	6029	6083	6038	6056	1601
25°	1021	1391	1436	1374	1005	626
35°	59	74	102	73	58	50
45°	9	9	12	9	8	8
55°	3	3	3	3	1	3
65°	1	1	1	1	1	1
75°	0	1	0	0	0	1
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°
0°	8881.0	8881.0	8881.0	8881.0	8881.0
2.5°	8725.0	8786.8	8842.0	8838.0	8883.7
5°	8501.6	8571.6	8644.2	8630.8	8679.2
7.5°	7944.6	8015.9	8110.1	8073.8	8106.1
10°	7308.2	7383.6	7457.6	7434.7	7479.1
12.5°	6712.2	6755.3	6809.1	6805.1	6852.2
15°	5970.9	6028.8	6082.6	6038.2	6055.7
17.5°	5042.6	5065.5	5105.8	5061.4	5073.5
20°	3816.9	3880.2	3903.0	3851.9	3908.4
22.5°	2388.1	2540.1	2552.2	2525.3	2440.6
25°	1021.2	1391.2	1435.5	1373.7	1005.0
27.5°	413.0	527.4	683.5	516.6	402.3
30°	234.1	254.3	297.3	250.2	238.1
32.5°	111.7	142.6	170.9	138.6	113.0
35°	59.2	74.0	102.3	72.7	57.9
37.5°	33.6	43.1	61.9	40.4	33.6
40°	20.2	25.6	36.3	24.2	18.8
42.5°	13.5	16.1	20.2	14.8	12.1
45°	9.4	9.4	12.1	9.4	8.1
47.5°	6.7	6.7	8.1	5.4	5.4
50°	5.4	5.4	5.4	4.0	4.0
52.5°	4.0	4.0	4.0	2.7	2.7
55°	2.7	2.7	2.7	2.7	1.3
57.5°	2.7	2.7	2.7	1.3	1.3
60°	2.7	2.7	1.3	1.3	1.3
62.5°	1.3	1.3	1.3	1.3	1.3
65°	1.3	1.3	1.3	1.3	1.3
67.5°	1.3	1.3	1.3	1.3	1.3
70°	1.3	1.3	1.3	1.3	0.0
72.5°	1.3	1.3	1.3	1.3	1.3
75°	0.0	1.3	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - 90°-270°







(END OF REPORT)