

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: P182493

Luminaire Tested: **LDSQA4A09940D010TE LAR35FL 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182493
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: LDSQA4A09940D010TE LAR35FL 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1123.3 lumens
Efficiency: N/A
Efficacy: 81.2 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

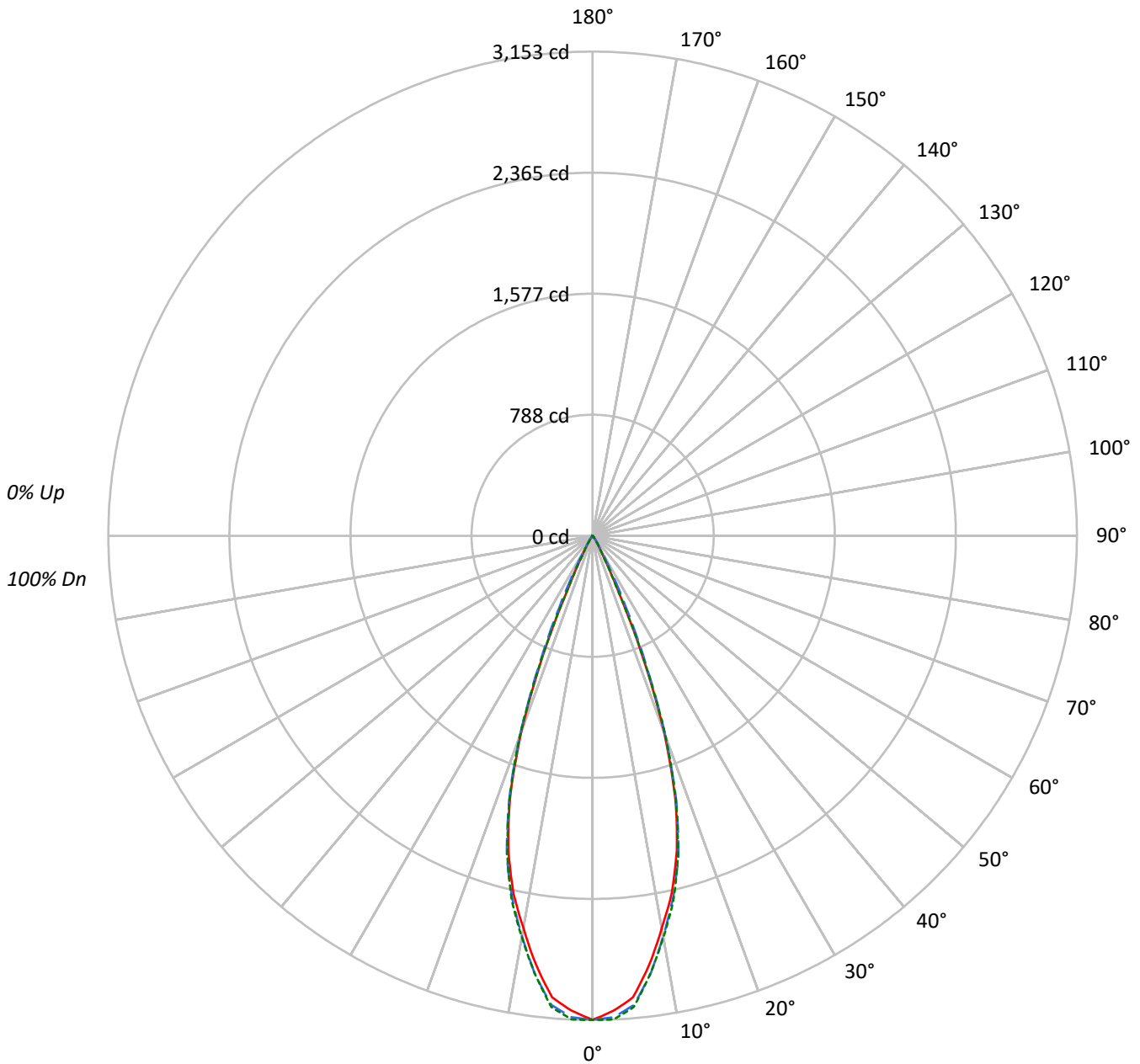
Input Watts (W): 13.84
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	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	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°	305371	305371	305371
5°	293438	298359	299574
10°	255171	260385	261133
15°	212551	216522	215569
20°	139670	142814	143010
25°	38737	54461	38128
30°	9296	11801	9452
35°	2484	4293	2424
40°	911	1631	847
45°	452	589	397
50°	286	286	211
55°	169	169	84
60°	194	97	97
65°	115	115	115
70°	142	142	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	277.0	24.7
10°-20°	574.4	51.1
20°-30°	245.3	21.8
30°-40°	21.7	1.9
40°-50°	3.2	0.3
50°-60°	0.9	0.1
60°-70°	0.5	0.0
70°-80°	0.2	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°	1096.7	97.6
0°-40°	1118.4	99.6
0°-60°	1122.5	99.9
0°-90°	1123.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1123.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3152	3152	3152	3152	3152	
5°	3018	3042	3068	3063	3081	273
15°	2119	2140	2159	2143	2149	568
25°	362	494	510	488	357	222
35°	21	26	36	26	20	18
45°	3	3	4	3	3	3
55°	1	1	1	1	0	1
65°	0	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3152.2	3152.2	3152.2	3152.2	3152.2
2.5°	3096.8	3118.8	3138.3	3136.9	3153.1
5°	3017.5	3042.4	3068.1	3063.4	3080.6
7.5°	2819.8	2845.1	2878.6	2865.7	2877.1
10°	2594.0	2620.7	2647.0	2638.8	2654.6
12.5°	2382.4	2397.7	2416.8	2415.4	2432.1
15°	2119.3	2139.8	2158.9	2143.2	2149.4
17.5°	1789.8	1797.9	1812.2	1796.5	1800.8
20°	1354.8	1377.2	1385.3	1367.2	1387.2
22.5°	847.6	901.6	905.9	896.3	866.2
25°	362.4	493.8	509.5	487.6	356.7
27.5°	146.6	187.2	242.6	183.4	142.8
30°	83.1	90.3	105.5	88.8	84.5
32.5°	39.6	50.6	60.6	49.2	40.1
35°	21.0	26.3	36.3	25.8	20.5
37.5°	11.9	15.3	22.0	14.3	11.9
40°	7.2	9.1	12.9	8.6	6.7
42.5°	4.8	5.7	7.2	5.3	4.3
45°	3.3	3.3	4.3	3.3	2.9
47.5°	2.4	2.4	2.9	1.9	1.9
50°	1.9	1.9	1.9	1.4	1.4
52.5°	1.4	1.4	1.4	1.0	1.0
55°	1.0	1.0	1.0	1.0	0.5
57.5°	1.0	1.0	1.0	0.5	0.5
60°	1.0	1.0	0.5	0.5	0.5
62.5°	0.5	0.5	0.5	0.5	0.5
65°	0.5	0.5	0.5	0.5	0.5
67.5°	0.5	0.5	0.5	0.5	0.5
70°	0.5	0.5	0.5	0.5	0.0
72.5°	0.5	0.5	0.5	0.5	0.5
75°	0.0	0.5	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)