

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: P182491

Luminaire Tested: **LDSQA4A09930D010TE LAR35FL 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182491
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: LDSQA4A09930D010TE LAR35FL 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1030.3 lumens
Efficiency: N/A
Efficacy: 74.4 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

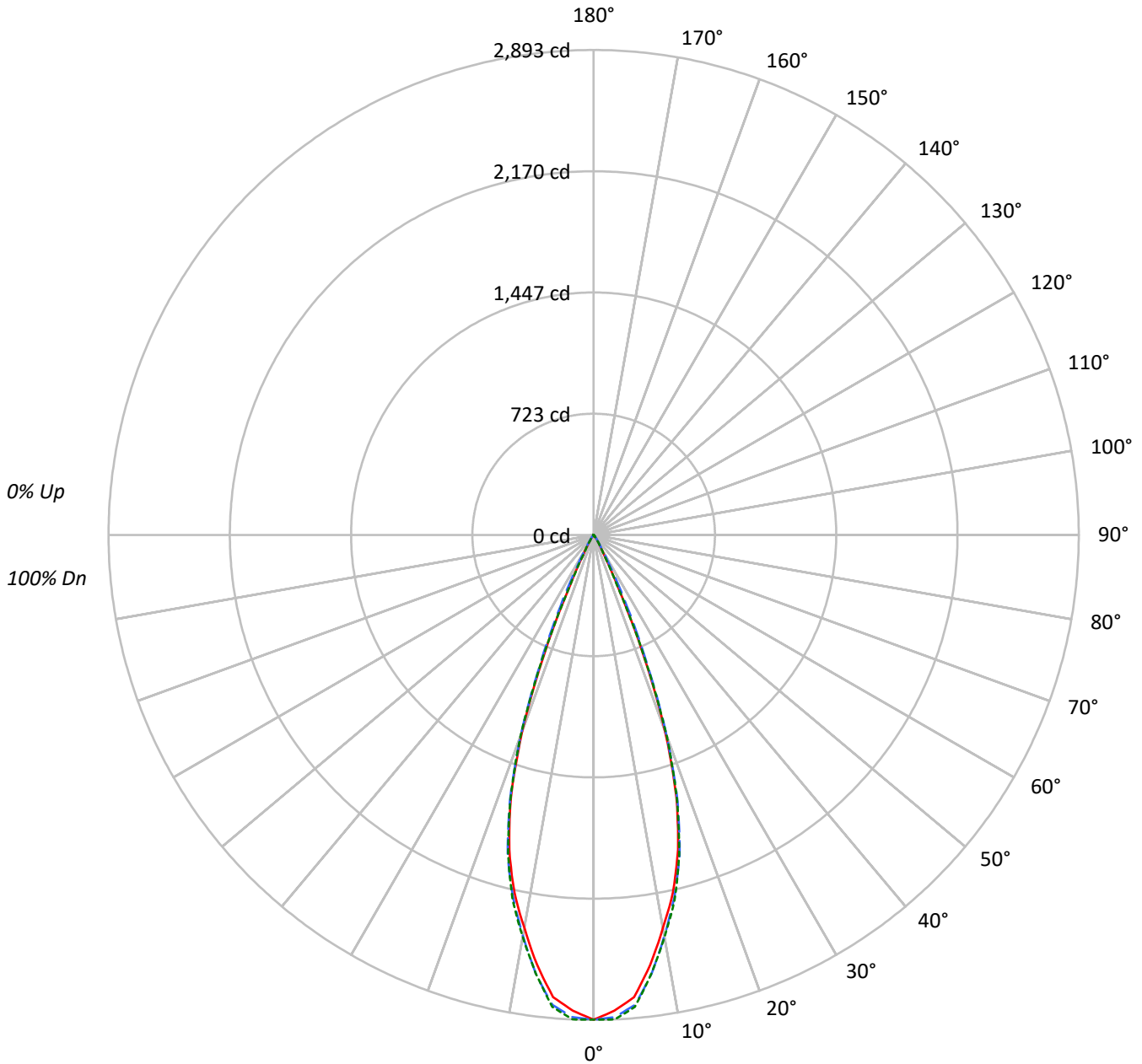
Input Watts (W): 13.84
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	280135	280135	280135
5°	269195	273707	274816
10°	234081	238862	239550
15°	194979	198630	197747
20°	128124	131010	131196
25°	35541	49960	34974
30°	8524	10828	8669
35°	2282	3938	2223
40°	835	1492	771
45°	425	534	356
50°	271	271	196
55°	152	152	68
60°	174	78	78
65°	92	92	92
70°	113	113	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	254.1	24.7
10°-20°	526.9	51.1
20°-30°	225.0	21.8
30°-40°	19.9	1.9
40°-50°	3.0	0.3
50°-60°	0.8	0.1
60°-70°	0.4	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°	1006.1	97.6
0°-40°	1025.9	99.6
0°-60°	1029.8	99.9
0°-90°	1030.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1030.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2892	2892	2892	2892	2892	
5°	2768	2791	2815	2810	2826	251
15°	1944	1963	1980	1966	1972	521
25°	332	453	467	447	327	204
35°	19	24	33	24	19	16
45°	3	3	4	3	3	3
55°	1	1	1	1	0	1
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	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2891.7	2891.7	2891.7	2891.7	2891.7
2.5°	2840.9	2861.0	2879.0	2877.7	2892.6
5°	2768.2	2790.9	2814.6	2810.2	2826.0
7.5°	2586.8	2610.0	2640.7	2628.8	2639.4
10°	2379.6	2404.1	2428.2	2420.8	2435.2
12.5°	2185.5	2199.5	2217.1	2215.7	2231.1
15°	1944.1	1963.0	1980.5	1966.0	1971.7
17.5°	1641.9	1649.3	1662.5	1648.0	1652.0
20°	1242.8	1263.4	1270.8	1254.2	1272.6
22.5°	777.6	827.1	831.0	822.3	794.7
25°	332.5	453.0	467.4	447.3	327.2
27.5°	134.5	171.7	222.5	168.2	131.0
30°	76.2	82.8	96.8	81.5	77.5
32.5°	36.4	46.4	55.6	45.1	36.8
35°	19.3	24.1	33.3	23.7	18.8
37.5°	11.0	14.0	20.2	13.1	11.0
40°	6.6	8.3	11.8	7.9	6.1
42.5°	4.4	5.3	6.6	4.8	3.9
45°	3.1	3.1	3.9	3.1	2.6
47.5°	2.2	2.2	2.6	1.8	1.8
50°	1.8	1.8	1.8	1.3	1.3
52.5°	1.3	1.3	1.3	0.9	0.9
55°	0.9	0.9	0.9	0.9	0.4
57.5°	0.9	0.9	0.9	0.4	0.4
60°	0.9	0.9	0.4	0.4	0.4
62.5°	0.4	0.4	0.4	0.4	0.4
65°	0.4	0.4	0.4	0.4	0.4
67.5°	0.4	0.4	0.4	0.4	0.4
70°	0.4	0.4	0.4	0.4	0.0
72.5°	0.4	0.4	0.4	0.4	0.4
75°	0.0	0.4	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)