

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: P182499

Luminaire Tested: **LDSQA4A13930D010TE LAR35FL 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182499
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: LDSQA4A13930D010TE 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: 1525.8 lumens
Efficiency: N/A
Efficacy: 68.5 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

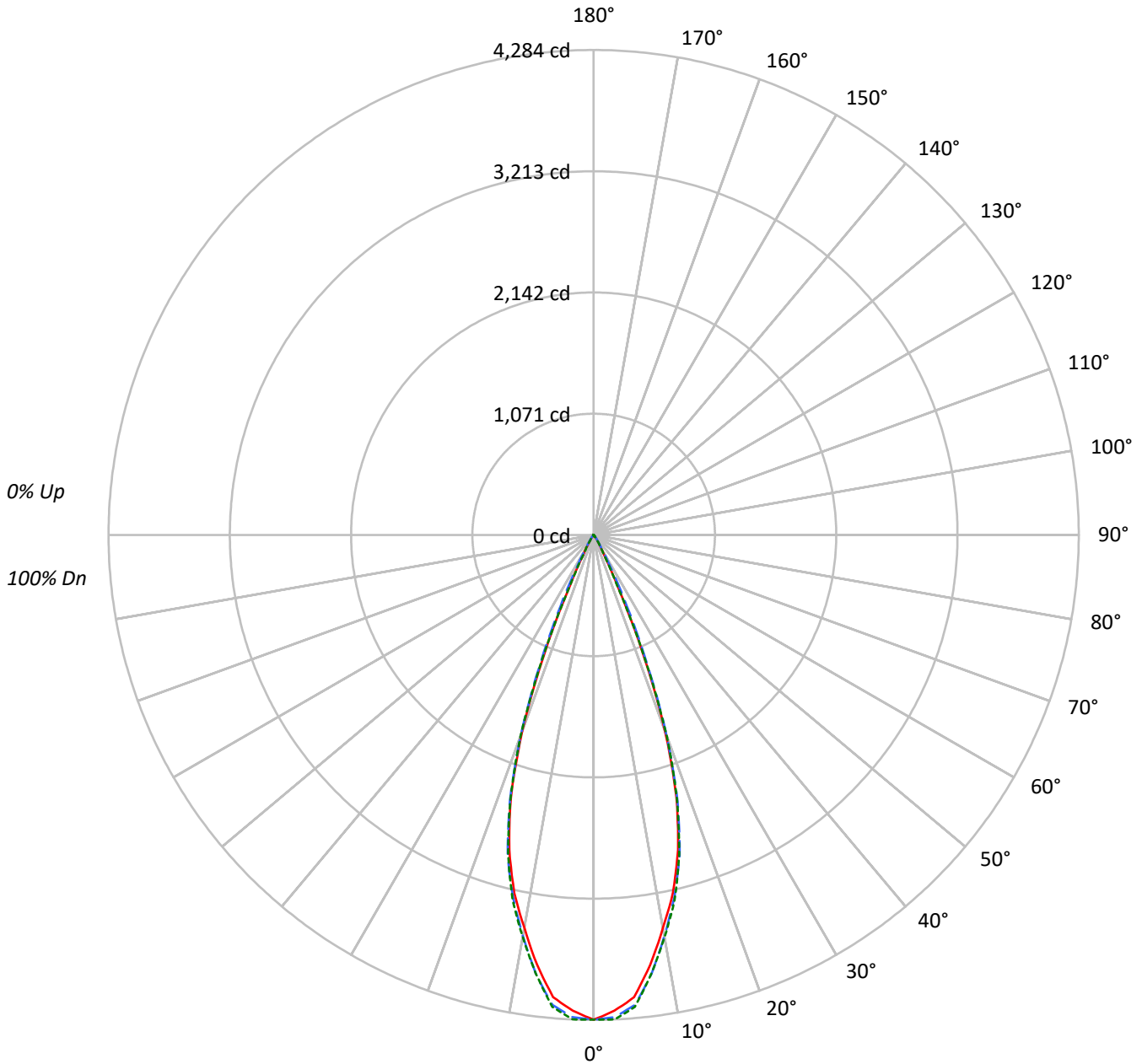
Input Watts (W): 22.27
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	414859	414859	414859
5°	398648	405339	406982
10°	346655	353738	354761
15°	288753	294159	292855
20°	189742	194020	194288
25°	52633	73989	51799
30°	12629	16041	12842
35°	3370	5830	3300
40°	1227	2213	1151
45°	617	795	534
50°	392	392	286
55°	220	220	101
60°	252	116	116
65°	138	138	138
70°	170	170	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	376.3	24.7
10°-20°	780.3	51.1
20°-30°	333.3	21.8
30°-40°	29.4	1.9
40°-50°	4.4	0.3
50°-60°	1.2	0.1
60°-70°	0.6	0.0
70°-80°	0.3	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°	1489.9	97.6
0°-40°	1519.4	99.6
0°-60°	1524.9	99.9
0°-90°	1525.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1525.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4282	4282	4282	4282	4282	
5°	4099	4133	4168	4162	4185	372
15°	2879	2907	2933	2912	2920	772
25°	492	671	692	662	485	302
35°	28	36	49	35	28	24
45°	4	4	6	4	4	4
55°	1	1	1	1	1	1
65°	1	1	1	1	1	1
75°	0	1	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°	4282.4	4282.4	4282.4	4282.4	4282.4
2.5°	4207.1	4237.0	4263.5	4261.6	4283.7
5°	4099.4	4133.2	4168.2	4161.7	4185.1
7.5°	3830.8	3865.2	3910.6	3893.1	3908.7
10°	3524.0	3560.3	3596.0	3585.0	3606.4
12.5°	3236.6	3257.3	3283.3	3281.4	3304.1
15°	2879.1	2907.0	2933.0	2911.6	2920.0
17.5°	2431.5	2442.5	2462.0	2440.6	2446.4
20°	1840.5	1871.0	1882.0	1857.4	1884.6
22.5°	1151.5	1224.8	1230.7	1217.7	1176.8
25°	492.4	670.8	692.2	662.4	484.6
27.5°	199.2	254.3	329.6	249.1	194.0
30°	112.9	122.6	143.4	120.7	114.8
32.5°	53.8	68.8	82.4	66.8	54.5
35°	28.5	35.7	49.3	35.0	27.9
37.5°	16.2	20.8	29.8	19.5	16.2
40°	9.7	12.3	17.5	11.7	9.1
42.5°	6.5	7.8	9.7	7.1	5.8
45°	4.5	4.5	5.8	4.5	3.9
47.5°	3.2	3.2	3.9	2.6	2.6
50°	2.6	2.6	2.6	1.9	1.9
52.5°	1.9	1.9	1.9	1.3	1.3
55°	1.3	1.3	1.3	1.3	0.6
57.5°	1.3	1.3	1.3	0.6	0.6
60°	1.3	1.3	0.6	0.6	0.6
62.5°	0.6	0.6	0.6	0.6	0.6
65°	0.6	0.6	0.6	0.6	0.6
67.5°	0.6	0.6	0.6	0.6	0.6
70°	0.6	0.6	0.6	0.6	0.0
72.5°	0.6	0.6	0.6	0.6	0.6
75°	0.0	0.6	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)