

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: P182487

Luminaire Tested: **LDSQA4A09830D010TE LAR35FL 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182487
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: LDSQA4A09830D010TE 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: 1252.2 lumens
Efficiency: N/A
Efficacy: 90.5 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

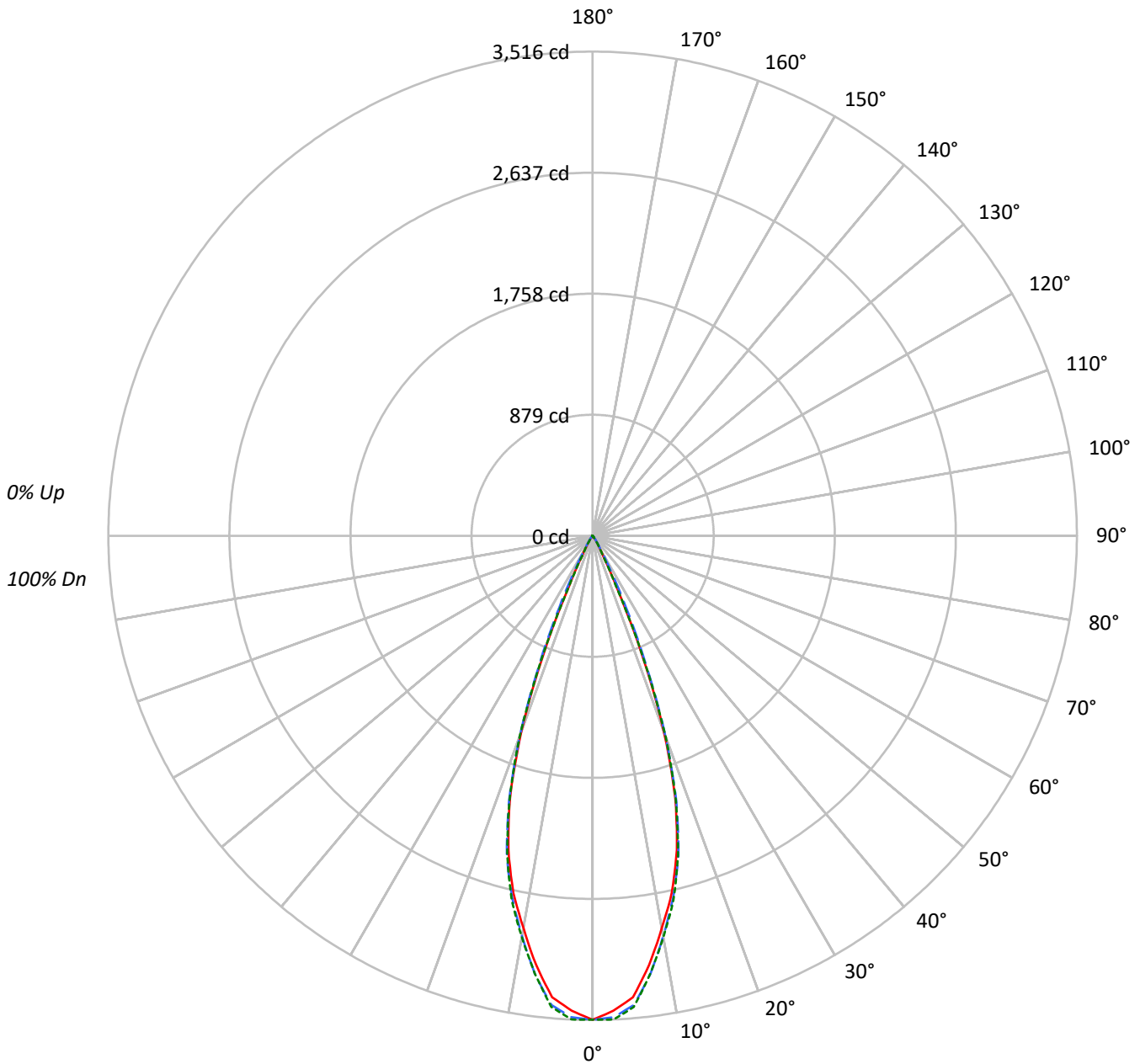
Input Watts (W): 13.84
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	340459	340459	340459
5°	327163	332648	333999
10°	284486	290299	291136
15°	236972	241405	240342
20°	155711	159227	159443
25°	43194	60724	42510
30°	10358	13166	10537
35°	2767	4790	2708
40°	1012	1821	948
45°	507	658	438
50°	316	316	241
55°	186	186	84
60°	213	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°	308.9	24.7
10°-20°	640.4	51.1
20°-30°	273.5	21.8
30°-40°	24.2	1.9
40°-50°	3.6	0.3
50°-60°	1.0	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°	1222.7	97.6
0°-40°	1246.9	99.6
0°-60°	1251.5	99.9
0°-90°	1252.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1252.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3514	3514	3514	3514	3514	
5°	3364	3392	3421	3415	3435	305
15°	2363	2386	2407	2389	2396	634
25°	404	550	568	544	398	248
35°	23	29	40	29	23	20
45°	4	4	5	4	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°	3514.4	3514.4	3514.4	3514.4	3514.4
2.5°	3452.7	3477.1	3499.0	3497.4	3515.5
5°	3364.3	3392.0	3420.7	3415.4	3434.6
7.5°	3143.9	3172.1	3209.3	3195.0	3207.8
10°	2892.0	2921.8	2951.1	2942.1	2959.6
12.5°	2656.2	2673.2	2694.5	2692.9	2711.5
15°	2362.8	2385.7	2407.0	2389.4	2396.4
17.5°	1995.5	2004.5	2020.5	2002.9	2007.7
20°	1510.4	1535.5	1544.5	1524.3	1546.6
22.5°	945.0	1005.2	1010.0	999.3	965.8
25°	404.1	550.5	568.1	543.6	397.7
27.5°	163.4	208.7	270.5	204.4	159.2
30°	92.6	100.6	117.7	99.0	94.2
32.5°	44.2	56.4	67.6	54.8	44.7
35°	23.4	29.3	40.5	28.7	22.9
37.5°	13.3	17.0	24.5	16.0	13.3
40°	8.0	10.1	14.4	9.6	7.5
42.5°	5.3	6.4	8.0	5.9	4.8
45°	3.7	3.7	4.8	3.7	3.2
47.5°	2.7	2.7	3.2	2.1	2.1
50°	2.1	2.1	2.1	1.6	1.6
52.5°	1.6	1.6	1.6	1.1	1.1
55°	1.1	1.1	1.1	1.1	0.5
57.5°	1.1	1.1	1.1	0.5	0.5
60°	1.1	1.1	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)