

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: P182501

Luminaire Tested: **LDSQA4A13940D010TE LAR35FL 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182501
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: LDSQA4A13940D010TE 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: 1663.4 lumens
Efficiency: N/A
Efficacy: 74.7 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

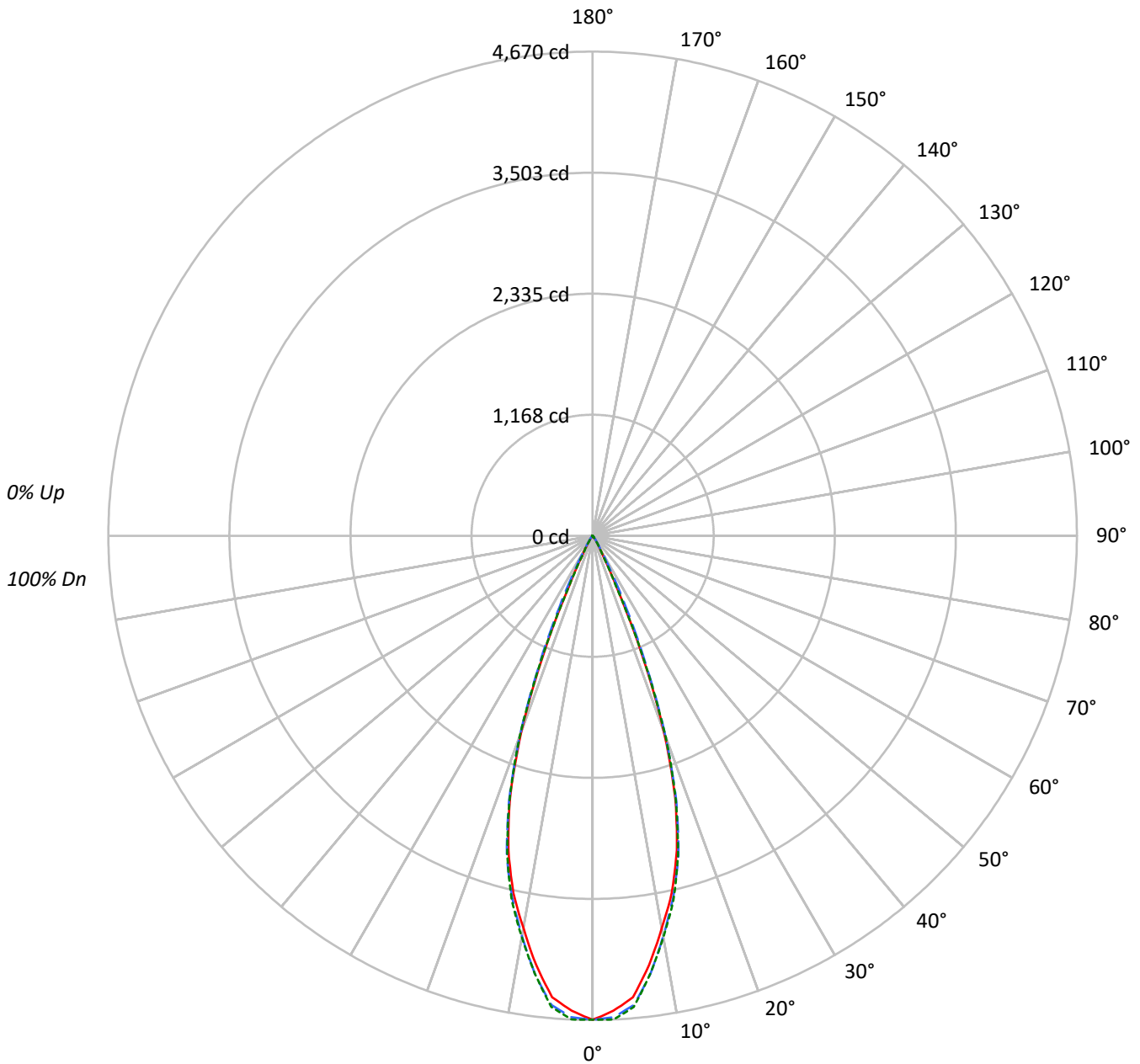
Input Watts (W): 22.27
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P182501

CATALOG NUMBER: LDSQA4A13940D010TE LAR35FL 4LSQA1H

Luminous Intensity Polar Plot





TEST NUMBER: P182501

CATALOG NUMBER: LDSQA4A13940D010TE LAR35FL 4LSQA1H

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°	452224	452224	452224
5°	434561	441854	443644
10°	377878	385600	386722
15°	314769	320656	319232
20°	206835	211495	211794
25°	57379	80659	56470
30°	13770	17484	14005
35°	3678	6351	3595
40°	1340	2415	1252
45°	685	877	575
50°	422	422	316
55°	236	236	118
60°	271	136	136
65°	160	160	160
70°	198	198	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P182501

CATALOG NUMBER: LDSQA4A13940D010TE LAR35FL 4LSQA1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	410.2	24.7
10°-20°	850.6	51.1
20°-30°	363.3	21.8
30°-40°	32.1	1.9
40°-50°	4.8	0.3
50°-60°	1.3	0.1
60°-70°	0.7	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°	1624.1	97.6
0°-40°	1656.2	99.6
0°-60°	1662.3	99.9
0°-90°	1663.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1663.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4668	4668	4668	4668	4668	
5°	4469	4506	4544	4537	4562	405
15°	3138	3169	3197	3174	3183	841
25°	537	731	755	722	528	329
35°	31	39	54	38	30	26
45°	5	5	6	5	4	4
55°	1	1	1	1	1	2
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



TEST NUMBER: P182501

CATALOG NUMBER: LDSQA4A13940D010TE LAR35FL 4LSQA1H

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4668.1	4668.1	4668.1	4668.1	4668.1
2.5°	4586.1	4618.6	4647.6	4645.5	4669.6
5°	4468.7	4505.5	4543.7	4536.6	4562.1
7.5°	4175.9	4213.4	4262.9	4243.8	4260.8
10°	3841.4	3881.0	3919.9	3907.9	3931.3
12.5°	3528.2	3550.8	3579.1	3577.0	3601.7
15°	3138.5	3168.9	3197.2	3173.9	3183.0
17.5°	2650.5	2662.6	2683.8	2660.4	2666.8
20°	2006.3	2039.5	2051.5	2024.7	2054.4
22.5°	1255.3	1335.2	1341.5	1327.4	1282.8
25°	536.8	731.2	754.6	722.0	528.3
27.5°	217.1	277.2	359.3	271.6	211.4
30°	123.1	133.7	156.3	131.5	125.2
32.5°	58.7	75.0	89.8	72.8	59.4
35°	31.1	38.9	53.7	38.2	30.4
37.5°	17.7	22.6	32.5	21.2	17.7
40°	10.6	13.4	19.1	12.7	9.9
42.5°	7.1	8.5	10.6	7.8	6.4
45°	5.0	5.0	6.4	5.0	4.2
47.5°	3.5	3.5	4.2	2.8	2.8
50°	2.8	2.8	2.8	2.1	2.1
52.5°	2.1	2.1	2.1	1.4	1.4
55°	1.4	1.4	1.4	1.4	0.7
57.5°	1.4	1.4	1.4	0.7	0.7
60°	1.4	1.4	0.7	0.7	0.7
62.5°	0.7	0.7	0.7	0.7	0.7
65°	0.7	0.7	0.7	0.7	0.7
67.5°	0.7	0.7	0.7	0.7	0.7
70°	0.7	0.7	0.7	0.7	0.0
72.5°	0.7	0.7	0.7	0.7	0.7
75°	0.0	0.7	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



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)