

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: P182500

Luminaire Tested: **LDSQA4A13935D010TE LAR35FL 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182500
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: LDSQA4A13935D010TE LAR35FL 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1540.6 lumens
Efficiency: N/A
Efficacy: 69.2 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

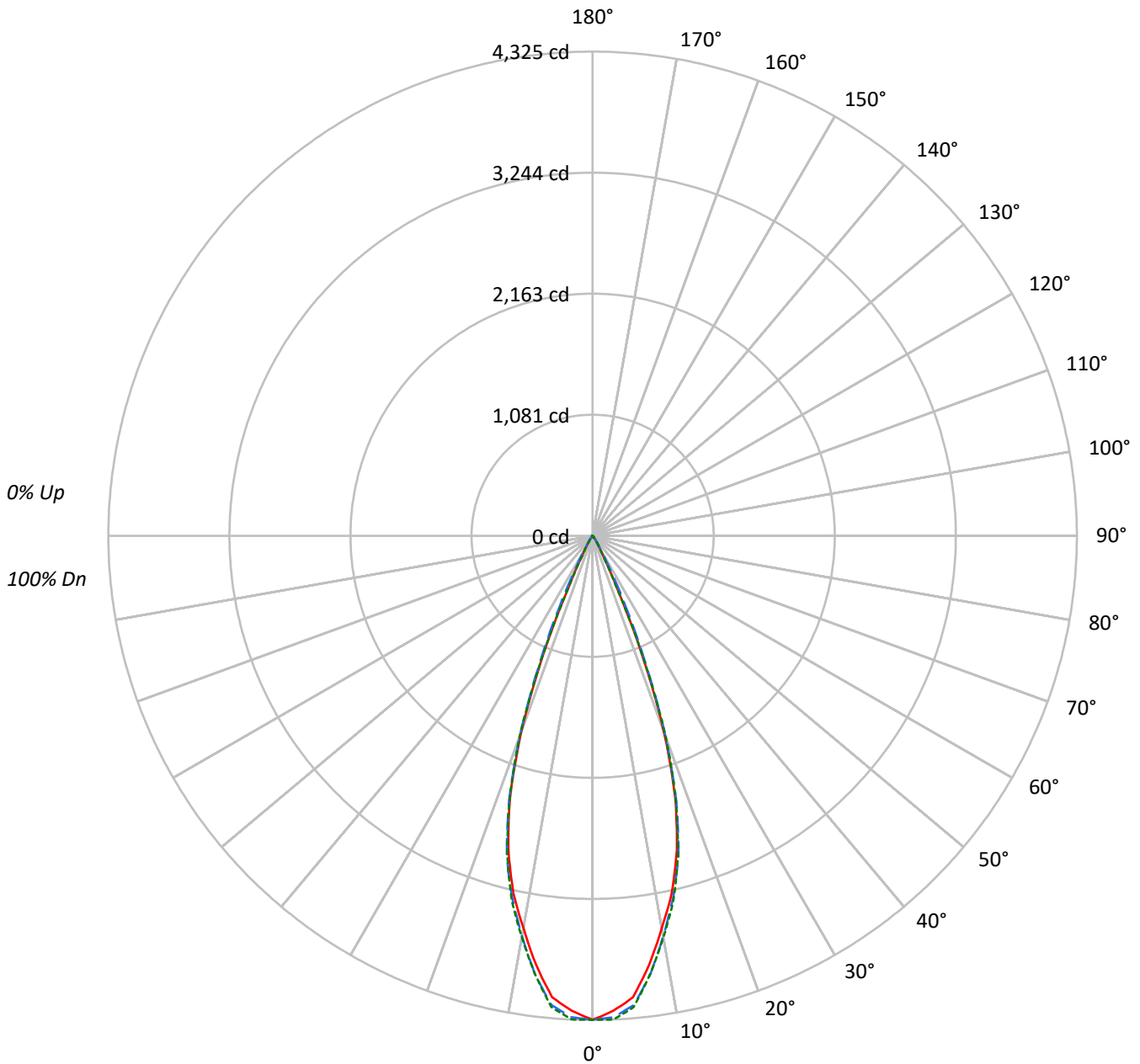
Input Watts (W): 22.27
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	418841	418841	418841
5°	402480	409228	410882
10°	349980	357132	358165
15°	291531	296977	295663
20°	191557	195886	196154
25°	53135	74706	52301
30°	12752	16186	12965
35°	3406	5890	3335
40°	1239	2238	1163
45°	630	808	534
50°	392	392	301
55°	220	220	118
60°	252	136	136
65°	160	160	160
70°	198	198	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	380.0	24.7
10°-20°	787.8	51.1
20°-30°	336.5	21.8
30°-40°	29.7	1.9
40°-50°	4.4	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°	1504.2	97.6
0°-40°	1533.9	99.6
0°-60°	1539.6	99.9
0°-90°	1540.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1540.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4324	4324	4324	4324	4324	
5°	4139	4173	4208	4202	4225	375
15°	2907	2935	2961	2940	2948	779
25°	497	677	699	669	489	305
35°	29	36	50	35	28	24
45°	5	5	6	5	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°	4323.5	4323.5	4323.5	4323.5	4323.5
2.5°	4247.5	4277.6	4304.5	4302.5	4324.8
5°	4138.8	4172.8	4208.2	4201.6	4225.2
7.5°	3867.6	3902.3	3948.2	3930.5	3946.2
10°	3557.8	3594.5	3630.5	3619.4	3641.0
12.5°	3267.6	3288.6	3314.8	3312.8	3335.8
15°	2906.8	2934.9	2961.1	2939.5	2948.0
17.5°	2454.8	2466.0	2485.6	2464.0	2469.9
20°	1858.1	1888.9	1900.1	1875.2	1902.7
22.5°	1162.6	1236.6	1242.5	1229.4	1188.1
25°	497.1	677.2	698.9	668.7	489.3
27.5°	201.1	256.7	332.7	251.5	195.8
30°	114.0	123.8	144.7	121.8	115.9
32.5°	54.4	69.4	83.2	67.5	55.0
35°	28.8	36.0	49.8	35.4	28.2
37.5°	16.4	21.0	30.1	19.6	16.4
40°	9.8	12.4	17.7	11.8	9.2
42.5°	6.5	7.9	9.8	7.2	5.9
45°	4.6	4.6	5.9	4.6	3.9
47.5°	3.3	3.3	3.9	2.6	2.6
50°	2.6	2.6	2.6	2.0	2.0
52.5°	2.0	2.0	2.0	1.3	1.3
55°	1.3	1.3	1.3	1.3	0.7
57.5°	1.3	1.3	1.3	0.7	0.7
60°	1.3	1.3	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



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







(END OF REPORT)