

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: P182497

Luminaire Tested: **LDSQA4A13840D010TE LAR35FL 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182497
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: LDSQA4A13840D010TE LAR35FL 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1979.8 lumens
Efficiency: N/A
Efficacy: 88.9 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

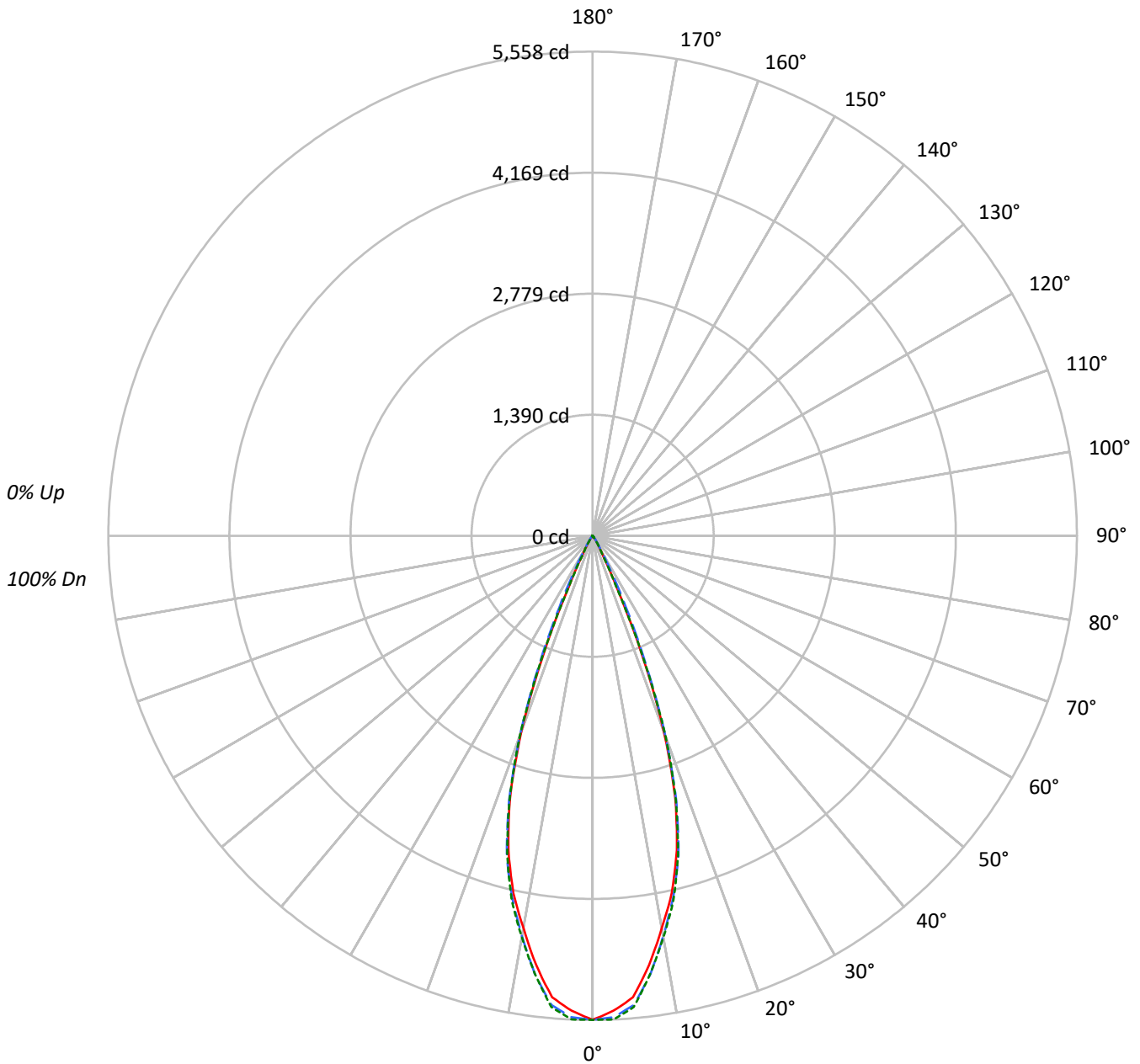
Input Watts (W): 22.27
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	538250	538250	538250
5°	517229	525904	528033
10°	449767	458955	460283
15°	374644	381654	379959
20°	246175	251732	252082
25°	68292	95998	67213
30°	16388	20806	16667
35°	4376	7569	4281
40°	1593	2871	1492
45°	808	1041	699
50°	512	512	377
55°	287	287	135
60°	329	155	155
65°	183	183	183
70°	227	227	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	488.3	24.7
10°-20°	1012.4	51.1
20°-30°	432.4	21.8
30°-40°	38.2	1.9
40°-50°	5.7	0.3
50°-60°	1.6	0.1
60°-70°	0.8	0.0
70°-80°	0.4	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°	1933.1	97.6
0°-40°	1971.3	99.6
0°-60°	1978.6	99.9
0°-90°	1979.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1979.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5556	5556	5556	5556	5556	
5°	5319	5362	5408	5400	5430	482
15°	3736	3772	3805	3778	3788	1002
25°	639	870	898	859	629	392
35°	37	46	64	46	36	31
45°	6	6	8	6	5	5
55°	2	2	2	2	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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5556.1	5556.1	5556.1	5556.1	5556.1
2.5°	5458.5	5497.2	5531.7	5529.2	5557.8
5°	5318.8	5362.5	5408.0	5399.6	5429.9
7.5°	4970.3	5014.9	5073.8	5051.1	5071.3
10°	4572.2	4619.3	4665.6	4651.3	4679.1
12.5°	4199.3	4226.2	4259.9	4257.4	4286.8
15°	3735.5	3771.7	3805.4	3777.6	3788.5
17.5°	3154.7	3169.0	3194.3	3166.5	3174.1
20°	2387.9	2427.5	2441.8	2409.8	2445.2
22.5°	1494.0	1589.1	1596.7	1579.9	1526.9
25°	638.9	870.3	898.1	859.4	628.8
27.5°	258.4	329.9	427.6	323.2	251.7
30°	146.5	159.1	186.0	156.6	149.0
32.5°	69.9	89.2	106.9	86.7	70.7
35°	37.0	46.3	64.0	45.5	36.2
37.5°	21.0	26.9	38.7	25.3	21.0
40°	12.6	16.0	22.7	15.2	11.8
42.5°	8.4	10.1	12.6	9.3	7.6
45°	5.9	5.9	7.6	5.9	5.1
47.5°	4.2	4.2	5.1	3.4	3.4
50°	3.4	3.4	3.4	2.5	2.5
52.5°	2.5	2.5	2.5	1.7	1.7
55°	1.7	1.7	1.7	1.7	0.8
57.5°	1.7	1.7	1.7	0.8	0.8
60°	1.7	1.7	0.8	0.8	0.8
62.5°	0.8	0.8	0.8	0.8	0.8
65°	0.8	0.8	0.8	0.8	0.8
67.5°	0.8	0.8	0.8	0.8	0.8
70°	0.8	0.8	0.8	0.8	0.0
72.5°	0.8	0.8	0.8	0.8	0.8
75°	0.0	0.8	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)