

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: P182450

Luminaire Tested: **LDSQA4A18927D010TE LAR25NF 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182450
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26785)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A18927D010TE LAR25NF 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 25° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1793.0 lumens
Efficiency: N/A
Efficacy: 61.6 lumens/watt
Spacing Criteria (0/90/45): 0.47 / 0.47 / 0.49
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

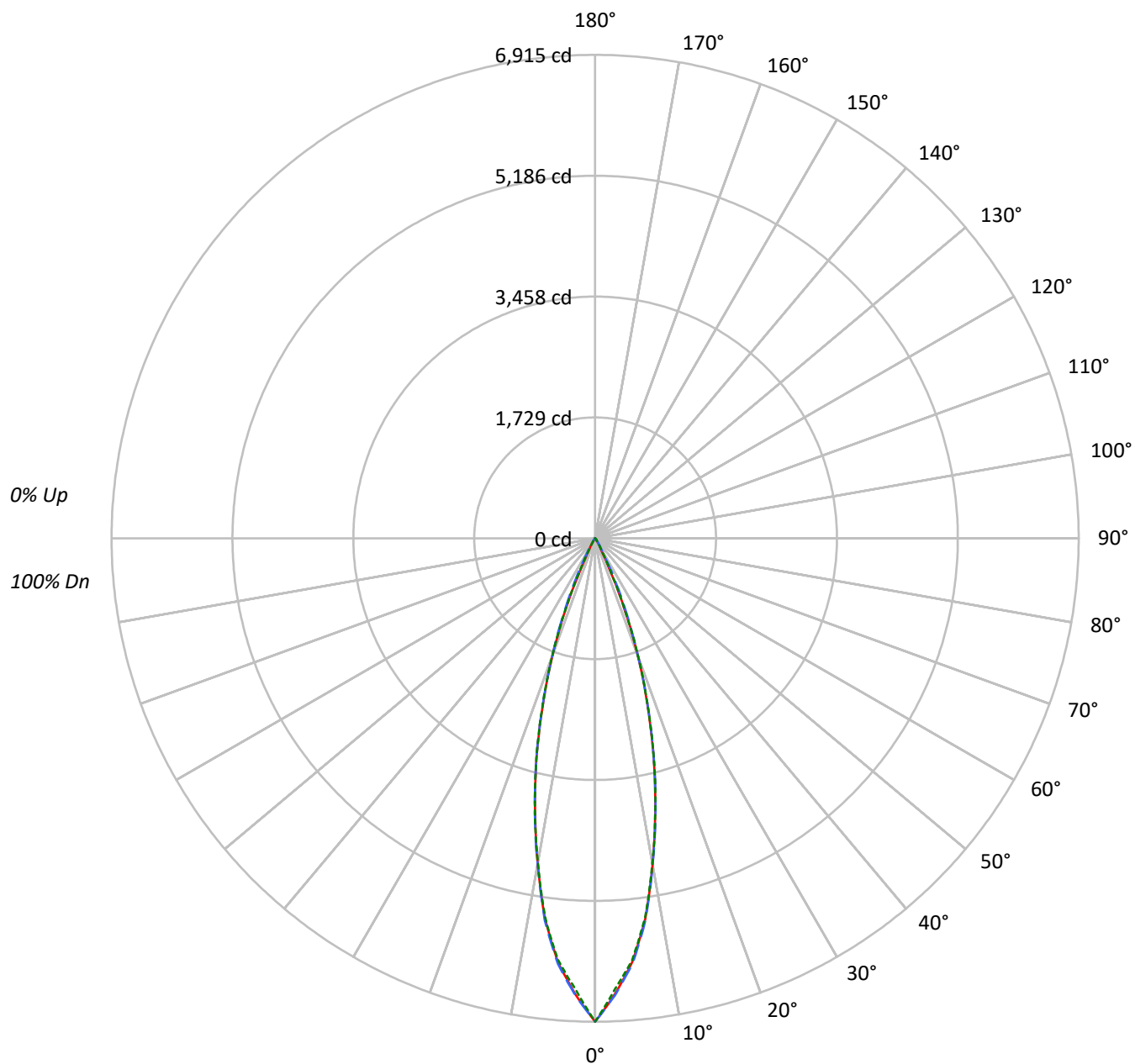
Input Watts (W): 29.12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	97	97	97
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	97	96	95	93	93	93
3	108	103	99	96	106	102	98	96	99	96	94	97	95	93	95	93	91	90	90	90
4	104	99	95	92	103	98	94	91	96	93	90	94	91	89	92	90	88	87	87	87
5	101	95	91	88	100	94	90	88	93	89	87	91	88	86	90	87	85	84	84	84
6	98	92	88	84	97	91	87	84	90	86	84	88	85	83	87	85	83	82	82	82
7	95	89	84	81	94	88	84	81	87	83	81	86	83	80	85	82	80	79	79	79
8	92	86	82	79	91	85	81	79	84	81	78	84	80	78	83	80	78	77	77	77
9	90	83	79	76	89	83	79	76	82	78	76	81	78	76	80	78	75	74	74	74
10	87	81	77	74	87	80	76	74	80	76	74	79	76	73	78	75	73	72	72	72

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	669884	669884	669884
5°	592147	594170	589142
10°	465408	465939	463971
15°	323986	324909	325149
20°	183794	184990	185629
25°	49544	74973	55733
30°	12271	16768	12618
35°	3654	7675	3926
40°	1467	2542	1467
45°	740	1055	630
50°	467	467	226
55°	388	253	135
60°	291	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°	542.5	30.3
10°-20°	882.2	49.2
20°-30°	327.9	18.3
30°-40°	32.5	1.8
40°-50°	5.5	0.3
50°-60°	1.5	0.1
60°-70°	0.8	0.0
70°-80°	0.1	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°	1752.6	97.7
0°-40°	1785.1	99.6
0°-60°	1792.1	99.9
0°-90°	1793.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1793.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6915	6915	6915	6915	6915	
5°	6089	6150	6110	6182	6058	539
15°	3230	3267	3240	3293	3242	874
25°	464	680	701	655	521	290
35°	31	39	65	40	33	25
45°	5	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°	6914.9	6914.9	6914.9	6914.9	6914.9
2.5°	6525.6	6560.4	6538.7	6596.7	6456.9
5°	6089.2	6150.2	6110.0	6181.9	6058.3
7.5°	5489.8	5553.1	5512.2	5581.7	5471.2
10°	4731.2	4778.3	4736.6	4803.8	4716.6
12.5°	3972.7	4019.8	3988.9	4050.7	3981.2
15°	3230.4	3266.7	3239.6	3292.9	3242.0
17.5°	2476.5	2511.2	2486.5	2529.8	2491.1
20°	1782.8	1812.9	1794.4	1830.7	1800.6
22.5°	1106.9	1187.2	1200.4	1203.5	1116.2
25°	463.5	680.5	701.4	655.0	521.4
27.5°	190.8	250.3	333.7	263.4	200.8
30°	109.7	127.5	149.9	131.3	112.8
32.5°	54.8	71.1	98.1	74.9	57.9
35°	30.9	38.6	64.9	40.2	33.2
37.5°	18.5	22.4	32.4	23.2	19.3
40°	11.6	13.9	20.1	14.7	11.6
42.5°	7.7	9.3	12.4	9.3	7.7
45°	5.4	6.2	7.7	6.2	4.6
47.5°	3.9	3.9	4.6	3.9	3.1
50°	3.1	3.1	3.1	2.3	1.5
52.5°	2.3	2.3	2.3	1.5	1.5
55°	2.3	1.5	1.5	1.5	0.8
57.5°	1.5	1.5	1.5	0.8	0.8
60°	1.5	1.5	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°	0.0	0.0	0.0	0.0	0.0
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)