

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: P182543

Luminaire Tested: **LDSQA4A18830D010TE LAR25NF 4LSQAL1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182543
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26797)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A18830D010TE LAR25NF 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 25° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2107.1 lumens
Efficiency: N/A
Efficacy: 72.4 lumens/watt
Spacing Criteria (0/90/45): 0.48 / 0.48 / 0.5
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

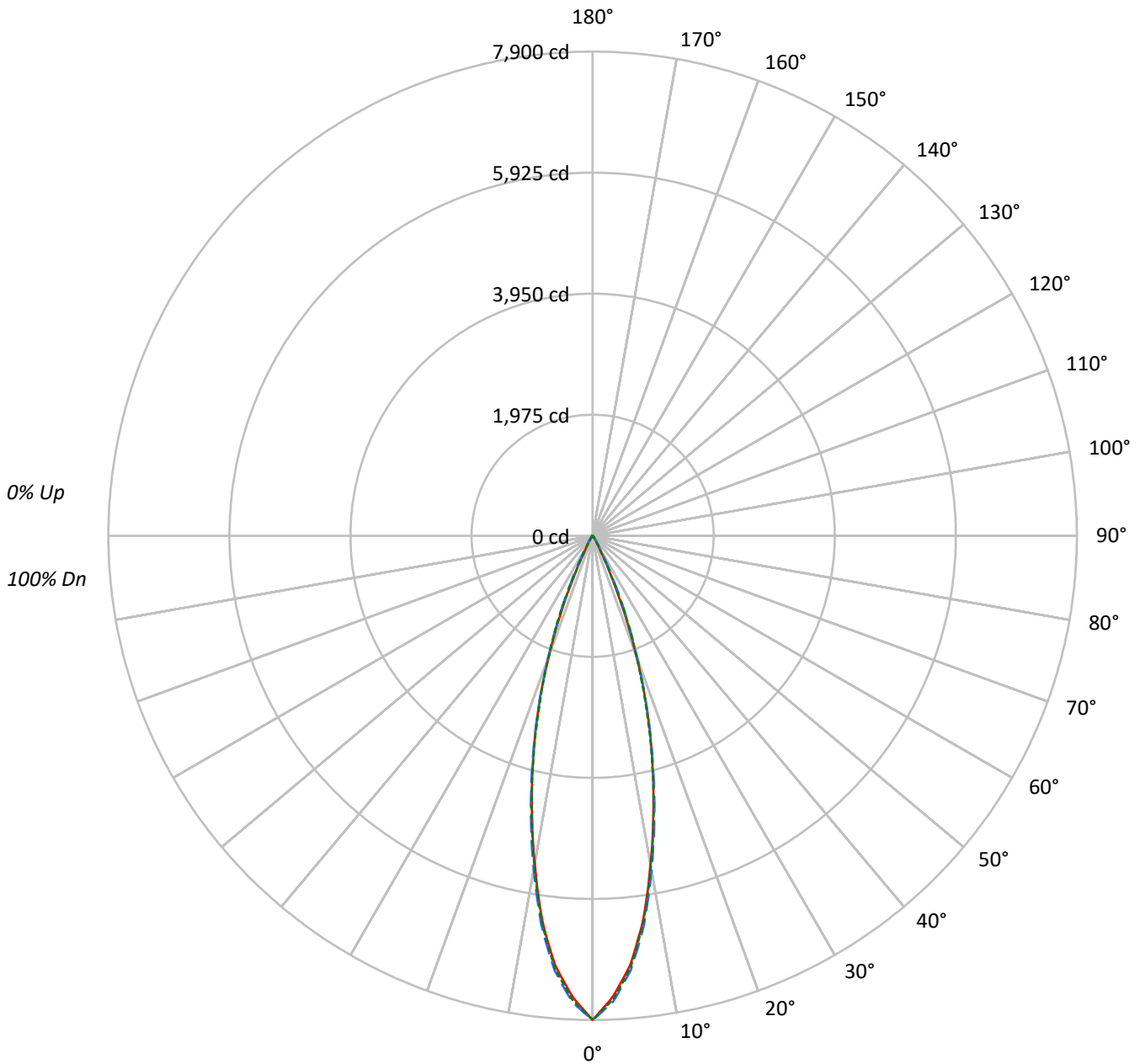
Input Watts (W): 29.12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	765326	765326	765326
5°	683500	692096	687798
10°	535034	544595	537926
15°	375717	378475	373641
20°	215639	220093	215433
25°	68260	89788	70462
30°	18133	22529	17473
35°	6162	11152	6280
40°	2732	4477	2732
45°	1480	2014	1206
50°	889	1040	588
55°	490	490	338
60°	388	388	194
65°	229	229	229
70°	283	283	283
75°	0	374	374
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	626.6	29.7
10°-20°	1021.7	48.5
20°-30°	395.7	18.8
30°-40°	48.5	2.3
40°-50°	10.2	0.5
50°-60°	2.7	0.1
60°-70°	1.1	0.1
70°-80°	0.6	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°	2044.0	97.0
0°-40°	2092.5	99.3
0°-60°	2105.5	99.9
0°-90°	2107.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2107.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7900	7900	7900	7900	7900	
5°	7029	7131	7117	7074	7073	621
15°	3746	3796	3774	3746	3726	1016
25°	639	800	840	825	659	358
35°	52	63	94	62	53	40
45°	11	12	15	11	9	9
55°	3	3	3	2	2	3
65°	1	1	1	1	1	1
75°	0	1	1	1	1	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°	7900.1	7900.1	7900.1	7900.1	7900.1
2.5°	7530.7	7635.8	7611.2	7562.1	7574.9
5°	7028.6	7130.8	7117.0	7073.8	7072.8
7.5°	6320.3	6420.5	6408.7	6356.6	6351.7
10°	5439.0	5530.3	5536.2	5460.6	5468.4
12.5°	4578.3	4653.0	4655.9	4603.9	4593.1
15°	3746.2	3796.3	3773.7	3746.2	3725.5
17.5°	2925.8	2936.6	2931.7	2891.4	2876.7
20°	2091.7	2138.8	2134.9	2100.5	2089.7
22.5°	1302.8	1388.2	1427.5	1396.1	1412.8
25°	638.6	799.7	840.0	825.3	659.2
27.5°	259.4	339.0	422.5	334.0	250.5
30°	162.1	176.8	201.4	170.0	156.2
32.5°	85.5	107.1	136.6	104.1	85.5
35°	52.1	62.9	94.3	61.9	53.1
37.5°	33.4	39.3	55.0	39.3	34.4
40°	21.6	25.5	35.4	25.5	21.6
42.5°	14.7	16.7	22.6	16.7	13.8
45°	10.8	11.8	14.7	10.8	8.8
47.5°	7.9	8.8	9.8	6.9	5.9
50°	5.9	5.9	6.9	4.9	3.9
52.5°	3.9	4.9	4.9	2.9	2.9
55°	2.9	2.9	2.9	2.0	2.0
57.5°	2.9	2.0	2.0	2.0	2.0
60°	2.0	2.0	2.0	1.0	1.0
62.5°	1.0	1.0	1.0	1.0	1.0
65°	1.0	1.0	1.0	1.0	1.0
67.5°	1.0	1.0	1.0	1.0	1.0
70°	1.0	1.0	1.0	1.0	1.0
72.5°	1.0	1.0	1.0	1.0	0.0
75°	0.0	1.0	1.0	1.0	1.0
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)