

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: P182446

Luminaire Tested: **LDSQA4A18827D010TE LAR25NF 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182446
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: LDSQA4A18827D010TE LAR25NF 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 25° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2234.0 lumens
Efficiency: N/A
Efficacy: 76.7 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

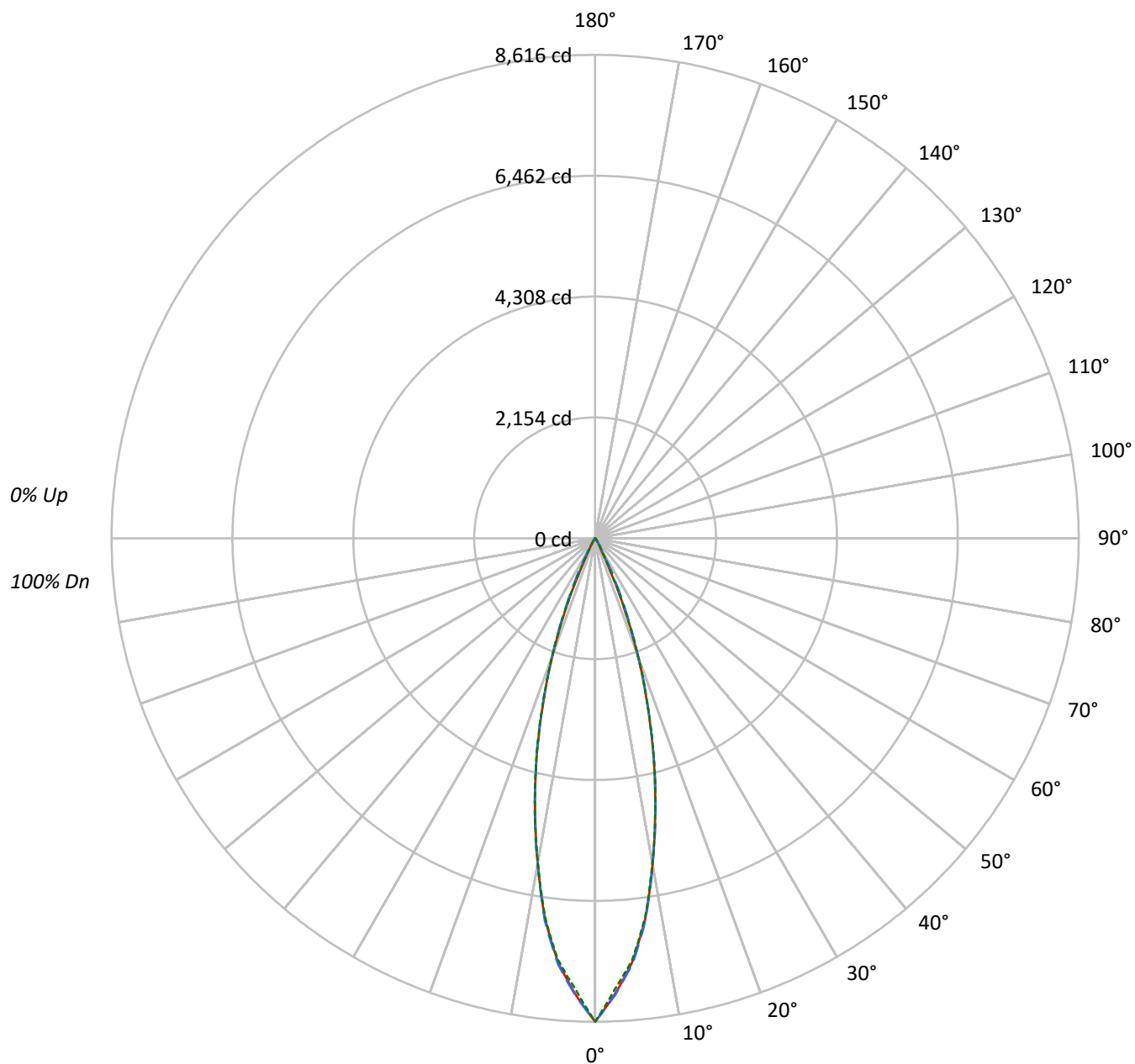
Input Watts (W): 29.12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	834650	834650	834650
5°	737792	740310	734048
10°	579881	580540	578080
15°	403669	404822	405113
20°	229000	230484	231278
25°	61729	93411	69436
30°	15292	20885	15717
35°	4553	9556	4896
40°	1821	3162	1821
45°	918	1315	795
50°	573	573	286
55°	490	321	169
60°	368	194	194
65°	229	229	229
70°	283	283	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	675.9	30.3
10°-20°	1099.2	49.2
20°-30°	408.6	18.3
30°-40°	40.5	1.8
40°-50°	6.8	0.3
50°-60°	1.9	0.1
60°-70°	1.0	0.0
70°-80°	0.2	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°	2183.7	97.7
0°-40°	2224.2	99.6
0°-60°	2232.8	99.9
0°-90°	2234.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2234.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8616	8616	8616	8616	8616	
5°	7587	7663	7613	7702	7548	672
15°	4025	4070	4036	4103	4039	1089
25°	578	848	874	816	650	361
35°	38	48	81	50	41	31
45°	7	8	10	8	6	6
55°	3	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°	8615.7	8615.7	8615.7	8615.7	8615.7
2.5°	8130.6	8173.9	8147.0	8219.2	8045.0
5°	7586.9	7662.9	7612.8	7702.4	7548.4
7.5°	6840.0	6918.9	6867.9	6954.5	6816.9
10°	5894.9	5953.6	5901.6	5985.4	5876.6
12.5°	4949.8	5008.5	4970.0	5047.0	4960.4
15°	4024.9	4070.1	4036.4	4102.9	4039.3
17.5°	3085.6	3128.9	3098.1	3152.0	3103.8
20°	2221.3	2258.8	2235.7	2281.0	2243.4
22.5°	1379.2	1479.3	1495.6	1499.5	1390.7
25°	577.5	847.9	873.9	816.1	649.6
27.5°	237.7	311.8	415.8	328.2	250.2
30°	136.7	158.8	186.7	163.6	140.5
32.5°	68.3	88.5	122.2	93.4	72.2
35°	38.5	48.1	80.8	50.0	41.4
37.5°	23.1	27.9	40.4	28.9	24.1
40°	14.4	17.3	25.0	18.3	14.4
42.5°	9.6	11.5	15.4	11.5	9.6
45°	6.7	7.7	9.6	7.7	5.8
47.5°	4.8	4.8	5.8	4.8	3.8
50°	3.8	3.8	3.8	2.9	1.9
52.5°	2.9	2.9	2.9	1.9	1.9
55°	2.9	1.9	1.9	1.9	1.0
57.5°	1.9	1.9	1.9	1.0	1.0
60°	1.9	1.9	1.0	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	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	1.0	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)