

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: P182475

Luminaire Tested: **LDSQA4A28930D010TE LAR25NF 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182475
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: LDSQA4A28930D010TE LAR25NF 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 25° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2569.5 lumens
Efficiency: N/A
Efficacy: 57.8 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

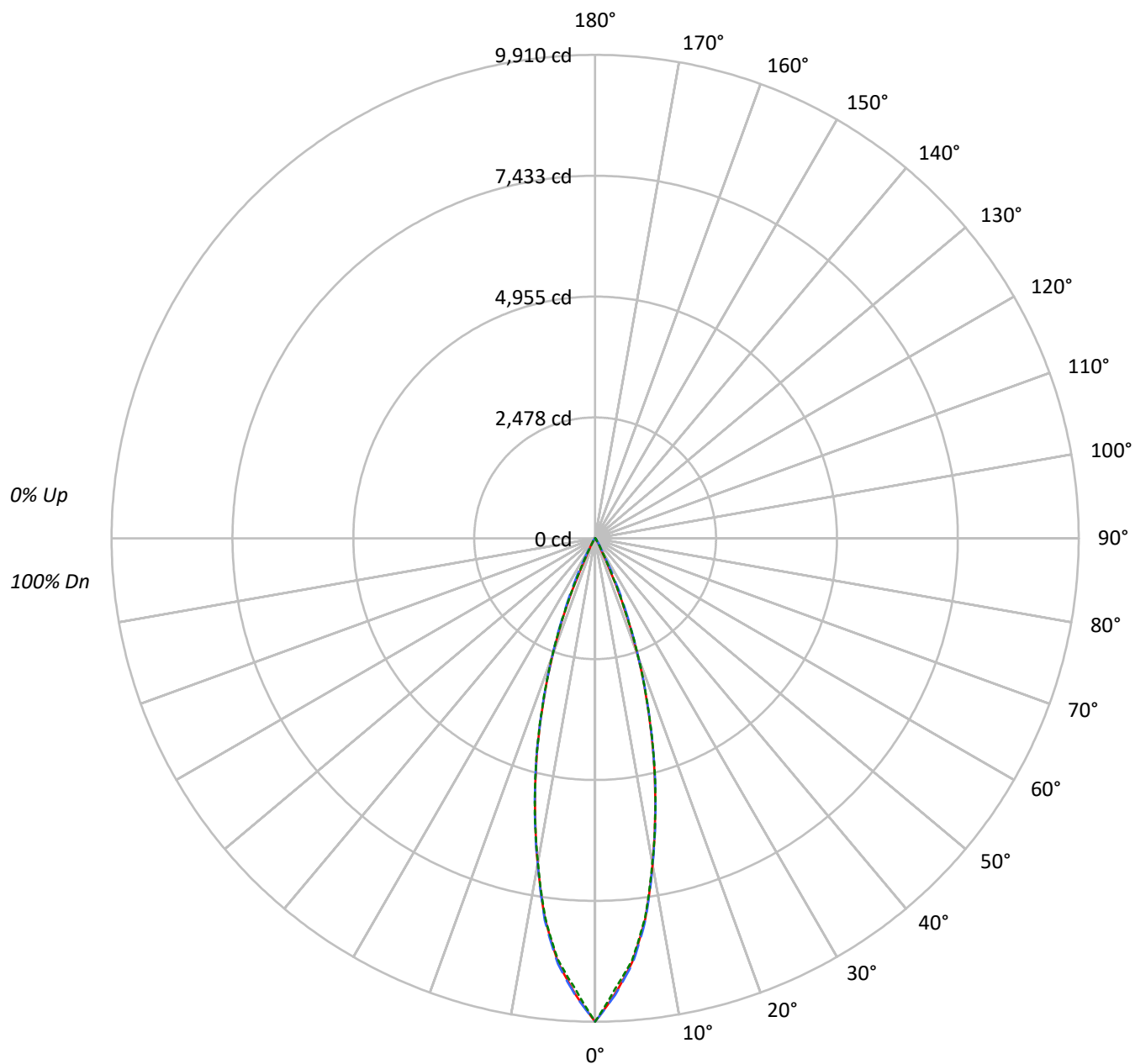
Input Watts (W): 44.49
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	959997	959997	959997
5°	848583	851491	844285
10°	666968	667725	664902
15°	464286	465619	465960
20°	263391	265103	266010
25°	70996	107435	79868
30°	17585	24028	18077
35°	5239	10998	5629
40°	2099	3642	2099
45°	1055	1521	904
50°	663	663	332
55°	557	372	186
60°	426	213	213
65°	252	252	252
70°	312	312	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	777.4	30.3
10°-20°	1264.2	49.2
20°-30°	469.9	18.3
30°-40°	46.6	1.8
40°-50°	7.8	0.3
50°-60°	2.1	0.1
60°-70°	1.1	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°	2511.6	97.7
0°-40°	2558.2	99.6
0°-60°	2568.1	99.9
0°-90°	2569.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2569.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9910	9910	9910	9910	9910	
5°	8726	8814	8756	8859	8682	773
15°	4629	4681	4643	4719	4646	1252
25°	664	975	1005	939	747	415
35°	44	55	93	58	48	36
45°	8	9	11	9	7	7
55°	3	2	2	2	1	3
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°	9909.6	9909.6	9909.6	9909.6	9909.6
2.5°	9351.7	9401.5	9370.5	9453.5	9253.2
5°	8726.2	8813.7	8756.1	8859.1	8682.0
7.5°	7867.2	7958.0	7899.3	7999.0	7840.7
10°	6780.2	6847.7	6787.9	6884.2	6759.2
12.5°	5693.1	5760.7	5716.4	5804.9	5705.3
15°	4629.3	4681.4	4642.6	4719.0	4646.0
17.5°	3548.9	3598.8	3563.3	3625.3	3570.0
20°	2554.9	2598.1	2571.5	2623.5	2580.3
22.5°	1586.3	1701.4	1720.2	1724.7	1599.6
25°	664.2	975.2	1005.1	938.7	747.2
27.5°	273.4	358.7	478.2	377.5	287.8
30°	157.2	182.6	214.8	188.2	161.6
32.5°	78.6	101.8	140.6	107.4	83.0
35°	44.3	55.3	93.0	57.6	47.6
37.5°	26.6	32.1	46.5	33.2	27.7
40°	16.6	19.9	28.8	21.0	16.6
42.5°	11.1	13.3	17.7	13.3	11.1
45°	7.7	8.9	11.1	8.9	6.6
47.5°	5.5	5.5	6.6	5.5	4.4
50°	4.4	4.4	4.4	3.3	2.2
52.5°	3.3	3.3	3.3	2.2	2.2
55°	3.3	2.2	2.2	2.2	1.1
57.5°	2.2	2.2	2.2	1.1	1.1
60°	2.2	2.2	1.1	1.1	1.1
62.5°	1.1	1.1	1.1	1.1	1.1
65°	1.1	1.1	1.1	1.1	1.1
67.5°	1.1	1.1	1.1	1.1	1.1
70°	1.1	1.1	1.1	1.1	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	1.1	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)