

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: P182476

Luminaire Tested: **LDSQA4A28935D010TE LAR25NF 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182476
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: LDSQA4A28935D010TE LAR25NF 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 25° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2594.1 lumens
Efficiency: N/A
Efficacy: 58.3 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

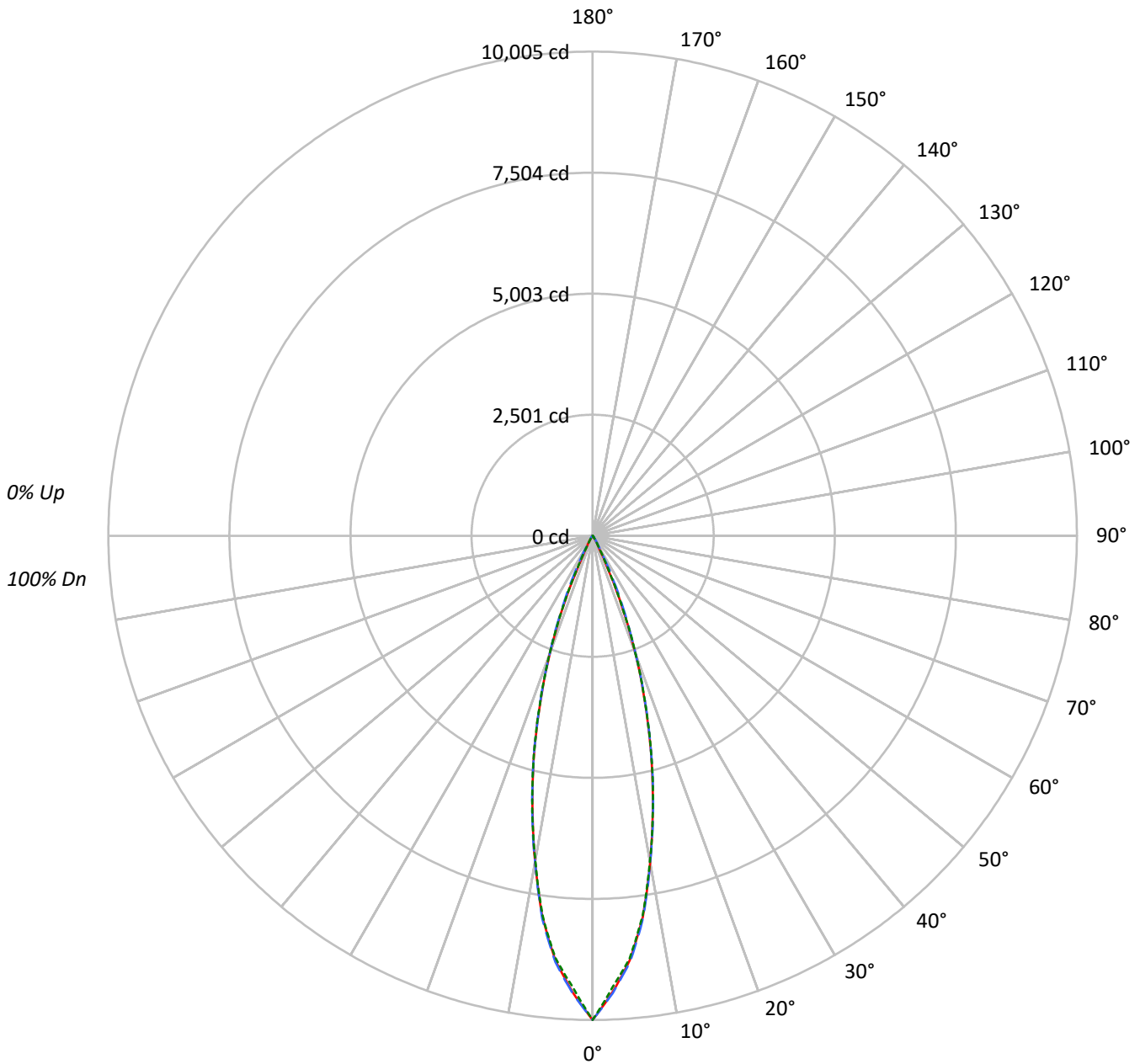
Input Watts (W): 44.49
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	969210	969210	969210
5°	856733	859660	852386
10°	673362	674139	671276
15°	468749	470093	470423
20°	265917	267649	268567
25°	71681	108472	80638
30°	17753	24252	18256
35°	5286	11105	5688
40°	2125	3680	2125
45°	1069	1534	918
50°	678	678	332
55°	574	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°	784.9	30.3
10°-20°	1276.4	49.2
20°-30°	474.4	18.3
30°-40°	47.1	1.8
40°-50°	7.9	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°	2535.7	97.7
0°-40°	2582.8	99.6
0°-60°	2592.8	99.9
0°-90°	2594.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2594.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10005	10005	10005	10005	10005	
5°	8810	8898	8840	8944	8765	780
15°	4674	4726	4687	4764	4690	1264
25°	671	985	1015	948	754	419
35°	45	56	94	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°	10004.7	10004.7	10004.7	10004.7	10004.7
2.5°	9441.4	9491.7	9460.4	9544.2	9341.9
5°	8810.0	8898.3	8840.1	8944.1	8765.3
7.5°	7942.7	8034.4	7975.1	8075.7	7915.9
10°	6845.2	6913.4	6853.1	6950.3	6824.0
12.5°	5747.8	5815.9	5771.2	5860.6	5760.1
15°	4673.8	4726.3	4687.2	4764.3	4690.5
17.5°	3583.0	3633.3	3597.5	3660.1	3604.2
20°	2579.4	2623.0	2596.2	2648.7	2605.1
22.5°	1601.5	1717.7	1736.7	1741.2	1614.9
25°	670.6	984.6	1014.8	947.7	754.4
27.5°	276.0	362.1	482.8	381.1	290.6
30°	158.7	184.4	216.8	190.0	163.2
32.5°	79.3	102.8	141.9	108.4	83.8
35°	44.7	55.9	93.9	58.1	48.1
37.5°	26.8	32.4	46.9	33.5	27.9
40°	16.8	20.1	29.1	21.2	16.8
42.5°	11.2	13.4	17.9	13.4	11.2
45°	7.8	8.9	11.2	8.9	6.7
47.5°	5.6	5.6	6.7	5.6	4.5
50°	4.5	4.5	4.5	3.4	2.2
52.5°	3.4	3.4	3.4	2.2	2.2
55°	3.4	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)