

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: P182474

Luminaire Tested: **LDSQA4A28927D010TE LAR25NF 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182474
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: LDSQA4A28927D010TE 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: 2455.9 lumens
Efficiency: N/A
Efficacy: 55.2 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

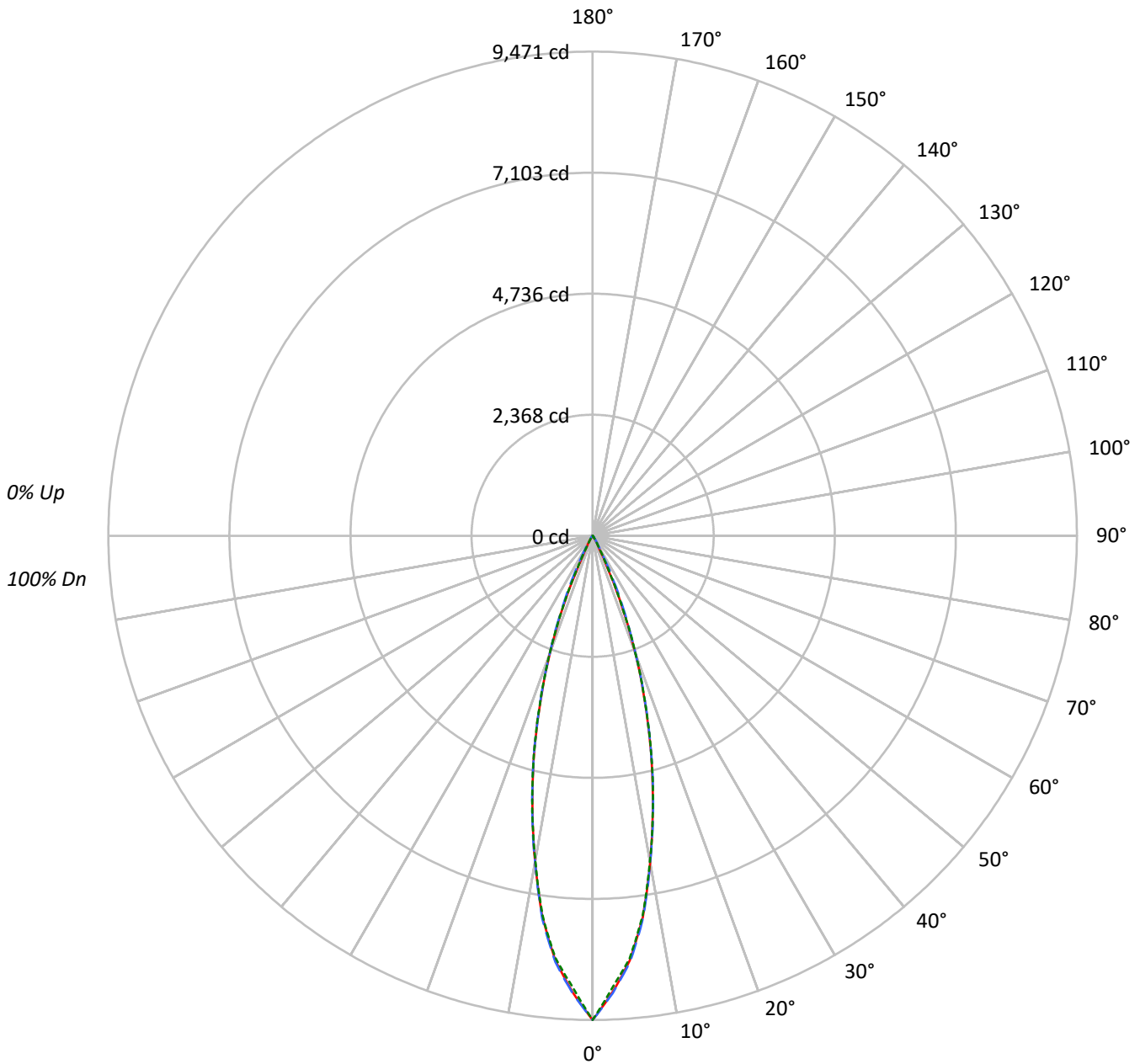
Input Watts (W): 44.49
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	917527	917527	917527
5°	811047	813818	806924
10°	637457	638184	635479
15°	443746	445019	445340
20°	251732	253371	254247
25°	67854	102689	76330
30°	16802	22965	17283
35°	5003	10514	5381
40°	2011	3478	2011
45°	1014	1452	863
50°	633	633	316
55°	540	355	186
60°	407	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°	743.0	30.3
10°-20°	1208.3	49.2
20°-30°	449.1	18.3
30°-40°	44.6	1.8
40°-50°	7.5	0.3
50°-60°	2.0	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°	2400.5	97.7
0°-40°	2445.0	99.6
0°-60°	2454.5	99.9
0°-90°	2455.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2455.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9471	9471	9471	9471	9471	
5°	8340	8424	8369	8467	8298	738
15°	4424	4474	4437	4510	4440	1197
25°	635	932	961	897	714	397
35°	42	53	89	55	46	34
45°	7	8	11	8	6	6
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°	9471.2	9471.2	9471.2	9471.2	9471.2
2.5°	8937.9	8985.5	8955.9	9035.3	8843.8
5°	8340.2	8423.7	8368.7	8467.1	8297.8
7.5°	7519.2	7605.9	7549.8	7645.1	7493.8
10°	6480.2	6544.7	6487.6	6579.7	6460.1
12.5°	5441.3	5505.8	5463.5	5548.1	5452.9
15°	4424.5	4474.3	4437.2	4510.2	4440.4
17.5°	3391.9	3439.5	3405.7	3464.9	3412.0
20°	2441.8	2483.1	2457.7	2507.4	2466.2
22.5°	1516.1	1626.1	1644.1	1648.4	1528.8
25°	634.8	932.1	960.7	897.2	714.1
27.5°	261.3	342.8	457.1	360.8	275.1
30°	150.2	174.6	205.3	179.9	154.5
32.5°	75.1	97.3	134.4	102.6	79.3
35°	42.3	52.9	88.9	55.0	45.5
37.5°	25.4	30.7	44.4	31.7	26.4
40°	15.9	19.0	27.5	20.1	15.9
42.5°	10.6	12.7	16.9	12.7	10.6
45°	7.4	8.5	10.6	8.5	6.3
47.5°	5.3	5.3	6.3	5.3	4.2
50°	4.2	4.2	4.2	3.2	2.1
52.5°	3.2	3.2	3.2	2.1	2.1
55°	3.2	2.1	2.1	2.1	1.1
57.5°	2.1	2.1	2.1	1.1	1.1
60°	2.1	2.1	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)