

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: P182457

Luminaire Tested: **LDSQA4A09840D010TE LAR25NF 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182457
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: LDSQA4A09840D010TE LAR25NF 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 25° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1319.3 lumens
Efficiency: N/A
Efficacy: 95.3 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

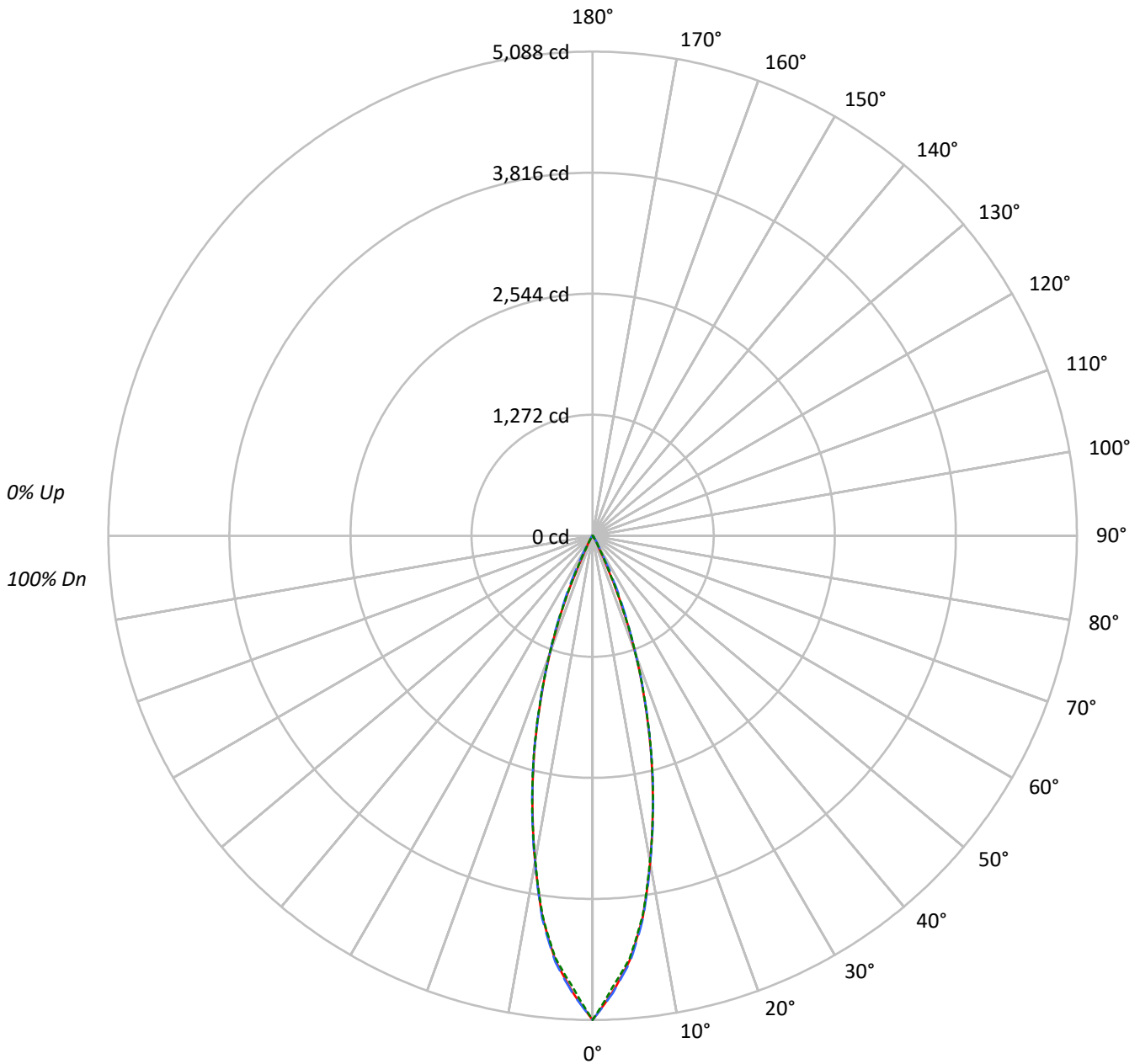
Input Watts (W): 13.84
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	492883	492883	492883
5°	435689	437177	433472
10°	342435	342829	341373
15°	238376	239058	239239
20°	135227	136113	136577
25°	36450	55166	41003
30°	9027	12338	9285
35°	2685	5641	2886
40°	1075	1872	1075
45°	548	781	466
50°	347	347	166
55°	287	186	101
60°	213	116	116
65°	138	138	138
70°	170	170	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	399.2	30.3
10°-20°	649.1	49.2
20°-30°	241.3	18.3
30°-40°	23.9	1.8
40°-50°	4.0	0.3
50°-60°	1.1	0.1
60°-70°	0.6	0.0
70°-80°	0.1	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°	1289.5	97.7
0°-40°	1313.5	99.6
0°-60°	1318.5	99.9
0°-90°	1319.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1319.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5088	5088	5088	5088	5088	
5°	4480	4525	4496	4548	4458	397
15°	2377	2404	2384	2423	2385	643
25°	341	501	516	482	384	213
35°	23	28	48	30	24	18
45°	4	4	6	4	3	3
55°	2	1	1	1	1	1
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°	5087.8	5087.8	5087.8	5087.8	5087.8
2.5°	4801.4	4827.0	4811.1	4853.7	4750.8
5°	4480.3	4525.2	4495.6	4548.5	4457.5
7.5°	4039.2	4085.8	4055.7	4106.9	4025.6
10°	3481.1	3515.8	3485.1	3534.5	3470.3
12.5°	2923.0	2957.7	2934.9	2980.4	2929.3
15°	2376.8	2403.5	2383.6	2422.9	2385.4
17.5°	1822.1	1847.7	1829.5	1861.3	1832.9
20°	1311.7	1333.9	1320.3	1347.0	1324.8
22.5°	814.4	873.5	883.2	885.5	821.3
25°	341.0	500.7	516.1	482.0	383.6
27.5°	140.4	184.1	245.5	193.8	147.8
30°	80.7	93.8	110.3	96.6	83.0
32.5°	40.4	52.3	72.2	55.1	42.6
35°	22.7	28.4	47.7	29.6	24.4
37.5°	13.6	16.5	23.9	17.1	14.2
40°	8.5	10.2	14.8	10.8	8.5
42.5°	5.7	6.8	9.1	6.8	5.7
45°	4.0	4.5	5.7	4.5	3.4
47.5°	2.8	2.8	3.4	2.8	2.3
50°	2.3	2.3	2.3	1.7	1.1
52.5°	1.7	1.7	1.7	1.1	1.1
55°	1.7	1.1	1.1	1.1	0.6
57.5°	1.1	1.1	1.1	0.6	0.6
60°	1.1	1.1	0.6	0.6	0.6
62.5°	0.6	0.6	0.6	0.6	0.6
65°	0.6	0.6	0.6	0.6	0.6
67.5°	0.6	0.6	0.6	0.6	0.6
70°	0.6	0.6	0.6	0.6	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.6	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)