

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: P182468

Luminaire Tested: **LDSQA4A13935D010TE LAR25NF 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182468
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: LDSQA4A13935D010TE 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: 1520.3 lumens
Efficiency: N/A
Efficacy: 68.3 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

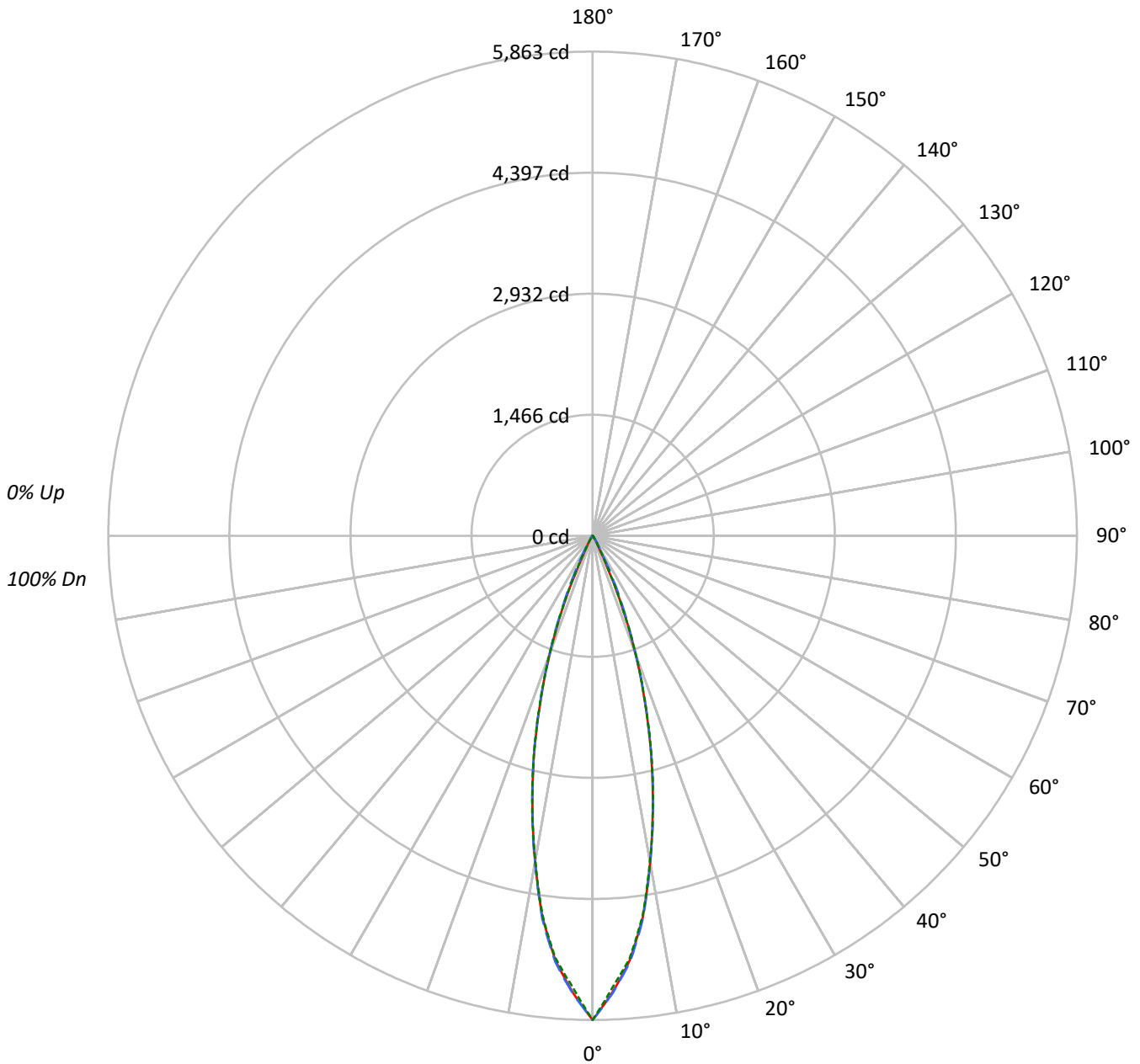
Input Watts (W): 22.27
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	567990	567990	567990
5°	502069	503790	499521
10°	394611	395063	393391
15°	274702	275484	275685
20°	155835	156845	157392
25°	42008	63568	47256
30°	10403	14218	10694
35°	3098	6504	3335
40°	1239	2150	1239
45°	630	891	534
50°	392	392	196
55°	338	220	118
60°	252	136	136
65°	160	160	160
70°	198	198	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	460.0	30.3
10°-20°	748.0	49.2
20°-30°	278.0	18.3
30°-40°	27.6	1.8
40°-50°	4.6	0.3
50°-60°	1.3	0.1
60°-70°	0.7	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°	1486.0	97.7
0°-40°	1513.6	99.6
0°-60°	1519.5	99.9
0°-90°	1520.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1520.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5863	5863	5863	5863	5863	
5°	5163	5215	5181	5242	5137	457
15°	2739	2770	2747	2792	2749	741
25°	393	577	595	555	442	246
35°	26	33	55	34	28	21
45°	5	5	6	5	4	4
55°	2	1	1	1	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°	5863.1	5863.1	5863.1	5863.1	5863.1
2.5°	5533.0	5562.5	5544.1	5593.2	5474.7
5°	5162.9	5214.7	5180.6	5241.5	5136.7
7.5°	4654.7	4708.4	4673.7	4732.6	4639.0
10°	4011.5	4051.5	4016.1	4073.1	3999.1
12.5°	3368.4	3408.3	3382.1	3434.5	3375.6
15°	2739.0	2769.8	2746.8	2792.0	2748.8
17.5°	2099.8	2129.2	2108.3	2144.9	2112.2
20°	1511.6	1537.2	1521.4	1552.2	1526.7
22.5°	938.5	1006.7	1017.8	1020.4	946.4
25°	393.0	577.0	594.7	555.4	442.1
27.5°	161.8	212.2	282.9	223.3	170.3
30°	93.0	108.1	127.1	111.3	95.6
32.5°	46.5	60.3	83.2	63.5	49.1
35°	26.2	32.7	55.0	34.1	28.2
37.5°	15.7	19.0	27.5	19.6	16.4
40°	9.8	11.8	17.0	12.4	9.8
42.5°	6.5	7.9	10.5	7.9	6.5
45°	4.6	5.2	6.5	5.2	3.9
47.5°	3.3	3.3	3.9	3.3	2.6
50°	2.6	2.6	2.6	2.0	1.3
52.5°	2.0	2.0	2.0	1.3	1.3
55°	2.0	1.3	1.3	1.3	0.7
57.5°	1.3	1.3	1.3	0.7	0.7
60°	1.3	1.3	0.7	0.7	0.7
62.5°	0.7	0.7	0.7	0.7	0.7
65°	0.7	0.7	0.7	0.7	0.7
67.5°	0.7	0.7	0.7	0.7	0.7
70°	0.7	0.7	0.7	0.7	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.7	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)