

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: P182467

Luminaire Tested: **LDSQA4A13930D010TE LAR25NF 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182467
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: LDSQA4A13930D010TE 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: 1505.7 lumens
Efficiency: N/A
Efficacy: 67.6 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

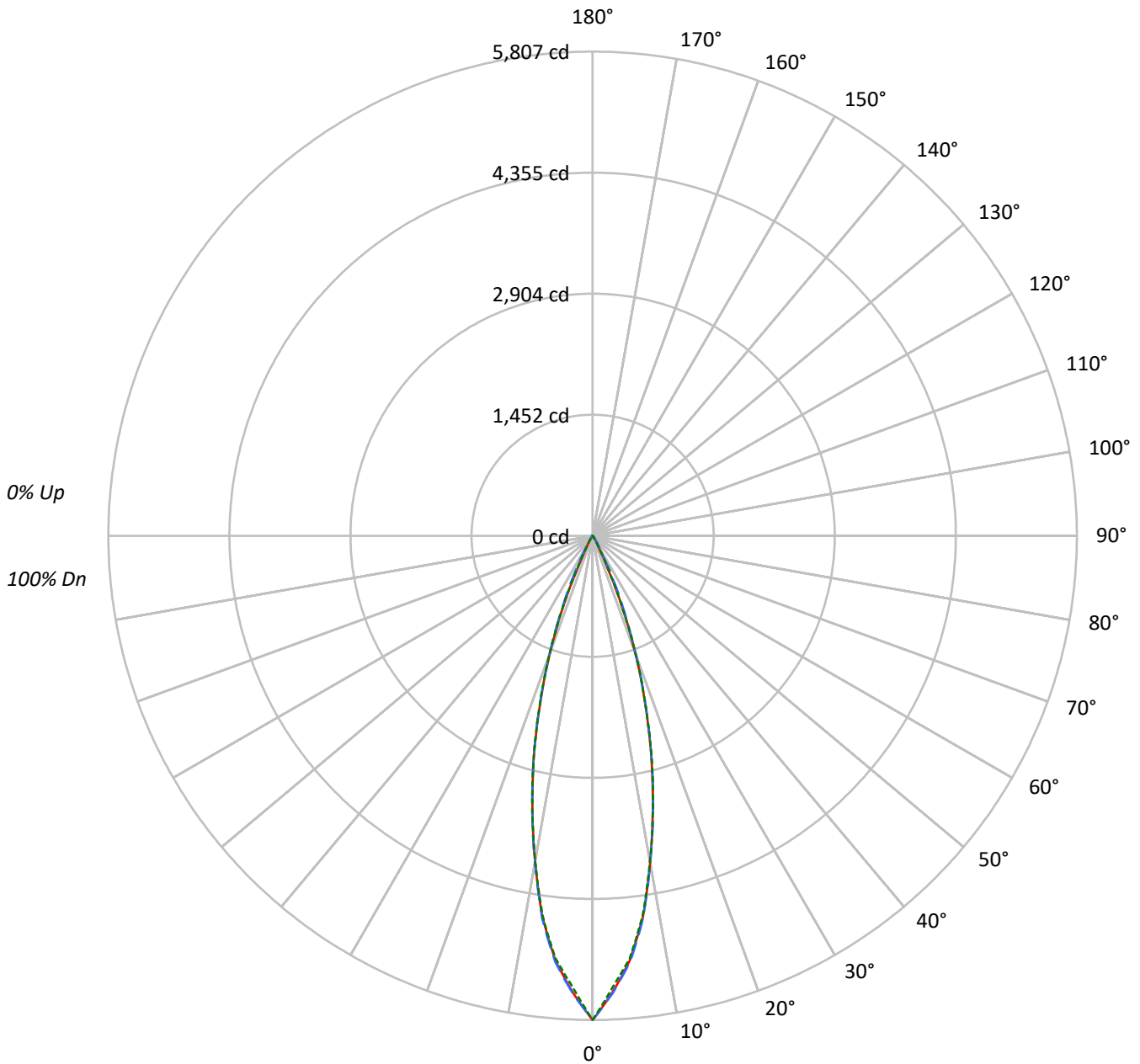
Input Watts (W): 22.27
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	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°	562594	562594	562594
5°	497304	499005	494775
10°	390863	391315	389653
15°	272094	272867	273067
20°	154350	155361	155897
25°	41602	62958	46807
30°	10303	14083	10593
35°	3063	6445	3300
40°	1227	2137	1227
45°	617	891	534
50°	392	392	196
55°	321	220	101
60°	252	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°	455.6	30.3
10°-20°	740.9	49.2
20°-30°	275.4	18.3
30°-40°	27.3	1.8
40°-50°	4.6	0.3
50°-60°	1.2	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°	1471.9	97.8
0°-40°	1499.2	99.6
0°-60°	1505.0	100.0
0°-90°	1505.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1505.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5807	5807	5807	5807	5807	
5°	5114	5165	5131	5192	5088	453
15°	2713	2743	2721	2766	2723	734
25°	389	572	589	550	438	243
35°	26	32	54	34	28	21
45°	4	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°	5807.4	5807.4	5807.4	5807.4	5807.4
2.5°	5480.4	5509.6	5491.4	5540.1	5422.7
5°	5113.9	5165.1	5131.4	5191.7	5087.9
7.5°	4610.5	4663.7	4629.3	4687.7	4594.9
10°	3973.4	4013.0	3978.0	4034.4	3961.1
12.5°	3336.4	3375.9	3350.0	3401.9	3343.5
15°	2713.0	2743.4	2720.7	2765.5	2722.7
17.5°	2079.8	2109.0	2088.2	2124.6	2092.1
20°	1497.2	1522.5	1507.0	1537.5	1512.2
22.5°	929.6	997.1	1008.1	1010.7	937.4
25°	389.2	571.5	589.0	550.1	437.9
27.5°	160.2	210.2	280.2	221.2	168.7
30°	92.1	107.0	125.9	110.3	94.7
32.5°	46.1	59.7	82.4	62.9	48.7
35°	25.9	32.4	54.5	33.7	27.9
37.5°	15.6	18.8	27.2	19.5	16.2
40°	9.7	11.7	16.9	12.3	9.7
42.5°	6.5	7.8	10.4	7.8	6.5
45°	4.5	5.2	6.5	5.2	3.9
47.5°	3.2	3.2	3.9	3.2	2.6
50°	2.6	2.6	2.6	1.9	1.3
52.5°	1.9	1.9	1.9	1.3	1.3
55°	1.9	1.3	1.3	1.3	0.6
57.5°	1.3	1.3	1.3	0.6	0.6
60°	1.3	1.3	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)