

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: P182462

Luminaire Tested: **LDSQA4A13827D010TE LAR25NF 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182462
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: LDSQA4A13827D010TE LAR25NF 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 25° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1793.2 lumens
Efficiency: N/A
Efficacy: 80.5 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

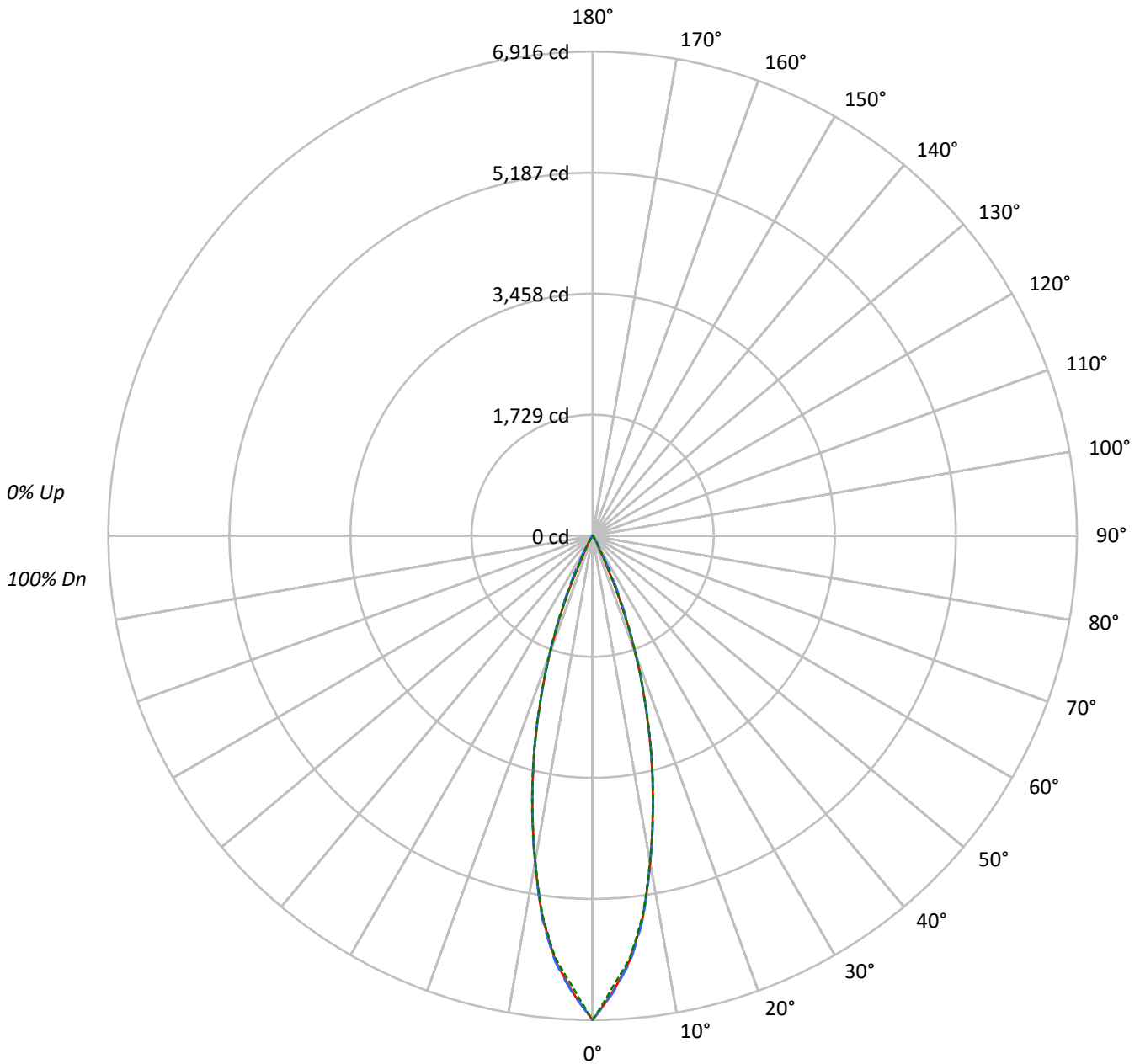
Input Watts (W): 22.27
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	669952	669952	669952
5°	592206	594228	589201
10°	465457	465988	464011
15°	324016	324939	325179
20°	183814	185010	185639
25°	49544	74973	55733
30°	12271	16768	12618
35°	3654	7675	3926
40°	1467	2542	1467
45°	740	1055	630
50°	467	467	226
55°	388	253	135
60°	291	155	155
65°	183	183	183
70°	227	227	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	542.6	30.3
10°-20°	882.3	49.2
20°-30°	327.9	18.3
30°-40°	32.5	1.8
40°-50°	5.5	0.3
50°-60°	1.5	0.1
60°-70°	0.8	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°	1752.8	97.7
0°-40°	1785.3	99.6
0°-60°	1792.2	99.9
0°-90°	1793.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1793.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6916	6916	6916	6916	6916	
5°	6090	6151	6111	6182	6059	539
15°	3231	3267	3240	3293	3242	874
25°	464	681	701	655	521	290
35°	31	39	65	40	33	25
45°	5	6	8	6	5	5
55°	2	2	2	2	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°	6915.6	6915.6	6915.6	6915.6	6915.6
2.5°	6526.2	6561.0	6539.4	6597.3	6457.5
5°	6089.8	6150.8	6110.6	6182.5	6058.9
7.5°	5490.3	5553.6	5512.7	5582.2	5471.7
10°	4731.7	4778.8	4737.1	4804.3	4717.0
12.5°	3973.1	4020.2	3989.3	4051.1	3981.6
15°	3230.7	3267.0	3239.9	3293.2	3242.3
17.5°	2476.7	2511.5	2486.7	2530.0	2491.4
20°	1783.0	1813.1	1794.6	1830.9	1800.7
22.5°	1107.0	1187.4	1200.5	1203.6	1116.3
25°	463.5	680.6	701.4	655.1	521.4
27.5°	190.8	250.3	333.7	263.4	200.9
30°	109.7	127.5	149.9	131.3	112.8
32.5°	54.8	71.1	98.1	74.9	57.9
35°	30.9	38.6	64.9	40.2	33.2
37.5°	18.5	22.4	32.4	23.2	19.3
40°	11.6	13.9	20.1	14.7	11.6
42.5°	7.7	9.3	12.4	9.3	7.7
45°	5.4	6.2	7.7	6.2	4.6
47.5°	3.9	3.9	4.6	3.9	3.1
50°	3.1	3.1	3.1	2.3	1.5
52.5°	2.3	2.3	2.3	1.5	1.5
55°	2.3	1.5	1.5	1.5	0.8
57.5°	1.5	1.5	1.5	0.8	0.8
60°	1.5	1.5	0.8	0.8	0.8
62.5°	0.8	0.8	0.8	0.8	0.8
65°	0.8	0.8	0.8	0.8	0.8
67.5°	0.8	0.8	0.8	0.8	0.8
70°	0.8	0.8	0.8	0.8	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.8	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)