

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: P182421

Luminaire Tested: **LDSQA4A18940D010TE LAR15SP 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182421
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26794)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A18940D010TE LAR15SP 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1843.3 lumens
Efficiency: N/A
Efficacy: 63.3 lumens/watt
Spacing Criteria (0/90/45): 0.32 / 0.32 / 0.36
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

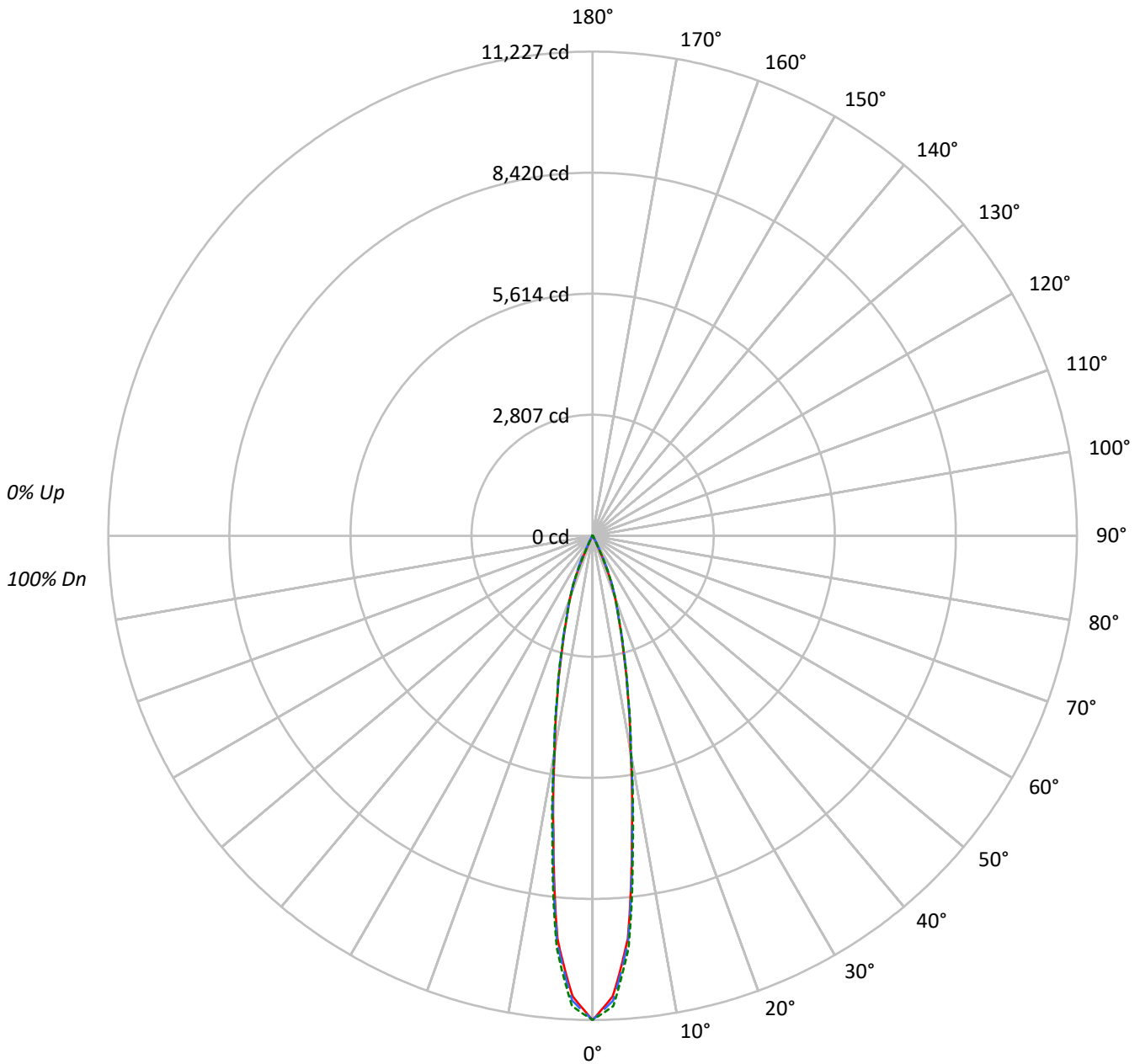
Input Watts (W): 29.12
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	113	111	110	108	107	106	105	104	103	102	100	99	99	97				97															
2	112	108	105	103	110	107	104	102	104	102	100	101	99	98	98	97	96	94				94															
3	108	104	101	98	107	103	100	97	100	98	96	98	96	94	96	94	93	92				92															
4	105	100	97	94	104	99	96	93	97	95	92	96	93	91	94	92	90	89				89															
5	103	97	93	90	101	96	93	90	95	92	89	93	91	89	92	90	88	87				87															
6	100	94	90	87	99	93	90	87	92	89	87	91	88	86	90	87	86	85				85															
7	97	91	88	85	96	91	87	85	90	87	84	89	86	84	88	85	83	82				82															
8	95	89	85	82	94	88	85	82	88	84	82	87	84	82	86	83	81	80				80															
9	93	87	83	80	92	86	83	80	85	82	80	85	82	80	84	81	79	79				79															
10	91	84	81	78	90	84	81	78	83	80	78	83	80	78	82	80	78	77				77															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1087630	1087630	1087630
5°	911628	919330	932701
10°	495961	503329	505238
15°	274251	278674	279737
20°	155309	155763	156670
25°	42371	66390	41623
30°	6801	10347	6600
35°	2294	3855	2188
40°	999	1555	999
45°	603	726	480
50°	392	392	271
55°	304	304	152
60°	174	174	174
65°	206	206	206
70°	255	255	255
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	748.4	40.6
10°-20°	791.4	42.9
20°-30°	278.4	15.1
30°-40°	18.7	1.0
40°-50°	3.9	0.2
50°-60°	1.3	0.1
60°-70°	0.9	0.0
70°-80°	0.3	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°	1818.1	98.6
0°-40°	1836.9	99.7
0°-60°	1842.1	99.9
0°-90°	1843.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1843.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11227	11227	11227	11227	11227	
5°	9374	9515	9454	9471	9591	740
15°	2734	2780	2779	2772	2789	784
25°	396	602	621	592	389	245
35°	19	24	33	24	18	15
45°	4	4	5	4	4	4
55°	2	2	2	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°	11227.1	11227.1	11227.1	11227.1	11227.1
2.5°	10688.0	10828.1	10792.8	10769.9	10917.0
5°	9374.5	9515.4	9453.7	9471.4	9591.2
7.5°	6969.4	7088.3	7024.9	7051.3	7142.9
10°	5041.8	5159.9	5116.7	5130.8	5136.1
12.5°	3759.1	3811.1	3776.7	3786.4	3804.1
15°	2734.5	2780.4	2778.6	2772.4	2789.2
17.5°	2006.9	2028.9	2006.9	2006.0	2017.4
20°	1506.5	1537.3	1510.9	1514.4	1519.7
22.5°	1012.2	1073.9	1063.3	1050.1	1036.0
25°	396.4	601.7	621.1	592.0	389.4
27.5°	113.6	187.6	266.9	184.1	110.1
30°	60.8	72.2	92.5	70.5	59.0
32.5°	32.6	41.4	52.9	40.5	31.7
35°	19.4	23.8	32.6	23.8	18.5
37.5°	12.3	15.0	20.3	15.0	12.3
40°	7.9	9.7	12.3	9.7	7.9
42.5°	6.2	7.0	7.9	6.2	5.3
45°	4.4	4.4	5.3	4.4	3.5
47.5°	3.5	3.5	3.5	2.6	2.6
50°	2.6	2.6	2.6	1.8	1.8
52.5°	1.8	1.8	1.8	1.8	1.8
55°	1.8	1.8	1.8	0.9	0.9
57.5°	1.8	0.9	0.9	0.9	0.9
60°	0.9	0.9	0.9	0.9	0.9
62.5°	0.9	0.9	0.9	0.9	0.9
65°	0.9	0.9	0.9	0.9	0.9
67.5°	0.9	0.9	0.9	0.9	0.0
70°	0.9	0.9	0.9	0.9	0.9
72.5°	0.9	0.9	0.9	0.0	0.0
75°	0.0	0.9	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)