

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: P182426

Luminaire Tested: **LDSQA4A09927D010TE LAR15SP 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182426
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: LDSQA4A09927D010TE LAR15SP 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 875.9 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

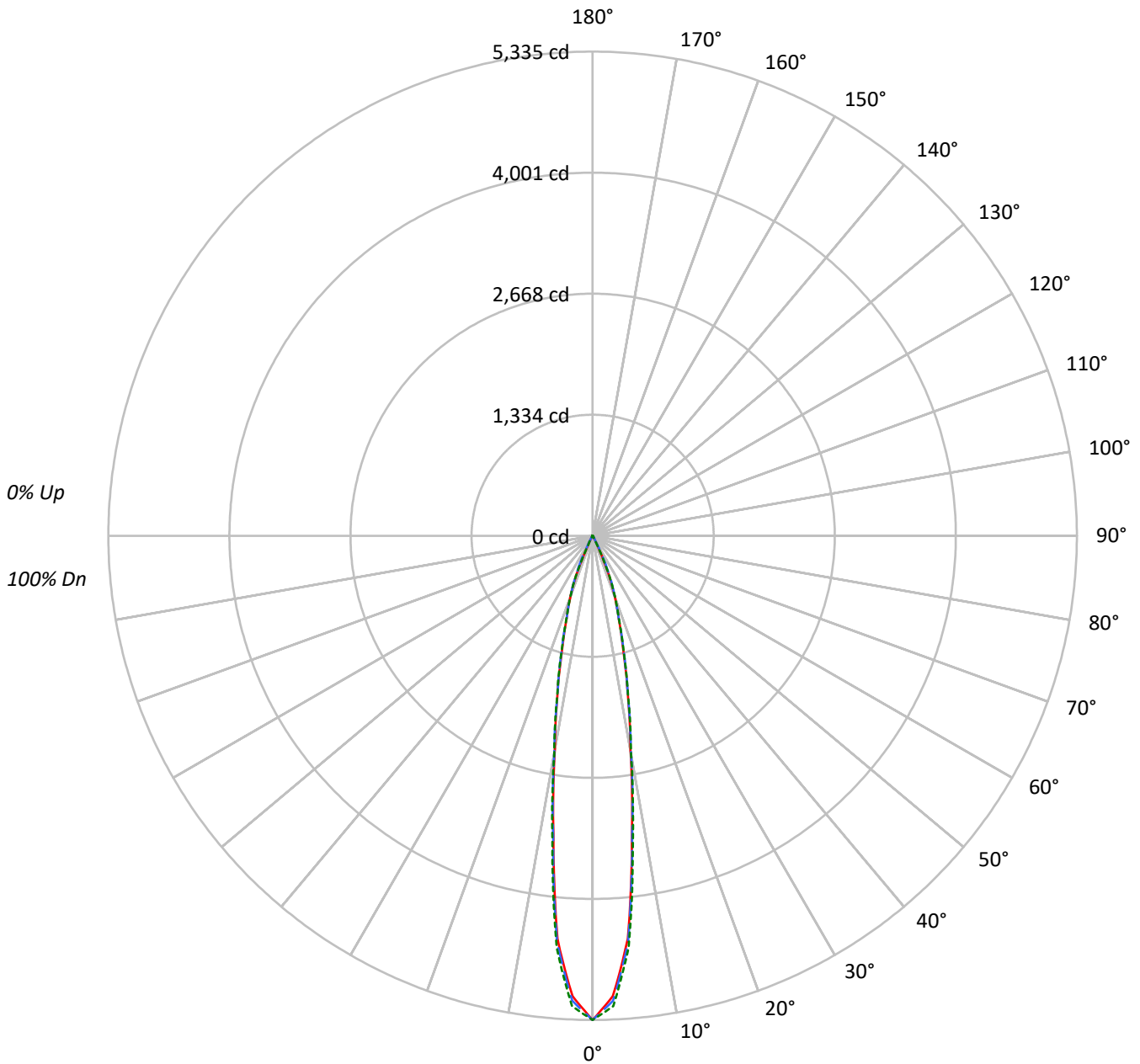
Input Watts (W): 13.84
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					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	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	100	100	100	100	100		
1	115	113	111	110	113	111	110	108	107	106	105	104	103	102	100	99	99	97	97	97	97	97	97	97		
2	112	108	105	103	110	107	104	102	104	102	100	101	99	98	98	97	96	94	94	94	94	94	94	94		
3	108	104	101	98	107	103	100	97	100	98	96	98	96	94	96	94	93	92	92	92	92	92	92	92		
4	105	100	97	94	104	99	96	93	97	95	92	96	93	91	94	92	90	89	89	89	89	89	89	89		
5	103	97	93	90	101	96	93	90	95	92	89	93	91	89	92	90	88	87	87	87	87	87	87	87		
6	100	94	90	87	99	93	90	87	92	89	87	91	88	86	90	87	86	85	85	85	85	85	85	85		
7	97	91	88	85	96	91	87	85	90	87	84	89	86	84	88	85	83	82	82	82	82	82	82	82		
8	95	89	85	82	94	88	85	82	88	84	82	87	84	82	86	83	81	80	80	80	80	80	80	80		
9	93	87	83	80	92	86	83	80	85	82	80	85	82	80	84	81	79	79	79	79	79	79	79	79		
10	91	84	81	78	90	84	81	78	83	80	78	83	80	78	82	80	78	77	77	77	77	77	77	77		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	516859	516859	516859
5°	433219	436885	443235
10°	235694	239186	240101
15°	130331	132427	132938
20°	73804	74021	74454
25°	20138	31554	19775
30°	3233	4922	3132
35°	1088	1833	1041
40°	481	746	481
45°	288	343	233
50°	196	196	121
55°	135	135	68
60°	78	78	78
65°	92	92	92
70°	113	113	113
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	355.6	40.6
10°-20°	376.1	42.9
20°-30°	132.3	15.1
30°-40°	8.9	1.0
40°-50°	1.9	0.2
50°-60°	0.6	0.1
60°-70°	0.4	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°	864.0	98.6
0°-40°	872.9	99.7
0°-60°	875.4	99.9
0°-90°	875.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	875.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5335	5335	5335	5335	5335	
5°	4455	4522	4493	4501	4558	352
15°	1300	1321	1320	1318	1326	372
25°	188	286	295	281	185	117
35°	9	11	16	11	9	7
45°	2	2	2	2	2	2
55°	1	1	1	0	0	1
65°	0	0	0	0	0	0
75°	0	0	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°	5335.3	5335.3	5335.3	5335.3	5335.3
2.5°	5079.1	5145.7	5128.9	5118.1	5188.0
5°	4454.9	4521.9	4492.6	4501.0	4557.9
7.5°	3312.0	3368.5	3338.4	3350.9	3394.5
10°	2396.0	2452.1	2431.5	2438.2	2440.8
12.5°	1786.4	1811.1	1794.8	1799.4	1807.8
15°	1299.5	1321.3	1320.4	1317.5	1325.5
17.5°	953.7	964.2	953.7	953.3	958.7
20°	715.9	730.6	718.0	719.7	722.2
22.5°	481.0	510.3	505.3	499.0	492.3
25°	188.4	285.9	295.2	281.3	185.0
27.5°	54.0	89.2	126.9	87.5	52.3
30°	28.9	34.3	44.0	33.5	28.0
32.5°	15.5	19.7	25.1	19.3	15.1
35°	9.2	11.3	15.5	11.3	8.8
37.5°	5.9	7.1	9.6	7.1	5.9
40°	3.8	4.6	5.9	4.6	3.8
42.5°	2.9	3.3	3.8	2.9	2.5
45°	2.1	2.1	2.5	2.1	1.7
47.5°	1.7	1.7	1.7	1.3	1.3
50°	1.3	1.3	1.3	0.8	0.8
52.5°	0.8	0.8	0.8	0.8	0.8
55°	0.8	0.8	0.8	0.4	0.4
57.5°	0.8	0.4	0.4	0.4	0.4
60°	0.4	0.4	0.4	0.4	0.4
62.5°	0.4	0.4	0.4	0.4	0.4
65°	0.4	0.4	0.4	0.4	0.4
67.5°	0.4	0.4	0.4	0.4	0.0
70°	0.4	0.4	0.4	0.4	0.4
72.5°	0.4	0.4	0.4	0.0	0.0
75°	0.0	0.4	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)