

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: P182428

Luminaire Tested: **LDSQA4A09935D010TE LAR15SP 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182428
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: LDSQA4A09935D010TE LAR15SP 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 925.2 lumens
Efficiency: N/A
Efficacy: 66.9 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

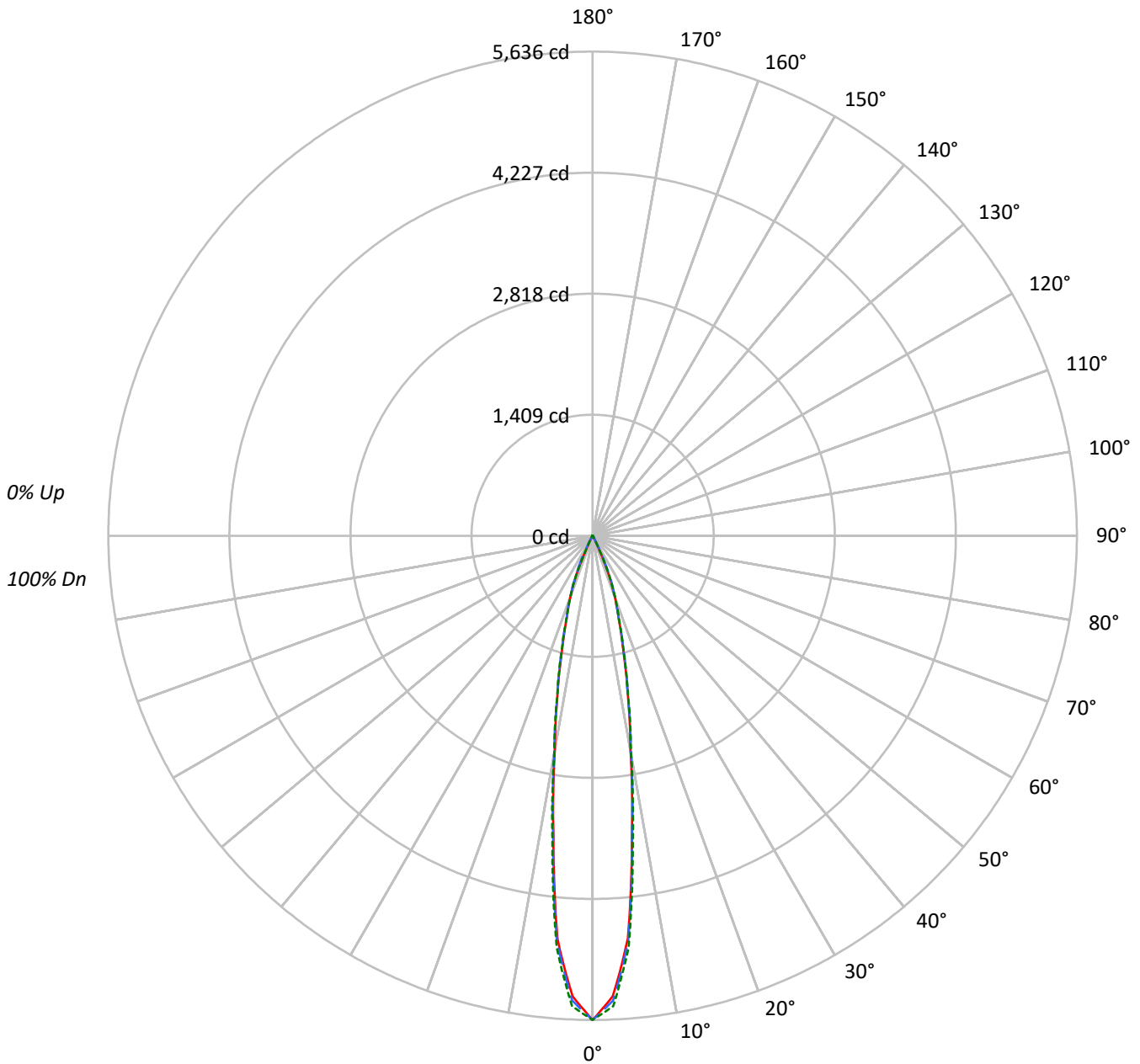
Input Watts (W): 13.84
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	106	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°	545980	545980	545980
5°	457627	461498	468198
10°	248964	252663	253617
15°	137672	139888	140420
20°	77959	78185	78649
25°	21271	33328	20897
30°	3412	5190	3311
35°	1147	1940	1100
40°	506	784	506
45°	301	370	247
50°	196	196	136
55°	152	152	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°	375.7	40.6
10°-20°	397.3	42.9
20°-30°	139.8	15.1
30°-40°	9.4	1.0
40°-50°	2.0	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°	912.7	98.6
0°-40°	922.1	99.7
0°-60°	924.7	99.9
0°-90°	925.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	925.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5636	5636	5636	5636	5636	
5°	4706	4777	4746	4754	4815	371
15°	1373	1396	1395	1392	1400	393
25°	199	302	312	297	196	123
35°	10	12	16	12	9	7
45°	2	2	3	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°	5635.9	5635.9	5635.9	5635.9	5635.9
2.5°	5365.2	5435.5	5417.9	5406.4	5480.2
5°	4705.9	4776.6	4745.7	4754.5	4814.6
7.5°	3498.5	3558.2	3526.4	3539.7	3585.7
10°	2530.9	2590.2	2568.5	2575.6	2578.2
12.5°	1887.0	1913.1	1895.9	1900.7	1909.6
15°	1372.7	1395.7	1394.8	1391.7	1400.1
17.5°	1007.4	1018.5	1007.4	1007.0	1012.7
20°	756.2	771.7	758.4	760.2	762.9
22.5°	508.1	539.1	533.8	527.1	520.1
25°	199.0	302.0	311.8	297.2	195.5
27.5°	57.0	94.2	134.0	92.4	55.3
30°	30.5	36.3	46.4	35.4	29.6
32.5°	16.4	20.8	26.5	20.3	15.9
35°	9.7	11.9	16.4	11.9	9.3
37.5°	6.2	7.5	10.2	7.5	6.2
40°	4.0	4.9	6.2	4.9	4.0
42.5°	3.1	3.5	4.0	3.1	2.7
45°	2.2	2.2	2.7	2.2	1.8
47.5°	1.8	1.8	1.8	1.3	1.3
50°	1.3	1.3	1.3	0.9	0.9
52.5°	0.9	0.9	0.9	0.9	0.9
55°	0.9	0.9	0.9	0.4	0.4
57.5°	0.9	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)