

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: P182427

Luminaire Tested: **LDSQA4A09930D010TE LAR15SP 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182427
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: LDSQA4A09930D010TE LAR15SP 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 916.4 lumens
Efficiency: N/A
Efficacy: 66.2 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

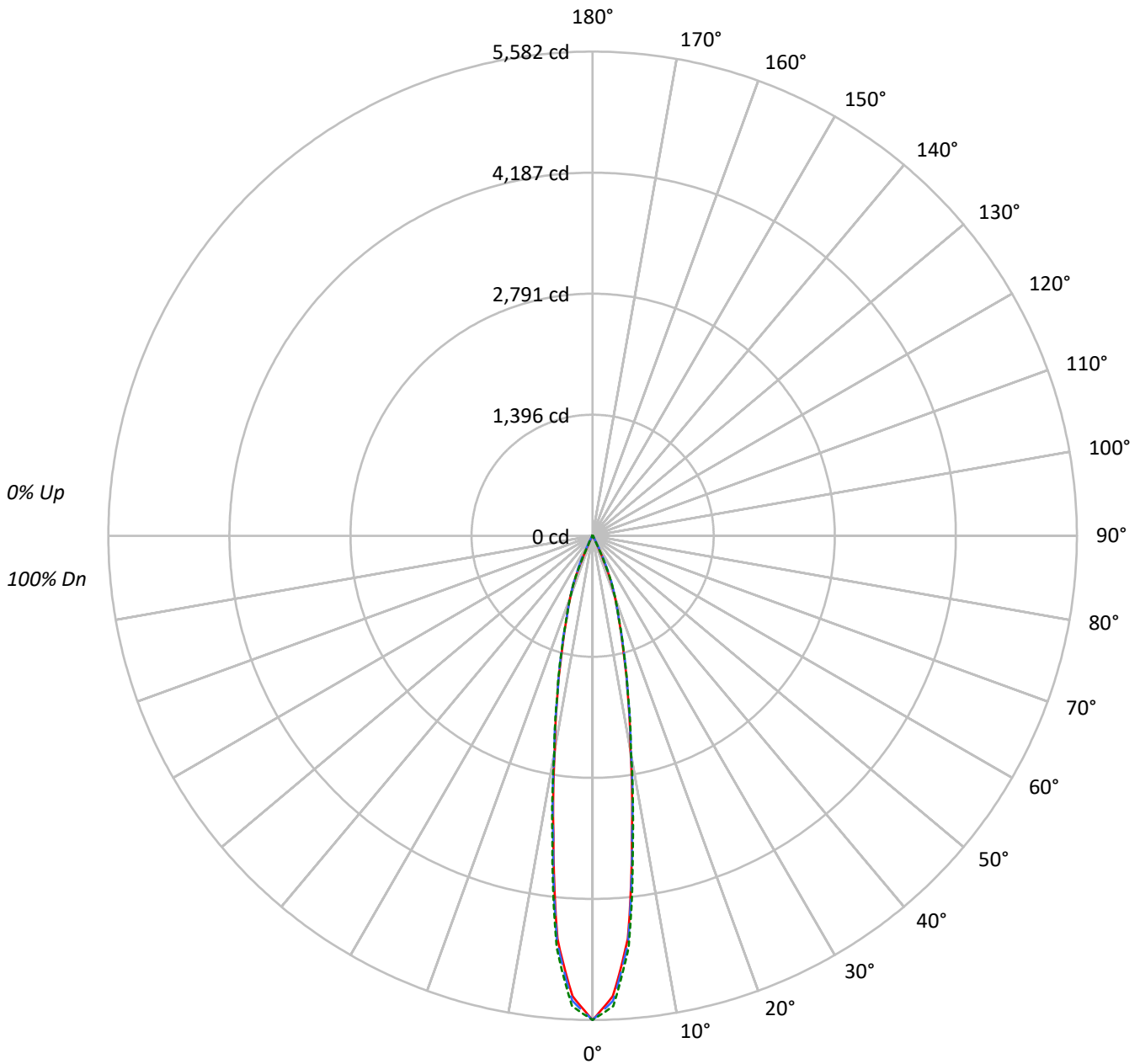
Input Watts (W): 13.84
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	540788	540788	540788
5°	453271	457112	463754
10°	246603	250263	251207
15°	136368	138565	139086
20°	77216	77443	77897
25°	21068	33008	20694
30°	3378	5146	3278
35°	1135	1916	1088
40°	493	771	493
45°	301	356	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°	372.1	40.6
10°-20°	393.5	42.9
20°-30°	138.4	15.1
30°-40°	9.3	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°	904.0	98.6
0°-40°	913.3	99.7
0°-60°	915.9	99.9
0°-90°	916.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	916.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5582	5582	5582	5582	5582	
5°	4661	4731	4701	4709	4769	368
15°	1360	1382	1382	1378	1387	390
25°	197	299	309	294	194	122
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°	5582.3	5582.3	5582.3	5582.3	5582.3
2.5°	5314.2	5383.9	5366.4	5355.0	5428.1
5°	4661.1	4731.2	4700.6	4709.3	4768.9
7.5°	3465.3	3524.4	3492.9	3506.0	3551.6
10°	2506.9	2565.6	2544.1	2551.1	2553.7
12.5°	1869.1	1894.9	1877.9	1882.7	1891.4
15°	1359.7	1382.4	1381.6	1378.5	1386.8
17.5°	997.8	1008.8	997.8	997.4	1003.1
20°	749.0	764.4	751.2	753.0	755.6
22.5°	503.3	534.0	528.7	522.1	515.1
25°	197.1	299.2	308.8	294.4	193.6
27.5°	56.5	93.3	132.7	91.5	54.8
30°	30.2	35.9	46.0	35.0	29.3
32.5°	16.2	20.6	26.3	20.1	15.8
35°	9.6	11.8	16.2	11.8	9.2
37.5°	6.1	7.4	10.1	7.4	6.1
40°	3.9	4.8	6.1	4.8	3.9
42.5°	3.1	3.5	3.9	3.1	2.6
45°	2.2	2.2	2.6	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)