

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: P182417

Luminaire Tested: **LDSQA4A18840D010TE LAR15SP 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182417
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: LDSQA4A18840D010TE LAR15SP 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2193.7 lumens
Efficiency: N/A
Efficacy: 75.3 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

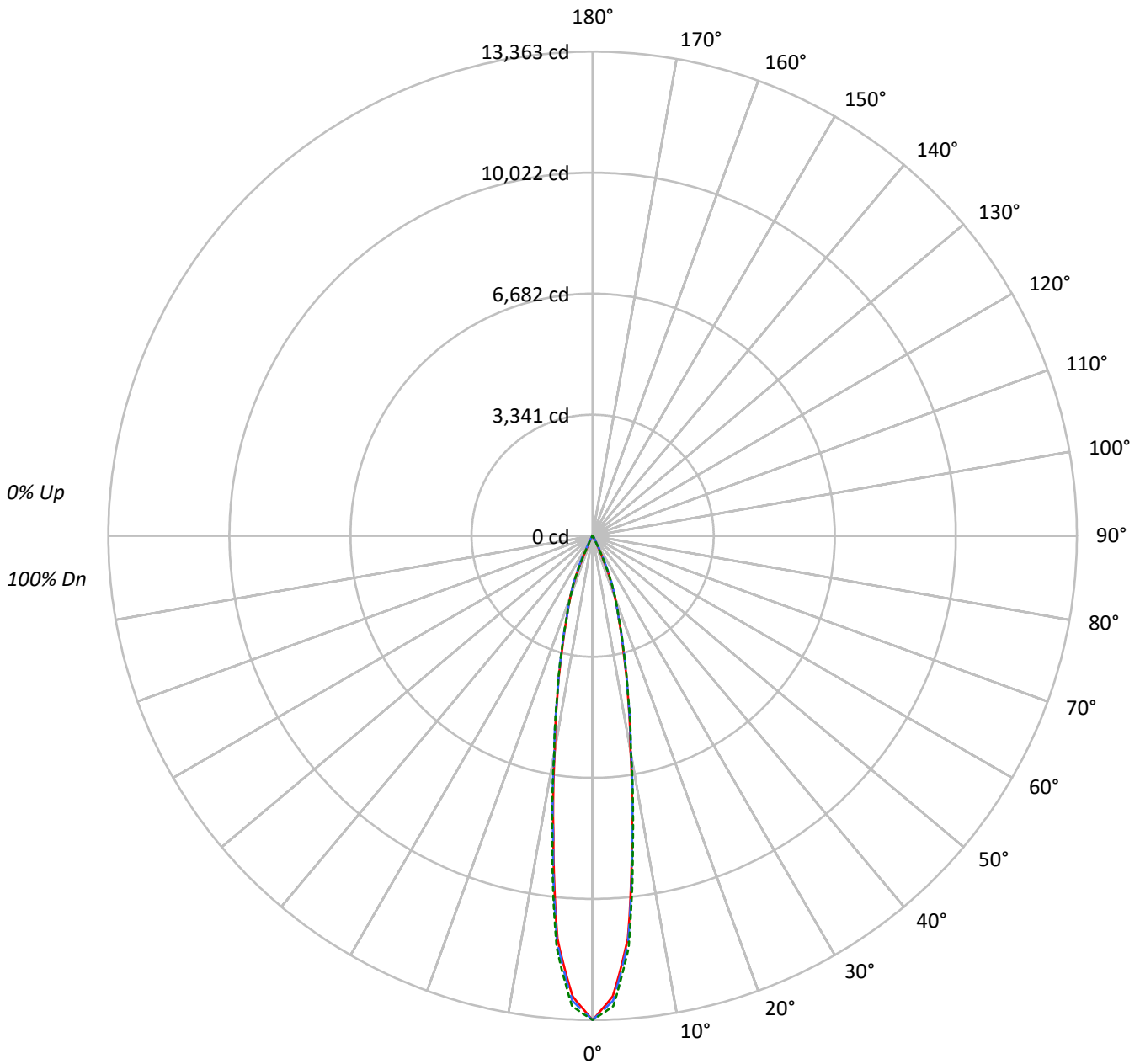
Input Watts (W): 29.12
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	100	100
1	115	113	111	110	113	111	110	108	107	106	105	104	103	102	100	99	99	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
3	108	104	101	98	107	103	100	97	100	98	96	98	96	94	96	94	93	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
5	103	97	93	90	101	96	93	90	95	92	89	93	91	89	92	90	88	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
7	97	91	88	85	96	91	87	85	90	87	84	89	86	84	88	85	83	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
9	93	87	83	80	92	86	83	80	85	82	80	85	82	80	84	81	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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1294527	1294527	1294527
5°	1085036	1094206	1110115
10°	590308	599073	601345
15°	326423	331678	332942
20°	184845	185392	186474
25°	50431	79013	49544
30°	8099	12316	7864
35°	2732	4589	2602
40°	1189	1859	1189
45°	712	863	575
50°	467	467	316
55°	355	355	169
60°	194	194	194
65°	229	229	229
70°	283	283	283
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	890.7	40.6
10°-20°	941.9	42.9
20°-30°	331.4	15.1
30°-40°	22.3	1.0
40°-50°	4.6	0.2
50°-60°	1.5	0.1
60°-70°	1.0	0.0
70°-80°	0.4	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°	2164.0	98.6
0°-40°	2186.3	99.7
0°-60°	2192.4	99.9
0°-90°	2193.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2193.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	13363	13363	13363	13363	13363	
5°	11158	11325	11252	11273	11416	880
15°	3255	3309	3307	3300	3320	933
25°	472	716	739	705	464	292
35°	23	28	39	28	22	18
45°	5	5	6	5	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°	13362.8	13362.8	13362.8	13362.8	13362.8
2.5°	12721.1	12887.8	12845.8	12818.6	12993.7
5°	11157.7	11325.4	11252.0	11273.0	11415.6
7.5°	8295.1	8436.7	8361.2	8392.6	8501.7
10°	6000.9	6141.4	6090.0	6106.8	6113.1
12.5°	4474.2	4536.0	4495.2	4506.7	4527.7
15°	3254.7	3309.2	3307.1	3299.8	3319.7
17.5°	2388.6	2414.8	2388.6	2387.6	2401.2
20°	1793.0	1829.7	1798.3	1802.5	1808.8
22.5°	1204.8	1278.2	1265.6	1249.9	1233.1
25°	471.8	716.2	739.2	704.6	463.5
27.5°	135.3	223.3	317.7	219.1	131.1
30°	72.4	86.0	110.1	83.9	70.3
32.5°	38.8	49.3	62.9	48.2	37.7
35°	23.1	28.3	38.8	28.3	22.0
37.5°	14.7	17.8	24.1	17.8	14.7
40°	9.4	11.5	14.7	11.5	9.4
42.5°	7.3	8.4	9.4	7.3	6.3
45°	5.2	5.2	6.3	5.2	4.2
47.5°	4.2	4.2	4.2	3.1	3.1
50°	3.1	3.1	3.1	2.1	2.1
52.5°	2.1	2.1	2.1	2.1	2.1
55°	2.1	2.1	2.1	1.0	1.0
57.5°	2.1	1.0	1.0	1.0	1.0
60°	1.0	1.0	1.0	1.0	1.0
62.5°	1.0	1.0	1.0	1.0	1.0
65°	1.0	1.0	1.0	1.0	1.0
67.5°	1.0	1.0	1.0	1.0	0.0
70°	1.0	1.0	1.0	1.0	1.0
72.5°	1.0	1.0	1.0	0.0	0.0
75°	0.0	1.0	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)