

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: P182420

Luminaire Tested: **LDSQA4A18935D010TE LAR15SP 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182420
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: LDSQA4A18935D010TE 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: 1707.1 lumens
Efficiency: N/A
Efficacy: 58.6 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

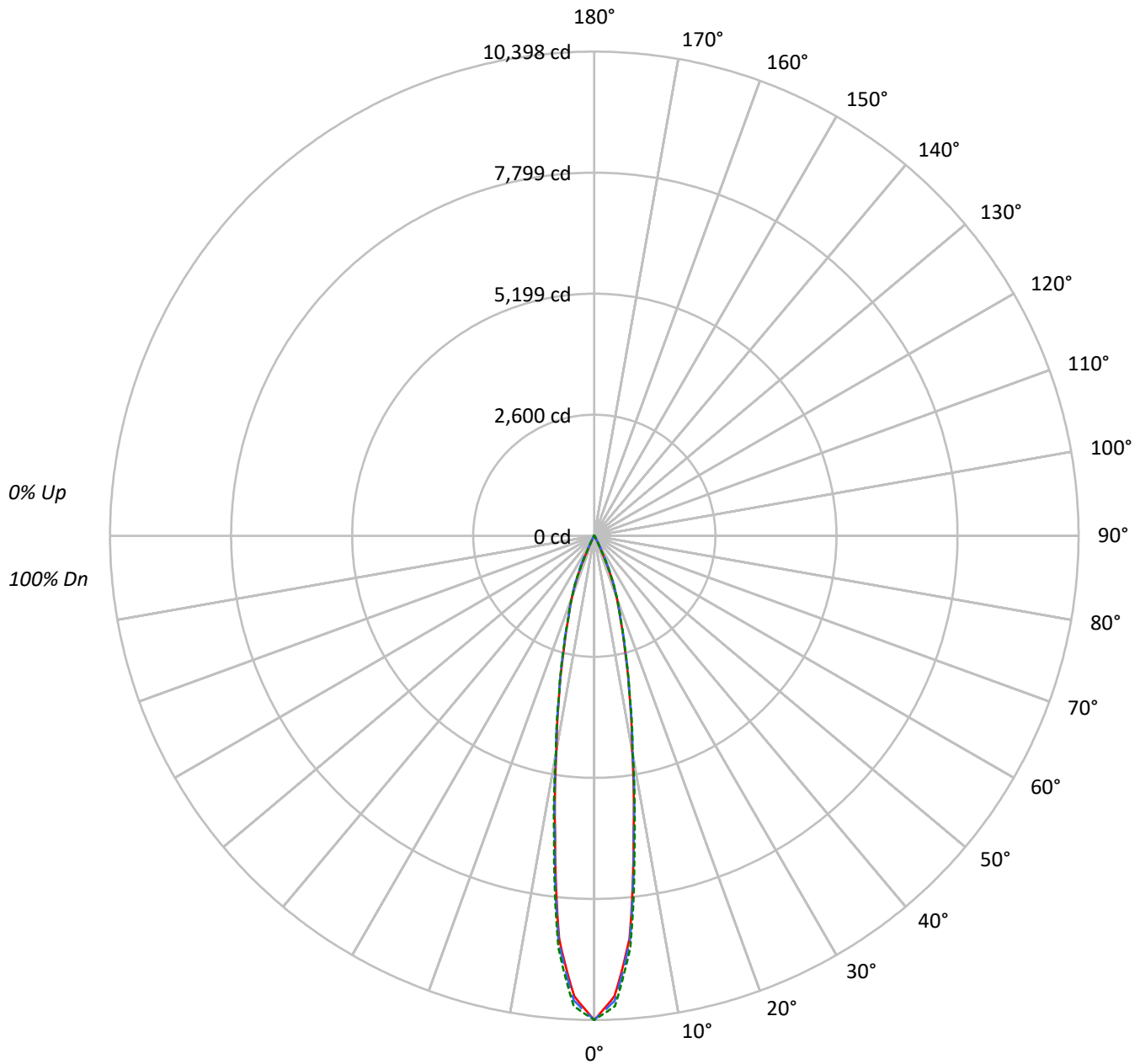
Input Watts (W): 29.12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	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			100
1	115	113	111	110	113	111	110	108		107	106	105			104	103	102			97
2	112	108	105	103	110	107	104	102		104	102	100			101	99	98			94
3	108	104	101	98	107	103	100	97		100	98	96			98	96	94			92
4	105	100	97	94	104	99	96	93		97	95	92			96	93	91			89
5	103	97	93	90	101	96	93	90		95	92	89			93	91	89			87
6	100	94	90	87	99	93	90	87		92	89	87			91	88	86			85
7	97	91	88	85	96	91	87	85		90	87	84			89	86	84			82
8	95	89	85	82	94	88	85	82		88	84	82			87	84	82			80
9	93	87	83	80	92	86	83	80		85	82	80			85	82	80			79
10	91	84	81	78	90	84	81	78		83	80	78			83	80	78			77

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1007320	1007320	1007320
5°	844314	851452	863832
10°	459338	466165	467926
15°	254002	258094	259076
20°	143835	144258	145103
25°	39250	61483	38545
30°	6298	9587	6119
35°	2129	3572	2022
40°	923	1442	923
45°	562	671	452
50°	362	362	241
55°	270	270	135
60°	155	155	155
65°	183	183	183
70°	227	227	227
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	693.1	40.6
10°-20°	732.9	42.9
20°-30°	257.9	15.1
30°-40°	17.4	1.0
40°-50°	3.6	0.2
50°-60°	1.2	0.1
60°-70°	0.8	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°	1683.9	98.6
0°-40°	1701.3	99.7
0°-60°	1706.0	99.9
0°-90°	1707.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1707.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10398	10398	10398	10398	10398	
5°	8682	8813	8756	8772	8883	685
15°	2533	2575	2573	2568	2583	726
25°	367	557	575	548	361	227
35°	18	22	30	22	17	14
45°	4	4	5	4	3	3
55°	2	2	2	1	1	1
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°	10398.1	10398.1	10398.1	10398.1	10398.1
2.5°	9898.8	10028.5	9995.9	9974.7	10110.9
5°	8682.3	8812.8	8755.7	8772.0	8883.0
7.5°	6454.8	6564.9	6506.2	6530.7	6615.5
10°	4669.5	4778.9	4738.9	4751.9	4756.8
12.5°	3481.6	3529.7	3497.9	3506.8	3523.2
15°	2532.6	2575.1	2573.4	2567.7	2583.2
17.5°	1858.7	1879.1	1858.7	1857.9	1868.5
20°	1395.2	1423.8	1399.3	1402.6	1407.5
22.5°	937.5	994.6	984.8	972.6	959.5
25°	367.2	557.3	575.2	548.3	360.6
27.5°	105.3	173.8	247.2	170.5	102.0
30°	56.3	66.9	85.7	65.3	54.7
32.5°	30.2	38.3	49.0	37.5	29.4
35°	18.0	22.0	30.2	22.0	17.1
37.5°	11.4	13.9	18.8	13.9	11.4
40°	7.3	9.0	11.4	9.0	7.3
42.5°	5.7	6.5	7.3	5.7	4.9
45°	4.1	4.1	4.9	4.1	3.3
47.5°	3.3	3.3	3.3	2.4	2.4
50°	2.4	2.4	2.4	1.6	1.6
52.5°	1.6	1.6	1.6	1.6	1.6
55°	1.6	1.6	1.6	0.8	0.8
57.5°	1.6	0.8	0.8	0.8	0.8
60°	0.8	0.8	0.8	0.8	0.8
62.5°	0.8	0.8	0.8	0.8	0.8
65°	0.8	0.8	0.8	0.8	0.8
67.5°	0.8	0.8	0.8	0.8	0.0
70°	0.8	0.8	0.8	0.8	0.8
72.5°	0.8	0.8	0.8	0.0	0.0
75°	0.0	0.8	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)