

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: P182514

Luminaire Tested: **LDSQA4A18927D010TE LAR15SP 4LSQAL1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182514
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26796)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A18927D010TE LAR15SP 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, 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: 1501.0 lumens
Efficiency: N/A
Efficacy: 51.5 lumens/watt
Spacing Criteria (0/90/45): 0.31 / 0.32 / 0.36
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

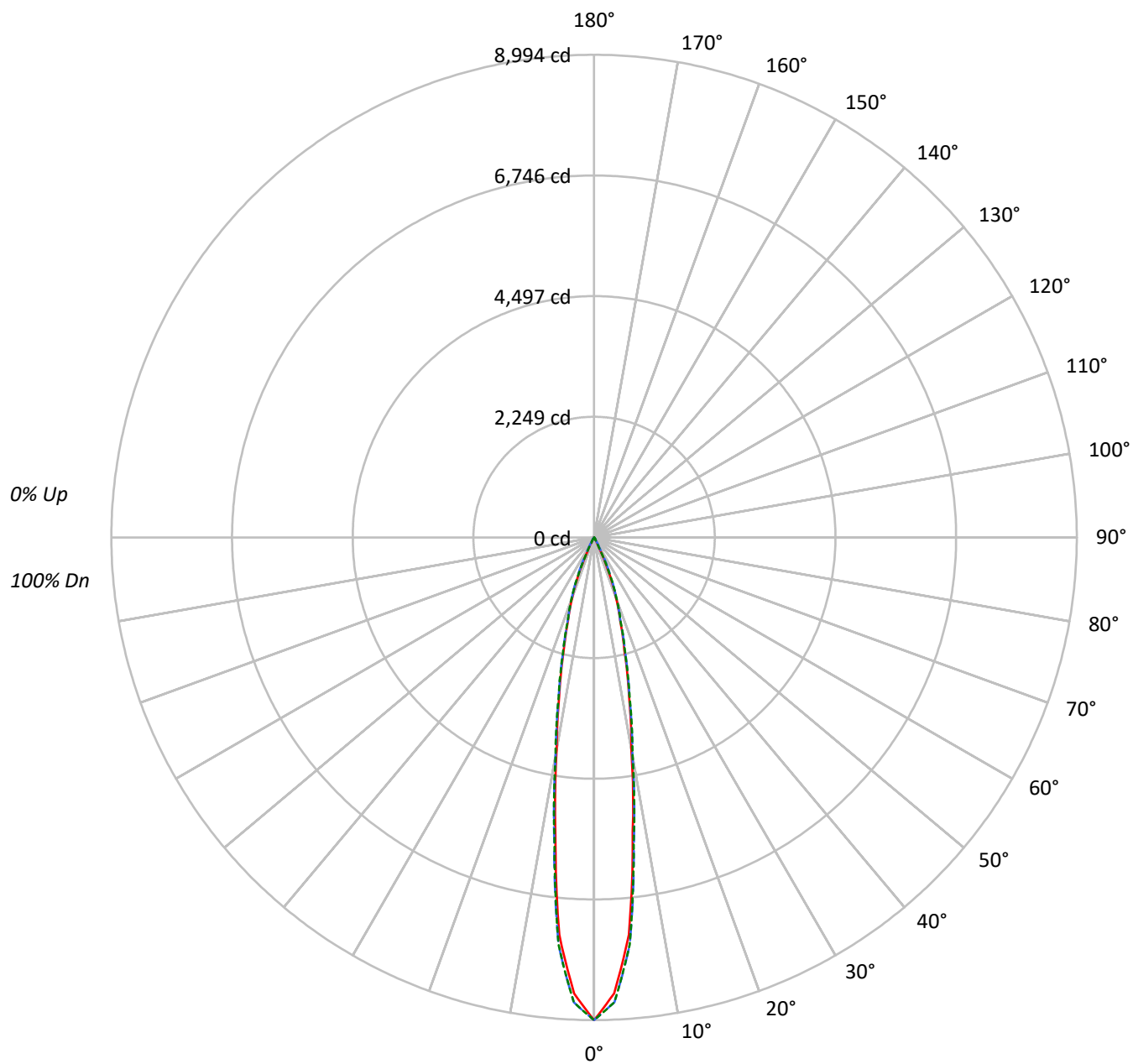
Input Watts (W): 29.12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	115	113	111	110	113	111	109	108	107	106	105	103	102	102	100	99	99	97	97	97
2	112	108	105	103	110	107	104	102	103	101	100	101	99	98	98	97	96	94	94	94
3	108	104	100	98	107	103	99	97	100	98	95	98	96	94	96	94	93	91	91	91
4	105	100	96	94	104	99	96	93	97	94	92	95	93	91	94	92	90	89	89	89
5	102	97	93	90	101	96	92	90	94	91	89	93	90	88	92	89	87	86	86	86
6	100	94	90	87	98	93	89	87	92	89	86	91	88	86	89	87	85	84	84	84
7	97	91	87	84	96	90	87	84	89	86	84	88	85	83	87	85	83	82	82	82
8	95	88	85	82	94	88	84	82	87	84	81	86	83	81	85	83	81	80	80	80
9	92	86	82	80	92	86	82	80	85	82	79	84	81	79	84	81	79	78	78	78
10	90	84	80	78	89	84	80	78	83	80	77	82	79	77	82	79	77	76	76	76

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	871336	871336	871336
5°	722758	741458	740408
10°	393824	405451	407507
15°	218969	225248	226411
20°	123453	126959	128557
25°	37166	54749	36995
30°	7003	10023	7003
35°	3016	4660	3110
40°	1467	2441	1467
45°	959	1274	740
50°	588	693	347
55°	388	388	253
60°	291	155	155
65°	183	183	183
70°	0	227	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	598.8	39.9
10°-20°	638.3	42.5
20°-30°	232.8	15.5
30°-40°	22.2	1.5
40°-50°	6.1	0.4
50°-60°	1.8	0.1
60°-70°	0.8	0.1
70°-80°	0.2	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°	1470.0	97.9
0°-40°	1492.1	99.4
0°-60°	1500.1	99.9
0°-90°	1501.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1501.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8994	8994	8994	8994	8994	
5°	7432	7620	7625	7545	7614	587
15°	2183	2235	2246	2241	2258	625
25°	348	503	512	508	346	201
35°	26	31	39	31	26	18
45°	7	7	9	7	5	5
55°	2	2	2	2	2	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°	8994.4	8994.4	8994.4	8994.4	8994.4
2.5°	8503.8	8683.1	8670.0	8629.8	8670.0
5°	7432.3	7620.0	7624.6	7545.1	7613.8
7.5°	5524.8	5670.0	5695.5	5617.5	5669.2
10°	4003.5	4133.3	4121.7	4106.3	4142.6
12.5°	2990.7	3056.3	3049.4	3066.4	3068.7
15°	2183.3	2235.1	2245.9	2241.3	2257.5
17.5°	1607.7	1635.6	1630.2	1638.7	1644.8
20°	1197.5	1241.5	1231.5	1239.2	1247.0
22.5°	794.2	875.3	865.3	877.7	870.7
25°	347.7	503.0	512.2	507.6	346.1
27.5°	106.6	180.0	231.0	176.1	106.6
30°	62.6	74.9	89.6	73.4	62.6
32.5°	39.4	47.1	56.4	46.4	38.6
35°	25.5	30.9	39.4	30.9	26.3
37.5°	17.0	20.9	27.8	20.9	17.8
40°	11.6	13.9	19.3	14.7	11.6
42.5°	8.5	10.0	13.1	10.0	7.7
45°	7.0	7.0	9.3	7.0	5.4
47.5°	5.4	5.4	6.2	4.6	3.9
50°	3.9	3.9	4.6	3.1	2.3
52.5°	2.3	3.1	3.1	2.3	1.5
55°	2.3	2.3	2.3	1.5	1.5
57.5°	1.5	1.5	1.5	0.8	0.8
60°	1.5	1.5	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	0.8
70°	0.0	0.8	0.8	0.0	0.0
72.5°	0.0	0.8	0.0	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)