

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: P182414

Luminaire Tested: **LDSQA4A18827D010TE LAR15SP 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182414
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: LDSQA4A18827D010TE LAR15SP 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2013.6 lumens
Efficiency: N/A
Efficacy: 69.1 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

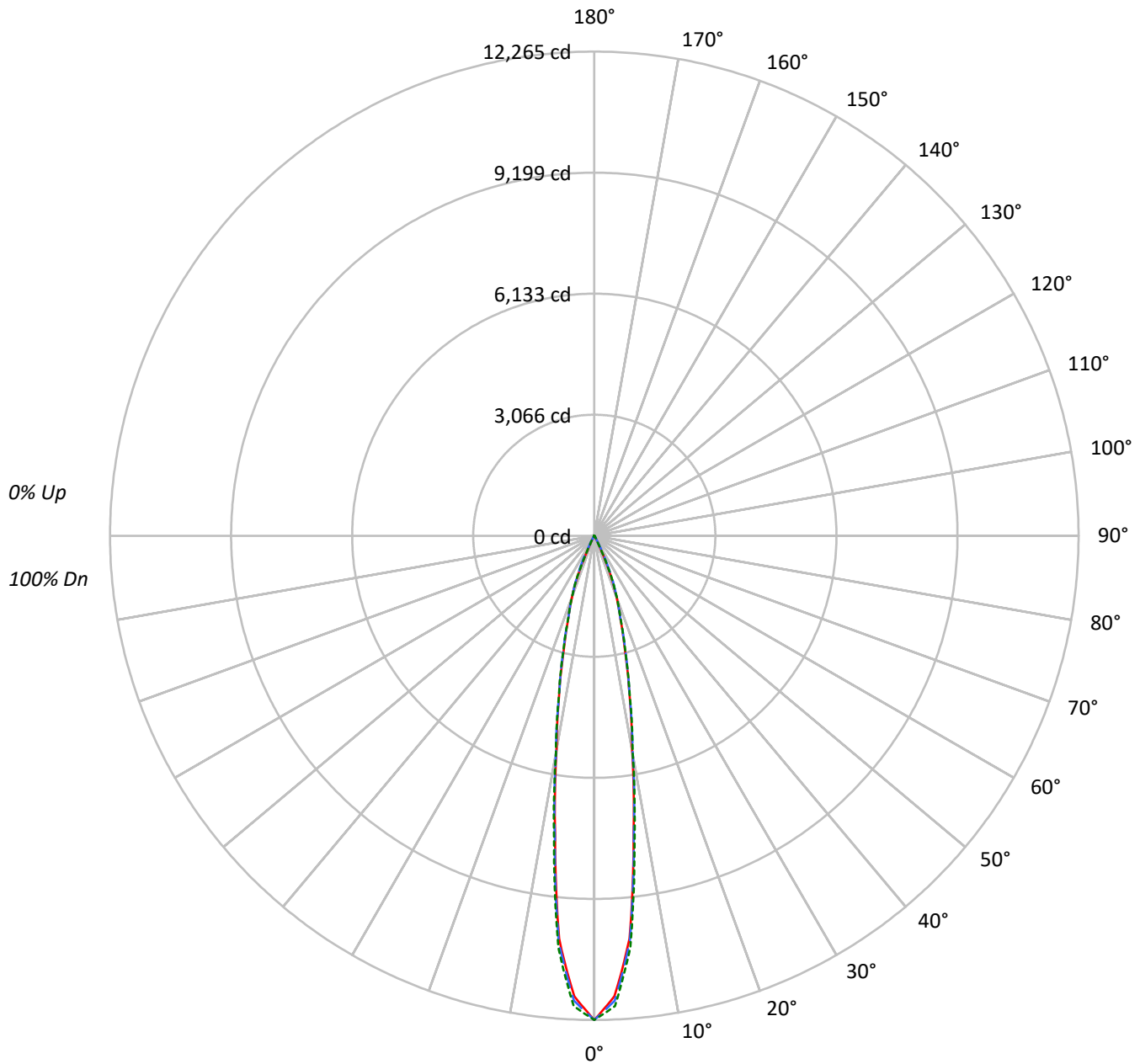
Input Watts (W): 29.12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1188158	1188158	1188158
5°	995871	1004303	1018899
10°	541802	549848	551934
15°	299605	304429	305582
20°	169660	170154	171144
25°	46294	72525	45471
30°	7428	11309	7215
35°	2507	4210	2389
40°	1100	1707	1100
45°	658	795	521
50°	437	437	286
55°	321	321	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°	817.5	40.6
10°-20°	864.5	42.9
20°-30°	304.2	15.1
30°-40°	20.5	1.0
40°-50°	4.3	0.2
50°-60°	1.4	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°	1986.2	98.6
0°-40°	2006.7	99.7
0°-60°	2012.3	99.9
0°-90°	2013.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2013.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12265	12265	12265	12265	12265	
5°	10241	10395	10328	10347	10478	808
15°	2987	3037	3035	3029	3047	856
25°	433	657	678	647	425	268
35°	21	26	36	26	20	16
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	12264.8	12264.8	12264.8	12264.8	12264.8
2.5°	11675.8	11828.8	11790.3	11765.3	11926.0
5°	10240.8	10394.8	10327.5	10346.7	10477.6
7.5°	7613.5	7743.4	7674.1	7703.0	7803.1
10°	5507.8	5636.7	5589.6	5605.0	5610.8
12.5°	4106.5	4163.3	4125.8	4136.4	4155.6
15°	2987.3	3037.3	3035.4	3028.7	3046.9
17.5°	2192.3	2216.4	2192.3	2191.4	2203.9
20°	1645.7	1679.4	1650.5	1654.4	1660.1
22.5°	1105.8	1173.2	1161.6	1147.2	1131.8
25°	433.1	657.3	678.5	646.7	425.4
27.5°	124.1	205.0	291.6	201.1	120.3
30°	66.4	78.9	101.1	77.0	64.5
32.5°	35.6	45.2	57.7	44.3	34.6
35°	21.2	26.0	35.6	26.0	20.2
37.5°	13.5	16.4	22.1	16.4	13.5
40°	8.7	10.6	13.5	10.6	8.7
42.5°	6.7	7.7	8.7	6.7	5.8
45°	4.8	4.8	5.8	4.8	3.8
47.5°	3.8	3.8	3.8	2.9	2.9
50°	2.9	2.9	2.9	1.9	1.9
52.5°	1.9	1.9	1.9	1.9	1.9
55°	1.9	1.9	1.9	1.0	1.0
57.5°	1.9	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)