

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: P182540

Luminaire Tested: **LDSQA4A28935D010TE LAR15SP 4LSQAL1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182540
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: LDSQA4A28935D010TE LAR15SP 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, 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: 2171.6 lumens
Efficiency: N/A
Efficacy: 48.8 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

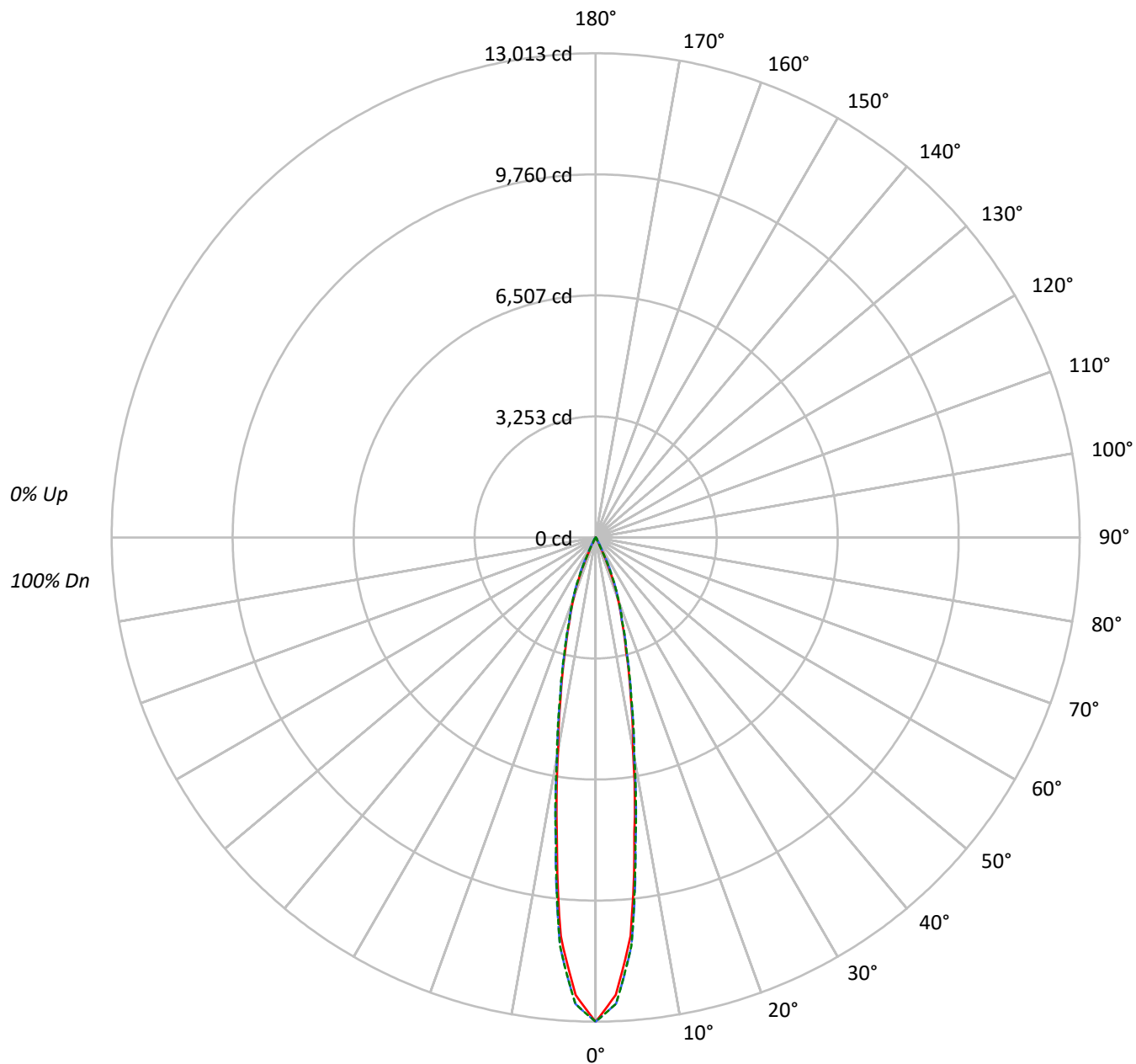
Input Watts (W): 44.49
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1260669	1260669	1260669
5°	1045700	1072763	1071246
10°	569798	586619	589590
15°	316815	325892	327576
20°	178618	183691	185990
25°	53766	79216	53531
30°	10124	14509	10124
35°	4364	6741	4494
40°	2125	3528	2125
45°	1384	1836	1069
50°	844	1010	512
55°	574	574	372
60°	426	213	213
65°	252	252	252
70°	0	312	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	866.4	39.9
10°-20°	923.5	42.5
20°-30°	336.8	15.5
30°-40°	32.1	1.5
40°-50°	8.8	0.4
50°-60°	2.6	0.1
60°-70°	1.1	0.0
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°	2126.8	97.9
0°-40°	2158.9	99.4
0°-60°	2170.4	99.9
0°-90°	2171.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2171.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	13013	13013	13013	13013	13013	
5°	10753	11025	11032	10916	11016	850
15°	3159	3234	3249	3243	3266	904
25°	503	728	741	734	501	290
35°	37	45	57	45	38	26
45°	10	10	13	10	8	8
55°	3	3	3	2	2	3
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°	13013.3	13013.3	13013.3	13013.3	13013.3
2.5°	12303.6	12562.9	12543.9	12485.8	12543.9
5°	10753.2	11024.8	11031.5	10916.4	11015.9
7.5°	7993.3	8203.5	8240.4	8127.5	8202.4
10°	5792.4	5980.2	5963.4	5941.1	5993.6
12.5°	4327.0	4422.0	4411.9	4436.5	4439.9
15°	3158.9	3233.8	3249.4	3242.7	3266.2
17.5°	2326.1	2366.4	2358.5	2370.8	2379.8
20°	1732.6	1796.3	1781.8	1792.9	1804.1
22.5°	1149.1	1266.5	1251.9	1269.8	1259.8
25°	503.0	727.7	741.1	734.4	500.8
27.5°	154.3	260.4	334.2	254.9	154.3
30°	90.5	108.4	129.7	106.2	90.5
32.5°	57.0	68.2	81.6	67.1	55.9
35°	36.9	44.7	57.0	44.7	38.0
37.5°	24.6	30.2	40.2	30.2	25.7
40°	16.8	20.1	27.9	21.2	16.8
42.5°	12.3	14.5	19.0	14.5	11.2
45°	10.1	10.1	13.4	10.1	7.8
47.5°	7.8	7.8	8.9	6.7	5.6
50°	5.6	5.6	6.7	4.5	3.4
52.5°	3.4	4.5	4.5	3.4	2.2
55°	3.4	3.4	3.4	2.2	2.2
57.5°	2.2	2.2	2.2	1.1	1.1
60°	2.2	2.2	1.1	1.1	1.1
62.5°	1.1	1.1	1.1	1.1	1.1
65°	1.1	1.1	1.1	1.1	1.1
67.5°	1.1	1.1	1.1	1.1	1.1
70°	0.0	1.1	1.1	0.0	0.0
72.5°	0.0	1.1	0.0	0.0	0.0
75°	0.0	1.1	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)