

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: P1212361

Luminaire Tested: **LDSQA4A35930D010TE LAR15SP 4LSQAL1H**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P1212361
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: LDSQA4A35930D010TE LAR15SP 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

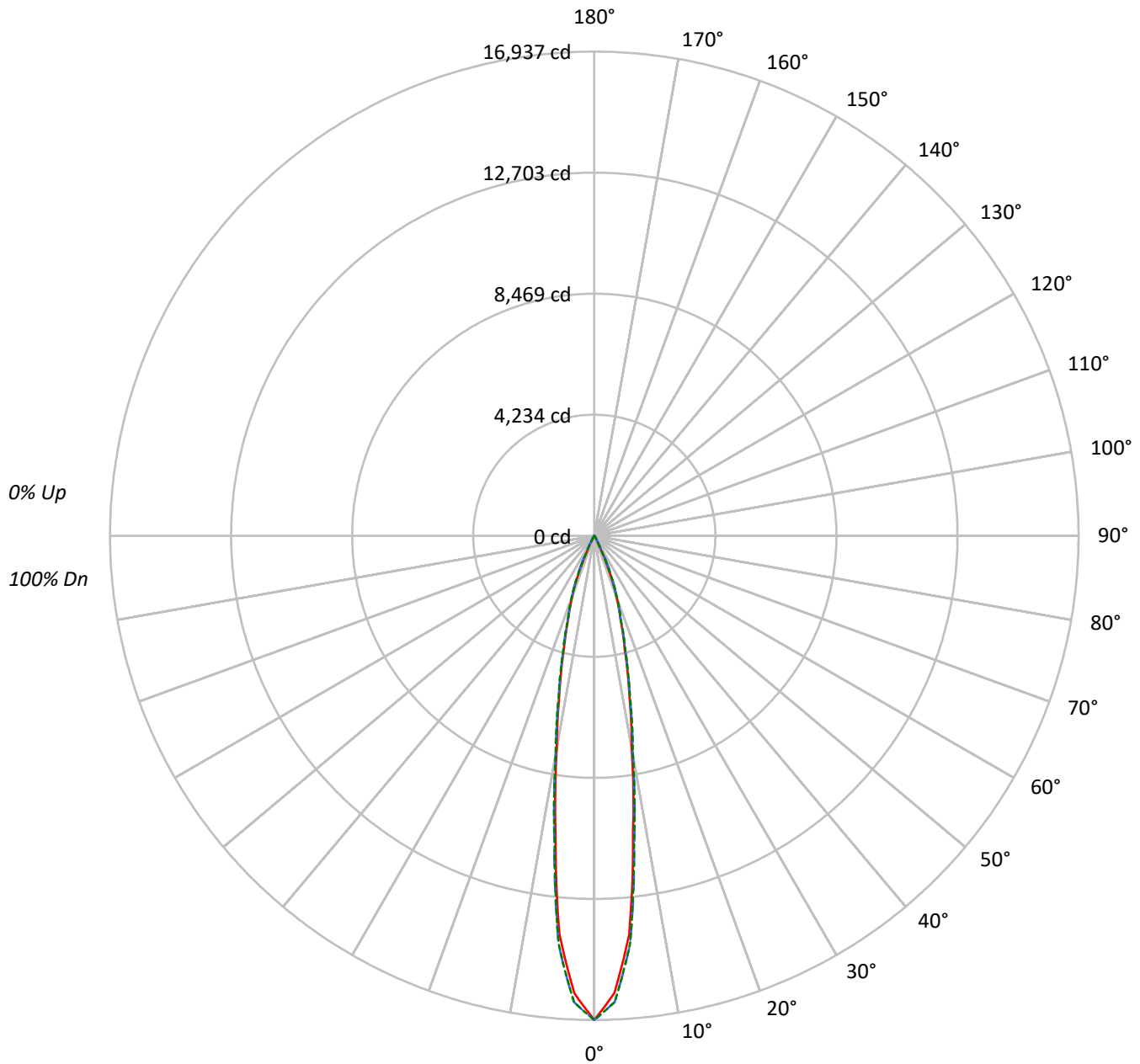
Lumens per Lamp: N/A
Luminaire Lumens: 2826.5 lumens
Efficiency: N/A
Efficacy: 59.3 lumens/watt
Spacing Criteria (0/90/45): 0.31 / 0.32 / 0.36
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 47.7
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



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

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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°	1640789	1640789	1640789
5°	1360989	1396221	1394238
10°	741601	763498	767354
15°	412344	424148	426355
20°	232474	239062	242072
25°	69981	103106	69660
30°	13189	18871	13189
35°	5677	8775	5842
40°	2757	4603	2757
45°	1795	2384	1397
50°	1085	1311	648
55°	726	726	490
60°	562	291	291
65°	344	344	344
70°	0	425	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1127.6	39.9
10°-20°	1202.0	42.5
20°-30°	438.4	15.5
30°-40°	41.8	1.5
40°-50°	11.5	0.4
50°-60°	3.4	0.1
60°-70°	1.5	0.1
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°	2768.0	97.9
0°-40°	2809.8	99.4
0°-60°	2824.7	99.9
0°-90°	2826.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2826.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	16937	16937	16937	16937	16937	
5°	13995	14349	14358	14208	14337	1106
15°	4111	4209	4229	4220	4251	1176
25°	655	947	965	956	652	378
35°	48	58	74	58	49	34
45°	13	13	17	13	10	10
55°	4	4	4	3	3	4
65°	2	2	2	2	2	1
75°	0	2	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°	16937.1	16937.1	16937.1	16937.1	16937.1
2.5°	16013.2	16350.8	16326.1	16250.4	16326.1
5°	13995.4	14348.9	14357.7	14207.8	14337.3
7.5°	10403.4	10676.9	10725.0	10578.0	10675.4
10°	7538.9	7783.3	7761.5	7732.4	7800.7
12.5°	5631.7	5755.3	5742.2	5774.2	5778.6
15°	4111.4	4208.7	4229.1	4220.4	4251.1
17.5°	3027.5	3079.9	3069.6	3085.6	3097.4
20°	2255.0	2337.9	2318.9	2333.5	2348.1
22.5°	1495.6	1648.3	1629.4	1652.6	1639.6
25°	654.7	947.1	964.6	955.8	651.7
27.5°	200.8	339.0	434.9	331.6	200.8
30°	117.9	141.1	168.7	138.3	117.9
32.5°	74.2	88.7	106.1	87.2	72.8
35°	48.0	58.2	74.2	58.2	49.4
37.5°	32.0	39.3	52.4	39.3	33.5
40°	21.8	26.1	36.4	27.6	21.8
42.5°	16.1	18.9	24.7	18.9	14.6
45°	13.1	13.1	17.4	13.1	10.2
47.5°	10.2	10.2	11.7	8.7	7.2
50°	7.2	7.2	8.7	5.8	4.3
52.5°	4.3	5.8	5.8	4.3	2.9
55°	4.3	4.3	4.3	2.9	2.9
57.5°	2.9	2.9	2.9	1.5	1.5
60°	2.9	2.9	1.5	1.5	1.5
62.5°	1.5	1.5	1.5	1.5	1.5
65°	1.5	1.5	1.5	1.5	1.5
67.5°	1.5	1.5	1.5	1.5	1.5
70°	0.0	1.5	1.5	0.0	0.0
72.5°	0.0	1.5	0.0	0.0	0.0
75°	0.0	1.5	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

Classified

Scaled Data Report

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— 0°-180° - - 45°-225° - - - 90°-270°

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