

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: P1219528

Luminaire Tested: **LDSQA4A20950D010TE LAR15SP 4LSQA1H-LSF-20**

Issue Date: 3/3/2020

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

**Test Information**

Test Method: LM-41-14
Report Number: P1219528
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26829)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A20950D010TE LAR15SP 4LSQA1H-LSF-20
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT WITH SOLITE LENS
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

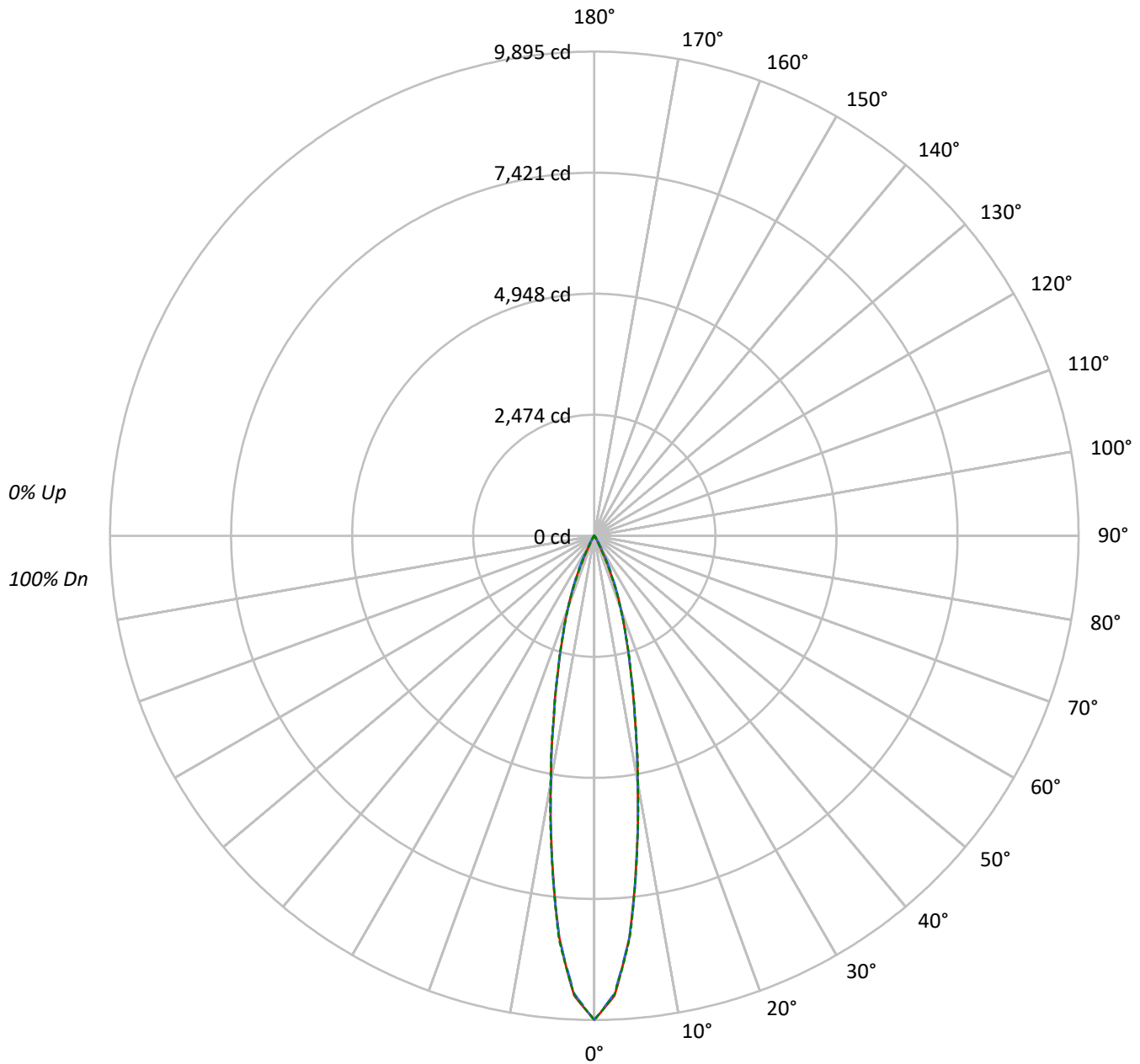
Lumens per Lamp: N/A
Luminaire Lumens: 1876.5 lumens
Efficiency: N/A
Efficacy: 65.2 lumens/watt
Spacing Criteria (0/90/45): 0.35 / 0.35 / 0.39
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 28.8
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	109	113	111	109	108		107	106	104			103	102	101			97
2	111	108	105	102	109	106	104	101		103	101	99			100	99	97			94
3	108	103	100	97	106	102	99	96		100	97	95			97	95	93			91
4	105	99	96	93	103	98	95	92		96	93	91			95	92	90			88
5	102	96	92	89	100	95	91	89		93	90	88			92	89	87			85
6	99	93	89	86	98	92	88	85		91	87	85			89	87	84			83
7	96	90	86	83	95	89	85	83		88	85	82			87	84	82			80
8	94	87	83	80	93	87	83	80		86	82	80			85	82	80			78
9	91	85	81	78	90	84	80	78		83	80	78			83	80	77			76
10	89	82	78	76	88	82	78	76		81	78	75			81	78	75			74

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	958544	958544	958544
5°	800321	800321	804123
10°	501381	500250	505326
15°	286125	287740	288222
20°	161979	161484	160814
25°	60810	78628	62135
30°	12473	26332	12584
35°	4955	8574	4849
40°	2529	3731	2403
45°	1713	1973	1439
50°	1025	1025	723
55°	473	642	321
60°	368	368	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°	683.7	36.4
10°-20°	813.2	43.3
20°-30°	324.2	17.3
30°-40°	40.9	2.2
40°-50°	10.1	0.5
50°-60°	3.0	0.2
60°-70°	1.1	0.1
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°	1821.1	97.0
0°-40°	1862.0	99.2
0°-60°	1875.0	99.9
0°-90°	1876.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1876.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9895	9895	9895	9895	9895	
5°	8230	8305	8230	8238	8269	682
15°	2853	2870	2869	2869	2874	811
25°	569	698	736	670	581	293
35°	42	50	72	49	41	31
45°	12	12	14	11	10	10
55°	3	3	4	3	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°	9894.6	9894.6	9894.6	9894.6	9894.6
2.5°	9408.6	9459.2	9361.9	9371.4	9383.9
5°	8229.9	8305.2	8229.9	8237.5	8269.0
7.5°	6622.4	6688.2	6645.4	6664.4	6630.1
10°	5096.9	5120.8	5085.4	5102.7	5137.0
12.5°	3832.4	3859.1	3833.4	3834.4	3849.7
15°	2852.9	2870.1	2869.0	2869.0	2873.8
17.5°	2130.6	2153.4	2128.7	2130.6	2136.4
20°	1571.2	1586.4	1566.4	1563.6	1559.9
22.5°	1071.9	1104.4	1116.8	1100.5	1049.2
25°	568.9	698.5	735.6	669.9	581.3
27.5°	228.6	347.9	429.7	340.1	248.7
30°	111.5	151.5	235.4	155.4	112.5
32.5°	65.7	82.0	128.6	81.0	64.8
35°	41.9	50.5	72.5	48.6	41.0
37.5°	27.7	33.3	44.7	32.4	26.7
40°	20.0	22.8	29.5	21.9	19.0
42.5°	15.2	16.2	20.0	16.2	14.4
45°	12.5	12.5	14.4	11.4	10.5
47.5°	9.5	9.5	9.5	8.5	6.8
50°	6.8	6.8	6.8	5.7	4.8
52.5°	4.8	4.8	4.8	3.8	2.8
55°	2.8	2.8	3.8	2.8	1.9
57.5°	2.8	1.9	2.8	1.9	1.9
60°	1.9	1.9	1.9	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	1.0
70°	1.0	1.0	1.0	1.0	1.0
72.5°	1.0	1.0	1.0	1.0	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

Classified

Scaled Data Report

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— 0°-180° - - 45°-225° - - - 90°-270°

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