

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: P1219570

Luminaire Tested: **LDSQA4A35950D010TE 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: P1219570
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: LDSQA4A35950D010TE 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

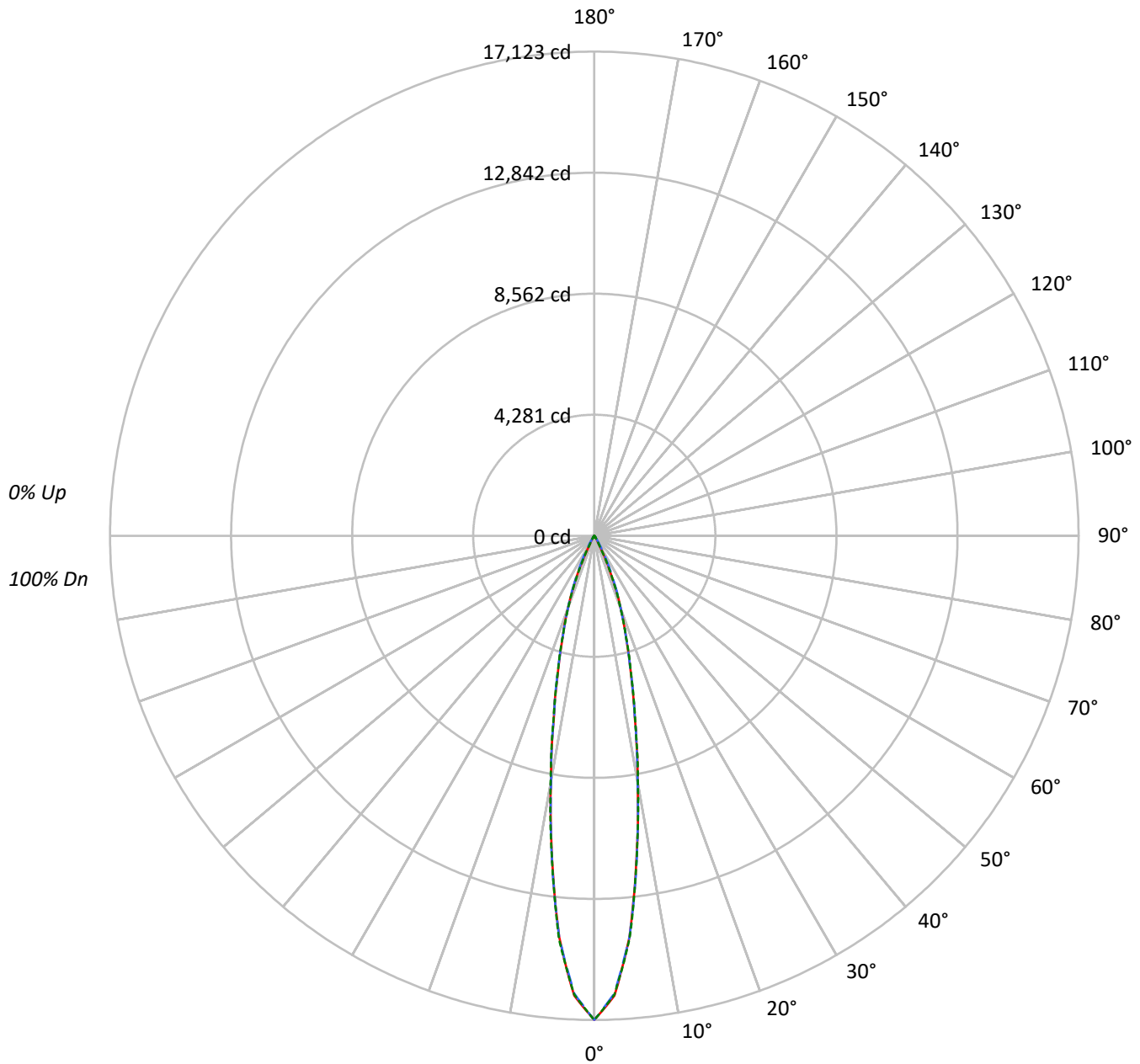
Lumens per Lamp: N/A
Luminaire Lumens: 3247.2 lumens
Efficiency: N/A
Efficacy: 68.1 lumens/watt
Spacing Criteria (0/90/45): 0.35 / 0.35 / 0.39
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 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



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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	76			81	78	75			74

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1658788	1658788	1658788
5°	1384990	1384990	1391554
10°	867652	865704	874469
15°	495146	497964	498786
20°	280330	279474	278278
25°	105233	136071	107521
30°	21589	45561	21768
35°	8586	14818	8385
40°	4363	6462	4173
45°	2946	3398	2480
50°	1718	1718	1236
55°	828	1115	540
60°	620	620	329
65°	390	390	390
70°	482	482	482
75°	0	0	0
80°	0	0	0
85°	0	0	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1183.2	36.4
10°-20°	1407.2	43.3
20°-30°	561.0	17.3
30°-40°	70.8	2.2
40°-50°	17.4	0.5
50°-60°	5.1	0.2
60°-70°	1.8	0.1
70°-80°	0.7	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°	3151.4	97.0
0°-40°	3222.2	99.2
0°-60°	3244.7	99.9
0°-90°	3247.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3247.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	17123	17123	17123	17123	17123	
5°	14242	14372	14242	14255	14310	1180
15°	4937	4967	4965	4965	4973	1403
25°	984	1209	1273	1159	1006	506
35°	73	88	125	84	71	53
45°	22	22	25	20	18	17
55°	5	5	7	5	3	6
65°	2	2	2	2	2	2
75°	0	2	0	0	0	1
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°	17122.9	17122.9	17122.9	17122.9	17122.9
2.5°	16281.9	16369.2	16201.1	16217.4	16239.0
5°	14242.2	14372.4	14242.2	14255.3	14309.7
7.5°	11460.3	11574.1	11499.9	11532.8	11473.5
10°	8820.3	8861.6	8800.5	8830.2	8889.6
12.5°	6632.2	6678.3	6633.8	6635.5	6661.8
15°	4937.0	4966.6	4965.1	4965.1	4973.3
17.5°	3687.1	3726.6	3683.9	3687.1	3696.9
20°	2719.2	2745.6	2710.9	2706.0	2699.3
22.5°	1855.2	1911.1	1932.6	1904.7	1815.4
25°	984.5	1208.7	1273.0	1159.2	1005.9
27.5°	395.7	601.8	743.7	588.6	430.4
30°	193.0	262.2	407.3	268.8	194.6
32.5°	113.8	141.9	222.6	140.2	112.2
35°	72.6	87.5	125.3	84.0	70.9
37.5°	47.8	57.7	77.5	56.1	46.2
40°	34.5	39.6	51.1	38.0	33.0
42.5°	26.3	28.0	34.5	28.0	24.8
45°	21.5	21.5	24.8	19.9	18.1
47.5°	16.5	16.5	16.5	14.9	11.4
50°	11.4	11.4	11.4	9.9	8.2
52.5°	8.2	8.2	8.2	6.6	4.9
55°	4.9	4.9	6.6	4.9	3.2
57.5°	4.9	3.2	4.9	3.2	3.2
60°	3.2	3.2	3.2	1.7	1.7
62.5°	1.7	1.7	1.7	1.7	1.7
65°	1.7	1.7	1.7	1.7	1.7
67.5°	1.7	1.7	1.7	1.7	1.7
70°	1.7	1.7	1.7	1.7	1.7
72.5°	1.7	1.7	1.7	1.7	0.0
75°	0.0	1.7	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°

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