

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: P1212231

Luminaire Tested: **LDSQA4A25927D010TE 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: P1212231
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: LDSQA4A25927D010TE 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 / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

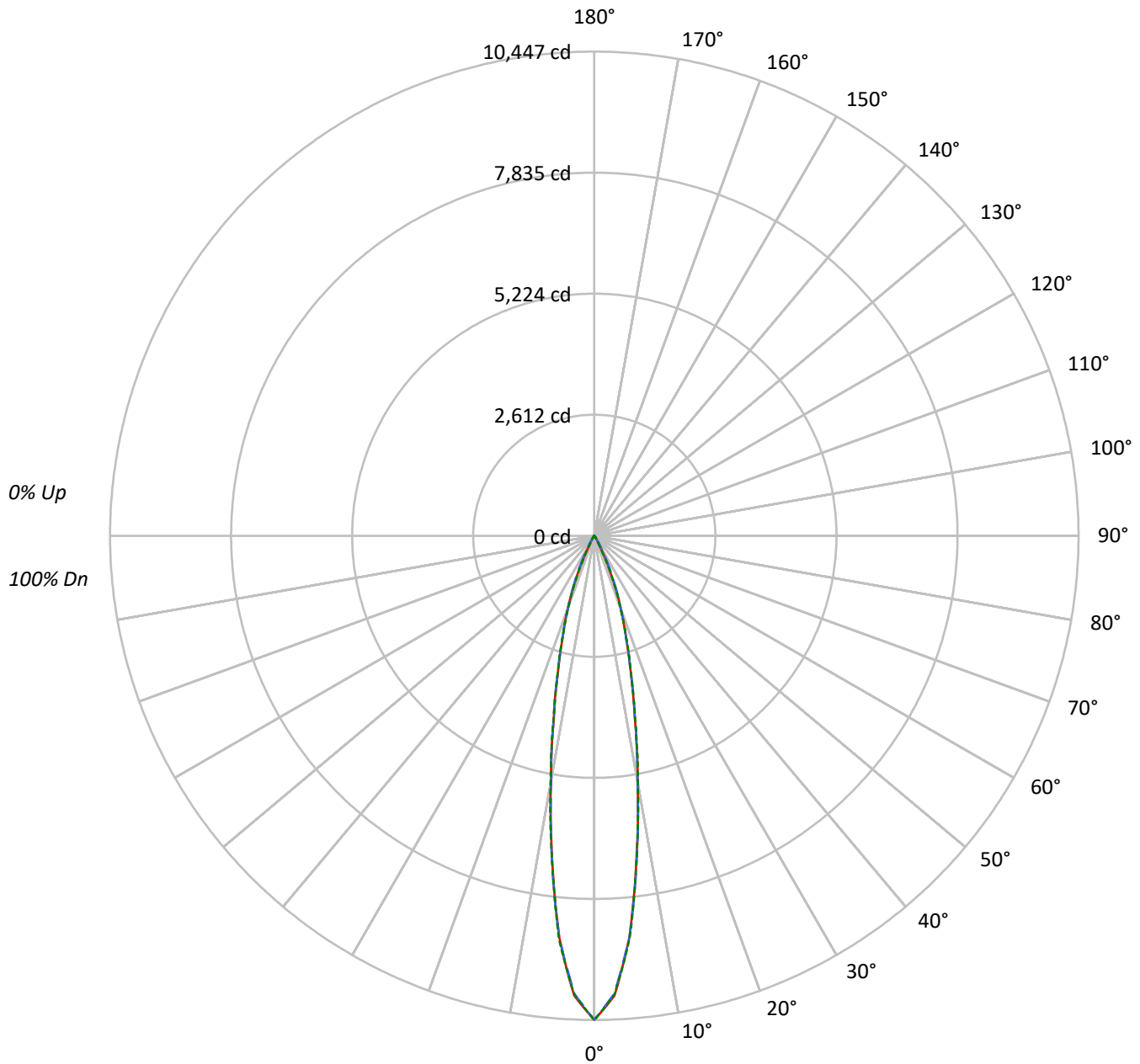
Lumens per Lamp: N/A
Luminaire Lumens: 1981.3 lumens
Efficiency: N/A
Efficacy: 64.1 lumens/watt
Spacing Criteria (0/90/45): 0.35 / 0.35 / 0.39
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 30.9
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					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	115	113	111	109	113	111	109	108	107	106	104	103	102	101	100	99	98	97	97	97
2	111	108	105	102	109	106	104	101	103	101	99	100	99	97	98	96	95	94	94	94
3	108	103	100	97	106	102	99	96	100	97	95	97	95	93	95	93	92	91	91	91
4	105	99	96	93	103	98	95	92	96	93	91	95	92	90	93	91	89	88	88	88
5	102	96	92	89	100	95	91	88	93	90	88	92	89	87	91	88	86	85	85	85
6	99	93	89	86	98	92	88	85	91	87	85	89	87	84	88	86	84	83	83	83
7	96	90	86	83	95	89	85	83	88	85	82	87	84	82	86	83	81	80	80	80
8	94	87	83	80	93	87	83	80	86	82	80	85	82	80	84	81	79	78	78	78
9	91	85	81	78	90	84	80	78	83	80	78	83	80	77	82	79	77	76	76	76
10	89	82	78	76	88	82	78	76	81	78	75	81	78	75	80	77	75	74	74	74

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1012058	1012058	1012058
5°	845005	845005	849021
10°	529368	528187	533539
15°	302102	303807	304319
20°	171031	170515	169783
25°	64198	83011	65609
30°	13177	27798	13278
35°	5239	9035	5121
40°	2668	3946	2555
45°	1808	2069	1507
50°	1055	1055	754
55°	524	676	338
60°	388	388	213
65°	252	252	252
70°	312	312	312
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	721.9	36.4
10°-20°	858.6	43.3
20°-30°	342.3	17.3
30°-40°	43.2	2.2
40°-50°	10.6	0.5
50°-60°	3.1	0.2
60°-70°	1.2	0.1
70°-80°	0.5	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°	1922.7	97.0
0°-40°	1965.9	99.2
0°-60°	1979.7	99.9
0°-90°	1981.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1981.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10447	10447	10447	10447	10447	
5°	8689	8769	8689	8698	8731	720
15°	3012	3030	3029	3029	3034	856
25°	601	738	777	707	614	309
35°	44	53	76	51	43	32
45°	13	13	15	12	11	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°	10447.0	10447.0	10447.0	10447.0	10447.0
2.5°	9933.9	9987.3	9884.7	9894.6	9907.8
5°	8689.4	8768.9	8689.4	8697.5	8730.7
7.5°	6992.1	7061.6	7016.3	7036.5	7000.2
10°	5381.4	5406.6	5369.4	5387.5	5423.8
12.5°	4046.4	4074.6	4047.4	4048.4	4064.6
15°	3012.2	3030.3	3029.2	3029.2	3034.3
17.5°	2249.5	2273.7	2247.6	2249.5	2255.5
20°	1659.0	1675.1	1654.0	1650.9	1646.9
22.5°	1131.8	1166.0	1179.1	1161.9	1107.7
25°	600.6	737.5	776.6	707.2	613.8
27.5°	241.5	367.2	453.7	359.1	262.5
30°	117.8	159.9	248.5	163.9	118.7
32.5°	69.4	86.5	135.8	85.5	68.4
35°	44.3	53.3	76.4	51.3	43.3
37.5°	29.2	35.2	47.3	34.2	28.2
40°	21.1	24.2	31.2	23.1	20.2
42.5°	16.1	17.1	21.1	17.1	15.1
45°	13.2	13.2	15.1	12.1	11.0
47.5°	10.1	10.1	10.1	9.0	7.0
50°	7.0	7.0	7.0	6.0	5.0
52.5°	5.0	5.0	5.0	4.0	3.1
55°	3.1	3.1	4.0	3.1	2.0
57.5°	3.1	2.0	3.1	2.0	2.0
60°	2.0	2.0	2.0	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°	1.1	1.1	1.1	1.1	1.1
72.5°	1.1	1.1	1.1	1.1	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

Classified

Scaled Data Report

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— 0°-180° - - 45°-225° - - - 90°-270°

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