

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: P1212301

Luminaire Tested: **LDSQA4A30930D010TE 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: P1212301
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: LDSQA4A30930D010TE 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 / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

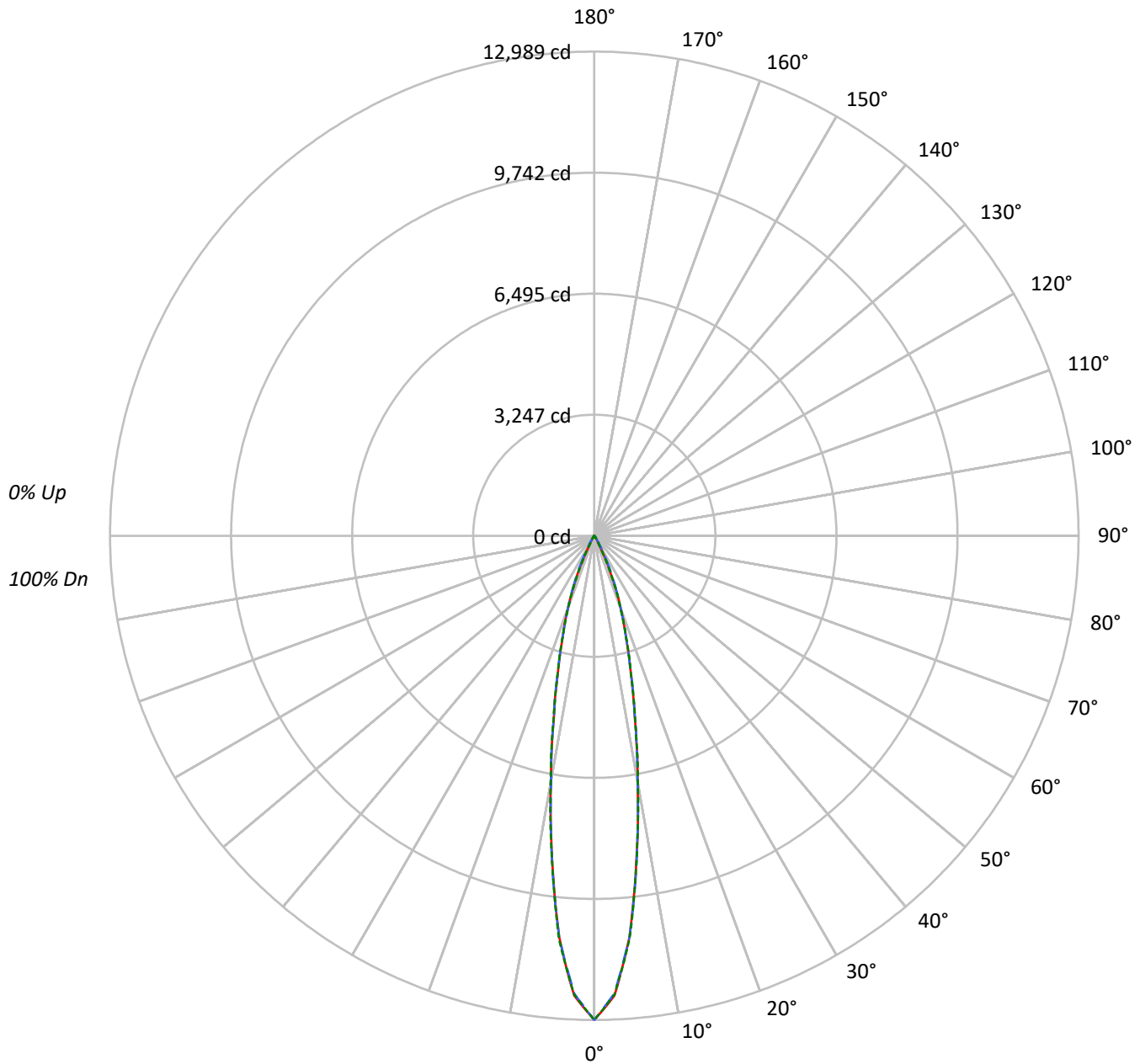
Lumens per Lamp: N/A
Luminaire Lumens: 2463.1 lumens
Efficiency: N/A
Efficacy: 61.9 lumens/watt
Spacing Criteria (0/90/45): 0.35 / 0.35 / 0.39
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 39.8
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	76			81	78	75			74

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1258286	1258286	1258286
5°	1050592	1050592	1055580
10°	658163	656688	663338
15°	375597	377733	378355
20°	212639	212000	211103
25°	79815	103224	81557
30°	16365	34554	16511
35°	6504	11235	6363
40°	3313	4907	3162
45°	2233	2576	1891
50°	1311	1311	934
55°	625	844	422
60°	484	484	233
65°	275	275	275
70°	340	340	340
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	897.5	36.4
10°-20°	1067.4	43.3
20°-30°	425.6	17.3
30°-40°	53.7	2.2
40°-50°	13.2	0.5
50°-60°	3.9	0.2
60°-70°	1.3	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°	2390.5	97.1
0°-40°	2444.2	99.2
0°-60°	2461.3	99.9
0°-90°	2463.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2463.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12989	12989	12989	12989	12989	
5°	10804	10902	10804	10813	10855	895
15°	3745	3768	3766	3766	3772	1064
25°	747	917	966	879	763	384
35°	55	66	95	64	54	40
45°	16	16	19	15	14	13
55°	4	4	5	4	2	4
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°	12988.7	12988.7	12988.7	12988.7	12988.7
2.5°	12350.8	12417.0	12289.4	12302.0	12318.2
5°	10803.5	10902.2	10803.5	10813.4	10854.8
7.5°	8693.3	8779.6	8723.4	8748.3	8703.3
10°	6690.7	6722.0	6675.7	6698.2	6743.3
12.5°	5030.9	5065.9	5032.1	5033.4	5053.4
15°	3745.0	3767.5	3766.3	3766.3	3772.5
17.5°	2796.9	2826.9	2794.4	2796.9	2804.3
20°	2062.6	2082.6	2056.4	2052.6	2047.7
22.5°	1407.2	1449.7	1465.9	1444.7	1377.1
25°	746.7	916.9	965.7	879.4	763.0
27.5°	300.2	456.5	564.1	446.6	326.5
30°	146.3	198.9	308.9	203.9	147.6
32.5°	86.3	107.6	168.8	106.3	85.1
35°	55.0	66.3	95.0	63.8	53.8
37.5°	36.3	43.7	58.8	42.5	35.0
40°	26.2	30.1	38.8	28.8	25.0
42.5°	20.0	21.2	26.2	21.2	18.8
45°	16.3	16.3	18.8	15.0	13.8
47.5°	12.5	12.5	12.5	11.3	8.7
50°	8.7	8.7	8.7	7.5	6.2
52.5°	6.2	6.2	6.2	5.0	3.7
55°	3.7	3.7	5.0	3.7	2.5
57.5°	3.7	2.5	3.7	2.5	2.5
60°	2.5	2.5	2.5	1.2	1.2
62.5°	1.2	1.2	1.2	1.2	1.2
65°	1.2	1.2	1.2	1.2	1.2
67.5°	1.2	1.2	1.2	1.2	1.2
70°	1.2	1.2	1.2	1.2	1.2
72.5°	1.2	1.2	1.2	1.2	0.0
75°	0.0	1.2	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

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— 0°-180° - - 45°-225° - - - 90°-270°

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