

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: P1219500

Luminaire Tested: **LDSQA4A15940D010TE 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: P1219500
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: LDSQA4A15940D010TE 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 / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

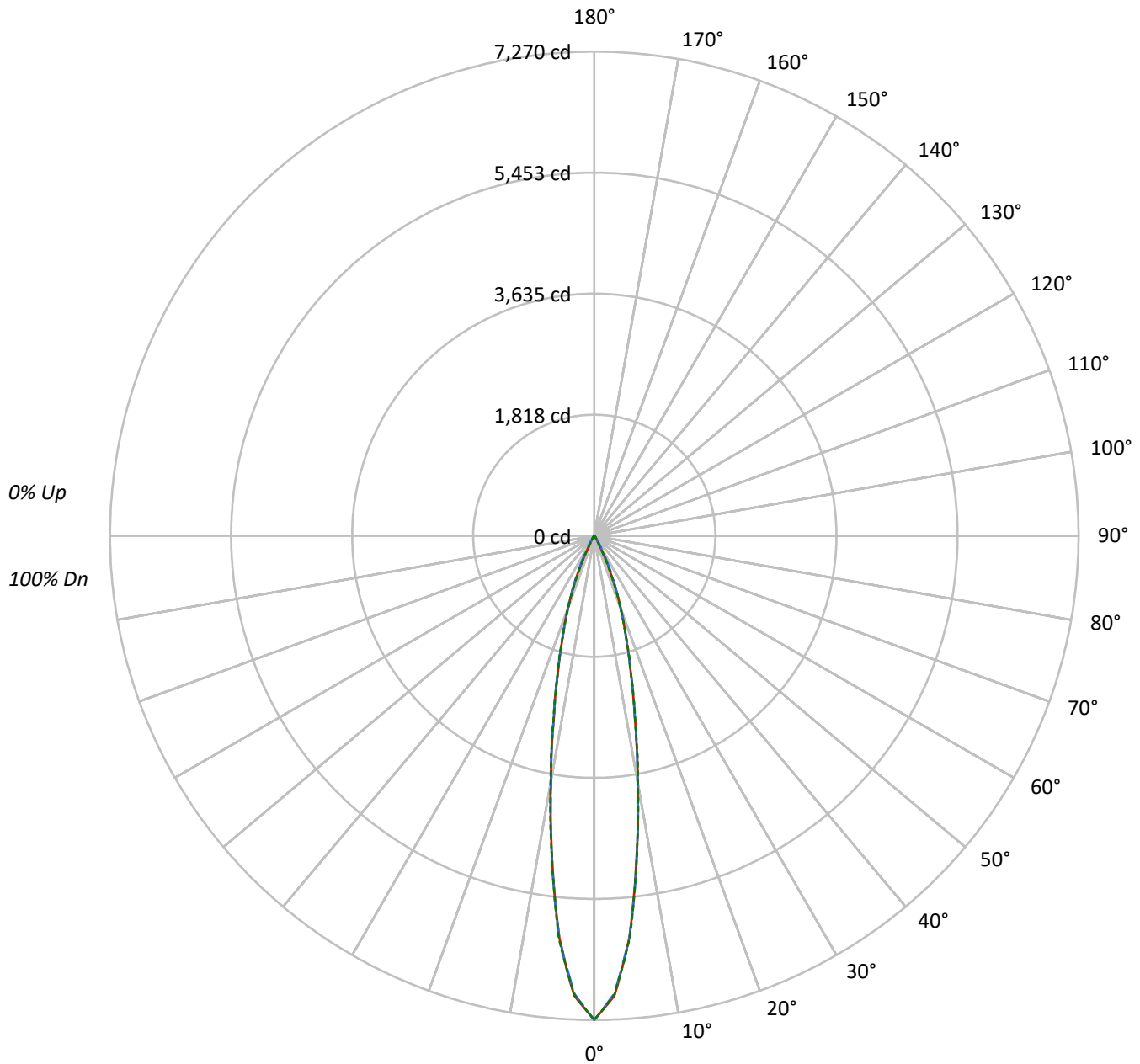
Lumens per Lamp: N/A
Luminaire Lumens: 1378.6 lumens
Efficiency: N/A
Efficacy: 67.6 lumens/watt
Spacing Criteria (0/90/45): 0.35 / 0.35 / 0.39
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 20.4
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		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	115	113	111	109	113	111	109	108		107	106	104		103	102	101		100	99	98
2	111	108	105	102	109	106	104	101		103	101	99		100	99	97		98	96	95
3	108	103	100	97	106	102	99	96		100	97	95		97	95	93		95	93	92
4	105	99	96	93	103	98	95	92		96	93	91		95	92	90		93	91	89
5	102	96	92	89	100	95	91	89		93	90	88		92	89	87		91	88	86
6	99	93	89	86	98	92	88	85		91	87	85		89	87	84		88	86	84
7	96	90	86	83	95	89	85	83		88	85	82		87	84	82		86	83	81
8	94	87	83	80	93	87	83	80		86	82	80		85	82	80		84	81	79
9	91	85	81	78	90	84	80	78		83	80	78		83	80	77		82	79	77
10	89	82	78	76	88	82	78	76		81	78	76		81	78	75		80	77	75

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	704236	704236	704236
5°	587995	587995	590776
10°	368366	367539	371258
15°	210214	211407	211758
20°	119010	118649	118144
25°	44680	57763	45653
30°	9162	19352	9240
35°	3643	6292	3560
40°	1859	2744	1770
45°	1247	1439	1055
50°	738	738	527
55°	355	473	236
60°	271	271	136
65°	160	160	160
70°	198	198	198
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	502.3	36.4
10°-20°	597.4	43.3
20°-30°	238.2	17.3
30°-40°	30.0	2.2
40°-50°	7.4	0.5
50°-60°	2.2	0.2
60°-70°	0.7	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°	1337.9	97.1
0°-40°	1368.0	99.2
0°-60°	1377.5	99.9
0°-90°	1378.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1378.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7270	7270	7270	7270	7270	
5°	6046	6102	6046	6052	6075	501
15°	2096	2109	2108	2108	2111	596
25°	418	513	540	492	427	215
35°	31	37	53	36	30	22
45°	9	9	10	8	8	7
55°	2	2	3	2	1	2
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°	7269.5	7269.5	7269.5	7269.5	7269.5
2.5°	6912.5	6949.6	6878.1	6885.2	6894.3
5°	6046.5	6101.8	6046.5	6052.1	6075.1
7.5°	4865.5	4913.8	4882.3	4896.2	4871.1
10°	3744.7	3762.2	3736.3	3748.8	3774.1
12.5°	2815.7	2835.3	2816.4	2817.0	2828.2
15°	2096.0	2108.6	2107.9	2107.9	2111.4
17.5°	1565.4	1582.1	1563.9	1565.4	1569.5
20°	1154.4	1165.6	1150.9	1148.8	1146.0
22.5°	787.5	811.4	820.5	808.5	770.8
25°	418.0	513.1	540.4	492.1	427.1
27.5°	168.0	255.5	315.7	249.9	182.8
30°	81.9	111.3	173.0	114.1	82.6
32.5°	48.3	60.2	94.5	59.5	47.6
35°	30.8	37.1	53.2	35.7	30.1
37.5°	20.3	24.5	32.9	23.8	19.6
40°	14.7	16.8	21.7	16.1	14.0
42.5°	11.2	11.9	14.7	11.9	10.5
45°	9.1	9.1	10.5	8.4	7.7
47.5°	7.0	7.0	7.0	6.3	4.9
50°	4.9	4.9	4.9	4.2	3.5
52.5°	3.5	3.5	3.5	2.8	2.1
55°	2.1	2.1	2.8	2.1	1.4
57.5°	2.1	1.4	2.1	1.4	1.4
60°	1.4	1.4	1.4	0.7	0.7
62.5°	0.7	0.7	0.7	0.7	0.7
65°	0.7	0.7	0.7	0.7	0.7
67.5°	0.7	0.7	0.7	0.7	0.7
70°	0.7	0.7	0.7	0.7	0.7
72.5°	0.7	0.7	0.7	0.7	0.0
75°	0.0	0.7	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

Classified

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— 0°-180° - - 45°-225° - - - 90°-270°

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