

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: P1219486

Luminaire Tested: **LDSQA4A15935D010TE 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: P1219486
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: LDSQA4A15935D010TE 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 / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

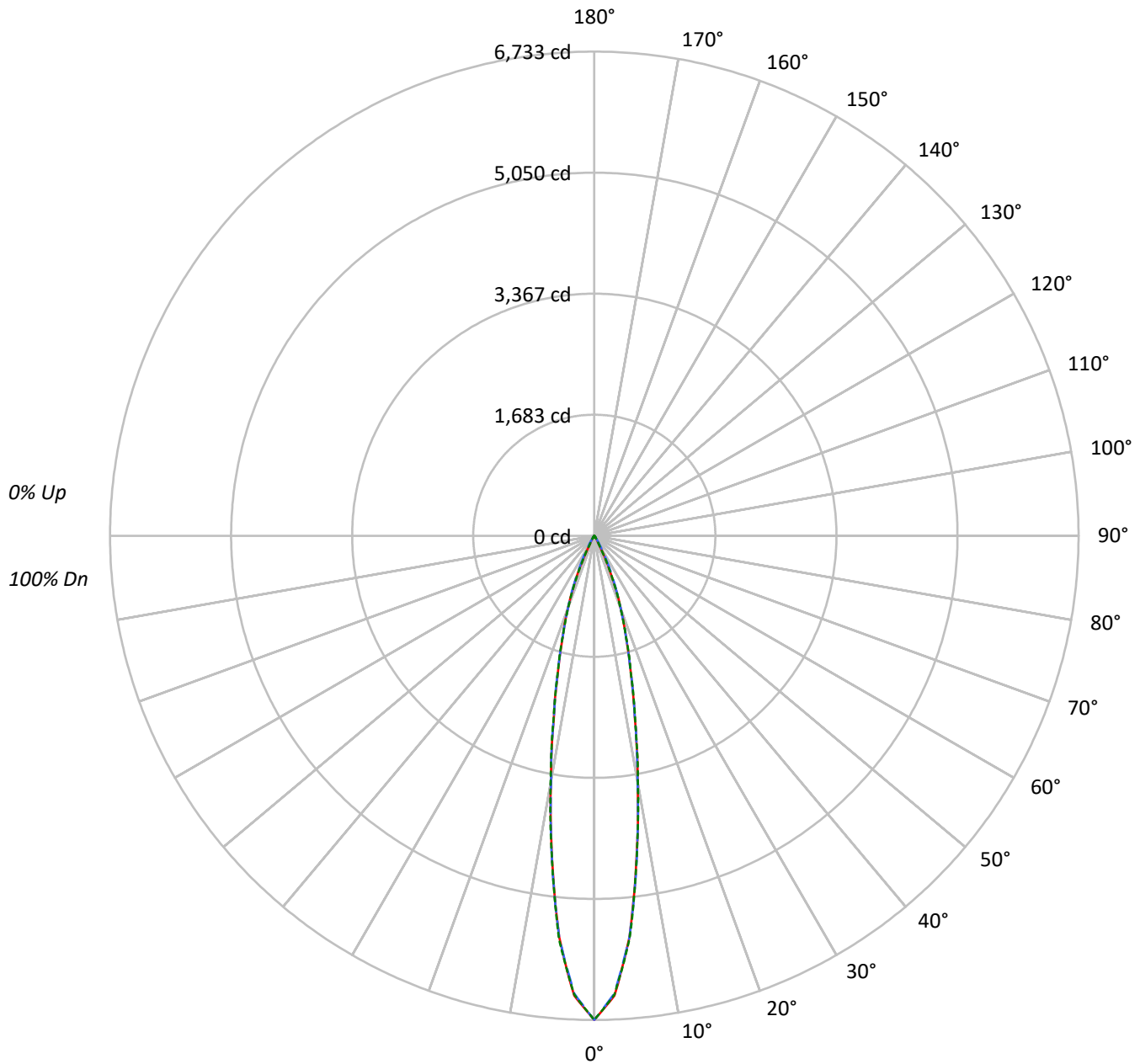
Lumens per Lamp: N/A
Luminaire Lumens: 1276.9 lumens
Efficiency: N/A
Efficacy: 62.6 lumens/watt
Spacing Criteria (0/90/45): 0.35 / 0.35 / 0.39
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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					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		
1	115	113	111	109	113	111	109	108	107	106	104	103	102	101	100	99	98	97		
2	111	108	105	102	109	106	104	101	103	101	99	100	99	97	98	96	95	94		
3	108	103	100	97	106	102	99	96	100	97	95	97	95	93	95	93	92	91		
4	105	99	96	93	103	98	95	92	96	93	91	95	92	90	93	91	89	88		
5	102	96	92	89	100	95	91	88	93	90	88	92	89	87	91	88	86	85		
6	99	93	89	86	98	92	88	85	91	87	85	89	87	84	88	86	84	83		
7	96	90	86	83	95	89	85	83	88	85	82	87	84	82	86	83	81	80		
8	94	87	83	80	93	87	83	80	86	82	80	85	82	80	84	81	79	78		
9	91	85	81	78	90	84	80	78	83	80	78	83	80	77	82	79	77	76		
10	89	82	78	76	88	82	78	76	81	78	75	81	78	75	80	77	75	74		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	652233	652233	652233
5°	544575	544575	547161
10°	341166	340389	343842
15°	194688	195802	196123
20°	110227	109886	109423
25°	41377	53499	42275
30°	8479	17920	8557
35°	3370	5830	3300
40°	1733	2542	1644
45°	1151	1329	973
50°	693	693	497
55°	338	439	220
60°	252	252	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°	465.2	36.4
10°-20°	553.3	43.3
20°-30°	220.6	17.3
30°-40°	27.8	2.2
40°-50°	6.8	0.5
50°-60°	2.0	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°	1239.1	97.0
0°-40°	1267.0	99.2
0°-60°	1275.9	99.9
0°-90°	1276.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1276.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6733	6733	6733	6733	6733	
5°	5600	5651	5600	5605	5627	464
15°	1941	1953	1952	1952	1956	552
25°	387	475	500	456	396	199
35°	28	34	49	33	28	21
45°	8	8	10	8	7	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°	6732.7	6732.7	6732.7	6732.7	6732.7
2.5°	6402.0	6436.4	6370.3	6376.8	6385.2
5°	5600.0	5651.2	5600.0	5605.2	5626.6
7.5°	4506.2	4550.9	4521.7	4534.7	4511.4
10°	3468.2	3484.4	3460.3	3472.0	3495.4
12.5°	2607.8	2625.9	2608.5	2609.0	2619.4
15°	1941.2	1952.9	1952.3	1952.3	1955.5
17.5°	1449.8	1465.3	1448.5	1449.8	1453.6
20°	1069.2	1079.5	1065.9	1064.0	1061.4
22.5°	729.4	751.5	759.9	748.8	713.9
25°	387.1	475.3	500.5	455.8	395.5
27.5°	155.6	236.6	292.4	231.5	169.2
30°	75.8	103.1	160.2	105.7	76.5
32.5°	44.7	55.7	87.5	55.1	44.1
35°	28.5	34.4	49.3	33.1	27.9
37.5°	18.8	22.7	30.5	22.1	18.1
40°	13.7	15.5	20.1	14.9	13.0
42.5°	10.4	11.0	13.7	11.0	9.7
45°	8.4	8.4	9.7	7.8	7.1
47.5°	6.4	6.4	6.4	5.8	4.6
50°	4.6	4.6	4.6	3.9	3.3
52.5°	3.3	3.3	3.3	2.6	2.0
55°	2.0	2.0	2.6	2.0	1.3
57.5°	2.0	1.3	2.0	1.3	1.3
60°	1.3	1.3	1.3	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

Scaled Data Report

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— 0°-180° - - 45°-225° - - - 90°-270°

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