

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: P1212331

Luminaire Tested: **LDSQA4A30940D010TE LAR15SP 4LSQA1H**

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: P1212331
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26794)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A30940D010TE LAR15SP 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

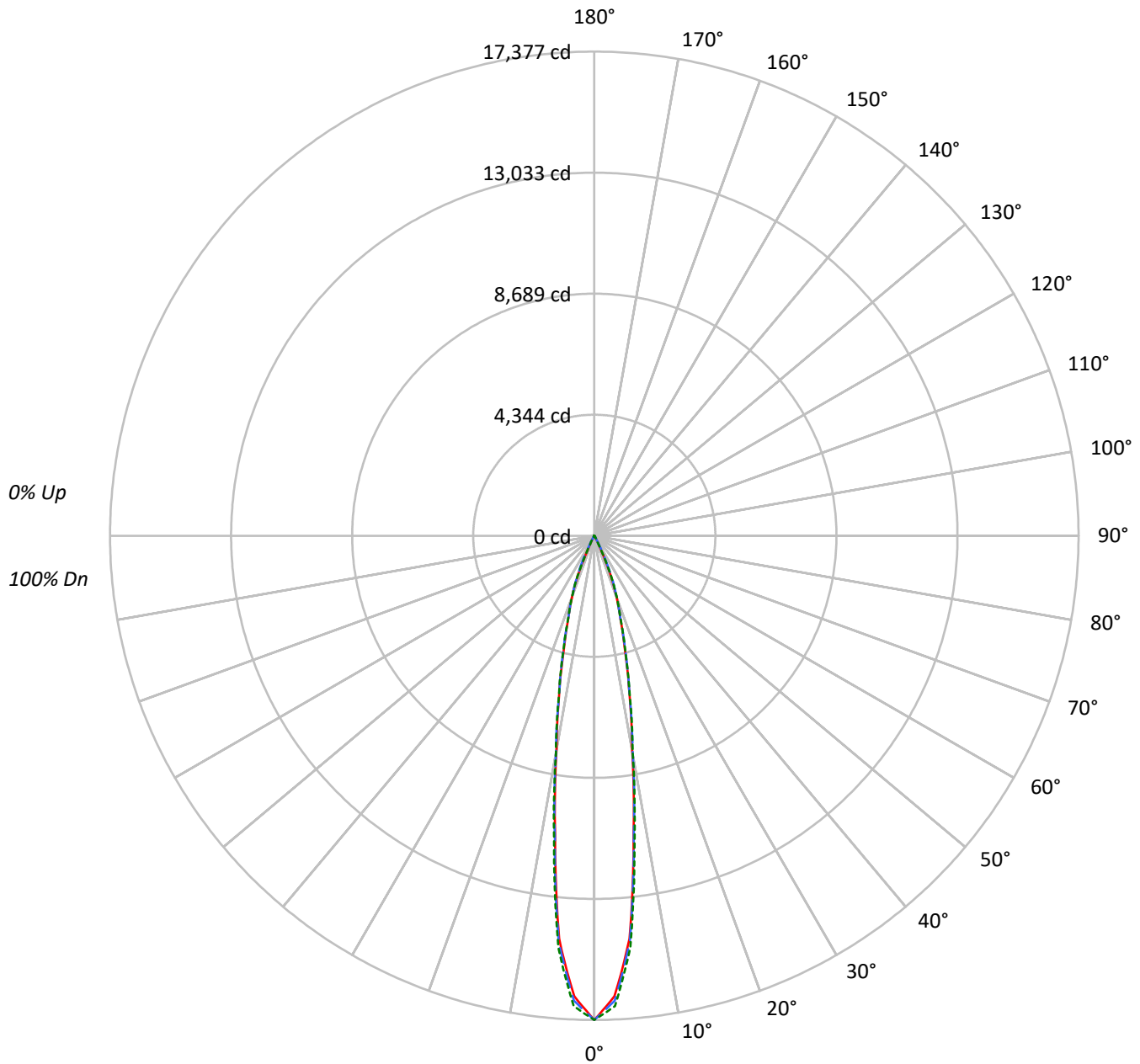
Lumens per Lamp: N/A
Luminaire Lumens: 2852.8 lumens
Efficiency: N/A
Efficacy: 71.7 lumens/watt
Spacing Criteria (0/90/45): 0.32 / 0.32 / 0.36
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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					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	110	113	111	110	108	107	106	105	104	103	102	100	99	99	97		
2	112	108	105	103	110	107	104	102	104	102	100	101	99	98	98	97	96	94		
3	108	104	101	98	107	103	100	97	100	98	96	98	96	94	96	94	93	92		
4	105	100	97	94	104	99	96	93	97	95	92	96	93	91	94	92	90	89		
5	103	97	93	90	101	96	93	90	95	92	89	93	91	89	92	90	88	87		
6	100	94	90	87	99	93	90	87	92	89	87	91	88	86	90	87	86	85		
7	97	91	88	85	96	91	87	85	90	87	84	89	86	84	88	85	83	82		
8	95	89	85	82	94	88	85	82	88	84	82	87	84	82	86	83	81	80		
9	93	87	83	80	92	86	83	80	85	82	80	85	82	80	84	81	79	79		
10	91	84	81	78	90	84	81	78	83	80	78	83	80	78	82	80	78	77		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1683366	1683366	1683366
5°	1410944	1422876	1443560
10°	767610	779021	781962
15°	424469	431319	432944
20°	240371	241072	242484
25°	65588	102754	64412
30°	10526	16019	10213
35°	3536	5960	3382
40°	1555	2415	1555
45°	932	1110	740
50°	618	618	407
55°	456	456	236
60°	271	271	271
65°	321	321	321
70°	397	397	397
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1158.2	40.6
10°-20°	1224.8	42.9
20°-30°	430.9	15.1
30°-40°	29.0	1.0
40°-50°	6.0	0.2
50°-60°	2.0	0.1
60°-70°	1.3	0.0
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°	2814.0	98.6
0°-40°	2843.0	99.7
0°-60°	2851.0	99.9
0°-90°	2852.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2852.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	17377	17377	17377	17377	17377	
5°	14509	14727	14632	14659	14844	1145
15°	4232	4303	4301	4291	4317	1213
25°	614	931	961	916	603	380
35°	30	37	50	37	29	23
45°	7	7	8	7	5	6
55°	3	3	3	1	1	2
65°	1	1	1	1	1	1
75°	0	1	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°	17376.6	17376.6	17376.6	17376.6	17376.6
2.5°	16542.1	16758.9	16704.3	16668.9	16896.6
5°	14509.1	14727.3	14631.8	14659.0	14844.5
7.5°	10786.8	10970.8	10872.6	10913.5	11055.4
10°	7803.3	7986.0	7919.3	7941.1	7949.2
12.5°	5818.0	5898.5	5845.4	5860.4	5887.6
15°	4232.3	4303.3	4300.6	4290.9	4316.8
17.5°	3106.0	3140.2	3106.0	3104.7	3122.4
20°	2331.6	2379.3	2338.4	2343.8	2352.1
22.5°	1566.6	1662.1	1645.7	1625.3	1603.5
25°	613.6	931.2	961.3	916.3	602.6
27.5°	175.9	290.4	413.1	285.0	170.4
30°	94.1	111.8	143.2	109.0	91.3
32.5°	50.4	64.1	81.8	62.7	49.0
35°	29.9	36.8	50.4	36.8	28.6
37.5°	19.1	23.2	31.4	23.2	19.1
40°	12.3	15.0	19.1	15.0	12.3
42.5°	9.5	11.0	12.3	9.5	8.1
45°	6.8	6.8	8.1	6.8	5.4
47.5°	5.4	5.4	5.4	4.1	4.1
50°	4.1	4.1	4.1	2.7	2.7
52.5°	2.7	2.7	2.7	2.7	2.7
55°	2.7	2.7	2.7	1.4	1.4
57.5°	2.7	1.4	1.4	1.4	1.4
60°	1.4	1.4	1.4	1.4	1.4
62.5°	1.4	1.4	1.4	1.4	1.4
65°	1.4	1.4	1.4	1.4	1.4
67.5°	1.4	1.4	1.4	1.4	0.0
70°	1.4	1.4	1.4	1.4	1.4
72.5°	1.4	1.4	1.4	0.0	0.0
75°	0.0	1.4	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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