

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: P1212193

Luminaire Tested: **LDSQA4A20930D010TE LAR15SP 4LSQAL1H**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P1212193
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26796)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A20930D010TE LAR15SP 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

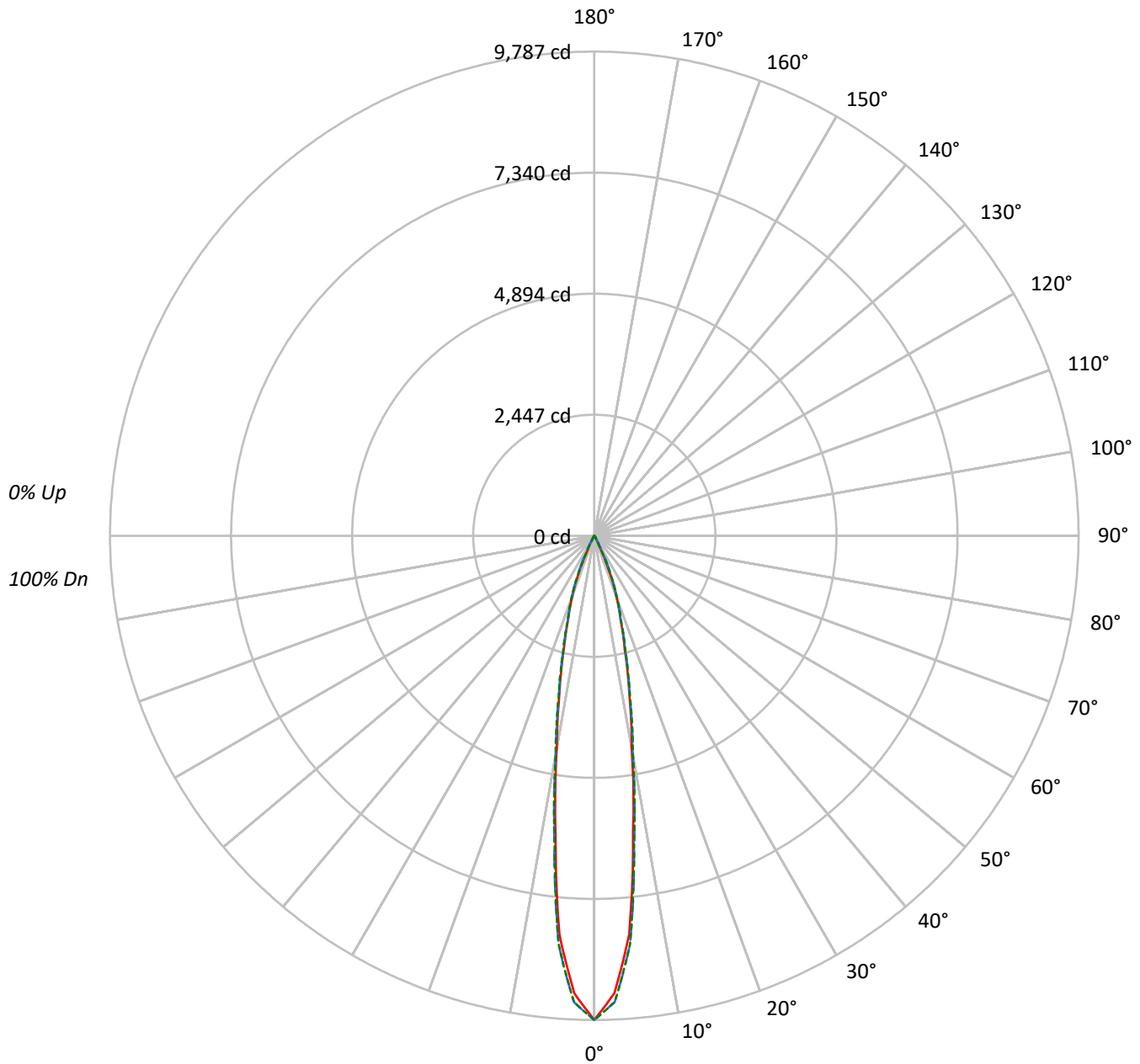
Lumens per Lamp: N/A
Luminaire Lumens: 1633.3 lumens
Efficiency: N/A
Efficacy: 56.7 lumens/watt
Spacing Criteria (0/90/45): 0.31 / 0.32 / 0.36
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 28.8
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



Cooper Lighting Solutions Photometric Lab

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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	109	108	107	106	105	103	102	102	100	99	99	97		
2	112	108	105	103	110	107	104	102	103	101	100	101	99	98	98	97	96	94		
3	108	104	100	98	107	103	99	97	100	98	95	98	96	94	96	94	93	91		
4	105	100	96	94	104	99	96	93	97	94	92	95	93	91	94	92	90	89		
5	102	97	93	90	101	96	92	90	94	91	89	93	90	88	92	89	87	86		
6	100	94	90	87	98	93	89	87	92	89	86	91	88	86	89	87	85	84		
7	97	91	87	84	96	90	87	84	89	86	84	88	85	83	87	85	83	82		
8	95	88	85	82	94	88	84	82	87	84	81	86	83	81	85	83	81	80		
9	92	86	82	80	92	86	82	80	85	82	79	84	81	79	84	81	79	78		
10	90	84	80	78	89	84	80	78	83	80	77	82	79	77	82	79	77	76		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	948139	948139	948139
5°	786463	806817	805679
10°	428548	441189	443432
15°	238276	245106	246369
20°	134330	138144	139886
25°	40437	59581	40255
30°	7629	10907	7629
35°	3288	5073	3382
40°	1593	2656	1593
45°	1041	1384	808
50°	633	769	377
55°	422	422	287
60°	329	155	155
65°	183	183	183
70°	0	227	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	651.6	39.9
10°-20°	694.6	42.5
20°-30°	253.3	15.5
30°-40°	24.1	1.5
40°-50°	6.7	0.4
50°-60°	2.0	0.1
60°-70°	0.8	0.0
70°-80°	0.2	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°	1599.5	97.9
0°-40°	1623.7	99.4
0°-60°	1632.3	99.9
0°-90°	1633.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1633.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9787	9787	9787	9787	9787	
5°	8087	8292	8297	8210	8285	639
15°	2376	2432	2444	2439	2456	680
25°	378	547	557	552	377	218
35°	28	34	43	34	29	20
45°	8	8	10	8	6	6
55°	2	2	2	2	2	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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9787.2	9787.2	9787.2	9787.2	9787.2
2.5°	9253.4	9448.4	9434.2	9390.5	9434.2
5°	8087.4	8291.6	8296.7	8210.1	8285.0
7.5°	6011.7	6169.8	6197.4	6112.6	6169.0
10°	4356.5	4497.7	4485.0	4468.2	4507.8
12.5°	3254.2	3325.7	3318.2	3336.6	3339.2
15°	2375.8	2432.2	2443.9	2438.8	2456.5
17.5°	1749.5	1779.8	1773.8	1783.0	1789.8
20°	1303.0	1351.0	1340.0	1348.5	1356.9
22.5°	864.2	952.6	941.6	955.0	947.4
25°	378.3	547.3	557.4	552.3	376.6
27.5°	116.1	195.8	251.4	191.7	116.1
30°	68.2	81.5	97.5	79.8	68.2
32.5°	42.9	51.3	61.4	50.4	42.0
35°	27.8	33.6	42.9	33.6	28.6
37.5°	18.5	22.6	30.2	22.6	19.4
40°	12.6	15.2	21.0	16.0	12.6
42.5°	9.3	10.9	14.2	10.9	8.4
45°	7.6	7.6	10.1	7.6	5.9
47.5°	5.9	5.9	6.8	5.1	4.2
50°	4.2	4.2	5.1	3.4	2.5
52.5°	2.5	3.4	3.4	2.5	1.7
55°	2.5	2.5	2.5	1.7	1.7
57.5°	1.7	1.7	1.7	0.8	0.8
60°	1.7	1.7	0.8	0.8	0.8
62.5°	0.8	0.8	0.8	0.8	0.8
65°	0.8	0.8	0.8	0.8	0.8
67.5°	0.8	0.8	0.8	0.8	0.8
70°	0.0	0.8	0.8	0.0	0.0
72.5°	0.0	0.8	0.0	0.0	0.0
75°	0.0	0.8	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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