

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: P1212225

Luminaire Tested: **LDSQA4A20940D010TE LAR25NF 4LSQAL1H**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P1212225
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26797)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A20940D010TE LAR25NF 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 25° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

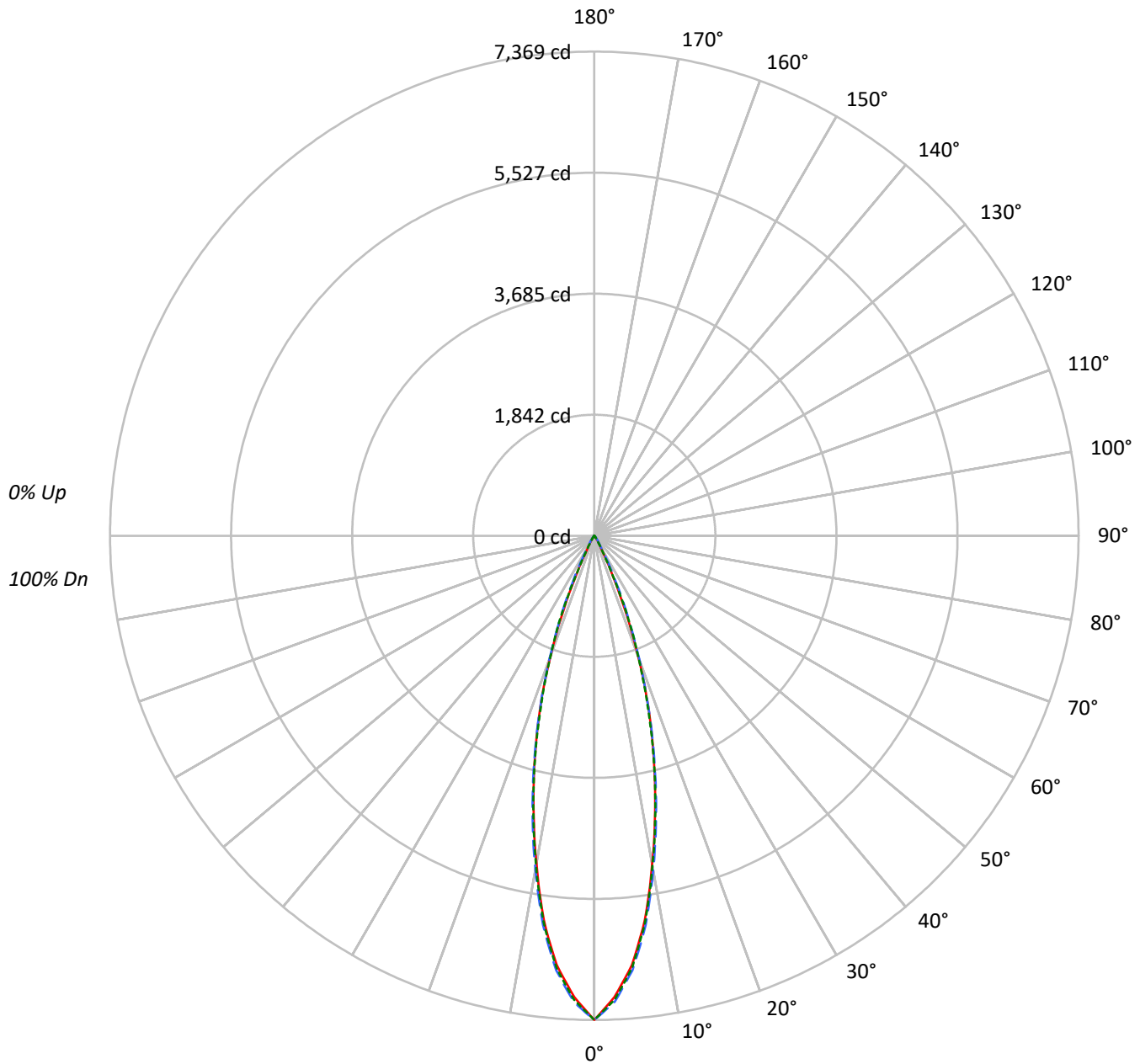
Lumens per Lamp: N/A
Luminaire Lumens: 1965.6 lumens
Efficiency: N/A
Efficacy: 68.3 lumens/watt
Spacing Criteria (0/90/45): 0.48 / 0.48 / 0.5
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96		
2	111	107	104	102	109	106	103	101	103	100	99	100	98	96	97	96	94	93		
3	107	103	99	96	106	101	98	95	99	96	94	97	94	92	95	93	91	90		
4	104	99	95	91	102	97	94	91	95	92	90	94	91	89	92	90	88	87		
5	101	95	91	87	99	94	90	87	92	89	86	91	88	86	89	87	85	84		
6	98	91	87	84	96	91	87	84	89	86	83	88	85	83	87	84	82	81		
7	95	88	84	81	94	88	84	81	87	83	80	85	82	80	85	82	80	79		
8	92	85	81	78	91	85	81	78	84	80	78	83	80	77	82	79	77	76		
9	89	83	78	76	89	82	78	76	81	78	75	81	77	75	80	77	75	74		
10	87	80	76	73	86	80	76	73	79	76	73	78	75	73	78	75	73	72		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	713894	713894	713894
5°	637580	645603	641577
10°	499080	508002	501785
15°	350473	353041	348538
20°	201144	205309	200959
25°	63674	83748	65737
30°	16914	21008	16298
35°	5748	10407	5854
40°	2555	4173	2555
45°	1384	1891	1123
50°	829	980	558
55°	456	456	304
60°	349	349	194
65°	229	229	229
70°	283	283	283
75°	0	374	374
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	584.5	29.7
10°-20°	953.0	48.5
20°-30°	369.1	18.8
30°-40°	45.2	2.3
40°-50°	9.5	0.5
50°-60°	2.5	0.1
60°-70°	1.1	0.1
70°-80°	0.6	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°	1906.7	97.0
0°-40°	1951.9	99.3
0°-60°	1964.0	99.9
0°-90°	1965.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1965.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7369	7369	7369	7369	7369	
5°	6556	6652	6639	6598	6598	579
15°	3494	3541	3520	3494	3475	948
25°	596	746	784	770	615	334
35°	49	59	88	58	50	37
45°	10	11	14	10	8	8
55°	3	3	3	2	2	3
65°	1	1	1	1	1	1
75°	0	1	1	1	1	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°	7369.2	7369.2	7369.2	7369.2	7369.2
2.5°	7024.6	7122.7	7099.8	7054.0	7065.8
5°	6556.4	6651.6	6638.9	6598.5	6597.5
7.5°	5895.5	5989.0	5978.0	5929.4	5924.9
10°	5073.5	5158.7	5164.2	5093.7	5101.0
12.5°	4270.6	4340.3	4343.1	4294.6	4284.5
15°	3494.5	3541.2	3520.1	3494.5	3475.2
17.5°	2729.2	2739.3	2734.7	2697.1	2683.4
20°	1951.1	1995.1	1991.5	1959.4	1949.3
22.5°	1215.2	1294.9	1331.6	1302.3	1317.9
25°	595.7	746.0	783.5	769.8	615.0
27.5°	241.9	316.2	394.1	311.6	233.7
30°	151.2	165.0	187.8	158.5	145.7
32.5°	79.8	99.9	127.4	97.1	79.8
35°	48.6	58.6	88.0	57.8	49.5
37.5°	31.2	36.6	51.3	36.6	32.0
40°	20.2	23.8	33.0	23.8	20.2
42.5°	13.8	15.6	21.1	15.6	12.8
45°	10.1	11.0	13.8	10.1	8.2
47.5°	7.3	8.2	9.1	6.5	5.5
50°	5.5	5.5	6.5	4.6	3.7
52.5°	3.7	4.6	4.6	2.7	2.7
55°	2.7	2.7	2.7	1.8	1.8
57.5°	2.7	1.8	1.8	1.8	1.8
60°	1.8	1.8	1.8	1.0	1.0
62.5°	1.0	1.0	1.0	1.0	1.0
65°	1.0	1.0	1.0	1.0	1.0
67.5°	1.0	1.0	1.0	1.0	1.0
70°	1.0	1.0	1.0	1.0	1.0
72.5°	1.0	1.0	1.0	1.0	0.0
75°	0.0	1.0	1.0	1.0	1.0
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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(END OF REPORT)