

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: P182571

Luminaire Tested: **LDSQA4A28930D010TE LAR25NF 4LSQAL1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182571
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: LDSQA4A28930D010TE LAR25NF 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 25° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2374.6 lumens
Efficiency: N/A
Efficacy: 53.4 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

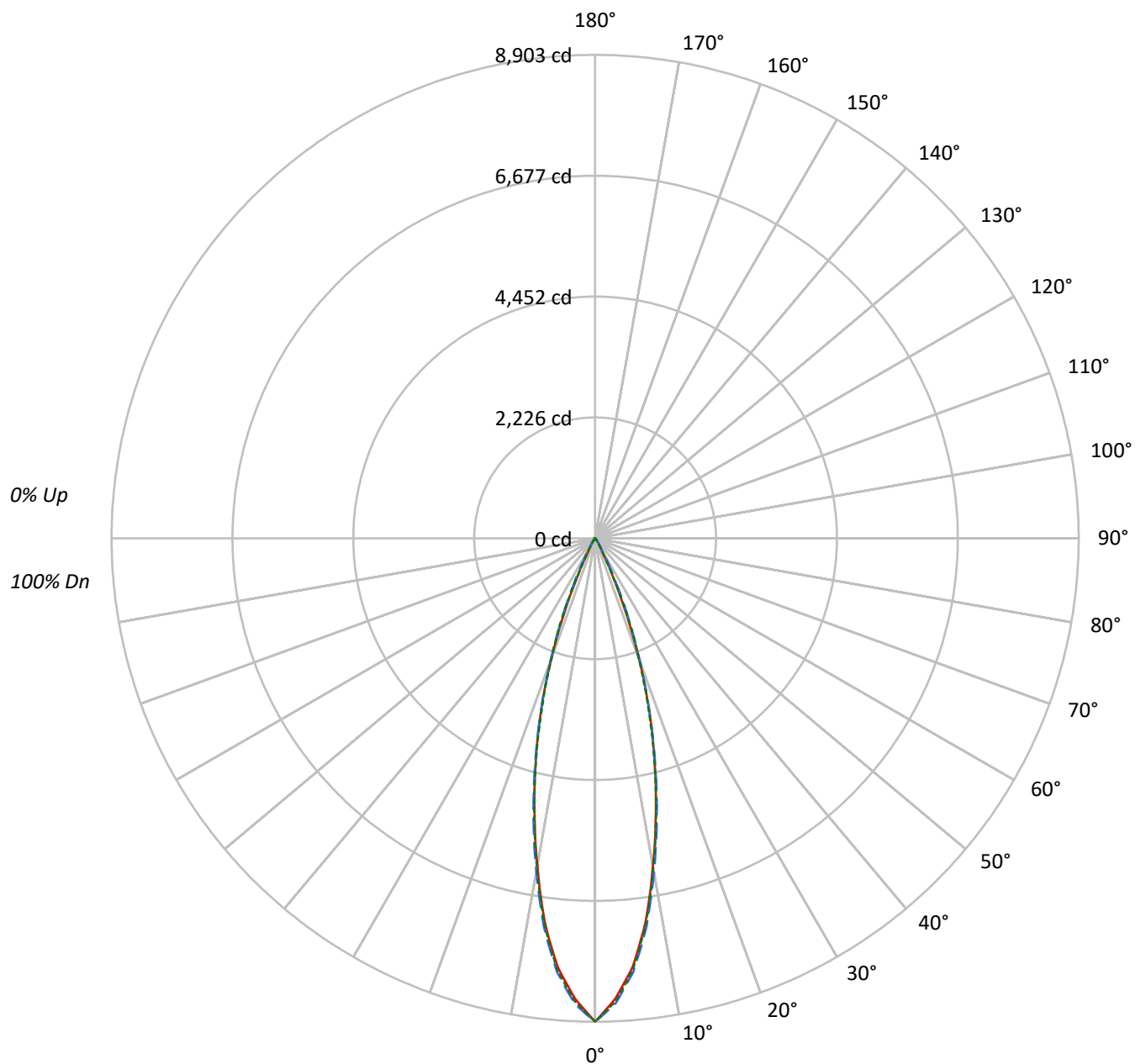
Input Watts (W): 44.49
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P182571

CATALOG NUMBER: LDSQA4A28930D010TE LAR25NF 4LSQAL1H

Luminous Intensity Polar Plot





TEST NUMBER: P182571

CATALOG NUMBER: LDSQA4A28930D010TE LAR25NF 4LSQAL1H

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			0
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			100
1	115	113	111	109	113	111	109	107		107	105	104			103	102	101			96
2	111	107	104	102	109	106	103	101		103	100	99			100	98	96			93
3	107	103	99	96	106	101	98	95		99	96	94			97	94	92			90
4	104	99	95	91	102	97	94	91		95	92	90			94	91	89			87
5	101	95	91	87	99	94	90	87		92	89	86			91	88	86			84
6	98	91	87	84	96	91	87	84		89	86	83			88	85	83			81
7	95	88	84	81	94	88	84	81		87	83	80			85	82	80			79
8	92	85	81	78	91	85	81	78		84	80	78			83	80	77			76
9	89	83	78	76	89	82	78	76		81	78	75			81	77	75			74
10	87	80	76	73	86	80	76	73		79	76	73			78	75	73			72

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	862501	862501	862501
5°	770291	779977	775134
10°	602968	613749	606234
15°	423416	426525	421089
20°	243020	248041	242794
25°	76929	101193	79409
30°	20437	25393	19688
35°	6942	12571	7072
40°	3086	5046	3086
45°	1671	2274	1370
50°	995	1176	663
55°	557	557	372
60°	426	426	213
65°	252	252	252
70°	312	312	312
75°	0	412	412
80°	0	0	0
85°	0	0	0



TEST NUMBER: P182571

CATALOG NUMBER: LDSQA4A28930D010TE LAR25NF 4LSQAL1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	706.2	29.7
10°-20°	1151.4	48.5
20°-30°	446.0	18.8
30°-40°	54.7	2.3
40°-50°	11.5	0.5
50°-60°	3.1	0.1
60°-70°	1.2	0.0
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°	2303.6	97.0
0°-40°	2358.3	99.3
0°-60°	2372.8	99.9
0°-90°	2374.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2374.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8903	8903	8903	8903	8903	
5°	7921	8036	8021	7972	7971	700
15°	4222	4278	4253	4222	4199	1145
25°	720	901	947	930	743	403
35°	59	71	106	70	60	45
45°	12	13	17	12	10	10
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	



TEST NUMBER: P182571

CATALOG NUMBER: LDSQA4A28930D010TE LAR25NF 4LSQAL1H

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8903.2	8903.2	8903.2	8903.2	8903.2
2.5°	8486.9	8605.3	8577.6	8522.3	8536.7
5°	7921.1	8036.2	8020.7	7972.0	7970.9
7.5°	7122.8	7235.7	7222.4	7163.7	7158.2
10°	6129.6	6232.5	6239.2	6153.9	6162.8
12.5°	5159.7	5243.8	5247.1	5188.4	5176.3
15°	4221.8	4278.3	4252.8	4221.8	4198.6
17.5°	3297.3	3309.5	3303.9	3258.6	3241.9
20°	2357.3	2410.4	2406.0	2367.2	2355.1
22.5°	1468.2	1564.5	1608.8	1573.4	1592.2
25°	719.7	901.3	946.7	930.1	742.9
27.5°	292.3	382.0	476.1	376.5	282.3
30°	182.7	199.3	227.0	191.5	176.0
32.5°	96.3	120.7	153.9	117.4	96.3
35°	58.7	70.9	106.3	69.8	59.8
37.5°	37.6	44.3	62.0	44.3	38.8
40°	24.4	28.8	39.9	28.8	24.4
42.5°	16.6	18.8	25.5	18.8	15.5
45°	12.2	13.3	16.6	12.2	10.0
47.5°	8.9	10.0	11.1	7.8	6.6
50°	6.6	6.6	7.8	5.5	4.4
52.5°	4.4	5.5	5.5	3.3	3.3
55°	3.3	3.3	3.3	2.2	2.2
57.5°	3.3	2.2	2.2	2.2	2.2
60°	2.2	2.2	2.2	1.1	1.1
62.5°	1.1	1.1	1.1	1.1	1.1
65°	1.1	1.1	1.1	1.1	1.1
67.5°	1.1	1.1	1.1	1.1	1.1
70°	1.1	1.1	1.1	1.1	1.1
72.5°	1.1	1.1	1.1	1.1	0.0
75°	0.0	1.1	1.1	1.1	1.1
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



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - 90°-270°







(END OF REPORT)