

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: P182555

Luminaire Tested: **LDSQA4A09930D010TE LAR25NF 4LSQAL1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182555
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: LDSQA4A09930D010TE 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: 939.6 lumens
Efficiency: N/A
Efficacy: 67.9 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

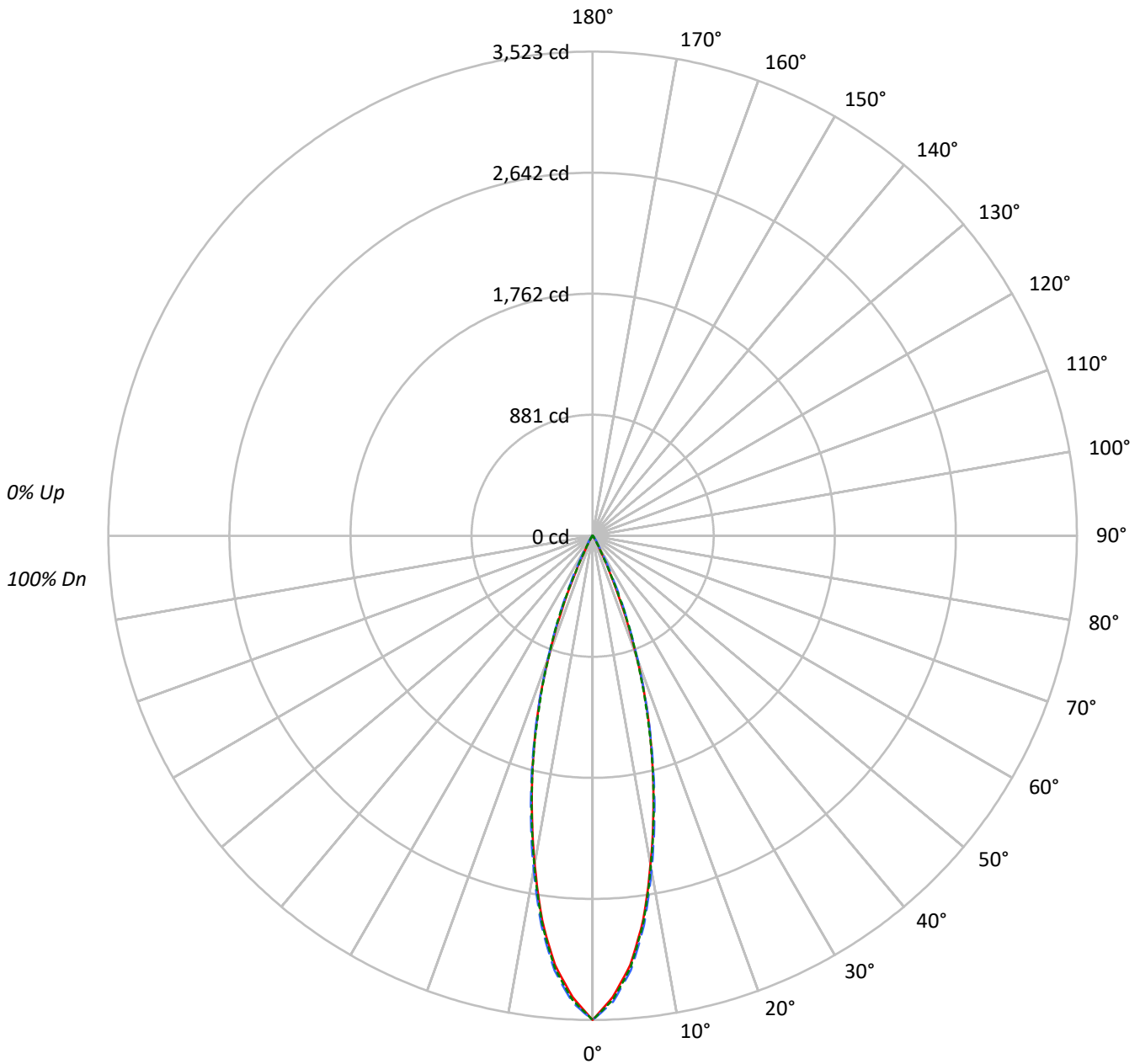
Input Watts (W): 13.84
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	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	102	102	102	100	100	100	100	100	100	100		
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	96	96	96	96	96	96		
2	111	107	104	102	109	106	103	101	103	100	99	100	98	96	97	96	94	93	93	93	93	93	93	93		
3	107	103	99	96	106	101	98	95	99	96	94	97	94	92	95	93	91	90	90	90	90	90	90	90		
4	104	99	95	91	102	97	94	91	95	92	90	94	91	89	92	90	88	87	87	87	87	87	87	87		
5	101	95	91	87	99	94	90	87	92	89	86	91	88	86	89	87	85	84	84	84	84	84	84	84		
6	98	91	87	84	97	91	87	84	89	86	83	88	85	83	87	84	82	81	81	81	81	81	81	81		
7	95	88	84	81	94	88	84	81	87	83	80	85	82	80	85	82	80	79	79	79	79	79	79	79		
8	92	85	81	78	91	85	81	78	84	80	78	83	80	77	82	79	77	76	76	76	76	76	76	76		
9	89	83	78	76	89	82	78	76	81	78	75	81	77	75	80	77	75	74	74	74	74	74	74	74		
10	87	80	76	73	86	80	76	73	79	76	73	78	75	73	78	75	73	72	72	72	72	72	72	72		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	341312	341312	341312
5°	304816	308657	306741
10°	238606	242875	239904
15°	167559	168783	166637
20°	96165	98155	96072
25°	30442	40041	31426
30°	8088	10045	7797
35°	2744	4979	2803
40°	1214	1998	1214
45°	658	904	534
50°	392	467	271
55°	220	220	152
60°	174	174	78
65°	92	92	92
70°	113	113	113
75°	0	150	150
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.5	29.7
10°-20°	455.6	48.5
20°-30°	176.5	18.8
30°-40°	21.6	2.3
40°-50°	4.5	0.5
50°-60°	1.2	0.1
60°-70°	0.4	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°	911.6	97.0
0°-40°	933.2	99.3
0°-60°	939.0	99.9
0°-90°	939.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	939.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3523	3523	3523	3523	3523	
5°	3134	3180	3174	3155	3154	277
15°	1671	1693	1683	1671	1662	453
25°	285	357	375	368	294	160
35°	23	28	42	28	24	18
45°	5	5	7	5	4	4
55°	1	1	1	1	1	1
65°	0	0	0	0	0	0
75°	0	0	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°	3523.2	3523.2	3523.2	3523.2	3523.2
2.5°	3358.4	3405.3	3394.4	3372.5	3378.1
5°	3134.5	3180.1	3174.0	3154.7	3154.3
7.5°	2818.6	2863.3	2858.1	2834.8	2832.7
10°	2425.6	2466.4	2469.0	2435.2	2438.8
12.5°	2041.8	2075.1	2076.4	2053.2	2048.4
15°	1670.7	1693.0	1682.9	1670.7	1661.5
17.5°	1304.8	1309.6	1307.4	1289.5	1282.9
20°	932.8	953.9	952.1	936.8	931.9
22.5°	581.0	619.1	636.6	622.6	630.1
25°	284.8	356.7	374.6	368.0	294.0
27.5°	115.7	151.2	188.4	149.0	111.7
30°	72.3	78.9	89.8	75.8	69.7
32.5°	38.1	47.8	60.9	46.4	38.1
35°	23.2	28.0	42.1	27.6	23.7
37.5°	14.9	17.5	24.5	17.5	15.3
40°	9.6	11.4	15.8	11.4	9.6
42.5°	6.6	7.4	10.1	7.4	6.1
45°	4.8	5.3	6.6	4.8	3.9
47.5°	3.5	3.9	4.4	3.1	2.6
50°	2.6	2.6	3.1	2.2	1.8
52.5°	1.8	2.2	2.2	1.3	1.3
55°	1.3	1.3	1.3	0.9	0.9
57.5°	1.3	0.9	0.9	0.9	0.9
60°	0.9	0.9	0.9	0.4	0.4
62.5°	0.4	0.4	0.4	0.4	0.4
65°	0.4	0.4	0.4	0.4	0.4
67.5°	0.4	0.4	0.4	0.4	0.4
70°	0.4	0.4	0.4	0.4	0.4
72.5°	0.4	0.4	0.4	0.4	0.0
75°	0.0	0.4	0.4	0.4	0.4
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



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— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)