

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: P283531

Luminaire Tested: **LDA2B059727D010 EU2B05FL409727 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P283531
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-15)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B059727D010 EU2B05FL409727 2LBALPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MMS

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 450.0 lumens
Efficiency: N/A
Efficacy: 64.3 lumens/watt
Spacing Criteria (0/90/45): 0.55 / 0.55 / 0.55
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

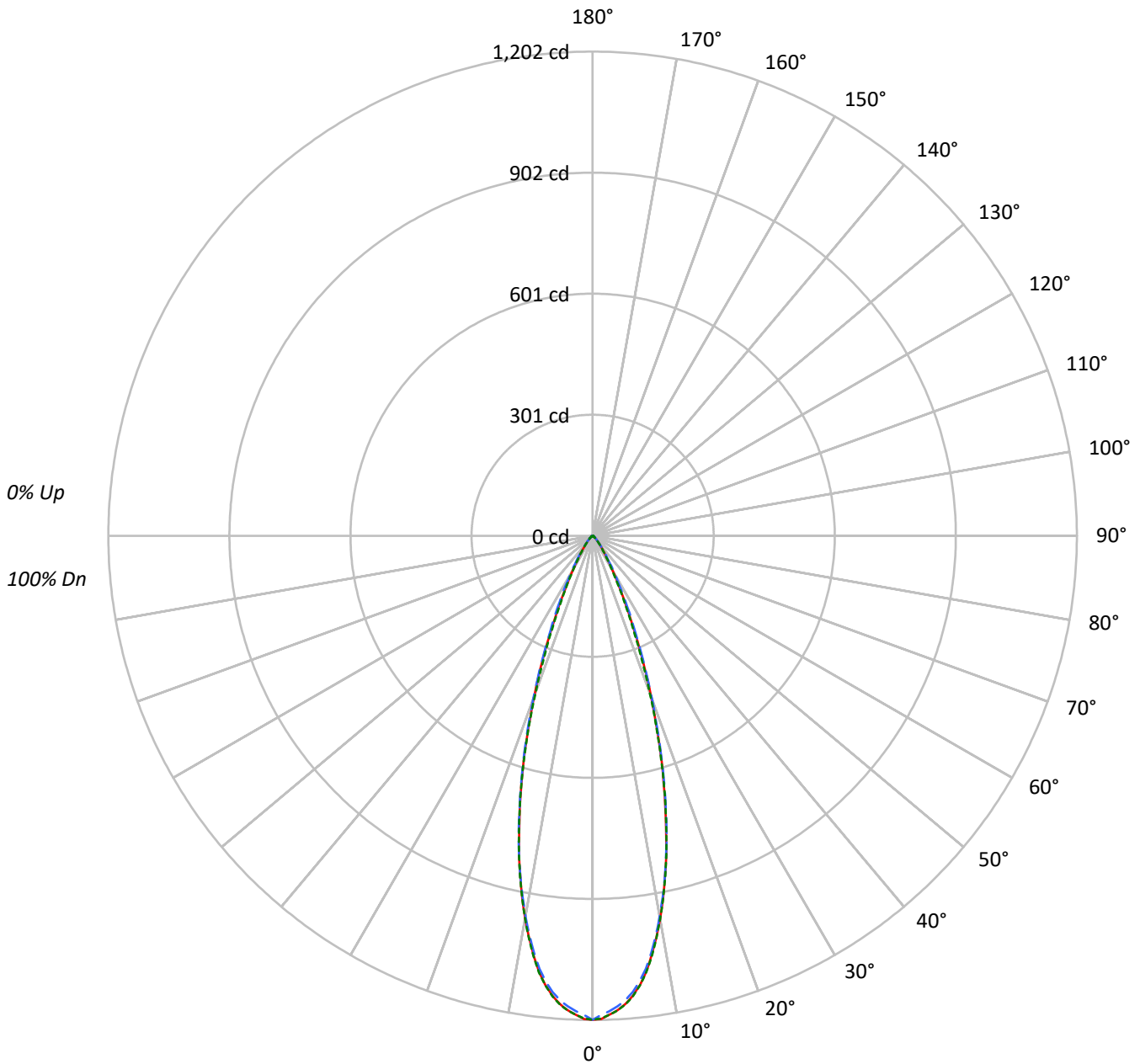
Input Watts (W): 7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95																			
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90																			
3	105	100	96	92	104	99	95	92	96	93	90	94	91	89	92	89	88	86																			
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	86	83	82																			
5	98	91	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	79																			
6	94	87	82	78	93	86	81	78	84	80	77	83	80	77	82	79	76	75																			
7	91	83	78	75	89	82	78	74	81	77	74	80	76	74	79	76	73	72																			
8	87	80	75	71	86	79	74	71	78	74	71	77	73	71	76	73	70	69																			
9	84	77	72	69	83	76	72	68	75	71	68	74	71	68	74	70	68	67																			
10	82	74	69	66	81	73	69	66	73	69	66	72	68	65	71	68	65	64																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	592922	592922	592922
5°	567453	563194	568345
10°	483439	480383	483940
15°	356310	358660	357485
20°	222453	226548	217518
25°	114915	123299	109145
30°	55089	63121	52525
35°	28428	31499	26621
40°	15908	16745	15135
45°	9698	9698	9349
50°	5066	6217	5066
55°	2580	4129	2838
60°	2960	2960	2960
65°	3269	3269	3269
70°	4039	3606	4039
75°	3812	3812	3812
80°	3694	3694	3694
85°	2830	2830	2830



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.4	23.0
10°-20°	189.9	42.2
20°-30°	102.9	22.9
30°-40°	33.0	7.3
40°-50°	11.3	2.5
50°-60°	3.9	0.9
60°-70°	2.9	0.6
70°-80°	2.1	0.5
80°-90°	0.6	0.1
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°	396.2	88.0
0°-40°	429.3	95.4
0°-60°	444.5	98.8
0°-90°	450.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	450.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1202	1202	1202	1202	1202	
5°	1146	1139	1137	1149	1148	104
15°	698	703	702	705	700	189
25°	211	221	226	211	200	101
35°	47	49	52	48	44	32
45°	14	14	14	14	13	11
55°	3	4	5	4	3	3
65°	3	3	3	3	3	3
75°	2	2	2	2	2	2
85°	0	0	0	0	0	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1201.8	1201.8	1201.8	1201.8	1201.8
1°	1199.8	1191.2	1190.0	1201.1	1198.6
2°	1190.2	1182.1	1180.9	1192.0	1189.7
3°	1179.6	1172.3	1169.8	1181.4	1179.9
4°	1165.5	1158.7	1156.4	1168.0	1166.7
5°	1145.8	1138.7	1137.2	1148.6	1147.6
6°	1121.5	1115.7	1113.0	1124.3	1122.3
7°	1091.2	1085.9	1082.9	1091.2	1092.3
8°	1051.9	1049.3	1045.8	1054.1	1054.1
9°	1009.9	1007.7	1003.9	1011.5	1011.5
10°	965.0	963.5	958.9	966.0	966.0
11°	915.8	915.0	911.7	917.5	917.5
12°	864.0	865.8	862.7	867.8	866.0
13°	812.3	811.5	811.7	815.5	812.8
14°	753.7	758.2	759.0	761.2	757.0
15°	697.6	703.4	702.2	705.4	699.9
16°	640.3	646.9	646.6	647.4	642.1
17°	586.8	590.6	590.8	590.1	583.5
18°	529.7	535.0	535.0	533.8	525.9
19°	473.9	478.0	480.7	478.0	468.9
20°	423.7	426.5	431.5	424.4	414.3
21°	375.4	378.0	382.3	373.9	362.8
22°	329.2	332.5	336.6	327.0	315.4
23°	286.1	293.6	295.2	282.0	272.2
24°	246.4	255.0	257.5	244.2	233.8
25°	211.1	220.7	226.5	210.8	200.5
26°	180.5	189.9	196.9	181.3	171.4
27°	153.8	163.6	170.9	156.3	146.9
28°	130.8	140.4	148.0	134.3	125.5
29°	113.6	119.2	126.7	115.4	107.3
30°	96.7	102.8	110.8	99.2	92.2
32.5°	66.4	69.7	76.0	68.9	63.4
35°	47.2	49.2	52.3	47.5	44.2
37.5°	33.6	34.6	36.4	33.6	31.8
40°	24.7	25.2	26.0	24.5	23.5
42.5°	18.4	18.7	18.7	18.2	17.7
45°	13.9	14.1	13.9	13.9	13.4
47.5°	10.1	10.9	10.6	10.6	9.8
50°	6.6	8.1	8.1	7.8	6.6
52.5°	4.0	5.6	6.3	5.6	4.3
55°	3.0	3.8	4.8	3.8	3.3
57.5°	3.0	3.0	3.5	3.0	3.0
60°	3.0	3.0	3.0	3.0	3.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	2.8	2.8	2.8	2.8	2.8
70°	2.8	2.8	2.5	2.8	2.8
72.5°	2.5	2.5	2.3	2.5	2.3
75°	2.0	2.0	2.0	2.0	2.0
77.5°	1.5	1.5	1.5	1.5	1.5
80°	1.3	1.3	1.3	1.3	1.3
82.5°	0.8	0.8	0.8	1.0	0.8
85°	0.5	0.5	0.5	0.5	0.5
87.5°	0.3	0.3	0.3	0.3	0.3
90°	0.0	0.0	0.0	0.0	0.0



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







62.5°	3.0	3.0	3.0	3.0	3.0
65°	2.8	3.0	2.8	3.0	2.8



(END OF REPORT)