

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: P282455

Luminaire Tested: **LDA2B058030D010 EU2B05SP158030 2LBALPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282455  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-7)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B058030D010 EU2B05SP158030 2LBALPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MW  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 796.4 lumens  
Efficiency: N/A  
Efficacy: 113.8 lumens/watt  
Spacing Criteria (0/90/45): 0.32 / 0.3 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

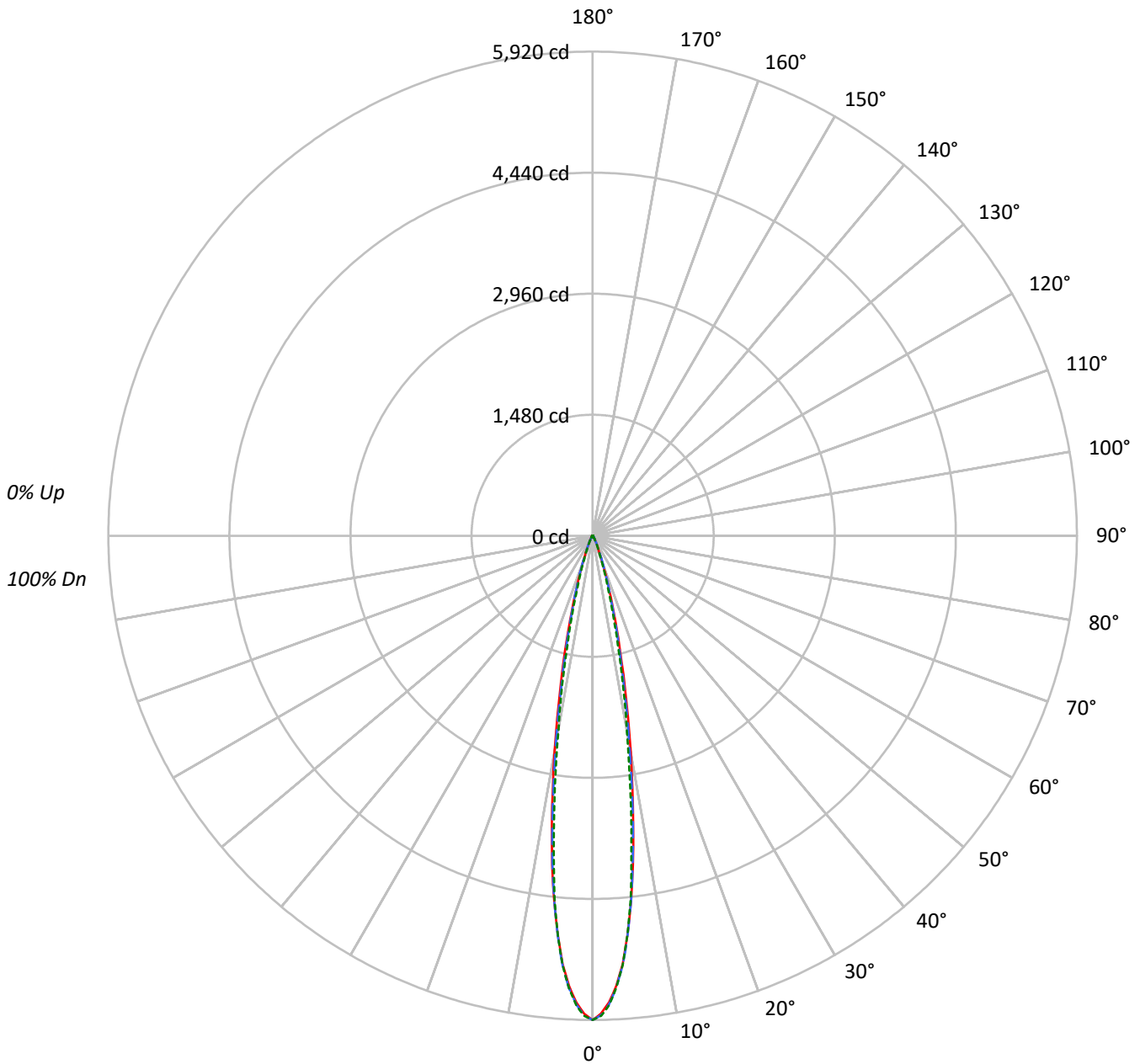
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
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				100															
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	96	98	96	96															
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	94	96	94	94															
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	94	92	90	89															
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	94	92	90	89	92	89	88	87															
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	90	88	86	85															
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	88	86	84	83															
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	88	86	84	83															
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	87	84	82	81															
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80	85	82	81	80															
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	84	81	79	78	84	81	79	78															

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2920800	2920800	2920800
5°	2423092	2430966	2421755
10°	1341104	1292660	1204188
15°	542893	519244	461017
20°	181869	192842	156142
25°	69189	69461	65759
30°	31048	30535	29510
35°	15057	13371	10660
40°	9918	12559	8759
45°	2512	4117	3768
50°	691	1075	1382
55°	6279	5505	8602
60°	8979	7203	11643
65°	4203	11090	10623
70°	3895	3318	3895
75°	1716	4384	12200
80°	20740	28412	25855
85°	0	13020	15284



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	387.7	48.7
10°-20°	293.7	36.9
20°-30°	66.8	8.4
30°-40°	19.7	2.5
40°-50°	6.6	0.8
50°-60°	5.8	0.7
60°-70°	7.0	0.9
70°-80°	4.5	0.6
80°-90°	4.7	0.6
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°	748.2	94.0
0°-40°	767.9	96.4
0°-60°	780.3	98.0
0°-90°	796.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	796.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5920	5920	5920	5920	5920	
5°	4893	4931	4909	4845	4890	392
15°	1063	1077	1017	921	903	309
25°	127	137	128	126	121	67
35°	25	28	22	26	18	20
45°	4	10	6	10	5	5
55°	7	10	6	10	10	3
65°	4	8	10	9	9	4
75°	1	3	2	4	6	2
85°	0	0	2	2	3	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5920.2	5920.2	5920.2	5920.2	5920.2
1°	5843.9	5867.5	5865.2	5855.7	5872.5
2°	5709.5	5738.1	5735.4	5714.5	5744.5
3°	5512.4	5537.9	5533.8	5503.8	5536.5
4°	5249.1	5278.2	5266.8	5221.9	5263.6
5°	4892.7	4931.3	4908.6	4844.6	4890.0
6°	4497.7	4530.4	4494.5	4409.6	4454.1
7°	4055.4	4075.9	4028.7	3919.7	3889.7
8°	3572.8	3599.6	3533.8	3406.6	3373.9
9°	3111.5	3120.6	3040.7	2905.4	2864.1
10°	2677.0	2670.2	2580.3	2443.2	2403.7
11°	2265.2	2256.1	2161.2	2034.5	2047.2
12°	1890.6	1908.3	1798.0	1683.1	1685.4
13°	1582.8	1584.6	1489.7	1380.3	1373.9
14°	1295.8	1312.6	1231.3	1133.3	1115.1
15°	1062.9	1077.4	1016.6	921.2	902.6
16°	850.9	869.0	825.4	739.2	714.7
17°	685.1	708.3	679.7	607.5	579.3
18°	548.0	565.7	558.9	484.5	461.3
19°	432.7	457.2	459.0	396.8	369.1
20°	346.4	368.7	367.3	319.2	297.4
22.5°	198.9	210.7	211.1	188.4	175.7
25°	127.1	136.7	127.6	126.2	120.8
26°	110.3	118.0	108.1	108.1	103.1
27°	89.4	96.3	86.7	90.8	84.0
28°	75.4	82.6	74.5	73.6	72.6
29°	62.7	69.5	59.0	63.6	60.8
30°	54.5	59.5	53.6	60.4	51.8
32.5°	42.2	46.3	35.9	45.4	34.1
35°	25.0	27.7	22.2	25.9	17.7
37.5°	25.9	26.8	24.1	26.8	25.0
40°	15.4	15.9	19.5	19.5	13.6
42.5°	14.5	14.1	8.6	13.6	10.9
45°	3.6	10.4	5.9	10.4	5.4
47.5°	2.7	3.6	3.6	7.3	7.3
50°	0.9	3.6	1.4	2.7	1.8
52.5°	0.0	8.6	1.8	6.4	5.4
55°	7.3	10.4	6.4	9.5	10.0
57.5°	0.9	7.3	3.6	7.7	5.4
60°	9.1	12.3	7.3	13.2	11.8
62.5°	0.9	8.2	9.5	7.3	6.4
65°	3.6	7.7	9.5	9.1	9.1
67.5°	4.5	7.7	5.9	5.9	8.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.9	3.2	2.3	4.1	6.4
77.5°	0.9	3.6	3.2	7.3	5.4
80°	7.3	8.2	10.0	13.2	9.1
82.5°	6.4	6.4	10.0	7.3	5.4
85°	0.0	0.0	2.3	2.3	2.7
87.5°	0.0	1.8	4.5	3.6	6.4
90°	0.0	0.0	0.0	0.0	0.0



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







70°	2.7	0.9	2.3	2.3	2.7
72.5°	0.9	4.1	3.6	2.3	4.5



(END OF REPORT)