

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: P282472

Luminaire Tested: **LDA2B059027D010 EU2B05SP159027 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282472  
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: LDA2B059027D010 EU2B05SP159027 2LBALPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MMS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 615.7 lumens  
Efficiency: N/A  
Efficacy: 88.0 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

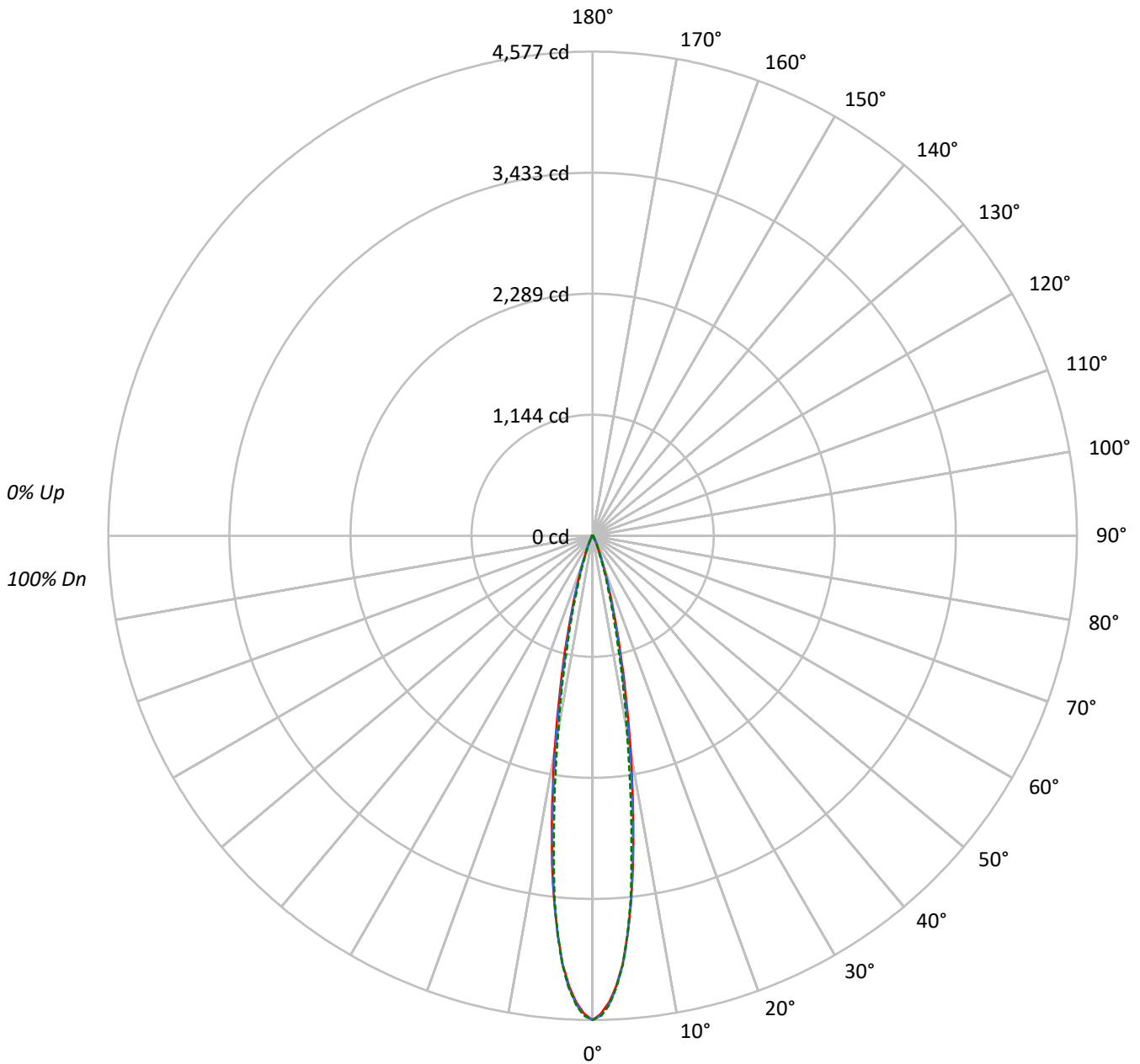
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	92	89	88	87	92	89	88	87															
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	92	89	88	87															
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	90	88	86	85															
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°	2258166	2258166	2258166
5°	1873368	1879460	1872328
10°	1036863	999390	931008
15°	419747	401462	356412
20°	140602	149107	120703
25°	53511	53674	50844
30°	23984	23585	22787
35°	11624	10359	8251
40°	7664	9725	6762
45°	1954	3210	2930
50°	537	844	1075
55°	4817	4215	6623
60°	6907	5526	8979
65°	3269	8639	8172
70°	3029	2596	3029
75°	1334	3431	9340
80°	15910	21877	19888
85°	0	10189	11887



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	299.8	48.7
10°-20°	227.1	36.9
20°-30°	51.6	8.4
30°-40°	15.3	2.5
40°-50°	5.1	0.8
50°-60°	4.5	0.7
60°-70°	5.4	0.9
70°-80°	3.5	0.6
80°-90°	3.6	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°	578.5	93.9
0°-40°	593.7	96.4
0°-60°	603.3	98.0
0°-90°	615.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	615.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4577	4577	4577	4577	4577	
5°	3783	3812	3795	3746	3781	303
15°	822	833	786	712	698	239
25°	98	106	99	98	93	51
35°	19	21	17	20	14	15
45°	3	8	5	8	4	4
55°	6	8	5	7	8	2
65°	3	6	7	7	7	3
75°	1	2	2	3	5	2
85°	0	0	2	2	2	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4577.1	4577.1	4577.1	4577.1	4577.1
1°	4518.1	4536.4	4534.6	4527.2	4540.2
2°	4414.2	4436.3	4434.2	4418.1	4441.2
3°	4261.9	4281.5	4278.4	4255.2	4280.5
4°	4058.3	4080.7	4072.0	4037.2	4069.5
5°	3782.7	3812.5	3795.0	3745.5	3780.6
6°	3477.3	3502.6	3474.9	3409.2	3443.6
7°	3135.4	3151.2	3114.7	3030.4	3007.3
8°	2762.3	2783.0	2732.1	2633.8	2608.5
9°	2405.6	2412.6	2350.9	2246.2	2214.3
10°	2069.7	2064.4	1994.9	1888.9	1858.4
11°	1751.3	1744.3	1670.9	1573.0	1582.8
12°	1461.7	1475.4	1390.1	1301.3	1303.0
13°	1223.7	1225.1	1151.7	1067.1	1062.2
14°	1001.8	1014.8	952.0	876.2	862.1
15°	821.8	833.0	786.0	712.2	697.8
16°	657.8	671.9	638.2	571.5	552.5
17°	529.7	547.6	525.5	469.7	447.9
18°	423.7	437.4	432.1	374.5	356.6
19°	334.5	353.5	354.9	306.8	285.4
20°	267.8	285.0	284.0	246.8	229.9
22.5°	153.8	162.9	163.2	145.7	135.8
25°	98.3	105.7	98.6	97.6	93.4
26°	85.3	91.3	83.5	83.5	79.7
27°	69.2	74.4	67.0	70.2	64.9
28°	58.3	63.9	57.6	56.9	56.2
29°	48.4	53.7	45.6	49.1	47.0
30°	42.1	46.0	41.4	46.7	40.0
32.5°	32.6	35.8	27.7	35.1	26.3
35°	19.3	21.4	17.2	20.0	13.7
37.5°	20.0	20.7	18.6	20.7	19.3
40°	11.9	12.3	15.1	15.1	10.5
42.5°	11.2	10.9	6.7	10.5	8.4
45°	2.8	8.1	4.6	8.1	4.2
47.5°	2.1	2.8	2.8	5.6	5.6
50°	0.7	2.8	1.1	2.1	1.4
52.5°	0.0	6.7	1.4	4.9	4.2
55°	5.6	8.1	4.9	7.4	7.7
57.5°	0.7	5.6	2.8	6.0	4.2
60°	7.0	9.5	5.6	10.2	9.1
62.5°	0.7	6.3	7.4	5.6	4.9
65°	2.8	6.0	7.4	7.0	7.0
67.5°	3.5	6.0	4.6	4.6	6.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.7	2.5	1.8	3.2	4.9
77.5°	0.7	2.8	2.5	5.6	4.2
80°	5.6	6.3	7.7	10.2	7.0
82.5°	4.9	4.9	7.7	5.6	4.2
85°	0.0	0.0	1.8	1.8	2.1
87.5°	0.0	1.4	3.5	2.8	4.9
90°	0.0	0.0	0.0	0.0	0.0



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







70°	2.1	0.7	1.8	1.8	2.1
72.5°	0.7	3.2	2.8	1.8	3.5



(END OF REPORT)