

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: P282585

Luminaire Tested: **LDA2B208035D010 EU2B20SP158035 2LBALPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282585  
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: LDA2B208035D010 EU2B20SP158035 2LBALPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2025.0 lumens  
Efficiency: N/A  
Efficacy: 98.3 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

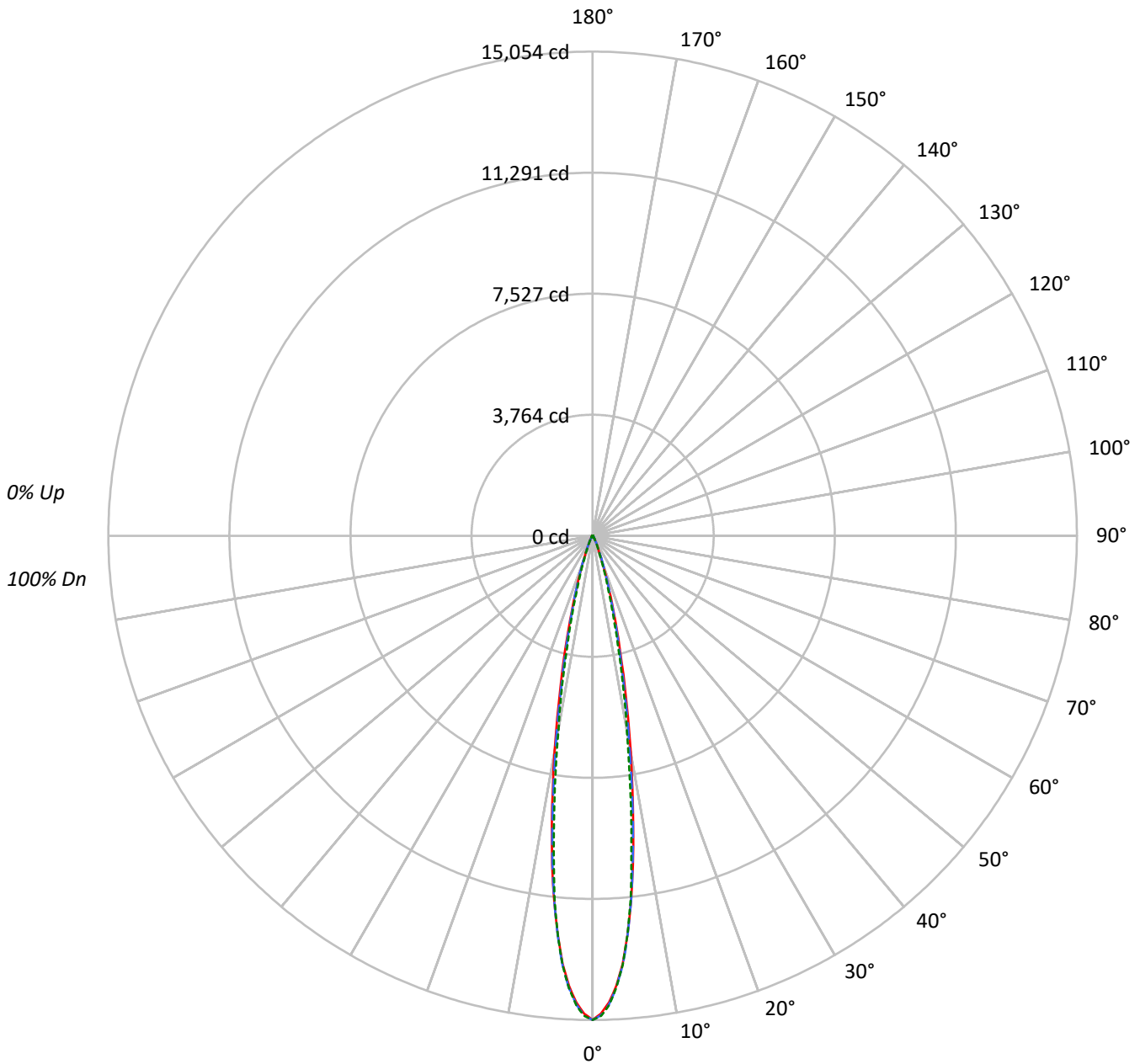
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	96	95	94															
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	96	94	92	91															
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	94	92	90	89	94	92	90	89															
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°	7426970	7426970	7426970
5°	6161409	6181417	6157992
10°	3410121	3286932	3061945
15°	1380446	1320329	1172309
20°	462494	490373	397024
25°	175993	176592	167174
30°	78901	77591	74971
35°	38245	34089	27103
40°	25311	31944	22284
45°	6419	10466	9698
50°	1765	2686	3531
55°	15913	13934	21848
60°	22793	18254	29602
65°	10740	28251	26967
70°	9953	8366	9953
75°	4384	11056	30880
80°	52561	72165	65631
85°	0	32832	39059



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	985.9	48.7
10°-20°	746.8	36.9
20°-30°	169.8	8.4
30°-40°	50.2	2.5
40°-50°	16.7	0.8
50°-60°	14.7	0.7
60°-70°	17.7	0.9
70°-80°	11.3	0.6
80°-90°	11.8	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°	1902.5	94.0
0°-40°	1952.7	96.4
0°-60°	1984.2	98.0
0°-90°	2025.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2025.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	15054	15054	15054	15054	15054	
5°	12441	12539	12482	12319	12434	998
15°	2703	2740	2585	2342	2295	785
25°	323	348	324	321	307	169
35°	64	70	57	66	45	50
45°	9	27	15	27	14	14
55°	18	27	16	24	25	8
65°	9	20	24	23	23	9
75°	2	8	6	10	16	5
85°	0	0	6	6	7	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	15053.8	15053.8	15053.8	15053.8	15053.8
1°	14859.8	14919.8	14914.1	14889.8	14932.5
2°	14518.1	14590.8	14583.9	14530.8	14607.0
3°	14017.0	14081.7	14071.3	13995.1	14078.2
4°	13347.4	13421.3	13392.4	13278.1	13384.3
5°	12441.1	12539.2	12481.5	12318.7	12434.2
6°	11436.7	11519.8	11428.6	11212.7	11325.8
7°	10312.2	10364.1	10244.0	9967.0	9890.8
8°	9084.9	9153.0	8985.6	8662.4	8579.2
9°	7911.9	7935.0	7731.8	7387.8	7282.7
10°	6807.0	6789.7	6561.1	6212.5	6112.0
11°	5759.9	5736.8	5495.5	5173.4	5205.7
12°	4807.4	4852.4	4571.9	4279.8	4285.6
13°	4024.7	4029.3	3788.0	3509.7	3493.6
14°	3295.0	3337.7	3131.1	2881.7	2835.5
15°	2702.7	2739.7	2585.0	2342.5	2295.2
16°	2163.6	2209.7	2098.9	1879.6	1817.2
17°	1742.2	1801.0	1728.3	1544.7	1473.2
18°	1393.5	1438.5	1421.2	1231.9	1173.0
19°	1100.3	1162.6	1167.2	1009.0	938.6
20°	880.9	937.5	934.0	811.6	756.2
22.5°	505.7	535.7	536.9	479.1	446.8
25°	323.3	347.5	324.4	321.0	307.1
26°	280.5	300.2	274.8	274.8	262.1
27°	227.4	244.8	220.5	230.9	213.6
28°	191.7	210.1	189.3	187.0	184.7
29°	159.3	176.6	150.1	161.6	154.7
30°	138.5	151.2	136.2	153.6	131.6
32.5°	107.4	117.8	91.2	115.5	86.6
35°	63.5	70.4	56.6	65.8	45.0
37.5°	65.8	68.1	61.2	68.1	63.5
40°	39.3	40.4	49.6	49.6	34.6
42.5°	36.9	35.8	21.9	34.6	27.7
45°	9.2	26.6	15.0	26.6	13.9
47.5°	6.9	9.2	9.2	18.5	18.5
50°	2.3	9.2	3.5	6.9	4.6
52.5°	0.0	21.9	4.6	16.2	13.9
55°	18.5	26.6	16.2	24.2	25.4
57.5°	2.3	18.5	9.2	19.6	13.9
60°	23.1	31.2	18.5	33.5	30.0
62.5°	2.3	20.8	24.2	18.5	16.2
65°	9.2	19.6	24.2	23.1	23.1
67.5°	11.5	19.6	15.0	15.0	20.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	2.3	8.1	5.8	10.4	16.2
77.5°	2.3	9.2	8.1	18.5	13.9
80°	18.5	20.8	25.4	33.5	23.1
82.5°	16.2	16.2	25.4	18.5	13.9
85°	0.0	0.0	5.8	5.8	6.9
87.5°	0.0	4.6	11.5	9.2	16.2
90°	0.0	0.0	0.0	0.0	0.0



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







70°	6.9	2.3	5.8	5.8	6.9
72.5°	2.3	10.4	9.2	5.8	11.5



(END OF REPORT)