

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: P282434

Luminaire Tested: **LDA2B209727D010 EU2B20NFL259727 2LBAPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282434  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-26)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B209727D010 EU2B20NFL259727 2LBAPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ PinHole, MW  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1277.7 lumens  
Efficiency: N/A  
Efficacy: 62.0 lumens/watt  
Spacing Criteria (0/90/45): 0.33 / 0.3 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

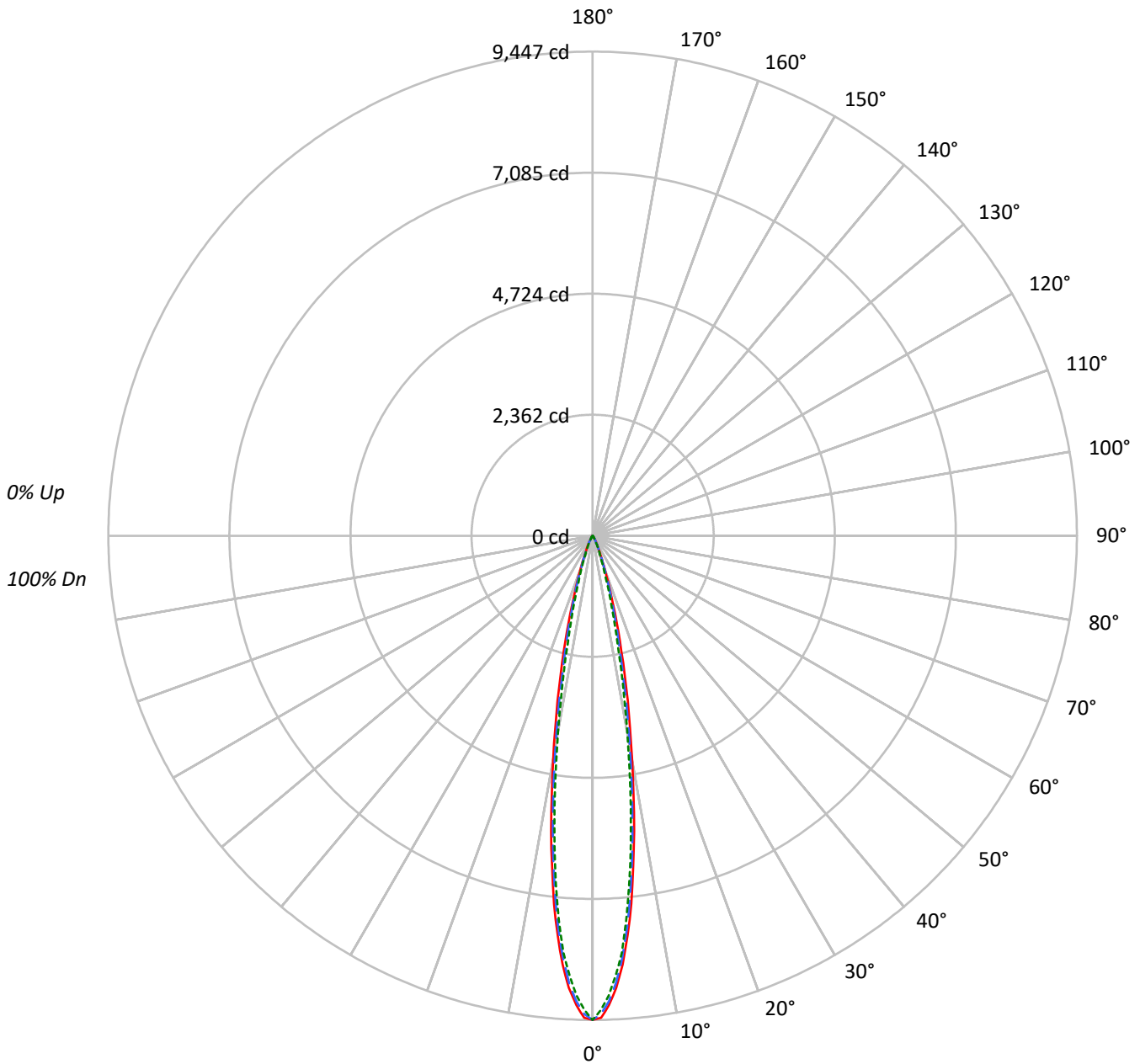
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97				97															
2	112	109	106	104	110	107	105	103	104	102	100	101	100	98	99	97	96	95				95															
3	109	105	101	99	107	103	100	98	101	99	97	99	97	95	97	95	94	92				92															
4	106	101	98	95	105	100	97	94	98	96	93	96	94	92	95	93	91	90				90															
5	103	98	94	92	102	97	94	91	96	93	91	94	92	90	93	91	89	88				88															
6	101	95	92	89	100	95	91	89	93	90	88	92	90	88	91	89	87	86				86															
7	99	93	89	87	98	92	89	86	91	88	86	90	88	86	89	87	85	84				84															
8	96	91	87	85	96	90	87	84	89	86	84	88	86	84	88	85	83	83				83															
9	94	89	85	83	94	88	85	82	87	84	82	87	84	82	86	84	82	81				81															
10	93	87	83	81	92	86	83	81	86	83	81	85	82	80	85	82	80	79				79															

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

	0°	45°	90°
0°	4660986	4660986	4660986
5°	3878423	3807355	3730493
10°	2221513	2084648	1945578
15°	988076	877547	735400
20°	358434	337013	267028
25°	137615	128524	110669
30°	59361	55202	48993
35°	28066	28066	23248
40°	14104	14555	11721
45°	8163	7605	7117
50°	5603	5066	5066
55°	4387	3097	3785
60°	3552	2171	2861
65°	2568	1751	2568
70°	2164	1010	2164
75°	1334	1334	1334
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	614.5	48.1
10°-20°	497.2	38.9
20°-30°	119.9	9.4
30°-40°	30.6	2.4
40°-50°	9.1	0.7
50°-60°	3.9	0.3
60°-70°	1.9	0.1
70°-80°	0.6	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°	1231.6	96.4
0°-40°	1262.2	98.8
0°-60°	1275.2	99.8
0°-90°	1277.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1277.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9447	9447	9447	9447	9447	
5°	7831	7759	7688	7621	7533	633
15°	1934	1889	1718	1548	1440	552
25°	253	254	236	214	203	131
35°	47	47	47	42	39	32
45°	12	12	11	10	10	10
55°	5	4	4	4	4	4
65°	2	2	2	2	2	2
75°	1	1	1	1	1	1
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°	9447.4	9447.4	9447.4	9447.4	9447.4
1°	9405.1	9339.6	9331.6	9372.4	9252.1
2°	9164.7	9118.1	9091.1	9115.2	8978.9
3°	8834.6	8789.5	8740.6	8741.4	8589.1
4°	8385.1	8349.4	8267.0	8242.3	8154.1
5°	7831.3	7759.2	7687.8	7620.7	7532.6
6°	7219.3	7126.0	7024.0	6924.2	6833.8
7°	6499.4	6437.4	6302.6	6166.4	6089.9
8°	5822.5	5722.7	5565.3	5394.8	5329.9
9°	5094.6	5023.2	4842.5	4644.3	4579.4
10°	4434.4	4360.1	4161.2	3940.4	3883.6
11°	3815.1	3745.2	3538.2	3306.5	3246.0
12°	3291.2	3192.1	2954.6	2753.5	2694.5
13°	2769.5	2701.8	2476.6	2277.7	2163.3
14°	2325.8	2269.7	2065.7	1890.8	1769.8
15°	1934.5	1888.6	1718.1	1547.6	1439.8
16°	1587.0	1558.5	1423.7	1259.1	1170.9
17°	1287.5	1261.3	1175.3	1023.7	949.4
18°	1039.8	1036.1	964.7	833.6	767.2
19°	855.4	854.0	788.4	678.4	623.7
20°	682.7	692.2	641.9	545.7	508.6
21°	556.7	561.8	521.7	448.8	415.3
22°	453.2	456.9	430.6	370.9	352.7
23°	371.6	373.8	351.9	307.5	291.5
24°	306.0	307.5	287.8	256.5	242.6
25°	252.8	254.3	236.1	214.2	203.3
26°	209.8	211.3	195.3	180.0	169.0
27°	174.1	177.1	161.0	151.6	139.9
28°	148.6	149.4	134.8	129.0	118.0
29°	121.7	126.1	113.7	108.6	100.6
30°	104.2	106.4	96.9	93.3	86.0
32.5°	69.2	70.7	66.3	63.4	57.6
35°	46.6	47.4	46.6	42.3	38.6
37.5°	32.1	32.1	32.8	27.7	26.2
40°	21.9	21.9	22.6	18.9	18.2
42.5°	16.0	16.0	15.3	13.1	13.1
45°	11.7	11.7	10.9	10.2	10.2
47.5°	9.5	8.7	8.0	8.0	8.0
50°	7.3	7.3	6.6	5.8	6.6
52.5°	5.8	5.8	5.1	5.1	5.1
55°	5.1	4.4	3.6	3.6	4.4
57.5°	3.6	3.6	2.9	2.9	3.6
60°	3.6	2.9	2.2	2.9	2.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	2.2	1.5	1.5	1.5	1.5
70°	1.5	1.5	0.7	0.7	1.5
72.5°	0.7	0.7	0.7	0.7	0.7
75°	0.7	0.7	0.7	0.7	0.7
77.5°	0.7	0.7	0.0	0.0	0.7
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°







62.5°	2.9	2.2	2.2	2.2	2.2
65°	2.2	2.2	1.5	1.5	2.2



(END OF REPORT)