

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: P282435

Luminaire Tested: **LDA2B209727D010 EU2B20NFL259727 2LBAPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282435  
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 2LBAPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ PinHole, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1264.0 lumens  
Efficiency: N/A  
Efficacy: 61.4 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

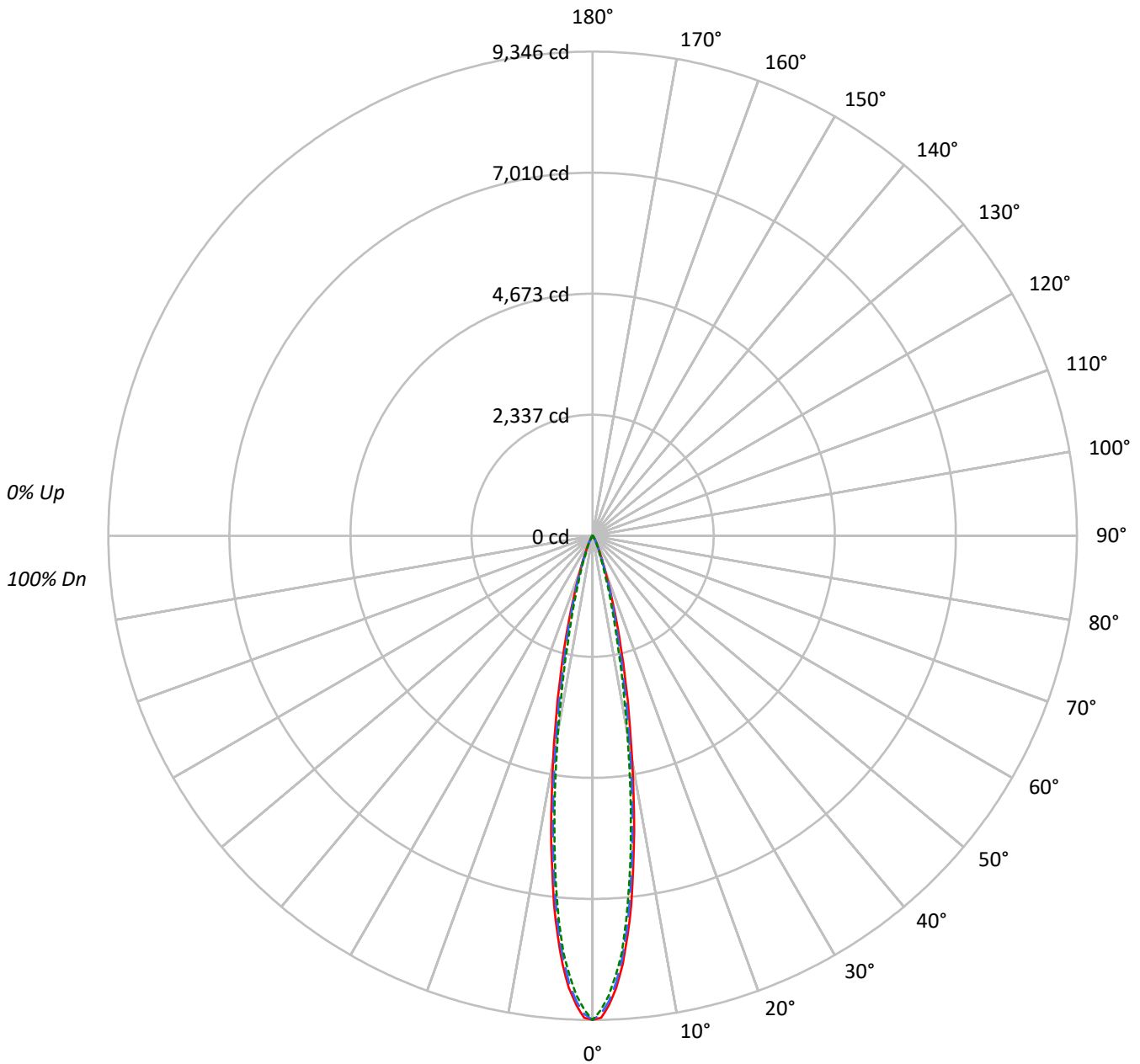
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20					20					20					20					20					
RC	80					70					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	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°	4611058	4611058	4611058
5°	3836872	3766547	3690477
10°	2197717	2062304	1924737
15°	977503	868148	727484
20°	354602	333391	264140
25°	136146	127109	109472
30°	58735	54633	48480
35°	27765	27765	23007
40°	13911	14362	11593
45°	8024	7535	7047
50°	5526	4989	4989
55°	4301	3097	3699
60°	3552	2171	2861
65°	2568	1634	2568
70°	2019	1010	2019
75°	1334	1334	1334
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	607.9	48.1
10°-20°	491.9	38.9
20°-30°	118.6	9.4
30°-40°	30.2	2.4
40°-50°	9.0	0.7
50°-60°	3.8	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°	1218.4	96.4
0°-40°	1248.6	98.8
0°-60°	1261.5	99.8
0°-90°	1264.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1264.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9346	9346	9346	9346	9346	
5°	7747	7676	7605	7539	7452	626
15°	1914	1868	1700	1531	1424	546
25°	250	252	234	212	201	129
35°	46	47	46	42	38	32
45°	12	12	11	10	10	10
55°	5	4	4	4	4	4
65°	2	2	1	1	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°	9346.2	9346.2	9346.2	9346.2	9346.2
1°	9304.4	9239.5	9231.6	9271.9	9153.0
2°	9066.5	9020.4	8993.7	9017.5	8882.7
3°	8740.0	8695.3	8647.0	8647.7	8497.0
4°	8295.2	8259.9	8178.4	8153.9	8066.7
5°	7747.4	7676.0	7605.4	7539.1	7451.8
6°	7141.9	7049.6	6948.7	6850.0	6760.6
7°	6429.7	6368.5	6235.1	6100.3	6024.6
8°	5760.1	5661.3	5505.6	5337.0	5272.8
9°	5040.0	4969.3	4790.6	4594.5	4530.4
10°	4386.9	4313.4	4116.6	3898.2	3842.0
11°	3774.2	3705.0	3500.3	3271.1	3211.3
12°	3255.9	3157.9	2922.9	2724.0	2665.6
13°	2739.8	2672.8	2450.1	2253.3	2140.1
14°	2300.9	2245.4	2043.5	1870.5	1750.9
15°	1913.8	1868.4	1699.7	1531.0	1424.3
16°	1569.9	1541.8	1408.5	1245.6	1158.4
17°	1273.7	1247.7	1162.7	1012.8	939.2
18°	1028.6	1025.0	954.4	824.6	759.0
19°	846.2	844.8	779.9	671.1	617.0
20°	675.4	684.8	635.0	539.9	503.1
21°	550.7	555.8	516.1	444.0	410.9
22°	448.4	452.0	426.0	366.9	348.9
23°	367.6	369.8	348.2	304.2	288.3
24°	302.7	304.2	284.7	253.7	240.0
25°	250.1	251.6	233.5	211.9	201.1
26°	207.6	209.0	193.2	178.0	167.2
27°	172.3	175.2	159.3	149.9	138.4
28°	147.0	147.8	133.4	127.6	116.8
29°	120.4	124.7	112.4	107.4	99.5
30°	103.1	105.2	95.9	92.3	85.1
32.5°	68.5	69.9	65.6	62.7	56.9
35°	46.1	46.9	46.1	41.8	38.2
37.5°	31.7	31.7	32.4	27.4	25.9
40°	21.6	21.6	22.3	18.7	18.0
42.5°	15.9	15.9	15.1	13.0	13.0
45°	11.5	11.5	10.8	10.1	10.1
47.5°	9.4	8.6	7.9	7.9	7.9
50°	7.2	7.2	6.5	5.8	6.5
52.5°	5.8	5.8	5.0	5.0	5.0
55°	5.0	4.3	3.6	3.6	4.3
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	1.4	1.4	1.4	1.4
70°	1.4	1.4	0.7	0.7	1.4
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	1.4	1.4	2.2



(END OF REPORT)