

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: P282429

Luminaire Tested: **LDA2B209050D010 EU2B20NFL259050 2LBAPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282429  
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: LDA2B209050D010 EU2B20NFL259050 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: 1596.4 lumens  
Efficiency: N/A  
Efficacy: 77.5 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

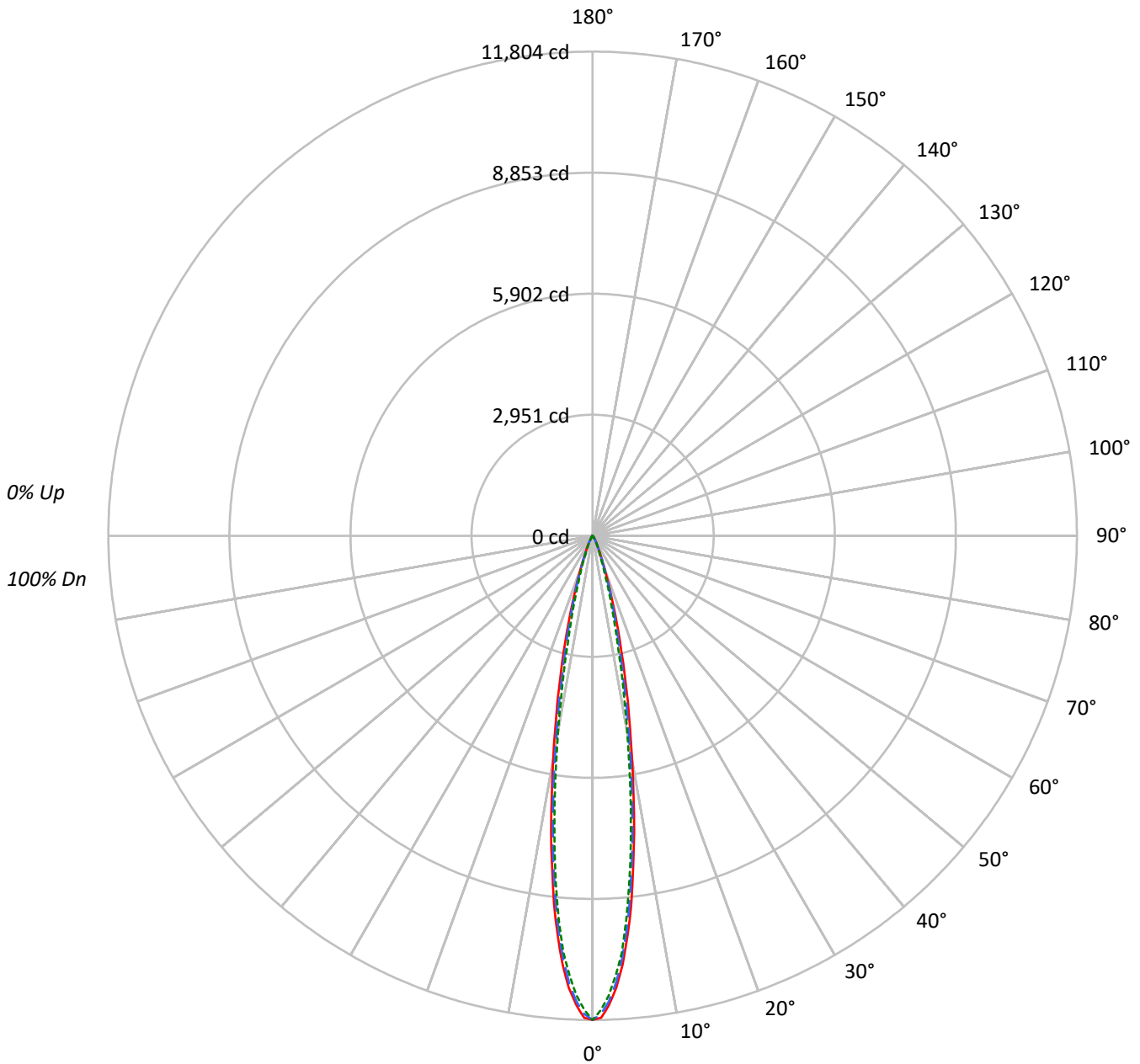
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	115	113	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97
2	112	109	106	104	110	107	105	103	104	102	100	101	100	98	99	97	96	95
3	109	105	101	99	107	103	100	98	101	99	97	99	97	95	97	95	94	92
4	106	101	98	95	105	100	97	94	98	96	93	96	94	92	95	93	91	90
5	103	98	94	92	102	97	94	91	96	93	91	94	92	90	93	91	89	88
6	101	95	92	89	100	95	91	89	93	90	88	92	90	88	91	89	87	86
7	99	93	89	87	98	92	89	86	91	88	86	90	88	86	89	87	85	84
8	96	91	87	85	96	90	87	84	89	86	84	88	86	84	88	85	83	83
9	94	89	85	83	94	88	85	82	87	84	82	87	84	82	86	84	82	81
10	93	87	83	81	92	86	83	81	86	83	81	85	82	80	85	82	80	79

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

	0°	45°	90°
0°	5823692	5823692	5823692
5°	4845886	4757089	4661061
10°	2775689	2604657	2430920
15°	1234572	1096461	918816
20°	447846	421122	333601
25°	171965	160588	138269
30°	74173	68989	61184
35°	35113	35113	29090
40°	17582	18162	14684
45°	10187	9559	8861
50°	6985	6294	6294
55°	5505	3957	4731
60°	4539	2664	3552
65°	3152	2101	3152
70°	2596	1298	2596
75°	1716	1716	1716
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	767.7	48.1
10°-20°	621.3	38.9
20°-30°	149.8	9.4
30°-40°	38.2	2.4
40°-50°	11.4	0.7
50°-60°	4.9	0.3
60°-70°	2.3	0.1
70°-80°	0.8	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°	1538.8	96.4
0°-40°	1577.0	98.8
0°-60°	1593.3	99.8
0°-90°	1596.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1596.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	11804	11804	11804	11804	11804	
5°	9785	9695	9606	9522	9412	791
15°	2417	2360	2147	1934	1799	689
25°	316	318	295	268	254	163
35°	58	59	58	53	48	40
45°	15	15	14	13	13	12
55°	6	6	5	5	6	6
65°	3	3	2	2	3	3
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°	11804.1	11804.1	11804.1	11804.1	11804.1
1°	11751.3	11669.3	11659.3	11710.3	11560.1
2°	11450.8	11392.6	11358.9	11388.9	11218.7
3°	11038.4	10982.0	10921.0	10921.9	10731.6
4°	10476.7	10432.1	10329.2	10298.3	10188.1
5°	9784.8	9694.7	9605.5	9521.7	9411.6
6°	9020.1	8903.6	8776.1	8651.4	8538.5
7°	8120.6	8043.3	7874.8	7704.6	7609.0
8°	7274.9	7150.2	6953.5	6740.5	6659.5
9°	6365.4	6276.2	6050.4	5802.8	5721.8
10°	5540.6	5447.7	5199.2	4923.4	4852.4
11°	4766.8	4679.4	4420.8	4131.3	4055.8
12°	4112.2	3988.4	3691.6	3440.3	3366.6
13°	3460.4	3375.7	3094.4	2845.9	2702.9
14°	2906.0	2835.9	2580.9	2362.5	2211.3
15°	2417.1	2359.7	2146.7	1933.7	1798.9
16°	1982.8	1947.3	1778.9	1573.1	1463.0
17°	1608.7	1575.9	1468.5	1279.1	1186.2
18°	1299.1	1294.6	1205.4	1041.5	958.6
19°	1068.8	1067.0	985.0	847.6	779.3
20°	853.0	864.9	802.1	681.9	635.4
21°	695.5	701.9	651.8	560.8	518.9
22°	566.3	570.8	538.0	463.4	440.6
23°	464.3	467.0	439.7	384.2	364.2
24°	382.4	384.2	359.6	320.5	303.2
25°	315.9	317.7	295.0	267.7	254.0
26°	262.2	264.0	244.0	224.9	211.2
27°	217.6	221.2	201.2	189.4	174.8
28°	185.7	186.6	168.4	161.1	147.5
29°	152.0	157.5	142.0	135.6	125.6
30°	130.2	132.9	121.1	116.5	107.4
32.5°	86.5	88.3	82.8	79.2	71.9
35°	58.3	59.2	58.3	52.8	48.3
37.5°	40.1	40.1	41.0	34.6	32.8
40°	27.3	27.3	28.2	23.7	22.8
42.5°	20.0	20.0	19.1	16.4	16.4
45°	14.6	14.6	13.7	12.7	12.7
47.5°	11.8	10.9	10.0	10.0	10.0
50°	9.1	9.1	8.2	7.3	8.2
52.5°	7.3	7.3	6.4	6.4	6.4
55°	6.4	5.5	4.6	4.6	5.5
57.5°	4.6	4.6	3.6	3.6	4.6
60°	4.6	3.6	2.7	3.6	3.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	2.7	1.8	1.8	1.8	1.8
70°	1.8	1.8	0.9	0.9	1.8
72.5°	0.9	0.9	0.9	0.9	0.9
75°	0.9	0.9	0.9	0.9	0.9
77.5°	0.9	0.9	0.0	0.0	0.9
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°	3.6	2.7	2.7	2.7	2.7
65°	2.7	2.7	1.8	1.8	2.7



(END OF REPORT)