

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: P281778

Luminaire Tested: **LDA2B208050D010 EU2B20SP158050 2LBALSQC1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281778  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-5)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B208050D010 EU2B20SP158050 2LBALSQC1MB  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim w/lens, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2094.1 lumens  
Efficiency: N/A  
Efficacy: 101.7 lumens/watt  
Spacing Criteria (0/90/45): 0.33 / 0.31 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

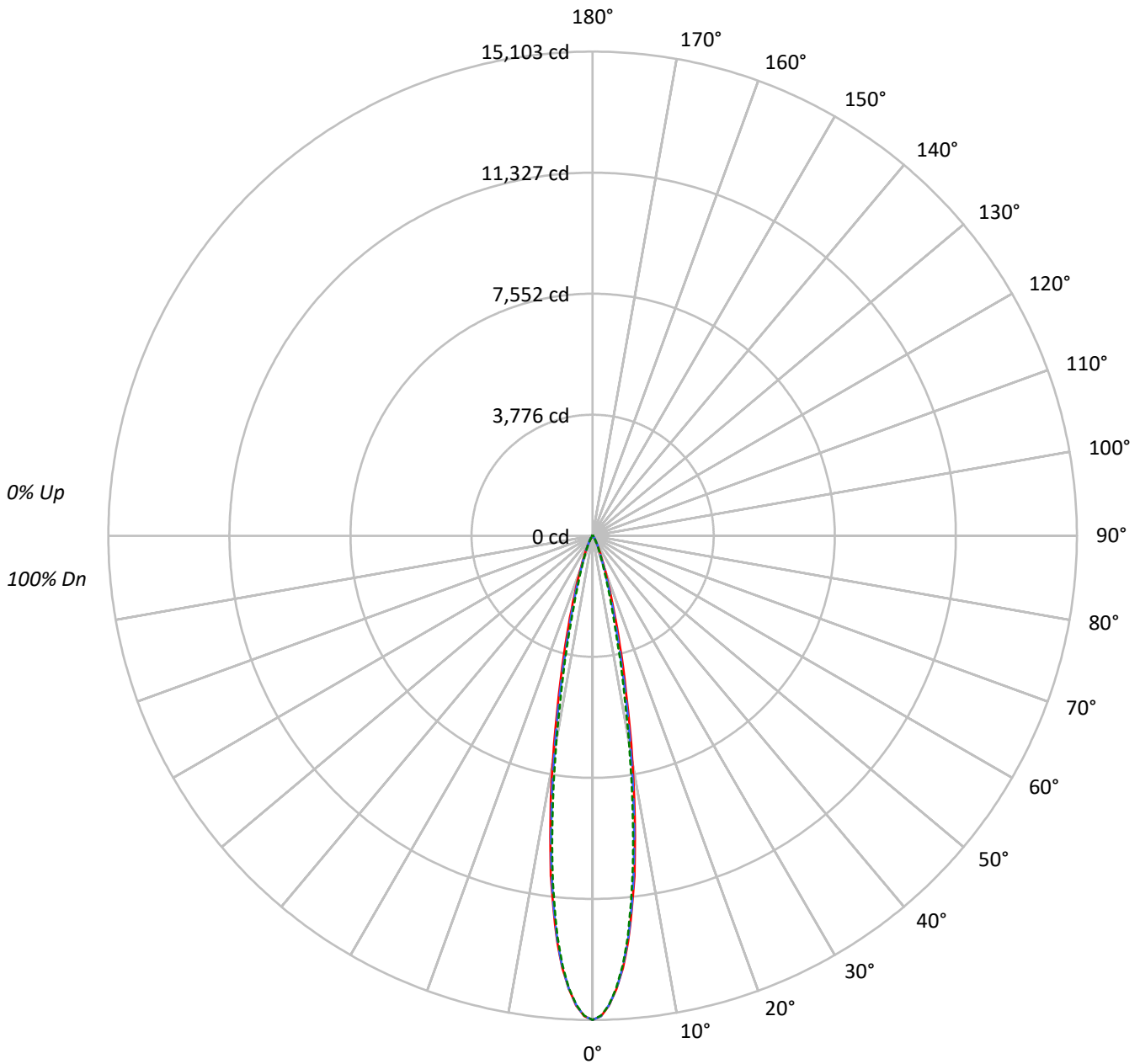
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	7451046	7451046	7451046
5°	6295423	6261796	6215589
10°	3583307	3425501	3251313
15°	1483877	1314353	1157855
20°	564454	494311	452571
25°	249319	239520	212955
30°	115361	127439	101461
35°	60650	71551	56856
40°	26663	30721	17775
45°	10326	8163	11861
50°	4912	5680	8136
55°	0	3613	0
60°	0	0	2072
65°	0	0	0
70°	0	1587	0
75°	0	0	0
80°	5966	0	0
85°	60003	53777	23775



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1009.8	48.2
10°-20°	772.0	36.9
20°-30°	214.7	10.3
30°-40°	69.8	3.3
40°-50°	15.4	0.7
50°-60°	4.7	0.2
60°-70°	2.7	0.1
70°-80°	1.6	0.1
80°-90°	3.4	0.2
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°	1996.4	95.3
0°-40°	2066.2	98.7
0°-60°	2086.3	99.6
0°-90°	2094.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2094.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	15103	15103	15103	15103	15103	
5°	12712	12618	12644	12550	12550	1028
15°	2905	2804	2573	2375	2267	848
25°	458	463	440	415	391	230
35°	101	109	119	90	94	66
45°	15	21	12	12	17	15
55°	0	6	4	2	0	4
65°	0	4	0	0	0	3
75°	0	0	0	2	0	1
85°	11	5	10	5	4	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	15102.6	15102.6	15102.6	15102.6	15102.6
1°	14987.1	14930.9	14984.9	14953.1	14971.2
2°	14661.6	14591.6	14647.8	14603.2	14640.3
3°	14154.7	14100.7	14150.5	14094.3	14124.0
4°	13519.6	13441.2	13491.0	13415.7	13433.7
5°	12711.7	12618.4	12643.8	12549.5	12550.5
6°	11693.8	11629.2	11644.0	11496.6	11486.0
7°	10698.2	10545.5	10529.6	10361.1	10328.2
8°	9489.5	9350.6	9305.0	9106.7	9036.8
9°	8330.6	8157.8	8064.5	7834.4	7752.8
10°	7152.7	6977.7	6837.7	6578.0	6490.0
11°	6062.7	5904.7	5730.8	5453.0	5367.1
12°	5051.2	4927.1	4736.3	4468.0	4377.9
13°	4225.2	4082.1	3877.4	3628.3	3550.9
14°	3509.5	3355.8	3151.2	2938.0	2787.5
15°	2905.2	2804.4	2573.3	2375.0	2266.9
16°	2374.0	2288.1	2088.8	1917.0	1840.6
17°	1946.7	1877.8	1708.1	1573.5	1509.8
18°	1606.3	1520.4	1386.8	1298.8	1249.0
19°	1303.1	1236.3	1138.7	1070.9	1021.0
20°	1075.1	1020.0	941.5	881.1	862.0
22.5°	694.5	684.9	634.0	601.2	585.3
25°	458.0	463.3	440.0	414.6	391.2
26°	391.2	394.4	373.2	358.4	328.7
27°	335.0	336.1	336.1	308.5	279.9
28°	273.6	285.2	274.6	261.9	234.3
29°	234.3	249.2	243.9	231.1	204.6
30°	202.5	213.1	223.7	203.6	178.1
32.5°	142.1	151.6	163.3	152.7	131.5
35°	100.7	109.2	118.8	90.1	94.4
37.5°	68.9	83.8	80.6	73.2	62.6
40°	41.4	43.5	47.7	50.9	27.6
42.5°	29.7	35.0	31.8	36.0	12.7
45°	14.8	21.2	11.7	11.7	17.0
47.5°	10.6	18.0	6.4	6.4	2.1
50°	6.4	13.8	7.4	3.2	10.6
52.5°	10.6	12.7	8.5	9.5	2.1
55°	0.0	6.4	4.2	2.1	0.0
57.5°	4.2	7.4	4.2	2.1	4.2
60°	0.0	0.0	0.0	1.1	2.1
62.5°	0.0	2.1	0.0	3.2	4.2
65°	0.0	4.2	0.0	0.0	0.0
67.5°	6.4	7.4	4.2	8.5	12.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	2.1	0.0
77.5°	0.0	10.6	3.2	3.2	4.2
80°	2.1	0.0	0.0	1.1	0.0
82.5°	0.0	8.5	1.1	4.2	6.4
85°	10.6	5.3	9.5	5.3	4.2
87.5°	0.0	1.1	2.1	1.1	0.0
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	0.0	1.1	1.1	0.0
72.5°	2.1	0.0	0.0	0.0	0.0



(END OF REPORT)