

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: P281350

Luminaire Tested: **LDA2B208035D010 EU2B20SP158035 2LBALD1WMH**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281350  
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: LDA2B208035D010 EU2B20SP158035 2LBALD1WMH  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in  
ADJ spun Refl w/lens Self-Flanged, WMH  
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): 0.33 / 0.31 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

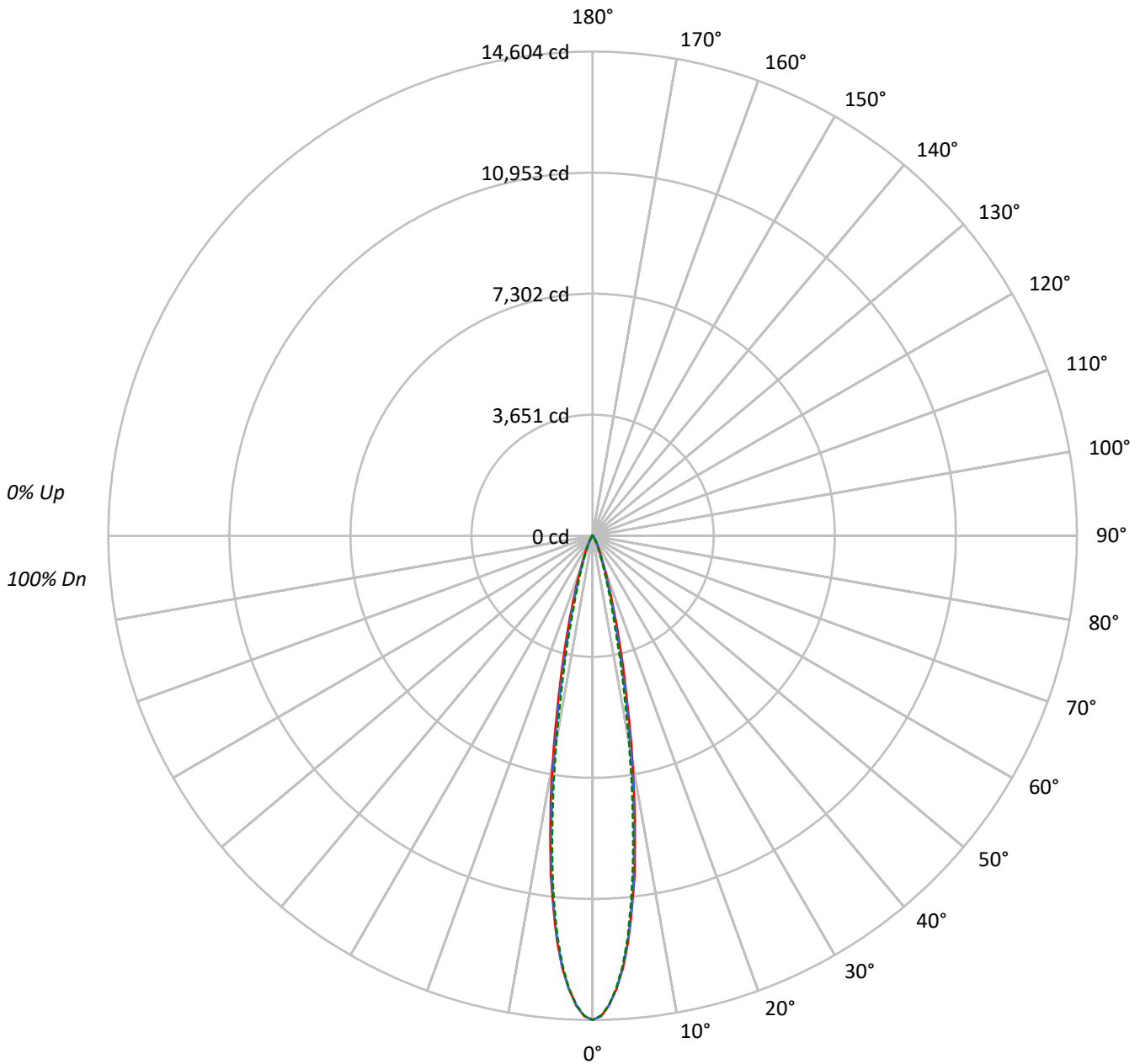
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
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																			
1	115	113	111	110	113	111	110	108	107	106	105	104	103	102	100	99	99	97																			
2	112	108	106	103	110	107	104	102	104	102	100	101	99	98	98	97	96	95																			
3	109	104	101	98	107	103	100	98	101	98	96	98	96	95	96	95	93	92																			
4	106	101	97	95	104	100	97	94	98	95	93	96	94	92	94	93	91	90																			
5	103	98	94	91	102	97	93	91	95	92	90	94	91	89	93	90	89	88																			
6	101	95	91	88	99	94	91	88	93	90	88	92	89	87	91	88	87	86																			
7	98	92	89	86	97	92	88	86	91	88	85	90	87	85	89	87	85	84																			
8	96	90	86	84	95	90	86	84	89	86	83	88	85	83	87	85	83	82																			
9	94	88	84	82	93	88	84	82	87	84	82	86	83	81	86	83	81	80																			
10	92	86	83	80	91	86	82	80	85	82	80	85	82	80	84	81	80	79																			

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

	0°	45°	90°
0°	7205253	7205253	7205253
5°	6087717	6055229	6010557
10°	3465078	3312532	3144054
15°	1434894	1270989	1119650
20°	545868	478035	437661
25°	241099	231627	205933
30°	111544	123223	98157
35°	58662	69142	54988
40°	25762	29690	17196
45°	10047	7884	11443
50°	4759	5526	7906
55°	0	3527	0
60°	0	0	2072
65°	0	0	0
70°	0	1442	0
75°	0	0	0
80°	5966	0	0
85°	58305	52078	23209



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	976.5	48.2
10°-20°	746.5	36.9
20°-30°	207.6	10.3
30°-40°	67.5	3.3
40°-50°	14.9	0.7
50°-60°	4.6	0.2
60°-70°	2.6	0.1
70°-80°	1.6	0.1
80°-90°	3.3	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°	1930.6	95.3
0°-40°	1998.1	98.7
0°-60°	2017.5	99.6
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°	14604	14604	14604	14604	14604	
5°	12292	12202	12227	12136	12136	994
15°	2809	2712	2488	2297	2192	820
25°	443	448	426	401	378	222
35°	97	106	115	87	91	64
45°	14	20	11	11	16	14
55°	0	6	4	2	0	4
65°	0	4	0	0	0	3
75°	0	0	0	2	0	1
85°	10	5	9	5	4	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	14604.4	14604.4	14604.4	14604.4	14604.4
1°	14492.6	14438.3	14490.6	14459.8	14477.3
2°	14177.9	14110.2	14164.5	14121.5	14157.4
3°	13687.8	13635.5	13683.7	13629.3	13658.0
4°	13073.6	12997.8	13045.9	12973.1	12990.6
5°	12292.3	12202.1	12226.7	12135.5	12136.5
6°	11308.1	11245.5	11259.9	11117.4	11107.1
7°	10345.3	10197.7	10182.3	10019.3	9987.5
8°	9176.5	9042.1	8998.1	8806.3	8738.6
9°	8055.8	7888.7	7798.4	7576.0	7497.0
10°	6916.7	6747.5	6612.2	6361.0	6275.9
11°	5862.7	5709.9	5541.8	5273.1	5190.1
12°	4884.5	4764.6	4580.0	4320.6	4233.5
13°	4085.8	3947.4	3749.5	3508.6	3433.7
14°	3393.8	3245.1	3047.2	2841.1	2695.5
15°	2809.3	2711.9	2488.4	2296.7	2192.1
16°	2295.7	2212.6	2019.8	1853.7	1779.9
17°	1882.5	1815.8	1651.8	1521.5	1460.0
18°	1553.3	1470.3	1341.1	1256.0	1207.8
19°	1260.1	1195.5	1101.2	1035.6	987.4
20°	1039.7	986.3	910.5	852.0	833.6
22.5°	671.6	662.3	613.1	581.3	566.0
25°	442.9	448.1	425.5	400.9	378.3
26°	378.3	381.4	360.9	346.6	317.8
27°	324.0	325.0	325.0	298.4	270.7
28°	264.5	275.8	265.6	253.2	226.6
29°	226.6	240.9	235.8	223.5	197.9
30°	195.8	206.1	216.3	196.9	172.3
32.5°	137.4	146.6	157.9	147.6	127.1
35°	97.4	105.6	114.8	87.2	91.3
37.5°	66.6	81.0	77.9	70.7	60.5
40°	40.0	42.0	46.1	49.2	26.7
42.5°	28.7	33.8	30.8	34.9	12.3
45°	14.4	20.5	11.3	11.3	16.4
47.5°	10.3	17.4	6.2	6.2	2.1
50°	6.2	13.3	7.2	3.1	10.3
52.5°	10.3	12.3	8.2	9.2	2.1
55°	0.0	6.2	4.1	2.1	0.0
57.5°	4.1	7.2	4.1	2.1	4.1
60°	0.0	0.0	0.0	1.0	2.1
62.5°	0.0	2.1	0.0	3.1	4.1
65°	0.0	4.1	0.0	0.0	0.0
67.5°	6.2	7.2	4.1	8.2	12.3



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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	10.3	3.1	3.1	4.1
80°	2.1	0.0	0.0	1.0	0.0
82.5°	0.0	8.2	1.0	4.1	6.2
85°	10.3	5.1	9.2	5.1	4.1
87.5°	0.0	1.0	2.1	1.0	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	1.0	1.0	0.0
72.5°	2.1	0.0	0.0	0.0	0.0



(END OF REPORT)