

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: P281576

Luminaire Tested: **LDA2B208035D010 EU2B20SP158035 2LBASQC1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281576  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-6)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B208035D010 EU2B20SP158035 2LBASQC1MMS  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim, MMS  
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): 0.31 / 0.31 / 0.29  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

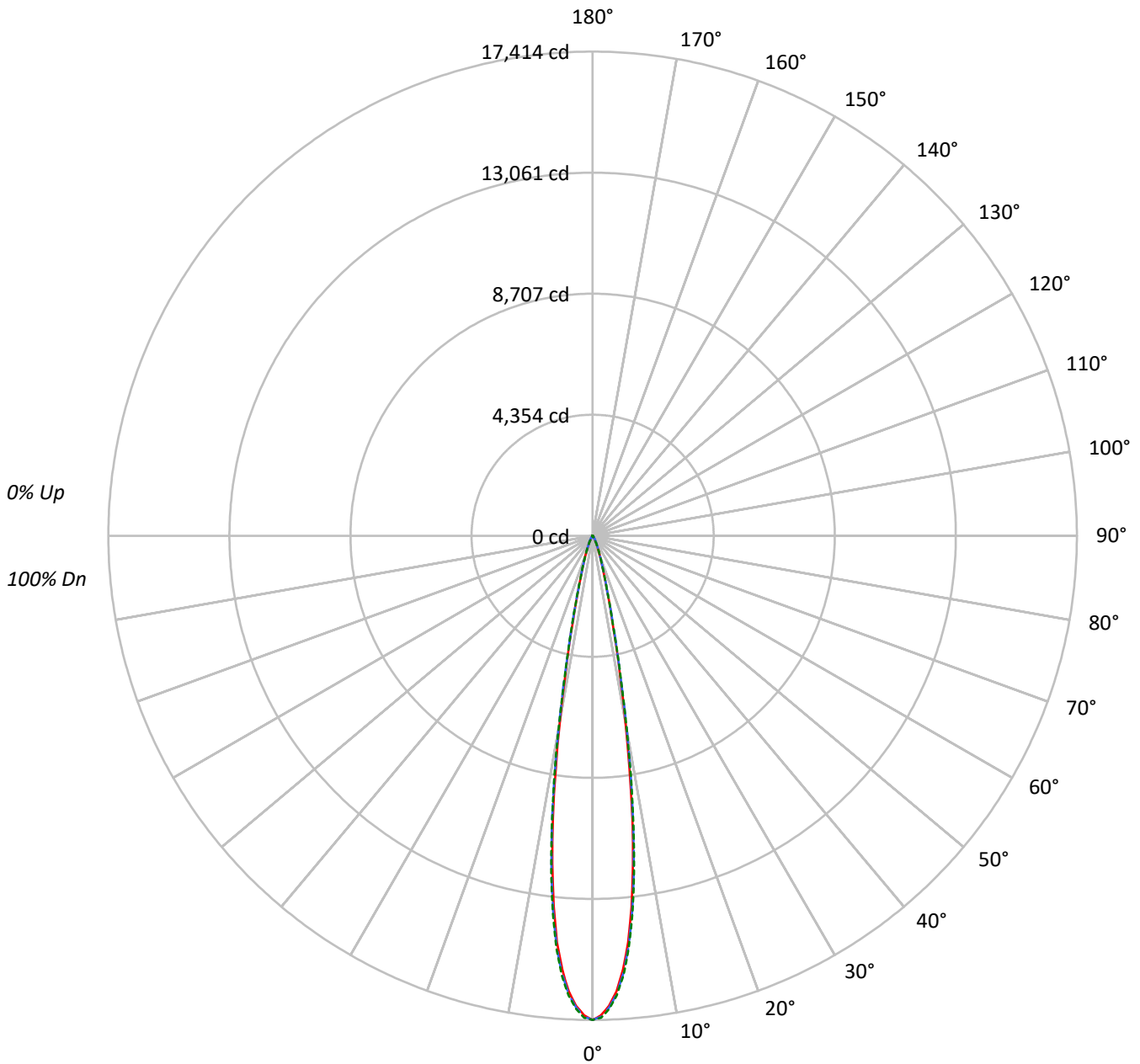
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	116	114	112	111	113	112	110	109	108	107	106	104	103	102	101	100	99	98																			
2	113	109	107	105	111	108	105	103	105	103	101	102	100	99	99	98	97	96																			
3	110	106	103	100	108	104	102	99	102	100	98	100	98	96	98	96	95	94																			
4	107	103	99	97	106	102	99	96	100	97	95	98	96	94	96	95	93	92																			
5	105	100	96	94	103	99	96	93	97	95	93	96	94	92	95	93	91	90																			
6	103	97	94	91	101	97	94	91	96	93	91	94	92	90	93	91	90	89																			
7	100	95	92	89	100	95	91	89	94	91	89	93	90	88	92	90	88	87																			
8	99	93	90	88	98	93	90	87	92	89	87	91	89	87	90	88	86	86																			
9	97	91	88	86	96	91	88	86	90	88	86	90	87	85	89	87	85	84																			
10	95	90	87	84	94	89	86	84	89	86	84	88	86	84	88	85	84	83																			

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

	0°	45°	90°
0°	8591254	8591254	8591254
5°	7271504	7347524	7379468
10°	3400252	3529102	3535965
15°	995942	1010397	1009886
20°	399964	400436	400961
25°	178334	196407	182580
30°	75768	104195	69103
35°	34752	48303	32403
40°	11335	18870	10047
45°	0	6838	0
50°	0	0	0
55°	3355	1720	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	5682	0	0
85°	11321	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1150.8	56.8
10°-20°	652.2	32.2
20°-30°	170.3	8.4
30°-40°	43.9	2.2
40°-50°	4.3	0.2
50°-60°	1.4	0.1
60°-70°	0.2	0.0
70°-80°	1.5	0.1
80°-90°	0.4	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°	1973.4	97.5
0°-40°	2017.3	99.6
0°-60°	2023.1	99.9
0°-90°	2025.2	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°	17414	17414	17414	17414	17414	
5°	14683	14814	14836	14742	14901	1136
15°	1950	1976	1978	1956	1977	640
25°	328	355	361	344	335	163
35°	58	62	80	55	54	39
45°	0	4	10	1	0	3
55°	4	5	2	1	0	3
65°	0	0	0	0	0	1
75°	0	1	0	0	0	4
85°	2	0	0	0	0	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	17413.7	17413.7	17413.7	17413.7	17413.7
1°	17250.4	17318.9	17298.4	17273.9	17342.4
2°	16918.0	16984.5	16978.6	16946.3	17026.5
3°	16405.6	16498.5	16498.5	16450.5	16550.3
4°	15641.9	15783.6	15797.3	15729.9	15854.1
5°	14682.6	14813.6	14836.1	14742.2	14900.6
6°	13383.0	13561.9	13612.8	13504.3	13666.6
7°	11889.8	12077.6	12154.8	12033.6	12215.4
8°	10279.3	10414.2	10507.1	10368.3	10553.1
9°	8477.1	8671.7	8756.7	8621.8	8801.7
10°	6787.3	6966.3	7044.5	7012.2	7058.2
11°	5271.6	5430.1	5482.9	5438.9	5460.4
12°	4127.5	4191.1	4225.3	4196.0	4210.7
13°	3134.0	3219.1	3234.8	3222.1	3228.9
14°	2447.6	2488.7	2506.3	2500.4	2503.3
15°	1949.9	1976.3	1978.2	1955.7	1977.2
16°	1570.4	1591.0	1599.8	1576.3	1604.7
17°	1286.9	1303.5	1313.3	1289.8	1301.5
18°	1059.0	1071.7	1085.4	1064.9	1082.5
19°	888.9	896.7	897.7	891.8	896.7
20°	761.8	757.8	762.7	752.0	763.7
22.5°	501.6	511.4	523.2	510.4	515.3
25°	327.6	355.0	360.8	344.2	335.4
26°	269.9	305.1	320.7	294.3	266.0
27°	223.9	249.4	269.9	234.7	212.2
28°	196.5	218.1	238.6	205.4	178.9
29°	164.3	185.8	221.0	182.9	166.2
30°	133.0	148.6	182.9	138.9	121.3
32.5°	75.3	88.0	118.3	82.1	67.5
35°	57.7	61.6	80.2	54.8	53.8
37.5°	49.9	45.0	62.6	45.0	36.2
40°	17.6	26.4	29.3	19.6	15.6
42.5°	7.8	7.8	12.7	3.9	3.9
45°	0.0	3.9	9.8	1.0	0.0
47.5°	0.0	0.0	2.0	0.0	0.0
50°	0.0	2.0	0.0	0.0	0.0
52.5°	2.0	0.0	0.0	0.0	0.0
55°	3.9	4.9	2.0	1.0	0.0
57.5°	5.9	4.9	2.0	2.0	2.0
60°	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	2.0	1.0	0.0	0.0	0.0



TEST NUMBER: P281576

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	1.0	0.0	0.0	0.0
77.5°	9.8	2.0	2.9	2.0	3.9
80°	2.0	0.0	0.0	0.0	0.0
82.5°	3.9	0.0	0.0	0.0	0.0
85°	2.0	0.0	0.0	0.0	0.0
87.5°	0.0	1.0	0.0	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	0.0	0.0	0.0
72.5°	3.9	2.9	0.0	0.0	3.9



(END OF REPORT)