

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: **LDA2B108030D010 EU2B10SP158030 2LBALSQC1MMS**

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: LDA2B108030D010 EU2B10SP158030 2LBALSQC1MMS  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim w/lens, MMS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1081.9 lumens  
Efficiency: N/A  
Efficacy: 108.2 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

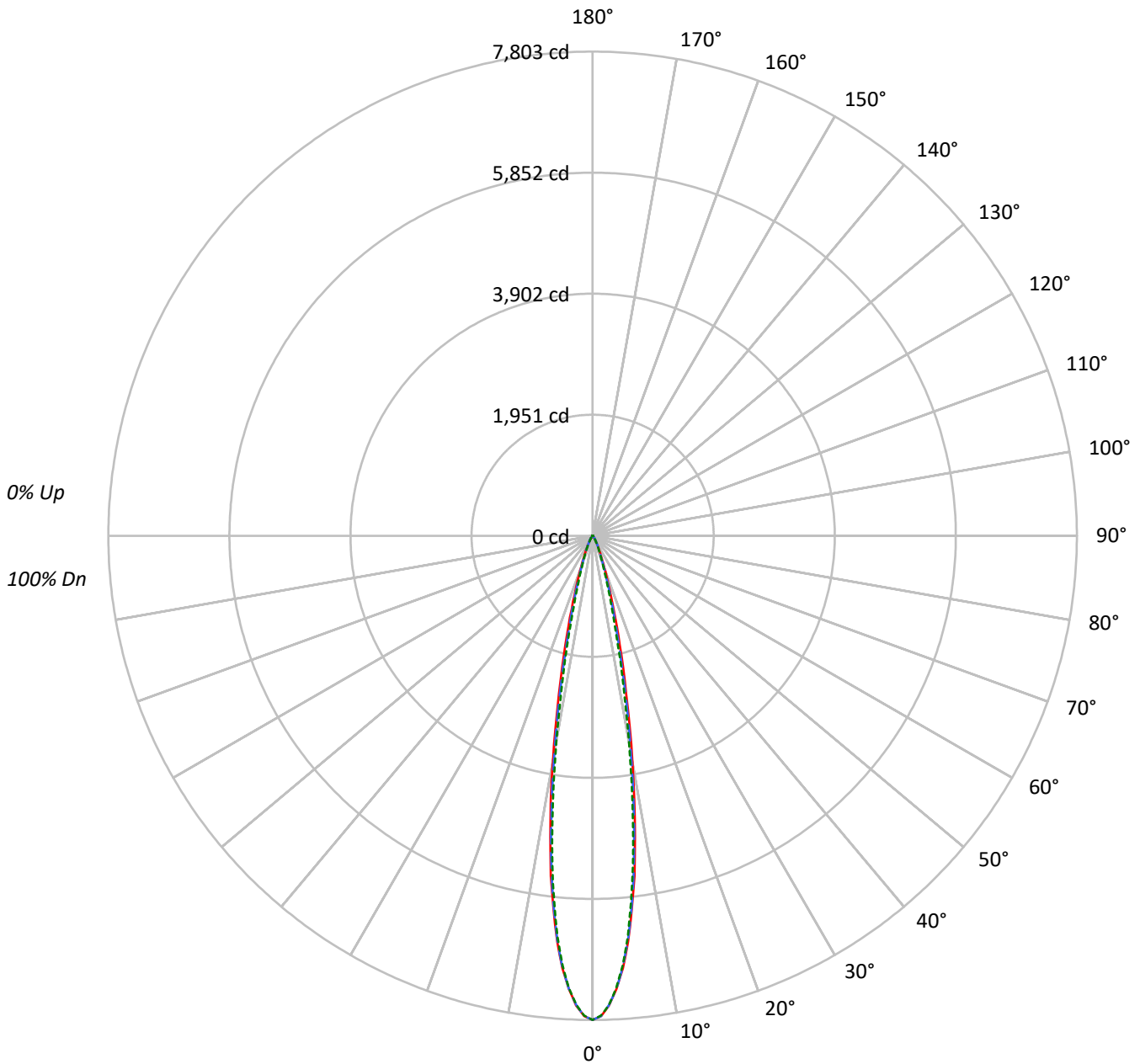
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	3849603	3849603	3849603
5°	3252530	3235197	3211326
10°	1851294	1769786	1679812
15°	766659	679063	598209
20°	291651	255372	233846
25°	128797	123734	110016
30°	59589	65856	52411
35°	31319	36980	29391
40°	13782	15908	9145
45°	5372	4186	6140
50°	2533	2917	4221
55°	0	1892	0
60°	0	0	1085
65°	0	0	0
70°	0	721	0
75°	0	0	0
80°	3125	0	0
85°	31134	27737	12454



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	521.7	48.2
10°-20°	398.8	36.9
20°-30°	110.9	10.3
30°-40°	36.1	3.3
40°-50°	7.9	0.7
50°-60°	2.4	0.2
60°-70°	1.4	0.1
70°-80°	0.8	0.1
80°-90°	1.7	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°	1031.5	95.3
0°-40°	1067.5	98.7
0°-60°	1077.9	99.6
0°-90°	1081.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1081.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7803	7803	7803	7803	7803	
5°	6568	6519	6532	6484	6484	531
15°	1501	1449	1330	1227	1171	438
25°	237	239	227	214	202	119
35°	52	56	61	47	49	34
45°	8	11	6	6	9	8
55°	0	3	2	1	0	2
65°	0	2	0	0	0	2
75°	0	0	0	1	0	0
85°	6	3	5	3	2	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7802.8	7802.8	7802.8	7802.8	7802.8
1°	7743.1	7714.1	7742.0	7725.6	7734.9
2°	7574.9	7538.8	7567.8	7544.8	7564.0
3°	7313.1	7285.2	7310.9	7281.9	7297.2
4°	6985.0	6944.4	6970.2	6931.3	6940.6
5°	6567.5	6519.3	6532.5	6483.7	6484.3
6°	6041.7	6008.2	6015.9	5939.8	5934.3
7°	5527.3	5448.4	5440.2	5353.1	5336.1
8°	4902.8	4831.0	4807.5	4705.0	4668.9
9°	4304.0	4214.8	4166.5	4047.7	4005.5
10°	3695.4	3605.1	3532.7	3398.5	3353.1
11°	3132.3	3050.7	2960.8	2817.3	2772.9
12°	2609.7	2545.6	2447.0	2308.4	2261.9
13°	2183.0	2109.0	2003.3	1874.6	1834.6
14°	1813.2	1733.8	1628.1	1517.9	1440.2
15°	1501.0	1448.9	1329.5	1227.1	1171.2
16°	1226.5	1182.1	1079.2	990.4	951.0
17°	1005.8	970.1	882.5	812.9	780.1
18°	829.9	785.5	716.5	671.1	645.3
19°	673.2	638.7	588.3	553.3	527.5
20°	555.5	527.0	486.4	455.2	445.4
22.5°	358.8	353.9	327.6	310.6	302.4
25°	236.6	239.4	227.3	214.2	202.1
26°	202.1	203.8	192.8	185.2	169.8
27°	173.1	173.7	173.7	159.4	144.6
28°	141.3	147.4	141.9	135.3	121.1
29°	121.1	128.7	126.0	119.4	105.7
30°	104.6	110.1	115.6	105.2	92.0
32.5°	73.4	78.3	84.4	78.9	67.9
35°	52.0	56.4	61.4	46.6	48.8
37.5°	35.6	43.3	41.6	37.8	32.3
40°	21.4	22.5	24.7	26.3	14.2
42.5°	15.3	18.1	16.4	18.6	6.6
45°	7.7	11.0	6.0	6.0	8.8
47.5°	5.5	9.3	3.3	3.3	1.1
50°	3.3	7.1	3.8	1.6	5.5
52.5°	5.5	6.6	4.4	4.9	1.1
55°	0.0	3.3	2.2	1.1	0.0
57.5°	2.2	3.8	2.2	1.1	2.2
60°	0.0	0.0	0.0	0.5	1.1
62.5°	0.0	1.1	0.0	1.6	2.2
65°	0.0	2.2	0.0	0.0	0.0
67.5°	3.3	3.8	2.2	4.4	6.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	1.1	0.0
77.5°	0.0	5.5	1.6	1.6	2.2
80°	1.1	0.0	0.0	0.5	0.0
82.5°	0.0	4.4	0.5	2.2	3.3
85°	5.5	2.7	4.9	2.7	2.2
87.5°	0.0	0.5	1.1	0.5	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	0.5	0.5	0.0
72.5°	1.1	0.0	0.0	0.0	0.0



(END OF REPORT)