

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: P281453

Luminaire Tested: **LDA2B058040D010 EU2B05SP158040 2LBASQC1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281453  
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: LDA2B058040D010 EU2B05SP158040 2LBASQC1MMS  
Description: PORTFOLIO 2IN ADJ 500 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: 838.1 lumens  
Efficiency: N/A  
Efficacy: 119.7 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

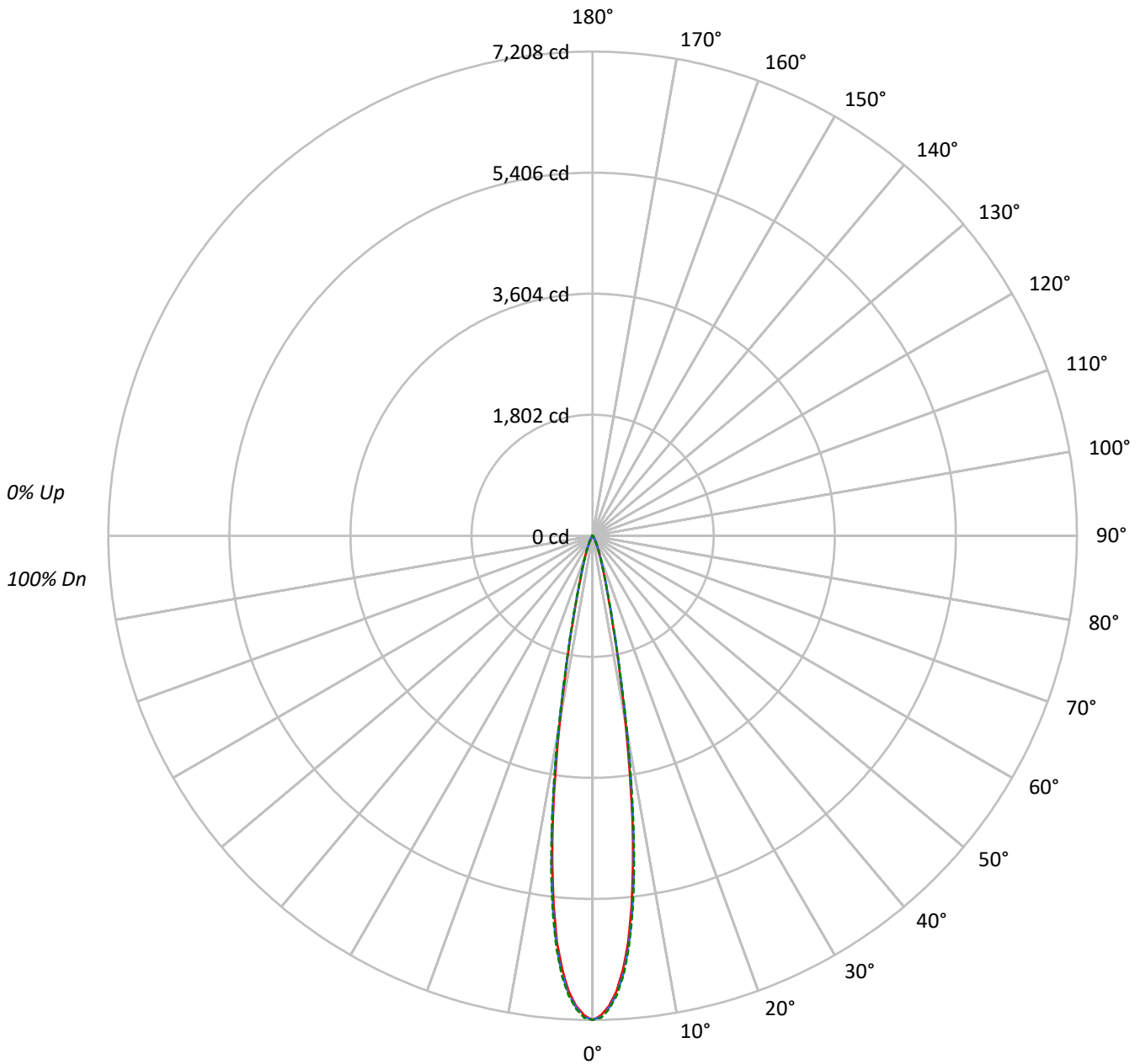
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	116	114	112	111	113	112	110	109	108	107	106	104	103	102	101	100	99	98	97	96					98	
2	113	109	107	105	111	108	105	103	105	103	101	102	100	99	99	98	97	96	95	94					96	
3	110	106	103	100	108	104	102	99	102	100	98	100	98	96	98	96	95	94	93	92					94	
4	107	103	99	97	106	102	99	96	100	97	95	98	96	94	96	95	93	92	91	90					92	
5	105	100	96	94	103	99	96	93	98	95	93	96	94	92	95	93	91	90	89	88					90	
6	103	97	94	91	101	97	94	91	96	93	91	94	92	90	93	91	90	89	88	87					89	
7	100	95	92	89	100	95	91	89	94	91	89	93	90	88	92	90	88	87	86	85					87	
8	99	93	90	88	98	93	90	87	92	89	87	91	89	87	90	88	87	86	85	84					86	
9	97	91	88	86	96	91	88	86	90	88	86	90	87	85	89	87	85	84	83	82					84	
10	95	90	87	84	94	89	86	84	89	86	84	88	86	84	88	85	84	83	82	81					83	

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

	0°	45°	90°
0°	3555905	3555905	3555905
5°	3009662	3041110	3054333
10°	1407332	1460686	1463542
15°	412188	418215	418011
20°	165540	165750	165960
25°	73816	81274	75558
30°	31333	43125	28598
35°	14395	19996	13431
40°	4701	7793	4186
45°	0	2791	0
50°	0	0	0
55°	1376	688	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	2273	0	0
85°	4529	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	476.3	56.8
10°-20°	270.0	32.2
20°-30°	70.5	8.4
30°-40°	18.2	2.2
40°-50°	1.8	0.2
50°-60°	0.6	0.1
60°-70°	0.1	0.0
70°-80°	0.6	0.1
80°-90°	0.1	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°	816.8	97.5
0°-40°	835.0	99.6
0°-60°	837.3	99.9
0°-90°	838.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	838.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7208	7208	7208	7208	7208	
5°	6077	6131	6141	6102	6167	470
15°	807	818	819	810	818	265
25°	136	147	149	142	139	67
35°	24	26	33	23	22	16
45°	0	2	4	0	0	1
55°	2	2	1	0	0	1
65°	0	0	0	0	0	0
75°	0	0	0	0	0	2
85°	1	0	0	0	0	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7207.5	7207.5	7207.5	7207.5	7207.5
1°	7139.9	7168.2	7159.7	7149.6	7177.9
2°	7002.3	7029.8	7027.4	7014.0	7047.2
3°	6790.2	6828.6	6828.6	6808.8	6850.1
4°	6474.1	6532.8	6538.4	6510.5	6561.9
5°	6077.1	6131.3	6140.6	6101.7	6167.3
6°	5539.2	5613.2	5634.3	5589.4	5656.5
7°	4921.1	4998.8	5030.8	4980.6	5055.9
8°	4254.5	4310.4	4348.8	4291.4	4367.9
9°	3508.6	3589.2	3624.4	3568.5	3643.0
10°	2809.2	2883.3	2915.7	2902.3	2921.4
11°	2181.9	2247.5	2269.3	2251.1	2260.0
12°	1708.4	1734.7	1748.8	1736.7	1742.8
13°	1297.2	1332.4	1338.9	1333.6	1336.4
14°	1013.0	1030.0	1037.3	1034.9	1036.1
15°	807.0	818.0	818.8	809.5	818.4
16°	650.0	658.5	662.1	652.4	664.2
17°	532.6	539.5	543.6	533.8	538.7
18°	438.3	443.6	449.3	440.8	448.0
19°	367.9	371.1	371.5	369.1	371.1
20°	315.3	313.7	315.7	311.2	316.1
22.5°	207.6	211.7	216.5	211.3	213.3
25°	135.6	146.9	149.3	142.5	138.8
26°	111.7	126.3	132.8	121.8	110.1
27°	92.7	103.2	111.7	97.1	87.8
28°	81.4	90.3	98.8	85.0	74.1
29°	68.0	76.9	91.5	75.7	68.8
30°	55.0	61.5	75.7	57.5	50.2
32.5°	31.2	36.4	49.0	34.0	27.9
35°	23.9	25.5	33.2	22.7	22.3
37.5°	20.6	18.6	25.9	18.6	15.0
40°	7.3	10.9	12.1	8.1	6.5
42.5°	3.2	3.2	5.3	1.6	1.6
45°	0.0	1.6	4.0	0.4	0.0
47.5°	0.0	0.0	0.8	0.0	0.0
50°	0.0	0.8	0.0	0.0	0.0
52.5°	0.8	0.0	0.0	0.0	0.0
55°	1.6	2.0	0.8	0.4	0.0
57.5°	2.4	2.0	0.8	0.8	0.8
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°	0.8	0.4	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.4	0.0	0.0	0.0
77.5°	4.0	0.8	1.2	0.8	1.6
80°	0.8	0.0	0.0	0.0	0.0
82.5°	1.6	0.0	0.0	0.0	0.0
85°	0.8	0.0	0.0	0.0	0.0
87.5°	0.0	0.4	0.0	0.4	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°	1.6	1.2	0.0	0.0	1.6



(END OF REPORT)