

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: **LDA2B058040D010 EU2B05SP158040 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: LDA2B058040D010 EU2B05SP158040 2LBALSQC1MMS  
Description: PORTFOLIO 2IN ADJ 500 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: 838.1 lumens  
Efficiency: N/A  
Efficacy: 119.7 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

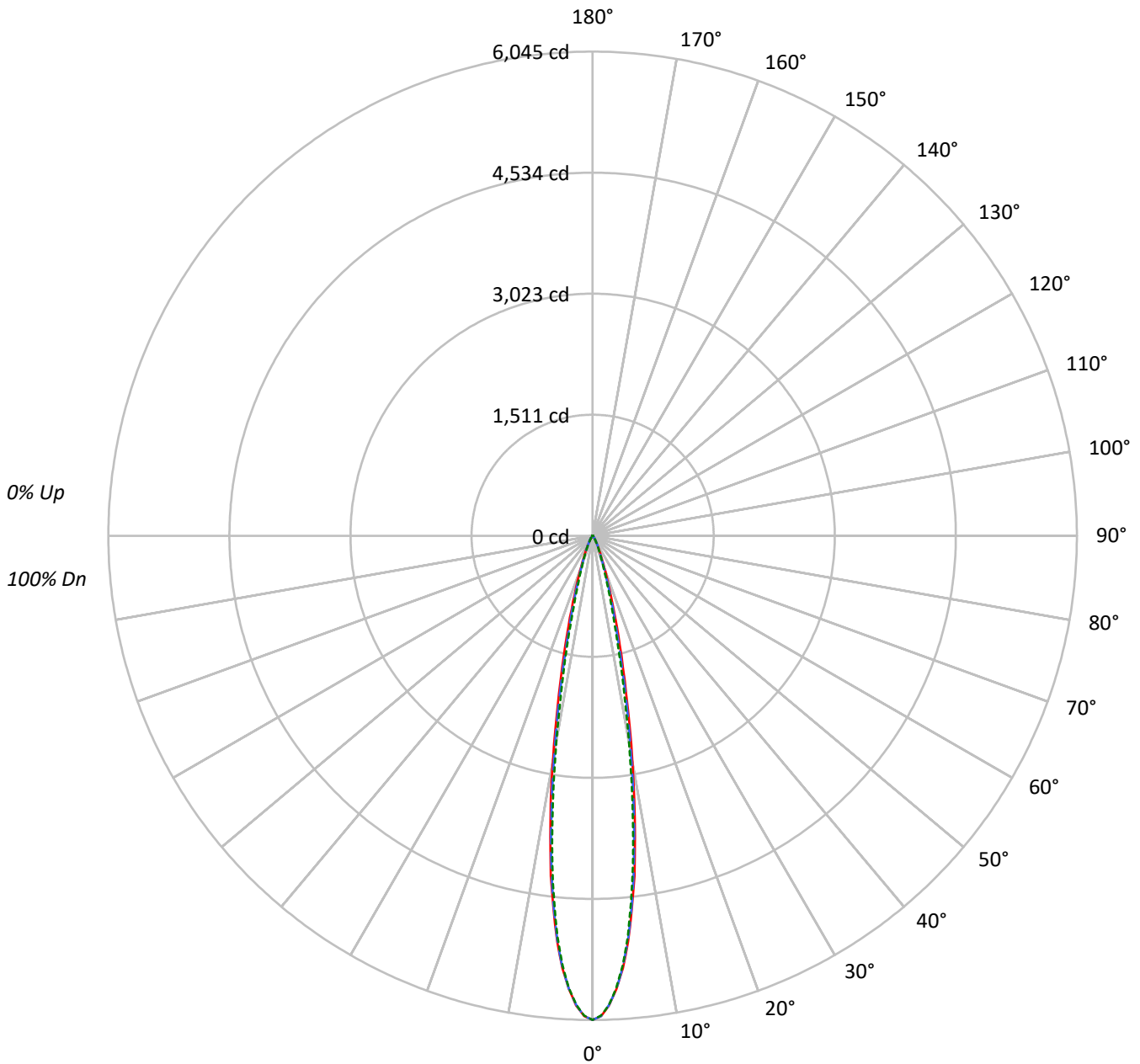
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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				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°	2982224	2982224	2982224
5°	2519665	2506244	2487721
10°	1434185	1371012	1301327
15°	593918	526038	463418
20°	225918	197829	181134
25°	99782	95863	85247
30°	46201	50987	40619
35°	24272	28608	22766
40°	10691	12301	7084
45°	4117	3279	4744
50°	1919	2303	3224
55°	0	1462	0
60°	0	0	789
65°	0	0	0
70°	0	577	0
75°	0	0	0
80°	2273	0	0
85°	23775	21511	9623



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	404.2	48.2
10°-20°	309.0	36.9
20°-30°	85.9	10.3
30°-40°	27.9	3.3
40°-50°	6.1	0.7
50°-60°	1.9	0.2
60°-70°	1.1	0.1
70°-80°	0.6	0.1
80°-90°	1.3	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°	799.1	95.3
0°-40°	827.0	98.7
0°-60°	835.0	99.6
0°-90°	838.1	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°	6045	6045	6045	6045	6045	
5°	5088	5050	5061	5023	5023	411
15°	1163	1122	1030	951	907	339
25°	183	185	176	166	157	92
35°	40	44	48	36	38	27
45°	6	8	5	5	7	6
55°	0	2	2	1	0	2
65°	0	2	0	0	0	1
75°	0	0	0	1	0	0
85°	4	2	4	2	2	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6044.7	6044.7	6044.7	6044.7	6044.7
1°	5998.4	5976.0	5997.6	5984.9	5992.1
2°	5868.2	5840.2	5862.6	5844.8	5859.7
3°	5665.3	5643.7	5663.6	5641.1	5653.0
4°	5411.1	5379.7	5399.7	5369.5	5376.7
5°	5087.7	5050.4	5060.6	5022.8	5023.2
6°	4680.4	4654.5	4660.4	4601.4	4597.2
7°	4281.9	4220.8	4214.4	4146.9	4133.8
8°	3798.1	3742.5	3724.3	3644.9	3616.9
9°	3334.3	3265.1	3227.7	3135.7	3103.0
10°	2862.8	2792.8	2736.7	2632.8	2597.6
11°	2426.5	2363.3	2293.7	2182.5	2148.2
12°	2021.7	1972.0	1895.7	1788.3	1752.2
13°	1691.1	1633.8	1551.9	1452.2	1421.2
14°	1404.7	1343.1	1261.2	1175.9	1115.7
15°	1162.8	1122.5	1029.9	950.6	907.3
16°	950.2	915.8	836.0	767.3	736.7
17°	779.1	751.6	683.7	629.8	604.3
18°	642.9	608.5	555.1	519.9	499.9
19°	521.5	494.8	455.8	428.6	408.7
20°	430.3	408.2	376.8	352.6	345.0
22.5°	278.0	274.1	253.8	240.6	234.3
25°	183.3	185.4	176.1	165.9	156.6
26°	156.6	157.9	149.4	143.4	131.6
27°	134.1	134.5	134.5	123.5	112.0
28°	109.5	114.2	109.9	104.8	93.8
29°	93.8	99.7	97.6	92.5	81.9
30°	81.1	85.3	89.5	81.5	71.3
32.5°	56.9	60.7	65.4	61.1	52.6
35°	40.3	43.7	47.5	36.1	37.8
37.5°	27.6	33.5	32.3	29.3	25.0
40°	16.6	17.4	19.1	20.4	11.0
42.5°	11.9	14.0	12.7	14.4	5.1
45°	5.9	8.5	4.7	4.7	6.8
47.5°	4.2	7.2	2.5	2.5	0.8
50°	2.5	5.5	3.0	1.3	4.2
52.5°	4.2	5.1	3.4	3.8	0.8
55°	0.0	2.5	1.7	0.8	0.0
57.5°	1.7	3.0	1.7	0.8	1.7
60°	0.0	0.0	0.0	0.4	0.8
62.5°	0.0	0.8	0.0	1.3	1.7
65°	0.0	1.7	0.0	0.0	0.0
67.5°	2.5	3.0	1.7	3.4	5.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	0.8	0.0
77.5°	0.0	4.2	1.3	1.3	1.7
80°	0.8	0.0	0.0	0.4	0.0
82.5°	0.0	3.4	0.4	1.7	2.5
85°	4.2	2.1	3.8	2.1	1.7
87.5°	0.0	0.4	0.8	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	0.4	0.4	0.0
72.5°	0.8	0.0	0.0	0.0	0.0



(END OF REPORT)