

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: **LDA2B058050D010 EU2B05SP158050 2LBALSQC1MB**

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: LDA2B058050D010 EU2B05SP158050 2LBALSQC1MB  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in  
Adj SQ Cast Trim w/lens, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 832.7 lumens  
Efficiency: N/A  
Efficacy: 119.0 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

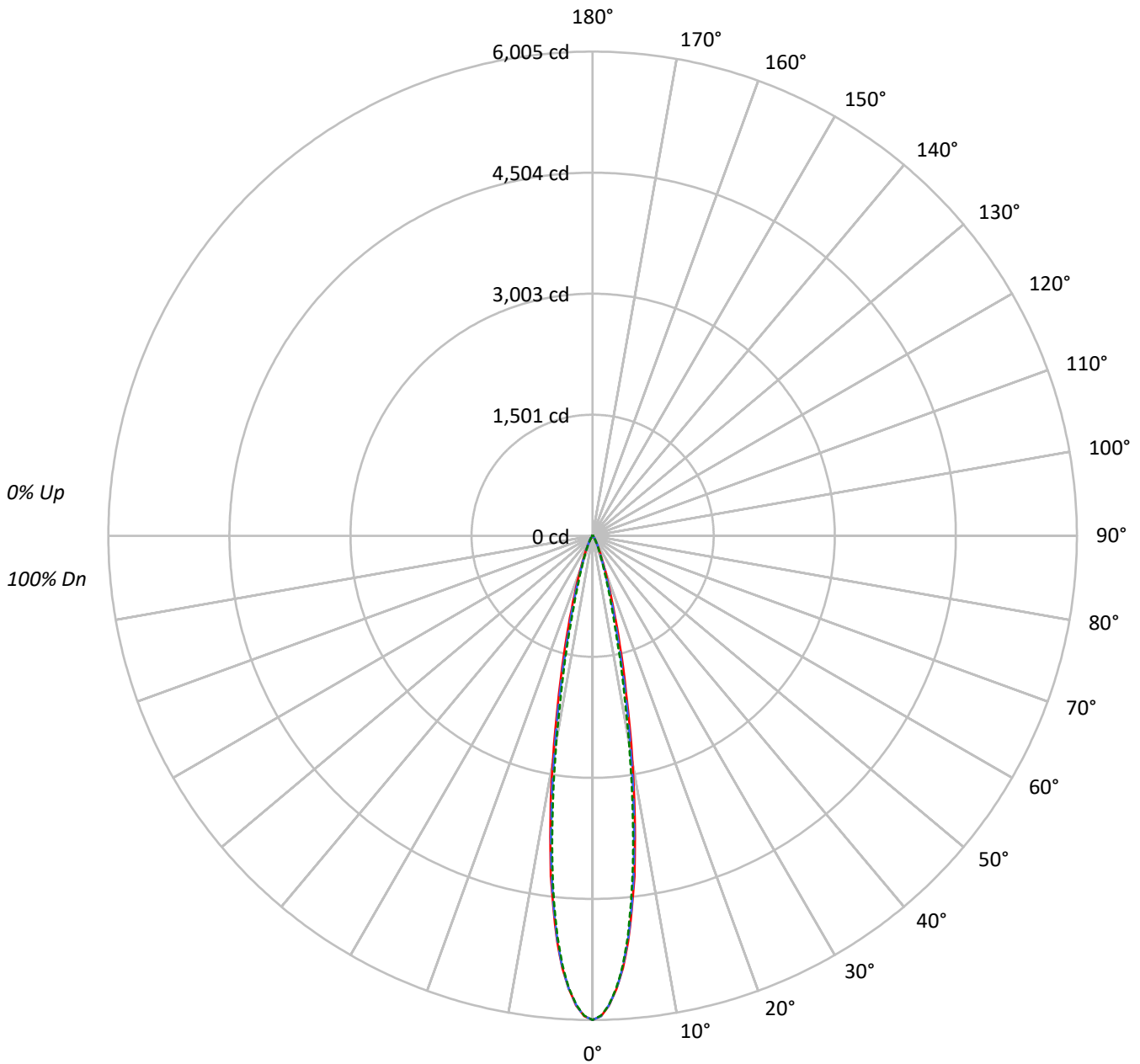
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	2962786	2962786	2962786
5°	2503272	2489901	2471527
10°	1424816	1362095	1292810
15°	590037	522615	460404
20°	224448	196569	179978
25°	99129	95264	84703
30°	45860	50702	40334
35°	24152	28428	22586
40°	10562	12237	7084
45°	4117	3210	4675
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°	401.5	48.2
10°-20°	307.0	36.9
20°-30°	85.4	10.3
30°-40°	27.7	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°	793.9	95.3
0°-40°	821.6	98.7
0°-60°	829.6	99.6
0°-90°	832.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	832.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6005	6005	6005	6005	6005	
5°	5055	5018	5028	4990	4990	409
15°	1155	1115	1023	944	901	337
25°	182	184	175	165	156	91
35°	40	43	47	36	38	26
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°	6005.3	6005.3	6005.3	6005.3	6005.3
1°	5959.3	5937.0	5958.5	5945.8	5953.0
2°	5829.9	5802.1	5824.4	5806.7	5821.5
3°	5628.4	5606.9	5626.7	5604.3	5616.2
4°	5375.8	5344.6	5364.5	5334.5	5341.7
5°	5054.6	5017.5	5027.6	4990.1	4990.5
6°	4649.8	4624.1	4630.0	4571.4	4567.2
7°	4254.0	4193.2	4186.9	4119.9	4106.8
8°	3773.3	3718.1	3700.0	3621.1	3593.3
9°	3312.5	3243.8	3206.7	3115.2	3082.7
10°	2844.1	2774.6	2718.9	2615.6	2580.6
11°	2410.7	2347.9	2278.8	2168.3	2134.1
12°	2008.5	1959.2	1883.3	1776.6	1740.8
13°	1680.1	1623.2	1541.8	1442.7	1411.9
14°	1395.5	1334.4	1253.0	1168.3	1108.4
15°	1155.2	1115.1	1023.2	944.4	901.4
16°	944.0	909.8	830.6	762.3	731.9
17°	774.1	746.7	679.2	625.7	600.4
18°	638.7	604.6	551.5	516.5	496.6
19°	518.1	491.6	452.8	425.8	406.0
20°	427.5	405.6	374.4	350.4	342.8
22.5°	276.1	272.4	252.1	239.0	232.7
25°	182.1	184.2	175.0	164.8	155.6
26°	155.6	156.8	148.4	142.5	130.7
27°	133.2	133.6	133.6	122.7	111.3
28°	108.8	113.4	109.2	104.1	93.2
29°	93.2	99.1	97.0	91.9	81.4
30°	80.5	84.7	89.0	80.9	70.8
32.5°	56.5	60.3	64.9	60.7	52.3
35°	40.1	43.4	47.2	35.8	37.5
37.5°	27.4	33.3	32.0	29.1	24.9
40°	16.4	17.3	19.0	20.2	11.0
42.5°	11.8	13.9	12.6	14.3	5.1
45°	5.9	8.4	4.6	4.6	6.7
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)