

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: P281190

Luminaire Tested: **LDA2B109050D010 EU2B10SP159050 2LBALD1WMH**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281190  
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: LDA2B109050D010 EU2B10SP159050 2LBALD1WMH  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in  
ADJ spun Refl w/lens Self-Flanged, WMH  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 950.6 lumens  
Efficiency: N/A  
Efficacy: 95.1 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

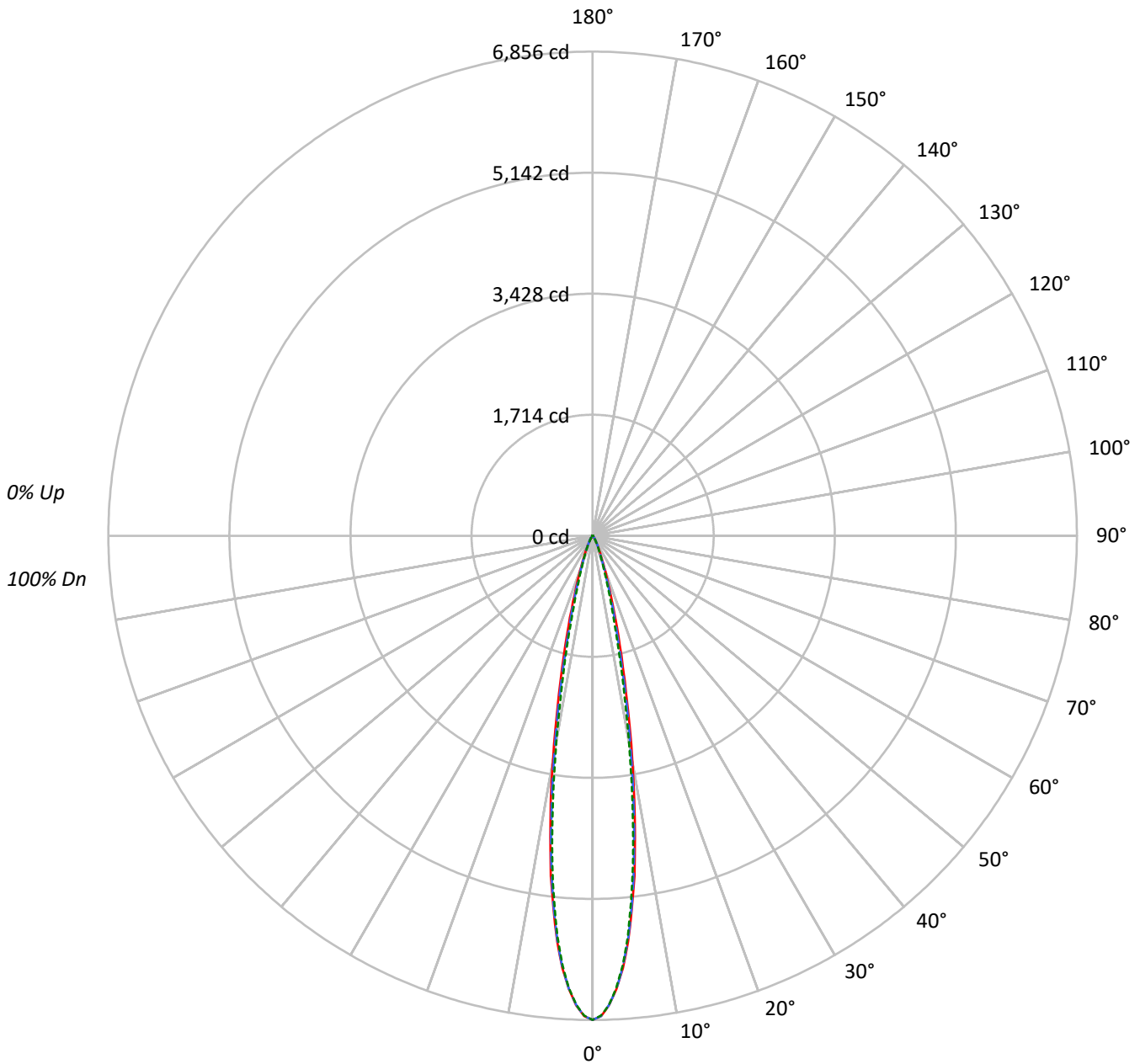
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
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													
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	88	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°	3382242	3382242	3382242
5°	2857670	2842417	2821418
10°	1626558	1554919	1475866
15°	673547	596625	525578
20°	256212	224396	205442
25°	113173	108710	96679
30°	52354	57880	46088
35°	27524	32463	25778
40°	12108	13976	8050
45°	4675	3698	5372
50°	2226	2610	3684
55°	0	1634	0
60°	0	0	987
65°	0	0	0
70°	0	721	0
75°	0	0	0
80°	2841	0	0
85°	27171	24341	10755



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	458.4	48.2
10°-20°	350.4	36.9
20°-30°	97.4	10.3
30°-40°	31.7	3.3
40°-50°	7.0	0.7
50°-60°	2.1	0.2
60°-70°	1.2	0.1
70°-80°	0.7	0.1
80°-90°	1.5	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°	906.3	95.3
0°-40°	937.9	98.7
0°-60°	947.1	99.6
0°-90°	950.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	950.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6856	6856	6856	6856	6856	
5°	5770	5728	5739	5697	5697	466
15°	1319	1273	1168	1078	1029	385
25°	208	210	200	188	178	104
35°	46	50	54	41	43	30
45°	7	10	5	5	8	7
55°	0	3	2	1	0	2
65°	0	2	0	0	0	1
75°	0	0	0	1	0	0
85°	5	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°	6855.5	6855.5	6855.5	6855.5	6855.5
1°	6803.0	6777.5	6802.1	6787.6	6795.8
2°	6655.3	6623.5	6649.0	6628.8	6645.7
3°	6425.2	6400.7	6423.3	6397.8	6411.3
4°	6136.9	6101.3	6123.9	6089.8	6098.0
5°	5770.2	5727.8	5739.4	5696.6	5697.0
6°	5308.2	5278.8	5285.5	5218.6	5213.8
7°	4856.2	4786.9	4779.7	4703.2	4688.3
8°	4307.6	4244.5	4223.8	4133.8	4102.0
9°	3781.5	3703.1	3660.7	3556.3	3519.2
10°	3246.8	3167.4	3103.8	2985.9	2946.0
11°	2752.0	2680.3	2601.4	2475.3	2436.3
12°	2292.9	2236.6	2149.9	2028.2	1987.2
13°	1917.9	1853.0	1760.1	1647.0	1611.8
14°	1593.1	1523.3	1430.4	1333.7	1265.3
15°	1318.7	1273.0	1168.1	1078.1	1029.0
16°	1077.6	1038.6	948.1	870.2	835.5
17°	883.6	852.4	775.4	714.2	685.4
18°	729.2	690.2	629.5	589.6	567.0
19°	591.5	561.2	516.9	486.1	463.5
20°	488.0	463.0	427.4	400.0	391.3
22.5°	315.2	310.9	287.8	272.9	265.7
25°	207.9	210.3	199.7	188.2	177.6
26°	177.6	179.0	169.4	162.7	149.2
27°	152.1	152.6	152.6	140.1	127.1
28°	124.2	129.5	124.7	118.9	106.4
29°	106.4	113.1	110.7	104.9	92.9
30°	91.9	96.7	101.6	92.4	80.9
32.5°	64.5	68.8	74.1	69.3	59.7
35°	45.7	49.6	53.9	40.9	42.8
37.5°	31.3	38.0	36.6	33.2	28.4
40°	18.8	19.7	21.7	23.1	12.5
42.5°	13.5	15.9	14.4	16.4	5.8
45°	6.7	9.6	5.3	5.3	7.7
47.5°	4.8	8.2	2.9	2.9	1.0
50°	2.9	6.3	3.4	1.4	4.8
52.5°	4.8	5.8	3.9	4.3	1.0
55°	0.0	2.9	1.9	1.0	0.0
57.5°	1.9	3.4	1.9	1.0	1.9
60°	0.0	0.0	0.0	0.5	1.0
62.5°	0.0	1.0	0.0	1.4	1.9
65°	0.0	1.9	0.0	0.0	0.0
67.5°	2.9	3.4	1.9	3.9	5.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	1.0	0.0
77.5°	0.0	4.8	1.4	1.4	1.9
80°	1.0	0.0	0.0	0.5	0.0
82.5°	0.0	3.9	0.5	1.9	2.9
85°	4.8	2.4	4.3	2.4	1.9
87.5°	0.0	0.5	1.0	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°	1.0	0.0	0.0	0.0	0.0



(END OF REPORT)