

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: P211730

Luminaire Tested: **LE\_4B20D010 EC4B10209040 4LBCSM1B**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211730  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35319)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LE\_4B20D010 EC4B10209040 4LBCSM1B  
Description: PORTFOLIO 4 INCH CYLINDER  
SHALLOW DISTRIBUTION WITH CAST MATTE METALLIC SILVER TRIM  
WATTAGE D010TR-21.86W DE010-20.46W D5LT-21.24W DMX-20.89W DL2-22.5W  
DL3-21.8 6W DLE-22.46W  
Light Source: HIGH LUMEN LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1991.3 lumens  
Efficiency: N/A  
Efficacy: 95.7 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.23 / 1.33  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

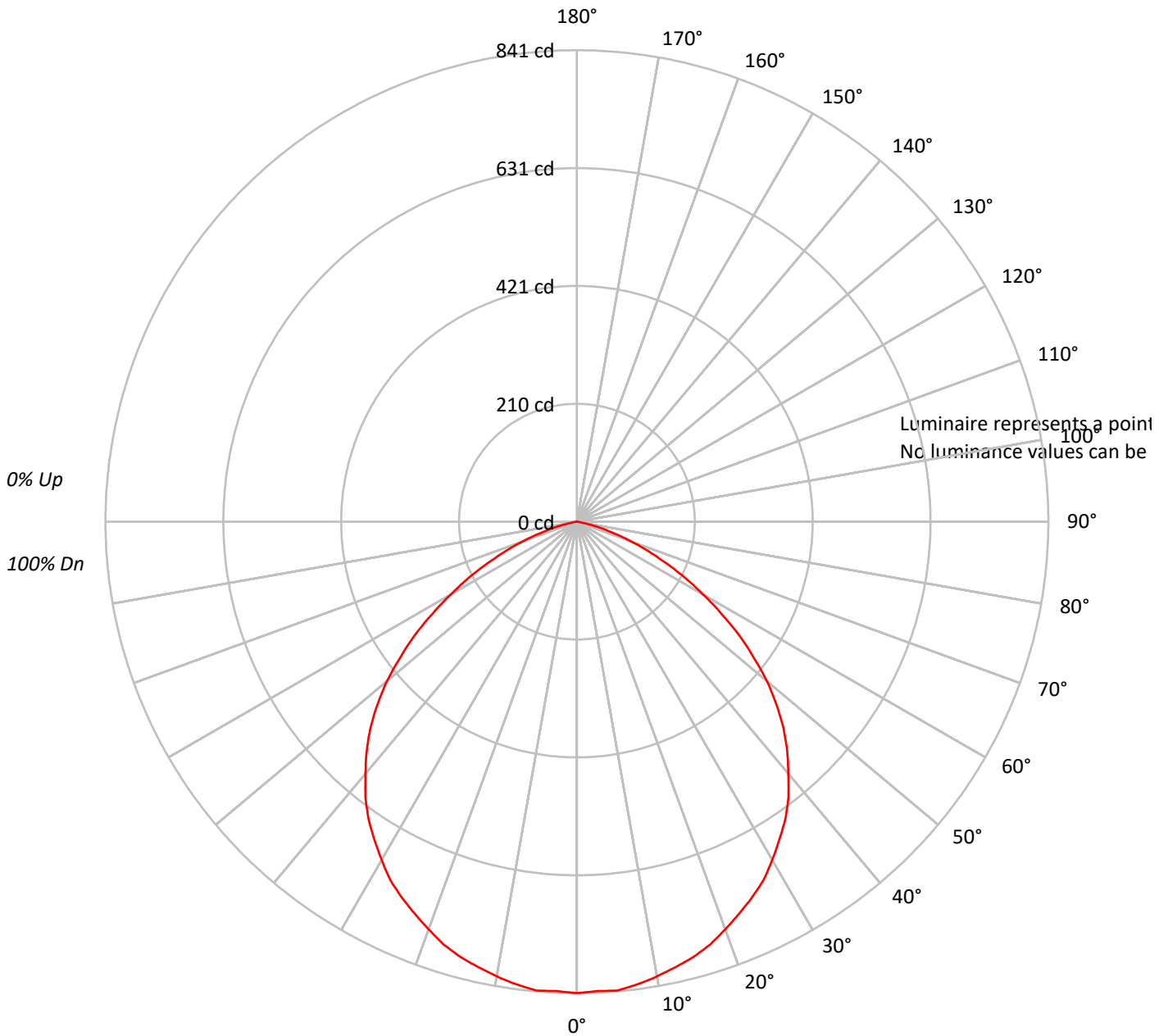
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	88	88	88	88
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75	75	75	75
3	93	84	77	71	91	83	76	70	80	74	69	77	72	68	74	70	67	65	65	65	65
4	86	75	67	61	84	74	66	61	71	65	60	69	63	59	67	62	58	56	56	56	56
5	79	67	59	53	77	66	59	53	64	57	52	62	56	52	61	55	51	49	49	49	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43	43	43	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	39	39	39	39
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	46	41	36	35	35	35	35
9	60	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31	31	31	31
10	56	43	35	30	55	43	35	30	42	35	30	41	34	30	40	34	30	28	28	28	28

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.5	4.0
10°-20°	226.6	11.4
20°-30°	340.6	17.1
30°-40°	404.1	20.3
40°-50°	399.9	20.1
50°-60°	314.1	15.8
60°-70°	176.1	8.8
70°-80°	49.5	2.5
80°-90°	0.8	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°	646.7	32.5
0°-40°	1050.9	52.8
0°-60°	1764.9	88.6
0°-90°	1991.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1991.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	841	
5°	839	80
15°	804	227
25°	740	341
35°	648	404
45°	521	400
55°	354	314
65°	176	176
75°	43	49
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	840.9
2.5°	838.0
5°	839.4
7.5°	832.3
10°	823.7
12.5°	813.7
15°	803.8
17.5°	790.9
20°	773.7
22.5°	756.7
25°	739.5
27.5°	720.9
30°	696.7
32.5°	672.3
35°	648.1
37.5°	619.6
40°	586.7
42.5°	555.3
45°	521.1
47.5°	482.6
50°	442.5
52.5°	396.8
55°	354.0
57.5°	305.5
60°	259.8
62.5°	218.4
65°	175.6
67.5°	138.5
70°	102.8
72.5°	69.9
75°	42.8
77.5°	21.5
80°	5.7
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)