

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: P211601

Luminaire Tested: **LE\_4B20D010 EC4B10209030 4LBS1B**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211601  
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 EC4B10209030 4LBS1B  
Description: PORTFOLIO 4 INCH CYLINDER  
SHALLOW DISTRIBUTION WITH SPECULAR BLACK 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: 1732.1 lumens  
Efficiency: N/A  
Efficacy: 83.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.3  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

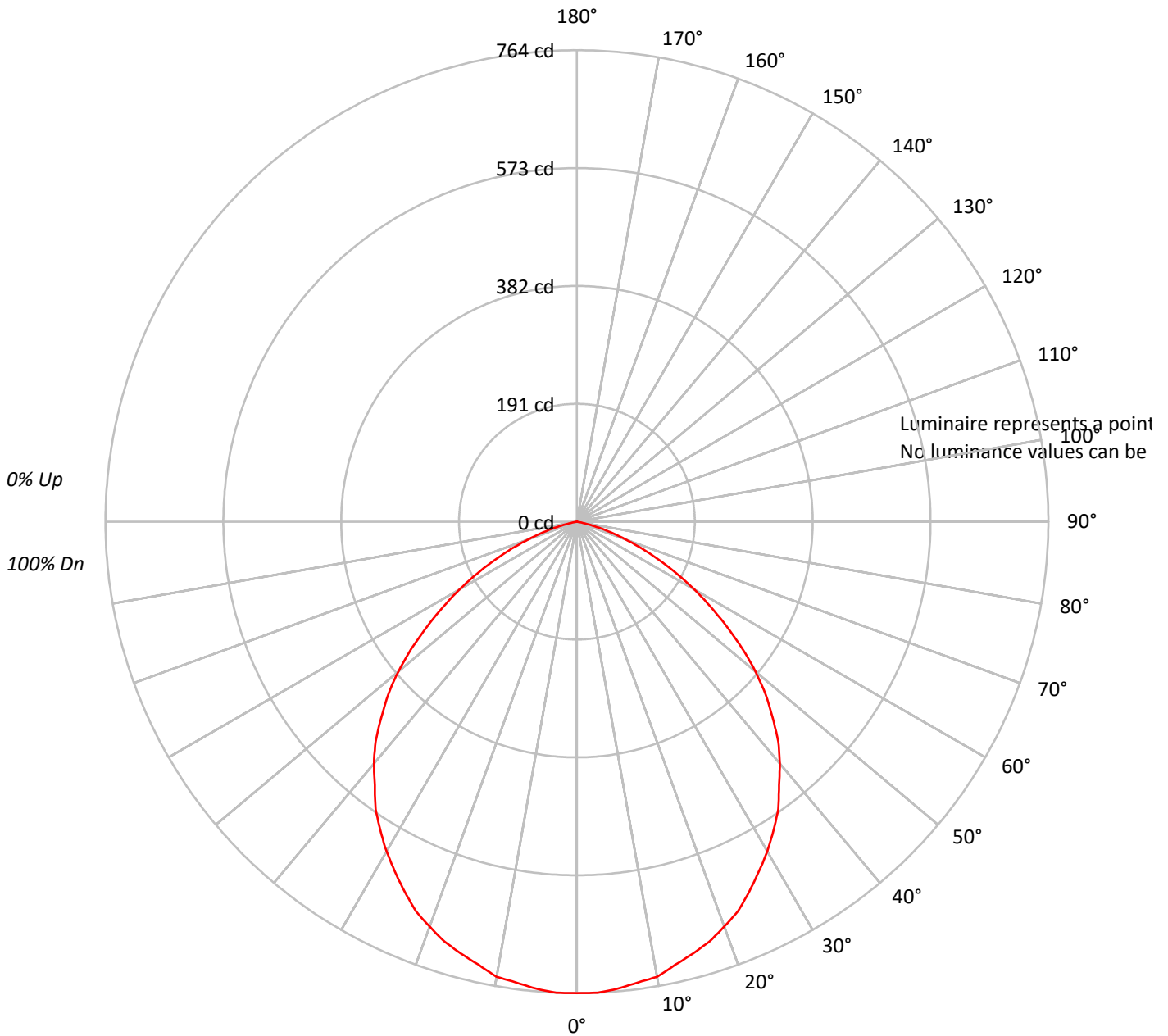
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
1	111	107	103	100	108	105	101	98	100	98	95	97	94	93	93	91	90	88			88
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78	76			76
3	94	84	77	72	91	83	76	71	80	74	70	77	73	69	75	71	67	65			65
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57			57
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50			50
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44			44
7	69	56	48	42	67	55	48	42	54	47	42	52	46	41	51	45	41	39			39
8	64	51	43	38	63	51	43	38	49	42	37	48	42	37	47	41	37	35			35
9	60	47	39	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32			32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	40	35	31	29			29

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.1	4.2
10°-20°	204.6	11.8
20°-30°	304.4	17.6
30°-40°	354.2	20.5
40°-50°	345.3	19.9
50°-60°	265.5	15.3
60°-70°	146.8	8.5
70°-80°	38.9	2.2
80°-90°	0.3	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°	581.2	33.6
0°-40°	935.4	54.0
0°-60°	1546.2	89.3
0°-90°	1732.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1732.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	764	
5°	760	72
15°	725	205
25°	661	304
35°	569	354
45°	448	345
55°	296	266
65°	147	147
75°	33	39
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	764.1
2.5°	764.1
5°	759.7
7.5°	753.2
10°	748.8
12.5°	735.6
15°	724.7
17.5°	713.6
20°	698.2
22.5°	682.9
25°	661.0
27.5°	638.9
30°	617.0
32.5°	592.9
35°	568.7
37.5°	538.0
40°	511.6
42.5°	483.0
45°	448.0
47.5°	415.0
50°	377.7
52.5°	338.1
55°	296.4
57.5°	256.9
60°	219.6
62.5°	182.2
65°	147.1
67.5°	114.1
70°	83.4
72.5°	57.1
75°	32.9
77.5°	15.4
80°	2.2
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)