

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: P211699

Luminaire Tested: **LSR4B20D010BZ EC4B10209035 4LBWMW1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211699  
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: LSR4B20D010BZ EC4B10209035 4LBWMW1  
Description: PORTFOLIO 4 INCH CYLINDER  
WIDE DISTRIBUTION WITH MATTE WHITE 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: 1532.3 lumens  
Efficiency: N/A  
Efficacy: 73.7 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.1 / 1.09  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

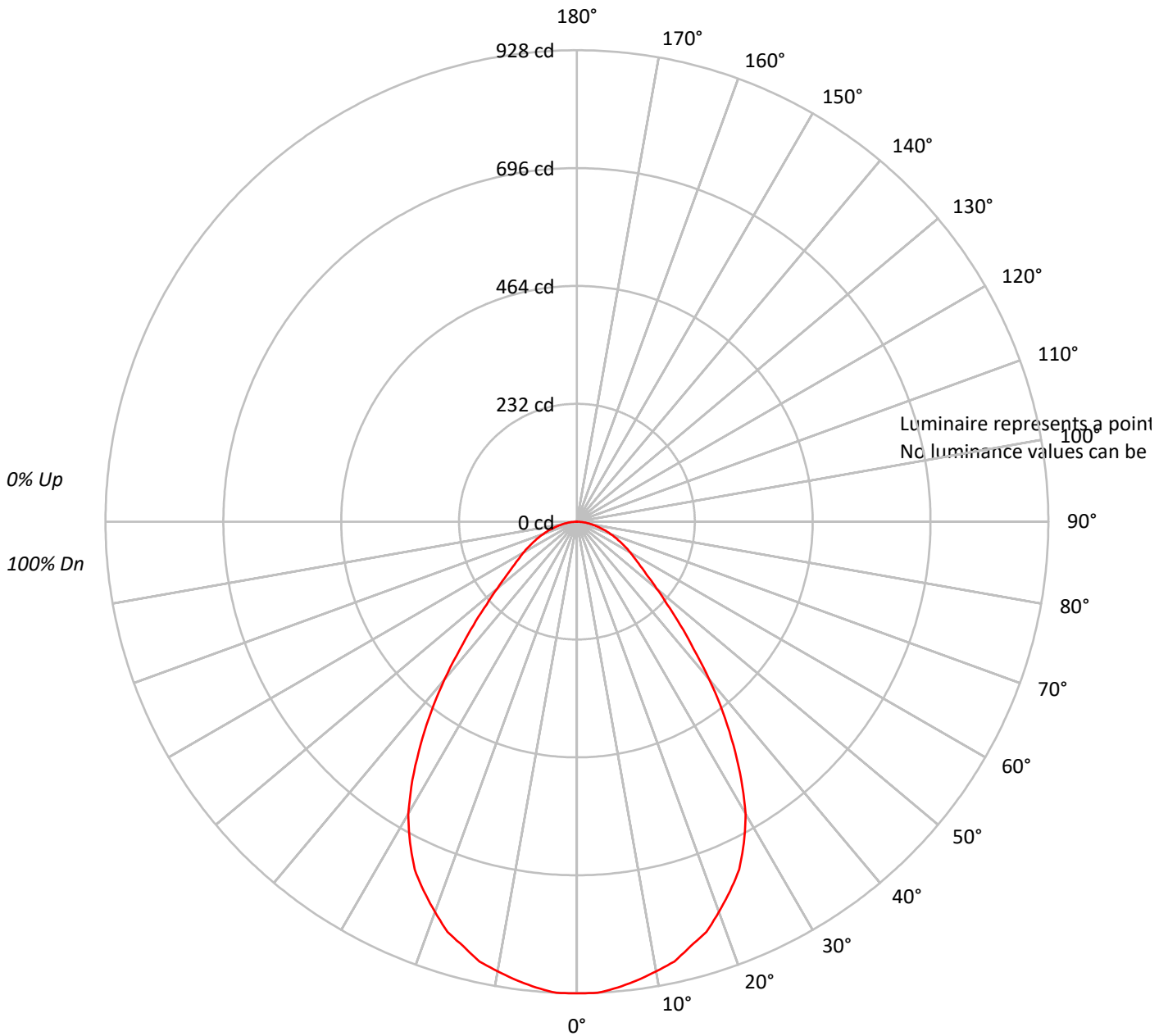
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
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																			
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88																			
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	80	78																			
3	96	87	80	75	93	85	79	74	83	77	73	80	76	72	78	74	71	69																			
4	89	79	72	66	87	78	71	66	75	69	65	73	68	64	71	67	63	61																			
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55																			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	60	55	51	50																			
7	73	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45																			
8	68	56	49	44	67	56	49	44	54	48	43	53	47	43	52	47	43	41																			
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	43	39	38																			
10	61	49	42	37	59	48	41	37	47	41	37	46	41	37	46	40	36	35																			

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.2	5.7
10°-20°	243.8	15.9
20°-30°	344.6	22.5
30°-40°	333.7	21.8
40°-50°	225.2	14.7
50°-60°	139.8	9.1
60°-70°	93.4	6.1
70°-80°	51.1	3.3
80°-90°	13.5	0.9
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°	675.5	44.1
0°-40°	1009.3	65.9
0°-60°	1374.3	89.7
0°-90°	1532.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1532.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	928	
5°	921	87
15°	865	244
25°	756	345
35°	537	334
45°	288	225
55°	153	140
65°	94	93
75°	48	51
85°	12	14
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	928.5
2.5°	928.5
5°	920.6
7.5°	910.6
10°	898.7
12.5°	886.8
15°	864.9
17.5°	847.0
20°	817.2
22.5°	787.4
25°	755.6
27.5°	711.8
30°	664.1
32.5°	602.5
35°	536.8
37.5°	471.2
40°	405.6
42.5°	340.0
45°	288.3
47.5°	240.6
50°	204.8
52.5°	175.0
55°	153.1
57.5°	135.2
60°	121.3
62.5°	107.4
65°	93.5
67.5°	81.5
70°	69.6
72.5°	59.6
75°	47.7
77.5°	37.8
80°	27.8
82.5°	19.9
85°	11.9
87.5°	4.0
90°	0.0



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— 0°-180°







(END OF REPORT)