

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: P211447

Luminaire Tested: **LSR4B20D010BZ EC4B10209024 4LBMMW1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211447  
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 EC4B10209024 4LBMMW1  
Description: PORTFOLIO 4 INCH CYLINDER  
MEDIUM 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: 1145.1 lumens  
Efficiency: N/A  
Efficacy: 55.1 lumens/watt  
Spacing Criteria (0/90/45): 0.99 / 0.99 / 0.97  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

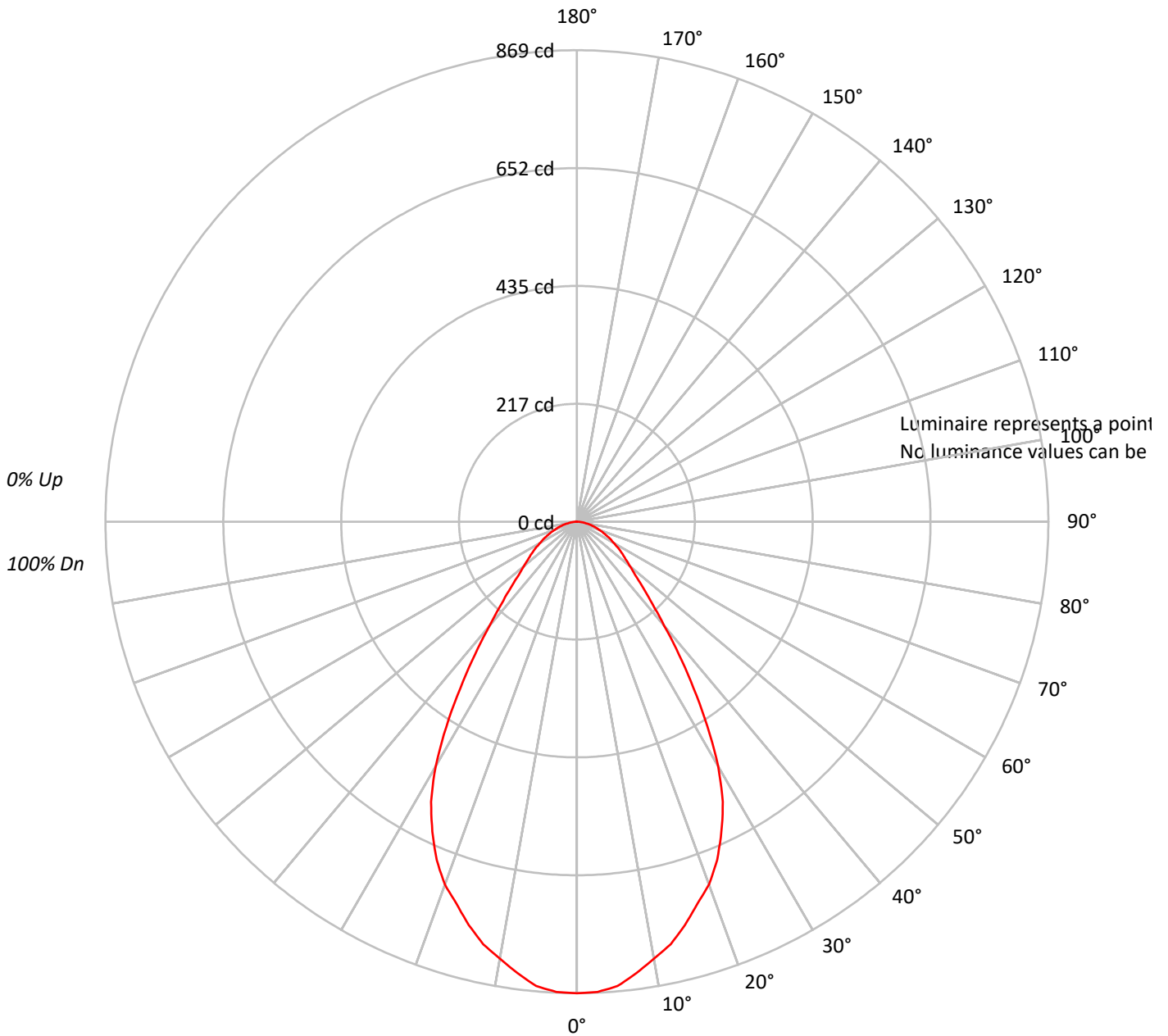
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89																			
2	104	98	92	88	102	96	91	87	93	89	85	89	86	83	87	84	81	80																			
3	97	89	83	77	95	87	82	77	85	80	76	82	78	74	80	76	73	71																			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64																			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58																			
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53																			
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49																			
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	45																			
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42																			
10	63	52	45	41	62	51	45	41	51	45	40	50	44	40	49	44	40	39																			

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.6	7.0
10°-20°	216.0	18.9
20°-30°	287.2	25.1
30°-40°	234.9	20.5
40°-50°	136.8	11.9
50°-60°	90.7	7.9
60°-70°	59.7	5.2
70°-80°	31.5	2.7
80°-90°	7.7	0.7
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°	583.8	51.0
0°-40°	818.7	71.5
0°-60°	1046.3	91.4
0°-90°	1145.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1145.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	869	
5°	859	81
15°	770	216
25°	630	287
35°	375	235
45°	172	137
55°	101	91
65°	60	60
75°	30	31
85°	7	8
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	869.3
2.5°	867.6
5°	859.3
7.5°	839.4
10°	817.8
12.5°	797.9
15°	769.7
17.5°	738.2
20°	711.7
22.5°	675.2
25°	630.4
27.5°	582.3
30°	520.9
32.5°	447.9
35°	374.9
37.5°	308.6
40°	250.5
42.5°	205.7
45°	172.5
47.5°	146.0
50°	127.7
52.5°	112.8
55°	101.2
57.5°	89.6
60°	78.0
62.5°	69.7
65°	59.7
67.5°	51.4
70°	43.1
72.5°	36.5
75°	29.9
77.5°	23.2
80°	16.6
82.5°	11.6
85°	6.6
87.5°	1.7
90°	0.0



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— 0°-180°







(END OF REPORT)