

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: P211785

Luminaire Tested: **LSR4B20D010BZ EC4B10208050 4LBWLI1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211785  
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 EC4B10208050 4LBWL1  
Description: PORTFOLIO 4 INCH CYLINDER  
WIDE DISTRIBUTION WITH SPECULAR CLEAR 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: 2076.2 lumens  
Efficiency: N/A  
Efficacy: 99.8 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.18  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

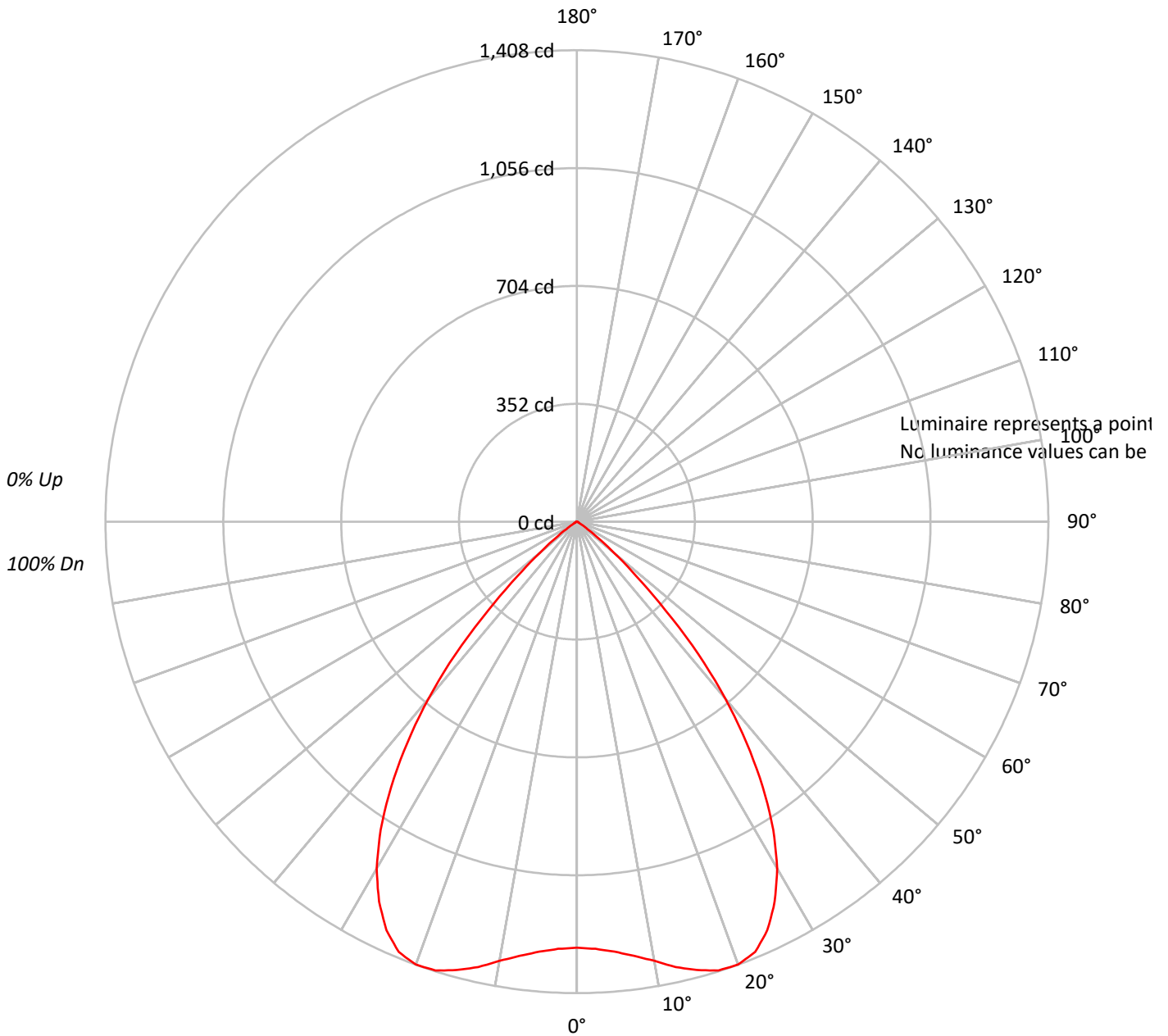
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92																			
2	106	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86	84																			
3	100	93	87	83	98	92	86	82	89	85	81	86	83	80	84	81	78	77																			
4	94	86	79	75	92	84	79	74	82	77	73	80	76	72	78	75	72	70																			
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64																			
6	83	73	66	62	82	72	66	61	71	65	61	69	64	60	68	63	60	58																			
7	78	68	61	56	77	67	61	56	66	60	56	64	59	55	63	59	55	54																			
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49																			
9	69	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45																			
10	66	55	48	44	65	54	48	44	53	48	44	53	47	44	52	47	43	42																			

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.4	6.0
10°-20°	392.6	18.9
20°-30°	612.5	29.5
30°-40°	595.9	28.7
40°-50°	297.6	14.3
50°-60°	46.0	2.2
60°-70°	5.6	0.3
70°-80°	1.6	0.1
80°-90°	0.0	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°	1129.5	54.4
0°-40°	1725.4	83.1
0°-60°	2069.1	99.7
0°-90°	2076.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2076.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1272	
5°	1289	124
15°	1386	393
25°	1346	612
35°	968	596
45°	373	298
55°	38	46
65°	5	6
75°	2	2
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1272.1
2.5°	1276.9
5°	1288.8
7.5°	1307.8
10°	1331.6
12.5°	1362.5
15°	1386.3
17.5°	1405.3
20°	1407.7
22.5°	1391.0
25°	1345.9
27.5°	1279.3
30°	1196.1
32.5°	1091.4
35°	967.8
37.5°	832.2
40°	689.6
42.5°	537.4
45°	373.3
47.5°	240.2
50°	145.0
52.5°	78.5
55°	38.0
57.5°	16.6
60°	9.5
62.5°	7.1
65°	4.8
67.5°	4.8
70°	2.4
72.5°	2.4
75°	2.4
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)