

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: P211680

Luminaire Tested: **LSR4B20D010BZ EC4B10209035 4LBMWH1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211680  
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 4LBMWH1  
Description: PORTFOLIO 4 INCH CYLINDER  
MEDIUM DISTRIBUTION WITH WHEAT 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: 1347.3 lumens  
Efficiency: N/A  
Efficacy: 64.8 lumens/watt  
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.87  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

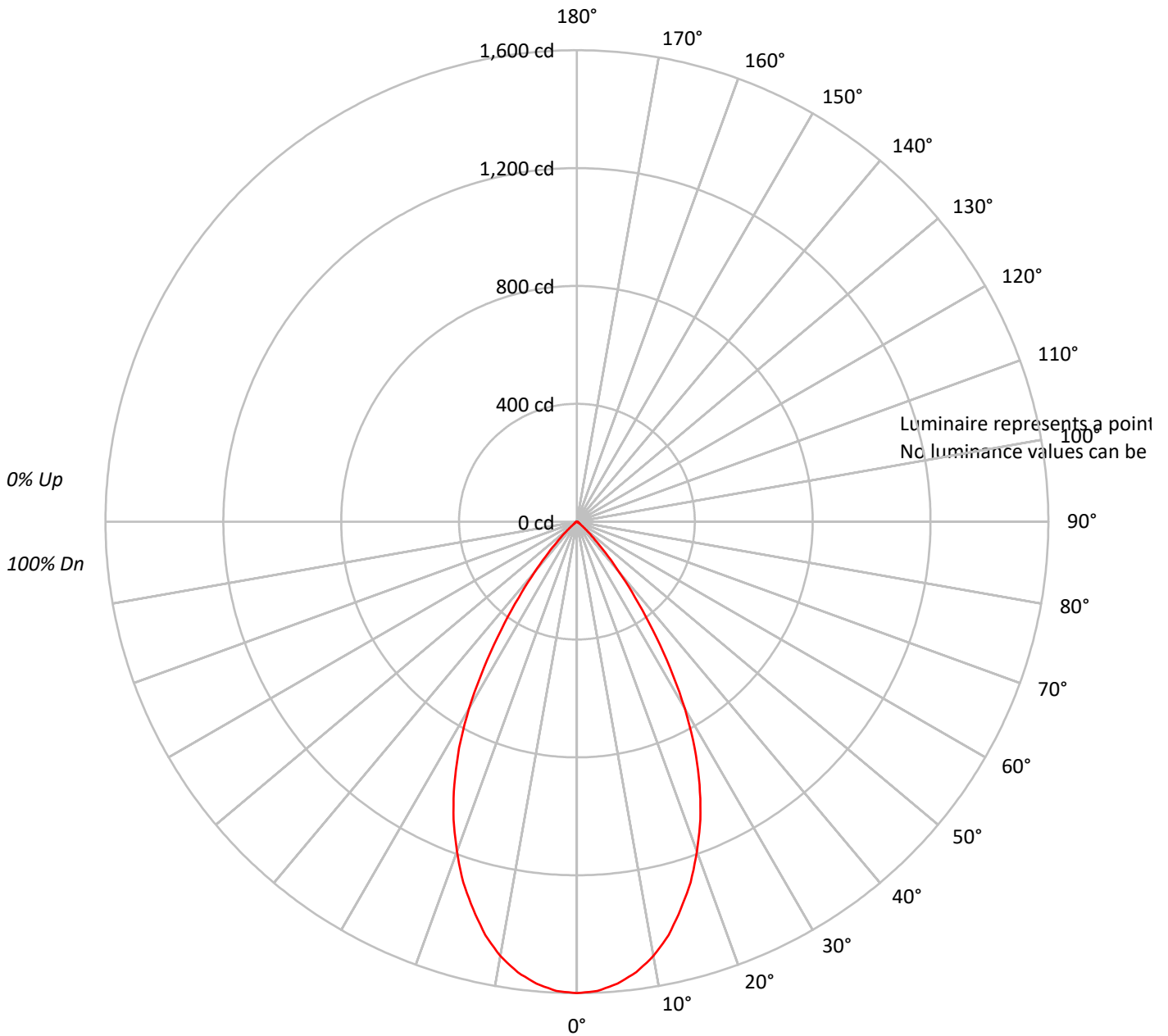
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	114	111	108	106	111	109	106	105	105	103	101	101	100	98	98	96	95	94																			
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87																			
3	103	96	91	88	101	95	90	87	92	89	85	90	87	84	88	85	83	81																			
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77	76																			
5	93	84	79	74	91	84	78	74	82	77	73	80	76	73	79	75	72	71																			
6	88	79	73	69	87	79	73	69	77	72	68	76	71	68	74	71	68	66																			
7	84	75	69	65	82	74	68	64	73	68	64	72	67	64	70	66	63	62																			
8	80	70	64	60	79	70	64	60	69	64	60	68	63	60	67	63	59	58																			
9	76	66	61	57	75	66	60	57	65	60	56	64	60	56	63	59	56	55																			
10	73	63	57	53	72	62	57	53	62	57	53	61	56	53	60	56	53	52																			

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.8	11.0
10°-20°	380.0	28.2
20°-30°	445.9	33.1
30°-40°	282.2	20.9
40°-50°	75.6	5.6
50°-60°	10.6	0.8
60°-70°	3.9	0.3
70°-80°	1.3	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°	973.7	72.3
0°-40°	1255.9	93.2
0°-60°	1342.1	99.6
0°-90°	1347.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1347.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1600	
5°	1574	148
15°	1361	380
25°	985	446
35°	448	282
45°	86	76
55°	10	11
65°	4	4
75°	2	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1600.0
2.5°	1594.1
5°	1574.2
7.5°	1542.3
10°	1496.6
12.5°	1436.9
15°	1361.2
17.5°	1283.6
20°	1190.1
22.5°	1094.6
25°	985.1
27.5°	865.7
30°	732.4
32.5°	587.1
35°	447.8
37.5°	324.4
40°	222.9
42.5°	143.3
45°	85.6
47.5°	47.8
50°	25.9
52.5°	13.9
55°	10.0
57.5°	8.0
60°	6.0
62.5°	6.0
65°	4.0
67.5°	2.0
70°	2.0
72.5°	2.0
75°	2.0
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)