

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: P211444

Luminaire Tested: **LSR4B20D010BZ EC4B10209024 4LBMGPH1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211444  
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 4LBMGPH1  
Description: PORTFOLIO 4 INCH CYLINDER  
MEDIUM DISTRIBUTION WITH GRAPHITE HAZE 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: 790.0 lumens  
Efficiency: N/A  
Efficacy: 38.0 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 0.94 / 0.92  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

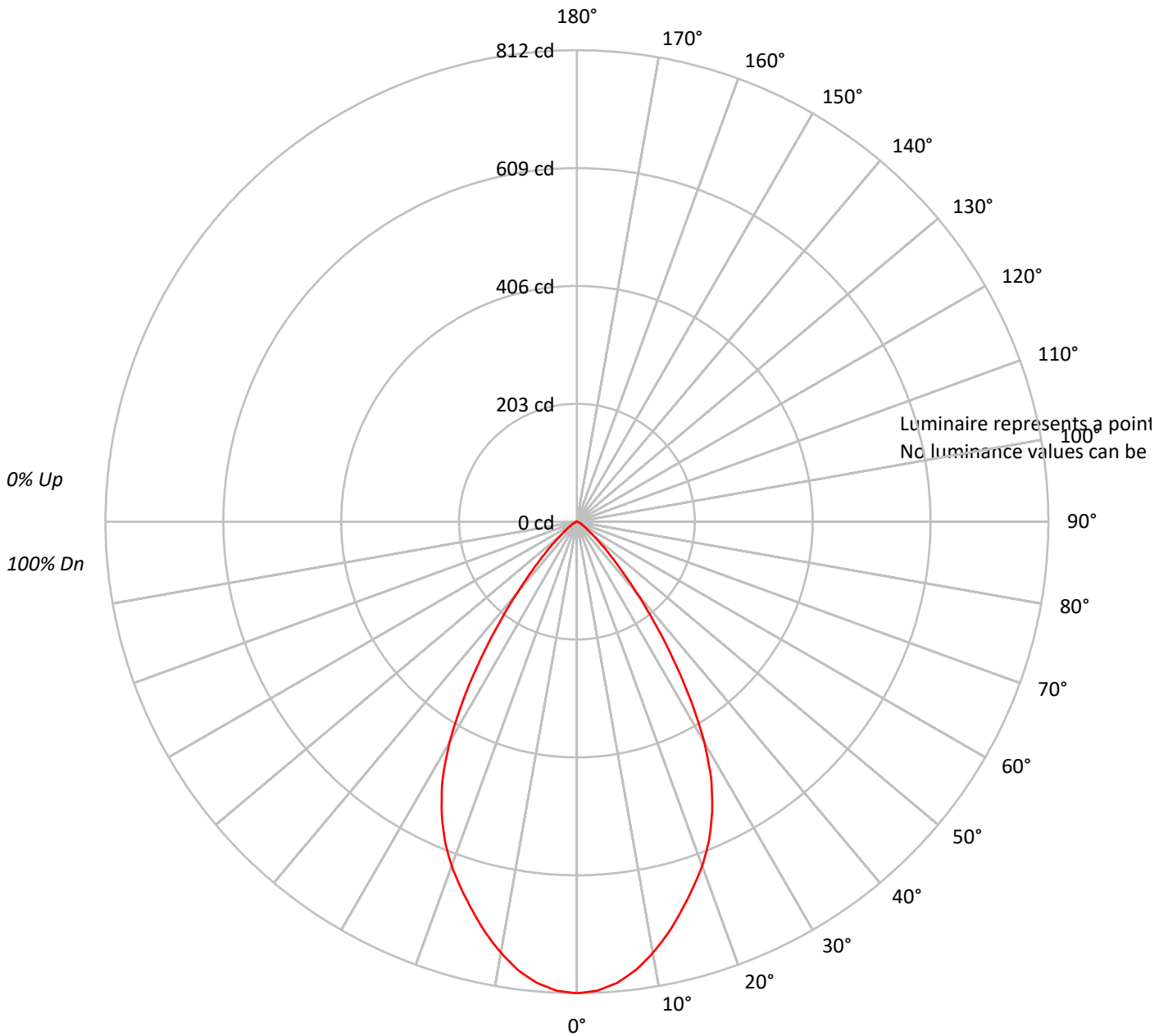
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	113	110	108	105	111	108	106	104	104	102	101		100	99	98		97	96	95	93
2	107	102	98	94	105	100	97	93	97	94	91		94	92	89		91	89	88	86
3	102	95	90	85	100	93	89	85	91	87	83		88	85	82		86	83	81	79
4	96	88	82	78	94	87	82	78	85	80	77		83	79	76		81	78	75	73
5	91	82	76	72	89	81	76	71	79	74	71		78	73	70		76	72	69	68
6	86	77	71	66	85	76	70	66	74	69	65		73	68	65		72	68	64	63
7	82	72	66	61	80	71	65	61	70	65	61		69	64	60		68	63	60	59
8	77	67	61	57	76	67	61	57	66	60	57		65	60	56		64	59	56	55
9	73	63	57	53	72	63	57	53	62	57	53		61	56	53		60	56	52	51
10	70	60	54	50	69	59	54	50	59	53	50		58	53	49		57	52	49	48

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.7	9.5
10°-20°	194.9	24.7
20°-30°	250.0	31.6
30°-40°	180.7	22.9
40°-50°	64.8	8.2
50°-60°	17.5	2.2
60°-70°	5.7	0.7
70°-80°	1.8	0.2
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°	519.6	65.8
0°-40°	700.2	88.6
0°-60°	782.5	99.1
0°-90°	790.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	790.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	812	
5°	797	75
15°	694	195
25°	551	250
35°	289	181
45°	78	65
55°	18	17
65°	5	6
75°	2	2
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	812.1
2.5°	808.8
5°	797.2
7.5°	778.9
10°	754.0
12.5°	725.8
15°	694.2
17.5°	662.6
20°	631.1
22.5°	594.6
25°	551.4
27.5°	501.6
30°	438.4
32.5°	365.4
35°	289.0
37.5°	219.2
40°	159.4
42.5°	112.9
45°	78.1
47.5°	53.1
50°	34.9
52.5°	24.9
55°	18.3
57.5°	13.3
60°	10.0
62.5°	8.3
65°	5.0
67.5°	3.3
70°	3.3
72.5°	1.7
75°	1.7
77.5°	1.7
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)