

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: P210942

Luminaire Tested: **LSR4B10D010BZ EC4B10209035 4LBWGPH1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P210942  
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: LSR4B10D010BZ EC4B10209035 4LBWGPH1  
Description: PORTFOLIO 4 INCH CYLINDER  
WIDE DISTRIBUTIONWITH GRAPHITE HAZE TRIM  
WATTAGE D010TR-10.05W DE010-10.58W D5LT-10.2W DMX-10.6W DL2-11.8W  
DL3-11.1W DLE-11.39W  
Light Source: HIGH LUMEN LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 609.1 lumens  
Efficiency: N/A  
Efficacy: 61.5 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 1.12 / 1.08  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

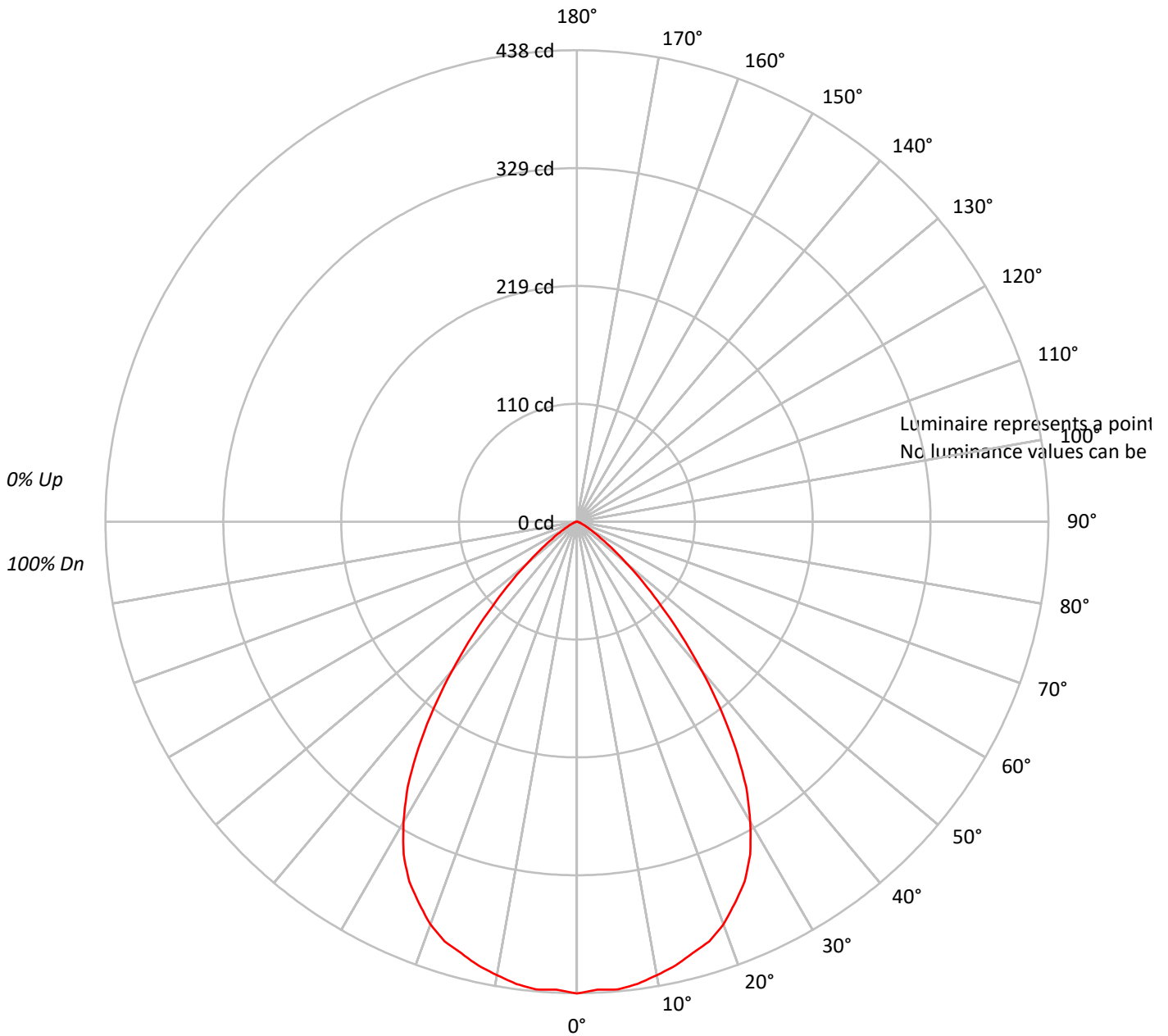
Input Watts (W): 9.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	0													
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100						100													
1	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92						92													
2	106	100	96	92	104	99	95	91	95	92	89	92	90	87	90	87	85	83						83													
3	100	92	87	82	98	91	86	81	88	84	80	86	82	79	83	80	77	76						76													
4	94	85	78	74	92	84	78	73	81	76	72	79	75	71	77	74	71	69						69													
5	88	78	72	67	86	77	71	66	75	70	66	74	69	65	72	68	64	63						63													
6	83	72	65	61	81	71	65	60	70	64	60	68	63	59	67	63	59	57						57													
7	78	67	60	55	76	66	60	55	65	59	55	64	58	55	63	58	54	53						53													
8	73	62	56	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48						48													
9	69	58	51	47	68	58	51	47	57	51	47	56	50	46	55	50	46	45						45													
10	65	54	48	43	64	54	48	43	53	47	43	52	47	43	51	46	43	41						41													

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.3	6.8
10°-20°	117.2	19.2
20°-30°	168.1	27.6
30°-40°	158.2	26.0
40°-50°	87.4	14.3
50°-60°	28.0	4.6
60°-70°	7.0	1.1
70°-80°	1.7	0.3
80°-90°	0.1	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°	326.6	53.6
0°-40°	484.8	79.6
0°-60°	600.3	98.5
0°-90°	609.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	609.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	438	
5°	436	41
15°	415	117
25°	369	168
35°	257	158
45°	111	87
55°	28	28
65°	6	7
75°	1	2
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	438.4
2.5°	435.2
5°	436.3
7.5°	433.1
10°	427.8
12.5°	422.5
15°	415.1
17.5°	408.8
20°	398.2
22.5°	383.5
25°	368.7
27.5°	348.6
30°	322.2
32.5°	292.6
35°	256.7
37.5°	218.7
40°	179.6
42.5°	143.7
45°	110.9
47.5°	83.5
50°	60.2
52.5°	42.3
55°	28.5
57.5°	19.0
60°	13.7
62.5°	9.5
65°	6.3
67.5°	4.2
70°	3.2
72.5°	2.1
75°	1.1
77.5°	1.1
80°	1.1
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)