

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: P210700

Luminaire Tested: **LSR4B10D010BZ EC4B10209024 4LBNWH1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P210700  
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 EC4B10209024 4LBNWH1  
Description: PORTFOLIO 4 INCH CYLINDER  
NARROW DISTRIBUTION WITH WHEAT 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: 509.3 lumens  
Efficiency: N/A  
Efficacy: 51.4 lumens/watt  
Spacing Criteria (0/90/45): 0.53 / 0.53 / 0.62  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

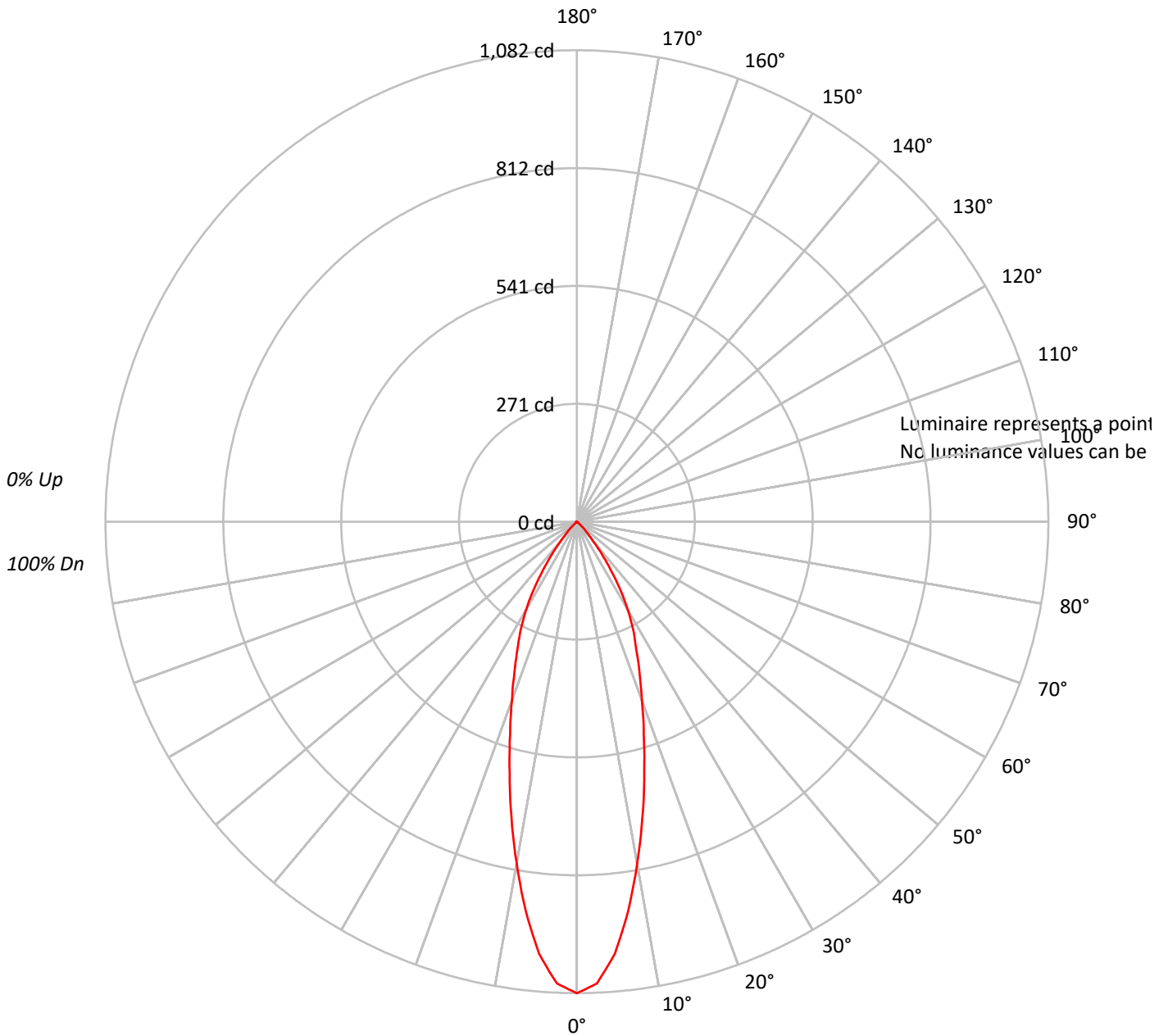
Input Watts (W): 9.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P210700

CATALOG NUMBER: LSR4B10D010BZ EC4B10209024 4LBNWH1

### Luminous Intensity Polar Plot





TEST NUMBER: P210700

CATALOG NUMBER: LSR4B10D010BZ EC4B10209024 4LBNWH1

**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	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	95																			
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89																			
3	104	98	94	90	102	97	93	90	94	91	88	92	89	87	90	87	85	84																			
4	100	93	88	84	98	92	87	83	90	86	82	88	84	82	86	83	81	79																			
5	95	88	82	78	94	87	82	78	85	81	77	83	80	77	82	79	76	75																			
6	91	83	78	74	90	82	77	74	81	76	73	79	76	73	78	75	72	71																			
7	87	79	73	70	86	78	73	69	77	72	69	76	72	69	75	71	68	67																			
8	84	75	70	66	82	74	69	66	73	69	65	72	68	65	71	68	65	64																			
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	65	62	61																			
10	77	68	63	59	76	68	63	59	67	62	59	66	62	59	66	62	59	58																			

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





TEST NUMBER: P210700

CATALOG NUMBER: LSR4B10D010BZ EC4B10209024 4LBNWH1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.5	17.4
10°-20°	166.0	32.6
20°-30°	149.0	29.2
30°-40°	85.5	16.8
40°-50°	17.1	3.3
50°-60°	2.2	0.4
60°-70°	1.0	0.2
70°-80°	0.1	0.0
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°	403.5	79.2
0°-40°	489.0	96.0
0°-60°	508.2	99.8
0°-90°	509.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	509.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1082	
5°	995	89
15°	596	166
25°	322	149
35°	135	85
45°	18	17
55°	3	2
65°	1	1
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P210700

CATALOG NUMBER: LSR4B10D010BZ EC4B10209024 4LBNWH1

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1082.4
2.5°	1060.5
5°	995.4
7.5°	900.4
10°	796.7
12.5°	694.7
15°	596.2
17.5°	510.0
20°	436.1
22.5°	374.6
25°	321.8
27.5°	279.6
30°	233.0
32.5°	185.5
35°	135.4
37.5°	92.3
40°	57.2
42.5°	34.3
45°	18.5
47.5°	7.9
50°	3.5
52.5°	2.6
55°	2.6
57.5°	1.8
60°	1.8
62.5°	0.9
65°	0.9
67.5°	0.9
70°	0.9
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093







— 0°-180°







(END OF REPORT)