

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: P211045

Luminaire Tested: **LSR4B10D010BZ EC4B10209050 4LBNH1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211045  
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 EC4B10209050 4LBNH1  
Description: PORTFOLIO 4 INCH CYLINDER  
NARROW DISTRIBUTION WITH SEMI-SPECULAR CLEAR 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: 584.7 lumens  
Efficiency: N/A  
Efficacy: 59.1 lumens/watt  
Spacing Criteria (0/90/45): 0.81 / 0.81 / 0.85  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

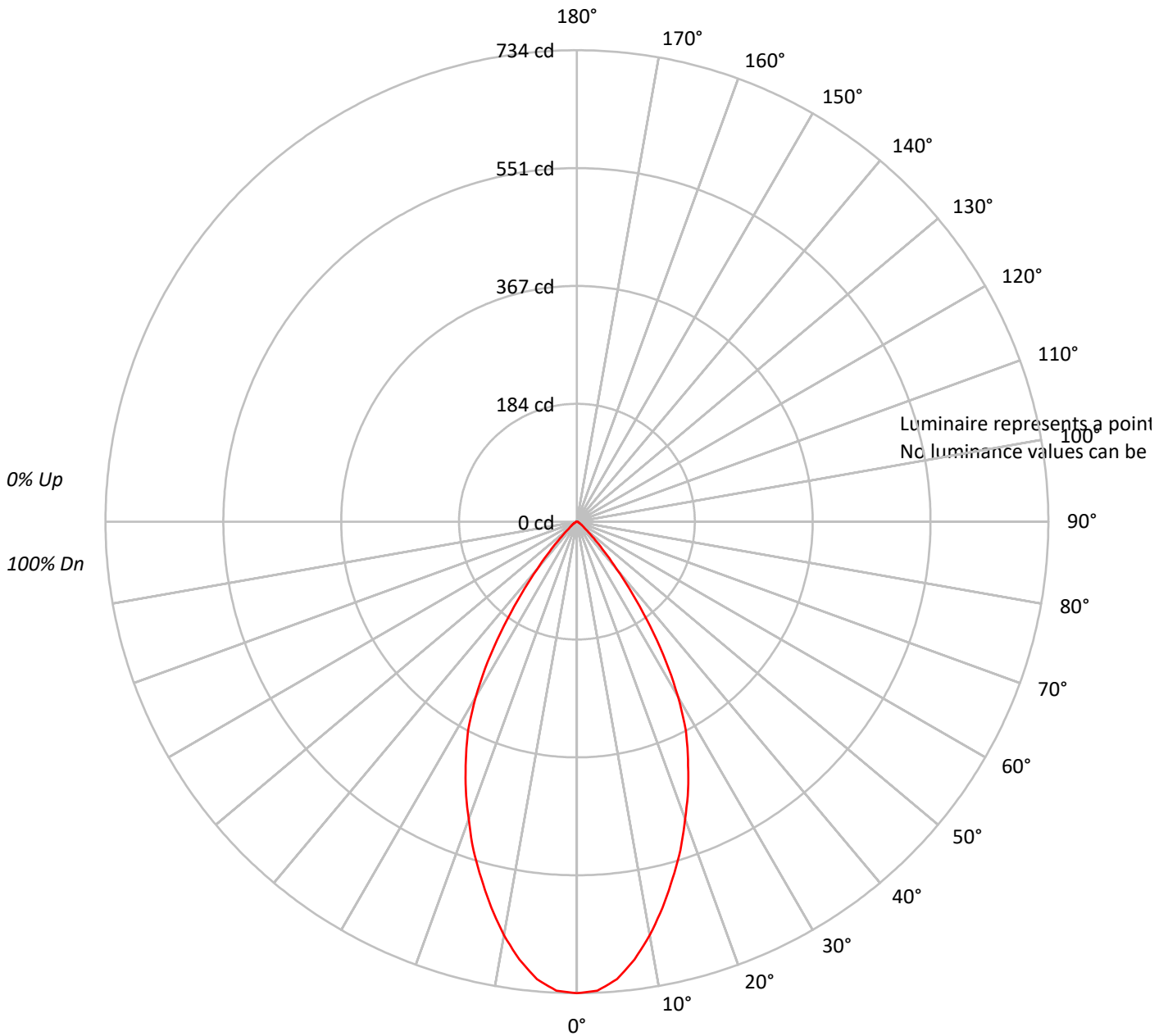
Input Watts (W): 9.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P211045

CATALOG NUMBER: LSR4B10D010BZ EC4B10209050 4LBNH1

### Luminous Intensity Polar Plot





TEST NUMBER: P211045

CATALOG NUMBER: LSR4B10D010BZ EC4B10209050 4LBNH1

**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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	113	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93		
2	108	103	99	96	106	101	98	94	98	95	92	95	93	90	92	90	89	87		
3	102	96	91	87	100	95	90	86	92	88	85	90	86	84	87	85	82	81		
4	97	90	84	80	95	89	83	79	86	82	78	84	81	78	83	79	77	75		
5	92	84	78	74	91	83	78	73	81	76	73	80	75	72	78	74	72	70		
6	88	79	73	69	86	78	72	68	76	72	68	75	71	67	74	70	67	65		
7	83	74	68	64	82	73	68	64	72	67	63	71	66	63	70	66	63	61		
8	79	70	64	60	78	69	64	60	68	63	59	67	63	59	66	62	59	58		
9	76	66	60	56	74	65	60	56	65	59	56	64	59	56	63	59	55	54		
10	72	62	57	53	71	62	56	53	61	56	53	60	56	52	60	55	52	51		

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





TEST NUMBER: P211045

CATALOG NUMBER: LSR4B10D010BZ EC4B10209050 4LBNH1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.2	11.3
10°-20°	160.7	27.5
20°-30°	186.5	31.9
30°-40°	123.5	21.1
40°-50°	34.7	5.9
50°-60°	8.7	1.5
60°-70°	3.3	0.6
70°-80°	1.1	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°	413.4	70.7
0°-40°	536.9	91.8
0°-60°	580.3	99.2
0°-90°	584.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	584.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	734	
5°	715	66
15°	575	161
25°	409	187
35°	198	124
45°	40	35
55°	10	9
65°	3	3
75°	1	1
85°	0	0
90°	0	



TEST NUMBER: P211045

CATALOG NUMBER: LSR4B10D010BZ EC4B10209050 4LBNH1

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	734.1
2.5°	730.9
5°	715.0
7.5°	687.5
10°	653.6
12.5°	615.4
15°	575.2
17.5°	536.0
20°	492.5
22.5°	452.3
25°	408.9
27.5°	367.6
30°	314.6
32.5°	258.5
35°	198.1
37.5°	141.9
40°	96.4
42.5°	62.5
45°	40.3
47.5°	24.4
50°	15.9
52.5°	11.7
55°	9.5
57.5°	7.4
60°	5.3
62.5°	4.2
65°	3.2
67.5°	2.1
70°	2.1
72.5°	1.1
75°	1.1
77.5°	1.1
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)