

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: P211724

Luminaire Tested: **LSR4B20D010BZ EC4B10208040 4LBWB1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211724  
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 EC4B10208040 4LBWB1  
Description: PORTFOLIO 4 INCH CYLINDER  
WIDE DISTRIBUTION WITH SPECULAR BLACK 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: 1025.4 lumens  
Efficiency: N/A  
Efficacy: 49.3 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.08 / 1.03  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

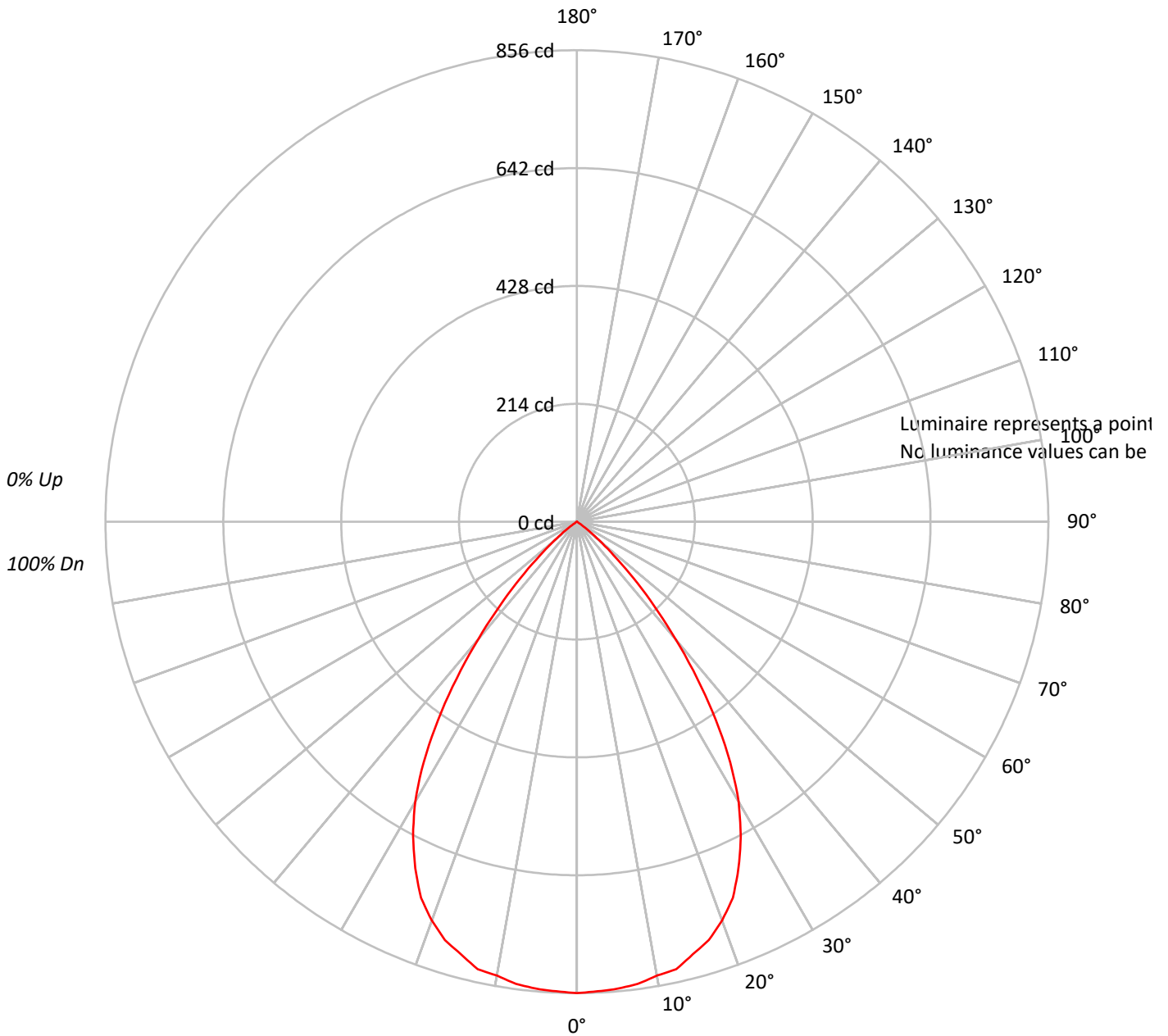
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P211724

CATALOG NUMBER: LSR4B20D010BZ EC4B10208040 4LBWB1

### Luminous Intensity Polar Plot





TEST NUMBER: P211724

CATALOG NUMBER: LSR4B20D010BZ EC4B10208040 4LBWB1

**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	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	100	100	99	97	97	96	95	93			
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	86			
3	101	94	89	85	99	93	88	84	90	86	83	88	84	82	86	83	80	79			
4	96	88	82	77	94	86	81	77	84	79	76	82	78	75	80	77	74	72			
5	90	81	75	70	89	80	74	70	79	73	69	77	72	69	75	71	68	67			
6	85	76	69	65	84	75	69	64	73	68	64	72	67	64	70	66	63	62			
7	80	71	64	60	79	70	64	59	69	63	59	67	62	59	66	62	58	57			
8	76	66	60	55	75	65	59	55	64	59	55	63	58	54	62	58	54	53			
9	72	62	55	51	71	61	55	51	60	55	51	59	54	51	58	54	50	49			
10	68	58	52	48	67	58	52	48	57	51	47	56	51	47	55	50	47	46			

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





TEST NUMBER: P211724

CATALOG NUMBER: LSR4B20D010BZ EC4B10208040 4LBWB1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.8	7.9
10°-20°	229.0	22.3
20°-30°	316.5	30.9
30°-40°	271.0	26.4
40°-50°	115.2	11.2
50°-60°	12.9	1.3
60°-70°	0.0	0.0
70°-80°	0.0	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°	626.3	61.1
0°-40°	897.3	87.5
0°-60°	1025.4	100.0
0°-90°	1025.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1025.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	856	
5°	851	81
15°	813	229
25°	694	317
35°	440	271
45°	145	115
55°	7	13
65°	0	0
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P211724

CATALOG NUMBER: LSR4B20D010BZ EC4B10208040 4LBWB1

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	856.0
2.5°	853.6
5°	851.2
7.5°	846.4
10°	836.9
12.5°	832.2
15°	813.2
17.5°	796.5
20°	770.4
22.5°	739.5
25°	694.3
27.5°	644.3
30°	587.3
32.5°	518.3
35°	439.9
37.5°	359.0
40°	278.2
42.5°	206.9
45°	145.0
47.5°	90.4
50°	52.3
52.5°	26.2
55°	7.1
57.5°	0.0
60°	0.0
62.5°	0.0
65°	0.0
67.5°	0.0
70°	0.0
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)