

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: P211588

Luminaire Tested: **LSR4B20D010BZ EC4B10209030 4LBMB1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211588  
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 EC4B10209030 4LBMB1  
Description: PORTFOLIO 4 INCH CYLINDER  
MEDIUM 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: 712.2 lumens  
Efficiency: N/A  
Efficacy: 34.2 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.87  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

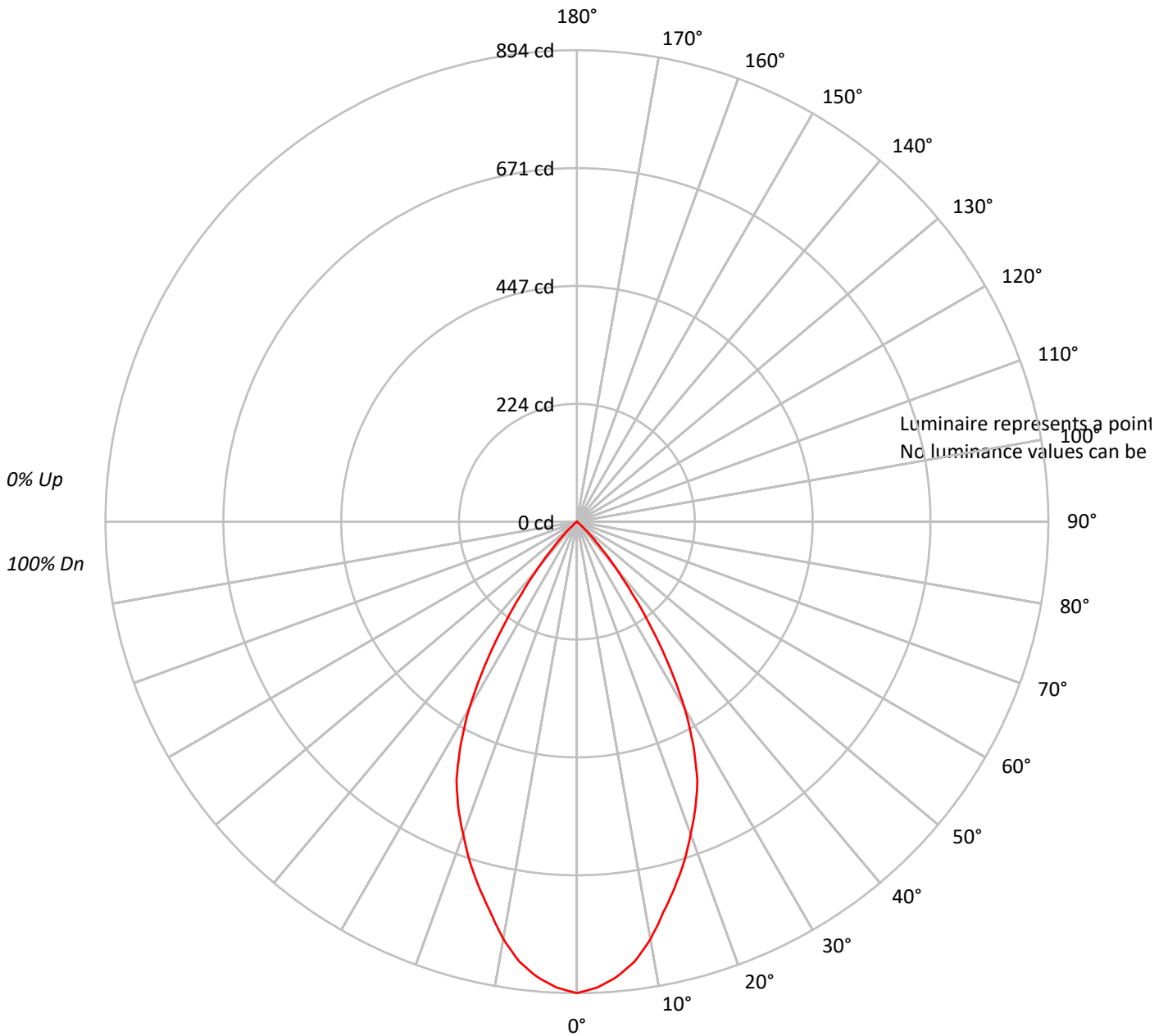
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P211588

CATALOG NUMBER: LSR4B20D010BZ EC4B10209030 4LBMB1

### Luminous Intensity Polar Plot





TEST NUMBER: P211588

CATALOG NUMBER: LSR4B20D010BZ EC4B10209030 4LBMB1

**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	114	111	109	106	111	109	107	105	105	103	102	101	100	99	98	97	96	94			
2	108	104	100	96	106	102	98	95	99	96	93	96	93	91	93	91	89	88			
3	103	97	92	88	101	95	91	87	93	89	86	90	87	85	88	86	83	82			
4	98	91	85	81	96	90	85	81	87	83	80	85	82	79	84	81	78	77			
5	93	85	79	75	92	84	79	75	82	78	74	81	77	74	79	76	73	72			
6	89	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	68	67			
7	84	75	70	65	83	75	69	65	73	68	65	72	68	65	71	67	64	63			
8	80	71	65	61	79	71	65	61	69	64	61	68	64	61	67	63	60	59			
9	77	67	61	58	76	67	61	57	66	61	57	65	60	57	64	60	57	56			
10	73	64	58	54	72	63	58	54	62	57	54	62	57	54	61	57	54	52			

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





TEST NUMBER: P211588

CATALOG NUMBER: LSR4B20D010BZ EC4B10209030 4LBMB1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.8	11.3
10°-20°	200.8	28.2
20°-30°	242.9	34.1
30°-40°	154.9	21.8
40°-50°	32.3	4.5
50°-60°	0.4	0.1
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°	524.5	73.6
0°-40°	679.5	95.4
0°-60°	712.2	100.0
0°-90°	712.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	712.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	894	
5°	866	81
15°	717	201
25°	540	243
35°	248	155
45°	33	32
55°	0	0
65°	0	0
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P211588

CATALOG NUMBER: LSR4B20D010BZ EC4B10209030 4LBMB1

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	894.0
2.5°	884.2
5°	866.5
7.5°	841.0
10°	803.6
12.5°	758.4
15°	717.2
17.5°	675.9
20°	630.7
22.5°	587.5
25°	540.3
27.5°	477.5
30°	408.7
32.5°	328.1
35°	247.6
37.5°	172.9
40°	114.0
42.5°	66.8
45°	33.4
47.5°	13.8
50°	3.9
52.5°	0.0
55°	0.0
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)