

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: P211523

Luminaire Tested: **LSR4B20D010BZ EC4B10209027 4LBWH1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211523
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 EC4B10209027 4LBWH1
Description: PORTFOLIO 4 INCH CYLINDER
WIDE DISTRIBUTION WITH SEMI-SPECULAR CLEAR 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: 1390.1 lumens
Efficiency: N/A
Efficacy: 66.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.13
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

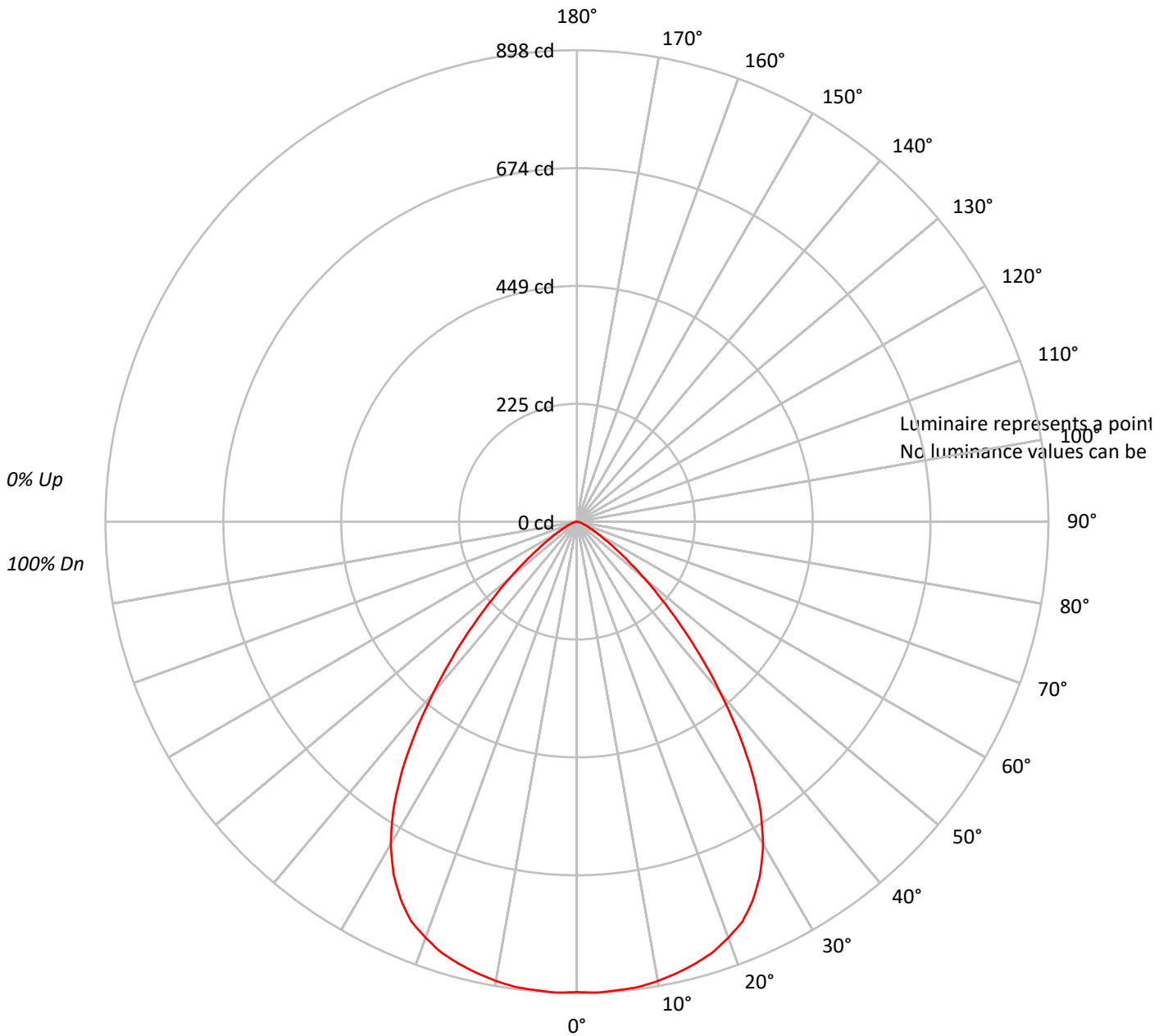
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91			
2	105	100	95	91	103	98	93	90	95	91	88	91	88	86	89	86	84	82			
3	99	91	85	80	97	90	84	80	87	82	78	84	80	77	82	79	76	74			
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67			
5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	62	61			
6	81	71	64	58	80	70	63	58	68	62	58	67	61	57	65	61	57	55			
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	50			
8	72	60	53	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46			
9	68	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	43			
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39			

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.3	6.1
10°-20°	245.9	17.7
20°-30°	362.8	26.1
30°-40°	358.0	25.8
40°-50°	219.1	15.8
50°-60°	84.0	6.0
60°-70°	26.3	1.9
70°-80°	7.7	0.6
80°-90°	1.0	0.1
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°	694.0	49.9
0°-40°	1052.0	75.7
0°-60°	1355.1	97.5
0°-90°	1390.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1390.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	896	
5°	896	85
15°	872	246
25°	794	363
35°	581	358
45°	281	219
55°	89	84
65°	24	26
75°	8	8
85°	0	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	896.0
2.5°	897.9
5°	896.0
7.5°	894.1
10°	888.4
12.5°	880.9
15°	871.5
17.5°	860.2
20°	843.2
22.5°	824.3
25°	794.1
27.5°	756.4
30°	709.2
32.5°	650.8
35°	581.0
37.5°	503.6
40°	424.4
42.5°	350.9
45°	281.1
47.5°	218.8
50°	166.0
52.5°	122.6
55°	88.7
57.5°	62.2
60°	45.3
62.5°	34.0
65°	24.5
67.5°	18.9
70°	13.2
72.5°	9.4
75°	7.5
77.5°	3.8
80°	3.8
82.5°	1.9
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)