

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: P211453

Luminaire Tested: **LSR4B20D010BZ EC4B10209024 4LBNMW1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211453
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 EC4B10209024 4LBNMW1
Description: PORTFOLIO 4 INCH CYLINDER
NARROW DISTRIBUTION WITH MATTE WHITE 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

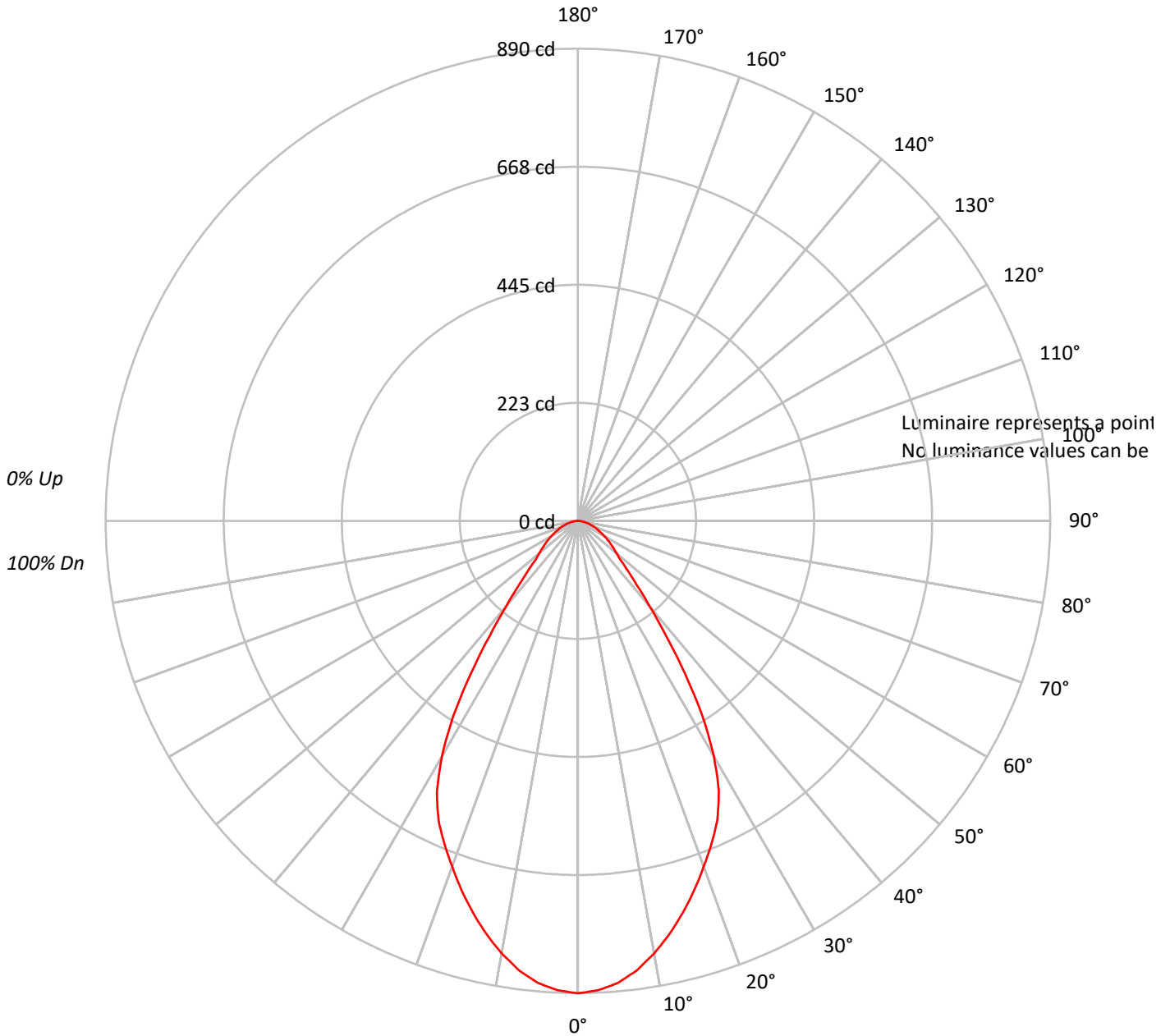
Lumens per Lamp: N/A
Luminaire Lumens: 1043.9 lumens
Efficiency: N/A
Efficacy: 50.2 lumens/watt
Spacing Criteria (0/90/45): 0.96 / 0.96 / 0.95
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	112	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90		
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81		
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73		
4	92	83	76	71	90	82	76	71	80	74	70	78	73	69	76	72	68	67		
5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	63	61		
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	56		
7	77	66	59	54	75	65	59	54	64	58	54	63	57	53	62	57	53	52		
8	73	62	55	50	71	61	55	50	60	54	50	59	53	49	58	53	49	48		
9	69	58	51	46	68	57	51	46	56	50	46	55	50	46	54	49	46	44		
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43	41		

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.9	7.8
10°-20°	214.3	20.5
20°-30°	282.1	27.0
30°-40°	219.6	21.0
40°-50°	106.7	10.2
50°-60°	67.4	6.5
60°-70°	43.4	4.2
70°-80°	22.7	2.2
80°-90°	5.7	0.5
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°	578.4	55.4
0°-40°	798.0	76.4
0°-60°	972.0	93.1
0°-90°	1043.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1043.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	890	
5°	874	82
15°	764	214
25°	622	282
35°	352	220
45°	133	107
55°	75	67
65°	43	43
75°	22	23
85°	5	6
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	890.5
2.5°	885.5
5°	873.9
7.5°	854.0
10°	827.5
12.5°	797.6
15°	764.5
17.5°	729.6
20°	693.2
22.5°	658.3
25°	621.9
27.5°	575.4
30°	512.4
32.5°	437.8
35°	351.6
37.5°	272.0
40°	210.6
42.5°	164.2
45°	132.7
47.5°	107.8
50°	94.5
52.5°	84.6
55°	74.6
57.5°	66.3
60°	58.0
62.5°	49.7
65°	43.1
67.5°	38.1
70°	31.5
72.5°	26.5
75°	21.6
77.5°	16.6
80°	11.6
82.5°	8.3
85°	5.0
87.5°	1.7
90°	0.0



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— 0°-180°







(END OF REPORT)