

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: P211551

Luminaire Tested: **LSR4B20D010BZ EC4B10209727 4LBWGPH1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211551
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 EC4B10209727 4LBWGPH1
Description: PORTFOLIO 4 INCH CYLINDER
WIDE DISTRIBUTION WITH GRAPHITE HAZE 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: 946.6 lumens
Efficiency: N/A
Efficacy: 45.5 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.12 / 1.08
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

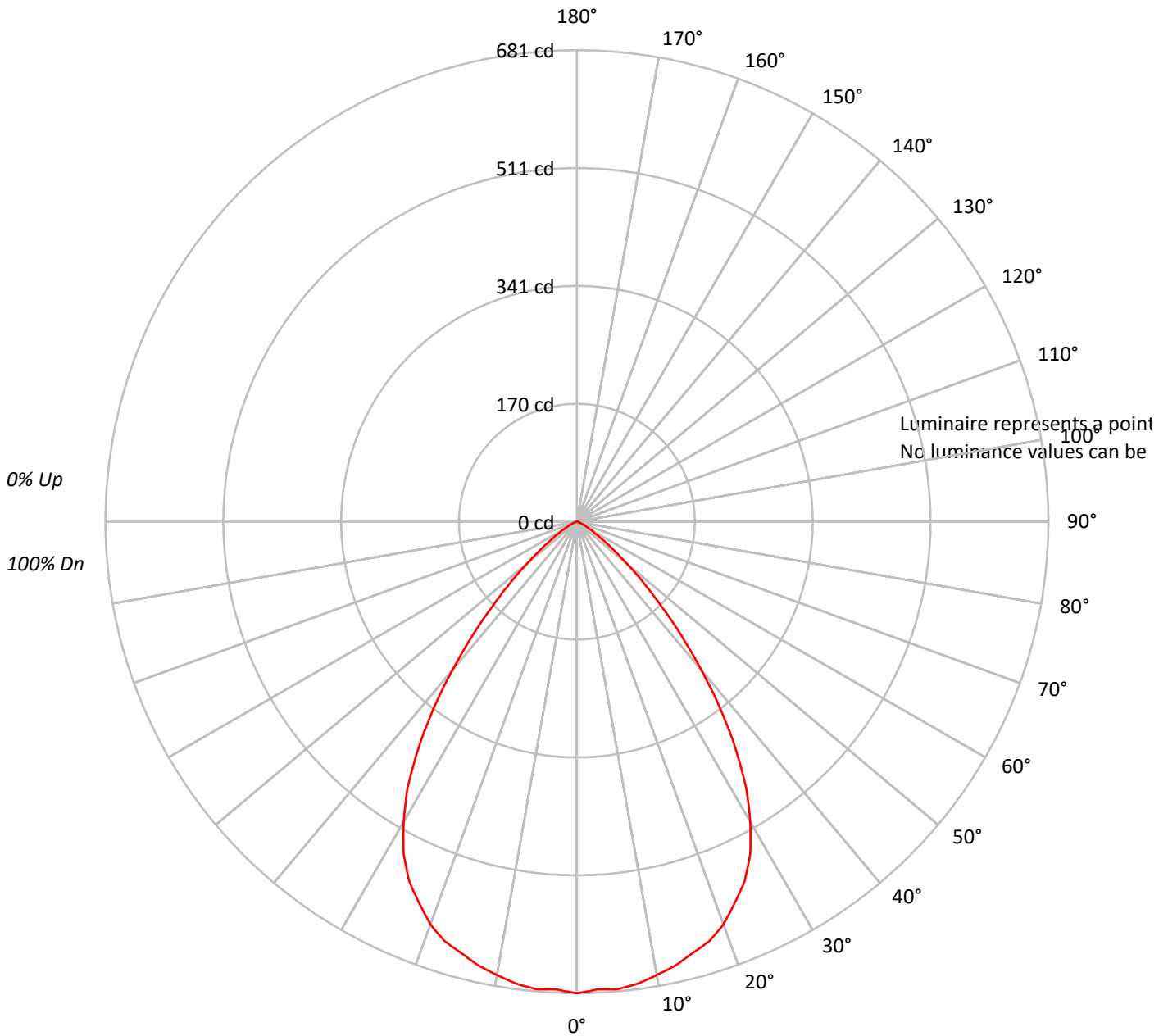
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92			
2	106	100	96	92	104	99	95	91	95	92	89	92	90	87	90	87	85	83			
3	100	92	87	82	98	91	86	81	88	84	80	86	82	79	83	80	77	76			
4	94	85	78	74	92	84	78	73	81	76	72	79	75	71	77	74	71	69			
5	88	78	72	67	86	77	71	66	75	70	66	74	69	65	72	68	64	63			
6	83	72	65	61	81	71	65	60	70	64	60	68	63	59	67	63	59	57			
7	78	67	60	55	76	66	60	55	65	59	55	64	58	55	63	58	54	53			
8	73	62	56	51	72	62	55	51	61	55	51	59	54	50	58	54	50	48			
9	69	58	51	47	68	58	51	47	57	51	47	56	50	46	55	50	46	45			
10	65	54	48	43	64	54	48	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°	64.3	6.8
10°-20°	182.1	19.2
20°-30°	261.2	27.6
30°-40°	245.9	26.0
40°-50°	135.8	14.3
50°-60°	43.6	4.6
60°-70°	10.9	1.2
70°-80°	2.6	0.3
80°-90°	0.2	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°	507.6	53.6
0°-40°	753.5	79.6
0°-60°	932.9	98.6
0°-90°	946.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	946.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	681	
5°	678	64
15°	645	182
25°	573	261
35°	399	246
45°	172	136
55°	44	44
65°	10	11
75°	2	3
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	681.3
2.5°	676.4
5°	678.0
7.5°	673.1
10°	664.9
12.5°	656.7
15°	645.2
17.5°	635.4
20°	618.9
22.5°	596.0
25°	573.0
27.5°	541.8
30°	500.7
32.5°	454.8
35°	398.9
37.5°	339.8
40°	279.1
42.5°	223.3
45°	172.4
47.5°	129.7
50°	93.6
52.5°	65.7
55°	44.3
57.5°	29.6
60°	21.3
62.5°	14.8
65°	9.9
67.5°	6.6
70°	4.9
72.5°	3.3
75°	1.6
77.5°	1.6
80°	1.6
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)