

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: P211678

Luminaire Tested: **LSR4B20D010BZ EC4B10209035 4LBMLI1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211678
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 EC4B10209035 4LBML1
Description: PORTFOLIO 4 INCH CYLINDER
MEDIUM DISTRIBUTION WITH 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: 1645.8 lumens
Efficiency: N/A
Efficacy: 79.1 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 0.7 / 0.76
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

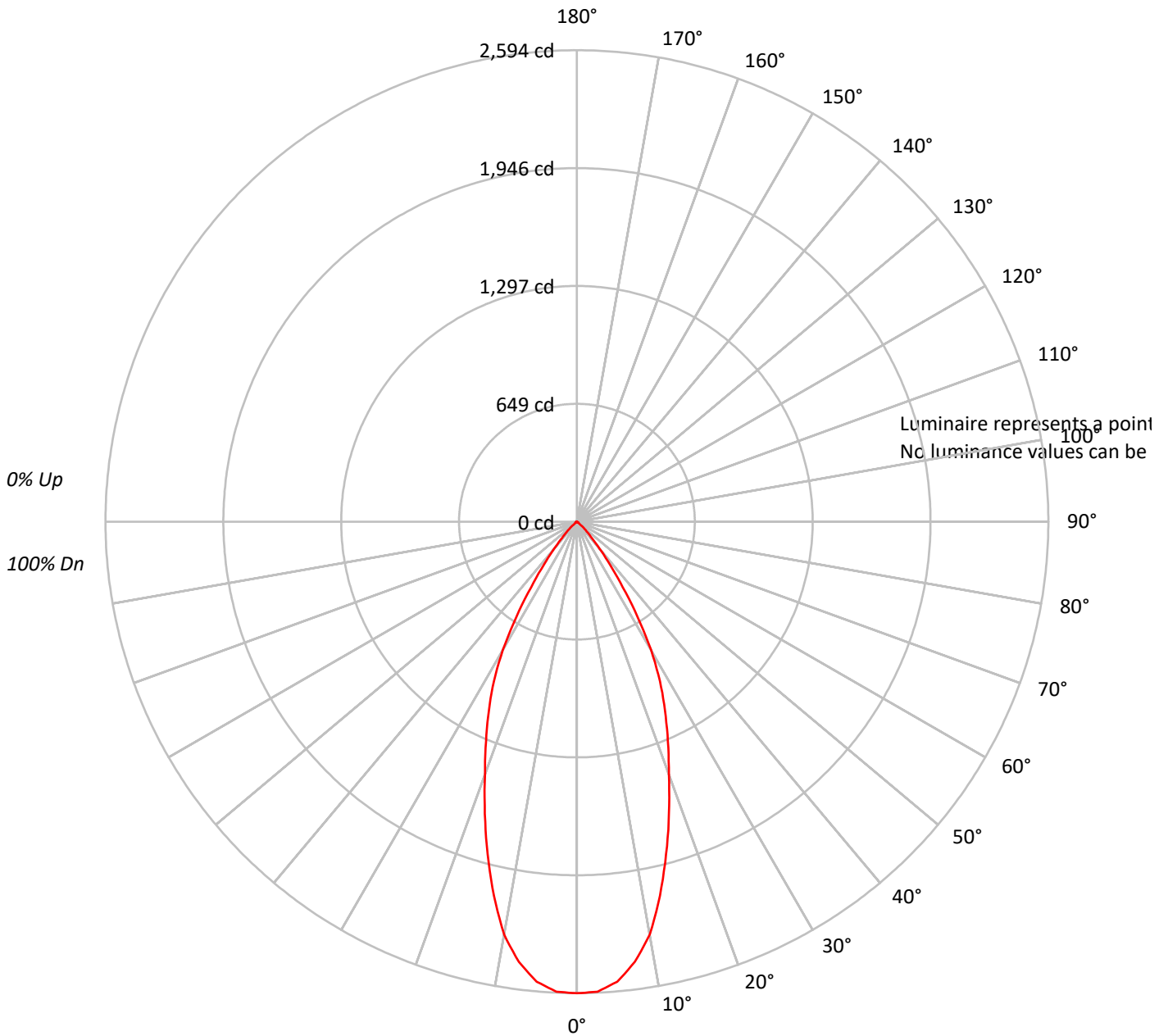
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94																			
2	109	104	100	97	107	102	99	96	99	96	94	96	94	92	94	92	90	88																			
3	104	98	93	89	102	96	92	89	94	90	87	91	88	86	89	87	85	83																			
4	99	92	87	83	97	91	86	82	89	85	81	87	83	80	85	82	79	78																			
5	94	87	81	77	93	86	81	77	84	79	76	82	78	75	81	77	75	73																			
6	90	82	76	72	89	81	76	72	80	75	71	78	74	71	77	73	71	69																			
7	86	77	72	68	85	77	71	68	75	71	67	74	70	67	73	69	67	65																			
8	82	73	68	64	81	73	67	64	72	67	64	71	66	63	70	66	63	62																			
9	79	70	64	60	78	69	64	60	68	63	60	67	63	60	67	63	60	58																			
10	75	66	61	57	74	66	61	57	65	60	57	64	60	57	64	60	57	56																			

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.9	14.3
10°-20°	525.2	31.9
20°-30°	522.1	31.7
30°-40°	284.3	17.3
40°-50°	65.7	4.0
50°-60°	9.3	0.6
60°-70°	3.4	0.2
70°-80°	0.8	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°	1282.2	77.9
0°-40°	1566.5	95.2
0°-60°	1641.5	99.7
0°-90°	1645.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1645.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2594	
5°	2541	235
15°	1896	525
25°	1145	522
35°	440	284
45°	76	66
55°	10	9
65°	4	3
75°	0	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2594.5
2.5°	2588.5
5°	2540.7
7.5°	2443.1
10°	2307.7
12.5°	2108.6
15°	1895.6
17.5°	1684.5
20°	1477.4
22.5°	1308.2
25°	1144.9
27.5°	989.6
30°	814.4
32.5°	619.2
35°	440.0
37.5°	296.7
40°	193.1
42.5°	121.5
45°	75.7
47.5°	43.8
50°	21.9
52.5°	11.9
55°	10.0
57.5°	6.0
60°	6.0
62.5°	4.0
65°	4.0
67.5°	2.0
70°	2.0
72.5°	2.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)