

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: P211698

Luminaire Tested: **LSR4B20D010BZ EC4B10209035 4LBWLI1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211698
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 4LBWL1
Description: PORTFOLIO 4 INCH CYLINDER
WIDE 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: 1737.3 lumens
Efficiency: N/A
Efficacy: 83.5 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

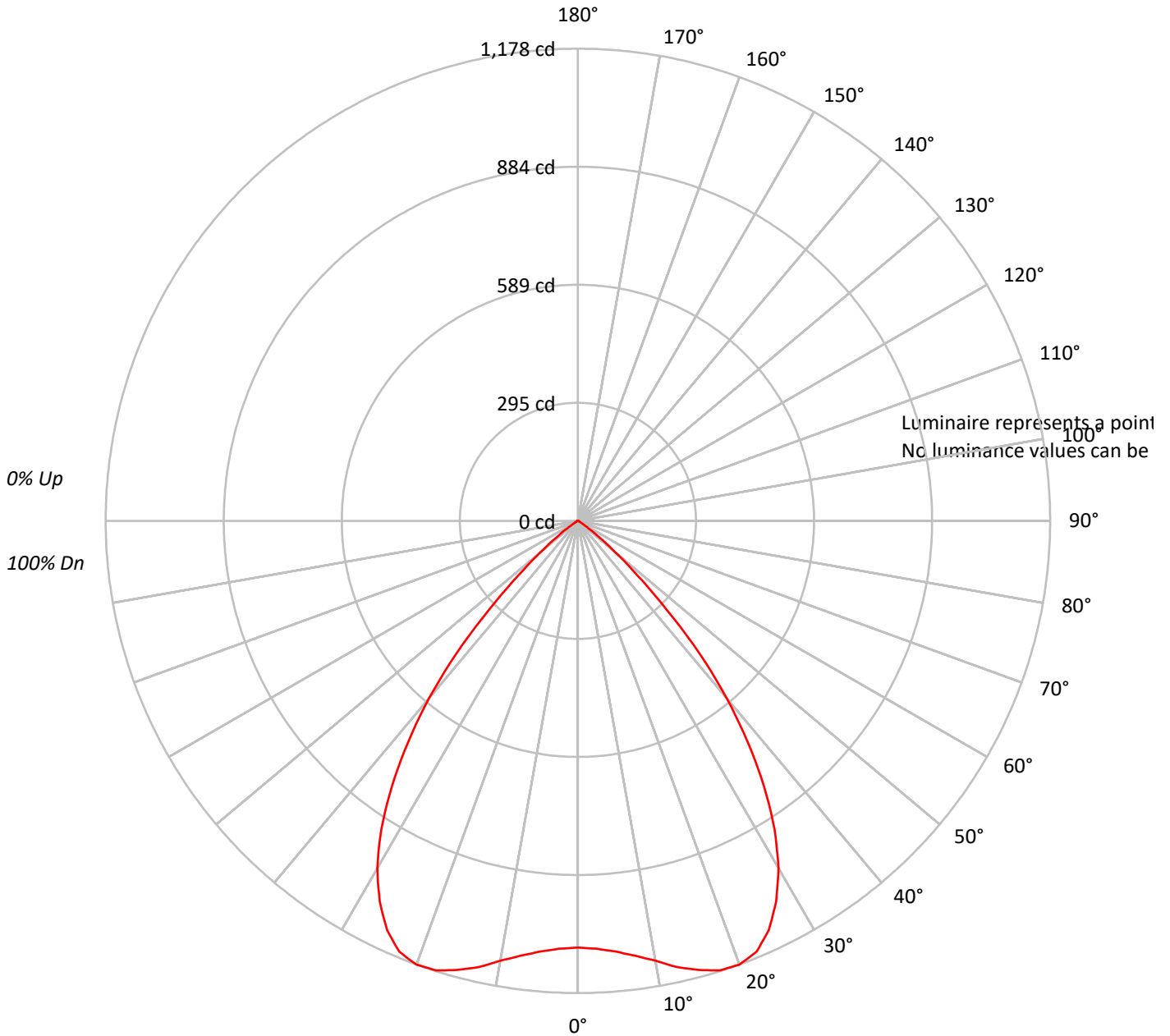
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92		
2	106	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86	84		
3	100	93	87	83	98	92	86	82	89	85	81	86	83	80	84	81	78	77		
4	94	86	79	75	92	84	79	74	82	77	73	80	76	72	78	75	72	70		
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64		
6	83	73	66	62	82	72	66	61	71	65	61	69	64	60	68	63	60	58		
7	78	68	61	56	77	67	61	56	66	60	56	64	59	55	63	59	55	54		
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49		
9	69	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45		
10	66	55	48	44	65	54	48	44	53	48	44	53	47	44	52	47	43	42		

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.1	6.0
10°-20°	328.5	18.9
20°-30°	512.5	29.5
30°-40°	498.6	28.7
40°-50°	249.1	14.3
50°-60°	38.6	2.2
60°-70°	4.7	0.3
70°-80°	1.3	0.1
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°	945.1	54.4
0°-40°	1443.7	83.1
0°-60°	1731.3	99.7
0°-90°	1737.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1737.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1064	
5°	1078	104
15°	1160	329
25°	1126	512
35°	810	499
45°	312	249
55°	32	39
65°	4	5
75°	2	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1064.5
2.5°	1068.4
5°	1078.4
7.5°	1094.3
10°	1114.2
12.5°	1140.1
15°	1160.0
17.5°	1175.9
20°	1177.9
22.5°	1163.9
25°	1126.1
27.5°	1070.4
30°	1000.8
32.5°	913.3
35°	809.8
37.5°	696.4
40°	577.0
42.5°	449.7
45°	312.4
47.5°	201.0
50°	121.4
52.5°	65.7
55°	31.8
57.5°	13.9
60°	8.0
62.5°	6.0
65°	4.0
67.5°	4.0
70°	2.0
72.5°	2.0
75°	2.0
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)