

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: P211540

Luminaire Tested: **LSR4B20D010BZ EC4B10209727 4LBNMW1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211540
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 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: 1031.9 lumens
Efficiency: N/A
Efficacy: 49.6 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

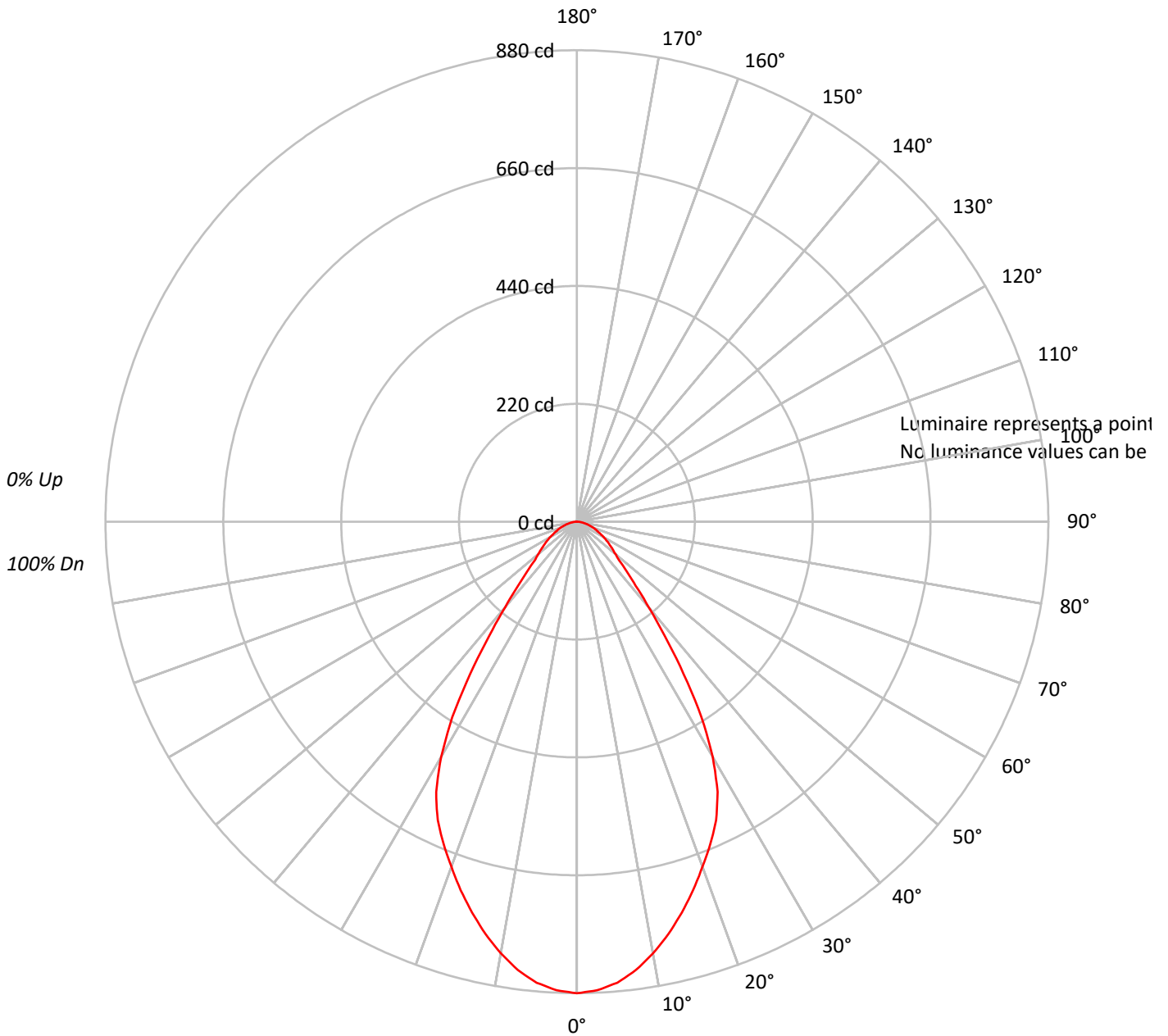
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
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°	81.0	7.8
10°-20°	211.9	20.5
20°-30°	278.9	27.0
30°-40°	217.1	21.0
40°-50°	105.4	10.2
50°-60°	66.6	6.5
60°-70°	43.0	4.2
70°-80°	22.5	2.2
80°-90°	5.6	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°	571.8	55.4
0°-40°	788.8	76.4
0°-60°	960.9	93.1
0°-90°	1031.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1031.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	880	
5°	864	81
15°	756	212
25°	615	279
35°	348	217
45°	131	105
55°	74	67
65°	43	43
75°	21	22
85°	5	6
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	880.3
2.5°	875.4
5°	863.9
7.5°	844.3
10°	818.0
12.5°	788.5
15°	755.7
17.5°	721.3
20°	685.2
22.5°	650.8
25°	614.7
27.5°	568.8
30°	506.6
32.5°	432.8
35°	347.5
37.5°	268.8
40°	208.2
42.5°	162.3
45°	131.1
47.5°	106.6
50°	93.4
52.5°	83.6
55°	73.8
57.5°	65.6
60°	57.4
62.5°	49.2
65°	42.6
67.5°	37.7
70°	31.1
72.5°	26.2
75°	21.3
77.5°	16.4
80°	11.5
82.5°	8.2
85°	4.9
87.5°	1.6
90°	0.0



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— 0°-180°







(END OF REPORT)