

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: P211508

Luminaire Tested: **LE_4B20D010 EC4B10209027 4LBN1GPH**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211508
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: LE_4B20D010 EC4B10209027 4LBN1GPH
Description: PORTFOLIO 4 INCH CYLINDER
NARROW 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: 903.6 lumens
Efficiency: N/A
Efficacy: 43.4 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.88
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

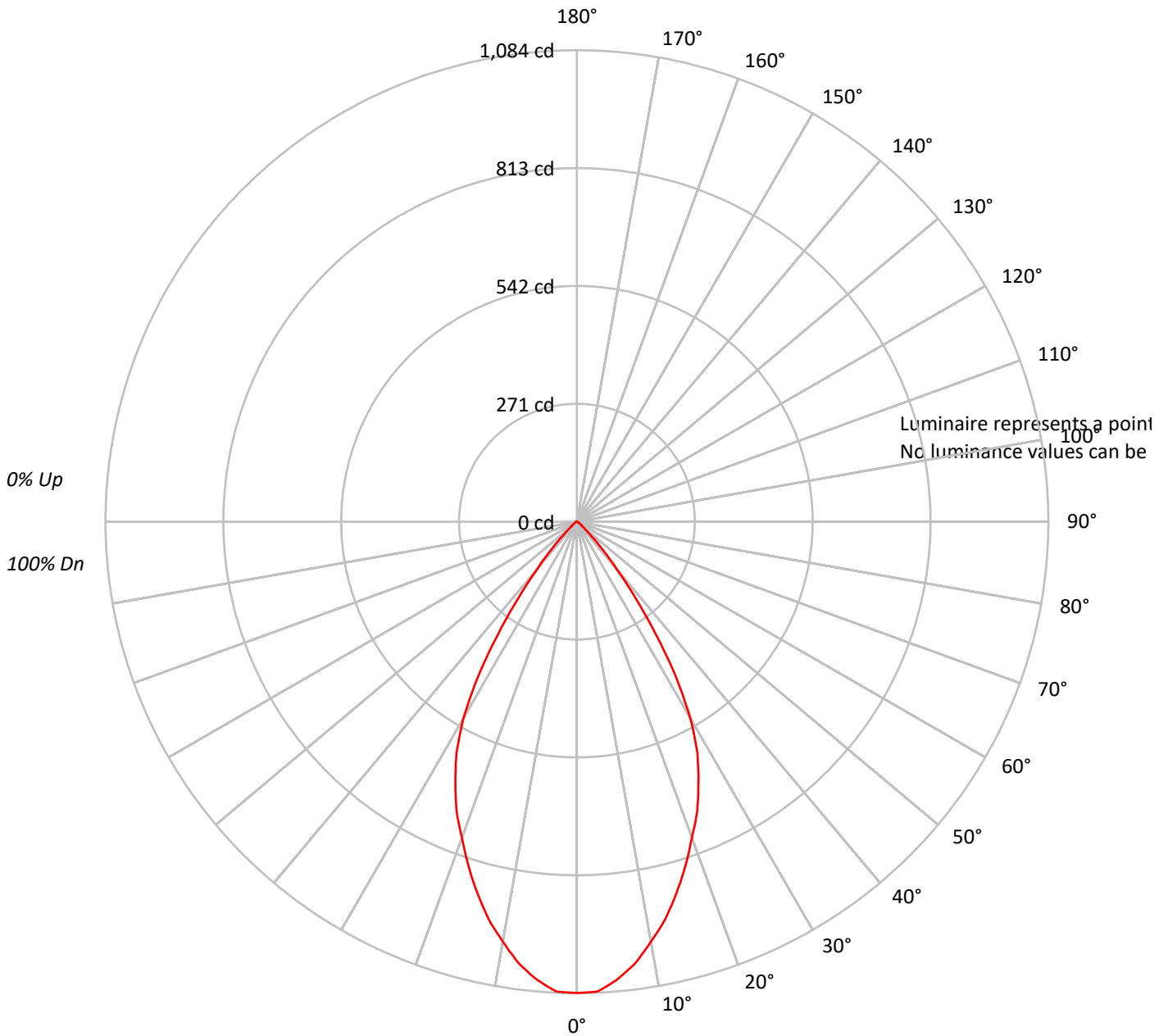
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	114	111	108	106	111	109	106	104	105	103	101	101	100	98	97	96	95	94			
2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	92	91	89	87			
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	88	85	83	81			
4	97	90	84	80	96	89	84	80	87	82	79	85	81	78	83	80	77	76			
5	93	84	78	74	91	83	78	74	82	77	73	80	76	73	78	75	72	70			
6	88	79	73	69	86	78	73	69	77	72	68	75	71	68	74	70	67	66			
7	84	74	68	64	82	74	68	64	72	67	64	71	67	63	70	66	63	62			
8	80	70	64	60	78	70	64	60	68	63	60	67	63	59	66	62	59	58			
9	76	66	60	56	75	66	60	56	65	60	56	64	59	56	63	59	56	54			
10	72	63	57	53	71	62	57	53	61	56	53	61	56	53	60	56	52	51			

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.5	10.9
10°-20°	247.0	27.3
20°-30°	301.0	33.3
30°-40°	198.6	22.0
40°-50°	45.7	5.1
50°-60°	8.7	1.0
60°-70°	3.2	0.4
70°-80°	0.9	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°	646.5	71.5
0°-40°	845.1	93.5
0°-60°	899.5	99.5
0°-90°	903.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	903.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1084	
5°	1057	99
15°	884	247
25°	661	301
35°	317	199
45°	50	46
55°	9	9
65°	2	3
75°	0	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1083.7
2.5°	1081.5
5°	1057.3
7.5°	1024.5
10°	980.8
12.5°	936.9
15°	884.4
17.5°	829.7
20°	772.8
22.5°	722.4
25°	661.1
27.5°	599.8
30°	521.1
32.5°	424.7
35°	317.4
37.5°	221.1
40°	142.3
42.5°	87.6
45°	50.3
47.5°	26.2
50°	15.3
52.5°	13.1
55°	8.7
57.5°	6.6
60°	6.6
62.5°	4.4
65°	2.2
67.5°	2.2
70°	2.2
72.5°	2.2
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)