

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: P207774

Luminaire Tested: **LD4B20D010 EU4B10209024 4LBNGPH1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P207774
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: LD4B20D010 EU4B10209024 4LBNGPH1
Description: PORTFOLIO 4 INCH 50 DEGREE CUTOFF RECESSED DOWNLIGHT
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: 685.4 lumens
Efficiency: N/A
Efficacy: 33.0 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

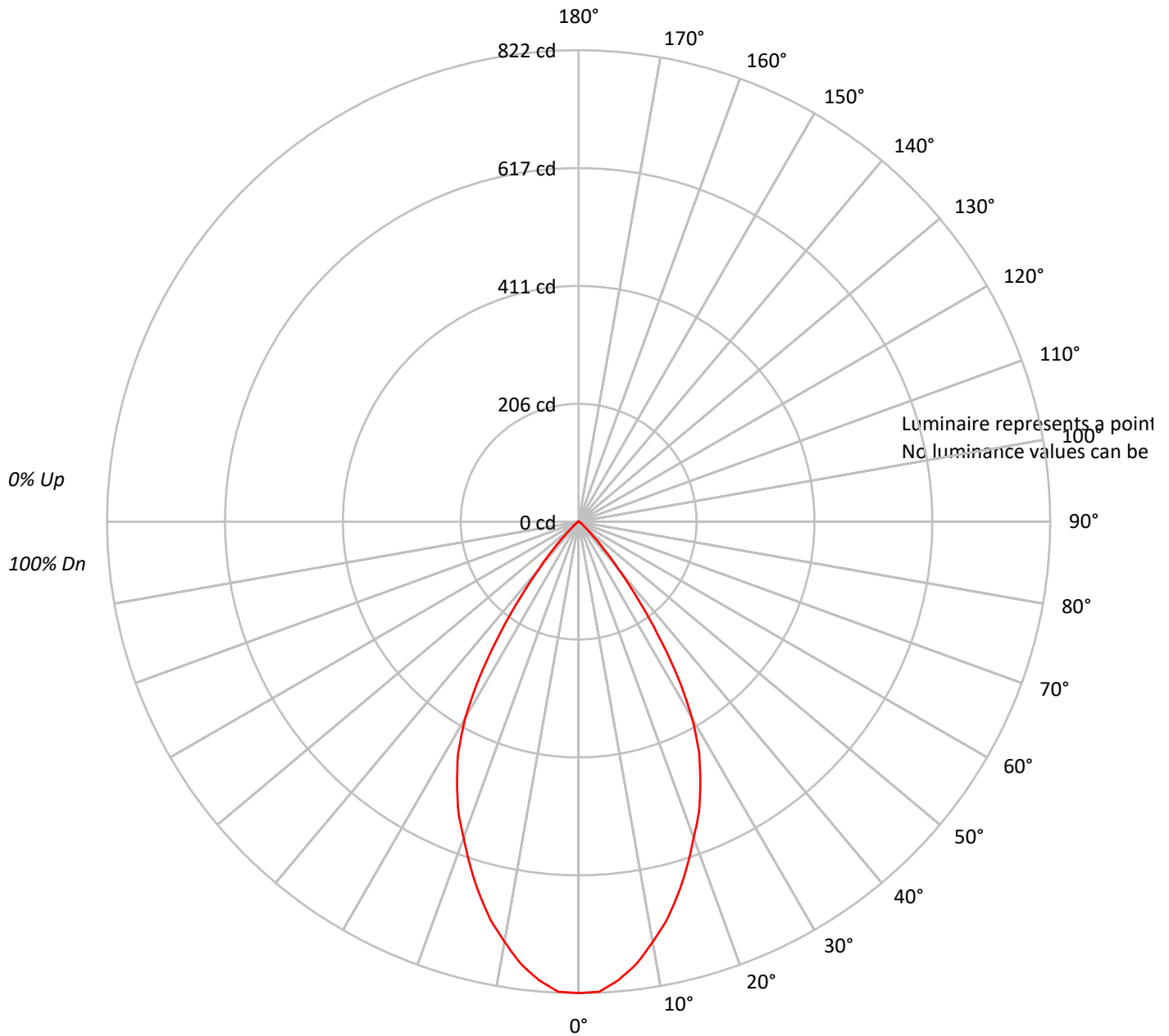
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	114	111	108	106	111	109	106	104	105	103	101		101	100	98		97
2	108	103	99	96	106	101	98	95	98	95	93		95	93	91		92
3	103	96	91	87	101	95	90	87	92	88	85		90	87	84		88
4	97	90	84	80	96	89	84	80	87	82	79		85	81	78		83
5	93	84	78	74	91	83	78	74	82	77	73		80	76	73		78
6	88	79	73	69	86	78	73	69	77	72	68		75	71	68		74
7	84	74	68	64	82	74	68	64	72	67	64		71	67	63		70
8	80	70	64	60	78	70	64	60	68	63	60		67	63	59		66
9	76	66	60	56	75	66	60	56	65	60	56		64	59	56		63
10	72	63	57	53	71	62	57	53	61	56	53		61	56	53		60

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.7	10.9
10°-20°	187.3	27.3
20°-30°	228.3	33.3
30°-40°	150.6	22.0
40°-50°	34.7	5.1
50°-60°	6.6	1.0
60°-70°	2.5	0.4
70°-80°	0.7	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°	490.4	71.5
0°-40°	641.0	93.5
0°-60°	682.3	99.5
0°-90°	685.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	685.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	822	
5°	802	75
15°	671	187
25°	502	228
35°	241	151
45°	38	35
55°	7	7
65°	2	2
75°	0	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	821.9
2.5°	820.3
5°	802.0
7.5°	777.1
10°	743.9
12.5°	710.7
15°	670.8
17.5°	629.3
20°	586.1
22.5°	548.0
25°	501.5
27.5°	455.0
30°	395.2
32.5°	322.1
35°	240.8
37.5°	167.7
40°	107.9
42.5°	66.4
45°	38.2
47.5°	19.9
50°	11.6
52.5°	10.0
55°	6.6
57.5°	5.0
60°	5.0
62.5°	3.3
65°	1.7
67.5°	1.7
70°	1.7
72.5°	1.7
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)