

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: P35293

Luminaire Tested: **LD4B10D010 EU4B10209027 4LBNWH1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P35293
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD4B10D010 EU4B10209027 4LBNWH1
Description: PORTFOLIO 4 INCH 50 DEGREE CUTOFF RECESSED DOWNLIGHT
NARROW DISTRIBUTION WITH WHEAT TRIM
WATTAGE D010TR-10.05W DE010-10.58W D5LT-10.2W DMX-10.6W DL2-11.8W
DL3-11.1W DLE-11.39W
Light Source: HIGH LUMEN LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 579.2 lumens
Efficiency: N/A
Efficacy: 59.5 lumens/watt
Spacing Criteria (0/90/45): 0.53 / 0.53 / 0.62
Luminous Opening: Circular (Dia: 0.35' x H: 0')
CIE Type: Direct

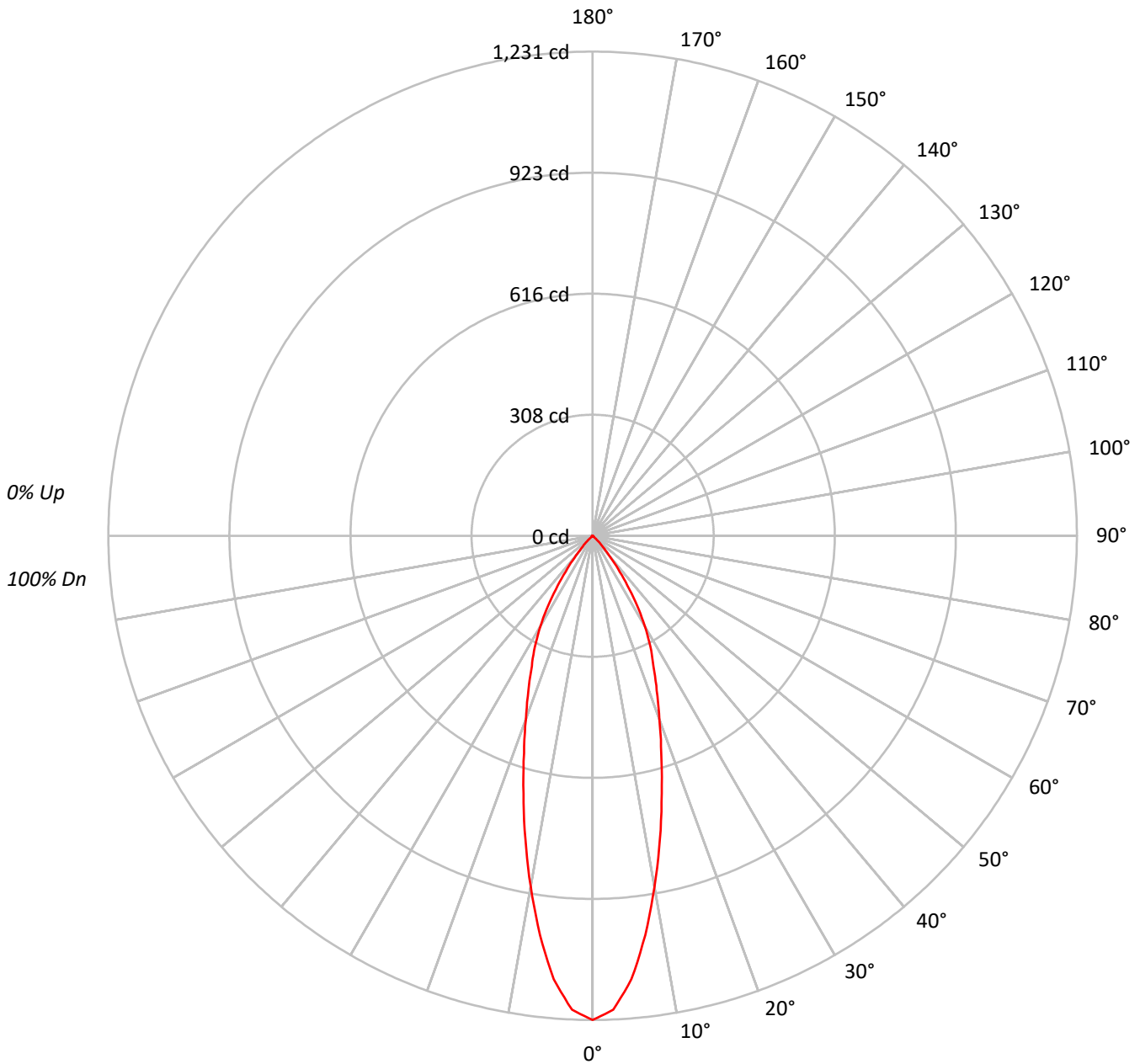
Input Watts (W): 9.73
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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				100
1	114	111	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	95				95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89				89
3	104	98	94	90	102	97	93	90	94	91	88	92	89	87	90	87	85	84				84
4	100	93	88	84	98	92	87	83	90	86	82	88	84	82	86	83	81	79				79
5	95	88	82	78	94	87	82	78	85	81	77	83	80	77	82	79	76	75				75
6	91	83	78	74	90	82	77	74	81	76	73	79	76	73	78	75	72	71				71
7	87	79	73	70	86	78	73	69	77	72	69	76	72	69	75	71	68	67				67
8	84	75	70	66	82	74	69	66	73	69	65	72	68	65	71	68	65	64				64
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	65	62	61				61
10	77	68	63	59	76	68	63	59	67	62	59	66	62	59	66	62	59	58				58

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	134500
5°	124156
10°	100517
15°	76692
20°	57671
25°	44123
30°	33433
35°	20541
40°	9271
45°	3245
50°	680
55°	571
60°	437
65°	259
70°	319
75°	0
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.7	17.4
10°-20°	188.8	32.6
20°-30°	169.4	29.3
30°-40°	97.2	16.8
40°-50°	19.4	3.3
50°-60°	2.5	0.4
60°-70°	1.1	0.2
70°-80°	0.1	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°	458.9	79.2
0°-40°	556.1	96.0
0°-60°	578.0	99.8
0°-90°	579.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	579.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1231	
5°	1132	101
15°	678	189
25°	366	169
35°	154	97
45°	21	19
55°	3	2
65°	1	1
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1231
2.5°	1206
5°	1132
7.5°	1024
10°	906
12.5°	790
15°	678
17.5°	580
20°	496
22.5°	426
25°	366
27.5°	318
30°	265
32.5°	211
35°	154
37.5°	105
40°	65
42.5°	39
45°	21
47.5°	9
50°	4
52.5°	3
55°	3
57.5°	2
60°	2
62.5°	1
65°	1
67.5°	1
70°	1
72.5°	0
75°	0
77.5°	0
80°	0
82.5°	0
85°	0
87.5°	0
90°	0



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— 0°-180°







(END OF REPORT)