

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: P35168

Luminaire Tested: **LD4B10D010 EU4B10209027 4LBWWH1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P35168
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD4B10D010 EU4B10209027 4LBWWH1
Description: PORTFOLIO 4 INCH 60 DEGREE CUTOFF RECESSED DOWNLIGHT
WIDE 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: 764.5 lumens
Efficiency: N/A
Efficacy: 55.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.16
Luminous Opening: Circular (Dia: 0.35' x H: 0')
CIE Type: Direct

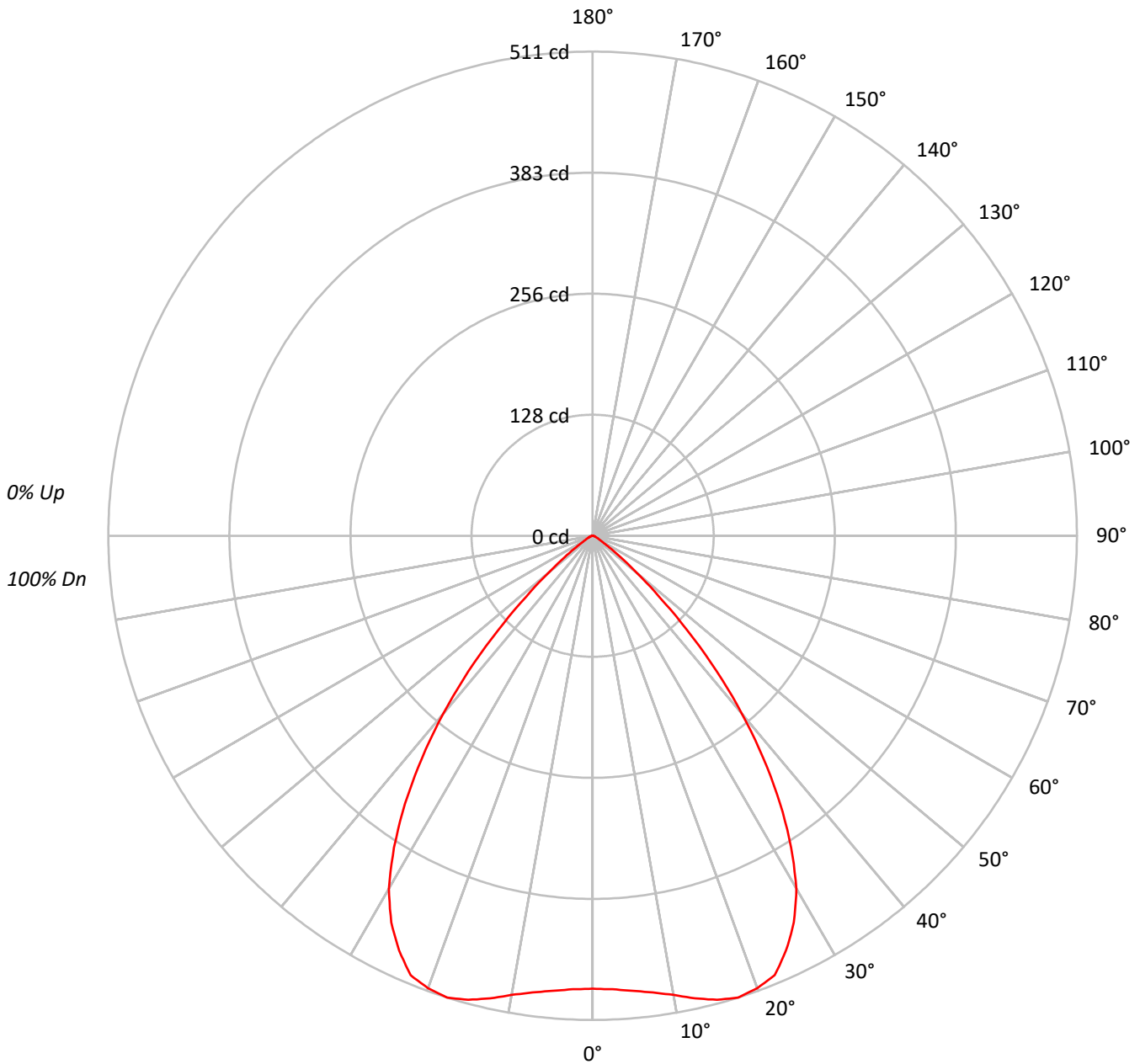
Input Watts (W): 13.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	100	100
1	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92	92	92	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84	84	84	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76	76	76	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69	69	69	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63	63	63	63
6	83	73	66	61	81	72	65	61	70	64	60	69	64	60	67	63	59	58	58	58	58
7	78	67	60	56	76	67	60	55	65	59	55	64	59	55	63	58	54	53	53	53	53
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49	49	49	49
9	69	58	51	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45	45	45	45
10	65	54	48	43	64	54	48	43	53	47	43	52	47	43	51	46	43	41	41	41	41

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	52227
5°	52865
10°	54586
15°	57349
20°	59067
25°	58229
30°	54250
35°	46017
40°	34944
45°	21787
50°	10369
55°	4000
60°	1967
65°	1293
70°	958
75°	844
80°	629
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.3	6.1
10°-20°	143.3	18.7
20°-30°	220.4	28.8
30°-40°	212.6	27.8
40°-50°	110.9	14.5
50°-60°	23.3	3.1
60°-70°	5.4	0.7
70°-80°	2.1	0.3
80°-90°	0.1	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°	410.0	53.6
0°-40°	622.6	81.4
0°-60°	756.8	99.0
0°-90°	764.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	764.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	478	
5°	482	46
15°	507	143
25°	483	220
35°	345	213
45°	141	111
55°	21	23
65°	5	5
75°	2	2
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	478
2.5°	479
5°	482
7.5°	486
10°	492
12.5°	500
15°	507
17.5°	511
20°	508
22.5°	502
25°	483
27.5°	460
30°	430
32.5°	390
35°	345
37.5°	296
40°	245
42.5°	194
45°	141
47.5°	95
50°	61
52.5°	37
55°	21
57.5°	13
60°	9
62.5°	7
65°	5
67.5°	4
70°	3
72.5°	3
75°	2
77.5°	1
80°	1
82.5°	0
85°	0
87.5°	0
90°	0



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— 0°-180°







(END OF REPORT)