

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: P35177

Luminaire Tested: **LD4B10D010 EU4B10209027 4LBMMW1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P35177
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD4B10D010 EU4B10209027 4LBMMW1
Description: PORTFOLIO 4 INCH 50 DEGREE CUTOFF RECESSED DOWNLIGHT
MEDIUM DISTRIBUTION WITH MATTE WHITE 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: 690.3 lumens
Efficiency: N/A
Efficacy: 70.9 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 0.99 / 0.97
Luminous Opening: Circular (Dia: 0.35' x H: 0')
CIE Type: Direct

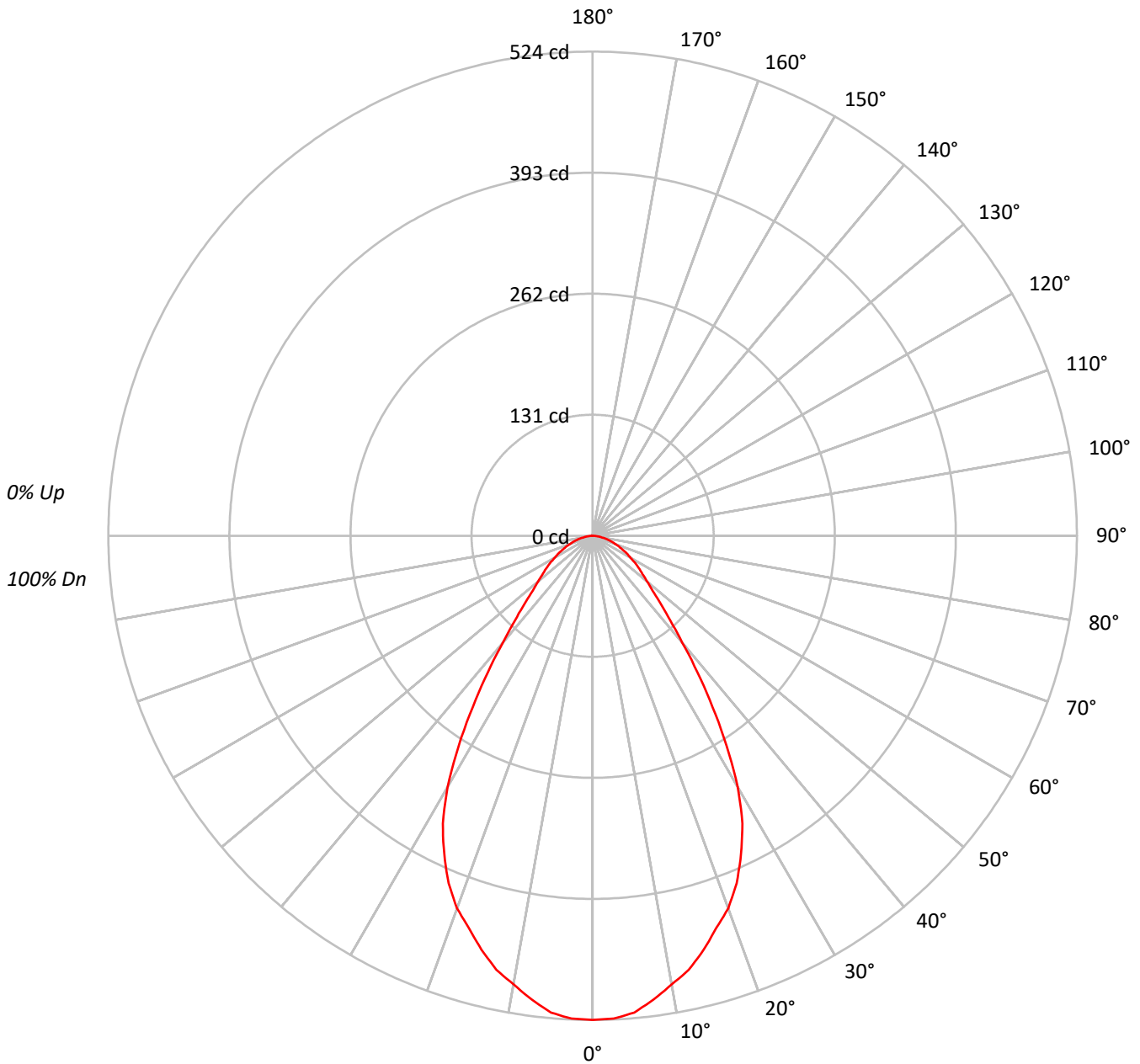
Input Watts (W): 9.73
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89			89
2	104	98	92	88	102	96	91	87	93	89	85	89	86	83	87	84	81	80			80
3	97	89	83	77	95	87	82	77	85	80	76	82	78	74	80	76	73	71			71
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64			64
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58			58
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53			53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49			49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	45			45
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42			42
10	63	52	45	41	62	51	45	41	51	45	40	50	44	40	49	44	40	39			39

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	57253
5°	56813
10°	54697
15°	52485
20°	49881
25°	45811
30°	39615
35°	30145
40°	21537
45°	16070
50°	13088
55°	11620
60°	10271
65°	9307
70°	8306
75°	7599
80°	6292
85°	5015



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.6	7.0
10°-20°	130.2	18.9
20°-30°	173.1	25.1
30°-40°	141.6	20.5
40°-50°	82.5	11.9
50°-60°	54.7	7.9
60°-70°	36.0	5.2
70°-80°	19.0	2.7
80°-90°	4.6	0.7
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°	351.9	51.0
0°-40°	493.5	71.5
0°-60°	630.7	91.4
0°-90°	690.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	690.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	524	
5°	518	49
15°	464	130
25°	380	173
35°	226	142
45°	104	82
55°	61	55
65°	36	36
75°	18	19
85°	4	5
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	524
2.5°	523
5°	518
7.5°	506
10°	493
12.5°	481
15°	464
17.5°	445
20°	429
22.5°	407
25°	380
27.5°	351
30°	314
32.5°	270
35°	226
37.5°	186
40°	151
42.5°	124
45°	104
47.5°	88
50°	77
52.5°	68
55°	61
57.5°	54
60°	47
62.5°	42
65°	36
67.5°	31
70°	26
72.5°	22
75°	18
77.5°	14
80°	10
82.5°	7
85°	4
87.5°	1
90°	0



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— 0°-180°







(END OF REPORT)