

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: P35210

Luminaire Tested: **LD4B10D010 EU4B10209027 4LBNMW1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P35210
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD4B10D010 EU4B10209027 4LBNMW1
Description: PORTFOLIO 4 INCH 50 DEGREE CUTOFF RECESSED DOWNLIGHT
NARROW 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: 629.5 lumens
Efficiency: N/A
Efficacy: 64.7 lumens/watt
Spacing Criteria (0/90/45): 0.96 / 0.96 / 0.95
Luminous Opening: Circular (Dia: 0.35' x H: 0')
CIE Type: Direct

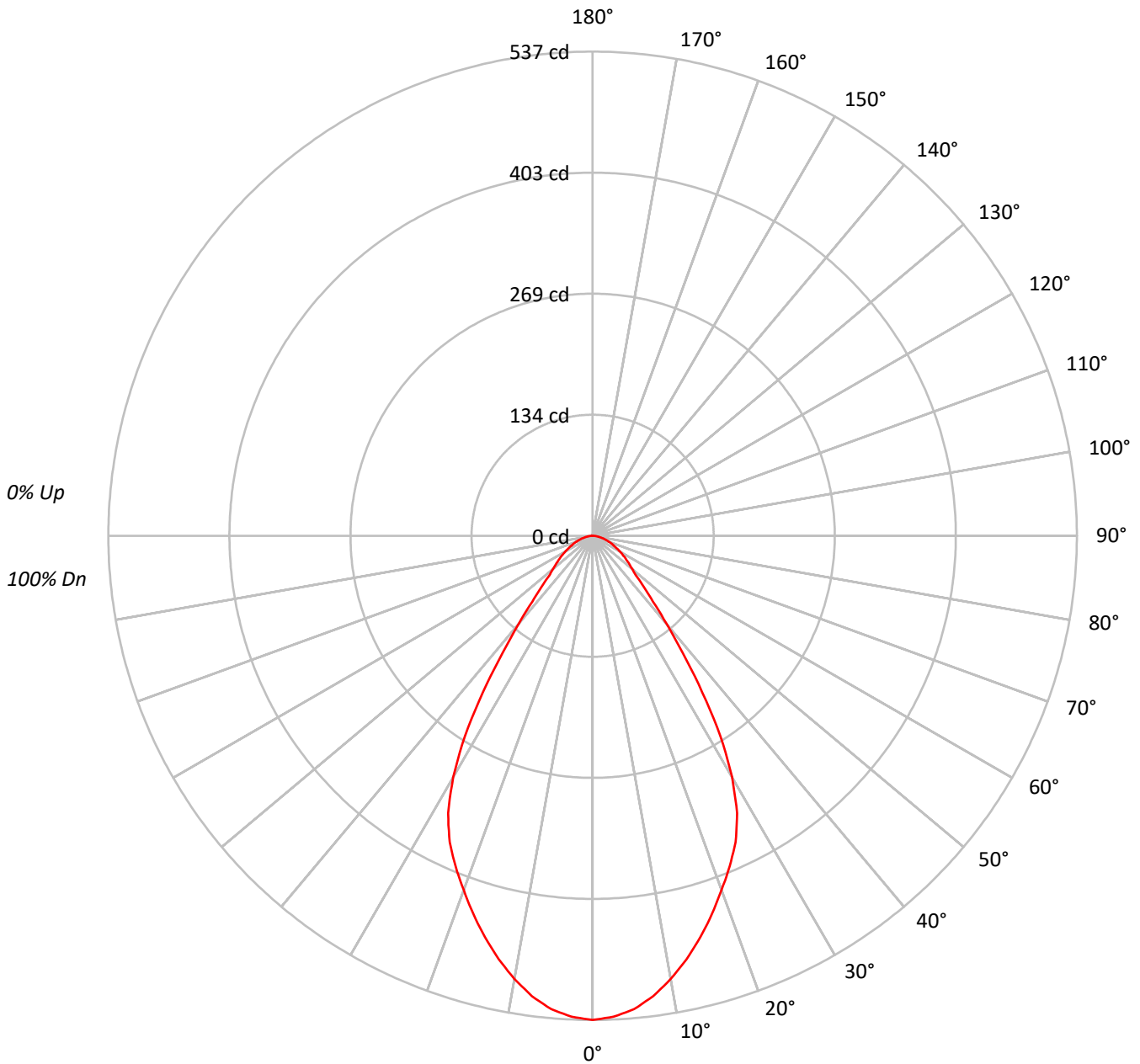
Input Watts (W): 9.73
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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			
1	112	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73			
4	92	83	76	71	90	82	76	71	80	74	70	78	73	69	76	72	68	67			
5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	63	61			
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	56			
7	77	66	59	54	75	65	59	54	64	58	54	63	57	53	62	57	53	52			
8	73	62	55	50	71	61	55	50	60	54	50	59	53	49	58	53	49	48			
9	69	58	51	46	68	57	51	46	56	50	46	55	50	46	54	49	46	44			
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43	41			

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	58673
5°	57800
10°	55362
15°	52146
20°	48602
25°	45208
30°	38985
35°	28277
40°	18114
45°	12361
50°	9689
55°	8572
60°	7648
65°	6722
70°	6070
75°	5488
80°	4404
85°	3761



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.4	7.8
10°-20°	129.3	20.5
20°-30°	170.1	27.0
30°-40°	132.4	21.0
40°-50°	64.3	10.2
50°-60°	40.6	6.5
60°-70°	26.2	4.2
70°-80°	13.7	2.2
80°-90°	3.4	0.5
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°	348.8	55.4
0°-40°	481.2	76.4
0°-60°	586.2	93.1
0°-90°	629.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	629.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	537	
5°	527	49
15°	461	129
25°	375	170
35°	212	132
45°	80	64
55°	45	41
65°	26	26
75°	13	14
85°	3	3
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	537
2.5°	534
5°	527
7.5°	515
10°	499
12.5°	481
15°	461
17.5°	440
20°	418
22.5°	397
25°	375
27.5°	347
30°	309
32.5°	264
35°	212
37.5°	164
40°	127
42.5°	99
45°	80
47.5°	65
50°	57
52.5°	51
55°	45
57.5°	40
60°	35
62.5°	30
65°	26
67.5°	23
70°	19
72.5°	16
75°	13
77.5°	10
80°	7
82.5°	5
85°	3
87.5°	1
90°	0



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— 0°-180°







(END OF REPORT)