

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: P205611

Luminaire Tested: **LD4B20D010 EU4B10209730 4LBSWMH1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P205611
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 EU4B10209730 4LBSWMH1
Description: PORTFOLIO 4 INCH SHALLOW RECESSED DOWNLIGHT
SHALLOW DISTRIBUTION WITH WARM 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: 1505.2 lumens
Efficiency: N/A
Efficacy: 72.4 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 0.99 / 1.08
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

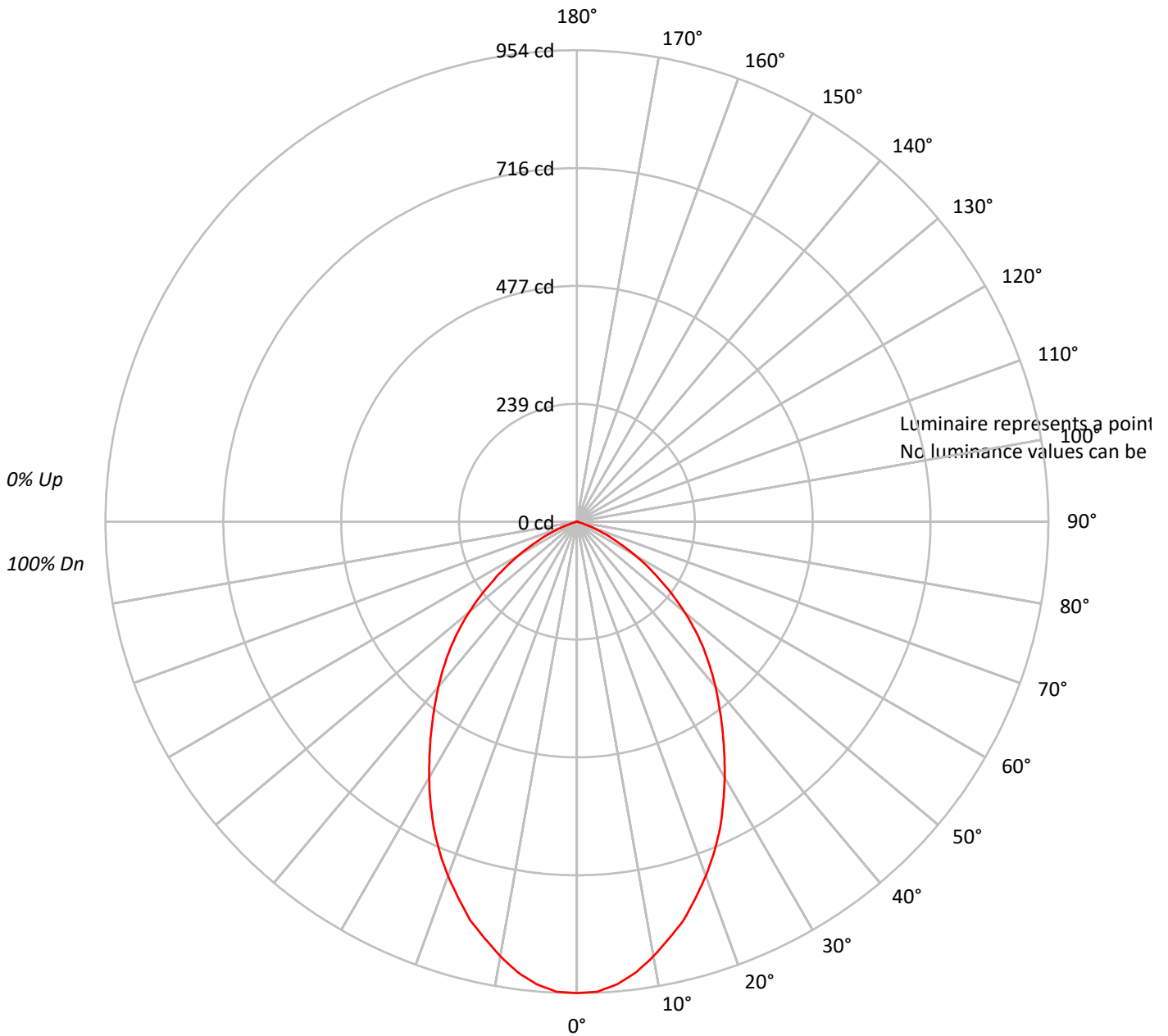
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90																			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79																			
3	96	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70																			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62																			
5	83	73	65	59	82	72	64	59	70	63	59	68	62	58	66	61	57	56																			
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	50																			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45																			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41																			
9	64	52	45	40	63	52	45	40	50	44	40	49	44	39	49	43	39	38																			
10	60	48	41	37	59	48	41	37	47	41	36	46	40	36	45	40	36	35																			

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.2	5.9
10°-20°	233.7	15.5
20°-30°	313.8	20.8
30°-40°	321.2	21.3
40°-50°	278.1	18.5
50°-60°	184.9	12.3
60°-70°	76.0	5.0
70°-80°	9.0	0.6
80°-90°	0.4	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°	635.6	42.2
0°-40°	956.9	63.6
0°-60°	1419.9	94.3
0°-90°	1505.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1505.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	954	
5°	939	88
15°	835	234
25°	685	314
35°	513	321
45°	362	278
55°	205	185
65°	75	76
75°	4	9
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	954.0
2.5°	952.0
5°	939.2
7.5°	919.5
10°	892.8
12.5°	863.2
15°	834.6
17.5°	798.1
20°	762.6
22.5°	725.1
25°	684.7
27.5°	641.3
30°	597.9
32.5°	554.4
35°	513.0
37.5°	473.5
40°	436.1
42.5°	398.6
45°	362.1
47.5°	323.6
50°	284.1
52.5°	244.7
55°	205.2
57.5°	170.7
60°	135.2
62.5°	102.6
65°	75.0
67.5°	49.3
70°	28.6
72.5°	13.8
75°	3.9
77.5°	2.0
80°	1.0
82.5°	1.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)