

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: P206515

Luminaire Tested: **LD4B10D010 EU4B10209035 4LBCSMMS1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P206515
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: LD4B10D010 EU4B10209035 4LBCSMMS1
Description: PORTFOLIO 4 INCH SHALLOW RECESSED DOWNLIGHT
SHALLOW DISTRIBUTION WITH CAST MATTE BLACK 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: 820.5 lumens
Efficiency: N/A
Efficacy: 82.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.27
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

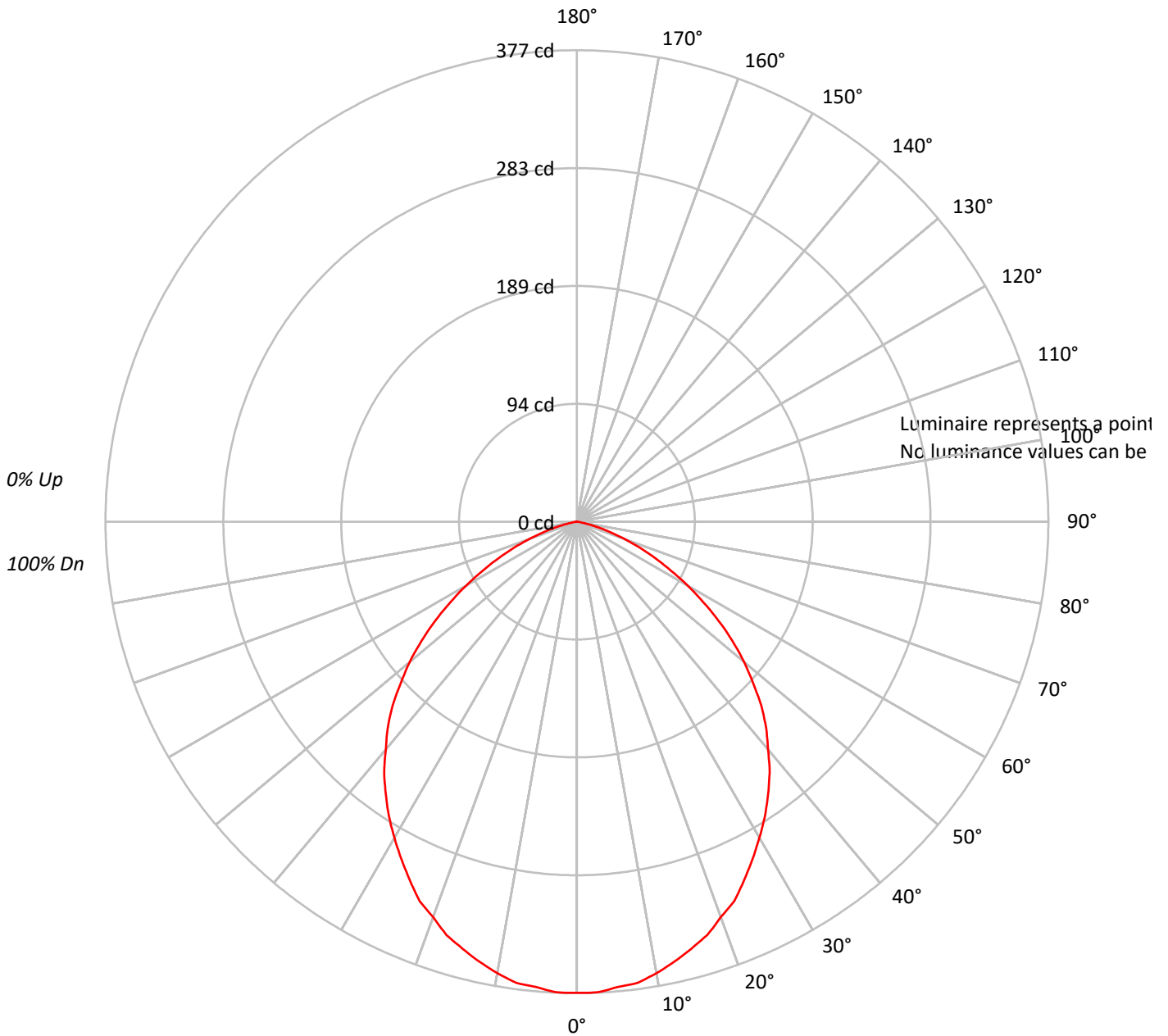
Input Watts (W): 9.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	103	100	108	105	101	98	100	98	95	97	94	92	93	91	90	88			88
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	83	80	78	76			76
3	94	85	77	72	92	83	76	71	80	74	70	77	73	69	75	71	67	65			65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57			57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50			50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44			44
7	69	56	48	42	67	56	48	42	54	47	42	53	46	42	51	46	41	40			40
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36			36
9	60	48	40	35	59	47	40	34	46	39	34	45	39	34	44	38	34	32			32
10	57	44	36	31	55	43	36	31	43	36	31	42	35	31	41	35	31	29			29

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.5	4.3
10°-20°	99.7	12.1
20°-30°	145.5	17.7
30°-40°	166.5	20.3
40°-50°	160.0	19.5
50°-60°	123.5	15.1
60°-70°	68.9	8.4
70°-80°	20.0	2.4
80°-90°	0.9	0.1
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°	280.7	34.2
0°-40°	447.2	54.5
0°-60°	730.7	89.1
0°-90°	820.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	820.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	377	
5°	374	36
15°	354	100
25°	316	146
35°	266	166
45°	209	160
55°	138	124
65°	69	69
75°	18	20
85°	0	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	376.8
2.5°	376.8
5°	373.6
7.5°	372.0
10°	366.7
12.5°	360.4
15°	353.5
17.5°	346.6
20°	336.5
22.5°	328.5
25°	316.3
27.5°	304.1
30°	291.9
32.5°	279.7
35°	266.4
37.5°	253.2
40°	237.8
42.5°	224.0
45°	208.6
47.5°	191.1
50°	174.6
52.5°	156.6
55°	138.5
57.5°	119.9
60°	102.4
62.5°	84.9
65°	69.0
67.5°	54.1
70°	40.3
72.5°	28.1
75°	17.5
77.5°	9.0
80°	3.2
82.5°	1.1
85°	0.5
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)