

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: P206513

Luminaire Tested: **LD4B10D010 EU4B10209027 4LBCSMMS1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P206513
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 EU4B10209027 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: 777.3 lumens
Efficiency: N/A
Efficacy: 78.5 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

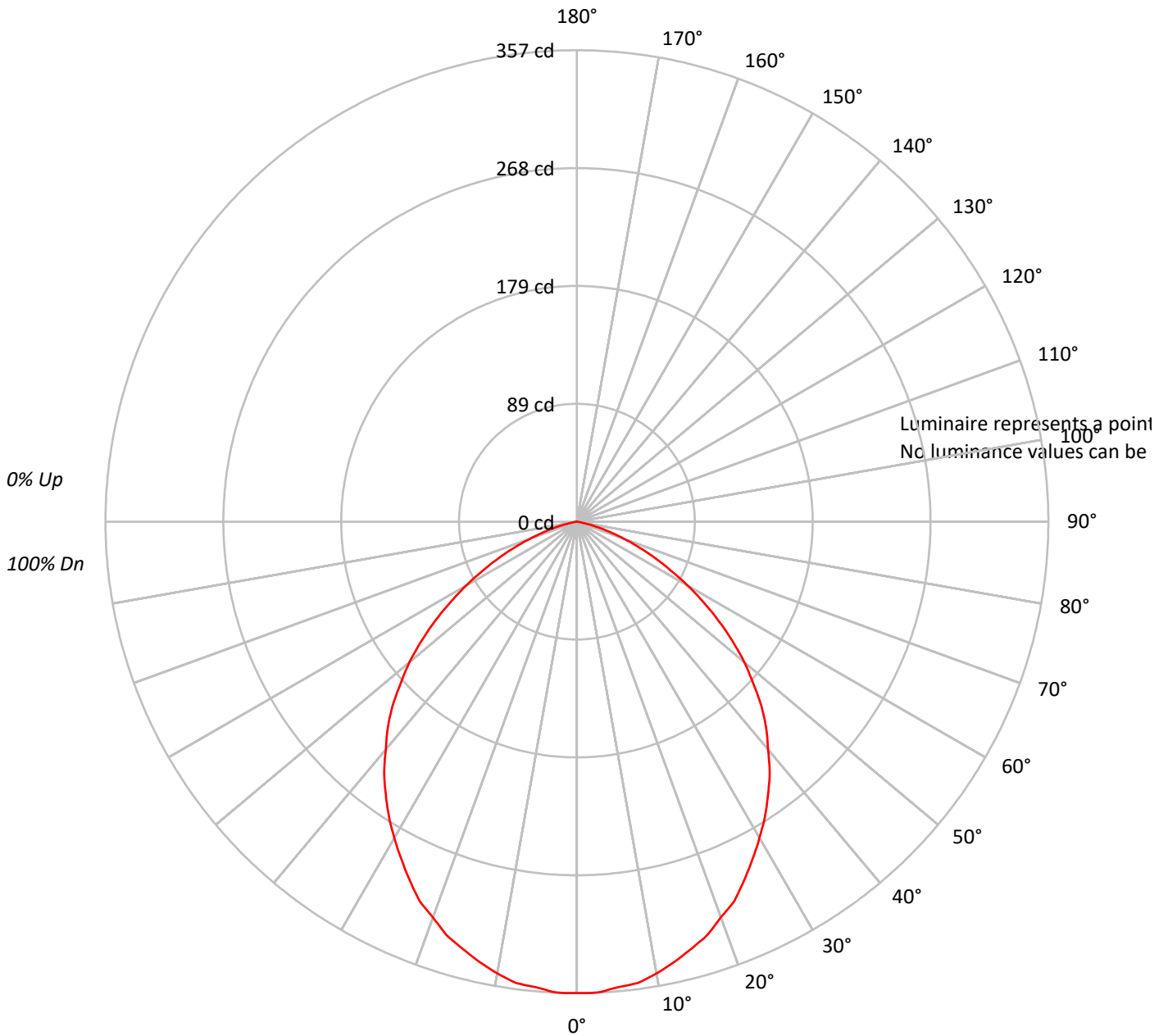
Input Watts (W): 9.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	33.6	4.3
10°-20°	94.4	12.1
20°-30°	137.9	17.7
30°-40°	157.7	20.3
40°-50°	151.6	19.5
50°-60°	117.0	15.1
60°-70°	65.3	8.4
70°-80°	19.0	2.4
80°-90°	0.8	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°	265.9	34.2
0°-40°	423.6	54.5
0°-60°	692.1	89.0
0°-90°	777.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	777.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	357	
5°	354	34
15°	335	94
25°	300	138
35°	252	158
45°	198	152
55°	131	117
65°	65	65
75°	17	19
85°	0	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	357.0
2.5°	357.0
5°	353.9
7.5°	352.4
10°	347.4
12.5°	341.4
15°	334.8
17.5°	328.3
20°	318.8
22.5°	311.2
25°	299.6
27.5°	288.1
30°	276.5
32.5°	265.0
35°	252.4
37.5°	239.8
40°	225.2
42.5°	212.2
45°	197.6
47.5°	181.0
50°	165.4
52.5°	148.3
55°	131.2
57.5°	113.6
60°	97.0
62.5°	80.4
65°	65.4
67.5°	51.3
70°	38.2
72.5°	26.6
75°	16.6
77.5°	8.5
80°	3.0
82.5°	1.0
85°	0.5
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)