

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: P206534

Luminaire Tested: **LD4B20D010 EU4B10208030 4LBCSMMS1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P206534
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 EU4B10208030 4LBCSMMS1
Description: PORTFOLIO 4 INCH SHALLOW RECESSED DOWNLIGHT
SHALLOW DISTRIBUTION WITH CAST MATTE BLACK 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: 1785.5 lumens
Efficiency: N/A
Efficacy: 85.8 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

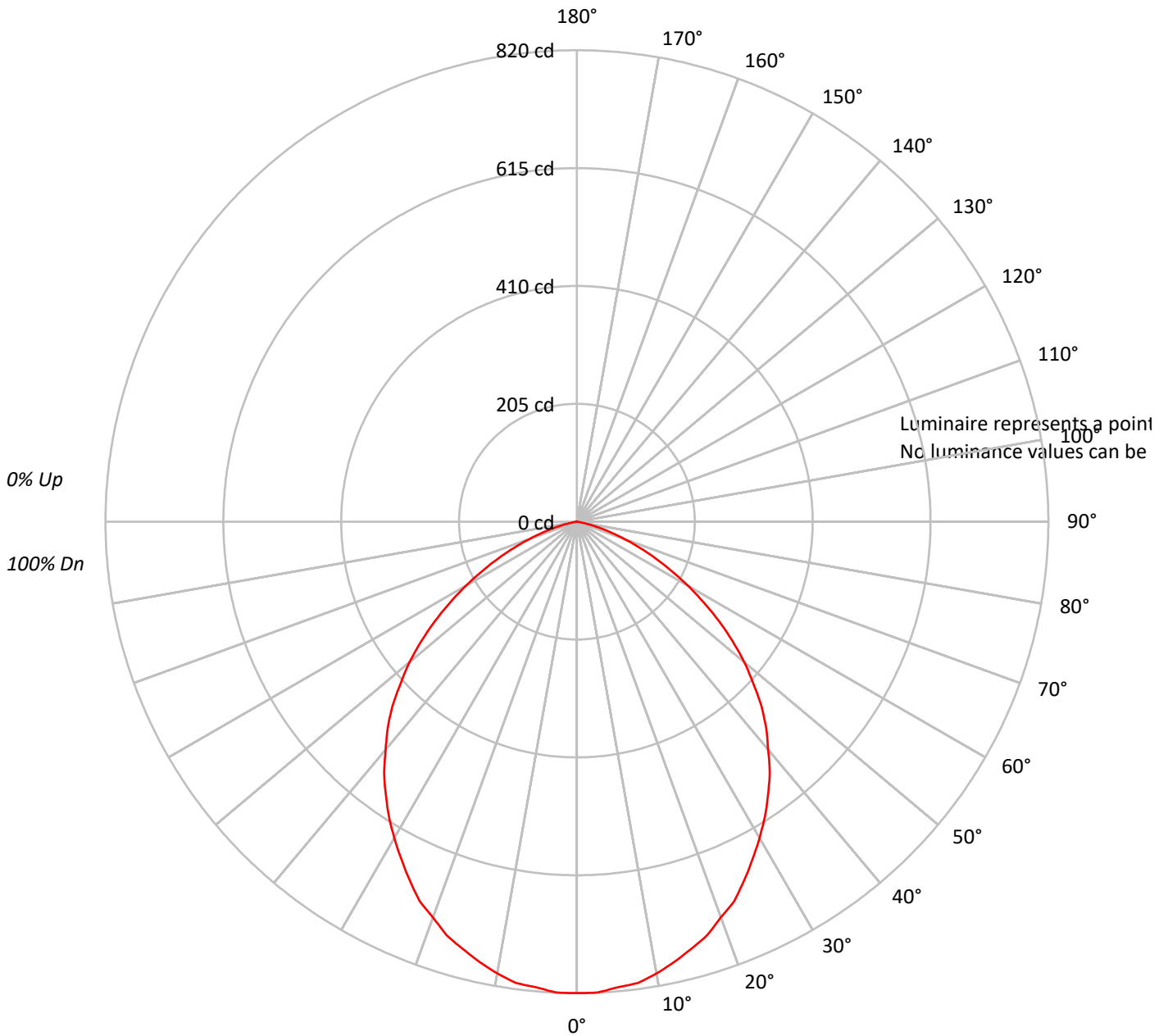
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





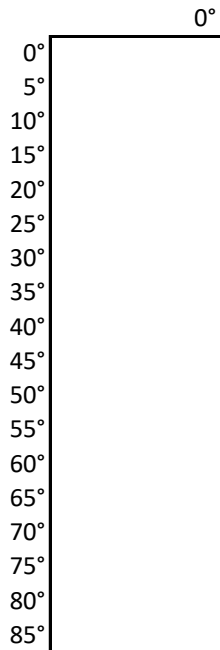
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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	100	100
1	111	107	103	100	108	105	101	98	100	98	95	97	94	92	93	91	90	88	88	88	88
2	102	95	89	84	99	93	88	83	90	85	81	86	83	79	83	80	78	76	76	76	76
3	94	85	77	72	92	83	76	71	80	74	70	77	73	69	75	71	67	65	65	65	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57	57	57	57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50	50	50	50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44	44	44	44
7	69	56	48	42	67	56	48	42	54	47	42	53	46	42	51	46	41	40	40	40	40
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36	36	36	36
9	60	48	40	35	59	47	40	34	46	39	34	45	39	34	44	38	34	32	32	32	32
10	57	44	36	31	55	43	36	31	43	36	31	42	35	31	41	35	31	29	29	29	29

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.3	4.3
10°-20°	216.8	12.1
20°-30°	316.7	17.7
30°-40°	362.2	20.3
40°-50°	348.1	19.5
50°-60°	268.8	15.1
60°-70°	150.0	8.4
70°-80°	43.7	2.4
80°-90°	1.9	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°	610.8	34.2
0°-40°	973.0	54.5
0°-60°	1589.9	89.0
0°-90°	1785.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1785.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	820	
5°	813	77
15°	769	217
25°	688	317
35°	580	362
45°	454	348
55°	301	269
65°	150	150
75°	38	44
85°	1	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	819.9
2.5°	819.9
5°	813.0
7.5°	809.5
10°	798.0
12.5°	784.1
15°	769.1
17.5°	754.1
20°	732.2
22.5°	714.8
25°	688.3
27.5°	661.7
30°	635.2
32.5°	608.6
35°	579.7
37.5°	550.9
40°	517.4
42.5°	487.3
45°	453.9
47.5°	415.7
50°	379.9
52.5°	340.7
55°	301.4
57.5°	261.0
60°	222.9
62.5°	184.8
65°	150.1
67.5°	117.8
70°	87.8
72.5°	61.2
75°	38.1
77.5°	19.6
80°	6.9
82.5°	2.3
85°	1.2
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)