

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: P206545

Luminaire Tested: **LD4B20D010 EU4B10209730 4LBCSMMS1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P206545
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 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: 1332.8 lumens
Efficiency: N/A
Efficacy: 64.1 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

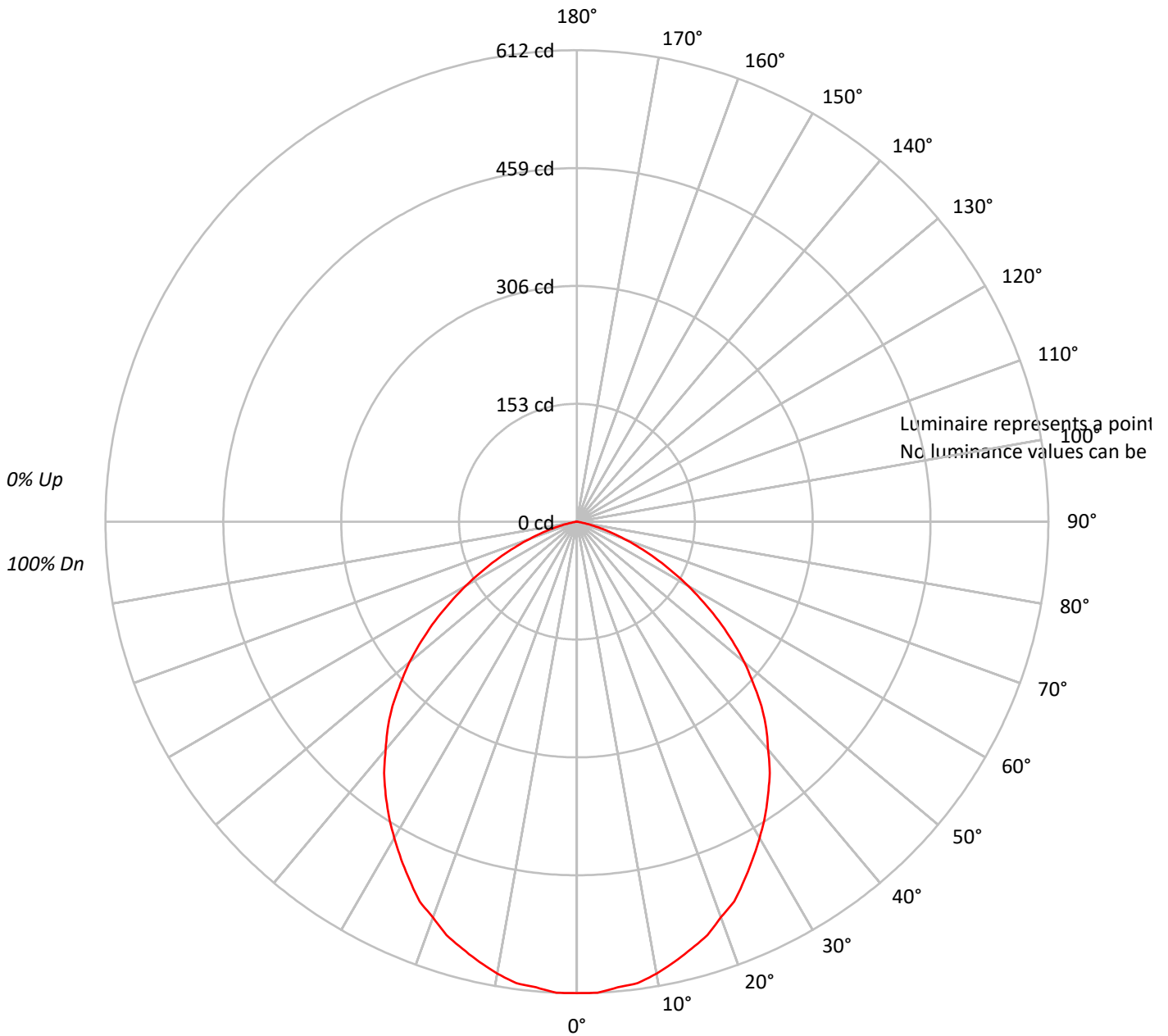
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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	99	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°	57.7	4.3
10°-20°	161.8	12.1
20°-30°	236.4	17.7
30°-40°	270.4	20.3
40°-50°	259.8	19.5
50°-60°	200.6	15.1
60°-70°	112.0	8.4
70°-80°	32.6	2.4
80°-90°	1.4	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°	455.9	34.2
0°-40°	726.3	54.5
0°-60°	1186.8	89.0
0°-90°	1332.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1332.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	612	
5°	607	58
15°	574	162
25°	514	236
35°	433	270
45°	339	260
55°	225	201
65°	112	112
75°	28	33
85°	1	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	612.1
2.5°	612.1
5°	606.9
7.5°	604.3
10°	595.7
12.5°	585.3
15°	574.1
17.5°	562.9
20°	546.5
22.5°	533.6
25°	513.8
27.5°	494.0
30°	474.1
32.5°	454.3
35°	432.7
37.5°	411.2
40°	386.2
42.5°	363.8
45°	338.8
47.5°	310.3
50°	283.6
52.5°	254.3
55°	225.0
57.5°	194.8
60°	166.4
62.5°	137.9
65°	112.1
67.5°	87.9
70°	65.5
72.5°	45.7
75°	28.4
77.5°	14.7
80°	5.2
82.5°	1.7
85°	0.9
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)