

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: P206542

Luminaire Tested: **LD4B20D010 EU4B10209040 4LBCSMMS1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P206542
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 EU4B10209040 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: 1549.0 lumens
Efficiency: N/A
Efficacy: 74.5 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

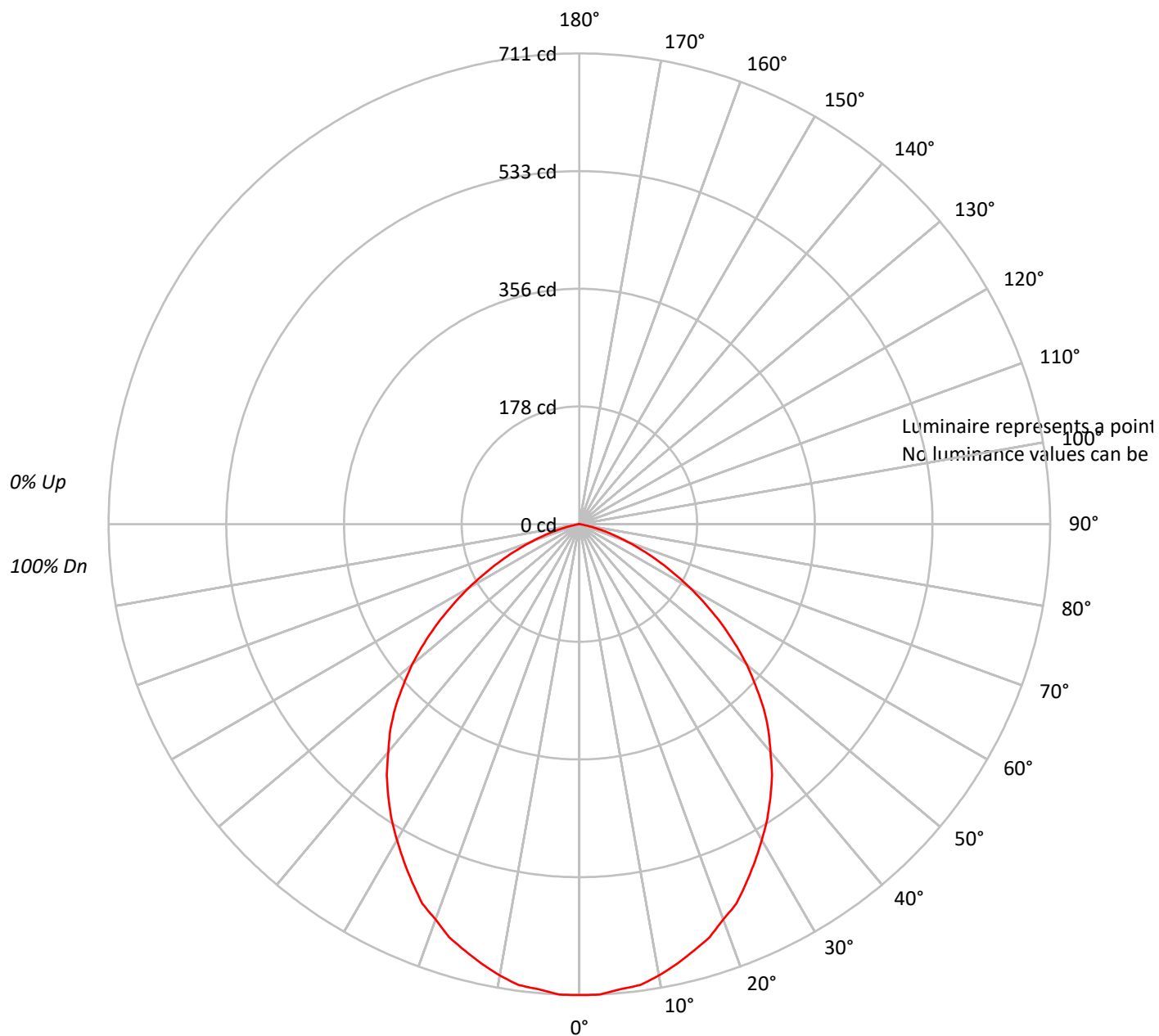
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





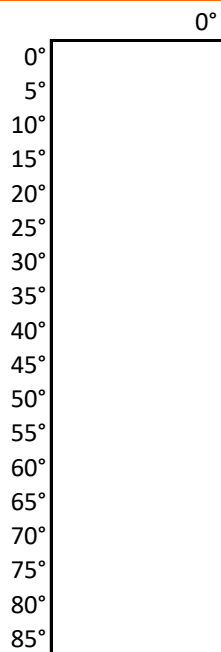
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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	111	107	103	100	108	105	101	98		100	98	95		97	94	92		93	91	90
2	102	95	89	84	99	93	88	83		90	85	81		86	83	79		83	80	78
3	94	85	77	72	92	83	76	71		80	74	70		77	73	69		75	71	67
4	87	76	68	62	84	74	67	61		72	66	61		70	64	60		68	63	59
5	80	68	60	54	78	67	59	54		65	58	53		63	57	53		61	56	52
6	74	62	54	48	72	61	53	47		59	52	47		58	51	47		56	51	46
7	69	56	48	42	67	56	48	42		54	47	42		53	46	42		51	46	41
8	64	52	44	38	63	51	43	38		50	43	38		48	42	38		47	42	37
9	60	48	40	35	59	47	40	34		46	39	34		45	39	34		44	38	34
10	57	44	36	31	55	43	36	31		43	36	31		42	35	31		41	35	31

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.0	4.3
10°-20°	188.1	12.1
20°-30°	274.7	17.7
30°-40°	314.2	20.3
40°-50°	302.0	19.5
50°-60°	233.2	15.1
60°-70°	130.1	8.4
70°-80°	37.9	2.4
80°-90°	1.6	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°	529.9	34.2
0°-40°	844.1	54.5
0°-60°	1379.3	89.0
0°-90°	1549.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1549.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	711	
5°	705	67
15°	667	188
25°	597	275
35°	503	314
45°	394	302
55°	262	233
65°	130	130
75°	33	38
85°	1	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	711.3
2.5°	711.3
5°	705.3
7.5°	702.3
10°	692.3
12.5°	680.3
15°	667.2
17.5°	654.2
20°	635.2
22.5°	620.2
25°	597.1
27.5°	574.1
30°	551.0
32.5°	528.0
35°	502.9
37.5°	477.9
40°	448.8
42.5°	422.8
45°	393.7
47.5°	360.7
50°	329.6
52.5°	295.6
55°	261.5
57.5°	226.4
60°	193.4
62.5°	160.3
65°	130.2
67.5°	102.2
70°	76.1
72.5°	53.1
75°	33.1
77.5°	17.0
80°	6.0
82.5°	2.0
85°	1.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)