

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: P205609

Luminaire Tested: **LD4B20D010 EU4B10209050 4LBSWMH1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P205609
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 EU4B10209050 4LBSWMH1
Description: PORTFOLIO 4 INCH SHALLOW RECESSED DOWNLIGHT
SHALLOW DISTRIBUTION WITH WARM HAZE 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: 1757.3 lumens
Efficiency: N/A
Efficacy: 84.5 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 0.99 / 1.08
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

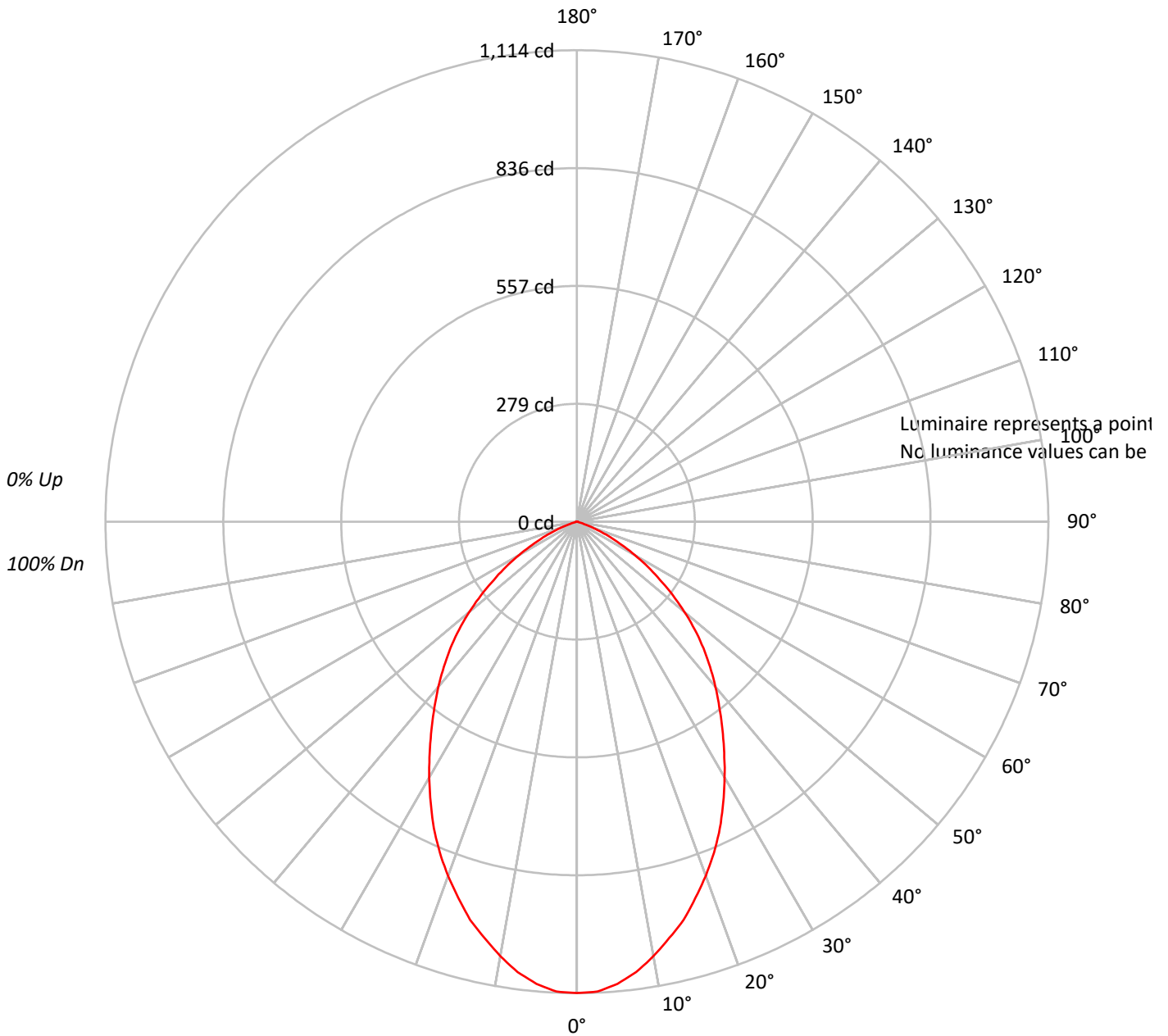
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P205609

CATALOG NUMBER: LD4B20D010 EU4B10209050 4LBSWMH1

Luminous Intensity Polar Plot





TEST NUMBER: P205609

CATALOG NUMBER: LD4B20D010 EU4B10209050 4LBSWMH1

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			
1	112	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79			
3	96	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62			
5	83	73	65	59	82	72	64	59	70	63	59	68	62	58	66	61	57	56			
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41			
9	64	52	45	40	63	52	45	40	50	44	40	49	44	39	49	43	39	38			
10	60	48	41	37	59	48	41	37	47	41	36	46	40	36	45	40	36	35			

AVERAGE LUMINANCE (cd/sqm):





TEST NUMBER: P205609

CATALOG NUMBER: LD4B20D010 EU4B10209050 4LBSWMH1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.9	5.9
10°-20°	272.8	15.5
20°-30°	366.3	20.8
30°-40°	375.0	21.3
40°-50°	324.6	18.5
50°-60°	215.9	12.3
60°-70°	88.7	5.0
70°-80°	10.5	0.6
80°-90°	0.5	0.0
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°	742.1	42.2
0°-40°	1117.1	63.6
0°-60°	1657.6	94.3
0°-90°	1757.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1757.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1114	
5°	1096	103
15°	974	273
25°	799	366
35°	599	375
45°	423	325
55°	240	216
65°	88	89
75°	5	11
85°	0	0
90°	0	



TEST NUMBER: P205609

CATALOG NUMBER: LD4B20D010 EU4B10209050 4LBSWMH1

CANDELA DISTRIBUTION (FULL):

	0°
0°	1113.8
2.5°	1111.4
5°	1096.5
7.5°	1073.4
10°	1042.3
12.5°	1007.8
15°	974.4
17.5°	931.8
20°	890.3
22.5°	846.5
25°	799.3
27.5°	748.6
30°	698.0
32.5°	647.3
35°	598.9
37.5°	552.8
40°	509.1
42.5°	465.3
45°	422.7
47.5°	377.8
50°	331.7
52.5°	285.6
55°	239.6
57.5°	199.3
60°	157.8
62.5°	119.8
65°	87.5
67.5°	57.6
70°	33.4
72.5°	16.1
75°	4.6
77.5°	2.3
80°	1.2
82.5°	1.2
85°	0.0
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°







(END OF REPORT)