

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: P208388

Luminaire Tested: **LD4B20D010 EU4B10209030 4LBSLI1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208388
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 EU4B10209030 4LBSLI1
Description: PORTFOLIO 4 INCH SHALLOW RECESSED DOWNLIGHT
SHALLOW DISTRIBUTION WITH SPECULAR CLEAR 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: 1771.8 lumens
Efficiency: N/A
Efficacy: 85.2 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.91 / 1
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

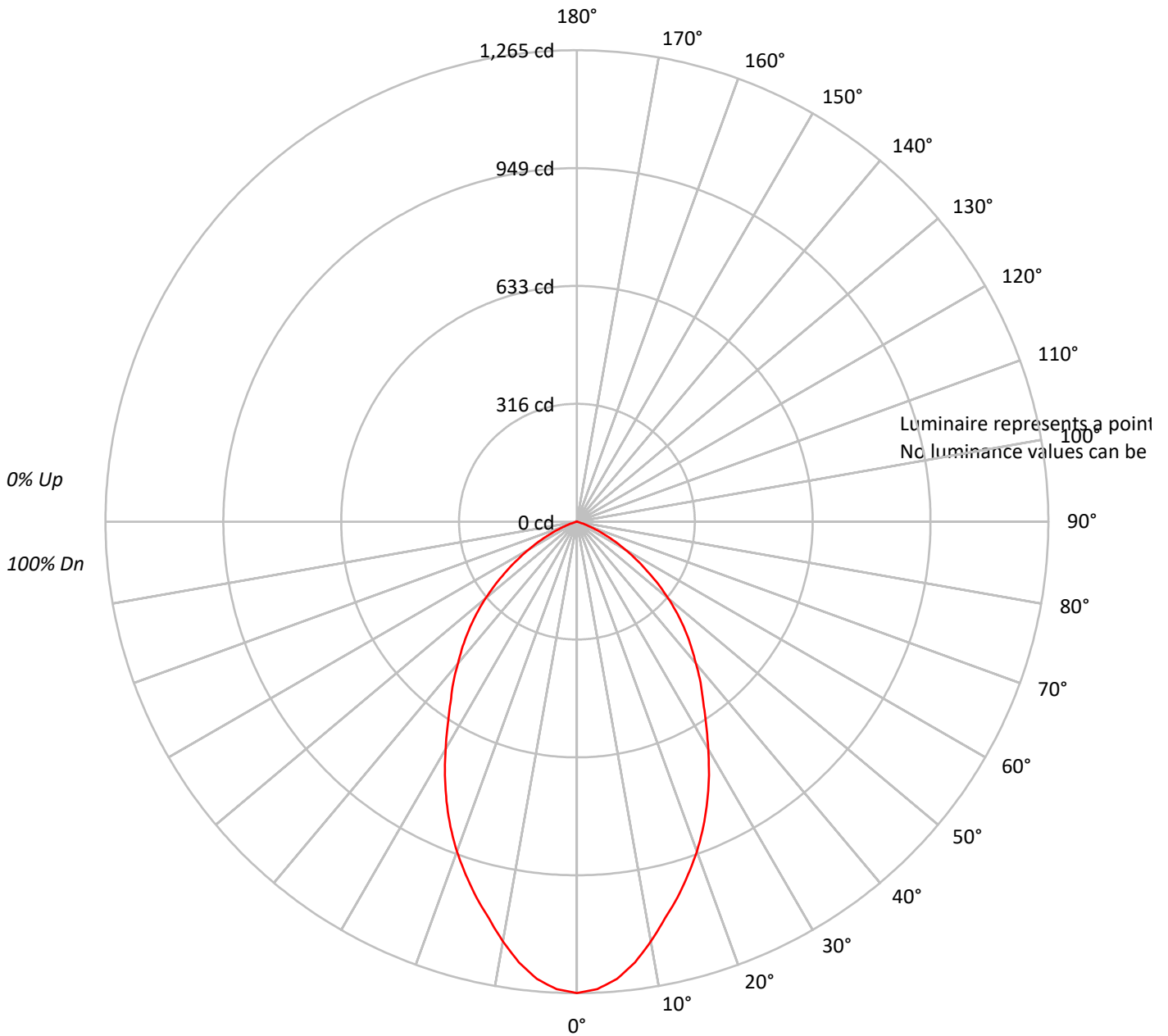
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P208388

CATALOG NUMBER: LD4B20D010 EU4B10209030 4LBSLI1

Luminous Intensity Polar Plot





TEST NUMBER: P208388

CATALOG NUMBER: LD4B20D010 EU4B10209030 4LBSLI1

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	98	98	96	95	95	93	92	90			
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80			
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71			
4	90	81	73	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63			
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57			
6	79	67	60	54	77	66	59	54	65	58	54	63	58	53	62	57	53	51			
7	74	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46			
8	69	57	50	45	68	57	50	45	55	49	45	54	49	44	53	48	44	42			
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39			
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36			

AVERAGE LUMINANCE (cd/sqm):





TEST NUMBER: P208388

CATALOG NUMBER: LD4B20D010 EU4B10209030 4LBSLI1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.7	6.5
10°-20°	292.5	16.5
20°-30°	379.1	21.4
30°-40°	371.4	21.0
40°-50°	314.8	17.8
50°-60°	206.4	11.6
60°-70°	83.0	4.7
70°-80°	9.5	0.5
80°-90°	0.3	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°	786.3	44.4
0°-40°	1157.8	65.3
0°-60°	1679.0	94.8
0°-90°	1771.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1771.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1265	
5°	1232	115
15°	1043	293
25°	828	379
35°	590	371
45°	410	315
55°	230	206
65°	80	83
75°	4	9
85°	0	0
90°	0	



TEST NUMBER: P208388

CATALOG NUMBER: LD4B20D010 EU4B10209030 4LBSL11

CANDELA DISTRIBUTION (FULL):

	0°
0°	1265.0
2.5°	1255.2
5°	1231.7
7.5°	1192.5
10°	1143.4
12.5°	1090.5
15°	1043.4
17.5°	992.4
20°	941.4
22.5°	886.5
25°	827.7
27.5°	766.9
30°	704.1
32.5°	645.3
35°	590.4
37.5°	545.2
40°	496.2
42.5°	453.1
45°	409.9
47.5°	364.8
50°	319.7
52.5°	274.6
55°	229.5
57.5°	188.3
60°	149.1
62.5°	113.8
65°	80.4
67.5°	53.0
70°	31.4
72.5°	13.7
75°	3.9
77.5°	2.0
80°	2.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°







(END OF REPORT)