

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: P211740

Luminaire Tested: **LE_4B20D010 EC4B10209040 4LBN1GPH**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211740
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: LE_4B20D010 EC4B10209040 4LBN1GPH
Description: PORTFOLIO 4 INCH CYLINDER
NARROW DISTRIBUTION WITH GRAPHITE 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: 954.7 lumens
Efficiency: N/A
Efficacy: 45.9 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.88
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

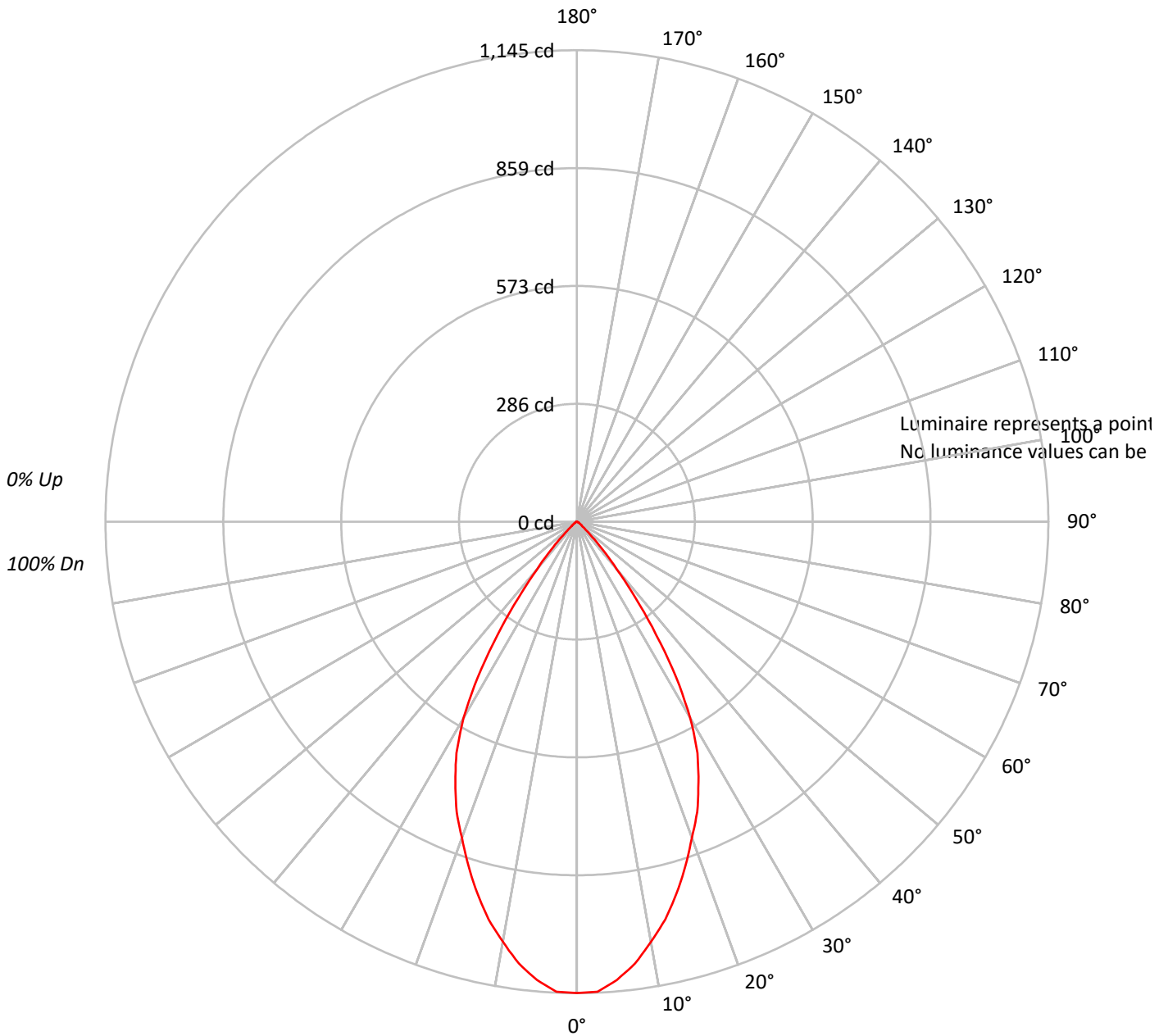
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P211740

CATALOG NUMBER: LE_4B20D010 EC4B10209040 4LBN1GPH

Luminous Intensity Polar Plot





TEST NUMBER: P211740

CATALOG NUMBER: LE_4B20D010 EC4B10209040 4LBN1GPH

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	114	111	108	106	111	109	106	104	105	103	101	101	100	98	97	96	95	94			
2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	92	91	89	87			
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	88	85	83	81			
4	97	90	84	80	96	89	84	80	87	82	79	85	81	78	83	80	77	76			
5	93	84	78	74	91	83	78	74	82	77	73	80	76	73	78	75	72	70			
6	88	79	73	69	86	78	73	69	77	72	68	75	71	68	74	70	67	66			
7	84	74	68	64	82	74	68	64	72	67	64	71	67	63	70	66	63	62			
8	80	70	64	60	78	70	64	60	68	63	60	67	63	59	66	62	59	58			
9	76	66	60	56	75	66	60	56	65	60	56	64	59	56	63	59	56	54			
10	72	63	57	53	71	62	57	53	61	56	53	61	56	53	60	56	52	51			

AVERAGE LUMINANCE (cd/sqm):





TEST NUMBER: P211740

CATALOG NUMBER: LE_4B20D010 EC4B10209040 4LBN1GPH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.1	10.9
10°-20°	260.9	27.3
20°-30°	318.0	33.3
30°-40°	209.8	22.0
40°-50°	48.3	5.1
50°-60°	9.3	1.0
60°-70°	3.4	0.4
70°-80°	0.9	0.1
80°-90°	0.0	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°	683.0	71.5
0°-40°	892.8	93.5
0°-60°	950.4	99.5
0°-90°	954.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	954.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1145	
5°	1117	104
15°	934	261
25°	698	318
35°	335	210
45°	53	48
55°	9	9
65°	2	3
75°	0	1
85°	0	0
90°	0	



TEST NUMBER: P211740

CATALOG NUMBER: LE_4B20D010 EC4B10209040 4LBN1GPH

CANDELA DISTRIBUTION (FULL):

	0°
0°	1144.8
2.5°	1142.5
5°	1117.1
7.5°	1082.4
10°	1036.1
12.5°	989.9
15°	934.4
17.5°	876.6
20°	816.4
22.5°	763.3
25°	698.4
27.5°	633.7
30°	550.4
32.5°	448.7
35°	335.4
37.5°	233.6
40°	150.3
42.5°	92.6
45°	53.2
47.5°	27.7
50°	16.2
52.5°	13.9
55°	9.3
57.5°	7.0
60°	7.0
62.5°	4.6
65°	2.3
67.5°	2.3
70°	2.3
72.5°	2.3
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°







(END OF REPORT)