

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: P211814

Luminaire Tested: **LE\_4B20D010 EC4B10209050 4LBW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211814  
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 EC4B10209050 4LBW1LI  
Description: PORTFOLIO 4 INCH CYLINDER  
WIDE 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: 2027.1 lumens  
Efficiency: N/A  
Efficacy: 97.5 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.18  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

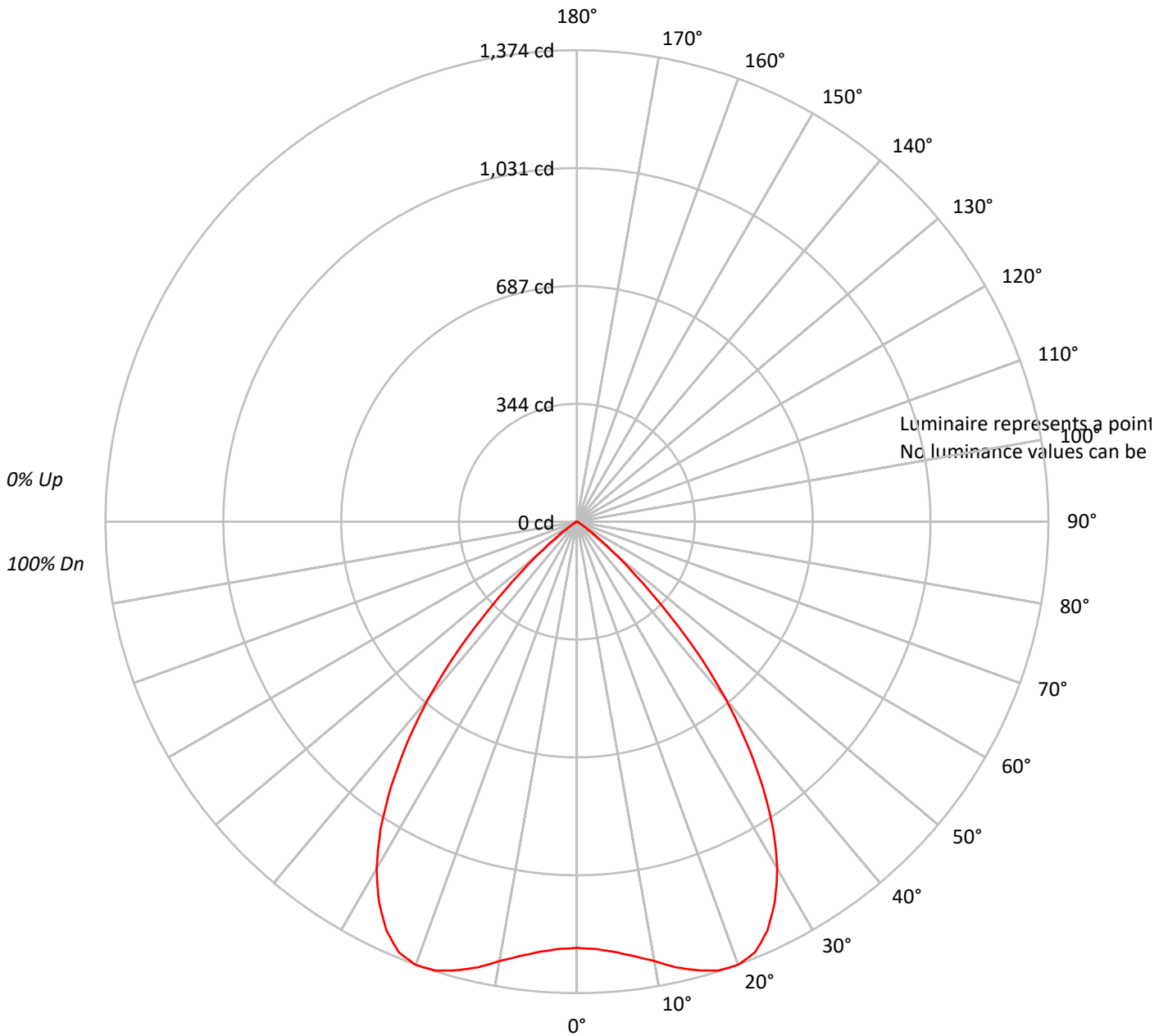
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P211814

CATALOG NUMBER: LE\_4B20D010 EC4B10209050 4LBW1LI

### Luminous Intensity Polar Plot





TEST NUMBER: P211814

CATALOG NUMBER: LE\_4B20D010 EC4B10209050 4LBW1LI

**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	100	100	100
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92	92	92	92
2	106	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86	84	84	84	84
3	100	93	87	83	98	92	86	82	89	85	81	86	83	80	84	81	78	77	77	77	77
4	94	86	79	75	92	84	79	74	82	77	73	80	76	72	78	75	72	70	70	70	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64	64	64	64
6	83	73	66	62	82	72	66	61	71	65	61	69	64	60	68	63	60	58	58	58	58
7	78	68	61	56	77	67	61	56	66	60	56	64	59	55	63	59	55	54	54	54	54
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49	49	49	49
9	69	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45	45	45	45
10	66	55	48	44	65	54	48	44	53	48	44	53	47	44	52	47	43	42	42	42	42

**AVERAGE LUMINANCE (cd/sqm):**





TEST NUMBER: P211814

CATALOG NUMBER: LE\_4B20D010 EC4B10209050 4LBW1LI

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.5	6.0
10°-20°	383.3	18.9
20°-30°	598.0	29.5
30°-40°	581.8	28.7
40°-50°	290.6	14.3
50°-60°	45.0	2.2
60°-70°	5.4	0.3
70°-80°	1.5	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°	1102.7	54.4
0°-40°	1684.6	83.1
0°-60°	2020.1	99.7
0°-90°	2027.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2027.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1242	
5°	1258	121
15°	1354	383
25°	1314	598
35°	945	582
45°	364	291
55°	37	45
65°	5	5
75°	2	2
85°	0	0
90°	0	



TEST NUMBER: P211814

CATALOG NUMBER: LE\_4B20D010 EC4B10209050 4LBW1LI

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1242.0
2.5°	1246.7
5°	1258.4
7.5°	1276.9
10°	1300.1
12.5°	1330.3
15°	1353.5
17.5°	1372.0
20°	1374.4
22.5°	1358.1
25°	1314.0
27.5°	1249.0
30°	1167.8
32.5°	1065.6
35°	944.9
37.5°	812.6
40°	673.3
42.5°	524.7
45°	364.5
47.5°	234.4
50°	141.6
52.5°	76.6
55°	37.1
57.5°	16.2
60°	9.3
62.5°	7.0
65°	4.6
67.5°	4.6
70°	2.3
72.5°	2.3
75°	2.3
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)