

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: P211598

Luminaire Tested: **LE_4B20D010 EC4B10209030 4LBN1MW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211598
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 EC4B10209030 4LBN1MW
Description: PORTFOLIO 4 INCH CYLINDER
NARROW DISTRIBUTION WITH MATTE WHITE 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: 1431.5 lumens
Efficiency: N/A
Efficacy: 68.8 lumens/watt
Spacing Criteria (0/90/45): 0.96 / 0.96 / 0.95
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

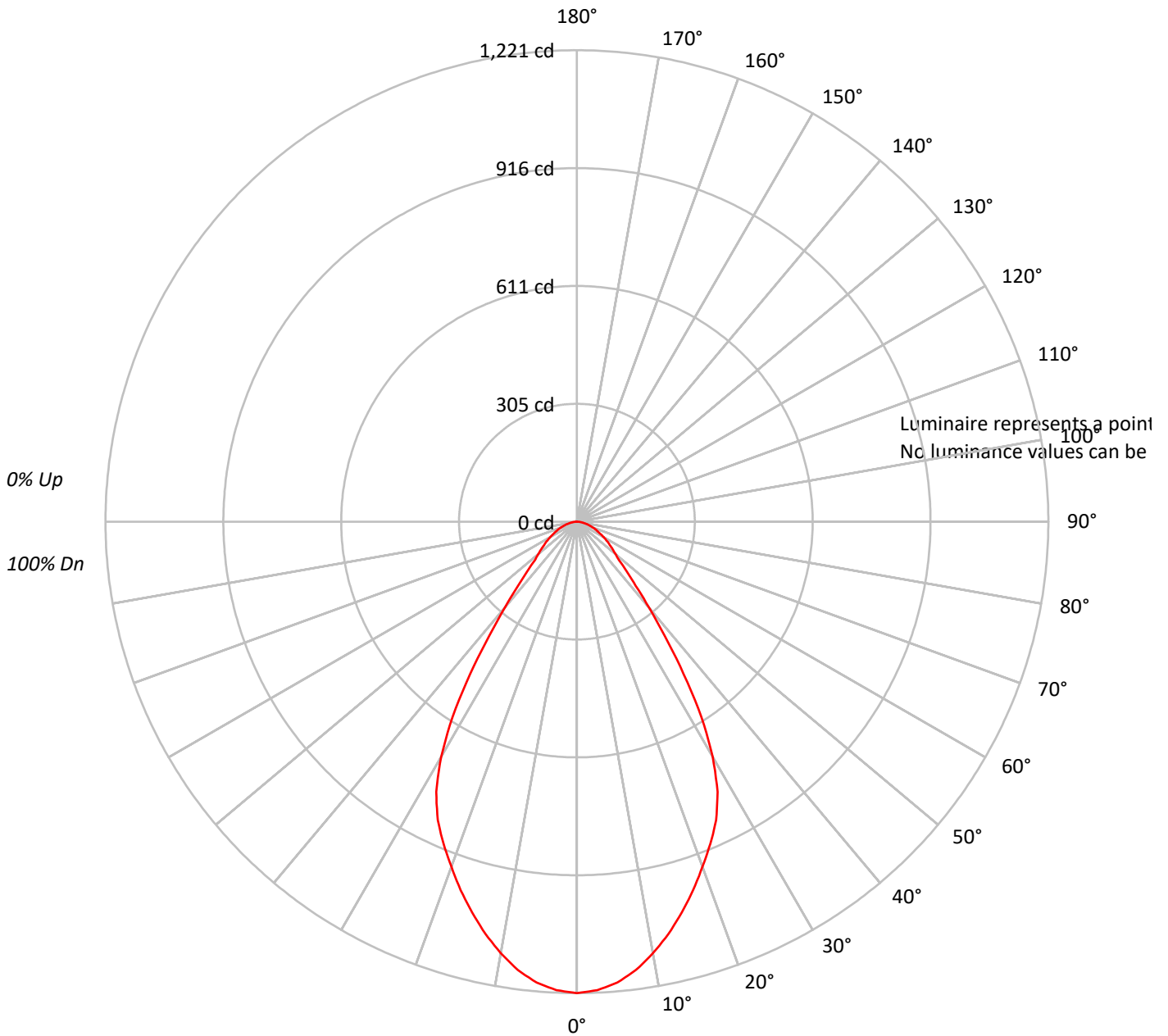
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P211598

CATALOG NUMBER: LE_4B20D010 EC4B10209030 4LBN1MW

Luminous Intensity Polar Plot





TEST NUMBER: P211598

CATALOG NUMBER: LE_4B20D010 EC4B10209030 4LBN1MW

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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	112	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90		
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81		
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73		
4	92	83	76	71	90	82	76	71	80	74	70	78	73	69	76	72	68	67		
5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	63	61		
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	56		
7	77	66	59	54	75	65	59	54	64	58	54	63	57	53	62	57	53	52		
8	73	62	55	50	71	61	55	50	60	54	50	59	53	49	58	53	49	48		
9	69	58	51	46	68	57	51	46	56	50	46	55	50	46	54	49	46	44		
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43	41		

AVERAGE LUMINANCE (cd/sqm):





TEST NUMBER: P211598

CATALOG NUMBER: LE_4B20D010 EC4B10209030 4LBN1MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.4	7.8
10°-20°	293.9	20.5
20°-30°	386.9	27.0
30°-40°	301.2	21.0
40°-50°	146.3	10.2
50°-60°	92.4	6.5
60°-70°	59.6	4.2
70°-80°	31.2	2.2
80°-90°	7.7	0.5
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°	793.2	55.4
0°-40°	1094.3	76.4
0°-60°	1333.0	93.1
0°-90°	1431.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1431.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1221	
5°	1198	112
15°	1048	294
25°	853	387
35°	482	301
45°	182	146
55°	102	92
65°	59	60
75°	30	31
85°	7	8
90°	0	



TEST NUMBER: P211598

CATALOG NUMBER: LE_4B20D010 EC4B10209030 4LBN1MW

CANDELA DISTRIBUTION (FULL):

	0°
0°	1221.2
2.5°	1214.4
5°	1198.5
7.5°	1171.3
10°	1134.8
12.5°	1093.9
15°	1048.4
17.5°	1000.6
20°	950.6
22.5°	902.8
25°	852.8
27.5°	789.1
30°	702.7
32.5°	600.4
35°	482.1
37.5°	372.9
40°	288.8
42.5°	225.2
45°	181.9
47.5°	147.8
50°	129.6
52.5°	116.0
55°	102.3
57.5°	90.9
60°	79.6
62.5°	68.2
65°	59.2
67.5°	52.3
70°	43.2
72.5°	36.4
75°	29.6
77.5°	22.7
80°	15.9
82.5°	11.4
85°	6.8
87.5°	2.3
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°







(END OF REPORT)