

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: P211473

Luminaire Tested: **LE_4B20D010 EC4B10208027 4LBM1GPH**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211473
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 EC4B10208027 4LBM1GPH
Description: PORTFOLIO 4 INCH CYLINDER
MEDIUM 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: 1213.5 lumens
Efficiency: N/A
Efficacy: 58.3 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 0.92
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

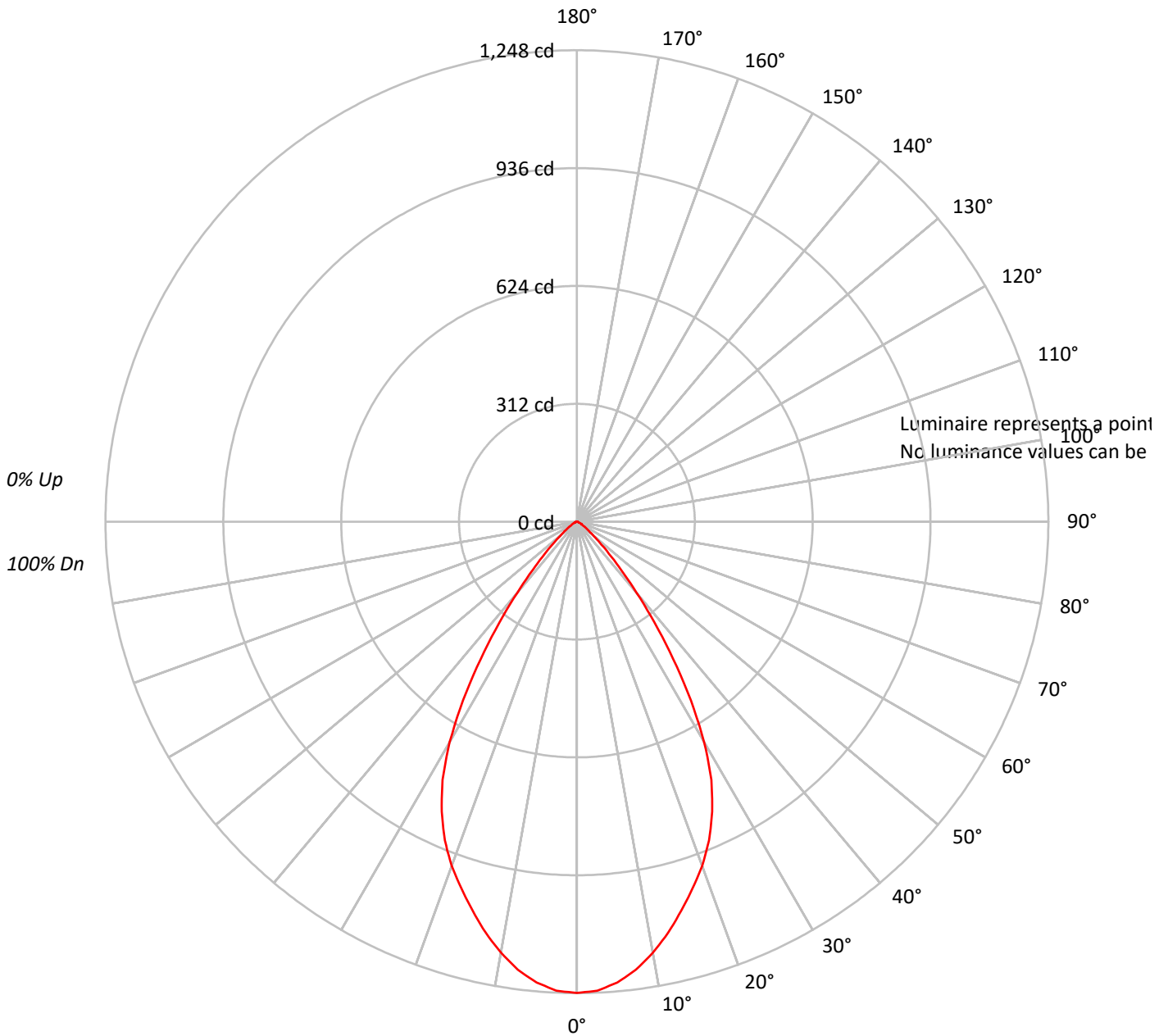
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93																			
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	88	86																			
3	102	95	90	85	100	93	89	85	91	87	83	88	85	82	86	83	81	79																			
4	96	88	82	78	94	87	82	78	85	80	77	83	79	76	81	78	75	73																			
5	91	82	76	72	89	81	76	71	79	74	71	78	73	70	76	72	69	68																			
6	86	77	71	66	85	76	70	66	74	69	65	73	68	65	72	68	64	63																			
7	82	72	66	61	80	71	65	61	70	65	61	69	64	60	68	63	60	59																			
8	77	67	61	57	76	67	61	57	66	60	57	65	60	56	64	59	56	55																			
9	73	63	57	53	72	63	57	53	62	57	53	61	56	53	60	56	52	51																			
10	70	60	54	50	69	59	54	50	59	53	50	58	53	49	57	52	49	48																			

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.8	9.5
10°-20°	299.4	24.7
20°-30°	384.0	31.6
30°-40°	277.5	22.9
40°-50°	99.5	8.2
50°-60°	26.9	2.2
60°-70°	8.8	0.7
70°-80°	2.7	0.2
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°	798.1	65.8
0°-40°	1075.6	88.6
0°-60°	1202.0	99.0
0°-90°	1213.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1213.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1248	
5°	1225	115
15°	1066	299
25°	847	384
35°	444	277
45°	120	100
55°	28	27
65°	8	9
75°	3	3
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1247.6
2.5°	1242.5
5°	1224.6
7.5°	1196.5
10°	1158.3
12.5°	1114.9
15°	1066.4
17.5°	1017.9
20°	969.4
22.5°	913.4
25°	847.0
27.5°	770.5
30°	673.5
32.5°	561.2
35°	443.9
37.5°	336.7
40°	244.9
42.5°	173.5
45°	119.9
47.5°	81.7
50°	53.6
52.5°	38.3
55°	28.1
57.5°	20.4
60°	15.3
62.5°	12.8
65°	7.7
67.5°	5.1
70°	5.1
72.5°	2.6
75°	2.6
77.5°	2.6
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)