

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: P211589

Luminaire Tested: **LE_4B20D010 EC4B10209030 4LBM1GPH**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211589
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 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: 1083.4 lumens
Efficiency: N/A
Efficacy: 52.1 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

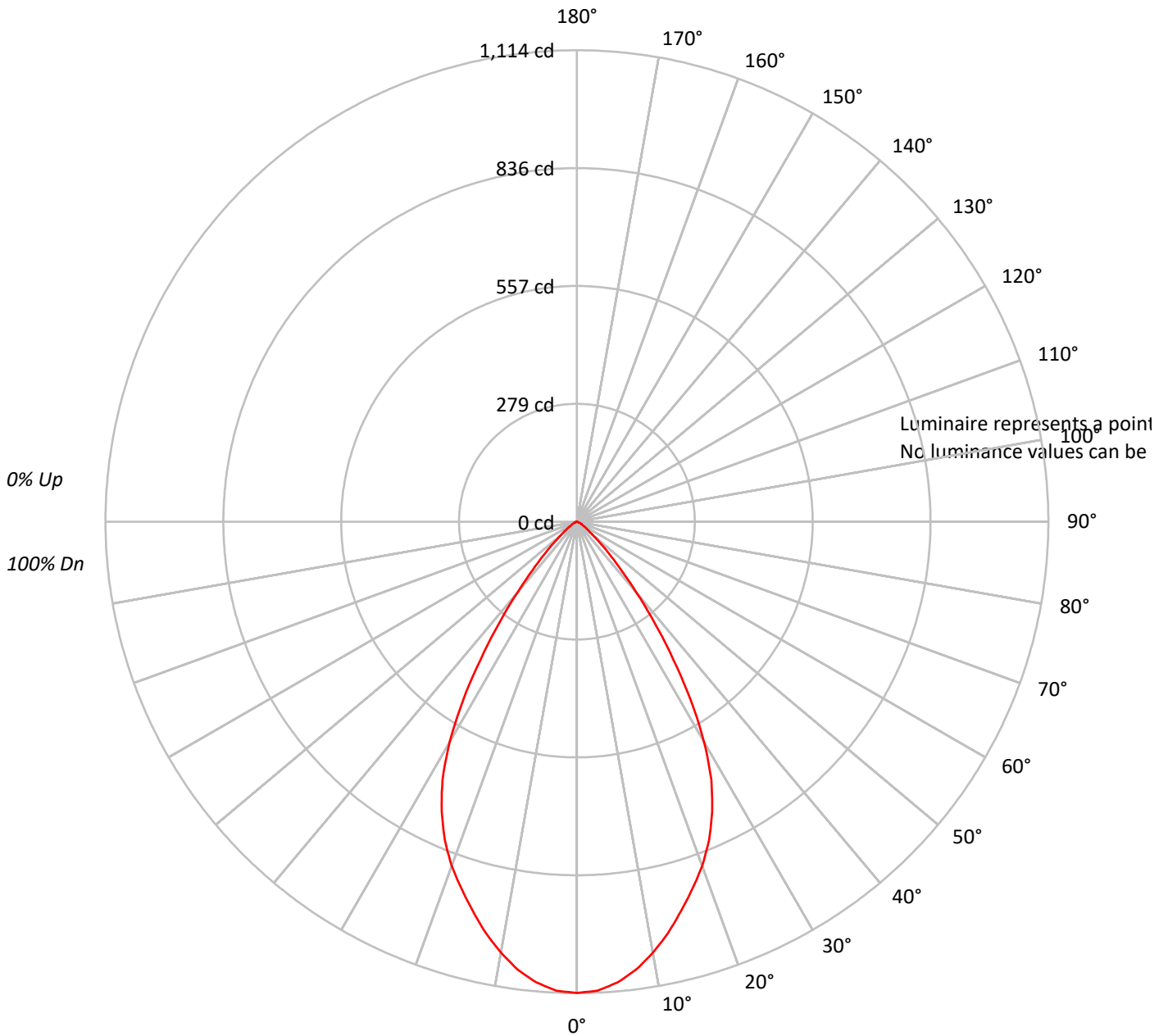
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





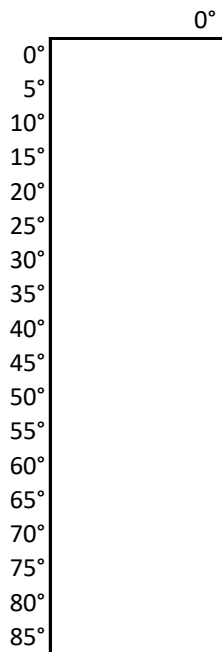
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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	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°	102.5	9.5
10°-20°	267.2	24.7
20°-30°	342.8	31.6
30°-40°	247.8	22.9
40°-50°	88.8	8.2
50°-60°	24.0	2.2
60°-70°	7.8	0.7
70°-80°	2.4	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°	712.5	65.8
0°-40°	960.3	88.6
0°-60°	1073.1	99.1
0°-90°	1083.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1083.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1114	
5°	1093	102
15°	952	267
25°	756	343
35°	396	248
45°	107	89
55°	25	24
65°	7	8
75°	2	2
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1113.7
2.5°	1109.2
5°	1093.3
7.5°	1068.2
10°	1034.0
12.5°	995.3
15°	952.0
17.5°	908.7
20°	865.5
22.5°	815.4
25°	756.2
27.5°	687.9
30°	601.3
32.5°	501.1
35°	396.3
37.5°	300.7
40°	218.7
42.5°	154.9
45°	107.1
47.5°	72.8
50°	47.8
52.5°	34.2
55°	25.1
57.5°	18.2
60°	13.7
62.5°	11.4
65°	6.8
67.5°	4.5
70°	4.5
72.5°	2.3
75°	2.3
77.5°	2.3
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)