

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: P211760

Luminaire Tested: **LE_4B20D010 EC4B10208050 4LBCS1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211760
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 EC4B10208050 4LBCS1MMS
Description: PORTFOLIO 4 INCH CYLINDER
SHALLOW DISTRIBUTION WITH CAST MATTE BLACK 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: 2144.4 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.27
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

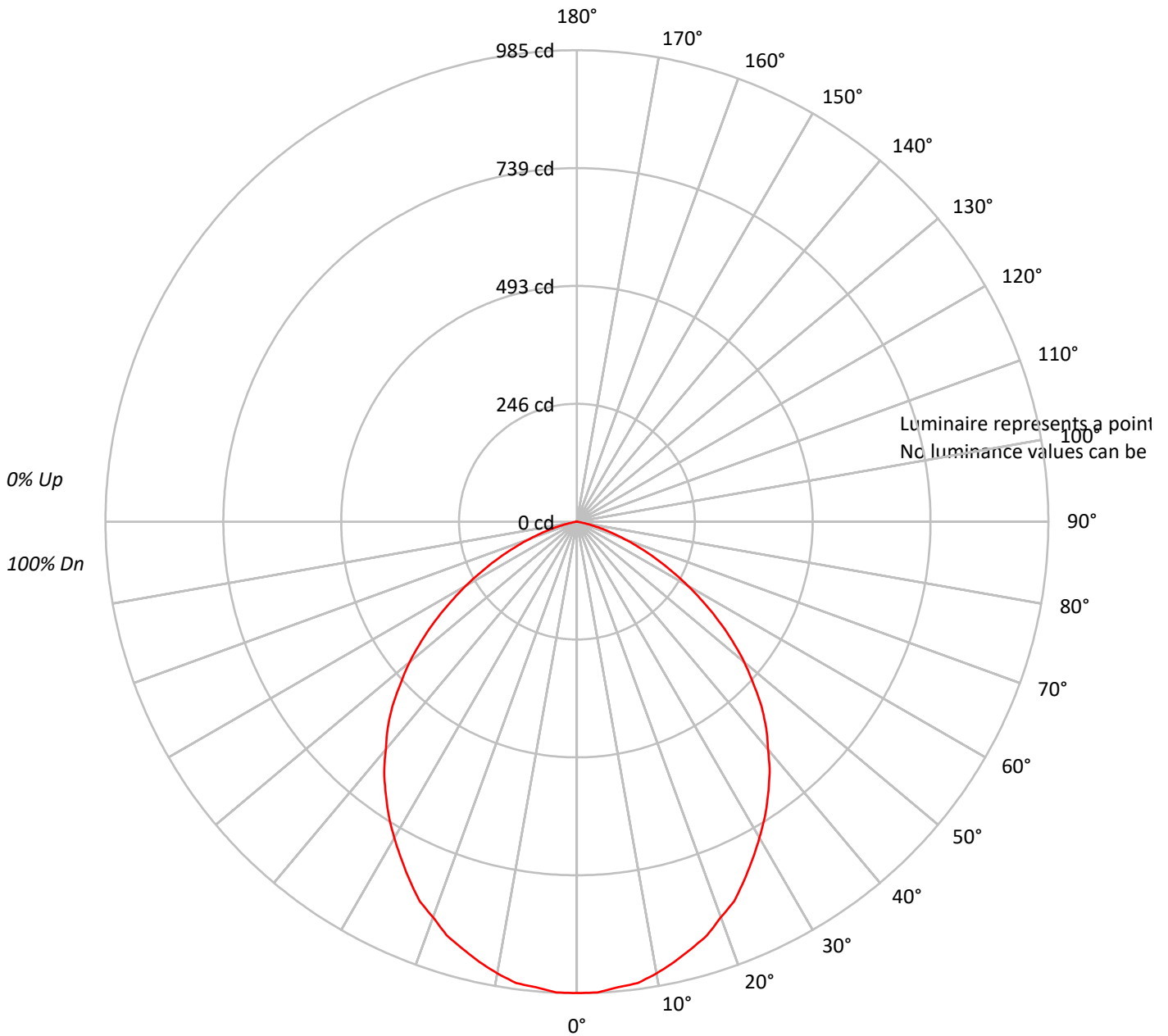
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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			100
1	111	107	103	100	108	105	101	98	100	98	95	97	94	92	93	91	90	88			88
2	102	95	89	84	99	93	88	83	90	85	81	86	83	79	83	80	78	76			76
3	94	85	77	72	92	83	76	71	80	74	70	77	73	69	75	71	67	65			65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57			57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50			50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44			44
7	69	56	48	42	67	56	48	42	54	47	42	53	46	42	51	46	41	40			40
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36			36
9	60	48	40	35	59	47	40	34	46	39	34	45	39	34	44	38	34	32			32
10	57	44	36	31	55	43	36	31	43	36	31	42	35	31	41	35	31	29			29

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.8	4.3
10°-20°	260.4	12.1
20°-30°	380.3	17.7
30°-40°	435.0	20.3
40°-50°	418.1	19.5
50°-60°	322.8	15.1
60°-70°	180.2	8.4
70°-80°	52.4	2.4
80°-90°	2.3	0.1
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°	733.5	34.2
0°-40°	1168.5	54.5
0°-60°	1909.4	89.0
0°-90°	2144.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2144.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	985	
5°	976	93
15°	924	260
25°	827	380
35°	696	435
45°	545	418
55°	362	323
65°	180	180
75°	46	52
85°	1	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	984.7
2.5°	984.7
5°	976.5
7.5°	972.3
10°	958.4
12.5°	941.8
15°	923.7
17.5°	905.7
20°	879.4
22.5°	858.5
25°	826.6
27.5°	794.7
30°	762.8
32.5°	730.9
35°	696.2
37.5°	661.5
40°	621.4
42.5°	585.3
45°	545.1
47.5°	499.4
50°	456.3
52.5°	409.1
55°	362.0
57.5°	313.4
60°	267.7
62.5°	221.9
65°	180.3
67.5°	141.5
70°	105.4
72.5°	73.5
75°	45.8
77.5°	23.5
80°	8.4
82.5°	2.8
85°	1.4
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)