

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: P211757

Luminaire Tested: **LSR4B20D010BZ EC4B10209040 4LBWMW1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211757
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: LSR4B20D010BZ EC4B10209040 4LBWMW1
Description: PORTFOLIO 4 INCH CYLINDER
WIDE 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: 1534.4 lumens
Efficiency: N/A
Efficacy: 73.8 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1.1 / 1.09
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

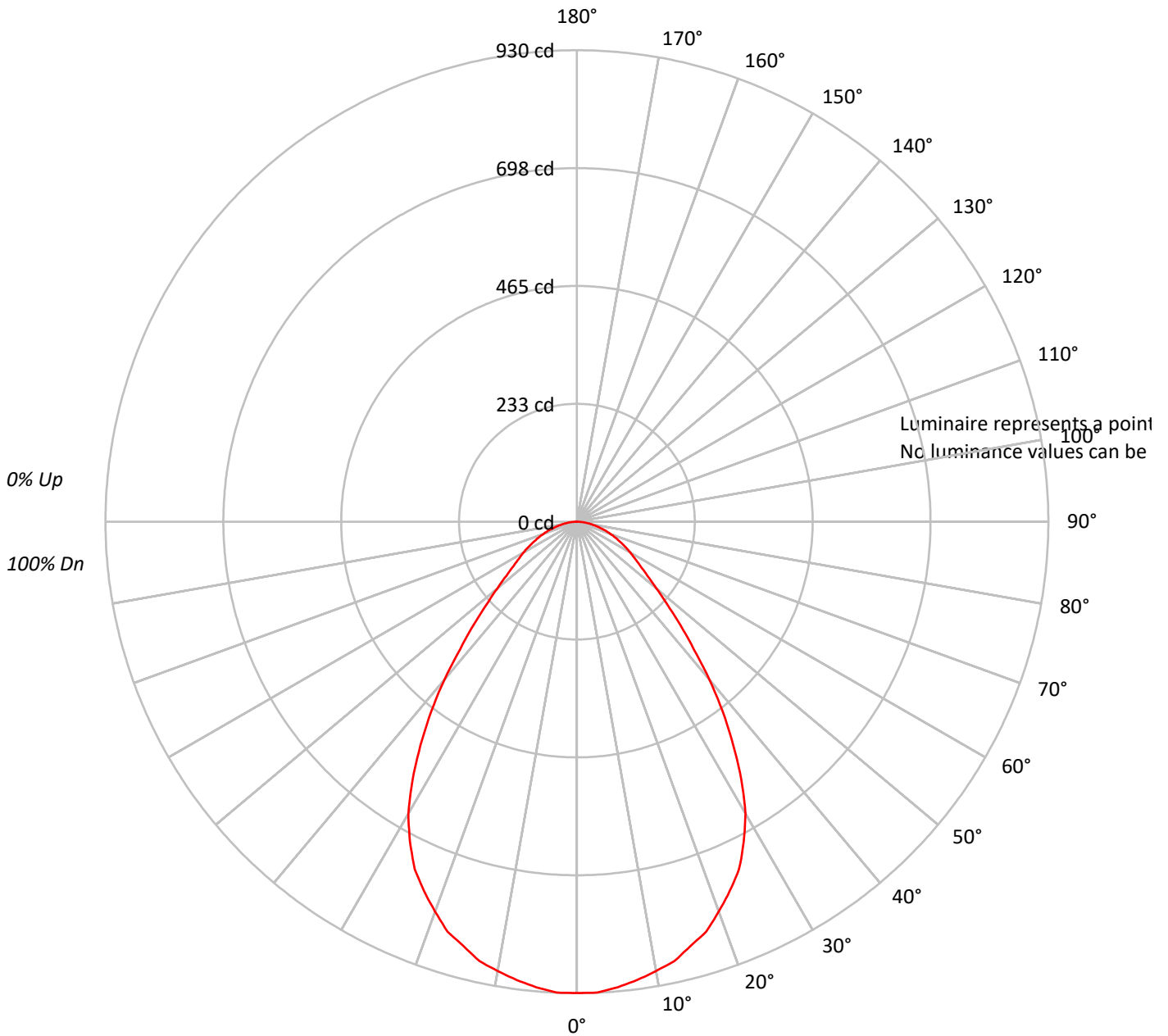
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88																			
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	80	78																			
3	96	87	80	75	93	85	79	74	83	77	73	80	76	72	78	74	71	69																			
4	89	79	72	66	87	78	71	66	75	69	65	73	68	64	71	67	63	61																			
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55																			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	60	55	51	50																			
7	73	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45																			
8	68	56	49	44	67	56	49	44	54	48	43	53	47	43	52	47	43	41																			
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	43	39	38																			
10	61	49	42	37	59	48	41	37	47	41	37	46	41	37	46	40	36	35																			

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.3	5.7
10°-20°	244.1	15.9
20°-30°	345.0	22.5
30°-40°	334.2	21.8
40°-50°	225.5	14.7
50°-60°	140.0	9.1
60°-70°	93.5	6.1
70°-80°	51.2	3.3
80°-90°	13.5	0.9
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°	676.5	44.1
0°-40°	1010.7	65.9
0°-60°	1376.2	89.7
0°-90°	1534.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1534.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	930	
5°	922	87
15°	866	244
25°	757	345
35°	538	334
45°	289	226
55°	153	140
65°	94	94
75°	48	51
85°	12	14
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	929.8
2.5°	929.8
5°	921.8
7.5°	911.9
10°	899.9
12.5°	888.0
15°	866.1
17.5°	848.2
20°	818.3
22.5°	788.4
25°	756.6
27.5°	712.8
30°	665.0
32.5°	603.3
35°	537.6
37.5°	471.9
40°	406.2
42.5°	340.5
45°	288.7
47.5°	240.9
50°	205.1
52.5°	175.2
55°	153.3
57.5°	135.4
60°	121.5
62.5°	107.5
65°	93.6
67.5°	81.6
70°	69.7
72.5°	59.7
75°	47.8
77.5°	37.8
80°	27.9
82.5°	19.9
85°	11.9
87.5°	4.0
90°	0.0



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— 0°-180°







(END OF REPORT)