

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: P211524

Luminaire Tested: **LSR4B20D010BZ EC4B10209027 4LBWLI1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211524
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 EC4B10209027 4LBWLI1
Description: PORTFOLIO 4 INCH CYLINDER
WIDE DISTRIBUTION WITH SPECULAR CLEAR 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: 1646.6 lumens
Efficiency: N/A
Efficacy: 79.2 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

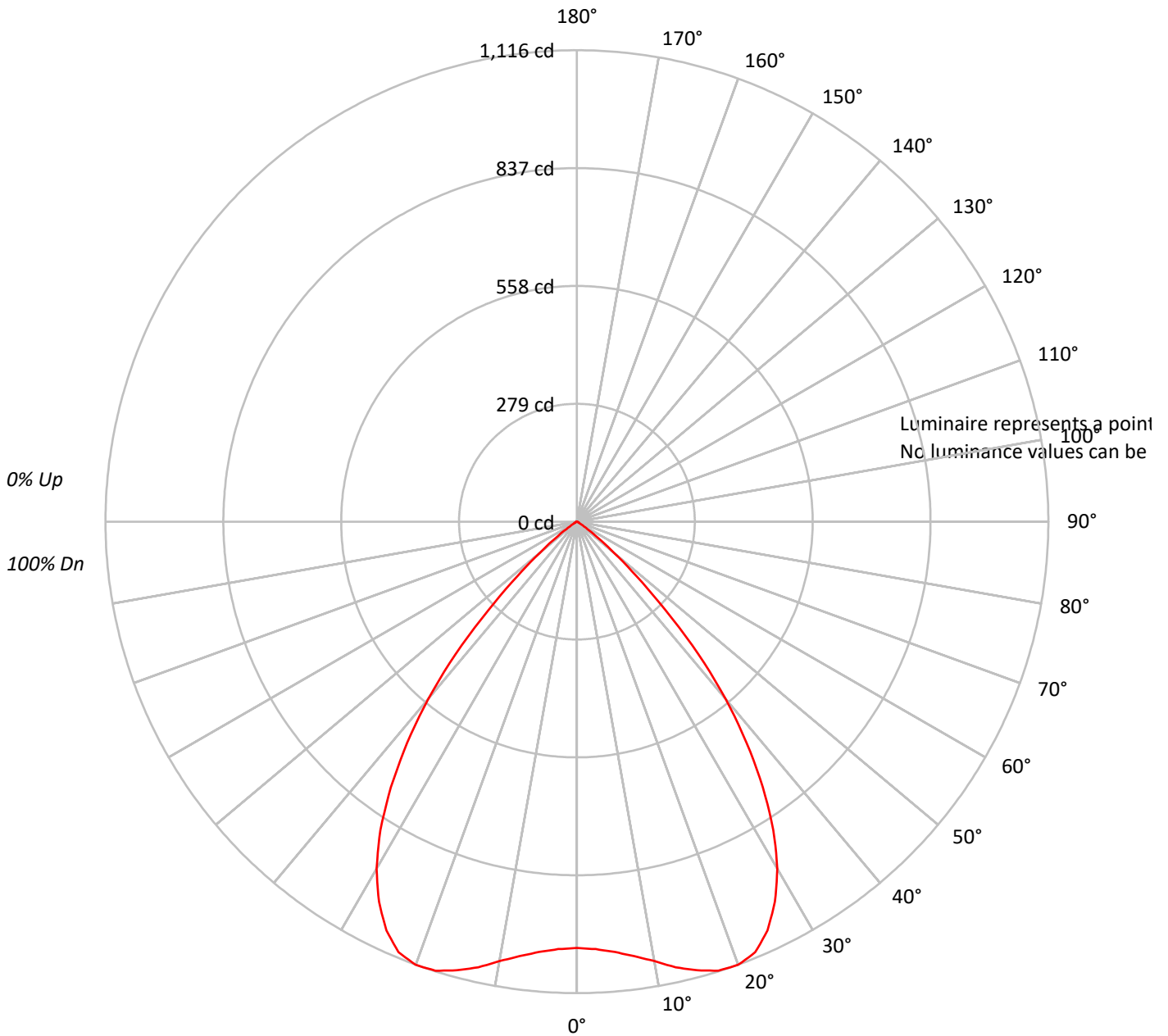
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92																			92																	
2	106	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86	84																			84																	
3	100	93	87	83	98	92	86	82	89	85	81	86	83	80	84	81	78	77																			77																	
4	94	86	79	75	92	84	79	74	82	77	73	80	76	72	78	75	72	70																			70																	
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64																			64																	
6	83	73	66	62	82	72	66	61	71	65	61	69	64	60	68	63	60	58																			58																	
7	78	68	61	56	77	67	61	56	66	60	56	64	59	55	63	59	55	54																			54																	
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49																			49																	
9	69	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45																			45																	
10	66	55	48	44	65	54	48	44	53	48	44	53	47	44	52	47	43	42																			42																	

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.7	6.0
10°-20°	311.4	18.9
20°-30°	485.7	29.5
30°-40°	472.6	28.7
40°-50°	236.1	14.3
50°-60°	36.5	2.2
60°-70°	4.4	0.3
70°-80°	1.2	0.1
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°	895.8	54.4
0°-40°	1368.4	83.1
0°-60°	1641.0	99.7
0°-90°	1646.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1646.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1009	
5°	1022	99
15°	1099	311
25°	1067	486
35°	768	473
45°	296	236
55°	30	37
65°	4	4
75°	2	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1008.9
2.5°	1012.7
5°	1022.1
7.5°	1037.2
10°	1056.1
12.5°	1080.6
15°	1099.4
17.5°	1114.5
20°	1116.4
22.5°	1103.2
25°	1067.4
27.5°	1014.6
30°	948.6
32.5°	865.6
35°	767.5
37.5°	660.0
40°	546.9
42.5°	426.2
45°	296.1
47.5°	190.5
50°	115.0
52.5°	62.2
55°	30.2
57.5°	13.2
60°	7.5
62.5°	5.7
65°	3.8
67.5°	3.8
70°	1.9
72.5°	1.9
75°	1.9
77.5°	0.0
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)