

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: P211758

Luminaire Tested: **LSR4B20D010BZ EC4B10209040 4LBWWH1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211758
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 4LBWWH1
Description: PORTFOLIO 4 INCH CYLINDER
WIDE DISTRIBUTION WITH WHEAT 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: 1524.4 lumens
Efficiency: N/A
Efficacy: 73.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.16
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

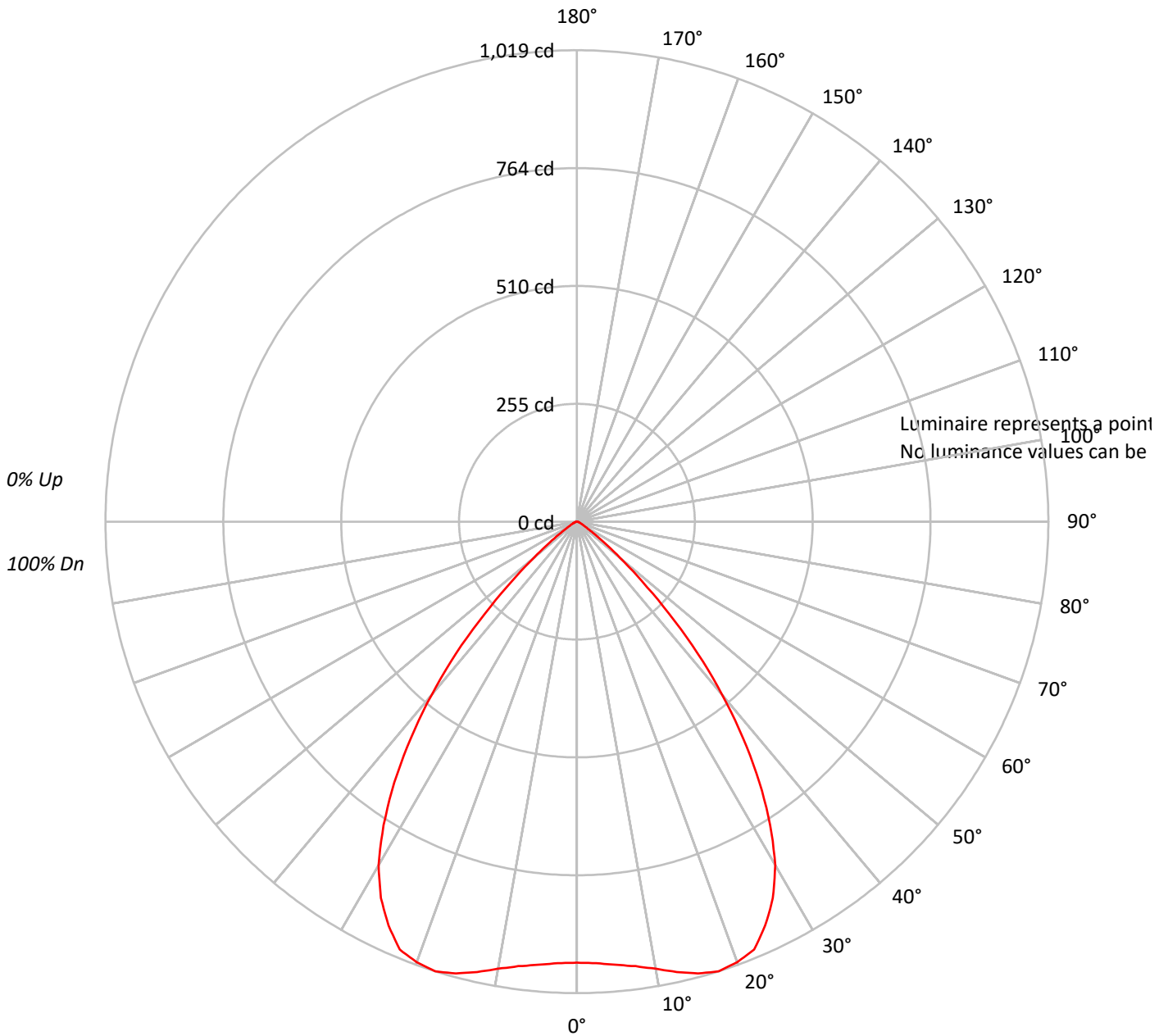
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	100
1	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92	92	92	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84	84	84	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76	76	76	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69	69	69	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63	63	63	63
6	83	73	66	61	81	72	65	61	70	64	60	69	64	60	67	63	59	58	58	58	58
7	78	67	60	56	76	67	60	55	65	59	55	64	59	55	63	58	54	53	53	53	53
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49	49	49	49
9	69	58	51	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45	45	45	45
10	65	54	48	43	64	54	48	43	53	47	43	52	47	43	51	46	43	41	41	41	41

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.4	6.1
10°-20°	285.7	18.7
20°-30°	439.5	28.8
30°-40°	424.0	27.8
40°-50°	221.1	14.5
50°-60°	46.5	3.1
60°-70°	10.8	0.7
70°-80°	4.2	0.3
80°-90°	0.3	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°	817.5	53.6
0°-40°	1241.5	81.4
0°-60°	1509.1	99.0
0°-90°	1524.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1524.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	953	
5°	961	92
15°	1011	286
25°	963	439
35°	688	424
45°	281	221
55°	42	47
65°	10	11
75°	4	4
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	953.1
2.5°	955.1
5°	961.1
7.5°	969.1
10°	981.1
12.5°	997.0
15°	1011.0
17.5°	1018.9
20°	1013.0
22.5°	1001.0
25°	963.1
27.5°	917.3
30°	857.4
32.5°	777.7
35°	687.9
37.5°	590.2
40°	488.5
42.5°	386.8
45°	281.2
47.5°	189.4
50°	121.6
52.5°	73.8
55°	41.9
57.5°	25.9
60°	17.9
62.5°	14.0
65°	10.0
67.5°	8.0
70°	6.0
72.5°	6.0
75°	4.0
77.5°	2.0
80°	2.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)