

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: P211505

Luminaire Tested: **LSR4B20D010BZ EC4B10209027 4LBMMW1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211505
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 4LBMMW1
Description: PORTFOLIO 4 INCH CYLINDER
MEDIUM 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: 1301.4 lumens
Efficiency: N/A
Efficacy: 62.6 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 0.99 / 0.97
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

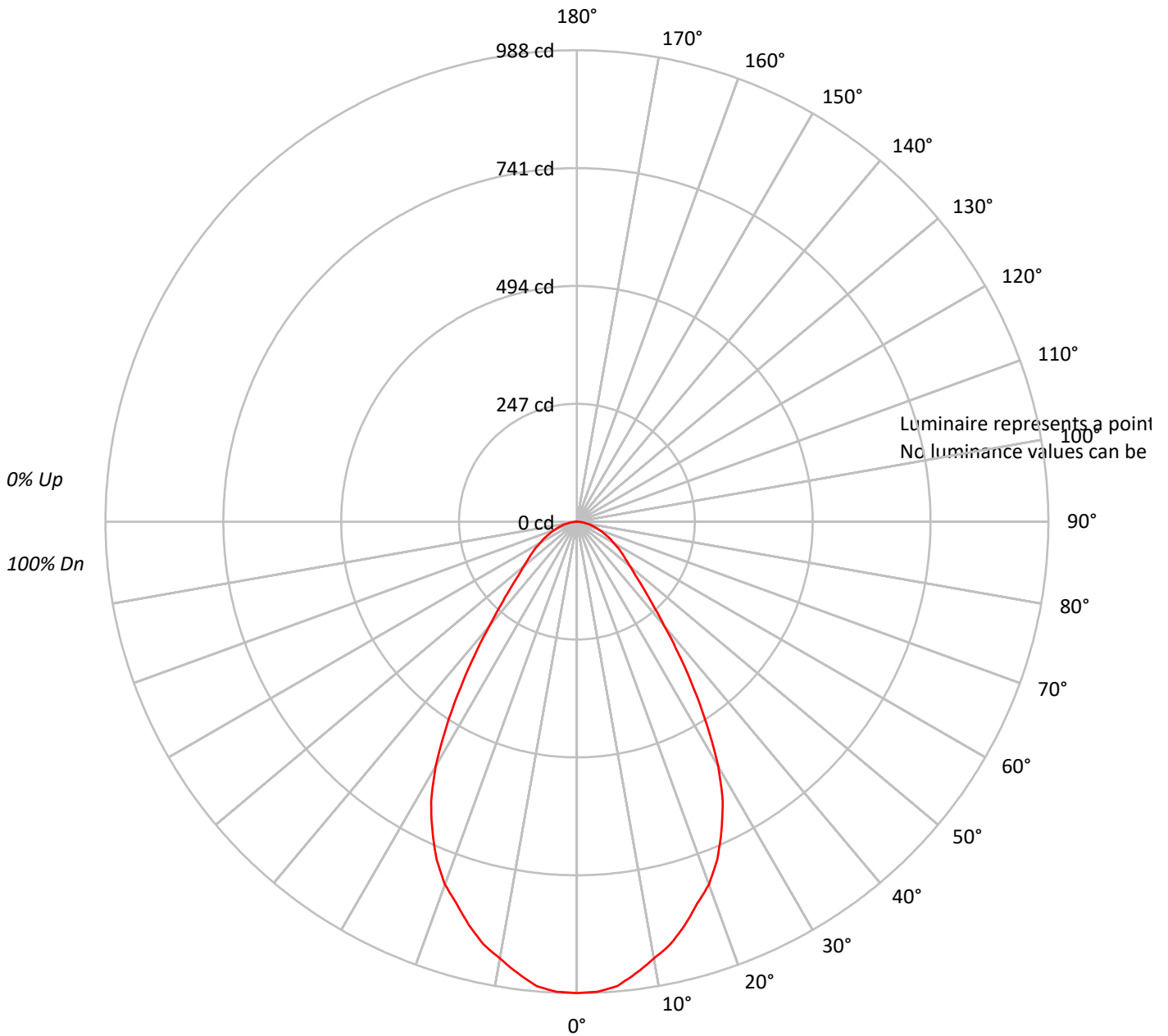
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89			
2	104	98	92	88	102	96	91	87	93	89	85	89	86	83	87	84	81	80			
3	97	89	83	77	95	87	82	77	85	80	76	82	78	74	80	76	73	71			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58			
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53			
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49			
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	45			
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42			
10	63	52	45	41	62	51	45	41	51	45	40	50	44	40	49	44	40	39			

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.6	7.0
10°-20°	245.5	18.9
20°-30°	326.4	25.1
30°-40°	267.0	20.5
40°-50°	155.5	11.9
50°-60°	103.1	7.9
60°-70°	67.8	5.2
70°-80°	35.8	2.7
80°-90°	8.7	0.7
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°	663.5	51.0
0°-40°	930.5	71.5
0°-60°	1189.1	91.4
0°-90°	1301.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1301.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	988	
5°	977	92
15°	875	245
25°	716	326
35°	426	267
45°	196	156
55°	115	103
65°	68	68
75°	34	36
85°	8	9
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	988.0
2.5°	986.1
5°	976.7
7.5°	954.0
10°	929.5
12.5°	906.9
15°	874.8
17.5°	839.0
20°	808.9
22.5°	767.4
25°	716.5
27.5°	661.8
30°	592.0
32.5°	509.1
35°	426.1
37.5°	350.7
40°	284.7
42.5°	233.8
45°	196.1
47.5°	165.9
50°	145.2
52.5°	128.2
55°	115.0
57.5°	101.8
60°	88.6
62.5°	79.2
65°	67.9
67.5°	58.4
70°	49.0
72.5°	41.5
75°	33.9
77.5°	26.4
80°	18.9
82.5°	13.2
85°	7.5
87.5°	1.9
90°	0.0



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— 0°-180°







(END OF REPORT)