

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: P211708

Luminaire Tested: **LSR4B20D010BZ EC4B10208040 4LBMMW1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211708
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 EC4B10208040 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: 1641.6 lumens
Efficiency: N/A
Efficacy: 78.9 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

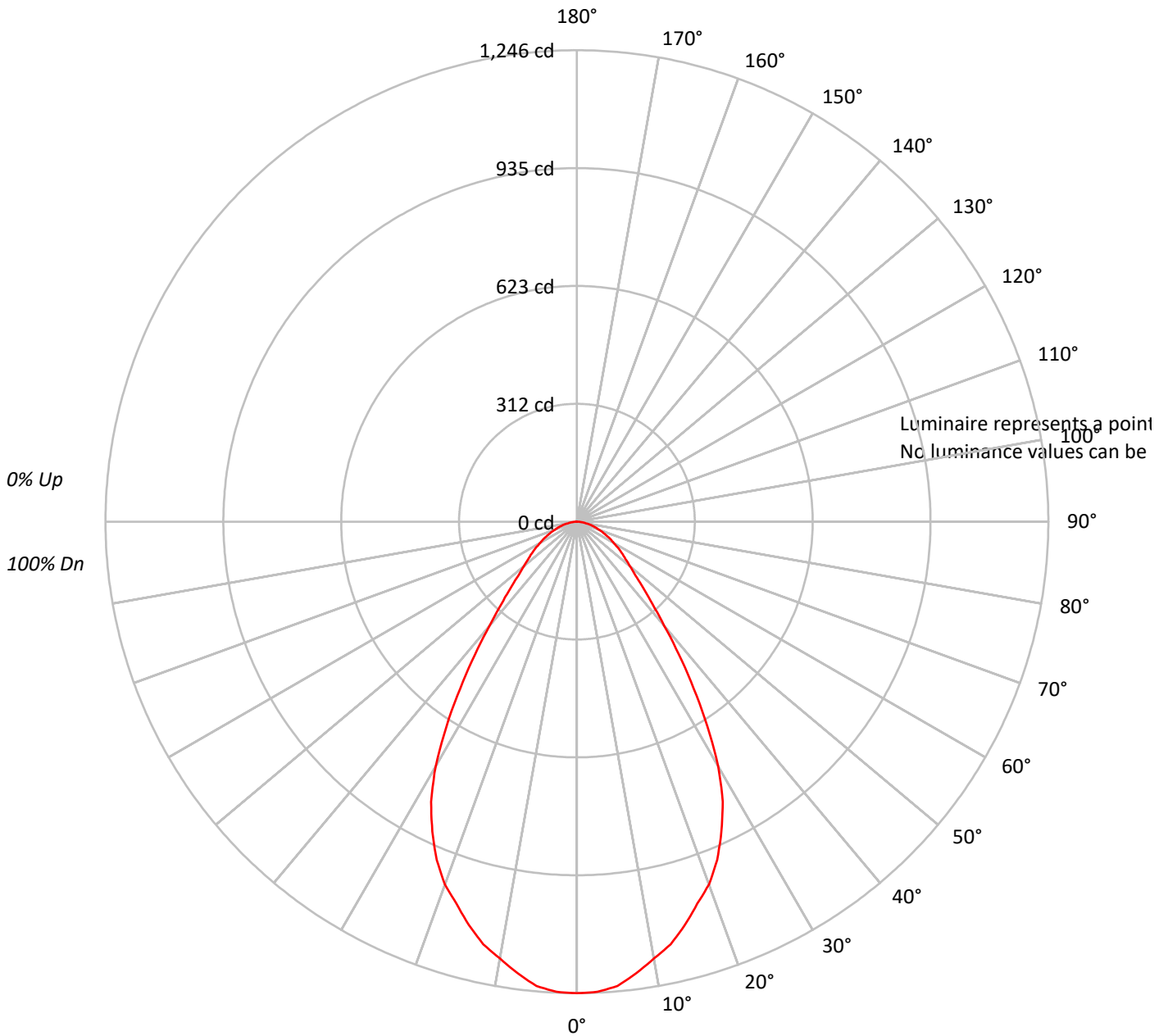
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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°	115.5	7.0
10°-20°	309.7	18.9
20°-30°	411.8	25.1
30°-40°	336.8	20.5
40°-50°	196.1	11.9
50°-60°	130.1	7.9
60°-70°	85.5	5.2
70°-80°	45.1	2.7
80°-90°	11.0	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°	836.9	51.0
0°-40°	1173.7	71.5
0°-60°	1499.9	91.4
0°-90°	1641.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1641.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1246	
5°	1232	116
15°	1104	310
25°	904	412
35°	538	337
45°	247	196
55°	145	130
65°	86	86
75°	43	45
85°	10	11
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1246.2
2.5°	1243.8
5°	1231.9
7.5°	1203.4
10°	1172.5
12.5°	1143.9
15°	1103.5
17.5°	1058.3
20°	1020.3
22.5°	967.9
25°	903.7
27.5°	834.8
30°	746.8
32.5°	642.1
35°	537.5
37.5°	442.4
40°	359.1
42.5°	294.9
45°	247.3
47.5°	209.3
50°	183.1
52.5°	161.7
55°	145.1
57.5°	128.4
60°	111.8
62.5°	99.9
65°	85.6
67.5°	73.7
70°	61.8
72.5°	52.3
75°	42.8
77.5°	33.3
80°	23.8
82.5°	16.6
85°	9.5
87.5°	2.4
90°	0.0



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— 0°-180°







(END OF REPORT)