

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: P211538

Luminaire Tested: **LSR4B20D010BZ EC4B10209727 4LBNH1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211538
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 EC4B10209727 4LBNH1
Description: PORTFOLIO 4 INCH CYLINDER
NARROW DISTRIBUTION WITH SEMI-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: 904.0 lumens
Efficiency: N/A
Efficacy: 43.5 lumens/watt
Spacing Criteria (0/90/45): 0.81 / 0.81 / 0.85
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

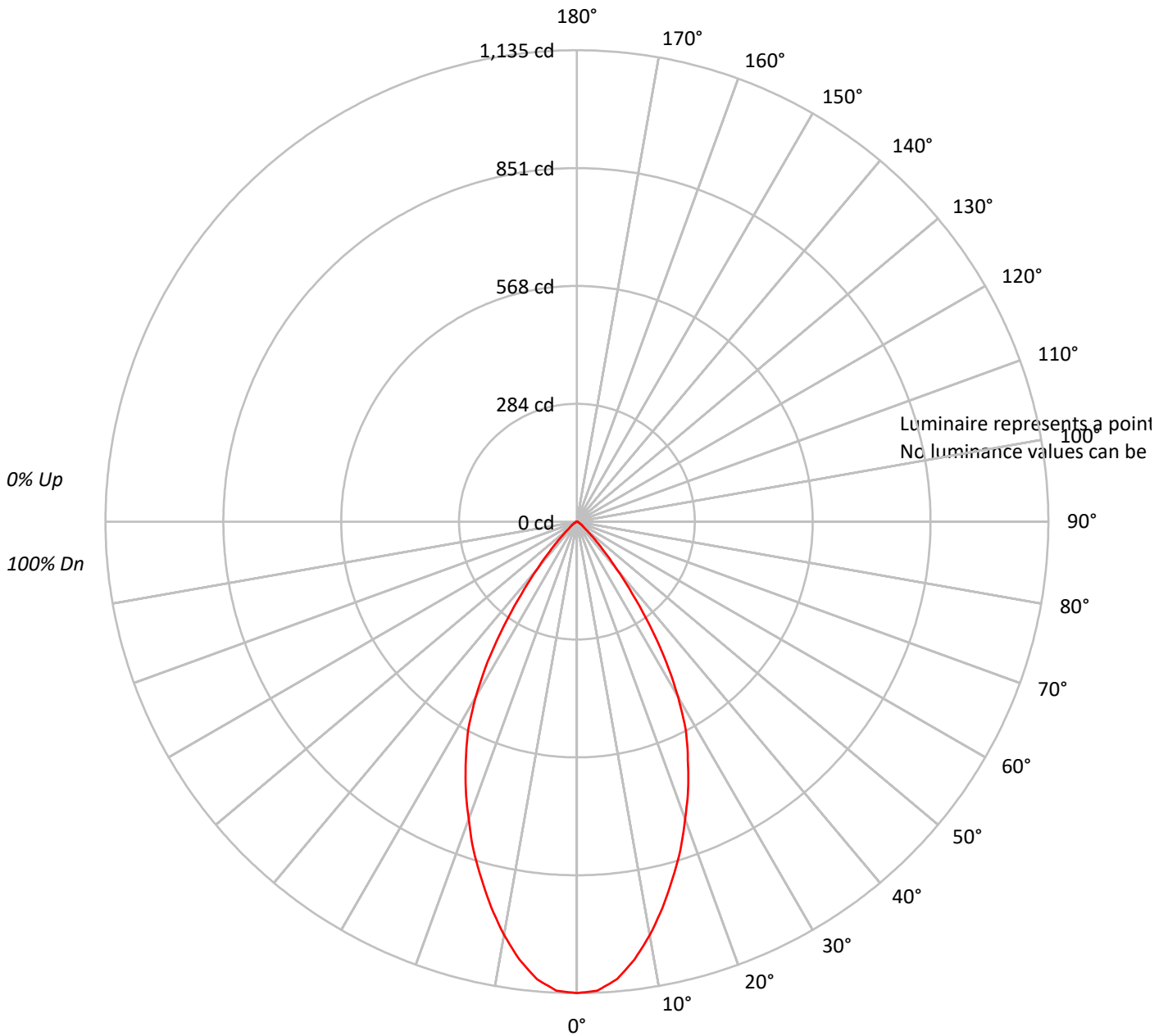
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93																			
2	108	103	99	96	106	101	98	94	98	95	92	95	93	90	92	90	89	87																			
3	102	96	91	87	100	95	90	86	92	88	85	90	86	84	87	85	82	81																			
4	97	90	84	80	95	89	83	79	86	82	78	84	81	78	83	79	77	75																			
5	92	84	78	74	91	83	78	73	81	76	73	80	75	72	78	74	72	70																			
6	88	79	73	69	86	78	72	68	77	72	68	75	71	67	74	70	67	65																			
7	83	74	68	64	82	73	68	64	72	67	63	71	66	63	70	66	63	61																			
8	79	70	64	60	78	69	64	60	68	63	59	67	63	59	66	62	59	58																			
9	76	66	60	56	74	65	60	56	65	59	56	64	59	56	63	59	55	54																			
10	72	62	57	53	71	62	56	53	61	56	53	60	56	52	60	55	52	51																			

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.4	11.3
10°-20°	248.4	27.5
20°-30°	288.4	31.9
30°-40°	191.0	21.1
40°-50°	53.6	5.9
50°-60°	13.5	1.5
60°-70°	5.1	0.6
70°-80°	1.7	0.2
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°	639.2	70.7
0°-40°	830.2	91.8
0°-60°	897.2	99.3
0°-90°	904.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	904.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1135	
5°	1106	102
15°	889	248
25°	632	288
35°	306	191
45°	62	54
55°	15	13
65°	5	5
75°	2	2
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1135.0
2.5°	1130.0
5°	1105.5
7.5°	1062.9
10°	1010.5
12.5°	951.5
15°	889.3
17.5°	828.7
20°	761.6
22.5°	699.3
25°	632.2
27.5°	568.3
30°	486.4
32.5°	399.6
35°	306.3
37.5°	219.5
40°	149.0
42.5°	96.6
45°	62.2
47.5°	37.7
50°	24.6
52.5°	18.0
55°	14.7
57.5°	11.5
60°	8.2
62.5°	6.6
65°	4.9
67.5°	3.3
70°	3.3
72.5°	1.6
75°	1.6
77.5°	1.6
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)