

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: P211509

Luminaire Tested: **LSR4B20D010BZ EC4B10209027 4LBNH1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211509
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 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: 1039.3 lumens
Efficiency: N/A
Efficacy: 50.0 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

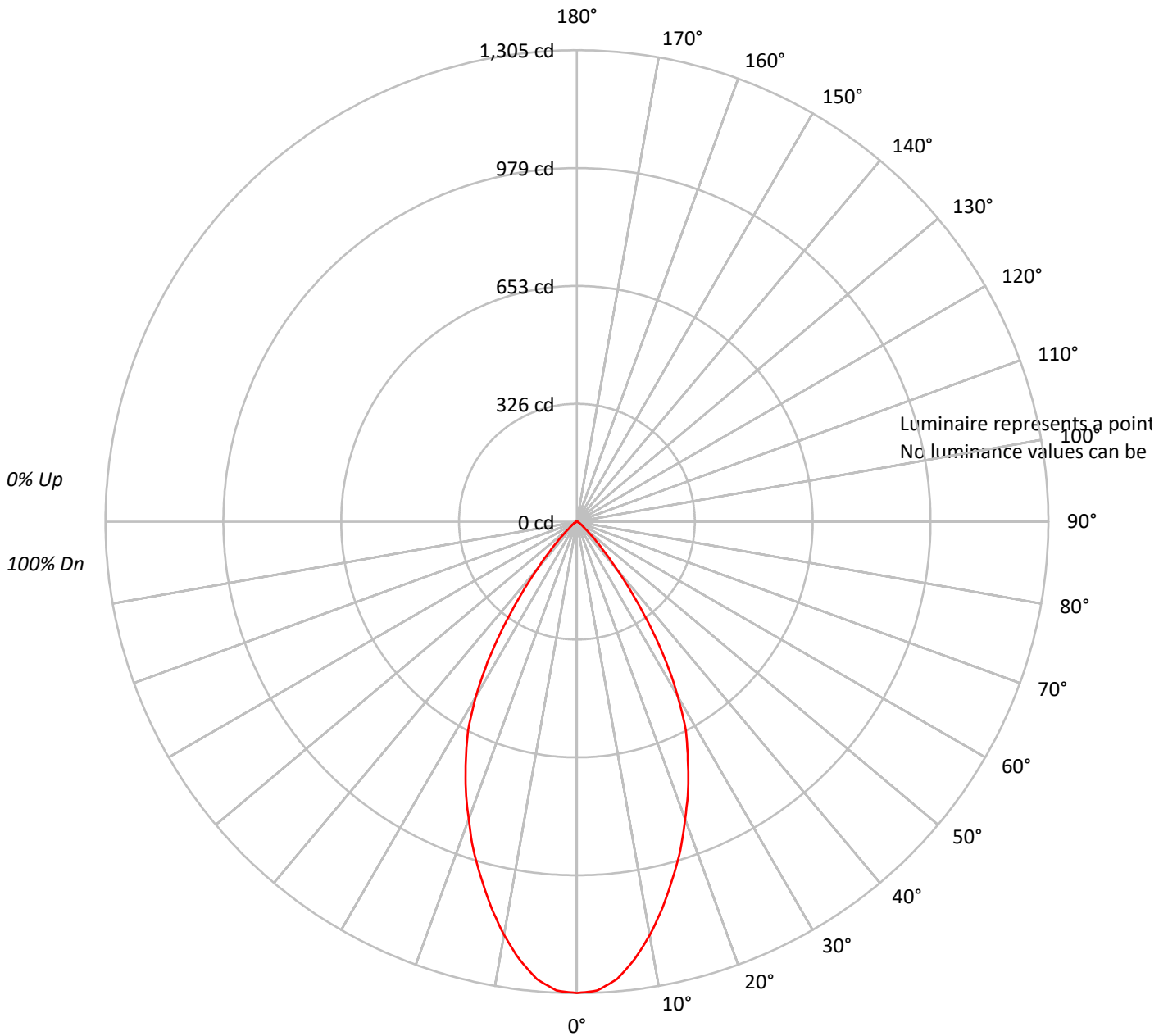
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	117.7	11.3
10°-20°	285.6	27.5
20°-30°	331.6	31.9
30°-40°	219.6	21.1
40°-50°	61.6	5.9
50°-60°	15.5	1.5
60°-70°	5.8	0.6
70°-80°	2.0	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°	734.9	70.7
0°-40°	954.4	91.8
0°-60°	1031.5	99.3
0°-90°	1039.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1039.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1305	
5°	1271	118
15°	1022	286
25°	727	332
35°	352	220
45°	72	62
55°	17	15
65°	6	6
75°	2	2
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1304.9
2.5°	1299.2
5°	1271.0
7.5°	1222.0
10°	1161.8
12.5°	1094.0
15°	1022.4
17.5°	952.8
20°	875.6
22.5°	804.0
25°	726.8
27.5°	653.4
30°	559.2
32.5°	459.4
35°	352.1
37.5°	252.3
40°	171.3
42.5°	111.1
45°	71.6
47.5°	43.3
50°	28.2
52.5°	20.7
55°	16.9
57.5°	13.2
60°	9.4
62.5°	7.5
65°	5.6
67.5°	3.8
70°	3.8
72.5°	1.9
75°	1.9
77.5°	1.9
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)