

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: P211539

Luminaire Tested: **LSR4B20D010BZ EC4B10209727 4LBNI1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211539
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 4LBNLI1
Description: PORTFOLIO 4 INCH CYLINDER
NARROW DISTRIBUTION WITH 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: 1064.7 lumens
Efficiency: N/A
Efficacy: 51.2 lumens/watt
Spacing Criteria (0/90/45): 0.48 / 0.48 / 0.54
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

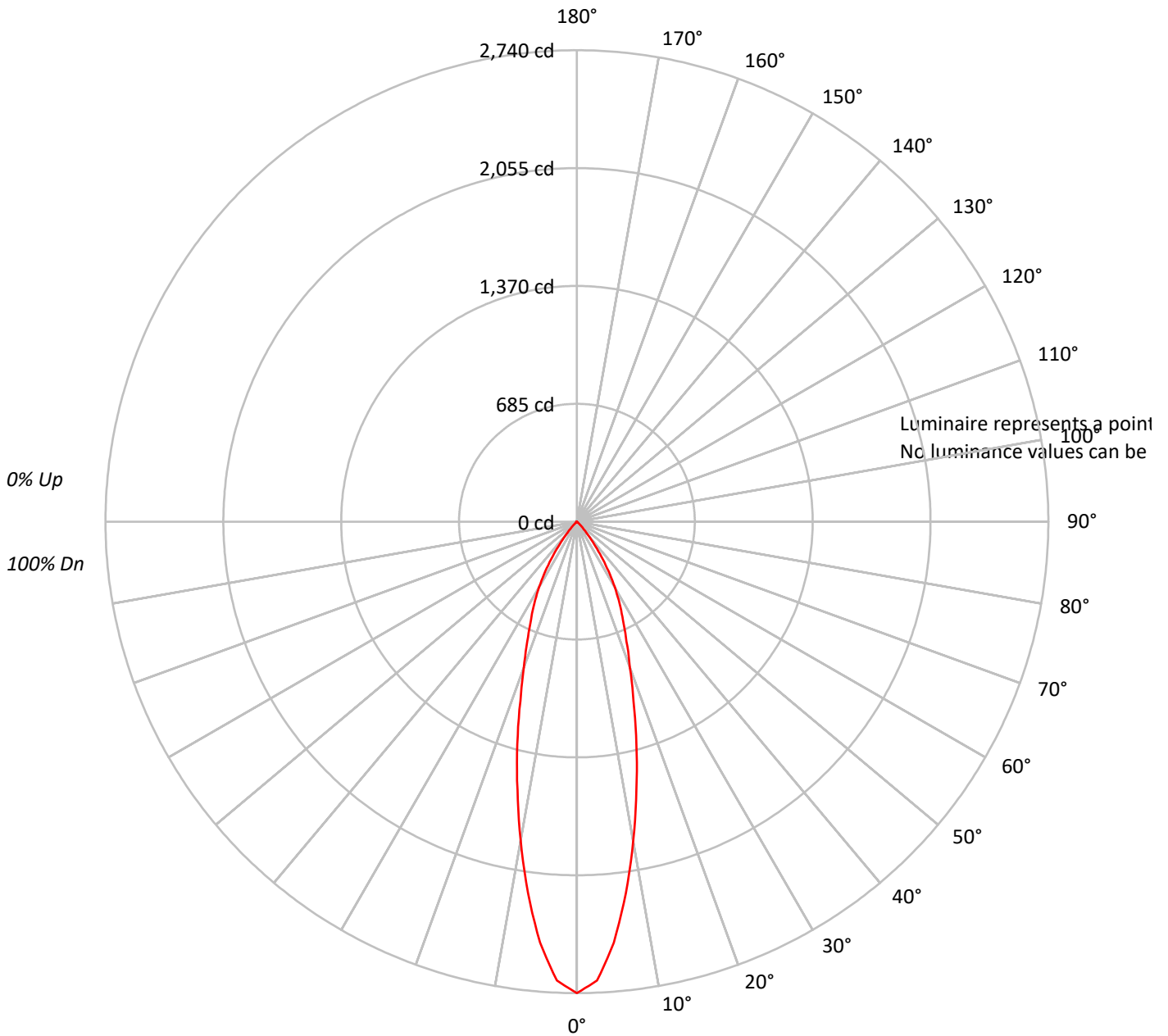
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				100															
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95				95															
2	109	105	102	99	107	103	100	98	100	98	95	97	95	93	95	93	92	90				90															
3	105	99	95	92	103	98	94	91	95	92	89	93	90	88	91	89	87	85				85															
4	101	94	89	86	99	93	88	85	91	87	84	89	86	83	87	84	82	81				81															
5	96	89	84	80	95	88	84	80	87	82	79	85	81	79	83	80	78	77				77															
6	92	85	80	76	91	84	79	76	83	78	75	81	78	75	80	77	74	73				73															
7	89	81	76	72	88	80	75	72	79	75	71	78	74	71	77	73	71	69				69															
8	85	77	72	68	84	77	72	68	76	71	68	75	71	68	74	70	67	66				66															
9	82	74	69	65	81	73	68	65	72	68	65	72	68	65	71	67	64	63				63															
10	79	71	66	62	78	70	65	62	69	65	62	69	65	62	68	64	62	61				61															

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	215.9	20.3
10°-20°	369.7	34.7
20°-30°	293.8	27.6
30°-40°	155.5	14.6
40°-50°	26.8	2.5
50°-60°	2.0	0.2
60°-70°	1.0	0.1
70°-80°	0.0	0.0
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°	879.4	82.6
0°-40°	1034.9	97.2
0°-60°	1063.7	99.9
0°-90°	1064.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1064.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2740	
5°	2456	216
15°	1336	370
25°	633	294
35°	246	156
45°	28	27
55°	2	2
65°	2	1
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2740.1
2.5°	2669.5
5°	2456.4
7.5°	2177.6
10°	1882.5
12.5°	1597.1
15°	1336.4
17.5°	1093.7
20°	900.2
22.5°	752.7
25°	633.0
27.5°	536.2
30°	439.5
32.5°	341.1
35°	246.0
37.5°	162.3
40°	96.7
42.5°	55.8
45°	27.9
47.5°	9.8
50°	3.3
52.5°	3.3
55°	1.6
57.5°	1.6
60°	1.6
62.5°	1.6
65°	1.6
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
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)