

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: P211454

Luminaire Tested: **LSR4B20D010BZ EC4B10209024 4LBNWH1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211454
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 EC4B10209024 4LBNWH1
Description: PORTFOLIO 4 INCH CYLINDER
NARROW DISTRIBUTION WITH WHEAT 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: 960.9 lumens
Efficiency: N/A
Efficacy: 46.2 lumens/watt
Spacing Criteria (0/90/45): 0.53 / 0.53 / 0.62
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

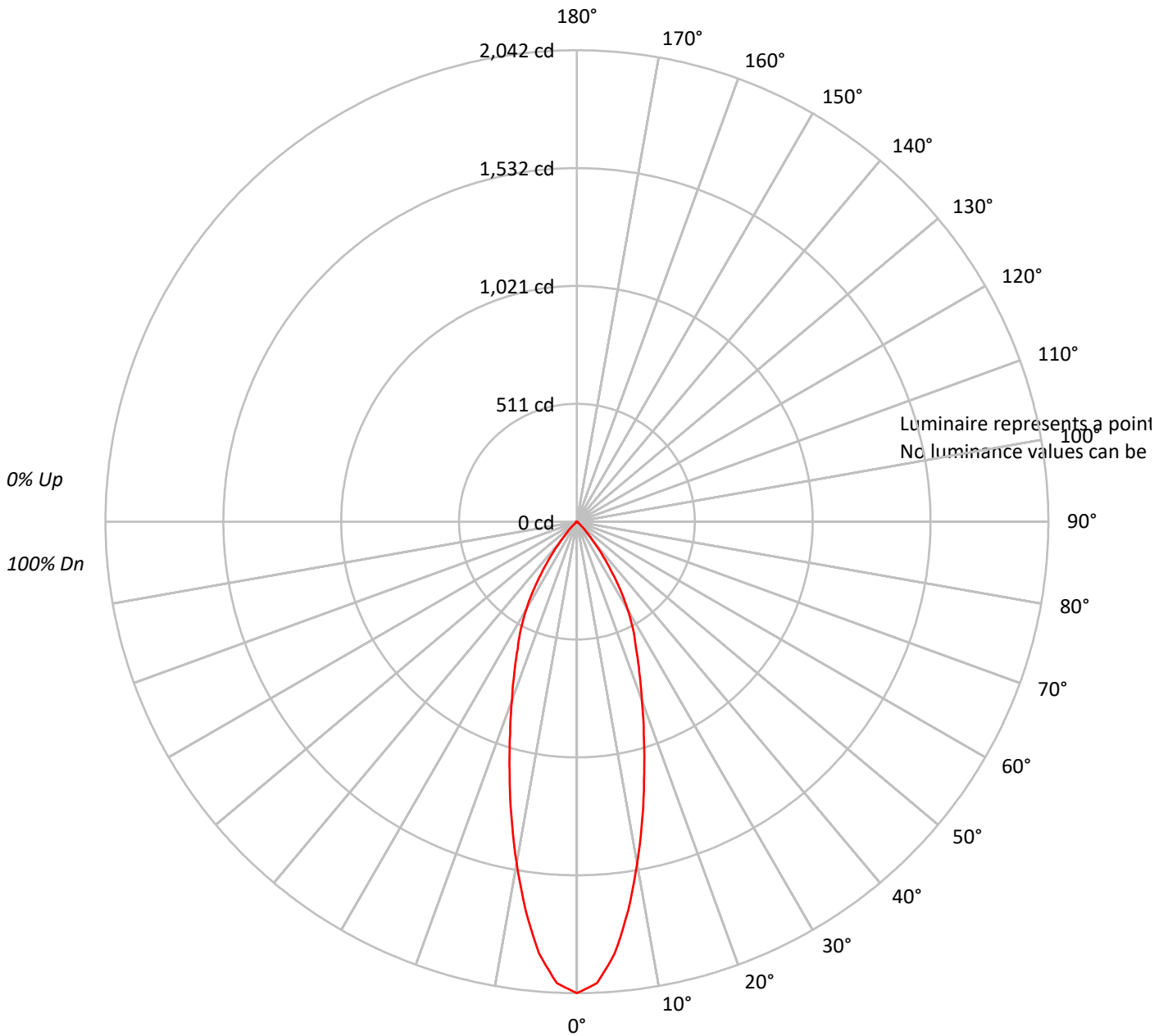
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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									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	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	114	111	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	95																												
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89																												
3	104	98	94	90	102	97	93	90	94	91	88	92	89	87	90	87	85	84																												
4	100	93	88	84	98	92	87	83	90	86	82	88	84	82	86	83	81	79																												
5	95	88	82	78	94	87	82	78	85	81	77	83	80	77	82	79	76	75																												
6	91	83	78	74	90	82	77	74	81	76	73	79	76	73	78	75	72	71																												
7	87	79	73	70	86	78	73	69	77	72	69	76	72	69	75	71	68	67																												
8	84	75	70	66	82	74	69	66	73	69	65	72	68	65	71	68	65	64																												
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	65	62	61																												
10	77	68	63	59	76	68	63	59	67	62	59	66	62	59	66	62	59	58																												

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.0	17.4
10°-20°	313.3	32.6
20°-30°	281.1	29.2
30°-40°	161.3	16.8
40°-50°	32.2	3.3
50°-60°	4.1	0.4
60°-70°	1.9	0.2
70°-80°	0.2	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°	761.3	79.2
0°-40°	922.6	96.0
0°-60°	958.8	99.8
0°-90°	960.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	960.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2042	
5°	1878	167
15°	1125	313
25°	607	281
35°	256	161
45°	35	32
55°	5	4
65°	2	2
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	2042.1
2.5°	2000.6
5°	1877.9
7.5°	1698.7
10°	1502.9
12.5°	1310.5
15°	1124.7
17.5°	962.2
20°	822.8
22.5°	706.7
25°	607.2
27.5°	527.5
30°	439.6
32.5°	350.0
35°	255.5
37.5°	174.2
40°	107.8
42.5°	64.7
45°	34.8
47.5°	14.9
50°	6.6
52.5°	5.0
55°	5.0
57.5°	3.3
60°	3.3
62.5°	1.7
65°	1.7
67.5°	1.7
70°	1.7
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)