

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: P211599

Luminaire Tested: **LSR4B20D010BZ EC4B10209030 4LBNWH1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211599
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 EC4B10209030 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: 1136.0 lumens
Efficiency: N/A
Efficacy: 54.6 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

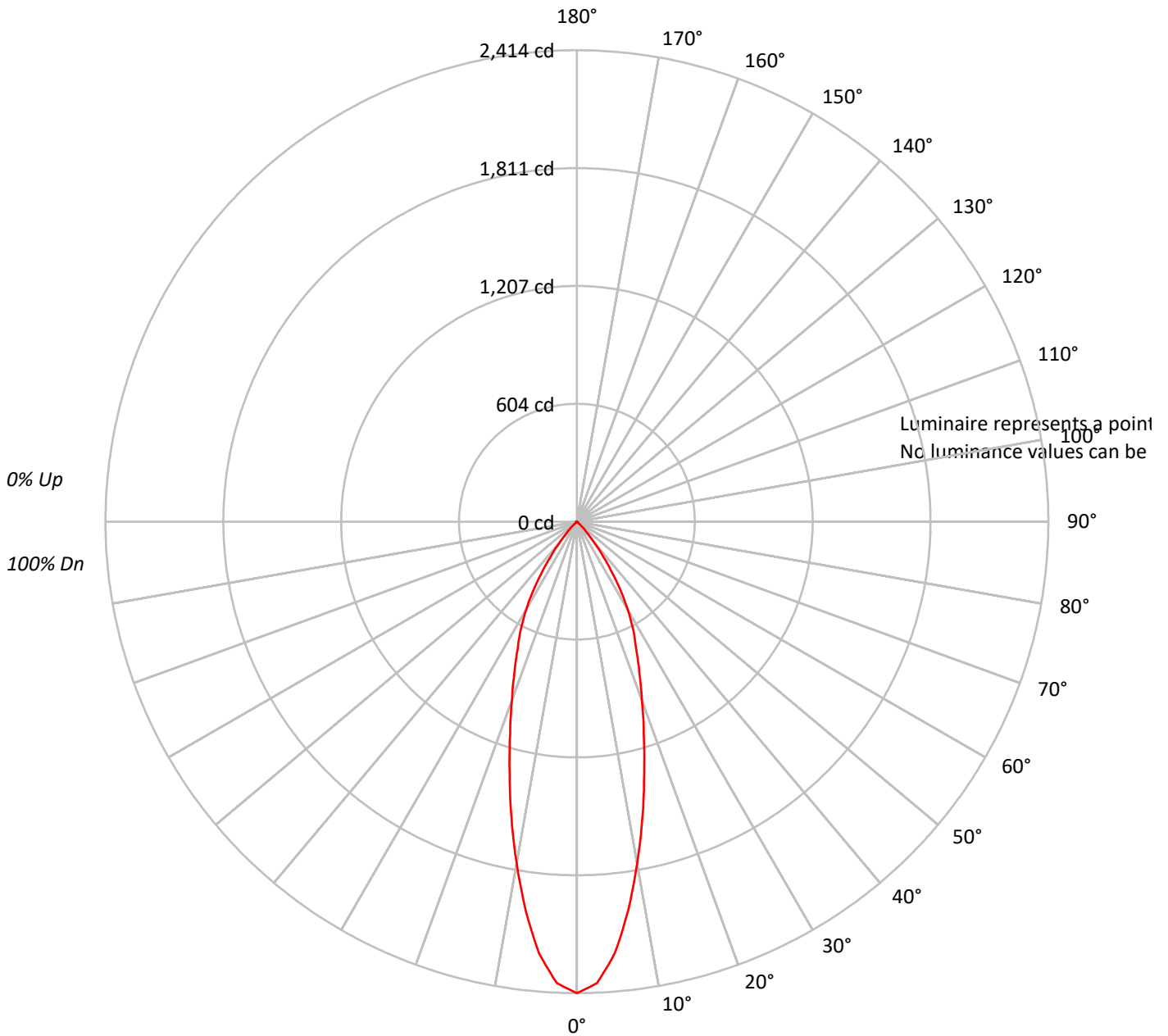
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	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°	197.4	17.4
10°-20°	370.4	32.6
20°-30°	332.3	29.2
30°-40°	190.7	16.8
40°-50°	38.1	3.3
50°-60°	4.8	0.4
60°-70°	2.2	0.2
70°-80°	0.3	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°	900.1	79.2
0°-40°	1090.7	96.0
0°-60°	1133.6	99.8
0°-90°	1136.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1136.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2414	
5°	2220	197
15°	1330	370
25°	718	332
35°	302	191
45°	41	38
55°	6	5
65°	2	2
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2414.3
2.5°	2365.3
5°	2220.1
7.5°	2008.3
10°	1776.9
12.5°	1549.4
15°	1329.7
17.5°	1137.5
20°	972.8
22.5°	835.5
25°	717.8
27.5°	623.7
30°	519.7
32.5°	413.8
35°	302.0
37.5°	205.9
40°	127.5
42.5°	76.5
45°	41.2
47.5°	17.7
50°	7.8
52.5°	5.9
55°	5.9
57.5°	3.9
60°	3.9
62.5°	2.0
65°	2.0
67.5°	2.0
70°	2.0
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)