

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: P211510

Luminaire Tested: **LSR4B20D010BZ EC4B10209027 4LBNI1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211510
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 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: 1224.1 lumens
Efficiency: N/A
Efficacy: 58.9 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

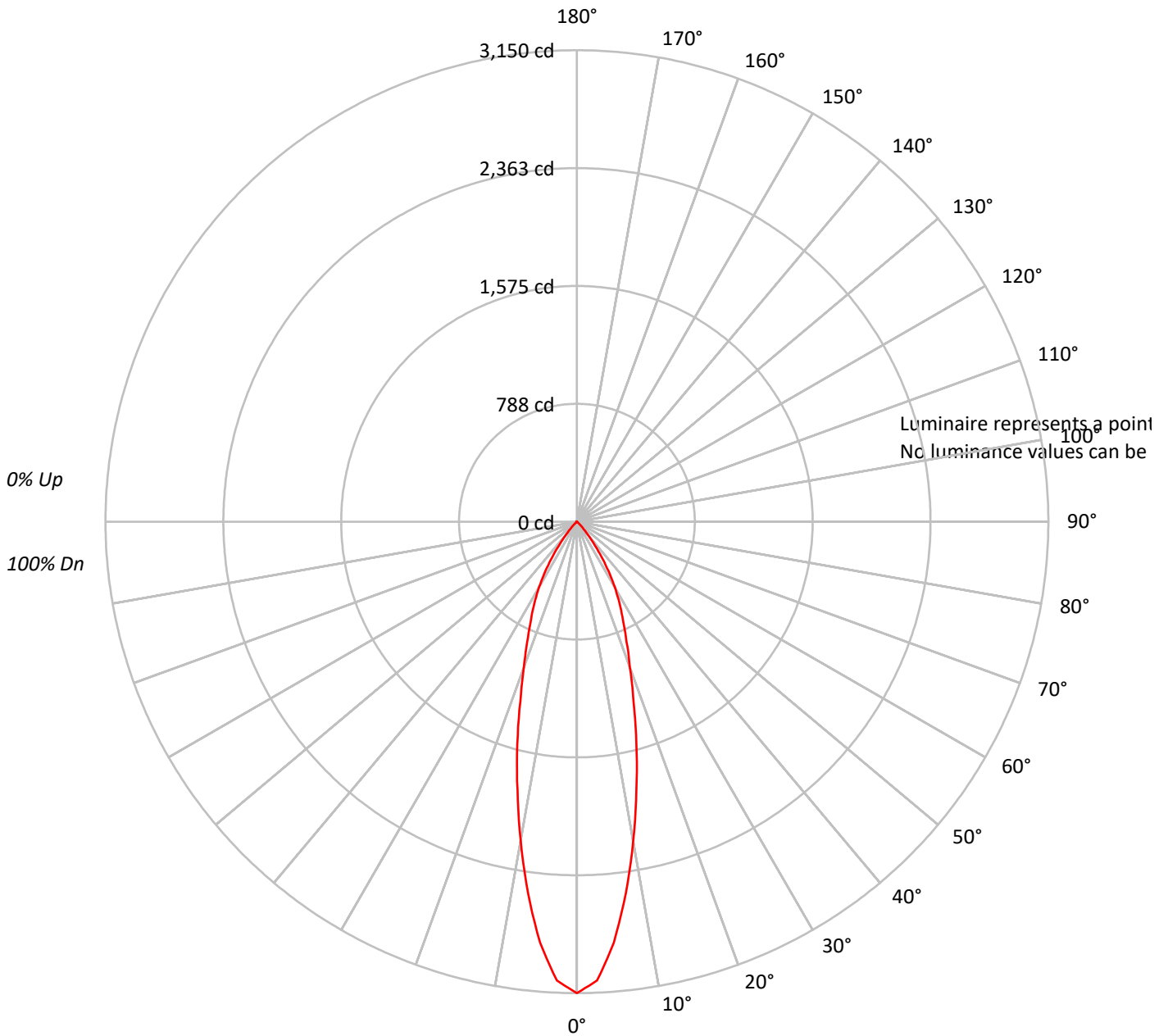
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.3	20.3
10°-20°	425.0	34.7
20°-30°	337.8	27.6
30°-40°	178.8	14.6
40°-50°	30.8	2.5
50°-60°	2.3	0.2
60°-70°	1.2	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°	1011.1	82.6
0°-40°	1189.9	97.2
0°-60°	1223.0	99.9
0°-90°	1224.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1224.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3150	
5°	2824	248
15°	1536	425
25°	728	338
35°	283	179
45°	32	31
55°	2	2
65°	2	1
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	3150.2
2.5°	3069.2
5°	2824.1
7.5°	2503.6
10°	2164.3
12.5°	1836.2
15°	1536.5
17.5°	1257.5
20°	1035.0
22.5°	865.3
25°	727.7
27.5°	616.5
30°	505.2
32.5°	392.1
35°	282.8
37.5°	186.6
40°	111.2
42.5°	64.1
45°	32.0
47.5°	11.3
50°	3.8
52.5°	3.8
55°	1.9
57.5°	1.9
60°	1.9
62.5°	1.9
65°	1.9
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)