

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: P211649

Luminaire Tested: **LSR4B20D010BZ EC4B10208035 4LBMLI1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211649
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 EC4B10208035 4LBML1
Description: PORTFOLIO 4 INCH CYLINDER
MEDIUM 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: 1946.7 lumens
Efficiency: N/A
Efficacy: 93.6 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 0.7 / 0.76
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

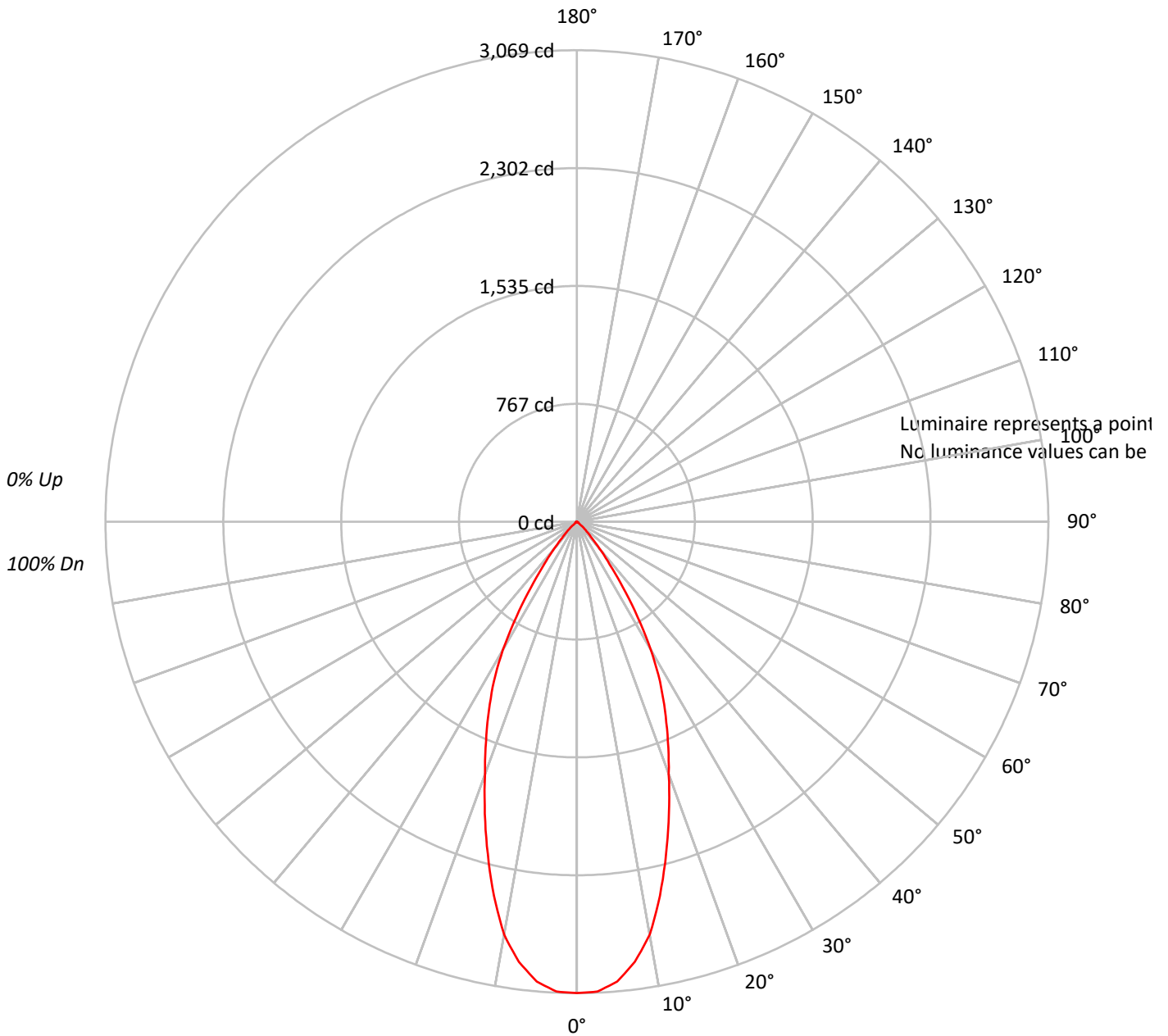
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	109	107	105	105	103	102	101	100	99	98	97	96	94			
2	109	104	100	97	107	102	99	96	99	96	94	96	94	92	94	92	90	88			
3	104	98	93	89	102	96	92	89	94	90	87	91	88	86	89	87	85	83			
4	99	92	87	83	97	91	86	82	89	85	81	87	83	80	85	82	79	78			
5	94	87	81	77	93	86	81	77	84	79	76	82	78	75	81	77	75	73			
6	90	82	76	72	89	81	76	72	80	75	71	78	74	71	77	73	71	69			
7	86	77	72	68	85	77	71	68	75	71	67	74	70	67	73	69	67	65			
8	82	73	68	64	81	73	67	64	72	67	64	71	66	63	70	66	63	62			
9	79	70	64	60	78	69	64	60	68	63	60	67	63	60	67	63	60	58			
10	75	66	61	57	74	66	61	57	65	60	57	64	60	57	64	60	57	56			

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	277.9	14.3
10°-20°	621.2	31.9
20°-30°	617.6	31.7
30°-40°	336.3	17.3
40°-50°	77.7	4.0
50°-60°	11.0	0.6
60°-70°	4.1	0.2
70°-80°	0.9	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°	1516.7	77.9
0°-40°	1853.0	95.2
0°-60°	1941.7	99.7
0°-90°	1946.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1946.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3069	
5°	3005	278
15°	2242	621
25°	1354	618
35°	520	336
45°	90	78
55°	12	11
65°	5	4
75°	0	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	3068.8
2.5°	3061.8
5°	3005.3
7.5°	2889.8
10°	2729.7
12.5°	2494.2
15°	2242.2
17.5°	1992.5
20°	1747.6
22.5°	1547.4
25°	1354.2
27.5°	1170.5
30°	963.3
32.5°	732.5
35°	520.5
37.5°	350.9
40°	228.5
42.5°	143.7
45°	89.5
47.5°	51.8
50°	25.9
52.5°	14.1
55°	11.8
57.5°	7.1
60°	7.1
62.5°	4.7
65°	4.7
67.5°	2.4
70°	2.4
72.5°	2.4
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)