

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: P211491

Luminaire Tested: **LSR4B20D010BZ EC4B10208027 4LBSWMH1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211491
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 EC4B10208027 4LBSWMH1
Description: PORTFOLIO 4 INCH CYLINDER
SHALLOW DISTRIBUTION WITH WARM HAZE 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: 1929.3 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 0.99 / 1.08
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

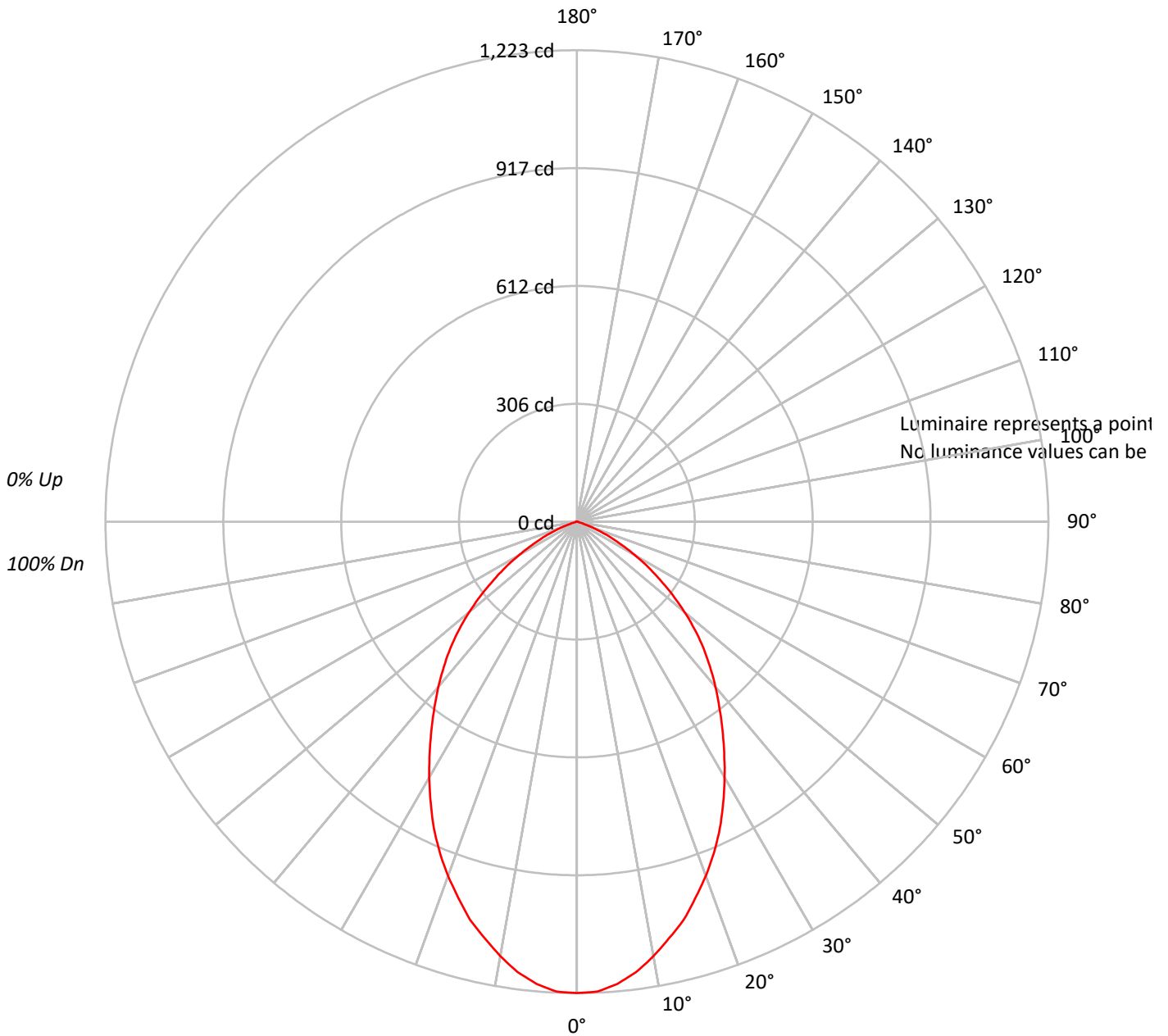
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79			
3	96	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62			
5	83	73	65	59	82	72	64	59	70	63	59	68	62	58	66	61	57	56			
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41			
9	64	52	45	40	63	52	45	40	50	44	40	49	44	39	49	43	39	38			
10	60	48	41	37	59	48	41	37	47	41	36	46	40	36	45	40	36	35			

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.0	5.9
10°-20°	299.5	15.5
20°-30°	402.2	20.8
30°-40°	411.7	21.3
40°-50°	356.4	18.5
50°-60°	237.0	12.3
60°-70°	97.3	5.0
70°-80°	11.6	0.6
80°-90°	0.5	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°	814.7	42.2
0°-40°	1226.4	63.6
0°-60°	1819.9	94.3
0°-90°	1929.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1929.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1223	
5°	1204	113
15°	1070	299
25°	878	402
35°	658	412
45°	464	356
55°	263	237
65°	96	97
75°	5	12
85°	0	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1222.8
2.5°	1220.2
5°	1203.8
7.5°	1178.5
10°	1144.4
12.5°	1106.4
15°	1069.8
17.5°	1023.0
20°	977.5
22.5°	929.4
25°	877.6
27.5°	821.9
30°	766.3
32.5°	710.6
35°	657.5
37.5°	607.0
40°	558.9
42.5°	510.9
45°	464.1
47.5°	414.8
50°	364.2
52.5°	313.6
55°	263.0
57.5°	218.8
60°	173.2
62.5°	131.5
65°	96.1
67.5°	63.2
70°	36.7
72.5°	17.7
75°	5.1
77.5°	2.5
80°	1.3
82.5°	1.3
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)