

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: P211515

Luminaire Tested: **LSR4B20D010BZ EC4B10209027 4LBSGPH1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211515
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 4LBSGPH1
Description: PORTFOLIO 4 INCH CYLINDER
SHALLOW DISTRIBUTION WITH GRAPHITE 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: 1498.4 lumens
Efficiency: N/A
Efficacy: 72.0 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.26
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

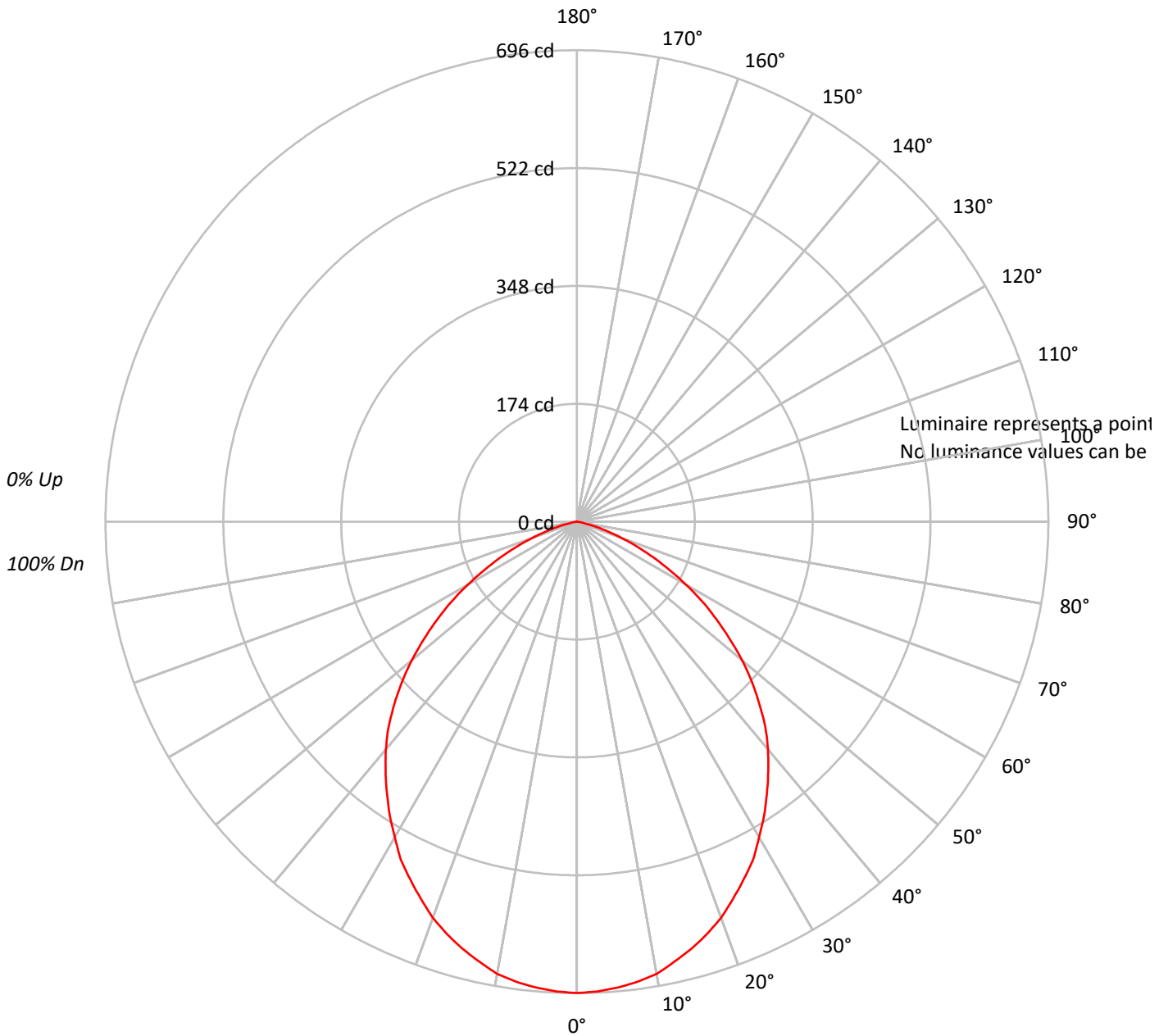
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	91	90	88																			
2	102	95	89	84	100	93	88	83	90	85	82	87	83	80	84	81	78	76																			
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66																			
4	87	76	68	62	85	75	67	62	72	66	61	70	65	60	68	63	59	57																			
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50																			
6	74	62	54	48	73	61	53	48	59	52	47	58	52	47	56	51	47	45																			
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40																			
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36																			
9	60	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	32																			
10	57	44	37	32	56	44	36	32	43	36	31	42	36	31	41	35	31	30																			

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.5	4.4
10°-20°	183.9	12.3
20°-30°	268.3	17.9
30°-40°	305.9	20.4
40°-50°	293.4	19.6
50°-60°	224.7	15.0
60°-70°	123.3	8.2
70°-80°	32.8	2.2
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°	517.7	34.5
0°-40°	823.6	55.0
0°-60°	1341.8	89.5
0°-90°	1498.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1498.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	696	
5°	690	66
15°	653	184
25°	583	268
35°	489	306
45°	381	293
55°	252	225
65°	124	123
75°	29	33
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	695.9
2.5°	694.1
5°	690.5
7.5°	685.2
10°	678.0
12.5°	665.4
15°	652.8
17.5°	638.4
20°	622.2
22.5°	602.4
25°	582.6
27.5°	562.9
30°	537.7
32.5°	514.3
35°	489.1
37.5°	464.0
40°	438.8
42.5°	411.8
45°	381.2
47.5°	350.7
50°	318.3
52.5°	284.1
55°	251.8
57.5°	219.4
60°	185.2
62.5°	152.9
65°	124.1
67.5°	95.3
70°	70.1
72.5°	46.8
75°	28.8
77.5°	12.6
80°	3.6
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)