

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: P211746

Luminaire Tested: **LSR4B20D010BZ EC4B10209040 4LBSB1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211746
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 EC4B10209040 4LBSB1
Description: PORTFOLIO 4 INCH CYLINDER
SHALLOW DISTRIBUTION WITH SPECULAR BLACK 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: 1516.7 lumens
Efficiency: N/A
Efficacy: 72.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.3
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

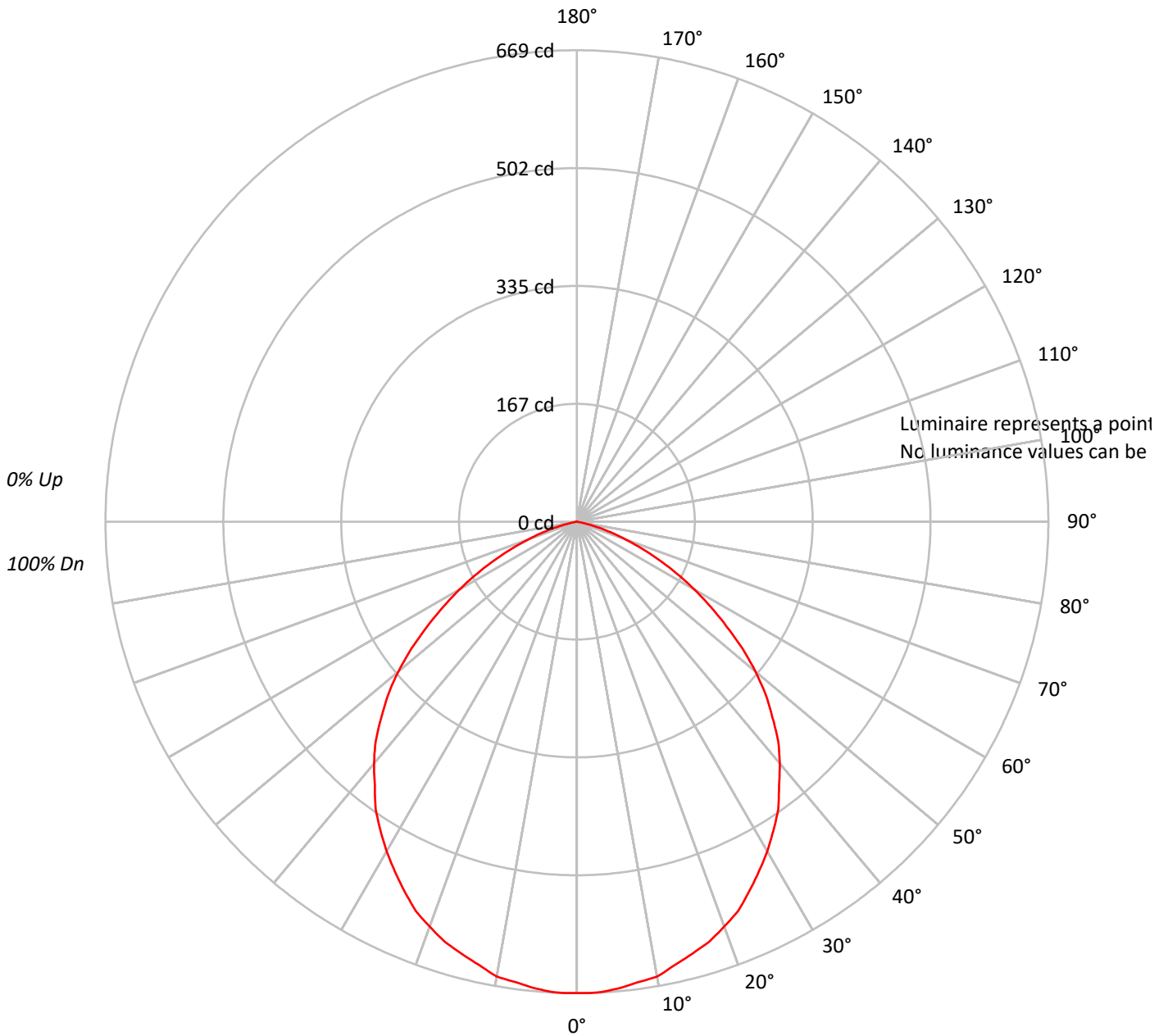
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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			100
1	111	107	103	100	108	105	101	98	100	98	95	97	94	93	93	91	90	88			88
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78	76			76
3	94	84	77	72	91	83	76	71	80	74	70	77	73	68	75	71	67	65			65
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57			57
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50			50
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44			44
7	69	56	48	42	67	55	48	42	54	47	42	52	46	41	51	45	41	39			39
8	64	51	43	38	63	51	43	38	49	42	37	48	42	37	47	41	37	35			35
9	60	47	39	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32			32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	40	35	31	29			29

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	4.2
10°-20°	179.2	11.8
20°-30°	266.5	17.6
30°-40°	310.1	20.4
40°-50°	302.3	19.9
50°-60°	232.5	15.3
60°-70°	128.6	8.5
70°-80°	34.0	2.2
80°-90°	0.3	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°	508.8	33.5
0°-40°	819.0	54.0
0°-60°	1353.8	89.3
0°-90°	1516.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1516.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	669	
5°	665	63
15°	634	179
25°	579	267
35°	498	310
45°	392	302
55°	260	233
65°	129	129
75°	29	34
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	669.0
2.5°	669.0
5°	665.2
7.5°	659.4
10°	655.6
12.5°	644.0
15°	634.4
17.5°	624.8
20°	611.4
22.5°	597.9
25°	578.7
27.5°	559.5
30°	540.2
32.5°	519.1
35°	497.9
37.5°	471.0
40°	447.9
42.5°	423.0
45°	392.2
47.5°	363.4
50°	330.7
52.5°	296.1
55°	259.5
57.5°	224.9
60°	192.3
62.5°	159.6
65°	128.8
67.5°	100.0
70°	73.1
72.5°	50.0
75°	28.8
77.5°	13.5
80°	1.9
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)