

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: P211650

Luminaire Tested: **LSR4B20D010BZ EC4B10208035 4LBMMW1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211650
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 4LBMMW1
Description: PORTFOLIO 4 INCH CYLINDER
MEDIUM DISTRIBUTION WITH MATTE WHITE 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: 1624.2 lumens
Efficiency: N/A
Efficacy: 78.1 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 0.99 / 0.97
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

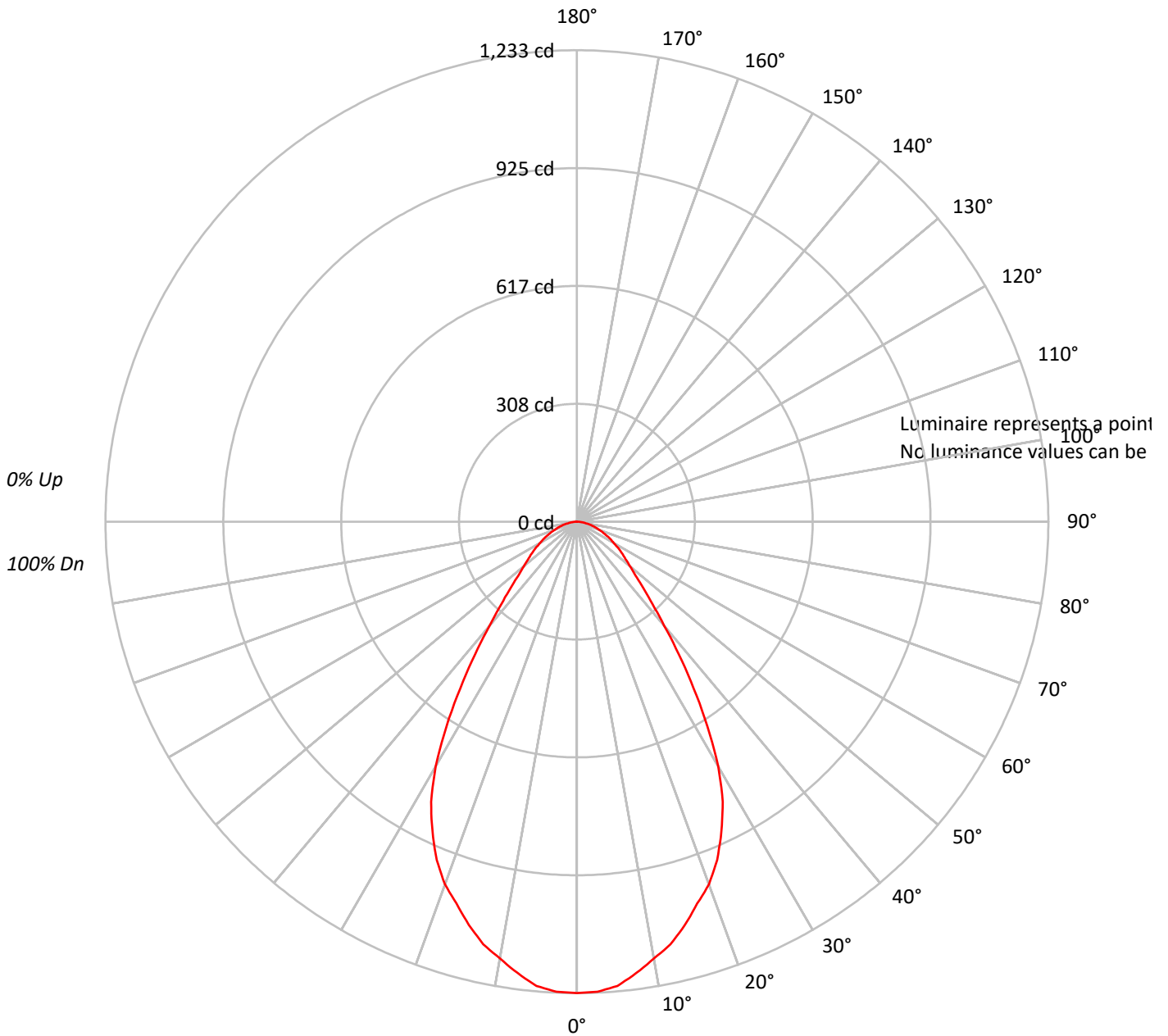
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89						89													
2	104	98	92	88	102	96	91	87	93	89	85	89	86	83	87	84	81	80						80													
3	97	89	83	77	95	87	82	77	85	80	76	82	78	74	80	76	73	71						71													
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64						64													
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58						58													
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53						53													
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49						49													
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	45						45													
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42						42													
10	63	52	45	41	62	51	45	41	51	45	40	50	44	40	49	44	40	39						39													

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.3	7.0
10°-20°	306.4	18.9
20°-30°	407.4	25.1
30°-40°	333.2	20.5
40°-50°	194.1	11.9
50°-60°	128.7	7.9
60°-70°	84.6	5.2
70°-80°	44.7	2.8
80°-90°	10.9	0.7
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°	828.0	51.0
0°-40°	1161.2	71.5
0°-60°	1484.0	91.4
0°-90°	1624.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1624.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1233	
5°	1219	114
15°	1092	306
25°	894	407
35°	532	333
45°	245	194
55°	144	129
65°	85	85
75°	42	45
85°	9	11
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1233.0
2.5°	1230.6
5°	1218.8
7.5°	1190.6
10°	1160.0
12.5°	1131.8
15°	1091.8
17.5°	1047.1
20°	1009.4
22.5°	957.7
25°	894.1
27.5°	825.9
30°	738.8
32.5°	635.3
35°	531.8
37.5°	437.7
40°	355.3
42.5°	291.8
45°	244.7
47.5°	207.1
50°	181.2
52.5°	160.0
55°	143.5
57.5°	127.1
60°	110.6
62.5°	98.8
65°	84.7
67.5°	72.9
70°	61.2
72.5°	51.8
75°	42.4
77.5°	32.9
80°	23.5
82.5°	16.5
85°	9.4
87.5°	2.4
90°	0.0



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— 0°-180°







(END OF REPORT)