

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: P211685

Luminaire Tested: **LSR4B20D010BZ EC4B10209035 4LBNMW1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211685
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 EC4B10209035 4LBNMW1
Description: PORTFOLIO 4 INCH CYLINDER
NARROW 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

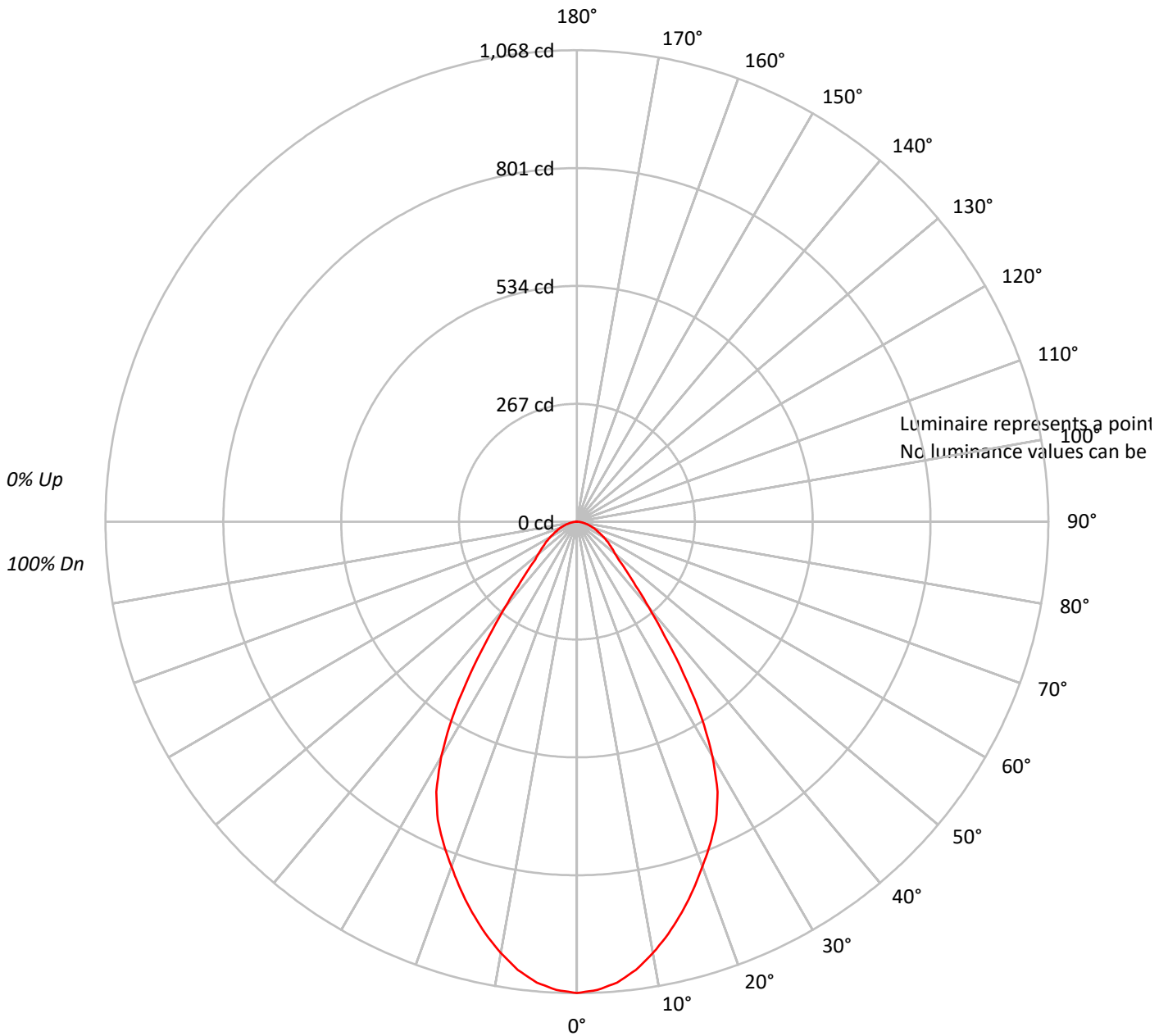
Lumens per Lamp: N/A
Luminaire Lumens: 1251.7 lumens
Efficiency: N/A
Efficacy: 60.2 lumens/watt
Spacing Criteria (0/90/45): 0.96 / 0.96 / 0.95
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

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									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	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	100	100	100	100	100	100	100										
	1	112	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90	90	90	90	90	90	90	90	90										
	2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81	81	81	81	81	81	81	81	81										
	3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73	73	73	73	73	73	73	73	73										
	4	92	83	76	71	90	82	76	71	80	74	70	78	73	69	76	72	68	67	67	67	67	67	67	67	67	67										
	5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	63	61	61	61	61	61	61	61	61	61										
	6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	56	56	56	56	56	56	56	56	56										
	7	77	66	59	54	75	65	59	54	64	58	54	63	57	53	62	57	53	52	52	52	52	52	52	52	52	52										
	8	73	62	55	50	71	61	55	50	60	54	50	59	53	49	58	53	49	48	48	48	48	48	48	48	48	48										
	9	69	58	51	46	68	57	51	46	56	50	46	55	50	46	54	49	46	44	44	44	44	44	44	44	44	44										
	10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43	41	41	41	41	41	41	41	41	41										

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.2	7.8
10°-20°	257.0	20.5
20°-30°	338.3	27.0
30°-40°	263.3	21.0
40°-50°	127.9	10.2
50°-60°	80.8	6.5
60°-70°	52.1	4.2
70°-80°	27.3	2.2
80°-90°	6.8	0.5
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°	693.6	55.4
0°-40°	956.9	76.4
0°-60°	1165.6	93.1
0°-90°	1251.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1251.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1068	
5°	1048	98
15°	917	257
25°	746	338
35°	422	263
45°	159	128
55°	90	81
65°	52	52
75°	26	27
85°	6	7
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1067.8
2.5°	1061.8
5°	1047.9
7.5°	1024.1
10°	992.3
12.5°	956.5
15°	916.7
17.5°	874.9
20°	831.2
22.5°	789.4
25°	745.7
27.5°	690.0
30°	614.4
32.5°	525.0
35°	421.6
37.5°	326.1
40°	252.5
42.5°	196.9
45°	159.1
47.5°	129.3
50°	113.3
52.5°	101.4
55°	89.5
57.5°	79.5
60°	69.6
62.5°	59.7
65°	51.7
67.5°	45.7
70°	37.8
72.5°	31.8
75°	25.9
77.5°	19.9
80°	13.9
82.5°	9.9
85°	6.0
87.5°	2.0
90°	0.0



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— 0°-180°







(END OF REPORT)