

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: io LED

Report Number: P397208

Luminaire Tested: **2VRVT2-LD5-4-FR50-UNV-LA59-CD1-WL-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397208  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-3)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: 2VRVT2-LD5-4-FR50-UNV-LA59-CD1-WL-U  
Description:  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1123.4 lumens  
Efficiency: N/A  
Efficacy: 25.4 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 2.08' x H: 0.17')  
CIE Type: Direct

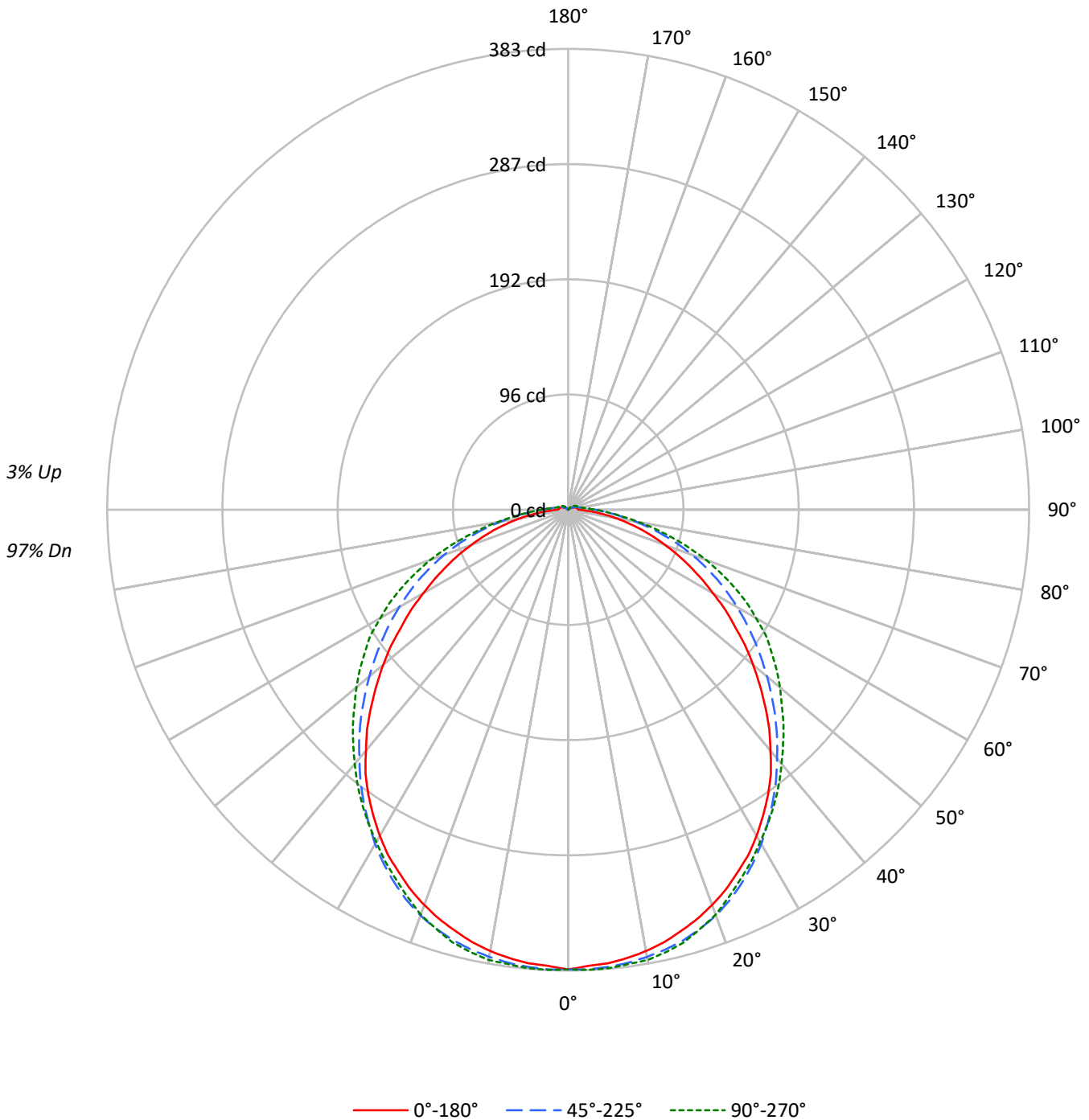
Input Watts (W): 44.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	118	118	118	118	115	115	115	115	110	110	110	104	104	104	99	99	99	97
1	107	102	98	94	104	100	96	92	95	92	89	91	88	85	87	84	82	80
2	98	89	82	76	95	87	80	75	83	77	73	79	75	71	76	72	69	66
3	89	78	70	63	86	76	69	62	73	66	61	70	64	59	67	62	58	56
4	81	69	60	53	79	68	59	53	65	57	52	62	56	51	60	54	50	47
5	75	62	53	46	72	60	52	46	58	51	45	56	49	44	54	48	43	41
6	69	56	47	40	67	54	46	40	52	45	39	50	44	39	49	43	38	36
7	64	50	42	35	62	49	41	35	48	40	35	46	39	34	44	38	34	32
8	60	46	37	32	58	45	37	31	44	36	31	42	36	31	41	35	30	28
9	56	42	34	28	54	42	34	28	40	33	28	39	32	28	38	32	27	26
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3948	3948	3948
5°	3898	3858	3855
10°	3854	3765	3765
15°	3797	3674	3654
20°	3736	3566	3512
25°	3656	3431	3344
30°	3570	3275	3191
35°	3457	3104	3054
40°	3304	2924	2907
45°	3132	2751	2772
50°	2943	2571	2642
55°	2728	2397	2514
60°	2519	2228	2361
65°	2327	2047	2169
70°	2123	1837	1921
75°	1906	1572	1589
80°	1646	1272	1231
85°	1307	989	900



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.2	3.2
10°-20°	104.0	9.3
20°-30°	156.2	13.9
30°-40°	185.0	16.5
40°-50°	187.9	16.7
50°-60°	168.7	15.0
60°-70°	132.5	11.8
70°-80°	83.9	7.5
80°-90°	37.1	3.3
90°-100°	14.3	1.3
100°-110°	8.0	0.7
110°-120°	5.2	0.5
120°-130°	2.9	0.3
130°-140°	1.2	0.1
140°-150°	0.3	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	296.4	26.4
0°-40°	481.5	42.9
0°-60°	838.0	74.6
0°-90°	1091.5	97.2
90°-120°	27.4	2.4
90°-150°	31.8	2.8
90°-180°	32.0	2.8
0°-180°	1123.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	382	382	382	382	382	
5°	378	380	381	382	382	36
15°	362	366	370	372	372	102
25°	333	338	342	340	339	153
35°	289	296	296	298	299	181
45°	232	238	243	250	253	179
55°	169	176	189	202	206	152
65°	112	118	136	149	152	111
75°	62	69	82	89	89	66
85°	21	28	36	38	36	21
90°	9	16	22	23	22	5
95°	8	10	14	15	14	6
105°	7	6	8	9	8	7
115°	4	3	5	7	7	4
125°	2	1	3	5	5	2
135°	1	1	1	3	3	1
145°	0	0	0	1	1	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	382.1	382.1	382.1	382.1	382.1
2.5°	379.5	380.6	382.5	382.8	382.8
5°	378.4	379.9	381.4	382.5	382.5
7.5°	375.8	377.3	379.9	381.0	381.0
10°	372.5	374.3	377.3	379.5	379.9
12.5°	368.1	370.3	374.3	376.5	376.5
15°	362.5	365.5	370.3	372.5	372.1
17.5°	356.6	359.9	365.1	366.2	365.1
20°	349.6	353.7	358.8	359.6	358.1
22.5°	341.9	346.6	351.1	350.0	348.5
25°	332.6	338.5	341.9	340.0	338.9
27.5°	323.8	329.3	331.9	329.7	329.3
30°	313.0	319.3	320.8	319.3	318.9
32.5°	301.3	308.6	308.6	308.6	309.0
35°	289.4	295.7	296.4	297.6	298.6
37.5°	276.5	282.8	283.5	286.5	287.6
40°	261.4	268.4	269.9	274.3	275.8
42.5°	247.4	253.6	256.9	262.5	264.3
45°	231.5	238.5	243.3	249.9	252.9
47.5°	216.0	223.0	229.3	237.7	240.7
50°	200.5	207.5	215.6	225.6	229.6
52.5°	185.3	191.2	201.9	213.8	218.2
55°	168.7	176.1	188.6	201.6	206.0
57.5°	154.7	160.6	175.4	189.4	194.9
60°	138.8	145.5	162.4	176.5	180.2
62.5°	125.2	131.8	149.2	163.2	166.9
65°	111.5	117.8	136.2	148.8	152.1
67.5°	98.6	105.6	122.6	135.1	136.6
70°	85.7	93.0	109.6	120.3	121.8
72.5°	73.8	80.8	96.0	104.8	105.2
75°	62.0	69.0	82.3	89.3	89.3
77.5°	50.6	58.0	69.4	74.9	74.2
80°	40.2	46.9	56.8	59.8	59.8
82.5°	29.9	36.9	45.4	48.4	46.9
85°	21.1	28.4	36.2	37.7	36.5
87.5°	13.7	21.4	28.1	29.2	28.4
90°	8.8	15.9	22.1	22.9	22.5
92.5°	8.1	12.2	17.4	18.1	17.7
95°	7.8	9.6	14.0	14.8	14.4
97.5°	7.8	8.1	11.8	12.5	12.2
100°	7.4	7.0	10.0	10.7	10.3
102.5°	7.4	6.3	8.8	9.6	9.2
105°	6.6	5.5	7.8	8.8	8.5
107.5°	6.3	4.8	7.0	8.1	8.1
110°	5.5	4.1	6.3	7.8	7.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	4.8	3.7	5.9	7.4	7.4
115°	4.1	3.3	5.2	6.6	7.0
117.5°	3.3	2.6	4.4	6.3	6.6
120°	2.9	2.2	4.1	5.9	6.3
122.5°	2.6	1.8	3.7	5.2	5.9
125°	1.8	1.1	2.9	4.8	5.2
127.5°	1.8	1.1	2.6	4.1	4.8
130°	1.5	1.1	2.2	3.7	4.1
132.5°	1.1	0.7	1.5	2.9	3.7
135°	0.7	0.7	1.1	2.6	2.9
137.5°	0.7	0.4	0.7	2.2	2.6
140°	0.4	0.4	0.4	1.5	1.8
142.5°	0.4	0.4	0.0	1.1	1.5
145°	0.4	0.4	0.0	0.7	1.1
147.5°	0.4	0.4	0.0	0.4	0.7
150°	0.4	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)