

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: P397211

Luminaire Tested: **2VRVT2-LD5-5-DR-UNV-LA59-CD1-WL-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397211  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: 2VRVT2-LD5-5-DR-UNV-LA59-CD1-WL-U  
Description:  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1449.0 lumens  
Efficiency: N/A  
Efficacy: 24.3 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.35  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 2.08' x H: 0.17')  
CIE Type: Direct

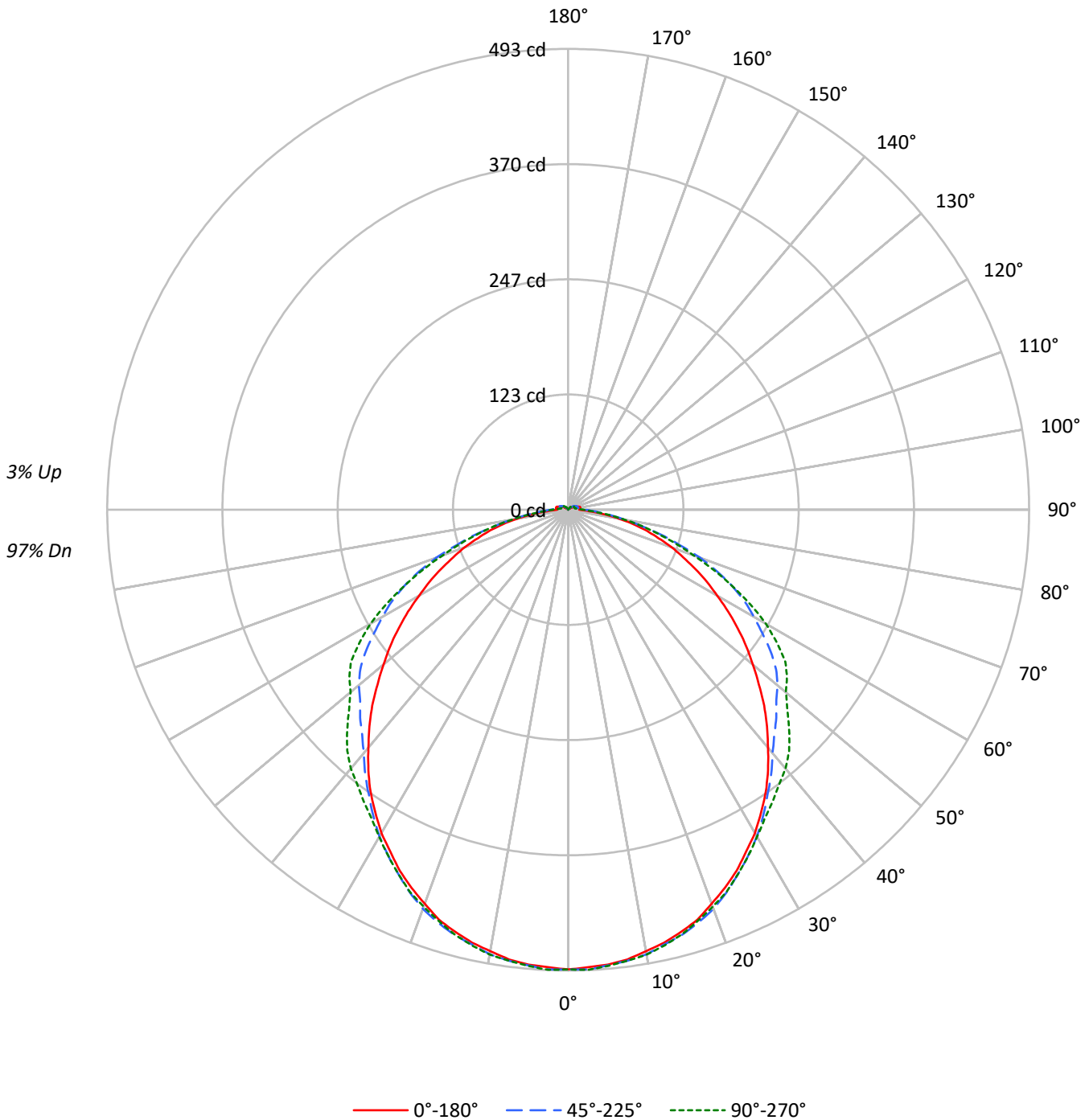
Input Watts (W): 59.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	100	100	97
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	80
2	98	89	82	76	95	87	80	75	83	78	73	79	75	71	76	72	69	66
3	89	78	70	63	86	76	68	62	73	66	61	70	64	59	67	62	58	56
4	81	69	60	53	79	67	59	53	65	57	52	62	56	51	59	54	50	47
5	75	62	52	46	72	60	52	45	58	50	45	56	49	44	53	48	43	41
6	69	55	46	40	67	54	46	40	52	45	39	50	44	38	48	42	38	36
7	64	50	41	35	62	49	41	35	47	40	34	46	39	34	44	38	34	31
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	37	31	27	25
10	52	39	31	25	51	38	31	25	37	30	25	36	29	25	35	29	25	23

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

	0°	45°	90°
0°	5082	5082	5082
5°	5032	4950	4938
10°	4962	4819	4790
15°	4895	4670	4618
20°	4793	4515	4432
25°	4684	4314	4242
30°	4555	4120	4044
35°	4402	3893	3898
40°	4202	3682	3811
45°	4009	3558	3664
50°	3785	3483	3495
55°	3578	3361	3461
60°	3344	3145	3200
65°	3131	2910	2760
70°	2925	2514	2247
75°	2666	1952	1769
80°	2264	1366	1246
85°	1629	910	762



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.5	3.2
10°-20°	132.5	9.1
20°-30°	197.7	13.6
30°-40°	234.0	16.1
40°-50°	243.0	16.8
50°-60°	227.5	15.7
60°-70°	182.1	12.6
70°-80°	107.5	7.4
80°-90°	38.7	2.7
90°-100°	14.0	1.0
100°-110°	10.3	0.7
110°-120°	7.8	0.5
120°-130°	4.7	0.3
130°-140°	2.3	0.2
140°-150°	0.4	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	376.7	26.0
0°-40°	610.7	42.1
0°-60°	1081.2	74.6
0°-90°	1409.6	97.3
90°-120°	32.1	2.2
90°-150°	39.4	2.7
90°-180°	39.0	2.7
0°-180°	1449.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	492	492	492	492	492	
5°	488	489	489	491	490	46
15°	467	467	471	473	470	132
25°	426	429	430	431	430	196
35°	368	370	372	377	381	230
45°	296	298	315	333	334	228
55°	221	228	264	276	284	198
65°	150	177	194	197	194	149
75°	87	111	102	100	99	91
85°	26	36	33	32	31	28
90°	12	19	18	17	16	7
95°	12	14	13	11	10	10
105°	12	11	10	8	7	12
115°	7	8	9	8	7	7
125°	3	3	6	7	7	3
135°	1	1	3	4	5	1
145°	0	0	0	0	0	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°	491.8	491.8	491.8	491.8	491.8
2.5°	489.9	491.3	492.2	493.2	492.7
5°	488.5	489.0	489.4	490.8	489.9
7.5°	485.2	485.2	486.6	488.0	486.6
10°	479.6	480.1	482.9	485.2	483.3
12.5°	474.4	474.9	476.3	480.5	477.2
15°	467.4	467.4	470.7	472.6	470.2
17.5°	459.9	459.9	463.2	463.7	461.3
20°	448.6	449.6	454.3	452.9	451.9
22.5°	437.9	439.3	443.0	443.5	442.5
25°	426.1	429.0	429.9	430.8	429.9
27.5°	412.1	415.8	417.2	416.8	417.2
30°	399.4	401.8	403.6	404.1	404.1
32.5°	383.9	386.3	388.2	390.0	391.4
35°	368.5	370.4	371.8	377.4	381.1
37.5°	351.1	353.9	356.7	366.1	370.4
40°	332.4	335.2	339.9	354.9	361.5
42.5°	314.6	316.9	326.3	346.0	349.7
45°	296.3	298.1	314.6	333.3	334.3
47.5°	276.6	279.4	301.9	316.4	317.9
50°	257.9	262.1	292.1	300.5	303.8
52.5°	240.0	244.7	280.3	286.4	294.9
55°	221.3	227.8	264.4	275.7	283.6
57.5°	203.0	214.3	246.1	261.6	264.4
60°	184.2	201.1	229.2	243.8	244.2
62.5°	167.4	188.9	212.8	220.8	219.9
65°	150.0	177.2	193.6	196.9	193.6
67.5°	133.1	164.6	172.5	169.7	168.8
70°	118.1	148.1	150.0	143.9	142.5
72.5°	101.2	129.4	124.2	121.9	120.5
75°	86.7	110.6	102.2	100.3	99.4
77.5°	71.3	90.5	79.7	80.6	80.6
80°	55.3	70.3	61.0	61.9	60.5
82.5°	40.3	51.6	46.4	45.9	44.5
85°	26.3	36.1	33.3	32.3	30.9
87.5°	15.9	25.3	24.4	23.4	22.5
90°	11.7	19.2	18.3	16.9	16.4
92.5°	11.7	15.9	15.0	13.6	12.7
95°	12.2	13.6	12.7	10.8	10.3
97.5°	13.1	12.7	11.3	9.9	8.9
100°	13.1	11.7	10.8	8.9	8.0
102.5°	12.7	11.3	10.3	8.4	7.5
105°	12.2	10.8	10.3	8.4	7.0
107.5°	10.8	10.3	10.3	8.0	7.0
110°	9.9	9.4	9.9	8.0	7.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	8.4	8.4	9.9	8.0	7.0
115°	7.0	7.5	9.4	8.0	7.0
117.5°	6.1	6.1	8.4	7.5	7.0
120°	4.7	5.2	8.0	7.5	6.6
122.5°	3.8	4.2	7.0	7.0	6.6
125°	3.3	3.3	6.1	6.6	6.6
127.5°	2.4	2.4	5.2	6.1	6.1
130°	1.9	1.9	4.7	5.6	5.6
132.5°	1.9	1.4	3.8	5.2	5.2
135°	1.4	0.9	2.8	4.2	4.7
137.5°	0.9	0.9	2.4	3.8	4.2
140°	0.9	0.9	1.4	2.8	3.3
142.5°	0.9	0.5	0.9	2.4	2.8
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	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)