

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: P397366

Luminaire Tested: **VRVT4LED-LD5-12-DR-UNV-LR63-CD1-WL-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P397366  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: VRVT4LED-LD5-12-DR-UNV-LR63-CD1-WL-U  
Description:  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

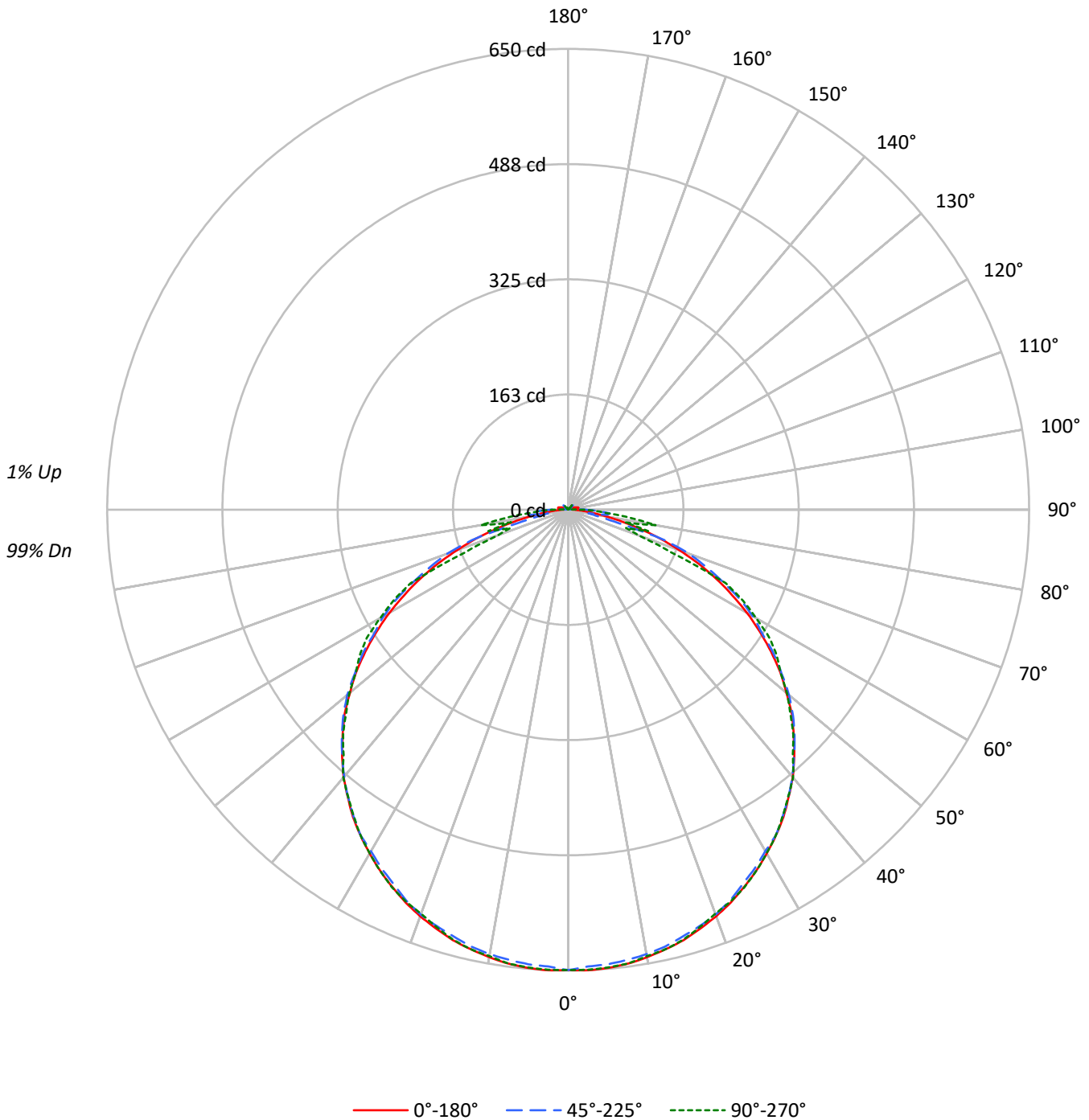
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1904.0 lumens  
Efficiency: N/A  
Efficacy: 7.9 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.4  
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')  
CIE Type: Direct  
  
Input Watts (W): 239.7  
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	119	119	119	119	116	116	116	116	110	110	110	106	106	106	101	101	101	99
1	108	104	99	96	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	84	78	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	64	60	58
4	82	70	62	55	80	69	61	54	66	59	54	64	58	53	61	56	52	50
5	76	63	54	47	73	62	53	47	59	52	46	57	51	46	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	44	37	32	43	36	32	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	45°	90°
0°	1627	1627	1627
5°	1623	1589	1596
10°	1613	1561	1560
15°	1604	1529	1530
20°	1592	1504	1487
25°	1578	1465	1461
30°	1565	1432	1422
35°	1552	1405	1381
40°	1533	1365	1343
45°	1502	1319	1282
50°	1460	1264	1221
55°	1404	1184	1168
60°	1320	1102	1083
65°	1207	977	958
70°	1042	836	460
75°	830	396	595
80°	586	190	765
85°	367	493	412



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.5	3.2
10°-20°	177.0	9.3
20°-30°	270.3	14.2
30°-40°	330.6	17.4
40°-50°	347.0	18.2
50°-60°	316.3	16.6
60°-70°	231.3	12.1
70°-80°	101.7	5.3
80°-90°	46.7	2.5
90°-100°	8.4	0.4
100°-110°	4.4	0.2
110°-120°	3.2	0.2
120°-130°	2.0	0.1
130°-140°	2.4	0.1
140°-150°	0.8	0.0
150°-160°	0.2	0.0
160°-170°	0.1	0.0
170°-180°	0.1	0.0
0°-30°	508.8	26.7
0°-40°	839.4	44.1
0°-60°	1502.6	78.9
0°-90°	1882.4	98.9
90°-120°	16.0	0.8
90°-150°	21.2	1.1
90°-180°	22.0	1.2
0°-180°	1904.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	649	649	649	649	649	
5°	649	648	644	648	648	62
15°	629	628	623	630	628	177
25°	587	586	582	588	588	271
35°	529	529	528	528	527	331
45°	450	450	451	450	449	347
55°	349	354	353	359	359	311
65°	230	233	240	250	245	227
75°	105	110	73	51	116	113
85°	22	15	59	64	54	25
90°	6	17	25	22	19	4
95°	10	6	4	4	3	9
105°	13	4	3	2	2	13
115°	6	4	2	2	2	6
125°	3	2	2	2	2	3
135°	1	1	2	4	2	1
145°	1	1	0	2	2	0
155°	0	1	1	0	0	0
165°	1	1	1	0	0	0
175°	1	1	1	1	0	0
180°	1	1	1	1	1	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	649.3	649.3	649.3	649.3	649.3
2.5°	650.4	649.5	644.8	649.3	649.5
5°	648.7	647.8	643.6	648.0	648.0
7.5°	645.9	644.6	640.4	645.7	645.7
10°	641.0	640.6	636.6	640.2	639.4
12.5°	635.1	634.3	631.1	634.7	635.1
15°	628.6	627.7	623.3	629.6	627.7
17.5°	619.5	620.1	615.9	620.1	617.4
20°	610.2	610.8	607.8	606.6	606.4
22.5°	599.6	599.2	596.6	596.0	598.1
25°	587.1	586.5	582.5	588.0	587.7
27.5°	574.2	574.0	570.0	576.8	574.4
30°	560.0	560.0	556.0	561.7	559.6
32.5°	545.0	545.9	544.8	545.9	545.0
35°	529.2	529.4	527.7	528.1	527.3
37.5°	510.6	511.8	510.1	510.8	509.7
40°	492.6	491.9	491.7	492.8	493.4
42.5°	471.9	467.8	471.6	472.5	468.9
45°	449.6	449.9	451.3	450.1	448.6
47.5°	427.9	427.0	430.0	427.2	424.7
50°	401.6	407.8	406.5	401.8	402.9
52.5°	377.1	381.7	379.2	380.3	377.3
55°	349.2	353.6	353.4	359.1	359.1
57.5°	320.2	324.9	323.8	331.4	336.5
60°	291.2	295.9	300.8	305.6	306.0
62.5°	260.6	265.2	272.8	277.1	277.9
65°	230.1	233.1	240.0	249.6	244.7
67.5°	198.4	200.5	210.2	211.7	157.4
70°	166.0	168.8	180.8	111.7	104.3
72.5°	136.6	137.7	142.1	93.3	85.4
75°	105.1	109.8	73.4	51.2	116.5
77.5°	78.3	81.9	42.3	84.6	82.5
80°	54.6	58.8	29.0	75.5	125.2
82.5°	35.5	27.5	54.8	85.2	88.6
85°	21.6	15.2	58.8	63.7	53.7
87.5°	13.3	11.6	39.6	40.4	37.4
90°	6.4	16.7	24.8	22.0	18.6
92.5°	5.9	11.8	11.0	8.9	8.3
95°	10.1	5.5	4.2	3.6	3.4
97.5°	14.2	3.6	3.0	2.5	2.5
100°	14.4	3.4	3.0	2.5	2.3
102.5°	14.4	3.6	3.0	2.5	2.3
105°	12.7	4.0	3.0	2.5	2.3
107.5°	10.8	4.4	2.8	2.5	2.3
110°	9.1	5.1	2.8	2.3	2.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	7.2	4.9	2.5	2.1	2.1
115°	5.9	4.4	2.3	1.9	1.9
117.5°	4.9	4.0	2.3	1.9	1.7
120°	4.0	3.6	2.3	1.7	1.7
122.5°	3.4	3.2	2.3	1.5	1.5
125°	2.8	2.3	2.1	1.5	1.5
127.5°	2.3	1.7	2.5	1.5	1.3
130°	1.9	1.5	4.4	1.5	1.5
132.5°	1.5	1.1	9.1	1.9	1.5
135°	1.3	0.8	2.1	4.2	2.1
137.5°	1.1	0.8	1.5	13.1	5.9
140°	0.8	0.6	1.5	2.1	8.3
142.5°	0.6	0.6	1.1	1.5	1.5
145°	0.6	0.6	0.4	2.3	1.7
147.5°	0.6	0.4	0.4	2.5	2.8
150°	0.4	0.4	0.4	0.8	1.5
152.5°	0.4	0.4	0.4	0.4	0.4
155°	0.4	0.6	0.6	0.4	0.2
157.5°	0.4	0.6	0.6	0.4	0.2
160°	0.6	0.6	0.6	0.4	0.2
162.5°	0.6	0.6	0.6	0.4	0.4
165°	0.6	0.6	0.6	0.4	0.4
167.5°	0.6	0.6	0.6	0.4	0.4
170°	0.6	0.6	0.6	0.4	0.4
172.5°	0.6	0.6	0.6	0.4	0.4
175°	0.6	0.6	0.6	0.6	0.4
177.5°	0.6	0.6	0.6	0.6	0.4
180°	0.6	0.6	0.6	0.6	0.6

(END OF REPORT)