

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: P397385

Luminaire Tested: **VRVT4LED-LD5-18-DRF-UNV-LA59-CD2-WL-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P397385  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-9)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: VRVT4LED-LD5-18-DRF-UNV-LA59-CD2-WL-U  
Description:  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

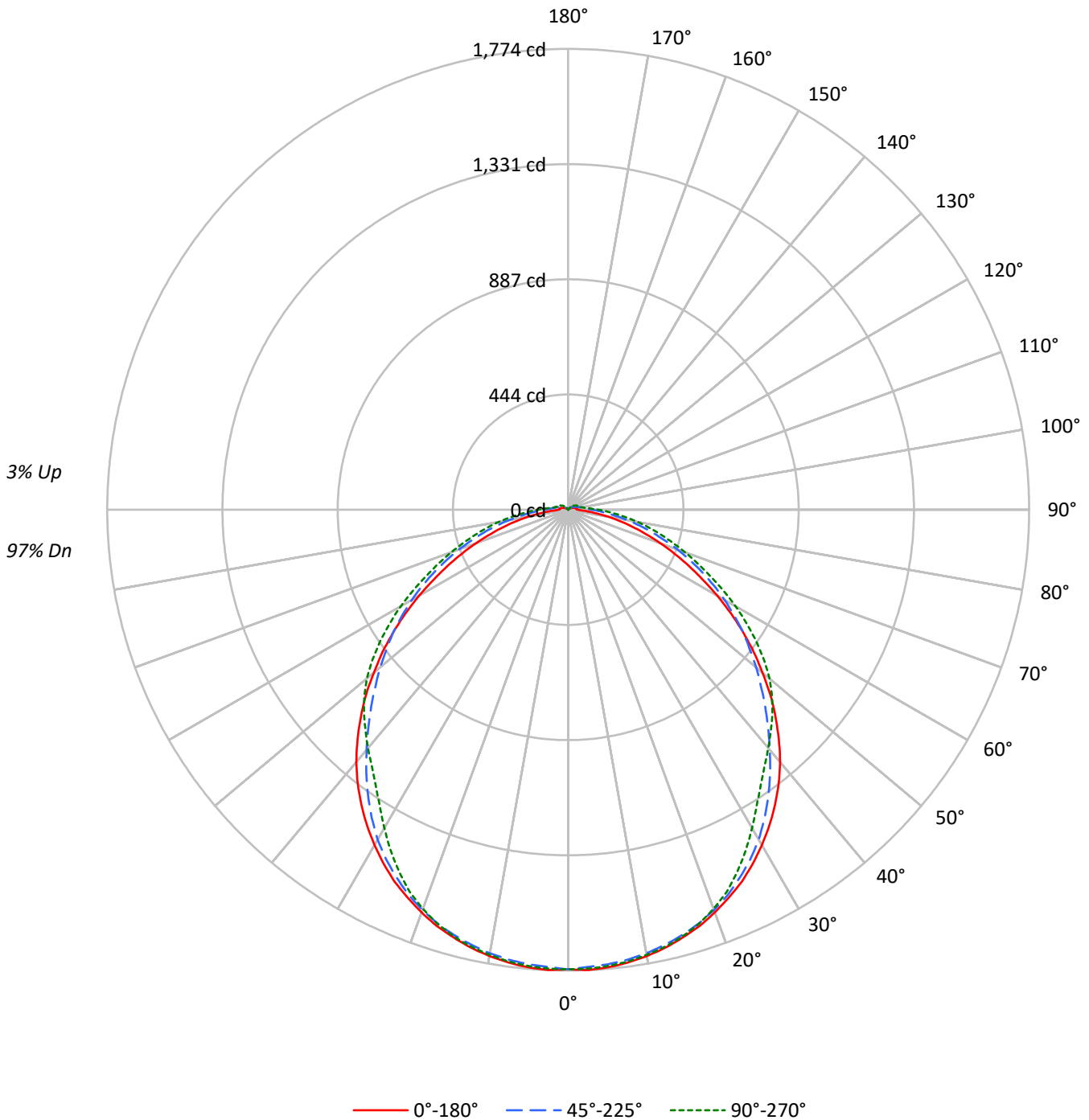
Lumens per Lamp: N/A  
Luminaire Lumens: 5015.6 lumens  
Efficiency: N/A  
Efficacy: 24.6 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.19 / 1.32  
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')  
CIE Type: Direct

Input Watts (W): 203.9  
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	109	109	109	104	104	104	99	99	99	97
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	80
2	98	90	83	77	95	87	81	76	83	78	73	80	75	71	76	72	69	67
3	89	79	70	64	87	77	69	63	73	67	62	70	65	60	67	63	59	56
4	82	70	61	54	79	68	60	54	65	58	53	63	57	52	60	55	51	48
5	75	62	53	47	73	61	53	46	59	51	46	56	50	45	54	49	44	42
6	70	56	47	41	67	55	47	41	53	46	40	51	44	39	49	43	39	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	45	39	35	32
8	60	47	38	32	58	46	38	32	44	37	32	43	36	31	41	35	31	29
9	56	43	35	29	55	42	34	29	41	34	29	39	33	28	38	32	28	26
10	53	40	32	26	51	39	31	26	38	31	26	37	30	26	35	30	25	24

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

	0°	45°	90°
0°	4432	4432	4432
5°	4423	4336	4343
10°	4391	4252	4246
15°	4350	4160	4144
20°	4302	4057	4009
25°	4248	3930	3825
30°	4167	3777	3594
35°	4070	3575	3382
40°	3948	3349	3261
45°	3769	3132	3174
50°	3546	2937	3066
55°	3301	2751	2872
60°	3004	2544	2633
65°	2684	2317	2356
70°	2368	2064	2110
75°	2042	1797	1878
80°	1677	1506	1649
85°	1270	1241	1397



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	167.5	3.3
10°-20°	479.5	9.6
20°-30°	718.5	14.3
30°-40°	839.7	16.7
40°-50°	848.9	16.9
50°-60°	749.3	14.9
60°-70°	556.6	11.1
70°-80°	341.3	6.8
80°-90°	157.2	3.1
90°-100°	65.9	1.3
100°-110°	40.2	0.8
110°-120°	26.6	0.5
120°-130°	15.1	0.3
130°-140°	6.7	0.1
140°-150°	1.9	0.0
150°-160°	0.5	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	1365.5	27.2
0°-40°	2205.1	44.0
0°-60°	3803.3	75.8
0°-90°	4858.4	96.9
90°-120°	132.6	2.6
90°-150°	156.4	3.1
90°-180°	157.0	3.1
0°-180°	5015.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1769	1769	1769	1769	1769	
5°	1768	1764	1756	1762	1763	168
15°	1705	1701	1695	1701	1700	481
25°	1580	1575	1563	1552	1539	727
35°	1387	1383	1343	1301	1292	867
45°	1128	1118	1072	1094	1111	869
55°	821	808	821	875	883	734
65°	512	514	569	602	602	509
75°	259	279	333	360	368	276
85°	75	100	148	178	182	78
90°	36	58	93	113	115	21
95°	33	45	62	71	71	26
105°	26	30	40	44	45	27
115°	16	17	29	35	37	16
125°	8	7	17	25	27	7
135°	4	3	7	14	16	3
145°	2	1	1	5	6	1
155°	1	1	1	1	0	1
165°	2	1	1	1	0	0
175°	2	2	1	1	1	0
180°	1	1	1	1	1	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1769.3	1769.3	1769.3	1769.3	1769.3
2.5°	1773.8	1769.3	1761.8	1766.8	1768.2
5°	1768.2	1764.0	1756.5	1761.8	1763.2
7.5°	1758.7	1754.5	1747.2	1752.5	1754.5
10°	1744.7	1740.5	1734.1	1738.3	1739.9
12.5°	1727.1	1723.4	1716.1	1722.3	1723.1
15°	1704.7	1701.0	1695.4	1700.7	1700.5
17.5°	1680.9	1675.5	1670.2	1673.0	1671.9
20°	1649.5	1644.7	1639.7	1638.0	1635.2
22.5°	1616.2	1612.3	1605.3	1598.5	1592.7
25°	1580.3	1574.7	1562.7	1551.5	1538.9
27.5°	1537.2	1533.9	1517.3	1493.8	1479.3
30°	1491.0	1487.7	1466.1	1430.8	1414.6
32.5°	1441.2	1437.0	1406.7	1367.3	1349.9
35°	1387.4	1382.9	1342.9	1300.9	1291.9
37.5°	1330.3	1322.7	1276.5	1241.0	1241.5
40°	1268.7	1258.6	1206.8	1187.5	1198.1
42.5°	1199.8	1191.4	1138.5	1139.9	1154.5
45°	1128.4	1118.1	1071.9	1094.0	1111.1
47.5°	1055.6	1042.5	1006.1	1042.5	1064.0
50°	975.5	964.6	944.4	992.9	1011.9
52.5°	900.2	890.1	880.0	934.9	949.2
55°	821.2	808.4	821.2	875.3	883.1
57.5°	742.3	730.8	756.3	808.9	813.7
60°	662.5	654.4	694.7	739.8	744.0
62.5°	583.8	583.2	631.4	669.8	671.7
65°	511.6	513.5	569.0	601.7	602.0
67.5°	442.7	450.0	505.7	534.2	538.2
70°	377.2	389.8	446.3	473.2	478.0
72.5°	315.3	332.1	385.8	414.1	420.8
75°	258.7	278.9	332.9	359.8	367.9
77.5°	205.0	227.6	280.3	309.1	319.5
80°	156.2	179.2	230.2	261.8	269.9
82.5°	109.8	136.9	186.8	219.0	225.4
85°	74.8	100.5	148.1	177.8	182.0
87.5°	47.3	74.8	117.6	142.0	145.6
90°	36.4	58.0	92.7	112.6	115.1
92.5°	34.2	49.8	74.8	87.6	90.2
95°	32.8	45.1	62.2	70.6	71.4
97.5°	31.6	40.9	54.6	59.9	59.9
100°	30.2	37.2	48.7	52.6	52.6
102.5°	28.6	33.6	44.0	47.9	48.7
105°	26.0	30.2	40.0	44.5	45.4
107.5°	23.5	26.9	37.0	41.7	42.8
110°	21.0	23.5	34.2	39.2	40.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	18.2	20.4	31.4	37.0	38.9
115°	15.7	17.1	28.6	34.7	36.7
117.5°	13.4	14.0	25.8	32.2	34.7
120°	11.5	11.2	23.0	30.0	32.5
122.5°	9.5	9.0	20.2	27.4	30.0
125°	8.1	6.7	17.1	24.6	27.4
127.5°	6.7	5.3	14.6	21.8	24.9
130°	5.6	4.5	11.8	19.3	22.1
132.5°	4.8	3.6	9.2	16.5	19.0
135°	3.9	3.1	7.0	14.0	16.2
137.5°	3.4	2.5	5.0	11.2	13.7
140°	2.8	2.2	3.1	8.7	10.9
142.5°	2.2	1.7	1.7	6.7	8.4
145°	2.0	1.4	1.1	4.8	6.2
147.5°	1.7	1.4	0.8	2.8	3.9
150°	1.4	1.1	0.8	1.1	2.2
152.5°	1.4	1.4	0.8	0.6	0.6
155°	1.4	1.4	1.1	0.6	0.3
157.5°	1.4	1.4	1.1	0.6	0.3
160°	1.4	1.4	1.1	0.6	0.3
162.5°	1.7	1.4	1.1	0.6	0.3
165°	1.7	1.4	1.1	0.6	0.3
167.5°	1.7	1.7	1.4	0.8	0.6
170°	1.7	1.7	1.4	0.8	0.6
172.5°	1.7	1.7	1.4	0.8	0.6
175°	1.7	1.7	1.4	0.8	0.8
177.5°	1.7	1.7	1.4	0.8	0.8
180°	1.4	1.4	1.4	1.4	1.4

(END OF REPORT)