

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: P397388

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397388
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-10)
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-PC-UNV-LA59-CD2-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

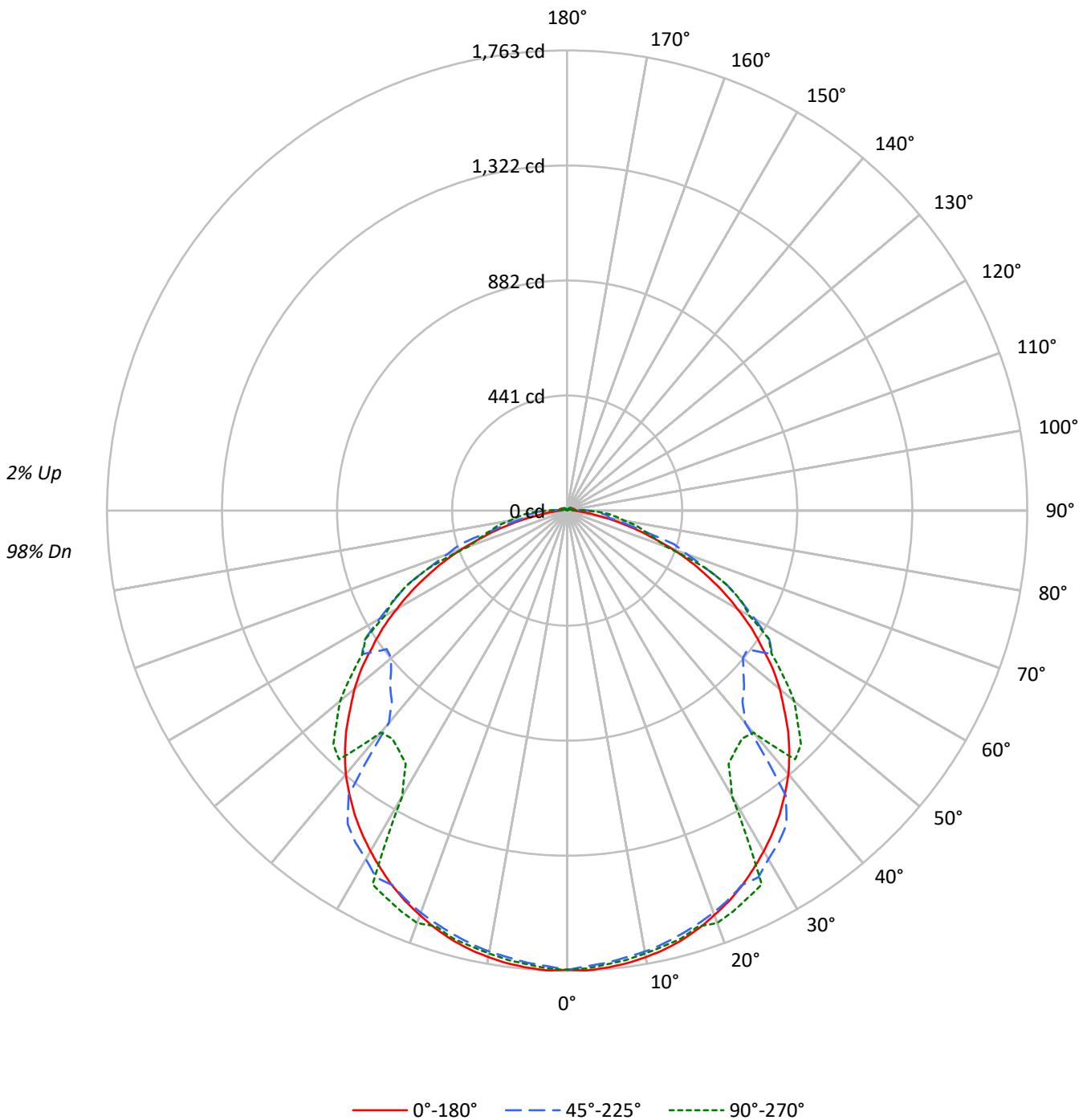
Lumens per Lamp: N/A
Luminaire Lumens: 5035.8 lumens
Efficiency: N/A
Efficacy: 24.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.13 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

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	119	119	119	119	116	116	116	116	110	110	110	105	105	105	101	101	101	98
1	108	103	99	95	105	101	97	93	96	93	90	92	89	87	88	86	84	82
2	98	90	83	77	96	88	82	76	84	79	74	81	76	72	77	74	71	68
3	90	79	71	64	87	77	70	64	74	68	62	71	66	61	68	64	60	57
4	82	70	61	54	80	69	60	54	66	59	53	63	57	52	61	56	51	49
5	75	63	54	47	73	61	53	47	59	52	46	57	50	45	55	49	45	42
6	70	56	47	41	68	55	47	41	53	46	40	51	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	48	41	36	47	40	35	45	39	35	33
8	60	47	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	35	29	55	42	34	29	41	34	29	40	33	28	38	33	28	26
10	53	39	32	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4408	4408	4408
5°	4396	4293	4297
10°	4372	4206	4204
15°	4347	4125	4132
20°	4302	4057	4123
25°	4261	3982	4070
30°	4211	3973	3210
35°	4165	3902	2939
40°	4105	2945	3023
45°	4000	2799	3620
50°	3863	2734	3442
55°	3660	3213	3109
60°	3416	3039	2856
65°	3101	2756	2645
70°	2683	2259	1758
75°	2086	1590	1561
80°	1413	1049	1358
85°	937	1115	1249



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.0	3.3
10°-20°	477.5	9.5
20°-30°	736.7	14.6
30°-40°	827.2	16.4
40°-50°	875.7	17.4
50°-60°	827.4	16.4
60°-70°	600.5	11.9
70°-80°	308.9	6.1
80°-90°	135.2	2.7
90°-100°	33.5	0.7
100°-110°	16.4	0.3
110°-120°	12.0	0.2
120°-130°	10.4	0.2
130°-140°	5.6	0.1
140°-150°	1.8	0.0
150°-160°	0.6	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	1380.1	27.4
0°-40°	2207.4	43.8
0°-60°	3910.5	77.7
0°-90°	4955.1	98.4
90°-120°	61.8	1.2
90°-150°	79.7	1.6
90°-180°	81.0	1.6
0°-180°	5035.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1760	1760	1760	1760	1760	
5°	1758	1750	1739	1743	1745	167
15°	1703	1688	1681	1692	1696	480
25°	1585	1577	1583	1630	1637	731
35°	1420	1423	1466	1116	1122	888
45°	1198	1218	958	1218	1267	922
55°	910	928	959	974	956	815
65°	591	486	677	672	676	585
75°	264	257	295	243	306	283
85°	55	87	133	153	163	62
90°	24	51	82	77	74	14
95°	24	28	25	20	19	21
105°	25	19	14	12	12	26
115°	13	13	12	8	8	13
125°	6	6	9	21	25	6
135°	3	2	7	11	6	2
145°	2	1	1	4	4	1
155°	1	1	1	1	1	1
165°	1	1	1	1	1	0
175°	2	2	2	1	1	0
180°	1	1	1	1	1	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1759.5	1759.5	1759.5	1759.5	1759.5
2.5°	1763.4	1758.1	1746.9	1752.5	1755.6
5°	1757.5	1749.7	1738.8	1743.3	1744.7
7.5°	1749.7	1741.0	1726.7	1734.6	1736.5
10°	1737.1	1726.5	1715.5	1722.3	1722.8
12.5°	1722.5	1709.9	1700.4	1708.3	1709.4
15°	1703.2	1687.8	1681.1	1691.5	1695.9
17.5°	1678.3	1665.1	1660.9	1676.6	1669.9
20°	1649.2	1638.3	1639.7	1648.3	1681.7
22.5°	1620.1	1608.9	1613.6	1668.5	1661.8
25°	1585.3	1576.7	1583.4	1630.4	1637.4
27.5°	1546.7	1541.4	1584.8	1602.4	1615.0
30°	1506.9	1503.9	1541.9	1547.5	1263.6
32.5°	1464.7	1463.5	1508.6	1188.6	1150.8
35°	1419.9	1422.7	1465.8	1115.5	1122.5
37.5°	1370.0	1383.7	1375.1	1086.7	1100.7
40°	1319.1	1345.9	1061.2	1059.5	1110.7
42.5°	1259.7	1282.1	994.0	1058.9	1293.0
45°	1197.5	1217.7	958.1	1218.0	1267.0
47.5°	1127.5	1157.5	915.6	1199.2	1196.7
50°	1062.9	1097.0	879.2	1127.8	1135.7
52.5°	991.7	1026.5	871.6	1061.2	1045.8
55°	910.5	927.6	959.0	973.8	955.9
57.5°	836.9	705.6	918.4	898.2	916.4
60°	753.5	608.2	829.9	837.8	807.0
62.5°	674.0	549.6	749.6	739.5	753.5
65°	591.1	485.5	676.8	672.0	675.9
67.5°	511.3	419.2	570.9	604.2	572.6
70°	427.3	356.2	488.6	400.1	398.2
72.5°	339.1	296.2	429.5	358.7	351.4
75°	264.3	256.8	294.6	243.0	305.8
77.5°	193.2	244.2	224.3	276.4	274.4
80°	131.6	192.6	160.4	208.6	222.3
82.5°	86.5	129.1	160.2	194.0	192.4
85°	55.2	86.8	133.0	152.9	162.7
87.5°	37.8	64.4	113.7	124.6	120.7
90°	24.1	51.0	81.8	77.3	73.6
92.5°	19.6	40.9	47.9	42.3	37.2
95°	23.5	28.0	24.6	20.4	18.8
97.5°	28.0	19.3	16.8	16.0	16.2
100°	28.8	19.3	14.0	12.0	11.2
102.5°	27.4	20.2	13.7	12.3	11.2
105°	24.6	19.0	13.7	11.8	11.5
107.5°	21.6	17.4	14.0	11.2	10.1
110°	18.5	16.2	12.9	12.6	11.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	15.4	15.4	11.5	10.1	11.5
115°	12.9	13.4	11.8	8.1	8.1
117.5°	10.9	10.9	19.0	7.6	7.0
120°	9.2	8.7	19.0	12.0	7.3
122.5°	7.6	7.3	13.4	25.8	19.9
125°	6.4	5.6	8.7	21.0	24.6
127.5°	5.3	4.2	6.7	12.9	17.1
130°	4.5	3.4	9.8	7.6	10.9
132.5°	3.6	2.8	15.1	5.6	5.9
135°	3.1	2.5	6.7	11.2	5.9
137.5°	2.5	2.0	3.4	22.1	16.0
140°	2.2	1.7	3.1	7.6	19.0
142.5°	1.7	1.4	2.5	3.6	5.0
145°	1.7	1.4	1.1	4.2	3.6
147.5°	1.4	1.1	1.1	5.0	5.3
150°	1.4	1.1	1.1	1.7	4.8
152.5°	1.4	1.1	1.1	0.8	0.8
155°	1.4	1.4	1.4	0.8	0.6
157.5°	1.4	1.4	1.4	0.8	0.6
160°	1.4	1.4	1.4	0.8	0.6
162.5°	1.4	1.4	1.4	1.1	0.6
165°	1.4	1.4	1.4	1.1	0.8
167.5°	1.4	1.4	1.7	1.1	0.8
170°	1.4	1.4	1.7	1.1	0.8
172.5°	1.7	1.4	1.7	1.1	0.8
175°	1.7	1.7	1.7	1.4	1.1
177.5°	1.7	1.7	1.7	1.4	1.1
180°	1.4	1.4	1.4	1.4	1.4

(END OF REPORT)