

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: P397416

Luminaire Tested: **VRVT4LED-LD5-9-PC-UNV-LG52-CD1-WL-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397416
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-3)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: VRVT4LED-LD5-9-PC-UNV-LG52-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

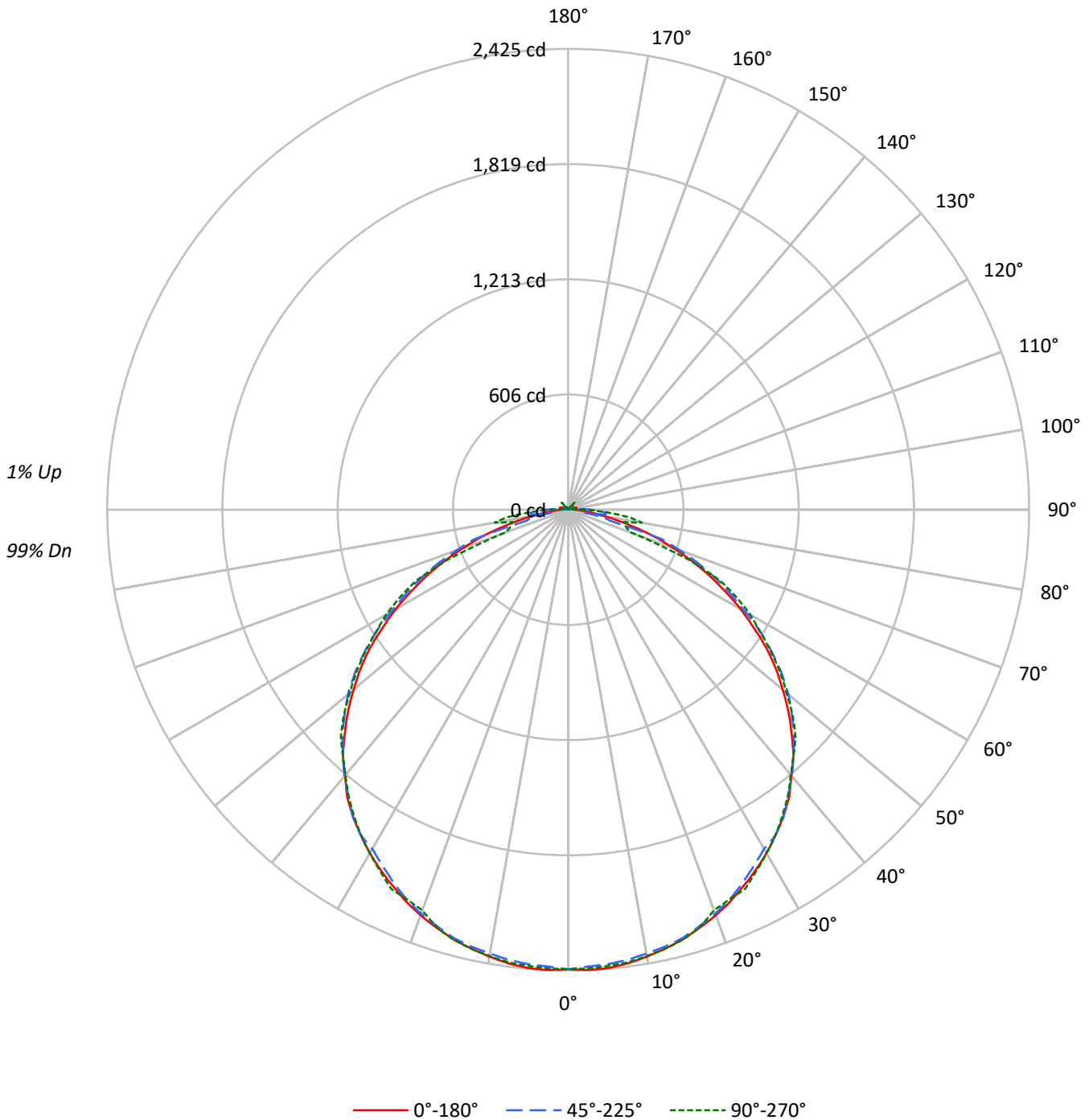
Lumens per Lamp: N/A
Luminaire Lumens: 7024.7 lumens
Efficiency: N/A
Efficacy: 46.0 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

Input Watts (W): 152.8
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	99
1	108	104	99	96	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	91	84	78	96	89	82	77	85	80	75	81	77	73	78	75	71	69
3	90	80	72	65	88	78	70	64	75	68	63	72	66	62	69	65	61	58
4	83	71	62	55	80	69	61	55	66	59	54	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	60	52	46	57	51	46	55	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	50	44	40	38
7	65	51	43	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6058	6058	6058
5°	6055	5927	5934
10°	6010	5815	5820
15°	5971	5722	5704
20°	5924	5598	5499
25°	5873	5454	5473
30°	5831	5309	5304
35°	5785	5258	5144
40°	5681	5082	4958
45°	5547	4906	4831
50°	5356	4704	4545
55°	5125	4385	4233
60°	4759	3937	3913
65°	4293	3488	3447
70°	3677	2882	1561
75°	2911	1278	1573
80°	2036	591	2395
85°	1358	1669	1831



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.1	3.3
10°-20°	659.1	9.4
20°-30°	1005.7	14.3
30°-40°	1231.5	17.5
40°-50°	1289.9	18.4
50°-60°	1159.7	16.5
60°-70°	828.7	11.8
70°-80°	351.5	5.0
80°-90°	178.8	2.5
90°-100°	37.5	0.5
100°-110°	16.2	0.2
110°-120°	11.5	0.2
120°-130°	7.9	0.1
130°-140°	12.1	0.2
140°-150°	4.1	0.1
150°-160°	0.8	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	1893.9	27.0
0°-40°	3125.4	44.5
0°-60°	5575.1	79.4
0°-90°	6934.1	98.7
90°-120°	65.2	0.9
90°-150°	89.2	1.3
90°-180°	91.0	1.3
0°-180°	7024.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2418	2418	2418	2418	2418	
5°	2421	2410	2401	2412	2410	230
15°	2340	2334	2332	2342	2341	660
25°	2185	2190	2169	2189	2202	1008
35°	1972	1974	1975	1971	1965	1232
45°	1661	1666	1679	1678	1691	1281
55°	1275	1290	1309	1307	1302	1134
65°	818	833	857	885	881	808
75°	369	376	237	154	308	397
85°	80	58	199	254	238	89
90°	33	50	115	97	101	20
95°	32	31	24	16	14	30
105°	42	18	10	9	8	43
115°	23	18	9	6	5	23
125°	11	10	9	4	4	10
135°	6	4	14	47	19	4
145°	2	2	2	14	10	2
155°	2	2	2	1	1	1
165°	2	2	2	2	1	1
175°	2	2	2	2	2	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2418.3	2418.3	2418.3	2418.3	2418.3
2.5°	2424.7	2417.5	2406.3	2416.7	2415.9
5°	2420.7	2410.3	2400.7	2411.9	2409.5
7.5°	2407.9	2396.7	2388.7	2400.7	2402.3
10°	2387.9	2381.5	2371.9	2386.3	2384.7
12.5°	2364.7	2362.3	2354.3	2365.5	2365.5
15°	2339.9	2334.3	2331.9	2342.3	2340.7
17.5°	2305.5	2305.5	2297.5	2311.9	2303.1
20°	2271.1	2267.9	2262.3	2254.3	2243.1
22.5°	2230.3	2231.1	2220.7	2203.9	2218.3
25°	2184.7	2189.5	2168.7	2188.7	2201.5
27.5°	2137.5	2140.7	2112.7	2151.1	2143.1
30°	2086.3	2085.5	2060.7	2088.7	2087.9
32.5°	2030.3	2035.1	2031.1	2031.1	2029.5
35°	1971.9	1973.5	1975.1	1971.1	1964.7
37.5°	1908.7	1903.1	1899.1	1903.1	1899.1
40°	1825.5	1832.7	1831.1	1833.5	1821.5
42.5°	1754.3	1737.5	1752.7	1755.1	1755.1
45°	1660.7	1665.5	1679.1	1678.3	1691.1
47.5°	1571.9	1571.1	1594.3	1605.5	1601.5
50°	1473.5	1499.9	1512.7	1509.5	1499.9
52.5°	1378.3	1400.7	1415.1	1412.7	1404.7
55°	1275.1	1289.5	1308.7	1307.1	1301.5
57.5°	1158.3	1187.9	1200.7	1205.5	1199.1
60°	1049.6	1064.8	1075.2	1094.4	1105.6
62.5°	931.2	951.2	964.8	995.2	997.6
65°	818.4	832.8	856.8	884.8	880.8
67.5°	701.6	716.8	743.2	773.6	683.2
70°	585.6	597.6	623.2	368.8	353.6
72.5°	480.0	477.6	515.2	312.8	323.2
75°	368.8	376.0	236.8	153.6	308.0
77.5°	270.4	284.0	184.0	304.8	299.2
80°	189.6	205.6	90.4	283.2	392.0
82.5°	125.6	103.2	197.6	336.8	336.0
85°	80.0	57.6	199.2	254.4	238.4
87.5°	53.6	44.0	172.0	168.0	152.8
90°	32.8	49.6	115.2	96.8	100.8
92.5°	25.6	52.0	60.8	47.2	42.4
95°	32.0	31.2	24.0	16.0	13.6
97.5°	42.4	16.8	12.8	10.4	8.8
100°	45.6	15.2	11.2	8.8	8.0
102.5°	45.6	16.8	11.2	8.8	8.0
105°	41.6	18.4	10.4	8.8	8.0
107.5°	36.8	19.2	10.4	8.0	7.2
110°	32.0	20.0	9.6	7.2	7.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	27.2	19.2	8.8	6.4	5.6
115°	23.2	17.6	8.8	5.6	4.8
117.5°	19.2	16.0	8.0	4.8	4.8
120°	16.0	14.4	8.0	4.8	4.0
122.5°	13.6	12.8	8.0	4.0	4.0
125°	11.2	9.6	8.8	4.0	4.0
127.5°	9.6	7.2	14.4	4.8	4.0
130°	8.0	5.6	32.0	6.4	4.8
132.5°	6.4	4.8	28.0	12.8	7.2
135°	5.6	4.0	13.6	47.2	19.2
137.5°	4.0	3.2	8.0	33.6	51.2
140°	3.2	2.4	8.8	19.2	30.4
142.5°	3.2	2.4	4.8	8.8	12.8
145°	2.4	2.4	1.6	14.4	10.4
147.5°	2.4	1.6	1.6	10.4	17.6
150°	1.6	1.6	1.6	3.2	8.0
152.5°	1.6	1.6	1.6	0.8	1.6
155°	1.6	1.6	1.6	0.8	0.8
157.5°	1.6	1.6	2.4	0.8	0.8
160°	1.6	2.4	2.4	0.8	0.8
162.5°	1.6	2.4	2.4	0.8	0.8
165°	2.4	2.4	2.4	1.6	0.8
167.5°	2.4	2.4	2.4	1.6	0.8
170°	2.4	2.4	2.4	1.6	0.8
172.5°	2.4	2.4	2.4	1.6	1.6
175°	2.4	2.4	2.4	1.6	1.6
177.5°	2.4	2.4	2.4	1.6	1.6
180°	1.6	1.6	1.6	1.6	1.6

(END OF REPORT)