

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: P397371

Luminaire Tested: **VRVT4LED-LD5-12-PC-UNV-LG52-CD1-WL-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397371
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-LD5-12-PC-UNV-LG52-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

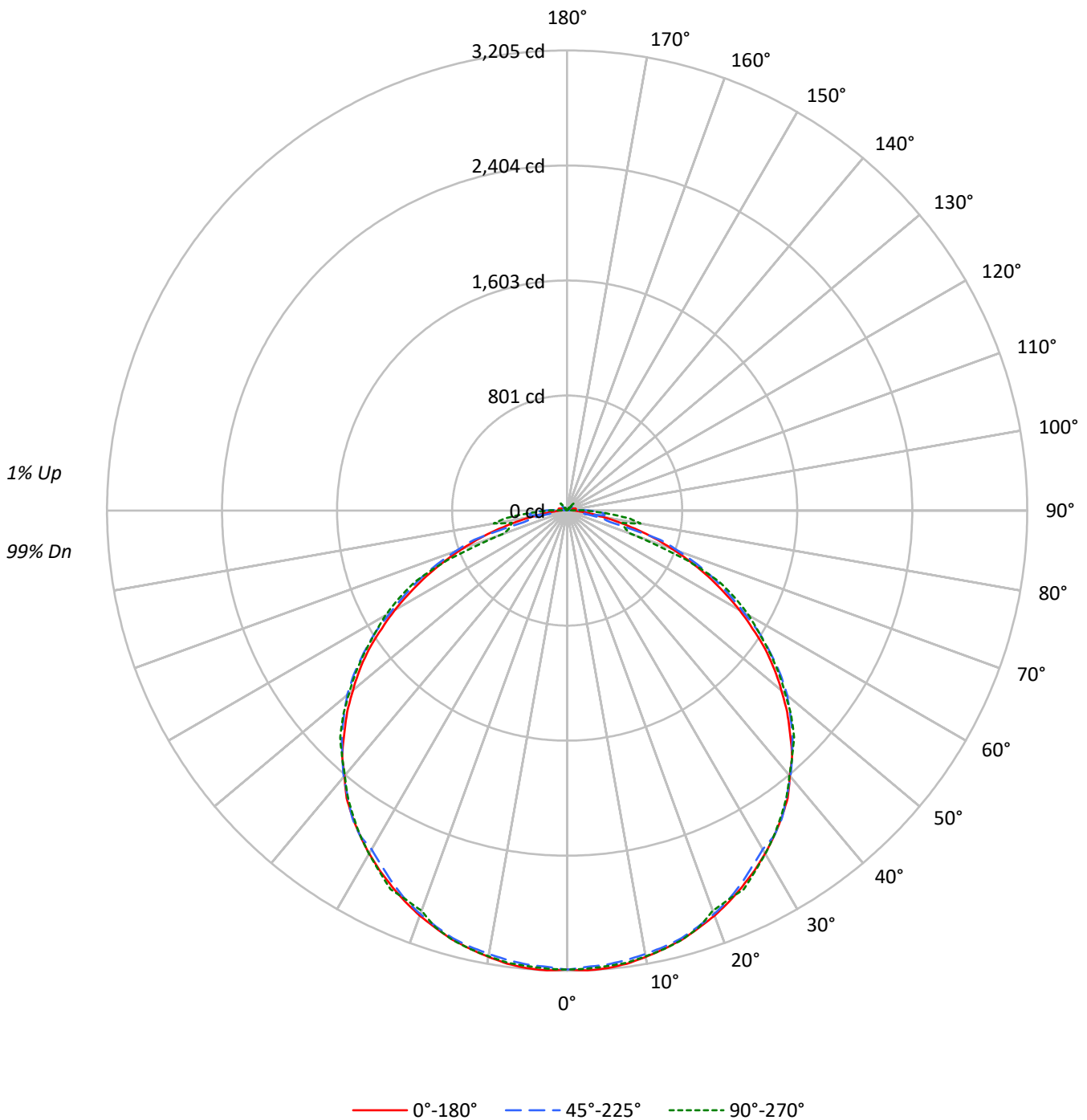
Lumens per Lamp: N/A
Luminaire Lumens: 9286.4 lumens
Efficiency: N/A
Efficacy: 42.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

Input Watts (W): 220.2
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°	8008	8008	8008
5°	8005	7835	7845
10°	7945	7688	7693
15°	7894	7564	7540
20°	7831	7400	7270
25°	7763	7210	7234
30°	7708	7019	7012
35°	7647	6950	6800
40°	7510	6718	6554
45°	7333	6485	6387
50°	7080	6218	6009
55°	6776	5796	5596
60°	6291	5205	5172
65°	5675	4611	4556
70°	4860	3809	2063
75°	3848	1689	2079
80°	2690	782	3166
85°	1796	2207	2419



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	302.9	3.3
10°-20°	871.3	9.4
20°-30°	1329.5	14.3
30°-40°	1628.0	17.5
40°-50°	1705.3	18.4
50°-60°	1533.1	16.5
60°-70°	1095.4	11.8
70°-80°	464.6	5.0
80°-90°	236.4	2.5
90°-100°	49.6	0.5
100°-110°	21.4	0.2
110°-120°	15.2	0.2
120°-130°	10.4	0.1
130°-140°	16.0	0.2
140°-150°	5.4	0.1
150°-160°	1.0	0.0
160°-170°	0.7	0.0
170°-180°	0.3	0.0
0°-30°	2503.7	27.0
0°-40°	4131.7	44.5
0°-60°	7370.1	79.4
0°-90°	9166.5	98.7
90°-120°	86.1	0.9
90°-150°	117.9	1.3
90°-180°	120.0	1.3
0°-180°	9286.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3197	3197	3197	3197	3197	
5°	3200	3186	3174	3188	3185	304
15°	3093	3086	3083	3096	3094	873
25°	2888	2894	2867	2893	2910	1332
35°	2607	2609	2611	2606	2597	1629
45°	2195	2202	2220	2219	2236	1694
55°	1686	1705	1730	1728	1721	1499
65°	1082	1101	1133	1170	1164	1068
75°	488	497	313	203	407	525
85°	106	76	263	336	315	118
90°	43	66	152	128	133	26
95°	42	41	32	21	18	40
105°	55	24	14	12	11	57
115°	31	23	12	7	6	31
125°	15	13	12	5	5	14
135°	7	5	18	62	25	6
145°	3	3	2	19	14	2
155°	2	2	2	1	1	1
165°	3	3	3	2	1	1
175°	3	3	3	2	2	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3196.9	3196.9	3196.9	3196.9	3196.9
2.5°	3205.4	3195.8	3181.0	3194.8	3193.7
5°	3200.1	3186.3	3173.6	3188.4	3185.3
7.5°	3183.1	3168.3	3157.8	3173.6	3175.8
10°	3156.7	3148.2	3135.5	3154.6	3152.5
12.5°	3126.0	3122.9	3112.2	3127.1	3127.1
15°	3093.3	3085.8	3082.6	3096.4	3094.3
17.5°	3047.8	3047.8	3037.2	3056.2	3044.6
20°	3002.3	2998.1	2990.6	2980.1	2965.3
22.5°	2948.4	2949.4	2935.7	2913.4	2932.5
25°	2888.1	2894.4	2867.0	2893.4	2910.3
27.5°	2825.7	2829.9	2792.9	2843.7	2833.1
30°	2758.0	2757.0	2724.2	2761.2	2760.2
32.5°	2684.0	2690.3	2685.0	2685.0	2683.0
35°	2606.8	2608.9	2611.0	2605.8	2597.3
37.5°	2523.2	2515.8	2510.6	2515.8	2510.6
40°	2413.3	2422.8	2420.6	2423.8	2408.0
42.5°	2319.1	2297.0	2317.0	2320.2	2320.2
45°	2195.4	2201.8	2219.8	2218.6	2235.6
47.5°	2078.0	2077.0	2107.6	2122.4	2117.1
50°	1947.9	1982.9	1999.8	1995.5	1982.9
52.5°	1822.1	1851.7	1870.7	1867.6	1857.0
55°	1685.7	1704.7	1730.1	1728.0	1720.6
57.5°	1531.3	1570.4	1587.4	1593.7	1585.2
60°	1387.4	1407.5	1421.3	1446.7	1461.5
62.5°	1231.0	1257.4	1275.4	1315.5	1318.7
65°	1081.8	1100.9	1132.6	1169.6	1164.3
67.5°	927.4	947.5	982.4	1022.6	903.1
70°	774.1	790.0	823.8	487.5	467.4
72.5°	634.5	631.4	681.0	413.5	427.2
75°	487.5	497.0	313.0	203.0	407.1
77.5°	357.4	375.4	243.2	402.9	395.5
80°	250.6	271.8	119.5	374.4	518.2
82.5°	166.0	136.4	261.2	445.2	444.2
85°	105.8	76.2	263.4	336.3	315.1
87.5°	70.9	58.2	227.4	222.1	202.0
90°	43.4	65.6	152.3	127.9	133.3
92.5°	33.8	68.7	80.4	62.4	56.1
95°	42.3	41.3	31.8	21.1	18.0
97.5°	56.1	22.2	17.0	13.8	11.6
100°	60.2	20.1	14.8	11.6	10.6
102.5°	60.2	22.2	14.8	11.6	10.6
105°	55.0	24.3	13.8	11.6	10.6
107.5°	48.6	25.4	13.8	10.6	9.5
110°	42.3	26.4	12.7	9.5	9.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	35.9	25.4	11.6	8.5	7.4
115°	30.6	23.3	11.6	7.4	6.3
117.5°	25.4	21.1	10.6	6.3	6.3
120°	21.1	19.0	10.6	6.3	5.3
122.5°	18.0	17.0	10.6	5.3	5.3
125°	14.8	12.7	11.6	5.3	5.3
127.5°	12.7	9.5	19.0	6.3	5.3
130°	10.6	7.4	42.3	8.5	6.3
132.5°	8.5	6.3	37.0	17.0	9.5
135°	7.4	5.3	18.0	62.4	25.4
137.5°	5.3	4.2	10.6	44.4	67.7
140°	4.2	3.2	11.6	25.4	40.2
142.5°	4.2	3.2	6.3	11.6	17.0
145°	3.2	3.2	2.1	19.0	13.8
147.5°	3.2	2.1	2.1	13.8	23.3
150°	2.1	2.1	2.1	4.2	10.6
152.5°	2.1	2.1	2.1	1.0	2.1
155°	2.1	2.1	2.1	1.0	1.0
157.5°	2.1	2.1	3.2	1.0	1.0
160°	2.1	3.2	3.2	1.0	1.0
162.5°	2.1	3.2	3.2	1.0	1.0
165°	3.2	3.2	3.2	2.1	1.0
167.5°	3.2	3.2	3.2	2.1	1.0
170°	3.2	3.2	3.2	2.1	1.0
172.5°	3.2	3.2	3.2	2.1	2.1
175°	3.2	3.2	3.2	2.1	2.1
177.5°	3.2	3.2	3.2	2.1	2.1
180°	2.1	2.1	2.1	2.1	2.1

(END OF REPORT)