

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: P397365

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397365
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-LG52-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

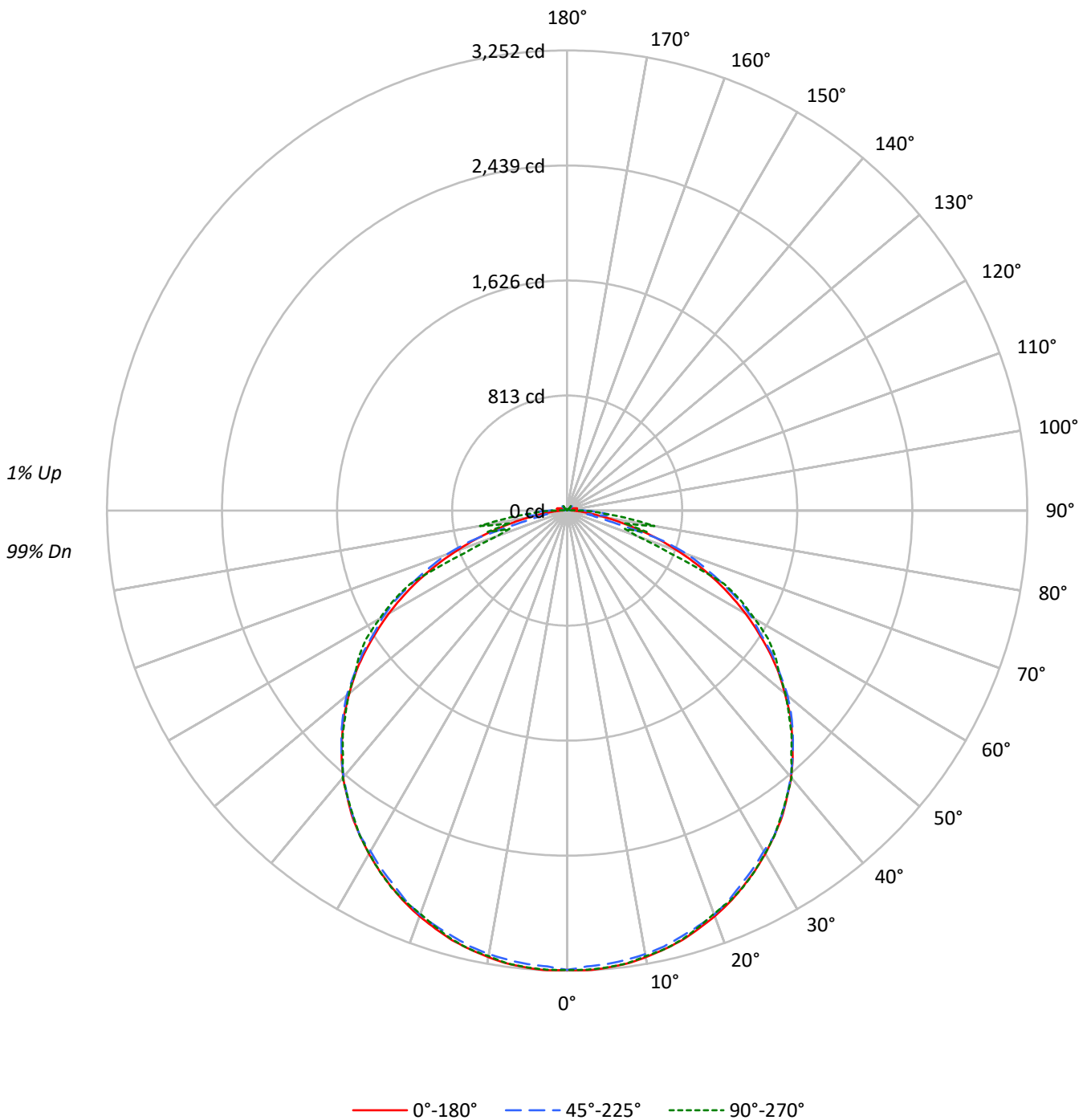
Lumens per Lamp: N/A
Luminaire Lumens: 9520.0 lumens
Efficiency: N/A
Efficacy: 43.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

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	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	74	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°	8133	8133	8133
5°	8113	7944	7980
10°	8067	7804	7802
15°	8020	7647	7648
20°	7957	7520	7433
25°	7891	7324	7305
30°	7826	7163	7109
35°	7762	7023	6902
40°	7664	6823	6715
45°	7510	6593	6408
50°	7299	6320	6105
55°	7018	5920	5840
60°	6603	5507	5415
65°	6036	4887	4788
70°	5213	4181	2301
75°	4149	1981	2975
80°	2929	948	3825
85°	1830	2464	2062



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	307.6	3.2
10°-20°	884.9	9.3
20°-30°	1351.4	14.2
30°-40°	1653.0	17.4
40°-50°	1734.8	18.2
50°-60°	1581.5	16.6
60°-70°	1156.5	12.1
70°-80°	508.4	5.3
80°-90°	233.7	2.5
90°-100°	42.0	0.4
100°-110°	22.3	0.2
110°-120°	16.0	0.2
120°-130°	9.8	0.1
130°-140°	12.1	0.1
140°-150°	3.9	0.0
150°-160°	1.2	0.0
160°-170°	0.8	0.0
170°-180°	0.3	0.0
0°-30°	2543.9	26.7
0°-40°	4196.9	44.1
0°-60°	7513.1	78.9
0°-90°	9411.8	98.9
90°-120°	80.2	0.8
90°-150°	106.0	1.1
90°-180°	108.0	1.1
0°-180°	9520.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3246	3246	3246	3246	3246	
5°	3243	3239	3218	3240	3240	308
15°	3143	3139	3116	3148	3139	887
25°	2936	2932	2912	2940	2939	1354
35°	2646	2647	2638	2641	2636	1654
45°	2248	2249	2257	2250	2243	1734
55°	1746	1768	1767	1796	1796	1557
65°	1151	1165	1200	1248	1224	1135
75°	526	549	367	256	583	567
85°	108	76	294	318	269	124
90°	32	84	124	110	93	22
95°	51	28	21	18	17	47
105°	63	20	15	13	12	66
115°	30	22	12	10	10	31
125°	14	12	11	7	7	13
135°	6	4	11	21	11	5
145°	3	3	2	12	8	2
155°	2	3	3	2	1	1
165°	3	3	3	2	2	1
175°	3	3	3	3	2	0
180°	3	3	3	3	3	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3246.5	3246.5	3246.5	3246.5	3246.5
2.5°	3251.8	3247.5	3224.2	3246.5	3247.5
5°	3243.3	3239.0	3217.9	3240.2	3240.2
7.5°	3229.5	3223.2	3202.1	3228.5	3228.5
10°	3205.2	3203.1	3183.0	3201.0	3196.8
12.5°	3175.6	3171.4	3155.5	3173.5	3175.6
15°	3142.8	3138.6	3116.4	3148.2	3138.6
17.5°	3097.4	3100.6	3079.4	3100.6	3086.8
20°	3050.8	3054.0	3039.2	3032.9	3031.8
22.5°	2998.0	2995.8	2983.1	2980.0	2990.6
25°	2935.6	2932.4	2912.3	2939.8	2938.7
27.5°	2871.0	2870.0	2849.9	2883.8	2872.2
30°	2800.2	2800.2	2780.2	2808.6	2798.1
32.5°	2725.1	2729.4	2724.1	2729.4	2725.1
35°	2645.8	2646.9	2638.4	2640.6	2636.3
37.5°	2552.8	2559.1	2550.6	2553.8	2548.6
40°	2462.9	2459.7	2458.6	2463.9	2467.1
42.5°	2359.3	2339.1	2358.2	2362.4	2344.4
45°	2248.2	2249.3	2256.6	2250.3	2243.0
47.5°	2139.3	2135.0	2149.8	2136.1	2123.4
50°	2008.2	2038.8	2032.5	2009.2	2014.5
52.5°	1885.5	1908.7	1896.1	1901.4	1886.6
55°	1745.9	1768.1	1767.0	1795.6	1795.6
57.5°	1601.0	1624.3	1619.0	1657.0	1682.5
60°	1456.2	1479.4	1503.8	1528.1	1530.2
62.5°	1302.8	1326.1	1364.2	1385.3	1389.5
65°	1150.6	1165.4	1200.2	1247.8	1223.5
67.5°	991.9	1002.5	1051.1	1058.6	786.8
70°	830.2	843.8	904.2	558.3	521.4
72.5°	683.1	688.4	710.6	466.3	427.2
75°	525.6	548.8	367.0	255.9	582.6
77.5°	391.3	409.3	211.5	423.0	412.4
80°	272.8	294.0	144.9	377.5	626.0
82.5°	177.7	137.4	273.9	426.2	443.1
85°	107.8	76.2	294.0	318.3	268.6
87.5°	66.6	58.2	197.8	202.0	187.2
90°	31.8	83.5	123.8	110.0	93.0
92.5°	29.6	59.2	55.0	44.4	41.3
95°	50.7	27.5	21.1	18.0	16.9
97.5°	70.9	18.0	14.8	12.7	12.7
100°	71.9	16.9	14.8	12.7	11.6
102.5°	71.9	18.0	14.8	12.7	11.6
105°	63.4	20.1	14.8	12.7	11.6
107.5°	53.9	22.2	13.8	12.7	11.6
110°	45.4	25.4	13.8	11.6	11.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	35.9	24.3	12.7	10.6	10.6
115°	29.6	22.2	11.6	9.5	9.5
117.5°	24.3	20.1	11.6	9.5	8.5
120°	20.1	18.0	11.6	8.5	8.5
122.5°	16.9	15.8	11.6	7.4	7.4
125°	13.8	11.6	10.6	7.4	7.4
127.5°	11.6	8.5	12.7	7.4	6.3
130°	9.5	7.4	22.2	7.4	7.4
132.5°	7.4	5.3	45.4	9.5	7.4
135°	6.3	4.2	10.6	21.1	10.6
137.5°	5.3	4.2	7.4	65.6	29.6
140°	4.2	3.2	7.4	10.6	41.3
142.5°	3.2	3.2	5.3	7.4	7.4
145°	3.2	3.2	2.1	11.6	8.5
147.5°	3.2	2.1	2.1	12.7	13.8
150°	2.1	2.1	2.1	4.2	7.4
152.5°	2.1	2.1	2.1	2.1	2.1
155°	2.1	3.2	3.2	2.1	1.0
157.5°	2.1	3.2	3.2	2.1	1.0
160°	3.2	3.2	3.2	2.1	1.0
162.5°	3.2	3.2	3.2	2.1	2.1
165°	3.2	3.2	3.2	2.1	2.1
167.5°	3.2	3.2	3.2	2.1	2.1
170°	3.2	3.2	3.2	2.1	2.1
172.5°	3.2	3.2	3.2	2.1	2.1
175°	3.2	3.2	3.2	3.2	2.1
177.5°	3.2	3.2	3.2	3.2	2.1
180°	3.2	3.2	3.2	3.2	3.2

(END OF REPORT)