

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: P397383

Luminaire Tested: **VRVT4LED-LD5-18-DR-UNV-LG52-CD2-WL-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397383
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-8)
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-DR-UNV-LG52-CD2-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

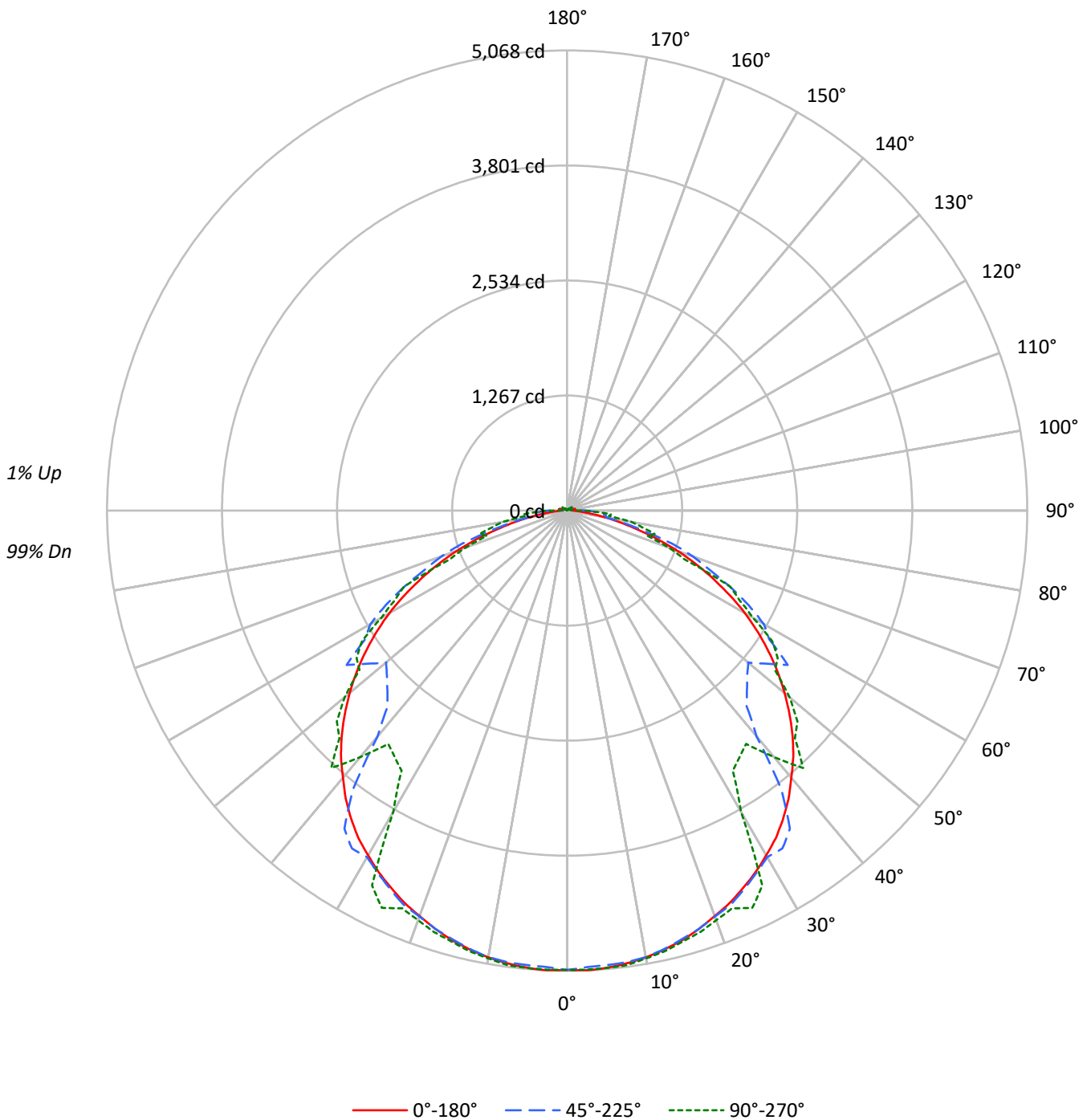
Lumens per Lamp: N/A
Luminaire Lumens: 14686.5 lumens
Efficiency: N/A
Efficacy: 46.2 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.15 / 1.26
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

Input Watts (W): 317.7
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	103	99	95	105	101	97	93	96	93	90	92	90	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	62	53	47	73	61	53	46	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	35	47	40	35	45	39	35	33
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	38	32	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12674	12674	12674
5°	12643	12405	12453
10°	12578	12244	12222
15°	12501	11992	11975
20°	12395	11772	11770
25°	12327	11580	12000
30°	12255	11355	9732
35°	12162	11385	8669
40°	11950	9016	9638
45°	11734	8181	10137
50°	11361	8095	9688
55°	10898	9931	9206
60°	10262	9161	8367
65°	9291	8029	7748
70°	8082	6784	5247
75°	6296	4771	5098
80°	4492	2826	4394
85°	2758	3252	3723



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	480.2	3.3
10°-20°	1384.9	9.4
20°-30°	2130.0	14.5
30°-40°	2417.2	16.5
40°-50°	2567.9	17.5
50°-60°	2429.7	16.5
60°-70°	1766.6	12.0
70°-80°	924.0	6.3
80°-90°	371.9	2.5
90°-100°	83.1	0.6
100°-110°	49.7	0.3
110°-120°	33.1	0.2
120°-130°	26.2	0.2
130°-140°	13.6	0.1
140°-150°	4.8	0.0
150°-160°	1.7	0.0
160°-170°	1.2	0.0
170°-180°	0.5	0.0
0°-30°	3995.1	27.2
0°-40°	6412.3	43.7
0°-60°	11409.9	77.7
0°-90°	14472.4	98.5
90°-120°	166.0	1.1
90°-150°	210.7	1.4
90°-180°	214.0	1.5
0°-180°	14686.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5059	5059	5059	5059	5059	
5°	5054	5042	5025	5050	5056	481
15°	4898	4907	4887	4908	4914	1382
25°	4586	4583	4605	4666	4827	2115
35°	4146	4123	4277	3290	3311	2591
45°	3513	3504	2800	3707	3548	2704
55°	2711	2591	2964	2747	2830	2419
65°	1771	1470	1972	1913	1980	1754
75°	798	886	884	704	998	864
85°	162	250	388	427	485	189
90°	51	142	205	190	157	35
95°	74	69	54	51	52	64
105°	74	56	41	38	36	77
115°	34	39	30	26	27	36
125°	16	14	22	66	62	15
135°	8	6	13	30	18	6
145°	5	4	4	15	14	3
155°	4	4	4	3	2	2
165°	5	5	5	4	2	1
175°	6	5	6	5	4	0
180°	5	5	5	5	5	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5059.3	5059.3	5059.3	5059.3	5059.3
2.5°	5068.1	5056.9	5032.1	5052.1	5060.1
5°	5054.5	5042.5	5024.9	5049.7	5056.1
7.5°	5029.7	5020.1	5016.9	5048.1	5049.7
10°	4997.7	4988.1	4993.7	5007.3	5008.1
12.5°	4952.1	4955.3	4945.7	4963.3	4970.5
15°	4898.5	4907.3	4887.3	4908.1	4914.5
17.5°	4829.7	4837.7	4829.7	4862.5	4868.1
20°	4752.1	4762.5	4757.7	4791.3	4800.9
22.5°	4678.5	4678.5	4700.1	4733.7	4742.5
25°	4585.7	4583.3	4604.9	4666.5	4827.3
27.5°	4492.1	4478.5	4504.9	4688.1	4654.5
30°	4384.9	4376.1	4407.3	4383.3	3830.5
32.5°	4276.9	4251.3	4412.9	3625.7	3395.3
35°	4145.7	4123.3	4276.9	3289.7	3311.3
37.5°	4004.1	3994.5	3877.7	3193.7	3238.5
40°	3840.1	3831.3	3248.9	3118.5	3540.9
42.5°	3686.5	3676.9	2925.7	3318.5	3846.5
45°	3512.9	3504.1	2800.1	3707.3	3548.1
47.5°	3322.5	3412.9	2690.5	3371.3	3439.3
50°	3125.7	3234.5	2603.3	3227.3	3196.9
52.5°	2924.1	3013.7	2768.9	3002.5	2883.3
55°	2711.3	2591.3	2964.1	2747.3	2830.5
57.5°	2489.7	2160.0	2637.7	2633.7	2680.1
60°	2263.2	1835.2	2501.7	2470.5	2364.1
62.5°	2018.4	1655.2	2249.6	2150.4	2143.2
65°	1771.2	1469.6	1972.0	1912.8	1980.0
67.5°	1529.6	1274.4	1688.0	1761.6	1394.4
70°	1287.2	1096.8	1467.2	1132.8	1188.8
72.5°	1038.4	944.8	1213.6	1060.0	927.2
75°	797.6	886.4	884.0	704.0	998.4
77.5°	592.0	786.4	660.8	752.0	845.6
80°	418.4	568.8	432.0	540.8	719.2
82.5°	272.8	351.2	431.2	546.4	464.0
85°	162.4	249.6	388.0	427.2	484.8
87.5°	102.4	182.4	294.4	316.0	312.0
90°	51.2	141.6	204.8	189.6	156.8
92.5°	47.2	104.8	101.6	90.4	80.8
95°	74.4	68.8	53.6	51.2	52.0
97.5°	91.2	52.8	41.6	41.6	41.6
100°	88.8	54.4	40.0	38.4	36.0
102.5°	84.8	65.6	40.0	37.6	36.8
105°	74.4	56.0	40.8	38.4	36.0
107.5°	62.4	48.8	39.2	40.0	39.2
110°	52.0	44.0	37.6	36.0	35.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	42.4	42.4	35.2	30.4	33.6
115°	34.4	39.2	30.4	26.4	27.2
117.5°	28.8	28.8	36.8	24.0	23.2
120°	23.2	24.0	59.2	22.4	21.6
122.5°	19.2	20.8	36.0	44.0	23.2
125°	16.0	14.4	21.6	66.4	62.4
127.5°	13.6	10.4	20.0	33.6	59.2
130°	11.2	8.8	30.4	17.6	24.8
132.5°	9.6	7.2	34.4	16.8	15.2
135°	8.0	6.4	12.8	30.4	17.6
137.5°	6.4	5.6	11.2	51.2	35.2
140°	5.6	4.8	12.0	12.0	26.4
142.5°	5.6	4.0	5.6	12.0	10.4
145°	4.8	4.0	4.0	15.2	14.4
147.5°	4.0	4.0	4.0	10.4	15.2
150°	4.0	4.0	4.0	4.0	6.4
152.5°	4.0	4.0	4.0	3.2	2.4
155°	4.0	4.0	4.0	3.2	2.4
157.5°	4.0	4.0	4.0	3.2	2.4
160°	4.8	4.0	4.8	3.2	2.4
162.5°	4.8	4.8	4.8	4.0	2.4
165°	4.8	4.8	4.8	4.0	2.4
167.5°	4.8	4.8	4.8	4.0	3.2
170°	4.8	4.8	4.8	4.0	3.2
172.5°	4.8	4.8	5.6	4.8	3.2
175°	5.6	4.8	5.6	4.8	4.0
177.5°	5.6	4.8	5.6	4.8	4.0
180°	4.8	4.8	4.8	4.8	4.8

(END OF REPORT)