

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: P397443

Luminaire Tested: **VRVT4S-LD5-18-DR-LG52-CD2-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397443
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1801-511-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: VRVT4S-LD5-18-DR-LG52-CD2-U
Description:
Light Source: -
Ballast/Driver: -

Summary

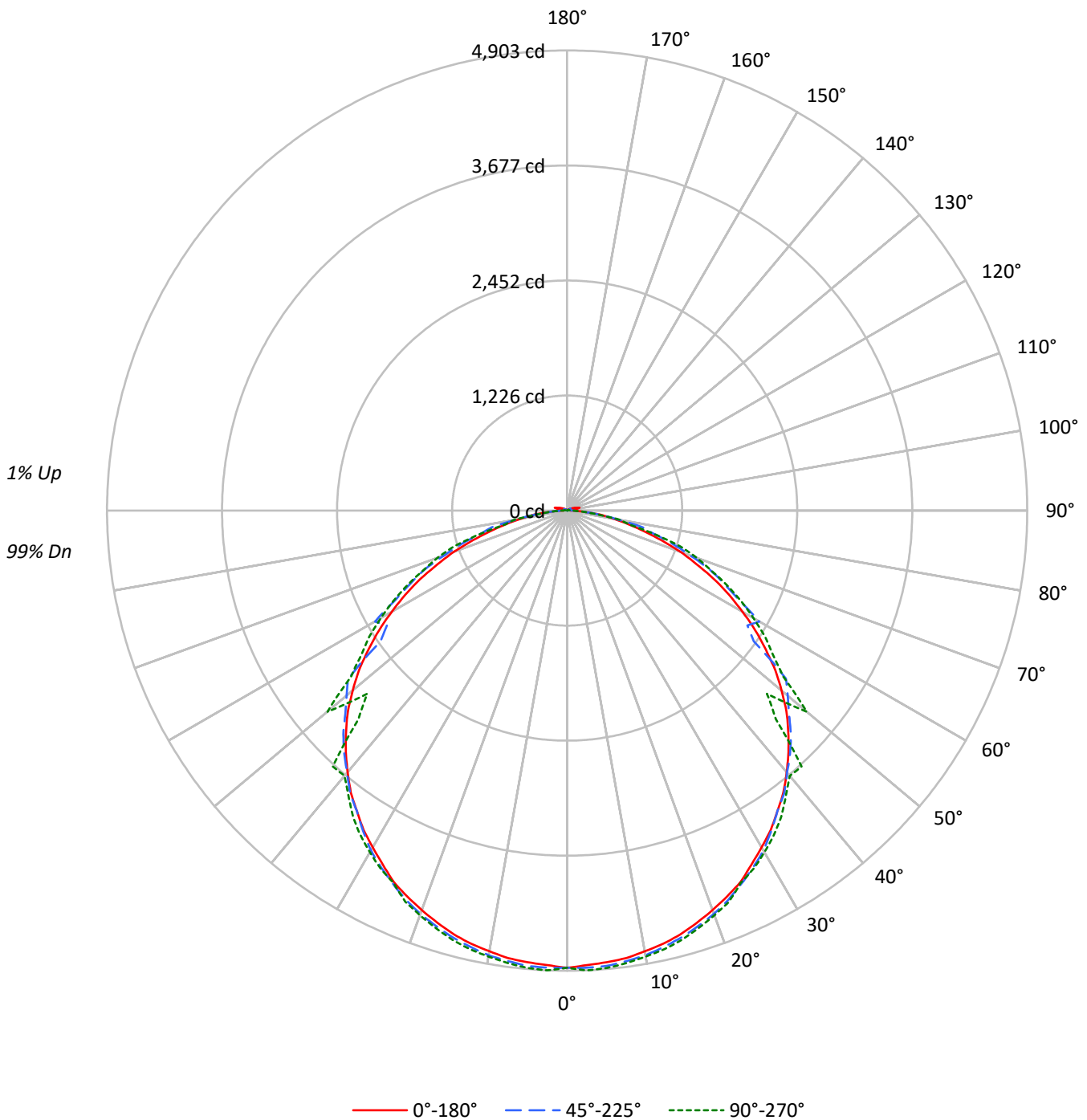
Lumens per Lamp: N/A
Luminaire Lumens: 14388.7 lumens
Efficiency: N/A
Efficacy: 44.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

Input Watts (W): 327.2
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

TEST NUMBER: P397443

CATALOG NUMBER: VRVT4S-LD5-18-DR-LG52-CD2-U

Luminous Intensity Polar Plot





TEST NUMBER: P397443

CATALOG NUMBER: VRVT4S-LD5-18-DR-LG52-CD2-U

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	111	111	111		106	106	106		101	101	101	99
1	108	104	99	95	106	101	97	94	97	94	91		93	90	88		89	87	85	83
2	99	90	83	78	96	88	82	77	84	79	75		81	77	73		78	74	71	69
3	90	79	71	64	87	77	70	64	74	68	62		71	66	61		69	64	60	58
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	51	46		57	50	45		55	49	45	42
6	70	56	47	41	68	55	47	40	53	46	40		51	45	39		50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35		47	40	35		45	39	35	33
8	60	46	38	32	58	46	37	32	44	37	31		43	36	31		42	35	31	29
9	56	42	34	29	54	42	34	29	41	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26		37	30	25		36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23241	23241	23241
5°	22899	22827	22962
10°	22624	22333	22463
15°	22366	21809	22018
20°	22036	21293	21488
25°	21780	20715	20808
30°	21349	20152	20441
35°	20996	19392	19954
40°	20595	18794	19254
45°	20081	18236	17240
50°	19367	17577	19403
55°	18350	14913	16732
60°	17038	15775	15632
65°	15486	13591	14147
70°	13467	11538	12527
75°	10707	9120	9359
80°	8238	6242	6799
85°	5198	2973	3018



TEST NUMBER: P397443

CATALOG NUMBER: VRVT4S-LD5-18-DR-LG52-CD2-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	462.6	3.2
10°-20°	1328.6	9.2
20°-30°	2022.4	14.1
30°-40°	2463.7	17.1
40°-50°	2573.1	17.9
50°-60°	2354.0	16.4
60°-70°	1797.8	12.5
70°-80°	980.2	6.8
80°-90°	264.8	1.8
90°-100°	40.5	0.3
100°-110°	49.2	0.3
110°-120°	29.6	0.2
120°-130°	14.1	0.1
130°-140°	4.8	0.0
140°-150°	1.5	0.0
150°-160°	0.7	0.0
160°-170°	0.7	0.0
170°-180°	0.3	0.0
0°-30°	3813.7	26.5
0°-40°	6277.3	43.6
0°-60°	11204.4	77.9
0°-90°	14247.2	99.0
90°-120°	119.4	0.8
90°-150°	139.8	1.0
90°-180°	141.0	1.0
0°-180°	14388.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4871	4871	4871	4871	4871	
5°	4831	4851	4869	4886	4891	459
15°	4673	4692	4708	4725	4733	1318
25°	4368	4382	4390	4402	4378	2009
35°	3907	3929	3907	3958	3979	2447
45°	3333	3348	3373	3546	3145	2569
55°	2584	2599	2428	2693	2674	2309
65°	1725	1777	1844	1850	1873	1702
75°	841	905	953	951	945	910
85°	225	227	208	202	201	246
90°	38	64	61	60	58	29
95°	37	34	35	29	29	43
105°	118	156	20	21	21	118
115°	58	29	38	14	15	59
125°	26	21	11	6	8	25
135°	12	9	5	3	3	10
145°	5	3	2	2	2	3
155°	2	2	2	2	2	1
165°	3	3	3	3	2	1
175°	3	3	3	3	3	0
180°	3	3	3	3	3	



TEST NUMBER: P397443

CATALOG NUMBER: VRVT4S-LD5-18-DR-LG52-CD2-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4870.9	4870.9	4870.9	4870.9	4870.9
2.5°	4847.9	4860.2	4875.4	4896.9	4903.0
5°	4831.0	4851.0	4869.4	4886.2	4890.8
7.5°	4809.6	4834.1	4841.8	4863.2	4863.2
10°	4768.2	4795.8	4811.1	4824.9	4824.9
12.5°	4728.4	4748.3	4762.1	4779.0	4786.6
15°	4673.3	4691.7	4708.5	4725.4	4733.0
17.5°	4602.8	4631.9	4642.6	4656.4	4662.6
20°	4529.3	4556.9	4572.2	4584.4	4587.5
22.5°	4451.2	4472.6	4487.9	4492.6	4509.4
25°	4368.5	4382.2	4389.9	4402.2	4377.7
27.5°	4252.1	4278.1	4288.8	4278.1	4302.6
30°	4143.3	4169.4	4181.6	4184.6	4204.6
32.5°	4036.1	4054.5	4048.3	4071.3	4100.4
35°	3907.4	3928.9	3907.4	3957.9	3979.4
37.5°	3786.4	3797.1	3798.6	3849.2	3827.8
40°	3639.4	3653.1	3645.5	3677.7	3689.9
42.5°	3490.8	3503.0	3516.8	3541.4	3697.6
45°	3333.0	3348.3	3372.9	3545.9	3144.6
47.5°	3169.1	3172.2	3204.3	2939.4	2888.8
50°	2982.2	2980.7	3068.0	2790.8	3333.0
52.5°	2795.4	2793.8	2939.4	3071.1	2899.5
55°	2584.0	2599.4	2427.8	2692.8	2674.4
57.5°	2378.7	2392.6	2276.2	2459.9	2499.8
60°	2156.6	2210.2	2363.4	2291.4	2293.0
62.5°	1945.3	1992.8	2060.2	2083.1	2092.3
65°	1724.7	1776.8	1844.2	1850.3	1873.3
67.5°	1490.4	1565.4	1646.6	1635.8	1657.3
70°	1283.6	1191.7	1390.8	1400.0	1467.4
72.5°	1050.7	1161.0	1176.3	980.3	1262.2
75°	840.9	905.3	952.7	951.2	945.0
77.5°	666.3	709.2	824.1	741.4	670.9
80°	503.9	516.2	546.8	543.8	571.4
82.5°	379.8	361.5	372.2	367.6	324.7
85°	225.2	226.7	208.3	202.2	200.6
87.5°	93.4	104.2	101.1	96.5	104.2
90°	38.3	64.3	61.3	59.8	58.2
92.5°	42.9	45.9	42.9	36.8	32.2
95°	36.8	33.7	35.2	29.1	29.1
97.5°	50.6	27.6	27.6	24.5	23.0
100°	101.1	24.5	26.0	21.4	21.4
102.5°	134.8	26.0	23.0	21.4	23.0
105°	117.9	156.2	19.9	21.4	21.4
107.5°	99.6	91.9	18.4	19.9	21.4
110°	84.2	56.6	15.3	18.4	19.9



TEST NUMBER: P397443

CATALOG NUMBER: VRVT4S-LD5-18-DR-LG52-CD2-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	69.0	39.8	13.8	15.3	18.4
115°	58.2	29.1	38.3	13.8	15.3
117.5°	49.0	30.6	41.4	12.2	13.8
120°	39.8	62.8	21.4	10.7	10.7
122.5°	32.2	29.1	15.3	7.7	9.2
125°	26.0	21.4	10.7	6.2	7.7
127.5°	21.4	16.9	7.7	4.6	6.2
130°	18.4	15.3	4.6	4.6	4.6
132.5°	15.3	12.2	4.6	3.0	4.6
135°	12.2	9.2	4.6	3.0	3.0
137.5°	9.2	7.7	3.0	3.0	3.0
140°	7.7	4.6	1.5	1.5	1.5
142.5°	6.2	4.6	1.5	1.5	1.5
145°	4.6	3.0	1.5	1.5	1.5
147.5°	3.0	1.5	1.5	1.5	1.5
150°	1.5	1.5	1.5	1.5	1.5
152.5°	1.5	1.5	1.5	1.5	1.5
155°	1.5	1.5	1.5	1.5	1.5
157.5°	1.5	1.5	1.5	1.5	1.5
160°	1.5	1.5	1.5	1.5	1.5
162.5°	3.0	3.0	3.0	3.0	1.5
165°	3.0	3.0	3.0	3.0	1.5
167.5°	3.0	3.0	3.0	3.0	1.5
170°	3.0	3.0	3.0	3.0	1.5
172.5°	3.0	3.0	3.0	3.0	3.0
175°	3.0	3.0	3.0	3.0	3.0
177.5°	3.0	3.0	3.0	3.0	3.0
180°	3.0	3.0	3.0	3.0	3.0

(END OF REPORT)