

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: P397438

Luminaire Tested: **VRVT4S-LD5-15-PC-LR63-CD2-U**

Issue Date: 3/3/2020



**Test Information**

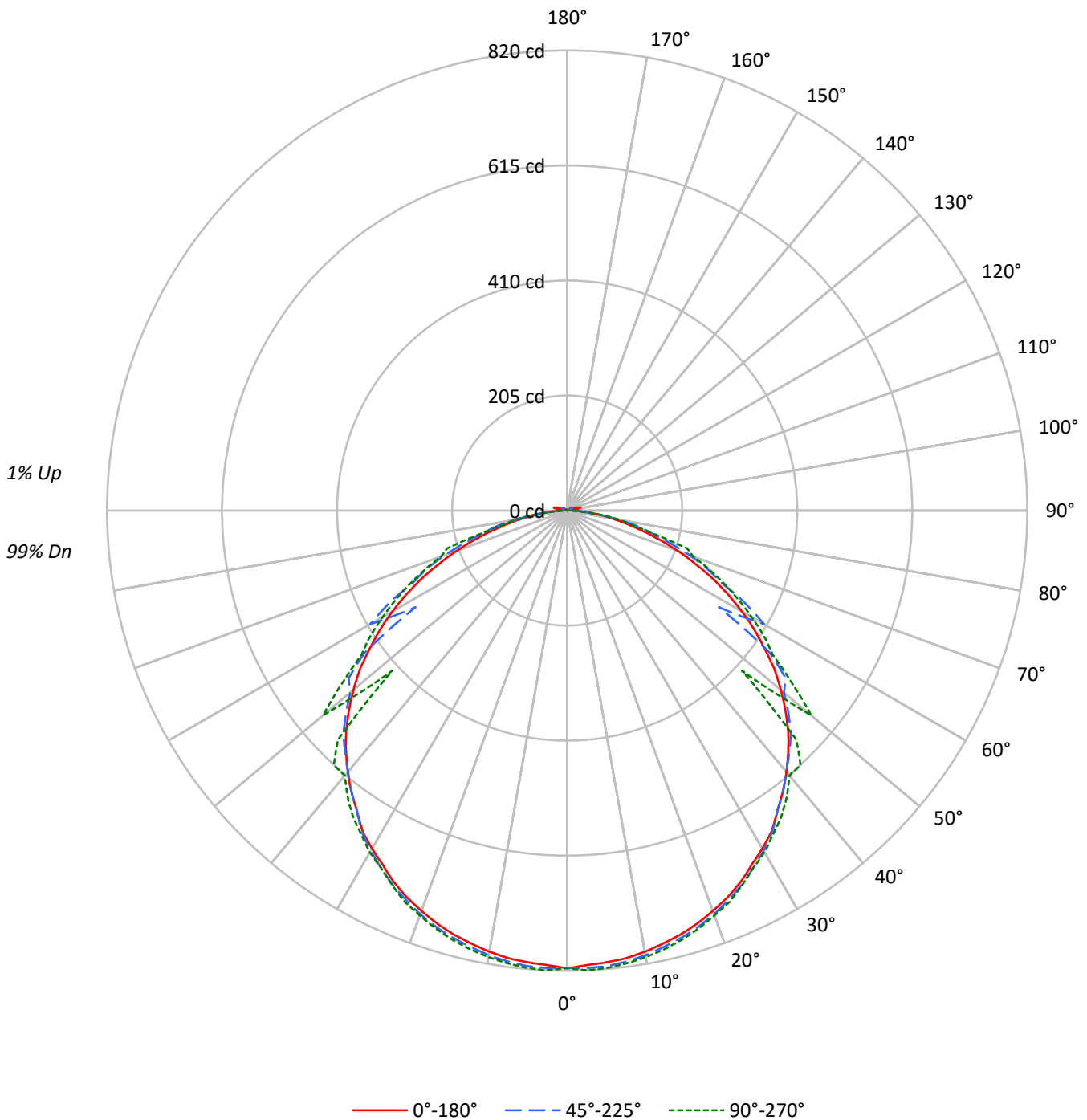
Test Method: LM-79-08  
Report Number: P397438  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1801-511-6)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: VRVT4S-LD5-15-PC-LR63-CD2-U  
Description:  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2399.4 lumens  
Efficiency: N/A  
Efficacy: 8.6 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): 280.5  
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: P397438  
CATALOG NUMBER: VRVT4S-LD5-15-PC-LR63-CD2-U

### Luminous Intensity Polar Plot





TEST NUMBER: P397438

CATALOG NUMBER: VRVT4S-LD5-15-PC-LR63-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	85	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	52	46	57	50	45	55	49	45	42
6	70	56	47	41	68	55	47	40	53	46	40	51	45	40	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	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	33	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°	3891	3891	3891
5°	3830	3820	3841
10°	3787	3735	3761
15°	3742	3649	3682
20°	3693	3564	3596
25°	3643	3472	3503
30°	3584	3373	3419
35°	3509	3241	3338
40°	3441	3133	3216
45°	3356	3049	3167
50°	3228	2889	3307
55°	3054	2705	2797
60°	2843	2704	2589
65°	2564	2227	2332
70°	2202	1925	2039
75°	1752	1481	1564
80°	1339	1054	1114
85°	854	540	472



TEST NUMBER: P397438

CATALOG NUMBER: VRVT4S-LD5-15-PC-LR63-CD2-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.4	3.2
10°-20°	222.4	9.3
20°-30°	338.6	14.1
30°-40°	412.0	17.2
40°-50°	429.1	17.9
50°-60°	392.2	16.3
60°-70°	298.7	12.4
70°-80°	162.1	6.8
80°-90°	44.7	1.9
90°-100°	5.7	0.2
100°-110°	7.8	0.3
110°-120°	5.2	0.2
120°-130°	2.0	0.1
130°-140°	0.8	0.0
140°-150°	0.2	0.0
150°-160°	0.1	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	638.4	26.6
0°-40°	1050.4	43.8
0°-60°	1871.8	78.0
0°-90°	2377.3	99.1
90°-120°	18.7	0.8
90°-150°	21.8	0.9
90°-180°	22.0	0.9
0°-180°	2399.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	815	815	815	815	815	
5°	808	811	815	818	818	77
15°	782	786	788	791	791	221
25°	731	734	736	737	737	337
35°	653	658	653	661	666	410
45°	557	558	564	591	578	429
55°	430	431	440	470	447	385
65°	286	294	302	308	309	282
75°	138	153	155	158	158	148
85°	37	40	38	31	31	40
90°	7	11	10	9	9	5
95°	6	5	5	3	3	9
105°	21	28	3	3	3	22
115°	11	7	11	1	1	11
125°	5	4	1	0	0	5
135°	2	2	1	0	0	2
145°	1	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P397438

CATALOG NUMBER: VRVT4S-LD5-15-PC-LR63-CD2-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	815.4	815.4	815.4	815.4	815.4
2.5°	810.7	813.3	816.0	818.9	820.0
5°	808.0	811.4	814.9	817.9	818.2
7.5°	804.6	808.0	810.4	813.0	813.8
10°	798.2	803.0	804.6	806.4	807.8
12.5°	790.4	794.9	796.3	799.8	800.6
15°	781.9	785.6	787.8	790.9	791.4
17.5°	771.5	775.2	777.8	779.5	780.6
20°	759.0	762.1	765.3	766.6	767.7
22.5°	746.1	748.0	751.0	753.1	755.0
25°	730.7	734.4	735.7	737.0	737.0
27.5°	711.8	717.3	718.2	716.3	717.9
30°	695.5	699.2	699.8	697.6	703.2
32.5°	678.2	678.4	680.3	679.8	683.5
35°	653.1	657.8	653.0	661.0	665.6
37.5°	631.7	635.5	631.5	643.7	642.9
40°	608.0	611.7	607.7	618.1	616.3
42.5°	583.2	586.4	585.4	590.2	615.4
45°	557.1	558.4	564.0	590.7	577.6
47.5°	527.7	528.8	534.7	525.1	422.4
50°	497.0	498.1	504.3	396.8	568.0
52.5°	465.9	464.3	490.6	533.6	505.1
55°	430.1	431.4	440.3	470.1	447.0
57.5°	395.7	398.6	320.6	413.6	415.8
60°	359.8	365.1	405.1	378.6	379.7
62.5°	322.7	331.7	358.2	343.7	344.8
65°	285.6	294.2	302.2	308.5	308.8
67.5°	246.1	259.4	269.6	267.2	273.8
70°	209.9	203.8	232.0	231.2	238.9
72.5°	172.5	187.4	190.6	165.4	224.2
75°	137.6	153.0	154.7	157.9	157.9
77.5°	106.6	115.5	128.8	122.6	118.1
80°	81.9	84.5	92.3	95.2	93.6
82.5°	61.0	57.4	63.7	66.4	60.2
85°	37.0	40.2	37.8	31.4	31.4
87.5°	15.2	19.2	17.0	15.5	13.8
90°	7.4	10.6	9.9	9.1	8.8
92.5°	7.7	7.4	5.3	3.7	2.9
95°	5.9	4.8	5.1	2.9	2.7
97.5°	11.2	3.5	3.5	2.6	2.1
100°	20.8	3.0	3.2	2.6	1.8
102.5°	24.8	4.5	3.2	2.6	2.6
105°	21.3	27.5	2.7	2.9	2.6
107.5°	18.1	12.5	2.1	2.6	2.9
110°	15.2	8.8	1.8	2.4	2.7



TEST NUMBER: P397438

CATALOG NUMBER: VRVT4S-LD5-15-PC-LR63-CD2-U

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	12.8	6.6	1.8	1.8	2.4
115°	11.0	6.9	10.9	1.4	1.4
117.5°	9.3	10.9	4.8	1.1	1.4
120°	7.5	6.2	2.9	1.4	1.0
122.5°	5.9	4.6	1.9	0.5	1.0
125°	5.0	3.7	1.4	0.3	0.5
127.5°	4.0	3.0	1.0	0.3	0.3
130°	3.2	2.9	0.6	0.3	0.3
132.5°	2.7	2.1	1.8	0.3	0.3
135°	2.1	1.6	0.6	0.3	0.3
137.5°	1.6	1.3	0.5	0.3	0.3
140°	1.3	1.0	0.3	0.3	0.2
142.5°	1.0	0.6	0.3	0.3	0.2
145°	0.6	0.3	0.3	0.3	0.2
147.5°	0.5	0.3	0.3	0.3	0.3
150°	0.3	0.3	0.3	0.3	0.3
152.5°	0.3	0.3	0.3	0.3	0.3
155°	0.3	0.3	0.3	0.3	0.3
157.5°	0.3	0.3	0.3	0.3	0.3
160°	0.3	0.3	0.3	0.3	0.3
162.5°	0.5	0.5	0.5	0.5	0.3
165°	0.5	0.5	0.5	0.5	0.5
167.5°	0.5	0.5	0.5	0.5	0.5
170°	0.5	0.5	0.5	0.5	0.5
172.5°	0.5	0.5	0.5	0.5	0.5
175°	0.5	0.5	0.5	0.5	0.5
177.5°	0.5	0.5	0.5	0.5	0.5
180°	0.5	0.5	0.5	0.5	0.5

(END OF REPORT)