

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: P397431

Luminaire Tested: **VRVT4S-LD5-15-DR-LG52-CD2-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397431
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-LD5-15-DR-LG52-CD2-U
Description:
Light Source: -
Ballast/Driver: -

Summary

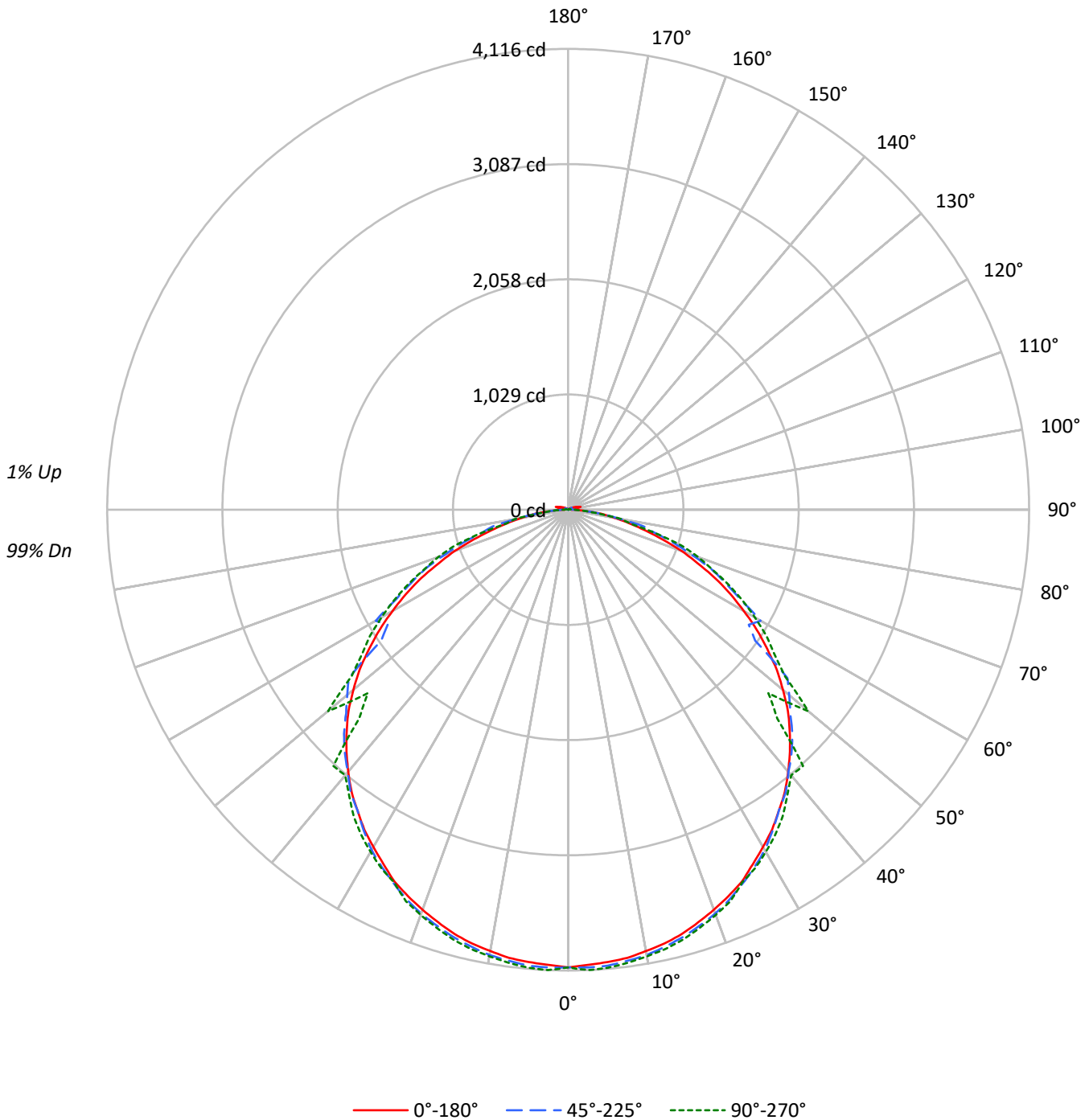
Lumens per Lamp: N/A
Luminaire Lumens: 12078.4 lumens
Efficiency: N/A
Efficacy: 46.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

Input Watts (W): 257.8
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: P397431

CATALOG NUMBER: VRVT4S-LD5-15-DR-LG52-CD2-U

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	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°	19509	19509	19509
5°	19222	19162	19274
10°	18991	18747	18856
15°	18775	18308	18483
20°	18497	17874	18038
25°	18283	17389	17466
30°	17921	16917	17159
35°	17625	16278	16750
40°	17288	15777	16162
45°	16856	15308	14472
50°	16258	14755	16288
55°	15404	12518	14045
60°	14303	13242	13122
65°	13000	11409	11875
70°	11303	9686	10515
75°	8988	7656	7857
80°	6916	5240	5707
85°	4363	2496	2534



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	388.3	3.2
10°-20°	1115.3	9.2
20°-30°	1697.6	14.1
30°-40°	2068.1	17.1
40°-50°	2159.9	17.9
50°-60°	1976.0	16.4
60°-70°	1509.1	12.5
70°-80°	822.8	6.8
80°-90°	222.3	1.8
90°-100°	34.0	0.3
100°-110°	41.3	0.3
110°-120°	24.9	0.2
120°-130°	11.8	0.1
130°-140°	4.0	0.0
140°-150°	1.2	0.0
150°-160°	0.6	0.0
160°-170°	0.6	0.0
170°-180°	0.2	0.0
0°-30°	3201.3	26.5
0°-40°	5269.4	43.6
0°-60°	9405.3	77.9
0°-90°	11959.6	99.0
90°-120°	100.2	0.8
90°-150°	117.3	1.0
90°-180°	119.0	1.0
0°-180°	12078.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4089	4089	4089	4089	4089	
5°	4055	4072	4087	4102	4105	386
15°	3923	3938	3952	3967	3973	1107
25°	3667	3679	3685	3695	3675	1686
35°	3280	3298	3280	3322	3340	2054
45°	2798	2811	2831	2977	2640	2156
55°	2169	2182	2038	2260	2245	1939
65°	1448	1492	1548	1553	1572	1429
75°	706	760	800	798	793	764
85°	189	190	175	170	168	206
90°	32	54	51	50	49	25
95°	31	28	30	24	24	36
105°	99	131	17	18	18	99
115°	49	24	32	12	13	50
125°	22	18	9	5	6	21
135°	10	8	4	3	3	8
145°	4	3	1	1	1	2
155°	1	1	1	1	1	1
165°	3	3	3	3	1	1
175°	3	3	3	3	3	0
180°	3	3	3	3	3	



TEST NUMBER: P397431

CATALOG NUMBER: VRVT4S-LD5-15-DR-LG52-CD2-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4088.7	4088.7	4088.7	4088.7	4088.7
2.5°	4069.4	4079.8	4092.6	4110.6	4115.8
5°	4055.4	4072.0	4087.4	4101.6	4105.4
7.5°	4037.4	4057.9	4064.3	4082.3	4082.3
10°	4002.6	4025.8	4038.6	4050.2	4050.2
12.5°	3969.2	3985.9	3997.4	4011.6	4018.0
15°	3922.9	3938.3	3952.5	3966.6	3973.0
17.5°	3863.8	3888.2	3897.2	3908.7	3913.9
20°	3802.0	3825.2	3838.0	3848.3	3850.9
22.5°	3736.5	3754.5	3767.3	3771.2	3785.3
25°	3667.0	3678.6	3685.0	3695.3	3674.7
27.5°	3569.3	3591.1	3600.2	3591.1	3611.8
30°	3478.0	3499.8	3510.2	3512.7	3529.4
32.5°	3388.0	3403.4	3398.3	3417.6	3442.0
35°	3280.0	3298.0	3280.0	3322.4	3340.4
37.5°	3178.4	3187.4	3188.7	3231.1	3213.1
40°	3055.0	3066.6	3060.2	3087.1	3097.4
42.5°	2930.2	2940.6	2952.2	2972.7	3103.8
45°	2797.8	2810.7	2831.3	2976.6	2639.7
47.5°	2660.2	2662.8	2689.8	2467.4	2425.0
50°	2503.4	2502.1	2575.4	2342.6	2797.8
52.5°	2346.6	2345.3	2467.4	2578.0	2434.0
55°	2169.1	2181.9	2037.9	2260.4	2245.0
57.5°	1996.8	2008.4	1910.6	2065.0	2098.4
60°	1810.4	1855.4	1983.9	1923.5	1924.8
62.5°	1633.0	1672.8	1729.4	1748.6	1756.4
65°	1447.8	1491.5	1548.1	1553.2	1572.5
67.5°	1251.0	1314.1	1382.2	1373.2	1391.2
70°	1077.4	1000.3	1167.5	1175.2	1231.8
72.5°	882.0	974.6	987.4	822.9	1059.4
75°	705.9	759.9	799.8	798.5	793.4
77.5°	559.3	595.3	691.8	622.3	563.2
80°	423.0	433.3	459.0	456.5	479.6
82.5°	318.9	303.4	312.5	308.6	272.6
85°	189.0	190.3	174.9	169.8	168.4
87.5°	78.4	87.4	84.9	81.0	87.4
90°	32.2	54.0	51.4	50.2	48.9
92.5°	36.0	38.6	36.0	30.9	27.0
95°	30.9	28.3	29.6	24.4	24.4
97.5°	42.4	23.1	23.1	20.6	19.3
100°	84.9	20.6	21.8	18.0	18.0
102.5°	113.1	21.8	19.3	18.0	19.3
105°	99.0	131.1	16.7	18.0	18.0
107.5°	83.6	77.1	15.4	16.7	18.0
110°	70.7	47.6	12.9	15.4	16.7



TEST NUMBER: P397431

CATALOG NUMBER: VRVT4S-LD5-15-DR-LG52-CD2-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	57.8	33.4	11.6	12.9	15.4
115°	48.9	24.4	32.2	11.6	12.9
117.5°	41.1	25.7	34.7	10.3	11.6
120°	33.4	52.7	18.0	9.0	9.0
122.5°	27.0	24.4	12.9	6.4	7.7
125°	21.8	18.0	9.0	5.1	6.4
127.5°	18.0	14.2	6.4	3.8	5.1
130°	15.4	12.9	3.8	3.8	3.8
132.5°	12.9	10.3	3.8	2.6	3.8
135°	10.3	7.7	3.8	2.6	2.6
137.5°	7.7	6.4	2.6	2.6	2.6
140°	6.4	3.8	1.3	1.3	1.3
142.5°	5.1	3.8	1.3	1.3	1.3
145°	3.8	2.6	1.3	1.3	1.3
147.5°	2.6	1.3	1.3	1.3	1.3
150°	1.3	1.3	1.3	1.3	1.3
152.5°	1.3	1.3	1.3	1.3	1.3
155°	1.3	1.3	1.3	1.3	1.3
157.5°	1.3	1.3	1.3	1.3	1.3
160°	1.3	1.3	1.3	1.3	1.3
162.5°	2.6	2.6	2.6	2.6	1.3
165°	2.6	2.6	2.6	2.6	1.3
167.5°	2.6	2.6	2.6	2.6	1.3
170°	2.6	2.6	2.6	2.6	1.3
172.5°	2.6	2.6	2.6	2.6	2.6
175°	2.6	2.6	2.6	2.6	2.6
177.5°	2.6	2.6	2.6	2.6	2.6
180°	2.6	2.6	2.6	2.6	2.6

(END OF REPORT)