

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: P397446

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397446
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1801-511-5)
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-DRF-LG52-CD2-U
Description:
Light Source: -
Ballast/Driver: -

Summary

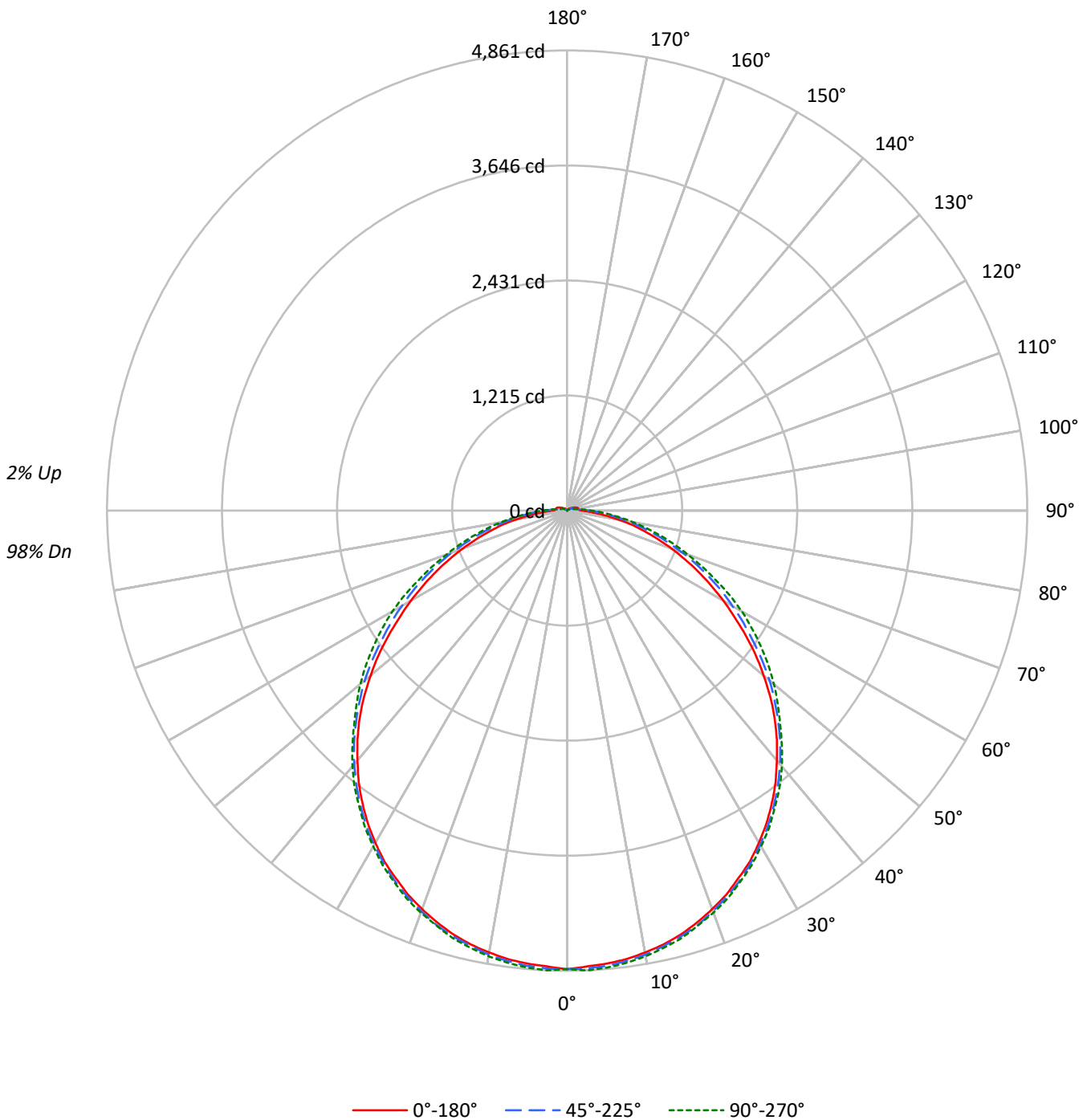
Lumens per Lamp: N/A
Luminaire Lumens: 14124.8 lumens
Efficiency: N/A
Efficacy: 43.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

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: P397446

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

Luminous Intensity Polar Plot





TEST NUMBER: P397446

CATALOG NUMBER: VRVT4S-LD5-18-DRF-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	118	118	118	118	115	115	115	115	110	110	110	105	105	105	100	100	100	98
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	81
2	98	89	82	77	95	87	81	75	83	78	73	80	75	71	76	73	69	67
3	89	78	70	64	86	77	69	63	73	67	61	70	65	60	67	63	59	56
4	82	69	61	54	79	68	60	53	65	58	52	63	56	51	60	55	50	48
5	75	62	53	46	73	61	52	46	58	51	45	56	50	45	54	48	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	49	43	39	36
7	64	51	42	36	62	50	41	36	48	41	35	46	40	35	45	39	34	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	41	35	31	29
9	56	42	34	29	54	42	34	29	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23113	23113	23113
5°	22771	22632	22751
10°	22491	22106	22259
15°	22189	21563	21750
20°	21801	20980	21173
25°	21357	20354	20565
30°	20883	19648	19918
35°	20263	18889	19182
40°	19500	18036	18414
45°	18683	17049	17440
50°	17595	15992	16600
55°	16364	14711	15615
60°	15066	13466	14533
65°	13734	12178	13033
70°	12318	10720	11560
75°	10811	9131	10080
80°	9005	7496	8471
85°	6687	5822	6667



TEST NUMBER: P397446

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	458.7	3.2
10°-20°	1313.0	9.3
20°-30°	1985.6	14.1
30°-40°	2378.3	16.8
40°-50°	2429.1	17.2
50°-60°	2150.6	15.2
60°-70°	1630.2	11.5
70°-80°	1004.9	7.1
80°-90°	444.5	3.1
90°-100°	159.7	1.1
100°-110°	85.6	0.6
110°-120°	51.1	0.4
120°-130°	23.6	0.2
130°-140°	7.3	0.1
140°-150°	1.4	0.0
150°-160°	0.6	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	3757.2	26.6
0°-40°	6135.5	43.4
0°-60°	10715.2	75.9
0°-90°	13794.8	97.7
90°-120°	296.4	2.1
90°-150°	328.7	2.3
90°-180°	330.0	2.3
0°-180°	14124.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4844	4844	4844	4844	4844	
5°	4804	4814	4828	4841	4846	457
15°	4636	4640	4655	4666	4675	1308
25°	4284	4296	4313	4327	4327	1976
35°	3771	3783	3806	3833	3825	2357
45°	3101	3118	3153	3190	3181	2387
55°	2304	2350	2395	2470	2496	2062
65°	1530	1570	1652	1716	1726	1516
75°	849	889	954	1004	1018	904
85°	290	347	408	443	443	295
90°	152	192	236	257	256	87
95°	125	125	137	151	150	101
105°	112	95	71	65	66	116
115°	73	59	47	40	42	74
125°	39	31	21	19	23	36
135°	17	14	5	5	8	14
145°	6	4	1	0	0	4
155°	2	2	2	1	0	1
165°	3	3	2	1	1	1
175°	3	3	3	2	1	0
180°	3	3	3	3	3	



TEST NUMBER: P397446

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4844.1	4844.1	4844.1	4844.1	4844.1
2.5°	4820.2	4825.9	4841.2	4856.5	4861.2
5°	4804.0	4813.6	4827.8	4841.2	4846.0
7.5°	4780.2	4787.8	4800.2	4813.6	4817.4
10°	4740.2	4748.7	4762.1	4774.5	4781.2
12.5°	4695.4	4699.2	4711.6	4725.9	4729.7
15°	4636.3	4640.1	4655.4	4665.8	4675.4
17.5°	4563.0	4566.7	4589.6	4594.4	4595.4
20°	4481.0	4486.7	4504.8	4513.4	4520.1
22.5°	4391.4	4399.0	4413.3	4423.8	4433.3
25°	4283.7	4296.1	4313.3	4326.6	4326.6
27.5°	4179.8	4181.8	4197.9	4212.2	4221.8
30°	4053.0	4055.0	4076.9	4093.1	4096.9
32.5°	3918.7	3926.3	3949.2	3966.3	3971.1
35°	3771.0	3783.4	3806.2	3833.0	3825.3
37.5°	3617.5	3624.2	3656.6	3678.6	3687.1
40°	3446.0	3465.0	3498.4	3522.2	3529.0
42.5°	3278.3	3295.4	3331.7	3354.6	3357.4
45°	3101.0	3118.2	3153.4	3189.7	3181.1
47.5°	2909.5	2936.2	2971.4	3009.5	3016.2
50°	2709.4	2748.4	2791.3	2822.8	2851.4
52.5°	2513.0	2544.5	2594.1	2650.2	2677.0
55°	2304.3	2350.1	2394.9	2470.2	2495.9
57.5°	2097.5	2152.8	2208.1	2291.0	2313.8
60°	1907.0	1950.8	2017.5	2098.5	2131.8
62.5°	1712.6	1763.0	1837.4	1911.7	1934.6
65°	1529.5	1569.6	1652.5	1716.3	1725.8
67.5°	1345.6	1393.3	1471.4	1538.2	1541.9
70°	1174.1	1217.0	1292.2	1348.5	1354.2
72.5°	1008.2	1052.1	1115.9	1173.1	1184.6
75°	849.1	889.1	953.9	1004.5	1017.8
77.5°	708.1	737.6	794.8	852.0	856.7
80°	550.8	585.1	656.6	704.2	711.9
82.5°	419.3	460.3	524.2	567.0	569.0
85°	289.7	346.9	407.9	443.1	443.1
87.5°	200.2	260.2	314.5	338.3	341.2
90°	152.5	191.5	236.3	257.3	256.3
92.5°	132.5	150.6	179.2	196.3	193.4
95°	124.9	124.9	137.2	150.6	149.6
97.5°	121.0	113.4	108.6	117.2	116.2
100°	120.1	106.7	89.6	93.4	94.3
102.5°	117.2	101.0	78.2	77.2	78.2
105°	111.5	95.3	70.6	64.8	65.8
107.5°	103.8	87.7	64.8	57.2	58.2
110°	94.3	78.2	59.1	51.4	51.4



TEST NUMBER: P397446

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

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	84.8	68.6	53.4	45.8	46.7
115°	73.4	59.1	46.7	40.0	41.9
117.5°	63.8	51.4	41.0	34.3	37.2
120°	54.3	44.8	33.4	28.6	32.4
122.5°	45.8	38.1	26.7	23.8	27.6
125°	39.0	31.4	21.0	19.0	22.9
127.5°	32.4	26.7	15.3	15.3	18.1
130°	26.7	21.9	9.5	11.4	14.3
132.5°	21.9	18.1	6.6	7.6	10.5
135°	17.1	14.3	4.8	4.8	7.6
137.5°	14.3	10.5	2.9	1.9	3.8
140°	10.5	7.6	1.9	0.0	1.0
142.5°	8.6	5.7	1.0	0.0	0.0
145°	5.7	3.8	1.0	0.0	0.0
147.5°	3.8	1.9	1.0	1.0	0.0
150°	1.9	1.9	1.0	1.0	0.0
152.5°	1.9	1.9	1.0	1.0	0.0
155°	1.9	1.9	1.9	1.0	0.0
157.5°	1.9	1.9	1.9	1.0	0.0
160°	1.9	1.9	1.9	1.0	1.0
162.5°	2.9	2.9	1.9	1.0	1.0
165°	2.9	2.9	1.9	1.0	1.0
167.5°	2.9	2.9	1.9	1.9	1.0
170°	2.9	2.9	1.9	1.0	1.0
172.5°	2.9	2.9	1.9	1.9	1.0
175°	2.9	2.9	2.9	1.9	1.0
177.5°	2.9	2.9	2.9	1.9	1.0
180°	2.9	2.9	2.9	2.9	2.9

(END OF REPORT)