

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: P397382

Luminaire Tested: **VRVT4LED-LD5-18-DR-UNV-LA59-CD2-WL-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397382
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-LA59-CD2-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

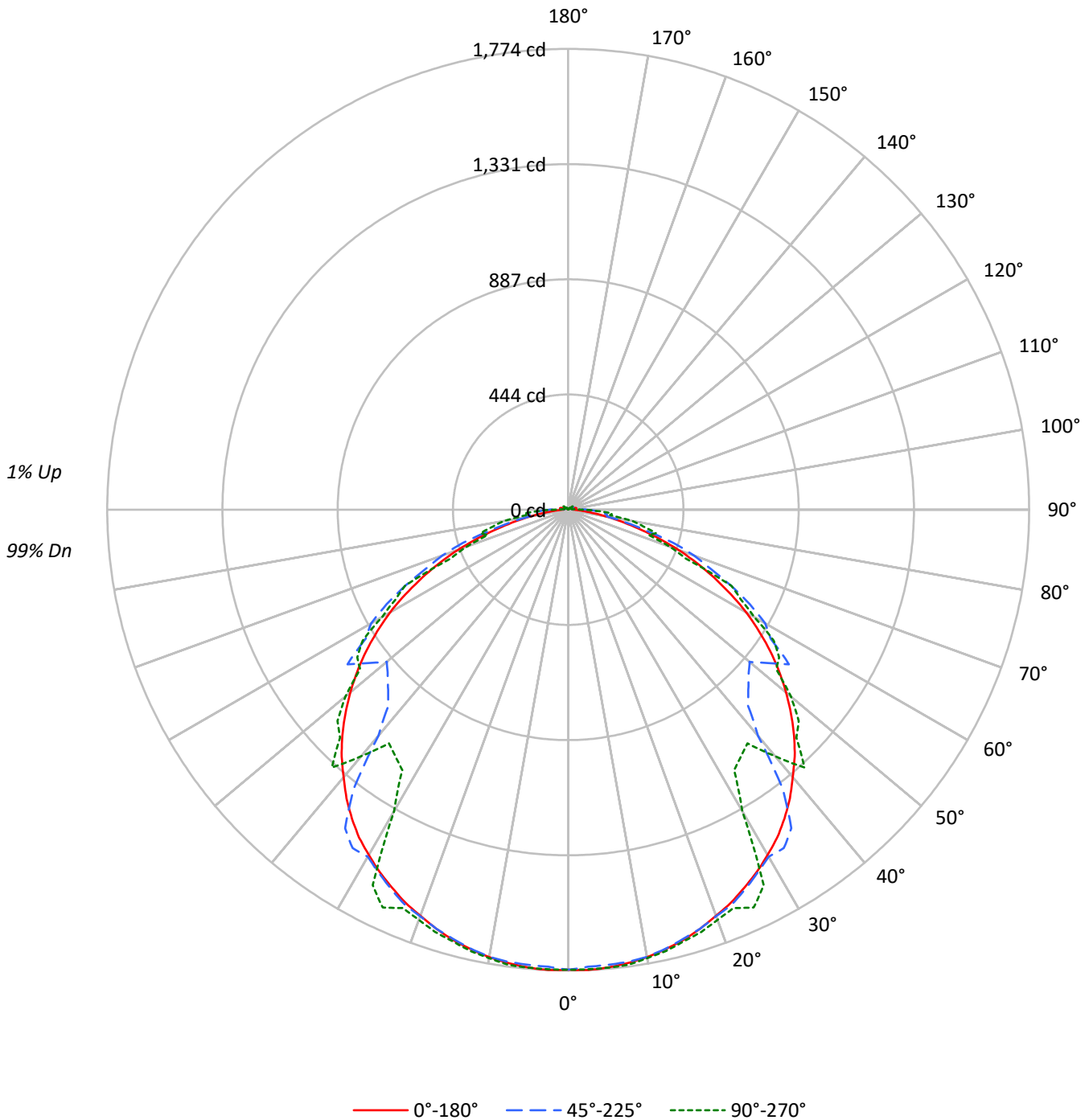
Lumens per Lamp: N/A
Luminaire Lumens: 5140.2 lumens
Efficiency: N/A
Efficacy: 25.2 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.15 / 1.26
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

Input Watts (W): 204.3
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: P397382

CATALOG NUMBER: VRVT4LED-LD5-18-DR-UNV-LA59-CD2-WL-U

Luminous Intensity Polar Plot





TEST NUMBER: P397382

CATALOG NUMBER: VRVT4LED-LD5-18-DR-UNV-LA59-CD2-WL-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	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°	4436	4436	4436
5°	4425	4342	4358
10°	4402	4285	4278
15°	4375	4197	4191
20°	4338	4120	4120
25°	4314	4053	4200
30°	4289	3974	3406
35°	4257	3985	3034
40°	4182	3156	3373
45°	4107	2863	3548
50°	3976	2833	3391
55°	3814	3476	3222
60°	3591	3206	2928
65°	3252	2810	2712
70°	2829	2374	1837
75°	2204	1670	1784
80°	1572	989	1538
85°	964	1138	1303



TEST NUMBER: P397382

CATALOG NUMBER: VRVT4LED-LD5-18-DR-UNV-LA59-CD2-WL-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.1	3.3
10°-20°	484.7	9.4
20°-30°	745.5	14.5
30°-40°	846.0	16.5
40°-50°	898.8	17.5
50°-60°	850.4	16.5
60°-70°	618.3	12.0
70°-80°	323.4	6.3
80°-90°	130.2	2.5
90°-100°	29.1	0.6
100°-110°	17.4	0.3
110°-120°	11.6	0.2
120°-130°	9.2	0.2
130°-140°	4.8	0.1
140°-150°	1.7	0.0
150°-160°	0.6	0.0
160°-170°	0.4	0.0
170°-180°	0.2	0.0
0°-30°	1398.3	27.2
0°-40°	2244.3	43.7
0°-60°	3993.4	77.7
0°-90°	5065.3	98.5
90°-120°	58.1	1.1
90°-150°	73.7	1.4
90°-180°	75.0	1.5
0°-180°	5140.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1771	1771	1771	1771	1771	
5°	1769	1765	1759	1767	1770	168
15°	1714	1718	1710	1718	1720	484
25°	1605	1604	1612	1633	1690	740
35°	1451	1443	1497	1151	1159	907
45°	1230	1226	980	1298	1242	946
55°	949	907	1037	962	991	847
65°	620	514	690	670	693	614
75°	279	310	309	246	349	302
85°	57	87	136	150	170	66
90°	18	50	72	66	55	12
95°	26	24	19	18	18	22
105°	26	20	14	13	13	27
115°	12	14	11	9	10	12
125°	6	5	8	23	22	5
135°	3	2	4	11	6	2
145°	2	1	1	5	5	1
155°	1	1	1	1	1	1
165°	2	2	2	1	1	0
175°	2	2	2	2	1	0
180°	2	2	2	2	2	



TEST NUMBER: P397382

CATALOG NUMBER: VRVT4LED-LD5-18-DR-UNV-LA59-CD2-WL-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1770.7	1770.7	1770.7	1770.7	1770.7
2.5°	1773.8	1769.9	1761.2	1768.2	1771.0
5°	1769.1	1764.9	1758.7	1767.4	1769.6
7.5°	1760.4	1757.0	1755.9	1766.8	1767.4
10°	1749.2	1745.8	1747.8	1752.5	1752.8
12.5°	1733.2	1734.3	1731.0	1737.1	1739.7
15°	1714.5	1717.5	1710.5	1717.8	1720.1
17.5°	1690.4	1693.2	1690.4	1701.9	1703.8
20°	1663.2	1666.9	1665.2	1676.9	1680.3
22.5°	1637.5	1637.5	1645.0	1656.8	1659.9
25°	1605.0	1604.1	1611.7	1633.3	1689.5
27.5°	1572.2	1567.5	1576.7	1640.8	1629.1
30°	1534.7	1531.6	1542.5	1534.1	1340.7
32.5°	1496.9	1487.9	1544.5	1269.0	1188.3
35°	1451.0	1443.1	1496.9	1151.4	1158.9
37.5°	1401.4	1398.1	1357.2	1117.8	1133.5
40°	1344.0	1340.9	1137.1	1091.5	1239.3
42.5°	1290.3	1286.9	1024.0	1161.5	1346.3
45°	1229.5	1226.4	980.0	1297.5	1241.8
47.5°	1162.9	1194.5	941.7	1179.9	1203.7
50°	1094.0	1132.1	911.1	1129.5	1118.9
52.5°	1023.4	1054.8	969.1	1050.9	1009.1
55°	948.9	906.9	1037.4	961.5	990.7
57.5°	871.4	756.0	923.2	921.8	938.0
60°	792.1	642.3	875.6	864.7	827.4
62.5°	706.4	579.3	787.4	752.6	750.1
65°	619.9	514.4	690.2	669.5	693.0
67.5°	535.4	446.0	590.8	616.6	488.0
70°	450.5	383.9	513.5	396.5	416.1
72.5°	363.4	330.7	424.8	371.0	324.5
75°	279.2	310.2	309.4	246.4	349.4
77.5°	207.2	275.2	231.3	263.2	296.0
80°	146.4	199.1	151.2	189.3	251.7
82.5°	95.5	122.9	150.9	191.2	162.4
85°	56.8	87.4	135.8	149.5	169.7
87.5°	35.8	63.8	103.0	110.6	109.2
90°	17.9	49.6	71.7	66.4	54.9
92.5°	16.5	36.7	35.6	31.6	28.3
95°	26.0	24.1	18.8	17.9	18.2
97.5°	31.9	18.5	14.6	14.6	14.6
100°	31.1	19.0	14.0	13.4	12.6
102.5°	29.7	23.0	14.0	13.2	12.9
105°	26.0	19.6	14.3	13.4	12.6
107.5°	21.8	17.1	13.7	14.0	13.7
110°	18.2	15.4	13.2	12.6	12.3



TEST NUMBER: P397382

CATALOG NUMBER: VRVT4LED-LD5-18-DR-UNV-LA59-CD2-WL-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	14.8	14.8	12.3	10.6	11.8
115°	12.0	13.7	10.6	9.2	9.5
117.5°	10.1	10.1	12.9	8.4	8.1
120°	8.1	8.4	20.7	7.8	7.6
122.5°	6.7	7.3	12.6	15.4	8.1
125°	5.6	5.0	7.6	23.2	21.8
127.5°	4.8	3.6	7.0	11.8	20.7
130°	3.9	3.1	10.6	6.2	8.7
132.5°	3.4	2.5	12.0	5.9	5.3
135°	2.8	2.2	4.5	10.6	6.2
137.5°	2.2	2.0	3.9	17.9	12.3
140°	2.0	1.7	4.2	4.2	9.2
142.5°	2.0	1.4	2.0	4.2	3.6
145°	1.7	1.4	1.4	5.3	5.0
147.5°	1.4	1.4	1.4	3.6	5.3
150°	1.4	1.4	1.4	1.4	2.2
152.5°	1.4	1.4	1.4	1.1	0.8
155°	1.4	1.4	1.4	1.1	0.8
157.5°	1.4	1.4	1.4	1.1	0.8
160°	1.7	1.4	1.7	1.1	0.8
162.5°	1.7	1.7	1.7	1.4	0.8
165°	1.7	1.7	1.7	1.4	0.8
167.5°	1.7	1.7	1.7	1.4	1.1
170°	1.7	1.7	1.7	1.4	1.1
172.5°	1.7	1.7	2.0	1.7	1.1
175°	2.0	1.7	2.0	1.7	1.4
177.5°	2.0	1.7	2.0	1.7	1.4
180°	1.7	1.7	1.7	1.7	1.7

(END OF REPORT)