

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: P397373

Luminaire Tested: **VRVT4LED-LD5-15-DR-UNV-LA59-CD2-WL-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397373
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: VRVT4LED-LD5-15-DR-UNV-LA59-CD2-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

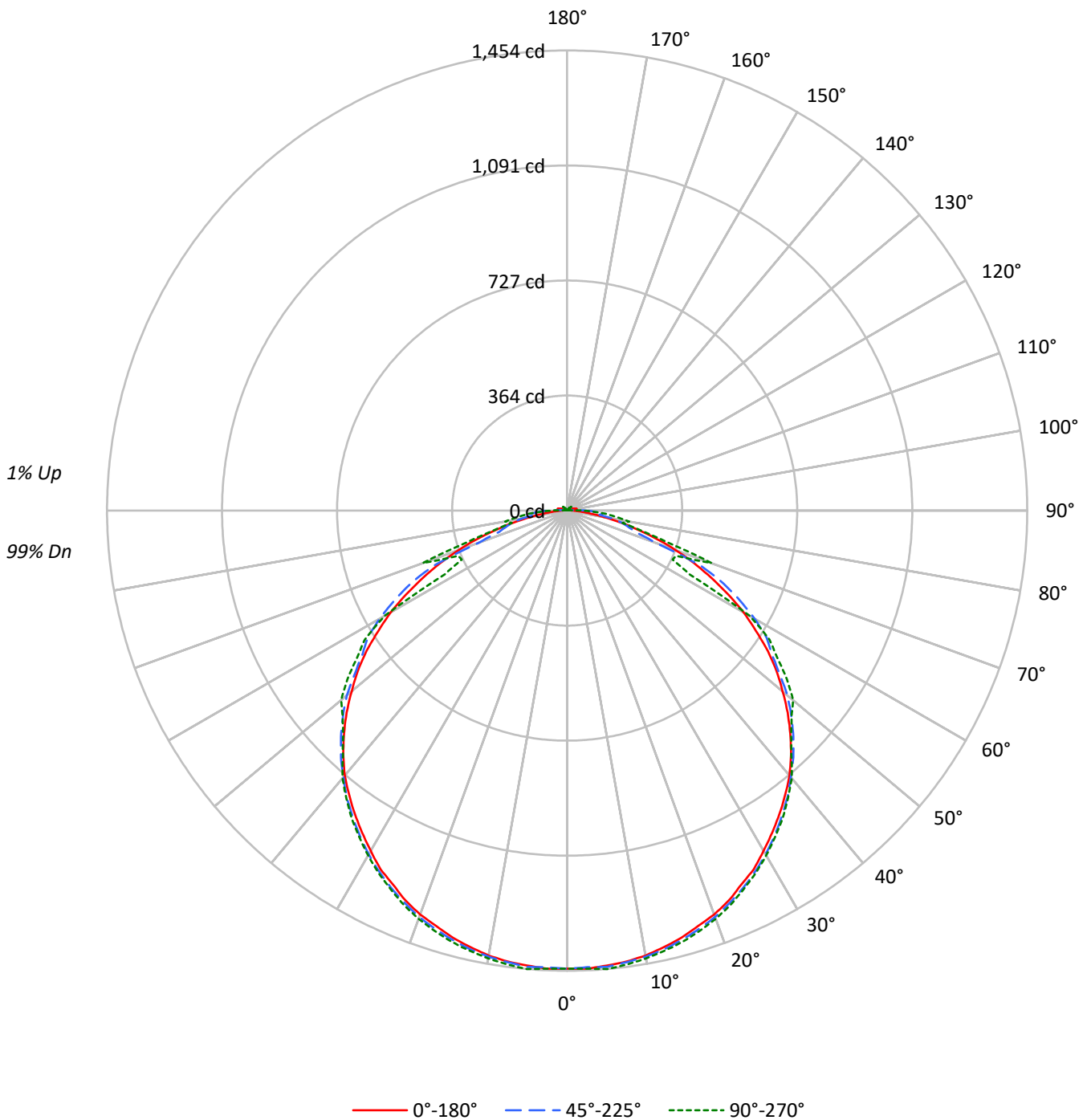
Lumens per Lamp: N/A
Luminaire Lumens: 4264.1 lumens
Efficiency: N/A
Efficacy: 24.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.29 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

Input Watts (W): 172
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: P397373

CATALOG NUMBER: VRVT4LED-LD5-15-DR-UNV-LA59-CD2-WL-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	0
RCR																		
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105	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	84	78	96	88	82	77	85	79	75	81	77	73	78	74	71	69
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	64	60	58
4	82	70	62	55	80	69	61	54	66	59	53	64	58	53	61	56	52	50
5	76	63	54	47	73	62	53	47	59	52	46	57	51	46	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	44	37	32	43	36	32	42	36	31	29
9	56	43	35	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3626	3626	3626
5°	3610	3572	3582
10°	3593	3509	3506
15°	3566	3445	3437
20°	3542	3382	3365
25°	3502	3309	3281
30°	3470	3233	3196
35°	3432	3145	3108
40°	3401	3052	3005
45°	3331	2952	2858
50°	3231	2824	2824
55°	3113	2642	2634
60°	2921	2504	2352
65°	2633	2221	1438
70°	2289	1371	2141
75°	1804	1084	1206
80°	1286	947	1218
85°	808	957	959



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.7	3.2
10°-20°	396.9	9.3
20°-30°	606.7	14.2
30°-40°	739.8	17.4
40°-50°	777.1	18.2
50°-60°	712.4	16.7
60°-70°	486.8	11.4
70°-80°	254.9	6.0
80°-90°	99.8	2.3
90°-100°	20.7	0.5
100°-110°	10.9	0.3
110°-120°	7.7	0.2
120°-130°	5.5	0.1
130°-140°	4.9	0.1
140°-150°	1.5	0.0
150°-160°	0.4	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	1141.3	26.8
0°-40°	1881.1	44.1
0°-60°	3370.6	79.0
0°-90°	4212.1	98.8
90°-120°	39.3	0.9
90°-150°	51.2	1.2
90°-180°	52.0	1.2
0°-180°	4264.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1448	1448	1448	1448	1448	
5°	1443	1447	1447	1451	1454	137
15°	1397	1404	1404	1409	1410	394
25°	1303	1315	1316	1320	1320	602
35°	1170	1184	1181	1187	1187	732
45°	997	1012	1010	1005	1000	768
55°	774	789	788	818	810	689
65°	502	525	545	371	367	498
75°	228	249	201	227	236	247
85°	48	40	114	152	125	54
90°	14	35	58	48	49	10
95°	22	14	12	11	10	20
105°	26	12	7	6	6	27
115°	12	10	6	6	6	13
125°	6	5	12	4	4	5
135°	2	2	11	5	9	2
145°	1	1	1	2	2	1
155°	1	1	1	1	1	0
165°	1	1	1	1	1	0
175°	1	1	1	1	1	0
180°	1	1	1	1	1	



TEST NUMBER: P397373

CATALOG NUMBER: VRVT4LED-LD5-15-DR-UNV-LA59-CD2-WL-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1447.6	1447.6	1447.6	1447.6	1447.6
2.5°	1448.7	1450.1	1444.3	1447.1	1448.5
5°	1443.1	1447.3	1447.1	1451.3	1454.3
7.5°	1437.3	1438.1	1439.2	1445.4	1446.5
10°	1427.5	1433.9	1431.1	1436.7	1436.7
12.5°	1412.9	1420.2	1419.6	1424.7	1424.7
15°	1397.2	1404.5	1403.9	1409.3	1410.4
17.5°	1376.2	1386.6	1386.0	1392.7	1392.7
20°	1358.0	1365.9	1366.7	1372.3	1372.6
22.5°	1334.2	1342.9	1342.1	1347.9	1348.5
25°	1302.9	1314.6	1315.7	1320.5	1319.9
27.5°	1277.4	1285.2	1286.1	1290.0	1290.8
30°	1241.5	1253.9	1254.7	1257.8	1258.1
32.5°	1206.0	1220.3	1218.9	1223.6	1222.8
35°	1169.9	1183.6	1181.3	1186.7	1187.2
37.5°	1132.1	1144.1	1143.0	1147.7	1146.1
40°	1092.9	1102.1	1099.9	1102.9	1104.1
42.5°	1047.2	1058.1	1058.1	1057.6	1048.9
45°	997.1	1011.9	1010.5	1005.2	1000.5
47.5°	945.0	960.4	961.0	954.0	961.8
50°	889.0	908.6	908.3	908.6	931.9
52.5°	834.7	851.8	844.5	880.1	875.6
55°	774.5	789.3	788.5	817.6	809.8
57.5°	707.0	724.9	747.3	752.9	758.3
60°	644.3	660.8	683.8	693.0	664.7
62.5°	573.7	591.1	615.7	584.4	434.6
65°	502.0	525.0	545.4	370.7	367.4
67.5°	433.4	450.5	459.8	326.5	372.4
70°	364.6	378.6	296.5	344.7	485.0
72.5°	296.2	315.0	225.1	399.8	327.6
75°	228.5	248.6	200.8	227.4	236.3
77.5°	169.4	177.5	176.7	176.1	179.2
80°	119.8	100.5	144.8	158.5	199.4
82.5°	78.1	64.7	102.8	148.7	157.1
85°	47.6	39.8	114.2	151.5	124.9
87.5°	29.4	38.4	88.8	89.3	80.6
90°	14.3	35.0	58.0	47.9	48.7
92.5°	12.9	26.3	29.4	23.5	23.2
95°	22.1	14.3	12.3	10.9	10.4
97.5°	29.7	9.0	7.8	8.1	8.1
100°	30.8	8.7	7.6	8.4	9.0
102.5°	29.4	9.5	7.3	6.7	6.2
105°	25.8	11.8	7.3	6.4	5.9
107.5°	22.1	12.6	7.3	6.4	6.2
110°	18.2	12.3	7.0	6.2	5.9



TEST NUMBER: P397373

CATALOG NUMBER: VRVT4LED-LD5-15-DR-UNV-LA59-CD2-WL-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	14.8	11.2	6.7	6.2	5.9
115°	12.0	10.1	6.4	5.6	5.6
117.5°	10.1	9.2	6.2	4.8	4.8
120°	8.4	8.4	5.9	4.2	4.2
122.5°	6.7	6.4	6.4	3.9	3.9
125°	5.6	4.8	12.3	3.9	3.6
127.5°	4.8	3.6	12.3	5.0	3.6
130°	3.9	3.1	5.9	12.9	5.6
132.5°	3.1	2.5	7.3	15.7	17.9
135°	2.5	2.0	10.6	5.0	9.0
137.5°	2.0	1.7	3.1	7.0	4.5
140°	1.7	1.4	1.7	15.4	9.2
142.5°	1.4	1.1	1.4	3.4	12.0
145°	1.1	1.1	1.1	1.7	2.0
147.5°	1.1	1.1	1.1	1.4	1.1
150°	1.1	0.8	1.1	0.8	0.8
152.5°	0.8	1.1	1.1	0.6	0.6
155°	1.1	1.1	1.1	0.8	0.6
157.5°	1.1	1.1	1.1	0.8	0.6
160°	1.1	1.1	1.1	0.8	0.6
162.5°	1.1	1.1	1.1	0.8	0.6
165°	1.1	1.1	1.4	0.8	0.6
167.5°	1.1	1.4	1.4	1.1	0.6
170°	1.1	1.4	1.4	1.1	0.8
172.5°	1.1	1.4	1.4	1.1	0.8
175°	1.4	1.4	1.4	1.1	0.8
177.5°	1.4	1.4	1.4	1.1	0.8
180°	1.1	1.1	1.1	1.1	1.1

(END OF REPORT)