

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: P397379

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397379
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-7)
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-PC-UNV-LA59-CD2-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

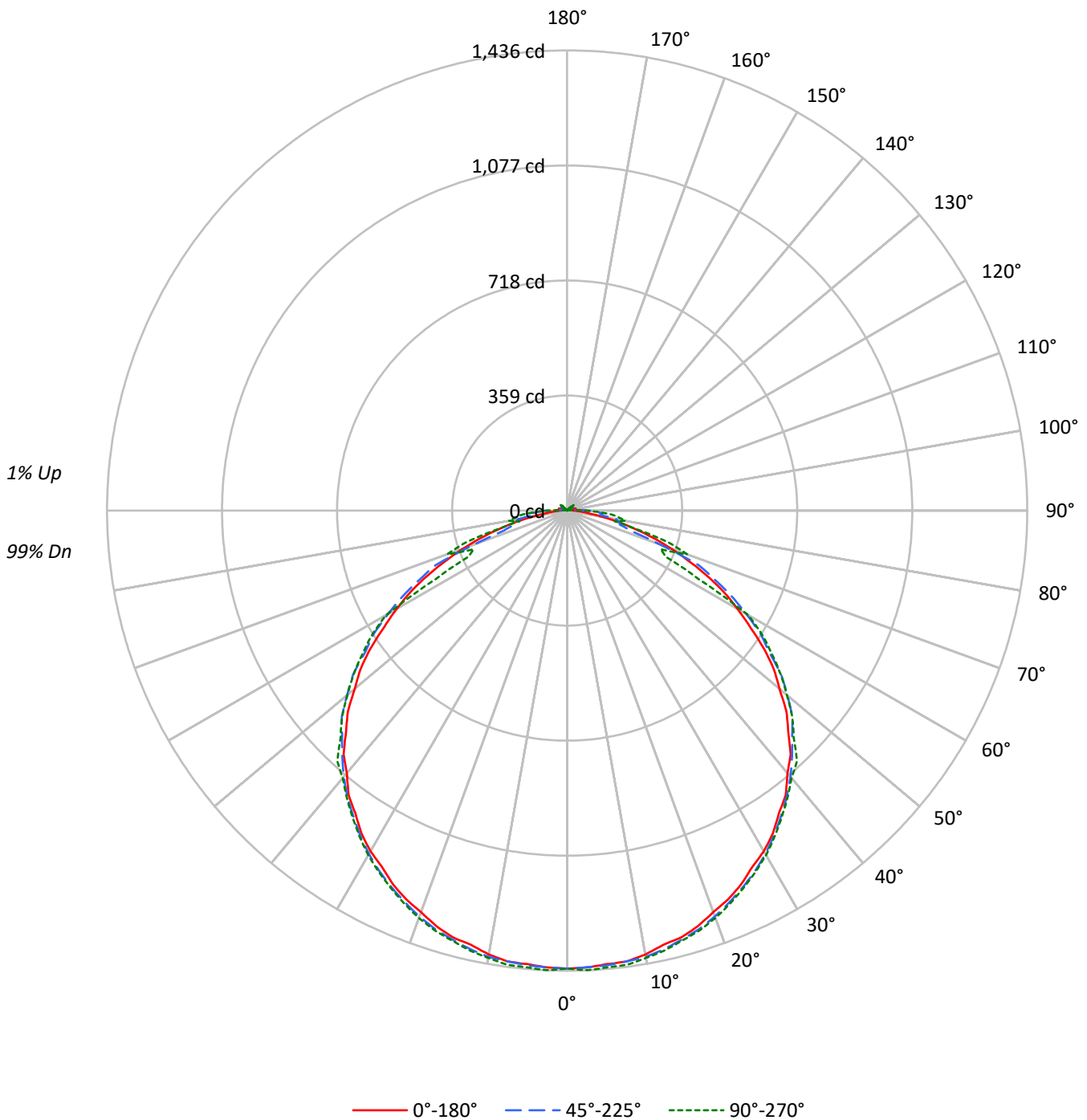
Lumens per Lamp: N/A
Luminaire Lumens: 4172.1 lumens
Efficiency: N/A
Efficacy: 24.3 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

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: P397379

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

Luminous Intensity Polar Plot





TEST NUMBER: P397379

CATALOG NUMBER: VRVT4LED-LD5-15-PC-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	104	99	96	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	91	84	78	96	89	82	77	85	79	75	81	77	73	78	74	71	69
3	90	80	71	65	87	78	70	64	75	68	63	72	66	62	69	64	60	58
4	82	71	62	55	80	69	61	55	66	59	54	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	55	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	50	44	40	38
7	65	51	43	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3580	3580	3580
5°	3554	3517	3524
10°	3540	3467	3460
15°	3518	3399	3385
20°	3478	3335	3317
25°	3458	3261	3232
30°	3431	3189	3154
35°	3381	3099	3056
40°	3328	3009	2966
45°	3258	2901	2857
50°	3143	2789	2713
55°	3008	2576	2536
60°	2787	2361	2312
65°	2529	2063	1326
70°	2159	1393	1756
75°	1696	920	1131
80°	1176	1013	1125
85°	803	929	1067



TEST NUMBER: P397379

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.8	3.3
10°-20°	391.6	9.4
20°-30°	598.1	14.3
30°-40°	729.7	17.5
40°-50°	767.1	18.4
50°-60°	687.9	16.5
60°-70°	460.9	11.0
70°-80°	237.1	5.7
80°-90°	102.6	2.5
90°-100°	25.1	0.6
100°-110°	10.8	0.3
110°-120°	7.6	0.2
120°-130°	9.2	0.2
130°-140°	6.5	0.2
140°-150°	1.2	0.0
150°-160°	0.4	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	1125.5	27.0
0°-40°	1855.2	44.5
0°-60°	3310.2	79.3
0°-90°	4110.9	98.5
90°-120°	43.5	1.0
90°-150°	60.4	1.4
90°-180°	61.0	1.5
0°-180°	4172.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1429	1429	1429	1429	1429	
5°	1421	1425	1425	1430	1431	135
15°	1378	1389	1385	1391	1389	388
25°	1286	1296	1297	1301	1300	592
35°	1152	1168	1164	1168	1167	723
45°	976	996	993	1006	1000	753
55°	748	762	769	779	780	666
65°	482	495	507	358	339	476
75°	215	222	170	225	222	232
85°	47	39	111	150	139	51
90°	19	38	68	60	58	11
95°	20	20	18	16	14	18
105°	24	13	7	6	6	25
115°	13	12	6	4	4	13
125°	6	6	16	9	4	6
135°	3	2	6	16	10	2
145°	1	1	1	1	2	1
155°	1	1	1	1	0	0
165°	1	1	1	1	1	0
175°	1	1	1	1	1	0
180°	1	1	1	1	1	



TEST NUMBER: P397379

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1429.1	1429.1	1429.1	1429.1	1429.1
2.5°	1426.8	1428.8	1426.5	1433.3	1435.5
5°	1420.9	1425.4	1424.6	1430.2	1431.0
7.5°	1419.0	1419.9	1419.0	1428.5	1429.6
10°	1406.7	1413.7	1414.0	1417.9	1417.6
12.5°	1387.7	1397.7	1401.4	1405.3	1405.9
15°	1378.4	1388.8	1385.4	1391.3	1389.1
17.5°	1359.1	1370.9	1369.2	1372.5	1373.7
20°	1333.6	1351.3	1347.9	1351.3	1352.9
22.5°	1313.2	1326.3	1323.0	1327.7	1328.0
25°	1286.3	1296.4	1296.9	1301.4	1300.3
27.5°	1252.4	1267.8	1268.7	1270.9	1271.7
30°	1227.5	1239.3	1237.6	1239.5	1241.5
32.5°	1194.7	1207.3	1201.7	1206.8	1205.7
35°	1152.5	1167.9	1164.2	1168.1	1167.3
37.5°	1119.7	1128.7	1125.6	1132.0	1129.8
40°	1069.3	1086.7	1084.4	1088.9	1089.5
42.5°	1032.6	1042.1	1038.5	1051.4	1061.5
45°	975.5	996.2	992.9	1006.3	999.9
47.5°	927.9	940.5	953.7	944.4	953.1
50°	864.6	884.2	896.8	899.1	895.1
52.5°	813.4	824.9	842.2	837.7	840.3
55°	748.4	762.4	768.9	778.9	779.8
57.5°	677.6	699.7	715.4	722.4	722.4
60°	614.6	628.9	644.8	657.4	653.2
62.5°	551.6	563.9	578.2	577.6	461.2
65°	482.1	495.0	506.8	357.8	338.8
67.5°	410.5	423.1	443.8	299.3	315.0
70°	343.8	348.3	301.3	289.8	397.9
72.5°	277.8	286.2	205.8	356.4	333.2
75°	214.8	222.0	170.5	225.4	221.5
77.5°	161.0	167.4	166.9	191.2	151.2
80°	109.5	86.5	154.8	155.7	184.2
82.5°	71.7	63.3	103.3	164.6	161.3
85°	47.3	38.9	110.9	149.8	138.9
87.5°	30.5	35.6	94.1	99.7	95.8
90°	18.8	37.5	67.5	60.5	57.7
92.5°	15.4	30.8	37.8	34.4	29.7
95°	19.9	19.9	17.9	15.7	13.7
97.5°	25.2	11.8	9.8	9.2	9.0
100°	27.2	10.6	7.8	7.3	6.7
102.5°	26.6	12.0	7.6	6.7	6.4
105°	24.4	13.2	7.3	6.2	5.6
107.5°	21.3	13.2	7.0	5.6	5.3
110°	18.2	12.6	6.4	5.0	4.8



TEST NUMBER: P397379

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

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	15.4	11.8	6.2	4.8	4.5
115°	12.9	11.8	6.2	4.2	3.9
117.5°	10.9	11.2	6.2	3.6	3.4
120°	9.2	8.7	8.4	3.4	3.1
122.5°	7.6	7.3	21.0	3.9	3.1
125°	6.4	5.6	15.7	9.0	4.2
127.5°	5.3	4.2	8.7	28.3	18.2
130°	4.2	3.4	13.2	17.6	26.6
132.5°	3.6	2.8	14.0	8.4	13.4
135°	2.8	2.2	5.9	16.2	9.5
137.5°	2.2	2.0	2.5	19.3	21.3
140°	1.7	1.7	1.7	7.8	15.4
142.5°	1.4	1.4	1.4	2.2	5.0
145°	1.4	1.1	1.1	1.4	1.7
147.5°	1.1	1.1	1.1	1.1	1.1
150°	1.1	1.1	1.1	1.1	1.1
152.5°	0.8	1.1	1.1	0.6	0.8
155°	1.1	1.1	1.1	0.6	0.3
157.5°	1.1	1.1	1.1	0.6	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	0.8	0.6
170°	1.1	1.4	1.4	0.8	0.6
172.5°	1.1	1.4	1.4	0.8	0.6
175°	1.4	1.4	1.4	0.8	0.8
177.5°	1.4	1.4	1.4	0.8	0.8
180°	1.1	1.1	1.1	1.1	1.1

(END OF REPORT)