

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: P397376

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397376
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-6)
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-DRF-UNV-LA59-CD2-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

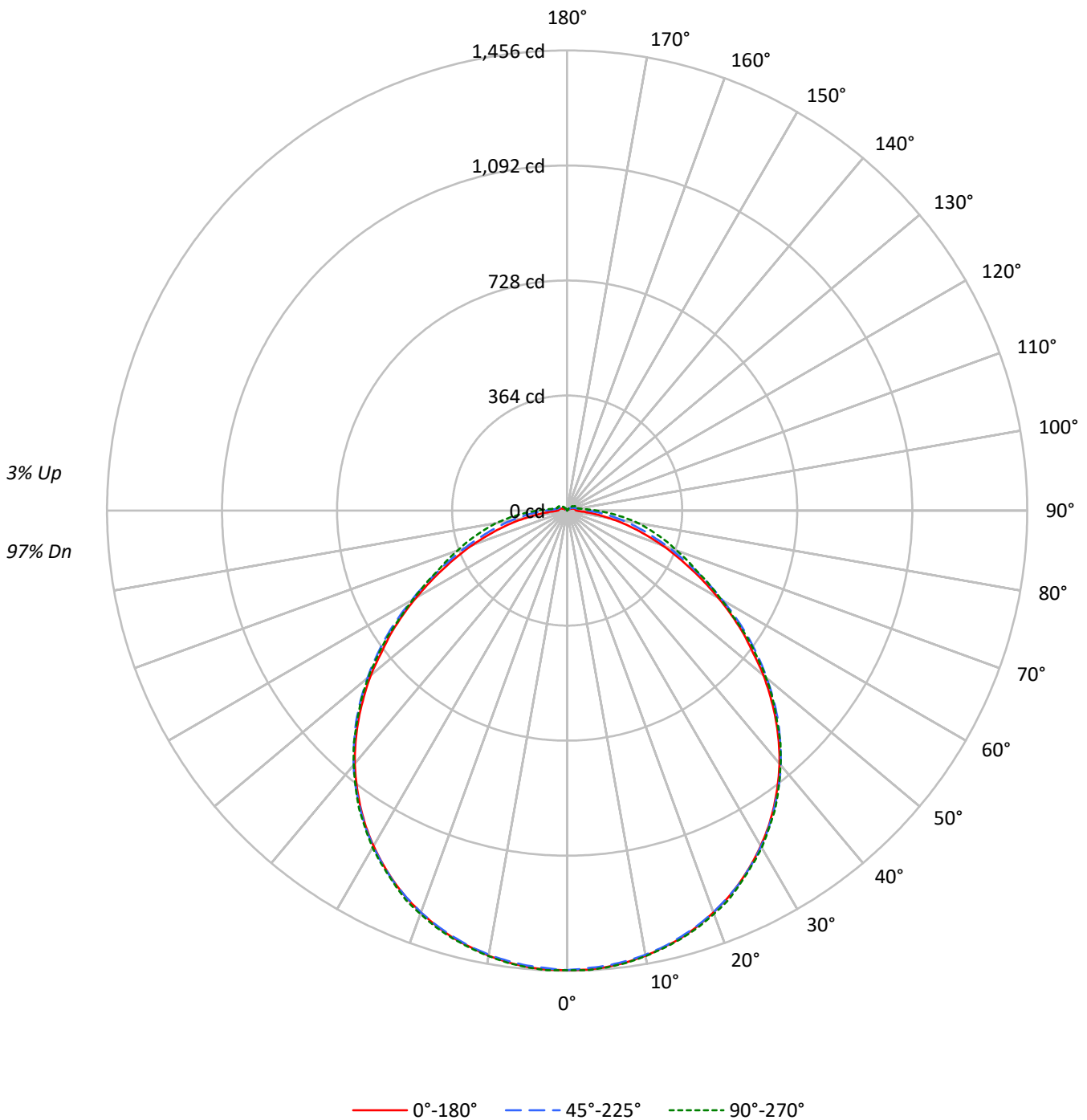
Lumens per Lamp: N/A
Luminaire Lumens: 4153.5 lumens
Efficiency: N/A
Efficacy: 24.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

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

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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	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	97
1	108	103	99	95	105	100	96	93	96	92	89	91	88	86	87	85	83	81
2	98	90	83	77	95	88	81	76	84	78	74	80	76	72	76	73	70	67
3	90	79	71	64	87	77	70	64	74	67	62	71	65	61	68	63	59	57
4	82	70	61	55	80	69	60	54	66	59	53	63	57	52	61	55	51	49
5	76	63	54	47	73	61	53	47	59	52	46	57	50	45	55	49	44	42
6	70	57	48	41	68	55	47	41	53	46	40	51	45	40	50	44	39	37
7	65	51	43	36	63	50	42	36	49	41	36	47	40	35	45	39	35	33
8	60	47	38	33	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	29	38	33	28	26
10	53	40	32	27	51	39	32	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3643	3643	3643
5°	3626	3568	3573
10°	3600	3498	3493
15°	3571	3424	3415
20°	3529	3347	3330
25°	3485	3262	3232
30°	3424	3162	3130
35°	3347	3046	3008
40°	3253	2919	2860
45°	3117	2759	2683
50°	2950	2565	2489
55°	2742	2346	2252
60°	2505	2081	1995
65°	2247	1818	1771
70°	2009	1580	1624
75°	1733	1364	1507
80°	1401	1170	1384
85°	1036	965	1176



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.7	3.3
10°-20°	394.8	9.5
20°-30°	598.2	14.4
30°-40°	716.3	17.2
40°-50°	725.0	17.5
50°-60°	619.4	14.9
60°-70°	443.6	10.7
70°-80°	272.6	6.6
80°-90°	125.4	3.0
90°-100°	47.6	1.1
100°-110°	29.6	0.7
110°-120°	21.7	0.5
120°-130°	13.3	0.3
130°-140°	6.1	0.1
140°-150°	1.6	0.0
150°-160°	0.3	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	1130.8	27.2
0°-40°	1847.1	44.5
0°-60°	3191.5	76.8
0°-90°	4033.0	97.1
90°-120°	98.9	2.4
90°-150°	119.9	2.9
90°-180°	120.0	2.9
0°-180°	4153.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1454	1454	1454	1454	1454	
5°	1450	1450	1445	1450	1451	138
15°	1399	1401	1395	1401	1401	395
25°	1296	1298	1297	1301	1300	597
35°	1141	1148	1144	1149	1149	713
45°	933	940	944	945	939	719
55°	682	691	700	693	692	609
65°	428	438	447	452	452	427
75°	220	229	253	287	295	234
85°	61	75	115	147	153	65
90°	29	37	67	89	93	17
95°	27	28	43	52	54	22
105°	23	22	29	32	33	24
115°	14	14	23	29	30	14
125°	7	6	15	22	24	7
135°	3	3	6	13	15	3
145°	2	1	1	4	6	1
155°	1	1	1	0	0	1
165°	1	1	1	0	0	0
175°	1	1	1	1	1	0
180°	1	1	1	1	1	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1454.1	1454.1	1454.1	1454.1	1454.1
2.5°	1453.8	1454.1	1449.3	1453.8	1455.5
5°	1449.6	1449.9	1445.4	1449.9	1450.7
7.5°	1441.7	1442.0	1437.5	1442.3	1442.9
10°	1430.3	1431.4	1426.9	1431.1	1431.4
12.5°	1415.1	1417.1	1413.2	1417.7	1417.4
15°	1399.2	1400.6	1395.3	1400.6	1401.4
17.5°	1377.6	1378.5	1375.9	1381.3	1381.8
20°	1353.0	1354.1	1352.7	1358.0	1358.3
22.5°	1327.2	1327.8	1326.1	1331.1	1333.7
25°	1296.4	1297.8	1297.3	1301.2	1300.1
27.5°	1262.0	1265.3	1262.8	1267.9	1265.9
30°	1225.3	1229.5	1227.3	1231.7	1232.0
32.5°	1185.3	1188.6	1187.8	1190.9	1189.7
35°	1141.0	1147.7	1144.1	1148.6	1148.9
37.5°	1094.5	1100.7	1100.1	1102.7	1099.9
40°	1045.5	1049.7	1051.7	1051.4	1050.6
42.5°	990.7	998.8	998.2	998.5	998.8
45°	933.3	940.3	944.2	944.7	939.1
47.5°	872.5	881.7	885.7	885.7	882.3
50°	811.5	820.1	824.9	823.2	821.3
52.5°	742.6	758.5	763.3	760.2	755.7
55°	682.1	690.8	700.3	693.3	692.4
57.5°	617.1	627.8	633.6	630.8	622.7
60°	552.4	562.2	568.4	567.0	563.6
62.5°	488.3	500.1	506.8	505.1	507.6
65°	428.4	438.5	446.6	451.6	452.5
67.5°	371.8	382.2	391.7	404.3	410.8
70°	320.0	327.9	341.6	362.6	367.9
72.5°	267.4	277.2	294.0	322.8	332.6
75°	219.5	229.0	252.8	286.7	295.1
77.5°	174.7	183.7	214.2	250.9	260.4
80°	130.5	143.6	178.9	215.6	226.5
82.5°	93.8	107.0	145.0	180.9	190.4
85°	61.0	75.3	115.1	146.7	153.2
87.5°	38.4	51.2	88.8	115.6	122.1
90°	29.1	37.2	67.2	88.8	93.2
92.5°	27.4	30.8	52.1	68.0	70.8
95°	26.9	28.3	42.8	52.4	53.8
97.5°	26.6	26.3	37.5	43.1	44.0
100°	25.8	24.6	33.6	37.5	37.5
102.5°	24.9	23.0	30.8	34.4	34.4
105°	23.0	21.6	29.1	32.5	32.8
107.5°	21.0	20.2	27.4	31.4	31.6
110°	18.8	18.2	26.0	30.2	31.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	16.5	16.0	24.6	29.4	30.5
115°	14.3	14.0	23.0	28.6	30.0
117.5°	12.3	11.8	21.3	27.2	29.1
120°	10.4	9.5	19.3	25.8	27.7
122.5°	8.7	7.6	17.1	24.1	26.3
125°	7.3	5.9	14.8	22.1	24.4
127.5°	6.2	4.8	12.6	19.9	22.4
130°	5.0	3.9	10.4	17.6	20.2
132.5°	4.2	3.4	8.4	15.1	17.6
135°	3.4	2.8	6.2	12.9	15.4
137.5°	2.8	2.2	4.2	10.4	12.9
140°	2.2	2.0	2.5	8.1	10.4
142.5°	2.0	1.4	1.1	6.2	7.8
145°	1.7	1.1	0.6	3.9	5.6
147.5°	1.4	1.1	0.6	2.2	3.6
150°	1.1	0.8	0.6	0.8	2.0
152.5°	1.1	0.8	0.6	0.0	0.3
155°	1.1	1.1	0.6	0.3	0.0
157.5°	1.1	1.1	0.6	0.3	0.0
160°	1.1	1.1	0.8	0.3	0.0
162.5°	1.1	1.1	0.8	0.3	0.3
165°	1.1	1.1	0.8	0.3	0.3
167.5°	1.1	1.1	0.8	0.3	0.3
170°	1.4	1.1	0.8	0.3	0.3
172.5°	1.4	1.1	0.8	0.6	0.3
175°	1.4	1.1	0.8	0.6	0.6
177.5°	1.4	1.4	0.8	0.6	0.6
180°	0.8	0.8	0.8	0.8	0.8

(END OF REPORT)