

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: P397402

Luminaire Tested: **VRVT4LED-LD5-30-DR-UNV-LR63-CD3-WL-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397402
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-14)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: VRVT4LED-LD5-30-DR-UNV-LR63-CD3-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

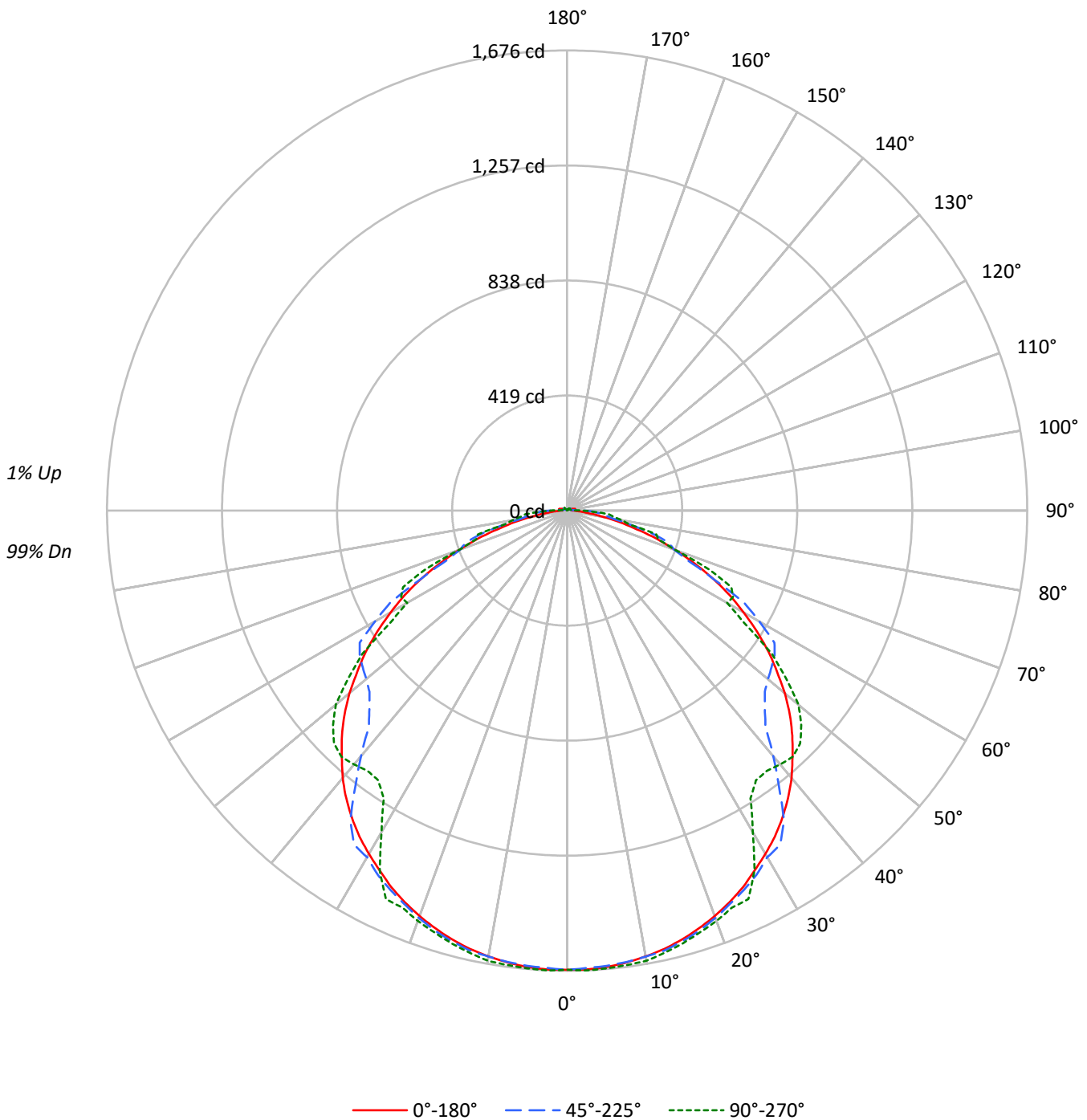
Lumens per Lamp: N/A
Luminaire Lumens: 4887.7 lumens
Efficiency: N/A
Efficacy: 8.1 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.19 / 1.32
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

Input Watts (W): 601.9
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	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	94	97	93	90	92	90	87	89	86	84	82
2	98	90	83	78	96	88	82	76	84	79	74	81	76	73	78	74	71	68
3	90	79	71	64	87	77	70	64	74	68	62	71	66	61	69	64	60	58
4	82	70	61	55	80	69	60	54	66	59	53	63	57	52	61	56	51	49
5	75	63	54	47	73	61	53	47	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	47	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	29	40	33	28	38	32	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°	4190	4190	4190
5°	4174	4109	4122
10°	4150	4044	4063
15°	4127	3984	3975
20°	4099	3907	3899
25°	4071	3833	3882
30°	4035	3756	3435
35°	4008	3665	3139
40°	3958	3243	3286
45°	3874	2974	3429
50°	3762	2970	3333
55°	3598	3089	2962
60°	3363	2956	2381
65°	3069	2386	2580
70°	2631	1915	1838
75°	2071	1720	1721
80°	1480	1119	1228
85°	942	1010	1169



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.8	3.2
10°-20°	458.7	9.4
20°-30°	701.7	14.4
30°-40°	820.9	16.8
40°-50°	872.1	17.8
50°-60°	803.5	16.4
60°-70°	574.4	11.8
70°-80°	311.3	6.4
80°-90°	117.1	2.4
90°-100°	27.2	0.6
100°-110°	16.2	0.3
110°-120°	10.7	0.2
120°-130°	8.0	0.2
130°-140°	4.7	0.1
140°-150°	1.4	0.0
150°-160°	0.5	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	1319.3	27.0
0°-40°	2140.2	43.8
0°-60°	3815.7	78.1
0°-90°	4818.6	98.6
90°-120°	54.0	1.1
90°-150°	68.1	1.4
90°-180°	69.0	1.4
0°-180°	4887.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1673	1673	1673	1673	1673	
5°	1668	1669	1664	1670	1674	159
15°	1617	1621	1624	1630	1631	457
25°	1514	1519	1524	1541	1562	698
35°	1366	1368	1377	1196	1199	854
45°	1160	1165	1018	1150	1200	894
55°	895	865	922	946	911	797
65°	585	530	586	618	659	577
75°	262	274	319	305	337	284
85°	56	76	120	134	152	62
90°	18	44	64	56	58	12
95°	22	21	17	18	18	20
105°	25	19	13	12	12	26
115°	12	12	10	9	9	12
125°	6	5	11	11	9	5
135°	3	2	6	7	14	2
145°	1	1	1	3	3	1
155°	1	1	1	1	0	1
165°	1	1	1	1	1	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°	1672.7	1672.7	1672.7	1672.7	1672.7
2.5°	1673.0	1673.1	1667.7	1673.0	1676.4
5°	1668.5	1668.8	1664.5	1670.3	1673.5
7.5°	1660.2	1662.4	1658.4	1666.3	1669.3
10°	1649.0	1650.7	1649.6	1661.5	1664.8
12.5°	1635.4	1636.7	1640.7	1646.3	1648.7
15°	1617.3	1621.0	1623.5	1630.3	1631.1
17.5°	1595.9	1601.6	1603.7	1608.0	1610.4
20°	1571.4	1578.1	1578.9	1586.7	1590.4
22.5°	1544.3	1550.1	1550.4	1561.5	1565.8
25°	1514.4	1518.7	1524.3	1540.8	1561.6
27.5°	1477.9	1484.2	1494.6	1509.6	1477.6
30°	1443.9	1449.8	1457.8	1406.6	1352.2
32.5°	1407.7	1409.9	1443.2	1301.1	1242.6
35°	1366.4	1368.2	1377.0	1195.7	1199.1
37.5°	1321.6	1319.4	1267.1	1159.7	1194.7
40°	1272.0	1273.3	1168.5	1148.2	1207.2
42.5°	1214.9	1220.7	1068.7	1158.7	1216.3
45°	1159.9	1165.3	1017.9	1150.3	1200.3
47.5°	1100.2	1112.0	976.3	1153.6	1156.5
50°	1035.1	1062.4	955.1	1093.8	1099.7
52.5°	962.7	978.1	938.3	1026.6	1005.0
55°	895.2	865.1	922.1	945.8	910.7
57.5°	818.9	759.1	895.4	837.1	766.9
60°	741.8	668.5	807.2	700.0	672.8
62.5°	666.9	594.9	726.4	605.6	681.5
65°	585.0	529.8	586.1	617.6	659.2
67.5°	499.8	463.7	475.7	583.9	557.6
70°	419.0	394.4	414.1	451.4	416.5
72.5°	340.6	335.7	386.6	367.0	346.4
75°	262.4	273.6	318.6	304.8	337.0
77.5°	196.5	212.0	233.4	261.3	231.0
80°	137.9	159.7	171.0	168.6	201.0
82.5°	87.5	105.4	140.5	154.7	170.2
85°	55.5	75.7	120.5	134.1	152.2
87.5°	34.2	61.8	95.7	100.3	89.9
90°	17.9	44.5	63.8	56.3	58.4
92.5°	15.2	33.3	33.3	28.3	26.1
95°	22.1	21.0	16.8	18.1	18.1
97.5°	29.3	16.3	14.9	17.0	17.8
100°	29.8	16.3	13.9	14.1	14.2
102.5°	28.0	18.7	13.1	12.6	12.2
105°	24.6	18.7	13.1	12.3	12.0
107.5°	20.8	17.1	12.3	12.5	12.5
110°	17.3	15.0	12.0	11.2	11.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	14.2	13.3	11.4	10.2	10.4
115°	11.8	11.8	10.2	9.3	9.3
117.5°	9.8	10.4	10.6	8.3	8.3
120°	8.0	8.5	11.2	7.7	7.8
122.5°	6.7	6.6	13.6	10.2	7.5
125°	5.6	5.0	10.6	11.2	9.1
127.5°	4.6	3.8	13.1	13.9	12.8
130°	3.8	3.2	7.0	10.6	12.5
132.5°	3.2	2.6	6.9	16.2	10.7
135°	2.7	2.2	6.2	6.6	14.2
137.5°	2.2	1.8	3.0	7.0	5.6
140°	1.9	1.6	2.2	8.8	8.8
142.5°	1.6	1.4	1.6	3.2	5.4
145°	1.4	1.3	1.3	2.6	2.7
147.5°	1.3	1.1	1.1	2.4	2.4
150°	1.1	1.1	1.1	1.6	2.1
152.5°	1.1	1.1	1.1	1.0	1.0
155°	1.1	1.1	1.1	0.8	0.5
157.5°	1.1	1.1	1.3	1.0	0.5
160°	1.3	1.3	1.3	1.0	0.6
162.5°	1.3	1.3	1.3	1.0	0.6
165°	1.3	1.3	1.4	1.1	0.6
167.5°	1.3	1.4	1.4	1.1	0.8
170°	1.3	1.4	1.4	1.1	0.8
172.5°	1.3	1.4	1.4	1.1	0.8
175°	1.4	1.4	1.4	1.3	1.0
177.5°	1.4	1.4	1.4	1.3	1.0
180°	1.3	1.3	1.3	1.3	1.3

(END OF REPORT)