

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: P397455

Luminaire Tested: **VRVT4S-LD5-9-DR-LG52-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397455
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1801-511-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: VRVT4S-LD5-9-DR-LG52-CD1-U
Description:
Light Source: -
Ballast/Driver: -

Summary

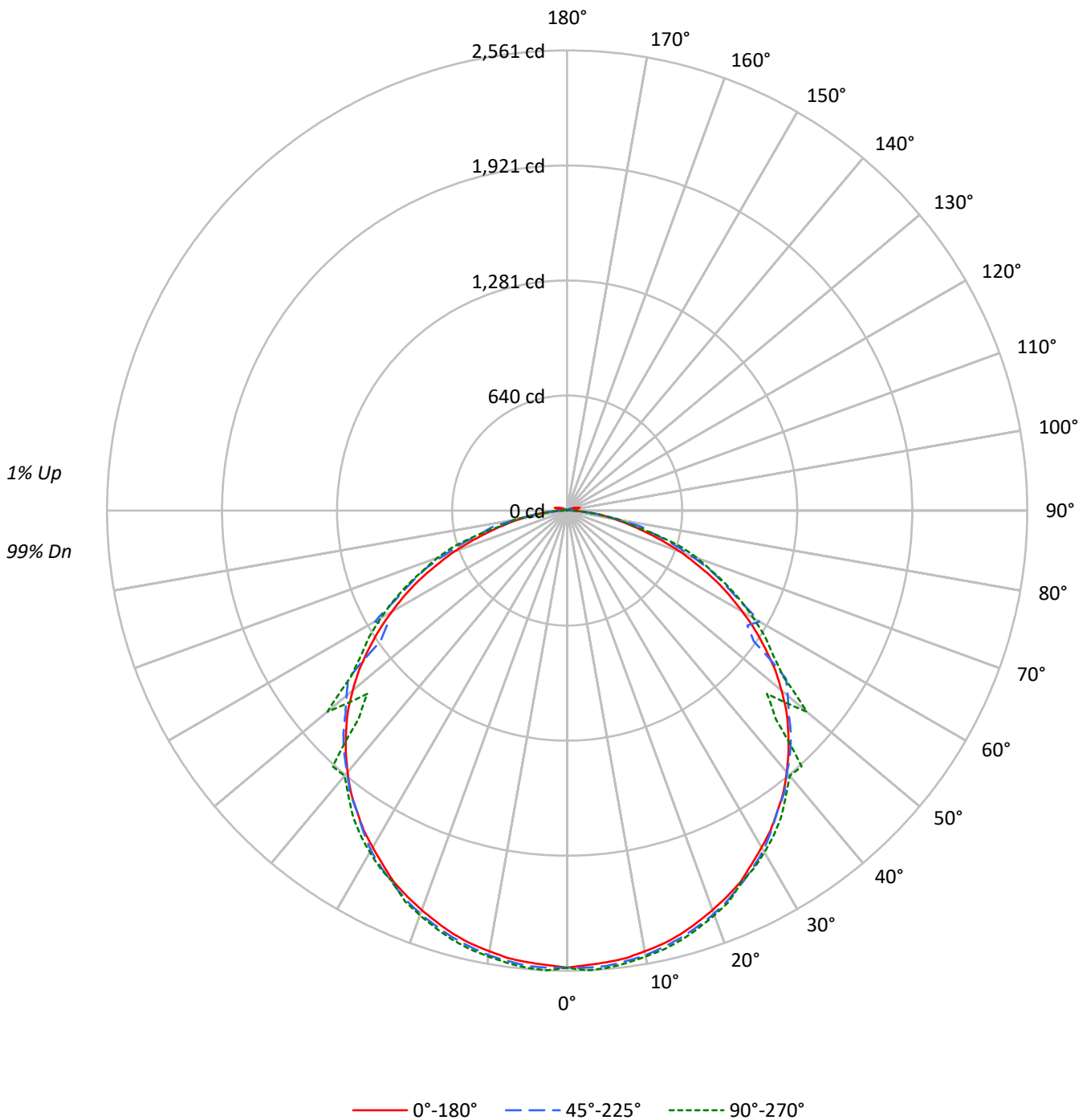
Lumens per Lamp: N/A
Luminaire Lumens: 7515.1 lumens
Efficiency: N/A
Efficacy: 51.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

Input Watts (W): 146.4
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	111	111	111		106	106	106		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	83	78	96	88	82	77	84	79	75		81	77	73		78	74	71	69
3	90	79	71	64	87	77	70	64	74	68	62		71	66	61		69	64	60	58
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	51	46		57	50	45		55	49	45	42
6	70	56	47	41	68	55	47	40	53	46	40		51	45	39		50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35		47	40	35		45	39	35	33
8	60	46	38	32	58	46	37	32	44	37	31		43	36	31		42	35	31	29
9	56	42	34	29	54	42	34	29	41	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26		37	30	25		36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12139	12139	12139
5°	11960	11922	11993
10°	11816	11664	11732
15°	11681	11391	11500
20°	11509	11121	11223
25°	11375	10819	10867
30°	11150	10525	10676
35°	10966	10128	10422
40°	10756	9816	10056
45°	10488	9524	9004
50°	10115	9180	10134
55°	9584	7789	8739
60°	8899	8239	8164
65°	8088	7098	7389
70°	7033	6026	6542
75°	5592	4763	4888
80°	4303	3260	3551
85°	2714	1553	1577



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.6	3.2
10°-20°	693.9	9.2
20°-30°	1056.3	14.1
30°-40°	1286.8	17.1
40°-50°	1343.9	17.9
50°-60°	1229.5	16.4
60°-70°	939.0	12.5
70°-80°	511.9	6.8
80°-90°	138.3	1.8
90°-100°	21.2	0.3
100°-110°	25.7	0.3
110°-120°	15.5	0.2
120°-130°	7.4	0.1
130°-140°	2.5	0.0
140°-150°	0.8	0.0
150°-160°	0.4	0.0
160°-170°	0.4	0.0
170°-180°	0.2	0.0
0°-30°	1991.8	26.5
0°-40°	3278.6	43.6
0°-60°	5852.0	77.9
0°-90°	7441.2	99.0
90°-120°	62.4	0.8
90°-150°	73.0	1.0
90°-180°	74.0	1.0
0°-180°	7515.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2544	2544	2544	2544	2544	
5°	2523	2534	2543	2552	2554	240
15°	2441	2450	2459	2468	2472	689
25°	2282	2289	2293	2299	2286	1049
35°	2041	2052	2041	2067	2078	1278
45°	1741	1749	1762	1852	1642	1342
55°	1350	1358	1268	1406	1397	1206
65°	901	928	963	966	978	889
75°	439	473	498	497	494	475
85°	118	118	109	106	105	128
90°	20	34	32	31	30	15
95°	19	18	18	15	15	23
105°	62	82	10	11	11	62
115°	30	15	20	7	8	31
125°	14	11	6	3	4	13
135°	6	5	2	2	2	5
145°	2	2	1	1	1	2
155°	1	1	1	1	1	0
165°	2	2	2	2	1	0
175°	2	2	2	2	2	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2544.0	2544.0	2544.0	2544.0	2544.0
2.5°	2532.0	2538.4	2546.4	2557.6	2560.8
5°	2523.2	2533.6	2543.2	2552.0	2554.4
7.5°	2512.0	2524.8	2528.8	2540.0	2540.0
10°	2490.4	2504.8	2512.8	2520.0	2520.0
12.5°	2469.6	2480.0	2487.2	2496.0	2500.0
15°	2440.8	2450.4	2459.2	2468.0	2472.0
17.5°	2404.0	2419.2	2424.8	2432.0	2435.2
20°	2365.6	2380.0	2388.0	2394.4	2396.0
22.5°	2324.8	2336.0	2344.0	2346.4	2355.2
25°	2281.6	2288.8	2292.8	2299.2	2286.4
27.5°	2220.8	2234.4	2240.0	2234.4	2247.2
30°	2164.0	2177.6	2184.0	2185.6	2196.0
32.5°	2108.0	2117.6	2114.4	2126.4	2141.6
35°	2040.8	2052.0	2040.8	2067.2	2078.4
37.5°	1977.6	1983.2	1984.0	2010.4	1999.2
40°	1900.8	1908.0	1904.0	1920.8	1927.2
42.5°	1823.2	1829.6	1836.8	1849.6	1931.2
45°	1740.8	1748.8	1761.6	1852.0	1642.4
47.5°	1655.2	1656.8	1673.6	1535.2	1508.8
50°	1557.6	1556.8	1602.4	1457.6	1740.8
52.5°	1460.0	1459.2	1535.2	1604.0	1514.4
55°	1349.6	1357.6	1268.0	1406.4	1396.8
57.5°	1242.4	1249.6	1188.8	1284.8	1305.6
60°	1126.4	1154.4	1234.4	1196.8	1197.6
62.5°	1016.0	1040.8	1076.0	1088.0	1092.8
65°	900.8	928.0	963.2	966.4	978.4
67.5°	778.4	817.6	860.0	854.4	865.6
70°	670.4	622.4	726.4	731.2	766.4
72.5°	548.8	606.4	614.4	512.0	659.2
75°	439.2	472.8	497.6	496.8	493.6
77.5°	348.0	370.4	430.4	387.2	350.4
80°	263.2	269.6	285.6	284.0	298.4
82.5°	198.4	188.8	194.4	192.0	169.6
85°	117.6	118.4	108.8	105.6	104.8
87.5°	48.8	54.4	52.8	50.4	54.4
90°	20.0	33.6	32.0	31.2	30.4
92.5°	22.4	24.0	22.4	19.2	16.8
95°	19.2	17.6	18.4	15.2	15.2
97.5°	26.4	14.4	14.4	12.8	12.0
100°	52.8	12.8	13.6	11.2	11.2
102.5°	70.4	13.6	12.0	11.2	12.0
105°	61.6	81.6	10.4	11.2	11.2
107.5°	52.0	48.0	9.6	10.4	11.2
110°	44.0	29.6	8.0	9.6	10.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	36.0	20.8	7.2	8.0	9.6
115°	30.4	15.2	20.0	7.2	8.0
117.5°	25.6	16.0	21.6	6.4	7.2
120°	20.8	32.8	11.2	5.6	5.6
122.5°	16.8	15.2	8.0	4.0	4.8
125°	13.6	11.2	5.6	3.2	4.0
127.5°	11.2	8.8	4.0	2.4	3.2
130°	9.6	8.0	2.4	2.4	2.4
132.5°	8.0	6.4	2.4	1.6	2.4
135°	6.4	4.8	2.4	1.6	1.6
137.5°	4.8	4.0	1.6	1.6	1.6
140°	4.0	2.4	0.8	0.8	0.8
142.5°	3.2	2.4	0.8	0.8	0.8
145°	2.4	1.6	0.8	0.8	0.8
147.5°	1.6	0.8	0.8	0.8	0.8
150°	0.8	0.8	0.8	0.8	0.8
152.5°	0.8	0.8	0.8	0.8	0.8
155°	0.8	0.8	0.8	0.8	0.8
157.5°	0.8	0.8	0.8	0.8	0.8
160°	0.8	0.8	0.8	0.8	0.8
162.5°	1.6	1.6	1.6	1.6	0.8
165°	1.6	1.6	1.6	1.6	0.8
167.5°	1.6	1.6	1.6	1.6	0.8
170°	1.6	1.6	1.6	1.6	0.8
172.5°	1.6	1.6	1.6	1.6	1.6
175°	1.6	1.6	1.6	1.6	1.6
177.5°	1.6	1.6	1.6	1.6	1.6
180°	1.6	1.6	1.6	1.6	1.6

(END OF REPORT)