

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: P397458

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397458
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1801-511-5)
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-DRF-LG52-CD1-U
Description:
Light Source: -
Ballast/Driver: -

Summary

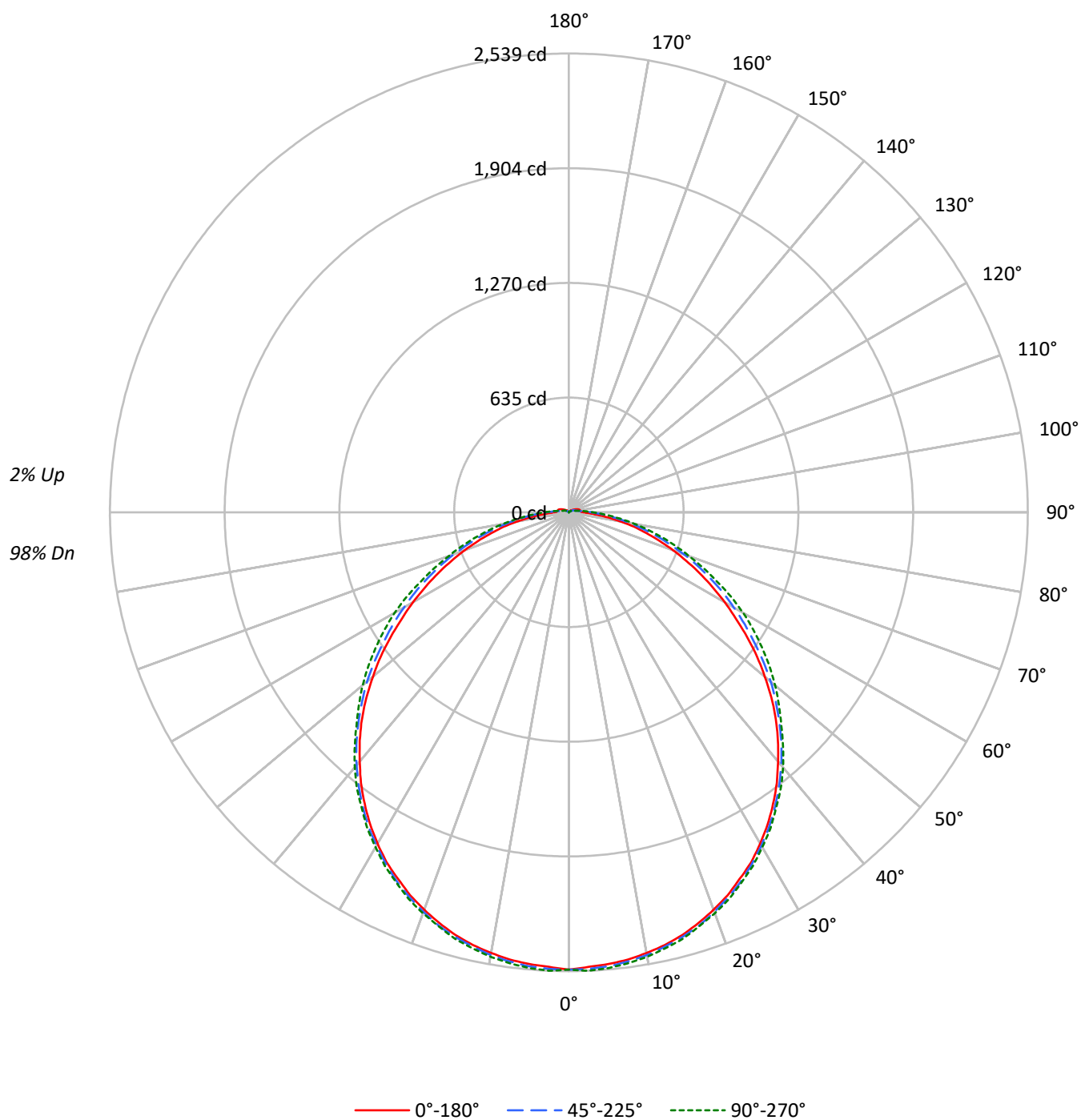
Lumens per Lamp: N/A
Luminaire Lumens: 7377.6 lumens
Efficiency: N/A
Efficacy: 50.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

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

TEST NUMBER: P397458

CATALOG NUMBER: VRVT4S-LD5-9-DRF-LG52-CD1-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
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	118	118	118	118	115	115	115	115		110	110	110		105	105	105		100	100	100
1	108	103	98	94	105	100	96	92		95	92	89		91	88	86		87	85	83
2	98	89	82	77	95	87	81	75		83	78	73		80	75	71		76	73	69
3	89	78	70	64	86	77	69	63		73	67	61		70	65	60		67	63	59
4	82	69	61	54	79	68	60	53		65	58	52		63	56	51		60	55	50
5	75	62	53	46	73	61	52	46		58	51	45		56	50	45		54	48	44
6	69	56	47	40	67	55	46	40		53	45	40		51	44	39		49	43	39
7	64	51	42	36	62	50	41	36		48	41	35		46	40	35		45	39	34
8	60	46	38	32	58	45	37	32		44	37	31		43	36	31		41	35	31
9	56	42	34	29	54	42	34	29		40	33	28		39	33	28		38	32	28
10	52	39	31	26	51	39	31	26		37	30	26		36	30	25		35	29	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12073	12073	12073
5°	11893	11822	11883
10°	11747	11546	11626
15°	11589	11263	11360
20°	11387	10958	11059
25°	11155	10631	10741
30°	10908	10262	10404
35°	10584	9866	10019
40°	10185	9421	9618
45°	9758	8905	9109
50°	9190	8353	8670
55°	8547	7684	8156
60°	7869	7034	7591
65°	7173	6361	6807
70°	6434	5600	6039
75°	5647	4769	5265
80°	4704	3916	4424
85°	3492	3040	3482



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.6	3.2
10°-20°	685.8	9.3
20°-30°	1037.1	14.1
30°-40°	1242.2	16.8
40°-50°	1268.8	17.2
50°-60°	1123.3	15.2
60°-70°	851.5	11.5
70°-80°	524.8	7.1
80°-90°	232.2	3.1
90°-100°	83.4	1.1
100°-110°	44.7	0.6
110°-120°	26.7	0.4
120°-130°	12.3	0.2
130°-140°	3.8	0.1
140°-150°	0.7	0.0
150°-160°	0.3	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	1962.4	26.6
0°-40°	3204.6	43.4
0°-60°	5596.7	75.9
0°-90°	7205.2	97.7
90°-120°	154.8	2.1
90°-150°	171.6	2.3
90°-180°	172.0	2.3
0°-180°	7377.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2530	2530	2530	2530	2530	
5°	2509	2514	2522	2529	2531	239
15°	2422	2424	2432	2437	2442	683
25°	2237	2244	2253	2260	2260	1032
35°	1970	1976	1988	2002	1998	1231
45°	1620	1629	1647	1666	1662	1247
55°	1204	1228	1251	1290	1304	1077
65°	799	820	863	896	901	792
75°	444	464	498	525	532	472
85°	151	181	213	231	231	154
90°	80	100	123	134	134	46
95°	65	65	72	79	78	53
105°	58	50	37	34	34	61
115°	38	31	24	21	22	39
125°	20	16	11	10	12	19
135°	9	7	2	2	4	7
145°	3	2	0	0	0	2
155°	1	1	1	0	0	0
165°	2	2	1	0	0	0
175°	2	2	2	1	0	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2530.2	2530.2	2530.2	2530.2	2530.2
2.5°	2517.7	2520.6	2528.6	2536.6	2539.1
5°	2509.2	2514.2	2521.7	2528.6	2531.1
7.5°	2496.8	2500.7	2507.2	2514.2	2516.2
10°	2475.8	2480.3	2487.3	2493.8	2497.3
12.5°	2452.5	2454.5	2461.0	2468.4	2470.4
15°	2421.6	2423.6	2431.6	2437.0	2442.0
17.5°	2383.3	2385.3	2397.2	2399.7	2400.2
20°	2340.5	2343.4	2353.0	2357.4	2360.9
22.5°	2293.7	2297.7	2305.1	2310.6	2315.6
25°	2237.4	2243.9	2252.9	2259.8	2259.8
27.5°	2183.2	2184.2	2192.6	2200.1	2205.1
30°	2117.0	2118.0	2129.4	2137.9	2139.9
32.5°	2046.8	2050.8	2062.7	2071.7	2074.2
35°	1969.7	1976.1	1988.1	2002.0	1998.0
37.5°	1889.5	1893.0	1909.9	1921.4	1925.8
40°	1799.9	1809.8	1827.3	1839.8	1843.2
42.5°	1712.3	1721.3	1740.2	1752.2	1753.6
45°	1619.7	1628.6	1647.1	1666.0	1661.5
47.5°	1519.7	1533.6	1552.0	1571.9	1575.4
50°	1415.1	1435.5	1457.9	1474.4	1489.3
52.5°	1312.6	1329.0	1354.9	1384.2	1398.2
55°	1203.6	1227.5	1250.9	1290.2	1303.6
57.5°	1095.6	1124.5	1153.3	1196.6	1208.6
60°	996.0	1018.9	1053.8	1096.1	1113.5
62.5°	894.5	920.9	959.7	998.5	1010.5
65°	798.9	819.8	863.1	896.5	901.4
67.5°	702.9	727.8	768.6	803.4	805.4
70°	613.3	635.7	675.0	704.3	707.4
72.5°	526.6	549.5	582.9	612.7	618.7
75°	443.5	464.4	498.2	524.6	531.6
77.5°	369.8	385.3	415.1	445.0	447.5
80°	287.7	305.6	343.0	367.8	371.8
82.5°	219.0	240.4	273.8	296.2	297.2
85°	151.3	181.2	213.0	231.4	231.4
87.5°	104.6	135.9	164.2	176.7	178.2
90°	79.7	100.1	123.4	134.4	133.9
92.5°	69.2	78.6	93.6	102.6	101.0
95°	65.2	65.2	71.7	78.6	78.2
97.5°	63.2	59.2	56.7	61.2	60.7
100°	62.7	55.8	46.8	48.8	49.3
102.5°	61.2	52.8	40.8	40.3	40.8
105°	58.2	49.8	36.8	33.8	34.3
107.5°	54.2	45.8	33.8	29.8	30.4
110°	49.3	40.8	30.9	26.9	26.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	44.3	35.8	27.8	23.9	24.4
115°	38.3	30.9	24.4	20.9	21.9
117.5°	33.4	26.9	21.4	17.9	19.4
120°	28.4	23.4	17.4	15.0	17.0
122.5°	23.9	19.9	13.9	12.5	14.4
125°	20.4	16.4	11.0	9.9	11.9
127.5°	17.0	13.9	8.0	8.0	9.4
130°	13.9	11.4	5.0	6.0	7.4
132.5°	11.4	9.4	3.5	4.0	5.4
135°	9.0	7.4	2.5	2.5	4.0
137.5°	7.4	5.4	1.5	1.0	2.0
140°	5.4	4.0	1.0	0.0	0.5
142.5°	4.5	3.0	0.5	0.0	0.0
145°	3.0	2.0	0.5	0.0	0.0
147.5°	2.0	1.0	0.5	0.5	0.0
150°	1.0	1.0	0.5	0.5	0.0
152.5°	1.0	1.0	0.5	0.5	0.0
155°	1.0	1.0	1.0	0.5	0.0
157.5°	1.0	1.0	1.0	0.5	0.0
160°	1.0	1.0	1.0	0.5	0.5
162.5°	1.5	1.5	1.0	0.5	0.5
165°	1.5	1.5	1.0	0.5	0.5
167.5°	1.5	1.5	1.0	1.0	0.5
170°	1.5	1.5	1.0	0.5	0.5
172.5°	1.5	1.5	1.0	1.0	0.5
175°	1.5	1.5	1.5	1.0	0.5
177.5°	1.5	1.5	1.5	1.0	0.5
180°	1.5	1.5	1.5	1.5	1.5

(END OF REPORT)