

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: P397464

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397464
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1801-511-7)
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-PCF-LG52-CD1-U
Description:
Light Source: -
Ballast/Driver: -

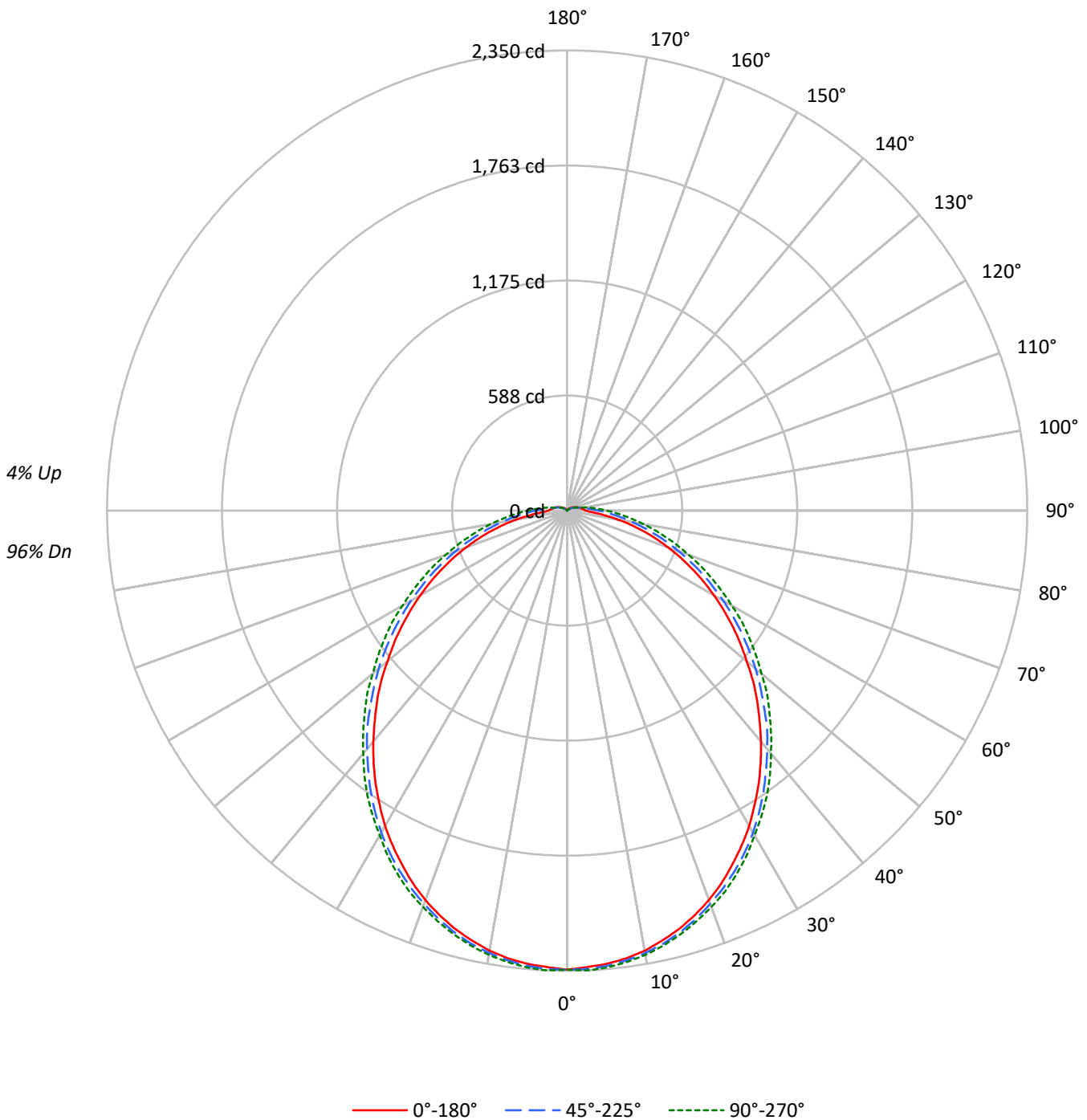
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6689.6 lumens
Efficiency: N/A
Efficacy: 45.7 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.32
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	50	30	10	0	
RCR																						
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	99	99	99	96	
1	107	102	97	93	104	99	95	91	94	91	88	90	87	85	86	83	81	86	83	81	79	
2	97	89	82	76	94	87	80	75	82	77	72	79	74	70	75	71	68	75	71	68	66	
3	89	78	70	63	86	76	68	62	73	66	61	69	64	59	66	62	58	66	62	58	55	
4	81	69	60	53	79	67	59	53	65	57	52	62	56	51	59	54	50	59	54	50	47	
5	75	62	53	46	72	60	52	46	58	50	45	56	49	44	53	48	43	53	48	43	41	
6	69	56	47	40	67	55	46	40	52	45	39	50	44	39	48	43	38	48	43	38	36	
7	64	51	42	36	62	50	41	35	48	40	35	46	39	34	44	38	34	44	38	34	32	
8	60	46	38	32	58	45	37	32	44	36	31	42	36	31	41	35	30	41	35	30	28	
9	56	42	34	29	54	42	34	28	40	33	28	39	32	28	38	32	27	38	32	27	26	
10	52	39	31	26	51	38	31	26	37	30	26	36	30	25	35	29	25	35	29	25	23	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11187	11187	11187
5°	11013	10944	10998
10°	10828	10650	10727
15°	10584	10324	10420
20°	10297	9952	10089
25°	9946	9569	9736
30°	9582	9152	9307
35°	9160	8680	8916
40°	8715	8194	8452
45°	8271	7691	8015
50°	7771	7201	7543
55°	7327	6677	7113
60°	6839	6147	6620
65°	6324	5602	6128
70°	5744	5026	5617
75°	5096	4431	5152
80°	4288	3870	4691
85°	3377	3374	4329



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.5	3.3
10°-20°	627.8	9.4
20°-30°	932.4	13.9
30°-40°	1091.3	16.3
40°-50°	1096.7	16.4
50°-60°	972.3	14.5
60°-70°	754.3	11.3
70°-80°	492.1	7.4
80°-90°	257.0	3.8
90°-100°	122.9	1.8
100°-110°	64.0	1.0
110°-120°	34.8	0.5
120°-130°	16.4	0.2
130°-140°	5.0	0.1
140°-150°	0.7	0.0
150°-160°	0.2	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1781.7	26.6
0°-40°	2873.0	42.9
0°-60°	4941.9	73.9
0°-90°	6445.3	96.3
90°-120°	221.7	3.3
90°-150°	243.9	3.6
90°-180°	244.0	3.6
0°-180°	6689.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2344	2344	2344	2344	2344	
5°	2324	2327	2334	2340	2342	221
15°	2212	2217	2229	2236	2240	623
25°	1995	2007	2028	2044	2048	919
35°	1705	1722	1749	1771	1778	1066
45°	1373	1391	1423	1450	1462	1058
55°	1032	1051	1087	1124	1137	923
65°	704	724	760	801	811	698
75°	400	419	463	506	520	425
85°	146	187	236	278	288	145
90°	95	122	162	193	200	53
95°	82	88	109	131	137	65
105°	60	57	59	60	63	64
115°	41	34	34	32	35	41
125°	25	20	14	15	18	23
135°	13	10	2	3	5	10
145°	4	2	0	0	0	3
155°	1	1	0	0	0	0
165°	1	1	0	0	0	0
175°	2	1	0	0	0	0
180°	0	0	0	0	0	0



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CATALOG NUMBER: VRVT4S-LD5-9-PCF-LG52-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2344.5	2344.5	2344.5	2344.5	2344.5
2.5°	2333.5	2336.5	2343.0	2349.4	2350.4
5°	2323.5	2326.6	2334.5	2340.0	2342.5
7.5°	2306.6	2309.6	2317.0	2324.6	2325.5
10°	2282.2	2286.2	2294.2	2302.6	2304.2
12.5°	2248.9	2255.4	2265.3	2272.8	2274.8
15°	2211.5	2217.0	2229.0	2236.4	2239.9
17.5°	2166.7	2173.8	2186.2	2195.1	2199.1
20°	2116.5	2123.4	2136.9	2152.3	2153.8
22.5°	2059.8	2070.7	2085.1	2100.1	2106.0
25°	1995.0	2007.4	2027.8	2043.8	2048.3
27.5°	1929.3	1941.3	1966.2	1982.6	1986.1
30°	1859.6	1872.6	1899.0	1911.9	1914.4
32.5°	1782.0	1796.9	1825.3	1843.2	1847.7
35°	1704.8	1722.2	1749.1	1770.6	1778.0
37.5°	1623.2	1642.6	1668.5	1695.8	1701.8
40°	1540.1	1560.5	1589.4	1614.7	1619.7
42.5°	1453.4	1475.8	1511.7	1532.1	1541.6
45°	1372.8	1391.3	1422.6	1450.0	1461.9
47.5°	1287.7	1306.2	1339.0	1371.4	1384.8
50°	1196.6	1221.5	1256.9	1288.2	1295.7
52.5°	1116.0	1139.8	1170.7	1205.6	1217.0
55°	1031.8	1050.8	1087.1	1123.9	1136.9
57.5°	948.2	968.6	1002.0	1039.4	1058.7
60°	865.6	885.0	920.9	959.7	971.1
62.5°	785.4	805.4	837.8	880.1	891.5
65°	704.3	723.8	760.1	800.9	811.4
67.5°	625.7	644.1	681.4	724.7	737.7
70°	547.5	571.4	605.8	646.1	658.0
72.5°	473.8	494.8	534.1	574.9	588.9
75°	400.2	419.1	462.9	505.8	520.2
77.5°	331.0	355.4	398.2	445.0	456.5
80°	262.3	288.2	339.0	383.8	394.2
82.5°	200.1	233.4	285.2	329.5	336.0
85°	146.3	187.1	236.4	277.8	287.7
87.5°	110.0	149.8	198.1	232.5	241.4
90°	94.6	121.9	161.8	192.6	200.1
92.5°	88.1	101.5	132.9	160.2	165.3
95°	82.2	87.6	109.0	131.4	136.9
97.5°	76.2	78.2	91.6	107.5	112.0
100°	70.7	71.2	77.1	88.6	91.6
102.5°	65.2	63.7	66.2	72.2	74.6
105°	60.2	57.3	58.7	59.8	62.7
107.5°	55.3	50.8	51.8	50.8	52.2
110°	50.2	44.3	45.3	43.8	45.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	45.3	38.8	39.8	37.8	39.8
115°	40.8	33.8	34.3	32.3	34.9
117.5°	36.8	30.4	28.9	27.4	30.4
120°	32.3	26.4	23.9	22.9	26.4
122.5°	28.9	23.4	18.9	18.9	22.4
125°	24.9	20.4	14.4	15.0	18.4
127.5°	21.9	17.4	10.5	11.9	15.0
130°	18.9	15.0	6.5	9.0	11.9
132.5°	15.4	11.9	4.0	6.0	8.5
135°	13.0	9.9	2.5	3.0	5.4
137.5°	10.5	7.4	1.0	0.5	2.5
140°	8.0	5.4	0.5	0.0	0.0
142.5°	5.4	3.5	0.0	0.0	0.0
145°	3.5	2.0	0.0	0.0	0.0
147.5°	2.0	1.0	0.0	0.0	0.0
150°	1.0	0.5	0.0	0.0	0.0
152.5°	1.0	0.5	0.0	0.0	0.0
155°	1.0	1.0	0.0	0.0	0.0
157.5°	1.0	1.0	0.5	0.0	0.0
160°	1.0	1.0	0.5	0.0	0.0
162.5°	1.0	1.0	0.5	0.0	0.0
165°	1.0	1.0	0.5	0.0	0.0
167.5°	1.0	1.0	0.5	0.0	0.0
170°	1.0	1.0	0.5	0.0	0.0
172.5°	1.0	1.0	0.5	0.0	0.0
175°	1.5	1.0	0.5	0.0	0.0
177.5°	1.5	1.0	0.5	0.0	0.0
180°	0.5	0.5	0.5	0.5	0.5

(END OF REPORT)