

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: P397465

Luminaire Tested: **VRVT4S-LD5-9-PCF-LR63-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397465
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-LR63-CD1-U
Description:
Light Source: -
Ballast/Driver: -

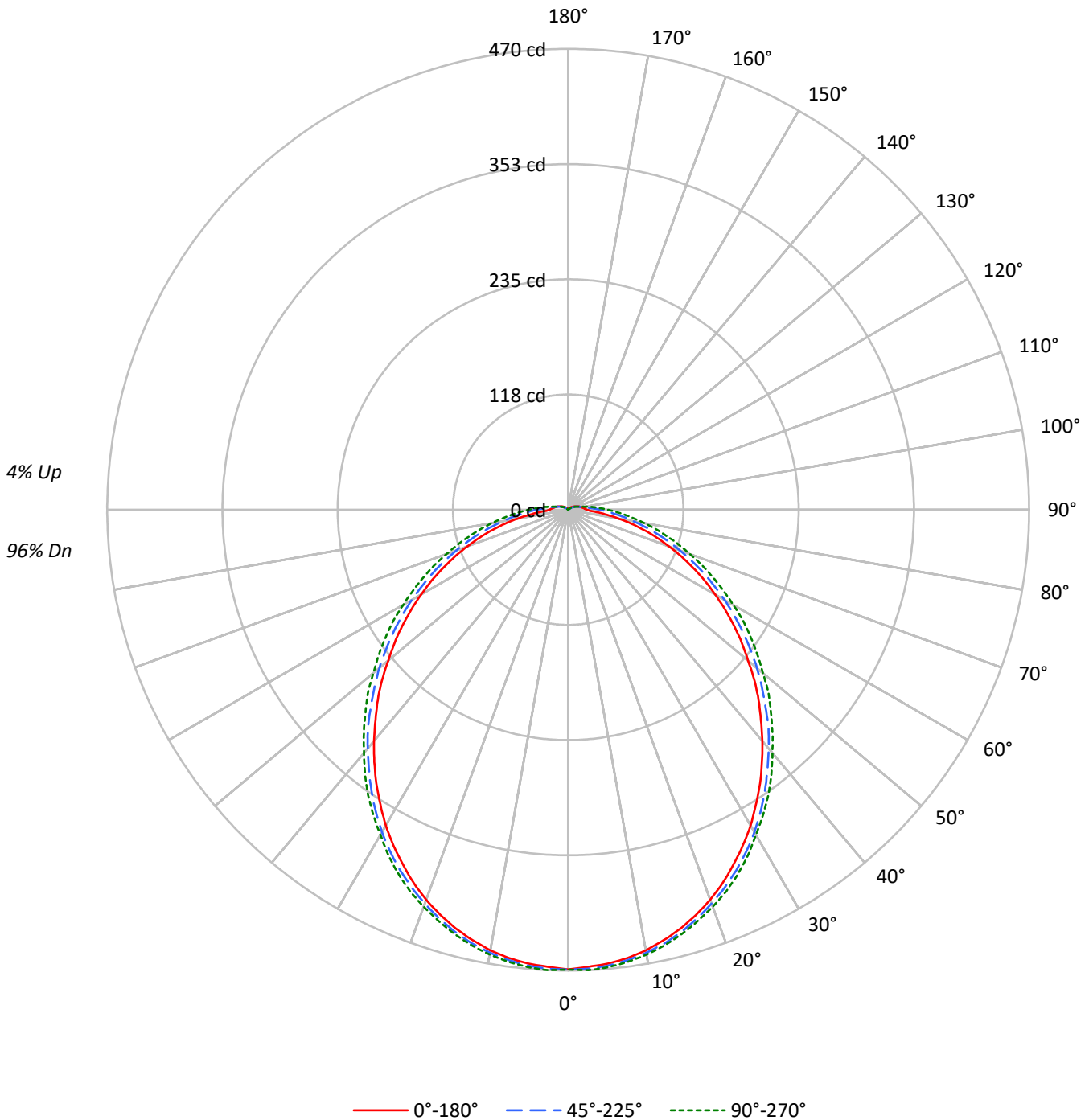
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1338.0 lumens
Efficiency: N/A
Efficacy: 8.4 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): 159.3
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	96
1	107	102	97	93	104	99	95	91	94	91	88	90	87	85	86	83	81	79
2	97	89	82	76	94	87	80	75	82	77	72	79	74	70	75	71	68	66
3	89	78	70	63	86	76	68	62	73	66	61	69	64	59	66	62	58	55
4	81	69	60	53	79	67	59	53	64	57	52	62	56	51	59	54	50	47
5	75	62	53	46	72	60	52	46	58	50	45	56	49	44	53	48	43	41
6	69	56	47	40	67	55	46	40	52	45	39	50	44	39	48	43	38	36
7	64	51	42	36	62	50	41	35	48	40	35	46	39	34	44	38	34	32
8	60	46	38	32	58	45	37	32	44	36	31	42	36	31	41	35	30	28
9	56	42	34	29	54	42	34	28	40	33	28	39	32	28	38	32	27	26
10	52	39	31	26	51	38	31	26	37	30	26	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2237	2237	2237
5°	2203	2189	2200
10°	2165	2130	2145
15°	2117	2065	2084
20°	2059	1990	2018
25°	1989	1914	1947
30°	1916	1830	1862
35°	1832	1736	1783
40°	1743	1639	1690
45°	1654	1538	1603
50°	1554	1440	1508
55°	1466	1335	1423
60°	1368	1229	1324
65°	1265	1120	1226
70°	1149	1005	1123
75°	1019	886	1030
80°	858	774	938
85°	676	675	865



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.3	3.3
10°-20°	125.6	9.4
20°-30°	186.5	13.9
30°-40°	218.3	16.3
40°-50°	219.3	16.4
50°-60°	194.5	14.5
60°-70°	150.9	11.3
70°-80°	98.4	7.4
80°-90°	51.4	3.8
90°-100°	24.6	1.8
100°-110°	12.8	1.0
110°-120°	7.0	0.5
120°-130°	3.3	0.2
130°-140°	1.0	0.1
140°-150°	0.1	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	356.3	26.6
0°-40°	574.6	42.9
0°-60°	988.4	73.9
0°-90°	1289.1	96.3
90°-120°	44.4	3.3
90°-150°	48.8	3.6
90°-180°	49.0	3.7
0°-180°	1338.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	469	469	469	469	469	
5°	465	465	467	468	468	44
15°	442	443	446	447	448	125
25°	399	402	406	409	410	184
35°	341	344	350	354	356	213
45°	275	278	284	290	292	212
55°	206	210	217	225	227	185
65°	141	145	152	160	162	140
75°	80	84	93	101	104	85
85°	29	37	47	56	58	29
90°	19	24	32	38	40	11
95°	16	18	22	26	27	13
105°	12	12	12	12	12	13
115°	8	7	7	6	7	8
125°	5	4	3	3	4	5
135°	3	2	0	1	1	2
145°	1	0	0	0	0	1
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	468.9	468.9	468.9	468.9	468.9
2.5°	466.7	467.3	468.6	469.9	470.1
5°	464.7	465.3	466.9	468.0	468.5
7.5°	461.3	461.9	463.4	464.9	465.1
10°	456.4	457.2	458.8	460.5	460.8
12.5°	449.8	451.1	453.1	454.6	455.0
15°	442.3	443.4	445.8	447.3	448.0
17.5°	433.3	434.8	437.2	439.0	439.8
20°	423.3	424.7	427.4	430.5	430.8
22.5°	412.0	414.1	417.0	420.0	421.2
25°	399.0	401.5	405.6	408.8	409.7
27.5°	385.9	388.3	393.2	396.5	397.2
30°	371.9	374.5	379.8	382.4	382.9
32.5°	356.4	359.4	365.1	368.6	369.5
35°	341.0	344.4	349.8	354.1	355.6
37.5°	324.6	328.5	333.7	339.2	340.4
40°	308.0	312.1	317.9	322.9	323.9
42.5°	290.7	295.2	302.3	306.4	308.3
45°	274.6	278.3	284.5	290.0	292.4
47.5°	257.5	261.2	267.8	274.3	277.0
50°	239.3	244.3	251.4	257.6	259.1
52.5°	223.2	228.0	234.1	241.1	243.4
55°	206.4	210.2	217.4	224.8	227.4
57.5°	189.6	193.7	200.4	207.9	211.7
60°	173.1	177.0	184.2	191.9	194.2
62.5°	157.1	161.1	167.6	176.0	178.3
65°	140.9	144.8	152.0	160.2	162.3
67.5°	125.1	128.8	136.3	144.9	147.5
70°	109.5	114.3	121.2	129.2	131.6
72.5°	94.8	99.0	106.8	115.0	117.8
75°	80.0	83.8	92.6	101.2	104.0
77.5°	66.2	71.1	79.6	89.0	91.3
80°	52.5	57.6	67.8	76.8	78.8
82.5°	40.0	46.7	57.0	65.9	67.2
85°	29.3	37.4	47.3	55.6	57.5
87.5°	22.0	30.0	39.6	46.5	48.3
90°	18.9	24.4	32.4	38.5	40.0
92.5°	17.6	20.3	26.6	32.0	33.1
95°	16.4	17.5	21.8	26.3	27.4
97.5°	15.2	15.6	18.3	21.5	22.4
100°	14.1	14.2	15.4	17.7	18.3
102.5°	13.0	12.7	13.2	14.4	14.9
105°	12.0	11.5	11.7	12.0	12.5
107.5°	11.1	10.2	10.4	10.2	10.4
110°	10.0	8.9	9.1	8.8	9.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	9.1	7.8	8.0	7.6	8.0
115°	8.2	6.8	6.9	6.5	7.0
117.5°	7.4	6.1	5.8	5.5	6.1
120°	6.5	5.3	4.8	4.6	5.3
122.5°	5.8	4.7	3.8	3.8	4.5
125°	5.0	4.1	2.9	3.0	3.7
127.5°	4.4	3.5	2.1	2.4	3.0
130°	3.8	3.0	1.3	1.8	2.4
132.5°	3.1	2.4	0.8	1.2	1.7
135°	2.6	2.0	0.5	0.6	1.1
137.5°	2.1	1.5	0.2	0.1	0.5
140°	1.6	1.1	0.1	0.0	0.0
142.5°	1.1	0.7	0.0	0.0	0.0
145°	0.7	0.4	0.0	0.0	0.0
147.5°	0.4	0.2	0.0	0.0	0.0
150°	0.2	0.1	0.0	0.0	0.0
152.5°	0.2	0.1	0.0	0.0	0.0
155°	0.2	0.2	0.0	0.0	0.0
157.5°	0.2	0.2	0.1	0.0	0.0
160°	0.2	0.2	0.1	0.0	0.0
162.5°	0.2	0.2	0.1	0.0	0.0
165°	0.2	0.2	0.1	0.0	0.0
167.5°	0.2	0.2	0.1	0.0	0.0
170°	0.2	0.2	0.1	0.0	0.0
172.5°	0.2	0.2	0.1	0.0	0.0
175°	0.3	0.2	0.1	0.0	0.0
177.5°	0.3	0.2	0.1	0.0	0.0
180°	0.1	0.1	0.1	0.1	0.1

(END OF REPORT)