

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: P397451

Luminaire Tested: **VRVT4S-LD5-18-PCF-LA59-CD2-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397451
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-LD5-18-PCF-LA59-CD2-U
Description:
Light Source: -
Ballast/Driver: -

Summary

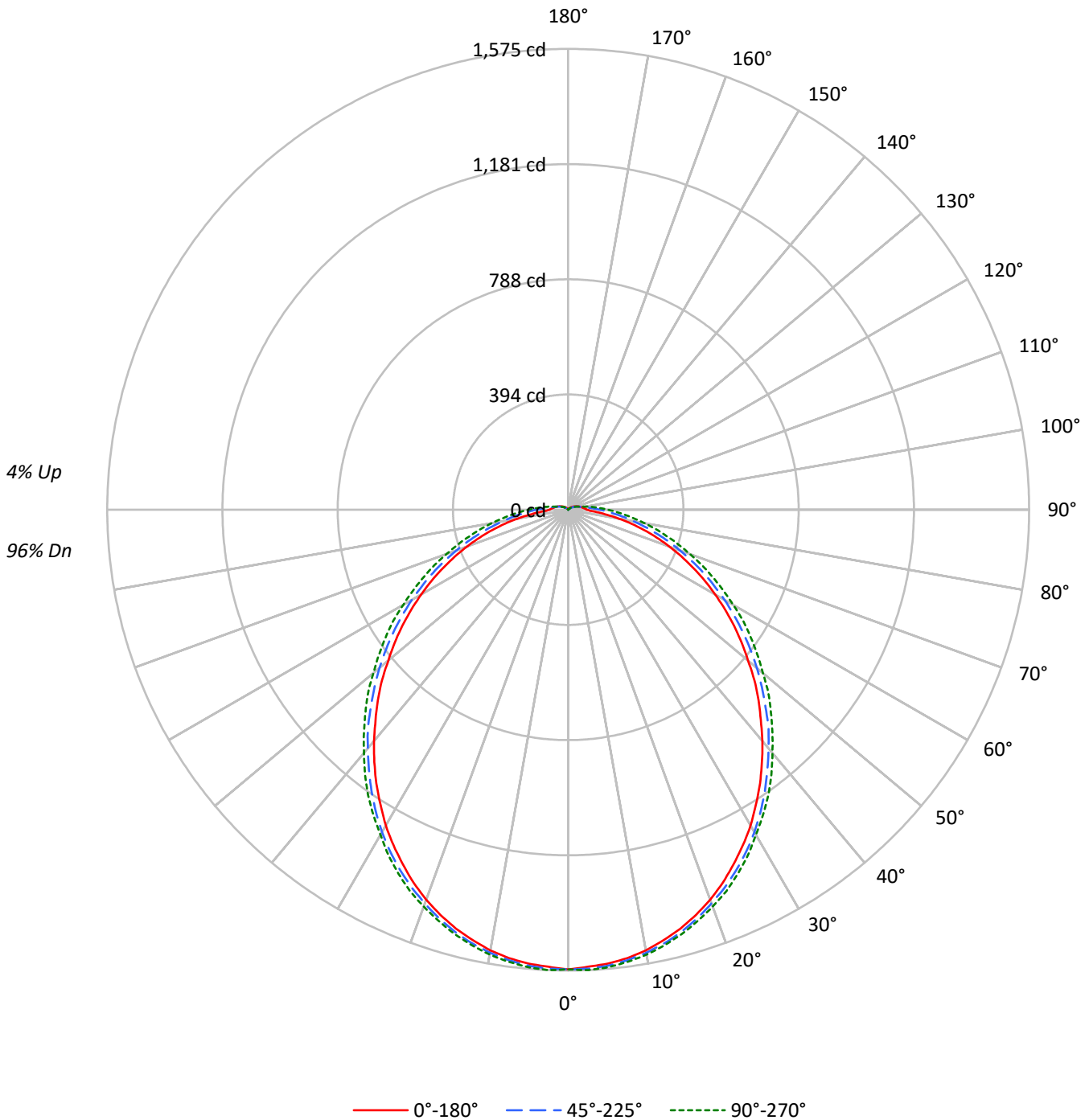
Lumens per Lamp: N/A
Luminaire Lumens: 4482.8 lumens
Efficiency: N/A
Efficacy: 21.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.32
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

Input Watts (W): 210.4
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°	7496	7496	7496
5°	7381	7334	7370
10°	7257	7137	7188
15°	7093	6919	6983
20°	6900	6669	6761
25°	6665	6412	6524
30°	6421	6133	6237
35°	6138	5817	5975
40°	5840	5491	5664
45°	5542	5154	5371
50°	5208	4825	5055
55°	4911	4475	4767
60°	4582	4119	4437
65°	4238	3753	4106
70°	3849	3367	3765
75°	3415	2969	3452
80°	2874	2594	3144
85°	2264	2262	2901



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.4	3.3
10°-20°	420.7	9.4
20°-30°	624.8	13.9
30°-40°	731.3	16.3
40°-50°	734.9	16.4
50°-60°	651.5	14.5
60°-70°	505.5	11.3
70°-80°	329.7	7.4
80°-90°	172.2	3.8
90°-100°	82.4	1.8
100°-110°	42.9	1.0
110°-120°	23.3	0.5
120°-130°	11.0	0.2
130°-140°	3.4	0.1
140°-150°	0.5	0.0
150°-160°	0.1	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1193.9	26.6
0°-40°	1925.2	42.9
0°-60°	3311.7	73.9
0°-90°	4319.1	96.3
90°-120°	148.6	3.3
90°-150°	163.5	3.6
90°-180°	164.0	3.7
0°-180°	4482.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1571	1571	1571	1571	1571	
5°	1557	1559	1564	1568	1570	148
15°	1482	1486	1494	1499	1501	418
25°	1337	1345	1359	1370	1373	616
35°	1142	1154	1172	1186	1192	714
45°	920	932	953	972	980	709
55°	692	704	728	753	762	618
65°	472	485	509	537	544	468
75°	268	281	310	339	349	285
85°	98	125	158	186	193	97
90°	63	82	108	129	134	36
95°	55	59	73	88	92	43
105°	40	38	39	40	42	43
115°	27	23	23	22	23	27
125°	17	14	10	10	12	15
135°	9	7	2	2	4	7
145°	2	1	0	0	0	2
155°	1	1	0	0	0	0
165°	1	1	0	0	0	0
175°	1	1	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°	1571.1	1571.1	1571.1	1571.1	1571.1
2.5°	1563.7	1565.7	1570.0	1574.4	1575.1
5°	1557.1	1559.0	1564.4	1568.1	1569.7
7.5°	1545.7	1547.7	1552.7	1557.7	1558.4
10°	1529.4	1532.0	1537.4	1543.0	1544.0
12.5°	1507.0	1511.4	1518.0	1523.0	1524.3
15°	1482.0	1485.7	1493.7	1498.7	1501.0
17.5°	1452.0	1456.6	1465.0	1471.0	1473.6
20°	1418.3	1423.0	1431.9	1442.3	1443.3
22.5°	1380.3	1387.6	1397.3	1407.3	1411.3
25°	1336.9	1345.2	1358.9	1369.6	1372.6
27.5°	1292.9	1300.9	1317.5	1328.5	1330.9
30°	1246.2	1254.8	1272.5	1281.2	1282.8
32.5°	1194.1	1204.1	1223.2	1235.2	1238.2
35°	1142.4	1154.1	1172.1	1186.5	1191.5
37.5°	1087.7	1100.7	1118.1	1136.4	1140.4
40°	1032.0	1045.7	1065.0	1082.1	1085.4
42.5°	974.0	989.0	1013.0	1026.7	1033.0
45°	919.9	932.3	953.3	971.7	979.7
47.5°	862.9	875.3	897.3	919.0	927.9
50°	801.9	818.6	842.2	863.2	868.3
52.5°	747.8	763.8	784.5	807.9	815.6
55°	691.5	704.1	728.5	753.2	761.9
57.5°	635.4	649.1	671.4	696.5	709.5
60°	580.0	593.1	617.1	643.1	650.8
62.5°	526.3	539.7	561.4	589.7	597.4
65°	472.0	485.0	509.3	536.7	543.7
67.5°	419.3	431.6	456.7	485.7	494.3
70°	366.9	382.9	405.9	433.0	441.0
72.5°	317.5	331.5	357.9	385.3	394.6
75°	268.2	280.9	310.2	338.9	348.6
77.5°	221.8	238.2	266.8	298.2	305.9
80°	175.8	193.1	227.2	257.2	264.2
82.5°	134.1	156.4	191.1	220.8	225.1
85°	98.1	125.4	158.5	186.1	192.8
87.5°	73.7	100.4	132.7	155.8	161.8
90°	63.4	81.7	108.4	129.1	134.1
92.5°	59.1	68.0	89.1	107.4	110.7
95°	55.0	58.7	73.1	88.1	91.7
97.5°	51.0	52.4	61.4	72.0	75.0
100°	47.4	47.7	51.7	59.4	61.4
102.5°	43.7	42.7	44.4	48.4	50.0
105°	40.3	38.4	39.4	40.0	42.0
107.5°	37.0	34.0	34.7	34.0	35.0
110°	33.7	29.7	30.4	29.3	30.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	30.4	26.0	26.7	25.3	26.7
115°	27.4	22.7	23.0	21.7	23.4
117.5°	24.7	20.4	19.3	18.3	20.4
120°	21.7	17.7	16.0	15.3	17.7
122.5°	19.3	15.7	12.7	12.7	15.0
125°	16.7	13.7	9.7	10.0	12.3
127.5°	14.7	11.7	7.0	8.0	10.0
130°	12.7	10.0	4.3	6.0	8.0
132.5°	10.3	8.0	2.7	4.0	5.7
135°	8.7	6.7	1.7	2.0	3.7
137.5°	7.0	5.0	0.7	0.3	1.7
140°	5.3	3.7	0.3	0.0	0.0
142.5°	3.7	2.3	0.0	0.0	0.0
145°	2.3	1.3	0.0	0.0	0.0
147.5°	1.3	0.7	0.0	0.0	0.0
150°	0.7	0.3	0.0	0.0	0.0
152.5°	0.7	0.3	0.0	0.0	0.0
155°	0.7	0.7	0.0	0.0	0.0
157.5°	0.7	0.7	0.3	0.0	0.0
160°	0.7	0.7	0.3	0.0	0.0
162.5°	0.7	0.7	0.3	0.0	0.0
165°	0.7	0.7	0.3	0.0	0.0
167.5°	0.7	0.7	0.3	0.0	0.0
170°	0.7	0.7	0.3	0.0	0.0
172.5°	0.7	0.7	0.3	0.0	0.0
175°	1.0	0.7	0.3	0.0	0.0
177.5°	1.0	0.7	0.3	0.0	0.0
180°	0.3	0.3	0.3	0.3	0.3

(END OF REPORT)