

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: P397430

Luminaire Tested: **VRVT4S-LD5-15-DR-LA59-CD2-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397430
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-LD5-15-DR-LA59-CD2-U
Description:
Light Source: -
Ballast/Driver: -

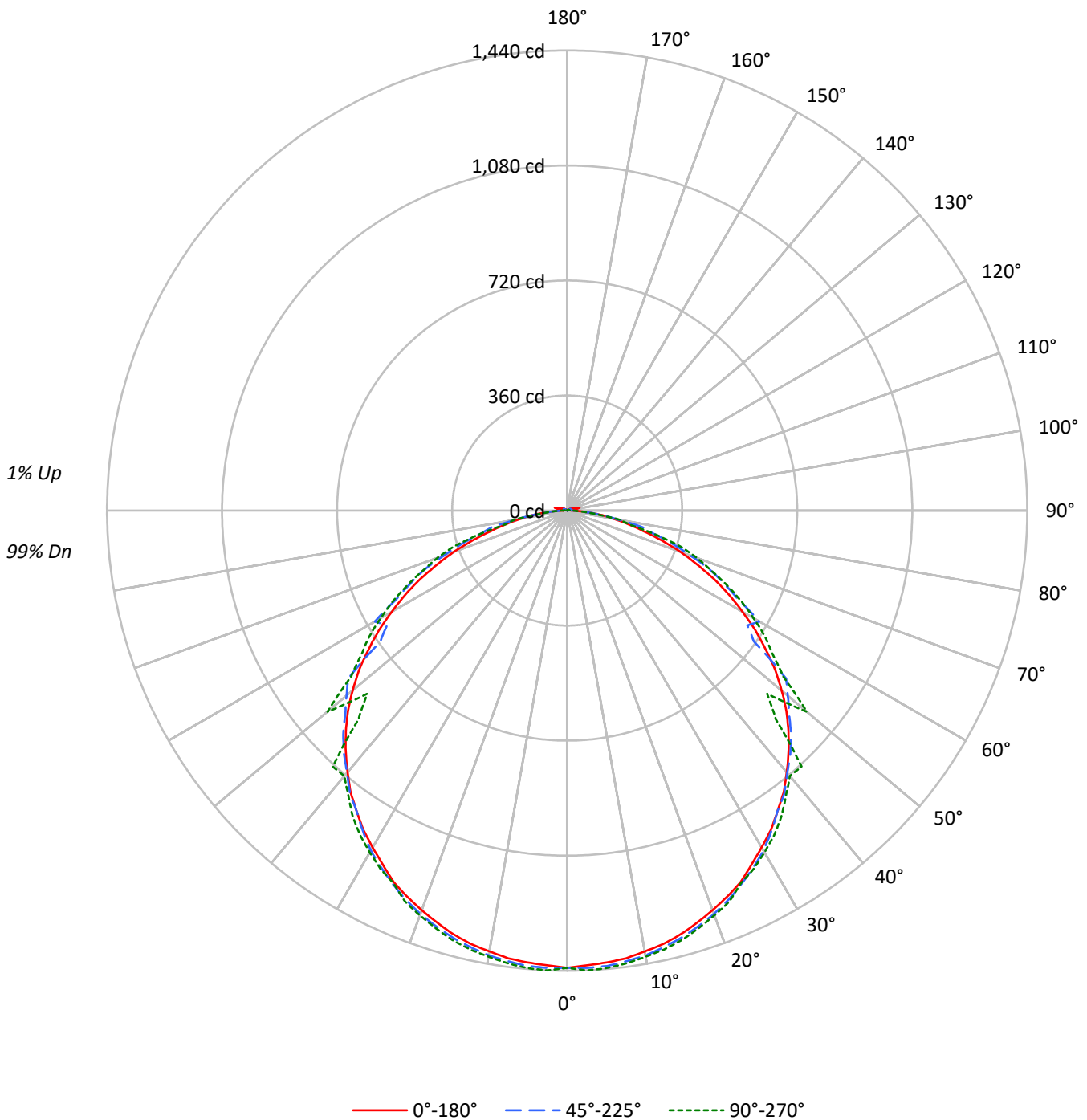
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4227.4 lumens
Efficiency: N/A
Efficacy: 25.5 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): 165.7
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°	6828	6828	6828
5°	6728	6707	6746
10°	6647	6561	6600
15°	6571	6408	6469
20°	6474	6256	6313
25°	6399	6086	6113
30°	6272	5921	6006
35°	6169	5697	5862
40°	6050	5522	5657
45°	5899	5357	5065
50°	5690	5164	5700
55°	5392	4381	4916
60°	5006	4635	4593
65°	4550	3993	4157
70°	3956	3390	3680
75°	3146	2679	2750
80°	2421	1835	1998
85°	1528	873	886



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.9	3.2
10°-20°	390.4	9.2
20°-30°	594.2	14.1
30°-40°	723.8	17.1
40°-50°	756.0	17.9
50°-60°	691.6	16.4
60°-70°	528.2	12.5
70°-80°	288.0	6.8
80°-90°	77.8	1.8
90°-100°	11.9	0.3
100°-110°	14.5	0.3
110°-120°	8.7	0.2
120°-130°	4.1	0.1
130°-140°	1.4	0.0
140°-150°	0.4	0.0
150°-160°	0.2	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	1120.5	26.5
0°-40°	1844.3	43.6
0°-60°	3291.9	77.9
0°-90°	4185.8	99.0
90°-120°	35.1	0.8
90°-150°	41.0	1.0
90°-180°	42.0	1.0
0°-180°	4227.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1431	1431	1431	1431	1431	
5°	1419	1425	1431	1436	1437	135
15°	1373	1378	1383	1388	1391	387
25°	1284	1288	1290	1293	1286	590
35°	1148	1154	1148	1163	1169	719
45°	979	984	991	1042	924	755
55°	759	764	713	791	786	678
65°	507	522	542	544	550	500
75°	247	266	280	280	278	267
85°	66	67	61	59	59	72
90°	11	19	18	18	17	9
95°	11	10	10	8	8	13
105°	35	46	6	6	6	35
115°	17	8	11	4	4	17
125°	8	6	3	2	2	7
135°	4	3	1	1	1	3
145°	1	1	0	0	0	1
155°	0	0	0	0	0	0
165°	1	1	1	1	0	0
175°	1	1	1	1	1	0
180°	1	1	1	1	1	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1431.1	1431.1	1431.1	1431.1	1431.1
2.5°	1424.3	1427.9	1432.4	1438.7	1440.5
5°	1419.4	1425.2	1430.6	1435.6	1436.9
7.5°	1413.1	1420.3	1422.5	1428.8	1428.8
10°	1400.9	1409.0	1413.5	1417.6	1417.6
12.5°	1389.2	1395.1	1399.1	1404.1	1406.3
15°	1373.0	1378.4	1383.4	1388.3	1390.6
17.5°	1352.3	1360.9	1364.0	1368.1	1369.9
20°	1330.7	1338.8	1343.3	1346.9	1347.8
22.5°	1307.8	1314.1	1318.5	1319.9	1324.8
25°	1283.5	1287.5	1289.8	1293.3	1286.2
27.5°	1249.2	1256.9	1260.1	1256.9	1264.1
30°	1217.3	1224.9	1228.6	1229.5	1235.3
32.5°	1185.8	1191.2	1189.4	1196.2	1204.7
35°	1148.0	1154.3	1148.0	1162.8	1169.1
37.5°	1112.4	1115.6	1116.1	1130.9	1124.6
40°	1069.2	1073.3	1071.1	1080.5	1084.1
42.5°	1025.6	1029.2	1033.3	1040.5	1086.3
45°	979.2	983.8	990.9	1041.8	923.9
47.5°	931.1	932.0	941.4	863.6	848.7
50°	876.2	875.7	901.4	819.9	979.2
52.5°	821.3	820.8	863.6	902.3	851.9
55°	759.2	763.7	713.3	791.1	785.7
57.5°	698.9	702.9	668.7	722.7	734.4
60°	633.6	649.4	694.4	673.2	673.7
62.5°	571.5	585.5	605.3	612.0	614.7
65°	506.7	522.0	541.8	543.6	550.4
67.5°	437.9	459.9	483.8	480.6	486.9
70°	377.1	350.1	408.6	411.3	431.1
72.5°	308.7	341.1	345.6	288.0	370.8
75°	247.1	266.0	279.9	279.5	277.7
77.5°	195.7	208.3	242.1	217.8	197.1
80°	148.1	151.6	160.7	159.8	167.9
82.5°	111.6	106.2	109.4	108.0	95.4
85°	66.2	66.6	61.2	59.4	58.9
87.5°	27.4	30.6	29.7	28.4	30.6
90°	11.3	18.9	18.0	17.6	17.1
92.5°	12.6	13.5	12.6	10.8	9.5
95°	10.8	9.9	10.4	8.5	8.5
97.5°	14.8	8.1	8.1	7.2	6.7
100°	29.7	7.2	7.6	6.3	6.3
102.5°	39.6	7.6	6.7	6.3	6.7
105°	34.7	45.9	5.9	6.3	6.3
107.5°	29.3	27.0	5.4	5.9	6.3
110°	24.8	16.7	4.5	5.4	5.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	20.2	11.7	4.1	4.5	5.4
115°	17.1	8.5	11.3	4.1	4.5
117.5°	14.4	9.0	12.2	3.6	4.1
120°	11.7	18.5	6.3	3.2	3.2
122.5°	9.5	8.5	4.5	2.2	2.7
125°	7.6	6.3	3.2	1.8	2.2
127.5°	6.3	5.0	2.2	1.3	1.8
130°	5.4	4.5	1.3	1.3	1.3
132.5°	4.5	3.6	1.3	0.9	1.3
135°	3.6	2.7	1.3	0.9	0.9
137.5°	2.7	2.2	0.9	0.9	0.9
140°	2.2	1.3	0.4	0.4	0.4
142.5°	1.8	1.3	0.4	0.4	0.4
145°	1.3	0.9	0.4	0.4	0.4
147.5°	0.9	0.4	0.4	0.4	0.4
150°	0.4	0.4	0.4	0.4	0.4
152.5°	0.4	0.4	0.4	0.4	0.4
155°	0.4	0.4	0.4	0.4	0.4
157.5°	0.4	0.4	0.4	0.4	0.4
160°	0.4	0.4	0.4	0.4	0.4
162.5°	0.9	0.9	0.9	0.9	0.4
165°	0.9	0.9	0.9	0.9	0.4
167.5°	0.9	0.9	0.9	0.9	0.4
170°	0.9	0.9	0.9	0.9	0.4
172.5°	0.9	0.9	0.9	0.9	0.9
175°	0.9	0.9	0.9	0.9	0.9
177.5°	0.9	0.9	0.9	0.9	0.9
180°	0.9	0.9	0.9	0.9	0.9

(END OF REPORT)