

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: P397433

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397433
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-LD5-15-DRF-LA59-CD2-U
Description:
Light Source: -
Ballast/Driver: -

Summary

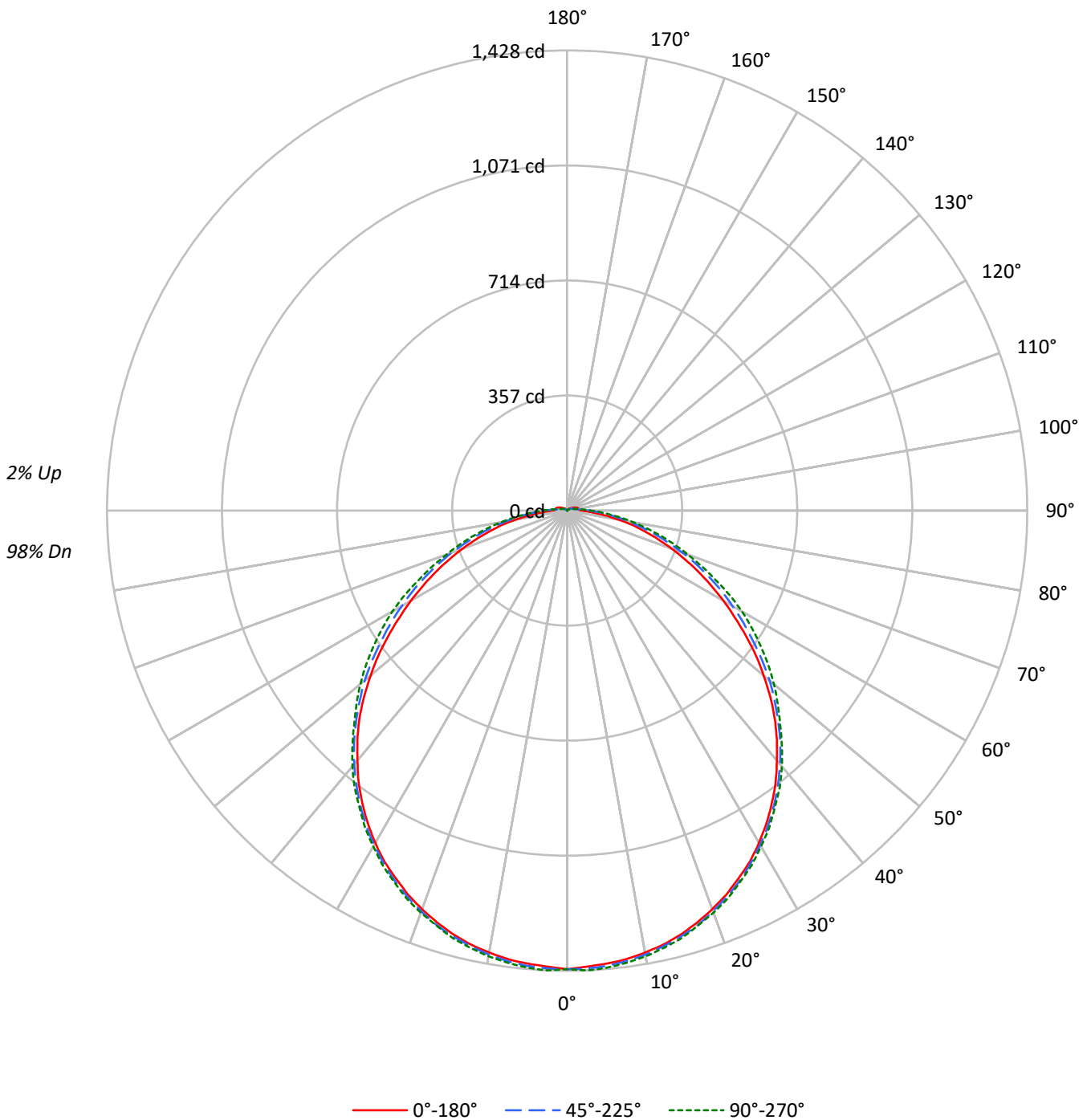
Lumens per Lamp: N/A
Luminaire Lumens: 4149.9 lumens
Efficiency: N/A
Efficacy: 25.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

Input Watts (W): 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	118	118	118	118	115	115	115	115	110	110	110	105	105	105	100	100	100	98
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	81
2	98	89	82	77	95	87	81	75	83	78	73	80	75	71	76	73	69	67
3	89	78	70	64	86	77	69	63	73	67	61	70	65	60	67	63	59	56
4	82	69	61	54	79	68	60	53	65	58	52	63	56	51	60	55	50	48
5	75	62	53	46	73	61	52	46	58	51	45	56	50	45	54	48	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	49	43	39	36
7	64	51	42	36	62	50	41	36	48	41	35	46	40	35	45	39	34	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	41	35	31	29
9	56	42	34	29	54	42	34	29	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6791	6791	6791
5°	6690	6649	6684
10°	6608	6495	6540
15°	6519	6335	6390
20°	6405	6164	6221
25°	6275	5980	6042
30°	6136	5773	5852
35°	5953	5550	5636
40°	5730	5299	5410
45°	5489	5009	5124
50°	5169	4698	4877
55°	4808	4322	4588
60°	4427	3956	4270
65°	4035	3578	3830
70°	3620	3150	3397
75°	3177	2683	2961
80°	2645	2202	2489
85°	1964	1710	1959



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.8	3.2
10°-20°	385.8	9.3
20°-30°	583.3	14.1
30°-40°	698.7	16.8
40°-50°	713.7	17.2
50°-60°	631.9	15.2
60°-70°	478.9	11.5
70°-80°	295.2	7.1
80°-90°	130.6	3.1
90°-100°	46.9	1.1
100°-110°	25.2	0.6
110°-120°	15.0	0.4
120°-130°	6.9	0.2
130°-140°	2.1	0.1
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°	1103.8	26.6
0°-40°	1802.6	43.4
0°-60°	3148.1	75.9
0°-90°	4052.9	97.7
90°-120°	87.1	2.1
90°-150°	96.6	2.3
90°-180°	97.0	2.3
0°-180°	4149.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1423	1423	1423	1423	1423	
5°	1411	1414	1418	1422	1424	134
15°	1362	1363	1368	1371	1374	384
25°	1258	1262	1267	1271	1271	580
35°	1108	1112	1118	1126	1124	693
45°	911	916	926	937	935	701
55°	677	690	704	726	733	606
65°	449	461	486	504	507	445
75°	250	261	280	295	299	266
85°	85	102	120	130	130	87
90°	45	56	69	76	75	26
95°	37	37	40	44	44	30
105°	33	28	21	19	19	34
115°	22	17	14	12	12	22
125°	12	9	6	6	7	10
135°	5	4	1	1	2	4
145°	2	1	0	0	0	1
155°	1	1	1	0	0	0
165°	1	1	1	0	0	0
175°	1	1	1	1	0	0
180°	1	1	1	1	1	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1423.2	1423.2	1423.2	1423.2	1423.2
2.5°	1416.2	1417.9	1422.3	1426.8	1428.2
5°	1411.4	1414.2	1418.4	1422.3	1423.7
7.5°	1404.4	1406.7	1410.3	1414.2	1415.3
10°	1392.7	1395.2	1399.1	1402.7	1404.7
12.5°	1379.5	1380.6	1384.3	1388.5	1389.6
15°	1362.1	1363.3	1367.7	1370.8	1373.6
17.5°	1340.6	1341.7	1348.4	1349.8	1350.1
20°	1316.5	1318.2	1323.5	1326.0	1328.0
22.5°	1290.2	1292.4	1296.6	1299.7	1302.5
25°	1258.5	1262.2	1267.2	1271.1	1271.1
27.5°	1228.0	1228.6	1233.3	1237.5	1240.3
30°	1190.8	1191.3	1197.8	1202.5	1203.7
32.5°	1151.3	1153.6	1160.3	1165.3	1166.7
35°	1107.9	1111.6	1118.3	1126.1	1123.9
37.5°	1062.9	1064.8	1074.3	1080.8	1083.3
40°	1012.5	1018.1	1027.9	1034.9	1036.8
42.5°	963.2	968.2	978.9	985.6	986.4
45°	911.1	916.1	926.5	937.1	934.6
47.5°	854.8	862.7	873.0	884.2	886.2
50°	796.0	807.5	820.1	829.3	837.7
52.5°	738.3	747.6	762.1	778.7	786.5
55°	677.0	690.5	703.6	725.7	733.3
57.5°	616.3	632.5	648.7	673.1	679.8
60°	560.3	573.1	592.7	616.5	626.3
62.5°	503.1	518.0	539.8	561.7	568.4
65°	449.4	461.1	485.5	504.3	507.1
67.5°	395.3	409.3	432.3	451.9	453.0
70°	345.0	357.6	379.7	396.2	397.9
72.5°	296.2	309.1	327.9	344.7	348.0
75°	249.5	261.2	280.3	295.1	299.0
77.5°	208.0	216.7	233.5	250.3	251.7
80°	161.8	171.9	192.9	206.9	209.2
82.5°	123.2	135.2	154.0	166.6	167.2
85°	85.1	101.9	119.8	130.2	130.2
87.5°	58.8	76.4	92.4	99.4	100.2
90°	44.8	56.3	69.4	75.6	75.3
92.5°	38.9	44.2	52.6	57.7	56.8
95°	36.7	36.7	40.3	44.2	44.0
97.5°	35.6	33.3	31.9	34.4	34.2
100°	35.3	31.4	26.3	27.4	27.7
102.5°	34.4	29.7	23.0	22.7	23.0
105°	32.8	28.0	20.7	19.0	19.3
107.5°	30.5	25.8	19.0	16.8	17.1
110°	27.7	23.0	17.4	15.1	15.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	24.9	20.2	15.7	13.4	13.7
115°	21.6	17.4	13.7	11.8	12.3
117.5°	18.8	15.1	12.0	10.1	10.9
120°	16.0	13.2	9.8	8.4	9.5
122.5°	13.4	11.2	7.8	7.0	8.1
125°	11.5	9.2	6.2	5.6	6.7
127.5°	9.5	7.8	4.5	4.5	5.3
130°	7.8	6.4	2.8	3.4	4.2
132.5°	6.4	5.3	2.0	2.2	3.1
135°	5.0	4.2	1.4	1.4	2.2
137.5°	4.2	3.1	0.8	0.6	1.1
140°	3.1	2.2	0.6	0.0	0.3
142.5°	2.5	1.7	0.3	0.0	0.0
145°	1.7	1.1	0.3	0.0	0.0
147.5°	1.1	0.6	0.3	0.3	0.0
150°	0.6	0.6	0.3	0.3	0.0
152.5°	0.6	0.6	0.3	0.3	0.0
155°	0.6	0.6	0.6	0.3	0.0
157.5°	0.6	0.6	0.6	0.3	0.0
160°	0.6	0.6	0.6	0.3	0.3
162.5°	0.8	0.8	0.6	0.3	0.3
165°	0.8	0.8	0.6	0.3	0.3
167.5°	0.8	0.8	0.6	0.6	0.3
170°	0.8	0.8	0.6	0.3	0.3
172.5°	0.8	0.8	0.6	0.6	0.3
175°	0.8	0.8	0.8	0.6	0.3
177.5°	0.8	0.8	0.8	0.6	0.3
180°	0.8	0.8	0.8	0.8	0.8

(END OF REPORT)