

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: P397428

Luminaire Tested: **VRVT4S-LD5-12-PCF-LG52-CD2-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397428
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-LD5-12-PCF-LG52-CD2-U
Description:
Light Source: -
Ballast/Driver: -

Summary

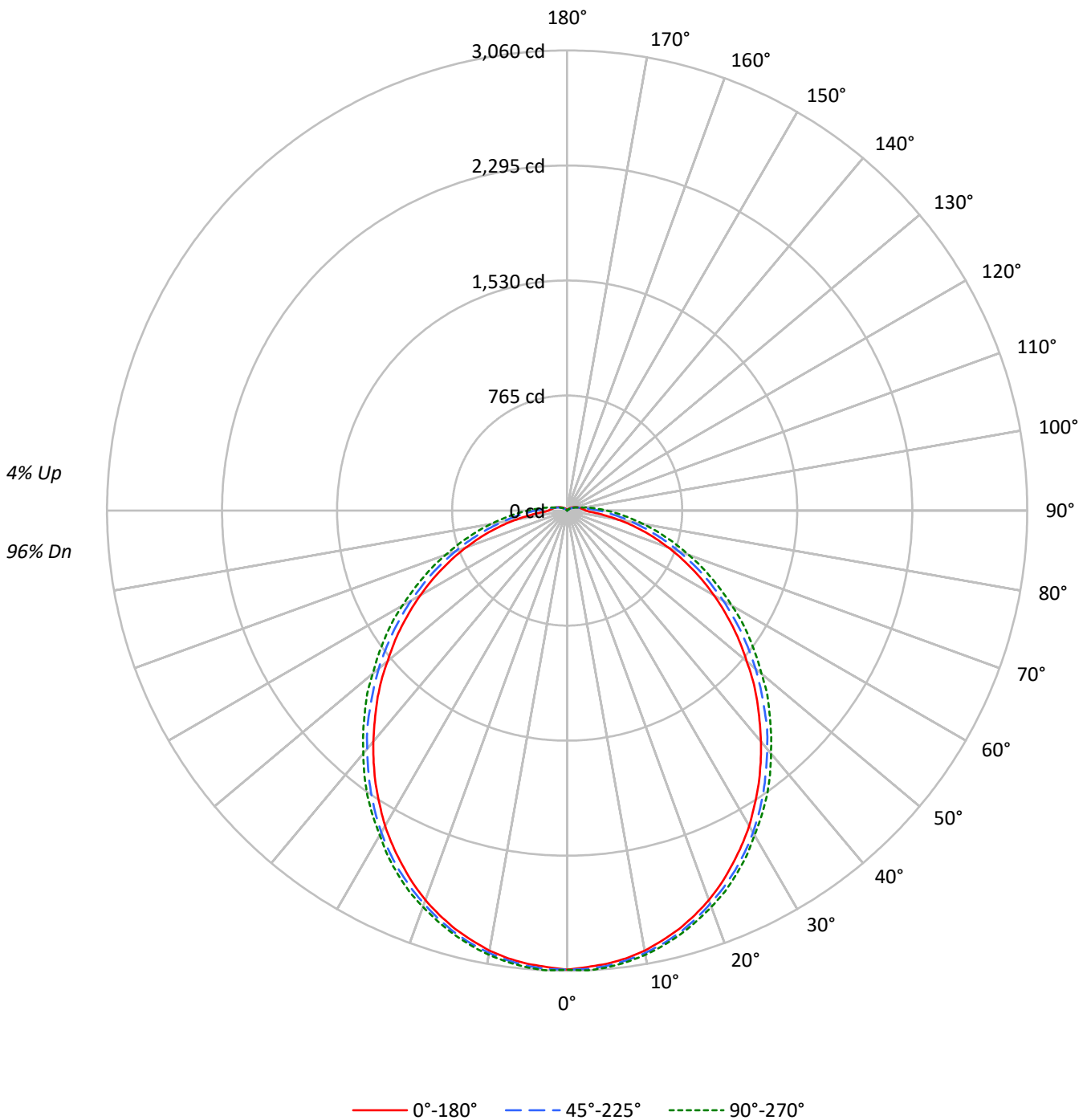
Lumens per Lamp: N/A
Luminaire Lumens: 8710.4 lumens
Efficiency: N/A
Efficacy: 43.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.32
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

Input Watts (W): 199.7
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	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	65	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°	14565	14565	14565
5°	14340	14250	14320
10°	14100	13867	13968
15°	13781	13443	13568
20°	13407	12958	13136
25°	12951	12460	12677
30°	12476	11916	12119
35°	11928	11303	11609
40°	11348	10669	11005
45°	10769	10015	10436
50°	10119	9376	9821
55°	9542	8695	9261
60°	8905	8003	8620
65°	8235	7294	7979
70°	7480	6544	7314
75°	6635	5769	6708
80°	5585	5039	6108
85°	4399	4393	5636



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	288.4	3.3
10°-20°	817.4	9.4
20°-30°	1214.1	13.9
30°-40°	1421.0	16.3
40°-50°	1427.9	16.4
50°-60°	1266.0	14.5
60°-70°	982.2	11.3
70°-80°	640.7	7.4
80°-90°	334.6	3.8
90°-100°	160.1	1.8
100°-110°	83.3	1.0
110°-120°	45.4	0.5
120°-130°	21.4	0.2
130°-140°	6.5	0.1
140°-150°	0.9	0.0
150°-160°	0.2	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	2319.9	26.6
0°-40°	3740.9	42.9
0°-60°	6434.8	73.9
0°-90°	8392.3	96.3
90°-120°	288.8	3.3
90°-150°	317.6	3.6
90°-180°	318.0	3.7
0°-180°	8710.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3053	3053	3053	3053	3053	
5°	3025	3029	3040	3047	3050	287
15°	2880	2887	2902	2912	2917	811
25°	2598	2614	2640	2661	2667	1197
35°	2220	2242	2278	2305	2315	1387
45°	1788	1812	1852	1888	1904	1377
55°	1344	1368	1416	1463	1480	1202
65°	917	942	990	1043	1056	909
75°	521	546	603	658	677	553
85°	191	244	308	362	375	189
90°	123	159	211	251	261	69
95°	107	114	142	171	178	84
105°	78	75	76	78	82	83
115°	53	44	45	42	45	53
125°	32	27	19	19	24	30
135°	17	13	3	4	7	13
145°	5	3	0	0	0	3
155°	1	1	0	0	0	1
165°	1	1	1	0	0	0
175°	2	1	1	0	0	0
180°	1	1	1	1	1	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3052.6	3052.6	3052.6	3052.6	3052.6
2.5°	3038.4	3042.3	3050.7	3059.1	3060.5
5°	3025.4	3029.4	3039.7	3046.8	3050.1
7.5°	3003.4	3007.3	3017.0	3026.7	3028.0
10°	2971.7	2976.8	2987.2	2998.2	3000.2
12.5°	2928.2	2936.6	2949.6	2959.4	2961.9
15°	2879.6	2886.7	2902.3	2912.0	2916.6
17.5°	2821.3	2830.3	2846.6	2858.2	2863.4
20°	2755.8	2764.9	2782.4	2802.5	2804.4
22.5°	2681.9	2696.2	2715.0	2734.4	2742.2
25°	2597.7	2613.9	2640.5	2661.2	2667.0
27.5°	2512.2	2527.7	2560.1	2581.4	2586.0
30°	2421.4	2438.2	2472.6	2489.4	2492.7
32.5°	2320.3	2339.8	2376.6	2400.0	2405.8
35°	2219.8	2242.5	2277.5	2305.4	2315.1
37.5°	2113.5	2138.8	2172.5	2208.2	2215.9
40°	2005.3	2031.8	2069.4	2102.5	2109.0
42.5°	1892.6	1921.7	1968.3	1995.0	2007.3
45°	1787.5	1811.5	1852.3	1888.0	1903.5
47.5°	1676.7	1700.6	1743.4	1785.6	1803.1
50°	1558.1	1590.5	1636.5	1677.4	1687.0
52.5°	1453.1	1484.2	1524.4	1569.8	1584.6
55°	1343.6	1368.2	1415.5	1463.4	1480.3
57.5°	1234.6	1261.3	1304.6	1353.3	1378.6
60°	1127.1	1152.4	1199.0	1249.6	1264.5
62.5°	1022.7	1048.6	1090.8	1145.9	1160.8
65°	917.1	942.4	989.7	1042.8	1056.5
67.5°	814.7	838.6	887.3	943.7	960.6
70°	713.0	744.1	788.8	841.3	856.8
72.5°	617.0	644.2	695.4	748.6	766.7
75°	521.1	545.8	602.7	658.5	677.3
77.5°	431.0	462.8	518.5	579.4	594.3
80°	341.6	375.3	441.4	499.7	513.3
82.5°	260.6	304.0	371.4	429.0	437.5
85°	190.6	243.7	307.8	361.7	374.6
87.5°	143.2	195.1	257.9	302.6	314.3
90°	123.1	158.8	210.6	250.8	260.6
92.5°	114.7	132.2	173.0	208.7	215.2
95°	107.0	114.1	141.9	171.1	178.2
97.5°	99.2	101.8	119.3	140.0	145.8
100°	92.0	92.7	100.5	115.4	119.3
102.5°	84.9	83.0	86.2	94.0	97.2
105°	78.4	74.6	76.5	77.8	81.7
107.5°	71.9	66.1	67.4	66.1	68.1
110°	65.4	57.7	59.0	57.0	59.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	59.0	50.6	51.8	49.3	51.8
115°	53.1	44.1	44.7	42.2	45.4
117.5°	48.0	39.5	37.6	35.7	39.5
120°	42.2	34.3	31.1	29.8	34.3
122.5°	37.6	30.5	24.6	24.6	29.2
125°	32.4	26.6	18.8	19.4	24.0
127.5°	28.5	22.7	13.6	15.5	19.4
130°	24.6	19.4	8.4	11.7	15.5
132.5°	20.1	15.5	5.2	7.8	11.0
135°	16.9	13.0	3.3	3.9	7.1
137.5°	13.6	9.8	1.3	0.6	3.3
140°	10.4	7.1	0.6	0.0	0.0
142.5°	7.1	4.6	0.0	0.0	0.0
145°	4.6	2.6	0.0	0.0	0.0
147.5°	2.6	1.3	0.0	0.0	0.0
150°	1.3	0.6	0.0	0.0	0.0
152.5°	1.3	0.6	0.0	0.0	0.0
155°	1.3	1.3	0.0	0.0	0.0
157.5°	1.3	1.3	0.6	0.0	0.0
160°	1.3	1.3	0.6	0.0	0.0
162.5°	1.3	1.3	0.6	0.0	0.0
165°	1.3	1.3	0.6	0.0	0.0
167.5°	1.3	1.3	0.6	0.0	0.0
170°	1.3	1.3	0.6	0.0	0.0
172.5°	1.3	1.3	0.6	0.0	0.0
175°	1.9	1.3	0.6	0.0	0.0
177.5°	1.9	1.3	0.6	0.0	0.0
180°	0.6	0.6	0.6	0.6	0.6

(END OF REPORT)