

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: P397406

Luminaire Tested: **VRVT4LED-LD5-30-PC-UNV-LA59-CD3-WL-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397406
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-16)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: VRVT4LED-LD5-30-PC-UNV-LA59-CD3-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

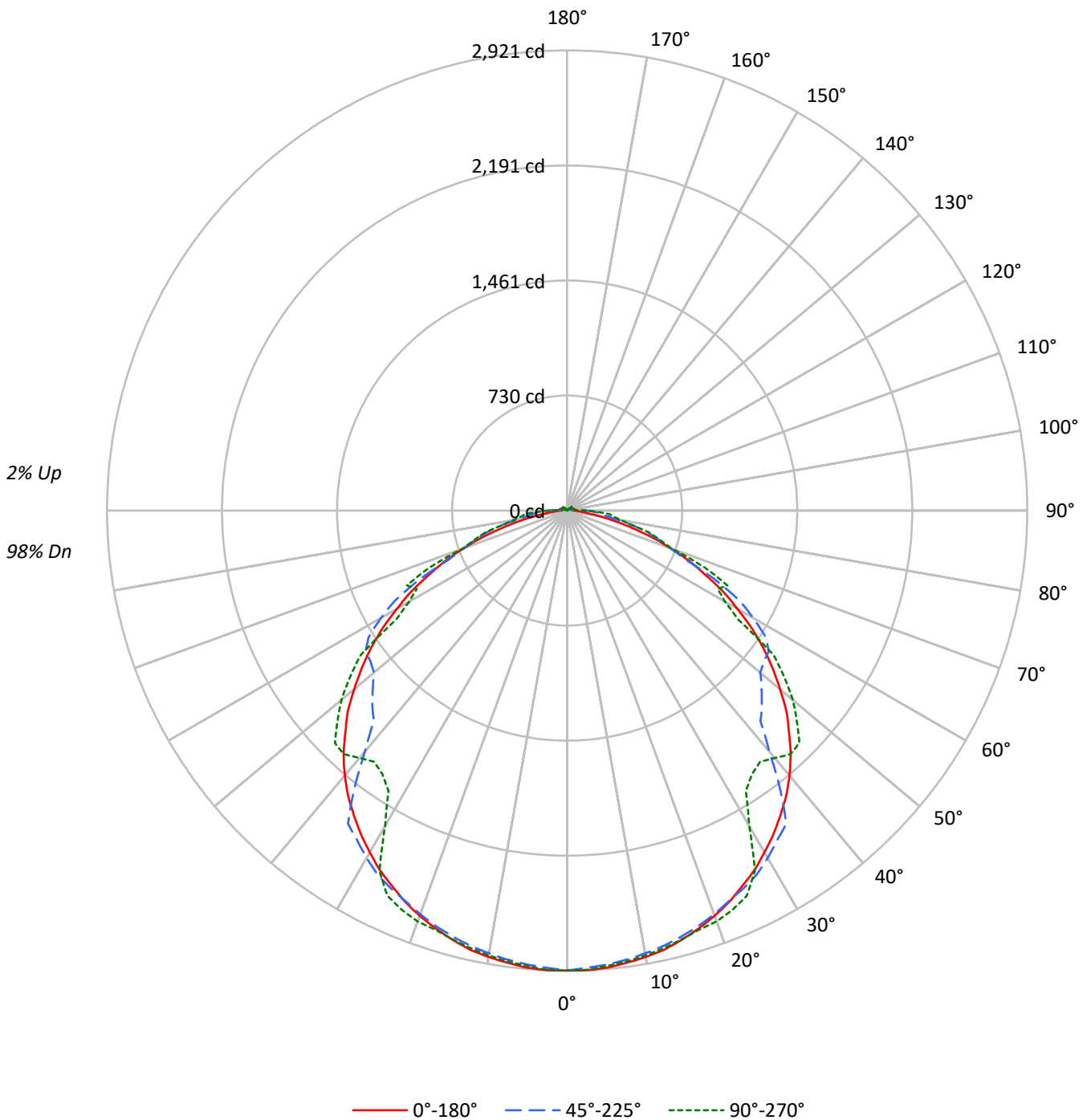
Lumens per Lamp: N/A
Luminaire Lumens: 8385.7 lumens
Efficiency: N/A
Efficacy: 23.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.17 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

Input Watts (W): 355.6
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	110	110	110	105	105	105	101	101	101	98
1	108	103	99	95	105	101	97	94	96	93	90	92	90	87	88	86	84	82
2	99	90	83	78	96	88	82	77	84	79	75	81	77	73	78	74	71	69
3	90	79	71	65	87	78	70	64	74	68	63	71	66	61	69	64	60	58
4	82	70	61	55	80	69	61	54	66	59	53	64	57	52	61	56	52	49
5	76	63	54	47	73	62	53	47	59	52	46	57	51	45	55	49	45	43
6	70	56	48	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	44	37	32	43	36	32	42	36	31	29
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	26
10	53	40	32	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7314	7314	7314
5°	7285	7141	7146
10°	7242	6997	6996
15°	7195	6870	6863
20°	7140	6748	6804
25°	7069	6655	6708
30°	7001	6560	5872
35°	6925	6458	5351
40°	6834	5541	5580
45°	6651	5108	5956
50°	6410	4978	5666
55°	6108	5233	5202
60°	5653	4999	4095
65°	5088	4211	4393
70°	4390	3214	3114
75°	3384	2820	2743
80°	2270	1994	2111
85°	1574	1757	2081



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	275.8	3.3
10°-20°	793.8	9.5
20°-30°	1219.3	14.5
30°-40°	1416.1	16.9
40°-50°	1496.0	17.8
50°-60°	1367.9	16.3
60°-70°	960.3	11.5
70°-80°	513.7	6.1
80°-90°	210.6	2.5
90°-100°	53.6	0.6
100°-110°	26.8	0.3
110°-120°	18.9	0.2
120°-130°	18.7	0.2
130°-140°	9.6	0.1
140°-150°	2.7	0.0
150°-160°	0.9	0.0
160°-170°	0.6	0.0
170°-180°	0.2	0.0
0°-30°	2288.9	27.3
0°-40°	3705.0	44.2
0°-60°	6569.0	78.3
0°-90°	8253.6	98.4
90°-120°	99.4	1.2
90°-150°	130.4	1.6
90°-180°	132.0	1.6
0°-180°	8385.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2920	2920	2920	2920	2920	
5°	2912	2908	2893	2898	2901	277
15°	2819	2809	2800	2813	2816	796
25°	2630	2626	2646	2682	2698	1213
35°	2360	2363	2426	2035	2044	1477
45°	1991	2018	1748	1988	2085	1537
55°	1520	1503	1562	1627	1599	1354
65°	970	867	1034	967	1122	965
75°	429	436	522	500	537	463
85°	93	130	210	263	271	100
90°	40	84	127	120	111	24
95°	38	44	40	33	30	34
105°	42	31	22	18	17	44
115°	22	22	19	12	12	23
125°	11	10	29	26	34	10
135°	5	4	8	22	13	4
145°	3	2	2	8	6	2
155°	2	2	2	1	1	1
165°	2	2	2	2	1	1
175°	2	2	3	2	2	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2919.5	2919.5	2919.5	2919.5	2919.5
2.5°	2920.9	2917.9	2905.3	2912.0	2917.9
5°	2912.5	2907.8	2892.7	2898.3	2901.3
7.5°	2895.7	2892.9	2876.1	2882.9	2887.1
10°	2877.3	2869.7	2853.7	2864.7	2866.9
12.5°	2854.3	2840.9	2829.7	2840.3	2843.7
15°	2819.3	2808.7	2799.7	2812.9	2816.5
17.5°	2780.4	2768.1	2766.1	2777.0	2788.5
20°	2737.3	2725.5	2727.2	2754.3	2775.1
22.5°	2688.0	2677.9	2682.9	2728.9	2742.9
25°	2629.7	2626.1	2646.3	2681.5	2698.3
27.5°	2574.3	2566.7	2605.7	2645.1	2579.3
30°	2505.1	2503.7	2546.0	2463.1	2311.4
32.5°	2436.8	2440.5	2481.3	2229.9	2110.1
35°	2360.4	2362.9	2425.9	2034.7	2044.0
37.5°	2283.1	2297.7	2217.3	1974.0	2010.4
40°	2196.0	2230.2	1996.7	1942.3	2050.1
42.5°	2100.8	2126.3	1816.6	1945.7	2097.7
45°	1991.3	2018.2	1748.3	1988.3	2084.6
47.5°	1889.1	1909.0	1673.3	1984.1	1977.3
50°	1763.7	1805.1	1601.0	1860.9	1869.8
52.5°	1643.3	1685.0	1572.7	1750.3	1738.8
55°	1519.5	1503.3	1561.8	1627.1	1599.3
57.5°	1388.8	1287.7	1493.8	1460.7	1286.3
60°	1246.8	1094.2	1365.0	1157.8	1157.2
62.5°	1118.3	976.1	1227.8	1055.0	1076.6
65°	969.9	867.4	1034.3	967.1	1122.5
67.5°	840.6	750.1	811.2	988.7	948.6
70°	699.2	635.6	695.0	774.2	705.6
72.5°	563.1	528.1	603.1	607.6	615.4
75°	428.7	435.7	522.5	499.5	537.3
77.5°	310.2	332.6	417.2	428.7	412.4
80°	211.4	259.6	304.9	318.6	345.5
82.5°	138.0	175.6	245.0	277.5	293.4
85°	92.7	129.6	209.7	262.9	271.0
87.5°	62.2	111.4	175.6	199.1	185.4
90°	40.3	84.0	126.6	120.4	111.4
92.5°	32.8	63.6	73.4	65.8	58.2
95°	37.8	43.7	39.8	33.0	30.5
97.5°	45.9	30.2	28.3	29.4	30.0
100°	48.2	30.0	24.1	23.8	24.1
102.5°	46.5	31.6	22.1	21.3	20.4
105°	42.3	31.1	21.6	18.2	17.1
107.5°	37.0	29.1	21.0	17.9	16.2
110°	31.6	26.9	19.3	17.6	17.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	26.6	25.2	17.6	14.6	14.8
115°	22.1	22.4	19.3	12.0	11.8
117.5°	18.8	19.6	27.7	11.5	9.8
120°	16.0	16.0	26.9	21.0	12.6
122.5°	13.2	12.6	26.0	34.4	28.0
125°	11.2	9.5	29.1	26.3	34.4
127.5°	9.2	7.6	16.2	31.1	24.4
130°	7.8	6.2	18.8	35.3	38.1
132.5°	6.4	5.0	15.7	15.1	26.9
135°	5.3	4.2	7.6	22.4	13.2
137.5°	4.2	3.6	5.3	22.4	25.5
140°	3.6	3.1	5.6	7.3	16.2
142.5°	3.1	2.5	3.6	5.9	5.6
145°	2.8	2.2	2.2	8.1	6.4
147.5°	2.2	2.2	2.0	6.4	8.7
150°	2.2	2.0	2.0	2.5	5.0
152.5°	2.0	2.0	2.0	1.4	1.4
155°	2.2	2.2	2.2	1.4	0.8
157.5°	2.2	2.2	2.2	1.4	0.8
160°	2.2	2.2	2.2	1.7	1.1
162.5°	2.2	2.2	2.5	1.7	1.1
165°	2.5	2.5	2.5	2.0	1.1
167.5°	2.5	2.5	2.5	2.0	1.4
170°	2.5	2.5	2.5	2.0	1.4
172.5°	2.5	2.5	2.8	2.0	1.7
175°	2.5	2.5	2.8	2.2	1.7
177.5°	2.5	2.5	2.8	2.2	2.0
180°	2.5	2.5	2.5	2.5	2.5

(END OF REPORT)