

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: P397368

Luminaire Tested: **VRVT4LED-LD5-12-DRF-UNV-LG52-CD1-WL-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397368
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-2)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: VRVT4LED-LD5-12-DRF-UNV-LG52-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

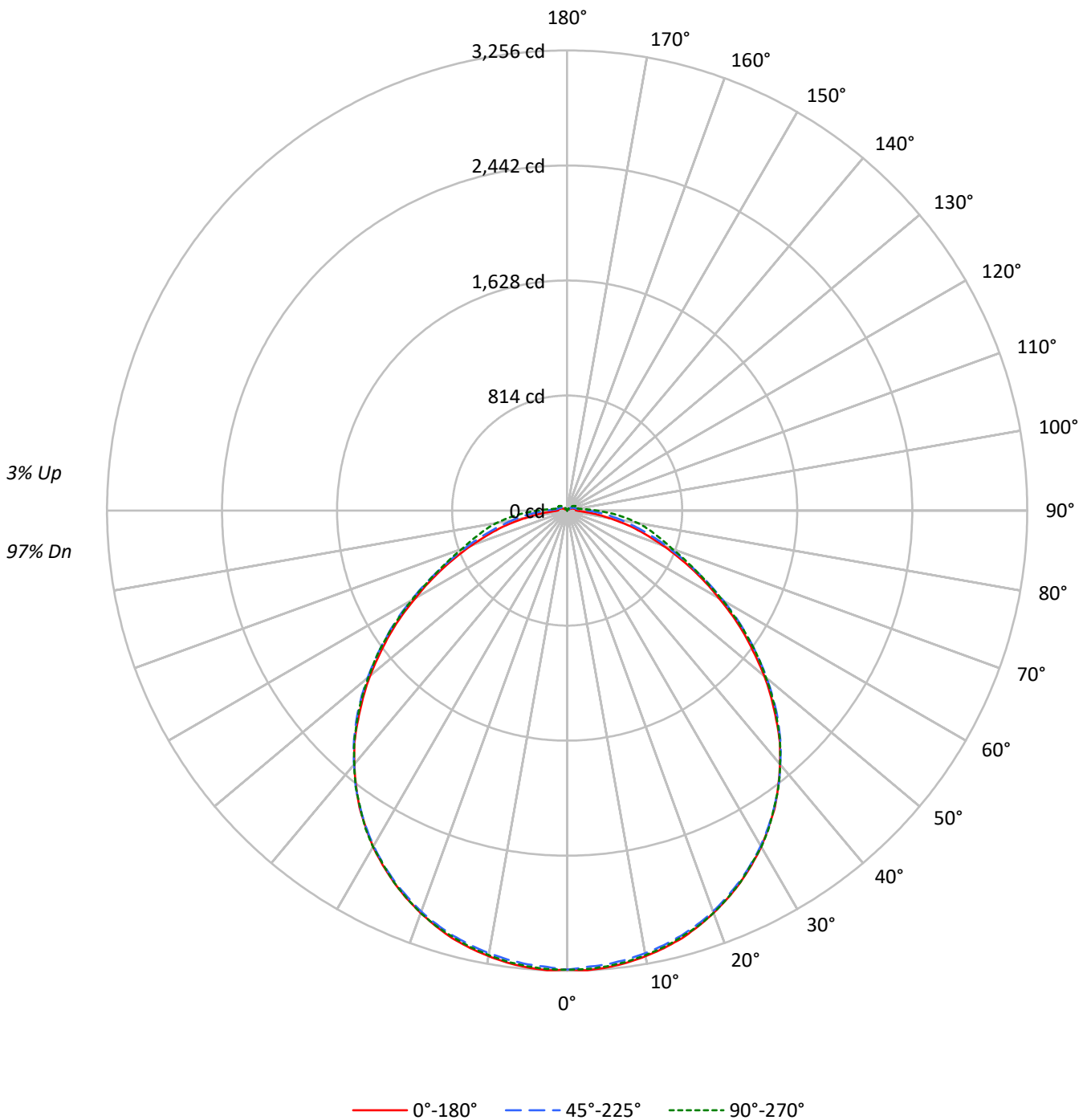
Lumens per Lamp: N/A
Luminaire Lumens: 9279.2 lumens
Efficiency: N/A
Efficacy: 42.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

Input Watts (W): 220.2
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	104	104	104	99	99	99	97
1	108	103	99	95	105	100	96	93	96	92	89	91	89	86	87	85	83	81
2	98	90	83	77	95	88	81	76	84	78	74	80	76	72	77	73	70	67
3	90	79	71	64	87	77	70	64	74	67	62	71	65	61	68	63	59	57
4	82	70	61	55	80	69	60	54	66	59	53	63	57	52	61	55	51	49
5	76	63	54	47	73	61	53	47	59	52	46	57	50	45	55	49	45	42
6	70	57	48	41	68	55	47	41	53	46	40	51	45	40	50	44	39	37
7	65	51	43	36	63	50	42	36	49	41	36	47	40	35	45	39	35	33
8	60	47	38	33	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	38	33	28	26
10	53	40	32	27	51	39	32	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8137	8137	8137
5°	8117	7956	7971
10°	8058	7800	7795
15°	7997	7642	7613
20°	7902	7470	7428
25°	7802	7274	7212
30°	7678	7059	6980
35°	7518	6808	6693
40°	7291	6511	6381
45°	6990	6170	6006
50°	6622	5735	5563
55°	6172	5233	5067
60°	5620	4679	4491
65°	5088	4074	3928
70°	4524	3508	3490
75°	3962	3001	3283
80°	3224	2554	3099
85°	2415	2108	2697



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	307.5	3.3
10°-20°	881.9	9.5
20°-30°	1335.9	14.4
30°-40°	1601.1	17.3
40°-50°	1623.4	17.5
50°-60°	1390.7	15.0
60°-70°	991.4	10.7
70°-80°	602.1	6.5
80°-90°	280.0	3.0
90°-100°	102.5	1.1
100°-110°	64.0	0.7
110°-120°	48.6	0.5
120°-130°	30.7	0.3
130°-140°	14.3	0.2
140°-150°	3.8	0.0
150°-160°	0.6	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	2525.3	27.2
0°-40°	4126.3	44.5
0°-60°	7140.4	77.0
0°-90°	9013.9	97.1
90°-120°	215.2	2.3
90°-150°	264.0	2.8
90°-180°	265.0	2.9
0°-180°	9279.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3248	3248	3248	3248	3248	
5°	3245	3238	3223	3239	3237	308
15°	3134	3126	3115	3130	3124	884
25°	2902	2899	2893	2907	2901	1337
35°	2563	2565	2557	2566	2556	1600
45°	2093	2109	2112	2110	2102	1613
55°	1536	1554	1562	1567	1558	1370
65°	970	989	1001	1005	1004	964
75°	502	516	556	618	643	532
85°	142	166	252	333	351	151
90°	67	77	145	200	210	39
95°	62	59	89	112	118	50
105°	53	47	63	69	69	56
115°	33	31	51	64	67	33
125°	17	14	34	52	57	16
135°	8	6	14	30	36	6
145°	3	3	1	10	14	2
155°	2	2	1	0	0	1
165°	3	2	2	1	1	1
175°	3	3	2	1	1	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3248.2	3248.2	3248.2	3248.2	3248.2
2.5°	3255.7	3248.2	3232.3	3248.2	3247.2
5°	3245.0	3237.6	3222.8	3238.7	3236.6
7.5°	3228.1	3220.6	3204.7	3221.7	3219.6
10°	3201.5	3198.4	3181.4	3197.3	3194.1
12.5°	3170.8	3165.4	3150.6	3166.6	3163.4
15°	3133.6	3126.2	3114.6	3130.5	3124.1
17.5°	3084.8	3081.6	3069.9	3085.8	3081.6
20°	3029.6	3025.4	3019.0	3031.8	3029.6
22.5°	2969.1	2966.0	2957.4	2974.5	2967.0
25°	2902.3	2899.1	2892.7	2906.6	2901.2
27.5°	2827.0	2827.0	2818.5	2831.2	2821.7
30°	2747.4	2745.3	2739.9	2749.5	2747.4
32.5°	2655.0	2663.5	2650.8	2659.3	2659.3
35°	2562.7	2564.9	2557.4	2565.9	2556.3
37.5°	2454.5	2460.9	2457.7	2463.0	2457.7
40°	2343.0	2351.5	2346.2	2348.4	2344.2
42.5°	2228.5	2237.0	2235.9	2234.8	2230.6
45°	2092.6	2108.6	2111.8	2109.6	2102.2
47.5°	1958.9	1980.2	1982.2	1985.4	1974.8
50°	1822.0	1835.8	1844.3	1845.4	1835.8
52.5°	1673.4	1695.8	1704.2	1708.5	1702.1
55°	1535.5	1553.5	1562.0	1567.4	1557.8
57.5°	1389.0	1401.8	1423.0	1424.1	1413.4
60°	1239.4	1262.8	1277.7	1276.6	1269.1
62.5°	1105.8	1119.5	1137.6	1136.5	1129.1
65°	969.9	989.0	1000.7	1005.0	1003.8
67.5°	840.5	858.5	874.4	888.2	893.5
70°	720.6	734.3	758.7	783.1	790.6
72.5°	604.9	621.8	654.7	695.0	713.1
75°	501.9	515.8	556.1	617.6	643.0
77.5°	401.1	412.8	469.0	549.7	577.3
80°	300.3	321.5	390.5	480.7	507.2
82.5°	216.5	235.6	319.4	406.4	431.9
85°	142.2	165.5	251.5	333.2	351.3
87.5°	90.2	110.4	193.1	263.2	277.0
90°	66.9	77.4	145.4	199.5	210.1
92.5°	62.6	64.7	109.3	150.7	157.0
95°	61.5	59.4	89.1	112.5	117.8
97.5°	60.5	55.2	77.4	91.3	93.4
100°	59.4	52.0	71.1	79.6	79.6
102.5°	57.3	48.8	65.8	73.2	73.2
105°	53.0	46.7	62.6	69.0	69.0
107.5°	48.8	43.5	59.4	67.9	67.9
110°	43.5	40.3	57.3	66.9	67.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	38.2	36.1	54.1	65.8	67.9
115°	32.9	30.8	51.0	63.7	66.9
117.5°	28.6	26.6	47.8	61.5	65.8
120°	24.4	21.2	43.5	59.4	64.7
122.5°	20.2	17.0	39.3	55.2	61.5
125°	17.0	13.8	33.9	52.0	57.3
127.5°	14.9	10.6	28.6	46.7	53.0
130°	11.7	9.5	23.4	41.4	47.8
132.5°	9.5	7.4	19.1	36.1	42.5
135°	8.5	6.4	13.8	29.7	36.1
137.5°	6.4	5.3	9.5	24.4	30.8
140°	5.3	4.2	5.3	19.1	24.4
142.5°	4.2	3.2	3.2	13.8	19.1
145°	3.2	3.2	1.0	9.5	13.8
147.5°	3.2	2.2	1.0	5.3	8.5
150°	2.2	2.2	1.0	2.2	4.2
152.5°	2.2	2.2	1.0	0.0	1.0
155°	2.2	2.2	1.0	0.0	0.0
157.5°	2.2	2.2	1.0	0.0	0.0
160°	2.2	2.2	1.0	0.0	0.0
162.5°	3.2	2.2	1.0	1.0	0.0
165°	3.2	2.2	2.2	1.0	1.0
167.5°	3.2	3.2	2.2	1.0	1.0
170°	3.2	2.2	2.2	1.0	1.0
172.5°	3.2	2.2	2.2	1.0	1.0
175°	3.2	3.2	2.2	1.0	1.0
177.5°	3.2	3.2	2.2	1.0	1.0
180°	2.2	2.2	2.2	2.2	2.2

(END OF REPORT)