

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: P397404

Luminaire Tested: **VRVT4LED-LD5-30-DRF-UNV-LG52-CD3-WL-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397404
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-15)
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-DRF-UNV-LG52-CD3-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

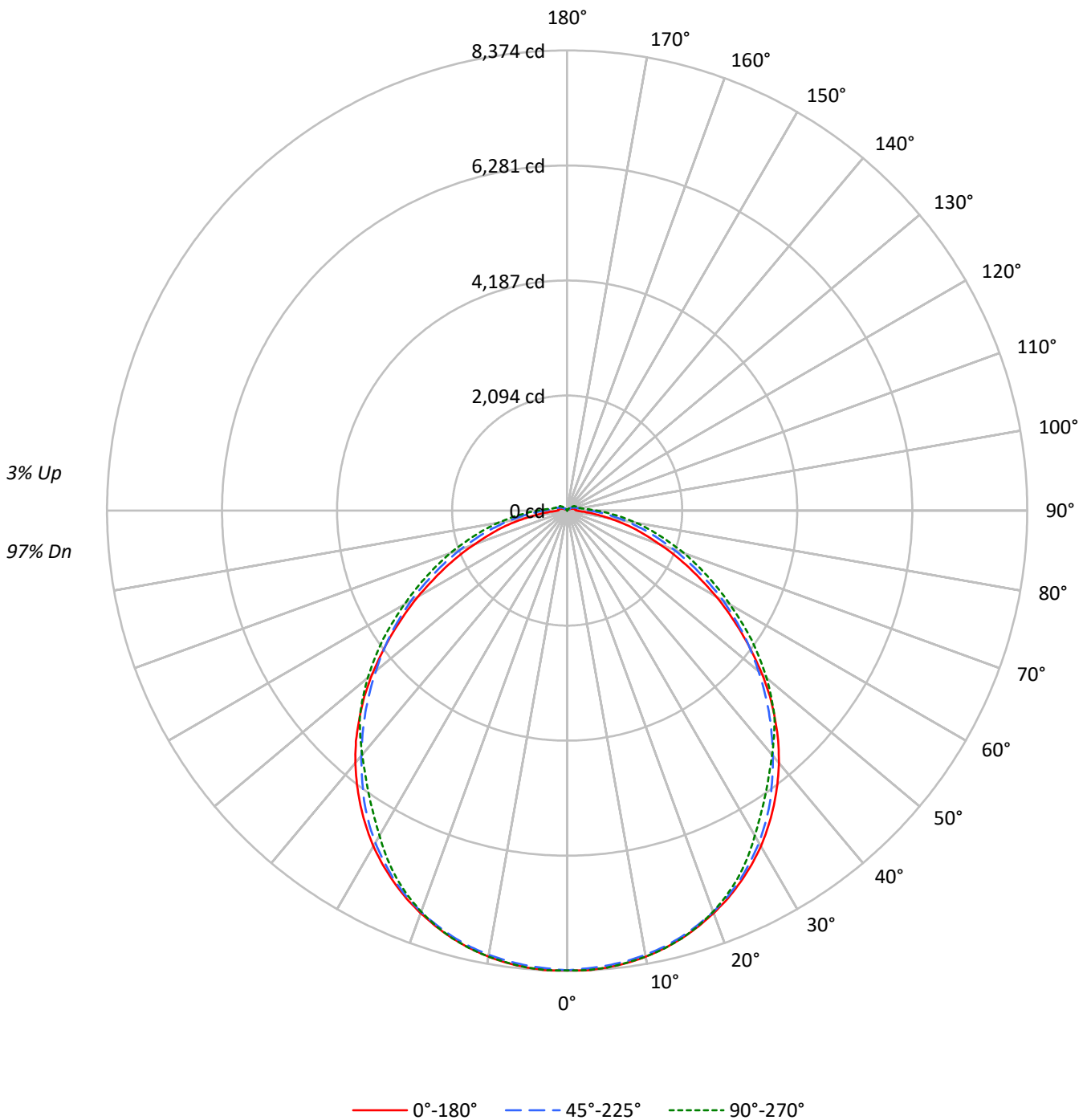
Lumens per Lamp: N/A
Luminaire Lumens: 23787.3 lumens
Efficiency: N/A
Efficacy: 43.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.21 / 1.33
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

Input Watts (W): 553.1
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	97
1	108	103	98	94	105	100	96	93	95	92	89	91	88	86	87	85	83	80
2	98	90	83	77	95	87	81	76	83	78	74	80	75	71	76	73	69	67
3	89	79	71	64	87	77	69	63	74	67	62	70	65	60	67	63	59	57
4	82	70	61	54	79	68	60	54	65	58	53	63	57	52	60	55	51	48
5	75	63	54	47	73	61	53	47	59	51	46	56	50	45	54	49	44	42
6	70	56	47	41	68	55	47	41	53	46	40	51	45	40	49	43	39	37
7	65	51	42	36	63	50	42	36	48	41	36	47	40	35	45	39	35	33
8	60	47	38	32	58	46	38	32	44	37	32	43	36	31	41	35	31	29
9	56	43	35	29	55	42	34	29	41	34	29	39	33	28	38	32	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°	20962	20962	20962
5°	20881	20522	20562
10°	20747	20124	20117
15°	20573	19704	19642
20°	20332	19235	19045
25°	20057	18682	18312
30°	19711	17992	17351
35°	19230	17151	16482
40°	18654	16171	15792
45°	17861	15167	15250
50°	16824	14132	14364
55°	15557	13115	13317
60°	14219	12008	12115
65°	12774	10749	11017
70°	11237	9533	9975
75°	9870	8269	8843
80°	8039	7028	7757
85°	5977	5759	6530



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	792.2	3.3
10°-20°	2270.2	9.5
20°-30°	3415.3	14.4
30°-40°	4024.5	16.9
40°-50°	4067.6	17.1
50°-60°	3535.6	14.9
60°-70°	2612.1	11.0
70°-80°	1605.7	6.8
80°-90°	732.6	3.1
90°-100°	302.0	1.3
100°-110°	186.7	0.8
110°-120°	125.7	0.5
120°-130°	72.2	0.3
130°-140°	32.6	0.1
140°-150°	9.0	0.0
150°-160°	1.8	0.0
160°-170°	1.2	0.0
170°-180°	0.4	0.0
0°-30°	6477.7	27.2
0°-40°	10502.1	44.2
0°-60°	18105.3	76.1
0°-90°	23055.7	96.9
90°-120°	614.4	2.6
90°-150°	728.2	3.1
90°-180°	732.0	3.1
0°-180°	23787.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8368	8368	8368	8368	8368	
5°	8348	8341	8313	8335	8349	794
15°	8062	8047	8030	8051	8061	2274
25°	7462	7453	7429	7393	7366	3438
35°	6555	6549	6443	6322	6295	4098
45°	5347	5330	5191	5256	5338	4120
55°	3870	3866	3914	4064	4094	3463
65°	2435	2459	2640	2797	2815	2417
75°	1250	1322	1532	1696	1732	1324
85°	352	464	687	826	850	373
90°	172	262	424	518	534	100
95°	153	201	283	326	334	123
105°	124	138	185	208	212	130
115°	74	81	134	166	176	75
125°	38	32	82	118	132	35
135°	18	15	34	67	79	15
145°	9	6	4	22	30	6
155°	6	6	4	2	0	3
165°	6	6	5	2	1	2
175°	7	6	6	3	2	1
180°	5	5	5	5	5	



TEST NUMBER: P397404

CATALOG NUMBER: VRVT4LED-LD5-30-DRF-UNV-LG52-CD3-WL-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8368.0	8368.0	8368.0	8368.0	8368.0
2.5°	8374.4	8366.4	8337.6	8359.2	8371.2
5°	8348.0	8340.8	8312.8	8335.2	8348.8
7.5°	8306.4	8295.2	8269.6	8293.6	8300.0
10°	8243.2	8231.2	8208.0	8231.2	8243.2
12.5°	8162.4	8150.4	8132.0	8152.0	8164.0
15°	8061.6	8047.2	8030.4	8051.2	8060.8
17.5°	7936.8	7927.2	7908.0	7930.4	7929.6
20°	7795.2	7787.2	7773.6	7781.6	7768.0
22.5°	7642.4	7627.2	7613.6	7598.4	7581.6
25°	7461.6	7452.8	7428.8	7392.8	7366.4
27.5°	7266.4	7260.0	7211.2	7149.6	7116.0
30°	7052.8	7040.0	6983.2	6888.0	6829.6
32.5°	6812.8	6805.6	6724.0	6616.8	6555.2
35°	6555.2	6548.8	6443.2	6322.4	6295.2
37.5°	6284.0	6273.6	6130.4	6045.6	6038.4
40°	5994.4	5974.4	5827.2	5775.2	5801.6
42.5°	5688.8	5667.2	5508.8	5520.0	5572.0
45°	5347.2	5330.4	5191.2	5256.0	5337.6
47.5°	5007.2	4982.4	4868.8	4980.8	5042.4
50°	4628.8	4600.8	4544.8	4700.8	4740.0
52.5°	4244.8	4232.8	4228.8	4385.6	4408.8
55°	3870.4	3866.4	3914.4	4064.0	4094.4
57.5°	3498.4	3497.6	3588.8	3729.6	3752.8
60°	3136.0	3141.6	3279.2	3406.4	3423.2
62.5°	2765.6	2796.0	2949.6	3085.6	3112.8
65°	2435.2	2459.2	2640.0	2796.8	2815.2
67.5°	2112.0	2151.2	2338.4	2494.4	2529.6
70°	1789.6	1859.2	2061.6	2215.2	2260.0
72.5°	1506.4	1569.6	1788.0	1961.6	1977.6
75°	1250.4	1322.4	1532.0	1696.0	1732.0
77.5°	995.2	1070.4	1295.2	1468.0	1491.2
80°	748.8	843.2	1074.4	1239.2	1269.6
82.5°	532.0	640.0	867.2	1024.8	1051.2
85°	352.0	464.0	687.2	826.4	850.4
87.5°	222.4	341.6	537.6	660.0	683.2
90°	172.0	261.6	424.0	517.6	534.4
92.5°	160.8	222.4	340.8	407.2	419.2
95°	152.8	200.8	283.2	326.4	334.4
97.5°	148.0	183.2	246.4	275.2	279.2
100°	142.4	168.0	221.6	244.0	247.2
102.5°	134.4	152.8	200.8	224.0	225.6
105°	124.0	138.4	184.8	208.0	212.0
107.5°	111.2	124.0	172.0	196.0	202.4
110°	99.2	109.6	159.2	185.6	192.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	86.4	95.2	147.2	176.0	184.0
115°	74.4	80.8	134.4	165.6	176.0
117.5°	64.8	66.4	121.6	154.4	165.6
120°	54.4	53.6	108.8	142.4	154.4
122.5°	45.6	42.4	95.2	131.2	144.0
125°	38.4	32.0	82.4	117.6	132.0
127.5°	32.0	25.6	69.6	105.6	119.2
130°	27.2	21.6	56.8	92.8	105.6
132.5°	22.4	17.6	45.6	80.0	92.0
135°	18.4	15.2	34.4	67.2	79.2
137.5°	15.2	12.0	24.0	54.4	65.6
140°	12.8	10.4	15.2	43.2	53.6
142.5°	10.4	8.0	8.0	32.0	41.6
145°	8.8	6.4	4.0	22.4	30.4
147.5°	7.2	5.6	3.2	12.8	20.0
150°	5.6	4.8	3.2	5.6	10.4
152.5°	5.6	4.8	4.0	1.6	2.4
155°	5.6	5.6	4.0	1.6	0.0
157.5°	5.6	5.6	4.0	1.6	0.0
160°	6.4	5.6	4.0	1.6	0.8
162.5°	6.4	5.6	4.8	2.4	0.8
165°	6.4	6.4	4.8	2.4	0.8
167.5°	6.4	6.4	4.8	2.4	1.6
170°	6.4	6.4	4.8	2.4	1.6
172.5°	6.4	6.4	4.8	3.2	1.6
175°	7.2	6.4	5.6	3.2	2.4
177.5°	7.2	6.4	4.8	3.2	2.4
180°	4.8	4.8	4.8	4.8	4.8

(END OF REPORT)