

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: P397407

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397407
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-LG52-CD3-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

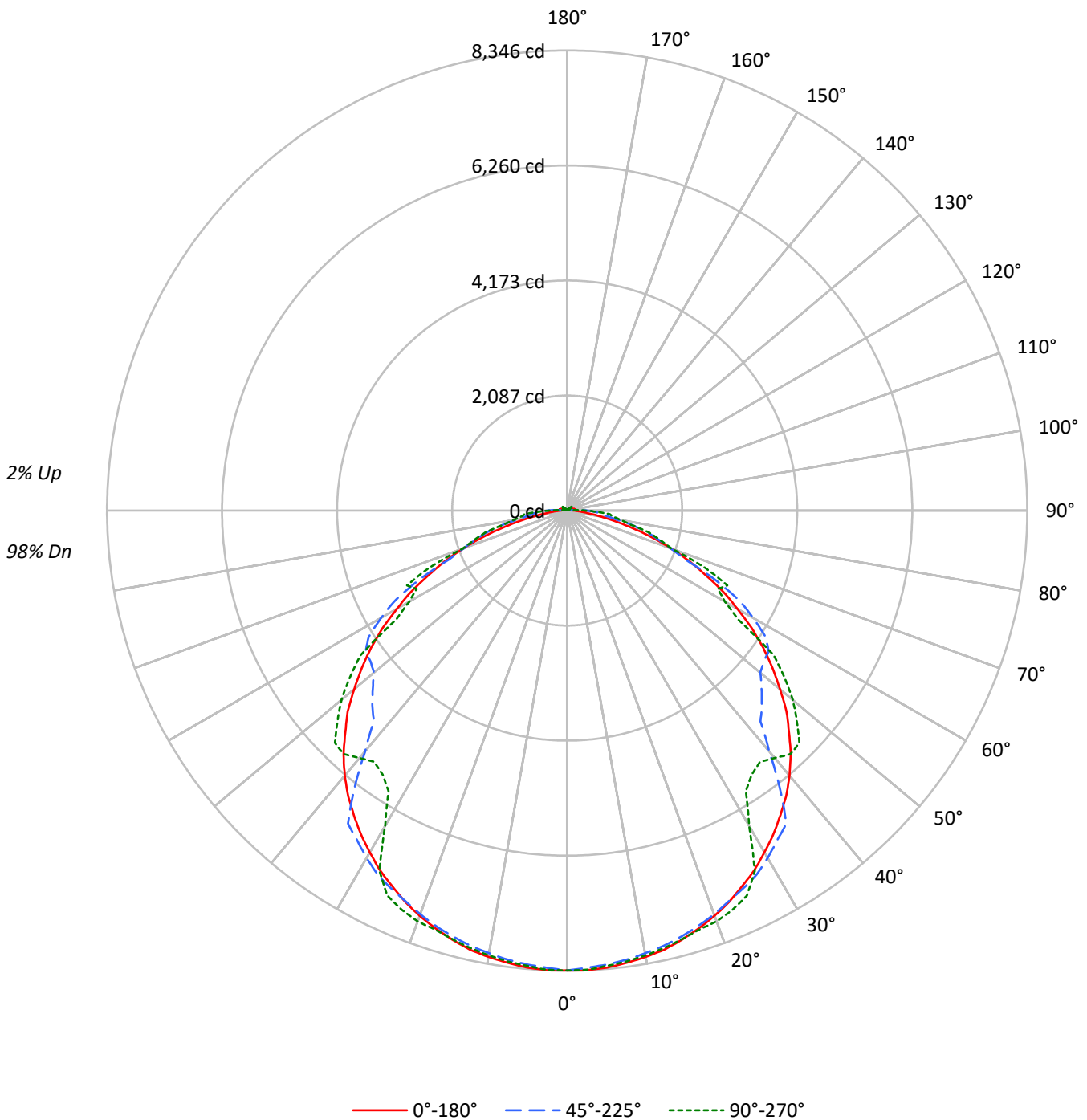
Lumens per Lamp: N/A
Luminaire Lumens: 23959.2 lumens
Efficiency: N/A
Efficacy: 43.3 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.17 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

Input Watts (W): 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	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°	20896	20896	20896
5°	20815	20403	20416
10°	20690	19991	19990
15°	20556	19627	19609
20°	20399	19280	19439
25°	20197	19013	19164
30°	20004	18742	16778
35°	19784	18450	15290
40°	19525	15831	15944
45°	19004	14594	17016
50°	18315	14224	16189
55°	17451	14950	14863
60°	16152	14281	11701
65°	14537	12032	12550
70°	12543	9181	8898
75°	9668	8057	7838
80°	6485	5698	6032
85°	4496	5022	5946



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	788.1	3.3
10°-20°	2267.8	9.5
20°-30°	3483.7	14.5
30°-40°	4046.0	16.9
40°-50°	4274.3	17.8
50°-60°	3908.4	16.3
60°-70°	2743.8	11.5
70°-80°	1467.7	6.1
80°-90°	601.8	2.5
90°-100°	153.2	0.6
100°-110°	76.5	0.3
110°-120°	54.1	0.2
120°-130°	53.6	0.2
130°-140°	27.5	0.1
140°-150°	7.7	0.0
150°-160°	2.6	0.0
160°-170°	1.7	0.0
170°-180°	0.6	0.0
0°-30°	6539.7	27.3
0°-40°	10585.7	44.2
0°-60°	18768.3	78.3
0°-90°	23581.6	98.4
90°-120°	283.9	1.2
90°-150°	372.6	1.6
90°-180°	378.0	1.6
0°-180°	23959.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8342	8342	8342	8342	8342	
5°	8322	8308	8265	8281	8290	791
15°	8055	8025	7999	8037	8047	2274
25°	7514	7503	7561	7662	7710	3467
35°	6744	6751	6931	5814	5840	4221
45°	5690	5766	4995	5681	5956	4391
55°	4342	4295	4462	4649	4570	3869
65°	2771	2478	2955	2763	3207	2756
75°	1225	1245	1493	1427	1535	1322
85°	265	370	599	751	774	286
90°	115	240	362	344	318	69
95°	108	125	114	94	87	97
105°	121	89	62	52	49	125
115°	63	64	55	34	34	65
125°	32	27	83	75	98	29
135°	15	12	22	64	38	12
145°	8	6	6	23	18	5
155°	6	6	6	4	2	3
165°	7	7	7	6	3	2
175°	7	7	8	6	5	1
180°	7	7	7	7	7	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8341.5	8341.5	8341.5	8341.5	8341.5
2.5°	8345.5	8336.7	8300.7	8319.9	8336.7
5°	8321.5	8307.9	8264.7	8280.7	8289.5
7.5°	8273.5	8265.5	8217.5	8236.7	8248.7
10°	8220.7	8199.1	8153.5	8184.7	8191.1
12.5°	8155.1	8116.7	8084.7	8115.1	8124.7
15°	8055.1	8024.7	7999.1	8036.7	8047.1
17.5°	7943.9	7908.7	7903.1	7934.3	7967.1
20°	7820.7	7787.1	7791.9	7869.5	7928.7
22.5°	7679.9	7651.1	7665.5	7796.7	7836.7
25°	7513.5	7503.1	7560.7	7661.5	7709.5
27.5°	7355.1	7333.5	7444.7	7557.5	7369.5
30°	7157.5	7153.5	7274.3	7037.5	6603.9
32.5°	6962.3	6972.7	7089.5	6371.1	6028.7
35°	6743.9	6751.1	6931.1	5813.5	5839.9
37.5°	6523.1	6564.7	6335.1	5639.9	5743.9
40°	6274.3	6371.9	5704.7	5549.5	5857.5
42.5°	6002.3	6075.1	5190.3	5559.1	5993.5
45°	5689.5	5766.3	4995.1	5680.7	5955.9
47.5°	5397.5	5454.3	4780.7	5668.7	5649.5
50°	5039.1	5157.5	4574.3	5316.7	5342.3
52.5°	4695.1	4814.3	4493.5	5000.7	4967.9
55°	4341.5	4295.1	4462.3	4648.7	4569.5
57.5°	3967.9	3679.1	4267.9	4173.5	3675.1
60°	3562.3	3126.3	3899.9	3307.9	3306.3
62.5°	3195.1	2788.8	3507.9	3014.4	3075.9
65°	2771.2	2478.4	2955.2	2763.2	3207.1
67.5°	2401.6	2143.2	2317.6	2824.8	2710.4
70°	1997.6	1816.0	1985.6	2212.0	2016.0
72.5°	1608.8	1508.8	1723.2	1736.0	1758.4
75°	1224.8	1244.8	1492.8	1427.2	1535.2
77.5°	886.4	950.4	1192.0	1224.8	1178.4
80°	604.0	741.6	871.2	910.4	987.2
82.5°	394.4	501.6	700.0	792.8	838.4
85°	264.8	370.4	599.2	751.2	774.4
87.5°	177.6	318.4	501.6	568.8	529.6
90°	115.2	240.0	361.6	344.0	318.4
92.5°	93.6	181.6	209.6	188.0	166.4
95°	108.0	124.8	113.6	94.4	87.2
97.5°	131.2	86.4	80.8	84.0	85.6
100°	137.6	85.6	68.8	68.0	68.8
102.5°	132.8	90.4	63.2	60.8	58.4
105°	120.8	88.8	61.6	52.0	48.8
107.5°	105.6	83.2	60.0	51.2	46.4
110°	90.4	76.8	55.2	50.4	49.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	76.0	72.0	50.4	41.6	42.4
115°	63.2	64.0	55.2	34.4	33.6
117.5°	53.6	56.0	79.2	32.8	28.0
120°	45.6	45.6	76.8	60.0	36.0
122.5°	37.6	36.0	74.4	98.4	80.0
125°	32.0	27.2	83.2	75.2	98.4
127.5°	26.4	21.6	46.4	88.8	69.6
130°	22.4	17.6	53.6	100.8	108.8
132.5°	18.4	14.4	44.8	43.2	76.8
135°	15.2	12.0	21.6	64.0	37.6
137.5°	12.0	10.4	15.2	64.0	72.8
140°	10.4	8.8	16.0	20.8	46.4
142.5°	8.8	7.2	10.4	16.8	16.0
145°	8.0	6.4	6.4	23.2	18.4
147.5°	6.4	6.4	5.6	18.4	24.8
150°	6.4	5.6	5.6	7.2	14.4
152.5°	5.6	5.6	5.6	4.0	4.0
155°	6.4	6.4	6.4	4.0	2.4
157.5°	6.4	6.4	6.4	4.0	2.4
160°	6.4	6.4	6.4	4.8	3.2
162.5°	6.4	6.4	7.2	4.8	3.2
165°	7.2	7.2	7.2	5.6	3.2
167.5°	7.2	7.2	7.2	5.6	4.0
170°	7.2	7.2	7.2	5.6	4.0
172.5°	7.2	7.2	8.0	5.6	4.8
175°	7.2	7.2	8.0	6.4	4.8
177.5°	7.2	7.2	8.0	6.4	5.6
180°	7.2	7.2	7.2	7.2	7.2

(END OF REPORT)