

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: P397395

Luminaire Tested: **VRVT4LED-LD5-24-DRF-UNV-LG52-CD2-WL-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397395
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-12)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: VRVT4LED-LD5-24-DRF-UNV-LG52-CD2-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

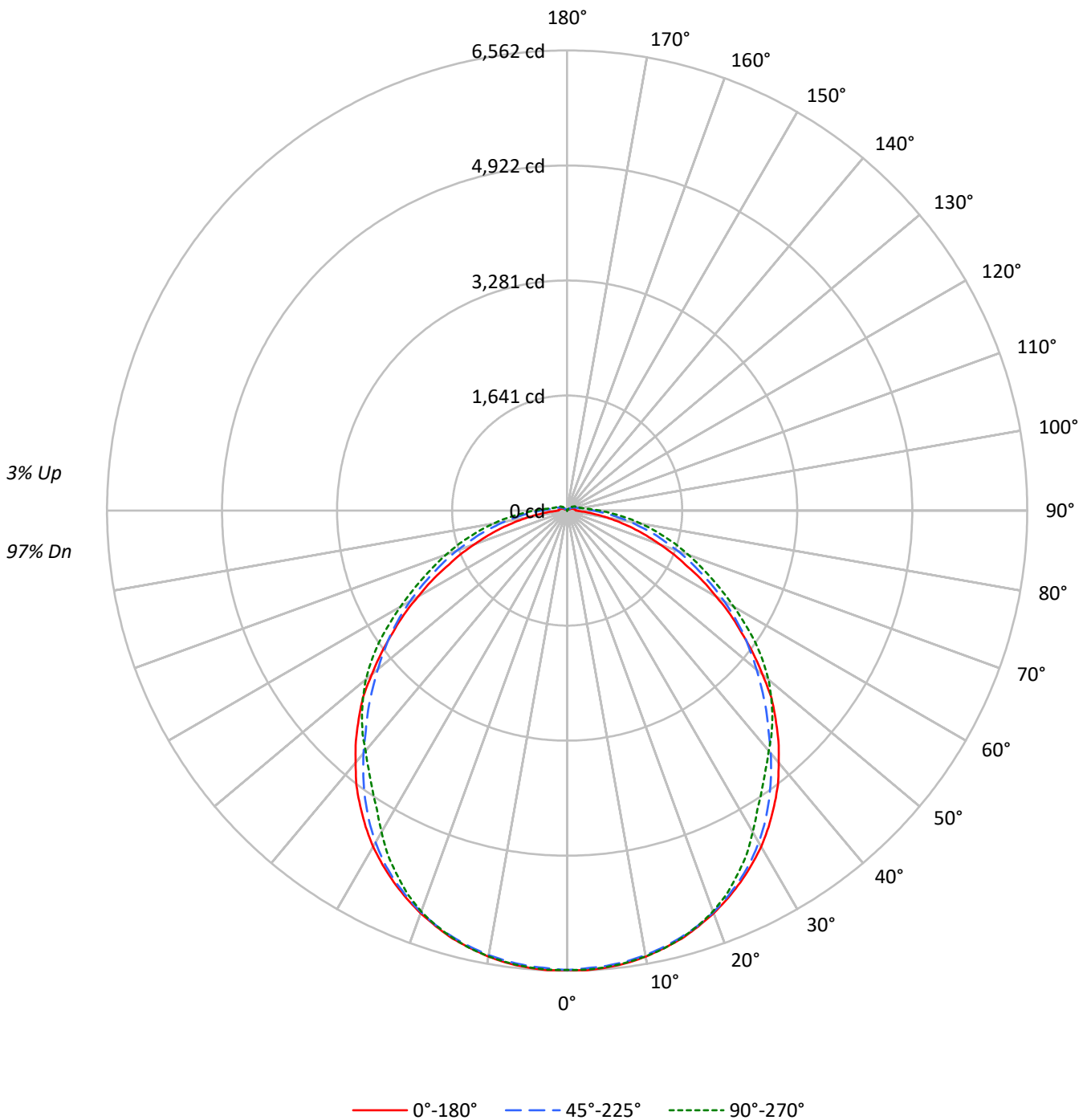
Lumens per Lamp: N/A
Luminaire Lumens: 18764.1 lumens
Efficiency: N/A
Efficacy: 44.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.2 / 1.32
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

Input Watts (W): 426.5
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	104	100	96	92	95	92	89	91	88	85	87	84	82	80
2	98	89	82	77	95	87	81	75	83	78	73	79	75	71	76	72	69	67
3	89	79	70	64	86	77	69	63	73	67	61	70	65	60	67	62	58	56
4	82	70	61	54	79	68	60	54	65	58	52	62	56	51	60	55	50	48
5	75	62	53	47	73	61	53	46	58	51	45	56	50	45	54	48	44	42
6	69	56	47	41	67	55	47	40	53	45	40	51	44	39	49	43	39	37
7	64	51	42	36	62	50	42	36	48	41	35	46	40	35	45	39	34	32
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	41	35	31	29
9	56	43	35	29	54	42	34	29	41	33	28	39	33	28	38	32	28	26
10	53	39	32	26	51	39	31	26	38	31	26	36	30	26	35	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16412	16412	16412
5°	16361	16085	16090
10°	16255	15782	15752
15°	16125	15451	15375
20°	15940	15080	14916
25°	15720	14634	14263
30°	15468	14078	13447
35°	15093	13372	12687
40°	14606	12535	12175
45°	14037	11727	11824
50°	13219	10966	11358
55°	12200	10277	10653
60°	11136	9472	9711
65°	9967	8583	8848
70°	8820	7746	8118
75°	7641	6874	7332
80°	6201	5892	6486
85°	4646	4968	5572



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	620.6	3.3
10°-20°	1779.3	9.5
20°-30°	2673.3	14.2
30°-40°	3134.1	16.7
40°-50°	3167.5	16.9
50°-60°	2788.8	14.9
60°-70°	2080.5	11.1
70°-80°	1307.4	7.0
80°-90°	616.7	3.3
90°-100°	259.8	1.4
100°-110°	151.0	0.8
110°-120°	96.8	0.5
120°-130°	54.4	0.3
130°-140°	24.4	0.1
140°-150°	6.9	0.0
150°-160°	1.4	0.0
160°-170°	1.0	0.0
170°-180°	0.4	0.0
0°-30°	5073.2	27.0
0°-40°	8207.2	43.7
0°-60°	14163.5	75.5
0°-90°	18168.1	96.8
90°-120°	507.6	2.7
90°-150°	593.2	3.2
90°-180°	596.0	3.2
0°-180°	18764.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6551	6551	6551	6551	6551	
5°	6541	6532	6515	6527	6533	622
15°	6319	6308	6297	6305	6310	1782
25°	5848	5843	5819	5779	5738	2694
35°	5145	5139	5023	4882	4846	3216
45°	4202	4178	4014	4075	4138	3238
55°	3035	3023	3067	3233	3275	2723
65°	1900	1933	2108	2238	2261	1899
75°	968	1048	1274	1406	1436	1031
85°	274	384	593	710	726	289
90°	128	226	374	452	466	76
95°	116	169	250	290	294	94
105°	94	112	152	168	171	99
115°	58	63	105	126	133	58
125°	29	25	63	88	98	27
135°	14	11	26	50	58	11
145°	6	6	3	16	22	4
155°	5	5	3	1	0	2
165°	6	5	4	2	1	1
175°	6	6	4	2	2	1
180°	4	4	4	4	4	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6551.4	6551.4	6551.4	6551.4	6551.4
2.5°	6561.8	6552.2	6531.4	6542.6	6553.0
5°	6541.0	6532.2	6515.4	6527.4	6533.0
7.5°	6509.0	6498.6	6485.0	6493.8	6501.8
10°	6458.6	6453.0	6437.0	6447.4	6454.6
12.5°	6390.6	6388.2	6373.8	6389.0	6393.8
15°	6318.6	6308.2	6297.0	6305.0	6309.8
17.5°	6217.8	6216.2	6205.8	6214.6	6206.6
20°	6111.4	6109.8	6094.6	6098.6	6084.2
22.5°	5984.2	5988.2	5965.0	5943.4	5927.4
25°	5848.2	5842.6	5819.4	5778.6	5737.8
27.5°	5697.0	5693.8	5657.0	5583.4	5537.8
30°	5534.6	5521.8	5464.2	5353.7	5292.9
32.5°	5346.5	5341.7	5254.5	5120.1	5050.5
35°	5144.9	5139.3	5023.3	4881.7	4845.7
37.5°	4936.9	4918.5	4775.3	4664.1	4650.5
40°	4693.7	4681.7	4516.9	4449.7	4472.9
42.5°	4460.1	4443.3	4248.9	4254.5	4316.9
45°	4202.5	4177.7	4013.7	4075.3	4138.5
47.5°	3951.3	3888.9	3762.5	3893.7	3948.1
50°	3636.9	3616.1	3526.5	3682.5	3748.1
52.5°	3343.3	3329.7	3292.1	3473.7	3516.9
55°	3035.3	3023.3	3067.3	3232.9	3275.3
57.5°	2760.9	2743.3	2830.5	2984.9	3004.9
60°	2456.1	2452.9	2586.5	2739.3	2744.1
62.5°	2188.9	2164.9	2346.5	2481.7	2494.5
65°	1900.1	1932.9	2108.1	2237.7	2260.9
67.5°	1659.2	1700.0	1888.9	2027.3	2040.1
70°	1404.8	1456.0	1675.2	1811.2	1839.3
72.5°	1184.8	1248.0	1454.4	1606.4	1638.4
75°	968.0	1048.0	1273.6	1405.6	1436.0
77.5°	767.2	862.4	1069.6	1226.4	1252.8
80°	577.6	677.6	900.8	1040.0	1061.6
82.5°	411.2	516.8	729.6	869.6	896.8
85°	273.6	384.0	592.8	709.6	725.6
87.5°	176.8	287.2	470.4	568.0	581.6
90°	128.0	225.6	374.4	452.0	465.6
92.5°	120.8	190.4	301.6	359.2	360.0
95°	116.0	168.8	249.6	289.6	293.6
97.5°	112.8	153.6	212.8	239.2	240.8
100°	108.8	138.4	188.0	205.6	208.0
102.5°	102.4	124.0	166.4	185.6	186.4
105°	94.4	112.0	152.0	168.0	171.2
107.5°	85.6	99.2	137.6	155.2	159.2
110°	76.0	87.2	126.4	144.8	150.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	67.2	74.4	115.2	135.2	140.8
115°	57.6	63.2	104.8	125.6	132.8
117.5°	48.8	52.0	93.6	116.0	124.8
120°	41.6	41.6	83.2	107.2	115.2
122.5°	34.4	32.8	73.6	97.6	106.4
125°	28.8	24.8	63.2	88.0	97.6
127.5°	24.0	19.2	53.6	78.4	87.2
130°	20.8	16.0	43.2	68.8	77.6
132.5°	16.8	13.6	34.4	59.2	67.2
135°	14.4	11.2	26.4	49.6	57.6
137.5°	12.0	9.6	18.4	40.8	48.0
140°	9.6	8.0	12.0	32.8	38.4
142.5°	8.0	6.4	6.4	24.0	30.4
145°	6.4	5.6	3.2	16.0	21.6
147.5°	5.6	4.8	3.2	10.4	14.4
150°	4.8	4.0	3.2	4.0	8.0
152.5°	4.8	4.0	3.2	0.8	1.6
155°	4.8	4.8	3.2	0.8	0.0
157.5°	4.8	4.8	3.2	0.8	0.0
160°	4.8	4.8	3.2	1.6	0.0
162.5°	4.8	4.8	4.0	1.6	0.0
165°	5.6	4.8	4.0	1.6	0.8
167.5°	5.6	5.6	4.0	1.6	0.8
170°	5.6	5.6	4.0	2.4	0.8
172.5°	5.6	5.6	4.0	2.4	0.8
175°	5.6	5.6	4.0	2.4	1.6
177.5°	5.6	5.6	4.0	2.4	1.6
180°	4.0	4.0	4.0	4.0	4.0

(END OF REPORT)