

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: P397403

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397403
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-LA59-CD3-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

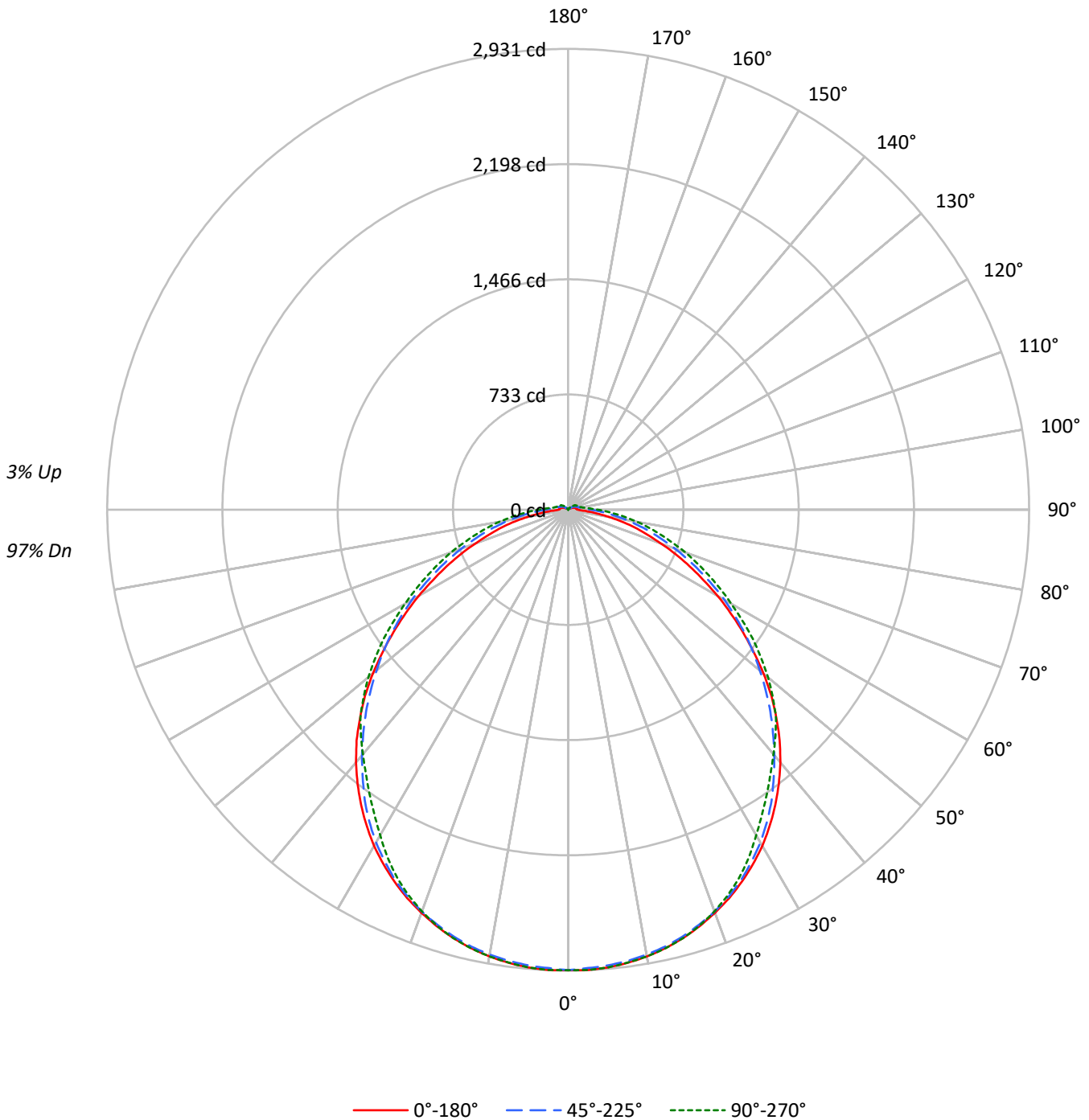
Lumens per Lamp: N/A
Luminaire Lumens: 8325.5 lumens
Efficiency: N/A
Efficacy: 23.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.21 / 1.33
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

Input Watts (W): 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	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°	7337	7337	7337
5°	7308	7183	7197
10°	7261	7044	7041
15°	7201	6896	6875
20°	7116	6732	6666
25°	7020	6539	6409
30°	6899	6297	6073
35°	6731	6003	5769
40°	6529	5660	5527
45°	6251	5308	5337
50°	5889	4946	5027
55°	5445	4590	4661
60°	4977	4203	4240
65°	4471	3762	3856
70°	3933	3337	3491
75°	3454	2894	3095
80°	2814	2459	2715
85°	2092	2016	2285



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	277.3	3.3
10°-20°	794.6	9.5
20°-30°	1195.3	14.4
30°-40°	1408.6	16.9
40°-50°	1423.7	17.1
50°-60°	1237.5	14.9
60°-70°	914.2	11.0
70°-80°	562.0	6.8
80°-90°	256.4	3.1
90°-100°	105.7	1.3
100°-110°	65.3	0.8
110°-120°	44.0	0.5
120°-130°	25.3	0.3
130°-140°	11.4	0.1
140°-150°	3.2	0.0
150°-160°	0.6	0.0
160°-170°	0.4	0.0
170°-180°	0.2	0.0
0°-30°	2267.2	27.2
0°-40°	3675.7	44.2
0°-60°	6336.9	76.1
0°-90°	8069.5	96.9
90°-120°	215.0	2.6
90°-150°	254.9	3.1
90°-180°	256.0	3.1
0°-180°	8325.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2929	2929	2929	2929	2929	
5°	2922	2919	2910	2917	2922	278
15°	2822	2816	2811	2818	2821	796
25°	2612	2608	2600	2588	2578	1203
35°	2294	2292	2255	2213	2203	1434
45°	1872	1866	1817	1840	1868	1442
55°	1355	1353	1370	1422	1433	1212
65°	852	861	924	979	985	846
75°	438	463	536	594	606	463
85°	123	162	240	289	298	130
90°	60	92	148	181	187	35
95°	54	70	99	114	117	43
105°	43	48	65	73	74	45
115°	26	28	47	58	62	26
125°	13	11	29	41	46	12
135°	6	5	12	24	28	5
145°	3	2	1	8	11	2
155°	2	2	1	1	0	1
165°	2	2	2	1	0	1
175°	2	2	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°	2928.8	2928.8	2928.8	2928.8	2928.8
2.5°	2931.0	2928.2	2918.2	2925.7	2929.9
5°	2921.8	2919.3	2909.5	2917.3	2922.1
7.5°	2907.2	2903.3	2894.4	2902.8	2905.0
10°	2885.1	2880.9	2872.8	2880.9	2885.1
12.5°	2856.8	2852.6	2846.2	2853.2	2857.4
15°	2821.6	2816.5	2810.6	2817.9	2821.3
17.5°	2777.9	2774.5	2767.8	2775.6	2775.4
20°	2728.3	2725.5	2720.8	2723.6	2718.8
22.5°	2674.8	2669.5	2664.8	2659.4	2653.6
25°	2611.6	2608.5	2600.1	2587.5	2578.2
27.5°	2543.2	2541.0	2523.9	2502.4	2490.6
30°	2468.5	2464.0	2444.1	2410.8	2390.4
32.5°	2384.5	2382.0	2353.4	2315.9	2294.3
35°	2294.3	2292.1	2255.1	2212.8	2203.3
37.5°	2199.4	2195.8	2145.6	2116.0	2113.4
40°	2098.0	2091.0	2039.5	2021.3	2030.6
42.5°	1991.1	1983.5	1928.1	1932.0	1950.2
45°	1871.5	1865.6	1816.9	1839.6	1868.2
47.5°	1752.5	1743.8	1704.1	1743.3	1764.8
50°	1620.1	1610.3	1590.7	1645.3	1659.0
52.5°	1485.7	1481.5	1480.1	1535.0	1543.1
55°	1354.6	1353.2	1370.0	1422.4	1433.0
57.5°	1224.4	1224.2	1256.1	1305.4	1313.5
60°	1097.6	1099.6	1147.7	1192.2	1198.1
62.5°	968.0	978.6	1032.4	1080.0	1089.5
65°	852.3	860.7	924.0	978.9	985.3
67.5°	739.2	752.9	818.4	873.0	885.4
70°	626.4	650.7	721.6	775.3	791.0
72.5°	527.2	549.4	625.8	686.6	692.2
75°	437.6	462.8	536.2	593.6	606.2
77.5°	348.3	374.6	453.3	513.8	521.9
80°	262.1	295.1	376.0	433.7	444.4
82.5°	186.2	224.0	303.5	358.7	367.9
85°	123.2	162.4	240.5	289.2	297.6
87.5°	77.8	119.6	188.2	231.0	239.1
90°	60.2	91.6	148.4	181.2	187.0
92.5°	56.3	77.8	119.3	142.5	146.7
95°	53.5	70.3	99.1	114.2	117.0
97.5°	51.8	64.1	86.2	96.3	97.7
100°	49.8	58.8	77.6	85.4	86.5
102.5°	47.0	53.5	70.3	78.4	79.0
105°	43.4	48.4	64.7	72.8	74.2
107.5°	38.9	43.4	60.2	68.6	70.8
110°	34.7	38.4	55.7	65.0	67.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	30.2	33.3	51.5	61.6	64.4
115°	26.0	28.3	47.0	58.0	61.6
117.5°	22.7	23.2	42.6	54.0	58.0
120°	19.0	18.8	38.1	49.8	54.0
122.5°	16.0	14.8	33.3	45.9	50.4
125°	13.4	11.2	28.8	41.2	46.2
127.5°	11.2	9.0	24.4	37.0	41.7
130°	9.5	7.6	19.9	32.5	37.0
132.5°	7.8	6.2	16.0	28.0	32.2
135°	6.4	5.3	12.0	23.5	27.7
137.5°	5.3	4.2	8.4	19.0	23.0
140°	4.5	3.6	5.3	15.1	18.8
142.5°	3.6	2.8	2.8	11.2	14.6
145°	3.1	2.2	1.4	7.8	10.6
147.5°	2.5	2.0	1.1	4.5	7.0
150°	2.0	1.7	1.1	2.0	3.6
152.5°	2.0	1.7	1.4	0.6	0.8
155°	2.0	2.0	1.4	0.6	0.0
157.5°	2.0	2.0	1.4	0.6	0.0
160°	2.2	2.0	1.4	0.6	0.3
162.5°	2.2	2.0	1.7	0.8	0.3
165°	2.2	2.2	1.7	0.8	0.3
167.5°	2.2	2.2	1.7	0.8	0.6
170°	2.2	2.2	1.7	0.8	0.6
172.5°	2.2	2.2	1.7	1.1	0.6
175°	2.5	2.2	2.0	1.1	0.8
177.5°	2.5	2.2	1.7	1.1	0.8
180°	1.7	1.7	1.7	1.7	1.7

(END OF REPORT)