

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: P397422

Luminaire Tested: **VRVT4S-LD5-12-DRF-LG52-CD2-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397422
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1801-511-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: VRVT4S-LD5-12-DRF-LG52-CD2-U
Description:
Light Source: -
Ballast/Driver: -

Summary

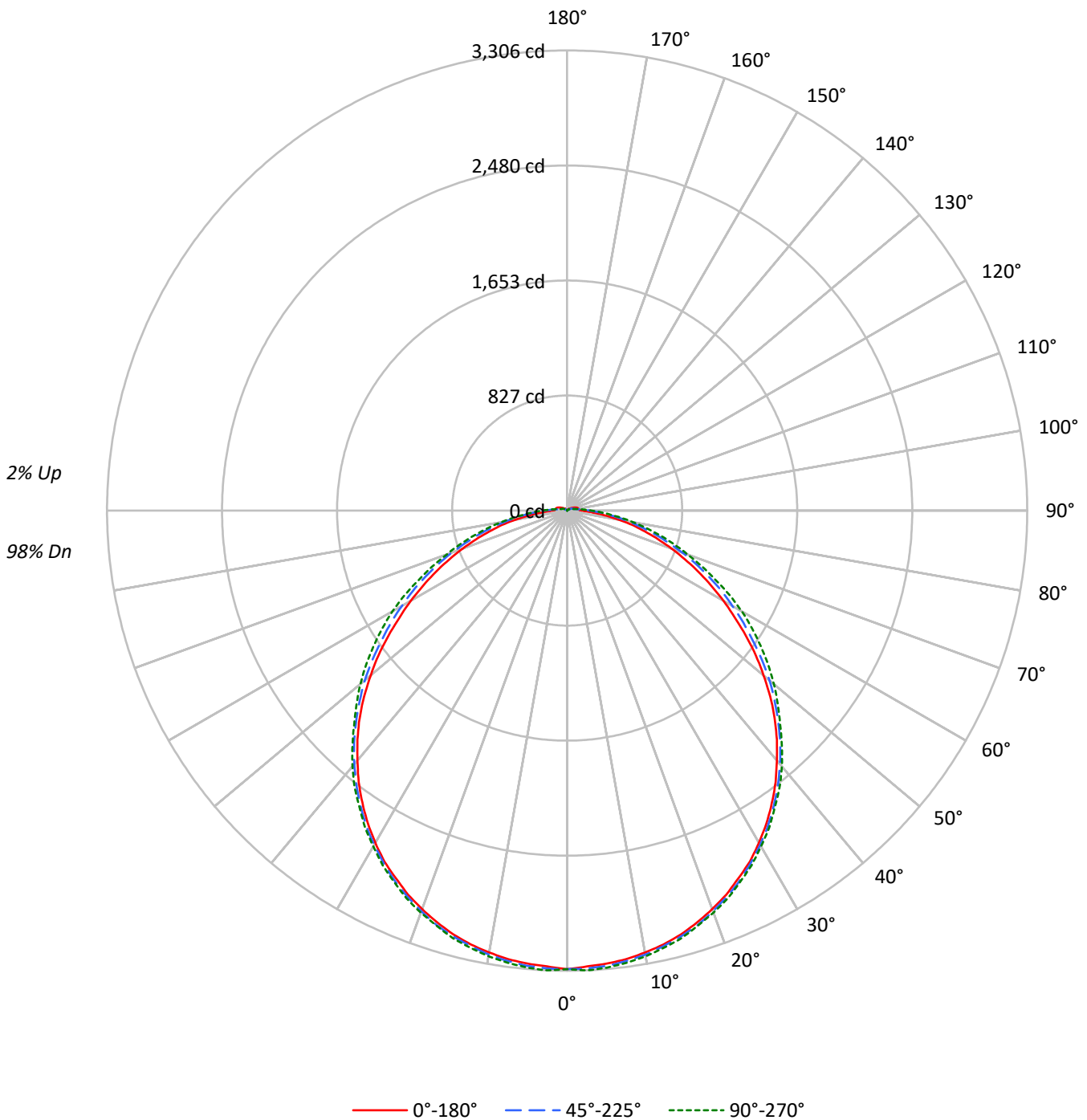
Lumens per Lamp: N/A
Luminaire Lumens: 9606.4 lumens
Efficiency: N/A
Efficacy: 48.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

Input Watts (W): 199.7
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	50	30	10	50	30	10	0		
RCR																										
0	118	118	118	118	115	115	115	115	110	110	110	105	105	105	100	100	100	98					98			
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	81					81			
2	98	89	82	77	95	87	81	75	83	78	73	80	75	71	76	73	69	67					67			
3	89	78	70	64	86	77	69	63	73	67	61	70	65	60	67	63	59	56					56			
4	82	69	61	54	79	68	60	53	65	58	52	63	56	51	60	55	50	48					48			
5	75	62	53	46	73	61	52	46	58	51	45	56	50	45	54	48	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	49	43	39	36					36			
7	64	51	42	36	62	50	41	36	48	41	35	46	40	35	45	39	34	32					32			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	41	35	31	29					29			
9	56	42	34	29	54	42	34	29	40	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	37	30	26	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15720	15720	15720
5°	15487	15392	15473
10°	15296	15034	15139
15°	15091	14665	14793
20°	14827	14269	14400
25°	14525	13842	13986
30°	14204	13363	13546
35°	13781	12847	13045
40°	13263	12266	12524
45°	12706	11595	11861
50°	11966	10876	11289
55°	11130	10005	10619
60°	10247	9158	9884
65°	9340	8282	8864
70°	8377	7291	7862
75°	7353	6211	6855
80°	6124	5098	5762
85°	4547	3959	4535



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	311.9	3.2
10°-20°	893.0	9.3
20°-30°	1350.4	14.1
30°-40°	1617.5	16.8
40°-50°	1652.1	17.2
50°-60°	1462.7	15.2
60°-70°	1108.7	11.5
70°-80°	683.4	7.1
80°-90°	302.3	3.1
90°-100°	108.6	1.1
100°-110°	58.2	0.6
110°-120°	34.7	0.4
120°-130°	16.0	0.2
130°-140°	5.0	0.1
140°-150°	0.9	0.0
150°-160°	0.4	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	2555.3	26.6
0°-40°	4172.8	43.4
0°-60°	7287.5	75.9
0°-90°	9381.9	97.7
90°-120°	201.6	2.1
90°-150°	223.5	2.3
90°-180°	224.0	2.3
0°-180°	9606.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3294	3294	3294	3294	3294	
5°	3267	3274	3283	3293	3296	311
15°	3153	3156	3166	3173	3180	889
25°	2913	2922	2933	2943	2943	1344
35°	2565	2573	2589	2607	2602	1603
45°	2109	2121	2145	2169	2164	1623
55°	1567	1598	1629	1680	1697	1402
65°	1040	1068	1124	1167	1174	1031
75°	578	605	649	683	692	615
85°	197	236	277	301	301	201
90°	104	130	161	175	174	59
95°	85	85	93	102	102	69
105°	76	65	48	44	45	79
115°	50	40	32	27	28	50
125°	27	21	14	13	16	24
135°	12	10	3	3	5	10
145°	4	3	1	0	0	3
155°	1	1	1	1	0	1
165°	2	2	1	1	1	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°	3294.5	3294.5	3294.5	3294.5	3294.5
2.5°	3278.3	3282.2	3292.6	3302.9	3306.2
5°	3267.3	3273.8	3283.4	3292.6	3295.8
7.5°	3251.0	3256.2	3264.6	3273.8	3276.3
10°	3223.8	3229.7	3238.7	3247.2	3251.7
12.5°	3193.4	3196.0	3204.4	3214.1	3216.7
15°	3153.2	3155.8	3166.2	3173.3	3179.8
17.5°	3103.3	3105.8	3121.4	3124.6	3125.4
20°	3047.5	3051.4	3063.8	3069.6	3074.1
22.5°	2986.6	2991.8	3001.5	3008.6	3015.1
25°	2913.4	2921.8	2933.4	2942.6	2942.6
27.5°	2842.7	2844.0	2855.0	2864.8	2871.3
30°	2756.6	2757.8	2772.7	2783.8	2786.3
32.5°	2665.1	2670.3	2685.9	2697.5	2700.8
35°	2564.7	2573.1	2588.6	2606.8	2601.6
37.5°	2460.3	2464.9	2486.9	2501.8	2507.7
40°	2343.7	2356.6	2379.3	2395.5	2400.1
42.5°	2229.6	2241.3	2265.9	2281.4	2283.4
45°	2109.0	2120.7	2144.7	2169.3	2163.5
47.5°	1978.8	1996.9	2020.9	2046.8	2051.4
50°	1842.6	1869.2	1898.4	1919.8	1939.2
52.5°	1709.1	1730.6	1764.2	1802.5	1820.6
55°	1567.2	1598.3	1628.8	1680.0	1697.4
57.5°	1426.6	1464.2	1501.8	1558.2	1573.7
60°	1297.0	1326.7	1372.1	1427.2	1449.9
62.5°	1164.7	1199.0	1249.6	1300.2	1315.8
65°	1040.2	1067.5	1123.8	1167.3	1173.8
67.5°	915.2	947.6	1000.7	1046.1	1048.7
70°	798.5	827.7	878.9	917.1	921.0
72.5°	685.8	715.5	759.0	797.8	805.6
75°	577.5	604.7	648.8	683.1	692.2
77.5°	481.6	501.7	540.6	579.4	582.6
80°	374.6	397.9	446.6	479.0	484.2
82.5°	285.2	313.0	356.5	385.7	387.0
85°	197.0	235.9	277.4	301.4	301.4
87.5°	136.1	177.0	213.9	230.1	232.0
90°	103.7	130.2	160.7	175.0	174.3
92.5°	90.1	102.4	121.8	133.5	131.6
95°	84.9	84.9	93.4	102.4	101.8
97.5°	82.3	77.1	73.9	79.8	79.0
100°	81.7	72.6	61.0	63.5	64.2
102.5°	79.8	68.7	53.1	52.5	53.1
105°	75.8	64.8	48.0	44.1	44.7
107.5°	70.6	59.6	44.1	38.9	39.5
110°	64.2	53.1	40.2	35.0	35.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	57.7	46.6	36.3	31.1	31.8
115°	49.9	40.2	31.8	27.2	28.5
117.5°	43.4	35.0	27.8	23.4	25.3
120°	37.0	30.5	22.7	19.4	22.0
122.5°	31.1	25.9	18.2	16.2	18.8
125°	26.6	21.4	14.2	13.0	15.5
127.5°	22.0	18.2	10.4	10.4	12.3
130°	18.2	14.9	6.5	7.8	9.8
132.5°	14.9	12.3	4.6	5.2	7.1
135°	11.7	9.8	3.3	3.3	5.2
137.5°	9.8	7.1	1.9	1.3	2.6
140°	7.1	5.2	1.3	0.0	0.6
142.5°	5.8	3.9	0.6	0.0	0.0
145°	3.9	2.6	0.6	0.0	0.0
147.5°	2.6	1.3	0.6	0.6	0.0
150°	1.3	1.3	0.6	0.6	0.0
152.5°	1.3	1.3	0.6	0.6	0.0
155°	1.3	1.3	1.3	0.6	0.0
157.5°	1.3	1.3	1.3	0.6	0.0
160°	1.3	1.3	1.3	0.6	0.6
162.5°	1.9	1.9	1.3	0.6	0.6
165°	1.9	1.9	1.3	0.6	0.6
167.5°	1.9	1.9	1.3	1.3	0.6
170°	1.9	1.9	1.3	0.6	0.6
172.5°	1.9	1.9	1.3	1.3	0.6
175°	1.9	1.9	1.9	1.3	0.6
177.5°	1.9	1.9	1.9	1.3	0.6
180°	1.9	1.9	1.9	1.9	1.9

(END OF REPORT)