

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: FAIL-SAFE

Report Number: P580244

Luminaire Tested: **HVSL12-4-LD4-3STD-30-UNV-O-EDD**

Issue Date: 12/16/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P580244  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 12/16/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: HVSL12-4-LD4-3STD-30-UNV-O-EDD  
Description: 4 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 3000K, 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

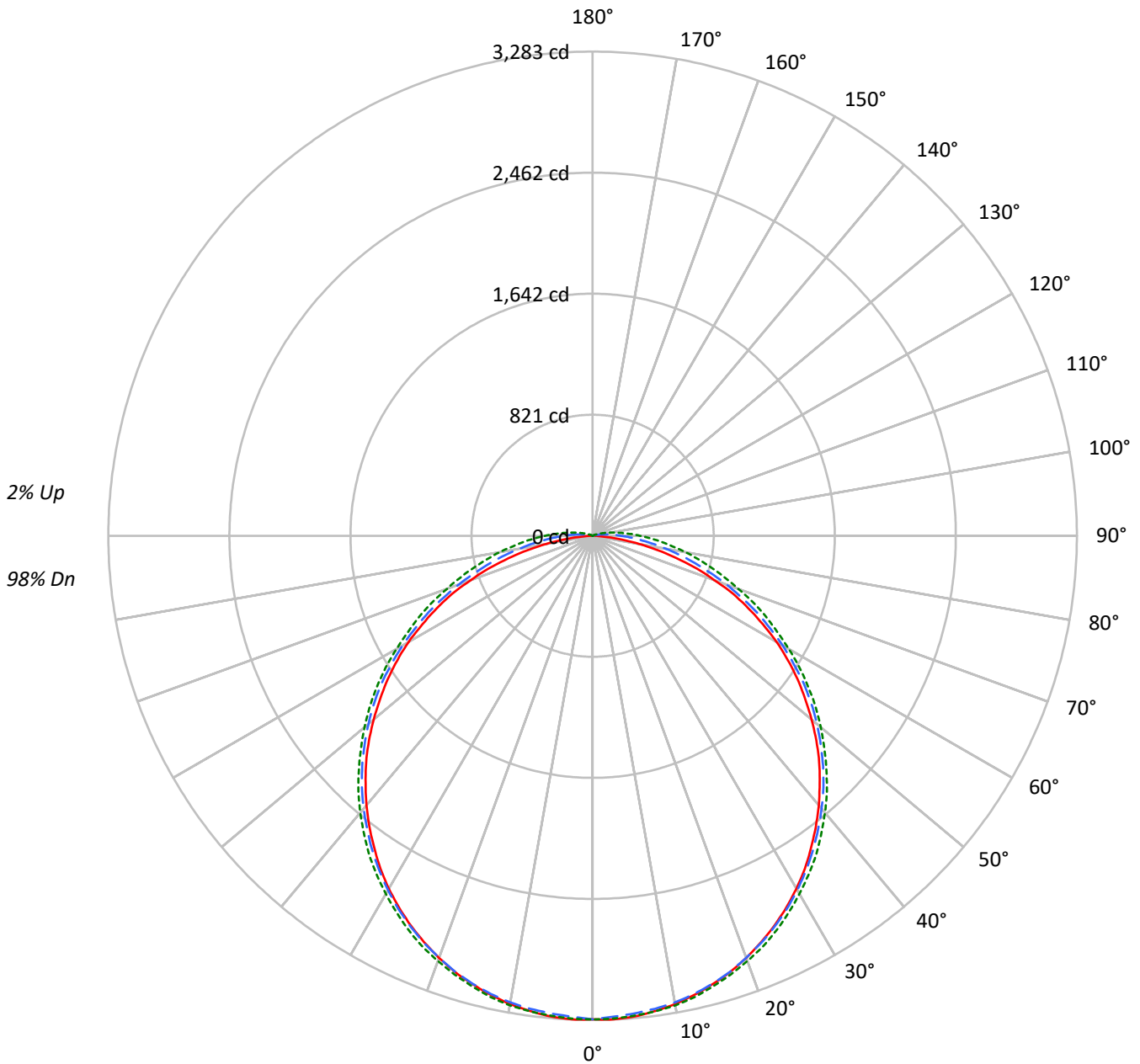
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9914.0 lumens  
Efficiency: N/A  
Efficacy: 98.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38  
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.17')  
CIE Type: Direct  
  
Input Watts (W): 101.1  
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									
RC	80									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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105	101	101	101				98																
1	108	102	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83				81																
2	98	89	82	76	95	87	80	75	83	77	73	79	75	71	76	72	69				67																
3	89	78	69	63	86	76	68	62	73	66	61	70	64	59	67	62	58				56																
4	81	69	60	53	79	67	59	52	65	57	52	62	56	51	60	54	50				47																
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	43				41																
6	69	55	46	40	67	54	46	39	52	45	39	50	44	38	49	43	38				36																
7	64	50	41	35	62	49	41	35	47	40	34	46	39	34	44	38	34				32																
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	41	35	30				28																
9	55	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27				25																
10	52	39	31	25	51	38	30	25	37	30	25	36	29	25	35	29	25				23																

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	8824	8824	8824
5°	8806	8670	8697
10°	8747	8558	8583
15°	8672	8428	8431
20°	8591	8275	8283
25°	8494	8118	8131
30°	8382	7947	7949
35°	8241	7755	7770
40°	8094	7552	7551
45°	7935	7328	7312
50°	7729	7063	7051
55°	7506	6771	6760
60°	7240	6377	6411
65°	6809	5932	6073
70°	6188	5398	5673
75°	5307	4812	5341
80°	3992	4255	5092
85°	2133	3726	4953



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	310.3	3.1
10°-20°	890.0	9.0
20°-30°	1350.5	13.6
30°-40°	1633.0	16.5
40°-50°	1703.9	17.2
50°-60°	1557.9	15.7
60°-70°	1214.4	12.2
70°-80°	759.7	7.7
80°-90°	345.0	3.5
90°-100°	115.6	1.2
100°-110°	29.0	0.3
110°-120°	4.6	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2550.8	25.7
0°-40°	4183.8	42.2
0°-60°	7445.6	75.1
0°-90°	9764.7	98.5
90°-120°	149.2	1.5
90°-150°	149.2	1.5
90°-180°	149.0	1.5
0°-180°	9914.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3279	3279	3279	3279	3279	
5°	3272	3266	3251	3267	3267	311
15°	3148	3153	3144	3162	3162	889
25°	2916	2919	2922	2947	2951	1344
35°	2582	2593	2604	2630	2641	1616
45°	2172	2191	2209	2231	2242	1674
55°	1695	1715	1747	1772	1784	1514
65°	1165	1185	1226	1275	1295	1153
75°	590	626	717	803	833	629
85°	102	189	324	428	466	129
90°	1	70	191	287	322	4
95°	1	19	99	179	207	1
105°	2	2	16	48	64	2
115°	2	2	3	8	12	1
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P580244

CATALOG NUMBER: HVSL12-4-LD4-3STD-30-UNV-O-EDD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3279.0	3279.0	3279.0	3279.0	3279.0
2.5°	3282.8	3278.2	3263.5	3278.2	3277.4
5°	3272.0	3265.8	3251.1	3266.6	3266.6
7.5°	3250.4	3248.0	3234.9	3252.7	3252.7
10°	3224.8	3224.1	3213.2	3232.6	3233.3
12.5°	3189.3	3192.4	3182.3	3200.9	3203.2
15°	3147.5	3153.0	3144.5	3162.2	3161.5
17.5°	3101.9	3105.0	3098.8	3118.9	3118.2
20°	3045.5	3049.4	3044.7	3065.6	3067.9
22.5°	2982.9	2988.3	2987.5	3009.2	3015.4
25°	2916.4	2918.7	2921.8	2946.6	2951.2
27.5°	2843.0	2846.9	2852.3	2874.7	2879.3
30°	2762.6	2768.8	2775.0	2798.2	2804.3
32.5°	2677.6	2683.8	2691.5	2721.6	2724.7
35°	2581.7	2593.3	2604.1	2630.4	2641.2
37.5°	2485.9	2500.6	2510.6	2538.4	2546.9
40°	2384.6	2399.3	2415.5	2444.9	2450.3
42.5°	2278.7	2295.7	2315.1	2341.3	2350.6
45°	2172.1	2191.4	2209.2	2230.8	2241.6
47.5°	2056.9	2076.2	2097.8	2122.6	2129.5
50°	1937.8	1960.3	1983.4	2006.6	2019.0
52.5°	1815.7	1842.8	1869.0	1893.8	1905.4
55°	1695.1	1715.2	1746.9	1772.4	1784.0
57.5°	1569.9	1586.9	1615.5	1657.3	1663.4
60°	1442.4	1457.8	1487.2	1521.2	1535.1
62.5°	1301.7	1322.6	1353.5	1396.8	1409.1
65°	1164.9	1185.0	1225.9	1274.6	1294.7
67.5°	1032.7	1039.6	1092.2	1143.2	1175.7
70°	876.6	902.8	963.9	1026.5	1051.2
72.5°	742.1	768.3	835.6	909.0	939.9
75°	589.8	626.1	717.3	803.1	833.3
77.5°	456.1	496.2	609.1	695.7	730.5
80°	318.5	381.1	504.0	601.4	639.2
82.5°	200.2	277.5	408.9	510.9	544.2
85°	102.0	188.6	323.9	428.2	466.1
87.5°	27.1	122.1	252.0	351.7	390.4
90°	0.8	70.3	190.9	286.8	321.6
92.5°	0.8	39.4	142.2	228.0	263.6
95°	0.8	18.6	98.9	179.3	207.2
97.5°	0.8	7.7	68.0	135.3	163.1
100°	0.8	3.9	43.3	98.2	122.1
102.5°	1.5	2.3	27.1	70.3	89.7
105°	1.5	2.3	16.2	47.9	64.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	2.3	2.3	3.1	13.1	19.3
115°	2.3	2.3	3.1	8.5	12.4
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC







— 0°-180°    - - 45°-225°    - - - - 90°-270°







107.5°	1.5	2.3	9.3	32.5	44.1
110°	2.3	2.3	5.4	20.1	29.4



(END OF REPORT)