

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: P580119

Luminaire Tested: **HVSL12-2-LD4-1LO-40-UNV-O-EDD-90**

Issue Date: 12/16/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P580119  
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: HVSL12-2-LD4-1LO-40-UNV-O-EDD-90  
Description: 2 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 90 CRI LEDS  
Light Source: -  
Ballast/Driver: -

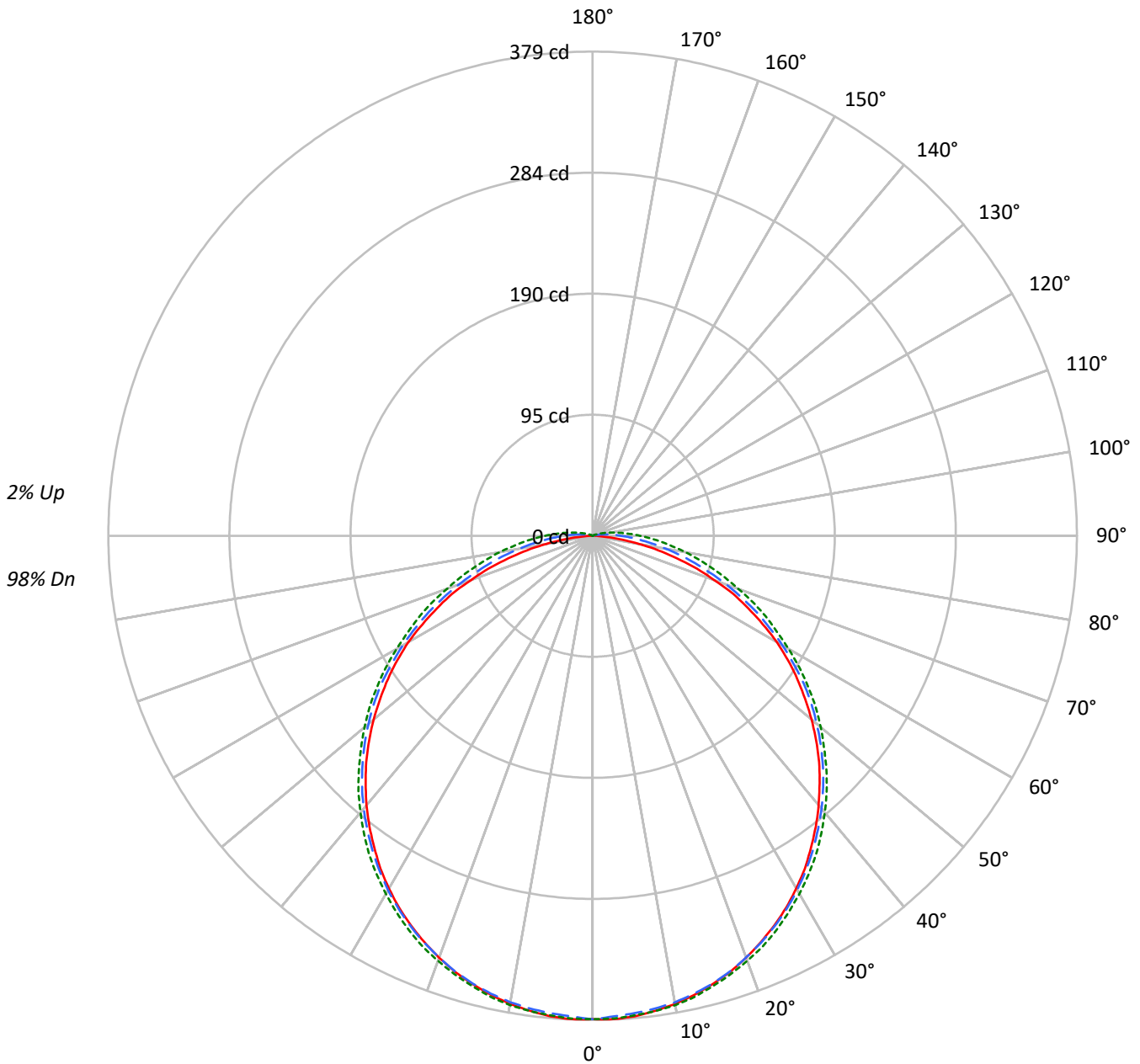
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1144.0 lumens  
Efficiency: N/A  
Efficacy: 93.8 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38  
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 2' x H: 0.17')  
CIE Type: Direct  
  
Input Watts (W): 12.2  
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°	2037	2037	2037
5°	2025	1996	2007
10°	2004	1965	1981
15°	1979	1930	1946
20°	1953	1890	1912
25°	1923	1850	1876
30°	1890	1806	1834
35°	1849	1757	1793
40°	1807	1705	1742
45°	1761	1649	1688
50°	1703	1583	1628
55°	1640	1510	1560
60°	1565	1414	1479
65°	1452	1307	1402
70°	1294	1178	1309
75°	1080	1037	1233
80°	772	901	1176
85°	373	764	1143



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.8	3.1
10°-20°	102.7	9.0
20°-30°	155.8	13.6
30°-40°	188.4	16.5
40°-50°	196.6	17.2
50°-60°	179.8	15.7
60°-70°	140.1	12.2
70°-80°	87.7	7.7
80°-90°	39.8	3.5
90°-100°	13.3	1.2
100°-110°	3.4	0.3
110°-120°	0.5	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°	294.3	25.7
0°-40°	482.8	42.2
0°-60°	859.1	75.1
0°-90°	1126.8	98.5
90°-120°	17.2	1.5
90°-150°	17.2	1.5
90°-180°	17.0	1.5
0°-180°	1144.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	378	378	378	378	378	
5°	378	377	375	377	377	36
15°	363	364	363	365	365	103
25°	336	337	337	340	340	155
35°	298	299	300	304	305	186
45°	251	253	255	257	259	193
55°	196	198	202	204	206	175
65°	134	137	142	147	149	133
75°	68	72	83	93	96	73
85°	12	22	37	49	54	15
90°	0	8	22	33	37	0
95°	0	2	11	21	24	0
105°	0	0	2	6	7	0
115°	0	0	0	1	1	0
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	378.4	378.4	378.4	378.4	378.4
2.5°	378.8	378.3	376.6	378.3	378.2
5°	377.6	376.8	375.2	376.9	376.9
7.5°	375.1	374.8	373.3	375.3	375.3
10°	372.1	372.0	370.8	373.0	373.1
12.5°	368.0	368.4	367.2	369.4	369.6
15°	363.2	363.8	362.8	364.9	364.8
17.5°	357.9	358.3	357.6	359.9	359.8
20°	351.4	351.9	351.3	353.7	354.0
22.5°	344.2	344.8	344.7	347.2	348.0
25°	336.5	336.8	337.2	340.0	340.5
27.5°	328.1	328.5	329.1	331.7	332.3
30°	318.8	319.5	320.2	322.9	323.6
32.5°	309.0	309.7	310.6	314.1	314.4
35°	297.9	299.2	300.5	303.5	304.8
37.5°	286.9	288.5	289.7	292.9	293.9
40°	275.2	276.9	278.7	282.1	282.7
42.5°	262.9	264.9	267.1	270.2	271.2
45°	250.6	252.9	254.9	257.4	258.7
47.5°	237.3	239.6	242.1	244.9	245.7
50°	223.6	226.2	228.9	231.6	233.0
52.5°	209.5	212.6	215.7	218.5	219.9
55°	195.6	197.9	201.6	204.5	205.9
57.5°	181.2	183.1	186.4	191.2	191.9
60°	166.4	168.2	171.6	175.5	177.1
62.5°	150.2	152.6	156.2	161.2	162.6
65°	134.4	136.7	141.5	147.1	149.4
67.5°	119.2	120.0	126.0	131.9	135.7
70°	101.1	104.2	111.2	118.5	121.3
72.5°	85.6	88.7	96.4	104.9	108.5
75°	68.1	72.2	82.8	92.7	96.2
77.5°	52.6	57.3	70.3	80.3	84.3
80°	36.7	44.0	58.2	69.4	73.8
82.5°	23.1	32.0	47.2	59.0	62.8
85°	11.8	21.8	37.4	49.4	53.8
87.5°	3.1	14.1	29.1	40.6	45.0
90°	0.1	8.1	22.0	33.1	37.1
92.5°	0.1	4.5	16.4	26.3	30.4
95°	0.1	2.1	11.4	20.7	23.9
97.5°	0.1	0.9	7.8	15.6	18.8
100°	0.1	0.4	5.0	11.3	14.1
102.5°	0.2	0.3	3.1	8.1	10.3
105°	0.2	0.3	1.9	5.5	7.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.3	0.3	0.4	1.5	2.2
115°	0.3	0.3	0.4	1.0	1.4
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°	0.2	0.3	1.1	3.7	5.1
110°	0.3	0.3	0.6	2.3	3.4



(END OF REPORT)