

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: P580127

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

Issue Date: 12/16/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P580127  
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-LD4-1STD-40-UNV-O-EDD-90  
Description: 2 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 90 CRI LEDS  
Light Source: -  
Ballast/Driver: -

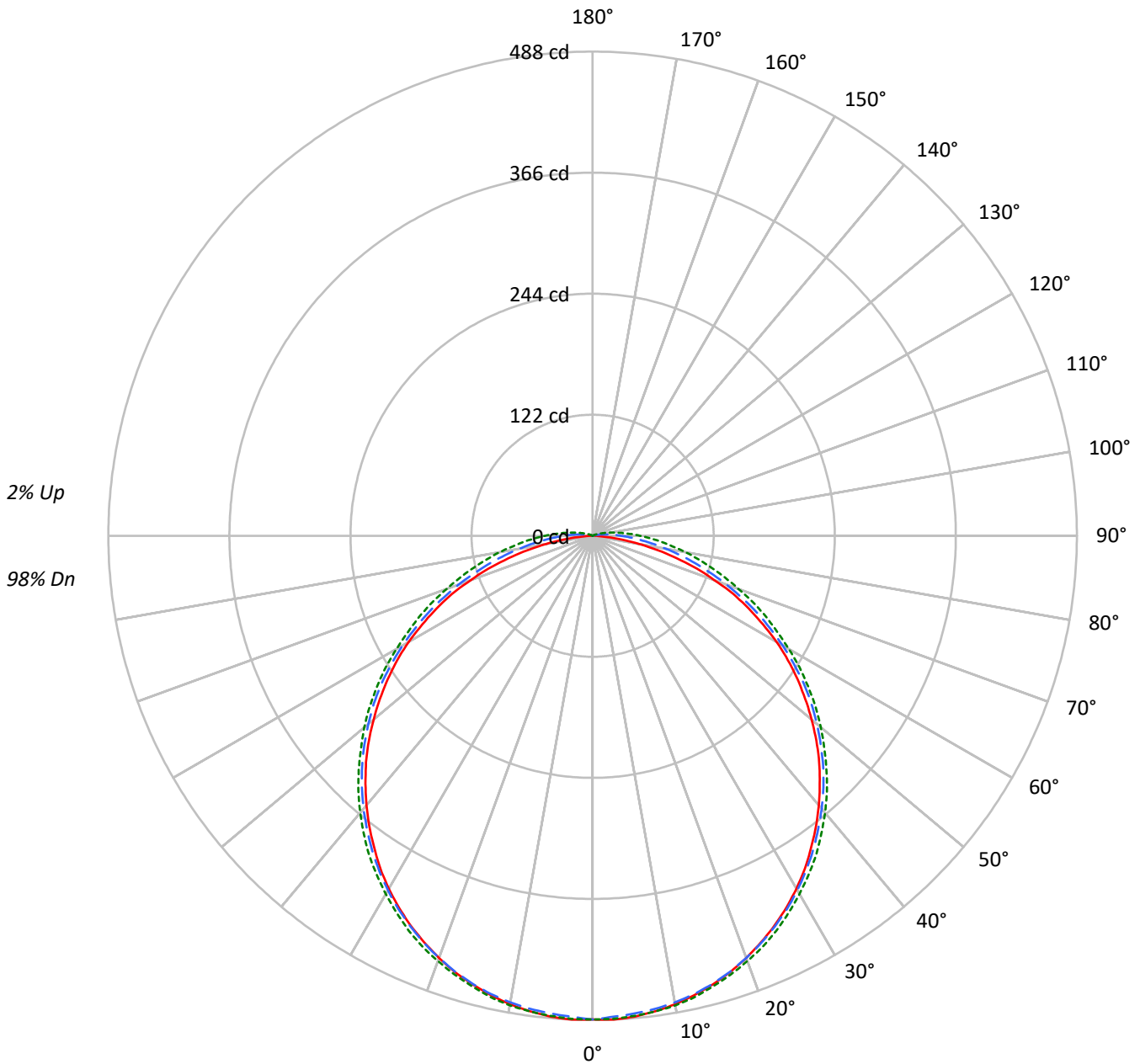
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1474.0 lumens  
Efficiency: N/A  
Efficacy: 85.2 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): 17.3  
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°	2624	2624	2624
5°	2609	2572	2586
10°	2583	2532	2552
15°	2551	2487	2507
20°	2517	2436	2463
25°	2479	2383	2418
30°	2435	2327	2363
35°	2383	2264	2310
40°	2328	2197	2245
45°	2269	2125	2174
50°	2194	2039	2097
55°	2113	1946	2010
60°	2017	1822	1906
65°	1871	1683	1806
70°	1668	1518	1687
75°	1391	1337	1588
80°	995	1159	1514
85°	481	985	1473



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.1	3.1
10°-20°	132.3	9.0
20°-30°	200.8	13.6
30°-40°	242.8	16.5
40°-50°	253.3	17.2
50°-60°	231.6	15.7
60°-70°	180.6	12.2
70°-80°	112.9	7.7
80°-90°	51.3	3.5
90°-100°	17.2	1.2
100°-110°	4.3	0.3
110°-120°	0.7	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°	379.3	25.7
0°-40°	622.0	42.2
0°-60°	1107.0	75.1
0°-90°	1451.8	98.5
90°-120°	22.2	1.5
90°-150°	22.2	1.5
90°-180°	22.0	1.5
0°-180°	1474.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	488	488	488	488	488	
5°	486	486	483	486	486	46
15°	468	469	468	470	470	132
25°	434	434	434	438	439	200
35°	384	386	387	391	393	240
45°	323	326	328	332	333	249
55°	252	255	260	264	265	225
65°	173	176	182	190	192	171
75°	88	93	107	119	124	93
85°	15	28	48	64	69	19
90°	0	10	28	43	48	1
95°	0	3	15	27	31	0
105°	0	0	2	7	10	0
115°	0	0	0	1	2	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°	487.5	487.5	487.5	487.5	487.5
2.5°	488.1	487.4	485.2	487.4	487.3
5°	486.5	485.6	483.4	485.7	485.7
7.5°	483.3	482.9	481.0	483.6	483.6
10°	479.5	479.4	477.7	480.6	480.7
12.5°	474.2	474.6	473.1	475.9	476.2
15°	468.0	468.8	467.5	470.2	470.0
17.5°	461.2	461.7	460.7	463.7	463.6
20°	452.8	453.4	452.7	455.8	456.1
22.5°	443.5	444.3	444.2	447.4	448.3
25°	433.6	434.0	434.4	438.1	438.8
27.5°	422.7	423.3	424.1	427.4	428.1
30°	410.7	411.7	412.6	416.0	416.9
32.5°	398.1	399.0	400.2	404.6	405.1
35°	383.8	385.6	387.2	391.1	392.7
37.5°	369.6	371.8	373.3	377.4	378.7
40°	354.5	356.7	359.1	363.5	364.3
42.5°	338.8	341.3	344.2	348.1	349.5
45°	322.9	325.8	328.5	331.7	333.3
47.5°	305.8	308.7	311.9	315.6	316.6
50°	288.1	291.4	294.9	298.3	300.2
52.5°	270.0	274.0	277.9	281.6	283.3
55°	252.0	255.0	259.7	263.5	265.2
57.5°	233.4	235.9	240.2	246.4	247.3
60°	214.4	216.7	221.1	226.2	228.2
62.5°	193.5	196.6	201.2	207.7	209.5
65°	173.2	176.2	182.3	189.5	192.5
67.5°	153.5	154.6	162.4	170.0	174.8
70°	130.3	134.2	143.3	152.6	156.3
72.5°	110.3	114.2	124.2	135.2	139.7
75°	87.7	93.1	106.7	119.4	123.9
77.5°	67.8	73.8	90.6	103.4	108.6
80°	47.3	56.7	74.9	89.4	95.0
82.5°	29.8	41.3	60.8	76.0	80.9
85°	15.2	28.0	48.2	63.7	69.3
87.5°	4.0	18.2	37.5	52.3	58.0
90°	0.1	10.5	28.4	42.6	47.8
92.5°	0.1	5.9	21.1	33.9	39.2
95°	0.1	2.8	14.7	26.7	30.8
97.5°	0.1	1.1	10.1	20.1	24.2
100°	0.1	0.6	6.4	14.6	18.2
102.5°	0.2	0.3	4.0	10.5	13.3
105°	0.2	0.3	2.4	7.1	9.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.3	0.3	0.5	2.0	2.9
115°	0.3	0.3	0.5	1.3	1.8
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	1.4	4.8	6.6
110°	0.3	0.3	0.8	3.0	4.4



(END OF REPORT)