

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: P580161

Luminaire Tested: **HVSL12-2-LD4-3HI-50-UNV-O-EDD-90**

Issue Date: 12/16/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P580161  
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-LD4-3HI-50-UNV-O-EDD-90  
Description: 2 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 5000K, 90 CRI LEDS  
Light Source: -  
Ballast/Driver: -

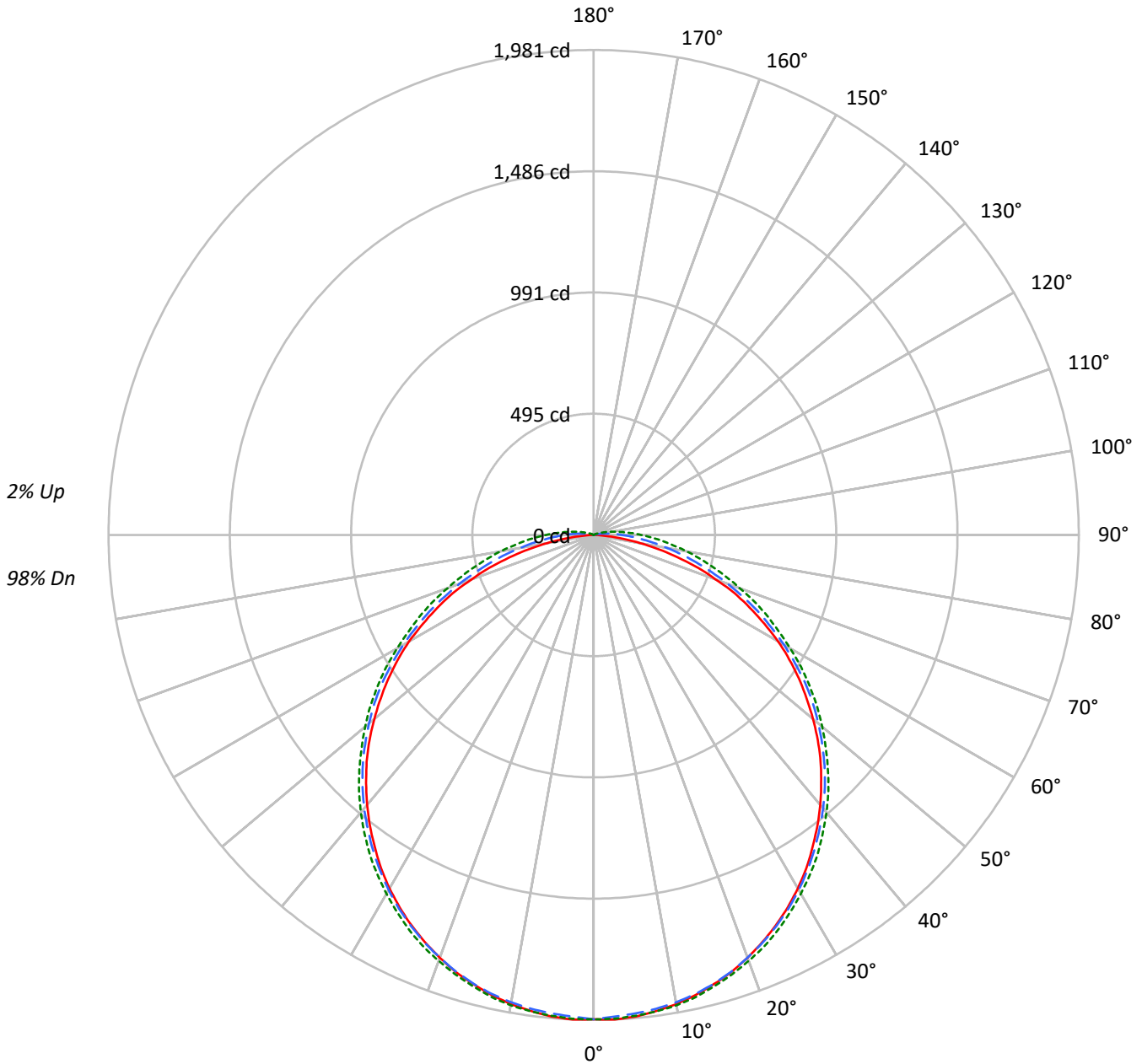
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5983.0 lumens  
Efficiency: N/A  
Efficacy: 89.7 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): 66.7  
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

TEST NUMBER: P580161

CATALOG NUMBER: HVSL12-2-LD4-3HI-50-UNV-O-EDD-90

### Luminous Intensity Polar Plot





TEST NUMBER: P580161

CATALOG NUMBER: HVSL12-2-LD4-3HI-50-UNV-O-EDD-90

**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°	10650	10650	10650
5°	10591	10438	10497
10°	10482	10277	10359
15°	10352	10095	10176
20°	10216	9888	9998
25°	10060	9673	9813
30°	9885	9443	9594
35°	9672	9188	9378
40°	9450	8919	9114
45°	9209	8623	8825
50°	8907	8278	8511
55°	8578	7897	8159
60°	8188	7396	7738
65°	7595	6831	7330
70°	6773	6161	6847
75°	5645	5423	6447
80°	4045	4706	6146
85°	1948	3996	5979



TEST NUMBER: P580161

CATALOG NUMBER: HVSL12-2-LD4-3HI-50-UNV-O-EDD-90

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	187.3	3.1
10°-20°	537.1	9.0
20°-30°	815.0	13.6
30°-40°	985.5	16.5
40°-50°	1028.3	17.2
50°-60°	940.2	15.7
60°-70°	732.9	12.2
70°-80°	458.5	7.7
80°-90°	208.2	3.5
90°-100°	69.8	1.2
100°-110°	17.5	0.3
110°-120°	2.8	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°	1539.4	25.7
0°-40°	2524.9	42.2
0°-60°	4493.3	75.1
0°-90°	5892.9	98.5
90°-120°	90.1	1.5
90°-150°	90.1	1.5
90°-180°	90.0	1.5
0°-180°	5983.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1979	1979	1979	1979	1979	
5°	1975	1971	1962	1971	1971	188
15°	1900	1903	1898	1908	1908	536
25°	1760	1761	1763	1778	1781	811
35°	1558	1565	1572	1587	1594	975
45°	1311	1322	1333	1346	1353	1010
55°	1023	1035	1054	1070	1077	914
65°	703	715	740	769	781	696
75°	356	378	433	485	503	379
85°	62	114	196	258	281	78
90°	0	42	115	173	194	2
95°	0	11	60	108	125	0
105°	1	1	10	29	39	1
115°	1	1	2	5	8	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: P580161

CATALOG NUMBER: HVSL12-2-LD4-3HI-50-UNV-O-EDD-90

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1978.8	1978.8	1978.8	1978.8	1978.8
2.5°	1981.1	1978.3	1969.5	1978.3	1977.9
5°	1974.6	1970.9	1962.0	1971.4	1971.4
7.5°	1961.6	1960.2	1952.2	1963.0	1963.0
10°	1946.2	1945.7	1939.2	1950.8	1951.3
12.5°	1924.7	1926.6	1920.5	1931.7	1933.1
15°	1899.5	1902.8	1897.6	1908.4	1907.9
17.5°	1872.0	1873.9	1870.1	1882.3	1881.8
20°	1837.9	1840.3	1837.5	1850.1	1851.5
22.5°	1800.2	1803.4	1803.0	1816.0	1819.7
25°	1760.0	1761.4	1763.3	1778.2	1781.0
27.5°	1715.7	1718.1	1721.3	1734.8	1737.6
30°	1667.2	1670.9	1674.7	1688.7	1692.4
32.5°	1615.9	1619.6	1624.3	1642.5	1644.3
35°	1558.0	1565.0	1571.6	1587.4	1594.0
37.5°	1500.2	1509.1	1515.1	1531.9	1537.1
40°	1439.1	1448.0	1457.8	1475.5	1478.7
42.5°	1375.2	1385.5	1397.1	1413.0	1418.6
45°	1310.8	1322.5	1333.2	1346.3	1352.8
47.5°	1241.3	1253.0	1266.0	1281.0	1285.2
50°	1169.5	1183.0	1197.0	1211.0	1218.4
52.5°	1095.8	1112.1	1128.0	1142.9	1149.9
55°	1023.0	1035.1	1054.2	1069.6	1076.6
57.5°	947.4	957.7	974.9	1000.1	1003.9
60°	870.5	879.8	897.5	918.0	926.4
62.5°	785.6	798.2	816.8	842.9	850.4
65°	703.0	715.1	739.8	769.2	781.4
67.5°	623.2	627.4	659.1	689.9	709.5
70°	529.0	544.9	581.7	619.5	634.4
72.5°	447.8	463.7	504.3	548.6	567.2
75°	355.9	377.9	432.9	484.7	502.9
77.5°	275.2	299.5	367.6	419.8	440.8
80°	192.2	230.0	304.1	362.9	385.8
82.5°	120.8	167.5	246.8	308.3	328.4
85°	61.6	113.8	195.5	258.4	281.3
87.5°	16.3	73.7	152.1	212.2	235.6
90°	0.5	42.4	115.2	173.1	194.1
92.5°	0.5	23.8	85.8	137.6	159.1
95°	0.5	11.2	59.7	108.2	125.0
97.5°	0.5	4.7	41.1	81.6	98.4
100°	0.5	2.3	26.1	59.2	73.7
102.5°	0.9	1.4	16.3	42.4	54.1
105°	0.9	1.4	9.8	28.9	38.7



TEST NUMBER: P580161

CATALOG NUMBER: HVSL12-2-LD4-3HI-50-UNV-O-EDD-90

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1.4	1.4	1.9	7.9	11.7
115°	1.4	1.4	1.9	5.1	7.5
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°	0.9	1.4	5.6	19.6	26.6
110°	1.4	1.4	3.3	12.1	17.7



(END OF REPORT)