

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: P580223

Luminaire Tested: **HVSL12-4-LD4-2STD-40-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580223
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-LD4-2STD-40-UNV-O-EDD-90
Description: 4 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

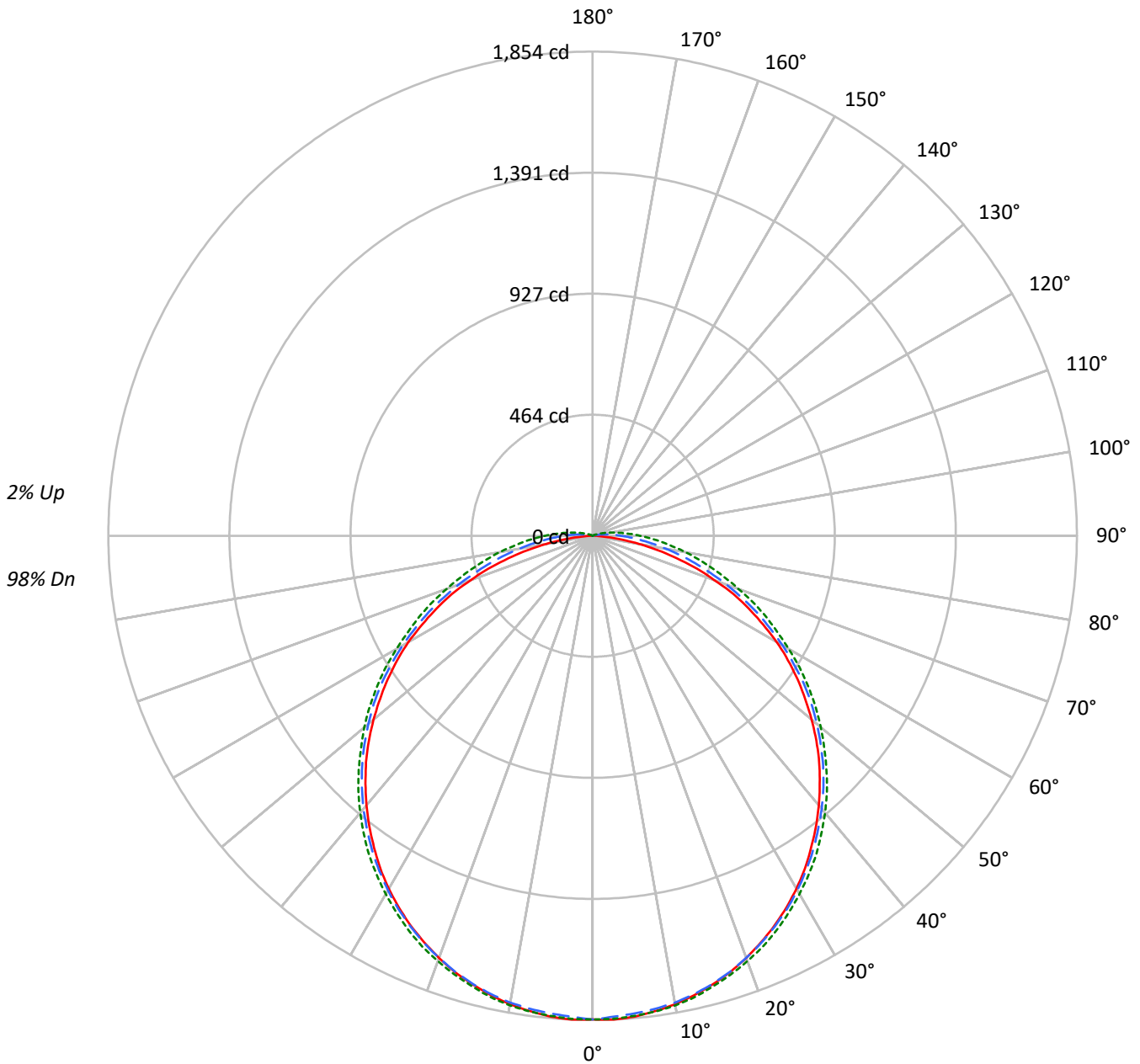
Lumens per Lamp: N/A
Luminaire Lumens: 5600.0 lumens
Efficiency: N/A
Efficacy: 80.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 69.2
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

TEST NUMBER: P580223

CATALOG NUMBER: HVSL12-4-LD4-2STD-40-UNV-O-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P580223

CATALOG NUMBER: HVSL12-4-LD4-2STD-40-UNV-O-EDD-90

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	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°	4984	4984	4984
5°	4974	4897	4913
10°	4941	4834	4848
15°	4898	4760	4762
20°	4853	4674	4679
25°	4798	4585	4593
30°	4735	4489	4490
35°	4655	4380	4389
40°	4572	4266	4265
45°	4482	4139	4130
50°	4366	3990	3983
55°	4240	3825	3819
60°	4089	3602	3621
65°	3846	3351	3430
70°	3495	3050	3204
75°	2997	2718	3017
80°	2255	2403	2876
85°	1205	2104	2798



TEST NUMBER: P580223

CATALOG NUMBER: HVSL12-4-LD4-2STD-40-UNV-O-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.3	3.1
10°-20°	502.8	9.0
20°-30°	762.8	13.6
30°-40°	922.4	16.5
40°-50°	962.5	17.2
50°-60°	880.0	15.7
60°-70°	686.0	12.2
70°-80°	429.1	7.7
80°-90°	194.9	3.5
90°-100°	65.3	1.2
100°-110°	16.4	0.3
110°-120°	2.6	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°	1440.9	25.7
0°-40°	2363.3	42.2
0°-60°	4205.7	75.1
0°-90°	5515.7	98.5
90°-120°	84.3	1.5
90°-150°	84.3	1.5
90°-180°	84.0	1.5
0°-180°	5600.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1852	1852	1852	1852	1852	
5°	1848	1845	1836	1845	1845	176
15°	1778	1781	1776	1786	1786	502
25°	1647	1649	1650	1664	1667	759
35°	1458	1465	1471	1486	1492	913
45°	1227	1238	1248	1260	1266	945
55°	958	969	987	1001	1008	855
65°	658	669	692	720	731	651
75°	333	354	405	454	471	355
85°	58	106	183	242	263	73
90°	0	40	108	162	182	2
95°	0	10	56	101	117	0
105°	1	1	9	27	36	1
115°	1	1	2	5	7	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: P580223

CATALOG NUMBER: HVSL12-4-LD4-2STD-40-UNV-O-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1852.1	1852.1	1852.1	1852.1	1852.1
2.5°	1854.3	1851.7	1843.4	1851.7	1851.3
5°	1848.2	1844.7	1836.4	1845.2	1845.2
7.5°	1836.0	1834.7	1827.3	1837.3	1837.3
10°	1821.6	1821.1	1815.0	1825.9	1826.4
12.5°	1801.5	1803.2	1797.6	1808.0	1809.4
15°	1777.9	1781.0	1776.2	1786.2	1785.8
17.5°	1752.2	1753.9	1750.4	1761.8	1761.3
20°	1720.3	1722.5	1719.8	1731.6	1732.9
22.5°	1684.9	1688.0	1687.5	1699.8	1703.3
25°	1647.4	1648.7	1650.4	1664.4	1667.0
27.5°	1605.9	1608.1	1611.1	1623.8	1626.4
30°	1560.5	1564.0	1567.5	1580.6	1584.1
32.5°	1512.5	1515.9	1520.3	1537.3	1539.1
35°	1458.3	1464.9	1471.0	1485.8	1491.9
37.5°	1404.2	1412.5	1418.1	1433.9	1438.7
40°	1347.0	1355.3	1364.4	1381.0	1384.1
42.5°	1287.2	1296.8	1307.7	1322.5	1327.8
45°	1226.9	1237.8	1247.9	1260.1	1266.2
47.5°	1161.8	1172.8	1185.0	1199.0	1202.9
50°	1094.6	1107.3	1120.4	1133.5	1140.5
52.5°	1025.6	1040.9	1055.7	1069.7	1076.3
55°	957.5	968.9	986.8	1001.2	1007.7
57.5°	886.8	896.4	912.5	936.1	939.6
60°	814.7	823.5	840.1	859.3	867.1
62.5°	735.3	747.1	764.5	789.0	796.0
65°	658.0	669.3	692.5	720.0	731.3
67.5°	583.3	587.3	616.9	645.8	664.1
70°	495.1	510.0	544.5	579.8	593.8
72.5°	419.2	434.0	472.0	513.5	530.9
75°	333.1	353.7	405.2	453.6	470.7
77.5°	257.6	280.3	344.1	393.0	412.6
80°	179.9	215.3	284.7	339.7	361.1
82.5°	113.1	156.7	231.0	288.6	307.4
85°	57.6	106.5	182.9	241.9	263.3
87.5°	15.3	69.0	142.3	198.7	220.5
90°	0.4	39.7	107.8	162.0	181.6
92.5°	0.4	22.3	80.3	128.8	148.9
95°	0.4	10.5	55.9	101.3	117.0
97.5°	0.4	4.4	38.4	76.4	92.1
100°	0.4	2.2	24.5	55.5	69.0
102.5°	0.9	1.3	15.3	39.7	50.6
105°	0.9	1.3	9.2	27.1	36.2



TEST NUMBER: P580223

CATALOG NUMBER: HVSL12-4-LD4-2STD-40-UNV-O-EDD-90

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.3	1.3	1.7	7.4	10.9
115°	1.3	1.3	1.7	4.8	7.0
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	1.3	5.2	18.3	24.9
110°	1.3	1.3	3.1	11.4	16.6



(END OF REPORT)