

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: P580216

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

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580216
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-LD4-2LO-40-UNV-O-EDD
Description: 4 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

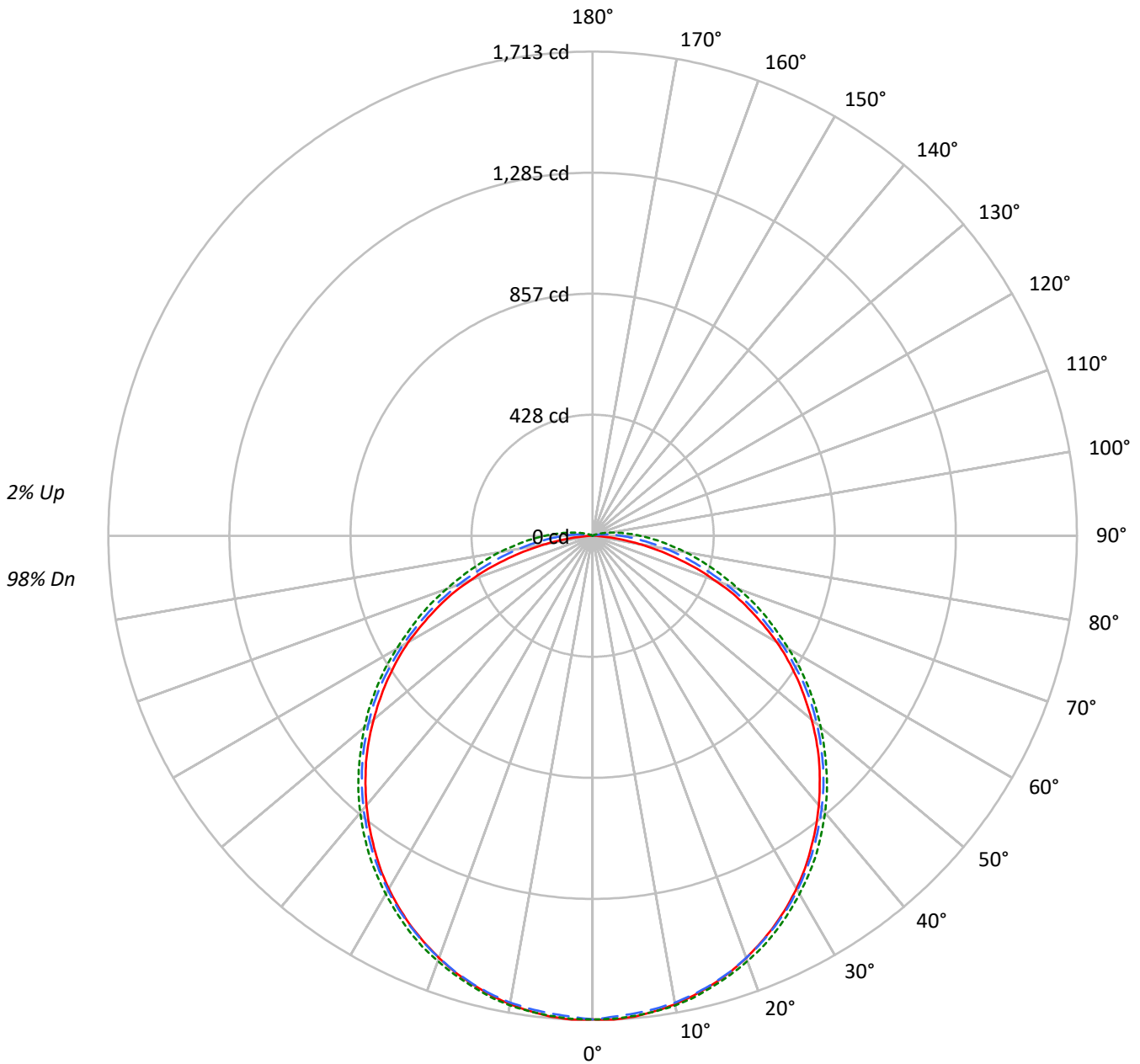
Lumens per Lamp: N/A
Luminaire Lumens: 5174.0 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 48.8
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: P580216

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

Luminous Intensity Polar Plot





TEST NUMBER: P580216

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

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°	4605	4605	4605
5°	4596	4525	4539
10°	4565	4466	4479
15°	4526	4398	4400
20°	4484	4319	4323
25°	4433	4237	4243
30°	4375	4147	4149
35°	4301	4047	4055
40°	4224	3941	3941
45°	4141	3824	3816
50°	4033	3686	3680
55°	3917	3534	3528
60°	3779	3328	3346
65°	3553	3096	3169
70°	3230	2817	2960
75°	2769	2512	2788
80°	2083	2220	2657
85°	1113	1944	2586



TEST NUMBER: P580216

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.9	3.1
10°-20°	464.5	9.0
20°-30°	704.8	13.6
30°-40°	852.2	16.5
40°-50°	889.2	17.2
50°-60°	813.0	15.7
60°-70°	633.8	12.2
70°-80°	396.5	7.7
80°-90°	180.1	3.5
90°-100°	60.3	1.2
100°-110°	15.1	0.3
110°-120°	2.4	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°	1331.3	25.7
0°-40°	2183.5	42.2
0°-60°	3885.8	75.1
0°-90°	5096.1	98.5
90°-120°	77.9	1.5
90°-150°	77.9	1.5
90°-180°	78.0	1.5
0°-180°	5174.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1711	1711	1711	1711	1711	
5°	1708	1704	1697	1705	1705	162
15°	1643	1646	1641	1650	1650	464
25°	1522	1523	1525	1538	1540	701
35°	1347	1353	1359	1373	1378	843
45°	1134	1144	1153	1164	1170	873
55°	885	895	912	925	931	790
65°	608	618	640	665	676	601
75°	308	327	374	419	435	328
85°	53	98	169	224	243	67
90°	0	37	100	150	168	2
95°	0	10	52	94	108	0
105°	1	1	8	25	34	1
115°	1	1	2	4	6	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: P580216

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1711.2	1711.2	1711.2	1711.2	1711.2
2.5°	1713.3	1710.8	1703.2	1710.8	1710.4
5°	1707.6	1704.4	1696.7	1704.8	1704.8
7.5°	1696.3	1695.1	1688.3	1697.5	1697.5
10°	1683.0	1682.6	1677.0	1687.0	1687.4
12.5°	1664.5	1666.1	1660.8	1670.5	1671.7
15°	1642.7	1645.5	1641.1	1650.3	1649.9
17.5°	1618.9	1620.5	1617.3	1627.7	1627.3
20°	1589.4	1591.4	1589.0	1599.9	1601.1
22.5°	1556.7	1559.6	1559.2	1570.5	1573.7
25°	1522.0	1523.3	1524.9	1537.8	1540.2
27.5°	1483.7	1485.7	1488.6	1500.3	1502.7
30°	1441.8	1445.0	1448.2	1460.3	1463.6
32.5°	1397.4	1400.6	1404.7	1420.4	1422.0
35°	1347.4	1353.4	1359.1	1372.8	1378.4
37.5°	1297.4	1305.0	1310.3	1324.8	1329.2
40°	1244.5	1252.2	1260.6	1276.0	1278.8
42.5°	1189.2	1198.1	1208.2	1221.9	1226.8
45°	1133.6	1143.7	1152.9	1164.2	1169.9
47.5°	1073.5	1083.5	1094.8	1107.8	1111.4
50°	1011.3	1023.0	1035.1	1047.2	1053.7
52.5°	947.6	961.7	975.4	988.3	994.4
55°	884.7	895.2	911.7	925.0	931.1
57.5°	819.3	828.2	843.1	864.9	868.1
60°	752.8	760.8	776.2	793.9	801.2
62.5°	679.3	690.2	706.4	729.0	735.4
65°	607.9	618.4	639.8	665.2	675.7
67.5°	538.9	542.6	570.0	596.6	613.6
70°	457.5	471.2	503.0	535.7	548.6
72.5°	387.3	401.0	436.1	474.4	490.5
75°	307.8	326.8	374.4	419.1	434.9
77.5°	238.0	259.0	317.9	363.1	381.2
80°	166.2	198.9	263.0	313.8	333.6
82.5°	104.5	144.8	213.4	266.7	284.0
85°	53.2	98.4	169.0	223.5	243.3
87.5°	14.1	63.7	131.5	183.5	203.7
90°	0.4	36.7	99.6	149.7	167.8
92.5°	0.4	20.6	74.2	119.0	137.6
95°	0.4	9.7	51.6	93.6	108.1
97.5°	0.4	4.0	35.5	70.6	85.1
100°	0.4	2.0	22.6	51.2	63.7
102.5°	0.8	1.2	14.1	36.7	46.8
105°	0.8	1.2	8.5	25.0	33.5



TEST NUMBER: P580216

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

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.2	1.2	1.6	6.9	10.1
115°	1.2	1.2	1.6	4.4	6.5
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°	0.8	1.2	4.8	16.9	23.0
110°	1.2	1.2	2.8	10.5	15.3



(END OF REPORT)