

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: P580183

Luminaire Tested: **HVSL12-4-LD4-1HI-40-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580183
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-LD4-1HI-40-UNV-O-EDD-90
Description: 4 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

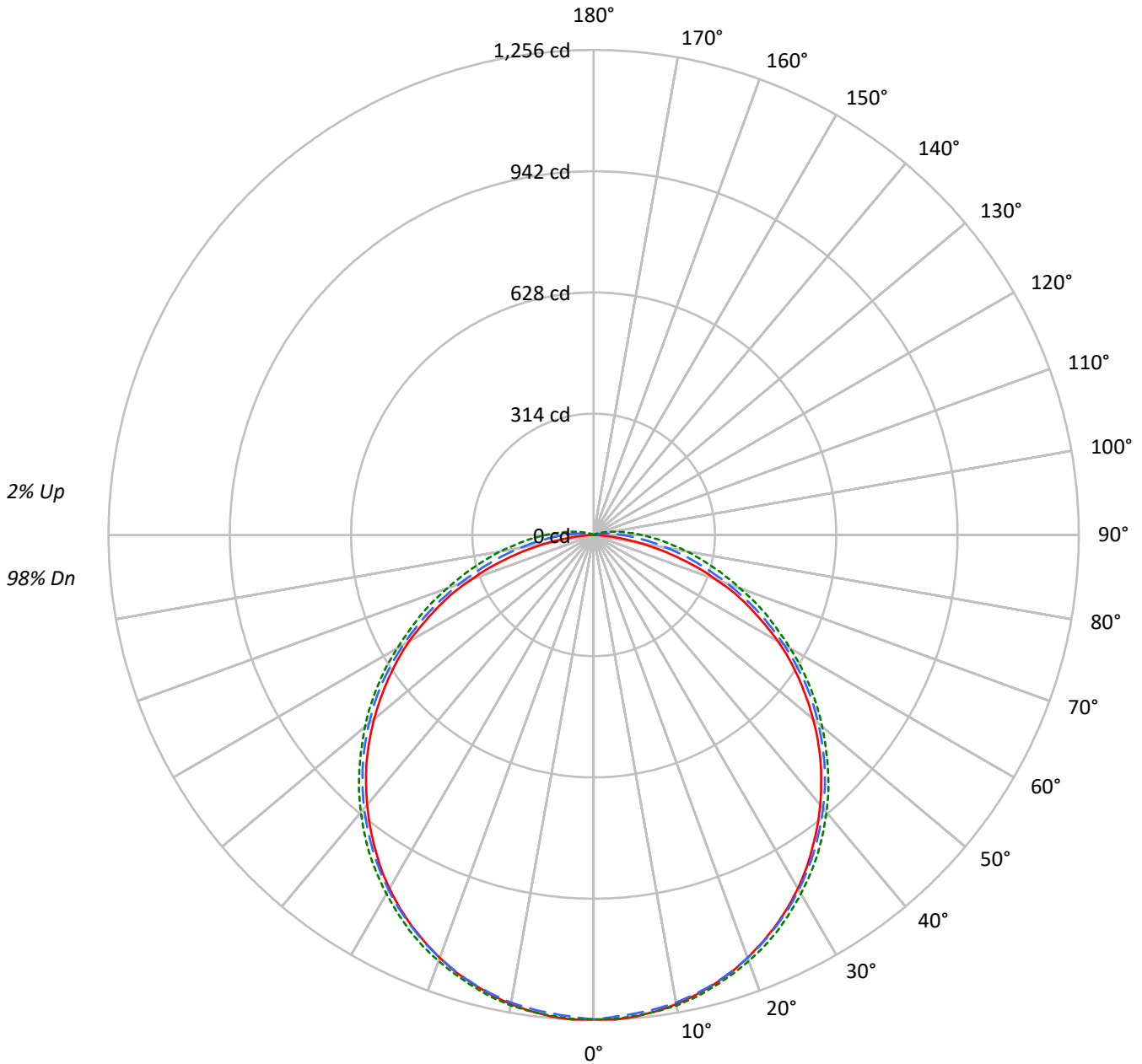
Lumens per Lamp: N/A
Luminaire Lumens: 3794.0 lumens
Efficiency: N/A
Efficacy: 83.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 45.5
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: P580183

CATALOG NUMBER: HVSL12-4-LD4-1HI-40-UNV-O-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P580183

CATALOG NUMBER: HVSL12-4-LD4-1HI-40-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°	3377	3377	3377
5°	3370	3318	3328
10°	3348	3275	3285
15°	3319	3225	3227
20°	3288	3167	3170
25°	3251	3107	3112
30°	3208	3041	3042
35°	3154	2968	2973
40°	3097	2890	2890
45°	3037	2804	2798
50°	2958	2703	2699
55°	2872	2591	2587
60°	2771	2440	2453
65°	2606	2270	2324
70°	2368	2066	2171
75°	2031	1841	2044
80°	1528	1629	1948
85°	816	1425	1896



TEST NUMBER: P580183

CATALOG NUMBER: HVSL12-4-LD4-1HI-40-UNV-O-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.7	3.1
10°-20°	340.6	9.0
20°-30°	516.8	13.6
30°-40°	624.9	16.5
40°-50°	652.1	17.2
50°-60°	596.2	15.7
60°-70°	464.8	12.2
70°-80°	290.7	7.7
80°-90°	132.0	3.5
90°-100°	44.3	1.2
100°-110°	11.1	0.3
110°-120°	1.8	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°	976.2	25.7
0°-40°	1601.1	42.2
0°-60°	2849.3	75.1
0°-90°	3736.9	98.5
90°-120°	57.1	1.5
90°-150°	57.1	1.5
90°-180°	57.0	1.5
0°-180°	3794.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1255	1255	1255	1255	1255	
5°	1252	1250	1244	1250	1250	119
15°	1204	1207	1203	1210	1210	340
25°	1116	1117	1118	1128	1129	514
35°	988	992	997	1007	1011	618
45°	831	839	845	854	858	641
55°	649	656	668	678	683	580
65°	446	454	469	488	496	441
75°	226	240	274	307	319	241
85°	39	72	124	164	178	49
90°	0	27	73	110	123	2
95°	0	7	38	69	79	0
105°	1	1	6	18	25	1
115°	1	1	1	3	5	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: P580183

CATALOG NUMBER: HVSL12-4-LD4-1HI-40-UNV-O-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1254.8	1254.8	1254.8	1254.8	1254.8
2.5°	1256.3	1254.5	1248.9	1254.5	1254.2
5°	1252.2	1249.8	1244.2	1250.1	1250.1
7.5°	1243.9	1243.0	1238.0	1244.8	1244.8
10°	1234.1	1233.8	1229.7	1237.1	1237.4
12.5°	1220.5	1221.7	1217.8	1224.9	1225.8
15°	1204.5	1206.6	1203.4	1210.2	1209.9
17.5°	1187.1	1188.3	1185.9	1193.6	1193.3
20°	1165.5	1167.0	1165.2	1173.2	1174.1
22.5°	1141.5	1143.6	1143.3	1151.6	1154.0
25°	1116.1	1117.0	1118.2	1127.6	1129.4
27.5°	1088.0	1089.5	1091.5	1100.1	1101.9
30°	1057.2	1059.6	1062.0	1070.8	1073.2
32.5°	1024.7	1027.1	1030.0	1041.5	1042.7
35°	988.0	992.4	996.6	1006.6	1010.8
37.5°	951.3	956.9	960.8	971.4	974.7
40°	912.6	918.2	924.4	935.6	937.7
42.5°	872.0	878.6	886.0	896.0	899.6
45°	831.2	838.6	845.4	853.7	857.8
47.5°	787.2	794.5	802.8	812.3	815.0
50°	741.6	750.2	759.0	767.9	772.7
52.5°	694.9	705.2	715.3	724.7	729.2
55°	648.7	656.4	668.5	678.3	682.7
57.5°	600.8	607.3	618.2	634.2	636.6
60°	552.0	557.9	569.1	582.2	587.5
62.5°	498.1	506.1	518.0	534.5	539.3
65°	445.8	453.5	469.2	487.8	495.5
67.5°	395.2	397.9	418.0	437.5	449.9
70°	335.4	345.5	368.9	392.8	402.3
72.5°	284.0	294.0	319.8	347.9	359.7
75°	225.7	239.6	274.5	307.3	318.9
77.5°	174.5	189.9	233.1	266.2	279.5
80°	121.9	145.8	192.9	230.1	244.6
82.5°	76.6	106.2	156.5	195.5	208.3
85°	39.0	72.2	123.9	163.9	178.4
87.5°	10.4	46.7	96.4	134.6	149.4
90°	0.3	26.9	73.1	109.7	123.1
92.5°	0.3	15.1	54.4	87.3	100.9
95°	0.3	7.1	37.9	68.6	79.3
97.5°	0.3	3.0	26.0	51.8	62.4
100°	0.3	1.5	16.6	37.6	46.7
102.5°	0.6	0.9	10.4	26.9	34.3
105°	0.6	0.9	6.2	18.3	24.6



TEST NUMBER: P580183

CATALOG NUMBER: HVSL12-4-LD4-1HI-40-UNV-O-EDD-90

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	0.9	1.2	5.0	7.4
115°	0.9	0.9	1.2	3.3	4.7
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°	0.6	0.9	3.5	12.4	16.9
110°	0.9	0.9	2.1	7.7	11.2



(END OF REPORT)