

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: P580567

Luminaire Tested: **HVSL4-4-LD4-1HI-40-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580567
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: HVSL4-4-LD4-1HI-40-UNV-O-EDD-90
Description: 4 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

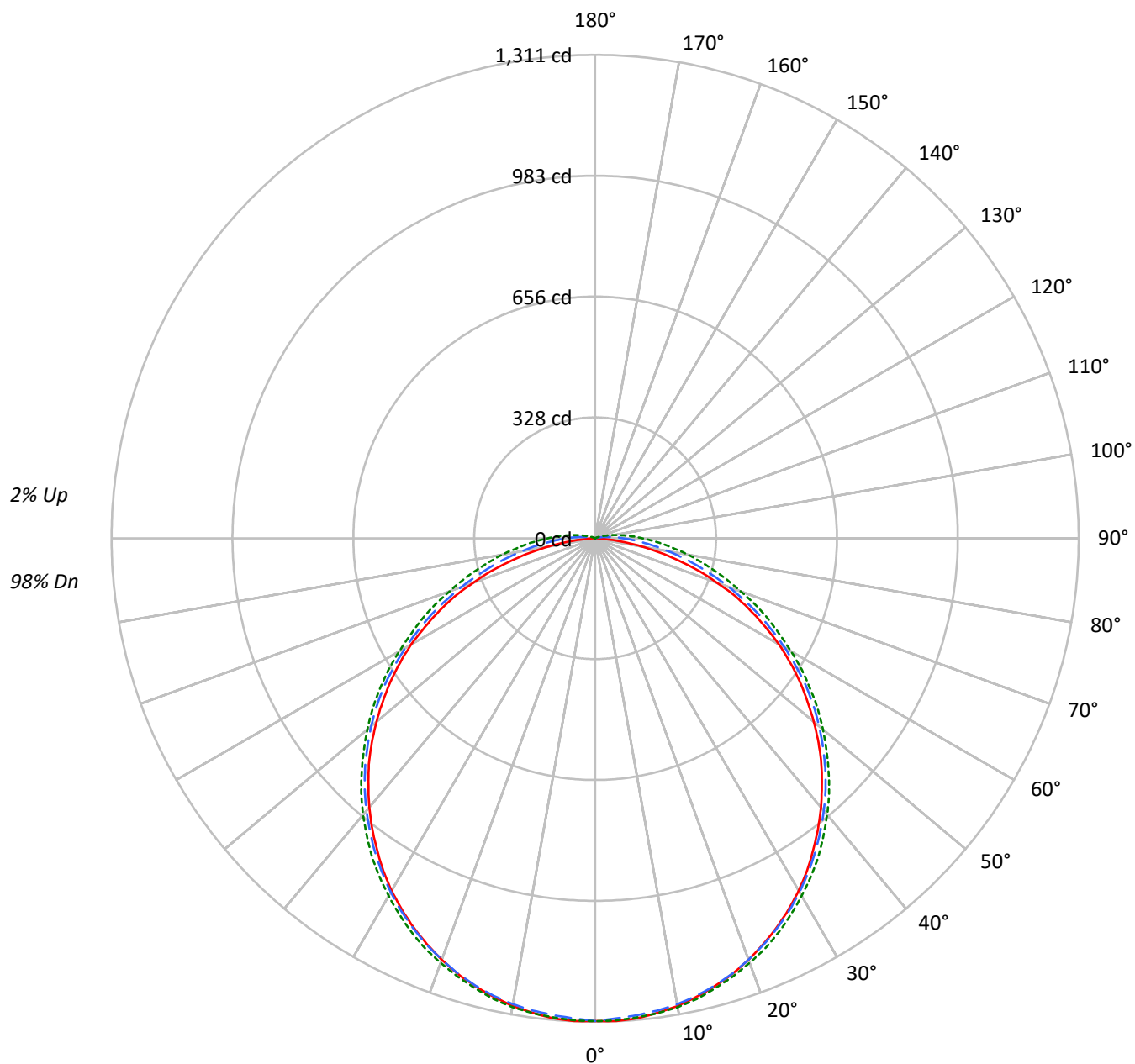
Lumens per Lamp: N/A
Luminaire Lumens: 3959.0 lumens
Efficiency: N/A
Efficacy: 91.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 43.1
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: P580567

CATALOG NUMBER: HVSL4-4-LD4-1HI-40-UNV-O-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P580567

CATALOG NUMBER: HVSL4-4-LD4-1HI-40-UNV-O-EDD-90

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	10571	10571	10571
5°	10550	10180	10128
10°	10480	9853	9727
15°	10389	9518	9305
20°	10292	9168	8904
25°	10176	8818	8512
30°	10042	8459	8101
35°	9873	8081	7699
40°	9697	7693	7264
45°	9507	7282	6813
50°	9259	6830	6345
55°	8992	6346	5849
60°	8674	5764	5304
65°	8157	5134	4765
70°	7413	4426	4174
75°	6357	3678	3621
80°	4783	2950	3094
85°	2554	2227	2567



TEST NUMBER: P580567

CATALOG NUMBER: HVSL4-4-LD4-1HI-40-UNV-O-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.9	3.1
10°-20°	355.4	9.0
20°-30°	539.3	13.6
30°-40°	652.1	16.5
40°-50°	680.4	17.2
50°-60°	622.1	15.7
60°-70°	485.0	12.2
70°-80°	303.4	7.7
80°-90°	137.8	3.5
90°-100°	46.2	1.2
100°-110°	11.6	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°	1018.6	25.7
0°-40°	1670.7	42.2
0°-60°	2973.3	75.1
0°-90°	3899.4	98.5
90°-120°	59.6	1.5
90°-150°	59.6	1.5
90°-180°	60.0	1.5
0°-180°	3959.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1309	1309	1309	1309	1309	
5°	1307	1304	1298	1304	1304	124
15°	1257	1259	1256	1263	1262	355
25°	1165	1166	1167	1177	1178	537
35°	1031	1036	1040	1050	1055	645
45°	867	875	882	891	895	668
55°	677	685	698	708	712	605
65°	465	473	490	509	517	460
75°	236	250	286	321	333	251
85°	41	75	129	171	186	52
90°	0	28	76	114	128	2
95°	0	7	40	72	83	0
105°	1	1	6	19	26	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	



TEST NUMBER: P580567

CATALOG NUMBER: HVSL4-4-LD4-1HI-40-UNV-O-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1309.4	1309.4	1309.4	1309.4	1309.4
2.5°	1310.9	1309.1	1303.2	1309.1	1308.8
5°	1306.6	1304.2	1298.3	1304.5	1304.5
7.5°	1298.0	1297.1	1291.8	1298.9	1298.9
10°	1287.8	1287.5	1283.2	1290.9	1291.2
12.5°	1273.6	1274.8	1270.8	1278.2	1279.1
15°	1256.9	1259.1	1255.7	1262.8	1262.5
17.5°	1238.7	1239.9	1237.5	1245.5	1245.2
20°	1216.2	1217.7	1215.9	1224.2	1225.1
22.5°	1191.2	1193.3	1193.0	1201.7	1204.1
25°	1164.6	1165.6	1166.8	1176.7	1178.5
27.5°	1135.3	1136.8	1139.0	1148.0	1149.8
30°	1103.2	1105.7	1108.1	1117.4	1119.9
32.5°	1069.2	1071.7	1074.8	1086.8	1088.1
35°	1031.0	1035.6	1039.9	1050.4	1054.7
37.5°	992.7	998.6	1002.6	1013.7	1017.1
40°	952.3	958.1	964.6	976.3	978.5
42.5°	910.0	916.8	924.5	935.0	938.7
45°	867.4	875.1	882.2	890.8	895.2
47.5°	821.4	829.1	837.7	847.6	850.4
50°	773.8	782.8	792.1	801.3	806.3
52.5°	725.1	735.9	746.4	756.3	760.9
55°	676.9	684.9	697.6	707.8	712.4
57.5°	626.9	633.7	645.1	661.8	664.3
60°	576.0	582.2	593.9	607.5	613.0
62.5°	519.8	528.1	540.5	557.8	562.7
65°	465.2	473.2	489.6	509.0	517.0
67.5°	412.4	415.2	436.2	456.5	469.5
70°	350.0	360.5	384.9	409.9	419.8
72.5°	296.3	306.8	333.7	363.0	375.3
75°	235.5	250.0	286.5	320.7	332.8
77.5°	182.1	198.2	243.2	277.8	291.7
80°	127.2	152.2	201.3	240.1	255.3
82.5°	79.9	110.8	163.3	204.0	217.3
85°	40.7	75.3	129.3	171.0	186.1
87.5°	10.8	48.8	100.6	140.4	155.9
90°	0.3	28.1	76.2	114.5	128.4
92.5°	0.3	15.7	56.8	91.1	105.3
95°	0.3	7.4	39.5	71.6	82.7
97.5°	0.3	3.1	27.2	54.0	65.1
100°	0.3	1.5	17.3	39.2	48.8
102.5°	0.6	0.9	10.8	28.1	35.8
105°	0.6	0.9	6.5	19.1	25.6



TEST NUMBER: P580567

CATALOG NUMBER: HVSL4-4-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	5.2	7.7
115°	0.9	0.9	1.2	3.4	4.9
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	3.7	13.0	17.6
110°	0.9	0.9	2.2	8.0	11.7



(END OF REPORT)