

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: P580519

Luminaire Tested: **HVSL4-3-LD4-1HI-40-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580519
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: HVSL4-3-LD4-1HI-40-UNV-O-EDD-90
Description: 3 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

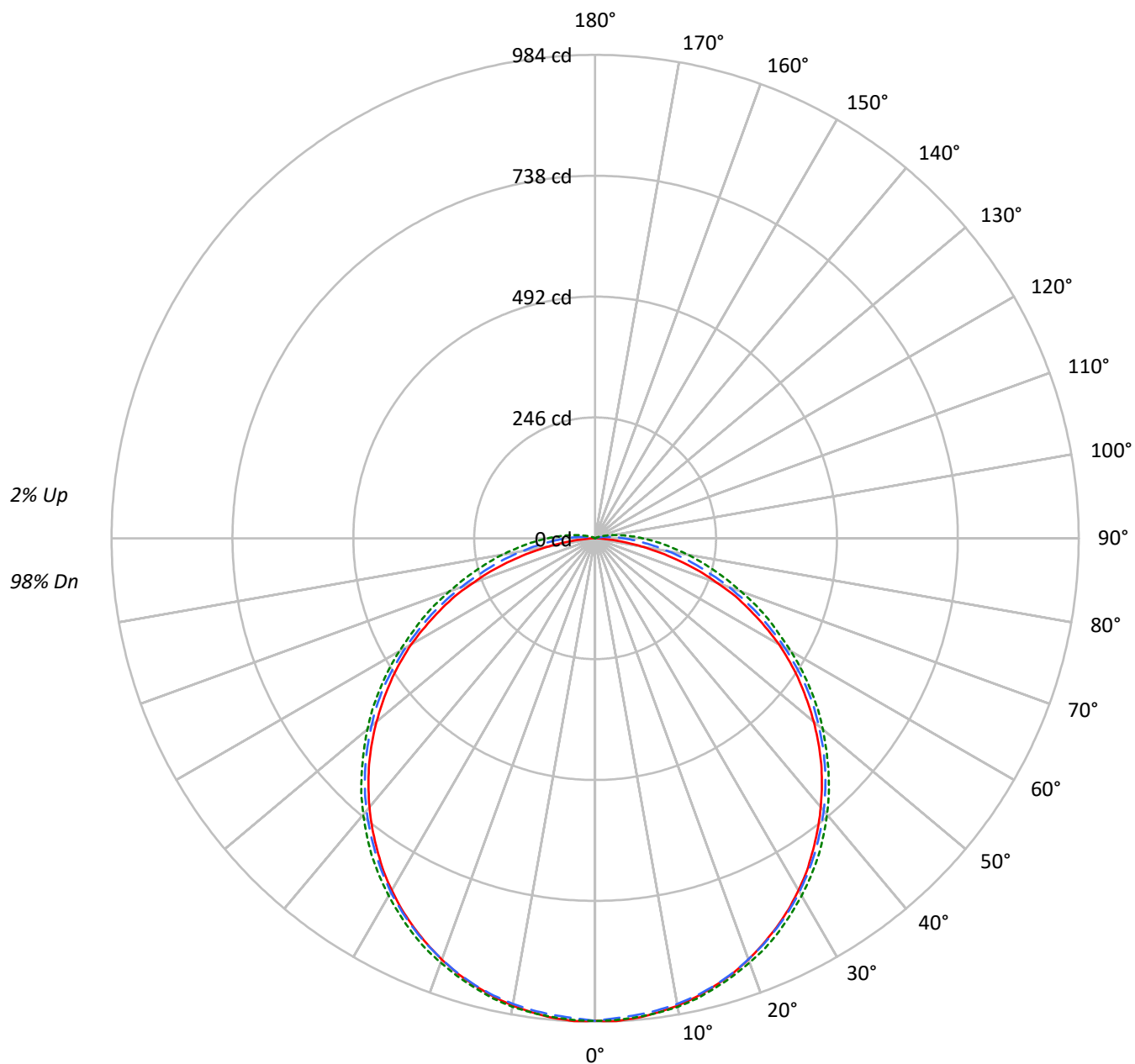
Lumens per Lamp: N/A
Luminaire Lumens: 2970.0 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 3' x H: 0.17')
CIE Type: Direct

Input Watts (W): 32.3
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: P580519

CATALOG NUMBER: HVSL4-3-LD4-1HI-40-UNV-O-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P580519

CATALOG NUMBER: HVSL4-3-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°	10573	10573	10573
5°	10540	10174	10131
10°	10457	9839	9729
15°	10353	9497	9307
20°	10244	9141	8907
25°	10115	8786	8515
30°	9967	8422	8102
35°	9782	8039	7701
40°	9591	7646	7266
45°	9384	7232	6814
50°	9117	6777	6346
55°	8829	6291	5851
60°	8485	5707	5305
65°	7942	5077	4767
70°	7170	4371	4175
75°	6086	3624	3621
80°	4497	2899	3094
85°	2311	2182	2567



TEST NUMBER: P580519

CATALOG NUMBER: HVSL4-3-LD4-1HI-40-UNV-O-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.0	3.1
10°-20°	266.6	9.0
20°-30°	404.6	13.6
30°-40°	489.2	16.5
40°-50°	510.4	17.2
50°-60°	466.7	15.7
60°-70°	363.8	12.2
70°-80°	227.6	7.7
80°-90°	103.4	3.5
90°-100°	34.6	1.2
100°-110°	8.7	0.3
110°-120°	1.4	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°	764.2	25.7
0°-40°	1253.4	42.2
0°-60°	2230.5	75.1
0°-90°	2925.3	98.5
90°-120°	44.7	1.5
90°-150°	44.7	1.5
90°-180°	45.0	1.5
0°-180°	2970.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	982	982	982	982	982	
5°	980	978	974	979	979	93
15°	943	945	942	947	947	266
25°	874	874	875	883	884	403
35°	773	777	780	788	791	484
45°	651	656	662	668	672	501
55°	508	514	523	531	534	454
65°	349	355	367	382	388	345
75°	177	188	215	241	250	188
85°	31	56	97	128	140	39
90°	0	21	57	86	96	1
95°	0	6	30	54	62	0
105°	0	1	5	14	19	1
115°	1	1	1	2	4	0
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: P580519

CATALOG NUMBER: HVSL4-3-LD4-1HI-40-UNV-O-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	982.3	982.3	982.3	982.3	982.3
2.5°	983.5	982.1	977.7	982.1	981.8
5°	980.2	978.4	974.0	978.6	978.6
7.5°	973.7	973.0	969.1	974.4	974.4
10°	966.1	965.9	962.6	968.4	968.6
12.5°	955.4	956.4	953.4	958.9	959.6
15°	942.9	944.6	942.0	947.3	947.1
17.5°	929.3	930.2	928.3	934.4	934.1
20°	912.4	913.5	912.1	918.4	919.1
22.5°	893.6	895.2	895.0	901.5	903.3
25°	873.7	874.4	875.3	882.7	884.1
27.5°	851.7	852.9	854.5	861.2	862.6
30°	827.6	829.5	831.3	838.3	840.1
32.5°	802.1	804.0	806.3	815.3	816.3
35°	773.4	776.9	780.1	788.0	791.3
37.5°	744.7	749.1	752.1	760.5	763.0
40°	714.4	718.8	723.6	732.4	734.1
42.5°	682.7	687.7	693.5	701.4	704.2
45°	650.7	656.5	661.8	668.3	671.5
47.5°	616.2	622.0	628.5	635.9	638.0
50°	580.5	587.2	594.2	601.1	604.8
52.5°	543.9	552.0	559.9	567.3	570.8
55°	507.8	513.8	523.3	531.0	534.5
57.5°	470.3	475.4	484.0	496.5	498.3
60°	432.1	436.7	445.5	455.7	459.9
62.5°	390.0	396.2	405.5	418.4	422.1
65°	349.0	355.0	367.3	381.8	387.9
67.5°	309.4	311.5	327.2	342.5	352.2
70°	262.6	270.5	288.8	307.5	314.9
72.5°	222.3	230.2	250.3	272.3	281.6
75°	176.7	187.6	214.9	240.6	249.6
77.5°	136.6	148.7	182.5	208.4	218.8
80°	95.4	114.2	151.0	180.2	191.5
82.5°	60.0	83.1	122.5	153.1	163.0
85°	30.6	56.5	97.0	128.3	139.6
87.5°	8.1	36.6	75.5	105.4	116.9
90°	0.2	21.1	57.2	85.9	96.3
92.5°	0.2	11.8	42.6	68.3	79.0
95°	0.2	5.6	29.6	53.7	62.1
97.5°	0.2	2.3	20.4	40.5	48.9
100°	0.2	1.2	13.0	29.4	36.6
102.5°	0.5	0.7	8.1	21.1	26.9
105°	0.5	0.7	4.9	14.4	19.2



TEST NUMBER: P580519

CATALOG NUMBER: HVSL4-3-LD4-1HI-40-UNV-O-EDD-90

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.7	0.7	0.9	3.9	5.8
115°	0.7	0.7	0.9	2.5	3.7
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°	0.5	0.7	2.8	9.7	13.2
110°	0.7	0.7	1.6	6.0	8.8



(END OF REPORT)