

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: P580655

Luminaire Tested: **HVSL4-8-LD4-2STD-40-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580655
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: HVSL4-8-LD4-2STD-40-UNV-O-EDD-90
Description: 8 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

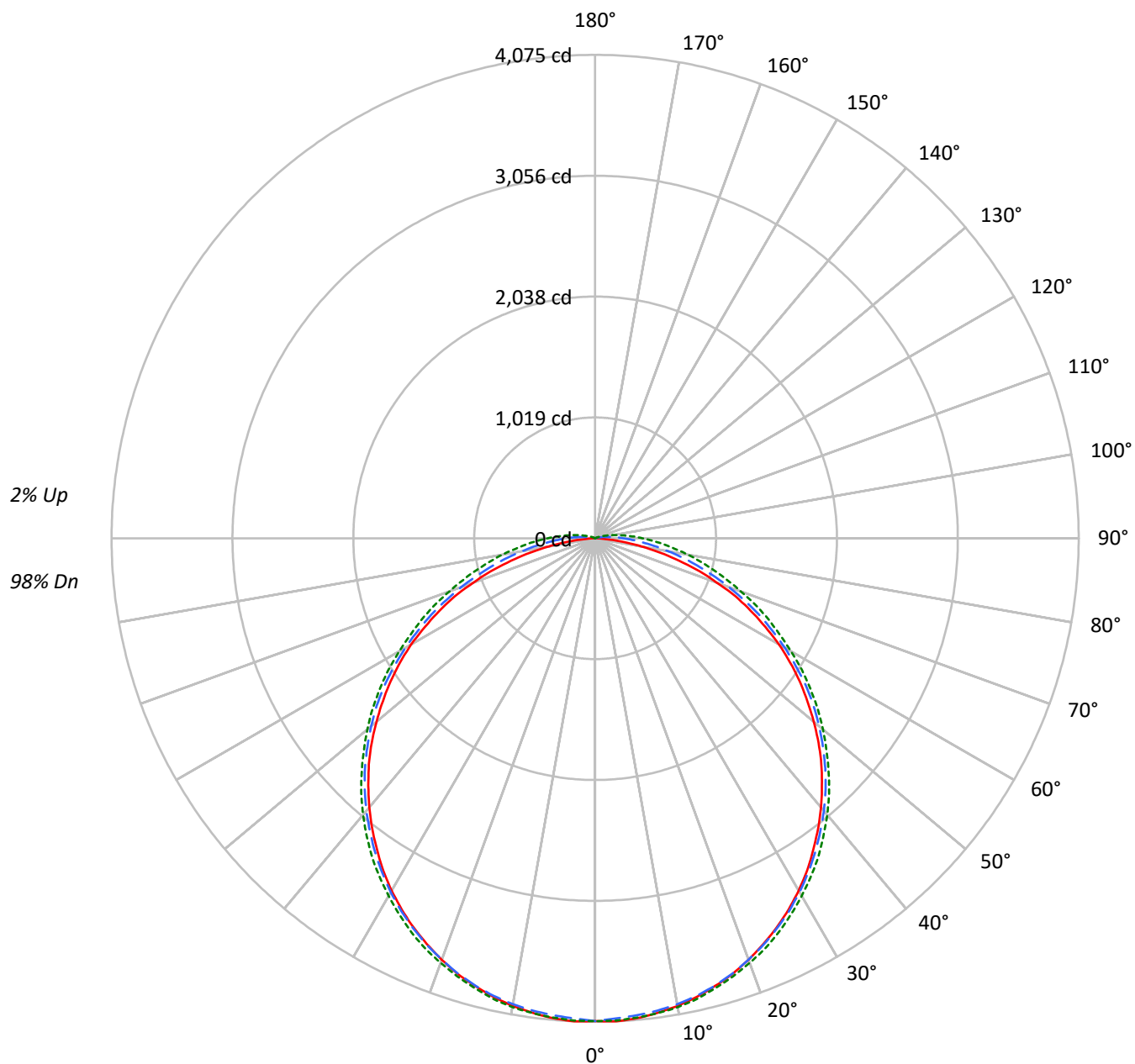
Lumens per Lamp: N/A
Luminaire Lumens: 12307.0 lumens
Efficiency: N/A
Efficacy: 94.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 8' x H: 0.17')
CIE Type: Direct

Input Watts (W): 130.8
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: P580655

CATALOG NUMBER: HVSL4-8-LD4-2STD-40-UNV-O-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P580655

CATALOG NUMBER: HVSL4-8-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
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°	16430	16430	16430
5°	16428	15842	15742
10°	16348	15352	15118
15°	16237	14847	14462
20°	16117	14316	13840
25°	15969	13786	13231
30°	15794	13240	12590
35°	15565	12663	11966
40°	15330	12070	11290
45°	15077	11441	10589
50°	14740	10745	9861
55°	14381	10000	9092
60°	13951	9099	8244
65°	13220	8120	7407
70°	12146	7019	6487
75°	10594	5848	5628
80°	8218	4708	4808
85°	4739	3574	3990



TEST NUMBER: P580655

CATALOG NUMBER: HVSL4-8-LD4-2STD-40-UNV-O-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	385.2	3.1
10°-20°	1104.9	9.0
20°-30°	1676.5	13.6
30°-40°	2027.1	16.5
40°-50°	2115.2	17.2
50°-60°	1933.9	15.7
60°-70°	1507.6	12.2
70°-80°	943.1	7.7
80°-90°	428.3	3.5
90°-100°	143.6	1.2
100°-110°	36.0	0.3
110°-120°	5.7	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°	3166.5	25.7
0°-40°	5193.7	42.2
0°-60°	9242.8	75.1
0°-90°	12121.7	98.5
90°-120°	185.3	1.5
90°-150°	185.3	1.5
90°-180°	185.0	1.5
0°-180°	12307.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4070	4070	4070	4070	4070	
5°	4062	4054	4036	4055	4055	386
15°	3907	3914	3904	3926	3925	1103
25°	3620	3623	3627	3658	3664	1668
35°	3205	3219	3233	3265	3279	2006
45°	2696	2720	2742	2769	2783	2078
55°	2104	2129	2169	2200	2215	1880
65°	1446	1471	1522	1582	1607	1431
75°	732	777	890	997	1034	780
85°	127	234	402	532	579	160
90°	1	87	237	356	399	5
95°	1	23	123	223	257	1
105°	2	3	20	60	80	2
115°	3	3	4	11	15	2
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: P580655

CATALOG NUMBER: HVSL4-8-LD4-2STD-40-UNV-O-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4070.4	4070.4	4070.4	4070.4	4070.4
2.5°	4075.2	4069.5	4051.2	4069.5	4068.5
5°	4061.8	4054.1	4035.9	4055.1	4055.1
7.5°	4034.9	4032.0	4015.7	4037.8	4037.8
10°	4003.2	4002.3	3988.9	4012.8	4013.8
12.5°	3959.1	3962.9	3950.5	3973.5	3976.4
15°	3907.3	3914.0	3903.5	3925.5	3924.6
17.5°	3850.7	3854.5	3846.8	3871.8	3870.8
20°	3780.6	3785.4	3779.7	3805.6	3808.5
22.5°	3702.9	3709.6	3708.7	3735.5	3743.2
25°	3620.4	3623.3	3627.1	3657.8	3663.6
27.5°	3529.2	3534.0	3540.7	3568.6	3574.3
30°	3429.4	3437.1	3444.8	3473.6	3481.2
32.5°	3323.9	3331.6	3341.2	3378.6	3382.4
35°	3204.9	3219.3	3232.7	3265.3	3278.8
37.5°	3085.9	3104.1	3116.6	3151.2	3161.7
40°	2960.2	2978.4	2998.6	3035.1	3041.8
42.5°	2828.8	2849.9	2873.9	2906.5	2918.0
45°	2696.3	2720.3	2742.4	2769.3	2782.7
47.5°	2553.4	2577.4	2604.2	2634.9	2643.6
50°	2405.6	2433.4	2462.2	2491.0	2506.3
52.5°	2254.0	2287.6	2320.2	2350.9	2365.3
55°	2104.3	2129.2	2168.6	2200.2	2214.6
57.5°	1948.8	1970.0	2005.5	2057.3	2065.0
60°	1790.5	1809.7	1846.2	1888.4	1905.7
62.5°	1615.9	1641.8	1680.2	1733.9	1749.3
65°	1446.0	1471.0	1521.8	1582.3	1607.2
67.5°	1282.0	1290.6	1355.8	1419.2	1459.5
70°	1088.1	1120.8	1196.6	1274.3	1305.0
72.5°	921.2	953.8	1037.3	1128.4	1166.8
75°	732.1	777.2	890.5	997.0	1034.4
77.5°	566.1	616.0	756.1	863.6	906.8
80°	395.3	473.1	625.6	746.5	793.5
82.5°	248.5	344.5	507.6	634.3	675.5
85°	126.7	234.1	402.1	531.6	578.6
87.5°	33.6	151.6	312.8	436.6	484.6
90°	1.0	87.3	237.0	356.0	399.2
92.5°	1.0	48.9	176.6	283.1	327.2
95°	1.0	23.0	122.8	222.6	257.2
97.5°	1.0	9.6	84.4	167.9	202.5
100°	1.0	4.8	53.7	121.9	151.6
102.5°	1.9	2.9	33.6	87.3	111.3
105°	1.9	2.9	20.2	59.5	79.6



TEST NUMBER: P580655

CATALOG NUMBER: HVSL4-8-LD4-2STD-40-UNV-O-EDD-90

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.9	2.9	3.8	16.3	24.0
115°	2.9	2.9	3.8	10.6	15.4
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°	1.9	2.9	11.5	40.3	54.7
110°	2.9	2.9	6.7	24.9	36.5



(END OF REPORT)