

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: P580200

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

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580200
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-LD4-1STD-40-UNV-O-EDD
Description: 4 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

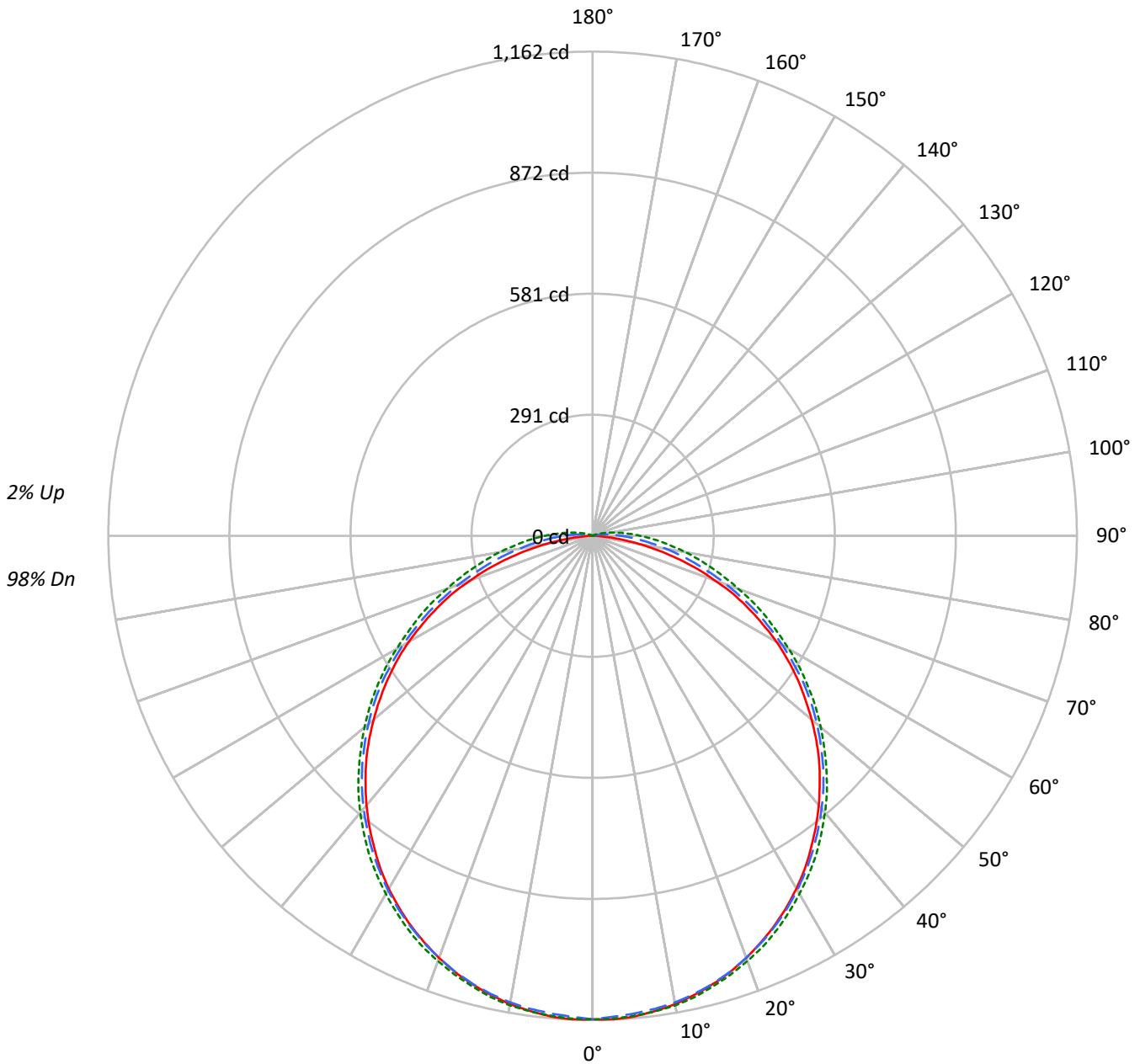
Lumens per Lamp: N/A
Luminaire Lumens: 3509.0 lumens
Efficiency: N/A
Efficacy: 101.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 34.5
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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20	
RC	80				70				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				98
1	108	102	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	81				81
2	98	89	82	76	95	87	80	75	83	77	73	79	75	71	76	72	69	67				67
3	89	78	69	63	86	76	68	62	73	66	61	70	64	59	67	62	58	56				56
4	81	69	60	53	79	67	59	52	65	57	52	62	56	51	60	54	50	47				47
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	43	41				41
6	69	55	46	40	67	54	46	39	52	45	39	50	44	38	49	43	38	36				36
7	64	50	41	35	62	49	41	35	47	40	34	46	39	34	44	38	34	32				32
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	41	35	30	28				28
9	55	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25				25
10	52	39	31	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23				23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3123	3123	3123
5°	3117	3069	3078
10°	3096	3029	3038
15°	3070	2983	2984
20°	3041	2929	2932
25°	3007	2873	2878
30°	2967	2813	2813
35°	2917	2745	2750
40°	2865	2673	2673
45°	2809	2593	2588
50°	2736	2500	2496
55°	2657	2397	2393
60°	2563	2257	2269
65°	2410	2099	2150
70°	2191	1911	2008
75°	1878	1703	1890
80°	1413	1506	1803
85°	755	1318	1753



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.8	3.1
10°-20°	315.0	9.0
20°-30°	478.0	13.6
30°-40°	578.0	16.5
40°-50°	603.1	17.2
50°-60°	551.4	15.7
60°-70°	429.8	12.2
70°-80°	268.9	7.7
80°-90°	122.1	3.5
90°-100°	40.9	1.2
100°-110°	10.3	0.3
110°-120°	1.6	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°	902.9	25.7
0°-40°	1480.8	42.2
0°-60°	2635.3	75.1
0°-90°	3456.2	98.5
90°-120°	52.8	1.5
90°-150°	52.8	1.5
90°-180°	53.0	1.5
0°-180°	3509.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1161	1161	1161	1161	1161	
5°	1158	1156	1151	1156	1156	110
15°	1114	1116	1113	1119	1119	314
25°	1032	1033	1034	1043	1045	476
35°	914	918	922	931	935	572
45°	769	776	782	790	793	592
55°	600	607	618	627	631	536
65°	412	419	434	451	458	408
75°	209	222	254	284	295	223
85°	36	67	115	152	165	46
90°	0	25	68	102	114	1
95°	0	7	35	64	73	0
105°	0	1	6	17	23	1
115°	1	1	1	3	4	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1160.6	1160.6	1160.6	1160.6	1160.6
2.5°	1161.9	1160.3	1155.1	1160.3	1160.0
5°	1158.1	1155.9	1150.7	1156.2	1156.2
7.5°	1150.4	1149.6	1145.0	1151.3	1151.3
10°	1141.4	1141.1	1137.3	1144.1	1144.4
12.5°	1128.8	1129.9	1126.4	1132.9	1133.8
15°	1114.1	1116.0	1113.0	1119.3	1119.0
17.5°	1097.9	1099.0	1096.8	1103.9	1103.7
20°	1077.9	1079.3	1077.7	1085.1	1085.9
22.5°	1055.8	1057.7	1057.4	1065.1	1067.3
25°	1032.3	1033.1	1034.2	1042.9	1044.6
27.5°	1006.3	1007.6	1009.5	1017.5	1019.1
30°	977.8	980.0	982.2	990.4	992.6
32.5°	947.7	949.9	952.6	963.3	964.4
35°	913.8	917.9	921.7	931.0	934.9
37.5°	879.9	885.1	888.6	898.5	901.5
40°	844.0	849.2	855.0	865.4	867.3
42.5°	806.5	812.6	819.4	828.7	832.0
45°	768.8	775.6	781.9	789.6	793.4
47.5°	728.0	734.9	742.5	751.3	753.7
50°	685.9	693.8	702.0	710.2	714.6
52.5°	642.7	652.2	661.5	670.3	674.4
55°	600.0	607.1	618.3	627.3	631.4
57.5°	555.7	561.7	571.8	586.6	588.8
60°	510.5	516.0	526.4	538.4	543.3
62.5°	460.7	468.1	479.1	494.4	498.8
65°	412.3	419.4	433.9	451.1	458.3
67.5°	365.5	368.0	386.6	404.6	416.1
70°	310.3	319.6	341.2	363.3	372.1
72.5°	262.6	271.9	295.7	321.7	332.7
75°	208.7	221.6	253.9	284.3	294.9
77.5°	161.4	175.6	215.6	246.2	258.5
80°	112.7	134.9	178.4	212.9	226.3
82.5°	70.9	98.2	144.7	180.8	192.6
85°	36.1	66.8	114.6	151.6	165.0
87.5°	9.6	43.2	89.2	124.5	138.2
90°	0.3	24.9	67.6	101.5	113.8
92.5°	0.3	14.0	50.3	80.7	93.3
95°	0.3	6.6	35.0	63.5	73.3
97.5°	0.3	2.7	24.1	47.9	57.7
100°	0.3	1.4	15.3	34.7	43.2
102.5°	0.5	0.8	9.6	24.9	31.7
105°	0.5	0.8	5.7	17.0	22.7



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

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.8	0.8	1.1	4.7	6.8
115°	0.8	0.8	1.1	3.0	4.4
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°	0.5	0.8	3.3	11.5	15.6
110°	0.8	0.8	1.9	7.1	10.4



(END OF REPORT)