

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: P580582

Luminaire Tested: **HVSL4-4-LD4-1STD-35-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580582
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-LD4-1STD-35-UNV-O-EDD
Description: 4 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 3500K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

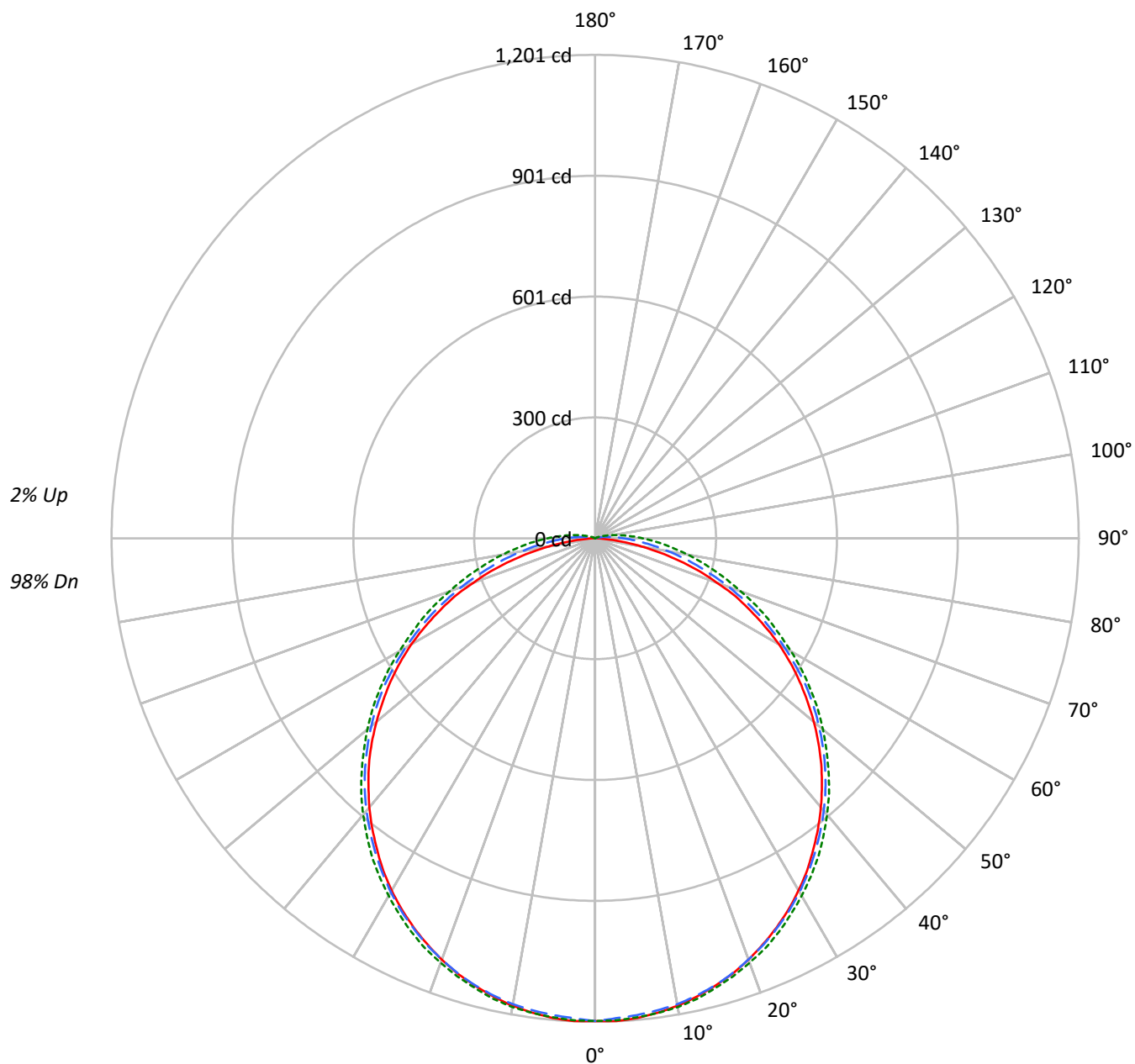
Lumens per Lamp: N/A
Luminaire Lumens: 3626.0 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 32.7
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: P580582

CATALOG NUMBER: HVSL4-4-LD4-1STD-35-UNV-O-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P580582

CATALOG NUMBER: HVSL4-4-LD4-1STD-35-UNV-O-EDD

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°	9682	9682	9682
5°	9663	9324	9276
10°	9598	9024	8909
15°	9515	8717	8522
20°	9427	8396	8156
25°	9321	8076	7797
30°	9197	7747	7419
35°	9042	7402	7051
40°	8881	7046	6653
45°	8707	6670	6240
50°	8481	6255	5811
55°	8236	5812	5357
60°	7944	5279	4858
65°	7470	4702	4364
70°	6790	4054	3823
75°	5822	3369	3317
80°	4381	2701	2833
85°	2340	2041	2351



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.5	3.1
10°-20°	325.5	9.0
20°-30°	493.9	13.6
30°-40°	597.3	16.5
40°-50°	623.2	17.2
50°-60°	569.8	15.7
60°-70°	444.2	12.2
70°-80°	277.9	7.7
80°-90°	126.2	3.5
90°-100°	42.3	1.2
100°-110°	10.6	0.3
110°-120°	1.7	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°	933.0	25.7
0°-40°	1530.2	42.2
0°-60°	2723.2	75.1
0°-90°	3571.4	98.5
90°-120°	54.6	1.5
90°-150°	54.6	1.5
90°-180°	55.0	1.5
0°-180°	3626.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1199	1199	1199	1199	1199	
5°	1197	1194	1189	1195	1195	114
15°	1151	1153	1150	1157	1156	325
25°	1067	1068	1069	1078	1079	492
35°	944	948	952	962	966	591
45°	794	802	808	816	820	612
55°	620	627	639	648	652	554
65°	426	433	448	466	474	422
75°	216	229	262	294	305	230
85°	37	69	118	157	170	47
90°	0	26	70	105	118	1
95°	0	7	36	66	76	0
105°	1	1	6	18	24	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	



TEST NUMBER: P580582

CATALOG NUMBER: HVSL4-4-LD4-1STD-35-UNV-O-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1199.3	1199.3	1199.3	1199.3	1199.3
2.5°	1200.7	1199.0	1193.6	1199.0	1198.7
5°	1196.7	1194.5	1189.1	1194.7	1194.7
7.5°	1188.8	1188.0	1183.1	1189.6	1189.6
10°	1179.5	1179.2	1175.2	1182.3	1182.6
12.5°	1166.5	1167.6	1163.9	1170.7	1171.6
15°	1151.2	1153.2	1150.1	1156.6	1156.3
17.5°	1134.5	1135.7	1133.4	1140.7	1140.5
20°	1113.9	1115.3	1113.6	1121.2	1122.1
22.5°	1091.0	1093.0	1092.7	1100.6	1102.9
25°	1066.7	1067.5	1068.6	1077.7	1079.4
27.5°	1039.8	1041.2	1043.2	1051.4	1053.1
30°	1010.4	1012.7	1014.9	1023.4	1025.7
32.5°	979.3	981.6	984.4	995.4	996.6
35°	944.3	948.5	952.5	962.1	966.0
37.5°	909.2	914.6	918.2	928.4	931.5
40°	872.2	877.5	883.5	894.2	896.2
42.5°	833.4	839.7	846.7	856.3	859.7
45°	794.4	801.5	808.0	815.9	819.9
47.5°	752.3	759.4	767.3	776.3	778.9
50°	708.8	717.0	725.4	733.9	738.4
52.5°	664.1	674.0	683.6	692.6	696.9
55°	620.0	627.3	638.9	648.3	652.5
57.5°	574.2	580.4	590.9	606.1	608.4
60°	527.5	533.2	543.9	556.4	561.5
62.5°	476.1	483.7	495.0	510.9	515.4
65°	426.0	433.4	448.4	466.2	473.5
67.5°	377.7	380.2	399.5	418.1	430.0
70°	320.6	330.2	352.5	375.4	384.5
72.5°	271.4	281.0	305.6	332.5	343.8
75°	215.7	229.0	262.4	293.7	304.8
77.5°	166.8	181.5	222.8	254.4	267.2
80°	116.5	139.4	184.3	219.9	233.8
82.5°	73.2	101.5	149.6	186.9	199.0
85°	37.3	69.0	118.5	156.6	170.5
87.5°	9.9	44.7	92.2	128.6	142.8
90°	0.3	25.7	69.8	104.9	117.6
92.5°	0.3	14.4	52.0	83.4	96.4
95°	0.3	6.8	36.2	65.6	75.8
97.5°	0.3	2.8	24.9	49.5	59.7
100°	0.3	1.4	15.8	35.9	44.7
102.5°	0.6	0.8	9.9	25.7	32.8
105°	0.6	0.8	5.9	17.5	23.5



TEST NUMBER: P580582

CATALOG NUMBER: HVSL4-4-LD4-1STD-35-UNV-O-EDD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.8	0.8	1.1	4.8	7.1
115°	0.8	0.8	1.1	3.1	4.5
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	0.8	3.4	11.9	16.1
110°	0.8	0.8	2.0	7.4	10.7



(END OF REPORT)