

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: P580580

Luminaire Tested: **HVSL4-4-LD4-1STD-30-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580580
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-30-UNV-O-EDD
Description: 4 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 3000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

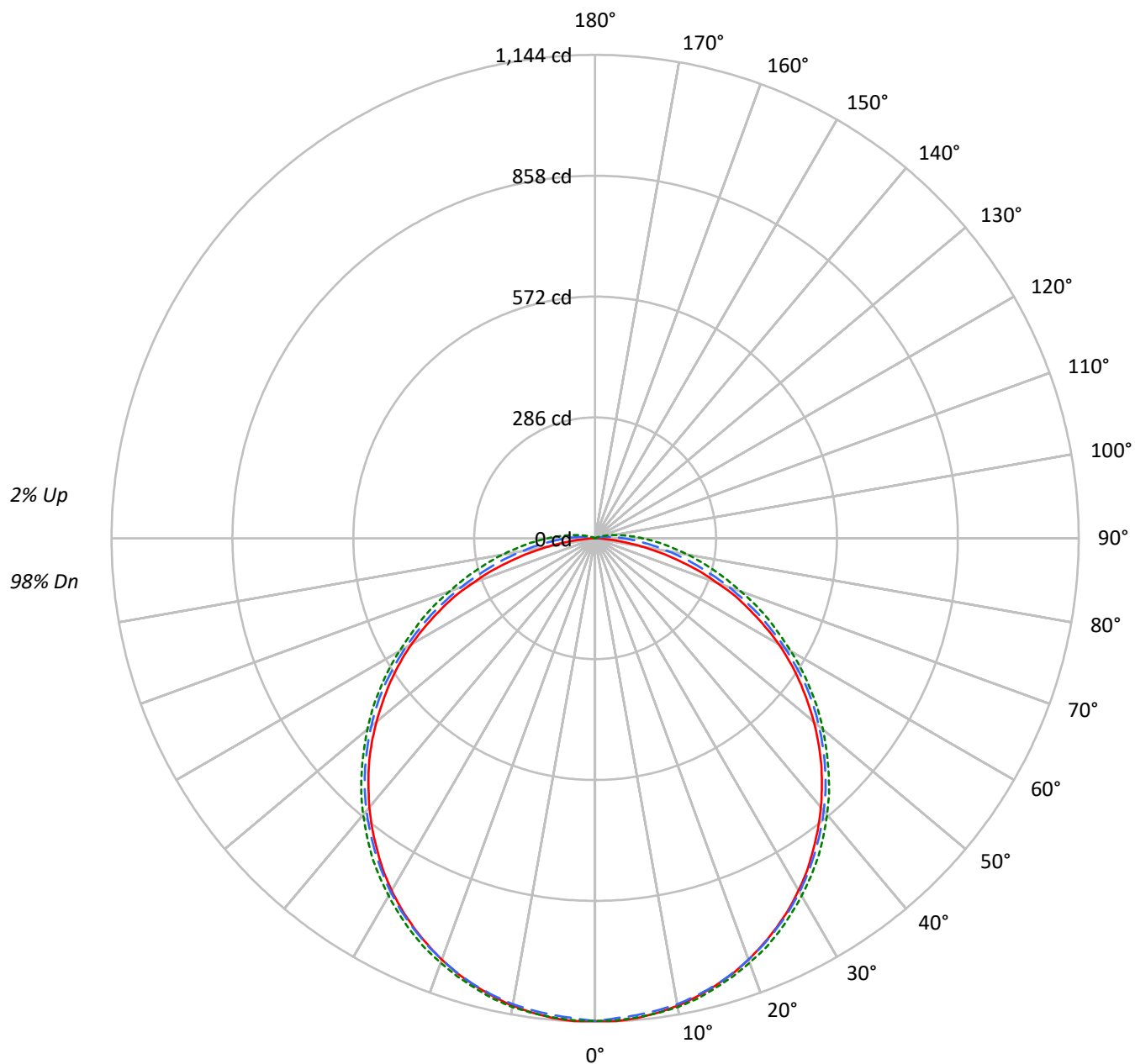
Lumens per Lamp: N/A
Luminaire Lumens: 3454.0 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.17')
CIE Type: Direct

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: P580580

CATALOG NUMBER: HVSL4-4-LD4-1STD-30-UNV-O-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P580580

CATALOG NUMBER: HVSL4-4-LD4-1STD-30-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°	9223	9223	9223
5°	9205	8881	8836
10°	9143	8596	8486
15°	9064	8304	8117
20°	8979	7998	7769
25°	8878	7693	7427
30°	8761	7380	7067
35°	8613	7050	6717
40°	8460	6712	6337
45°	8294	6354	5944
50°	8078	5958	5535
55°	7846	5537	5103
60°	7567	5029	4627
65°	7116	4479	4158
70°	6468	3862	3641
75°	5547	3208	3159
80°	4174	2573	2699
85°	2227	1943	2240



TEST NUMBER: P580580

CATALOG NUMBER: HVSL4-4-LD4-1STD-30-UNV-O-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.1	3.1
10°-20°	310.1	9.0
20°-30°	470.5	13.6
30°-40°	568.9	16.5
40°-50°	593.6	17.2
50°-60°	542.8	15.7
60°-70°	423.1	12.2
70°-80°	264.7	7.7
80°-90°	120.2	3.5
90°-100°	40.3	1.2
100°-110°	10.1	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°	888.7	25.7
0°-40°	1457.6	42.2
0°-60°	2594.0	75.1
0°-90°	3402.0	98.5
90°-120°	52.0	1.5
90°-150°	52.0	1.5
90°-180°	52.0	1.5
0°-180°	3454.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1142	1142	1142	1142	1142	
5°	1140	1138	1133	1138	1138	108
15°	1097	1098	1096	1102	1101	310
25°	1016	1017	1018	1027	1028	468
35°	900	904	907	916	920	563
45°	757	764	770	777	781	583
55°	591	598	609	618	622	528
65°	406	413	427	444	451	402
75°	206	218	250	280	290	219
85°	36	66	113	149	162	45
90°	0	24	66	100	112	1
95°	0	6	34	62	72	0
105°	0	1	6	17	22	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: P580580

CATALOG NUMBER: HVSL4-4-LD4-1STD-30-UNV-O-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1142.4	1142.4	1142.4	1142.4	1142.4
2.5°	1143.7	1142.1	1137.0	1142.1	1141.8
5°	1140.0	1137.8	1132.7	1138.1	1138.1
7.5°	1132.4	1131.6	1127.0	1133.2	1133.2
10°	1123.5	1123.3	1119.5	1126.2	1126.5
12.5°	1111.1	1112.2	1108.7	1115.2	1116.0
15°	1096.6	1098.5	1095.5	1101.7	1101.4
17.5°	1080.7	1081.8	1079.6	1086.6	1086.4
20°	1061.0	1062.4	1060.8	1068.0	1068.9
22.5°	1039.2	1041.1	1040.8	1048.4	1050.5
25°	1016.1	1016.9	1018.0	1026.6	1028.2
27.5°	990.5	991.8	993.7	1001.5	1003.1
30°	962.5	964.6	966.8	974.9	977.0
32.5°	932.9	935.0	937.7	948.2	949.3
35°	899.5	903.5	907.3	916.4	920.2
37.5°	866.1	871.2	874.7	884.4	887.3
40°	830.8	835.9	841.6	851.8	853.7
42.5°	793.9	799.8	806.6	815.7	818.9
45°	756.7	763.5	769.7	777.2	781.0
47.5°	716.6	723.3	730.9	739.5	741.9
50°	675.1	682.9	691.0	699.1	703.4
52.5°	632.6	642.0	651.2	659.8	663.8
55°	590.6	597.6	608.6	617.5	621.5
57.5°	547.0	552.9	562.8	577.4	579.5
60°	502.5	507.9	518.1	530.0	534.8
62.5°	453.5	460.8	471.5	486.6	490.9
65°	405.8	412.8	427.1	444.1	451.1
67.5°	359.8	362.2	380.5	398.3	409.6
70°	305.4	314.5	335.8	357.6	366.2
72.5°	258.5	267.7	291.1	316.7	327.5
75°	205.5	218.1	249.9	279.8	290.3
77.5°	158.9	172.9	212.2	242.4	254.5
80°	111.0	132.8	175.6	209.5	222.7
82.5°	69.7	96.7	142.5	178.0	189.6
85°	35.5	65.7	112.8	149.2	162.4
87.5°	9.4	42.5	87.8	122.5	136.0
90°	0.3	24.5	66.5	99.9	112.0
92.5°	0.3	13.7	49.6	79.4	91.8
95°	0.3	6.5	34.5	62.5	72.2
97.5°	0.3	2.7	23.7	47.1	56.8
100°	0.3	1.3	15.1	34.2	42.5
102.5°	0.5	0.8	9.4	24.5	31.2
105°	0.5	0.8	5.7	16.7	22.4



TEST NUMBER: P580580

CATALOG NUMBER: HVSL4-4-LD4-1STD-30-UNV-O-EDD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.8	0.8	1.1	4.6	6.7
115°	0.8	0.8	1.1	3.0	4.3
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	3.2	11.3	15.4
110°	0.8	0.8	1.9	7.0	10.2



(END OF REPORT)