

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: P580182

Luminaire Tested: **HVSL12-4-LD4-1HI-35-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580182
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-LD4-1HI-35-UNV-O-EDD
Description: 4 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 3500K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

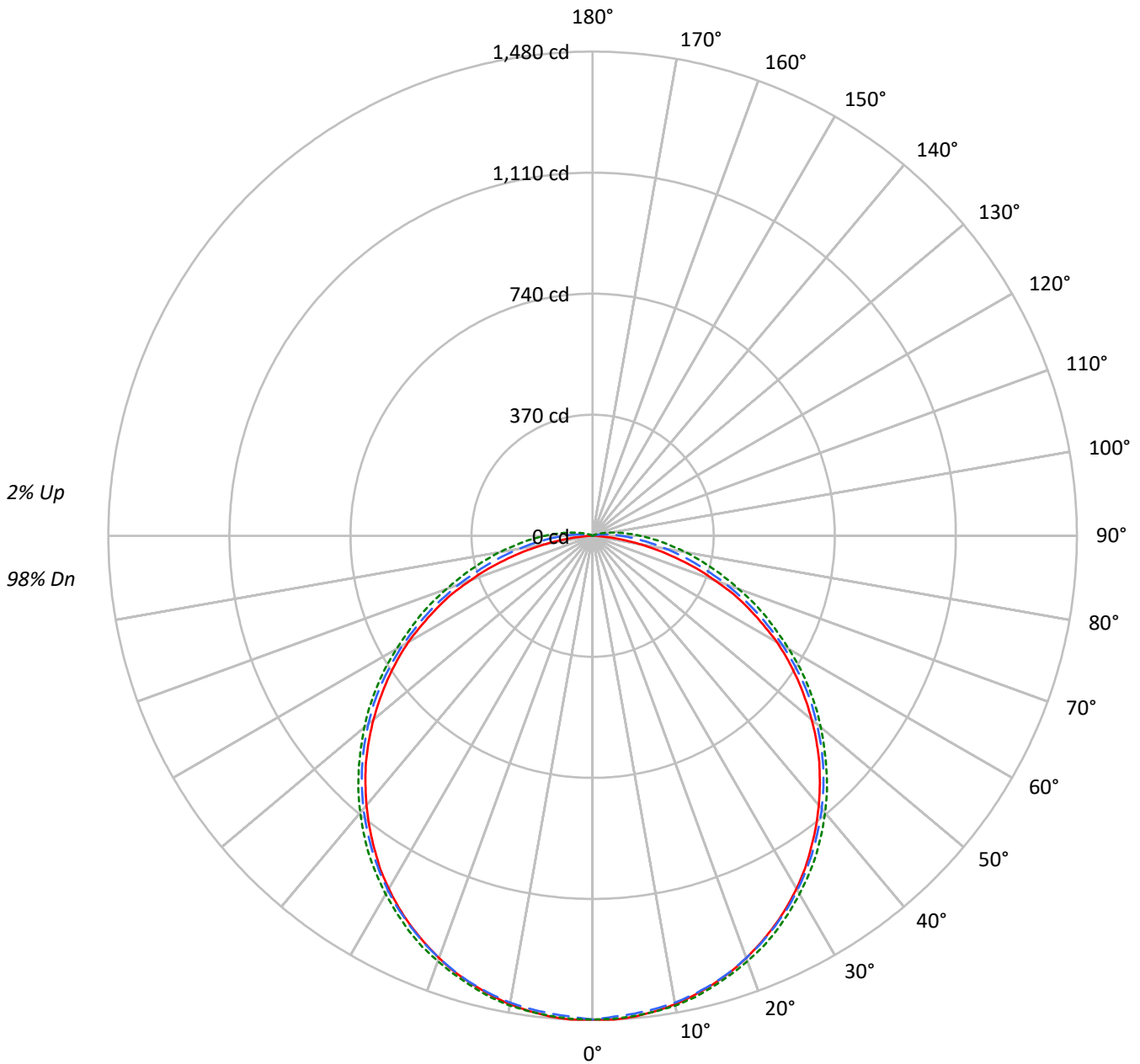
Lumens per Lamp: N/A
Luminaire Lumens: 4470.9 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 45.5
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

TEST NUMBER: P580182

CATALOG NUMBER: HVSL12-4-LD4-1HI-35-UNV-O-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P580182

CATALOG NUMBER: HVSL12-4-LD4-1HI-35-UNV-O-EDD

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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																
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°	3979	3979	3979
5°	3971	3910	3922
10°	3945	3859	3871
15°	3911	3801	3802
20°	3874	3732	3736
25°	3831	3661	3667
30°	3780	3584	3585
35°	3716	3497	3504
40°	3650	3406	3405
45°	3578	3305	3297
50°	3485	3185	3180
55°	3385	3053	3049
60°	3265	2876	2891
65°	3070	2675	2739
70°	2791	2435	2558
75°	2393	2170	2409
80°	1800	1919	2297
85°	962	1681	2234



TEST NUMBER: P580182

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.9	3.1
10°-20°	401.4	9.0
20°-30°	609.0	13.6
30°-40°	736.4	16.5
40°-50°	768.4	17.2
50°-60°	702.6	15.7
60°-70°	547.7	12.2
70°-80°	342.6	7.7
80°-90°	155.6	3.5
90°-100°	52.1	1.2
100°-110°	13.1	0.3
110°-120°	2.0	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°	1150.4	25.7
0°-40°	1886.8	42.2
0°-60°	3357.8	75.1
0°-90°	4403.7	98.5
90°-120°	67.3	1.5
90°-150°	67.3	1.5
90°-180°	67.0	1.5
0°-180°	4470.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1479	1479	1479	1479	1479	
5°	1476	1473	1466	1473	1473	140
15°	1420	1422	1418	1426	1426	401
25°	1315	1316	1318	1329	1331	606
35°	1164	1170	1174	1186	1191	729
45°	980	988	996	1006	1011	755
55°	764	774	788	799	805	683
65°	525	534	553	575	584	520
75°	266	282	324	362	376	284
85°	46	85	146	193	210	58
90°	0	32	86	129	145	2
95°	0	8	45	81	93	0
105°	1	1	7	22	29	1
115°	1	1	1	4	6	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	0



TEST NUMBER: P580182

CATALOG NUMBER: HVSL12-4-LD4-1HI-35-UNV-O-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1478.7	1478.7	1478.7	1478.7	1478.7
2.5°	1480.5	1478.4	1471.8	1478.4	1478.0
5°	1475.6	1472.8	1466.2	1473.2	1473.2
7.5°	1465.8	1464.8	1458.9	1466.9	1466.9
10°	1454.3	1454.0	1449.1	1457.8	1458.2
12.5°	1438.3	1439.7	1435.2	1443.5	1444.6
15°	1419.5	1421.9	1418.1	1426.1	1425.8
17.5°	1398.9	1400.3	1397.5	1406.6	1406.2
20°	1373.5	1375.2	1373.1	1382.5	1383.6
22.5°	1345.2	1347.7	1347.3	1357.1	1359.9
25°	1315.2	1316.3	1317.7	1328.8	1330.9
27.5°	1282.1	1283.9	1286.3	1296.4	1298.5
30°	1245.9	1248.7	1251.5	1261.9	1264.7
32.5°	1207.5	1210.3	1213.8	1227.4	1228.8
35°	1164.3	1169.5	1174.4	1186.3	1191.1
37.5°	1121.1	1127.7	1132.2	1144.8	1148.6
40°	1075.4	1082.0	1089.4	1102.6	1105.0
42.5°	1027.7	1035.3	1044.0	1055.9	1060.1
45°	979.5	988.3	996.3	1006.0	1010.9
47.5°	927.6	936.3	946.1	957.2	960.4
50°	873.9	884.0	894.5	905.0	910.5
52.5°	818.8	831.0	842.9	854.1	859.3
55°	764.5	773.5	787.8	799.3	804.6
57.5°	708.0	715.7	728.6	747.4	750.2
60°	650.5	657.4	670.7	686.0	692.3
62.5°	587.0	596.4	610.4	629.9	635.5
65°	525.3	534.4	552.9	574.8	583.9
67.5°	465.7	468.9	492.6	515.6	530.2
70°	395.3	407.2	434.7	462.9	474.1
72.5°	334.7	346.5	376.8	409.9	423.9
75°	266.0	282.4	323.5	362.2	375.8
77.5°	205.7	223.8	274.7	313.7	329.4
80°	143.6	171.9	227.3	271.2	288.3
82.5°	90.3	125.1	184.4	230.4	245.4
85°	46.0	85.1	146.1	193.1	210.2
87.5°	12.2	55.1	113.6	158.6	176.0
90°	0.3	31.7	86.1	129.3	145.0
92.5°	0.3	17.8	64.1	102.8	118.9
95°	0.3	8.4	44.6	80.9	93.4
97.5°	0.3	3.5	30.7	61.0	73.6
100°	0.3	1.7	19.5	44.3	55.1
102.5°	0.7	1.0	12.2	31.7	40.4
105°	0.7	1.0	7.3	21.6	28.9



TEST NUMBER: P580182

CATALOG NUMBER: HVSL12-4-LD4-1HI-35-UNV-O-EDD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.0	1.0	1.4	5.9	8.7
115°	1.0	1.0	1.4	3.8	5.6
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°	0.7	1.0	4.2	14.6	19.9
110°	1.0	1.0	2.4	9.1	13.2



(END OF REPORT)