

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: P580187

Luminaire Tested: **HVSL12-4-LD4-1LO-30-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580187
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-LD4-1LO-30-UNV-O-EDD-90
Description: 4 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 3000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

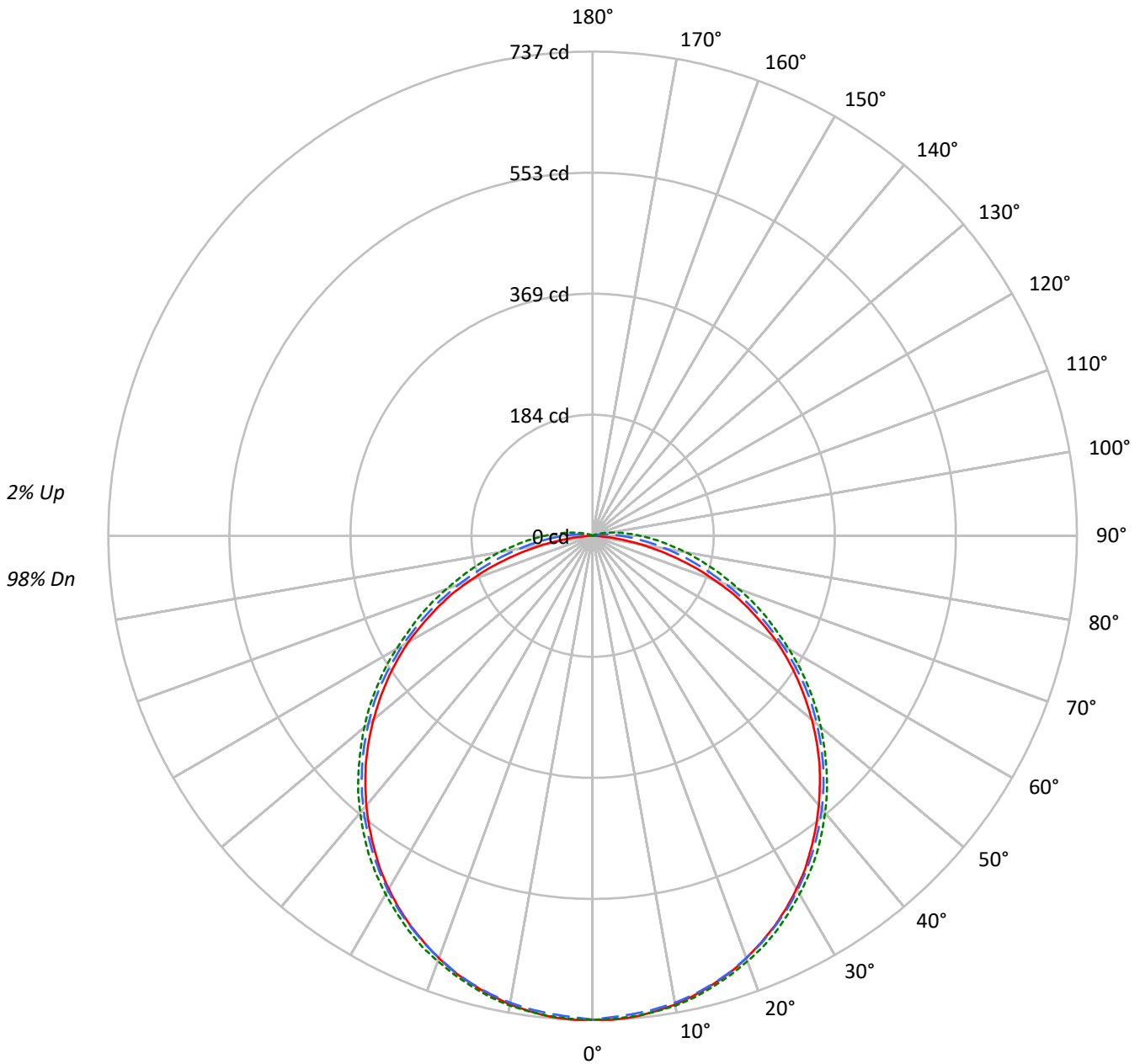
Lumens per Lamp: N/A
Luminaire Lumens: 2227.0 lumens
Efficiency: N/A
Efficacy: 91.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 24.4
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									
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°	1982	1982	1982
5°	1978	1948	1954
10°	1965	1922	1928
15°	1948	1893	1894
20°	1930	1859	1861
25°	1908	1823	1826
30°	1883	1785	1785
35°	1851	1742	1745
40°	1818	1696	1696
45°	1782	1646	1642
50°	1736	1586	1584
55°	1686	1521	1518
60°	1626	1433	1440
65°	1530	1333	1364
70°	1390	1213	1274
75°	1192	1081	1200
80°	896	956	1144
85°	479	837	1113



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.7	3.1
10°-20°	199.9	9.0
20°-30°	303.4	13.6
30°-40°	366.8	16.5
40°-50°	382.7	17.2
50°-60°	349.9	15.7
60°-70°	272.8	12.2
70°-80°	170.6	7.7
80°-90°	77.5	3.5
90°-100°	26.0	1.2
100°-110°	6.5	0.3
110°-120°	1.0	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°	573.0	25.7
0°-40°	939.8	42.2
0°-60°	1672.5	75.1
0°-90°	2193.5	98.5
90°-120°	33.5	1.5
90°-150°	33.5	1.5
90°-180°	34.0	1.5
0°-180°	2227.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	737	737	737	737	737	
5°	735	734	730	734	734	70
15°	707	708	706	710	710	200
25°	655	656	656	662	663	302
35°	580	582	585	591	593	363
45°	488	492	496	501	504	376
55°	381	385	392	398	401	340
65°	262	266	275	286	291	259
75°	132	141	161	180	187	141
85°	23	42	73	96	105	29
90°	0	16	43	64	72	1
95°	0	4	22	40	46	0
105°	0	0	4	11	14	0
115°	0	0	1	2	3	0
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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	736.6	736.6	736.6	736.6	736.6
2.5°	737.4	736.4	733.1	736.4	736.2
5°	735.0	733.6	730.3	733.8	733.8
7.5°	730.1	729.6	726.7	730.7	730.7
10°	724.4	724.2	721.8	726.1	726.3
12.5°	716.4	717.1	714.9	719.0	719.5
15°	707.0	708.3	706.3	710.3	710.2
17.5°	696.8	697.5	696.1	700.6	700.4
20°	684.1	685.0	683.9	688.6	689.2
22.5°	670.1	671.3	671.1	676.0	677.3
25°	655.1	655.6	656.3	661.9	662.9
27.5°	638.6	639.5	640.7	645.7	646.8
30°	620.6	622.0	623.3	628.6	629.9
32.5°	601.5	602.9	604.6	611.4	612.1
35°	579.9	582.5	585.0	590.9	593.3
37.5°	558.4	561.7	564.0	570.2	572.1
40°	535.7	539.0	542.6	549.2	550.4
42.5°	511.9	515.7	520.0	525.9	528.0
45°	487.9	492.3	496.2	501.1	503.5
47.5°	462.0	466.4	471.2	476.8	478.4
50°	435.3	440.3	445.5	450.8	453.5
52.5°	407.9	413.9	419.8	425.4	428.0
55°	380.8	385.3	392.4	398.1	400.7
57.5°	352.7	356.5	362.9	372.3	373.7
60°	324.0	327.5	334.1	341.7	344.8
62.5°	292.4	297.1	304.0	313.8	316.5
65°	261.7	266.2	275.4	286.3	290.8
67.5°	232.0	233.5	245.3	256.8	264.1
70°	196.9	202.8	216.5	230.6	236.1
72.5°	166.7	172.6	187.7	204.2	211.1
75°	132.5	140.6	161.1	180.4	187.2
77.5°	102.4	111.5	136.8	156.3	164.1
80°	71.5	85.6	113.2	135.1	143.6
82.5°	45.0	62.3	91.9	114.8	122.2
85°	22.9	42.4	72.8	96.2	104.7
87.5°	6.1	27.4	56.6	79.0	87.7
90°	0.2	15.8	42.9	64.4	72.2
92.5°	0.2	8.9	31.9	51.2	59.2
95°	0.2	4.2	22.2	40.3	46.5
97.5°	0.2	1.7	15.3	30.4	36.6
100°	0.2	0.9	9.7	22.1	27.4
102.5°	0.3	0.5	6.1	15.8	20.1
105°	0.3	0.5	3.6	10.8	14.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.5	0.5	0.7	3.0	4.3
115°	0.5	0.5	0.7	1.9	2.8
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°	0.3	0.5	2.1	7.3	9.9
110°	0.5	0.5	1.2	4.5	6.6



(END OF REPORT)