

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: P580189

Luminaire Tested: **HVSL12-4-LD4-1LO-35-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580189
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-35-UNV-O-EDD-90
Description: 4 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 3500K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

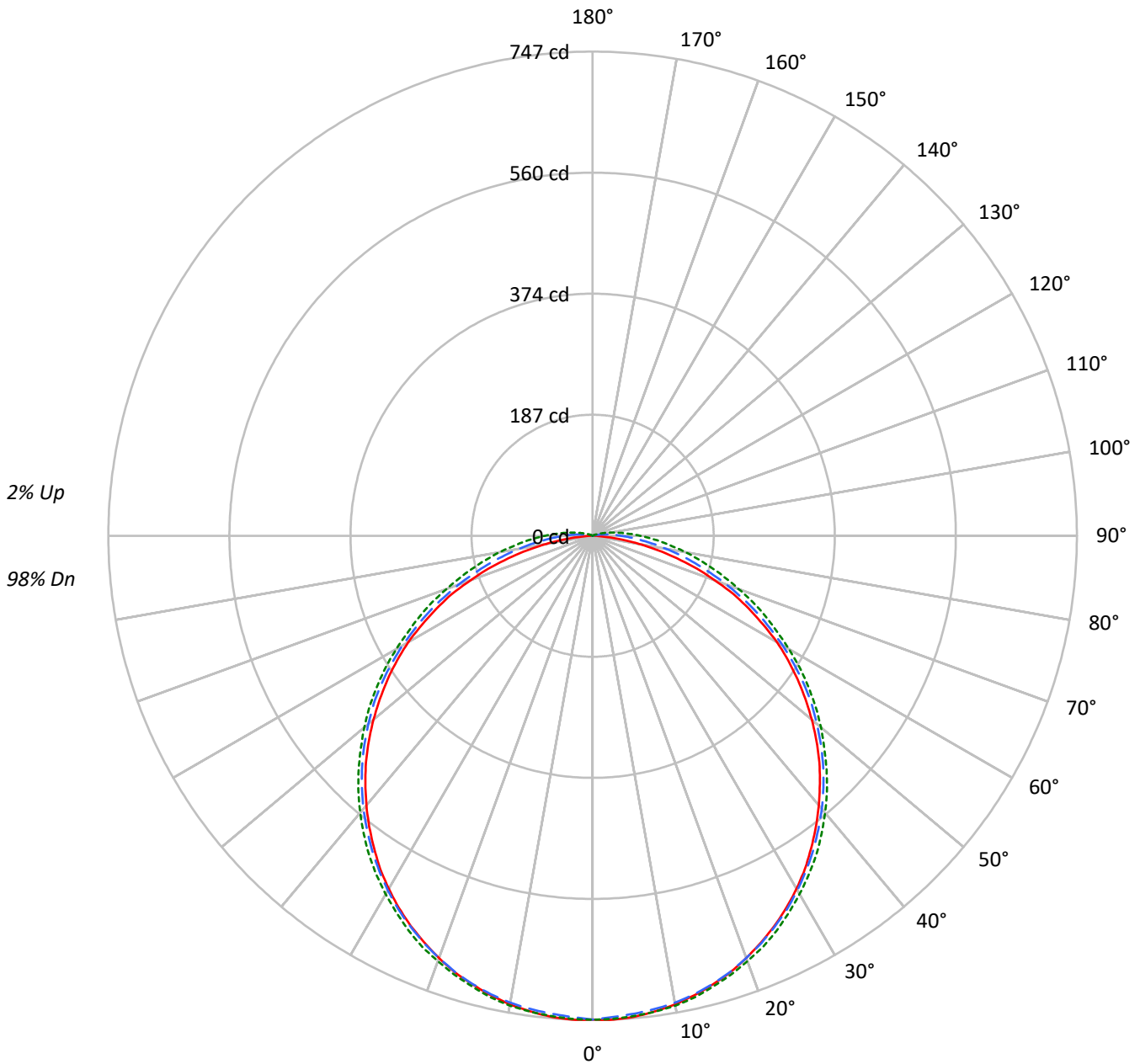
Lumens per Lamp: N/A
Luminaire Lumens: 2257.0 lumens
Efficiency: N/A
Efficacy: 92.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.17')
CIE Type: Direct

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°	2009	2009	2009
5°	2005	1974	1980
10°	1992	1948	1954
15°	1974	1919	1919
20°	1956	1884	1886
25°	1934	1848	1851
30°	1908	1809	1810
35°	1876	1766	1769
40°	1843	1719	1719
45°	1807	1668	1665
50°	1760	1608	1605
55°	1709	1541	1539
60°	1648	1452	1460
65°	1550	1350	1383
70°	1409	1229	1291
75°	1208	1095	1216
80°	909	968	1159
85°	485	848	1128



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.6	3.1
10°-20°	202.6	9.0
20°-30°	307.4	13.6
30°-40°	371.8	16.5
40°-50°	387.9	17.2
50°-60°	354.7	15.7
60°-70°	276.5	12.3
70°-80°	172.9	7.7
80°-90°	78.6	3.5
90°-100°	26.3	1.2
100°-110°	6.6	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°	580.7	25.7
0°-40°	952.5	42.2
0°-60°	1695.0	75.1
0°-90°	2223.0	98.5
90°-120°	34.0	1.5
90°-150°	34.0	1.5
90°-180°	34.0	1.5
0°-180°	2257.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	746	746	746	746	746	
5°	745	744	740	744	744	71
15°	717	718	716	720	720	202
25°	664	664	665	671	672	306
35°	588	590	593	599	601	368
45°	494	499	503	508	510	381
55°	386	390	398	404	406	345
65°	265	270	279	290	295	262
75°	134	142	163	183	190	143
85°	23	43	74	98	106	29
90°	0	16	44	65	73	1
95°	0	4	22	41	47	0
105°	0	0	4	11	15	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°	746.5	746.5	746.5	746.5	746.5
2.5°	747.4	746.3	743.0	746.3	746.1
5°	744.9	743.5	740.1	743.7	743.7
7.5°	740.0	739.4	736.4	740.5	740.5
10°	734.2	734.0	731.5	735.9	736.1
12.5°	726.1	726.8	724.5	728.7	729.2
15°	716.6	717.8	715.9	719.9	719.7
17.5°	706.2	706.9	705.5	710.1	709.9
20°	693.3	694.2	693.2	697.9	698.4
22.5°	679.1	680.3	680.1	685.1	686.5
25°	663.9	664.5	665.2	670.8	671.9
27.5°	647.2	648.1	649.3	654.4	655.5
30°	628.9	630.3	631.7	637.0	638.4
32.5°	609.6	611.0	612.7	619.6	620.3
35°	587.8	590.4	592.9	598.8	601.3
37.5°	565.9	569.3	571.6	577.9	579.8
40°	542.9	546.2	549.9	556.6	557.8
42.5°	518.8	522.6	527.0	533.0	535.1
45°	494.5	498.9	502.9	507.9	510.3
47.5°	468.3	472.7	477.6	483.2	484.8
50°	441.2	446.3	451.5	456.8	459.6
52.5°	413.4	419.5	425.5	431.1	433.8
55°	385.9	390.5	397.7	403.5	406.1
57.5°	357.4	361.3	367.8	377.3	378.7
60°	328.4	331.9	338.6	346.3	349.5
62.5°	296.3	301.1	308.1	318.0	320.8
65°	265.2	269.8	279.1	290.2	294.8
67.5°	235.1	236.7	248.7	260.3	267.7
70°	199.6	205.5	219.4	233.7	239.3
72.5°	168.9	174.9	190.2	206.9	214.0
75°	134.3	142.5	163.3	182.8	189.7
77.5°	103.8	113.0	138.7	158.4	166.3
80°	72.5	86.8	114.7	136.9	145.5
82.5°	45.6	63.2	93.1	116.3	123.9
85°	23.2	42.9	73.7	97.5	106.1
87.5°	6.2	27.8	57.4	80.1	88.9
90°	0.2	16.0	43.5	65.3	73.2
92.5°	0.2	9.0	32.4	51.9	60.0
95°	0.2	4.2	22.5	40.8	47.2
97.5°	0.2	1.8	15.5	30.8	37.1
100°	0.2	0.9	9.9	22.3	27.8
102.5°	0.4	0.5	6.2	16.0	20.4
105°	0.4	0.5	3.7	10.9	14.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.5	0.5	0.7	3.0	4.4
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°	0.4	0.5	2.1	7.4	10.0
110°	0.5	0.5	1.2	4.6	6.7



(END OF REPORT)