

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: P580231

Luminaire Tested: **HVSL12-4-LD4-3HI-40-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580231
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-LD4-3HI-40-UNV-O-EDD-90
Description: 4 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

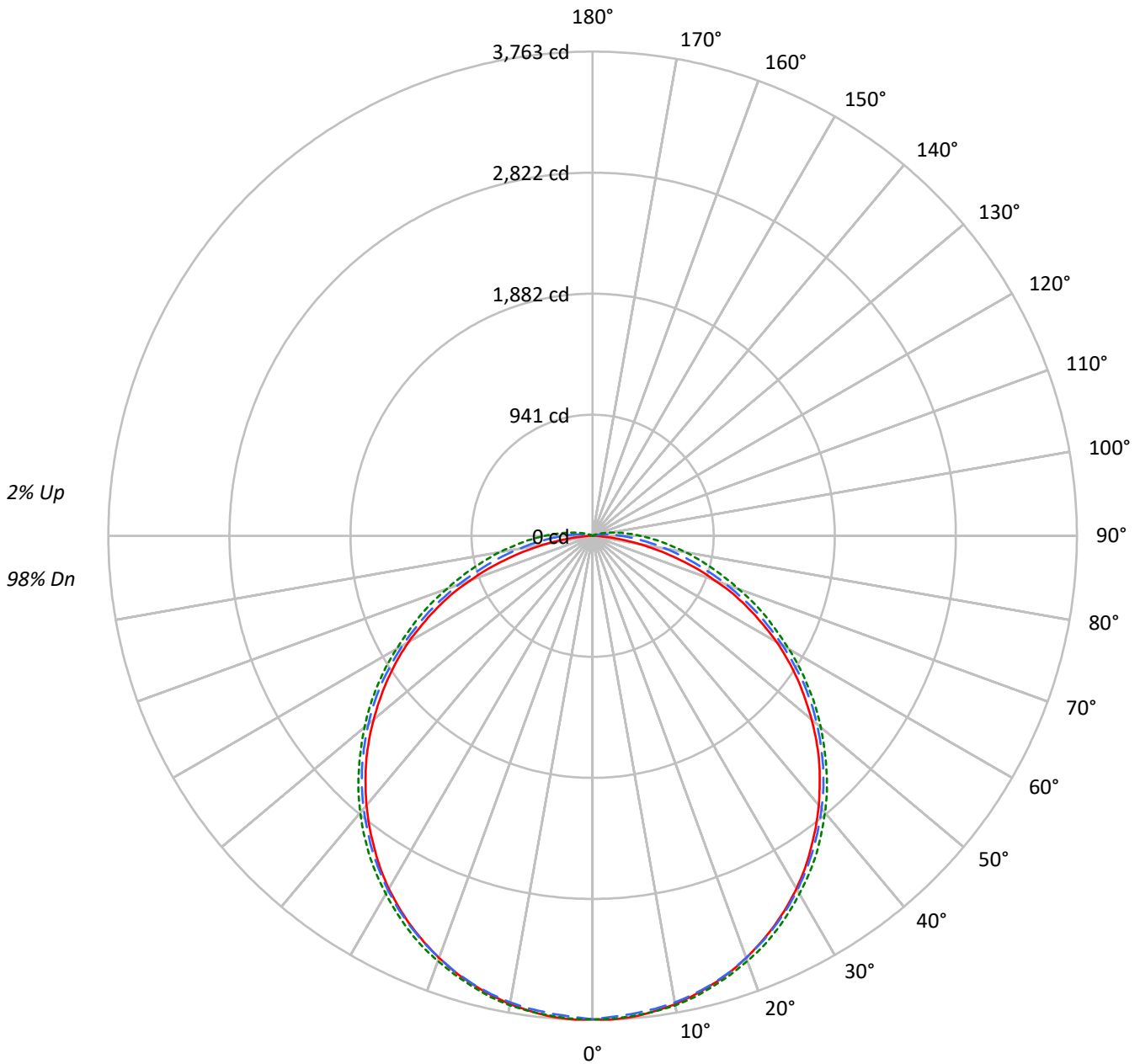
Lumens per Lamp: N/A
Luminaire Lumens: 11364.0 lumens
Efficiency: N/A
Efficacy: 85.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 133.3
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				20				20
RC	80				70				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°	10114	10114	10114
5°	10095	9938	9969
10°	10027	9809	9838
15°	9940	9660	9664
20°	9847	9486	9494
25°	9737	9305	9320
30°	9609	9109	9111
35°	9446	8889	8906
40°	9278	8656	8656
45°	9096	8399	8381
50°	8859	8096	8083
55°	8604	7761	7749
60°	8299	7309	7348
65°	7804	6799	6961
70°	7093	6188	6503
75°	6082	5516	6122
80°	4575	4877	5837
85°	2447	4270	5678



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	355.7	3.1
10°-20°	1020.2	9.0
20°-30°	1548.0	13.6
30°-40°	1871.8	16.5
40°-50°	1953.1	17.2
50°-60°	1785.7	15.7
60°-70°	1392.1	12.2
70°-80°	870.8	7.7
80°-90°	395.5	3.5
90°-100°	132.6	1.2
100°-110°	33.3	0.3
110°-120°	5.2	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°	2923.9	25.7
0°-40°	4795.7	42.2
0°-60°	8534.5	75.1
0°-90°	11192.9	98.5
90°-120°	171.1	1.5
90°-150°	171.1	1.5
90°-180°	171.0	1.5
0°-180°	11364.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3758	3758	3758	3758	3758	
5°	3751	3744	3727	3744	3744	356
15°	3608	3614	3604	3625	3624	1018
25°	3343	3346	3349	3378	3383	1540
35°	2959	2973	2985	3015	3028	1852
45°	2490	2512	2532	2557	2570	1918
55°	1943	1966	2002	2032	2045	1736
65°	1335	1358	1405	1461	1484	1321
75°	676	718	822	921	955	721
85°	117	216	371	491	534	148
90°	1	81	219	329	369	5
95°	1	21	113	206	238	1
105°	2	3	19	55	74	2
115°	3	3	4	10	14	2
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°	3758.5	3758.5	3758.5	3758.5	3758.5
2.5°	3763.0	3757.6	3740.8	3757.6	3756.8
5°	3750.6	3743.5	3726.6	3744.3	3744.3
7.5°	3725.7	3723.1	3708.0	3728.4	3728.4
10°	3696.5	3695.6	3683.2	3705.4	3706.2
12.5°	3655.7	3659.3	3647.8	3669.0	3671.7
15°	3607.9	3614.1	3604.4	3624.7	3623.8
17.5°	3555.6	3559.2	3552.1	3575.1	3574.2
20°	3490.9	3495.4	3490.1	3514.0	3516.6
22.5°	3419.2	3425.4	3424.5	3449.3	3456.4
25°	3343.0	3345.6	3349.2	3377.5	3382.8
27.5°	3258.8	3263.2	3269.4	3295.1	3300.4
30°	3166.7	3173.7	3180.8	3207.4	3214.5
32.5°	3069.2	3076.3	3085.1	3119.7	3123.2
35°	2959.3	2972.6	2985.0	3015.1	3027.6
37.5°	2849.5	2866.3	2877.8	2909.7	2919.5
40°	2733.4	2750.2	2768.8	2802.5	2808.7
42.5°	2612.0	2631.5	2653.6	2683.8	2694.4
45°	2489.7	2511.9	2532.3	2557.1	2569.5
47.5°	2357.7	2379.9	2404.7	2433.0	2441.0
50°	2221.3	2247.0	2273.5	2300.1	2314.3
52.5°	2081.3	2112.3	2142.4	2170.8	2184.1
55°	1943.1	1966.1	2002.4	2031.7	2044.9
57.5°	1799.5	1819.0	1851.8	1899.6	1906.7
60°	1653.3	1671.0	1704.7	1743.7	1759.6
62.5°	1492.1	1516.0	1551.4	1601.1	1615.2
65°	1335.2	1358.3	1405.2	1461.1	1484.1
67.5°	1183.7	1191.7	1252.0	1310.4	1347.6
70°	1004.8	1034.9	1104.9	1176.6	1205.0
72.5°	850.6	880.7	957.8	1042.0	1077.4
75°	676.0	717.7	822.2	920.6	955.1
77.5°	522.8	568.8	698.2	797.4	837.3
80°	365.0	436.8	577.7	689.3	732.7
82.5°	229.5	318.1	468.7	585.7	623.8
85°	117.0	216.2	371.2	490.9	534.3
87.5°	31.0	140.0	288.8	403.1	447.4
90°	0.9	80.6	218.8	328.7	368.6
92.5°	0.9	45.2	163.0	261.4	302.1
95°	0.9	21.3	113.4	205.6	237.5
97.5°	0.9	8.9	78.0	155.1	187.0
100°	0.9	4.4	49.6	112.5	140.0
102.5°	1.8	2.7	31.0	80.6	102.8
105°	1.8	2.7	18.6	54.9	73.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.7	2.7	3.5	15.1	22.2
115°	2.7	2.7	3.5	9.7	14.2
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°	1.8	2.7	10.6	37.2	50.5
110°	2.7	2.7	6.2	23.0	33.7



(END OF REPORT)