

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: P580227

Luminaire Tested: **HVSL12-4-LD4-3HI-30-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580227
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-30-UNV-O-EDD-90
Description: 4 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 3000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

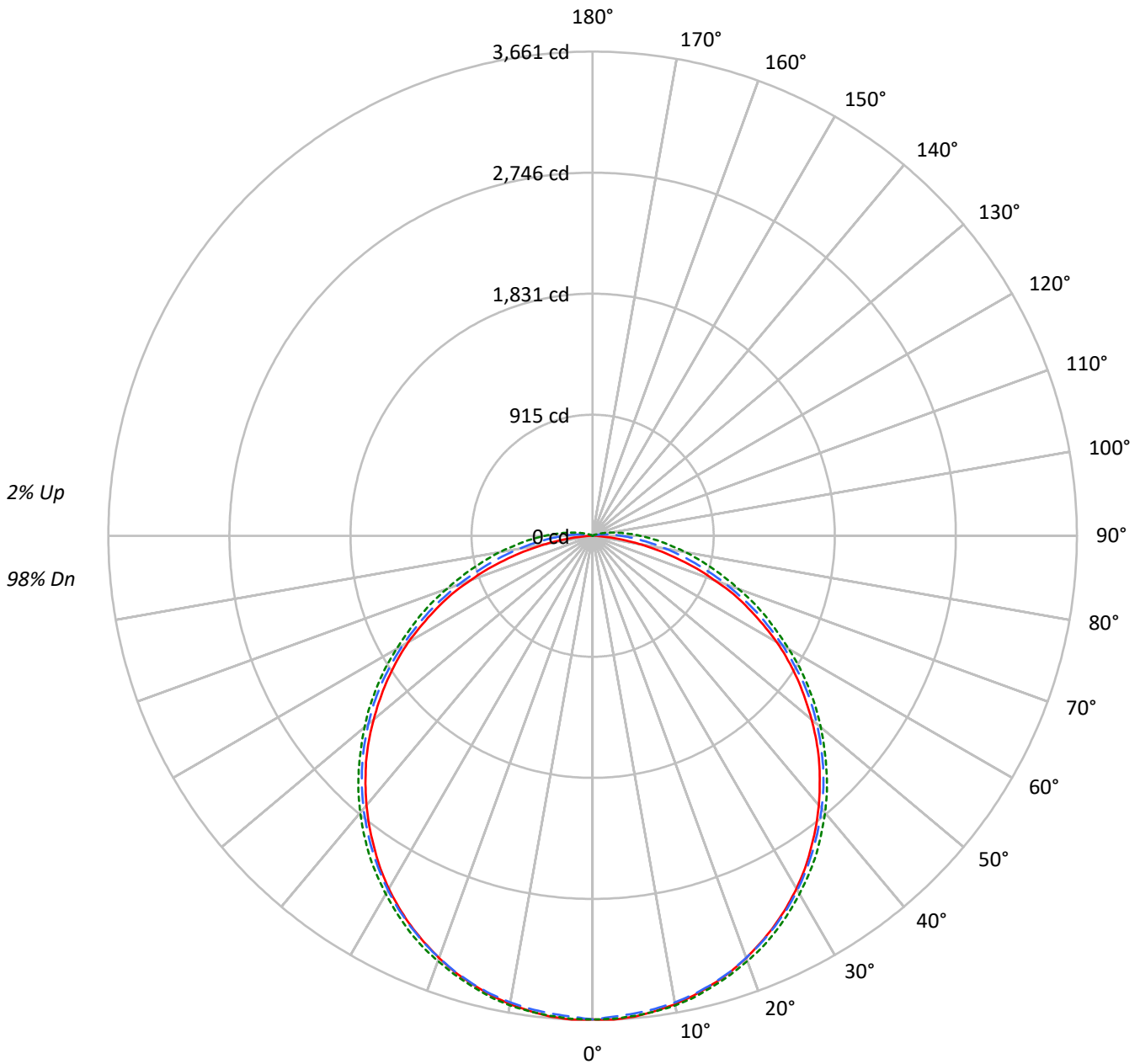
Lumens per Lamp: N/A
Luminaire Lumens: 11057.0 lumens
Efficiency: N/A
Efficacy: 82.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.17')
CIE Type: Direct

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									
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°	9841	9841	9841
5°	9822	9670	9700
10°	9756	9544	9572
15°	9672	9399	9403
20°	9581	9230	9238
25°	9474	9054	9068
30°	9349	8863	8865
35°	9191	8649	8666
40°	9027	8422	8422
45°	8850	8173	8155
50°	8620	7878	7865
55°	8372	7552	7540
60°	8075	7112	7150
65°	7594	6616	6773
70°	6901	6021	6327
75°	5919	5367	5956
80°	4452	4745	5679
85°	2380	4155	5524



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	346.1	3.1
10°-20°	992.7	9.0
20°-30°	1506.2	13.6
30°-40°	1821.3	16.5
40°-50°	1900.3	17.2
50°-60°	1737.5	15.7
60°-70°	1354.4	12.2
70°-80°	847.3	7.7
80°-90°	384.8	3.5
90°-100°	129.0	1.2
100°-110°	32.4	0.3
110°-120°	5.1	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°	2844.9	25.7
0°-40°	4666.2	42.2
0°-60°	8304.0	75.1
0°-90°	10890.5	98.5
90°-120°	166.5	1.5
90°-150°	166.5	1.5
90°-180°	166.0	1.5
0°-180°	11057.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3657	3657	3657	3657	3657	
5°	3649	3642	3626	3643	3643	347
15°	3510	3516	3507	3527	3526	991
25°	3253	3255	3259	3286	3292	1499
35°	2879	2892	2904	2934	2946	1802
45°	2422	2444	2464	2488	2500	1867
55°	1891	1913	1948	1977	1990	1689
65°	1299	1322	1367	1422	1444	1285
75°	658	698	800	896	929	701
85°	114	210	361	478	520	144
90°	1	78	213	320	359	5
95°	1	21	110	200	231	1
105°	2	3	18	53	72	2
115°	3	3	3	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°	3657.0	3657.0	3657.0	3657.0	3657.0
2.5°	3661.3	3656.1	3639.7	3656.1	3655.3
5°	3649.2	3642.3	3626.0	3643.2	3643.2
7.5°	3625.1	3622.5	3607.8	3627.7	3627.7
10°	3596.6	3595.8	3583.7	3605.3	3606.1
12.5°	3557.0	3560.4	3549.2	3569.9	3572.5
15°	3510.4	3516.5	3507.0	3526.8	3525.9
17.5°	3459.6	3463.0	3456.1	3478.5	3477.7
20°	3396.6	3400.9	3395.8	3419.1	3421.6
22.5°	3326.8	3332.8	3332.0	3356.1	3363.0
25°	3252.7	3255.3	3258.7	3286.3	3291.5
27.5°	3170.8	3175.1	3181.1	3206.1	3211.3
30°	3081.1	3088.0	3094.9	3120.8	3127.7
32.5°	2986.3	2993.2	3001.8	3035.4	3038.9
35°	2879.4	2892.3	2904.4	2933.7	2945.8
37.5°	2772.5	2788.9	2800.1	2831.1	2840.6
40°	2659.5	2675.9	2694.0	2726.8	2732.8
42.5°	2541.4	2560.4	2582.0	2611.3	2621.6
45°	2422.5	2444.0	2463.9	2488.0	2500.1
47.5°	2294.0	2315.6	2339.7	2367.3	2375.1
50°	2161.3	2186.3	2212.1	2238.0	2251.8
52.5°	2025.1	2055.2	2084.5	2112.1	2125.1
55°	1890.6	1913.0	1948.3	1976.8	1989.7
57.5°	1750.9	1769.9	1801.8	1848.3	1855.2
60°	1608.7	1625.9	1658.7	1696.6	1712.1
62.5°	1451.8	1475.0	1509.5	1557.8	1571.6
65°	1299.2	1321.6	1367.3	1421.6	1444.0
67.5°	1151.8	1159.5	1218.1	1275.0	1311.2
70°	977.6	1006.9	1075.0	1144.9	1172.4
72.5°	827.6	856.9	931.9	1013.8	1048.3
75°	657.8	698.3	800.0	895.7	929.3
77.5°	508.6	553.5	679.3	775.9	814.7
80°	355.2	425.0	562.1	670.7	712.9
82.5°	223.3	309.5	456.0	569.8	606.9
85°	113.8	210.4	361.2	477.6	519.8
87.5°	30.2	136.2	281.0	392.3	435.4
90°	0.9	78.5	212.9	319.8	358.6
92.5°	0.9	44.0	158.6	254.3	294.0
95°	0.9	20.7	110.3	200.0	231.0
97.5°	0.9	8.6	75.9	150.9	181.9
100°	0.9	4.3	48.3	109.5	136.2
102.5°	1.7	2.6	30.2	78.5	100.0
105°	1.7	2.6	18.1	53.4	71.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.6	2.6	3.4	14.7	21.6
115°	2.6	2.6	3.4	9.5	13.8
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°	1.7	2.6	10.3	36.2	49.1
110°	2.6	2.6	6.0	22.4	32.8



(END OF REPORT)