

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: P580229

Luminaire Tested: **HVSL12-4-LD4-3HI-35-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580229
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-35-UNV-O-EDD-90
Description: 4 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 3500K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

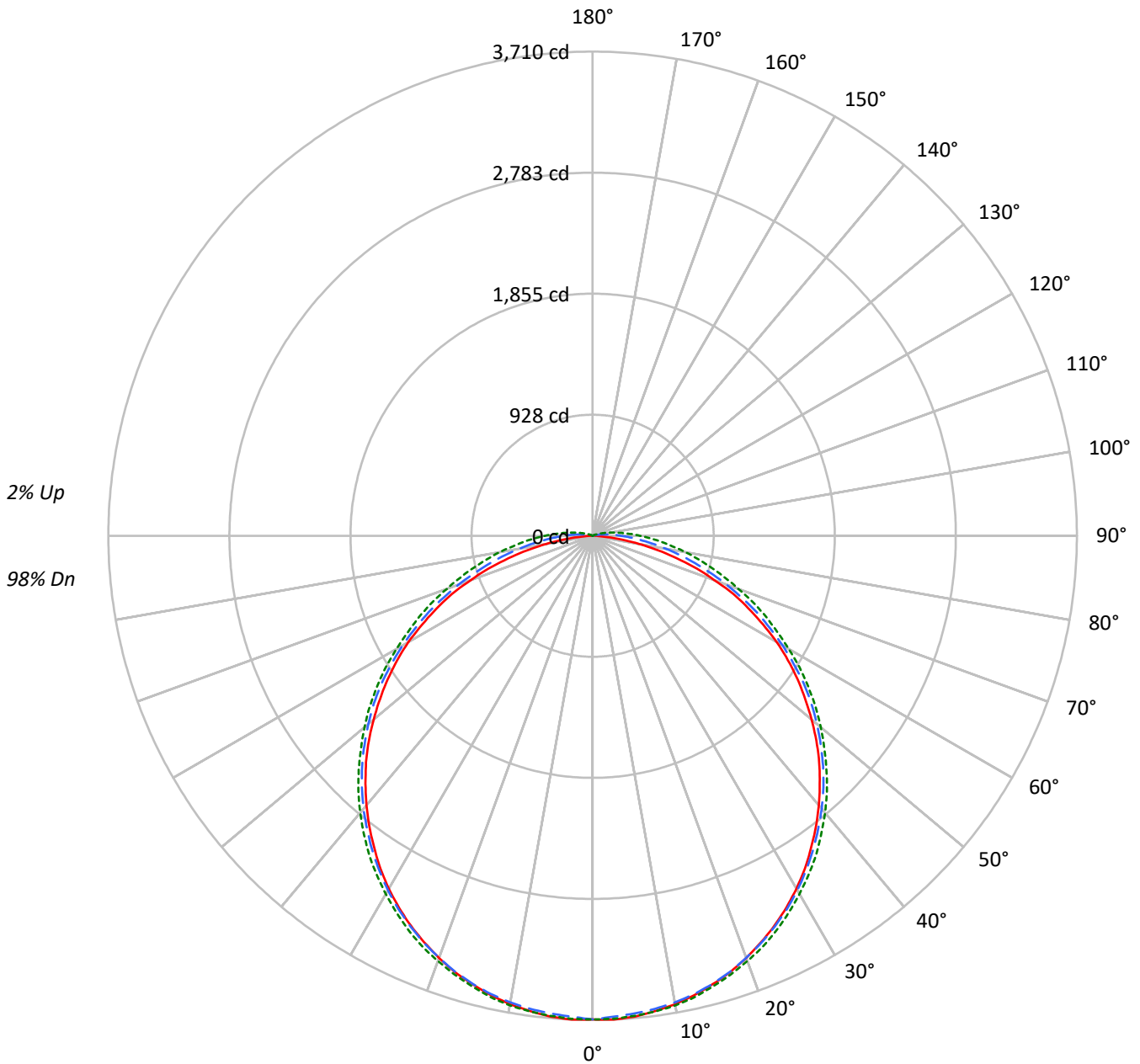
Lumens per Lamp: N/A
Luminaire Lumens: 11205.0 lumens
Efficiency: N/A
Efficacy: 84.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.17')
CIE Type: Direct

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°	9972	9972	9972
5°	9953	9799	9830
10°	9887	9672	9700
15°	9801	9525	9529
20°	9710	9353	9362
25°	9600	9175	9189
30°	9474	8981	8984
35°	9314	8765	8782
40°	9148	8535	8535
45°	8969	8282	8264
50°	8735	7983	7970
55°	8484	7653	7641
60°	8183	7207	7246
65°	7696	6704	6864
70°	6994	6101	6411
75°	5998	5438	6037
80°	4511	4809	5755
85°	2411	4211	5598



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	350.7	3.1
10°-20°	1006.0	9.0
20°-30°	1526.4	13.6
30°-40°	1845.6	16.5
40°-50°	1925.8	17.2
50°-60°	1760.7	15.7
60°-70°	1372.6	12.2
70°-80°	858.6	7.7
80°-90°	390.0	3.5
90°-100°	130.7	1.2
100°-110°	32.8	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°	2883.0	25.7
0°-40°	4728.6	42.2
0°-60°	8415.1	75.1
0°-90°	11036.3	98.5
90°-120°	168.7	1.5
90°-150°	168.7	1.5
90°-180°	169.0	1.5
0°-180°	11205.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3706	3706	3706	3706	3706	
5°	3698	3691	3674	3692	3692	351
15°	3557	3564	3554	3574	3573	1004
25°	3296	3299	3302	3330	3336	1519
35°	2918	2931	2943	2973	2985	1826
45°	2455	2477	2497	2521	2534	1892
55°	1916	1939	1974	2003	2016	1712
65°	1317	1339	1386	1441	1463	1303
75°	667	708	811	908	942	711
85°	115	213	366	484	527	146
90°	1	80	216	324	363	5
95°	1	21	112	203	234	1
105°	2	3	18	54	72	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°	3705.9	3705.9	3705.9	3705.9	3705.9
2.5°	3710.3	3705.1	3688.5	3705.1	3704.2
5°	3698.1	3691.1	3674.5	3692.0	3692.0
7.5°	3673.6	3671.0	3656.1	3676.2	3676.2
10°	3644.8	3643.9	3631.7	3653.5	3654.4
12.5°	3604.6	3608.1	3596.7	3617.7	3620.3
15°	3557.4	3563.5	3553.9	3574.0	3573.1
17.5°	3505.9	3509.4	3502.4	3525.1	3524.2
20°	3442.1	3446.5	3441.2	3464.8	3467.4
22.5°	3371.3	3377.5	3376.6	3401.0	3408.0
25°	3296.2	3298.8	3302.3	3330.3	3335.5
27.5°	3213.2	3217.6	3223.7	3249.0	3254.3
30°	3122.4	3129.3	3136.3	3162.5	3169.5
32.5°	3026.3	3033.2	3042.0	3076.1	3079.5
35°	2917.9	2931.0	2943.3	2973.0	2985.2
37.5°	2809.6	2826.2	2837.5	2869.0	2878.6
40°	2695.1	2711.7	2730.1	2763.3	2769.4
42.5°	2575.5	2594.7	2616.5	2646.2	2656.7
45°	2454.9	2476.7	2496.8	2521.3	2533.5
47.5°	2324.7	2346.6	2371.0	2399.0	2406.8
50°	2190.2	2215.5	2241.7	2267.9	2281.9
52.5°	2052.2	2082.7	2112.4	2140.4	2153.5
55°	1915.9	1938.6	1974.4	2003.2	2016.3
57.5°	1774.3	1793.6	1825.9	1873.1	1880.1
60°	1630.2	1647.7	1680.9	1719.3	1735.0
62.5°	1471.2	1494.8	1529.7	1578.6	1592.6
65°	1316.6	1339.3	1385.6	1440.6	1463.3
67.5°	1167.2	1175.0	1234.4	1292.1	1328.8
70°	990.7	1020.4	1089.4	1160.2	1188.1
72.5°	838.7	868.4	944.4	1027.4	1062.3
75°	666.6	707.6	810.7	907.7	941.8
77.5°	515.4	560.9	688.4	786.3	825.6
80°	359.9	430.7	569.6	679.7	722.5
82.5°	226.3	313.6	462.2	577.5	615.0
85°	115.3	213.2	366.1	484.0	526.8
87.5°	30.6	138.0	284.8	397.5	441.2
90°	0.9	79.5	215.8	324.1	363.4
92.5°	0.9	44.6	160.7	257.7	297.9
95°	0.9	21.0	111.8	202.7	234.1
97.5°	0.9	8.7	76.9	152.9	184.3
100°	0.9	4.4	48.9	111.0	138.0
102.5°	1.7	2.6	30.6	79.5	101.3
105°	1.7	2.6	18.3	54.2	72.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.6	2.6	3.5	14.9	21.8
115°	2.6	2.6	3.5	9.6	14.0
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	10.5	36.7	49.8
110°	2.6	2.6	6.1	22.7	33.2



(END OF REPORT)