

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: P580594

Luminaire Tested: **HVSL4-4-LD4-2HI-50-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580594
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: HVSL4-4-LD4-2HI-50-UNV-O-EDD
Description: 4 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 5000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

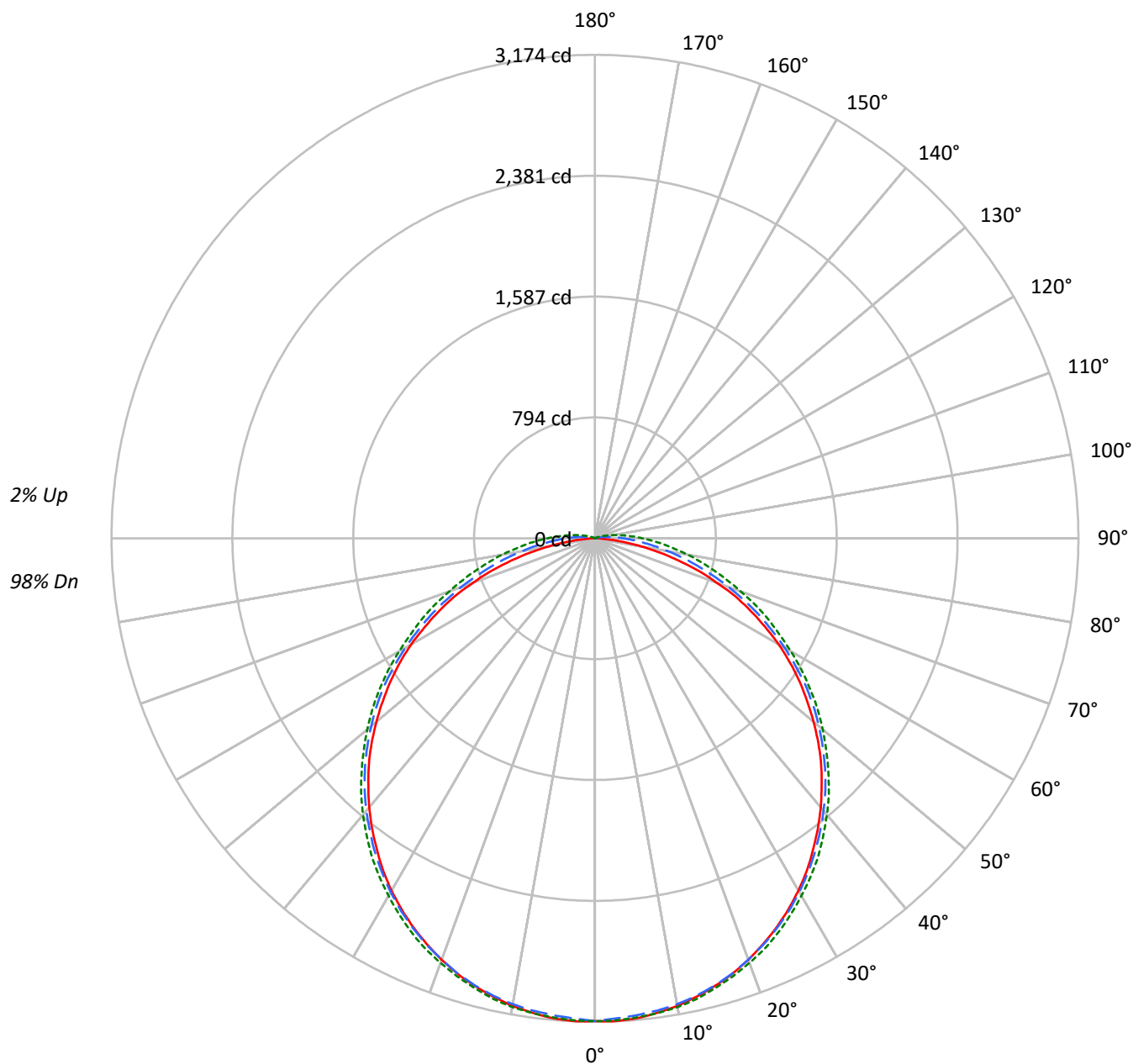
Lumens per Lamp: N/A
Luminaire Lumens: 9585.0 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 86.2
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
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	25592	25592	25592
5°	25542	24646	24520
10°	25372	23855	23549
15°	25153	23043	22527
20°	24917	22195	21558
25°	24637	21349	20610
30°	24313	20480	19612
35°	23902	19564	18639
40°	23476	18625	17586
45°	23016	17630	16494
50°	22416	16535	15361
55°	21771	15365	14162
60°	21000	13955	12841
65°	19748	12430	11538
70°	17949	10717	10106
75°	15391	8903	8766
80°	11578	7141	7489
85°	6186	5392	6214



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	300.0	3.1
10°-20°	860.5	9.0
20°-30°	1305.7	13.6
30°-40°	1578.8	16.5
40°-50°	1647.3	17.2
50°-60°	1506.2	15.7
60°-70°	1174.1	12.2
70°-80°	734.5	7.7
80°-90°	333.6	3.5
90°-100°	111.8	1.2
100°-110°	28.1	0.3
110°-120°	4.4	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°	2466.2	25.7
0°-40°	4045.0	42.2
0°-60°	7198.5	75.1
0°-90°	9440.7	98.5
90°-120°	144.3	1.5
90°-150°	144.3	1.5
90°-180°	144.0	1.5
0°-180°	9585.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3170	3170	3170	3170	3170	
5°	3163	3157	3143	3158	3158	300
15°	3043	3048	3040	3057	3056	859
25°	2820	2822	2825	2849	2853	1299
35°	2496	2507	2518	2543	2554	1562
45°	2100	2119	2136	2157	2167	1618
55°	1639	1658	1689	1714	1725	1464
65°	1126	1146	1185	1232	1252	1114
75°	570	605	694	776	806	608
85°	99	182	313	414	451	125
90°	1	68	185	277	311	4
95°	1	18	96	173	200	1
105°	2	2	16	46	62	2
115°	2	2	3	8	12	1
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3170.1	3170.1	3170.1	3170.1	3170.1
2.5°	3173.9	3169.4	3155.2	3169.4	3168.6
5°	3163.4	3157.4	3143.2	3158.2	3158.2
7.5°	3142.5	3140.2	3127.5	3144.7	3144.7
10°	3117.8	3117.1	3106.6	3125.3	3126.0
12.5°	3083.4	3086.4	3076.7	3094.7	3096.9
15°	3043.1	3048.3	3040.1	3057.3	3056.5
17.5°	2999.0	3002.0	2996.0	3015.4	3014.7
20°	2944.4	2948.2	2943.7	2963.9	2966.1
22.5°	2883.9	2889.1	2888.4	2909.3	2915.3
25°	2819.6	2821.9	2824.9	2848.8	2853.3
27.5°	2748.6	2752.4	2757.6	2779.3	2783.8
30°	2670.9	2676.9	2682.9	2705.3	2711.3
32.5°	2588.7	2594.7	2602.2	2631.3	2634.3
35°	2496.1	2507.3	2517.7	2543.1	2553.6
37.5°	2403.4	2417.6	2427.3	2454.2	2462.4
40°	2305.5	2319.7	2335.4	2363.8	2369.0
42.5°	2203.1	2219.5	2238.2	2263.6	2272.6
45°	2100.0	2118.7	2135.8	2156.8	2167.2
47.5°	1988.6	2007.3	2028.2	2052.1	2058.9
50°	1873.5	1895.2	1917.6	1940.0	1952.0
52.5°	1755.5	1781.6	1807.0	1830.9	1842.1
55°	1638.9	1658.3	1688.9	1713.6	1724.8
57.5°	1517.8	1534.3	1561.9	1602.3	1608.2
60°	1394.5	1409.4	1437.8	1470.7	1484.2
62.5°	1258.5	1278.7	1308.6	1350.4	1362.4
65°	1126.2	1145.6	1185.3	1232.3	1251.8
67.5°	998.4	1005.1	1056.0	1105.3	1136.7
70°	847.5	872.9	931.9	992.4	1016.4
72.5°	717.4	742.8	807.9	878.9	908.7
75°	570.2	605.3	693.5	776.5	805.6
77.5°	440.9	479.8	588.9	672.6	706.2
80°	307.9	368.4	487.3	581.4	618.0
82.5°	193.6	268.3	395.3	494.0	526.1
85°	98.6	182.3	313.1	414.0	450.6
87.5°	26.2	118.1	243.6	340.0	377.4
90°	0.7	68.0	184.6	277.3	310.9
92.5°	0.7	38.1	137.5	220.5	254.8
95°	0.7	17.9	95.7	173.4	200.3
97.5°	0.7	7.5	65.8	130.8	157.7
100°	0.7	3.7	41.9	94.9	118.1
102.5°	1.5	2.2	26.2	68.0	86.7
105°	1.5	2.2	15.7	46.3	62.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.2	2.2	3.0	12.7	18.7
115°	2.2	2.2	3.0	8.2	12.0
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°	1.5	2.2	9.0	31.4	42.6
110°	2.2	2.2	5.2	19.4	28.4



(END OF REPORT)