

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: P580521

Luminaire Tested: **HVSL4-3-LD4-1HI-50-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580521
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: HVSL4-3-LD4-1HI-50-UNV-O-EDD-90
Description: 3 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 5000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

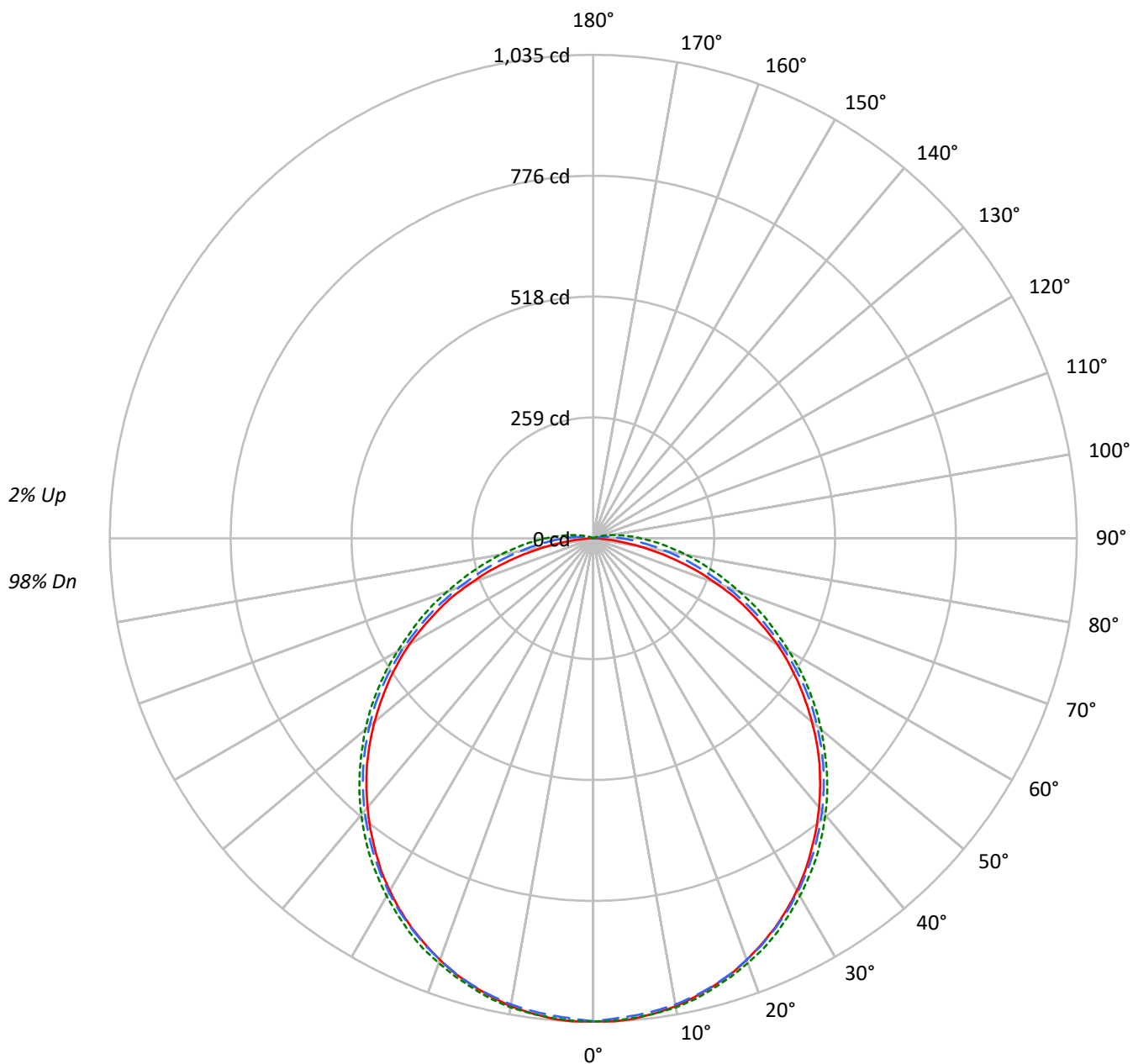
Lumens per Lamp: N/A
Luminaire Lumens: 3127.0 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 3' x H: 0.17')
CIE Type: Direct

Input Watts (W): 32.3
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
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°	11132	11132	11132
5°	11097	10711	10666
10°	11010	10360	10243
15°	10901	9999	9799
20°	10785	9624	9378
25°	10649	9251	8964
30°	10494	8868	8531
35°	10299	8465	8108
40°	10097	8051	7650
45°	9880	7615	7174
50°	9599	7135	6682
55°	9297	6624	6160
60°	8933	6009	5586
65°	8361	5345	5019
70°	7549	4601	4396
75°	6407	3816	3813
80°	4732	3053	3258
85°	2432	2299	2703



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.9	3.1
10°-20°	280.7	9.0
20°-30°	426.0	13.6
30°-40°	515.1	16.5
40°-50°	537.4	17.2
50°-60°	491.4	15.7
60°-70°	383.1	12.3
70°-80°	239.6	7.7
80°-90°	108.8	3.5
90°-100°	36.5	1.2
100°-110°	9.1	0.3
110°-120°	1.4	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°	804.6	25.7
0°-40°	1319.6	42.2
0°-60°	2348.4	75.1
0°-90°	3079.9	98.5
90°-120°	47.1	1.5
90°-150°	47.1	1.5
90°-180°	47.0	1.5
0°-180°	3127.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1034	1034	1034	1034	1034	
5°	1032	1030	1025	1030	1030	98
15°	993	994	992	997	997	280
25°	920	921	922	929	931	424
35°	814	818	821	830	833	510
45°	685	691	697	704	707	528
55°	535	541	551	559	563	478
65°	367	374	387	402	408	364
75°	186	198	226	253	263	198
85°	32	60	102	135	147	41
90°	0	22	60	90	101	1
95°	0	6	31	57	65	0
105°	0	1	5	15	20	1
115°	1	1	1	3	4	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1034.2	1034.2	1034.2	1034.2	1034.2
2.5°	1035.4	1034.0	1029.3	1034.0	1033.7
5°	1032.0	1030.1	1025.4	1030.3	1030.3
7.5°	1025.2	1024.5	1020.3	1025.9	1025.9
10°	1017.2	1016.9	1013.5	1019.6	1019.8
12.5°	1005.9	1006.9	1003.7	1009.6	1010.3
15°	992.8	994.5	991.8	997.4	997.2
17.5°	978.4	979.4	977.4	983.8	983.5
20°	960.6	961.8	960.3	966.9	967.7
22.5°	940.8	942.6	942.3	949.1	951.1
25°	919.9	920.6	921.6	929.4	930.8
27.5°	896.7	897.9	899.6	906.7	908.2
30°	871.4	873.3	875.3	882.6	884.5
32.5°	844.5	846.5	848.9	858.4	859.4
35°	814.3	818.0	821.4	829.7	833.1
37.5°	784.1	788.7	791.9	800.7	803.3
40°	752.1	756.8	761.9	771.2	772.9
42.5°	718.7	724.1	730.2	738.5	741.4
45°	685.1	691.2	696.8	703.6	707.0
47.5°	648.8	654.9	661.7	669.5	671.7
50°	611.2	618.3	625.6	632.9	636.8
52.5°	572.7	581.2	589.5	597.3	601.0
55°	534.7	541.0	551.0	559.0	562.7
57.5°	495.2	500.5	509.6	522.7	524.7
60°	454.9	459.8	469.1	479.8	484.2
62.5°	410.6	417.2	426.9	440.6	444.5
65°	367.4	373.8	386.7	402.0	408.4
67.5°	325.7	327.9	344.5	360.6	370.8
70°	276.5	284.8	304.0	323.8	331.6
72.5°	234.1	242.3	263.6	286.7	296.5
75°	186.0	197.5	226.3	253.3	262.8
77.5°	143.8	156.5	192.1	219.4	230.4
80°	100.4	120.2	159.0	189.7	201.6
82.5°	63.1	87.5	129.0	161.2	171.6
85°	32.2	59.5	102.2	135.1	147.0
87.5°	8.5	38.5	79.5	110.9	123.1
90°	0.2	22.2	60.2	90.5	101.4
92.5°	0.2	12.4	44.9	71.9	83.1
95°	0.2	5.9	31.2	56.6	65.3
97.5°	0.2	2.4	21.5	42.7	51.4
100°	0.2	1.2	13.7	31.0	38.5
102.5°	0.5	0.7	8.5	22.2	28.3
105°	0.5	0.7	5.1	15.1	20.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.7	0.7	1.0	4.1	6.1
115°	0.7	0.7	1.0	2.7	3.9
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°	0.5	0.7	2.9	10.2	13.9
110°	0.7	0.7	1.7	6.3	9.3



(END OF REPORT)