

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: P580579

Luminaire Tested: **HVSL4-4-LD4-1STD-30-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580579
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-LD4-1STD-30-UNV-O-EDD-90
Description: 4 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 3000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

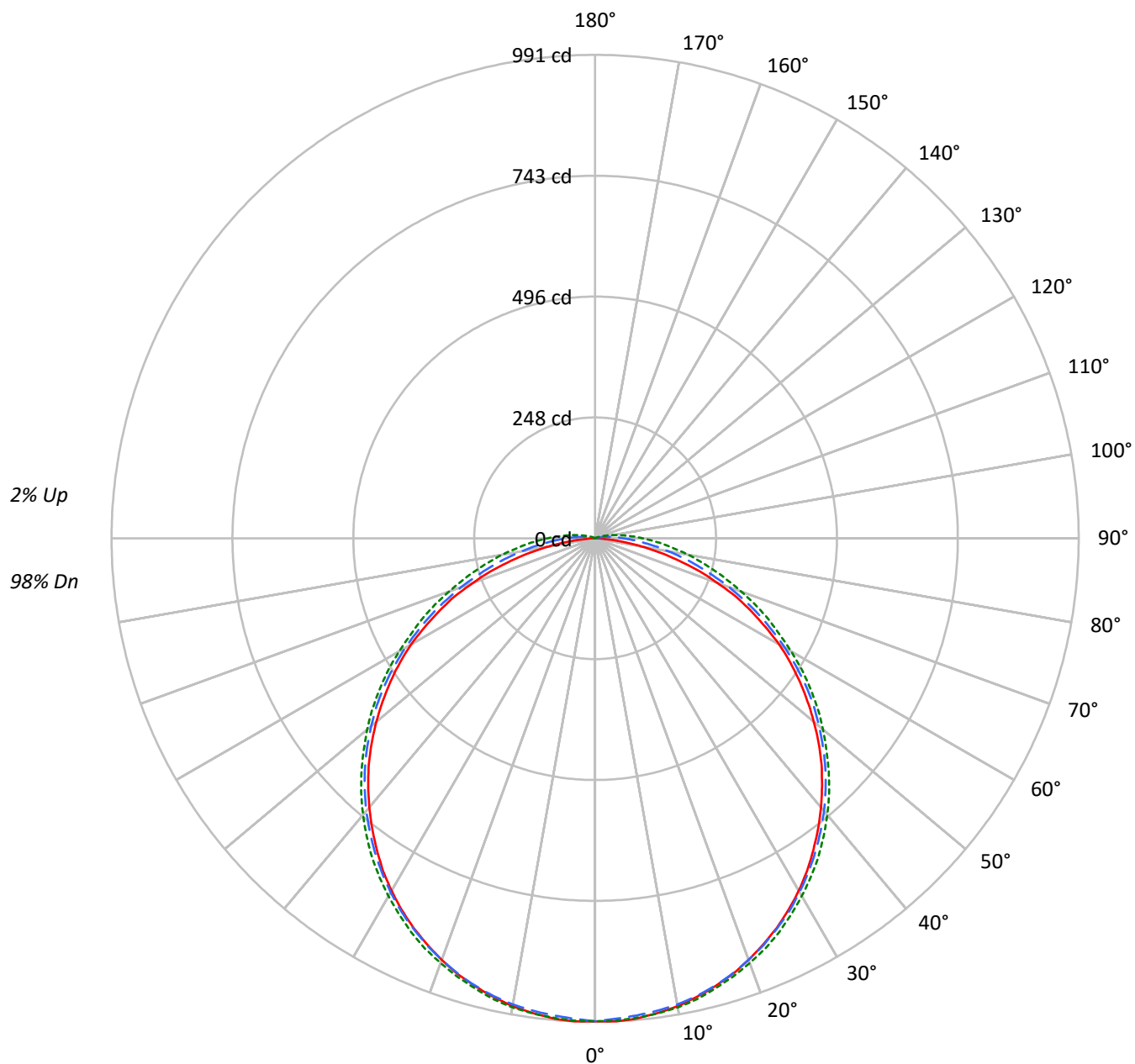
Lumens per Lamp: N/A
Luminaire Lumens: 2994.0 lumens
Efficiency: N/A
Efficacy: 91.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 32.7
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°	7994	7994	7994
5°	7978	7698	7659
10°	7925	7451	7356
15°	7857	7198	7037
20°	7783	6933	6734
25°	7696	6669	6438
30°	7594	6397	6126
35°	7466	6111	5822
40°	7332	5818	5493
45°	7190	5507	5152
50°	7002	5165	4798
55°	6800	4800	4424
60°	6560	4359	4011
65°	6169	3882	3604
70°	5606	3348	3157
75°	4807	2781	2738
80°	3617	2230	2340
85°	1932	1684	1942



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.7	3.1
10°-20°	268.8	9.0
20°-30°	407.8	13.6
30°-40°	493.2	16.5
40°-50°	514.6	17.2
50°-60°	470.5	15.7
60°-70°	366.8	12.2
70°-80°	229.4	7.7
80°-90°	104.2	3.5
90°-100°	34.9	1.2
100°-110°	8.8	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°	770.3	25.7
0°-40°	1263.5	42.2
0°-60°	2248.5	75.1
0°-90°	2948.9	98.5
90°-120°	45.1	1.5
90°-150°	45.1	1.5
90°-180°	45.0	1.5
0°-180°	2994.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	990	990	990	990	990	
5°	988	986	982	986	986	94
15°	951	952	950	955	955	268
25°	881	882	882	890	891	406
35°	780	783	786	794	798	488
45°	656	662	667	674	677	505
55°	512	518	528	535	539	457
65°	352	358	370	385	391	348
75°	178	189	217	242	252	190
85°	31	57	98	129	141	39
90°	0	21	58	87	97	1
95°	0	6	30	54	63	0
105°	0	1	5	14	19	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°	990.2	990.2	990.2	990.2	990.2
2.5°	991.4	990.0	985.6	990.0	989.8
5°	988.1	986.3	981.8	986.5	986.5
7.5°	981.6	980.9	976.9	982.3	982.3
10°	973.9	973.7	970.4	976.2	976.5
12.5°	963.2	964.1	961.1	966.7	967.4
15°	950.6	952.2	949.6	955.0	954.8
17.5°	936.8	937.7	935.8	941.9	941.7
20°	919.7	920.9	919.5	925.8	926.5
22.5°	900.8	902.5	902.2	908.8	910.6
25°	880.8	881.5	882.4	889.9	891.3
27.5°	858.6	859.7	861.4	868.1	869.5
30°	834.3	836.2	838.0	845.0	846.9
32.5°	808.6	810.5	812.8	821.9	822.9
35°	779.7	783.2	786.4	794.4	797.6
37.5°	750.7	755.2	758.2	766.6	769.2
40°	720.1	724.6	729.5	738.4	740.0
42.5°	688.2	693.3	699.1	707.1	709.9
45°	656.0	661.8	667.2	673.7	677.0
47.5°	621.2	627.0	633.5	641.0	643.1
50°	585.2	592.0	599.0	606.0	609.7
52.5°	548.3	556.5	564.4	571.9	575.4
55°	511.9	518.0	527.6	535.3	538.8
57.5°	474.1	479.2	487.9	500.5	502.4
60°	435.6	440.3	449.1	459.4	463.6
62.5°	393.1	399.4	408.7	421.8	425.6
65°	351.8	357.9	370.2	384.9	391.0
67.5°	311.9	314.0	329.8	345.3	355.1
70°	264.7	272.7	291.1	310.0	317.5
72.5°	224.1	232.0	252.3	274.5	283.9
75°	178.1	189.1	216.6	242.5	251.6
77.5°	137.7	149.9	183.9	210.1	220.6
80°	96.2	115.1	152.2	181.6	193.1
82.5°	60.5	83.8	123.5	154.3	164.3
85°	30.8	57.0	97.8	129.3	140.8
87.5°	8.2	36.9	76.1	106.2	117.9
90°	0.2	21.2	57.7	86.6	97.1
92.5°	0.2	11.9	43.0	68.9	79.6
95°	0.2	5.6	29.9	54.2	62.6
97.5°	0.2	2.3	20.5	40.9	49.3
100°	0.2	1.2	13.1	29.6	36.9
102.5°	0.5	0.7	8.2	21.2	27.1
105°	0.5	0.7	4.9	14.5	19.4



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CATALOG NUMBER: HVSL4-4-LD4-1STD-30-UNV-O-EDD-90

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.7	0.7	0.9	4.0	5.8
115°	0.7	0.7	0.9	2.6	3.7
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	2.8	9.8	13.3
110°	0.7	0.7	1.6	6.1	8.9



(END OF REPORT)