

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: P580439

Luminaire Tested: **HVSL4-1-LD4-1STD-40-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580439
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: HVSL4-1-LD4-1STD-40-UNV-O-EDD-90
Description: 1 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

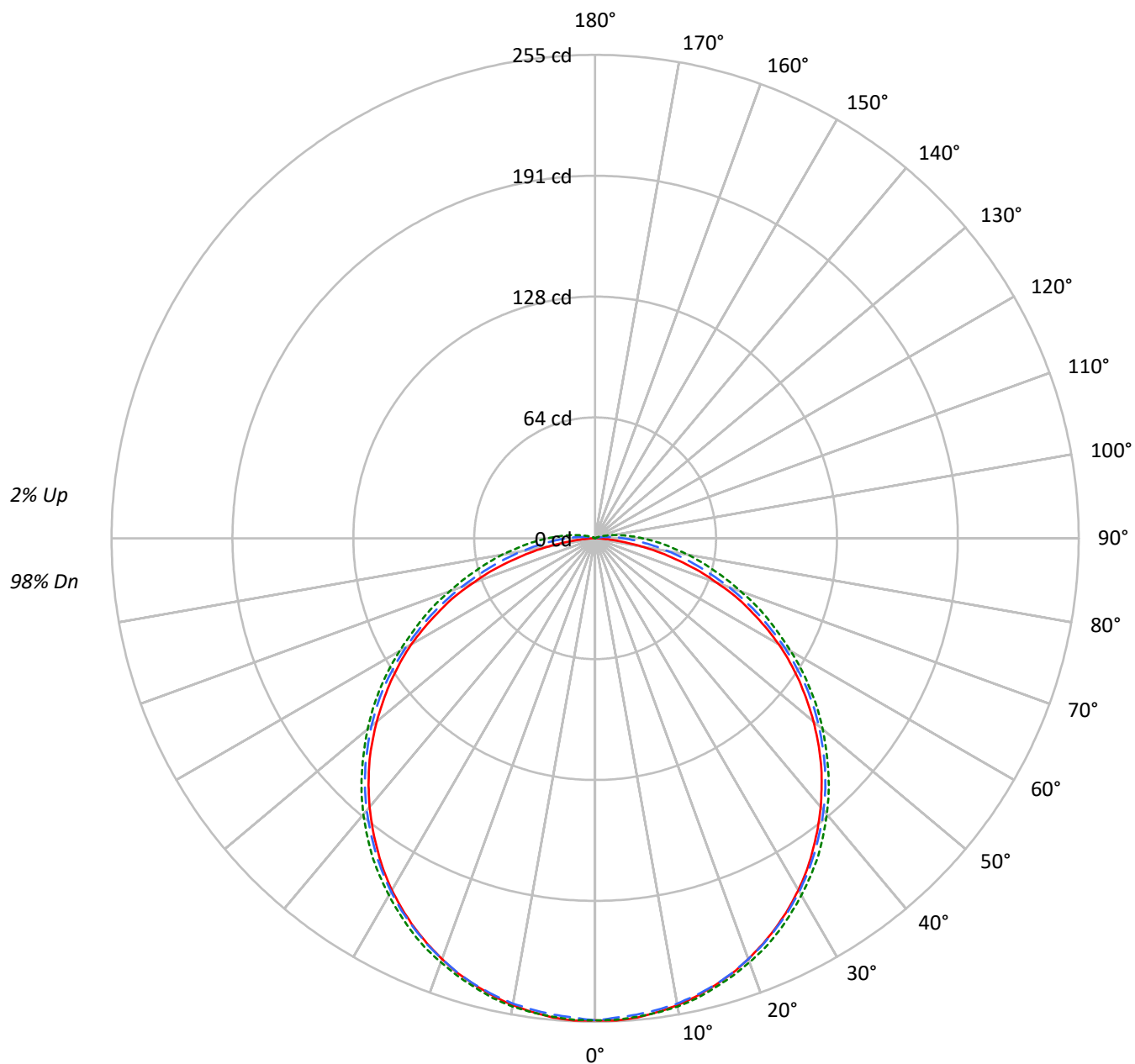
Lumens per Lamp: N/A
Luminaire Lumens: 769.0 lumens
Efficiency: N/A
Efficacy: 93.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.17')
CIE Type: Direct

Input Watts (W): 8.2
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°	8212	8212	8212
5°	8109	7851	7870
10°	7967	7544	7557
15°	7812	7239	7229
20°	7653	6928	6919
25°	7478	6619	6613
30°	7289	6307	6293
35°	7071	5987	5982
40°	6841	5660	5645
45°	6595	5319	5294
50°	6299	4950	4929
55°	5980	4559	4545
60°	5608	4103	4122
65°	5088	3613	3702
70°	4403	3077	3241
75°	3515	2514	2812
80°	2361	1979	2404
85°	1007	1456	1997



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.1	3.1
10°-20°	69.0	9.0
20°-30°	104.7	13.6
30°-40°	126.7	16.5
40°-50°	132.2	17.2
50°-60°	120.8	15.7
60°-70°	94.2	12.2
70°-80°	58.9	7.7
80°-90°	26.8	3.5
90°-100°	9.0	1.2
100°-110°	2.3	0.3
110°-120°	0.4	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°	197.9	25.7
0°-40°	324.5	42.2
0°-60°	577.5	75.1
0°-90°	757.4	98.5
90°-120°	11.6	1.5
90°-150°	11.6	1.5
90°-180°	12.0	1.6
0°-180°	769.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	254	254	254	254	254	
5°	254	253	252	253	253	24
15°	244	245	244	245	245	69
25°	226	226	227	229	229	104
35°	200	201	202	204	205	125
45°	168	170	171	173	174	130
55°	132	133	136	138	138	117
65°	90	92	95	99	100	89
75°	46	49	56	62	65	49
85°	8	15	25	33	36	10
90°	0	6	15	22	25	0
95°	0	1	8	14	16	0
105°	0	0	1	4	5	0
115°	0	0	0	1	1	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°	254.3	254.3	254.3	254.3	254.3
2.5°	254.6	254.3	253.1	254.3	254.2
5°	253.8	253.3	252.2	253.4	253.4
7.5°	252.1	251.9	250.9	252.3	252.3
10°	250.1	250.1	249.2	250.7	250.8
12.5°	247.4	247.6	246.8	248.3	248.5
15°	244.1	244.6	243.9	245.3	245.2
17.5°	240.6	240.8	240.4	241.9	241.9
20°	236.2	236.5	236.2	237.8	238.0
22.5°	231.4	231.8	231.7	233.4	233.9
25°	226.2	226.4	226.6	228.6	228.9
27.5°	220.5	220.8	221.2	223.0	223.3
30°	214.3	214.8	215.2	217.0	217.5
32.5°	207.7	208.2	208.8	211.1	211.3
35°	200.3	201.2	202.0	204.0	204.9
37.5°	192.8	194.0	194.7	196.9	197.6
40°	185.0	186.1	187.4	189.6	190.1
42.5°	176.8	178.1	179.6	181.6	182.3
45°	168.5	170.0	171.4	173.0	173.9
47.5°	159.5	161.0	162.7	164.6	165.2
50°	150.3	152.1	153.9	155.6	156.6
52.5°	140.8	142.9	145.0	146.9	147.8
55°	131.5	133.0	135.5	137.5	138.4
57.5°	121.8	123.1	125.3	128.5	129.0
60°	111.9	113.1	115.4	118.0	119.1
62.5°	101.0	102.6	105.0	108.3	109.3
65°	90.4	91.9	95.1	98.9	100.4
67.5°	80.1	80.6	84.7	88.7	91.2
70°	68.0	70.0	74.8	79.6	81.5
72.5°	57.6	59.6	64.8	70.5	72.9
75°	45.7	48.6	55.6	62.3	64.6
77.5°	35.4	38.5	47.2	54.0	56.7
80°	24.7	29.6	39.1	46.6	49.6
82.5°	15.5	21.5	31.7	39.6	42.2
85°	7.9	14.6	25.1	33.2	36.2
87.5°	2.1	9.5	19.5	27.3	30.3
90°	0.1	5.5	14.8	22.2	24.9
92.5°	0.1	3.1	11.0	17.7	20.4
95°	0.1	1.4	7.7	13.9	16.1
97.5°	0.1	0.6	5.3	10.5	12.7
100°	0.1	0.3	3.4	7.6	9.5
102.5°	0.1	0.2	2.1	5.5	7.0
105°	0.1	0.2	1.3	3.7	5.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.2	0.2	0.2	1.0	1.5
115°	0.2	0.2	0.2	0.7	1.0
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°	0.1	0.2	0.7	2.5	3.4
110°	0.2	0.2	0.4	1.6	2.3



(END OF REPORT)