

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: P580423

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

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580423
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-LD4-1HI-40-UNV-O-EDD-90
Description: 1 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

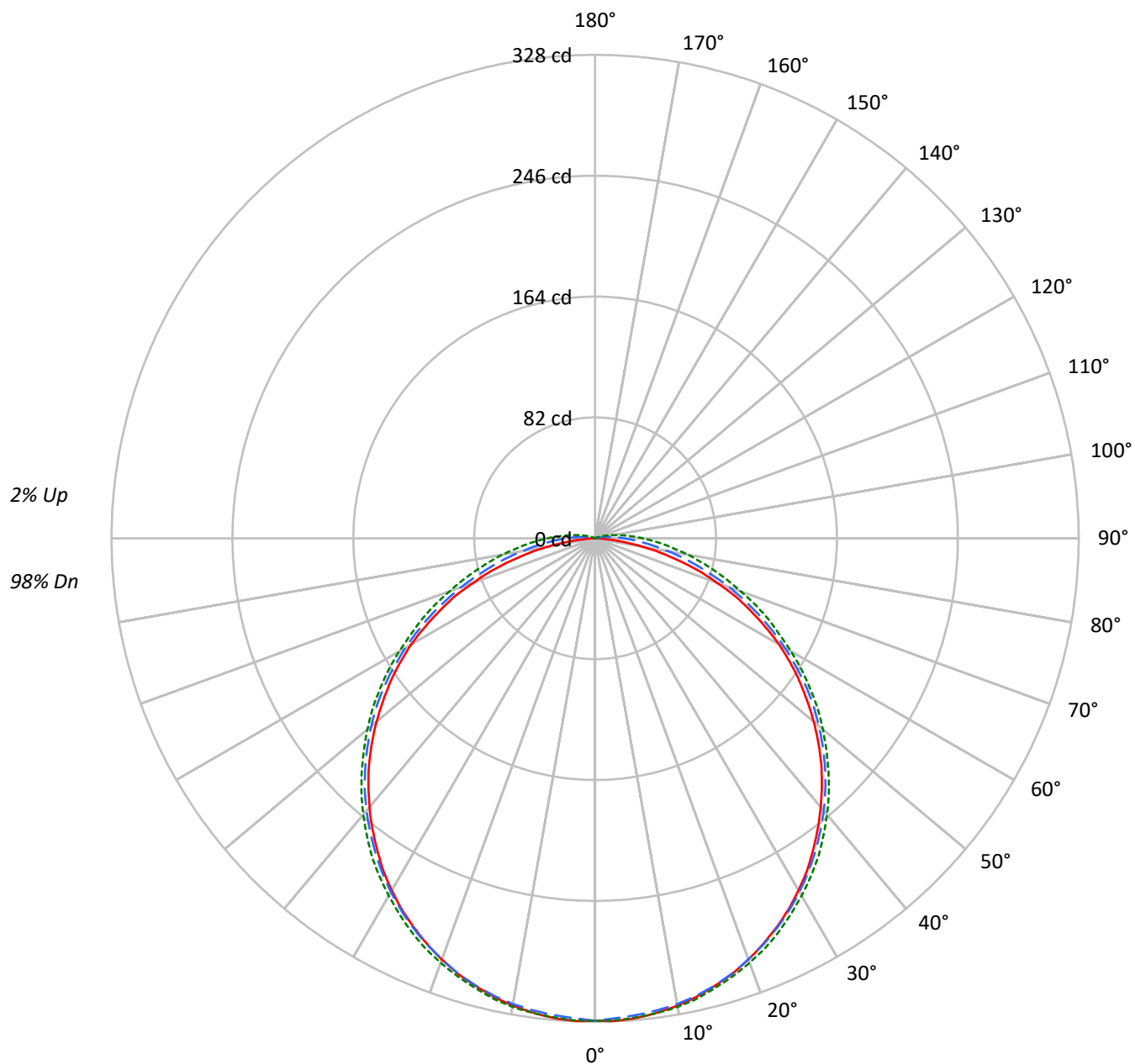
Lumens per Lamp: N/A
Luminaire Lumens: 990.0 lumens
Efficiency: N/A
Efficacy: 91.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.17')
CIE Type: Direct

Input Watts (W): 10.8
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°	10572	10572	10572
5°	10438	10108	10131
10°	10257	9715	9730
15°	10058	9320	9307
20°	9852	8917	8908
25°	9627	8523	8515
30°	9384	8121	8101
35°	9100	7705	7702
40°	8805	7285	7266
45°	8490	6846	6813
50°	8110	6372	6346
55°	7699	5868	5853
60°	7216	5279	5305
65°	6546	4650	4767
70°	5666	3961	4176
75°	4530	3237	3621
80°	3040	2546	3093
85°	1301	1873	2565



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.0	3.1
10°-20°	88.9	9.0
20°-30°	134.9	13.6
30°-40°	163.1	16.5
40°-50°	170.1	17.2
50°-60°	155.6	15.7
60°-70°	121.3	12.3
70°-80°	75.9	7.7
80°-90°	34.4	3.5
90°-100°	11.6	1.2
100°-110°	2.9	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°	254.7	25.7
0°-40°	417.8	42.2
0°-60°	743.5	75.1
0°-90°	975.1	98.5
90°-120°	14.9	1.5
90°-150°	14.9	1.5
90°-180°	15.0	1.5
0°-180°	990.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	327	327	327	327	327	
5°	327	326	325	326	326	31
15°	314	315	314	316	316	89
25°	291	292	292	294	295	134
35°	258	259	260	263	264	161
45°	217	219	221	223	224	167
55°	169	171	174	177	178	151
65°	116	118	122	127	129	115
75°	59	62	72	80	83	63
85°	10	19	32	43	46	13
90°	0	7	19	29	32	0
95°	0	2	10	18	21	0
105°	0	0	2	5	6	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°	327.4	327.4	327.4	327.4	327.4
2.5°	327.8	327.4	325.9	327.4	327.3
5°	326.7	326.1	324.7	326.2	326.2
7.5°	324.6	324.3	323.0	324.8	324.8
10°	322.0	322.0	320.9	322.8	322.9
12.5°	318.5	318.8	317.8	319.6	319.9
15°	314.3	314.9	314.0	315.8	315.7
17.5°	309.8	310.1	309.4	311.5	311.4
20°	304.1	304.5	304.0	306.1	306.4
22.5°	297.9	298.4	298.3	300.5	301.1
25°	291.2	291.5	291.8	294.2	294.7
27.5°	283.9	284.3	284.8	287.1	287.5
30°	275.9	276.5	277.1	279.4	280.0
32.5°	267.4	268.0	268.8	271.8	272.1
35°	257.8	259.0	260.0	262.7	263.8
37.5°	248.2	249.7	250.7	253.5	254.3
40°	238.1	239.6	241.2	244.1	244.7
42.5°	227.6	229.2	231.2	233.8	234.7
45°	216.9	218.8	220.6	222.8	223.8
47.5°	205.4	207.3	209.5	212.0	212.7
50°	193.5	195.7	198.1	200.4	201.6
52.5°	181.3	184.0	186.6	189.1	190.3
55°	169.3	171.3	174.4	177.0	178.2
57.5°	156.8	158.5	161.3	165.5	166.1
60°	144.0	145.6	148.5	151.9	153.3
62.5°	130.0	132.1	135.2	139.5	140.7
65°	116.3	118.3	122.4	127.3	129.3
67.5°	103.1	103.8	109.1	114.2	117.4
70°	87.5	90.2	96.3	102.5	105.0
72.5°	74.1	76.7	83.4	90.8	93.9
75°	58.9	62.5	71.6	80.2	83.2
77.5°	45.5	49.6	60.8	69.5	72.9
80°	31.8	38.1	50.3	60.1	63.8
82.5°	20.0	27.7	40.8	51.0	54.3
85°	10.2	18.8	32.3	42.8	46.5
87.5°	2.7	12.2	25.2	35.1	39.0
90°	0.1	7.0	19.1	28.6	32.1
92.5°	0.1	3.9	14.2	22.8	26.3
95°	0.1	1.9	9.9	17.9	20.7
97.5°	0.1	0.8	6.8	13.5	16.3
100°	0.1	0.4	4.3	9.8	12.2
102.5°	0.2	0.2	2.7	7.0	9.0
105°	0.2	0.2	1.6	4.8	6.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.2	0.2	0.3	1.3	1.9
115°	0.2	0.2	0.3	0.8	1.2
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°	0.2	0.2	0.9	3.2	4.4
110°	0.2	0.2	0.5	2.0	2.9



(END OF REPORT)