

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: P580421

Luminaire Tested: **HVSL4-1-LD4-1HI-35-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580421
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-35-UNV-O-EDD-90
Description: 1 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 3500K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

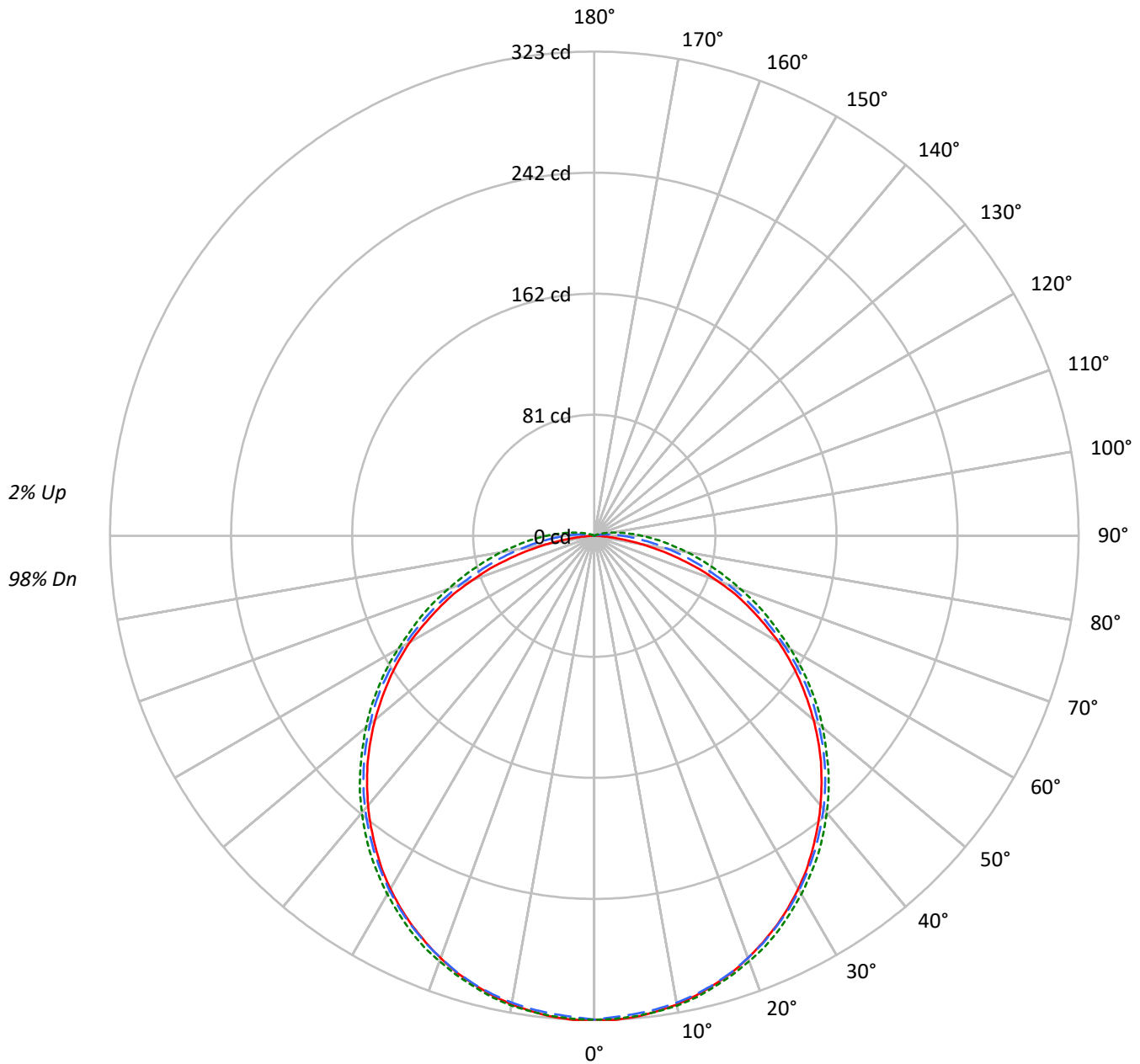
Lumens per Lamp: N/A
Luminaire Lumens: 976.0 lumens
Efficiency: N/A
Efficacy: 90.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.17')
CIE Type: Direct

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°	10424	10424	10424
5°	10291	9965	9988
10°	10114	9575	9591
15°	9917	9189	9174
20°	9713	8790	8780
25°	9492	8400	8393
30°	9252	8007	7988
35°	8973	7599	7591
40°	8683	7183	7162
45°	8369	6750	6719
50°	7997	6282	6258
55°	7589	5787	5767
60°	7116	5205	5229
65°	6456	4586	4701
70°	5588	3903	4116
75°	4469	3192	3569
80°	3002	2511	3049
85°	1275	1850	2532



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.5	3.1
10°-20°	87.6	9.0
20°-30°	133.0	13.6
30°-40°	160.8	16.5
40°-50°	167.7	17.2
50°-60°	153.4	15.7
60°-70°	119.6	12.2
70°-80°	74.8	7.7
80°-90°	34.0	3.5
90°-100°	11.4	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°	251.1	25.7
0°-40°	411.9	42.2
0°-60°	733.0	75.1
0°-90°	961.3	98.5
90°-120°	14.7	1.5
90°-150°	14.7	1.5
90°-180°	15.0	1.5
0°-180°	976.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	323	323	323	323	323	
5°	322	322	320	322	322	31
15°	310	310	310	311	311	87
25°	287	287	288	290	290	132
35°	254	255	256	259	260	159
45°	214	216	218	220	221	165
55°	167	169	172	174	176	149
65°	115	117	121	126	128	113
75°	58	62	71	79	82	62
85°	10	19	32	42	46	13
90°	0	7	19	28	32	0
95°	0	2	10	18	20	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°	322.8	322.8	322.8	322.8	322.8
2.5°	323.2	322.7	321.3	322.7	322.6
5°	322.1	321.5	320.1	321.6	321.6
7.5°	320.0	319.8	318.5	320.2	320.2
10°	317.5	317.4	316.3	318.2	318.3
12.5°	314.0	314.3	313.3	315.1	315.3
15°	309.9	310.4	309.6	311.3	311.2
17.5°	305.4	305.7	305.1	307.0	307.0
20°	299.8	300.2	299.7	301.8	302.0
22.5°	293.7	294.2	294.1	296.2	296.9
25°	287.1	287.3	287.6	290.1	290.5
27.5°	279.9	280.3	280.8	283.0	283.5
30°	272.0	272.6	273.2	275.5	276.1
32.5°	263.6	264.2	265.0	267.9	268.2
35°	254.2	255.3	256.4	259.0	260.0
37.5°	244.7	246.2	247.2	249.9	250.7
40°	234.8	236.2	237.8	240.7	241.2
42.5°	224.3	226.0	227.9	230.5	231.4
45°	213.8	215.7	217.5	219.6	220.7
47.5°	202.5	204.4	206.5	209.0	209.6
50°	190.8	193.0	195.3	197.5	198.8
52.5°	178.8	181.4	184.0	186.4	187.6
55°	166.9	168.9	172.0	174.5	175.6
57.5°	154.6	156.2	159.0	163.2	163.8
60°	142.0	143.5	146.4	149.8	151.1
62.5°	128.1	130.2	133.2	137.5	138.7
65°	114.7	116.7	120.7	125.5	127.5
67.5°	101.7	102.3	107.5	112.5	115.7
70°	86.3	88.9	94.9	101.1	103.5
72.5°	73.1	75.6	82.3	89.5	92.5
75°	58.1	61.6	70.6	79.1	82.0
77.5°	44.9	48.9	60.0	68.5	71.9
80°	31.4	37.5	49.6	59.2	62.9
82.5°	19.7	27.3	40.3	50.3	53.6
85°	10.0	18.6	31.9	42.2	45.9
87.5°	2.7	12.0	24.8	34.6	38.4
90°	0.1	6.9	18.8	28.2	31.7
92.5°	0.1	3.9	14.0	22.4	25.9
95°	0.1	1.8	9.7	17.7	20.4
97.5°	0.1	0.8	6.7	13.3	16.1
100°	0.1	0.4	4.3	9.7	12.0
102.5°	0.2	0.2	2.7	6.9	8.8
105°	0.2	0.2	1.6	4.7	6.3



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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	4.3
110°	0.2	0.2	0.5	2.0	2.9



(END OF REPORT)