

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: P580517

Luminaire Tested: **HVSL4-3-LD4-1HI-35-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580517
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-35-UNV-O-EDD-90
Description: 3 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 3500K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

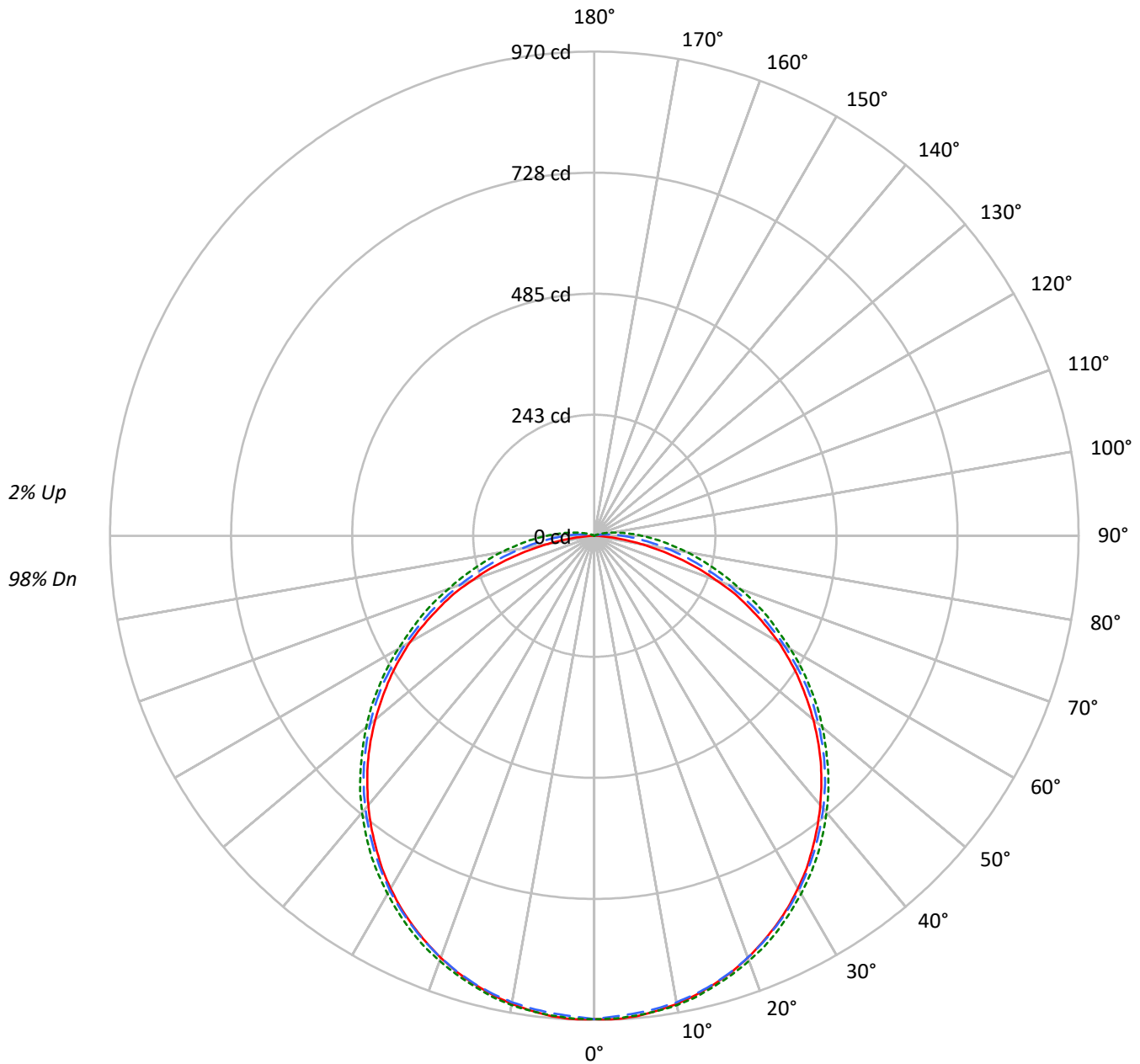
Lumens per Lamp: N/A
Luminaire Lumens: 2928.0 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 3' x H: 0.17')
CIE Type: Direct

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°	10424	10424	10424
5°	10391	10030	9988
10°	10309	9700	9591
15°	10207	9363	9175
20°	10099	9011	8781
25°	9971	8661	8394
30°	9826	8303	7988
35°	9644	7926	7592
40°	9455	7539	7163
45°	9251	7131	6718
50°	8988	6681	6257
55°	8704	6202	5768
60°	8366	5626	5230
65°	7829	5005	4700
70°	7069	4309	4116
75°	6000	3573	3571
80°	4435	2857	3051
85°	2273	2152	2532



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.6	3.1
10°-20°	262.9	9.0
20°-30°	398.9	13.6
30°-40°	482.3	16.5
40°-50°	503.2	17.2
50°-60°	460.1	15.7
60°-70°	358.7	12.2
70°-80°	224.4	7.7
80°-90°	101.9	3.5
90°-100°	34.2	1.2
100°-110°	8.6	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°	753.4	25.7
0°-40°	1235.6	42.2
0°-60°	2199.0	75.1
0°-90°	2883.9	98.5
90°-120°	44.1	1.5
90°-150°	44.1	1.5
90°-180°	44.0	1.5
0°-180°	2928.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	968	968	968	968	968	
5°	966	964	960	965	965	92
15°	930	931	929	934	934	262
25°	861	862	863	870	872	397
35°	762	766	769	777	780	477
45°	642	647	652	659	662	494
55°	501	507	516	524	527	447
65°	344	350	362	376	382	340
75°	174	185	212	237	246	186
85°	30	56	96	126	138	38
90°	0	21	56	85	95	1
95°	0	6	29	53	61	0
105°	0	1	5	14	19	1
115°	1	1	1	2	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°	968.4	968.4	968.4	968.4	968.4
2.5°	969.5	968.2	963.8	968.2	967.9
5°	966.4	964.5	960.2	964.8	964.8
7.5°	960.0	959.3	955.4	960.6	960.6
10°	952.4	952.2	949.0	954.7	954.9
12.5°	941.9	942.8	939.9	945.3	946.0
15°	929.6	931.2	928.7	933.9	933.7
17.5°	916.1	917.0	915.2	921.1	920.9
20°	899.5	900.6	899.2	905.4	906.1
22.5°	881.0	882.6	882.3	888.7	890.6
25°	861.3	862.0	862.9	870.2	871.6
27.5°	839.7	840.8	842.4	849.0	850.4
30°	815.9	817.7	819.6	826.4	828.2
32.5°	790.8	792.6	794.9	803.8	804.7
35°	762.5	765.9	769.1	776.9	780.1
37.5°	734.2	738.5	741.5	749.7	752.2
40°	704.3	708.6	713.4	722.1	723.7
42.5°	673.0	678.0	683.7	691.5	694.2
45°	641.5	647.2	652.5	658.8	662.0
47.5°	607.5	613.2	619.6	626.9	628.9
50°	572.3	578.9	585.8	592.6	596.3
52.5°	536.3	544.2	552.0	559.3	562.7
55°	500.6	506.6	515.9	523.5	526.9
57.5°	463.7	468.7	477.1	489.5	491.3
60°	426.0	430.6	439.2	449.3	453.4
62.5°	384.4	390.6	399.7	412.5	416.2
65°	344.0	350.0	362.1	376.4	382.4
67.5°	305.0	307.0	322.6	337.6	347.2
70°	258.9	266.6	284.7	303.2	310.5
72.5°	219.2	226.9	246.8	268.5	277.6
75°	174.2	184.9	211.9	237.2	246.1
77.5°	134.7	146.6	179.9	205.5	215.7
80°	94.1	112.5	148.8	177.6	188.8
82.5°	59.1	82.0	120.8	150.9	160.7
85°	30.1	55.7	95.7	126.5	137.7
87.5°	8.0	36.1	74.4	103.9	115.3
90°	0.2	20.8	56.4	84.7	95.0
92.5°	0.2	11.6	42.0	67.3	77.8
95°	0.2	5.5	29.2	53.0	61.2
97.5°	0.2	2.3	20.1	40.0	48.2
100°	0.2	1.1	12.8	29.0	36.1
102.5°	0.5	0.7	8.0	20.8	26.5
105°	0.5	0.7	4.8	14.2	18.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.7	0.7	0.9	3.9	5.7
115°	0.7	0.7	0.9	2.5	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	2.7	9.6	13.0
110°	0.7	0.7	1.6	5.9	8.7



(END OF REPORT)