

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: P580449

Luminaire Tested: **HVSL4-1-LD4-2HI-50-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580449
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-LD4-2HI-50-UNV-O-EDD-90
Description: 1 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 5000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

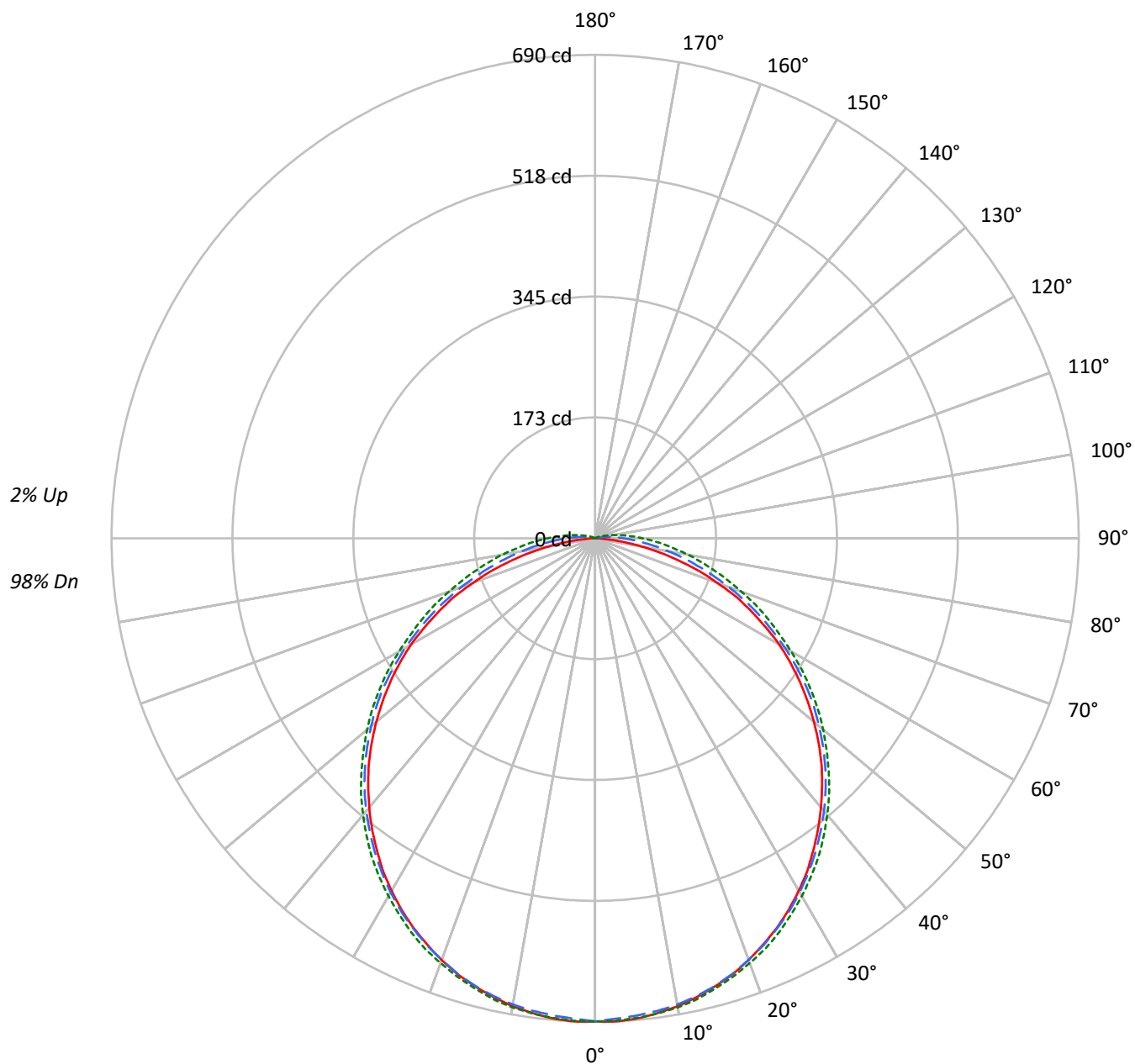
Lumens per Lamp: N/A
Luminaire Lumens: 2085.0 lumens
Efficiency: N/A
Efficacy: 96.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.17')
CIE Type: Direct

Input Watts (W): 21.6
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°	22268	22268	22268
5°	21984	21284	21336
10°	21603	20459	20490
15°	21185	19628	19602
20°	20751	18780	18757
25°	20279	17948	17933
30°	19762	17105	17065
35°	19168	16232	16219
40°	18546	15344	15301
45°	17880	14419	14351
50°	17079	13416	13365
55°	16211	12361	12322
60°	15200	11120	11175
65°	13790	9795	10039
70°	11935	8337	8793
75°	9537	6822	7626
80°	6405	5365	6515
85°	2742	3949	5406



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	3.1
10°-20°	187.2	9.0
20°-30°	284.0	13.6
30°-40°	343.4	16.5
40°-50°	358.3	17.2
50°-60°	327.6	15.7
60°-70°	255.4	12.2
70°-80°	159.8	7.7
80°-90°	72.6	3.5
90°-100°	24.3	1.2
100°-110°	6.1	0.3
110°-120°	1.0	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°	536.5	25.7
0°-40°	879.9	42.2
0°-60°	1565.9	75.1
0°-90°	2053.6	98.5
90°-120°	31.4	1.5
90°-150°	31.4	1.5
90°-180°	31.0	1.5
0°-180°	2085.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	690	690	690	690	690	
5°	688	687	684	687	687	65
15°	662	663	661	665	665	187
25°	613	614	614	620	621	283
35°	543	545	548	553	556	340
45°	457	461	465	469	471	352
55°	356	361	367	373	375	318
65°	245	249	258	268	272	242
75°	124	132	151	169	175	132
85°	22	40	68	90	98	27
90°	0	15	40	60	68	1
95°	0	4	21	38	44	0
105°	0	0	3	10	14	0
115°	0	0	1	2	3	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°	689.6	689.6	689.6	689.6	689.6
2.5°	690.4	689.4	686.3	689.4	689.3
5°	688.1	686.8	683.7	687.0	687.0
7.5°	683.6	683.1	680.3	684.1	684.1
10°	678.2	678.1	675.8	679.8	680.0
12.5°	670.7	671.4	669.3	673.2	673.7
15°	662.0	663.1	661.3	665.0	664.9
17.5°	652.4	653.0	651.7	655.9	655.8
20°	640.5	641.3	640.3	644.7	645.2
22.5°	627.3	628.5	628.3	632.9	634.2
25°	613.4	613.8	614.5	619.7	620.7
27.5°	597.9	598.7	599.9	604.6	605.5
30°	581.0	582.3	583.6	588.5	589.8
32.5°	563.1	564.4	566.0	572.4	573.0
35°	543.0	545.4	547.7	553.2	555.5
37.5°	522.8	525.9	528.0	533.9	535.6
40°	501.5	504.6	508.0	514.2	515.3
42.5°	479.2	482.8	486.9	492.4	494.4
45°	456.8	460.9	464.6	469.2	471.4
47.5°	432.6	436.6	441.2	446.4	447.9
50°	407.5	412.3	417.1	422.0	424.6
52.5°	381.9	387.6	393.1	398.3	400.7
55°	356.5	360.7	367.4	372.8	375.2
57.5°	330.2	333.7	339.8	348.5	349.8
60°	303.3	306.6	312.8	319.9	322.9
62.5°	273.8	278.1	284.6	293.8	296.4
65°	245.0	249.2	257.8	268.1	272.3
67.5°	217.2	218.6	229.7	240.4	247.3
70°	184.3	189.9	202.7	215.9	221.1
72.5°	156.1	161.6	175.7	191.2	197.7
75°	124.0	131.7	150.9	168.9	175.2
77.5°	95.9	104.4	128.1	146.3	153.6
80°	67.0	80.1	106.0	126.5	134.4
82.5°	42.1	58.4	86.0	107.5	114.4
85°	21.5	39.7	68.1	90.1	98.0
87.5°	5.7	25.7	53.0	74.0	82.1
90°	0.2	14.8	40.2	60.3	67.6
92.5°	0.2	8.3	29.9	48.0	55.4
95°	0.2	3.9	20.8	37.7	43.6
97.5°	0.2	1.6	14.3	28.4	34.3
100°	0.2	0.8	9.1	20.6	25.7
102.5°	0.3	0.5	5.7	14.8	18.9
105°	0.3	0.5	3.4	10.1	13.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.5	0.5	0.7	2.8	4.1
115°	0.5	0.5	0.7	1.8	2.6
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°	0.3	0.5	2.0	6.8	9.3
110°	0.5	0.5	1.1	4.2	6.2



(END OF REPORT)