

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: P580345

Luminaire Tested: **HVSL2-2-LD4-STD-50-UNV-O-EDD-90**

Issue Date: 12/16/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P580345  
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: HVSL2-2-LD4-STD-50-UNV-O-EDD-90  
Description: 2 FOOT, 2INCH WIDE, HVSL LED LUMINAIRE, WITH 5000K, 90 CRI LEDS  
Light Source: -  
Ballast/Driver: -

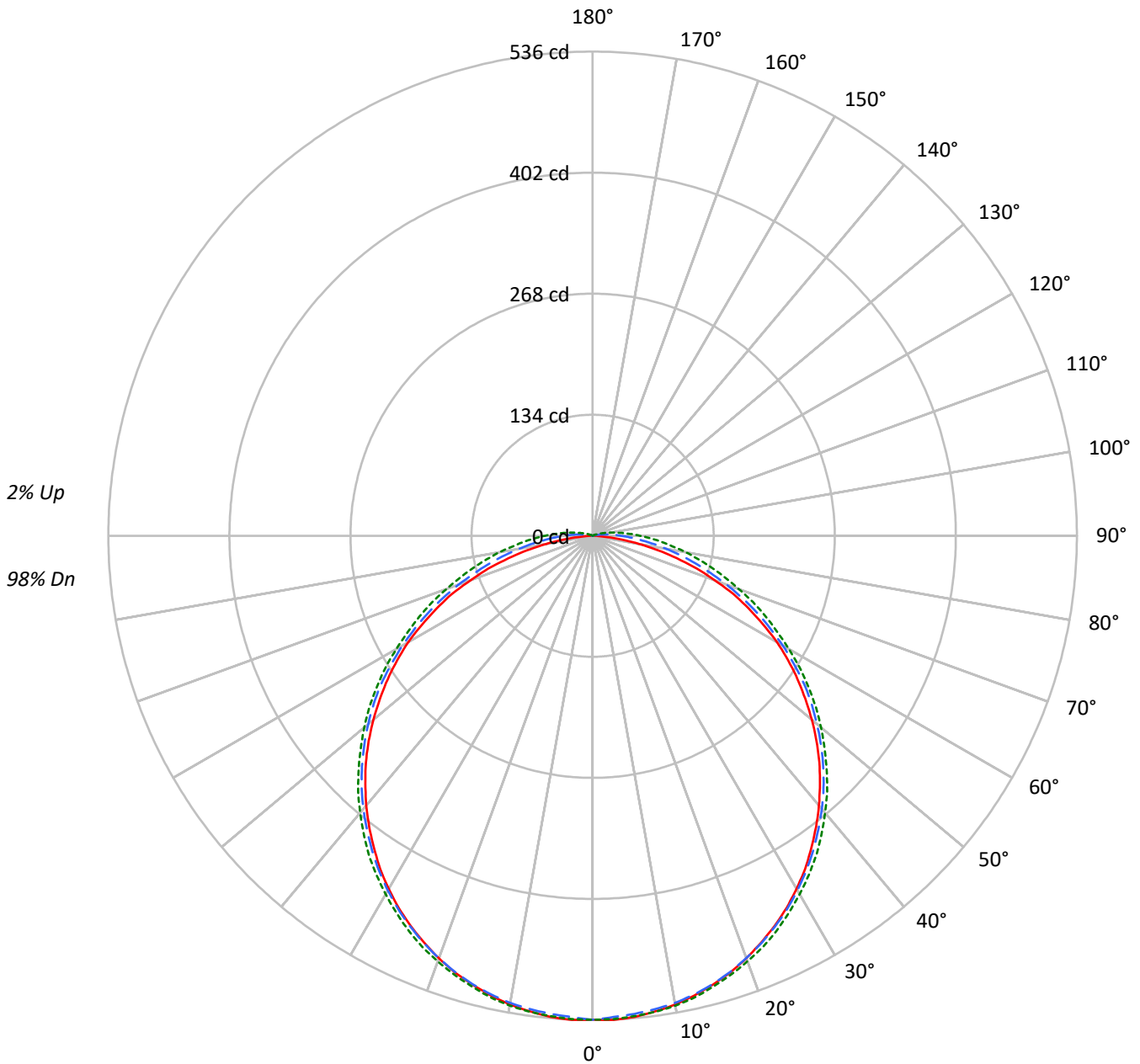
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1620.0 lumens  
Efficiency: N/A  
Efficacy: 98.8 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 2' x H: 0.17')  
CIE Type: Direct  
  
Input Watts (W): 16.4  
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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0					
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°	17302	17302	17302
5°	17207	16140	15911
10°	17030	15169	14726
15°	16818	14251	13620
20°	16599	13368	12629
25°	16346	12532	11716
30°	16059	11721	10831
35°	15715	10917	10006
40°	15354	10127	9177
45°	14960	9334	8363
50°	14472	8511	7561
55°	13936	7675	6758
60°	13302	6744	5928
65°	12336	5790	5141
70°	11001	4789	4328
75°	9174	3789	3590
80°	6566	2867	2912
85°	3169	2009	2271



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.7	3.1
10°-20°	145.4	9.0
20°-30°	220.7	13.6
30°-40°	266.8	16.5
40°-50°	278.4	17.2
50°-60°	254.6	15.7
60°-70°	198.4	12.2
70°-80°	124.1	7.7
80°-90°	56.4	3.5
90°-100°	18.9	1.2
100°-110°	4.8	0.3
110°-120°	0.8	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°	416.8	25.7
0°-40°	683.6	42.2
0°-60°	1216.6	75.1
0°-90°	1595.6	98.5
90°-120°	24.4	1.5
90°-150°	24.4	1.5
90°-180°	24.0	1.5
0°-180°	1620.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	536	536	536	536	536	
5°	535	534	531	534	534	51
15°	514	515	514	517	517	145
25°	477	477	477	482	482	220
35°	422	424	426	430	432	264
45°	355	358	361	364	366	274
55°	277	280	286	290	292	247
65°	190	194	200	208	212	188
75°	96	102	117	131	136	103
85°	17	31	53	70	76	21
90°	0	12	31	47	52	1
95°	0	3	16	29	34	0
105°	0	0	3	8	10	0
115°	0	0	0	1	2	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	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	535.8	535.8	535.8	535.8	535.8
2.5°	536.4	535.7	533.3	535.7	535.5
5°	534.7	533.7	531.3	533.8	533.8
7.5°	531.1	530.7	528.6	531.5	531.5
10°	527.0	526.8	525.1	528.2	528.3
12.5°	521.1	521.7	520.0	523.0	523.4
15°	514.3	515.2	513.8	516.7	516.6
17.5°	506.9	507.4	506.4	509.7	509.5
20°	497.7	498.3	497.5	500.9	501.3
22.5°	487.4	488.3	488.2	491.7	492.7
25°	476.6	476.9	477.4	481.5	482.2
27.5°	464.6	465.2	466.1	469.7	470.5
30°	451.4	452.4	453.4	457.2	458.2
32.5°	437.5	438.5	439.8	444.7	445.2
35°	421.9	423.8	425.5	429.8	431.6
37.5°	406.2	408.6	410.2	414.8	416.2
40°	389.7	392.1	394.7	399.5	400.4
42.5°	372.4	375.1	378.3	382.6	384.1
45°	354.9	358.1	361.0	364.5	366.3
47.5°	336.1	339.3	342.8	346.8	348.0
50°	316.7	320.3	324.1	327.9	329.9
52.5°	296.7	301.1	305.4	309.5	311.3
55°	277.0	280.3	285.5	289.6	291.5
57.5°	256.5	259.3	264.0	270.8	271.8
60°	235.7	238.2	243.0	248.6	250.8
62.5°	212.7	216.1	221.2	228.2	230.3
65°	190.3	193.6	200.3	208.3	211.6
67.5°	168.7	169.9	178.5	186.8	192.1
70°	143.2	147.5	157.5	167.7	171.8
72.5°	121.3	125.6	136.5	148.5	153.6
75°	96.4	102.3	117.2	131.2	136.2
77.5°	74.5	81.1	99.5	113.7	119.4
80°	52.0	62.3	82.4	98.3	104.5
82.5°	32.7	45.3	66.8	83.5	88.9
85°	16.7	30.8	52.9	70.0	76.2
87.5°	4.4	20.0	41.2	57.5	63.8
90°	0.1	11.5	31.2	46.9	52.5
92.5°	0.1	6.4	23.2	37.3	43.1
95°	0.1	3.0	16.2	29.3	33.9
97.5°	0.1	1.3	11.1	22.1	26.7
100°	0.1	0.6	7.1	16.0	20.0
102.5°	0.3	0.4	4.4	11.5	14.7
105°	0.3	0.4	2.7	7.8	10.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.4	0.4	0.5	2.1	3.2
115°	0.4	0.4	0.5	1.4	2.0
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°	0.3	0.4	1.5	5.3	7.2
110°	0.4	0.4	0.9	3.3	4.8



(END OF REPORT)