

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: P580331

Luminaire Tested: **HVSL2-2-LD4-LO-30-UNV-O-EDD-90**

Issue Date: 12/16/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P580331  
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-LO-30-UNV-O-EDD-90  
Description: 2 FOOT, 2INCH WIDE, HVSL LED LUMINAIRE, WITH 3000K, 90 CRI LEDS  
Light Source: -  
Ballast/Driver: -

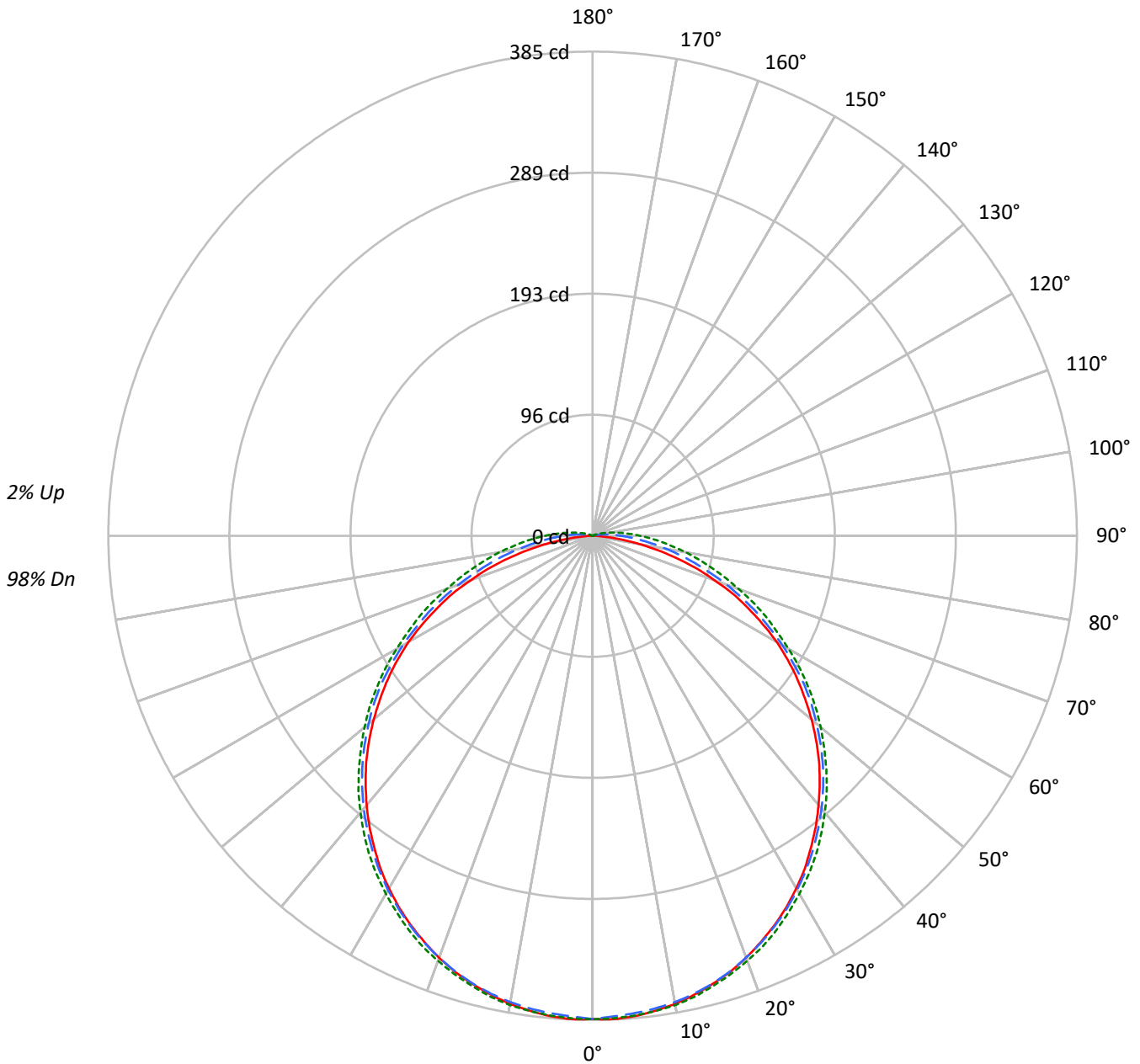
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1162.0 lumens  
Efficiency: N/A  
Efficacy: 100.2 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): 11.6  
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									
RC	80									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°	12410	12410	12410
5°	12341	11577	11413
10°	12215	10879	10564
15°	12063	10224	9768
20°	11907	9590	9059
25°	11723	8991	8405
30°	11519	8407	7770
35°	11271	7830	7178
40°	11012	7264	6582
45°	10732	6694	5998
50°	10378	6105	5423
55°	9997	5506	4848
60°	9543	4837	4252
65°	8848	4154	3688
70°	7890	3436	3103
75°	6576	2719	2576
80°	4710	2056	2087
85°	2277	1443	1627



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.4	3.1
10°-20°	104.3	9.0
20°-30°	158.3	13.6
30°-40°	191.4	16.5
40°-50°	199.7	17.2
50°-60°	182.6	15.7
60°-70°	142.3	12.2
70°-80°	89.0	7.7
80°-90°	40.4	3.5
90°-100°	13.6	1.2
100°-110°	3.4	0.3
110°-120°	0.5	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°	299.0	25.7
0°-40°	490.4	42.2
0°-60°	872.7	75.1
0°-90°	1144.5	98.5
90°-120°	17.5	1.5
90°-150°	17.5	1.5
90°-180°	18.0	1.5
0°-180°	1162.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	384	384	384	384	384	
5°	384	383	381	383	383	36
15°	369	370	369	371	370	104
25°	342	342	342	345	346	158
35°	303	304	305	308	310	189
45°	255	257	259	262	263	196
55°	199	201	205	208	209	178
65°	136	139	144	149	152	135
75°	69	73	84	94	98	74
85°	12	22	38	50	55	15
90°	0	8	22	34	38	0
95°	0	2	12	21	24	0
105°	0	0	2	6	8	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°	384.3	384.3	384.3	384.3	384.3
2.5°	384.8	384.2	382.5	384.2	384.1
5°	383.5	382.8	381.1	382.9	382.9
7.5°	381.0	380.7	379.2	381.2	381.2
10°	378.0	377.9	376.6	378.9	379.0
12.5°	373.8	374.2	373.0	375.2	375.4
15°	368.9	369.6	368.6	370.6	370.5
17.5°	363.6	363.9	363.2	365.6	365.5
20°	357.0	357.4	356.9	359.3	359.6
22.5°	349.6	350.3	350.2	352.7	353.4
25°	341.8	342.1	342.5	345.4	345.9
27.5°	333.2	333.7	334.3	336.9	337.5
30°	323.8	324.5	325.2	328.0	328.7
32.5°	313.8	314.6	315.5	319.0	319.4
35°	302.6	304.0	305.2	308.3	309.6
37.5°	291.4	293.1	294.3	297.5	298.5
40°	279.5	281.2	283.1	286.6	287.2
42.5°	267.1	269.1	271.3	274.4	275.5
45°	254.6	256.8	258.9	261.5	262.7
47.5°	241.1	243.3	245.9	248.8	249.6
50°	227.1	229.8	232.5	235.2	236.6
52.5°	212.8	216.0	219.1	222.0	223.3
55°	198.7	201.0	204.8	207.7	209.1
57.5°	184.0	186.0	189.4	194.2	195.0
60°	169.1	170.9	174.3	178.3	179.9
62.5°	152.6	155.0	158.6	163.7	165.2
65°	136.5	138.9	143.7	149.4	151.8
67.5°	121.0	121.9	128.0	134.0	137.8
70°	102.7	105.8	113.0	120.3	123.2
72.5°	87.0	90.1	97.9	106.5	110.2
75°	69.1	73.4	84.1	94.1	97.7
77.5°	53.5	58.2	71.4	81.5	85.6
80°	37.3	44.7	59.1	70.5	74.9
82.5°	23.5	32.5	47.9	59.9	63.8
85°	12.0	22.1	38.0	50.2	54.6
87.5°	3.2	14.3	29.5	41.2	45.8
90°	0.1	8.2	22.4	33.6	37.7
92.5°	0.1	4.6	16.7	26.7	30.9
95°	0.1	2.2	11.6	21.0	24.3
97.5°	0.1	0.9	8.0	15.9	19.1
100°	0.1	0.5	5.1	11.5	14.3
102.5°	0.2	0.3	3.2	8.2	10.5
105°	0.2	0.3	1.9	5.6	7.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.3	0.3	0.4	1.5	2.3
115°	0.3	0.3	0.4	1.0	1.4
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	0.3	1.1	3.8	5.2
110°	0.3	0.3	0.6	2.4	3.4



(END OF REPORT)