

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: P580136

Luminaire Tested: **HVSL12-2-LD4-2HI-40-UNV-O-EDD**

Issue Date: 12/16/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P580136  
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: HVSL12-2-LD4-2HI-40-UNV-O-EDD  
Description: 2 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

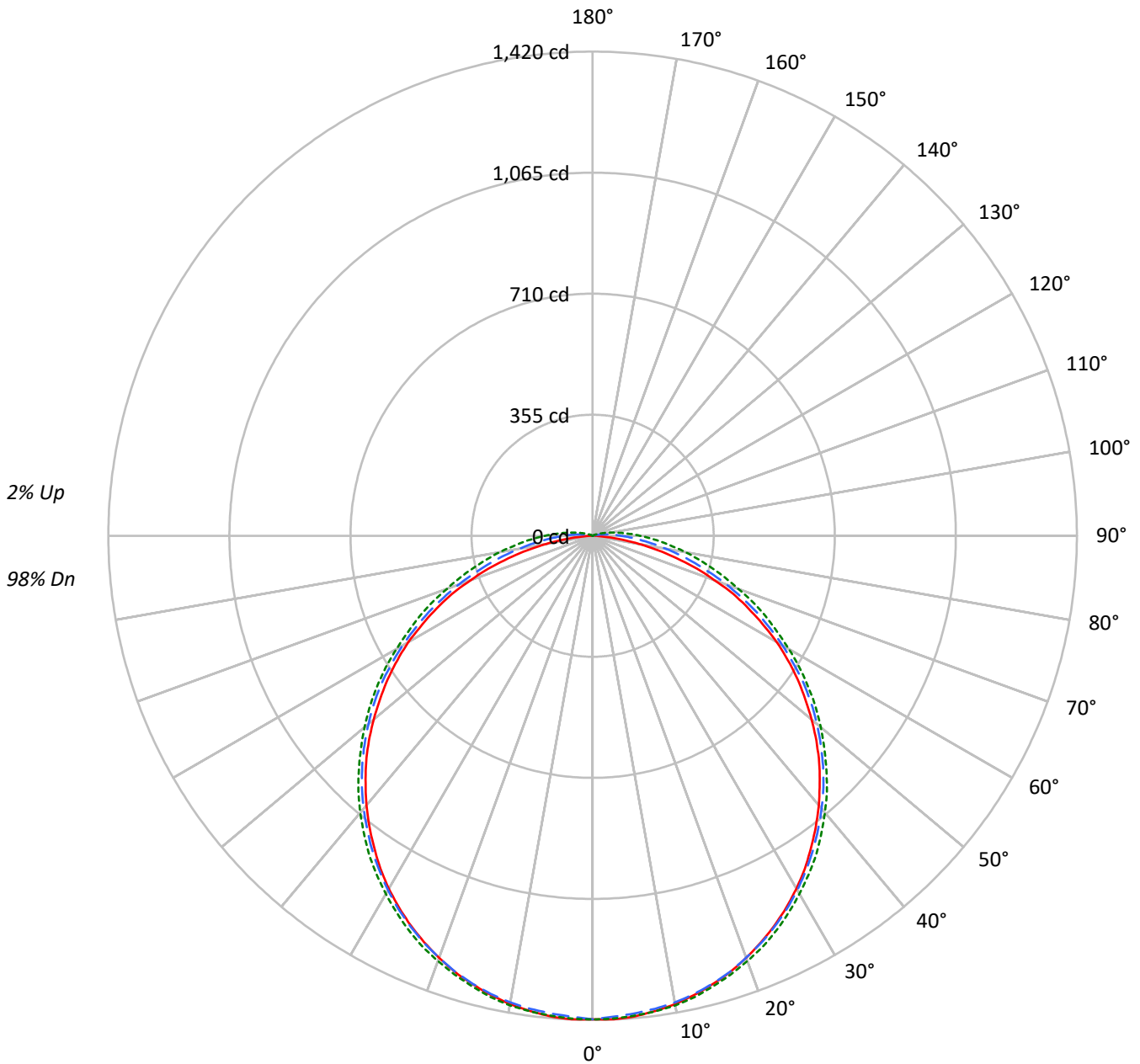
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4288.0 lumens  
Efficiency: N/A  
Efficacy: 94.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38  
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 2' x H: 0.17')  
CIE Type: Direct  
  
Input Watts (W): 45.6  
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°	7633	7633	7633
5°	7590	7481	7523
10°	7512	7366	7425
15°	7420	7235	7293
20°	7322	7086	7165
25°	7210	6933	7034
30°	7085	6768	6876
35°	6932	6585	6721
40°	6773	6392	6532
45°	6601	6180	6325
50°	6384	5933	6100
55°	6148	5661	5848
60°	5868	5300	5546
65°	5443	4896	5253
70°	4854	4415	4907
75°	4046	3887	4620
80°	2898	3374	4405
85°	1395	2864	4285



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.2	3.1
10°-20°	385.0	9.0
20°-30°	584.1	13.6
30°-40°	706.3	16.5
40°-50°	737.0	17.2
50°-60°	673.8	15.7
60°-70°	525.3	12.2
70°-80°	328.6	7.7
80°-90°	149.2	3.5
90°-100°	50.0	1.2
100°-110°	12.5	0.3
110°-120°	2.0	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°	1103.3	25.7
0°-40°	1809.6	42.2
0°-60°	3220.4	75.1
0°-90°	4223.5	98.5
90°-120°	64.5	1.5
90°-150°	64.5	1.5
90°-180°	65.0	1.5
0°-180°	4288.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1418	1418	1418	1418	1418	
5°	1415	1412	1406	1413	1413	134
15°	1361	1364	1360	1368	1367	384
25°	1261	1262	1264	1274	1276	581
35°	1117	1122	1126	1138	1142	699
45°	940	948	956	965	970	724
55°	733	742	756	767	772	655
65°	504	512	530	551	560	499
75°	255	271	310	347	360	272
85°	44	82	140	185	202	56
90°	0	30	83	124	139	2
95°	0	8	43	78	90	0
105°	1	1	7	21	28	1
115°	1	1	1	4	5	1
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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CATALOG NUMBER: HVSL12-2-LD4-2HI-40-UNV-O-EDD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1418.2	1418.2	1418.2	1418.2	1418.2
2.5°	1419.9	1417.9	1411.5	1417.9	1417.5
5°	1415.2	1412.5	1406.2	1412.9	1412.9
7.5°	1405.8	1404.8	1399.2	1406.8	1406.8
10°	1394.8	1394.5	1389.8	1398.2	1398.5
12.5°	1379.4	1380.8	1376.4	1384.4	1385.4
15°	1361.4	1363.7	1360.0	1367.7	1367.4
17.5°	1341.7	1343.0	1340.3	1349.0	1348.7
20°	1317.2	1318.9	1316.9	1325.9	1326.9
22.5°	1290.2	1292.5	1292.2	1301.5	1304.2
25°	1261.4	1262.4	1263.8	1274.5	1276.5
27.5°	1229.7	1231.3	1233.7	1243.4	1245.4
30°	1194.9	1197.6	1200.2	1210.3	1212.9
32.5°	1158.1	1160.8	1164.1	1177.2	1178.5
35°	1116.6	1121.7	1126.3	1137.7	1142.4
37.5°	1075.2	1081.5	1085.9	1097.9	1101.6
40°	1031.4	1037.7	1044.8	1057.5	1059.8
42.5°	985.6	992.9	1001.3	1012.7	1016.7
45°	939.5	947.8	955.5	964.9	969.5
47.5°	889.6	898.0	907.4	918.1	921.1
50°	838.2	847.9	857.9	867.9	873.3
52.5°	785.3	797.0	808.4	819.1	824.1
55°	733.2	741.9	755.6	766.6	771.6
57.5°	679.0	686.4	698.7	716.8	719.5
60°	623.9	630.5	643.2	658.0	664.0
62.5°	563.0	572.0	585.4	604.1	609.5
65°	503.8	512.5	530.2	551.3	560.0
67.5°	446.7	449.7	472.4	494.5	508.5
70°	379.1	390.5	416.9	444.0	454.7
72.5°	321.0	332.3	361.4	393.2	406.5
75°	255.1	270.8	310.3	347.4	360.4
77.5°	197.3	214.6	263.4	300.9	315.9
80°	137.7	164.8	218.0	260.1	276.5
82.5°	86.6	120.0	176.9	221.0	235.4
85°	44.1	81.6	140.1	185.2	201.6
87.5°	11.7	52.8	109.0	152.1	168.8
90°	0.3	30.4	82.6	124.0	139.1
92.5°	0.3	17.1	61.5	98.6	114.0
95°	0.3	8.0	42.8	77.6	89.6
97.5°	0.3	3.3	29.4	58.5	70.5
100°	0.3	1.7	18.7	42.5	52.8
102.5°	0.7	1.0	11.7	30.4	38.8
105°	0.7	1.0	7.0	20.7	27.7



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CATALOG NUMBER: HVSL12-2-LD4-2HI-40-UNV-O-EDD

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1.0	1.0	1.3	5.7	8.4
115°	1.0	1.0	1.3	3.7	5.3
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°	0.7	1.0	4.0	14.0	19.1
110°	1.0	1.0	2.3	8.7	12.7



(END OF REPORT)