

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: P580320

Luminaire Tested: **HVSL12-8-LD4-3STD-40-UNV-O-EDD**

Issue Date: 12/16/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P580320  
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: HVSL12-8-LD4-3STD-40-UNV-O-EDD  
Description: 8 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

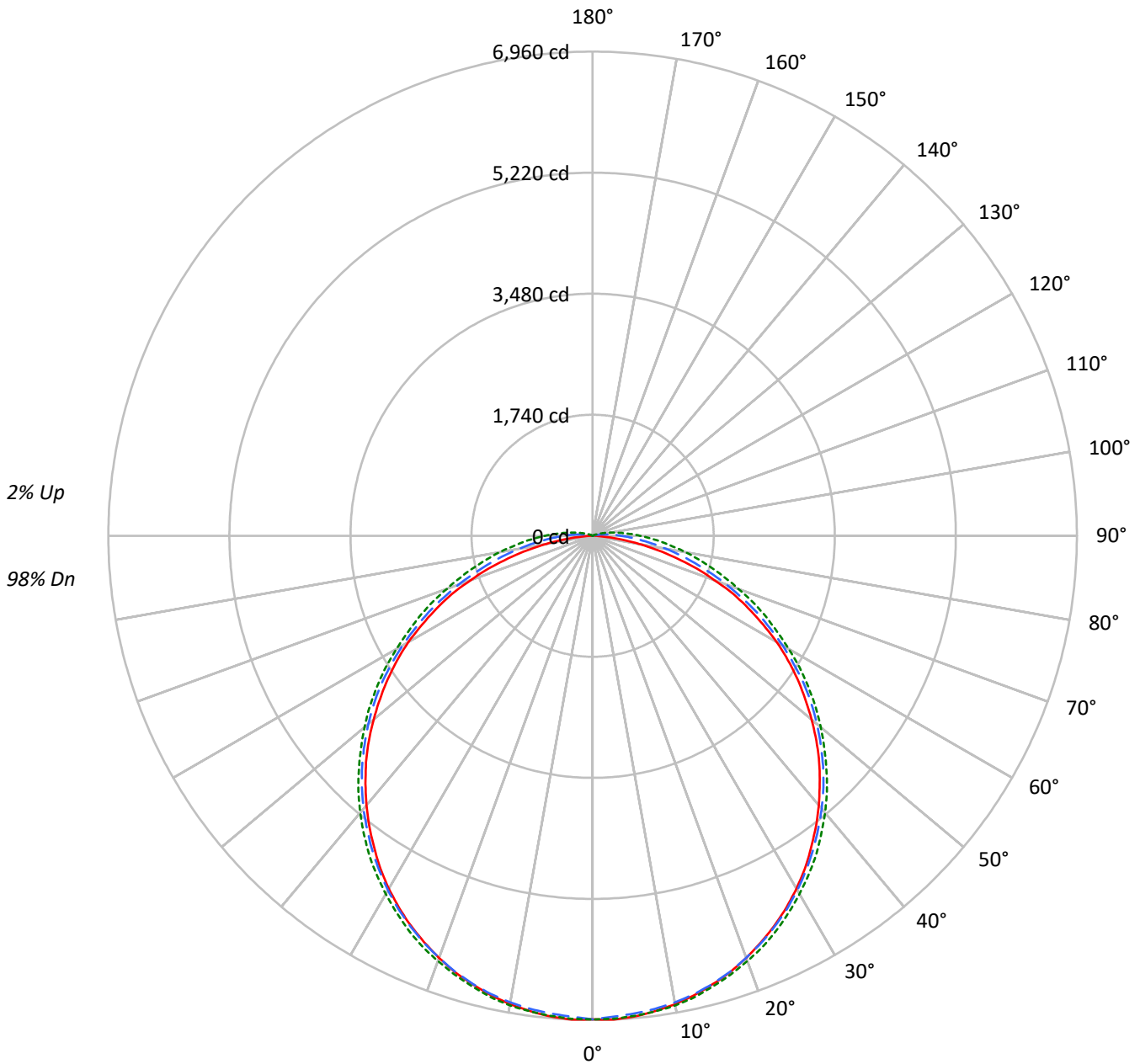
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21020.0 lumens  
Efficiency: N/A  
Efficacy: 103.9 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38  
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 8' x H: 0.17')  
CIE Type: Direct  
  
Input Watts (W): 202.3  
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	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°	9354	9354	9354
5°	9353	9203	9220
10°	9307	9095	9099
15°	9244	8968	8938
20°	9176	8818	8781
25°	9092	8661	8619
30°	8992	8491	8427
35°	8862	8299	8237
40°	8728	8095	8005
45°	8584	7869	7751
50°	8392	7601	7475
55°	8187	7305	7167
60°	7943	6900	6796
65°	7527	6443	6438
70°	6915	5893	6014
75°	6032	5289	5662
80°	4679	4726	5398
85°	2697	4214	5251



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	657.9	3.1
10°-20°	1887.1	9.0
20°-30°	2863.4	13.6
30°-40°	3462.3	16.5
40°-50°	3612.6	17.2
50°-60°	3303.0	15.7
60°-70°	2574.9	12.2
70°-80°	1610.7	7.7
80°-90°	731.6	3.5
90°-100°	245.2	1.2
100°-110°	61.5	0.3
110°-120°	9.7	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°	5408.4	25.7
0°-40°	8870.7	42.2
0°-60°	15786.4	75.1
0°-90°	20703.6	98.5
90°-120°	316.4	1.5
90°-150°	316.4	1.5
90°-180°	316.0	1.5
0°-180°	21020.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6952	6952	6952	6952	6952	
5°	6937	6924	6893	6926	6926	659
15°	6674	6685	6667	6705	6703	1884
25°	6184	6188	6195	6247	6257	2849
35°	5474	5498	5521	5577	5600	3426
45°	4605	4646	4684	4730	4753	3549
55°	3594	3637	3704	3758	3782	3211
65°	2470	2512	2599	2702	2745	2444
75°	1250	1328	1521	1703	1767	1333
85°	216	400	687	908	988	274
90°	2	149	405	608	682	9
95°	2	39	210	380	439	1
105°	3	5	34	102	136	3
115°	5	5	7	18	26	3
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



TEST NUMBER: P580320

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6952.1	6952.1	6952.1	6952.1	6952.1
2.5°	6960.3	6950.5	6919.4	6950.5	6948.9
5°	6937.4	6924.3	6893.1	6925.9	6925.9
7.5°	6891.5	6886.6	6858.7	6896.4	6896.4
10°	6837.4	6835.8	6812.8	6853.8	6855.5
12.5°	6762.0	6768.6	6747.3	6786.6	6791.5
15°	6673.5	6685.0	6667.0	6704.7	6703.0
17.5°	6576.8	6583.4	6570.3	6612.9	6611.3
20°	6457.2	6465.4	6455.6	6499.8	6504.7
22.5°	6324.5	6335.9	6334.3	6380.2	6393.3
25°	6183.5	6188.4	6195.0	6247.4	6257.3
27.5°	6027.8	6036.0	6047.5	6095.0	6104.8
30°	5857.4	5870.5	5883.6	5932.8	5945.9
32.5°	5677.1	5690.2	5706.6	5770.5	5777.1
35°	5473.9	5498.5	5521.4	5577.1	5600.1
37.5°	5270.7	5301.8	5323.1	5382.1	5400.1
40°	5056.0	5087.1	5121.5	5183.8	5195.3
42.5°	4831.4	4867.5	4908.5	4964.2	4983.8
45°	4605.3	4646.2	4683.9	4729.8	4752.8
47.5°	4361.1	4402.0	4447.9	4500.4	4515.1
50°	4108.7	4156.2	4205.4	4254.5	4280.8
52.5°	3849.7	3907.1	3962.8	4015.3	4039.8
55°	3594.1	3636.7	3703.9	3758.0	3782.5
57.5°	3328.6	3364.6	3425.3	3513.8	3526.9
60°	3058.2	3090.9	3153.2	3225.3	3254.8
62.5°	2759.9	2804.1	2869.7	2961.5	2987.7
65°	2469.8	2512.4	2599.3	2702.5	2745.1
67.5°	2189.5	2204.3	2315.7	2423.9	2492.7
70°	1858.5	1914.2	2043.7	2176.4	2228.9
72.5°	1573.3	1629.1	1771.6	1927.3	1992.9
75°	1250.5	1327.5	1520.9	1702.8	1766.7
77.5°	966.9	1052.2	1291.4	1475.0	1548.7
80°	675.2	808.0	1068.6	1275.1	1355.4
82.5°	424.5	588.4	867.0	1083.3	1153.8
85°	216.3	399.9	686.7	907.9	988.2
87.5°	57.4	258.9	534.3	745.7	827.6
90°	1.6	149.1	404.8	608.0	681.8
92.5°	1.6	83.6	301.6	483.5	558.9
95°	1.6	39.3	209.8	380.2	439.2
97.5°	1.6	16.4	144.2	286.8	345.8
100°	1.6	8.2	91.8	208.1	258.9
102.5°	3.3	4.9	57.4	149.1	190.1
105°	3.3	4.9	34.4	101.6	136.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	4.9	4.9	6.6	27.9	41.0
115°	4.9	4.9	6.6	18.0	26.2
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°	3.3	4.9	19.7	68.8	93.4
110°	4.9	4.9	11.5	42.6	62.3



(END OF REPORT)