

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: P580520

Luminaire Tested: **HVSL4-3-LD4-1HI-40-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580520
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: HVSL4-3-LD4-1HI-40-UNV-O-EDD
Description: 3 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

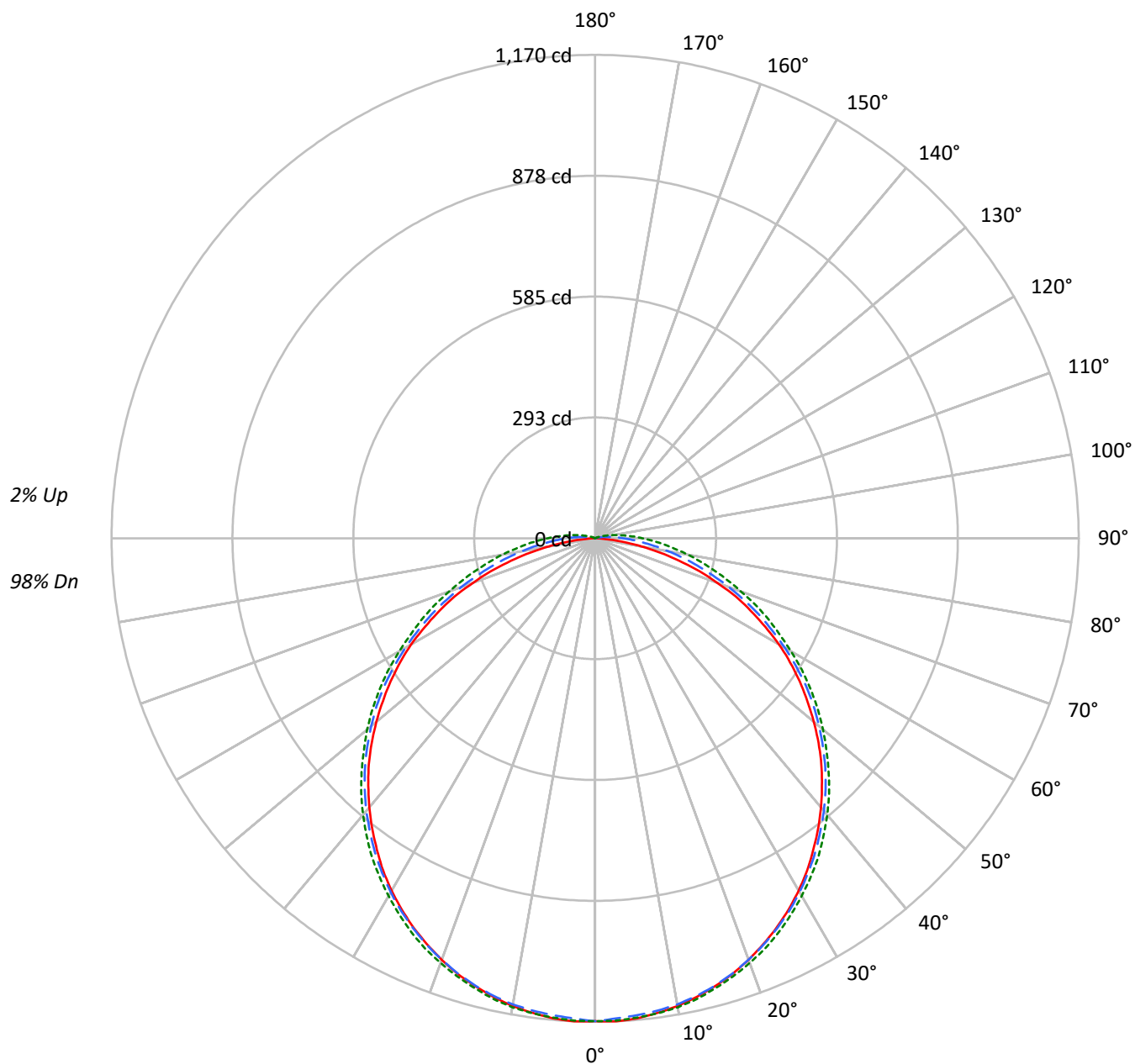
Lumens per Lamp: N/A
Luminaire Lumens: 3534.0 lumens
Efficiency: N/A
Efficacy: 109.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 3' x H: 0.17')
CIE Type: Direct

Input Watts (W): 32.3
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
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°	12581	12581	12581
5°	12542	12106	12054
10°	12442	11708	11577
15°	12320	11301	11075
20°	12189	10876	10598
25°	12035	10454	10132
30°	11860	10021	9642
35°	11640	9566	9163
40°	11412	9100	8646
45°	11166	8606	8109
50°	10849	8063	7551
55°	10507	7485	6961
60°	10098	6791	6312
65°	9449	6040	5672
70°	8532	5200	4967
75°	7240	4312	4309
80°	5350	3450	3682
85°	2749	2598	3054



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.6	3.1
10°-20°	317.3	9.0
20°-30°	481.4	13.6
30°-40°	582.1	16.5
40°-50°	607.4	17.2
50°-60°	555.3	15.7
60°-70°	432.9	12.2
70°-80°	270.8	7.7
80°-90°	123.0	3.5
90°-100°	41.2	1.2
100°-110°	10.4	0.3
110°-120°	1.6	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°	909.3	25.7
0°-40°	1491.4	42.2
0°-60°	2654.1	75.1
0°-90°	3480.8	98.5
90°-120°	53.2	1.5
90°-150°	53.2	1.5
90°-180°	53.0	1.5
0°-180°	3534.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1169	1169	1169	1169	1169	
5°	1166	1164	1159	1164	1164	111
15°	1122	1124	1121	1127	1127	317
25°	1040	1040	1042	1050	1052	479
35°	920	924	928	938	942	576
45°	774	781	788	795	799	597
55°	604	611	623	632	636	540
65°	415	422	437	454	462	411
75°	210	223	256	286	297	224
85°	36	67	116	153	166	46
90°	0	25	68	102	115	1
95°	0	7	35	64	74	0
105°	1	1	6	17	23	1
115°	1	1	1	3	4	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1168.8	1168.8	1168.8	1168.8	1168.8
2.5°	1170.2	1168.6	1163.3	1168.6	1168.3
5°	1166.4	1164.1	1158.9	1164.4	1164.4
7.5°	1158.6	1157.8	1153.1	1159.5	1159.5
10°	1149.5	1149.3	1145.4	1152.3	1152.6
12.5°	1136.9	1138.0	1134.4	1141.0	1141.8
15°	1122.0	1123.9	1120.9	1127.2	1127.0
17.5°	1105.7	1106.8	1104.6	1111.8	1111.5
20°	1085.6	1087.0	1085.3	1092.8	1093.6
22.5°	1063.3	1065.2	1065.0	1072.7	1074.9
25°	1039.6	1040.4	1041.5	1050.4	1052.0
27.5°	1013.4	1014.8	1016.7	1024.7	1026.4
30°	984.8	987.0	989.2	997.4	999.7
32.5°	954.5	956.7	959.4	970.2	971.3
35°	920.3	924.4	928.3	937.7	941.5
37.5°	886.1	891.4	894.9	904.9	907.9
40°	850.0	855.3	861.1	871.5	873.5
42.5°	812.3	818.3	825.2	834.6	837.9
45°	774.3	781.2	787.5	795.2	799.1
47.5°	733.2	740.1	747.8	756.6	759.1
50°	690.8	698.8	707.0	715.3	719.7
52.5°	647.2	656.9	666.3	675.1	679.2
55°	604.3	611.4	622.7	631.8	635.9
57.5°	559.6	565.7	575.9	590.8	593.0
60°	514.2	519.7	530.1	542.3	547.2
62.5°	464.0	471.4	482.5	497.9	502.3
65°	415.2	422.4	437.0	454.4	461.5
67.5°	368.1	370.6	389.3	407.5	419.1
70°	312.5	321.8	343.6	365.9	374.7
72.5°	264.5	273.9	297.9	324.0	335.1
75°	210.2	223.2	255.7	286.3	297.0
77.5°	162.6	176.9	217.1	248.0	260.4
80°	113.5	135.8	179.7	214.4	227.9
82.5°	71.4	98.9	145.8	182.1	194.0
85°	36.4	67.2	115.5	152.6	166.1
87.5°	9.6	43.5	89.8	125.4	139.1
90°	0.3	25.1	68.1	102.2	114.6
92.5°	0.3	14.1	50.7	81.3	94.0
95°	0.3	6.6	35.3	63.9	73.8
97.5°	0.3	2.8	24.2	48.2	58.1
100°	0.3	1.4	15.4	35.0	43.5
102.5°	0.6	0.8	9.6	25.1	32.0
105°	0.6	0.8	5.8	17.1	22.9



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CATALOG NUMBER: HVSL4-3-LD4-1HI-40-UNV-O-EDD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.8	0.8	1.1	4.7	6.9
115°	0.8	0.8	1.1	3.0	4.4
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°	0.6	0.8	3.3	11.6	15.7
110°	0.8	0.8	1.9	7.2	10.5



(END OF REPORT)