

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: P580568

Luminaire Tested: **HVSL4-4-LD4-1HI-40-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580568
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: HVSL4-4-LD4-1HI-40-UNV-O-EDD
Description: 4 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

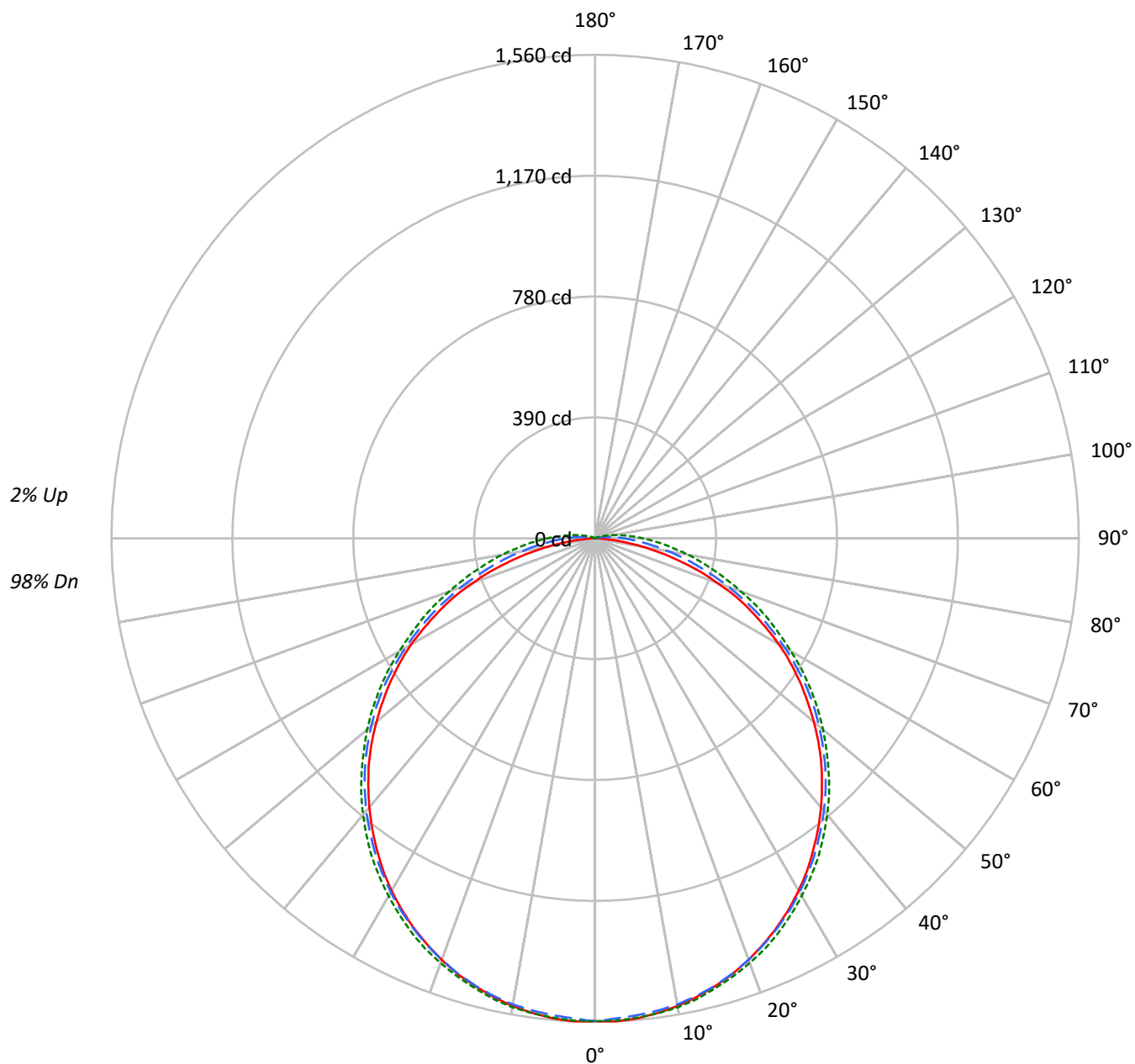
Lumens per Lamp: N/A
Luminaire Lumens: 4711.9 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 43.1
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°	12556	12116	12054
10°	12473	11727	11577
15°	12365	11328	11074
20°	12250	10911	10598
25°	12111	10495	10132
30°	11952	10068	9641
35°	11750	9618	9163
40°	11541	9156	8645
45°	11315	8667	8108
50°	11020	8129	7551
55°	10703	7554	6962
60°	10323	6860	6312
65°	9707	6111	5672
70°	8823	5268	4967
75°	7566	4376	4309
80°	5693	3510	3682
85°	3043	2650	3055



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.5	3.1
10°-20°	423.0	9.0
20°-30°	641.9	13.6
30°-40°	776.1	16.5
40°-50°	809.8	17.2
50°-60°	740.4	15.7
60°-70°	577.2	12.2
70°-80°	361.1	7.7
80°-90°	164.0	3.5
90°-100°	55.0	1.2
100°-110°	13.8	0.3
110°-120°	2.2	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°	1212.4	25.7
0°-40°	1988.5	42.2
0°-60°	3538.8	75.1
0°-90°	4641.0	98.5
90°-120°	70.9	1.5
90°-150°	70.9	1.5
90°-180°	71.0	1.5
0°-180°	4711.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1558	1558	1558	1558	1558	
5°	1555	1552	1545	1553	1553	148
15°	1496	1499	1494	1503	1503	422
25°	1386	1387	1389	1400	1403	639
35°	1227	1233	1238	1250	1255	768
45°	1032	1042	1050	1060	1065	795
55°	806	815	830	842	848	720
65°	554	563	583	606	615	548
75°	280	298	341	382	396	299
85°	48	90	154	204	222	61
90°	0	33	91	136	153	2
95°	0	9	47	85	98	0
105°	1	1	8	23	30	1
115°	1	1	2	4	6	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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CATALOG NUMBER: HVSL4-4-LD4-1HI-40-UNV-O-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1558.4	1558.4	1558.4	1558.4	1558.4
2.5°	1560.3	1558.1	1551.1	1558.1	1557.7
5°	1555.1	1552.2	1545.2	1552.6	1552.6
7.5°	1544.9	1543.7	1537.5	1546.0	1546.0
10°	1532.7	1532.4	1527.2	1536.4	1536.8
12.5°	1515.8	1517.3	1512.5	1521.3	1522.4
15°	1496.0	1498.6	1494.5	1503.0	1502.6
17.5°	1474.3	1475.8	1472.8	1482.4	1482.0
20°	1447.5	1449.3	1447.1	1457.0	1458.1
22.5°	1417.7	1420.3	1419.9	1430.2	1433.2
25°	1386.1	1387.2	1388.7	1400.5	1402.7
27.5°	1351.2	1353.1	1355.6	1366.3	1368.5
30°	1313.0	1316.0	1318.9	1329.9	1332.9
32.5°	1272.6	1275.6	1279.2	1293.6	1295.0
35°	1227.1	1232.6	1237.7	1250.2	1255.4
37.5°	1181.5	1188.5	1193.3	1206.5	1210.5
40°	1133.4	1140.4	1148.1	1162.0	1164.6
42.5°	1083.0	1091.1	1100.3	1112.8	1117.2
45°	1032.4	1041.5	1050.0	1060.3	1065.4
47.5°	977.6	986.8	997.1	1008.8	1012.1
50°	921.0	931.7	942.7	953.7	959.6
52.5°	863.0	875.8	888.3	900.1	905.6
55°	805.7	815.2	830.3	842.4	847.9
57.5°	746.2	754.2	767.8	787.7	790.6
60°	685.5	692.9	706.8	723.0	729.6
62.5°	618.7	628.6	643.3	663.9	669.7
65°	553.6	563.2	582.7	605.8	615.4
67.5°	490.8	494.1	519.1	543.4	558.8
70°	416.6	429.1	458.1	487.9	499.6
72.5°	352.7	365.2	397.1	432.0	446.7
75°	280.3	297.6	340.9	381.7	396.0
77.5°	216.8	235.9	289.5	330.6	347.2
80°	151.4	181.1	239.5	285.8	303.8
82.5°	95.2	131.9	194.3	242.8	258.6
85°	48.5	89.6	153.9	203.5	221.5
87.5°	12.9	58.0	119.8	167.2	185.5
90°	0.4	33.4	90.7	136.3	152.8
92.5°	0.4	18.7	67.6	108.4	125.3
95°	0.4	8.8	47.0	85.2	98.5
97.5°	0.4	3.7	32.3	64.3	77.5
100°	0.4	1.8	20.6	46.7	58.0
102.5°	0.7	1.1	12.9	33.4	42.6
105°	0.7	1.1	7.7	22.8	30.5



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CATALOG NUMBER: HVSL4-4-LD4-1HI-40-UNV-O-EDD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.1	1.1	1.5	6.2	9.2
115°	1.1	1.1	1.5	4.0	5.9
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	1.1	4.4	15.4	20.9
110°	1.1	1.1	2.6	9.6	14.0



(END OF REPORT)