

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: P580215

Luminaire Tested: **HVSL12-4-LD4-2LO-40-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580215
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: HVSL12-4-LD4-2LO-40-UNV-O-EDD-90
Description: 4 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

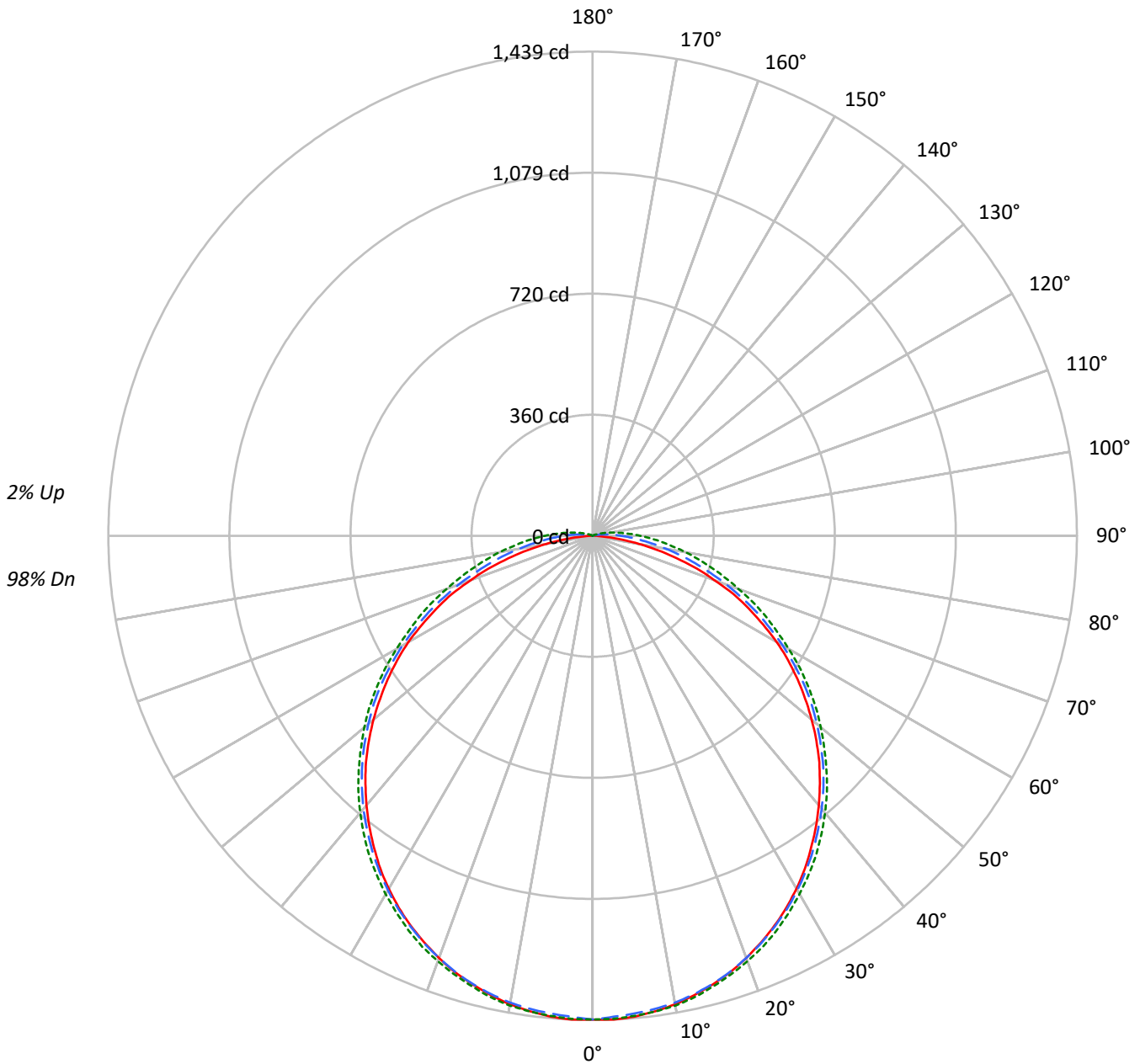
Lumens per Lamp: N/A
Luminaire Lumens: 4347.0 lumens
Efficiency: N/A
Efficacy: 89.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 48.8
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				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°	3869	3869	3869
5°	3861	3802	3813
10°	3836	3752	3763
15°	3802	3695	3697
20°	3767	3628	3632
25°	3725	3559	3565
30°	3675	3484	3485
35°	3613	3400	3407
40°	3549	3311	3311
45°	3479	3213	3206
50°	3389	3097	3092
55°	3291	2969	2964
60°	3174	2796	2811
65°	2986	2601	2663
70°	2713	2367	2487
75°	2327	2110	2342
80°	1750	1866	2233
85°	935	1633	2172



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.1	3.1
10°-20°	390.3	9.0
20°-30°	592.2	13.6
30°-40°	716.0	16.5
40°-50°	747.1	17.2
50°-60°	683.1	15.7
60°-70°	532.5	12.2
70°-80°	333.1	7.7
80°-90°	151.3	3.5
90°-100°	50.7	1.2
100°-110°	12.7	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°	1118.5	25.7
0°-40°	1834.5	42.2
0°-60°	3264.7	75.1
0°-90°	4281.6	98.5
90°-120°	65.4	1.5
90°-150°	65.4	1.5
90°-180°	65.0	1.5
0°-180°	4347.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1438	1438	1438	1438	1438	
5°	1435	1432	1426	1432	1432	136
15°	1380	1382	1379	1386	1386	390
25°	1279	1280	1281	1292	1294	589
35°	1132	1137	1142	1153	1158	709
45°	952	961	969	978	983	734
55°	743	752	766	777	782	664
65°	511	520	538	559	568	505
75°	259	274	314	352	365	276
85°	45	83	142	188	204	57
90°	0	31	84	126	141	2
95°	0	8	43	79	91	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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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1437.7	1437.7	1437.7	1437.7	1437.7
2.5°	1439.4	1437.4	1430.9	1437.4	1437.0
5°	1434.7	1432.0	1425.5	1432.3	1432.3
7.5°	1425.2	1424.2	1418.4	1426.2	1426.2
10°	1414.0	1413.7	1408.9	1417.4	1417.7
12.5°	1398.4	1399.8	1395.4	1403.5	1404.5
15°	1380.1	1382.5	1378.8	1386.5	1386.2
17.5°	1360.1	1361.5	1358.8	1367.6	1367.2
20°	1335.4	1337.1	1335.0	1344.2	1345.2
22.5°	1307.9	1310.3	1309.9	1319.4	1322.2
25°	1278.8	1279.8	1281.1	1292.0	1294.0
27.5°	1246.6	1248.3	1250.6	1260.5	1262.5
30°	1211.3	1214.0	1216.7	1226.9	1229.6
32.5°	1174.0	1176.8	1180.1	1193.4	1194.7
35°	1132.0	1137.1	1141.8	1153.4	1158.1
37.5°	1090.0	1096.4	1100.8	1113.0	1116.8
40°	1045.6	1052.0	1059.1	1072.0	1074.4
42.5°	999.2	1006.6	1015.1	1026.6	1030.7
45°	952.4	960.9	968.7	978.1	982.9
47.5°	901.9	910.4	919.8	930.7	933.7
50°	849.7	859.5	869.7	879.9	885.3
52.5°	796.1	808.0	819.5	830.4	835.5
55°	743.3	752.1	766.0	777.2	782.2
57.5°	688.4	695.8	708.4	726.7	729.4
60°	632.4	639.2	652.1	667.0	673.1
62.5°	570.8	579.9	593.5	612.4	617.9
65°	510.8	519.6	537.5	558.9	567.7
67.5°	452.8	455.9	478.9	501.3	515.5
70°	384.3	395.9	422.6	450.1	460.9
72.5°	325.4	336.9	366.4	398.6	412.1
75°	258.6	274.5	314.5	352.1	365.4
77.5°	200.0	217.6	267.1	305.0	320.3
80°	139.6	167.1	221.0	263.7	280.3
82.5°	87.8	121.7	179.3	224.0	238.6
85°	44.7	82.7	142.0	187.8	204.4
87.5°	11.9	53.6	110.5	154.2	171.2
90°	0.3	30.8	83.7	125.7	141.0
92.5°	0.3	17.3	62.4	100.0	115.6
95°	0.3	8.1	43.4	78.6	90.8
97.5°	0.3	3.4	29.8	59.3	71.5
100°	0.3	1.7	19.0	43.0	53.6
102.5°	0.7	1.0	11.9	30.8	39.3
105°	0.7	1.0	7.1	21.0	28.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.0	1.0	1.4	5.8	8.5
115°	1.0	1.0	1.4	3.7	5.4
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°	0.7	1.0	4.1	14.2	19.3
110°	1.0	1.0	2.4	8.8	12.9



(END OF REPORT)