

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: P580213

Luminaire Tested: **HVSL12-4-LD4-2LO-35-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580213
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-35-UNV-O-EDD-90
Description: 4 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 3500K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

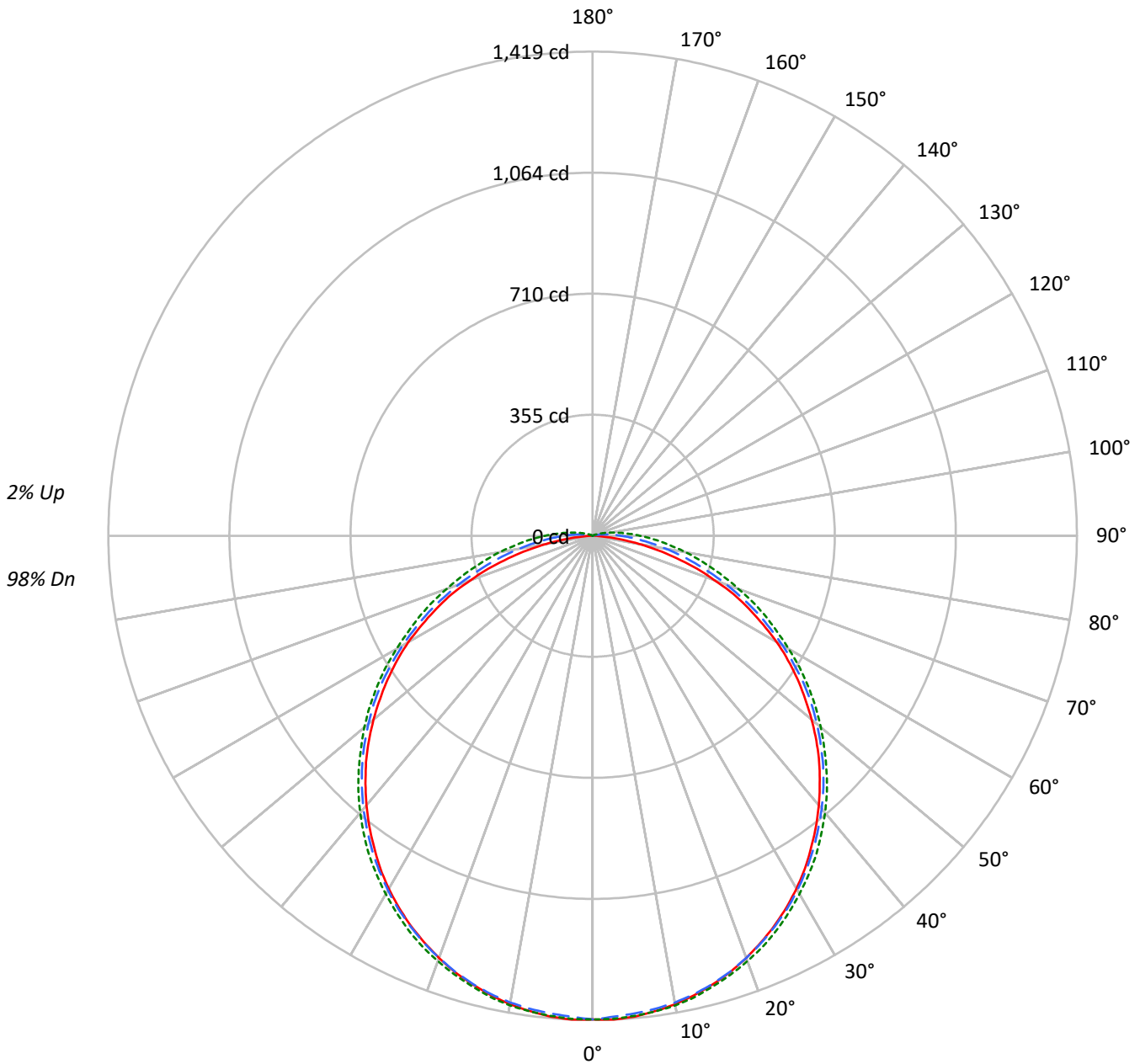
Lumens per Lamp: N/A
Luminaire Lumens: 4286.0 lumens
Efficiency: N/A
Efficacy: 87.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.17')
CIE Type: Direct

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°	3814	3814	3814
5°	3807	3748	3760
10°	3782	3700	3710
15°	3749	3643	3645
20°	3714	3578	3581
25°	3672	3510	3515
30°	3624	3436	3437
35°	3563	3352	3359
40°	3499	3265	3265
45°	3431	3168	3161
50°	3341	3054	3049
55°	3245	2927	2923
60°	3130	2757	2772
65°	2944	2564	2625
70°	2675	2334	2453
75°	2294	2080	2309
80°	1726	1840	2202
85°	922	1610	2141



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.1	3.1
10°-20°	384.8	9.0
20°-30°	583.8	13.6
30°-40°	706.0	16.5
40°-50°	736.6	17.2
50°-60°	673.5	15.7
60°-70°	525.0	12.2
70°-80°	328.4	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°	1102.8	25.7
0°-40°	1808.7	42.2
0°-60°	3218.9	75.1
0°-90°	4221.5	98.5
90°-120°	64.5	1.5
90°-150°	64.5	1.5
90°-180°	65.0	1.5
0°-180°	4286.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1418	1418	1418	1418	1418	
5°	1414	1412	1406	1412	1412	134
15°	1361	1363	1359	1367	1367	384
25°	1261	1262	1263	1274	1276	581
35°	1116	1121	1126	1137	1142	699
45°	939	947	955	964	969	724
55°	733	742	755	766	771	655
65°	504	512	530	551	560	498
75°	255	271	310	347	360	272
85°	44	82	140	185	202	56
90°	0	30	82	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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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1417.5	1417.5	1417.5	1417.5	1417.5
2.5°	1419.2	1417.2	1410.9	1417.2	1416.9
5°	1414.5	1411.9	1405.5	1412.2	1412.2
7.5°	1405.2	1404.2	1398.5	1406.2	1406.2
10°	1394.2	1393.8	1389.1	1397.5	1397.8
12.5°	1378.8	1380.1	1375.8	1383.8	1384.8
15°	1360.7	1363.1	1359.4	1367.1	1366.8
17.5°	1341.0	1342.4	1339.7	1348.4	1348.0
20°	1316.6	1318.3	1316.3	1325.3	1326.3
22.5°	1289.6	1291.9	1291.6	1300.9	1303.6
25°	1260.8	1261.8	1263.2	1273.9	1275.9
27.5°	1229.1	1230.7	1233.1	1242.8	1244.8
30°	1194.3	1197.0	1199.7	1209.7	1212.4
32.5°	1157.6	1160.2	1163.6	1176.6	1177.9
35°	1116.1	1121.1	1125.8	1137.2	1141.9
37.5°	1074.7	1081.0	1085.4	1097.4	1101.1
40°	1030.9	1037.3	1044.3	1057.0	1059.3
42.5°	985.1	992.5	1000.8	1012.2	1016.2
45°	939.0	947.4	955.1	964.4	969.1
47.5°	889.2	897.6	906.9	917.6	920.6
50°	837.8	847.5	857.5	867.5	872.9
52.5°	785.0	796.7	808.0	818.7	823.7
55°	732.8	741.5	755.2	766.3	771.3
57.5°	678.7	686.1	698.4	716.5	719.1
60°	623.6	630.2	642.9	657.6	663.7
62.5°	562.7	571.8	585.1	603.8	609.2
65°	503.6	512.3	530.0	551.0	559.7
67.5°	446.5	449.5	472.2	494.2	508.3
70°	378.9	390.3	416.7	443.8	454.5
72.5°	320.8	332.2	361.2	393.0	406.4
75°	255.0	270.7	310.1	347.2	360.2
77.5°	197.2	214.5	263.3	300.8	315.8
80°	137.7	164.7	217.9	260.0	276.4
82.5°	86.6	120.0	176.8	220.9	235.3
85°	44.1	81.5	140.0	185.1	201.5
87.5°	11.7	52.8	108.9	152.0	168.8
90°	0.3	30.4	82.5	124.0	139.0
92.5°	0.3	17.0	61.5	98.6	114.0
95°	0.3	8.0	42.8	77.5	89.6
97.5°	0.3	3.3	29.4	58.5	70.5
100°	0.3	1.7	18.7	42.4	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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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	19.0
110°	1.0	1.0	2.3	8.7	12.7



(END OF REPORT)