

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: P580214

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

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580214
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
Description: 4 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 3500K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

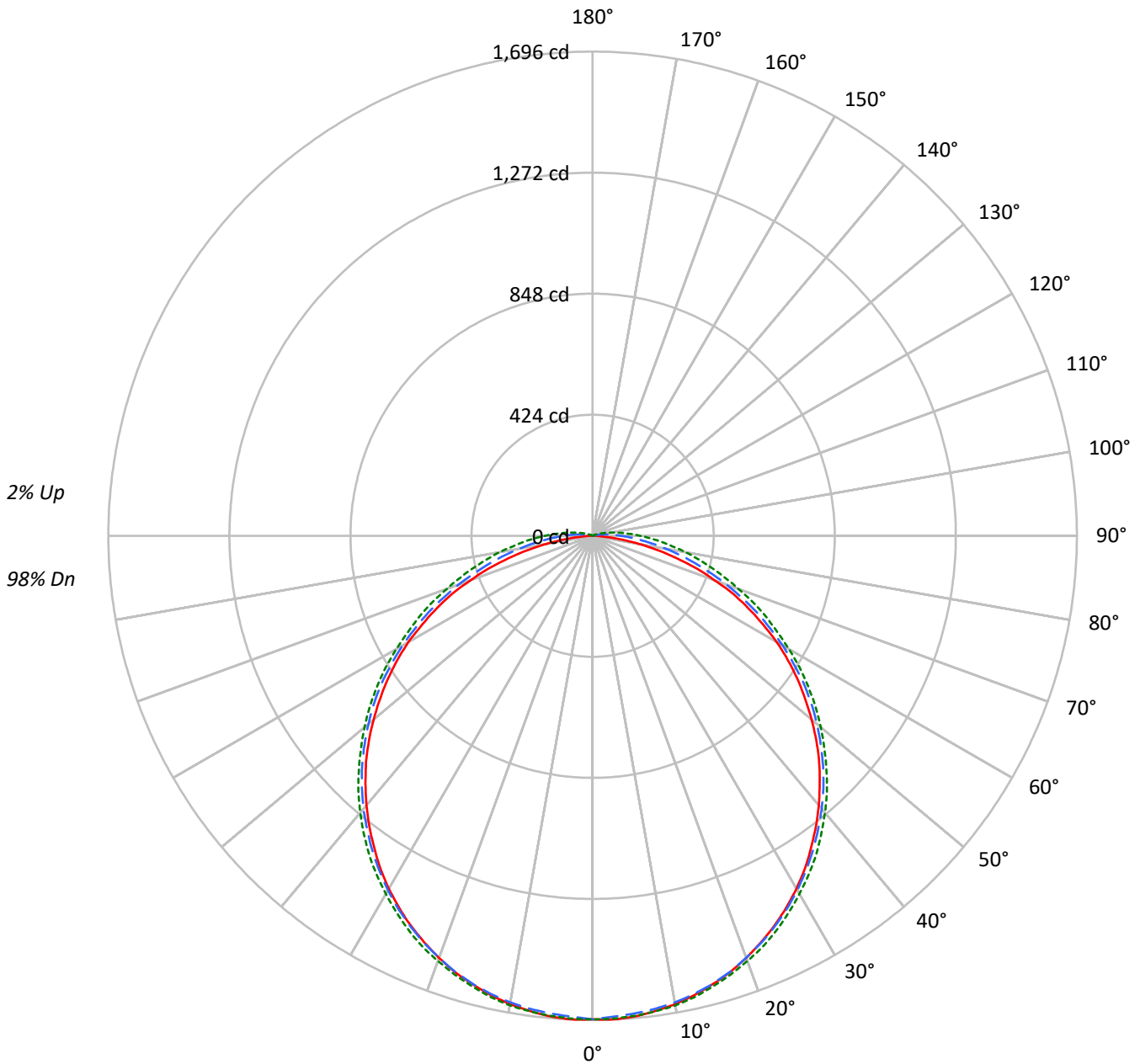
Lumens per Lamp: N/A
Luminaire Lumens: 5122.0 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.17')
CIE Type: Direct

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									
RC	80									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°	4559	4559	4559
5°	4550	4480	4493
10°	4519	4421	4434
15°	4480	4354	4356
20°	4438	4275	4279
25°	4389	4194	4201
30°	4331	4106	4107
35°	4257	4006	4014
40°	4182	3902	3901
45°	4100	3786	3778
50°	3993	3649	3643
55°	3878	3498	3493
60°	3741	3295	3312
65°	3518	3065	3138
70°	3197	2789	2931
75°	2742	2486	2759
80°	2062	2198	2631
85°	1102	1924	2559



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.3	3.1
10°-20°	459.8	9.0
20°-30°	697.7	13.6
30°-40°	843.7	16.5
40°-50°	880.3	17.2
50°-60°	804.9	15.7
60°-70°	627.4	12.2
70°-80°	392.5	7.7
80°-90°	178.3	3.5
90°-100°	59.7	1.2
100°-110°	15.0	0.3
110°-120°	2.4	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°	1317.9	25.7
0°-40°	2161.5	42.2
0°-60°	3846.7	75.1
0°-90°	5044.9	98.5
90°-120°	77.1	1.5
90°-150°	77.1	1.5
90°-180°	77.0	1.5
0°-180°	5122.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1694	1694	1694	1694	1694	
5°	1690	1687	1680	1688	1688	161
15°	1626	1629	1625	1634	1633	459
25°	1507	1508	1510	1522	1525	694
35°	1334	1340	1345	1359	1365	835
45°	1122	1132	1141	1152	1158	865
55°	876	886	902	916	922	782
65°	602	612	633	658	669	595
75°	305	324	371	415	430	325
85°	53	97	167	221	241	67
90°	0	36	99	148	166	2
95°	0	10	51	93	107	0
105°	1	1	8	25	33	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	0



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CATALOG NUMBER: HVSL12-4-LD4-2LO-35-UNV-O-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1694.0	1694.0	1694.0	1694.0	1694.0
2.5°	1696.0	1693.6	1686.1	1693.6	1693.2
5°	1690.5	1687.3	1679.7	1687.7	1687.7
7.5°	1679.3	1678.1	1671.3	1680.5	1680.5
10°	1666.1	1665.7	1660.1	1670.1	1670.5
12.5°	1647.7	1649.3	1644.1	1653.7	1654.9
15°	1626.2	1629.0	1624.6	1633.7	1633.3
17.5°	1602.6	1604.2	1601.0	1611.4	1611.0
20°	1573.4	1575.4	1573.0	1583.8	1585.0
22.5°	1541.1	1543.9	1543.5	1554.7	1557.9
25°	1506.8	1508.0	1509.5	1522.3	1524.7
27.5°	1468.8	1470.8	1473.6	1485.2	1487.6
30°	1427.3	1430.5	1433.7	1445.7	1448.8
32.5°	1383.4	1386.5	1390.5	1406.1	1407.7
35°	1333.8	1339.8	1345.4	1359.0	1364.6
37.5°	1284.3	1291.9	1297.1	1311.5	1315.9
40°	1232.0	1239.6	1248.0	1263.1	1265.9
42.5°	1177.3	1186.1	1196.1	1209.6	1214.4
45°	1122.2	1132.2	1141.3	1152.5	1158.1
47.5°	1062.7	1072.7	1083.8	1096.6	1100.2
50°	1001.2	1012.8	1024.7	1036.7	1043.1
52.5°	938.1	952.1	965.6	978.4	984.4
55°	875.8	886.2	902.5	915.7	921.7
57.5°	811.1	819.9	834.6	856.2	859.4
60°	745.2	753.2	768.4	785.9	793.1
62.5°	672.5	683.3	699.3	721.6	728.0
65°	601.8	612.2	633.4	658.5	668.9
67.5°	533.5	537.1	564.3	590.6	607.4
70°	452.9	466.4	498.0	530.3	543.1
72.5°	383.4	397.0	431.7	469.6	485.6
75°	304.7	323.5	370.6	414.9	430.5
77.5°	235.6	256.4	314.7	359.4	377.4
80°	164.5	196.9	260.4	310.7	330.3
82.5°	103.4	143.4	211.3	264.0	281.1
85°	52.7	97.4	167.3	221.2	240.8
87.5°	14.0	63.1	130.2	181.7	201.7
90°	0.4	36.3	98.6	148.2	166.1
92.5°	0.4	20.4	73.5	117.8	136.2
95°	0.4	9.6	51.1	92.6	107.0
97.5°	0.4	4.0	35.1	69.9	84.3
100°	0.4	2.0	22.4	50.7	63.1
102.5°	0.8	1.2	14.0	36.3	46.3
105°	0.8	1.2	8.4	24.8	33.1



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CATALOG NUMBER: HVSL12-4-LD4-2LO-35-UNV-O-EDD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.2	1.2	1.6	6.8	10.0
115°	1.2	1.2	1.6	4.4	6.4
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°	0.8	1.2	4.8	16.8	22.8
110°	1.2	1.2	2.8	10.4	15.2



(END OF REPORT)