

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: P580222

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

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580222
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-LD4-2STD-35-UNV-O-EDD
Description: 4 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 3500K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

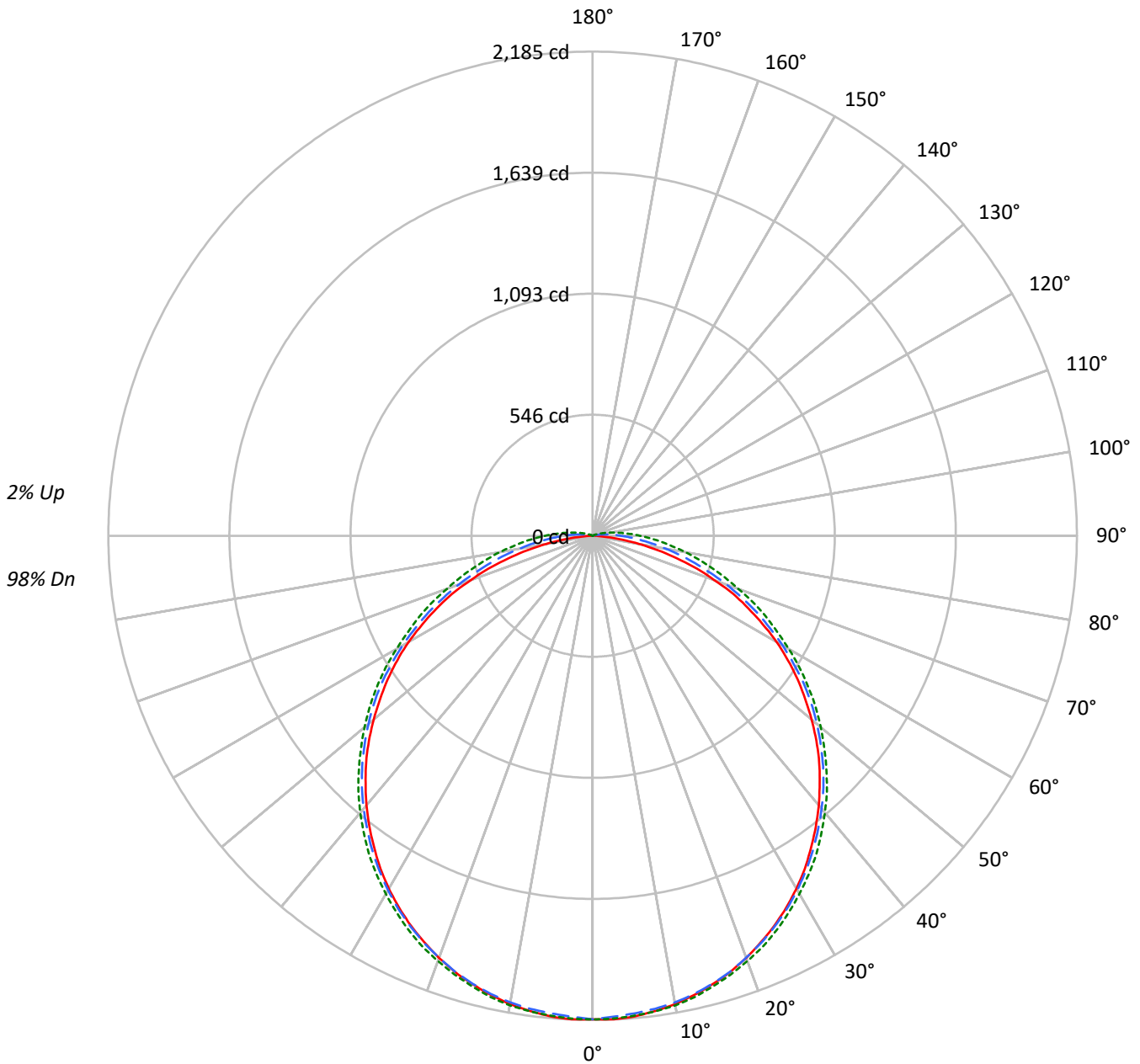
Lumens per Lamp: N/A
Luminaire Lumens: 6598.0 lumens
Efficiency: N/A
Efficacy: 95.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 69.2
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°	5872	5872	5872
5°	5861	5770	5788
10°	5822	5695	5712
15°	5771	5609	5611
20°	5718	5507	5513
25°	5653	5403	5411
30°	5579	5289	5290
35°	5484	5161	5171
40°	5386	5026	5025
45°	5281	4877	4866
50°	5144	4701	4693
55°	4995	4506	4499
60°	4818	4244	4267
65°	4531	3948	4042
70°	4119	3593	3775
75°	3532	3203	3555
80°	2656	2832	3389
85°	1420	2479	3296



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.5	3.1
10°-20°	592.3	9.0
20°-30°	898.8	13.6
30°-40°	1086.8	16.5
40°-50°	1134.0	17.2
50°-60°	1036.8	15.7
60°-70°	808.2	12.2
70°-80°	505.6	7.7
80°-90°	229.6	3.5
90°-100°	77.0	1.2
100°-110°	19.3	0.3
110°-120°	3.0	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°	1697.6	25.7
0°-40°	2784.4	42.2
0°-60°	4955.2	75.1
0°-90°	6498.7	98.5
90°-120°	99.3	1.5
90°-150°	99.3	1.5
90°-180°	99.0	1.5
0°-180°	6598.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2182	2182	2182	2182	2182	
5°	2178	2174	2164	2174	2174	207
15°	2095	2098	2093	2104	2104	591
25°	1941	1942	1945	1961	1964	894
35°	1718	1726	1733	1751	1758	1075
45°	1446	1458	1470	1485	1492	1114
55°	1128	1142	1163	1180	1187	1008
65°	775	789	816	848	862	767
75°	392	417	477	534	555	418
85°	68	126	216	285	310	86
90°	0	47	127	191	214	3
95°	0	12	66	119	138	0
105°	1	2	11	32	43	1
115°	2	2	2	6	8	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-LD4-2STD-35-UNV-O-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2182.2	2182.2	2182.2	2182.2	2182.2
2.5°	2184.8	2181.7	2171.9	2181.7	2181.2
5°	2177.6	2173.5	2163.7	2174.0	2174.0
7.5°	2163.2	2161.6	2152.9	2164.7	2164.7
10°	2146.2	2145.7	2138.5	2151.4	2151.9
12.5°	2122.5	2124.6	2117.9	2130.3	2131.8
15°	2094.8	2098.4	2092.7	2104.5	2104.0
17.5°	2064.4	2066.5	2062.4	2075.7	2075.2
20°	2026.9	2029.4	2026.3	2040.2	2041.8
22.5°	1985.2	1988.8	1988.3	2002.7	2006.8
25°	1941.0	1942.5	1944.6	1961.0	1964.1
27.5°	1892.1	1894.7	1898.3	1913.2	1916.3
30°	1838.6	1842.7	1846.8	1862.2	1866.4
32.5°	1782.0	1786.1	1791.3	1811.3	1813.4
35°	1718.2	1725.9	1733.1	1750.6	1757.8
37.5°	1654.4	1664.2	1670.9	1689.4	1695.1
40°	1587.0	1596.8	1607.6	1627.1	1630.7
42.5°	1516.5	1527.9	1540.7	1558.2	1564.4
45°	1445.6	1458.4	1470.2	1484.7	1491.9
47.5°	1368.9	1381.8	1396.2	1412.6	1417.3
50°	1289.7	1304.6	1320.0	1335.5	1343.7
52.5°	1208.4	1226.4	1243.9	1260.4	1268.1
55°	1128.1	1141.5	1162.6	1179.6	1187.3
57.5°	1044.8	1056.1	1075.2	1102.9	1107.1
60°	959.9	970.2	989.8	1012.4	1021.7
62.5°	866.3	880.2	900.8	929.6	937.8
65°	775.2	788.6	815.9	848.3	861.7
67.5°	687.3	691.9	726.9	760.8	782.5
70°	583.4	600.9	641.5	683.2	699.6
72.5°	493.9	511.3	556.1	605.0	625.5
75°	392.5	416.7	477.4	534.5	554.6
77.5°	303.5	330.3	405.4	463.0	486.1
80°	211.9	253.6	335.4	400.2	425.4
82.5°	133.2	184.7	272.1	340.0	362.2
85°	67.9	125.5	215.5	285.0	310.2
87.5°	18.0	81.3	167.7	234.1	259.8
90°	0.5	46.8	127.1	190.9	214.0
92.5°	0.5	26.2	94.7	151.8	175.4
95°	0.5	12.3	65.8	119.3	137.9
97.5°	0.5	5.1	45.3	90.0	108.5
100°	0.5	2.6	28.8	65.3	81.3
102.5°	1.0	1.5	18.0	46.8	59.7
105°	1.0	1.5	10.8	31.9	42.7



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

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.5	1.5	2.1	8.7	12.9
115°	1.5	1.5	2.1	5.7	8.2
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°	1.0	1.5	6.2	21.6	29.3
110°	1.5	1.5	3.6	13.4	19.5



(END OF REPORT)