

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: P580606

Luminaire Tested: **HVSL4-4-LD4-2STD-35-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580606
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-LD4-2STD-35-UNV-O-EDD
Description: 4 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 3500K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

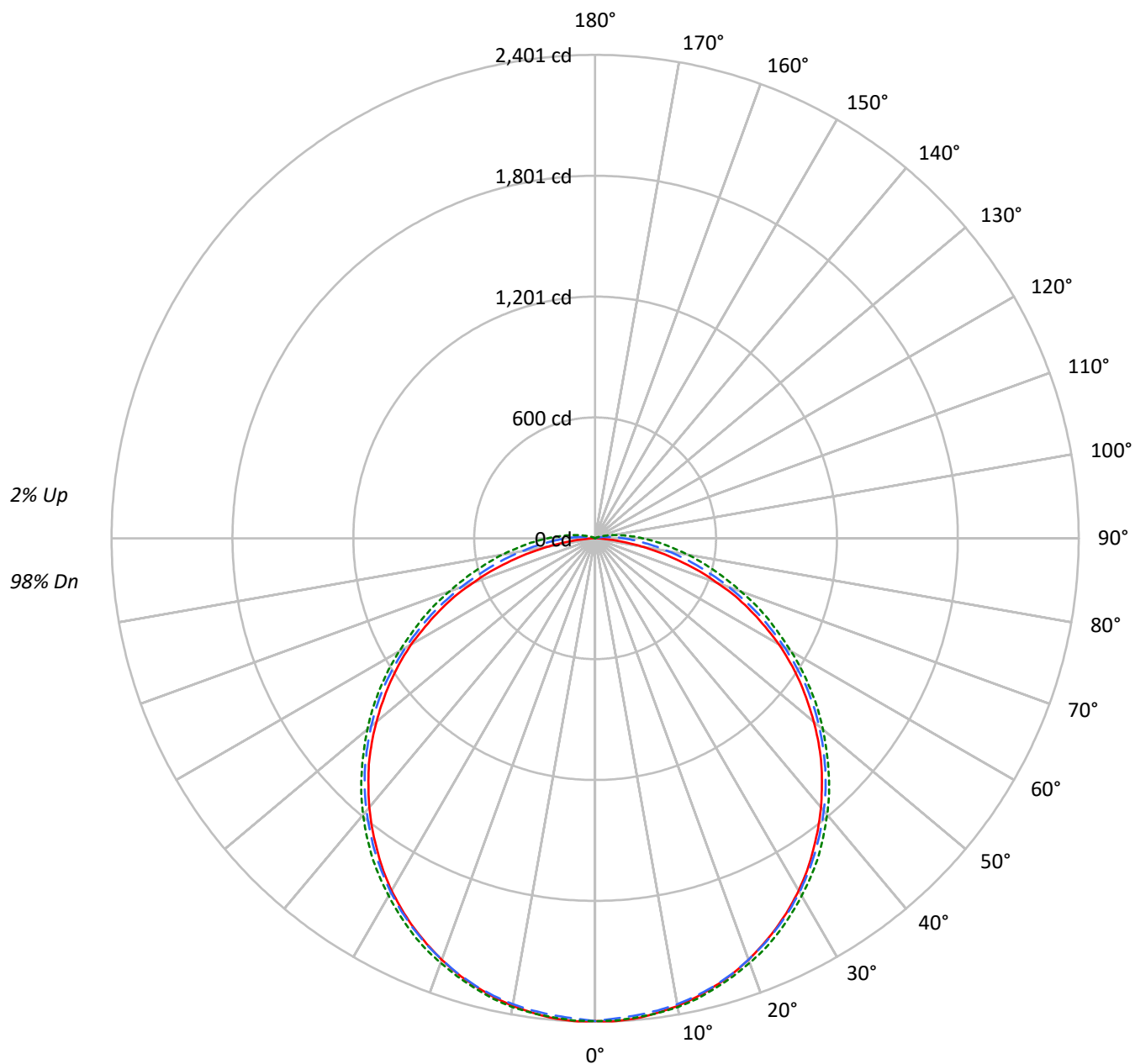
Lumens per Lamp: N/A
Luminaire Lumens: 7251.0 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 65.4
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°	19361	19361	19361
5°	19323	18644	18549
10°	19194	18046	17814
15°	19028	17432	17042
20°	18851	16790	16309
25°	18638	16150	15591
30°	18392	15493	14836
35°	18082	14800	14101
40°	17759	14089	13303
45°	17411	13338	12478
50°	16958	12509	11620
55°	16470	11624	10713
60°	15886	10557	9714
65°	14940	9402	8729
70°	13578	8107	7645
75°	11645	6735	6631
80°	8758	5401	5666
85°	4680	4080	4702



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.9	3.1
10°-20°	651.0	9.0
20°-30°	987.7	13.6
30°-40°	1194.3	16.5
40°-50°	1246.2	17.2
50°-60°	1139.4	15.7
60°-70°	888.2	12.2
70°-80°	555.6	7.7
80°-90°	252.4	3.5
90°-100°	84.6	1.2
100°-110°	21.2	0.3
110°-120°	3.3	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°	1865.7	25.7
0°-40°	3060.0	42.2
0°-60°	5445.6	75.1
0°-90°	7141.8	98.5
90°-120°	109.2	1.5
90°-150°	109.2	1.5
90°-180°	109.0	1.5
0°-180°	7251.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2398	2398	2398	2398	2398	
5°	2393	2389	2378	2389	2389	227
15°	2302	2306	2300	2313	2312	650
25°	2133	2135	2137	2155	2158	983
35°	1888	1897	1905	1924	1932	1182
45°	1589	1603	1616	1632	1640	1224
55°	1240	1254	1278	1296	1305	1108
65°	852	867	897	932	947	843
75°	431	458	525	587	609	460
85°	75	138	237	313	341	94
90°	1	51	140	210	235	3
95°	1	14	72	131	152	0
105°	1	2	12	35	47	1
115°	2	2	2	6	9	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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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2398.2	2398.2	2398.2	2398.2	2398.2
2.5°	2401.0	2397.6	2386.9	2397.6	2397.1
5°	2393.1	2388.6	2377.8	2389.1	2389.1
7.5°	2377.3	2375.6	2366.0	2379.0	2379.0
10°	2358.6	2358.1	2350.1	2364.3	2364.8
12.5°	2332.6	2334.9	2327.5	2341.1	2342.8
15°	2302.1	2306.0	2299.8	2312.8	2312.3
17.5°	2268.7	2271.0	2266.5	2281.2	2280.6
20°	2227.5	2230.3	2226.9	2242.2	2243.9
22.5°	2181.7	2185.6	2185.1	2200.9	2205.4
25°	2133.0	2134.7	2137.0	2155.1	2158.5
27.5°	2079.3	2082.2	2086.1	2102.5	2105.9
30°	2020.5	2025.1	2029.6	2046.5	2051.1
32.5°	1958.4	1962.9	1968.5	1990.6	1992.8
35°	1888.3	1896.7	1904.6	1923.9	1931.8
37.5°	1818.1	1828.9	1836.2	1856.6	1862.8
40°	1744.1	1754.8	1766.7	1788.2	1792.1
42.5°	1666.6	1679.1	1693.2	1712.4	1719.2
45°	1588.6	1602.8	1615.8	1631.6	1639.5
47.5°	1504.4	1518.5	1534.3	1552.4	1557.5
50°	1417.3	1433.7	1450.7	1467.6	1476.7
52.5°	1328.0	1347.8	1367.0	1385.1	1393.6
55°	1239.8	1254.5	1277.7	1296.3	1304.8
57.5°	1148.2	1160.7	1181.6	1212.1	1216.6
60°	1054.9	1066.2	1087.7	1112.6	1122.8
62.5°	952.0	967.3	989.9	1021.6	1030.6
65°	852.0	866.7	896.6	932.3	947.0
67.5°	755.3	760.4	798.8	836.1	859.9
70°	641.1	660.3	705.0	750.8	768.9
72.5°	542.7	562.0	611.1	664.8	687.5
75°	431.4	457.9	524.6	587.4	609.4
77.5°	333.6	363.0	445.5	508.8	534.3
80°	232.9	278.7	368.6	439.8	467.5
82.5°	146.4	203.0	299.1	373.7	398.0
85°	74.6	137.9	236.9	313.2	340.9
87.5°	19.8	89.3	184.3	257.2	285.5
90°	0.6	51.4	139.6	209.7	235.2
92.5°	0.6	28.8	104.0	166.8	192.8
95°	0.6	13.6	72.4	131.2	151.5
97.5°	0.6	5.7	49.8	98.9	119.3
100°	0.6	2.8	31.7	71.8	89.3
102.5°	1.1	1.7	19.8	51.4	65.6
105°	1.1	1.7	11.9	35.1	46.9



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CATALOG NUMBER: HVSL4-4-LD4-2STD-35-UNV-O-EDD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.7	1.7	2.3	9.6	14.1
115°	1.7	1.7	2.3	6.2	9.0
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°	1.1	1.7	6.8	23.7	32.2
110°	1.7	1.7	4.0	14.7	21.5



(END OF REPORT)