

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: P580610

Luminaire Tested: **HVSL4-4-LD4-2STD-50-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580610
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-50-UNV-O-EDD
Description: 4 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 5000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

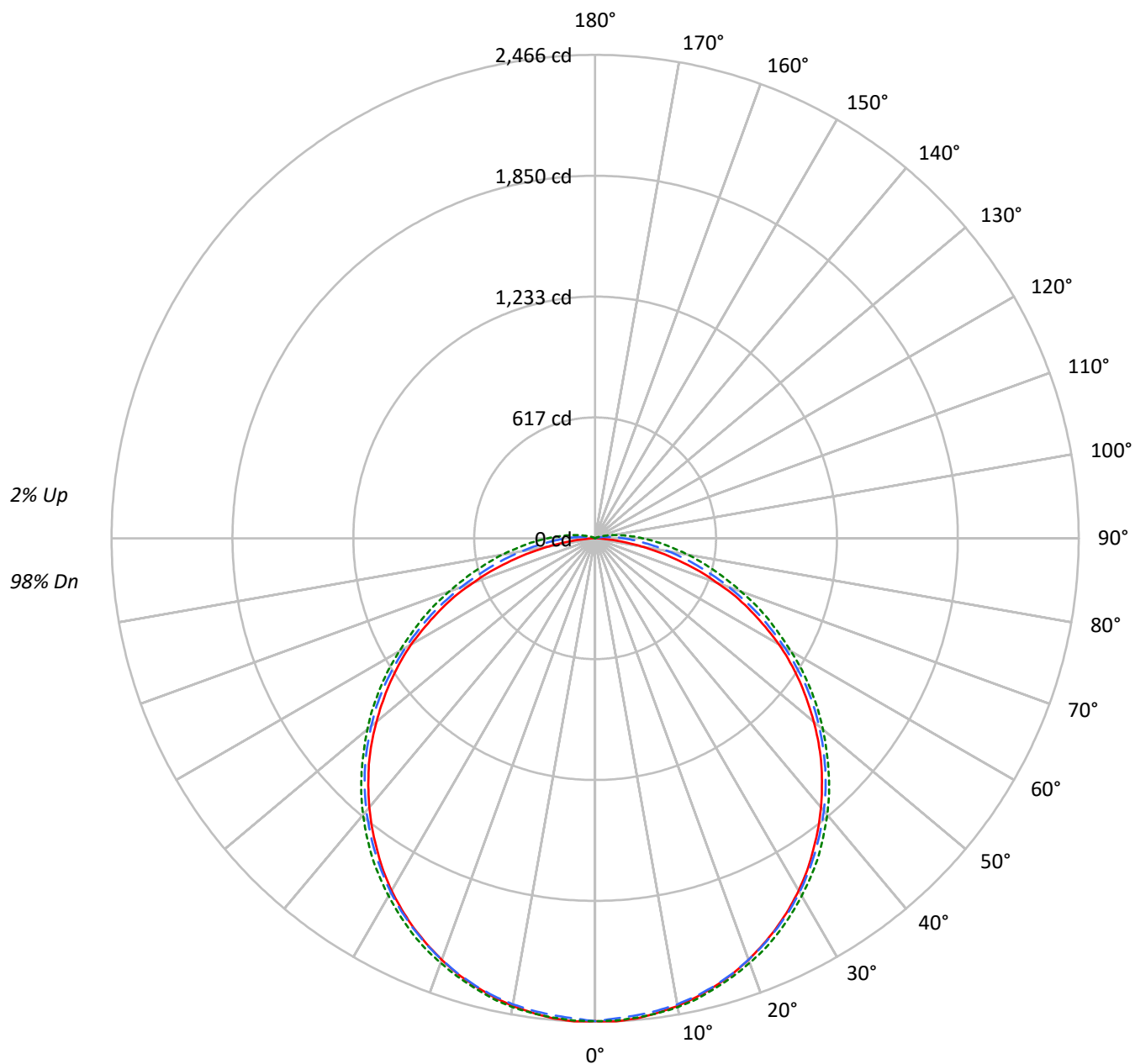
Lumens per Lamp: N/A
Luminaire Lumens: 7448.0 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.17')
CIE Type: Direct

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°	19886	19886	19886
5°	19848	19151	19054
10°	19715	18537	18299
15°	19544	17905	17505
20°	19363	17246	16751
25°	19144	16589	16014
30°	18892	15913	15239
35°	18573	15203	14484
40°	18242	14472	13665
45°	17885	13700	12816
50°	17419	12849	11936
55°	16917	11939	11005
60°	16318	10844	9978
65°	15345	9658	8965
70°	13946	8327	7853
75°	11961	6918	6812
80°	8998	5548	5819
85°	4812	4190	4830



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	233.1	3.1
10°-20°	668.7	9.0
20°-30°	1014.6	13.6
30°-40°	1226.8	16.5
40°-50°	1280.1	17.2
50°-60°	1170.4	15.7
60°-70°	912.4	12.2
70°-80°	570.7	7.7
80°-90°	259.2	3.5
90°-100°	86.9	1.2
100°-110°	21.8	0.3
110°-120°	3.4	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°	1916.3	25.7
0°-40°	3143.1	42.2
0°-60°	5593.6	75.1
0°-90°	7335.9	98.5
90°-120°	112.1	1.5
90°-150°	112.1	1.5
90°-180°	112.0	1.5
0°-180°	7448.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2463	2463	2463	2463	2463	
5°	2458	2454	2442	2454	2454	233
15°	2365	2369	2362	2376	2375	668
25°	2191	2193	2195	2214	2217	1010
35°	1940	1948	1956	1976	1984	1214
45°	1632	1646	1660	1676	1684	1257
55°	1274	1289	1312	1332	1340	1138
65°	875	890	921	958	973	866
75°	443	470	539	603	626	472
85°	77	142	243	322	350	97
90°	1	53	143	215	242	3
95°	1	14	74	135	156	0
105°	1	2	12	36	48	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°	2463.3	2463.3	2463.3	2463.3	2463.3
2.5°	2466.3	2462.8	2451.7	2462.8	2462.2
5°	2458.1	2453.5	2442.4	2454.1	2454.1
7.5°	2441.9	2440.1	2430.2	2443.6	2443.6
10°	2422.7	2422.1	2414.0	2428.5	2429.1
12.5°	2396.0	2398.3	2390.8	2404.7	2406.4
15°	2364.6	2368.7	2362.3	2375.7	2375.1
17.5°	2330.4	2332.7	2328.0	2343.1	2342.6
20°	2288.0	2290.9	2287.4	2303.1	2304.8
22.5°	2240.9	2245.0	2244.4	2260.7	2265.3
25°	2191.0	2192.7	2195.1	2213.6	2217.1
27.5°	2135.8	2138.7	2142.8	2159.6	2163.1
30°	2075.4	2080.1	2084.7	2102.2	2106.8
32.5°	2011.6	2016.2	2022.0	2044.7	2047.0
35°	1939.6	1948.3	1956.4	1976.1	1984.3
37.5°	1867.5	1878.6	1886.1	1907.0	1913.4
40°	1791.5	1802.5	1814.7	1836.8	1840.8
42.5°	1711.9	1724.7	1739.2	1759.0	1765.9
45°	1631.8	1646.3	1659.7	1675.9	1684.0
47.5°	1545.3	1559.8	1576.0	1594.6	1599.8
50°	1455.8	1472.7	1490.1	1507.5	1516.8
52.5°	1364.1	1384.4	1404.1	1422.7	1431.4
55°	1273.5	1288.6	1312.4	1331.6	1340.3
57.5°	1179.4	1192.2	1213.7	1245.0	1249.7
60°	1083.6	1095.2	1117.3	1142.8	1153.3
62.5°	977.9	993.6	1016.8	1049.3	1058.6
65°	875.1	890.2	921.0	957.6	972.7
67.5°	775.8	781.0	820.5	858.9	883.3
70°	658.5	678.3	724.1	771.2	789.8
72.5°	557.5	577.2	627.7	682.9	706.1
75°	443.1	470.4	538.9	603.4	626.0
77.5°	342.6	372.8	457.6	522.6	548.8
80°	239.3	286.3	378.6	451.8	480.2
82.5°	150.4	208.5	307.2	383.8	408.8
85°	76.7	141.7	243.3	321.7	350.2
87.5°	20.3	91.8	189.3	264.2	293.3
90°	0.6	52.8	143.4	215.4	241.6
92.5°	0.6	29.6	106.8	171.3	198.0
95°	0.6	13.9	74.3	134.7	155.6
97.5°	0.6	5.8	51.1	101.6	122.5
100°	0.6	2.9	32.5	73.7	91.8
102.5°	1.2	1.7	20.3	52.8	67.4
105°	1.2	1.7	12.2	36.0	48.2



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CATALOG NUMBER: HVSL4-4-LD4-2STD-50-UNV-O-EDD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.7	1.7	2.3	9.9	14.5
115°	1.7	1.7	2.3	6.4	9.3
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°	1.2	1.7	7.0	24.4	33.1
110°	1.7	1.7	4.1	15.1	22.1



(END OF REPORT)