

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: P580608

Luminaire Tested: **HVSL4-4-LD4-2STD-40-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580608
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-40-UNV-O-EDD
Description: 4 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

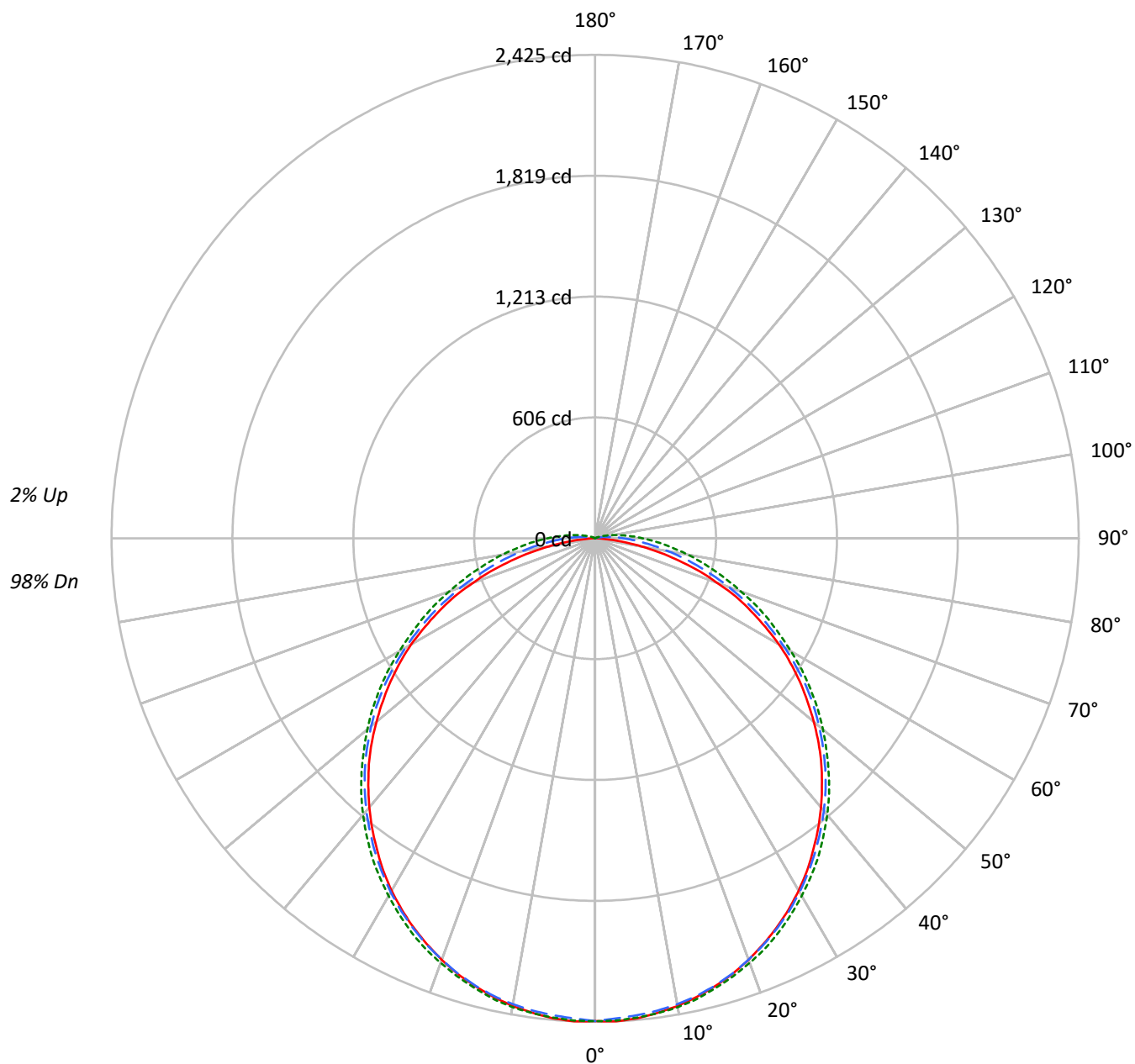
Lumens per Lamp: N/A
Luminaire Lumens: 7324.0 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.17')
CIE Type: Direct

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				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°	19555	19555	19555
5°	19517	18832	18736
10°	19387	18228	17994
15°	19220	17608	17213
20°	19040	16959	16472
25°	18825	16313	15748
30°	18578	15649	14985
35°	18264	14949	14242
40°	17937	14231	13438
45°	17587	13471	12603
50°	17129	12635	11737
55°	16636	11740	10822
60°	16047	10664	9812
65°	15091	9498	8816
70°	13715	8189	7721
75°	11761	6803	6699
80°	8848	5456	5722
85°	4731	4121	4748



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.2	3.1
10°-20°	657.5	9.0
20°-30°	997.7	13.6
30°-40°	1206.4	16.5
40°-50°	1258.8	17.2
50°-60°	1150.9	15.7
60°-70°	897.2	12.2
70°-80°	561.2	7.7
80°-90°	254.9	3.5
90°-100°	85.4	1.2
100°-110°	21.4	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°	1884.4	25.7
0°-40°	3090.8	42.2
0°-60°	5500.4	75.1
0°-90°	7213.7	98.5
90°-120°	110.3	1.5
90°-150°	110.3	1.5
90°-180°	110.0	1.5
0°-180°	7324.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2422	2422	2422	2422	2422	
5°	2417	2413	2402	2413	2413	230
15°	2325	2329	2323	2336	2336	656
25°	2154	2156	2158	2177	2180	993
35°	1907	1916	1924	1943	1951	1194
45°	1605	1619	1632	1648	1656	1236
55°	1252	1267	1290	1309	1318	1119
65°	861	875	906	942	956	851
75°	436	462	530	593	616	464
85°	75	139	239	316	344	95
90°	1	52	141	212	238	3
95°	1	14	73	132	153	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°	2422.3	2422.3	2422.3	2422.3	2422.3
2.5°	2425.2	2421.8	2410.9	2421.8	2421.2
5°	2417.2	2412.6	2401.8	2413.2	2413.2
7.5°	2401.2	2399.5	2389.8	2402.9	2402.9
10°	2382.4	2381.8	2373.8	2388.1	2388.6
12.5°	2356.1	2358.4	2351.0	2364.7	2366.4
15°	2325.3	2329.3	2323.0	2336.1	2335.5
17.5°	2291.6	2293.9	2289.3	2304.1	2303.6
20°	2249.9	2252.7	2249.3	2264.7	2266.4
22.5°	2203.6	2207.6	2207.1	2223.0	2227.6
25°	2154.5	2156.2	2158.5	2176.8	2180.2
27.5°	2100.3	2103.1	2107.1	2123.7	2127.1
30°	2040.9	2045.5	2050.0	2067.2	2071.7
32.5°	1978.1	1982.6	1988.3	2010.6	2012.9
35°	1907.3	1915.8	1923.8	1943.2	1951.2
37.5°	1836.5	1847.3	1854.7	1875.3	1881.6
40°	1761.6	1772.5	1784.5	1806.2	1810.2
42.5°	1683.4	1696.0	1710.3	1729.7	1736.5
45°	1604.6	1618.9	1632.0	1648.0	1656.0
47.5°	1519.5	1533.8	1549.8	1568.1	1573.2
50°	1431.6	1448.1	1465.3	1482.4	1491.5
52.5°	1341.4	1361.4	1380.8	1399.0	1407.6
55°	1252.3	1267.1	1290.5	1309.4	1318.0
57.5°	1159.8	1172.3	1193.5	1224.3	1228.9
60°	1065.6	1077.0	1098.7	1123.8	1134.1
62.5°	961.6	977.0	999.9	1031.9	1041.0
65°	860.6	875.4	905.7	941.6	956.5
67.5°	762.9	768.0	806.9	844.6	868.5
70°	647.6	667.0	712.1	758.3	776.6
72.5°	548.2	567.6	617.3	671.5	694.4
75°	435.7	462.5	529.9	593.3	615.6
77.5°	336.9	366.6	450.0	513.9	539.6
80°	235.3	281.5	372.3	444.3	472.2
82.5°	147.9	205.0	302.1	377.5	402.0
85°	75.4	139.3	239.3	316.4	344.3
87.5°	20.0	90.2	186.2	259.8	288.4
90°	0.6	52.0	141.0	211.9	237.6
92.5°	0.6	29.1	105.1	168.5	194.7
95°	0.6	13.7	73.1	132.5	153.0
97.5°	0.6	5.7	50.3	99.9	120.5
100°	0.6	2.9	32.0	72.5	90.2
102.5°	1.1	1.7	20.0	52.0	66.2
105°	1.1	1.7	12.0	35.4	47.4



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CATALOG NUMBER: HVSL4-4-LD4-2STD-40-UNV-O-EDD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.7	1.7	2.3	9.7	14.3
115°	1.7	1.7	2.3	6.3	9.1
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	6.9	24.0	32.5
110°	1.7	1.7	4.0	14.8	21.7



(END OF REPORT)