

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: P580559

Luminaire Tested: **HVSL4-3-LD4-2STD-40-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580559
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: HVSL4-3-LD4-2STD-40-UNV-O-EDD-90
Description: 3 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

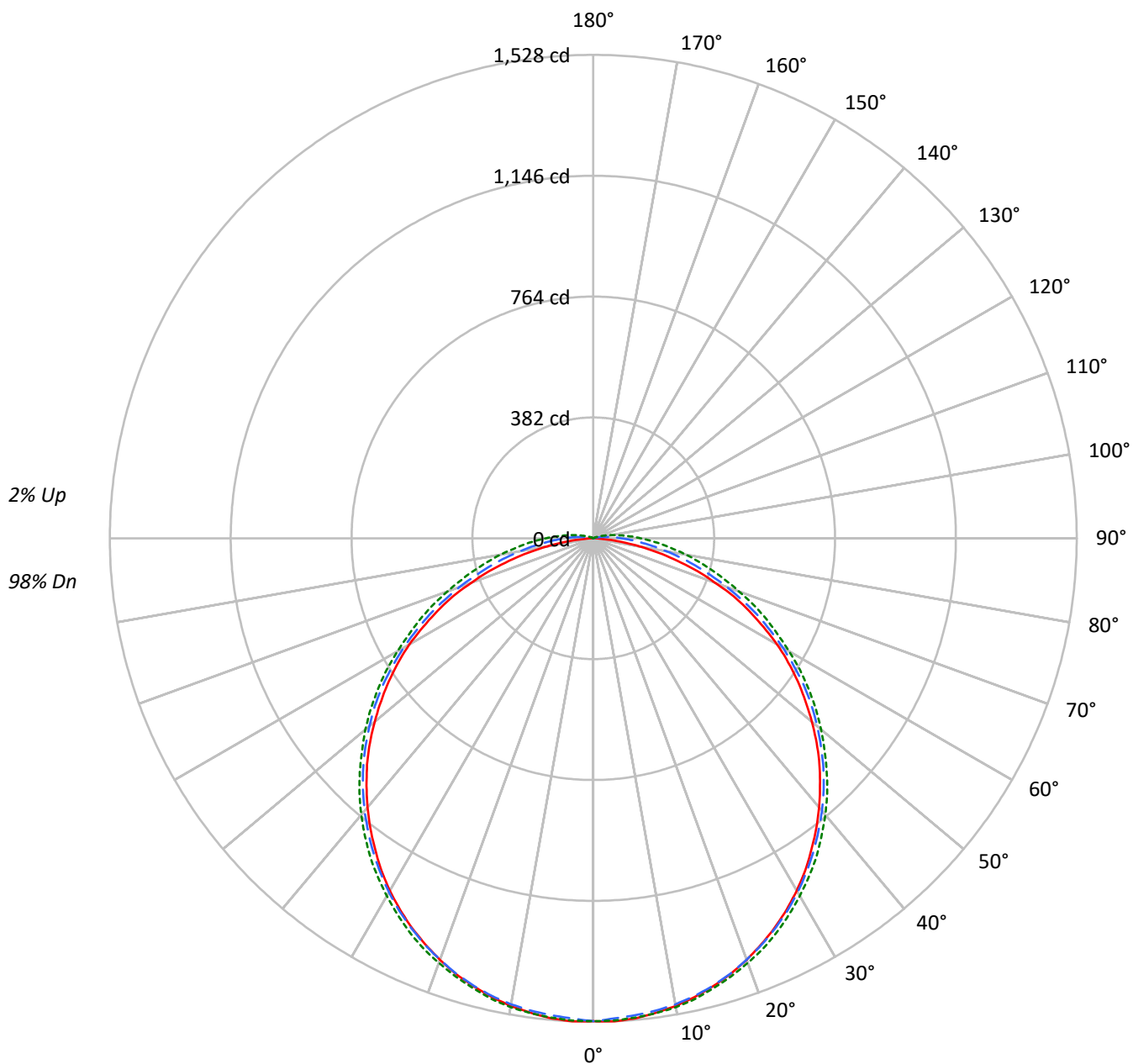
Lumens per Lamp: N/A
Luminaire Lumens: 4615.0 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 3' x H: 0.17')
CIE Type: Direct

Input Watts (W): 49.1
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°	16430	16430	16430
5°	16378	15809	15741
10°	16249	15290	15118
15°	16088	14758	14462
20°	15917	14204	13839
25°	15717	13652	13231
30°	15487	13087	12590
35°	15201	12492	11966
40°	14902	11882	11289
45°	14581	11239	10589
50°	14168	10530	9862
55°	13720	9775	9092
60°	13185	8868	8243
65°	12342	7889	7407
70°	11140	6791	6488
75°	9455	5630	5628
80°	6985	4505	4809
85°	3588	3392	3990



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.4	3.1
10°-20°	414.3	9.0
20°-30°	628.7	13.6
30°-40°	760.2	16.5
40°-50°	793.2	17.2
50°-60°	725.2	15.7
60°-70°	565.3	12.2
70°-80°	353.6	7.7
80°-90°	160.6	3.5
90°-100°	53.8	1.2
100°-110°	13.5	0.3
110°-120°	2.1	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°	1187.4	25.7
0°-40°	1947.6	42.2
0°-60°	3465.9	75.1
0°-90°	4545.5	98.5
90°-120°	69.5	1.5
90°-150°	69.5	1.5
90°-180°	69.0	1.5
0°-180°	4615.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1526	1526	1526	1526	1526	
5°	1523	1520	1513	1521	1521	145
15°	1465	1468	1464	1472	1472	414
25°	1358	1359	1360	1372	1374	626
35°	1202	1207	1212	1224	1230	752
45°	1011	1020	1028	1038	1044	779
55°	789	798	813	825	830	705
65°	542	552	571	593	603	537
75°	274	292	334	374	388	293
85°	48	88	151	199	217	60
90°	0	33	89	134	150	2
95°	0	9	46	84	96	0
105°	1	1	8	22	30	1
115°	1	1	1	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1526.4	1526.4	1526.4	1526.4	1526.4
2.5°	1528.2	1526.0	1519.2	1526.0	1525.6
5°	1523.1	1520.2	1513.4	1520.6	1520.6
7.5°	1513.0	1512.0	1505.9	1514.1	1514.1
10°	1501.2	1500.8	1495.8	1504.8	1505.1
12.5°	1484.6	1486.1	1481.4	1490.0	1491.1
15°	1465.2	1467.7	1463.8	1472.0	1471.7
17.5°	1444.0	1445.4	1442.5	1451.9	1451.5
20°	1417.7	1419.5	1417.3	1427.1	1428.1
22.5°	1388.6	1391.1	1390.7	1400.8	1403.7
25°	1357.6	1358.7	1360.1	1371.6	1373.8
27.5°	1323.4	1325.2	1327.7	1338.2	1340.3
30°	1286.0	1288.9	1291.8	1302.6	1305.4
32.5°	1246.4	1249.3	1252.9	1266.9	1268.4
35°	1201.8	1207.2	1212.2	1224.5	1229.5
37.5°	1157.2	1164.0	1168.7	1181.7	1185.6
40°	1110.0	1116.9	1124.4	1138.1	1140.6
42.5°	1060.8	1068.7	1077.7	1089.9	1094.2
45°	1011.1	1020.1	1028.4	1038.4	1043.5
47.5°	957.5	966.5	976.6	988.1	991.3
50°	902.1	912.5	923.3	934.1	939.9
52.5°	845.2	857.8	870.0	881.6	887.0
55°	789.1	798.4	813.2	825.1	830.5
57.5°	730.8	738.7	752.0	771.5	774.3
60°	671.4	678.6	692.3	708.1	714.6
62.5°	605.9	615.7	630.0	650.2	656.0
65°	542.3	551.6	570.7	593.3	602.7
67.5°	480.7	484.0	508.4	532.2	547.3
70°	408.0	420.3	448.7	477.8	489.4
72.5°	345.4	357.7	389.0	423.2	437.5
75°	274.5	291.5	333.9	373.9	387.9
77.5°	212.3	231.0	283.5	323.8	340.0
80°	148.2	177.4	234.6	279.9	297.6
82.5°	93.2	129.2	190.3	237.8	253.3
85°	47.5	87.8	150.8	199.3	217.0
87.5°	12.6	56.9	117.3	163.7	181.7
90°	0.4	32.7	88.9	133.5	149.7
92.5°	0.4	18.4	66.2	106.1	122.7
95°	0.4	8.6	46.1	83.5	96.4
97.5°	0.4	3.6	31.7	63.0	75.9
100°	0.4	1.8	20.2	45.7	56.9
102.5°	0.7	1.1	12.6	32.7	41.7
105°	0.7	1.1	7.6	22.3	29.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.1	1.1	1.4	6.1	9.0
115°	1.1	1.1	1.4	4.0	5.8
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°	0.7	1.1	4.3	15.1	20.5
110°	1.1	1.1	2.5	9.4	13.7



(END OF REPORT)