

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: P580180

Luminaire Tested: **HVSL12-4-LD4-1HI-30-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580180
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-LD4-1HI-30-UNV-O-EDD
Description: 4 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 3000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

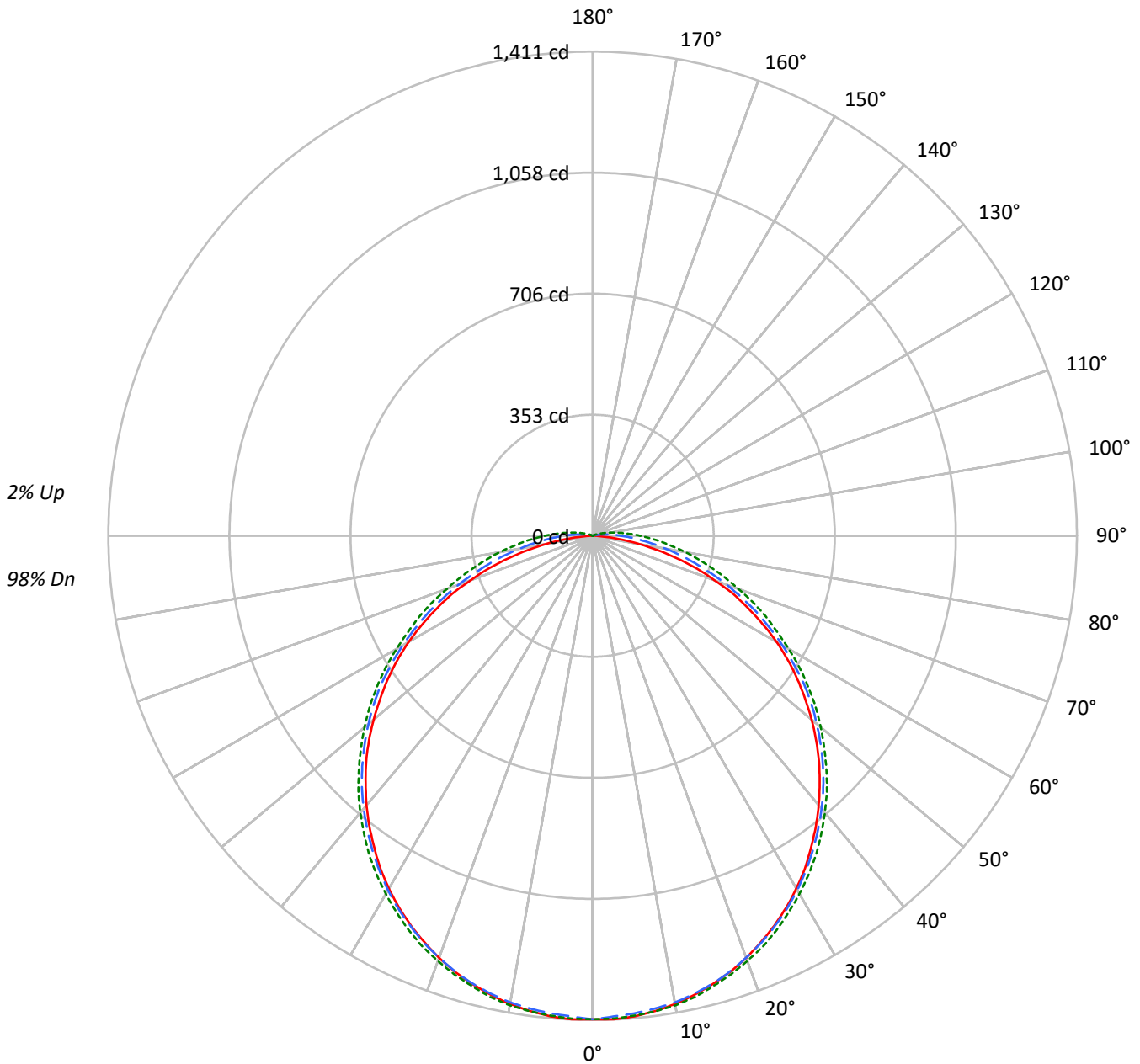
Lumens per Lamp: N/A
Luminaire Lumens: 4260.0 lumens
Efficiency: N/A
Efficacy: 93.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 45.5
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									
RC	80									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°	3792	3792	3792
5°	3784	3726	3737
10°	3759	3677	3688
15°	3726	3621	3623
20°	3691	3556	3559
25°	3650	3488	3494
30°	3602	3415	3416
35°	3541	3332	3339
40°	3478	3245	3245
45°	3410	3149	3142
50°	3321	3035	3030
55°	3225	2909	2905
60°	3111	2740	2755
65°	2925	2549	2609
70°	2659	2320	2438
75°	2280	2067	2295
80°	1715	1829	2188
85°	916	1601	2129



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.3	3.1
10°-20°	382.5	9.0
20°-30°	580.3	13.6
30°-40°	701.7	16.5
40°-50°	732.2	17.2
50°-60°	669.4	15.7
60°-70°	521.8	12.2
70°-80°	326.4	7.7
80°-90°	148.2	3.5
90°-100°	49.7	1.2
100°-110°	12.5	0.3
110°-120°	2.0	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°	1096.1	25.7
0°-40°	1797.8	42.2
0°-60°	3199.3	75.1
0°-90°	4195.8	98.5
90°-120°	64.1	1.5
90°-150°	64.1	1.5
90°-180°	64.0	1.5
0°-180°	4260.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1409	1409	1409	1409	1409	
5°	1406	1403	1397	1404	1404	134
15°	1352	1355	1351	1359	1358	382
25°	1253	1254	1256	1266	1268	577
35°	1109	1114	1119	1130	1135	694
45°	933	942	949	959	963	719
55°	728	737	751	762	767	651
65°	500	509	527	548	556	495
75°	253	269	308	345	358	270
85°	44	81	139	184	200	55
90°	0	30	82	123	138	2
95°	0	8	42	77	89	0
105°	1	1	7	21	28	1
115°	1	1	1	4	5	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-LD4-1HI-30-UNV-O-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1409.0	1409.0	1409.0	1409.0	1409.0
2.5°	1410.6	1408.6	1402.3	1408.6	1408.3
5°	1406.0	1403.3	1397.0	1403.6	1403.6
7.5°	1396.7	1395.7	1390.0	1397.7	1397.7
10°	1385.7	1385.4	1380.7	1389.0	1389.4
12.5°	1370.4	1371.8	1367.4	1375.4	1376.4
15°	1352.5	1354.8	1351.2	1358.8	1358.5
17.5°	1332.9	1334.2	1331.6	1340.2	1339.9
20°	1308.6	1310.3	1308.3	1317.3	1318.3
22.5°	1281.7	1284.1	1283.7	1293.0	1295.7
25°	1253.2	1254.2	1255.5	1266.1	1268.1
27.5°	1221.6	1223.3	1225.6	1235.2	1237.2
30°	1187.1	1189.7	1192.4	1202.4	1205.0
32.5°	1150.5	1153.2	1156.5	1169.5	1170.8
35°	1109.4	1114.3	1119.0	1130.3	1134.9
37.5°	1068.2	1074.5	1078.8	1090.8	1094.4
40°	1024.7	1031.0	1037.9	1050.6	1052.9
42.5°	979.2	986.5	994.8	1006.1	1010.0
45°	933.3	941.6	949.3	958.6	963.2
47.5°	883.8	892.1	901.4	912.1	915.1
50°	832.7	842.3	852.3	862.2	867.6
52.5°	780.2	791.8	803.1	813.8	818.7
55°	728.4	737.0	750.6	761.6	766.6
57.5°	674.6	681.9	694.2	712.1	714.8
60°	619.8	626.4	639.0	653.7	659.6
62.5°	559.3	568.3	581.6	600.2	605.5
65°	500.5	509.2	526.8	547.7	556.3
67.5°	443.7	446.7	469.3	491.2	505.2
70°	376.7	387.9	414.2	441.1	451.7
72.5°	318.9	330.2	359.0	390.6	403.9
75°	253.4	269.0	308.2	345.1	358.1
77.5°	196.0	213.2	261.7	298.9	313.9
80°	136.8	163.7	216.6	258.4	274.7
82.5°	86.0	119.2	175.7	219.5	233.8
85°	43.8	81.0	139.2	184.0	200.3
87.5°	11.6	52.5	108.3	151.1	167.7
90°	0.3	30.2	82.0	123.2	138.2
92.5°	0.3	16.9	61.1	98.0	113.3
95°	0.3	8.0	42.5	77.1	89.0
97.5°	0.3	3.3	29.2	58.1	70.1
100°	0.3	1.7	18.6	42.2	52.5
102.5°	0.7	1.0	11.6	30.2	38.5
105°	0.7	1.0	7.0	20.6	27.6



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CATALOG NUMBER: HVSL12-4-LD4-1HI-30-UNV-O-EDD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.0	1.0	1.3	5.6	8.3
115°	1.0	1.0	1.3	3.7	5.3
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°	0.7	1.0	4.0	14.0	18.9
110°	1.0	1.0	2.3	8.6	12.6



(END OF REPORT)