

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: P580463

Luminaire Tested: **HVSL4-1-LD4-2STD-40-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580463
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: HVSL4-1-LD4-2STD-40-UNV-O-EDD-90
Description: 1 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

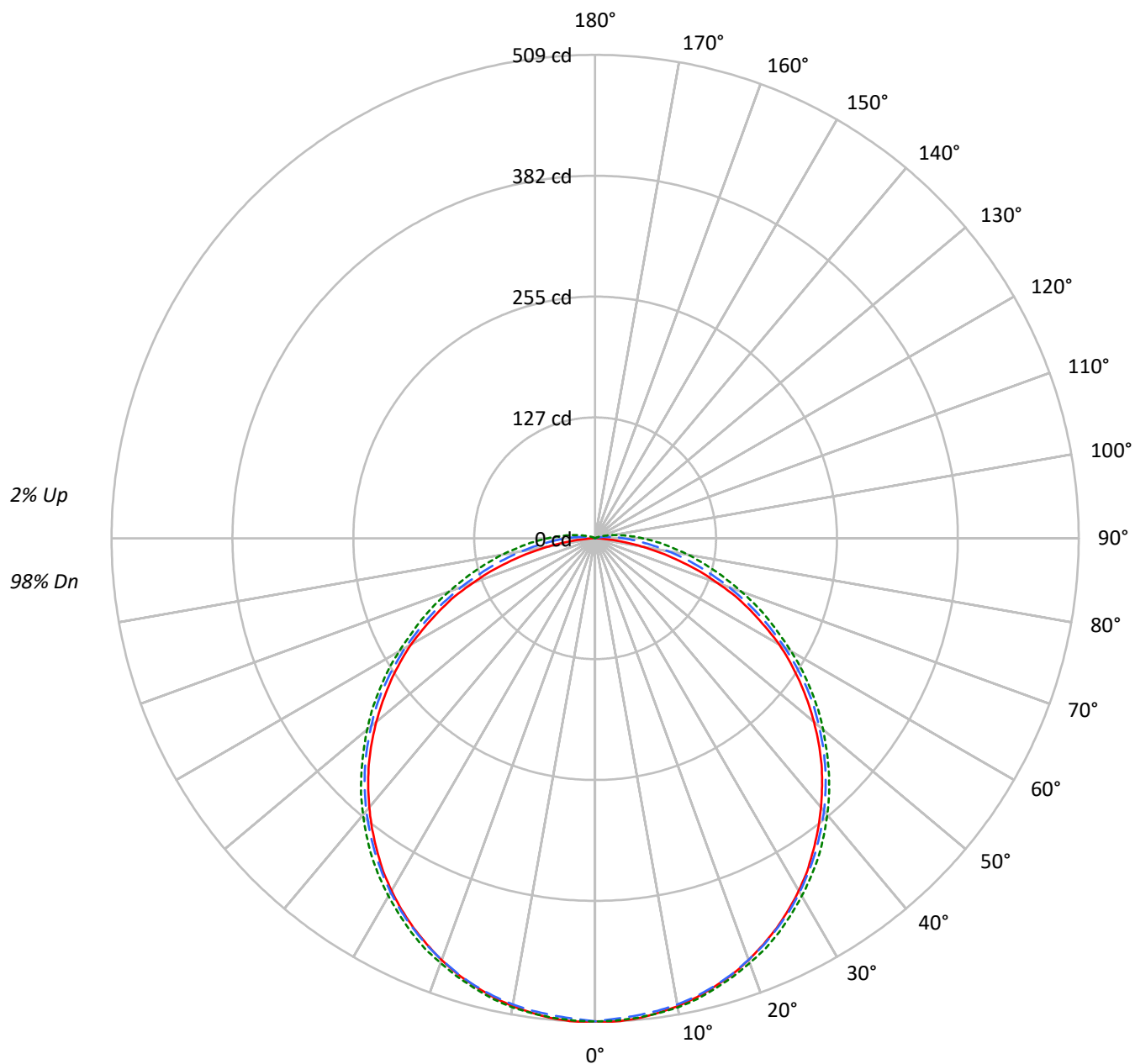
Lumens per Lamp: N/A
Luminaire Lumens: 1538.0 lumens
Efficiency: N/A
Efficacy: 93.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.17')
CIE Type: Direct

Input Watts (W): 16.4
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°	16427	16427	16427
5°	16217	15702	15739
10°	15936	15091	15115
15°	15626	14478	14460
20°	15308	13853	13836
25°	14956	13240	13227
30°	14578	12617	12586
35°	14138	11973	11962
40°	13679	11317	11286
45°	13191	10636	10588
50°	12598	9897	9859
55°	11959	9118	9091
60°	11216	8202	8243
65°	10171	7226	7407
70°	8807	6149	6487
75°	7038	5032	5628
80°	4722	3958	4809
85°	2015	2911	3989



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.1	3.1
10°-20°	138.1	9.0
20°-30°	209.5	13.6
30°-40°	253.3	16.5
40°-50°	264.3	17.2
50°-60°	241.7	15.7
60°-70°	188.4	12.3
70°-80°	117.8	7.7
80°-90°	53.5	3.5
90°-100°	17.9	1.2
100°-110°	4.5	0.3
110°-120°	0.7	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°	395.7	25.7
0°-40°	649.0	42.2
0°-60°	1155.1	75.1
0°-90°	1514.8	98.5
90°-120°	23.2	1.5
90°-150°	23.2	1.5
90°-180°	23.0	1.5
0°-180°	1538.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	509	509	509	509	509	
5°	508	507	504	507	507	48
15°	488	489	488	491	490	138
25°	452	453	453	457	458	208
35°	400	402	404	408	410	251
45°	337	340	343	346	348	260
55°	263	266	271	275	277	235
65°	181	184	190	198	201	179
75°	92	97	111	125	129	98
85°	16	29	50	66	72	20
90°	0	11	30	44	50	1
95°	0	3	15	28	32	0
105°	0	0	2	7	10	0
115°	0	0	0	1	2	0
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°	508.7	508.7	508.7	508.7	508.7
2.5°	509.3	508.6	506.3	508.6	508.4
5°	507.6	506.6	504.4	506.8	506.8
7.5°	504.2	503.9	501.8	504.6	504.6
10°	500.3	500.2	498.5	501.5	501.6
12.5°	494.8	495.2	493.7	496.6	496.9
15°	488.3	489.1	487.8	490.6	490.5
17.5°	481.2	481.7	480.7	483.9	483.7
20°	472.5	473.1	472.3	475.6	475.9
22.5°	462.8	463.6	463.5	466.8	467.8
25°	452.4	452.8	453.3	457.1	457.8
27.5°	441.0	441.6	442.5	446.0	446.7
30°	428.6	429.5	430.5	434.1	435.0
32.5°	415.4	416.3	417.5	422.2	422.7
35°	400.5	402.3	404.0	408.1	409.7
37.5°	385.6	387.9	389.5	393.8	395.1
40°	369.9	372.2	374.7	379.3	380.1
42.5°	353.5	356.1	359.1	363.2	364.7
45°	337.0	340.0	342.7	346.1	347.8
47.5°	319.1	322.1	325.4	329.3	330.4
50°	300.6	304.1	307.7	311.3	313.2
52.5°	281.7	285.9	290.0	293.8	295.6
55°	263.0	266.1	271.0	275.0	276.8
57.5°	243.5	246.2	250.6	257.1	258.1
60°	223.8	226.2	230.7	236.0	238.2
62.5°	201.9	205.2	210.0	216.7	218.6
65°	180.7	183.8	190.2	197.7	200.9
67.5°	160.2	161.3	169.4	177.4	182.4
70°	136.0	140.1	149.5	159.2	163.1
72.5°	115.1	119.2	129.6	141.0	145.8
75°	91.5	97.1	111.3	124.6	129.3
77.5°	70.7	77.0	94.5	107.9	113.3
80°	49.4	59.1	78.2	93.3	99.2
82.5°	31.1	43.0	63.4	79.3	84.4
85°	15.8	29.3	50.2	66.4	72.3
87.5°	4.2	18.9	39.1	54.6	60.6
90°	0.1	10.9	29.6	44.5	49.9
92.5°	0.1	6.1	22.1	35.4	40.9
95°	0.1	2.9	15.3	27.8	32.1
97.5°	0.1	1.2	10.6	21.0	25.3
100°	0.1	0.6	6.7	15.2	18.9
102.5°	0.2	0.4	4.2	10.9	13.9
105°	0.2	0.4	2.5	7.4	10.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.4	0.4	0.5	2.0	3.0
115°	0.4	0.4	0.5	1.3	1.9
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°	0.2	0.4	1.4	5.0	6.8
110°	0.4	0.4	0.8	3.1	4.6



(END OF REPORT)