

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: P580531

Luminaire Tested: **HVSL4-3-LD4-1STD-30-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580531
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-LD4-1STD-30-UNV-O-EDD-90
Description: 3 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 3000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

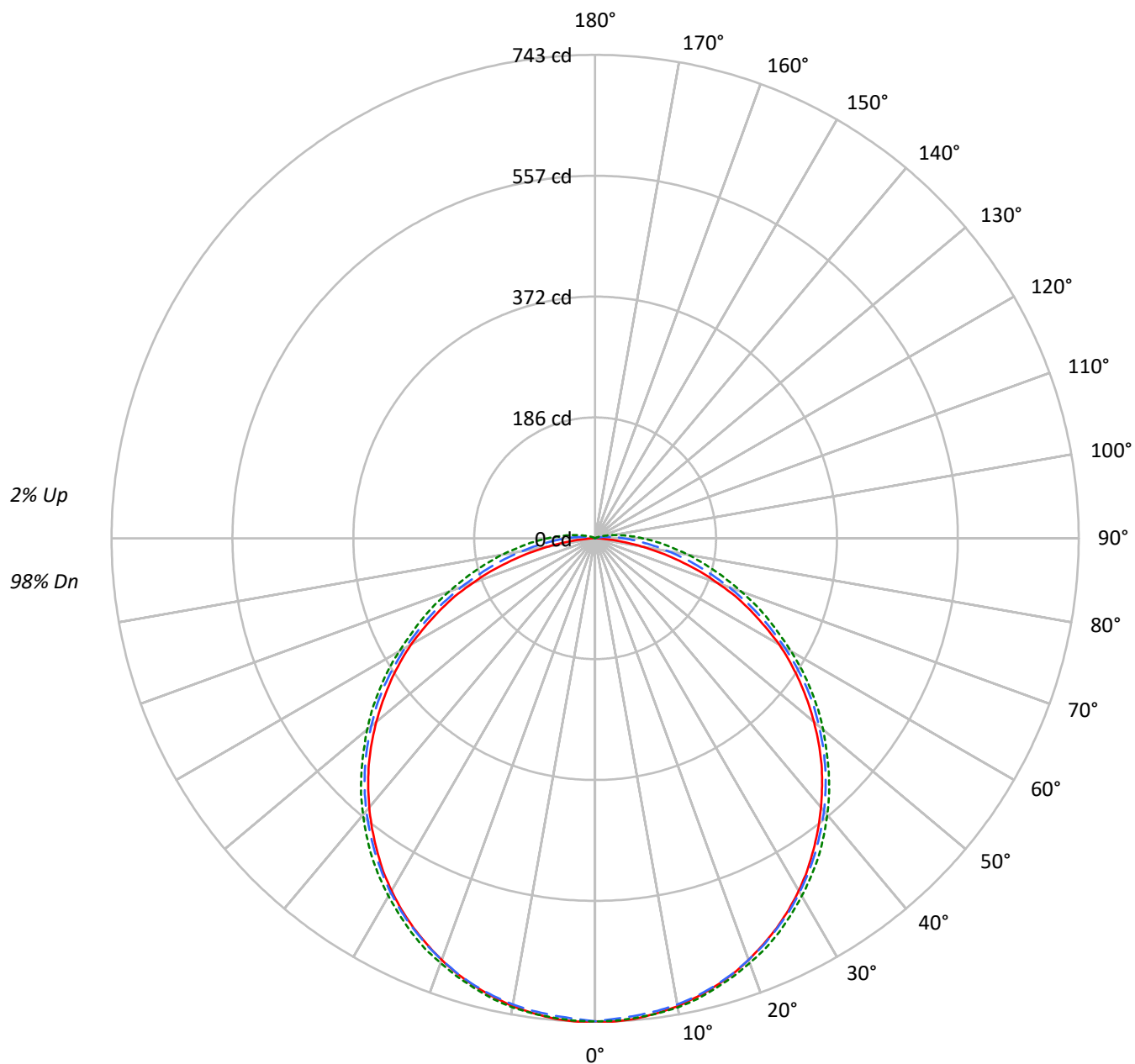
Lumens per Lamp: N/A
Luminaire Lumens: 2245.0 lumens
Efficiency: N/A
Efficacy: 91.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 3' x H: 0.17')
CIE Type: Direct

Input Watts (W): 24.5
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					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°	7992	7992	7992
5°	7967	7690	7657
10°	7905	7437	7354
15°	7827	7180	7035
20°	7743	6910	6732
25°	7645	6641	6436
30°	7534	6366	6124
35°	7394	6077	5821
40°	7250	5780	5492
45°	7094	5468	5151
50°	6892	5122	4797
55°	6675	4755	4423
60°	6414	4314	4010
65°	6003	3837	3603
70°	5420	3304	3156
75°	4602	2738	2738
80°	3398	2191	2340
85°	1745	1649	1940



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.3	3.1
10°-20°	201.5	9.0
20°-30°	305.8	13.6
30°-40°	369.8	16.5
40°-50°	385.9	17.2
50°-60°	352.8	15.7
60°-70°	275.0	12.2
70°-80°	172.0	7.7
80°-90°	78.1	3.5
90°-100°	26.2	1.2
100°-110°	6.6	0.3
110°-120°	1.0	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°	577.6	25.7
0°-40°	947.4	42.2
0°-60°	1686.0	75.1
0°-90°	2211.2	98.5
90°-120°	33.8	1.5
90°-150°	33.8	1.5
90°-180°	34.0	1.5
0°-180°	2245.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	742	742	742	742	742	
5°	741	740	736	740	740	70
15°	713	714	712	716	716	201
25°	660	661	662	667	668	304
35°	585	587	590	596	598	366
45°	492	496	500	505	508	379
55°	384	388	396	401	404	343
65°	264	268	278	289	293	261
75°	134	142	162	182	189	142
85°	23	43	73	97	106	29
90°	0	16	43	65	73	1
95°	0	4	22	41	47	0
105°	0	0	4	11	14	0
115°	0	0	1	2	3	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°	742.5	742.5	742.5	742.5	742.5
2.5°	743.4	742.3	739.0	742.3	742.2
5°	740.9	739.5	736.2	739.7	739.7
7.5°	736.0	735.5	732.5	736.6	736.6
10°	730.3	730.1	727.6	732.0	732.2
12.5°	722.2	722.9	720.6	724.8	725.4
15°	712.8	714.0	712.1	716.1	715.9
17.5°	702.4	703.1	701.7	706.3	706.1
20°	689.6	690.5	689.5	694.2	694.7
22.5°	675.5	676.7	676.5	681.4	682.8
25°	660.4	660.9	661.6	667.2	668.3
27.5°	643.8	644.7	645.9	651.0	652.0
30°	625.6	627.0	628.4	633.6	635.0
32.5°	606.3	607.7	609.5	616.3	617.0
35°	584.6	587.3	589.7	595.7	598.1
37.5°	562.9	566.2	568.5	574.8	576.7
40°	540.0	543.3	547.0	553.6	554.9
42.5°	516.0	519.9	524.2	530.2	532.3
45°	491.9	496.2	500.3	505.2	507.6
47.5°	465.8	470.2	475.1	480.7	482.2
50°	438.8	443.9	449.1	454.4	457.2
52.5°	411.2	417.3	423.2	428.8	431.5
55°	383.9	388.4	395.6	401.4	404.0
57.5°	355.5	359.4	365.8	375.3	376.7
60°	326.6	330.1	336.8	344.5	347.6
62.5°	294.8	299.5	306.5	316.3	319.1
65°	263.8	268.3	277.6	288.6	293.2
67.5°	233.9	235.4	247.3	258.9	266.2
70°	198.5	204.4	218.3	232.5	238.1
72.5°	168.0	174.0	189.2	205.8	212.8
75°	133.6	141.8	162.4	181.9	188.7
77.5°	103.3	112.4	137.9	157.5	165.4
80°	72.1	86.3	114.1	136.2	144.8
82.5°	45.3	62.8	92.6	115.7	123.2
85°	23.1	42.7	73.3	97.0	105.5
87.5°	6.1	27.7	57.1	79.6	88.4
90°	0.2	15.9	43.2	64.9	72.8
92.5°	0.2	8.9	32.2	51.6	59.7
95°	0.2	4.2	22.4	40.6	46.9
97.5°	0.2	1.8	15.4	30.6	36.9
100°	0.2	0.9	9.8	22.2	27.7
102.5°	0.4	0.5	6.1	15.9	20.3
105°	0.4	0.5	3.7	10.9	14.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.5	0.5	0.7	3.0	4.4
115°	0.5	0.5	0.7	1.9	2.8
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°	0.4	0.5	2.1	7.4	10.0
110°	0.5	0.5	1.2	4.6	6.7



(END OF REPORT)