

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: P580457

Luminaire Tested: **HVSL4-1-LD4-2LO-50-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580457
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-LD4-2LO-50-UNV-O-EDD-90
Description: 1 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 5000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

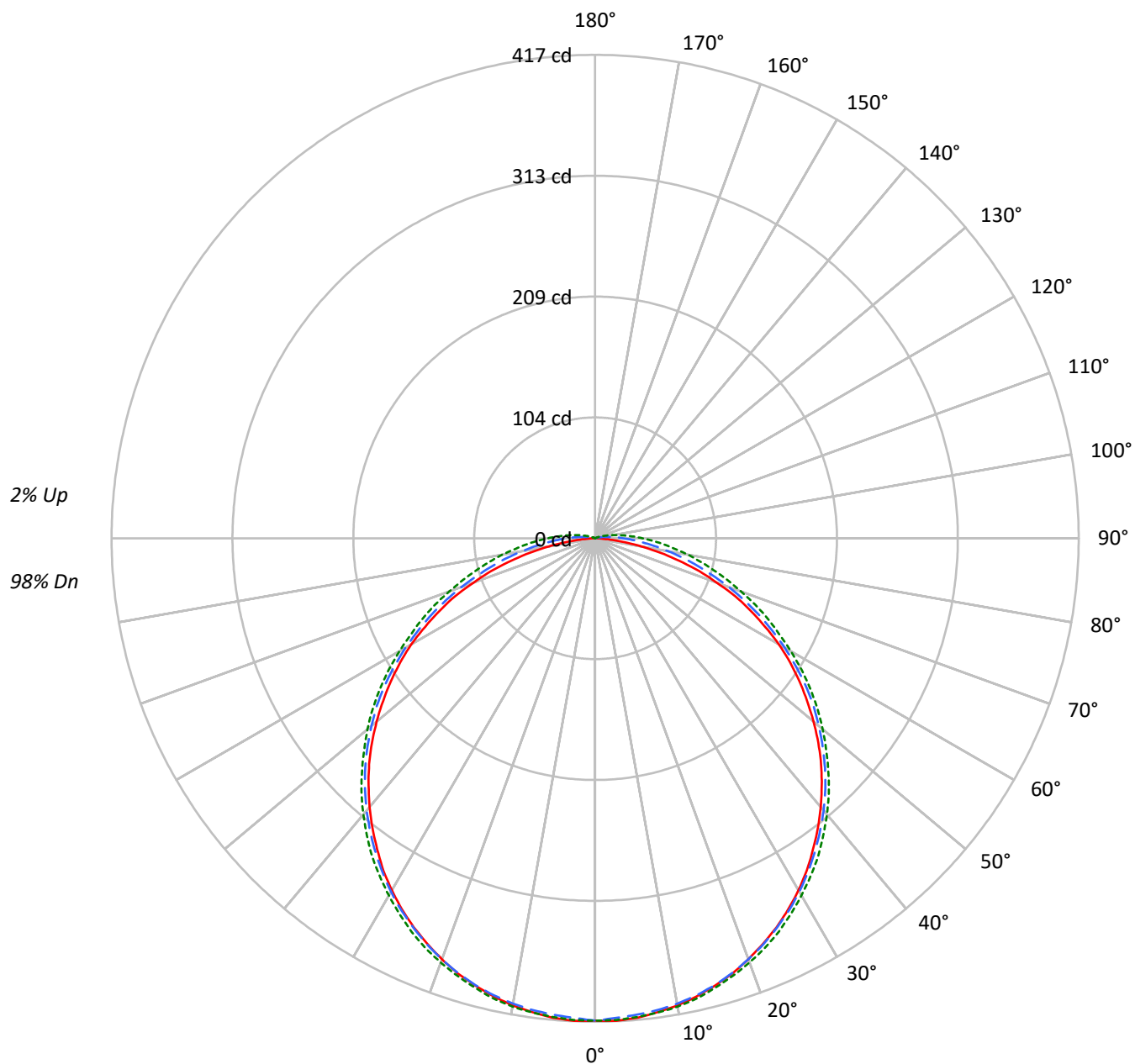
Lumens per Lamp: N/A
Luminaire Lumens: 1258.0 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.17')
CIE Type: Direct

Input Watts (W): 11.6
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°	13437	13437	13437
5°	13265	12842	12873
10°	13034	12342	12363
15°	12781	11843	11828
20°	12519	11333	11318
25°	12236	10830	10820
30°	11925	10320	10294
35°	11564	9792	9787
40°	11190	9258	9232
45°	10788	8699	8658
50°	10306	8096	8064
55°	9781	7459	7436
60°	9171	6708	6741
65°	8319	5912	6057
70°	7201	5030	5305
75°	5753	4114	4601
80°	3862	3239	3931
85°	1645	2383	3260



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.4	3.1
10°-20°	112.9	9.0
20°-30°	171.4	13.6
30°-40°	207.2	16.5
40°-50°	216.2	17.2
50°-60°	197.7	15.7
60°-70°	154.1	12.2
70°-80°	96.4	7.7
80°-90°	43.8	3.5
90°-100°	14.7	1.2
100°-110°	3.7	0.3
110°-120°	0.6	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°	323.7	25.7
0°-40°	530.9	42.2
0°-60°	944.8	75.1
0°-90°	1239.1	98.5
90°-120°	19.0	1.5
90°-150°	19.0	1.5
90°-180°	19.0	1.5
0°-180°	1258.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	416	416	416	416	416	
5°	415	414	412	414	414	39
15°	399	400	399	401	401	113
25°	370	370	371	374	374	171
35°	328	329	330	334	335	205
45°	276	278	280	283	284	212
55°	215	218	222	225	226	192
65°	148	150	156	162	164	146
75°	75	79	91	102	106	80
85°	13	24	41	54	59	16
90°	0	9	24	36	41	1
95°	0	2	13	23	26	0
105°	0	0	2	6	8	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°	416.1	416.1	416.1	416.1	416.1
2.5°	416.6	416.0	414.1	416.0	415.9
5°	415.2	414.4	412.5	414.5	414.5
7.5°	412.4	412.1	410.5	412.7	412.7
10°	409.2	409.1	407.7	410.2	410.3
12.5°	404.7	405.1	403.8	406.2	406.5
15°	399.4	400.1	399.0	401.3	401.2
17.5°	393.6	394.0	393.2	395.8	395.7
20°	386.4	386.9	386.4	389.0	389.3
22.5°	378.5	379.2	379.1	381.8	382.6
25°	370.1	370.4	370.8	373.9	374.5
27.5°	360.8	361.2	361.9	364.8	365.4
30°	350.6	351.3	352.1	355.1	355.8
32.5°	339.8	340.5	341.5	345.4	345.7
35°	327.6	329.1	330.4	333.8	335.2
37.5°	315.4	317.3	318.6	322.1	323.2
40°	302.6	304.5	306.5	310.2	310.9
42.5°	289.2	291.3	293.8	297.1	298.3
45°	275.6	278.1	280.3	283.1	284.4
47.5°	261.0	263.5	266.2	269.3	270.2
50°	245.9	248.7	251.7	254.6	256.2
52.5°	230.4	233.8	237.2	240.3	241.8
55°	215.1	217.6	221.7	224.9	226.4
57.5°	199.2	201.4	205.0	210.3	211.1
60°	183.0	185.0	188.7	193.0	194.8
62.5°	165.2	167.8	171.7	177.2	178.8
65°	147.8	150.4	155.6	161.7	164.3
67.5°	131.0	131.9	138.6	145.1	149.2
70°	111.2	114.6	122.3	130.3	133.4
72.5°	94.2	97.5	106.0	115.3	119.3
75°	74.8	79.4	91.0	101.9	105.7
77.5°	57.9	63.0	77.3	88.3	92.7
80°	40.4	48.4	64.0	76.3	81.1
82.5°	25.4	35.2	51.9	64.8	69.1
85°	12.9	23.9	41.1	54.3	59.1
87.5°	3.4	15.5	32.0	44.6	49.5
90°	0.1	8.9	24.2	36.4	40.8
92.5°	0.1	5.0	18.0	28.9	33.4
95°	0.1	2.4	12.6	22.8	26.3
97.5°	0.1	1.0	8.6	17.2	20.7
100°	0.1	0.5	5.5	12.5	15.5
102.5°	0.2	0.3	3.4	8.9	11.4
105°	0.2	0.3	2.1	6.1	8.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.3	0.3	0.4	1.7	2.5
115°	0.3	0.3	0.4	1.1	1.6
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	0.3	1.2	4.1	5.6
110°	0.3	0.3	0.7	2.6	3.7



(END OF REPORT)