

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: P580432

Luminaire Tested: **HVSL4-1-LD4-1LO-40-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580432
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-LD4-1LO-40-UNV-O-EDD
Description: 1 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

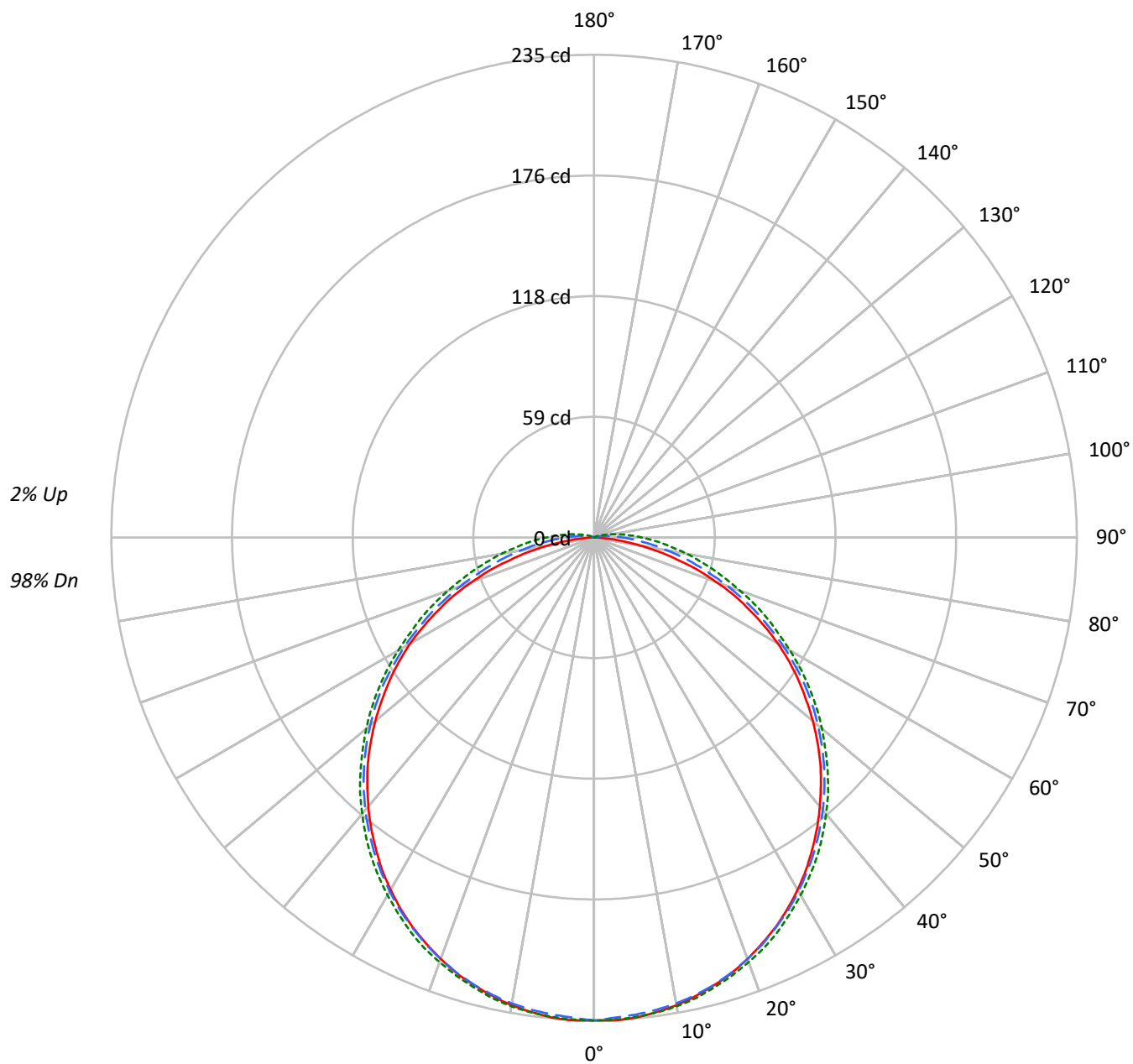
Lumens per Lamp: N/A
Luminaire Lumens: 711.0 lumens
Efficiency: N/A
Efficacy: 122.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.17')
CIE Type: Direct

Input Watts (W): 5.8
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°	7595	7595	7595
5°	7498	7260	7276
10°	7368	6975	6988
15°	7223	6693	6683
20°	7076	6406	6396
25°	6916	6119	6117
30°	6738	5832	5818
35°	6538	5536	5530
40°	6324	5231	5217
45°	6098	4916	4895
50°	5826	4574	4558
55°	5530	4216	4201
60°	5182	3793	3810
65°	4700	3340	3425
70°	4073	2842	2999
75°	3253	2324	2603
80°	2179	1827	2220
85°	931	1345	1843



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.3	3.1
10°-20°	63.8	9.0
20°-30°	96.9	13.6
30°-40°	117.1	16.5
40°-50°	122.2	17.2
50°-60°	111.7	15.7
60°-70°	87.1	12.3
70°-80°	54.5	7.7
80°-90°	24.7	3.5
90°-100°	8.3	1.2
100°-110°	2.1	0.3
110°-120°	0.3	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°	182.9	25.7
0°-40°	300.1	42.2
0°-60°	534.0	75.1
0°-90°	700.3	98.5
90°-120°	10.7	1.5
90°-150°	10.7	1.5
90°-180°	11.0	1.5
0°-180°	711.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	235	235	235	235	235	
5°	235	234	233	234	234	22
15°	226	226	226	227	227	64
25°	209	209	210	211	212	96
35°	185	186	187	189	189	116
45°	156	157	158	160	161	120
55°	122	123	125	127	128	109
65°	84	85	88	91	93	83
75°	42	45	51	58	60	45
85°	7	14	23	31	33	9
90°	0	5	14	21	23	0
95°	0	1	7	13	15	0
105°	0	0	1	3	5	0
115°	0	0	0	1	1	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°	235.2	235.2	235.2	235.2	235.2
2.5°	235.4	235.1	234.0	235.1	235.0
5°	234.7	234.2	233.2	234.3	234.3
7.5°	233.1	232.9	232.0	233.3	233.3
10°	231.3	231.2	230.4	231.8	231.9
12.5°	228.7	228.9	228.2	229.6	229.7
15°	225.7	226.1	225.5	226.8	226.7
17.5°	222.5	222.7	222.2	223.7	223.6
20°	218.4	218.7	218.4	219.9	220.0
22.5°	213.9	214.3	214.3	215.8	216.3
25°	209.2	209.3	209.5	211.3	211.7
27.5°	203.9	204.2	204.6	206.2	206.5
30°	198.1	198.6	199.0	200.7	201.1
32.5°	192.0	192.5	193.0	195.2	195.4
35°	185.2	186.0	186.8	188.6	189.4
37.5°	178.3	179.3	180.1	182.0	182.7
40°	171.0	172.1	173.2	175.3	175.7
42.5°	163.4	164.6	166.0	167.9	168.6
45°	155.8	157.2	158.4	160.0	160.8
47.5°	147.5	148.9	150.5	152.2	152.7
50°	139.0	140.6	142.2	143.9	144.8
52.5°	130.2	132.2	134.0	135.8	136.6
55°	121.6	123.0	125.3	127.1	127.9
57.5°	112.6	113.8	115.9	118.9	119.3
60°	103.4	104.6	106.7	109.1	110.1
62.5°	93.4	94.8	97.1	100.2	101.1
65°	83.5	85.0	87.9	91.4	92.9
67.5°	74.1	74.6	78.3	82.0	84.3
70°	62.9	64.7	69.1	73.6	75.4
72.5°	53.2	55.1	59.9	65.2	67.4
75°	42.3	44.9	51.4	57.6	59.8
77.5°	32.7	35.6	43.7	49.9	52.4
80°	22.8	27.3	36.1	43.1	45.8
82.5°	14.4	19.9	29.3	36.6	39.0
85°	7.3	13.5	23.2	30.7	33.4
87.5°	1.9	8.8	18.1	25.2	28.0
90°	0.1	5.0	13.7	20.6	23.1
92.5°	0.1	2.8	10.2	16.4	18.9
95°	0.1	1.3	7.1	12.9	14.9
97.5°	0.1	0.6	4.9	9.7	11.7
100°	0.1	0.3	3.1	7.0	8.8
102.5°	0.1	0.2	1.9	5.0	6.4
105°	0.1	0.2	1.2	3.4	4.6



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CATALOG NUMBER: HVSL4-1-LD4-1LO-40-UNV-O-EDD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.2	0.2	0.2	0.9	1.4
115°	0.2	0.2	0.2	0.6	0.9
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°	0.1	0.2	0.7	2.3	3.2
110°	0.2	0.2	0.4	1.4	2.1



(END OF REPORT)