

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: P580419

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

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580419
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-LD4-1HI-30-UNV-O-EDD-90
Description: 1 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 3000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

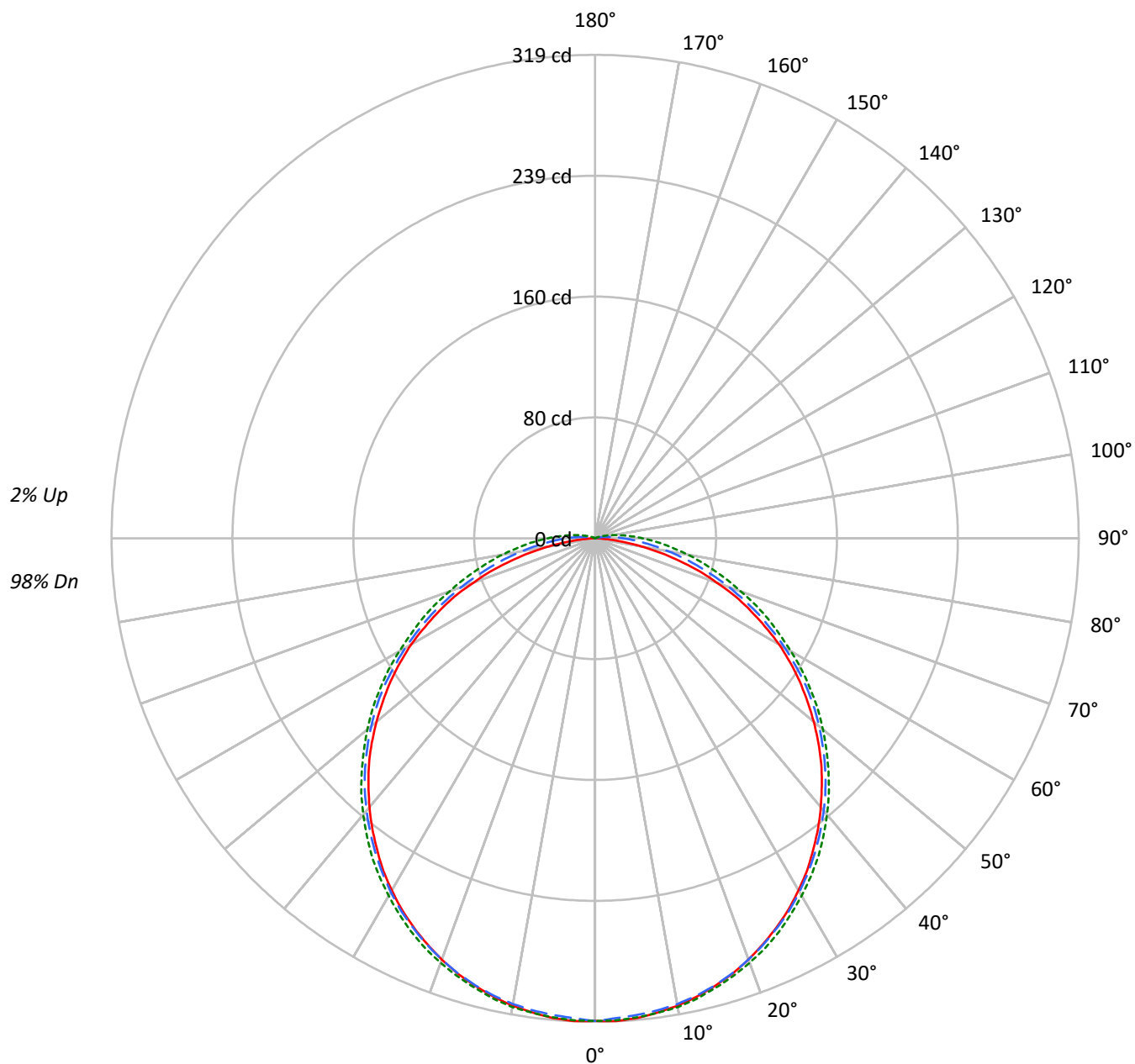
Lumens per Lamp: N/A
Luminaire Lumens: 963.0 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.17')
CIE Type: Direct

Input Watts (W): 10.8
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°	10285	10285	10285
5°	10153	9831	9854
10°	9977	9448	9465
15°	9783	9065	9053
20°	9583	8676	8664
25°	9366	8289	8283
30°	9126	7899	7881
35°	8853	7498	7492
40°	8565	7086	7067
45°	8259	6660	6627
50°	7888	6198	6173
55°	7489	5709	5692
60°	7021	5137	5160
65°	6372	4525	4638
70°	5511	3850	4061
75°	4407	3151	3521
80°	2954	2480	3010
85°	1262	1827	2499



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.1	3.1
10°-20°	86.5	9.0
20°-30°	131.2	13.6
30°-40°	158.6	16.5
40°-50°	165.5	17.2
50°-60°	151.3	15.7
60°-70°	118.0	12.2
70°-80°	73.8	7.7
80°-90°	33.5	3.5
90°-100°	11.2	1.2
100°-110°	2.8	0.3
110°-120°	0.4	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°	247.8	25.7
0°-40°	406.4	42.2
0°-60°	723.2	75.1
0°-90°	948.5	98.5
90°-120°	14.5	1.5
90°-150°	14.5	1.5
90°-180°	14.0	1.5
0°-180°	963.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	318	318	318	318	318	
5°	318	317	316	317	317	30
15°	306	306	305	307	307	86
25°	283	284	284	286	287	131
35°	251	252	253	256	257	157
45°	211	213	215	217	218	163
55°	165	167	170	172	173	147
65°	113	115	119	124	126	112
75°	57	61	70	78	81	61
85°	10	18	32	42	45	13
90°	0	7	18	28	31	0
95°	0	2	10	17	20	0
105°	0	0	2	5	6	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°	318.5	318.5	318.5	318.5	318.5
2.5°	318.9	318.4	317.0	318.4	318.4
5°	317.8	317.2	315.8	317.3	317.3
7.5°	315.7	315.5	314.2	315.9	315.9
10°	313.2	313.2	312.1	314.0	314.1
12.5°	309.8	310.1	309.1	310.9	311.1
15°	305.7	306.3	305.4	307.2	307.1
17.5°	301.3	301.6	301.0	303.0	302.9
20°	295.8	296.2	295.8	297.8	298.0
22.5°	289.7	290.3	290.2	292.3	292.9
25°	283.3	283.5	283.8	286.2	286.7
27.5°	276.2	276.5	277.1	279.2	279.7
30°	268.3	268.9	269.5	271.8	272.4
32.5°	260.1	260.7	261.4	264.4	264.7
35°	250.8	251.9	253.0	255.5	256.6
37.5°	241.5	242.9	243.9	246.6	247.4
40°	231.6	233.1	234.6	237.5	238.0
42.5°	221.3	223.0	224.9	227.4	228.3
45°	211.0	212.9	214.6	216.7	217.7
47.5°	199.8	201.7	203.8	206.2	206.9
50°	188.2	190.4	192.7	194.9	196.1
52.5°	176.4	179.0	181.6	184.0	185.1
55°	164.7	166.6	169.7	172.2	173.3
57.5°	152.5	154.1	156.9	161.0	161.6
60°	140.1	141.6	144.5	147.8	149.1
62.5°	126.4	128.5	131.5	135.7	136.9
65°	113.2	115.1	119.1	123.8	125.8
67.5°	100.3	101.0	106.1	111.0	114.2
70°	85.1	87.7	93.6	99.7	102.1
72.5°	72.1	74.6	81.2	88.3	91.3
75°	57.3	60.8	69.7	78.0	80.9
77.5°	44.3	48.2	59.2	67.6	71.0
80°	30.9	37.0	49.0	58.4	62.1
82.5°	19.4	27.0	39.7	49.6	52.9
85°	9.9	18.3	31.5	41.6	45.3
87.5°	2.6	11.9	24.5	34.2	37.9
90°	0.1	6.8	18.5	27.9	31.2
92.5°	0.1	3.8	13.8	22.1	25.6
95°	0.1	1.8	9.6	17.4	20.1
97.5°	0.1	0.8	6.6	13.1	15.8
100°	0.1	0.4	4.2	9.5	11.9
102.5°	0.2	0.2	2.6	6.8	8.7
105°	0.2	0.2	1.6	4.7	6.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.2	0.2	0.3	1.3	1.9
115°	0.2	0.2	0.3	0.8	1.2
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	0.2	0.9	3.2	4.3
110°	0.2	0.2	0.5	2.0	2.9



(END OF REPORT)