

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: P580444

Luminaire Tested: **HVSL4-1-LD4-2HI-30-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580444
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-LD4-2HI-30-UNV-O-EDD
Description: 1 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 3000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

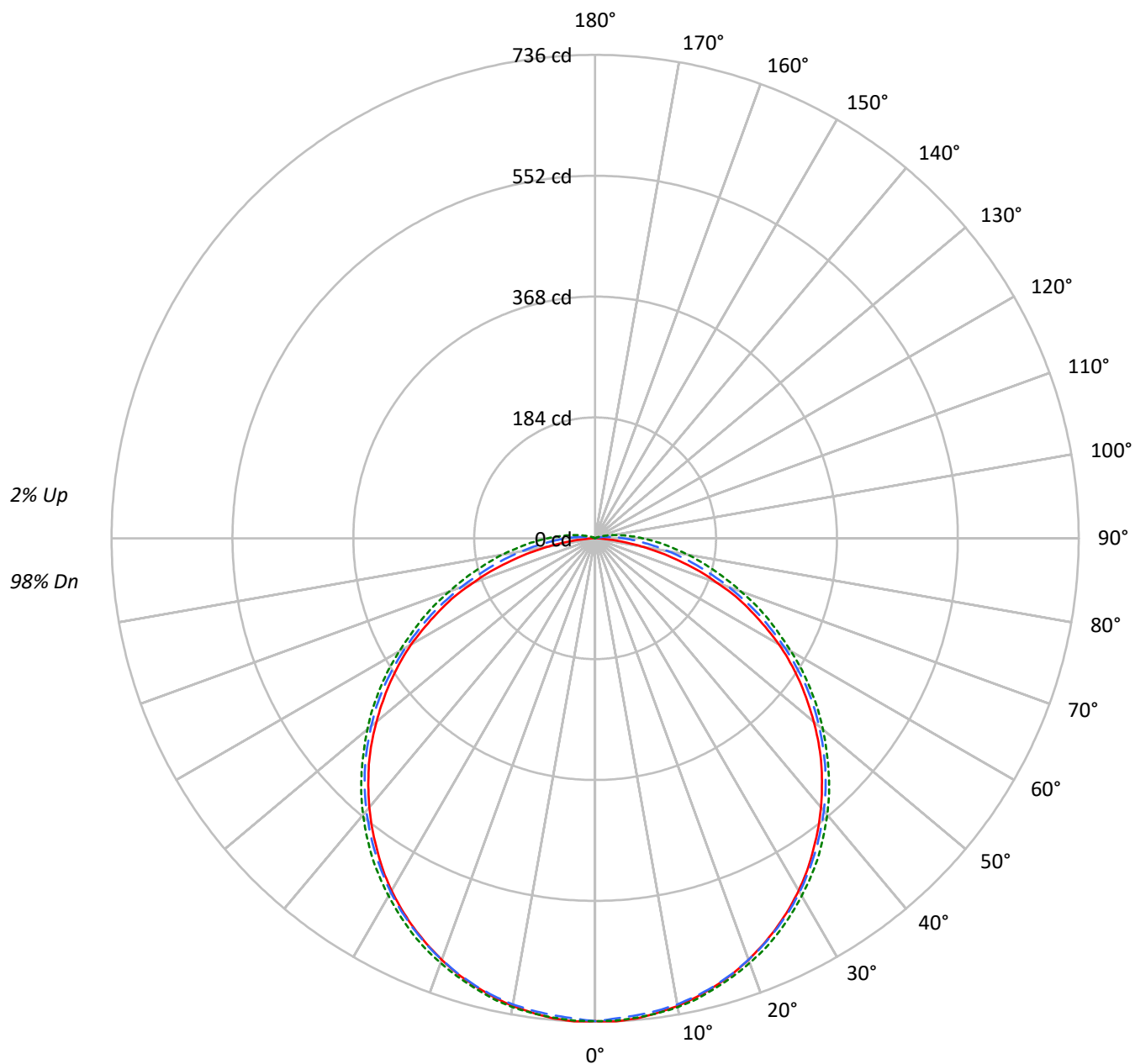
Lumens per Lamp: N/A
Luminaire Lumens: 2223.0 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.17')
CIE Type: Direct

Input Watts (W): 21.6
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°	23741	23741	23741
5°	23441	22694	22749
10°	23033	21812	21846
15°	22587	20928	20899
20°	22125	20024	19999
25°	21618	19137	19118
30°	21071	18236	18193
35°	20435	17305	17290
40°	19774	16359	16314
45°	19062	15375	15301
50°	18210	14303	14250
55°	17284	13178	13137
60°	16207	11856	11912
65°	14702	10444	10703
70°	12725	8889	9374
75°	10168	7270	8131
80°	6825	5720	6946
85°	2920	4210	5765



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.6	3.1
10°-20°	199.6	9.0
20°-30°	302.8	13.6
30°-40°	366.2	16.5
40°-50°	382.1	17.2
50°-60°	349.3	15.7
60°-70°	272.3	12.2
70°-80°	170.3	7.7
80°-90°	77.4	3.5
90°-100°	25.9	1.2
100°-110°	6.5	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°	572.0	25.7
0°-40°	938.1	42.2
0°-60°	1669.5	75.1
0°-90°	2189.5	98.5
90°-120°	33.5	1.5
90°-150°	33.5	1.5
90°-180°	33.0	1.5
0°-180°	2223.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	735	735	735	735	735	
5°	734	732	729	732	732	70
15°	706	707	705	709	709	199
25°	654	654	655	661	662	301
35°	579	582	584	590	592	362
45°	487	491	495	500	503	375
55°	380	385	392	397	400	340
65°	261	266	275	286	290	258
75°	132	140	161	180	187	141
85°	23	42	73	96	104	29
90°	0	16	43	64	72	1
95°	0	4	22	40	46	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°	735.2	735.2	735.2	735.2	735.2
2.5°	736.1	735.1	731.8	735.1	734.9
5°	733.7	732.3	729.0	732.5	732.5
7.5°	728.8	728.3	725.4	729.3	729.3
10°	723.1	722.9	720.5	724.8	725.0
12.5°	715.1	715.8	713.6	717.7	718.2
15°	705.8	707.0	705.1	709.1	708.9
17.5°	695.5	696.2	694.8	699.4	699.2
20°	682.9	683.8	682.7	687.4	687.9
22.5°	668.9	670.1	669.9	674.7	676.1
25°	653.9	654.5	655.2	660.7	661.7
27.5°	637.5	638.3	639.6	644.6	645.6
30°	619.5	620.8	622.2	627.4	628.8
32.5°	600.4	601.8	603.5	610.3	611.0
35°	578.9	581.5	583.9	589.8	592.2
37.5°	557.4	560.7	563.0	569.2	571.1
40°	534.7	538.0	541.6	548.2	549.4
42.5°	511.0	514.8	519.1	525.0	527.1
45°	487.0	491.4	495.4	500.2	502.6
47.5°	461.2	465.5	470.4	475.9	477.5
50°	434.5	439.5	444.7	449.9	452.7
52.5°	407.1	413.2	419.1	424.6	427.2
55°	380.1	384.6	391.7	397.4	400.0
57.5°	352.0	355.8	362.2	371.6	373.0
60°	323.4	326.9	333.5	341.1	344.2
62.5°	291.9	296.6	303.5	313.2	316.0
65°	261.2	265.7	274.9	285.8	290.3
67.5°	231.6	233.1	244.9	256.3	263.6
70°	196.5	202.4	216.1	230.2	235.7
72.5°	166.4	172.3	187.4	203.8	210.8
75°	132.2	140.4	160.8	180.1	186.8
77.5°	102.3	111.3	136.6	156.0	163.8
80°	71.4	85.4	113.0	134.8	143.3
82.5°	44.9	62.2	91.7	114.6	122.0
85°	22.9	42.3	72.6	96.0	104.5
87.5°	6.1	27.4	56.5	78.9	87.5
90°	0.2	15.8	42.8	64.3	72.1
92.5°	0.2	8.8	31.9	51.1	59.1
95°	0.2	4.2	22.2	40.2	46.5
97.5°	0.2	1.7	15.3	30.3	36.6
100°	0.2	0.9	9.7	22.0	27.4
102.5°	0.3	0.5	6.1	15.8	20.1
105°	0.3	0.5	3.6	10.7	14.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.5	0.5	0.7	2.9	4.3
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°	0.3	0.5	2.1	7.3	9.9
110°	0.5	0.5	1.2	4.5	6.6



(END OF REPORT)