

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: P520618

Luminaire Tested: **4WSLA-75-L935-UNV-U**

Issue Date: 5/3/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P520618
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2002-689-5)
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 4WSLA-75-L935-UNV-U
Description: 4 FOOT, 750 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3500K, 90 CRI
LEDS WITH NO UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

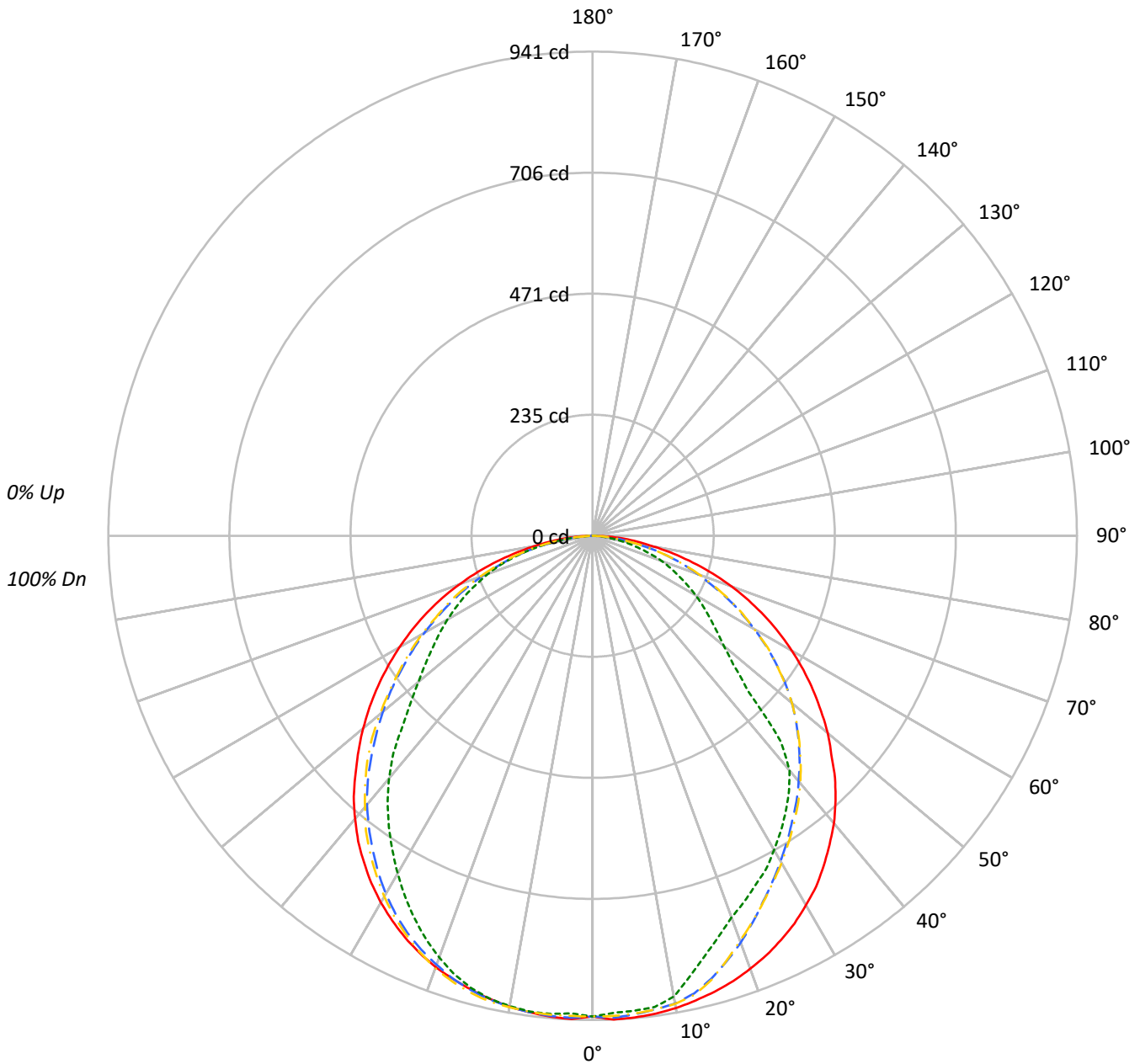
Lumens per Lamp: N/A
Luminaire Lumens: 2506.0 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.2
Input Voltage (V): NR
Input Current (A_{in}): 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			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84			84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70			70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60			60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51			51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44			44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39			39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34			34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31			31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28			28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25			25

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5028	5028	5028	5028
5°	5077	5006	5069	5039
10°	5094	4968	5080	5072
15°	5110	4705	5088	5071
20°	5129	4521	5109	4994
25°	5146	4446	5119	4869
30°	5151	4382	5114	4709
35°	5143	4297	5091	4534
40°	5127	4183	5046	4324
45°	5069	3250	4955	3967
50°	4994	2782	4871	3701
55°	4905	2605	4778	3560
60°	4811	2486	4666	3500
65°	4698	2355	4537	3459
70°	4511	2239	4321	3407
75°	4200	1969	4001	3242
80°	3729	1646	3496	2749
85°	3526	1173	3094	1581



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.8	3.5
10°-20°	253.2	10.1
20°-30°	378.3	15.1
30°-40°	450.3	18.0
40°-50°	450.1	18.0
50°-60°	387.3	15.5
60°-70°	291.5	11.6
70°-80°	166.1	6.6
80°-90°	40.4	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	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°	720.2	28.7
0°-40°	1170.5	46.7
0°-60°	2007.9	80.1
0°-90°	2506.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2506.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	934	934	934	934	934	
5°	940	927	938	933	940	89
15°	917	844	913	910	917	259
25°	866	749	862	820	866	400
35°	783	654	775	690	783	490
45°	666	427	651	521	666	513
55°	523	278	509	379	523	467
65°	369	185	356	272	369	364
75°	202	95	192	156	202	214
85°	57	19	50	26	57	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	934.2	934.2	934.2	934.2	934.2	934.2	934.2	934.2	934.2	934.2	934.2
2.5°	941.2	932.7	937.7	936.2	928.1	931.1	934.2	931.1	940.2	932.1	937.7
5°	939.7	930.6	933.7	930.6	926.6	927.6	932.1	929.1	938.2	929.6	936.7
7.5°	936.7	925.6	928.6	927.1	923.6	924.1	928.6	926.1	934.2	926.1	934.2
10°	932.1	920.6	923.1	916.6	909.1	914.6	923.6	921.1	929.6	920.6	929.6
12.5°	925.1	913.6	911.1	889.6	876.0	886.5	914.1	914.1	922.1	913.6	923.1
15°	917.1	904.6	891.1	858.5	844.4	855.0	893.1	906.1	913.1	904.6	914.1
17.5°	907.6	893.1	867.0	828.9	815.9	826.4	865.5	894.1	903.1	894.1	902.6
20°	895.6	878.5	841.4	797.8	789.3	798.8	837.9	879.5	892.1	881.0	887.0
22.5°	882.5	862.0	812.9	773.8	769.8	775.8	811.4	861.5	878.0	866.5	870.5
25°	866.5	842.4	784.3	751.7	748.7	752.2	785.3	840.4	862.0	850.0	851.5
27.5°	849.5	823.4	757.2	733.2	730.2	731.7	759.3	816.9	843.4	831.4	828.9
30°	828.9	800.8	730.2	708.1	705.1	710.6	734.2	792.8	822.9	810.9	803.4
32.5°	808.4	776.3	703.6	686.6	680.6	685.6	708.1	767.8	800.3	787.8	775.3
35°	782.8	750.2	676.1	659.0	654.0	659.5	682.1	741.7	774.8	762.3	745.2
37.5°	756.2	722.7	651.0	635.5	626.4	633.0	655.5	714.6	748.2	735.2	714.1
40°	729.7	693.6	622.9	606.9	595.4	604.9	627.9	686.1	718.2	706.1	682.1
42.5°	698.6	664.5	595.4	572.8	540.2	570.8	598.4	657.5	687.1	675.6	646.5
45°	666.0	633.5	566.3	511.7	427.0	516.7	568.3	627.4	651.0	640.0	608.4
47.5°	629.0	601.4	536.7	453.5	371.4	458.6	537.7	598.9	616.9	604.9	569.8
50°	596.4	569.3	505.7	404.4	332.3	409.9	505.2	566.8	581.8	570.8	531.7
52.5°	559.3	535.7	472.1	360.8	303.2	366.3	471.1	533.7	545.8	532.7	493.6
55°	522.7	501.7	436.5	322.2	277.6	327.3	435.5	499.7	509.2	494.1	453.5
57.5°	485.6	466.6	399.9	287.7	254.1	293.2	402.4	464.6	471.1	452.0	415.0
60°	447.0	431.0	362.8	257.1	231.0	261.6	361.8	429.5	433.5	413.0	377.4
62.5°	408.4	393.9	325.8	229.0	207.5	232.0	328.3	392.4	394.9	375.4	338.8
65°	368.9	355.3	289.7	199.5	184.9	204.5	292.2	353.8	356.3	334.3	301.2
67.5°	327.8	316.7	251.1	176.9	163.4	178.4	256.1	314.7	316.2	294.7	264.6
70°	286.7	277.1	217.0	152.4	142.3	152.9	220.5	271.6	274.6	251.6	227.5
72.5°	244.6	237.0	183.9	126.8	117.8	126.8	185.9	232.0	234.0	215.0	191.4
75°	202.0	196.5	150.3	101.7	94.7	101.2	151.3	192.4	192.4	174.4	155.9
77.5°	160.9	156.9	115.3	78.2	73.2	77.2	115.8	152.4	151.3	137.3	122.8
80°	120.3	117.3	82.7	56.6	53.1	55.1	82.7	112.8	112.8	102.7	85.2
82.5°	86.2	82.7	54.6	37.1	35.1	36.1	53.6	78.7	80.2	72.7	57.6
85°	57.1	49.1	29.6	20.5	19.0	19.5	28.1	45.6	50.1	42.1	30.1
87.5°	25.1	16.5	7.5	3.0	1.5	2.0	6.0	14.5	19.0	12.5	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	934.2	934.2	934.2	934.2	934.2	934.2
2.5°	937.2	929.1	932.1	934.2	932.1	941.2
5°	936.2	932.7	932.1	934.7	930.6	939.7
7.5°	934.7	932.7	932.1	933.2	928.1	936.7
10°	931.1	928.1	929.1	930.6	924.1	932.1
12.5°	924.6	921.6	922.1	927.1	918.1	925.1
15°	913.6	910.1	913.6	919.1	911.1	917.1
17.5°	899.1	893.6	899.6	908.1	902.1	907.6
20°	880.5	872.0	878.5	894.1	888.5	895.6
22.5°	858.0	847.5	854.0	876.5	875.0	882.5
25°	832.4	819.9	828.9	856.5	859.5	866.5
27.5°	803.9	789.8	801.8	834.4	841.4	849.5
30°	772.8	757.7	771.8	809.9	820.4	828.9
32.5°	740.7	724.2	740.2	782.3	797.3	808.4
35°	707.1	690.1	708.1	753.7	771.8	782.8
37.5°	671.0	654.5	674.1	723.7	745.2	756.2
40°	634.0	615.4	637.5	688.1	716.7	729.7
42.5°	595.9	572.8	599.9	654.5	685.6	698.6
45°	553.3	521.2	557.8	618.9	651.5	666.0
47.5°	510.7	478.6	515.7	580.8	615.9	629.0
50°	469.6	442.0	471.6	539.2	579.8	596.4
52.5°	432.0	409.4	434.5	498.6	542.8	559.3
55°	396.9	379.4	399.9	458.6	503.7	522.7
57.5°	363.8	352.8	366.8	420.5	467.6	485.6
60°	332.8	325.2	335.3	382.9	425.0	447.0
62.5°	302.2	298.2	305.7	343.3	385.4	408.4
65°	272.6	271.6	275.6	308.7	343.8	368.9
67.5°	243.1	242.6	245.1	272.1	303.2	327.8
70°	213.5	216.5	215.0	232.5	262.6	286.7
72.5°	183.4	187.9	185.4	196.5	225.5	244.6
75°	149.8	155.9	150.8	163.4	181.4	202.0
77.5°	115.3	121.8	115.8	126.8	146.3	160.9
80°	82.7	88.7	83.7	92.2	109.3	120.3
82.5°	52.1	56.6	52.6	61.1	78.2	86.2
85°	23.1	25.6	26.6	33.1	48.1	57.1
87.5°	1.0	0.5	1.0	6.5	17.0	25.1
90°	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270° - · - · 135°-315°









(END OF REPORT)