

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: P520621

Luminaire Tested: **4WSLA-75-L940-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: P520621  
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-L940-UNV-U  
Description: 4 FOOT, 750 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 4000K, 90 CRI  
LEDS WITH NO UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

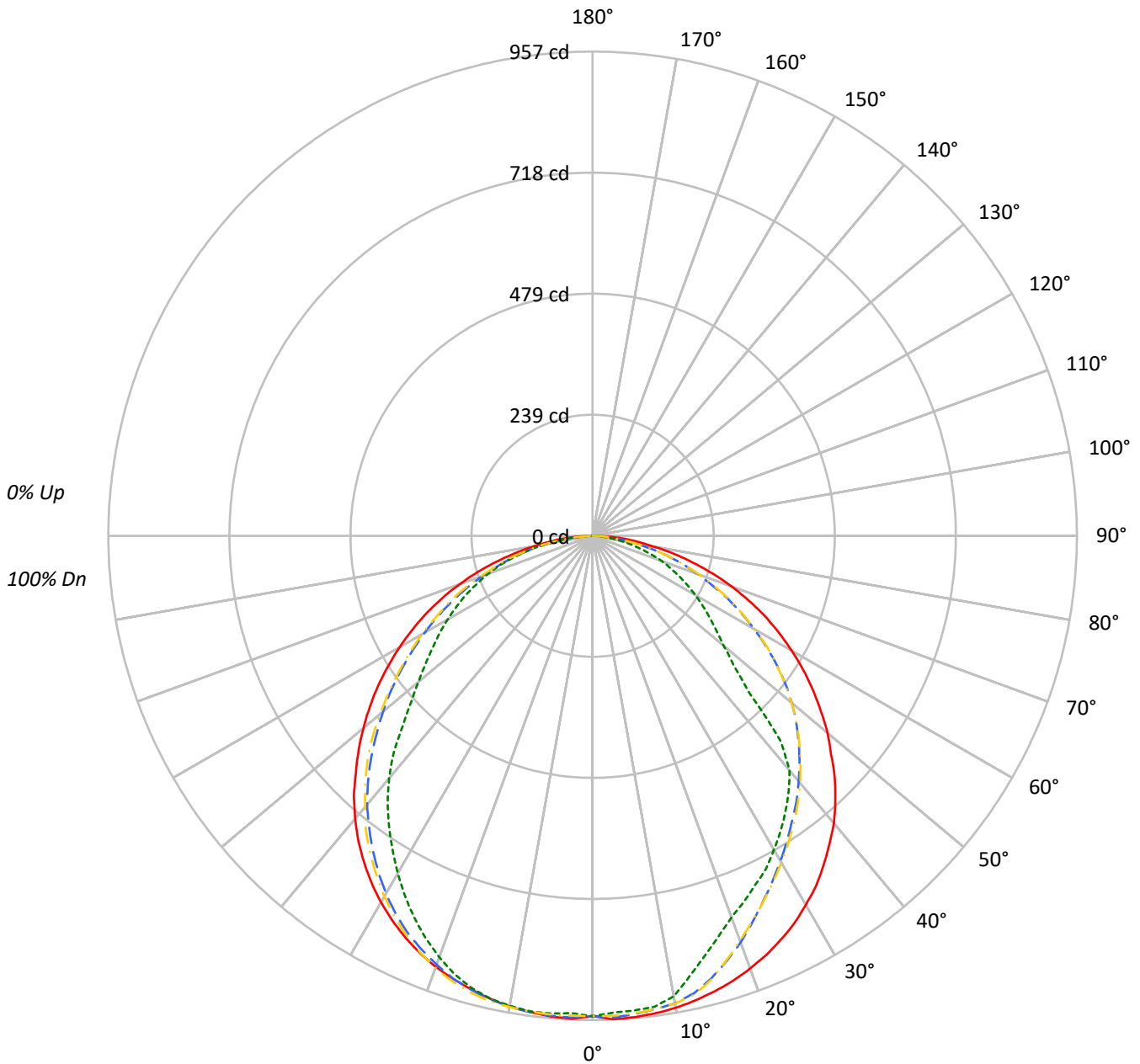
Lumens per Lamp: N/A  
Luminaire Lumens: 2547.0 lumens  
Efficiency: N/A  
Efficacy: 109.8 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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				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°	5110	5110	5110	5110
5°	5159	5088	5151	5121
10°	5178	5050	5164	5155
15°	5193	4782	5171	5154
20°	5213	4594	5193	5076
25°	5230	4519	5203	4948
30°	5236	4454	5198	4786
35°	5227	4367	5174	4608
40°	5210	4251	5128	4395
45°	5152	3303	5036	4032
50°	5075	2828	4952	3762
55°	4985	2648	4856	3618
60°	4890	2527	4743	3559
65°	4774	2394	4613	3516
70°	4585	2277	4392	3462
75°	4269	2002	4067	3294
80°	3787	1674	3552	2796
85°	3588	1198	3143	1606



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.2	3.5
10°-20°	257.3	10.1
20°-30°	384.5	15.1
30°-40°	457.7	18.0
40°-50°	457.5	18.0
50°-60°	393.6	15.5
60°-70°	296.3	11.6
70°-80°	168.8	6.6
80°-90°	41.1	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°	732.0	28.7
0°-40°	1189.7	46.7
0°-60°	2040.8	80.1
0°-90°	2547.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2547.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	949	949	949	949	949	
5°	955	942	954	948	955	91
15°	932	858	928	925	932	263
25°	881	761	876	833	881	406
35°	796	665	788	701	796	498
45°	677	434	662	530	677	521
55°	531	282	518	386	531	475
65°	375	188	362	276	375	370
75°	205	96	196	158	205	217
85°	58	19	51	26	58	63
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°	949.4	949.4	949.4	949.4	949.4	949.4	949.4	949.4	949.4	949.4	949.4
2.5°	956.6	947.9	953.0	951.5	943.3	946.4	949.4	946.4	955.5	947.4	953.0
5°	955.0	945.9	948.9	945.9	941.8	942.8	947.4	944.3	953.5	944.9	952.0
7.5°	952.0	940.8	943.8	942.3	938.7	939.3	943.8	941.3	949.4	941.3	949.4
10°	947.4	935.7	938.2	931.6	924.0	929.6	938.7	936.2	944.9	935.7	944.9
12.5°	940.3	928.6	926.0	904.1	890.4	901.0	929.1	929.1	937.2	928.6	938.2
15°	932.1	919.4	905.6	872.5	858.3	869.0	907.7	920.9	928.0	919.4	929.1
17.5°	922.4	907.7	881.2	842.5	829.2	839.9	879.7	908.7	917.9	908.7	917.3
20°	910.2	892.9	855.2	810.9	802.2	811.9	851.6	893.9	906.7	895.4	901.6
22.5°	897.0	876.1	826.2	786.4	782.4	788.5	824.6	875.6	892.4	880.7	884.7
25°	880.7	856.2	797.1	764.0	761.0	764.5	798.2	854.2	876.1	863.9	865.4
27.5°	863.4	836.9	769.6	745.2	742.1	743.7	771.7	830.2	857.2	845.0	842.5
30°	842.5	813.9	742.1	719.7	716.7	722.3	746.2	805.8	836.4	824.1	816.5
32.5°	821.6	789.0	715.1	697.8	691.7	696.8	719.7	780.3	813.4	800.7	788.0
35°	795.6	762.5	687.1	669.8	664.7	670.3	693.2	753.8	787.5	774.7	757.4
37.5°	768.6	734.5	661.7	645.9	636.7	643.3	666.2	726.3	760.5	747.2	725.8
40°	741.6	704.9	633.1	616.8	605.1	614.8	638.2	697.3	729.9	717.7	693.2
42.5°	710.0	675.4	605.1	582.2	549.1	580.2	608.2	668.3	698.3	686.6	657.1
45°	676.9	643.8	575.6	520.1	434.0	525.1	577.6	637.7	661.7	650.4	618.4
47.5°	639.2	611.2	545.5	461.0	377.4	466.1	546.5	608.7	627.0	614.8	579.1
50°	606.1	578.6	513.9	411.0	337.7	416.7	513.4	576.1	591.4	580.2	540.4
52.5°	568.4	544.5	479.8	366.7	308.2	372.3	478.8	542.5	554.7	541.4	501.7
55°	531.3	509.9	443.6	327.5	282.2	332.6	442.6	507.8	517.5	502.2	461.0
57.5°	493.6	474.2	406.5	292.4	258.2	298.0	409.0	472.2	478.8	459.4	421.7
60°	454.3	438.0	368.8	261.3	234.8	265.9	367.8	436.5	440.6	419.7	383.5
62.5°	415.1	400.4	331.1	232.8	210.9	235.8	333.6	398.8	401.4	381.5	344.3
65°	374.9	361.1	294.4	202.7	188.0	207.8	297.0	359.6	362.2	339.7	306.1
67.5°	333.1	321.9	255.2	179.8	166.0	181.3	260.3	319.9	321.4	299.5	268.9
70°	291.4	281.7	220.6	154.8	144.7	155.4	224.1	276.1	279.1	255.7	231.2
72.5°	248.6	240.9	186.9	128.9	119.7	128.9	189.0	235.8	237.9	218.5	194.6
75°	205.3	199.7	152.8	103.4	96.3	102.9	153.8	195.6	195.6	177.3	158.4
77.5°	163.5	159.4	117.2	79.5	74.4	78.4	117.7	154.8	153.8	139.6	124.8
80°	122.2	119.2	84.0	57.6	54.0	56.0	84.0	114.6	114.6	104.4	86.6
82.5°	87.6	84.0	55.5	37.7	35.7	36.7	54.5	80.0	81.5	73.9	58.6
85°	58.1	49.9	30.1	20.9	19.4	19.9	28.5	46.4	50.9	42.8	30.6
87.5°	25.5	16.8	7.6	3.1	1.5	2.0	6.1	14.8	19.4	12.7	4.1
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°	949.4	949.4	949.4	949.4	949.4	949.4
2.5°	952.5	944.3	947.4	949.4	947.4	956.6
5°	951.5	947.9	947.4	949.9	945.9	955.0
7.5°	949.9	947.9	947.4	948.4	943.3	952.0
10°	946.4	943.3	944.3	945.9	939.3	947.4
12.5°	939.8	936.7	937.2	942.3	933.1	940.3
15°	928.6	925.0	928.6	934.2	926.0	932.1
17.5°	913.8	908.2	914.3	923.0	916.8	922.4
20°	894.9	886.3	892.9	908.7	903.1	910.2
22.5°	872.0	861.3	867.9	890.9	889.3	897.0
25°	846.0	833.3	842.5	870.5	873.5	880.7
27.5°	817.0	802.7	815.0	848.1	855.2	863.4
30°	785.4	770.1	784.4	823.1	833.8	842.5
32.5°	752.8	736.0	752.3	795.1	810.4	821.6
35°	718.7	701.4	719.7	766.1	784.4	795.6
37.5°	682.0	665.2	685.1	735.5	757.4	768.6
40°	644.3	625.5	647.9	699.3	728.4	741.6
42.5°	605.6	582.2	609.7	665.2	696.8	710.0
45°	562.3	529.7	566.9	629.1	662.2	676.9
47.5°	519.0	486.4	524.1	590.3	626.0	639.2
50°	477.3	449.3	479.3	548.1	589.3	606.1
52.5°	439.1	416.1	441.6	506.8	551.6	568.4
55°	403.4	385.6	406.5	466.1	511.9	531.3
57.5°	369.8	358.6	372.8	427.3	475.2	493.6
60°	338.2	330.6	340.8	389.1	431.9	454.3
62.5°	307.1	303.1	310.7	348.9	391.7	415.1
65°	277.1	276.1	280.1	313.8	349.4	374.9
67.5°	247.0	246.5	249.1	276.6	308.2	333.1
70°	217.0	220.0	218.5	236.3	266.9	291.4
72.5°	186.4	191.0	188.5	199.7	229.2	248.6
75°	152.3	158.4	153.3	166.0	184.4	205.3
77.5°	117.2	123.8	117.7	128.9	148.7	163.5
80°	84.0	90.2	85.1	93.7	111.0	122.2
82.5°	53.0	57.6	53.5	62.1	79.5	87.6
85°	23.4	26.0	27.0	33.6	48.9	58.1
87.5°	1.0	0.5	1.0	6.6	17.3	25.5
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)