

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: P520717

Luminaire Tested: **8WSLA-175-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: P520717  
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: 8WSLA-175-L940-UNV-U  
Description: 8 FOOT, 3500 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**

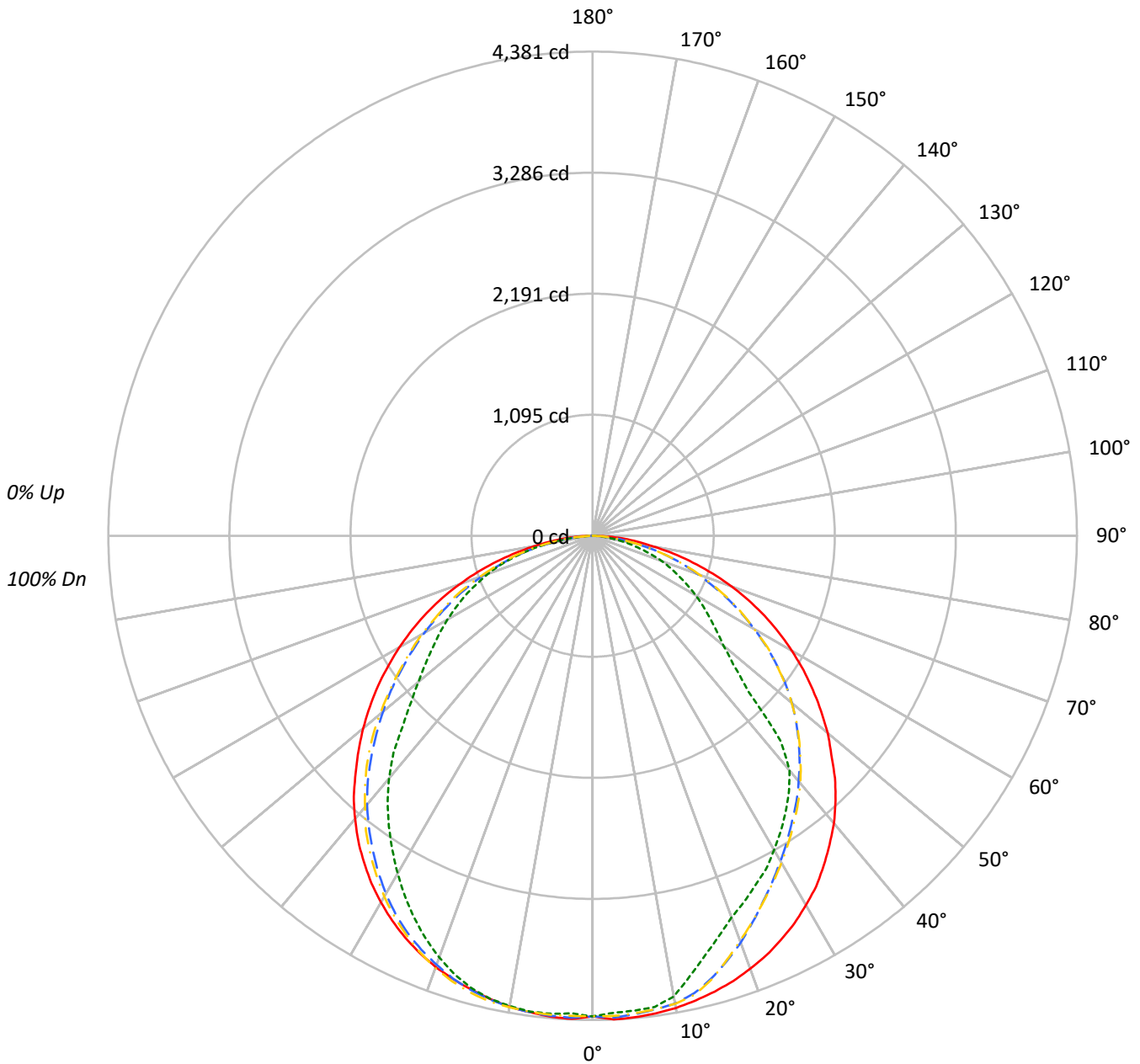
Lumens per Lamp: N/A  
Luminaire Lumens: 11665.0 lumens  
Efficiency: N/A  
Efficacy: 98.0 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')  
CIE Type: Direct

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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	11701	11701	11701	11701
5°	11815	11651	11796	11727
10°	11856	11563	11824	11805
15°	11893	10951	11841	11802
20°	11938	10521	11891	11624
25°	11976	10348	11913	11332
30°	11989	10199	11902	10960
35°	11970	10001	11848	10553
40°	11931	9735	11743	10063
45°	11799	7564	11532	9233
50°	11622	6475	11338	8614
55°	11415	6063	11120	8285
60°	11199	5788	10860	8148
65°	10932	5481	10561	8051
70°	10499	5212	10058	7929
75°	9774	4584	9314	7543
80°	8677	3832	8134	6399
85°	8210	2736	7203	3674



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	413.2	3.5
10°-20°	1178.4	10.1
20°-30°	1760.9	15.1
30°-40°	2096.1	18.0
40°-50°	2095.2	18.0
50°-60°	1802.9	15.5
60°-70°	1356.9	11.6
70°-80°	773.2	6.6
80°-90°	188.2	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°	3352.5	28.7
0°-40°	5448.6	46.7
0°-60°	9346.6	80.1
0°-90°	11665.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11665.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	4348	4348	4348	4348	4348	
5°	4374	4313	4367	4341	4374	416
15°	4269	3931	4250	4236	4269	1206
25°	4033	3485	4012	3816	4033	1860
35°	3644	3044	3606	3212	3644	2280
45°	3100	1988	3030	2426	3100	2388
55°	2433	1292	2370	1766	2433	2175
65°	1717	861	1659	1264	1717	1695
75°	940	441	896	726	940	995
85°	266	89	233	119	266	289
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°	4348.3	4348.3	4348.3	4348.3	4348.3	4348.3	4348.3	4348.3	4348.3	4348.3	4348.3
2.5°	4381.0	4341.3	4364.7	4357.7	4320.3	4334.3	4348.3	4334.3	4376.3	4339.0	4364.7
5°	4374.0	4332.0	4346.0	4332.0	4313.3	4318.0	4339.0	4325.0	4367.0	4327.3	4360.0
7.5°	4360.0	4308.7	4322.7	4315.7	4299.3	4301.7	4322.7	4311.0	4348.3	4311.0	4348.3
10°	4339.0	4285.3	4297.0	4266.7	4231.7	4257.3	4299.3	4287.7	4327.3	4285.3	4327.3
12.5°	4306.3	4252.7	4241.0	4140.7	4077.7	4126.7	4255.0	4255.0	4292.3	4252.7	4297.0
15°	4269.0	4210.7	4147.7	3996.1	3930.8	3979.7	4157.0	4217.7	4250.3	4210.7	4255.0
17.5°	4224.7	4157.0	4035.7	3858.4	3797.8	3846.8	4028.7	4161.7	4203.7	4161.7	4201.4
20°	4168.7	4089.4	3916.8	3713.8	3674.1	3718.5	3900.4	4094.1	4152.4	4101.1	4129.0
22.5°	4108.0	4012.4	3783.8	3601.8	3583.2	3611.2	3776.8	4010.1	4087.1	4033.4	4052.1
25°	4033.4	3921.4	3650.8	3499.2	3485.2	3501.5	3655.5	3912.1	4012.4	3956.4	3963.4
27.5°	3954.1	3832.8	3524.9	3412.9	3398.9	3405.9	3534.2	3802.5	3926.1	3870.1	3858.4
30°	3858.4	3727.8	3398.9	3296.2	3282.2	3307.9	3417.5	3690.5	3830.4	3774.5	3739.5
32.5°	3762.8	3613.5	3275.2	3195.9	3167.9	3191.3	3296.2	3573.8	3725.5	3667.2	3608.8
35°	3643.8	3492.2	3146.9	3067.6	3044.3	3070.0	3174.9	3452.5	3606.5	3548.2	3468.9
37.5°	3520.2	3363.9	3030.3	2958.0	2916.0	2946.3	3051.3	3326.6	3482.9	3422.2	3324.2
40°	3396.5	3228.6	2899.7	2825.0	2771.4	2815.7	2923.0	3193.6	3342.9	3286.9	3174.9
42.5°	3251.9	3093.3	2771.4	2666.4	2514.8	2657.1	2785.4	3060.6	3198.3	3144.6	3009.3
45°	3100.3	2948.7	2636.1	2381.8	1987.5	2405.1	2645.4	2920.7	3030.3	2979.0	2832.0
47.5°	2927.7	2799.4	2498.4	2111.2	1728.6	2134.5	2503.1	2787.7	2871.7	2815.7	2652.4
50°	2776.0	2650.1	2353.8	1882.6	1546.6	1908.2	2351.5	2638.4	2708.4	2657.1	2475.1
52.5°	2603.4	2493.8	2197.5	1679.6	1411.3	1705.3	2192.8	2484.4	2540.4	2479.8	2297.8
55°	2433.1	2335.1	2031.9	1500.0	1292.4	1523.3	2027.2	2325.8	2370.1	2300.1	2111.2
57.5°	2260.5	2171.8	1861.6	1339.0	1182.7	1364.7	1873.2	2162.5	2192.8	2104.2	1931.6
60°	2080.9	2006.2	1688.9	1196.7	1075.4	1217.7	1684.3	1999.2	2017.9	1922.2	1756.6
62.5°	1901.2	1833.6	1516.3	1066.1	965.8	1080.1	1528.0	1826.6	1838.2	1747.3	1577.0
65°	1716.9	1654.0	1348.4	928.5	860.8	951.8	1360.0	1647.0	1658.6	1556.0	1402.0
67.5°	1525.6	1474.3	1168.7	823.5	760.5	830.5	1192.1	1465.0	1472.0	1371.7	1231.7
70°	1334.4	1290.0	1010.1	709.2	662.5	711.5	1026.4	1264.4	1278.4	1171.1	1059.1
72.5°	1138.4	1103.4	856.1	590.2	548.2	590.2	865.5	1080.1	1089.4	1000.8	891.1
75°	940.1	914.5	699.8	473.6	440.9	471.2	704.5	895.8	895.8	811.8	725.5
77.5°	748.8	730.2	536.5	363.9	340.6	359.3	538.9	709.2	704.5	639.2	571.5
80°	559.9	545.9	384.9	263.6	247.3	256.6	384.9	524.9	524.9	478.2	396.6
82.5°	401.2	384.9	254.3	172.6	163.3	168.0	249.6	366.2	373.2	338.3	268.3
85°	265.9	228.6	137.6	95.6	88.6	91.0	130.6	212.3	233.3	196.0	140.0
87.5°	116.6	77.0	35.0	14.0	7.0	9.3	28.0	67.7	88.6	58.3	18.7
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°	4348.3	4348.3	4348.3	4348.3	4348.3	4348.3
2.5°	4362.3	4325.0	4339.0	4348.3	4339.0	4381.0
5°	4357.7	4341.3	4339.0	4350.7	4332.0	4374.0
7.5°	4350.7	4341.3	4339.0	4343.7	4320.3	4360.0
10°	4334.3	4320.3	4325.0	4332.0	4301.7	4339.0
12.5°	4304.0	4290.0	4292.3	4315.7	4273.7	4306.3
15°	4252.7	4236.4	4252.7	4278.3	4241.0	4269.0
17.5°	4185.0	4159.4	4187.4	4227.0	4199.0	4224.7
20°	4098.7	4059.1	4089.4	4161.7	4136.0	4168.7
22.5°	3993.7	3944.8	3975.1	4080.1	4073.1	4108.0
25°	3874.8	3816.4	3858.4	3986.7	4000.7	4033.4
27.5°	3741.8	3676.5	3732.5	3884.1	3916.8	3954.1
30°	3597.2	3527.2	3592.5	3769.8	3818.8	3858.4
32.5°	3447.9	3370.9	3445.5	3641.5	3711.5	3762.8
35°	3291.6	3212.3	3296.2	3508.5	3592.5	3643.8
37.5°	3123.6	3046.6	3137.6	3368.6	3468.9	3520.2
40°	2951.0	2864.7	2967.3	3202.9	3335.9	3396.5
42.5°	2773.7	2666.4	2792.4	3046.6	3191.3	3251.9
45°	2575.4	2426.1	2596.4	2881.0	3032.6	3100.3
47.5°	2377.1	2227.8	2400.4	2703.7	2867.0	2927.7
50°	2185.8	2057.5	2195.2	2510.1	2699.0	2776.0
52.5°	2010.9	1905.9	2022.5	2321.1	2526.4	2603.4
55°	1847.6	1765.9	1861.6	2134.5	2344.5	2433.1
57.5°	1693.6	1642.3	1707.6	1957.2	2176.5	2260.5
60°	1549.0	1514.0	1560.6	1782.3	1978.2	2080.9
62.5°	1406.7	1388.0	1423.0	1598.0	1793.9	1901.2
65°	1269.0	1264.4	1283.0	1437.0	1600.3	1716.9
67.5°	1131.4	1129.1	1140.7	1266.7	1411.3	1525.6
70°	993.8	1007.8	1000.8	1082.4	1222.4	1334.4
72.5°	853.8	874.8	863.1	914.5	1049.8	1138.4
75°	697.5	725.5	702.2	760.5	844.5	940.1
77.5°	536.5	566.9	538.9	590.2	681.2	748.8
80°	384.9	412.9	389.6	429.2	508.5	559.9
82.5°	242.6	263.6	244.9	284.6	363.9	401.2
85°	107.3	119.0	123.6	154.0	223.9	265.9
87.5°	4.7	2.3	4.7	30.3	79.3	116.6
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)