

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: P520489

Luminaire Tested: **4WSLA-125-L840-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: P520489  
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-125-L840-UNV-U  
Description: 4 FOOT, 1250 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 4000K, 80 CRI  
LEDS WITH NO UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

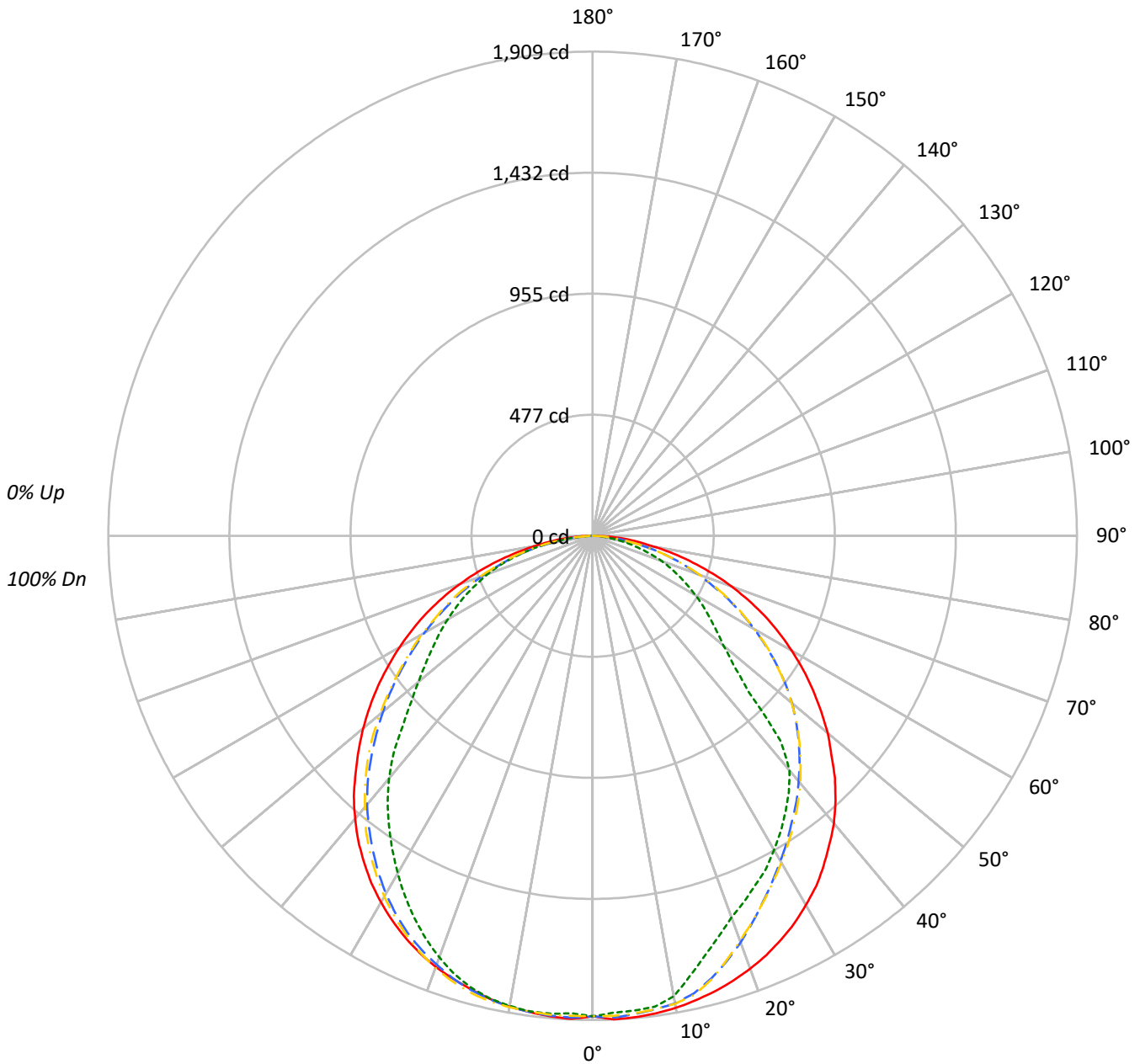
Lumens per Lamp: N/A  
Luminaire Lumens: 5082.0 lumens  
Efficiency: N/A  
Efficacy: 131.0 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 38.8  
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

TEST NUMBER: P520489

CATALOG NUMBER: 4WSLA-125-L840-UNV-U

### Luminous Intensity Polar Plot





TEST NUMBER: P520489

CATALOG NUMBER: 4WSLA-125-L840-UNV-U

**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°	10196	10196	10196	10196
5°	10295	10152	10278	10218
10°	10330	10075	10303	10286
15°	10362	9542	10317	10283
20°	10401	9168	10361	10128
25°	10435	9017	10381	9874
30°	10447	8886	10371	9550
35°	10430	8714	10323	9195
40°	10396	8483	10232	8768
45°	10280	6591	10048	8045
50°	10126	5642	9879	7505
55°	9946	5283	9689	7218
60°	9757	5043	9463	7100
65°	9526	4776	9202	7014
70°	9147	4541	8763	6908
75°	8517	3995	8116	6573
80°	7559	3338	7088	5576
85°	7157	2384	6274	3199



TEST NUMBER: P520489

CATALOG NUMBER: 4WSLA-125-L840-UNV-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	180.0	3.5
10°-20°	513.4	10.1
20°-30°	767.2	15.1
30°-40°	913.2	18.0
40°-50°	912.8	18.0
50°-60°	785.4	15.5
60°-70°	591.2	11.6
70°-80°	336.9	6.6
80°-90°	82.0	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°	1460.6	28.7
0°-40°	2373.7	46.7
0°-60°	4072.0	80.1
0°-90°	5082.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5082.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1894	1894	1894	1894	1894	
5°	1906	1879	1902	1891	1906	181
15°	1860	1712	1852	1846	1860	525
25°	1757	1518	1748	1663	1757	810
35°	1588	1326	1571	1400	1588	993
45°	1351	866	1320	1057	1351	1040
55°	1060	563	1033	769	1060	948
65°	748	375	723	551	748	739
75°	410	192	390	316	410	434
85°	116	39	102	52	116	126
90°	0	0	0	0	0	



TEST NUMBER: P520489

CATALOG NUMBER: 4WSLA-125-L840-UNV-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1894.4	1894.4	1894.4	1894.4	1894.4	1894.4	1894.4	1894.4	1894.4	1894.4	1894.4
2.5°	1908.6	1891.4	1901.5	1898.5	1882.2	1888.3	1894.4	1888.3	1906.6	1890.3	1901.5
5°	1905.6	1887.3	1893.4	1887.3	1879.2	1881.2	1890.3	1884.2	1902.5	1885.3	1899.5
7.5°	1899.5	1877.1	1883.2	1880.2	1873.1	1874.1	1883.2	1878.1	1894.4	1878.1	1894.4
10°	1890.3	1867.0	1872.0	1858.8	1843.6	1854.8	1873.1	1868.0	1885.3	1867.0	1885.3
12.5°	1876.1	1852.7	1847.7	1804.0	1776.5	1797.9	1853.7	1853.7	1870.0	1852.7	1872.0
15°	1859.8	1834.4	1807.0	1740.9	1712.5	1733.8	1811.1	1837.5	1851.7	1834.4	1853.7
17.5°	1840.5	1811.1	1758.2	1681.0	1654.6	1675.9	1755.2	1813.1	1831.4	1813.1	1830.4
20°	1816.1	1781.6	1706.4	1618.0	1600.7	1620.0	1699.3	1783.6	1809.0	1786.7	1798.9
22.5°	1789.7	1748.1	1648.5	1569.2	1561.1	1573.2	1645.4	1747.0	1780.6	1757.2	1765.3
25°	1757.2	1708.4	1590.5	1524.5	1518.4	1525.5	1592.6	1704.4	1748.1	1723.7	1726.7
27.5°	1722.6	1669.8	1535.6	1486.9	1480.8	1483.8	1539.7	1656.6	1710.4	1686.1	1681.0
30°	1681.0	1624.1	1480.8	1436.0	1429.9	1441.1	1488.9	1607.8	1668.8	1644.4	1629.1
32.5°	1639.3	1574.3	1426.9	1392.3	1380.1	1390.3	1436.0	1557.0	1623.0	1597.6	1572.2
35°	1587.5	1521.4	1371.0	1336.4	1326.3	1337.5	1383.2	1504.1	1571.2	1545.8	1511.3
37.5°	1533.6	1465.5	1320.2	1288.7	1270.4	1283.6	1329.3	1449.3	1517.4	1490.9	1448.2
40°	1479.7	1406.6	1263.3	1230.8	1207.4	1226.7	1273.4	1391.3	1456.4	1432.0	1383.2
42.5°	1416.7	1347.6	1207.4	1161.6	1095.6	1157.6	1213.5	1333.4	1393.4	1370.0	1311.0
45°	1350.7	1284.6	1148.4	1037.7	865.9	1047.8	1152.5	1272.4	1320.2	1297.8	1233.8
47.5°	1275.5	1219.6	1088.5	919.8	753.1	929.9	1090.5	1214.5	1251.1	1226.7	1155.5
50°	1209.4	1154.5	1025.5	820.2	673.8	831.3	1024.4	1149.4	1179.9	1157.6	1078.3
52.5°	1134.2	1086.4	957.4	731.7	614.9	742.9	955.3	1082.4	1106.8	1080.3	1001.1
55°	1060.0	1017.3	885.2	653.5	563.0	663.7	883.2	1013.3	1032.6	1002.1	919.8
57.5°	984.8	946.2	811.0	583.4	515.3	594.5	816.1	942.1	955.3	916.7	841.5
60°	906.5	874.0	735.8	521.4	468.5	530.5	733.8	871.0	879.1	837.4	765.3
62.5°	828.3	798.8	660.6	464.5	420.8	470.6	665.7	795.8	800.9	761.2	687.0
65°	748.0	720.6	587.4	404.5	375.0	414.7	592.5	717.5	722.6	677.9	610.8
67.5°	664.7	642.3	509.2	358.8	331.3	361.8	519.3	638.2	641.3	597.6	536.6
70°	581.3	562.0	440.1	309.0	288.6	310.0	447.2	550.8	556.9	510.2	461.4
72.5°	496.0	480.7	373.0	257.1	238.8	257.1	377.1	470.6	474.6	436.0	388.2
75°	409.6	398.4	304.9	206.3	192.1	205.3	306.9	390.3	390.3	353.7	316.1
77.5°	326.2	318.1	233.8	158.5	148.4	156.5	234.8	309.0	306.9	278.5	249.0
80°	243.9	237.8	167.7	114.8	107.7	111.8	167.7	228.7	228.7	208.3	172.8
82.5°	174.8	167.7	110.8	75.2	71.1	73.2	108.7	159.6	162.6	147.4	116.9
85°	115.9	99.6	60.0	41.7	38.6	39.6	56.9	92.5	101.6	85.4	61.0
87.5°	50.8	33.5	15.2	6.1	3.0	4.1	12.2	29.5	38.6	25.4	8.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P520489

CATALOG NUMBER: 4WSLA-125-L840-UNV-U

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1894.4	1894.4	1894.4	1894.4	1894.4	1894.4
2.5°	1900.5	1884.2	1890.3	1894.4	1890.3	1908.6
5°	1898.5	1891.4	1890.3	1895.4	1887.3	1905.6
7.5°	1895.4	1891.4	1890.3	1892.4	1882.2	1899.5
10°	1888.3	1882.2	1884.2	1887.3	1874.1	1890.3
12.5°	1875.1	1869.0	1870.0	1880.2	1861.9	1876.1
15°	1852.7	1845.6	1852.7	1863.9	1847.7	1859.8
17.5°	1823.3	1812.1	1824.3	1841.6	1829.4	1840.5
20°	1785.7	1768.4	1781.6	1813.1	1801.9	1816.1
22.5°	1739.9	1718.6	1731.8	1777.5	1774.5	1789.7
25°	1688.1	1662.7	1681.0	1736.9	1743.0	1757.2
27.5°	1630.2	1601.7	1626.1	1692.2	1706.4	1722.6
30°	1567.1	1536.7	1565.1	1642.4	1663.7	1681.0
32.5°	1502.1	1468.6	1501.1	1586.5	1616.9	1639.3
35°	1434.0	1399.5	1436.0	1528.5	1565.1	1587.5
37.5°	1360.8	1327.3	1366.9	1467.6	1511.3	1533.6
40°	1285.6	1248.0	1292.7	1395.4	1453.3	1479.7
42.5°	1208.4	1161.6	1216.5	1327.3	1390.3	1416.7
45°	1122.0	1057.0	1131.2	1255.1	1321.2	1350.7
47.5°	1035.6	970.6	1045.8	1177.9	1249.0	1275.5
50°	952.3	896.4	956.3	1093.5	1175.9	1209.4
52.5°	876.1	830.3	881.1	1011.2	1100.7	1134.2
55°	804.9	769.3	811.0	929.9	1021.4	1060.0
57.5°	737.8	715.5	743.9	852.7	948.2	984.8
60°	674.8	659.6	679.9	776.5	861.8	906.5
62.5°	612.8	604.7	619.9	696.2	781.5	828.3
65°	552.9	550.8	559.0	626.0	697.2	748.0
67.5°	492.9	491.9	497.0	551.9	614.9	664.7
70°	432.9	439.0	436.0	471.6	532.5	581.3
72.5°	372.0	381.1	376.0	398.4	457.3	496.0
75°	303.9	316.1	305.9	331.3	367.9	409.6
77.5°	233.8	247.0	234.8	257.1	296.8	326.2
80°	167.7	179.9	169.7	187.0	221.6	243.9
82.5°	105.7	114.8	106.7	124.0	158.5	174.8
85°	46.8	51.8	53.9	67.1	97.6	115.9
87.5°	2.0	1.0	2.0	13.2	34.6	50.8
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)