

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: P520750

Luminaire Tested: **8WSLA-50-L835-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: P520750
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-50-L835-UNV-U
Description: 8 FOOT, 1000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3500K, 80 CRI
LEDS WITH NO UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

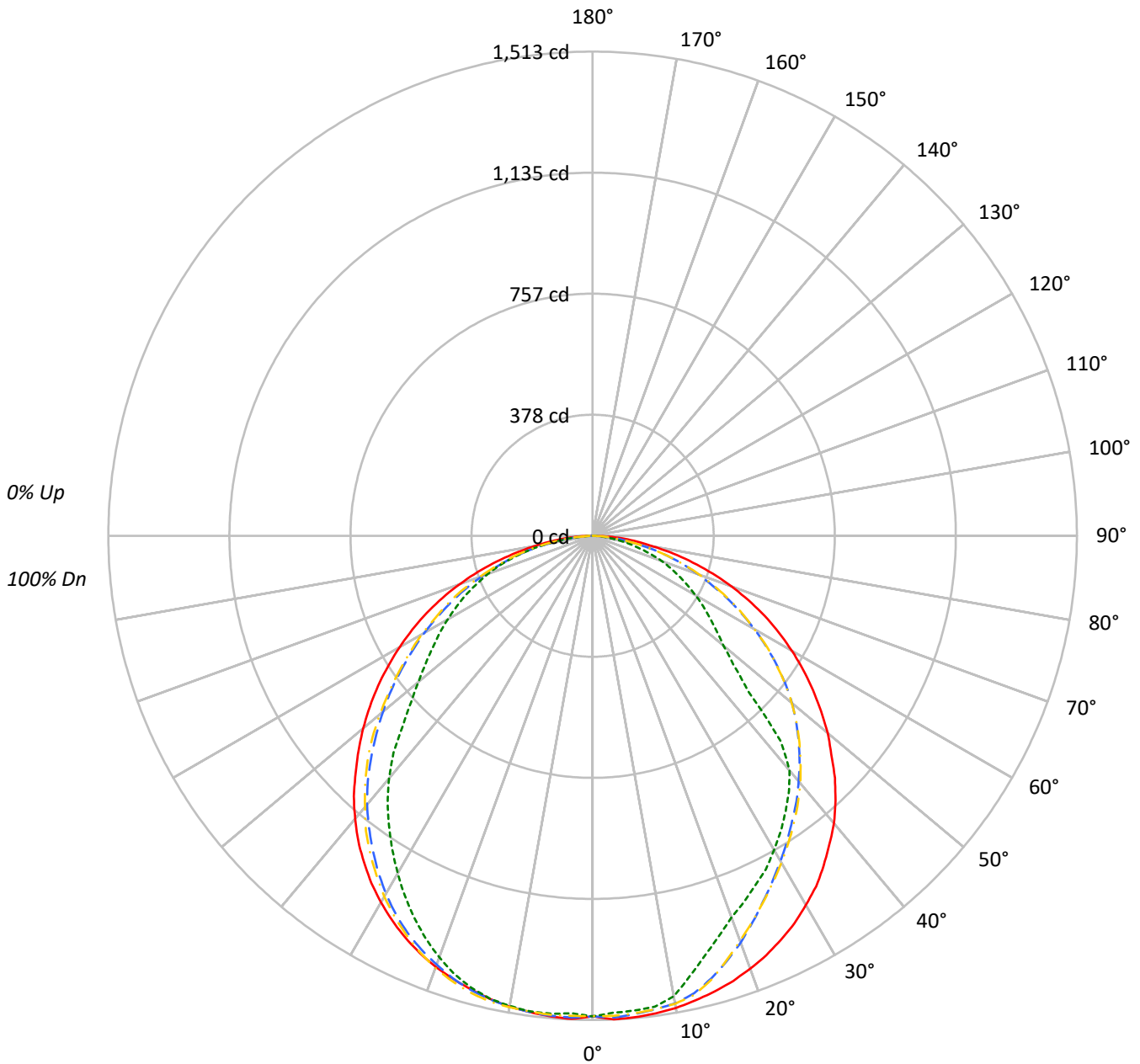
Lumens per Lamp: N/A
Luminaire Lumens: 4028.0 lumens
Efficiency: N/A
Efficacy: 132.1 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 30.5
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

TEST NUMBER: P520750

CATALOG NUMBER: 8WSLA-50-L835-UNV-U

Luminous Intensity Polar Plot





TEST NUMBER: P520750

CATALOG NUMBER: 8WSLA-50-L835-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			
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°	4041	4041	4041	4041
5°	4080	4023	4073	4049
10°	4094	3993	4083	4076
15°	4107	3781	4089	4075
20°	4122	3633	4106	4014
25°	4135	3573	4114	3913
30°	4140	3522	4110	3785
35°	4133	3453	4091	3644
40°	4120	3362	4055	3475
45°	4074	2612	3982	3188
50°	4013	2236	3915	2974
55°	3942	2094	3840	2861
60°	3867	1998	3750	2814
65°	3775	1892	3647	2780
70°	3626	1800	3473	2738
75°	3375	1582	3216	2604
80°	2996	1323	2808	2210
85°	2834	945	2489	1269



TEST NUMBER: P520750

CATALOG NUMBER: 8WSLA-50-L835-UNV-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.7	3.5
10°-20°	406.9	10.1
20°-30°	608.1	15.1
30°-40°	723.8	18.0
40°-50°	723.5	18.0
50°-60°	622.5	15.5
60°-70°	468.6	11.6
70°-80°	267.0	6.6
80°-90°	65.0	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°	1157.6	28.7
0°-40°	1881.4	46.7
0°-60°	3227.5	80.1
0°-90°	4028.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4028.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1502	1502	1502	1502	1502	
5°	1510	1489	1508	1499	1510	144
15°	1474	1357	1468	1463	1474	416
25°	1393	1204	1386	1318	1393	642
35°	1258	1051	1245	1109	1258	787
45°	1070	686	1046	838	1070	824
55°	840	446	818	610	840	751
65°	593	297	573	437	593	585
75°	325	152	309	250	325	344
85°	92	31	81	41	92	100
90°	0	0	0	0	0	



TEST NUMBER: P520750

CATALOG NUMBER: 8WSLA-50-L835-UNV-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1501.5	1501.5	1501.5	1501.5	1501.5	1501.5	1501.5	1501.5	1501.5	1501.5	1501.5
2.5°	1512.8	1499.1	1507.1	1504.7	1491.8	1496.7	1501.5	1496.7	1511.2	1498.3	1507.1
5°	1510.4	1495.9	1500.7	1495.9	1489.4	1491.0	1498.3	1493.5	1507.9	1494.3	1505.5
7.5°	1505.5	1487.8	1492.6	1490.2	1484.6	1485.4	1492.6	1488.6	1501.5	1488.6	1501.5
10°	1498.3	1479.8	1483.8	1473.3	1461.2	1470.1	1484.6	1480.6	1494.3	1479.8	1494.3
12.5°	1487.0	1468.5	1464.5	1429.8	1408.1	1425.0	1469.3	1469.3	1482.2	1468.5	1483.8
15°	1474.1	1454.0	1432.2	1379.9	1357.3	1374.2	1435.5	1456.4	1467.7	1454.0	1469.3
17.5°	1458.8	1435.5	1393.6	1332.3	1311.4	1328.3	1391.1	1437.1	1451.6	1437.1	1450.8
20°	1439.5	1412.1	1352.5	1282.4	1268.7	1284.0	1346.8	1413.7	1433.8	1416.1	1425.8
22.5°	1418.5	1385.5	1306.6	1243.7	1237.3	1247.0	1304.2	1384.7	1411.3	1392.8	1399.2
25°	1392.8	1354.1	1260.7	1208.3	1203.5	1209.1	1262.3	1350.9	1385.5	1366.2	1368.6
27.5°	1365.4	1323.5	1217.2	1178.5	1173.7	1176.1	1220.4	1313.0	1355.7	1336.4	1332.3
30°	1332.3	1287.2	1173.7	1138.2	1133.4	1142.2	1180.1	1274.3	1322.7	1303.3	1291.3
32.5°	1299.3	1247.8	1131.0	1103.6	1093.9	1102.0	1138.2	1234.1	1286.4	1266.3	1246.2
35°	1258.2	1205.9	1086.7	1059.3	1051.2	1060.1	1096.3	1192.2	1245.3	1225.2	1197.8
37.5°	1215.5	1161.6	1046.4	1021.4	1006.9	1017.4	1053.6	1148.7	1202.7	1181.7	1147.9
40°	1172.8	1114.9	1001.3	975.5	957.0	972.3	1009.3	1102.8	1154.3	1135.0	1096.3
42.5°	1122.9	1068.1	957.0	920.7	868.4	917.5	961.8	1056.9	1104.4	1085.9	1039.1
45°	1070.5	1018.2	910.2	822.4	686.3	830.5	913.5	1008.5	1046.4	1028.7	977.9
47.5°	1010.9	966.6	862.7	729.0	596.9	737.1	864.3	962.6	991.6	972.3	915.9
50°	958.6	915.1	812.8	650.1	534.1	658.9	812.0	911.1	935.2	917.5	854.7
52.5°	899.0	861.1	758.8	580.0	487.3	588.8	757.2	857.9	877.2	856.3	793.4
55°	840.2	806.3	701.6	518.0	446.3	526.0	700.0	803.1	818.4	794.3	729.0
57.5°	780.6	749.9	642.8	462.4	408.4	471.2	646.8	746.7	757.2	726.6	667.0
60°	718.5	692.8	583.2	413.2	371.3	420.5	581.6	690.3	696.8	663.8	606.6
62.5°	656.5	633.1	523.6	368.1	333.5	373.0	527.6	630.7	634.8	603.3	544.5
65°	592.9	571.1	465.6	320.6	297.2	328.7	469.6	568.7	572.7	537.3	484.1
67.5°	526.8	509.1	403.6	284.4	262.6	286.8	411.6	505.9	508.3	473.7	425.3
70°	460.8	445.5	348.8	244.9	228.8	245.7	354.4	436.6	441.4	404.4	365.7
72.5°	393.1	381.0	295.6	203.8	189.3	203.8	298.9	373.0	376.2	345.6	307.7
75°	324.6	315.8	241.7	163.5	152.2	162.7	243.3	309.3	309.3	280.3	250.5
77.5°	258.6	252.1	185.3	125.7	117.6	124.1	186.1	244.9	243.3	220.7	197.4
80°	193.3	188.5	132.9	91.0	85.4	88.6	132.9	181.2	181.2	165.1	136.9
82.5°	138.6	132.9	87.8	59.6	56.4	58.0	86.2	126.5	128.9	116.8	92.6
85°	91.8	78.9	47.5	33.0	30.6	31.4	45.1	73.3	80.6	67.7	48.3
87.5°	40.3	26.6	12.1	4.8	2.4	3.2	9.7	23.4	30.6	20.1	6.4
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: P520750

CATALOG NUMBER: 8WSLA-50-L835-UNV-U

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1501.5	1501.5	1501.5	1501.5	1501.5	1501.5
2.5°	1506.3	1493.5	1498.3	1501.5	1498.3	1512.8
5°	1504.7	1499.1	1498.3	1502.3	1495.9	1510.4
7.5°	1502.3	1499.1	1498.3	1499.9	1491.8	1505.5
10°	1496.7	1491.8	1493.5	1495.9	1485.4	1498.3
12.5°	1486.2	1481.4	1482.2	1490.2	1475.7	1487.0
15°	1468.5	1462.8	1468.5	1477.3	1464.5	1474.1
17.5°	1445.1	1436.3	1445.9	1459.6	1450.0	1458.8
20°	1415.3	1401.6	1412.1	1437.1	1428.2	1439.5
22.5°	1379.1	1362.1	1372.6	1408.9	1406.5	1418.5
25°	1338.0	1317.8	1332.3	1376.6	1381.5	1392.8
27.5°	1292.1	1269.5	1288.8	1341.2	1352.5	1365.4
30°	1242.1	1218.0	1240.5	1301.7	1318.7	1332.3
32.5°	1190.6	1164.0	1189.8	1257.4	1281.6	1299.3
35°	1136.6	1109.2	1138.2	1211.5	1240.5	1258.2
37.5°	1078.6	1052.0	1083.4	1163.2	1197.8	1215.5
40°	1019.0	989.2	1024.6	1106.0	1151.9	1172.8
42.5°	957.8	920.7	964.2	1052.0	1102.0	1122.9
45°	889.3	837.7	896.6	994.8	1047.2	1070.5
47.5°	820.8	769.3	828.9	933.6	990.0	1010.9
50°	754.8	710.5	758.0	866.7	932.0	958.6
52.5°	694.4	658.1	698.4	801.5	872.4	899.0
55°	638.0	609.8	642.8	737.1	809.6	840.2
57.5°	584.8	567.1	589.6	675.8	751.6	780.6
60°	534.9	522.8	538.9	615.4	683.1	718.5
62.5°	485.7	479.3	491.4	551.8	619.5	656.5
65°	438.2	436.6	443.0	496.2	552.6	592.9
67.5°	390.7	389.9	393.9	437.4	487.3	526.8
70°	343.2	348.0	345.6	373.8	422.1	460.8
72.5°	294.8	302.1	298.0	315.8	362.5	393.1
75°	240.9	250.5	242.5	262.6	291.6	324.6
77.5°	185.3	195.7	186.1	203.8	235.2	258.6
80°	132.9	142.6	134.5	148.2	175.6	193.3
82.5°	83.8	91.0	84.6	98.3	125.7	138.6
85°	37.1	41.1	42.7	53.2	77.3	91.8
87.5°	1.6	0.8	1.6	10.5	27.4	40.3
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)