

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: METALUX

Report Number: P192412

Luminaire Tested: **4WSL-LD2-45-UNV-L850-CD1-U**

Issue Date: 3/3/2020



**Test Information**

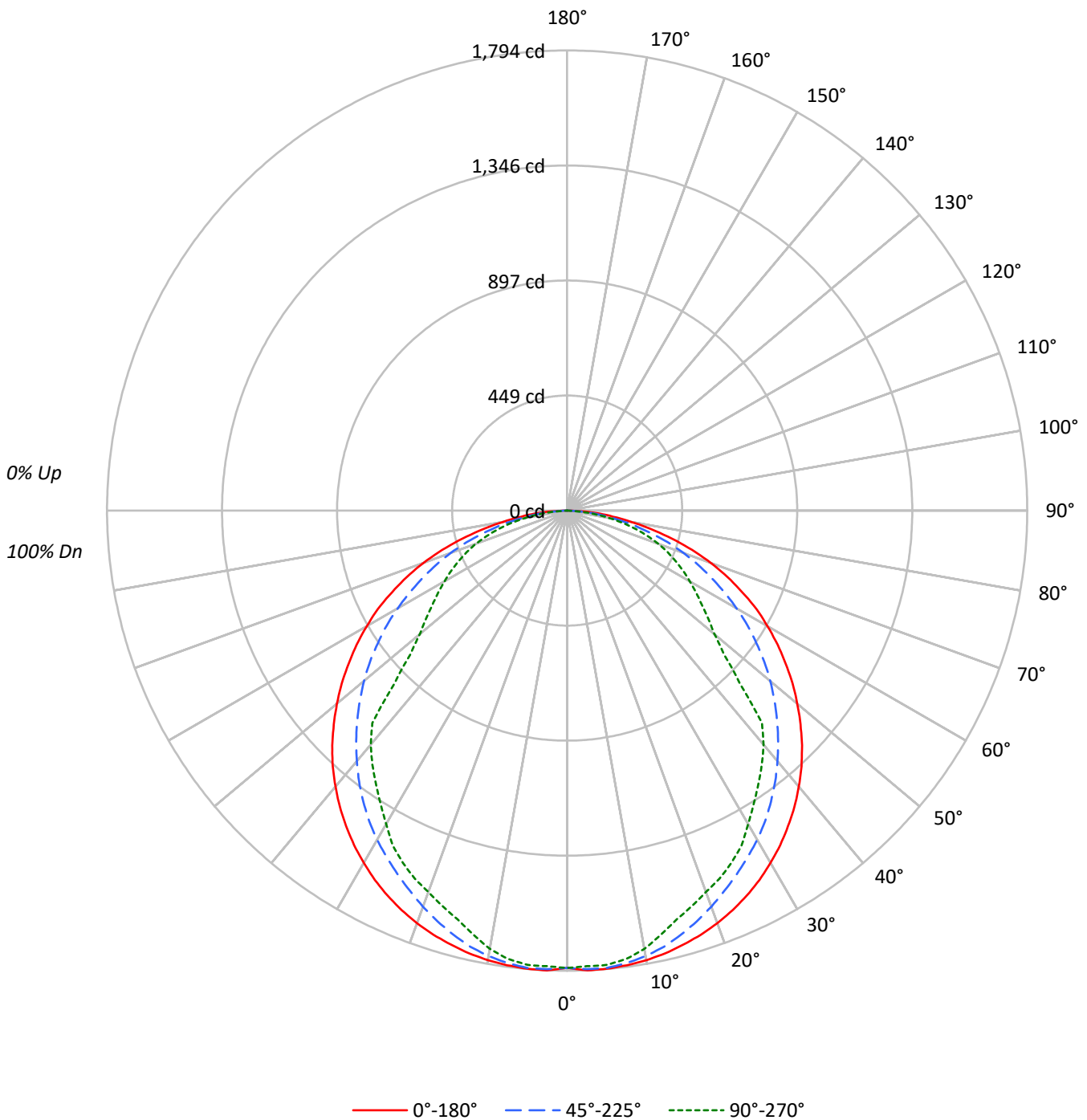
Test Method: LM-79-08  
Report Number: P192412  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P28104)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4WSL-LD2-45-UNV-L850-CD1-U  
Description: 4FT Linear Wavestream System, L850  
Light Source: (238) 5000K CCT, 80 CRI LEDS  
EL236N0119D850  
Ballast/Driver: OSRAM  
OT50W

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4967.0 lumens  
Efficiency: N/A  
Efficacy: 124.5 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 1.18 / 1.35  
Luminous Opening: Rectangular (W 0.5' x L: 3.8' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 39.9  
Input Voltage (V): NR  
Input Current (Ain): 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	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	94	97	94	91	93	91	88	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	38
7	65	51	43	36	63	51	42	36	49	42	36	48	41	36	46	40	35	33
8	60	47	38	33	59	46	38	32	45	37	32	44	37	32	42	36	32	30
9	57	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	10101	10101	10101
5°	10195	10177	10111
10°	10237	10143	9982
15°	10274	10042	9676
20°	10323	9907	9540
25°	10354	9779	9471
30°	10373	9696	9234
35°	10387	9580	8989
40°	10391	9430	8810
45°	10375	9268	7622
50°	10326	9110	6604
55°	10274	8894	6330
60°	10221	8639	6256
65°	10089	8326	6256
70°	9880	8002	6260
75°	9244	7374	6078
80°	8257	6378	5416
85°	7586	4914	3952



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	169.4	3.4
10°-20°	480.7	9.7
20°-30°	724.6	14.6
30°-40°	870.0	17.5
40°-50°	886.0	17.8
50°-60°	777.6	15.7
60°-70°	604.9	12.2
70°-80°	359.7	7.2
80°-90°	94.2	1.9
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°	1374.6	27.7
0°-40°	2244.6	45.2
0°-60°	3908.2	78.7
0°-90°	4967.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4967.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1783	1783	1783	1783	1783	
5°	1793	1776	1790	1783	1778	171
15°	1752	1727	1712	1670	1650	495
25°	1656	1619	1564	1523	1515	764
35°	1502	1454	1385	1320	1300	940
45°	1295	1252	1157	1068	951	998
55°	1040	1009	900	721	641	930
65°	753	723	621	490	467	745
75°	422	401	337	273	278	446
85°	117	104	76	61	61	128
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1782.9	1782.9	1782.9	1782.9	1782.9
2.5°	1794.4	1776.3	1789.5	1786.2	1778.0
5°	1792.8	1776.3	1789.5	1782.9	1778.0
7.5°	1787.8	1771.4	1779.6	1769.8	1763.2
10°	1779.6	1761.5	1763.2	1746.8	1735.2
12.5°	1768.1	1746.8	1741.8	1709.0	1692.5
15°	1751.7	1727.0	1712.2	1669.5	1649.8
17.5°	1733.6	1705.7	1679.4	1631.7	1616.9
20°	1712.2	1679.4	1643.2	1593.9	1582.4
22.5°	1686.0	1651.4	1603.8	1559.4	1552.9
25°	1656.4	1618.6	1564.4	1523.3	1515.1
27.5°	1623.5	1579.1	1523.3	1482.2	1472.3
30°	1585.7	1539.7	1482.2	1434.5	1411.5
32.5°	1546.3	1498.6	1436.2	1375.4	1354.0
35°	1501.9	1454.3	1385.2	1319.5	1299.8
37.5°	1455.9	1406.6	1332.7	1263.6	1247.2
40°	1405.0	1357.3	1275.1	1207.8	1191.3
42.5°	1352.4	1306.4	1217.6	1150.3	1124.0
45°	1294.9	1252.1	1156.8	1068.1	951.4
47.5°	1234.1	1194.6	1096.0	964.6	829.8
50°	1171.6	1135.5	1033.6	872.6	749.3
52.5°	1107.5	1074.7	969.5	792.0	693.4
55°	1040.2	1008.9	900.5	721.4	640.9
57.5°	972.8	941.6	834.8	657.3	596.5
60°	902.1	872.6	762.5	598.1	552.1
62.5°	833.1	800.3	691.8	543.9	511.0
65°	752.6	723.0	621.1	489.7	466.7
67.5°	677.0	645.8	552.1	437.1	424.0
70°	596.5	565.3	483.1	382.9	377.9
72.5°	511.0	486.4	410.8	330.3	327.0
75°	422.3	400.9	336.9	272.8	277.7
77.5°	335.2	322.1	266.2	218.5	221.8
80°	253.1	243.2	195.5	162.7	166.0
82.5°	180.8	172.5	133.1	108.5	108.5
85°	116.7	103.5	75.6	60.8	60.8
87.5°	46.0	37.8	23.0	6.6	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)