

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: P192417

Luminaire Tested: **4WSL-LD2-55-UNV-L830-CD1-U**

Issue Date: 3/3/2020



**Test Information**

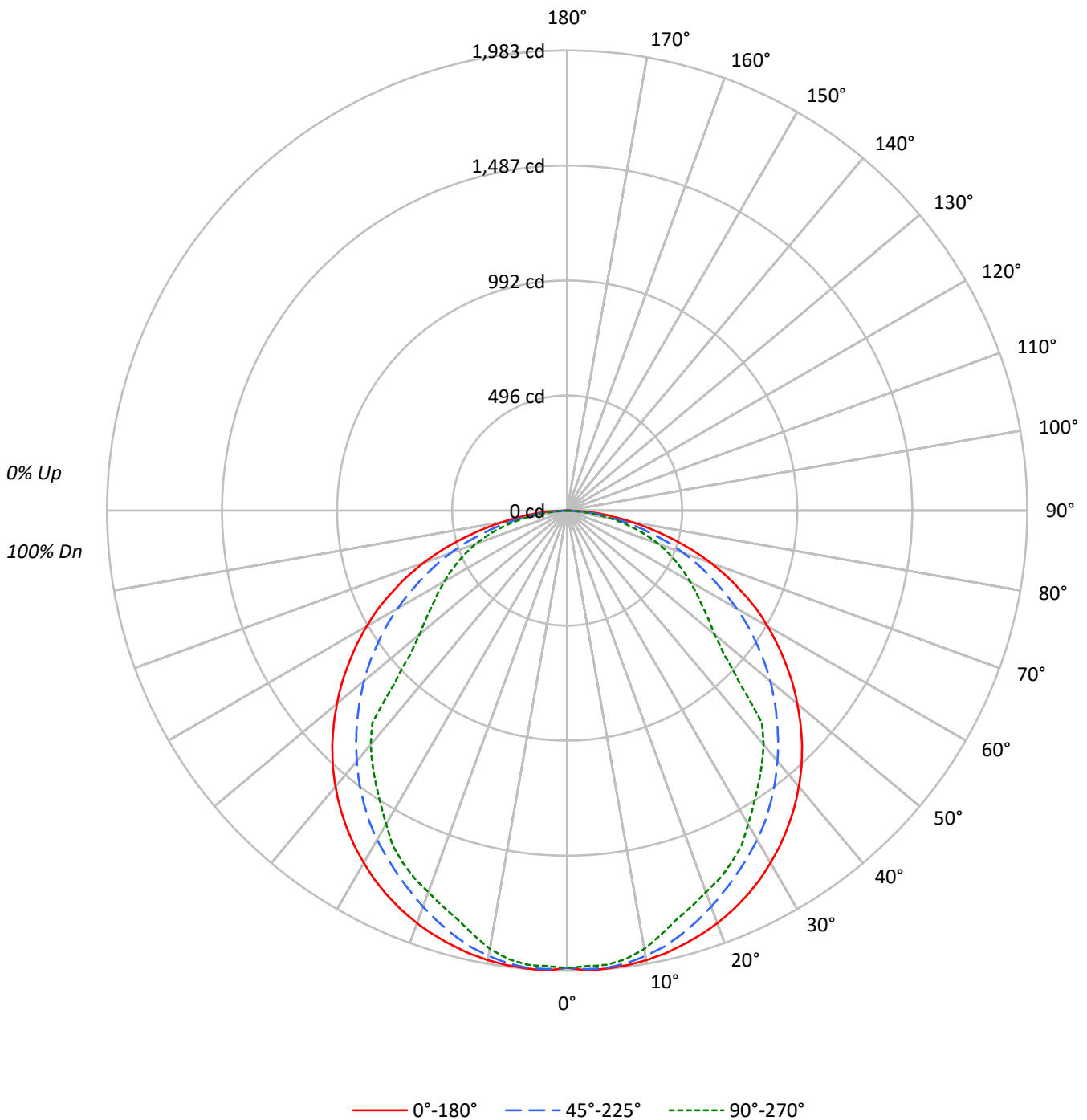
Test Method: LM-79-08  
Report Number: P192417  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P28104)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4WSL-LD2-55-UNV-L830-CD1-U  
Description: 4FT Linear Wavestream System, L830  
Light Source: (238) 3000K CCT, 80 CRI LEDS  
EL236N0119D830  
Ballast/Driver: OSRAM  
OT50W

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5490.0 lumens  
Efficiency: N/A  
Efficacy: 110.0 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): 49.9  
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°	11164	11164	11164
5°	11269	11248	11176
10°	11315	11211	11034
15°	11355	11100	10695
20°	11410	10950	10545
25°	11444	10808	10468
30°	11466	10717	10206
35°	11481	10589	9936
40°	11484	10423	9738
45°	11467	10244	8425
50°	11414	10069	7299
55°	11356	9831	6996
60°	11298	9548	6915
65°	11150	9203	6914
70°	10921	8845	6919
75°	10218	8149	6718
80°	9125	7050	5983
85°	8385	5428	4368



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	187.2	3.4
10°-20°	531.3	9.7
20°-30°	800.9	14.6
30°-40°	961.6	17.5
40°-50°	979.3	17.8
50°-60°	859.5	15.7
60°-70°	668.6	12.2
70°-80°	397.6	7.2
80°-90°	104.1	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°	1519.4	27.7
0°-40°	2480.9	45.2
0°-60°	4319.7	78.7
0°-90°	5490.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5490.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1971	1971	1971	1971	1971	
5°	1982	1963	1978	1971	1965	189
15°	1936	1909	1892	1845	1824	547
25°	1831	1789	1729	1684	1675	844
35°	1660	1607	1531	1458	1437	1039
45°	1431	1384	1279	1181	1052	1104
55°	1150	1115	995	797	708	1028
65°	832	799	686	541	516	824
75°	467	443	372	302	307	494
85°	129	114	84	67	67	141
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1970.6	1970.6	1970.6	1970.6	1970.6
2.5°	1983.3	1963.4	1977.9	1974.3	1965.2
5°	1981.5	1963.4	1977.9	1970.6	1965.2
7.5°	1976.1	1957.9	1967.0	1956.1	1948.8
10°	1967.0	1947.0	1948.8	1930.7	1918.0
12.5°	1954.3	1930.7	1925.2	1888.9	1870.7
15°	1936.1	1908.9	1892.5	1845.3	1823.5
17.5°	1916.1	1885.3	1856.2	1803.5	1787.2
20°	1892.5	1856.2	1816.3	1761.8	1749.1
22.5°	1863.5	1825.3	1772.7	1723.6	1716.4
25°	1830.8	1789.0	1729.1	1683.7	1674.6
27.5°	1794.5	1745.4	1683.7	1638.3	1627.4
30°	1752.7	1701.8	1638.3	1585.6	1560.2
32.5°	1709.1	1656.4	1587.4	1520.2	1496.6
35°	1660.1	1607.4	1531.1	1458.5	1436.7
37.5°	1609.2	1554.7	1473.0	1396.7	1378.5
40°	1552.9	1500.2	1409.4	1334.9	1316.8
42.5°	1494.8	1443.9	1345.8	1271.4	1242.3
45°	1431.2	1384.0	1278.6	1180.6	1051.6
47.5°	1364.0	1320.4	1211.4	1066.1	917.2
50°	1295.0	1255.0	1142.4	964.4	828.2
52.5°	1224.2	1187.8	1071.6	875.4	766.5
55°	1149.7	1115.2	995.3	797.3	708.3
57.5°	1075.2	1040.7	922.7	726.5	659.3
60°	997.1	964.4	842.7	661.1	610.3
62.5°	920.8	884.5	764.6	601.2	564.9
65°	831.8	799.2	686.5	541.2	515.8
67.5°	748.3	713.8	610.3	483.1	468.6
70°	659.3	624.8	534.0	423.2	417.7
72.5°	564.9	537.6	454.1	365.1	361.4
75°	466.8	443.2	372.3	301.5	306.9
77.5°	370.5	356.0	294.2	241.6	245.2
80°	279.7	268.8	216.1	179.8	183.4
82.5°	199.8	190.7	147.1	119.9	119.9
85°	129.0	114.4	83.5	67.2	67.2
87.5°	50.9	41.8	25.4	7.3	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)