

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: P192415

Luminaire Tested: **4WSL-LD2-50-UNV-L840-CD1-U**

Issue Date: 3/3/2020



**Test Information**

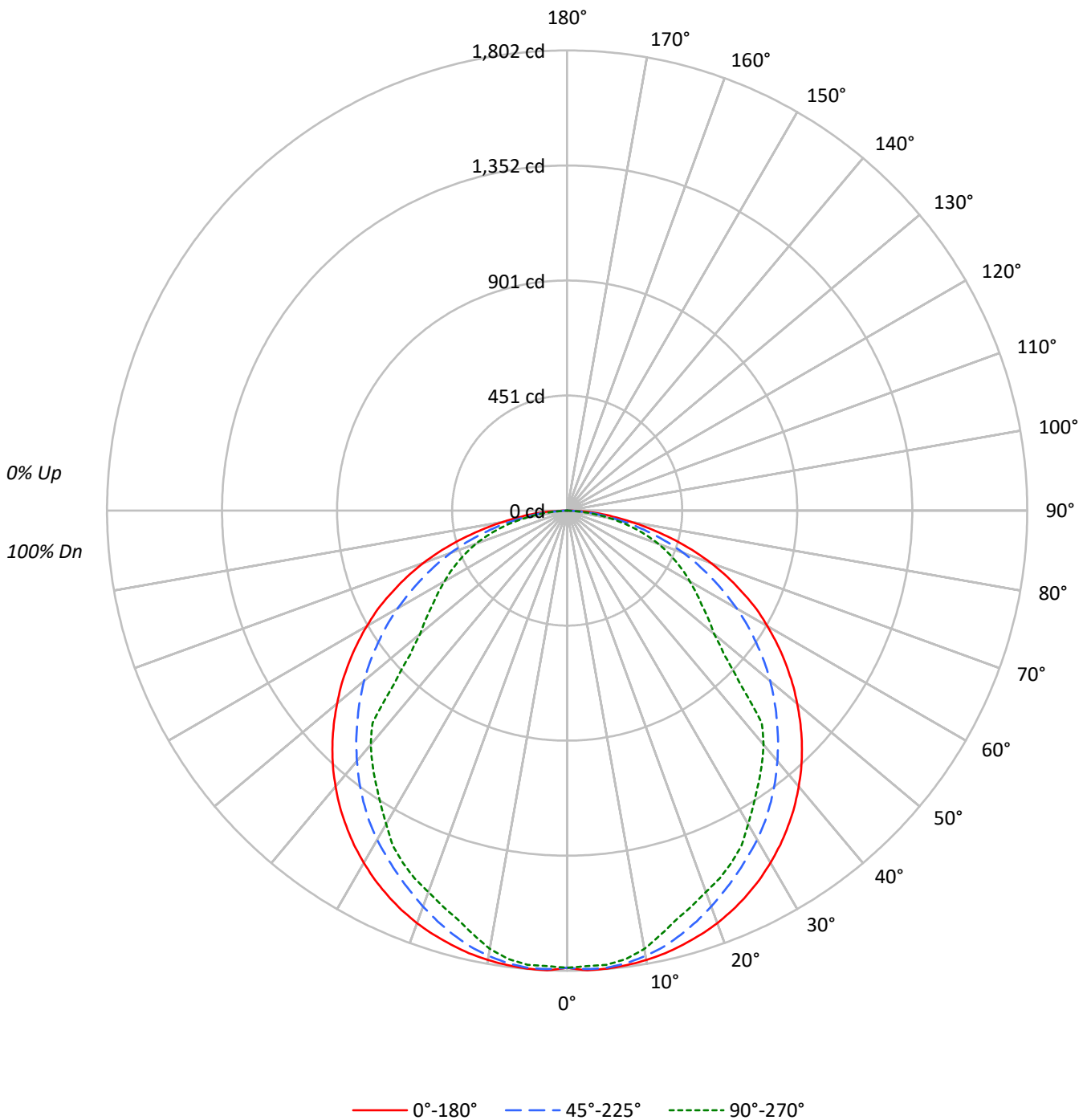
Test Method: LM-79-08  
Report Number: P192415  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P28104)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4WSL-LD2-50-UNV-L840-CD1-U  
Description: 4FT Linear Wavestream System, L840  
Light Source: (238) 4000K CCT, 80 CRI LEDS  
EL236N0119D840  
Ballast/Driver: OSRAM  
OT50W

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4988.0 lumens  
Efficiency: N/A  
Efficacy: 111.3 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): 44.8  
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

TEST NUMBER: P192415  
CATALOG NUMBER: 4WSL-LD2-50-UNV-L840-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P192415

CATALOG NUMBER: 4WSL-LD2-50-UNV-L840-CD1-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	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°	10143	10143	10143
5°	10238	10219	10154
10°	10280	10186	10025
15°	10317	10085	9717
20°	10367	9949	9580
25°	10398	9820	9511
30°	10417	9737	9273
35°	10431	9621	9027
40°	10434	9470	8848
45°	10418	9307	7655
50°	10370	9148	6632
55°	10318	8932	6357
60°	10264	8676	6283
65°	10132	8362	6283
70°	9922	8037	6286
75°	9283	7405	6105
80°	8290	6407	5439
85°	7618	4934	3972



TEST NUMBER: P192415

CATALOG NUMBER: 4WSL-LD2-50-UNV-L840-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	170.1	3.4
10°-20°	482.7	9.7
20°-30°	727.7	14.6
30°-40°	873.7	17.5
40°-50°	889.8	17.8
50°-60°	780.9	15.7
60°-70°	607.4	12.2
70°-80°	361.3	7.2
80°-90°	94.6	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°	1380.4	27.7
0°-40°	2254.1	45.2
0°-60°	3924.8	78.7
0°-90°	4988.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4988.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1790	1790	1790	1790	1790	
5°	1800	1784	1797	1790	1786	171
15°	1759	1734	1720	1677	1657	497
25°	1663	1625	1571	1530	1522	767
35°	1508	1460	1391	1325	1305	944
45°	1300	1257	1162	1073	956	1003
55°	1045	1013	904	724	644	934
65°	756	726	624	492	469	749
75°	424	403	338	274	279	448
85°	117	104	76	61	61	128
90°	0	0	0	0	0	



TEST NUMBER: P192415

CATALOG NUMBER: 4WSL-LD2-50-UNV-L840-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1790.4	1790.4	1790.4	1790.4	1790.4
2.5°	1802.0	1783.8	1797.0	1793.7	1785.5
5°	1800.3	1783.8	1797.0	1790.4	1785.5
7.5°	1795.4	1778.9	1787.1	1777.2	1770.6
10°	1787.1	1769.0	1770.6	1754.1	1742.6
12.5°	1775.6	1754.1	1749.2	1716.2	1699.7
15°	1759.1	1734.3	1719.5	1676.6	1656.8
17.5°	1740.9	1712.9	1686.5	1638.6	1623.8
20°	1719.5	1686.5	1650.2	1600.7	1589.1
22.5°	1693.1	1658.4	1610.6	1566.0	1559.4
25°	1663.4	1625.4	1571.0	1529.7	1521.5
27.5°	1630.4	1585.8	1529.7	1488.5	1478.6
30°	1592.4	1546.2	1488.5	1440.6	1417.5
32.5°	1552.8	1505.0	1442.3	1381.2	1359.7
35°	1508.3	1460.4	1391.1	1325.1	1305.3
37.5°	1462.1	1412.6	1338.3	1269.0	1252.5
40°	1410.9	1363.0	1280.5	1212.9	1196.4
42.5°	1358.1	1311.9	1222.8	1155.1	1128.7
45°	1300.3	1257.4	1161.7	1072.6	955.5
47.5°	1239.3	1199.7	1100.7	968.7	833.3
50°	1176.6	1140.3	1038.0	876.2	752.5
52.5°	1112.2	1079.2	973.6	795.4	696.4
55°	1044.6	1013.2	904.3	724.4	643.6
57.5°	976.9	945.6	838.3	660.1	599.0
60°	905.9	876.2	765.7	600.7	554.5
62.5°	836.6	803.6	694.7	546.2	513.2
65°	755.8	726.1	623.8	491.8	468.7
67.5°	679.9	648.5	554.5	438.9	425.7
70°	599.0	567.7	485.2	384.5	379.5
72.5°	513.2	488.5	412.5	331.7	328.4
75°	424.1	402.6	338.3	273.9	278.9
77.5°	336.6	323.4	267.3	219.5	222.8
80°	254.1	244.2	196.4	163.4	166.7
82.5°	181.5	173.3	133.7	108.9	108.9
85°	117.2	104.0	75.9	61.1	61.1
87.5°	46.2	38.0	23.1	6.6	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)