

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: P192421

Luminaire Tested: **4WSL-LD2-60-UNV-L830-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P192421
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-LD2-60-UNV-L830-CD1-U
Description: 4FT Linear Wavestream System, L830
Light Source: (238) 3000K CCT, 80 CRI LEDS
EL236N0119D830
Ballast/Driver: OSRAM
OT50W

Summary

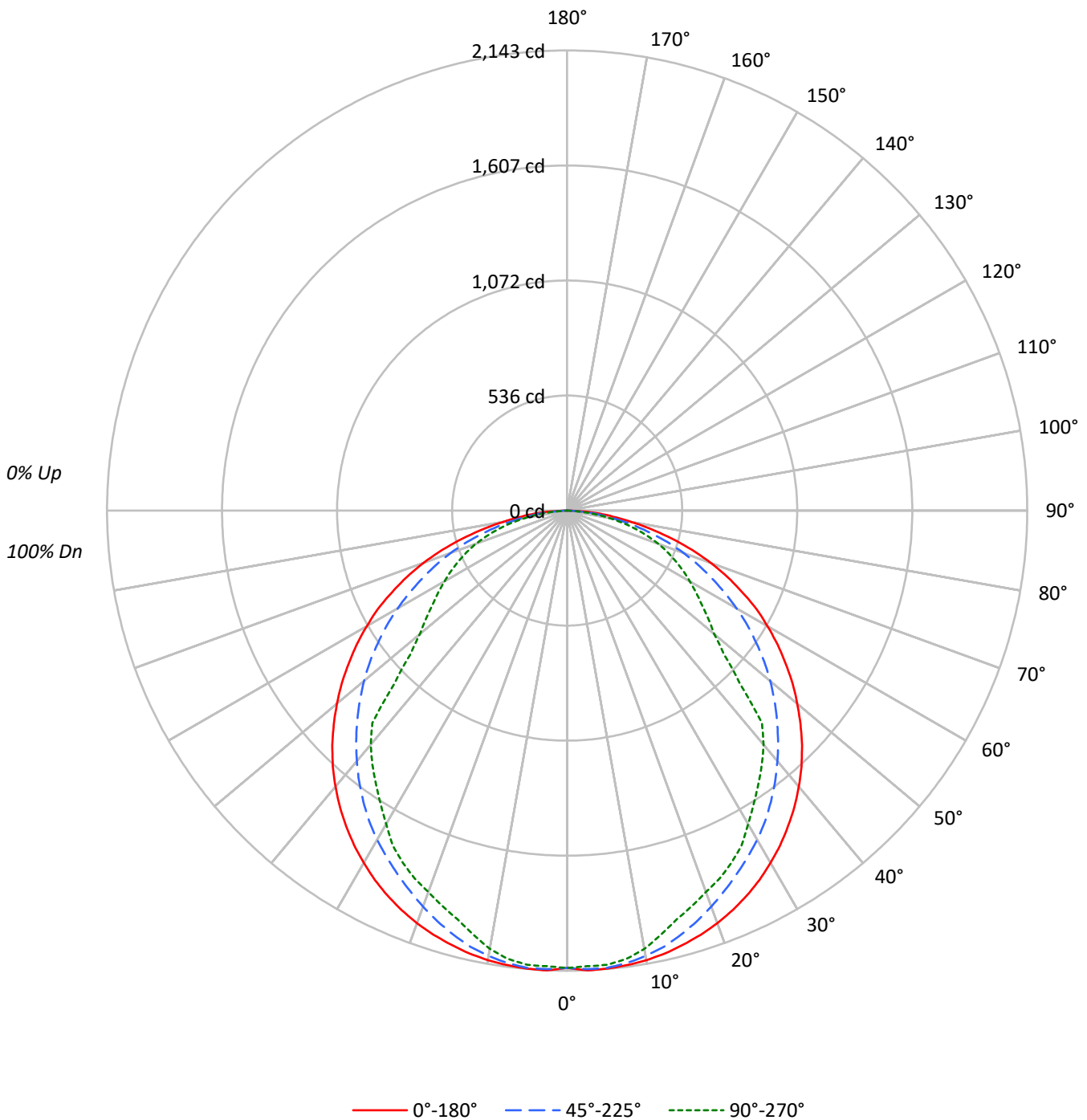
Lumens per Lamp: N/A
Luminaire Lumens: 5933.0 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 1.18 / 1.35
Luminous Opening: Rectangular (W 0.5' x L: 3.8' x H: 0')
CIE Type: Direct

Input Watts (W): 56.2
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°	12065	12065	12065
5°	12178	12156	12078
10°	12228	12116	11923
15°	12272	11995	11558
20°	12330	11833	11396
25°	12367	11680	11312
30°	12391	11582	11030
35°	12407	11443	10738
40°	12411	11264	10524
45°	12392	11071	9105
50°	12335	10881	7888
55°	12272	10624	7561
60°	12210	10319	7472
65°	12051	9945	7472
70°	11802	9559	7477
75°	11041	8808	7260
80°	9862	7621	6466
85°	9061	5870	4719



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.3	3.4
10°-20°	574.1	9.7
20°-30°	865.5	14.6
30°-40°	1039.2	17.5
40°-50°	1058.4	17.8
50°-60°	928.8	15.7
60°-70°	722.5	12.2
70°-80°	429.7	7.2
80°-90°	112.5	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°	1642.0	27.7
0°-40°	2681.1	45.2
0°-60°	4668.3	78.7
0°-90°	5933.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5933.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2130	2130	2130	2130	2130	
5°	2141	2122	2138	2130	2124	204
15°	2092	2063	2045	1994	1971	591
25°	1978	1933	1869	1820	1810	912
35°	1794	1737	1655	1576	1553	1123
45°	1547	1496	1382	1276	1136	1193
55°	1242	1205	1076	862	766	1111
65°	899	864	742	585	557	890
75°	504	479	402	326	332	533
85°	139	124	90	73	73	153
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2129.6	2129.6	2129.6	2129.6	2129.6
2.5°	2143.4	2121.8	2137.5	2133.6	2123.8
5°	2141.4	2121.8	2137.5	2129.6	2123.8
7.5°	2135.5	2115.9	2125.7	2113.9	2106.1
10°	2125.7	2104.1	2106.1	2086.5	2072.7
12.5°	2112.0	2086.5	2080.6	2041.3	2021.7
15°	2092.4	2062.9	2045.2	1994.2	1970.7
17.5°	2070.8	2037.4	2006.0	1949.1	1931.4
20°	2045.2	2006.0	1962.8	1903.9	1890.2
22.5°	2013.8	1972.6	1915.7	1862.7	1854.9
25°	1978.5	1933.4	1868.6	1819.5	1809.7
27.5°	1939.3	1886.3	1819.5	1770.5	1758.7
30°	1894.1	1839.2	1770.5	1713.5	1686.1
32.5°	1847.0	1790.1	1715.5	1642.9	1617.4
35°	1794.0	1737.1	1654.6	1576.1	1552.6
37.5°	1739.0	1680.2	1591.8	1509.4	1489.8
40°	1678.2	1621.3	1523.1	1442.7	1423.0
42.5°	1615.4	1560.4	1454.4	1374.0	1342.6
45°	1546.7	1495.7	1381.8	1275.8	1136.5
47.5°	1474.1	1427.0	1309.2	1152.2	991.2
50°	1399.5	1356.3	1234.6	1042.3	895.0
52.5°	1322.9	1283.7	1158.1	946.1	828.3
55°	1242.5	1205.2	1075.6	861.7	765.5
57.5°	1162.0	1124.7	997.1	785.1	712.5
60°	1077.6	1042.3	910.7	714.5	659.5
62.5°	995.1	955.9	826.3	649.7	610.4
65°	899.0	863.6	741.9	584.9	557.4
67.5°	808.7	771.4	659.5	522.1	506.4
70°	712.5	675.2	577.1	457.3	451.4
72.5°	610.4	581.0	490.7	394.5	390.6
75°	504.4	478.9	402.4	325.8	331.7
77.5°	400.4	384.7	318.0	261.1	265.0
80°	302.3	290.5	233.6	194.3	198.2
82.5°	215.9	206.1	159.0	129.5	129.5
85°	139.4	123.7	90.3	72.6	72.6
87.5°	55.0	45.1	27.5	7.9	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)