

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: P192429

Luminaire Tested: **4WSL-LD2-70-UNV-L830-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P192429
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-LD2-70-UNV-L830-CD1-U
Description: 4FT Linear Wavestream System, L830
Light Source: (238) 3000K CCT, 80 CRI LEDS
EL236N0119D830
Ballast/Driver: OSRAM
OT85W1202772A0DIML

Summary

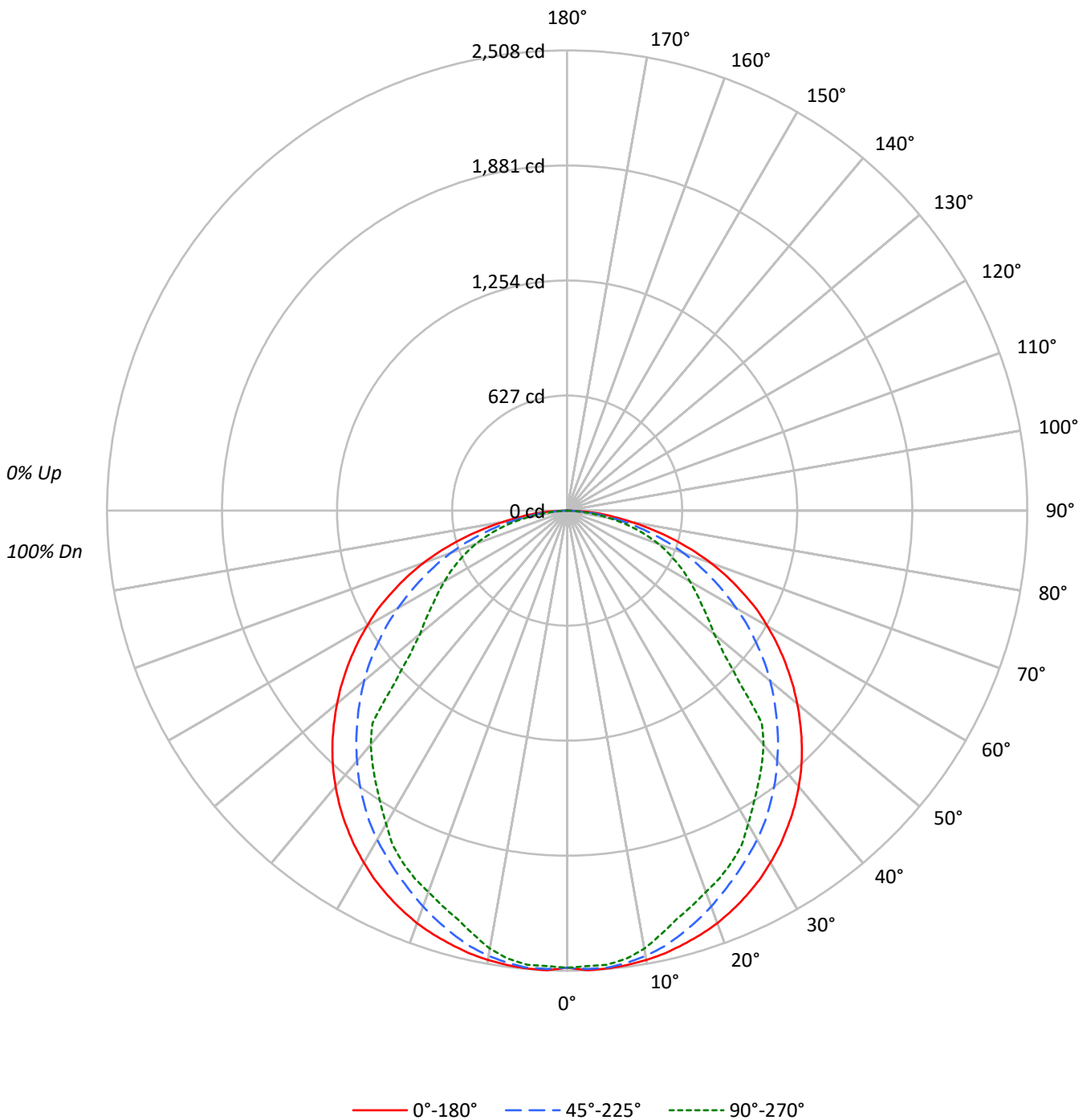
Lumens per Lamp: N/A
Luminaire Lumens: 6941.0 lumens
Efficiency: N/A
Efficacy: 101.0 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 1.18 / 1.35
Luminous Opening: Rectangular (W 0.5' x L: 3.8' x H: 0')
CIE Type: Direct

Input Watts (W): 68.7
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°	14115	14115	14115
5°	14247	14221	14130
10°	14306	14174	13950
15°	14357	14033	13522
20°	14425	13844	13331
25°	14469	13665	13234
30°	14496	13549	12903
35°	14515	13388	12562
40°	14519	13178	12312
45°	14497	12952	10652
50°	14430	12730	9229
55°	14356	12429	8846
60°	14284	12073	8743
65°	14098	11636	8741
70°	13808	11182	8747
75°	12917	10303	8495
80°	11536	8916	7566
85°	10595	6864	5525



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.7	3.4
10°-20°	671.7	9.7
20°-30°	1012.6	14.6
30°-40°	1215.7	17.5
40°-50°	1238.2	17.8
50°-60°	1086.6	15.7
60°-70°	845.3	12.2
70°-80°	502.7	7.2
80°-90°	131.6	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°	1920.9	27.7
0°-40°	3136.6	45.2
0°-60°	5461.5	78.7
0°-90°	6941.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6941.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2492	2492	2492	2492	2492	
5°	2505	2482	2501	2492	2485	238
15°	2448	2413	2393	2333	2306	692
25°	2315	2262	2186	2129	2117	1067
35°	2099	2032	1936	1844	1816	1314
45°	1810	1750	1617	1493	1330	1395
55°	1454	1410	1258	1008	896	1300
65°	1052	1010	868	684	652	1042
75°	590	560	471	381	388	624
85°	163	145	106	85	85	179
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2491.5	2491.5	2491.5	2491.5	2491.5
2.5°	2507.5	2482.3	2500.7	2496.1	2484.6
5°	2505.2	2482.3	2500.7	2491.5	2484.6
7.5°	2498.4	2475.4	2486.9	2473.1	2463.9
10°	2486.9	2461.6	2463.9	2441.0	2424.9
12.5°	2470.8	2441.0	2434.1	2388.1	2365.2
15°	2447.8	2413.4	2392.7	2333.0	2305.5
17.5°	2422.6	2383.5	2346.8	2280.2	2259.5
20°	2392.7	2346.8	2296.3	2227.4	2211.3
22.5°	2356.0	2307.8	2241.2	2179.2	2170.0
25°	2314.7	2261.8	2186.1	2128.7	2117.2
27.5°	2268.7	2206.7	2128.7	2071.2	2057.5
30°	2215.9	2151.6	2071.2	2004.7	1972.5
32.5°	2160.8	2094.2	2007.0	1922.0	1892.1
35°	2098.8	2032.2	1935.8	1843.9	1816.4
37.5°	2034.5	1965.6	1862.3	1765.8	1742.9
40°	1963.3	1896.7	1781.9	1687.8	1664.8
42.5°	1889.8	1825.5	1701.5	1607.4	1570.7
45°	1809.5	1749.8	1616.6	1492.6	1329.5
47.5°	1724.5	1669.4	1531.6	1347.9	1159.6
50°	1637.3	1586.7	1444.4	1219.3	1047.1
52.5°	1547.7	1501.8	1354.8	1106.8	969.0
55°	1453.5	1409.9	1258.4	1008.1	895.6
57.5°	1359.4	1315.8	1166.5	918.5	833.6
60°	1260.7	1219.3	1065.5	835.8	771.6
62.5°	1164.2	1118.3	966.7	760.1	714.1
65°	1051.7	1010.4	868.0	684.3	652.1
67.5°	946.1	902.4	771.6	610.8	592.4
70°	833.6	789.9	675.1	535.0	528.1
72.5°	714.1	679.7	574.1	461.6	457.0
75°	590.1	560.3	470.7	381.2	388.1
77.5°	468.4	450.1	372.0	305.4	310.0
80°	353.6	339.9	273.3	227.3	231.9
82.5°	252.6	241.1	186.0	151.6	151.6
85°	163.0	144.7	105.6	85.0	85.0
87.5°	64.3	52.8	32.1	9.2	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)