

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: P192409

Luminaire Tested: **4WSL-LD2-45-UNV-L830-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P192409
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-L830-CD1-U
Description: 4FT Linear Wavestream System, L830
Light Source: (238) 3000K CCT, 80 CRI LEDS
EL236N0119D830
Ballast/Driver: OSRAM
OT50W

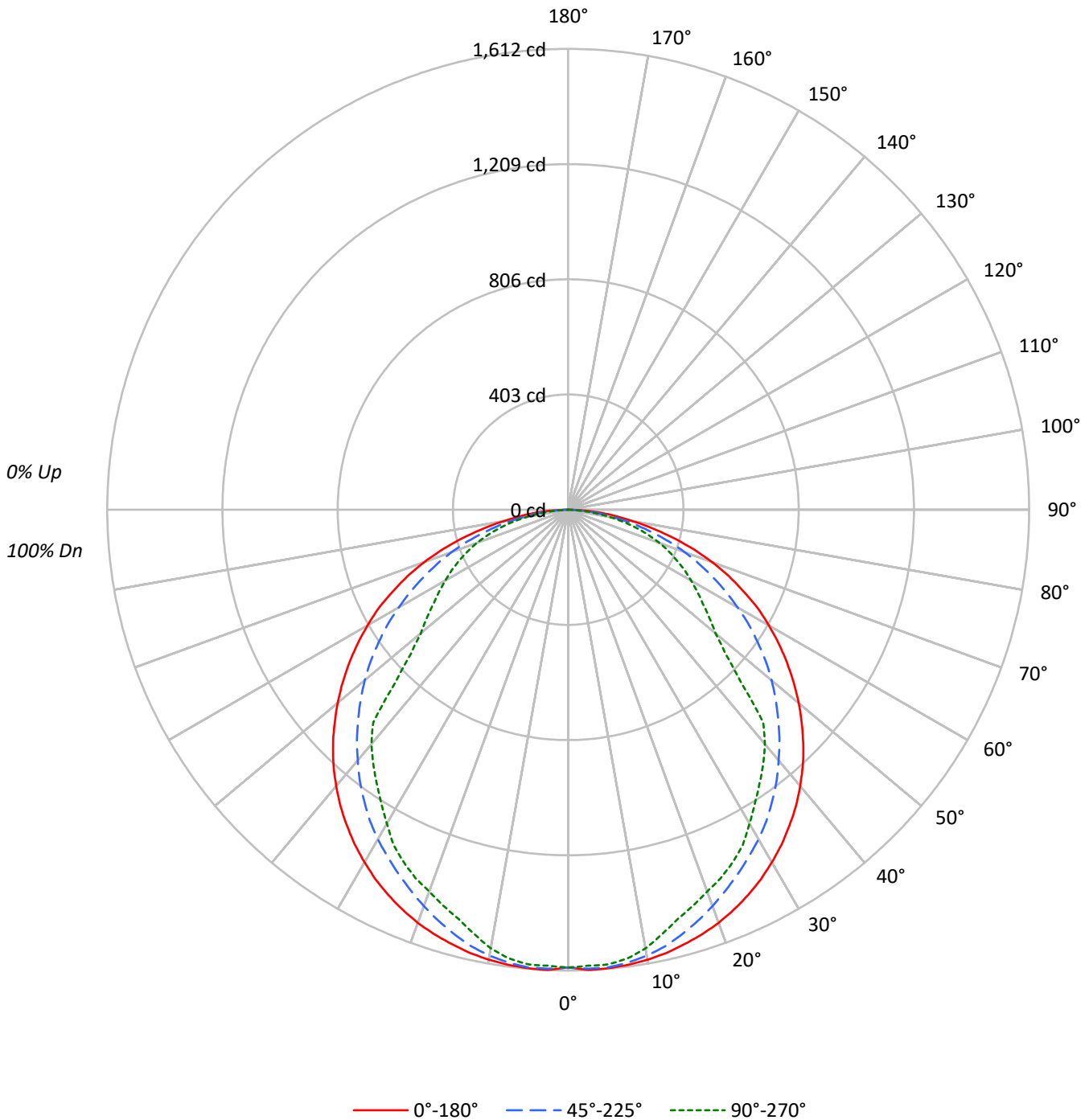
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4461.0 lumens
Efficiency: N/A
Efficacy: 111.8 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°	9072	9072	9072
5°	9156	9140	9081
10°	9194	9110	8965
15°	9227	9019	8690
20°	9271	8897	8568
25°	9299	8782	8506
30°	9317	8708	8293
35°	9329	8604	8074
40°	9332	8469	7913
45°	9318	8324	6846
50°	9274	8182	5931
55°	9227	7989	5685
60°	9180	7759	5619
65°	9060	7479	5618
70°	8873	7187	5622
75°	8302	6621	5459
80°	7416	5729	4864
85°	6812	4414	3549



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.1	3.4
10°-20°	431.7	9.7
20°-30°	650.8	14.6
30°-40°	781.3	17.5
40°-50°	795.8	17.8
50°-60°	698.4	15.7
60°-70°	543.3	12.2
70°-80°	323.1	7.2
80°-90°	84.6	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°	1234.6	27.7
0°-40°	2015.9	45.2
0°-60°	3510.1	78.7
0°-90°	4461.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4461.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1601	1601	1601	1601	1601	
5°	1610	1595	1607	1601	1597	153
15°	1573	1551	1538	1499	1482	445
25°	1488	1454	1405	1368	1361	686
35°	1349	1306	1244	1185	1167	844
45°	1163	1125	1039	959	854	897
55°	934	906	809	648	576	835
65°	676	649	558	440	419	670
75°	379	360	302	245	249	401
85°	105	93	68	55	55	115
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1601.3	1601.3	1601.3	1601.3	1601.3
2.5°	1611.6	1595.4	1607.2	1604.2	1596.8
5°	1610.1	1595.4	1607.2	1601.3	1596.8
7.5°	1605.7	1590.9	1598.3	1589.5	1583.6
10°	1598.3	1582.1	1583.6	1568.8	1558.5
12.5°	1588.0	1568.8	1564.4	1534.9	1520.1
15°	1573.2	1551.1	1537.8	1499.4	1481.7
17.5°	1557.0	1531.9	1508.3	1465.5	1452.2
20°	1537.8	1508.3	1475.8	1431.6	1421.2
22.5°	1514.2	1483.2	1440.4	1400.6	1394.7
25°	1487.6	1453.7	1405.0	1368.1	1360.7
27.5°	1458.1	1418.3	1368.1	1331.2	1322.3
30°	1424.2	1382.9	1331.2	1288.4	1267.7
32.5°	1388.8	1346.0	1289.9	1235.3	1216.1
35°	1348.9	1306.1	1244.1	1185.1	1167.4
37.5°	1307.6	1263.3	1196.9	1134.9	1120.2
40°	1261.8	1219.0	1145.2	1084.7	1070.0
42.5°	1214.6	1173.3	1093.6	1033.1	1009.5
45°	1163.0	1124.6	1039.0	959.3	854.5
47.5°	1108.3	1072.9	984.4	866.3	745.3
50°	1052.3	1019.8	928.3	783.7	673.0
52.5°	994.7	965.2	870.7	711.3	622.8
55°	934.2	906.2	808.8	647.9	575.6
57.5°	873.7	845.7	749.7	590.3	535.7
60°	810.2	783.7	684.8	537.2	495.9
62.5°	748.2	718.7	621.3	488.5	459.0
65°	675.9	649.4	557.9	439.8	419.1
67.5°	608.0	580.0	495.9	392.6	380.8
70°	535.7	507.7	433.9	343.9	339.4
72.5°	459.0	436.8	369.0	296.6	293.7
75°	379.3	360.1	302.5	245.0	249.4
77.5°	301.1	289.3	239.1	196.3	199.2
80°	227.3	218.4	175.6	146.1	149.1
82.5°	162.3	155.0	119.5	97.4	97.4
85°	104.8	93.0	67.9	54.6	54.6
87.5°	41.3	33.9	20.7	5.9	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)