

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: P192411

Luminaire Tested: **4WSL-LD2-45-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P192411
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-L840-CD1-U
Description: 4FT Linear Wavestream System, L840
Light Source: (238) 4000K CCT, 80 CRI LEDS
EL236N0119D840
Ballast/Driver: OSRAM
OT50W

Summary

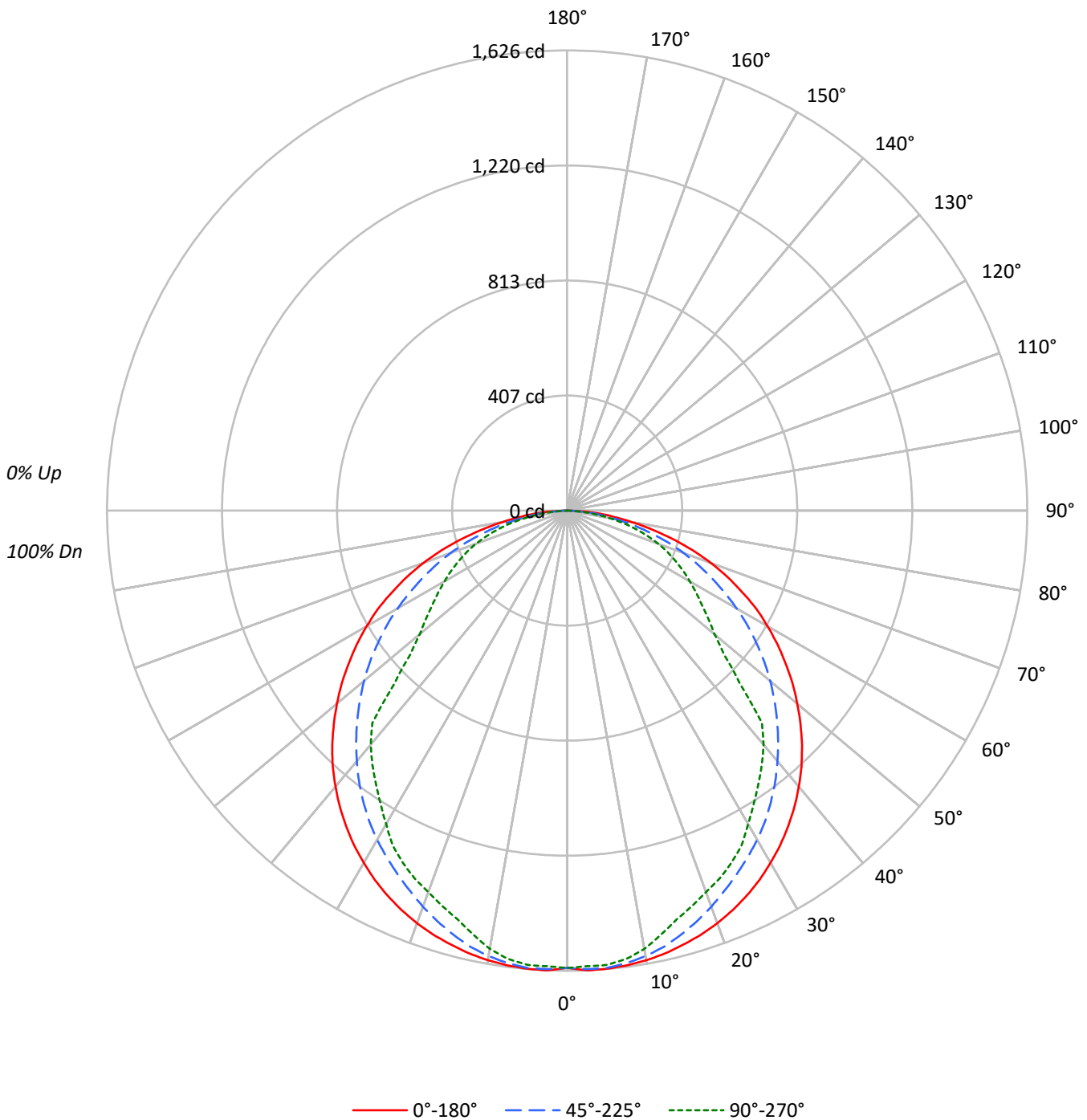
Lumens per Lamp: N/A
Luminaire Lumens: 4502.0 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 1.18 / 1.35
Luminous Opening: Rectangular (W 0.5' x L: 3.8' x H: 0')
CIE Type: Direct

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°	9155	9155	9155
5°	9241	9224	9164
10°	9279	9193	9048
15°	9312	9102	8771
20°	9356	8979	8647
25°	9384	8863	8584
30°	9402	8788	8369
35°	9415	8684	8148
40°	9417	8548	7986
45°	9403	8400	6909
50°	9359	8257	5986
55°	9312	8062	5738
60°	9265	7830	5670
65°	9144	7547	5670
70°	8954	7253	5675
75°	8379	6683	5509
80°	7484	5781	4907
85°	6871	4453	3582



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.5	3.4
10°-20°	435.7	9.7
20°-30°	656.8	14.6
30°-40°	788.5	17.5
40°-50°	803.1	17.8
50°-60°	704.8	15.7
60°-70°	548.2	12.2
70°-80°	326.1	7.2
80°-90°	85.3	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°	1245.9	27.7
0°-40°	2034.5	45.2
0°-60°	3542.3	78.7
0°-90°	4502.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4502.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1616	1616	1616	1616	1616	
5°	1625	1610	1622	1616	1612	155
15°	1588	1565	1552	1513	1495	449
25°	1501	1467	1418	1381	1373	692
35°	1361	1318	1256	1196	1178	852
45°	1174	1135	1048	968	862	905
55°	943	914	816	654	581	843
65°	682	655	563	444	423	676
75°	383	363	305	247	252	405
85°	106	94	68	55	55	116
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1616.0	1616.0	1616.0	1616.0	1616.0
2.5°	1626.4	1610.0	1621.9	1619.0	1611.5
5°	1624.9	1610.0	1621.9	1616.0	1611.5
7.5°	1620.5	1605.6	1613.0	1604.1	1598.1
10°	1613.0	1596.6	1598.1	1583.2	1572.8
12.5°	1602.6	1583.2	1578.8	1549.0	1534.1
15°	1587.7	1565.4	1551.9	1513.2	1495.4
17.5°	1571.3	1546.0	1522.2	1479.0	1465.6
20°	1551.9	1522.2	1489.4	1444.7	1434.3
22.5°	1528.1	1496.8	1453.6	1413.4	1407.5
25°	1501.3	1467.1	1417.9	1380.7	1373.2
27.5°	1471.5	1431.3	1380.7	1343.4	1334.5
30°	1437.3	1395.6	1343.4	1300.2	1279.4
32.5°	1401.5	1358.3	1301.7	1246.6	1227.3
35°	1361.3	1318.1	1255.6	1196.0	1178.1
37.5°	1319.6	1274.9	1207.9	1145.3	1130.4
40°	1273.4	1230.2	1155.8	1094.7	1079.8
42.5°	1225.8	1184.1	1103.6	1042.6	1018.7
45°	1173.6	1134.9	1048.5	968.1	862.4
47.5°	1118.5	1082.8	993.4	874.3	752.1
50°	1061.9	1029.2	936.8	790.9	679.2
52.5°	1003.9	974.1	878.7	717.9	628.5
55°	942.8	914.5	816.2	653.8	580.9
57.5°	881.7	853.4	756.6	595.8	540.6
60°	817.7	790.9	691.1	542.1	500.4
62.5°	755.1	725.3	627.0	493.0	463.2
65°	682.1	655.3	563.0	443.8	423.0
67.5°	613.6	585.3	500.4	396.2	384.3
70°	540.6	512.4	437.9	347.0	342.6
72.5°	463.2	440.9	372.3	299.4	296.4
75°	382.8	363.4	305.3	247.2	251.7
77.5°	303.8	291.9	241.3	198.1	201.1
80°	229.4	220.4	177.2	147.4	150.4
82.5°	163.8	156.4	120.6	98.3	98.3
85°	105.7	93.8	68.5	55.1	55.1
87.5°	41.7	34.3	20.9	6.0	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)