

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: P232463

Luminaire Tested: **4SRS-56-W-UNV-L850-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P232463
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1706-124-1)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SRS-56-W-UNV-L850-CD1-U
Description: WAVESTREAM LED RECESSED 4 FT FIXTURE
Light Source: -
Ballast/Driver: -

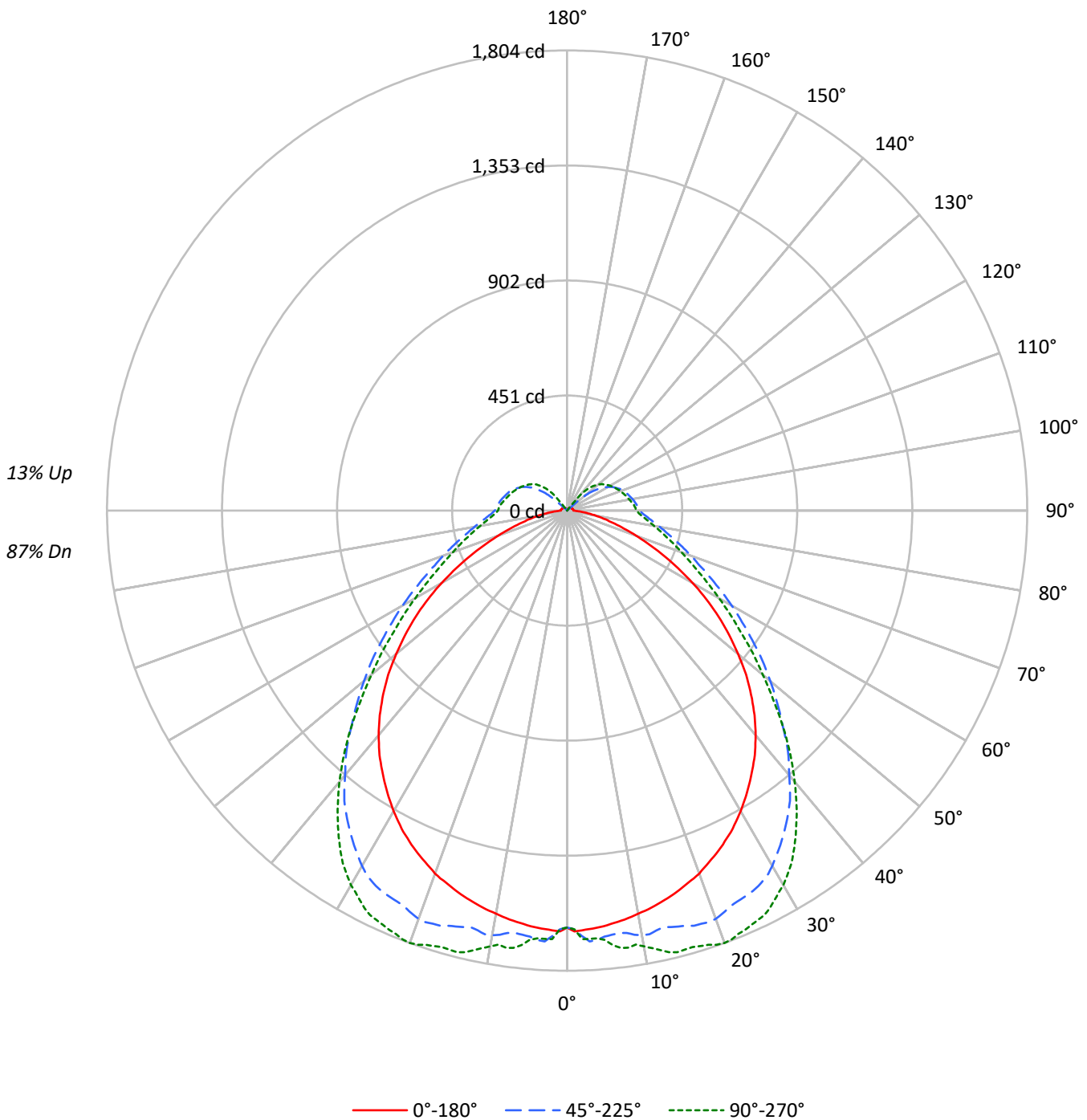
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5933.0 lumens
Efficiency: N/A
Efficacy: 157.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.44 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.02' x L: 3.88' x H: 0.3')
CIE Type: Semi-Direct

Input Watts (W): 37.8
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

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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	116	116	116	116	112	112	112	112	104	104	104	97	97	97	91	91	91	87
1	105	100	95	91	101	96	92	88	89	86	83	83	81	78	78	76	74	71
2	95	87	79	73	91	84	77	72	78	73	68	73	68	65	68	65	61	59
3	87	76	68	61	83	73	66	60	69	62	57	64	59	55	60	56	52	49
4	79	67	58	52	76	65	57	51	61	54	49	57	51	47	54	49	45	42
5	73	60	51	45	70	58	50	44	55	48	42	51	45	41	48	43	39	37
6	67	54	45	39	65	53	44	38	49	42	37	47	40	36	44	39	34	32
7	62	49	40	34	60	48	39	34	45	38	33	42	36	32	40	35	30	28
8	58	45	36	30	56	43	36	30	41	34	29	39	33	28	37	31	27	25
9	54	41	33	27	52	40	32	27	38	31	26	36	30	25	34	29	25	23
10	51	38	30	25	49	37	29	24	35	28	24	33	27	23	32	26	22	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	290629	290629	290629
5°	289962	137091	113096
10°	285792	90182	71852
15°	282417	67198	53752
20°	278749	54426	43019
25°	273613	44705	35149
30°	267574	37482	29008
35°	259721	31051	23646
40°	250724	25459	18974
45°	238246	20712	15004
50°	221755	16794	11688
55°	202627	13517	9129
60°	178311	10850	7190
65°	150773	8659	5718
70°	123182	7023	4648
75°	98248	5789	3853
80°	80723	4856	3253
85°	62072	4169	2803



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.8	2.7
10°-20°	476.0	8.0
20°-30°	752.4	12.7
30°-40°	907.9	15.3
40°-50°	889.9	15.0
50°-60°	747.7	12.6
60°-70°	561.1	9.5
70°-80°	403.0	6.8
80°-90°	291.1	4.9
90°-100°	240.6	4.1
100°-110°	204.9	3.5
110°-120°	151.3	2.6
120°-130°	100.0	1.7
130°-140°	41.7	0.7
140°-150°	4.4	0.1
150°-160°	1.1	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1388.2	23.4
0°-40°	2296.1	38.7
0°-60°	3933.7	66.3
0°-90°	5188.9	87.5
90°-120°	596.8	10.1
90°-150°	742.8	12.5
90°-180°	744.0	12.5
0°-180°	5933.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1635	1635	1635	1635	1635	
5°	1636	1664	1677	1680	1690	155
15°	1566	1594	1688	1772	1782	442
25°	1444	1510	1665	1743	1771	665
35°	1261	1357	1498	1558	1562	788
45°	1020	1101	1196	1210	1196	785
55°	725	817	886	854	831	646
65°	417	558	618	582	569	416
75°	184	374	434	410	404	201
85°	57	258	318	300	300	58
90°	25	220	284	271	271	15
95°	24	209	273	260	262	20
105°	23	166	246	234	235	24
115°	20	72	210	211	209	20
125°	18	23	148	180	179	16
135°	15	16	10	114	129	11
145°	10	9	6	0	0	6
155°	6	5	2	0	0	3
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1634.6	1634.6	1634.6	1634.6	1634.6
1°	1650.2	1632.8	1641.9	1645.6	1641.9
2°	1646.5	1637.4	1668.6	1687.0	1681.5
3°	1642.9	1648.4	1691.6	1689.7	1681.5
4°	1640.1	1658.5	1687.0	1684.2	1681.5
5°	1635.5	1664.0	1676.9	1680.5	1689.7
6°	1630.0	1661.2	1672.3	1693.4	1712.7
7°	1624.5	1653.0	1668.6	1711.8	1727.4
8°	1619.0	1644.7	1672.3	1722.8	1730.2
9°	1612.5	1637.4	1683.3	1720.0	1722.8
10°	1604.3	1630.9	1690.6	1713.6	1734.7
11°	1598.8	1621.7	1692.5	1722.8	1747.6
12°	1591.4	1610.7	1682.4	1735.7	1762.3
13°	1583.1	1602.4	1676.9	1751.3	1777.0
14°	1574.0	1596.0	1682.4	1763.2	1784.4
15°	1565.7	1594.2	1687.9	1771.5	1782.5
16°	1556.5	1593.2	1693.4	1769.7	1779.8
17°	1545.5	1591.4	1701.7	1762.3	1785.3
18°	1534.4	1588.7	1703.5	1762.3	1789.9
19°	1525.3	1584.1	1706.3	1766.0	1800.0
20°	1514.2	1574.0	1703.5	1769.7	1803.7
21°	1499.5	1561.1	1694.3	1773.3	1800.9
22°	1485.7	1546.4	1682.4	1770.6	1790.8
23°	1472.9	1530.8	1674.1	1763.2	1786.2
24°	1459.1	1519.7	1669.5	1751.3	1777.9
25°	1444.4	1509.6	1664.9	1743.0	1770.6
26°	1428.8	1499.5	1659.4	1734.7	1764.2
27°	1414.1	1489.4	1652.1	1724.6	1749.5
28°	1396.6	1476.6	1641.0	1714.5	1730.2
29°	1378.2	1462.8	1627.2	1699.8	1711.8
30°	1360.8	1449.0	1608.0	1677.8	1695.2
32.5°	1312.1	1407.6	1555.6	1624.5	1638.3
35°	1260.6	1357.1	1497.7	1558.3	1562.0
37.5°	1208.3	1301.1	1435.2	1478.4	1478.4
40°	1149.5	1234.0	1354.4	1392.9	1388.4
42.5°	1087.0	1169.7	1281.8	1304.7	1294.6
45°	1019.9	1100.8	1196.3	1210.1	1196.3
47.5°	951.0	1030.0	1117.3	1118.2	1095.2
50°	874.7	959.3	1039.2	1024.5	1001.5
52.5°	800.3	888.5	964.8	935.4	917.0
55°	725.0	816.8	885.8	853.6	830.6
57.5°	646.9	746.1	813.2	778.2	758.0
60°	567.8	679.9	745.2	705.7	687.3
62.5°	489.7	614.7	678.1	640.4	624.8
65°	417.1	557.7	617.5	581.6	568.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	349.2	502.6	562.3	530.2	519.1
70°	286.7	454.8	515.5	485.1	476.9
72.5°	233.4	411.6	473.2	445.6	439.2
75°	183.8	374.0	433.7	409.8	404.3
77.5°	147.0	340.9	398.8	377.6	374.0
80°	113.0	310.6	368.5	349.2	346.4
82.5°	82.7	283.0	340.9	322.5	321.6
85°	57.0	258.2	317.9	300.5	300.5
87.5°	36.8	238.0	297.7	281.2	283.0
90°	24.8	219.6	283.9	271.1	271.1
92.5°	24.8	215.9	279.3	266.5	267.4
95°	23.9	208.6	272.9	260.0	261.9
97.5°	23.9	200.3	266.5	252.7	254.5
100°	23.0	190.2	260.0	246.2	248.1
102.5°	23.0	179.2	252.7	240.7	240.7
105°	23.0	166.3	246.2	234.3	235.2
107.5°	22.1	151.6	239.8	228.8	228.8
110°	21.1	131.4	232.5	223.3	222.4
112.5°	21.1	105.7	222.4	217.8	215.9
115°	20.2	71.7	210.4	211.3	208.6
117.5°	19.3	31.2	200.3	204.9	202.1
120°	18.4	28.5	185.6	198.5	194.8
122.5°	18.4	25.7	168.1	190.2	187.4
125°	17.5	23.0	147.9	180.1	179.2
127.5°	17.5	21.1	122.2	168.1	170.0
130°	16.5	19.3	90.0	154.4	159.0
132.5°	15.6	17.5	18.4	136.9	145.2
135°	14.7	15.6	10.1	113.9	128.6
137.5°	13.8	13.8	9.2	85.5	106.6
140°	12.9	11.9	7.4	12.9	79.0
142.5°	11.0	11.0	6.4	0.9	2.8
145°	10.1	9.2	5.5	0.0	0.0
147.5°	9.2	8.3	4.6	0.0	0.0
150°	8.3	7.4	3.7	0.0	0.0
152.5°	7.4	5.5	2.8	0.0	0.0
155°	5.5	4.6	1.8	0.0	0.0
157.5°	4.6	3.7	0.9	0.0	0.0
160°	3.7	2.8	0.9	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)