

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: P232464

Luminaire Tested: **4SRS-65-W-UNV-L830-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P232464
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-65-W-UNV-L830-CD1-U
Description: WAVESTREAM LED RECESSED 4 FT FIXTURE
Light Source: -
Ballast/Driver: -

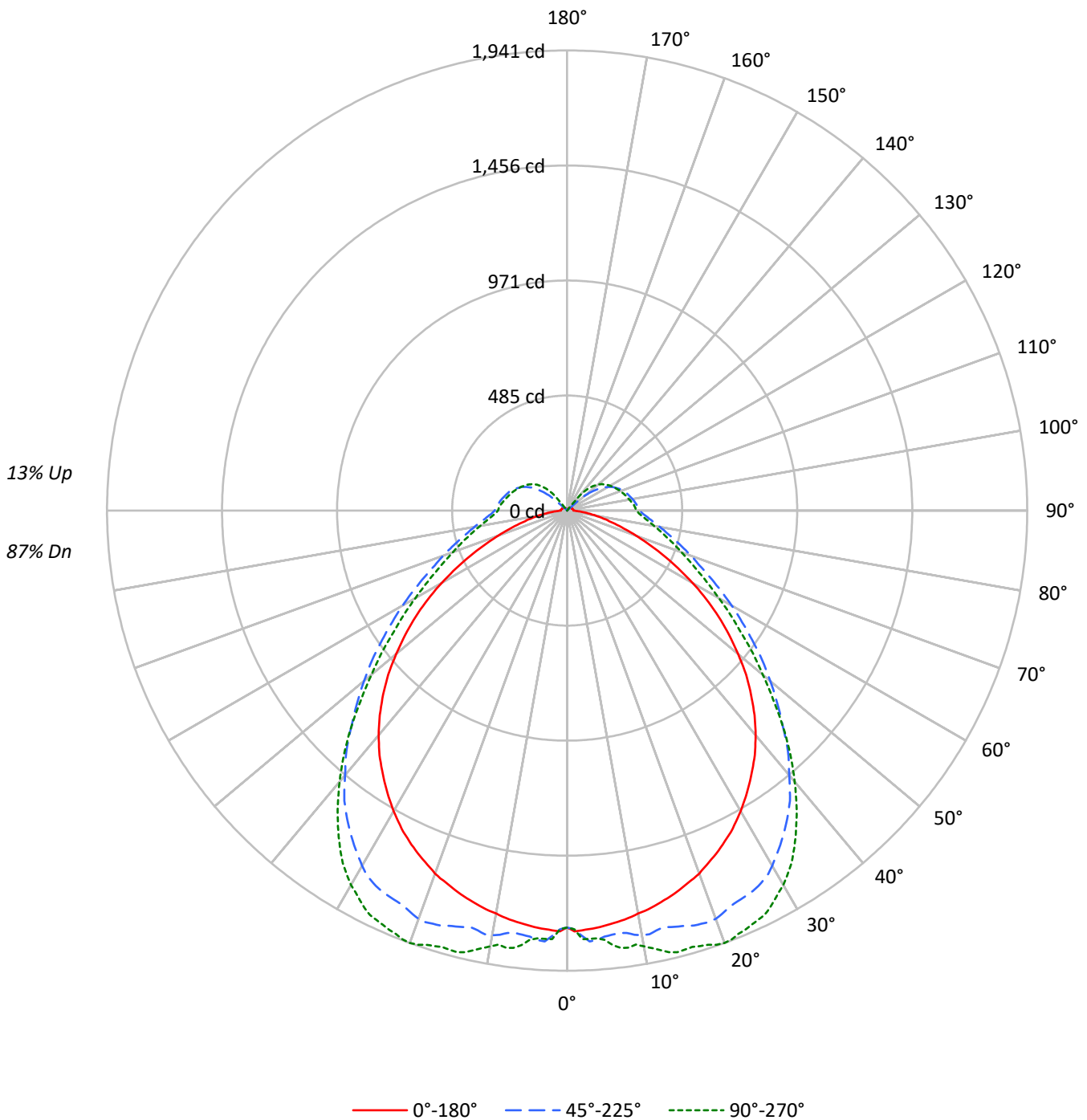
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6383.2 lumens
Efficiency: N/A
Efficacy: 142.8 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): 44.7
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	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°	312694	312694	312694
5°	311964	147490	121683
10°	307472	97031	77307
15°	303846	72297	57832
20°	299919	58557	46285
25°	294374	48099	37817
30°	287886	40326	31211
35°	279438	33408	25441
40°	269744	27390	20413
45°	256326	22284	16143
50°	238588	18069	12575
55°	217999	14543	9822
60°	191846	11673	7735
65°	162232	9316	6151
70°	132506	7556	5001
75°	105678	6228	4145
80°	86866	5224	3500
85°	66755	4485	3015



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.0	2.7
10°-20°	512.1	8.0
20°-30°	809.5	12.7
30°-40°	976.8	15.3
40°-50°	957.5	15.0
50°-60°	804.5	12.6
60°-70°	603.6	9.5
70°-80°	433.6	6.8
80°-90°	313.2	4.9
90°-100°	258.9	4.1
100°-110°	220.4	3.5
110°-120°	162.8	2.5
120°-130°	107.6	1.7
130°-140°	44.8	0.7
140°-150°	4.8	0.1
150°-160°	1.2	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1493.6	23.4
0°-40°	2470.4	38.7
0°-60°	4232.3	66.3
0°-90°	5582.7	87.5
90°-120°	642.0	10.1
90°-150°	799.2	12.5
90°-180°	800.0	12.5
0°-180°	6383.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1759	1759	1759	1759	1759	
5°	1760	1790	1804	1808	1818	167
15°	1684	1715	1816	1906	1918	475
25°	1554	1624	1791	1875	1905	716
35°	1356	1460	1611	1677	1681	848
45°	1097	1184	1287	1302	1287	845
55°	780	879	953	918	894	695
65°	449	600	664	626	612	448
75°	198	402	467	441	435	217
85°	61	278	342	323	323	63
90°	27	236	306	292	292	16
95°	26	224	294	280	282	21
105°	25	179	265	252	253	26
115°	22	77	226	227	224	21
125°	19	25	159	194	193	17
135°	16	17	11	123	138	12
145°	11	10	6	0	0	7
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°	1758.7	1758.7	1758.7	1758.7	1758.7
1°	1775.5	1756.7	1766.6	1770.5	1766.6
2°	1771.5	1761.6	1795.2	1815.0	1809.1
3°	1767.6	1773.5	1820.0	1818.0	1809.1
4°	1764.6	1784.4	1815.0	1812.0	1809.1
5°	1759.6	1790.3	1804.1	1808.1	1818.0
6°	1753.7	1787.3	1799.2	1821.9	1842.7
7°	1747.8	1778.4	1795.2	1841.7	1858.5
8°	1741.9	1769.5	1799.2	1853.6	1861.5
9°	1734.9	1761.6	1811.1	1850.6	1853.6
10°	1726.0	1754.7	1819.0	1843.7	1866.4
11°	1720.1	1744.8	1820.9	1853.6	1880.3
12°	1712.2	1733.0	1810.1	1867.4	1896.1
13°	1703.3	1724.1	1804.1	1884.2	1911.9
14°	1693.4	1717.1	1810.1	1897.1	1919.8
15°	1684.5	1715.2	1816.0	1906.0	1917.8
16°	1674.6	1714.2	1821.9	1904.0	1914.9
17°	1662.8	1712.2	1830.8	1896.1	1920.8
18°	1650.9	1709.2	1832.8	1896.1	1925.7
19°	1641.0	1704.3	1835.8	1900.0	1936.6
20°	1629.2	1693.4	1832.8	1904.0	1940.6
21°	1613.3	1679.6	1822.9	1907.9	1937.6
22°	1598.5	1663.8	1810.1	1905.0	1926.7
23°	1584.7	1647.0	1801.2	1897.1	1921.8
24°	1569.8	1635.1	1796.2	1884.2	1912.9
25°	1554.0	1624.2	1791.3	1875.3	1905.0
26°	1537.2	1613.3	1785.4	1866.4	1898.0
27°	1521.4	1602.5	1777.4	1855.5	1882.2
28°	1502.6	1588.6	1765.6	1844.7	1861.5
29°	1482.9	1573.8	1750.8	1828.8	1841.7
30°	1464.1	1559.0	1730.0	1805.1	1823.9
32.5°	1411.7	1514.5	1673.6	1747.8	1762.6
35°	1356.3	1460.1	1611.4	1676.6	1680.6
37.5°	1300.0	1399.8	1544.1	1590.6	1590.6
40°	1236.7	1327.6	1457.1	1498.7	1493.7
42.5°	1169.5	1258.4	1379.1	1403.8	1392.9
45°	1097.3	1184.3	1287.1	1301.9	1287.1
47.5°	1023.2	1108.2	1202.1	1203.1	1178.4
50°	941.1	1032.1	1118.1	1102.3	1077.5
52.5°	861.0	955.9	1038.0	1006.4	986.6
55°	780.0	878.8	953.0	918.4	893.7
57.5°	696.0	802.7	874.9	837.3	815.6
60°	610.9	731.5	801.7	759.2	739.4
62.5°	526.9	661.4	729.6	689.0	672.2
65°	448.8	600.1	664.3	625.8	611.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	375.7	540.7	605.0	570.4	558.5
70°	308.4	489.3	554.6	522.0	513.1
72.5°	251.1	442.9	509.1	479.5	472.5
75°	197.7	402.3	466.6	440.9	435.0
77.5°	158.2	366.8	429.0	406.3	402.3
80°	121.6	334.1	396.4	375.7	372.7
82.5°	89.0	304.5	366.8	347.0	346.0
85°	61.3	277.8	342.0	323.3	323.3
87.5°	39.5	256.0	320.3	302.5	304.5
90°	26.7	236.3	305.5	291.6	291.6
92.5°	26.7	232.3	300.5	286.7	287.7
95°	25.7	224.4	293.6	279.8	281.7
97.5°	25.7	215.5	286.7	271.9	273.8
100°	24.7	204.6	279.8	264.9	266.9
102.5°	24.7	192.8	271.9	259.0	259.0
105°	24.7	178.9	264.9	252.1	253.1
107.5°	23.7	163.1	258.0	246.2	246.2
110°	22.7	141.4	250.1	240.2	239.2
112.5°	22.7	113.7	239.2	234.3	232.3
115°	21.7	77.1	226.4	227.4	224.4
117.5°	20.8	33.6	215.5	220.5	217.5
120°	19.8	30.6	199.7	213.5	209.6
122.5°	19.8	27.7	180.9	204.6	201.7
125°	18.8	24.7	159.2	193.8	192.8
127.5°	18.8	22.7	131.5	180.9	182.9
130°	17.8	20.8	96.9	166.1	171.0
132.5°	16.8	18.8	19.8	147.3	156.2
135°	15.8	16.8	10.9	122.6	138.4
137.5°	14.8	14.8	9.9	91.9	114.7
140°	13.8	12.9	7.9	13.8	85.0
142.5°	11.9	11.9	6.9	1.0	3.0
145°	10.9	9.9	5.9	0.0	0.0
147.5°	9.9	8.9	4.9	0.0	0.0
150°	8.9	7.9	4.0	0.0	0.0
152.5°	7.9	5.9	3.0	0.0	0.0
155°	5.9	4.9	2.0	0.0	0.0
157.5°	4.9	4.0	1.0	0.0	0.0
160°	4.0	3.0	1.0	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)