

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: P232465

Luminaire Tested: **4SRS-65-W-UNV-L835-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P232465  
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-L835-CD1-U  
Description: WAVESTREAM LED RECESSED 4 FT FIXTURE  
Light Source: -  
Ballast/Driver: -

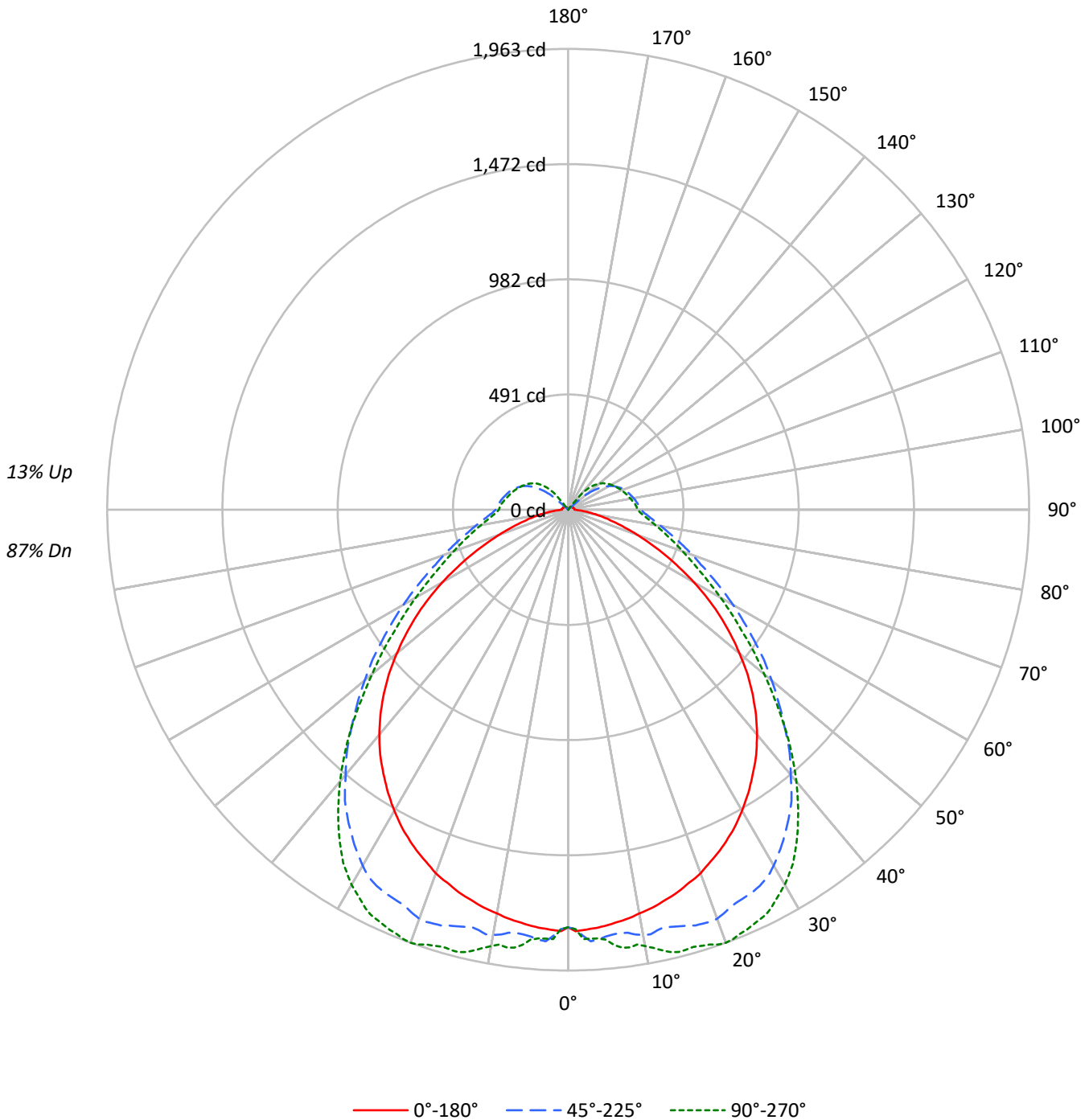
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6457.0 lumens  
Efficiency: N/A  
Efficacy: 144.5 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	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°	316304	316304	316304
5°	315581	149199	123089
10°	311035	98151	78201
15°	307364	73133	58502
20°	303380	59235	46819
25°	297784	48655	38253
30°	291209	40792	31572
35°	282672	33794	25735
40°	272863	27707	20649
45°	259293	22542	16329
50°	241352	18277	12721
55°	220514	14711	9936
60°	194076	11808	7825
65°	164111	9424	6223
70°	134052	7643	5059
75°	106908	6300	4193
80°	87866	5285	3540
85°	67517	4537	3050



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	173.9	2.7
10°-20°	518.0	8.0
20°-30°	818.9	12.7
30°-40°	988.1	15.3
40°-50°	968.5	15.0
50°-60°	813.8	12.6
60°-70°	610.6	9.5
70°-80°	438.6	6.8
80°-90°	316.8	4.9
90°-100°	261.9	4.1
100°-110°	223.0	3.5
110°-120°	164.6	2.5
120°-130°	108.8	1.7
130°-140°	45.3	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°	1510.9	23.4
0°-40°	2498.9	38.7
0°-60°	4281.2	66.3
0°-90°	5647.3	87.5
90°-120°	649.5	10.1
90°-150°	808.4	12.5
90°-180°	810.0	12.5
0°-180°	6457.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1779	1779	1779	1779	1779	
5°	1780	1811	1825	1829	1839	169
15°	1704	1735	1837	1928	1940	481
25°	1572	1643	1812	1897	1927	724
35°	1372	1477	1630	1696	1700	858
45°	1110	1198	1302	1317	1302	854
55°	789	889	964	929	904	703
65°	454	607	672	633	619	453
75°	200	407	472	446	440	219
85°	62	281	346	327	327	64
90°	27	239	309	295	295	17
95°	26	227	297	283	285	21
105°	25	181	268	255	256	26
115°	22	78	229	230	227	22
125°	19	25	161	196	195	17
135°	16	17	11	124	140	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°	1779	1779	1779	1779	1779
1°	1796	1777	1787	1791	1787
2°	1792	1782	1816	1836	1830
3°	1788	1794	1841	1839	1830
4°	1785	1805	1836	1833	1830
5°	1780	1811	1825	1829	1839
6°	1774	1808	1820	1843	1864
7°	1768	1799	1816	1863	1880
8°	1762	1790	1820	1875	1883
9°	1755	1782	1832	1872	1875
10°	1746	1775	1840	1865	1888
11°	1740	1765	1842	1875	1902
12°	1732	1753	1831	1889	1918
13°	1723	1744	1825	1906	1934
14°	1713	1737	1831	1919	1942
15°	1704	1735	1837	1928	1940
16°	1694	1734	1843	1926	1937
17°	1682	1732	1852	1918	1943
18°	1670	1729	1854	1918	1948
19°	1660	1724	1857	1922	1959
20°	1648	1713	1854	1926	1963
21°	1632	1699	1844	1930	1960
22°	1617	1683	1831	1927	1949
23°	1603	1666	1822	1919	1944
24°	1588	1654	1817	1906	1935
25°	1572	1643	1812	1897	1927
26°	1555	1632	1806	1888	1920
27°	1539	1621	1798	1877	1904
28°	1520	1607	1786	1866	1883
29°	1500	1592	1771	1850	1863
30°	1481	1577	1750	1826	1845
32.5°	1428	1532	1693	1768	1783
35°	1372	1477	1630	1696	1700
37.5°	1315	1416	1562	1609	1609
40°	1251	1343	1474	1516	1511
42.5°	1183	1273	1395	1420	1409
45°	1110	1198	1302	1317	1302
47.5°	1035	1121	1216	1217	1192
50°	952	1044	1131	1115	1090
52.5°	871	967	1050	1018	998
55°	789	889	964	929	904
57.5°	704	812	885	847	825
60°	618	740	811	768	748
62.5°	533	669	738	697	680
65°	454	607	672	633	619



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	380	547	612	577	565
70°	312	495	561	528	519
72.5°	254	448	515	485	478
75°	200	407	472	446	440
77.5°	160	371	434	411	407
80°	123	338	401	380	377
82.5°	90	308	371	351	350
85°	62	281	346	327	327
87.5°	40	259	324	306	308
90°	27	239	309	295	295
92.5°	27	235	304	290	291
95°	26	227	297	283	285
97.5°	26	218	290	275	277
100°	25	207	283	268	270
102.5°	25	195	275	262	262
105°	25	181	268	255	256
107.5°	24	165	261	249	249
110°	23	143	253	243	242
112.5°	23	115	242	237	235
115°	22	78	229	230	227
117.5°	21	34	218	223	220
120°	20	31	202	216	212
122.5°	20	28	183	207	204
125°	19	25	161	196	195
127.5°	19	23	133	183	185
130°	18	21	98	168	173
132.5°	17	19	20	149	158
135°	16	17	11	124	140
137.5°	15	15	10	93	116
140°	14	13	8	14	86
142.5°	12	12	7	1	3
145°	11	10	6	0	0
147.5°	10	9	5	0	0
150°	9	8	4	0	0
152.5°	8	6	3	0	0
155°	6	5	2	0	0
157.5°	5	4	1	0	0
160°	4	3	1	0	0
162.5°	0	0	0	0	0
165°	0	0	0	0	0
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	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

(END OF REPORT)