

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P257644

Luminaire Tested: **8ST2L8040R**

Issue Date: 3/3/2020



**Test Information**

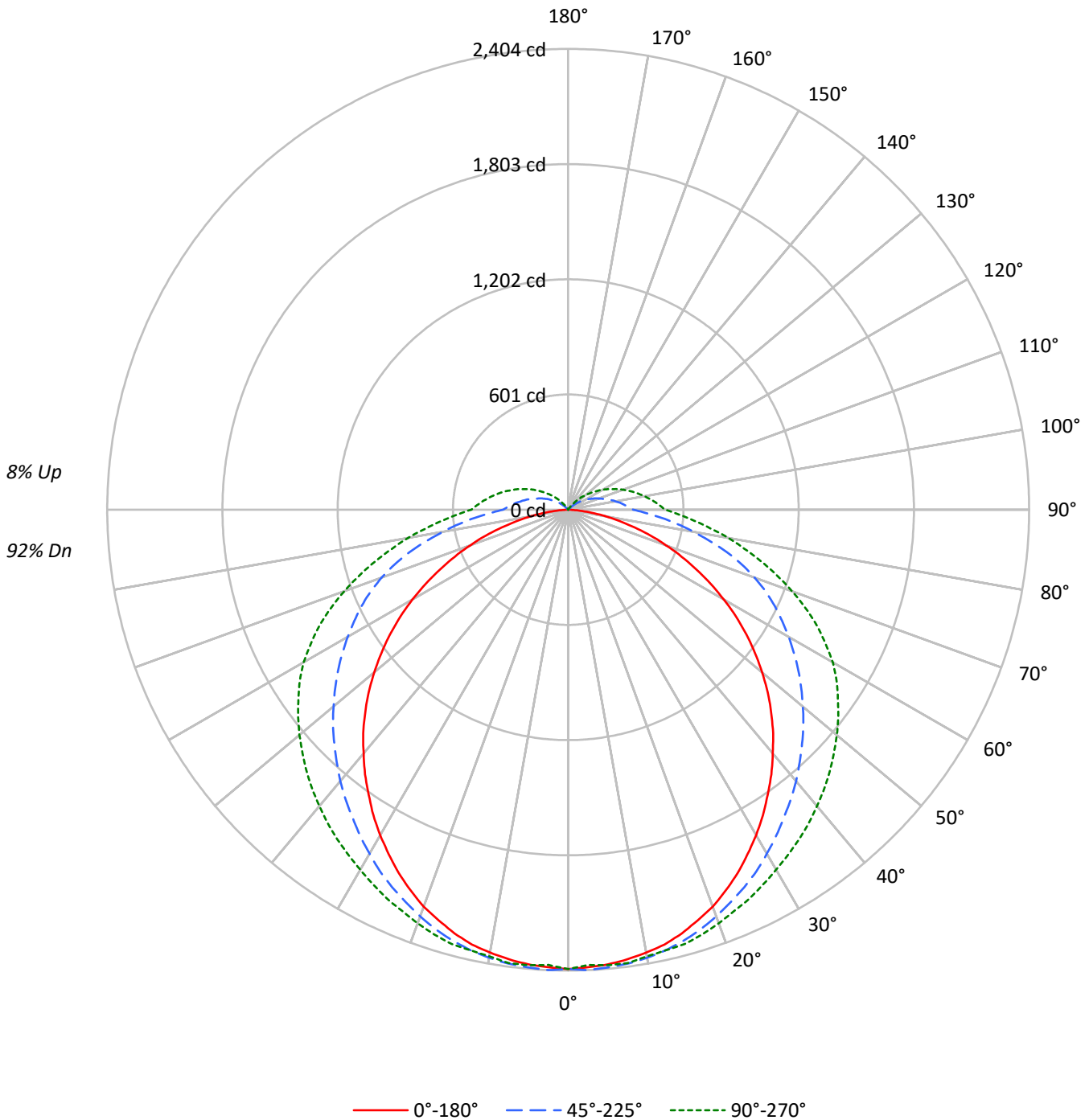
Test Method: LM-41-14  
Report Number: P257644  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1804-713-2)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8ST2L8040R  
Description: 8' LED STRIP  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8867.0 lumens  
Efficiency: N/A  
Efficacy: 113.4 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.35 / 1.43  
Luminous Opening: Rectangular w/ Sides (W: 0.08' x L: 8' x H: 0.08')  
CIE Type: Direct  
  
Input Watts (W): 78.18  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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									
RC	80									70									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	117	117	117	117	113	113	113	113	107	107	107	100	100	100	95	95	95	92						92													
1	105	99	94	90	101	96	91	87	90	86	83	85	82	79	80	78	75	73						73													
2	94	85	78	71	91	83	76	70	78	72	67	73	68	64	69	65	61	59						59													
3	86	74	65	58	82	72	64	57	68	61	55	64	58	53	60	55	51	48						48													
4	78	65	56	49	75	63	55	48	60	52	46	56	50	45	53	48	43	41						41													
5	71	58	48	41	69	56	47	41	53	45	40	50	44	38	48	42	37	35						35													
6	66	52	43	36	63	51	42	35	48	40	34	45	39	33	43	37	33	30						30													
7	61	47	38	31	59	46	37	31	43	36	30	41	34	29	39	33	29	27						27													
8	57	43	34	28	55	42	33	28	40	32	27	38	31	26	36	30	26	24						24													
9	53	39	31	25	51	38	30	25	36	29	24	35	28	24	33	27	23	21						21													
10	50	36	28	22	48	35	27	22	34	27	22	32	26	21	31	25	21	19						19													

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	38707	38707	38707
5°	38570	36569	35558
10°	38412	34571	32984
15°	38160	32660	30944
20°	37733	30796	28936
25°	37097	29044	27204
30°	36345	27363	25643
35°	35504	25766	24347
40°	34686	24368	23139
45°	33850	22983	22038
50°	32758	21683	20972
55°	31480	20439	19915
60°	29755	19166	18846
65°	27556	17940	17401
70°	24981	16484	15659
75°	21560	14582	13741
80°	17285	12220	11838
85°	10219	9909	9839



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	227.3	2.6
10°-20°	654.2	7.4
20°-30°	997.4	11.2
30°-40°	1224.0	13.8
40°-50°	1322.6	14.9
50°-60°	1289.0	14.5
60°-70°	1124.1	12.7
70°-80°	832.5	9.4
80°-90°	487.1	5.5
90°-100°	288.3	3.3
100°-110°	203.2	2.3
110°-120°	127.0	1.4
120°-130°	65.4	0.7
130°-140°	22.7	0.3
140°-150°	2.2	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1878.9	21.2
0°-40°	3102.9	35.0
0°-60°	5714.5	64.4
0°-90°	8158.2	92.0
90°-120°	618.4	7.0
90°-150°	708.8	8.0
90°-180°	709.0	8.0
0°-180°	8867.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2396	2396	2396	2396	2396	
5°	2381	2408	2396	2389	2385	226
15°	2288	2315	2327	2338	2346	645
25°	2092	2122	2173	2215	2238	963
35°	1814	1856	1960	2053	2099	1136
45°	1497	1559	1725	1864	1930	1154
55°	1134	1235	1466	1644	1717	1012
65°	737	911	1189	1366	1432	731
75°	359	602	857	992	1042	383
85°	62	289	490	610	660	80
90°	4	158	340	459	506	4
95°	0	124	293	409	455	0
105°	0	66	212	316	355	0
115°	0	19	135	224	255	0
125°	0	0	70	139	162	0
135°	0	0	8	62	81	0
145°	0	0	0	0	12	0
155°	0	0	0	0	0	0
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°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2396.4	2396.4	2396.4	2396.4	2396.4	2396.4	2396.4	2396.4	2396.4	2396.4	2396.4
2.5°	2388.7	2384.9	2419.6	2396.4	2400.3	2419.6	2404.1	2396.4	2404.1	2400.3	2404.1
5°	2381.0	2373.3	2408.0	2388.7	2392.6	2408.0	2392.6	2388.7	2392.6	2392.6	2396.4
7.5°	2365.6	2357.8	2392.6	2373.3	2377.1	2392.6	2377.1	2373.3	2381.0	2377.1	2388.7
10°	2346.3	2338.5	2369.4	2354.0	2357.8	2373.3	2357.8	2357.8	2361.7	2365.6	2373.3
12.5°	2323.1	2311.5	2342.4	2330.8	2330.8	2350.1	2334.7	2334.7	2338.5	2342.4	2354.0
15°	2288.4	2276.8	2303.8	2296.1	2296.1	2315.4	2300.0	2303.8	2307.7	2315.4	2327.0
17.5°	2245.9	2234.4	2257.5	2253.6	2253.6	2272.9	2257.5	2265.2	2269.1	2276.8	2296.1
20°	2203.5	2191.9	2211.2	2207.3	2211.2	2230.5	2215.1	2222.8	2230.5	2242.1	2257.5
22.5°	2149.5	2137.9	2157.2	2157.2	2157.2	2176.5	2164.9	2176.5	2184.2	2195.8	2215.1
25°	2091.6	2083.9	2095.4	2099.3	2103.1	2122.4	2110.9	2122.4	2134.0	2149.5	2172.6
27.5°	2026.0	2018.2	2026.0	2037.5	2041.4	2060.7	2049.1	2068.4	2076.1	2095.4	2126.3
30°	1960.4	1952.6	1960.4	1971.9	1979.7	1995.1	1987.4	2006.7	2018.2	2041.4	2072.3
32.5°	1890.9	1887.0	1890.9	1906.3	1914.1	1929.5	1925.6	1948.8	1960.4	1987.4	2018.2
35°	1813.7	1809.9	1813.7	1833.0	1844.6	1856.2	1852.3	1879.3	1898.6	1925.6	1960.4
37.5°	1740.4	1736.5	1740.4	1763.6	1771.3	1790.6	1786.7	1813.7	1836.9	1867.7	1906.3
40°	1659.4	1659.4	1659.4	1686.4	1698.0	1717.2	1713.4	1748.1	1771.3	1802.1	1848.5
42.5°	1582.2	1578.3	1578.3	1605.3	1624.6	1640.1	1640.1	1674.8	1705.7	1740.4	1786.7
45°	1497.3	1497.3	1493.4	1524.3	1543.6	1559.0	1562.9	1601.5	1636.2	1674.8	1725.0
47.5°	1412.4	1408.5	1408.5	1443.3	1462.6	1481.8	1485.7	1532.0	1566.7	1609.2	1663.2
50°	1319.8	1319.8	1319.8	1358.4	1381.5	1397.0	1408.5	1454.8	1493.4	1539.7	1597.6
52.5°	1227.2	1231.0	1231.0	1269.6	1300.5	1315.9	1331.3	1381.5	1424.0	1470.3	1532.0
55°	1134.5	1138.4	1142.3	1184.7	1215.6	1234.9	1254.2	1304.3	1354.5	1400.8	1466.4
57.5°	1038.1	1045.8	1049.6	1096.0	1134.5	1153.8	1173.1	1231.0	1281.2	1331.3	1397.0
60°	937.7	949.3	960.9	1007.2	1049.6	1072.8	1096.0	1153.8	1207.9	1265.7	1327.5
62.5°	837.4	852.8	864.4	918.4	964.7	991.8	1018.8	1076.7	1134.5	1192.4	1258.0
65°	737.1	752.5	767.9	829.7	887.6	910.7	941.6	1003.3	1061.2	1123.0	1188.6
67.5°	640.6	659.9	683.0	744.8	802.7	829.7	864.4	930.0	991.8	1049.6	1115.2
70°	544.1	563.4	594.3	659.9	721.6	748.6	779.5	856.7	918.4	976.3	1034.2
72.5°	451.5	474.7	513.2	582.7	648.3	675.3	706.2	775.7	841.3	895.3	949.3
75°	358.9	385.9	432.2	501.7	571.1	602.0	636.7	698.5	752.5	802.7	856.7
77.5°	274.0	301.0	358.9	432.2	497.8	528.7	559.6	621.3	671.5	713.9	756.4
80°	196.8	223.8	285.6	358.9	424.5	451.5	478.5	532.5	578.8	621.3	663.7
82.5°	123.5	158.2	220.0	289.4	347.3	370.5	397.5	447.6	493.9	532.5	575.0
85°	61.7	100.3	158.2	216.1	266.3	289.4	316.4	362.7	409.1	447.6	490.1
87.5°	19.3	54.0	96.5	150.5	196.8	216.1	239.3	285.6	328.0	366.6	405.2
90°	3.9	19.3	54.0	96.5	138.9	158.2	181.4	223.8	262.4	301.0	339.6
92.5°	0.0	11.6	42.4	81.0	119.6	138.9	162.1	200.7	243.1	277.8	316.4
95°	0.0	3.9	30.9	65.6	104.2	123.5	142.8	181.4	223.8	258.6	293.3
97.5°	0.0	0.0	19.3	54.0	88.8	108.1	127.3	165.9	200.7	239.3	274.0
100°	0.0	0.0	11.6	42.4	77.2	92.6	111.9	146.6	185.2	216.1	250.8
102.5°	0.0	0.0	7.7	30.9	61.7	77.2	96.5	131.2	165.9	196.8	231.5
105°	0.0	0.0	3.9	23.2	50.2	65.6	81.0	115.8	150.5	181.4	212.2
107.5°	0.0	0.0	0.0	11.6	38.6	54.0	69.5	100.3	131.2	162.1	189.1
110°	0.0	0.0	0.0	3.9	27.0	42.4	57.9	84.9	115.8	142.8	169.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	0.0	0.0	0.0	19.3	30.9	42.4	73.3	100.3	127.3	154.4
115°	0.0	0.0	0.0	0.0	7.7	19.3	30.9	57.9	84.9	111.9	135.1
117.5°	0.0	0.0	0.0	0.0	3.9	11.6	19.3	46.3	69.5	92.6	119.6
120°	0.0	0.0	0.0	0.0	0.0	3.9	11.6	30.9	57.9	77.2	100.3
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.9	19.3	42.4	65.6	84.9
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.6	30.9	50.2	69.5
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	15.4	34.7	54.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	19.3	38.6
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7	23.2
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2396.4	2396.4	2396.4	2396.4	2396.4	2396.4	2396.4	2396.4	2396.4	2396.4
2.5°	2408.0	2404.1	2400.3	2384.9	2388.7	2373.3	2357.8	2369.4	2388.7	2377.1
5°	2400.3	2396.4	2396.4	2384.9	2388.7	2373.3	2357.8	2373.3	2396.4	2384.9
7.5°	2392.6	2388.7	2388.7	2381.0	2384.9	2373.3	2357.8	2373.3	2396.4	2384.9
10°	2377.1	2377.1	2377.1	2365.6	2369.4	2357.8	2342.4	2357.8	2377.1	2365.6
12.5°	2357.8	2357.8	2361.7	2350.1	2357.8	2342.4	2330.8	2346.3	2369.4	2354.0
15°	2334.7	2334.7	2342.4	2334.7	2338.5	2330.8	2315.4	2334.7	2357.8	2346.3
17.5°	2300.0	2307.7	2315.4	2311.5	2315.4	2307.7	2296.1	2311.5	2338.5	2323.1
20°	2265.2	2276.8	2284.5	2280.7	2284.5	2276.8	2269.1	2284.5	2311.5	2296.1
22.5°	2222.8	2234.4	2245.9	2245.9	2249.8	2245.9	2238.2	2253.6	2280.7	2265.2
25°	2180.3	2195.8	2211.2	2211.2	2215.1	2211.2	2207.3	2226.6	2253.6	2238.2
27.5°	2134.0	2153.3	2168.7	2172.6	2176.5	2176.5	2176.5	2191.9	2218.9	2203.5
30°	2083.9	2103.1	2126.3	2130.2	2137.9	2137.9	2137.9	2157.2	2184.2	2168.7
32.5°	2033.7	2056.8	2080.0	2091.6	2095.4	2099.3	2103.1	2122.4	2149.5	2134.0
35°	1975.8	2002.8	2033.7	2041.4	2053.0	2056.8	2064.6	2080.0	2110.9	2099.3
37.5°	1921.8	1956.5	1987.4	2002.8	2010.5	2018.2	2029.8	2041.4	2072.3	2060.7
40°	1867.7	1902.5	1937.2	1956.5	1964.2	1975.8	1983.5	2002.8	2029.8	2018.2
42.5°	1809.9	1848.5	1887.0	1906.3	1917.9	1925.6	1941.1	1956.5	1983.5	1975.8
45°	1752.0	1794.4	1833.0	1856.2	1863.9	1879.3	1894.8	1910.2	1937.2	1929.5
47.5°	1690.2	1736.5	1775.1	1802.1	1813.7	1829.2	1844.6	1860.0	1887.0	1879.3
50°	1624.6	1674.8	1717.2	1744.3	1755.8	1775.1	1794.4	1809.9	1833.0	1829.2
52.5°	1566.7	1613.1	1659.4	1690.2	1701.8	1721.1	1740.4	1755.8	1779.0	1775.1
55°	1497.3	1551.3	1597.6	1628.5	1643.9	1663.2	1686.4	1701.8	1725.0	1717.2
57.5°	1435.5	1485.7	1535.9	1566.7	1582.2	1601.5	1628.5	1643.9	1659.4	1659.4
60°	1366.1	1420.1	1470.3	1505.0	1516.6	1539.7	1562.9	1574.5	1593.8	1593.8
62.5°	1296.6	1350.6	1400.8	1431.7	1443.3	1466.4	1489.6	1497.3	1516.6	1512.7
65°	1227.2	1277.3	1323.6	1354.5	1366.1	1385.4	1408.5	1416.2	1431.7	1431.7
67.5°	1150.0	1200.1	1242.6	1269.6	1277.3	1300.5	1319.8	1323.6	1339.1	1339.1
70°	1068.9	1111.4	1150.0	1177.0	1184.7	1204.0	1223.3	1227.2	1242.6	1242.6
72.5°	980.2	1018.8	1053.5	1080.5	1092.1	1107.5	1123.0	1126.8	1138.4	1142.3
75°	887.6	922.3	957.0	984.0	991.8	1007.2	1022.6	1026.5	1038.1	1041.9
77.5°	787.2	825.8	860.6	887.6	895.3	910.7	926.2	930.0	937.7	941.6
80°	694.6	725.5	760.2	783.4	791.1	806.5	825.8	833.5	841.3	849.0
82.5°	605.9	636.7	667.6	690.8	698.5	713.9	729.3	737.1	744.8	748.6
85°	521.0	551.8	578.8	602.0	609.7	625.2	640.6	648.3	656.0	659.9
87.5°	436.1	466.9	493.9	521.0	528.7	544.1	559.6	571.1	571.1	578.8
90°	370.5	397.5	428.3	451.5	459.2	470.8	486.2	497.8	501.7	505.5
92.5°	343.4	374.3	401.3	424.5	436.1	447.6	463.1	470.8	474.7	478.5
95°	324.2	351.2	378.2	401.3	409.1	424.5	436.1	447.6	451.5	455.4
97.5°	301.0	328.0	355.0	378.2	385.9	397.5	412.9	420.6	424.5	428.3
100°	281.7	308.7	331.9	355.0	362.7	374.3	389.8	397.5	401.3	405.2
102.5°	258.6	285.6	308.7	331.9	339.6	351.2	362.7	374.3	378.2	378.2
105°	239.3	262.4	285.6	308.7	316.4	324.2	339.6	347.3	351.2	355.0
107.5°	216.1	243.1	262.4	285.6	293.3	301.0	312.6	324.2	328.0	328.0
110°	196.8	220.0	239.3	258.6	270.1	277.8	289.4	297.1	301.0	304.9





TEST NUMBER: P257644

CATALOG NUMBER: 8ST2L8040R

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	177.5	200.7	220.0	239.3	247.0	254.7	266.3	274.0	277.8	281.7
115°	158.2	181.4	196.8	216.1	223.8	231.5	243.1	250.8	254.7	254.7
117.5°	138.9	158.2	177.5	192.9	200.7	208.4	220.0	227.7	231.5	231.5
120°	123.5	138.9	158.2	173.7	177.5	185.2	196.8	204.5	208.4	208.4
122.5°	104.2	123.5	135.1	150.5	158.2	165.9	173.7	181.4	185.2	185.2
125°	84.9	104.2	115.8	131.2	138.9	142.8	150.5	158.2	162.1	162.1
127.5°	69.5	84.9	100.3	111.9	115.8	123.5	131.2	138.9	138.9	138.9
130°	54.0	69.5	81.0	92.6	96.5	104.2	111.9	115.8	119.6	119.6
132.5°	38.6	50.2	61.7	73.3	81.0	84.9	92.6	96.5	100.3	100.3
135°	23.2	34.7	46.3	57.9	61.7	65.6	73.3	77.2	77.2	81.0
137.5°	7.7	19.3	30.9	38.6	42.4	46.3	54.0	57.9	61.7	61.7
140°	0.0	7.7	15.4	23.2	27.0	30.9	34.7	38.6	42.4	42.4
142.5°	0.0	0.0	3.9	7.7	11.6	15.4	19.3	23.2	23.2	27.0
145°	0.0	0.0	0.0	0.0	0.0	3.9	3.9	7.7	7.7	11.6
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)