

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: P#

Luminaire Tested: **8SNLED-LD5-170HL-LW-UNV-L930-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33520)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8SNLED-LD5-170HL-LW-UNV-L930-CD1-U  
Description: 8FT LINEAR SNLED LED FIXTURE  
WIDE FROSTED LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

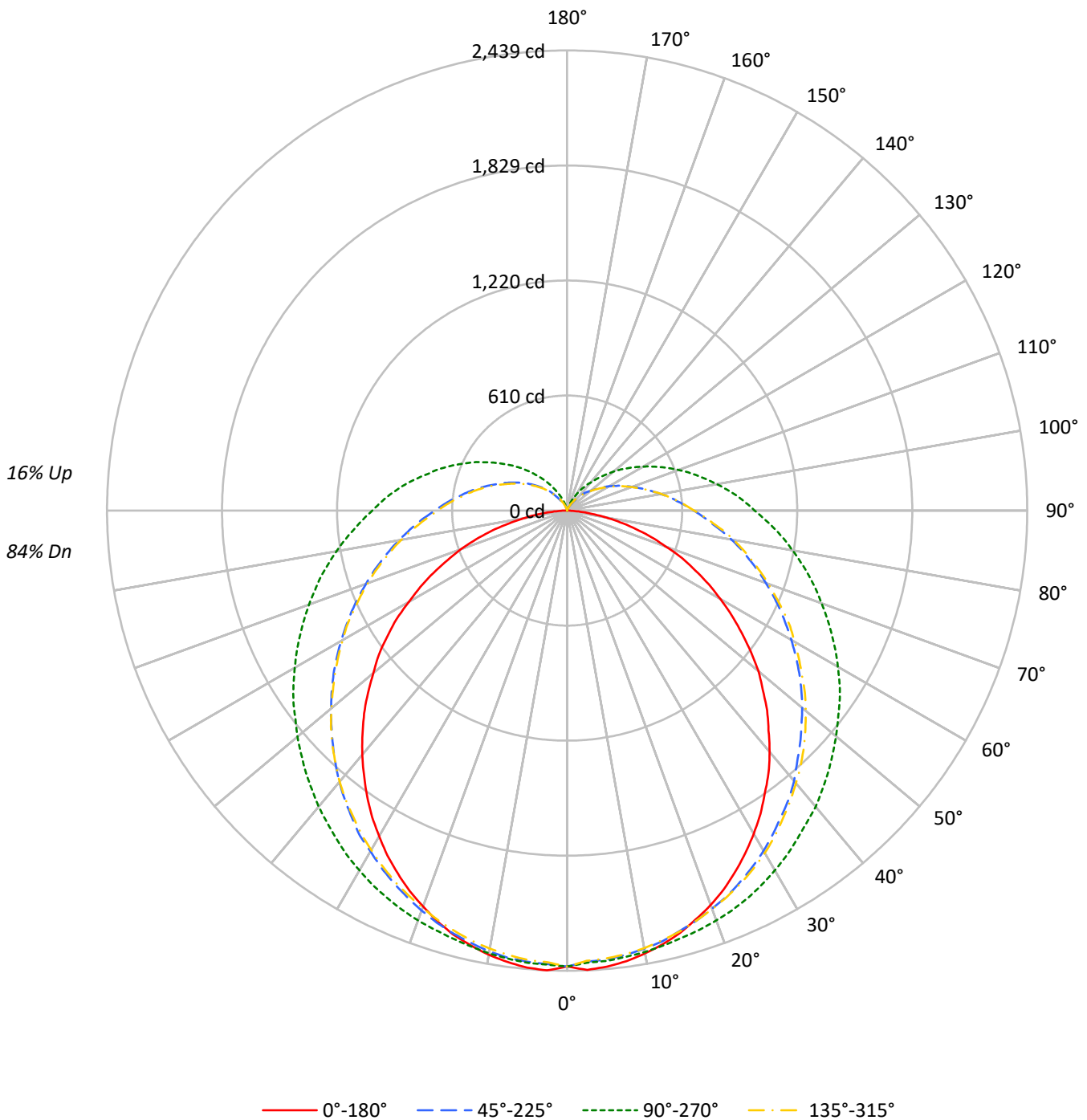
Lumens per Lamp: N/A  
Luminaire Lumens: 10498.0 lumens  
Efficiency: N/A  
Efficacy: 84.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 8' x H: 0.12')  
CIE Type: Semi-Direct

Input Watts (W): 124  
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	115	115	115	115	111	111	111	111	102	102	102	94	94	94	87	87	87	84				
1	102	96	91	86	98	92	87	83	85	81	77	78	75	72	72	70	67	64				
2	92	82	74	68	87	79	72	66	73	67	62	67	62	58	62	58	54	51				
3	83	71	62	55	79	69	60	54	63	56	51	58	52	48	54	49	45	42				
4	76	63	53	46	72	60	52	45	56	48	42	51	45	40	47	42	38	35				
5	69	56	46	39	66	54	45	38	50	42	36	46	39	34	42	37	33	30				
6	64	50	41	34	61	48	39	33	45	37	31	41	35	30	38	33	28	26				
7	59	45	36	30	56	43	35	29	40	33	28	38	31	26	35	29	25	23				
8	55	41	32	26	52	40	31	26	37	30	24	34	28	23	32	26	22	20				
9	51	37	29	23	49	36	28	23	34	27	22	32	25	21	30	24	20	18				
10	48	34	26	21	46	33	26	21	31	24	20	29	23	19	27	22	18	16				

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

	0°	90°	180°	270°
0°	9763	9763	9763	9763
5°	9828	9409	9849	9449
10°	9751	9141	9782	9171
15°	9651	8913	9694	8922
20°	9514	8745	9546	8745
25°	9341	8597	9397	8588
30°	9146	8444	9216	8444
35°	8917	8303	9016	8313
40°	8692	8220	8798	8220
45°	8432	8133	8561	8143
50°	8164	8081	8273	8103
55°	7781	8089	8026	8124
60°	7380	8113	7621	8163
65°	6932	8195	7239	8276
70°	6295	8346	6785	8464
75°	5564	8618	6091	8784
80°	4414	9023	5012	9231
85°	2808	9671	3509	9939



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	228.9	2.2
10°-20°	657.9	6.3
20°-30°	1008.6	9.6
30°-40°	1244.3	11.9
40°-50°	1350.0	12.9
50°-60°	1330.6	12.7
60°-70°	1203.0	11.5
70°-80°	1002.2	9.5
80°-90°	776.3	7.4
90°-100°	588.7	5.6
100°-110°	435.7	4.1
110°-120°	303.0	2.9
120°-130°	193.4	1.8
130°-140°	108.5	1.0
140°-150°	49.5	0.5
150°-160°	15.3	0.1
160°-170°	1.9	0.0
170°-180°	0.0	0.0
0°-30°	1895.4	18.1
0°-40°	3139.7	29.9
0°-60°	5820.3	55.4
0°-90°	8801.9	83.8
90°-120°	1327.4	12.6
90°-150°	1678.8	16.0
90°-180°	1696.0	16.2
0°-180°	10498.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	2416	2416	2416	2416	2416	
5°	2426	2396	2432	2406	2426	230
15°	2317	2345	2327	2348	2317	653
25°	2110	2266	2123	2263	2110	972
35°	1828	2126	1848	2128	1828	1144
45°	1499	1958	1522	1960	1499	1155
55°	1129	1764	1165	1772	1129	1011
65°	749	1547	782	1562	749	743
75°	377	1325	413	1351	377	399
85°	71	1104	89	1134	71	86
90°	2	994	5	1032	2	4
95°	2	902	2	946	2	2
105°	2	716	2	760	2	3
115°	2	546	2	594	2	2
125°	2	392	2	436	2	2
135°	2	255	2	301	2	2
145°	2	148	2	181	2	2
155°	2	61	2	84	2	1
165°	2	10	2	15	2	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°	25°	30°	35°	40°	45°	50°
0°	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3
2.5°	2436.7	2436.7	2434.2	2429.1	2431.6	2439.3	2434.2	2421.4	2413.8	2393.4	2398.5
5°	2426.5	2426.5	2424.0	2418.9	2421.4	2431.6	2426.5	2416.3	2406.1	2388.3	2395.9
7.5°	2408.7	2408.7	2406.1	2401.0	2406.1	2416.3	2411.2	2401.0	2393.4	2375.5	2383.2
10°	2383.2	2385.7	2383.2	2375.5	2385.7	2395.9	2393.4	2380.6	2373.0	2357.7	2365.4
12.5°	2352.6	2355.2	2352.6	2350.1	2355.2	2370.5	2365.4	2355.2	2350.1	2337.3	2345.0
15°	2316.9	2319.5	2314.4	2314.4	2319.5	2334.8	2334.8	2324.6	2319.5	2306.7	2322.0
17.5°	2271.0	2273.6	2271.0	2271.0	2276.1	2291.4	2294.0	2288.9	2283.8	2278.7	2294.0
20°	2225.2	2222.6	2222.6	2220.1	2230.3	2253.2	2250.7	2250.7	2245.6	2245.6	2263.4
22.5°	2171.6	2171.6	2169.1	2169.1	2181.8	2202.2	2202.2	2207.3	2202.2	2212.4	2227.7
25°	2110.5	2113.0	2110.5	2115.6	2125.8	2148.7	2151.2	2158.9	2161.4	2171.6	2189.5
27.5°	2046.7	2049.3	2046.7	2051.8	2069.7	2087.5	2100.3	2110.5	2113.0	2128.3	2151.2
30°	1977.9	1977.9	1980.5	1985.6	2006.0	2034.0	2044.2	2056.9	2056.9	2082.4	2105.4
32.5°	1906.6	1906.6	1906.6	1916.8	1939.7	1972.8	1985.6	2000.9	2006.0	2031.5	2056.9
35°	1827.5	1830.1	1830.1	1837.7	1868.3	1901.5	1919.3	1937.1	1947.3	1977.9	2003.4
37.5°	1753.6	1758.7	1751.1	1761.3	1804.6	1832.6	1853.0	1870.9	1888.7	1929.5	1949.9
40°	1669.5	1674.6	1672.1	1692.5	1728.1	1763.8	1786.8	1804.6	1830.1	1870.9	1893.8
42.5°	1580.3	1585.4	1590.5	1613.4	1651.7	1687.4	1715.4	1738.3	1768.9	1804.6	1842.8
45°	1498.7	1498.7	1506.4	1534.4	1575.2	1613.4	1646.6	1672.1	1707.7	1746.0	1784.2
47.5°	1407.0	1409.5	1419.7	1452.9	1496.2	1542.1	1572.7	1605.8	1644.0	1684.8	1728.1
50°	1322.9	1322.9	1338.2	1373.8	1414.6	1465.6	1498.7	1537.0	1577.8	1626.2	1669.5
52.5°	1226.0	1231.1	1254.0	1287.2	1340.7	1386.6	1424.8	1465.6	1514.0	1565.0	1613.4
55°	1129.2	1139.3	1157.2	1203.1	1259.1	1302.5	1348.4	1399.3	1445.2	1501.3	1557.4
57.5°	1034.8	1042.5	1070.5	1116.4	1175.0	1228.6	1277.0	1325.4	1381.5	1437.6	1496.2
60°	938.0	948.2	981.3	1027.2	1090.9	1147.0	1203.1	1254.0	1312.7	1371.3	1432.5
62.5°	846.2	853.9	892.1	945.6	1009.4	1070.5	1126.6	1187.8	1251.5	1307.6	1368.7
65°	749.4	762.1	805.4	853.9	927.8	989.0	1052.7	1119.0	1185.2	1246.4	1305.0
67.5°	660.2	667.8	713.7	769.8	843.7	912.5	978.8	1050.1	1119.0	1182.7	1241.3
70°	555.7	581.1	627.0	685.6	764.7	836.0	907.4	981.3	1055.2	1121.5	1177.6
72.5°	469.0	489.4	540.4	604.1	680.5	764.7	838.6	917.6	991.5	1060.3	1119.0
75°	377.2	397.6	456.2	527.6	606.6	695.8	772.3	853.9	930.3	999.2	1060.3
77.5°	288.0	313.5	377.2	451.2	537.8	629.6	708.6	790.2	869.2	943.1	1004.3
80°	206.5	234.5	303.3	387.4	471.5	563.3	650.0	731.5	810.5	884.5	948.2
82.5°	132.5	163.1	237.0	321.2	410.4	502.1	591.3	672.9	751.9	825.8	892.1
85°	71.4	104.5	181.0	265.1	354.3	446.1	535.3	621.9	698.4	767.2	838.6
87.5°	20.4	61.2	135.1	219.2	311.0	395.1	481.7	568.4	644.9	718.8	782.5
90°	2.5	35.7	102.0	181.0	270.2	351.7	438.4	520.0	596.4	670.4	734.1
92.5°	2.5	22.9	79.0	150.4	231.9	316.1	402.7	481.7	553.1	627.0	690.7
95°	2.5	17.8	63.7	127.4	203.9	282.9	364.5	441.0	514.9	583.7	647.4
97.5°	2.5	12.7	51.0	109.6	178.4	252.3	331.4	407.8	479.2	545.5	604.1
100°	2.5	10.2	40.8	94.3	155.5	226.8	298.2	372.1	441.0	504.7	565.8
102.5°	2.5	7.6	35.7	79.0	137.6	201.4	270.2	339.0	405.3	466.4	527.6
105°	2.5	7.6	30.6	68.8	122.3	181.0	244.7	311.0	372.1	430.8	486.8
107.5°	2.5	5.1	25.5	58.6	107.1	163.1	221.8	285.5	341.5	397.6	451.2
110°	2.5	5.1	20.4	53.5	94.3	145.3	201.4	260.0	313.5	367.0	418.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	2.5	5.1	17.8	45.9	81.6	130.0	181.0	234.5	285.5	339.0	384.9
115°	2.5	5.1	15.3	40.8	76.5	112.2	163.1	211.6	262.5	311.0	354.3
117.5°	2.5	5.1	12.7	33.1	66.3	102.0	142.7	191.2	237.0	282.9	323.7
120°	2.5	5.1	10.2	30.6	58.6	91.8	127.4	170.8	214.1	257.4	300.8
122.5°	2.5	2.5	10.2	25.5	51.0	81.6	117.2	150.4	191.2	231.9	270.2
125°	2.5	2.5	10.2	22.9	43.3	73.9	104.5	135.1	170.8	206.5	239.6
127.5°	2.5	2.5	7.6	17.8	38.2	63.7	91.8	124.9	150.4	183.5	216.7
130°	2.5	2.5	7.6	15.3	33.1	53.5	81.6	109.6	140.2	163.1	191.2
132.5°	2.5	2.5	7.6	12.7	25.5	43.3	68.8	94.3	122.3	147.8	170.8
135°	2.5	2.5	5.1	10.2	20.4	35.7	56.1	79.0	107.1	132.5	155.5
137.5°	2.5	2.5	5.1	10.2	15.3	30.6	43.3	63.7	89.2	112.2	135.1
140°	2.5	2.5	5.1	7.6	12.7	22.9	35.7	51.0	71.4	91.8	117.2
142.5°	2.5	2.5	2.5	7.6	10.2	17.8	28.0	40.8	56.1	73.9	94.3
145°	2.5	2.5	2.5	7.6	10.2	12.7	22.9	33.1	43.3	56.1	73.9
147.5°	2.5	2.5	2.5	5.1	7.6	10.2	17.8	25.5	33.1	43.3	53.5
150°	2.5	2.5	2.5	5.1	7.6	10.2	12.7	17.8	25.5	35.7	43.3
152.5°	2.5	2.5	2.5	5.1	5.1	7.6	10.2	12.7	17.8	25.5	30.6
155°	2.5	2.5	2.5	2.5	5.1	7.6	10.2	10.2	12.7	17.8	22.9
157.5°	2.5	2.5	2.5	2.5	5.1	5.1	7.6	7.6	10.2	10.2	15.3
160°	2.5	2.5	2.5	2.5	2.5	5.1	5.1	7.6	7.6	7.6	7.6
162.5°	2.5	2.5	2.5	2.5	2.5	2.5	5.1	5.1	5.1	7.6	7.6
165°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	5.1	5.1	5.1
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3
2.5°	2398.5	2401.0	2408.7	2408.7	2403.6	2403.6	2401.0	2398.5	2401.0	2406.1	2406.1
5°	2393.4	2395.9	2403.6	2406.1	2401.0	2398.5	2398.5	2395.9	2398.5	2403.6	2403.6
7.5°	2383.2	2385.7	2393.4	2395.9	2390.8	2390.8	2388.3	2385.7	2390.8	2393.4	2393.4
10°	2367.9	2370.5	2380.6	2383.2	2380.6	2378.1	2378.1	2375.5	2378.1	2383.2	2383.2
12.5°	2347.5	2352.6	2365.4	2365.4	2365.4	2362.8	2362.8	2360.3	2362.8	2367.9	2365.4
15°	2324.6	2334.8	2345.0	2350.1	2350.1	2350.1	2347.5	2345.0	2350.1	2352.6	2350.1
17.5°	2299.1	2311.8	2327.1	2332.2	2332.2	2334.8	2332.2	2329.7	2334.8	2334.8	2332.2
20°	2273.6	2286.3	2301.6	2306.7	2311.8	2314.4	2314.4	2311.8	2314.4	2316.9	2314.4
22.5°	2240.5	2255.8	2273.6	2281.2	2286.3	2291.4	2291.4	2291.4	2294.0	2296.5	2291.4
25°	2204.8	2222.6	2243.0	2250.7	2260.9	2263.4	2265.9	2265.9	2268.5	2271.0	2263.4
27.5°	2166.5	2186.9	2207.3	2220.1	2227.7	2232.8	2232.8	2235.4	2237.9	2240.5	2232.8
30°	2120.7	2151.2	2169.1	2179.3	2189.5	2197.1	2199.7	2202.2	2204.8	2207.3	2199.7
32.5°	2079.9	2105.4	2128.3	2141.1	2153.8	2164.0	2166.5	2166.5	2171.6	2171.6	2164.0
35°	2031.5	2062.0	2085.0	2097.7	2113.0	2120.7	2125.8	2125.8	2130.9	2130.9	2123.2
37.5°	1983.0	2013.6	2039.1	2054.4	2072.2	2082.4	2085.0	2085.0	2090.1	2090.1	2079.9
40°	1932.0	1965.2	1993.2	2011.1	2026.4	2039.1	2041.6	2049.3	2049.3	2046.7	2036.5
42.5°	1881.1	1911.7	1942.2	1962.6	1983.0	1995.8	2000.9	2003.4	2003.4	2000.9	1993.2
45°	1825.0	1860.7	1888.7	1914.2	1934.6	1947.3	1955.0	1957.5	1957.5	1952.4	1944.8
47.5°	1771.5	1807.2	1835.2	1863.2	1883.6	1898.9	1906.6	1909.1	1906.6	1904.0	1896.4
50°	1715.4	1756.2	1784.2	1812.2	1832.6	1845.4	1858.1	1860.7	1858.1	1855.6	1840.3
52.5°	1656.8	1700.1	1730.7	1758.7	1781.7	1797.0	1807.2	1809.7	1809.7	1804.6	1794.4
55°	1598.1	1636.4	1674.6	1705.2	1730.7	1746.0	1758.7	1763.8	1758.7	1753.6	1740.9
57.5°	1544.6	1580.3	1618.5	1651.7	1677.2	1697.5	1707.7	1712.8	1707.7	1700.1	1687.4
60°	1480.9	1519.1	1562.5	1593.0	1621.1	1641.5	1646.6	1656.8	1651.7	1644.0	1631.3
62.5°	1419.7	1465.6	1503.8	1542.1	1565.0	1587.9	1598.1	1603.2	1598.1	1590.5	1577.8
65°	1356.0	1407.0	1445.2	1483.4	1508.9	1531.9	1544.6	1547.2	1542.1	1534.4	1521.7
67.5°	1297.4	1345.8	1386.6	1427.4	1450.3	1473.2	1486.0	1491.1	1486.0	1475.8	1463.1
70°	1238.8	1287.2	1335.6	1366.2	1394.2	1419.7	1427.4	1435.0	1429.9	1419.7	1404.4
72.5°	1180.1	1231.1	1279.5	1310.1	1340.7	1363.6	1373.8	1381.5	1376.4	1366.2	1348.4
75°	1119.0	1172.5	1220.9	1254.0	1284.6	1307.6	1317.8	1325.4	1320.3	1310.1	1289.7
77.5°	1062.9	1116.4	1162.3	1198.0	1228.6	1248.9	1266.8	1269.3	1264.2	1254.0	1233.7
80°	1004.3	1057.8	1106.2	1141.9	1172.5	1192.9	1205.6	1213.3	1208.2	1198.0	1177.6
82.5°	953.3	1001.7	1050.1	1085.8	1116.4	1141.9	1152.1	1159.7	1157.2	1141.9	1126.6
85°	897.2	953.3	991.5	1029.7	1060.3	1085.8	1093.5	1103.7	1101.1	1088.4	1068.0
87.5°	841.1	897.2	943.1	981.3	1009.4	1029.7	1042.5	1047.6	1045.0	1032.3	1009.4
90°	795.2	846.2	892.1	932.9	955.8	978.8	991.5	994.1	994.1	978.8	960.9
92.5°	751.9	800.3	846.2	884.5	912.5	932.9	943.1	948.2	945.6	932.9	912.5
95°	703.5	757.0	800.3	838.6	866.6	887.0	897.2	902.3	899.8	887.0	866.6
97.5°	662.7	711.1	754.5	790.2	818.2	838.6	848.8	853.9	853.9	841.1	820.7
100°	621.9	670.4	711.1	746.8	772.3	792.7	802.9	805.4	802.9	792.7	772.3
102.5°	581.1	627.0	667.8	700.9	729.0	746.8	757.0	759.6	759.6	746.8	726.4
105°	540.4	586.2	624.5	660.2	683.1	700.9	708.6	716.2	713.7	703.5	683.1
107.5°	502.1	548.0	583.7	616.8	639.8	657.6	665.3	672.9	670.4	660.2	639.8
110°	466.4	509.8	542.9	576.0	596.4	614.3	627.0	629.6	624.5	614.3	596.4





TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-170HL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	433.3	471.5	504.7	535.3	558.2	570.9	581.1	586.2	581.1	570.9	558.2
115°	397.6	435.9	469.0	497.0	517.4	532.7	540.4	545.5	540.4	530.2	517.4
117.5°	364.5	400.2	433.3	461.3	479.2	491.9	499.6	504.7	499.6	491.9	479.2
120°	336.5	367.0	397.6	423.1	443.5	453.7	461.3	466.4	463.9	453.7	441.0
122.5°	303.3	336.5	364.5	390.0	407.8	418.0	423.1	428.2	425.7	418.0	405.3
125°	275.3	303.3	331.4	354.3	372.1	382.3	387.4	392.5	390.0	382.3	367.0
127.5°	244.7	275.3	298.2	321.2	333.9	349.2	351.7	356.8	354.3	346.6	333.9
130°	221.8	244.7	267.6	288.0	303.3	313.5	318.6	321.2	316.1	311.0	298.2
132.5°	193.7	219.2	239.6	257.4	267.6	277.8	282.9	285.5	285.5	277.8	267.6
135°	173.3	191.2	209.0	226.8	237.0	247.2	252.3	254.9	252.3	247.2	237.0
137.5°	155.5	170.8	183.5	198.8	211.6	216.7	221.8	221.8	219.2	216.7	209.0
140°	135.1	152.9	165.7	175.9	186.1	188.6	193.7	193.7	191.2	188.6	183.5
142.5°	114.7	130.0	142.7	155.5	163.1	168.2	170.8	173.3	170.8	168.2	160.6
145°	91.8	109.6	122.3	130.0	140.2	142.7	145.3	147.8	145.3	142.7	135.1
147.5°	71.4	86.7	99.4	109.6	117.2	119.8	122.3	124.9	122.3	117.2	114.7
150°	51.0	63.7	79.0	89.2	94.3	99.4	99.4	99.4	102.0	96.9	91.8
152.5°	40.8	45.9	56.1	66.3	73.9	76.5	79.0	79.0	76.5	76.5	71.4
155°	28.0	33.1	40.8	48.4	56.1	58.6	61.2	61.2	58.6	58.6	56.1
157.5°	17.8	22.9	28.0	33.1	40.8	43.3	45.9	45.9	45.9	43.3	40.8
160°	10.2	12.7	15.3	20.4	25.5	28.0	30.6	30.6	30.6	30.6	28.0
162.5°	7.6	7.6	7.6	10.2	12.7	15.3	17.8	17.8	17.8	17.8	15.3
165°	5.1	5.1	5.1	5.1	5.1	7.6	10.2	10.2	10.2	10.2	10.2
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



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-170HL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3
2.5°	2403.6	2403.6	2406.1	2401.0	2385.7	2388.3	2388.3	2398.5	2403.6	2406.1	2418.9
5°	2398.5	2398.5	2403.6	2395.9	2383.2	2383.2	2383.2	2393.4	2395.9	2401.0	2411.2
7.5°	2390.8	2390.8	2393.4	2385.7	2370.5	2370.5	2367.9	2378.1	2383.2	2385.7	2395.9
10°	2378.1	2378.1	2380.6	2373.0	2355.2	2355.2	2352.6	2360.3	2362.8	2367.9	2375.5
12.5°	2360.3	2360.3	2360.3	2352.6	2334.8	2332.2	2329.7	2337.3	2337.3	2339.9	2347.5
15°	2345.0	2339.9	2339.9	2332.2	2314.4	2309.3	2304.2	2306.7	2311.8	2309.3	2314.4
17.5°	2327.1	2322.0	2316.9	2309.3	2286.3	2278.7	2273.6	2276.1	2273.6	2271.0	2276.1
20°	2306.7	2299.1	2296.5	2283.8	2260.9	2248.1	2237.9	2232.8	2235.4	2227.7	2230.3
22.5°	2283.8	2273.6	2268.5	2253.2	2230.3	2215.0	2202.2	2192.0	2189.5	2179.3	2181.8
25°	2255.8	2243.0	2235.4	2222.6	2197.1	2179.3	2164.0	2148.7	2141.1	2128.3	2125.8
27.5°	2222.6	2209.9	2199.7	2186.9	2161.4	2138.5	2120.7	2100.3	2090.1	2074.8	2067.1
30°	2189.5	2174.2	2158.9	2148.7	2120.7	2095.2	2067.1	2049.3	2034.0	2016.2	2003.4
32.5°	2148.7	2133.4	2118.1	2102.8	2077.3	2046.7	2023.8	1995.8	1977.9	1957.5	1942.2
35°	2107.9	2087.5	2072.2	2051.8	2028.9	1993.2	1965.2	1937.1	1914.2	1891.3	1873.4
37.5°	2062.0	2046.7	2023.8	2006.0	1977.9	1942.2	1911.7	1876.0	1855.6	1825.0	1802.1
40°	2018.7	2000.9	1977.9	1955.0	1926.9	1886.2	1853.0	1812.2	1789.3	1753.6	1730.7
42.5°	1975.4	1949.9	1926.9	1901.5	1870.9	1832.6	1791.9	1751.1	1720.5	1687.4	1654.2
45°	1926.9	1898.9	1870.9	1842.8	1812.2	1774.0	1730.7	1687.4	1649.1	1618.5	1577.8
47.5°	1876.0	1847.9	1814.8	1784.2	1751.1	1712.8	1667.0	1621.1	1580.3	1544.6	1501.3
50°	1825.0	1797.0	1761.3	1728.1	1689.9	1651.7	1603.2	1549.7	1506.4	1460.5	1422.3
52.5°	1771.5	1743.4	1710.3	1667.0	1626.2	1587.9	1537.0	1480.9	1432.5	1394.2	1345.8
55°	1717.9	1689.9	1651.7	1608.3	1567.6	1519.1	1470.7	1414.6	1361.1	1315.2	1266.8
57.5°	1661.9	1636.4	1593.0	1557.4	1506.4	1455.4	1404.4	1350.9	1292.3	1238.8	1182.7
60°	1605.8	1577.8	1537.0	1493.6	1442.7	1391.7	1338.2	1279.5	1218.4	1159.7	1108.8
62.5°	1554.8	1519.1	1480.9	1435.0	1381.5	1333.1	1271.9	1208.2	1147.0	1085.8	1024.6
65°	1496.2	1458.0	1422.3	1376.4	1320.3	1264.2	1203.1	1139.3	1073.1	1006.8	945.6
67.5°	1437.6	1399.3	1361.1	1315.2	1256.6	1198.0	1134.2	1070.5	996.6	932.9	861.5
70°	1378.9	1348.4	1299.9	1251.5	1198.0	1134.2	1070.5	1001.7	925.2	856.4	782.5
72.5°	1320.3	1289.7	1241.3	1190.3	1139.3	1073.1	1004.3	935.4	864.1	785.1	706.0
75°	1264.2	1226.0	1182.7	1134.2	1080.7	1011.9	943.1	871.7	787.6	713.7	632.1
77.5°	1210.7	1175.0	1131.7	1078.2	1019.5	953.3	881.9	808.0	723.9	644.9	555.7
80°	1152.1	1116.4	1073.1	1019.5	960.9	897.2	820.7	744.3	662.7	576.0	484.3
82.5°	1096.0	1062.9	1014.5	966.0	902.3	838.6	762.1	685.6	599.0	514.9	425.7
85°	1037.4	1004.3	958.4	907.4	846.2	777.4	706.0	629.6	542.9	456.2	367.0
87.5°	986.4	948.2	902.3	851.3	790.2	723.9	655.1	573.5	489.4	405.3	313.5
90°	932.9	897.2	851.3	800.3	739.2	672.9	601.5	525.1	443.5	356.8	270.2
92.5°	887.0	848.8	805.4	754.5	693.3	629.6	558.2	481.7	402.7	318.6	234.5
95°	841.1	802.9	762.1	711.1	650.0	586.2	514.9	441.0	364.5	282.9	203.9
97.5°	790.2	757.0	716.2	667.8	606.6	545.5	476.6	405.3	331.4	252.3	178.4
100°	749.4	711.1	672.9	621.9	565.8	507.2	438.4	369.6	298.2	224.3	155.5
102.5°	703.5	667.8	629.6	581.1	525.1	466.4	402.7	336.5	270.2	201.4	135.1
105°	660.2	627.0	586.2	540.4	486.8	430.8	369.6	308.4	244.7	178.4	119.8
107.5°	616.8	583.7	545.5	502.1	451.2	395.1	339.0	277.8	219.2	160.6	107.1
110°	573.5	542.9	507.2	463.9	415.5	364.5	311.0	254.9	196.3	142.7	94.3



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-170HL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	535.3	504.7	469.0	428.2	382.3	333.9	282.9	229.4	175.9	127.4	81.6
115°	497.0	469.0	433.3	397.6	351.7	305.9	257.4	206.5	158.0	114.7	71.4
117.5°	458.8	430.8	397.6	361.9	321.2	277.8	231.9	183.5	142.7	102.0	63.7
120°	420.6	395.1	364.5	331.4	295.7	252.3	206.5	165.7	127.4	89.2	56.1
122.5°	384.9	361.9	333.9	303.3	265.1	224.3	186.1	150.4	114.7	79.0	45.9
125°	351.7	328.8	303.3	272.7	237.0	201.4	168.2	135.1	99.4	68.8	38.2
127.5°	318.6	295.7	270.2	242.1	214.1	181.0	150.4	119.8	89.2	61.2	33.1
130°	285.5	265.1	242.1	219.2	191.2	160.6	135.1	104.5	76.5	48.4	28.0
132.5°	252.3	237.0	216.7	193.7	168.2	145.3	117.2	91.8	66.3	43.3	25.5
135°	224.3	209.0	191.2	170.8	150.4	127.4	102.0	79.0	56.1	35.7	20.4
137.5°	198.8	186.1	168.2	150.4	132.5	109.6	89.2	66.3	45.9	30.6	15.3
140°	175.9	163.1	147.8	130.0	114.7	94.3	73.9	53.5	40.8	25.5	12.7
142.5°	152.9	140.2	127.4	112.2	96.9	79.0	61.2	45.9	33.1	20.4	12.7
145°	130.0	119.8	107.1	94.3	79.0	63.7	51.0	38.2	25.5	15.3	10.2
147.5°	107.1	99.4	86.7	76.5	63.7	51.0	40.8	30.6	20.4	12.7	7.6
150°	86.7	79.0	68.8	58.6	51.0	40.8	33.1	22.9	15.3	12.7	7.6
152.5°	66.3	61.2	53.5	48.4	40.8	30.6	22.9	17.8	12.7	10.2	5.1
155°	53.5	48.4	43.3	35.7	30.6	22.9	17.8	12.7	10.2	7.6	5.1
157.5°	38.2	35.7	30.6	25.5	20.4	15.3	12.7	12.7	7.6	5.1	2.5
160°	25.5	22.9	20.4	15.3	12.7	12.7	10.2	7.6	5.1	5.1	2.5
162.5°	15.3	12.7	12.7	12.7	10.2	10.2	7.6	5.1	5.1	2.5	2.5
165°	10.2	10.2	10.2	7.6	7.6	7.6	5.1	2.5	2.5	2.5	2.5
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



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-170HL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3
2.5°	2418.9	2411.2	2421.4	2439.3	2441.8	2439.3	2434.2	2441.8	2452.0	2449.5	2431.6
5°	2413.8	2403.6	2413.8	2431.6	2431.6	2429.1	2426.5	2434.2	2444.4	2441.8	2426.5
7.5°	2398.5	2388.3	2398.5	2413.8	2416.3	2411.2	2411.2	2418.9	2429.1	2426.5	2413.8
10°	2378.1	2367.9	2373.0	2390.8	2395.9	2390.8	2390.8	2398.5	2411.2	2408.7	2393.4
12.5°	2347.5	2339.9	2345.0	2360.3	2365.4	2362.8	2360.3	2370.5	2383.2	2383.2	2367.9
15°	2314.4	2304.2	2309.3	2327.1	2329.7	2324.6	2327.1	2334.8	2350.1	2350.1	2337.3
17.5°	2276.1	2263.4	2271.0	2283.8	2286.3	2286.3	2286.3	2296.5	2314.4	2311.8	2301.6
20°	2232.8	2215.0	2220.1	2232.8	2237.9	2237.9	2237.9	2255.8	2268.5	2268.5	2258.3
22.5°	2181.8	2169.1	2169.1	2181.8	2189.5	2186.9	2186.9	2202.2	2220.1	2217.5	2217.5
25°	2123.2	2113.0	2107.9	2123.2	2125.8	2128.3	2133.4	2148.7	2169.1	2169.1	2171.6
27.5°	2062.0	2051.8	2049.3	2062.0	2064.6	2067.1	2072.2	2090.1	2110.5	2113.0	2118.1
30°	2003.4	1988.1	1983.0	1993.2	1998.3	2000.9	2000.9	2028.9	2046.7	2054.4	2064.6
32.5°	1934.6	1919.3	1906.6	1924.4	1926.9	1932.0	1934.6	1962.6	1983.0	1995.8	2011.1
35°	1865.8	1840.3	1835.2	1847.9	1853.0	1855.6	1860.7	1891.3	1919.3	1929.5	1949.9
37.5°	1789.3	1771.5	1756.2	1768.9	1774.0	1776.6	1791.9	1819.9	1847.9	1863.2	1883.6
40°	1717.9	1695.0	1682.3	1689.9	1695.0	1697.5	1715.4	1746.0	1779.1	1797.0	1822.4
42.5°	1638.9	1608.3	1598.1	1605.8	1608.3	1616.0	1631.3	1672.1	1705.2	1730.7	1751.1
45°	1559.9	1537.0	1514.0	1521.7	1524.2	1529.3	1552.3	1595.6	1631.3	1661.9	1684.8
47.5°	1478.3	1450.3	1427.4	1432.5	1442.7	1445.2	1470.7	1521.7	1554.8	1587.9	1618.5
50°	1396.8	1358.5	1340.7	1340.7	1345.8	1358.5	1391.7	1442.7	1478.3	1516.6	1549.7
52.5°	1312.7	1277.0	1256.6	1259.1	1264.2	1279.5	1310.1	1361.1	1401.9	1442.7	1483.4
55°	1228.6	1190.3	1169.9	1164.8	1169.9	1190.3	1226.0	1279.5	1320.3	1368.7	1412.1
57.5°	1144.4	1098.6	1080.7	1073.1	1078.2	1103.7	1139.3	1195.4	1246.4	1292.3	1343.3
60°	1052.7	1017.0	986.4	968.6	981.3	1014.5	1052.7	1111.3	1164.8	1215.8	1271.9
62.5°	973.7	927.8	894.7	876.8	889.6	917.6	971.1	1027.2	1085.8	1144.4	1200.5
65°	884.5	838.6	800.3	782.5	795.2	828.4	881.9	943.1	1006.8	1065.4	1131.7
67.5°	797.8	749.4	703.5	685.6	700.9	736.6	795.2	864.1	932.9	994.1	1065.4
70°	713.7	660.2	611.7	599.0	609.2	657.6	713.7	782.5	853.9	925.2	999.2
72.5°	637.2	570.9	520.0	504.7	517.4	570.9	634.7	706.0	782.5	859.0	938.0
75°	548.0	486.8	430.8	412.9	428.2	476.6	555.7	632.1	713.7	795.2	869.2
77.5°	476.6	405.3	346.6	318.6	344.1	405.3	481.7	563.3	647.4	731.5	815.6
80°	402.7	328.8	265.1	234.5	262.5	328.8	405.3	494.5	588.8	672.9	749.4
82.5°	336.5	257.4	191.2	158.0	188.6	262.5	346.6	435.9	527.6	611.7	700.9
85°	275.3	193.7	124.9	89.2	132.5	198.8	288.0	379.8	474.1	560.8	647.4
87.5°	224.3	145.3	76.5	38.2	81.6	155.5	239.6	331.4	425.7	512.3	593.9
90°	183.5	104.5	40.8	5.1	48.4	117.2	198.8	288.0	377.2	466.4	548.0
92.5°	150.4	79.0	22.9	2.5	30.6	94.3	170.8	254.9	341.5	428.2	507.2
95°	124.9	61.2	15.3	2.5	22.9	73.9	145.3	226.8	308.4	392.5	471.5
97.5°	107.1	51.0	12.7	2.5	17.8	63.7	124.9	201.4	280.4	359.4	435.9
100°	91.8	40.8	10.2	2.5	15.3	53.5	109.6	178.4	252.3	328.8	402.7
102.5°	79.0	33.1	7.6	2.5	12.7	45.9	96.9	160.6	226.8	300.8	372.1
105°	68.8	28.0	7.6	2.5	10.2	40.8	86.7	142.7	209.0	275.3	344.1
107.5°	58.6	22.9	5.1	2.5	7.6	33.1	76.5	130.0	188.6	252.3	316.1
110°	51.0	20.4	5.1	2.5	7.6	30.6	66.3	117.2	170.8	229.4	290.6



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-170HL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	43.3	15.3	5.1	2.5	5.1	25.5	58.6	104.5	155.5	209.0	267.6
115°	38.2	12.7	2.5	2.5	5.1	22.9	53.5	94.3	140.2	191.2	244.7
117.5°	30.6	10.2	2.5	2.5	2.5	17.8	45.9	84.1	127.4	175.9	224.3
120°	25.5	10.2	2.5	2.5	2.5	15.3	40.8	73.9	114.7	158.0	203.9
122.5°	22.9	7.6	2.5	2.5	2.5	12.7	35.7	66.3	102.0	142.7	186.1
125°	20.4	7.6	2.5	2.5	2.5	10.2	30.6	58.6	91.8	127.4	168.2
127.5°	15.3	7.6	2.5	2.5	2.5	7.6	28.0	51.0	81.6	114.7	150.4
130°	12.7	5.1	2.5	2.5	2.5	7.6	22.9	45.9	71.4	102.0	135.1
132.5°	10.2	5.1	2.5	2.5	2.5	5.1	17.8	35.7	61.2	89.2	119.8
135°	10.2	5.1	2.5	2.5	2.5	5.1	12.7	30.6	51.0	76.5	102.0
137.5°	10.2	2.5	2.5	2.5	2.5	5.1	10.2	22.9	40.8	61.2	84.1
140°	7.6	2.5	2.5	2.5	2.5	2.5	7.6	17.8	33.1	51.0	71.4
142.5°	7.6	2.5	2.5	2.5	2.5	2.5	7.6	12.7	25.5	40.8	56.1
145°	5.1	2.5	2.5	2.5	2.5	2.5	5.1	10.2	20.4	30.6	45.9
147.5°	5.1	2.5	2.5	2.5	2.5	2.5	5.1	7.6	15.3	25.5	35.7
150°	5.1	2.5	2.5	2.5	2.5	2.5	5.1	7.6	10.2	17.8	28.0
152.5°	2.5	2.5	2.5	2.5	2.5	2.5	5.1	5.1	7.6	12.7	17.8
155°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	5.1	7.6	10.2	12.7
157.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	5.1	5.1	7.6	10.2
160°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	5.1	5.1	7.6
162.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	5.1	5.1
165°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
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



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-170HL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3
2.5°	2424.0	2406.1	2411.2	2408.7	2413.8	2421.4	2421.4	2418.9	2418.9	2413.8	2408.7
5°	2418.9	2401.0	2408.7	2406.1	2411.2	2418.9	2418.9	2416.3	2416.3	2408.7	2406.1
7.5°	2403.6	2390.8	2395.9	2395.9	2401.0	2408.7	2408.7	2406.1	2406.1	2398.5	2395.9
10°	2388.3	2373.0	2380.6	2380.6	2385.7	2395.9	2395.9	2393.4	2393.4	2385.7	2383.2
12.5°	2362.8	2347.5	2360.3	2362.8	2367.9	2378.1	2375.5	2375.5	2375.5	2367.9	2365.4
15°	2332.2	2322.0	2334.8	2337.3	2345.0	2357.7	2357.7	2357.7	2357.7	2350.1	2347.5
17.5°	2299.1	2291.4	2304.2	2309.3	2319.5	2332.2	2332.2	2334.8	2337.3	2332.2	2329.7
20°	2260.9	2255.8	2268.5	2278.7	2294.0	2306.7	2311.8	2314.4	2319.5	2314.4	2311.8
22.5°	2217.5	2217.5	2235.4	2245.6	2263.4	2276.1	2283.8	2291.4	2296.5	2291.4	2288.9
25°	2169.1	2176.7	2194.6	2212.4	2232.8	2245.6	2253.2	2263.4	2268.5	2265.9	2263.4
27.5°	2123.2	2133.4	2156.3	2174.2	2192.0	2212.4	2220.1	2232.8	2237.9	2237.9	2235.4
30°	2069.7	2085.0	2110.5	2130.9	2153.8	2174.2	2184.4	2197.1	2204.8	2199.7	2202.2
32.5°	2018.7	2044.2	2064.6	2087.5	2113.0	2133.4	2146.2	2161.4	2169.1	2166.5	2169.1
35°	1962.6	1988.1	2016.2	2039.1	2069.7	2090.1	2107.9	2120.7	2130.9	2128.3	2128.3
37.5°	1901.5	1934.6	1962.6	1993.2	2021.3	2044.2	2062.0	2077.3	2087.5	2087.5	2087.5
40°	1842.8	1878.5	1906.6	1942.2	1977.9	1998.3	2018.7	2034.0	2044.2	2046.7	2049.3
42.5°	1779.1	1817.3	1850.5	1888.7	1924.4	1949.9	1972.8	1990.7	2000.9	2006.0	2003.4
45°	1720.5	1756.2	1794.4	1837.7	1870.9	1896.4	1924.4	1944.8	1955.0	1957.5	1960.1
47.5°	1654.2	1695.0	1738.3	1781.7	1814.8	1847.9	1873.4	1893.8	1904.0	1911.7	1911.7
50°	1590.5	1633.8	1682.3	1728.1	1763.8	1797.0	1822.4	1845.4	1858.1	1863.2	1865.8
52.5°	1531.9	1572.7	1623.6	1669.5	1705.2	1738.3	1771.5	1797.0	1809.7	1814.8	1814.8
55°	1460.5	1511.5	1567.6	1610.9	1649.1	1687.4	1720.5	1746.0	1758.7	1766.4	1771.5
57.5°	1394.2	1447.8	1506.4	1552.3	1598.1	1633.8	1664.4	1697.5	1707.7	1717.9	1720.5
60°	1330.5	1384.0	1440.1	1491.1	1537.0	1575.2	1610.9	1638.9	1656.8	1661.9	1667.0
62.5°	1264.2	1320.3	1378.9	1429.9	1478.3	1524.2	1557.4	1582.9	1603.2	1610.9	1616.0
65°	1200.5	1259.1	1317.8	1371.3	1422.3	1468.2	1501.3	1526.8	1547.2	1559.9	1562.5
67.5°	1131.7	1195.4	1256.6	1312.7	1363.6	1412.1	1445.2	1470.7	1491.1	1506.4	1508.9
70°	1068.0	1134.2	1195.4	1256.6	1307.6	1356.0	1391.7	1417.2	1440.1	1450.3	1455.4
72.5°	1006.8	1075.6	1139.3	1200.5	1251.5	1299.9	1338.2	1363.6	1386.6	1399.3	1401.9
75°	948.2	1017.0	1085.8	1144.4	1198.0	1246.4	1284.6	1312.7	1333.1	1345.8	1350.9
77.5°	889.6	960.9	1029.7	1088.4	1144.4	1192.9	1226.0	1259.1	1279.5	1294.8	1294.8
80°	830.9	904.8	976.2	1034.8	1090.9	1134.2	1172.5	1205.6	1226.0	1241.3	1241.3
82.5°	780.0	851.3	920.1	978.8	1034.8	1083.3	1121.5	1152.1	1175.0	1185.2	1187.8
85°	721.3	800.3	864.1	927.8	981.3	1027.2	1065.4	1098.6	1119.0	1129.2	1134.2
87.5°	672.9	749.4	818.2	874.3	927.8	973.7	1017.0	1045.0	1065.4	1078.2	1083.3
90°	627.0	700.9	769.8	825.8	881.9	925.2	966.0	994.1	1017.0	1027.2	1032.3
92.5°	586.2	660.2	726.4	782.5	836.0	884.5	922.7	950.7	971.1	981.3	989.0
95°	548.0	619.4	683.1	744.3	795.2	838.6	879.4	907.4	930.3	938.0	945.6
97.5°	509.8	578.6	642.3	700.9	754.5	795.2	833.5	861.5	879.4	892.1	899.8
100°	476.6	542.9	604.1	660.2	711.1	749.4	790.2	815.6	833.5	843.7	853.9
102.5°	441.0	507.2	565.8	619.4	672.9	708.6	746.8	772.3	787.6	805.4	805.4
105°	410.4	471.5	530.2	581.1	627.0	670.4	703.5	729.0	746.8	759.6	759.6
107.5°	377.2	438.4	494.5	548.0	591.3	632.1	662.7	685.6	706.0	713.7	721.3
110°	351.7	405.3	461.3	512.3	553.1	591.3	621.9	647.4	665.3	672.9	678.0



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-170HL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	321.2	377.2	428.2	476.6	517.4	553.1	583.7	604.1	621.9	632.1	634.7
115°	295.7	349.2	395.1	441.0	484.3	514.9	542.9	563.3	581.1	588.8	593.9
117.5°	272.7	321.2	367.0	405.3	446.1	479.2	507.2	525.1	540.4	550.6	555.7
120°	249.8	295.7	336.5	374.7	412.9	443.5	469.0	486.8	504.7	512.3	512.3
122.5°	226.8	270.2	308.4	344.1	379.8	407.8	435.9	451.2	466.4	474.1	474.1
125°	206.5	247.2	282.9	316.1	349.2	374.7	397.6	415.5	430.8	435.9	435.9
127.5°	186.1	224.3	257.4	288.0	316.1	341.5	364.5	382.3	395.1	400.2	400.2
130°	168.2	201.4	231.9	262.5	290.6	311.0	333.9	349.2	356.8	364.5	367.0
132.5°	150.4	181.0	209.0	234.5	262.5	282.9	300.8	316.1	323.7	331.4	333.9
135°	132.5	160.6	186.1	211.6	234.5	254.9	270.2	282.9	293.1	298.2	300.8
137.5°	112.2	142.7	165.7	186.1	211.6	226.8	244.7	252.3	262.5	267.6	267.6
140°	94.3	117.2	142.7	163.1	183.5	198.8	214.1	226.8	234.5	237.0	237.0
142.5°	76.5	96.9	117.2	142.7	160.6	173.3	188.6	198.8	203.9	206.5	209.0
145°	61.2	76.5	94.3	117.2	137.6	152.9	160.6	170.8	175.9	178.4	181.0
147.5°	45.9	61.2	76.5	91.8	112.2	127.4	135.1	145.3	150.4	152.9	152.9
150°	35.7	45.9	56.1	71.4	86.7	104.5	114.7	122.3	124.9	127.4	127.4
152.5°	25.5	35.7	43.3	53.5	63.7	79.0	94.3	99.4	102.0	104.5	104.5
155°	17.8	25.5	30.6	38.2	45.9	58.6	71.4	79.0	81.6	84.1	84.1
157.5°	12.7	17.8	20.4	28.0	33.1	38.2	48.4	61.2	63.7	63.7	63.7
160°	7.6	10.2	12.7	17.8	20.4	25.5	30.6	38.2	45.9	45.9	45.9
162.5°	5.1	7.6	7.6	10.2	10.2	15.3	17.8	20.4	28.0	30.6	30.6
165°	2.5	5.1	5.1	5.1	5.1	5.1	7.6	7.6	12.7	15.3	15.3
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



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-170HL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3
2.5°	2411.2	2416.3	2413.8	2413.8	2413.8	2418.9	2413.8	2390.8	2395.9	2401.0	2406.1
5°	2408.7	2411.2	2411.2	2408.7	2408.7	2413.8	2408.7	2385.7	2390.8	2395.9	2398.5
7.5°	2398.5	2401.0	2401.0	2401.0	2398.5	2403.6	2395.9	2375.5	2375.5	2380.6	2383.2
10°	2385.7	2390.8	2388.3	2385.7	2385.7	2385.7	2380.6	2357.7	2357.7	2360.3	2362.8
12.5°	2370.5	2370.5	2370.5	2367.9	2365.4	2365.4	2360.3	2337.3	2334.8	2339.9	2337.3
15°	2350.1	2355.2	2350.1	2347.5	2342.4	2342.4	2334.8	2311.8	2306.7	2309.3	2306.7
17.5°	2332.2	2334.8	2329.7	2324.6	2319.5	2316.9	2309.3	2283.8	2276.1	2278.7	2273.6
20°	2314.4	2314.4	2309.3	2304.2	2296.5	2288.9	2278.7	2253.2	2240.5	2240.5	2230.3
22.5°	2291.4	2291.4	2286.3	2278.7	2271.0	2260.9	2250.7	2225.2	2204.8	2199.7	2192.0
25°	2265.9	2263.4	2260.9	2253.2	2237.9	2227.7	2217.5	2189.5	2166.5	2156.3	2143.6
27.5°	2235.4	2235.4	2227.7	2220.1	2204.8	2192.0	2179.3	2153.8	2123.2	2110.5	2092.6
30°	2202.2	2202.2	2194.6	2184.4	2169.1	2153.8	2138.5	2107.9	2077.3	2059.5	2039.1
32.5°	2169.1	2166.5	2158.9	2148.7	2133.4	2110.5	2097.7	2067.1	2031.5	2011.1	1983.0
35°	2128.3	2125.8	2118.1	2105.4	2085.0	2067.1	2046.7	2018.7	1977.9	1952.4	1921.9
37.5°	2087.5	2085.0	2079.9	2062.0	2041.6	2021.3	1995.8	1967.7	1929.5	1896.4	1865.8
40°	2046.7	2044.2	2034.0	2021.3	1995.8	1970.3	1944.8	1916.8	1876.0	1837.7	1804.6
42.5°	2003.4	2000.9	1988.1	1972.8	1944.8	1919.3	1888.7	1858.1	1817.3	1771.5	1738.3
45°	1960.1	1955.0	1942.2	1924.4	1893.8	1865.8	1835.2	1799.5	1758.7	1715.4	1672.1
47.5°	1914.2	1906.6	1893.8	1868.3	1842.8	1812.2	1776.6	1738.3	1697.5	1649.1	1603.2
50°	1863.2	1858.1	1842.8	1819.9	1789.3	1758.7	1717.9	1679.7	1631.3	1585.4	1529.3
52.5°	1814.8	1804.6	1791.9	1766.4	1735.8	1702.6	1659.3	1613.4	1565.0	1521.7	1463.1
55°	1763.8	1758.7	1740.9	1720.5	1682.3	1644.0	1603.2	1554.8	1501.3	1450.3	1394.2
57.5°	1715.4	1705.2	1689.9	1661.9	1628.7	1590.5	1547.2	1496.2	1437.6	1384.0	1322.9
60°	1667.0	1651.7	1633.8	1608.3	1572.7	1531.9	1486.0	1432.5	1373.8	1315.2	1251.5
62.5°	1613.4	1600.7	1580.3	1554.8	1519.1	1475.8	1427.4	1371.3	1315.2	1254.0	1185.2
65°	1559.9	1547.2	1526.8	1501.3	1465.6	1417.2	1366.2	1310.1	1246.4	1187.8	1113.9
67.5°	1506.4	1493.6	1470.7	1442.7	1407.0	1361.1	1307.6	1248.9	1185.2	1121.5	1045.0
70°	1452.9	1437.6	1417.2	1386.6	1350.9	1302.5	1248.9	1187.8	1124.1	1055.2	978.8
72.5°	1399.3	1386.6	1361.1	1333.1	1294.8	1246.4	1192.9	1131.7	1065.4	994.1	917.6
75°	1345.8	1330.5	1312.7	1279.5	1238.8	1192.9	1136.8	1075.6	1004.3	935.4	856.4
77.5°	1292.3	1279.5	1256.6	1223.5	1185.2	1136.8	1080.7	1019.5	948.2	876.8	792.7
80°	1238.8	1223.5	1205.6	1175.0	1131.7	1083.3	1024.6	963.5	892.1	818.2	734.1
82.5°	1185.2	1169.9	1149.5	1119.0	1078.2	1029.7	973.7	907.4	836.0	759.6	680.5
85°	1131.7	1119.0	1096.0	1065.4	1022.1	973.7	917.6	859.0	782.5	706.0	627.0
87.5°	1078.2	1065.4	1042.5	1011.9	971.1	922.7	866.6	805.4	731.5	660.2	573.5
90°	1027.2	1017.0	994.1	963.5	922.7	874.3	823.3	757.0	685.6	614.3	532.7
92.5°	981.3	971.1	950.7	920.1	884.5	830.9	780.0	716.2	644.9	570.9	491.9
95°	940.5	927.8	907.4	879.4	836.0	790.2	739.2	675.5	606.6	532.7	456.2
97.5°	894.7	881.9	861.5	830.9	795.2	746.8	695.8	634.7	565.8	497.0	420.6
100°	848.8	836.0	813.1	787.6	751.9	703.5	655.1	593.9	530.2	463.9	390.0
102.5°	802.9	790.2	769.8	744.3	708.6	665.3	616.8	558.2	494.5	428.2	359.4
105°	759.6	746.8	726.4	700.9	667.8	624.5	573.5	522.5	461.3	397.6	331.4
107.5°	716.2	703.5	685.6	660.2	627.0	586.2	537.8	484.3	428.2	367.0	303.3
110°	672.9	662.7	642.3	619.4	586.2	545.5	502.1	451.2	395.1	339.0	277.8





TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-170HL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	632.1	621.9	601.5	576.0	548.0	509.8	466.4	418.0	364.5	311.0	252.3
115°	591.3	578.6	560.8	537.8	509.8	474.1	433.3	390.0	336.5	285.5	231.9
117.5°	550.6	540.4	522.5	499.6	474.1	438.4	400.2	359.4	308.4	260.0	211.6
120°	509.8	502.1	484.3	463.9	438.4	405.3	369.6	328.8	282.9	237.0	191.2
122.5°	471.5	463.9	446.1	428.2	402.7	372.1	339.0	300.8	260.0	216.7	175.9
125°	435.9	425.7	410.4	392.5	369.6	341.5	308.4	272.7	234.5	196.3	158.0
127.5°	397.6	390.0	379.8	359.4	336.5	311.0	280.4	249.8	214.1	178.4	142.7
130°	367.0	356.8	344.1	328.8	308.4	282.9	254.9	224.3	193.7	160.6	124.9
132.5°	331.4	321.2	311.0	295.7	277.8	254.9	229.4	201.4	173.3	142.7	112.2
135°	298.2	290.6	280.4	265.1	247.2	229.4	203.9	178.4	152.9	124.9	99.4
137.5°	267.6	260.0	249.8	239.6	221.8	203.9	181.0	158.0	135.1	109.6	86.7
140°	237.0	231.9	221.8	211.6	196.3	178.4	158.0	137.6	117.2	94.3	73.9
142.5°	206.5	201.4	193.7	183.5	170.8	155.5	137.6	119.8	99.4	81.6	63.7
145°	178.4	175.9	168.2	158.0	147.8	132.5	117.2	102.0	84.1	68.8	51.0
147.5°	150.4	147.8	142.7	135.1	124.9	112.2	99.4	84.1	71.4	56.1	40.8
150°	124.9	122.3	119.8	109.6	104.5	91.8	81.6	68.8	58.6	43.3	33.1
152.5°	102.0	102.0	96.9	89.2	84.1	73.9	66.3	56.1	45.9	35.7	25.5
155°	81.6	79.0	76.5	71.4	66.3	58.6	51.0	43.3	35.7	25.5	17.8
157.5°	63.7	61.2	58.6	53.5	48.4	45.9	38.2	30.6	22.9	17.8	12.7
160°	45.9	43.3	40.8	38.2	35.7	30.6	25.5	20.4	15.3	10.2	7.6
162.5°	30.6	28.0	28.0	25.5	22.9	17.8	15.3	12.7	10.2	7.6	5.1
165°	15.3	15.3	12.7	12.7	10.2	7.6	7.6	7.6	5.1	5.1	2.5
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



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-170HL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3	2416.3
2.5°	2403.6	2403.6	2413.8	2411.2	2403.6	2418.9	2436.7
5°	2395.9	2395.9	2403.6	2403.6	2395.9	2411.2	2426.5
7.5°	2383.2	2380.6	2388.3	2388.3	2378.1	2390.8	2408.7
10°	2360.3	2357.7	2365.4	2365.4	2355.2	2367.9	2383.2
12.5°	2334.8	2329.7	2337.3	2334.8	2324.6	2337.3	2352.6
15°	2301.6	2299.1	2304.2	2299.1	2288.9	2301.6	2316.9
17.5°	2268.5	2260.9	2263.4	2263.4	2245.6	2258.3	2271.0
20°	2225.2	2215.0	2217.5	2215.0	2202.2	2209.9	2225.2
22.5°	2181.8	2166.5	2166.5	2164.0	2148.7	2158.9	2171.6
25°	2128.3	2110.5	2110.5	2107.9	2090.1	2097.7	2110.5
27.5°	2074.8	2056.9	2049.3	2046.7	2028.9	2028.9	2046.7
30°	2018.7	1993.2	1988.1	1980.5	1962.6	1962.6	1977.9
32.5°	1965.2	1929.5	1919.3	1909.1	1891.3	1888.7	1906.6
35°	1893.8	1865.8	1847.9	1837.7	1817.3	1812.2	1827.5
37.5°	1835.2	1799.5	1774.0	1761.3	1740.9	1733.2	1753.6
40°	1771.5	1733.2	1700.1	1692.5	1661.9	1651.7	1669.5
42.5°	1700.1	1659.3	1626.2	1610.9	1587.9	1577.8	1580.3
45°	1628.7	1585.4	1549.7	1529.3	1506.4	1488.5	1498.7
47.5°	1554.8	1516.6	1473.2	1442.7	1414.6	1401.9	1407.0
50°	1480.9	1435.0	1394.2	1361.1	1328.0	1312.7	1322.9
52.5°	1407.0	1358.5	1312.7	1277.0	1238.8	1223.5	1226.0
55°	1335.6	1284.6	1231.1	1192.9	1157.2	1134.2	1129.2
57.5°	1264.2	1208.2	1152.1	1108.8	1062.9	1042.5	1034.8
60°	1187.8	1129.2	1070.5	1019.5	971.1	948.2	938.0
62.5°	1116.4	1052.7	986.4	932.9	884.5	853.9	846.2
65°	1047.6	973.7	907.4	846.2	792.7	759.6	749.4
67.5°	973.7	897.2	825.8	759.6	708.6	665.3	660.2
70°	904.8	823.3	744.3	675.5	619.4	576.0	555.7
72.5°	836.0	751.9	670.4	596.4	525.1	484.3	469.0
75°	769.8	683.1	596.4	520.0	441.0	392.5	377.2
77.5°	708.6	619.4	527.6	443.5	369.6	308.4	288.0
80°	650.0	558.2	461.3	374.7	295.7	229.4	206.5
82.5°	588.8	502.1	402.7	311.0	229.4	160.6	132.5
85°	535.3	448.6	349.2	257.4	175.9	102.0	71.4
87.5°	491.9	397.6	308.4	216.7	132.5	58.6	20.4
90°	448.6	356.8	267.6	178.4	99.4	33.1	2.5
92.5°	410.4	323.7	234.5	152.9	76.5	22.9	2.5
95°	374.7	290.6	206.5	127.4	61.2	15.3	2.5
97.5°	341.5	262.5	183.5	109.6	51.0	12.7	2.5
100°	313.5	237.0	163.1	96.9	43.3	10.2	2.5
102.5°	285.5	214.1	145.3	84.1	38.2	7.6	2.5
105°	262.5	193.7	130.0	76.5	33.1	7.6	2.5
107.5°	239.6	175.9	117.2	66.3	28.0	5.1	2.5
110°	216.7	160.6	104.5	58.6	25.5	5.1	2.5



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-170HL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	198.8	145.3	94.3	53.5	20.4	5.1	2.5
115°	181.0	130.0	84.1	45.9	17.8	2.5	2.5
117.5°	163.1	117.2	73.9	40.8	15.3	2.5	2.5
120°	147.8	104.5	66.3	35.7	12.7	2.5	2.5
122.5°	132.5	94.3	58.6	30.6	10.2	2.5	2.5
125°	119.8	84.1	51.0	25.5	7.6	2.5	2.5
127.5°	107.1	73.9	45.9	22.9	7.6	2.5	2.5
130°	94.3	66.3	38.2	17.8	5.1	2.5	2.5
132.5°	84.1	56.1	33.1	15.3	5.1	2.5	2.5
135°	73.9	48.4	28.0	10.2	5.1	2.5	2.5
137.5°	63.7	40.8	22.9	7.6	2.5	2.5	2.5
140°	53.5	35.7	17.8	7.6	2.5	2.5	2.5
142.5°	45.9	28.0	12.7	5.1	2.5	2.5	2.5
145°	35.7	22.9	10.2	5.1	2.5	2.5	2.5
147.5°	28.0	17.8	7.6	5.1	2.5	2.5	2.5
150°	20.4	12.7	7.6	2.5	2.5	2.5	2.5
152.5°	15.3	10.2	5.1	2.5	2.5	2.5	2.5
155°	10.2	7.6	5.1	2.5	2.5	2.5	2.5
157.5°	7.6	5.1	2.5	2.5	2.5	2.5	2.5
160°	5.1	2.5	2.5	2.5	2.5	2.5	2.5
162.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5
165°	2.5	2.5	2.5	2.5	2.5	2.5	2.5
167.5°	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
172.5°	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
177.5°	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

(END OF REPORT)