

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: **4SNLED-LD5-48HL-RW-UNV-L935-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 (P33525)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SNLED-LD5-48HL-RW-UNV-L935-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
WHITE REFLECTOR  
Light Source: -  
Ballast/Driver: -

**Summary**

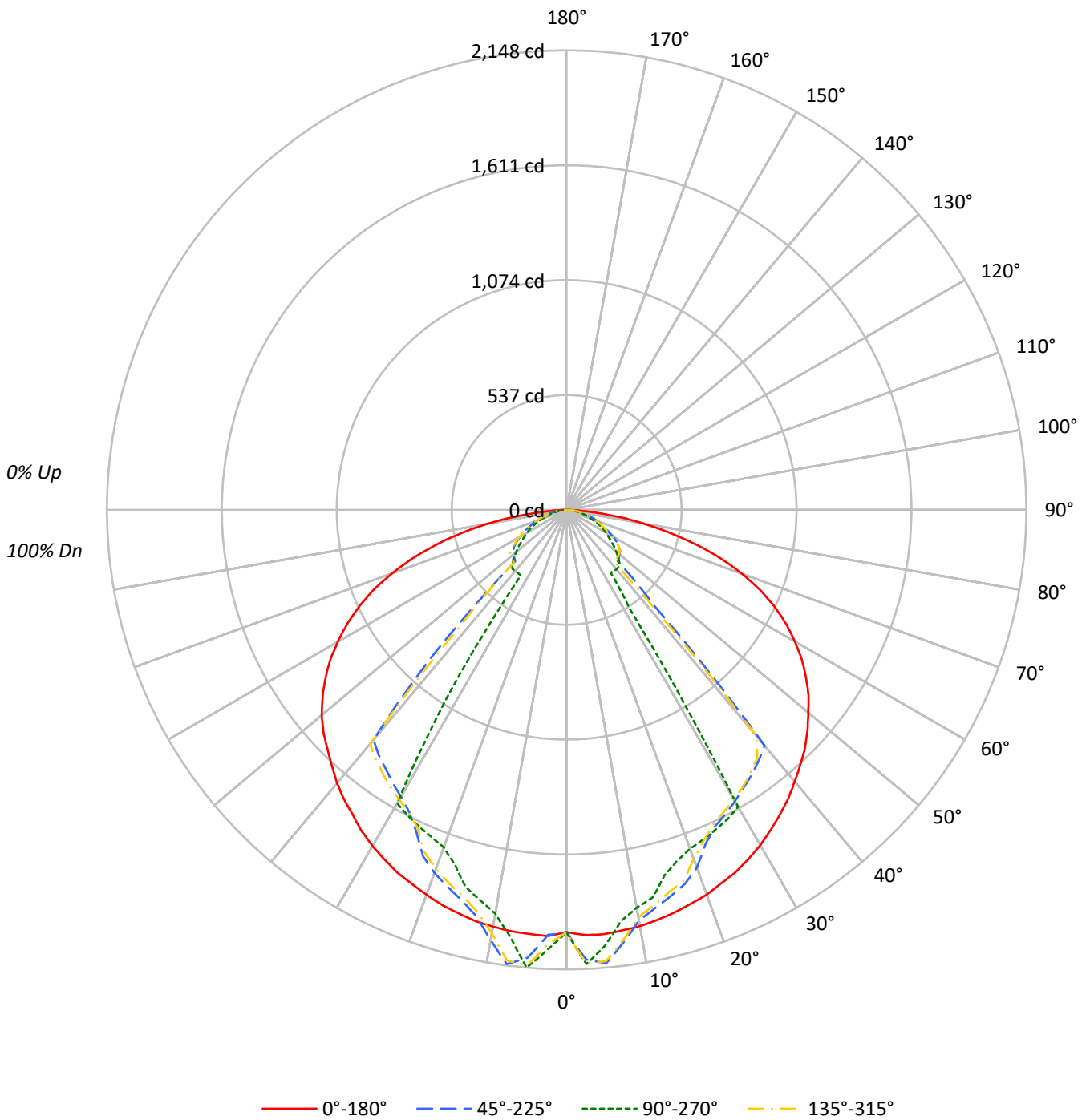
Lumens per Lamp: N/A  
Luminaire Lumens: 3953.0 lumens  
Efficiency: N/A  
Efficacy: 101.4 lumens/watt  
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Direct

Input Watts (W): 39  
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



TEST NUMBER: P#  
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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	99	108	104	101	98	100	97	94	96	94	92	92	91	89	87
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77	75
3	94	84	77	72	91	83	76	71	80	74	70	77	73	69	75	71	67	65
4	87	76	68	62	85	75	67	62	72	66	61	70	65	60	68	63	59	57
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	51
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	47	46
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37
9	62	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31

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

	0°	90°	180°	270°
0°	15952	15952	15952	15952
5°	16108	16072	16101	16868
10°	16124	14531	16146	14754
15°	16160	13445	16197	13871
20°	16277	12752	16277	12704
25°	16418	12508	16442	12391
30°	16585	12287	16626	12142
35°	16777	2799	16812	2919
40°	17046	2910	17148	3004
45°	17455	2894	17515	3000
50°	17862	2617	18103	2687
55°	18412	2323	18558	2356
60°	18878	2065	18920	2091
65°	19212	1802	19162	1773
70°	18937	1452	18878	1399
75°	17582	1117	17708	1070
80°	14271	794	14840	727
85°	7727	475	8157	365



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	194.2	4.9
10°-20°	534.0	13.5
20°-30°	791.0	20.0
30°-40°	797.0	20.2
40°-50°	622.6	15.7
50°-60°	480.9	12.2
60°-70°	322.9	8.2
70°-80°	164.7	4.2
80°-90°	45.8	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1519.2	38.4
0°-40°	2316.2	58.6
0°-60°	3419.6	86.5
0°-90°	3953.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3953.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1974	1974	1974	1974	1974	
5°	1991	2046	1990	2148	1991	189
15°	1948	1769	1952	1825	1948	551
25°	1868	1648	1871	1633	1868	862
35°	1738	358	1742	374	1738	1089
45°	1575	348	1580	361	1575	1215
55°	1365	253	1376	257	1365	1219
65°	1072	170	1069	167	1072	1054
75°	629	86	633	82	629	658
85°	113	27	119	21	113	156
90°	0	0	0	0	0	



TEST NUMBER: P#

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**CANDELA DISTRIBUTION (FULL):**

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0
2.5°	1989.4	1996.6	2002.1	2005.7	2007.5	2007.5	2008.4	2009.3	2021.1	2026.5	2030.1
5°	1991.2	1998.5	2009.3	2023.8	2036.4	2047.3	2056.4	2069.0	2081.7	2095.3	2099.8
7.5°	1983.1	1992.1	2013.8	2040.1	2064.5	2081.7	2093.4	2101.6	2107.9	2108.8	2113.3
10°	1975.8	1992.1	2022.0	2056.4	2087.1	2107.9	2107.9	2103.4	2109.7	2085.3	2060.9
12.5°	1963.2	1981.3	2022.0	2067.2	2096.2	2104.3	2100.7	2082.6	2045.5	2015.6	2002.1
15°	1947.8	1972.2	2022.9	2073.5	2098.0	2100.7	2066.3	2020.2	1992.1	1974.0	1951.4
17.5°	1930.6	1963.2	2023.8	2074.4	2083.5	2070.8	2005.7	1976.7	1947.8	1905.3	1874.5
20°	1914.3	1946.0	2016.5	2061.8	2067.2	2010.2	1959.6	1928.8	1879.9	1842.8	1829.3
22.5°	1889.0	1926.1	2010.2	2044.6	2023.8	1957.7	1908.9	1860.0	1815.7	1804.9	1788.6
25°	1868.2	1907.1	1995.7	2023.8	1968.6	1909.8	1852.8	1795.8	1775.0	1759.6	1745.1
27.5°	1840.1	1888.1	1976.7	1985.8	1909.8	1858.2	1775.0	1749.7	1730.7	1713.5	1707.1
30°	1809.4	1868.2	1950.5	1933.3	1860.9	1784.9	1723.4	1699.9	1686.3	1668.2	1661.0
32.5°	1774.1	1838.3	1921.6	1872.7	1808.5	1713.5	1673.7	1655.6	1637.5	1623.9	1578.7
35°	1737.9	1812.1	1887.2	1814.8	1745.1	1659.2	1623.9	1607.6	1590.4	1540.7	1493.6
37.5°	1700.8	1783.1	1845.6	1752.4	1661.0	1603.1	1573.3	1555.2	1516.3	1452.9	1429.4
40°	1658.3	1747.9	1792.2	1688.1	1587.7	1546.1	1518.1	1500.0	1412.2	1384.2	1376.9
42.5°	1615.8	1713.5	1727.0	1625.7	1527.1	1485.5	1462.0	1402.3	1342.6	1328.1	1330.8
45°	1575.1	1676.4	1655.6	1537.1	1463.8	1429.4	1389.6	1307.3	1275.6	1282.8	1284.7
47.5°	1526.2	1632.1	1580.5	1448.4	1398.6	1364.3	1275.6	1225.9	1221.3	1231.3	1236.7
50°	1473.7	1582.3	1500.9	1367.9	1328.1	1287.4	1186.9	1161.6	1167.0	1177.0	1183.3
52.5°	1424.9	1526.2	1418.5	1292.8	1258.4	1165.2	1097.4	1101.9	1111.0	1122.7	1126.3
55°	1365.2	1458.4	1330.8	1216.8	1184.2	1062.1	1031.3	1042.2	1051.2	1061.2	1068.4
57.5°	1302.7	1380.6	1226.8	1131.8	1079.3	970.7	973.4	980.7	987.0	998.8	412.5
60°	1231.3	1291.9	1112.8	1053.1	949.0	898.4	901.1	913.7	920.1	513.9	284.1
62.5°	1157.1	1188.8	1009.6	963.5	829.6	826.0	838.6	844.1	574.5	271.4	266.0
65°	1072.1	1065.7	908.3	835.0	748.2	751.8	765.4	738.2	254.2	254.2	252.4
67.5°	978.0	940.0	809.7	691.2	669.5	677.6	692.1	241.6	235.2	237.0	230.7
70°	870.3	816.9	707.5	585.3	592.6	600.7	233.4	218.9	216.2	211.7	199.0
72.5°	756.3	683.0	579.0	508.4	513.0	322.1	204.5	197.2	188.2	179.1	165.6
75°	628.8	533.8	425.2	425.2	431.5	183.7	178.2	166.5	156.5	144.7	136.6
77.5°	493.1	410.7	330.2	342.9	167.4	153.8	143.8	131.2	123.0	115.8	111.3
80°	361.0	286.8	248.8	222.6	130.3	116.7	106.8	99.5	95.9	91.4	85.9
82.5°	237.0	172.8	172.8	104.9	91.4	80.5	77.8	72.4	68.8	66.0	63.3
85°	113.1	100.4	76.0	64.2	57.0	51.6	49.8	47.0	47.0	46.1	45.2
87.5°	41.6	45.2	33.5	32.6	30.8	29.9	30.8	30.8	31.7	30.8	29.9
90°	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):**

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0
2.5°	2039.2	2046.4	2051.8	2060.9	2072.6	2082.6	2091.6	2104.3	2124.2	2129.6	2134.2
5°	2099.8	2102.5	2108.8	2116.1	2117.9	2122.4	2121.5	2126.9	2129.6	2136.0	2122.4
7.5°	2103.4	2088.9	2071.7	2056.4	2045.5	2035.5	2029.2	2039.2	2044.6	2049.1	2035.5
10°	2027.4	2010.2	2000.3	1991.2	1980.4	1965.0	1944.2	1948.7	1946.9	1946.9	1942.4
12.5°	1979.5	1955.0	1929.7	1907.1	1897.1	1896.2	1897.1	1907.1	1907.1	1906.2	1900.7
15°	1904.4	1880.8	1868.2	1862.8	1862.8	1860.0	1860.0	1870.9	1868.2	1868.2	1865.5
17.5°	1854.6	1838.3	1829.3	1822.9	1820.2	1824.8	1830.2	1834.7	1835.6	1832.0	1817.5
20°	1813.9	1798.5	1787.7	1789.5	1788.6	1791.3	1794.0	1778.6	1759.6	1734.3	1722.5
22.5°	1771.4	1759.6	1751.5	1751.5	1740.6	1723.4	1698.1	1692.7	1690.0	1678.2	1668.2
25°	1730.7	1717.1	1705.3	1669.1	1646.5	1649.2	1644.7	1635.7	1634.8	1633.9	1637.5
27.5°	1690.0	1654.7	1609.4	1604.0	1595.0	1594.1	1599.5	1604.0	1604.0	1607.6	1612.2
30°	1605.8	1565.1	1557.0	1547.0	1550.6	1563.3	1566.0	1572.3	1574.2	1580.5	1584.1
32.5°	1528.9	1510.8	1503.6	1508.1	1519.9	1530.7	1537.1	1539.8	1544.3	1549.7	1554.3
35°	1466.5	1461.1	1467.4	1477.4	1489.1	1498.2	1503.6	1509.0	1513.5	1518.1	1521.7
37.5°	1420.4	1424.0	1433.0	1445.7	1457.5	1464.7	1469.2	1475.5	1481.9	1487.3	1465.6
40°	1376.9	1386.0	1395.9	1409.5	1419.5	1426.7	1431.2	1439.4	1385.1	626.9	343.8
42.5°	1338.9	1348.9	1356.1	1367.0	1377.8	1383.3	1343.5	599.8	339.3	337.4	342.0
45°	1292.8	1300.9	1312.7	1320.8	1330.8	873.9	333.8	337.4	332.0	335.6	337.4
47.5°	1245.8	1258.4	1264.8	1206.9	359.2	332.0	328.4	332.0	328.4	332.9	330.2
50°	1192.4	1207.8	859.5	324.8	322.1	320.3	323.9	322.1	324.8	328.4	321.2
52.5°	1138.1	704.8	314.8	313.0	314.8	313.0	319.4	314.8	315.7	312.1	303.1
55°	385.4	304.9	302.2	301.3	306.7	306.7	306.7	299.5	294.9	285.9	279.5
57.5°	294.9	294.9	294.0	294.9	293.1	291.3	283.2	276.8	270.5	257.8	254.2
60°	279.5	279.5	279.5	279.5	271.4	267.8	255.1	249.7	238.8	232.5	228.9
62.5°	266.9	265.1	256.9	254.2	245.2	235.2	228.0	222.6	211.7	208.1	205.4
65°	248.8	242.5	232.5	221.6	217.1	206.3	202.6	194.5	189.1	186.4	184.6
67.5°	218.9	209.9	201.7	194.5	186.4	182.7	178.2	171.9	168.3	166.5	164.7
70°	187.3	180.9	172.8	168.3	162.8	160.1	153.8	152.0	149.3	146.6	143.8
72.5°	156.5	152.9	149.3	142.9	141.1	139.3	133.0	129.4	125.8	122.1	120.3
75°	131.2	128.5	126.7	121.2	118.5	113.1	108.6	105.8	103.1	100.4	98.6
77.5°	107.7	105.8	100.4	96.8	95.0	90.5	88.7	89.6	87.8	84.1	82.3
80°	84.1	82.3	77.8	77.8	76.0	74.2	72.4	70.6	68.8	66.0	64.2
82.5°	64.2	62.4	60.6	58.8	57.0	56.1	55.2	53.4	51.6	49.8	48.9
85°	45.2	44.3	43.4	42.5	41.6	40.7	39.8	38.0	36.2	35.3	34.4
87.5°	30.8	29.9	28.9	28.0	27.1	26.2	25.3	24.4	22.6	21.7	20.8
90°	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°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0
2.5°	2134.2	2138.7	2134.2	2124.2	2117.9	2115.2	2120.6	2120.6	2124.2	2128.7	2129.6
5°	2100.7	2089.8	2077.2	2064.5	2058.2	2054.5	2044.6	2046.4	2049.1	2050.9	2052.7
7.5°	2017.5	2003.0	1985.8	1969.5	1963.2	1957.7	1946.0	1946.0	1946.0	1946.9	1952.3
10°	1932.4	1926.1	1918.8	1908.0	1899.8	1897.1	1887.2	1889.9	1888.1	1890.8	1897.1
12.5°	1892.6	1885.4	1879.0	1868.2	1859.1	1855.5	1851.0	1853.7	1852.8	1857.3	1862.8
15°	1856.4	1852.8	1845.6	1837.4	1829.3	1822.0	1805.8	1800.3	1796.7	1792.2	1798.5
17.5°	1796.7	1771.4	1754.2	1741.5	1732.5	1726.1	1721.6	1721.6	1724.3	1727.0	1732.5
20°	1715.3	1708.0	1699.9	1686.3	1677.3	1673.7	1671.0	1671.0	1675.5	1679.1	1689.1
22.5°	1659.2	1658.3	1655.6	1649.2	1644.7	1644.7	1645.6	1647.4	1653.8	1659.2	1669.1
25°	1633.0	1636.6	1634.8	1631.2	1628.4	1629.3	1627.5	1629.3	1635.7	1641.1	1649.2
27.5°	1612.2	1617.6	1615.8	1610.3	1605.8	1607.6	1610.3	1608.5	1614.0	1620.3	1626.6
30°	1584.1	1585.0	1588.6	1582.3	1580.5	1583.2	1584.1	1585.9	1591.3	1595.9	1601.3
32.5°	1552.4	1559.7	1558.8	1552.4	1552.4	1555.2	1556.1	1495.4	1382.4	1190.6	1138.1
35°	1521.7	1529.8	1516.3	1278.3	884.8	472.2	364.6	351.9	354.6	356.4	358.3
37.5°	1125.4	533.8	340.2	342.9	345.6	348.3	351.0	353.7	356.4	359.2	360.1
40°	338.4	337.4	340.2	343.8	346.5	348.3	351.9	354.6	357.4	360.1	361.0
42.5°	334.7	336.5	339.3	342.9	346.5	350.1	352.8	356.4	358.3	360.1	361.0
45°	332.9	336.5	340.2	342.9	345.6	347.4	349.2	350.1	349.2	349.2	351.0
47.5°	330.2	333.8	334.7	333.8	334.7	333.8	333.8	333.8	331.1	330.2	330.2
50°	320.3	320.3	318.4	314.8	313.9	313.0	311.2	310.3	306.7	305.8	305.8
52.5°	299.5	298.5	295.8	291.3	289.5	287.7	286.8	285.9	282.3	280.5	281.4
55°	275.0	273.2	270.5	265.1	264.2	262.4	261.5	260.5	256.9	258.7	256.0
57.5°	252.4	248.8	245.2	244.3	240.6	239.7	238.8	237.9	235.2	236.1	234.3
60°	225.3	224.4	222.6	218.9	218.9	218.0	218.0	216.2	214.4	213.5	213.5
62.5°	205.4	202.6	200.8	200.8	198.1	198.1	198.1	196.3	194.5	195.4	194.5
65°	183.7	182.7	181.8	180.0	180.0	179.1	179.1	177.3	174.6	175.5	173.7
67.5°	165.6	163.7	161.9	161.0	157.4	155.6	154.7	153.8	150.2	151.1	149.3
70°	142.9	140.2	138.4	136.6	133.9	132.1	132.1	130.3	127.6	128.5	126.7
72.5°	119.4	117.6	115.8	114.9	112.2	111.3	110.4	109.5	106.8	107.7	106.8
75°	99.5	99.5	98.6	97.7	95.0	92.3	90.5	89.6	87.8	88.7	86.8
77.5°	82.3	80.5	78.7	78.7	76.0	74.2	72.4	72.4	72.4	71.5	70.6
80°	64.2	62.4	62.4	61.5	59.7	57.9	57.0	57.0	56.1	56.1	55.2
82.5°	48.9	47.0	46.1	46.1	44.3	43.4	42.5	41.6	41.6	41.6	40.7
85°	34.4	32.6	31.7	31.7	29.9	28.9	28.9	28.0	28.0	27.1	27.1
87.5°	20.8	19.9	19.0	19.0	17.2	16.3	16.3	16.3	15.4	15.4	14.5
90°	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: 4SNLED-LD5-48HL-RW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
0°	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0
2.5°	2129.6	2129.6	2123.3	2125.1	2122.4	2126.0	2121.5	2121.5	2126.9	2126.9	2130.5
5°	2053.6	2049.1	2048.2	2046.4	2037.4	2041.0	2036.4	2031.9	2038.3	2038.3	2046.4
7.5°	1949.6	1941.5	1945.1	1939.6	1934.2	1926.1	1928.8	1925.2	1929.7	1936.0	1944.2
10°	1896.2	1889.0	1893.5	1888.1	1890.8	1879.0	1879.9	1880.8	1885.4	1887.2	1894.4
12.5°	1861.8	1860.0	1858.2	1856.4	1858.2	1851.9	1848.3	1849.2	1851.0	1851.9	1857.3
15°	1789.5	1777.7	1781.3	1768.7	1769.6	1770.5	1763.2	1770.5	1769.6	1781.3	1792.2
17.5°	1730.7	1730.7	1724.3	1718.9	1715.3	1714.4	1709.0	1712.6	1709.0	1716.2	1718.9
20°	1690.0	1689.1	1688.1	1685.4	1676.4	1677.3	1680.0	1671.9	1671.0	1670.1	1675.5
22.5°	1671.0	1671.9	1668.2	1668.2	1660.1	1661.9	1662.8	1653.8	1654.7	1652.0	1654.7
25°	1651.1	1652.9	1648.3	1648.3	1646.5	1645.6	1641.1	1642.9	1637.5	1633.0	1637.5
27.5°	1627.5	1631.2	1627.5	1629.3	1625.7	1623.9	1621.2	1619.4	1614.0	1613.1	1615.8
30°	1605.8	1607.6	1606.7	1602.2	1601.3	1595.9	1598.6	1593.2	1587.7	1588.6	1590.4
32.5°	823.3	786.2	606.1	547.3	541.9	561.8	665.8	810.6	1050.3	1282.8	1450.2
35°	359.2	359.2	359.2	358.3	358.3	357.4	356.4	355.5	354.6	353.7	352.8
37.5°	361.0	361.0	361.0	361.0	360.1	359.2	359.2	357.4	356.4	355.5	354.6
40°	361.9	362.8	362.8	362.8	361.9	361.9	361.0	359.2	358.3	356.4	354.6
42.5°	361.0	361.9	361.9	361.0	361.0	360.1	360.1	359.2	358.3	357.4	356.4
45°	349.2	350.1	348.3	348.3	347.4	347.4	347.4	347.4	347.4	348.3	348.3
47.5°	328.4	328.4	327.5	326.6	326.6	325.7	326.6	325.7	327.5	328.4	330.2
50°	304.0	304.0	302.2	301.3	301.3	301.3	301.3	302.2	303.1	304.9	306.7
52.5°	278.6	278.6	277.7	276.8	275.9	275.9	278.6	277.7	278.6	279.5	282.3
55°	254.2	255.1	253.3	253.3	252.4	252.4	252.4	253.3	254.2	255.1	257.8
57.5°	233.4	233.4	231.6	231.6	231.6	230.7	233.4	231.6	232.5	233.4	235.2
60°	212.6	211.7	211.7	210.8	210.8	210.8	212.6	211.7	211.7	212.6	214.4
62.5°	193.6	193.6	192.7	192.7	191.8	191.8	193.6	192.7	192.7	193.6	194.5
65°	171.9	171.9	171.0	170.1	172.8	170.1	172.8	171.0	172.8	173.7	175.5
67.5°	147.5	147.5	147.5	146.6	146.6	148.4	149.3	147.5	148.4	150.2	151.1
70°	125.8	125.8	124.8	124.8	124.8	126.7	127.6	125.8	126.7	127.6	129.4
72.5°	106.8	104.9	104.9	104.0	105.8	105.8	106.8	105.8	106.8	106.8	108.6
75°	87.8	85.9	85.9	85.9	87.8	86.8	87.8	86.8	87.8	87.8	88.7
77.5°	70.6	69.7	68.8	68.8	70.6	70.6	70.6	69.7	70.6	71.5	72.4
80°	55.2	54.3	53.4	53.4	55.2	55.2	55.2	56.1	55.2	56.1	57.0
82.5°	40.7	39.8	38.9	40.7	40.7	40.7	40.7	41.6	40.7	41.6	42.5
85°	27.1	26.2	25.3	27.1	27.1	27.1	27.1	28.0	27.1	28.0	28.9
87.5°	14.5	13.6	13.6	14.5	14.5	14.5	15.4	15.4	15.4	16.3	16.3
90°	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: 4SNLED-LD5-48HL-RW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
0°	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0
2.5°	2136.0	2138.7	2137.8	2132.3	2126.9	2120.6	2116.1	2117.0	2126.0	2128.7	2120.6
5°	2046.4	2063.6	2063.6	2075.4	2069.0	2063.6	2067.2	2087.1	2097.1	2112.4	2117.9
7.5°	1954.1	1962.3	1961.4	1973.1	1971.3	1971.3	1974.0	2000.3	2012.9	2025.6	2029.2
10°	1902.6	1910.7	1909.8	1910.7	1908.0	1901.7	1901.7	1913.4	1924.3	1930.6	1932.4
12.5°	1865.5	1870.0	1869.1	1869.1	1867.3	1861.8	1860.9	1870.9	1882.7	1890.8	1891.7
15°	1810.3	1822.9	1825.7	1837.4	1834.7	1827.5	1829.3	1837.4	1844.7	1851.9	1849.2
17.5°	1728.0	1734.3	1735.2	1739.7	1737.9	1737.9	1748.8	1778.6	1798.5	1815.7	1817.5
20°	1680.9	1685.4	1683.6	1693.6	1689.1	1688.1	1690.9	1703.5	1712.6	1720.7	1735.2
22.5°	1658.3	1661.9	1659.2	1660.1	1652.0	1644.7	1642.9	1652.9	1662.8	1673.7	1673.7
25°	1639.3	1642.0	1641.1	1639.3	1633.0	1623.0	1621.2	1623.0	1626.6	1627.5	1621.2
27.5°	1616.7	1618.5	1618.5	1619.4	1611.2	1602.2	1600.4	1598.6	1602.2	1601.3	1591.3
30°	1593.2	1590.4	1591.3	1592.2	1585.0	1576.9	1573.3	1572.3	1576.0	1575.1	1565.1
32.5°	1537.1	1557.9	1559.7	1561.5	1555.2	1547.9	1544.3	1541.6	1543.4	1542.5	1533.4
35°	351.9	358.3	438.8	993.3	1348.9	1493.6	1509.0	1505.4	1506.3	1506.3	1499.1
37.5°	352.8	351.9	351.0	348.3	345.6	343.8	594.4	1267.5	1468.3	1469.2	1462.9
40°	352.8	351.9	351.0	349.2	345.6	342.9	338.4	334.7	342.9	754.5	1380.6
42.5°	354.6	352.8	351.0	349.2	345.6	342.0	338.4	333.8	336.5	334.7	330.2
45°	349.2	348.3	348.3	347.4	345.6	342.0	337.4	332.0	329.3	332.0	327.5
47.5°	332.0	332.9	335.6	336.5	336.5	337.4	334.7	331.1	326.6	329.3	323.9
50°	308.5	310.3	311.2	315.7	317.5	321.2	322.1	322.1	321.2	324.8	321.2
52.5°	283.2	285.0	289.5	291.3	293.1	298.5	300.4	303.1	304.9	310.3	313.9
55°	258.7	259.6	261.5	265.1	267.8	272.3	275.0	277.7	282.3	285.0	295.8
57.5°	236.1	237.0	240.6	241.6	243.4	247.0	249.7	253.3	256.9	258.7	271.4
60°	214.4	215.3	218.0	218.9	219.8	223.5	226.2	228.9	231.6	233.4	242.5
62.5°	195.4	195.4	198.1	198.1	199.0	201.7	203.6	205.4	208.1	209.0	213.5
65°	176.4	177.3	179.1	179.1	180.0	181.8	182.7	183.7	186.4	186.4	190.0
67.5°	152.9	153.8	156.5	158.3	159.2	162.8	163.7	164.7	166.5	167.4	169.2
70°	130.3	131.2	133.9	134.8	135.7	138.4	140.2	142.9	145.7	148.4	150.2
72.5°	109.5	110.4	113.1	113.1	115.8	116.7	118.5	119.4	122.1	123.9	126.7
75°	89.6	90.5	93.2	93.2	95.9	96.8	97.7	98.6	100.4	102.2	104.0
77.5°	73.3	73.3	76.9	78.7	80.5	80.5	81.4	81.4	81.4	82.3	84.1
80°	57.9	57.9	60.6	62.4	64.2	64.2	65.1	66.0	66.9	66.9	67.9
82.5°	43.4	43.4	46.1	47.0	48.9	48.9	48.9	49.8	50.7	49.8	51.6
85°	29.9	29.9	31.7	32.6	34.4	34.4	34.4	35.3	36.2	35.3	36.2
87.5°	17.2	18.1	19.0	19.9	20.8	21.7	21.7	21.7	22.6	22.6	23.5
90°	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: 4SNLED-LD5-48HL-RW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (continued):**

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
0°	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0
2.5°	2111.5	2100.7	2099.8	2087.1	2083.5	2084.4	2074.4	2070.8	2054.5	2050.9	2033.7
5°	2119.7	2125.1	2122.4	2121.5	2124.2	2122.4	2115.2	2111.5	2108.8	2101.6	2087.1
7.5°	2030.1	2033.7	2036.4	2048.2	2058.2	2075.4	2093.4	2105.2	2114.3	2116.1	2104.3
10°	1938.7	1955.9	1967.7	1985.8	2000.3	2010.2	2021.1	2031.0	2057.3	2083.5	2098.9
12.5°	1891.7	1896.2	1895.3	1905.3	1915.2	1941.5	1966.8	1981.3	2001.2	2012.9	2041.0
15°	1851.9	1852.8	1855.5	1862.8	1868.2	1877.2	1889.0	1910.7	1950.5	1968.6	1984.0
17.5°	1815.7	1815.7	1817.5	1823.8	1831.1	1839.2	1846.5	1855.5	1875.4	1905.3	1943.3
20°	1757.8	1783.1	1785.9	1784.9	1788.6	1803.9	1805.8	1822.0	1832.0	1843.8	1880.8
22.5°	1671.9	1687.2	1709.0	1742.4	1755.1	1762.3	1767.8	1775.0	1790.4	1803.9	1819.3
25°	1624.8	1634.8	1641.1	1651.1	1677.3	1719.8	1728.0	1736.1	1746.0	1756.0	1775.0
27.5°	1583.2	1582.3	1586.8	1595.9	1603.1	1625.7	1665.5	1697.2	1699.0	1713.5	1729.8
30°	1553.3	1547.9	1541.6	1539.8	1549.7	1561.5	1573.3	1623.0	1657.4	1664.6	1681.8
32.5°	1525.3	1516.3	1507.2	1500.0	1493.6	1503.6	1510.8	1532.5	1576.9	1618.5	1627.5
35°	1490.9	1481.9	1471.0	1462.9	1452.9	1452.0	1451.1	1471.9	1486.4	1536.2	1579.6
37.5°	1455.6	1445.7	1436.6	1427.6	1417.6	1410.4	1405.9	1411.3	1424.9	1446.6	1519.0
40°	1418.5	1406.8	1397.7	1390.5	1376.9	1371.5	1362.5	1358.8	1359.7	1378.7	1416.7
42.5°	847.7	1351.6	1356.1	1348.0	1336.2	1329.0	1319.0	1314.5	1305.5	1314.5	1336.2
45°	326.6	330.2	988.8	1306.4	1291.9	1282.8	1273.8	1269.3	1259.3	1252.1	1272.0
47.5°	320.3	323.9	316.6	448.7	1233.1	1235.8	1224.9	1220.4	1210.5	1205.0	1199.6
50°	315.7	318.4	313.0	314.8	308.5	1130.0	1175.2	1169.8	1158.9	1152.6	1141.7
52.5°	311.2	311.2	307.6	303.1	301.3	302.2	950.8	1118.2	1105.5	1099.2	1084.7
55°	296.7	298.5	302.2	294.9	293.1	292.2	289.5	905.6	1046.7	1039.5	1026.8
57.5°	275.0	278.6	288.6	286.8	286.8	279.5	277.7	277.7	840.5	978.9	966.2
60°	249.7	253.3	264.2	267.8	270.5	268.7	266.9	266.0	262.4	885.7	902.0
62.5°	223.5	227.1	230.7	242.5	246.1	250.6	256.0	253.3	249.7	249.7	834.1
65°	195.4	200.8	202.6	213.5	218.0	226.2	230.7	237.0	235.2	234.3	238.8
67.5°	171.0	177.3	178.2	182.7	190.9	194.5	199.9	211.7	217.1	218.9	220.7
70°	150.2	153.8	156.5	158.3	163.7	164.7	174.6	182.7	190.9	199.9	202.6
72.5°	129.4	132.1	137.5	135.7	137.5	141.1	146.6	152.0	160.1	172.8	180.9
75°	105.8	107.7	111.3	113.1	116.7	119.4	123.0	127.6	134.8	141.1	152.0
77.5°	85.0	85.9	88.7	89.6	93.2	95.9	102.2	104.9	109.5	114.0	120.3
80°	68.8	68.8	69.7	69.7	72.4	75.1	79.6	82.3	87.8	91.4	91.4
82.5°	52.5	52.5	55.2	55.2	57.0	57.0	59.7	59.7	62.4	64.2	66.0
85°	37.1	38.0	39.8	38.9	40.7	39.8	41.6	43.4	44.3	43.4	42.5
87.5°	24.4	24.4	26.2	25.3	26.2	26.2	28.0	28.0	28.9	28.9	28.0
90°	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: 4SNLED-LD5-48HL-RW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0
2.5°	2027.4	2013.8	2005.7	1995.7	1993.0	1990.3	1993.9	1993.9	1988.5	1984.0	1975.8
5°	2074.4	2060.0	2044.6	2028.3	2012.9	1996.6	1990.3	1989.4	1979.5	1974.0	1971.3
7.5°	2098.9	2091.6	2074.4	2051.8	2028.3	1999.4	1986.7	1979.5	1969.5	1967.7	1967.7
10°	2101.6	2093.4	2084.4	2068.1	2041.0	2003.0	1978.5	1964.1	1955.0	1961.4	1973.1
12.5°	2075.4	2090.7	2082.6	2071.7	2050.0	2003.9	1968.6	1946.9	1944.2	1960.5	1991.2
15°	2008.4	2053.6	2076.3	2065.4	2048.2	2002.1	1952.3	1927.0	1927.0	1960.5	2000.3
17.5°	1957.7	1993.0	2048.2	2057.3	2037.4	1998.5	1936.9	1907.1	1915.2	1964.1	2006.6
20°	1916.1	1937.8	1991.2	2041.9	2022.9	1990.3	1914.3	1883.6	1899.8	1958.6	2015.6
22.5°	1851.0	1894.4	1927.0	2002.1	2008.4	1974.9	1891.7	1854.6	1887.2	1958.6	2011.1
25°	1787.7	1840.1	1874.5	1947.8	1986.7	1955.9	1870.9	1823.8	1873.6	1955.9	2007.5
27.5°	1743.3	1767.8	1830.2	1882.7	1954.1	1930.6	1842.8	1790.4	1856.4	1941.5	1986.7
30°	1696.3	1712.6	1774.1	1823.8	1910.7	1901.7	1813.9	1753.3	1834.7	1927.9	1932.4
32.5°	1644.7	1662.8	1694.5	1766.9	1850.1	1874.5	1781.3	1716.2	1811.2	1907.1	1869.1
35°	1592.2	1605.8	1631.2	1709.0	1779.5	1833.8	1741.5	1673.7	1794.9	1875.4	1808.5
37.5°	1539.8	1554.3	1576.0	1641.1	1705.3	1795.8	1707.1	1631.2	1765.0	1819.3	1745.1
40°	1490.0	1498.2	1520.8	1561.5	1643.8	1756.9	1668.2	1586.8	1734.3	1747.9	1659.2
42.5°	1398.6	1439.4	1460.2	1492.7	1574.2	1703.5	1623.0	1539.8	1699.9	1676.4	1573.3
45°	1300.0	1388.7	1397.7	1430.3	1512.6	1646.5	1580.5	1493.6	1667.3	1614.9	1491.8
47.5°	1219.5	1283.8	1336.2	1363.4	1439.4	1579.6	1540.7	1454.7	1618.5	1537.1	1412.2
50°	1148.0	1182.4	1277.4	1297.3	1351.6	1499.1	1493.6	1409.5	1550.6	1439.4	1334.4
52.5°	1078.4	1102.8	1188.8	1231.3	1275.6	1412.2	1437.5	1365.2	1476.4	1341.7	1255.7
55°	1017.8	1025.9	1073.0	1162.5	1202.3	1324.5	1376.0	1313.6	1382.4	1248.5	1179.7
57.5°	955.3	948.1	982.5	1097.4	1126.3	1234.9	1310.9	1261.1	1306.4	1153.5	1101.0
60°	890.2	880.3	894.7	970.7	1045.8	1146.2	1234.0	1203.2	1214.1	1059.4	1013.2
62.5°	822.4	812.4	807.9	855.8	967.1	1054.9	1156.2	1139.0	1101.0	973.4	904.7
65°	751.8	741.8	734.6	753.6	880.3	936.4	1069.3	1064.8	977.1	883.0	761.7
67.5°	228.9	674.9	659.5	658.6	741.8	828.7	975.3	968.0	852.2	786.2	655.9
70°	206.3	547.3	581.7	573.6	609.8	719.2	867.6	862.2	731.0	630.6	579.9
72.5°	189.1	193.6	513.9	504.8	513.0	611.6	755.4	740.9	619.7	497.6	501.2
75°	161.9	170.1	177.3	426.1	415.3	506.6	633.3	610.7	511.1	410.7	418.9
77.5°	132.1	142.0	147.5	310.3	335.6	361.0	505.7	475.9	351.9	328.4	156.5
80°	98.6	106.8	115.8	123.9	255.1	252.4	375.4	345.6	245.2	204.5	122.1
82.5°	72.4	75.1	80.5	89.6	101.3	169.2	241.6	212.6	170.1	93.2	84.1
85°	45.2	48.9	51.6	54.3	61.5	101.3	119.4	95.0	71.5	57.0	53.4
87.5°	28.9	28.9	28.0	28.9	29.9	36.2	40.7	38.9	30.8	28.9	28.9
90°	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: 4SNLED-LD5-48HL-RW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (continued):**

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
0°	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0
2.5°	1966.8	1954.1	1954.1	1950.5	1953.2	1953.2	1952.3	1953.2	1959.6	1963.2	1969.5
5°	1965.9	1962.3	1970.4	1980.4	1992.1	2006.6	2010.2	2022.9	2034.6	2050.0	2066.3
7.5°	1977.6	1990.3	2005.7	2022.0	2045.5	2062.7	2078.1	2093.4	2104.3	2118.8	2127.8
10°	1994.8	2020.2	2046.4	2067.2	2092.5	2107.0	2117.0	2118.8	2103.4	2079.0	2059.1
12.5°	2019.3	2049.1	2073.5	2093.4	2105.2	2099.8	2070.8	2041.0	2023.8	1998.5	1963.2
15°	2040.1	2067.2	2092.5	2084.4	2052.7	2022.9	2000.3	1965.0	1930.6	1907.1	1891.7
17.5°	2049.1	2075.4	2066.3	2023.8	1993.9	1959.6	1913.4	1886.3	1863.7	1845.6	1836.5
20°	2054.5	2050.0	2001.2	1970.4	1912.5	1880.8	1851.0	1825.7	1808.5	1799.4	1797.6
22.5°	2040.1	1984.9	1943.3	1888.1	1845.6	1819.3	1795.8	1775.0	1763.2	1756.0	1751.5
25°	1992.1	1927.9	1866.4	1822.9	1786.8	1764.1	1746.0	1728.9	1714.4	1710.8	1701.7
27.5°	1925.2	1872.7	1791.3	1757.8	1726.1	1715.3	1695.4	1678.2	1665.5	1654.7	1625.7
30°	1870.0	1786.8	1728.0	1697.2	1678.2	1665.5	1642.9	1624.8	1603.1	1563.3	1547.0
32.5°	1802.1	1719.8	1663.7	1646.5	1623.0	1612.2	1586.8	1547.0	1513.5	1497.3	1496.4
35°	1714.4	1646.5	1605.8	1590.4	1571.4	1553.3	1500.9	1464.7	1448.4	1450.2	1463.8
37.5°	1641.1	1580.5	1554.3	1532.5	1510.8	1464.7	1420.4	1403.2	1407.7	1416.7	1423.1
40°	1566.9	1520.8	1490.9	1473.7	1424.9	1379.6	1356.1	1362.5	1370.6	1376.9	1385.1
42.5°	1494.5	1462.0	1432.1	1398.6	1331.7	1307.3	1312.7	1320.8	1328.1	1337.1	1345.3
45°	1425.8	1396.8	1362.5	1286.5	1253.0	1259.3	1267.5	1273.8	1284.7	1291.0	1299.1
47.5°	1360.6	1329.9	1269.3	1202.3	1198.7	1211.4	1218.6	1226.8	1234.9	1218.6	672.2
50°	1287.4	1255.7	1163.4	1138.1	1146.2	1158.0	1167.0	1175.2	1046.7	416.2	320.3
52.5°	1215.0	1134.5	1075.7	1082.9	1091.1	1104.6	1111.0	825.1	328.4	313.0	313.9
55°	1134.5	1031.3	1014.2	1023.2	1030.4	1044.0	692.1	303.1	301.3	300.4	307.6
57.5°	1007.8	945.4	952.6	961.7	968.9	683.9	294.9	293.1	294.0	294.9	295.8
60°	894.7	881.2	889.3	897.4	635.1	285.0	279.5	280.5	284.1	281.4	274.1
62.5°	805.2	816.0	824.2	721.9	270.5	267.8	270.5	267.8	261.5	256.9	247.9
65°	736.4	747.3	753.6	254.2	253.3	256.9	254.2	245.2	235.2	222.6	219.8
67.5°	664.0	674.9	241.6	235.2	238.8	234.3	223.5	212.6	205.4	194.5	190.0
70°	589.0	252.4	218.9	218.0	211.7	204.5	192.7	181.8	172.8	168.3	163.7
72.5°	425.2	199.9	197.2	190.0	179.1	169.2	159.2	152.9	148.4	145.7	142.9
75°	177.3	173.7	165.6	152.9	142.0	137.5	130.3	125.8	123.9	118.5	116.7
77.5°	148.4	141.1	129.4	120.3	114.0	111.3	105.8	100.4	97.7	96.8	93.2
80°	114.0	104.0	98.6	94.1	92.3	85.9	79.6	76.9	75.1	74.2	71.5
82.5°	77.8	74.2	70.6	64.2	64.2	61.5	58.8	57.0	55.2	55.2	53.4
85°	50.7	47.9	47.0	44.3	44.3	42.5	41.6	40.7	39.8	38.9	38.0
87.5°	28.9	28.9	29.9	28.9	28.9	28.0	27.1	26.2	25.3	25.3	23.5
90°	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: 4SNLED-LD5-48HL-RW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0
2.5°	1977.6	1986.7	1988.5	2019.3	2036.4	2035.5	2030.1	2046.4	2036.4	2031.0	2036.4
5°	2082.6	2093.4	2102.5	2136.0	2147.7	2153.2	2152.2	2161.3	2154.1	2147.7	2147.7
7.5°	2134.2	2137.8	2141.4	2133.3	2127.8	2118.8	2105.2	2085.3	2075.4	2064.5	2050.9
10°	2049.1	2037.4	2041.9	2025.6	2012.0	2002.1	1989.4	1973.1	1959.6	1949.6	1934.2
12.5°	1945.1	1944.2	1946.0	1948.7	1935.1	1927.0	1917.0	1905.3	1895.3	1884.5	1871.8
15°	1881.7	1882.7	1889.9	1887.2	1882.7	1878.1	1867.3	1863.7	1854.6	1842.8	1835.6
17.5°	1836.5	1841.0	1848.3	1844.7	1837.4	1832.9	1824.8	1816.6	1808.5	1799.4	1788.6
20°	1796.7	1801.2	1805.8	1801.2	1787.7	1781.3	1770.5	1745.1	1727.0	1709.0	1692.7
22.5°	1753.3	1756.0	1752.4	1737.9	1703.5	1687.2	1674.6	1667.3	1652.0	1642.0	1632.1
25°	1699.0	1683.6	1660.1	1643.8	1630.2	1623.0	1617.6	1616.7	1614.9	1613.1	1608.5
27.5°	1610.3	1604.9	1592.2	1585.9	1586.8	1589.5	1590.4	1593.2	1590.4	1586.8	1583.2
30°	1544.3	1547.0	1547.9	1549.7	1554.3	1557.0	1557.9	1561.5	1559.7	1557.0	1555.2
32.5°	1502.7	1509.0	1512.6	1518.1	1520.8	1525.3	1525.3	1530.7	1525.3	1524.4	1522.6
35°	1468.3	1473.7	1475.5	1483.7	1486.4	1490.9	1490.9	1495.4	1490.9	1444.8	1140.8
37.5°	1433.9	1439.4	1443.0	1450.2	1451.1	1453.8	1341.7	981.6	633.3	490.3	374.5
40°	1393.2	1399.6	1403.2	1405.9	987.9	626.9	431.5	351.0	351.0	353.7	356.4
42.5°	1349.8	1354.3	943.6	549.1	342.0	341.1	343.8	346.5	349.2	352.8	356.4
45°	1061.2	535.6	340.2	332.0	334.7	338.4	342.0	345.6	350.1	353.7	355.5
47.5°	348.3	326.6	331.1	327.5	332.0	336.5	340.2	343.8	344.7	345.6	344.7
50°	322.1	322.1	324.8	324.8	328.4	330.2	330.2	330.2	326.6	325.7	323.0
52.5°	311.2	318.4	314.8	316.6	314.8	312.1	309.4	306.7	301.3	299.5	295.8
55°	305.8	308.5	299.5	296.7	293.1	285.9	282.3	278.6	274.1	272.3	267.8
57.5°	293.1	286.8	276.8	272.3	266.0	258.7	255.1	252.4	247.9	246.1	243.4
60°	269.6	256.9	250.6	245.2	237.9	231.6	228.9	227.1	223.5	222.6	219.8
62.5°	240.6	229.8	224.4	217.1	211.7	208.1	205.4	204.5	200.8	200.8	199.0
65°	209.0	203.6	199.0	191.8	189.1	185.5	184.6	183.7	181.8	180.9	179.1
67.5°	183.7	180.0	173.7	170.1	168.3	165.6	163.7	161.9	158.3	156.5	153.8
70°	161.0	158.3	152.0	149.3	145.7	141.1	138.4	136.6	133.9	132.1	129.4
72.5°	139.3	131.2	126.7	123.9	121.2	116.7	115.8	114.0	111.3	110.4	107.7
75°	112.2	105.8	103.1	101.3	98.6	95.9	95.9	95.9	93.2	92.3	91.4
77.5°	89.6	85.9	84.1	82.3	81.4	79.6	76.9	76.0	73.3	73.3	72.4
80°	68.8	66.9	65.1	64.2	63.3	61.5	59.7	58.8	56.1	56.1	55.2
82.5°	50.7	49.8	48.9	47.9	47.0	46.1	43.4	42.5	40.7	40.7	39.8
85°	36.2	35.3	33.5	32.6	32.6	31.7	28.9	28.0	26.2	26.2	26.2
87.5°	22.6	21.7	20.8	19.9	19.0	18.1	16.3	15.4	15.4	13.6	12.7
90°	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: 4SNLED-LD5-48HL-RW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
0°	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0
2.5°	2025.6	2041.0	2039.2	2050.0	2052.7	2058.2	2060.0	2060.9	2047.3	2058.2	2059.1
5°	2145.0	2147.7	2149.5	2154.1	2158.6	2159.5	2155.0	2149.5	2151.3	2147.7	2138.7
7.5°	2049.1	2035.5	2032.8	2029.2	2027.4	2025.6	2017.5	2024.7	2016.5	2012.9	2000.3
10°	1931.5	1918.8	1917.9	1917.9	1920.6	1919.7	1917.9	1914.3	1921.6	1917.0	1914.3
12.5°	1870.0	1865.5	1868.2	1866.4	1873.6	1875.4	1873.6	1873.6	1871.8	1868.2	1870.0
15°	1832.9	1829.3	1832.0	1829.3	1834.7	1835.6	1831.1	1833.8	1829.3	1824.8	1822.9
17.5°	1784.0	1775.9	1769.6	1760.5	1761.4	1759.6	1754.2	1754.2	1749.7	1737.9	1738.8
20°	1690.0	1681.8	1678.2	1678.2	1682.7	1684.5	1683.6	1685.4	1680.9	1679.1	1671.9
22.5°	1631.2	1630.2	1632.1	1636.6	1643.8	1653.8	1654.7	1654.7	1654.7	1653.8	1644.7
25°	1610.3	1610.3	1612.2	1618.5	1623.9	1631.2	1633.0	1634.8	1633.0	1633.0	1624.8
27.5°	1586.8	1585.0	1588.6	1595.0	1601.3	1606.7	1611.2	1612.2	1609.4	1609.4	1612.2
30°	1557.9	1557.0	1561.5	1567.8	1573.3	1578.7	1583.2	1586.8	1583.2	1583.2	1580.5
32.5°	1528.0	1528.0	1529.8	1491.8	1383.3	1245.8	1248.5	1168.9	1113.7	1044.0	1136.3
35°	953.5	693.9	596.2	504.8	440.6	399.0	398.1	384.5	378.2	373.6	372.7
37.5°	360.1	361.9	365.5	367.3	370.0	371.8	372.7	372.7	372.7	372.7	371.8
40°	359.2	362.8	365.5	368.2	370.9	372.7	372.7	373.6	374.5	374.5	374.5
42.5°	360.1	363.7	367.3	370.0	371.8	372.7	373.6	374.5	374.5	374.5	374.5
45°	359.2	361.0	361.0	361.9	361.9	361.9	362.8	362.8	361.9	361.0	362.8
47.5°	345.6	345.6	342.9	342.0	341.1	339.3	340.2	339.3	338.4	337.4	339.3
50°	322.1	318.4	316.6	314.8	313.9	312.1	313.0	312.1	311.2	309.4	312.1
52.5°	294.0	293.1	289.5	287.7	286.8	287.7	285.9	285.0	284.1	283.2	284.1
55°	266.9	263.3	262.4	260.5	259.6	260.5	259.6	258.7	257.8	256.9	257.8
57.5°	242.5	239.7	238.8	237.0	237.0	237.0	237.0	236.1	235.2	234.3	235.2
60°	218.9	217.1	216.2	216.2	215.3	215.3	215.3	214.4	213.5	213.5	214.4
62.5°	199.0	199.0	196.3	195.4	195.4	196.3	195.4	194.5	193.6	192.7	194.5
65°	178.2	174.6	173.7	171.9	170.1	171.0	170.1	169.2	168.3	167.4	169.2
67.5°	152.9	152.0	148.4	146.6	145.7	146.6	145.7	144.7	143.8	142.9	144.7
70°	128.5	128.5	124.8	123.9	123.0	123.0	122.1	122.1	121.2	120.3	122.1
72.5°	106.8	106.8	105.8	104.0	103.1	102.2	101.3	100.4	100.4	101.3	101.3
75°	88.7	86.8	83.2	84.1	83.2	82.3	82.3	81.4	80.5	82.3	81.4
77.5°	69.7	68.8	66.0	66.9	66.0	65.1	65.1	64.2	63.3	64.2	64.2
80°	52.5	52.5	51.6	50.7	50.7	49.8	48.9	48.9	47.9	48.9	48.9
82.5°	38.0	38.0	37.1	36.2	35.3	35.3	34.4	34.4	34.4	34.4	34.4
85°	24.4	23.5	23.5	21.7	21.7	21.7	20.8	20.8	20.8	20.8	20.8
87.5°	11.8	11.8	10.9	10.9	10.0	9.0	9.0	8.1	8.1	9.0	9.0
90°	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: 4SNLED-LD5-48HL-RW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0
2.5°	2042.8	2054.5	2044.6	2049.1	2050.0	2065.4	2064.5	2068.1	2061.8	2054.5	2044.6
5°	2146.8	2141.4	2134.2	2151.3	2142.3	2153.2	2156.8	2164.0	2164.0	2163.1	2155.0
7.5°	2013.8	2002.1	2011.1	2017.5	2020.2	2012.9	2027.4	2043.7	2057.3	2065.4	2066.3
10°	1909.8	1913.4	1912.5	1915.2	1921.6	1920.6	1929.7	1938.7	1942.4	1947.8	1949.6
12.5°	1860.9	1860.0	1861.8	1868.2	1871.8	1870.9	1879.9	1885.4	1887.2	1888.1	1887.2
15°	1822.0	1815.7	1820.2	1821.1	1823.8	1823.8	1834.7	1842.8	1846.5	1848.3	1846.5
17.5°	1748.8	1733.4	1747.9	1747.9	1757.8	1756.0	1773.2	1786.8	1794.0	1799.4	1799.4
20°	1676.4	1669.1	1674.6	1672.8	1680.0	1679.1	1690.0	1699.0	1705.3	1709.9	1715.3
22.5°	1647.4	1649.2	1641.1	1642.0	1642.0	1641.1	1646.5	1651.1	1652.9	1655.6	1653.8
25°	1628.4	1630.2	1627.5	1623.0	1621.2	1623.0	1625.7	1631.2	1632.1	1630.2	1623.9
27.5°	1609.4	1604.0	1608.5	1600.4	1598.6	1602.2	1605.8	1606.7	1607.6	1607.6	1602.2
30°	1580.5	1576.0	1580.5	1576.9	1573.3	1576.9	1579.6	1579.6	1581.4	1582.3	1576.0
32.5°	1104.6	1113.7	1260.2	1348.9	1473.7	1537.1	1548.8	1548.8	1550.6	1550.6	1545.2
35°	376.3	377.3	408.0	442.4	515.7	606.1	724.7	786.2	994.3	1243.0	1483.7
37.5°	371.8	370.9	370.0	369.1	368.2	367.3	365.5	364.6	370.0	438.8	595.3
40°	373.6	372.7	370.9	370.0	369.1	367.3	366.4	364.6	362.8	361.0	359.2
42.5°	373.6	372.7	371.8	370.9	370.0	369.1	367.3	365.5	363.7	361.0	358.3
45°	361.0	361.0	361.9	361.9	362.8	362.8	362.8	361.9	361.9	361.0	357.4
47.5°	337.4	337.4	340.2	340.2	342.0	343.8	343.8	345.6	348.3	350.1	351.0
50°	310.3	310.3	313.0	313.9	315.7	318.4	321.2	322.1	324.8	328.4	332.0
52.5°	283.2	283.2	285.9	285.9	287.7	290.4	293.1	294.0	297.6	301.3	305.8
55°	257.8	257.8	259.6	260.5	261.5	263.3	266.0	266.0	269.6	272.3	276.8
57.5°	235.2	237.0	237.0	237.0	237.9	239.7	241.6	241.6	244.3	247.0	250.6
60°	213.5	215.3	215.3	215.3	216.2	217.1	218.9	218.9	220.7	222.6	226.2
62.5°	193.6	195.4	195.4	196.3	196.3	197.2	199.0	198.1	199.9	200.8	203.6
65°	168.3	170.1	171.0	171.9	172.8	174.6	177.3	176.4	179.1	180.9	183.7
67.5°	143.8	145.7	145.7	146.6	147.5	149.3	151.1	151.1	153.8	155.6	159.2
70°	121.2	123.0	123.0	123.9	124.8	126.7	128.5	127.6	130.3	132.1	134.8
72.5°	100.4	102.2	102.2	103.1	103.1	104.9	106.8	108.6	108.6	110.4	112.2
75°	81.4	82.3	83.2	83.2	84.1	85.0	86.8	88.7	89.6	90.5	92.3
77.5°	64.2	65.1	66.0	66.0	66.9	67.9	68.8	72.4	74.2	75.1	75.1
80°	48.9	49.8	49.8	49.8	50.7	51.6	53.4	53.4	57.0	57.0	57.9
82.5°	34.4	35.3	35.3	35.3	36.2	38.0	38.9	39.8	41.6	42.5	42.5
85°	20.8	21.7	21.7	21.7	22.6	23.5	25.3	26.2	27.1	27.1	28.0
87.5°	8.1	9.0	10.0	10.0	10.9	11.8	12.7	13.6	14.5	14.5	15.4
90°	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#

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**CANDELA DISTRIBUTION (continued):**

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
0°	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0
2.5°	2033.7	2040.1	2033.7	2037.4	2041.9	2033.7	2014.7	2007.5	2004.8	1993.9	1986.7
5°	2146.8	2146.8	2144.1	2151.3	2150.4	2137.8	2117.9	2108.8	2099.8	2088.0	2079.0
7.5°	2066.3	2073.5	2078.1	2106.1	2124.2	2126.0	2138.7	2141.4	2145.0	2141.4	2136.0
10°	1950.5	1947.8	1960.5	1986.7	2002.1	2010.2	2034.6	2046.4	2056.4	2076.3	2097.1
12.5°	1885.4	1889.0	1894.4	1913.4	1927.9	1924.3	1934.2	1942.4	1954.1	1974.0	2003.9
15°	1841.9	1845.6	1851.0	1865.5	1874.5	1870.0	1875.4	1880.8	1889.0	1898.9	1917.0
17.5°	1794.9	1801.2	1807.6	1822.9	1831.1	1830.2	1834.7	1836.5	1839.2	1845.6	1858.2
20°	1721.6	1741.5	1754.2	1775.0	1786.8	1784.9	1793.1	1795.8	1799.4	1805.8	1811.2
22.5°	1654.7	1660.1	1666.4	1689.1	1709.0	1733.4	1738.8	1746.0	1755.1	1761.4	1766.9
25°	1616.7	1613.1	1615.8	1631.2	1642.0	1643.8	1652.0	1675.5	1699.9	1710.8	1723.4
27.5°	1594.1	1590.4	1589.5	1596.8	1598.6	1594.1	1592.2	1599.5	1617.6	1635.7	1673.7
30°	1569.6	1565.1	1561.5	1567.8	1570.5	1564.2	1552.4	1546.1	1557.0	1561.5	1576.9
32.5°	1540.7	1536.2	1534.3	1538.0	1539.8	1534.3	1521.7	1514.4	1512.6	1509.0	1512.6
35°	1508.1	1503.6	1500.9	1501.8	1505.4	1500.9	1490.0	1481.0	1476.4	1466.5	1459.3
37.5°	777.1	1101.0	1429.4	1463.8	1467.4	1466.5	1455.6	1445.7	1441.2	1429.4	1425.8
40°	355.5	397.2	596.2	778.9	1123.6	1427.6	1417.6	1407.7	1399.6	1395.9	1382.4
42.5°	354.6	355.5	356.4	351.9	436.1	742.7	1096.5	1368.8	1363.4	1354.3	1344.4
45°	354.6	350.1	353.7	348.3	350.1	349.2	435.2	702.0	1249.4	1305.5	1300.9
47.5°	351.0	348.3	351.9	347.4	342.0	344.7	341.1	345.6	539.2	914.6	1253.0
50°	334.7	336.5	342.9	342.0	337.4	341.1	334.7	340.2	335.6	368.2	709.3
52.5°	310.3	313.9	320.3	325.7	327.5	332.0	330.2	332.0	328.4	329.3	330.2
55°	281.4	285.9	291.3	299.5	303.1	310.3	315.7	318.4	323.0	322.1	314.8
57.5°	254.2	258.7	263.3	271.4	279.5	283.2	293.1	298.5	310.3	307.6	305.8
60°	228.9	232.5	237.0	238.8	248.8	255.1	264.2	269.6	285.0	288.6	294.0
62.5°	206.3	208.1	211.7	214.4	220.7	227.1	231.6	240.6	248.8	260.5	268.7
65°	185.5	187.3	190.0	191.8	192.7	201.7	204.5	214.4	217.1	229.8	237.0
67.5°	161.9	165.6	169.2	171.0	172.8	178.2	180.0	184.6	190.9	196.3	205.4
70°	137.5	140.2	143.8	146.6	150.2	153.8	159.2	161.9	166.5	170.1	177.3
72.5°	114.9	117.6	119.4	122.1	124.8	127.6	132.1	138.4	142.0	148.4	150.2
75°	93.2	95.9	97.7	99.5	102.2	104.0	105.8	112.2	115.8	121.2	126.7
77.5°	76.9	76.9	78.7	84.1	83.2	83.2	85.0	88.7	91.4	95.0	100.4
80°	59.7	60.6	61.5	66.0	66.9	67.9	66.9	69.7	72.4	73.3	76.9
82.5°	44.3	45.2	45.2	47.9	50.7	50.7	50.7	51.6	54.3	55.2	57.0
85°	29.9	30.8	31.7	32.6	34.4	35.3	36.2	36.2	38.0	38.9	39.8
87.5°	16.3	18.1	19.0	19.9	20.8	21.7	22.6	23.5	24.4	25.3	26.2
90°	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#

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**CANDELA DISTRIBUTION (continued):**

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0	1974.0
2.5°	1984.0	1979.5	1976.7	1969.5	1967.7	1955.9	1957.7	1955.9	1955.9	1958.6	1967.7
5°	2069.0	2047.3	2041.9	2026.5	2013.8	1992.1	1978.5	1971.3	1960.5	1955.9	1962.3
7.5°	2126.9	2110.6	2097.1	2083.5	2065.4	2040.1	2021.1	1999.4	1981.3	1964.1	1959.6
10°	2117.0	2135.1	2135.1	2126.9	2109.7	2084.4	2061.8	2034.6	2003.0	1975.8	1959.6
12.5°	2032.8	2064.5	2089.8	2108.8	2126.0	2108.8	2086.2	2064.5	2029.2	1989.4	1959.6
15°	1940.6	1973.1	2004.8	2044.6	2086.2	2103.4	2102.5	2077.2	2045.5	2003.9	1962.3
17.5°	1875.4	1898.0	1915.2	1958.6	2009.3	2053.6	2083.5	2085.3	2054.5	2017.5	1963.2
20°	1826.6	1842.8	1857.3	1881.7	1926.1	1980.4	2035.5	2066.3	2060.9	2020.2	1965.9
22.5°	1782.2	1794.0	1805.8	1823.8	1859.1	1894.4	1958.6	2022.0	2049.1	2015.6	1963.2
25°	1737.9	1750.6	1759.6	1772.3	1800.3	1829.3	1874.5	1953.2	2013.8	2012.0	1957.7
27.5°	1685.4	1702.6	1713.5	1730.7	1749.7	1771.4	1802.1	1876.3	1963.2	1993.9	1943.3
30°	1622.1	1647.4	1663.7	1682.7	1699.0	1718.0	1742.4	1787.7	1895.3	1958.6	1927.9
32.5°	1530.7	1576.0	1612.2	1630.2	1648.3	1664.6	1686.3	1724.3	1812.1	1910.7	1910.7
35°	1465.6	1486.4	1519.0	1571.4	1594.1	1610.3	1630.2	1660.1	1716.2	1853.7	1882.7
37.5°	1414.9	1423.1	1439.4	1490.9	1533.4	1559.7	1579.6	1598.6	1653.8	1775.9	1846.5
40°	1376.9	1374.2	1372.4	1396.8	1457.5	1499.1	1521.7	1540.7	1583.2	1682.7	1798.5
42.5°	1332.6	1329.9	1320.8	1327.2	1357.0	1426.7	1461.1	1481.9	1517.2	1585.0	1746.0
45°	1286.5	1281.9	1278.3	1272.0	1282.8	1321.7	1392.3	1423.1	1443.0	1503.6	1680.0
47.5°	1239.4	1233.1	1228.6	1223.1	1216.8	1234.9	1301.8	1357.0	1391.4	1429.4	1600.4
50°	1172.5	1180.6	1175.2	1168.9	1163.4	1159.8	1187.9	1278.3	1320.8	1351.6	1503.6
52.5°	552.8	1074.8	1120.0	1113.7	1106.4	1100.1	1106.4	1175.2	1252.1	1276.5	1386.9
55°	314.8	478.6	996.1	1053.1	1046.7	1037.7	1032.2	1055.8	1170.7	1203.2	1280.1
57.5°	303.1	304.0	439.7	949.0	984.3	976.2	969.8	975.3	1073.0	1128.1	1186.9
60°	293.1	293.1	293.1	419.8	907.4	910.1	902.0	892.9	935.4	1044.0	1092.9
62.5°	271.4	276.8	279.5	279.5	414.3	840.5	832.3	829.6	831.4	942.7	998.8
65°	243.4	256.0	261.5	265.1	265.1	435.2	760.8	756.3	750.0	792.5	903.8
67.5°	212.6	225.3	237.0	244.3	245.2	253.3	454.2	681.2	672.2	673.1	802.5
70°	180.9	191.8	204.5	215.3	225.3	229.8	237.0	565.4	595.3	582.6	687.6
72.5°	156.5	161.0	170.1	180.9	192.7	203.6	209.9	225.3	516.6	503.0	522.9
75°	130.3	133.9	140.2	147.5	156.5	169.2	180.0	190.9	274.1	421.6	418.9
77.5°	101.3	107.7	114.9	119.4	123.9	133.0	147.5	158.3	169.2	285.0	335.6
80°	77.8	82.3	85.9	90.5	95.9	102.2	107.7	120.3	133.0	142.9	256.9
82.5°	57.9	60.6	63.3	65.1	66.9	70.6	80.5	85.0	93.2	102.2	121.2
85°	40.7	42.5	44.3	45.2	46.1	47.0	50.7	51.6	59.7	61.5	73.3
87.5°	26.2	27.1	28.9	29.9	29.9	30.8	31.7	31.7	31.7	29.9	36.2
90°	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: 4SNLED-LD5-48HL-RW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (continued):**

	357.5°	360°
0°	1974.0	1974.0
2.5°	1974.9	1989.4
5°	1972.2	1991.2
7.5°	1965.0	1983.1
10°	1954.1	1975.8
12.5°	1942.4	1963.2
15°	1932.4	1947.8
17.5°	1921.6	1930.6
20°	1907.1	1914.3
22.5°	1892.6	1889.0
25°	1876.3	1868.2
27.5°	1855.5	1840.1
30°	1836.5	1809.4
32.5°	1818.4	1774.1
35°	1794.0	1737.9
37.5°	1768.7	1700.8
40°	1738.8	1658.3
42.5°	1707.1	1615.8
45°	1667.3	1575.1
47.5°	1632.1	1526.2
50°	1583.2	1473.7
52.5°	1523.5	1424.9
55°	1452.9	1365.2
57.5°	1376.9	1302.7
60°	1295.5	1231.3
62.5°	1196.9	1157.1
65°	1081.1	1072.1
67.5°	930.0	978.0
70°	762.7	870.3
72.5°	637.8	756.3
75°	522.9	628.8
77.5°	414.3	493.1
80°	258.7	361.0
82.5°	173.7	237.0
85°	104.9	113.1
87.5°	40.7	41.6
90°	0.0	0.0

(END OF REPORT)