

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1212994

Luminaire Tested: 2SNLED-LD5-32HL-RM-UNV-L930-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1212994
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33524)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2SNLED-LD5-32HL-RM-UNV-L930-CD1-U
Description: 2FT LINEAR SNLED LED FIXTURE
METALIC FINISH REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

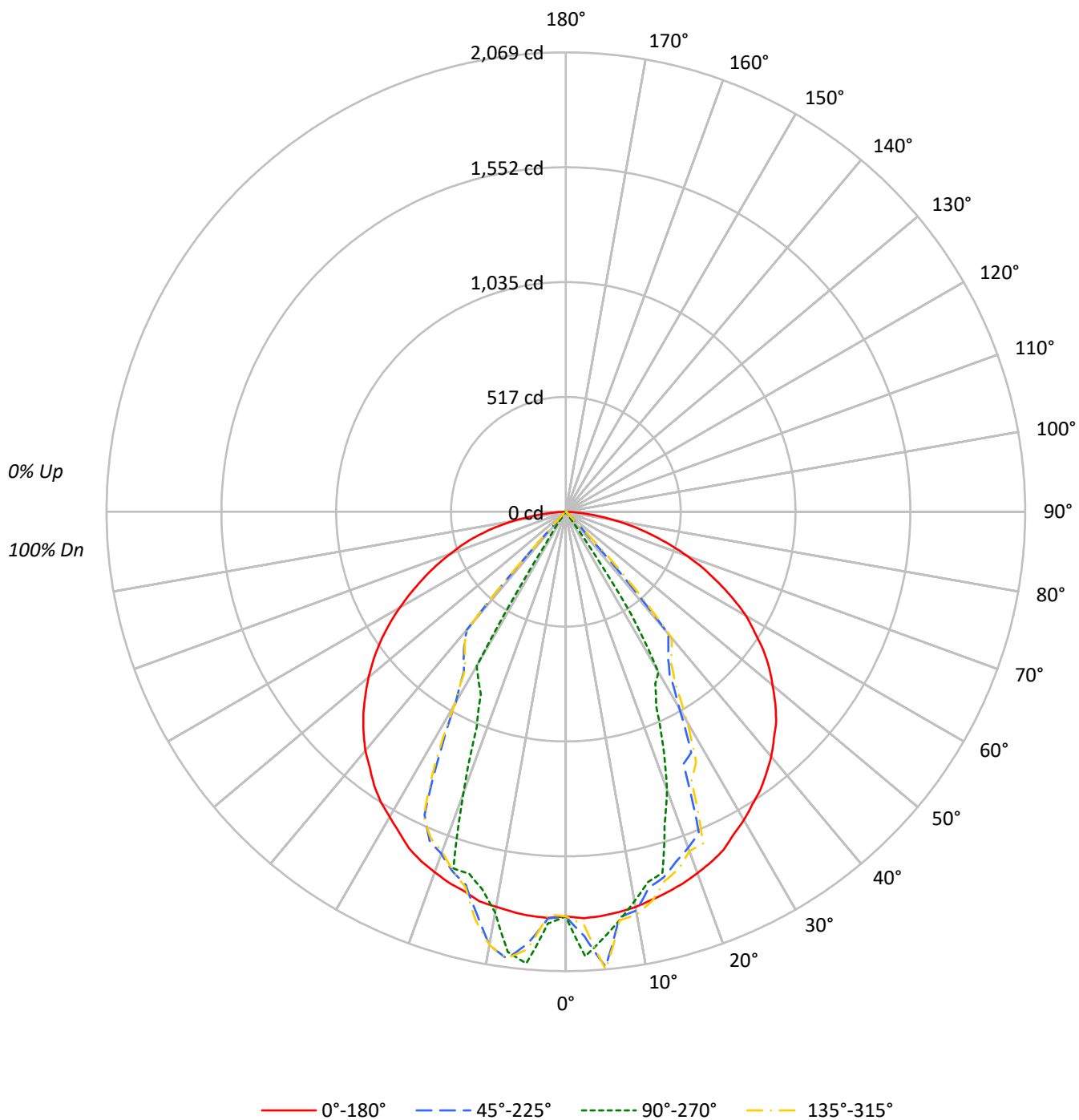
Lumens per Lamp: N/A
Luminaire Lumens: 2590.9 lumens
Efficiency: N/A
Efficacy: 96.0 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 0.81 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2' x H: 0.12')
CIE Type: Direct

Input Watts (W): 27
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: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	112	108	105	103	109	106	103	101	102	100	98		98	96	95		95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86		90	87	84		87	85	82	81
3	98	90	83	78	95	88	82	78	85	80	76		83	79	75		80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	69		76	72	68		74	70	67	65
5	85	75	68	63	84	74	68	63	72	66	62		71	65	61		69	64	61	59
6	80	69	62	57	79	69	62	57	67	61	56		65	60	56		64	59	55	54
7	75	64	57	52	74	64	57	52	62	56	52		61	55	51		60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	47		57	51	47		56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44		53	48	44		52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41		50	44	41		49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	29450	29450	29450	29450
5°	29491	30290	29481	32076
10°	29339	27408	29321	28199
15°	29178	25582	29105	25649
20°	29127	20150	29042	20398
25°	29119	14583	28977	13760
30°	28892	12792	28586	12297
35°	28872	281	28449	342
40°	28855	61	28164	61
45°	28822	37	27740	27
50°	28448	28	27142	28
55°	28096	20	26370	20
60°	27338	22	25203	22
65°	25636	34	23808	23
70°	23423	37	22298	37
75°	20244	42	20573	42
80°	15784	48	16684	48
85°	8459	56	8632	56

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 2°

Vertical Angle: 45°

Luminance: 31135 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.8	7.1
10°-20°	498.7	19.2
20°-30°	634.5	24.5
30°-40°	536.0	20.7
40°-50°	350.4	13.5
50°-60°	220.8	8.5
60°-70°	117.5	4.5
70°-80°	42.8	1.7
80°-90°	7.4	0.3
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°	1316.0	50.8
0°-40°	1852.0	71.5
0°-60°	2423.2	93.5
0°-90°	2590.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2590.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1822	1822	1822	1822	1822	
5°	1828	1928	1827	2042	1828	174
15°	1773	1683	1769	1687	1773	501
25°	1680	961	1672	907	1680	773
35°	1527	18	1505	22	1527	956
45°	1340	2	1290	2	1340	1030
55°	1086	1	1019	1	1086	968
65°	760	2	706	1	760	753
75°	400	2	406	2	400	424
85°	78	2	80	2	78	99
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°
0°	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2
2.5°	1832.6	1833.7	1834.2	1835.3	1837.0	1837.5	1838.6	1837.5	1837.5	1837.5	1837.5
5°	1827.7	1829.8	1831.5	1833.7	1837.5	1838.0	1842.4	1843.0	1845.2	1849.5	1852.8
7.5°	1819.5	1821.6	1824.9	1830.4	1835.9	1841.9	1849.5	1857.7	1869.2	1880.2	1893.8
10°	1807.4	1810.2	1814.0	1818.9	1845.7	1849.5	1866.5	1890.0	1896.6	1931.0	1956.7
12.5°	1789.9	1799.2	1809.1	1813.4	1839.1	1879.6	1936.5	1925.0	1912.4	2025.1	2023.4
15°	1773.0	1785.5	1780.6	1816.2	1839.7	1910.2	1886.2	1937.6	2031.6	2008.7	2009.8
17.5°	1754.9	1757.7	1785.0	1814.5	1856.6	1892.7	1922.3	1992.8	2011.4	2013.0	1992.8
20°	1732.0	1745.1	1785.0	1811.8	1882.9	1899.8	1963.8	1999.9	1992.3	1973.7	1939.2
22.5°	1708.4	1748.4	1788.8	1826.6	1876.3	1921.7	1953.4	1970.4	1930.5	1857.2	1817.8
25°	1680.5	1704.1	1757.1	1812.3	1874.7	1900.9	1919.5	1892.2	1840.2	1774.6	1708.4
27.5°	1637.3	1675.1	1742.9	1805.2	1861.6	1893.3	1863.2	1797.6	1713.9	1670.7	1640.6
30°	1604.0	1653.2	1709.0	1769.1	1827.7	1846.2	1769.7	1694.8	1637.3	1594.1	1587.6
32.5°	1563.5	1633.5	1686.6	1744.0	1793.2	1768.6	1694.2	1597.4	1549.8	1533.4	1540.0
35°	1527.4	1580.5	1649.9	1706.2	1741.8	1686.6	1569.0	1508.8	1485.9	1495.2	1483.1
37.5°	1484.2	1554.2	1618.2	1666.9	1654.8	1571.7	1472.2	1433.9	1436.6	1429.0	1406.0
40°	1439.4	1506.1	1572.8	1618.7	1576.6	1449.8	1383.6	1375.4	1377.0	1352.4	1319.6
42.5°	1386.9	1447.6	1514.3	1555.9	1465.1	1366.1	1321.2	1322.3	1308.1	1273.7	1256.2
45°	1339.8	1395.6	1465.1	1468.9	1357.3	1274.8	1261.6	1247.4	1215.7	1204.2	1191.1
47.5°	1279.7	1341.5	1398.9	1378.1	1251.8	1200.4	1190.5	1159.4	1143.5	1134.8	1123.8
50°	1215.7	1278.0	1330.5	1271.5	1152.3	1140.2	1108.0	1083.4	1072.4	1063.1	1053.3
52.5°	1155.0	1206.4	1260.0	1158.3	1075.7	1064.2	1027.6	1013.4	1002.4	992.0	989.8
55°	1086.1	1131.5	1168.1	1050.5	1002.4	975.6	949.4	939.5	929.1	924.2	932.4
57.5°	1007.9	1059.3	1053.8	944.5	923.1	884.3	874.5	867.9	860.2	863.5	795.2
60°	937.3	976.7	949.9	866.8	830.7	804.5	795.7	791.3	795.7	729.0	640.9
62.5°	850.4	894.7	840.5	776.0	737.7	725.2	717.5	723.5	659.5	586.2	564.9
65°	760.2	808.3	728.4	678.7	654.6	643.7	643.1	592.3	529.4	500.9	500.9
67.5°	673.2	723.0	620.2	578.6	569.3	570.4	538.7	461.6	444.1	424.9	369.7
70°	580.8	624.5	512.4	487.3	481.8	478.0	400.9	380.1	359.3	308.4	304.1
72.5°	488.9	510.2	411.8	405.8	404.7	336.3	321.0	285.5	261.4	255.4	252.7
75°	399.8	393.2	325.4	330.9	278.9	254.8	230.2	209.5	206.2	204.0	50.9
77.5°	315.5	282.7	256.5	223.1	199.6	169.5	164.6	161.3	106.1	38.3	31.2
80°	229.7	183.2	170.6	144.9	123.6	118.7	121.4	37.2	29.5	24.6	21.3
82.5°	146.0	117.0	95.7	83.7	81.5	35.5	26.2	21.3	18.6	15.9	13.1
85°	78.2	52.0	48.1	40.5	24.1	16.4	13.7	10.4	8.7	7.1	6.6
87.5°	24.6	20.8	17.0	13.7	8.2	5.5	4.4	3.8	3.3	2.7	2.7
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):

	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°	25°
0°	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2
2.5°	1836.4	1837.5	1837.0	1838.6	1838.6	1840.8	1842.4	1844.1	1847.3	1849.0	1861.6
5°	1859.9	1862.7	1870.9	1878.5	1887.8	1890.5	1906.4	1910.2	1928.8	1931.0	1992.3
7.5°	1912.4	1922.8	1942.5	1962.2	1981.9	1994.5	2016.3	2030.0	2044.8	2057.9	2106.6
10°	1975.9	1993.4	2012.5	2032.2	2043.7	2067.7	2080.9	2083.0	2079.2	2057.9	1979.1
12.5°	2038.2	2055.7	2047.5	2051.3	2065.0	2022.3	2028.4	1997.7	2019.1	1913.5	1835.3
15°	2029.5	2028.4	2008.1	1942.5	1953.4	1872.0	1839.1	1814.0	1834.2	1823.3	1811.2
17.5°	2003.2	1953.4	1918.4	1839.7	1806.3	1783.4	1783.9	1784.5	1774.6	1785.0	1754.4
20°	1892.2	1836.4	1784.5	1756.6	1746.7	1730.3	1738.5	1730.3	1730.9	1734.1	1687.1
22.5°	1744.5	1727.6	1697.5	1706.2	1703.0	1717.7	1706.8	1689.8	1695.3	1670.7	1635.2
25°	1684.9	1665.2	1664.1	1667.4	1662.5	1655.9	1646.1	1620.4	1618.7	1611.1	1594.7
27.5°	1624.8	1625.9	1629.1	1619.3	1601.8	1588.7	1573.9	1561.3	1566.2	1557.5	1535.1
30°	1583.2	1582.7	1563.0	1554.2	1522.0	1522.5	1518.7	1511.0	1506.1	1506.6	1492.4
32.5°	1524.1	1507.2	1484.8	1473.8	1471.1	1461.2	1453.6	1455.2	1459.1	1445.4	1460.2
35°	1463.4	1428.4	1425.2	1415.9	1407.1	1400.5	1403.3	1392.3	1391.8	1390.2	1269.8
37.5°	1382.0	1365.0	1363.4	1353.5	1347.5	1345.9	1335.5	1337.1	1342.0	1350.8	1082.8
40°	1314.7	1299.4	1295.5	1295.0	1281.9	1280.8	1283.5	1293.9	1301.0	1246.3	1032.0
42.5°	1242.5	1243.6	1231.6	1223.9	1225.5	1230.5	1243.6	1207.5	1046.2	997.0	943.4
45°	1180.7	1175.2	1168.7	1166.5	1180.7	1170.9	1026.5	947.2	928.0	925.9	775.5
47.5°	1116.2	1114.5	1111.8	1113.4	1032.5	920.4	887.6	877.2	880.5	878.3	666.1
50°	1051.1	1053.3	1053.3	919.8	844.4	825.8	828.5	837.8	779.8	727.9	620.7
52.5°	994.8	977.8	837.8	789.7	772.7	780.9	761.2	688.5	636.0	605.4	574.2
55°	890.3	765.6	734.5	726.8	732.8	660.1	615.2	568.2	554.5	551.2	533.2
57.5°	700.5	675.4	678.1	647.5	578.0	537.0	519.0	512.4	506.4	502.0	43.7
60°	619.6	626.7	573.7	508.0	480.2	474.7	470.3	464.3	463.2	455.5	27.9
62.5°	567.1	498.7	452.8	436.4	429.8	428.2	420.0	417.3	354.4	48.7	20.8
65°	427.7	399.8	391.0	387.2	380.1	380.1	315.5	49.8	40.5	35.0	18.6
67.5°	348.9	346.7	342.3	337.4	229.7	48.1	42.1	36.6	31.7	27.9	16.4
70°	295.3	294.2	268.0	49.2	41.0	36.1	31.7	28.4	26.2	23.5	14.8
72.5°	242.3	49.2	41.6	36.1	31.2	28.4	25.7	23.0	20.8	19.1	12.0
75°	37.7	33.4	29.5	26.8	24.6	21.9	19.7	18.0	17.5	15.3	8.2
77.5°	27.3	23.5	21.3	19.1	17.0	15.3	13.1	11.5	10.4	8.7	6.0
80°	19.1	17.0	15.3	12.6	10.9	9.3	8.2	7.1	6.6	5.5	2.7
82.5°	10.9	9.3	8.2	6.6	6.0	4.9	4.4	3.8	3.8	2.7	2.7
85°	4.9	4.9	3.8	3.3	2.7	2.7	2.7	2.2	2.2	1.6	1.6
87.5°	2.2	2.2	2.2	2.2	2.2	1.6	1.6	1.6	1.6	1.6	1.1
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):

	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°
0°	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2
2.5°	1879.1	1886.2	1899.8	1914.1	1898.2	1955.1	1950.7	1969.8	1980.2	1985.2	1996.6
5°	2046.4	2078.1	2088.5	2057.3	2039.3	2020.7	1978.6	1946.9	1950.7	1940.3	1902.6
7.5°	2043.1	1975.3	1884.0	1842.4	1839.1	1834.2	1847.3	1855.0	1856.1	1855.5	1854.5
10°	1870.3	1835.3	1829.3	1823.8	1826.0	1805.8	1796.5	1770.2	1784.5	1776.8	1779.5
12.5°	1817.8	1809.6	1777.3	1732.5	1759.3	1739.1	1727.6	1735.2	1726.5	1718.3	1715.5
15°	1786.6	1733.6	1715.5	1704.6	1697.0	1692.6	1696.4	1687.7	1684.9	1683.3	1687.1
17.5°	1722.1	1700.8	1681.1	1652.1	1652.7	1651.0	1662.0	1678.4	1679.5	1595.2	1519.2
20°	1671.2	1653.7	1628.6	1610.5	1635.2	1591.4	1422.4	1342.0	1329.5	1329.5	1331.6
22.5°	1630.8	1592.0	1593.6	1565.2	1334.9	1287.9	1289.0	1293.9	1271.5	1194.9	1186.7
25°	1575.5	1569.5	1449.8	1252.9	1254.5	1217.9	1161.6	1082.3	996.4	996.4	982.2
27.5°	1534.0	1406.6	1231.6	1223.4	1100.3	1022.7	974.5	901.8	892.0	882.7	883.7
30°	1498.4	1190.0	1194.4	1022.7	931.9	867.3	863.5	851.5	845.5	843.8	837.8
32.5°	1184.5	1158.8	999.7	870.6	835.1	824.7	819.8	806.1	805.5	795.2	723.0
35°	1110.7	1017.2	836.7	801.7	791.3	781.5	773.3	519.0	61.2	24.6	21.3
37.5°	1026.5	849.8	773.8	758.0	748.1	552.9	55.2	19.1	13.7	9.8	8.7
40°	870.1	759.1	735.0	717.5	295.9	19.1	12.0	9.3	5.5	4.9	4.4
42.5°	733.9	715.3	689.6	210.0	21.9	9.3	6.0	4.4	3.8	3.8	3.3
45°	686.9	670.5	277.8	20.8	13.7	4.4	3.8	3.8	3.3	2.2	2.2
47.5°	643.1	566.0	25.2	13.1	8.7	3.8	3.3	2.2	2.2	2.2	1.6
50°	596.6	31.2	17.5	9.8	5.5	2.2	2.2	2.2	2.2	1.6	1.6
52.5°	111.6	21.9	14.2	8.7	2.7	2.2	2.2	2.2	1.6	1.6	1.6
55°	26.2	17.5	13.1	7.7	2.2	2.2	2.2	1.6	1.6	1.6	1.1
57.5°	19.7	13.1	10.4	7.1	2.2	1.6	1.6	1.6	1.6	1.6	1.1
60°	16.4	9.3	8.2	6.6	1.6	1.6	1.6	1.6	1.6	1.6	1.1
62.5°	11.5	7.7	6.0	4.9	1.6	1.6	1.6	1.6	1.6	1.6	1.6
65°	9.3	6.0	4.9	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
67.5°	8.2	4.9	3.3	1.1	1.6	1.6	1.6	1.6	1.6	1.6	1.6
70°	6.6	1.6	1.6	1.1	1.6	1.6	1.6	1.6	1.6	1.6	1.6
72.5°	5.5	1.6	1.1	1.1	1.6	1.6	1.6	1.6	1.6	1.6	1.6
75°	5.5	2.7	1.1	1.1	1.6	1.6	2.2	2.2	1.6	1.6	1.6
77.5°	3.8	2.7	1.1	1.1	1.6	1.6	2.2	2.2	1.6	1.6	1.6
80°	2.2	2.7	1.1	1.6	1.6	3.3	3.8	2.2	1.6	1.6	1.6
82.5°	2.2	2.7	3.3	3.3	1.6	2.7	3.3	2.7	2.2	1.6	1.6
85°	2.2	1.6	2.2	2.7	1.6	2.7	2.7	2.2	2.2	1.6	1.6
87.5°	1.1	1.6	1.6	2.2	2.2	2.2	2.7	2.2	2.2	2.2	1.6
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: P1212994

CATALOG NUMBER: 2SNLED-LD5-32HL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	85°	90°	95°	100°	105°	110°	115°	120°	125°	130°	135°
0°	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2
2.5°	2002.1	2004.3	1969.8	1957.8	1968.2	1966.0	1956.7	1922.3	1918.4	1895.5	1862.1
5°	1913.5	1928.3	1910.2	1941.4	1926.6	1941.4	1986.2	2007.0	2040.9	2061.7	2069.4
7.5°	1851.7	1855.0	1855.0	1857.7	1860.5	1861.0	1857.7	1855.5	1846.2	1834.8	1855.5
10°	1776.8	1780.6	1787.2	1786.1	1785.5	1797.0	1799.8	1823.3	1822.2	1826.6	1842.4
12.5°	1738.0	1708.4	1735.2	1728.1	1738.0	1722.7	1751.1	1746.2	1747.8	1760.9	1794.8
15°	1673.4	1682.7	1689.3	1689.3	1693.1	1689.8	1686.6	1709.0	1722.7	1723.2	1721.0
17.5°	1549.3	1478.7	1550.9	1532.3	1680.5	1684.4	1671.8	1661.4	1661.4	1669.6	1687.1
20°	1330.0	1331.6	1332.2	1339.3	1348.0	1347.5	1348.0	1563.5	1665.8	1642.3	1626.4
22.5°	1165.9	1145.7	1183.4	1180.7	1227.7	1279.7	1329.5	1324.5	1327.8	1479.8	1616.6
25°	934.6	960.9	939.5	948.8	1001.9	1063.7	1102.0	1202.0	1310.9	1303.2	1338.7
27.5°	879.9	872.8	882.7	882.7	889.8	898.0	919.3	975.6	1072.4	1174.1	1270.4
30°	828.0	834.0	835.1	844.9	850.4	855.9	859.1	880.5	902.3	972.9	1091.6
32.5°	621.8	545.2	717.5	764.0	803.4	812.7	819.2	828.0	843.8	854.2	913.8
35°	18.0	18.0	19.1	21.9	27.9	188.1	716.4	789.7	800.1	813.2	824.1
37.5°	8.7	6.6	7.7	8.2	9.8	13.7	19.7	61.2	682.0	771.1	783.1
40°	3.8	3.8	3.8	3.8	4.4	5.5	8.2	13.7	20.8	548.5	739.9
42.5°	3.3	3.3	3.3	3.3	3.3	3.3	3.8	4.9	9.8	23.5	388.3
45°	2.2	2.2	1.6	2.2	2.2	2.7	3.3	3.3	4.4	14.8	26.8
47.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.7	3.3	9.8	14.2
50°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	7.7	9.8
52.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	3.3	8.7
55°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.6	1.6	2.2	7.7
57.5°	1.1	1.1	1.1	1.1	1.1	1.6	1.1	1.1	1.6	1.6	7.1
60°	1.1	1.1	1.1	1.1	1.1	1.6	1.6	1.6	1.6	1.6	6.6
62.5°	1.6	1.6	1.1	1.6	1.1	1.1	1.6	1.6	1.6	1.6	4.4
65°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.1	1.6
67.5°	1.6	1.6	1.6	1.6	1.1	1.6	1.1	1.6	1.6	1.1	1.1
70°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.1	1.1	1.1	1.1
72.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.1	1.1	1.1	1.1
75°	1.6	1.6	1.6	1.6	1.6	1.6	2.2	2.2	1.1	1.1	1.1
77.5°	1.6	1.6	1.6	1.6	1.6	1.6	2.7	3.3	2.7	2.7	1.1
80°	1.6	1.6	1.6	1.6	1.6	1.6	2.7	2.7	2.7	2.7	3.8
82.5°	1.6	1.6	1.6	1.6	1.6	1.6	2.2	2.2	2.2	2.2	2.7
85°	1.6	1.6	1.6	1.6	1.6	1.6	2.2	2.2	2.2	1.6	2.2
87.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.2	1.6	1.6	1.6
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: P1212994

CATALOG NUMBER: 2SNLED-LD5-32HL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	140°	145°	150°	155°	160°	161°	162°	163°	164°	165°	166°
0°	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2
2.5°	1864.8	1846.2	1840.2	1827.7	1826.6	1827.7	1824.9	1821.1	1823.3	1819.5	1816.2
5°	2073.7	2024.0	1991.7	1948.5	1888.9	1875.8	1872.5	1853.9	1847.3	1845.2	1836.4
7.5°	1904.8	1995.5	2050.2	2068.8	1998.8	1982.4	1963.3	1948.0	1933.2	1905.3	1888.4
10°	1829.8	1834.2	1886.7	1948.0	2047.5	2061.2	2071.6	2038.2	2028.9	1957.8	1942.5
12.5°	1812.3	1812.9	1818.9	1856.1	1934.3	1943.0	1979.7	1999.4	2023.4	2037.1	2026.2
15°	1732.5	1776.8	1809.6	1812.9	1820.0	1835.3	1846.2	1914.6	1943.6	2021.2	2016.9
17.5°	1695.3	1709.5	1757.1	1795.9	1789.4	1783.9	1792.7	1802.0	1829.8	1907.5	1906.4
20°	1633.5	1678.9	1704.6	1745.1	1781.7	1783.4	1773.5	1768.0	1757.1	1769.7	1781.2
22.5°	1607.3	1614.4	1662.5	1690.9	1732.5	1747.3	1749.5	1750.0	1744.0	1737.4	1734.1
25°	1604.5	1582.1	1606.7	1642.3	1672.9	1688.7	1706.8	1712.8	1710.6	1710.6	1707.3
27.5°	1313.0	1575.0	1561.9	1585.4	1622.6	1633.5	1642.8	1661.4	1672.9	1681.1	1684.9
30°	1250.7	1297.7	1526.9	1530.2	1567.9	1566.8	1577.2	1592.5	1607.3	1626.4	1631.3
32.5°	1106.3	1221.7	1397.8	1474.9	1514.3	1518.1	1523.6	1528.0	1541.6	1563.0	1581.6
35°	886.5	1112.9	1197.7	1448.7	1455.8	1463.4	1466.7	1477.1	1481.5	1490.2	1506.6
37.5°	802.3	919.8	1149.0	1252.9	1388.5	1395.1	1412.6	1417.0	1424.1	1431.2	1443.7
40°	753.6	785.9	956.5	1118.9	1334.4	1338.7	1344.8	1355.7	1356.2	1364.5	1375.9
42.5°	714.8	735.5	785.3	1068.6	1296.1	1295.5	1281.3	1288.4	1291.7	1300.5	1316.3
45°	570.9	690.2	721.9	872.8	1032.0	1106.3	1249.1	1225.5	1225.0	1228.3	1245.2
47.5°	29.0	649.1	671.6	720.2	974.5	977.3	995.9	1152.3	1176.3	1168.7	1170.3
50°	19.7	44.8	625.6	648.0	840.0	907.8	921.5	928.6	1018.8	1119.5	1103.0
52.5°	15.3	25.7	383.4	601.6	682.5	732.3	820.3	870.6	876.1	916.6	1053.8
55°	13.7	19.7	41.6	555.1	580.2	591.2	642.6	730.6	801.7	823.0	824.7
57.5°	12.0	18.0	28.4	251.0	527.7	529.9	538.7	569.3	633.3	691.8	758.0
60°	10.9	15.9	22.4	43.2	479.6	485.1	486.7	494.9	502.6	542.5	618.5
62.5°	6.6	12.6	19.7	31.2	379.5	435.9	435.3	440.8	447.9	452.3	467.6
65°	5.5	9.8	17.0	26.2	46.5	58.0	352.2	391.6	395.9	402.0	404.7
67.5°	4.9	8.7	12.6	20.8	35.0	39.9	45.9	56.9	310.6	350.0	355.5
70°	4.4	6.0	10.4	17.5	28.4	30.6	34.5	39.4	46.5	57.4	281.1
72.5°	2.7	4.4	7.1	12.6	21.9	24.6	26.8	30.1	33.4	39.9	45.9
75°	1.1	3.3	6.0	9.3	17.0	18.6	20.2	22.4	25.2	29.5	32.8
77.5°	1.1	2.7	4.9	6.6	10.9	12.6	14.8	16.4	18.6	20.8	24.1
80°	3.8	2.2	3.3	4.9	7.7	8.2	9.3	10.4	12.0	13.7	15.9
82.5°	2.7	3.3	3.8	3.3	3.8	4.9	5.5	6.6	7.1	8.2	8.7
85°	2.2	2.2	2.7	2.7	2.7	2.7	2.7	2.7	3.3	3.8	4.9
87.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.2	2.2
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: P1212994

CATALOG NUMBER: 2SNLED-LD5-32HL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	167°	168°	169°	170°	171°	172°	173°	174°	175°	176°	177°
0°	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2
2.5°	1816.2	1815.1	1811.8	1811.8	1811.2	1813.4	1815.1	1816.7	1816.2	1819.5	1816.2
5°	1829.8	1827.1	1822.2	1817.8	1816.2	1817.3	1815.6	1817.3	1815.1	1817.8	1812.9
7.5°	1867.6	1858.3	1839.1	1831.5	1821.6	1821.1	1816.2	1815.1	1811.8	1811.8	1805.8
10°	1934.3	1889.5	1884.0	1861.0	1852.8	1812.9	1821.6	1806.9	1805.2	1798.1	1795.4
12.5°	1989.0	1954.0	1943.6	1923.4	1900.4	1819.5	1837.5	1805.8	1804.1	1789.9	1775.2
15°	1990.1	2010.3	1981.9	1926.1	1921.2	1865.4	1828.7	1817.8	1803.6	1760.9	1768.0
17.5°	1926.1	1972.6	1986.2	1974.2	1939.2	1901.5	1850.1	1828.2	1785.5	1766.4	1753.3
20°	1822.2	1869.2	1927.7	1931.6	1953.4	1926.6	1859.4	1823.8	1772.4	1739.1	1728.1
22.5°	1739.6	1774.1	1841.3	1872.5	1899.3	1908.6	1865.9	1813.4	1749.5	1717.2	1710.6
25°	1695.9	1703.5	1723.7	1760.4	1819.5	1862.1	1868.1	1812.3	1779.0	1708.4	1671.2
27.5°	1680.0	1673.4	1665.2	1683.8	1728.1	1780.1	1814.5	1823.8	1740.7	1673.4	1636.2
30°	1639.5	1643.4	1630.8	1624.2	1653.2	1706.8	1768.0	1783.4	1719.4	1649.9	1607.3
32.5°	1589.8	1596.3	1598.5	1587.0	1581.0	1618.2	1684.4	1721.0	1717.7	1616.6	1569.0
35°	1527.4	1546.0	1550.9	1551.5	1541.6	1535.6	1573.9	1649.9	1678.9	1601.2	1532.3
37.5°	1461.8	1467.3	1494.1	1501.2	1501.2	1483.1	1511.6	1572.3	1612.7	1566.8	1487.5
40°	1379.8	1397.3	1422.4	1435.0	1447.6	1449.2	1433.4	1476.0	1542.7	1531.2	1445.4
42.5°	1320.2	1331.6	1347.0	1363.9	1389.6	1396.2	1379.8	1387.4	1456.9	1487.0	1390.7
45°	1250.7	1266.0	1270.4	1289.0	1315.8	1334.9	1334.4	1318.5	1374.3	1411.5	1350.8
47.5°	1179.6	1194.4	1202.0	1211.3	1231.0	1255.6	1269.3	1262.2	1273.1	1345.9	1297.7
50°	1106.3	1114.5	1129.8	1140.2	1153.4	1167.6	1200.4	1207.0	1191.6	1249.6	1239.2
52.5°	1036.9	1039.6	1050.0	1060.4	1077.9	1088.3	1114.5	1134.2	1133.1	1150.1	1174.1
55°	982.7	970.7	972.9	981.1	992.6	1008.4	1023.2	1053.8	1064.2	1067.5	1105.8
57.5°	767.8	891.4	902.3	901.8	915.5	922.6	936.2	956.5	993.7	985.5	1028.1
60°	697.8	711.5	814.8	826.9	831.8	838.4	854.8	873.4	900.7	918.2	936.8
62.5°	532.1	615.2	646.4	737.7	752.0	755.8	766.7	775.5	803.9	843.8	836.2
65°	411.8	447.3	542.5	579.7	657.3	667.2	682.5	691.8	700.0	745.9	748.1
67.5°	356.0	361.5	387.2	458.8	508.0	584.1	593.4	601.6	614.1	647.0	667.2
70°	304.1	310.6	317.7	323.7	387.7	438.0	508.6	511.3	519.5	541.4	587.3
72.5°	57.4	259.8	264.1	268.0	275.1	308.4	375.7	430.4	433.7	444.1	486.2
75°	38.8	45.4	62.3	214.4	221.5	223.7	235.2	303.5	353.8	356.0	374.6
77.5°	27.9	31.2	37.7	44.8	114.3	171.7	174.5	187.0	239.0	276.7	280.0
80°	19.1	21.3	25.2	28.4	35.0	45.9	126.9	130.7	137.3	189.2	199.1
82.5°	10.9	12.6	14.8	18.0	20.8	26.2	33.9	43.7	89.1	95.2	126.3
85°	5.5	6.0	7.1	8.7	10.4	12.6	17.0	20.8	28.4	51.4	53.0
87.5°	2.7	2.7	2.7	2.7	4.4	4.9	6.0	7.7	9.8	14.8	19.1
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: P1212994

CATALOG NUMBER: 2SNLED-LD5-32HL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	178°	179°	180°	181°	182°	183°	184°	185°	186°	187°	188°
0°	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2
2.5°	1816.7	1824.4	1830.9	1832.6	1832.6	1833.7	1835.3	1836.4	1837.5	1838.6	1837.5
5°	1813.4	1821.6	1827.1	1828.7	1828.7	1832.0	1834.8	1838.0	1839.7	1839.7	1838.6
7.5°	1805.2	1811.2	1818.4	1822.7	1823.3	1828.7	1833.7	1833.1	1835.3	1836.4	1839.1
10°	1794.3	1794.3	1806.3	1809.6	1812.3	1818.4	1820.0	1823.3	1830.9	1832.0	1839.1
12.5°	1788.8	1783.4	1797.6	1799.2	1808.5	1800.9	1810.7	1814.0	1806.3	1816.7	1803.0
15°	1764.2	1770.8	1768.6	1773.5	1789.9	1781.2	1808.0	1799.2	1818.9	1795.4	1837.0
17.5°	1744.0	1742.9	1751.6	1756.0	1759.3	1777.9	1785.0	1794.8	1802.5	1795.9	1812.3
20°	1729.2	1720.5	1727.0	1732.0	1743.4	1757.7	1762.0	1747.3	1773.0	1816.7	1827.1
22.5°	1701.3	1695.3	1703.0	1703.0	1720.5	1718.3	1734.7	1725.4	1749.5	1800.3	1853.4
25°	1663.6	1664.1	1672.3	1682.2	1685.5	1710.1	1718.8	1730.9	1760.9	1821.6	1853.9
27.5°	1625.3	1622.0	1627.0	1647.2	1664.1	1682.2	1684.9	1725.9	1767.0	1808.5	1837.0
30°	1587.0	1583.7	1587.0	1601.8	1622.0	1634.1	1664.1	1718.8	1757.1	1785.5	1812.3
32.5°	1546.0	1542.7	1550.4	1561.3	1596.9	1598.5	1658.1	1709.5	1739.6	1760.4	1755.5
35°	1502.3	1497.9	1505.0	1522.0	1554.8	1566.8	1629.1	1667.4	1701.3	1711.2	1688.2
37.5°	1449.8	1442.1	1450.9	1474.4	1508.8	1543.8	1595.8	1640.1	1658.1	1631.9	1604.5
40°	1395.1	1389.6	1404.9	1417.0	1457.4	1506.1	1565.7	1596.9	1585.4	1555.3	1525.2
42.5°	1346.4	1334.9	1348.6	1371.6	1417.5	1472.7	1520.9	1538.4	1511.0	1466.7	1431.7
45°	1286.8	1273.1	1289.5	1320.2	1369.4	1432.3	1470.0	1464.0	1417.5	1379.2	1331.1
47.5°	1224.5	1208.0	1224.5	1261.1	1316.3	1383.0	1410.4	1383.0	1324.5	1276.4	1237.6
50°	1163.2	1144.1	1159.9	1215.2	1269.3	1320.7	1320.2	1267.1	1232.1	1179.6	1145.7
52.5°	1102.5	1075.2	1091.0	1151.2	1205.3	1263.8	1220.6	1171.4	1129.3	1083.4	1072.4
55°	1027.6	998.0	1019.4	1106.9	1148.4	1182.9	1114.0	1070.8	1029.2	1006.2	992.6
57.5°	956.5	924.2	942.8	1046.2	1076.8	1085.5	1022.1	960.9	936.2	928.6	908.9
60°	883.2	846.6	864.1	983.3	1004.6	969.1	906.7	859.1	854.2	838.9	823.6
62.5°	813.2	772.7	783.7	905.1	914.9	850.4	793.0	780.4	768.4	753.0	744.8
65°	732.8	690.7	706.0	822.0	812.7	729.5	697.3	694.5	678.7	666.1	678.1
67.5°	659.0	609.2	630.5	731.2	689.1	621.2	608.1	601.6	589.0	596.1	469.8
70°	578.0	523.9	552.9	633.3	570.9	526.1	521.2	511.3	511.9	406.9	342.9
72.5°	487.8	440.8	482.9	526.1	451.7	438.6	431.5	430.4	347.3	282.2	266.3
75°	408.5	360.9	406.3	422.7	359.8	351.1	350.5	289.8	228.0	217.7	212.7
77.5°	318.8	282.2	325.4	300.8	276.2	266.3	239.0	179.4	171.7	164.6	61.8
80°	214.9	217.7	242.8	207.3	196.9	167.9	132.3	126.9	109.4	43.7	34.5
82.5°	130.7	164.1	154.8	129.6	126.9	91.3	83.7	42.7	31.7	25.2	21.9
85°	67.8	83.1	79.8	70.5	52.5	47.0	26.2	20.2	16.4	12.6	10.4
87.5°	23.0	30.6	29.5	23.5	18.0	14.2	9.3	7.7	5.5	4.4	3.8
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: P1212994

CATALOG NUMBER: 2SNLED-LD5-32HL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	189°	190°	191°	192°	193°	194°	195°	196°	197°	198°	199°
0°	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2
2.5°	1836.4	1836.4	1835.3	1836.4	1837.0	1835.9	1835.9	1837.0	1837.5	1838.0	1840.8
5°	1839.1	1840.2	1841.9	1845.2	1845.7	1852.3	1855.0	1856.6	1858.3	1858.8	1855.0
7.5°	1845.2	1849.0	1852.3	1851.7	1847.9	1837.5	1834.2	1831.5	1836.4	1849.0	1863.7
10°	1850.6	1833.1	1800.3	1845.2	1831.5	1844.1	1881.2	1889.5	1914.6	1950.2	1960.5
12.5°	1812.9	1861.0	1871.4	1821.1	1914.1	1879.6	1920.6	1956.7	1967.1	2003.2	1981.3
15°	1853.4	1876.9	1892.7	1943.0	1937.6	1967.1	1978.6	1971.5	1973.1	1982.4	2007.0
17.5°	1852.8	1899.8	1910.2	1944.1	1967.1	1967.7	1964.4	1961.1	1969.8	1977.0	1962.2
20°	1884.5	1899.8	1920.1	1933.7	1938.1	1943.6	1954.0	1945.8	1929.4	1913.5	1907.0
22.5°	1868.7	1903.1	1920.6	1922.8	1920.1	1903.1	1887.8	1864.8	1857.2	1849.0	1851.7
25°	1872.0	1887.8	1885.6	1876.9	1865.4	1833.7	1826.0	1816.2	1801.4	1765.9	1733.6
27.5°	1848.4	1840.2	1830.4	1809.1	1788.3	1771.3	1752.2	1720.5	1694.2	1655.9	1641.7
30°	1809.1	1776.2	1752.2	1739.6	1719.4	1690.9	1662.0	1623.1	1589.8	1582.1	1575.0
32.5°	1733.6	1701.3	1681.6	1651.0	1616.6	1582.7	1549.3	1534.0	1526.9	1528.0	1521.4
35°	1656.5	1628.0	1598.5	1552.6	1526.9	1493.0	1480.9	1477.7	1471.1	1464.0	1456.3
37.5°	1574.5	1541.1	1496.8	1469.5	1443.7	1430.1	1424.1	1419.1	1407.7	1395.1	1386.3
40°	1495.2	1435.0	1410.4	1383.6	1375.9	1369.9	1361.2	1349.1	1333.3	1331.1	1327.3
42.5°	1389.1	1345.9	1324.5	1319.1	1309.8	1299.4	1291.7	1278.6	1272.0	1276.4	1279.7
45°	1288.4	1266.6	1259.5	1252.9	1235.4	1220.6	1215.7	1211.3	1216.8	1240.9	1183.4
47.5°	1207.0	1198.2	1189.5	1178.5	1162.1	1151.2	1156.1	1160.5	1165.4	988.7	902.3
50°	1136.4	1124.4	1110.7	1098.7	1088.8	1087.7	1113.4	1036.3	867.9	863.5	776.0
52.5°	1059.3	1041.2	1033.0	1025.9	1030.3	1046.7	866.2	803.9	771.1	669.9	625.1
55°	976.2	960.3	960.3	966.9	943.4	764.5	755.2	653.0	591.2	573.7	566.6
57.5°	893.0	891.4	900.7	823.6	694.0	665.5	559.5	537.0	527.2	525.0	513.5
60°	817.0	832.3	696.7	640.9	557.3	502.6	487.3	484.5	474.1	470.3	459.9
62.5°	756.3	627.3	584.1	476.9	449.0	441.9	433.7	429.8	420.5	371.3	108.8
65°	546.3	516.2	418.9	400.9	398.7	388.3	385.0	346.2	81.5	54.7	46.5
67.5°	412.3	365.9	353.3	350.0	339.6	318.8	94.6	54.1	46.5	40.5	35.5
70°	316.6	308.4	299.1	291.5	85.9	53.6	46.5	39.4	33.9	30.1	27.3
72.5°	259.2	253.7	147.7	56.3	45.9	38.8	34.5	30.1	26.2	24.1	21.9
75°	202.9	56.3	46.5	38.8	33.4	28.4	25.2	22.4	20.2	18.6	17.0
77.5°	45.9	37.2	31.7	26.8	24.1	21.3	19.1	16.4	14.8	13.1	10.9
80°	28.4	24.6	20.8	19.1	16.4	13.7	12.0	10.9	8.7	8.2	7.1
82.5°	18.6	14.8	13.1	10.9	8.7	8.2	7.1	5.5	4.9	4.4	3.8
85°	8.2	7.1	6.0	4.9	3.8	3.3	2.7	2.2	2.2	2.2	2.2
87.5°	2.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.1	1.1
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: P1212994

CATALOG NUMBER: 2SNLED-LD5-32HL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	200°	205°	210°	215°	220°	225°	230°	235°	240°	245°	250°
0°	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2
2.5°	1841.9	1851.7	1861.0	1858.3	1848.4	1833.1	1828.7	1822.7	1827.1	1836.4	1840.2
5°	1855.0	1849.5	1869.2	1898.2	1945.2	1949.6	1982.4	1990.1	2016.3	2032.7	2032.2
7.5°	1873.6	1951.2	1983.5	2018.5	2034.4	2030.5	2035.5	2031.6	2025.6	2022.9	2019.6
10°	1968.2	2027.3	2039.3	2039.3	2014.7	1981.3	1967.1	1942.5	1893.3	1894.4	1886.2
12.5°	2023.4	2044.2	2015.8	1991.7	1892.7	1854.5	1812.9	1793.2	1781.7	1764.2	1770.8
15°	1994.5	1964.9	1948.0	1870.3	1809.6	1740.7	1741.8	1729.8	1717.2	1718.3	1710.1
17.5°	1951.8	1928.3	1808.0	1754.4	1724.8	1698.0	1693.1	1677.3	1669.1	1666.3	1665.8
20°	1893.3	1808.5	1718.8	1705.7	1670.2	1639.5	1634.6	1639.5	1664.7	1619.8	1467.8
22.5°	1824.9	1703.0	1676.7	1639.5	1615.5	1603.4	1633.5	1496.8	1290.1	1315.2	1288.4
25°	1709.0	1655.9	1611.1	1582.7	1579.9	1506.1	1255.1	1228.8	1095.9	1024.8	945.0
27.5°	1624.2	1601.2	1554.2	1549.3	1513.7	1231.6	1100.9	956.5	903.4	895.2	877.7
30°	1572.8	1540.0	1511.6	1387.4	1208.0	991.5	883.2	863.0	853.7	843.8	828.5
32.5°	1511.0	1479.8	1493.5	1166.5	963.0	853.7	831.8	817.0	800.1	793.5	738.3
35°	1448.1	1433.9	1167.0	980.5	828.0	801.7	785.3	770.0	612.5	148.2	50.3
37.5°	1380.9	1377.6	1048.9	813.7	775.5	750.9	704.4	145.5	34.5	23.5	17.5
40°	1328.4	1049.5	829.1	762.9	731.7	692.9	97.3	24.1	15.3	9.3	6.0
42.5°	1293.4	943.9	742.1	715.9	648.0	71.6	24.6	10.4	6.0	4.9	3.8
45°	997.0	745.4	693.4	666.1	82.0	24.6	14.2	4.9	3.8	3.3	2.2
47.5°	919.8	677.0	646.4	145.5	27.3	13.1	9.8	3.3	2.2	2.2	2.2
50°	696.7	625.6	514.6	35.5	17.5	9.3	7.1	2.2	2.2	2.2	1.6
52.5°	610.9	577.5	55.2	23.5	13.7	7.1	4.4	1.6	1.6	1.6	1.6
55°	558.4	366.4	32.8	18.0	11.5	6.6	2.7	1.6	1.6	1.6	1.1
57.5°	510.8	49.2	24.1	15.3	10.4	6.0	1.6	1.6	1.6	1.6	1.1
60°	433.1	35.5	19.7	13.7	9.8	5.5	1.6	1.6	1.6	1.6	1.6
62.5°	56.3	27.9	17.0	12.0	7.1	4.4	1.1	1.6	1.6	1.6	1.6
65°	41.0	21.9	15.3	8.2	4.4	1.6	1.1	1.6	1.6	1.6	1.6
67.5°	31.7	18.0	11.5	7.1	3.8	1.1	1.1	1.6	1.6	1.6	1.6
70°	25.2	15.3	9.3	6.0	3.3	1.1	1.1	1.6	1.6	1.6	1.6
72.5°	19.7	10.9	6.6	3.3	2.2	1.1	1.1	1.6	1.6	1.6	1.6
75°	14.8	8.7	4.9	2.7	1.1	1.1	1.1	1.6	1.6	1.6	1.6
77.5°	9.8	5.5	3.8	2.2	2.2	2.2	2.7	2.7	1.6	1.6	1.6
80°	6.6	3.8	2.7	2.7	2.7	2.2	2.7	2.7	1.6	2.7	1.6
82.5°	3.3	2.7	2.7	2.2	2.2	1.6	2.2	2.2	2.2	2.2	1.6
85°	2.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.2	2.2	1.6
87.5°	1.1	1.1	1.1	1.1	1.6	1.6	1.6	1.6	2.2	2.2	1.6
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: P1212994

CATALOG NUMBER: 2SNLED-LD5-32HL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	305°
0°	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2
2.5°	1835.3	1837.0	1832.6	1856.1	1844.1	1845.2	1850.1	1837.5	1840.2	1831.5	1825.5
5°	2034.4	2037.7	2040.9	2042.0	2044.2	2047.0	2043.7	2042.0	2038.7	2027.8	2016.3
7.5°	2003.2	1999.4	1997.7	1999.9	2003.7	2005.4	2002.7	2006.5	2020.7	2026.7	2030.5
10°	1839.1	1821.6	1833.7	1832.0	1818.4	1864.3	1851.7	1858.8	1863.7	1914.1	1944.7
12.5°	1760.9	1771.9	1751.1	1740.7	1754.4	1763.7	1773.0	1753.3	1780.6	1768.0	1808.5
15°	1695.3	1688.7	1686.6	1687.1	1684.4	1697.5	1700.8	1705.2	1709.0	1725.9	1732.5
17.5°	1665.8	1676.7	1681.1	1684.4	1678.9	1672.9	1666.9	1658.1	1660.9	1656.5	1669.1
20°	1365.5	1328.9	1326.7	1348.0	1324.5	1337.7	1369.4	1581.6	1574.5	1657.0	1629.1
22.5°	1139.7	1105.2	1075.7	1050.0	1086.6	1102.0	1161.0	1227.7	1336.0	1319.1	1436.6
25°	930.8	918.2	910.5	906.7	909.5	908.4	921.5	952.7	1001.9	1117.8	1267.7
27.5°	870.6	864.6	861.9	853.1	859.7	857.5	867.9	874.5	889.2	900.7	949.4
30°	823.0	815.9	811.0	801.7	808.3	808.8	812.1	829.1	835.1	844.9	860.2
32.5°	300.8	177.2	166.2	158.0	172.8	225.3	395.4	691.2	788.6	796.2	813.7
35°	29.5	24.6	21.9	21.9	22.4	24.6	32.8	86.4	158.0	610.9	764.5
37.5°	11.5	9.8	8.2	7.7	8.2	9.3	12.6	16.4	22.4	46.5	207.3
40°	4.9	4.4	3.8	3.8	3.8	3.8	4.4	5.5	8.2	15.3	24.1
42.5°	3.3	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.8	4.9	9.8
45°	2.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.2	2.7	4.4
47.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.2
50°	1.6	1.6	1.6	1.6	1.1	1.6	1.1	1.6	1.6	1.6	1.6
52.5°	1.6	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.6	1.6
55°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.6
57.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
60°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
62.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.6	1.6	1.1
65°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.6	1.1
67.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
70°	1.6	1.6	1.1	1.6	1.1	1.1	1.6	1.6	1.6	1.1	1.1
72.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	3.3	3.3	2.2
75°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.7	3.3	2.7
77.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.7	2.7	2.7
80°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.2	2.2	2.2
82.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.2	2.2	2.2
85°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
87.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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: P1212994

CATALOG NUMBER: 2SNLED-LD5-32HL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	310°	315°	320°	325°	330°	335°	340°	341°	342°	343°	344°
0°	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2
2.5°	1815.1	1814.5	1826.0	1834.8	1831.5	1834.8	1838.6	1839.1	1840.2	1835.9	1834.2
5°	1994.5	1977.5	1944.7	1921.2	1893.8	1844.1	1819.5	1822.2	1822.7	1821.1	1823.3
7.5°	2028.9	2027.3	2015.8	2010.9	1992.3	1956.7	1899.8	1890.0	1865.9	1850.6	1838.0
10°	1942.5	1981.9	1992.3	2009.8	2020.7	2014.1	1966.0	1958.9	1943.6	1926.1	1929.9
12.5°	1849.0	1881.2	1882.9	1978.0	1999.4	2001.6	1983.0	1992.8	1995.0	1955.6	1932.7
15°	1734.1	1749.5	1781.7	1870.3	1934.8	1975.3	1987.3	1992.8	1966.0	1964.4	1955.1
17.5°	1683.8	1693.7	1708.4	1758.2	1856.1	1915.7	1966.6	1962.7	1973.1	1965.5	1942.0
20°	1620.4	1628.6	1654.8	1680.0	1728.1	1807.4	1902.6	1909.7	1923.4	1921.7	1928.3
22.5°	1619.3	1590.3	1594.7	1614.4	1664.7	1735.8	1837.0	1860.5	1869.2	1875.2	1882.3
25°	1284.6	1514.8	1557.0	1569.5	1602.3	1643.9	1763.1	1771.9	1788.3	1815.1	1834.8
27.5°	1112.9	1269.3	1437.7	1525.2	1546.0	1580.5	1651.6	1664.7	1720.5	1727.0	1757.7
30°	878.3	999.1	1250.7	1461.2	1495.7	1519.8	1570.1	1596.3	1620.4	1646.6	1678.9
32.5°	826.3	845.5	984.9	1209.1	1477.1	1459.1	1496.2	1512.1	1538.4	1561.3	1584.8
35°	778.7	791.9	821.4	990.4	1203.1	1409.3	1434.5	1444.8	1459.6	1477.1	1494.1
37.5°	729.0	748.7	768.9	814.3	1112.9	1369.9	1369.4	1381.4	1390.2	1404.9	1419.1
40°	132.3	687.4	720.2	749.8	863.0	1092.7	1308.1	1313.6	1319.6	1328.9	1343.7
42.5°	21.3	114.8	674.8	703.3	735.5	978.4	1280.2	1257.8	1254.0	1260.5	1273.7
45°	10.9	27.9	135.6	656.8	685.8	780.4	1046.7	1219.0	1215.2	1202.6	1205.3
47.5°	8.2	17.5	33.4	227.0	642.0	669.9	965.8	955.4	1028.1	1167.6	1146.2
50°	7.1	12.0	19.7	46.5	567.1	616.9	743.7	869.0	907.3	912.2	1079.5
52.5°	6.6	8.2	14.2	30.1	119.2	570.4	604.8	648.6	713.1	851.5	848.2
55°	6.0	7.7	12.0	20.2	41.6	514.1	549.6	557.8	571.5	637.7	725.2
57.5°	3.3	7.1	11.5	17.5	31.2	94.1	498.7	505.3	516.2	519.0	550.2
60°	1.6	6.6	10.4	15.3	23.0	43.7	448.4	456.1	462.7	463.7	473.6
62.5°	1.1	6.0	8.7	14.2	19.1	31.2	106.1	216.6	411.8	411.8	423.3
65°	1.1	4.4	5.5	9.3	17.5	25.7	44.8	52.0	101.2	248.8	371.3
67.5°	1.1	1.6	4.9	7.7	13.1	19.7	32.8	38.3	45.9	52.5	97.3
70°	1.1	1.1	4.4	4.9	8.2	14.8	23.5	26.8	31.2	35.5	41.0
72.5°	1.1	1.1	3.8	3.8	5.5	9.8	18.0	19.7	22.4	25.2	29.0
75°	2.7	2.2	3.3	3.3	3.8	7.7	13.7	15.3	16.4	18.6	21.3
77.5°	2.7	2.7	2.7	2.7	2.7	4.9	8.7	9.8	11.5	12.6	14.8
80°	2.2	2.2	2.2	2.7	2.7	3.3	5.5	6.0	6.6	8.2	8.7
82.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	3.3	3.8	4.9
85°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.2	2.2	2.2	2.2
87.5°	1.6	1.6	1.6	1.1	1.1	1.6	1.6	1.6	1.6	1.6	1.6
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: P1212994

CATALOG NUMBER: 2SNLED-LD5-32HL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	345°	346°	347°	348°	349°	350°	351°	352°	353°	354°	355°
0°	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2	1822.2
2.5°	1833.7	1830.4	1827.7	1829.3	1824.4	1822.2	1823.8	1824.4	1825.5	1828.2	1828.7
5°	1828.7	1827.7	1832.6	1835.3	1834.2	1835.3	1835.3	1833.1	1829.8	1832.0	1827.1
7.5°	1825.5	1818.4	1812.9	1814.0	1808.5	1815.1	1821.1	1829.8	1832.6	1832.6	1827.1
10°	1881.8	1874.1	1843.5	1822.7	1809.1	1797.0	1825.5	1796.5	1810.2	1758.2	1817.8
12.5°	1928.3	1938.7	1925.0	1868.1	1858.3	1822.2	1843.0	1807.4	1797.0	1737.4	1756.6
15°	1946.9	1927.2	1922.8	1907.0	1885.6	1875.2	1819.5	1813.4	1796.5	1803.0	1777.9
17.5°	1930.5	1940.3	1927.2	1916.8	1894.9	1870.3	1837.0	1807.4	1783.9	1731.4	1775.7
20°	1914.6	1927.7	1888.4	1894.9	1897.1	1868.7	1851.2	1826.6	1797.0	1747.8	1709.5
22.5°	1888.4	1879.1	1882.3	1872.5	1864.3	1868.1	1844.1	1827.1	1777.3	1754.9	1703.0
25°	1845.7	1842.4	1851.2	1850.1	1830.4	1823.8	1811.8	1793.7	1774.1	1738.0	1695.3
27.5°	1776.2	1793.2	1808.5	1815.6	1805.2	1787.7	1781.2	1770.8	1757.1	1720.5	1688.7
30°	1703.0	1722.1	1739.6	1754.9	1764.2	1756.6	1750.5	1744.5	1723.7	1699.7	1664.1
32.5°	1619.3	1644.5	1668.5	1687.1	1707.3	1713.4	1709.0	1704.1	1686.6	1664.7	1636.2
35°	1522.5	1557.0	1592.0	1625.3	1634.1	1648.3	1662.5	1654.3	1645.0	1623.1	1596.9
37.5°	1440.5	1465.1	1490.2	1532.3	1563.0	1581.0	1606.2	1609.5	1593.6	1583.2	1548.7
40°	1355.7	1378.1	1414.8	1439.4	1481.5	1502.3	1529.1	1541.1	1537.3	1531.2	1501.2
42.5°	1289.0	1299.9	1324.0	1345.9	1387.4	1430.1	1453.6	1466.7	1480.4	1475.5	1460.2
45°	1217.9	1227.7	1235.9	1255.1	1295.5	1333.3	1362.3	1382.0	1406.6	1418.0	1399.5
47.5°	1147.3	1150.1	1159.9	1175.8	1199.8	1228.8	1277.5	1307.0	1330.0	1352.4	1340.4
50°	1093.2	1083.4	1085.0	1094.8	1114.5	1143.0	1178.0	1219.5	1245.8	1273.1	1275.9
52.5°	955.4	1035.2	1016.1	1021.6	1032.0	1045.6	1082.3	1123.3	1155.5	1179.1	1202.6
55°	801.7	817.6	971.2	949.4	955.9	968.0	984.9	1025.9	1057.1	1089.9	1122.7
57.5°	621.8	739.9	745.9	888.1	884.8	885.9	900.2	923.7	954.8	995.9	1023.7
60°	483.4	533.2	630.0	679.2	803.9	808.3	816.5	830.2	857.0	895.8	940.1
62.5°	426.6	433.1	467.6	541.4	622.3	720.2	737.7	739.9	752.0	790.8	842.2
65°	374.6	379.0	389.4	397.0	464.8	559.5	643.7	657.3	665.0	688.0	731.7
67.5°	258.1	326.5	335.8	341.2	347.8	391.6	496.0	565.5	574.2	594.5	632.7
70°	49.8	103.4	282.7	288.7	292.0	301.9	318.8	429.3	487.3	506.4	523.9
72.5°	33.9	39.9	48.1	113.7	240.6	246.1	249.9	264.1	362.0	417.8	427.1
75°	24.6	27.3	32.3	39.9	49.2	160.2	198.5	205.6	212.7	293.7	340.7
77.5°	17.5	19.7	21.9	25.7	30.1	38.8	55.8	153.7	160.8	164.6	232.4
80°	9.8	12.0	14.8	17.0	19.1	21.9	28.4	35.5	79.3	115.9	122.0
82.5°	5.5	6.6	7.7	9.3	10.4	13.1	15.9	19.1	25.2	37.2	78.7
85°	2.7	2.7	2.7	3.8	4.4	6.0	7.1	8.2	11.5	15.9	21.9
87.5°	1.6	1.6	2.2	2.2	2.2	2.7	2.7	2.7	3.3	4.9	7.1
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: P1212994

CATALOG NUMBER: 2SNLED-LD5-32HL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	356°	357°	358°	359°	360°
0°	1822.2	1822.2	1822.2	1822.2	1822.2
2.5°	1829.3	1827.7	1827.7	1834.2	1832.6
5°	1826.0	1824.4	1823.8	1830.9	1827.7
7.5°	1823.3	1817.3	1815.6	1822.2	1819.5
10°	1812.3	1808.0	1810.7	1808.5	1807.4
12.5°	1793.7	1791.0	1779.5	1780.6	1789.9
15°	1760.4	1771.3	1751.6	1769.1	1773.0
17.5°	1699.1	1723.7	1742.9	1753.3	1754.9
20°	1726.5	1734.7	1724.8	1725.4	1732.0
22.5°	1690.9	1694.8	1697.5	1694.2	1708.4
25°	1634.1	1619.3	1651.0	1657.6	1680.5
27.5°	1616.6	1604.5	1619.3	1618.2	1637.3
30°	1602.3	1563.5	1570.1	1580.5	1604.0
32.5°	1582.1	1520.9	1514.3	1537.3	1563.5
35°	1546.6	1488.6	1473.3	1488.0	1527.4
37.5°	1516.5	1443.7	1413.1	1432.8	1484.2
40°	1471.6	1408.7	1361.2	1378.7	1439.4
42.5°	1418.0	1378.7	1305.4	1317.4	1386.9
45°	1363.9	1328.9	1251.2	1257.3	1339.8
47.5°	1308.7	1276.4	1194.9	1196.0	1279.7
50°	1254.5	1211.9	1144.6	1125.5	1215.7
52.5°	1184.0	1144.6	1093.7	1062.6	1155.0
55°	1117.3	1073.0	1035.8	987.7	1086.1
57.5°	1052.2	1003.0	977.8	916.0	1007.9
60°	963.0	939.5	902.3	843.3	937.3
62.5°	871.7	864.1	826.3	765.1	850.4
65°	765.1	783.1	744.3	691.8	760.2
67.5°	664.5	696.7	654.1	621.8	673.2
70°	557.3	594.5	570.4	558.9	580.8
72.5°	451.7	487.8	490.0	481.8	488.9
75°	348.9	388.8	410.7	398.1	399.8
77.5°	264.7	283.8	307.9	317.7	315.5
80°	163.5	196.9	216.6	236.8	229.7
82.5°	82.6	110.5	134.5	156.4	146.0
85°	34.5	44.3	61.8	81.5	78.2
87.5°	10.4	17.5	18.6	26.2	24.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)