

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: P1213045

Luminaire Tested: 4SNLED-LD5-31SL-RM-UNV-L930-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213045
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: 4SNLED-LD5-31SL-RM-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
METALIC FINISH REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

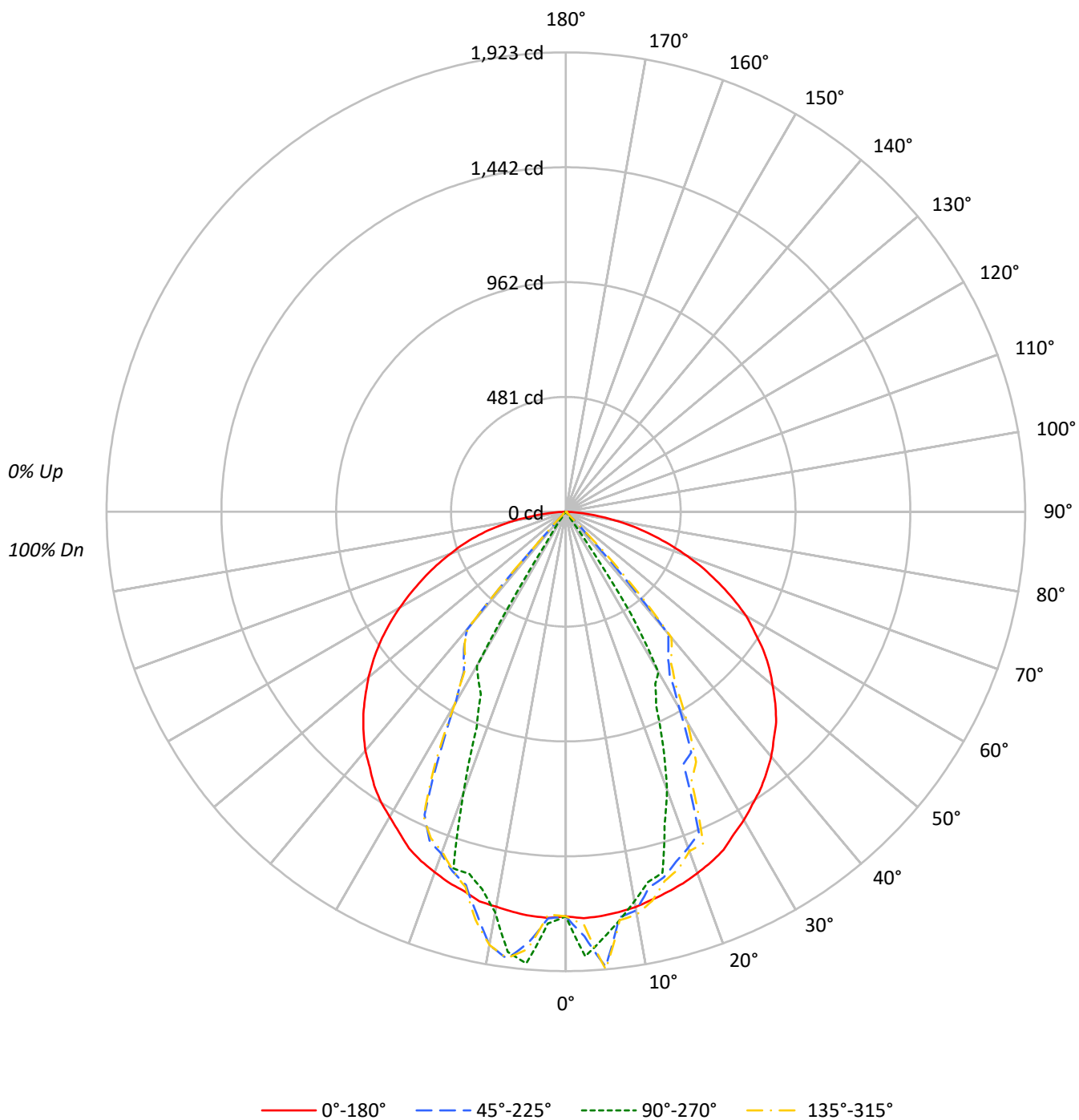
Lumens per Lamp: N/A
Luminaire Lumens: 2407.9 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 0.81 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 21
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

TEST NUMBER: P1213045

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L930-CD1-U

Luminous Intensity Polar Plot



TEST NUMBER: P1213045

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L930-CD1-U

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°	13685	13685	13685	13685
5°	13741	14075	13737	14905
10°	13708	12737	13699	13104
15°	13670	11888	13637	11918
20°	13686	9364	13648	9479
25°	13726	6776	13659	6395
30°	13663	5944	13519	5714
35°	13704	131	13503	159
40°	13751	29	13422	29
45°	13799	17	13282	12
50°	13694	13	13066	13
55°	13614	9	12777	9
60°	13356	10	12312	10
65°	12661	16	11758	11
70°	11746	17	11180	17
75°	10388	20	10558	20
80°	8440	22	8922	22
85°	4967	26	5069	26

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 2°

Vertical Angle: 45°

Luminance: 14900 cd/sqm

TEST NUMBER: P1213045

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.9	7.1
10°-20°	463.4	19.2
20°-30°	589.7	24.5
30°-40°	498.2	20.7
40°-50°	325.7	13.5
50°-60°	205.2	8.5
60°-70°	109.2	4.5
70°-80°	39.8	1.7
80°-90°	6.8	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°	1223.1	50.8
0°-40°	1721.2	71.5
0°-60°	2252.1	93.5
0°-90°	2407.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2407.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1694	1694	1694	1694	1694	
5°	1699	1792	1698	1898	1699	162
15°	1648	1564	1644	1568	1648	466
25°	1562	893	1554	843	1562	718
35°	1420	17	1399	20	1420	888
45°	1245	2	1198	2	1245	958
55°	1009	1	947	1	1009	899
65°	706	2	656	1	706	700
75°	372	2	378	2	372	394
85°	73	2	74	2	73	92
90°	0	0	0	0	0	

TEST NUMBER: P1213045

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°
0°	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5
2.5°	1703.1	1704.2	1704.7	1705.7	1707.2	1707.7	1708.7	1707.7	1707.7	1707.7	1707.7
5°	1698.6	1700.6	1702.1	1704.2	1707.7	1708.2	1712.3	1712.8	1714.8	1718.9	1721.9
7.5°	1690.9	1693.0	1696.0	1701.1	1706.2	1711.8	1718.9	1726.5	1737.2	1747.4	1760.1
10°	1679.8	1682.3	1685.9	1690.4	1715.3	1718.9	1734.7	1756.5	1762.6	1794.6	1818.5
12.5°	1663.5	1672.1	1681.3	1685.4	1709.2	1746.9	1799.7	1789.0	1777.3	1882.0	1880.5
15°	1647.7	1659.4	1654.9	1687.9	1709.7	1775.3	1753.0	1800.7	1888.1	1866.8	1867.8
17.5°	1631.0	1633.5	1658.9	1686.4	1725.5	1759.0	1786.5	1852.1	1869.3	1870.9	1852.1
20°	1609.6	1621.8	1658.9	1683.8	1749.9	1765.7	1825.1	1858.7	1851.6	1834.3	1802.3
22.5°	1587.8	1624.9	1662.5	1697.6	1743.8	1786.0	1815.5	1831.2	1794.1	1726.0	1689.4
25°	1561.8	1583.7	1633.0	1684.3	1742.3	1766.7	1784.0	1758.5	1710.3	1649.3	1587.8
27.5°	1521.7	1556.8	1619.8	1677.7	1730.1	1759.6	1731.6	1670.6	1592.9	1552.7	1524.7
30°	1490.7	1536.4	1588.3	1644.2	1698.6	1715.8	1644.7	1575.1	1521.7	1481.5	1475.4
32.5°	1453.1	1518.1	1567.4	1620.8	1666.5	1643.7	1574.6	1484.6	1440.4	1425.1	1431.2
35°	1419.5	1468.8	1533.4	1585.7	1618.8	1567.4	1458.2	1402.3	1380.9	1389.6	1378.4
37.5°	1379.4	1444.4	1503.9	1549.1	1538.0	1460.7	1368.2	1332.6	1335.2	1328.1	1306.7
40°	1337.7	1399.7	1461.7	1504.4	1465.3	1347.4	1285.9	1278.2	1279.8	1256.9	1226.4
42.5°	1288.9	1345.3	1407.3	1446.0	1361.6	1269.6	1227.9	1228.9	1215.7	1183.7	1167.4
45°	1245.2	1297.1	1361.6	1365.2	1261.5	1184.7	1172.5	1159.3	1129.8	1119.2	1107.0
47.5°	1189.3	1246.7	1300.1	1280.8	1163.4	1115.6	1106.5	1077.5	1062.7	1054.6	1044.5
50°	1129.8	1187.8	1236.6	1181.7	1070.9	1059.7	1029.7	1006.8	996.7	988.0	978.9
52.5°	1073.4	1121.2	1171.0	1076.5	999.7	989.1	955.0	941.8	931.6	922.0	919.9
55°	1009.4	1051.6	1085.6	976.3	931.6	906.7	882.3	873.2	863.5	858.9	866.6
57.5°	936.7	984.5	979.4	877.7	857.9	821.8	812.7	806.6	799.5	802.5	739.0
60°	871.1	907.7	882.8	805.6	772.0	747.6	739.5	735.4	739.5	677.5	595.7
62.5°	790.3	831.5	781.2	721.2	685.6	673.9	666.8	672.4	612.9	544.8	525.0
65°	706.5	751.2	677.0	630.7	608.4	598.2	597.7	550.4	492.0	465.6	465.6
67.5°	625.7	671.9	576.4	537.7	529.1	530.1	500.6	429.0	412.7	394.9	343.6
70°	539.8	580.4	476.2	452.8	447.8	444.2	372.5	353.2	333.9	286.7	282.6
72.5°	454.4	474.2	382.7	377.1	376.1	312.6	298.3	265.3	242.9	237.4	234.8
75°	371.5	365.4	302.4	307.5	259.2	236.8	214.0	194.7	191.6	189.6	47.3
77.5°	293.3	262.8	238.4	207.4	185.5	157.6	153.0	149.9	98.6	35.6	29.0
80°	213.5	170.3	158.6	134.7	114.9	110.3	112.8	34.6	27.4	22.9	19.8
82.5°	135.7	108.8	88.9	77.8	75.7	33.0	24.4	19.8	17.3	14.7	12.2
85°	72.7	48.3	44.7	37.6	22.4	15.2	12.7	9.7	8.1	6.6	6.1
87.5°	22.9	19.3	15.8	12.7	7.6	5.1	4.1	3.6	3.0	2.5	2.5
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: P1213045

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°	25°
0°	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5
2.5°	1706.7	1707.7	1707.2	1708.7	1708.7	1710.8	1712.3	1713.8	1716.9	1718.4	1730.1
5°	1728.6	1731.1	1738.7	1745.8	1754.5	1757.0	1771.8	1775.3	1792.6	1794.6	1851.6
7.5°	1777.3	1787.0	1805.3	1823.6	1841.9	1853.6	1873.9	1886.6	1900.3	1912.5	1957.8
10°	1836.3	1852.6	1870.4	1888.7	1899.3	1921.7	1933.9	1935.9	1932.4	1912.5	1839.4
12.5°	1894.2	1910.5	1902.9	1906.4	1919.1	1879.5	1885.1	1856.6	1876.5	1778.4	1705.7
15°	1886.1	1885.1	1866.3	1805.3	1815.5	1739.7	1709.2	1685.9	1704.7	1694.5	1683.3
17.5°	1861.7	1815.5	1782.9	1709.7	1678.7	1657.4	1657.9	1658.4	1649.3	1658.9	1630.5
20°	1758.5	1706.7	1658.4	1632.5	1623.3	1608.1	1615.7	1608.1	1608.6	1611.7	1567.9
22.5°	1621.3	1605.6	1577.6	1585.7	1582.7	1596.4	1586.2	1570.5	1575.6	1552.7	1519.7
25°	1565.9	1547.6	1546.6	1549.7	1545.1	1539.0	1529.8	1505.9	1504.4	1497.3	1482.1
27.5°	1510.0	1511.0	1514.1	1504.9	1488.7	1476.5	1462.7	1451.1	1455.6	1447.5	1426.7
30°	1471.4	1470.9	1452.6	1444.4	1414.5	1415.0	1411.4	1404.3	1399.7	1400.2	1387.0
32.5°	1416.5	1400.7	1379.9	1369.7	1367.2	1358.0	1350.9	1352.5	1356.0	1343.3	1357.0
35°	1360.1	1327.5	1324.5	1315.9	1307.7	1301.6	1304.2	1294.0	1293.5	1292.0	1180.2
37.5°	1284.3	1268.6	1267.1	1257.9	1252.3	1250.8	1241.1	1242.7	1247.2	1255.4	1006.3
40°	1221.8	1207.6	1204.0	1203.5	1191.3	1190.3	1192.9	1202.5	1209.1	1158.3	959.1
42.5°	1154.7	1155.8	1144.6	1137.5	1139.0	1143.6	1155.8	1122.2	972.3	926.5	876.7
45°	1097.3	1092.2	1086.1	1084.1	1097.3	1088.2	954.0	880.3	862.5	860.5	720.7
47.5°	1037.3	1035.8	1033.3	1034.8	959.6	855.4	824.9	815.2	818.3	816.2	619.0
50°	976.9	978.9	978.9	854.9	784.7	767.5	770.0	778.6	724.8	676.5	576.9
52.5°	924.5	908.7	778.6	733.9	718.2	725.8	707.5	639.9	591.1	562.6	533.7
55°	827.4	711.5	682.6	675.5	681.1	613.5	571.8	528.1	515.4	512.3	495.5
57.5°	651.1	627.7	630.2	601.8	537.2	499.1	482.3	476.2	470.6	466.6	40.7
60°	575.8	582.5	533.2	472.2	446.2	441.2	437.1	431.5	430.5	423.4	25.9
62.5°	527.1	463.5	420.8	405.6	399.5	398.0	390.3	387.8	329.3	45.2	19.3
65°	397.5	371.5	363.4	359.8	353.2	353.2	293.3	46.3	37.6	32.5	17.3
67.5°	324.3	322.2	318.2	313.6	213.5	44.7	39.1	34.1	29.5	25.9	15.2
70°	274.5	273.4	249.0	45.7	38.1	33.5	29.5	26.4	24.4	21.9	13.7
72.5°	225.2	45.7	38.6	33.5	29.0	26.4	23.9	21.3	19.3	17.8	11.2
75°	35.1	31.0	27.4	24.9	22.9	20.3	18.3	16.8	16.3	14.2	7.6
77.5°	25.4	21.9	19.8	17.8	15.8	14.2	12.2	10.7	9.7	8.1	5.6
80°	17.8	15.8	14.2	11.7	10.2	8.6	7.6	6.6	6.1	5.1	2.5
82.5°	10.2	8.6	7.6	6.1	5.6	4.6	4.1	3.6	3.6	2.5	2.5
85°	4.6	4.6	3.6	3.0	2.5	2.5	2.5	2.0	2.0	1.5	1.5
87.5°	2.0	2.0	2.0	2.0	2.0	1.5	1.5	1.5	1.5	1.5	1.0
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: P1213045

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°
0°	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5
2.5°	1746.3	1753.0	1765.7	1778.9	1764.1	1817.0	1812.9	1830.7	1840.4	1844.9	1855.6
5°	1901.9	1931.3	1941.0	1912.0	1895.3	1878.0	1838.8	1809.4	1812.9	1803.3	1768.2
7.5°	1898.8	1835.8	1750.9	1712.3	1709.2	1704.7	1716.9	1724.0	1725.0	1724.5	1723.5
10°	1738.2	1705.7	1700.1	1695.0	1697.0	1678.2	1669.6	1645.2	1658.4	1651.3	1653.8
12.5°	1689.4	1681.8	1651.8	1610.1	1635.0	1616.2	1605.6	1612.7	1604.5	1596.9	1594.4
15°	1660.4	1611.1	1594.4	1584.2	1577.1	1573.0	1576.6	1568.5	1565.9	1564.4	1567.9
17.5°	1600.5	1580.7	1562.4	1535.4	1535.9	1534.4	1544.6	1559.8	1560.8	1482.6	1411.9
20°	1553.2	1536.9	1513.6	1496.8	1519.7	1479.0	1322.0	1247.2	1235.6	1235.6	1237.6
22.5°	1515.6	1479.5	1481.0	1454.6	1240.6	1196.9	1197.9	1202.5	1181.7	1110.5	1102.9
25°	1464.3	1458.7	1347.4	1164.4	1165.9	1131.9	1079.5	1005.8	926.0	926.0	912.8
27.5°	1425.6	1307.2	1144.6	1137.0	1022.6	950.4	905.7	838.1	829.0	820.3	821.3
30°	1392.6	1105.9	1110.0	950.4	866.1	806.1	802.5	791.3	785.8	784.2	778.6
32.5°	1100.9	1077.0	929.1	809.1	776.1	766.4	761.9	749.2	748.7	739.0	671.9
35°	1032.3	945.3	777.6	745.1	735.4	726.3	718.7	482.3	56.9	22.9	19.8
37.5°	954.0	789.8	719.2	704.4	695.3	513.8	51.3	17.8	12.7	9.1	8.1
40°	808.6	705.4	683.1	666.8	275.0	17.8	11.2	8.6	5.1	4.6	4.1
42.5°	682.1	664.8	640.9	195.2	20.3	8.6	5.6	4.1	3.6	3.6	3.0
45°	638.4	623.1	258.2	19.3	12.7	4.1	3.6	3.6	3.0	2.0	2.0
47.5°	597.7	526.0	23.4	12.2	8.1	3.6	3.0	2.0	2.0	2.0	1.5
50°	554.5	29.0	16.3	9.1	5.1	2.0	2.0	2.0	2.0	1.5	1.5
52.5°	103.7	20.3	13.2	8.1	2.5	2.0	2.0	2.0	1.5	1.5	1.5
55°	24.4	16.3	12.2	7.1	2.0	2.0	2.0	1.5	1.5	1.5	1.0
57.5°	18.3	12.2	9.7	6.6	2.0	1.5	1.5	1.5	1.5	1.5	1.0
60°	15.2	8.6	7.6	6.1	1.5	1.5	1.5	1.5	1.5	1.5	1.0
62.5°	10.7	7.1	5.6	4.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5
65°	8.6	5.6	4.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
67.5°	7.6	4.6	3.0	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
70°	6.1	1.5	1.5	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
72.5°	5.1	1.5	1.0	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
75°	5.1	2.5	1.0	1.0	1.5	1.5	2.0	2.0	1.5	1.5	1.5
77.5°	3.6	2.5	1.0	1.0	1.5	1.5	2.0	2.0	1.5	1.5	1.5
80°	2.0	2.5	1.0	1.5	1.5	3.0	3.6	2.0	1.5	1.5	1.5
82.5°	2.0	2.5	3.0	3.0	1.5	2.5	3.0	2.5	2.0	1.5	1.5
85°	2.0	1.5	2.0	2.5	1.5	2.5	2.5	2.0	2.0	1.5	1.5
87.5°	1.0	1.5	1.5	2.0	2.0	2.0	2.5	2.0	2.0	2.0	1.5
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: P1213045

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	85°	90°	95°	100°	105°	110°	115°	120°	125°	130°	135°
0°	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5
2.5°	1860.7	1862.7	1830.7	1819.5	1829.2	1827.2	1818.5	1786.5	1782.9	1761.6	1730.6
5°	1778.4	1792.1	1775.3	1804.3	1790.6	1804.3	1846.0	1865.3	1896.8	1916.1	1923.2
7.5°	1720.9	1724.0	1724.0	1726.5	1729.1	1729.6	1726.5	1724.5	1715.8	1705.2	1724.5
10°	1651.3	1654.9	1661.0	1659.9	1659.4	1670.1	1672.6	1694.5	1693.5	1697.6	1712.3
12.5°	1615.2	1587.8	1612.7	1606.1	1615.2	1601.0	1627.4	1622.8	1624.4	1636.6	1668.1
15°	1555.2	1563.9	1570.0	1570.0	1573.5	1570.5	1567.4	1588.3	1601.0	1601.5	1599.5
17.5°	1439.9	1374.3	1441.4	1424.1	1561.8	1565.4	1553.7	1544.1	1544.1	1551.7	1567.9
20°	1236.1	1237.6	1238.1	1244.7	1252.8	1252.3	1252.8	1453.1	1548.1	1526.3	1511.5
22.5°	1083.6	1064.8	1099.9	1097.3	1141.0	1189.3	1235.6	1231.0	1234.0	1375.3	1502.4
25°	868.6	893.0	873.2	881.8	931.1	988.5	1024.1	1117.1	1218.3	1211.2	1244.2
27.5°	817.8	811.2	820.3	820.3	826.9	834.5	854.4	906.7	996.7	1091.2	1180.7
30°	769.5	775.1	776.1	785.2	790.3	795.4	798.5	818.3	838.6	904.2	1014.5
32.5°	577.9	506.7	666.8	710.0	746.6	755.3	761.4	769.5	784.2	793.9	849.3
35°	16.8	16.8	17.8	20.3	25.9	174.8	665.8	733.9	743.6	755.8	765.9
37.5°	8.1	6.1	7.1	7.6	9.1	12.7	18.3	56.9	633.8	716.6	727.8
40°	3.6	3.6	3.6	3.6	4.1	5.1	7.6	12.7	19.3	509.8	687.7
42.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.6	4.6	9.1	21.9	360.9
45°	2.0	2.0	1.5	2.0	2.0	2.5	3.0	3.0	4.1	13.7	24.9
47.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.5	3.0	9.1	13.2
50°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	7.1	9.1
52.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.0	8.1
55°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5	2.0	7.1
57.5°	1.0	1.0	1.0	1.0	1.0	1.5	1.0	1.0	1.5	1.5	6.6
60°	1.0	1.0	1.0	1.0	1.0	1.5	1.5	1.5	1.5	1.5	6.1
62.5°	1.5	1.5	1.0	1.5	1.0	1.0	1.5	1.5	1.5	1.5	4.1
65°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.0	1.5
67.5°	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.5	1.5	1.0	1.0
70°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.0	1.0	1.0	1.0
72.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.0	1.0	1.0	1.0
75°	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	1.0	1.0	1.0
77.5°	1.5	1.5	1.5	1.5	1.5	1.5	2.5	3.0	2.5	2.5	1.0
80°	1.5	1.5	1.5	1.5	1.5	1.5	2.5	2.5	2.5	2.5	3.6
82.5°	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.5
85°	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0	1.5	2.0
87.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	1.5	1.5	1.5
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: P1213045

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	140°	145°	150°	155°	160°	161°	162°	163°	164°	165°	166°
0°	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5
2.5°	1733.1	1715.8	1710.3	1698.6	1697.6	1698.6	1696.0	1692.5	1694.5	1690.9	1687.9
5°	1927.3	1881.0	1851.0	1810.9	1755.5	1743.3	1740.2	1723.0	1716.9	1714.8	1706.7
7.5°	1770.2	1854.6	1905.4	1922.7	1857.7	1842.4	1824.6	1810.4	1796.7	1770.7	1755.0
10°	1700.6	1704.7	1753.5	1810.4	1902.9	1915.6	1925.2	1894.2	1885.6	1819.5	1805.3
12.5°	1684.3	1684.8	1690.4	1725.0	1797.7	1805.8	1839.9	1858.2	1880.5	1893.2	1883.1
15°	1610.1	1651.3	1681.8	1684.8	1691.5	1705.7	1715.8	1779.4	1806.3	1878.5	1874.4
17.5°	1575.6	1588.8	1633.0	1669.1	1663.0	1657.9	1666.0	1674.7	1700.6	1772.8	1771.8
20°	1518.1	1560.3	1584.2	1621.8	1655.9	1657.4	1648.3	1643.2	1633.0	1644.7	1655.4
22.5°	1493.7	1500.4	1545.1	1571.5	1610.1	1623.9	1625.9	1626.4	1620.8	1614.7	1611.7
25°	1491.2	1470.4	1493.2	1526.3	1554.7	1569.5	1586.2	1591.8	1589.8	1589.8	1586.8
27.5°	1220.3	1463.8	1451.6	1473.4	1508.0	1518.1	1526.8	1544.1	1554.7	1562.4	1565.9
30°	1162.4	1206.1	1419.0	1422.1	1457.1	1456.1	1465.8	1480.0	1493.7	1511.5	1516.1
32.5°	1028.2	1135.4	1299.1	1370.7	1407.3	1410.9	1416.0	1420.0	1432.8	1452.6	1469.9
35°	823.9	1034.3	1113.1	1346.4	1353.0	1360.1	1363.1	1372.8	1376.8	1385.0	1400.2
37.5°	745.6	854.9	1067.8	1164.4	1290.4	1296.5	1312.8	1316.9	1323.5	1330.1	1341.8
40°	700.4	730.4	888.9	1039.9	1240.1	1244.2	1249.8	1259.9	1260.5	1268.1	1278.8
42.5°	664.3	683.6	729.8	993.1	1204.6	1204.0	1190.8	1197.4	1200.5	1208.6	1223.4
45°	530.6	641.4	670.9	811.2	959.1	1028.2	1160.8	1139.0	1138.5	1141.5	1157.3
47.5°	26.9	603.3	624.1	669.4	905.7	908.2	925.5	1070.9	1093.2	1086.1	1087.7
50°	18.3	41.7	581.4	602.3	780.7	843.7	856.4	863.0	946.9	1040.4	1025.1
52.5°	14.2	23.9	356.3	559.1	634.3	680.5	762.4	809.1	814.2	851.8	979.4
55°	12.7	18.3	38.6	515.9	539.3	549.4	597.2	679.0	745.1	764.9	766.4
57.5°	11.2	16.8	26.4	233.3	490.5	492.5	500.6	529.1	588.6	642.9	704.4
60°	10.2	14.7	20.8	40.2	445.7	450.8	452.3	460.0	467.1	504.2	574.8
62.5°	6.1	11.7	18.3	29.0	352.7	405.1	404.6	409.6	416.3	420.3	434.6
65°	5.1	9.1	15.8	24.4	43.2	53.9	327.3	363.9	368.0	373.6	376.1
67.5°	4.6	8.1	11.7	19.3	32.5	37.1	42.7	52.9	288.7	325.3	330.4
70°	4.1	5.6	9.7	16.3	26.4	28.5	32.0	36.6	43.2	53.4	261.2
72.5°	2.5	4.1	6.6	11.7	20.3	22.9	24.9	28.0	31.0	37.1	42.7
75°	1.0	3.0	5.6	8.6	15.8	17.3	18.8	20.8	23.4	27.4	30.5
77.5°	1.0	2.5	4.6	6.1	10.2	11.7	13.7	15.2	17.3	19.3	22.4
80°	3.6	2.0	3.0	4.6	7.1	7.6	8.6	9.7	11.2	12.7	14.7
82.5°	2.5	3.0	3.6	3.0	3.6	4.6	5.1	6.1	6.6	7.6	8.1
85°	2.0	2.0	2.5	2.5	2.5	2.5	2.5	2.5	3.0	3.6	4.6
87.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0
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: P1213045

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	167°	168°	169°	170°	171°	172°	173°	174°	175°	176°	177°
0°	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5
2.5°	1687.9	1686.9	1683.8	1683.8	1683.3	1685.4	1686.9	1688.4	1687.9	1690.9	1687.9
5°	1700.6	1698.1	1693.5	1689.4	1687.9	1688.9	1687.4	1688.9	1686.9	1689.4	1684.8
7.5°	1735.7	1727.0	1709.2	1702.1	1693.0	1692.5	1687.9	1686.9	1683.8	1683.8	1678.2
10°	1797.7	1756.0	1750.9	1729.6	1721.9	1684.8	1693.0	1679.3	1677.7	1671.1	1668.6
12.5°	1848.5	1816.0	1806.3	1787.5	1766.2	1690.9	1707.7	1678.2	1676.7	1663.5	1649.8
15°	1849.5	1868.3	1841.9	1790.1	1785.5	1733.6	1699.6	1689.4	1676.2	1636.6	1643.2
17.5°	1790.1	1833.3	1846.0	1834.8	1802.3	1767.2	1719.4	1699.1	1659.4	1641.6	1629.4
20°	1693.5	1737.2	1791.6	1795.1	1815.5	1790.6	1728.0	1695.0	1647.2	1616.2	1606.1
22.5°	1616.7	1648.8	1711.3	1740.2	1765.1	1773.8	1734.1	1685.4	1625.9	1595.9	1589.8
25°	1576.1	1583.2	1602.0	1636.1	1690.9	1730.6	1736.2	1684.3	1653.3	1587.8	1553.2
27.5°	1561.3	1555.2	1547.6	1564.9	1606.1	1654.4	1686.4	1695.0	1617.8	1555.2	1520.7
30°	1523.7	1527.3	1515.6	1509.5	1536.4	1586.2	1643.2	1657.4	1597.9	1533.4	1493.7
32.5°	1477.5	1483.6	1485.6	1474.9	1469.3	1503.9	1565.4	1599.5	1596.4	1502.4	1458.2
35°	1419.5	1436.8	1441.4	1441.9	1432.8	1427.2	1462.7	1533.4	1560.3	1488.2	1424.1
37.5°	1358.5	1363.6	1388.5	1395.1	1395.1	1378.4	1404.8	1461.2	1498.8	1456.1	1382.4
40°	1282.3	1298.6	1322.0	1333.6	1345.3	1346.9	1332.1	1371.8	1433.8	1423.1	1343.3
42.5°	1226.9	1237.6	1251.8	1267.6	1291.5	1297.6	1282.3	1289.4	1354.0	1381.9	1292.5
45°	1162.4	1176.6	1180.7	1197.9	1222.8	1240.6	1240.1	1225.4	1277.2	1311.8	1255.4
47.5°	1096.3	1110.0	1117.1	1125.8	1144.1	1166.9	1179.6	1173.0	1183.2	1250.8	1206.1
50°	1028.2	1035.8	1050.0	1059.7	1071.9	1085.1	1115.6	1121.7	1107.5	1161.3	1151.7
52.5°	963.6	966.2	975.8	985.5	1001.8	1011.4	1035.8	1054.1	1053.1	1068.8	1091.2
55°	913.3	902.1	904.2	911.8	922.5	937.2	950.9	979.4	989.1	992.1	1027.7
57.5°	713.6	828.4	838.6	838.1	850.8	857.4	870.1	888.9	923.5	915.9	955.5
60°	648.5	661.2	757.3	768.5	773.0	779.1	794.4	811.7	837.1	853.4	870.6
62.5°	494.5	571.8	600.8	685.6	698.8	702.4	712.6	720.7	747.1	784.2	777.1
65°	382.7	415.7	504.2	538.7	610.9	620.1	634.3	642.9	650.6	693.3	695.3
67.5°	330.9	336.0	359.8	426.4	472.2	542.8	551.5	559.1	570.8	601.3	620.1
70°	282.6	288.7	295.3	300.9	360.3	407.1	472.7	475.2	482.8	503.2	545.9
72.5°	53.4	241.4	245.5	249.0	255.6	286.7	349.2	400.0	403.0	412.7	451.8
75°	36.1	42.2	57.9	199.2	205.8	207.9	218.5	282.1	328.8	330.9	348.2
77.5°	25.9	29.0	35.1	41.7	106.2	159.6	162.1	173.8	222.1	257.2	260.2
80°	17.8	19.8	23.4	26.4	32.5	42.7	117.9	121.5	127.6	175.9	185.0
82.5°	10.2	11.7	13.7	16.8	19.3	24.4	31.5	40.7	82.8	88.4	117.4
85°	5.1	5.6	6.6	8.1	9.7	11.7	15.8	19.3	26.4	47.8	49.3
87.5°	2.5	2.5	2.5	2.5	4.1	4.6	5.6	7.1	9.1	13.7	17.8
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: P1213045

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	178°	179°	180°	181°	182°	183°	184°	185°	186°	187°	188°
0°	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5
2.5°	1688.4	1695.5	1701.6	1703.1	1703.1	1704.2	1705.7	1706.7	1707.7	1708.7	1707.7
5°	1685.4	1693.0	1698.1	1699.6	1699.6	1702.6	1705.2	1708.2	1709.7	1709.7	1708.7
7.5°	1677.7	1683.3	1689.9	1694.0	1694.5	1699.6	1704.2	1703.7	1705.7	1706.7	1709.2
10°	1667.6	1667.6	1678.7	1681.8	1684.3	1689.9	1691.5	1694.5	1701.6	1702.6	1709.2
12.5°	1662.5	1657.4	1670.6	1672.1	1680.8	1673.7	1682.8	1685.9	1678.7	1688.4	1675.7
15°	1639.6	1645.7	1643.7	1648.3	1663.5	1655.4	1680.3	1672.1	1690.4	1668.6	1707.2
17.5°	1620.8	1619.8	1627.9	1632.0	1635.0	1652.3	1658.9	1668.1	1675.2	1669.1	1684.3
20°	1607.1	1599.0	1605.1	1609.6	1620.3	1633.5	1637.6	1623.9	1647.7	1688.4	1698.1
22.5°	1581.2	1575.6	1582.7	1582.7	1599.0	1596.9	1612.2	1603.5	1625.9	1673.2	1722.5
25°	1546.1	1546.6	1554.2	1563.4	1566.4	1589.3	1597.4	1608.6	1636.6	1693.0	1723.0
27.5°	1510.5	1507.5	1512.0	1530.8	1546.6	1563.4	1565.9	1604.0	1642.2	1680.8	1707.2
30°	1474.9	1471.9	1474.9	1488.7	1507.5	1518.6	1546.6	1597.4	1633.0	1659.4	1684.3
32.5°	1436.8	1433.8	1440.9	1451.1	1484.1	1485.6	1541.0	1588.8	1616.7	1636.1	1631.5
35°	1396.2	1392.1	1398.7	1414.5	1445.0	1456.1	1514.1	1549.7	1581.2	1590.3	1569.0
37.5°	1347.4	1340.3	1348.4	1370.2	1402.3	1434.8	1483.1	1524.2	1541.0	1516.6	1491.2
40°	1296.5	1291.5	1305.7	1316.9	1354.5	1399.7	1455.1	1484.1	1473.4	1445.5	1417.5
42.5°	1251.3	1240.6	1253.3	1274.7	1317.4	1368.7	1413.4	1429.7	1404.3	1363.1	1330.6
45°	1195.9	1183.2	1198.5	1226.9	1272.7	1331.1	1366.2	1360.6	1317.4	1281.8	1237.1
47.5°	1138.0	1122.7	1138.0	1172.0	1223.4	1285.4	1310.8	1285.4	1231.0	1186.3	1150.2
50°	1081.0	1063.3	1078.0	1129.3	1179.6	1227.4	1226.9	1177.6	1145.1	1096.3	1064.8
52.5°	1024.6	999.2	1014.0	1069.9	1120.2	1174.6	1134.4	1088.7	1049.5	1006.8	996.7
55°	955.0	927.6	947.4	1028.7	1067.3	1099.3	1035.3	995.2	956.5	935.2	922.5
57.5°	888.9	858.9	876.2	972.3	1000.7	1008.9	949.9	893.0	870.1	863.0	844.7
60°	820.8	786.8	803.0	913.8	933.7	900.6	842.7	798.5	793.9	779.7	765.4
62.5°	755.8	718.2	728.3	841.2	850.3	790.3	737.0	725.3	714.1	699.9	692.2
65°	681.1	641.9	656.1	763.9	755.3	678.0	648.0	645.5	630.7	619.0	630.2
67.5°	612.4	566.2	586.0	679.5	640.4	577.4	565.2	559.1	547.4	554.0	436.6
70°	537.2	486.9	513.8	588.6	530.6	488.9	484.4	475.2	475.7	378.1	318.7
72.5°	453.4	409.6	448.8	488.9	419.8	407.6	401.0	400.0	322.7	262.3	247.5
75°	379.7	335.4	377.6	392.9	334.4	326.3	325.8	269.4	211.9	202.3	197.7
77.5°	296.3	262.3	302.4	279.5	256.7	247.5	222.1	166.7	159.6	153.0	57.4
80°	199.7	202.3	225.7	192.6	183.0	156.0	123.0	117.9	101.6	40.7	32.0
82.5°	121.5	152.5	143.8	120.5	117.9	84.9	77.8	39.6	29.5	23.4	20.3
85°	63.0	77.3	74.2	65.6	48.8	43.7	24.4	18.8	15.2	11.7	9.7
87.5°	21.3	28.5	27.4	21.9	16.8	13.2	8.6	7.1	5.1	4.1	3.6
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: P1213045

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	189°	190°	191°	192°	193°	194°	195°	196°	197°	198°	199°
0°	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5
2.5°	1706.7	1706.7	1705.7	1706.7	1707.2	1706.2	1706.2	1707.2	1707.7	1708.2	1710.8
5°	1709.2	1710.3	1711.8	1714.8	1715.3	1721.4	1724.0	1725.5	1727.0	1727.5	1724.0
7.5°	1714.8	1718.4	1721.4	1720.9	1717.4	1707.7	1704.7	1702.1	1706.7	1718.4	1732.1
10°	1719.9	1703.7	1673.2	1714.8	1702.1	1713.8	1748.4	1756.0	1779.4	1812.4	1822.1
12.5°	1684.8	1729.6	1739.2	1692.5	1778.9	1746.9	1785.0	1818.5	1828.2	1861.7	1841.4
15°	1722.5	1744.3	1759.0	1805.8	1800.7	1828.2	1838.8	1832.2	1833.8	1842.4	1865.3
17.5°	1721.9	1765.7	1775.3	1806.8	1828.2	1828.7	1825.6	1822.6	1830.7	1837.3	1823.6
20°	1751.4	1765.7	1784.5	1797.2	1801.2	1806.3	1816.0	1808.3	1793.1	1778.4	1772.3
22.5°	1736.7	1768.7	1785.0	1787.0	1784.5	1768.7	1754.5	1733.1	1726.0	1718.4	1720.9
25°	1739.7	1754.5	1752.4	1744.3	1733.6	1704.2	1697.0	1687.9	1674.2	1641.1	1611.1
27.5°	1717.9	1710.3	1701.1	1681.3	1662.0	1646.2	1628.4	1599.0	1574.6	1539.0	1525.8
30°	1681.3	1650.8	1628.4	1616.7	1597.9	1571.5	1544.6	1508.5	1477.5	1470.4	1463.8
32.5°	1611.1	1581.2	1562.9	1534.4	1502.4	1470.9	1439.9	1425.6	1419.0	1420.0	1413.9
35°	1539.5	1513.1	1485.6	1442.9	1419.0	1387.5	1376.3	1373.3	1367.2	1360.6	1353.5
37.5°	1463.2	1432.2	1391.1	1365.7	1341.8	1329.1	1323.5	1318.9	1308.2	1296.5	1288.4
40°	1389.6	1333.6	1310.8	1285.9	1278.8	1273.2	1265.0	1253.9	1239.1	1237.1	1233.5
42.5°	1291.0	1250.8	1231.0	1225.9	1217.3	1207.6	1200.5	1188.3	1182.2	1186.3	1189.3
45°	1197.4	1177.1	1170.5	1164.4	1148.1	1134.4	1129.8	1125.8	1130.9	1153.2	1099.9
47.5°	1121.7	1113.6	1105.4	1095.3	1080.0	1069.9	1074.4	1078.5	1083.1	918.9	838.6
50°	1056.1	1045.0	1032.3	1021.1	1011.9	1010.9	1034.8	963.1	806.6	802.5	721.2
52.5°	984.5	967.7	960.1	953.5	957.5	972.8	805.1	747.1	716.6	622.6	580.9
55°	907.2	892.5	892.5	898.6	876.7	710.5	701.9	606.8	549.4	533.2	526.5
57.5°	830.0	828.4	837.1	765.4	645.0	618.5	519.9	499.1	490.0	487.9	477.2
60°	759.3	773.6	647.5	595.7	517.9	467.1	452.8	450.3	440.7	437.1	427.4
62.5°	702.9	583.0	542.8	443.2	417.3	410.7	403.0	399.5	390.8	345.1	101.1
65°	507.7	479.8	389.3	372.5	370.5	360.9	357.8	321.7	75.7	50.8	43.2
67.5°	383.2	340.0	328.3	325.3	315.6	296.3	87.9	50.3	43.2	37.6	33.0
70°	294.3	286.7	278.0	270.9	79.8	49.8	43.2	36.6	31.5	28.0	25.4
72.5°	240.9	235.8	137.2	52.3	42.7	36.1	32.0	28.0	24.4	22.4	20.3
75°	188.6	52.3	43.2	36.1	31.0	26.4	23.4	20.8	18.8	17.3	15.8
77.5°	42.7	34.6	29.5	24.9	22.4	19.8	17.8	15.2	13.7	12.2	10.2
80°	26.4	22.9	19.3	17.8	15.2	12.7	11.2	10.2	8.1	7.6	6.6
82.5°	17.3	13.7	12.2	10.2	8.1	7.6	6.6	5.1	4.6	4.1	3.6
85°	7.6	6.6	5.6	4.6	3.6	3.0	2.5	2.0	2.0	2.0	2.0
87.5°	2.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.0	1.0
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: P1213045

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	200°	205°	210°	215°	220°	225°	230°	235°	240°	245°	250°
0°	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5
2.5°	1711.8	1720.9	1729.6	1727.0	1717.9	1703.7	1699.6	1694.0	1698.1	1706.7	1710.3
5°	1724.0	1718.9	1737.2	1764.1	1807.8	1811.9	1842.4	1849.5	1873.9	1889.2	1888.7
7.5°	1741.3	1813.4	1843.4	1875.9	1890.7	1887.1	1891.7	1888.1	1882.6	1880.0	1877.0
10°	1829.2	1884.1	1895.3	1895.3	1872.4	1841.4	1828.2	1805.3	1759.6	1760.6	1753.0
12.5°	1880.5	1899.8	1873.4	1851.0	1759.0	1723.5	1684.8	1666.5	1655.9	1639.6	1645.7
15°	1853.6	1826.1	1810.4	1738.2	1681.8	1617.8	1618.8	1607.6	1595.9	1596.9	1589.3
17.5°	1813.9	1792.1	1680.3	1630.5	1603.0	1578.1	1573.5	1558.8	1551.2	1548.6	1548.1
20°	1759.6	1680.8	1597.4	1585.2	1552.2	1523.7	1519.2	1523.7	1547.1	1505.4	1364.1
22.5°	1696.0	1582.7	1558.3	1523.7	1501.4	1490.2	1518.1	1391.1	1199.0	1222.3	1197.4
25°	1588.3	1539.0	1497.3	1470.9	1468.3	1399.7	1166.4	1142.0	1018.5	952.5	878.3
27.5°	1509.5	1488.2	1444.4	1439.9	1406.8	1144.6	1023.1	888.9	839.6	832.0	815.7
30°	1461.7	1431.2	1404.8	1289.4	1122.7	921.5	820.8	802.0	793.4	784.2	770.0
32.5°	1404.3	1375.3	1388.0	1084.1	895.0	793.4	773.0	759.3	743.6	737.5	686.1
35°	1345.8	1332.6	1084.6	911.3	769.5	745.1	729.8	715.6	569.2	137.7	46.8
37.5°	1283.3	1280.3	974.8	756.3	720.7	697.8	654.6	135.2	32.0	21.9	16.3
40°	1234.5	975.3	770.5	709.0	680.0	644.0	90.5	22.4	14.2	8.6	5.6
42.5°	1202.0	877.2	689.7	665.3	602.3	66.6	22.9	9.7	5.6	4.6	3.6
45°	926.5	692.7	644.5	619.0	76.2	22.9	13.2	4.6	3.6	3.0	2.0
47.5°	854.9	629.2	600.8	135.2	25.4	12.2	9.1	3.0	2.0	2.0	2.0
50°	647.5	581.4	478.3	33.0	16.3	8.6	6.6	2.0	2.0	2.0	1.5
52.5°	567.7	536.7	51.3	21.9	12.7	6.6	4.1	1.5	1.5	1.5	1.5
55°	518.9	340.5	30.5	16.8	10.7	6.1	2.5	1.5	1.5	1.5	1.0
57.5°	474.7	45.7	22.4	14.2	9.7	5.6	1.5	1.5	1.5	1.5	1.0
60°	402.5	33.0	18.3	12.7	9.1	5.1	1.5	1.5	1.5	1.5	1.5
62.5°	52.3	25.9	15.8	11.2	6.6	4.1	1.0	1.5	1.5	1.5	1.5
65°	38.1	20.3	14.2	7.6	4.1	1.5	1.0	1.5	1.5	1.5	1.5
67.5°	29.5	16.8	10.7	6.6	3.6	1.0	1.0	1.5	1.5	1.5	1.5
70°	23.4	14.2	8.6	5.6	3.0	1.0	1.0	1.5	1.5	1.5	1.5
72.5°	18.3	10.2	6.1	3.0	2.0	1.0	1.0	1.5	1.5	1.5	1.5
75°	13.7	8.1	4.6	2.5	1.0	1.0	1.0	1.5	1.5	1.5	1.5
77.5°	9.1	5.1	3.6	2.0	2.0	2.0	2.5	2.5	1.5	1.5	1.5
80°	6.1	3.6	2.5	2.5	2.5	2.0	2.5	2.5	1.5	2.5	1.5
82.5°	3.0	2.5	2.5	2.0	2.0	1.5	2.0	2.0	2.0	2.0	1.5
85°	2.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	1.5
87.5°	1.0	1.0	1.0	1.0	1.5	1.5	1.5	1.5	2.0	2.0	1.5
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: P1213045

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	305°
0°	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5
2.5°	1705.7	1707.2	1703.1	1725.0	1713.8	1714.8	1719.4	1707.7	1710.3	1702.1	1696.5
5°	1890.7	1893.7	1896.8	1897.8	1899.8	1902.4	1899.3	1897.8	1894.8	1884.6	1873.9
7.5°	1861.7	1858.2	1856.6	1858.7	1862.2	1863.7	1861.2	1864.8	1878.0	1883.6	1887.1
10°	1709.2	1693.0	1704.2	1702.6	1689.9	1732.6	1720.9	1727.5	1732.1	1778.9	1807.3
12.5°	1636.6	1646.7	1627.4	1617.8	1630.5	1639.1	1647.7	1629.4	1654.9	1643.2	1680.8
15°	1575.6	1569.5	1567.4	1567.9	1565.4	1577.6	1580.7	1584.7	1588.3	1604.0	1610.1
17.5°	1548.1	1558.3	1562.4	1565.4	1560.3	1554.7	1549.1	1541.0	1543.6	1539.5	1551.2
20°	1269.1	1235.0	1233.0	1252.8	1231.0	1243.2	1272.7	1469.9	1463.2	1540.0	1514.1
22.5°	1059.2	1027.2	999.7	975.8	1009.9	1024.1	1079.0	1141.0	1241.7	1225.9	1335.2
25°	865.0	853.4	846.2	842.7	845.2	844.2	856.4	885.4	931.1	1038.9	1178.1
27.5°	809.1	803.5	801.0	792.9	799.0	796.9	806.6	812.7	826.4	837.1	882.3
30°	764.9	758.3	753.7	745.1	751.2	751.7	754.7	770.5	776.1	785.2	799.5
32.5°	279.5	164.7	154.5	146.9	160.6	209.4	367.5	642.4	732.9	740.0	756.3
35°	27.4	22.9	20.3	20.3	20.8	22.9	30.5	80.3	146.9	567.7	710.5
37.5°	10.7	9.1	7.6	7.1	7.6	8.6	11.7	15.2	20.8	43.2	192.6
40°	4.6	4.1	3.6	3.6	3.6	3.6	4.1	5.1	7.6	14.2	22.4
42.5°	3.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.6	4.6	9.1
45°	2.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.5	4.1
47.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0
50°	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.5	1.5	1.5	1.5
52.5°	1.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5
55°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5
57.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
60°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
62.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5	1.0
65°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.0
67.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
70°	1.5	1.5	1.0	1.5	1.0	1.0	1.5	1.5	1.5	1.0	1.0
72.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.0	3.0	2.0
75°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.5	3.0	2.5
77.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.5	2.5	2.5
80°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0
82.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0
85°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
87.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
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: P1213045

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	310°	315°	320°	325°	330°	335°	340°	341°	342°	343°	344°
0°	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5
2.5°	1686.9	1686.4	1697.0	1705.2	1702.1	1705.2	1708.7	1709.2	1710.3	1706.2	1704.7
5°	1853.6	1837.8	1807.3	1785.5	1760.1	1713.8	1690.9	1693.5	1694.0	1692.5	1694.5
7.5°	1885.6	1884.1	1873.4	1868.8	1851.6	1818.5	1765.7	1756.5	1734.1	1719.9	1708.2
10°	1805.3	1841.9	1851.6	1867.8	1878.0	1871.9	1827.2	1820.5	1806.3	1790.1	1793.6
12.5°	1718.4	1748.4	1749.9	1838.3	1858.2	1860.2	1842.9	1852.1	1854.1	1817.5	1796.2
15°	1611.7	1625.9	1655.9	1738.2	1798.2	1835.8	1847.0	1852.1	1827.2	1825.6	1817.0
17.5°	1564.9	1574.0	1587.8	1634.0	1725.0	1780.4	1827.7	1824.1	1833.8	1826.6	1804.8
20°	1505.9	1513.6	1538.0	1561.3	1606.1	1679.8	1768.2	1774.8	1787.5	1786.0	1792.1
22.5°	1504.9	1478.0	1482.1	1500.4	1547.1	1613.2	1707.2	1729.1	1737.2	1742.8	1749.4
25°	1193.9	1407.8	1447.0	1458.7	1489.2	1527.8	1638.6	1646.7	1662.0	1686.9	1705.2
27.5°	1034.3	1179.6	1336.2	1417.5	1436.8	1468.8	1534.9	1547.1	1599.0	1605.1	1633.5
30°	816.2	928.6	1162.4	1358.0	1390.1	1412.4	1459.2	1483.6	1505.9	1530.3	1560.3
32.5°	768.0	785.8	915.4	1123.7	1372.8	1356.0	1390.6	1405.3	1429.7	1451.1	1472.9
35°	723.7	735.9	763.4	920.4	1118.1	1309.8	1333.1	1342.8	1356.5	1372.8	1388.5
37.5°	677.5	695.8	714.6	756.8	1034.3	1273.2	1272.7	1283.8	1292.0	1305.7	1318.9
40°	123.0	638.9	669.4	696.8	802.0	1015.5	1215.7	1220.8	1226.4	1235.0	1248.8
42.5°	19.8	106.7	627.2	653.6	683.6	909.3	1189.8	1169.0	1165.4	1171.5	1183.7
45°	10.2	25.9	126.0	610.4	637.3	725.3	972.8	1132.9	1129.3	1117.6	1120.2
47.5°	7.6	16.3	31.0	210.9	596.7	622.6	897.6	887.9	955.5	1085.1	1065.3
50°	6.6	11.2	18.3	43.2	527.1	573.3	691.2	807.6	843.2	847.8	1003.3
52.5°	6.1	7.6	13.2	28.0	110.8	530.1	562.1	602.8	662.8	791.3	788.3
55°	5.6	7.1	11.2	18.8	38.6	477.8	510.8	518.4	531.1	592.6	673.9
57.5°	3.0	6.6	10.7	16.3	29.0	87.4	463.5	469.6	479.8	482.3	511.3
60°	1.5	6.1	9.7	14.2	21.3	40.7	416.8	423.9	430.0	431.0	440.1
62.5°	1.0	5.6	8.1	13.2	17.8	29.0	98.6	201.3	382.7	382.7	393.4
65°	1.0	4.1	5.1	8.6	16.3	23.9	41.7	48.3	94.0	231.3	345.1
67.5°	1.0	1.5	4.6	7.1	12.2	18.3	30.5	35.6	42.7	48.8	90.5
70°	1.0	1.0	4.1	4.6	7.6	13.7	21.9	24.9	29.0	33.0	38.1
72.5°	1.0	1.0	3.6	3.6	5.1	9.1	16.8	18.3	20.8	23.4	26.9
75°	2.5	2.0	3.0	3.0	3.6	7.1	12.7	14.2	15.2	17.3	19.8
77.5°	2.5	2.5	2.5	2.5	2.5	4.6	8.1	9.1	10.7	11.7	13.7
80°	2.0	2.0	2.0	2.5	2.5	3.0	5.1	5.6	6.1	7.6	8.1
82.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.6	4.6
85°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0
87.5°	1.5	1.5	1.5	1.0	1.0	1.5	1.5	1.5	1.5	1.5	1.5
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: P1213045

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	345°	346°	347°	348°	349°	350°	351°	352°	353°	354°	355°
0°	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5	1693.5
2.5°	1704.2	1701.1	1698.6	1700.1	1695.5	1693.5	1695.0	1695.5	1696.5	1699.1	1699.6
5°	1699.6	1698.6	1703.1	1705.7	1704.7	1705.7	1705.7	1703.7	1700.6	1702.6	1698.1
7.5°	1696.5	1689.9	1684.8	1685.9	1680.8	1686.9	1692.5	1700.6	1703.1	1703.1	1698.1
10°	1748.9	1741.8	1713.3	1694.0	1681.3	1670.1	1696.5	1669.6	1682.3	1634.0	1689.4
12.5°	1792.1	1801.7	1789.0	1736.2	1727.0	1693.5	1712.8	1679.8	1670.1	1614.7	1632.5
15°	1809.4	1791.1	1787.0	1772.3	1752.4	1742.8	1690.9	1685.4	1669.6	1675.7	1652.3
17.5°	1794.1	1803.3	1791.1	1781.4	1761.1	1738.2	1707.2	1679.8	1657.9	1609.1	1650.3
20°	1779.4	1791.6	1755.0	1761.1	1763.1	1736.7	1720.4	1697.6	1670.1	1624.4	1588.8
22.5°	1755.0	1746.3	1749.4	1740.2	1732.6	1736.2	1713.8	1698.1	1651.8	1631.0	1582.7
25°	1715.3	1712.3	1720.4	1719.4	1701.1	1695.0	1683.8	1667.1	1648.8	1615.2	1575.6
27.5°	1650.8	1666.5	1680.8	1687.4	1677.7	1661.5	1655.4	1645.7	1633.0	1599.0	1569.5
30°	1582.7	1600.5	1616.7	1631.0	1639.6	1632.5	1626.9	1621.3	1602.0	1579.6	1546.6
32.5°	1504.9	1528.3	1550.7	1567.9	1586.8	1592.3	1588.3	1583.7	1567.4	1547.1	1520.7
35°	1415.0	1447.0	1479.5	1510.5	1518.6	1531.9	1545.1	1537.5	1528.8	1508.5	1484.1
37.5°	1338.7	1361.6	1385.0	1424.1	1452.6	1469.3	1492.7	1495.8	1481.0	1471.4	1439.4
40°	1259.9	1280.8	1314.8	1337.7	1376.8	1396.2	1421.1	1432.2	1428.7	1423.1	1395.1
42.5°	1197.9	1208.1	1230.5	1250.8	1289.4	1329.1	1350.9	1363.1	1375.8	1371.3	1357.0
45°	1131.9	1141.0	1148.6	1166.4	1204.0	1239.1	1266.0	1284.3	1307.2	1317.9	1300.6
47.5°	1066.3	1068.8	1078.0	1092.7	1115.1	1142.0	1187.3	1214.7	1236.1	1256.9	1245.7
50°	1016.0	1006.8	1008.4	1017.5	1035.8	1062.2	1094.8	1133.4	1157.8	1183.2	1185.7
52.5°	887.9	962.1	944.3	949.4	959.1	971.8	1005.8	1043.9	1073.9	1095.8	1117.6
55°	745.1	759.8	902.7	882.3	888.4	899.6	915.4	953.5	982.4	1012.9	1043.4
57.5°	577.9	687.7	693.3	825.4	822.3	823.4	836.6	858.4	887.4	925.5	951.4
60°	449.3	495.5	585.5	631.2	747.1	751.2	758.8	771.5	796.4	832.5	873.7
62.5°	396.4	402.5	434.6	503.2	578.4	669.4	685.6	687.7	698.8	734.9	782.7
65°	348.2	352.2	361.9	369.0	432.0	519.9	598.2	610.9	618.0	639.4	680.0
67.5°	239.9	303.4	312.1	317.1	323.2	363.9	461.0	525.5	533.7	552.5	588.0
70°	46.3	96.1	262.8	268.4	271.4	280.6	296.3	399.0	452.8	470.6	486.9
72.5°	31.5	37.1	44.7	105.7	223.6	228.7	232.3	245.5	336.5	388.3	396.9
75°	22.9	25.4	30.0	37.1	45.7	148.9	184.5	191.1	197.7	272.9	316.6
77.5°	16.3	18.3	20.3	23.9	28.0	36.1	51.8	142.8	149.4	153.0	216.0
80°	9.1	11.2	13.7	15.8	17.8	20.3	26.4	33.0	73.7	107.7	113.3
82.5°	5.1	6.1	7.1	8.6	9.7	12.2	14.7	17.8	23.4	34.6	73.2
85°	2.5	2.5	2.5	3.6	4.1	5.6	6.6	7.6	10.7	14.7	20.3
87.5°	1.5	1.5	2.0	2.0	2.0	2.5	2.5	2.5	3.0	4.6	6.6
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: P1213045

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	356°	357°	358°	359°	360°
0°	1693.5	1693.5	1693.5	1693.5	1693.5
2.5°	1700.1	1698.6	1698.6	1704.7	1703.1
5°	1697.0	1695.5	1695.0	1701.6	1698.6
7.5°	1694.5	1688.9	1687.4	1693.5	1690.9
10°	1684.3	1680.3	1682.8	1680.8	1679.8
12.5°	1667.1	1664.5	1653.8	1654.9	1663.5
15°	1636.1	1646.2	1627.9	1644.2	1647.7
17.5°	1579.1	1602.0	1619.8	1629.4	1631.0
20°	1604.5	1612.2	1603.0	1603.5	1609.6
22.5°	1571.5	1575.1	1577.6	1574.6	1587.8
25°	1518.6	1504.9	1534.4	1540.5	1561.8
27.5°	1502.4	1491.2	1504.9	1503.9	1521.7
30°	1489.2	1453.1	1459.2	1468.8	1490.7
32.5°	1470.4	1413.4	1407.3	1428.7	1453.1
35°	1437.3	1383.5	1369.2	1382.9	1419.5
37.5°	1409.4	1341.8	1313.3	1331.6	1379.4
40°	1367.7	1309.2	1265.0	1281.3	1337.7
42.5°	1317.9	1281.3	1213.2	1224.4	1288.9
45°	1267.6	1235.0	1162.9	1168.5	1245.2
47.5°	1216.2	1186.3	1110.5	1111.5	1189.3
50°	1165.9	1126.3	1063.8	1046.0	1129.8
52.5°	1100.4	1063.8	1016.5	987.5	1073.4
55°	1038.4	997.2	962.6	917.9	1009.4
57.5°	977.9	932.1	908.7	851.3	936.7
60°	895.0	873.2	838.6	783.7	871.1
62.5°	810.1	803.0	768.0	711.0	790.3
65°	711.0	727.8	691.7	642.9	706.5
67.5°	617.5	647.5	607.9	577.9	625.7
70°	517.9	552.5	530.1	519.4	539.8
72.5°	419.8	453.4	455.4	447.8	454.4
75°	324.3	361.4	381.7	370.0	371.5
77.5°	246.0	263.8	286.1	295.3	293.3
80°	152.0	183.0	201.3	220.1	213.5
82.5°	76.7	102.7	125.0	145.4	135.7
85°	32.0	41.2	57.4	75.7	72.7
87.5°	9.7	16.3	17.3	24.4	22.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)