

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: P1213690

Luminaire Tested: 2SNLED-LD5-27SL-RM-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213690
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-LD5-27SL-RM-UNV-L940-CD1-U
Description: 2FT LINEAR SNLED LED FIXTURE
METALIC FINISH REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

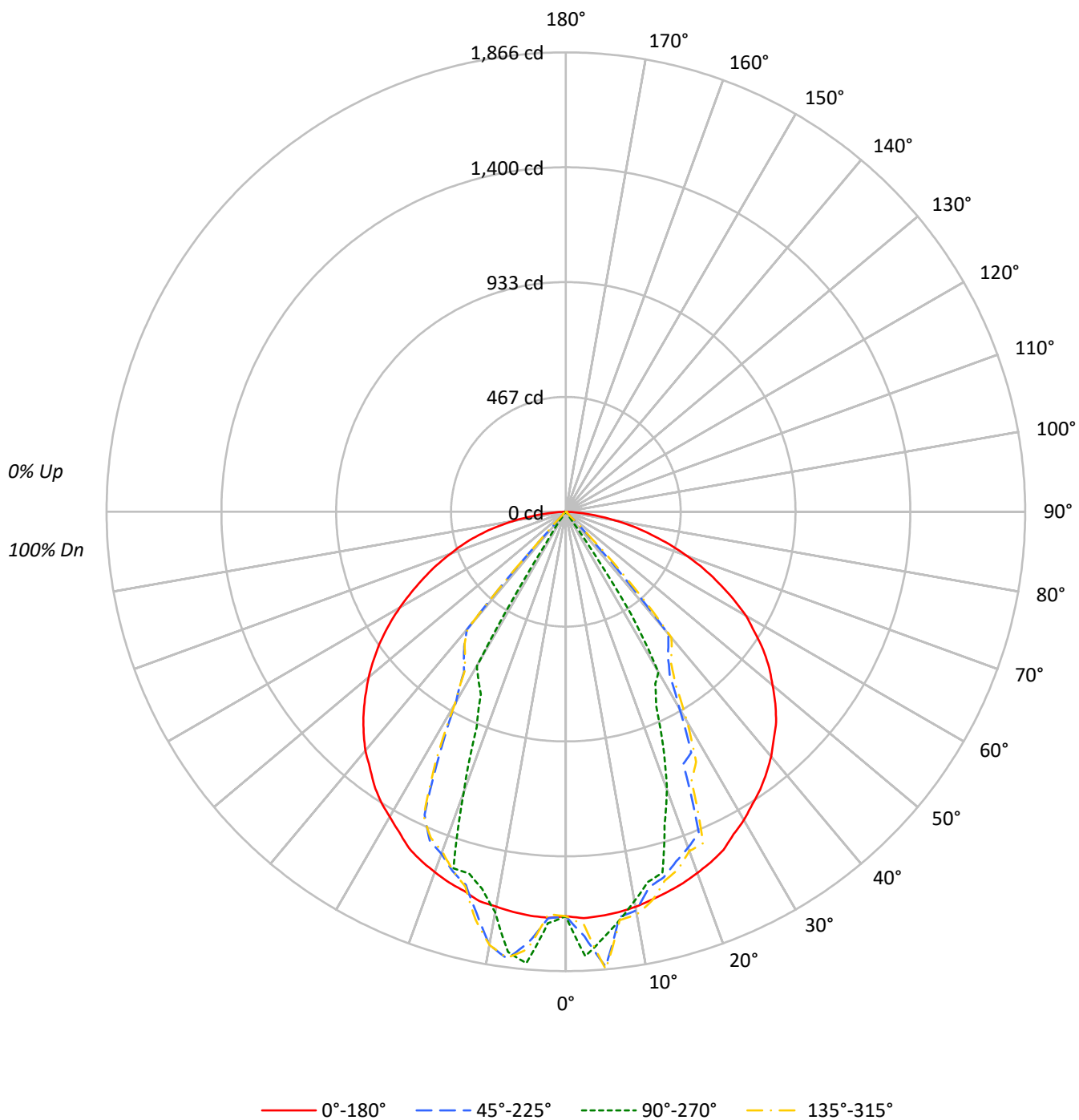
Lumens per Lamp: N/A
Luminaire Lumens: 2336.1 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 0.81 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2' x H: 0.12')
CIE Type: Direct

Input Watts (W): 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

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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	26551	26551	26551	26551
5°	26588	27308	26580	28920
10°	26451	24711	26436	25424
15°	26306	23065	26240	23125
20°	26259	18167	26185	18391
25°	26253	13147	26127	12407
30°	26048	11533	25772	11086
35°	26031	255	25649	308
40°	26015	56	25393	56
45°	25987	33	25010	25
50°	25649	26	24472	26
55°	25331	18	23773	18
60°	24649	20	22721	20
65°	23110	32	21465	21
70°	21116	35	20104	35
75°	18249	39	18547	39
80°	14231	45	15042	45
85°	7626	53	7788	53

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 2°

Vertical Angle: 45°

Luminance: 28070 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.8	7.1
10°-20°	449.6	19.2
20°-30°	572.1	24.5
30°-40°	483.3	20.7
40°-50°	315.9	13.5
50°-60°	199.1	8.5
60°-70°	106.0	4.5
70°-80°	38.6	1.7
80°-90°	6.7	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°	1186.5	50.8
0°-40°	1669.7	71.5
0°-60°	2184.8	93.5
0°-90°	2336.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2336.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1643	1643	1643	1643	1643	
5°	1648	1738	1647	1841	1648	157
15°	1598	1517	1594	1521	1598	452
25°	1515	866	1508	818	1515	697
35°	1377	16	1357	20	1377	861
45°	1208	2	1163	2	1208	929
55°	979	1	919	1	979	872
65°	685	2	636	1	685	679
75°	360	2	366	2	360	383
85°	70	2	72	2	70	89
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°	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8
2.5°	1652.2	1653.2	1653.7	1654.7	1656.2	1656.7	1657.6	1656.7	1656.7	1656.7	1656.7
5°	1647.8	1649.8	1651.2	1653.2	1656.7	1657.1	1661.1	1661.6	1663.6	1667.5	1670.5
7.5°	1640.4	1642.4	1645.3	1650.2	1655.2	1660.6	1667.5	1674.9	1685.3	1695.1	1707.4
10°	1629.5	1632.0	1635.5	1639.9	1664.1	1667.5	1682.8	1704.0	1709.9	1741.0	1764.1
12.5°	1613.8	1622.1	1631.0	1635.0	1658.1	1694.6	1745.9	1735.5	1724.2	1825.8	1824.3
15°	1598.5	1609.8	1605.4	1637.4	1658.6	1722.2	1700.5	1746.9	1831.7	1811.0	1812.0
17.5°	1582.2	1584.7	1609.3	1635.9	1673.9	1706.5	1733.1	1796.7	1813.4	1814.9	1796.7
20°	1561.5	1573.3	1609.3	1633.5	1697.6	1712.9	1770.6	1803.1	1796.2	1779.4	1748.4
22.5°	1540.3	1576.3	1612.8	1646.8	1691.7	1732.6	1761.2	1776.5	1740.5	1674.4	1638.9
25°	1515.1	1536.4	1584.2	1634.0	1690.2	1713.8	1730.6	1706.0	1659.1	1600.0	1540.3
27.5°	1476.2	1510.2	1571.4	1627.6	1678.3	1706.9	1679.8	1620.7	1545.2	1506.3	1479.2
30°	1446.1	1490.5	1540.8	1595.0	1647.8	1664.5	1595.5	1528.0	1476.2	1437.2	1431.3
32.5°	1409.6	1472.7	1520.6	1572.3	1616.7	1594.5	1527.5	1440.2	1397.3	1382.5	1388.4
35°	1377.1	1424.9	1487.5	1538.3	1570.4	1520.6	1414.6	1360.3	1339.6	1348.0	1337.2
37.5°	1338.1	1401.3	1458.9	1502.8	1492.0	1417.0	1327.3	1292.8	1295.2	1288.3	1267.6
40°	1297.7	1357.9	1418.0	1459.4	1421.5	1307.1	1247.4	1240.0	1241.5	1219.3	1189.7
42.5°	1250.4	1305.1	1365.3	1402.7	1320.9	1231.6	1191.2	1192.2	1179.4	1148.3	1132.5
45°	1208.0	1258.3	1320.9	1324.3	1223.8	1149.3	1137.5	1124.7	1096.1	1085.7	1073.9
47.5°	1153.7	1209.5	1261.2	1242.5	1128.6	1082.2	1073.4	1045.3	1031.0	1023.1	1013.2
50°	1096.1	1152.3	1199.6	1146.3	1038.9	1028.0	998.9	976.7	966.9	958.5	949.6
52.5°	1041.3	1087.7	1136.0	1044.3	969.8	959.5	926.4	913.6	903.8	894.4	892.4
55°	979.2	1020.1	1053.2	947.2	903.8	879.6	855.9	847.1	837.7	833.3	840.7
57.5°	908.7	955.0	950.1	851.5	832.3	797.3	788.4	782.5	775.6	778.5	716.9
60°	845.1	880.6	856.4	781.5	748.9	725.3	717.4	713.4	717.4	657.2	577.9
62.5°	766.7	806.6	757.8	699.6	665.1	653.8	646.9	652.3	594.6	528.6	509.3
65°	685.3	728.7	656.7	611.9	590.2	580.3	579.8	534.0	477.3	451.6	451.6
67.5°	606.9	651.8	559.1	521.6	513.3	514.3	485.7	416.1	400.4	383.1	333.3
70°	523.6	563.1	462.0	439.3	434.4	430.9	361.4	342.7	323.9	278.1	274.1
72.5°	440.8	460.0	371.3	365.8	364.9	303.2	289.4	257.4	235.7	230.3	227.8
75°	360.4	354.5	293.4	298.3	251.5	229.8	207.6	188.8	185.9	183.9	45.9
77.5°	284.5	254.9	231.2	201.2	180.0	152.8	148.4	145.5	95.7	34.5	28.1
80°	207.1	165.2	153.8	130.7	111.4	107.0	109.5	33.5	26.6	22.2	19.2
82.5°	131.6	105.5	86.3	75.4	73.5	32.0	23.7	19.2	16.8	14.3	11.8
85°	70.5	46.8	43.4	36.5	21.7	14.8	12.3	9.4	7.9	6.4	5.9
87.5°	22.2	18.7	15.3	12.3	7.4	4.9	3.9	3.5	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

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CANDELA DISTRIBUTION (continued):

	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°	25°
0°	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8
2.5°	1655.7	1656.7	1656.2	1657.6	1657.6	1659.6	1661.1	1662.6	1665.5	1667.0	1678.3
5°	1676.9	1679.3	1686.7	1693.6	1702.0	1704.5	1718.8	1722.2	1739.0	1741.0	1796.2
7.5°	1724.2	1733.6	1751.3	1769.1	1786.8	1798.2	1817.9	1830.2	1843.5	1855.4	1899.2
10°	1781.4	1797.2	1814.4	1832.2	1842.5	1864.2	1876.1	1878.0	1874.6	1855.4	1784.4
12.5°	1837.6	1853.4	1846.0	1849.4	1861.8	1823.3	1828.7	1801.1	1820.3	1725.2	1654.7
15°	1829.7	1828.7	1810.5	1751.3	1761.2	1687.7	1658.1	1635.5	1653.7	1643.8	1633.0
17.5°	1806.1	1761.2	1729.6	1658.6	1628.6	1607.8	1608.3	1608.8	1600.0	1609.3	1581.7
20°	1706.0	1655.7	1608.8	1583.7	1574.8	1560.0	1567.4	1560.0	1560.5	1563.5	1521.1
22.5°	1572.8	1557.6	1530.4	1538.3	1535.4	1548.7	1538.8	1523.5	1528.5	1506.3	1474.2
25°	1519.1	1501.3	1500.4	1503.3	1498.9	1493.0	1484.1	1460.9	1459.4	1452.5	1437.7
27.5°	1464.9	1465.8	1468.8	1459.9	1444.1	1432.3	1419.0	1407.7	1412.1	1404.2	1384.0
30°	1427.4	1426.9	1409.1	1401.3	1372.2	1372.7	1369.2	1362.3	1357.9	1358.4	1345.5
32.5°	1374.1	1358.9	1338.6	1328.8	1326.3	1317.4	1310.5	1312.0	1315.5	1303.1	1316.4
35°	1319.4	1287.9	1284.9	1276.5	1268.6	1262.7	1265.2	1255.3	1254.8	1253.3	1144.9
37.5°	1245.9	1230.7	1229.2	1220.3	1214.9	1213.4	1204.0	1205.5	1210.0	1217.8	976.2
40°	1185.3	1171.5	1168.0	1167.5	1155.7	1154.7	1157.2	1166.6	1173.0	1123.7	930.4
42.5°	1120.2	1121.2	1110.4	1103.5	1104.9	1109.4	1121.2	1088.7	943.2	898.8	850.5
45°	1064.5	1059.6	1053.7	1051.7	1064.5	1055.6	925.5	854.0	836.7	834.7	699.1
47.5°	1006.3	1004.8	1002.4	1003.9	930.9	829.8	800.2	790.9	793.8	791.8	600.5
50°	947.6	949.6	949.6	829.3	761.3	744.5	747.0	755.4	703.1	656.3	559.6
52.5°	896.9	881.6	755.4	712.0	696.7	704.1	686.3	620.8	573.4	545.8	517.7
55°	802.7	690.3	662.2	655.3	660.7	595.1	554.7	512.3	500.0	497.0	480.7
57.5°	631.6	608.9	611.4	583.8	521.2	484.2	467.9	462.0	456.6	452.6	39.4
60°	558.6	565.0	517.2	458.0	432.9	428.0	424.0	418.6	417.6	410.7	25.1
62.5°	511.3	449.7	408.2	393.5	387.5	386.1	378.7	376.2	319.5	43.9	18.7
65°	385.6	360.4	352.5	349.1	342.7	342.7	284.5	44.9	36.5	31.6	16.8
67.5°	314.6	312.6	308.7	304.2	207.1	43.4	38.0	33.0	28.6	25.1	14.8
70°	266.2	265.3	241.6	44.4	37.0	32.5	28.6	25.6	23.7	21.2	13.3
72.5°	218.4	44.4	37.5	32.5	28.1	25.6	23.2	20.7	18.7	17.3	10.8
75°	34.0	30.1	26.6	24.2	22.2	19.7	17.7	16.3	15.8	13.8	7.4
77.5°	24.7	21.2	19.2	17.3	15.3	13.8	11.8	10.4	9.4	7.9	5.4
80°	17.3	15.3	13.8	11.3	9.9	8.4	7.4	6.4	5.9	4.9	2.5
82.5°	9.9	8.4	7.4	5.9	5.4	4.4	3.9	3.5	3.5	2.5	2.5
85°	4.4	4.4	3.5	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

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CANDELA DISTRIBUTION (continued):

	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°
0°	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8
2.5°	1694.1	1700.5	1712.9	1725.7	1711.4	1762.7	1758.7	1776.0	1785.3	1789.8	1800.1
5°	1845.0	1873.6	1883.0	1854.9	1838.6	1821.8	1783.9	1755.3	1758.7	1749.3	1715.3
7.5°	1842.0	1780.9	1698.6	1661.1	1658.1	1653.7	1665.5	1672.4	1673.4	1672.9	1671.9
10°	1686.2	1654.7	1649.3	1644.3	1646.3	1628.1	1619.7	1596.0	1608.8	1601.9	1604.4
12.5°	1638.9	1631.5	1602.4	1562.0	1586.1	1567.9	1557.6	1564.5	1556.6	1549.2	1546.7
15°	1610.8	1563.0	1546.7	1536.8	1529.9	1526.0	1529.4	1521.6	1519.1	1517.6	1521.1
17.5°	1552.6	1533.4	1515.6	1489.5	1490.0	1488.5	1498.4	1513.2	1514.2	1438.2	1369.7
20°	1506.8	1491.0	1468.3	1452.0	1474.2	1434.8	1282.4	1210.0	1198.6	1198.6	1200.6
22.5°	1470.3	1435.3	1436.8	1411.1	1203.5	1161.1	1162.1	1166.6	1146.3	1077.3	1069.9
25°	1420.5	1415.1	1307.1	1129.6	1131.1	1098.0	1047.2	975.8	898.3	898.3	885.5
27.5°	1383.0	1268.1	1110.4	1103.0	992.0	922.0	878.6	813.0	804.2	795.8	796.8
30°	1351.0	1072.9	1076.8	922.0	840.2	782.0	778.5	767.7	762.3	760.8	755.4
32.5°	1068.0	1044.8	901.3	784.9	752.9	743.5	739.1	726.8	726.3	716.9	651.8
35°	1001.4	917.1	754.4	722.8	713.4	704.6	697.2	467.9	55.2	22.2	19.2
37.5°	925.5	766.2	697.7	683.4	674.5	498.5	49.8	17.3	12.3	8.9	7.9
40°	784.4	684.4	662.7	646.9	266.7	17.3	10.8	8.4	4.9	4.4	3.9
42.5°	661.7	644.9	621.7	189.3	19.7	8.4	5.4	3.9	3.5	3.5	3.0
45°	619.3	604.5	250.5	18.7	12.3	3.9	3.5	3.5	3.0	2.0	2.0
47.5°	579.8	510.3	22.7	11.8	7.9	3.5	3.0	2.0	2.0	2.0	1.5
50°	537.9	28.1	15.8	8.9	4.9	2.0	2.0	2.0	2.0	1.5	1.5
52.5°	100.6	19.7	12.8	7.9	2.5	2.0	2.0	2.0	1.5	1.5	1.5
55°	23.7	15.8	11.8	6.9	2.0	2.0	2.0	1.5	1.5	1.5	1.0
57.5°	17.7	11.8	9.4	6.4	2.0	1.5	1.5	1.5	1.5	1.5	1.0
60°	14.8	8.4	7.4	5.9	1.5	1.5	1.5	1.5	1.5	1.5	1.0
62.5°	10.4	6.9	5.4	4.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5
65°	8.4	5.4	4.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
67.5°	7.4	4.4	3.0	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
70°	5.9	1.5	1.5	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
72.5°	4.9	1.5	1.0	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
75°	4.9	2.5	1.0	1.0	1.5	1.5	2.0	2.0	1.5	1.5	1.5
77.5°	3.5	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	3.5	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: P1213690

CATALOG NUMBER: 2SNLED-LD5-27SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	85°	90°	95°	100°	105°	110°	115°	120°	125°	130°	135°
0°	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8
2.5°	1805.1	1807.0	1776.0	1765.1	1774.5	1772.5	1764.1	1733.1	1729.6	1708.9	1678.8
5°	1725.2	1738.5	1722.2	1750.3	1737.0	1750.3	1790.8	1809.5	1840.1	1858.8	1865.7
7.5°	1669.5	1672.4	1672.4	1674.9	1677.4	1677.9	1674.9	1672.9	1664.5	1654.2	1672.9
10°	1601.9	1605.4	1611.3	1610.3	1609.8	1620.2	1622.6	1643.8	1642.8	1646.8	1661.1
12.5°	1566.9	1540.3	1564.5	1558.0	1566.9	1553.1	1578.8	1574.3	1575.8	1587.6	1618.2
15°	1508.7	1517.1	1523.0	1523.0	1526.5	1523.5	1520.6	1540.8	1553.1	1553.6	1551.6
17.5°	1396.8	1333.2	1398.3	1381.5	1515.1	1518.6	1507.3	1497.9	1497.9	1505.3	1521.1
20°	1199.1	1200.6	1201.1	1207.5	1215.4	1214.9	1215.4	1409.6	1501.8	1480.6	1466.3
22.5°	1051.2	1032.9	1067.0	1064.5	1106.9	1153.7	1198.6	1194.2	1197.1	1334.2	1457.5
25°	842.6	866.3	847.1	855.4	903.3	959.0	993.5	1083.7	1181.8	1174.9	1207.0
27.5°	793.3	786.9	795.8	795.8	802.2	809.6	828.8	879.6	966.9	1058.6	1145.4
30°	746.5	751.9	752.9	761.8	766.7	771.6	774.6	793.8	813.5	877.1	984.1
32.5°	560.6	491.6	646.9	688.8	724.3	732.7	738.6	746.5	760.8	770.1	823.9
35°	16.3	16.3	17.3	19.7	25.1	169.6	645.9	712.0	721.3	733.2	743.0
37.5°	7.9	5.9	6.9	7.4	8.9	12.3	17.7	55.2	614.8	695.2	706.1
40°	3.5	3.5	3.5	3.5	3.9	4.9	7.4	12.3	18.7	494.5	667.1
42.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.5	4.4	8.9	21.2	350.1
45°	2.0	2.0	1.5	2.0	2.0	2.5	3.0	3.0	3.9	13.3	24.2
47.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.5	3.0	8.9	12.8
50°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	6.9	8.9
52.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.0	7.9
55°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.5	2.0	6.9
57.5°	1.0	1.0	1.0	1.0	1.0	1.5	1.0	1.0	1.5	1.5	6.4
60°	1.0	1.0	1.0	1.0	1.0	1.5	1.5	1.5	1.5	1.5	5.9
62.5°	1.5	1.5	1.0	1.5	1.0	1.0	1.5	1.5	1.5	1.5	3.9
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	3.5
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: P1213690

CATALOG NUMBER: 2SNLED-LD5-27SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	140°	145°	150°	155°	160°	161°	162°	163°	164°	165°	166°
0°	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8
2.5°	1681.3	1664.5	1659.1	1647.8	1646.8	1647.8	1645.3	1641.9	1643.8	1640.4	1637.4
5°	1869.7	1824.8	1795.7	1756.7	1703.0	1691.2	1688.2	1671.4	1665.5	1663.6	1655.7
7.5°	1717.3	1799.1	1848.5	1865.2	1802.1	1787.3	1770.1	1756.3	1742.9	1717.8	1702.5
10°	1649.8	1653.7	1701.0	1756.3	1846.0	1858.3	1867.7	1837.6	1829.2	1765.1	1751.3
12.5°	1634.0	1634.5	1639.9	1673.4	1743.9	1751.8	1784.8	1802.6	1824.3	1836.6	1826.8
15°	1562.0	1601.9	1631.5	1634.5	1640.9	1654.7	1664.5	1726.2	1752.3	1822.3	1818.4
17.5°	1528.5	1541.3	1584.2	1619.2	1613.3	1608.3	1616.2	1624.6	1649.8	1719.8	1718.8
20°	1472.7	1513.7	1536.8	1573.3	1606.4	1607.8	1599.0	1594.0	1584.2	1595.5	1605.9
22.5°	1449.1	1455.5	1498.9	1524.5	1562.0	1575.3	1577.3	1577.8	1572.3	1566.4	1563.5
25°	1446.6	1426.4	1448.6	1480.6	1508.2	1522.5	1538.8	1544.2	1542.3	1542.3	1539.3
27.5°	1183.8	1420.0	1408.2	1429.4	1462.9	1472.7	1481.1	1497.9	1508.2	1515.6	1519.1
30°	1127.6	1170.0	1376.6	1379.6	1413.6	1412.6	1422.0	1435.8	1449.1	1466.3	1470.8
32.5°	997.4	1101.5	1260.2	1329.8	1365.3	1368.7	1373.6	1377.6	1389.9	1409.1	1425.9
35°	799.2	1003.4	1079.8	1306.1	1312.5	1319.4	1322.4	1331.7	1335.7	1343.6	1358.4
37.5°	723.3	829.3	1035.9	1129.6	1251.9	1257.8	1273.6	1277.5	1283.9	1290.3	1301.7
40°	679.4	708.5	862.3	1008.8	1203.0	1207.0	1212.4	1222.3	1222.8	1230.2	1240.5
42.5°	644.4	663.2	708.0	963.4	1168.5	1168.0	1155.2	1161.6	1164.6	1172.5	1186.8
45°	514.7	622.2	650.8	786.9	930.4	997.4	1126.1	1104.9	1104.4	1107.4	1122.7
47.5°	26.1	585.3	605.5	649.3	878.6	881.1	897.8	1038.9	1060.6	1053.7	1055.1
50°	17.7	40.4	564.1	584.3	757.3	818.5	830.8	837.2	918.6	1009.3	994.5
52.5°	13.8	23.2	345.6	542.4	615.3	660.2	739.6	784.9	789.9	826.4	950.1
55°	12.3	17.7	37.5	500.4	523.1	533.0	579.3	658.7	722.8	742.0	743.5
57.5°	10.8	16.3	25.6	226.3	475.8	477.8	485.7	513.3	571.0	623.7	683.4
60°	9.9	14.3	20.2	39.0	432.4	437.3	438.8	446.2	453.1	489.1	557.6
62.5°	5.9	11.3	17.7	28.1	342.2	393.0	392.5	397.4	403.8	407.8	421.6
65°	4.9	8.9	15.3	23.7	41.9	52.3	317.5	353.0	357.0	362.4	364.9
67.5°	4.4	7.9	11.3	18.7	31.6	36.0	41.4	51.3	280.1	315.6	320.5
70°	3.9	5.4	9.4	15.8	25.6	27.6	31.1	35.5	41.9	51.8	253.4
72.5°	2.5	3.9	6.4	11.3	19.7	22.2	24.2	27.1	30.1	36.0	41.4
75°	1.0	3.0	5.4	8.4	15.3	16.8	18.2	20.2	22.7	26.6	29.6
77.5°	1.0	2.5	4.4	5.9	9.9	11.3	13.3	14.8	16.8	18.7	21.7
80°	3.5	2.0	3.0	4.4	6.9	7.4	8.4	9.4	10.8	12.3	14.3
82.5°	2.5	3.0	3.5	3.0	3.5	4.4	4.9	5.9	6.4	7.4	7.9
85°	2.0	2.0	2.5	2.5	2.5	2.5	2.5	2.5	3.0	3.5	4.4
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: P1213690

CATALOG NUMBER: 2SNLED-LD5-27SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	167°	168°	169°	170°	171°	172°	173°	174°	175°	176°	177°
0°	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8
2.5°	1637.4	1636.4	1633.5	1633.5	1633.0	1635.0	1636.4	1637.9	1637.4	1640.4	1637.4
5°	1649.8	1647.3	1642.8	1638.9	1637.4	1638.4	1636.9	1638.4	1636.4	1638.9	1634.5
7.5°	1683.8	1675.4	1658.1	1651.2	1642.4	1641.9	1637.4	1636.4	1633.5	1633.5	1628.1
10°	1743.9	1703.5	1698.6	1677.9	1670.5	1634.5	1642.4	1629.0	1627.6	1621.2	1618.7
12.5°	1793.2	1761.7	1752.3	1734.1	1713.4	1640.4	1656.7	1628.1	1626.6	1613.8	1600.4
15°	1794.2	1812.5	1786.8	1736.5	1732.1	1681.8	1648.8	1638.9	1626.1	1587.6	1594.0
17.5°	1736.5	1778.4	1790.8	1779.9	1748.4	1714.3	1668.0	1648.3	1609.8	1592.6	1580.7
20°	1642.8	1685.3	1738.0	1741.5	1761.2	1737.0	1676.4	1644.3	1598.0	1567.9	1558.0
22.5°	1568.4	1599.5	1660.1	1688.2	1712.4	1720.8	1682.3	1635.0	1577.3	1548.2	1542.3
25°	1529.0	1535.9	1554.1	1587.1	1640.4	1678.8	1684.3	1634.0	1603.9	1540.3	1506.8
27.5°	1514.7	1508.7	1501.3	1518.1	1558.0	1604.9	1635.9	1644.3	1569.4	1508.7	1475.2
30°	1478.2	1481.6	1470.3	1464.4	1490.5	1538.8	1594.0	1607.8	1550.2	1487.5	1449.1
32.5°	1433.3	1439.2	1441.2	1430.8	1425.4	1458.9	1518.6	1551.6	1548.7	1457.5	1414.6
35°	1377.1	1393.9	1398.3	1398.8	1389.9	1384.5	1419.0	1487.5	1513.7	1443.7	1381.5
37.5°	1317.9	1322.9	1347.0	1353.4	1353.4	1337.2	1362.8	1417.5	1454.0	1412.6	1341.1
40°	1244.0	1259.7	1282.4	1293.8	1305.1	1306.6	1292.3	1330.7	1390.9	1380.5	1303.1
42.5°	1190.2	1200.6	1214.4	1229.7	1252.8	1258.8	1244.0	1250.9	1313.5	1340.6	1253.8
45°	1127.6	1141.4	1145.4	1162.1	1186.3	1203.5	1203.0	1188.7	1239.0	1272.6	1217.8
47.5°	1063.5	1076.8	1083.7	1092.1	1109.9	1132.0	1144.4	1138.0	1147.8	1213.4	1170.0
50°	997.4	1004.8	1018.6	1028.0	1039.8	1052.7	1082.2	1088.2	1074.4	1126.6	1117.3
52.5°	934.8	937.3	946.7	956.0	971.8	981.2	1004.8	1022.6	1021.6	1036.9	1058.6
55°	886.0	875.2	877.1	884.5	894.9	909.2	922.5	950.1	959.5	962.4	997.0
57.5°	692.2	803.7	813.5	813.0	825.4	831.8	844.1	862.3	895.9	888.5	926.9
60°	629.1	641.5	734.6	745.5	749.9	755.8	770.6	787.4	812.1	827.8	844.6
62.5°	479.7	554.7	582.8	665.1	677.9	681.4	691.3	699.1	724.8	760.8	753.9
65°	371.3	403.3	489.1	522.6	592.6	601.5	615.3	623.7	631.1	672.5	674.5
67.5°	321.0	325.9	349.1	413.7	458.0	526.6	535.0	542.4	553.7	583.3	601.5
70°	274.1	280.1	286.5	291.9	349.6	394.9	458.5	461.0	468.4	488.1	529.5
72.5°	51.8	234.2	238.1	241.6	248.0	278.1	338.7	388.0	391.0	400.4	438.3
75°	35.0	40.9	56.2	193.3	199.7	201.7	212.0	273.6	319.0	321.0	337.7
77.5°	25.1	28.1	34.0	40.4	103.0	154.8	157.3	168.6	215.5	249.5	252.4
80°	17.3	19.2	22.7	25.6	31.6	41.4	114.4	117.8	123.8	170.6	179.5
82.5°	9.9	11.3	13.3	16.3	18.7	23.7	30.6	39.4	80.4	85.8	113.9
85°	4.9	5.4	6.4	7.9	9.4	11.3	15.3	18.7	25.6	46.3	47.8
87.5°	2.5	2.5	2.5	2.5	3.9	4.4	5.4	6.9	8.9	13.3	17.3
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: P1213690

CATALOG NUMBER: 2SNLED-LD5-27SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	178°	179°	180°	181°	182°	183°	184°	185°	186°	187°	188°
0°	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8
2.5°	1637.9	1644.8	1650.7	1652.2	1652.2	1653.2	1654.7	1655.7	1656.7	1657.6	1656.7
5°	1635.0	1642.4	1647.3	1648.8	1648.8	1651.7	1654.2	1657.1	1658.6	1658.6	1657.6
7.5°	1627.6	1633.0	1639.4	1643.3	1643.8	1648.8	1653.2	1652.7	1654.7	1655.7	1658.1
10°	1617.7	1617.7	1628.6	1631.5	1634.0	1639.4	1640.9	1643.8	1650.7	1651.7	1658.1
12.5°	1612.8	1607.8	1620.7	1622.1	1630.5	1623.6	1632.5	1635.5	1628.6	1637.9	1625.6
15°	1590.6	1596.5	1594.5	1599.0	1613.8	1605.9	1630.0	1622.1	1639.9	1618.7	1656.2
17.5°	1572.3	1571.4	1579.2	1583.2	1586.1	1602.9	1609.3	1618.2	1625.1	1619.2	1634.0
20°	1559.0	1551.1	1557.1	1561.5	1571.9	1584.7	1588.6	1575.3	1598.5	1637.9	1647.3
22.5°	1533.9	1528.5	1535.4	1535.4	1551.1	1549.2	1564.0	1555.6	1577.3	1623.1	1671.0
25°	1499.9	1500.4	1507.8	1516.6	1519.6	1541.8	1549.7	1560.5	1587.6	1642.4	1671.4
27.5°	1465.4	1462.4	1466.8	1485.1	1500.4	1516.6	1519.1	1556.1	1593.1	1630.5	1656.2
30°	1430.8	1427.9	1430.8	1444.1	1462.4	1473.2	1500.4	1549.7	1584.2	1609.8	1634.0
32.5°	1393.9	1390.9	1397.8	1407.7	1439.7	1441.2	1494.9	1541.3	1568.4	1587.1	1582.7
35°	1354.4	1350.5	1356.9	1372.2	1401.7	1412.6	1468.8	1503.3	1533.9	1542.8	1522.1
37.5°	1307.1	1300.2	1308.1	1329.3	1360.3	1391.9	1438.7	1478.7	1494.9	1471.3	1446.6
40°	1257.8	1252.8	1266.7	1277.5	1314.0	1357.9	1411.6	1439.7	1429.4	1402.2	1375.1
42.5°	1213.9	1203.5	1215.9	1236.6	1278.0	1327.8	1371.2	1387.0	1362.3	1322.4	1290.8
45°	1160.2	1147.8	1162.6	1190.2	1234.6	1291.3	1325.3	1319.9	1278.0	1243.5	1200.1
47.5°	1103.9	1089.2	1103.9	1137.0	1186.8	1246.9	1271.6	1246.9	1194.2	1150.8	1115.8
50°	1048.7	1031.5	1045.8	1095.6	1144.4	1190.7	1190.2	1142.4	1110.8	1063.5	1032.9
52.5°	994.0	969.3	983.6	1037.9	1086.7	1139.4	1100.5	1056.1	1018.2	976.7	966.9
55°	926.4	899.8	919.0	997.9	1035.4	1066.5	1004.3	965.4	927.9	907.2	894.9
57.5°	862.3	833.3	850.0	943.2	970.8	978.7	921.5	866.3	844.1	837.2	819.5
60°	796.3	763.2	779.0	886.5	905.7	873.7	817.5	774.6	770.1	756.3	742.5
62.5°	733.2	696.7	706.5	816.0	824.9	766.7	714.9	703.6	692.7	678.9	671.5
65°	660.7	622.7	636.5	741.1	732.7	657.7	628.6	626.2	611.9	600.5	611.4
67.5°	594.1	549.3	568.5	659.2	621.2	560.1	548.3	542.4	531.0	537.4	423.5
70°	521.2	472.3	498.5	571.0	514.7	474.3	469.9	461.0	461.5	366.8	309.1
72.5°	439.8	397.4	435.4	474.3	407.3	395.4	389.0	388.0	313.1	254.4	240.1
75°	368.3	325.4	366.3	381.1	324.4	316.5	316.0	261.3	205.6	196.2	191.8
77.5°	287.4	254.4	293.4	271.2	249.0	240.1	215.5	161.7	154.8	148.4	55.7
80°	193.8	196.2	218.9	186.9	177.5	151.4	119.3	114.4	98.6	39.4	31.1
82.5°	117.8	147.9	139.5	116.9	114.4	82.3	75.4	38.5	28.6	22.7	19.7
85°	61.1	74.9	72.0	63.6	47.3	42.4	23.7	18.2	14.8	11.3	9.4
87.5°	20.7	27.6	26.6	21.2	16.3	12.8	8.4	6.9	4.9	3.9	3.5
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: P1213690

CATALOG NUMBER: 2SNLED-LD5-27SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	189°	190°	191°	192°	193°	194°	195°	196°	197°	198°	199°
0°	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8
2.5°	1655.7	1655.7	1654.7	1655.7	1656.2	1655.2	1655.2	1656.2	1656.7	1657.1	1659.6
5°	1658.1	1659.1	1660.6	1663.6	1664.1	1670.0	1672.4	1673.9	1675.4	1675.9	1672.4
7.5°	1663.6	1667.0	1670.0	1669.5	1666.0	1656.7	1653.7	1651.2	1655.7	1667.0	1680.3
10°	1668.5	1652.7	1623.1	1663.6	1651.2	1662.6	1696.1	1703.5	1726.2	1758.2	1767.6
12.5°	1634.5	1677.9	1687.2	1641.9	1725.7	1694.6	1731.6	1764.1	1773.5	1806.1	1786.3
15°	1671.0	1692.2	1706.5	1751.8	1746.9	1773.5	1783.9	1777.5	1778.9	1787.3	1809.5
17.5°	1670.5	1712.9	1722.2	1752.8	1773.5	1774.0	1771.0	1768.1	1776.0	1782.4	1769.1
20°	1699.1	1712.9	1731.1	1743.4	1747.4	1752.3	1761.7	1754.3	1739.5	1725.2	1719.3
22.5°	1684.8	1715.8	1731.6	1733.6	1731.1	1715.8	1702.0	1681.3	1674.4	1667.0	1669.5
25°	1687.7	1702.0	1700.0	1692.2	1681.8	1653.2	1646.3	1637.4	1624.1	1592.1	1563.0
27.5°	1666.5	1659.1	1650.2	1631.0	1612.3	1597.0	1579.7	1551.1	1527.5	1493.0	1480.1
30°	1631.0	1601.4	1579.7	1568.4	1550.2	1524.5	1498.4	1463.4	1433.3	1426.4	1420.0
32.5°	1563.0	1533.9	1516.1	1488.5	1457.5	1426.9	1396.8	1383.0	1376.6	1377.6	1371.7
35°	1493.5	1467.8	1441.2	1399.8	1376.6	1346.0	1335.2	1332.2	1326.3	1319.9	1313.0
37.5°	1419.5	1389.4	1349.5	1324.8	1301.7	1289.3	1283.9	1279.5	1269.1	1257.8	1249.9
40°	1348.0	1293.8	1271.6	1247.4	1240.5	1235.1	1227.2	1216.4	1202.1	1200.1	1196.6
42.5°	1252.4	1213.4	1194.2	1189.2	1180.9	1171.5	1164.6	1152.8	1146.8	1150.8	1153.7
45°	1161.6	1141.9	1135.5	1129.6	1113.8	1100.5	1096.1	1092.1	1097.0	1118.7	1067.0
47.5°	1088.2	1080.3	1072.4	1062.5	1047.7	1037.9	1042.3	1046.3	1050.7	891.4	813.5
50°	1024.6	1013.7	1001.4	990.5	981.7	980.7	1003.9	934.3	782.5	778.5	699.6
52.5°	955.0	938.8	931.4	925.0	928.9	943.7	781.0	724.8	695.2	604.0	563.6
55°	880.1	865.8	865.8	871.7	850.5	689.3	680.9	588.7	533.0	517.2	510.8
57.5°	805.2	803.7	812.1	742.5	625.7	600.0	504.4	484.2	475.3	473.3	463.0
60°	736.6	750.4	628.1	577.9	502.4	453.1	439.3	436.8	427.5	424.0	414.7
62.5°	681.9	565.5	526.6	429.9	404.8	398.4	391.0	387.5	379.2	334.8	98.1
65°	492.6	465.4	377.7	361.4	359.4	350.1	347.1	312.1	73.5	49.3	41.9
67.5°	371.8	329.9	318.5	315.6	306.2	287.4	85.3	48.8	41.9	36.5	32.0
70°	285.5	278.1	269.7	262.8	77.4	48.3	41.9	35.5	30.6	27.1	24.7
72.5°	233.7	228.8	133.1	50.8	41.4	35.0	31.1	27.1	23.7	21.7	19.7
75°	182.9	50.8	41.9	35.0	30.1	25.6	22.7	20.2	18.2	16.8	15.3
77.5°	41.4	33.5	28.6	24.2	21.7	19.2	17.3	14.8	13.3	11.8	9.9
80°	25.6	22.2	18.7	17.3	14.8	12.3	10.8	9.9	7.9	7.4	6.4
82.5°	16.8	13.3	11.8	9.9	7.9	7.4	6.4	4.9	4.4	3.9	3.5
85°	7.4	6.4	5.4	4.4	3.5	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: P1213690

CATALOG NUMBER: 2SNLED-LD5-27SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	200°	205°	210°	215°	220°	225°	230°	235°	240°	245°	250°
0°	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8
2.5°	1660.6	1669.5	1677.9	1675.4	1666.5	1652.7	1648.8	1643.3	1647.3	1655.7	1659.1
5°	1672.4	1667.5	1685.3	1711.4	1753.8	1757.7	1787.3	1794.2	1817.9	1832.7	1832.2
7.5°	1689.2	1759.2	1788.3	1819.9	1834.2	1830.7	1835.1	1831.7	1826.3	1823.8	1820.8
10°	1774.5	1827.7	1838.6	1838.6	1816.4	1786.3	1773.5	1751.3	1706.9	1707.9	1700.5
12.5°	1824.3	1843.0	1817.4	1795.7	1706.5	1671.9	1634.5	1616.7	1606.4	1590.6	1596.5
15°	1798.2	1771.5	1756.3	1686.2	1631.5	1569.4	1570.4	1559.5	1548.2	1549.2	1541.8
17.5°	1759.7	1738.5	1630.0	1581.7	1555.1	1530.9	1526.5	1512.2	1504.8	1502.3	1501.8
20°	1706.9	1630.5	1549.7	1537.8	1505.8	1478.2	1473.7	1478.2	1500.9	1460.4	1323.4
22.5°	1645.3	1535.4	1511.7	1478.2	1456.5	1445.6	1472.7	1349.5	1163.1	1185.8	1161.6
25°	1540.8	1493.0	1452.5	1426.9	1424.4	1357.9	1131.6	1107.9	988.1	924.0	852.0
27.5°	1464.4	1443.7	1401.3	1396.8	1364.8	1110.4	992.5	862.3	814.5	807.1	791.3
30°	1418.0	1388.4	1362.8	1250.9	1089.2	893.9	796.3	778.0	769.7	760.8	747.0
32.5°	1362.3	1334.2	1346.5	1051.7	868.3	769.7	749.9	736.6	721.3	715.4	665.6
35°	1305.6	1292.8	1052.2	884.0	746.5	722.8	708.0	694.2	552.2	133.6	45.4
37.5°	1245.0	1242.0	945.7	733.7	699.1	677.0	635.1	131.2	31.1	21.2	15.8
40°	1197.6	946.2	747.5	687.8	659.7	624.7	87.8	21.7	13.8	8.4	5.4
42.5°	1166.1	851.0	669.1	645.4	584.3	64.6	22.2	9.4	5.4	4.4	3.5
45°	898.8	672.0	625.2	600.5	74.0	22.2	12.8	4.4	3.5	3.0	2.0
47.5°	829.3	610.4	582.8	131.2	24.7	11.8	8.9	3.0	2.0	2.0	2.0
50°	628.1	564.1	464.0	32.0	15.8	8.4	6.4	2.0	2.0	2.0	1.5
52.5°	550.7	520.7	49.8	21.2	12.3	6.4	3.9	1.5	1.5	1.5	1.5
55°	503.4	330.3	29.6	16.3	10.4	5.9	2.5	1.5	1.5	1.5	1.0
57.5°	460.5	44.4	21.7	13.8	9.4	5.4	1.5	1.5	1.5	1.5	1.0
60°	390.5	32.0	17.7	12.3	8.9	4.9	1.5	1.5	1.5	1.5	1.5
62.5°	50.8	25.1	15.3	10.8	6.4	3.9	1.0	1.5	1.5	1.5	1.5
65°	37.0	19.7	13.8	7.4	3.9	1.5	1.0	1.5	1.5	1.5	1.5
67.5°	28.6	16.3	10.4	6.4	3.5	1.0	1.0	1.5	1.5	1.5	1.5
70°	22.7	13.8	8.4	5.4	3.0	1.0	1.0	1.5	1.5	1.5	1.5
72.5°	17.7	9.9	5.9	3.0	2.0	1.0	1.0	1.5	1.5	1.5	1.5
75°	13.3	7.9	4.4	2.5	1.0	1.0	1.0	1.5	1.5	1.5	1.5
77.5°	8.9	4.9	3.5	2.0	2.0	2.0	2.5	2.5	1.5	1.5	1.5
80°	5.9	3.5	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: P1213690

CATALOG NUMBER: 2SNLED-LD5-27SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	305°
0°	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8
2.5°	1654.7	1656.2	1652.2	1673.4	1662.6	1663.6	1668.0	1656.7	1659.1	1651.2	1645.8
5°	1834.2	1837.1	1840.1	1841.1	1843.0	1845.5	1842.5	1841.1	1838.1	1828.2	1817.9
7.5°	1806.1	1802.6	1801.1	1803.1	1806.5	1808.0	1805.6	1809.0	1821.8	1827.3	1830.7
10°	1658.1	1642.4	1653.2	1651.7	1639.4	1680.8	1669.5	1675.9	1680.3	1725.7	1753.3
12.5°	1587.6	1597.5	1578.8	1569.4	1581.7	1590.1	1598.5	1580.7	1605.4	1594.0	1630.5
15°	1528.5	1522.5	1520.6	1521.1	1518.6	1530.4	1533.4	1537.3	1540.8	1556.1	1562.0
17.5°	1501.8	1511.7	1515.6	1518.6	1513.7	1508.2	1502.8	1494.9	1497.4	1493.5	1504.8
20°	1231.2	1198.1	1196.1	1215.4	1194.2	1206.0	1234.6	1425.9	1419.5	1493.9	1468.8
22.5°	1027.5	996.5	969.8	946.7	979.7	993.5	1046.7	1106.9	1204.5	1189.2	1295.2
25°	839.2	827.8	820.9	817.5	819.9	819.0	830.8	858.9	903.3	1007.8	1142.9
27.5°	784.9	779.5	777.1	769.2	775.1	773.1	782.5	788.4	801.7	812.1	855.9
30°	742.0	735.6	731.2	722.8	728.7	729.2	732.2	747.5	752.9	761.8	775.6
32.5°	271.2	159.7	149.9	142.5	155.8	203.1	356.5	623.2	711.0	717.9	733.7
35°	26.6	22.2	19.7	19.7	20.2	22.2	29.6	77.9	142.5	550.7	689.3
37.5°	10.4	8.9	7.4	6.9	7.4	8.4	11.3	14.8	20.2	41.9	186.9
40°	4.4	3.9	3.5	3.5	3.5	3.5	3.9	4.9	7.4	13.8	21.7
42.5°	3.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.5	4.4	8.9
45°	2.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.5	3.9
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: P1213690

CATALOG NUMBER: 2SNLED-LD5-27SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	310°	315°	320°	325°	330°	335°	340°	341°	342°	343°	344°
0°	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8
2.5°	1636.4	1635.9	1646.3	1654.2	1651.2	1654.2	1657.6	1658.1	1659.1	1655.2	1653.7
5°	1798.2	1782.9	1753.3	1732.1	1707.4	1662.6	1640.4	1642.8	1643.3	1641.9	1643.8
7.5°	1829.2	1827.7	1817.4	1813.0	1796.2	1764.1	1712.9	1704.0	1682.3	1668.5	1657.1
10°	1751.3	1786.8	1796.2	1812.0	1821.8	1815.9	1772.5	1766.1	1752.3	1736.5	1740.0
12.5°	1667.0	1696.1	1697.6	1783.4	1802.6	1804.6	1787.8	1796.7	1798.7	1763.2	1742.4
15°	1563.5	1577.3	1606.4	1686.2	1744.4	1780.9	1791.8	1796.7	1772.5	1771.0	1762.7
17.5°	1518.1	1527.0	1540.3	1585.2	1673.4	1727.2	1773.0	1769.6	1778.9	1772.0	1750.8
20°	1460.9	1468.3	1492.0	1514.7	1558.0	1629.5	1715.3	1721.7	1734.1	1732.6	1738.5
22.5°	1459.9	1433.8	1437.7	1455.5	1500.9	1564.9	1656.2	1677.4	1685.3	1690.7	1697.1
25°	1158.2	1365.8	1403.7	1415.1	1444.6	1482.1	1589.6	1597.5	1612.3	1636.4	1654.2
27.5°	1003.4	1144.4	1296.2	1375.1	1393.9	1424.9	1489.0	1500.9	1551.1	1557.1	1584.7
30°	791.8	900.8	1127.6	1317.4	1348.5	1370.2	1415.6	1439.2	1460.9	1484.6	1513.7
32.5°	745.0	762.3	888.0	1090.1	1331.7	1315.5	1349.0	1363.3	1387.0	1407.7	1428.9
35°	702.1	713.9	740.6	892.9	1084.7	1270.6	1293.3	1302.6	1316.0	1331.7	1347.0
37.5°	657.2	675.0	693.2	734.2	1003.4	1235.1	1234.6	1245.4	1253.3	1266.7	1279.5
40°	119.3	619.8	649.3	676.0	778.0	985.1	1179.4	1184.3	1189.7	1198.1	1211.4
42.5°	19.2	103.5	608.4	634.1	663.2	882.1	1154.2	1134.0	1130.6	1136.5	1148.3
45°	9.9	25.1	122.3	592.2	618.3	703.6	943.7	1099.0	1095.6	1084.2	1086.7
47.5°	7.4	15.8	30.1	204.6	578.8	604.0	870.7	861.4	926.9	1052.7	1033.4
50°	6.4	10.8	17.7	41.9	511.3	556.2	670.6	783.5	818.0	822.4	973.3
52.5°	5.9	7.4	12.8	27.1	107.5	514.3	545.3	584.8	642.9	767.7	764.7
55°	5.4	6.9	10.8	18.2	37.5	463.5	495.5	502.9	515.2	574.9	653.8
57.5°	3.0	6.4	10.4	15.8	28.1	84.8	449.7	455.6	465.4	467.9	496.0
60°	1.5	5.9	9.4	13.8	20.7	39.4	404.3	411.2	417.1	418.1	427.0
62.5°	1.0	5.4	7.9	12.8	17.3	28.1	95.7	195.2	371.3	371.3	381.6
65°	1.0	3.9	4.9	8.4	15.8	23.2	40.4	46.8	91.2	224.3	334.8
67.5°	1.0	1.5	4.4	6.9	11.8	17.7	29.6	34.5	41.4	47.3	87.8
70°	1.0	1.0	3.9	4.4	7.4	13.3	21.2	24.2	28.1	32.0	37.0
72.5°	1.0	1.0	3.5	3.5	4.9	8.9	16.3	17.7	20.2	22.7	26.1
75°	2.5	2.0	3.0	3.0	3.5	6.9	12.3	13.8	14.8	16.8	19.2
77.5°	2.5	2.5	2.5	2.5	2.5	4.4	7.9	8.9	10.4	11.3	13.3
80°	2.0	2.0	2.0	2.5	2.5	3.0	4.9	5.4	5.9	7.4	7.9
82.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.5	4.4
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

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CATALOG NUMBER: 2SNLED-LD5-27SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	345°	346°	347°	348°	349°	350°	351°	352°	353°	354°	355°
0°	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8
2.5°	1653.2	1650.2	1647.8	1649.3	1644.8	1642.8	1644.3	1644.8	1645.8	1648.3	1648.8
5°	1648.8	1647.8	1652.2	1654.7	1653.7	1654.7	1654.7	1652.7	1649.8	1651.7	1647.3
7.5°	1645.8	1639.4	1634.5	1635.5	1630.5	1636.4	1641.9	1649.8	1652.2	1652.2	1647.3
10°	1696.6	1689.7	1662.1	1643.3	1631.0	1620.2	1645.8	1619.7	1632.0	1585.2	1638.9
12.5°	1738.5	1747.9	1735.5	1684.3	1675.4	1642.8	1661.6	1629.5	1620.2	1566.4	1583.7
15°	1755.3	1737.5	1733.6	1719.3	1700.0	1690.7	1640.4	1635.0	1619.7	1625.6	1602.9
17.5°	1740.5	1749.3	1737.5	1728.1	1708.4	1686.2	1656.2	1629.5	1608.3	1561.0	1600.9
20°	1726.2	1738.0	1702.5	1708.4	1710.4	1684.8	1669.0	1646.8	1620.2	1575.8	1541.3
22.5°	1702.5	1694.1	1697.1	1688.2	1680.8	1684.3	1662.6	1647.3	1602.4	1582.2	1535.4
25°	1664.1	1661.1	1669.0	1668.0	1650.2	1644.3	1633.5	1617.2	1599.5	1566.9	1528.5
27.5°	1601.4	1616.7	1630.5	1636.9	1627.6	1611.8	1605.9	1596.5	1584.2	1551.1	1522.5
30°	1535.4	1552.6	1568.4	1582.2	1590.6	1583.7	1578.3	1572.8	1554.1	1532.4	1500.4
32.5°	1459.9	1482.6	1504.3	1521.1	1539.3	1544.7	1540.8	1536.4	1520.6	1500.9	1475.2
35°	1372.7	1403.7	1435.3	1465.4	1473.2	1486.1	1498.9	1491.5	1483.1	1463.4	1439.7
37.5°	1298.7	1320.9	1343.6	1381.5	1409.1	1425.4	1448.1	1451.1	1436.8	1427.4	1396.3
40°	1222.3	1242.5	1275.5	1297.7	1335.7	1354.4	1378.6	1389.4	1386.0	1380.5	1353.4
42.5°	1162.1	1172.0	1193.7	1213.4	1250.9	1289.3	1310.5	1322.4	1334.7	1330.3	1316.4
45°	1098.0	1106.9	1114.3	1131.6	1168.0	1202.1	1228.2	1245.9	1268.1	1278.5	1261.7
47.5°	1034.4	1036.9	1045.8	1060.1	1081.8	1107.9	1151.8	1178.4	1199.1	1219.3	1208.5
50°	985.6	976.7	978.2	987.1	1004.8	1030.5	1062.0	1099.5	1123.2	1147.8	1150.3
52.5°	861.4	933.3	916.1	921.0	930.4	942.7	975.8	1012.7	1041.8	1063.0	1084.2
55°	722.8	737.1	875.7	855.9	861.9	872.7	888.0	925.0	953.1	982.7	1012.2
57.5°	560.6	667.1	672.5	800.7	797.8	798.7	811.6	832.8	860.9	897.8	923.0
60°	435.9	480.7	568.0	612.4	724.8	728.7	736.1	748.5	772.6	807.6	847.6
62.5°	384.6	390.5	421.6	488.1	561.1	649.3	665.1	667.1	677.9	713.0	759.3
65°	337.7	341.7	351.1	358.0	419.1	504.4	580.3	592.6	599.6	620.3	659.7
67.5°	232.7	294.4	302.7	307.7	313.6	353.0	447.2	509.8	517.7	535.9	570.5
70°	44.9	93.2	254.9	260.3	263.3	272.2	287.4	387.0	439.3	456.6	472.3
72.5°	30.6	36.0	43.4	102.6	216.9	221.9	225.3	238.1	326.4	376.7	385.1
75°	22.2	24.7	29.1	36.0	44.4	144.5	179.0	185.4	191.8	264.8	307.2
77.5°	15.8	17.7	19.7	23.2	27.1	35.0	50.3	138.5	145.0	148.4	209.5
80°	8.9	10.8	13.3	15.3	17.3	19.7	25.6	32.0	71.5	104.5	110.0
82.5°	4.9	5.9	6.9	8.4	9.4	11.8	14.3	17.3	22.7	33.5	71.0
85°	2.5	2.5	2.5	3.5	3.9	5.4	6.4	7.4	10.4	14.3	19.7
87.5°	1.5	1.5	2.0	2.0	2.0	2.5	2.5	2.5	3.0	4.4	6.4
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: P1213690

CATALOG NUMBER: 2SNLED-LD5-27SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	356°	357°	358°	359°	360°
0°	1642.8	1642.8	1642.8	1642.8	1642.8
2.5°	1649.3	1647.8	1647.8	1653.7	1652.2
5°	1646.3	1644.8	1644.3	1650.7	1647.8
7.5°	1643.8	1638.4	1636.9	1642.8	1640.4
10°	1634.0	1630.0	1632.5	1630.5	1629.5
12.5°	1617.2	1614.7	1604.4	1605.4	1613.8
15°	1587.1	1597.0	1579.2	1595.0	1598.5
17.5°	1531.9	1554.1	1571.4	1580.7	1582.2
20°	1556.6	1564.0	1555.1	1555.6	1561.5
22.5°	1524.5	1528.0	1530.4	1527.5	1540.3
25°	1473.2	1459.9	1488.5	1494.4	1515.1
27.5°	1457.5	1446.6	1459.9	1458.9	1476.2
30°	1444.6	1409.6	1415.6	1424.9	1446.1
32.5°	1426.4	1371.2	1365.3	1386.0	1409.6
35°	1394.4	1342.1	1328.3	1341.6	1377.1
37.5°	1367.2	1301.7	1274.0	1291.8	1338.1
40°	1326.8	1270.1	1227.2	1243.0	1297.7
42.5°	1278.5	1243.0	1176.9	1187.8	1250.4
45°	1229.7	1198.1	1128.1	1133.5	1208.0
47.5°	1179.9	1150.8	1077.3	1078.3	1153.7
50°	1131.1	1092.6	1032.0	1014.7	1096.1
52.5°	1067.5	1032.0	986.1	958.0	1041.3
55°	1007.3	967.4	933.8	890.5	979.2
57.5°	948.6	904.3	881.6	825.9	908.7
60°	868.3	847.1	813.5	760.3	845.1
62.5°	785.9	779.0	745.0	689.8	766.7
65°	689.8	706.1	671.0	623.7	685.3
67.5°	599.1	628.1	589.7	560.6	606.9
70°	502.4	535.9	514.3	503.9	523.6
72.5°	407.3	439.8	441.8	434.4	440.8
75°	314.6	350.6	370.3	358.9	360.4
77.5°	238.6	255.9	277.6	286.5	284.5
80°	147.4	177.5	195.2	213.5	207.1
82.5°	74.5	99.6	121.3	141.0	131.6
85°	31.1	39.9	55.7	73.5	70.5
87.5°	9.4	15.8	16.8	23.7	22.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)