

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P#

Luminaire Tested: **2SNLED-LD5-46HL-LC-UNV-L950-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33518)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2SNLED-LD5-46HL-LC-UNV-L950-CD1-U  
Description: 2FT LINEAR SNLED LED FIXTURE  
CLEAR LENSED  
Light Source: -  
Ballast/Driver: -

**Summary**

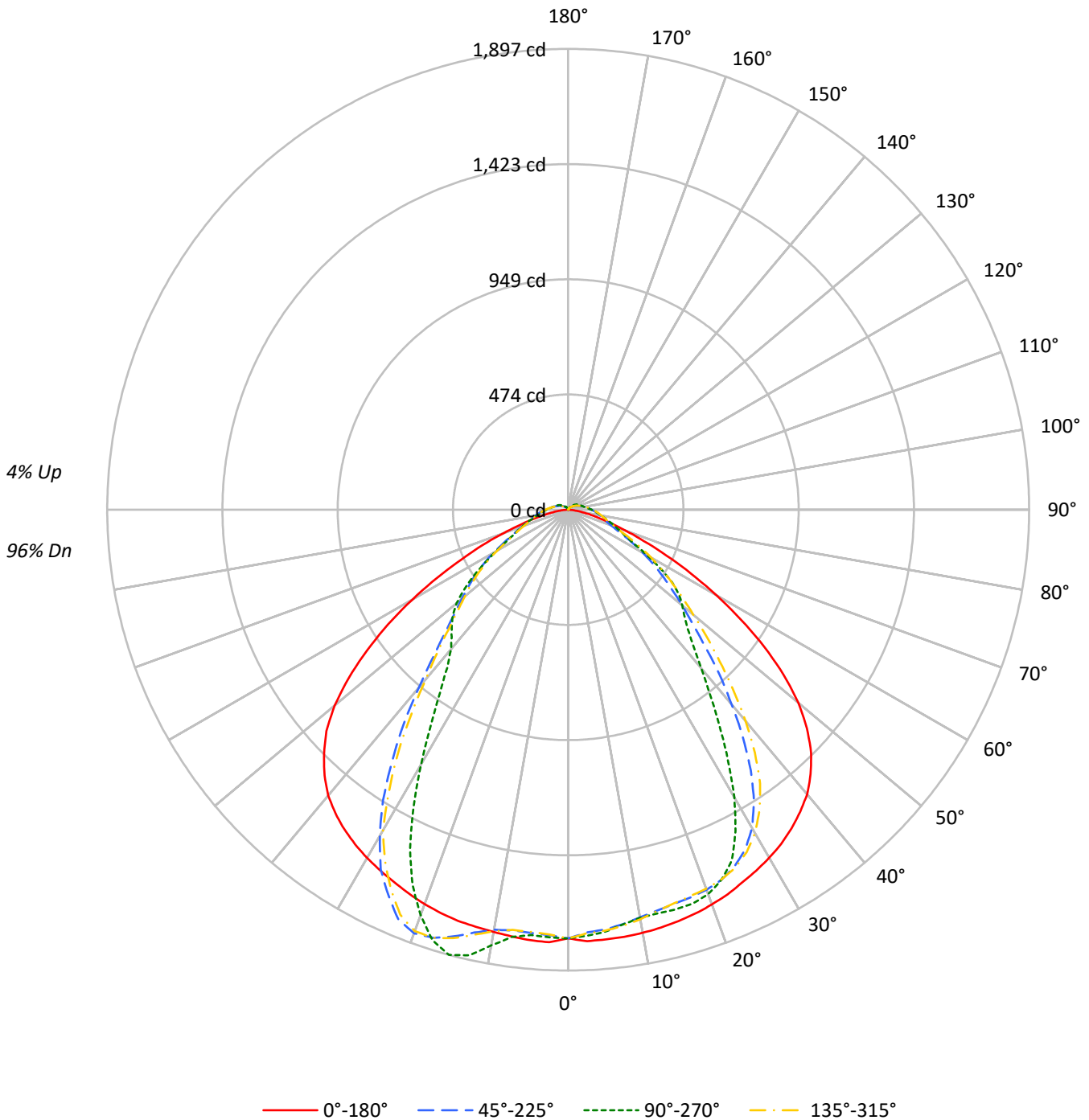
Lumens per Lamp: N/A  
Luminaire Lumens: 4207.0 lumens  
Efficiency: N/A  
Efficacy: 116.9 lumens/watt  
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2' x H: 0.12')  
CIE Type: Direct

Input Watts (W): 36  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P#  
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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	96								
1	109	104	100	97	106	102	98	95	97	94	91	92	90	88	88	86	84	82								
2	100	93	86	81	97	90	85	80	86	82	77	82	79	75	79	76	73	71								
3	92	83	75	69	89	81	74	68	77	71	67	74	69	65	71	67	63	61								
4	85	74	66	60	83	73	65	59	70	63	58	67	61	57	64	60	56	54								
5	79	67	59	52	76	66	58	52	63	56	51	61	55	50	59	53	49	47								
6	73	61	52	46	71	60	52	46	57	51	45	55	49	45	54	48	44	42								
7	68	55	47	42	66	54	47	41	53	46	41	51	45	40	49	44	40	38								
8	64	51	43	37	62	50	42	37	48	42	37	47	41	36	45	40	36	34								
9	60	47	39	34	58	46	39	34	45	38	33	43	37	33	42	37	33	31								
10	56	43	36	31	54	43	36	31	42	35	30	40	34	30	39	34	30	28								

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

	0°	90°	180°	270°
0°	28521	28521	28521	28521
5°	28652	27391	28710	27605
10°	28706	26252	28645	28033
15°	28847	25901	28832	28839
20°	29079	25490	29049	26870
25°	29346	24182	29331	23366
30°	29800	20958	29816	18567
35°	30275	16947	30360	14341
40°	30663	13646	30790	12022
45°	30414	11558	30571	11256
50°	28947	10642	29351	10404
55°	25514	9564	26151	8695
60°	20525	7320	21615	6713
65°	15094	5600	16261	5312
70°	10111	4834	11397	4622
75°	6461	4362	7524	4125
80°	4006	4066	4700	3742
85°	1871	4059	2466	3705



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	167.6	4.0
10°-20°	498.8	11.9
20°-30°	758.2	18.0
30°-40°	813.4	19.3
40°-50°	706.0	16.8
50°-60°	523.2	12.4
60°-70°	299.8	7.1
70°-80°	166.0	3.9
80°-90°	101.1	2.4
90°-100°	65.7	1.6
100°-110°	44.0	1.0
110°-120°	29.7	0.7
120°-130°	18.2	0.4
130°-140°	9.6	0.2
140°-150°	4.4	0.1
150°-160°	1.3	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1424.6	33.9
0°-40°	2238.0	53.2
0°-60°	3467.2	82.4
0°-90°	4034.0	95.9
90°-120°	139.5	3.3
90°-150°	171.7	4.1
90°-180°	173.0	4.1
0°-180°	4207.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1765	1765	1765	1765	1765	
5°	1776	1744	1779	1757	1776	169
15°	1753	1704	1752	1897	1753	496
25°	1694	1593	1693	1540	1694	783
35°	1602	1085	1606	918	1602	1002
45°	1414	696	1421	677	1414	1082
55°	986	521	1011	474	986	875
65°	448	264	482	251	448	451
75°	128	168	149	159	128	146
85°	17	116	23	106	17	23
90°	0	97	2	89	0	1
95°	1	79	0	76	1	1
105°	1	59	1	56	1	1
115°	1	48	1	44	1	1
125°	1	36	1	30	1	1
135°	1	23	1	19	1	1
145°	1	14	2	11	1	1
155°	2	6	2	6	2	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7
2.5°	1777.5	1772.9	1771.1	1767.5	1770.2	1781.1	1773.8	1762.0	1762.9	1741.9	1752.9
5°	1775.7	1770.2	1767.5	1763.8	1765.6	1775.7	1768.4	1756.5	1755.6	1734.6	1744.7
7.5°	1772.9	1767.5	1762.9	1760.2	1761.1	1769.3	1760.2	1746.5	1743.8	1721.0	1730.1
10°	1768.4	1764.7	1758.3	1753.8	1752.9	1762.0	1747.4	1733.7	1727.4	1703.7	1712.8
12.5°	1762.0	1756.5	1750.1	1741.9	1741.0	1746.5	1734.6	1715.5	1709.1	1690.0	1700.0
15°	1752.9	1746.5	1739.2	1730.1	1725.5	1729.2	1714.6	1697.3	1696.4	1680.0	1693.6
17.5°	1742.9	1733.7	1725.5	1712.8	1706.4	1709.1	1697.3	1681.8	1683.6	1673.6	1689.1
20°	1729.2	1719.2	1706.4	1693.6	1684.5	1689.1	1680.9	1669.0	1671.8	1664.5	1678.1
22.5°	1713.7	1700.0	1684.5	1669.9	1662.6	1669.0	1662.6	1652.6	1653.5	1649.0	1657.2
25°	1693.6	1678.1	1659.9	1641.7	1638.0	1642.6	1638.9	1630.7	1627.1	1619.8	1623.4
27.5°	1675.4	1658.1	1635.3	1616.1	1609.8	1618.9	1610.7	1597.0	1587.0	1577.0	1569.7
30°	1654.4	1633.5	1607.9	1586.1	1580.6	1584.2	1572.4	1551.4	1525.0	1512.2	1492.2
32.5°	1631.6	1604.3	1572.4	1547.8	1544.1	1541.4	1519.5	1489.4	1448.4	1422.9	1391.9
35°	1601.6	1571.5	1533.2	1503.1	1497.7	1482.2	1446.6	1406.5	1353.6	1309.9	1257.0
37.5°	1567.8	1532.3	1492.2	1452.1	1436.6	1405.6	1355.5	1313.5	1233.3	1180.4	1116.6
40°	1529.6	1486.7	1437.5	1389.2	1363.7	1313.5	1256.1	1194.1	1116.6	1045.5	991.7
42.5°	1476.7	1431.1	1372.8	1319.0	1275.2	1208.7	1141.2	1053.7	982.6	922.5	867.8
45°	1413.8	1359.1	1291.6	1226.9	1171.3	1092.0	1012.7	925.2	866.0	795.8	758.4
47.5°	1332.7	1273.4	1201.4	1129.4	1056.5	969.0	886.0	802.1	742.9	692.8	665.4
50°	1237.0	1182.3	1103.0	1017.3	937.1	845.9	763.0	700.1	642.6	611.6	590.7
52.5°	1118.5	1067.4	986.3	893.3	815.8	726.5	650.8	599.8	558.8	536.0	528.7
55°	986.3	941.6	861.4	774.8	695.5	613.5	556.0	511.4	484.9	471.3	472.2
57.5°	845.0	810.4	734.7	657.2	582.5	520.5	468.5	433.0	412.9	412.0	414.7
60°	703.7	678.2	612.6	546.0	480.4	430.2	392.0	367.3	354.6	355.5	354.6
62.5°	568.8	545.1	497.7	443.0	391.0	357.3	322.7	312.7	301.7	300.8	300.8
65°	447.6	429.3	391.0	351.9	312.7	290.8	273.5	261.6	253.4	251.6	252.5
67.5°	336.4	329.1	302.6	276.2	251.6	237.9	223.3	220.6	214.2	214.2	216.0
70°	250.7	245.2	230.6	215.1	205.1	196.0	188.7	188.7	187.8	186.9	191.4
72.5°	181.4	182.3	177.7	165.9	165.0	163.2	161.3	164.1	165.0	167.7	173.2
75°	127.6	130.3	130.3	128.5	132.2	136.7	139.5	144.0	149.5	153.1	159.5
77.5°	90.2	90.2	94.8	100.3	107.6	115.8	123.1	129.4	136.7	141.3	146.8
80°	58.3	61.1	68.4	78.4	88.4	99.4	109.4	117.6	124.9	132.2	135.8
82.5°	34.6	39.2	48.3	61.1	73.8	87.5	97.5	107.6	115.8	123.1	125.8
85°	17.3	23.7	34.6	48.3	62.0	76.6	89.3	98.4	107.6	113.9	117.6
87.5°	5.5	12.8	24.6	37.4	52.0	66.5	80.2	90.2	98.4	103.9	107.6
90°	0.0	6.4	17.3	31.0	44.7	59.2	72.0	82.9	91.2	95.7	98.4
92.5°	0.0	3.6	13.7	25.5	38.3	52.9	65.6	75.7	82.9	87.5	89.3
95°	0.9	2.7	10.0	21.0	33.7	47.4	59.2	68.4	75.7	80.2	81.1
97.5°	0.9	1.8	8.2	17.3	29.2	41.9	53.8	62.9	68.4	72.9	73.8
100°	0.9	1.8	6.4	15.5	25.5	37.4	48.3	56.5	62.9	66.5	67.5
102.5°	0.9	0.9	5.5	12.8	22.8	32.8	42.8	51.0	56.5	60.2	62.0
105°	0.9	0.9	4.6	10.9	20.1	29.2	38.3	46.5	51.0	54.7	56.5
107.5°	0.9	0.9	3.6	9.1	17.3	25.5	34.6	41.0	46.5	50.1	52.0
110°	0.9	0.9	2.7	8.2	14.6	22.8	30.1	36.5	41.9	45.6	47.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.9	0.9	2.7	7.3	12.8	20.1	26.4	32.8	37.4	41.0	43.8
115°	0.9	0.9	2.7	6.4	11.8	17.3	23.7	29.2	33.7	37.4	40.1
117.5°	0.9	0.9	2.7	5.5	10.0	15.5	21.0	26.4	30.1	33.7	36.5
120°	0.9	0.9	1.8	4.6	9.1	13.7	18.2	22.8	27.3	31.0	33.7
122.5°	0.9	0.9	1.8	4.6	7.3	11.8	16.4	20.1	24.6	27.3	30.1
125°	0.9	0.9	1.8	3.6	6.4	10.9	14.6	18.2	21.0	24.6	27.3
127.5°	0.9	0.9	1.8	3.6	5.5	9.1	12.8	16.4	19.1	21.9	23.7
130°	0.9	0.9	1.8	2.7	4.6	7.3	10.9	13.7	17.3	19.1	21.0
132.5°	0.9	0.9	0.9	2.7	3.6	5.5	8.2	11.8	14.6	17.3	18.2
135°	0.9	0.9	0.9	1.8	3.6	4.6	6.4	9.1	11.8	14.6	16.4
137.5°	0.9	0.9	0.9	1.8	2.7	4.6	5.5	7.3	10.0	11.8	14.6
140°	0.9	0.9	0.9	1.8	2.7	3.6	4.6	6.4	8.2	10.0	11.8
142.5°	0.9	0.9	0.9	1.8	1.8	2.7	3.6	5.5	6.4	8.2	10.0
145°	0.9	0.9	0.9	1.8	1.8	2.7	3.6	4.6	5.5	6.4	8.2
147.5°	0.9	0.9	0.9	1.8	1.8	1.8	2.7	3.6	4.6	5.5	6.4
150°	1.8	1.8	1.8	1.8	1.8	1.8	2.7	2.7	3.6	4.6	5.5
152.5°	1.8	1.8	1.8	1.8	1.8	1.8	2.7	2.7	2.7	3.6	4.6
155°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.7	2.7	3.6	3.6
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7
2.5°	1749.2	1751.1	1762.0	1761.1	1759.3	1757.4	1757.4	1755.6	1757.4	1762.0	1760.2
5°	1740.1	1742.9	1751.1	1750.1	1748.3	1747.4	1746.5	1743.8	1745.6	1752.0	1750.1
7.5°	1723.7	1726.4	1733.7	1730.1	1727.4	1729.2	1724.6	1721.9	1725.5	1731.9	1731.0
10°	1706.4	1708.2	1717.3	1715.5	1710.9	1711.9	1707.3	1705.5	1710.0	1713.7	1714.6
12.5°	1694.5	1700.9	1709.1	1708.2	1707.3	1708.2	1703.7	1701.8	1704.6	1708.2	1707.3
15°	1691.8	1700.0	1709.1	1709.1	1710.0	1710.9	1706.4	1703.7	1706.4	1709.1	1708.2
17.5°	1689.1	1699.1	1707.3	1706.4	1707.3	1709.1	1701.8	1700.0	1703.7	1707.3	1705.5
20°	1680.0	1689.1	1694.5	1692.7	1692.7	1693.6	1684.5	1684.5	1690.0	1692.7	1693.6
22.5°	1654.4	1665.4	1665.4	1660.8	1660.8	1657.2	1654.4	1649.0	1655.3	1659.9	1663.5
25°	1616.1	1620.7	1615.2	1605.2	1599.7	1595.2	1582.4	1593.4	1593.4	1607.0	1611.6
27.5°	1562.4	1552.3	1536.8	1515.9	1511.3	1496.7	1488.5	1491.3	1495.8	1515.0	1529.6
30°	1474.0	1443.9	1417.4	1408.3	1388.3	1373.7	1359.1	1366.4	1374.6	1385.5	1415.6
32.5°	1357.3	1328.1	1285.3	1269.8	1248.8	1230.6	1213.3	1224.2	1238.8	1246.1	1278.9
35°	1223.3	1188.6	1149.4	1123.0	1101.1	1091.1	1069.2	1084.7	1100.2	1105.7	1133.9
37.5°	1081.1	1045.5	1010.9	988.1	967.1	960.8	946.2	957.1	969.0	977.2	1000.9
40°	946.2	913.4	886.9	871.4	856.8	851.4	845.9	850.5	859.6	866.0	884.2
42.5°	830.4	804.0	785.7	776.6	766.6	759.3	760.2	762.0	766.6	780.3	788.5
45°	729.2	713.7	701.9	700.1	693.7	692.8	691.9	695.5	698.2	706.4	712.8
47.5°	648.1	641.7	639.0	642.6	645.4	641.7	643.5	648.1	653.6	653.6	652.7
50°	584.3	586.1	589.8	598.0	603.4	605.3	607.1	612.6	613.5	615.3	612.6
52.5°	532.3	534.2	544.2	556.9	563.3	566.1	569.7	575.2	575.2	577.0	573.4
55°	479.5	482.2	492.2	505.0	510.5	514.1	517.8	521.4	524.1	527.8	525.0
57.5°	421.1	429.3	435.7	439.4	443.0	445.7	448.5	449.4	454.9	455.8	460.3
60°	359.1	361.0	367.3	366.4	363.7	371.0	367.3	373.7	380.1	388.3	389.2
62.5°	299.9	300.8	305.4	303.5	307.2	306.3	309.0	309.0	313.6	317.2	321.8
65°	253.4	254.3	258.0	258.0	257.1	259.8	262.5	264.3	264.3	267.1	270.7
67.5°	218.8	221.5	225.1	227.0	228.8	228.8	231.5	232.4	234.3	235.2	237.0
70°	195.1	198.7	202.4	204.2	205.1	206.9	207.8	207.8	209.7	210.6	212.4
72.5°	177.7	181.4	184.1	184.1	186.0	186.9	186.9	187.8	188.7	190.5	192.3
75°	163.2	165.9	167.7	166.8	166.8	166.8	167.7	167.7	169.5	171.4	173.2
77.5°	149.5	152.2	152.2	150.4	150.4	150.4	150.4	151.3	152.2	154.0	155.9
80°	139.5	139.5	138.6	138.6	136.7	135.8	135.8	136.7	136.7	138.6	141.3
82.5°	128.5	128.5	127.6	126.7	125.8	124.9	124.9	125.8	126.7	127.6	129.4
85°	118.5	118.5	116.7	116.7	115.8	115.8	115.8	115.8	116.7	117.6	119.4
87.5°	108.5	107.6	106.6	105.7	105.7	105.7	105.7	105.7	106.6	108.5	109.4
90°	98.4	97.5	96.6	96.6	95.7	95.7	96.6	96.6	97.5	98.4	99.4
92.5°	89.3	88.4	87.5	87.5	86.6	86.6	87.5	86.6	88.4	88.4	89.3
95°	81.1	80.2	79.3	79.3	79.3	79.3	79.3	79.3	80.2	80.2	81.1
97.5°	73.8	72.9	72.0	72.0	72.9	72.0	72.9	72.9	72.9	73.8	74.7
100°	67.5	66.5	66.5	67.5	66.5	66.5	67.5	67.5	67.5	67.5	68.4
102.5°	62.0	62.0	62.0	62.0	62.0	62.0	62.9	62.9	62.9	62.9	63.8
105°	56.5	57.4	57.4	57.4	58.3	58.3	58.3	59.2	59.2	59.2	59.2
107.5°	52.9	53.8	53.8	54.7	54.7	55.6	55.6	55.6	55.6	56.5	56.5
110°	49.2	50.1	51.0	52.0	52.0	52.9	52.9	52.9	52.9	52.9	52.9





TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	45.6	46.5	47.4	49.2	50.1	50.1	50.1	50.1	51.0	51.0	50.1
115°	41.9	43.8	44.7	46.5	47.4	47.4	48.3	48.3	48.3	48.3	47.4
117.5°	38.3	41.0	41.9	43.8	44.7	44.7	45.6	45.6	45.6	45.6	44.7
120°	35.5	37.4	39.2	40.1	41.0	41.9	41.9	42.8	42.8	42.8	41.9
122.5°	32.8	34.6	36.5	37.4	38.3	39.2	39.2	39.2	39.2	39.2	39.2
125°	29.2	31.0	32.8	33.7	34.6	35.5	35.5	36.5	36.5	36.5	35.5
127.5°	26.4	28.3	29.2	31.0	31.9	31.9	32.8	32.8	32.8	32.8	31.9
130°	22.8	24.6	26.4	27.3	28.3	28.3	29.2	29.2	29.2	29.2	29.2
132.5°	20.1	21.9	22.8	24.6	24.6	25.5	25.5	26.4	26.4	26.4	25.5
135°	18.2	19.1	20.1	21.9	21.9	22.8	22.8	22.8	22.8	22.8	22.8
137.5°	16.4	17.3	18.2	19.1	19.1	20.1	20.1	20.1	20.1	21.0	20.1
140°	13.7	15.5	16.4	16.4	17.3	17.3	17.3	18.2	18.2	18.2	17.3
142.5°	11.8	12.8	13.7	14.6	15.5	15.5	15.5	15.5	16.4	15.5	15.5
145°	9.1	10.9	11.8	12.8	13.7	13.7	13.7	13.7	13.7	13.7	13.7
147.5°	7.3	8.2	10.0	10.9	10.9	11.8	11.8	11.8	11.8	11.8	11.8
150°	6.4	6.4	8.2	9.1	10.0	10.0	10.0	10.0	10.0	10.0	10.0
152.5°	4.6	5.5	6.4	7.3	8.2	8.2	8.2	8.2	8.2	8.2	8.2
155°	4.6	4.6	5.5	5.5	6.4	6.4	6.4	6.4	7.3	6.4	6.4
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7
2.5°	1757.4	1756.5	1760.2	1756.5	1738.3	1745.6	1742.9	1752.9	1753.8	1756.5	1765.6
5°	1748.3	1748.3	1752.9	1749.2	1731.9	1739.2	1738.3	1748.3	1750.1	1752.0	1762.0
7.5°	1730.1	1731.0	1737.4	1734.6	1716.4	1727.4	1726.4	1738.3	1741.9	1745.6	1754.7
10°	1712.8	1711.9	1719.2	1716.4	1699.1	1711.9	1710.9	1722.8	1728.3	1734.6	1745.6
12.5°	1703.7	1700.9	1703.7	1700.9	1681.8	1691.8	1692.7	1706.4	1712.8	1721.0	1733.7
15°	1703.7	1699.1	1699.1	1693.6	1671.8	1678.1	1679.0	1688.2	1696.4	1704.6	1720.1
17.5°	1701.8	1697.3	1696.4	1691.8	1668.1	1668.1	1667.2	1673.6	1678.1	1686.3	1702.7
20°	1691.8	1690.0	1689.1	1686.3	1664.5	1660.8	1659.0	1659.0	1661.7	1664.5	1680.9
22.5°	1665.4	1667.2	1669.0	1670.8	1653.5	1647.1	1648.1	1646.2	1643.5	1643.5	1657.2
25°	1616.1	1625.3	1632.6	1640.8	1630.7	1626.2	1631.6	1628.9	1624.4	1620.7	1632.6
27.5°	1537.8	1556.9	1572.4	1592.4	1593.4	1589.7	1604.3	1602.5	1601.6	1596.1	1605.2
30°	1429.3	1459.4	1480.3	1509.5	1534.1	1537.8	1562.4	1566.0	1569.7	1566.9	1576.0
32.5°	1298.0	1339.0	1374.6	1420.2	1443.9	1464.8	1499.5	1514.1	1528.6	1533.2	1543.2
35°	1154.9	1201.4	1243.3	1293.5	1330.8	1376.4	1418.3	1440.2	1473.0	1485.8	1500.4
37.5°	1019.1	1062.8	1103.9	1154.0	1214.2	1261.6	1313.5	1362.7	1407.4	1425.6	1447.5
40°	898.8	934.3	973.5	1017.3	1072.0	1133.9	1190.5	1258.8	1311.7	1348.2	1380.1
42.5°	807.6	824.9	858.7	897.9	941.6	1004.5	1061.9	1138.5	1202.3	1254.3	1307.1
45°	726.5	734.7	759.3	780.3	824.9	880.5	941.6	1016.4	1082.9	1149.4	1213.3
47.5°	657.2	667.2	679.1	691.9	723.8	770.2	823.1	890.6	957.1	1034.6	1107.5
50°	610.7	613.5	615.3	620.8	639.9	671.8	714.6	772.1	835.9	918.8	996.3
52.5°	569.7	569.7	564.2	561.5	568.8	588.9	613.5	654.5	720.1	796.7	878.7
55°	526.0	517.8	515.9	506.8	508.6	517.8	529.6	561.5	615.3	680.9	760.2
57.5°	464.9	461.2	461.2	457.6	450.3	454.9	457.6	480.4	518.7	575.2	644.5
60°	394.7	392.9	397.4	398.3	392.0	394.7	393.8	407.5	434.8	480.4	537.8
62.5°	324.5	332.7	333.6	337.3	333.6	332.7	337.3	349.1	362.8	397.4	442.1
65°	272.5	277.1	278.0	282.6	280.8	280.8	284.4	293.5	301.7	325.4	360.1
67.5°	238.8	237.0	237.9	240.6	237.9	237.0	239.7	245.2	251.6	266.2	290.8
70°	212.4	210.6	210.6	210.6	206.9	204.2	205.1	206.9	209.7	217.9	233.4
72.5°	192.3	192.3	189.6	186.9	184.1	182.3	180.5	178.7	177.7	180.5	188.7
75°	174.1	175.0	174.1	171.4	167.7	164.1	160.4	156.8	152.2	150.4	151.3
77.5°	157.7	158.6	159.5	158.6	155.0	150.4	144.9	139.5	133.1	126.7	123.1
80°	143.1	144.9	145.8	144.9	142.2	138.6	132.2	125.8	116.7	108.5	99.4
82.5°	130.3	133.1	134.0	134.0	132.2	128.5	121.2	113.9	103.9	93.0	81.1
85°	120.3	122.1	124.0	124.0	123.1	119.4	112.1	103.9	93.9	81.1	68.4
87.5°	110.3	111.2	113.0	114.9	113.0	109.4	103.0	93.9	83.9	71.1	56.5
90°	100.3	101.2	103.0	104.8	103.9	100.3	94.8	86.6	75.7	62.0	47.4
92.5°	90.2	92.1	93.0	93.9	94.8	92.1	87.5	79.3	68.4	54.7	41.0
95°	82.9	82.9	84.8	85.7	86.6	83.9	80.2	72.0	62.0	49.2	35.5
97.5°	75.7	75.7	77.5	77.5	78.4	76.6	72.9	65.6	55.6	43.8	30.1
100°	68.4	69.3	70.2	71.1	71.1	70.2	66.5	59.2	50.1	39.2	26.4
102.5°	63.8	63.8	64.7	64.7	65.6	63.8	60.2	53.8	44.7	34.6	22.8
105°	59.2	59.2	60.2	60.2	59.2	57.4	53.8	48.3	40.1	30.1	20.1
107.5°	55.6	55.6	55.6	55.6	54.7	52.9	49.2	42.8	35.5	27.3	18.2
110°	52.9	52.0	52.0	51.0	50.1	47.4	43.8	38.3	31.9	23.7	15.5



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	50.1	49.2	48.3	47.4	45.6	42.8	39.2	34.6	28.3	21.0	13.7
115°	47.4	46.5	45.6	43.8	41.9	39.2	35.5	31.0	24.6	18.2	11.8
117.5°	44.7	43.8	41.9	40.1	38.3	35.5	31.9	27.3	21.9	16.4	10.9
120°	41.0	40.1	39.2	37.4	35.5	31.9	28.3	24.6	19.1	14.6	9.1
122.5°	38.3	37.4	35.5	34.6	31.9	29.2	25.5	21.9	17.3	12.8	8.2
125°	34.6	33.7	32.8	31.0	29.2	25.5	22.8	19.1	15.5	10.9	6.4
127.5°	31.9	31.0	29.2	27.3	25.5	22.8	20.1	17.3	13.7	9.1	6.4
130°	28.3	27.3	26.4	24.6	22.8	20.1	18.2	14.6	11.8	8.2	5.5
132.5°	24.6	24.6	23.7	21.9	20.1	18.2	15.5	12.8	10.0	7.3	4.6
135°	22.8	21.9	21.0	19.1	18.2	15.5	13.7	10.9	8.2	6.4	3.6
137.5°	20.1	19.1	18.2	17.3	15.5	13.7	11.8	9.1	7.3	5.5	3.6
140°	17.3	16.4	16.4	14.6	13.7	11.8	10.0	8.2	6.4	4.6	2.7
142.5°	15.5	14.6	13.7	12.8	11.8	10.0	8.2	6.4	5.5	3.6	2.7
145°	13.7	12.8	11.8	10.9	10.0	8.2	7.3	5.5	4.6	3.6	2.7
147.5°	10.9	10.9	10.0	9.1	8.2	7.3	6.4	5.5	3.6	2.7	1.8
150°	9.1	9.1	8.2	7.3	7.3	6.4	5.5	4.6	3.6	2.7	1.8
152.5°	8.2	7.3	7.3	6.4	6.4	5.5	4.6	3.6	2.7	2.7	1.8
155°	6.4	6.4	6.4	5.5	5.5	4.6	3.6	3.6	2.7	1.8	1.8
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7
2.5°	1767.5	1756.5	1765.6	1782.0	1780.2	1778.4	1776.6	1780.2	1792.1	1785.7	1775.7
5°	1764.7	1753.8	1763.8	1779.3	1778.4	1775.7	1773.8	1777.5	1789.3	1783.0	1772.0
7.5°	1759.3	1749.2	1756.5	1772.0	1772.0	1770.2	1768.4	1772.0	1783.0	1777.5	1766.6
10°	1750.1	1742.9	1750.1	1764.7	1765.6	1762.0	1760.2	1764.7	1775.7	1772.9	1763.8
12.5°	1742.9	1735.6	1743.8	1758.3	1759.3	1755.6	1752.9	1758.3	1772.9	1774.8	1772.0
15°	1732.8	1726.4	1736.5	1752.0	1752.0	1749.2	1749.2	1756.5	1776.6	1784.8	1789.3
17.5°	1718.2	1713.7	1725.5	1741.0	1741.9	1740.1	1741.0	1755.6	1782.0	1802.1	1814.9
20°	1700.0	1698.2	1710.9	1727.4	1730.1	1731.0	1735.6	1757.4	1793.9	1821.2	1834.0
22.5°	1678.1	1679.0	1693.6	1710.9	1714.6	1717.3	1726.4	1757.4	1803.0	1832.2	1837.7
25°	1653.5	1656.3	1671.8	1692.7	1697.3	1702.7	1718.2	1758.3	1805.7	1824.9	1815.8
27.5°	1627.1	1632.6	1652.6	1674.5	1680.0	1689.1	1709.1	1752.9	1793.0	1793.9	1760.2
30°	1599.7	1606.1	1629.8	1655.3	1664.5	1673.6	1698.2	1740.1	1762.0	1732.8	1673.6
32.5°	1568.7	1577.9	1601.6	1632.6	1643.5	1655.3	1680.0	1715.5	1707.3	1644.4	1559.6
35°	1529.6	1542.3	1569.7	1606.1	1616.1	1631.6	1649.0	1657.2	1620.7	1531.4	1435.7
37.5°	1481.2	1500.4	1532.3	1574.2	1585.2	1595.2	1599.7	1577.0	1504.0	1407.4	1308.1
40°	1425.6	1454.8	1489.4	1535.9	1546.9	1546.9	1530.5	1482.2	1390.1	1263.4	1153.1
42.5°	1358.2	1393.7	1437.5	1484.0	1494.9	1482.2	1443.0	1358.2	1253.4	1112.1	995.4
45°	1276.1	1323.5	1372.8	1421.1	1426.6	1398.3	1328.1	1220.5	1091.1	959.8	848.6
47.5°	1178.6	1240.6	1294.4	1349.1	1341.8	1294.4	1200.5	1078.3	941.6	817.6	728.3
50°	1069.2	1142.2	1202.3	1254.3	1238.8	1173.1	1062.8	935.2	799.4	693.7	619.8
52.5°	952.6	1036.4	1096.6	1138.5	1117.5	1039.1	917.9	795.8	684.6	587.9	538.7
55°	831.3	916.1	978.1	1010.9	983.5	898.8	779.4	668.2	563.3	500.4	471.3
57.5°	713.7	793.0	851.4	877.8	843.2	758.4	648.1	554.2	478.6	425.7	411.1
60°	600.7	665.4	721.0	741.1	703.7	625.3	530.5	455.8	400.2	363.7	356.4
62.5°	495.9	548.7	592.5	608.0	571.5	510.5	428.4	372.8	333.6	315.4	306.3
65°	409.3	440.3	484.9	482.2	460.3	403.8	343.6	304.5	278.9	267.1	261.6
67.5°	321.8	350.0	378.3	381.9	354.6	315.4	276.2	247.9	234.3	227.9	225.1
70°	248.8	269.8	287.1	282.6	268.0	243.4	218.8	203.3	197.8	195.1	195.1
72.5°	193.2	204.2	212.4	206.9	197.8	185.0	173.2	166.8	167.7	169.5	171.4
75°	149.5	152.2	154.0	148.6	146.8	138.6	137.6	138.6	144.0	149.5	152.2
77.5°	114.9	111.2	108.5	103.0	103.9	103.0	107.6	114.9	123.1	131.3	138.6
80°	88.4	80.2	73.8	68.4	71.1	75.7	84.8	95.7	106.6	115.8	124.9
82.5°	68.4	56.5	47.4	41.9	47.4	54.7	66.5	80.2	93.0	103.0	113.0
85°	52.9	39.2	28.3	22.8	28.3	39.2	52.0	67.5	81.1	92.1	102.1
87.5°	41.0	28.3	15.5	9.1	15.5	27.3	41.9	56.5	70.2	82.9	93.0
90°	32.8	19.1	7.3	1.8	8.2	19.1	32.8	47.4	61.1	74.7	84.8
92.5°	26.4	13.7	3.6	0.0	4.6	14.6	27.3	41.0	54.7	67.5	77.5
95°	21.9	10.9	2.7	0.0	3.6	10.9	21.9	35.5	48.3	61.1	69.3
97.5°	18.2	8.2	1.8	0.0	1.8	9.1	18.2	30.1	42.8	54.7	62.9
100°	15.5	7.3	1.8	0.0	1.8	7.3	15.5	26.4	37.4	48.3	56.5
102.5°	12.8	5.5	0.9	0.9	0.9	5.5	13.7	22.8	32.8	42.8	51.0
105°	11.8	4.6	0.9	0.9	0.9	4.6	11.8	20.1	29.2	38.3	45.6
107.5°	10.0	3.6	0.9	0.9	0.9	3.6	10.0	17.3	26.4	34.6	41.0
110°	8.2	3.6	0.9	0.9	0.9	3.6	8.2	15.5	22.8	30.1	36.5



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	7.3	2.7	0.9	0.9	0.9	2.7	7.3	13.7	20.1	27.3	32.8
115°	6.4	2.7	0.9	0.9	0.9	2.7	6.4	11.8	17.3	23.7	29.2
117.5°	5.5	2.7	0.9	0.9	0.9	1.8	5.5	10.0	15.5	21.0	26.4
120°	4.6	1.8	0.9	0.9	0.9	1.8	4.6	9.1	13.7	18.2	22.8
122.5°	4.6	1.8	0.9	0.9	0.9	1.8	3.6	7.3	11.8	15.5	20.1
125°	3.6	1.8	0.9	0.9	0.9	0.9	3.6	6.4	10.0	13.7	17.3
127.5°	3.6	1.8	0.9	0.9	0.9	0.9	2.7	5.5	8.2	11.8	15.5
130°	2.7	1.8	0.9	0.9	0.9	0.9	1.8	4.6	7.3	10.0	12.8
132.5°	2.7	1.8	0.9	0.9	0.9	0.9	1.8	3.6	5.5	8.2	10.9
135°	2.7	0.9	0.9	0.9	0.9	0.9	0.9	2.7	4.6	6.4	8.2
137.5°	1.8	0.9	0.9	0.9	0.9	0.9	0.9	1.8	3.6	4.6	7.3
140°	1.8	0.9	0.9	0.9	0.9	0.9	0.9	1.8	2.7	3.6	5.5
142.5°	1.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.8	2.7	4.6
145°	1.8	0.9	0.9	1.8	1.8	0.9	0.9	1.8	1.8	2.7	3.6
147.5°	1.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.8	1.8	2.7
150°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.7
152.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
155°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7
2.5°	1773.8	1752.9	1763.8	1760.2	1763.8	1772.9	1772.0	1769.3	1771.1	1766.6	1762.0
5°	1770.2	1749.2	1760.2	1755.6	1760.2	1769.3	1767.5	1764.7	1767.5	1762.0	1757.4
7.5°	1765.6	1746.5	1759.3	1758.3	1766.6	1778.4	1779.3	1779.3	1785.7	1777.5	1773.8
10°	1765.6	1755.6	1772.9	1779.3	1800.3	1815.8	1817.6	1821.2	1832.2	1830.4	1821.2
12.5°	1784.8	1783.0	1808.5	1824.0	1843.1	1865.0	1876.8	1880.5	1887.8	1882.3	1878.7
15°	1809.4	1818.5	1846.8	1864.1	1885.1	1901.5	1904.2	1906.0	1911.5	1903.3	1896.9
17.5°	1842.2	1847.7	1870.5	1877.8	1891.4	1894.2	1890.5	1881.4	1881.4	1863.2	1857.7
20°	1857.7	1855.0	1864.1	1852.2	1846.8	1830.4	1814.9	1797.5	1796.6	1777.5	1775.7
22.5°	1844.0	1825.8	1806.7	1777.5	1764.7	1741.0	1720.1	1710.0	1703.7	1679.0	1672.7
25°	1795.7	1751.1	1722.8	1688.2	1657.2	1629.8	1609.8	1588.8	1568.7	1548.7	1539.6
27.5°	1711.9	1669.9	1624.4	1576.0	1533.2	1491.3	1457.5	1436.6	1417.4	1391.0	1377.3
30°	1608.9	1550.5	1500.4	1453.9	1383.7	1332.7	1304.4	1262.5	1247.9	1236.0	1210.5
32.5°	1487.6	1417.4	1349.1	1286.2	1214.2	1166.8	1129.4	1098.4	1089.3	1058.3	1051.0
35°	1353.6	1261.6	1184.1	1122.1	1070.1	1012.7	981.7	960.8	942.5	921.6	917.9
37.5°	1195.9	1113.0	1025.5	970.8	929.8	880.5	856.8	842.3	834.1	818.6	815.8
40°	1037.3	954.4	894.2	839.5	814.0	787.6	770.2	763.9	760.2	754.8	749.3
42.5°	893.3	820.4	777.5	741.1	730.1	717.4	712.8	716.5	712.8	711.0	710.1
45°	771.2	715.6	685.5	674.5	671.8	668.2	671.8	678.2	679.1	677.3	677.3
47.5°	660.0	633.5	620.8	622.6	627.1	629.9	636.3	644.5	646.3	641.7	643.5
50°	587.0	571.5	568.8	576.1	586.1	589.8	597.1	603.4	602.5	600.7	598.9
52.5°	518.7	514.1	521.4	528.7	539.6	541.5	544.2	546.9	546.0	542.4	540.5
55°	461.2	464.9	471.3	474.0	482.2	481.3	482.2	482.2	478.6	476.7	474.0
57.5°	409.3	410.2	413.8	414.7	419.3	417.5	416.6	414.7	409.3	408.4	405.6
60°	356.4	354.6	362.8	356.4	360.1	356.4	355.5	350.9	345.5	344.6	342.7
62.5°	306.3	302.6	308.1	305.4	307.2	303.5	301.7	296.2	291.7	290.8	289.9
65°	261.6	259.8	265.3	264.3	266.2	261.6	259.8	256.1	252.5	251.6	250.7
67.5°	224.2	228.8	231.5	231.5	233.4	232.4	227.9	227.0	226.1	222.4	222.4
70°	196.9	199.6	205.1	206.0	205.1	206.9	203.3	202.4	201.4	199.6	198.7
72.5°	175.0	178.7	184.1	185.0	184.1	184.1	182.3	181.4	181.4	178.7	178.7
75°	157.7	162.3	166.8	166.8	166.8	165.0	163.2	163.2	161.3	160.4	158.6
77.5°	143.1	148.6	152.2	151.3	150.4	148.6	148.6	145.8	143.1	143.1	141.3
80°	132.2	135.8	138.6	137.6	136.7	134.0	133.1	130.3	128.5	125.8	125.8
82.5°	120.3	124.9	126.7	125.8	124.0	121.2	120.3	118.5	116.7	115.8	113.9
85°	110.3	114.9	115.8	113.9	112.1	110.3	109.4	108.5	107.6	105.7	105.7
87.5°	100.3	104.8	104.8	103.9	102.1	101.2	100.3	99.4	98.4	97.5	96.6
90°	92.1	95.7	95.7	94.8	93.9	93.0	92.1	91.2	90.2	89.3	89.3
92.5°	83.9	87.5	87.5	86.6	85.7	84.8	84.8	83.9	82.9	82.0	81.1
95°	76.6	80.2	80.2	80.2	79.3	78.4	78.4	77.5	76.6	76.6	75.7
97.5°	69.3	72.9	72.9	72.9	72.0	71.1	71.1	70.2	70.2	70.2	69.3
100°	62.9	65.6	66.5	66.5	65.6	65.6	65.6	64.7	64.7	64.7	63.8
102.5°	56.5	59.2	61.1	61.1	61.1	60.2	60.2	60.2	60.2	60.2	59.2
105°	51.0	53.8	55.6	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5
107.5°	46.5	49.2	51.0	52.0	52.9	52.9	53.8	53.8	53.8	53.8	53.8
110°	41.9	44.7	47.4	48.3	49.2	50.1	50.1	51.0	50.1	50.1	50.1



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	37.4	41.0	42.8	44.7	45.6	46.5	47.4	47.4	47.4	47.4	47.4
115°	33.7	37.4	39.2	41.0	42.8	43.8	43.8	44.7	44.7	44.7	43.8
117.5°	30.1	33.7	35.5	37.4	38.3	40.1	41.0	41.0	41.0	41.0	40.1
120°	27.3	30.1	31.9	33.7	35.5	36.5	37.4	37.4	37.4	37.4	37.4
122.5°	23.7	26.4	29.2	31.0	31.9	32.8	33.7	33.7	33.7	33.7	33.7
125°	21.0	23.7	25.5	27.3	28.3	30.1	30.1	30.1	30.1	30.1	30.1
127.5°	18.2	21.0	22.8	24.6	25.5	26.4	27.3	27.3	27.3	27.3	27.3
130°	15.5	18.2	20.1	21.9	22.8	23.7	23.7	24.6	24.6	24.6	24.6
132.5°	13.7	15.5	17.3	19.1	20.1	21.0	21.0	21.9	21.9	21.9	21.9
135°	10.9	13.7	14.6	16.4	17.3	18.2	18.2	19.1	19.1	19.1	19.1
137.5°	9.1	10.9	12.8	14.6	15.5	15.5	16.4	16.4	17.3	17.3	17.3
140°	7.3	8.2	10.9	11.8	12.8	13.7	14.6	14.6	14.6	14.6	14.6
142.5°	5.5	7.3	8.2	10.0	10.9	11.8	12.8	12.8	12.8	12.8	12.8
145°	4.6	5.5	6.4	8.2	9.1	10.0	10.9	10.9	10.9	10.9	10.9
147.5°	3.6	4.6	5.5	6.4	7.3	8.2	9.1	9.1	9.1	9.1	9.1
150°	2.7	3.6	4.6	4.6	5.5	6.4	7.3	8.2	8.2	8.2	8.2
152.5°	2.7	2.7	3.6	3.6	4.6	5.5	6.4	6.4	6.4	6.4	6.4
155°	1.8	2.7	2.7	2.7	3.6	3.6	4.6	5.5	5.5	5.5	5.5
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7
2.5°	1764.7	1768.4	1766.6	1763.8	1762.9	1767.5	1762.9	1741.9	1750.1	1751.1	1757.4
5°	1762.0	1764.7	1762.9	1761.1	1758.3	1763.8	1758.3	1736.5	1744.7	1745.6	1752.0
7.5°	1780.2	1781.1	1781.1	1776.6	1769.3	1772.0	1764.7	1740.1	1744.7	1744.7	1749.2
10°	1825.8	1827.6	1830.4	1818.5	1809.4	1802.1	1792.1	1762.0	1761.1	1753.8	1753.8
12.5°	1885.1	1880.5	1875.9	1870.5	1863.2	1854.1	1839.5	1803.9	1792.1	1780.2	1768.4
15°	1902.4	1900.5	1899.6	1896.9	1892.3	1889.6	1878.7	1843.1	1825.8	1811.2	1790.3
17.5°	1856.8	1860.4	1872.3	1873.2	1878.7	1889.6	1887.8	1863.2	1847.7	1841.3	1815.8
20°	1774.8	1775.7	1790.3	1796.6	1820.3	1838.6	1852.2	1849.5	1845.9	1853.1	1834.0
22.5°	1676.3	1682.7	1698.2	1708.2	1731.0	1752.0	1773.8	1785.7	1804.8	1834.9	1831.3
25°	1542.3	1550.5	1572.4	1588.8	1620.7	1652.6	1681.8	1702.7	1725.5	1783.0	1802.1
27.5°	1381.9	1394.6	1422.9	1439.3	1484.0	1516.8	1558.7	1599.7	1631.6	1697.3	1736.5
30°	1213.3	1224.2	1254.3	1277.1	1315.3	1360.0	1412.9	1471.2	1524.1	1590.6	1639.8
32.5°	1055.6	1067.4	1092.0	1112.1	1154.9	1192.3	1250.6	1322.6	1371.9	1463.9	1529.6
35°	917.9	928.9	946.2	963.5	999.0	1037.3	1087.5	1157.6	1220.5	1316.3	1399.2
37.5°	821.3	823.1	833.1	843.2	869.6	898.8	938.0	1000.0	1058.3	1161.3	1252.4
40°	752.0	752.0	757.5	760.2	772.1	789.4	814.0	862.3	910.6	989.0	1100.2
42.5°	709.2	707.4	707.4	708.3	707.4	715.6	730.1	752.9	795.8	860.5	947.1
45°	677.3	673.6	670.9	664.5	660.9	660.9	661.8	670.0	694.6	736.5	806.7
47.5°	641.7	640.8	636.3	629.0	622.6	618.0	610.7	608.0	615.3	639.0	686.4
50°	600.7	596.1	591.6	586.1	578.8	574.3	560.6	561.5	555.1	566.1	590.7
52.5°	540.5	536.9	535.1	530.5	527.8	526.0	515.0	504.1	501.3	503.2	512.3
55°	474.0	475.8	468.5	472.2	471.3	463.1	458.5	450.3	447.6	446.7	451.2
57.5°	404.7	406.5	402.0	405.6	405.6	401.1	398.3	398.3	392.0	386.5	392.9
60°	341.8	338.2	340.9	345.5	345.5	342.7	340.9	340.9	336.4	334.5	339.1
62.5°	290.8	287.1	289.9	294.4	295.3	293.5	291.7	291.7	286.2	286.2	289.9
65°	251.6	252.5	251.6	255.2	255.2	256.1	254.3	252.5	246.1	248.8	247.9
67.5°	223.3	222.4	222.4	226.1	225.1	227.0	225.1	222.4	217.9	214.2	213.3
70°	199.6	198.7	198.7	200.5	201.4	201.4	200.5	198.7	192.3	188.7	186.0
72.5°	178.7	177.7	178.7	179.6	180.5	181.4	180.5	178.7	173.2	168.6	164.1
75°	159.5	158.6	161.3	161.3	162.3	162.3	163.2	162.3	157.7	152.2	146.8
77.5°	140.4	141.3	144.0	144.9	146.8	147.7	148.6	148.6	144.0	139.5	132.2
80°	124.9	126.7	128.5	129.4	131.3	134.0	134.9	135.8	132.2	127.6	119.4
82.5°	113.9	114.9	116.7	117.6	120.3	121.2	122.1	124.0	122.1	117.6	108.5
85°	104.8	105.7	107.6	107.6	109.4	111.2	112.1	113.0	112.1	107.6	98.4
87.5°	96.6	97.5	98.4	99.4	100.3	101.2	102.1	103.0	102.1	97.5	89.3
90°	89.3	89.3	90.2	90.2	91.2	92.1	93.9	93.9	93.0	89.3	81.1
92.5°	81.1	82.0	82.0	82.9	83.9	84.8	85.7	85.7	84.8	81.1	73.8
95°	75.7	75.7	76.6	76.6	77.5	77.5	78.4	78.4	77.5	73.8	66.5
97.5°	69.3	69.3	69.3	69.3	70.2	70.2	71.1	71.1	70.2	66.5	60.2
100°	63.8	63.8	63.8	63.8	63.8	64.7	64.7	64.7	63.8	60.2	53.8
102.5°	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	57.4	54.7	48.3
105°	56.5	56.5	56.5	55.6	55.6	55.6	54.7	54.7	52.0	49.2	43.8
107.5°	52.9	52.9	52.9	52.0	52.0	51.0	50.1	50.1	47.4	44.7	39.2
110°	50.1	50.1	50.1	49.2	48.3	47.4	46.5	45.6	42.8	39.2	34.6





TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	47.4	47.4	46.5	46.5	45.6	44.7	42.8	41.9	39.2	35.5	31.0
115°	43.8	43.8	43.8	42.8	41.9	41.0	40.1	38.3	35.5	31.9	27.3
117.5°	40.1	40.1	40.1	39.2	38.3	37.4	36.5	34.6	31.9	28.3	24.6
120°	36.5	36.5	36.5	35.5	34.6	33.7	32.8	31.0	28.3	25.5	21.0
122.5°	33.7	33.7	32.8	31.9	31.0	30.1	29.2	27.3	25.5	21.9	18.2
125°	30.1	30.1	29.2	29.2	28.3	27.3	26.4	24.6	21.9	19.1	16.4
127.5°	27.3	26.4	26.4	26.4	25.5	24.6	22.8	21.9	19.1	16.4	13.7
130°	23.7	23.7	23.7	22.8	22.8	21.9	20.1	18.2	16.4	14.6	11.8
132.5°	21.0	21.0	21.0	21.0	20.1	19.1	17.3	16.4	14.6	11.8	10.0
135°	19.1	19.1	18.2	18.2	17.3	16.4	15.5	13.7	11.8	10.0	8.2
137.5°	16.4	16.4	16.4	15.5	15.5	14.6	12.8	11.8	10.9	9.1	7.3
140°	14.6	14.6	13.7	13.7	12.8	12.8	11.8	10.0	9.1	7.3	6.4
142.5°	12.8	12.8	11.8	11.8	10.9	10.9	10.0	9.1	7.3	6.4	4.6
145°	10.9	10.9	10.0	10.0	10.0	9.1	8.2	7.3	6.4	5.5	4.6
147.5°	9.1	9.1	9.1	8.2	8.2	7.3	7.3	6.4	5.5	4.6	3.6
150°	8.2	8.2	7.3	7.3	7.3	6.4	5.5	5.5	4.6	3.6	2.7
152.5°	6.4	6.4	6.4	6.4	5.5	5.5	4.6	4.6	3.6	2.7	2.7
155°	5.5	5.5	5.5	4.6	4.6	4.6	3.6	3.6	2.7	2.7	1.8
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7	1764.7
2.5°	1754.7	1753.8	1762.0	1761.1	1750.1	1766.6	1777.5
5°	1750.1	1749.2	1756.5	1758.3	1746.5	1763.8	1775.7
7.5°	1746.5	1745.6	1753.8	1756.5	1744.7	1760.2	1772.9
10°	1747.4	1742.9	1750.1	1752.0	1741.0	1757.4	1768.4
12.5°	1753.8	1742.9	1745.6	1745.6	1735.6	1750.1	1762.0
15°	1769.3	1746.5	1742.9	1740.1	1727.4	1741.0	1752.9
17.5°	1786.6	1755.6	1742.9	1733.7	1718.2	1730.1	1742.9
20°	1803.9	1765.6	1744.7	1730.1	1709.1	1720.1	1729.2
22.5°	1812.1	1774.8	1746.5	1724.6	1698.2	1703.7	1713.7
25°	1801.2	1771.1	1742.9	1716.4	1684.5	1685.4	1693.6
27.5°	1761.1	1752.9	1734.6	1708.2	1673.6	1669.0	1675.4
30°	1692.7	1715.5	1716.4	1697.3	1660.8	1651.7	1654.4
32.5°	1597.0	1648.1	1678.1	1674.5	1642.6	1629.8	1631.6
35°	1486.7	1550.5	1616.1	1638.0	1615.2	1605.2	1601.6
37.5°	1354.5	1440.2	1527.7	1581.5	1577.9	1571.5	1567.8
40°	1208.7	1311.7	1415.6	1501.3	1527.7	1527.7	1529.6
42.5°	1052.8	1173.1	1287.1	1395.6	1457.5	1471.2	1476.7
45°	902.4	1023.7	1147.6	1272.5	1355.5	1398.3	1413.8
47.5°	765.7	887.8	1005.4	1142.2	1252.4	1308.1	1332.7
50°	649.0	740.2	864.1	1000.0	1120.3	1188.6	1237.0
52.5°	552.4	623.5	732.0	858.7	979.9	1073.8	1118.5
55°	471.3	519.6	611.6	721.0	836.8	934.3	986.3
57.5°	402.9	441.2	504.1	595.2	692.8	789.4	845.0
60°	342.7	369.2	412.0	484.0	567.0	649.9	703.7
62.5°	290.8	308.1	336.4	389.2	453.9	518.7	568.8
65°	250.7	258.0	273.5	306.3	355.5	404.7	447.6
67.5°	211.5	216.0	227.9	247.9	272.5	308.1	336.4
70°	182.3	182.3	183.2	195.1	207.8	230.6	250.7
72.5°	158.6	155.9	150.4	153.1	155.9	168.6	181.4
75°	139.5	133.1	124.0	120.3	118.5	120.3	127.6
77.5°	123.1	113.9	103.0	93.9	86.6	83.9	90.2
80°	109.4	98.4	85.7	73.8	62.0	55.6	58.3
82.5°	98.4	84.8	71.1	57.4	43.8	34.6	34.6
85°	86.6	73.8	59.2	44.7	31.0	19.1	17.3
87.5°	78.4	64.7	49.2	35.5	21.9	10.0	5.5
90°	70.2	56.5	41.9	28.3	15.5	4.6	0.0
92.5°	62.9	50.1	36.5	22.8	10.9	2.7	0.0
95°	56.5	44.7	31.0	19.1	9.1	1.8	0.9
97.5°	50.1	39.2	27.3	15.5	6.4	1.8	0.9
100°	45.6	34.6	23.7	12.8	5.5	0.9	0.9
102.5°	40.1	31.0	20.1	10.9	4.6	0.9	0.9
105°	35.5	27.3	17.3	9.1	3.6	0.9	0.9
107.5°	31.9	23.7	15.5	8.2	3.6	0.9	0.9
110°	28.3	21.0	13.7	7.3	2.7	0.9	0.9



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	25.5	18.2	11.8	6.4	1.8	0.9	0.9
115°	21.9	16.4	10.0	5.5	1.8	0.9	0.9
117.5°	19.1	13.7	9.1	4.6	1.8	0.9	0.9
120°	16.4	11.8	7.3	3.6	0.9	0.9	0.9
122.5°	14.6	10.0	6.4	3.6	0.9	0.9	0.9
125°	12.8	9.1	5.5	2.7	0.9	0.9	0.9
127.5°	10.9	7.3	4.6	1.8	0.9	0.9	0.9
130°	9.1	6.4	3.6	1.8	0.9	0.9	0.9
132.5°	7.3	5.5	3.6	1.8	0.9	0.9	0.9
135°	6.4	4.6	2.7	1.8	0.9	0.9	0.9
137.5°	5.5	3.6	1.8	1.8	1.8	0.9	0.9
140°	4.6	2.7	1.8	1.8	1.8	1.8	0.9
142.5°	3.6	2.7	1.8	1.8	1.8	1.8	0.9
145°	2.7	1.8	1.8	1.8	1.8	1.8	0.9
147.5°	2.7	1.8	1.8	1.8	1.8	1.8	0.9
150°	1.8	1.8	1.8	1.8	1.8	1.8	1.8
152.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8
155°	1.8	1.8	1.8	1.8	1.8	1.8	1.8
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)