

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

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P#

Luminaire Tested: **4SNLED-LD5-70SL-LW-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 (P33520)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-70SL-LW-UNV-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

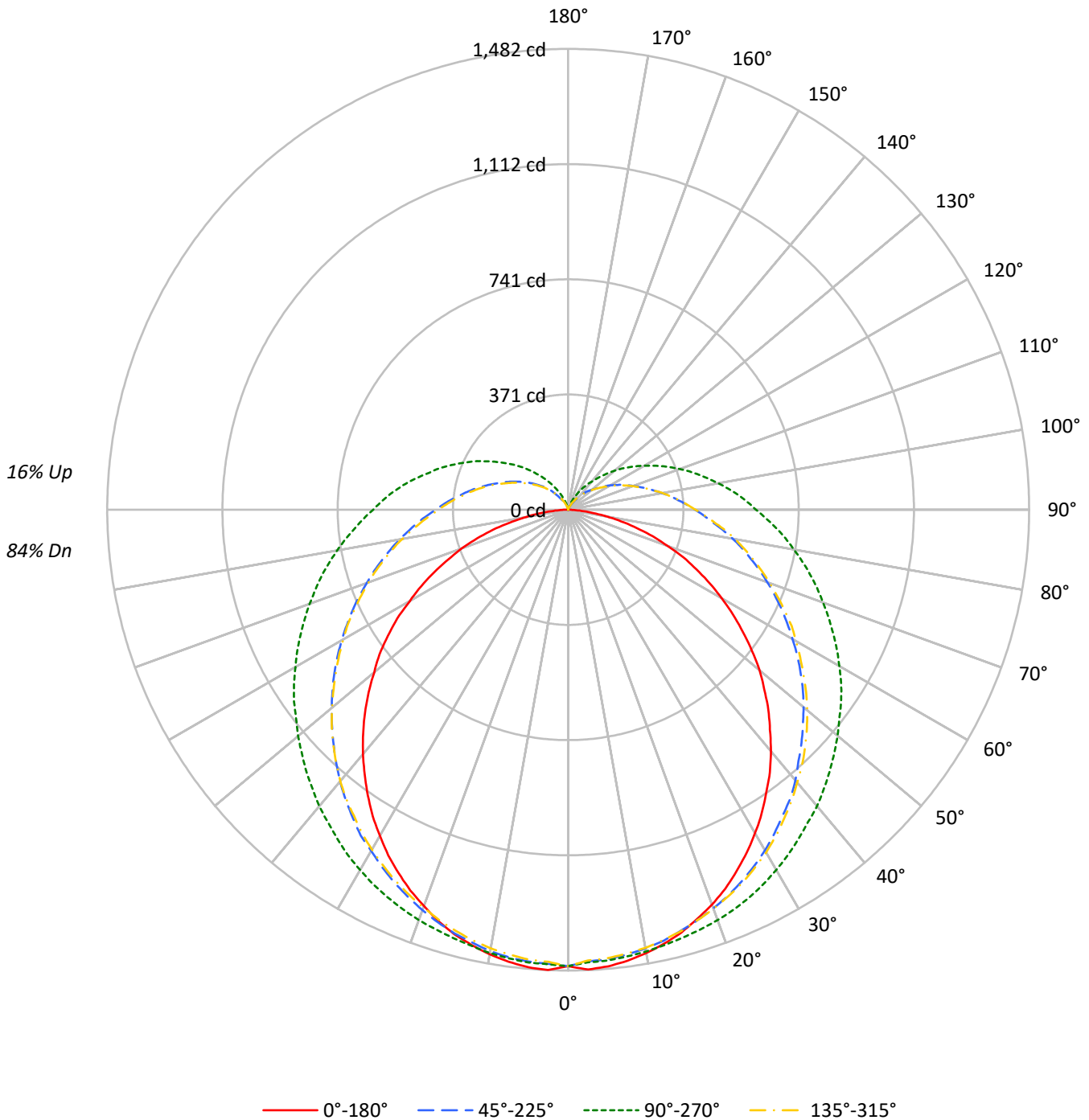
Lumens per Lamp: N/A
Luminaire Lumens: 6377.0 lumens
Efficiency: N/A
Efficacy: 91.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 70
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P#
CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L950-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L950-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	50	30	10	0	
RCR																						
0	115	115	115	115	111	111	111	111	102	102	102	94	94	94	87	87	87	84				
1	102	96	91	86	98	92	87	83	85	81	77	78	75	72	72	70	67	64				
2	92	82	74	68	87	79	72	66	73	67	62	67	62	58	62	58	54	51				
3	83	71	62	55	79	69	60	54	63	56	51	58	52	48	54	49	45	42				
4	76	63	53	46	72	60	52	45	56	48	42	51	45	40	47	42	38	35				
5	69	56	46	39	66	54	45	38	50	42	36	46	39	34	42	37	33	30				
6	64	50	41	34	61	48	39	33	45	37	31	41	35	30	38	33	28	26				
7	59	45	36	30	56	43	35	29	40	33	28	38	31	26	35	29	25	23				
8	55	41	32	26	52	40	31	26	37	30	24	34	28	23	32	26	22	20				
9	51	37	29	23	49	36	28	23	34	27	22	32	25	21	30	24	20	18				
10	48	34	26	21	46	33	26	21	31	24	20	29	23	19	27	22	18	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	11861	11861	11861	11861
5°	11924	11431	11949	11479
10°	11814	11106	11852	11142
15°	11677	10828	11728	10840
20°	11493	10625	11533	10625
25°	11267	10444	11334	10433
30°	11013	10259	11098	10259
35°	10717	10087	10836	10099
40°	10424	9986	10552	9986
45°	10089	9880	10243	9894
50°	9740	9818	9871	9845
55°	9251	9827	9543	9870
60°	8736	9857	9021	9918
65°	8157	9956	8518	10054
70°	7344	10139	7918	10283
75°	6406	10470	7013	10671
80°	4957	10962	5629	11215
85°	2965	11749	3703	12075



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L950-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.0	2.2
10°-20°	399.6	6.3
20°-30°	612.7	9.6
30°-40°	755.9	11.9
40°-50°	820.1	12.9
50°-60°	808.3	12.7
60°-70°	730.8	11.5
70°-80°	608.8	9.5
80°-90°	471.5	7.4
90°-100°	357.6	5.6
100°-110°	264.6	4.1
110°-120°	184.1	2.9
120°-130°	117.5	1.8
130°-140°	65.9	1.0
140°-150°	30.1	0.5
150°-160°	9.3	0.1
160°-170°	1.2	0.0
170°-180°	0.0	0.0
0°-30°	1151.4	18.1
0°-40°	1907.2	29.9
0°-60°	3535.6	55.4
0°-90°	5346.7	83.8
90°-120°	806.3	12.6
90°-150°	1019.8	16.0
90°-180°	1030.0	16.2
0°-180°	6377.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1468	1468	1468	1468	1468	
5°	1474	1455	1477	1462	1474	140
15°	1407	1424	1414	1426	1407	397
25°	1282	1376	1290	1375	1282	591
35°	1110	1291	1122	1293	1110	695
45°	910	1189	924	1191	910	701
55°	686	1071	708	1076	686	614
65°	455	940	475	949	455	451
75°	229	805	251	821	229	243
85°	43	670	54	689	43	52
90°	2	604	3	627	2	2
95°	2	548	2	574	2	1
105°	2	435	2	461	2	2
115°	2	331	2	361	2	1
125°	2	238	2	265	2	1
135°	2	155	2	183	2	1
145°	2	90	2	110	2	1
155°	2	37	2	51	2	1
165°	2	6	2	9	2	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8
2.5°	1480.2	1480.2	1478.6	1475.5	1477.1	1481.7	1478.6	1470.9	1466.2	1453.9	1457.0
5°	1474.0	1474.0	1472.4	1469.3	1470.9	1477.1	1474.0	1467.8	1461.6	1450.8	1455.4
7.5°	1463.2	1463.2	1461.6	1458.5	1461.6	1467.8	1464.7	1458.5	1453.9	1443.0	1447.7
10°	1447.7	1449.2	1447.7	1443.0	1449.2	1455.4	1453.9	1446.1	1441.5	1432.2	1436.8
12.5°	1429.1	1430.6	1429.1	1427.5	1430.6	1439.9	1436.8	1430.6	1427.5	1419.8	1424.4
15°	1407.4	1409.0	1405.9	1405.9	1409.0	1418.3	1418.3	1412.1	1409.0	1401.2	1410.5
17.5°	1379.5	1381.1	1379.5	1379.5	1382.6	1391.9	1393.5	1390.4	1387.3	1384.2	1393.5
20°	1351.7	1350.1	1350.1	1348.6	1354.8	1368.7	1367.2	1367.2	1364.1	1364.1	1374.9
22.5°	1319.2	1319.2	1317.6	1317.6	1325.4	1337.7	1337.7	1340.8	1337.7	1343.9	1353.2
25°	1282.0	1283.5	1282.0	1285.1	1291.3	1305.2	1306.8	1311.4	1313.0	1319.2	1330.0
27.5°	1243.3	1244.8	1243.3	1246.4	1257.2	1268.1	1275.8	1282.0	1283.5	1292.8	1306.8
30°	1201.5	1201.5	1203.0	1206.1	1218.5	1235.6	1241.7	1249.5	1249.5	1265.0	1278.9
32.5°	1158.1	1158.1	1158.1	1164.3	1178.3	1198.4	1206.1	1215.4	1218.5	1234.0	1249.5
35°	1110.1	1111.7	1111.7	1116.3	1134.9	1155.0	1165.9	1176.7	1182.9	1201.5	1217.0
37.5°	1065.2	1068.3	1063.7	1069.9	1096.2	1113.2	1125.6	1136.5	1147.3	1172.1	1184.5
40°	1014.1	1017.2	1015.7	1028.1	1049.8	1071.4	1085.4	1096.2	1111.7	1136.5	1150.4
42.5°	960.0	963.0	966.1	980.1	1003.3	1025.0	1042.0	1055.9	1074.5	1096.2	1119.4
45°	910.4	910.4	915.1	932.1	956.9	980.1	1000.2	1015.7	1037.4	1060.6	1083.8
47.5°	854.7	856.2	862.4	882.5	908.9	936.7	955.3	975.4	998.7	1023.4	1049.8
50°	803.6	803.6	812.9	834.5	859.3	890.3	910.4	933.6	958.4	987.8	1014.1
52.5°	744.7	747.8	761.8	781.9	814.4	842.3	865.5	890.3	919.7	950.7	980.1
55°	685.9	692.1	702.9	730.8	764.9	791.2	819.1	850.0	877.9	912.0	946.0
57.5°	628.6	633.3	650.3	678.2	713.8	746.3	775.7	805.1	839.2	873.2	908.9
60°	569.8	576.0	596.1	624.0	662.7	696.7	730.8	761.8	797.4	833.0	870.2
62.5°	514.0	518.7	541.9	574.4	613.1	650.3	684.4	721.5	760.2	794.3	831.4
65°	455.2	462.9	489.3	518.7	563.6	600.7	639.5	679.7	720.0	757.1	792.7
67.5°	401.0	405.7	433.5	467.6	512.5	554.3	594.6	637.9	679.7	718.4	754.0
70°	337.5	353.0	380.9	416.5	464.5	507.8	551.2	596.1	641.0	681.3	715.3
72.5°	284.9	297.3	328.2	366.9	413.4	464.5	509.4	557.4	602.3	644.1	679.7
75°	229.1	241.5	277.1	320.5	368.5	422.7	469.1	518.7	565.1	606.9	644.1
77.5°	175.0	190.4	229.1	274.1	326.7	382.4	430.4	480.0	528.0	572.9	610.0
80°	125.4	142.4	184.2	235.3	286.4	342.2	394.8	444.4	492.4	537.3	576.0
82.5°	80.5	99.1	144.0	195.1	249.3	305.0	359.2	408.8	456.8	501.7	541.9
85°	43.4	63.5	109.9	161.0	215.2	271.0	325.1	377.8	424.2	466.0	509.4
87.5°	12.4	37.2	82.1	133.2	188.9	240.0	292.6	345.3	391.7	436.6	475.3
90°	1.5	21.7	61.9	109.9	164.1	213.7	266.3	315.9	362.3	407.2	445.9
92.5°	1.5	13.9	48.0	91.4	140.9	192.0	244.6	292.6	336.0	380.9	419.6
95°	1.5	10.8	38.7	77.4	123.9	171.9	221.4	267.9	312.8	354.6	393.3
97.5°	1.5	7.7	31.0	66.6	108.4	153.3	201.3	247.7	291.1	331.3	366.9
100°	1.5	6.2	24.8	57.3	94.4	137.8	181.2	226.1	267.9	306.6	343.7
102.5°	1.5	4.6	21.7	48.0	83.6	122.3	164.1	205.9	246.2	283.3	320.5
105°	1.5	4.6	18.6	41.8	74.3	109.9	148.6	188.9	226.1	261.7	295.7
107.5°	1.5	3.1	15.5	35.6	65.0	99.1	134.7	173.4	207.5	241.5	274.1
110°	1.5	3.1	12.4	32.5	57.3	88.3	122.3	157.9	190.4	223.0	253.9



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.5	3.1	10.8	27.9	49.5	79.0	109.9	142.4	173.4	205.9	233.8
115°	1.5	3.1	9.3	24.8	46.4	68.1	99.1	128.5	159.5	188.9	215.2
117.5°	1.5	3.1	7.7	20.1	40.3	61.9	86.7	116.1	144.0	171.9	196.6
120°	1.5	3.1	6.2	18.6	35.6	55.7	77.4	103.7	130.1	156.4	182.7
122.5°	1.5	1.5	6.2	15.5	31.0	49.5	71.2	91.4	116.1	140.9	164.1
125°	1.5	1.5	6.2	13.9	26.3	44.9	63.5	82.1	103.7	125.4	145.5
127.5°	1.5	1.5	4.6	10.8	23.2	38.7	55.7	75.9	91.4	111.5	131.6
130°	1.5	1.5	4.6	9.3	20.1	32.5	49.5	66.6	85.2	99.1	116.1
132.5°	1.5	1.5	4.6	7.7	15.5	26.3	41.8	57.3	74.3	89.8	103.7
135°	1.5	1.5	3.1	6.2	12.4	21.7	34.1	48.0	65.0	80.5	94.4
137.5°	1.5	1.5	3.1	6.2	9.3	18.6	26.3	38.7	54.2	68.1	82.1
140°	1.5	1.5	3.1	4.6	7.7	13.9	21.7	31.0	43.4	55.7	71.2
142.5°	1.5	1.5	1.5	4.6	6.2	10.8	17.0	24.8	34.1	44.9	57.3
145°	1.5	1.5	1.5	4.6	6.2	7.7	13.9	20.1	26.3	34.1	44.9
147.5°	1.5	1.5	1.5	3.1	4.6	6.2	10.8	15.5	20.1	26.3	32.5
150°	1.5	1.5	1.5	3.1	4.6	6.2	7.7	10.8	15.5	21.7	26.3
152.5°	1.5	1.5	1.5	3.1	3.1	4.6	6.2	7.7	10.8	15.5	18.6
155°	1.5	1.5	1.5	1.5	3.1	4.6	6.2	6.2	7.7	10.8	13.9
157.5°	1.5	1.5	1.5	1.5	3.1	3.1	4.6	4.6	6.2	6.2	9.3
160°	1.5	1.5	1.5	1.5	1.5	3.1	3.1	4.6	4.6	4.6	4.6
162.5°	1.5	1.5	1.5	1.5	1.5	1.5	3.1	3.1	3.1	4.6	4.6
165°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.1	3.1	3.1
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: 4SNLED-LD5-70SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8
2.5°	1457.0	1458.5	1463.2	1463.2	1460.1	1460.1	1458.5	1457.0	1458.5	1461.6	1461.6
5°	1453.9	1455.4	1460.1	1461.6	1458.5	1457.0	1457.0	1455.4	1457.0	1460.1	1460.1
7.5°	1447.7	1449.2	1453.9	1455.4	1452.3	1452.3	1450.8	1449.2	1452.3	1453.9	1453.9
10°	1438.4	1439.9	1446.1	1447.7	1446.1	1444.6	1444.6	1443.0	1444.6	1447.7	1447.7
12.5°	1426.0	1429.1	1436.8	1436.8	1436.8	1435.3	1435.3	1433.7	1435.3	1438.4	1436.8
15°	1412.1	1418.3	1424.4	1427.5	1427.5	1427.5	1426.0	1424.4	1427.5	1429.1	1427.5
17.5°	1396.6	1404.3	1413.6	1416.7	1416.7	1418.3	1416.7	1415.2	1418.3	1418.3	1416.7
20°	1381.1	1388.8	1398.1	1401.2	1404.3	1405.9	1405.9	1404.3	1405.9	1407.4	1405.9
22.5°	1361.0	1370.3	1381.1	1385.7	1388.8	1391.9	1391.9	1391.9	1393.5	1395.0	1391.9
25°	1339.3	1350.1	1362.5	1367.2	1373.4	1374.9	1376.4	1376.4	1378.0	1379.5	1374.9
27.5°	1316.1	1328.5	1340.8	1348.6	1353.2	1356.3	1356.3	1357.9	1359.4	1361.0	1356.3
30°	1288.2	1306.8	1317.6	1323.8	1330.0	1334.6	1336.2	1337.7	1339.3	1340.8	1336.2
32.5°	1263.4	1278.9	1292.8	1300.6	1308.3	1314.5	1316.1	1316.1	1319.2	1319.2	1314.5
35°	1234.0	1252.6	1266.5	1274.3	1283.5	1288.2	1291.3	1291.3	1294.4	1294.4	1289.7
37.5°	1204.6	1223.2	1238.6	1247.9	1258.8	1265.0	1266.5	1266.5	1269.6	1269.6	1263.4
40°	1173.6	1193.7	1210.8	1221.6	1230.9	1238.6	1240.2	1244.8	1244.8	1243.3	1237.1
42.5°	1142.7	1161.2	1179.8	1192.2	1204.6	1212.3	1215.4	1217.0	1217.0	1215.4	1210.8
45°	1108.6	1130.3	1147.3	1162.8	1175.2	1182.9	1187.6	1189.1	1189.1	1186.0	1181.4
47.5°	1076.1	1097.8	1114.8	1131.8	1144.2	1153.5	1158.1	1159.7	1158.1	1156.6	1151.9
50°	1042.0	1066.8	1083.8	1100.8	1113.2	1121.0	1128.7	1130.3	1128.7	1127.2	1117.9
52.5°	1006.4	1032.7	1051.3	1068.3	1082.3	1091.6	1097.8	1099.3	1099.3	1096.2	1090.0
55°	970.8	994.0	1017.2	1035.8	1051.3	1060.6	1068.3	1071.4	1068.3	1065.2	1057.5
57.5°	938.3	960.0	983.2	1003.3	1018.8	1031.2	1037.4	1040.5	1037.4	1032.7	1025.0
60°	899.6	922.8	949.1	967.7	984.7	997.1	1000.2	1006.4	1003.3	998.7	990.9
62.5°	862.4	890.3	913.5	936.7	950.7	964.6	970.8	973.9	970.8	966.1	958.4
65°	823.7	854.7	877.9	901.1	916.6	930.5	938.3	939.8	936.7	932.1	924.3
67.5°	788.1	817.5	842.3	867.1	881.0	894.9	902.7	905.8	902.7	896.5	888.7
70°	752.5	781.9	811.3	829.9	846.9	862.4	867.1	871.7	868.6	862.4	853.1
72.5°	716.9	747.8	777.3	795.8	814.4	828.3	834.5	839.2	836.1	829.9	819.1
75°	679.7	712.2	741.6	761.8	780.3	794.3	800.5	805.1	802.0	795.8	783.4
77.5°	645.6	678.2	706.0	727.7	746.3	758.7	769.5	771.1	768.0	761.8	749.4
80°	610.0	642.5	672.0	693.6	712.2	724.6	732.4	737.0	733.9	727.7	715.3
82.5°	579.1	608.5	637.9	659.6	678.2	693.6	699.8	704.5	702.9	693.6	684.4
85°	545.0	579.1	602.3	625.5	644.1	659.6	664.2	670.4	668.9	661.1	648.7
87.5°	510.9	545.0	572.9	596.1	613.1	625.5	633.3	636.4	634.8	627.1	613.1
90°	483.1	514.0	541.9	566.7	580.6	594.6	602.3	603.8	603.8	594.6	583.7
92.5°	456.8	486.2	514.0	537.3	554.3	566.7	572.9	576.0	574.4	566.7	554.3
95°	427.3	459.8	486.2	509.4	526.4	538.8	545.0	548.1	546.6	538.8	526.4
97.5°	402.6	432.0	458.3	480.0	497.0	509.4	515.6	518.7	518.7	510.9	498.6
100°	377.8	407.2	432.0	453.7	469.1	481.5	487.7	489.3	487.7	481.5	469.1
102.5°	353.0	380.9	405.7	425.8	442.8	453.7	459.8	461.4	461.4	453.7	441.3
105°	328.2	356.1	379.3	401.0	414.9	425.8	430.4	435.1	433.5	427.3	414.9
107.5°	305.0	332.9	354.6	374.7	388.6	399.5	404.1	408.8	407.2	401.0	388.6
110°	283.3	309.7	329.8	349.9	362.3	373.1	380.9	382.4	379.3	373.1	362.3



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	263.2	286.4	306.6	325.1	339.1	346.8	353.0	356.1	353.0	346.8	339.1
115°	241.5	264.8	284.9	301.9	314.3	323.6	328.2	331.3	328.2	322.0	314.3
117.5°	221.4	243.1	263.2	280.2	291.1	298.8	303.5	306.6	303.5	298.8	291.1
120°	204.4	223.0	241.5	257.0	269.4	275.6	280.2	283.3	281.8	275.6	267.9
122.5°	184.2	204.4	221.4	236.9	247.7	253.9	257.0	260.1	258.6	253.9	246.2
125°	167.2	184.2	201.3	215.2	226.1	232.2	235.3	238.4	236.9	232.2	223.0
127.5°	148.6	167.2	181.2	195.1	202.8	212.1	213.7	216.8	215.2	210.6	202.8
130°	134.7	148.6	162.6	175.0	184.2	190.4	193.5	195.1	192.0	188.9	181.2
132.5°	117.7	133.2	145.5	156.4	162.6	168.8	171.9	173.4	173.4	168.8	162.6
135°	105.3	116.1	127.0	137.8	144.0	150.2	153.3	154.8	153.3	150.2	144.0
137.5°	94.4	103.7	111.5	120.8	128.5	131.6	134.7	134.7	133.2	131.6	127.0
140°	82.1	92.9	100.6	106.8	113.0	114.6	117.7	117.7	116.1	114.6	111.5
142.5°	69.7	79.0	86.7	94.4	99.1	102.2	103.7	105.3	103.7	102.2	97.5
145°	55.7	66.6	74.3	79.0	85.2	86.7	88.3	89.8	88.3	86.7	82.1
147.5°	43.4	52.6	60.4	66.6	71.2	72.8	74.3	75.9	74.3	71.2	69.7
150°	31.0	38.7	48.0	54.2	57.3	60.4	60.4	60.4	61.9	58.8	55.7
152.5°	24.8	27.9	34.1	40.3	44.9	46.4	48.0	48.0	46.4	46.4	43.4
155°	17.0	20.1	24.8	29.4	34.1	35.6	37.2	37.2	35.6	35.6	34.1
157.5°	10.8	13.9	17.0	20.1	24.8	26.3	27.9	27.9	27.9	26.3	24.8
160°	6.2	7.7	9.3	12.4	15.5	17.0	18.6	18.6	18.6	18.6	17.0
162.5°	4.6	4.6	4.6	6.2	7.7	9.3	10.8	10.8	10.8	10.8	9.3
165°	3.1	3.1	3.1	3.1	3.1	4.6	6.2	6.2	6.2	6.2	6.2
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: 4SNLED-LD5-70SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8
2.5°	1460.1	1460.1	1461.6	1458.5	1449.2	1450.8	1450.8	1457.0	1460.1	1461.6	1469.3
5°	1457.0	1457.0	1460.1	1455.4	1447.7	1447.7	1447.7	1453.9	1455.4	1458.5	1464.7
7.5°	1452.3	1452.3	1453.9	1449.2	1439.9	1439.9	1438.4	1444.6	1447.7	1449.2	1455.4
10°	1444.6	1444.6	1446.1	1441.5	1430.6	1430.6	1429.1	1433.7	1435.3	1438.4	1443.0
12.5°	1433.7	1433.7	1433.7	1429.1	1418.3	1416.7	1415.2	1419.8	1419.8	1421.3	1426.0
15°	1424.4	1421.3	1421.3	1416.7	1405.9	1402.8	1399.7	1401.2	1404.3	1402.8	1405.9
17.5°	1413.6	1410.5	1407.4	1402.8	1388.8	1384.2	1381.1	1382.6	1381.1	1379.5	1382.6
20°	1401.2	1396.6	1395.0	1387.3	1373.4	1365.6	1359.4	1356.3	1357.9	1353.2	1354.8
22.5°	1387.3	1381.1	1378.0	1368.7	1354.8	1345.5	1337.7	1331.5	1330.0	1323.8	1325.4
25°	1370.3	1362.5	1357.9	1350.1	1334.6	1323.8	1314.5	1305.2	1300.6	1292.8	1291.3
27.5°	1350.1	1342.4	1336.2	1328.5	1313.0	1299.0	1288.2	1275.8	1269.6	1260.3	1255.7
30°	1330.0	1320.7	1311.4	1305.2	1288.2	1272.7	1255.7	1244.8	1235.6	1224.7	1217.0
32.5°	1305.2	1295.9	1286.6	1277.4	1261.9	1243.3	1229.4	1212.3	1201.5	1189.1	1179.8
35°	1280.5	1268.1	1258.8	1246.4	1232.5	1210.8	1193.7	1176.7	1162.8	1148.8	1138.0
37.5°	1252.6	1243.3	1229.4	1218.5	1201.5	1179.8	1161.2	1139.6	1127.2	1108.6	1094.7
40°	1226.3	1215.4	1201.5	1187.6	1170.5	1145.7	1125.6	1100.8	1086.9	1065.2	1051.3
42.5°	1199.9	1184.5	1170.5	1155.0	1136.5	1113.2	1088.5	1063.7	1045.1	1025.0	1004.9
45°	1170.5	1153.5	1136.5	1119.4	1100.8	1077.6	1051.3	1025.0	1001.8	983.2	958.4
47.5°	1139.6	1122.5	1102.4	1083.8	1063.7	1040.5	1012.6	984.7	960.0	938.3	912.0
50°	1108.6	1091.6	1069.9	1049.8	1026.5	1003.3	973.9	941.4	915.1	887.2	864.0
52.5°	1076.1	1059.0	1038.9	1012.6	987.8	964.6	933.6	899.6	870.2	846.9	817.5
55°	1043.6	1026.5	1003.3	977.0	952.2	922.8	893.4	859.3	826.8	798.9	769.5
57.5°	1009.5	994.0	967.7	946.0	915.1	884.1	853.1	820.6	785.0	752.5	718.4
60°	975.4	958.4	933.6	907.3	876.3	845.4	812.9	777.3	740.1	704.5	673.5
62.5°	944.5	922.8	899.6	871.7	839.2	809.8	772.6	733.9	696.7	659.6	622.4
65°	908.9	885.6	864.0	836.1	802.0	768.0	730.8	692.1	651.8	611.6	574.4
67.5°	873.2	850.0	826.8	798.9	763.3	727.7	689.0	650.3	605.4	566.7	523.3
70°	837.6	819.1	789.6	760.2	727.7	689.0	650.3	608.5	562.0	520.2	475.3
72.5°	802.0	783.4	754.0	723.1	692.1	651.8	610.0	568.2	524.9	476.9	428.9
75°	768.0	744.7	718.4	689.0	656.5	614.7	572.9	529.5	478.4	433.5	384.0
77.5°	735.4	713.8	687.4	654.9	619.3	579.1	535.7	490.8	439.7	391.7	337.5
80°	699.8	678.2	651.8	619.3	583.7	545.0	498.6	452.1	402.6	349.9	294.2
82.5°	665.8	645.6	616.2	586.8	548.1	509.4	462.9	416.5	363.9	312.8	258.6
85°	630.2	610.0	582.2	551.2	514.0	472.2	428.9	382.4	329.8	277.1	223.0
87.5°	599.2	576.0	548.1	517.1	480.0	439.7	397.9	348.4	297.3	246.2	190.4
90°	566.7	545.0	517.1	486.2	449.0	408.8	365.4	319.0	269.4	216.8	164.1
92.5°	538.8	515.6	489.3	458.3	421.1	382.4	339.1	292.6	244.6	193.5	142.4
95°	510.9	487.7	462.9	432.0	394.8	356.1	312.8	267.9	221.4	171.9	123.9
97.5°	480.0	459.8	435.1	405.7	368.5	331.3	289.5	246.2	201.3	153.3	108.4
100°	455.2	432.0	408.8	377.8	343.7	308.1	266.3	224.5	181.2	136.3	94.4
102.5°	427.3	405.7	382.4	353.0	319.0	283.3	244.6	204.4	164.1	122.3	82.1
105°	401.0	380.9	356.1	328.2	295.7	261.7	224.5	187.3	148.6	108.4	72.8
107.5°	374.7	354.6	331.3	305.0	274.1	240.0	205.9	168.8	133.2	97.5	65.0
110°	348.4	329.8	308.1	281.8	252.4	221.4	188.9	154.8	119.2	86.7	57.3



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	325.1	306.6	284.9	260.1	232.2	202.8	171.9	139.3	106.8	77.4	49.5
115°	301.9	284.9	263.2	241.5	213.7	185.8	156.4	125.4	96.0	69.7	43.4
117.5°	278.7	261.7	241.5	219.9	195.1	168.8	140.9	111.5	86.7	61.9	38.7
120°	255.5	240.0	221.4	201.3	179.6	153.3	125.4	100.6	77.4	54.2	34.1
122.5°	233.8	219.9	202.8	184.2	161.0	136.3	113.0	91.4	69.7	48.0	27.9
125°	213.7	199.7	184.2	165.7	144.0	122.3	102.2	82.1	60.4	41.8	23.2
127.5°	193.5	179.6	164.1	147.1	130.1	109.9	91.4	72.8	54.2	37.2	20.1
130°	173.4	161.0	147.1	133.2	116.1	97.5	82.1	63.5	46.4	29.4	17.0
132.5°	153.3	144.0	131.6	117.7	102.2	88.3	71.2	55.7	40.3	26.3	15.5
135°	136.3	127.0	116.1	103.7	91.4	77.4	61.9	48.0	34.1	21.7	12.4
137.5°	120.8	113.0	102.2	91.4	80.5	66.6	54.2	40.3	27.9	18.6	9.3
140°	106.8	99.1	89.8	79.0	69.7	57.3	44.9	32.5	24.8	15.5	7.7
142.5°	92.9	85.2	77.4	68.1	58.8	48.0	37.2	27.9	20.1	12.4	7.7
145°	79.0	72.8	65.0	57.3	48.0	38.7	31.0	23.2	15.5	9.3	6.2
147.5°	65.0	60.4	52.6	46.4	38.7	31.0	24.8	18.6	12.4	7.7	4.6
150°	52.6	48.0	41.8	35.6	31.0	24.8	20.1	13.9	9.3	7.7	4.6
152.5°	40.3	37.2	32.5	29.4	24.8	18.6	13.9	10.8	7.7	6.2	3.1
155°	32.5	29.4	26.3	21.7	18.6	13.9	10.8	7.7	6.2	4.6	3.1
157.5°	23.2	21.7	18.6	15.5	12.4	9.3	7.7	7.7	4.6	3.1	1.5
160°	15.5	13.9	12.4	9.3	7.7	7.7	6.2	4.6	3.1	3.1	1.5
162.5°	9.3	7.7	7.7	7.7	6.2	6.2	4.6	3.1	3.1	1.5	1.5
165°	6.2	6.2	6.2	4.6	4.6	4.6	3.1	1.5	1.5	1.5	1.5
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: 4SNLED-LD5-70SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8
2.5°	1469.3	1464.7	1470.9	1481.7	1483.3	1481.7	1478.6	1483.3	1489.5	1487.9	1477.1
5°	1466.2	1460.1	1466.2	1477.1	1477.1	1475.5	1474.0	1478.6	1484.8	1483.3	1474.0
7.5°	1457.0	1450.8	1457.0	1466.2	1467.8	1464.7	1464.7	1469.3	1475.5	1474.0	1466.2
10°	1444.6	1438.4	1441.5	1452.3	1455.4	1452.3	1452.3	1457.0	1464.7	1463.2	1453.9
12.5°	1426.0	1421.3	1424.4	1433.7	1436.8	1435.3	1433.7	1439.9	1447.7	1447.7	1438.4
15°	1405.9	1399.7	1402.8	1413.6	1415.2	1412.1	1413.6	1418.3	1427.5	1427.5	1419.8
17.5°	1382.6	1374.9	1379.5	1387.3	1388.8	1388.8	1388.8	1395.0	1405.9	1404.3	1398.1
20°	1356.3	1345.5	1348.6	1356.3	1359.4	1359.4	1359.4	1370.3	1378.0	1378.0	1371.8
22.5°	1325.4	1317.6	1317.6	1325.4	1330.0	1328.5	1328.5	1337.7	1348.6	1347.0	1347.0
25°	1289.7	1283.5	1280.5	1289.7	1291.3	1292.8	1295.9	1305.2	1317.6	1317.6	1319.2
27.5°	1252.6	1246.4	1244.8	1252.6	1254.1	1255.7	1258.8	1269.6	1282.0	1283.5	1286.6
30°	1217.0	1207.7	1204.6	1210.8	1213.9	1215.4	1215.4	1232.5	1243.3	1247.9	1254.1
32.5°	1175.2	1165.9	1158.1	1169.0	1170.5	1173.6	1175.2	1192.2	1204.6	1212.3	1221.6
35°	1133.4	1117.9	1114.8	1122.5	1125.6	1127.2	1130.3	1148.8	1165.9	1172.1	1184.5
37.5°	1086.9	1076.1	1066.8	1074.5	1077.6	1079.2	1088.5	1105.5	1122.5	1131.8	1144.2
40°	1043.6	1029.6	1021.9	1026.5	1029.6	1031.2	1042.0	1060.6	1080.7	1091.6	1107.0
42.5°	995.6	977.0	970.8	975.4	977.0	981.6	990.9	1015.7	1035.8	1051.3	1063.7
45°	947.6	933.6	919.7	924.3	925.9	929.0	942.9	969.2	990.9	1009.5	1023.4
47.5°	898.0	881.0	867.1	870.2	876.3	877.9	893.4	924.3	944.5	964.6	983.2
50°	848.5	825.2	814.4	814.4	817.5	825.2	845.4	876.3	898.0	921.2	941.4
52.5°	797.4	775.7	763.3	764.9	768.0	777.3	795.8	826.8	851.6	876.3	901.1
55°	746.3	723.1	710.7	707.6	710.7	723.1	744.7	777.3	802.0	831.4	857.8
57.5°	695.2	667.3	656.5	651.8	654.9	670.4	692.1	726.2	757.1	785.0	816.0
60°	639.5	617.8	599.2	588.4	596.1	616.2	639.5	675.1	707.6	738.5	772.6
62.5°	591.5	563.6	543.5	532.6	540.4	557.4	589.9	624.0	659.6	695.2	729.3
65°	537.3	509.4	486.2	475.3	483.1	503.2	535.7	572.9	611.6	647.2	687.4
67.5°	484.6	455.2	427.3	416.5	425.8	447.5	483.1	524.9	566.7	603.8	647.2
70°	433.5	401.0	371.6	363.9	370.0	399.5	433.5	475.3	518.7	562.0	606.9
72.5°	387.1	346.8	315.9	306.6	314.3	346.8	385.5	428.9	475.3	521.8	569.8
75°	332.9	295.7	261.7	250.8	260.1	289.5	337.5	384.0	433.5	483.1	528.0
77.5°	289.5	246.2	210.6	193.5	209.0	246.2	292.6	342.2	393.3	444.4	495.5
80°	244.6	199.7	161.0	142.4	159.5	199.7	246.2	300.4	357.7	408.8	455.2
82.5°	204.4	156.4	116.1	96.0	114.6	159.5	210.6	264.8	320.5	371.6	425.8
85°	167.2	117.7	75.9	54.2	80.5	120.8	175.0	230.7	288.0	340.6	393.3
87.5°	136.3	88.3	46.4	23.2	49.5	94.4	145.5	201.3	258.6	311.2	360.8
90°	111.5	63.5	24.8	3.1	29.4	71.2	120.8	175.0	229.1	283.3	332.9
92.5°	91.4	48.0	13.9	1.5	18.6	57.3	103.7	154.8	207.5	260.1	308.1
95°	75.9	37.2	9.3	1.5	13.9	44.9	88.3	137.8	187.3	238.4	286.4
97.5°	65.0	31.0	7.7	1.5	10.8	38.7	75.9	122.3	170.3	218.3	264.8
100°	55.7	24.8	6.2	1.5	9.3	32.5	66.6	108.4	153.3	199.7	244.6
102.5°	48.0	20.1	4.6	1.5	7.7	27.9	58.8	97.5	137.8	182.7	226.1
105°	41.8	17.0	4.6	1.5	6.2	24.8	52.6	86.7	127.0	167.2	209.0
107.5°	35.6	13.9	3.1	1.5	4.6	20.1	46.4	79.0	114.6	153.3	192.0
110°	31.0	12.4	3.1	1.5	4.6	18.6	40.3	71.2	103.7	139.3	176.5



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	26.3	9.3	3.1	1.5	3.1	15.5	35.6	63.5	94.4	127.0	162.6
115°	23.2	7.7	1.5	1.5	3.1	13.9	32.5	57.3	85.2	116.1	148.6
117.5°	18.6	6.2	1.5	1.5	1.5	10.8	27.9	51.1	77.4	106.8	136.3
120°	15.5	6.2	1.5	1.5	1.5	9.3	24.8	44.9	69.7	96.0	123.9
122.5°	13.9	4.6	1.5	1.5	1.5	7.7	21.7	40.3	61.9	86.7	113.0
125°	12.4	4.6	1.5	1.5	1.5	6.2	18.6	35.6	55.7	77.4	102.2
127.5°	9.3	4.6	1.5	1.5	1.5	4.6	17.0	31.0	49.5	69.7	91.4
130°	7.7	3.1	1.5	1.5	1.5	4.6	13.9	27.9	43.4	61.9	82.1
132.5°	6.2	3.1	1.5	1.5	1.5	3.1	10.8	21.7	37.2	54.2	72.8
135°	6.2	3.1	1.5	1.5	1.5	3.1	7.7	18.6	31.0	46.4	61.9
137.5°	6.2	1.5	1.5	1.5	1.5	3.1	6.2	13.9	24.8	37.2	51.1
140°	4.6	1.5	1.5	1.5	1.5	1.5	4.6	10.8	20.1	31.0	43.4
142.5°	4.6	1.5	1.5	1.5	1.5	1.5	4.6	7.7	15.5	24.8	34.1
145°	3.1	1.5	1.5	1.5	1.5	1.5	3.1	6.2	12.4	18.6	27.9
147.5°	3.1	1.5	1.5	1.5	1.5	1.5	3.1	4.6	9.3	15.5	21.7
150°	3.1	1.5	1.5	1.5	1.5	1.5	3.1	4.6	6.2	10.8	17.0
152.5°	1.5	1.5	1.5	1.5	1.5	1.5	3.1	3.1	4.6	7.7	10.8
155°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.1	4.6	6.2	7.7
157.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.1	3.1	4.6	6.2
160°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.1	3.1	4.6
162.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.1	3.1
165°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
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: 4SNLED-LD5-70SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8
2.5°	1472.4	1461.6	1464.7	1463.2	1466.2	1470.9	1470.9	1469.3	1469.3	1466.2	1463.2
5°	1469.3	1458.5	1463.2	1461.6	1464.7	1469.3	1469.3	1467.8	1467.8	1463.2	1461.6
7.5°	1460.1	1452.3	1455.4	1455.4	1458.5	1463.2	1463.2	1461.6	1461.6	1457.0	1455.4
10°	1450.8	1441.5	1446.1	1446.1	1449.2	1455.4	1455.4	1453.9	1453.9	1449.2	1447.7
12.5°	1435.3	1426.0	1433.7	1435.3	1438.4	1444.6	1443.0	1443.0	1443.0	1438.4	1436.8
15°	1416.7	1410.5	1418.3	1419.8	1424.4	1432.2	1432.2	1432.2	1432.2	1427.5	1426.0
17.5°	1396.6	1391.9	1399.7	1402.8	1409.0	1416.7	1416.7	1418.3	1419.8	1416.7	1415.2
20°	1373.4	1370.3	1378.0	1384.2	1393.5	1401.2	1404.3	1405.9	1409.0	1405.9	1404.3
22.5°	1347.0	1347.0	1357.9	1364.1	1374.9	1382.6	1387.3	1391.9	1395.0	1391.9	1390.4
25°	1317.6	1322.3	1333.1	1343.9	1356.3	1364.1	1368.7	1374.9	1378.0	1376.4	1374.9
27.5°	1289.7	1295.9	1309.9	1320.7	1331.5	1343.9	1348.6	1356.3	1359.4	1359.4	1357.9
30°	1257.2	1266.5	1282.0	1294.4	1308.3	1320.7	1326.9	1334.6	1339.3	1336.2	1337.7
32.5°	1226.3	1241.7	1254.1	1268.1	1283.5	1295.9	1303.7	1313.0	1317.6	1316.1	1317.6
35°	1192.2	1207.7	1224.7	1238.6	1257.2	1269.6	1280.5	1288.2	1294.4	1292.8	1292.8
37.5°	1155.0	1175.2	1192.2	1210.8	1227.8	1241.7	1252.6	1261.9	1268.1	1268.1	1268.1
40°	1119.4	1141.1	1158.1	1179.8	1201.5	1213.9	1226.3	1235.6	1241.7	1243.3	1244.8
42.5°	1080.7	1103.9	1124.1	1147.3	1169.0	1184.5	1198.4	1209.2	1215.4	1218.5	1217.0
45°	1045.1	1066.8	1090.0	1116.3	1136.5	1151.9	1169.0	1181.4	1187.6	1189.1	1190.7
47.5°	1004.9	1029.6	1055.9	1082.3	1102.4	1122.5	1138.0	1150.4	1156.6	1161.2	1161.2
50°	966.1	992.5	1021.9	1049.8	1071.4	1091.6	1107.0	1121.0	1128.7	1131.8	1133.4
52.5°	930.5	955.3	986.3	1014.1	1035.8	1055.9	1076.1	1091.6	1099.3	1102.4	1102.4
55°	887.2	918.1	952.2	978.5	1001.8	1025.0	1045.1	1060.6	1068.3	1073.0	1076.1
57.5°	846.9	879.4	915.1	942.9	970.8	992.5	1011.0	1031.2	1037.4	1043.6	1045.1
60°	808.2	840.7	874.8	905.8	933.6	956.9	978.5	995.6	1006.4	1009.5	1012.6
62.5°	768.0	802.0	837.6	868.6	898.0	925.9	946.0	961.5	973.9	978.5	981.6
65°	729.3	764.9	800.5	833.0	864.0	891.8	912.0	927.4	939.8	947.6	949.1
67.5°	687.4	726.2	763.3	797.4	828.3	857.8	877.9	893.4	905.8	915.1	916.6
70°	648.7	689.0	726.2	763.3	794.3	823.7	845.4	860.9	874.8	881.0	884.1
72.5°	611.6	653.4	692.1	729.3	760.2	789.6	812.9	828.3	842.3	850.0	851.6
75°	576.0	617.8	659.6	695.2	727.7	757.1	780.3	797.4	809.8	817.5	820.6
77.5°	540.4	583.7	625.5	661.1	695.2	724.6	744.7	764.9	777.3	786.5	786.5
80°	504.7	549.7	593.0	628.6	662.7	689.0	712.2	732.4	744.7	754.0	754.0
82.5°	473.8	517.1	558.9	594.6	628.6	658.0	681.3	699.8	713.8	720.0	721.5
85°	438.2	486.2	524.9	563.6	596.1	624.0	647.2	667.3	679.7	685.9	689.0
87.5°	408.8	455.2	497.0	531.1	563.6	591.5	617.8	634.8	647.2	654.9	658.0
90°	380.9	425.8	467.6	501.7	535.7	562.0	586.8	603.8	617.8	624.0	627.1
92.5°	356.1	401.0	441.3	475.3	507.8	537.3	560.5	577.5	589.9	596.1	600.7
95°	332.9	376.2	414.9	452.1	483.1	509.4	534.2	551.2	565.1	569.8	574.4
97.5°	309.7	351.5	390.2	425.8	458.3	483.1	506.3	523.3	534.2	541.9	546.6
100°	289.5	329.8	366.9	401.0	432.0	455.2	480.0	495.5	506.3	512.5	518.7
102.5°	267.9	308.1	343.7	376.2	408.8	430.4	453.7	469.1	478.4	489.3	489.3
105°	249.3	286.4	322.0	353.0	380.9	407.2	427.3	442.8	453.7	461.4	461.4
107.5°	229.1	266.3	300.4	332.9	359.2	384.0	402.6	416.5	428.9	433.5	438.2
110°	213.7	246.2	280.2	311.2	336.0	359.2	377.8	393.3	404.1	408.8	411.9



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	195.1	229.1	260.1	289.5	314.3	336.0	354.6	366.9	377.8	384.0	385.5
115°	179.6	212.1	240.0	267.9	294.2	312.8	329.8	342.2	353.0	357.7	360.8
117.5°	165.7	195.1	223.0	246.2	271.0	291.1	308.1	319.0	328.2	334.4	337.5
120°	151.7	179.6	204.4	227.6	250.8	269.4	284.9	295.7	306.6	311.2	311.2
122.5°	137.8	164.1	187.3	209.0	230.7	247.7	264.8	274.1	283.3	288.0	288.0
125°	125.4	150.2	171.9	192.0	212.1	227.6	241.5	252.4	261.7	264.8	264.8
127.5°	113.0	136.3	156.4	175.0	192.0	207.5	221.4	232.2	240.0	243.1	243.1
130°	102.2	122.3	140.9	159.5	176.5	188.9	202.8	212.1	216.8	221.4	223.0
132.5°	91.4	109.9	127.0	142.4	159.5	171.9	182.7	192.0	196.6	201.3	202.8
135°	80.5	97.5	113.0	128.5	142.4	154.8	164.1	171.9	178.1	181.2	182.7
137.5°	68.1	86.7	100.6	113.0	128.5	137.8	148.6	153.3	159.5	162.6	162.6
140°	57.3	71.2	86.7	99.1	111.5	120.8	130.1	137.8	142.4	144.0	144.0
142.5°	46.4	58.8	71.2	86.7	97.5	105.3	114.6	120.8	123.9	125.4	127.0
145°	37.2	46.4	57.3	71.2	83.6	92.9	97.5	103.7	106.8	108.4	109.9
147.5°	27.9	37.2	46.4	55.7	68.1	77.4	82.1	88.3	91.4	92.9	92.9
150°	21.7	27.9	34.1	43.4	52.6	63.5	69.7	74.3	75.9	77.4	77.4
152.5°	15.5	21.7	26.3	32.5	38.7	48.0	57.3	60.4	61.9	63.5	63.5
155°	10.8	15.5	18.6	23.2	27.9	35.6	43.4	48.0	49.5	51.1	51.1
157.5°	7.7	10.8	12.4	17.0	20.1	23.2	29.4	37.2	38.7	38.7	38.7
160°	4.6	6.2	7.7	10.8	12.4	15.5	18.6	23.2	27.9	27.9	27.9
162.5°	3.1	4.6	4.6	6.2	6.2	9.3	10.8	12.4	17.0	18.6	18.6
165°	1.5	3.1	3.1	3.1	3.1	3.1	4.6	4.6	7.7	9.3	9.3
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: 4SNLED-LD5-70SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8
2.5°	1464.7	1467.8	1466.2	1466.2	1466.2	1469.3	1466.2	1452.3	1455.4	1458.5	1461.6
5°	1463.2	1464.7	1464.7	1463.2	1463.2	1466.2	1463.2	1449.2	1452.3	1455.4	1457.0
7.5°	1457.0	1458.5	1458.5	1458.5	1457.0	1460.1	1455.4	1443.0	1443.0	1446.1	1447.7
10°	1449.2	1452.3	1450.8	1449.2	1449.2	1449.2	1446.1	1432.2	1432.2	1433.7	1435.3
12.5°	1439.9	1439.9	1439.9	1438.4	1436.8	1436.8	1433.7	1419.8	1418.3	1421.3	1419.8
15°	1427.5	1430.6	1427.5	1426.0	1422.9	1422.9	1418.3	1404.3	1401.2	1402.8	1401.2
17.5°	1416.7	1418.3	1415.2	1412.1	1409.0	1407.4	1402.8	1387.3	1382.6	1384.2	1381.1
20°	1405.9	1405.9	1402.8	1399.7	1395.0	1390.4	1384.2	1368.7	1361.0	1361.0	1354.8
22.5°	1391.9	1391.9	1388.8	1384.2	1379.5	1373.4	1367.2	1351.7	1339.3	1336.2	1331.5
25°	1376.4	1374.9	1373.4	1368.7	1359.4	1353.2	1347.0	1330.0	1316.1	1309.9	1302.1
27.5°	1357.9	1357.9	1353.2	1348.6	1339.3	1331.5	1323.8	1308.3	1289.7	1282.0	1271.2
30°	1337.7	1337.7	1333.1	1326.9	1317.6	1308.3	1299.0	1280.5	1261.9	1251.0	1238.6
32.5°	1317.6	1316.1	1311.4	1305.2	1295.9	1282.0	1274.3	1255.7	1234.0	1221.6	1204.6
35°	1292.8	1291.3	1286.6	1278.9	1266.5	1255.7	1243.3	1226.3	1201.5	1186.0	1167.4
37.5°	1268.1	1266.5	1263.4	1252.6	1240.2	1227.8	1212.3	1195.3	1172.1	1151.9	1133.4
40°	1243.3	1241.7	1235.6	1227.8	1212.3	1196.8	1181.4	1164.3	1139.6	1116.3	1096.2
42.5°	1217.0	1215.4	1207.7	1198.4	1181.4	1165.9	1147.3	1128.7	1103.9	1076.1	1055.9
45°	1190.7	1187.6	1179.8	1169.0	1150.4	1133.4	1114.8	1093.1	1068.3	1042.0	1015.7
47.5°	1162.8	1158.1	1150.4	1134.9	1119.4	1100.8	1079.2	1055.9	1031.2	1001.8	973.9
50°	1131.8	1128.7	1119.4	1105.5	1086.9	1068.3	1043.6	1020.3	990.9	963.0	929.0
52.5°	1102.4	1096.2	1088.5	1073.0	1054.4	1034.3	1008.0	980.1	950.7	924.3	888.7
55°	1071.4	1068.3	1057.5	1045.1	1021.9	998.7	973.9	944.5	912.0	881.0	846.9
57.5°	1042.0	1035.8	1026.5	1009.5	989.4	966.1	939.8	908.9	873.2	840.7	803.6
60°	1012.6	1003.3	992.5	977.0	955.3	930.5	902.7	870.2	834.5	798.9	760.2
62.5°	980.1	972.3	960.0	944.5	922.8	896.5	867.1	833.0	798.9	761.8	720.0
65°	947.6	939.8	927.4	912.0	890.3	860.9	829.9	795.8	757.1	721.5	676.6
67.5°	915.1	907.3	893.4	876.3	854.7	826.8	794.3	758.7	720.0	681.3	634.8
70°	882.5	873.2	860.9	842.3	820.6	791.2	758.7	721.5	682.8	641.0	594.6
72.5°	850.0	842.3	826.8	809.8	786.5	757.1	724.6	687.4	647.2	603.8	557.4
75°	817.5	808.2	797.4	777.3	752.5	724.6	690.5	653.4	610.0	568.2	520.2
77.5°	785.0	777.3	763.3	743.2	720.0	690.5	656.5	619.3	576.0	532.6	481.5
80°	752.5	743.2	732.4	713.8	687.4	658.0	622.4	585.3	541.9	497.0	445.9
82.5°	720.0	710.7	698.3	679.7	654.9	625.5	591.5	551.2	507.8	461.4	413.4
85°	687.4	679.7	665.8	647.2	620.9	591.5	557.4	521.8	475.3	428.9	380.9
87.5°	654.9	647.2	633.3	614.7	589.9	560.5	526.4	489.3	444.4	401.0	348.4
90°	624.0	617.8	603.8	585.3	560.5	531.1	500.1	459.8	416.5	373.1	323.6
92.5°	596.1	589.9	577.5	558.9	537.3	504.7	473.8	435.1	391.7	346.8	298.8
95°	571.3	563.6	551.2	534.2	507.8	480.0	449.0	410.3	368.5	323.6	277.1
97.5°	543.5	535.7	523.3	504.7	483.1	453.7	422.7	385.5	343.7	301.9	255.5
100°	515.6	507.8	493.9	478.4	456.8	427.3	397.9	360.8	322.0	281.8	236.9
102.5°	487.7	480.0	467.6	452.1	430.4	404.1	374.7	339.1	300.4	260.1	218.3
105°	461.4	453.7	441.3	425.8	405.7	379.3	348.4	317.4	280.2	241.5	201.3
107.5°	435.1	427.3	416.5	401.0	380.9	356.1	326.7	294.2	260.1	223.0	184.2
110°	408.8	402.6	390.2	376.2	356.1	331.3	305.0	274.1	240.0	205.9	168.8



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	384.0	377.8	365.4	349.9	332.9	309.7	283.3	253.9	221.4	188.9	153.3
115°	359.2	351.5	340.6	326.7	309.7	288.0	263.2	236.9	204.4	173.4	140.9
117.5°	334.4	328.2	317.4	303.5	288.0	266.3	243.1	218.3	187.3	157.9	128.5
120°	309.7	305.0	294.2	281.8	266.3	246.2	224.5	199.7	171.9	144.0	116.1
122.5°	286.4	281.8	271.0	260.1	244.6	226.1	205.9	182.7	157.9	131.6	106.8
125°	264.8	258.6	249.3	238.4	224.5	207.5	187.3	165.7	142.4	119.2	96.0
127.5°	241.5	236.9	230.7	218.3	204.4	188.9	170.3	151.7	130.1	108.4	86.7
130°	223.0	216.8	209.0	199.7	187.3	171.9	154.8	136.3	117.7	97.5	75.9
132.5°	201.3	195.1	188.9	179.6	168.8	154.8	139.3	122.3	105.3	86.7	68.1
135°	181.2	176.5	170.3	161.0	150.2	139.3	123.9	108.4	92.9	75.9	60.4
137.5°	162.6	157.9	151.7	145.5	134.7	123.9	109.9	96.0	82.1	66.6	52.6
140°	144.0	140.9	134.7	128.5	119.2	108.4	96.0	83.6	71.2	57.3	44.9
142.5°	125.4	122.3	117.7	111.5	103.7	94.4	83.6	72.8	60.4	49.5	38.7
145°	108.4	106.8	102.2	96.0	89.8	80.5	71.2	61.9	51.1	41.8	31.0
147.5°	91.4	89.8	86.7	82.1	75.9	68.1	60.4	51.1	43.4	34.1	24.8
150°	75.9	74.3	72.8	66.6	63.5	55.7	49.5	41.8	35.6	26.3	20.1
152.5°	61.9	61.9	58.8	54.2	51.1	44.9	40.3	34.1	27.9	21.7	15.5
155°	49.5	48.0	46.4	43.4	40.3	35.6	31.0	26.3	21.7	15.5	10.8
157.5°	38.7	37.2	35.6	32.5	29.4	27.9	23.2	18.6	13.9	10.8	7.7
160°	27.9	26.3	24.8	23.2	21.7	18.6	15.5	12.4	9.3	6.2	4.6
162.5°	18.6	17.0	17.0	15.5	13.9	10.8	9.3	7.7	6.2	4.6	3.1
165°	9.3	9.3	7.7	7.7	6.2	4.6	4.6	4.6	3.1	3.1	1.5
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: 4SNLED-LD5-70SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8
2.5°	1460.1	1460.1	1466.2	1464.7	1460.1	1469.3	1480.2
5°	1455.4	1455.4	1460.1	1460.1	1455.4	1464.7	1474.0
7.5°	1447.7	1446.1	1450.8	1450.8	1444.6	1452.3	1463.2
10°	1433.7	1432.2	1436.8	1436.8	1430.6	1438.4	1447.7
12.5°	1418.3	1415.2	1419.8	1418.3	1412.1	1419.8	1429.1
15°	1398.1	1396.6	1399.7	1396.6	1390.4	1398.1	1407.4
17.5°	1378.0	1373.4	1374.9	1374.9	1364.1	1371.8	1379.5
20°	1351.7	1345.5	1347.0	1345.5	1337.7	1342.4	1351.7
22.5°	1325.4	1316.1	1316.1	1314.5	1305.2	1311.4	1319.2
25°	1292.8	1282.0	1282.0	1280.5	1269.6	1274.3	1282.0
27.5°	1260.3	1249.5	1244.8	1243.3	1232.5	1232.5	1243.3
30°	1226.3	1210.8	1207.7	1203.0	1192.2	1192.2	1201.5
32.5°	1193.7	1172.1	1165.9	1159.7	1148.8	1147.3	1158.1
35°	1150.4	1133.4	1122.5	1116.3	1103.9	1100.8	1110.1
37.5°	1114.8	1093.1	1077.6	1069.9	1057.5	1052.9	1065.2
40°	1076.1	1052.9	1032.7	1028.1	1009.5	1003.3	1014.1
42.5°	1032.7	1008.0	987.8	978.5	964.6	958.4	960.0
45°	989.4	963.0	941.4	929.0	915.1	904.2	910.4
47.5°	944.5	921.2	894.9	876.3	859.3	851.6	854.7
50°	899.6	871.7	846.9	826.8	806.7	797.4	803.6
52.5°	854.7	825.2	797.4	775.7	752.5	743.2	744.7
55°	811.3	780.3	747.8	724.6	702.9	689.0	685.9
57.5°	768.0	733.9	699.8	673.5	645.6	633.3	628.6
60°	721.5	685.9	650.3	619.3	589.9	576.0	569.8
62.5°	678.2	639.5	599.2	566.7	537.3	518.7	514.0
65°	636.4	591.5	551.2	514.0	481.5	461.4	455.2
67.5°	591.5	545.0	501.7	461.4	430.4	404.1	401.0
70°	549.7	500.1	452.1	410.3	376.2	349.9	337.5
72.5°	507.8	456.8	407.2	362.3	319.0	294.2	284.9
75°	467.6	414.9	362.3	315.9	267.9	238.4	229.1
77.5°	430.4	376.2	320.5	269.4	224.5	187.3	175.0
80°	394.8	339.1	280.2	227.6	179.6	139.3	125.4
82.5°	357.7	305.0	244.6	188.9	139.3	97.5	80.5
85°	325.1	272.5	212.1	156.4	106.8	61.9	43.4
87.5°	298.8	241.5	187.3	131.6	80.5	35.6	12.4
90°	272.5	216.8	162.6	108.4	60.4	20.1	1.5
92.5°	249.3	196.6	142.4	92.9	46.4	13.9	1.5
95°	227.6	176.5	125.4	77.4	37.2	9.3	1.5
97.5°	207.5	159.5	111.5	66.6	31.0	7.7	1.5
100°	190.4	144.0	99.1	58.8	26.3	6.2	1.5
102.5°	173.4	130.1	88.3	51.1	23.2	4.6	1.5
105°	159.5	117.7	79.0	46.4	20.1	4.6	1.5
107.5°	145.5	106.8	71.2	40.3	17.0	3.1	1.5
110°	131.6	97.5	63.5	35.6	15.5	3.1	1.5



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	120.8	88.3	57.3	32.5	12.4	3.1	1.5
115°	109.9	79.0	51.1	27.9	10.8	1.5	1.5
117.5°	99.1	71.2	44.9	24.8	9.3	1.5	1.5
120°	89.8	63.5	40.3	21.7	7.7	1.5	1.5
122.5°	80.5	57.3	35.6	18.6	6.2	1.5	1.5
125°	72.8	51.1	31.0	15.5	4.6	1.5	1.5
127.5°	65.0	44.9	27.9	13.9	4.6	1.5	1.5
130°	57.3	40.3	23.2	10.8	3.1	1.5	1.5
132.5°	51.1	34.1	20.1	9.3	3.1	1.5	1.5
135°	44.9	29.4	17.0	6.2	3.1	1.5	1.5
137.5°	38.7	24.8	13.9	4.6	1.5	1.5	1.5
140°	32.5	21.7	10.8	4.6	1.5	1.5	1.5
142.5°	27.9	17.0	7.7	3.1	1.5	1.5	1.5
145°	21.7	13.9	6.2	3.1	1.5	1.5	1.5
147.5°	17.0	10.8	4.6	3.1	1.5	1.5	1.5
150°	12.4	7.7	4.6	1.5	1.5	1.5	1.5
152.5°	9.3	6.2	3.1	1.5	1.5	1.5	1.5
155°	6.2	4.6	3.1	1.5	1.5	1.5	1.5
157.5°	4.6	3.1	1.5	1.5	1.5	1.5	1.5
160°	3.1	1.5	1.5	1.5	1.5	1.5	1.5
162.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5
165°	1.5	1.5	1.5	1.5	1.5	1.5	1.5
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)