

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-LD5-65HL-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-LD5-65HL-LW-UNV-L950-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
WIDE FROSTED LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

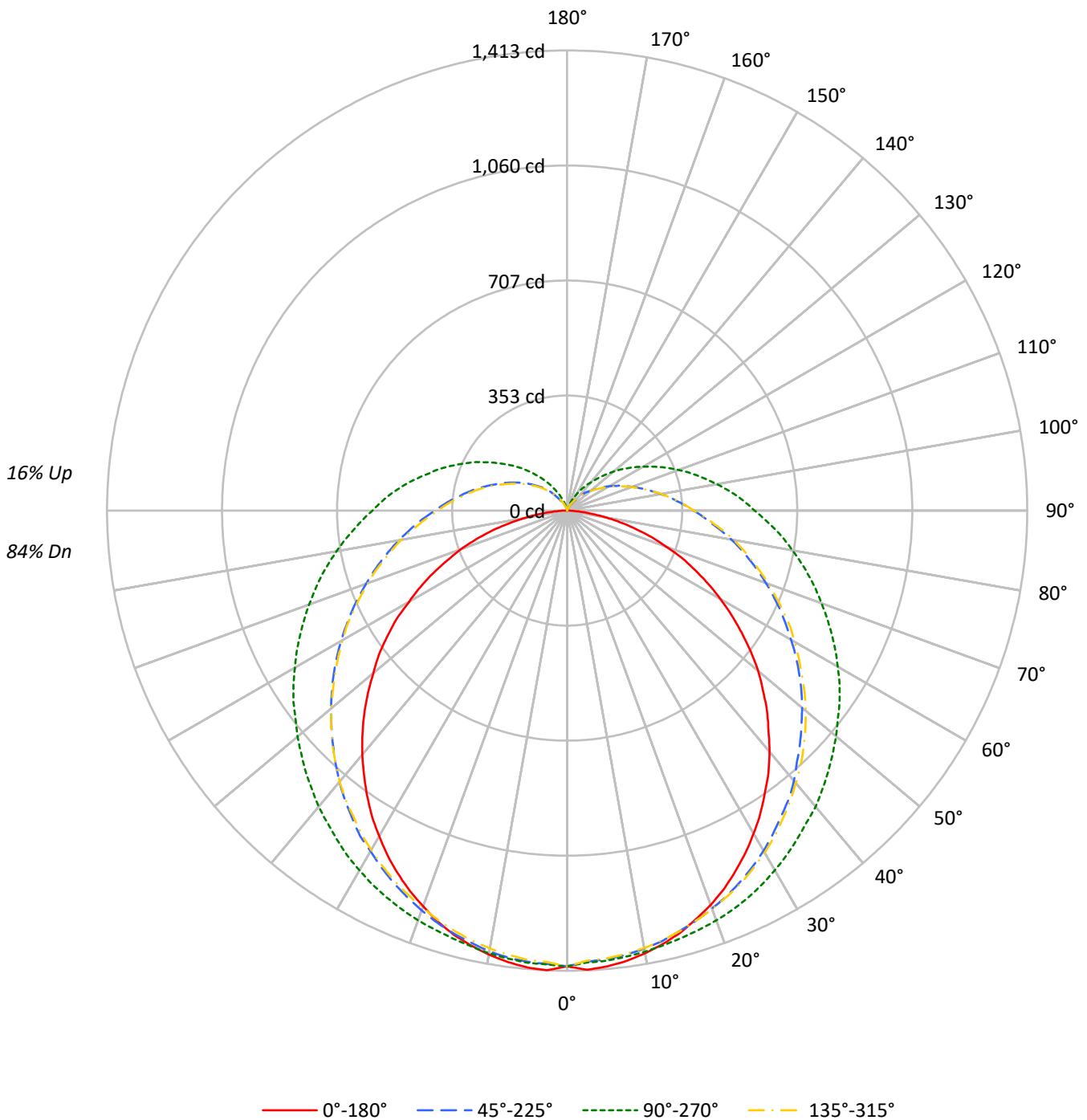
Lumens per Lamp: N/A  
Luminaire Lumens: 6080.0 lumens  
Efficiency: N/A  
Efficacy: 98.1 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Semi-Direct

Input Watts (W): 62  
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-LD5-65HL-LW-UNV-L950-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

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

RF	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	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°	11309	11309	11309	11309
5°	11369	10898	11393	10944
10°	11263	10589	11300	10622
15°	11133	10324	11182	10335
20°	10958	10130	10996	10130
25°	10742	9958	10807	9947
30°	10499	9781	10581	9781
35°	10218	9618	10332	9629
40°	9939	9522	10061	9522
45°	9619	9420	9767	9433
50°	9285	9360	9412	9386
55°	8820	9369	9098	9410
60°	8328	9398	8601	9455
65°	7777	9493	8122	9586
70°	7002	9667	7548	9804
75°	6110	9982	6686	10175
80°	4728	10452	5368	10692
85°	2821	11202	3532	11512



TEST NUMBER: P#

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.6	2.2
10°-20°	381.0	6.3
20°-30°	584.2	9.6
30°-40°	720.7	11.9
40°-50°	781.9	12.9
50°-60°	770.6	12.7
60°-70°	696.7	11.5
70°-80°	580.5	9.5
80°-90°	449.6	7.4
90°-100°	341.0	5.6
100°-110°	252.3	4.1
110°-120°	175.5	2.9
120°-130°	112.0	1.8
130°-140°	62.8	1.0
140°-150°	28.7	0.5
150°-160°	8.9	0.1
160°-170°	1.1	0.0
170°-180°	0.0	0.0
0°-30°	1097.7	18.1
0°-40°	1818.4	29.9
0°-60°	3370.9	55.4
0°-90°	5097.7	83.8
90°-120°	768.8	12.6
90°-150°	972.3	16.0
90°-180°	982.0	16.2
0°-180°	6080.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1399	1399	1399	1399	1399	
5°	1405	1388	1408	1394	1405	133
15°	1342	1358	1348	1360	1342	378
25°	1222	1312	1230	1311	1222	563
35°	1058	1231	1070	1233	1058	663
45°	868	1134	881	1135	868	669
55°	654	1022	675	1026	654	585
65°	434	896	453	905	434	430
75°	218	768	239	782	218	231
85°	41	639	52	657	41	50
90°	2	576	3	598	2	2
95°	2	523	2	548	2	1
105°	2	415	2	440	2	2
115°	2	316	2	344	2	1
125°	2	227	2	252	2	1
135°	2	148	2	174	2	1
145°	2	86	2	105	2	1
155°	2	35	2	49	2	1
165°	2	6	2	9	2	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



TEST NUMBER: P#

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4
2.5°	1411.2	1411.2	1409.8	1406.8	1408.3	1412.7	1409.8	1402.4	1398.0	1386.2	1389.1
5°	1405.3	1405.3	1403.9	1400.9	1402.4	1408.3	1405.3	1399.4	1393.5	1383.2	1387.6
7.5°	1395.0	1395.0	1393.5	1390.6	1393.5	1399.4	1396.5	1390.6	1386.2	1375.8	1380.2
10°	1380.2	1381.7	1380.2	1375.8	1381.7	1387.6	1386.2	1378.8	1374.3	1365.5	1369.9
12.5°	1362.5	1364.0	1362.5	1361.1	1364.0	1372.9	1369.9	1364.0	1361.1	1353.7	1358.1
15°	1341.9	1343.3	1340.4	1340.4	1343.3	1352.2	1352.2	1346.3	1343.3	1336.0	1344.8
17.5°	1315.3	1316.8	1315.3	1315.3	1318.2	1327.1	1328.6	1325.6	1322.7	1319.7	1328.6
20°	1288.7	1287.2	1287.2	1285.8	1291.7	1305.0	1303.5	1303.5	1300.5	1300.5	1310.9
22.5°	1257.7	1257.7	1256.2	1256.2	1263.6	1275.4	1275.4	1278.4	1275.4	1281.3	1290.2
25°	1222.3	1223.8	1222.3	1225.2	1231.2	1244.4	1245.9	1250.3	1251.8	1257.7	1268.1
27.5°	1185.4	1186.9	1185.4	1188.3	1198.7	1209.0	1216.4	1222.3	1223.8	1232.6	1245.9
30°	1145.5	1145.5	1147.0	1150.0	1161.8	1178.0	1183.9	1191.3	1191.3	1206.1	1219.3
32.5°	1104.2	1104.2	1104.2	1110.1	1123.4	1142.6	1150.0	1158.8	1161.8	1176.5	1191.3
35°	1058.4	1059.9	1059.9	1064.3	1082.1	1101.2	1111.6	1121.9	1127.8	1145.5	1160.3
37.5°	1015.6	1018.6	1014.1	1020.1	1045.1	1061.4	1073.2	1083.5	1093.9	1117.5	1129.3
40°	966.9	969.9	968.4	980.2	1000.9	1021.5	1034.8	1045.1	1059.9	1083.5	1096.8
42.5°	915.2	918.2	921.1	934.4	956.6	977.2	993.5	1006.8	1024.5	1045.1	1067.3
45°	868.0	868.0	872.4	888.7	912.3	934.4	953.6	968.4	989.1	1011.2	1033.3
47.5°	814.9	816.3	822.2	841.4	866.5	893.1	910.8	930.0	952.1	975.8	1000.9
50°	766.1	766.1	775.0	795.7	819.3	848.8	868.0	890.1	913.8	941.8	966.9
52.5°	710.1	713.0	726.3	745.5	776.5	803.1	825.2	848.8	876.9	906.4	934.4
55°	654.0	659.9	670.2	696.8	729.2	754.3	780.9	810.4	837.0	869.5	902.0
57.5°	599.3	603.8	620.0	646.6	680.5	711.5	739.6	767.6	800.1	832.6	866.5
60°	543.2	549.1	568.3	594.9	631.8	664.3	696.8	726.3	760.2	794.2	829.6
62.5°	490.1	494.5	516.7	547.7	584.6	620.0	652.5	687.9	724.8	757.3	792.7
65°	434.0	441.4	466.5	494.5	537.3	572.8	609.7	648.1	686.4	721.9	755.8
67.5°	382.3	386.8	413.3	445.8	488.6	528.5	566.9	608.2	648.1	685.0	718.9
70°	321.8	336.6	363.1	397.1	442.9	484.2	525.5	568.3	611.1	649.5	682.0
72.5°	271.6	283.4	313.0	349.9	394.1	442.9	485.7	531.4	574.2	614.1	648.1
75°	218.5	230.3	264.2	305.6	351.3	403.0	447.3	494.5	538.8	578.7	614.1
77.5°	166.8	181.6	218.5	261.3	311.5	364.6	410.4	457.6	503.4	546.2	581.6
80°	119.6	135.8	175.7	224.4	273.1	326.2	376.4	423.7	469.4	512.2	549.1
82.5°	76.8	94.5	137.3	186.0	237.7	290.8	342.5	389.7	435.5	478.3	516.7
85°	41.3	60.5	104.8	153.5	205.2	258.3	310.0	360.2	404.5	444.3	485.7
87.5°	11.8	35.4	78.2	127.0	180.1	228.8	279.0	329.2	373.5	416.3	453.2
90°	1.5	20.7	59.0	104.8	156.5	203.7	253.9	301.1	345.4	388.2	425.1
92.5°	1.5	13.3	45.8	87.1	134.3	183.0	233.2	279.0	320.3	363.1	400.1
95°	1.5	10.3	36.9	73.8	118.1	163.9	211.1	255.4	298.2	338.0	375.0
97.5°	1.5	7.4	29.5	63.5	103.3	146.1	191.9	236.2	277.5	315.9	349.9
100°	1.5	5.9	23.6	54.6	90.0	131.4	172.7	215.5	255.4	292.3	327.7
102.5°	1.5	4.4	20.7	45.8	79.7	116.6	156.5	196.3	234.7	270.1	305.6
105°	1.5	4.4	17.7	39.9	70.9	104.8	141.7	180.1	215.5	249.5	282.0
107.5°	1.5	3.0	14.8	34.0	62.0	94.5	128.4	165.3	197.8	230.3	261.3
110°	1.5	3.0	11.8	31.0	54.6	84.1	116.6	150.6	181.6	212.6	242.1



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-65HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.5	3.0	10.3	26.6	47.2	75.3	104.8	135.8	165.3	196.3	222.9
115°	1.5	3.0	8.9	23.6	44.3	65.0	94.5	122.5	152.0	180.1	205.2
117.5°	1.5	3.0	7.4	19.2	38.4	59.0	82.7	110.7	137.3	163.9	187.5
120°	1.5	3.0	5.9	17.7	34.0	53.1	73.8	98.9	124.0	149.1	174.2
122.5°	1.5	1.5	5.9	14.8	29.5	47.2	67.9	87.1	110.7	134.3	156.5
125°	1.5	1.5	5.9	13.3	25.1	42.8	60.5	78.2	98.9	119.6	138.8
127.5°	1.5	1.5	4.4	10.3	22.1	36.9	53.1	72.3	87.1	106.3	125.5
130°	1.5	1.5	4.4	8.9	19.2	31.0	47.2	63.5	81.2	94.5	110.7
132.5°	1.5	1.5	4.4	7.4	14.8	25.1	39.9	54.6	70.9	85.6	98.9
135°	1.5	1.5	3.0	5.9	11.8	20.7	32.5	45.8	62.0	76.8	90.0
137.5°	1.5	1.5	3.0	5.9	8.9	17.7	25.1	36.9	51.7	65.0	78.2
140°	1.5	1.5	3.0	4.4	7.4	13.3	20.7	29.5	41.3	53.1	67.9
142.5°	1.5	1.5	1.5	4.4	5.9	10.3	16.2	23.6	32.5	42.8	54.6
145°	1.5	1.5	1.5	4.4	5.9	7.4	13.3	19.2	25.1	32.5	42.8
147.5°	1.5	1.5	1.5	3.0	4.4	5.9	10.3	14.8	19.2	25.1	31.0
150°	1.5	1.5	1.5	3.0	4.4	5.9	7.4	10.3	14.8	20.7	25.1
152.5°	1.5	1.5	1.5	3.0	3.0	4.4	5.9	7.4	10.3	14.8	17.7
155°	1.5	1.5	1.5	1.5	3.0	4.4	5.9	5.9	7.4	10.3	13.3
157.5°	1.5	1.5	1.5	1.5	3.0	3.0	4.4	4.4	5.9	5.9	8.9
160°	1.5	1.5	1.5	1.5	1.5	3.0	3.0	4.4	4.4	4.4	4.4
162.5°	1.5	1.5	1.5	1.5	1.5	1.5	3.0	3.0	3.0	4.4	4.4
165°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.0	3.0	3.0
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°	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4
2.5°	1389.1	1390.6	1395.0	1395.0	1392.1	1392.1	1390.6	1389.1	1390.6	1393.5	1393.5
5°	1386.2	1387.6	1392.1	1393.5	1390.6	1389.1	1389.1	1387.6	1389.1	1392.1	1392.1
7.5°	1380.2	1381.7	1386.2	1387.6	1384.7	1384.7	1383.2	1381.7	1384.7	1386.2	1386.2
10°	1371.4	1372.9	1378.8	1380.2	1378.8	1377.3	1377.3	1375.8	1377.3	1380.2	1380.2
12.5°	1359.6	1362.5	1369.9	1369.9	1369.9	1368.4	1368.4	1367.0	1368.4	1371.4	1369.9
15°	1346.3	1352.2	1358.1	1361.1	1361.1	1361.1	1359.6	1358.1	1361.1	1362.5	1361.1
17.5°	1331.5	1338.9	1347.8	1350.7	1350.7	1352.2	1350.7	1349.2	1352.2	1352.2	1350.7
20°	1316.8	1324.2	1333.0	1336.0	1338.9	1340.4	1340.4	1338.9	1340.4	1341.9	1340.4
22.5°	1297.6	1306.4	1316.8	1321.2	1324.2	1327.1	1327.1	1327.1	1328.6	1330.1	1327.1
25°	1276.9	1287.2	1299.1	1303.5	1309.4	1310.9	1312.3	1312.3	1313.8	1315.3	1310.9
27.5°	1254.8	1266.6	1278.4	1285.8	1290.2	1293.2	1293.2	1294.6	1296.1	1297.6	1293.2
30°	1228.2	1245.9	1256.2	1262.2	1268.1	1272.5	1274.0	1275.4	1276.9	1278.4	1274.0
32.5°	1204.6	1219.3	1232.6	1240.0	1247.4	1253.3	1254.8	1254.8	1257.7	1257.7	1253.3
35°	1176.5	1194.2	1207.5	1214.9	1223.8	1228.2	1231.2	1231.2	1234.1	1234.1	1229.7
37.5°	1148.5	1166.2	1181.0	1189.8	1200.2	1206.1	1207.5	1207.5	1210.5	1210.5	1204.6
40°	1119.0	1138.2	1154.4	1164.7	1173.6	1181.0	1182.4	1186.9	1186.9	1185.4	1179.5
42.5°	1089.4	1107.2	1124.9	1136.7	1148.5	1155.9	1158.8	1160.3	1160.3	1158.8	1154.4
45°	1057.0	1077.6	1093.9	1108.6	1120.4	1127.8	1132.2	1133.7	1133.7	1130.8	1126.3
47.5°	1026.0	1046.6	1062.9	1079.1	1090.9	1099.8	1104.2	1105.7	1104.2	1102.7	1098.3
50°	993.5	1017.1	1033.3	1049.6	1061.4	1068.8	1076.1	1077.6	1076.1	1074.7	1065.8
52.5°	959.5	984.6	1002.3	1018.6	1031.9	1040.7	1046.6	1048.1	1048.1	1045.1	1039.2
55°	925.6	947.7	969.9	987.6	1002.3	1011.2	1018.6	1021.5	1018.6	1015.6	1008.2
57.5°	894.6	915.2	937.4	956.6	971.3	983.1	989.1	992.0	989.1	984.6	977.2
60°	857.7	879.8	904.9	922.6	938.9	950.7	953.6	959.5	956.6	952.1	944.8
62.5°	822.2	848.8	871.0	893.1	906.4	919.7	925.6	928.5	925.6	921.1	913.8
65°	785.3	814.9	837.0	859.1	873.9	887.2	894.6	896.1	893.1	888.7	881.3
67.5°	751.4	779.4	803.1	826.7	840.0	853.2	860.6	863.6	860.6	854.7	847.3
70°	717.4	745.5	773.5	791.2	807.5	822.2	826.7	831.1	828.1	822.2	813.4
72.5°	683.5	713.0	741.1	758.8	776.5	789.8	795.7	800.1	797.1	791.2	780.9
75°	648.1	679.1	707.1	726.3	744.0	757.3	763.2	767.6	764.7	758.8	747.0
77.5°	615.6	646.6	673.1	693.8	711.5	723.3	733.7	735.1	732.2	726.3	714.5
80°	581.6	612.6	640.7	661.3	679.1	690.9	698.2	702.7	699.7	693.8	682.0
82.5°	552.1	580.1	608.2	628.9	646.6	661.3	667.2	671.7	670.2	661.3	652.5
85°	519.6	552.1	574.2	596.4	614.1	628.9	633.3	639.2	637.7	630.3	618.5
87.5°	487.1	519.6	546.2	568.3	584.6	596.4	603.8	606.7	605.2	597.9	584.6
90°	460.6	490.1	516.7	540.3	553.6	566.9	574.2	575.7	575.7	566.9	556.5
92.5°	435.5	463.5	490.1	512.2	528.5	540.3	546.2	549.1	547.7	540.3	528.5
95°	407.4	438.4	463.5	485.7	501.9	513.7	519.6	522.6	521.1	513.7	501.9
97.5°	383.8	411.9	437.0	457.6	473.9	485.7	491.6	494.5	494.5	487.1	475.3
100°	360.2	388.2	411.9	432.5	447.3	459.1	465.0	466.5	465.0	459.1	447.3
102.5°	336.6	363.1	386.8	406.0	422.2	432.5	438.4	439.9	439.9	432.5	420.7
105°	313.0	339.5	361.7	382.3	395.6	406.0	410.4	414.8	413.3	407.4	395.6
107.5°	290.8	317.4	338.0	357.2	370.5	380.9	385.3	389.7	388.2	382.3	370.5
110°	270.1	295.2	314.4	333.6	345.4	355.8	363.1	364.6	361.7	355.8	345.4





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-65HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	251.0	273.1	292.3	310.0	323.3	330.7	336.6	339.5	336.6	330.7	323.3
115°	230.3	252.4	271.6	287.9	299.7	308.5	313.0	315.9	313.0	307.0	299.7
117.5°	211.1	231.8	251.0	267.2	277.5	284.9	289.3	292.3	289.3	284.9	277.5
120°	194.9	212.6	230.3	245.0	256.9	262.8	267.2	270.1	268.7	262.8	255.4
122.5°	175.7	194.9	211.1	225.9	236.2	242.1	245.0	248.0	246.5	242.1	234.7
125°	159.4	175.7	191.9	205.2	215.5	221.4	224.4	227.3	225.9	221.4	212.6
127.5°	141.7	159.4	172.7	186.0	193.4	202.2	203.7	206.7	205.2	200.8	193.4
130°	128.4	141.7	155.0	166.8	175.7	181.6	184.5	186.0	183.0	180.1	172.7
132.5°	112.2	127.0	138.8	149.1	155.0	160.9	163.9	165.3	165.3	160.9	155.0
135°	100.4	110.7	121.0	131.4	137.3	143.2	146.1	147.6	146.1	143.2	137.3
137.5°	90.0	98.9	106.3	115.1	122.5	125.5	128.4	128.4	127.0	125.5	121.0
140°	78.2	88.6	96.0	101.9	107.8	109.2	112.2	112.2	110.7	109.2	106.3
142.5°	66.4	75.3	82.7	90.0	94.5	97.4	98.9	100.4	98.9	97.4	93.0
145°	53.1	63.5	70.9	75.3	81.2	82.7	84.1	85.6	84.1	82.7	78.2
147.5°	41.3	50.2	57.6	63.5	67.9	69.4	70.9	72.3	70.9	67.9	66.4
150°	29.5	36.9	45.8	51.7	54.6	57.6	57.6	57.6	59.0	56.1	53.1
152.5°	23.6	26.6	32.5	38.4	42.8	44.3	45.8	45.8	44.3	44.3	41.3
155°	16.2	19.2	23.6	28.0	32.5	34.0	35.4	35.4	34.0	34.0	32.5
157.5°	10.3	13.3	16.2	19.2	23.6	25.1	26.6	26.6	26.6	25.1	23.6
160°	5.9	7.4	8.9	11.8	14.8	16.2	17.7	17.7	17.7	17.7	16.2
162.5°	4.4	4.4	4.4	5.9	7.4	8.9	10.3	10.3	10.3	10.3	8.9
165°	3.0	3.0	3.0	3.0	3.0	4.4	5.9	5.9	5.9	5.9	5.9
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-LD5-65HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4
2.5°	1392.1	1392.1	1393.5	1390.6	1381.7	1383.2	1383.2	1389.1	1392.1	1393.5	1400.9
5°	1389.1	1389.1	1392.1	1387.6	1380.2	1380.2	1380.2	1386.2	1387.6	1390.6	1396.5
7.5°	1384.7	1384.7	1386.2	1381.7	1372.9	1372.9	1371.4	1377.3	1380.2	1381.7	1387.6
10°	1377.3	1377.3	1378.8	1374.3	1364.0	1364.0	1362.5	1367.0	1368.4	1371.4	1375.8
12.5°	1367.0	1367.0	1367.0	1362.5	1352.2	1350.7	1349.2	1353.7	1353.7	1355.2	1359.6
15°	1358.1	1355.2	1355.2	1350.7	1340.4	1337.4	1334.5	1336.0	1338.9	1337.4	1340.4
17.5°	1347.8	1344.8	1341.9	1337.4	1324.2	1319.7	1316.8	1318.2	1316.8	1315.3	1318.2
20°	1336.0	1331.5	1330.1	1322.7	1309.4	1302.0	1296.1	1293.2	1294.6	1290.2	1291.7
22.5°	1322.7	1316.8	1313.8	1305.0	1291.7	1282.8	1275.4	1269.5	1268.1	1262.2	1263.6
25°	1306.4	1299.1	1294.6	1287.2	1272.5	1262.2	1253.3	1244.4	1240.0	1232.6	1231.2
27.5°	1287.2	1279.9	1274.0	1266.6	1251.8	1238.5	1228.2	1216.4	1210.5	1201.6	1197.2
30°	1268.1	1259.2	1250.3	1244.4	1228.2	1213.4	1197.2	1186.9	1178.0	1167.7	1160.3
32.5°	1244.4	1235.6	1226.7	1217.9	1203.1	1185.4	1172.1	1155.9	1145.5	1133.7	1124.9
35°	1220.8	1209.0	1200.2	1188.3	1175.1	1154.4	1138.2	1121.9	1108.6	1095.3	1085.0
37.5°	1194.2	1185.4	1172.1	1161.8	1145.5	1124.9	1107.2	1086.5	1074.7	1057.0	1043.7
40°	1169.2	1158.8	1145.5	1132.2	1116.0	1092.4	1073.2	1049.6	1036.3	1015.6	1002.3
42.5°	1144.1	1129.3	1116.0	1101.2	1083.5	1061.4	1037.8	1014.1	996.4	977.2	958.1
45°	1116.0	1099.8	1083.5	1067.3	1049.6	1027.4	1002.3	977.2	955.1	937.4	913.8
47.5°	1086.5	1070.2	1051.1	1033.3	1014.1	992.0	965.4	938.9	915.2	894.6	869.5
50°	1057.0	1040.7	1020.1	1000.9	978.7	956.6	928.5	897.5	872.4	845.9	823.7
52.5°	1026.0	1009.7	990.5	965.4	941.8	919.7	890.1	857.7	829.6	807.5	779.4
55°	995.0	978.7	956.6	931.5	907.9	879.8	851.8	819.3	788.3	761.7	733.7
57.5°	962.5	947.7	922.6	902.0	872.4	842.9	813.4	782.4	748.4	717.4	685.0
60°	930.0	913.8	890.1	865.1	835.5	806.0	775.0	741.1	705.6	671.7	642.1
62.5°	900.5	879.8	857.7	831.1	800.1	772.1	736.6	699.7	664.3	628.9	593.4
65°	866.5	844.4	823.7	797.1	764.7	732.2	696.8	659.9	621.5	583.1	547.7
67.5°	832.6	810.4	788.3	761.7	727.8	693.8	656.9	620.0	577.2	540.3	499.0
70°	798.6	780.9	752.9	724.8	693.8	656.9	620.0	580.1	535.9	496.0	453.2
72.5°	764.7	747.0	718.9	689.4	659.9	621.5	581.6	541.8	500.4	454.7	408.9
75°	732.2	710.1	685.0	656.9	625.9	586.1	546.2	504.9	456.1	413.3	366.1
77.5°	701.2	680.5	655.4	624.4	590.5	552.1	510.8	468.0	419.2	373.5	321.8
80°	667.2	646.6	621.5	590.5	556.5	519.6	475.3	431.1	383.8	333.6	280.5
82.5°	634.8	615.6	587.5	559.5	522.6	485.7	441.4	397.1	346.9	298.2	246.5
85°	600.8	581.6	555.1	525.5	490.1	450.2	408.9	364.6	314.4	264.2	212.6
87.5°	571.3	549.1	522.6	493.1	457.6	419.2	379.4	332.1	283.4	234.7	181.6
90°	540.3	519.6	493.1	463.5	428.1	389.7	348.4	304.1	256.9	206.7	156.5
92.5°	513.7	491.6	466.5	437.0	401.5	364.6	323.3	279.0	233.2	184.5	135.8
95°	487.1	465.0	441.4	411.9	376.4	339.5	298.2	255.4	211.1	163.9	118.1
97.5°	457.6	438.4	414.8	386.8	351.3	315.9	276.0	234.7	191.9	146.1	103.3
100°	434.0	411.9	389.7	360.2	327.7	293.8	253.9	214.0	172.7	129.9	90.0
102.5°	407.4	386.8	364.6	336.6	304.1	270.1	233.2	194.9	156.5	116.6	78.2
105°	382.3	363.1	339.5	313.0	282.0	249.5	214.0	178.6	141.7	103.3	69.4
107.5°	357.2	338.0	315.9	290.8	261.3	228.8	196.3	160.9	127.0	93.0	62.0
110°	332.1	314.4	293.8	268.7	240.6	211.1	180.1	147.6	113.7	82.7	54.6



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-65HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	310.0	292.3	271.6	248.0	221.4	193.4	163.9	132.9	101.9	73.8	47.2
115°	287.9	271.6	251.0	230.3	203.7	177.1	149.1	119.6	91.5	66.4	41.3
117.5°	265.7	249.5	230.3	209.6	186.0	160.9	134.3	106.3	82.7	59.0	36.9
120°	243.6	228.8	211.1	191.9	171.2	146.1	119.6	96.0	73.8	51.7	32.5
122.5°	222.9	209.6	193.4	175.7	153.5	129.9	107.8	87.1	66.4	45.8	26.6
125°	203.7	190.4	175.7	158.0	137.3	116.6	97.4	78.2	57.6	39.9	22.1
127.5°	184.5	171.2	156.5	140.2	124.0	104.8	87.1	69.4	51.7	35.4	19.2
130°	165.3	153.5	140.2	127.0	110.7	93.0	78.2	60.5	44.3	28.0	16.2
132.5°	146.1	137.3	125.5	112.2	97.4	84.1	67.9	53.1	38.4	25.1	14.8
135°	129.9	121.0	110.7	98.9	87.1	73.8	59.0	45.8	32.5	20.7	11.8
137.5°	115.1	107.8	97.4	87.1	76.8	63.5	51.7	38.4	26.6	17.7	8.9
140°	101.9	94.5	85.6	75.3	66.4	54.6	42.8	31.0	23.6	14.8	7.4
142.5°	88.6	81.2	73.8	65.0	56.1	45.8	35.4	26.6	19.2	11.8	7.4
145°	75.3	69.4	62.0	54.6	45.8	36.9	29.5	22.1	14.8	8.9	5.9
147.5°	62.0	57.6	50.2	44.3	36.9	29.5	23.6	17.7	11.8	7.4	4.4
150°	50.2	45.8	39.9	34.0	29.5	23.6	19.2	13.3	8.9	7.4	4.4
152.5°	38.4	35.4	31.0	28.0	23.6	17.7	13.3	10.3	7.4	5.9	3.0
155°	31.0	28.0	25.1	20.7	17.7	13.3	10.3	7.4	5.9	4.4	3.0
157.5°	22.1	20.7	17.7	14.8	11.8	8.9	7.4	7.4	4.4	3.0	1.5
160°	14.8	13.3	11.8	8.9	7.4	7.4	5.9	4.4	3.0	3.0	1.5
162.5°	8.9	7.4	7.4	7.4	5.9	5.9	4.4	3.0	3.0	1.5	1.5
165°	5.9	5.9	5.9	4.4	4.4	4.4	3.0	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-LD5-65HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4
2.5°	1400.9	1396.5	1402.4	1412.7	1414.2	1412.7	1409.8	1414.2	1420.1	1418.6	1408.3
5°	1398.0	1392.1	1398.0	1408.3	1408.3	1406.8	1405.3	1409.8	1415.7	1414.2	1405.3
7.5°	1389.1	1383.2	1389.1	1398.0	1399.4	1396.5	1396.5	1400.9	1406.8	1405.3	1398.0
10°	1377.3	1371.4	1374.3	1384.7	1387.6	1384.7	1384.7	1389.1	1396.5	1395.0	1386.2
12.5°	1359.6	1355.2	1358.1	1367.0	1369.9	1368.4	1367.0	1372.9	1380.2	1380.2	1371.4
15°	1340.4	1334.5	1337.4	1347.8	1349.2	1346.3	1347.8	1352.2	1361.1	1361.1	1353.7
17.5°	1318.2	1310.9	1315.3	1322.7	1324.2	1324.2	1324.2	1330.1	1340.4	1338.9	1333.0
20°	1293.2	1282.8	1285.8	1293.2	1296.1	1296.1	1296.1	1306.4	1313.8	1313.8	1307.9
22.5°	1263.6	1256.2	1256.2	1263.6	1268.1	1266.6	1266.6	1275.4	1285.8	1284.3	1284.3
25°	1229.7	1223.8	1220.8	1229.7	1231.2	1232.6	1235.6	1244.4	1256.2	1256.2	1257.7
27.5°	1194.2	1188.3	1186.9	1194.2	1195.7	1197.2	1200.2	1210.5	1222.3	1223.8	1226.7
30°	1160.3	1151.4	1148.5	1154.4	1157.3	1158.8	1158.8	1175.1	1185.4	1189.8	1195.7
32.5°	1120.4	1111.6	1104.2	1114.5	1116.0	1119.0	1120.4	1136.7	1148.5	1155.9	1164.7
35°	1080.6	1065.8	1062.9	1070.2	1073.2	1074.7	1077.6	1095.3	1111.6	1117.5	1129.3
37.5°	1036.3	1026.0	1017.1	1024.5	1027.4	1028.9	1037.8	1054.0	1070.2	1079.1	1090.9
40°	995.0	981.7	974.3	978.7	981.7	983.1	993.5	1011.2	1030.4	1040.7	1055.5
42.5°	949.2	931.5	925.6	930.0	931.5	935.9	944.8	968.4	987.6	1002.3	1014.1
45°	903.4	890.1	876.9	881.3	882.8	885.7	899.0	924.1	944.8	962.5	975.8
47.5°	856.2	840.0	826.7	829.6	835.5	837.0	851.8	881.3	900.5	919.7	937.4
50°	809.0	786.8	776.5	776.5	779.4	786.8	806.0	835.5	856.2	878.3	897.5
52.5°	760.2	739.6	727.8	729.2	732.2	741.1	758.8	788.3	811.9	835.5	859.1
55°	711.5	689.4	677.6	674.6	677.6	689.4	710.1	741.1	764.7	792.7	817.8
57.5°	662.8	636.2	625.9	621.5	624.4	639.2	659.9	692.3	721.9	748.4	778.0
60°	609.7	589.0	571.3	561.0	568.3	587.5	609.7	643.6	674.6	704.1	736.6
62.5°	563.9	537.3	518.1	507.8	515.2	531.4	562.4	594.9	628.9	662.8	695.3
65°	512.2	485.7	463.5	453.2	460.6	479.8	510.8	546.2	583.1	617.1	655.4
67.5°	462.1	434.0	407.4	397.1	406.0	426.6	460.6	500.4	540.3	575.7	617.1
70°	413.3	382.3	354.3	346.9	352.8	380.9	413.3	453.2	494.5	535.9	578.7
72.5°	369.1	330.7	301.1	292.3	299.7	330.7	367.6	408.9	453.2	497.5	543.2
75°	317.4	282.0	249.5	239.1	248.0	276.0	321.8	366.1	413.3	460.6	503.4
77.5°	276.0	234.7	200.8	184.5	199.3	234.7	279.0	326.2	375.0	423.7	472.4
80°	233.2	190.4	153.5	135.8	152.0	190.4	234.7	286.4	341.0	389.7	434.0
82.5°	194.9	149.1	110.7	91.5	109.2	152.0	200.8	252.4	305.6	354.3	406.0
85°	159.4	112.2	72.3	51.7	76.8	115.1	166.8	220.0	274.6	324.8	375.0
87.5°	129.9	84.1	44.3	22.1	47.2	90.0	138.8	191.9	246.5	296.7	344.0
90°	106.3	60.5	23.6	3.0	28.0	67.9	115.1	166.8	218.5	270.1	317.4
92.5°	87.1	45.8	13.3	1.5	17.7	54.6	98.9	147.6	197.8	248.0	293.8
95°	72.3	35.4	8.9	1.5	13.3	42.8	84.1	131.4	178.6	227.3	273.1
97.5°	62.0	29.5	7.4	1.5	10.3	36.9	72.3	116.6	162.4	208.1	252.4
100°	53.1	23.6	5.9	1.5	8.9	31.0	63.5	103.3	146.1	190.4	233.2
102.5°	45.8	19.2	4.4	1.5	7.4	26.6	56.1	93.0	131.4	174.2	215.5
105°	39.9	16.2	4.4	1.5	5.9	23.6	50.2	82.7	121.0	159.4	199.3
107.5°	34.0	13.3	3.0	1.5	4.4	19.2	44.3	75.3	109.2	146.1	183.0
110°	29.5	11.8	3.0	1.5	4.4	17.7	38.4	67.9	98.9	132.9	168.3



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-65HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	25.1	8.9	3.0	1.5	3.0	14.8	34.0	60.5	90.0	121.0	155.0
115°	22.1	7.4	1.5	1.5	3.0	13.3	31.0	54.6	81.2	110.7	141.7
117.5°	17.7	5.9	1.5	1.5	1.5	10.3	26.6	48.7	73.8	101.9	129.9
120°	14.8	5.9	1.5	1.5	1.5	8.9	23.6	42.8	66.4	91.5	118.1
122.5°	13.3	4.4	1.5	1.5	1.5	7.4	20.7	38.4	59.0	82.7	107.8
125°	11.8	4.4	1.5	1.5	1.5	5.9	17.7	34.0	53.1	73.8	97.4
127.5°	8.9	4.4	1.5	1.5	1.5	4.4	16.2	29.5	47.2	66.4	87.1
130°	7.4	3.0	1.5	1.5	1.5	4.4	13.3	26.6	41.3	59.0	78.2
132.5°	5.9	3.0	1.5	1.5	1.5	3.0	10.3	20.7	35.4	51.7	69.4
135°	5.9	3.0	1.5	1.5	1.5	3.0	7.4	17.7	29.5	44.3	59.0
137.5°	5.9	1.5	1.5	1.5	1.5	3.0	5.9	13.3	23.6	35.4	48.7
140°	4.4	1.5	1.5	1.5	1.5	1.5	4.4	10.3	19.2	29.5	41.3
142.5°	4.4	1.5	1.5	1.5	1.5	1.5	4.4	7.4	14.8	23.6	32.5
145°	3.0	1.5	1.5	1.5	1.5	1.5	3.0	5.9	11.8	17.7	26.6
147.5°	3.0	1.5	1.5	1.5	1.5	1.5	3.0	4.4	8.9	14.8	20.7
150°	3.0	1.5	1.5	1.5	1.5	1.5	3.0	4.4	5.9	10.3	16.2
152.5°	1.5	1.5	1.5	1.5	1.5	1.5	3.0	3.0	4.4	7.4	10.3
155°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.0	4.4	5.9	7.4
157.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.0	3.0	4.4	5.9
160°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.0	3.0	4.4
162.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.0	3.0
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-LD5-65HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4
2.5°	1403.9	1393.5	1396.5	1395.0	1398.0	1402.4	1402.4	1400.9	1400.9	1398.0	1395.0
5°	1400.9	1390.6	1395.0	1393.5	1396.5	1400.9	1400.9	1399.4	1399.4	1395.0	1393.5
7.5°	1392.1	1384.7	1387.6	1387.6	1390.6	1395.0	1395.0	1393.5	1393.5	1389.1	1387.6
10°	1383.2	1374.3	1378.8	1378.8	1381.7	1387.6	1387.6	1386.2	1386.2	1381.7	1380.2
12.5°	1368.4	1359.6	1367.0	1368.4	1371.4	1377.3	1375.8	1375.8	1375.8	1371.4	1369.9
15°	1350.7	1344.8	1352.2	1353.7	1358.1	1365.5	1365.5	1365.5	1365.5	1361.1	1359.6
17.5°	1331.5	1327.1	1334.5	1337.4	1343.3	1350.7	1350.7	1352.2	1353.7	1350.7	1349.2
20°	1309.4	1306.4	1313.8	1319.7	1328.6	1336.0	1338.9	1340.4	1343.3	1340.4	1338.9
22.5°	1284.3	1284.3	1294.6	1300.5	1310.9	1318.2	1322.7	1327.1	1330.1	1327.1	1325.6
25°	1256.2	1260.7	1271.0	1281.3	1293.2	1300.5	1305.0	1310.9	1313.8	1312.3	1310.9
27.5°	1229.7	1235.6	1248.9	1259.2	1269.5	1281.3	1285.8	1293.2	1296.1	1296.1	1294.6
30°	1198.7	1207.5	1222.3	1234.1	1247.4	1259.2	1265.1	1272.5	1276.9	1274.0	1275.4
32.5°	1169.2	1183.9	1195.7	1209.0	1223.8	1235.6	1243.0	1251.8	1256.2	1254.8	1256.2
35°	1136.7	1151.4	1167.7	1181.0	1198.7	1210.5	1220.8	1228.2	1234.1	1232.6	1232.6
37.5°	1101.2	1120.4	1136.7	1154.4	1170.6	1183.9	1194.2	1203.1	1209.0	1209.0	1209.0
40°	1067.3	1088.0	1104.2	1124.9	1145.5	1157.3	1169.2	1178.0	1183.9	1185.4	1186.9
42.5°	1030.4	1052.5	1071.7	1093.9	1114.5	1129.3	1142.6	1152.9	1158.8	1161.8	1160.3
45°	996.4	1017.1	1039.2	1064.3	1083.5	1098.3	1114.5	1126.3	1132.2	1133.7	1135.2
47.5°	958.1	981.7	1006.8	1031.9	1051.1	1070.2	1085.0	1096.8	1102.7	1107.2	1107.2
50°	921.1	946.2	974.3	1000.9	1021.5	1040.7	1055.5	1068.8	1076.1	1079.1	1080.6
52.5°	887.2	910.8	940.3	966.9	987.6	1006.8	1026.0	1040.7	1048.1	1051.1	1051.1
55°	845.9	875.4	907.9	933.0	955.1	977.2	996.4	1011.2	1018.6	1023.0	1026.0
57.5°	807.5	838.5	872.4	899.0	925.6	946.2	964.0	983.1	989.1	995.0	996.4
60°	770.6	801.6	834.1	863.6	890.1	912.3	933.0	949.2	959.5	962.5	965.4
62.5°	732.2	764.7	798.6	828.1	856.2	882.8	902.0	916.7	928.5	933.0	935.9
65°	695.3	729.2	763.2	794.2	823.7	850.3	869.5	884.2	896.1	903.4	904.9
67.5°	655.4	692.3	727.8	760.2	789.8	817.8	837.0	851.8	863.6	872.4	873.9
70°	618.5	656.9	692.3	727.8	757.3	785.3	806.0	820.8	834.1	840.0	842.9
72.5°	583.1	623.0	659.9	695.3	724.8	752.9	775.0	789.8	803.1	810.4	811.9
75°	549.1	589.0	628.9	662.8	693.8	721.9	744.0	760.2	772.1	779.4	782.4
77.5°	515.2	556.5	596.4	630.3	662.8	690.9	710.1	729.2	741.1	749.9	749.9
80°	481.2	524.1	565.4	599.3	631.8	656.9	679.1	698.2	710.1	718.9	718.9
82.5°	451.7	493.1	532.9	566.9	599.3	627.4	649.5	667.2	680.5	686.4	687.9
85°	417.8	463.5	500.4	537.3	568.3	594.9	617.1	636.2	648.1	654.0	656.9
87.5°	389.7	434.0	473.9	506.3	537.3	563.9	589.0	605.2	617.1	624.4	627.4
90°	363.1	406.0	445.8	478.3	510.8	535.9	559.5	575.7	589.0	594.9	597.9
92.5°	339.5	382.3	420.7	453.2	484.2	512.2	534.4	550.6	562.4	568.3	572.8
95°	317.4	358.7	395.6	431.1	460.6	485.7	509.3	525.5	538.8	543.2	547.7
97.5°	295.2	335.1	372.0	406.0	437.0	460.6	482.7	499.0	509.3	516.7	521.1
100°	276.0	314.4	349.9	382.3	411.9	434.0	457.6	472.4	482.7	488.6	494.5
102.5°	255.4	293.8	327.7	358.7	389.7	410.4	432.5	447.3	456.1	466.5	466.5
105°	237.7	273.1	307.0	336.6	363.1	388.2	407.4	422.2	432.5	439.9	439.9
107.5°	218.5	253.9	286.4	317.4	342.5	366.1	383.8	397.1	408.9	413.3	417.8
110°	203.7	234.7	267.2	296.7	320.3	342.5	360.2	375.0	385.3	389.7	392.7



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-65HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	186.0	218.5	248.0	276.0	299.7	320.3	338.0	349.9	360.2	366.1	367.6
115°	171.2	202.2	228.8	255.4	280.5	298.2	314.4	326.2	336.6	341.0	344.0
117.5°	158.0	186.0	212.6	234.7	258.3	277.5	293.8	304.1	313.0	318.9	321.8
120°	144.7	171.2	194.9	217.0	239.1	256.9	271.6	282.0	292.3	296.7	296.7
122.5°	131.4	156.5	178.6	199.3	220.0	236.2	252.4	261.3	270.1	274.6	274.6
125°	119.6	143.2	163.9	183.0	202.2	217.0	230.3	240.6	249.5	252.4	252.4
127.5°	107.8	129.9	149.1	166.8	183.0	197.8	211.1	221.4	228.8	231.8	231.8
130°	97.4	116.6	134.3	152.0	168.3	180.1	193.4	202.2	206.7	211.1	212.6
132.5°	87.1	104.8	121.0	135.8	152.0	163.9	174.2	183.0	187.5	191.9	193.4
135°	76.8	93.0	107.8	122.5	135.8	147.6	156.5	163.9	169.8	172.7	174.2
137.5°	65.0	82.7	96.0	107.8	122.5	131.4	141.7	146.1	152.0	155.0	155.0
140°	54.6	67.9	82.7	94.5	106.3	115.1	124.0	131.4	135.8	137.3	137.3
142.5°	44.3	56.1	67.9	82.7	93.0	100.4	109.2	115.1	118.1	119.6	121.0
145°	35.4	44.3	54.6	67.9	79.7	88.6	93.0	98.9	101.9	103.3	104.8
147.5°	26.6	35.4	44.3	53.1	65.0	73.8	78.2	84.1	87.1	88.6	88.6
150°	20.7	26.6	32.5	41.3	50.2	60.5	66.4	70.9	72.3	73.8	73.8
152.5°	14.8	20.7	25.1	31.0	36.9	45.8	54.6	57.6	59.0	60.5	60.5
155°	10.3	14.8	17.7	22.1	26.6	34.0	41.3	45.8	47.2	48.7	48.7
157.5°	7.4	10.3	11.8	16.2	19.2	22.1	28.0	35.4	36.9	36.9	36.9
160°	4.4	5.9	7.4	10.3	11.8	14.8	17.7	22.1	26.6	26.6	26.6
162.5°	3.0	4.4	4.4	5.9	5.9	8.9	10.3	11.8	16.2	17.7	17.7
165°	1.5	3.0	3.0	3.0	3.0	3.0	4.4	4.4	7.4	8.9	8.9
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-LD5-65HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4
2.5°	1396.5	1399.4	1398.0	1398.0	1398.0	1400.9	1398.0	1384.7	1387.6	1390.6	1393.5
5°	1395.0	1396.5	1396.5	1395.0	1395.0	1398.0	1395.0	1381.7	1384.7	1387.6	1389.1
7.5°	1389.1	1390.6	1390.6	1390.6	1389.1	1392.1	1387.6	1375.8	1375.8	1378.8	1380.2
10°	1381.7	1384.7	1383.2	1381.7	1381.7	1381.7	1378.8	1365.5	1365.5	1367.0	1368.4
12.5°	1372.9	1372.9	1372.9	1371.4	1369.9	1369.9	1367.0	1353.7	1352.2	1355.2	1353.7
15°	1361.1	1364.0	1361.1	1359.6	1356.6	1356.6	1352.2	1338.9	1336.0	1337.4	1336.0
17.5°	1350.7	1352.2	1349.2	1346.3	1343.3	1341.9	1337.4	1322.7	1318.2	1319.7	1316.8
20°	1340.4	1340.4	1337.4	1334.5	1330.1	1325.6	1319.7	1305.0	1297.6	1297.6	1291.7
22.5°	1327.1	1327.1	1324.2	1319.7	1315.3	1309.4	1303.5	1288.7	1276.9	1274.0	1269.5
25°	1312.3	1310.9	1309.4	1305.0	1296.1	1290.2	1284.3	1268.1	1254.8	1248.9	1241.5
27.5°	1294.6	1294.6	1290.2	1285.8	1276.9	1269.5	1262.2	1247.4	1229.7	1222.3	1212.0
30°	1275.4	1275.4	1271.0	1265.1	1256.2	1247.4	1238.5	1220.8	1203.1	1192.8	1181.0
32.5°	1256.2	1254.8	1250.3	1244.4	1235.6	1222.3	1214.9	1197.2	1176.5	1164.7	1148.5
35°	1232.6	1231.2	1226.7	1219.3	1207.5	1197.2	1185.4	1169.2	1145.5	1130.8	1113.1
37.5°	1209.0	1207.5	1204.6	1194.2	1182.4	1170.6	1155.9	1139.6	1117.5	1098.3	1080.6
40°	1185.4	1183.9	1178.0	1170.6	1155.9	1141.1	1126.3	1110.1	1086.5	1064.3	1045.1
42.5°	1160.3	1158.8	1151.4	1142.6	1126.3	1111.6	1093.9	1076.1	1052.5	1026.0	1006.8
45°	1135.2	1132.2	1124.9	1114.5	1096.8	1080.6	1062.9	1042.2	1018.6	993.5	968.4
47.5°	1108.6	1104.2	1096.8	1082.1	1067.3	1049.6	1028.9	1006.8	983.1	955.1	928.5
50°	1079.1	1076.1	1067.3	1054.0	1036.3	1018.6	995.0	972.8	944.8	918.2	885.7
52.5°	1051.1	1045.1	1037.8	1023.0	1005.3	986.1	961.0	934.4	906.4	881.3	847.3
55°	1021.5	1018.6	1008.2	996.4	974.3	952.1	928.5	900.5	869.5	840.0	807.5
57.5°	993.5	987.6	978.7	962.5	943.3	921.1	896.1	866.5	832.6	801.6	766.1
60°	965.4	956.6	946.2	931.5	910.8	887.2	860.6	829.6	795.7	761.7	724.8
62.5°	934.4	927.1	915.2	900.5	879.8	854.7	826.7	794.2	761.7	726.3	686.4
65°	903.4	896.1	884.2	869.5	848.8	820.8	791.2	758.8	721.9	687.9	645.1
67.5°	872.4	865.1	851.8	835.5	814.9	788.3	757.3	723.3	686.4	649.5	605.2
70°	841.4	832.6	820.8	803.1	782.4	754.3	723.3	687.9	651.0	611.1	566.9
72.5°	810.4	803.1	788.3	772.1	749.9	721.9	690.9	655.4	617.1	575.7	531.4
75°	779.4	770.6	760.2	741.1	717.4	690.9	658.4	623.0	581.6	541.8	496.0
77.5°	748.4	741.1	727.8	708.6	686.4	658.4	625.9	590.5	549.1	507.8	459.1
80°	717.4	708.6	698.2	680.5	655.4	627.4	593.4	558.0	516.7	473.9	425.1
82.5°	686.4	677.6	665.8	648.1	624.4	596.4	563.9	525.5	484.2	439.9	394.1
85°	655.4	648.1	634.8	617.1	592.0	563.9	531.4	497.5	453.2	408.9	363.1
87.5°	624.4	617.1	603.8	586.1	562.4	534.4	501.9	466.5	423.7	382.3	332.1
90°	594.9	589.0	575.7	558.0	534.4	506.3	476.8	438.4	397.1	355.8	308.5
92.5°	568.3	562.4	550.6	532.9	512.2	481.2	451.7	414.8	373.5	330.7	284.9
95°	544.7	537.3	525.5	509.3	484.2	457.6	428.1	391.2	351.3	308.5	264.2
97.5°	518.1	510.8	499.0	481.2	460.6	432.5	403.0	367.6	327.7	287.9	243.6
100°	491.6	484.2	470.9	456.1	435.5	407.4	379.4	344.0	307.0	268.7	225.9
102.5°	465.0	457.6	445.8	431.1	410.4	385.3	357.2	323.3	286.4	248.0	208.1
105°	439.9	432.5	420.7	406.0	386.8	361.7	332.1	302.6	267.2	230.3	191.9
107.5°	414.8	407.4	397.1	382.3	363.1	339.5	311.5	280.5	248.0	212.6	175.7
110°	389.7	383.8	372.0	358.7	339.5	315.9	290.8	261.3	228.8	196.3	160.9





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-65HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	366.1	360.2	348.4	333.6	317.4	295.2	270.1	242.1	211.1	180.1	146.1
115°	342.5	335.1	324.8	311.5	295.2	274.6	251.0	225.9	194.9	165.3	134.3
117.5°	318.9	313.0	302.6	289.3	274.6	253.9	231.8	208.1	178.6	150.6	122.5
120°	295.2	290.8	280.5	268.7	253.9	234.7	214.0	190.4	163.9	137.3	110.7
122.5°	273.1	268.7	258.3	248.0	233.2	215.5	196.3	174.2	150.6	125.5	101.9
125°	252.4	246.5	237.7	227.3	214.0	197.8	178.6	158.0	135.8	113.7	91.5
127.5°	230.3	225.9	220.0	208.1	194.9	180.1	162.4	144.7	124.0	103.3	82.7
130°	212.6	206.7	199.3	190.4	178.6	163.9	147.6	129.9	112.2	93.0	72.3
132.5°	191.9	186.0	180.1	171.2	160.9	147.6	132.9	116.6	100.4	82.7	65.0
135°	172.7	168.3	162.4	153.5	143.2	132.9	118.1	103.3	88.6	72.3	57.6
137.5°	155.0	150.6	144.7	138.8	128.4	118.1	104.8	91.5	78.2	63.5	50.2
140°	137.3	134.3	128.4	122.5	113.7	103.3	91.5	79.7	67.9	54.6	42.8
142.5°	119.6	116.6	112.2	106.3	98.9	90.0	79.7	69.4	57.6	47.2	36.9
145°	103.3	101.9	97.4	91.5	85.6	76.8	67.9	59.0	48.7	39.9	29.5
147.5°	87.1	85.6	82.7	78.2	72.3	65.0	57.6	48.7	41.3	32.5	23.6
150°	72.3	70.9	69.4	63.5	60.5	53.1	47.2	39.9	34.0	25.1	19.2
152.5°	59.0	59.0	56.1	51.7	48.7	42.8	38.4	32.5	26.6	20.7	14.8
155°	47.2	45.8	44.3	41.3	38.4	34.0	29.5	25.1	20.7	14.8	10.3
157.5°	36.9	35.4	34.0	31.0	28.0	26.6	22.1	17.7	13.3	10.3	7.4
160°	26.6	25.1	23.6	22.1	20.7	17.7	14.8	11.8	8.9	5.9	4.4
162.5°	17.7	16.2	16.2	14.8	13.3	10.3	8.9	7.4	5.9	4.4	3.0
165°	8.9	8.9	7.4	7.4	5.9	4.4	4.4	4.4	3.0	3.0	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-LD5-65HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4	1399.4
2.5°	1392.1	1392.1	1398.0	1396.5	1392.1	1400.9	1411.2
5°	1387.6	1387.6	1392.1	1392.1	1387.6	1396.5	1405.3
7.5°	1380.2	1378.8	1383.2	1383.2	1377.3	1384.7	1395.0
10°	1367.0	1365.5	1369.9	1369.9	1364.0	1371.4	1380.2
12.5°	1352.2	1349.2	1353.7	1352.2	1346.3	1353.7	1362.5
15°	1333.0	1331.5	1334.5	1331.5	1325.6	1333.0	1341.9
17.5°	1313.8	1309.4	1310.9	1310.9	1300.5	1307.9	1315.3
20°	1288.7	1282.8	1284.3	1282.8	1275.4	1279.9	1288.7
22.5°	1263.6	1254.8	1254.8	1253.3	1244.4	1250.3	1257.7
25°	1232.6	1222.3	1222.3	1220.8	1210.5	1214.9	1222.3
27.5°	1201.6	1191.3	1186.9	1185.4	1175.1	1175.1	1185.4
30°	1169.2	1154.4	1151.4	1147.0	1136.7	1136.7	1145.5
32.5°	1138.2	1117.5	1111.6	1105.7	1095.3	1093.9	1104.2
35°	1096.8	1080.6	1070.2	1064.3	1052.5	1049.6	1058.4
37.5°	1062.9	1042.2	1027.4	1020.1	1008.2	1003.8	1015.6
40°	1026.0	1003.8	984.6	980.2	962.5	956.6	966.9
42.5°	984.6	961.0	941.8	933.0	919.7	913.8	915.2
45°	943.3	918.2	897.5	885.7	872.4	862.1	868.0
47.5°	900.5	878.3	853.2	835.5	819.3	811.9	814.9
50°	857.7	831.1	807.5	788.3	769.1	760.2	766.1
52.5°	814.9	786.8	760.2	739.6	717.4	708.6	710.1
55°	773.5	744.0	713.0	690.9	670.2	656.9	654.0
57.5°	732.2	699.7	667.2	642.1	615.6	603.8	599.3
60°	687.9	654.0	620.0	590.5	562.4	549.1	543.2
62.5°	646.6	609.7	571.3	540.3	512.2	494.5	490.1
65°	606.7	563.9	525.5	490.1	459.1	439.9	434.0
67.5°	563.9	519.6	478.3	439.9	410.4	385.3	382.3
70°	524.1	476.8	431.1	391.2	358.7	333.6	321.8
72.5°	484.2	435.5	388.2	345.4	304.1	280.5	271.6
75°	445.8	395.6	345.4	301.1	255.4	227.3	218.5
77.5°	410.4	358.7	305.6	256.9	214.0	178.6	166.8
80°	376.4	323.3	267.2	217.0	171.2	132.9	119.6
82.5°	341.0	290.8	233.2	180.1	132.9	93.0	76.8
85°	310.0	259.8	202.2	149.1	101.9	59.0	41.3
87.5°	284.9	230.3	178.6	125.5	76.8	34.0	11.8
90°	259.8	206.7	155.0	103.3	57.6	19.2	1.5
92.5°	237.7	187.5	135.8	88.6	44.3	13.3	1.5
95°	217.0	168.3	119.6	73.8	35.4	8.9	1.5
97.5°	197.8	152.0	106.3	63.5	29.5	7.4	1.5
100°	181.6	137.3	94.5	56.1	25.1	5.9	1.5
102.5°	165.3	124.0	84.1	48.7	22.1	4.4	1.5
105°	152.0	112.2	75.3	44.3	19.2	4.4	1.5
107.5°	138.8	101.9	67.9	38.4	16.2	3.0	1.5
110°	125.5	93.0	60.5	34.0	14.8	3.0	1.5



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-65HL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	115.1	84.1	54.6	31.0	11.8	3.0	1.5
115°	104.8	75.3	48.7	26.6	10.3	1.5	1.5
117.5°	94.5	67.9	42.8	23.6	8.9	1.5	1.5
120°	85.6	60.5	38.4	20.7	7.4	1.5	1.5
122.5°	76.8	54.6	34.0	17.7	5.9	1.5	1.5
125°	69.4	48.7	29.5	14.8	4.4	1.5	1.5
127.5°	62.0	42.8	26.6	13.3	4.4	1.5	1.5
130°	54.6	38.4	22.1	10.3	3.0	1.5	1.5
132.5°	48.7	32.5	19.2	8.9	3.0	1.5	1.5
135°	42.8	28.0	16.2	5.9	3.0	1.5	1.5
137.5°	36.9	23.6	13.3	4.4	1.5	1.5	1.5
140°	31.0	20.7	10.3	4.4	1.5	1.5	1.5
142.5°	26.6	16.2	7.4	3.0	1.5	1.5	1.5
145°	20.7	13.3	5.9	3.0	1.5	1.5	1.5
147.5°	16.2	10.3	4.4	3.0	1.5	1.5	1.5
150°	11.8	7.4	4.4	1.5	1.5	1.5	1.5
152.5°	8.9	5.9	3.0	1.5	1.5	1.5	1.5
155°	5.9	4.4	3.0	1.5	1.5	1.5	1.5
157.5°	4.4	3.0	1.5	1.5	1.5	1.5	1.5
160°	3.0	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)