

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1213517

Luminaire Tested: 4SNLED-LD5-70SL-LW-UNV-L935-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213517
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33520)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-70SL-LW-UNV-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

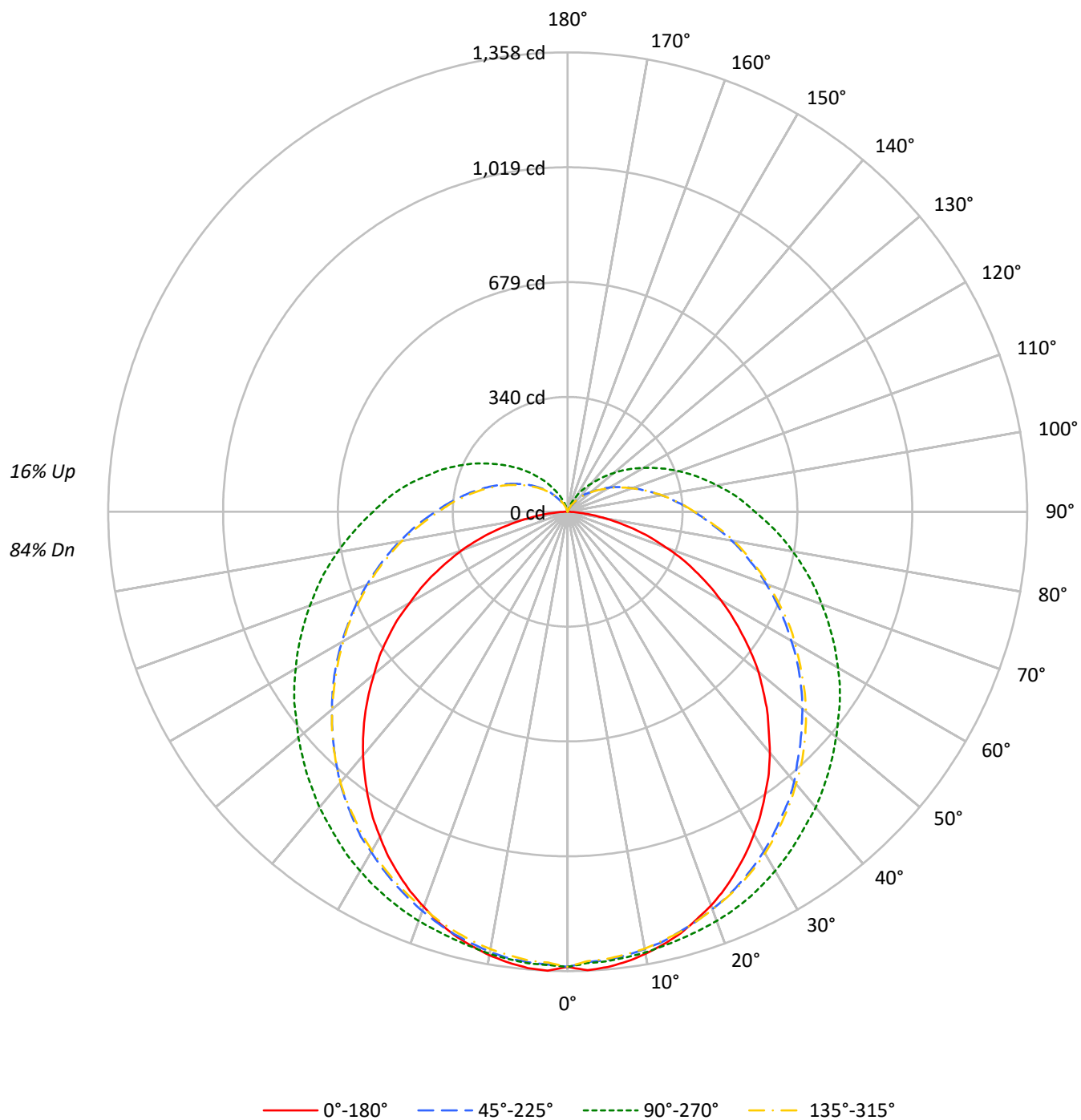
Lumens per Lamp: N/A
Luminaire Lumens: 5845.0 lumens
Efficiency: N/A
Efficacy: 83.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

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: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	10871	10871	10871	10871
5°	10929	10477	10953	10522
10°	10828	10179	10864	10212
15°	10703	9925	10750	9935
20°	10534	9739	10571	9739
25°	10327	9573	10389	9563
30°	10094	9403	10172	9403
35°	9823	9246	9933	9257
40°	9555	9153	9672	9153
45°	9248	9056	9389	9068
50°	8927	8999	9048	9023
55°	8479	9007	8746	9046
60°	8006	9034	8269	9090
65°	7476	9125	7808	9215
70°	6732	9294	7257	9425
75°	5872	9597	6428	9781
80°	4546	10047	5163	10279
85°	2712	10769	3395	11067

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 270°

Vertical Angle: 90°

Luminance: 12374 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.4	2.2
10°-20°	366.3	6.3
20°-30°	561.6	9.6
30°-40°	692.8	11.9
40°-50°	751.6	12.9
50°-60°	740.8	12.7
60°-70°	669.8	11.5
70°-80°	558.0	9.5
80°-90°	432.2	7.4
90°-100°	327.8	5.6
100°-110°	242.6	4.1
110°-120°	168.7	2.9
120°-130°	107.7	1.8
130°-140°	60.4	1.0
140°-150°	27.6	0.5
150°-160°	8.5	0.1
160°-170°	1.1	0.0
170°-180°	0.0	0.0
0°-30°	1055.3	18.1
0°-40°	1748.1	29.9
0°-60°	3240.6	55.4
0°-90°	4900.6	83.8
90°-120°	739.1	12.6
90°-150°	934.7	16.0
90°-180°	944.0	16.2
0°-180°	5845.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1345	1345	1345	1345	1345	
5°	1351	1334	1354	1340	1351	128
15°	1290	1306	1296	1307	1290	363
25°	1175	1262	1182	1260	1175	541
35°	1018	1184	1029	1185	1018	637
45°	834	1090	847	1091	834	643
55°	629	982	648	986	629	563
65°	417	861	436	870	417	414
75°	210	738	230	752	210	222
85°	40	614	50	632	40	48
90°	1	554	3	575	1	2
95°	1	502	1	526	1	1
105°	1	399	1	423	1	1
115°	1	304	1	331	1	1
125°	1	218	1	243	1	1
135°	1	142	1	168	1	1
145°	1	82	1	101	1	1
155°	1	34	1	47	1	1
165°	1	6	1	8	1	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3
2.5°	1356.7	1356.7	1355.3	1352.4	1353.9	1358.1	1355.3	1348.2	1343.9	1332.6	1335.4
5°	1351.0	1351.0	1349.6	1346.8	1348.2	1353.9	1351.0	1345.3	1339.7	1329.7	1334.0
7.5°	1341.1	1341.1	1339.7	1336.8	1339.7	1345.3	1342.5	1336.8	1332.6	1322.6	1326.9
10°	1326.9	1328.3	1326.9	1322.6	1328.3	1334.0	1332.6	1325.5	1321.2	1312.7	1317.0
12.5°	1309.9	1311.3	1309.9	1308.4	1311.3	1319.8	1317.0	1311.3	1308.4	1301.4	1305.6
15°	1290.0	1291.4	1288.6	1288.6	1291.4	1299.9	1299.9	1294.3	1291.4	1284.3	1292.8
17.5°	1264.5	1265.9	1264.5	1264.5	1267.3	1275.8	1277.2	1274.4	1271.6	1268.7	1277.2
20°	1238.9	1237.5	1237.5	1236.1	1241.8	1254.5	1253.1	1253.1	1250.3	1250.3	1260.2
22.5°	1209.1	1209.1	1207.7	1207.7	1214.8	1226.1	1226.1	1229.0	1226.1	1231.8	1240.3
25°	1175.1	1176.5	1175.1	1177.9	1183.6	1196.3	1197.8	1202.0	1203.4	1209.1	1219.0
27.5°	1139.6	1141.0	1139.6	1142.4	1152.3	1162.3	1169.4	1175.1	1176.5	1185.0	1197.8
30°	1101.3	1101.3	1102.7	1105.5	1116.9	1132.5	1138.2	1145.2	1145.2	1159.4	1172.2
32.5°	1061.5	1061.5	1061.5	1067.2	1080.0	1098.4	1105.5	1114.0	1116.9	1131.1	1145.2
35°	1017.5	1018.9	1018.9	1023.2	1040.2	1058.7	1068.6	1078.5	1084.2	1101.3	1115.4
37.5°	976.4	979.2	975.0	980.6	1004.8	1020.4	1031.7	1041.7	1051.6	1074.3	1085.6
40°	929.5	932.4	931.0	942.3	962.2	982.0	994.8	1004.8	1018.9	1041.7	1054.4
42.5°	879.9	882.7	885.5	898.3	919.6	939.5	955.1	967.9	984.9	1004.8	1026.0
45°	834.5	834.5	838.7	854.3	877.0	898.3	916.8	931.0	950.8	972.1	993.4
47.5°	783.4	784.8	790.5	808.9	833.0	858.6	875.6	894.1	915.3	938.1	962.2
50°	736.5	736.5	745.1	764.9	787.6	816.0	834.5	855.7	878.4	905.4	929.5
52.5°	682.6	685.4	698.2	716.7	746.5	772.0	793.3	816.0	843.0	871.4	898.3
55°	628.7	634.4	644.3	669.8	701.1	725.2	750.7	779.1	804.7	835.9	867.1
57.5°	576.2	580.4	596.0	621.6	654.2	684.0	711.0	738.0	769.2	800.4	833.0
60°	522.2	527.9	546.4	571.9	607.4	638.6	669.8	698.2	730.9	763.5	797.6
62.5°	471.2	475.4	496.7	526.5	562.0	596.0	627.3	661.3	696.8	728.0	762.1
65°	417.2	424.3	448.4	475.4	516.6	550.6	586.1	623.0	659.9	694.0	726.6
67.5°	367.6	371.8	397.4	428.6	469.7	508.1	545.0	584.7	623.0	658.5	691.1
70°	309.4	323.6	349.1	381.7	425.7	465.5	505.2	546.4	587.5	624.4	655.6
72.5°	261.1	272.5	300.9	336.3	378.9	425.7	466.9	510.9	552.0	590.4	623.0
75°	210.0	221.4	254.0	293.8	337.8	387.4	430.0	475.4	518.0	556.3	590.4
77.5°	160.4	174.6	210.0	251.2	299.4	350.5	394.5	439.9	483.9	525.1	559.1
80°	115.0	130.6	168.9	215.7	262.5	313.6	361.9	407.3	451.3	492.4	527.9
82.5°	73.8	90.8	132.0	178.8	228.5	279.6	329.2	374.7	418.6	459.8	496.7
85°	39.7	58.2	100.8	147.6	197.3	248.4	298.0	346.3	388.8	427.2	466.9
87.5°	11.4	34.1	75.2	122.0	173.1	220.0	268.2	316.5	359.0	400.2	435.7
90°	1.4	19.9	56.8	100.8	150.4	195.8	244.1	289.5	332.1	373.2	408.7
92.5°	1.4	12.8	44.0	83.7	129.1	176.0	224.2	268.2	308.0	349.1	384.6
95°	1.4	9.9	35.5	71.0	113.5	157.5	202.9	245.5	286.7	325.0	360.5
97.5°	1.4	7.1	28.4	61.0	99.3	140.5	184.5	227.1	266.8	303.7	336.3
100°	1.4	5.7	22.7	52.5	86.6	126.3	166.0	207.2	245.5	281.0	315.0
102.5°	1.4	4.3	19.9	44.0	76.6	112.1	150.4	188.7	225.6	259.7	293.8
105°	1.4	4.3	17.0	38.3	68.1	100.8	136.2	173.1	207.2	239.8	271.1
107.5°	1.4	2.8	14.2	32.6	59.6	90.8	123.5	158.9	190.2	221.4	251.2
110°	1.4	2.8	11.4	29.8	52.5	80.9	112.1	144.8	174.6	204.4	232.7

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.4	2.8	9.9	25.5	45.4	72.4	100.8	130.6	158.9	188.7	214.3
115°	1.4	2.8	8.5	22.7	42.6	62.4	90.8	117.8	146.2	173.1	197.3
117.5°	1.4	2.8	7.1	18.4	36.9	56.8	79.5	106.4	132.0	157.5	180.2
120°	1.4	2.8	5.7	17.0	32.6	51.1	71.0	95.1	119.2	143.3	167.5
122.5°	1.4	1.4	5.7	14.2	28.4	45.4	65.3	83.7	106.4	129.1	150.4
125°	1.4	1.4	5.7	12.8	24.1	41.2	58.2	75.2	95.1	115.0	133.4
127.5°	1.4	1.4	4.3	9.9	21.3	35.5	51.1	69.5	83.7	102.2	120.6
130°	1.4	1.4	4.3	8.5	18.4	29.8	45.4	61.0	78.1	90.8	106.4
132.5°	1.4	1.4	4.3	7.1	14.2	24.1	38.3	52.5	68.1	82.3	95.1
135°	1.4	1.4	2.8	5.7	11.4	19.9	31.2	44.0	59.6	73.8	86.6
137.5°	1.4	1.4	2.8	5.7	8.5	17.0	24.1	35.5	49.7	62.4	75.2
140°	1.4	1.4	2.8	4.3	7.1	12.8	19.9	28.4	39.7	51.1	65.3
142.5°	1.4	1.4	1.4	4.3	5.7	9.9	15.6	22.7	31.2	41.2	52.5
145°	1.4	1.4	1.4	4.3	5.7	7.1	12.8	18.4	24.1	31.2	41.2
147.5°	1.4	1.4	1.4	2.8	4.3	5.7	9.9	14.2	18.4	24.1	29.8
150°	1.4	1.4	1.4	2.8	4.3	5.7	7.1	9.9	14.2	19.9	24.1
152.5°	1.4	1.4	1.4	2.8	2.8	4.3	5.7	7.1	9.9	14.2	17.0
155°	1.4	1.4	1.4	1.4	2.8	4.3	5.7	5.7	7.1	9.9	12.8
157.5°	1.4	1.4	1.4	1.4	2.8	2.8	4.3	4.3	5.7	5.7	8.5
160°	1.4	1.4	1.4	1.4	1.4	2.8	2.8	4.3	4.3	4.3	4.3
162.5°	1.4	1.4	1.4	1.4	1.4	1.4	2.8	2.8	2.8	4.3	4.3
165°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8	2.8	2.8
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°	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3
2.5°	1335.4	1336.8	1341.1	1341.1	1338.3	1338.3	1336.8	1335.4	1336.8	1339.7	1339.7
5°	1332.6	1334.0	1338.3	1339.7	1336.8	1335.4	1335.4	1334.0	1335.4	1338.3	1338.3
7.5°	1326.9	1328.3	1332.6	1334.0	1331.2	1331.2	1329.7	1328.3	1331.2	1332.6	1332.6
10°	1318.4	1319.8	1325.5	1326.9	1325.5	1324.1	1324.1	1322.6	1324.1	1326.9	1326.9
12.5°	1307.0	1309.9	1317.0	1317.0	1317.0	1315.5	1315.5	1314.1	1315.5	1318.4	1317.0
15°	1294.3	1299.9	1305.6	1308.4	1308.4	1308.4	1307.0	1305.6	1308.4	1309.9	1308.4
17.5°	1280.1	1287.2	1295.7	1298.5	1298.5	1299.9	1298.5	1297.1	1299.9	1299.9	1298.5
20°	1265.9	1273.0	1281.5	1284.3	1287.2	1288.6	1288.6	1287.2	1288.6	1290.0	1288.6
22.5°	1247.4	1255.9	1265.9	1270.1	1273.0	1275.8	1275.8	1275.8	1277.2	1278.6	1275.8
25°	1227.6	1237.5	1248.8	1253.1	1258.8	1260.2	1261.6	1261.6	1263.0	1264.5	1260.2
27.5°	1206.3	1217.6	1229.0	1236.1	1240.3	1243.2	1243.2	1244.6	1246.0	1247.4	1243.2
30°	1180.7	1197.8	1207.7	1213.4	1219.0	1223.3	1224.7	1226.1	1227.6	1229.0	1224.7
32.5°	1158.0	1172.2	1185.0	1192.1	1199.2	1204.9	1206.3	1206.3	1209.1	1209.1	1204.9
35°	1131.1	1148.1	1160.9	1168.0	1176.5	1180.7	1183.6	1183.6	1186.4	1186.4	1182.1
37.5°	1104.1	1121.1	1135.3	1143.8	1153.8	1159.4	1160.9	1160.9	1163.7	1163.7	1158.0
40°	1075.7	1094.2	1109.8	1119.7	1128.2	1135.3	1136.7	1141.0	1141.0	1139.6	1133.9
42.5°	1047.3	1064.4	1081.4	1092.7	1104.1	1111.2	1114.0	1115.4	1115.4	1114.0	1109.8
45°	1016.1	1036.0	1051.6	1065.8	1077.1	1084.2	1088.5	1089.9	1089.9	1087.1	1082.8
47.5°	986.3	1006.2	1021.8	1037.4	1048.7	1057.3	1061.5	1062.9	1061.5	1060.1	1055.8
50°	955.1	977.8	993.4	1009.0	1020.4	1027.5	1034.6	1036.0	1034.6	1033.1	1024.6
52.5°	922.4	946.6	963.6	979.2	992.0	1000.5	1006.2	1007.6	1007.6	1004.8	999.1
55°	889.8	911.1	932.4	949.4	963.6	972.1	979.2	982.0	979.2	976.4	969.3
57.5°	860.0	879.9	901.2	919.6	933.8	945.1	950.8	953.7	950.8	946.6	939.5
60°	824.5	845.8	869.9	887.0	902.6	913.9	916.8	922.4	919.6	915.3	908.3
62.5°	790.5	816.0	837.3	858.6	871.4	884.1	889.8	892.6	889.8	885.5	878.4
65°	755.0	783.4	804.7	825.9	840.1	852.9	860.0	861.4	858.6	854.3	847.2
67.5°	722.3	749.3	772.0	794.7	807.5	820.3	827.4	830.2	827.4	821.7	814.6
70°	689.7	716.7	743.6	760.7	776.3	790.5	794.7	799.0	796.1	790.5	781.9
72.5°	657.1	685.4	712.4	729.4	746.5	759.2	764.9	769.2	766.3	760.7	750.7
75°	623.0	652.8	679.8	698.2	715.2	728.0	733.7	738.0	735.1	729.4	718.1
77.5°	591.8	621.6	647.1	667.0	684.0	695.4	705.3	706.7	703.9	698.2	686.9
80°	559.1	588.9	615.9	635.8	652.8	664.2	671.3	675.5	672.7	667.0	655.6
82.5°	530.8	557.7	584.7	604.6	621.6	635.8	641.5	645.7	644.3	635.8	627.3
85°	499.5	530.8	552.0	573.3	590.4	604.6	608.8	614.5	613.1	606.0	594.6
87.5°	468.3	499.5	525.1	546.4	562.0	573.3	580.4	583.3	581.8	574.8	562.0
90°	442.8	471.2	496.7	519.4	532.2	545.0	552.0	553.5	553.5	545.0	535.0
92.5°	418.6	445.6	471.2	492.4	508.1	519.4	525.1	527.9	526.5	519.4	508.1
95°	391.7	421.5	445.6	466.9	482.5	493.9	499.5	502.4	501.0	493.9	482.5
97.5°	369.0	395.9	420.1	439.9	455.5	466.9	472.6	475.4	475.4	468.3	457.0
100°	346.3	373.2	395.9	415.8	430.0	441.4	447.0	448.4	447.0	441.4	430.0
102.5°	323.6	349.1	371.8	390.3	405.9	415.8	421.5	422.9	422.9	415.8	404.5
105°	300.9	326.4	347.7	367.6	380.3	390.3	394.5	398.8	397.4	391.7	380.3
107.5°	279.6	305.1	325.0	343.4	356.2	366.1	370.4	374.7	373.2	367.6	356.2
110°	259.7	283.8	302.3	320.7	332.1	342.0	349.1	350.5	347.7	342.0	332.1

TEST NUMBER: P1213517

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	241.3	262.5	281.0	298.0	310.8	317.9	323.6	326.4	323.6	317.9	310.8
115°	221.4	242.7	261.1	276.7	288.1	296.6	300.9	303.7	300.9	295.2	288.1
117.5°	202.9	222.8	241.3	256.9	266.8	273.9	278.2	281.0	278.2	273.9	266.8
120°	187.3	204.4	221.4	235.6	246.9	252.6	256.9	259.7	258.3	252.6	245.5
122.5°	168.9	187.3	202.9	217.1	227.1	232.7	235.6	238.4	237.0	232.7	225.6
125°	153.3	168.9	184.5	197.3	207.2	212.9	215.7	218.5	217.1	212.9	204.4
127.5°	136.2	153.3	166.0	178.8	185.9	194.4	195.8	198.7	197.3	193.0	185.9
130°	123.5	136.2	149.0	160.4	168.9	174.6	177.4	178.8	176.0	173.1	166.0
132.5°	107.9	122.0	133.4	143.3	149.0	154.7	157.5	158.9	158.9	154.7	149.0
135°	96.5	106.4	116.4	126.3	132.0	137.7	140.5	141.9	140.5	137.7	132.0
137.5°	86.6	95.1	102.2	110.7	117.8	120.6	123.5	123.5	122.0	120.6	116.4
140°	75.2	85.1	92.2	97.9	103.6	105.0	107.9	107.9	106.4	105.0	102.2
142.5°	63.9	72.4	79.5	86.6	90.8	93.7	95.1	96.5	95.1	93.7	89.4
145°	51.1	61.0	68.1	72.4	78.1	79.5	80.9	82.3	80.9	79.5	75.2
147.5°	39.7	48.3	55.3	61.0	65.3	66.7	68.1	69.5	68.1	65.3	63.9
150°	28.4	35.5	44.0	49.7	52.5	55.3	55.3	55.3	56.8	53.9	51.1
152.5°	22.7	25.5	31.2	36.9	41.2	42.6	44.0	44.0	42.6	42.6	39.7
155°	15.6	18.4	22.7	27.0	31.2	32.6	34.1	34.1	32.6	32.6	31.2
157.5°	9.9	12.8	15.6	18.4	22.7	24.1	25.5	25.5	25.5	24.1	22.7
160°	5.7	7.1	8.5	11.4	14.2	15.6	17.0	17.0	17.0	17.0	15.6
162.5°	4.3	4.3	4.3	5.7	7.1	8.5	9.9	9.9	9.9	9.9	8.5
165°	2.8	2.8	2.8	2.8	2.8	4.3	5.7	5.7	5.7	5.7	5.7
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: P1213517

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3
2.5°	1338.3	1338.3	1339.7	1336.8	1328.3	1329.7	1329.7	1335.4	1338.3	1339.7	1346.8
5°	1335.4	1335.4	1338.3	1334.0	1326.9	1326.9	1326.9	1332.6	1334.0	1336.8	1342.5
7.5°	1331.2	1331.2	1332.6	1328.3	1319.8	1319.8	1318.4	1324.1	1326.9	1328.3	1334.0
10°	1324.1	1324.1	1325.5	1321.2	1311.3	1311.3	1309.9	1314.1	1315.5	1318.4	1322.6
12.5°	1314.1	1314.1	1314.1	1309.9	1299.9	1298.5	1297.1	1301.4	1301.4	1302.8	1307.0
15°	1305.6	1302.8	1302.8	1298.5	1288.6	1285.7	1282.9	1284.3	1287.2	1285.7	1288.6
17.5°	1295.7	1292.8	1290.0	1285.7	1273.0	1268.7	1265.9	1267.3	1265.9	1264.5	1267.3
20°	1284.3	1280.1	1278.6	1271.6	1258.8	1251.7	1246.0	1243.2	1244.6	1240.3	1241.8
22.5°	1271.6	1265.9	1263.0	1254.5	1241.8	1233.2	1226.1	1220.5	1219.0	1213.4	1214.8
25°	1255.9	1248.8	1244.6	1237.5	1223.3	1213.4	1204.9	1196.3	1192.1	1185.0	1183.6
27.5°	1237.5	1230.4	1224.7	1217.6	1203.4	1190.7	1180.7	1169.4	1163.7	1155.2	1150.9
30°	1219.0	1210.5	1202.0	1196.3	1180.7	1166.5	1150.9	1141.0	1132.5	1122.5	1115.4
32.5°	1196.3	1187.8	1179.3	1170.8	1156.6	1139.6	1126.8	1111.2	1101.3	1089.9	1081.4
35°	1173.6	1162.3	1153.8	1142.4	1129.6	1109.8	1094.2	1078.5	1065.8	1053.0	1043.1
37.5°	1148.1	1139.6	1126.8	1116.9	1101.3	1081.4	1064.4	1044.5	1033.1	1016.1	1003.3
40°	1124.0	1114.0	1101.3	1088.5	1072.9	1050.2	1031.7	1009.0	996.2	976.4	963.6
42.5°	1099.8	1085.6	1072.9	1058.7	1041.7	1020.4	997.7	975.0	957.9	939.5	921.0
45°	1072.9	1057.3	1041.7	1026.0	1009.0	987.7	963.6	939.5	918.2	901.2	878.4
47.5°	1044.5	1028.9	1010.4	993.4	975.0	953.7	928.1	902.6	879.9	860.0	835.9
50°	1016.1	1000.5	980.6	962.2	940.9	919.6	892.6	862.8	838.7	813.2	791.9
52.5°	986.3	970.7	952.2	928.1	905.4	884.1	855.7	824.5	797.6	776.3	749.3
55°	956.5	940.9	919.6	895.5	872.8	845.8	818.8	787.6	757.8	732.3	705.3
57.5°	925.3	911.1	887.0	867.1	838.7	810.3	781.9	752.1	719.5	689.7	658.5
60°	894.1	878.4	855.7	831.6	803.2	774.9	745.1	712.4	678.4	645.7	617.3
62.5°	865.7	845.8	824.5	799.0	769.2	742.2	708.2	672.7	638.6	604.6	570.5
65°	833.0	811.7	791.9	766.3	735.1	703.9	669.8	634.4	597.5	560.6	526.5
67.5°	800.4	779.1	757.8	732.3	699.6	667.0	631.5	596.0	554.9	519.4	479.7
70°	767.8	750.7	723.8	696.8	667.0	631.5	596.0	557.7	515.1	476.8	435.7
72.5°	735.1	718.1	691.1	662.7	634.4	597.5	559.1	520.8	481.1	437.1	393.1
75°	703.9	682.6	658.5	631.5	601.7	563.4	525.1	485.3	438.5	397.4	351.9
77.5°	674.1	654.2	630.1	600.3	567.7	530.8	491.0	449.9	403.0	359.0	309.4
80°	641.5	621.6	597.5	567.7	535.0	499.5	457.0	414.4	369.0	320.7	269.6
82.5°	610.2	591.8	564.8	537.9	502.4	466.9	424.3	381.7	333.5	286.7	237.0
85°	577.6	559.1	533.6	505.2	471.2	432.8	393.1	350.5	302.3	254.0	204.4
87.5°	549.2	527.9	502.4	474.0	439.9	403.0	364.7	319.3	272.5	225.6	174.6
90°	519.4	499.5	474.0	445.6	411.6	374.7	334.9	292.3	246.9	198.7	150.4
92.5°	493.9	472.6	448.4	420.1	386.0	350.5	310.8	268.2	224.2	177.4	130.6
95°	468.3	447.0	424.3	395.9	361.9	326.4	286.7	245.5	202.9	157.5	113.5
97.5°	439.9	421.5	398.8	371.8	337.8	303.7	265.4	225.6	184.5	140.5	99.3
100°	417.2	395.9	374.7	346.3	315.0	282.4	244.1	205.8	166.0	124.9	86.6
102.5°	391.7	371.8	350.5	323.6	292.3	259.7	224.2	187.3	150.4	112.1	75.2
105°	367.6	349.1	326.4	300.9	271.1	239.8	205.8	171.7	136.2	99.3	66.7
107.5°	343.4	325.0	303.7	279.6	251.2	220.0	188.7	154.7	122.0	89.4	59.6
110°	319.3	302.3	282.4	258.3	231.3	202.9	173.1	141.9	109.3	79.5	52.5

TEST NUMBER: P1213517

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	298.0	281.0	261.1	238.4	212.9	185.9	157.5	127.7	97.9	71.0	45.4
115°	276.7	261.1	241.3	221.4	195.8	170.3	143.3	115.0	88.0	63.9	39.7
117.5°	255.4	239.8	221.4	201.5	178.8	154.7	129.1	102.2	79.5	56.8	35.5
120°	234.2	220.0	202.9	184.5	164.6	140.5	115.0	92.2	71.0	49.7	31.2
122.5°	214.3	201.5	185.9	168.9	147.6	124.9	103.6	83.7	63.9	44.0	25.5
125°	195.8	183.1	168.9	151.8	132.0	112.1	93.7	75.2	55.3	38.3	21.3
127.5°	177.4	164.6	150.4	134.8	119.2	100.8	83.7	66.7	49.7	34.1	18.4
130°	158.9	147.6	134.8	122.0	106.4	89.4	75.2	58.2	42.6	27.0	15.6
132.5°	140.5	132.0	120.6	107.9	93.7	80.9	65.3	51.1	36.9	24.1	14.2
135°	124.9	116.4	106.4	95.1	83.7	71.0	56.8	44.0	31.2	19.9	11.4
137.5°	110.7	103.6	93.7	83.7	73.8	61.0	49.7	36.9	25.5	17.0	8.5
140°	97.9	90.8	82.3	72.4	63.9	52.5	41.2	29.8	22.7	14.2	7.1
142.5°	85.1	78.1	71.0	62.4	53.9	44.0	34.1	25.5	18.4	11.4	7.1
145°	72.4	66.7	59.6	52.5	44.0	35.5	28.4	21.3	14.2	8.5	5.7
147.5°	59.6	55.3	48.3	42.6	35.5	28.4	22.7	17.0	11.4	7.1	4.3
150°	48.3	44.0	38.3	32.6	28.4	22.7	18.4	12.8	8.5	7.1	4.3
152.5°	36.9	34.1	29.8	27.0	22.7	17.0	12.8	9.9	7.1	5.7	2.8
155°	29.8	27.0	24.1	19.9	17.0	12.8	9.9	7.1	5.7	4.3	2.8
157.5°	21.3	19.9	17.0	14.2	11.4	8.5	7.1	7.1	4.3	2.8	1.4
160°	14.2	12.8	11.4	8.5	7.1	7.1	5.7	4.3	2.8	2.8	1.4
162.5°	8.5	7.1	7.1	7.1	5.7	5.7	4.3	2.8	2.8	1.4	1.4
165°	5.7	5.7	5.7	4.3	4.3	4.3	2.8	1.4	1.4	1.4	1.4
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: P1213517

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3
2.5°	1346.8	1342.5	1348.2	1358.1	1359.5	1358.1	1355.3	1359.5	1365.2	1363.8	1353.9
5°	1343.9	1338.3	1343.9	1353.9	1353.9	1352.4	1351.0	1355.3	1361.0	1359.5	1351.0
7.5°	1335.4	1329.7	1335.4	1343.9	1345.3	1342.5	1342.5	1346.8	1352.4	1351.0	1343.9
10°	1324.1	1318.4	1321.2	1331.2	1334.0	1331.2	1331.2	1335.4	1342.5	1341.1	1332.6
12.5°	1307.0	1302.8	1305.6	1314.1	1317.0	1315.5	1314.1	1319.8	1326.9	1326.9	1318.4
15°	1288.6	1282.9	1285.7	1295.7	1297.1	1294.3	1295.7	1299.9	1308.4	1308.4	1301.4
17.5°	1267.3	1260.2	1264.5	1271.6	1273.0	1273.0	1273.0	1278.6	1288.6	1287.2	1281.5
20°	1243.2	1233.2	1236.1	1243.2	1246.0	1246.0	1246.0	1255.9	1263.0	1263.0	1257.4
22.5°	1214.8	1207.7	1207.7	1214.8	1219.0	1217.6	1217.6	1226.1	1236.1	1234.7	1234.7
25°	1182.1	1176.5	1173.6	1182.1	1183.6	1185.0	1187.8	1196.3	1207.7	1207.7	1209.1
27.5°	1148.1	1142.4	1141.0	1148.1	1149.5	1150.9	1153.8	1163.7	1175.1	1176.5	1179.3
30°	1115.4	1106.9	1104.1	1109.8	1112.6	1114.0	1114.0	1129.6	1139.6	1143.8	1149.5
32.5°	1077.1	1068.6	1061.5	1071.5	1072.9	1075.7	1077.1	1092.7	1104.1	1111.2	1119.7
35°	1038.8	1024.6	1021.8	1028.9	1031.7	1033.1	1036.0	1053.0	1068.6	1074.3	1085.6
37.5°	996.2	986.3	977.8	984.9	987.7	989.1	997.7	1013.3	1028.9	1037.4	1048.7
40°	956.5	943.7	936.6	940.9	943.7	945.1	955.1	972.1	990.6	1000.5	1014.7
42.5°	912.5	895.5	889.8	894.1	895.5	899.7	908.3	931.0	949.4	963.6	975.0
45°	868.5	855.7	843.0	847.2	848.6	851.5	864.3	888.4	908.3	925.3	938.1
47.5°	823.1	807.5	794.7	797.6	803.2	804.7	818.8	847.2	865.7	884.1	901.2
50°	777.7	756.4	746.5	746.5	749.3	756.4	774.9	803.2	823.1	844.4	862.8
52.5°	730.9	711.0	699.6	701.1	703.9	712.4	729.4	757.8	780.5	803.2	825.9
55°	684.0	662.7	651.4	648.5	651.4	662.7	682.6	712.4	735.1	762.1	786.2
57.5°	637.2	611.7	601.7	597.5	600.3	614.5	634.4	665.6	694.0	719.5	747.9
60°	586.1	566.2	549.2	539.3	546.4	564.8	586.1	618.7	648.5	676.9	708.2
62.5°	542.1	516.6	498.1	488.2	495.3	510.9	540.7	571.9	604.6	637.2	668.4
65°	492.4	466.9	445.6	435.7	442.8	461.2	491.0	525.1	560.6	593.2	630.1
67.5°	444.2	417.2	391.7	381.7	390.3	410.1	442.8	481.1	519.4	553.5	593.2
70°	397.4	367.6	340.6	333.5	339.2	366.1	397.4	435.7	475.4	515.1	556.3
72.5°	354.8	317.9	289.5	281.0	288.1	317.9	353.4	393.1	435.7	478.3	522.2
75°	305.1	271.1	239.8	229.9	238.4	265.4	309.4	351.9	397.4	442.8	483.9
77.5°	265.4	225.6	193.0	177.4	191.6	225.6	268.2	313.6	360.5	407.3	454.1
80°	224.2	183.1	147.6	130.6	146.2	183.1	225.6	275.3	327.8	374.7	417.2
82.5°	187.3	143.3	106.4	88.0	105.0	146.2	193.0	242.7	293.8	340.6	390.3
85°	153.3	107.9	69.5	49.7	73.8	110.7	160.4	211.5	264.0	312.2	360.5
87.5°	124.9	80.9	42.6	21.3	45.4	86.6	133.4	184.5	237.0	285.2	330.7
90°	102.2	58.2	22.7	2.8	27.0	65.3	110.7	160.4	210.0	259.7	305.1
92.5°	83.7	44.0	12.8	1.4	17.0	52.5	95.1	141.9	190.2	238.4	282.4
95°	69.5	34.1	8.5	1.4	12.8	41.2	80.9	126.3	171.7	218.5	262.5
97.5°	59.6	28.4	7.1	1.4	9.9	35.5	69.5	112.1	156.1	200.1	242.7
100°	51.1	22.7	5.7	1.4	8.5	29.8	61.0	99.3	140.5	183.1	224.2
102.5°	44.0	18.4	4.3	1.4	7.1	25.5	53.9	89.4	126.3	167.5	207.2
105°	38.3	15.6	4.3	1.4	5.7	22.7	48.3	79.5	116.4	153.3	191.6
107.5°	32.6	12.8	2.8	1.4	4.3	18.4	42.6	72.4	105.0	140.5	176.0
110°	28.4	11.4	2.8	1.4	4.3	17.0	36.9	65.3	95.1	127.7	161.8

TEST NUMBER: P1213517

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	24.1	8.5	2.8	1.4	2.8	14.2	32.6	58.2	86.6	116.4	149.0
115°	21.3	7.1	1.4	1.4	2.8	12.8	29.8	52.5	78.1	106.4	136.2
117.5°	17.0	5.7	1.4	1.4	1.4	9.9	25.5	46.8	71.0	97.9	124.9
120°	14.2	5.7	1.4	1.4	1.4	8.5	22.7	41.2	63.9	88.0	113.5
122.5°	12.8	4.3	1.4	1.4	1.4	7.1	19.9	36.9	56.8	79.5	103.6
125°	11.4	4.3	1.4	1.4	1.4	5.7	17.0	32.6	51.1	71.0	93.7
127.5°	8.5	4.3	1.4	1.4	1.4	4.3	15.6	28.4	45.4	63.9	83.7
130°	7.1	2.8	1.4	1.4	1.4	4.3	12.8	25.5	39.7	56.8	75.2
132.5°	5.7	2.8	1.4	1.4	1.4	2.8	9.9	19.9	34.1	49.7	66.7
135°	5.7	2.8	1.4	1.4	1.4	2.8	7.1	17.0	28.4	42.6	56.8
137.5°	5.7	1.4	1.4	1.4	1.4	2.8	5.7	12.8	22.7	34.1	46.8
140°	4.3	1.4	1.4	1.4	1.4	1.4	4.3	9.9	18.4	28.4	39.7
142.5°	4.3	1.4	1.4	1.4	1.4	1.4	4.3	7.1	14.2	22.7	31.2
145°	2.8	1.4	1.4	1.4	1.4	1.4	2.8	5.7	11.4	17.0	25.5
147.5°	2.8	1.4	1.4	1.4	1.4	1.4	2.8	4.3	8.5	14.2	19.9
150°	2.8	1.4	1.4	1.4	1.4	1.4	2.8	4.3	5.7	9.9	15.6
152.5°	1.4	1.4	1.4	1.4	1.4	1.4	2.8	2.8	4.3	7.1	9.9
155°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8	4.3	5.7	7.1
157.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8	2.8	4.3	5.7
160°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8	2.8	4.3
162.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8	2.8
165°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
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: P1213517

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3
2.5°	1349.6	1339.7	1342.5	1341.1	1343.9	1348.2	1348.2	1346.8	1346.8	1343.9	1341.1
5°	1346.8	1336.8	1341.1	1339.7	1342.5	1346.8	1346.8	1345.3	1345.3	1341.1	1339.7
7.5°	1338.3	1331.2	1334.0	1334.0	1336.8	1341.1	1341.1	1339.7	1339.7	1335.4	1334.0
10°	1329.7	1321.2	1325.5	1325.5	1328.3	1334.0	1334.0	1332.6	1332.6	1328.3	1326.9
12.5°	1315.5	1307.0	1314.1	1315.5	1318.4	1324.1	1322.6	1322.6	1322.6	1318.4	1317.0
15°	1298.5	1292.8	1299.9	1301.4	1305.6	1312.7	1312.7	1312.7	1312.7	1308.4	1307.0
17.5°	1280.1	1275.8	1282.9	1285.7	1291.4	1298.5	1298.5	1299.9	1301.4	1298.5	1297.1
20°	1258.8	1255.9	1263.0	1268.7	1277.2	1284.3	1287.2	1288.6	1291.4	1288.6	1287.2
22.5°	1234.7	1234.7	1244.6	1250.3	1260.2	1267.3	1271.6	1275.8	1278.6	1275.8	1274.4
25°	1207.7	1211.9	1221.9	1231.8	1243.2	1250.3	1254.5	1260.2	1263.0	1261.6	1260.2
27.5°	1182.1	1187.8	1200.6	1210.5	1220.5	1231.8	1236.1	1243.2	1246.0	1246.0	1244.6
30°	1152.3	1160.9	1175.1	1186.4	1199.2	1210.5	1216.2	1223.3	1227.6	1224.7	1226.1
32.5°	1124.0	1138.2	1149.5	1162.3	1176.5	1187.8	1194.9	1203.4	1207.7	1206.3	1207.7
35°	1092.7	1106.9	1122.5	1135.3	1152.3	1163.7	1173.6	1180.7	1186.4	1185.0	1185.0
37.5°	1058.7	1077.1	1092.7	1109.8	1125.4	1138.2	1148.1	1156.6	1162.3	1162.3	1162.3
40°	1026.0	1045.9	1061.5	1081.4	1101.3	1112.6	1124.0	1132.5	1138.2	1139.6	1141.0
42.5°	990.6	1011.8	1030.3	1051.6	1071.5	1085.6	1098.4	1108.4	1114.0	1116.9	1115.4
45°	957.9	977.8	999.1	1023.2	1041.7	1055.8	1071.5	1082.8	1088.5	1089.9	1091.3
47.5°	921.0	943.7	967.9	992.0	1010.4	1028.9	1043.1	1054.4	1060.1	1064.4	1064.4
50°	885.5	909.7	936.6	962.2	982.0	1000.5	1014.7	1027.5	1034.6	1037.4	1038.8
52.5°	852.9	875.6	904.0	929.5	949.4	967.9	986.3	1000.5	1007.6	1010.4	1010.4
55°	813.2	841.6	872.8	896.9	918.2	939.5	957.9	972.1	979.2	983.5	986.3
57.5°	776.3	806.1	838.7	864.3	889.8	909.7	926.7	945.1	950.8	956.5	957.9
60°	740.8	770.6	801.8	830.2	855.7	877.0	896.9	912.5	922.4	925.3	928.1
62.5°	703.9	735.1	767.8	796.1	823.1	848.6	867.1	881.3	892.6	896.9	899.7
65°	668.4	701.1	733.7	763.5	791.9	817.4	835.9	850.1	861.4	868.5	869.9
67.5°	630.1	665.6	699.6	730.9	759.2	786.2	804.7	818.8	830.2	838.7	840.1
70°	594.6	631.5	665.6	699.6	728.0	755.0	774.9	789.0	801.8	807.5	810.3
72.5°	560.6	598.9	634.4	668.4	696.8	723.8	745.1	759.2	772.0	779.1	780.5
75°	527.9	566.2	604.6	637.2	667.0	694.0	715.2	730.9	742.2	749.3	752.1
77.5°	495.3	535.0	573.3	606.0	637.2	664.2	682.6	701.1	712.4	720.9	720.9
80°	462.6	503.8	543.5	576.2	607.4	631.5	652.8	671.3	682.6	691.1	691.1
82.5°	434.3	474.0	512.3	545.0	576.2	603.1	624.4	641.5	654.2	659.9	661.3
85°	401.6	445.6	481.1	516.6	546.4	571.9	593.2	611.7	623.0	628.7	631.5
87.5°	374.7	417.2	455.5	486.8	516.6	542.1	566.2	581.8	593.2	600.3	603.1
90°	349.1	390.3	428.6	459.8	491.0	515.1	537.9	553.5	566.2	571.9	574.8
92.5°	326.4	367.6	404.5	435.7	465.5	492.4	513.7	529.3	540.7	546.4	550.6
95°	305.1	344.9	380.3	414.4	442.8	466.9	489.6	505.2	518.0	522.2	526.5
97.5°	283.8	322.1	357.6	390.3	420.1	442.8	464.1	479.7	489.6	496.7	501.0
100°	265.4	302.3	336.3	367.6	395.9	417.2	439.9	454.1	464.1	469.7	475.4
102.5°	245.5	282.4	315.0	344.9	374.7	394.5	415.8	430.0	438.5	448.4	448.4
105°	228.5	262.5	295.2	323.6	349.1	373.2	391.7	405.9	415.8	422.9	422.9
107.5°	210.0	244.1	275.3	305.1	329.2	351.9	369.0	381.7	393.1	397.4	401.6
110°	195.8	225.6	256.9	285.2	308.0	329.2	346.3	360.5	370.4	374.7	377.5

TEST NUMBER: P1213517

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	178.8	210.0	238.4	265.4	288.1	308.0	325.0	336.3	346.3	351.9	353.4
115°	164.6	194.4	220.0	245.5	269.6	286.7	302.3	313.6	323.6	327.8	330.7
117.5°	151.8	178.8	204.4	225.6	248.4	266.8	282.4	292.3	300.9	306.5	309.4
120°	139.1	164.6	187.3	208.6	229.9	246.9	261.1	271.1	281.0	285.2	285.2
122.5°	126.3	150.4	171.7	191.6	211.5	227.1	242.7	251.2	259.7	264.0	264.0
125°	115.0	137.7	157.5	176.0	194.4	208.6	221.4	231.3	239.8	242.7	242.7
127.5°	103.6	124.9	143.3	160.4	176.0	190.2	202.9	212.9	220.0	222.8	222.8
130°	93.7	112.1	129.1	146.2	161.8	173.1	185.9	194.4	198.7	202.9	204.4
132.5°	83.7	100.8	116.4	130.6	146.2	157.5	167.5	176.0	180.2	184.5	185.9
135°	73.8	89.4	103.6	117.8	130.6	141.9	150.4	157.5	163.2	166.0	167.5
137.5°	62.4	79.5	92.2	103.6	117.8	126.3	136.2	140.5	146.2	149.0	149.0
140°	52.5	65.3	79.5	90.8	102.2	110.7	119.2	126.3	130.6	132.0	132.0
142.5°	42.6	53.9	65.3	79.5	89.4	96.5	105.0	110.7	113.5	115.0	116.4
145°	34.1	42.6	52.5	65.3	76.6	85.1	89.4	95.1	97.9	99.3	100.8
147.5°	25.5	34.1	42.6	51.1	62.4	71.0	75.2	80.9	83.7	85.1	85.1
150°	19.9	25.5	31.2	39.7	48.3	58.2	63.9	68.1	69.5	71.0	71.0
152.5°	14.2	19.9	24.1	29.8	35.5	44.0	52.5	55.3	56.8	58.2	58.2
155°	9.9	14.2	17.0	21.3	25.5	32.6	39.7	44.0	45.4	46.8	46.8
157.5°	7.1	9.9	11.4	15.6	18.4	21.3	27.0	34.1	35.5	35.5	35.5
160°	4.3	5.7	7.1	9.9	11.4	14.2	17.0	21.3	25.5	25.5	25.5
162.5°	2.8	4.3	4.3	5.7	5.7	8.5	9.9	11.4	15.6	17.0	17.0
165°	1.4	2.8	2.8	2.8	2.8	2.8	4.3	4.3	7.1	8.5	8.5
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: P1213517

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3
2.5°	1342.5	1345.3	1343.9	1343.9	1343.9	1346.8	1343.9	1331.2	1334.0	1336.8	1339.7
5°	1341.1	1342.5	1342.5	1341.1	1341.1	1343.9	1341.1	1328.3	1331.2	1334.0	1335.4
7.5°	1335.4	1336.8	1336.8	1336.8	1335.4	1338.3	1334.0	1322.6	1322.6	1325.5	1326.9
10°	1328.3	1331.2	1329.7	1328.3	1328.3	1328.3	1325.5	1312.7	1312.7	1314.1	1315.5
12.5°	1319.8	1319.8	1319.8	1318.4	1317.0	1317.0	1314.1	1301.4	1299.9	1302.8	1301.4
15°	1308.4	1311.3	1308.4	1307.0	1304.2	1304.2	1299.9	1287.2	1284.3	1285.7	1284.3
17.5°	1298.5	1299.9	1297.1	1294.3	1291.4	1290.0	1285.7	1271.6	1267.3	1268.7	1265.9
20°	1288.6	1288.6	1285.7	1282.9	1278.6	1274.4	1268.7	1254.5	1247.4	1247.4	1241.8
22.5°	1275.8	1275.8	1273.0	1268.7	1264.5	1258.8	1253.1	1238.9	1227.6	1224.7	1220.5
25°	1261.6	1260.2	1258.8	1254.5	1246.0	1240.3	1234.7	1219.0	1206.3	1200.6	1193.5
27.5°	1244.6	1244.6	1240.3	1236.1	1227.6	1220.5	1213.4	1199.2	1182.1	1175.1	1165.1
30°	1226.1	1226.1	1221.9	1216.2	1207.7	1199.2	1190.7	1173.6	1156.6	1146.7	1135.3
32.5°	1207.7	1206.3	1202.0	1196.3	1187.8	1175.1	1168.0	1150.9	1131.1	1119.7	1104.1
35°	1185.0	1183.6	1179.3	1172.2	1160.9	1150.9	1139.6	1124.0	1101.3	1087.1	1070.0
37.5°	1162.3	1160.9	1158.0	1148.1	1136.7	1125.4	1111.2	1095.6	1074.3	1055.8	1038.8
40°	1139.6	1138.2	1132.5	1125.4	1111.2	1097.0	1082.8	1067.2	1044.5	1023.2	1004.8
42.5°	1115.4	1114.0	1106.9	1098.4	1082.8	1068.6	1051.6	1034.6	1011.8	986.3	967.9
45°	1091.3	1088.5	1081.4	1071.5	1054.4	1038.8	1021.8	1001.9	979.2	955.1	931.0
47.5°	1065.8	1061.5	1054.4	1040.2	1026.0	1009.0	989.1	967.9	945.1	918.2	892.6
50°	1037.4	1034.6	1026.0	1013.3	996.2	979.2	956.5	935.2	908.3	882.7	851.5
52.5°	1010.4	1004.8	997.7	983.5	966.4	948.0	923.9	898.3	871.4	847.2	814.6
55°	982.0	979.2	969.3	957.9	936.6	915.3	892.6	865.7	835.9	807.5	776.3
57.5°	955.1	949.4	940.9	925.3	906.8	885.5	861.4	833.0	800.4	770.6	736.5
60°	928.1	919.6	909.7	895.5	875.6	852.9	827.4	797.6	764.9	732.3	696.8
62.5°	898.3	891.2	879.9	865.7	845.8	821.7	794.7	763.5	732.3	698.2	659.9
65°	868.5	861.4	850.1	835.9	816.0	789.0	760.7	729.4	694.0	661.3	620.2
67.5°	838.7	831.6	818.8	803.2	783.4	757.8	728.0	695.4	659.9	624.4	581.8
70°	808.9	800.4	789.0	772.0	752.1	725.2	695.4	661.3	625.8	587.5	545.0
72.5°	779.1	772.0	757.8	742.2	720.9	694.0	664.2	630.1	593.2	553.5	510.9
75°	749.3	740.8	730.9	712.4	689.7	664.2	632.9	598.9	559.1	520.8	476.8
77.5°	719.5	712.4	699.6	681.2	659.9	632.9	601.7	567.7	527.9	488.2	441.4
80°	689.7	681.2	671.3	654.2	630.1	603.1	570.5	536.4	496.7	455.5	408.7
82.5°	659.9	651.4	640.0	623.0	600.3	573.3	542.1	505.2	465.5	422.9	378.9
85°	630.1	623.0	610.2	593.2	569.1	542.1	510.9	478.3	435.7	393.1	349.1
87.5°	600.3	593.2	580.4	563.4	540.7	513.7	482.5	448.4	407.3	367.6	319.3
90°	571.9	566.2	553.5	536.4	513.7	486.8	458.4	421.5	381.7	342.0	296.6
92.5°	546.4	540.7	529.3	512.3	492.4	462.6	434.3	398.8	359.0	317.9	273.9
95°	523.7	516.6	505.2	489.6	465.5	439.9	411.6	376.1	337.8	296.6	254.0
97.5°	498.1	491.0	479.7	462.6	442.8	415.8	387.4	353.4	315.0	276.7	234.2
100°	472.6	465.5	452.7	438.5	418.6	391.7	364.7	330.7	295.2	258.3	217.1
102.5°	447.0	439.9	428.6	414.4	394.5	370.4	343.4	310.8	275.3	238.4	200.1
105°	422.9	415.8	404.5	390.3	371.8	347.7	319.3	290.9	256.9	221.4	184.5
107.5°	398.8	391.7	381.7	367.6	349.1	326.4	299.4	269.6	238.4	204.4	168.9
110°	374.7	369.0	357.6	344.9	326.4	303.7	279.6	251.2	220.0	188.7	154.7

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CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	351.9	346.3	334.9	320.7	305.1	283.8	259.7	232.7	202.9	173.1	140.5
115°	329.2	322.1	312.2	299.4	283.8	264.0	241.3	217.1	187.3	158.9	129.1
117.5°	306.5	300.9	290.9	278.2	264.0	244.1	222.8	200.1	171.7	144.8	117.8
120°	283.8	279.6	269.6	258.3	244.1	225.6	205.8	183.1	157.5	132.0	106.4
122.5°	262.5	258.3	248.4	238.4	224.2	207.2	188.7	167.5	144.8	120.6	97.9
125°	242.7	237.0	228.5	218.5	205.8	190.2	171.7	151.8	130.6	109.3	88.0
127.5°	221.4	217.1	211.5	200.1	187.3	173.1	156.1	139.1	119.2	99.3	79.5
130°	204.4	198.7	191.6	183.1	171.7	157.5	141.9	124.9	107.9	89.4	69.5
132.5°	184.5	178.8	173.1	164.6	154.7	141.9	127.7	112.1	96.5	79.5	62.4
135°	166.0	161.8	156.1	147.6	137.7	127.7	113.5	99.3	85.1	69.5	55.3
137.5°	149.0	144.8	139.1	133.4	123.5	113.5	100.8	88.0	75.2	61.0	48.3
140°	132.0	129.1	123.5	117.8	109.3	99.3	88.0	76.6	65.3	52.5	41.2
142.5°	115.0	112.1	107.9	102.2	95.1	86.6	76.6	66.7	55.3	45.4	35.5
145°	99.3	97.9	93.7	88.0	82.3	73.8	65.3	56.8	46.8	38.3	28.4
147.5°	83.7	82.3	79.5	75.2	69.5	62.4	55.3	46.8	39.7	31.2	22.7
150°	69.5	68.1	66.7	61.0	58.2	51.1	45.4	38.3	32.6	24.1	18.4
152.5°	56.8	56.8	53.9	49.7	46.8	41.2	36.9	31.2	25.5	19.9	14.2
155°	45.4	44.0	42.6	39.7	36.9	32.6	28.4	24.1	19.9	14.2	9.9
157.5°	35.5	34.1	32.6	29.8	27.0	25.5	21.3	17.0	12.8	9.9	7.1
160°	25.5	24.1	22.7	21.3	19.9	17.0	14.2	11.4	8.5	5.7	4.3
162.5°	17.0	15.6	15.6	14.2	12.8	9.9	8.5	7.1	5.7	4.3	2.8
165°	8.5	8.5	7.1	7.1	5.7	4.3	4.3	4.3	2.8	2.8	1.4
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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CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3	1345.3
2.5°	1338.3	1338.3	1343.9	1342.5	1338.3	1346.8	1356.7
5°	1334.0	1334.0	1338.3	1338.3	1334.0	1342.5	1351.0
7.5°	1326.9	1325.5	1329.7	1329.7	1324.1	1331.2	1341.1
10°	1314.1	1312.7	1317.0	1317.0	1311.3	1318.4	1326.9
12.5°	1299.9	1297.1	1301.4	1299.9	1294.3	1301.4	1309.9
15°	1281.5	1280.1	1282.9	1280.1	1274.4	1281.5	1290.0
17.5°	1263.0	1258.8	1260.2	1260.2	1250.3	1257.4	1264.5
20°	1238.9	1233.2	1234.7	1233.2	1226.1	1230.4	1238.9
22.5°	1214.8	1206.3	1206.3	1204.9	1196.3	1202.0	1209.1
25°	1185.0	1175.1	1175.1	1173.6	1163.7	1168.0	1175.1
27.5°	1155.2	1145.2	1141.0	1139.6	1129.6	1129.6	1139.6
30°	1124.0	1109.8	1106.9	1102.7	1092.7	1092.7	1101.3
32.5°	1094.2	1074.3	1068.6	1062.9	1053.0	1051.6	1061.5
35°	1054.4	1038.8	1028.9	1023.2	1011.8	1009.0	1017.5
37.5°	1021.8	1001.9	987.7	980.6	969.3	965.0	976.4
40°	986.3	965.0	946.6	942.3	925.3	919.6	929.5
42.5°	946.6	923.9	905.4	896.9	884.1	878.4	879.9
45°	906.8	882.7	862.8	851.5	838.7	828.8	834.5
47.5°	865.7	844.4	820.3	803.2	787.6	780.5	783.4
50°	824.5	799.0	776.3	757.8	739.4	730.9	736.5
52.5°	783.4	756.4	730.9	711.0	689.7	681.2	682.6
55°	743.6	715.2	685.4	664.2	644.3	631.5	628.7
57.5°	703.9	672.7	641.5	617.3	591.8	580.4	576.2
60°	661.3	628.7	596.0	567.7	540.7	527.9	522.2
62.5°	621.6	586.1	549.2	519.4	492.4	475.4	471.2
65°	583.3	542.1	505.2	471.2	441.4	422.9	417.2
67.5°	542.1	499.5	459.8	422.9	394.5	370.4	367.6
70°	503.8	458.4	414.4	376.1	344.9	320.7	309.4
72.5°	465.5	418.6	373.2	332.1	292.3	269.6	261.1
75°	428.6	380.3	332.1	289.5	245.5	218.5	210.0
77.5°	394.5	344.9	293.8	246.9	205.8	171.7	160.4
80°	361.9	310.8	256.9	208.6	164.6	127.7	115.0
82.5°	327.8	279.6	224.2	173.1	127.7	89.4	73.8
85°	298.0	249.8	194.4	143.3	97.9	56.8	39.7
87.5°	273.9	221.4	171.7	120.6	73.8	32.6	11.4
90°	249.8	198.7	149.0	99.3	55.3	18.4	1.4
92.5°	228.5	180.2	130.6	85.1	42.6	12.8	1.4
95°	208.6	161.8	115.0	71.0	34.1	8.5	1.4
97.5°	190.2	146.2	102.2	61.0	28.4	7.1	1.4
100°	174.6	132.0	90.8	53.9	24.1	5.7	1.4
102.5°	158.9	119.2	80.9	46.8	21.3	4.3	1.4
105°	146.2	107.9	72.4	42.6	18.4	4.3	1.4
107.5°	133.4	97.9	65.3	36.9	15.6	2.8	1.4
110°	120.6	89.4	58.2	32.6	14.2	2.8	1.4



TEST NUMBER: P1213517

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	110.7	80.9	52.5	29.8	11.4	2.8	1.4
115°	100.8	72.4	46.8	25.5	9.9	1.4	1.4
117.5°	90.8	65.3	41.2	22.7	8.5	1.4	1.4
120°	82.3	58.2	36.9	19.9	7.1	1.4	1.4
122.5°	73.8	52.5	32.6	17.0	5.7	1.4	1.4
125°	66.7	46.8	28.4	14.2	4.3	1.4	1.4
127.5°	59.6	41.2	25.5	12.8	4.3	1.4	1.4
130°	52.5	36.9	21.3	9.9	2.8	1.4	1.4
132.5°	46.8	31.2	18.4	8.5	2.8	1.4	1.4
135°	41.2	27.0	15.6	5.7	2.8	1.4	1.4
137.5°	35.5	22.7	12.8	4.3	1.4	1.4	1.4
140°	29.8	19.9	9.9	4.3	1.4	1.4	1.4
142.5°	25.5	15.6	7.1	2.8	1.4	1.4	1.4
145°	19.9	12.8	5.7	2.8	1.4	1.4	1.4
147.5°	15.6	9.9	4.3	2.8	1.4	1.4	1.4
150°	11.4	7.1	4.3	1.4	1.4	1.4	1.4
152.5°	8.5	5.7	2.8	1.4	1.4	1.4	1.4
155°	5.7	4.3	2.8	1.4	1.4	1.4	1.4
157.5°	4.3	2.8	1.4	1.4	1.4	1.4	1.4
160°	2.8	1.4	1.4	1.4	1.4	1.4	1.4
162.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4
165°	1.4	1.4	1.4	1.4	1.4	1.4	1.4
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)