

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-L935-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-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

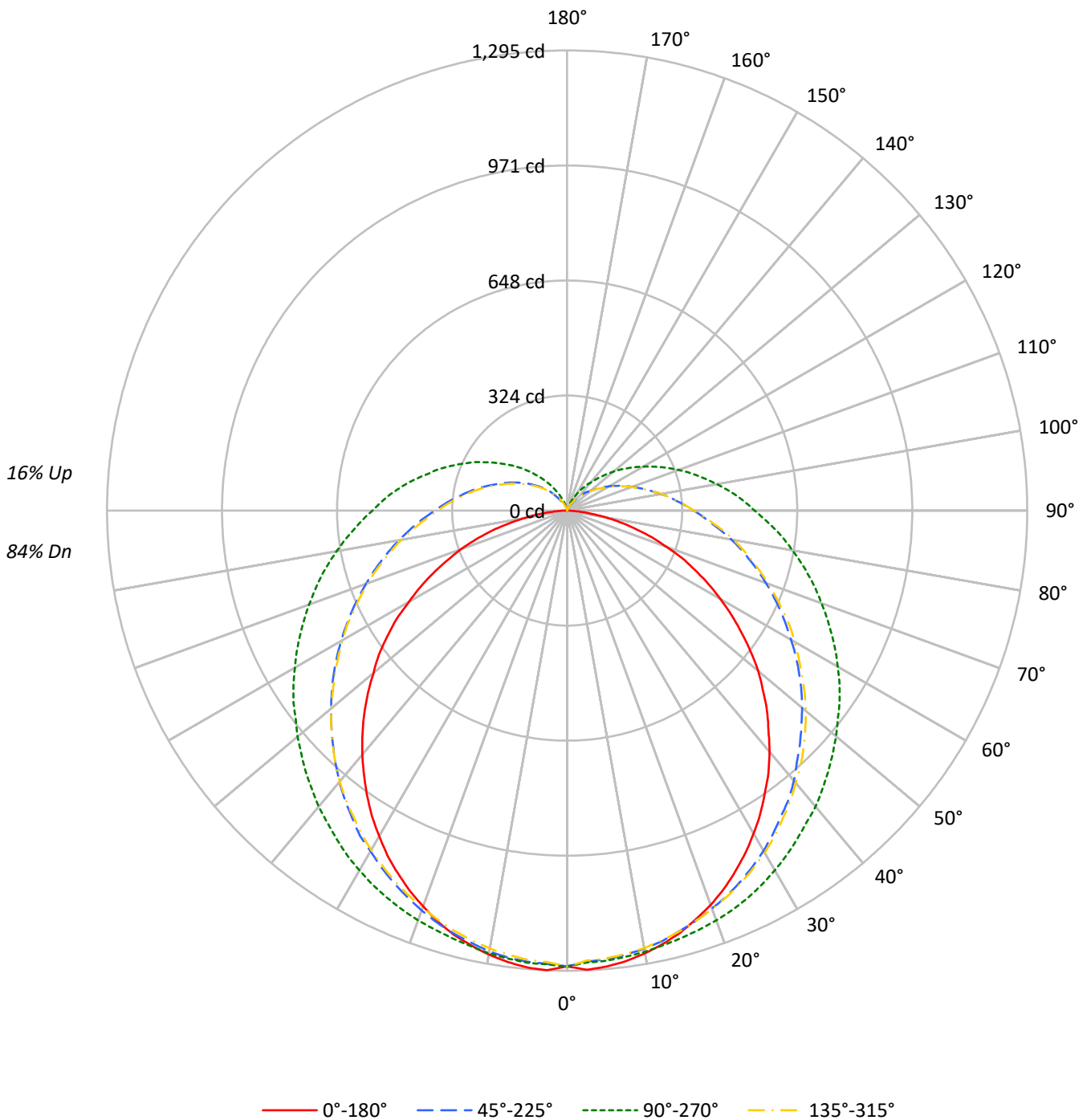
Lumens per Lamp: N/A
Luminaire Lumens: 5572.0 lumens
Efficiency: N/A
Efficacy: 89.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

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



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CATALOG NUMBER: 4SNLED-LD5-65HL-LW-UNV-L935-CD1-U

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	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°	10364	10364	10364	10364
5°	10419	9988	10441	10030
10°	10322	9704	10356	9735
15°	10202	9461	10248	9471
20°	10042	9283	10077	9283
25°	9845	9126	9904	9116
30°	9622	8964	9696	8964
35°	9364	8814	9469	8824
40°	9109	8726	9220	8726
45°	8816	8633	8951	8644
50°	8510	8578	8625	8602
55°	8083	8587	8339	8623
60°	7634	8613	7882	8666
65°	7127	8699	7442	8785
70°	6417	8860	6917	8985
75°	5598	9149	6129	9324
80°	4333	9578	4922	9799
85°	2589	10266	3238	10550



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.5	2.2
10°-20°	349.2	6.3
20°-30°	535.4	9.6
30°-40°	660.4	11.9
40°-50°	716.5	12.9
50°-60°	706.2	12.7
60°-70°	638.5	11.5
70°-80°	532.0	9.5
80°-90°	412.0	7.4
90°-100°	312.5	5.6
100°-110°	231.2	4.2
110°-120°	160.9	2.9
120°-130°	102.6	1.8
130°-140°	57.6	1.0
140°-150°	26.3	0.5
150°-160°	8.2	0.1
160°-170°	1.0	0.0
170°-180°	0.0	0.0
0°-30°	1006.0	18.1
0°-40°	1666.5	29.9
0°-60°	3089.3	55.4
0°-90°	4671.7	83.8
90°-120°	704.6	12.6
90°-150°	891.1	16.0
90°-180°	900.0	16.2
0°-180°	5572.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1282	1282	1282	1282	1282	
5°	1288	1272	1291	1277	1288	122
15°	1230	1245	1235	1246	1230	346
25°	1120	1203	1127	1201	1120	516
35°	970	1128	981	1130	970	607
45°	796	1039	808	1040	796	613
55°	599	936	618	940	599	536
65°	398	821	415	829	398	394
75°	200	704	219	717	200	212
85°	38	586	47	602	38	46
90°	1	528	3	548	1	2
95°	1	479	1	502	1	1
105°	1	380	1	403	1	1
115°	1	290	1	315	1	1
125°	1	208	1	231	1	1
135°	1	135	1	160	1	1
145°	1	78	1	96	1	1
155°	1	32	1	45	1	1
165°	1	5	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°	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5
2.5°	1293.3	1293.3	1292.0	1289.3	1290.6	1294.7	1292.0	1285.2	1281.2	1270.3	1273.0
5°	1287.9	1287.9	1286.6	1283.9	1285.2	1290.6	1287.9	1282.5	1277.1	1267.6	1271.7
7.5°	1278.5	1278.5	1277.1	1274.4	1277.1	1282.5	1279.8	1274.4	1270.3	1260.9	1264.9
10°	1264.9	1266.3	1264.9	1260.9	1266.3	1271.7	1270.3	1263.6	1259.5	1251.4	1255.5
12.5°	1248.7	1250.0	1248.7	1247.3	1250.0	1258.2	1255.5	1250.0	1247.3	1240.6	1244.6
15°	1229.7	1231.1	1228.4	1228.4	1231.1	1239.2	1239.2	1233.8	1231.1	1224.3	1232.5
17.5°	1205.4	1206.8	1205.4	1205.4	1208.1	1216.2	1217.6	1214.9	1212.2	1209.5	1217.6
20°	1181.0	1179.7	1179.7	1178.3	1183.8	1195.9	1194.6	1194.6	1191.9	1191.9	1201.3
22.5°	1152.6	1152.6	1151.3	1151.3	1158.0	1168.9	1168.9	1171.6	1168.9	1174.3	1182.4
25°	1120.2	1121.5	1120.2	1122.9	1128.3	1140.5	1141.8	1145.9	1147.2	1152.6	1162.1
27.5°	1086.3	1087.7	1086.3	1089.1	1098.5	1108.0	1114.8	1120.2	1121.5	1129.6	1141.8
30°	1049.8	1049.8	1051.2	1053.9	1064.7	1079.6	1085.0	1091.8	1091.8	1105.3	1117.5
32.5°	1011.9	1011.9	1011.9	1017.4	1029.5	1047.1	1053.9	1062.0	1064.7	1078.2	1091.8
35°	970.0	971.4	971.4	975.4	991.6	1009.2	1018.7	1028.2	1033.6	1049.8	1063.3
37.5°	930.8	933.5	929.4	934.8	957.8	972.7	983.5	993.0	1002.5	1024.1	1034.9
40°	886.1	888.8	887.5	898.3	917.2	936.2	948.4	957.8	971.4	993.0	1005.2
42.5°	838.8	841.5	844.2	856.4	876.7	895.6	910.5	922.7	938.9	957.8	978.1
45°	795.5	795.5	799.5	814.4	836.1	856.4	873.9	887.5	906.4	926.7	947.0
47.5°	746.8	748.1	753.5	771.1	794.1	818.5	834.7	852.3	872.6	894.2	917.2
50°	702.1	702.1	710.3	729.2	750.8	777.9	795.5	815.8	837.4	863.1	886.1
52.5°	650.7	653.4	665.6	683.2	711.6	736.0	756.2	777.9	803.6	830.7	856.4
55°	599.3	604.7	614.2	638.5	668.3	691.3	715.7	742.7	767.1	796.8	826.6
57.5°	549.3	553.3	568.2	592.6	623.7	652.1	677.8	703.5	733.2	763.0	794.1
60°	497.9	503.3	520.9	545.2	579.0	608.8	638.5	665.6	696.7	727.8	760.3
62.5°	449.1	453.2	473.5	501.9	535.7	568.2	598.0	630.4	664.3	694.0	726.5
65°	397.7	404.5	427.5	453.2	492.4	524.9	558.7	593.9	629.1	661.5	692.7
67.5°	350.4	354.4	378.8	408.6	447.8	484.3	519.5	557.4	593.9	627.7	658.8
70°	294.9	308.5	332.8	363.9	405.9	443.7	481.6	520.9	560.1	595.3	625.0
72.5°	248.9	259.7	286.8	320.6	361.2	405.9	445.1	487.0	526.3	562.8	593.9
75°	200.2	211.0	242.2	280.0	322.0	369.3	409.9	453.2	493.8	530.3	562.8
77.5°	152.9	166.4	200.2	239.5	285.5	334.2	376.1	419.4	461.3	500.6	533.0
80°	109.6	124.5	161.0	205.6	250.3	299.0	345.0	388.3	430.2	469.4	503.3
82.5°	70.3	86.6	125.8	170.5	217.8	266.5	313.9	357.2	399.1	438.3	473.5
85°	37.9	55.5	96.1	140.7	188.0	236.8	284.1	330.1	370.7	407.2	445.1
87.5°	10.8	32.5	71.7	116.3	165.0	209.7	255.7	301.7	342.3	381.5	415.3
90°	1.4	18.9	54.1	96.1	143.4	186.7	232.7	276.0	316.6	355.8	389.6
92.5°	1.4	12.2	41.9	79.8	123.1	167.8	213.8	255.7	293.6	332.8	366.6
95°	1.4	9.5	33.8	67.6	108.2	150.2	193.5	234.0	273.3	309.8	343.6
97.5°	1.4	6.8	27.1	58.2	94.7	133.9	175.9	216.5	254.3	289.5	320.6
100°	1.4	5.4	21.6	50.1	82.5	120.4	158.3	197.5	234.0	267.9	300.3
102.5°	1.4	4.1	18.9	41.9	73.1	106.9	143.4	179.9	215.1	247.6	280.0
105°	1.4	4.1	16.2	36.5	64.9	96.1	129.9	165.0	197.5	228.6	258.4
107.5°	1.4	2.7	13.5	31.1	56.8	86.6	117.7	151.5	181.3	211.0	239.5
110°	1.4	2.7	10.8	28.4	50.1	77.1	106.9	138.0	166.4	194.8	221.9



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-65HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.4	2.7	9.5	24.4	43.3	69.0	96.1	124.5	151.5	179.9	204.3
115°	1.4	2.7	8.1	21.6	40.6	59.5	86.6	112.3	139.3	165.0	188.0
117.5°	1.4	2.7	6.8	17.6	35.2	54.1	75.8	101.5	125.8	150.2	171.8
120°	1.4	2.7	5.4	16.2	31.1	48.7	67.6	90.6	113.6	136.6	159.6
122.5°	1.4	1.4	5.4	13.5	27.1	43.3	62.2	79.8	101.5	123.1	143.4
125°	1.4	1.4	5.4	12.2	23.0	39.2	55.5	71.7	90.6	109.6	127.2
127.5°	1.4	1.4	4.1	9.5	20.3	33.8	48.7	66.3	79.8	97.4	115.0
130°	1.4	1.4	4.1	8.1	17.6	28.4	43.3	58.2	74.4	86.6	101.5
132.5°	1.4	1.4	4.1	6.8	13.5	23.0	36.5	50.1	64.9	78.5	90.6
135°	1.4	1.4	2.7	5.4	10.8	18.9	29.8	41.9	56.8	70.3	82.5
137.5°	1.4	1.4	2.7	5.4	8.1	16.2	23.0	33.8	47.4	59.5	71.7
140°	1.4	1.4	2.7	4.1	6.8	12.2	18.9	27.1	37.9	48.7	62.2
142.5°	1.4	1.4	1.4	4.1	5.4	9.5	14.9	21.6	29.8	39.2	50.1
145°	1.4	1.4	1.4	4.1	5.4	6.8	12.2	17.6	23.0	29.8	39.2
147.5°	1.4	1.4	1.4	2.7	4.1	5.4	9.5	13.5	17.6	23.0	28.4
150°	1.4	1.4	1.4	2.7	4.1	5.4	6.8	9.5	13.5	18.9	23.0
152.5°	1.4	1.4	1.4	2.7	2.7	4.1	5.4	6.8	9.5	13.5	16.2
155°	1.4	1.4	1.4	1.4	2.7	4.1	5.4	5.4	6.8	9.5	12.2
157.5°	1.4	1.4	1.4	1.4	2.7	2.7	4.1	4.1	5.4	5.4	8.1
160°	1.4	1.4	1.4	1.4	1.4	2.7	2.7	4.1	4.1	4.1	4.1
162.5°	1.4	1.4	1.4	1.4	1.4	1.4	2.7	2.7	2.7	4.1	4.1
165°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.7	2.7	2.7
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: P#

CATALOG NUMBER: 4SNLED-LD5-65HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5
2.5°	1273.0	1274.4	1278.5	1278.5	1275.7	1275.7	1274.4	1273.0	1274.4	1277.1	1277.1
5°	1270.3	1271.7	1275.7	1277.1	1274.4	1273.0	1273.0	1271.7	1273.0	1275.7	1275.7
7.5°	1264.9	1266.3	1270.3	1271.7	1269.0	1269.0	1267.6	1266.3	1269.0	1270.3	1270.3
10°	1256.8	1258.2	1263.6	1264.9	1263.6	1262.2	1262.2	1260.9	1262.2	1264.9	1264.9
12.5°	1246.0	1248.7	1255.5	1255.5	1255.5	1254.1	1254.1	1252.7	1254.1	1256.8	1255.5
15°	1233.8	1239.2	1244.6	1247.3	1247.3	1247.3	1246.0	1244.6	1247.3	1248.7	1247.3
17.5°	1220.3	1227.0	1235.2	1237.9	1237.9	1239.2	1237.9	1236.5	1239.2	1239.2	1237.9
20°	1206.8	1213.5	1221.6	1224.3	1227.0	1228.4	1228.4	1227.0	1228.4	1229.7	1228.4
22.5°	1189.2	1197.3	1206.8	1210.8	1213.5	1216.2	1216.2	1216.2	1217.6	1218.9	1216.2
25°	1170.2	1179.7	1190.5	1194.6	1200.0	1201.3	1202.7	1202.7	1204.0	1205.4	1201.3
27.5°	1149.9	1160.8	1171.6	1178.3	1182.4	1185.1	1185.1	1186.5	1187.8	1189.2	1185.1
30°	1125.6	1141.8	1151.3	1156.7	1162.1	1166.2	1167.5	1168.9	1170.2	1171.6	1167.5
32.5°	1103.9	1117.5	1129.6	1136.4	1143.2	1148.6	1149.9	1149.9	1152.6	1152.6	1148.6
35°	1078.2	1094.5	1106.6	1113.4	1121.5	1125.6	1128.3	1128.3	1131.0	1131.0	1126.9
37.5°	1052.5	1068.8	1082.3	1090.4	1099.9	1105.3	1106.6	1106.6	1109.3	1109.3	1103.9
40°	1025.5	1043.1	1057.9	1067.4	1075.5	1082.3	1083.6	1087.7	1087.7	1086.3	1080.9
42.5°	998.4	1014.6	1030.9	1041.7	1052.5	1059.3	1062.0	1063.3	1063.3	1062.0	1057.9
45°	968.6	987.6	1002.5	1016.0	1026.8	1033.6	1037.6	1039.0	1039.0	1036.3	1032.2
47.5°	940.2	959.2	974.1	988.9	999.8	1007.9	1011.9	1013.3	1011.9	1010.6	1006.5
50°	910.5	932.1	947.0	961.9	972.7	979.5	986.2	987.6	986.2	984.9	976.8
52.5°	879.4	902.4	918.6	933.5	945.6	953.8	959.2	960.5	960.5	957.8	952.4
55°	848.2	868.5	888.8	905.1	918.6	926.7	933.5	936.2	933.5	930.8	924.0
57.5°	819.8	838.8	859.1	876.7	890.2	901.0	906.4	909.1	906.4	902.4	895.6
60°	786.0	806.3	829.3	845.5	860.4	871.2	873.9	879.4	876.7	872.6	865.8
62.5°	753.5	777.9	798.2	818.5	830.7	842.8	848.2	850.9	848.2	844.2	837.4
65°	719.7	746.8	767.1	787.4	800.9	813.1	819.8	821.2	818.5	814.4	807.7
67.5°	688.6	714.3	736.0	757.6	769.8	782.0	788.7	791.4	788.7	783.3	776.5
70°	657.5	683.2	708.9	725.1	740.0	753.5	757.6	761.7	759.0	753.5	745.4
72.5°	626.4	653.4	679.1	695.4	711.6	723.8	729.2	733.2	730.5	725.1	715.7
75°	593.9	622.3	648.0	665.6	681.8	694.0	699.4	703.5	700.8	695.4	684.5
77.5°	564.1	592.6	616.9	635.8	652.1	662.9	672.4	673.7	671.0	665.6	654.8
80°	533.0	561.4	587.1	606.1	622.3	633.1	639.9	644.0	641.3	635.8	625.0
82.5°	506.0	531.7	557.4	576.3	592.6	606.1	611.5	615.6	614.2	606.1	598.0
85°	476.2	506.0	526.3	546.6	562.8	576.3	580.4	585.8	584.4	577.7	566.8
87.5°	446.4	476.2	500.6	520.9	535.7	546.6	553.3	556.0	554.7	547.9	535.7
90°	422.1	449.1	473.5	495.1	507.3	519.5	526.3	527.6	527.6	519.5	510.0
92.5°	399.1	424.8	449.1	469.4	484.3	495.1	500.6	503.3	501.9	495.1	484.3
95°	373.4	401.8	424.8	445.1	460.0	470.8	476.2	478.9	477.6	470.8	460.0
97.5°	351.7	377.4	400.4	419.4	434.3	445.1	450.5	453.2	453.2	446.4	435.6
100°	330.1	355.8	377.4	396.4	409.9	420.7	426.2	427.5	426.2	420.7	409.9
102.5°	308.5	332.8	354.4	372.0	386.9	396.4	401.8	403.2	403.2	396.4	385.6
105°	286.8	311.2	331.5	350.4	362.6	372.0	376.1	380.2	378.8	373.4	362.6
107.5°	266.5	290.9	309.8	327.4	339.6	349.0	353.1	357.2	355.8	350.4	339.6
110°	247.6	270.6	288.2	305.7	316.6	326.0	332.8	334.2	331.5	326.0	316.6



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-65HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	230.0	250.3	267.9	284.1	296.3	303.0	308.5	311.2	308.5	303.0	296.3
115°	211.0	231.3	248.9	263.8	274.6	282.7	286.8	289.5	286.8	281.4	274.6
117.5°	193.5	212.4	230.0	244.9	254.3	261.1	265.2	267.9	265.2	261.1	254.3
120°	178.6	194.8	211.0	224.6	235.4	240.8	244.9	247.6	246.2	240.8	234.0
122.5°	161.0	178.6	193.5	207.0	216.5	221.9	224.6	227.3	225.9	221.9	215.1
125°	146.1	161.0	175.9	188.0	197.5	202.9	205.6	208.3	207.0	202.9	194.8
127.5°	129.9	146.1	158.3	170.5	177.2	185.3	186.7	189.4	188.0	184.0	177.2
130°	117.7	129.9	142.1	152.9	161.0	166.4	169.1	170.5	167.8	165.0	158.3
132.5°	102.8	116.3	127.2	136.6	142.1	147.5	150.2	151.5	151.5	147.5	142.1
135°	92.0	101.5	110.9	120.4	125.8	131.2	133.9	135.3	133.9	131.2	125.8
137.5°	82.5	90.6	97.4	105.5	112.3	115.0	117.7	117.7	116.3	115.0	110.9
140°	71.7	81.2	87.9	93.3	98.8	100.1	102.8	102.8	101.5	100.1	97.4
142.5°	60.9	69.0	75.8	82.5	86.6	89.3	90.6	92.0	90.6	89.3	85.2
145°	48.7	58.2	64.9	69.0	74.4	75.8	77.1	78.5	77.1	75.8	71.7
147.5°	37.9	46.0	52.8	58.2	62.2	63.6	64.9	66.3	64.9	62.2	60.9
150°	27.1	33.8	41.9	47.4	50.1	52.8	52.8	52.8	54.1	51.4	48.7
152.5°	21.6	24.4	29.8	35.2	39.2	40.6	41.9	41.9	40.6	40.6	37.9
155°	14.9	17.6	21.6	25.7	29.8	31.1	32.5	32.5	31.1	31.1	29.8
157.5°	9.5	12.2	14.9	17.6	21.6	23.0	24.4	24.4	24.4	23.0	21.6
160°	5.4	6.8	8.1	10.8	13.5	14.9	16.2	16.2	16.2	16.2	14.9
162.5°	4.1	4.1	4.1	5.4	6.8	8.1	9.5	9.5	9.5	9.5	8.1
165°	2.7	2.7	2.7	2.7	2.7	4.1	5.4	5.4	5.4	5.4	5.4
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: P#

CATALOG NUMBER: 4SNLED-LD5-65HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5
2.5°	1275.7	1275.7	1277.1	1274.4	1266.3	1267.6	1267.6	1273.0	1275.7	1277.1	1283.9
5°	1273.0	1273.0	1275.7	1271.7	1264.9	1264.9	1264.9	1270.3	1271.7	1274.4	1279.8
7.5°	1269.0	1269.0	1270.3	1266.3	1258.2	1258.2	1256.8	1262.2	1264.9	1266.3	1271.7
10°	1262.2	1262.2	1263.6	1259.5	1250.0	1250.0	1248.7	1252.7	1254.1	1256.8	1260.9
12.5°	1252.7	1252.7	1252.7	1248.7	1239.2	1237.9	1236.5	1240.6	1240.6	1241.9	1246.0
15°	1244.6	1241.9	1241.9	1237.9	1228.4	1225.7	1223.0	1224.3	1227.0	1225.7	1228.4
17.5°	1235.2	1232.5	1229.7	1225.7	1213.5	1209.5	1206.8	1208.1	1206.8	1205.4	1208.1
20°	1224.3	1220.3	1218.9	1212.2	1200.0	1193.2	1187.8	1185.1	1186.5	1182.4	1183.8
22.5°	1212.2	1206.8	1204.0	1195.9	1183.8	1175.6	1168.9	1163.5	1162.1	1156.7	1158.0
25°	1197.3	1190.5	1186.5	1179.7	1166.2	1156.7	1148.6	1140.5	1136.4	1129.6	1128.3
27.5°	1179.7	1172.9	1167.5	1160.8	1147.2	1135.0	1125.6	1114.8	1109.3	1101.2	1097.2
30°	1162.1	1154.0	1145.9	1140.5	1125.6	1112.1	1097.2	1087.7	1079.6	1070.1	1063.3
32.5°	1140.5	1132.3	1124.2	1116.1	1102.6	1086.3	1074.2	1059.3	1049.8	1039.0	1030.9
35°	1118.8	1108.0	1099.9	1089.1	1076.9	1057.9	1043.1	1028.2	1016.0	1003.8	994.4
37.5°	1094.5	1086.3	1074.2	1064.7	1049.8	1030.9	1014.6	995.7	984.9	968.6	956.5
40°	1071.5	1062.0	1049.8	1037.6	1022.8	1001.1	983.5	961.9	949.7	930.8	918.6
42.5°	1048.5	1034.9	1022.8	1009.2	993.0	972.7	951.1	929.4	913.2	895.6	878.0
45°	1022.8	1007.9	993.0	978.1	961.9	941.6	918.6	895.6	875.3	859.1	837.4
47.5°	995.7	980.8	963.2	947.0	929.4	909.1	884.8	860.4	838.8	819.8	796.8
50°	968.6	953.8	934.8	917.2	896.9	876.7	850.9	822.5	799.5	775.2	754.9
52.5°	940.2	925.4	907.8	884.8	863.1	842.8	815.8	786.0	760.3	740.0	714.3
55°	911.8	896.9	876.7	853.7	832.0	806.3	780.6	750.8	722.4	698.1	672.4
57.5°	882.1	868.5	845.5	826.6	799.5	772.5	745.4	717.0	685.9	657.5	627.7
60°	852.3	837.4	815.8	792.8	765.7	738.7	710.3	679.1	646.7	615.6	588.5
62.5°	825.2	806.3	786.0	761.7	733.2	707.5	675.1	641.3	608.8	576.3	543.8
65°	794.1	773.8	754.9	730.5	700.8	671.0	638.5	604.7	569.6	534.4	501.9
67.5°	763.0	742.7	722.4	698.1	667.0	635.8	602.0	568.2	529.0	495.1	457.3
70°	731.9	715.7	690.0	664.3	635.8	602.0	568.2	531.7	491.1	454.6	415.3
72.5°	700.8	684.5	658.8	631.8	604.7	569.6	533.0	496.5	458.6	416.7	374.7
75°	671.0	650.7	627.7	602.0	573.6	537.1	500.6	462.7	418.0	378.8	335.5
77.5°	642.6	623.7	600.7	572.3	541.1	506.0	468.1	428.9	384.2	342.3	294.9
80°	611.5	592.6	569.6	541.1	510.0	476.2	435.6	395.0	351.7	305.7	257.0
82.5°	581.7	564.1	538.4	512.7	478.9	445.1	404.5	363.9	317.9	273.3	225.9
85°	550.6	533.0	508.7	481.6	449.1	412.6	374.7	334.2	288.2	242.2	194.8
87.5°	523.6	503.3	478.9	451.9	419.4	384.2	347.7	304.4	259.7	215.1	166.4
90°	495.1	476.2	451.9	424.8	392.3	357.2	319.3	278.7	235.4	189.4	143.4
92.5°	470.8	450.5	427.5	400.4	368.0	334.2	296.3	255.7	213.8	169.1	124.5
95°	446.4	426.2	404.5	377.4	345.0	311.2	273.3	234.0	193.5	150.2	108.2
97.5°	419.4	401.8	380.2	354.4	322.0	289.5	253.0	215.1	175.9	133.9	94.7
100°	397.7	377.4	357.2	330.1	300.3	269.2	232.7	196.2	158.3	119.1	82.5
102.5°	373.4	354.4	334.2	308.5	278.7	247.6	213.8	178.6	143.4	106.9	71.7
105°	350.4	332.8	311.2	286.8	258.4	228.6	196.2	163.7	129.9	94.7	63.6
107.5°	327.4	309.8	289.5	266.5	239.5	209.7	179.9	147.5	116.3	85.2	56.8
110°	304.4	288.2	269.2	246.2	220.5	193.5	165.0	135.3	104.2	75.8	50.1



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-65HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	284.1	267.9	248.9	227.3	202.9	177.2	150.2	121.8	93.3	67.6	43.3
115°	263.8	248.9	230.0	211.0	186.7	162.3	136.6	109.6	83.9	60.9	37.9
117.5°	243.5	228.6	211.0	192.1	170.5	147.5	123.1	97.4	75.8	54.1	33.8
120°	223.2	209.7	193.5	175.9	156.9	133.9	109.6	87.9	67.6	47.4	29.8
122.5°	204.3	192.1	177.2	161.0	140.7	119.1	98.8	79.8	60.9	41.9	24.4
125°	186.7	174.5	161.0	144.8	125.8	106.9	89.3	71.7	52.8	36.5	20.3
127.5°	169.1	156.9	143.4	128.5	113.6	96.1	79.8	63.6	47.4	32.5	17.6
130°	151.5	140.7	128.5	116.3	101.5	85.2	71.7	55.5	40.6	25.7	14.9
132.5°	133.9	125.8	115.0	102.8	89.3	77.1	62.2	48.7	35.2	23.0	13.5
135°	119.1	110.9	101.5	90.6	79.8	67.6	54.1	41.9	29.8	18.9	10.8
137.5°	105.5	98.8	89.3	79.8	70.3	58.2	47.4	35.2	24.4	16.2	8.1
140°	93.3	86.6	78.5	69.0	60.9	50.1	39.2	28.4	21.6	13.5	6.8
142.5°	81.2	74.4	67.6	59.5	51.4	41.9	32.5	24.4	17.6	10.8	6.8
145°	69.0	63.6	56.8	50.1	41.9	33.8	27.1	20.3	13.5	8.1	5.4
147.5°	56.8	52.8	46.0	40.6	33.8	27.1	21.6	16.2	10.8	6.8	4.1
150°	46.0	41.9	36.5	31.1	27.1	21.6	17.6	12.2	8.1	6.8	4.1
152.5°	35.2	32.5	28.4	25.7	21.6	16.2	12.2	9.5	6.8	5.4	2.7
155°	28.4	25.7	23.0	18.9	16.2	12.2	9.5	6.8	5.4	4.1	2.7
157.5°	20.3	18.9	16.2	13.5	10.8	8.1	6.8	6.8	4.1	2.7	1.4
160°	13.5	12.2	10.8	8.1	6.8	6.8	5.4	4.1	2.7	2.7	1.4
162.5°	8.1	6.8	6.8	6.8	5.4	5.4	4.1	2.7	2.7	1.4	1.4
165°	5.4	5.4	5.4	4.1	4.1	4.1	2.7	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: P#

CATALOG NUMBER: 4SNLED-LD5-65HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5
2.5°	1283.9	1279.8	1285.2	1294.7	1296.0	1294.7	1292.0	1296.0	1301.5	1300.1	1290.6
5°	1281.2	1275.7	1281.2	1290.6	1290.6	1289.3	1287.9	1292.0	1297.4	1296.0	1287.9
7.5°	1273.0	1267.6	1273.0	1281.2	1282.5	1279.8	1279.8	1283.9	1289.3	1287.9	1281.2
10°	1262.2	1256.8	1259.5	1269.0	1271.7	1269.0	1269.0	1273.0	1279.8	1278.5	1270.3
12.5°	1246.0	1241.9	1244.6	1252.7	1255.5	1254.1	1252.7	1258.2	1264.9	1264.9	1256.8
15°	1228.4	1223.0	1225.7	1235.2	1236.5	1233.8	1235.2	1239.2	1247.3	1247.3	1240.6
17.5°	1208.1	1201.3	1205.4	1212.2	1213.5	1213.5	1213.5	1218.9	1228.4	1227.0	1221.6
20°	1185.1	1175.6	1178.3	1185.1	1187.8	1187.8	1187.8	1197.3	1204.0	1204.0	1198.6
22.5°	1158.0	1151.3	1151.3	1158.0	1162.1	1160.8	1160.8	1168.9	1178.3	1177.0	1177.0
25°	1126.9	1121.5	1118.8	1126.9	1128.3	1129.6	1132.3	1140.5	1151.3	1151.3	1152.6
27.5°	1094.5	1089.1	1087.7	1094.5	1095.8	1097.2	1099.9	1109.3	1120.2	1121.5	1124.2
30°	1063.3	1055.2	1052.5	1057.9	1060.6	1062.0	1062.0	1076.9	1086.3	1090.4	1095.8
32.5°	1026.8	1018.7	1011.9	1021.4	1022.8	1025.5	1026.8	1041.7	1052.5	1059.3	1067.4
35°	990.3	976.8	974.1	980.8	983.5	984.9	987.6	1003.8	1018.7	1024.1	1034.9
37.5°	949.7	940.2	932.1	938.9	941.6	942.9	951.1	965.9	980.8	988.9	999.8
40°	911.8	899.7	892.9	896.9	899.7	901.0	910.5	926.7	944.3	953.8	967.3
42.5°	869.9	853.7	848.2	852.3	853.7	857.7	865.8	887.5	905.1	918.6	929.4
45°	828.0	815.8	803.6	807.7	809.0	811.7	823.9	846.9	865.8	882.1	894.2
47.5°	784.7	769.8	757.6	760.3	765.7	767.1	780.6	807.7	825.2	842.8	859.1
50°	741.4	721.1	711.6	711.6	714.3	721.1	738.7	765.7	784.7	805.0	822.5
52.5°	696.7	677.8	667.0	668.3	671.0	679.1	695.4	722.4	744.1	765.7	787.4
55°	652.1	631.8	621.0	618.3	621.0	631.8	650.7	679.1	700.8	726.5	749.5
57.5°	607.4	583.1	573.6	569.6	572.3	585.8	604.7	634.5	661.5	685.9	713.0
60°	558.7	539.8	523.6	514.1	520.9	538.4	558.7	589.8	618.3	645.3	675.1
62.5°	516.8	492.4	474.9	465.4	472.1	487.0	515.4	545.2	576.3	607.4	637.2
65°	469.4	445.1	424.8	415.3	422.1	439.7	468.1	500.6	534.4	565.5	600.7
67.5°	423.4	397.7	373.4	363.9	372.0	391.0	422.1	458.6	495.1	527.6	565.5
70°	378.8	350.4	324.7	317.9	323.3	349.0	378.8	415.3	453.2	491.1	530.3
72.5°	338.2	303.0	276.0	267.9	274.6	303.0	336.9	374.7	415.3	455.9	497.9
75°	290.9	258.4	228.6	219.2	227.3	253.0	294.9	335.5	378.8	422.1	461.3
77.5°	253.0	215.1	184.0	169.1	182.6	215.1	255.7	299.0	343.6	388.3	432.9
80°	213.8	174.5	140.7	124.5	139.3	174.5	215.1	262.5	312.5	357.2	397.7
82.5°	178.6	136.6	101.5	83.9	100.1	139.3	184.0	231.3	280.0	324.7	372.0
85°	146.1	102.8	66.3	47.4	70.3	105.5	152.9	201.6	251.6	297.6	343.6
87.5°	119.1	77.1	40.6	20.3	43.3	82.5	127.2	175.9	225.9	271.9	315.2
90°	97.4	55.5	21.6	2.7	25.7	62.2	105.5	152.9	200.2	247.6	290.9
92.5°	79.8	41.9	12.2	1.4	16.2	50.1	90.6	135.3	181.3	227.3	269.2
95°	66.3	32.5	8.1	1.4	12.2	39.2	77.1	120.4	163.7	208.3	250.3
97.5°	56.8	27.1	6.8	1.4	9.5	33.8	66.3	106.9	148.8	190.8	231.3
100°	48.7	21.6	5.4	1.4	8.1	28.4	58.2	94.7	133.9	174.5	213.8
102.5°	41.9	17.6	4.1	1.4	6.8	24.4	51.4	85.2	120.4	159.6	197.5
105°	36.5	14.9	4.1	1.4	5.4	21.6	46.0	75.8	110.9	146.1	182.6
107.5°	31.1	12.2	2.7	1.4	4.1	17.6	40.6	69.0	100.1	133.9	167.8
110°	27.1	10.8	2.7	1.4	4.1	16.2	35.2	62.2	90.6	121.8	154.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-65HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	23.0	8.1	2.7	1.4	2.7	13.5	31.1	55.5	82.5	110.9	142.1
115°	20.3	6.8	1.4	1.4	2.7	12.2	28.4	50.1	74.4	101.5	129.9
117.5°	16.2	5.4	1.4	1.4	1.4	9.5	24.4	44.6	67.6	93.3	119.1
120°	13.5	5.4	1.4	1.4	1.4	8.1	21.6	39.2	60.9	83.9	108.2
122.5°	12.2	4.1	1.4	1.4	1.4	6.8	18.9	35.2	54.1	75.8	98.8
125°	10.8	4.1	1.4	1.4	1.4	5.4	16.2	31.1	48.7	67.6	89.3
127.5°	8.1	4.1	1.4	1.4	1.4	4.1	14.9	27.1	43.3	60.9	79.8
130°	6.8	2.7	1.4	1.4	1.4	4.1	12.2	24.4	37.9	54.1	71.7
132.5°	5.4	2.7	1.4	1.4	1.4	2.7	9.5	18.9	32.5	47.4	63.6
135°	5.4	2.7	1.4	1.4	1.4	2.7	6.8	16.2	27.1	40.6	54.1
137.5°	5.4	1.4	1.4	1.4	1.4	2.7	5.4	12.2	21.6	32.5	44.6
140°	4.1	1.4	1.4	1.4	1.4	1.4	4.1	9.5	17.6	27.1	37.9
142.5°	4.1	1.4	1.4	1.4	1.4	1.4	4.1	6.8	13.5	21.6	29.8
145°	2.7	1.4	1.4	1.4	1.4	1.4	2.7	5.4	10.8	16.2	24.4
147.5°	2.7	1.4	1.4	1.4	1.4	1.4	2.7	4.1	8.1	13.5	18.9
150°	2.7	1.4	1.4	1.4	1.4	1.4	2.7	4.1	5.4	9.5	14.9
152.5°	1.4	1.4	1.4	1.4	1.4	1.4	2.7	2.7	4.1	6.8	9.5
155°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.7	4.1	5.4	6.8
157.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.7	2.7	4.1	5.4
160°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.7	2.7	4.1
162.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.7	2.7
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: P#

CATALOG NUMBER: 4SNLED-LD5-65HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5
2.5°	1286.6	1277.1	1279.8	1278.5	1281.2	1285.2	1285.2	1283.9	1283.9	1281.2	1278.5
5°	1283.9	1274.4	1278.5	1277.1	1279.8	1283.9	1283.9	1282.5	1282.5	1278.5	1277.1
7.5°	1275.7	1269.0	1271.7	1271.7	1274.4	1278.5	1278.5	1277.1	1277.1	1273.0	1271.7
10°	1267.6	1259.5	1263.6	1263.6	1266.3	1271.7	1271.7	1270.3	1270.3	1266.3	1264.9
12.5°	1254.1	1246.0	1252.7	1254.1	1256.8	1262.2	1260.9	1260.9	1260.9	1256.8	1255.5
15°	1237.9	1232.5	1239.2	1240.6	1244.6	1251.4	1251.4	1251.4	1251.4	1247.3	1246.0
17.5°	1220.3	1216.2	1223.0	1225.7	1231.1	1237.9	1237.9	1239.2	1240.6	1237.9	1236.5
20°	1200.0	1197.3	1204.0	1209.5	1217.6	1224.3	1227.0	1228.4	1231.1	1228.4	1227.0
22.5°	1177.0	1177.0	1186.5	1191.9	1201.3	1208.1	1212.2	1216.2	1218.9	1216.2	1214.9
25°	1151.3	1155.3	1164.8	1174.3	1185.1	1191.9	1195.9	1201.3	1204.0	1202.7	1201.3
27.5°	1126.9	1132.3	1144.5	1154.0	1163.5	1174.3	1178.3	1185.1	1187.8	1187.8	1186.5
30°	1098.5	1106.6	1120.2	1131.0	1143.2	1154.0	1159.4	1166.2	1170.2	1167.5	1168.9
32.5°	1071.5	1085.0	1095.8	1108.0	1121.5	1132.3	1139.1	1147.2	1151.3	1149.9	1151.3
35°	1041.7	1055.2	1070.1	1082.3	1098.5	1109.3	1118.8	1125.6	1131.0	1129.6	1129.6
37.5°	1009.2	1026.8	1041.7	1057.9	1072.8	1085.0	1094.5	1102.6	1108.0	1108.0	1108.0
40°	978.1	997.1	1011.9	1030.9	1049.8	1060.6	1071.5	1079.6	1085.0	1086.3	1087.7
42.5°	944.3	964.6	982.2	1002.5	1021.4	1034.9	1047.1	1056.6	1062.0	1064.7	1063.3
45°	913.2	932.1	952.4	975.4	993.0	1006.5	1021.4	1032.2	1037.6	1039.0	1040.3
47.5°	878.0	899.7	922.7	945.6	963.2	980.8	994.4	1005.2	1010.6	1014.6	1014.6
50°	844.2	867.2	892.9	917.2	936.2	953.8	967.3	979.5	986.2	988.9	990.3
52.5°	813.1	834.7	861.8	886.1	905.1	922.7	940.2	953.8	960.5	963.2	963.2
55°	775.2	802.2	832.0	855.0	875.3	895.6	913.2	926.7	933.5	937.5	940.2
57.5°	740.0	768.4	799.5	823.9	848.2	867.2	883.4	901.0	906.4	911.8	913.2
60°	706.2	734.6	764.4	791.4	815.8	836.1	855.0	869.9	879.4	882.1	884.8
62.5°	671.0	700.8	731.9	759.0	784.7	809.0	826.6	840.1	850.9	855.0	857.7
65°	637.2	668.3	699.4	727.8	754.9	779.2	796.8	810.4	821.2	828.0	829.3
67.5°	600.7	634.5	667.0	696.7	723.8	749.5	767.1	780.6	791.4	799.5	800.9
70°	566.8	602.0	634.5	667.0	694.0	719.7	738.7	752.2	764.4	769.8	772.5
72.5°	534.4	570.9	604.7	637.2	664.3	690.0	710.3	723.8	736.0	742.7	744.1
75°	503.3	539.8	576.3	607.4	635.8	661.5	681.8	696.7	707.5	714.3	717.0
77.5°	472.1	510.0	546.6	577.7	607.4	633.1	650.7	668.3	679.1	687.3	687.3
80°	441.0	480.3	518.1	549.3	579.0	602.0	622.3	639.9	650.7	658.8	658.8
82.5°	414.0	451.9	488.4	519.5	549.3	575.0	595.3	611.5	623.7	629.1	630.4
85°	382.9	424.8	458.6	492.4	520.9	545.2	565.5	583.1	593.9	599.3	602.0
87.5°	357.2	397.7	434.3	464.0	492.4	516.8	539.8	554.7	565.5	572.3	575.0
90°	332.8	372.0	408.6	438.3	468.1	491.1	512.7	527.6	539.8	545.2	547.9
92.5°	311.2	350.4	385.6	415.3	443.7	469.4	489.7	504.6	515.4	520.9	524.9
95°	290.9	328.7	362.6	395.0	422.1	445.1	466.7	481.6	493.8	497.9	501.9
97.5°	270.6	307.1	340.9	372.0	400.4	422.1	442.4	457.3	466.7	473.5	477.6
100°	253.0	288.2	320.6	350.4	377.4	397.7	419.4	432.9	442.4	447.8	453.2
102.5°	234.0	269.2	300.3	328.7	357.2	376.1	396.4	409.9	418.0	427.5	427.5
105°	217.8	250.3	281.4	308.5	332.8	355.8	373.4	386.9	396.4	403.2	403.2
107.5°	200.2	232.7	262.5	290.9	313.9	335.5	351.7	363.9	374.7	378.8	382.9
110°	186.7	215.1	244.9	271.9	293.6	313.9	330.1	343.6	353.1	357.2	359.9



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-65HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	170.5	200.2	227.3	253.0	274.6	293.6	309.8	320.6	330.1	335.5	336.9
115°	156.9	185.3	209.7	234.0	257.0	273.3	288.2	299.0	308.5	312.5	315.2
117.5°	144.8	170.5	194.8	215.1	236.8	254.3	269.2	278.7	286.8	292.2	294.9
120°	132.6	156.9	178.6	198.9	219.2	235.4	248.9	258.4	267.9	271.9	271.9
122.5°	120.4	143.4	163.7	182.6	201.6	216.5	231.3	239.5	247.6	251.6	251.6
125°	109.6	131.2	150.2	167.8	185.3	198.9	211.0	220.5	228.6	231.3	231.3
127.5°	98.8	119.1	136.6	152.9	167.8	181.3	193.5	202.9	209.7	212.4	212.4
130°	89.3	106.9	123.1	139.3	154.2	165.0	177.2	185.3	189.4	193.5	194.8
132.5°	79.8	96.1	110.9	124.5	139.3	150.2	159.6	167.8	171.8	175.9	177.2
135°	70.3	85.2	98.8	112.3	124.5	135.3	143.4	150.2	155.6	158.3	159.6
137.5°	59.5	75.8	87.9	98.8	112.3	120.4	129.9	133.9	139.3	142.1	142.1
140°	50.1	62.2	75.8	86.6	97.4	105.5	113.6	120.4	124.5	125.8	125.8
142.5°	40.6	51.4	62.2	75.8	85.2	92.0	100.1	105.5	108.2	109.6	110.9
145°	32.5	40.6	50.1	62.2	73.1	81.2	85.2	90.6	93.3	94.7	96.1
147.5°	24.4	32.5	40.6	48.7	59.5	67.6	71.7	77.1	79.8	81.2	81.2
150°	18.9	24.4	29.8	37.9	46.0	55.5	60.9	64.9	66.3	67.6	67.6
152.5°	13.5	18.9	23.0	28.4	33.8	41.9	50.1	52.8	54.1	55.5	55.5
155°	9.5	13.5	16.2	20.3	24.4	31.1	37.9	41.9	43.3	44.6	44.6
157.5°	6.8	9.5	10.8	14.9	17.6	20.3	25.7	32.5	33.8	33.8	33.8
160°	4.1	5.4	6.8	9.5	10.8	13.5	16.2	20.3	24.4	24.4	24.4
162.5°	2.7	4.1	4.1	5.4	5.4	8.1	9.5	10.8	14.9	16.2	16.2
165°	1.4	2.7	2.7	2.7	2.7	2.7	4.1	4.1	6.8	8.1	8.1
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-LD5-65HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5
2.5°	1279.8	1282.5	1281.2	1281.2	1281.2	1283.9	1281.2	1269.0	1271.7	1274.4	1277.1
5°	1278.5	1279.8	1279.8	1278.5	1278.5	1281.2	1278.5	1266.3	1269.0	1271.7	1273.0
7.5°	1273.0	1274.4	1274.4	1274.4	1273.0	1275.7	1271.7	1260.9	1260.9	1263.6	1264.9
10°	1266.3	1269.0	1267.6	1266.3	1266.3	1266.3	1263.6	1251.4	1251.4	1252.7	1254.1
12.5°	1258.2	1258.2	1258.2	1256.8	1255.5	1255.5	1252.7	1240.6	1239.2	1241.9	1240.6
15°	1247.3	1250.0	1247.3	1246.0	1243.3	1243.3	1239.2	1227.0	1224.3	1225.7	1224.3
17.5°	1237.9	1239.2	1236.5	1233.8	1231.1	1229.7	1225.7	1212.2	1208.1	1209.5	1206.8
20°	1228.4	1228.4	1225.7	1223.0	1218.9	1214.9	1209.5	1195.9	1189.2	1189.2	1183.8
22.5°	1216.2	1216.2	1213.5	1209.5	1205.4	1200.0	1194.6	1181.0	1170.2	1167.5	1163.5
25°	1202.7	1201.3	1200.0	1195.9	1187.8	1182.4	1177.0	1162.1	1149.9	1144.5	1137.8
27.5°	1186.5	1186.5	1182.4	1178.3	1170.2	1163.5	1156.7	1143.2	1126.9	1120.2	1110.7
30°	1168.9	1168.9	1164.8	1159.4	1151.3	1143.2	1135.0	1118.8	1102.6	1093.1	1082.3
32.5°	1151.3	1149.9	1145.9	1140.5	1132.3	1120.2	1113.4	1097.2	1078.2	1067.4	1052.5
35°	1129.6	1128.3	1124.2	1117.5	1106.6	1097.2	1086.3	1071.5	1049.8	1036.3	1020.1
37.5°	1108.0	1106.6	1103.9	1094.5	1083.6	1072.8	1059.3	1044.4	1024.1	1006.5	990.3
40°	1086.3	1085.0	1079.6	1072.8	1059.3	1045.8	1032.2	1017.4	995.7	975.4	957.8
42.5°	1063.3	1062.0	1055.2	1047.1	1032.2	1018.7	1002.5	986.2	964.6	940.2	922.7
45°	1040.3	1037.6	1030.9	1021.4	1005.2	990.3	974.1	955.1	933.5	910.5	887.5
47.5°	1016.0	1011.9	1005.2	991.6	978.1	961.9	942.9	922.7	901.0	875.3	850.9
50°	988.9	986.2	978.1	965.9	949.7	933.5	911.8	891.5	865.8	841.5	811.7
52.5°	963.2	957.8	951.1	937.5	921.3	903.7	880.7	856.4	830.7	807.7	776.5
55°	936.2	933.5	924.0	913.2	892.9	872.6	850.9	825.2	796.8	769.8	740.0
57.5°	910.5	905.1	896.9	882.1	864.5	844.2	821.2	794.1	763.0	734.6	702.1
60°	884.8	876.7	867.2	853.7	834.7	813.1	788.7	760.3	729.2	698.1	664.3
62.5°	856.4	849.6	838.8	825.2	806.3	783.3	757.6	727.8	698.1	665.6	629.1
65°	828.0	821.2	810.4	796.8	777.9	752.2	725.1	695.4	661.5	630.4	591.2
67.5°	799.5	792.8	780.6	765.7	746.8	722.4	694.0	662.9	629.1	595.3	554.7
70°	771.1	763.0	752.2	736.0	717.0	691.3	662.9	630.4	596.6	560.1	519.5
72.5°	742.7	736.0	722.4	707.5	687.3	661.5	633.1	600.7	565.5	527.6	487.0
75°	714.3	706.2	696.7	679.1	657.5	633.1	603.4	570.9	533.0	496.5	454.6
77.5°	685.9	679.1	667.0	649.4	629.1	603.4	573.6	541.1	503.3	465.4	420.7
80°	657.5	649.4	639.9	623.7	600.7	575.0	543.8	511.4	473.5	434.3	389.6
82.5°	629.1	621.0	610.1	593.9	572.3	546.6	516.8	481.6	443.7	403.2	361.2
85°	600.7	593.9	581.7	565.5	542.5	516.8	487.0	455.9	415.3	374.7	332.8
87.5°	572.3	565.5	553.3	537.1	515.4	489.7	460.0	427.5	388.3	350.4	304.4
90°	545.2	539.8	527.6	511.4	489.7	464.0	437.0	401.8	363.9	326.0	282.7
92.5°	520.9	515.4	504.6	488.4	469.4	441.0	414.0	380.2	342.3	303.0	261.1
95°	499.2	492.4	481.6	466.7	443.7	419.4	392.3	358.5	322.0	282.7	242.2
97.5°	474.9	468.1	457.3	441.0	422.1	396.4	369.3	336.9	300.3	263.8	223.2
100°	450.5	443.7	431.6	418.0	399.1	373.4	347.7	315.2	281.4	246.2	207.0
102.5°	426.2	419.4	408.6	395.0	376.1	353.1	327.4	296.3	262.5	227.3	190.8
105°	403.2	396.4	385.6	372.0	354.4	331.5	304.4	277.3	244.9	211.0	175.9
107.5°	380.2	373.4	363.9	350.4	332.8	311.2	285.5	257.0	227.3	194.8	161.0
110°	357.2	351.7	340.9	328.7	311.2	289.5	266.5	239.5	209.7	179.9	147.5



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-65HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	335.5	330.1	319.3	305.7	290.9	270.6	247.6	221.9	193.5	165.0	133.9
115°	313.9	307.1	297.6	285.5	270.6	251.6	230.0	207.0	178.6	151.5	123.1
117.5°	292.2	286.8	277.3	265.2	251.6	232.7	212.4	190.8	163.7	138.0	112.3
120°	270.6	266.5	257.0	246.2	232.7	215.1	196.2	174.5	150.2	125.8	101.5
122.5°	250.3	246.2	236.8	227.3	213.8	197.5	179.9	159.6	138.0	115.0	93.3
125°	231.3	225.9	217.8	208.3	196.2	181.3	163.7	144.8	124.5	104.2	83.9
127.5°	211.0	207.0	201.6	190.8	178.6	165.0	148.8	132.6	113.6	94.7	75.8
130°	194.8	189.4	182.6	174.5	163.7	150.2	135.3	119.1	102.8	85.2	66.3
132.5°	175.9	170.5	165.0	156.9	147.5	135.3	121.8	106.9	92.0	75.8	59.5
135°	158.3	154.2	148.8	140.7	131.2	121.8	108.2	94.7	81.2	66.3	52.8
137.5°	142.1	138.0	132.6	127.2	117.7	108.2	96.1	83.9	71.7	58.2	46.0
140°	125.8	123.1	117.7	112.3	104.2	94.7	83.9	73.1	62.2	50.1	39.2
142.5°	109.6	106.9	102.8	97.4	90.6	82.5	73.1	63.6	52.8	43.3	33.8
145°	94.7	93.3	89.3	83.9	78.5	70.3	62.2	54.1	44.6	36.5	27.1
147.5°	79.8	78.5	75.8	71.7	66.3	59.5	52.8	44.6	37.9	29.8	21.6
150°	66.3	64.9	63.6	58.2	55.5	48.7	43.3	36.5	31.1	23.0	17.6
152.5°	54.1	54.1	51.4	47.4	44.6	39.2	35.2	29.8	24.4	18.9	13.5
155°	43.3	41.9	40.6	37.9	35.2	31.1	27.1	23.0	18.9	13.5	9.5
157.5°	33.8	32.5	31.1	28.4	25.7	24.4	20.3	16.2	12.2	9.5	6.8
160°	24.4	23.0	21.6	20.3	18.9	16.2	13.5	10.8	8.1	5.4	4.1
162.5°	16.2	14.9	14.9	13.5	12.2	9.5	8.1	6.8	5.4	4.1	2.7
165°	8.1	8.1	6.8	6.8	5.4	4.1	4.1	4.1	2.7	2.7	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: P#

CATALOG NUMBER: 4SNLED-LD5-65HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5
2.5°	1275.7	1275.7	1281.2	1279.8	1275.7	1283.9	1293.3
5°	1271.7	1271.7	1275.7	1275.7	1271.7	1279.8	1287.9
7.5°	1264.9	1263.6	1267.6	1267.6	1262.2	1269.0	1278.5
10°	1252.7	1251.4	1255.5	1255.5	1250.0	1256.8	1264.9
12.5°	1239.2	1236.5	1240.6	1239.2	1233.8	1240.6	1248.7
15°	1221.6	1220.3	1223.0	1220.3	1214.9	1221.6	1229.7
17.5°	1204.0	1200.0	1201.3	1201.3	1191.9	1198.6	1205.4
20°	1181.0	1175.6	1177.0	1175.6	1168.9	1172.9	1181.0
22.5°	1158.0	1149.9	1149.9	1148.6	1140.5	1145.9	1152.6
25°	1129.6	1120.2	1120.2	1118.8	1109.3	1113.4	1120.2
27.5°	1101.2	1091.8	1087.7	1086.3	1076.9	1076.9	1086.3
30°	1071.5	1057.9	1055.2	1051.2	1041.7	1041.7	1049.8
32.5°	1043.1	1024.1	1018.7	1013.3	1003.8	1002.5	1011.9
35°	1005.2	990.3	980.8	975.4	964.6	961.9	970.0
37.5°	974.1	955.1	941.6	934.8	924.0	919.9	930.8
40°	940.2	919.9	902.4	898.3	882.1	876.7	886.1
42.5°	902.4	880.7	863.1	855.0	842.8	837.4	838.8
45°	864.5	841.5	822.5	811.7	799.5	790.1	795.5
47.5°	825.2	805.0	782.0	765.7	750.8	744.1	746.8
50°	786.0	761.7	740.0	722.4	704.8	696.7	702.1
52.5°	746.8	721.1	696.7	677.8	657.5	649.4	650.7
55°	708.9	681.8	653.4	633.1	614.2	602.0	599.3
57.5°	671.0	641.3	611.5	588.5	564.1	553.3	549.3
60°	630.4	599.3	568.2	541.1	515.4	503.3	497.9
62.5°	592.6	558.7	523.6	495.1	469.4	453.2	449.1
65°	556.0	516.8	481.6	449.1	420.7	403.2	397.7
67.5°	516.8	476.2	438.3	403.2	376.1	353.1	350.4
70°	480.3	437.0	395.0	358.5	328.7	305.7	294.9
72.5°	443.7	399.1	355.8	316.6	278.7	257.0	248.9
75°	408.6	362.6	316.6	276.0	234.0	208.3	200.2
77.5°	376.1	328.7	280.0	235.4	196.2	163.7	152.9
80°	345.0	296.3	244.9	198.9	156.9	121.8	109.6
82.5°	312.5	266.5	213.8	165.0	121.8	85.2	70.3
85°	284.1	238.1	185.3	136.6	93.3	54.1	37.9
87.5°	261.1	211.0	163.7	115.0	70.3	31.1	10.8
90°	238.1	189.4	142.1	94.7	52.8	17.6	1.4
92.5°	217.8	171.8	124.5	81.2	40.6	12.2	1.4
95°	198.9	154.2	109.6	67.6	32.5	8.1	1.4
97.5°	181.3	139.3	97.4	58.2	27.1	6.8	1.4
100°	166.4	125.8	86.6	51.4	23.0	5.4	1.4
102.5°	151.5	113.6	77.1	44.6	20.3	4.1	1.4
105°	139.3	102.8	69.0	40.6	17.6	4.1	1.4
107.5°	127.2	93.3	62.2	35.2	14.9	2.7	1.4
110°	115.0	85.2	55.5	31.1	13.5	2.7	1.4



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-65HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	105.5	77.1	50.1	28.4	10.8	2.7	1.4
115°	96.1	69.0	44.6	24.4	9.5	1.4	1.4
117.5°	86.6	62.2	39.2	21.6	8.1	1.4	1.4
120°	78.5	55.5	35.2	18.9	6.8	1.4	1.4
122.5°	70.3	50.1	31.1	16.2	5.4	1.4	1.4
125°	63.6	44.6	27.1	13.5	4.1	1.4	1.4
127.5°	56.8	39.2	24.4	12.2	4.1	1.4	1.4
130°	50.1	35.2	20.3	9.5	2.7	1.4	1.4
132.5°	44.6	29.8	17.6	8.1	2.7	1.4	1.4
135°	39.2	25.7	14.9	5.4	2.7	1.4	1.4
137.5°	33.8	21.6	12.2	4.1	1.4	1.4	1.4
140°	28.4	18.9	9.5	4.1	1.4	1.4	1.4
142.5°	24.4	14.9	6.8	2.7	1.4	1.4	1.4
145°	18.9	12.2	5.4	2.7	1.4	1.4	1.4
147.5°	14.9	9.5	4.1	2.7	1.4	1.4	1.4
150°	10.8	6.8	4.1	1.4	1.4	1.4	1.4
152.5°	8.1	5.4	2.7	1.4	1.4	1.4	1.4
155°	5.4	4.1	2.7	1.4	1.4	1.4	1.4
157.5°	4.1	2.7	1.4	1.4	1.4	1.4	1.4
160°	2.7	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)