

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: P1214092

Luminaire Tested: 4SNLED-LD5-30SL-LC-UNV-L950-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1214092
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33518)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-30SL-LC-UNV-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

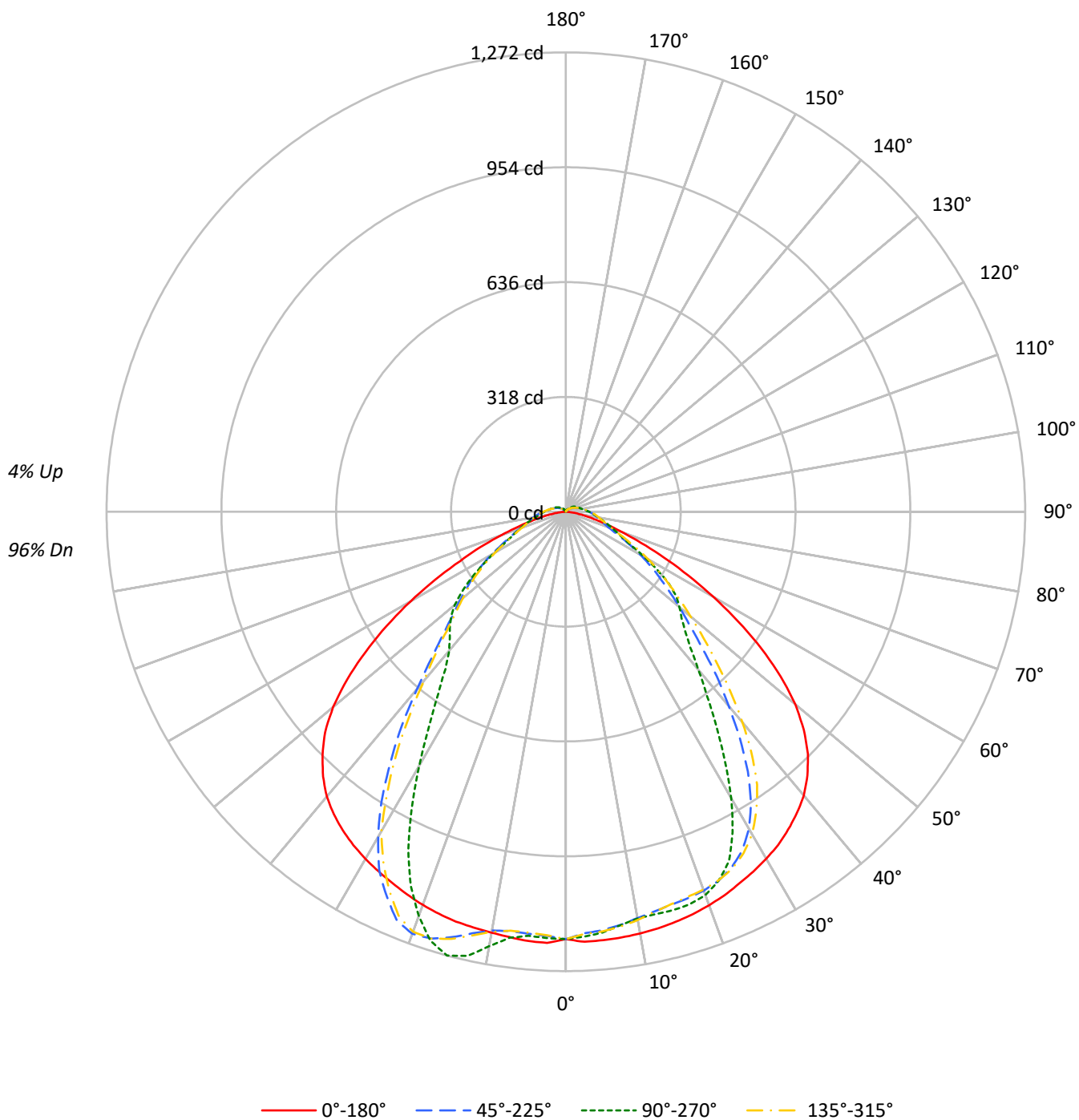
Lumens per Lamp: N/A
Luminaire Lumens: 2821.0 lumens
Efficiency: N/A
Efficacy: 134.3 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 21
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

TEST NUMBER: P1214092

CATALOG NUMBER: 4SNLED-LD5-30SL-LC-UNV-L950-CD1-U

Luminous Intensity Polar Plot



TEST NUMBER: P1214092

CATALOG NUMBER: 4SNLED-LD5-30SL-LC-UNV-L950-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	9562	9562	9562	9562
5°	9632	9184	9652	9255
10°	9677	8801	9657	9399
15°	9752	8684	9747	9669
20°	9859	8546	9849	9009
25°	9981	8107	9976	7834
30°	10169	7026	10174	6225
35°	10367	5682	10397	4808
40°	10543	4575	10587	4030
45°	10506	3875	10560	3773
50°	10053	3567	10195	3488
55°	8919	3206	9143	2915
60°	7235	2454	7619	2251
65°	5378	1878	5794	1781
70°	3658	1621	4123	1549
75°	2394	1463	2785	1384
80°	1546	1364	1811	1254
85°	792	1360	1045	1243

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 10560 cd/sqm

TEST NUMBER: P1214092

CATALOG NUMBER: 4SNLED-LD5-30SL-LC-UNV-L950-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.4	4.0
10°-20°	334.4	11.9
20°-30°	508.4	18.0
30°-40°	545.4	19.3
40°-50°	473.4	16.8
50°-60°	350.8	12.4
60°-70°	201.0	7.1
70°-80°	111.3	3.9
80°-90°	67.8	2.4
90°-100°	44.1	1.6
100°-110°	29.5	1.0
110°-120°	19.9	0.7
120°-130°	12.2	0.4
130°-140°	6.4	0.2
140°-150°	2.9	0.1
150°-160°	0.9	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	955.3	33.9
0°-40°	1500.7	53.2
0°-60°	2324.9	82.4
0°-90°	2705.0	95.9
90°-120°	93.5	3.3
90°-150°	115.1	4.1
90°-180°	116.0	4.1
0°-180°	2821.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1183	1183	1183	1183	1183	
5°	1191	1169	1193	1178	1191	113
15°	1175	1142	1175	1272	1175	333
25°	1136	1068	1135	1032	1136	525
35°	1074	727	1077	616	1074	672
45°	948	466	953	454	948	726
55°	661	350	678	318	661	586
65°	300	177	323	168	300	303
75°	86	112	100	106	86	98
85°	12	78	15	71	12	15
90°	0	65	1	60	0	1
95°	1	53	0	51	1	0
105°	1	40	1	38	1	1
115°	1	32	1	29	1	1
125°	1	24	1	20	1	1
135°	1	15	1	13	1	0
145°	1	9	1	7	1	0
155°	1	4	1	4	1	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

TEST NUMBER: P1214092

CATALOG NUMBER: 4SNLED-LD5-30SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3
2.5°	1191.9	1188.8	1187.6	1185.2	1187.0	1194.3	1189.5	1181.5	1182.1	1168.1	1175.4
5°	1190.7	1187.0	1185.2	1182.7	1183.9	1190.7	1185.8	1177.8	1177.2	1163.2	1169.9
7.5°	1188.8	1185.2	1182.1	1180.3	1180.9	1186.4	1180.3	1171.1	1169.3	1154.0	1160.1
10°	1185.8	1183.3	1179.1	1176.0	1175.4	1181.5	1171.7	1162.6	1158.3	1142.4	1148.5
12.5°	1181.5	1177.8	1173.6	1168.1	1167.4	1171.1	1163.2	1150.3	1146.1	1133.2	1139.9
15°	1175.4	1171.1	1166.2	1160.1	1157.1	1159.5	1149.7	1138.1	1137.5	1126.5	1135.7
17.5°	1168.7	1162.6	1157.1	1148.5	1144.2	1146.1	1138.1	1127.7	1128.9	1122.2	1132.6
20°	1159.5	1152.8	1144.2	1135.7	1129.5	1132.6	1127.1	1119.2	1121.0	1116.1	1125.3
22.5°	1149.1	1139.9	1129.5	1119.8	1114.9	1119.2	1114.9	1108.2	1108.8	1105.7	1111.2
25°	1135.7	1125.3	1113.0	1100.8	1098.4	1101.4	1099.0	1093.5	1091.0	1086.2	1088.6
27.5°	1123.4	1111.8	1096.5	1083.7	1079.4	1085.5	1080.0	1070.9	1064.1	1057.4	1052.5
30°	1109.4	1095.3	1078.2	1063.5	1059.9	1062.3	1054.4	1040.3	1022.6	1014.0	1000.6
32.5°	1094.1	1075.8	1054.4	1037.9	1035.4	1033.6	1018.9	998.7	971.2	954.1	933.3
35°	1073.9	1053.8	1028.1	1007.9	1004.2	993.9	970.0	943.1	907.7	878.3	842.9
37.5°	1051.3	1027.5	1000.6	973.7	963.3	942.5	908.9	880.8	827.0	791.5	748.8
40°	1025.6	996.9	963.9	931.5	914.4	880.8	842.3	800.7	748.8	701.1	665.0
42.5°	990.2	959.6	920.5	884.4	855.1	810.5	765.3	706.6	658.9	618.6	581.9
45°	948.0	911.3	866.1	822.7	785.4	732.3	679.1	620.4	580.7	533.6	508.5
47.5°	893.6	853.9	805.6	757.3	708.4	649.7	594.1	537.9	498.2	464.5	446.2
50°	829.4	792.8	739.6	682.1	628.3	567.2	511.6	469.4	430.9	410.1	396.1
52.5°	750.0	715.7	661.3	599.0	547.0	487.1	436.4	402.2	374.7	359.4	354.5
55°	661.3	631.4	577.6	519.5	466.4	411.4	372.8	342.9	325.2	316.0	316.6
57.5°	566.6	543.4	492.6	440.7	390.6	349.0	314.2	290.3	276.9	276.3	278.1
60°	471.9	454.8	410.7	366.1	322.1	288.5	262.8	246.3	237.8	238.4	237.8
62.5°	381.4	365.5	333.7	297.1	262.2	239.6	216.4	209.7	202.3	201.7	201.7
65°	300.1	287.9	262.2	235.9	209.7	195.0	183.4	175.4	169.9	168.7	169.3
67.5°	225.5	220.7	202.9	185.2	168.7	159.5	149.8	147.9	143.6	143.6	144.9
70°	168.1	164.4	154.6	144.2	137.5	131.4	126.5	126.5	125.9	125.3	128.4
72.5°	121.6	122.2	119.2	111.2	110.6	109.4	108.2	110.0	110.6	112.5	116.1
75°	85.6	87.4	87.4	86.2	88.6	91.7	93.5	96.6	100.2	102.7	107.0
77.5°	60.5	60.5	63.6	67.2	72.1	77.6	82.5	86.8	91.7	94.7	98.4
80°	39.1	41.0	45.8	52.6	59.3	66.6	73.3	78.8	83.7	88.6	91.1
82.5°	23.2	26.3	32.4	41.0	49.5	58.7	65.4	72.1	77.6	82.5	84.3
85°	11.6	15.9	23.2	32.4	41.6	51.3	59.9	66.0	72.1	76.4	78.8
87.5°	3.7	8.6	16.5	25.1	34.8	44.6	53.8	60.5	66.0	69.7	72.1
90°	0.0	4.3	11.6	20.8	30.0	39.7	48.3	55.6	61.1	64.2	66.0
92.5°	0.0	2.4	9.2	17.1	25.7	35.5	44.0	50.7	55.6	58.7	59.9
95°	0.6	1.8	6.7	14.1	22.6	31.8	39.7	45.8	50.7	53.8	54.4
97.5°	0.6	1.2	5.5	11.6	19.6	28.1	36.1	42.2	45.8	48.9	49.5
100°	0.6	1.2	4.3	10.4	17.1	25.1	32.4	37.9	42.2	44.6	45.2
102.5°	0.6	0.6	3.7	8.6	15.3	22.0	28.7	34.2	37.9	40.3	41.6
105°	0.6	0.6	3.1	7.3	13.4	19.6	25.7	31.2	34.2	36.7	37.9
107.5°	0.6	0.6	2.4	6.1	11.6	17.1	23.2	27.5	31.2	33.6	34.8
110°	0.6	0.6	1.8	5.5	9.8	15.3	20.2	24.4	28.1	30.6	31.8

TEST NUMBER: P1214092

CATALOG NUMBER: 4SNLED-LD5-30SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.6	0.6	1.8	4.9	8.6	13.4	17.7	22.0	25.1	27.5	29.3
115°	0.6	0.6	1.8	4.3	7.9	11.6	15.9	19.6	22.6	25.1	26.9
117.5°	0.6	0.6	1.8	3.7	6.7	10.4	14.1	17.7	20.2	22.6	24.4
120°	0.6	0.6	1.2	3.1	6.1	9.2	12.2	15.3	18.3	20.8	22.6
122.5°	0.6	0.6	1.2	3.1	4.9	7.9	11.0	13.4	16.5	18.3	20.2
125°	0.6	0.6	1.2	2.4	4.3	7.3	9.8	12.2	14.1	16.5	18.3
127.5°	0.6	0.6	1.2	2.4	3.7	6.1	8.6	11.0	12.8	14.7	15.9
130°	0.6	0.6	1.2	1.8	3.1	4.9	7.3	9.2	11.6	12.8	14.1
132.5°	0.6	0.6	0.6	1.8	2.4	3.7	5.5	7.9	9.8	11.6	12.2
135°	0.6	0.6	0.6	1.2	2.4	3.1	4.3	6.1	7.9	9.8	11.0
137.5°	0.6	0.6	0.6	1.2	1.8	3.1	3.7	4.9	6.7	7.9	9.8
140°	0.6	0.6	0.6	1.2	1.8	2.4	3.1	4.3	5.5	6.7	7.9
142.5°	0.6	0.6	0.6	1.2	1.2	1.8	2.4	3.7	4.3	5.5	6.7
145°	0.6	0.6	0.6	1.2	1.2	1.8	2.4	3.1	3.7	4.3	5.5
147.5°	0.6	0.6	0.6	1.2	1.2	1.2	1.8	2.4	3.1	3.7	4.3
150°	1.2	1.2	1.2	1.2	1.2	1.2	1.8	1.8	2.4	3.1	3.7
152.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.8	1.8	1.8	2.4	3.1
155°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.8	1.8	2.4	2.4
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214092

CATALOG NUMBER: 4SNLED-LD5-30SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3
2.5°	1172.9	1174.2	1181.5	1180.9	1179.7	1178.4	1178.4	1177.2	1178.4	1181.5	1180.3
5°	1166.8	1168.7	1174.2	1173.6	1172.3	1171.7	1171.1	1169.3	1170.5	1174.8	1173.6
7.5°	1155.8	1157.7	1162.6	1160.1	1158.3	1159.5	1156.4	1154.6	1157.1	1161.3	1160.7
10°	1144.2	1145.4	1151.6	1150.3	1147.3	1147.9	1144.8	1143.6	1146.7	1149.1	1149.7
12.5°	1136.3	1140.6	1146.1	1145.4	1144.8	1145.4	1142.4	1141.2	1143.0	1145.4	1144.8
15°	1134.4	1139.9	1146.1	1146.1	1146.7	1147.3	1144.2	1142.4	1144.2	1146.1	1145.4
17.5°	1132.6	1139.3	1144.8	1144.2	1144.8	1146.1	1141.2	1139.9	1142.4	1144.8	1143.6
20°	1126.5	1132.6	1136.3	1135.1	1135.1	1135.7	1129.5	1129.5	1133.2	1135.1	1135.7
22.5°	1109.4	1116.7	1116.7	1113.7	1113.7	1111.2	1109.4	1105.7	1110.0	1113.0	1115.5
25°	1083.7	1086.8	1083.1	1076.4	1072.7	1069.6	1061.1	1068.4	1068.4	1077.6	1080.7
27.5°	1047.6	1040.9	1030.5	1016.5	1013.4	1003.6	998.1	1000.0	1003.0	1015.9	1025.6
30°	988.4	968.2	950.5	944.3	930.9	921.1	911.3	916.2	921.7	929.1	949.2
32.5°	910.1	890.6	861.8	851.4	837.4	825.2	813.5	820.9	830.7	835.5	857.6
35°	820.3	797.0	770.8	753.0	738.4	731.6	717.0	727.4	737.8	741.4	760.4
37.5°	724.9	701.1	677.9	662.6	648.5	644.2	634.5	641.8	649.7	655.2	671.1
40°	634.5	612.5	594.7	584.3	574.6	570.9	567.2	570.3	576.4	580.7	592.9
42.5°	556.8	539.1	526.9	520.8	514.0	509.2	509.8	511.0	514.0	523.2	528.7
45°	489.0	478.6	470.6	469.4	465.1	464.5	463.9	466.4	468.2	473.7	478.0
47.5°	434.6	430.3	428.5	430.9	432.7	430.3	431.5	434.6	438.3	438.3	437.6
50°	391.8	393.0	395.5	401.0	404.6	405.9	407.1	410.7	411.4	412.6	410.7
52.5°	357.0	358.2	364.9	373.5	377.7	379.6	382.0	385.7	385.7	386.9	384.5
55°	321.5	323.3	330.1	338.6	342.3	344.7	347.2	349.6	351.5	353.9	352.1
57.5°	282.4	287.9	292.2	294.6	297.1	298.9	300.7	301.3	305.0	305.6	308.7
60°	240.8	242.0	246.3	245.7	243.9	248.8	246.3	250.6	254.9	260.4	261.0
62.5°	201.1	201.7	204.8	203.5	206.0	205.4	207.2	207.2	210.3	212.7	215.8
65°	169.9	170.5	173.0	173.0	172.4	174.2	176.0	177.3	177.3	179.1	181.5
67.5°	146.7	148.5	151.0	152.2	153.4	153.4	155.3	155.9	157.1	157.7	158.9
70°	130.8	133.2	135.7	136.9	137.5	138.7	139.4	139.4	140.6	141.2	142.4
72.5°	119.2	121.6	123.5	123.5	124.7	125.3	125.3	125.9	126.5	127.7	129.0
75°	109.4	111.2	112.5	111.9	111.9	111.9	112.5	112.5	113.7	114.9	116.1
77.5°	100.2	102.1	102.1	100.9	100.9	100.9	100.9	101.5	102.1	103.3	104.5
80°	93.5	93.5	92.9	92.9	91.7	91.1	91.1	91.7	91.7	92.9	94.7
82.5°	86.2	86.2	85.6	85.0	84.3	83.7	83.7	84.3	85.0	85.6	86.8
85°	79.5	79.5	78.2	78.2	77.6	77.6	77.6	77.6	78.2	78.8	80.1
87.5°	72.7	72.1	71.5	70.9	70.9	70.9	70.9	70.9	71.5	72.7	73.3
90°	66.0	65.4	64.8	64.8	64.2	64.2	64.8	64.8	65.4	66.0	66.6
92.5°	59.9	59.3	58.7	58.7	58.1	58.1	58.7	58.1	59.3	59.3	59.9
95°	54.4	53.8	53.2	53.2	53.2	53.2	53.2	53.2	53.8	53.8	54.4
97.5°	49.5	48.9	48.3	48.3	48.9	48.3	48.9	48.9	48.9	49.5	50.1
100°	45.2	44.6	44.6	45.2	44.6	44.6	45.2	45.2	45.2	45.2	45.8
102.5°	41.6	41.6	41.6	41.6	41.6	41.6	42.2	42.2	42.2	42.2	42.8
105°	37.9	38.5	38.5	38.5	39.1	39.1	39.1	39.7	39.7	39.7	39.7
107.5°	35.5	36.1	36.1	36.7	36.7	37.3	37.3	37.3	37.3	37.9	37.9
110°	33.0	33.6	34.2	34.8	34.8	35.5	35.5	35.5	35.5	35.5	35.5

TEST NUMBER: P1214092

CATALOG NUMBER: 4SNLED-LD5-30SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	30.6	31.2	31.8	33.0	33.6	33.6	33.6	33.6	34.2	34.2	33.6
115°	28.1	29.3	30.0	31.2	31.8	31.8	32.4	32.4	32.4	32.4	31.8
117.5°	25.7	27.5	28.1	29.3	30.0	30.0	30.6	30.6	30.6	30.6	30.0
120°	23.8	25.1	26.3	26.9	27.5	28.1	28.1	28.7	28.7	28.7	28.1
122.5°	22.0	23.2	24.4	25.1	25.7	26.3	26.3	26.3	26.3	26.3	26.3
125°	19.6	20.8	22.0	22.6	23.2	23.8	23.8	24.4	24.4	24.4	23.8
127.5°	17.7	18.9	19.6	20.8	21.4	21.4	22.0	22.0	22.0	22.0	21.4
130°	15.3	16.5	17.7	18.3	18.9	18.9	19.6	19.6	19.6	19.6	19.6
132.5°	13.4	14.7	15.3	16.5	16.5	17.1	17.1	17.7	17.7	17.7	17.1
135°	12.2	12.8	13.4	14.7	14.7	15.3	15.3	15.3	15.3	15.3	15.3
137.5°	11.0	11.6	12.2	12.8	12.8	13.4	13.4	13.4	13.4	14.1	13.4
140°	9.2	10.4	11.0	11.0	11.6	11.6	11.6	12.2	12.2	12.2	11.6
142.5°	7.9	8.6	9.2	9.8	10.4	10.4	10.4	10.4	11.0	10.4	10.4
145°	6.1	7.3	7.9	8.6	9.2	9.2	9.2	9.2	9.2	9.2	9.2
147.5°	4.9	5.5	6.7	7.3	7.3	7.9	7.9	7.9	7.9	7.9	7.9
150°	4.3	4.3	5.5	6.1	6.7	6.7	6.7	6.7	6.7	6.7	6.7
152.5°	3.1	3.7	4.3	4.9	5.5	5.5	5.5	5.5	5.5	5.5	5.5
155°	3.1	3.1	3.7	3.7	4.3	4.3	4.3	4.3	4.9	4.3	4.3
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214092

CATALOG NUMBER: 4SNLED-LD5-30SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3
2.5°	1178.4	1177.8	1180.3	1177.8	1165.6	1170.5	1168.7	1175.4	1176.0	1177.8	1183.9
5°	1172.3	1172.3	1175.4	1172.9	1161.3	1166.2	1165.6	1172.3	1173.6	1174.8	1181.5
7.5°	1160.1	1160.7	1165.0	1163.2	1150.9	1158.3	1157.7	1165.6	1168.1	1170.5	1176.6
10°	1148.5	1147.9	1152.8	1150.9	1139.3	1147.9	1147.3	1155.2	1158.9	1163.2	1170.5
12.5°	1142.4	1140.6	1142.4	1140.6	1127.7	1134.4	1135.1	1144.2	1148.5	1154.0	1162.6
15°	1142.4	1139.3	1139.3	1135.7	1121.0	1125.3	1125.9	1132.0	1137.5	1143.0	1153.4
17.5°	1141.2	1138.1	1137.5	1134.4	1118.5	1118.5	1117.9	1122.2	1125.3	1130.8	1141.8
20°	1134.4	1133.2	1132.6	1130.8	1116.1	1113.7	1112.4	1112.4	1114.3	1116.1	1127.1
22.5°	1116.7	1117.9	1119.2	1120.4	1108.8	1104.5	1105.1	1103.9	1102.0	1102.0	1111.2
25°	1083.7	1089.8	1094.7	1100.2	1093.5	1090.4	1094.1	1092.3	1089.2	1086.8	1094.7
27.5°	1031.1	1044.0	1054.4	1067.8	1068.4	1066.0	1075.8	1074.5	1073.9	1070.3	1076.4
30°	958.4	978.6	992.6	1012.2	1028.7	1031.1	1047.6	1050.1	1052.5	1050.7	1056.8
32.5°	870.4	897.9	921.7	952.3	968.2	982.2	1005.5	1015.3	1025.0	1028.1	1034.8
35°	774.4	805.6	833.7	867.3	892.4	923.0	951.1	965.7	987.7	996.3	1006.1
37.5°	683.4	712.7	740.2	773.8	814.2	845.9	880.8	913.8	943.7	956.0	970.6
40°	602.7	626.5	652.8	682.1	718.8	760.4	798.3	844.1	879.6	904.0	925.4
42.5°	541.5	553.2	575.8	602.1	631.4	673.6	712.1	763.4	806.2	841.1	876.5
45°	487.1	492.6	509.2	523.2	553.2	590.4	631.4	681.5	726.1	770.8	813.5
47.5°	440.7	447.4	455.4	463.9	485.3	516.5	551.9	597.2	641.8	693.7	742.6
50°	409.5	411.4	412.6	416.2	429.1	450.5	479.2	517.7	560.5	616.1	668.1
52.5°	382.0	382.0	378.4	376.5	381.4	394.9	411.4	438.9	482.9	534.2	589.2
55°	352.7	347.2	346.0	339.8	341.1	347.2	355.1	376.5	412.6	456.6	509.8
57.5°	311.7	309.3	309.3	306.8	301.9	305.0	306.8	322.1	347.8	385.7	432.1
60°	264.7	263.4	266.5	267.1	262.8	264.7	264.1	273.2	291.6	322.1	360.6
62.5°	217.6	223.1	223.7	226.2	223.7	223.1	226.2	234.1	243.3	266.5	296.4
65°	182.8	185.8	186.4	189.5	188.3	188.3	190.7	196.8	202.3	218.2	241.4
67.5°	160.1	158.9	159.5	161.4	159.5	158.9	160.8	164.4	168.7	178.5	195.0
70°	142.4	141.2	141.2	141.2	138.7	136.9	137.5	138.7	140.6	146.1	156.5
72.5°	129.0	129.0	127.1	125.3	123.5	122.2	121.0	119.8	119.2	121.0	126.5
75°	116.7	117.4	116.7	114.9	112.5	110.0	107.6	105.1	102.1	100.9	101.5
77.5°	105.7	106.4	107.0	106.4	103.9	100.9	97.2	93.5	89.2	85.0	82.5
80°	96.0	97.2	97.8	97.2	95.4	92.9	88.6	84.3	78.2	72.7	66.6
82.5°	87.4	89.2	89.9	89.9	88.6	86.2	81.3	76.4	69.7	62.3	54.4
85°	80.7	81.9	83.1	83.1	82.5	80.1	75.2	69.7	63.0	54.4	45.8
87.5°	74.0	74.6	75.8	77.0	75.8	73.3	69.1	63.0	56.2	47.7	37.9
90°	67.2	67.8	69.1	70.3	69.7	67.2	63.6	58.1	50.7	41.6	31.8
92.5°	60.5	61.7	62.3	63.0	63.6	61.7	58.7	53.2	45.8	36.7	27.5
95°	55.6	55.6	56.8	57.5	58.1	56.2	53.8	48.3	41.6	33.0	23.8
97.5°	50.7	50.7	52.0	52.0	52.6	51.3	48.9	44.0	37.3	29.3	20.2
100°	45.8	46.5	47.1	47.7	47.7	47.1	44.6	39.7	33.6	26.3	17.7
102.5°	42.8	42.8	43.4	43.4	44.0	42.8	40.3	36.1	30.0	23.2	15.3
105°	39.7	39.7	40.3	40.3	39.7	38.5	36.1	32.4	26.9	20.2	13.4
107.5°	37.3	37.3	37.3	37.3	36.7	35.5	33.0	28.7	23.8	18.3	12.2
110°	35.5	34.8	34.8	34.2	33.6	31.8	29.3	25.7	21.4	15.9	10.4

TEST NUMBER: P1214092

CATALOG NUMBER: 4SNLED-LD5-30SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	33.6	33.0	32.4	31.8	30.6	28.7	26.3	23.2	18.9	14.1	9.2
115°	31.8	31.2	30.6	29.3	28.1	26.3	23.8	20.8	16.5	12.2	7.9
117.5°	30.0	29.3	28.1	26.9	25.7	23.8	21.4	18.3	14.7	11.0	7.3
120°	27.5	26.9	26.3	25.1	23.8	21.4	18.9	16.5	12.8	9.8	6.1
122.5°	25.7	25.1	23.8	23.2	21.4	19.6	17.1	14.7	11.6	8.6	5.5
125°	23.2	22.6	22.0	20.8	19.6	17.1	15.3	12.8	10.4	7.3	4.3
127.5°	21.4	20.8	19.6	18.3	17.1	15.3	13.4	11.6	9.2	6.1	4.3
130°	18.9	18.3	17.7	16.5	15.3	13.4	12.2	9.8	7.9	5.5	3.7
132.5°	16.5	16.5	15.9	14.7	13.4	12.2	10.4	8.6	6.7	4.9	3.1
135°	15.3	14.7	14.1	12.8	12.2	10.4	9.2	7.3	5.5	4.3	2.4
137.5°	13.4	12.8	12.2	11.6	10.4	9.2	7.9	6.1	4.9	3.7	2.4
140°	11.6	11.0	11.0	9.8	9.2	7.9	6.7	5.5	4.3	3.1	1.8
142.5°	10.4	9.8	9.2	8.6	7.9	6.7	5.5	4.3	3.7	2.4	1.8
145°	9.2	8.6	7.9	7.3	6.7	5.5	4.9	3.7	3.1	2.4	1.8
147.5°	7.3	7.3	6.7	6.1	5.5	4.9	4.3	3.7	2.4	1.8	1.2
150°	6.1	6.1	5.5	4.9	4.9	4.3	3.7	3.1	2.4	1.8	1.2
152.5°	5.5	4.9	4.9	4.3	4.3	3.7	3.1	2.4	1.8	1.8	1.2
155°	4.3	4.3	4.3	3.7	3.7	3.1	2.4	2.4	1.8	1.2	1.2
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214092

CATALOG NUMBER: 4SNLED-LD5-30SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3
2.5°	1185.2	1177.8	1183.9	1195.0	1193.7	1192.5	1191.3	1193.7	1201.7	1197.4	1190.7
5°	1183.3	1176.0	1182.7	1193.1	1192.5	1190.7	1189.5	1191.9	1199.8	1195.6	1188.2
7.5°	1179.7	1172.9	1177.8	1188.2	1188.2	1187.0	1185.8	1188.2	1195.6	1191.9	1184.6
10°	1173.6	1168.7	1173.6	1183.3	1183.9	1181.5	1180.3	1183.3	1190.7	1188.8	1182.7
12.5°	1168.7	1163.8	1169.3	1179.1	1179.7	1177.2	1175.4	1179.1	1188.8	1190.1	1188.2
15°	1161.9	1157.7	1164.4	1174.8	1174.8	1172.9	1172.9	1177.8	1191.3	1196.8	1199.8
17.5°	1152.2	1149.1	1157.1	1167.4	1168.1	1166.8	1167.4	1177.2	1195.0	1208.4	1217.0
20°	1139.9	1138.7	1147.3	1158.3	1160.1	1160.7	1163.8	1178.4	1202.9	1221.2	1229.8
22.5°	1125.3	1125.9	1135.7	1147.3	1149.7	1151.6	1157.7	1178.4	1209.0	1228.6	1232.2
25°	1108.8	1110.6	1121.0	1135.1	1138.1	1141.8	1152.2	1179.1	1210.8	1223.7	1217.6
27.5°	1091.0	1094.7	1108.2	1122.8	1126.5	1132.6	1146.1	1175.4	1202.3	1202.9	1180.3
30°	1072.7	1077.0	1092.9	1110.0	1116.1	1122.2	1138.7	1166.8	1181.5	1161.9	1122.2
32.5°	1051.9	1058.0	1073.9	1094.7	1102.0	1110.0	1126.5	1150.3	1144.8	1102.7	1045.8
35°	1025.6	1034.2	1052.5	1077.0	1083.7	1094.1	1105.7	1111.2	1086.8	1026.9	962.7
37.5°	993.2	1006.1	1027.5	1055.6	1062.9	1069.6	1072.7	1057.4	1008.5	943.7	877.1
40°	956.0	975.5	998.7	1029.9	1037.3	1037.3	1026.3	993.9	932.1	847.2	773.2
42.5°	910.7	934.6	963.9	995.1	1002.4	993.9	967.6	910.7	840.4	745.7	667.5
45°	855.7	887.5	920.5	952.9	956.6	937.6	890.6	818.4	731.6	643.6	569.1
47.5°	790.3	831.9	867.9	904.6	899.7	867.9	805.0	723.1	631.4	548.3	488.4
50°	717.0	765.9	806.2	841.1	830.7	786.7	712.7	627.1	536.0	465.1	415.6
52.5°	638.7	695.0	735.3	763.4	749.4	696.8	615.5	533.6	459.0	394.2	361.2
55°	557.4	614.3	655.8	677.9	659.5	602.7	522.6	448.0	377.7	335.6	316.0
57.5°	478.6	531.8	570.9	588.6	565.4	508.5	434.6	371.6	320.9	285.4	275.7
60°	402.8	446.2	483.5	496.9	471.9	419.3	355.7	305.6	268.3	243.9	239.0
62.5°	332.5	368.0	397.3	407.7	383.2	342.3	287.3	250.0	223.7	211.5	205.4
65°	274.4	295.2	325.2	323.3	308.7	270.8	230.4	204.2	187.0	179.1	175.4
67.5°	215.8	234.7	253.7	256.1	237.8	211.5	185.2	166.3	157.1	152.8	151.0
70°	166.9	180.9	192.5	189.5	179.7	163.2	146.7	136.3	132.6	130.8	130.8
72.5°	129.6	136.9	142.4	138.7	132.6	124.1	116.1	111.9	112.5	113.7	114.9
75°	100.2	102.1	103.3	99.6	98.4	92.9	92.3	92.9	96.6	100.2	102.1
77.5°	77.0	74.6	72.7	69.1	69.7	69.1	72.1	77.0	82.5	88.0	92.9
80°	59.3	53.8	49.5	45.8	47.7	50.7	56.8	64.2	71.5	77.6	83.7
82.5°	45.8	37.9	31.8	28.1	31.8	36.7	44.6	53.8	62.3	69.1	75.8
85°	35.5	26.3	18.9	15.3	18.9	26.3	34.8	45.2	54.4	61.7	68.5
87.5°	27.5	18.9	10.4	6.1	10.4	18.3	28.1	37.9	47.1	55.6	62.3
90°	22.0	12.8	4.9	1.2	5.5	12.8	22.0	31.8	41.0	50.1	56.8
92.5°	17.7	9.2	2.4	0.0	3.1	9.8	18.3	27.5	36.7	45.2	52.0
95°	14.7	7.3	1.8	0.0	2.4	7.3	14.7	23.8	32.4	41.0	46.5
97.5°	12.2	5.5	1.2	0.0	1.2	6.1	12.2	20.2	28.7	36.7	42.2
100°	10.4	4.9	1.2	0.0	1.2	4.9	10.4	17.7	25.1	32.4	37.9
102.5°	8.6	3.7	0.6	0.6	0.6	3.7	9.2	15.3	22.0	28.7	34.2
105°	7.9	3.1	0.6	0.6	0.6	3.1	7.9	13.4	19.6	25.7	30.6
107.5°	6.7	2.4	0.6	0.6	0.6	2.4	6.7	11.6	17.7	23.2	27.5
110°	5.5	2.4	0.6	0.6	0.6	2.4	5.5	10.4	15.3	20.2	24.4

TEST NUMBER: P1214092

CATALOG NUMBER: 4SNLED-LD5-30SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	4.9	1.8	0.6	0.6	0.6	1.8	4.9	9.2	13.4	18.3	22.0
115°	4.3	1.8	0.6	0.6	0.6	1.8	4.3	7.9	11.6	15.9	19.6
117.5°	3.7	1.8	0.6	0.6	0.6	1.2	3.7	6.7	10.4	14.1	17.7
120°	3.1	1.2	0.6	0.6	0.6	1.2	3.1	6.1	9.2	12.2	15.3
122.5°	3.1	1.2	0.6	0.6	0.6	1.2	2.4	4.9	7.9	10.4	13.4
125°	2.4	1.2	0.6	0.6	0.6	0.6	2.4	4.3	6.7	9.2	11.6
127.5°	2.4	1.2	0.6	0.6	0.6	0.6	1.8	3.7	5.5	7.9	10.4
130°	1.8	1.2	0.6	0.6	0.6	0.6	1.2	3.1	4.9	6.7	8.6
132.5°	1.8	1.2	0.6	0.6	0.6	0.6	1.2	2.4	3.7	5.5	7.3
135°	1.8	0.6	0.6	0.6	0.6	0.6	0.6	1.8	3.1	4.3	5.5
137.5°	1.2	0.6	0.6	0.6	0.6	0.6	0.6	1.2	2.4	3.1	4.9
140°	1.2	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.8	2.4	3.7
142.5°	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.8	3.1
145°	1.2	0.6	0.6	1.2	1.2	0.6	0.6	1.2	1.2	1.8	2.4
147.5°	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.2	1.8
150°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.8
152.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
155°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214092

CATALOG NUMBER: 4SNLED-LD5-30SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3
2.5°	1189.5	1175.4	1182.7	1180.3	1182.7	1188.8	1188.2	1186.4	1187.6	1184.6	1181.5
5°	1187.0	1172.9	1180.3	1177.2	1180.3	1186.4	1185.2	1183.3	1185.2	1181.5	1178.4
7.5°	1183.9	1171.1	1179.7	1179.1	1184.6	1192.5	1193.1	1193.1	1197.4	1191.9	1189.5
10°	1183.9	1177.2	1188.8	1193.1	1207.2	1217.6	1218.8	1221.2	1228.6	1227.3	1221.2
12.5°	1196.8	1195.6	1212.7	1223.1	1235.9	1250.6	1258.5	1261.0	1265.9	1262.2	1259.7
15°	1213.3	1219.4	1238.3	1250.0	1264.0	1275.0	1276.9	1278.1	1281.7	1276.2	1272.0
17.5°	1235.3	1239.0	1254.2	1259.1	1268.3	1270.1	1267.7	1261.6	1261.6	1249.4	1245.7
20°	1245.7	1243.8	1250.0	1242.0	1238.3	1227.3	1217.0	1205.3	1204.7	1191.9	1190.7
22.5°	1236.5	1224.3	1211.5	1191.9	1183.3	1167.4	1153.4	1146.7	1142.4	1125.9	1121.6
25°	1204.1	1174.2	1155.2	1132.0	1111.2	1092.9	1079.4	1065.4	1051.9	1038.5	1032.4
27.5°	1147.9	1119.8	1089.2	1056.8	1028.1	1000.0	977.4	963.3	950.5	932.7	923.6
30°	1078.8	1039.7	1006.1	974.9	927.8	893.6	874.7	846.6	836.8	828.8	811.7
32.5°	997.5	950.5	904.6	862.4	814.2	782.4	757.3	736.5	730.4	709.6	704.7
35°	907.7	845.9	794.0	752.4	717.6	679.1	658.3	644.2	632.0	618.0	615.5
37.5°	801.9	746.3	687.6	651.0	623.5	590.4	574.6	564.8	559.3	548.9	547.0
40°	695.6	640.0	599.6	562.9	545.8	528.1	516.5	512.2	509.8	506.1	502.4
42.5°	599.0	550.1	521.4	496.9	489.6	481.0	478.0	480.4	478.0	476.8	476.1
45°	517.1	479.8	459.6	452.3	450.5	448.0	450.5	454.8	455.4	454.1	454.1
47.5°	442.5	424.8	416.2	417.5	420.5	422.4	426.6	432.1	433.4	430.3	431.5
50°	393.6	383.2	381.4	386.3	393.0	395.5	400.4	404.6	404.0	402.8	401.6
52.5°	347.8	344.7	349.6	354.5	361.8	363.1	364.9	366.7	366.1	363.7	362.5
55°	309.3	311.7	316.0	317.8	323.3	322.7	323.3	323.3	320.9	319.7	317.8
57.5°	274.4	275.1	277.5	278.1	281.2	279.9	279.3	278.1	274.4	273.8	272.0
60°	239.0	237.8	243.3	239.0	241.4	239.0	238.4	235.3	231.7	231.0	229.8
62.5°	205.4	202.9	206.6	204.8	206.0	203.5	202.3	198.6	195.6	195.0	194.4
65°	175.4	174.2	177.9	177.3	178.5	175.4	174.2	171.8	169.3	168.7	168.1
67.5°	150.4	153.4	155.3	155.3	156.5	155.9	152.8	152.2	151.6	149.1	149.1
70°	132.0	133.9	137.5	138.1	137.5	138.7	136.3	135.7	135.1	133.9	133.2
72.5°	117.4	119.8	123.5	124.1	123.5	123.5	122.2	121.6	121.6	119.8	119.8
75°	105.7	108.8	111.9	111.9	111.9	110.6	109.4	109.4	108.2	107.6	106.4
77.5°	96.0	99.6	102.1	101.5	100.9	99.6	99.6	97.8	96.0	96.0	94.7
80°	88.6	91.1	92.9	92.3	91.7	89.9	89.2	87.4	86.2	84.3	84.3
82.5°	80.7	83.7	85.0	84.3	83.1	81.3	80.7	79.5	78.2	77.6	76.4
85°	74.0	77.0	77.6	76.4	75.2	74.0	73.3	72.7	72.1	70.9	70.9
87.5°	67.2	70.3	70.3	69.7	68.5	67.8	67.2	66.6	66.0	65.4	64.8
90°	61.7	64.2	64.2	63.6	63.0	62.3	61.7	61.1	60.5	59.9	59.9
92.5°	56.2	58.7	58.7	58.1	57.5	56.8	56.8	56.2	55.6	55.0	54.4
95°	51.3	53.8	53.8	53.8	53.2	52.6	52.6	52.0	51.3	51.3	50.7
97.5°	46.5	48.9	48.9	48.9	48.3	47.7	47.7	47.1	47.1	47.1	46.5
100°	42.2	44.0	44.6	44.6	44.0	44.0	44.0	43.4	43.4	43.4	42.8
102.5°	37.9	39.7	41.0	41.0	41.0	40.3	40.3	40.3	40.3	40.3	39.7
105°	34.2	36.1	37.3	37.9	37.9	37.9	37.9	37.9	37.9	37.9	37.9
107.5°	31.2	33.0	34.2	34.8	35.5	35.5	36.1	36.1	36.1	36.1	36.1
110°	28.1	30.0	31.8	32.4	33.0	33.6	33.6	34.2	33.6	33.6	33.6

TEST NUMBER: P1214092

CATALOG NUMBER: 4SNLED-LD5-30SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	25.1	27.5	28.7	30.0	30.6	31.2	31.8	31.8	31.8	31.8	31.8
115°	22.6	25.1	26.3	27.5	28.7	29.3	29.3	30.0	30.0	30.0	29.3
117.5°	20.2	22.6	23.8	25.1	25.7	26.9	27.5	27.5	27.5	27.5	26.9
120°	18.3	20.2	21.4	22.6	23.8	24.4	25.1	25.1	25.1	25.1	25.1
122.5°	15.9	17.7	19.6	20.8	21.4	22.0	22.6	22.6	22.6	22.6	22.6
125°	14.1	15.9	17.1	18.3	18.9	20.2	20.2	20.2	20.2	20.2	20.2
127.5°	12.2	14.1	15.3	16.5	17.1	17.7	18.3	18.3	18.3	18.3	18.3
130°	10.4	12.2	13.4	14.7	15.3	15.9	15.9	16.5	16.5	16.5	16.5
132.5°	9.2	10.4	11.6	12.8	13.4	14.1	14.1	14.7	14.7	14.7	14.7
135°	7.3	9.2	9.8	11.0	11.6	12.2	12.2	12.8	12.8	12.8	12.8
137.5°	6.1	7.3	8.6	9.8	10.4	10.4	11.0	11.0	11.6	11.6	11.6
140°	4.9	5.5	7.3	7.9	8.6	9.2	9.8	9.8	9.8	9.8	9.8
142.5°	3.7	4.9	5.5	6.7	7.3	7.9	8.6	8.6	8.6	8.6	8.6
145°	3.1	3.7	4.3	5.5	6.1	6.7	7.3	7.3	7.3	7.3	7.3
147.5°	2.4	3.1	3.7	4.3	4.9	5.5	6.1	6.1	6.1	6.1	6.1
150°	1.8	2.4	3.1	3.1	3.7	4.3	4.9	5.5	5.5	5.5	5.5
152.5°	1.8	1.8	2.4	2.4	3.1	3.7	4.3	4.3	4.3	4.3	4.3
155°	1.2	1.8	1.8	1.8	2.4	2.4	3.1	3.7	3.7	3.7	3.7
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214092

CATALOG NUMBER: 4SNLED-LD5-30SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3
2.5°	1183.3	1185.8	1184.6	1182.7	1182.1	1185.2	1182.1	1168.1	1173.6	1174.2	1178.4
5°	1181.5	1183.3	1182.1	1180.9	1179.1	1182.7	1179.1	1164.4	1169.9	1170.5	1174.8
7.5°	1193.7	1194.3	1194.3	1191.3	1186.4	1188.2	1183.3	1166.8	1169.9	1169.9	1172.9
10°	1224.3	1225.5	1227.3	1219.4	1213.3	1208.4	1201.7	1181.5	1180.9	1176.0	1176.0
12.5°	1264.0	1261.0	1257.9	1254.2	1249.4	1243.2	1233.5	1209.6	1201.7	1193.7	1185.8
15°	1275.6	1274.4	1273.8	1272.0	1268.9	1267.1	1259.7	1235.9	1224.3	1214.5	1200.5
17.5°	1245.1	1247.5	1255.5	1256.1	1259.7	1267.1	1265.9	1249.4	1239.0	1234.7	1217.6
20°	1190.1	1190.7	1200.5	1204.7	1220.6	1232.8	1242.0	1240.2	1237.7	1242.6	1229.8
22.5°	1124.0	1128.3	1138.7	1145.4	1160.7	1174.8	1189.5	1197.4	1210.2	1230.4	1228.0
25°	1034.2	1039.7	1054.4	1065.4	1086.8	1108.2	1127.7	1141.8	1157.1	1195.6	1208.4
27.5°	926.6	935.2	954.1	965.1	995.1	1017.1	1045.2	1072.7	1094.1	1138.1	1164.4
30°	813.5	820.9	841.1	856.3	882.0	912.0	947.4	986.5	1022.0	1066.6	1099.6
32.5°	707.8	715.7	732.3	745.7	774.4	799.5	838.6	886.9	919.9	981.6	1025.6
35°	615.5	622.8	634.5	646.1	669.9	695.6	729.2	776.3	818.4	882.6	938.2
37.5°	550.7	551.9	558.7	565.4	583.1	602.7	629.0	670.5	709.6	778.7	839.8
40°	504.3	504.3	507.9	509.8	517.7	529.3	545.8	578.2	610.6	663.2	737.8
42.5°	475.5	474.3	474.3	474.9	474.3	479.8	489.6	504.9	533.6	577.0	635.1
45°	454.1	451.7	449.9	445.6	443.1	443.1	443.8	449.3	465.8	493.9	540.9
47.5°	430.3	429.7	426.6	421.7	417.5	414.4	409.5	407.7	412.6	428.5	460.3
50°	402.8	399.7	396.7	393.0	388.1	385.1	375.9	376.5	372.2	379.6	396.1
52.5°	362.5	360.0	358.8	355.7	353.9	352.7	345.3	338.0	336.2	337.4	343.5
55°	317.8	319.1	314.2	316.6	316.0	310.5	307.4	301.9	300.1	299.5	302.6
57.5°	271.4	272.6	269.6	272.0	272.0	268.9	267.1	267.1	262.8	259.2	263.4
60°	229.2	226.8	228.6	231.7	231.7	229.8	228.6	228.6	225.5	224.3	227.4
62.5°	195.0	192.5	194.4	197.4	198.0	196.8	195.6	195.6	191.9	191.9	194.4
65°	168.7	169.3	168.7	171.1	171.1	171.8	170.5	169.3	165.0	166.9	166.3
67.5°	149.8	149.1	149.1	151.6	151.0	152.2	151.0	149.1	146.1	143.6	143.0
70°	133.9	133.2	133.2	134.5	135.1	135.1	134.5	133.2	129.0	126.5	124.7
72.5°	119.8	119.2	119.8	120.4	121.0	121.6	121.0	119.8	116.1	113.1	110.0
75°	107.0	106.4	108.2	108.2	108.8	108.8	109.4	108.8	105.7	102.1	98.4
77.5°	94.1	94.7	96.6	97.2	98.4	99.0	99.6	99.6	96.6	93.5	88.6
80°	83.7	85.0	86.2	86.8	88.0	89.9	90.5	91.1	88.6	85.6	80.1
82.5°	76.4	77.0	78.2	78.8	80.7	81.3	81.9	83.1	81.9	78.8	72.7
85°	70.3	70.9	72.1	72.1	73.3	74.6	75.2	75.8	75.2	72.1	66.0
87.5°	64.8	65.4	66.0	66.6	67.2	67.8	68.5	69.1	68.5	65.4	59.9
90°	59.9	59.9	60.5	60.5	61.1	61.7	63.0	63.0	62.3	59.9	54.4
92.5°	54.4	55.0	55.0	55.6	56.2	56.8	57.5	57.5	56.8	54.4	49.5
95°	50.7	50.7	51.3	51.3	52.0	52.0	52.6	52.6	52.0	49.5	44.6
97.5°	46.5	46.5	46.5	46.5	47.1	47.1	47.7	47.7	47.1	44.6	40.3
100°	42.8	42.8	42.8	42.8	42.8	43.4	43.4	43.4	42.8	40.3	36.1
102.5°	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	38.5	36.7	32.4
105°	37.9	37.9	37.9	37.3	37.3	37.3	36.7	36.7	34.8	33.0	29.3
107.5°	35.5	35.5	35.5	34.8	34.8	34.2	33.6	33.6	31.8	30.0	26.3
110°	33.6	33.6	33.6	33.0	32.4	31.8	31.2	30.6	28.7	26.3	23.2

TEST NUMBER: P1214092

CATALOG NUMBER: 4SNLED-LD5-30SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	31.8	31.8	31.2	31.2	30.6	30.0	28.7	28.1	26.3	23.8	20.8
115°	29.3	29.3	29.3	28.7	28.1	27.5	26.9	25.7	23.8	21.4	18.3
117.5°	26.9	26.9	26.9	26.3	25.7	25.1	24.4	23.2	21.4	18.9	16.5
120°	24.4	24.4	24.4	23.8	23.2	22.6	22.0	20.8	18.9	17.1	14.1
122.5°	22.6	22.6	22.0	21.4	20.8	20.2	19.6	18.3	17.1	14.7	12.2
125°	20.2	20.2	19.6	19.6	18.9	18.3	17.7	16.5	14.7	12.8	11.0
127.5°	18.3	17.7	17.7	17.7	17.1	16.5	15.3	14.7	12.8	11.0	9.2
130°	15.9	15.9	15.9	15.3	15.3	14.7	13.4	12.2	11.0	9.8	7.9
132.5°	14.1	14.1	14.1	14.1	13.4	12.8	11.6	11.0	9.8	7.9	6.7
135°	12.8	12.8	12.2	12.2	11.6	11.0	10.4	9.2	7.9	6.7	5.5
137.5°	11.0	11.0	11.0	10.4	10.4	9.8	8.6	7.9	7.3	6.1	4.9
140°	9.8	9.8	9.2	9.2	8.6	8.6	7.9	6.7	6.1	4.9	4.3
142.5°	8.6	8.6	7.9	7.9	7.3	7.3	6.7	6.1	4.9	4.3	3.1
145°	7.3	7.3	6.7	6.7	6.7	6.1	5.5	4.9	4.3	3.7	3.1
147.5°	6.1	6.1	6.1	5.5	5.5	4.9	4.9	4.3	3.7	3.1	2.4
150°	5.5	5.5	4.9	4.9	4.9	4.3	3.7	3.7	3.1	2.4	1.8
152.5°	4.3	4.3	4.3	4.3	3.7	3.7	3.1	3.1	2.4	1.8	1.8
155°	3.7	3.7	3.7	3.1	3.1	3.1	2.4	2.4	1.8	1.8	1.2
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214092

CATALOG NUMBER: 4SNLED-LD5-30SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3	1183.3
2.5°	1176.6	1176.0	1181.5	1180.9	1173.6	1184.6	1191.9
5°	1173.6	1172.9	1177.8	1179.1	1171.1	1182.7	1190.7
7.5°	1171.1	1170.5	1176.0	1177.8	1169.9	1180.3	1188.8
10°	1171.7	1168.7	1173.6	1174.8	1167.4	1178.4	1185.8
12.5°	1176.0	1168.7	1170.5	1170.5	1163.8	1173.6	1181.5
15°	1186.4	1171.1	1168.7	1166.8	1158.3	1167.4	1175.4
17.5°	1198.0	1177.2	1168.7	1162.6	1152.2	1160.1	1168.7
20°	1209.6	1183.9	1169.9	1160.1	1146.1	1153.4	1159.5
22.5°	1215.1	1190.1	1171.1	1156.4	1138.7	1142.4	1149.1
25°	1207.8	1187.6	1168.7	1150.9	1129.5	1130.2	1135.7
27.5°	1180.9	1175.4	1163.2	1145.4	1122.2	1119.2	1123.4
30°	1135.1	1150.3	1150.9	1138.1	1113.7	1107.5	1109.4
32.5°	1070.9	1105.1	1125.3	1122.8	1101.4	1092.9	1094.1
35°	996.9	1039.7	1083.7	1098.4	1083.1	1076.4	1073.9
37.5°	908.3	965.7	1024.4	1060.5	1058.0	1053.8	1051.3
40°	810.5	879.6	949.2	1006.7	1024.4	1024.4	1025.6
42.5°	706.0	786.7	863.1	935.8	977.4	986.5	990.2
45°	605.1	686.4	769.5	853.3	908.9	937.6	948.0
47.5°	513.4	595.3	674.2	765.9	839.8	877.1	893.6
50°	435.2	496.3	579.4	670.5	751.2	797.0	829.4
52.5°	370.4	418.1	490.8	575.8	657.1	720.0	750.0
55°	316.0	348.4	410.1	483.5	561.1	626.5	661.3
57.5°	270.2	295.8	338.0	399.1	464.5	529.3	566.6
60°	229.8	247.5	276.3	324.6	380.2	435.8	471.9
62.5°	195.0	206.6	225.5	261.0	304.4	347.8	381.4
65°	168.1	173.0	183.4	205.4	238.4	271.4	300.1
67.5°	141.8	144.9	152.8	166.3	182.8	206.6	225.5
70°	122.2	122.2	122.9	130.8	139.4	154.6	168.1
72.5°	106.4	104.5	100.9	102.7	104.5	113.1	121.6
75°	93.5	89.2	83.1	80.7	79.5	80.7	85.6
77.5°	82.5	76.4	69.1	63.0	58.1	56.2	60.5
80°	73.3	66.0	57.5	49.5	41.6	37.3	39.1
82.5°	66.0	56.8	47.7	38.5	29.3	23.2	23.2
85°	58.1	49.5	39.7	30.0	20.8	12.8	11.6
87.5°	52.6	43.4	33.0	23.8	14.7	6.7	3.7
90°	47.1	37.9	28.1	18.9	10.4	3.1	0.0
92.5°	42.2	33.6	24.4	15.3	7.3	1.8	0.0
95°	37.9	30.0	20.8	12.8	6.1	1.2	0.6
97.5°	33.6	26.3	18.3	10.4	4.3	1.2	0.6
100°	30.6	23.2	15.9	8.6	3.7	0.6	0.6
102.5°	26.9	20.8	13.4	7.3	3.1	0.6	0.6
105°	23.8	18.3	11.6	6.1	2.4	0.6	0.6
107.5°	21.4	15.9	10.4	5.5	2.4	0.6	0.6
110°	18.9	14.1	9.2	4.9	1.8	0.6	0.6



TEST NUMBER: P1214092

CATALOG NUMBER: 4SNLED-LD5-30SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	17.1	12.2	7.9	4.3	1.2	0.6	0.6
115°	14.7	11.0	6.7	3.7	1.2	0.6	0.6
117.5°	12.8	9.2	6.1	3.1	1.2	0.6	0.6
120°	11.0	7.9	4.9	2.4	0.6	0.6	0.6
122.5°	9.8	6.7	4.3	2.4	0.6	0.6	0.6
125°	8.6	6.1	3.7	1.8	0.6	0.6	0.6
127.5°	7.3	4.9	3.1	1.2	0.6	0.6	0.6
130°	6.1	4.3	2.4	1.2	0.6	0.6	0.6
132.5°	4.9	3.7	2.4	1.2	0.6	0.6	0.6
135°	4.3	3.1	1.8	1.2	0.6	0.6	0.6
137.5°	3.7	2.4	1.2	1.2	1.2	0.6	0.6
140°	3.1	1.8	1.2	1.2	1.2	1.2	0.6
142.5°	2.4	1.8	1.2	1.2	1.2	1.2	0.6
145°	1.8	1.2	1.2	1.2	1.2	1.2	0.6
147.5°	1.8	1.2	1.2	1.2	1.2	1.2	0.6
150°	1.2	1.2	1.2	1.2	1.2	1.2	1.2
152.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2
155°	1.2	1.2	1.2	1.2	1.2	1.2	1.2
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)