

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: P1213057

Luminaire Tested: 4SNLED-LD5-37SL-LC-UNV-L930-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213057
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-LD5-37SL-LC-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

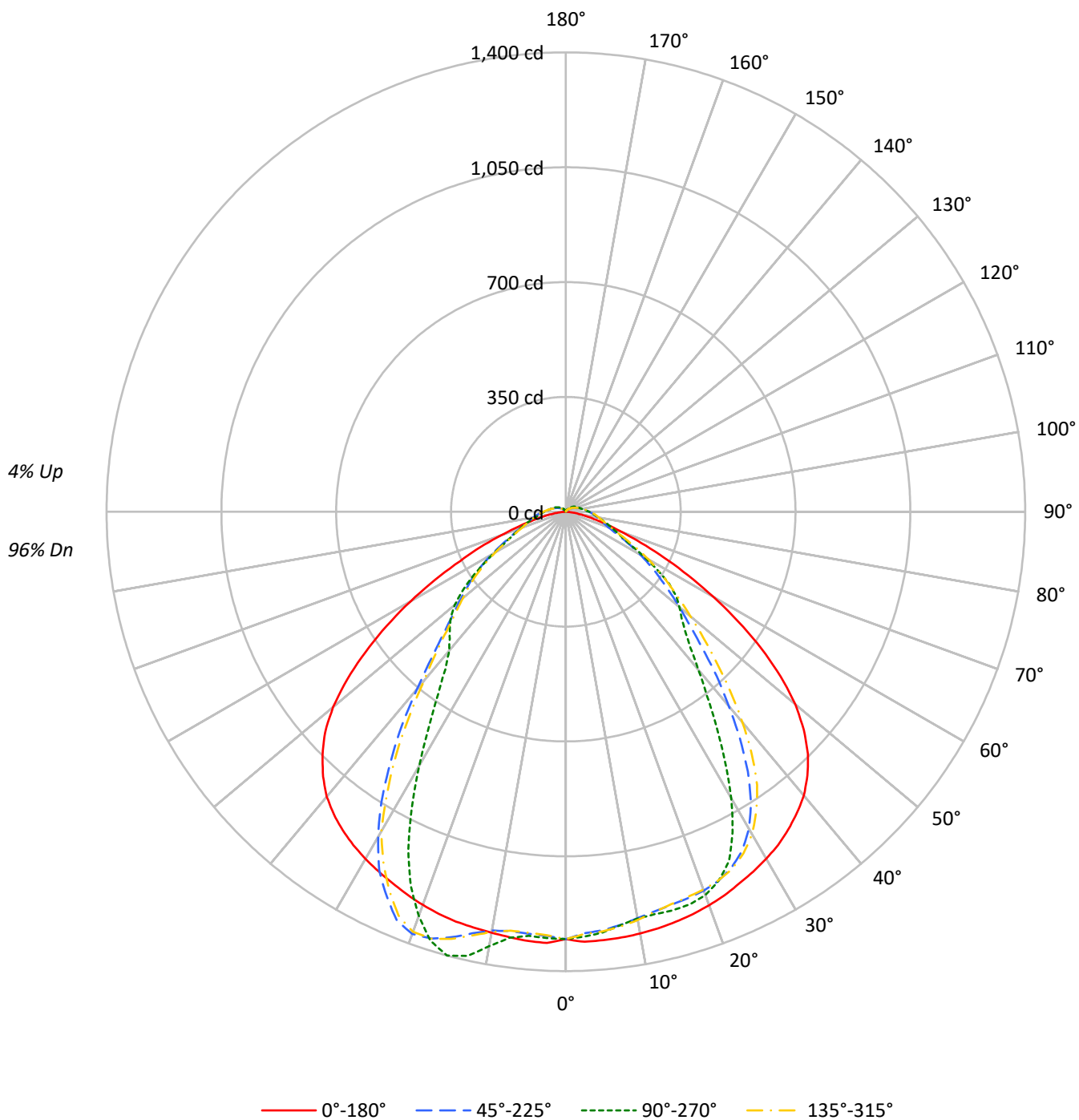
Lumens per Lamp: N/A
Luminaire Lumens: 3105.0 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 28
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					0
RW	70	50	30	10	70	50	30	10	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	98	98	96
1	109	104	100	97	106	102	98	95	97	94	91	92	90	88	88	86	84	84	84	82
2	100	93	86	81	97	90	85	80	86	82	77	82	79	75	79	76	73	73	73	71
3	92	83	75	69	89	81	74	68	77	71	67	74	69	65	71	67	63	63	63	61
4	85	74	66	60	83	73	65	59	70	63	58	67	61	57	64	60	56	56	56	54
5	79	67	59	52	76	66	58	52	63	56	51	61	55	50	59	53	49	49	49	47
6	73	61	52	46	71	60	52	46	57	51	45	55	49	45	54	48	44	44	44	42
7	68	55	47	42	66	54	47	41	53	46	41	51	45	40	49	44	40	40	40	38
8	64	51	43	37	62	50	42	37	48	42	37	47	41	36	45	40	36	36	36	34
9	60	47	39	34	58	46	39	34	45	38	33	43	37	33	42	37	33	33	33	31
10	56	43	36	31	54	43	36	31	42	35	30	40	34	30	39	34	30	30	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	10526	10526	10526	10526
5°	10602	10108	10623	10187
10°	10651	9687	10629	10345
15°	10733	9558	10728	10642
20°	10851	9407	10840	9915
25°	10985	8924	10979	8622
30°	11192	7734	11198	6852
35°	11411	6254	11444	5293
40°	11604	5036	11653	4436
45°	11564	4265	11623	4154
50°	11065	3927	11220	3839
55°	9817	3529	10063	3208
60°	7964	2701	8387	2478
65°	5919	2067	6378	1960
70°	4025	1784	4539	1706
75°	2634	1610	3067	1523
80°	1704	1501	1996	1380
85°	874	1497	1148	1367

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 11623 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.7	4.0
10°-20°	368.1	11.9
20°-30°	559.6	18.0
30°-40°	600.3	19.3
40°-50°	521.0	16.8
50°-60°	386.1	12.4
60°-70°	221.2	7.1
70°-80°	122.5	3.9
80°-90°	74.6	2.4
90°-100°	48.5	1.6
100°-110°	32.5	1.0
110°-120°	21.9	0.7
120°-130°	13.5	0.4
130°-140°	7.1	0.2
140°-150°	3.2	0.1
150°-160°	0.9	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1051.5	33.9
0°-40°	1651.8	53.2
0°-60°	2559.0	82.4
0°-90°	2977.3	95.9
90°-120°	102.9	3.3
90°-150°	126.7	4.1
90°-180°	128.0	4.1
0°-180°	3105.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1302	1302	1302	1302	1302	
5°	1310	1287	1313	1297	1310	125
15°	1294	1257	1293	1400	1294	366
25°	1250	1176	1249	1136	1250	578
35°	1182	801	1185	678	1182	740
45°	1044	513	1049	500	1044	799
55°	728	385	746	350	728	646
65°	330	195	356	185	330	333
75°	94	124	110	117	94	108
85°	13	85	17	78	13	17
90°	0	71	1	66	0	1
95°	1	58	0	56	1	0
105°	1	44	1	42	1	1
115°	1	36	1	32	1	1
125°	1	27	1	22	1	1
135°	1	17	1	14	1	1
145°	1	10	1	8	1	0
155°	1	5	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

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5
2.5°	1311.9	1308.5	1307.2	1304.5	1306.5	1314.6	1309.2	1300.5	1301.1	1285.6	1293.7
5°	1310.5	1306.5	1304.5	1301.8	1303.1	1310.5	1305.2	1296.4	1295.7	1280.3	1287.7
7.5°	1308.5	1304.5	1301.1	1299.1	1299.8	1305.8	1299.1	1289.0	1287.0	1270.2	1276.9
10°	1305.2	1302.5	1297.8	1294.4	1293.7	1300.5	1289.7	1279.6	1274.9	1257.4	1264.1
12.5°	1300.5	1296.4	1291.7	1285.6	1285.0	1289.0	1280.3	1266.1	1261.4	1247.3	1254.7
15°	1293.7	1289.0	1283.6	1276.9	1273.5	1276.2	1265.5	1252.7	1252.0	1239.9	1250.0
17.5°	1286.3	1279.6	1273.5	1264.1	1259.4	1261.4	1252.7	1241.2	1242.6	1235.2	1246.6
20°	1276.2	1268.8	1259.4	1250.0	1243.3	1246.6	1240.6	1231.8	1233.8	1228.5	1238.6
22.5°	1264.8	1254.7	1243.3	1232.5	1227.1	1231.8	1227.1	1219.7	1220.4	1217.0	1223.1
25°	1250.0	1238.6	1225.1	1211.6	1209.0	1212.3	1209.6	1203.6	1200.9	1195.5	1198.2
27.5°	1236.5	1223.8	1206.9	1192.8	1188.1	1194.8	1188.8	1178.7	1171.3	1163.9	1158.5
30°	1221.1	1205.6	1186.8	1170.6	1166.6	1169.3	1160.5	1145.0	1125.5	1116.1	1101.3
32.5°	1204.2	1184.1	1160.5	1142.4	1139.7	1137.6	1121.5	1099.3	1069.0	1050.2	1027.3
35°	1182.0	1159.8	1131.6	1109.4	1105.3	1093.9	1067.7	1038.1	999.1	966.8	927.7
37.5°	1157.2	1130.9	1101.3	1071.7	1060.3	1037.4	1000.4	969.5	910.2	871.2	824.1
40°	1128.9	1097.3	1060.9	1025.3	1006.5	969.5	927.1	881.3	824.1	771.7	732.0
42.5°	1089.9	1056.2	1013.2	973.5	941.2	892.1	842.3	777.7	725.2	680.8	640.5
45°	1043.5	1003.1	953.3	905.5	864.5	806.0	747.4	682.9	639.1	587.3	559.7
47.5°	983.6	939.8	886.7	833.6	779.7	715.1	653.9	592.0	548.3	511.3	491.1
50°	912.9	872.6	814.0	750.8	691.6	624.3	563.1	516.7	474.3	451.4	436.0
52.5°	825.5	787.8	727.9	659.3	602.1	536.2	480.4	442.7	412.4	395.6	390.2
55°	727.9	695.0	635.8	571.8	513.3	452.8	410.4	377.4	357.9	347.8	348.5
57.5°	623.7	598.1	542.2	485.1	429.9	384.1	345.8	319.6	304.8	304.1	306.1
60°	519.4	500.5	452.1	403.0	354.5	317.5	289.3	271.1	261.7	262.4	261.7
62.5°	419.8	402.3	367.3	327.0	288.6	263.7	238.2	230.8	222.7	222.0	222.0
65°	330.3	316.9	288.6	259.7	230.8	214.6	201.8	193.1	187.0	185.7	186.4
67.5°	248.2	242.9	223.4	203.8	185.7	175.6	164.8	162.8	158.1	158.1	159.4
70°	185.0	181.0	170.2	158.8	151.4	144.6	139.3	139.3	138.6	137.9	141.3
72.5°	133.9	134.6	131.2	122.4	121.8	120.4	119.1	121.1	121.8	123.8	127.8
75°	94.2	96.2	96.2	94.9	97.6	100.9	102.9	106.3	110.3	113.0	117.7
77.5°	66.6	66.6	70.0	74.0	79.4	85.4	90.8	95.5	100.9	104.3	108.3
80°	43.1	45.1	50.5	57.9	65.3	73.3	80.7	86.8	92.2	97.6	100.2
82.5°	25.6	28.9	35.7	45.1	54.5	64.6	72.0	79.4	85.4	90.8	92.8
85°	12.8	17.5	25.6	35.7	45.7	56.5	65.9	72.7	79.4	84.1	86.8
87.5°	4.0	9.4	18.2	27.6	38.3	49.1	59.2	66.6	72.7	76.7	79.4
90°	0.0	4.7	12.8	22.9	33.0	43.7	53.1	61.2	67.3	70.6	72.7
92.5°	0.0	2.7	10.1	18.8	28.3	39.0	48.4	55.8	61.2	64.6	65.9
95°	0.7	2.0	7.4	15.5	24.9	35.0	43.7	50.5	55.8	59.2	59.9
97.5°	0.7	1.3	6.1	12.8	21.5	30.9	39.7	46.4	50.5	53.8	54.5
100°	0.7	1.3	4.7	11.4	18.8	27.6	35.7	41.7	46.4	49.1	49.8
102.5°	0.7	0.7	4.0	9.4	16.8	24.2	31.6	37.7	41.7	44.4	45.7
105°	0.7	0.7	3.4	8.1	14.8	21.5	28.3	34.3	37.7	40.4	41.7
107.5°	0.7	0.7	2.7	6.7	12.8	18.8	25.6	30.3	34.3	37.0	38.3
110°	0.7	0.7	2.0	6.1	10.8	16.8	22.2	26.9	30.9	33.6	35.0

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.7	0.7	2.0	5.4	9.4	14.8	19.5	24.2	27.6	30.3	32.3
115°	0.7	0.7	2.0	4.7	8.7	12.8	17.5	21.5	24.9	27.6	29.6
117.5°	0.7	0.7	2.0	4.0	7.4	11.4	15.5	19.5	22.2	24.9	26.9
120°	0.7	0.7	1.3	3.4	6.7	10.1	13.5	16.8	20.2	22.9	24.9
122.5°	0.7	0.7	1.3	3.4	5.4	8.7	12.1	14.8	18.2	20.2	22.2
125°	0.7	0.7	1.3	2.7	4.7	8.1	10.8	13.5	15.5	18.2	20.2
127.5°	0.7	0.7	1.3	2.7	4.0	6.7	9.4	12.1	14.1	16.1	17.5
130°	0.7	0.7	1.3	2.0	3.4	5.4	8.1	10.1	12.8	14.1	15.5
132.5°	0.7	0.7	0.7	2.0	2.7	4.0	6.1	8.7	10.8	12.8	13.5
135°	0.7	0.7	0.7	1.3	2.7	3.4	4.7	6.7	8.7	10.8	12.1
137.5°	0.7	0.7	0.7	1.3	2.0	3.4	4.0	5.4	7.4	8.7	10.8
140°	0.7	0.7	0.7	1.3	2.0	2.7	3.4	4.7	6.1	7.4	8.7
142.5°	0.7	0.7	0.7	1.3	1.3	2.0	2.7	4.0	4.7	6.1	7.4
145°	0.7	0.7	0.7	1.3	1.3	2.0	2.7	3.4	4.0	4.7	6.1
147.5°	0.7	0.7	0.7	1.3	1.3	1.3	2.0	2.7	3.4	4.0	4.7
150°	1.3	1.3	1.3	1.3	1.3	1.3	2.0	2.0	2.7	3.4	4.0
152.5°	1.3	1.3	1.3	1.3	1.3	1.3	2.0	2.0	2.0	2.7	3.4
155°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.0	2.0	2.7	2.7
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

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5
2.5°	1291.0	1292.4	1300.5	1299.8	1298.4	1297.1	1297.1	1295.7	1297.1	1300.5	1299.1
5°	1284.3	1286.3	1292.4	1291.7	1290.4	1289.7	1289.0	1287.0	1288.3	1293.1	1291.7
7.5°	1272.2	1274.2	1279.6	1276.9	1274.9	1276.2	1272.9	1270.8	1273.5	1278.2	1277.6
10°	1259.4	1260.8	1267.5	1266.1	1262.8	1263.4	1260.1	1258.7	1262.1	1264.8	1265.5
12.5°	1250.7	1255.4	1261.4	1260.8	1260.1	1260.8	1257.4	1256.0	1258.1	1260.8	1260.1
15°	1248.6	1254.7	1261.4	1261.4	1262.1	1262.8	1259.4	1257.4	1259.4	1261.4	1260.8
17.5°	1246.6	1254.0	1260.1	1259.4	1260.1	1261.4	1256.0	1254.7	1257.4	1260.1	1258.7
20°	1239.9	1246.6	1250.7	1249.3	1249.3	1250.0	1243.3	1243.3	1247.3	1249.3	1250.0
22.5°	1221.1	1229.1	1229.1	1225.8	1225.8	1223.1	1221.1	1217.0	1221.7	1225.1	1227.8
25°	1192.8	1196.2	1192.1	1184.7	1180.7	1177.3	1167.9	1176.0	1176.0	1186.1	1189.4
27.5°	1153.1	1145.7	1134.3	1118.8	1115.4	1104.7	1098.6	1100.6	1104.0	1118.1	1128.9
30°	1087.9	1065.7	1046.1	1039.4	1024.6	1013.9	1003.1	1008.5	1014.5	1022.6	1044.8
32.5°	1001.7	980.2	948.6	937.2	921.7	908.2	895.4	903.5	914.3	919.7	943.9
35°	902.8	877.3	848.4	828.8	812.7	805.3	789.2	800.6	812.0	816.1	836.9
37.5°	797.9	771.7	746.1	729.3	713.8	709.1	698.3	706.4	715.1	721.2	738.7
40°	698.3	674.1	654.6	643.2	632.4	628.4	624.3	627.7	634.4	639.1	652.6
42.5°	612.9	593.4	579.9	573.2	565.8	560.4	561.1	562.4	565.8	575.9	581.9
45°	538.2	526.8	518.0	516.7	512.0	511.3	510.6	513.3	515.3	521.4	526.1
47.5°	478.3	473.6	471.6	474.3	476.3	473.6	475.0	478.3	482.4	482.4	481.7
50°	431.2	432.6	435.3	441.3	445.4	446.7	448.1	452.1	452.8	454.1	452.1
52.5°	392.9	394.2	401.6	411.1	415.8	417.8	420.5	424.5	424.5	425.9	423.2
55°	353.9	355.9	363.3	372.7	376.7	379.4	382.1	384.8	386.8	389.5	387.5
57.5°	310.8	316.9	321.6	324.3	327.0	329.0	331.0	331.7	335.7	336.4	339.7
60°	265.1	266.4	271.1	270.5	268.4	273.8	271.1	275.8	280.5	286.6	287.3
62.5°	221.3	222.0	225.4	224.0	226.7	226.0	228.1	228.1	231.4	234.1	237.5
65°	187.0	187.7	190.4	190.4	189.7	191.7	193.8	195.1	195.1	197.1	199.8
67.5°	161.5	163.5	166.2	167.5	168.9	168.9	170.9	171.6	172.9	173.6	174.9
70°	144.0	146.7	149.4	150.7	151.4	152.7	153.4	153.4	154.7	155.4	156.8
72.5°	131.2	133.9	135.9	135.9	137.2	137.9	137.9	138.6	139.3	140.6	142.0
75°	120.4	122.4	123.8	123.1	123.1	123.1	123.8	123.8	125.1	126.5	127.8
77.5°	110.3	112.4	112.4	111.0	111.0	111.0	111.0	111.7	112.4	113.7	115.0
80°	102.9	102.9	102.3	102.3	100.9	100.2	100.2	100.9	100.9	102.3	104.3
82.5°	94.9	94.9	94.2	93.5	92.8	92.2	92.2	92.8	93.5	94.2	95.5
85°	87.5	87.5	86.1	86.1	85.4	85.4	85.4	85.4	86.1	86.8	88.1
87.5°	80.1	79.4	78.7	78.0	78.0	78.0	78.0	78.0	78.7	80.1	80.7
90°	72.7	72.0	71.3	71.3	70.6	70.6	71.3	71.3	72.0	72.7	73.3
92.5°	65.9	65.3	64.6	64.6	63.9	63.9	64.6	63.9	65.3	65.3	65.9
95°	59.9	59.2	58.5	58.5	58.5	58.5	58.5	58.5	59.2	59.2	59.9
97.5°	54.5	53.8	53.1	53.1	53.8	53.1	53.8	53.8	53.8	54.5	55.2
100°	49.8	49.1	49.1	49.8	49.1	49.1	49.8	49.8	49.8	49.8	50.5
102.5°	45.7	45.7	45.7	45.7	45.7	45.7	46.4	46.4	46.4	46.4	47.1
105°	41.7	42.4	42.4	42.4	43.1	43.1	43.1	43.7	43.7	43.7	43.7
107.5°	39.0	39.7	39.7	40.4	40.4	41.0	41.0	41.0	41.0	41.7	41.7
110°	36.3	37.0	37.7	38.3	38.3	39.0	39.0	39.0	39.0	39.0	39.0

TEST NUMBER: P1213057

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	33.6	34.3	35.0	36.3	37.0	37.0	37.0	37.0	37.7	37.7	37.0
115°	30.9	32.3	33.0	34.3	35.0	35.0	35.7	35.7	35.7	35.7	35.0
117.5°	28.3	30.3	30.9	32.3	33.0	33.0	33.6	33.6	33.6	33.6	33.0
120°	26.2	27.6	28.9	29.6	30.3	30.9	30.9	31.6	31.6	31.6	30.9
122.5°	24.2	25.6	26.9	27.6	28.3	28.9	28.9	28.9	28.9	28.9	28.9
125°	21.5	22.9	24.2	24.9	25.6	26.2	26.2	26.9	26.9	26.9	26.2
127.5°	19.5	20.9	21.5	22.9	23.5	23.5	24.2	24.2	24.2	24.2	23.5
130°	16.8	18.2	19.5	20.2	20.9	20.9	21.5	21.5	21.5	21.5	21.5
132.5°	14.8	16.1	16.8	18.2	18.2	18.8	18.8	19.5	19.5	19.5	18.8
135°	13.5	14.1	14.8	16.1	16.1	16.8	16.8	16.8	16.8	16.8	16.8
137.5°	12.1	12.8	13.5	14.1	14.1	14.8	14.8	14.8	14.8	15.5	14.8
140°	10.1	11.4	12.1	12.1	12.8	12.8	12.8	13.5	13.5	13.5	12.8
142.5°	8.7	9.4	10.1	10.8	11.4	11.4	11.4	11.4	12.1	11.4	11.4
145°	6.7	8.1	8.7	9.4	10.1	10.1	10.1	10.1	10.1	10.1	10.1
147.5°	5.4	6.1	7.4	8.1	8.1	8.7	8.7	8.7	8.7	8.7	8.7
150°	4.7	4.7	6.1	6.7	7.4	7.4	7.4	7.4	7.4	7.4	7.4
152.5°	3.4	4.0	4.7	5.4	6.1	6.1	6.1	6.1	6.1	6.1	6.1
155°	3.4	3.4	4.0	4.0	4.7	4.7	4.7	4.7	5.4	4.7	4.7
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: P1213057

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5
2.5°	1297.1	1296.4	1299.1	1296.4	1283.0	1288.3	1286.3	1293.7	1294.4	1296.4	1303.1
5°	1290.4	1290.4	1293.7	1291.0	1278.2	1283.6	1283.0	1290.4	1291.7	1293.1	1300.5
7.5°	1276.9	1277.6	1282.3	1280.3	1266.8	1274.9	1274.2	1283.0	1285.6	1288.3	1295.1
10°	1264.1	1263.4	1268.8	1266.8	1254.0	1263.4	1262.8	1271.5	1275.6	1280.3	1288.3
12.5°	1257.4	1255.4	1257.4	1255.4	1241.2	1248.6	1249.3	1259.4	1264.1	1270.2	1279.6
15°	1257.4	1254.0	1254.0	1250.0	1233.8	1238.6	1239.2	1246.0	1252.0	1258.1	1269.5
17.5°	1256.0	1252.7	1252.0	1248.6	1231.2	1231.2	1230.5	1235.2	1238.6	1244.6	1256.7
20°	1248.6	1247.3	1246.6	1244.6	1228.5	1225.8	1224.4	1224.4	1226.4	1228.5	1240.6
22.5°	1229.1	1230.5	1231.8	1233.2	1220.4	1215.7	1216.4	1215.0	1213.0	1213.0	1223.1
25°	1192.8	1199.5	1204.9	1211.0	1203.6	1200.2	1204.2	1202.2	1198.9	1196.2	1204.9
27.5°	1135.0	1149.1	1160.5	1175.3	1176.0	1173.3	1184.1	1182.7	1182.0	1178.0	1184.7
30°	1054.9	1077.1	1092.6	1114.1	1132.3	1135.0	1153.1	1155.8	1158.5	1156.5	1163.2
32.5°	958.0	988.3	1014.5	1048.2	1065.7	1081.1	1106.7	1117.5	1128.2	1131.6	1139.0
35°	852.4	886.7	917.6	954.7	982.2	1015.9	1046.8	1063.0	1087.2	1096.6	1107.4
37.5°	752.1	784.4	814.7	851.7	896.1	931.1	969.5	1005.8	1038.7	1052.2	1068.3
40°	663.3	689.6	718.5	750.8	791.2	836.9	878.6	929.1	968.1	995.0	1018.6
42.5°	596.1	608.9	633.7	662.7	695.0	741.4	783.8	840.3	887.4	925.7	964.7
45°	536.2	542.2	560.4	575.9	608.9	649.9	695.0	750.1	799.2	848.4	895.4
47.5°	485.1	492.5	501.2	510.6	534.2	568.5	607.5	657.3	706.4	763.6	817.4
50°	450.8	452.8	454.1	458.2	472.3	495.8	527.4	569.8	616.9	678.1	735.3
52.5°	420.5	420.5	416.4	414.4	419.8	434.6	452.8	483.0	531.5	588.0	648.5
55°	388.2	382.1	380.8	374.1	375.4	382.1	390.9	414.4	454.1	502.6	561.1
57.5°	343.1	340.4	340.4	337.7	332.3	335.7	337.7	354.5	382.8	424.5	475.6
60°	291.3	290.0	293.3	294.0	289.3	291.3	290.6	300.7	320.9	354.5	396.9
62.5°	239.5	245.6	246.2	248.9	246.2	245.6	248.9	257.7	267.8	293.3	326.3
65°	201.2	204.5	205.2	208.6	207.2	207.2	209.9	216.6	222.7	240.2	265.7
67.5°	176.3	174.9	175.6	177.6	175.6	174.9	176.9	181.0	185.7	196.4	214.6
70°	156.8	155.4	155.4	155.4	152.7	150.7	151.4	152.7	154.7	160.8	172.2
72.5°	142.0	142.0	139.9	137.9	135.9	134.6	133.2	131.9	131.2	133.2	139.3
75°	128.5	129.2	128.5	126.5	123.8	121.1	118.4	115.7	112.4	111.0	111.7
77.5°	116.4	117.1	117.7	117.1	114.4	111.0	107.0	102.9	98.2	93.5	90.8
80°	105.6	107.0	107.6	107.0	105.0	102.3	97.6	92.8	86.1	80.1	73.3
82.5°	96.2	98.2	98.9	98.9	97.6	94.9	89.5	84.1	76.7	68.6	59.9
85°	88.8	90.2	91.5	91.5	90.8	88.1	82.7	76.7	69.3	59.9	50.5
87.5°	81.4	82.1	83.4	84.8	83.4	80.7	76.0	69.3	61.9	52.5	41.7
90°	74.0	74.7	76.0	77.4	76.7	74.0	70.0	63.9	55.8	45.7	35.0
92.5°	66.6	67.9	68.6	69.3	70.0	67.9	64.6	58.5	50.5	40.4	30.3
95°	61.2	61.2	62.6	63.2	63.9	61.9	59.2	53.1	45.7	36.3	26.2
97.5°	55.8	55.8	57.2	57.2	57.9	56.5	53.8	48.4	41.0	32.3	22.2
100°	50.5	51.1	51.8	52.5	52.5	51.8	49.1	43.7	37.0	28.9	19.5
102.5°	47.1	47.1	47.8	47.8	48.4	47.1	44.4	39.7	33.0	25.6	16.8
105°	43.7	43.7	44.4	44.4	43.7	42.4	39.7	35.7	29.6	22.2	14.8
107.5°	41.0	41.0	41.0	41.0	40.4	39.0	36.3	31.6	26.2	20.2	13.5
110°	39.0	38.3	38.3	37.7	37.0	35.0	32.3	28.3	23.5	17.5	11.4

TEST NUMBER: P1213057

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	37.0	36.3	35.7	35.0	33.6	31.6	28.9	25.6	20.9	15.5	10.1
115°	35.0	34.3	33.6	32.3	30.9	28.9	26.2	22.9	18.2	13.5	8.7
117.5°	33.0	32.3	30.9	29.6	28.3	26.2	23.5	20.2	16.1	12.1	8.1
120°	30.3	29.6	28.9	27.6	26.2	23.5	20.9	18.2	14.1	10.8	6.7
122.5°	28.3	27.6	26.2	25.6	23.5	21.5	18.8	16.1	12.8	9.4	6.1
125°	25.6	24.9	24.2	22.9	21.5	18.8	16.8	14.1	11.4	8.1	4.7
127.5°	23.5	22.9	21.5	20.2	18.8	16.8	14.8	12.8	10.1	6.7	4.7
130°	20.9	20.2	19.5	18.2	16.8	14.8	13.5	10.8	8.7	6.1	4.0
132.5°	18.2	18.2	17.5	16.1	14.8	13.5	11.4	9.4	7.4	5.4	3.4
135°	16.8	16.1	15.5	14.1	13.5	11.4	10.1	8.1	6.1	4.7	2.7
137.5°	14.8	14.1	13.5	12.8	11.4	10.1	8.7	6.7	5.4	4.0	2.7
140°	12.8	12.1	12.1	10.8	10.1	8.7	7.4	6.1	4.7	3.4	2.0
142.5°	11.4	10.8	10.1	9.4	8.7	7.4	6.1	4.7	4.0	2.7	2.0
145°	10.1	9.4	8.7	8.1	7.4	6.1	5.4	4.0	3.4	2.7	2.0
147.5°	8.1	8.1	7.4	6.7	6.1	5.4	4.7	4.0	2.7	2.0	1.3
150°	6.7	6.7	6.1	5.4	5.4	4.7	4.0	3.4	2.7	2.0	1.3
152.5°	6.1	5.4	5.4	4.7	4.7	4.0	3.4	2.7	2.0	2.0	1.3
155°	4.7	4.7	4.7	4.0	4.0	3.4	2.7	2.7	2.0	1.3	1.3
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: P1213057

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5
2.5°	1304.5	1296.4	1303.1	1315.3	1313.9	1312.6	1311.2	1313.9	1322.7	1317.9	1310.5
5°	1302.5	1294.4	1301.8	1313.2	1312.6	1310.5	1309.2	1311.9	1320.6	1315.9	1307.9
7.5°	1298.4	1291.0	1296.4	1307.9	1307.9	1306.5	1305.2	1307.9	1315.9	1311.9	1303.8
10°	1291.7	1286.3	1291.7	1302.5	1303.1	1300.5	1299.1	1302.5	1310.5	1308.5	1301.8
12.5°	1286.3	1280.9	1287.0	1297.8	1298.4	1295.7	1293.7	1297.8	1308.5	1309.9	1307.9
15°	1278.9	1274.2	1281.6	1293.1	1293.1	1291.0	1291.0	1296.4	1311.2	1317.3	1320.6
17.5°	1268.2	1264.8	1273.5	1285.0	1285.6	1284.3	1285.0	1295.7	1315.3	1330.1	1339.5
20°	1254.7	1253.4	1262.8	1274.9	1276.9	1277.6	1280.9	1297.1	1324.0	1344.2	1353.6
22.5°	1238.6	1239.2	1250.0	1262.8	1265.5	1267.5	1274.2	1297.1	1330.7	1352.3	1356.3
25°	1220.4	1222.4	1233.8	1249.3	1252.7	1256.7	1268.2	1297.8	1332.7	1346.9	1340.1
27.5°	1200.9	1204.9	1219.7	1235.9	1239.9	1246.6	1261.4	1293.7	1323.3	1324.0	1299.1
30°	1180.7	1185.4	1202.9	1221.7	1228.5	1235.2	1253.4	1284.3	1300.5	1278.9	1235.2
32.5°	1157.8	1164.6	1182.0	1204.9	1213.0	1221.7	1239.9	1266.1	1260.1	1213.7	1151.1
35°	1128.9	1138.3	1158.5	1185.4	1192.8	1204.2	1217.0	1223.1	1196.2	1130.2	1059.6
37.5°	1093.2	1107.4	1130.9	1161.9	1169.9	1177.3	1180.7	1163.9	1110.1	1038.7	965.4
40°	1052.2	1073.7	1099.3	1133.6	1141.7	1141.7	1129.6	1093.9	1026.0	932.4	851.0
42.5°	1002.4	1028.7	1060.9	1095.3	1103.3	1093.9	1065.0	1002.4	925.0	820.8	734.7
45°	941.9	976.9	1013.2	1048.8	1052.9	1032.0	980.2	900.8	805.3	708.4	626.3
47.5°	869.9	915.6	955.3	995.7	990.3	955.3	886.0	795.9	695.0	603.5	537.5
50°	789.2	843.0	887.4	925.7	914.3	865.8	784.4	690.3	590.0	512.0	457.5
52.5°	703.0	764.9	809.3	840.3	824.8	766.9	677.5	587.3	505.2	433.9	397.6
55°	613.6	676.1	721.9	746.1	725.9	663.3	575.2	493.1	415.8	369.3	347.8
57.5°	526.8	585.3	628.4	647.9	622.3	559.7	478.3	409.0	353.2	314.2	303.4
60°	443.4	491.1	532.2	547.0	519.4	461.5	391.5	336.4	295.3	268.4	263.1
62.5°	366.0	405.0	437.3	448.7	421.8	376.7	316.2	275.2	246.2	232.8	226.0
65°	302.1	324.9	357.9	355.9	339.7	298.0	253.6	224.7	205.9	197.1	193.1
67.5°	237.5	258.3	279.2	281.9	261.7	232.8	203.8	183.0	172.9	168.2	166.2
70°	183.7	199.1	211.9	208.6	197.8	179.6	161.5	150.0	146.0	144.0	144.0
72.5°	142.6	150.7	156.8	152.7	146.0	136.6	127.8	123.1	123.8	125.1	126.5
75°	110.3	112.4	113.7	109.7	108.3	102.3	101.6	102.3	106.3	110.3	112.4
77.5°	84.8	82.1	80.1	76.0	76.7	76.0	79.4	84.8	90.8	96.9	102.3
80°	65.3	59.2	54.5	50.5	52.5	55.8	62.6	70.6	78.7	85.4	92.2
82.5°	50.5	41.7	35.0	30.9	35.0	40.4	49.1	59.2	68.6	76.0	83.4
85°	39.0	28.9	20.9	16.8	20.9	28.9	38.3	49.8	59.9	67.9	75.3
87.5°	30.3	20.9	11.4	6.7	11.4	20.2	30.9	41.7	51.8	61.2	68.6
90°	24.2	14.1	5.4	1.3	6.1	14.1	24.2	35.0	45.1	55.2	62.6
92.5°	19.5	10.1	2.7	0.0	3.4	10.8	20.2	30.3	40.4	49.8	57.2
95°	16.1	8.1	2.0	0.0	2.7	8.1	16.1	26.2	35.7	45.1	51.1
97.5°	13.5	6.1	1.3	0.0	1.3	6.7	13.5	22.2	31.6	40.4	46.4
100°	11.4	5.4	1.3	0.0	1.3	5.4	11.4	19.5	27.6	35.7	41.7
102.5°	9.4	4.0	0.7	0.7	0.7	4.0	10.1	16.8	24.2	31.6	37.7
105°	8.7	3.4	0.7	0.7	0.7	3.4	8.7	14.8	21.5	28.3	33.6
107.5°	7.4	2.7	0.7	0.7	0.7	2.7	7.4	12.8	19.5	25.6	30.3
110°	6.1	2.7	0.7	0.7	0.7	2.7	6.1	11.4	16.8	22.2	26.9



TEST NUMBER: P1213057

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	5.4	2.0	0.7	0.7	0.7	2.0	5.4	10.1	14.8	20.2	24.2
115°	4.7	2.0	0.7	0.7	0.7	2.0	4.7	8.7	12.8	17.5	21.5
117.5°	4.0	2.0	0.7	0.7	0.7	1.3	4.0	7.4	11.4	15.5	19.5
120°	3.4	1.3	0.7	0.7	0.7	1.3	3.4	6.7	10.1	13.5	16.8
122.5°	3.4	1.3	0.7	0.7	0.7	1.3	2.7	5.4	8.7	11.4	14.8
125°	2.7	1.3	0.7	0.7	0.7	0.7	2.7	4.7	7.4	10.1	12.8
127.5°	2.7	1.3	0.7	0.7	0.7	0.7	2.0	4.0	6.1	8.7	11.4
130°	2.0	1.3	0.7	0.7	0.7	0.7	1.3	3.4	5.4	7.4	9.4
132.5°	2.0	1.3	0.7	0.7	0.7	0.7	1.3	2.7	4.0	6.1	8.1
135°	2.0	0.7	0.7	0.7	0.7	0.7	0.7	2.0	3.4	4.7	6.1
137.5°	1.3	0.7	0.7	0.7	0.7	0.7	0.7	1.3	2.7	3.4	5.4
140°	1.3	0.7	0.7	0.7	0.7	0.7	0.7	1.3	2.0	2.7	4.0
142.5°	1.3	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.3	2.0	3.4
145°	1.3	0.7	0.7	1.3	1.3	0.7	0.7	1.3	1.3	2.0	2.7
147.5°	1.3	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.3	1.3	2.0
150°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.0
152.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
155°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
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

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CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5
2.5°	1309.2	1293.7	1301.8	1299.1	1301.8	1308.5	1307.9	1305.8	1307.2	1303.8	1300.5
5°	1306.5	1291.0	1299.1	1295.7	1299.1	1305.8	1304.5	1302.5	1304.5	1300.5	1297.1
7.5°	1303.1	1289.0	1298.4	1297.8	1303.8	1312.6	1313.2	1313.2	1317.9	1311.9	1309.2
10°	1303.1	1295.7	1308.5	1313.2	1328.7	1340.1	1341.5	1344.2	1352.3	1350.9	1344.2
12.5°	1317.3	1315.9	1334.8	1346.2	1360.3	1376.5	1385.2	1387.9	1393.3	1389.3	1386.6
15°	1335.4	1342.2	1363.0	1375.8	1391.3	1403.4	1405.4	1406.7	1410.8	1404.7	1400.0
17.5°	1359.7	1363.7	1380.5	1385.9	1396.0	1398.0	1395.3	1388.6	1388.6	1375.1	1371.1
20°	1371.1	1369.1	1375.8	1367.1	1363.0	1350.9	1339.5	1326.7	1326.0	1311.9	1310.5
22.5°	1361.0	1347.5	1333.4	1311.9	1302.5	1285.0	1269.5	1262.1	1257.4	1239.2	1234.5
25°	1325.3	1292.4	1271.5	1246.0	1223.1	1202.9	1188.1	1172.6	1157.8	1143.0	1136.3
27.5°	1263.4	1232.5	1198.9	1163.2	1131.6	1100.6	1075.7	1060.3	1046.1	1026.6	1016.5
30°	1187.4	1144.4	1107.4	1073.1	1021.3	983.6	962.7	931.8	921.0	912.3	893.4
32.5°	1097.9	1046.1	995.7	949.3	896.1	861.1	833.6	810.7	804.0	781.1	775.7
35°	999.1	931.1	873.9	828.2	789.8	747.4	724.6	709.1	695.6	680.2	677.5
37.5°	882.7	821.4	756.9	716.5	686.2	649.9	632.4	621.6	615.6	604.1	602.1
40°	765.6	704.4	660.0	619.6	600.8	581.3	568.5	563.8	561.1	557.0	553.0
42.5°	659.3	605.5	573.9	547.0	538.9	529.5	526.1	528.8	526.1	524.8	524.1
45°	569.2	528.1	505.9	497.8	495.8	493.1	495.8	500.5	501.2	499.9	499.9
47.5°	487.1	467.6	458.2	459.5	462.9	464.9	469.6	475.6	477.0	473.6	475.0
50°	433.3	421.8	419.8	425.2	432.6	435.3	440.7	445.4	444.7	443.4	442.0
52.5°	382.8	379.4	384.8	390.2	398.3	399.6	401.6	403.7	403.0	400.3	398.9
55°	340.4	343.1	347.8	349.8	355.9	355.2	355.9	355.9	353.2	351.9	349.8
57.5°	302.1	302.7	305.4	306.1	309.5	308.1	307.5	306.1	302.1	301.4	299.4
60°	263.1	261.7	267.8	263.1	265.7	263.1	262.4	259.0	255.0	254.3	253.0
62.5°	226.0	223.4	227.4	225.4	226.7	224.0	222.7	218.6	215.3	214.6	213.9
65°	193.1	191.7	195.8	195.1	196.4	193.1	191.7	189.0	186.4	185.7	185.0
67.5°	165.5	168.9	170.9	170.9	172.2	171.6	168.2	167.5	166.8	164.2	164.2
70°	145.3	147.3	151.4	152.0	151.4	152.7	150.0	149.4	148.7	147.3	146.7
72.5°	129.2	131.9	135.9	136.6	135.9	135.9	134.6	133.9	133.9	131.9	131.9
75°	116.4	119.8	123.1	123.1	123.1	121.8	120.4	120.4	119.1	118.4	117.1
77.5°	105.6	109.7	112.4	111.7	111.0	109.7	109.7	107.6	105.6	105.6	104.3
80°	97.6	100.2	102.3	101.6	100.9	98.9	98.2	96.2	94.9	92.8	92.8
82.5°	88.8	92.2	93.5	92.8	91.5	89.5	88.8	87.5	86.1	85.4	84.1
85°	81.4	84.8	85.4	84.1	82.7	81.4	80.7	80.1	79.4	78.0	78.0
87.5°	74.0	77.4	77.4	76.7	75.3	74.7	74.0	73.3	72.7	72.0	71.3
90°	67.9	70.6	70.6	70.0	69.3	68.6	67.9	67.3	66.6	65.9	65.9
92.5°	61.9	64.6	64.6	63.9	63.2	62.6	62.6	61.9	61.2	60.5	59.9
95°	56.5	59.2	59.2	59.2	58.5	57.9	57.9	57.2	56.5	56.5	55.8
97.5°	51.1	53.8	53.8	53.8	53.1	52.5	52.5	51.8	51.8	51.8	51.1
100°	46.4	48.4	49.1	49.1	48.4	48.4	48.4	47.8	47.8	47.8	47.1
102.5°	41.7	43.7	45.1	45.1	45.1	44.4	44.4	44.4	44.4	44.4	43.7
105°	37.7	39.7	41.0	41.7	41.7	41.7	41.7	41.7	41.7	41.7	41.7
107.5°	34.3	36.3	37.7	38.3	39.0	39.0	39.7	39.7	39.7	39.7	39.7
110°	30.9	33.0	35.0	35.7	36.3	37.0	37.0	37.7	37.0	37.0	37.0

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CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	27.6	30.3	31.6	33.0	33.6	34.3	35.0	35.0	35.0	35.0	35.0
115°	24.9	27.6	28.9	30.3	31.6	32.3	32.3	33.0	33.0	33.0	32.3
117.5°	22.2	24.9	26.2	27.6	28.3	29.6	30.3	30.3	30.3	30.3	29.6
120°	20.2	22.2	23.5	24.9	26.2	26.9	27.6	27.6	27.6	27.6	27.6
122.5°	17.5	19.5	21.5	22.9	23.5	24.2	24.9	24.9	24.9	24.9	24.9
125°	15.5	17.5	18.8	20.2	20.9	22.2	22.2	22.2	22.2	22.2	22.2
127.5°	13.5	15.5	16.8	18.2	18.8	19.5	20.2	20.2	20.2	20.2	20.2
130°	11.4	13.5	14.8	16.1	16.8	17.5	17.5	18.2	18.2	18.2	18.2
132.5°	10.1	11.4	12.8	14.1	14.8	15.5	15.5	16.1	16.1	16.1	16.1
135°	8.1	10.1	10.8	12.1	12.8	13.5	13.5	14.1	14.1	14.1	14.1
137.5°	6.7	8.1	9.4	10.8	11.4	11.4	12.1	12.1	12.8	12.8	12.8
140°	5.4	6.1	8.1	8.7	9.4	10.1	10.8	10.8	10.8	10.8	10.8
142.5°	4.0	5.4	6.1	7.4	8.1	8.7	9.4	9.4	9.4	9.4	9.4
145°	3.4	4.0	4.7	6.1	6.7	7.4	8.1	8.1	8.1	8.1	8.1
147.5°	2.7	3.4	4.0	4.7	5.4	6.1	6.7	6.7	6.7	6.7	6.7
150°	2.0	2.7	3.4	3.4	4.0	4.7	5.4	6.1	6.1	6.1	6.1
152.5°	2.0	2.0	2.7	2.7	3.4	4.0	4.7	4.7	4.7	4.7	4.7
155°	1.3	2.0	2.0	2.0	2.7	2.7	3.4	4.0	4.0	4.0	4.0
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

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CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5
2.5°	1302.5	1305.2	1303.8	1301.8	1301.1	1304.5	1301.1	1285.6	1291.7	1292.4	1297.1
5°	1300.5	1302.5	1301.1	1299.8	1297.8	1301.8	1297.8	1281.6	1287.7	1288.3	1293.1
7.5°	1313.9	1314.6	1314.6	1311.2	1305.8	1307.9	1302.5	1284.3	1287.7	1287.7	1291.0
10°	1347.5	1348.9	1350.9	1342.2	1335.4	1330.1	1322.7	1300.5	1299.8	1294.4	1294.4
12.5°	1391.3	1387.9	1384.5	1380.5	1375.1	1368.4	1357.6	1331.4	1322.7	1313.9	1305.2
15°	1404.1	1402.7	1402.0	1400.0	1396.7	1394.6	1386.6	1360.3	1347.5	1336.8	1321.3
17.5°	1370.4	1373.1	1381.9	1382.5	1386.6	1394.6	1393.3	1375.1	1363.7	1359.0	1340.1
20°	1309.9	1310.5	1321.3	1326.0	1343.5	1357.0	1367.1	1365.0	1362.3	1367.7	1353.6
22.5°	1237.2	1241.9	1253.4	1260.8	1277.6	1293.1	1309.2	1317.9	1332.1	1354.3	1351.6
25°	1138.3	1144.4	1160.5	1172.6	1196.2	1219.7	1241.2	1256.7	1273.5	1315.9	1330.1
27.5°	1019.9	1029.3	1050.2	1062.3	1095.3	1119.5	1150.4	1180.7	1204.2	1252.7	1281.6
30°	895.4	903.5	925.7	942.5	970.8	1003.8	1042.8	1085.8	1124.9	1174.0	1210.3
32.5°	779.1	787.8	806.0	820.8	852.4	880.0	923.0	976.2	1012.5	1080.5	1128.9
35°	677.5	685.5	698.3	711.1	737.3	765.6	802.6	854.4	900.8	971.5	1032.7
37.5°	606.2	607.5	614.9	622.3	641.8	663.3	692.3	738.0	781.1	857.1	924.4
40°	555.0	555.0	559.1	561.1	569.8	582.6	600.8	636.4	672.1	729.9	812.0
42.5°	523.4	522.1	522.1	522.7	522.1	528.1	538.9	555.7	587.3	635.1	699.0
45°	499.9	497.2	495.2	490.4	487.8	487.8	488.4	494.5	512.6	543.6	595.4
47.5°	473.6	473.0	469.6	464.2	459.5	456.1	450.8	448.7	454.1	471.6	506.6
50°	443.4	440.0	436.6	432.6	427.2	423.8	413.7	414.4	409.7	417.8	436.0
52.5°	398.9	396.3	394.9	391.5	389.5	388.2	380.1	372.0	370.0	371.4	378.1
55°	349.8	351.2	345.8	348.5	347.8	341.8	338.4	332.3	330.3	329.7	333.0
57.5°	298.7	300.1	296.7	299.4	299.4	296.0	294.0	294.0	289.3	285.3	290.0
60°	252.3	249.6	251.6	255.0	255.0	253.0	251.6	251.6	248.2	246.9	250.3
62.5°	214.6	211.9	213.9	217.3	218.0	216.6	215.3	215.3	211.2	211.2	213.9
65°	185.7	186.4	185.7	188.4	188.4	189.0	187.7	186.4	181.6	183.7	183.0
67.5°	164.8	164.2	164.2	166.8	166.2	167.5	166.2	164.2	160.8	158.1	157.4
70°	147.3	146.7	146.7	148.0	148.7	148.7	148.0	146.7	142.0	139.3	137.2
72.5°	131.9	131.2	131.9	132.5	133.2	133.9	133.2	131.9	127.8	124.5	121.1
75°	117.7	117.1	119.1	119.1	119.8	119.8	120.4	119.8	116.4	112.4	108.3
77.5°	103.6	104.3	106.3	107.0	108.3	109.0	109.7	109.7	106.3	102.9	97.6
80°	92.2	93.5	94.9	95.5	96.9	98.9	99.6	100.2	97.6	94.2	88.1
82.5°	84.1	84.8	86.1	86.8	88.8	89.5	90.2	91.5	90.2	86.8	80.1
85°	77.4	78.0	79.4	79.4	80.7	82.1	82.7	83.4	82.7	79.4	72.7
87.5°	71.3	72.0	72.7	73.3	74.0	74.7	75.3	76.0	75.3	72.0	65.9
90°	65.9	65.9	66.6	66.6	67.3	67.9	69.3	69.3	68.6	65.9	59.9
92.5°	59.9	60.5	60.5	61.2	61.9	62.6	63.2	63.2	62.6	59.9	54.5
95°	55.8	55.8	56.5	56.5	57.2	57.2	57.9	57.9	57.2	54.5	49.1
97.5°	51.1	51.1	51.1	51.1	51.8	51.8	52.5	52.5	51.8	49.1	44.4
100°	47.1	47.1	47.1	47.1	47.1	47.8	47.8	47.8	47.1	44.4	39.7
102.5°	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	42.4	40.4	35.7
105°	41.7	41.7	41.7	41.0	41.0	41.0	40.4	40.4	38.3	36.3	32.3
107.5°	39.0	39.0	39.0	38.3	38.3	37.7	37.0	37.0	35.0	33.0	28.9
110°	37.0	37.0	37.0	36.3	35.7	35.0	34.3	33.6	31.6	28.9	25.6

TEST NUMBER: P1213057

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	35.0	35.0	34.3	34.3	33.6	33.0	31.6	30.9	28.9	26.2	22.9
115°	32.3	32.3	32.3	31.6	30.9	30.3	29.6	28.3	26.2	23.5	20.2
117.5°	29.6	29.6	29.6	28.9	28.3	27.6	26.9	25.6	23.5	20.9	18.2
120°	26.9	26.9	26.9	26.2	25.6	24.9	24.2	22.9	20.9	18.8	15.5
122.5°	24.9	24.9	24.2	23.5	22.9	22.2	21.5	20.2	18.8	16.1	13.5
125°	22.2	22.2	21.5	21.5	20.9	20.2	19.5	18.2	16.1	14.1	12.1
127.5°	20.2	19.5	19.5	19.5	18.8	18.2	16.8	16.1	14.1	12.1	10.1
130°	17.5	17.5	17.5	16.8	16.8	16.1	14.8	13.5	12.1	10.8	8.7
132.5°	15.5	15.5	15.5	15.5	14.8	14.1	12.8	12.1	10.8	8.7	7.4
135°	14.1	14.1	13.5	13.5	12.8	12.1	11.4	10.1	8.7	7.4	6.1
137.5°	12.1	12.1	12.1	11.4	11.4	10.8	9.4	8.7	8.1	6.7	5.4
140°	10.8	10.8	10.1	10.1	9.4	9.4	8.7	7.4	6.7	5.4	4.7
142.5°	9.4	9.4	8.7	8.7	8.1	8.1	7.4	6.7	5.4	4.7	3.4
145°	8.1	8.1	7.4	7.4	7.4	6.7	6.1	5.4	4.7	4.0	3.4
147.5°	6.7	6.7	6.7	6.1	6.1	5.4	5.4	4.7	4.0	3.4	2.7
150°	6.1	6.1	5.4	5.4	5.4	4.7	4.0	4.0	3.4	2.7	2.0
152.5°	4.7	4.7	4.7	4.7	4.0	4.0	3.4	3.4	2.7	2.0	2.0
155°	4.0	4.0	4.0	3.4	3.4	3.4	2.7	2.7	2.0	2.0	1.3
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: P1213057

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5	1302.5
2.5°	1295.1	1294.4	1300.5	1299.8	1291.7	1303.8	1311.9
5°	1291.7	1291.0	1296.4	1297.8	1289.0	1301.8	1310.5
7.5°	1289.0	1288.3	1294.4	1296.4	1287.7	1299.1	1308.5
10°	1289.7	1286.3	1291.7	1293.1	1285.0	1297.1	1305.2
12.5°	1294.4	1286.3	1288.3	1288.3	1280.9	1291.7	1300.5
15°	1305.8	1289.0	1286.3	1284.3	1274.9	1285.0	1293.7
17.5°	1318.6	1295.7	1286.3	1279.6	1268.2	1276.9	1286.3
20°	1331.4	1303.1	1287.7	1276.9	1261.4	1269.5	1276.2
22.5°	1337.5	1309.9	1289.0	1272.9	1253.4	1257.4	1264.8
25°	1329.4	1307.2	1286.3	1266.8	1243.3	1243.9	1250.0
27.5°	1299.8	1293.7	1280.3	1260.8	1235.2	1231.8	1236.5
30°	1249.3	1266.1	1266.8	1252.7	1225.8	1219.0	1221.1
32.5°	1178.7	1216.4	1238.6	1235.9	1212.3	1202.9	1204.2
35°	1097.3	1144.4	1192.8	1209.0	1192.1	1184.7	1182.0
37.5°	999.7	1063.0	1127.6	1167.2	1164.6	1159.8	1157.2
40°	892.1	968.1	1044.8	1108.0	1127.6	1127.6	1128.9
42.5°	777.0	865.8	949.9	1030.0	1075.7	1085.8	1089.9
45°	666.0	755.5	847.0	939.2	1000.4	1032.0	1043.5
47.5°	565.1	655.3	742.1	843.0	924.4	965.4	983.6
50°	479.0	546.3	637.8	738.0	826.8	877.3	912.9
52.5°	407.7	460.2	540.2	633.7	723.2	792.5	825.5
55°	347.8	383.5	451.4	532.2	617.6	689.6	727.9
57.5°	297.4	325.6	372.0	439.3	511.3	582.6	623.7
60°	253.0	272.5	304.1	357.2	418.5	479.7	519.4
62.5°	214.6	227.4	248.2	287.3	335.0	382.8	419.8
65°	185.0	190.4	201.8	226.0	262.4	298.7	330.3
67.5°	156.1	159.4	168.2	183.0	201.2	227.4	248.2
70°	134.6	134.6	135.2	144.0	153.4	170.2	185.0
72.5°	117.1	115.0	111.0	113.0	115.0	124.5	133.9
75°	102.9	98.2	91.5	88.8	87.5	88.8	94.2
77.5°	90.8	84.1	76.0	69.3	63.9	61.9	66.6
80°	80.7	72.7	63.2	54.5	45.7	41.0	43.1
82.5°	72.7	62.6	52.5	42.4	32.3	25.6	25.6
85°	63.9	54.5	43.7	33.0	22.9	14.1	12.8
87.5°	57.9	47.8	36.3	26.2	16.1	7.4	4.0
90°	51.8	41.7	30.9	20.9	11.4	3.4	0.0
92.5°	46.4	37.0	26.9	16.8	8.1	2.0	0.0
95°	41.7	33.0	22.9	14.1	6.7	1.3	0.7
97.5°	37.0	28.9	20.2	11.4	4.7	1.3	0.7
100°	33.6	25.6	17.5	9.4	4.0	0.7	0.7
102.5°	29.6	22.9	14.8	8.1	3.4	0.7	0.7
105°	26.2	20.2	12.8	6.7	2.7	0.7	0.7
107.5°	23.5	17.5	11.4	6.1	2.7	0.7	0.7
110°	20.9	15.5	10.1	5.4	2.0	0.7	0.7

TEST NUMBER: P1213057

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	18.8	13.5	8.7	4.7	1.3	0.7	0.7
115°	16.1	12.1	7.4	4.0	1.3	0.7	0.7
117.5°	14.1	10.1	6.7	3.4	1.3	0.7	0.7
120°	12.1	8.7	5.4	2.7	0.7	0.7	0.7
122.5°	10.8	7.4	4.7	2.7	0.7	0.7	0.7
125°	9.4	6.7	4.0	2.0	0.7	0.7	0.7
127.5°	8.1	5.4	3.4	1.3	0.7	0.7	0.7
130°	6.7	4.7	2.7	1.3	0.7	0.7	0.7
132.5°	5.4	4.0	2.7	1.3	0.7	0.7	0.7
135°	4.7	3.4	2.0	1.3	0.7	0.7	0.7
137.5°	4.0	2.7	1.3	1.3	1.3	0.7	0.7
140°	3.4	2.0	1.3	1.3	1.3	1.3	0.7
142.5°	2.7	2.0	1.3	1.3	1.3	1.3	0.7
145°	2.0	1.3	1.3	1.3	1.3	1.3	0.7
147.5°	2.0	1.3	1.3	1.3	1.3	1.3	0.7
150°	1.3	1.3	1.3	1.3	1.3	1.3	1.3
152.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3
155°	1.3	1.3	1.3	1.3	1.3	1.3	1.3
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)