

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-LD5-41SL-LN-UNV-L950-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33519)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SNLED-LD5-41SL-LN-UNV-L950-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
NARROW LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

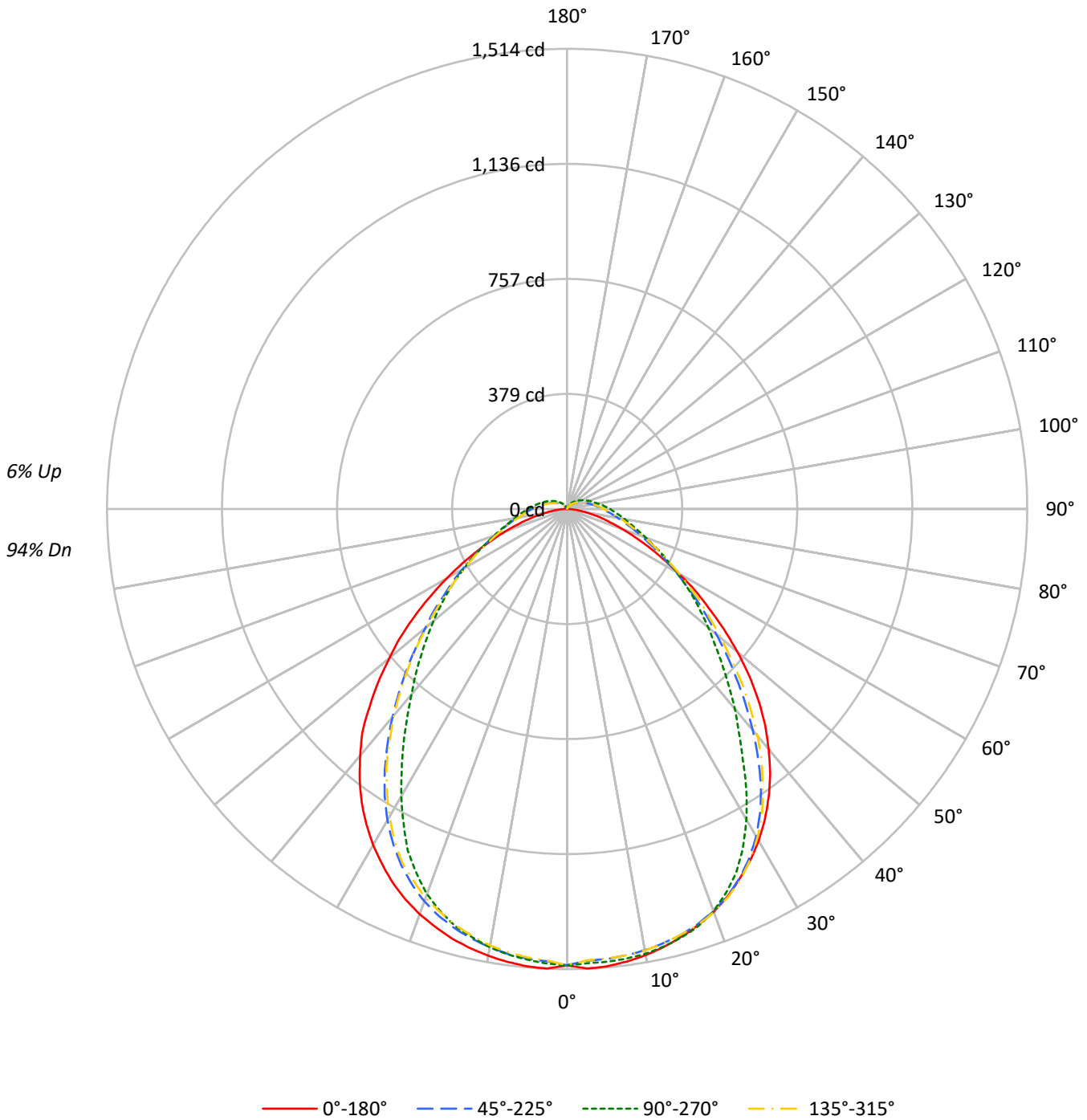
Lumens per Lamp: N/A  
Luminaire Lumens: 3799.0 lumens  
Efficiency: N/A  
Efficacy: 122.5 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Direct

Input Watts (W): 31  
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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### 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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94				
1	107	103	98	95	104	100	96	92	94	91	88	89	87	85	85	83	81	79				
2	98	90	84	78	95	88	82	77	83	78	74	79	75	72	75	72	69	67				
3	90	80	72	66	87	78	71	65	74	68	63	71	66	61	67	63	60	57				
4	83	72	63	57	80	70	62	56	67	60	55	64	58	53	61	56	52	50				
5	77	64	56	50	74	63	55	49	60	53	48	58	52	47	55	50	46	44				
6	71	58	50	44	69	57	49	43	55	48	42	52	46	42	50	45	41	39				
7	66	53	45	39	64	52	44	39	50	43	38	48	42	37	46	41	37	35				
8	62	49	41	35	60	48	40	35	46	39	34	44	38	34	43	37	33	31				
9	58	45	37	32	56	44	37	31	42	36	31	41	35	30	40	34	30	28				
10	54	42	34	29	53	41	34	29	39	33	28	38	32	28	37	31	27	26				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	12130	12130	12130	12130
5°	12217	11745	12217	11693
10°	12163	11433	12183	11274
15°	12085	11091	12140	10802
20°	11992	10651	12062	10202
25°	11799	10000	11930	9411
30°	11549	9043	11701	8372
35°	11160	7870	11375	7327
40°	10601	6882	10882	6386
45°	9864	5983	10184	5639
50°	8858	5257	9248	4992
55°	7662	4643	8219	4408
60°	6444	4076	7027	3841
65°	5283	3604	5815	3341
70°	4204	3199	4706	2958
75°	3302	2953	3716	2717
80°	2384	2850	2807	2604
85°	1469	2865	1974	2634



TEST NUMBER: P#

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.3	3.7
10°-20°	408.1	10.7
20°-30°	604.8	15.9
30°-40°	671.9	17.7
40°-50°	609.1	16.0
50°-60°	472.0	12.4
60°-70°	320.5	8.4
70°-80°	203.9	5.4
80°-90°	130.4	3.4
90°-100°	87.9	2.3
100°-110°	60.2	1.6
110°-120°	40.2	1.1
120°-130°	25.0	0.7
130°-140°	13.8	0.4
140°-150°	6.5	0.2
150°-160°	2.4	0.1
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1155.2	30.4
0°-40°	1827.1	48.1
0°-60°	2908.2	76.6
0°-90°	3562.9	93.8
90°-120°	188.3	5.0
90°-150°	233.5	6.1
90°-180°	236.0	6.2
0°-180°	3799.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1501	1501	1501	1501	1501	
5°	1510	1495	1510	1489	1510	143
15°	1457	1459	1463	1421	1457	411
25°	1343	1318	1358	1240	1343	618
35°	1156	1007	1178	938	1156	721
45°	890	720	919	679	890	684
55°	568	506	609	481	568	512
65°	295	340	324	315	295	296
75°	118	227	133	209	118	127
85°	22	164	29	150	22	26
90°	0	141	2	129	0	1
95°	1	121	0	112	1	1
105°	1	88	0	83	1	1
115°	1	67	0	62	1	1
125°	1	50	1	44	1	1
135°	1	35	1	28	1	1
145°	1	22	1	16	1	1
155°	1	12	1	6	1	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



TEST NUMBER: P#

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1
2.5°	1513.5	1511.9	1510.2	1507.7	1510.2	1516.8	1512.7	1503.6	1502.0	1487.1	1493.7
5°	1510.2	1507.7	1506.1	1503.6	1506.9	1515.2	1511.1	1502.8	1500.3	1486.3	1493.7
7.5°	1502.0	1500.3	1497.8	1497.8	1501.1	1509.4	1506.1	1497.0	1495.4	1481.3	1489.6
10°	1490.4	1489.6	1487.9	1487.9	1491.2	1501.1	1497.0	1488.8	1487.1	1473.9	1483.0
12.5°	1475.5	1476.4	1473.9	1473.9	1478.8	1488.8	1485.5	1476.4	1474.7	1463.2	1472.2
15°	1456.6	1457.4	1455.7	1456.6	1461.5	1473.1	1468.9	1460.7	1459.0	1449.9	1457.4
17.5°	1435.1	1435.9	1435.9	1435.1	1440.9	1452.4	1449.1	1441.7	1439.2	1431.8	1440.9
20°	1410.3	1410.3	1410.3	1410.3	1416.9	1428.5	1424.4	1418.6	1413.6	1407.8	1415.3
22.5°	1379.8	1378.9	1379.8	1382.2	1388.8	1397.9	1395.5	1388.8	1381.4	1378.1	1383.9
25°	1342.6	1345.1	1345.9	1348.4	1356.6	1364.1	1361.6	1355.0	1343.4	1341.0	1342.6
27.5°	1303.8	1305.5	1307.9	1307.1	1318.7	1326.1	1321.1	1315.4	1298.8	1296.4	1294.7
30°	1260.0	1262.5	1264.2	1263.3	1272.4	1280.7	1275.7	1268.3	1246.0	1244.3	1231.1
32.5°	1210.5	1213.0	1214.6	1214.6	1227.8	1231.1	1222.1	1211.3	1187.4	1181.6	1170.0
35°	1156.0	1158.5	1159.3	1159.3	1172.5	1171.7	1160.1	1145.3	1118.8	1111.4	1091.6
37.5°	1097.4	1099.0	1099.8	1104.8	1110.6	1105.6	1090.8	1071.8	1052.0	1031.3	1009.8
40°	1031.3	1033.8	1035.4	1038.7	1044.5	1038.7	1017.3	994.2	972.7	949.6	928.1
42.5°	963.6	971.0	969.4	968.6	971.9	956.2	939.7	913.2	891.8	867.8	846.4
45°	890.1	889.3	893.4	895.1	894.2	881.0	857.9	834.0	812.5	787.7	769.6
47.5°	812.5	811.7	815.0	816.6	811.7	797.6	779.5	752.2	734.1	712.6	698.6
50°	730.8	730.8	735.7	730.8	728.3	714.2	699.4	672.1	658.1	639.1	630.8
52.5°	649.0	656.4	651.5	649.8	647.4	633.3	621.8	599.5	587.9	579.6	569.7
55°	568.1	576.3	573.0	570.6	569.7	558.2	547.4	530.9	523.5	517.7	511.9
57.5°	499.6	498.7	497.1	494.6	495.4	486.3	475.6	466.5	463.2	460.7	462.4
60°	420.3	426.9	424.4	425.2	426.1	424.4	415.3	409.6	410.4	411.2	413.7
62.5°	355.1	360.8	365.0	361.7	363.3	365.8	360.8	359.2	362.5	365.8	369.1
65°	294.8	300.6	304.7	303.9	308.8	313.8	312.9	314.6	322.0	326.2	330.3
67.5°	240.3	246.1	251.8	252.7	260.1	267.5	270.8	276.6	284.9	290.7	295.6
70°	193.2	198.2	204.8	208.9	218.8	228.7	234.5	246.1	251.0	259.3	262.6
72.5°	151.1	155.2	164.3	174.2	182.5	194.9	206.4	216.3	223.8	232.9	237.0
75°	118.1	119.7	129.6	141.2	152.8	166.8	179.2	189.9	199.8	208.9	215.5
77.5°	86.7	89.2	98.3	113.9	127.2	142.0	156.1	167.6	178.4	187.4	196.5
80°	60.3	65.2	75.1	90.8	105.7	122.2	135.4	148.6	160.2	169.3	178.4
82.5°	38.8	42.9	57.0	72.7	88.4	104.9	118.9	132.1	144.5	154.4	162.7
85°	21.5	27.2	41.3	57.8	73.5	90.0	104.9	118.1	130.5	139.5	147.8
87.5°	8.3	16.5	29.7	45.4	61.1	76.8	92.5	104.9	117.3	127.2	134.6
90°	0.0	9.9	22.3	38.0	53.7	69.4	84.2	97.4	109.0	118.1	126.3
92.5°	0.8	6.6	17.3	30.6	45.4	60.3	74.3	87.5	99.1	108.2	115.6
95°	0.8	5.0	14.0	26.4	39.6	53.7	66.9	79.3	90.0	99.1	106.5
97.5°	0.8	3.3	11.6	23.1	34.7	48.7	61.1	72.7	82.6	91.7	97.4
100°	0.8	3.3	9.9	19.8	31.4	43.8	55.3	66.9	76.0	83.4	90.0
102.5°	0.8	2.5	8.3	17.3	28.1	38.8	50.4	61.1	69.4	76.8	83.4
105°	0.8	2.5	7.4	14.9	24.8	35.5	45.4	55.3	64.4	71.0	76.8
107.5°	0.8	1.7	6.6	12.4	21.5	32.2	42.1	50.4	58.6	65.2	71.0
110°	0.8	1.7	5.8	11.6	19.0	28.9	38.0	46.2	53.7	60.3	65.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.8	1.7	5.0	10.7	17.3	25.6	34.7	42.1	49.5	55.3	60.3
115°	0.8	1.7	5.0	9.9	15.7	22.3	30.6	38.8	44.6	51.2	55.3
117.5°	0.8	1.7	4.1	8.3	14.9	20.6	28.1	34.7	41.3	47.1	51.2
120°	0.8	1.7	4.1	7.4	13.2	19.0	24.8	31.4	38.0	42.1	46.2
122.5°	0.8	1.7	3.3	7.4	11.6	17.3	22.3	28.1	33.9	38.8	42.9
125°	0.8	1.7	3.3	6.6	10.7	15.7	20.6	24.8	30.6	34.7	38.8
127.5°	0.8	1.7	3.3	5.8	9.9	14.0	19.0	23.1	27.2	31.4	34.7
130°	0.8	1.7	2.5	5.0	9.1	12.4	16.5	21.5	24.8	28.1	31.4
132.5°	0.8	1.7	2.5	5.0	7.4	10.7	14.9	19.0	22.3	25.6	28.1
135°	0.8	1.7	2.5	4.1	6.6	9.9	12.4	16.5	19.8	23.1	25.6
137.5°	0.8	1.7	2.5	4.1	5.8	8.3	10.7	14.0	17.3	19.8	23.1
140°	0.8	1.7	2.5	3.3	5.0	7.4	9.9	11.6	14.9	17.3	19.8
142.5°	0.8	1.7	2.5	3.3	5.0	6.6	8.3	9.9	12.4	14.9	17.3
145°	0.8	1.7	2.5	3.3	4.1	5.8	7.4	9.1	9.9	12.4	14.0
147.5°	0.8	1.7	2.5	3.3	3.3	5.0	6.6	7.4	9.1	9.9	11.6
150°	0.8	1.7	2.5	2.5	3.3	4.1	5.8	6.6	7.4	9.1	9.9
152.5°	0.8	1.7	2.5	2.5	3.3	4.1	5.0	5.8	6.6	7.4	8.3
155°	0.8	1.7	2.5	2.5	2.5	3.3	4.1	5.0	5.8	6.6	7.4
157.5°	1.7	1.7	1.7	2.5	2.5	3.3	3.3	4.1	5.0	5.0	5.8
160°	1.7	1.7	1.7	2.5	2.5	2.5	3.3	3.3	4.1	4.1	5.0
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°	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1
2.5°	1492.1	1494.5	1502.0	1502.0	1500.3	1498.7	1498.7	1496.2	1497.8	1501.1	1499.5
5°	1492.1	1494.5	1502.0	1502.0	1500.3	1498.7	1497.8	1495.4	1497.8	1501.1	1499.5
7.5°	1487.1	1490.4	1497.8	1497.8	1496.2	1495.4	1493.7	1492.1	1494.5	1497.8	1496.2
10°	1480.5	1483.8	1491.2	1491.2	1489.6	1489.6	1487.1	1485.5	1488.8	1491.2	1490.4
12.5°	1470.6	1474.7	1481.3	1480.5	1478.8	1479.7	1477.2	1473.9	1477.2	1479.7	1480.5
15°	1456.6	1461.5	1468.1	1466.5	1464.0	1465.6	1461.5	1459.0	1461.5	1466.5	1465.6
17.5°	1438.4	1441.7	1446.6	1446.6	1444.2	1442.5	1440.9	1438.4	1440.0	1443.3	1444.2
20°	1412.8	1416.9	1419.4	1416.9	1416.1	1413.6	1410.3	1407.8	1411.1	1416.1	1416.9
22.5°	1378.9	1379.8	1385.5	1379.8	1375.6	1374.8	1371.5	1366.6	1371.5	1375.6	1376.5
25°	1336.8	1341.0	1338.5	1328.6	1328.6	1322.0	1320.3	1317.8	1318.7	1326.1	1329.4
27.5°	1283.2	1284.8	1278.2	1269.9	1262.5	1258.4	1252.6	1253.4	1253.4	1263.3	1266.6
30°	1224.5	1215.4	1209.7	1196.5	1190.7	1180.8	1179.1	1179.1	1177.5	1182.4	1197.3
32.5°	1154.3	1142.0	1132.9	1120.5	1110.6	1100.7	1095.7	1098.2	1097.4	1109.8	1114.7
35°	1077.6	1070.1	1051.1	1035.4	1029.7	1014.8	1014.8	1007.4	1012.3	1026.4	1032.1
37.5°	996.6	985.1	969.4	952.0	947.9	936.4	932.2	928.1	938.8	941.3	947.1
40°	914.1	903.3	888.5	872.0	872.0	857.9	857.9	857.9	858.7	863.7	874.4
42.5°	835.6	824.1	810.8	799.3	797.6	786.9	786.9	786.1	787.7	791.9	801.8
45°	759.7	750.6	736.5	730.8	731.6	720.0	722.5	720.0	723.3	727.5	730.8
47.5°	689.5	683.7	677.9	669.7	667.2	666.3	662.2	658.9	664.7	664.7	669.7
50°	624.2	620.9	617.6	612.7	613.5	610.2	605.2	605.2	609.4	610.2	613.5
52.5°	567.3	563.1	559.0	559.8	560.7	559.0	556.5	554.1	556.5	558.2	562.3
55°	510.3	507.0	511.1	509.5	511.1	509.5	507.8	506.2	510.3	507.8	511.9
57.5°	459.1	462.4	464.0	460.7	463.2	461.6	462.4	459.9	463.2	464.9	464.0
60°	412.0	417.0	414.5	415.3	418.6	417.0	413.7	416.2	419.5	420.3	419.5
62.5°	369.1	374.9	377.4	375.7	376.5	374.9	377.4	374.0	378.2	379.8	377.4
65°	330.3	336.9	338.5	338.5	338.5	336.9	339.4	340.2	341.8	341.8	340.2
67.5°	297.3	303.0	304.7	306.3	304.7	303.0	303.0	303.9	307.2	308.8	307.2
70°	267.5	273.3	274.1	274.1	275.0	276.6	273.3	275.0	277.4	278.3	277.4
72.5°	241.9	247.7	249.4	248.5	249.4	250.2	250.2	248.5	251.0	252.7	252.7
75°	221.3	224.6	226.2	226.2	227.1	227.9	227.9	227.1	228.7	229.5	230.4
77.5°	202.3	204.8	207.3	207.3	208.1	207.3	208.9	208.9	209.7	210.6	211.4
80°	183.3	186.6	188.3	189.1	190.7	191.6	191.6	191.6	192.4	193.2	193.2
82.5°	168.4	170.9	173.4	175.9	175.9	176.7	176.7	176.7	177.5	177.5	178.4
85°	153.6	156.9	159.4	161.0	161.8	162.7	162.7	163.5	163.5	163.5	164.3
87.5°	140.4	144.5	146.2	147.8	148.6	150.3	150.3	150.3	151.1	151.1	151.1
90°	131.3	135.4	137.1	138.7	139.5	140.4	140.4	141.2	141.2	142.0	142.0
92.5°	120.6	124.7	128.0	128.0	128.8	130.5	129.6	129.6	130.5	131.3	131.3
95°	112.3	115.6	118.1	118.9	119.7	119.7	119.7	120.6	119.7	120.6	120.6
97.5°	102.4	105.7	108.2	109.8	110.6	110.6	110.6	111.5	110.6	111.5	111.5
100°	94.1	97.4	99.9	100.7	102.4	102.4	102.4	102.4	102.4	102.4	103.2
102.5°	87.5	90.8	92.5	93.3	94.1	95.0	95.0	95.0	95.0	95.8	95.8
105°	80.9	84.2	85.9	86.7	87.5	88.4	88.4	88.4	89.2	89.2	88.4
107.5°	75.1	77.6	79.3	80.9	81.7	81.7	82.6	82.6	82.6	82.6	82.6
110°	69.4	71.8	74.3	76.0	76.0	76.8	76.8	77.6	77.6	76.8	77.6





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	63.6	66.9	68.5	70.2	71.0	71.8	71.8	71.8	71.8	71.8	71.8
115°	58.6	61.9	63.6	65.2	66.1	66.9	66.9	66.9	66.9	66.9	66.9
117.5°	54.5	57.8	59.5	60.3	61.1	61.9	62.8	62.8	62.8	62.8	61.9
120°	50.4	52.8	54.5	56.1	57.0	57.8	57.8	57.8	57.8	57.8	57.8
122.5°	46.2	48.7	50.4	52.0	52.8	53.7	53.7	53.7	53.7	53.7	53.7
125°	42.1	44.6	46.2	47.9	48.7	49.5	49.5	49.5	49.5	49.5	49.5
127.5°	38.0	40.5	42.9	43.8	44.6	45.4	45.4	45.4	46.2	45.4	45.4
130°	33.9	36.3	38.8	39.6	40.5	41.3	42.1	42.1	42.1	42.1	41.3
132.5°	30.6	33.0	34.7	35.5	37.2	37.2	38.0	38.0	38.0	38.0	37.2
135°	28.1	29.7	31.4	32.2	33.9	33.9	33.9	34.7	34.7	33.9	33.0
137.5°	24.8	26.4	28.1	28.9	29.7	30.6	30.6	31.4	30.6	30.6	30.6
140°	23.1	23.9	25.6	26.4	27.2	27.2	27.2	28.1	28.1	27.2	27.2
142.5°	19.8	21.5	23.1	23.9	24.8	24.8	24.8	24.8	24.8	24.8	24.8
145°	16.5	19.0	19.8	21.5	21.5	22.3	22.3	22.3	22.3	22.3	21.5
147.5°	14.0	15.7	18.2	19.0	19.0	19.8	19.8	19.8	19.8	19.8	19.0
150°	10.7	12.4	14.9	16.5	16.5	17.3	17.3	17.3	17.3	16.5	16.5
152.5°	9.1	10.7	11.6	13.2	14.0	14.0	14.0	14.9	14.0	14.0	14.0
155°	8.3	9.1	9.9	10.7	11.6	12.4	12.4	12.4	12.4	11.6	11.6
157.5°	6.6	7.4	8.3	9.1	9.9	10.7	10.7	10.7	10.7	10.7	9.9
160°	5.0	5.8	6.6	6.6	7.4	8.3	9.1	8.3	8.3	8.3	8.3
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: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1
2.5°	1497.8	1497.0	1499.5	1495.4	1483.0	1486.3	1484.6	1492.1	1493.7	1495.4	1502.8
5°	1497.8	1497.0	1498.7	1495.4	1482.2	1484.6	1483.0	1490.4	1492.1	1492.9	1500.3
7.5°	1494.5	1493.7	1496.2	1492.1	1478.0	1481.3	1478.8	1486.3	1487.1	1487.9	1494.5
10°	1487.9	1487.1	1488.8	1485.5	1471.4	1474.7	1471.4	1478.8	1478.8	1480.5	1485.5
12.5°	1478.0	1476.4	1479.7	1475.5	1459.9	1464.0	1462.3	1467.3	1468.1	1468.9	1473.9
15°	1464.0	1462.3	1464.8	1462.3	1448.3	1449.1	1446.6	1454.1	1454.9	1453.3	1458.2
17.5°	1443.3	1441.7	1446.6	1445.0	1431.0	1434.3	1433.4	1435.1	1437.6	1433.4	1440.0
20°	1417.7	1419.4	1421.0	1421.9	1411.1	1411.1	1410.3	1413.6	1416.1	1412.8	1417.7
22.5°	1379.8	1383.9	1388.8	1390.5	1383.1	1382.2	1387.2	1385.5	1388.0	1386.4	1389.7
25°	1331.9	1340.1	1345.1	1350.0	1345.9	1347.6	1355.0	1356.6	1356.6	1355.8	1359.1
27.5°	1272.4	1283.2	1292.2	1303.0	1298.8	1302.1	1314.5	1316.2	1319.5	1316.2	1322.8
30°	1201.4	1211.3	1228.7	1244.3	1246.0	1251.0	1268.3	1269.9	1279.0	1275.7	1278.2
32.5°	1130.4	1135.4	1155.2	1170.9	1180.8	1193.2	1212.1	1215.4	1227.8	1230.3	1230.3
35°	1041.2	1055.3	1073.4	1095.7	1108.1	1121.3	1146.9	1151.9	1170.0	1175.8	1182.4
37.5°	966.1	979.3	990.9	1014.0	1036.3	1051.1	1071.8	1084.2	1103.2	1113.9	1122.1
40°	886.0	896.7	909.1	932.2	951.2	973.5	994.2	1009.0	1033.0	1045.4	1056.1
42.5°	810.0	818.3	831.5	848.0	867.8	892.6	912.4	929.8	955.3	972.7	985.1
45°	742.3	747.3	758.8	771.2	788.6	814.2	833.1	855.4	876.1	894.2	909.1
47.5°	678.7	685.3	691.1	699.4	715.1	730.8	753.0	774.5	795.2	815.0	829.8
50°	620.1	620.1	629.2	635.0	645.7	659.7	677.1	691.9	717.5	731.6	750.6
52.5°	563.1	566.4	571.4	574.7	583.0	592.0	606.1	618.5	639.9	653.1	671.3
55°	512.8	516.1	518.5	520.2	525.2	535.9	540.8	550.7	565.6	576.3	592.0
57.5°	464.9	466.5	469.0	469.8	470.7	477.3	481.4	483.9	498.7	509.5	522.7
60°	421.1	421.1	423.6	422.8	421.9	425.2	424.4	426.9	436.0	442.6	448.4
62.5°	379.8	379.8	380.7	379.0	378.2	378.2	374.9	377.4	379.8	380.7	384.8
65°	341.8	346.0	342.7	343.5	338.5	336.9	335.2	330.3	329.5	326.2	327.8
67.5°	308.0	311.3	308.0	308.0	303.9	300.6	296.4	288.2	285.7	279.1	277.4
70°	280.7	278.3	279.9	277.4	272.5	268.4	262.6	256.0	247.7	239.5	233.7
72.5°	254.3	254.3	252.7	250.2	247.7	239.5	232.9	225.4	215.5	204.8	196.5
75°	228.7	229.5	229.5	227.1	222.9	215.5	208.1	197.3	186.6	174.2	163.5
77.5°	210.6	210.6	210.6	206.4	202.3	195.7	186.6	175.1	163.5	148.6	136.2
80°	193.2	192.4	192.4	187.4	183.3	175.9	166.8	155.2	142.8	127.2	113.1
82.5°	179.2	178.4	176.7	172.6	166.8	159.4	150.3	137.9	124.7	110.6	93.3
85°	164.3	163.5	161.8	157.7	151.9	145.3	135.4	123.0	109.8	94.1	77.6
87.5°	151.1	150.3	147.8	145.3	138.7	131.3	121.4	109.8	95.8	80.9	64.4
90°	142.0	140.4	138.7	135.4	129.6	121.4	111.5	99.1	85.0	70.2	53.7
92.5°	131.3	130.5	128.0	124.7	119.7	111.5	101.6	90.0	76.0	61.9	46.2
95°	120.6	119.7	118.1	114.8	109.8	102.4	93.3	81.7	68.5	54.5	40.5
97.5°	110.6	110.6	108.2	105.7	99.9	94.1	85.0	74.3	61.9	49.5	36.3
100°	102.4	102.4	99.9	96.6	92.5	86.7	77.6	67.7	56.1	44.6	31.4
102.5°	95.0	94.1	92.5	89.2	85.0	79.3	71.0	61.9	51.2	39.6	28.1
105°	88.4	87.5	85.9	82.6	79.3	72.7	66.1	57.0	46.2	35.5	24.8
107.5°	81.7	80.9	80.1	76.8	72.7	66.9	60.3	51.2	42.1	32.2	22.3
110°	76.0	75.1	73.5	70.2	66.1	61.1	54.5	47.1	38.0	28.9	19.8



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	71.0	70.2	68.5	65.2	61.9	56.1	50.4	42.1	34.7	26.4	17.3
115°	66.1	65.2	63.6	60.3	56.1	51.2	45.4	38.8	30.6	23.1	15.7
117.5°	61.1	60.3	58.6	56.1	52.0	47.1	41.3	34.7	27.2	21.5	14.0
120°	57.0	55.3	53.7	51.2	47.1	42.9	37.2	31.4	24.8	19.0	12.4
122.5°	52.8	51.2	49.5	47.1	42.9	38.8	33.0	28.1	23.1	17.3	11.6
125°	47.9	47.1	45.4	42.9	38.8	34.7	30.6	25.6	20.6	15.7	9.9
127.5°	43.8	42.9	41.3	38.0	34.7	31.4	27.2	23.1	18.2	13.2	9.1
130°	40.5	38.8	37.2	34.7	32.2	28.9	24.8	20.6	16.5	11.6	8.3
132.5°	36.3	34.7	33.0	31.4	28.9	25.6	22.3	18.2	14.9	10.7	7.4
135°	33.0	31.4	29.7	28.1	25.6	23.1	19.8	16.5	13.2	9.9	6.6
137.5°	28.9	28.1	27.2	25.6	23.1	20.6	18.2	14.0	11.6	9.1	5.8
140°	26.4	25.6	24.8	22.3	20.6	18.2	15.7	12.4	9.9	7.4	5.0
142.5°	23.9	23.1	21.5	19.8	18.2	16.5	13.2	11.6	9.1	6.6	5.0
145°	20.6	19.8	19.0	17.3	15.7	13.2	11.6	9.9	8.3	5.8	4.1
147.5°	19.0	18.2	16.5	14.9	13.2	11.6	10.7	9.1	6.6	5.0	3.3
150°	15.7	14.9	14.0	12.4	11.6	10.7	9.1	7.4	5.8	4.1	3.3
152.5°	13.2	12.4	11.6	11.6	9.9	9.1	7.4	6.6	5.0	4.1	2.5
155°	11.6	11.6	10.7	9.9	8.3	7.4	6.6	5.0	4.1	3.3	2.5
157.5°	9.9	9.1	8.3	8.3	7.4	6.6	5.0	4.1	3.3	3.3	2.5
160°	8.3	7.4	7.4	6.6	5.8	5.0	4.1	4.1	3.3	2.5	2.5
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: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1
2.5°	1503.6	1494.5	1502.8	1513.5	1513.5	1511.9	1510.2	1513.5	1521.8	1518.5	1508.6
5°	1501.1	1492.1	1499.5	1510.2	1510.2	1507.7	1506.1	1508.6	1517.7	1513.5	1504.4
7.5°	1496.2	1487.9	1492.9	1502.8	1502.8	1500.3	1498.7	1502.0	1509.4	1505.3	1495.4
10°	1487.1	1478.0	1483.8	1492.9	1492.1	1490.4	1487.9	1492.1	1498.7	1492.9	1481.3
12.5°	1475.5	1466.5	1471.4	1479.7	1478.8	1475.5	1473.9	1476.4	1482.2	1478.8	1466.5
15°	1459.9	1450.8	1454.9	1463.2	1460.7	1458.2	1454.9	1455.7	1463.2	1457.4	1444.2
17.5°	1440.9	1431.0	1434.3	1441.7	1439.2	1436.7	1432.6	1433.4	1441.7	1433.4	1419.4
20°	1417.7	1407.0	1409.5	1418.6	1414.4	1410.3	1406.2	1406.2	1414.4	1405.4	1389.7
22.5°	1393.0	1382.2	1383.9	1390.5	1387.2	1379.8	1375.6	1378.1	1382.2	1370.7	1354.2
25°	1362.4	1348.4	1350.9	1357.5	1355.0	1345.1	1341.0	1342.6	1341.0	1331.9	1314.5
27.5°	1326.9	1312.1	1313.7	1317.8	1314.5	1305.5	1300.5	1301.3	1298.0	1286.5	1266.6
30°	1282.3	1274.9	1274.1	1276.6	1271.6	1262.5	1256.7	1255.1	1254.3	1237.7	1213.8
32.5°	1236.9	1230.3	1226.2	1229.5	1223.7	1214.6	1204.7	1204.7	1196.5	1180.8	1160.1
35°	1190.7	1179.9	1175.8	1178.3	1171.7	1160.1	1151.9	1147.7	1135.4	1115.5	1093.2
37.5°	1131.2	1123.8	1118.8	1121.3	1113.9	1105.6	1089.9	1085.8	1072.6	1045.4	1017.3
40°	1066.8	1061.0	1056.1	1058.6	1050.3	1037.9	1023.9	1017.3	1002.4	971.9	949.6
42.5°	997.5	995.0	989.2	998.3	981.8	969.4	955.3	944.6	929.8	896.7	871.1
45°	924.0	929.8	916.5	919.0	908.3	897.5	882.7	867.0	852.1	820.8	791.9
47.5°	846.4	850.5	841.4	843.1	831.5	821.6	808.4	788.6	772.0	744.8	719.2
50°	766.3	764.6	764.6	763.0	753.9	741.5	728.3	710.1	693.6	668.8	647.4
52.5°	681.2	684.5	686.2	690.3	678.7	671.3	650.7	635.0	622.6	597.0	578.8
55°	599.5	611.0	607.7	609.4	596.2	590.4	573.9	561.5	543.3	528.5	516.9
57.5°	525.2	527.6	529.3	531.8	526.0	514.4	501.2	491.3	477.3	464.9	456.6
60°	453.3	453.3	454.1	458.3	452.5	442.6	432.7	425.2	415.3	407.9	402.9
62.5°	385.6	391.4	392.2	388.9	381.5	376.5	369.9	365.8	359.2	356.7	355.1
65°	322.9	322.9	322.9	324.5	320.4	317.1	312.9	312.1	314.6	311.3	312.9
67.5°	270.0	267.5	265.9	266.7	265.1	263.4	262.6	265.1	270.0	270.0	274.1
70°	224.6	219.6	216.3	216.3	216.3	217.2	219.6	224.6	232.9	236.2	241.9
72.5°	187.4	176.7	171.7	171.7	172.6	175.9	183.3	192.4	199.8	206.4	213.9
75°	151.9	141.2	133.8	132.9	134.6	139.5	150.3	158.5	170.9	180.0	189.1
77.5°	123.0	109.8	100.7	99.9	102.4	109.8	123.0	133.8	147.8	157.7	167.6
80°	98.3	83.4	76.0	71.0	75.1	84.2	99.1	112.3	125.5	138.7	151.1
82.5°	78.4	64.4	52.8	47.9	52.8	65.2	79.3	95.0	108.2	122.2	134.6
85°	61.9	47.1	33.9	28.9	34.7	47.9	63.6	79.3	94.1	108.2	120.6
87.5°	48.7	33.9	20.6	14.0	21.5	35.5	50.4	66.1	81.7	95.8	108.2
90°	38.0	23.9	11.6	1.7	12.4	25.6	40.5	55.3	71.0	85.0	97.4
92.5°	32.2	18.2	6.6	0.0	7.4	19.0	33.0	47.9	61.9	76.0	88.4
95°	27.2	14.9	5.0	0.0	5.0	14.9	27.2	40.5	54.5	68.5	80.9
97.5°	23.1	11.6	3.3	0.0	3.3	11.6	22.3	35.5	47.9	61.1	72.7
100°	19.8	9.9	2.5	0.0	2.5	9.1	19.0	30.6	42.9	55.3	66.1
102.5°	17.3	8.3	1.7	0.0	1.7	7.4	15.7	26.4	37.2	48.7	59.5
105°	14.9	6.6	1.7	0.0	0.8	5.8	13.2	23.1	33.0	43.8	53.7
107.5°	13.2	5.8	1.7	0.0	0.8	5.0	11.6	19.8	29.7	38.8	47.9
110°	11.6	5.0	1.7	0.0	0.8	3.3	9.9	17.3	25.6	34.7	43.8



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	9.9	4.1	0.8	0.0	0.0	2.5	8.3	14.9	22.3	31.4	38.8
115°	9.1	4.1	0.8	0.0	0.0	1.7	6.6	13.2	19.8	28.1	34.7
117.5°	8.3	3.3	0.8	0.0	0.8	1.7	5.8	11.6	17.3	23.9	31.4
120°	7.4	3.3	0.8	0.0	0.8	0.8	4.1	9.9	14.9	21.5	27.2
122.5°	6.6	3.3	0.8	0.0	0.8	0.8	3.3	8.3	13.2	19.0	23.9
125°	5.8	2.5	1.7	0.8	0.8	0.8	2.5	6.6	11.6	15.7	21.5
127.5°	5.8	2.5	1.7	0.8	0.8	0.8	1.7	5.8	9.1	14.0	19.0
130°	5.0	2.5	1.7	0.8	0.8	0.8	0.8	4.1	8.3	11.6	15.7
132.5°	4.1	2.5	1.7	0.8	0.8	0.8	0.8	2.5	5.8	9.9	13.2
135°	4.1	2.5	1.7	0.8	0.8	0.8	0.8	1.7	4.1	7.4	10.7
137.5°	3.3	1.7	1.7	0.8	0.8	0.8	0.8	0.8	3.3	5.8	8.3
140°	3.3	1.7	1.7	0.8	0.8	0.8	0.8	0.8	2.5	4.1	6.6
142.5°	2.5	1.7	1.7	0.8	0.8	0.8	0.8	0.8	1.7	3.3	5.0
145°	2.5	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	1.7	3.3
147.5°	2.5	2.5	1.7	0.8	0.8	0.8	0.8	0.8	0.8	1.7	2.5
150°	2.5	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.7
152.5°	2.5	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.7
155°	2.5	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	1.7	1.7
157.5°	2.5	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.7
160°	2.5	1.7	1.7	0.8	1.7	0.8	1.7	1.7	1.7	1.7	1.7
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: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1
2.5°	1505.3	1489.6	1497.8	1495.4	1498.7	1505.3	1504.4	1502.8	1502.8	1500.3	1497.0
5°	1500.3	1485.5	1492.9	1488.8	1492.9	1498.7	1497.8	1495.4	1497.0	1492.9	1488.8
7.5°	1490.4	1477.2	1483.8	1480.5	1483.8	1489.6	1487.1	1486.3	1487.9	1481.3	1478.8
10°	1478.8	1464.0	1471.4	1467.3	1471.4	1475.5	1473.9	1470.6	1473.9	1467.3	1464.8
12.5°	1460.7	1448.3	1453.3	1451.6	1454.1	1458.2	1454.9	1452.4	1454.1	1448.3	1443.3
15°	1440.9	1428.5	1432.6	1430.1	1431.8	1436.7	1431.0	1430.1	1428.5	1422.7	1421.0
17.5°	1415.3	1403.7	1407.8	1403.7	1406.2	1404.5	1403.7	1399.6	1399.6	1393.0	1388.0
20°	1383.9	1374.0	1371.5	1368.2	1371.5	1368.2	1363.2	1359.9	1359.1	1352.5	1348.4
22.5°	1347.6	1336.0	1337.7	1328.6	1329.4	1324.4	1316.2	1312.9	1309.6	1302.1	1296.4
25°	1303.8	1292.2	1284.0	1278.2	1270.8	1269.9	1259.2	1251.0	1250.1	1241.0	1240.2
27.5°	1254.3	1241.0	1234.4	1220.4	1211.3	1203.9	1194.8	1186.5	1182.4	1172.5	1165.9
30°	1197.3	1182.4	1165.9	1156.0	1142.0	1136.2	1120.5	1110.6	1107.3	1096.5	1091.6
32.5°	1132.9	1117.2	1104.0	1085.0	1069.3	1061.0	1045.4	1035.4	1031.3	1019.8	1013.1
35°	1062.7	1045.4	1029.7	1011.5	999.1	985.1	966.1	956.2	947.1	943.0	938.0
37.5°	989.2	970.2	952.0	933.9	923.1	906.6	890.1	883.5	872.8	868.6	863.7
40°	913.2	894.2	876.9	859.6	847.2	832.3	817.5	815.0	803.4	799.3	796.0
42.5°	838.1	818.3	798.5	786.1	777.0	762.1	752.2	749.7	739.8	737.4	737.4
45°	770.4	745.6	729.1	718.4	710.9	698.6	690.3	688.6	680.4	678.7	678.7
47.5°	697.7	674.6	662.2	655.6	649.0	639.9	635.0	635.0	626.7	625.1	624.2
50°	630.0	608.5	599.5	592.9	592.0	585.4	581.3	579.6	579.6	573.9	574.7
52.5°	565.6	554.9	547.4	543.3	538.4	534.2	530.9	530.9	528.5	524.3	526.0
55°	506.2	493.8	494.6	491.3	488.8	486.3	487.2	482.2	481.4	478.1	480.6
57.5°	446.7	446.7	445.1	442.6	438.5	440.1	440.1	440.1	436.0	433.5	436.0
60°	396.3	398.8	394.7	397.2	395.5	396.3	394.7	394.7	392.2	391.4	392.2
62.5°	351.8	355.9	354.2	357.5	355.9	356.7	358.4	355.1	353.4	351.8	353.4
65°	312.1	317.1	316.2	318.7	319.6	320.4	321.2	319.6	317.9	316.2	315.4
67.5°	277.4	282.4	285.7	286.5	287.3	289.8	289.0	287.3	285.7	283.2	282.4
70°	246.1	252.7	256.8	258.4	261.8	260.1	260.1	259.3	257.6	255.1	254.3
72.5°	219.6	227.1	231.2	232.9	236.2	236.2	235.3	234.5	232.9	230.4	229.5
75°	196.5	203.1	208.9	212.2	214.7	214.7	213.9	213.0	211.4	209.7	208.9
77.5°	178.4	184.1	189.1	193.2	194.9	195.7	194.9	193.2	193.2	192.4	191.6
80°	160.2	166.8	171.7	175.9	178.4	178.4	177.5	178.4	176.7	175.9	175.1
82.5°	144.5	151.9	157.7	161.8	163.5	164.3	163.5	164.3	162.7	162.7	162.7
85°	130.5	137.9	144.5	147.8	150.3	151.1	151.1	151.1	150.3	150.3	150.3
87.5°	118.9	126.3	132.9	136.2	138.7	139.5	139.5	140.4	138.7	138.7	138.7
90°	108.2	115.6	122.2	125.5	128.0	129.6	129.6	130.5	129.6	128.8	128.8
92.5°	98.3	106.5	113.1	116.4	118.9	121.4	121.4	122.2	120.6	120.6	120.6
95°	90.0	98.3	104.0	108.2	110.6	112.3	113.1	113.1	112.3	112.3	112.3
97.5°	82.6	90.0	95.8	99.9	102.4	103.2	104.0	104.9	104.0	104.0	104.0
100°	75.1	82.6	88.4	91.7	95.0	95.8	96.6	97.4	97.4	96.6	96.6
102.5°	68.5	76.0	80.9	85.0	87.5	89.2	90.0	90.0	90.0	90.0	90.0
105°	61.9	69.4	74.3	78.4	80.9	82.6	83.4	84.2	84.2	83.4	83.4
107.5°	56.1	62.8	68.5	71.8	75.1	76.8	77.6	77.6	78.4	77.6	77.6
110°	50.4	57.8	62.8	66.1	69.4	71.0	71.8	72.7	72.7	72.7	72.7



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	46.2	52.0	57.0	60.3	63.6	65.2	66.1	66.9	67.7	66.9	66.9
115°	41.3	47.1	52.0	55.3	57.8	59.5	61.1	61.9	61.9	62.8	61.9
117.5°	37.2	42.1	47.1	50.4	52.8	55.3	56.1	57.0	57.8	57.0	57.0
120°	33.0	38.0	42.1	45.4	47.9	50.4	51.2	52.0	52.8	52.0	52.0
122.5°	29.7	33.9	38.0	41.3	43.8	45.4	47.1	47.1	47.9	47.9	47.9
125°	26.4	30.6	33.9	37.2	39.6	41.3	42.1	42.9	42.9	43.8	43.8
127.5°	23.1	26.4	30.6	33.0	35.5	37.2	38.0	38.8	38.8	39.6	39.6
130°	19.8	23.1	26.4	28.9	31.4	33.0	33.9	34.7	35.5	35.5	35.5
132.5°	17.3	20.6	23.1	25.6	27.2	28.9	30.6	31.4	31.4	31.4	31.4
135°	14.0	17.3	19.8	22.3	23.9	25.6	26.4	28.1	28.1	28.1	28.1
137.5°	11.6	14.9	17.3	19.0	20.6	22.3	23.1	23.9	24.8	24.8	24.8
140°	9.1	11.6	14.0	16.5	18.2	19.0	20.6	20.6	21.5	21.5	21.5
142.5°	6.6	9.1	10.7	13.2	14.9	16.5	17.3	18.2	18.2	18.2	18.2
145°	5.0	6.6	8.3	9.9	12.4	13.2	14.0	14.9	15.7	15.7	15.7
147.5°	3.3	5.0	5.8	7.4	9.1	10.7	11.6	12.4	13.2	13.2	13.2
150°	2.5	3.3	5.0	5.8	6.6	8.3	9.9	9.9	10.7	10.7	9.9
152.5°	1.7	2.5	3.3	4.1	5.0	5.8	7.4	7.4	8.3	8.3	8.3
155°	1.7	1.7	1.7	2.5	3.3	4.1	5.0	5.8	5.8	5.8	5.8
157.5°	1.7	1.7	1.7	1.7	1.7	2.5	3.3	4.1	4.1	4.1	4.1
160°	1.7	1.7	0.8	0.8	1.7	1.7	1.7	1.7	2.5	2.5	2.5
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: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1
2.5°	1499.5	1501.1	1501.1	1499.5	1498.7	1502.0	1497.8	1482.2	1487.1	1488.8	1493.7
5°	1492.1	1493.7	1493.7	1493.7	1492.1	1495.4	1491.2	1475.5	1481.3	1483.8	1487.1
7.5°	1481.3	1482.2	1483.8	1483.0	1481.3	1486.3	1482.2	1466.5	1470.6	1474.7	1478.8
10°	1467.3	1467.3	1468.1	1469.8	1468.1	1472.2	1468.1	1454.1	1458.2	1460.7	1465.6
12.5°	1448.3	1449.9	1450.8	1449.9	1449.1	1452.4	1450.8	1437.6	1439.2	1444.2	1449.1
15°	1422.7	1422.7	1426.8	1425.2	1425.2	1428.5	1430.1	1415.3	1417.7	1425.2	1430.1
17.5°	1391.3	1392.1	1395.5	1397.1	1396.3	1402.1	1402.9	1391.3	1390.5	1399.6	1404.5
20°	1350.9	1352.5	1356.6	1359.9	1359.9	1366.6	1369.0	1361.6	1362.4	1372.3	1374.0
22.5°	1301.3	1301.3	1308.8	1313.7	1317.8	1322.0	1329.4	1322.8	1322.8	1336.0	1343.4
25°	1240.2	1246.0	1248.5	1258.4	1264.2	1275.7	1282.3	1283.2	1284.0	1296.4	1301.3
27.5°	1172.5	1174.2	1181.6	1193.2	1199.8	1210.5	1222.9	1225.4	1229.5	1246.0	1253.4
30°	1095.7	1100.7	1104.0	1120.5	1129.6	1143.6	1159.3	1165.1	1168.4	1190.7	1199.8
32.5°	1017.3	1018.9	1033.0	1042.0	1052.8	1067.6	1085.8	1096.5	1103.2	1126.3	1139.5
35°	938.8	942.1	953.7	965.3	976.0	990.9	1009.8	1024.7	1036.3	1056.9	1074.3
37.5°	867.0	875.3	877.7	889.3	897.5	912.4	925.6	947.1	958.7	980.1	1002.4
40°	802.6	805.1	806.7	818.3	824.1	838.1	857.1	871.1	886.8	902.5	928.9
42.5°	739.0	740.7	743.1	749.7	756.4	766.3	780.3	794.3	810.8	834.0	851.3
45°	680.4	682.0	683.7	687.8	693.6	702.7	711.8	721.7	738.2	758.0	776.2
47.5°	625.9	629.2	629.2	630.0	634.1	641.6	648.2	660.6	669.7	680.4	701.0
50°	573.9	576.3	577.2	577.2	579.6	584.6	586.3	594.5	602.8	612.7	627.5
52.5°	525.2	525.2	524.3	527.6	527.6	530.9	531.8	536.7	542.5	553.2	559.8
55°	478.9	478.9	481.4	479.7	479.7	481.4	480.6	481.4	486.3	492.9	498.7
57.5°	434.3	433.5	436.0	434.3	433.5	435.2	436.8	433.5	434.3	440.9	440.9
60°	389.7	390.6	393.0	391.4	391.4	391.4	389.7	388.1	386.4	390.6	392.2
62.5°	354.2	351.8	354.2	351.8	353.4	352.6	350.9	347.6	348.5	346.8	345.1
65°	317.1	317.1	317.9	315.4	317.1	317.1	314.6	313.8	308.8	307.2	303.0
67.5°	284.9	284.9	285.7	284.0	284.0	284.9	282.4	279.9	275.0	272.5	266.7
70°	256.8	256.8	256.8	256.0	256.0	256.0	254.3	251.0	246.1	241.9	234.5
72.5°	231.2	232.0	231.2	231.2	233.7	231.2	228.7	225.4	221.3	213.0	206.4
75°	210.6	211.4	210.6	210.6	210.6	209.7	208.9	204.0	199.0	192.4	182.5
77.5°	192.4	192.4	193.2	192.4	192.4	191.6	189.1	185.0	179.2	173.4	161.8
80°	175.1	175.9	176.7	177.5	175.9	175.1	172.6	169.3	161.8	155.2	143.7
82.5°	162.7	161.8	162.7	163.5	161.8	161.0	158.5	154.4	148.6	139.5	128.0
85°	150.3	149.5	149.5	150.3	149.5	147.8	145.3	141.2	135.4	126.3	114.8
87.5°	137.9	138.7	139.5	138.7	137.9	136.2	133.8	129.6	123.0	115.6	103.2
90°	128.8	128.8	128.8	128.8	128.0	126.3	123.9	118.9	113.1	104.0	93.3
92.5°	120.6	120.6	120.6	120.6	119.7	117.3	114.8	110.6	104.0	95.0	85.0
95°	112.3	113.1	112.3	112.3	110.6	109.8	105.7	101.6	95.8	86.7	76.0
97.5°	103.2	104.0	103.2	103.2	102.4	100.7	98.3	93.3	87.5	79.3	69.4
100°	96.6	96.6	95.8	95.8	95.0	93.3	90.0	85.9	80.1	71.8	61.9
102.5°	89.2	90.0	89.2	89.2	87.5	85.9	83.4	79.3	73.5	65.2	56.1
105°	83.4	83.4	82.6	82.6	80.9	79.3	76.8	71.8	66.9	59.5	50.4
107.5°	77.6	77.6	76.8	76.8	75.1	73.5	70.2	66.1	61.1	53.7	45.4
110°	71.8	71.8	71.8	71.0	69.4	66.9	64.4	60.3	55.3	48.7	40.5





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	67.7	66.9	66.1	65.2	63.6	61.9	58.6	54.5	49.5	43.8	36.3
115°	61.9	61.9	61.1	60.3	58.6	56.1	53.7	50.4	45.4	38.8	32.2
117.5°	57.0	57.0	56.1	55.3	53.7	51.2	48.7	45.4	40.5	34.7	28.9
120°	52.0	52.0	51.2	50.4	48.7	46.2	44.6	40.5	36.3	30.6	25.6
122.5°	47.9	47.1	47.1	45.4	44.6	42.1	39.6	36.3	32.2	27.2	22.3
125°	42.9	42.9	42.1	41.3	40.5	38.0	35.5	32.2	28.1	23.9	19.8
127.5°	38.8	38.8	38.0	37.2	36.3	33.9	31.4	28.9	24.8	20.6	16.5
130°	34.7	34.7	33.9	33.0	32.2	29.7	28.1	24.8	21.5	18.2	14.0
132.5°	31.4	31.4	30.6	29.7	28.1	26.4	24.8	21.5	19.0	15.7	12.4
135°	28.1	27.2	27.2	26.4	24.8	23.1	21.5	19.0	15.7	13.2	9.9
137.5°	24.8	23.9	23.1	22.3	21.5	19.8	18.2	16.5	14.0	10.7	8.3
140°	21.5	20.6	20.6	19.8	18.2	17.3	15.7	13.2	11.6	9.1	6.6
142.5°	18.2	18.2	17.3	16.5	15.7	14.9	13.2	11.6	9.1	7.4	5.0
145°	15.7	14.9	14.9	14.0	13.2	11.6	10.7	9.1	7.4	5.8	4.1
147.5°	12.4	12.4	12.4	11.6	10.7	9.9	9.1	7.4	5.8	4.1	2.5
150°	9.9	9.9	9.9	9.1	8.3	7.4	6.6	5.8	4.1	2.5	1.7
152.5°	8.3	8.3	7.4	7.4	6.6	5.8	5.0	4.1	2.5	1.7	1.7
155°	5.8	5.8	5.8	5.0	5.0	4.1	3.3	2.5	1.7	1.7	1.7
157.5°	4.1	4.1	4.1	3.3	3.3	2.5	2.5	1.7	1.7	1.7	1.7
160°	2.5	2.5	2.5	2.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7
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: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1	1501.1
2.5°	1491.2	1490.4	1497.0	1497.0	1489.6	1501.1	1513.5
5°	1486.3	1485.5	1492.1	1492.1	1485.5	1497.0	1510.2
7.5°	1476.4	1477.2	1483.8	1485.5	1477.2	1487.9	1502.0
10°	1465.6	1464.8	1472.2	1473.9	1467.3	1477.2	1490.4
12.5°	1448.3	1448.3	1455.7	1458.2	1451.6	1463.2	1475.5
15°	1430.1	1430.1	1435.1	1439.2	1433.4	1444.2	1456.6
17.5°	1407.0	1406.2	1411.1	1416.1	1410.3	1421.9	1435.1
20°	1377.3	1377.3	1383.1	1388.8	1384.7	1395.5	1410.3
22.5°	1345.9	1342.6	1352.5	1356.6	1354.2	1364.9	1379.8
25°	1306.3	1305.5	1315.4	1321.1	1317.8	1329.4	1342.6
27.5°	1263.3	1262.5	1272.4	1279.9	1278.2	1288.9	1303.8
30°	1211.3	1215.4	1224.5	1236.9	1232.8	1244.3	1260.0
32.5°	1156.8	1161.0	1171.7	1184.9	1185.7	1194.8	1210.5
35°	1091.6	1102.3	1109.8	1127.1	1130.4	1139.5	1156.0
37.5°	1023.1	1035.4	1051.1	1064.3	1070.9	1078.4	1097.4
40°	946.3	964.4	981.8	997.5	1005.7	1013.1	1031.3
42.5°	876.9	890.9	907.5	923.1	938.0	944.6	963.6
45°	798.5	815.0	829.8	848.8	863.7	871.1	890.1
47.5°	721.7	738.2	758.0	771.2	786.9	794.3	812.5
50°	648.2	663.0	679.6	695.2	708.5	715.1	730.8
52.5°	575.5	591.2	606.9	616.8	630.8	635.8	649.0
55°	511.1	521.8	535.9	541.7	555.7	559.0	568.1
57.5°	449.2	456.6	461.6	471.5	481.4	488.8	499.6
60°	393.0	396.3	399.6	405.4	413.7	416.2	420.3
62.5°	342.7	341.8	348.5	350.1	350.9	359.2	355.1
65°	298.1	298.9	293.1	290.7	294.0	296.4	294.8
67.5°	260.9	256.0	251.0	245.2	240.3	242.8	240.3
70°	224.6	220.5	212.2	204.0	200.6	195.7	193.2
72.5°	195.7	185.8	177.5	166.8	161.0	155.2	151.1
75°	173.4	159.4	147.8	136.2	128.0	119.7	118.1
77.5°	150.3	137.1	123.9	111.5	99.1	90.0	86.7
80°	132.1	119.7	104.0	89.2	76.0	64.4	60.3
82.5°	115.6	102.4	86.7	71.0	56.1	43.8	38.8
85°	101.6	87.5	71.8	56.1	41.3	28.1	21.5
87.5°	90.8	75.1	59.5	44.6	28.9	15.7	8.3
90°	80.9	66.1	51.2	35.5	20.6	8.3	0.0
92.5°	71.8	57.8	42.9	28.9	15.7	5.0	0.8
95°	63.6	51.2	36.3	23.1	11.6	3.3	0.8
97.5°	57.0	44.6	31.4	19.0	9.1	2.5	0.8
100°	51.2	38.8	27.2	15.7	7.4	1.7	0.8
102.5°	45.4	34.7	23.1	13.2	5.8	0.8	0.8
105°	40.5	30.6	19.8	11.6	5.0	0.8	0.8
107.5°	36.3	27.2	17.3	9.9	3.3	0.8	0.8
110°	32.2	23.1	14.9	8.3	2.5	0.8	0.8



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LN-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	28.9	20.6	13.2	6.6	1.7	0.8	0.8
115°	25.6	18.2	11.6	5.8	1.7	0.8	0.8
117.5°	22.3	15.7	9.9	4.1	0.8	0.8	0.8
120°	19.8	14.0	8.3	3.3	0.8	0.8	0.8
122.5°	17.3	11.6	6.6	2.5	0.8	0.8	0.8
125°	14.9	9.9	5.8	1.7	0.8	0.8	0.8
127.5°	12.4	8.3	4.1	1.7	0.8	0.8	0.8
130°	10.7	6.6	3.3	0.8	0.8	0.8	0.8
132.5°	9.1	5.0	2.5	0.8	0.8	0.8	0.8
135°	7.4	4.1	1.7	0.8	0.8	0.8	0.8
137.5°	5.8	3.3	1.7	0.8	0.8	0.8	0.8
140°	4.1	2.5	0.8	0.8	0.8	0.8	0.8
142.5°	3.3	1.7	0.8	0.8	0.8	0.8	0.8
145°	2.5	1.7	0.8	0.8	0.8	0.8	0.8
147.5°	1.7	1.7	1.7	1.7	0.8	0.8	0.8
150°	1.7	1.7	0.8	0.8	1.7	0.8	0.8
152.5°	1.7	0.8	0.8	0.8	1.7	0.8	0.8
155°	1.7	1.7	1.7	1.7	1.7	1.7	0.8
157.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7
160°	1.7	1.7	1.7	1.7	1.7	1.7	1.7
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)