

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-LC-UNV-L940-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 (P33518)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-41SL-LC-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

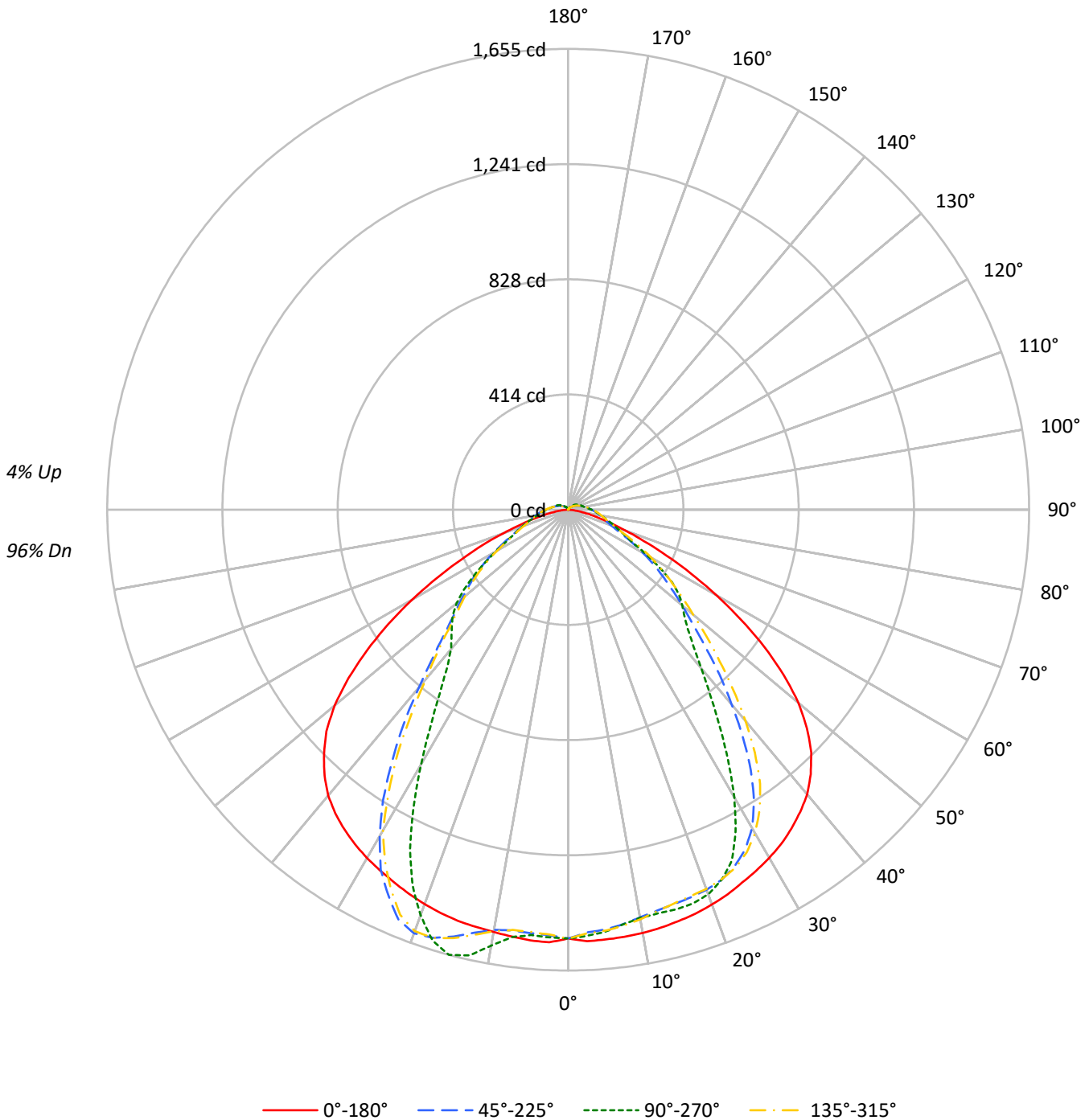
Lumens per Lamp: N/A
Luminaire Lumens: 3671.0 lumens
Efficiency: N/A
Efficacy: 118.4 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 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



TEST NUMBER: P#
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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	115	115	115	115	109	109	109	103	103	103	98	98	98	96				
1	109	104	100	97	106	102	98	95	97	94	91	92	90	88	88	86	84	82				
2	100	93	86	81	97	90	85	80	86	82	77	82	79	75	79	76	73	71				
3	92	83	75	69	89	81	74	68	77	71	67	74	69	65	71	67	63	61				
4	85	74	66	60	83	73	65	59	70	63	58	67	61	57	64	60	56	54				
5	79	67	59	52	76	66	58	52	63	56	51	61	55	50	59	53	49	47				
6	73	61	52	46	71	60	52	46	57	51	45	55	49	45	54	48	44	42				
7	68	55	47	42	66	54	47	41	53	46	41	51	45	40	49	44	40	38				
8	64	51	43	37	62	50	42	37	48	42	37	47	41	36	45	40	36	34				
9	60	47	39	34	58	46	39	34	45	38	33	43	37	33	42	37	33	31				
10	56	43	36	31	54	43	36	31	42	35	30	40	34	30	39	34	30	28				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	12444	12444	12444	12444
5°	12534	11951	12560	12044
10°	12593	11454	12567	12231
15°	12691	11300	12684	12582
20°	12830	11121	12816	11723
25°	12988	10551	12981	10194
30°	13232	9144	13239	8101
35°	13491	7394	13530	6257
40°	13720	5953	13777	5245
45°	13672	5043	13742	4911
50°	13083	4643	13266	4539
55°	11607	4173	11897	3793
60°	9414	3194	9915	2929
65°	6998	2444	7541	2317
70°	4759	2110	5366	2017
75°	3115	1904	3624	1800
80°	2012	1774	2360	1633
85°	1032	1770	1360	1618



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.3	4.0
10°-20°	435.2	11.9
20°-30°	661.6	18.0
30°-40°	709.8	19.3
40°-50°	616.0	16.8
50°-60°	456.5	12.4
60°-70°	261.6	7.1
70°-80°	144.9	3.9
80°-90°	88.2	2.4
90°-100°	57.4	1.6
100°-110°	38.4	1.0
110°-120°	25.9	0.7
120°-130°	15.9	0.4
130°-140°	8.4	0.2
140°-150°	3.8	0.1
150°-160°	1.1	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1243.1	33.9
0°-40°	1952.9	53.2
0°-60°	3025.4	82.4
0°-90°	3520.1	95.9
90°-120°	121.7	3.3
90°-150°	149.8	4.1
90°-180°	151.0	4.1
0°-180°	3671.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1540	1540	1540	1540	1540	
5°	1549	1522	1553	1534	1549	148
15°	1530	1487	1529	1655	1530	433
25°	1478	1390	1477	1343	1478	683
35°	1398	946	1402	801	1398	875
45°	1234	607	1240	591	1234	945
55°	861	455	882	414	861	763
65°	390	231	421	219	390	394
75°	111	146	130	138	111	127
85°	15	101	20	92	15	20
90°	0	84	2	78	0	1
95°	1	69	0	66	1	1
105°	1	52	1	49	1	1
115°	1	42	1	38	1	1
125°	1	32	1	26	1	1
135°	1	20	1	17	1	1
145°	1	12	2	10	1	1
155°	2	6	2	5	2	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	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°	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9
2.5°	1551.0	1547.0	1545.5	1542.3	1544.7	1554.2	1547.8	1537.5	1538.3	1520.0	1529.6
5°	1549.4	1544.7	1542.3	1539.1	1540.7	1549.4	1543.1	1532.7	1531.9	1513.6	1522.4
7.5°	1547.0	1542.3	1538.3	1535.9	1536.7	1543.9	1535.9	1524.0	1521.6	1501.7	1509.7
10°	1543.1	1539.9	1534.3	1530.3	1529.6	1537.5	1524.8	1512.8	1507.3	1486.6	1494.6
12.5°	1537.5	1532.7	1527.2	1520.0	1519.2	1524.0	1513.6	1496.9	1491.4	1474.7	1483.4
15°	1529.6	1524.0	1517.6	1509.7	1505.7	1508.9	1496.1	1481.0	1480.2	1465.9	1477.9
17.5°	1520.8	1512.8	1505.7	1494.6	1489.0	1491.4	1481.0	1467.5	1469.1	1460.4	1473.9
20°	1508.9	1500.1	1489.0	1477.9	1469.9	1473.9	1466.7	1456.4	1458.8	1452.4	1464.3
22.5°	1495.3	1483.4	1469.9	1457.2	1450.8	1456.4	1450.8	1442.1	1442.9	1438.9	1446.0
25°	1477.9	1464.3	1448.4	1432.5	1429.3	1433.3	1430.1	1423.0	1419.8	1413.4	1416.6
27.5°	1461.9	1446.8	1426.9	1410.2	1404.7	1412.6	1405.5	1393.5	1384.8	1376.0	1369.7
30°	1443.6	1425.4	1403.1	1384.0	1379.2	1382.4	1372.1	1353.8	1330.7	1319.6	1302.1
32.5°	1423.8	1399.9	1372.1	1350.6	1347.4	1345.0	1325.9	1299.7	1263.9	1241.6	1214.6
35°	1397.5	1371.3	1337.9	1311.6	1306.8	1293.3	1262.3	1227.3	1181.2	1143.0	1096.9
37.5°	1368.1	1337.1	1302.1	1267.1	1253.5	1226.5	1182.8	1146.2	1076.2	1030.0	974.4
40°	1334.7	1297.3	1254.3	1212.2	1189.9	1146.2	1096.1	1042.0	974.4	912.3	865.4
42.5°	1288.5	1248.8	1197.9	1150.9	1112.8	1054.7	995.8	919.5	857.4	804.9	757.2
45°	1233.7	1185.9	1127.1	1070.6	1022.1	952.9	883.7	807.3	755.6	694.4	661.8
47.5°	1162.9	1111.2	1048.3	985.5	921.9	845.5	773.1	700.0	648.2	604.5	580.6
50°	1079.4	1031.6	962.4	887.7	817.7	738.1	665.7	610.9	560.8	533.7	515.4
52.5°	976.0	931.4	860.6	779.5	711.9	633.9	567.9	523.4	487.6	467.7	461.3
55°	860.6	821.6	751.7	676.1	606.9	535.3	485.2	446.2	423.2	411.2	412.0
57.5°	737.3	707.1	641.1	573.5	508.3	454.2	408.8	377.8	360.3	359.5	361.9
60°	614.0	591.8	534.5	476.4	419.2	375.4	342.0	320.5	309.4	310.2	309.4
62.5°	496.3	475.6	434.3	386.6	341.2	311.8	281.6	272.8	263.3	262.5	262.5
65°	390.5	374.6	341.2	307.0	272.8	253.7	238.6	228.3	221.1	219.5	220.3
67.5°	293.5	287.1	264.1	241.0	219.5	207.6	194.9	192.5	186.9	186.9	188.5
70°	218.7	214.0	201.2	187.7	179.0	171.0	164.6	164.6	163.9	163.1	167.0
72.5°	158.3	159.1	155.1	144.8	144.0	142.4	140.8	143.2	144.0	146.4	151.1
75°	111.4	113.7	113.7	112.2	115.3	119.3	121.7	125.7	130.4	133.6	139.2
77.5°	78.7	78.7	82.7	87.5	93.9	101.0	107.4	112.9	119.3	123.3	128.1
80°	50.9	53.3	59.7	68.4	77.2	86.7	95.4	102.6	109.0	115.3	118.5
82.5°	30.2	34.2	42.2	53.3	64.4	76.4	85.1	93.9	101.0	107.4	109.8
85°	15.1	20.7	30.2	42.2	54.1	66.8	77.9	85.9	93.9	99.4	102.6
87.5°	4.8	11.1	21.5	32.6	45.3	58.1	70.0	78.7	85.9	90.7	93.9
90°	0.0	5.6	15.1	27.0	39.0	51.7	62.8	72.4	79.5	83.5	85.9
92.5°	0.0	3.2	11.9	22.3	33.4	46.1	57.3	66.0	72.4	76.4	77.9
95°	0.8	2.4	8.7	18.3	29.4	41.4	51.7	59.7	66.0	70.0	70.8
97.5°	0.8	1.6	7.2	15.1	25.5	36.6	46.9	54.9	59.7	63.6	64.4
100°	0.8	1.6	5.6	13.5	22.3	32.6	42.2	49.3	54.9	58.1	58.9
102.5°	0.8	0.8	4.8	11.1	19.9	28.6	37.4	44.5	49.3	52.5	54.1
105°	0.8	0.8	4.0	9.5	17.5	25.5	33.4	40.6	44.5	47.7	49.3
107.5°	0.8	0.8	3.2	8.0	15.1	22.3	30.2	35.8	40.6	43.7	45.3
110°	0.8	0.8	2.4	7.2	12.7	19.9	26.2	31.8	36.6	39.8	41.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.8	0.8	2.4	6.4	11.1	17.5	23.1	28.6	32.6	35.8	38.2
115°	0.8	0.8	2.4	5.6	10.3	15.1	20.7	25.5	29.4	32.6	35.0
117.5°	0.8	0.8	2.4	4.8	8.7	13.5	18.3	23.1	26.2	29.4	31.8
120°	0.8	0.8	1.6	4.0	8.0	11.9	15.9	19.9	23.9	27.0	29.4
122.5°	0.8	0.8	1.6	4.0	6.4	10.3	14.3	17.5	21.5	23.9	26.2
125°	0.8	0.8	1.6	3.2	5.6	9.5	12.7	15.9	18.3	21.5	23.9
127.5°	0.8	0.8	1.6	3.2	4.8	8.0	11.1	14.3	16.7	19.1	20.7
130°	0.8	0.8	1.6	2.4	4.0	6.4	9.5	11.9	15.1	16.7	18.3
132.5°	0.8	0.8	0.8	2.4	3.2	4.8	7.2	10.3	12.7	15.1	15.9
135°	0.8	0.8	0.8	1.6	3.2	4.0	5.6	8.0	10.3	12.7	14.3
137.5°	0.8	0.8	0.8	1.6	2.4	4.0	4.8	6.4	8.7	10.3	12.7
140°	0.8	0.8	0.8	1.6	2.4	3.2	4.0	5.6	7.2	8.7	10.3
142.5°	0.8	0.8	0.8	1.6	1.6	2.4	3.2	4.8	5.6	7.2	8.7
145°	0.8	0.8	0.8	1.6	1.6	2.4	3.2	4.0	4.8	5.6	7.2
147.5°	0.8	0.8	0.8	1.6	1.6	1.6	2.4	3.2	4.0	4.8	5.6
150°	1.6	1.6	1.6	1.6	1.6	1.6	2.4	2.4	3.2	4.0	4.8
152.5°	1.6	1.6	1.6	1.6	1.6	1.6	2.4	2.4	2.4	3.2	4.0
155°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.4	2.4	3.2	3.2
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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9
2.5°	1526.4	1528.0	1537.5	1536.7	1535.1	1533.5	1533.5	1531.9	1533.5	1537.5	1535.9
5°	1518.4	1520.8	1528.0	1527.2	1525.6	1524.8	1524.0	1521.6	1523.2	1528.8	1527.2
7.5°	1504.1	1506.5	1512.8	1509.7	1507.3	1508.9	1504.9	1502.5	1505.7	1511.3	1510.5
10°	1489.0	1490.6	1498.5	1496.9	1493.0	1493.8	1489.8	1488.2	1492.2	1495.3	1496.1
12.5°	1478.6	1484.2	1491.4	1490.6	1489.8	1490.6	1486.6	1485.0	1487.4	1490.6	1489.8
15°	1476.3	1483.4	1491.4	1491.4	1492.2	1493.0	1489.0	1486.6	1489.0	1491.4	1490.6
17.5°	1473.9	1482.6	1489.8	1489.0	1489.8	1491.4	1485.0	1483.4	1486.6	1489.8	1488.2
20°	1465.9	1473.9	1478.6	1477.1	1477.1	1477.9	1469.9	1469.9	1474.7	1477.1	1477.9
22.5°	1443.6	1453.2	1453.2	1449.2	1449.2	1446.0	1443.6	1438.9	1444.4	1448.4	1451.6
25°	1410.2	1414.2	1409.4	1400.7	1395.9	1391.9	1380.8	1390.4	1390.4	1402.3	1406.3
27.5°	1363.3	1354.6	1341.0	1322.7	1318.8	1306.0	1298.9	1301.3	1305.2	1322.0	1334.7
30°	1286.2	1259.9	1236.8	1228.9	1211.4	1198.7	1185.9	1192.3	1199.5	1209.0	1235.3
32.5°	1184.3	1158.9	1121.5	1108.0	1089.7	1073.8	1058.7	1068.2	1080.9	1087.3	1115.9
35°	1067.4	1037.2	1003.0	979.9	960.8	952.1	933.0	946.5	960.0	964.8	989.5
37.5°	943.3	912.3	882.1	862.2	843.9	838.3	825.6	835.2	845.5	852.7	873.3
40°	825.6	797.0	773.9	760.4	747.7	742.9	738.1	742.1	750.1	755.6	771.5
42.5°	724.6	701.5	685.6	677.7	668.9	662.6	663.4	665.0	668.9	680.9	688.0
45°	636.3	622.8	612.5	610.9	605.3	604.5	603.7	606.9	609.3	616.4	622.0
47.5°	565.5	560.0	557.6	560.8	563.1	560.0	561.6	565.5	570.3	570.3	569.5
50°	509.9	511.4	514.6	521.8	526.6	528.1	529.7	534.5	535.3	536.9	534.5
52.5°	464.5	466.1	474.9	486.0	491.6	493.9	497.1	501.9	501.9	503.5	500.3
55°	418.4	420.8	429.5	440.7	445.4	448.6	451.8	455.0	457.4	460.5	458.1
57.5°	367.5	374.6	380.2	383.4	386.6	388.9	391.3	392.1	396.9	397.7	401.7
60°	313.4	315.0	320.5	319.8	317.4	323.7	320.5	326.1	331.7	338.8	339.6
62.5°	261.7	262.5	266.5	264.9	268.0	267.3	269.6	269.6	273.6	276.8	280.8
65°	221.1	221.9	225.1	225.1	224.3	226.7	229.1	230.7	230.7	233.1	236.2
67.5°	190.9	193.3	196.5	198.1	199.6	199.6	202.0	202.8	204.4	205.2	206.8
70°	170.2	173.4	176.6	178.2	179.0	180.6	181.4	181.4	182.9	183.7	185.3
72.5°	155.1	158.3	160.7	160.7	162.3	163.1	163.1	163.9	164.6	166.2	167.8
75°	142.4	144.8	146.4	145.6	145.6	145.6	146.4	146.4	147.9	149.5	151.1
77.5°	130.4	132.8	132.8	131.2	131.2	131.2	131.2	132.0	132.8	134.4	136.0
80°	121.7	121.7	120.9	120.9	119.3	118.5	118.5	119.3	119.3	120.9	123.3
82.5°	112.2	112.2	111.4	110.6	109.8	109.0	109.0	109.8	110.6	111.4	112.9
85°	103.4	103.4	101.8	101.8	101.0	101.0	101.0	101.0	101.8	102.6	104.2
87.5°	94.7	93.9	93.1	92.3	92.3	92.3	92.3	92.3	93.1	94.7	95.4
90°	85.9	85.1	84.3	84.3	83.5	83.5	84.3	84.3	85.1	85.9	86.7
92.5°	77.9	77.2	76.4	76.4	75.6	75.6	76.4	75.6	77.2	77.2	77.9
95°	70.8	70.0	69.2	69.2	69.2	69.2	69.2	69.2	70.0	70.0	70.8
97.5°	64.4	63.6	62.8	62.8	63.6	62.8	63.6	63.6	63.6	64.4	65.2
100°	58.9	58.1	58.1	58.9	58.1	58.1	58.9	58.9	58.9	58.9	59.7
102.5°	54.1	54.1	54.1	54.1	54.1	54.1	54.9	54.9	54.9	54.9	55.7
105°	49.3	50.1	50.1	50.1	50.9	50.9	50.9	51.7	51.7	51.7	51.7
107.5°	46.1	46.9	46.9	47.7	47.7	48.5	48.5	48.5	48.5	49.3	49.3
110°	43.0	43.7	44.5	45.3	45.3	46.1	46.1	46.1	46.1	46.1	46.1



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	39.8	40.6	41.4	43.0	43.7	43.7	43.7	43.7	44.5	44.5	43.7
115°	36.6	38.2	39.0	40.6	41.4	41.4	42.2	42.2	42.2	42.2	41.4
117.5°	33.4	35.8	36.6	38.2	39.0	39.0	39.8	39.8	39.8	39.8	39.0
120°	31.0	32.6	34.2	35.0	35.8	36.6	36.6	37.4	37.4	37.4	36.6
122.5°	28.6	30.2	31.8	32.6	33.4	34.2	34.2	34.2	34.2	34.2	34.2
125°	25.5	27.0	28.6	29.4	30.2	31.0	31.0	31.8	31.8	31.8	31.0
127.5°	23.1	24.7	25.5	27.0	27.8	27.8	28.6	28.6	28.6	28.6	27.8
130°	19.9	21.5	23.1	23.9	24.7	24.7	25.5	25.5	25.5	25.5	25.5
132.5°	17.5	19.1	19.9	21.5	21.5	22.3	22.3	23.1	23.1	23.1	22.3
135°	15.9	16.7	17.5	19.1	19.1	19.9	19.9	19.9	19.9	19.9	19.9
137.5°	14.3	15.1	15.9	16.7	16.7	17.5	17.5	17.5	17.5	18.3	17.5
140°	11.9	13.5	14.3	14.3	15.1	15.1	15.1	15.9	15.9	15.9	15.1
142.5°	10.3	11.1	11.9	12.7	13.5	13.5	13.5	13.5	14.3	13.5	13.5
145°	8.0	9.5	10.3	11.1	11.9	11.9	11.9	11.9	11.9	11.9	11.9
147.5°	6.4	7.2	8.7	9.5	9.5	10.3	10.3	10.3	10.3	10.3	10.3
150°	5.6	5.6	7.2	8.0	8.7	8.7	8.7	8.7	8.7	8.7	8.7
152.5°	4.0	4.8	5.6	6.4	7.2	7.2	7.2	7.2	7.2	7.2	7.2
155°	4.0	4.0	4.8	4.8	5.6	5.6	5.6	5.6	6.4	5.6	5.6
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: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9
2.5°	1533.5	1532.7	1535.9	1532.7	1516.8	1523.2	1520.8	1529.6	1530.3	1532.7	1540.7
5°	1525.6	1525.6	1529.6	1526.4	1511.3	1517.6	1516.8	1525.6	1527.2	1528.8	1537.5
7.5°	1509.7	1510.5	1516.0	1513.6	1497.7	1507.3	1506.5	1516.8	1520.0	1523.2	1531.1
10°	1494.6	1493.8	1500.1	1497.7	1482.6	1493.8	1493.0	1503.3	1508.1	1513.6	1523.2
12.5°	1486.6	1484.2	1486.6	1484.2	1467.5	1476.3	1477.1	1489.0	1494.6	1501.7	1512.8
15°	1486.6	1482.6	1482.6	1477.9	1458.8	1464.3	1465.1	1473.1	1480.2	1487.4	1500.9
17.5°	1485.0	1481.0	1480.2	1476.3	1455.6	1455.6	1454.8	1460.4	1464.3	1471.5	1485.8
20°	1476.3	1474.7	1473.9	1471.5	1452.4	1449.2	1447.6	1447.6	1450.0	1452.4	1466.7
22.5°	1453.2	1454.8	1456.4	1458.0	1442.9	1437.3	1438.1	1436.5	1434.1	1434.1	1446.0
25°	1410.2	1418.2	1424.6	1431.7	1423.0	1419.0	1423.8	1421.4	1417.4	1414.2	1424.6
27.5°	1341.8	1358.5	1372.1	1389.6	1390.4	1387.2	1399.9	1398.3	1397.5	1392.7	1400.7
30°	1247.2	1273.4	1291.7	1317.2	1338.7	1341.8	1363.3	1366.5	1369.7	1367.3	1375.2
32.5°	1132.6	1168.4	1199.5	1239.2	1259.9	1278.2	1308.4	1321.2	1333.9	1337.9	1346.6
35°	1007.8	1048.3	1084.9	1128.7	1161.3	1201.1	1237.6	1256.7	1285.4	1296.5	1309.2
37.5°	889.3	927.4	963.2	1007.0	1059.5	1100.8	1146.2	1189.1	1228.1	1244.0	1263.1
40°	784.3	815.3	849.5	887.7	935.4	989.5	1038.8	1098.4	1144.6	1176.4	1204.2
42.5°	704.7	719.8	749.3	783.5	821.6	876.5	926.6	993.5	1049.1	1094.5	1140.6
45°	633.9	641.1	662.6	680.9	719.8	768.4	821.6	886.9	944.9	1003.0	1058.7
47.5°	573.5	582.2	592.6	603.7	631.5	672.1	718.2	777.1	835.2	902.8	966.4
50°	532.9	535.3	536.9	541.7	558.4	586.2	623.6	673.7	729.4	801.8	869.4
52.5°	497.1	497.1	492.4	490.0	496.3	513.8	535.3	571.1	628.4	695.2	766.8
55°	458.9	451.8	450.2	442.2	443.8	451.8	462.1	490.0	536.9	594.2	663.4
57.5°	405.7	402.5	402.5	399.3	392.9	396.9	399.3	419.2	452.6	501.9	562.3
60°	344.4	342.8	346.8	347.6	342.0	344.4	343.6	355.5	379.4	419.2	469.3
62.5°	283.2	290.3	291.1	294.3	291.1	290.3	294.3	304.6	316.6	346.8	385.8
65°	237.8	241.8	242.6	246.6	245.0	245.0	248.2	256.1	263.3	284.0	314.2
67.5°	208.4	206.8	207.6	210.0	207.6	206.8	209.2	214.0	219.5	232.3	253.7
70°	185.3	183.7	183.7	183.7	180.6	178.2	179.0	180.6	182.9	190.1	203.6
72.5°	167.8	167.8	165.4	163.1	160.7	159.1	157.5	155.9	155.1	157.5	164.6
75°	151.9	152.7	151.9	149.5	146.4	143.2	140.0	136.8	132.8	131.2	132.0
77.5°	137.6	138.4	139.2	138.4	135.2	131.2	126.5	121.7	116.1	110.6	107.4
80°	124.9	126.5	127.3	126.5	124.1	120.9	115.3	109.8	101.8	94.7	86.7
82.5°	113.7	116.1	116.9	116.9	115.3	112.2	105.8	99.4	90.7	81.1	70.8
85°	105.0	106.6	108.2	108.2	107.4	104.2	97.8	90.7	81.9	70.8	59.7
87.5°	96.2	97.0	98.6	100.2	98.6	95.4	89.9	81.9	73.2	62.0	49.3
90°	87.5	88.3	89.9	91.5	90.7	87.5	82.7	75.6	66.0	54.1	41.4
92.5°	78.7	80.3	81.1	81.9	82.7	80.3	76.4	69.2	59.7	47.7	35.8
95°	72.4	72.4	74.0	74.8	75.6	73.2	70.0	62.8	54.1	43.0	31.0
97.5°	66.0	66.0	67.6	67.6	68.4	66.8	63.6	57.3	48.5	38.2	26.2
100°	59.7	60.5	61.2	62.0	62.0	61.2	58.1	51.7	43.7	34.2	23.1
102.5°	55.7	55.7	56.5	56.5	57.3	55.7	52.5	46.9	39.0	30.2	19.9
105°	51.7	51.7	52.5	52.5	51.7	50.1	46.9	42.2	35.0	26.2	17.5
107.5°	48.5	48.5	48.5	48.5	47.7	46.1	43.0	37.4	31.0	23.9	15.9
110°	46.1	45.3	45.3	44.5	43.7	41.4	38.2	33.4	27.8	20.7	13.5



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	43.7	43.0	42.2	41.4	39.8	37.4	34.2	30.2	24.7	18.3	11.9
115°	41.4	40.6	39.8	38.2	36.6	34.2	31.0	27.0	21.5	15.9	10.3
117.5°	39.0	38.2	36.6	35.0	33.4	31.0	27.8	23.9	19.1	14.3	9.5
120°	35.8	35.0	34.2	32.6	31.0	27.8	24.7	21.5	16.7	12.7	8.0
122.5°	33.4	32.6	31.0	30.2	27.8	25.5	22.3	19.1	15.1	11.1	7.2
125°	30.2	29.4	28.6	27.0	25.5	22.3	19.9	16.7	13.5	9.5	5.6
127.5°	27.8	27.0	25.5	23.9	22.3	19.9	17.5	15.1	11.9	8.0	5.6
130°	24.7	23.9	23.1	21.5	19.9	17.5	15.9	12.7	10.3	7.2	4.8
132.5°	21.5	21.5	20.7	19.1	17.5	15.9	13.5	11.1	8.7	6.4	4.0
135°	19.9	19.1	18.3	16.7	15.9	13.5	11.9	9.5	7.2	5.6	3.2
137.5°	17.5	16.7	15.9	15.1	13.5	11.9	10.3	8.0	6.4	4.8	3.2
140°	15.1	14.3	14.3	12.7	11.9	10.3	8.7	7.2	5.6	4.0	2.4
142.5°	13.5	12.7	11.9	11.1	10.3	8.7	7.2	5.6	4.8	3.2	2.4
145°	11.9	11.1	10.3	9.5	8.7	7.2	6.4	4.8	4.0	3.2	2.4
147.5°	9.5	9.5	8.7	8.0	7.2	6.4	5.6	4.8	3.2	2.4	1.6
150°	8.0	8.0	7.2	6.4	6.4	5.6	4.8	4.0	3.2	2.4	1.6
152.5°	7.2	6.4	6.4	5.6	5.6	4.8	4.0	3.2	2.4	2.4	1.6
155°	5.6	5.6	5.6	4.8	4.8	4.0	3.2	3.2	2.4	1.6	1.6
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: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9
2.5°	1542.3	1532.7	1540.7	1555.0	1553.4	1551.8	1550.2	1553.4	1563.8	1558.2	1549.4
5°	1539.9	1530.3	1539.1	1552.6	1551.8	1549.4	1547.8	1551.0	1561.4	1555.8	1546.3
7.5°	1535.1	1526.4	1532.7	1546.3	1546.3	1544.7	1543.1	1546.3	1555.8	1551.0	1541.5
10°	1527.2	1520.8	1527.2	1539.9	1540.7	1537.5	1535.9	1539.9	1549.4	1547.0	1539.1
12.5°	1520.8	1514.4	1521.6	1534.3	1535.1	1531.9	1529.6	1534.3	1547.0	1548.6	1546.3
15°	1512.1	1506.5	1515.2	1528.8	1528.8	1526.4	1526.4	1532.7	1550.2	1557.4	1561.4
17.5°	1499.3	1495.3	1505.7	1519.2	1520.0	1518.4	1519.2	1531.9	1555.0	1572.5	1583.6
20°	1483.4	1481.8	1493.0	1507.3	1509.7	1510.5	1514.4	1533.5	1565.3	1589.2	1600.3
22.5°	1464.3	1465.1	1477.9	1493.0	1496.1	1498.5	1506.5	1533.5	1573.3	1598.8	1603.5
25°	1442.9	1445.2	1458.8	1477.1	1481.0	1485.8	1499.3	1534.3	1575.7	1592.4	1584.4
27.5°	1419.8	1424.6	1442.1	1461.1	1465.9	1473.9	1491.4	1529.6	1564.5	1565.3	1535.9
30°	1395.9	1401.5	1422.2	1444.4	1452.4	1460.4	1481.8	1518.4	1537.5	1512.1	1460.4
32.5°	1368.9	1376.8	1397.5	1424.6	1434.1	1444.4	1465.9	1496.9	1489.8	1434.9	1360.9
35°	1334.7	1345.8	1369.7	1401.5	1410.2	1423.8	1438.9	1446.0	1414.2	1336.3	1252.8
37.5°	1292.5	1309.2	1337.1	1373.7	1383.2	1391.9	1395.9	1376.0	1312.4	1228.1	1141.4
40°	1244.0	1269.5	1299.7	1340.2	1349.8	1349.8	1335.5	1293.3	1213.0	1102.4	1006.2
42.5°	1185.1	1216.2	1254.3	1294.9	1304.5	1293.3	1259.1	1185.1	1093.7	970.4	868.6
45°	1113.6	1154.9	1197.9	1240.0	1244.8	1220.1	1158.9	1065.0	952.1	837.6	740.5
47.5°	1028.5	1082.5	1129.5	1177.2	1170.8	1129.5	1047.5	941.0	821.6	713.5	635.5
50°	933.0	996.6	1049.1	1094.5	1080.9	1023.7	927.4	816.1	697.6	605.3	540.9
52.5°	831.2	904.4	956.9	993.5	975.2	906.8	801.0	694.4	597.3	513.0	470.1
55°	725.4	799.4	853.5	882.1	858.2	784.3	680.1	583.0	491.6	436.7	411.2
57.5°	622.8	692.0	742.9	766.0	735.7	661.8	565.5	483.6	417.6	371.5	358.7
60°	524.2	580.6	629.2	646.7	614.0	545.6	462.9	397.7	349.2	317.4	311.0
62.5°	432.7	478.8	517.0	530.5	498.7	445.4	373.8	325.3	291.1	275.2	267.3
65°	357.1	384.2	423.2	420.8	401.7	352.4	299.9	265.7	243.4	233.1	228.3
67.5°	280.8	305.4	330.1	333.3	309.4	275.2	241.0	216.3	204.4	198.8	196.5
70°	217.1	235.4	250.6	246.6	233.8	212.4	190.9	177.4	172.6	170.2	170.2
72.5°	168.6	178.2	185.3	180.6	172.6	161.5	151.1	145.6	146.4	147.9	149.5
75°	130.4	132.8	134.4	129.6	128.1	120.9	120.1	120.9	125.7	130.4	132.8
77.5°	100.2	97.0	94.7	89.9	90.7	89.9	93.9	100.2	107.4	114.5	120.9
80°	77.2	70.0	64.4	59.7	62.0	66.0	74.0	83.5	93.1	101.0	109.0
82.5°	59.7	49.3	41.4	36.6	41.4	47.7	58.1	70.0	81.1	89.9	98.6
85°	46.1	34.2	24.7	19.9	24.7	34.2	45.3	58.9	70.8	80.3	89.1
87.5°	35.8	24.7	13.5	8.0	13.5	23.9	36.6	49.3	61.2	72.4	81.1
90°	28.6	16.7	6.4	1.6	7.2	16.7	28.6	41.4	53.3	65.2	74.0
92.5°	23.1	11.9	3.2	0.0	4.0	12.7	23.9	35.8	47.7	58.9	67.6
95°	19.1	9.5	2.4	0.0	3.2	9.5	19.1	31.0	42.2	53.3	60.5
97.5°	15.9	7.2	1.6	0.0	1.6	8.0	15.9	26.2	37.4	47.7	54.9
100°	13.5	6.4	1.6	0.0	1.6	6.4	13.5	23.1	32.6	42.2	49.3
102.5°	11.1	4.8	0.8	0.8	0.8	4.8	11.9	19.9	28.6	37.4	44.5
105°	10.3	4.0	0.8	0.8	0.8	4.0	10.3	17.5	25.5	33.4	39.8
107.5°	8.7	3.2	0.8	0.8	0.8	3.2	8.7	15.1	23.1	30.2	35.8
110°	7.2	3.2	0.8	0.8	0.8	3.2	7.2	13.5	19.9	26.2	31.8



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	6.4	2.4	0.8	0.8	0.8	2.4	6.4	11.9	17.5	23.9	28.6
115°	5.6	2.4	0.8	0.8	0.8	2.4	5.6	10.3	15.1	20.7	25.5
117.5°	4.8	2.4	0.8	0.8	0.8	1.6	4.8	8.7	13.5	18.3	23.1
120°	4.0	1.6	0.8	0.8	0.8	1.6	4.0	8.0	11.9	15.9	19.9
122.5°	4.0	1.6	0.8	0.8	0.8	1.6	3.2	6.4	10.3	13.5	17.5
125°	3.2	1.6	0.8	0.8	0.8	0.8	3.2	5.6	8.7	11.9	15.1
127.5°	3.2	1.6	0.8	0.8	0.8	0.8	2.4	4.8	7.2	10.3	13.5
130°	2.4	1.6	0.8	0.8	0.8	0.8	1.6	4.0	6.4	8.7	11.1
132.5°	2.4	1.6	0.8	0.8	0.8	0.8	1.6	3.2	4.8	7.2	9.5
135°	2.4	0.8	0.8	0.8	0.8	0.8	0.8	2.4	4.0	5.6	7.2
137.5°	1.6	0.8	0.8	0.8	0.8	0.8	0.8	1.6	3.2	4.0	6.4
140°	1.6	0.8	0.8	0.8	0.8	0.8	0.8	1.6	2.4	3.2	4.8
142.5°	1.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	2.4	4.0
145°	1.6	0.8	0.8	1.6	1.6	0.8	0.8	1.6	1.6	2.4	3.2
147.5°	1.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6	2.4
150°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.4
152.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
155°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9
2.5°	1547.8	1529.6	1539.1	1535.9	1539.1	1547.0	1546.3	1543.9	1545.5	1541.5	1537.5
5°	1544.7	1526.4	1535.9	1531.9	1535.9	1543.9	1542.3	1539.9	1542.3	1537.5	1533.5
7.5°	1540.7	1524.0	1535.1	1534.3	1541.5	1551.8	1552.6	1552.6	1558.2	1551.0	1547.8
10°	1540.7	1531.9	1547.0	1552.6	1570.9	1584.4	1586.0	1589.2	1598.8	1597.2	1589.2
12.5°	1557.4	1555.8	1578.1	1591.6	1608.3	1627.4	1637.7	1640.9	1647.3	1642.5	1639.3
15°	1578.9	1586.8	1611.5	1626.6	1644.9	1659.2	1661.6	1663.2	1668.0	1660.8	1655.2
17.5°	1607.5	1612.3	1632.2	1638.5	1650.5	1652.8	1649.7	1641.7	1641.7	1625.8	1621.0
20°	1621.0	1618.6	1626.6	1616.2	1611.5	1597.2	1583.6	1568.5	1567.7	1551.0	1549.4
22.5°	1609.1	1593.2	1576.5	1551.0	1539.9	1519.2	1500.9	1492.2	1486.6	1465.1	1459.6
25°	1566.9	1528.0	1503.3	1473.1	1446.0	1422.2	1404.7	1386.4	1368.9	1351.4	1343.4
27.5°	1493.8	1457.2	1417.4	1375.2	1337.9	1301.3	1271.8	1253.5	1236.8	1213.8	1201.8
30°	1403.9	1353.0	1309.2	1268.7	1207.4	1162.9	1138.2	1101.6	1088.9	1078.6	1056.3
32.5°	1298.1	1236.8	1177.2	1122.3	1059.5	1018.1	985.5	958.5	950.5	923.5	917.1
35°	1181.2	1100.8	1033.2	979.1	933.8	883.7	856.6	838.3	822.4	804.1	801.0
37.5°	1043.6	971.2	894.8	847.1	811.3	768.4	747.7	734.9	727.8	714.3	711.9
40°	905.2	832.8	780.3	732.6	710.3	687.2	672.1	666.5	663.4	658.6	653.8
42.5°	779.5	715.9	678.5	646.7	637.1	626.0	622.0	625.2	622.0	620.4	619.6
45°	672.9	624.4	598.1	588.6	586.2	583.0	586.2	591.8	592.6	591.0	591.0
47.5°	575.9	552.8	541.7	543.3	547.2	549.6	555.2	562.3	563.9	560.0	561.6
50°	512.2	498.7	496.3	502.7	511.4	514.6	521.0	526.6	525.8	524.2	522.6
52.5°	452.6	448.6	455.0	461.3	470.9	472.5	474.9	477.2	476.4	473.3	471.7
55°	402.5	405.7	411.2	413.6	420.8	420.0	420.8	420.8	417.6	416.0	413.6
57.5°	357.1	357.9	361.1	361.9	365.9	364.3	363.5	361.9	357.1	356.3	354.0
60°	311.0	309.4	316.6	311.0	314.2	311.0	310.2	306.2	301.5	300.7	299.1
62.5°	267.3	264.1	268.8	266.5	268.0	264.9	263.3	258.5	254.5	253.7	252.9
65°	228.3	226.7	231.5	230.7	232.3	228.3	226.7	223.5	220.3	219.5	218.7
67.5°	195.7	199.6	202.0	202.0	203.6	202.8	198.8	198.1	197.3	194.1	194.1
70°	171.8	174.2	179.0	179.8	179.0	180.6	177.4	176.6	175.8	174.2	173.4
72.5°	152.7	155.9	160.7	161.5	160.7	160.7	159.1	158.3	158.3	155.9	155.9
75°	137.6	141.6	145.6	145.6	145.6	144.0	142.4	142.4	140.8	140.0	138.4
77.5°	124.9	129.6	132.8	132.0	131.2	129.6	129.6	127.3	124.9	124.9	123.3
80°	115.3	118.5	120.9	120.1	119.3	116.9	116.1	113.7	112.2	109.8	109.8
82.5°	105.0	109.0	110.6	109.8	108.2	105.8	105.0	103.4	101.8	101.0	99.4
85°	96.2	100.2	101.0	99.4	97.8	96.2	95.4	94.7	93.9	92.3	92.3
87.5°	87.5	91.5	91.5	90.7	89.1	88.3	87.5	86.7	85.9	85.1	84.3
90°	80.3	83.5	83.5	82.7	81.9	81.1	80.3	79.5	78.7	77.9	77.9
92.5°	73.2	76.4	76.4	75.6	74.8	74.0	74.0	73.2	72.4	71.6	70.8
95°	66.8	70.0	70.0	70.0	69.2	68.4	68.4	67.6	66.8	66.8	66.0
97.5°	60.5	63.6	63.6	63.6	62.8	62.0	62.0	61.2	61.2	61.2	60.5
100°	54.9	57.3	58.1	58.1	57.3	57.3	57.3	56.5	56.5	56.5	55.7
102.5°	49.3	51.7	53.3	53.3	53.3	52.5	52.5	52.5	52.5	52.5	51.7
105°	44.5	46.9	48.5	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
107.5°	40.6	43.0	44.5	45.3	46.1	46.1	46.9	46.9	46.9	46.9	46.9
110°	36.6	39.0	41.4	42.2	43.0	43.7	43.7	44.5	43.7	43.7	43.7



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	32.6	35.8	37.4	39.0	39.8	40.6	41.4	41.4	41.4	41.4	41.4
115°	29.4	32.6	34.2	35.8	37.4	38.2	38.2	39.0	39.0	39.0	38.2
117.5°	26.2	29.4	31.0	32.6	33.4	35.0	35.8	35.8	35.8	35.8	35.0
120°	23.9	26.2	27.8	29.4	31.0	31.8	32.6	32.6	32.6	32.6	32.6
122.5°	20.7	23.1	25.5	27.0	27.8	28.6	29.4	29.4	29.4	29.4	29.4
125°	18.3	20.7	22.3	23.9	24.7	26.2	26.2	26.2	26.2	26.2	26.2
127.5°	15.9	18.3	19.9	21.5	22.3	23.1	23.9	23.9	23.9	23.9	23.9
130°	13.5	15.9	17.5	19.1	19.9	20.7	20.7	21.5	21.5	21.5	21.5
132.5°	11.9	13.5	15.1	16.7	17.5	18.3	18.3	19.1	19.1	19.1	19.1
135°	9.5	11.9	12.7	14.3	15.1	15.9	15.9	16.7	16.7	16.7	16.7
137.5°	8.0	9.5	11.1	12.7	13.5	13.5	14.3	14.3	15.1	15.1	15.1
140°	6.4	7.2	9.5	10.3	11.1	11.9	12.7	12.7	12.7	12.7	12.7
142.5°	4.8	6.4	7.2	8.7	9.5	10.3	11.1	11.1	11.1	11.1	11.1
145°	4.0	4.8	5.6	7.2	8.0	8.7	9.5	9.5	9.5	9.5	9.5
147.5°	3.2	4.0	4.8	5.6	6.4	7.2	8.0	8.0	8.0	8.0	8.0
150°	2.4	3.2	4.0	4.0	4.8	5.6	6.4	7.2	7.2	7.2	7.2
152.5°	2.4	2.4	3.2	3.2	4.0	4.8	5.6	5.6	5.6	5.6	5.6
155°	1.6	2.4	2.4	2.4	3.2	3.2	4.0	4.8	4.8	4.8	4.8
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: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9
2.5°	1539.9	1543.1	1541.5	1539.1	1538.3	1542.3	1538.3	1520.0	1527.2	1528.0	1533.5
5°	1537.5	1539.9	1538.3	1536.7	1534.3	1539.1	1534.3	1515.2	1522.4	1523.2	1528.8
7.5°	1553.4	1554.2	1554.2	1550.2	1543.9	1546.3	1539.9	1518.4	1522.4	1522.4	1526.4
10°	1593.2	1594.8	1597.2	1586.8	1578.9	1572.5	1563.8	1537.5	1536.7	1530.3	1530.3
12.5°	1644.9	1640.9	1636.9	1632.2	1625.8	1617.8	1605.1	1574.1	1563.8	1553.4	1543.1
15°	1660.0	1658.4	1657.6	1655.2	1651.2	1648.9	1639.3	1608.3	1593.2	1580.5	1562.2
17.5°	1620.2	1623.4	1633.7	1634.5	1639.3	1648.9	1647.3	1625.8	1612.3	1606.7	1584.4
20°	1548.6	1549.4	1562.2	1567.7	1588.4	1604.3	1616.2	1613.9	1610.7	1617.0	1600.3
22.5°	1462.7	1468.3	1481.8	1490.6	1510.5	1528.8	1547.8	1558.2	1574.9	1601.1	1598.0
25°	1345.8	1353.0	1372.1	1386.4	1414.2	1442.1	1467.5	1485.8	1505.7	1555.8	1572.5
27.5°	1205.8	1217.0	1241.6	1255.9	1294.9	1323.5	1360.1	1395.9	1423.8	1481.0	1515.2
30°	1058.7	1068.2	1094.5	1114.4	1147.8	1186.7	1232.9	1283.8	1329.9	1388.0	1430.9
32.5°	921.1	931.4	952.9	970.4	1007.8	1040.4	1091.3	1154.1	1197.1	1277.4	1334.7
35°	801.0	810.5	825.6	840.7	871.8	905.2	948.9	1010.2	1065.0	1148.6	1220.9
37.5°	716.7	718.2	727.0	735.7	758.8	784.3	818.5	872.6	923.5	1013.3	1092.9
40°	656.2	656.2	661.0	663.4	673.7	688.8	710.3	752.4	794.6	863.0	960.0
42.5°	618.8	617.2	617.2	618.0	617.2	624.4	637.1	657.0	694.4	750.9	826.4
45°	591.0	587.8	585.4	579.8	576.7	576.7	577.5	584.6	606.1	642.7	703.9
47.5°	560.0	559.2	555.2	548.8	543.3	539.3	532.9	530.5	536.9	557.6	598.9
50°	524.2	520.2	516.2	511.4	505.1	501.1	489.2	490.0	484.4	493.9	515.4
52.5°	471.7	468.5	466.9	462.9	460.5	458.9	449.4	439.9	437.5	439.1	447.0
55°	413.6	415.2	408.8	412.0	411.2	404.1	400.1	392.9	390.5	389.7	393.7
57.5°	353.2	354.7	350.8	354.0	354.0	350.0	347.6	347.6	342.0	337.2	342.8
60°	298.3	295.1	297.5	301.5	301.5	299.1	297.5	297.5	293.5	291.9	295.9
62.5°	253.7	250.6	252.9	256.9	257.7	256.1	254.5	254.5	249.8	249.8	252.9
65°	219.5	220.3	219.5	222.7	222.7	223.5	221.9	220.3	214.8	217.1	216.3
67.5°	194.9	194.1	194.1	197.3	196.5	198.1	196.5	194.1	190.1	186.9	186.1
70°	174.2	173.4	173.4	175.0	175.8	175.8	175.0	173.4	167.8	164.6	162.3
72.5°	155.9	155.1	155.9	156.7	157.5	158.3	157.5	155.9	151.1	147.1	143.2
75°	139.2	138.4	140.8	140.8	141.6	141.6	142.4	141.6	137.6	132.8	128.1
77.5°	122.5	123.3	125.7	126.5	128.1	128.9	129.6	129.6	125.7	121.7	115.3
80°	109.0	110.6	112.2	112.9	114.5	116.9	117.7	118.5	115.3	111.4	104.2
82.5°	99.4	100.2	101.8	102.6	105.0	105.8	106.6	108.2	106.6	102.6	94.7
85°	91.5	92.3	93.9	93.9	95.4	97.0	97.8	98.6	97.8	93.9	85.9
87.5°	84.3	85.1	85.9	86.7	87.5	88.3	89.1	89.9	89.1	85.1	77.9
90°	77.9	77.9	78.7	78.7	79.5	80.3	81.9	81.9	81.1	77.9	70.8
92.5°	70.8	71.6	71.6	72.4	73.2	74.0	74.8	74.8	74.0	70.8	64.4
95°	66.0	66.0	66.8	66.8	67.6	67.6	68.4	68.4	67.6	64.4	58.1
97.5°	60.5	60.5	60.5	60.5	61.2	61.2	62.0	62.0	61.2	58.1	52.5
100°	55.7	55.7	55.7	55.7	55.7	56.5	56.5	56.5	55.7	52.5	46.9
102.5°	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	50.1	47.7	42.2
105°	49.3	49.3	49.3	48.5	48.5	48.5	47.7	47.7	45.3	43.0	38.2
107.5°	46.1	46.1	46.1	45.3	45.3	44.5	43.7	43.7	41.4	39.0	34.2
110°	43.7	43.7	43.7	43.0	42.2	41.4	40.6	39.8	37.4	34.2	30.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	41.4	41.4	40.6	40.6	39.8	39.0	37.4	36.6	34.2	31.0	27.0
115°	38.2	38.2	38.2	37.4	36.6	35.8	35.0	33.4	31.0	27.8	23.9
117.5°	35.0	35.0	35.0	34.2	33.4	32.6	31.8	30.2	27.8	24.7	21.5
120°	31.8	31.8	31.8	31.0	30.2	29.4	28.6	27.0	24.7	22.3	18.3
122.5°	29.4	29.4	28.6	27.8	27.0	26.2	25.5	23.9	22.3	19.1	15.9
125°	26.2	26.2	25.5	25.5	24.7	23.9	23.1	21.5	19.1	16.7	14.3
127.5°	23.9	23.1	23.1	23.1	22.3	21.5	19.9	19.1	16.7	14.3	11.9
130°	20.7	20.7	20.7	19.9	19.9	19.1	17.5	15.9	14.3	12.7	10.3
132.5°	18.3	18.3	18.3	18.3	17.5	16.7	15.1	14.3	12.7	10.3	8.7
135°	16.7	16.7	15.9	15.9	15.1	14.3	13.5	11.9	10.3	8.7	7.2
137.5°	14.3	14.3	14.3	13.5	13.5	12.7	11.1	10.3	9.5	8.0	6.4
140°	12.7	12.7	11.9	11.9	11.1	11.1	10.3	8.7	8.0	6.4	5.6
142.5°	11.1	11.1	10.3	10.3	9.5	9.5	8.7	8.0	6.4	5.6	4.0
145°	9.5	9.5	8.7	8.7	8.7	8.0	7.2	6.4	5.6	4.8	4.0
147.5°	8.0	8.0	8.0	7.2	7.2	6.4	6.4	5.6	4.8	4.0	3.2
150°	7.2	7.2	6.4	6.4	6.4	5.6	4.8	4.8	4.0	3.2	2.4
152.5°	5.6	5.6	5.6	5.6	4.8	4.8	4.0	4.0	3.2	2.4	2.4
155°	4.8	4.8	4.8	4.0	4.0	4.0	3.2	3.2	2.4	2.4	1.6
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: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9	1539.9
2.5°	1531.1	1530.3	1537.5	1536.7	1527.2	1541.5	1551.0
5°	1527.2	1526.4	1532.7	1534.3	1524.0	1539.1	1549.4
7.5°	1524.0	1523.2	1530.3	1532.7	1522.4	1535.9	1547.0
10°	1524.8	1520.8	1527.2	1528.8	1519.2	1533.5	1543.1
12.5°	1530.3	1520.8	1523.2	1523.2	1514.4	1527.2	1537.5
15°	1543.9	1524.0	1520.8	1518.4	1507.3	1519.2	1529.6
17.5°	1559.0	1531.9	1520.8	1512.8	1499.3	1509.7	1520.8
20°	1574.1	1540.7	1522.4	1509.7	1491.4	1500.9	1508.9
22.5°	1581.3	1548.6	1524.0	1504.9	1481.8	1486.6	1495.3
25°	1571.7	1545.5	1520.8	1497.7	1469.9	1470.7	1477.9
27.5°	1536.7	1529.6	1513.6	1490.6	1460.4	1456.4	1461.9
30°	1477.1	1496.9	1497.7	1481.0	1449.2	1441.3	1443.6
32.5°	1393.5	1438.1	1464.3	1461.1	1433.3	1422.2	1423.8
35°	1297.3	1353.0	1410.2	1429.3	1409.4	1400.7	1397.5
37.5°	1182.0	1256.7	1333.1	1380.0	1376.8	1371.3	1368.1
40°	1054.7	1144.6	1235.3	1310.0	1333.1	1333.1	1334.7
42.5°	918.7	1023.7	1123.1	1217.8	1271.8	1283.8	1288.5
45°	787.4	893.2	1001.4	1110.4	1182.8	1220.1	1233.7
47.5°	668.1	774.7	877.3	996.6	1092.9	1141.4	1162.9
50°	566.3	645.9	754.0	872.6	977.5	1037.2	1079.4
52.5°	482.0	544.1	638.7	749.3	855.1	937.0	976.0
55°	411.2	453.4	533.7	629.2	730.2	815.3	860.6
57.5°	351.6	385.0	439.9	519.4	604.5	688.8	737.3
60°	299.1	322.1	359.5	422.4	494.7	567.1	614.0
62.5°	253.7	268.8	293.5	339.6	396.1	452.6	496.3
65°	218.7	225.1	238.6	267.3	310.2	353.2	390.5
67.5°	184.5	188.5	198.8	216.3	237.8	268.8	293.5
70°	159.1	159.1	159.9	170.2	181.4	201.2	218.7
72.5°	138.4	136.0	131.2	133.6	136.0	147.1	158.3
75°	121.7	116.1	108.2	105.0	103.4	105.0	111.4
77.5°	107.4	99.4	89.9	81.9	75.6	73.2	78.7
80°	95.4	85.9	74.8	64.4	54.1	48.5	50.9
82.5°	85.9	74.0	62.0	50.1	38.2	30.2	30.2
85°	75.6	64.4	51.7	39.0	27.0	16.7	15.1
87.5°	68.4	56.5	43.0	31.0	19.1	8.7	4.8
90°	61.2	49.3	36.6	24.7	13.5	4.0	0.0
92.5°	54.9	43.7	31.8	19.9	9.5	2.4	0.0
95°	49.3	39.0	27.0	16.7	8.0	1.6	0.8
97.5°	43.7	34.2	23.9	13.5	5.6	1.6	0.8
100°	39.8	30.2	20.7	11.1	4.8	0.8	0.8
102.5°	35.0	27.0	17.5	9.5	4.0	0.8	0.8
105°	31.0	23.9	15.1	8.0	3.2	0.8	0.8
107.5°	27.8	20.7	13.5	7.2	3.2	0.8	0.8
110°	24.7	18.3	11.9	6.4	2.4	0.8	0.8



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	22.3	15.9	10.3	5.6	1.6	0.8	0.8
115°	19.1	14.3	8.7	4.8	1.6	0.8	0.8
117.5°	16.7	11.9	8.0	4.0	1.6	0.8	0.8
120°	14.3	10.3	6.4	3.2	0.8	0.8	0.8
122.5°	12.7	8.7	5.6	3.2	0.8	0.8	0.8
125°	11.1	8.0	4.8	2.4	0.8	0.8	0.8
127.5°	9.5	6.4	4.0	1.6	0.8	0.8	0.8
130°	8.0	5.6	3.2	1.6	0.8	0.8	0.8
132.5°	6.4	4.8	3.2	1.6	0.8	0.8	0.8
135°	5.6	4.0	2.4	1.6	0.8	0.8	0.8
137.5°	4.8	3.2	1.6	1.6	1.6	0.8	0.8
140°	4.0	2.4	1.6	1.6	1.6	1.6	0.8
142.5°	3.2	2.4	1.6	1.6	1.6	1.6	0.8
145°	2.4	1.6	1.6	1.6	1.6	1.6	0.8
147.5°	2.4	1.6	1.6	1.6	1.6	1.6	0.8
150°	1.6	1.6	1.6	1.6	1.6	1.6	1.6
152.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6
155°	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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)