

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-LD5-49SL-LN-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33519)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-49SL-LN-UNV-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

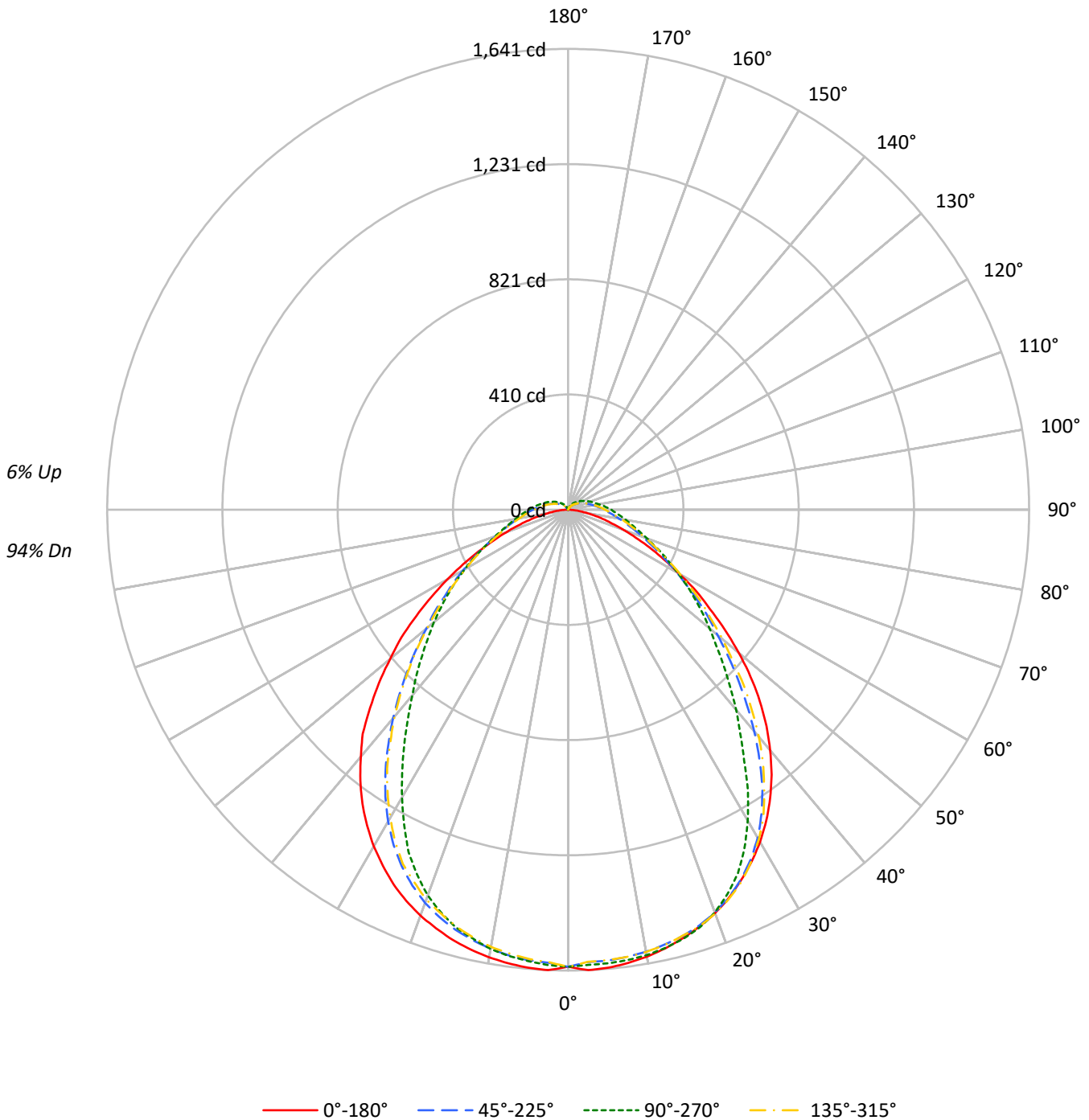
Lumens per Lamp: N/A
Luminaire Lumens: 4119.0 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 38
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°	13153	13153	13153	13153
5°	13246	12734	13246	12678
10°	13188	12396	13209	12223
15°	13102	12025	13162	11712
20°	13002	11549	13078	11061
25°	12793	10842	12935	10204
30°	12522	9804	12686	9076
35°	12100	8532	12333	7945
40°	11495	7462	11798	6923
45°	10695	6487	11042	6115
50°	9603	5700	10026	5412
55°	8307	5034	8911	4779
60°	6987	4419	7619	4165
65°	5727	3907	6304	3623
70°	4559	3467	5105	3207
75°	3579	3202	4029	2946
80°	2585	3089	3044	2823
85°	1592	3107	2138	2855



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.3	3.7
10°-20°	442.5	10.7
20°-30°	655.7	15.9
30°-40°	728.5	17.7
40°-50°	660.4	16.0
50°-60°	511.7	12.4
60°-70°	347.5	8.4
70°-80°	221.1	5.4
80°-90°	141.3	3.4
90°-100°	95.3	2.3
100°-110°	65.3	1.6
110°-120°	43.5	1.1
120°-130°	27.1	0.7
130°-140°	15.0	0.4
140°-150°	7.0	0.2
150°-160°	2.6	0.1
160°-170°	0.2	0.0
170°-180°	0.0	0.0
0°-30°	1252.5	30.4
0°-40°	1981.0	48.1
0°-60°	3153.1	76.6
0°-90°	3863.1	93.8
90°-120°	204.1	5.0
90°-150°	253.2	6.1
90°-180°	256.0	6.2
0°-180°	4119.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1628	1628	1628	1628	1628	
5°	1637	1621	1637	1614	1637	156
15°	1579	1582	1586	1541	1579	446
25°	1456	1429	1472	1345	1456	670
35°	1253	1092	1278	1017	1253	782
45°	965	781	996	736	965	741
55°	616	549	661	521	616	555
65°	320	369	352	342	320	320
75°	128	246	144	226	128	138
85°	23	177	31	163	23	28
90°	0	153	2	140	0	1
95°	1	131	0	122	1	1
105°	1	96	0	90	1	1
115°	1	72	0	67	1	1
125°	1	54	1	47	1	1
135°	1	38	1	30	1	1
145°	1	24	1	17	1	1
155°	1	13	1	6	1	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6
2.5°	1641.0	1639.2	1637.4	1634.8	1637.4	1644.6	1640.1	1630.3	1628.5	1612.4	1619.5
5°	1637.4	1634.8	1633.0	1630.3	1633.9	1642.8	1638.3	1629.4	1626.7	1611.5	1619.5
7.5°	1628.5	1626.7	1624.0	1624.0	1627.6	1636.5	1633.0	1623.1	1621.3	1606.1	1615.1
10°	1616.0	1615.1	1613.3	1613.3	1616.8	1627.6	1623.1	1614.2	1612.4	1598.0	1607.9
12.5°	1599.8	1600.7	1598.0	1598.0	1603.4	1614.2	1610.6	1600.7	1598.9	1586.4	1596.3
15°	1579.2	1580.1	1578.3	1579.2	1584.6	1597.2	1592.7	1583.7	1581.9	1572.1	1580.1
17.5°	1556.0	1556.9	1556.9	1556.0	1562.2	1574.8	1571.2	1563.1	1560.4	1552.4	1562.2
20°	1529.1	1529.1	1529.1	1529.1	1536.3	1548.8	1544.3	1538.1	1532.7	1526.4	1534.5
22.5°	1496.0	1495.1	1496.0	1498.7	1505.8	1515.7	1513.0	1505.8	1497.8	1494.2	1500.5
25°	1455.7	1458.4	1459.3	1462.0	1470.9	1479.0	1476.3	1469.1	1456.6	1453.9	1455.7
27.5°	1413.6	1415.4	1418.1	1417.2	1429.7	1437.8	1432.4	1426.2	1408.2	1405.6	1403.8
30°	1366.2	1368.9	1370.6	1369.8	1379.6	1388.6	1383.2	1375.1	1351.0	1349.2	1334.8
32.5°	1312.5	1315.1	1316.9	1316.9	1331.3	1334.8	1325.0	1313.4	1287.4	1281.1	1268.6
35°	1253.4	1256.1	1257.0	1257.0	1271.3	1270.4	1257.8	1241.7	1213.1	1205.0	1183.5
37.5°	1189.8	1191.6	1192.5	1197.9	1204.1	1198.8	1182.6	1162.1	1140.6	1118.2	1094.9
40°	1118.2	1120.9	1122.7	1126.2	1132.5	1126.2	1103.0	1077.9	1054.6	1029.6	1006.3
42.5°	1044.8	1052.8	1051.0	1050.1	1053.7	1036.7	1018.8	990.2	966.9	940.9	917.6
45°	965.1	964.2	968.7	970.5	969.6	955.2	930.2	904.2	880.9	854.1	834.4
47.5°	880.9	880.0	883.6	885.4	880.0	864.8	845.1	815.6	795.9	772.6	757.4
50°	792.3	792.3	797.7	792.3	789.6	774.4	758.3	728.7	713.5	692.9	684.0
52.5°	703.7	711.7	706.4	704.6	701.9	686.7	674.1	650.0	637.4	628.5	617.7
55°	615.9	624.9	621.3	618.6	617.7	605.2	593.6	575.7	567.6	561.3	555.1
57.5°	541.6	540.7	538.9	536.3	537.2	527.3	515.7	505.8	502.2	499.6	501.3
60°	455.7	462.9	460.2	461.1	462.0	460.2	450.3	444.1	444.9	445.8	448.5
62.5°	385.0	391.2	395.7	392.1	393.9	396.6	391.2	389.4	393.0	396.6	400.2
65°	319.6	325.9	330.4	329.5	334.8	340.2	339.3	341.1	349.2	353.6	358.1
67.5°	260.5	266.8	273.1	274.0	282.0	290.1	293.6	299.9	308.9	315.1	320.5
70°	209.5	214.9	222.0	226.5	237.2	248.0	254.3	266.8	272.2	281.1	284.7
72.5°	163.8	168.3	178.2	188.9	197.9	211.3	223.8	234.6	242.6	252.5	256.9
75°	128.0	129.8	140.6	153.1	165.6	180.8	194.3	205.9	216.7	226.5	233.7
77.5°	94.0	96.7	106.5	123.5	137.9	154.0	169.2	181.7	193.4	203.2	213.1
80°	65.4	70.7	81.5	98.5	114.6	132.5	146.8	161.1	173.7	183.5	193.4
82.5°	42.1	46.6	61.8	78.8	95.8	113.7	128.9	143.2	156.7	167.4	176.4
85°	23.3	29.5	44.8	62.7	79.7	97.6	113.7	128.0	141.5	151.3	160.3
87.5°	9.0	17.9	32.2	49.2	66.2	83.3	100.3	113.7	127.1	137.9	145.9
90°	0.0	10.7	24.2	41.2	58.2	75.2	91.3	105.6	118.2	128.0	137.0
92.5°	0.9	7.2	18.8	33.1	49.2	65.4	80.6	94.9	107.4	117.3	125.3
95°	0.9	5.4	15.2	28.6	43.0	58.2	72.5	85.9	97.6	107.4	115.5
97.5°	0.9	3.6	12.5	25.1	37.6	52.8	66.2	78.8	89.5	99.4	105.6
100°	0.9	3.6	10.7	21.5	34.0	47.4	60.0	72.5	82.4	90.4	97.6
102.5°	0.9	2.7	9.0	18.8	30.4	42.1	54.6	66.2	75.2	83.3	90.4
105°	0.9	2.7	8.1	16.1	26.9	38.5	49.2	60.0	69.8	77.0	83.3
107.5°	0.9	1.8	7.2	13.4	23.3	34.9	45.7	54.6	63.6	70.7	77.0
110°	0.9	1.8	6.3	12.5	20.6	31.3	41.2	50.1	58.2	65.4	70.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.9	1.8	5.4	11.6	18.8	27.8	37.6	45.7	53.7	60.0	65.4
115°	0.9	1.8	5.4	10.7	17.0	24.2	33.1	42.1	48.3	55.5	60.0
117.5°	0.9	1.8	4.5	9.0	16.1	22.4	30.4	37.6	44.8	51.0	55.5
120°	0.9	1.8	4.5	8.1	14.3	20.6	26.9	34.0	41.2	45.7	50.1
122.5°	0.9	1.8	3.6	8.1	12.5	18.8	24.2	30.4	36.7	42.1	46.6
125°	0.9	1.8	3.6	7.2	11.6	17.0	22.4	26.9	33.1	37.6	42.1
127.5°	0.9	1.8	3.6	6.3	10.7	15.2	20.6	25.1	29.5	34.0	37.6
130°	0.9	1.8	2.7	5.4	9.8	13.4	17.9	23.3	26.9	30.4	34.0
132.5°	0.9	1.8	2.7	5.4	8.1	11.6	16.1	20.6	24.2	27.8	30.4
135°	0.9	1.8	2.7	4.5	7.2	10.7	13.4	17.9	21.5	25.1	27.8
137.5°	0.9	1.8	2.7	4.5	6.3	9.0	11.6	15.2	18.8	21.5	25.1
140°	0.9	1.8	2.7	3.6	5.4	8.1	10.7	12.5	16.1	18.8	21.5
142.5°	0.9	1.8	2.7	3.6	5.4	7.2	9.0	10.7	13.4	16.1	18.8
145°	0.9	1.8	2.7	3.6	4.5	6.3	8.1	9.8	10.7	13.4	15.2
147.5°	0.9	1.8	2.7	3.6	3.6	5.4	7.2	8.1	9.8	10.7	12.5
150°	0.9	1.8	2.7	2.7	3.6	4.5	6.3	7.2	8.1	9.8	10.7
152.5°	0.9	1.8	2.7	2.7	3.6	4.5	5.4	6.3	7.2	8.1	9.0
155°	0.9	1.8	2.7	2.7	2.7	3.6	4.5	5.4	6.3	7.2	8.1
157.5°	1.8	1.8	1.8	2.7	2.7	3.6	3.6	4.5	5.4	5.4	6.3
160°	1.8	1.8	1.8	2.7	2.7	2.7	3.6	3.6	4.5	4.5	5.4
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°	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6
2.5°	1617.7	1620.4	1628.5	1628.5	1626.7	1624.9	1624.9	1622.2	1624.0	1627.6	1625.8
5°	1617.7	1620.4	1628.5	1628.5	1626.7	1624.9	1624.0	1621.3	1624.0	1627.6	1625.8
7.5°	1612.4	1616.0	1624.0	1624.0	1622.2	1621.3	1619.5	1617.7	1620.4	1624.0	1622.2
10°	1605.2	1608.8	1616.8	1616.8	1615.1	1615.1	1612.4	1610.6	1614.2	1616.8	1616.0
12.5°	1594.5	1598.9	1606.1	1605.2	1603.4	1604.3	1601.6	1598.0	1601.6	1604.3	1605.2
15°	1579.2	1584.6	1591.8	1590.0	1587.3	1589.1	1584.6	1581.9	1584.6	1590.0	1589.1
17.5°	1559.5	1563.1	1568.5	1568.5	1565.8	1564.0	1562.2	1559.5	1561.3	1564.9	1565.8
20°	1531.8	1536.3	1539.0	1536.3	1535.4	1532.7	1529.1	1526.4	1530.0	1535.4	1536.3
22.5°	1495.1	1496.0	1502.3	1496.0	1491.5	1490.6	1487.0	1481.7	1487.0	1491.5	1492.4
25°	1449.4	1453.9	1451.2	1440.5	1440.5	1433.3	1431.5	1428.8	1429.7	1437.8	1441.4
27.5°	1391.2	1393.0	1385.9	1376.9	1368.9	1364.4	1358.1	1359.0	1359.0	1369.8	1373.3
30°	1327.7	1317.8	1311.6	1297.2	1291.0	1280.2	1278.4	1278.4	1276.6	1282.0	1298.1
32.5°	1251.6	1238.1	1228.3	1214.9	1204.1	1193.4	1188.0	1190.7	1189.8	1203.2	1208.6
35°	1168.3	1160.3	1139.7	1122.7	1116.4	1100.3	1100.3	1092.2	1097.6	1112.8	1119.1
37.5°	1080.6	1068.0	1051.0	1032.2	1027.8	1015.2	1010.8	1006.3	1017.9	1020.6	1026.9
40°	991.1	979.4	963.3	945.4	945.4	930.2	930.2	930.2	931.1	936.4	948.1
42.5°	906.0	893.5	879.1	866.6	864.8	853.2	853.2	852.3	854.1	858.6	869.3
45°	823.6	813.8	798.6	792.3	793.2	780.7	783.4	780.7	784.3	788.7	792.3
47.5°	747.5	741.3	735.0	726.1	723.4	722.5	718.0	714.4	720.7	720.7	726.1
50°	676.8	673.2	669.7	664.3	665.2	661.6	656.2	656.2	660.7	661.6	665.2
52.5°	615.0	610.6	606.1	607.0	607.9	606.1	603.4	600.7	603.4	605.2	609.7
55°	553.3	549.7	554.2	552.4	554.2	552.4	550.6	548.8	553.3	550.6	555.1
57.5°	497.8	501.3	503.1	499.6	502.2	500.5	501.3	498.7	502.2	504.0	503.1
60°	446.7	452.1	449.4	450.3	453.9	452.1	448.5	451.2	454.8	455.7	454.8
62.5°	400.2	406.4	409.1	407.3	408.2	406.4	409.1	405.6	410.0	411.8	409.1
65°	358.1	365.3	367.1	367.1	367.1	365.3	368.0	368.8	370.6	370.6	368.8
67.5°	322.3	328.6	330.4	332.1	330.4	328.6	328.6	329.5	333.0	334.8	333.0
70°	290.1	296.3	297.2	297.2	298.1	299.9	296.3	298.1	300.8	301.7	300.8
72.5°	262.3	268.6	270.4	269.5	270.4	271.3	271.3	269.5	272.2	274.0	274.0
75°	239.9	243.5	245.3	245.3	246.2	247.1	247.1	246.2	248.0	248.9	249.8
77.5°	219.3	222.0	224.7	224.7	225.6	224.7	226.5	226.5	227.4	228.3	229.2
80°	198.7	202.3	204.1	205.0	206.8	207.7	207.7	207.7	208.6	209.5	209.5
82.5°	182.6	185.3	188.0	190.7	190.7	191.6	191.6	191.6	192.5	192.5	193.4
85°	166.5	170.1	172.8	174.6	175.5	176.4	176.4	177.3	177.3	177.3	178.2
87.5°	152.2	156.7	158.5	160.3	161.1	162.9	162.9	162.9	163.8	163.8	163.8
90°	142.3	146.8	148.6	150.4	151.3	152.2	152.2	153.1	153.1	154.0	154.0
92.5°	130.7	135.2	138.8	138.8	139.7	141.5	140.6	140.6	141.5	142.3	142.3
95°	121.8	125.3	128.0	128.9	129.8	129.8	129.8	130.7	129.8	130.7	130.7
97.5°	111.0	114.6	117.3	119.1	120.0	120.0	120.0	120.9	120.0	120.9	120.9
100°	102.1	105.6	108.3	109.2	111.0	111.0	111.0	111.0	111.0	111.0	111.9
102.5°	94.9	98.5	100.3	101.2	102.1	103.0	103.0	103.0	103.0	103.9	103.9
105°	87.7	91.3	93.1	94.0	94.9	95.8	95.8	95.8	96.7	96.7	95.8
107.5°	81.5	84.2	85.9	87.7	88.6	88.6	89.5	89.5	89.5	89.5	89.5
110°	75.2	77.9	80.6	82.4	82.4	83.3	83.3	84.2	84.2	83.3	84.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-49SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	68.9	72.5	74.3	76.1	77.0	77.9	77.9	77.9	77.9	77.9	77.9
115°	63.6	67.1	68.9	70.7	71.6	72.5	72.5	72.5	72.5	72.5	72.5
117.5°	59.1	62.7	64.5	65.4	66.2	67.1	68.0	68.0	68.0	68.0	67.1
120°	54.6	57.3	59.1	60.9	61.8	62.7	62.7	62.7	62.7	62.7	62.7
122.5°	50.1	52.8	54.6	56.4	57.3	58.2	58.2	58.2	58.2	58.2	58.2
125°	45.7	48.3	50.1	51.9	52.8	53.7	53.7	53.7	53.7	53.7	53.7
127.5°	41.2	43.9	46.6	47.4	48.3	49.2	49.2	49.2	50.1	49.2	49.2
130°	36.7	39.4	42.1	43.0	43.9	44.8	45.7	45.7	45.7	45.7	44.8
132.5°	33.1	35.8	37.6	38.5	40.3	40.3	41.2	41.2	41.2	41.2	40.3
135°	30.4	32.2	34.0	34.9	36.7	36.7	36.7	37.6	37.6	36.7	35.8
137.5°	26.9	28.6	30.4	31.3	32.2	33.1	33.1	34.0	33.1	33.1	33.1
140°	25.1	26.0	27.8	28.6	29.5	29.5	29.5	30.4	30.4	29.5	29.5
142.5°	21.5	23.3	25.1	26.0	26.9	26.9	26.9	26.9	26.9	26.9	26.9
145°	17.9	20.6	21.5	23.3	23.3	24.2	24.2	24.2	24.2	24.2	23.3
147.5°	15.2	17.0	19.7	20.6	20.6	21.5	21.5	21.5	21.5	21.5	20.6
150°	11.6	13.4	16.1	17.9	17.9	18.8	18.8	18.8	18.8	17.9	17.9
152.5°	9.8	11.6	12.5	14.3	15.2	15.2	15.2	16.1	15.2	15.2	15.2
155°	9.0	9.8	10.7	11.6	12.5	13.4	13.4	13.4	13.4	12.5	12.5
157.5°	7.2	8.1	9.0	9.8	10.7	11.6	11.6	11.6	11.6	11.6	10.7
160°	5.4	6.3	7.2	7.2	8.1	9.0	9.8	9.0	9.0	9.0	9.0
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-LD5-49SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6
2.5°	1624.0	1623.1	1625.8	1621.3	1607.9	1611.5	1609.7	1617.7	1619.5	1621.3	1629.4
5°	1624.0	1623.1	1624.9	1621.3	1607.0	1609.7	1607.9	1616.0	1617.7	1618.6	1626.7
7.5°	1620.4	1619.5	1622.2	1617.7	1602.5	1606.1	1603.4	1611.5	1612.4	1613.3	1620.4
10°	1613.3	1612.4	1614.2	1610.6	1595.4	1598.9	1595.4	1603.4	1603.4	1605.2	1610.6
12.5°	1602.5	1600.7	1604.3	1599.8	1582.8	1587.3	1585.5	1590.9	1591.8	1592.7	1598.0
15°	1587.3	1585.5	1588.2	1585.5	1570.3	1571.2	1568.5	1576.6	1577.5	1575.7	1581.0
17.5°	1564.9	1563.1	1568.5	1566.7	1551.5	1555.1	1554.2	1556.0	1558.7	1554.2	1561.3
20°	1537.2	1539.0	1540.7	1541.6	1530.0	1530.0	1529.1	1532.7	1535.4	1531.8	1537.2
22.5°	1496.0	1500.5	1505.8	1507.6	1499.6	1498.7	1504.0	1502.3	1504.9	1503.1	1506.7
25°	1444.1	1453.0	1458.4	1463.8	1459.3	1461.1	1469.1	1470.9	1470.9	1470.0	1473.6
27.5°	1379.6	1391.2	1401.1	1412.7	1408.2	1411.8	1425.3	1427.1	1430.6	1427.1	1434.2
30°	1302.6	1313.4	1332.2	1349.2	1351.0	1356.3	1375.1	1376.9	1386.8	1383.2	1385.9
32.5°	1225.6	1231.0	1252.5	1269.5	1280.2	1293.7	1314.2	1317.8	1331.3	1333.9	1333.9
35°	1128.9	1144.1	1163.8	1188.0	1201.4	1215.8	1243.5	1248.9	1268.6	1274.9	1282.0
37.5°	1047.5	1061.8	1074.3	1099.4	1123.6	1139.7	1162.1	1175.5	1196.1	1207.7	1216.7
40°	960.6	972.3	985.7	1010.8	1031.3	1055.5	1077.9	1094.0	1120.0	1133.4	1145.0
42.5°	878.3	887.2	901.5	919.4	940.9	967.8	989.3	1008.1	1035.8	1054.6	1068.0
45°	804.8	810.2	822.7	836.2	855.0	882.7	903.3	927.5	949.9	969.6	985.7
47.5°	735.9	743.1	749.3	758.3	775.3	792.3	816.5	839.8	862.1	883.6	899.7
50°	672.3	672.3	682.2	688.5	700.1	715.3	734.1	750.2	778.0	793.2	813.8
52.5°	610.6	614.2	619.5	623.1	632.1	641.9	657.1	670.6	693.8	708.2	727.8
55°	556.0	559.5	562.2	564.0	569.4	581.0	586.4	597.1	613.3	624.9	641.9
57.5°	504.0	505.8	508.5	509.4	510.3	517.5	521.9	524.6	540.7	552.4	566.7
60°	456.6	456.6	459.3	458.4	457.5	461.1	460.2	462.9	472.7	479.9	486.1
62.5°	411.8	411.8	412.7	410.9	410.0	410.0	406.4	409.1	411.8	412.7	417.2
65°	370.6	375.1	371.5	372.4	367.1	365.3	363.5	358.1	357.2	353.6	355.4
67.5°	333.9	337.5	333.9	333.9	329.5	325.9	321.4	312.4	309.8	302.6	300.8
70°	304.4	301.7	303.5	300.8	295.4	291.0	284.7	277.5	268.6	259.6	253.4
72.5°	275.7	275.7	274.0	271.3	268.6	259.6	252.5	244.4	233.7	222.0	213.1
75°	248.0	248.9	248.9	246.2	241.7	233.7	225.6	214.0	202.3	188.9	177.3
77.5°	228.3	228.3	228.3	223.8	219.3	212.2	202.3	189.8	177.3	161.1	147.7
80°	209.5	208.6	208.6	203.2	198.7	190.7	180.8	168.3	154.9	137.9	122.7
82.5°	194.3	193.4	191.6	187.1	180.8	172.8	162.9	149.5	135.2	120.0	101.2
85°	178.2	177.3	175.5	171.0	164.7	157.6	146.8	133.4	119.1	102.1	84.2
87.5°	163.8	162.9	160.3	157.6	150.4	142.3	131.6	119.1	103.9	87.7	69.8
90°	154.0	152.2	150.4	146.8	140.6	131.6	120.9	107.4	92.2	76.1	58.2
92.5°	142.3	141.5	138.8	135.2	129.8	120.9	110.1	97.6	82.4	67.1	50.1
95°	130.7	129.8	128.0	124.4	119.1	111.0	101.2	88.6	74.3	59.1	43.9
97.5°	120.0	120.0	117.3	114.6	108.3	102.1	92.2	80.6	67.1	53.7	39.4
100°	111.0	111.0	108.3	104.7	100.3	94.0	84.2	73.4	60.9	48.3	34.0
102.5°	103.0	102.1	100.3	96.7	92.2	85.9	77.0	67.1	55.5	43.0	30.4
105°	95.8	94.9	93.1	89.5	85.9	78.8	71.6	61.8	50.1	38.5	26.9
107.5°	88.6	87.7	86.8	83.3	78.8	72.5	65.4	55.5	45.7	34.9	24.2
110°	82.4	81.5	79.7	76.1	71.6	66.2	59.1	51.0	41.2	31.3	21.5



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-49SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	77.0	76.1	74.3	70.7	67.1	60.9	54.6	45.7	37.6	28.6	18.8
115°	71.6	70.7	68.9	65.4	60.9	55.5	49.2	42.1	33.1	25.1	17.0
117.5°	66.2	65.4	63.6	60.9	56.4	51.0	44.8	37.6	29.5	23.3	15.2
120°	61.8	60.0	58.2	55.5	51.0	46.6	40.3	34.0	26.9	20.6	13.4
122.5°	57.3	55.5	53.7	51.0	46.6	42.1	35.8	30.4	25.1	18.8	12.5
125°	51.9	51.0	49.2	46.6	42.1	37.6	33.1	27.8	22.4	17.0	10.7
127.5°	47.4	46.6	44.8	41.2	37.6	34.0	29.5	25.1	19.7	14.3	9.8
130°	43.9	42.1	40.3	37.6	34.9	31.3	26.9	22.4	17.9	12.5	9.0
132.5°	39.4	37.6	35.8	34.0	31.3	27.8	24.2	19.7	16.1	11.6	8.1
135°	35.8	34.0	32.2	30.4	27.8	25.1	21.5	17.9	14.3	10.7	7.2
137.5°	31.3	30.4	29.5	27.8	25.1	22.4	19.7	15.2	12.5	9.8	6.3
140°	28.6	27.8	26.9	24.2	22.4	19.7	17.0	13.4	10.7	8.1	5.4
142.5°	26.0	25.1	23.3	21.5	19.7	17.9	14.3	12.5	9.8	7.2	5.4
145°	22.4	21.5	20.6	18.8	17.0	14.3	12.5	10.7	9.0	6.3	4.5
147.5°	20.6	19.7	17.9	16.1	14.3	12.5	11.6	9.8	7.2	5.4	3.6
150°	17.0	16.1	15.2	13.4	12.5	11.6	9.8	8.1	6.3	4.5	3.6
152.5°	14.3	13.4	12.5	12.5	10.7	9.8	8.1	7.2	5.4	4.5	2.7
155°	12.5	12.5	11.6	10.7	9.0	8.1	7.2	5.4	4.5	3.6	2.7
157.5°	10.7	9.8	9.0	9.0	8.1	7.2	5.4	4.5	3.6	3.6	2.7
160°	9.0	8.1	8.1	7.2	6.3	5.4	4.5	4.5	3.6	2.7	2.7
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-LD5-49SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6
2.5°	1630.3	1620.4	1629.4	1641.0	1641.0	1639.2	1637.4	1641.0	1650.0	1646.4	1635.6
5°	1627.6	1617.7	1625.8	1637.4	1637.4	1634.8	1633.0	1635.6	1645.5	1641.0	1631.2
7.5°	1622.2	1613.3	1618.6	1629.4	1629.4	1626.7	1624.9	1628.5	1636.5	1632.1	1621.3
10°	1612.4	1602.5	1608.8	1618.6	1617.7	1616.0	1613.3	1617.7	1624.9	1618.6	1606.1
12.5°	1599.8	1590.0	1595.4	1604.3	1603.4	1599.8	1598.0	1600.7	1607.0	1603.4	1590.0
15°	1582.8	1573.0	1577.5	1586.4	1583.7	1581.0	1577.5	1578.3	1586.4	1580.1	1565.8
17.5°	1562.2	1551.5	1555.1	1563.1	1560.4	1557.8	1553.3	1554.2	1563.1	1554.2	1539.0
20°	1537.2	1525.5	1528.2	1538.1	1533.6	1529.1	1524.6	1524.6	1533.6	1523.7	1506.7
22.5°	1510.3	1498.7	1500.5	1507.6	1504.0	1496.0	1491.5	1494.2	1498.7	1486.1	1468.2
25°	1477.2	1462.0	1464.7	1471.8	1469.1	1458.4	1453.9	1455.7	1453.9	1444.1	1425.3
27.5°	1438.7	1422.6	1424.4	1428.8	1425.3	1415.4	1410.0	1410.9	1407.4	1394.8	1373.3
30°	1390.3	1382.3	1381.4	1384.1	1378.7	1368.9	1362.6	1360.8	1359.9	1342.0	1316.0
32.5°	1341.1	1333.9	1329.5	1333.0	1326.8	1316.9	1306.2	1306.2	1297.2	1280.2	1257.8
35°	1291.0	1279.3	1274.9	1277.5	1270.4	1257.8	1248.9	1244.4	1231.0	1209.5	1185.3
37.5°	1226.5	1218.5	1213.1	1215.8	1207.7	1198.8	1181.7	1177.3	1162.9	1133.4	1103.0
40°	1156.7	1150.4	1145.0	1147.7	1138.8	1125.3	1110.1	1103.0	1086.8	1053.7	1029.6
42.5°	1081.5	1078.8	1072.5	1082.4	1064.5	1051.0	1035.8	1024.2	1008.1	972.3	944.5
45°	1001.8	1008.1	993.7	996.4	984.8	973.2	957.0	940.0	923.9	889.9	858.6
47.5°	917.6	922.1	912.3	914.1	901.5	890.8	876.5	855.0	837.1	807.5	779.8
50°	830.8	829.0	829.0	827.2	817.4	803.9	789.6	769.9	752.0	725.2	701.9
52.5°	738.6	742.2	744.0	748.4	735.9	727.8	705.5	688.5	675.0	647.3	627.6
55°	650.0	662.5	658.9	660.7	646.4	640.1	622.2	608.8	589.1	573.0	560.4
57.5°	569.4	572.1	573.9	576.5	570.3	557.7	543.4	532.7	517.5	504.0	495.1
60°	491.5	491.5	492.4	496.9	490.6	479.9	469.1	461.1	450.3	442.3	436.9
62.5°	418.1	424.4	425.3	421.7	413.6	408.2	401.1	396.6	389.4	386.8	385.0
65°	350.0	350.0	350.0	351.8	347.4	343.8	339.3	338.4	341.1	337.5	339.3
67.5°	292.8	290.1	288.3	289.2	287.4	285.6	284.7	287.4	292.8	292.8	297.2
70°	243.5	238.1	234.6	234.6	234.6	235.5	238.1	243.5	252.5	256.0	262.3
72.5°	203.2	191.6	186.2	186.2	187.1	190.7	198.7	208.6	216.7	223.8	231.9
75°	164.7	153.1	145.0	144.1	145.9	151.3	162.9	171.9	185.3	195.2	205.0
77.5°	133.4	119.1	109.2	108.3	111.0	119.1	133.4	145.0	160.3	171.0	181.7
80°	106.5	90.4	82.4	77.0	81.5	91.3	107.4	121.8	136.1	150.4	163.8
82.5°	85.1	69.8	57.3	51.9	57.3	70.7	85.9	103.0	117.3	132.5	145.9
85°	67.1	51.0	36.7	31.3	37.6	51.9	68.9	85.9	102.1	117.3	130.7
87.5°	52.8	36.7	22.4	15.2	23.3	38.5	54.6	71.6	88.6	103.9	117.3
90°	41.2	26.0	12.5	1.8	13.4	27.8	43.9	60.0	77.0	92.2	105.6
92.5°	34.9	19.7	7.2	0.0	8.1	20.6	35.8	51.9	67.1	82.4	95.8
95°	29.5	16.1	5.4	0.0	5.4	16.1	29.5	43.9	59.1	74.3	87.7
97.5°	25.1	12.5	3.6	0.0	3.6	12.5	24.2	38.5	51.9	66.2	78.8
100°	21.5	10.7	2.7	0.0	2.7	9.8	20.6	33.1	46.6	60.0	71.6
102.5°	18.8	9.0	1.8	0.0	1.8	8.1	17.0	28.6	40.3	52.8	64.5
105°	16.1	7.2	1.8	0.0	0.9	6.3	14.3	25.1	35.8	47.4	58.2
107.5°	14.3	6.3	1.8	0.0	0.9	5.4	12.5	21.5	32.2	42.1	51.9
110°	12.5	5.4	1.8	0.0	0.9	3.6	10.7	18.8	27.8	37.6	47.4



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-49SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	10.7	4.5	0.9	0.0	0.0	2.7	9.0	16.1	24.2	34.0	42.1
115°	9.8	4.5	0.9	0.0	0.0	1.8	7.2	14.3	21.5	30.4	37.6
117.5°	9.0	3.6	0.9	0.0	0.9	1.8	6.3	12.5	18.8	26.0	34.0
120°	8.1	3.6	0.9	0.0	0.9	0.9	4.5	10.7	16.1	23.3	29.5
122.5°	7.2	3.6	0.9	0.0	0.9	0.9	3.6	9.0	14.3	20.6	26.0
125°	6.3	2.7	1.8	0.9	0.9	0.9	2.7	7.2	12.5	17.0	23.3
127.5°	6.3	2.7	1.8	0.9	0.9	0.9	1.8	6.3	9.8	15.2	20.6
130°	5.4	2.7	1.8	0.9	0.9	0.9	0.9	4.5	9.0	12.5	17.0
132.5°	4.5	2.7	1.8	0.9	0.9	0.9	0.9	2.7	6.3	10.7	14.3
135°	4.5	2.7	1.8	0.9	0.9	0.9	0.9	1.8	4.5	8.1	11.6
137.5°	3.6	1.8	1.8	0.9	0.9	0.9	0.9	0.9	3.6	6.3	9.0
140°	3.6	1.8	1.8	0.9	0.9	0.9	0.9	0.9	2.7	4.5	7.2
142.5°	2.7	1.8	1.8	0.9	0.9	0.9	0.9	0.9	1.8	3.6	5.4
145°	2.7	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	1.8	3.6
147.5°	2.7	2.7	1.8	0.9	0.9	0.9	0.9	0.9	0.9	1.8	2.7
150°	2.7	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.8
152.5°	2.7	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.8
155°	2.7	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	1.8	1.8
157.5°	2.7	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.8
160°	2.7	1.8	1.8	0.9	1.8	0.9	1.8	1.8	1.8	1.8	1.8
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-LD5-49SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6
2.5°	1632.1	1615.1	1624.0	1621.3	1624.9	1632.1	1631.2	1629.4	1629.4	1626.7	1623.1
5°	1626.7	1610.6	1618.6	1614.2	1618.6	1624.9	1624.0	1621.3	1623.1	1618.6	1614.2
7.5°	1616.0	1601.6	1608.8	1605.2	1608.8	1615.1	1612.4	1611.5	1613.3	1606.1	1603.4
10°	1603.4	1587.3	1595.4	1590.9	1595.4	1599.8	1598.0	1594.5	1598.0	1590.9	1588.2
12.5°	1583.7	1570.3	1575.7	1573.9	1576.6	1581.0	1577.5	1574.8	1576.6	1570.3	1564.9
15°	1562.2	1548.8	1553.3	1550.6	1552.4	1557.8	1551.5	1550.6	1548.8	1542.5	1540.7
17.5°	1534.5	1521.9	1526.4	1521.9	1524.6	1522.8	1521.9	1517.5	1517.5	1510.3	1504.9
20°	1500.5	1489.7	1487.0	1483.5	1487.0	1483.5	1478.1	1474.5	1473.6	1466.4	1462.0
22.5°	1461.1	1448.5	1450.3	1440.5	1441.4	1436.0	1427.1	1423.5	1419.9	1411.8	1405.6
25°	1413.6	1401.1	1392.1	1385.9	1377.8	1376.9	1365.3	1356.3	1355.4	1345.6	1344.7
27.5°	1359.9	1345.6	1338.4	1323.2	1313.4	1305.3	1295.4	1286.5	1282.0	1271.3	1264.1
30°	1298.1	1282.0	1264.1	1253.4	1238.1	1231.9	1214.9	1204.1	1200.5	1188.9	1183.5
32.5°	1228.3	1211.3	1197.0	1176.4	1159.4	1150.4	1133.4	1122.7	1118.2	1105.7	1098.5
35°	1152.2	1133.4	1116.4	1096.7	1083.3	1068.0	1047.5	1036.7	1026.9	1022.4	1017.0
37.5°	1072.5	1051.9	1032.2	1012.5	1000.9	983.0	965.1	957.9	946.3	941.8	936.4
40°	990.2	969.6	950.8	932.0	918.5	902.4	886.3	883.6	871.1	866.6	863.0
42.5°	908.7	887.2	865.7	852.3	842.4	826.3	815.6	812.9	802.2	799.5	799.5
45°	835.3	808.4	790.5	778.9	770.8	757.4	748.4	746.6	737.7	735.9	735.9
47.5°	756.5	731.4	718.0	710.8	703.7	693.8	688.5	688.5	679.5	677.7	676.8
50°	683.1	659.8	650.0	642.8	641.9	634.7	630.3	628.5	628.5	622.2	623.1
52.5°	613.3	601.6	593.6	589.1	583.7	579.2	575.7	575.7	573.0	568.5	570.3
55°	548.8	535.4	536.3	532.7	530.0	527.3	528.2	522.8	521.9	518.4	521.0
57.5°	484.3	484.3	482.5	479.9	475.4	477.2	477.2	477.2	472.7	470.0	472.7
60°	429.7	432.4	427.9	430.6	428.8	429.7	427.9	427.9	425.3	424.4	425.3
62.5°	381.4	385.9	384.1	387.6	385.9	386.8	388.5	385.0	383.2	381.4	383.2
65°	338.4	343.8	342.9	345.6	346.5	347.4	348.3	346.5	344.7	342.9	342.0
67.5°	300.8	306.2	309.8	310.7	311.6	314.2	313.3	311.6	309.8	307.1	306.2
70°	266.8	274.0	278.4	280.2	283.8	282.0	282.0	281.1	279.3	276.6	275.7
72.5°	238.1	246.2	250.7	252.5	256.0	256.0	255.2	254.3	252.5	249.8	248.9
75°	213.1	220.2	226.5	230.1	232.8	232.8	231.9	231.0	229.2	227.4	226.5
77.5°	193.4	199.6	205.0	209.5	211.3	212.2	211.3	209.5	209.5	208.6	207.7
80°	173.7	180.8	186.2	190.7	193.4	193.4	192.5	193.4	191.6	190.7	189.8
82.5°	156.7	164.7	171.0	175.5	177.3	178.2	177.3	178.2	176.4	176.4	176.4
85°	141.5	149.5	156.7	160.3	162.9	163.8	163.8	163.8	162.9	162.9	162.9
87.5°	128.9	137.0	144.1	147.7	150.4	151.3	151.3	152.2	150.4	150.4	150.4
90°	117.3	125.3	132.5	136.1	138.8	140.6	140.6	141.5	140.6	139.7	139.7
92.5°	106.5	115.5	122.7	126.2	128.9	131.6	131.6	132.5	130.7	130.7	130.7
95°	97.6	106.5	112.8	117.3	120.0	121.8	122.7	122.7	121.8	121.8	121.8
97.5°	89.5	97.6	103.9	108.3	111.0	111.9	112.8	113.7	112.8	112.8	112.8
100°	81.5	89.5	95.8	99.4	103.0	103.9	104.7	105.6	105.6	104.7	104.7
102.5°	74.3	82.4	87.7	92.2	94.9	96.7	97.6	97.6	97.6	97.6	97.6
105°	67.1	75.2	80.6	85.1	87.7	89.5	90.4	91.3	91.3	90.4	90.4
107.5°	60.9	68.0	74.3	77.9	81.5	83.3	84.2	84.2	85.1	84.2	84.2
110°	54.6	62.7	68.0	71.6	75.2	77.0	77.9	78.8	78.8	78.8	78.8



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-49SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	50.1	56.4	61.8	65.4	68.9	70.7	71.6	72.5	73.4	72.5	72.5
115°	44.8	51.0	56.4	60.0	62.7	64.5	66.2	67.1	67.1	68.0	67.1
117.5°	40.3	45.7	51.0	54.6	57.3	60.0	60.9	61.8	62.7	61.8	61.8
120°	35.8	41.2	45.7	49.2	51.9	54.6	55.5	56.4	57.3	56.4	56.4
122.5°	32.2	36.7	41.2	44.8	47.4	49.2	51.0	51.0	51.9	51.9	51.9
125°	28.6	33.1	36.7	40.3	43.0	44.8	45.7	46.6	46.6	47.4	47.4
127.5°	25.1	28.6	33.1	35.8	38.5	40.3	41.2	42.1	42.1	43.0	43.0
130°	21.5	25.1	28.6	31.3	34.0	35.8	36.7	37.6	38.5	38.5	38.5
132.5°	18.8	22.4	25.1	27.8	29.5	31.3	33.1	34.0	34.0	34.0	34.0
135°	15.2	18.8	21.5	24.2	26.0	27.8	28.6	30.4	30.4	30.4	30.4
137.5°	12.5	16.1	18.8	20.6	22.4	24.2	25.1	26.0	26.9	26.9	26.9
140°	9.8	12.5	15.2	17.9	19.7	20.6	22.4	22.4	23.3	23.3	23.3
142.5°	7.2	9.8	11.6	14.3	16.1	17.9	18.8	19.7	19.7	19.7	19.7
145°	5.4	7.2	9.0	10.7	13.4	14.3	15.2	16.1	17.0	17.0	17.0
147.5°	3.6	5.4	6.3	8.1	9.8	11.6	12.5	13.4	14.3	14.3	14.3
150°	2.7	3.6	5.4	6.3	7.2	9.0	10.7	10.7	11.6	11.6	10.7
152.5°	1.8	2.7	3.6	4.5	5.4	6.3	8.1	8.1	9.0	9.0	9.0
155°	1.8	1.8	1.8	2.7	3.6	4.5	5.4	6.3	6.3	6.3	6.3
157.5°	1.8	1.8	1.8	1.8	1.8	2.7	3.6	4.5	4.5	4.5	4.5
160°	1.8	1.8	0.9	0.9	1.8	1.8	1.8	1.8	2.7	2.7	2.7
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-LD5-49SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6
2.5°	1625.8	1627.6	1627.6	1625.8	1624.9	1628.5	1624.0	1607.0	1612.4	1614.2	1619.5
5°	1617.7	1619.5	1619.5	1619.5	1617.7	1621.3	1616.8	1599.8	1606.1	1608.8	1612.4
7.5°	1606.1	1607.0	1608.8	1607.9	1606.1	1611.5	1607.0	1590.0	1594.5	1598.9	1603.4
10°	1590.9	1590.9	1591.8	1593.6	1591.8	1596.3	1591.8	1576.6	1581.0	1583.7	1589.1
12.5°	1570.3	1572.1	1573.0	1572.1	1571.2	1574.8	1573.0	1558.7	1560.4	1565.8	1571.2
15°	1542.5	1542.5	1547.0	1545.2	1545.2	1548.8	1550.6	1534.5	1537.2	1545.2	1550.6
17.5°	1508.5	1509.4	1513.0	1514.8	1513.9	1520.2	1521.1	1508.5	1507.6	1517.5	1522.8
20°	1464.7	1466.4	1470.9	1474.5	1474.5	1481.7	1484.3	1476.3	1477.2	1487.9	1489.7
22.5°	1410.9	1410.9	1419.0	1424.4	1428.8	1433.3	1441.4	1434.2	1434.2	1448.5	1456.6
25°	1344.7	1351.0	1353.6	1364.4	1370.6	1383.2	1390.3	1391.2	1392.1	1405.6	1410.9
27.5°	1271.3	1273.1	1281.1	1293.7	1300.8	1312.5	1325.9	1328.6	1333.0	1351.0	1359.0
30°	1188.0	1193.4	1197.0	1214.9	1224.7	1239.9	1257.0	1263.2	1266.8	1291.0	1300.8
32.5°	1103.0	1104.8	1120.0	1129.8	1141.5	1157.6	1177.3	1188.9	1196.1	1221.1	1235.5
35°	1017.9	1021.5	1034.0	1046.6	1058.2	1074.3	1094.9	1111.0	1123.6	1145.9	1164.7
37.5°	940.0	949.0	951.7	964.2	973.2	989.3	1003.6	1026.9	1039.4	1062.7	1086.8
40°	870.2	872.9	874.7	887.2	893.5	908.7	929.3	944.5	961.5	978.5	1007.2
42.5°	801.3	803.1	805.7	812.9	820.1	830.8	846.0	861.2	879.1	904.2	923.0
45°	737.7	739.5	741.3	745.8	752.0	761.9	771.7	782.5	800.4	821.9	841.5
47.5°	678.6	682.2	682.2	683.1	687.6	695.6	702.8	716.2	726.1	737.7	760.1
50°	622.2	624.9	625.8	625.8	628.5	633.8	635.6	644.6	653.5	664.3	680.4
52.5°	569.4	569.4	568.5	572.1	572.1	575.7	576.5	581.9	588.2	599.8	607.0
55°	519.3	519.3	521.9	520.1	520.1	521.9	521.0	521.9	527.3	534.5	540.7
57.5°	470.9	470.0	472.7	470.9	470.0	471.8	473.6	470.0	470.9	478.1	478.1
60°	422.6	423.5	426.1	424.4	424.4	424.4	422.6	420.8	419.0	423.5	425.3
62.5°	384.1	381.4	384.1	381.4	383.2	382.3	380.5	376.9	377.8	376.0	374.2
65°	343.8	343.8	344.7	342.0	343.8	343.8	341.1	340.2	334.8	333.0	328.6
67.5°	308.9	308.9	309.8	308.0	308.0	308.9	306.2	303.5	298.1	295.4	289.2
70°	278.4	278.4	278.4	277.5	277.5	277.5	275.7	272.2	266.8	262.3	254.3
72.5°	250.7	251.6	250.7	250.7	253.4	250.7	248.0	244.4	239.9	231.0	223.8
75°	228.3	229.2	228.3	228.3	228.3	227.4	226.5	221.1	215.8	208.6	197.9
77.5°	208.6	208.6	209.5	208.6	208.6	207.7	205.0	200.5	194.3	188.0	175.5
80°	189.8	190.7	191.6	192.5	190.7	189.8	187.1	183.5	175.5	168.3	155.8
82.5°	176.4	175.5	176.4	177.3	175.5	174.6	171.9	167.4	161.1	151.3	138.8
85°	162.9	162.0	162.0	162.9	162.0	160.3	157.6	153.1	146.8	137.0	124.4
87.5°	149.5	150.4	151.3	150.4	149.5	147.7	145.0	140.6	133.4	125.3	111.9
90°	139.7	139.7	139.7	139.7	138.8	137.0	134.3	128.9	122.7	112.8	101.2
92.5°	130.7	130.7	130.7	130.7	129.8	127.1	124.4	120.0	112.8	103.0	92.2
95°	121.8	122.7	121.8	121.8	120.0	119.1	114.6	110.1	103.9	94.0	82.4
97.5°	111.9	112.8	111.9	111.9	111.0	109.2	106.5	101.2	94.9	85.9	75.2
100°	104.7	104.7	103.9	103.9	103.0	101.2	97.6	93.1	86.8	77.9	67.1
102.5°	96.7	97.6	96.7	96.7	94.9	93.1	90.4	85.9	79.7	70.7	60.9
105°	90.4	90.4	89.5	89.5	87.7	85.9	83.3	77.9	72.5	64.5	54.6
107.5°	84.2	84.2	83.3	83.3	81.5	79.7	76.1	71.6	66.2	58.2	49.2
110°	77.9	77.9	77.9	77.0	75.2	72.5	69.8	65.4	60.0	52.8	43.9



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-49SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	73.4	72.5	71.6	70.7	68.9	67.1	63.6	59.1	53.7	47.4	39.4
115°	67.1	67.1	66.2	65.4	63.6	60.9	58.2	54.6	49.2	42.1	34.9
117.5°	61.8	61.8	60.9	60.0	58.2	55.5	52.8	49.2	43.9	37.6	31.3
120°	56.4	56.4	55.5	54.6	52.8	50.1	48.3	43.9	39.4	33.1	27.8
122.5°	51.9	51.0	51.0	49.2	48.3	45.7	43.0	39.4	34.9	29.5	24.2
125°	46.6	46.6	45.7	44.8	43.9	41.2	38.5	34.9	30.4	26.0	21.5
127.5°	42.1	42.1	41.2	40.3	39.4	36.7	34.0	31.3	26.9	22.4	17.9
130°	37.6	37.6	36.7	35.8	34.9	32.2	30.4	26.9	23.3	19.7	15.2
132.5°	34.0	34.0	33.1	32.2	30.4	28.6	26.9	23.3	20.6	17.0	13.4
135°	30.4	29.5	29.5	28.6	26.9	25.1	23.3	20.6	17.0	14.3	10.7
137.5°	26.9	26.0	25.1	24.2	23.3	21.5	19.7	17.9	15.2	11.6	9.0
140°	23.3	22.4	22.4	21.5	19.7	18.8	17.0	14.3	12.5	9.8	7.2
142.5°	19.7	19.7	18.8	17.9	17.0	16.1	14.3	12.5	9.8	8.1	5.4
145°	17.0	16.1	16.1	15.2	14.3	12.5	11.6	9.8	8.1	6.3	4.5
147.5°	13.4	13.4	13.4	12.5	11.6	10.7	9.8	8.1	6.3	4.5	2.7
150°	10.7	10.7	10.7	9.8	9.0	8.1	7.2	6.3	4.5	2.7	1.8
152.5°	9.0	9.0	8.1	8.1	7.2	6.3	5.4	4.5	2.7	1.8	1.8
155°	6.3	6.3	6.3	5.4	5.4	4.5	3.6	2.7	1.8	1.8	1.8
157.5°	4.5	4.5	4.5	3.6	3.6	2.7	2.7	1.8	1.8	1.8	1.8
160°	2.7	2.7	2.7	2.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8
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-LD5-49SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6	1627.6
2.5°	1616.8	1616.0	1623.1	1623.1	1615.1	1627.6	1641.0
5°	1611.5	1610.6	1617.7	1617.7	1610.6	1623.1	1637.4
7.5°	1600.7	1601.6	1608.8	1610.6	1601.6	1613.3	1628.5
10°	1589.1	1588.2	1596.3	1598.0	1590.9	1601.6	1616.0
12.5°	1570.3	1570.3	1578.3	1581.0	1573.9	1586.4	1599.8
15°	1550.6	1550.6	1556.0	1560.4	1554.2	1565.8	1579.2
17.5°	1525.5	1524.6	1530.0	1535.4	1529.1	1541.6	1556.0
20°	1493.3	1493.3	1499.6	1505.8	1501.4	1513.0	1529.1
22.5°	1459.3	1455.7	1466.4	1470.9	1468.2	1479.9	1496.0
25°	1416.3	1415.4	1426.2	1432.4	1428.8	1441.4	1455.7
27.5°	1369.8	1368.9	1379.6	1387.7	1385.9	1397.5	1413.6
30°	1313.4	1317.8	1327.7	1341.1	1336.6	1349.2	1366.2
32.5°	1254.3	1258.7	1270.4	1284.7	1285.6	1295.4	1312.5
35°	1183.5	1195.2	1203.2	1222.0	1225.6	1235.5	1253.4
37.5°	1109.2	1122.7	1139.7	1154.0	1161.2	1169.2	1189.8
40°	1026.0	1045.7	1064.5	1081.5	1090.4	1098.5	1118.2
42.5°	950.8	966.0	983.9	1000.9	1017.0	1024.2	1044.8
45°	865.7	883.6	899.7	920.3	936.4	944.5	965.1
47.5°	782.5	800.4	821.9	836.2	853.2	861.2	880.9
50°	702.8	718.9	736.8	753.8	768.1	775.3	792.3
52.5°	624.0	641.0	658.0	668.8	684.0	689.4	703.7
55°	554.2	565.8	581.0	587.3	602.5	606.1	615.9
57.5°	487.0	495.1	500.5	511.2	521.9	530.0	541.6
60°	426.1	429.7	433.3	439.6	448.5	451.2	455.7
62.5°	371.5	370.6	377.8	379.6	380.5	389.4	385.0
65°	323.2	324.1	317.8	315.1	318.7	321.4	319.6
67.5°	282.9	277.5	272.2	265.9	260.5	263.2	260.5
70°	243.5	239.0	230.1	221.1	217.5	212.2	209.5
72.5°	212.2	201.4	192.5	180.8	174.6	168.3	163.8
75°	188.0	172.8	160.3	147.7	138.8	129.8	128.0
77.5°	162.9	148.6	134.3	120.9	107.4	97.6	94.0
80°	143.2	129.8	112.8	96.7	82.4	69.8	65.4
82.5°	125.3	111.0	94.0	77.0	60.9	47.4	42.1
85°	110.1	94.9	77.9	60.9	44.8	30.4	23.3
87.5°	98.5	81.5	64.5	48.3	31.3	17.0	9.0
90°	87.7	71.6	55.5	38.5	22.4	9.0	0.0
92.5°	77.9	62.7	46.6	31.3	17.0	5.4	0.9
95°	68.9	55.5	39.4	25.1	12.5	3.6	0.9
97.5°	61.8	48.3	34.0	20.6	9.8	2.7	0.9
100°	55.5	42.1	29.5	17.0	8.1	1.8	0.9
102.5°	49.2	37.6	25.1	14.3	6.3	0.9	0.9
105°	43.9	33.1	21.5	12.5	5.4	0.9	0.9
107.5°	39.4	29.5	18.8	10.7	3.6	0.9	0.9
110°	34.9	25.1	16.1	9.0	2.7	0.9	0.9



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-49SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	31.3	22.4	14.3	7.2	1.8	0.9	0.9
115°	27.8	19.7	12.5	6.3	1.8	0.9	0.9
117.5°	24.2	17.0	10.7	4.5	0.9	0.9	0.9
120°	21.5	15.2	9.0	3.6	0.9	0.9	0.9
122.5°	18.8	12.5	7.2	2.7	0.9	0.9	0.9
125°	16.1	10.7	6.3	1.8	0.9	0.9	0.9
127.5°	13.4	9.0	4.5	1.8	0.9	0.9	0.9
130°	11.6	7.2	3.6	0.9	0.9	0.9	0.9
132.5°	9.8	5.4	2.7	0.9	0.9	0.9	0.9
135°	8.1	4.5	1.8	0.9	0.9	0.9	0.9
137.5°	6.3	3.6	1.8	0.9	0.9	0.9	0.9
140°	4.5	2.7	0.9	0.9	0.9	0.9	0.9
142.5°	3.6	1.8	0.9	0.9	0.9	0.9	0.9
145°	2.7	1.8	0.9	0.9	0.9	0.9	0.9
147.5°	1.8	1.8	1.8	1.8	0.9	0.9	0.9
150°	1.8	1.8	0.9	0.9	1.8	0.9	0.9
152.5°	1.8	0.9	0.9	0.9	1.8	0.9	0.9
155°	1.8	1.8	1.8	1.8	1.8	1.8	0.9
157.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8
160°	1.8	1.8	1.8	1.8	1.8	1.8	1.8
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)