

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: **8SNLED-LD5-81SL-LW-UNV-L930-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 (P33520)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8SNLED-LD5-81SL-LW-UNV-L930-CD1-U  
Description: 8FT LINEAR SNLED LED FIXTURE  
WIDE FROSTED LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

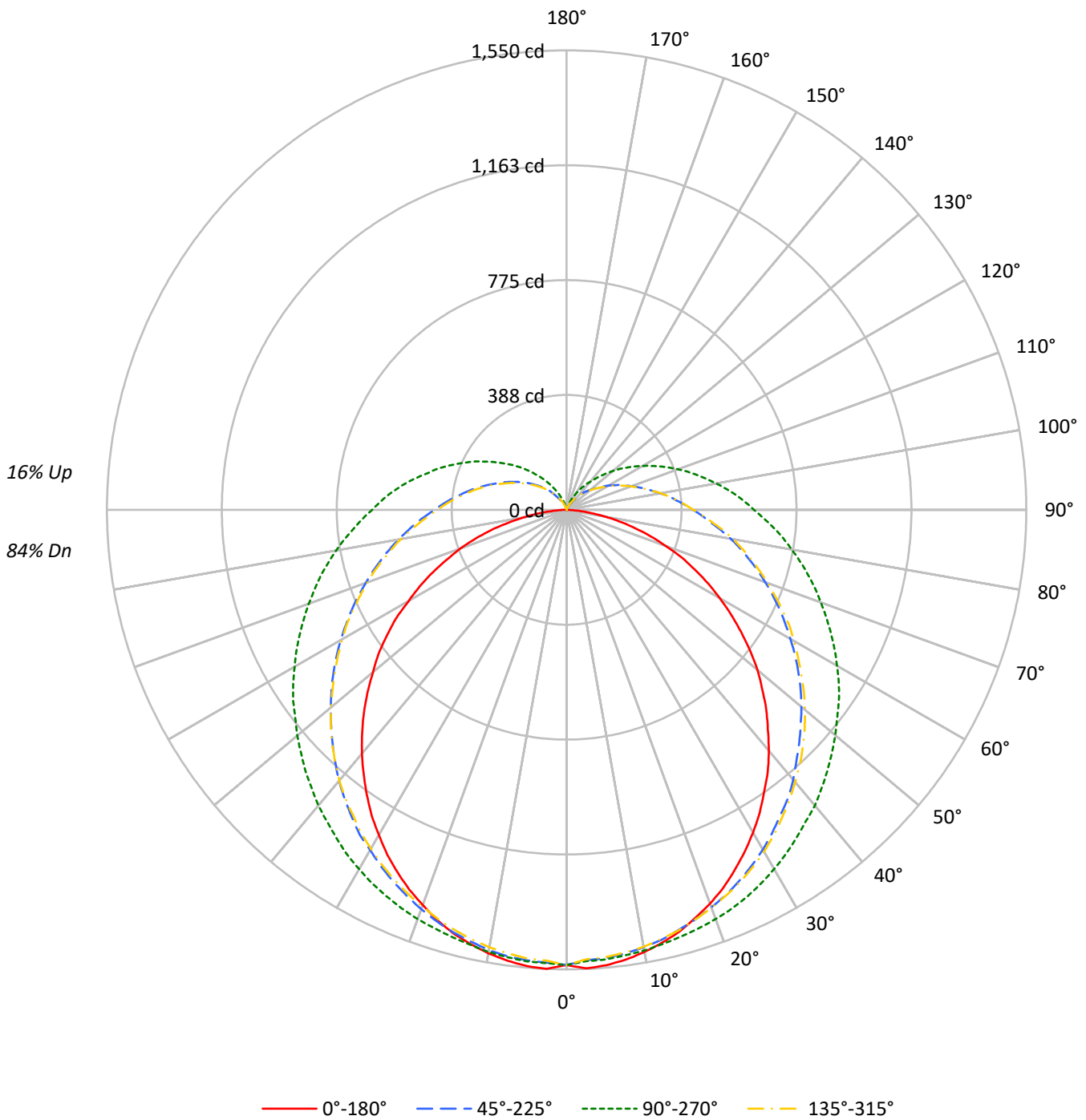
Lumens per Lamp: N/A  
Luminaire Lumens: 6670.0 lumens  
Efficiency: N/A  
Efficacy: 96.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 8' x H: 0.12')  
CIE Type: Semi-Direct

Input Watts (W): 69  
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#  
CATALOG NUMBER: 8SNLED-LD5-81SL-LW-UNV-L930-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				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	0
RCR																		
0	115	115	115	115	111	111	111	111	102	102	102	94	94	94	87	87	87	84
1	102	96	91	86	98	92	87	83	85	81	77	78	75	72	72	70	67	64
2	92	82	74	68	87	79	72	66	73	67	62	67	62	58	62	58	54	51
3	83	71	62	55	79	69	60	54	63	56	51	58	52	48	54	49	45	42
4	76	63	53	46	72	60	52	45	56	48	42	51	45	40	47	42	38	35
5	69	56	46	39	66	54	45	38	50	42	36	46	39	34	42	37	33	30
6	64	50	41	34	61	48	39	33	45	37	31	41	35	30	38	33	28	26
7	59	45	36	30	56	43	35	29	40	33	28	38	31	26	35	29	25	23
8	55	41	32	26	52	40	31	26	37	30	24	34	28	23	32	26	22	20
9	51	37	29	23	49	36	28	23	34	27	22	32	25	21	30	24	20	18
10	48	34	26	21	46	33	26	21	31	24	20	29	23	19	27	22	18	16

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

	0°	90°	180°	270°
0°	6203	6203	6203	6203
5°	6245	5978	6258	6004
10°	6195	5808	6215	5827
15°	6132	5663	6159	5669
20°	6045	5556	6065	5556
25°	5935	5462	5971	5456
30°	5811	5365	5856	5365
35°	5665	5275	5729	5282
40°	5522	5222	5590	5222
45°	5357	5167	5439	5174
50°	5187	5134	5256	5148
55°	4943	5139	5100	5161
60°	4689	5155	4842	5187
65°	4404	5207	4599	5258
70°	3999	5303	4311	5378
75°	3536	5476	3871	5581
80°	2804	5733	3185	5865
85°	1782	6144	2230	6315



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.4	2.2
10°-20°	418.0	6.3
20°-30°	640.8	9.6
30°-40°	790.6	11.9
40°-50°	857.7	12.9
50°-60°	845.4	12.7
60°-70°	764.4	11.5
70°-80°	636.8	9.5
80°-90°	493.2	7.4
90°-100°	374.1	5.6
100°-110°	276.8	4.1
110°-120°	192.5	2.9
120°-130°	122.9	1.8
130°-140°	68.9	1.0
140°-150°	31.5	0.5
150°-160°	9.8	0.1
160°-170°	1.2	0.0
170°-180°	0.0	0.0
0°-30°	1204.3	18.1
0°-40°	1994.9	29.9
0°-60°	3698.0	55.4
0°-90°	5592.4	83.8
90°-120°	843.4	12.6
90°-150°	1066.7	16.0
90°-180°	1078.0	16.2
0°-180°	6670.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1535	1535	1535	1535	1535	
5°	1542	1522	1545	1529	1542	146
15°	1472	1490	1479	1492	1472	415
25°	1341	1440	1349	1438	1341	618
35°	1161	1351	1174	1352	1161	727
45°	952	1244	967	1245	952	734
55°	717	1121	740	1126	717	642
65°	476	983	497	993	476	472
75°	240	842	262	858	240	254
85°	45	701	57	721	45	55
90°	2	632	3	656	2	2
95°	2	573	2	601	2	1
105°	2	455	2	483	2	2
115°	2	347	2	377	2	2
125°	2	249	2	277	2	1
135°	2	162	2	191	2	1
145°	2	94	2	115	2	1
155°	2	39	2	53	2	1
165°	2	6	2	10	2	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°	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2
2.5°	1548.2	1548.2	1546.6	1543.3	1545.0	1549.8	1546.6	1538.5	1533.6	1520.7	1523.9
5°	1541.7	1541.7	1540.1	1536.9	1538.5	1545.0	1541.7	1535.2	1528.8	1517.4	1522.3
7.5°	1530.4	1530.4	1528.8	1525.5	1528.8	1535.2	1532.0	1525.5	1520.7	1509.3	1514.2
10°	1514.2	1515.8	1514.2	1509.3	1515.8	1522.3	1520.7	1512.6	1507.7	1498.0	1502.8
12.5°	1494.8	1496.4	1494.8	1493.1	1496.4	1506.1	1502.8	1496.4	1493.1	1485.0	1489.9
15°	1472.1	1473.7	1470.5	1470.5	1473.7	1483.4	1483.4	1476.9	1473.7	1465.6	1475.3
17.5°	1442.9	1444.5	1442.9	1442.9	1446.2	1455.9	1457.5	1454.3	1451.0	1447.8	1457.5
20°	1413.8	1412.2	1412.2	1410.5	1417.0	1431.6	1430.0	1430.0	1426.7	1426.7	1438.1
22.5°	1379.8	1379.8	1378.2	1378.2	1386.2	1399.2	1399.2	1402.4	1399.2	1405.7	1415.4
25°	1340.9	1342.5	1340.9	1344.1	1350.6	1365.2	1366.8	1371.7	1373.3	1379.8	1391.1
27.5°	1300.4	1302.0	1300.4	1303.7	1315.0	1326.3	1334.4	1340.9	1342.5	1352.2	1366.8
30°	1256.7	1256.7	1258.3	1261.6	1274.5	1292.3	1298.8	1306.9	1306.9	1323.1	1337.7
32.5°	1211.3	1211.3	1211.3	1217.8	1232.4	1253.5	1261.6	1271.3	1274.5	1290.7	1306.9
35°	1161.1	1162.8	1162.8	1167.6	1187.1	1208.1	1219.4	1230.8	1237.3	1256.7	1272.9
37.5°	1114.2	1117.4	1112.6	1119.0	1146.6	1164.4	1177.3	1188.7	1200.0	1225.9	1238.9
40°	1060.7	1064.0	1062.4	1075.3	1098.0	1120.7	1135.2	1146.6	1162.8	1188.7	1203.3
42.5°	1004.1	1007.3	1010.5	1025.1	1049.4	1072.1	1089.9	1104.5	1123.9	1146.6	1170.9
45°	952.2	952.2	957.1	974.9	1000.8	1025.1	1046.2	1062.4	1085.0	1109.3	1133.6
47.5°	893.9	895.6	902.0	923.1	950.6	979.8	999.2	1020.3	1044.5	1070.5	1098.0
50°	840.5	840.5	850.2	872.9	898.8	931.2	952.2	976.5	1002.4	1033.2	1060.7
52.5°	779.0	782.2	796.8	817.8	851.8	881.0	905.3	931.2	962.0	994.3	1025.1
55°	717.4	723.9	735.2	764.4	800.0	827.5	856.7	889.1	918.2	953.9	989.5
57.5°	657.5	662.4	680.2	709.3	746.6	780.6	811.3	842.1	877.7	913.4	950.6
60°	596.0	602.4	623.5	652.6	693.1	728.8	764.4	796.8	834.0	871.3	910.1
62.5°	537.7	542.5	566.8	600.8	641.3	680.2	715.8	754.7	795.1	830.8	869.6
65°	476.1	484.2	511.7	542.5	589.5	628.3	668.8	710.9	753.0	791.9	829.2
67.5°	419.4	424.3	453.4	489.1	536.0	579.8	621.9	667.2	710.9	751.4	788.7
70°	353.0	369.2	398.4	435.6	485.8	531.2	576.5	623.5	670.5	712.6	748.2
72.5°	298.0	310.9	343.3	383.8	432.4	485.8	532.8	583.0	630.0	673.7	710.9
75°	239.7	252.6	289.9	335.2	385.4	442.1	490.7	542.5	591.1	634.8	673.7
77.5°	183.0	199.2	239.7	286.6	341.7	400.0	450.2	502.0	552.2	599.2	638.1
80°	131.2	149.0	192.7	246.2	299.6	357.9	413.0	464.8	515.0	561.9	602.4
82.5°	84.2	103.6	150.6	204.1	260.7	319.0	375.7	427.5	477.7	524.7	566.8
85°	45.3	66.4	115.0	168.4	225.1	283.4	340.1	395.1	443.7	487.5	532.8
87.5°	13.0	38.9	85.8	139.3	197.6	251.0	306.1	361.1	409.7	456.7	497.2
90°	1.6	22.7	64.8	115.0	171.7	223.5	278.5	330.4	379.0	425.9	466.4
92.5°	1.6	14.6	50.2	95.5	147.4	200.8	255.9	306.1	351.4	398.4	438.9
95°	1.6	11.3	40.5	81.0	129.6	179.8	231.6	280.2	327.1	370.9	411.3
97.5°	1.6	8.1	32.4	69.6	113.4	160.3	210.5	259.1	304.5	346.6	383.8
100°	1.6	6.5	25.9	59.9	98.8	144.1	189.5	236.4	280.2	320.7	359.5
102.5°	1.6	4.9	22.7	50.2	87.5	127.9	171.7	215.4	257.5	296.4	335.2
105°	1.6	4.9	19.4	43.7	77.7	115.0	155.5	197.6	236.4	273.7	309.3
107.5°	1.6	3.2	16.2	37.2	68.0	103.6	140.9	181.4	217.0	252.6	286.6
110°	1.6	3.2	13.0	34.0	59.9	92.3	127.9	165.2	199.2	233.2	265.6



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CATALOG NUMBER: 8SNLED-LD5-81SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.6	3.2	11.3	29.2	51.8	82.6	115.0	149.0	181.4	215.4	244.5
115°	1.6	3.2	9.7	25.9	48.6	71.3	103.6	134.4	166.8	197.6	225.1
117.5°	1.6	3.2	8.1	21.1	42.1	64.8	90.7	121.5	150.6	179.8	205.7
120°	1.6	3.2	6.5	19.4	37.2	58.3	81.0	108.5	136.0	163.6	191.1
122.5°	1.6	1.6	6.5	16.2	32.4	51.8	74.5	95.5	121.5	147.4	171.7
125°	1.6	1.6	6.5	14.6	27.5	47.0	66.4	85.8	108.5	131.2	152.2
127.5°	1.6	1.6	4.9	11.3	24.3	40.5	58.3	79.4	95.5	116.6	137.7
130°	1.6	1.6	4.9	9.7	21.1	34.0	51.8	69.6	89.1	103.6	121.5
132.5°	1.6	1.6	4.9	8.1	16.2	27.5	43.7	59.9	77.7	93.9	108.5
135°	1.6	1.6	3.2	6.5	13.0	22.7	35.6	50.2	68.0	84.2	98.8
137.5°	1.6	1.6	3.2	6.5	9.7	19.4	27.5	40.5	56.7	71.3	85.8
140°	1.6	1.6	3.2	4.9	8.1	14.6	22.7	32.4	45.3	58.3	74.5
142.5°	1.6	1.6	1.6	4.9	6.5	11.3	17.8	25.9	35.6	47.0	59.9
145°	1.6	1.6	1.6	4.9	6.5	8.1	14.6	21.1	27.5	35.6	47.0
147.5°	1.6	1.6	1.6	3.2	4.9	6.5	11.3	16.2	21.1	27.5	34.0
150°	1.6	1.6	1.6	3.2	4.9	6.5	8.1	11.3	16.2	22.7	27.5
152.5°	1.6	1.6	1.6	3.2	3.2	4.9	6.5	8.1	11.3	16.2	19.4
155°	1.6	1.6	1.6	1.6	3.2	4.9	6.5	6.5	8.1	11.3	14.6
157.5°	1.6	1.6	1.6	1.6	3.2	3.2	4.9	4.9	6.5	6.5	9.7
160°	1.6	1.6	1.6	1.6	1.6	3.2	3.2	4.9	4.9	4.9	4.9
162.5°	1.6	1.6	1.6	1.6	1.6	1.6	3.2	3.2	3.2	4.9	4.9
165°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	3.2	3.2	3.2
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°	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2
2.5°	1523.9	1525.5	1530.4	1530.4	1527.1	1527.1	1525.5	1523.9	1525.5	1528.8	1528.8
5°	1520.7	1522.3	1527.1	1528.8	1525.5	1523.9	1523.9	1522.3	1523.9	1527.1	1527.1
7.5°	1514.2	1515.8	1520.7	1522.3	1519.0	1519.0	1517.4	1515.8	1519.0	1520.7	1520.7
10°	1504.5	1506.1	1512.6	1514.2	1512.6	1510.9	1510.9	1509.3	1510.9	1514.2	1514.2
12.5°	1491.5	1494.8	1502.8	1502.8	1502.8	1501.2	1501.2	1499.6	1501.2	1504.5	1502.8
15°	1476.9	1483.4	1489.9	1493.1	1493.1	1493.1	1491.5	1489.9	1493.1	1494.8	1493.1
17.5°	1460.7	1468.8	1478.6	1481.8	1481.8	1483.4	1481.8	1480.2	1483.4	1483.4	1481.8
20°	1444.5	1452.6	1462.4	1465.6	1468.8	1470.5	1470.5	1468.8	1470.5	1472.1	1470.5
22.5°	1423.5	1433.2	1444.5	1449.4	1452.6	1455.9	1455.9	1455.9	1457.5	1459.1	1455.9
25°	1400.8	1412.2	1425.1	1430.0	1436.5	1438.1	1439.7	1439.7	1441.3	1442.9	1438.1
27.5°	1376.5	1389.5	1402.4	1410.5	1415.4	1418.6	1418.6	1420.3	1421.9	1423.5	1418.6
30°	1347.4	1366.8	1378.2	1384.6	1391.1	1396.0	1397.6	1399.2	1400.8	1402.4	1397.6
32.5°	1321.5	1337.7	1352.2	1360.3	1368.4	1374.9	1376.5	1376.5	1379.8	1379.8	1374.9
35°	1290.7	1310.1	1324.7	1332.8	1342.5	1347.4	1350.6	1350.6	1353.9	1353.9	1349.0
37.5°	1259.9	1279.4	1295.6	1305.3	1316.6	1323.1	1324.7	1324.7	1327.9	1327.9	1321.5
40°	1227.5	1248.6	1266.4	1277.7	1287.5	1295.6	1297.2	1302.0	1302.0	1300.4	1293.9
42.5°	1195.2	1214.6	1234.0	1247.0	1259.9	1268.0	1271.3	1272.9	1272.9	1271.3	1266.4
45°	1159.5	1182.2	1200.0	1216.2	1229.2	1237.3	1242.1	1243.7	1243.7	1240.5	1235.6
47.5°	1125.5	1148.2	1166.0	1183.8	1196.8	1206.5	1211.3	1213.0	1211.3	1209.7	1204.9
50°	1089.9	1115.8	1133.6	1151.4	1164.4	1172.5	1180.6	1182.2	1180.6	1179.0	1169.2
52.5°	1052.6	1080.2	1099.6	1117.4	1132.0	1141.7	1148.2	1149.8	1149.8	1146.6	1140.1
55°	1015.4	1039.7	1064.0	1083.4	1099.6	1109.3	1117.4	1120.7	1117.4	1114.2	1106.1
57.5°	981.4	1004.1	1028.4	1049.4	1065.6	1078.6	1085.0	1088.3	1085.0	1080.2	1072.1
60°	940.9	965.2	992.7	1012.2	1030.0	1042.9	1046.2	1052.6	1049.4	1044.5	1036.4
62.5°	902.0	931.2	955.5	979.8	994.3	1008.9	1015.4	1018.6	1015.4	1010.5	1002.4
65°	861.5	893.9	918.2	942.5	958.7	973.3	981.4	983.0	979.8	974.9	966.8
67.5°	824.3	855.1	881.0	906.9	921.5	936.0	944.1	947.4	944.1	937.7	929.6
70°	787.1	817.8	848.6	868.0	885.8	902.0	906.9	911.8	908.5	902.0	892.3
72.5°	749.8	782.2	813.0	832.4	851.8	866.4	872.9	877.7	874.5	868.0	856.7
75°	710.9	744.9	775.7	796.8	816.2	830.8	837.3	842.1	838.9	832.4	819.4
77.5°	675.3	709.3	738.5	761.1	780.6	793.5	804.9	806.5	803.2	796.8	783.8
80°	638.1	672.1	702.8	725.5	744.9	757.9	766.0	770.9	767.6	761.1	748.2
82.5°	605.7	636.4	667.2	689.9	709.3	725.5	732.0	736.8	735.2	725.5	715.8
85°	570.0	605.7	630.0	654.3	673.7	689.9	694.7	701.2	699.6	691.5	678.5
87.5°	534.4	570.0	599.2	623.5	641.3	654.3	662.4	665.6	664.0	655.9	641.3
90°	505.3	537.7	566.8	592.7	607.3	621.9	630.0	631.6	631.6	621.9	610.5
92.5°	477.7	508.5	537.7	561.9	579.8	592.7	599.2	602.4	600.8	592.7	579.8
95°	447.0	481.0	508.5	532.8	550.6	563.6	570.0	573.3	571.7	563.6	550.6
97.5°	421.1	451.8	479.4	502.0	519.8	532.8	539.3	542.5	542.5	534.4	521.5
100°	395.1	425.9	451.8	474.5	490.7	503.6	510.1	511.7	510.1	503.6	490.7
102.5°	369.2	398.4	424.3	445.3	463.2	474.5	481.0	482.6	482.6	474.5	461.5
105°	343.3	372.5	396.8	419.4	434.0	445.3	450.2	455.1	453.4	447.0	434.0
107.5°	319.0	348.2	370.9	391.9	406.5	417.8	422.7	427.5	425.9	419.4	406.5
110°	296.4	323.9	344.9	366.0	379.0	390.3	398.4	400.0	396.8	390.3	379.0





TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-81SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	275.3	299.6	320.7	340.1	354.7	362.8	369.2	372.5	369.2	362.8	354.7
115°	252.6	276.9	298.0	315.8	328.7	338.5	343.3	346.6	343.3	336.8	328.7
117.5°	231.6	254.3	275.3	293.1	304.5	312.6	317.4	320.7	317.4	312.6	304.5
120°	213.8	233.2	252.6	268.8	281.8	288.3	293.1	296.4	294.7	288.3	280.2
122.5°	192.7	213.8	231.6	247.8	259.1	265.6	268.8	272.1	270.4	265.6	257.5
125°	174.9	192.7	210.5	225.1	236.4	242.9	246.2	249.4	247.8	242.9	233.2
127.5°	155.5	174.9	189.5	204.1	212.1	221.9	223.5	226.7	225.1	220.2	212.1
130°	140.9	155.5	170.0	183.0	192.7	199.2	202.4	204.1	200.8	197.6	189.5
132.5°	123.1	139.3	152.2	163.6	170.0	176.5	179.8	181.4	181.4	176.5	170.0
135°	110.1	121.5	132.8	144.1	150.6	157.1	160.3	161.9	160.3	157.1	150.6
137.5°	98.8	108.5	116.6	126.3	134.4	137.7	140.9	140.9	139.3	137.7	132.8
140°	85.8	97.2	105.3	111.7	118.2	119.8	123.1	123.1	121.5	119.8	116.6
142.5°	72.9	82.6	90.7	98.8	103.6	106.9	108.5	110.1	108.5	106.9	102.0
145°	58.3	69.6	77.7	82.6	89.1	90.7	92.3	93.9	92.3	90.7	85.8
147.5°	45.3	55.1	63.2	69.6	74.5	76.1	77.7	79.4	77.7	74.5	72.9
150°	32.4	40.5	50.2	56.7	59.9	63.2	63.2	63.2	64.8	61.5	58.3
152.5°	25.9	29.2	35.6	42.1	47.0	48.6	50.2	50.2	48.6	48.6	45.3
155°	17.8	21.1	25.9	30.8	35.6	37.2	38.9	38.9	37.2	37.2	35.6
157.5°	11.3	14.6	17.8	21.1	25.9	27.5	29.2	29.2	29.2	27.5	25.9
160°	6.5	8.1	9.7	13.0	16.2	17.8	19.4	19.4	19.4	19.4	17.8
162.5°	4.9	4.9	4.9	6.5	8.1	9.7	11.3	11.3	11.3	11.3	9.7
165°	3.2	3.2	3.2	3.2	3.2	4.9	6.5	6.5	6.5	6.5	6.5
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: 8SNLED-LD5-81SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2
2.5°	1527.1	1527.1	1528.8	1525.5	1515.8	1517.4	1517.4	1523.9	1527.1	1528.8	1536.9
5°	1523.9	1523.9	1527.1	1522.3	1514.2	1514.2	1514.2	1520.7	1522.3	1525.5	1532.0
7.5°	1519.0	1519.0	1520.7	1515.8	1506.1	1506.1	1504.5	1510.9	1514.2	1515.8	1522.3
10°	1510.9	1510.9	1512.6	1507.7	1496.4	1496.4	1494.8	1499.6	1501.2	1504.5	1509.3
12.5°	1499.6	1499.6	1499.6	1494.8	1483.4	1481.8	1480.2	1485.0	1485.0	1486.7	1491.5
15°	1489.9	1486.7	1486.7	1481.8	1470.5	1467.2	1464.0	1465.6	1468.8	1467.2	1470.5
17.5°	1478.6	1475.3	1472.1	1467.2	1452.6	1447.8	1444.5	1446.2	1444.5	1442.9	1446.2
20°	1465.6	1460.7	1459.1	1451.0	1436.5	1428.4	1421.9	1418.6	1420.3	1415.4	1417.0
22.5°	1451.0	1444.5	1441.3	1431.6	1417.0	1407.3	1399.2	1392.7	1391.1	1384.6	1386.2
25°	1433.2	1425.1	1420.3	1412.2	1396.0	1384.6	1374.9	1365.2	1360.3	1352.2	1350.6
27.5°	1412.2	1404.1	1397.6	1389.5	1373.3	1358.7	1347.4	1334.4	1327.9	1318.2	1313.4
30°	1391.1	1381.4	1371.7	1365.2	1347.4	1331.2	1313.4	1302.0	1292.3	1281.0	1272.9
32.5°	1365.2	1355.5	1345.8	1336.0	1319.9	1300.4	1285.8	1268.0	1256.7	1243.7	1234.0
35°	1339.3	1326.3	1316.6	1303.7	1289.1	1266.4	1248.6	1230.8	1216.2	1201.6	1190.3
37.5°	1310.1	1300.4	1285.8	1274.5	1256.7	1234.0	1214.6	1191.9	1179.0	1159.5	1145.0
40°	1282.6	1271.3	1256.7	1242.1	1224.3	1198.4	1177.3	1151.4	1136.9	1114.2	1099.6
42.5°	1255.1	1238.9	1224.3	1208.1	1188.7	1164.4	1138.5	1112.6	1093.1	1072.1	1051.0
45°	1224.3	1206.5	1188.7	1170.9	1151.4	1127.1	1099.6	1072.1	1047.8	1028.4	1002.4
47.5°	1191.9	1174.1	1153.0	1133.6	1112.6	1088.3	1059.1	1030.0	1004.1	981.4	953.9
50°	1159.5	1141.7	1119.0	1098.0	1073.7	1049.4	1018.6	984.6	957.1	927.9	903.7
52.5°	1125.5	1107.7	1086.7	1059.1	1033.2	1008.9	976.5	940.9	910.1	885.8	855.1
55°	1091.5	1073.7	1049.4	1021.9	996.0	965.2	934.4	898.8	864.8	835.6	804.9
57.5°	1055.9	1039.7	1012.2	989.5	957.1	924.7	892.3	858.3	821.1	787.1	751.4
60°	1020.3	1002.4	976.5	949.0	916.6	884.2	850.2	813.0	774.1	736.8	704.5
62.5°	987.9	965.2	940.9	911.8	877.7	847.0	808.1	767.6	728.8	689.9	651.0
65°	950.6	926.3	903.7	874.5	838.9	803.2	764.4	723.9	681.8	639.7	600.8
67.5°	913.4	889.1	864.8	835.6	798.4	761.1	720.7	680.2	633.2	592.7	547.4
70°	876.1	856.7	825.9	795.1	761.1	720.7	680.2	636.4	587.9	544.1	497.2
72.5°	838.9	819.4	788.7	756.3	723.9	681.8	638.1	594.3	549.0	498.8	448.6
75°	803.2	779.0	751.4	720.7	686.6	642.9	599.2	553.9	500.4	453.4	401.6
77.5°	769.2	746.6	719.0	685.0	647.8	605.7	560.3	513.4	459.9	409.7	353.0
80°	732.0	709.3	681.8	647.8	610.5	570.0	521.5	472.9	421.1	366.0	307.7
82.5°	696.4	675.3	644.5	613.8	573.3	532.8	484.2	435.6	380.6	327.1	270.4
85°	659.1	638.1	608.9	576.5	537.7	493.9	448.6	400.0	344.9	289.9	233.2
87.5°	626.7	602.4	573.3	540.9	502.0	459.9	416.2	364.4	310.9	257.5	199.2
90°	592.7	570.0	540.9	508.5	469.6	427.5	382.2	333.6	281.8	226.7	171.7
92.5°	563.6	539.3	511.7	479.4	440.5	400.0	354.7	306.1	255.9	202.4	149.0
95°	534.4	510.1	484.2	451.8	413.0	372.5	327.1	280.2	231.6	179.8	129.6
97.5°	502.0	481.0	455.1	424.3	385.4	346.6	302.8	257.5	210.5	160.3	113.4
100°	476.1	451.8	427.5	395.1	359.5	322.3	278.5	234.8	189.5	142.5	98.8
102.5°	447.0	424.3	400.0	369.2	333.6	296.4	255.9	213.8	171.7	127.9	85.8
105°	419.4	398.4	372.5	343.3	309.3	273.7	234.8	196.0	155.5	113.4	76.1
107.5°	391.9	370.9	346.6	319.0	286.6	251.0	215.4	176.5	139.3	102.0	68.0
110°	364.4	344.9	322.3	294.7	264.0	231.6	197.6	161.9	124.7	90.7	59.9



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-81SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	340.1	320.7	298.0	272.1	242.9	212.1	179.8	145.8	111.7	81.0	51.8
115°	315.8	298.0	275.3	252.6	223.5	194.3	163.6	131.2	100.4	72.9	45.3
117.5°	291.5	273.7	252.6	230.0	204.1	176.5	147.4	116.6	90.7	64.8	40.5
120°	267.2	251.0	231.6	210.5	187.9	160.3	131.2	105.3	81.0	56.7	35.6
122.5°	244.5	230.0	212.1	192.7	168.4	142.5	118.2	95.5	72.9	50.2	29.2
125°	223.5	208.9	192.7	173.3	150.6	127.9	106.9	85.8	63.2	43.7	24.3
127.5°	202.4	187.9	171.7	153.8	136.0	115.0	95.5	76.1	56.7	38.9	21.1
130°	181.4	168.4	153.8	139.3	121.5	102.0	85.8	66.4	48.6	30.8	17.8
132.5°	160.3	150.6	137.7	123.1	106.9	92.3	74.5	58.3	42.1	27.5	16.2
135°	142.5	132.8	121.5	108.5	95.5	81.0	64.8	50.2	35.6	22.7	13.0
137.5°	126.3	118.2	106.9	95.5	84.2	69.6	56.7	42.1	29.2	19.4	9.7
140°	111.7	103.6	93.9	82.6	72.9	59.9	47.0	34.0	25.9	16.2	8.1
142.5°	97.2	89.1	81.0	71.3	61.5	50.2	38.9	29.2	21.1	13.0	8.1
145°	82.6	76.1	68.0	59.9	50.2	40.5	32.4	24.3	16.2	9.7	6.5
147.5°	68.0	63.2	55.1	48.6	40.5	32.4	25.9	19.4	13.0	8.1	4.9
150°	55.1	50.2	43.7	37.2	32.4	25.9	21.1	14.6	9.7	8.1	4.9
152.5°	42.1	38.9	34.0	30.8	25.9	19.4	14.6	11.3	8.1	6.5	3.2
155°	34.0	30.8	27.5	22.7	19.4	14.6	11.3	8.1	6.5	4.9	3.2
157.5°	24.3	22.7	19.4	16.2	13.0	9.7	8.1	8.1	4.9	3.2	1.6
160°	16.2	14.6	13.0	9.7	8.1	8.1	6.5	4.9	3.2	3.2	1.6
162.5°	9.7	8.1	8.1	8.1	6.5	6.5	4.9	3.2	3.2	1.6	1.6
165°	6.5	6.5	6.5	4.9	4.9	4.9	3.2	1.6	1.6	1.6	1.6
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: 8SNLED-LD5-81SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2
2.5°	1536.9	1532.0	1538.5	1549.8	1551.4	1549.8	1546.6	1551.4	1557.9	1556.3	1545.0
5°	1533.6	1527.1	1533.6	1545.0	1545.0	1543.3	1541.7	1546.6	1553.1	1551.4	1541.7
7.5°	1523.9	1517.4	1523.9	1533.6	1535.2	1532.0	1532.0	1536.9	1543.3	1541.7	1533.6
10°	1510.9	1504.5	1507.7	1519.0	1522.3	1519.0	1519.0	1523.9	1532.0	1530.4	1520.7
12.5°	1491.5	1486.7	1489.9	1499.6	1502.8	1501.2	1499.6	1506.1	1514.2	1514.2	1504.5
15°	1470.5	1464.0	1467.2	1478.6	1480.2	1476.9	1478.6	1483.4	1493.1	1493.1	1485.0
17.5°	1446.2	1438.1	1442.9	1451.0	1452.6	1452.6	1452.6	1459.1	1470.5	1468.8	1462.4
20°	1418.6	1407.3	1410.5	1418.6	1421.9	1421.9	1421.9	1433.2	1441.3	1441.3	1434.8
22.5°	1386.2	1378.2	1378.2	1386.2	1391.1	1389.5	1389.5	1399.2	1410.5	1408.9	1408.9
25°	1349.0	1342.5	1339.3	1349.0	1350.6	1352.2	1355.5	1365.2	1378.2	1378.2	1379.8
27.5°	1310.1	1303.7	1302.0	1310.1	1311.8	1313.4	1316.6	1327.9	1340.9	1342.5	1345.8
30°	1272.9	1263.2	1259.9	1266.4	1269.6	1271.3	1271.3	1289.1	1300.4	1305.3	1311.8
32.5°	1229.2	1219.4	1211.3	1222.7	1224.3	1227.5	1229.2	1247.0	1259.9	1268.0	1277.7
35°	1185.4	1169.2	1166.0	1174.1	1177.3	1179.0	1182.2	1201.6	1219.4	1225.9	1238.9
37.5°	1136.9	1125.5	1115.8	1123.9	1127.1	1128.8	1138.5	1156.3	1174.1	1183.8	1196.8
40°	1091.5	1076.9	1068.8	1073.7	1076.9	1078.6	1089.9	1109.3	1130.4	1141.7	1157.9
42.5°	1041.3	1021.9	1015.4	1020.3	1021.9	1026.7	1036.4	1062.4	1083.4	1099.6	1112.6
45°	991.1	976.5	962.0	966.8	968.4	971.7	986.2	1013.8	1036.4	1055.9	1070.5
47.5°	939.3	921.5	906.9	910.1	916.6	918.2	934.4	966.8	987.9	1008.9	1028.4
50°	887.5	863.2	851.8	851.8	855.1	863.2	884.2	916.6	939.3	963.6	984.6
52.5°	834.0	811.3	798.4	800.0	803.2	813.0	832.4	864.8	890.7	916.6	942.5
55°	780.6	756.3	743.3	740.1	743.3	756.3	779.0	813.0	838.9	869.6	897.2
57.5°	727.1	698.0	686.6	681.8	685.0	701.2	723.9	759.5	791.9	821.1	853.4
60°	668.8	646.2	626.7	615.4	623.5	644.5	668.8	706.1	740.1	772.5	808.1
62.5°	618.6	589.5	568.4	557.1	565.2	583.0	617.0	652.6	689.9	727.1	762.8
65°	561.9	532.8	508.5	497.2	505.3	526.3	560.3	599.2	639.7	676.9	719.0
67.5°	506.9	476.1	447.0	435.6	445.3	468.0	505.3	549.0	592.7	631.6	676.9
70°	453.4	419.4	388.7	380.6	387.0	417.8	453.4	497.2	542.5	587.9	634.8
72.5°	404.9	362.8	330.4	320.7	328.7	362.8	403.2	448.6	497.2	545.8	596.0
75°	348.2	309.3	273.7	262.4	272.1	302.8	353.0	401.6	453.4	505.3	552.2
77.5°	302.8	257.5	220.2	202.4	218.6	257.5	306.1	357.9	411.3	464.8	518.2
80°	255.9	208.9	168.4	149.0	166.8	208.9	257.5	314.2	374.1	427.5	476.1
82.5°	213.8	163.6	121.5	100.4	119.8	166.8	220.2	276.9	335.2	388.7	445.3
85°	174.9	123.1	79.4	56.7	84.2	126.3	183.0	241.3	301.2	356.3	411.3
87.5°	142.5	92.3	48.6	24.3	51.8	98.8	152.2	210.5	270.4	325.5	377.3
90°	116.6	66.4	25.9	3.2	30.8	74.5	126.3	183.0	239.7	296.4	348.2
92.5°	95.5	50.2	14.6	1.6	19.4	59.9	108.5	161.9	217.0	272.1	322.3
95°	79.4	38.9	9.7	1.6	14.6	47.0	92.3	144.1	196.0	249.4	299.6
97.5°	68.0	32.4	8.1	1.6	11.3	40.5	79.4	127.9	178.1	228.3	276.9
100°	58.3	25.9	6.5	1.6	9.7	34.0	69.6	113.4	160.3	208.9	255.9
102.5°	50.2	21.1	4.9	1.6	8.1	29.2	61.5	102.0	144.1	191.1	236.4
105°	43.7	17.8	4.9	1.6	6.5	25.9	55.1	90.7	132.8	174.9	218.6
107.5°	37.2	14.6	3.2	1.6	4.9	21.1	48.6	82.6	119.8	160.3	200.8
110°	32.4	13.0	3.2	1.6	4.9	19.4	42.1	74.5	108.5	145.8	184.6



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-81SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	27.5	9.7	3.2	1.6	3.2	16.2	37.2	66.4	98.8	132.8	170.0
115°	24.3	8.1	1.6	1.6	3.2	14.6	34.0	59.9	89.1	121.5	155.5
117.5°	19.4	6.5	1.6	1.6	1.6	11.3	29.2	53.4	81.0	111.7	142.5
120°	16.2	6.5	1.6	1.6	1.6	9.7	25.9	47.0	72.9	100.4	129.6
122.5°	14.6	4.9	1.6	1.6	1.6	8.1	22.7	42.1	64.8	90.7	118.2
125°	13.0	4.9	1.6	1.6	1.6	6.5	19.4	37.2	58.3	81.0	106.9
127.5°	9.7	4.9	1.6	1.6	1.6	4.9	17.8	32.4	51.8	72.9	95.5
130°	8.1	3.2	1.6	1.6	1.6	4.9	14.6	29.2	45.3	64.8	85.8
132.5°	6.5	3.2	1.6	1.6	1.6	3.2	11.3	22.7	38.9	56.7	76.1
135°	6.5	3.2	1.6	1.6	1.6	3.2	8.1	19.4	32.4	48.6	64.8
137.5°	6.5	1.6	1.6	1.6	1.6	3.2	6.5	14.6	25.9	38.9	53.4
140°	4.9	1.6	1.6	1.6	1.6	1.6	4.9	11.3	21.1	32.4	45.3
142.5°	4.9	1.6	1.6	1.6	1.6	1.6	4.9	8.1	16.2	25.9	35.6
145°	3.2	1.6	1.6	1.6	1.6	1.6	3.2	6.5	13.0	19.4	29.2
147.5°	3.2	1.6	1.6	1.6	1.6	1.6	3.2	4.9	9.7	16.2	22.7
150°	3.2	1.6	1.6	1.6	1.6	1.6	3.2	4.9	6.5	11.3	17.8
152.5°	1.6	1.6	1.6	1.6	1.6	1.6	3.2	3.2	4.9	8.1	11.3
155°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	3.2	4.9	6.5	8.1
157.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	3.2	3.2	4.9	6.5
160°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	3.2	3.2	4.9
162.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	3.2	3.2
165°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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: 8SNLED-LD5-81SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2
2.5°	1540.1	1528.8	1532.0	1530.4	1533.6	1538.5	1538.5	1536.9	1536.9	1533.6	1530.4
5°	1536.9	1525.5	1530.4	1528.8	1532.0	1536.9	1536.9	1535.2	1535.2	1530.4	1528.8
7.5°	1527.1	1519.0	1522.3	1522.3	1525.5	1530.4	1530.4	1528.8	1528.8	1523.9	1522.3
10°	1517.4	1507.7	1512.6	1512.6	1515.8	1522.3	1522.3	1520.7	1520.7	1515.8	1514.2
12.5°	1501.2	1491.5	1499.6	1501.2	1504.5	1510.9	1509.3	1509.3	1509.3	1504.5	1502.8
15°	1481.8	1475.3	1483.4	1485.0	1489.9	1498.0	1498.0	1498.0	1498.0	1493.1	1491.5
17.5°	1460.7	1455.9	1464.0	1467.2	1473.7	1481.8	1481.8	1483.4	1485.0	1481.8	1480.2
20°	1436.5	1433.2	1441.3	1447.8	1457.5	1465.6	1468.8	1470.5	1473.7	1470.5	1468.8
22.5°	1408.9	1408.9	1420.3	1426.7	1438.1	1446.2	1451.0	1455.9	1459.1	1455.9	1454.3
25°	1378.2	1383.0	1394.3	1405.7	1418.6	1426.7	1431.6	1438.1	1441.3	1439.7	1438.1
27.5°	1349.0	1355.5	1370.1	1381.4	1392.7	1405.7	1410.5	1418.6	1421.9	1421.9	1420.3
30°	1315.0	1324.7	1340.9	1353.9	1368.4	1381.4	1387.9	1396.0	1400.8	1397.6	1399.2
32.5°	1282.6	1298.8	1311.8	1326.3	1342.5	1355.5	1363.6	1373.3	1378.2	1376.5	1378.2
35°	1247.0	1263.2	1281.0	1295.6	1315.0	1327.9	1339.3	1347.4	1353.9	1352.2	1352.2
37.5°	1208.1	1229.2	1247.0	1266.4	1284.2	1298.8	1310.1	1319.9	1326.3	1326.3	1326.3
40°	1170.9	1193.5	1211.3	1234.0	1256.7	1269.6	1282.6	1292.3	1298.8	1300.4	1302.0
42.5°	1130.4	1154.7	1175.7	1200.0	1222.7	1238.9	1253.5	1264.8	1271.3	1274.5	1272.9
45°	1093.1	1115.8	1140.1	1167.6	1188.7	1204.9	1222.7	1235.6	1242.1	1243.7	1245.4
47.5°	1051.0	1076.9	1104.5	1132.0	1153.0	1174.1	1190.3	1203.3	1209.7	1214.6	1214.6
50°	1010.5	1038.1	1068.8	1098.0	1120.7	1141.7	1157.9	1172.5	1180.6	1183.8	1185.4
52.5°	973.3	999.2	1031.6	1060.7	1083.4	1104.5	1125.5	1141.7	1149.8	1153.0	1153.0
55°	927.9	960.3	996.0	1023.5	1047.8	1072.1	1093.1	1109.3	1117.4	1122.3	1125.5
57.5°	885.8	919.8	957.1	986.2	1015.4	1038.1	1057.5	1078.6	1085.0	1091.5	1093.1
60°	845.4	879.4	915.0	947.4	976.5	1000.8	1023.5	1041.3	1052.6	1055.9	1059.1
62.5°	803.2	838.9	876.1	908.5	939.3	968.4	989.5	1005.7	1018.6	1023.5	1026.7
65°	762.8	800.0	837.3	871.3	903.7	932.8	953.9	970.1	983.0	991.1	992.7
67.5°	719.0	759.5	798.4	834.0	866.4	897.2	918.2	934.4	947.4	957.1	958.7
70°	678.5	720.7	759.5	798.4	830.8	861.5	884.2	900.4	915.0	921.5	924.7
72.5°	639.7	683.4	723.9	762.8	795.1	825.9	850.2	866.4	881.0	889.1	890.7
75°	602.4	646.2	689.9	727.1	761.1	791.9	816.2	834.0	847.0	855.1	858.3
77.5°	565.2	610.5	654.3	691.5	727.1	757.9	779.0	800.0	813.0	822.7	822.7
80°	527.9	574.9	620.2	657.5	693.1	720.7	744.9	766.0	779.0	788.7	788.7
82.5°	495.6	540.9	584.6	621.9	657.5	688.3	712.6	732.0	746.6	753.0	754.7
85°	458.3	508.5	549.0	589.5	623.5	652.6	676.9	698.0	710.9	717.4	720.7
87.5°	427.5	476.1	519.8	555.5	589.5	618.6	646.2	664.0	676.9	685.0	688.3
90°	398.4	445.3	489.1	524.7	560.3	587.9	613.8	631.6	646.2	652.6	655.9
92.5°	372.5	419.4	461.5	497.2	531.2	561.9	586.2	604.1	617.0	623.5	628.3
95°	348.2	393.5	434.0	472.9	505.3	532.8	558.7	576.5	591.1	596.0	600.8
97.5°	323.9	367.6	408.1	445.3	479.4	505.3	529.6	547.4	558.7	566.8	571.7
100°	302.8	344.9	383.8	419.4	451.8	476.1	502.0	518.2	529.6	536.0	542.5
102.5°	280.2	322.3	359.5	393.5	427.5	450.2	474.5	490.7	500.4	511.7	511.7
105°	260.7	299.6	336.8	369.2	398.4	425.9	447.0	463.2	474.5	482.6	482.6
107.5°	239.7	278.5	314.2	348.2	375.7	401.6	421.1	435.6	448.6	453.4	458.3
110°	223.5	257.5	293.1	325.5	351.4	375.7	395.1	411.3	422.7	427.5	430.8



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-81SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	204.1	239.7	272.1	302.8	328.7	351.4	370.9	383.8	395.1	401.6	403.2
115°	187.9	221.9	251.0	280.2	307.7	327.1	344.9	357.9	369.2	374.1	377.3
117.5°	173.3	204.1	233.2	257.5	283.4	304.5	322.3	333.6	343.3	349.8	353.0
120°	158.7	187.9	213.8	238.1	262.4	281.8	298.0	309.3	320.7	325.5	325.5
122.5°	144.1	171.7	196.0	218.6	241.3	259.1	276.9	286.6	296.4	301.2	301.2
125°	131.2	157.1	179.8	200.8	221.9	238.1	252.6	264.0	273.7	276.9	276.9
127.5°	118.2	142.5	163.6	183.0	200.8	217.0	231.6	242.9	251.0	254.3	254.3
130°	106.9	127.9	147.4	166.8	184.6	197.6	212.1	221.9	226.7	231.6	233.2
132.5°	95.5	115.0	132.8	149.0	166.8	179.8	191.1	200.8	205.7	210.5	212.1
135°	84.2	102.0	118.2	134.4	149.0	161.9	171.7	179.8	186.2	189.5	191.1
137.5°	71.3	90.7	105.3	118.2	134.4	144.1	155.5	160.3	166.8	170.0	170.0
140°	59.9	74.5	90.7	103.6	116.6	126.3	136.0	144.1	149.0	150.6	150.6
142.5°	48.6	61.5	74.5	90.7	102.0	110.1	119.8	126.3	129.6	131.2	132.8
145°	38.9	48.6	59.9	74.5	87.5	97.2	102.0	108.5	111.7	113.4	115.0
147.5°	29.2	38.9	48.6	58.3	71.3	81.0	85.8	92.3	95.5	97.2	97.2
150°	22.7	29.2	35.6	45.3	55.1	66.4	72.9	77.7	79.4	81.0	81.0
152.5°	16.2	22.7	27.5	34.0	40.5	50.2	59.9	63.2	64.8	66.4	66.4
155°	11.3	16.2	19.4	24.3	29.2	37.2	45.3	50.2	51.8	53.4	53.4
157.5°	8.1	11.3	13.0	17.8	21.1	24.3	30.8	38.9	40.5	40.5	40.5
160°	4.9	6.5	8.1	11.3	13.0	16.2	19.4	24.3	29.2	29.2	29.2
162.5°	3.2	4.9	4.9	6.5	6.5	9.7	11.3	13.0	17.8	19.4	19.4
165°	1.6	3.2	3.2	3.2	3.2	3.2	4.9	4.9	8.1	9.7	9.7
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: 8SNLED-LD5-81SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2
2.5°	1532.0	1535.2	1533.6	1533.6	1533.6	1536.9	1533.6	1519.0	1522.3	1525.5	1528.8
5°	1530.4	1532.0	1532.0	1530.4	1530.4	1533.6	1530.4	1515.8	1519.0	1522.3	1523.9
7.5°	1523.9	1525.5	1525.5	1525.5	1523.9	1527.1	1522.3	1509.3	1509.3	1512.6	1514.2
10°	1515.8	1519.0	1517.4	1515.8	1515.8	1515.8	1512.6	1498.0	1498.0	1499.6	1501.2
12.5°	1506.1	1506.1	1506.1	1504.5	1502.8	1502.8	1499.6	1485.0	1483.4	1486.7	1485.0
15°	1493.1	1496.4	1493.1	1491.5	1488.3	1488.3	1483.4	1468.8	1465.6	1467.2	1465.6
17.5°	1481.8	1483.4	1480.2	1476.9	1473.7	1472.1	1467.2	1451.0	1446.2	1447.8	1444.5
20°	1470.5	1470.5	1467.2	1464.0	1459.1	1454.3	1447.8	1431.6	1423.5	1423.5	1417.0
22.5°	1455.9	1455.9	1452.6	1447.8	1442.9	1436.5	1430.0	1413.8	1400.8	1397.6	1392.7
25°	1439.7	1438.1	1436.5	1431.6	1421.9	1415.4	1408.9	1391.1	1376.5	1370.1	1362.0
27.5°	1420.3	1420.3	1415.4	1410.5	1400.8	1392.7	1384.6	1368.4	1349.0	1340.9	1329.6
30°	1399.2	1399.2	1394.3	1387.9	1378.2	1368.4	1358.7	1339.3	1319.9	1308.5	1295.6
32.5°	1378.2	1376.5	1371.7	1365.2	1355.5	1340.9	1332.8	1313.4	1290.7	1277.7	1259.9
35°	1352.2	1350.6	1345.8	1337.7	1324.7	1313.4	1300.4	1282.6	1256.7	1240.5	1221.1
37.5°	1326.3	1324.7	1321.5	1310.1	1297.2	1284.2	1268.0	1250.2	1225.9	1204.9	1185.4
40°	1300.4	1298.8	1292.3	1284.2	1268.0	1251.8	1235.6	1217.8	1191.9	1167.6	1146.6
42.5°	1272.9	1271.3	1263.2	1253.5	1235.6	1219.4	1200.0	1180.6	1154.7	1125.5	1104.5
45°	1245.4	1242.1	1234.0	1222.7	1203.3	1185.4	1166.0	1143.3	1117.4	1089.9	1062.4
47.5°	1216.2	1211.3	1203.3	1187.1	1170.9	1151.4	1128.8	1104.5	1078.6	1047.8	1018.6
50°	1183.8	1180.6	1170.9	1156.3	1136.9	1117.4	1091.5	1067.2	1036.4	1007.3	971.7
52.5°	1153.0	1146.6	1138.5	1122.3	1102.8	1081.8	1054.3	1025.1	994.3	966.8	929.6
55°	1120.7	1117.4	1106.1	1093.1	1068.8	1044.5	1018.6	987.9	953.9	921.5	885.8
57.5°	1089.9	1083.4	1073.7	1055.9	1034.8	1010.5	983.0	950.6	913.4	879.4	840.5
60°	1059.1	1049.4	1038.1	1021.9	999.2	973.3	944.1	910.1	872.9	835.6	795.1
62.5°	1025.1	1017.0	1004.1	987.9	965.2	937.7	906.9	871.3	835.6	796.8	753.0
65°	991.1	983.0	970.1	953.9	931.2	900.4	868.0	832.4	791.9	754.7	707.7
67.5°	957.1	949.0	934.4	916.6	893.9	864.8	830.8	793.5	753.0	712.6	664.0
70°	923.1	913.4	900.4	881.0	858.3	827.5	793.5	754.7	714.2	670.5	621.9
72.5°	889.1	881.0	864.8	847.0	822.7	791.9	757.9	719.0	676.9	631.6	583.0
75°	855.1	845.4	834.0	813.0	787.1	757.9	722.3	683.4	638.1	594.3	544.1
77.5°	821.1	813.0	798.4	777.3	753.0	722.3	686.6	647.8	602.4	557.1	503.6
80°	787.1	777.3	766.0	746.6	719.0	688.3	651.0	612.2	566.8	519.8	466.4
82.5°	753.0	743.3	730.4	710.9	685.0	654.3	618.6	576.5	531.2	482.6	432.4
85°	719.0	710.9	696.4	676.9	649.4	618.6	583.0	545.8	497.2	448.6	398.4
87.5°	685.0	676.9	662.4	642.9	617.0	586.2	550.6	511.7	464.8	419.4	364.4
90°	652.6	646.2	631.6	612.2	586.2	555.5	523.1	481.0	435.6	390.3	338.5
92.5°	623.5	617.0	604.1	584.6	561.9	527.9	495.6	455.1	409.7	362.8	312.6
95°	597.6	589.5	576.5	558.7	531.2	502.0	469.6	429.2	385.4	338.5	289.9
97.5°	568.4	560.3	547.4	527.9	505.3	474.5	442.1	403.2	359.5	315.8	267.2
100°	539.3	531.2	516.6	500.4	477.7	447.0	416.2	377.3	336.8	294.7	247.8
102.5°	510.1	502.0	489.1	472.9	450.2	422.7	391.9	354.7	314.2	272.1	228.3
105°	482.6	474.5	461.5	445.3	424.3	396.8	364.4	332.0	293.1	252.6	210.5
107.5°	455.1	447.0	435.6	419.4	398.4	372.5	341.7	307.7	272.1	233.2	192.7
110°	427.5	421.1	408.1	393.5	372.5	346.6	319.0	286.6	251.0	215.4	176.5





TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-81SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	401.6	395.1	382.2	366.0	348.2	323.9	296.4	265.6	231.6	197.6	160.3
115°	375.7	367.6	356.3	341.7	323.9	301.2	275.3	247.8	213.8	181.4	147.4
117.5°	349.8	343.3	332.0	317.4	301.2	278.5	254.3	228.3	196.0	165.2	134.4
120°	323.9	319.0	307.7	294.7	278.5	257.5	234.8	208.9	179.8	150.6	121.5
122.5°	299.6	294.7	283.4	272.1	255.9	236.4	215.4	191.1	165.2	137.7	111.7
125°	276.9	270.4	260.7	249.4	234.8	217.0	196.0	173.3	149.0	124.7	100.4
127.5°	252.6	247.8	241.3	228.3	213.8	197.6	178.1	158.7	136.0	113.4	90.7
130°	233.2	226.7	218.6	208.9	196.0	179.8	161.9	142.5	123.1	102.0	79.4
132.5°	210.5	204.1	197.6	187.9	176.5	161.9	145.8	127.9	110.1	90.7	71.3
135°	189.5	184.6	178.1	168.4	157.1	145.8	129.6	113.4	97.2	79.4	63.2
137.5°	170.0	165.2	158.7	152.2	140.9	129.6	115.0	100.4	85.8	69.6	55.1
140°	150.6	147.4	140.9	134.4	124.7	113.4	100.4	87.5	74.5	59.9	47.0
142.5°	131.2	127.9	123.1	116.6	108.5	98.8	87.5	76.1	63.2	51.8	40.5
145°	113.4	111.7	106.9	100.4	93.9	84.2	74.5	64.8	53.4	43.7	32.4
147.5°	95.5	93.9	90.7	85.8	79.4	71.3	63.2	53.4	45.3	35.6	25.9
150°	79.4	77.7	76.1	69.6	66.4	58.3	51.8	43.7	37.2	27.5	21.1
152.5°	64.8	64.8	61.5	56.7	53.4	47.0	42.1	35.6	29.2	22.7	16.2
155°	51.8	50.2	48.6	45.3	42.1	37.2	32.4	27.5	22.7	16.2	11.3
157.5°	40.5	38.9	37.2	34.0	30.8	29.2	24.3	19.4	14.6	11.3	8.1
160°	29.2	27.5	25.9	24.3	22.7	19.4	16.2	13.0	9.7	6.5	4.9
162.5°	19.4	17.8	17.8	16.2	14.6	11.3	9.7	8.1	6.5	4.9	3.2
165°	9.7	9.7	8.1	8.1	6.5	4.9	4.9	4.9	3.2	3.2	1.6
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: 8SNLED-LD5-81SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2
2.5°	1527.1	1527.1	1533.6	1532.0	1527.1	1536.9	1548.2
5°	1522.3	1522.3	1527.1	1527.1	1522.3	1532.0	1541.7
7.5°	1514.2	1512.6	1517.4	1517.4	1510.9	1519.0	1530.4
10°	1499.6	1498.0	1502.8	1502.8	1496.4	1504.5	1514.2
12.5°	1483.4	1480.2	1485.0	1483.4	1476.9	1485.0	1494.8
15°	1462.4	1460.7	1464.0	1460.7	1454.3	1462.4	1472.1
17.5°	1441.3	1436.5	1438.1	1438.1	1426.7	1434.8	1442.9
20°	1413.8	1407.3	1408.9	1407.3	1399.2	1404.1	1413.8
22.5°	1386.2	1376.5	1376.5	1374.9	1365.2	1371.7	1379.8
25°	1352.2	1340.9	1340.9	1339.3	1327.9	1332.8	1340.9
27.5°	1318.2	1306.9	1302.0	1300.4	1289.1	1289.1	1300.4
30°	1282.6	1266.4	1263.2	1258.3	1247.0	1247.0	1256.7
32.5°	1248.6	1225.9	1219.4	1213.0	1201.6	1200.0	1211.3
35°	1203.3	1185.4	1174.1	1167.6	1154.7	1151.4	1161.1
37.5°	1166.0	1143.3	1127.1	1119.0	1106.1	1101.2	1114.2
40°	1125.5	1101.2	1080.2	1075.3	1055.9	1049.4	1060.7
42.5°	1080.2	1054.3	1033.2	1023.5	1008.9	1002.4	1004.1
45°	1034.8	1007.3	984.6	971.7	957.1	945.8	952.2
47.5°	987.9	963.6	936.0	916.6	898.8	890.7	893.9
50°	940.9	911.8	885.8	864.8	843.7	834.0	840.5
52.5°	893.9	863.2	834.0	811.3	787.1	777.3	779.0
55°	848.6	816.2	782.2	757.9	735.2	720.7	717.4
57.5°	803.2	767.6	732.0	704.5	675.3	662.4	657.5
60°	754.7	717.4	680.2	647.8	617.0	602.4	596.0
62.5°	709.3	668.8	626.7	592.7	561.9	542.5	537.7
65°	665.6	618.6	576.5	537.7	503.6	482.6	476.1
67.5°	618.6	570.0	524.7	482.6	450.2	422.7	419.4
70°	574.9	523.1	472.9	429.2	393.5	366.0	353.0
72.5°	531.2	477.7	425.9	379.0	333.6	307.7	298.0
75°	489.1	434.0	379.0	330.4	280.2	249.4	239.7
77.5°	450.2	393.5	335.2	281.8	234.8	196.0	183.0
80°	413.0	354.7	293.1	238.1	187.9	145.8	131.2
82.5°	374.1	319.0	255.9	197.6	145.8	102.0	84.2
85°	340.1	285.0	221.9	163.6	111.7	64.8	45.3
87.5°	312.6	252.6	196.0	137.7	84.2	37.2	13.0
90°	285.0	226.7	170.0	113.4	63.2	21.1	1.6
92.5°	260.7	205.7	149.0	97.2	48.6	14.6	1.6
95°	238.1	184.6	131.2	81.0	38.9	9.7	1.6
97.5°	217.0	166.8	116.6	69.6	32.4	8.1	1.6
100°	199.2	150.6	103.6	61.5	27.5	6.5	1.6
102.5°	181.4	136.0	92.3	53.4	24.3	4.9	1.6
105°	166.8	123.1	82.6	48.6	21.1	4.9	1.6
107.5°	152.2	111.7	74.5	42.1	17.8	3.2	1.6
110°	137.7	102.0	66.4	37.2	16.2	3.2	1.6



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-81SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	126.3	92.3	59.9	34.0	13.0	3.2	1.6
115°	115.0	82.6	53.4	29.2	11.3	1.6	1.6
117.5°	103.6	74.5	47.0	25.9	9.7	1.6	1.6
120°	93.9	66.4	42.1	22.7	8.1	1.6	1.6
122.5°	84.2	59.9	37.2	19.4	6.5	1.6	1.6
125°	76.1	53.4	32.4	16.2	4.9	1.6	1.6
127.5°	68.0	47.0	29.2	14.6	4.9	1.6	1.6
130°	59.9	42.1	24.3	11.3	3.2	1.6	1.6
132.5°	53.4	35.6	21.1	9.7	3.2	1.6	1.6
135°	47.0	30.8	17.8	6.5	3.2	1.6	1.6
137.5°	40.5	25.9	14.6	4.9	1.6	1.6	1.6
140°	34.0	22.7	11.3	4.9	1.6	1.6	1.6
142.5°	29.2	17.8	8.1	3.2	1.6	1.6	1.6
145°	22.7	14.6	6.5	3.2	1.6	1.6	1.6
147.5°	17.8	11.3	4.9	3.2	1.6	1.6	1.6
150°	13.0	8.1	4.9	1.6	1.6	1.6	1.6
152.5°	9.7	6.5	3.2	1.6	1.6	1.6	1.6
155°	6.5	4.9	3.2	1.6	1.6	1.6	1.6
157.5°	4.9	3.2	1.6	1.6	1.6	1.6	1.6
160°	3.2	1.6	1.6	1.6	1.6	1.6	1.6
162.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6
165°	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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)