

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: NEO-RAY

Report Number: P332083-840

Luminaire Tested: **S123DIP-S1165D1195U840-4F0-1E-UDD-A4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332083-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-17,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DIP-S1165D1195U840-4F0-1E-UDD-A4
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1195 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9309.5 lumens
Efficiency: N/A
Efficacy: 129.8 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: General Diffuse

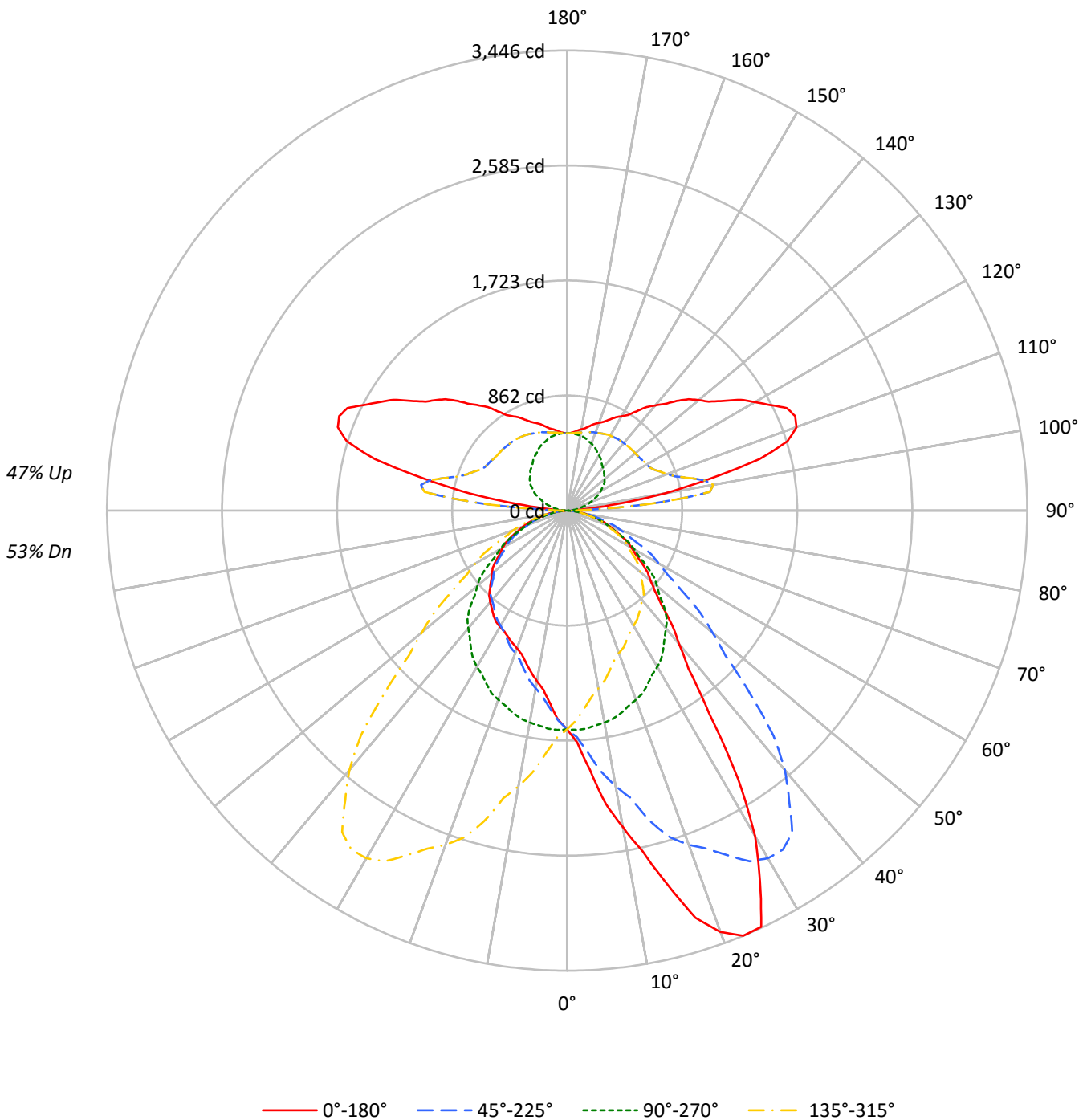
Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332083-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A4

Luminous Intensity Polar Plot





TEST NUMBER: P332083-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A4

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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59	53				
1	99	95	91	87	91	88	84	82	75	73	71	63	62	60	53	51	50	45				
2	90	83	77	72	83	77	72	67	66	62	59	56	53	51	47	45	43	38				
3	82	73	66	60	76	68	62	57	59	54	50	50	46	43	42	39	37	33				
4	76	65	57	51	70	60	54	48	52	47	43	44	40	37	37	34	32	28				
5	69	58	50	44	64	54	47	41	47	41	37	40	36	32	34	30	28	25				
6	64	52	44	38	59	49	41	36	42	36	32	36	32	28	31	27	25	22				
7	59	47	39	33	55	44	37	32	38	33	28	33	28	25	28	25	22	19				
8	55	43	35	30	51	40	33	28	35	29	25	30	26	22	26	22	20	17				
9	51	39	31	26	47	37	30	25	32	27	23	28	23	20	24	20	18	16				
10	48	36	29	24	44	34	27	23	29	24	20	26	21	18	22	19	16	14				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	17632	17632	17632	17632
5°	21028	17708	15693	17708
10°	26319	17618	14175	17618
15°	32282	17477	13196	17477
20°	38456	17255	12564	17255
25°	40834	16986	12423	16986
30°	34999	16789	12489	16789
35°	24341	16509	12620	16509
40°	18334	16183	12579	16183
45°	15224	15694	12420	15694
50°	13638	14699	12308	14699
55°	12748	13628	12153	13628
60°	11959	12508	12030	12508
65°	11240	11403	11645	11403
70°	10543	10140	11087	10140
75°	9441	8879	10168	8879
80°	8263	7277	8759	7277
85°	6472	5286	5891	5286



TEST NUMBER: P332083-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.4	1.7
10°-20°	517.4	5.6
20°-30°	868.4	9.3
30°-40°	983.3	10.6
40°-50°	881.8	9.5
50°-60°	711.6	7.6
60°-70°	495.9	5.3
70°-80°	260.6	2.8
80°-90°	68.2	0.7
90°-100°	322.6	3.5
100°-110°	913.4	9.8
110°-120°	898.5	9.7
120°-130°	716.7	7.7
130°-140°	565.1	6.1
140°-150°	421.7	4.5
150°-160°	294.0	3.2
160°-170°	172.7	1.9
170°-180°	56.2	0.6
0°-30°	1547.2	16.6
0°-40°	2530.6	27.2
0°-60°	4124.0	44.3
0°-90°	4948.7	53.2
90°-120°	2134.4	22.9
90°-150°	3837.9	41.2
90°-180°	4361.0	46.8
0°-180°	9309.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1638	1638	1638	1638	1638	
5°	1946	1639	1452	1639	1946	202
15°	2897	1568	1184	1568	2897	836
25°	3438	1430	1046	1430	3438	1508
35°	1852	1256	960	1256	1852	1204
45°	1000	1031	816	1031	1000	791
55°	679	726	648	726	679	610
65°	441	448	457	448	441	439
75°	227	214	244	214	227	243
85°	52	43	48	43	52	63
90°	34	2	34	2	34	21
95°	136	40	136	40	136	245
105°	1492	136	1492	136	1492	1472
115°	1815	240	1815	240	1815	1764
125°	1432	334	1432	334	1432	1297
135°	1160	392	1160	392	1160	900
145°	907	447	907	447	907	577
155°	752	508	752	508	752	351
165°	656	555	656	555	656	187
175°	590	578	590	578	590	57
180°	580	580	580	580	580	



TEST NUMBER: P332083-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1738.5	1737.2	1734.0	1736.6	1731.5	1724.4	1723.8	1717.5	1699.1	1697.8	1692.7
5°	1946.1	1939.7	1938.9	1938.1	1927.0	1912.0	1883.4	1881.0	1842.9	1823.8	1800.9
7.5°	2214.9	2218.3	2206.8	2196.6	2162.6	2140.2	2109.6	2070.4	2023.6	1976.1	1944.5
10°	2408.0	2434.2	2401.7	2379.4	2358.8	2319.9	2274.7	2218.3	2161.9	2096.1	2046.1
12.5°	2615.0	2627.9	2621.3	2600.4	2568.3	2509.1	2428.9	2366.9	2315.0	2205.3	2161.0
15°	2896.9	2945.4	2914.4	2843.0	2844.5	2788.1	2683.4	2568.3	2507.2	2411.2	2280.3
17.5°	3197.2	3203.3	3190.1	3130.6	3090.9	3013.4	2916.8	2806.4	2682.6	2566.5	2427.5
20°	3357.2	3352.4	3324.7	3293.8	3225.5	3165.2	3059.6	2936.6	2777.8	2663.6	2511.9
22.5°	3446.2	3438.2	3425.1	3399.1	3342.4	3277.5	3182.8	3048.4	2897.2	2739.8	2564.7
25°	3438.2	3448.5	3450.1	3442.9	3423.1	3384.3	3309.6	3202.5	3051.7	2849.3	2666.8
27.5°	3127.0	3141.7	3184.1	3221.7	3263.8	3306.6	3300.8	3247.7	3136.1	2961.3	2738.1
30°	2815.9	2784.2	2862.8	2962.0	3029.5	3148.5	3215.2	3219.1	3156.4	3006.5	2788.9
32.5°	2384.2	2419.1	2453.9	2576.0	2723.4	2857.1	2989.8	3096.7	3108.9	3009.0	2818.8
35°	1852.4	1896.1	1959.5	2023.1	2181.8	2318.3	2551.6	2754.8	2916.8	2938.2	2821.5
37.5°	1492.8	1514.3	1554.5	1618.1	1721.9	1883.9	2064.4	2321.2	2555.8	2730.3	2737.8
40°	1304.8	1311.1	1356.3	1404.8	1488.9	1622.2	1784.9	2012.0	2292.9	2536.6	2638.2
42.5°	1163.9	1177.8	1197.0	1243.5	1310.5	1410.9	1562.2	1749.7	2007.2	2287.6	2486.4
45°	1000.1	1015.9	1027.8	1058.7	1106.4	1173.9	1279.4	1450.9	1646.9	1936.5	2204.0
47.5°	891.8	893.0	901.9	925.2	957.7	1008.2	1082.9	1193.1	1373.0	1608.0	1882.6
50°	814.4	827.0	830.2	848.4	873.8	911.1	973.0	1066.7	1214.4	1420.7	1673.0
52.5°	759.7	763.6	772.4	785.6	807.8	836.9	890.5	963.8	1079.7	1255.6	1487.6
55°	679.3	679.3	688.1	698.4	711.1	737.3	773.1	827.0	915.1	1051.6	1243.6
57.5°	605.1	609.0	615.2	618.4	629.2	646.5	676.4	717.3	783.0	888.1	1040.9
60°	555.5	562.7	561.9	568.3	577.8	591.3	616.7	650.1	708.7	792.8	921.5
62.5°	512.4	511.9	511.8	519.4	528.9	541.8	558.3	587.1	637.0	711.7	821.1
65°	441.3	439.7	445.2	450.0	453.2	462.7	475.4	500.8	534.1	589.7	674.6
67.5°	378.1	373.5	376.5	378.1	383.5	390.9	402.8	418.6	445.0	489.7	553.7
70°	335.0	330.9	330.1	331.7	336.5	342.0	350.8	365.9	390.5	426.2	473.0
72.5°	290.4	287.8	287.6	291.1	293.4	297.0	303.2	317.0	336.5	363.3	407.0
75°	227.0	227.0	227.0	227.8	230.1	233.4	238.1	245.2	260.3	279.3	308.7
77.5°	170.2	170.0	169.1	168.8	172.4	173.8	174.9	181.6	190.0	202.9	224.3
80°	133.3	129.4	131.0	133.3	134.9	135.7	138.1	139.7	146.8	154.0	169.1
82.5°	99.1	95.7	96.0	99.7	100.0	100.8	103.2	105.4	108.1	114.6	122.7
85°	52.4	52.4	53.2	53.2	53.9	53.2	55.5	56.4	56.4	60.3	65.0
87.5°	25.9	24.8	25.2	25.7	25.2	25.3	25.8	26.2	26.6	27.5	27.4
90°	34.0	35.2	34.0	32.8	34.0	31.7	30.5	29.3	28.2	29.3	25.9
92.5°	56.6	58.7	57.5	61.0	63.1	69.2	78.4	98.8	136.1	180.5	198.5
95°	136.1	140.8	149.1	159.6	181.9	224.1	286.3	422.4	564.3	695.8	619.6
97.5°	370.5	380.6	412.3	465.1	551.7	692.1	843.3	1052.9	1153.6	1078.2	789.4
100°	735.7	734.5	780.2	865.9	984.4	1151.0	1288.3	1383.3	1342.3	1111.2	750.9
102.5°	1079.2	1106.2	1144.5	1212.2	1304.4	1410.1	1490.1	1493.2	1351.6	1050.2	694.6
105°	1492.5	1498.3	1535.9	1580.4	1634.5	1665.0	1642.6	1525.3	1280.1	943.3	625.4
107.5°	1730.4	1741.2	1753.8	1768.9	1768.0	1726.2	1623.4	1432.8	1154.8	849.0	581.3
110°	1828.1	1830.4	1832.7	1823.3	1790.5	1708.4	1560.5	1344.6	1075.9	795.5	564.3



TEST NUMBER: P332083-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1847.8	1847.2	1838.4	1809.3	1749.2	1643.6	1477.9	1257.3	1007.4	759.8	555.0
115°	1815.1	1809.3	1785.7	1734.1	1646.2	1518.2	1345.7	1141.7	924.5	721.5	551.5
117.5°	1711.4	1703.4	1669.6	1610.5	1518.7	1389.0	1234.1	1057.8	874.5	699.0	553.6
120°	1625.1	1618.0	1589.8	1524.1	1431.5	1312.9	1172.2	1013.7	848.3	688.7	557.3
122.5°	1544.3	1535.4	1504.4	1445.3	1362.9	1252.8	1122.4	979.0	826.7	682.2	563.9
125°	1431.5	1423.2	1393.9	1342.3	1267.2	1173.3	1060.7	932.8	799.0	673.5	573.7
127.5°	1338.5	1331.0	1304.4	1260.4	1193.5	1108.0	1006.4	892.4	774.7	669.2	585.0
130°	1286.0	1276.6	1251.9	1209.7	1147.5	1067.7	972.7	867.1	761.4	666.4	592.5
132.5°	1234.4	1227.8	1205.9	1163.7	1105.3	1029.3	940.8	843.6	749.3	665.5	598.1
135°	1160.4	1152.2	1131.0	1095.9	1038.3	971.5	895.2	811.9	733.4	664.1	606.6
137.5°	1082.3	1076.8	1059.0	1023.4	975.0	917.1	851.3	783.0	719.4	661.5	612.3
140°	1027.8	1029.0	1010.3	977.3	932.8	882.3	826.0	766.2	711.0	660.6	616.0
142.5°	977.1	978.3	961.4	932.3	894.3	850.4	801.6	750.2	703.5	658.7	618.8
145°	907.0	904.6	895.2	870.6	841.2	807.3	769.7	730.9	693.5	655.9	620.7
147.5°	849.2	848.3	839.4	822.7	800.4	776.3	746.0	715.3	683.6	651.5	620.7
150°	815.5	815.5	808.4	795.5	777.9	755.6	730.9	704.0	677.0	647.6	620.7
152.5°	787.3	787.3	783.0	771.1	757.3	738.7	716.9	693.7	669.5	643.0	617.8
155°	752.0	750.9	748.6	739.2	728.6	714.6	696.9	678.1	658.2	634.8	614.8
157.5°	719.9	720.1	718.3	711.2	702.1	691.1	677.5	661.8	645.5	627.5	610.9
160°	699.3	700.4	700.4	693.5	685.2	677.0	665.3	652.4	637.1	621.9	608.9
162.5°	680.5	681.7	681.7	675.6	670.1	662.9	652.2	641.1	628.6	616.2	605.2
165°	655.9	655.9	657.0	652.4	647.6	641.8	633.6	626.5	617.1	607.7	599.6
167.5°	632.4	632.4	633.6	630.3	628.2	624.0	619.2	613.9	606.1	599.4	593.9
170°	618.3	618.3	619.6	617.1	616.0	613.6	608.9	605.4	599.6	593.7	590.2
172.5°	605.2	606.1	608.2	605.9	605.6	604.3	600.5	597.9	593.0	589.0	587.3
175°	590.2	591.4	592.5	591.4	591.4	591.4	589.0	587.8	585.5	583.1	583.1
177.5°	581.5	581.5	583.4	582.4	583.4	583.4	582.4	581.5	580.6	579.7	580.6
180°	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7



TEST NUMBER: P332083-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1688.9	1683.8	1678.8	1669.9	1662.2	1651.4	1648.3	1644.5	1633.1	1623.0	1615.3
5°	1792.1	1773.0	1745.2	1719.9	1699.3	1671.5	1655.6	1638.9	1615.1	1593.7	1576.2
7.5°	1900.1	1862.6	1819.4	1772.7	1729.3	1687.4	1653.6	1623.4	1590.0	1558.4	1533.9
10°	1985.8	1931.8	1871.5	1806.4	1750.8	1696.9	1651.6	1611.9	1569.1	1531.8	1500.9
12.5°	2083.6	2003.6	1920.4	1841.3	1775.6	1700.7	1645.9	1595.5	1546.9	1502.0	1467.2
15°	2199.3	2097.7	1999.2	1890.6	1790.5	1696.9	1631.8	1568.3	1512.0	1465.9	1421.5
17.5°	2304.7	2189.6	2059.9	1927.6	1807.1	1696.0	1604.8	1533.1	1462.6	1406.2	1361.9
20°	2364.4	2233.4	2086.6	1949.2	1815.9	1692.1	1592.2	1506.4	1430.2	1370.7	1320.7
22.5°	2415.8	2262.6	2110.7	1963.9	1815.3	1681.9	1568.6	1480.4	1397.9	1339.6	1286.4
25°	2469.1	2285.8	2133.4	1961.2	1795.3	1657.2	1530.2	1430.2	1347.7	1279.4	1224.7
27.5°	2514.9	2284.2	2103.3	1918.1	1763.8	1625.5	1489.9	1382.6	1294.9	1220.8	1165.3
30°	2545.3	2287.3	2072.2	1889.0	1733.4	1590.5	1458.8	1350.8	1258.8	1183.4	1130.9
32.5°	2564.4	2285.4	2043.7	1848.4	1685.2	1558.7	1425.1	1313.3	1218.8	1144.7	1094.2
35°	2575.5	2271.5	1994.5	1764.3	1607.2	1484.2	1372.3	1256.4	1157.2	1088.1	1031.0
37.5°	2553.2	2242.1	1937.3	1683.3	1511.4	1390.2	1296.1	1197.3	1102.4	1026.4	977.1
40°	2518.3	2223.1	1892.9	1626.3	1445.3	1328.6	1248.5	1151.7	1057.9	985.7	939.7
42.5°	2451.6	2184.3	1844.0	1562.8	1376.7	1260.0	1186.2	1105.3	1016.7	948.9	902.9
45°	2289.0	2100.0	1770.7	1467.5	1275.5	1154.8	1089.7	1031.0	950.8	884.9	845.3
47.5°	2063.3	1973.3	1664.7	1367.1	1169.7	1053.7	986.0	938.8	880.2	827.0	788.9
50°	1906.4	1869.1	1592.9	1298.5	1099.2	985.7	920.7	877.8	835.8	782.5	747.6
52.5°	1725.5	1748.5	1509.1	1227.3	1027.5	915.9	854.6	820.6	782.4	738.7	708.3
55°	1470.7	1554.0	1364.3	1107.9	920.7	814.4	756.4	726.2	704.0	671.5	645.3
57.5°	1232.1	1338.2	1207.8	984.9	815.8	724.0	668.4	635.6	621.3	604.3	583.7
60°	1090.6	1195.3	1096.1	902.4	745.3	657.9	608.7	581.0	566.6	554.8	537.3
62.5°	964.1	1070.2	986.8	818.6	676.0	595.1	552.2	525.1	514.0	507.8	492.9
65°	790.5	881.8	826.2	688.1	577.0	505.5	466.7	447.7	437.3	434.9	425.5
67.5°	643.4	712.9	672.4	570.8	483.3	421.6	388.6	372.4	364.5	363.7	356.5
70°	546.8	611.9	581.0	488.9	413.5	365.1	336.5	322.2	317.5	316.7	312.8
72.5°	471.9	517.4	492.7	415.9	357.6	313.7	292.7	277.8	272.4	273.5	270.8
75°	349.2	383.3	369.1	315.9	269.0	240.4	223.0	213.5	208.7	211.2	207.9
77.5°	251.3	272.9	260.0	223.2	194.3	173.7	160.8	154.9	150.7	150.5	149.1
80°	189.7	202.4	195.2	173.0	149.3	131.8	121.4	117.4	115.1	114.3	113.5
82.5°	135.1	145.9	137.4	122.2	106.0	95.5	89.7	84.4	82.7	83.2	82.4
85°	68.3	72.2	69.1	59.5	53.2	48.4	45.2	42.8	41.3	42.1	40.5
87.5°	28.0	27.9	25.2	22.2	20.5	17.9	17.5	15.8	14.9	15.3	15.5
90°	22.3	18.8	15.2	12.9	10.6	7.1	4.6	2.3	4.6	7.1	10.6
92.5°	149.1	98.6	67.9	50.5	40.6	31.4	21.6	14.5	21.6	31.4	40.6
95°	427.1	252.3	152.5	106.7	76.2	56.4	43.4	39.9	43.4	56.4	76.2
97.5°	468.6	271.6	176.2	126.7	96.6	79.3	69.2	68.1	69.2	79.3	96.6
100°	442.3	268.7	186.5	140.8	112.6	96.2	88.0	86.8	88.0	96.2	112.6
102.5°	419.8	272.5	198.7	156.7	131.4	115.9	108.7	106.5	108.7	115.9	131.4
105°	403.6	282.8	219.4	183.0	160.8	146.6	139.7	136.1	139.7	146.6	160.8
107.5°	402.4	302.1	246.4	212.6	191.7	177.8	171.1	167.5	171.1	177.8	191.7
110°	407.2	318.0	265.2	232.3	212.4	199.4	193.6	190.1	193.6	199.4	212.4



TEST NUMBER: P332083-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	416.6	334.0	284.9	253.0	233.0	220.2	214.3	210.8	214.3	220.2	233.0
115°	431.8	360.2	315.6	284.0	264.0	252.3	245.2	240.5	245.2	252.3	264.0
117.5°	451.9	388.1	344.1	314.7	292.4	281.6	275.7	270.3	275.7	281.6	292.4
120°	467.0	406.0	363.8	334.4	312.1	300.3	294.5	290.9	294.5	300.3	312.1
122.5°	481.1	424.7	383.4	352.2	330.8	318.2	312.4	308.8	312.4	318.2	330.8
125°	503.3	451.7	410.6	379.0	356.7	343.8	336.8	334.4	336.8	343.8	356.7
127.5°	521.7	475.1	435.6	403.8	379.2	366.1	357.4	353.9	357.4	366.1	379.2
130°	533.8	489.3	450.5	418.9	394.3	380.1	369.6	366.1	369.6	380.1	394.3
132.5°	545.1	501.5	463.7	432.9	408.3	391.4	379.9	375.5	379.9	391.4	408.3
135°	559.7	519.8	483.4	451.7	427.1	409.5	396.6	391.9	396.6	409.5	427.1
137.5°	570.5	532.4	497.5	468.2	443.7	425.0	412.3	407.4	412.3	425.0	443.7
140°	576.1	540.9	506.9	477.6	454.0	435.3	423.5	417.7	423.5	435.3	454.0
142.5°	581.7	547.4	514.4	487.0	463.4	446.6	433.9	429.0	433.9	446.6	463.4
145°	587.8	556.1	525.6	498.7	478.7	461.1	450.5	447.1	450.5	461.1	478.7
147.5°	591.6	563.2	535.2	512.3	493.0	477.8	467.5	465.3	467.5	477.8	493.0
150°	592.5	567.8	540.9	519.8	503.3	488.1	478.7	477.6	478.7	488.1	503.3
152.5°	594.4	570.7	547.4	527.3	512.7	499.4	490.0	489.8	490.0	499.4	512.7
155°	594.9	576.1	556.1	539.7	526.8	515.1	508.1	508.1	508.1	515.1	526.8
157.5°	596.0	579.2	563.2	550.5	539.5	529.2	523.5	522.6	523.5	529.2	539.5
160°	596.0	582.0	567.8	556.1	548.0	538.6	533.8	533.8	533.8	538.6	548.0
162.5°	595.1	582.9	570.7	560.9	553.6	546.0	542.3	542.3	542.3	546.0	553.6
165°	592.5	584.3	574.9	566.7	562.0	556.1	553.8	555.0	553.8	556.1	562.0
167.5°	590.7	584.1	577.2	572.1	568.9	564.3	563.2	564.6	563.2	564.3	568.9
170°	587.8	583.1	577.2	574.9	572.6	569.1	567.8	570.3	567.8	569.1	572.6
172.5°	586.9	583.1	578.2	576.8	575.4	572.8	572.6	574.0	572.6	572.8	575.4
175°	584.3	582.0	579.7	578.5	578.5	576.1	577.2	578.5	577.2	576.1	578.5
177.5°	582.4	580.6	579.7	579.7	579.7	578.7	579.7	580.6	579.7	578.7	579.7
180°	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7



TEST NUMBER: P332083-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1610.8	1606.4	1600.0	1590.5	1582.9	1570.8	1570.8	1572.8	1572.8	1572.2	1570.8
5°	1562.0	1550.0	1535.8	1519.1	1501.7	1484.2	1481.0	1474.6	1469.9	1466.7	1462.8
7.5°	1510.4	1489.2	1468.4	1445.1	1423.8	1406.2	1394.0	1383.8	1377.4	1370.4	1365.2
10°	1475.4	1449.3	1424.6	1400.1	1373.0	1351.6	1338.2	1328.6	1321.5	1315.1	1311.9
12.5°	1434.2	1404.2	1377.1	1353.7	1324.1	1302.1	1289.3	1284.8	1276.4	1263.0	1256.1
15°	1373.8	1346.0	1313.5	1277.8	1263.5	1236.6	1221.4	1214.4	1209.5	1199.2	1196.1
17.5°	1322.2	1285.9	1249.4	1222.7	1196.2	1174.3	1165.9	1157.0	1150.6	1142.3	1139.7
20°	1281.0	1248.5	1215.1	1186.6	1158.7	1135.0	1127.8	1121.5	1115.1	1111.2	1107.9
22.5°	1239.1	1206.6	1178.9	1152.3	1122.6	1107.0	1099.2	1092.3	1087.8	1085.1	1082.0
25°	1180.2	1151.7	1120.6	1096.8	1073.1	1062.7	1057.9	1054.0	1050.9	1046.8	1046.0
27.5°	1127.5	1096.4	1071.3	1049.0	1032.0	1023.4	1018.8	1016.8	1017.5	1019.0	1019.9
30°	1088.1	1059.6	1038.9	1019.9	1004.0	996.0	995.2	995.2	998.5	999.3	1000.8
32.5°	1052.0	1028.4	1007.8	989.4	977.3	971.9	974.9	974.9	977.4	979.6	982.4
35°	999.3	978.6	962.7	946.8	936.5	938.9	940.5	942.1	946.0	950.8	954.0
37.5°	948.9	931.0	914.4	902.1	897.4	901.6	905.4	908.8	913.3	917.1	920.2
40°	912.7	899.2	883.3	872.2	873.8	876.3	879.4	883.3	887.4	889.7	892.9
42.5°	879.1	864.9	852.9	843.6	845.9	848.9	850.8	852.9	857.5	861.8	863.6
45°	827.8	816.7	805.6	800.0	801.6	803.2	804.8	807.2	811.1	814.4	815.1
47.5°	770.2	762.4	755.0	749.5	752.0	751.4	753.6	758.6	759.8	761.7	766.2
50°	733.4	726.2	717.5	715.9	715.9	715.9	716.7	723.1	723.1	726.2	729.4
52.5°	692.8	688.1	682.6	679.7	678.4	678.4	681.8	685.0	686.2	690.6	693.9
55°	632.6	627.8	623.0	620.7	619.0	620.7	627.0	628.5	632.6	634.9	637.3
57.5°	569.9	566.2	562.4	561.1	560.8	562.9	566.3	571.1	572.1	579.4	583.0
60°	528.6	523.0	519.9	519.9	518.3	525.4	523.8	531.8	533.3	538.2	543.7
62.5°	486.0	478.6	477.4	477.4	479.6	481.6	483.8	487.4	491.4	497.5	501.8
65°	417.5	413.5	419.1	418.3	416.7	421.4	421.4	425.5	430.2	435.8	444.4
67.5°	352.5	350.5	350.9	350.9	353.4	356.1	358.3	361.7	367.5	373.3	379.1
70°	308.7	311.1	307.2	310.3	312.8	313.5	315.1	319.8	326.2	330.1	336.5
72.5°	266.2	266.0	266.5	267.8	270.1	271.6	273.2	278.6	285.6	288.9	294.0
75°	204.8	204.0	206.3	206.3	210.4	211.9	213.5	215.9	222.3	227.0	231.0
77.5°	149.6	150.5	150.0	152.7	151.6	151.9	156.8	159.3	159.9	169.3	171.3
80°	112.7	114.3	115.1	115.8	116.6	115.1	120.7	123.0	123.0	128.6	132.5
82.5°	81.0	81.9	84.0	84.7	84.9	86.5	86.9	88.8	90.7	93.0	98.3
85°	40.5	42.8	43.6	42.8	43.6	42.1	44.4	45.2	46.0	46.0	46.0
87.5°	15.2	16.4	16.5	17.8	17.9	19.2	19.0	18.0	18.2	20.3	18.3
90°	12.9	15.2	18.8	22.3	25.9	29.3	28.2	29.3	30.5	31.7	34.0
92.5°	50.5	67.9	98.6	149.1	198.5	180.5	136.1	98.8	78.4	69.2	63.1
95°	106.7	152.5	252.3	427.1	619.6	695.8	564.3	422.4	286.3	224.1	181.9
97.5°	126.7	176.2	271.6	468.6	789.4	1078.2	1153.6	1052.9	843.3	692.1	551.7
100°	140.8	186.5	268.7	442.3	750.9	1111.2	1342.3	1383.3	1288.3	1151.0	984.4
102.5°	156.7	198.7	272.5	419.8	694.6	1050.2	1351.6	1493.2	1490.1	1410.1	1304.4
105°	183.0	219.4	282.8	403.6	625.4	943.3	1280.1	1525.3	1642.6	1665.0	1634.5
107.5°	212.6	246.4	302.1	402.4	581.3	849.0	1154.8	1432.8	1623.4	1726.2	1768.0
110°	232.3	265.2	318.0	407.2	564.3	795.5	1075.9	1344.6	1560.5	1708.4	1790.5



TEST NUMBER: P332083-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	253.0	284.9	334.0	416.6	555.0	759.8	1007.4	1257.3	1477.9	1643.6	1749.2
115°	284.0	315.6	360.2	431.8	551.5	721.5	924.5	1141.7	1345.7	1518.2	1646.2
117.5°	314.7	344.1	388.1	451.9	553.6	699.0	874.5	1057.8	1234.1	1389.0	1518.7
120°	334.4	363.8	406.0	467.0	557.3	688.7	848.3	1013.7	1172.2	1312.9	1431.5
122.5°	352.2	383.4	424.7	481.1	563.9	682.2	826.7	979.0	1122.4	1252.8	1362.9
125°	379.0	410.6	451.7	503.3	573.7	673.5	799.0	932.8	1060.7	1173.3	1267.2
127.5°	403.8	435.6	475.1	521.7	585.0	669.2	774.7	892.4	1006.4	1108.0	1193.5
130°	418.9	450.5	489.3	533.8	592.5	666.4	761.4	867.1	972.7	1067.7	1147.5
132.5°	432.9	463.7	501.5	545.1	598.1	665.5	749.3	843.6	940.8	1029.3	1105.3
135°	451.7	483.4	519.8	559.7	606.6	664.1	733.4	811.9	895.2	971.5	1038.3
137.5°	468.2	497.5	532.4	570.5	612.3	661.5	719.4	783.0	851.3	917.1	975.0
140°	477.6	506.9	540.9	576.1	616.0	660.6	711.0	766.2	826.0	882.3	932.8
142.5°	487.0	514.4	547.4	581.7	618.8	658.7	703.5	750.2	801.6	850.4	894.3
145°	498.7	525.6	556.1	587.8	620.7	655.9	693.5	730.9	769.7	807.3	841.2
147.5°	512.3	535.2	563.2	591.6	620.7	651.5	683.6	715.3	746.0	776.3	800.4
150°	519.8	540.9	567.8	592.5	620.7	647.6	677.0	704.0	730.9	755.6	777.9
152.5°	527.3	547.4	570.7	594.4	617.8	643.0	669.5	693.7	716.9	738.7	757.3
155°	539.7	556.1	576.1	594.9	614.8	634.8	658.2	678.1	696.9	714.6	728.6
157.5°	550.5	563.2	579.2	596.0	610.9	627.5	645.5	661.8	677.5	691.1	702.1
160°	556.1	567.8	582.0	596.0	608.9	621.9	637.1	652.4	665.3	677.0	685.2
162.5°	560.9	570.7	582.9	595.1	605.2	616.2	628.6	641.1	652.2	662.9	670.1
165°	566.7	574.9	584.3	592.5	599.6	607.7	617.1	626.5	633.6	641.8	647.6
167.5°	572.1	577.2	584.1	590.7	593.9	599.4	606.1	613.9	619.2	624.0	628.2
170°	574.9	577.2	583.1	587.8	590.2	593.7	599.6	605.4	608.9	613.6	616.0
172.5°	576.8	578.2	583.1	586.9	587.3	589.0	593.0	597.9	600.5	604.3	605.6
175°	578.5	579.7	582.0	584.3	583.1	583.1	585.5	587.8	589.0	591.4	591.4
177.5°	579.7	579.7	580.6	582.4	580.6	579.7	580.6	581.5	582.4	583.4	583.4
180°	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7



TEST NUMBER: P332083-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1566.4	1565.8	1570.2	1567.0	1570.2	1565.8	1566.4	1570.8	1572.2	1572.8	1572.8
5°	1457.9	1460.4	1452.4	1452.4	1452.4	1460.4	1457.9	1462.8	1466.7	1469.9	1474.6
7.5°	1361.5	1358.0	1358.3	1354.0	1358.3	1358.0	1361.5	1365.2	1370.4	1377.4	1383.8
10°	1302.4	1297.7	1296.1	1296.9	1296.1	1297.7	1302.4	1311.9	1315.1	1321.5	1328.6
12.5°	1253.5	1252.5	1242.1	1242.2	1242.1	1252.5	1253.5	1256.1	1263.0	1276.4	1284.8
15°	1196.1	1181.0	1179.4	1184.2	1179.4	1181.0	1196.1	1196.1	1199.2	1209.5	1214.4
17.5°	1138.4	1130.5	1130.9	1128.6	1130.9	1130.5	1138.4	1139.7	1142.3	1150.6	1157.0
20°	1107.9	1103.2	1102.4	1096.8	1102.4	1103.2	1107.9	1107.9	1111.2	1115.1	1121.5
22.5°	1080.1	1078.4	1078.9	1072.8	1078.9	1078.4	1080.1	1082.0	1085.1	1087.8	1092.3
25°	1045.3	1049.2	1046.0	1046.0	1046.0	1049.2	1045.3	1046.0	1046.8	1050.9	1054.0
27.5°	1021.8	1021.6	1020.1	1020.1	1020.1	1021.6	1021.8	1019.9	1019.0	1017.5	1016.8
30°	1004.0	1003.2	1004.8	1004.8	1004.8	1003.2	1004.0	1000.8	999.3	998.5	995.2
32.5°	986.2	987.3	987.6	988.3	987.6	987.3	986.2	982.4	979.6	977.4	974.9
35°	958.8	959.6	961.9	960.4	961.9	959.6	958.8	954.0	950.8	946.0	942.1
37.5°	921.6	925.2	924.4	925.7	924.4	925.2	921.6	920.2	917.1	913.3	908.8
40°	893.6	896.1	895.2	895.2	895.2	896.1	893.6	892.9	889.7	887.4	883.3
42.5°	865.2	866.9	864.7	863.5	864.7	866.9	865.2	863.6	861.8	857.5	852.9
45°	818.3	816.7	819.1	815.9	819.1	816.7	818.3	815.1	814.4	811.1	807.2
47.5°	765.9	767.5	768.1	770.5	768.1	767.5	765.9	766.2	761.7	759.8	758.6
50°	730.9	735.7	735.7	735.0	735.7	735.7	730.9	729.4	726.2	723.1	723.1
52.5°	696.7	698.9	702.1	702.0	702.1	698.9	696.7	693.9	690.6	686.2	685.0
55°	643.7	645.3	646.8	647.6	646.8	645.3	643.7	637.3	634.9	632.6	628.5
57.5°	588.8	588.1	591.9	593.0	591.9	588.1	588.8	583.0	579.4	572.1	571.1
60°	550.0	550.0	556.3	558.8	556.3	550.0	550.0	543.7	538.2	533.3	531.8
62.5°	508.8	511.3	517.7	514.3	517.7	511.3	508.8	501.8	497.5	491.4	487.4
65°	448.4	454.7	453.9	457.2	453.9	454.7	448.4	444.4	435.8	430.2	425.5
67.5°	385.4	389.4	395.1	395.6	395.1	389.4	385.4	379.1	373.3	367.5	361.7
70°	342.8	346.8	350.0	352.3	350.0	346.8	342.8	336.5	330.1	326.2	319.8
72.5°	301.6	303.7	311.2	307.9	311.2	303.7	301.6	294.0	288.9	285.6	278.6
75°	236.5	242.1	246.8	244.5	246.8	242.1	236.5	231.0	227.0	222.3	215.9
77.5°	174.9	180.5	182.7	180.7	182.7	180.5	174.9	171.3	169.3	159.9	159.3
80°	138.1	137.3	142.1	141.3	142.1	137.3	138.1	132.5	128.6	123.0	123.0
82.5°	101.3	100.5	102.7	103.2	102.7	100.5	101.3	98.3	93.0	90.7	88.8
85°	49.2	51.6	48.4	47.7	48.4	51.6	49.2	46.0	46.0	46.0	45.2
87.5°	18.0	18.3	17.9	17.0	17.9	18.3	18.0	18.3	20.3	18.2	18.0
90°	32.8	34.0	35.2	34.0	35.2	34.0	32.8	34.0	31.7	30.5	29.3
92.5°	61.0	57.5	58.7	56.6	58.7	57.5	61.0	63.1	69.2	78.4	98.8
95°	159.6	149.1	140.8	136.1	140.8	149.1	159.6	181.9	224.1	286.3	422.4
97.5°	465.1	412.3	380.6	370.5	380.6	412.3	465.1	551.7	692.1	843.3	1052.9
100°	865.9	780.2	734.5	735.7	734.5	780.2	865.9	984.4	1151.0	1288.3	1383.3
102.5°	1212.2	1144.5	1106.2	1079.2	1106.2	1144.5	1212.2	1304.4	1410.1	1490.1	1493.2
105°	1580.4	1535.9	1498.3	1492.5	1498.3	1535.9	1580.4	1634.5	1665.0	1642.6	1525.3
107.5°	1768.9	1753.8	1741.2	1730.4	1741.2	1753.8	1768.9	1768.0	1726.2	1623.4	1432.8
110°	1823.3	1832.7	1830.4	1828.1	1830.4	1832.7	1823.3	1790.5	1708.4	1560.5	1344.6



TEST NUMBER: P332083-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1809.3	1838.4	1847.2	1847.8	1847.2	1838.4	1809.3	1749.2	1643.6	1477.9	1257.3
115°	1734.1	1785.7	1809.3	1815.1	1809.3	1785.7	1734.1	1646.2	1518.2	1345.7	1141.7
117.5°	1610.5	1669.6	1703.4	1711.4	1703.4	1669.6	1610.5	1518.7	1389.0	1234.1	1057.8
120°	1524.1	1589.8	1618.0	1625.1	1618.0	1589.8	1524.1	1431.5	1312.9	1172.2	1013.7
122.5°	1445.3	1504.4	1535.4	1544.3	1535.4	1504.4	1445.3	1362.9	1252.8	1122.4	979.0
125°	1342.3	1393.9	1423.2	1431.5	1423.2	1393.9	1342.3	1267.2	1173.3	1060.7	932.8
127.5°	1260.4	1304.4	1331.0	1338.5	1331.0	1304.4	1260.4	1193.5	1108.0	1006.4	892.4
130°	1209.7	1251.9	1276.6	1286.0	1276.6	1251.9	1209.7	1147.5	1067.7	972.7	867.1
132.5°	1163.7	1205.9	1227.8	1234.4	1227.8	1205.9	1163.7	1105.3	1029.3	940.8	843.6
135°	1095.9	1131.0	1152.2	1160.4	1152.2	1131.0	1095.9	1038.3	971.5	895.2	811.9
137.5°	1023.4	1059.0	1076.8	1082.3	1076.8	1059.0	1023.4	975.0	917.1	851.3	783.0
140°	977.3	1010.3	1029.0	1027.8	1029.0	1010.3	977.3	932.8	882.3	826.0	766.2
142.5°	932.3	961.4	978.3	977.1	978.3	961.4	932.3	894.3	850.4	801.6	750.2
145°	870.6	895.2	904.6	907.0	904.6	895.2	870.6	841.2	807.3	769.7	730.9
147.5°	822.7	839.4	848.3	849.2	848.3	839.4	822.7	800.4	776.3	746.0	715.3
150°	795.5	808.4	815.5	815.5	815.5	808.4	795.5	777.9	755.6	730.9	704.0
152.5°	771.1	783.0	787.3	787.3	787.3	783.0	771.1	757.3	738.7	716.9	693.7
155°	739.2	748.6	750.9	752.0	750.9	748.6	739.2	728.6	714.6	696.9	678.1
157.5°	711.2	718.3	720.1	719.9	720.1	718.3	711.2	702.1	691.1	677.5	661.8
160°	693.5	700.4	700.4	699.3	700.4	700.4	693.5	685.2	677.0	665.3	652.4
162.5°	675.6	681.7	681.7	680.5	681.7	681.7	675.6	670.1	662.9	652.2	641.1
165°	652.4	657.0	655.9	655.9	655.9	657.0	652.4	647.6	641.8	633.6	626.5
167.5°	630.3	633.6	632.4	632.4	632.4	633.6	630.3	628.2	624.0	619.2	613.9
170°	617.1	619.6	618.3	618.3	618.3	619.6	617.1	616.0	613.6	608.9	605.4
172.5°	605.9	608.2	606.1	605.2	606.1	608.2	605.9	605.6	604.3	600.5	597.9
175°	591.4	592.5	591.4	590.2	591.4	592.5	591.4	591.4	591.4	589.0	587.8
177.5°	582.4	583.4	581.5	581.5	581.5	583.4	582.4	583.4	583.4	582.4	581.5
180°	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7



TEST NUMBER: P332083-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1570.8	1570.8	1582.9	1590.5	1600.0	1606.4	1610.8	1615.3	1623.0	1633.1	1644.5
5°	1481.0	1484.2	1501.7	1519.1	1535.8	1550.0	1562.0	1576.2	1593.7	1615.1	1638.9
7.5°	1394.0	1406.2	1423.8	1445.1	1468.4	1489.2	1510.4	1533.9	1558.4	1590.0	1623.4
10°	1338.2	1351.6	1373.0	1400.1	1424.6	1449.3	1475.4	1500.9	1531.8	1569.1	1611.9
12.5°	1289.3	1302.1	1324.1	1353.7	1377.1	1404.2	1434.2	1467.2	1502.0	1546.9	1595.5
15°	1221.4	1236.6	1263.5	1277.8	1313.5	1346.0	1373.8	1421.5	1465.9	1512.0	1568.3
17.5°	1165.9	1174.3	1196.2	1222.7	1249.4	1285.9	1322.2	1361.9	1406.2	1462.6	1533.1
20°	1127.8	1135.0	1158.7	1186.6	1215.1	1248.5	1281.0	1320.7	1370.7	1430.2	1506.4
22.5°	1099.2	1107.0	1122.6	1152.3	1178.9	1206.6	1239.1	1286.4	1339.6	1397.9	1480.4
25°	1057.9	1062.7	1073.1	1096.8	1120.6	1151.7	1180.2	1224.7	1279.4	1347.7	1430.2
27.5°	1018.8	1023.4	1032.0	1049.0	1071.3	1096.4	1127.5	1165.3	1220.8	1294.9	1382.6
30°	995.2	996.0	1004.0	1019.9	1038.9	1059.6	1088.1	1130.9	1183.4	1258.8	1350.8
32.5°	974.9	971.9	977.3	989.4	1007.8	1028.4	1052.0	1094.2	1144.7	1218.8	1313.3
35°	940.5	938.9	936.5	946.8	962.7	978.6	999.3	1031.0	1088.1	1157.2	1256.4
37.5°	905.4	901.6	897.4	902.1	914.4	931.0	948.9	977.1	1026.4	1102.4	1197.3
40°	879.4	876.3	873.8	872.2	883.3	899.2	912.7	939.7	985.7	1057.9	1151.7
42.5°	850.8	848.9	845.9	843.6	852.9	864.9	879.1	902.9	948.9	1016.7	1105.3
45°	804.8	803.2	801.6	800.0	805.6	816.7	827.8	845.3	884.9	950.8	1031.0
47.5°	753.6	751.4	752.0	749.5	755.0	762.4	770.2	788.9	827.0	880.2	938.8
50°	716.7	715.9	715.9	715.9	717.5	726.2	733.4	747.6	782.5	835.8	877.8
52.5°	681.8	678.4	678.4	679.7	682.6	688.1	692.8	708.3	738.7	782.4	820.6
55°	627.0	620.7	619.0	620.7	623.0	627.8	632.6	645.3	671.5	704.0	726.2
57.5°	566.3	562.9	560.8	561.1	562.4	566.2	569.9	583.7	604.3	621.3	635.6
60°	523.8	525.4	518.3	519.9	519.9	523.0	528.6	537.3	554.8	566.6	581.0
62.5°	483.8	481.6	479.6	477.4	477.4	478.6	486.0	492.9	507.8	514.0	525.1
65°	421.4	421.4	416.7	418.3	419.1	413.5	417.5	425.5	434.9	437.3	447.7
67.5°	358.3	356.1	353.4	350.9	350.9	350.5	352.5	356.5	363.7	364.5	372.4
70°	315.1	313.5	312.8	310.3	307.2	311.1	308.7	312.8	316.7	317.5	322.2
72.5°	273.2	271.6	270.1	267.8	266.5	266.0	266.2	270.8	273.5	272.4	277.8
75°	213.5	211.9	210.4	206.3	206.3	204.0	204.8	207.9	211.2	208.7	213.5
77.5°	156.8	151.9	151.6	152.7	150.0	150.5	149.6	149.1	150.5	150.7	154.9
80°	120.7	115.1	116.6	115.8	115.1	114.3	112.7	113.5	114.3	115.1	117.4
82.5°	86.9	86.5	84.9	84.7	84.0	81.9	81.0	82.4	83.2	82.7	84.4
85°	44.4	42.1	43.6	42.8	43.6	42.8	40.5	40.5	42.1	41.3	42.8
87.5°	19.0	19.2	17.9	17.8	16.5	16.4	15.2	15.5	15.3	14.9	15.8
90°	28.2	29.3	25.9	22.3	18.8	15.2	12.9	10.6	7.1	4.6	2.3
92.5°	136.1	180.5	198.5	149.1	98.6	67.9	50.5	40.6	31.4	21.6	14.5
95°	564.3	695.8	619.6	427.1	252.3	152.5	106.7	76.2	56.4	43.4	39.9
97.5°	1153.6	1078.2	789.4	468.6	271.6	176.2	126.7	96.6	79.3	69.2	68.1
100°	1342.3	1111.2	750.9	442.3	268.7	186.5	140.8	112.6	96.2	88.0	86.8
102.5°	1351.6	1050.2	694.6	419.8	272.5	198.7	156.7	131.4	115.9	108.7	106.5
105°	1280.1	943.3	625.4	403.6	282.8	219.4	183.0	160.8	146.6	139.7	136.1
107.5°	1154.8	849.0	581.3	402.4	302.1	246.4	212.6	191.7	177.8	171.1	167.5
110°	1075.9	795.5	564.3	407.2	318.0	265.2	232.3	212.4	199.4	193.6	190.1



TEST NUMBER: P332083-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	1007.4	759.8	555.0	416.6	334.0	284.9	253.0	233.0	220.2	214.3	210.8
115°	924.5	721.5	551.5	431.8	360.2	315.6	284.0	264.0	252.3	245.2	240.5
117.5°	874.5	699.0	553.6	451.9	388.1	344.1	314.7	292.4	281.6	275.7	270.3
120°	848.3	688.7	557.3	467.0	406.0	363.8	334.4	312.1	300.3	294.5	290.9
122.5°	826.7	682.2	563.9	481.1	424.7	383.4	352.2	330.8	318.2	312.4	308.8
125°	799.0	673.5	573.7	503.3	451.7	410.6	379.0	356.7	343.8	336.8	334.4
127.5°	774.7	669.2	585.0	521.7	475.1	435.6	403.8	379.2	366.1	357.4	353.9
130°	761.4	666.4	592.5	533.8	489.3	450.5	418.9	394.3	380.1	369.6	366.1
132.5°	749.3	665.5	598.1	545.1	501.5	463.7	432.9	408.3	391.4	379.9	375.5
135°	733.4	664.1	606.6	559.7	519.8	483.4	451.7	427.1	409.5	396.6	391.9
137.5°	719.4	661.5	612.3	570.5	532.4	497.5	468.2	443.7	425.0	412.3	407.4
140°	711.0	660.6	616.0	576.1	540.9	506.9	477.6	454.0	435.3	423.5	417.7
142.5°	703.5	658.7	618.8	581.7	547.4	514.4	487.0	463.4	446.6	433.9	429.0
145°	693.5	655.9	620.7	587.8	556.1	525.6	498.7	478.7	461.1	450.5	447.1
147.5°	683.6	651.5	620.7	591.6	563.2	535.2	512.3	493.0	477.8	467.5	465.3
150°	677.0	647.6	620.7	592.5	567.8	540.9	519.8	503.3	488.1	478.7	477.6
152.5°	669.5	643.0	617.8	594.4	570.7	547.4	527.3	512.7	499.4	490.0	489.8
155°	658.2	634.8	614.8	594.9	576.1	556.1	539.7	526.8	515.1	508.1	508.1
157.5°	645.5	627.5	610.9	596.0	579.2	563.2	550.5	539.5	529.2	523.5	522.6
160°	637.1	621.9	608.9	596.0	582.0	567.8	556.1	548.0	538.6	533.8	533.8
162.5°	628.6	616.2	605.2	595.1	582.9	570.7	560.9	553.6	546.0	542.3	542.3
165°	617.1	607.7	599.6	592.5	584.3	574.9	566.7	562.0	556.1	553.8	555.0
167.5°	606.1	599.4	593.9	590.7	584.1	577.2	572.1	568.9	564.3	563.2	564.6
170°	599.6	593.7	590.2	587.8	583.1	577.2	574.9	572.6	569.1	567.8	570.3
172.5°	593.0	589.0	587.3	586.9	583.1	578.2	576.8	575.4	572.8	572.6	574.0
175°	585.5	583.1	583.1	584.3	582.0	579.7	578.5	578.5	576.1	577.2	578.5
177.5°	580.6	579.7	580.6	582.4	580.6	579.7	579.7	579.7	578.7	579.7	580.6
180°	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7



TEST NUMBER: P332083-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1648.3	1651.4	1662.2	1669.9	1678.8	1683.8	1688.9	1692.7	1697.8	1699.1	1717.5
5°	1655.6	1671.5	1699.3	1719.9	1745.2	1773.0	1792.1	1800.9	1823.8	1842.9	1881.0
7.5°	1653.6	1687.4	1729.3	1772.7	1819.4	1862.6	1900.1	1944.5	1976.1	2023.6	2070.4
10°	1651.6	1696.9	1750.8	1806.4	1871.5	1931.8	1985.8	2046.1	2096.1	2161.9	2218.3
12.5°	1645.9	1700.7	1775.6	1841.3	1920.4	2003.6	2083.6	2161.0	2205.3	2315.0	2366.9
15°	1631.8	1696.9	1790.5	1890.6	1999.2	2097.7	2199.3	2280.3	2411.2	2507.2	2568.3
17.5°	1604.8	1696.0	1807.1	1927.6	2059.9	2189.6	2304.7	2427.5	2566.5	2682.6	2806.4
20°	1592.2	1692.1	1815.9	1949.2	2086.6	2233.4	2364.4	2511.9	2663.6	2777.8	2936.6
22.5°	1568.6	1681.9	1815.3	1963.9	2110.7	2262.6	2415.8	2564.7	2739.8	2897.2	3048.4
25°	1530.2	1657.2	1795.3	1961.2	2133.4	2285.8	2469.1	2666.8	2849.3	3051.7	3202.5
27.5°	1489.9	1625.5	1763.8	1918.1	2103.3	2284.2	2514.9	2738.1	2961.3	3136.1	3247.7
30°	1458.8	1590.5	1733.4	1889.0	2072.2	2287.3	2545.3	2788.9	3006.5	3156.4	3219.1
32.5°	1425.1	1558.7	1685.2	1848.4	2043.7	2285.4	2564.4	2818.8	3009.0	3108.9	3096.7
35°	1372.3	1484.2	1607.2	1764.3	1994.5	2271.5	2575.5	2821.5	2938.2	2916.8	2754.8
37.5°	1296.1	1390.2	1511.4	1683.3	1937.3	2242.1	2553.2	2737.8	2730.3	2555.8	2321.2
40°	1248.5	1328.6	1445.3	1626.3	1892.9	2223.1	2518.3	2638.2	2536.6	2292.9	2012.0
42.5°	1186.2	1260.0	1376.7	1562.8	1844.0	2184.3	2451.6	2486.4	2287.6	2007.2	1749.7
45°	1089.7	1154.8	1275.5	1467.5	1770.7	2100.0	2289.0	2204.0	1936.5	1646.9	1450.9
47.5°	986.0	1053.7	1169.7	1367.1	1664.7	1973.3	2063.3	1882.6	1608.0	1373.0	1193.1
50°	920.7	985.7	1099.2	1298.5	1592.9	1869.1	1906.4	1673.0	1420.7	1214.4	1066.7
52.5°	854.6	915.9	1027.5	1227.3	1509.1	1748.5	1725.5	1487.6	1255.6	1079.7	963.8
55°	756.4	814.4	920.7	1107.9	1364.3	1554.0	1470.7	1243.6	1051.6	915.1	827.0
57.5°	668.4	724.0	815.8	984.9	1207.8	1338.2	1232.1	1040.9	888.1	783.0	717.3
60°	608.7	657.9	745.3	902.4	1096.1	1195.3	1090.6	921.5	792.8	708.7	650.1
62.5°	552.2	595.1	676.0	818.6	986.8	1070.2	964.1	821.1	711.7	637.0	587.1
65°	466.7	505.5	577.0	688.1	826.2	881.8	790.5	674.6	589.7	534.1	500.8
67.5°	388.6	421.6	483.3	570.8	672.4	712.9	643.4	553.7	489.7	445.0	418.6
70°	336.5	365.1	413.5	488.9	581.0	611.9	546.8	473.0	426.2	390.5	365.9
72.5°	292.7	313.7	357.6	415.9	492.7	517.4	471.9	407.0	363.3	336.5	317.0
75°	223.0	240.4	269.0	315.9	369.1	383.3	349.2	308.7	279.3	260.3	245.2
77.5°	160.8	173.7	194.3	223.2	260.0	272.9	251.3	224.3	202.9	190.0	181.6
80°	121.4	131.8	149.3	173.0	195.2	202.4	189.7	169.1	154.0	146.8	139.7
82.5°	89.7	95.5	106.0	122.2	137.4	145.9	135.1	122.7	114.6	108.1	105.4
85°	45.2	48.4	53.2	59.5	69.1	72.2	68.3	65.0	60.3	56.4	56.4
87.5°	17.5	17.9	20.5	22.2	25.2	27.9	28.0	27.4	27.5	26.6	26.2
90°	4.6	7.1	10.6	12.9	15.2	18.8	22.3	25.9	29.3	28.2	29.3
92.5°	21.6	31.4	40.6	50.5	67.9	98.6	149.1	198.5	180.5	136.1	98.8
95°	43.4	56.4	76.2	106.7	152.5	252.3	427.1	619.6	695.8	564.3	422.4
97.5°	69.2	79.3	96.6	126.7	176.2	271.6	468.6	789.4	1078.2	1153.6	1052.9
100°	88.0	96.2	112.6	140.8	186.5	268.7	442.3	750.9	1111.2	1342.3	1383.3
102.5°	108.7	115.9	131.4	156.7	198.7	272.5	419.8	694.6	1050.2	1351.6	1493.2
105°	139.7	146.6	160.8	183.0	219.4	282.8	403.6	625.4	943.3	1280.1	1525.3
107.5°	171.1	177.8	191.7	212.6	246.4	302.1	402.4	581.3	849.0	1154.8	1432.8
110°	193.6	199.4	212.4	232.3	265.2	318.0	407.2	564.3	795.5	1075.9	1344.6



TEST NUMBER: P332083-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	214.3	220.2	233.0	253.0	284.9	334.0	416.6	555.0	759.8	1007.4	1257.3
115°	245.2	252.3	264.0	284.0	315.6	360.2	431.8	551.5	721.5	924.5	1141.7
117.5°	275.7	281.6	292.4	314.7	344.1	388.1	451.9	553.6	699.0	874.5	1057.8
120°	294.5	300.3	312.1	334.4	363.8	406.0	467.0	557.3	688.7	848.3	1013.7
122.5°	312.4	318.2	330.8	352.2	383.4	424.7	481.1	563.9	682.2	826.7	979.0
125°	336.8	343.8	356.7	379.0	410.6	451.7	503.3	573.7	673.5	799.0	932.8
127.5°	357.4	366.1	379.2	403.8	435.6	475.1	521.7	585.0	669.2	774.7	892.4
130°	369.6	380.1	394.3	418.9	450.5	489.3	533.8	592.5	666.4	761.4	867.1
132.5°	379.9	391.4	408.3	432.9	463.7	501.5	545.1	598.1	665.5	749.3	843.6
135°	396.6	409.5	427.1	451.7	483.4	519.8	559.7	606.6	664.1	733.4	811.9
137.5°	412.3	425.0	443.7	468.2	497.5	532.4	570.5	612.3	661.5	719.4	783.0
140°	423.5	435.3	454.0	477.6	506.9	540.9	576.1	616.0	660.6	711.0	766.2
142.5°	433.9	446.6	463.4	487.0	514.4	547.4	581.7	618.8	658.7	703.5	750.2
145°	450.5	461.1	478.7	498.7	525.6	556.1	587.8	620.7	655.9	693.5	730.9
147.5°	467.5	477.8	493.0	512.3	535.2	563.2	591.6	620.7	651.5	683.6	715.3
150°	478.7	488.1	503.3	519.8	540.9	567.8	592.5	620.7	647.6	677.0	704.0
152.5°	490.0	499.4	512.7	527.3	547.4	570.7	594.4	617.8	643.0	669.5	693.7
155°	508.1	515.1	526.8	539.7	556.1	576.1	594.9	614.8	634.8	658.2	678.1
157.5°	523.5	529.2	539.5	550.5	563.2	579.2	596.0	610.9	627.5	645.5	661.8
160°	533.8	538.6	548.0	556.1	567.8	582.0	596.0	608.9	621.9	637.1	652.4
162.5°	542.3	546.0	553.6	560.9	570.7	582.9	595.1	605.2	616.2	628.6	641.1
165°	553.8	556.1	562.0	566.7	574.9	584.3	592.5	599.6	607.7	617.1	626.5
167.5°	563.2	564.3	568.9	572.1	577.2	584.1	590.7	593.9	599.4	606.1	613.9
170°	567.8	569.1	572.6	574.9	577.2	583.1	587.8	590.2	593.7	599.6	605.4
172.5°	572.6	572.8	575.4	576.8	578.2	583.1	586.9	587.3	589.0	593.0	597.9
175°	577.2	576.1	578.5	578.5	579.7	582.0	584.3	583.1	583.1	585.5	587.8
177.5°	579.7	578.7	579.7	579.7	579.7	580.6	582.4	580.6	579.7	580.6	581.5
180°	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7



TEST NUMBER: P332083-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1723.8	1724.4	1731.5	1736.6	1734.0	1737.2	1738.5
5°	1883.4	1912.0	1927.0	1938.1	1938.9	1939.7	1946.1
7.5°	2109.6	2140.2	2162.6	2196.6	2206.8	2218.3	2214.9
10°	2274.7	2319.9	2358.8	2379.4	2401.7	2434.2	2408.0
12.5°	2428.9	2509.1	2568.3	2600.4	2621.3	2627.9	2615.0
15°	2683.4	2788.1	2844.5	2843.0	2914.4	2945.4	2896.9
17.5°	2916.8	3013.4	3090.9	3130.6	3190.1	3203.3	3197.2
20°	3059.6	3165.2	3225.5	3293.8	3324.7	3352.4	3357.2
22.5°	3182.8	3277.5	3342.4	3399.1	3425.1	3438.2	3446.2
25°	3309.6	3384.3	3423.1	3442.9	3450.1	3448.5	3438.2
27.5°	3300.8	3306.6	3263.8	3221.7	3184.1	3141.7	3127.0
30°	3215.2	3148.5	3029.5	2962.0	2862.8	2784.2	2815.9
32.5°	2989.8	2857.1	2723.4	2576.0	2453.9	2419.1	2384.2
35°	2551.6	2318.3	2181.8	2023.1	1959.5	1896.1	1852.4
37.5°	2064.4	1883.9	1721.9	1618.1	1554.5	1514.3	1492.8
40°	1784.9	1622.2	1488.9	1404.8	1356.3	1311.1	1304.8
42.5°	1562.2	1410.9	1310.5	1243.5	1197.0	1177.8	1163.9
45°	1279.4	1173.9	1106.4	1058.7	1027.8	1015.9	1000.1
47.5°	1082.9	1008.2	957.7	925.2	901.9	893.0	891.8
50°	973.0	911.1	873.8	848.4	830.2	827.0	814.4
52.5°	890.5	836.9	807.8	785.6	772.4	763.6	759.7
55°	773.1	737.3	711.1	698.4	688.1	679.3	679.3
57.5°	676.4	646.5	629.2	618.4	615.2	609.0	605.1
60°	616.7	591.3	577.8	568.3	561.9	562.7	555.5
62.5°	558.3	541.8	528.9	519.4	511.8	511.9	512.4
65°	475.4	462.7	453.2	450.0	445.2	439.7	441.3
67.5°	402.8	390.9	383.5	378.1	376.5	373.5	378.1
70°	350.8	342.0	336.5	331.7	330.1	330.9	335.0
72.5°	303.2	297.0	293.4	291.1	287.6	287.8	290.4
75°	238.1	233.4	230.1	227.8	227.0	227.0	227.0
77.5°	174.9	173.8	172.4	168.8	169.1	170.0	170.2
80°	138.1	135.7	134.9	133.3	131.0	129.4	133.3
82.5°	103.2	100.8	100.0	99.7	96.0	95.7	99.1
85°	55.5	53.2	53.9	53.2	53.2	52.4	52.4
87.5°	25.8	25.3	25.2	25.7	25.2	24.8	25.9
90°	30.5	31.7	34.0	32.8	34.0	35.2	34.0
92.5°	78.4	69.2	63.1	61.0	57.5	58.7	56.6
95°	286.3	224.1	181.9	159.6	149.1	140.8	136.1
97.5°	843.3	692.1	551.7	465.1	412.3	380.6	370.5
100°	1288.3	1151.0	984.4	865.9	780.2	734.5	735.7
102.5°	1490.1	1410.1	1304.4	1212.2	1144.5	1106.2	1079.2
105°	1642.6	1665.0	1634.5	1580.4	1535.9	1498.3	1492.5
107.5°	1623.4	1726.2	1768.0	1768.9	1753.8	1741.2	1730.4
110°	1560.5	1708.4	1790.5	1823.3	1832.7	1830.4	1828.1



TEST NUMBER: P332083-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	1477.9	1643.6	1749.2	1809.3	1838.4	1847.2	1847.8
115°	1345.7	1518.2	1646.2	1734.1	1785.7	1809.3	1815.1
117.5°	1234.1	1389.0	1518.7	1610.5	1669.6	1703.4	1711.4
120°	1172.2	1312.9	1431.5	1524.1	1589.8	1618.0	1625.1
122.5°	1122.4	1252.8	1362.9	1445.3	1504.4	1535.4	1544.3
125°	1060.7	1173.3	1267.2	1342.3	1393.9	1423.2	1431.5
127.5°	1006.4	1108.0	1193.5	1260.4	1304.4	1331.0	1338.5
130°	972.7	1067.7	1147.5	1209.7	1251.9	1276.6	1286.0
132.5°	940.8	1029.3	1105.3	1163.7	1205.9	1227.8	1234.4
135°	895.2	971.5	1038.3	1095.9	1131.0	1152.2	1160.4
137.5°	851.3	917.1	975.0	1023.4	1059.0	1076.8	1082.3
140°	826.0	882.3	932.8	977.3	1010.3	1029.0	1027.8
142.5°	801.6	850.4	894.3	932.3	961.4	978.3	977.1
145°	769.7	807.3	841.2	870.6	895.2	904.6	907.0
147.5°	746.0	776.3	800.4	822.7	839.4	848.3	849.2
150°	730.9	755.6	777.9	795.5	808.4	815.5	815.5
152.5°	716.9	738.7	757.3	771.1	783.0	787.3	787.3
155°	696.9	714.6	728.6	739.2	748.6	750.9	752.0
157.5°	677.5	691.1	702.1	711.2	718.3	720.1	719.9
160°	665.3	677.0	685.2	693.5	700.4	700.4	699.3
162.5°	652.2	662.9	670.1	675.6	681.7	681.7	680.5
165°	633.6	641.8	647.6	652.4	657.0	655.9	655.9
167.5°	619.2	624.0	628.2	630.3	633.6	632.4	632.4
170°	608.9	613.6	616.0	617.1	619.6	618.3	618.3
172.5°	600.5	604.3	605.6	605.9	608.2	606.1	605.2
175°	589.0	591.4	591.4	591.4	592.5	591.4	590.2
177.5°	582.4	583.4	583.4	582.4	583.4	581.5	581.5
180°	579.7	579.7	579.7	579.7	579.7	579.7	579.7

(END OF REPORT)