

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: P332074-840

Luminaire Tested: **S123DIP-S1165D1025U840-4F0-1E-UDD-A4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332074-840
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-S1165D1025U840-4F0-1E-UDD-A4
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1025 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8694.5 lumens
Efficiency: N/A
Efficacy: 130.2 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

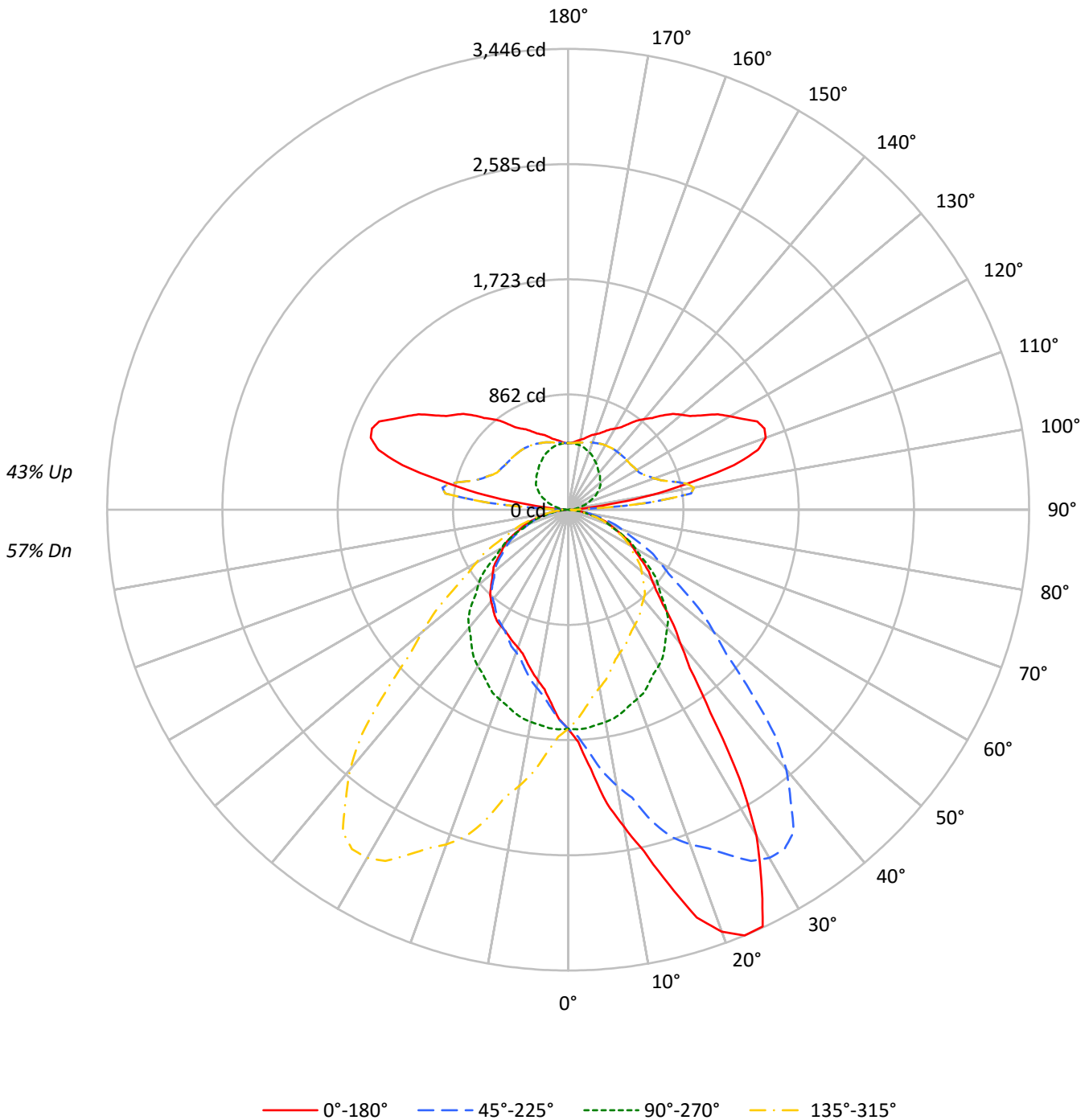
Input Watts (W): 66.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57
1	100	95	92	88	93	89	86	83	77	75	72	66	64	63	56	55	53	49
2	91	84	78	72	84	78	73	68	68	64	60	58	55	53	49	47	45	41
3	83	74	67	61	77	69	63	57	60	55	51	52	48	45	44	41	39	35
4	76	65	58	52	71	61	54	49	53	48	44	46	42	39	39	36	34	30
5	70	58	50	44	65	55	48	42	48	42	38	42	37	34	36	32	30	26
6	65	53	44	39	60	49	42	37	43	37	33	38	33	30	32	29	26	23
7	60	48	40	34	56	45	37	32	39	34	29	34	30	26	30	26	23	21
8	56	43	35	30	52	41	34	29	36	30	26	31	27	23	27	24	21	19
9	52	39	32	27	48	37	30	26	33	27	23	29	24	21	25	21	19	17
10	48	36	29	24	45	34	28	23	30	25	21	27	22	19	23	20	17	15

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.4	1.9
10°-20°	517.4	6.0
20°-30°	868.4	10.0
30°-40°	983.3	11.3
40°-50°	881.8	10.1
50°-60°	711.6	8.2
60°-70°	495.9	5.7
70°-80°	260.6	3.0
80°-90°	67.6	0.8
90°-100°	277.1	3.2
100°-110°	784.7	9.0
110°-120°	771.9	8.9
120°-130°	615.7	7.1
130°-140°	485.5	5.6
140°-150°	362.3	4.2
150°-160°	252.5	2.9
160°-170°	148.4	1.7
170°-180°	48.3	0.6
0°-30°	1547.2	17.8
0°-40°	2530.6	29.1
0°-60°	4124.0	47.4
0°-90°	4948.1	56.9
90°-120°	1833.8	21.1
90°-150°	3297.3	37.9
90°-180°	3746.0	43.1
0°-180°	8694.5	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°	29	2	29	2	29	18
95°	117	34	117	34	117	211
105°	1282	117	1282	117	1282	1265
115°	1559	207	1559	207	1559	1515
125°	1230	287	1230	287	1230	1115
135°	997	337	997	337	997	773
145°	779	384	779	384	779	496
155°	646	436	646	436	646	301
165°	564	477	564	477	564	161
175°	507	497	507	497	507	49
180°	498	498	498	498	498	



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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°	24.9	23.8	24.2	24.7	24.2	24.5	24.9	25.3	25.8	26.7	26.7
90°	29.2	30.2	29.2	28.2	29.2	27.3	26.3	25.2	24.2	25.2	22.2
92.5°	48.6	50.4	49.4	52.4	54.2	59.5	67.4	84.8	116.9	155.0	170.6
95°	116.9	121.0	128.1	137.1	156.2	192.6	246.0	362.8	484.8	597.7	532.2
97.5°	318.3	327.0	354.3	399.6	473.9	594.5	724.6	904.6	991.1	926.3	678.2
100°	632.1	631.1	670.3	744.0	845.8	988.9	1106.8	1188.5	1153.2	954.6	645.1
102.5°	927.2	950.4	983.2	1041.5	1120.7	1211.4	1280.2	1282.8	1161.2	902.2	596.7
105°	1282.2	1287.3	1319.5	1357.8	1404.2	1430.4	1411.3	1310.4	1099.7	810.4	537.2
107.5°	1486.6	1495.9	1506.8	1519.7	1518.9	1483.0	1394.7	1231.0	992.1	729.4	499.4
110°	1570.5	1572.6	1574.6	1566.5	1538.2	1467.6	1340.7	1155.2	924.3	683.5	484.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1587.4	1587.0	1579.3	1554.4	1502.8	1412.0	1269.7	1080.2	865.5	652.8	476.8
115°	1559.4	1554.4	1534.2	1489.9	1414.2	1304.3	1156.2	980.8	794.4	620.0	473.7
117.5°	1470.3	1463.5	1434.4	1383.6	1304.7	1193.3	1060.3	908.9	751.3	600.6	475.5
120°	1396.1	1390.1	1365.8	1309.4	1229.8	1128.0	1007.0	870.9	728.8	591.7	478.8
122.5°	1326.8	1319.1	1292.5	1241.7	1170.9	1076.4	964.3	841.1	710.2	586.0	484.4
125°	1229.8	1222.7	1197.5	1153.2	1088.6	1008.0	911.3	801.4	686.5	578.7	492.9
127.5°	1149.9	1143.5	1120.7	1082.8	1025.3	952.0	864.6	766.7	665.5	575.0	502.6
130°	1104.8	1096.7	1075.6	1039.3	985.8	917.3	835.7	745.0	654.2	572.6	509.1
132.5°	1060.5	1054.8	1036.0	999.8	949.6	884.2	808.2	724.8	643.7	571.8	513.9
135°	996.9	989.9	971.7	941.5	892.1	834.7	769.1	697.5	630.1	570.6	521.2
137.5°	929.8	925.1	909.9	879.2	837.7	787.9	731.4	672.8	618.1	568.4	525.9
140°	883.0	884.0	867.9	839.7	801.4	758.0	709.6	658.2	610.9	567.5	529.2
142.5°	839.5	840.5	826.0	801.0	768.3	730.6	688.7	644.5	604.4	565.9	531.6
145°	779.2	777.2	769.1	747.9	722.8	693.5	661.3	628.0	595.7	563.5	533.2
147.5°	729.6	728.8	721.1	706.8	687.7	666.9	640.9	614.5	587.2	559.7	533.2
150°	700.5	700.5	694.5	683.5	668.3	649.1	628.0	604.8	581.6	556.4	533.2
152.5°	676.4	676.4	672.8	662.5	650.6	634.7	615.9	595.9	575.2	552.4	530.8
155°	646.1	645.1	643.1	635.1	626.0	613.9	598.7	582.6	565.5	545.3	528.2
157.5°	618.5	618.7	617.1	611.1	603.2	593.7	582.0	568.6	554.6	539.1	524.8
160°	600.8	601.8	601.8	595.7	588.7	581.6	571.6	560.5	547.3	534.2	523.2
162.5°	584.6	585.6	585.6	580.5	575.8	569.6	560.3	550.8	540.1	529.4	520.0
165°	563.5	563.5	564.5	560.5	556.4	551.4	544.3	538.3	530.2	522.2	515.1
167.5°	543.3	543.3	544.3	541.5	539.7	536.0	532.0	527.4	520.8	514.9	510.3
170°	531.2	531.2	532.2	530.2	529.2	527.1	523.2	520.2	515.1	510.1	507.1
172.5°	520.0	520.8	522.6	520.6	520.4	519.2	515.9	513.7	509.5	506.0	504.6
175°	507.1	508.1	509.1	508.1	508.1	508.1	506.0	505.0	503.0	501.0	501.0
177.5°	499.6	499.6	501.2	500.4	501.2	501.2	500.4	499.6	498.8	498.0	498.8
180°	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0



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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°	27.4	27.4	24.8	21.9	20.2	17.7	17.3	15.7	14.7	15.1	15.1
90°	19.2	16.2	13.1	11.1	9.1	6.1	4.0	2.0	4.0	6.1	9.1
92.5°	128.1	84.6	58.3	43.3	34.8	27.1	18.6	12.5	18.6	27.1	34.8
95°	366.9	216.7	131.1	91.7	65.5	48.4	37.3	34.2	37.3	48.4	65.5
97.5°	402.6	233.3	151.4	108.9	83.0	68.2	59.5	58.5	59.5	68.2	83.0
100°	380.0	230.9	160.3	121.0	96.7	82.7	75.6	74.6	75.6	82.7	96.7
102.5°	360.6	234.1	170.8	134.7	112.9	99.6	93.3	91.5	93.3	99.6	112.9
105°	346.8	243.0	188.5	157.2	138.1	126.0	120.0	116.9	120.0	126.0	138.1
107.5°	345.8	259.4	211.7	182.7	164.7	152.8	146.9	143.9	146.9	152.8	164.7
110°	349.8	273.2	227.8	199.5	182.5	171.4	166.3	163.3	166.3	171.4	182.5



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CATALOG NUMBER: S123DIP-S1165D1025U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	357.9	286.9	244.8	217.3	200.2	189.1	184.1	181.1	184.1	189.1	200.2
115°	370.9	309.4	271.1	244.0	226.8	216.7	210.7	206.6	210.7	216.7	226.8
117.5°	388.3	333.5	295.6	270.3	251.2	242.0	236.9	232.3	236.9	242.0	251.2
120°	401.2	348.8	312.5	287.3	268.1	258.0	253.0	249.9	253.0	258.0	268.1
122.5°	413.3	364.9	329.4	302.7	284.3	273.4	268.3	265.3	268.3	273.4	284.3
125°	432.4	388.1	352.8	325.6	306.4	295.4	289.3	287.3	289.3	295.4	306.4
127.5°	448.2	408.3	374.2	347.0	325.8	314.5	307.0	304.1	307.0	314.5	325.8
130°	458.7	420.3	387.1	359.8	338.7	326.6	317.5	314.5	317.5	326.6	338.7
132.5°	468.4	430.8	398.4	371.9	350.8	336.3	326.4	322.6	326.4	336.3	350.8
135°	480.8	446.6	415.3	388.1	366.9	351.8	340.7	336.7	340.7	351.8	366.9
137.5°	490.1	457.5	427.4	402.2	381.2	365.1	354.3	350.0	354.3	365.1	381.2
140°	494.9	464.7	435.5	410.3	390.1	374.0	363.9	358.9	363.9	374.0	390.1
142.5°	499.8	470.4	441.9	418.3	398.2	383.6	372.7	368.5	372.7	383.6	398.2
145°	505.0	477.8	451.6	428.4	411.3	396.2	387.1	384.1	387.1	396.2	411.3
147.5°	508.3	483.8	459.9	440.1	423.5	410.5	401.6	399.8	401.6	410.5	423.5
150°	509.1	487.9	464.7	446.6	432.4	419.3	411.3	410.3	411.3	419.3	432.4
152.5°	510.7	490.3	470.4	453.0	440.5	429.0	420.9	420.7	420.9	429.0	440.5
155°	511.1	494.9	477.8	463.7	452.6	442.5	436.5	436.5	436.5	442.5	452.6
157.5°	512.1	497.6	483.8	472.9	463.5	454.6	449.8	449.0	449.8	454.6	463.5
160°	512.1	500.0	487.9	477.8	470.7	462.7	458.7	458.7	458.7	462.7	470.7
162.5°	511.3	500.8	490.3	481.8	475.5	469.2	466.0	466.0	466.0	469.2	475.5
165°	509.1	502.0	493.9	486.9	482.8	477.8	475.7	476.8	475.7	477.8	482.8
167.5°	507.5	501.8	495.9	491.5	488.7	484.8	483.8	485.0	483.8	484.8	488.7
170°	505.0	501.0	495.9	493.9	491.9	488.9	487.9	489.9	487.9	488.9	491.9
172.5°	504.2	501.0	496.8	495.5	494.3	492.1	491.9	493.1	491.9	492.1	494.3
175°	502.0	500.0	498.0	497.0	497.0	494.9	495.9	497.0	495.9	494.9	497.0
177.5°	500.4	498.8	498.0	498.0	498.0	497.2	498.0	498.8	498.0	497.2	498.0
180°	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0



TEST NUMBER: P332074-840

CATALOG NUMBER: S123DIP-S1165D1025U840-4F0-1E-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°	14.9	16.0	16.0	17.2	17.2	18.4	18.2	17.1	17.3	19.4	17.3
90°	11.1	13.1	16.2	19.2	22.2	25.2	24.2	25.2	26.3	27.3	29.2
92.5°	43.3	58.3	84.6	128.1	170.6	155.0	116.9	84.8	67.4	59.5	54.2
95°	91.7	131.1	216.7	366.9	532.2	597.7	484.8	362.8	246.0	192.6	156.2
97.5°	108.9	151.4	233.3	402.6	678.2	926.3	991.1	904.6	724.6	594.5	473.9
100°	121.0	160.3	230.9	380.0	645.1	954.6	1153.2	1188.5	1106.8	988.9	845.8
102.5°	134.7	170.8	234.1	360.6	596.7	902.2	1161.2	1282.8	1280.2	1211.4	1120.7
105°	157.2	188.5	243.0	346.8	537.2	810.4	1099.7	1310.4	1411.3	1430.4	1404.2
107.5°	182.7	211.7	259.4	345.8	499.4	729.4	992.1	1231.0	1394.7	1483.0	1518.9
110°	199.5	227.8	273.2	349.8	484.8	683.5	924.3	1155.2	1340.7	1467.6	1538.2



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CATALOG NUMBER: S123DIP-S1165D1025U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	217.3	244.8	286.9	357.9	476.8	652.8	865.5	1080.2	1269.7	1412.0	1502.8
115°	244.0	271.1	309.4	370.9	473.7	620.0	794.4	980.8	1156.2	1304.3	1414.2
117.5°	270.3	295.6	333.5	388.3	475.5	600.6	751.3	908.9	1060.3	1193.3	1304.7
120°	287.3	312.5	348.8	401.2	478.8	591.7	728.8	870.9	1007.0	1128.0	1229.8
122.5°	302.7	329.4	364.9	413.3	484.4	586.0	710.2	841.1	964.3	1076.4	1170.9
125°	325.6	352.8	388.1	432.4	492.9	578.7	686.5	801.4	911.3	1008.0	1088.6
127.5°	347.0	374.2	408.3	448.2	502.6	575.0	665.5	766.7	864.6	952.0	1025.3
130°	359.8	387.1	420.3	458.7	509.1	572.6	654.2	745.0	835.7	917.3	985.8
132.5°	371.9	398.4	430.8	468.4	513.9	571.8	643.7	724.8	808.2	884.2	949.6
135°	388.1	415.3	446.6	480.8	521.2	570.6	630.1	697.5	769.1	834.7	892.1
137.5°	402.2	427.4	457.5	490.1	525.9	568.4	618.1	672.8	731.4	787.9	837.7
140°	410.3	435.5	464.7	494.9	529.2	567.5	610.9	658.2	709.6	758.0	801.4
142.5°	418.3	441.9	470.4	499.8	531.6	565.9	604.4	644.5	688.7	730.6	768.3
145°	428.4	451.6	477.8	505.0	533.2	563.5	595.7	628.0	661.3	693.5	722.8
147.5°	440.1	459.9	483.8	508.3	533.2	559.7	587.2	614.5	640.9	666.9	687.7
150°	446.6	464.7	487.9	509.1	533.2	556.4	581.6	604.8	628.0	649.1	668.3
152.5°	453.0	470.4	490.3	510.7	530.8	552.4	575.2	595.9	615.9	634.7	650.6
155°	463.7	477.8	494.9	511.1	528.2	545.3	565.5	582.6	598.7	613.9	626.0
157.5°	472.9	483.8	497.6	512.1	524.8	539.1	554.6	568.6	582.0	593.7	603.2
160°	477.8	487.9	500.0	512.1	523.2	534.2	547.3	560.5	571.6	581.6	588.7
162.5°	481.8	490.3	500.8	511.3	520.0	529.4	540.1	550.8	560.3	569.6	575.8
165°	486.9	493.9	502.0	509.1	515.1	522.2	530.2	538.3	544.3	551.4	556.4
167.5°	491.5	495.9	501.8	507.5	510.3	514.9	520.8	527.4	532.0	536.0	539.7
170°	493.9	495.9	501.0	505.0	507.1	510.1	515.1	520.2	523.2	527.1	529.2
172.5°	495.5	496.8	501.0	504.2	504.6	506.0	509.5	513.7	515.9	519.2	520.4
175°	497.0	498.0	500.0	502.0	501.0	501.0	503.0	505.0	506.0	508.1	508.1
177.5°	498.0	498.0	498.8	500.4	498.8	498.0	498.8	499.6	500.4	501.2	501.2
180°	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0



TEST NUMBER: P332074-840

CATALOG NUMBER: S123DIP-S1165D1025U840-4F0-1E-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°	17.1	17.3	16.9	16.0	16.9	17.3	17.1	17.3	19.4	17.3	17.1
90°	28.2	29.2	30.2	29.2	30.2	29.2	28.2	29.2	27.3	26.3	25.2
92.5°	52.4	49.4	50.4	48.6	50.4	49.4	52.4	54.2	59.5	67.4	84.8
95°	137.1	128.1	121.0	116.9	121.0	128.1	137.1	156.2	192.6	246.0	362.8
97.5°	399.6	354.3	327.0	318.3	327.0	354.3	399.6	473.9	594.5	724.6	904.6
100°	744.0	670.3	631.1	632.1	631.1	670.3	744.0	845.8	988.9	1106.8	1188.5
102.5°	1041.5	983.2	950.4	927.2	950.4	983.2	1041.5	1120.7	1211.4	1280.2	1282.8
105°	1357.8	1319.5	1287.3	1282.2	1287.3	1319.5	1357.8	1404.2	1430.4	1411.3	1310.4
107.5°	1519.7	1506.8	1495.9	1486.6	1495.9	1506.8	1519.7	1518.9	1483.0	1394.7	1231.0
110°	1566.5	1574.6	1572.6	1570.5	1572.6	1574.6	1566.5	1538.2	1467.6	1340.7	1155.2



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1554.4	1579.3	1587.0	1587.4	1587.0	1579.3	1554.4	1502.8	1412.0	1269.7	1080.2
115°	1489.9	1534.2	1554.4	1559.4	1554.4	1534.2	1489.9	1414.2	1304.3	1156.2	980.8
117.5°	1383.6	1434.4	1463.5	1470.3	1463.5	1434.4	1383.6	1304.7	1193.3	1060.3	908.9
120°	1309.4	1365.8	1390.1	1396.1	1390.1	1365.8	1309.4	1229.8	1128.0	1007.0	870.9
122.5°	1241.7	1292.5	1319.1	1326.8	1319.1	1292.5	1241.7	1170.9	1076.4	964.3	841.1
125°	1153.2	1197.5	1222.7	1229.8	1222.7	1197.5	1153.2	1088.6	1008.0	911.3	801.4
127.5°	1082.8	1120.7	1143.5	1149.9	1143.5	1120.7	1082.8	1025.3	952.0	864.6	766.7
130°	1039.3	1075.6	1096.7	1104.8	1096.7	1075.6	1039.3	985.8	917.3	835.7	745.0
132.5°	999.8	1036.0	1054.8	1060.5	1054.8	1036.0	999.8	949.6	884.2	808.2	724.8
135°	941.5	971.7	989.9	996.9	989.9	971.7	941.5	892.1	834.7	769.1	697.5
137.5°	879.2	909.9	925.1	929.8	925.1	909.9	879.2	837.7	787.9	731.4	672.8
140°	839.7	867.9	884.0	883.0	884.0	867.9	839.7	801.4	758.0	709.6	658.2
142.5°	801.0	826.0	840.5	839.5	840.5	826.0	801.0	768.3	730.6	688.7	644.5
145°	747.9	769.1	777.2	779.2	777.2	769.1	747.9	722.8	693.5	661.3	628.0
147.5°	706.8	721.1	728.8	729.6	728.8	721.1	706.8	687.7	666.9	640.9	614.5
150°	683.5	694.5	700.5	700.5	700.5	694.5	683.5	668.3	649.1	628.0	604.8
152.5°	662.5	672.8	676.4	676.4	676.4	672.8	662.5	650.6	634.7	615.9	595.9
155°	635.1	643.1	645.1	646.1	645.1	643.1	635.1	626.0	613.9	598.7	582.6
157.5°	611.1	617.1	618.7	618.5	618.7	617.1	611.1	603.2	593.7	582.0	568.6
160°	595.7	601.8	601.8	600.8	601.8	601.8	595.7	588.7	581.6	571.6	560.5
162.5°	580.5	585.6	585.6	584.6	585.6	585.6	580.5	575.8	569.6	560.3	550.8
165°	560.5	564.5	563.5	563.5	563.5	564.5	560.5	556.4	551.4	544.3	538.3
167.5°	541.5	544.3	543.3	543.3	543.3	544.3	541.5	539.7	536.0	532.0	527.4
170°	530.2	532.2	531.2	531.2	531.2	532.2	530.2	529.2	527.1	523.2	520.2
172.5°	520.6	522.6	520.8	520.0	520.8	522.6	520.6	520.4	519.2	515.9	513.7
175°	508.1	509.1	508.1	507.1	508.1	509.1	508.1	508.1	508.1	506.0	505.0
177.5°	500.4	501.2	499.6	499.6	499.6	501.2	500.4	501.2	501.2	500.4	499.6
180°	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0



TEST NUMBER: P332074-840

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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°	18.2	18.4	17.2	17.2	16.0	16.0	14.9	15.1	15.1	14.7	15.7
90°	24.2	25.2	22.2	19.2	16.2	13.1	11.1	9.1	6.1	4.0	2.0
92.5°	116.9	155.0	170.6	128.1	84.6	58.3	43.3	34.8	27.1	18.6	12.5
95°	484.8	597.7	532.2	366.9	216.7	131.1	91.7	65.5	48.4	37.3	34.2
97.5°	991.1	926.3	678.2	402.6	233.3	151.4	108.9	83.0	68.2	59.5	58.5
100°	1153.2	954.6	645.1	380.0	230.9	160.3	121.0	96.7	82.7	75.6	74.6
102.5°	1161.2	902.2	596.7	360.6	234.1	170.8	134.7	112.9	99.6	93.3	91.5
105°	1099.7	810.4	537.2	346.8	243.0	188.5	157.2	138.1	126.0	120.0	116.9
107.5°	992.1	729.4	499.4	345.8	259.4	211.7	182.7	164.7	152.8	146.9	143.9
110°	924.3	683.5	484.8	349.8	273.2	227.8	199.5	182.5	171.4	166.3	163.3



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	865.5	652.8	476.8	357.9	286.9	244.8	217.3	200.2	189.1	184.1	181.1
115°	794.4	620.0	473.7	370.9	309.4	271.1	244.0	226.8	216.7	210.7	206.6
117.5°	751.3	600.6	475.5	388.3	333.5	295.6	270.3	251.2	242.0	236.9	232.3
120°	728.8	591.7	478.8	401.2	348.8	312.5	287.3	268.1	258.0	253.0	249.9
122.5°	710.2	586.0	484.4	413.3	364.9	329.4	302.7	284.3	273.4	268.3	265.3
125°	686.5	578.7	492.9	432.4	388.1	352.8	325.6	306.4	295.4	289.3	287.3
127.5°	665.5	575.0	502.6	448.2	408.3	374.2	347.0	325.8	314.5	307.0	304.1
130°	654.2	572.6	509.1	458.7	420.3	387.1	359.8	338.7	326.6	317.5	314.5
132.5°	643.7	571.8	513.9	468.4	430.8	398.4	371.9	350.8	336.3	326.4	322.6
135°	630.1	570.6	521.2	480.8	446.6	415.3	388.1	366.9	351.8	340.7	336.7
137.5°	618.1	568.4	525.9	490.1	457.5	427.4	402.2	381.2	365.1	354.3	350.0
140°	610.9	567.5	529.2	494.9	464.7	435.5	410.3	390.1	374.0	363.9	358.9
142.5°	604.4	565.9	531.6	499.8	470.4	441.9	418.3	398.2	383.6	372.7	368.5
145°	595.7	563.5	533.2	505.0	477.8	451.6	428.4	411.3	396.2	387.1	384.1
147.5°	587.2	559.7	533.2	508.3	483.8	459.9	440.1	423.5	410.5	401.6	399.8
150°	581.6	556.4	533.2	509.1	487.9	464.7	446.6	432.4	419.3	411.3	410.3
152.5°	575.2	552.4	530.8	510.7	490.3	470.4	453.0	440.5	429.0	420.9	420.7
155°	565.5	545.3	528.2	511.1	494.9	477.8	463.7	452.6	442.5	436.5	436.5
157.5°	554.6	539.1	524.8	512.1	497.6	483.8	472.9	463.5	454.6	449.8	449.0
160°	547.3	534.2	523.2	512.1	500.0	487.9	477.8	470.7	462.7	458.7	458.7
162.5°	540.1	529.4	520.0	511.3	500.8	490.3	481.8	475.5	469.2	466.0	466.0
165°	530.2	522.2	515.1	509.1	502.0	493.9	486.9	482.8	477.8	475.7	476.8
167.5°	520.8	514.9	510.3	507.5	501.8	495.9	491.5	488.7	484.8	483.8	485.0
170°	515.1	510.1	507.1	505.0	501.0	495.9	493.9	491.9	488.9	487.9	489.9
172.5°	509.5	506.0	504.6	504.2	501.0	496.8	495.5	494.3	492.1	491.9	493.1
175°	503.0	501.0	501.0	502.0	500.0	498.0	497.0	497.0	494.9	495.9	497.0
177.5°	498.8	498.0	498.8	500.4	498.8	498.0	498.0	498.0	497.2	498.0	498.8
180°	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0



TEST NUMBER: P332074-840

CATALOG NUMBER: S123DIP-S1165D1025U840-4F0-1E-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°	17.3	17.7	20.2	21.9	24.8	27.4	27.4	26.7	26.7	25.8	25.3
90°	4.0	6.1	9.1	11.1	13.1	16.2	19.2	22.2	25.2	24.2	25.2
92.5°	18.6	27.1	34.8	43.3	58.3	84.6	128.1	170.6	155.0	116.9	84.8
95°	37.3	48.4	65.5	91.7	131.1	216.7	366.9	532.2	597.7	484.8	362.8
97.5°	59.5	68.2	83.0	108.9	151.4	233.3	402.6	678.2	926.3	991.1	904.6
100°	75.6	82.7	96.7	121.0	160.3	230.9	380.0	645.1	954.6	1153.2	1188.5
102.5°	93.3	99.6	112.9	134.7	170.8	234.1	360.6	596.7	902.2	1161.2	1282.8
105°	120.0	126.0	138.1	157.2	188.5	243.0	346.8	537.2	810.4	1099.7	1310.4
107.5°	146.9	152.8	164.7	182.7	211.7	259.4	345.8	499.4	729.4	992.1	1231.0
110°	166.3	171.4	182.5	199.5	227.8	273.2	349.8	484.8	683.5	924.3	1155.2



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	184.1	189.1	200.2	217.3	244.8	286.9	357.9	476.8	652.8	865.5	1080.2
115°	210.7	216.7	226.8	244.0	271.1	309.4	370.9	473.7	620.0	794.4	980.8
117.5°	236.9	242.0	251.2	270.3	295.6	333.5	388.3	475.5	600.6	751.3	908.9
120°	253.0	258.0	268.1	287.3	312.5	348.8	401.2	478.8	591.7	728.8	870.9
122.5°	268.3	273.4	284.3	302.7	329.4	364.9	413.3	484.4	586.0	710.2	841.1
125°	289.3	295.4	306.4	325.6	352.8	388.1	432.4	492.9	578.7	686.5	801.4
127.5°	307.0	314.5	325.8	347.0	374.2	408.3	448.2	502.6	575.0	665.5	766.7
130°	317.5	326.6	338.7	359.8	387.1	420.3	458.7	509.1	572.6	654.2	745.0
132.5°	326.4	336.3	350.8	371.9	398.4	430.8	468.4	513.9	571.8	643.7	724.8
135°	340.7	351.8	366.9	388.1	415.3	446.6	480.8	521.2	570.6	630.1	697.5
137.5°	354.3	365.1	381.2	402.2	427.4	457.5	490.1	525.9	568.4	618.1	672.8
140°	363.9	374.0	390.1	410.3	435.5	464.7	494.9	529.2	567.5	610.9	658.2
142.5°	372.7	383.6	398.2	418.3	441.9	470.4	499.8	531.6	565.9	604.4	644.5
145°	387.1	396.2	411.3	428.4	451.6	477.8	505.0	533.2	563.5	595.7	628.0
147.5°	401.6	410.5	423.5	440.1	459.9	483.8	508.3	533.2	559.7	587.2	614.5
150°	411.3	419.3	432.4	446.6	464.7	487.9	509.1	533.2	556.4	581.6	604.8
152.5°	420.9	429.0	440.5	453.0	470.4	490.3	510.7	530.8	552.4	575.2	595.9
155°	436.5	442.5	452.6	463.7	477.8	494.9	511.1	528.2	545.3	565.5	582.6
157.5°	449.8	454.6	463.5	472.9	483.8	497.6	512.1	524.8	539.1	554.6	568.6
160°	458.7	462.7	470.7	477.8	487.9	500.0	512.1	523.2	534.2	547.3	560.5
162.5°	466.0	469.2	475.5	481.8	490.3	500.8	511.3	520.0	529.4	540.1	550.8
165°	475.7	477.8	482.8	486.9	493.9	502.0	509.1	515.1	522.2	530.2	538.3
167.5°	483.8	484.8	488.7	491.5	495.9	501.8	507.5	510.3	514.9	520.8	527.4
170°	487.9	488.9	491.9	493.9	495.9	501.0	505.0	507.1	510.1	515.1	520.2
172.5°	491.9	492.1	494.3	495.5	496.8	501.0	504.2	504.6	506.0	509.5	513.7
175°	495.9	494.9	497.0	497.0	498.0	500.0	502.0	501.0	501.0	503.0	505.0
177.5°	498.0	497.2	498.0	498.0	498.0	498.8	500.4	498.8	498.0	498.8	499.6
180°	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0	498.0



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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°	24.9	24.5	24.2	24.7	24.2	23.8	24.9
90°	26.3	27.3	29.2	28.2	29.2	30.2	29.2
92.5°	67.4	59.5	54.2	52.4	49.4	50.4	48.6
95°	246.0	192.6	156.2	137.1	128.1	121.0	116.9
97.5°	724.6	594.5	473.9	399.6	354.3	327.0	318.3
100°	1106.8	988.9	845.8	744.0	670.3	631.1	632.1
102.5°	1280.2	1211.4	1120.7	1041.5	983.2	950.4	927.2
105°	1411.3	1430.4	1404.2	1357.8	1319.5	1287.3	1282.2
107.5°	1394.7	1483.0	1518.9	1519.7	1506.8	1495.9	1486.6
110°	1340.7	1467.6	1538.2	1566.5	1574.6	1572.6	1570.5



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	1269.7	1412.0	1502.8	1554.4	1579.3	1587.0	1587.4
115°	1156.2	1304.3	1414.2	1489.9	1534.2	1554.4	1559.4
117.5°	1060.3	1193.3	1304.7	1383.6	1434.4	1463.5	1470.3
120°	1007.0	1128.0	1229.8	1309.4	1365.8	1390.1	1396.1
122.5°	964.3	1076.4	1170.9	1241.7	1292.5	1319.1	1326.8
125°	911.3	1008.0	1088.6	1153.2	1197.5	1222.7	1229.8
127.5°	864.6	952.0	1025.3	1082.8	1120.7	1143.5	1149.9
130°	835.7	917.3	985.8	1039.3	1075.6	1096.7	1104.8
132.5°	808.2	884.2	949.6	999.8	1036.0	1054.8	1060.5
135°	769.1	834.7	892.1	941.5	971.7	989.9	996.9
137.5°	731.4	787.9	837.7	879.2	909.9	925.1	929.8
140°	709.6	758.0	801.4	839.7	867.9	884.0	883.0
142.5°	688.7	730.6	768.3	801.0	826.0	840.5	839.5
145°	661.3	693.5	722.8	747.9	769.1	777.2	779.2
147.5°	640.9	666.9	687.7	706.8	721.1	728.8	729.6
150°	628.0	649.1	668.3	683.5	694.5	700.5	700.5
152.5°	615.9	634.7	650.6	662.5	672.8	676.4	676.4
155°	598.7	613.9	626.0	635.1	643.1	645.1	646.1
157.5°	582.0	593.7	603.2	611.1	617.1	618.7	618.5
160°	571.6	581.6	588.7	595.7	601.8	601.8	600.8
162.5°	560.3	569.6	575.8	580.5	585.6	585.6	584.6
165°	544.3	551.4	556.4	560.5	564.5	563.5	563.5
167.5°	532.0	536.0	539.7	541.5	544.3	543.3	543.3
170°	523.2	527.1	529.2	530.2	532.2	531.2	531.2
172.5°	515.9	519.2	520.4	520.6	522.6	520.8	520.0
175°	506.0	508.1	508.1	508.1	509.1	508.1	507.1
177.5°	500.4	501.2	501.2	500.4	501.2	499.6	499.6
180°	498.0	498.0	498.0	498.0	498.0	498.0	498.0

(END OF REPORT)