

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: P332645

Luminaire Tested: **S124DIP-S1020D810U835-4F0-1E-UDD-A4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332645
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DIP-S1020D810U835-4F0-1E-UDD-A4
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7501.1 lumens
Efficiency: N/A
Efficacy: 137.9 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: Semi-Direct

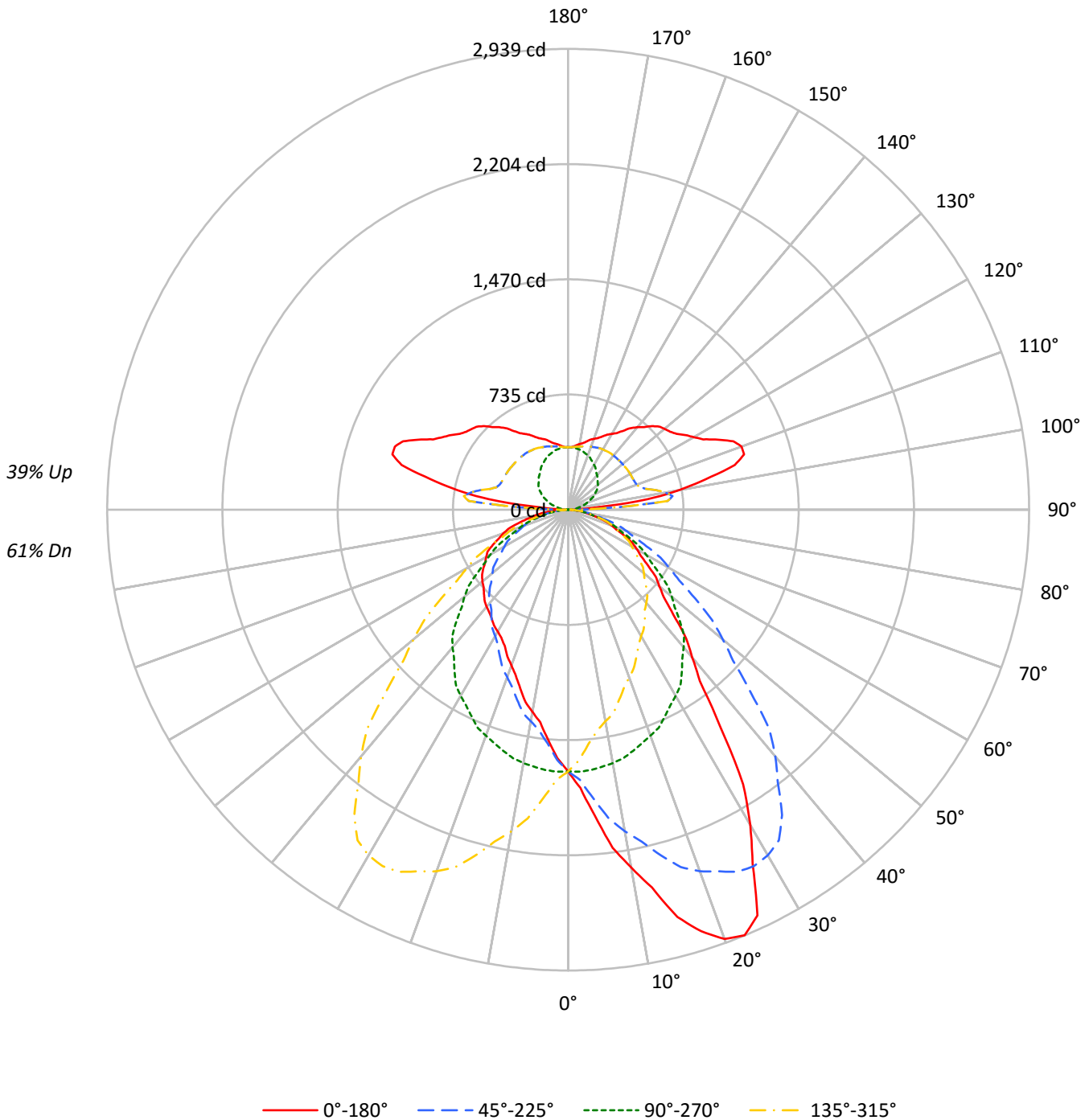
Input Watts (W): 54.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	61
1	101	96	92	89	94	90	87	84	79	77	74	69	67	65	59	58	57	52
2	92	84	78	73	86	79	74	69	70	66	62	61	58	55	53	50	48	44
3	84	74	67	61	78	70	64	58	62	57	52	54	50	47	47	44	41	38
4	77	66	58	52	72	62	55	50	55	49	45	48	44	40	42	39	36	33
5	71	59	51	45	66	56	48	43	49	44	39	44	39	35	38	34	31	29
6	65	53	45	39	61	50	43	38	45	39	34	39	35	31	35	31	28	25
7	61	48	40	35	57	46	38	33	41	35	30	36	31	28	32	28	25	22
8	56	44	36	31	53	42	34	29	37	31	27	33	28	25	29	25	22	20
9	52	40	33	27	49	38	31	26	34	28	24	30	26	22	27	23	20	18
10	49	37	30	25	46	35	28	24	31	26	22	28	23	20	25	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	13472	13472	13472	13472
5°	15866	13507	11921	13507
10°	18996	13448	10733	13448
15°	22476	13312	9857	13312
20°	25027	13173	9075	13173
25°	25432	12968	8535	12968
30°	21640	12773	8364	12773
35°	16638	12454	8366	12454
40°	12968	12079	8524	12079
45°	10813	11515	8667	11515
50°	9516	10827	8960	10827
55°	8718	10003	9322	10003
60°	8170	9265	9755	9265
65°	7607	8437	10115	8437
70°	6951	7619	10346	7619
75°	6210	6706	10221	6706
80°	5207	5495	9898	5495
85°	3844	3974	9476	3974



TEST NUMBER: P332645

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.6	2.2
10°-20°	501.1	6.7
20°-30°	794.6	10.6
30°-40°	884.3	11.8
40°-50°	805.0	10.7
50°-60°	657.8	8.8
60°-70°	469.6	6.3
70°-80°	258.6	3.4
80°-90°	72.8	1.0
90°-100°	287.5	3.8
100°-110°	598.3	8.0
110°-120°	535.9	7.1
120°-130°	450.8	6.0
130°-140°	375.9	5.0
140°-150°	287.1	3.8
150°-160°	201.8	2.7
160°-170°	118.7	1.6
170°-180°	38.6	0.5
0°-30°	1458.3	19.4
0°-40°	2342.7	31.2
0°-60°	3805.5	50.7
0°-90°	4606.5	61.4
90°-120°	1421.6	19.0
90°-150°	2535.4	33.8
90°-180°	2895.0	38.6
0°-180°	7501.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1669	1669	1669	1669	1669	
5°	1958	1667	1471	1667	1958	199
15°	2689	1593	1179	1593	2689	760
25°	2855	1456	958	1456	2855	1259
35°	1688	1264	849	1264	1688	1072
45°	947	1009	759	1009	947	746
55°	619	711	662	711	619	560
65°	398	442	530	442	398	394
75°	199	215	328	215	199	212
85°	42	43	102	43	42	51
90°	16	1	16	1	16	15
95°	191	26	191	26	191	296
105°	1100	92	1100	92	1100	1088
115°	1056	161	1056	161	1056	1049
125°	843	224	843	224	843	766
135°	754	267	754	267	754	582
145°	615	307	615	307	615	390
155°	515	350	515	350	515	240
165°	450	381	450	381	450	129
175°	405	397	405	397	405	39
180°	398	398	398	398	398	



TEST NUMBER: P332645

CATALOG NUMBER: S124DIP-S1020D810U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1776.1	1775.6	1770.0	1768.9	1765.0	1760.1	1759.0	1750.1	1732.4	1724.1	1721.9
5°	1957.8	1971.6	1953.6	1950.2	1948.1	1925.3	1913.5	1899.7	1867.9	1849.2	1834.7
7.5°	2174.6	2176.2	2168.4	2162.0	2144.4	2124.5	2094.7	2062.9	2025.0	1985.6	1955.8
10°	2317.3	2322.8	2313.8	2312.4	2277.2	2255.0	2210.8	2173.5	2130.6	2082.9	2039.4
12.5°	2467.7	2459.9	2455.4	2425.8	2419.3	2378.9	2327.5	2289.1	2223.0	2168.1	2110.1
15°	2689.2	2674.0	2664.3	2623.5	2603.5	2547.5	2492.8	2450.7	2364.3	2282.0	2219.8
17.5°	2819.1	2834.4	2812.0	2795.2	2743.4	2704.1	2648.3	2559.8	2492.2	2390.0	2311.5
20°	2913.2	2914.5	2902.1	2884.8	2844.0	2794.3	2733.4	2636.6	2555.8	2454.1	2346.3
22.5°	2938.6	2938.9	2933.6	2917.4	2886.6	2846.2	2784.9	2704.1	2606.1	2495.6	2387.8
25°	2855.1	2852.3	2858.6	2876.5	2864.8	2852.3	2817.1	2756.9	2665.7	2548.8	2432.7
27.5°	2544.8	2563.9	2599.0	2643.3	2685.9	2718.4	2727.5	2715.2	2658.6	2562.5	2440.9
30°	2321.4	2344.9	2371.2	2415.4	2501.1	2550.2	2604.2	2644.9	2622.1	2545.4	2432.0
32.5°	2075.9	2081.7	2120.7	2171.0	2249.5	2343.9	2429.4	2512.2	2539.7	2499.5	2404.9
35°	1688.2	1697.8	1740.0	1789.8	1885.9	2001.3	2129.9	2244.7	2339.4	2377.4	2329.0
37.5°	1377.6	1405.4	1435.2	1488.7	1573.3	1677.2	1810.8	1959.3	2100.5	2195.0	2211.1
40°	1230.5	1247.8	1269.2	1310.0	1381.9	1484.2	1599.0	1769.1	1919.1	2054.6	2098.8
42.5°	1114.4	1124.5	1137.6	1174.5	1229.3	1331.0	1435.8	1585.4	1736.0	1898.0	1972.2
45°	947.1	957.5	979.6	1001.0	1042.5	1113.0	1210.5	1333.5	1484.9	1641.2	1778.0
47.5°	826.2	832.9	846.0	869.0	904.2	950.7	1030.0	1132.8	1273.1	1424.8	1570.6
50°	757.7	763.2	773.6	794.3	821.3	862.7	927.7	1023.8	1133.7	1286.5	1429.6
52.5°	703.5	705.7	713.3	727.4	748.8	783.7	837.0	916.5	1018.7	1154.9	1297.4
55°	619.4	622.2	629.1	639.5	658.1	680.2	721.0	780.5	869.7	987.9	1111.6
57.5°	550.3	552.2	558.0	562.0	577.4	595.4	626.7	669.2	736.8	837.0	947.5
60°	506.0	504.7	511.6	515.0	525.4	540.6	564.8	605.6	664.3	745.2	846.8
62.5°	462.9	461.0	466.8	471.3	477.3	490.3	510.0	542.0	589.7	662.8	750.6
65°	398.2	395.4	398.9	404.4	409.9	416.9	431.4	459.7	497.7	550.3	617.3
67.5°	333.2	336.1	336.7	339.4	342.6	352.0	362.0	382.0	408.8	450.9	507.7
70°	294.5	295.2	298.0	298.0	300.0	308.3	316.6	328.4	354.6	393.4	439.7
72.5°	255.8	258.7	257.6	259.8	261.3	266.8	272.9	284.1	306.5	335.3	374.4
75°	199.1	201.2	201.2	201.9	203.9	206.0	210.8	219.1	235.0	256.5	283.4
77.5°	145.2	145.5	146.4	148.9	148.9	152.2	155.8	162.5	170.3	185.0	201.4
80°	112.0	113.4	112.7	114.1	114.1	116.8	118.2	126.5	130.0	139.6	152.8
82.5°	82.1	83.5	83.4	85.3	86.4	87.0	88.9	92.2	95.7	104.2	109.6
85°	41.5	42.9	41.5	42.9	44.9	45.6	47.7	48.4	51.2	53.2	58.1
87.5°	15.5	17.1	17.3	17.7	18.6	19.2	19.6	18.9	20.9	21.6	23.5
90°	16.4	16.4	17.2	16.4	15.6	15.6	14.9	14.1	13.3	14.1	12.5
92.5°	60.2	60.2	62.9	67.1	76.3	92.0	115.6	153.6	206.6	248.0	217.1
95°	190.8	201.0	215.0	239.3	277.6	353.4	458.2	579.4	655.3	637.3	480.9
97.5°	510.0	526.2	549.7	596.8	652.9	734.5	811.0	856.0	823.2	671.2	450.1
100°	717.0	723.3	746.7	794.4	862.5	920.3	958.6	943.0	828.8	628.7	408.2
102.5°	897.2	902.2	926.9	961.5	1003.2	1027.3	1016.2	938.6	781.9	575.5	380.0
105°	1100.2	1104.9	1115.8	1122.1	1120.5	1088.4	1011.0	875.8	696.7	512.9	355.8
107.5°	1175.5	1173.5	1165.7	1147.9	1109.2	1039.5	930.5	786.5	627.9	477.9	351.4
110°	1176.8	1169.8	1155.7	1122.8	1067.3	981.3	867.9	732.7	593.5	466.0	352.6



TEST NUMBER: P332645

CATALOG NUMBER: S124DIP-S1020D810U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1139.9	1128.5	1108.8	1069.0	1006.0	920.0	812.9	693.3	574.1	460.4	356.4
115°	1056.4	1050.1	1025.1	978.2	916.4	841.3	749.9	653.7	555.9	457.4	363.6
117.5°	971.8	966.9	941.6	902.2	849.5	785.8	713.9	634.3	547.8	456.6	371.3
120°	924.2	915.6	895.3	860.9	816.3	760.8	698.3	625.5	543.4	456.6	376.9
122.5°	886.7	878.1	860.9	831.5	793.8	745.2	688.2	618.0	538.4	456.0	382.5
125°	842.9	838.2	823.4	800.7	769.4	726.4	672.5	605.2	530.1	455.1	391.0
127.5°	817.3	812.6	800.1	779.9	748.5	707.6	653.8	589.6	519.0	453.4	397.7
130°	802.3	797.6	785.1	765.5	733.4	692.0	638.8	577.1	512.2	452.7	402.7
132.5°	785.4	780.7	768.8	746.7	715.3	673.9	621.9	563.9	505.9	452.1	407.1
135°	753.8	749.1	736.6	714.7	683.4	644.3	596.6	545.8	496.5	451.2	413.6
137.5°	714.7	709.0	698.7	677.1	647.9	612.6	572.4	529.4	488.4	451.0	417.5
140°	686.5	680.3	669.3	652.1	624.8	591.9	556.7	520.0	484.0	450.4	420.7
142.5°	656.5	652.1	642.4	626.5	602.2	573.8	543.6	511.2	480.3	450.4	423.2
145°	615.4	611.5	603.6	590.4	570.8	548.9	525.5	498.9	473.8	448.8	424.6
147.5°	578.9	577.5	571.6	560.2	545.8	528.6	509.8	488.7	468.1	446.0	425.4
150°	558.3	557.5	552.8	542.7	530.1	516.1	500.4	482.4	463.7	444.1	425.4
152.5°	539.5	538.7	535.9	527.6	517.0	505.4	491.0	475.6	458.7	441.0	424.1
155°	515.3	515.3	512.9	506.7	498.9	489.5	477.8	465.2	451.2	436.3	422.2
157.5°	494.0	494.0	492.6	487.9	482.0	474.5	464.6	454.1	443.5	431.5	420.2
160°	480.9	480.9	480.1	475.4	470.7	464.5	455.9	447.3	437.9	427.7	418.3
162.5°	468.4	469.0	468.2	463.5	460.1	454.5	447.7	440.4	432.9	424.0	416.5
165°	449.6	450.4	451.2	448.0	444.9	441.0	435.5	430.8	424.6	418.3	412.9
167.5°	434.7	435.4	435.5	433.5	431.9	429.6	425.2	421.6	417.1	412.7	409.1
170°	425.4	425.4	426.1	425.4	423.8	421.5	418.3	416.0	412.1	408.9	406.6
172.5°	416.0	417.2	418.0	417.2	416.3	414.6	412.7	411.0	407.7	405.2	404.1
175°	405.0	406.6	408.2	406.6	406.6	406.6	405.0	404.3	402.7	401.1	401.1
177.5°	398.6	399.9	401.1	400.5	401.1	400.5	400.5	399.9	399.2	398.6	398.6
180°	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0



TEST NUMBER: P332645

CATALOG NUMBER: S124DIP-S1020D810U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1722.5	1714.7	1709.2	1704.8	1692.6	1685.4	1679.9	1672.1	1663.3	1653.9	1642.3
5°	1820.2	1796.7	1779.4	1753.2	1728.3	1707.5	1686.1	1666.7	1643.2	1617.7	1599.0
7.5°	1922.9	1888.0	1843.2	1804.3	1760.6	1722.6	1688.6	1653.7	1617.5	1582.4	1550.2
10°	1988.2	1943.3	1893.5	1834.7	1779.4	1730.3	1684.7	1640.5	1597.6	1554.7	1518.1
12.5°	2058.4	2002.4	1928.9	1860.2	1798.2	1732.6	1677.5	1623.3	1571.6	1526.5	1483.8
15°	2152.7	2071.8	1986.8	1894.9	1813.3	1736.6	1661.2	1592.8	1534.7	1475.2	1433.8
17.5°	2210.7	2110.6	2013.4	1917.3	1818.5	1721.8	1640.5	1561.5	1488.8	1429.8	1377.5
20°	2248.8	2149.3	2028.3	1932.2	1814.7	1715.1	1621.1	1533.3	1457.3	1394.4	1340.4
22.5°	2282.0	2167.0	2046.0	1919.5	1802.5	1696.9	1594.0	1505.7	1428.0	1361.7	1310.0
25°	2300.0	2167.9	2036.6	1910.8	1778.0	1652.9	1559.6	1455.9	1372.9	1303.1	1247.8
27.5°	2301.9	2160.7	2012.1	1872.3	1735.3	1618.8	1501.0	1408.3	1322.2	1248.4	1195.3
30°	2295.8	2148.6	1988.9	1837.5	1699.9	1573.4	1471.1	1370.2	1282.4	1209.1	1153.8
32.5°	2276.5	2123.1	1959.0	1798.8	1656.2	1532.5	1426.9	1330.9	1245.3	1173.1	1115.1
35°	2220.5	2069.1	1894.2	1727.6	1581.7	1456.6	1361.2	1263.7	1178.0	1109.5	1053.6
37.5°	2133.0	1996.1	1818.3	1645.9	1502.6	1376.9	1282.4	1194.3	1117.0	1047.5	990.1
40°	2056.6	1936.3	1758.0	1590.0	1435.2	1315.6	1227.1	1146.2	1069.5	1003.8	949.2
42.5°	1968.7	1863.9	1699.4	1521.4	1372.1	1252.0	1165.7	1093.1	1020.8	960.1	905.5
45°	1811.9	1742.8	1587.9	1423.4	1267.9	1154.5	1072.2	1008.6	947.8	888.3	842.7
47.5°	1631.6	1597.3	1467.0	1310.7	1163.1	1051.3	980.0	921.2	867.9	817.5	777.3
50°	1510.5	1493.9	1381.2	1230.5	1089.5	984.4	912.5	862.1	816.4	772.2	734.2
52.5°	1391.0	1390.5	1288.9	1150.9	1020.4	919.2	847.8	800.7	761.1	725.2	691.0
55°	1208.4	1227.8	1148.3	1025.2	908.4	817.1	752.8	710.7	683.0	653.3	627.7
57.5°	1040.7	1072.8	1007.2	898.8	801.4	717.3	661.3	629.6	600.2	582.2	563.6
60°	931.2	961.6	910.5	819.2	727.3	655.4	602.1	573.8	548.2	535.8	522.6
62.5°	833.9	861.0	823.1	738.5	658.7	589.5	544.6	517.4	500.1	486.5	477.8
65°	694.8	717.6	685.1	623.6	555.1	499.8	463.2	441.7	425.2	419.6	409.9
67.5°	561.6	582.4	564.8	512.5	457.6	415.8	387.1	366.5	356.7	351.9	345.0
70°	482.5	503.3	484.6	439.0	396.8	361.6	334.6	322.8	312.5	310.4	300.7
72.5°	415.6	429.7	411.1	375.4	339.3	309.6	288.7	276.4	271.0	267.3	262.0
75°	311.8	324.2	311.8	284.1	258.5	237.8	219.8	215.0	208.8	206.7	203.2
77.5°	220.7	231.4	221.9	204.6	185.5	169.5	159.8	153.6	152.2	148.6	150.3
80°	168.7	175.6	166.6	154.9	139.6	128.6	121.7	118.2	114.1	112.7	115.4
82.5°	121.1	124.2	119.6	111.7	100.4	93.2	88.5	84.5	83.6	83.9	83.9
85°	62.9	62.2	61.5	54.6	51.2	46.3	43.6	42.9	42.2	43.6	44.9
87.5°	23.2	23.8	22.3	20.1	18.2	16.4	15.4	14.5	15.4	16.4	17.1
90°	10.9	10.9	6.3	6.3	5.5	4.7	2.3	0.8	2.3	4.7	5.5
92.5°	157.9	97.3	57.5	41.3	29.9	20.3	13.0	8.9	13.0	20.3	29.9
95°	294.0	165.8	97.7	64.9	46.1	36.0	28.1	25.8	28.1	36.0	46.1
97.5°	264.3	158.4	106.0	78.5	62.4	53.0	46.3	46.3	46.3	53.0	62.4
100°	248.7	160.3	114.2	89.1	74.3	64.9	59.4	59.4	59.4	64.9	74.3
102.5°	244.3	166.5	124.8	101.0	86.8	78.0	73.2	71.9	73.2	78.0	86.8
105°	246.3	181.4	143.9	121.2	107.1	97.7	93.8	91.5	93.8	97.7	107.1
107.5°	257.9	198.8	164.4	142.0	128.5	118.5	114.6	113.1	114.6	118.5	128.5
110°	266.6	211.9	177.5	156.4	142.3	132.9	129.0	127.5	129.0	132.9	142.3



TEST NUMBER: P332645

CATALOG NUMBER: S124DIP-S1020D810U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	276.0	224.4	191.3	170.1	156.1	147.3	142.8	141.2	142.8	147.3	156.1
115°	290.9	244.0	212.7	191.6	176.7	168.9	163.4	161.1	163.4	168.9	176.7
117.5°	306.0	262.9	233.2	211.3	197.4	188.8	183.9	181.7	183.9	188.8	197.4
120°	316.7	276.0	246.3	224.4	211.1	202.5	197.0	195.5	197.0	202.5	211.1
122.5°	326.7	288.5	258.8	237.5	223.0	215.0	209.6	208.0	209.6	215.0	223.0
125°	341.7	305.7	277.6	255.7	240.8	232.2	227.5	224.4	227.5	232.2	240.8
127.5°	354.7	321.7	294.5	272.4	256.9	247.1	241.5	239.0	241.5	247.1	256.9
130°	362.8	332.3	305.7	283.1	268.2	256.5	250.2	247.1	250.2	256.5	268.2
132.5°	370.9	341.1	314.5	293.1	277.0	265.9	257.7	255.2	257.7	265.9	277.0
135°	381.6	353.4	327.6	307.3	290.9	277.6	269.8	266.6	269.8	277.6	290.9
137.5°	389.1	362.8	338.7	319.3	302.3	289.6	281.0	278.1	281.0	289.6	302.3
140°	394.1	369.1	345.6	326.8	310.4	297.1	288.5	286.2	288.5	297.1	310.4
142.5°	397.8	374.7	351.9	333.7	317.9	305.3	297.3	294.9	297.3	305.3	317.9
145°	401.9	380.8	360.5	343.3	328.4	317.5	309.6	307.3	309.6	317.5	328.4
147.5°	405.5	387.1	368.0	352.5	340.1	328.9	322.0	321.2	322.0	328.9	340.1
150°	407.4	390.2	373.0	358.1	346.4	337.0	330.8	330.0	330.8	337.0	346.4
152.5°	408.6	392.7	377.4	363.8	353.3	344.5	338.3	338.1	338.3	344.5	353.3
155°	409.7	396.4	383.1	371.4	362.8	355.0	350.3	349.5	350.3	355.0	362.8
157.5°	409.7	399.1	387.8	378.6	371.1	365.0	360.6	360.6	360.6	365.0	371.1
160°	409.7	400.3	391.0	382.4	376.1	370.6	367.5	367.5	367.5	370.6	376.1
162.5°	409.7	401.6	392.8	386.1	380.5	375.6	373.1	373.8	373.1	375.6	380.5
165°	408.2	401.9	394.9	390.2	386.3	382.4	380.8	380.8	380.8	382.4	386.3
167.5°	406.3	401.8	396.6	393.0	390.8	387.8	387.1	387.8	387.1	387.8	390.8
170°	405.0	401.1	397.2	394.9	393.3	391.0	390.2	391.0	390.2	391.0	393.3
172.5°	403.8	400.5	397.8	396.1	395.2	393.5	393.3	394.1	393.3	393.5	395.2
175°	401.9	399.6	398.0	398.0	397.2	396.4	396.4	397.2	396.4	396.4	397.2
177.5°	399.9	398.6	398.0	398.0	398.0	397.4	398.0	398.6	398.0	397.4	398.0
180°	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0



TEST NUMBER: P332645

CATALOG NUMBER: S124DIP-S1020D810U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1636.7	1631.8	1624.6	1614.6	1606.3	1597.5	1595.3	1591.9	1598.6	1593.0	1591.4
5°	1583.1	1568.6	1549.9	1528.5	1516.0	1498.1	1494.6	1487.7	1480.8	1480.1	1473.2
7.5°	1526.3	1505.0	1480.5	1458.7	1438.5	1418.8	1406.0	1403.2	1393.0	1387.0	1380.1
10°	1489.8	1463.5	1435.2	1414.4	1390.9	1370.2	1355.7	1347.4	1340.4	1332.8	1325.9
12.5°	1446.6	1418.7	1395.3	1372.9	1345.0	1329.2	1305.3	1290.9	1289.6	1289.7	1271.7
15°	1396.4	1368.8	1332.8	1301.0	1285.8	1255.4	1242.3	1225.7	1215.3	1204.9	1196.7
17.5°	1339.1	1304.6	1276.6	1240.1	1211.0	1186.8	1169.6	1159.6	1144.0	1129.3	1118.7
20°	1303.1	1266.5	1236.7	1198.0	1166.2	1136.5	1122.0	1108.2	1096.4	1084.0	1072.2
22.5°	1266.6	1228.3	1191.9	1154.3	1124.8	1093.4	1079.4	1060.6	1049.4	1042.5	1030.7
25°	1209.1	1167.6	1126.1	1090.2	1059.8	1032.1	1013.5	998.9	986.5	981.0	973.4
27.5°	1146.6	1105.4	1065.3	1024.5	990.0	969.9	955.0	944.0	936.9	929.5	926.1
30°	1106.8	1063.9	1021.1	983.0	951.2	931.2	917.4	909.8	904.2	900.8	897.3
32.5°	1066.4	1024.1	979.0	944.3	915.8	898.0	887.5	879.9	877.1	875.9	874.6
35°	1001.7	958.8	917.4	886.3	859.3	852.4	843.4	839.2	837.9	842.7	844.8
37.5°	939.1	899.3	861.1	830.9	813.3	803.2	800.1	800.3	805.2	809.5	814.5
40°	898.7	860.0	824.0	797.8	781.2	775.0	773.6	777.0	782.6	787.4	792.9
42.5°	859.4	821.3	788.6	764.0	752.4	746.7	747.6	751.0	758.8	764.7	773.0
45°	798.5	766.7	734.9	714.8	705.1	706.5	706.5	712.7	720.3	729.3	738.3
47.5°	741.1	709.0	682.9	666.0	661.0	659.8	663.7	671.8	682.7	693.8	706.4
50°	702.4	671.9	649.1	633.9	628.4	630.5	636.0	643.6	656.7	670.6	683.7
52.5°	663.1	635.4	614.3	600.2	596.3	600.1	605.6	617.6	629.1	644.0	659.9
55°	602.1	578.6	562.0	551.7	550.3	552.4	558.6	571.7	588.3	607.0	622.2
57.5°	541.4	521.8	506.6	499.4	500.1	502.0	512.3	527.9	545.6	565.5	585.1
60°	500.5	482.5	470.1	464.6	465.2	469.4	481.8	496.4	518.5	537.8	558.6
62.5°	461.8	446.0	434.1	429.2	428.2	437.3	449.2	464.3	486.4	508.0	530.4
65°	399.6	387.1	377.5	374.7	376.8	383.7	398.9	418.9	437.6	460.4	483.9
67.5°	338.7	328.5	321.9	323.1	325.6	335.8	348.6	365.8	387.0	410.6	433.9
70°	300.0	290.3	284.8	285.5	289.7	302.1	313.2	330.4	353.3	377.5	396.8
72.5°	260.2	253.8	248.9	251.8	255.9	264.5	278.3	295.6	315.7	338.2	358.6
75°	199.8	199.8	197.0	199.1	205.3	213.6	224.0	242.0	262.0	280.0	296.6
77.5°	148.2	146.7	148.5	151.0	154.6	164.4	176.3	189.1	204.2	222.2	235.9
80°	113.4	114.1	117.5	121.7	123.1	130.7	143.1	154.9	166.6	181.8	194.9
82.5°	85.2	85.9	87.7	92.9	94.3	102.5	110.5	122.2	132.9	143.1	154.0
85°	46.3	46.3	49.8	51.8	55.3	60.8	65.7	72.6	82.3	89.2	99.5
87.5°	18.9	18.9	22.1	23.2	25.2	28.3	29.2	35.4	37.8	40.7	45.7
90°	6.3	6.3	10.9	10.9	12.5	14.1	13.3	14.1	14.9	15.6	15.6
92.5°	41.3	57.5	97.3	157.9	217.1	248.0	206.6	153.6	115.6	92.0	76.3
95°	64.9	97.7	165.8	294.0	480.9	637.3	655.3	579.4	458.2	353.4	277.6
97.5°	78.5	106.0	158.4	264.3	450.1	671.2	823.2	856.0	811.0	734.5	652.9
100°	89.1	114.2	160.3	248.7	408.2	628.7	828.8	943.0	958.6	920.3	862.5
102.5°	101.0	124.8	166.5	244.3	380.0	575.5	781.9	938.6	1016.2	1027.3	1003.2
105°	121.2	143.9	181.4	246.3	355.8	512.9	696.7	875.8	1011.0	1088.4	1120.5
107.5°	142.0	164.4	198.8	257.9	351.4	477.9	627.9	786.5	930.5	1039.5	1109.2
110°	156.4	177.5	211.9	266.6	352.6	466.0	593.5	732.7	867.9	981.3	1067.3



TEST NUMBER: P332645

CATALOG NUMBER: S124DIP-S1020D810U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	170.1	191.3	224.4	276.0	356.4	460.4	574.1	693.3	812.9	920.0	1006.0
115°	191.6	212.7	244.0	290.9	363.6	457.4	555.9	653.7	749.9	841.3	916.4
117.5°	211.3	233.2	262.9	306.0	371.3	456.6	547.8	634.3	713.9	785.8	849.5
120°	224.4	246.3	276.0	316.7	376.9	456.6	543.4	625.5	698.3	760.8	816.3
122.5°	237.5	258.8	288.5	326.7	382.5	456.0	538.4	618.0	688.2	745.2	793.8
125°	255.7	277.6	305.7	341.7	391.0	455.1	530.1	605.2	672.5	726.4	769.4
127.5°	272.4	294.5	321.7	354.7	397.7	453.4	519.0	589.6	653.8	707.6	748.5
130°	283.1	305.7	332.3	362.8	402.7	452.7	512.2	577.1	638.8	692.0	733.4
132.5°	293.1	314.5	341.1	370.9	407.1	452.1	505.9	563.9	621.9	673.9	715.3
135°	307.3	327.6	353.4	381.6	413.6	451.2	496.5	545.8	596.6	644.3	683.4
137.5°	319.3	338.7	362.8	389.1	417.5	451.0	488.4	529.4	572.4	612.6	647.9
140°	326.8	345.6	369.1	394.1	420.7	450.4	484.0	520.0	556.7	591.9	624.8
142.5°	333.7	351.9	374.7	397.8	423.2	450.4	480.3	511.2	543.6	573.8	602.2
145°	343.3	360.5	380.8	401.9	424.6	448.8	473.8	498.9	525.5	548.9	570.8
147.5°	352.5	368.0	387.1	405.5	425.4	446.0	468.1	488.7	509.8	528.6	545.8
150°	358.1	373.0	390.2	407.4	425.4	444.1	463.7	482.4	500.4	516.1	530.1
152.5°	363.8	377.4	392.7	408.6	424.1	441.0	458.7	475.6	491.0	505.4	517.0
155°	371.4	383.1	396.4	409.7	422.2	436.3	451.2	465.2	477.8	489.5	498.9
157.5°	378.6	387.8	399.1	409.7	420.2	431.5	443.5	454.1	464.6	474.5	482.0
160°	382.4	391.0	400.3	409.7	418.3	427.7	437.9	447.3	455.9	464.5	470.7
162.5°	386.1	392.8	401.6	409.7	416.5	424.0	432.9	440.4	447.7	454.5	460.1
165°	390.2	394.9	401.9	408.2	412.9	418.3	424.6	430.8	435.5	441.0	444.9
167.5°	393.0	396.6	401.8	406.3	409.1	412.7	417.1	421.6	425.2	429.6	431.9
170°	394.9	397.2	401.1	405.0	406.6	408.9	412.1	416.0	418.3	421.5	423.8
172.5°	396.1	397.8	400.5	403.8	404.1	405.2	407.7	411.0	412.7	414.6	416.3
175°	398.0	398.0	399.6	401.9	401.1	401.1	402.7	404.3	405.0	406.6	406.6
177.5°	398.0	398.0	398.6	399.9	398.6	398.6	399.2	399.9	400.5	400.5	401.1
180°	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0



TEST NUMBER: P332645

CATALOG NUMBER: S124DIP-S1020D810U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1590.3	1589.2	1585.3	1584.8	1585.3	1589.2	1590.3	1591.4	1593.0	1598.6	1591.9
5°	1469.0	1465.6	1463.5	1471.1	1463.5	1465.6	1469.0	1473.2	1480.1	1480.8	1487.7
7.5°	1377.6	1374.9	1368.8	1366.9	1368.8	1374.9	1377.6	1380.1	1387.0	1393.0	1403.2
10°	1319.0	1316.2	1310.7	1309.3	1310.7	1316.2	1319.0	1325.9	1332.8	1340.4	1347.4
12.5°	1262.6	1257.1	1256.0	1257.3	1256.0	1257.1	1262.6	1271.7	1289.7	1289.6	1290.9
15°	1187.7	1184.9	1177.3	1179.4	1177.3	1184.9	1187.7	1196.7	1204.9	1215.3	1225.7
17.5°	1113.8	1110.5	1101.3	1109.4	1101.3	1110.5	1113.8	1118.7	1129.3	1144.0	1159.6
20°	1067.4	1061.8	1057.0	1056.3	1057.0	1061.8	1067.4	1072.2	1084.0	1096.4	1108.2
22.5°	1023.1	1018.2	1017.7	1013.2	1017.7	1018.2	1023.1	1030.7	1042.5	1049.4	1060.6
25°	967.8	963.0	961.6	958.2	961.6	963.0	967.8	973.4	981.0	986.5	998.9
27.5°	925.4	923.0	920.5	921.6	920.5	923.0	925.4	926.1	929.5	936.9	944.0
30°	899.4	898.7	897.3	897.3	897.3	898.7	899.4	897.3	900.8	904.2	909.8
32.5°	877.8	877.7	878.5	878.5	878.5	877.7	877.8	874.6	875.9	877.1	879.9
35°	847.5	849.6	851.0	848.9	851.0	849.6	847.5	844.8	842.7	837.9	839.2
37.5°	820.2	822.2	824.2	826.5	824.2	822.2	820.2	814.5	809.5	805.2	800.3
40°	799.1	804.0	805.4	808.8	805.4	804.0	799.1	792.9	787.4	782.6	777.0
42.5°	779.2	784.6	788.2	788.9	788.2	784.6	779.2	773.0	764.7	758.8	751.0
45°	748.7	754.2	759.1	759.1	759.1	754.2	748.7	738.3	729.3	720.3	712.7
47.5°	717.0	725.0	729.9	731.1	729.9	725.0	717.0	706.4	693.8	682.7	671.8
50°	695.5	705.1	710.0	713.4	710.0	705.1	695.5	683.7	670.6	656.7	643.6
52.5°	674.4	684.1	690.6	692.4	690.6	684.1	674.4	659.9	644.0	629.1	617.6
55°	638.1	651.9	659.5	662.3	659.5	651.9	638.1	622.2	607.0	588.3	571.7
57.5°	603.8	616.5	625.4	627.4	625.4	616.5	603.8	585.1	565.5	545.6	527.9
60°	577.2	591.1	602.1	604.2	602.1	591.1	577.2	558.6	537.8	518.5	496.4
62.5°	550.1	564.5	574.5	579.9	574.5	564.5	550.1	530.4	508.0	486.4	464.3
65°	503.3	517.8	527.5	529.5	527.5	517.8	503.3	483.9	460.4	437.6	418.9
67.5°	452.1	466.6	473.0	477.0	473.0	466.6	452.1	433.9	410.6	387.0	365.8
70°	416.2	427.9	434.8	438.3	434.8	427.9	416.2	396.8	377.5	353.3	330.4
72.5°	375.2	387.5	395.6	396.3	395.6	387.5	375.2	358.6	338.2	315.7	295.6
75°	312.5	323.5	327.7	327.7	327.7	323.5	312.5	296.6	280.0	262.0	242.0
77.5°	247.3	253.0	258.3	259.4	258.3	253.0	247.3	235.9	222.2	204.2	189.1
80°	205.3	208.8	212.9	212.9	212.9	208.8	205.3	194.9	181.8	166.6	154.9
82.5°	162.2	165.1	169.2	168.7	169.2	165.1	162.2	154.0	143.1	132.9	122.2
85°	98.2	104.4	103.7	102.3	103.7	104.4	98.2	99.5	89.2	82.3	72.6
87.5°	47.5	48.2	49.7	50.8	49.7	48.2	47.5	45.7	40.7	37.8	35.4
90°	16.4	17.2	16.4	16.4	16.4	17.2	16.4	15.6	15.6	14.9	14.1
92.5°	67.1	62.9	60.2	60.2	60.2	62.9	67.1	76.3	92.0	115.6	153.6
95°	239.3	215.0	201.0	190.8	201.0	215.0	239.3	277.6	353.4	458.2	579.4
97.5°	596.8	549.7	526.2	510.0	526.2	549.7	596.8	652.9	734.5	811.0	856.0
100°	794.4	746.7	723.3	717.0	723.3	746.7	794.4	862.5	920.3	958.6	943.0
102.5°	961.5	926.9	902.2	897.2	902.2	926.9	961.5	1003.2	1027.3	1016.2	938.6
105°	1122.1	1115.8	1104.9	1100.2	1104.9	1115.8	1122.1	1120.5	1088.4	1011.0	875.8
107.5°	1147.9	1165.7	1173.5	1175.5	1173.5	1165.7	1147.9	1109.2	1039.5	930.5	786.5
110°	1122.8	1155.7	1169.8	1176.8	1169.8	1155.7	1122.8	1067.3	981.3	867.9	732.7



TEST NUMBER: P332645

CATALOG NUMBER: S124DIP-S1020D810U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1069.0	1108.8	1128.5	1139.9	1128.5	1108.8	1069.0	1006.0	920.0	812.9	693.3
115°	978.2	1025.1	1050.1	1056.4	1050.1	1025.1	978.2	916.4	841.3	749.9	653.7
117.5°	902.2	941.6	966.9	971.8	966.9	941.6	902.2	849.5	785.8	713.9	634.3
120°	860.9	895.3	915.6	924.2	915.6	895.3	860.9	816.3	760.8	698.3	625.5
122.5°	831.5	860.9	878.1	886.7	878.1	860.9	831.5	793.8	745.2	688.2	618.0
125°	800.7	823.4	838.2	842.9	838.2	823.4	800.7	769.4	726.4	672.5	605.2
127.5°	779.9	800.1	812.6	817.3	812.6	800.1	779.9	748.5	707.6	653.8	589.6
130°	765.5	785.1	797.6	802.3	797.6	785.1	765.5	733.4	692.0	638.8	577.1
132.5°	746.7	768.8	780.7	785.4	780.7	768.8	746.7	715.3	673.9	621.9	563.9
135°	714.7	736.6	749.1	753.8	749.1	736.6	714.7	683.4	644.3	596.6	545.8
137.5°	677.1	698.7	709.0	714.7	709.0	698.7	677.1	647.9	612.6	572.4	529.4
140°	652.1	669.3	680.3	686.5	680.3	669.3	652.1	624.8	591.9	556.7	520.0
142.5°	626.5	642.4	652.1	656.5	652.1	642.4	626.5	602.2	573.8	543.6	511.2
145°	590.4	603.6	611.5	615.4	611.5	603.6	590.4	570.8	548.9	525.5	498.9
147.5°	560.2	571.6	577.5	578.9	577.5	571.6	560.2	545.8	528.6	509.8	488.7
150°	542.7	552.8	557.5	558.3	557.5	552.8	542.7	530.1	516.1	500.4	482.4
152.5°	527.6	535.9	538.7	539.5	538.7	535.9	527.6	517.0	505.4	491.0	475.6
155°	506.7	512.9	515.3	515.3	515.3	512.9	506.7	498.9	489.5	477.8	465.2
157.5°	487.9	492.6	494.0	494.0	494.0	492.6	487.9	482.0	474.5	464.6	454.1
160°	475.4	480.1	480.9	480.9	480.9	480.1	475.4	470.7	464.5	455.9	447.3
162.5°	463.5	468.2	469.0	468.4	469.0	468.2	463.5	460.1	454.5	447.7	440.4
165°	448.0	451.2	450.4	449.6	450.4	451.2	448.0	444.9	441.0	435.5	430.8
167.5°	433.5	435.5	435.4	434.7	435.4	435.5	433.5	431.9	429.6	425.2	421.6
170°	425.4	426.1	425.4	425.4	425.4	426.1	425.4	423.8	421.5	418.3	416.0
172.5°	417.2	418.0	417.2	416.0	417.2	418.0	417.2	416.3	414.6	412.7	411.0
175°	406.6	408.2	406.6	405.0	406.6	408.2	406.6	406.6	406.6	405.0	404.3
177.5°	400.5	401.1	399.9	398.6	399.9	401.1	400.5	401.1	400.5	400.5	399.9
180°	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0



TEST NUMBER: P332645

CATALOG NUMBER: S124DIP-S1020D810U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1595.3	1597.5	1606.3	1614.6	1624.6	1631.8	1636.7	1642.3	1653.9	1663.3	1672.1
5°	1494.6	1498.1	1516.0	1528.5	1549.9	1568.6	1583.1	1599.0	1617.7	1643.2	1666.7
7.5°	1406.0	1418.8	1438.5	1458.7	1480.5	1505.0	1526.3	1550.2	1582.4	1617.5	1653.7
10°	1355.7	1370.2	1390.9	1414.4	1435.2	1463.5	1489.8	1518.1	1554.7	1597.6	1640.5
12.5°	1305.3	1329.2	1345.0	1372.9	1395.3	1418.7	1446.6	1483.8	1526.5	1571.6	1623.3
15°	1242.3	1255.4	1285.8	1301.0	1332.8	1368.8	1396.4	1433.8	1475.2	1534.7	1592.8
17.5°	1169.6	1186.8	1211.0	1240.1	1276.6	1304.6	1339.1	1377.5	1429.8	1488.8	1561.5
20°	1122.0	1136.5	1166.2	1198.0	1236.7	1266.5	1303.1	1340.4	1394.4	1457.3	1533.3
22.5°	1079.4	1093.4	1124.8	1154.3	1191.9	1228.3	1266.6	1310.0	1361.7	1428.0	1505.7
25°	1013.5	1032.1	1059.8	1090.2	1126.1	1167.6	1209.1	1247.8	1303.1	1372.9	1455.9
27.5°	955.0	969.9	990.0	1024.5	1065.3	1105.4	1146.6	1195.3	1248.4	1322.2	1408.3
30°	917.4	931.2	951.2	983.0	1021.1	1063.9	1106.8	1153.8	1209.1	1282.4	1370.2
32.5°	887.5	898.0	915.8	944.3	979.0	1024.1	1066.4	1115.1	1173.1	1245.3	1330.9
35°	843.4	852.4	859.3	886.3	917.4	958.8	1001.7	1053.6	1109.5	1178.0	1263.7
37.5°	800.1	803.2	813.3	830.9	861.1	899.3	939.1	990.1	1047.5	1117.0	1194.3
40°	773.6	775.0	781.2	797.8	824.0	860.0	898.7	949.2	1003.8	1069.5	1146.2
42.5°	747.6	746.7	752.4	764.0	788.6	821.3	859.4	905.5	960.1	1020.8	1093.1
45°	706.5	706.5	705.1	714.8	734.9	766.7	798.5	842.7	888.3	947.8	1008.6
47.5°	663.7	659.8	661.0	666.0	682.9	709.0	741.1	777.3	817.5	867.9	921.2
50°	636.0	630.5	628.4	633.9	649.1	671.9	702.4	734.2	772.2	816.4	862.1
52.5°	605.6	600.1	596.3	600.2	614.3	635.4	663.1	691.0	725.2	761.1	800.7
55°	558.6	552.4	550.3	551.7	562.0	578.6	602.1	627.7	653.3	683.0	710.7
57.5°	512.3	502.0	500.1	499.4	506.6	521.8	541.4	563.6	582.2	600.2	629.6
60°	481.8	469.4	465.2	464.6	470.1	482.5	500.5	522.6	535.8	548.2	573.8
62.5°	449.2	437.3	428.2	429.2	434.1	446.0	461.8	477.8	486.5	500.1	517.4
65°	398.9	383.7	376.8	374.7	377.5	387.1	399.6	409.9	419.6	425.2	441.7
67.5°	348.6	335.8	325.6	323.1	321.9	328.5	338.7	345.0	351.9	356.7	366.5
70°	313.2	302.1	289.7	285.5	284.8	290.3	300.0	300.7	310.4	312.5	322.8
72.5°	278.3	264.5	255.9	251.8	248.9	253.8	260.2	262.0	267.3	271.0	276.4
75°	224.0	213.6	205.3	199.1	197.0	199.8	199.8	203.2	206.7	208.8	215.0
77.5°	176.3	164.4	154.6	151.0	148.5	146.7	148.2	150.3	148.6	152.2	153.6
80°	143.1	130.7	123.1	121.7	117.5	114.1	113.4	115.4	112.7	114.1	118.2
82.5°	110.5	102.5	94.3	92.9	87.7	85.9	85.2	83.9	83.9	83.6	84.5
85°	65.7	60.8	55.3	51.8	49.8	46.3	46.3	44.9	43.6	42.2	42.9
87.5°	29.2	28.3	25.2	23.2	22.1	18.9	18.9	17.1	16.4	15.4	14.5
90°	13.3	14.1	12.5	10.9	10.9	6.3	6.3	5.5	4.7	2.3	0.8
92.5°	206.6	248.0	217.1	157.9	97.3	57.5	41.3	29.9	20.3	13.0	8.9
95°	655.3	637.3	480.9	294.0	165.8	97.7	64.9	46.1	36.0	28.1	25.8
97.5°	823.2	671.2	450.1	264.3	158.4	106.0	78.5	62.4	53.0	46.3	46.3
100°	828.8	628.7	408.2	248.7	160.3	114.2	89.1	74.3	64.9	59.4	59.4
102.5°	781.9	575.5	380.0	244.3	166.5	124.8	101.0	86.8	78.0	73.2	71.9
105°	696.7	512.9	355.8	246.3	181.4	143.9	121.2	107.1	97.7	93.8	91.5
107.5°	627.9	477.9	351.4	257.9	198.8	164.4	142.0	128.5	118.5	114.6	113.1
110°	593.5	466.0	352.6	266.6	211.9	177.5	156.4	142.3	132.9	129.0	127.5



TEST NUMBER: P332645

CATALOG NUMBER: S124DIP-S1020D810U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	574.1	460.4	356.4	276.0	224.4	191.3	170.1	156.1	147.3	142.8	141.2
115°	555.9	457.4	363.6	290.9	244.0	212.7	191.6	176.7	168.9	163.4	161.1
117.5°	547.8	456.6	371.3	306.0	262.9	233.2	211.3	197.4	188.8	183.9	181.7
120°	543.4	456.6	376.9	316.7	276.0	246.3	224.4	211.1	202.5	197.0	195.5
122.5°	538.4	456.0	382.5	326.7	288.5	258.8	237.5	223.0	215.0	209.6	208.0
125°	530.1	455.1	391.0	341.7	305.7	277.6	255.7	240.8	232.2	227.5	224.4
127.5°	519.0	453.4	397.7	354.7	321.7	294.5	272.4	256.9	247.1	241.5	239.0
130°	512.2	452.7	402.7	362.8	332.3	305.7	283.1	268.2	256.5	250.2	247.1
132.5°	505.9	452.1	407.1	370.9	341.1	314.5	293.1	277.0	265.9	257.7	255.2
135°	496.5	451.2	413.6	381.6	353.4	327.6	307.3	290.9	277.6	269.8	266.6
137.5°	488.4	451.0	417.5	389.1	362.8	338.7	319.3	302.3	289.6	281.0	278.1
140°	484.0	450.4	420.7	394.1	369.1	345.6	326.8	310.4	297.1	288.5	286.2
142.5°	480.3	450.4	423.2	397.8	374.7	351.9	333.7	317.9	305.3	297.3	294.9
145°	473.8	448.8	424.6	401.9	380.8	360.5	343.3	328.4	317.5	309.6	307.3
147.5°	468.1	446.0	425.4	405.5	387.1	368.0	352.5	340.1	328.9	322.0	321.2
150°	463.7	444.1	425.4	407.4	390.2	373.0	358.1	346.4	337.0	330.8	330.0
152.5°	458.7	441.0	424.1	408.6	392.7	377.4	363.8	353.3	344.5	338.3	338.1
155°	451.2	436.3	422.2	409.7	396.4	383.1	371.4	362.8	355.0	350.3	349.5
157.5°	443.5	431.5	420.2	409.7	399.1	387.8	378.6	371.1	365.0	360.6	360.6
160°	437.9	427.7	418.3	409.7	400.3	391.0	382.4	376.1	370.6	367.5	367.5
162.5°	432.9	424.0	416.5	409.7	401.6	392.8	386.1	380.5	375.6	373.1	373.8
165°	424.6	418.3	412.9	408.2	401.9	394.9	390.2	386.3	382.4	380.8	380.8
167.5°	417.1	412.7	409.1	406.3	401.8	396.6	393.0	390.8	387.8	387.1	387.8
170°	412.1	408.9	406.6	405.0	401.1	397.2	394.9	393.3	391.0	390.2	391.0
172.5°	407.7	405.2	404.1	403.8	400.5	397.8	396.1	395.2	393.5	393.3	394.1
175°	402.7	401.1	401.1	401.9	399.6	398.0	398.0	397.2	396.4	396.4	397.2
177.5°	399.2	398.6	398.6	399.9	398.6	398.0	398.0	398.0	397.4	398.0	398.6
180°	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0



TEST NUMBER: P332645

CATALOG NUMBER: S124DIP-S1020D810U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1679.9	1685.4	1692.6	1704.8	1709.2	1714.7	1722.5	1721.9	1724.1	1732.4	1750.1
5°	1686.1	1707.5	1728.3	1753.2	1779.4	1796.7	1820.2	1834.7	1849.2	1867.9	1899.7
7.5°	1688.6	1722.6	1760.6	1804.3	1843.2	1888.0	1922.9	1955.8	1985.6	2025.0	2062.9
10°	1684.7	1730.3	1779.4	1834.7	1893.5	1943.3	1988.2	2039.4	2082.9	2130.6	2173.5
12.5°	1677.5	1732.6	1798.2	1860.2	1928.9	2002.4	2058.4	2110.1	2168.1	2223.0	2289.1
15°	1661.2	1736.6	1813.3	1894.9	1986.8	2071.8	2152.7	2219.8	2282.0	2364.3	2450.7
17.5°	1640.5	1721.8	1818.5	1917.3	2013.4	2110.6	2210.7	2311.5	2390.0	2492.2	2559.8
20°	1621.1	1715.1	1814.7	1932.2	2028.3	2149.3	2248.8	2346.3	2454.1	2555.8	2636.6
22.5°	1594.0	1696.9	1802.5	1919.5	2046.0	2167.0	2282.0	2387.8	2495.6	2606.1	2704.1
25°	1559.6	1652.9	1778.0	1910.8	2036.6	2167.9	2300.0	2432.7	2548.8	2665.7	2756.9
27.5°	1501.0	1618.8	1735.3	1872.3	2012.1	2160.7	2301.9	2440.9	2562.5	2658.6	2715.2
30°	1471.1	1573.4	1699.9	1837.5	1988.9	2148.6	2295.8	2432.0	2545.4	2622.1	2644.9
32.5°	1426.9	1532.5	1656.2	1798.8	1959.0	2123.1	2276.5	2404.9	2499.5	2539.7	2512.2
35°	1361.2	1456.6	1581.7	1727.6	1894.2	2069.1	2220.5	2329.0	2377.4	2339.4	2244.7
37.5°	1282.4	1376.9	1502.6	1645.9	1818.3	1996.1	2133.0	2211.1	2195.0	2100.5	1959.3
40°	1227.1	1315.6	1435.2	1590.0	1758.0	1936.3	2056.6	2098.8	2054.6	1919.1	1769.1
42.5°	1165.7	1252.0	1372.1	1521.4	1699.4	1863.9	1968.7	1972.2	1898.0	1736.0	1585.4
45°	1072.2	1154.5	1267.9	1423.4	1587.9	1742.8	1811.9	1778.0	1641.2	1484.9	1333.5
47.5°	980.0	1051.3	1163.1	1310.7	1467.0	1597.3	1631.6	1570.6	1424.8	1273.1	1132.8
50°	912.5	984.4	1089.5	1230.5	1381.2	1493.9	1510.5	1429.6	1286.5	1133.7	1023.8
52.5°	847.8	919.2	1020.4	1150.9	1288.9	1390.5	1391.0	1297.4	1154.9	1018.7	916.5
55°	752.8	817.1	908.4	1025.2	1148.3	1227.8	1208.4	1111.6	987.9	869.7	780.5
57.5°	661.3	717.3	801.4	898.8	1007.2	1072.8	1040.7	947.5	837.0	736.8	669.2
60°	602.1	655.4	727.3	819.2	910.5	961.6	931.2	846.8	745.2	664.3	605.6
62.5°	544.6	589.5	658.7	738.5	823.1	861.0	833.9	750.6	662.8	589.7	542.0
65°	463.2	499.8	555.1	623.6	685.1	717.6	694.8	617.3	550.3	497.7	459.7
67.5°	387.1	415.8	457.6	512.5	564.8	582.4	561.6	507.7	450.9	408.8	382.0
70°	334.6	361.6	396.8	439.0	484.6	503.3	482.5	439.7	393.4	354.6	328.4
72.5°	288.7	309.6	339.3	375.4	411.1	429.7	415.6	374.4	335.3	306.5	284.1
75°	219.8	237.8	258.5	284.1	311.8	324.2	311.8	283.4	256.5	235.0	219.1
77.5°	159.8	169.5	185.5	204.6	221.9	231.4	220.7	201.4	185.0	170.3	162.5
80°	121.7	128.6	139.6	154.9	166.6	175.6	168.7	152.8	139.6	130.0	126.5
82.5°	88.5	93.2	100.4	111.7	119.6	124.2	121.1	109.6	104.2	95.7	92.2
85°	43.6	46.3	51.2	54.6	61.5	62.2	62.9	58.1	53.2	51.2	48.4
87.5°	15.4	16.4	18.2	20.1	22.3	23.8	23.2	23.5	21.6	20.9	18.9
90°	2.3	4.7	5.5	6.3	6.3	10.9	10.9	12.5	14.1	13.3	14.1
92.5°	13.0	20.3	29.9	41.3	57.5	97.3	157.9	217.1	248.0	206.6	153.6
95°	28.1	36.0	46.1	64.9	97.7	165.8	294.0	480.9	637.3	655.3	579.4
97.5°	46.3	53.0	62.4	78.5	106.0	158.4	264.3	450.1	671.2	823.2	856.0
100°	59.4	64.9	74.3	89.1	114.2	160.3	248.7	408.2	628.7	828.8	943.0
102.5°	73.2	78.0	86.8	101.0	124.8	166.5	244.3	380.0	575.5	781.9	938.6
105°	93.8	97.7	107.1	121.2	143.9	181.4	246.3	355.8	512.9	696.7	875.8
107.5°	114.6	118.5	128.5	142.0	164.4	198.8	257.9	351.4	477.9	627.9	786.5
110°	129.0	132.9	142.3	156.4	177.5	211.9	266.6	352.6	466.0	593.5	732.7



TEST NUMBER: P332645

CATALOG NUMBER: S124DIP-S1020D810U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	142.8	147.3	156.1	170.1	191.3	224.4	276.0	356.4	460.4	574.1	693.3
115°	163.4	168.9	176.7	191.6	212.7	244.0	290.9	363.6	457.4	555.9	653.7
117.5°	183.9	188.8	197.4	211.3	233.2	262.9	306.0	371.3	456.6	547.8	634.3
120°	197.0	202.5	211.1	224.4	246.3	276.0	316.7	376.9	456.6	543.4	625.5
122.5°	209.6	215.0	223.0	237.5	258.8	288.5	326.7	382.5	456.0	538.4	618.0
125°	227.5	232.2	240.8	255.7	277.6	305.7	341.7	391.0	455.1	530.1	605.2
127.5°	241.5	247.1	256.9	272.4	294.5	321.7	354.7	397.7	453.4	519.0	589.6
130°	250.2	256.5	268.2	283.1	305.7	332.3	362.8	402.7	452.7	512.2	577.1
132.5°	257.7	265.9	277.0	293.1	314.5	341.1	370.9	407.1	452.1	505.9	563.9
135°	269.8	277.6	290.9	307.3	327.6	353.4	381.6	413.6	451.2	496.5	545.8
137.5°	281.0	289.6	302.3	319.3	338.7	362.8	389.1	417.5	451.0	488.4	529.4
140°	288.5	297.1	310.4	326.8	345.6	369.1	394.1	420.7	450.4	484.0	520.0
142.5°	297.3	305.3	317.9	333.7	351.9	374.7	397.8	423.2	450.4	480.3	511.2
145°	309.6	317.5	328.4	343.3	360.5	380.8	401.9	424.6	448.8	473.8	498.9
147.5°	322.0	328.9	340.1	352.5	368.0	387.1	405.5	425.4	446.0	468.1	488.7
150°	330.8	337.0	346.4	358.1	373.0	390.2	407.4	425.4	444.1	463.7	482.4
152.5°	338.3	344.5	353.3	363.8	377.4	392.7	408.6	424.1	441.0	458.7	475.6
155°	350.3	355.0	362.8	371.4	383.1	396.4	409.7	422.2	436.3	451.2	465.2
157.5°	360.6	365.0	371.1	378.6	387.8	399.1	409.7	420.2	431.5	443.5	454.1
160°	367.5	370.6	376.1	382.4	391.0	400.3	409.7	418.3	427.7	437.9	447.3
162.5°	373.1	375.6	380.5	386.1	392.8	401.6	409.7	416.5	424.0	432.9	440.4
165°	380.8	382.4	386.3	390.2	394.9	401.9	408.2	412.9	418.3	424.6	430.8
167.5°	387.1	387.8	390.8	393.0	396.6	401.8	406.3	409.1	412.7	417.1	421.6
170°	390.2	391.0	393.3	394.9	397.2	401.1	405.0	406.6	408.9	412.1	416.0
172.5°	393.3	393.5	395.2	396.1	397.8	400.5	403.8	404.1	405.2	407.7	411.0
175°	396.4	396.4	397.2	398.0	398.0	399.6	401.9	401.1	401.1	402.7	404.3
177.5°	398.0	397.4	398.0	398.0	398.0	398.6	399.9	398.6	398.6	399.2	399.9
180°	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0	398.0



TEST NUMBER: P332645

CATALOG NUMBER: S124DIP-S1020D810U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1759.0	1760.1	1765.0	1768.9	1770.0	1775.6	1776.1
5°	1913.5	1925.3	1948.1	1950.2	1953.6	1971.6	1957.8
7.5°	2094.7	2124.5	2144.4	2162.0	2168.4	2176.2	2174.6
10°	2210.8	2255.0	2277.2	2312.4	2313.8	2322.8	2317.3
12.5°	2327.5	2378.9	2419.3	2425.8	2455.4	2459.9	2467.7
15°	2492.8	2547.5	2603.5	2623.5	2664.3	2674.0	2689.2
17.5°	2648.3	2704.1	2743.4	2795.2	2812.0	2834.4	2819.1
20°	2733.4	2794.3	2844.0	2884.8	2902.1	2914.5	2913.2
22.5°	2784.9	2846.2	2886.6	2917.4	2933.6	2938.9	2938.6
25°	2817.1	2852.3	2864.8	2876.5	2858.6	2852.3	2855.1
27.5°	2727.5	2718.4	2685.9	2643.3	2599.0	2563.9	2544.8
30°	2604.2	2550.2	2501.1	2415.4	2371.2	2344.9	2321.4
32.5°	2429.4	2343.9	2249.5	2171.0	2120.7	2081.7	2075.9
35°	2129.9	2001.3	1885.9	1789.8	1740.0	1697.8	1688.2
37.5°	1810.8	1677.2	1573.3	1488.7	1435.2	1405.4	1377.6
40°	1599.0	1484.2	1381.9	1310.0	1269.2	1247.8	1230.5
42.5°	1435.8	1331.0	1229.3	1174.5	1137.6	1124.5	1114.4
45°	1210.5	1113.0	1042.5	1001.0	979.6	957.5	947.1
47.5°	1030.0	950.7	904.2	869.0	846.0	832.9	826.2
50°	927.7	862.7	821.3	794.3	773.6	763.2	757.7
52.5°	837.0	783.7	748.8	727.4	713.3	705.7	703.5
55°	721.0	680.2	658.1	639.5	629.1	622.2	619.4
57.5°	626.7	595.4	577.4	562.0	558.0	552.2	550.3
60°	564.8	540.6	525.4	515.0	511.6	504.7	506.0
62.5°	510.0	490.3	477.3	471.3	466.8	461.0	462.9
65°	431.4	416.9	409.9	404.4	398.9	395.4	398.2
67.5°	362.0	352.0	342.6	339.4	336.7	336.1	333.2
70°	316.6	308.3	300.0	298.0	298.0	295.2	294.5
72.5°	272.9	266.8	261.3	259.8	257.6	258.7	255.8
75°	210.8	206.0	203.9	201.9	201.2	201.2	199.1
77.5°	155.8	152.2	148.9	148.9	146.4	145.5	145.2
80°	118.2	116.8	114.1	114.1	112.7	113.4	112.0
82.5°	88.9	87.0	86.4	85.3	83.4	83.5	82.1
85°	47.7	45.6	44.9	42.9	41.5	42.9	41.5
87.5°	19.6	19.2	18.6	17.7	17.3	17.1	15.5
90°	14.9	15.6	15.6	16.4	17.2	16.4	16.4
92.5°	115.6	92.0	76.3	67.1	62.9	60.2	60.2
95°	458.2	353.4	277.6	239.3	215.0	201.0	190.8
97.5°	811.0	734.5	652.9	596.8	549.7	526.2	510.0
100°	958.6	920.3	862.5	794.4	746.7	723.3	717.0
102.5°	1016.2	1027.3	1003.2	961.5	926.9	902.2	897.2
105°	1011.0	1088.4	1120.5	1122.1	1115.8	1104.9	1100.2
107.5°	930.5	1039.5	1109.2	1147.9	1165.7	1173.5	1175.5
110°	867.9	981.3	1067.3	1122.8	1155.7	1169.8	1176.8



TEST NUMBER: P332645

CATALOG NUMBER: S124DIP-S1020D810U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	812.9	920.0	1006.0	1069.0	1108.8	1128.5	1139.9
115°	749.9	841.3	916.4	978.2	1025.1	1050.1	1056.4
117.5°	713.9	785.8	849.5	902.2	941.6	966.9	971.8
120°	698.3	760.8	816.3	860.9	895.3	915.6	924.2
122.5°	688.2	745.2	793.8	831.5	860.9	878.1	886.7
125°	672.5	726.4	769.4	800.7	823.4	838.2	842.9
127.5°	653.8	707.6	748.5	779.9	800.1	812.6	817.3
130°	638.8	692.0	733.4	765.5	785.1	797.6	802.3
132.5°	621.9	673.9	715.3	746.7	768.8	780.7	785.4
135°	596.6	644.3	683.4	714.7	736.6	749.1	753.8
137.5°	572.4	612.6	647.9	677.1	698.7	709.0	714.7
140°	556.7	591.9	624.8	652.1	669.3	680.3	686.5
142.5°	543.6	573.8	602.2	626.5	642.4	652.1	656.5
145°	525.5	548.9	570.8	590.4	603.6	611.5	615.4
147.5°	509.8	528.6	545.8	560.2	571.6	577.5	578.9
150°	500.4	516.1	530.1	542.7	552.8	557.5	558.3
152.5°	491.0	505.4	517.0	527.6	535.9	538.7	539.5
155°	477.8	489.5	498.9	506.7	512.9	515.3	515.3
157.5°	464.6	474.5	482.0	487.9	492.6	494.0	494.0
160°	455.9	464.5	470.7	475.4	480.1	480.9	480.9
162.5°	447.7	454.5	460.1	463.5	468.2	469.0	468.4
165°	435.5	441.0	444.9	448.0	451.2	450.4	449.6
167.5°	425.2	429.6	431.9	433.5	435.5	435.4	434.7
170°	418.3	421.5	423.8	425.4	426.1	425.4	425.4
172.5°	412.7	414.6	416.3	417.2	418.0	417.2	416.0
175°	405.0	406.6	406.6	406.6	408.2	406.6	405.0
177.5°	400.5	400.5	401.1	400.5	401.1	399.9	398.6
180°	398.0	398.0	398.0	398.0	398.0	398.0	398.0

(END OF REPORT)