

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: P332645-840

Luminaire Tested: **SA4XXDIP-C1020D810U840-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332645-840  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA4XXDIP-C1020D810U840-4F0-1E-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**

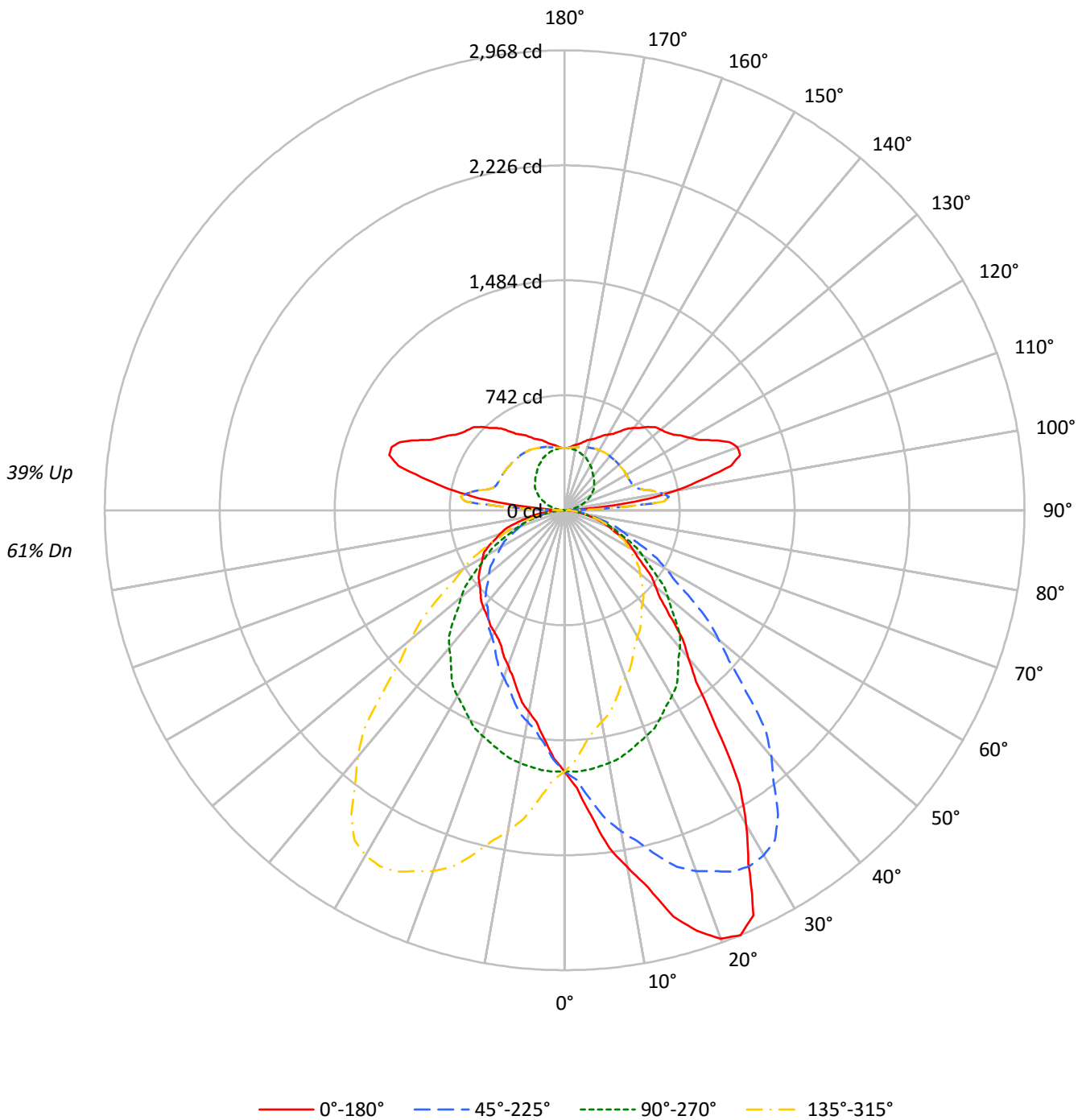
Lumens per Lamp: N/A  
Luminaire Lumens: 7575.1 lumens  
Efficiency: N/A  
Efficacy: 139.2 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41  
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')  
CIE Type: Semi-Direct

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°	13605	13605	13605	13605
5°	16022	13639	12039	13639
10°	19184	13581	10839	13581
15°	22697	13443	9954	13443
20°	25274	13302	9164	13302
25°	25683	13097	8620	13097
30°	21853	12899	8447	12899
35°	16802	12577	8449	12577
40°	13095	12198	8608	12198
45°	10919	11628	8752	11628
50°	9610	10934	9048	10934
55°	8804	10101	9413	10101
60°	8251	9357	9852	9357
65°	7681	8521	10214	8521
70°	7020	7695	10447	7695
75°	6273	6772	10321	6772
80°	5258	5551	9995	5551
85°	3881	4011	9568	4011



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.2	2.2
10°-20°	506.1	6.7
20°-30°	802.5	10.6
30°-40°	893.1	11.8
40°-50°	812.9	10.7
50°-60°	664.3	8.8
60°-70°	474.2	6.3
70°-80°	261.1	3.4
80°-90°	73.5	1.0
90°-100°	290.3	3.8
100°-110°	604.2	8.0
110°-120°	541.2	7.1
120°-130°	455.2	6.0
130°-140°	379.6	5.0
140°-150°	290.0	3.8
150°-160°	203.8	2.7
160°-170°	119.9	1.6
170°-180°	39.0	0.5
0°-30°	1472.7	19.4
0°-40°	2365.8	31.2
0°-60°	3843.0	50.7
0°-90°	4651.9	61.4
90°-120°	1435.7	19.0
90°-150°	2560.4	33.8
90°-180°	2923.0	38.6
0°-180°	7575.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1685	1685	1685	1685	1685	
5°	1977	1683	1486	1683	1977	201
15°	2716	1608	1191	1608	2716	767
25°	2883	1470	968	1470	2883	1271
35°	1705	1276	857	1276	1705	1082
45°	956	1018	767	1018	956	753
55°	626	718	669	718	626	565
65°	402	446	535	446	402	398
75°	201	217	331	217	201	214
85°	42	43	103	43	42	51
90°	17	1	17	1	17	15
95°	193	26	193	26	193	299
105°	1111	92	1111	92	1111	1098
115°	1067	163	1067	163	1067	1059
125°	851	227	851	227	851	774
135°	761	269	761	269	761	588
145°	622	310	622	310	622	394
155°	520	353	520	353	520	243
165°	454	385	454	385	454	130
175°	409	401	409	401	409	40
180°	402	402	402	402	402	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1793.6	1793.1	1787.5	1786.4	1782.4	1777.5	1776.4	1767.4	1749.5	1741.1	1738.9
5°	1977.1	1991.0	1972.9	1969.4	1967.3	1944.3	1932.4	1918.4	1886.3	1867.4	1852.8
7.5°	2196.1	2197.7	2189.8	2183.3	2165.6	2145.5	2115.4	2083.3	2045.0	2005.2	1975.1
10°	2340.2	2345.7	2336.6	2335.2	2299.7	2277.2	2232.6	2194.9	2151.6	2103.4	2059.5
12.5°	2492.0	2484.2	2479.6	2449.7	2443.2	2402.4	2350.5	2311.7	2244.9	2189.5	2130.9
15°	2715.7	2700.4	2690.6	2649.4	2629.2	2572.6	2517.4	2474.9	2387.6	2304.5	2241.7
17.5°	2846.9	2862.4	2839.7	2822.8	2770.5	2730.8	2674.4	2585.1	2516.8	2413.6	2334.3
20°	2941.9	2943.3	2930.7	2913.3	2872.1	2821.9	2760.4	2662.6	2581.0	2478.3	2369.4
22.5°	2967.6	2967.9	2962.5	2946.2	2915.1	2874.3	2812.4	2730.8	2631.8	2520.2	2411.4
25°	2883.3	2880.4	2886.8	2904.9	2893.1	2880.4	2844.9	2784.1	2692.0	2573.9	2456.7
27.5°	2569.9	2589.2	2624.6	2669.4	2712.4	2745.2	2754.4	2742.0	2684.8	2587.8	2465.0
30°	2344.3	2368.0	2394.6	2439.2	2525.8	2575.4	2629.9	2671.0	2648.0	2570.5	2456.0
32.5°	2096.4	2102.2	2141.6	2192.4	2271.7	2367.0	2453.4	2537.0	2564.8	2524.2	2428.6
35°	1704.9	1714.5	1757.2	1807.5	1904.5	2021.0	2150.9	2266.8	2362.5	2400.9	2352.0
37.5°	1391.2	1419.3	1449.4	1503.4	1588.8	1693.7	1828.7	1978.6	2121.2	2216.7	2232.9
40°	1242.6	1260.1	1281.7	1322.9	1395.5	1498.8	1614.8	1786.6	1938.0	2074.9	2119.5
42.5°	1125.4	1135.6	1148.8	1186.1	1241.4	1344.1	1450.0	1601.0	1753.1	1916.7	1991.7
45°	956.4	966.9	989.3	1010.9	1052.8	1124.0	1222.4	1346.7	1499.5	1657.4	1795.5
47.5°	834.4	841.1	854.3	877.6	913.1	960.1	1040.2	1144.0	1285.7	1438.9	1586.1
50°	765.2	770.7	781.2	802.1	829.4	871.2	936.9	1033.9	1144.9	1299.2	1443.7
52.5°	710.4	712.7	720.3	734.6	756.2	791.4	845.3	925.5	1028.7	1166.3	1310.2
55°	625.5	628.3	635.3	645.8	664.6	686.9	728.1	788.2	878.3	997.6	1122.6
57.5°	555.7	557.6	563.5	567.5	583.1	601.3	632.9	675.8	744.1	845.3	956.8
60°	511.0	509.7	516.6	520.1	530.6	545.9	570.4	611.6	670.9	752.6	855.2
62.5°	467.5	465.5	471.4	475.9	482.0	495.1	515.0	547.3	595.5	669.3	758.0
65°	402.1	399.3	402.8	408.4	413.9	421.0	435.7	464.2	502.6	555.7	623.4
67.5°	336.5	339.4	340.0	342.7	346.0	355.5	365.6	385.8	412.8	455.3	512.7
70°	297.4	298.1	300.9	300.9	303.0	311.3	319.7	331.6	358.1	397.3	444.0
72.5°	258.3	261.3	260.1	262.4	263.9	269.4	275.6	286.9	309.5	338.6	378.1
75°	201.1	203.2	203.2	203.9	205.9	208.0	212.9	221.3	237.3	259.0	286.2
77.5°	146.6	146.9	147.8	150.4	150.4	153.7	157.3	164.1	172.0	186.8	203.4
80°	113.1	114.5	113.8	115.2	115.2	118.0	119.4	127.7	131.3	141.0	154.3
82.5°	82.9	84.3	84.2	86.1	87.3	87.9	89.8	93.1	96.6	105.2	110.7
85°	41.9	43.3	41.9	43.3	45.3	46.0	48.2	48.9	51.7	53.7	58.7
87.5°	15.7	17.3	17.5	17.9	18.8	19.4	19.8	19.1	21.1	21.8	23.7
90°	16.6	16.6	17.4	16.6	15.8	15.8	15.0	14.2	13.4	14.2	12.6
92.5°	60.8	60.8	63.5	67.8	77.1	92.9	116.7	155.1	208.6	250.4	219.2
95°	192.7	203.0	217.1	241.7	280.3	356.9	462.7	585.1	661.8	643.6	485.6
97.5°	515.0	531.4	555.1	602.7	659.3	741.7	819.0	864.4	831.3	677.8	454.5
100°	724.1	730.4	754.1	802.2	871.0	929.4	968.1	952.3	837.0	634.9	412.2
102.5°	906.1	911.1	936.0	971.0	1013.1	1037.4	1026.2	947.9	789.6	581.2	383.7
105°	1111.1	1115.8	1126.8	1133.2	1131.6	1099.1	1021.0	884.4	703.6	518.0	359.3
107.5°	1187.1	1185.1	1177.2	1159.2	1120.1	1049.8	939.7	794.3	634.1	482.6	354.9
110°	1188.4	1181.3	1167.1	1133.9	1077.8	991.0	876.5	739.9	599.4	470.6	356.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1151.1	1139.6	1119.7	1079.5	1015.9	929.1	820.9	700.1	579.8	464.9	359.9
115°	1066.8	1060.5	1035.2	987.8	925.4	849.6	757.3	660.1	561.4	461.9	367.2
117.5°	981.4	976.4	950.9	911.1	857.9	793.6	720.9	640.6	553.2	461.1	375.0
120°	933.3	924.6	904.1	869.4	824.4	768.3	705.2	631.7	548.8	461.1	380.6
122.5°	895.4	886.8	869.4	839.7	801.6	752.6	695.0	624.1	543.7	460.5	386.3
125°	851.2	846.5	831.5	808.6	777.0	733.6	679.1	611.2	535.3	459.6	394.9
127.5°	825.4	820.6	808.0	787.6	755.9	714.6	660.2	595.4	524.1	457.9	401.6
130°	810.2	805.5	792.8	773.1	740.6	698.8	645.1	582.8	517.3	457.2	406.7
132.5°	793.1	788.4	776.4	754.1	722.4	680.5	628.0	569.5	510.9	456.6	411.1
135°	761.2	756.5	743.9	721.8	690.1	650.7	602.5	551.2	501.4	455.7	417.7
137.5°	721.8	716.0	705.6	683.8	654.3	618.6	578.0	534.6	493.2	455.4	421.6
140°	693.3	687.0	675.9	658.5	631.0	597.7	562.2	525.1	488.8	454.8	424.9
142.5°	663.0	658.5	648.7	632.7	608.1	579.5	549.0	516.2	485.0	454.8	427.4
145°	621.5	617.5	609.6	596.2	576.4	554.3	530.7	503.8	478.5	453.2	428.8
147.5°	584.6	583.2	577.2	565.7	551.2	533.8	514.8	493.5	472.7	450.4	429.6
150°	563.8	563.0	558.3	548.1	535.3	521.2	505.3	487.2	468.3	448.5	429.6
152.5°	544.8	544.0	541.2	532.8	522.1	510.4	495.8	480.3	463.2	445.4	428.3
155°	520.4	520.4	518.0	511.7	503.8	494.3	482.5	469.8	455.7	440.6	426.4
157.5°	498.9	498.9	497.5	492.7	486.8	479.2	469.2	458.6	447.9	435.8	424.3
160°	485.6	485.6	484.8	480.1	475.3	469.1	460.4	451.7	442.2	431.9	422.4
162.5°	473.0	473.6	472.8	468.1	464.6	459.0	452.1	444.7	437.2	428.2	420.6
165°	454.0	454.8	455.7	452.4	449.3	445.4	439.8	435.0	428.8	422.4	417.0
167.5°	439.0	439.7	439.8	437.8	436.2	433.8	429.4	425.8	421.2	416.8	413.1
170°	429.6	429.6	430.3	429.6	428.0	425.7	422.4	420.1	416.2	412.9	410.6
172.5°	420.1	421.3	422.1	421.3	420.4	418.7	416.8	415.1	411.7	409.2	408.1
175°	409.0	410.6	412.2	410.6	410.6	410.6	409.0	408.3	406.7	405.1	405.1
177.5°	402.5	403.8	405.1	404.5	405.1	404.5	404.5	403.8	403.1	402.5	402.5
180°	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1739.5	1731.6	1726.1	1721.6	1709.3	1702.0	1696.5	1688.6	1679.7	1670.2	1658.5
5°	1838.2	1814.4	1797.0	1770.5	1745.3	1724.3	1702.7	1683.1	1659.4	1633.7	1614.8
7.5°	1941.9	1906.6	1861.4	1822.1	1778.0	1739.6	1705.3	1670.0	1633.5	1598.0	1565.5
10°	2007.8	1962.5	1912.2	1852.8	1797.0	1747.4	1701.3	1656.7	1613.4	1570.0	1533.1
12.5°	2078.7	2022.2	1947.9	1878.6	1815.9	1749.7	1694.0	1639.3	1587.1	1541.6	1498.4
15°	2173.9	2092.2	2006.4	1913.6	1831.2	1753.7	1677.6	1608.5	1549.8	1489.8	1447.9
17.5°	2232.5	2131.4	2033.3	1936.2	1836.4	1738.8	1656.7	1576.9	1503.5	1443.9	1391.1
20°	2271.0	2170.5	2048.3	1951.3	1832.6	1732.0	1637.1	1548.4	1471.7	1408.2	1353.6
22.5°	2304.5	2188.4	2066.2	1938.4	1820.3	1713.6	1609.7	1520.6	1442.1	1375.1	1322.9
25°	2322.7	2189.3	2056.7	1929.7	1795.5	1669.2	1575.0	1470.3	1386.4	1316.0	1260.1
27.5°	2324.6	2182.0	2031.9	1890.8	1752.4	1634.8	1515.8	1422.2	1335.2	1260.7	1207.1
30°	2318.4	2169.8	2008.5	1855.6	1716.7	1588.9	1485.6	1383.7	1295.1	1221.0	1165.2
32.5°	2299.0	2144.0	1978.3	1816.5	1672.5	1547.6	1441.0	1344.0	1257.6	1184.7	1126.1
35°	2242.4	2089.5	1912.9	1744.6	1597.3	1471.0	1374.6	1276.2	1189.6	1120.4	1064.0
37.5°	2154.0	2015.8	1836.2	1662.1	1517.4	1390.5	1295.1	1206.1	1128.0	1057.8	999.9
40°	2076.9	1955.4	1775.3	1605.7	1449.4	1328.6	1239.2	1157.5	1080.1	1013.7	958.6
42.5°	1988.1	1882.3	1716.2	1536.4	1385.6	1264.4	1177.2	1103.9	1030.9	969.6	914.4
45°	1829.8	1760.0	1603.6	1437.4	1280.4	1165.9	1082.8	1018.5	957.2	897.1	851.0
47.5°	1647.7	1613.1	1481.5	1323.6	1174.6	1061.7	989.7	930.3	876.5	825.6	785.0
50°	1525.4	1508.6	1394.8	1242.6	1100.2	994.1	921.5	870.6	824.5	779.8	741.4
52.5°	1404.7	1404.2	1301.6	1162.3	1030.5	928.3	856.2	808.6	768.6	732.4	697.8
55°	1220.3	1239.9	1159.6	1035.3	917.4	825.2	760.2	717.7	689.7	659.7	633.9
57.5°	1051.0	1083.4	1017.1	907.7	809.3	724.4	667.8	635.8	606.1	587.9	569.2
60°	940.4	971.1	919.5	827.3	734.5	661.9	608.0	579.5	553.6	541.1	527.8
62.5°	842.1	869.5	831.2	745.8	665.2	595.3	550.0	522.5	505.0	491.3	482.5
65°	701.7	724.7	691.9	629.8	560.6	504.7	467.8	446.1	429.4	423.7	413.9
67.5°	567.1	588.1	570.4	517.6	462.1	419.9	390.9	370.1	360.2	355.4	348.4
70°	487.3	508.3	489.4	443.3	400.7	365.2	337.9	326.0	315.6	313.5	303.7
72.5°	419.7	433.9	415.2	379.1	342.6	312.7	291.5	279.1	273.7	269.9	264.6
75°	314.9	327.4	314.9	286.9	261.1	240.1	222.0	217.1	210.9	208.7	205.2
77.5°	222.9	233.7	224.1	206.6	187.3	171.2	161.4	155.1	153.7	150.1	151.8
80°	170.4	177.3	168.2	156.4	141.0	129.9	122.9	119.4	115.2	113.8	116.5
82.5°	122.3	125.4	120.8	112.8	101.4	94.1	89.4	85.3	84.4	84.7	84.7
85°	63.5	62.8	62.1	55.1	51.7	46.8	44.0	43.3	42.6	44.0	45.3
87.5°	23.4	24.0	22.5	20.3	18.4	16.6	15.6	14.6	15.6	16.6	17.3
90°	11.0	11.0	6.4	6.4	5.6	4.7	2.3	0.8	2.3	4.7	5.6
92.5°	159.5	98.3	58.1	41.7	30.2	20.5	13.1	9.0	13.1	20.5	30.2
95°	296.9	167.4	98.7	65.5	46.6	36.4	28.4	26.1	28.4	36.4	46.6
97.5°	266.9	160.0	107.0	79.3	63.0	53.5	46.8	46.8	46.8	53.5	63.0
100°	251.2	161.9	115.3	90.0	75.0	65.5	60.0	60.0	60.0	65.5	75.0
102.5°	246.7	168.1	126.0	102.0	87.7	78.8	73.9	72.6	73.9	78.8	87.7
105°	248.7	183.2	145.3	122.4	108.2	98.7	94.7	92.4	94.7	98.7	108.2
107.5°	260.4	200.8	166.0	143.4	129.8	119.7	115.7	114.2	115.7	119.7	129.8
110°	269.2	214.0	179.3	157.9	143.7	134.2	130.3	128.8	130.3	134.2	143.7





TEST NUMBER: P332645-840

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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	278.7	226.6	193.2	171.8	157.6	148.8	144.2	142.6	144.2	148.8	157.6
115°	293.8	246.4	214.8	193.5	178.4	170.6	165.0	162.7	165.0	170.6	178.4
117.5°	309.0	265.5	235.5	213.4	199.3	190.7	185.7	183.5	185.7	190.7	199.3
120°	319.8	278.7	248.7	226.6	213.2	204.5	198.9	197.4	198.9	204.5	213.2
122.5°	329.9	291.3	261.4	239.8	225.2	217.1	211.7	210.1	211.7	217.1	225.2
125°	345.1	308.7	280.3	258.2	243.2	234.5	229.7	226.6	229.7	234.5	243.2
127.5°	358.2	324.9	297.4	275.1	259.4	249.5	243.9	241.4	243.9	249.5	259.4
130°	366.4	335.6	308.7	285.9	270.8	259.0	252.7	249.5	252.7	259.0	270.8
132.5°	374.6	344.5	317.6	296.0	279.7	268.5	260.2	257.7	260.2	268.5	279.7
135°	385.4	356.9	330.8	310.3	293.8	280.3	272.5	269.2	272.5	280.3	293.8
137.5°	392.9	366.4	342.0	322.4	305.3	292.5	283.8	280.8	283.8	292.5	305.3
140°	398.0	372.7	349.0	330.0	313.5	300.0	291.3	289.0	291.3	300.0	313.5
142.5°	401.7	378.4	355.4	337.0	321.0	308.3	300.2	297.8	300.2	308.3	321.0
145°	405.9	384.6	364.1	346.7	331.6	320.6	312.7	310.3	312.7	320.6	331.6
147.5°	409.5	390.9	371.6	356.0	343.5	332.1	325.2	324.4	325.2	332.1	343.5
150°	411.4	394.0	376.7	361.6	349.8	340.3	334.1	333.3	334.1	340.3	349.8
152.5°	412.6	396.6	381.1	367.4	356.8	347.9	341.6	341.4	341.6	347.9	356.8
155°	413.7	400.3	386.9	375.1	366.4	358.5	353.8	352.9	353.8	358.5	366.4
157.5°	413.7	403.0	391.6	382.3	374.8	368.6	364.2	364.2	364.2	368.6	374.8
160°	413.7	404.2	394.9	386.2	379.8	374.3	371.1	371.1	371.1	374.3	379.8
162.5°	413.7	405.6	396.7	389.9	384.3	379.3	376.8	377.5	376.8	379.3	384.3
165°	412.2	405.9	398.8	394.0	390.1	386.2	384.6	384.6	384.6	386.2	390.1
167.5°	410.3	405.8	400.5	396.9	394.7	391.6	390.9	391.6	390.9	391.6	394.7
170°	409.0	405.1	401.1	398.8	397.2	394.9	394.0	394.9	394.0	394.9	397.2
172.5°	407.8	404.5	401.7	400.0	399.1	397.4	397.2	398.0	397.2	397.4	399.1
175°	405.9	403.5	401.9	401.9	401.1	400.3	400.3	401.1	400.3	400.3	401.1
177.5°	403.8	402.5	401.9	401.9	401.9	401.3	401.9	402.5	401.9	401.3	401.9
180°	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9



TEST NUMBER: P332645-840

CATALOG NUMBER: SA4XXDIP-C1020D810U840-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1652.8	1647.9	1640.6	1630.5	1622.1	1613.3	1611.0	1607.6	1614.4	1608.7	1607.1
5°	1598.7	1584.1	1565.2	1543.6	1531.0	1512.9	1509.3	1502.4	1495.4	1494.7	1487.7
7.5°	1541.4	1519.8	1495.1	1473.1	1452.7	1432.8	1419.9	1417.0	1406.7	1400.7	1393.7
10°	1504.5	1477.9	1449.4	1428.4	1404.6	1383.7	1369.1	1360.7	1353.6	1345.9	1339.0
12.5°	1460.9	1432.7	1409.1	1386.4	1358.3	1342.3	1318.2	1303.6	1302.3	1302.4	1284.2
15°	1410.2	1382.3	1345.9	1313.8	1298.5	1267.8	1254.6	1237.8	1227.3	1216.8	1208.5
17.5°	1352.3	1317.5	1289.2	1252.3	1222.9	1198.5	1181.1	1171.0	1155.3	1140.4	1129.7
20°	1316.0	1279.0	1248.9	1209.8	1177.7	1147.7	1133.1	1119.1	1107.2	1094.7	1082.8
22.5°	1279.1	1240.4	1203.7	1165.7	1135.9	1104.2	1090.0	1071.1	1059.8	1052.8	1040.9
25°	1221.0	1179.1	1137.2	1101.0	1070.3	1042.3	1023.5	1008.8	996.2	990.7	983.0
27.5°	1157.9	1116.3	1075.8	1034.6	999.8	979.5	964.4	953.3	946.1	938.7	935.2
30°	1117.7	1074.4	1031.2	992.7	960.6	940.4	926.5	918.8	913.1	909.7	906.2
32.5°	1076.9	1034.2	988.7	953.6	924.8	906.9	896.3	888.6	885.8	884.5	883.2
35°	1011.6	968.3	926.5	895.0	867.8	860.8	851.7	847.5	846.2	851.0	853.1
37.5°	948.4	908.2	869.6	839.1	821.3	811.1	808.0	808.2	813.1	817.5	822.5
40°	907.6	868.5	832.1	805.7	788.9	782.6	781.2	784.7	790.3	795.2	800.7
42.5°	867.9	829.4	796.4	771.5	759.8	754.1	755.0	758.4	766.3	772.2	780.6
45°	806.4	774.3	742.1	721.9	712.1	713.5	713.5	719.7	727.4	736.5	745.6
47.5°	748.4	716.0	689.6	672.6	667.5	666.3	670.2	678.4	689.4	700.6	713.4
50°	709.3	678.5	655.5	640.2	634.6	636.7	642.3	649.9	663.2	677.2	690.4
52.5°	669.6	641.7	620.4	606.1	602.2	606.0	611.6	623.7	635.3	650.4	666.4
55°	608.0	584.3	567.5	557.1	555.7	557.8	564.1	577.3	594.1	613.0	628.3
57.5°	546.7	526.9	511.6	504.3	505.0	507.0	517.4	533.1	551.0	571.1	590.9
60°	505.4	487.3	474.7	469.2	469.8	474.0	486.6	501.3	523.6	543.1	564.1
62.5°	466.4	450.4	438.4	433.4	432.4	441.6	453.6	468.9	491.2	513.0	535.6
65°	403.5	390.9	381.2	378.4	380.5	387.5	402.8	423.0	441.9	464.9	488.7
67.5°	342.0	331.7	325.1	326.3	328.8	339.1	352.0	369.4	390.8	414.7	438.2
70°	303.0	293.2	287.6	288.3	292.6	305.1	316.3	333.7	356.8	381.2	400.7
72.5°	262.8	256.3	251.4	254.3	258.4	267.1	281.0	298.5	318.8	341.5	362.1
75°	201.8	201.8	198.9	201.1	207.3	215.7	226.2	244.4	264.6	282.8	299.5
77.5°	149.7	148.1	150.0	152.5	156.1	166.0	178.0	191.0	206.2	224.4	238.2
80°	114.5	115.2	118.7	122.9	124.3	132.0	144.5	156.4	168.2	183.6	196.8
82.5°	86.0	86.7	88.6	93.8	95.2	103.5	111.6	123.4	134.2	144.5	155.5
85°	46.8	46.8	50.3	52.3	55.8	61.4	66.3	73.3	83.1	90.1	100.5
87.5°	19.1	19.1	22.3	23.4	25.4	28.6	29.5	35.7	38.2	41.1	46.2
90°	6.4	6.4	11.0	11.0	12.6	14.2	13.4	14.2	15.0	15.8	15.8
92.5°	41.7	58.1	98.3	159.5	219.2	250.4	208.6	155.1	116.7	92.9	77.1
95°	65.5	98.7	167.4	296.9	485.6	643.6	661.8	585.1	462.7	356.9	280.3
97.5°	79.3	107.0	160.0	266.9	454.5	677.8	831.3	864.4	819.0	741.7	659.3
100°	90.0	115.3	161.9	251.2	412.2	634.9	837.0	952.3	968.1	929.4	871.0
102.5°	102.0	126.0	168.1	246.7	383.7	581.2	789.6	947.9	1026.2	1037.4	1013.1
105°	122.4	145.3	183.2	248.7	359.3	518.0	703.6	884.4	1021.0	1099.1	1131.6
107.5°	143.4	166.0	200.8	260.4	354.9	482.6	634.1	794.3	939.7	1049.8	1120.1
110°	157.9	179.3	214.0	269.2	356.1	470.6	599.4	739.9	876.5	991.0	1077.8



TEST NUMBER: P332645-840

CATALOG NUMBER: SA4XXDIP-C1020D810U840-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	171.8	193.2	226.6	278.7	359.9	464.9	579.8	700.1	820.9	929.1	1015.9
115°	193.5	214.8	246.4	293.8	367.2	461.9	561.4	660.1	757.3	849.6	925.4
117.5°	213.4	235.5	265.5	309.0	375.0	461.1	553.2	640.6	720.9	793.6	857.9
120°	226.6	248.7	278.7	319.8	380.6	461.1	548.8	631.7	705.2	768.3	824.4
122.5°	239.8	261.4	291.3	329.9	386.3	460.5	543.7	624.1	695.0	752.6	801.6
125°	258.2	280.3	308.7	345.1	394.9	459.6	535.3	611.2	679.1	733.6	777.0
127.5°	275.1	297.4	324.9	358.2	401.6	457.9	524.1	595.4	660.2	714.6	755.9
130°	285.9	308.7	335.6	366.4	406.7	457.2	517.3	582.8	645.1	698.8	740.6
132.5°	296.0	317.6	344.5	374.6	411.1	456.6	510.9	569.5	628.0	680.5	722.4
135°	310.3	330.8	356.9	385.4	417.7	455.7	501.4	551.2	602.5	650.7	690.1
137.5°	322.4	342.0	366.4	392.9	421.6	455.4	493.2	534.6	578.0	618.6	654.3
140°	330.0	349.0	372.7	398.0	424.9	454.8	488.8	525.1	562.2	597.7	631.0
142.5°	337.0	355.4	378.4	401.7	427.4	454.8	485.0	516.2	549.0	579.5	608.1
145°	346.7	364.1	384.6	405.9	428.8	453.2	478.5	503.8	530.7	554.3	576.4
147.5°	356.0	371.6	390.9	409.5	429.6	450.4	472.7	493.5	514.8	533.8	551.2
150°	361.6	376.7	394.0	411.4	429.6	448.5	468.3	487.2	505.3	521.2	535.3
152.5°	367.4	381.1	396.6	412.6	428.3	445.4	463.2	480.3	495.8	510.4	522.1
155°	375.1	386.9	400.3	413.7	426.4	440.6	455.7	469.8	482.5	494.3	503.8
157.5°	382.3	391.6	403.0	413.7	424.3	435.8	447.9	458.6	469.2	479.2	486.8
160°	386.2	394.9	404.2	413.7	422.4	431.9	442.2	451.7	460.4	469.1	475.3
162.5°	389.9	396.7	405.6	413.7	420.6	428.2	437.2	444.7	452.1	459.0	464.6
165°	394.0	398.8	405.9	412.2	417.0	422.4	428.8	435.0	439.8	445.4	449.3
167.5°	396.9	400.5	405.8	410.3	413.1	416.8	421.2	425.8	429.4	433.8	436.2
170°	398.8	401.1	405.1	409.0	410.6	412.9	416.2	420.1	422.4	425.7	428.0
172.5°	400.0	401.7	404.5	407.8	408.1	409.2	411.7	415.1	416.8	418.7	420.4
175°	401.9	401.9	403.5	405.9	405.1	405.1	406.7	408.3	409.0	410.6	410.6
177.5°	401.9	401.9	402.5	403.8	402.5	402.5	403.1	403.8	404.5	404.5	405.1
180°	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9



TEST NUMBER: P332645-840

CATALOG NUMBER: SA4XXDIP-C1020D810U840-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1606.0	1604.9	1600.9	1600.4	1600.9	1604.9	1606.0	1607.1	1608.7	1614.4	1607.6
5°	1483.5	1480.1	1477.9	1485.6	1477.9	1480.1	1483.5	1487.7	1494.7	1495.4	1502.4
7.5°	1391.2	1388.5	1382.3	1380.4	1382.3	1388.5	1391.2	1393.7	1400.7	1406.7	1417.0
10°	1332.0	1329.2	1323.6	1322.2	1323.6	1329.2	1332.0	1339.0	1345.9	1353.6	1360.7
12.5°	1275.1	1269.5	1268.4	1269.7	1268.4	1269.5	1275.1	1284.2	1302.4	1302.3	1303.6
15°	1199.4	1196.6	1188.9	1191.0	1188.9	1196.6	1199.4	1208.5	1216.8	1227.3	1237.8
17.5°	1124.8	1121.5	1112.2	1120.3	1112.2	1121.5	1124.8	1129.7	1140.4	1155.3	1171.0
20°	1077.9	1072.3	1067.4	1066.7	1067.4	1072.3	1077.9	1082.8	1094.7	1107.2	1119.1
22.5°	1033.2	1028.2	1027.7	1023.2	1027.7	1028.2	1033.2	1040.9	1052.8	1059.8	1071.1
25°	977.3	972.5	971.1	967.7	971.1	972.5	977.3	983.0	990.7	996.2	1008.8
27.5°	934.5	932.1	929.6	930.7	929.6	932.1	934.5	935.2	938.7	946.1	953.3
30°	908.3	907.6	906.2	906.2	906.2	907.6	908.3	906.2	909.7	913.1	918.8
32.5°	886.5	886.4	887.2	887.2	887.2	886.4	886.5	883.2	884.5	885.8	888.6
35°	855.9	858.0	859.4	857.3	859.4	858.0	855.9	853.1	851.0	846.2	847.5
37.5°	828.3	830.3	832.3	834.7	832.3	830.3	828.3	822.5	817.5	813.1	808.2
40°	807.0	811.9	813.3	816.8	813.3	811.9	807.0	800.7	795.2	790.3	784.7
42.5°	786.9	792.3	796.0	796.7	796.0	792.3	786.9	780.6	772.2	766.3	758.4
45°	756.1	761.6	766.6	766.6	766.6	761.6	756.1	745.6	736.5	727.4	719.7
47.5°	724.1	732.2	737.1	738.3	737.1	732.2	724.1	713.4	700.6	689.4	678.4
50°	702.4	712.1	717.0	720.4	717.0	712.1	702.4	690.4	677.2	663.2	649.9
52.5°	681.1	690.8	697.4	699.2	697.4	690.8	681.1	666.4	650.4	635.3	623.7
55°	644.4	658.3	666.0	668.8	666.0	658.3	644.4	628.3	613.0	594.1	577.3
57.5°	609.8	622.6	631.6	633.6	631.6	622.6	609.8	590.9	571.1	551.0	533.1
60°	582.9	596.9	608.0	610.2	608.0	596.9	582.9	564.1	543.1	523.6	501.3
62.5°	555.5	570.1	580.2	585.6	580.2	570.1	555.5	535.6	513.0	491.2	468.9
65°	508.3	522.9	532.7	534.7	532.7	522.9	508.3	488.7	464.9	441.9	423.0
67.5°	456.6	471.2	477.7	481.7	477.7	471.2	456.6	438.2	414.7	390.8	369.4
70°	420.3	432.1	439.1	442.6	439.1	432.1	420.3	400.7	381.2	356.8	333.7
72.5°	378.9	391.3	399.5	400.2	399.5	391.3	378.9	362.1	341.5	318.8	298.5
75°	315.6	326.7	330.9	330.9	330.9	326.7	315.6	299.5	282.8	264.6	244.4
77.5°	249.7	255.5	260.8	262.0	260.8	255.5	249.7	238.2	224.4	206.2	191.0
80°	207.3	210.9	215.0	215.0	215.0	210.9	207.3	196.8	183.6	168.2	156.4
82.5°	163.8	166.7	170.9	170.4	170.9	166.7	163.8	155.5	144.5	134.2	123.4
85°	99.2	105.4	104.7	103.3	104.7	105.4	99.2	100.5	90.1	83.1	73.3
87.5°	48.0	48.7	50.2	51.3	50.2	48.7	48.0	46.2	41.1	38.2	35.7
90°	16.6	17.4	16.6	16.6	16.6	17.4	16.6	15.8	15.8	15.0	14.2
92.5°	67.8	63.5	60.8	60.8	60.8	63.5	67.8	77.1	92.9	116.7	155.1
95°	241.7	217.1	203.0	192.7	203.0	217.1	241.7	280.3	356.9	462.7	585.1
97.5°	602.7	555.1	531.4	515.0	531.4	555.1	602.7	659.3	741.7	819.0	864.4
100°	802.2	754.1	730.4	724.1	730.4	754.1	802.2	871.0	929.4	968.1	952.3
102.5°	971.0	936.0	911.1	906.1	911.1	936.0	971.0	1013.1	1037.4	1026.2	947.9
105°	1133.2	1126.8	1115.8	1111.1	1115.8	1126.8	1133.2	1131.6	1099.1	1021.0	884.4
107.5°	1159.2	1177.2	1185.1	1187.1	1185.1	1177.2	1159.2	1120.1	1049.8	939.7	794.3
110°	1133.9	1167.1	1181.3	1188.4	1181.3	1167.1	1133.9	1077.8	991.0	876.5	739.9



TEST NUMBER: P332645-840

CATALOG NUMBER: SA4XXDIP-C1020D810U840-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1079.5	1119.7	1139.6	1151.1	1139.6	1119.7	1079.5	1015.9	929.1	820.9	700.1
115°	987.8	1035.2	1060.5	1066.8	1060.5	1035.2	987.8	925.4	849.6	757.3	660.1
117.5°	911.1	950.9	976.4	981.4	976.4	950.9	911.1	857.9	793.6	720.9	640.6
120°	869.4	904.1	924.6	933.3	924.6	904.1	869.4	824.4	768.3	705.2	631.7
122.5°	839.7	869.4	886.8	895.4	886.8	869.4	839.7	801.6	752.6	695.0	624.1
125°	808.6	831.5	846.5	851.2	846.5	831.5	808.6	777.0	733.6	679.1	611.2
127.5°	787.6	808.0	820.6	825.4	820.6	808.0	787.6	755.9	714.6	660.2	595.4
130°	773.1	792.8	805.5	810.2	805.5	792.8	773.1	740.6	698.8	645.1	582.8
132.5°	754.1	776.4	788.4	793.1	788.4	776.4	754.1	722.4	680.5	628.0	569.5
135°	721.8	743.9	756.5	761.2	756.5	743.9	721.8	690.1	650.7	602.5	551.2
137.5°	683.8	705.6	716.0	721.8	716.0	705.6	683.8	654.3	618.6	578.0	534.6
140°	658.5	675.9	687.0	693.3	687.0	675.9	658.5	631.0	597.7	562.2	525.1
142.5°	632.7	648.7	658.5	663.0	658.5	648.7	632.7	608.1	579.5	549.0	516.2
145°	596.2	609.6	617.5	621.5	617.5	609.6	596.2	576.4	554.3	530.7	503.8
147.5°	565.7	577.2	583.2	584.6	583.2	577.2	565.7	551.2	533.8	514.8	493.5
150°	548.1	558.3	563.0	563.8	563.0	558.3	548.1	535.3	521.2	505.3	487.2
152.5°	532.8	541.2	544.0	544.8	544.0	541.2	532.8	522.1	510.4	495.8	480.3
155°	511.7	518.0	520.4	520.4	520.4	518.0	511.7	503.8	494.3	482.5	469.8
157.5°	492.7	497.5	498.9	498.9	498.9	497.5	492.7	486.8	479.2	469.2	458.6
160°	480.1	484.8	485.6	485.6	485.6	484.8	480.1	475.3	469.1	460.4	451.7
162.5°	468.1	472.8	473.6	473.0	473.6	472.8	468.1	464.6	459.0	452.1	444.7
165°	452.4	455.7	454.8	454.0	454.8	455.7	452.4	449.3	445.4	439.8	435.0
167.5°	437.8	439.8	439.7	439.0	439.7	439.8	437.8	436.2	433.8	429.4	425.8
170°	429.6	430.3	429.6	429.6	429.6	430.3	429.6	428.0	425.7	422.4	420.1
172.5°	421.3	422.1	421.3	420.1	421.3	422.1	421.3	420.4	418.7	416.8	415.1
175°	410.6	412.2	410.6	409.0	410.6	412.2	410.6	410.6	410.6	409.0	408.3
177.5°	404.5	405.1	403.8	402.5	403.8	405.1	404.5	405.1	404.5	404.5	403.8
180°	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9



TEST NUMBER: P332645-840

CATALOG NUMBER: SA4XXDIP-C1020D810U840-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1611.0	1613.3	1622.1	1630.5	1640.6	1647.9	1652.8	1658.5	1670.2	1679.7	1688.6
5°	1509.3	1512.9	1531.0	1543.6	1565.2	1584.1	1598.7	1614.8	1633.7	1659.4	1683.1
7.5°	1419.9	1432.8	1452.7	1473.1	1495.1	1519.8	1541.4	1565.5	1598.0	1633.5	1670.0
10°	1369.1	1383.7	1404.6	1428.4	1449.4	1477.9	1504.5	1533.1	1570.0	1613.4	1656.7
12.5°	1318.2	1342.3	1358.3	1386.4	1409.1	1432.7	1460.9	1498.4	1541.6	1587.1	1639.3
15°	1254.6	1267.8	1298.5	1313.8	1345.9	1382.3	1410.2	1447.9	1489.8	1549.8	1608.5
17.5°	1181.1	1198.5	1222.9	1252.3	1289.2	1317.5	1352.3	1391.1	1443.9	1503.5	1576.9
20°	1133.1	1147.7	1177.7	1209.8	1248.9	1279.0	1316.0	1353.6	1408.2	1471.7	1548.4
22.5°	1090.0	1104.2	1135.9	1165.7	1203.7	1240.4	1279.1	1322.9	1375.1	1442.1	1520.6
25°	1023.5	1042.3	1070.3	1101.0	1137.2	1179.1	1221.0	1260.1	1316.0	1386.4	1470.3
27.5°	964.4	979.5	999.8	1034.6	1075.8	1116.3	1157.9	1207.1	1260.7	1335.2	1422.2
30°	926.5	940.4	960.6	992.7	1031.2	1074.4	1117.7	1165.2	1221.0	1295.1	1383.7
32.5°	896.3	906.9	924.8	953.6	988.7	1034.2	1076.9	1126.1	1184.7	1257.6	1344.0
35°	851.7	860.8	867.8	895.0	926.5	968.3	1011.6	1064.0	1120.4	1189.6	1276.2
37.5°	808.0	811.1	821.3	839.1	869.6	908.2	948.4	999.9	1057.8	1128.0	1206.1
40°	781.2	782.6	788.9	805.7	832.1	868.5	907.6	958.6	1013.7	1080.1	1157.5
42.5°	755.0	754.1	759.8	771.5	796.4	829.4	867.9	914.4	969.6	1030.9	1103.9
45°	713.5	713.5	712.1	721.9	742.1	774.3	806.4	851.0	897.1	957.2	1018.5
47.5°	670.2	666.3	667.5	672.6	689.6	716.0	748.4	785.0	825.6	876.5	930.3
50°	642.3	636.7	634.6	640.2	655.5	678.5	709.3	741.4	779.8	824.5	870.6
52.5°	611.6	606.0	602.2	606.1	620.4	641.7	669.6	697.8	732.4	768.6	808.6
55°	564.1	557.8	555.7	557.1	567.5	584.3	608.0	633.9	659.7	689.7	717.7
57.5°	517.4	507.0	505.0	504.3	511.6	526.9	546.7	569.2	587.9	606.1	635.8
60°	486.6	474.0	469.8	469.2	474.7	487.3	505.4	527.8	541.1	553.6	579.5
62.5°	453.6	441.6	432.4	433.4	438.4	450.4	466.4	482.5	491.3	505.0	522.5
65°	402.8	387.5	380.5	378.4	381.2	390.9	403.5	413.9	423.7	429.4	446.1
67.5°	352.0	339.1	328.8	326.3	325.1	331.7	342.0	348.4	355.4	360.2	370.1
70°	316.3	305.1	292.6	288.3	287.6	293.2	303.0	303.7	313.5	315.6	326.0
72.5°	281.0	267.1	258.4	254.3	251.4	256.3	262.8	264.6	269.9	273.7	279.1
75°	226.2	215.7	207.3	201.1	198.9	201.8	201.8	205.2	208.7	210.9	217.1
77.5°	178.0	166.0	156.1	152.5	150.0	148.1	149.7	151.8	150.1	153.7	155.1
80°	144.5	132.0	124.3	122.9	118.7	115.2	114.5	116.5	113.8	115.2	119.4
82.5°	111.6	103.5	95.2	93.8	88.6	86.7	86.0	84.7	84.7	84.4	85.3
85°	66.3	61.4	55.8	52.3	50.3	46.8	46.8	45.3	44.0	42.6	43.3
87.5°	29.5	28.6	25.4	23.4	22.3	19.1	19.1	17.3	16.6	15.6	14.6
90°	13.4	14.2	12.6	11.0	11.0	6.4	6.4	5.6	4.7	2.3	0.8
92.5°	208.6	250.4	219.2	159.5	98.3	58.1	41.7	30.2	20.5	13.1	9.0
95°	661.8	643.6	485.6	296.9	167.4	98.7	65.5	46.6	36.4	28.4	26.1
97.5°	831.3	677.8	454.5	266.9	160.0	107.0	79.3	63.0	53.5	46.8	46.8
100°	837.0	634.9	412.2	251.2	161.9	115.3	90.0	75.0	65.5	60.0	60.0
102.5°	789.6	581.2	383.7	246.7	168.1	126.0	102.0	87.7	78.8	73.9	72.6
105°	703.6	518.0	359.3	248.7	183.2	145.3	122.4	108.2	98.7	94.7	92.4
107.5°	634.1	482.6	354.9	260.4	200.8	166.0	143.4	129.8	119.7	115.7	114.2
110°	599.4	470.6	356.1	269.2	214.0	179.3	157.9	143.7	134.2	130.3	128.8



TEST NUMBER: P332645-840

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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	579.8	464.9	359.9	278.7	226.6	193.2	171.8	157.6	148.8	144.2	142.6
115°	561.4	461.9	367.2	293.8	246.4	214.8	193.5	178.4	170.6	165.0	162.7
117.5°	553.2	461.1	375.0	309.0	265.5	235.5	213.4	199.3	190.7	185.7	183.5
120°	548.8	461.1	380.6	319.8	278.7	248.7	226.6	213.2	204.5	198.9	197.4
122.5°	543.7	460.5	386.3	329.9	291.3	261.4	239.8	225.2	217.1	211.7	210.1
125°	535.3	459.6	394.9	345.1	308.7	280.3	258.2	243.2	234.5	229.7	226.6
127.5°	524.1	457.9	401.6	358.2	324.9	297.4	275.1	259.4	249.5	243.9	241.4
130°	517.3	457.2	406.7	366.4	335.6	308.7	285.9	270.8	259.0	252.7	249.5
132.5°	510.9	456.6	411.1	374.6	344.5	317.6	296.0	279.7	268.5	260.2	257.7
135°	501.4	455.7	417.7	385.4	356.9	330.8	310.3	293.8	280.3	272.5	269.2
137.5°	493.2	455.4	421.6	392.9	366.4	342.0	322.4	305.3	292.5	283.8	280.8
140°	488.8	454.8	424.9	398.0	372.7	349.0	330.0	313.5	300.0	291.3	289.0
142.5°	485.0	454.8	427.4	401.7	378.4	355.4	337.0	321.0	308.3	300.2	297.8
145°	478.5	453.2	428.8	405.9	384.6	364.1	346.7	331.6	320.6	312.7	310.3
147.5°	472.7	450.4	429.6	409.5	390.9	371.6	356.0	343.5	332.1	325.2	324.4
150°	468.3	448.5	429.6	411.4	394.0	376.7	361.6	349.8	340.3	334.1	333.3
152.5°	463.2	445.4	428.3	412.6	396.6	381.1	367.4	356.8	347.9	341.6	341.4
155°	455.7	440.6	426.4	413.7	400.3	386.9	375.1	366.4	358.5	353.8	352.9
157.5°	447.9	435.8	424.3	413.7	403.0	391.6	382.3	374.8	368.6	364.2	364.2
160°	442.2	431.9	422.4	413.7	404.2	394.9	386.2	379.8	374.3	371.1	371.1
162.5°	437.2	428.2	420.6	413.7	405.6	396.7	389.9	384.3	379.3	376.8	377.5
165°	428.8	422.4	417.0	412.2	405.9	398.8	394.0	390.1	386.2	384.6	384.6
167.5°	421.2	416.8	413.1	410.3	405.8	400.5	396.9	394.7	391.6	390.9	391.6
170°	416.2	412.9	410.6	409.0	405.1	401.1	398.8	397.2	394.9	394.0	394.9
172.5°	411.7	409.2	408.1	407.8	404.5	401.7	400.0	399.1	397.4	397.2	398.0
175°	406.7	405.1	405.1	405.9	403.5	401.9	401.9	401.1	400.3	400.3	401.1
177.5°	403.1	402.5	402.5	403.8	402.5	401.9	401.9	401.9	401.3	401.9	402.5
180°	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9



TEST NUMBER: P332645-840

CATALOG NUMBER: SA4XXDIP-C1020D810U840-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1696.5	1702.0	1709.3	1721.6	1726.1	1731.6	1739.5	1738.9	1741.1	1749.5	1767.4
5°	1702.7	1724.3	1745.3	1770.5	1797.0	1814.4	1838.2	1852.8	1867.4	1886.3	1918.4
7.5°	1705.3	1739.6	1778.0	1822.1	1861.4	1906.6	1941.9	1975.1	2005.2	2045.0	2083.3
10°	1701.3	1747.4	1797.0	1852.8	1912.2	1962.5	2007.8	2059.5	2103.4	2151.6	2194.9
12.5°	1694.0	1749.7	1815.9	1878.6	1947.9	2022.2	2078.7	2130.9	2189.5	2244.9	2311.7
15°	1677.6	1753.7	1831.2	1913.6	2006.4	2092.2	2173.9	2241.7	2304.5	2387.6	2474.9
17.5°	1656.7	1738.8	1836.4	1936.2	2033.3	2131.4	2232.5	2334.3	2413.6	2516.8	2585.1
20°	1637.1	1732.0	1832.6	1951.3	2048.3	2170.5	2271.0	2369.4	2478.3	2581.0	2662.6
22.5°	1609.7	1713.6	1820.3	1938.4	2066.2	2188.4	2304.5	2411.4	2520.2	2631.8	2730.8
25°	1575.0	1669.2	1795.5	1929.7	2056.7	2189.3	2322.7	2456.7	2573.9	2692.0	2784.1
27.5°	1515.8	1634.8	1752.4	1890.8	2031.9	2182.0	2324.6	2465.0	2587.8	2684.8	2742.0
30°	1485.6	1588.9	1716.7	1855.6	2008.5	2169.8	2318.4	2456.0	2570.5	2648.0	2671.0
32.5°	1441.0	1547.6	1672.5	1816.5	1978.3	2144.0	2299.0	2428.6	2524.2	2564.8	2537.0
35°	1374.6	1471.0	1597.3	1744.6	1912.9	2089.5	2242.4	2352.0	2400.9	2362.5	2266.8
37.5°	1295.1	1390.5	1517.4	1662.1	1836.2	2015.8	2154.0	2232.9	2216.7	2121.2	1978.6
40°	1239.2	1328.6	1449.4	1605.7	1775.3	1955.4	2076.9	2119.5	2074.9	1938.0	1786.6
42.5°	1177.2	1264.4	1385.6	1536.4	1716.2	1882.3	1988.1	1991.7	1916.7	1753.1	1601.0
45°	1082.8	1165.9	1280.4	1437.4	1603.6	1760.0	1829.8	1795.5	1657.4	1499.5	1346.7
47.5°	989.7	1061.7	1174.6	1323.6	1481.5	1613.1	1647.7	1586.1	1438.9	1285.7	1144.0
50°	921.5	994.1	1100.2	1242.6	1394.8	1508.6	1525.4	1443.7	1299.2	1144.9	1033.9
52.5°	856.2	928.3	1030.5	1162.3	1301.6	1404.2	1404.7	1310.2	1166.3	1028.7	925.5
55°	760.2	825.2	917.4	1035.3	1159.6	1239.9	1220.3	1122.6	997.6	878.3	788.2
57.5°	667.8	724.4	809.3	907.7	1017.1	1083.4	1051.0	956.8	845.3	744.1	675.8
60°	608.0	661.9	734.5	827.3	919.5	971.1	940.4	855.2	752.6	670.9	611.6
62.5°	550.0	595.3	665.2	745.8	831.2	869.5	842.1	758.0	669.3	595.5	547.3
65°	467.8	504.7	560.6	629.8	691.9	724.7	701.7	623.4	555.7	502.6	464.2
67.5°	390.9	419.9	462.1	517.6	570.4	588.1	567.1	512.7	455.3	412.8	385.8
70°	337.9	365.2	400.7	443.3	489.4	508.3	487.3	444.0	397.3	358.1	331.6
72.5°	291.5	312.7	342.6	379.1	415.2	433.9	419.7	378.1	338.6	309.5	286.9
75°	222.0	240.1	261.1	286.9	314.9	327.4	314.9	286.2	259.0	237.3	221.3
77.5°	161.4	171.2	187.3	206.6	224.1	233.7	222.9	203.4	186.8	172.0	164.1
80°	122.9	129.9	141.0	156.4	168.2	177.3	170.4	154.3	141.0	131.3	127.7
82.5°	89.4	94.1	101.4	112.8	120.8	125.4	122.3	110.7	105.2	96.6	93.1
85°	44.0	46.8	51.7	55.1	62.1	62.8	63.5	58.7	53.7	51.7	48.9
87.5°	15.6	16.6	18.4	20.3	22.5	24.0	23.4	23.7	21.8	21.1	19.1
90°	2.3	4.7	5.6	6.4	6.4	11.0	11.0	12.6	14.2	13.4	14.2
92.5°	13.1	20.5	30.2	41.7	58.1	98.3	159.5	219.2	250.4	208.6	155.1
95°	28.4	36.4	46.6	65.5	98.7	167.4	296.9	485.6	643.6	661.8	585.1
97.5°	46.8	53.5	63.0	79.3	107.0	160.0	266.9	454.5	677.8	831.3	864.4
100°	60.0	65.5	75.0	90.0	115.3	161.9	251.2	412.2	634.9	837.0	952.3
102.5°	73.9	78.8	87.7	102.0	126.0	168.1	246.7	383.7	581.2	789.6	947.9
105°	94.7	98.7	108.2	122.4	145.3	183.2	248.7	359.3	518.0	703.6	884.4
107.5°	115.7	119.7	129.8	143.4	166.0	200.8	260.4	354.9	482.6	634.1	794.3
110°	130.3	134.2	143.7	157.9	179.3	214.0	269.2	356.1	470.6	599.4	739.9





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	144.2	148.8	157.6	171.8	193.2	226.6	278.7	359.9	464.9	579.8	700.1
115°	165.0	170.6	178.4	193.5	214.8	246.4	293.8	367.2	461.9	561.4	660.1
117.5°	185.7	190.7	199.3	213.4	235.5	265.5	309.0	375.0	461.1	553.2	640.6
120°	198.9	204.5	213.2	226.6	248.7	278.7	319.8	380.6	461.1	548.8	631.7
122.5°	211.7	217.1	225.2	239.8	261.4	291.3	329.9	386.3	460.5	543.7	624.1
125°	229.7	234.5	243.2	258.2	280.3	308.7	345.1	394.9	459.6	535.3	611.2
127.5°	243.9	249.5	259.4	275.1	297.4	324.9	358.2	401.6	457.9	524.1	595.4
130°	252.7	259.0	270.8	285.9	308.7	335.6	366.4	406.7	457.2	517.3	582.8
132.5°	260.2	268.5	279.7	296.0	317.6	344.5	374.6	411.1	456.6	510.9	569.5
135°	272.5	280.3	293.8	310.3	330.8	356.9	385.4	417.7	455.7	501.4	551.2
137.5°	283.8	292.5	305.3	322.4	342.0	366.4	392.9	421.6	455.4	493.2	534.6
140°	291.3	300.0	313.5	330.0	349.0	372.7	398.0	424.9	454.8	488.8	525.1
142.5°	300.2	308.3	321.0	337.0	355.4	378.4	401.7	427.4	454.8	485.0	516.2
145°	312.7	320.6	331.6	346.7	364.1	384.6	405.9	428.8	453.2	478.5	503.8
147.5°	325.2	332.1	343.5	356.0	371.6	390.9	409.5	429.6	450.4	472.7	493.5
150°	334.1	340.3	349.8	361.6	376.7	394.0	411.4	429.6	448.5	468.3	487.2
152.5°	341.6	347.9	356.8	367.4	381.1	396.6	412.6	428.3	445.4	463.2	480.3
155°	353.8	358.5	366.4	375.1	386.9	400.3	413.7	426.4	440.6	455.7	469.8
157.5°	364.2	368.6	374.8	382.3	391.6	403.0	413.7	424.3	435.8	447.9	458.6
160°	371.1	374.3	379.8	386.2	394.9	404.2	413.7	422.4	431.9	442.2	451.7
162.5°	376.8	379.3	384.3	389.9	396.7	405.6	413.7	420.6	428.2	437.2	444.7
165°	384.6	386.2	390.1	394.0	398.8	405.9	412.2	417.0	422.4	428.8	435.0
167.5°	390.9	391.6	394.7	396.9	400.5	405.8	410.3	413.1	416.8	421.2	425.8
170°	394.0	394.9	397.2	398.8	401.1	405.1	409.0	410.6	412.9	416.2	420.1
172.5°	397.2	397.4	399.1	400.0	401.7	404.5	407.8	408.1	409.2	411.7	415.1
175°	400.3	400.3	401.1	401.9	401.9	403.5	405.9	405.1	405.1	406.7	408.3
177.5°	401.9	401.3	401.9	401.9	401.9	402.5	403.8	402.5	402.5	403.1	403.8
180°	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9	401.9



TEST NUMBER: P332645-840

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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1776.4	1777.5	1782.4	1786.4	1787.5	1793.1	1793.6
5°	1932.4	1944.3	1967.3	1969.4	1972.9	1991.0	1977.1
7.5°	2115.4	2145.5	2165.6	2183.3	2189.8	2197.7	2196.1
10°	2232.6	2277.2	2299.7	2335.2	2336.6	2345.7	2340.2
12.5°	2350.5	2402.4	2443.2	2449.7	2479.6	2484.2	2492.0
15°	2517.4	2572.6	2629.2	2649.4	2690.6	2700.4	2715.7
17.5°	2674.4	2730.8	2770.5	2822.8	2839.7	2862.4	2846.9
20°	2760.4	2821.9	2872.1	2913.3	2930.7	2943.3	2941.9
22.5°	2812.4	2874.3	2915.1	2946.2	2962.5	2967.9	2967.6
25°	2844.9	2880.4	2893.1	2904.9	2886.8	2880.4	2883.3
27.5°	2754.4	2745.2	2712.4	2669.4	2624.6	2589.2	2569.9
30°	2629.9	2575.4	2525.8	2439.2	2394.6	2368.0	2344.3
32.5°	2453.4	2367.0	2271.7	2192.4	2141.6	2102.2	2096.4
35°	2150.9	2021.0	1904.5	1807.5	1757.2	1714.5	1704.9
37.5°	1828.7	1693.7	1588.8	1503.4	1449.4	1419.3	1391.2
40°	1614.8	1498.8	1395.5	1322.9	1281.7	1260.1	1242.6
42.5°	1450.0	1344.1	1241.4	1186.1	1148.8	1135.6	1125.4
45°	1222.4	1124.0	1052.8	1010.9	989.3	966.9	956.4
47.5°	1040.2	960.1	913.1	877.6	854.3	841.1	834.4
50°	936.9	871.2	829.4	802.1	781.2	770.7	765.2
52.5°	845.3	791.4	756.2	734.6	720.3	712.7	710.4
55°	728.1	686.9	664.6	645.8	635.3	628.3	625.5
57.5°	632.9	601.3	583.1	567.5	563.5	557.6	555.7
60°	570.4	545.9	530.6	520.1	516.6	509.7	511.0
62.5°	515.0	495.1	482.0	475.9	471.4	465.5	467.5
65°	435.7	421.0	413.9	408.4	402.8	399.3	402.1
67.5°	365.6	355.5	346.0	342.7	340.0	339.4	336.5
70°	319.7	311.3	303.0	300.9	300.9	298.1	297.4
72.5°	275.6	269.4	263.9	262.4	260.1	261.3	258.3
75°	212.9	208.0	205.9	203.9	203.2	203.2	201.1
77.5°	157.3	153.7	150.4	150.4	147.8	146.9	146.6
80°	119.4	118.0	115.2	115.2	113.8	114.5	113.1
82.5°	89.8	87.9	87.3	86.1	84.2	84.3	82.9
85°	48.2	46.0	45.3	43.3	41.9	43.3	41.9
87.5°	19.8	19.4	18.8	17.9	17.5	17.3	15.7
90°	15.0	15.8	15.8	16.6	17.4	16.6	16.6
92.5°	116.7	92.9	77.1	67.8	63.5	60.8	60.8
95°	462.7	356.9	280.3	241.7	217.1	203.0	192.7
97.5°	819.0	741.7	659.3	602.7	555.1	531.4	515.0
100°	968.1	929.4	871.0	802.2	754.1	730.4	724.1
102.5°	1026.2	1037.4	1013.1	971.0	936.0	911.1	906.1
105°	1021.0	1099.1	1131.6	1133.2	1126.8	1115.8	1111.1
107.5°	939.7	1049.8	1120.1	1159.2	1177.2	1185.1	1187.1
110°	876.5	991.0	1077.8	1133.9	1167.1	1181.3	1188.4



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	820.9	929.1	1015.9	1079.5	1119.7	1139.6	1151.1
115°	757.3	849.6	925.4	987.8	1035.2	1060.5	1066.8
117.5°	720.9	793.6	857.9	911.1	950.9	976.4	981.4
120°	705.2	768.3	824.4	869.4	904.1	924.6	933.3
122.5°	695.0	752.6	801.6	839.7	869.4	886.8	895.4
125°	679.1	733.6	777.0	808.6	831.5	846.5	851.2
127.5°	660.2	714.6	755.9	787.6	808.0	820.6	825.4
130°	645.1	698.8	740.6	773.1	792.8	805.5	810.2
132.5°	628.0	680.5	722.4	754.1	776.4	788.4	793.1
135°	602.5	650.7	690.1	721.8	743.9	756.5	761.2
137.5°	578.0	618.6	654.3	683.8	705.6	716.0	721.8
140°	562.2	597.7	631.0	658.5	675.9	687.0	693.3
142.5°	549.0	579.5	608.1	632.7	648.7	658.5	663.0
145°	530.7	554.3	576.4	596.2	609.6	617.5	621.5
147.5°	514.8	533.8	551.2	565.7	577.2	583.2	584.6
150°	505.3	521.2	535.3	548.1	558.3	563.0	563.8
152.5°	495.8	510.4	522.1	532.8	541.2	544.0	544.8
155°	482.5	494.3	503.8	511.7	518.0	520.4	520.4
157.5°	469.2	479.2	486.8	492.7	497.5	498.9	498.9
160°	460.4	469.1	475.3	480.1	484.8	485.6	485.6
162.5°	452.1	459.0	464.6	468.1	472.8	473.6	473.0
165°	439.8	445.4	449.3	452.4	455.7	454.8	454.0
167.5°	429.4	433.8	436.2	437.8	439.8	439.7	439.0
170°	422.4	425.7	428.0	429.6	430.3	429.6	429.6
172.5°	416.8	418.7	420.4	421.3	422.1	421.3	420.1
175°	409.0	410.6	410.6	410.6	412.2	410.6	409.0
177.5°	404.5	404.5	405.1	404.5	405.1	403.8	402.5
180°	401.9	401.9	401.9	401.9	401.9	401.9	401.9

(END OF REPORT)