

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: P332645-830

Luminaire Tested: **SA4XXDIP-C1020D810U830-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332645-830  
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-C1020D810U830-4F0-1E-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**

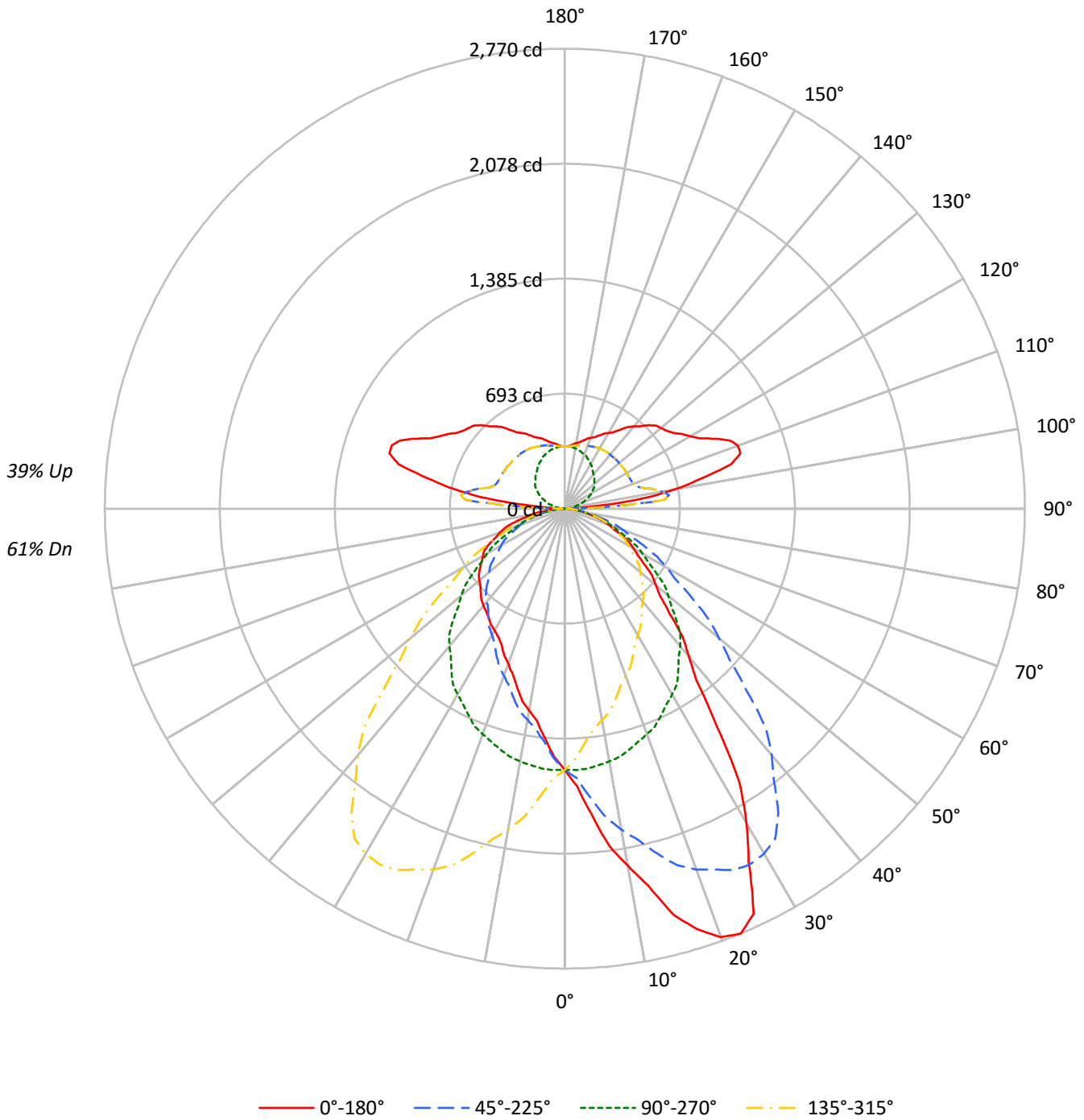
Lumens per Lamp: N/A  
Luminaire Lumens: 7070.1 lumens  
Efficiency: N/A  
Efficacy: 130.0 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41  
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')  
CIE Type: Semi-Direct

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°	12698	12698	12698	12698
5°	14954	12730	11237	12730
10°	17905	12675	10117	12675
15°	21184	12547	9290	12547
20°	23589	12416	8553	12416
25°	23971	12223	8044	12223
30°	20396	12039	7883	12039
35°	15682	11739	7885	11739
40°	12223	11385	8033	11385
45°	10192	10853	8169	10853
50°	8970	10206	8445	10206
55°	8217	9429	8785	9429
60°	7700	8732	9195	8732
65°	7169	7952	9534	7952
70°	6552	7183	9751	7183
75°	5855	6319	9635	6319
80°	4909	5179	9331	5179
85°	3622	3742	8929	3742



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.2	2.2
10°-20°	472.3	6.7
20°-30°	749.0	10.6
30°-40°	833.5	11.8
40°-50°	758.7	10.7
50°-60°	620.0	8.8
60°-70°	442.6	6.3
70°-80°	243.7	3.4
80°-90°	68.6	1.0
90°-100°	270.9	3.8
100°-110°	563.9	8.0
110°-120°	505.1	7.1
120°-130°	424.9	6.0
130°-140°	354.3	5.0
140°-150°	270.6	3.8
150°-160°	190.2	2.7
160°-170°	111.9	1.6
170°-180°	36.4	0.5
0°-30°	1374.6	19.4
0°-40°	2208.1	31.2
0°-60°	3586.8	50.7
0°-90°	4341.8	61.4
90°-120°	1340.0	19.0
90°-150°	2389.7	33.8
90°-180°	2728.0	38.6
0°-180°	7070.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1573	1573	1573	1573	1573	
5°	1845	1571	1387	1571	1845	188
15°	2535	1501	1112	1501	2535	716
25°	2691	1372	903	1372	2691	1186
35°	1591	1191	800	1191	1591	1010
45°	893	951	716	951	893	703
55°	584	670	624	670	584	527
65°	375	416	499	416	375	372
75°	188	203	309	203	188	200
85°	39	40	96	40	39	48
90°	16	1	16	1	16	14
95°	180	24	180	24	180	279
105°	1037	86	1037	86	1037	1025
115°	996	152	996	152	996	988
125°	794	212	794	212	794	722
135°	710	251	710	251	710	548
145°	580	290	580	290	580	368
155°	486	329	486	329	486	227
165°	424	359	424	359	424	121
175°	382	374	382	374	382	37
180°	375	375	375	375	375	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1674.0	1673.6	1668.3	1667.3	1663.6	1659.0	1657.9	1649.5	1632.9	1625.0	1623.0
5°	1845.3	1858.3	1841.4	1838.1	1836.2	1814.7	1803.6	1790.5	1760.6	1742.9	1729.3
7.5°	2049.7	2051.2	2043.8	2037.8	2021.2	2002.4	1974.3	1944.4	1908.6	1871.5	1843.4
10°	2184.2	2189.3	2180.9	2179.5	2146.4	2125.4	2083.8	2048.6	2008.2	1963.2	1922.2
12.5°	2325.9	2318.6	2314.3	2286.4	2280.3	2242.2	2193.8	2157.6	2095.3	2043.5	1988.9
15°	2534.7	2520.4	2511.2	2472.8	2453.9	2401.1	2349.6	2309.9	2228.5	2150.9	2092.3
17.5°	2657.1	2671.5	2650.4	2634.6	2585.8	2548.7	2496.1	2412.7	2349.0	2252.7	2178.7
20°	2745.8	2747.0	2735.4	2719.0	2680.6	2633.7	2576.3	2485.1	2409.0	2313.1	2211.5
22.5°	2769.8	2770.0	2765.0	2749.8	2720.7	2682.7	2624.9	2548.7	2456.4	2352.2	2250.6
25°	2691.1	2688.4	2694.4	2711.2	2700.2	2688.4	2655.2	2598.5	2512.5	2402.4	2292.9
27.5°	2398.6	2416.6	2449.7	2491.4	2531.6	2562.2	2570.8	2559.2	2505.8	2415.3	2300.7
30°	2188.0	2210.2	2235.0	2276.6	2357.4	2403.7	2454.6	2492.9	2471.4	2399.1	2292.3
32.5°	1956.6	1962.1	1998.8	2046.3	2120.2	2209.2	2289.8	2367.9	2393.8	2355.9	2266.7
35°	1591.2	1600.2	1640.0	1687.0	1777.5	1886.3	2007.5	2115.7	2205.0	2240.8	2195.2
37.5°	1298.4	1324.6	1352.7	1403.2	1482.9	1580.8	1706.8	1846.7	1979.8	2068.9	2084.1
40°	1159.8	1176.1	1196.3	1234.7	1302.5	1398.9	1507.1	1667.5	1808.8	1936.5	1978.2
42.5°	1050.4	1059.9	1072.2	1107.0	1158.7	1254.5	1353.3	1494.3	1636.3	1788.9	1858.9
45°	892.7	902.5	923.3	943.5	982.6	1049.0	1140.9	1256.9	1399.6	1546.9	1675.8
47.5°	778.7	785.0	797.4	819.1	852.2	896.1	970.8	1067.7	1200.0	1342.9	1480.4
50°	714.2	719.3	729.2	748.7	774.1	813.1	874.4	965.0	1068.6	1212.6	1347.5
52.5°	663.1	665.2	672.3	685.6	705.8	738.7	788.9	863.8	960.2	1088.5	1222.9
55°	583.8	586.4	593.0	602.8	620.3	641.1	679.6	735.7	819.7	931.1	1047.7
57.5°	518.7	520.5	525.9	529.7	544.2	561.2	590.7	630.7	694.5	788.9	893.1
60°	476.9	475.7	482.2	485.4	495.2	509.5	532.3	570.8	626.1	702.4	798.1
62.5°	436.3	434.5	440.0	444.2	449.9	462.1	480.7	510.9	555.8	624.7	707.5
65°	375.3	372.7	376.0	381.2	386.3	392.9	406.6	433.3	469.1	518.7	581.8
67.5°	314.1	316.8	317.4	319.9	322.9	331.8	341.2	360.1	385.3	425.0	478.5
70°	277.6	278.2	280.9	280.9	282.8	290.6	298.4	309.5	334.2	370.8	414.4
72.5°	241.1	243.8	242.8	244.9	246.3	251.5	257.2	267.8	288.9	316.0	352.9
75°	187.7	189.6	189.6	190.3	192.2	194.2	198.7	206.5	221.5	241.8	267.1
77.5°	136.9	137.1	138.0	140.3	140.3	143.5	146.8	153.2	160.5	174.4	189.8
80°	105.6	106.9	106.2	107.5	107.5	110.1	111.4	119.2	122.5	131.6	144.0
82.5°	77.4	78.7	78.6	80.4	81.4	82.0	83.8	86.9	90.2	98.2	103.3
85°	39.1	40.4	39.1	40.4	42.3	43.0	45.0	45.6	48.3	50.1	54.8
87.5°	14.6	16.1	16.3	16.7	17.5	18.1	18.5	17.8	19.7	20.4	22.1
90°	15.5	15.5	16.2	15.5	14.7	14.7	14.0	13.3	12.5	13.3	11.8
92.5°	56.7	56.7	59.3	63.2	71.9	86.7	109.0	144.8	194.7	233.8	204.6
95°	179.8	189.5	202.6	225.6	261.6	333.1	431.9	546.1	617.6	600.7	453.3
97.5°	480.7	496.0	518.1	562.5	615.4	692.3	764.4	806.8	775.9	632.6	424.2
100°	675.8	681.7	703.8	748.8	812.9	867.4	903.5	888.8	781.2	592.6	384.7
102.5°	845.6	850.4	873.6	906.3	945.6	968.3	957.8	884.7	737.0	542.4	358.2
105°	1037.0	1041.4	1051.7	1057.6	1056.1	1025.9	952.9	825.5	656.7	483.4	335.4
107.5°	1108.0	1106.1	1098.7	1081.9	1045.5	979.8	877.0	741.3	591.8	450.4	331.2
110°	1109.2	1102.6	1089.3	1058.3	1006.0	924.9	818.0	690.6	559.4	439.2	332.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1074.4	1063.7	1045.1	1007.6	948.2	867.1	766.2	653.5	541.1	433.9	335.9
115°	995.7	989.8	966.2	922.0	863.7	793.0	706.8	616.1	524.0	431.1	342.7
117.5°	916.0	911.3	887.5	850.4	800.7	740.6	672.9	597.9	516.3	430.4	350.0
120°	871.1	863.0	843.9	811.4	769.4	717.1	658.2	589.6	512.2	430.4	355.2
122.5°	835.8	827.6	811.4	783.7	748.2	702.4	648.7	582.5	507.5	429.8	360.5
125°	794.5	790.0	776.1	754.7	725.2	684.7	633.9	570.4	499.6	429.0	368.5
127.5°	770.3	765.9	754.1	735.1	705.5	666.9	616.2	555.7	489.2	427.3	374.8
130°	756.2	751.8	740.0	721.5	691.3	652.2	602.1	543.9	482.8	426.7	379.6
132.5°	740.3	735.8	724.6	703.8	674.2	635.2	586.2	531.5	476.8	426.1	383.7
135°	710.5	706.1	694.3	673.6	644.1	607.3	562.3	514.4	468.0	425.3	389.8
137.5°	673.6	668.3	658.6	638.2	610.7	577.4	539.5	499.0	460.3	425.1	393.5
140°	647.1	641.2	630.8	614.6	588.9	557.9	524.7	490.1	456.2	424.5	396.5
142.5°	618.8	614.6	605.5	590.5	567.6	540.8	512.4	481.8	452.7	424.5	398.9
145°	580.0	576.4	568.9	556.5	538.0	517.4	495.3	470.2	446.6	423.0	400.2
147.5°	545.6	544.3	538.8	528.0	514.4	498.2	480.5	460.6	441.2	420.4	401.0
150°	526.2	525.5	521.0	511.5	499.6	486.4	471.6	454.7	437.1	418.6	401.0
152.5°	508.5	507.7	505.1	497.3	487.3	476.4	462.8	448.3	432.3	415.7	399.7
155°	485.7	485.7	483.4	477.6	470.2	461.4	450.3	438.5	425.3	411.2	397.9
157.5°	465.6	465.6	464.3	459.9	454.3	447.2	437.9	428.0	418.0	406.7	396.1
160°	453.3	453.3	452.5	448.1	443.7	437.8	429.7	421.6	412.7	403.1	394.3
162.5°	441.5	442.1	441.3	436.9	433.7	428.4	422.0	415.1	408.0	399.6	392.6
165°	423.8	424.5	425.3	422.3	419.3	415.7	410.5	406.0	400.2	394.3	389.2
167.5°	409.7	410.4	410.5	408.6	407.1	404.9	400.8	397.4	393.1	389.0	385.6
170°	401.0	401.0	401.6	401.0	399.4	397.3	394.3	392.1	388.4	385.4	383.2
172.5°	392.1	393.2	394.0	393.2	392.4	390.8	389.0	387.4	384.3	381.9	380.9
175°	381.7	383.2	384.7	383.2	383.2	383.2	381.7	381.1	379.6	378.1	378.1
177.5°	375.7	376.9	378.1	377.5	378.1	377.5	377.5	376.9	376.3	375.7	375.7
180°	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1623.5	1616.2	1611.0	1606.8	1595.3	1588.6	1583.4	1576.0	1567.7	1558.9	1547.9
5°	1715.6	1693.5	1677.2	1652.5	1629.0	1609.4	1589.2	1570.9	1548.8	1524.8	1507.1
7.5°	1812.4	1779.5	1737.3	1700.6	1659.4	1623.6	1591.6	1558.7	1524.6	1491.5	1461.1
10°	1874.0	1831.6	1784.7	1729.3	1677.2	1630.9	1587.9	1546.2	1505.8	1465.4	1430.9
12.5°	1940.1	1887.3	1818.1	1753.3	1694.9	1633.0	1581.1	1530.0	1481.3	1438.8	1398.5
15°	2029.0	1952.8	1872.6	1786.0	1709.1	1636.8	1565.8	1501.3	1446.5	1390.4	1351.4
17.5°	2083.7	1989.3	1897.7	1807.1	1714.0	1622.9	1546.2	1471.8	1403.3	1347.6	1298.4
20°	2119.6	2025.8	1911.8	1821.2	1710.4	1616.6	1528.0	1445.2	1373.6	1314.3	1263.4
22.5°	2150.9	2042.5	1928.4	1809.2	1698.9	1599.4	1502.4	1419.2	1346.0	1283.5	1234.7
25°	2167.8	2043.3	1919.6	1801.0	1675.8	1557.9	1470.0	1372.2	1294.0	1228.2	1176.1
27.5°	2169.6	2036.6	1896.5	1764.7	1635.6	1525.8	1414.8	1327.4	1246.2	1176.7	1126.6
30°	2163.9	2025.1	1874.6	1731.9	1602.2	1483.0	1386.6	1291.5	1208.7	1139.6	1087.5
32.5°	2145.7	2001.1	1846.4	1695.4	1561.0	1444.4	1344.9	1254.4	1173.7	1105.7	1051.0
35°	2092.9	1950.2	1785.4	1628.3	1490.8	1372.9	1283.0	1191.1	1110.3	1045.8	993.1
37.5°	2010.4	1881.4	1713.8	1551.3	1416.3	1297.8	1208.7	1125.7	1052.8	987.3	933.2
40°	1938.4	1825.0	1657.0	1498.6	1352.7	1240.0	1156.6	1080.3	1008.0	946.1	894.7
42.5°	1855.6	1756.8	1601.8	1434.0	1293.3	1180.1	1098.7	1030.3	962.1	904.9	853.5
45°	1707.8	1642.7	1496.7	1341.6	1195.0	1088.2	1010.6	950.6	893.3	837.3	794.3
47.5°	1537.9	1505.5	1382.7	1235.4	1096.3	990.9	923.7	868.3	818.0	770.5	732.6
50°	1423.7	1408.1	1301.8	1159.8	1026.9	927.8	860.1	812.6	769.5	727.8	692.0
52.5°	1311.1	1310.6	1214.8	1084.8	961.8	866.4	799.1	754.7	717.4	683.5	651.3
55°	1139.0	1157.3	1082.3	966.3	856.2	770.2	709.5	669.9	643.8	615.8	591.6
57.5°	980.9	1011.2	949.3	847.2	755.4	676.1	623.3	593.4	565.7	548.7	531.2
60°	877.7	906.3	858.2	772.1	685.5	617.7	567.5	540.8	516.7	505.0	492.6
62.5°	786.0	811.5	775.8	696.1	620.9	555.6	513.3	487.7	471.4	458.5	450.3
65°	654.9	676.4	645.7	587.8	523.2	471.1	436.6	416.3	400.8	395.5	386.3
67.5°	529.3	548.9	532.3	483.1	431.3	391.9	364.9	345.4	336.2	331.7	325.2
70°	454.8	474.4	456.8	413.8	374.0	340.8	315.4	304.3	294.5	292.6	283.4
72.5°	391.7	405.0	387.5	353.8	319.8	291.8	272.1	260.5	255.4	251.9	246.9
75°	293.9	305.6	293.9	267.8	243.6	224.1	207.2	202.6	196.8	194.8	191.5
77.5°	208.0	218.1	209.2	192.8	174.8	159.8	150.6	144.8	143.5	140.1	141.7
80°	159.0	165.5	157.0	146.0	131.6	121.2	114.7	111.4	107.5	106.2	108.8
82.5°	114.1	117.1	112.7	105.3	94.6	87.8	83.4	79.6	78.8	79.1	79.1
85°	59.3	58.6	58.0	51.5	48.3	43.6	41.1	40.4	39.8	41.1	42.3
87.5°	21.9	22.4	21.0	18.9	17.2	15.5	14.5	13.7	14.5	15.5	16.1
90°	10.3	10.3	5.9	5.9	5.2	4.4	2.2	0.8	2.2	4.4	5.2
92.5°	148.8	91.7	54.2	38.9	28.2	19.1	12.3	8.4	12.3	19.1	28.2
95°	277.1	156.3	92.1	61.2	43.5	33.9	26.5	24.3	26.5	33.9	43.5
97.5°	249.1	149.3	99.9	74.0	58.8	50.0	43.6	43.6	43.6	50.0	58.8
100°	234.4	151.1	107.6	84.0	70.0	61.2	56.0	56.0	56.0	61.2	70.0
102.5°	230.3	156.9	117.6	95.2	81.8	73.5	69.0	67.8	69.0	73.5	81.8
105°	232.1	171.0	135.6	114.2	100.9	92.1	88.4	86.2	88.4	92.1	100.9
107.5°	243.1	187.4	155.0	133.8	121.1	111.7	108.0	106.6	108.0	111.7	121.1
110°	251.3	199.7	167.3	147.4	134.1	125.3	121.6	120.2	121.6	125.3	134.1





TEST NUMBER: P332645-830

CATALOG NUMBER: SA4XXDIP-C1020D810U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	260.1	211.5	180.3	160.3	147.1	138.8	134.6	133.1	134.6	138.8	147.1
115°	274.2	230.0	200.5	180.6	166.5	159.2	154.0	151.8	154.0	159.2	166.5
117.5°	288.4	247.8	219.8	199.2	186.1	178.0	173.3	171.3	173.3	178.0	186.1
120°	298.5	260.1	232.1	211.5	199.0	190.9	185.7	184.3	185.7	190.9	199.0
122.5°	307.9	271.9	243.9	223.9	210.2	202.6	197.6	196.0	197.6	202.6	210.2
125°	322.1	288.1	261.6	241.0	227.0	218.9	214.4	211.5	214.4	218.9	227.0
127.5°	334.3	303.2	277.6	256.7	242.1	232.9	227.6	225.3	227.6	232.9	242.1
130°	342.0	313.2	288.1	266.8	252.8	241.8	235.8	232.9	235.8	241.8	252.8
132.5°	349.6	321.5	296.4	276.3	261.1	250.6	242.9	240.5	242.9	250.6	261.1
135°	359.7	333.1	308.8	289.6	274.2	261.6	254.3	251.3	254.3	261.6	274.2
137.5°	366.7	342.0	319.2	301.0	284.9	273.0	264.9	262.1	264.9	273.0	284.9
140°	371.5	347.9	325.7	308.0	292.6	280.0	271.9	269.8	271.9	280.0	292.6
142.5°	374.9	353.2	331.7	314.5	299.6	287.8	280.2	278.0	280.2	287.8	299.6
145°	378.8	358.9	339.8	323.6	309.5	299.3	291.8	289.6	291.8	299.3	309.5
147.5°	382.2	364.9	346.9	332.2	320.6	310.0	303.5	302.7	303.5	310.0	320.6
150°	384.0	367.8	351.6	337.5	326.5	317.6	311.8	311.0	311.8	317.6	326.5
152.5°	385.1	370.1	355.7	342.9	333.0	324.7	318.9	318.7	318.9	324.7	333.0
155°	386.2	373.6	361.1	350.1	342.0	334.6	330.2	329.4	330.2	334.6	342.0
157.5°	386.2	376.2	365.5	356.8	349.8	344.0	339.9	339.9	339.9	344.0	349.8
160°	386.2	377.3	368.5	360.4	354.5	349.3	346.4	346.4	346.4	349.3	354.5
162.5°	386.2	378.5	370.2	363.9	358.6	354.0	351.7	352.3	351.7	354.0	358.6
165°	384.7	378.8	372.2	367.8	364.1	360.4	358.9	358.9	358.9	360.4	364.1
167.5°	383.0	378.7	373.8	370.4	368.3	365.5	364.9	365.5	364.9	365.5	368.3
170°	381.7	378.1	374.4	372.2	370.7	368.5	367.8	368.5	367.8	368.5	370.7
172.5°	380.6	377.5	374.9	373.3	372.5	370.9	370.7	371.5	370.7	370.9	372.5
175°	378.8	376.6	375.1	375.1	374.4	373.6	373.6	374.4	373.6	373.6	374.4
177.5°	376.9	375.7	375.1	375.1	375.1	374.6	375.1	375.7	375.1	374.6	375.1
180°	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1



TEST NUMBER: P332645-830  
 CATALOG NUMBER: SA4XXDIP-C1020D810U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1542.7	1538.0	1531.3	1521.8	1514.0	1505.7	1503.6	1500.4	1506.7	1501.5	1500.0
5°	1492.1	1478.5	1460.8	1440.7	1428.9	1412.0	1408.7	1402.2	1395.7	1395.1	1388.6
7.5°	1438.6	1418.5	1395.4	1374.9	1355.8	1337.3	1325.2	1322.6	1313.0	1307.3	1300.8
10°	1404.2	1379.4	1352.7	1333.1	1311.0	1291.5	1277.8	1270.0	1263.4	1256.2	1249.7
12.5°	1363.5	1337.2	1315.1	1294.0	1267.7	1252.8	1230.3	1216.7	1215.5	1215.6	1198.6
15°	1316.2	1290.2	1256.2	1226.2	1211.9	1183.3	1170.9	1155.3	1145.5	1135.7	1127.9
17.5°	1262.2	1229.6	1203.2	1168.8	1141.4	1118.6	1102.4	1093.0	1078.3	1064.4	1054.4
20°	1228.2	1193.7	1165.6	1129.2	1099.2	1071.2	1057.5	1044.5	1033.4	1021.7	1010.6
22.5°	1193.8	1157.7	1123.4	1088.0	1060.2	1030.6	1017.4	999.7	989.1	982.6	971.5
25°	1139.6	1100.5	1061.4	1027.6	998.9	972.8	955.3	941.5	929.8	924.6	917.5
27.5°	1080.7	1041.9	1004.1	965.6	933.1	914.2	900.1	889.8	883.1	876.1	872.9
30°	1043.2	1002.8	962.4	926.5	896.5	877.7	864.7	857.5	852.2	849.0	845.7
32.5°	1005.1	965.3	922.7	890.0	863.2	846.4	836.5	829.3	826.7	825.6	824.3
35°	944.1	903.7	864.7	835.4	809.9	803.4	794.9	791.0	789.8	794.3	796.3
37.5°	885.1	847.6	811.6	783.2	766.6	757.1	754.1	754.3	758.9	763.0	767.7
40°	847.1	810.6	776.7	752.0	736.3	730.5	729.2	732.4	737.6	742.2	747.3
42.5°	810.0	774.1	743.3	720.1	709.2	703.8	704.6	707.8	715.2	720.8	728.6
45°	752.6	722.6	692.7	673.7	664.6	665.9	665.9	671.8	678.9	687.4	695.9
47.5°	698.5	668.3	643.7	627.7	623.0	621.9	625.6	633.2	643.5	653.9	665.8
50°	662.0	633.3	611.8	597.5	592.3	594.3	599.5	606.6	619.0	632.1	644.4
52.5°	625.0	598.9	579.0	565.7	562.0	565.6	570.8	582.1	593.0	607.0	622.0
55°	567.5	545.4	529.7	520.0	518.7	520.7	526.5	538.9	554.5	572.1	586.4
57.5°	510.3	491.8	477.5	470.7	471.4	473.2	482.9	497.6	514.3	533.0	551.5
60°	471.7	454.8	443.1	437.9	438.5	442.4	454.1	467.9	488.7	506.9	526.5
62.5°	435.3	420.4	409.2	404.5	403.6	412.2	423.4	437.6	458.5	478.8	499.9
65°	376.6	364.9	355.8	353.2	355.2	361.7	376.0	394.8	412.5	433.9	456.1
67.5°	319.2	309.6	303.4	304.5	306.9	316.5	328.6	344.8	364.8	387.0	409.0
70°	282.8	273.6	268.4	269.1	273.1	284.7	295.2	311.4	333.0	355.8	374.0
72.5°	245.2	239.2	234.6	237.3	241.2	249.3	262.3	278.6	297.6	318.8	338.0
75°	188.3	188.3	185.7	187.7	193.5	201.3	211.1	228.1	246.9	263.9	279.6
77.5°	139.7	138.3	140.0	142.3	145.7	155.0	166.2	178.2	192.5	209.4	222.3
80°	106.9	107.5	110.7	114.7	116.0	123.2	134.9	146.0	157.0	171.4	183.7
82.5°	80.3	81.0	82.7	87.6	88.9	96.6	104.2	115.2	125.3	134.9	145.2
85°	43.6	43.6	46.9	48.8	52.1	57.3	61.9	68.4	77.6	84.1	93.8
87.5°	17.8	17.8	20.8	21.9	23.8	26.7	27.5	33.4	35.6	38.4	43.1
90°	5.9	5.9	10.3	10.3	11.8	13.3	12.5	13.3	14.0	14.7	14.7
92.5°	38.9	54.2	91.7	148.8	204.6	233.8	194.7	144.8	109.0	86.7	71.9
95°	61.2	92.1	156.3	277.1	453.3	600.7	617.6	546.1	431.9	333.1	261.6
97.5°	74.0	99.9	149.3	249.1	424.2	632.6	775.9	806.8	764.4	692.3	615.4
100°	84.0	107.6	151.1	234.4	384.7	592.6	781.2	888.8	903.5	867.4	812.9
102.5°	95.2	117.6	156.9	230.3	358.2	542.4	737.0	884.7	957.8	968.3	945.6
105°	114.2	135.6	171.0	232.1	335.4	483.4	656.7	825.5	952.9	1025.9	1056.1
107.5°	133.8	155.0	187.4	243.1	331.2	450.4	591.8	741.3	877.0	979.8	1045.5
110°	147.4	167.3	199.7	251.3	332.3	439.2	559.4	690.6	818.0	924.9	1006.0



TEST NUMBER: P332645-830

CATALOG NUMBER: SA4XXDIP-C1020D810U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	160.3	180.3	211.5	260.1	335.9	433.9	541.1	653.5	766.2	867.1	948.2
115°	180.6	200.5	230.0	274.2	342.7	431.1	524.0	616.1	706.8	793.0	863.7
117.5°	199.2	219.8	247.8	288.4	350.0	430.4	516.3	597.9	672.9	740.6	800.7
120°	211.5	232.1	260.1	298.5	355.2	430.4	512.2	589.6	658.2	717.1	769.4
122.5°	223.9	243.9	271.9	307.9	360.5	429.8	507.5	582.5	648.7	702.4	748.2
125°	241.0	261.6	288.1	322.1	368.5	429.0	499.6	570.4	633.9	684.7	725.2
127.5°	256.7	277.6	303.2	334.3	374.8	427.3	489.2	555.7	616.2	666.9	705.5
130°	266.8	288.1	313.2	342.0	379.6	426.7	482.8	543.9	602.1	652.2	691.3
132.5°	276.3	296.4	321.5	349.6	383.7	426.1	476.8	531.5	586.2	635.2	674.2
135°	289.6	308.8	333.1	359.7	389.8	425.3	468.0	514.4	562.3	607.3	644.1
137.5°	301.0	319.2	342.0	366.7	393.5	425.1	460.3	499.0	539.5	577.4	610.7
140°	308.0	325.7	347.9	371.5	396.5	424.5	456.2	490.1	524.7	557.9	588.9
142.5°	314.5	331.7	353.2	374.9	398.9	424.5	452.7	481.8	512.4	540.8	567.6
145°	323.6	339.8	358.9	378.8	400.2	423.0	446.6	470.2	495.3	517.4	538.0
147.5°	332.2	346.9	364.9	382.2	401.0	420.4	441.2	460.6	480.5	498.2	514.4
150°	337.5	351.6	367.8	384.0	401.0	418.6	437.1	454.7	471.6	486.4	499.6
152.5°	342.9	355.7	370.1	385.1	399.7	415.7	432.3	448.3	462.8	476.4	487.3
155°	350.1	361.1	373.6	386.2	397.9	411.2	425.3	438.5	450.3	461.4	470.2
157.5°	356.8	365.5	376.2	386.2	396.1	406.7	418.0	428.0	437.9	447.2	454.3
160°	360.4	368.5	377.3	386.2	394.3	403.1	412.7	421.6	429.7	437.8	443.7
162.5°	363.9	370.2	378.5	386.2	392.6	399.6	408.0	415.1	422.0	428.4	433.7
165°	367.8	372.2	378.8	384.7	389.2	394.3	400.2	406.0	410.5	415.7	419.3
167.5°	370.4	373.8	378.7	383.0	385.6	389.0	393.1	397.4	400.8	404.9	407.1
170°	372.2	374.4	378.1	381.7	383.2	385.4	388.4	392.1	394.3	397.3	399.4
172.5°	373.3	374.9	377.5	380.6	380.9	381.9	384.3	387.4	389.0	390.8	392.4
175°	375.1	375.1	376.6	378.8	378.1	378.1	379.6	381.1	381.7	383.2	383.2
177.5°	375.1	375.1	375.7	376.9	375.7	375.7	376.3	376.9	377.5	377.5	378.1
180°	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1



TEST NUMBER: P332645-830

CATALOG NUMBER: SA4XXDIP-C1020D810U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1498.9	1497.9	1494.2	1493.7	1494.2	1497.9	1498.9	1500.0	1501.5	1506.7	1500.4
5°	1384.6	1381.4	1379.4	1386.6	1379.4	1381.4	1384.6	1388.6	1395.1	1395.7	1402.2
7.5°	1298.4	1295.9	1290.2	1288.4	1290.2	1295.9	1298.4	1300.8	1307.3	1313.0	1322.6
10°	1243.2	1240.6	1235.4	1234.1	1235.4	1240.6	1243.2	1249.7	1256.2	1263.4	1270.0
12.5°	1190.1	1184.9	1183.8	1185.1	1183.8	1184.9	1190.1	1198.6	1215.6	1215.5	1216.7
15°	1119.5	1116.8	1109.7	1111.6	1109.7	1116.8	1119.5	1127.9	1135.7	1145.5	1155.3
17.5°	1049.8	1046.7	1038.0	1045.7	1038.0	1046.7	1049.8	1054.4	1064.4	1078.3	1093.0
20°	1006.1	1000.8	996.3	995.6	996.3	1000.8	1006.1	1010.6	1021.7	1033.4	1044.5
22.5°	964.3	959.7	959.2	955.0	959.2	959.7	964.3	971.5	982.6	989.1	999.7
25°	912.2	907.7	906.3	903.1	906.3	907.7	912.2	917.5	924.6	929.8	941.5
27.5°	872.2	870.0	867.6	868.6	867.6	870.0	872.2	872.9	876.1	883.1	889.8
30°	847.7	847.1	845.7	845.7	845.7	847.1	847.7	845.7	849.0	852.2	857.5
32.5°	827.4	827.3	828.0	828.0	828.0	827.3	827.4	824.3	825.6	826.7	829.3
35°	798.8	800.8	802.1	800.1	802.1	800.8	798.8	796.3	794.3	789.8	791.0
37.5°	773.1	775.0	776.8	779.0	776.8	775.0	773.1	767.7	763.0	758.9	754.3
40°	753.2	757.8	759.1	762.3	759.1	757.8	753.2	747.3	742.2	737.6	732.4
42.5°	734.4	739.5	742.9	743.6	742.9	739.5	734.4	728.6	720.8	715.2	707.8
45°	705.7	710.9	715.5	715.5	715.5	710.9	705.7	695.9	687.4	678.9	671.8
47.5°	675.8	683.3	688.0	689.1	688.0	683.3	675.8	665.8	653.9	643.5	633.2
50°	655.5	664.6	669.2	672.4	669.2	664.6	655.5	644.4	632.1	619.0	606.6
52.5°	635.7	644.8	650.9	652.6	650.9	644.8	635.7	622.0	607.0	593.0	582.1
55°	601.4	614.4	621.6	624.2	621.6	614.4	601.4	586.4	572.1	554.5	538.9
57.5°	569.1	581.1	589.5	591.4	589.5	581.1	569.1	551.5	533.0	514.3	497.6
60°	544.0	557.1	567.5	569.5	567.5	557.1	544.0	526.5	506.9	488.7	467.9
62.5°	518.5	532.1	541.5	546.6	541.5	532.1	518.5	499.9	478.8	458.5	437.6
65°	474.4	488.0	497.2	499.1	497.2	488.0	474.4	456.1	433.9	412.5	394.8
67.5°	426.1	439.8	445.8	449.6	445.8	439.8	426.1	409.0	387.0	364.8	344.8
70°	392.3	403.3	409.8	413.1	409.8	403.3	392.3	374.0	355.8	333.0	311.4
72.5°	353.6	365.2	372.9	373.5	372.9	365.2	353.6	338.0	318.8	297.6	278.6
75°	294.5	304.9	308.9	308.9	308.9	304.9	294.5	279.6	263.9	246.9	228.1
77.5°	233.1	238.5	243.5	244.5	243.5	238.5	233.1	222.3	209.4	192.5	178.2
80°	193.5	196.8	200.7	200.7	200.7	196.8	193.5	183.7	171.4	157.0	146.0
82.5°	152.9	155.6	159.5	159.0	159.5	155.6	152.9	145.2	134.9	125.3	115.2
85°	92.6	98.4	97.7	96.4	97.7	98.4	92.6	93.8	84.1	77.6	68.4
87.5°	44.8	45.4	46.8	47.9	46.8	45.4	44.8	43.1	38.4	35.6	33.4
90°	15.5	16.2	15.5	15.5	15.5	16.2	15.5	14.7	14.7	14.0	13.3
92.5°	63.2	59.3	56.7	56.7	56.7	59.3	63.2	71.9	86.7	109.0	144.8
95°	225.6	202.6	189.5	179.8	189.5	202.6	225.6	261.6	333.1	431.9	546.1
97.5°	562.5	518.1	496.0	480.7	496.0	518.1	562.5	615.4	692.3	764.4	806.8
100°	748.8	703.8	681.7	675.8	681.7	703.8	748.8	812.9	867.4	903.5	888.8
102.5°	906.3	873.6	850.4	845.6	850.4	873.6	906.3	945.6	968.3	957.8	884.7
105°	1057.6	1051.7	1041.4	1037.0	1041.4	1051.7	1057.6	1056.1	1025.9	952.9	825.5
107.5°	1081.9	1098.7	1106.1	1108.0	1106.1	1098.7	1081.9	1045.5	979.8	877.0	741.3
110°	1058.3	1089.3	1102.6	1109.2	1102.6	1089.3	1058.3	1006.0	924.9	818.0	690.6



TEST NUMBER: P332645-830

CATALOG NUMBER: SA4XXDIP-C1020D810U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1007.6	1045.1	1063.7	1074.4	1063.7	1045.1	1007.6	948.2	867.1	766.2	653.5
115°	922.0	966.2	989.8	995.7	989.8	966.2	922.0	863.7	793.0	706.8	616.1
117.5°	850.4	887.5	911.3	916.0	911.3	887.5	850.4	800.7	740.6	672.9	597.9
120°	811.4	843.9	863.0	871.1	863.0	843.9	811.4	769.4	717.1	658.2	589.6
122.5°	783.7	811.4	827.6	835.8	827.6	811.4	783.7	748.2	702.4	648.7	582.5
125°	754.7	776.1	790.0	794.5	790.0	776.1	754.7	725.2	684.7	633.9	570.4
127.5°	735.1	754.1	765.9	770.3	765.9	754.1	735.1	705.5	666.9	616.2	555.7
130°	721.5	740.0	751.8	756.2	751.8	740.0	721.5	691.3	652.2	602.1	543.9
132.5°	703.8	724.6	735.8	740.3	735.8	724.6	703.8	674.2	635.2	586.2	531.5
135°	673.6	694.3	706.1	710.5	706.1	694.3	673.6	644.1	607.3	562.3	514.4
137.5°	638.2	658.6	668.3	673.6	668.3	658.6	638.2	610.7	577.4	539.5	499.0
140°	614.6	630.8	641.2	647.1	641.2	630.8	614.6	588.9	557.9	524.7	490.1
142.5°	590.5	605.5	614.6	618.8	614.6	605.5	590.5	567.6	540.8	512.4	481.8
145°	556.5	568.9	576.4	580.0	576.4	568.9	556.5	538.0	517.4	495.3	470.2
147.5°	528.0	538.8	544.3	545.6	544.3	538.8	528.0	514.4	498.2	480.5	460.6
150°	511.5	521.0	525.5	526.2	525.5	521.0	511.5	499.6	486.4	471.6	454.7
152.5°	497.3	505.1	507.7	508.5	507.7	505.1	497.3	487.3	476.4	462.8	448.3
155°	477.6	483.4	485.7	485.7	485.7	483.4	477.6	470.2	461.4	450.3	438.5
157.5°	459.9	464.3	465.6	465.6	465.6	464.3	459.9	454.3	447.2	437.9	428.0
160°	448.1	452.5	453.3	453.3	453.3	452.5	448.1	443.7	437.8	429.7	421.6
162.5°	436.9	441.3	442.1	441.5	442.1	441.3	436.9	433.7	428.4	422.0	415.1
165°	422.3	425.3	424.5	423.8	424.5	425.3	422.3	419.3	415.7	410.5	406.0
167.5°	408.6	410.5	410.4	409.7	410.4	410.5	408.6	407.1	404.9	400.8	397.4
170°	401.0	401.6	401.0	401.0	401.0	401.6	401.0	399.4	397.3	394.3	392.1
172.5°	393.2	394.0	393.2	392.1	393.2	394.0	393.2	392.4	390.8	389.0	387.4
175°	383.2	384.7	383.2	381.7	383.2	384.7	383.2	383.2	383.2	381.7	381.1
177.5°	377.5	378.1	376.9	375.7	376.9	378.1	377.5	378.1	377.5	377.5	376.9
180°	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1



TEST NUMBER: P332645-830

CATALOG NUMBER: SA4XXDIP-C1020D810U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1503.6	1505.7	1514.0	1521.8	1531.3	1538.0	1542.7	1547.9	1558.9	1567.7	1576.0
5°	1408.7	1412.0	1428.9	1440.7	1460.8	1478.5	1492.1	1507.1	1524.8	1548.8	1570.9
7.5°	1325.2	1337.3	1355.8	1374.9	1395.4	1418.5	1438.6	1461.1	1491.5	1524.6	1558.7
10°	1277.8	1291.5	1311.0	1333.1	1352.7	1379.4	1404.2	1430.9	1465.4	1505.8	1546.2
12.5°	1230.3	1252.8	1267.7	1294.0	1315.1	1337.2	1363.5	1398.5	1438.8	1481.3	1530.0
15°	1170.9	1183.3	1211.9	1226.2	1256.2	1290.2	1316.2	1351.4	1390.4	1446.5	1501.3
17.5°	1102.4	1118.6	1141.4	1168.8	1203.2	1229.6	1262.2	1298.4	1347.6	1403.3	1471.8
20°	1057.5	1071.2	1099.2	1129.2	1165.6	1193.7	1228.2	1263.4	1314.3	1373.6	1445.2
22.5°	1017.4	1030.6	1060.2	1088.0	1123.4	1157.7	1193.8	1234.7	1283.5	1346.0	1419.2
25°	955.3	972.8	998.9	1027.6	1061.4	1100.5	1139.6	1176.1	1228.2	1294.0	1372.2
27.5°	900.1	914.2	933.1	965.6	1004.1	1041.9	1080.7	1126.6	1176.7	1246.2	1327.4
30°	864.7	877.7	896.5	926.5	962.4	1002.8	1043.2	1087.5	1139.6	1208.7	1291.5
32.5°	836.5	846.4	863.2	890.0	922.7	965.3	1005.1	1051.0	1105.7	1173.7	1254.4
35°	794.9	803.4	809.9	835.4	864.7	903.7	944.1	993.1	1045.8	1110.3	1191.1
37.5°	754.1	757.1	766.6	783.2	811.6	847.6	885.1	933.2	987.3	1052.8	1125.7
40°	729.2	730.5	736.3	752.0	776.7	810.6	847.1	894.7	946.1	1008.0	1080.3
42.5°	704.6	703.8	709.2	720.1	743.3	774.1	810.0	853.5	904.9	962.1	1030.3
45°	665.9	665.9	664.6	673.7	692.7	722.6	752.6	794.3	837.3	893.3	950.6
47.5°	625.6	621.9	623.0	627.7	643.7	668.3	698.5	732.6	770.5	818.0	868.3
50°	599.5	594.3	592.3	597.5	611.8	633.3	662.0	692.0	727.8	769.5	812.6
52.5°	570.8	565.6	562.0	565.7	579.0	598.9	625.0	651.3	683.5	717.4	754.7
55°	526.5	520.7	518.7	520.0	529.7	545.4	567.5	591.6	615.8	643.8	669.9
57.5°	482.9	473.2	471.4	470.7	477.5	491.8	510.3	531.2	548.7	565.7	593.4
60°	454.1	442.4	438.5	437.9	443.1	454.8	471.7	492.6	505.0	516.7	540.8
62.5°	423.4	412.2	403.6	404.5	409.2	420.4	435.3	450.3	458.5	471.4	487.7
65°	376.0	361.7	355.2	353.2	355.8	364.9	376.6	386.3	395.5	400.8	416.3
67.5°	328.6	316.5	306.9	304.5	303.4	309.6	319.2	325.2	331.7	336.2	345.4
70°	295.2	284.7	273.1	269.1	268.4	273.6	282.8	283.4	292.6	294.5	304.3
72.5°	262.3	249.3	241.2	237.3	234.6	239.2	245.2	246.9	251.9	255.4	260.5
75°	211.1	201.3	193.5	187.7	185.7	188.3	188.3	191.5	194.8	196.8	202.6
77.5°	166.2	155.0	145.7	142.3	140.0	138.3	139.7	141.7	140.1	143.5	144.8
80°	134.9	123.2	116.0	114.7	110.7	107.5	106.9	108.8	106.2	107.5	111.4
82.5°	104.2	96.6	88.9	87.6	82.7	81.0	80.3	79.1	79.1	78.8	79.6
85°	61.9	57.3	52.1	48.8	46.9	43.6	43.6	42.3	41.1	39.8	40.4
87.5°	27.5	26.7	23.8	21.9	20.8	17.8	17.8	16.1	15.5	14.5	13.7
90°	12.5	13.3	11.8	10.3	10.3	5.9	5.9	5.2	4.4	2.2	0.8
92.5°	194.7	233.8	204.6	148.8	91.7	54.2	38.9	28.2	19.1	12.3	8.4
95°	617.6	600.7	453.3	277.1	156.3	92.1	61.2	43.5	33.9	26.5	24.3
97.5°	775.9	632.6	424.2	249.1	149.3	99.9	74.0	58.8	50.0	43.6	43.6
100°	781.2	592.6	384.7	234.4	151.1	107.6	84.0	70.0	61.2	56.0	56.0
102.5°	737.0	542.4	358.2	230.3	156.9	117.6	95.2	81.8	73.5	69.0	67.8
105°	656.7	483.4	335.4	232.1	171.0	135.6	114.2	100.9	92.1	88.4	86.2
107.5°	591.8	450.4	331.2	243.1	187.4	155.0	133.8	121.1	111.7	108.0	106.6
110°	559.4	439.2	332.3	251.3	199.7	167.3	147.4	134.1	125.3	121.6	120.2



TEST NUMBER: P332645-830

CATALOG NUMBER: SA4XXDIP-C1020D810U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	541.1	433.9	335.9	260.1	211.5	180.3	160.3	147.1	138.8	134.6	133.1
115°	524.0	431.1	342.7	274.2	230.0	200.5	180.6	166.5	159.2	154.0	151.8
117.5°	516.3	430.4	350.0	288.4	247.8	219.8	199.2	186.1	178.0	173.3	171.3
120°	512.2	430.4	355.2	298.5	260.1	232.1	211.5	199.0	190.9	185.7	184.3
122.5°	507.5	429.8	360.5	307.9	271.9	243.9	223.9	210.2	202.6	197.6	196.0
125°	499.6	429.0	368.5	322.1	288.1	261.6	241.0	227.0	218.9	214.4	211.5
127.5°	489.2	427.3	374.8	334.3	303.2	277.6	256.7	242.1	232.9	227.6	225.3
130°	482.8	426.7	379.6	342.0	313.2	288.1	266.8	252.8	241.8	235.8	232.9
132.5°	476.8	426.1	383.7	349.6	321.5	296.4	276.3	261.1	250.6	242.9	240.5
135°	468.0	425.3	389.8	359.7	333.1	308.8	289.6	274.2	261.6	254.3	251.3
137.5°	460.3	425.1	393.5	366.7	342.0	319.2	301.0	284.9	273.0	264.9	262.1
140°	456.2	424.5	396.5	371.5	347.9	325.7	308.0	292.6	280.0	271.9	269.8
142.5°	452.7	424.5	398.9	374.9	353.2	331.7	314.5	299.6	287.8	280.2	278.0
145°	446.6	423.0	400.2	378.8	358.9	339.8	323.6	309.5	299.3	291.8	289.6
147.5°	441.2	420.4	401.0	382.2	364.9	346.9	332.2	320.6	310.0	303.5	302.7
150°	437.1	418.6	401.0	384.0	367.8	351.6	337.5	326.5	317.6	311.8	311.0
152.5°	432.3	415.7	399.7	385.1	370.1	355.7	342.9	333.0	324.7	318.9	318.7
155°	425.3	411.2	397.9	386.2	373.6	361.1	350.1	342.0	334.6	330.2	329.4
157.5°	418.0	406.7	396.1	386.2	376.2	365.5	356.8	349.8	344.0	339.9	339.9
160°	412.7	403.1	394.3	386.2	377.3	368.5	360.4	354.5	349.3	346.4	346.4
162.5°	408.0	399.6	392.6	386.2	378.5	370.2	363.9	358.6	354.0	351.7	352.3
165°	400.2	394.3	389.2	384.7	378.8	372.2	367.8	364.1	360.4	358.9	358.9
167.5°	393.1	389.0	385.6	383.0	378.7	373.8	370.4	368.3	365.5	364.9	365.5
170°	388.4	385.4	383.2	381.7	378.1	374.4	372.2	370.7	368.5	367.8	368.5
172.5°	384.3	381.9	380.9	380.6	377.5	374.9	373.3	372.5	370.9	370.7	371.5
175°	379.6	378.1	378.1	378.8	376.6	375.1	375.1	374.4	373.6	373.6	374.4
177.5°	376.3	375.7	375.7	376.9	375.7	375.1	375.1	375.1	374.6	375.1	375.7
180°	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1



TEST NUMBER: P332645-830

CATALOG NUMBER: SA4XXDIP-C1020D810U830-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1583.4	1588.6	1595.3	1606.8	1611.0	1616.2	1623.5	1623.0	1625.0	1632.9	1649.5
5°	1589.2	1609.4	1629.0	1652.5	1677.2	1693.5	1715.6	1729.3	1742.9	1760.6	1790.5
7.5°	1591.6	1623.6	1659.4	1700.6	1737.3	1779.5	1812.4	1843.4	1871.5	1908.6	1944.4
10°	1587.9	1630.9	1677.2	1729.3	1784.7	1831.6	1874.0	1922.2	1963.2	2008.2	2048.6
12.5°	1581.1	1633.0	1694.9	1753.3	1818.1	1887.3	1940.1	1988.9	2043.5	2095.3	2157.6
15°	1565.8	1636.8	1709.1	1786.0	1872.6	1952.8	2029.0	2092.3	2150.9	2228.5	2309.9
17.5°	1546.2	1622.9	1714.0	1807.1	1897.7	1989.3	2083.7	2178.7	2252.7	2349.0	2412.7
20°	1528.0	1616.6	1710.4	1821.2	1911.8	2025.8	2119.6	2211.5	2313.1	2409.0	2485.1
22.5°	1502.4	1599.4	1698.9	1809.2	1928.4	2042.5	2150.9	2250.6	2352.2	2456.4	2548.7
25°	1470.0	1557.9	1675.8	1801.0	1919.6	2043.3	2167.8	2292.9	2402.4	2512.5	2598.5
27.5°	1414.8	1525.8	1635.6	1764.7	1896.5	2036.6	2169.6	2300.7	2415.3	2505.8	2559.2
30°	1386.6	1483.0	1602.2	1731.9	1874.6	2025.1	2163.9	2292.3	2399.1	2471.4	2492.9
32.5°	1344.9	1444.4	1561.0	1695.4	1846.4	2001.1	2145.7	2266.7	2355.9	2393.8	2367.9
35°	1283.0	1372.9	1490.8	1628.3	1785.4	1950.2	2092.9	2195.2	2240.8	2205.0	2115.7
37.5°	1208.7	1297.8	1416.3	1551.3	1713.8	1881.4	2010.4	2084.1	2068.9	1979.8	1846.7
40°	1156.6	1240.0	1352.7	1498.6	1657.0	1825.0	1938.4	1978.2	1936.5	1808.8	1667.5
42.5°	1098.7	1180.1	1293.3	1434.0	1601.8	1756.8	1855.6	1858.9	1788.9	1636.3	1494.3
45°	1010.6	1088.2	1195.0	1341.6	1496.7	1642.7	1707.8	1675.8	1546.9	1399.6	1256.9
47.5°	923.7	990.9	1096.3	1235.4	1382.7	1505.5	1537.9	1480.4	1342.9	1200.0	1067.7
50°	860.1	927.8	1026.9	1159.8	1301.8	1408.1	1423.7	1347.5	1212.6	1068.6	965.0
52.5°	799.1	866.4	961.8	1084.8	1214.8	1310.6	1311.1	1222.9	1088.5	960.2	863.8
55°	709.5	770.2	856.2	966.3	1082.3	1157.3	1139.0	1047.7	931.1	819.7	735.7
57.5°	623.3	676.1	755.4	847.2	949.3	1011.2	980.9	893.1	788.9	694.5	630.7
60°	567.5	617.7	685.5	772.1	858.2	906.3	877.7	798.1	702.4	626.1	570.8
62.5°	513.3	555.6	620.9	696.1	775.8	811.5	786.0	707.5	624.7	555.8	510.9
65°	436.6	471.1	523.2	587.8	645.7	676.4	654.9	581.8	518.7	469.1	433.3
67.5°	364.9	391.9	431.3	483.1	532.3	548.9	529.3	478.5	425.0	385.3	360.1
70°	315.4	340.8	374.0	413.8	456.8	474.4	454.8	414.4	370.8	334.2	309.5
72.5°	272.1	291.8	319.8	353.8	387.5	405.0	391.7	352.9	316.0	288.9	267.8
75°	207.2	224.1	243.6	267.8	293.9	305.6	293.9	267.1	241.8	221.5	206.5
77.5°	150.6	159.8	174.8	192.8	209.2	218.1	208.0	189.8	174.4	160.5	153.2
80°	114.7	121.2	131.6	146.0	157.0	165.5	159.0	144.0	131.6	122.5	119.2
82.5°	83.4	87.8	94.6	105.3	112.7	117.1	114.1	103.3	98.2	90.2	86.9
85°	41.1	43.6	48.3	51.5	58.0	58.6	59.3	54.8	50.1	48.3	45.6
87.5°	14.5	15.5	17.2	18.9	21.0	22.4	21.9	22.1	20.4	19.7	17.8
90°	2.2	4.4	5.2	5.9	5.9	10.3	10.3	11.8	13.3	12.5	13.3
92.5°	12.3	19.1	28.2	38.9	54.2	91.7	148.8	204.6	233.8	194.7	144.8
95°	26.5	33.9	43.5	61.2	92.1	156.3	277.1	453.3	600.7	617.6	546.1
97.5°	43.6	50.0	58.8	74.0	99.9	149.3	249.1	424.2	632.6	775.9	806.8
100°	56.0	61.2	70.0	84.0	107.6	151.1	234.4	384.7	592.6	781.2	888.8
102.5°	69.0	73.5	81.8	95.2	117.6	156.9	230.3	358.2	542.4	737.0	884.7
105°	88.4	92.1	100.9	114.2	135.6	171.0	232.1	335.4	483.4	656.7	825.5
107.5°	108.0	111.7	121.1	133.8	155.0	187.4	243.1	331.2	450.4	591.8	741.3
110°	121.6	125.3	134.1	147.4	167.3	199.7	251.3	332.3	439.2	559.4	690.6





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	134.6	138.8	147.1	160.3	180.3	211.5	260.1	335.9	433.9	541.1	653.5
115°	154.0	159.2	166.5	180.6	200.5	230.0	274.2	342.7	431.1	524.0	616.1
117.5°	173.3	178.0	186.1	199.2	219.8	247.8	288.4	350.0	430.4	516.3	597.9
120°	185.7	190.9	199.0	211.5	232.1	260.1	298.5	355.2	430.4	512.2	589.6
122.5°	197.6	202.6	210.2	223.9	243.9	271.9	307.9	360.5	429.8	507.5	582.5
125°	214.4	218.9	227.0	241.0	261.6	288.1	322.1	368.5	429.0	499.6	570.4
127.5°	227.6	232.9	242.1	256.7	277.6	303.2	334.3	374.8	427.3	489.2	555.7
130°	235.8	241.8	252.8	266.8	288.1	313.2	342.0	379.6	426.7	482.8	543.9
132.5°	242.9	250.6	261.1	276.3	296.4	321.5	349.6	383.7	426.1	476.8	531.5
135°	254.3	261.6	274.2	289.6	308.8	333.1	359.7	389.8	425.3	468.0	514.4
137.5°	264.9	273.0	284.9	301.0	319.2	342.0	366.7	393.5	425.1	460.3	499.0
140°	271.9	280.0	292.6	308.0	325.7	347.9	371.5	396.5	424.5	456.2	490.1
142.5°	280.2	287.8	299.6	314.5	331.7	353.2	374.9	398.9	424.5	452.7	481.8
145°	291.8	299.3	309.5	323.6	339.8	358.9	378.8	400.2	423.0	446.6	470.2
147.5°	303.5	310.0	320.6	332.2	346.9	364.9	382.2	401.0	420.4	441.2	460.6
150°	311.8	317.6	326.5	337.5	351.6	367.8	384.0	401.0	418.6	437.1	454.7
152.5°	318.9	324.7	333.0	342.9	355.7	370.1	385.1	399.7	415.7	432.3	448.3
155°	330.2	334.6	342.0	350.1	361.1	373.6	386.2	397.9	411.2	425.3	438.5
157.5°	339.9	344.0	349.8	356.8	365.5	376.2	386.2	396.1	406.7	418.0	428.0
160°	346.4	349.3	354.5	360.4	368.5	377.3	386.2	394.3	403.1	412.7	421.6
162.5°	351.7	354.0	358.6	363.9	370.2	378.5	386.2	392.6	399.6	408.0	415.1
165°	358.9	360.4	364.1	367.8	372.2	378.8	384.7	389.2	394.3	400.2	406.0
167.5°	364.9	365.5	368.3	370.4	373.8	378.7	383.0	385.6	389.0	393.1	397.4
170°	367.8	368.5	370.7	372.2	374.4	378.1	381.7	383.2	385.4	388.4	392.1
172.5°	370.7	370.9	372.5	373.3	374.9	377.5	380.6	380.9	381.9	384.3	387.4
175°	373.6	373.6	374.4	375.1	375.1	376.6	378.8	378.1	378.1	379.6	381.1
177.5°	375.1	374.6	375.1	375.1	375.1	375.7	376.9	375.7	375.7	376.3	376.9
180°	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1657.9	1659.0	1663.6	1667.3	1668.3	1673.6	1674.0
5°	1803.6	1814.7	1836.2	1838.1	1841.4	1858.3	1845.3
7.5°	1974.3	2002.4	2021.2	2037.8	2043.8	2051.2	2049.7
10°	2083.8	2125.4	2146.4	2179.5	2180.9	2189.3	2184.2
12.5°	2193.8	2242.2	2280.3	2286.4	2314.3	2318.6	2325.9
15°	2349.6	2401.1	2453.9	2472.8	2511.2	2520.4	2534.7
17.5°	2496.1	2548.7	2585.8	2634.6	2650.4	2671.5	2657.1
20°	2576.3	2633.7	2680.6	2719.0	2735.4	2747.0	2745.8
22.5°	2624.9	2682.7	2720.7	2749.8	2765.0	2770.0	2769.8
25°	2655.2	2688.4	2700.2	2711.2	2694.4	2688.4	2691.1
27.5°	2570.8	2562.2	2531.6	2491.4	2449.7	2416.6	2398.6
30°	2454.6	2403.7	2357.4	2276.6	2235.0	2210.2	2188.0
32.5°	2289.8	2209.2	2120.2	2046.3	1998.8	1962.1	1956.6
35°	2007.5	1886.3	1777.5	1687.0	1640.0	1600.2	1591.2
37.5°	1706.8	1580.8	1482.9	1403.2	1352.7	1324.6	1298.4
40°	1507.1	1398.9	1302.5	1234.7	1196.3	1176.1	1159.8
42.5°	1353.3	1254.5	1158.7	1107.0	1072.2	1059.9	1050.4
45°	1140.9	1049.0	982.6	943.5	923.3	902.5	892.7
47.5°	970.8	896.1	852.2	819.1	797.4	785.0	778.7
50°	874.4	813.1	774.1	748.7	729.2	719.3	714.2
52.5°	788.9	738.7	705.8	685.6	672.3	665.2	663.1
55°	679.6	641.1	620.3	602.8	593.0	586.4	583.8
57.5°	590.7	561.2	544.2	529.7	525.9	520.5	518.7
60°	532.3	509.5	495.2	485.4	482.2	475.7	476.9
62.5°	480.7	462.1	449.9	444.2	440.0	434.5	436.3
65°	406.6	392.9	386.3	381.2	376.0	372.7	375.3
67.5°	341.2	331.8	322.9	319.9	317.4	316.8	314.1
70°	298.4	290.6	282.8	280.9	280.9	278.2	277.6
72.5°	257.2	251.5	246.3	244.9	242.8	243.8	241.1
75°	198.7	194.2	192.2	190.3	189.6	189.6	187.7
77.5°	146.8	143.5	140.3	140.3	138.0	137.1	136.9
80°	111.4	110.1	107.5	107.5	106.2	106.9	105.6
82.5°	83.8	82.0	81.4	80.4	78.6	78.7	77.4
85°	45.0	43.0	42.3	40.4	39.1	40.4	39.1
87.5°	18.5	18.1	17.5	16.7	16.3	16.1	14.6
90°	14.0	14.7	14.7	15.5	16.2	15.5	15.5
92.5°	109.0	86.7	71.9	63.2	59.3	56.7	56.7
95°	431.9	333.1	261.6	225.6	202.6	189.5	179.8
97.5°	764.4	692.3	615.4	562.5	518.1	496.0	480.7
100°	903.5	867.4	812.9	748.8	703.8	681.7	675.8
102.5°	957.8	968.3	945.6	906.3	873.6	850.4	845.6
105°	952.9	1025.9	1056.1	1057.6	1051.7	1041.4	1037.0
107.5°	877.0	979.8	1045.5	1081.9	1098.7	1106.1	1108.0
110°	818.0	924.9	1006.0	1058.3	1089.3	1102.6	1109.2



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	766.2	867.1	948.2	1007.6	1045.1	1063.7	1074.4
115°	706.8	793.0	863.7	922.0	966.2	989.8	995.7
117.5°	672.9	740.6	800.7	850.4	887.5	911.3	916.0
120°	658.2	717.1	769.4	811.4	843.9	863.0	871.1
122.5°	648.7	702.4	748.2	783.7	811.4	827.6	835.8
125°	633.9	684.7	725.2	754.7	776.1	790.0	794.5
127.5°	616.2	666.9	705.5	735.1	754.1	765.9	770.3
130°	602.1	652.2	691.3	721.5	740.0	751.8	756.2
132.5°	586.2	635.2	674.2	703.8	724.6	735.8	740.3
135°	562.3	607.3	644.1	673.6	694.3	706.1	710.5
137.5°	539.5	577.4	610.7	638.2	658.6	668.3	673.6
140°	524.7	557.9	588.9	614.6	630.8	641.2	647.1
142.5°	512.4	540.8	567.6	590.5	605.5	614.6	618.8
145°	495.3	517.4	538.0	556.5	568.9	576.4	580.0
147.5°	480.5	498.2	514.4	528.0	538.8	544.3	545.6
150°	471.6	486.4	499.6	511.5	521.0	525.5	526.2
152.5°	462.8	476.4	487.3	497.3	505.1	507.7	508.5
155°	450.3	461.4	470.2	477.6	483.4	485.7	485.7
157.5°	437.9	447.2	454.3	459.9	464.3	465.6	465.6
160°	429.7	437.8	443.7	448.1	452.5	453.3	453.3
162.5°	422.0	428.4	433.7	436.9	441.3	442.1	441.5
165°	410.5	415.7	419.3	422.3	425.3	424.5	423.8
167.5°	400.8	404.9	407.1	408.6	410.5	410.4	409.7
170°	394.3	397.3	399.4	401.0	401.6	401.0	401.0
172.5°	389.0	390.8	392.4	393.2	394.0	393.2	392.1
175°	381.7	383.2	383.2	383.2	384.7	383.2	381.7
177.5°	377.5	377.5	378.1	377.5	378.1	376.9	375.7
180°	375.1	375.1	375.1	375.1	375.1	375.1	375.1

(END OF REPORT)