

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: P332362-830

Luminaire Tested: **S123RDIP-S1165D365U830-4F0-1E-UDD-A4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332362-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-17,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123RDIP-S1165D365U830-4F0-1E-UDD-A4
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5547.9 lumens
Efficiency: N/A
Efficacy: 111.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.36
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: Semi-Direct

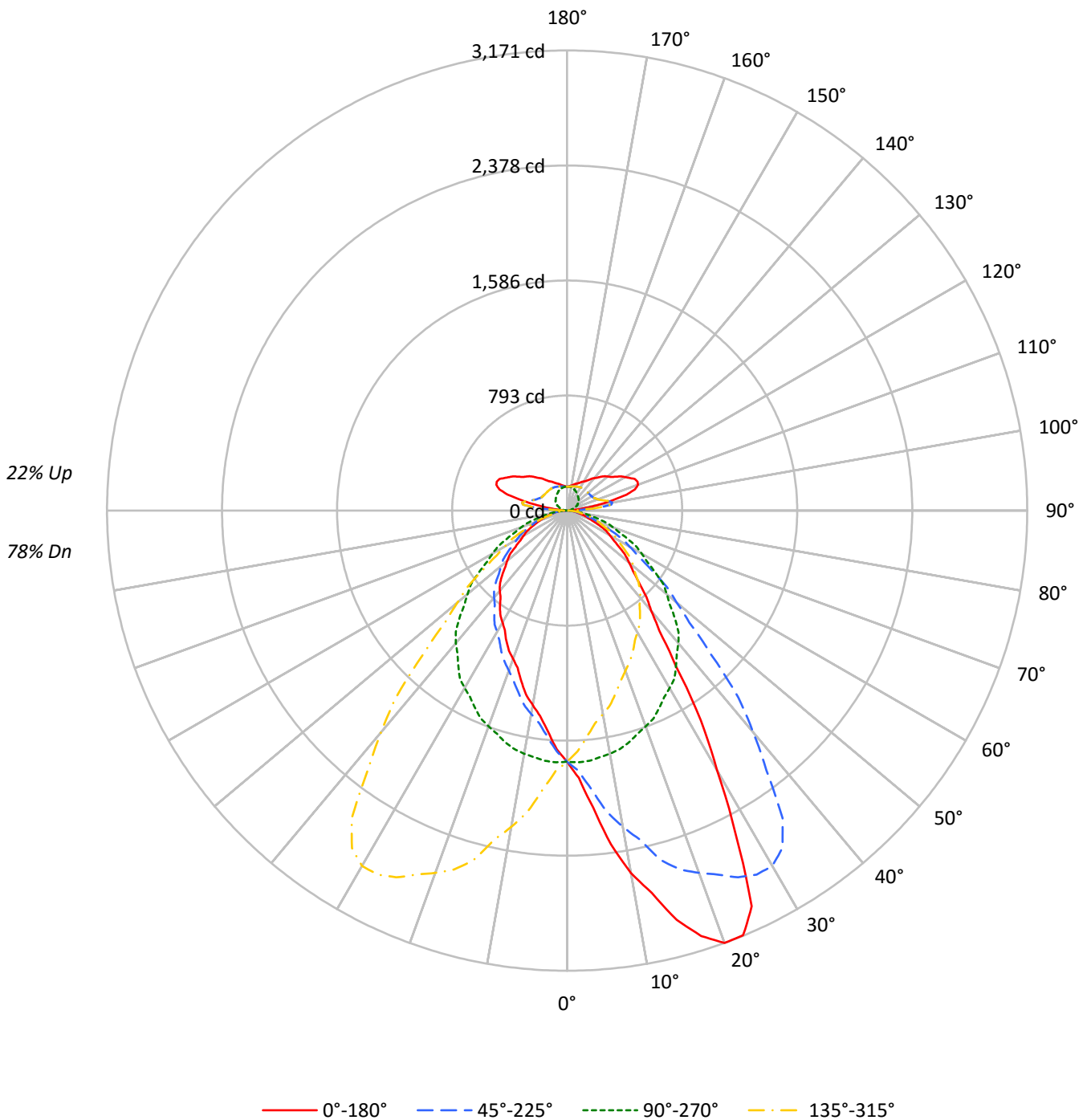
Input Watts (W): 49.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332362-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A4

Luminous Intensity Polar Plot





TEST NUMBER: P332362-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A4

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	114	114	114	114	108	108	108	108	99	99	99	90	90	90	82	82	82	78
1	105	101	97	94	100	96	93	90	88	86	83	81	79	77	74	72	71	67
2	96	89	83	78	92	85	80	75	78	74	70	72	69	66	66	63	61	58
3	88	79	72	66	84	76	69	64	70	65	60	64	60	57	59	56	53	50
4	81	71	63	57	78	68	61	55	63	57	52	58	53	49	53	50	46	44
5	75	64	56	50	72	61	54	48	57	51	46	53	47	43	49	44	41	38
6	70	58	50	44	66	56	48	43	52	45	41	48	43	39	44	40	37	34
7	65	52	44	39	62	51	43	38	47	41	36	44	38	35	41	36	33	31
8	60	48	40	35	58	46	39	34	43	37	33	40	35	31	38	33	30	28
9	56	44	37	31	54	43	36	31	40	34	29	37	32	28	35	30	27	25
10	53	41	33	29	51	39	33	28	37	31	27	35	29	26	32	28	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	18627	18627	18627	18627
5°	22204	18707	16473	18707
10°	27725	18600	14882	18600
15°	32543	18409	13572	18409
20°	36318	18125	12457	18125
25°	35739	17826	11772	17826
30°	25690	17550	11067	17550
35°	17152	17190	10611	17190
40°	12638	16759	10138	16759
45°	10601	16002	9677	16002
50°	9354	15011	9031	15011
55°	8203	13874	8146	13874
60°	7304	12790	7464	12790
65°	6413	11624	6943	11624
70°	5035	10584	6342	10584
75°	4438	9245	5793	9245
80°	3856	7854	5697	7854
85°	3112	6311	6039	6311



TEST NUMBER: P332362-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.2	3.1
10°-20°	531.7	9.6
20°-30°	835.3	15.1
30°-40°	871.4	15.7
40°-50°	745.8	13.4
50°-60°	568.4	10.2
60°-70°	364.3	6.6
70°-80°	175.3	3.2
80°-90°	47.7	0.9
90°-100°	91.6	1.7
100°-110°	259.3	4.7
110°-120°	255.1	4.6
120°-130°	203.5	3.7
130°-140°	160.4	2.9
140°-150°	119.7	2.2
150°-160°	83.4	1.5
160°-170°	49.0	0.9
170°-180°	16.0	0.3
0°-30°	1537.1	27.7
0°-40°	2408.6	43.4
0°-60°	3722.7	67.1
0°-90°	4310.0	77.7
90°-120°	605.9	10.9
90°-150°	1089.5	19.6
90°-180°	1238.0	22.3
0°-180°	5547.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1730	1730	1730	1730	1730	
5°	2055	1731	1525	1731	2055	212
15°	2920	1652	1218	1652	2920	828
25°	3009	1501	991	1501	3009	1293
35°	1305	1308	808	1308	1305	856
45°	696	1051	636	1051	696	548
55°	437	739	434	739	437	395
65°	252	456	273	456	252	248
75°	107	222	139	222	107	114
85°	25	51	49	51	25	29
90°	10	1	10	1	10	6
95°	39	11	39	11	39	70
105°	424	39	424	39	424	418
115°	515	68	515	68	515	501
125°	406	95	406	95	406	368
135°	329	111	329	111	329	256
145°	258	127	258	127	258	164
155°	214	144	214	144	214	100
165°	186	158	186	158	186	53
175°	168	164	168	164	168	16
180°	165	165	165	165	165	



TEST NUMBER: P332362-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1843.1	1845.5	1837.8	1836.6	1827.7	1825.3	1825.3	1812.9	1805.2	1795.2	1789.2
5°	2055.0	2066.9	2061.0	2047.6	2025.3	2020.2	2006.1	1983.9	1958.7	1927.6	1912.8
7.5°	2319.6	2335.8	2329.6	2308.9	2285.7	2266.9	2227.1	2190.3	2138.5	2093.2	2054.4
10°	2536.6	2519.5	2506.1	2486.1	2464.7	2429.9	2388.4	2331.3	2265.4	2213.6	2155.8
12.5°	2698.9	2696.1	2679.2	2658.6	2628.3	2595.2	2544.2	2474.7	2398.1	2323.2	2257.1
15°	2920.3	2924.7	2913.6	2892.1	2849.1	2790.6	2713.6	2684.7	2575.0	2493.6	2412.1
17.5°	3073.4	3072.6	3071.1	3041.3	2997.5	2955.8	2884.4	2808.4	2709.2	2594.3	2484.5
20°	3170.6	3163.3	3164.8	3131.4	3098.8	3050.6	2981.0	2870.6	2789.2	2656.6	2543.2
22.5°	3168.3	3166.8	3172.4	3161.0	3137.3	3100.4	3045.6	2952.4	2848.5	2714.6	2587.1
25°	3009.2	3003.2	3038.1	3047.7	3085.5	3092.1	3075.8	3024.7	2926.2	2788.4	2630.6
27.5°	2518.5	2515.2	2579.8	2660.7	2763.3	2842.9	2920.0	2957.1	2926.2	2827.5	2669.5
30°	2066.9	2136.5	2169.1	2286.1	2416.5	2572.1	2708.4	2838.0	2869.9	2827.0	2697.3
32.5°	1716.0	1776.8	1804.0	1904.5	2026.0	2208.2	2412.6	2596.2	2725.9	2758.7	2680.7
35°	1305.3	1306.1	1368.3	1412.7	1525.3	1712.8	1911.3	2157.2	2401.7	2586.9	2606.1
37.5°	1041.6	1045.3	1082.9	1127.2	1211.6	1310.8	1485.6	1690.1	1972.5	2256.8	2423.5
40°	899.4	906.0	934.2	977.9	1038.6	1113.4	1249.7	1442.4	1677.9	1994.2	2252.8
42.5°	808.0	818.9	833.4	867.0	904.7	974.8	1085.0	1233.8	1448.0	1747.1	2045.4
45°	696.4	702.3	713.4	729.0	763.0	811.9	886.0	986.0	1163.9	1404.6	1703.1
47.5°	614.3	611.1	622.8	635.5	658.2	691.4	741.1	822.7	949.6	1142.7	1396.0
50°	558.6	557.8	566.0	575.6	597.1	621.5	662.3	723.8	824.5	984.6	1216.4
52.5°	506.4	509.3	515.0	527.0	542.5	562.3	598.9	643.2	729.7	867.8	1061.1
55°	437.1	439.3	447.4	454.1	465.2	485.2	508.2	545.3	604.5	700.8	860.1
57.5°	378.4	377.4	385.2	386.8	399.4	415.8	433.5	462.2	505.2	576.8	684.1
60°	339.3	337.1	343.7	348.9	355.6	368.9	383.7	411.9	446.0	498.6	590.4
62.5°	303.7	302.7	307.6	312.7	318.3	330.4	342.8	364.5	391.4	435.7	508.6
65°	251.8	254.1	256.3	258.5	261.5	268.9	280.8	295.6	314.1	345.3	397.8
67.5°	197.9	200.2	201.0	205.5	211.9	216.5	223.8	237.0	249.8	276.1	305.9
70°	160.0	159.3	160.0	162.2	170.4	178.5	188.1	197.8	205.9	224.4	249.7
72.5°	137.5	136.2	138.1	138.6	142.5	144.8	150.8	159.9	170.4	182.9	201.0
75°	106.7	106.7	106.7	106.7	109.6	111.1	113.4	115.6	119.2	125.2	138.6
77.5°	78.8	79.0	80.0	80.8	81.3	82.2	83.6	85.8	87.1	90.2	96.0
80°	62.2	63.0	62.2	63.0	63.0	64.5	65.2	67.4	68.1	71.8	74.1
82.5°	46.8	46.4	46.8	47.6	47.6	49.0	49.2	50.8	51.0	52.9	55.1
85°	25.2	23.8	25.2	24.4	25.9	24.4	25.2	26.7	26.7	27.4	30.3
87.5°	7.8	9.1	7.8	8.4	8.5	9.0	8.9	8.8	9.9	9.3	9.8
90°	9.6	10.0	9.6	9.3	9.6	9.0	8.7	8.3	8.0	8.3	7.4
92.5°	16.0	16.7	16.3	17.3	17.9	19.6	22.2	28.1	38.6	51.2	56.4
95°	38.6	40.0	42.3	45.3	51.7	63.6	81.2	119.9	160.2	197.6	175.9
97.5°	105.2	108.0	117.1	132.1	156.7	196.4	239.4	298.9	327.4	306.1	224.1
100°	208.9	208.5	221.5	245.8	279.5	326.8	365.7	392.7	381.1	315.5	213.2
102.5°	306.3	314.1	324.9	344.1	370.3	400.3	423.0	423.9	383.7	298.1	197.2
105°	423.7	425.4	436.0	448.7	464.0	472.6	466.3	433.0	363.4	267.8	177.6
107.5°	491.3	494.3	497.9	502.2	501.9	490.0	460.8	406.7	327.8	241.0	165.0
110°	519.0	519.6	520.3	517.6	508.3	484.9	443.0	381.7	305.5	225.8	160.2



TEST NUMBER: P332362-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	524.5	524.4	521.9	513.6	496.5	466.6	419.5	356.9	286.0	215.7	157.5
115°	515.3	513.6	506.9	492.3	467.3	431.0	382.0	324.0	262.5	204.8	156.6
117.5°	485.8	483.5	474.0	457.2	431.1	394.3	350.3	300.3	248.3	198.4	157.1
120°	461.3	459.3	451.3	432.6	406.3	372.7	332.7	287.8	240.8	195.5	158.3
122.5°	438.4	435.8	427.1	410.3	386.9	355.6	318.6	278.0	234.7	193.7	160.0
125°	406.3	404.1	395.7	381.1	359.8	333.1	301.1	264.8	226.9	191.1	162.9
127.5°	379.9	377.9	370.3	357.8	338.8	314.5	285.7	253.4	219.9	190.0	166.1
130°	365.0	362.4	355.4	343.4	325.7	303.1	276.2	246.1	216.1	189.2	168.2
132.5°	350.4	348.6	342.3	330.4	313.8	292.2	267.0	239.5	212.7	188.9	169.8
135°	329.4	327.1	321.1	311.1	294.7	275.8	254.1	230.5	208.2	188.5	172.2
137.5°	307.3	305.7	300.7	290.5	276.8	260.3	241.7	222.3	204.2	187.8	173.8
140°	291.8	292.1	286.8	277.5	264.8	250.4	234.5	217.5	201.8	187.6	174.8
142.5°	277.4	277.7	273.0	264.7	253.8	241.4	227.5	213.0	199.7	187.0	175.7
145°	257.5	256.8	254.1	247.1	238.8	229.1	218.5	207.5	196.8	186.2	176.2
147.5°	241.1	240.8	238.3	233.6	227.2	220.4	211.8	203.0	194.1	184.9	176.2
150°	231.5	231.5	229.5	225.8	220.8	214.5	207.5	199.8	192.2	183.9	176.2
152.5°	223.5	223.5	222.3	218.9	215.0	209.7	203.5	196.9	190.0	182.6	175.4
155°	213.5	213.2	212.5	209.8	206.8	202.8	197.8	192.6	186.8	180.2	174.6
157.5°	204.3	204.4	203.9	201.9	199.3	196.1	192.3	187.8	183.2	178.1	173.4
160°	198.5	198.9	198.9	196.8	194.5	192.2	188.9	185.2	180.9	176.5	172.9
162.5°	193.2	193.5	193.5	191.8	190.3	188.2	185.1	182.0	178.4	174.9	171.8
165°	186.2	186.2	186.5	185.2	183.9	182.2	179.8	177.9	175.2	172.6	170.2
167.5°	179.6	179.6	179.8	178.9	178.3	177.1	175.8	174.3	172.1	170.1	168.6
170°	175.5	175.5	175.9	175.2	174.8	174.2	172.9	171.8	170.2	168.5	167.6
172.5°	171.8	172.1	172.7	172.0	171.9	171.5	170.5	169.8	168.3	167.2	166.7
175°	167.6	167.9	168.2	167.9	167.9	167.9	167.2	166.8	166.2	165.5	165.5
177.5°	165.0	165.0	165.6	165.3	165.6	165.6	165.3	165.0	164.9	164.6	164.9
180°	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6



TEST NUMBER: P332362-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1786.9	1785.1	1776.8	1767.3	1754.8	1746.5	1740.0	1736.4	1725.8	1712.8	1703.8
5°	1897.2	1875.0	1851.2	1822.4	1795.7	1768.3	1751.2	1731.3	1706.9	1679.4	1660.2
7.5°	2015.4	1971.9	1925.0	1876.5	1828.6	1785.6	1747.8	1715.2	1676.3	1637.0	1609.5
10°	2106.1	2042.4	1976.5	1909.0	1847.6	1789.8	1745.3	1701.7	1655.0	1609.8	1575.7
12.5°	2188.5	2104.6	2028.6	1945.8	1867.2	1798.1	1734.1	1682.6	1626.5	1578.4	1539.5
15°	2292.8	2206.9	2115.0	1989.0	1884.6	1797.2	1719.4	1652.0	1583.8	1524.6	1486.8
17.5°	2390.3	2261.0	2137.5	2032.5	1896.8	1787.5	1692.6	1612.0	1537.2	1474.3	1427.9
20°	2430.6	2305.4	2171.3	2037.2	1903.8	1781.7	1671.2	1582.3	1504.6	1433.4	1390.5
22.5°	2454.9	2313.1	2171.9	2027.8	1886.1	1759.2	1649.9	1552.2	1467.8	1400.2	1347.3
25°	2483.2	2314.3	2158.7	2016.5	1872.0	1734.3	1604.6	1500.9	1409.8	1337.9	1281.6
27.5°	2501.9	2303.2	2119.3	1961.2	1814.7	1677.4	1558.7	1448.7	1356.3	1280.3	1219.8
30°	2505.4	2294.2	2089.1	1918.0	1769.1	1643.1	1517.2	1412.0	1314.2	1233.4	1177.1
32.5°	2510.2	2272.4	2048.1	1866.4	1713.9	1589.2	1475.1	1374.6	1274.5	1195.0	1137.5
35°	2490.6	2260.2	1986.1	1777.2	1624.6	1503.8	1400.9	1308.2	1209.8	1132.7	1074.2
37.5°	2406.4	2212.1	1921.8	1676.8	1517.2	1405.3	1321.4	1240.7	1150.4	1067.2	1012.1
40°	2321.7	2164.6	1872.0	1615.7	1449.1	1334.2	1258.7	1192.7	1105.3	1027.5	968.3
42.5°	2195.5	2100.1	1824.6	1551.7	1372.0	1261.3	1197.6	1135.8	1059.0	980.1	924.4
45°	1963.9	1976.5	1727.6	1449.7	1265.3	1154.1	1094.2	1051.2	983.1	917.8	860.8
47.5°	1673.5	1791.3	1613.6	1341.1	1152.8	1048.6	996.1	958.6	912.7	848.7	796.6
50°	1483.8	1652.0	1522.4	1268.3	1082.3	978.6	926.7	896.4	856.4	806.0	756.4
52.5°	1309.0	1489.6	1412.1	1187.0	1005.9	911.1	860.4	835.4	803.6	756.2	711.3
55°	1067.5	1250.5	1232.8	1064.5	891.2	806.0	767.5	739.3	717.8	682.3	646.8
57.5°	863.5	1037.0	1046.1	928.2	790.1	706.0	672.8	651.6	637.5	610.8	577.9
60°	734.9	894.2	925.3	836.4	717.8	643.8	611.1	594.1	583.1	561.6	536.3
62.5°	628.2	763.7	799.0	735.0	648.5	579.2	553.6	537.2	529.7	511.1	488.9
65°	480.8	593.4	627.5	591.9	546.7	491.2	470.4	456.4	449.7	439.3	423.0
67.5°	361.6	443.6	481.0	455.9	439.6	404.4	391.2	383.7	377.8	370.7	357.0
70°	290.4	351.1	389.6	383.0	369.7	351.1	341.5	336.3	330.4	324.5	312.6
72.5°	233.5	275.3	311.4	314.8	303.9	300.2	291.7	289.5	286.0	278.8	272.3
75°	154.9	183.7	208.9	218.6	223.0	226.7	223.0	222.3	221.5	215.6	211.9
77.5°	101.5	117.1	132.9	149.4	156.3	161.4	162.5	165.2	163.2	160.1	158.3
80°	77.8	81.5	92.6	106.7	117.8	122.2	125.2	126.7	125.9	125.2	122.2
82.5°	56.5	59.6	64.8	74.6	84.0	91.4	93.2	92.9	94.5	95.0	92.6
85°	30.3	31.1	32.6	34.1	39.3	47.4	49.7	51.1	52.6	52.6	48.2
87.5°	10.7	10.0	10.9	10.8	12.4	12.8	16.3	19.1	19.8	17.6	17.8
90°	6.3	5.4	4.3	3.7	3.0	2.0	1.3	0.7	1.3	2.0	3.0
92.5°	42.3	28.0	19.2	14.3	11.5	9.0	6.1	4.1	6.1	9.0	11.5
95°	121.2	71.6	43.3	30.3	21.7	16.0	12.3	11.3	12.3	16.0	21.7
97.5°	133.0	77.1	50.0	36.0	27.4	22.5	19.6	19.3	19.6	22.5	27.4
100°	125.5	76.3	53.0	40.0	32.0	27.3	25.0	24.7	25.0	27.3	32.0
102.5°	119.1	77.4	56.5	44.5	37.3	32.9	30.8	30.3	30.8	32.9	37.3
105°	114.6	80.3	62.3	51.9	45.6	41.7	39.7	38.6	39.7	41.7	45.6
107.5°	114.2	85.8	69.9	60.3	54.4	50.5	48.5	47.6	48.5	50.5	54.4
110°	115.6	90.3	75.3	66.0	60.3	56.6	55.0	53.9	55.0	56.6	60.3



TEST NUMBER: P332362-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	118.3	94.8	80.9	71.8	66.2	62.5	60.8	59.9	60.8	62.5	66.2
115°	122.5	102.3	89.6	80.6	74.9	71.6	69.7	68.2	69.7	71.6	74.9
117.5°	128.3	110.2	97.6	89.4	83.0	79.9	78.2	76.7	78.2	79.9	83.0
120°	132.5	115.3	103.2	94.9	88.6	85.3	83.6	82.6	83.6	85.3	88.6
122.5°	136.6	120.6	108.9	100.0	94.0	90.3	88.7	87.7	88.7	90.3	94.0
125°	142.9	128.3	116.6	107.5	101.2	97.6	95.6	94.9	95.6	97.6	101.2
127.5°	148.1	134.9	123.7	114.6	107.6	104.0	101.4	100.5	101.4	104.0	107.6
130°	151.6	138.9	127.9	118.9	111.9	107.9	104.9	104.0	104.9	107.9	111.9
132.5°	154.8	142.3	131.7	122.9	115.9	111.1	107.8	106.6	107.8	111.1	115.9
135°	158.9	147.5	137.2	128.3	121.2	116.2	112.5	111.2	112.5	116.2	121.2
137.5°	161.9	151.2	141.2	132.9	125.9	120.6	117.1	115.6	117.1	120.6	125.9
140°	163.5	153.5	143.9	135.5	128.9	123.6	120.3	118.6	120.3	123.6	128.9
142.5°	165.1	155.4	146.0	138.3	131.6	126.8	123.2	121.8	123.2	126.8	131.6
145°	166.8	157.9	149.2	141.6	135.9	130.9	127.9	126.9	127.9	130.9	135.9
147.5°	168.0	159.9	151.9	145.4	140.0	135.6	132.7	132.1	132.7	135.6	140.0
150°	168.2	161.2	153.5	147.5	142.9	138.6	135.9	135.5	135.9	138.6	142.9
152.5°	168.7	162.0	155.4	149.7	145.5	141.8	139.1	139.0	139.1	141.8	145.5
155°	168.9	163.5	157.9	153.3	149.6	146.2	144.2	144.2	144.2	146.2	149.6
157.5°	169.2	164.4	159.9	156.3	153.2	150.2	148.6	148.4	148.6	150.2	153.2
160°	169.2	165.2	161.2	157.9	155.5	152.9	151.6	151.6	151.6	152.9	155.5
162.5°	168.9	165.5	162.0	159.2	157.1	155.0	153.9	153.9	153.9	155.0	157.1
165°	168.2	165.9	163.2	160.9	159.6	157.9	157.2	157.5	157.2	157.9	159.6
167.5°	167.7	165.8	163.9	162.4	161.5	160.2	159.9	160.2	159.9	160.2	161.5
170°	166.8	165.5	163.9	163.2	162.5	161.6	161.2	161.8	161.2	161.6	162.5
172.5°	166.6	165.5	164.1	163.7	163.3	162.6	162.5	163.0	162.5	162.6	163.3
175°	165.9	165.2	164.6	164.2	164.2	163.5	163.9	164.2	163.9	163.5	164.2
177.5°	165.3	164.9	164.6	164.6	164.6	164.3	164.6	164.9	164.6	164.3	164.6
180°	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6



TEST NUMBER: P332362-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1700.9	1693.2	1687.9	1676.0	1668.3	1660.0	1651.7	1657.1	1656.4	1655.9	1655.9
5°	1643.9	1626.8	1611.3	1591.3	1578.7	1563.1	1551.2	1549.7	1552.7	1542.4	1536.4
7.5°	1587.2	1564.0	1541.9	1519.8	1496.5	1477.8	1466.0	1460.6	1453.0	1446.6	1440.0
10°	1547.6	1520.1	1498.6	1471.2	1446.0	1423.8	1409.8	1400.1	1395.0	1389.8	1380.2
12.5°	1506.7	1479.9	1452.5	1421.4	1397.5	1371.7	1361.1	1350.4	1340.4	1334.6	1321.4
15°	1446.8	1412.0	1383.1	1350.5	1323.8	1298.6	1283.8	1262.3	1259.3	1252.0	1238.6
17.5°	1386.8	1349.0	1309.2	1285.0	1254.9	1228.7	1206.2	1198.9	1177.7	1169.7	1158.2
20°	1339.4	1304.6	1274.2	1242.4	1198.6	1174.2	1156.4	1146.8	1129.7	1119.4	1111.9
22.5°	1298.4	1263.1	1227.9	1190.8	1154.8	1127.4	1114.4	1099.4	1090.1	1075.5	1067.5
25°	1240.1	1201.6	1159.3	1119.4	1093.4	1072.7	1052.0	1038.6	1025.3	1018.6	1003.8
27.5°	1172.2	1132.0	1092.5	1062.2	1030.3	1009.8	991.1	979.2	963.2	952.0	943.8
30°	1134.9	1087.5	1053.4	1026.1	985.2	966.0	952.0	937.2	925.3	913.4	905.3
32.5°	1091.7	1048.4	1016.1	982.1	950.9	929.8	911.6	898.6	888.5	877.2	869.1
35°	1023.8	987.5	954.1	920.1	897.1	875.6	854.1	843.0	833.4	823.0	815.7
37.5°	962.4	928.5	896.8	864.5	836.0	818.6	801.3	792.8	779.8	772.8	765.3
40°	924.5	891.2	857.1	826.0	796.4	783.1	767.5	754.9	743.0	737.8	729.7
42.5°	883.1	849.7	821.0	787.5	763.2	745.1	730.8	717.0	708.0	700.5	695.9
45°	821.5	791.9	763.7	730.5	707.5	691.9	675.6	663.0	654.9	649.7	641.5
47.5°	761.9	732.3	703.6	674.6	652.3	634.6	618.3	609.5	598.7	592.4	586.8
50°	718.6	691.9	661.6	634.9	612.7	594.8	581.5	570.4	560.8	552.6	548.9
52.5°	678.9	650.4	624.2	599.3	575.9	555.7	543.6	531.9	524.6	515.3	511.0
55°	613.4	586.0	563.7	539.3	516.3	499.3	484.5	474.1	466.7	456.4	450.4
57.5°	551.9	527.4	500.8	479.6	455.9	441.5	429.2	415.2	406.1	397.9	392.2
60°	510.4	482.3	459.3	439.3	418.6	400.0	388.9	377.8	368.2	360.1	354.9
62.5°	467.1	442.5	420.8	399.0	380.0	363.9	351.0	341.7	333.2	328.0	322.8
65°	400.8	381.5	359.3	341.5	323.8	311.9	301.5	293.3	287.5	283.7	279.3
67.5°	339.7	321.0	301.6	284.2	272.3	263.3	256.5	249.5	246.6	241.8	238.8
70°	300.0	280.8	263.7	250.4	238.6	231.9	227.4	222.3	219.2	213.4	210.4
72.5°	256.7	242.8	230.5	219.6	210.1	204.1	198.4	192.0	187.3	180.8	177.8
75°	202.3	189.6	180.0	172.6	166.6	158.5	150.4	143.7	141.5	139.3	138.6
77.5°	149.8	141.8	134.8	128.6	121.2	115.3	113.5	112.0	111.6	110.4	110.4
80°	117.8	110.4	105.2	97.7	93.3	93.3	93.3	91.9	92.6	92.6	92.6
82.5°	87.6	80.8	77.9	75.3	74.4	74.9	74.9	75.3	74.8	76.0	75.4
85°	45.1	45.9	47.4	46.7	47.4	47.4	48.9	48.2	48.9	47.4	48.9
87.5°	17.3	19.2	20.1	20.8	21.6	21.2	21.8	21.8	22.4	22.5	22.7
90°	3.7	4.3	5.4	6.3	7.4	8.3	8.0	8.3	8.7	9.0	9.6
92.5°	14.3	19.2	28.0	42.3	56.4	51.2	38.6	28.1	22.2	19.6	17.9
95°	30.3	43.3	71.6	121.2	175.9	197.6	160.2	119.9	81.2	63.6	51.7
97.5°	36.0	50.0	77.1	133.0	224.1	306.1	327.4	298.9	239.4	196.4	156.7
100°	40.0	53.0	76.3	125.5	213.2	315.5	381.1	392.7	365.7	326.8	279.5
102.5°	44.5	56.5	77.4	119.1	197.2	298.1	383.7	423.9	423.0	400.3	370.3
105°	51.9	62.3	80.3	114.6	177.6	267.8	363.4	433.0	466.3	472.6	464.0
107.5°	60.3	69.9	85.8	114.2	165.0	241.0	327.8	406.7	460.8	490.0	501.9
110°	66.0	75.3	90.3	115.6	160.2	225.8	305.5	381.7	443.0	484.9	508.3



TEST NUMBER: P332362-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	71.8	80.9	94.8	118.3	157.5	215.7	286.0	356.9	419.5	466.6	496.5
115°	80.6	89.6	102.3	122.5	156.6	204.8	262.5	324.0	382.0	431.0	467.3
117.5°	89.4	97.6	110.2	128.3	157.1	198.4	248.3	300.3	350.3	394.3	431.1
120°	94.9	103.2	115.3	132.5	158.3	195.5	240.8	287.8	332.7	372.7	406.3
122.5°	100.0	108.9	120.6	136.6	160.0	193.7	234.7	278.0	318.6	355.6	386.9
125°	107.5	116.6	128.3	142.9	162.9	191.1	226.9	264.8	301.1	333.1	359.8
127.5°	114.6	123.7	134.9	148.1	166.1	190.0	219.9	253.4	285.7	314.5	338.8
130°	118.9	127.9	138.9	151.6	168.2	189.2	216.1	246.1	276.2	303.1	325.7
132.5°	122.9	131.7	142.3	154.8	169.8	188.9	212.7	239.5	267.0	292.2	313.8
135°	128.3	137.2	147.5	158.9	172.2	188.5	208.2	230.5	254.1	275.8	294.7
137.5°	132.9	141.2	151.2	161.9	173.8	187.8	204.2	222.3	241.7	260.3	276.8
140°	135.5	143.9	153.5	163.5	174.8	187.6	201.8	217.5	234.5	250.4	264.8
142.5°	138.3	146.0	155.4	165.1	175.7	187.0	199.7	213.0	227.5	241.4	253.8
145°	141.6	149.2	157.9	166.8	176.2	186.2	196.8	207.5	218.5	229.1	238.8
147.5°	145.4	151.9	159.9	168.0	176.2	184.9	194.1	203.0	211.8	220.4	227.2
150°	147.5	153.5	161.2	168.2	176.2	183.9	192.2	199.8	207.5	214.5	220.8
152.5°	149.7	155.4	162.0	168.7	175.4	182.6	190.0	196.9	203.5	209.7	215.0
155°	153.3	157.9	163.5	168.9	174.6	180.2	186.8	192.6	197.8	202.8	206.8
157.5°	156.3	159.9	164.4	169.2	173.4	178.1	183.2	187.8	192.3	196.1	199.3
160°	157.9	161.2	165.2	169.2	172.9	176.5	180.9	185.2	188.9	192.2	194.5
162.5°	159.2	162.0	165.5	168.9	171.8	174.9	178.4	182.0	185.1	188.2	190.3
165°	160.9	163.2	165.9	168.2	170.2	172.6	175.2	177.9	179.8	182.2	183.9
167.5°	162.4	163.9	165.8	167.7	168.6	170.1	172.1	174.3	175.8	177.1	178.3
170°	163.2	163.9	165.5	166.8	167.6	168.5	170.2	171.8	172.9	174.2	174.8
172.5°	163.7	164.1	165.5	166.6	166.7	167.2	168.3	169.8	170.5	171.5	171.9
175°	164.2	164.6	165.2	165.9	165.5	165.5	166.2	166.8	167.2	167.9	167.9
177.5°	164.6	164.6	164.9	165.3	164.9	164.6	164.9	165.0	165.3	165.6	165.6
180°	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6



TEST NUMBER: P332362-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1648.8	1648.1	1648.8	1646.3	1648.8	1648.1	1648.8	1655.9	1655.9	1656.4	1657.1
5°	1534.2	1533.5	1531.3	1524.6	1531.3	1533.5	1534.2	1536.4	1542.4	1552.7	1549.7
7.5°	1434.2	1433.1	1426.6	1426.8	1426.6	1433.1	1434.2	1440.0	1446.6	1453.0	1460.6
10°	1375.0	1375.6	1366.8	1361.6	1366.8	1375.6	1375.0	1380.2	1389.8	1395.0	1400.1
12.5°	1317.5	1314.1	1306.9	1301.2	1306.9	1314.1	1317.5	1321.4	1334.6	1340.4	1350.4
15°	1241.6	1234.2	1216.4	1217.9	1216.4	1234.2	1241.6	1238.6	1252.0	1259.3	1262.3
17.5°	1152.3	1146.8	1146.5	1136.1	1146.5	1146.8	1152.3	1158.2	1169.7	1177.7	1198.9
20°	1100.1	1096.4	1097.9	1087.5	1097.9	1096.4	1100.1	1111.9	1119.4	1129.7	1146.8
22.5°	1059.2	1055.5	1049.2	1046.0	1049.2	1055.5	1059.2	1067.5	1075.5	1090.1	1099.4
25°	999.4	993.4	987.5	991.2	987.5	993.4	999.4	1003.8	1018.6	1025.3	1038.6
27.5°	939.5	935.1	929.2	928.4	929.2	935.1	939.5	943.8	952.0	963.2	979.2
30°	901.5	897.1	894.2	890.4	894.2	897.1	901.5	905.3	913.4	925.3	937.2
32.5°	863.1	862.1	856.9	856.1	856.9	862.1	863.1	869.1	877.2	888.5	898.6
35°	812.7	808.2	806.7	807.5	806.7	808.2	812.7	815.7	823.0	833.4	843.0
37.5°	764.8	758.8	756.2	753.6	756.2	758.8	764.8	765.3	772.8	779.8	792.8
40°	730.5	724.5	723.0	721.5	723.0	724.5	730.5	729.7	737.8	743.0	754.9
42.5°	691.9	689.6	688.6	686.0	688.6	689.6	691.9	695.9	700.5	708.0	717.0
45°	639.3	638.6	634.1	635.7	634.1	638.6	639.3	641.5	649.7	654.9	663.0
47.5°	583.9	580.6	577.5	579.6	577.5	580.6	583.9	586.8	592.4	598.7	609.5
50°	546.0	544.5	537.8	539.3	537.8	544.5	546.0	548.9	552.6	560.8	570.4
52.5°	508.0	502.4	499.9	499.0	499.9	502.4	508.0	511.0	515.3	524.6	531.9
55°	445.3	438.6	435.5	434.1	435.5	438.6	445.3	450.4	456.4	466.7	474.1
57.5°	383.6	381.8	379.5	381.1	379.5	381.8	383.6	392.2	397.9	406.1	415.2
60°	347.4	347.4	347.4	346.7	347.4	347.4	347.4	354.9	360.1	368.2	377.8
62.5°	319.6	317.8	317.3	318.3	317.3	317.8	319.6	322.8	328.0	333.2	341.7
65°	277.1	276.4	273.3	272.6	273.3	276.4	277.1	279.3	283.7	287.5	293.3
67.5°	237.0	234.2	233.4	232.3	233.4	234.2	237.0	238.8	241.8	246.6	249.5
70°	206.7	205.2	200.8	201.5	200.8	205.2	206.7	210.4	213.4	219.2	222.3
72.5°	174.1	172.6	171.7	170.7	171.7	172.6	174.1	177.8	180.8	187.3	192.0
75°	137.8	137.0	136.3	139.3	136.3	137.0	137.8	138.6	139.3	141.5	143.7
77.5°	110.4	110.4	110.8	109.6	110.8	110.4	110.4	110.4	110.4	111.6	112.0
80°	92.6	92.6	91.9	91.9	91.9	92.6	92.6	92.6	92.6	92.6	91.9
82.5°	74.3	74.8	75.3	74.1	75.3	74.8	74.3	75.4	76.0	74.8	75.3
85°	48.9	48.2	49.7	48.9	49.7	48.2	48.9	48.9	47.4	48.9	48.2
87.5°	23.8	22.7	22.7	23.3	22.7	22.7	23.8	22.7	22.5	22.4	21.8
90°	9.3	9.6	10.0	9.6	10.0	9.6	9.3	9.6	9.0	8.7	8.3
92.5°	17.3	16.3	16.7	16.0	16.7	16.3	17.3	17.9	19.6	22.2	28.1
95°	45.3	42.3	40.0	38.6	40.0	42.3	45.3	51.7	63.6	81.2	119.9
97.5°	132.1	117.1	108.0	105.2	108.0	117.1	132.1	156.7	196.4	239.4	298.9
100°	245.8	221.5	208.5	208.9	208.5	221.5	245.8	279.5	326.8	365.7	392.7
102.5°	344.1	324.9	314.1	306.3	314.1	324.9	344.1	370.3	400.3	423.0	423.9
105°	448.7	436.0	425.4	423.7	425.4	436.0	448.7	464.0	472.6	466.3	433.0
107.5°	502.2	497.9	494.3	491.3	494.3	497.9	502.2	501.9	490.0	460.8	406.7
110°	517.6	520.3	519.6	519.0	519.6	520.3	517.6	508.3	484.9	443.0	381.7



TEST NUMBER: P332362-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	513.6	521.9	524.4	524.5	524.4	521.9	513.6	496.5	466.6	419.5	356.9
115°	492.3	506.9	513.6	515.3	513.6	506.9	492.3	467.3	431.0	382.0	324.0
117.5°	457.2	474.0	483.5	485.8	483.5	474.0	457.2	431.1	394.3	350.3	300.3
120°	432.6	451.3	459.3	461.3	459.3	451.3	432.6	406.3	372.7	332.7	287.8
122.5°	410.3	427.1	435.8	438.4	435.8	427.1	410.3	386.9	355.6	318.6	278.0
125°	381.1	395.7	404.1	406.3	404.1	395.7	381.1	359.8	333.1	301.1	264.8
127.5°	357.8	370.3	377.9	379.9	377.9	370.3	357.8	338.8	314.5	285.7	253.4
130°	343.4	355.4	362.4	365.0	362.4	355.4	343.4	325.7	303.1	276.2	246.1
132.5°	330.4	342.3	348.6	350.4	348.6	342.3	330.4	313.8	292.2	267.0	239.5
135°	311.1	321.1	327.1	329.4	327.1	321.1	311.1	294.7	275.8	254.1	230.5
137.5°	290.5	300.7	305.7	307.3	305.7	300.7	290.5	276.8	260.3	241.7	222.3
140°	277.5	286.8	292.1	291.8	292.1	286.8	277.5	264.8	250.4	234.5	217.5
142.5°	264.7	273.0	277.7	277.4	277.7	273.0	264.7	253.8	241.4	227.5	213.0
145°	247.1	254.1	256.8	257.5	256.8	254.1	247.1	238.8	229.1	218.5	207.5
147.5°	233.6	238.3	240.8	241.1	240.8	238.3	233.6	227.2	220.4	211.8	203.0
150°	225.8	229.5	231.5	231.5	231.5	229.5	225.8	220.8	214.5	207.5	199.8
152.5°	218.9	222.3	223.5	223.5	223.5	222.3	218.9	215.0	209.7	203.5	196.9
155°	209.8	212.5	213.2	213.5	213.2	212.5	209.8	206.8	202.8	197.8	192.6
157.5°	201.9	203.9	204.4	204.3	204.4	203.9	201.9	199.3	196.1	192.3	187.8
160°	196.8	198.9	198.9	198.5	198.9	198.9	196.8	194.5	192.2	188.9	185.2
162.5°	191.8	193.5	193.5	193.2	193.5	193.5	191.8	190.3	188.2	185.1	182.0
165°	185.2	186.5	186.2	186.2	186.2	186.5	185.2	183.9	182.2	179.8	177.9
167.5°	178.9	179.8	179.6	179.6	179.6	179.8	178.9	178.3	177.1	175.8	174.3
170°	175.2	175.9	175.5	175.5	175.5	175.9	175.2	174.8	174.2	172.9	171.8
172.5°	172.0	172.7	172.1	171.8	172.1	172.7	172.0	171.9	171.5	170.5	169.8
175°	167.9	168.2	167.9	167.6	167.9	168.2	167.9	167.9	167.9	167.2	166.8
177.5°	165.3	165.6	165.0	165.0	165.0	165.6	165.3	165.6	165.6	165.3	165.0
180°	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6



TEST NUMBER: P332362-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1651.7	1660.0	1668.3	1676.0	1687.9	1693.2	1700.9	1703.8	1712.8	1725.8	1736.4
5°	1551.2	1563.1	1578.7	1591.3	1611.3	1626.8	1643.9	1660.2	1679.4	1706.9	1731.3
7.5°	1466.0	1477.8	1496.5	1519.8	1541.9	1564.0	1587.2	1609.5	1637.0	1676.3	1715.2
10°	1409.8	1423.8	1446.0	1471.2	1498.6	1520.1	1547.6	1575.7	1609.8	1655.0	1701.7
12.5°	1361.1	1371.7	1397.5	1421.4	1452.5	1479.9	1506.7	1539.5	1578.4	1626.5	1682.6
15°	1283.8	1298.6	1323.8	1350.5	1383.1	1412.0	1446.8	1486.8	1524.6	1583.8	1652.0
17.5°	1206.2	1228.7	1254.9	1285.0	1309.2	1349.0	1386.8	1427.9	1474.3	1537.2	1612.0
20°	1156.4	1174.2	1198.6	1242.4	1274.2	1304.6	1339.4	1390.5	1433.4	1504.6	1582.3
22.5°	1114.4	1127.4	1154.8	1190.8	1227.9	1263.1	1298.4	1347.3	1400.2	1467.8	1552.2
25°	1052.0	1072.7	1093.4	1119.4	1159.3	1201.6	1240.1	1281.6	1337.9	1409.8	1500.9
27.5°	991.1	1009.8	1030.3	1062.2	1092.5	1132.0	1172.2	1219.8	1280.3	1356.3	1448.7
30°	952.0	966.0	985.2	1026.1	1053.4	1087.5	1134.9	1177.1	1233.4	1314.2	1412.0
32.5°	911.6	929.8	950.9	982.1	1016.1	1048.4	1091.7	1137.5	1195.0	1274.5	1374.6
35°	854.1	875.6	897.1	920.1	954.1	987.5	1023.8	1074.2	1132.7	1209.8	1308.2
37.5°	801.3	818.6	836.0	864.5	896.8	928.5	962.4	1012.1	1067.2	1150.4	1240.7
40°	767.5	783.1	796.4	826.0	857.1	891.2	924.5	968.3	1027.5	1105.3	1192.7
42.5°	730.8	745.1	763.2	787.5	821.0	849.7	883.1	924.4	980.1	1059.0	1135.8
45°	675.6	691.9	707.5	730.5	763.7	791.9	821.5	860.8	917.8	983.1	1051.2
47.5°	618.3	634.6	652.3	674.6	703.6	732.3	761.9	796.6	848.7	912.7	958.6
50°	581.5	594.8	612.7	634.9	661.6	691.9	718.6	756.4	806.0	856.4	896.4
52.5°	543.6	555.7	575.9	599.3	624.2	650.4	678.9	711.3	756.2	803.6	835.4
55°	484.5	499.3	516.3	539.3	563.7	586.0	613.4	646.8	682.3	717.8	739.3
57.5°	429.2	441.5	455.9	479.6	500.8	527.4	551.9	577.9	610.8	637.5	651.6
60°	388.9	400.0	418.6	439.3	459.3	482.3	510.4	536.3	561.6	583.1	594.1
62.5°	351.0	363.9	380.0	399.0	420.8	442.5	467.1	488.9	511.1	529.7	537.2
65°	301.5	311.9	323.8	341.5	359.3	381.5	400.8	423.0	439.3	449.7	456.4
67.5°	256.5	263.3	272.3	284.2	301.6	321.0	339.7	357.0	370.7	377.8	383.7
70°	227.4	231.9	238.6	250.4	263.7	280.8	300.0	312.6	324.5	330.4	336.3
72.5°	198.4	204.1	210.1	219.6	230.5	242.8	256.7	272.3	278.8	286.0	289.5
75°	150.4	158.5	166.6	172.6	180.0	189.6	202.3	211.9	215.6	221.5	222.3
77.5°	113.5	115.3	121.2	128.6	134.8	141.8	149.8	158.3	160.1	163.2	165.2
80°	93.3	93.3	93.3	97.7	105.2	110.4	117.8	122.2	125.2	125.9	126.7
82.5°	74.9	74.9	74.4	75.3	77.9	80.8	87.6	92.6	95.0	94.5	92.9
85°	48.9	47.4	47.4	46.7	47.4	45.9	45.1	48.2	52.6	52.6	51.1
87.5°	21.8	21.2	21.6	20.8	20.1	19.2	17.3	17.8	17.6	19.8	19.1
90°	8.0	8.3	7.4	6.3	5.4	4.3	3.7	3.0	2.0	1.3	0.7
92.5°	38.6	51.2	56.4	42.3	28.0	19.2	14.3	11.5	9.0	6.1	4.1
95°	160.2	197.6	175.9	121.2	71.6	43.3	30.3	21.7	16.0	12.3	11.3
97.5°	327.4	306.1	224.1	133.0	77.1	50.0	36.0	27.4	22.5	19.6	19.3
100°	381.1	315.5	213.2	125.5	76.3	53.0	40.0	32.0	27.3	25.0	24.7
102.5°	383.7	298.1	197.2	119.1	77.4	56.5	44.5	37.3	32.9	30.8	30.3
105°	363.4	267.8	177.6	114.6	80.3	62.3	51.9	45.6	41.7	39.7	38.6
107.5°	327.8	241.0	165.0	114.2	85.8	69.9	60.3	54.4	50.5	48.5	47.6
110°	305.5	225.8	160.2	115.6	90.3	75.3	66.0	60.3	56.6	55.0	53.9



TEST NUMBER: P332362-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	286.0	215.7	157.5	118.3	94.8	80.9	71.8	66.2	62.5	60.8	59.9
115°	262.5	204.8	156.6	122.5	102.3	89.6	80.6	74.9	71.6	69.7	68.2
117.5°	248.3	198.4	157.1	128.3	110.2	97.6	89.4	83.0	79.9	78.2	76.7
120°	240.8	195.5	158.3	132.5	115.3	103.2	94.9	88.6	85.3	83.6	82.6
122.5°	234.7	193.7	160.0	136.6	120.6	108.9	100.0	94.0	90.3	88.7	87.7
125°	226.9	191.1	162.9	142.9	128.3	116.6	107.5	101.2	97.6	95.6	94.9
127.5°	219.9	190.0	166.1	148.1	134.9	123.7	114.6	107.6	104.0	101.4	100.5
130°	216.1	189.2	168.2	151.6	138.9	127.9	118.9	111.9	107.9	104.9	104.0
132.5°	212.7	188.9	169.8	154.8	142.3	131.7	122.9	115.9	111.1	107.8	106.6
135°	208.2	188.5	172.2	158.9	147.5	137.2	128.3	121.2	116.2	112.5	111.2
137.5°	204.2	187.8	173.8	161.9	151.2	141.2	132.9	125.9	120.6	117.1	115.6
140°	201.8	187.6	174.8	163.5	153.5	143.9	135.5	128.9	123.6	120.3	118.6
142.5°	199.7	187.0	175.7	165.1	155.4	146.0	138.3	131.6	126.8	123.2	121.8
145°	196.8	186.2	176.2	166.8	157.9	149.2	141.6	135.9	130.9	127.9	126.9
147.5°	194.1	184.9	176.2	168.0	159.9	151.9	145.4	140.0	135.6	132.7	132.1
150°	192.2	183.9	176.2	168.2	161.2	153.5	147.5	142.9	138.6	135.9	135.5
152.5°	190.0	182.6	175.4	168.7	162.0	155.4	149.7	145.5	141.8	139.1	139.0
155°	186.8	180.2	174.6	168.9	163.5	157.9	153.3	149.6	146.2	144.2	144.2
157.5°	183.2	178.1	173.4	169.2	164.4	159.9	156.3	153.2	150.2	148.6	148.4
160°	180.9	176.5	172.9	169.2	165.2	161.2	157.9	155.5	152.9	151.6	151.6
162.5°	178.4	174.9	171.8	168.9	165.5	162.0	159.2	157.1	155.0	153.9	153.9
165°	175.2	172.6	170.2	168.2	165.9	163.2	160.9	159.6	157.9	157.2	157.5
167.5°	172.1	170.1	168.6	167.7	165.8	163.9	162.4	161.5	160.2	159.9	160.2
170°	170.2	168.5	167.6	166.8	165.5	163.9	163.2	162.5	161.6	161.2	161.8
172.5°	168.3	167.2	166.7	166.6	165.5	164.1	163.7	163.3	162.6	162.5	163.0
175°	166.2	165.5	165.5	165.9	165.2	164.6	164.2	164.2	163.5	163.9	164.2
177.5°	164.9	164.6	164.9	165.3	164.9	164.6	164.6	164.6	164.3	164.6	164.9
180°	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6



TEST NUMBER: P332362-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1740.0	1746.5	1754.8	1767.3	1776.8	1785.1	1786.9	1789.2	1795.2	1805.2	1812.9
5°	1751.2	1768.3	1795.7	1822.4	1851.2	1875.0	1897.2	1912.8	1927.6	1958.7	1983.9
7.5°	1747.8	1785.6	1828.6	1876.5	1925.0	1971.9	2015.4	2054.4	2093.2	2138.5	2190.3
10°	1745.3	1789.8	1847.6	1909.0	1976.5	2042.4	2106.1	2155.8	2213.6	2265.4	2331.3
12.5°	1734.1	1798.1	1867.2	1945.8	2028.6	2104.6	2188.5	2257.1	2323.2	2398.1	2474.7
15°	1719.4	1797.2	1884.6	1989.0	2115.0	2206.9	2292.8	2412.1	2493.6	2575.0	2684.7
17.5°	1692.6	1787.5	1896.8	2032.5	2137.5	2261.0	2390.3	2484.5	2594.3	2709.2	2808.4
20°	1671.2	1781.7	1903.8	2037.2	2171.3	2305.4	2430.6	2543.2	2656.6	2789.2	2870.6
22.5°	1649.9	1759.2	1886.1	2027.8	2171.9	2313.1	2454.9	2587.1	2714.6	2848.5	2952.4
25°	1604.6	1734.3	1872.0	2016.5	2158.7	2314.3	2483.2	2630.6	2788.4	2926.2	3024.7
27.5°	1558.7	1677.4	1814.7	1961.2	2119.3	2303.2	2501.9	2669.5	2827.5	2926.2	2957.1
30°	1517.2	1643.1	1769.1	1918.0	2089.1	2294.2	2505.4	2697.3	2827.0	2869.9	2838.0
32.5°	1475.1	1589.2	1713.9	1866.4	2048.1	2272.4	2510.2	2680.7	2758.7	2725.9	2596.2
35°	1400.9	1503.8	1624.6	1777.2	1986.1	2260.2	2490.6	2606.1	2586.9	2401.7	2157.2
37.5°	1321.4	1405.3	1517.2	1676.8	1921.8	2212.1	2406.4	2423.5	2256.8	1972.5	1690.1
40°	1258.7	1334.2	1449.1	1615.7	1872.0	2164.6	2321.7	2252.8	1994.2	1677.9	1442.4
42.5°	1197.6	1261.3	1372.0	1551.7	1824.6	2100.1	2195.5	2045.4	1747.1	1448.0	1233.8
45°	1094.2	1154.1	1265.3	1449.7	1727.6	1976.5	1963.9	1703.1	1404.6	1163.9	986.0
47.5°	996.1	1048.6	1152.8	1341.1	1613.6	1791.3	1673.5	1396.0	1142.7	949.6	822.7
50°	926.7	978.6	1082.3	1268.3	1522.4	1652.0	1483.8	1216.4	984.6	824.5	723.8
52.5°	860.4	911.1	1005.9	1187.0	1412.1	1489.6	1309.0	1061.1	867.8	729.7	643.2
55°	767.5	806.0	891.2	1064.5	1232.8	1250.5	1067.5	860.1	700.8	604.5	545.3
57.5°	672.8	706.0	790.1	928.2	1046.1	1037.0	863.5	684.1	576.8	505.2	462.2
60°	611.1	643.8	717.8	836.4	925.3	894.2	734.9	590.4	498.6	446.0	411.9
62.5°	553.6	579.2	648.5	735.0	799.0	763.7	628.2	508.6	435.7	391.4	364.5
65°	470.4	491.2	546.7	591.9	627.5	593.4	480.8	397.8	345.3	314.1	295.6
67.5°	391.2	404.4	439.6	455.9	481.0	443.6	361.6	305.9	276.1	249.8	237.0
70°	341.5	351.1	369.7	383.0	389.6	351.1	290.4	249.7	224.4	205.9	197.8
72.5°	291.7	300.2	303.9	314.8	311.4	275.3	233.5	201.0	182.9	170.4	159.9
75°	223.0	226.7	223.0	218.6	208.9	183.7	154.9	138.6	125.2	119.2	115.6
77.5°	162.5	161.4	156.3	149.4	132.9	117.1	101.5	96.0	90.2	87.1	85.8
80°	125.2	122.2	117.8	106.7	92.6	81.5	77.8	74.1	71.8	68.1	67.4
82.5°	93.2	91.4	84.0	74.6	64.8	59.6	56.5	55.1	52.9	51.0	50.8
85°	49.7	47.4	39.3	34.1	32.6	31.1	30.3	30.3	27.4	26.7	26.7
87.5°	16.3	12.8	12.4	10.8	10.9	10.0	10.7	9.8	9.3	9.9	8.8
90°	1.3	2.0	3.0	3.7	4.3	5.4	6.3	7.4	8.3	8.0	8.3
92.5°	6.1	9.0	11.5	14.3	19.2	28.0	42.3	56.4	51.2	38.6	28.1
95°	12.3	16.0	21.7	30.3	43.3	71.6	121.2	175.9	197.6	160.2	119.9
97.5°	19.6	22.5	27.4	36.0	50.0	77.1	133.0	224.1	306.1	327.4	298.9
100°	25.0	27.3	32.0	40.0	53.0	76.3	125.5	213.2	315.5	381.1	392.7
102.5°	30.8	32.9	37.3	44.5	56.5	77.4	119.1	197.2	298.1	383.7	423.9
105°	39.7	41.7	45.6	51.9	62.3	80.3	114.6	177.6	267.8	363.4	433.0
107.5°	48.5	50.5	54.4	60.3	69.9	85.8	114.2	165.0	241.0	327.8	406.7
110°	55.0	56.6	60.3	66.0	75.3	90.3	115.6	160.2	225.8	305.5	381.7



TEST NUMBER: P332362-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	60.8	62.5	66.2	71.8	80.9	94.8	118.3	157.5	215.7	286.0	356.9
115°	69.7	71.6	74.9	80.6	89.6	102.3	122.5	156.6	204.8	262.5	324.0
117.5°	78.2	79.9	83.0	89.4	97.6	110.2	128.3	157.1	198.4	248.3	300.3
120°	83.6	85.3	88.6	94.9	103.2	115.3	132.5	158.3	195.5	240.8	287.8
122.5°	88.7	90.3	94.0	100.0	108.9	120.6	136.6	160.0	193.7	234.7	278.0
125°	95.6	97.6	101.2	107.5	116.6	128.3	142.9	162.9	191.1	226.9	264.8
127.5°	101.4	104.0	107.6	114.6	123.7	134.9	148.1	166.1	190.0	219.9	253.4
130°	104.9	107.9	111.9	118.9	127.9	138.9	151.6	168.2	189.2	216.1	246.1
132.5°	107.8	111.1	115.9	122.9	131.7	142.3	154.8	169.8	188.9	212.7	239.5
135°	112.5	116.2	121.2	128.3	137.2	147.5	158.9	172.2	188.5	208.2	230.5
137.5°	117.1	120.6	125.9	132.9	141.2	151.2	161.9	173.8	187.8	204.2	222.3
140°	120.3	123.6	128.9	135.5	143.9	153.5	163.5	174.8	187.6	201.8	217.5
142.5°	123.2	126.8	131.6	138.3	146.0	155.4	165.1	175.7	187.0	199.7	213.0
145°	127.9	130.9	135.9	141.6	149.2	157.9	166.8	176.2	186.2	196.8	207.5
147.5°	132.7	135.6	140.0	145.4	151.9	159.9	168.0	176.2	184.9	194.1	203.0
150°	135.9	138.6	142.9	147.5	153.5	161.2	168.2	176.2	183.9	192.2	199.8
152.5°	139.1	141.8	145.5	149.7	155.4	162.0	168.7	175.4	182.6	190.0	196.9
155°	144.2	146.2	149.6	153.3	157.9	163.5	168.9	174.6	180.2	186.8	192.6
157.5°	148.6	150.2	153.2	156.3	159.9	164.4	169.2	173.4	178.1	183.2	187.8
160°	151.6	152.9	155.5	157.9	161.2	165.2	169.2	172.9	176.5	180.9	185.2
162.5°	153.9	155.0	157.1	159.2	162.0	165.5	168.9	171.8	174.9	178.4	182.0
165°	157.2	157.9	159.6	160.9	163.2	165.9	168.2	170.2	172.6	175.2	177.9
167.5°	159.9	160.2	161.5	162.4	163.9	165.8	167.7	168.6	170.1	172.1	174.3
170°	161.2	161.6	162.5	163.2	163.9	165.5	166.8	167.6	168.5	170.2	171.8
172.5°	162.5	162.6	163.3	163.7	164.1	165.5	166.6	166.7	167.2	168.3	169.8
175°	163.9	163.5	164.2	164.2	164.6	165.2	165.9	165.5	165.5	166.2	166.8
177.5°	164.6	164.3	164.6	164.6	164.6	164.9	165.3	164.9	164.6	164.9	165.0
180°	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6	164.6



TEST NUMBER: P332362-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5	1730.5
2.5°	1825.3	1825.3	1827.7	1836.6	1837.8	1845.5	1843.1
5°	2006.1	2020.2	2025.3	2047.6	2061.0	2066.9	2055.0
7.5°	2227.1	2266.9	2285.7	2308.9	2329.6	2335.8	2319.6
10°	2388.4	2429.9	2464.7	2486.1	2506.1	2519.5	2536.6
12.5°	2544.2	2595.2	2628.3	2658.6	2679.2	2696.1	2698.9
15°	2713.6	2790.6	2849.1	2892.1	2913.6	2924.7	2920.3
17.5°	2884.4	2955.8	2997.5	3041.3	3071.1	3072.6	3073.4
20°	2981.0	3050.6	3098.8	3131.4	3164.8	3163.3	3170.6
22.5°	3045.6	3100.4	3137.3	3161.0	3172.4	3166.8	3168.3
25°	3075.8	3092.1	3085.5	3047.7	3038.1	3003.2	3009.2
27.5°	2920.0	2842.9	2763.3	2660.7	2579.8	2515.2	2518.5
30°	2708.4	2572.1	2416.5	2286.1	2169.1	2136.5	2066.9
32.5°	2412.6	2208.2	2026.0	1904.5	1804.0	1776.8	1716.0
35°	1911.3	1712.8	1525.3	1412.7	1368.3	1306.1	1305.3
37.5°	1485.6	1310.8	1211.6	1127.2	1082.9	1045.3	1041.6
40°	1249.7	1113.4	1038.6	977.9	934.2	906.0	899.4
42.5°	1085.0	974.8	904.7	867.0	833.4	818.9	808.0
45°	886.0	811.9	763.0	729.0	713.4	702.3	696.4
47.5°	741.1	691.4	658.2	635.5	622.8	611.1	614.3
50°	662.3	621.5	597.1	575.6	566.0	557.8	558.6
52.5°	598.9	562.3	542.5	527.0	515.0	509.3	506.4
55°	508.2	485.2	465.2	454.1	447.4	439.3	437.1
57.5°	433.5	415.8	399.4	386.8	385.2	377.4	378.4
60°	383.7	368.9	355.6	348.9	343.7	337.1	339.3
62.5°	342.8	330.4	318.3	312.7	307.6	302.7	303.7
65°	280.8	268.9	261.5	258.5	256.3	254.1	251.8
67.5°	223.8	216.5	211.9	205.5	201.0	200.2	197.9
70°	188.1	178.5	170.4	162.2	160.0	159.3	160.0
72.5°	150.8	144.8	142.5	138.6	138.1	136.2	137.5
75°	113.4	111.1	109.6	106.7	106.7	106.7	106.7
77.5°	83.6	82.2	81.3	80.8	80.0	79.0	78.8
80°	65.2	64.5	63.0	63.0	62.2	63.0	62.2
82.5°	49.2	49.0	47.6	47.6	46.8	46.4	46.8
85°	25.2	24.4	25.9	24.4	25.2	23.8	25.2
87.5°	8.9	9.0	8.5	8.4	7.8	9.1	7.8
90°	8.7	9.0	9.6	9.3	9.6	10.0	9.6
92.5°	22.2	19.6	17.9	17.3	16.3	16.7	16.0
95°	81.2	63.6	51.7	45.3	42.3	40.0	38.6
97.5°	239.4	196.4	156.7	132.1	117.1	108.0	105.2
100°	365.7	326.8	279.5	245.8	221.5	208.5	208.9
102.5°	423.0	400.3	370.3	344.1	324.9	314.1	306.3
105°	466.3	472.6	464.0	448.7	436.0	425.4	423.7
107.5°	460.8	490.0	501.9	502.2	497.9	494.3	491.3
110°	443.0	484.9	508.3	517.6	520.3	519.6	519.0



TEST NUMBER: P332362-830

CATALOG NUMBER: S123RDIP-S1165D365U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	419.5	466.6	496.5	513.6	521.9	524.4	524.5
115°	382.0	431.0	467.3	492.3	506.9	513.6	515.3
117.5°	350.3	394.3	431.1	457.2	474.0	483.5	485.8
120°	332.7	372.7	406.3	432.6	451.3	459.3	461.3
122.5°	318.6	355.6	386.9	410.3	427.1	435.8	438.4
125°	301.1	333.1	359.8	381.1	395.7	404.1	406.3
127.5°	285.7	314.5	338.8	357.8	370.3	377.9	379.9
130°	276.2	303.1	325.7	343.4	355.4	362.4	365.0
132.5°	267.0	292.2	313.8	330.4	342.3	348.6	350.4
135°	254.1	275.8	294.7	311.1	321.1	327.1	329.4
137.5°	241.7	260.3	276.8	290.5	300.7	305.7	307.3
140°	234.5	250.4	264.8	277.5	286.8	292.1	291.8
142.5°	227.5	241.4	253.8	264.7	273.0	277.7	277.4
145°	218.5	229.1	238.8	247.1	254.1	256.8	257.5
147.5°	211.8	220.4	227.2	233.6	238.3	240.8	241.1
150°	207.5	214.5	220.8	225.8	229.5	231.5	231.5
152.5°	203.5	209.7	215.0	218.9	222.3	223.5	223.5
155°	197.8	202.8	206.8	209.8	212.5	213.2	213.5
157.5°	192.3	196.1	199.3	201.9	203.9	204.4	204.3
160°	188.9	192.2	194.5	196.8	198.9	198.9	198.5
162.5°	185.1	188.2	190.3	191.8	193.5	193.5	193.2
165°	179.8	182.2	183.9	185.2	186.5	186.2	186.2
167.5°	175.8	177.1	178.3	178.9	179.8	179.6	179.6
170°	172.9	174.2	174.8	175.2	175.9	175.5	175.5
172.5°	170.5	171.5	171.9	172.0	172.7	172.1	171.8
175°	167.2	167.9	167.9	167.9	168.2	167.9	167.6
177.5°	165.3	165.6	165.6	165.3	165.6	165.0	165.0
180°	164.6	164.6	164.6	164.6	164.6	164.6	164.6

(END OF REPORT)