

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: P332470

Luminaire Tested: **S123RDIW-S1165D460U835-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332470
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123RDIW-S1165D460U835-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 460 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6417.2 lumens
Efficiency: N/A
Efficacy: 122.5 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

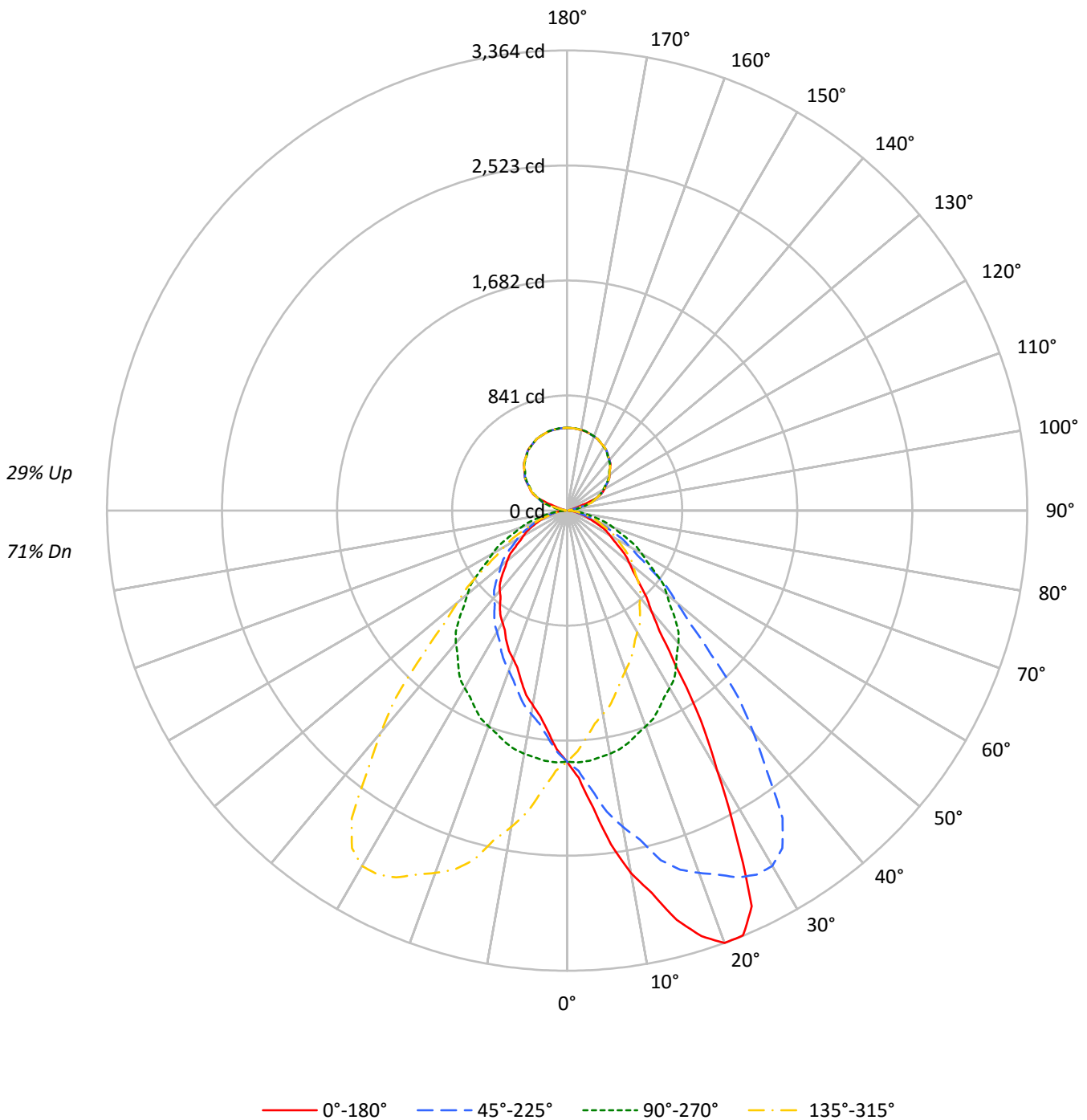
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	71
1	103	99	96	92	98	94	91	88	85	82	80	76	74	73	68	67	66	62
2	95	88	82	77	90	83	78	74	75	71	68	68	65	62	61	59	57	53
3	87	78	71	65	82	74	68	63	67	62	58	61	57	53	55	52	49	46
4	80	70	62	56	76	66	59	54	60	55	50	55	50	47	50	46	43	40
5	74	62	54	49	70	60	52	47	54	48	44	50	45	41	45	41	38	35
6	68	56	48	43	65	54	47	41	49	43	39	45	40	36	41	37	34	31
7	64	51	43	38	60	49	42	37	45	39	35	41	36	32	38	34	30	28
8	59	47	39	34	56	45	38	33	41	35	31	38	33	29	35	31	27	25
9	55	43	36	31	53	41	34	30	38	32	28	35	30	27	32	28	25	23
10	52	40	32	28	49	38	31	27	35	30	26	33	28	24	30	26	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	19763	19763	19763	19763
5°	23558	19847	17477	19847
10°	29415	19733	15789	19733
15°	34526	19531	14399	19531
20°	38533	19230	13216	19230
25°	37917	18912	12490	18912
30°	27256	18620	11742	18620
35°	18198	18239	11257	18239
40°	13408	17781	10756	17781
45°	11246	16978	10266	16978
50°	9923	15925	9582	15925
55°	8702	14720	8644	14720
60°	7750	13569	7918	13569
65°	6805	12332	7366	12332
70°	5344	11229	6729	11229
75°	4708	9807	6147	9807
80°	4091	8331	6044	8331
85°	3298	6694	6410	6694



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.6	2.8
10°-20°	564.1	8.8
20°-30°	886.2	13.8
30°-40°	924.6	14.4
40°-50°	791.2	12.3
50°-60°	603.1	9.4
60°-70°	386.5	6.0
70°-80°	186.0	2.9
80°-90°	50.9	0.8
90°-100°	22.0	0.3
100°-110°	104.8	1.6
110°-120°	251.7	3.9
120°-130°	320.5	5.0
130°-140°	342.4	5.3
140°-150°	320.2	5.0
150°-160°	258.3	4.0
160°-170°	166.7	2.6
170°-180°	57.5	0.9
0°-30°	1630.8	25.4
0°-40°	2555.4	39.8
0°-60°	3949.7	61.5
0°-90°	4573.1	71.3
90°-120°	378.5	5.9
90°-150°	1361.6	21.2
90°-180°	1844.0	28.7
0°-180°	6417.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1836	1836	1836	1836	1836	
5°	2180	1837	1618	1837	2180	225
15°	3098	1753	1292	1753	3098	879
25°	3193	1592	1052	1592	3193	1372
35°	1385	1388	857	1388	1385	908
45°	739	1115	674	1115	739	581
55°	464	784	461	784	464	419
65°	267	484	289	484	267	263
75°	113	236	148	236	113	121
85°	27	54	52	54	27	31
90°	14	0	14	0	14	7
95°	17	27	17	27	17	14
105°	20	134	20	134	20	45
115°	264	251	264	251	264	244
125°	361	354	361	354	361	323
135°	445	441	445	441	445	343
145°	514	509	514	509	514	321
155°	559	560	559	560	559	258
165°	590	591	590	591	590	166
175°	602	605	602	605	602	57
180°	605	605	605	605	605	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0
2.5°	1955.5	1958.0	1949.8	1948.6	1939.1	1936.6	1936.6	1923.4	1915.2	1904.6	1898.3
5°	2180.3	2192.9	2186.6	2172.4	2148.8	2143.3	2128.4	2104.8	2078.1	2045.1	2029.4
7.5°	2461.0	2478.2	2471.6	2449.7	2425.0	2405.1	2362.9	2323.8	2268.9	2220.8	2179.6
10°	2691.2	2673.1	2658.9	2637.7	2614.9	2578.0	2534.0	2473.4	2403.5	2348.5	2287.2
12.5°	2863.4	2860.5	2842.5	2820.7	2788.5	2753.4	2699.3	2625.6	2544.3	2464.8	2394.7
15°	3098.3	3103.0	3091.2	3068.4	3022.8	2960.7	2879.0	2848.4	2732.0	2645.6	2559.1
17.5°	3260.8	3259.9	3258.3	3226.7	3180.2	3136.0	3060.2	2979.6	2874.3	2752.5	2636.0
20°	3363.9	3356.1	3357.7	3322.3	3287.7	3236.6	3162.7	3045.6	2959.2	2818.5	2698.2
22.5°	3361.4	3359.9	3365.8	3353.7	3328.6	3289.4	3231.3	3132.4	3022.1	2880.1	2744.8
25°	3192.6	3186.3	3223.3	3233.5	3273.6	3280.6	3263.3	3209.1	3104.6	2958.4	2791.0
27.5°	2672.0	2668.5	2737.1	2822.9	2931.7	3016.2	3098.0	3137.4	3104.6	2999.9	2832.2
30°	2192.9	2266.7	2301.3	2425.5	2563.8	2728.9	2873.5	3011.0	3044.8	2999.3	2861.7
32.5°	1820.6	1885.1	1914.0	2020.6	2149.5	2342.8	2559.7	2754.5	2892.1	2926.9	2844.1
35°	1384.9	1385.7	1451.7	1498.8	1618.3	1817.2	2027.8	2288.7	2548.1	2744.6	2765.0
37.5°	1105.1	1109.0	1148.9	1195.9	1285.5	1390.7	1576.2	1793.1	2092.7	2394.4	2571.2
40°	954.2	961.2	991.1	1037.5	1101.9	1181.3	1325.9	1530.3	1780.2	2115.8	2390.1
42.5°	857.3	868.8	884.2	919.9	959.8	1034.2	1151.1	1309.0	1536.3	1853.6	2170.1
45°	738.8	745.1	756.9	773.4	809.5	861.4	940.0	1046.1	1234.8	1490.2	1806.9
47.5°	651.7	648.4	660.8	674.2	698.3	733.6	786.3	872.9	1007.5	1212.4	1481.1
50°	592.6	591.8	600.5	610.7	633.5	659.4	702.7	767.9	874.8	1044.6	1290.6
52.5°	537.3	540.3	546.4	559.1	575.6	596.6	635.4	682.4	774.2	920.7	1125.8
55°	463.7	466.1	474.7	481.8	493.6	514.8	539.2	578.5	641.4	743.5	912.5
57.5°	401.5	400.4	408.7	410.4	423.8	441.1	459.9	490.4	536.0	612.0	725.8
60°	360.0	357.6	364.7	370.2	377.3	391.4	407.1	437.0	473.2	529.0	626.4
62.5°	322.2	321.1	326.3	331.8	337.7	350.5	363.7	386.7	415.3	462.3	539.6
65°	267.2	269.6	271.9	274.3	277.4	285.3	297.9	313.6	333.3	366.3	422.1
67.5°	210.0	212.4	213.2	218.0	224.8	229.7	237.4	251.4	265.0	292.9	324.6
70°	169.8	169.0	169.8	172.1	180.8	189.4	199.6	209.9	218.5	238.1	264.9
72.5°	145.9	144.5	146.5	147.0	151.2	153.6	160.0	169.6	180.8	194.1	213.3
75°	113.2	113.2	113.2	113.2	116.3	117.9	120.3	122.6	126.5	132.8	147.0
77.5°	83.6	83.8	84.9	85.7	86.3	87.2	88.7	91.0	92.4	95.7	101.9
80°	66.0	66.8	66.0	66.8	66.8	68.4	69.2	71.5	72.3	76.2	78.6
82.5°	49.7	49.2	49.7	50.5	50.5	52.0	52.2	53.9	54.1	56.1	58.5
85°	26.7	25.2	26.7	25.9	27.5	25.9	26.7	28.3	28.3	29.1	32.2
87.5°	9.0	10.2	8.9	9.5	9.5	10.0	9.9	9.9	11.0	10.3	10.7
90°	13.5	13.3	13.1	12.9	12.7	12.4	12.0	11.6	11.2	10.8	9.5
92.5°	14.9	14.8	14.7	14.6	14.4	14.1	13.4	12.8	12.1	11.5	10.5
95°	17.1	17.1	17.1	17.1	17.1	16.7	16.0	15.3	14.6	13.9	12.8
97.5°	18.5	18.4	18.3	18.2	18.1	17.7	16.9	16.1	15.3	14.5	21.7
100°	18.9	18.8	18.7	18.6	18.5	18.0	17.2	16.4	15.6	14.8	30.4
102.5°	19.2	19.0	18.9	18.7	18.5	19.7	22.1	24.6	27.1	29.6	46.6
105°	19.8	19.6	19.4	19.2	19.0	27.7	45.4	63.0	80.7	98.4	107.4
107.5°	62.1	75.4	88.7	102.0	115.4	128.5	141.5	154.4	167.4	180.3	178.9
110°	123.6	137.8	152.1	166.4	180.7	189.4	192.7	196.0	199.3	202.6	201.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	212.0	215.0	218.0	221.0	224.0	225.5	225.4	225.4	225.3	225.3	224.2
115°	264.2	263.8	263.4	263.0	262.6	261.9	260.9	259.9	258.9	257.9	257.0
117.5°	293.5	293.4	293.3	293.2	293.1	292.7	291.9	291.1	290.3	289.5	289.1
120°	313.6	313.6	313.6	313.6	313.6	313.2	312.4	311.6	310.8	310.0	309.7
122.5°	333.4	333.3	333.2	333.1	333.0	332.7	332.2	331.6	331.0	330.5	330.1
125°	361.2	361.0	360.8	360.6	360.4	360.2	360.0	359.8	359.6	359.4	359.0
127.5°	388.0	388.2	388.4	388.6	388.8	388.7	388.4	388.1	387.8	387.5	387.0
130°	405.2	405.4	405.6	405.8	406.0	405.9	405.5	405.1	404.7	404.3	404.0
132.5°	421.1	421.3	421.6	421.9	422.2	422.1	421.7	421.3	420.9	420.5	420.2
135°	445.2	445.5	445.8	446.1	446.4	446.4	446.1	445.8	445.5	445.2	444.8
137.5°	468.0	468.2	468.4	468.6	468.8	468.6	468.1	467.7	467.2	466.7	466.5
140°	481.6	481.8	482.0	482.2	482.4	482.3	481.9	481.5	481.1	480.7	480.4
142.5°	494.2	494.5	494.8	495.0	495.3	495.3	495.0	494.7	494.3	494.0	493.7
145°	513.5	513.5	513.5	513.5	513.5	513.4	513.2	513.0	512.8	512.6	512.4
147.5°	527.9	528.4	528.8	529.3	529.7	529.9	529.7	529.5	529.3	529.1	528.9
150°	538.7	539.0	539.3	539.6	539.9	539.9	539.7	539.5	539.3	539.1	538.9
152.5°	547.3	547.8	548.2	548.7	549.1	549.2	548.8	548.5	548.1	547.8	547.6
155°	559.4	559.9	560.5	561.1	561.7	561.8	561.3	560.8	560.3	559.8	559.7
157.5°	569.5	570.3	571.1	571.8	572.6	572.7	572.1	571.5	570.9	570.3	570.4
160°	576.0	576.7	577.4	578.1	578.8	578.8	578.2	577.6	577.0	576.4	576.5
162.5°	582.1	582.7	583.3	583.9	584.6	584.5	583.9	583.2	582.5	581.8	581.9
165°	589.5	590.2	590.9	591.5	592.2	592.2	591.4	590.6	589.8	589.0	589.1
167.5°	594.8	595.6	596.4	597.1	597.9	597.9	597.1	596.4	595.6	594.8	594.8
170°	598.0	598.8	599.6	600.4	601.2	601.2	600.4	599.6	598.8	598.0	598.0
172.5°	599.8	600.7	601.5	602.4	603.3	603.3	602.5	601.7	600.9	600.1	600.1
175°	602.5	603.3	604.1	604.9	605.7	605.7	605.0	604.3	603.6	602.9	602.8
177.5°	603.3	604.1	604.9	605.7	606.5	606.6	605.9	605.3	604.6	604.0	603.9
180°	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0
2.5°	1895.8	1893.9	1885.1	1875.0	1861.8	1853.0	1846.1	1842.3	1831.0	1817.2	1807.7
5°	2012.9	1989.3	1964.1	1933.5	1905.2	1876.1	1858.0	1836.8	1810.9	1781.8	1761.4
7.5°	2138.3	2092.1	2042.3	1990.9	1940.1	1894.5	1854.3	1819.8	1778.5	1736.8	1707.6
10°	2234.5	2166.9	2097.0	2025.4	1960.2	1898.9	1851.7	1805.4	1755.9	1707.9	1671.8
12.5°	2321.9	2232.9	2152.3	2064.4	1981.0	1907.7	1839.8	1785.2	1725.7	1674.6	1633.4
15°	2432.6	2341.4	2243.9	2110.3	1999.5	1906.8	1824.2	1752.7	1680.4	1617.5	1577.4
17.5°	2536.0	2398.8	2267.8	2156.4	2012.4	1896.5	1795.8	1710.3	1630.9	1564.2	1514.9
20°	2578.8	2445.9	2303.7	2161.4	2019.9	1890.3	1773.1	1678.8	1596.3	1520.8	1475.3
22.5°	2604.5	2454.1	2304.3	2151.4	2001.1	1866.4	1750.5	1646.8	1557.3	1485.6	1429.4
25°	2634.6	2455.4	2290.3	2139.4	1986.1	1840.0	1702.4	1592.4	1495.7	1419.5	1359.7
27.5°	2654.4	2443.6	2248.5	2080.8	1925.3	1779.7	1653.7	1537.0	1439.0	1358.3	1294.2
30°	2658.1	2434.1	2216.4	2034.9	1876.9	1743.3	1609.7	1498.1	1394.3	1308.6	1248.9
32.5°	2663.2	2410.9	2173.0	1980.2	1818.4	1686.1	1565.0	1458.4	1352.2	1267.8	1206.8
35°	2642.4	2398.0	2107.2	1885.5	1723.6	1595.5	1486.3	1388.0	1283.5	1201.7	1139.7
37.5°	2553.1	2346.9	2039.0	1779.0	1609.7	1491.0	1402.0	1316.3	1220.5	1132.3	1073.8
40°	2463.2	2296.6	1986.1	1714.2	1537.4	1415.5	1335.4	1265.4	1172.7	1090.1	1027.3
42.5°	2329.3	2228.1	1935.8	1646.3	1455.6	1338.2	1270.6	1205.0	1123.6	1039.8	980.7
45°	2083.6	2097.0	1832.9	1538.1	1342.4	1224.5	1160.9	1115.3	1043.0	973.8	913.3
47.5°	1775.5	1900.5	1712.0	1422.9	1223.1	1112.5	1056.8	1017.0	968.3	900.4	845.2
50°	1574.3	1752.7	1615.2	1345.6	1148.3	1038.3	983.2	951.0	908.6	855.1	802.5
52.5°	1388.8	1580.4	1498.2	1259.4	1067.2	966.6	912.8	886.3	852.6	802.3	754.7
55°	1132.6	1326.7	1307.9	1129.4	945.5	855.1	814.3	784.4	761.6	723.9	686.2
57.5°	916.1	1100.2	1109.9	984.8	838.3	749.0	713.8	691.3	676.4	648.0	613.1
60°	779.7	948.7	981.7	887.4	761.6	683.0	648.4	630.3	618.6	595.8	569.0
62.5°	666.5	810.3	847.7	779.8	688.0	614.5	587.4	570.0	562.0	542.3	518.7
65°	510.1	629.6	665.7	628.0	580.0	521.1	499.1	484.2	477.1	466.1	448.8
67.5°	383.6	470.6	510.3	483.7	466.4	429.1	415.1	407.1	400.8	393.3	378.8
70°	308.1	372.5	413.4	406.3	392.2	372.5	362.3	356.8	350.5	344.3	331.7
72.5°	247.7	292.1	330.4	334.0	322.4	318.5	309.5	307.2	303.4	295.8	288.9
75°	164.3	194.9	221.6	231.9	236.6	240.5	236.6	235.8	235.0	228.7	224.8
77.5°	107.7	124.2	141.0	158.5	165.8	171.2	172.4	175.3	173.2	169.9	168.0
80°	82.5	86.5	98.2	113.2	125.0	129.7	132.8	134.4	133.6	132.8	129.7
82.5°	59.9	63.2	68.7	79.2	89.1	97.0	98.9	98.6	100.3	100.8	98.2
85°	32.2	33.0	34.6	36.2	41.7	50.3	52.7	54.2	55.8	55.8	51.1
87.5°	11.7	10.8	11.8	11.6	13.3	13.7	17.3	20.2	21.0	18.7	18.9
90°	8.2	6.9	5.6	4.4	3.4	2.4	1.4	0.4	1.4	2.4	3.4
92.5°	9.5	8.6	7.6	7.2	7.5	7.8	8.1	8.4	8.1	7.8	7.5
95°	11.7	10.6	9.5	11.0	15.1	19.2	23.3	27.4	23.3	19.2	15.1
97.5°	28.8	36.0	43.2	47.7	49.6	51.4	53.2	55.1	53.2	51.4	49.6
100°	46.0	61.6	77.1	83.9	81.9	79.9	77.9	75.9	77.9	79.9	81.9
102.5°	63.6	80.6	97.6	105.4	104.0	102.5	101.1	99.6	101.1	102.5	104.0
105°	116.4	125.3	134.3	138.3	137.2	136.1	135.0	133.9	135.0	136.1	137.2
107.5°	177.5	176.1	174.7	173.5	172.6	171.8	170.9	170.0	170.9	171.8	172.6
110°	200.4	199.3	198.2	197.3	196.5	195.7	194.9	194.1	194.9	195.7	196.5



TEST NUMBER: P332470

CATALOG NUMBER: S123RDIW-S1165D460U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	223.1	222.0	220.9	220.0	219.2	218.5	217.8	217.1	217.8	218.5	219.2
115°	256.1	255.2	254.3	253.5	252.9	252.3	251.7	251.1	251.7	252.3	252.9
117.5°	288.6	288.1	287.7	287.1	286.3	285.6	284.9	284.1	284.9	285.6	286.3
120°	309.4	309.1	308.8	308.2	307.3	306.4	305.5	304.6	305.5	306.4	307.3
122.5°	329.7	329.4	329.0	328.4	327.7	326.9	326.2	325.5	326.2	326.9	327.7
125°	358.6	358.2	357.8	357.2	356.4	355.6	354.8	354.0	354.8	355.6	356.4
127.5°	386.5	386.0	385.5	384.9	384.1	383.3	382.5	381.7	382.5	383.3	384.1
130°	403.6	403.2	402.8	402.2	401.4	400.6	399.8	399.0	399.8	400.6	401.4
132.5°	419.9	419.6	419.2	418.7	417.9	417.1	416.3	415.5	416.3	417.1	417.9
135°	444.4	444.0	443.6	443.1	442.5	441.9	441.3	440.7	441.3	441.9	442.5
137.5°	466.3	466.1	465.8	465.3	464.6	463.8	463.1	462.3	463.1	463.8	464.6
140°	480.1	479.8	479.5	479.1	478.5	477.9	477.3	476.7	477.3	477.9	478.5
142.5°	493.4	493.1	492.8	492.4	491.8	491.2	490.6	490.0	490.6	491.2	491.8
145°	512.2	512.0	511.8	511.4	510.7	510.0	509.3	508.6	509.3	510.0	510.7
147.5°	528.7	528.5	528.3	527.9	527.5	527.0	526.6	526.1	526.6	527.0	527.5
150°	538.7	538.5	538.3	538.1	537.8	537.5	537.2	536.9	537.2	537.5	537.8
152.5°	547.5	547.4	547.3	547.2	547.0	546.9	546.7	546.6	546.7	546.9	547.0
155°	559.6	559.5	559.4	559.5	559.7	559.8	560.0	560.2	560.0	559.8	559.7
157.5°	570.5	570.6	570.7	570.8	570.8	570.8	570.8	570.9	570.8	570.8	570.8
160°	576.6	576.7	576.8	576.9	577.0	577.1	577.2	577.3	577.2	577.1	577.0
162.5°	582.0	582.1	582.2	582.4	582.7	582.9	583.2	583.4	583.2	582.9	582.7
165°	589.2	589.3	589.4	589.6	589.9	590.2	590.5	590.8	590.5	590.2	589.9
167.5°	594.8	594.8	594.8	595.0	595.4	595.8	596.2	596.6	596.2	595.8	595.4
170°	598.0	598.0	598.0	598.2	598.6	599.0	599.4	599.8	599.4	599.0	598.6
172.5°	600.0	599.9	599.8	600.0	600.5	601.0	601.5	601.9	601.5	601.0	600.5
175°	602.7	602.6	602.5	602.7	603.2	603.7	604.2	604.7	604.2	603.7	603.2
177.5°	603.8	603.8	603.7	603.8	604.2	604.6	605.0	605.4	605.0	604.6	604.2
180°	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7



TEST NUMBER: P332470

CATALOG NUMBER: S123RDIW-S1165D460U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0
2.5°	1804.6	1796.4	1790.8	1778.2	1770.0	1761.2	1752.4	1758.1	1757.4	1756.8	1756.8
5°	1744.1	1726.0	1709.5	1688.3	1674.9	1658.4	1645.8	1644.2	1647.4	1636.4	1630.1
7.5°	1684.0	1659.3	1635.9	1612.5	1587.7	1567.9	1555.4	1549.6	1541.6	1534.8	1527.8
10°	1641.9	1612.8	1590.0	1560.9	1534.2	1510.6	1495.7	1485.5	1480.0	1474.5	1464.3
12.5°	1598.5	1570.1	1541.0	1508.1	1482.7	1455.3	1444.1	1432.7	1422.1	1416.0	1402.0
15°	1535.0	1498.1	1467.4	1432.8	1404.5	1377.8	1362.1	1339.3	1336.1	1328.3	1314.1
17.5°	1471.3	1431.2	1389.0	1363.3	1331.4	1303.6	1279.7	1272.0	1249.5	1241.0	1228.8
20°	1421.0	1384.1	1351.9	1318.1	1271.7	1245.8	1226.9	1216.7	1198.6	1187.6	1179.7
22.5°	1377.6	1340.1	1302.8	1263.4	1225.2	1196.1	1182.3	1166.4	1156.5	1141.1	1132.6
25°	1315.7	1274.8	1230.0	1187.6	1160.1	1138.1	1116.1	1101.9	1087.8	1080.7	1065.0
27.5°	1243.7	1201.0	1159.1	1126.9	1093.1	1071.4	1051.5	1038.9	1021.9	1010.0	1001.3
30°	1204.1	1153.8	1117.6	1088.6	1045.3	1024.9	1010.0	994.3	981.7	969.1	960.5
32.5°	1158.2	1112.3	1078.0	1042.0	1008.9	986.5	967.2	953.4	942.7	930.7	922.1
35°	1086.2	1047.7	1012.3	976.2	951.8	929.0	906.2	894.4	884.2	873.2	865.4
37.5°	1021.1	985.1	951.5	917.2	887.0	868.5	850.1	841.1	827.3	819.9	811.9
40°	980.9	945.5	909.4	876.4	844.9	830.8	814.3	800.9	788.3	782.8	774.2
42.5°	936.9	901.5	871.0	835.5	809.7	790.5	775.3	760.7	751.2	743.2	738.3
45°	871.6	840.2	810.3	775.0	750.6	734.1	716.8	703.4	694.8	689.3	680.6
47.5°	808.3	776.9	746.5	715.7	692.1	673.3	656.0	646.7	635.2	628.5	622.6
50°	762.4	734.1	701.9	673.6	650.0	631.1	617.0	605.2	595.0	586.3	582.4
52.5°	720.3	690.1	662.3	635.8	611.0	589.6	576.7	564.3	556.6	546.7	542.2
55°	650.8	621.7	598.1	572.2	547.8	529.7	514.0	503.0	495.2	484.2	477.9
57.5°	585.5	559.5	531.3	508.8	483.7	468.4	455.4	440.5	430.9	422.2	416.1
60°	541.5	511.7	487.3	466.1	444.1	424.4	412.6	400.8	390.6	382.0	376.5
62.5°	495.6	469.5	446.4	423.3	403.2	386.1	372.4	362.5	353.5	348.0	342.5
65°	425.2	404.8	381.2	362.3	343.5	330.9	319.9	311.2	305.0	301.0	296.3
67.5°	360.4	340.6	320.0	301.5	288.9	279.3	272.1	264.7	261.6	256.5	253.4
70°	318.3	297.9	279.8	265.7	253.1	246.0	241.3	235.8	232.6	226.4	223.2
72.5°	272.4	257.6	244.6	233.0	222.9	216.5	210.5	203.7	198.7	191.8	188.6
75°	214.6	201.2	191.0	183.1	176.8	168.2	159.6	152.5	150.1	147.8	147.0
77.5°	158.9	150.4	143.0	136.4	128.6	122.3	120.4	118.8	118.4	117.1	117.1
80°	125.0	117.1	111.6	103.7	99.0	99.0	99.0	97.5	98.2	98.2	98.2
82.5°	92.9	85.7	82.7	79.9	78.9	79.5	79.5	79.9	79.4	80.6	80.0
85°	47.9	48.7	50.3	49.5	50.3	50.3	51.9	51.1	51.9	50.3	51.9
87.5°	18.5	20.6	21.5	22.4	23.3	22.9	23.6	23.7	24.4	24.5	24.5
90°	4.4	5.6	6.9	8.2	9.5	10.8	11.2	11.6	12.0	12.4	12.7
92.5°	7.2	7.6	8.6	9.5	10.5	11.5	12.1	12.8	13.4	14.1	14.4
95°	11.0	9.5	10.6	11.7	12.8	13.9	14.6	15.3	16.0	16.7	17.1
97.5°	47.7	43.2	36.0	28.8	21.7	14.5	15.3	16.1	16.9	17.7	18.1
100°	83.9	77.1	61.6	46.0	30.4	14.8	15.6	16.4	17.2	18.0	18.5
102.5°	105.4	97.6	80.6	63.6	46.6	29.6	27.1	24.6	22.1	19.7	18.5
105°	138.3	134.3	125.3	116.4	107.4	98.4	80.7	63.0	45.4	27.7	19.0
107.5°	173.5	174.7	176.1	177.5	178.9	180.3	167.4	154.4	141.5	128.5	115.4
110°	197.3	198.2	199.3	200.4	201.5	202.6	199.3	196.0	192.7	189.4	180.7



TEST NUMBER: P332470

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	220.0	220.9	222.0	223.1	224.2	225.3	225.3	225.4	225.4	225.5	224.0
115°	253.5	254.3	255.2	256.1	257.0	257.9	258.9	259.9	260.9	261.9	262.6
117.5°	287.1	287.7	288.1	288.6	289.1	289.5	290.3	291.1	291.9	292.7	293.1
120°	308.2	308.8	309.1	309.4	309.7	310.0	310.8	311.6	312.4	313.2	313.6
122.5°	328.4	329.0	329.4	329.7	330.1	330.5	331.0	331.6	332.2	332.7	333.0
125°	357.2	357.8	358.2	358.6	359.0	359.4	359.6	359.8	360.0	360.2	360.4
127.5°	384.9	385.5	386.0	386.5	387.0	387.5	387.8	388.1	388.4	388.7	388.8
130°	402.2	402.8	403.2	403.6	404.0	404.3	404.7	405.1	405.5	405.9	406.0
132.5°	418.7	419.2	419.6	419.9	420.2	420.5	420.9	421.3	421.7	422.1	422.2
135°	443.1	443.6	444.0	444.4	444.8	445.2	445.5	445.8	446.1	446.4	446.4
137.5°	465.3	465.8	466.1	466.3	466.5	466.7	467.2	467.7	468.1	468.6	468.8
140°	479.1	479.5	479.8	480.1	480.4	480.7	481.1	481.5	481.9	482.3	482.4
142.5°	492.4	492.8	493.1	493.4	493.7	494.0	494.3	494.7	495.0	495.3	495.3
145°	511.4	511.8	512.0	512.2	512.4	512.6	512.8	513.0	513.2	513.4	513.5
147.5°	527.9	528.3	528.5	528.7	528.9	529.1	529.3	529.5	529.7	529.9	529.7
150°	538.1	538.3	538.5	538.7	538.9	539.1	539.3	539.5	539.7	539.9	539.9
152.5°	547.2	547.3	547.4	547.5	547.6	547.8	548.1	548.5	548.8	549.2	549.1
155°	559.5	559.4	559.5	559.6	559.7	559.8	560.3	560.8	561.3	561.8	561.7
157.5°	570.8	570.7	570.6	570.5	570.4	570.3	570.9	571.5	572.1	572.7	572.6
160°	576.9	576.8	576.7	576.6	576.5	576.4	577.0	577.6	578.2	578.8	578.8
162.5°	582.4	582.2	582.1	582.0	581.9	581.8	582.5	583.2	583.9	584.5	584.6
165°	589.6	589.4	589.3	589.2	589.1	589.0	589.8	590.6	591.4	592.2	592.2
167.5°	595.0	594.8	594.8	594.8	594.8	594.8	595.6	596.4	597.1	597.9	597.9
170°	598.2	598.0	598.0	598.0	598.0	598.0	598.8	599.6	600.4	601.2	601.2
172.5°	600.0	599.8	599.9	600.0	600.1	600.1	600.9	601.7	602.5	603.3	603.3
175°	602.7	602.5	602.6	602.7	602.8	602.9	603.6	604.3	605.0	605.7	605.7
177.5°	603.8	603.7	603.8	603.8	603.9	604.0	604.6	605.3	605.9	606.6	606.5
180°	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7



TEST NUMBER: P332470

CATALOG NUMBER: S123RDIW-S1165D460U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0
2.5°	1749.3	1748.6	1749.3	1746.7	1749.3	1748.6	1749.3	1756.8	1756.8	1757.4	1758.1
5°	1627.7	1627.0	1624.6	1617.5	1624.6	1627.0	1627.7	1630.1	1636.4	1647.4	1644.2
7.5°	1521.6	1520.5	1513.6	1513.8	1513.6	1520.5	1521.6	1527.8	1534.8	1541.6	1549.6
10°	1458.8	1459.5	1450.1	1444.6	1450.1	1459.5	1458.8	1464.3	1474.5	1480.0	1485.5
12.5°	1397.8	1394.2	1386.6	1380.5	1386.6	1394.2	1397.8	1402.0	1416.0	1422.1	1432.7
15°	1317.3	1309.4	1290.6	1292.1	1290.6	1309.4	1317.3	1314.1	1328.3	1336.1	1339.3
17.5°	1222.5	1216.7	1216.4	1205.4	1216.4	1216.7	1222.5	1228.8	1241.0	1249.5	1272.0
20°	1167.2	1163.2	1164.8	1153.8	1164.8	1163.2	1167.2	1179.7	1187.6	1198.6	1216.7
22.5°	1123.8	1119.8	1113.2	1109.8	1113.2	1119.8	1123.8	1132.6	1141.1	1156.5	1166.4
25°	1060.3	1054.0	1047.7	1051.6	1047.7	1054.0	1060.3	1065.0	1080.7	1087.8	1101.9
27.5°	996.8	992.1	985.8	985.0	985.8	992.1	996.8	1001.3	1010.0	1021.9	1038.9
30°	956.5	951.8	948.7	944.7	948.7	951.8	956.5	960.5	969.1	981.7	994.3
32.5°	915.7	914.7	909.1	908.3	909.1	914.7	915.7	922.1	930.7	942.7	953.4
35°	862.2	857.5	855.9	856.7	855.9	857.5	862.2	865.4	873.2	884.2	894.4
37.5°	811.4	805.1	802.3	799.5	802.3	805.1	811.4	811.9	819.9	827.3	841.1
40°	775.0	768.7	767.1	765.5	767.1	768.7	775.0	774.2	782.8	788.3	800.9
42.5°	734.1	731.6	730.6	727.8	730.6	731.6	734.1	738.3	743.2	751.2	760.7
45°	678.3	677.5	672.8	674.4	672.8	677.5	678.3	680.6	689.3	694.8	703.4
47.5°	619.5	616.0	612.7	614.9	612.7	616.0	619.5	622.6	628.5	635.2	646.7
50°	579.3	577.7	570.6	572.2	570.6	577.7	579.3	582.4	586.3	595.0	605.2
52.5°	539.0	533.0	530.4	529.4	530.4	533.0	539.0	542.2	546.7	556.6	564.3
55°	472.4	465.3	462.1	460.6	462.1	465.3	472.4	477.9	484.2	495.2	503.0
57.5°	407.0	405.1	402.6	404.3	402.6	405.1	407.0	416.1	422.2	430.9	440.5
60°	368.6	368.6	368.6	367.8	368.6	368.6	368.6	376.5	382.0	390.6	400.8
62.5°	339.1	337.2	336.6	337.7	336.6	337.2	339.1	342.5	348.0	353.5	362.5
65°	294.0	293.2	290.0	289.2	290.0	293.2	294.0	296.3	301.0	305.0	311.2
67.5°	251.4	248.5	247.6	246.5	247.6	248.5	251.4	253.4	256.5	261.6	264.7
70°	219.3	217.7	213.0	213.8	213.0	217.7	219.3	223.2	226.4	232.6	235.8
72.5°	184.7	183.1	182.2	181.1	182.2	183.1	184.7	188.6	191.8	198.7	203.7
75°	146.2	145.4	144.6	147.8	144.6	145.4	146.2	147.0	147.8	150.1	152.5
77.5°	117.1	117.1	117.6	116.3	117.6	117.1	117.1	117.1	117.1	118.4	118.8
80°	98.2	98.2	97.5	97.5	97.5	98.2	98.2	98.2	98.2	98.2	97.5
82.5°	78.8	79.4	79.9	78.6	79.9	79.4	78.8	80.0	80.6	79.4	79.9
85°	51.9	51.1	52.7	51.9	52.7	51.1	51.9	51.9	50.3	51.9	51.1
87.5°	25.8	24.6	24.7	25.3	24.7	24.6	25.8	24.5	24.5	24.4	23.7
90°	12.9	13.1	13.3	13.5	13.3	13.1	12.9	12.7	12.4	12.0	11.6
92.5°	14.6	14.7	14.8	14.9	14.8	14.7	14.6	14.4	14.1	13.4	12.8
95°	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	16.7	16.0	15.3
97.5°	18.2	18.3	18.4	18.5	18.4	18.3	18.2	18.1	17.7	16.9	16.1
100°	18.6	18.7	18.8	18.9	18.8	18.7	18.6	18.5	18.0	17.2	16.4
102.5°	18.7	18.9	19.0	19.2	19.0	18.9	18.7	18.5	19.7	22.1	24.6
105°	19.2	19.4	19.6	19.8	19.6	19.4	19.2	19.0	27.7	45.4	63.0
107.5°	102.0	88.7	75.4	62.1	75.4	88.7	102.0	115.4	128.5	141.5	154.4
110°	166.4	152.1	137.8	123.6	137.8	152.1	166.4	180.7	189.4	192.7	196.0



TEST NUMBER: P332470

CATALOG NUMBER: S123RDIW-S1165D460U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	221.0	218.0	215.0	212.0	215.0	218.0	221.0	224.0	225.5	225.4	225.4
115°	263.0	263.4	263.8	264.2	263.8	263.4	263.0	262.6	261.9	260.9	259.9
117.5°	293.2	293.3	293.4	293.5	293.4	293.3	293.2	293.1	292.7	291.9	291.1
120°	313.6	313.6	313.6	313.6	313.6	313.6	313.6	313.6	313.2	312.4	311.6
122.5°	333.1	333.2	333.3	333.4	333.3	333.2	333.1	333.0	332.7	332.2	331.6
125°	360.6	360.8	361.0	361.2	361.0	360.8	360.6	360.4	360.2	360.0	359.8
127.5°	388.6	388.4	388.2	388.0	388.2	388.4	388.6	388.8	388.7	388.4	388.1
130°	405.8	405.6	405.4	405.2	405.4	405.6	405.8	406.0	405.9	405.5	405.1
132.5°	421.9	421.6	421.3	421.1	421.3	421.6	421.9	422.2	422.1	421.7	421.3
135°	446.1	445.8	445.5	445.2	445.5	445.8	446.1	446.4	446.4	446.1	445.8
137.5°	468.6	468.4	468.2	468.0	468.2	468.4	468.6	468.8	468.6	468.1	467.7
140°	482.2	482.0	481.8	481.6	481.8	482.0	482.2	482.4	482.3	481.9	481.5
142.5°	495.0	494.8	494.5	494.2	494.5	494.8	495.0	495.3	495.3	495.0	494.7
145°	513.5	513.5	513.5	513.5	513.5	513.5	513.5	513.5	513.4	513.2	513.0
147.5°	529.3	528.8	528.4	527.9	528.4	528.8	529.3	529.7	529.9	529.7	529.5
150°	539.6	539.3	539.0	538.7	539.0	539.3	539.6	539.9	539.9	539.7	539.5
152.5°	548.7	548.2	547.8	547.3	547.8	548.2	548.7	549.1	549.2	548.8	548.5
155°	561.1	560.5	559.9	559.4	559.9	560.5	561.1	561.7	561.8	561.3	560.8
157.5°	571.8	571.1	570.3	569.5	570.3	571.1	571.8	572.6	572.7	572.1	571.5
160°	578.1	577.4	576.7	576.0	576.7	577.4	578.1	578.8	578.8	578.2	577.6
162.5°	583.9	583.3	582.7	582.1	582.7	583.3	583.9	584.6	584.5	583.9	583.2
165°	591.5	590.9	590.2	589.5	590.2	590.9	591.5	592.2	592.2	591.4	590.6
167.5°	597.1	596.4	595.6	594.8	595.6	596.4	597.1	597.9	597.9	597.1	596.4
170°	600.4	599.6	598.8	598.0	598.8	599.6	600.4	601.2	601.2	600.4	599.6
172.5°	602.4	601.5	600.7	599.8	600.7	601.5	602.4	603.3	603.3	602.5	601.7
175°	604.9	604.1	603.3	602.5	603.3	604.1	604.9	605.7	605.7	605.0	604.3
177.5°	605.7	604.9	604.1	603.3	604.1	604.9	605.7	606.5	606.6	605.9	605.3
180°	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7



TEST NUMBER: P332470

CATALOG NUMBER: S123RDIW-S1165D460U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0
2.5°	1752.4	1761.2	1770.0	1778.2	1790.8	1796.4	1804.6	1807.7	1817.2	1831.0	1842.3
5°	1645.8	1658.4	1674.9	1688.3	1709.5	1726.0	1744.1	1761.4	1781.8	1810.9	1836.8
7.5°	1555.4	1567.9	1587.7	1612.5	1635.9	1659.3	1684.0	1707.6	1736.8	1778.5	1819.8
10°	1495.7	1510.6	1534.2	1560.9	1590.0	1612.8	1641.9	1671.8	1707.9	1755.9	1805.4
12.5°	1444.1	1455.3	1482.7	1508.1	1541.0	1570.1	1598.5	1633.4	1674.6	1725.7	1785.2
15°	1362.1	1377.8	1404.5	1432.8	1467.4	1498.1	1535.0	1577.4	1617.5	1680.4	1752.7
17.5°	1279.7	1303.6	1331.4	1363.3	1389.0	1431.2	1471.3	1514.9	1564.2	1630.9	1710.3
20°	1226.9	1245.8	1271.7	1318.1	1351.9	1384.1	1421.0	1475.3	1520.8	1596.3	1678.8
22.5°	1182.3	1196.1	1225.2	1263.4	1302.8	1340.1	1377.6	1429.4	1485.6	1557.3	1646.8
25°	1116.1	1138.1	1160.1	1187.6	1230.0	1274.8	1315.7	1359.7	1419.5	1495.7	1592.4
27.5°	1051.5	1071.4	1093.1	1126.9	1159.1	1201.0	1243.7	1294.2	1358.3	1439.0	1537.0
30°	1010.0	1024.9	1045.3	1088.6	1117.6	1153.8	1204.1	1248.9	1308.6	1394.3	1498.1
32.5°	967.2	986.5	1008.9	1042.0	1078.0	1112.3	1158.2	1206.8	1267.8	1352.2	1458.4
35°	906.2	929.0	951.8	976.2	1012.3	1047.7	1086.2	1139.7	1201.7	1283.5	1388.0
37.5°	850.1	868.5	887.0	917.2	951.5	985.1	1021.1	1073.8	1132.3	1220.5	1316.3
40°	814.3	830.8	844.9	876.4	909.4	945.5	980.9	1027.3	1090.1	1172.7	1265.4
42.5°	775.3	790.5	809.7	835.5	871.0	901.5	936.9	980.7	1039.8	1123.6	1205.0
45°	716.8	734.1	750.6	775.0	810.3	840.2	871.6	913.3	973.8	1043.0	1115.3
47.5°	656.0	673.3	692.1	715.7	746.5	776.9	808.3	845.2	900.4	968.3	1017.0
50°	617.0	631.1	650.0	673.6	701.9	734.1	762.4	802.5	855.1	908.6	951.0
52.5°	576.7	589.6	611.0	635.8	662.3	690.1	720.3	754.7	802.3	852.6	886.3
55°	514.0	529.7	547.8	572.2	598.1	621.7	650.8	686.2	723.9	761.6	784.4
57.5°	455.4	468.4	483.7	508.8	531.3	559.5	585.5	613.1	648.0	676.4	691.3
60°	412.6	424.4	444.1	466.1	487.3	511.7	541.5	569.0	595.8	618.6	630.3
62.5°	372.4	386.1	403.2	423.3	446.4	469.5	495.6	518.7	542.3	562.0	570.0
65°	319.9	330.9	343.5	362.3	381.2	404.8	425.2	448.8	466.1	477.1	484.2
67.5°	272.1	279.3	288.9	301.5	320.0	340.6	360.4	378.8	393.3	400.8	407.1
70°	241.3	246.0	253.1	265.7	279.8	297.9	318.3	331.7	344.3	350.5	356.8
72.5°	210.5	216.5	222.9	233.0	244.6	257.6	272.4	288.9	295.8	303.4	307.2
75°	159.6	168.2	176.8	183.1	191.0	201.2	214.6	224.8	228.7	235.0	235.8
77.5°	120.4	122.3	128.6	136.4	143.0	150.4	158.9	168.0	169.9	173.2	175.3
80°	99.0	99.0	99.0	103.7	111.6	117.1	125.0	129.7	132.8	133.6	134.4
82.5°	79.5	79.5	78.9	79.9	82.7	85.7	92.9	98.2	100.8	100.3	98.6
85°	51.9	50.3	50.3	49.5	50.3	48.7	47.9	51.1	55.8	55.8	54.2
87.5°	23.6	22.9	23.3	22.4	21.5	20.6	18.5	18.9	18.7	21.0	20.2
90°	11.2	10.8	9.5	8.2	6.9	5.6	4.4	3.4	2.4	1.4	0.4
92.5°	12.1	11.5	10.5	9.5	8.6	7.6	7.2	7.5	7.8	8.1	8.4
95°	14.6	13.9	12.8	11.7	10.6	9.5	11.0	15.1	19.2	23.3	27.4
97.5°	15.3	14.5	21.7	28.8	36.0	43.2	47.7	49.6	51.4	53.2	55.1
100°	15.6	14.8	30.4	46.0	61.6	77.1	83.9	81.9	79.9	77.9	75.9
102.5°	27.1	29.6	46.6	63.6	80.6	97.6	105.4	104.0	102.5	101.1	99.6
105°	80.7	98.4	107.4	116.4	125.3	134.3	138.3	137.2	136.1	135.0	133.9
107.5°	167.4	180.3	178.9	177.5	176.1	174.7	173.5	172.6	171.8	170.9	170.0
110°	199.3	202.6	201.5	200.4	199.3	198.2	197.3	196.5	195.7	194.9	194.1



TEST NUMBER: P332470

CATALOG NUMBER: S123RDIW-S1165D460U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	225.3	225.3	224.2	223.1	222.0	220.9	220.0	219.2	218.5	217.8	217.1
115°	258.9	257.9	257.0	256.1	255.2	254.3	253.5	252.9	252.3	251.7	251.1
117.5°	290.3	289.5	289.1	288.6	288.1	287.7	287.1	286.3	285.6	284.9	284.1
120°	310.8	310.0	309.7	309.4	309.1	308.8	308.2	307.3	306.4	305.5	304.6
122.5°	331.0	330.5	330.1	329.7	329.4	329.0	328.4	327.7	326.9	326.2	325.5
125°	359.6	359.4	359.0	358.6	358.2	357.8	357.2	356.4	355.6	354.8	354.0
127.5°	387.8	387.5	387.0	386.5	386.0	385.5	384.9	384.1	383.3	382.5	381.7
130°	404.7	404.3	404.0	403.6	403.2	402.8	402.2	401.4	400.6	399.8	399.0
132.5°	420.9	420.5	420.2	419.9	419.6	419.2	418.7	417.9	417.1	416.3	415.5
135°	445.5	445.2	444.8	444.4	444.0	443.6	443.1	442.5	441.9	441.3	440.7
137.5°	467.2	466.7	466.5	466.3	466.1	465.8	465.3	464.6	463.8	463.1	462.3
140°	481.1	480.7	480.4	480.1	479.8	479.5	479.1	478.5	477.9	477.3	476.7
142.5°	494.3	494.0	493.7	493.4	493.1	492.8	492.4	491.8	491.2	490.6	490.0
145°	512.8	512.6	512.4	512.2	512.0	511.8	511.4	510.7	510.0	509.3	508.6
147.5°	529.3	529.1	528.9	528.7	528.5	528.3	527.9	527.5	527.0	526.6	526.1
150°	539.3	539.1	538.9	538.7	538.5	538.3	538.1	537.8	537.5	537.2	536.9
152.5°	548.1	547.8	547.6	547.5	547.4	547.3	547.2	547.0	546.9	546.7	546.6
155°	560.3	559.8	559.7	559.6	559.5	559.4	559.5	559.7	559.8	560.0	560.2
157.5°	570.9	570.3	570.4	570.5	570.6	570.7	570.8	570.8	570.8	570.8	570.9
160°	577.0	576.4	576.5	576.6	576.7	576.8	576.9	577.0	577.1	577.2	577.3
162.5°	582.5	581.8	581.9	582.0	582.1	582.2	582.4	582.7	582.9	583.2	583.4
165°	589.8	589.0	589.1	589.2	589.3	589.4	589.6	589.9	590.2	590.5	590.8
167.5°	595.6	594.8	594.8	594.8	594.8	594.8	595.0	595.4	595.8	596.2	596.6
170°	598.8	598.0	598.0	598.0	598.0	598.0	598.2	598.6	599.0	599.4	599.8
172.5°	600.9	600.1	600.1	600.0	599.9	599.8	600.0	600.5	601.0	601.5	601.9
175°	603.6	602.9	602.8	602.7	602.6	602.5	602.7	603.2	603.7	604.2	604.7
177.5°	604.6	604.0	603.9	603.8	603.8	603.7	603.8	604.2	604.6	605.0	605.4
180°	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7



TEST NUMBER: P332470

CATALOG NUMBER: S123RDIW-S1165D460U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0
2.5°	1846.1	1853.0	1861.8	1875.0	1885.1	1893.9	1895.8	1898.3	1904.6	1915.2	1923.4
5°	1858.0	1876.1	1905.2	1933.5	1964.1	1989.3	2012.9	2029.4	2045.1	2078.1	2104.8
7.5°	1854.3	1894.5	1940.1	1990.9	2042.3	2092.1	2138.3	2179.6	2220.8	2268.9	2323.8
10°	1851.7	1898.9	1960.2	2025.4	2097.0	2166.9	2234.5	2287.2	2348.5	2403.5	2473.4
12.5°	1839.8	1907.7	1981.0	2064.4	2152.3	2232.9	2321.9	2394.7	2464.8	2544.3	2625.6
15°	1824.2	1906.8	1999.5	2110.3	2243.9	2341.4	2432.6	2559.1	2645.6	2732.0	2848.4
17.5°	1795.8	1896.5	2012.4	2156.4	2267.8	2398.8	2536.0	2636.0	2752.5	2874.3	2979.6
20°	1773.1	1890.3	2019.9	2161.4	2303.7	2445.9	2578.8	2698.2	2818.5	2959.2	3045.6
22.5°	1750.5	1866.4	2001.1	2151.4	2304.3	2454.1	2604.5	2744.8	2880.1	3022.1	3132.4
25°	1702.4	1840.0	1986.1	2139.4	2290.3	2455.4	2634.6	2791.0	2958.4	3104.6	3209.1
27.5°	1653.7	1779.7	1925.3	2080.8	2248.5	2443.6	2654.4	2832.2	2999.9	3104.6	3137.4
30°	1609.7	1743.3	1876.9	2034.9	2216.4	2434.1	2658.1	2861.7	2999.3	3044.8	3011.0
32.5°	1565.0	1686.1	1818.4	1980.2	2173.0	2410.9	2663.2	2844.1	2926.9	2892.1	2754.5
35°	1486.3	1595.5	1723.6	1885.5	2107.2	2398.0	2642.4	2765.0	2744.6	2548.1	2288.7
37.5°	1402.0	1491.0	1609.7	1779.0	2039.0	2346.9	2553.1	2571.2	2394.4	2092.7	1793.1
40°	1335.4	1415.5	1537.4	1714.2	1986.1	2296.6	2463.2	2390.1	2115.8	1780.2	1530.3
42.5°	1270.6	1338.2	1455.6	1646.3	1935.8	2228.1	2329.3	2170.1	1853.6	1536.3	1309.0
45°	1160.9	1224.5	1342.4	1538.1	1832.9	2097.0	2083.6	1806.9	1490.2	1234.8	1046.1
47.5°	1056.8	1112.5	1223.1	1422.9	1712.0	1900.5	1775.5	1481.1	1212.4	1007.5	872.9
50°	983.2	1038.3	1148.3	1345.6	1615.2	1752.7	1574.3	1290.6	1044.6	874.8	767.9
52.5°	912.8	966.6	1067.2	1259.4	1498.2	1580.4	1388.8	1125.8	920.7	774.2	682.4
55°	814.3	855.1	945.5	1129.4	1307.9	1326.7	1132.6	912.5	743.5	641.4	578.5
57.5°	713.8	749.0	838.3	984.8	1109.9	1100.2	916.1	725.8	612.0	536.0	490.4
60°	648.4	683.0	761.6	887.4	981.7	948.7	779.7	626.4	529.0	473.2	437.0
62.5°	587.4	614.5	688.0	779.8	847.7	810.3	666.5	539.6	462.3	415.3	386.7
65°	499.1	521.1	580.0	628.0	665.7	629.6	510.1	422.1	366.3	333.3	313.6
67.5°	415.1	429.1	466.4	483.7	510.3	470.6	383.6	324.6	292.9	265.0	251.4
70°	362.3	372.5	392.2	406.3	413.4	372.5	308.1	264.9	238.1	218.5	209.9
72.5°	309.5	318.5	322.4	334.0	330.4	292.1	247.7	213.3	194.1	180.8	169.6
75°	236.6	240.5	236.6	231.9	221.6	194.9	164.3	147.0	132.8	126.5	122.6
77.5°	172.4	171.2	165.8	158.5	141.0	124.2	107.7	101.9	95.7	92.4	91.0
80°	132.8	129.7	125.0	113.2	98.2	86.5	82.5	78.6	76.2	72.3	71.5
82.5°	98.9	97.0	89.1	79.2	68.7	63.2	59.9	58.5	56.1	54.1	53.9
85°	52.7	50.3	41.7	36.2	34.6	33.0	32.2	32.2	29.1	28.3	28.3
87.5°	17.3	13.7	13.3	11.6	11.8	10.8	11.7	10.7	10.3	11.0	9.9
90°	1.4	2.4	3.4	4.4	5.6	6.9	8.2	9.5	10.8	11.2	11.6
92.5°	8.1	7.8	7.5	7.2	7.6	8.6	9.5	10.5	11.5	12.1	12.8
95°	23.3	19.2	15.1	11.0	9.5	10.6	11.7	12.8	13.9	14.6	15.3
97.5°	53.2	51.4	49.6	47.7	43.2	36.0	28.8	21.7	14.5	15.3	16.1
100°	77.9	79.9	81.9	83.9	77.1	61.6	46.0	30.4	14.8	15.6	16.4
102.5°	101.1	102.5	104.0	105.4	97.6	80.6	63.6	46.6	29.6	27.1	24.6
105°	135.0	136.1	137.2	138.3	134.3	125.3	116.4	107.4	98.4	80.7	63.0
107.5°	170.9	171.8	172.6	173.5	174.7	176.1	177.5	178.9	180.3	167.4	154.4
110°	194.9	195.7	196.5	197.3	198.2	199.3	200.4	201.5	202.6	199.3	196.0



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	217.8	218.5	219.2	220.0	220.9	222.0	223.1	224.2	225.3	225.3	225.4
115°	251.7	252.3	252.9	253.5	254.3	255.2	256.1	257.0	257.9	258.9	259.9
117.5°	284.9	285.6	286.3	287.1	287.7	288.1	288.6	289.1	289.5	290.3	291.1
120°	305.5	306.4	307.3	308.2	308.8	309.1	309.4	309.7	310.0	310.8	311.6
122.5°	326.2	326.9	327.7	328.4	329.0	329.4	329.7	330.1	330.5	331.0	331.6
125°	354.8	355.6	356.4	357.2	357.8	358.2	358.6	359.0	359.4	359.6	359.8
127.5°	382.5	383.3	384.1	384.9	385.5	386.0	386.5	387.0	387.5	387.8	388.1
130°	399.8	400.6	401.4	402.2	402.8	403.2	403.6	404.0	404.3	404.7	405.1
132.5°	416.3	417.1	417.9	418.7	419.2	419.6	419.9	420.2	420.5	420.9	421.3
135°	441.3	441.9	442.5	443.1	443.6	444.0	444.4	444.8	445.2	445.5	445.8
137.5°	463.1	463.8	464.6	465.3	465.8	466.1	466.3	466.5	466.7	467.2	467.7
140°	477.3	477.9	478.5	479.1	479.5	479.8	480.1	480.4	480.7	481.1	481.5
142.5°	490.6	491.2	491.8	492.4	492.8	493.1	493.4	493.7	494.0	494.3	494.7
145°	509.3	510.0	510.7	511.4	511.8	512.0	512.2	512.4	512.6	512.8	513.0
147.5°	526.6	527.0	527.5	527.9	528.3	528.5	528.7	528.9	529.1	529.3	529.5
150°	537.2	537.5	537.8	538.1	538.3	538.5	538.7	538.9	539.1	539.3	539.5
152.5°	546.7	546.9	547.0	547.2	547.3	547.4	547.5	547.6	547.8	548.1	548.5
155°	560.0	559.8	559.7	559.5	559.4	559.5	559.6	559.7	559.8	560.3	560.8
157.5°	570.8	570.8	570.8	570.8	570.7	570.6	570.5	570.4	570.3	570.9	571.5
160°	577.2	577.1	577.0	576.9	576.8	576.7	576.6	576.5	576.4	577.0	577.6
162.5°	583.2	582.9	582.7	582.4	582.2	582.1	582.0	581.9	581.8	582.5	583.2
165°	590.5	590.2	589.9	589.6	589.4	589.3	589.2	589.1	589.0	589.8	590.6
167.5°	596.2	595.8	595.4	595.0	594.8	594.8	594.8	594.8	594.8	595.6	596.4
170°	599.4	599.0	598.6	598.2	598.0	598.0	598.0	598.0	598.0	598.8	599.6
172.5°	601.5	601.0	600.5	600.0	599.8	599.9	600.0	600.1	600.1	600.9	601.7
175°	604.2	603.7	603.2	602.7	602.5	602.6	602.7	602.8	602.9	603.6	604.3
177.5°	605.0	604.6	604.2	603.8	603.7	603.8	603.8	603.9	604.0	604.6	605.3
180°	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0	1836.0
2.5°	1936.6	1936.6	1939.1	1948.6	1949.8	1958.0	1955.5
5°	2128.4	2143.3	2148.8	2172.4	2186.6	2192.9	2180.3
7.5°	2362.9	2405.1	2425.0	2449.7	2471.6	2478.2	2461.0
10°	2534.0	2578.0	2614.9	2637.7	2658.9	2673.1	2691.2
12.5°	2699.3	2753.4	2788.5	2820.7	2842.5	2860.5	2863.4
15°	2879.0	2960.7	3022.8	3068.4	3091.2	3103.0	3098.3
17.5°	3060.2	3136.0	3180.2	3226.7	3258.3	3259.9	3260.8
20°	3162.7	3236.6	3287.7	3322.3	3357.7	3356.1	3363.9
22.5°	3231.3	3289.4	3328.6	3353.7	3365.8	3359.9	3361.4
25°	3263.3	3280.6	3273.6	3233.5	3223.3	3186.3	3192.6
27.5°	3098.0	3016.2	2931.7	2822.9	2737.1	2668.5	2672.0
30°	2873.5	2728.9	2563.8	2425.5	2301.3	2266.7	2192.9
32.5°	2559.7	2342.8	2149.5	2020.6	1914.0	1885.1	1820.6
35°	2027.8	1817.2	1618.3	1498.8	1451.7	1385.7	1384.9
37.5°	1576.2	1390.7	1285.5	1195.9	1148.9	1109.0	1105.1
40°	1325.9	1181.3	1101.9	1037.5	991.1	961.2	954.2
42.5°	1151.1	1034.2	959.8	919.9	884.2	868.8	857.3
45°	940.0	861.4	809.5	773.4	756.9	745.1	738.8
47.5°	786.3	733.6	698.3	674.2	660.8	648.4	651.7
50°	702.7	659.4	633.5	610.7	600.5	591.8	592.6
52.5°	635.4	596.6	575.6	559.1	546.4	540.3	537.3
55°	539.2	514.8	493.6	481.8	474.7	466.1	463.7
57.5°	459.9	441.1	423.8	410.4	408.7	400.4	401.5
60°	407.1	391.4	377.3	370.2	364.7	357.6	360.0
62.5°	363.7	350.5	337.7	331.8	326.3	321.1	322.2
65°	297.9	285.3	277.4	274.3	271.9	269.6	267.2
67.5°	237.4	229.7	224.8	218.0	213.2	212.4	210.0
70°	199.6	189.4	180.8	172.1	169.8	169.0	169.8
72.5°	160.0	153.6	151.2	147.0	146.5	144.5	145.9
75°	120.3	117.9	116.3	113.2	113.2	113.2	113.2
77.5°	88.7	87.2	86.3	85.7	84.9	83.8	83.6
80°	69.2	68.4	66.8	66.8	66.0	66.8	66.0
82.5°	52.2	52.0	50.5	50.5	49.7	49.2	49.7
85°	26.7	25.9	27.5	25.9	26.7	25.2	26.7
87.5°	9.9	10.0	9.5	9.5	8.9	10.2	9.0
90°	12.0	12.4	12.7	12.9	13.1	13.3	13.5
92.5°	13.4	14.1	14.4	14.6	14.7	14.8	14.9
95°	16.0	16.7	17.1	17.1	17.1	17.1	17.1
97.5°	16.9	17.7	18.1	18.2	18.3	18.4	18.5
100°	17.2	18.0	18.5	18.6	18.7	18.8	18.9
102.5°	22.1	19.7	18.5	18.7	18.9	19.0	19.2
105°	45.4	27.7	19.0	19.2	19.4	19.6	19.8
107.5°	141.5	128.5	115.4	102.0	88.7	75.4	62.1
110°	192.7	189.4	180.7	166.4	152.1	137.8	123.6



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	225.4	225.5	224.0	221.0	218.0	215.0	212.0
115°	260.9	261.9	262.6	263.0	263.4	263.8	264.2
117.5°	291.9	292.7	293.1	293.2	293.3	293.4	293.5
120°	312.4	313.2	313.6	313.6	313.6	313.6	313.6
122.5°	332.2	332.7	333.0	333.1	333.2	333.3	333.4
125°	360.0	360.2	360.4	360.6	360.8	361.0	361.2
127.5°	388.4	388.7	388.8	388.6	388.4	388.2	388.0
130°	405.5	405.9	406.0	405.8	405.6	405.4	405.2
132.5°	421.7	422.1	422.2	421.9	421.6	421.3	421.1
135°	446.1	446.4	446.4	446.1	445.8	445.5	445.2
137.5°	468.1	468.6	468.8	468.6	468.4	468.2	468.0
140°	481.9	482.3	482.4	482.2	482.0	481.8	481.6
142.5°	495.0	495.3	495.3	495.0	494.8	494.5	494.2
145°	513.2	513.4	513.5	513.5	513.5	513.5	513.5
147.5°	529.7	529.9	529.7	529.3	528.8	528.4	527.9
150°	539.7	539.9	539.9	539.6	539.3	539.0	538.7
152.5°	548.8	549.2	549.1	548.7	548.2	547.8	547.3
155°	561.3	561.8	561.7	561.1	560.5	559.9	559.4
157.5°	572.1	572.7	572.6	571.8	571.1	570.3	569.5
160°	578.2	578.8	578.8	578.1	577.4	576.7	576.0
162.5°	583.9	584.5	584.6	583.9	583.3	582.7	582.1
165°	591.4	592.2	592.2	591.5	590.9	590.2	589.5
167.5°	597.1	597.9	597.9	597.1	596.4	595.6	594.8
170°	600.4	601.2	601.2	600.4	599.6	598.8	598.0
172.5°	602.5	603.3	603.3	602.4	601.5	600.7	599.8
175°	605.0	605.7	605.7	604.9	604.1	603.3	602.5
177.5°	605.9	606.6	606.5	605.7	604.9	604.1	603.3
180°	604.7	604.7	604.7	604.7	604.7	604.7	604.7

(END OF REPORT)