

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: P332471

Luminaire Tested: **S123RDIW-S1165D460U835-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332471
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9,
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-A1
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 460 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6171.5 lumens
Efficiency: N/A
Efficacy: 117.8 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

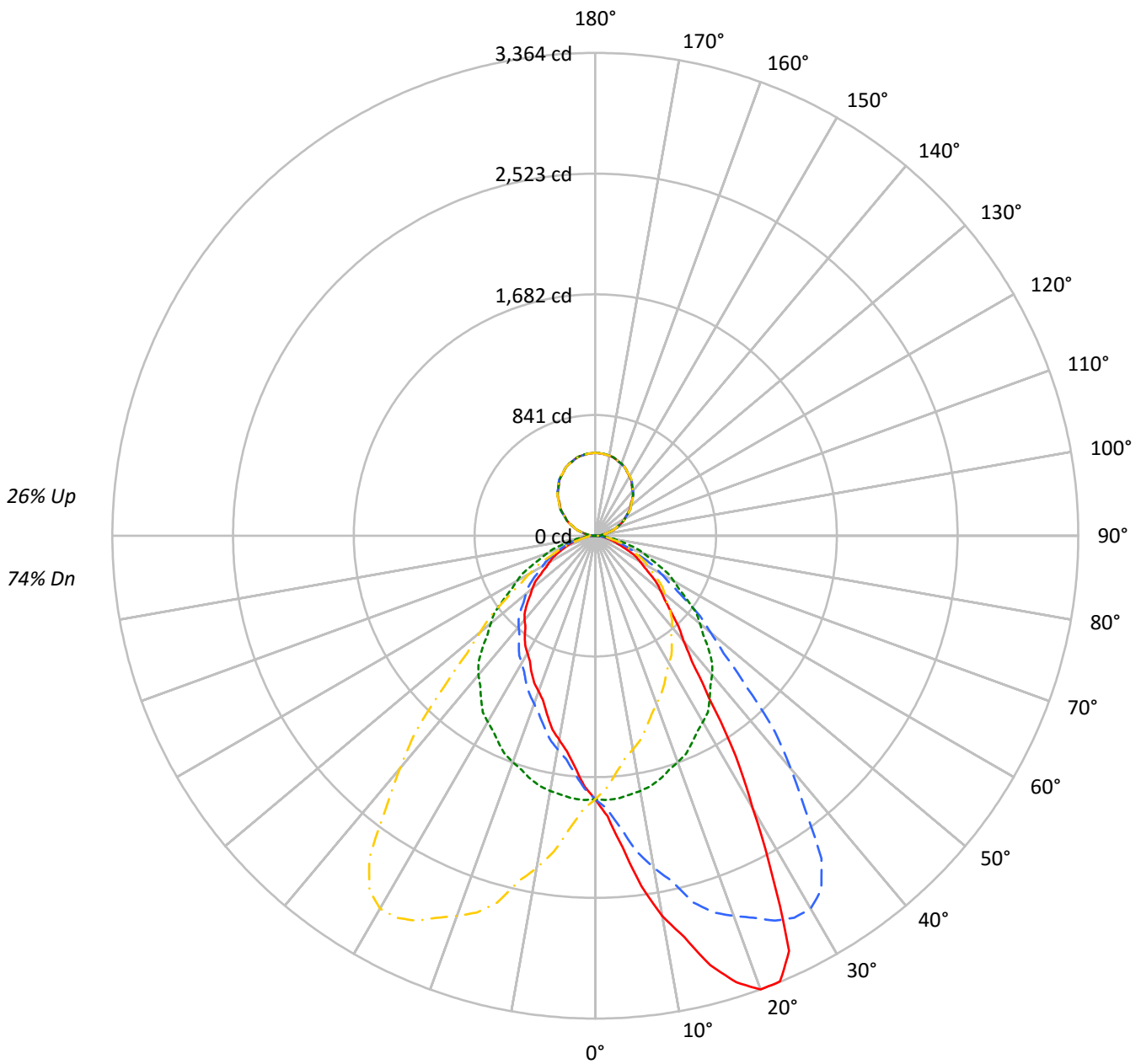
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot



— 0°-180° - - - 45°-225° - · - · 90°-270° - · - · 135°-315°



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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	113	113	113	113	107	107	107	107	97	97	97	87	87	87	78	78	78	74
1	104	100	96	93	99	95	92	89	86	84	81	78	76	74	71	69	68	64
2	95	88	82	77	91	84	79	74	77	72	69	70	66	64	63	61	58	55
3	88	78	71	66	83	75	69	63	68	63	59	62	58	55	57	54	51	48
4	81	70	62	56	77	67	60	55	61	56	51	56	52	48	51	48	44	42
5	75	63	55	49	71	60	53	48	55	49	45	51	46	42	47	43	39	37
6	69	57	49	43	66	55	47	42	50	44	40	46	41	37	43	38	35	33
7	64	52	44	38	61	50	42	37	46	40	35	42	37	33	39	35	31	29
8	60	47	40	34	57	46	38	33	42	36	32	39	34	30	36	32	28	26
9	56	44	36	31	53	42	35	30	39	33	29	36	31	27	33	29	26	24
10	52	40	33	28	50	39	32	27	36	30	26	34	28	25	31	27	24	22

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	2.9
10°-20°	564.1	9.1
20°-30°	886.2	14.4
30°-40°	924.6	15.0
40°-50°	791.2	12.8
50°-60°	603.1	9.8
60°-70°	386.5	6.3
70°-80°	186.0	3.0
80°-90°	50.9	0.8
90°-100°	37.6	0.6
100°-110°	112.5	1.8
110°-120°	191.3	3.1
120°-130°	251.7	4.1
130°-140°	282.9	4.6
140°-150°	278.0	4.5
150°-160°	234.1	3.8
160°-170°	155.8	2.5
170°-180°	54.6	0.9
0°-30°	1630.8	26.4
0°-40°	2555.4	41.4
0°-60°	3949.7	64.0
0°-90°	4573.1	74.1
90°-120°	341.4	5.5
90°-150°	1153.9	18.7
90°-180°	1598.0	25.9
0°-180°	6171.5	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°	35	27	35	27	35	36
105°	108	102	108	102	108	114
115°	193	193	193	193	193	191
125°	279	282	279	282	279	249
135°	365	366	365	366	365	281
145°	444	444	444	444	444	277
155°	507	508	507	508	507	233
165°	552	553	552	553	552	156
175°	573	576	573	576	573	54
180°	577	577	577	577	577	



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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	10.0	9.9	11.1	10.3	10.7
90°	13.6	13.4	13.2	13.0	12.8	12.5	12.1	11.7	11.3	10.9	9.6
92.5°	18.3	18.4	18.5	18.7	18.8	18.7	18.4	18.0	17.7	17.4	16.7
95°	35.3	35.3	35.3	35.3	35.3	35.1	34.7	34.3	33.9	33.5	32.7
97.5°	54.4	54.4	54.5	54.5	54.5	54.3	53.9	53.4	52.9	52.5	51.9
100°	68.9	68.7	68.5	68.3	68.1	67.8	67.5	67.2	66.9	66.6	66.1
102.5°	83.7	83.8	83.8	83.9	83.9	83.8	83.5	83.2	82.9	82.6	81.9
105°	107.9	107.7	107.5	107.3	107.0	106.9	106.9	106.9	106.9	106.9	106.0
107.5°	133.0	133.1	133.2	133.3	133.4	133.3	133.0	132.7	132.4	132.1	131.7
110°	150.0	150.2	150.4	150.6	150.8	150.7	150.3	149.9	149.5	149.1	148.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	168.1	168.2	168.2	168.2	168.3	168.1	167.6	167.1	166.6	166.1	166.1
115°	193.1	193.2	193.3	193.4	193.5	193.5	193.4	193.3	193.2	193.1	193.3
117.5°	218.3	218.6	218.9	219.2	219.5	219.6	219.6	219.7	219.7	219.7	220.0
120°	236.1	236.3	236.5	236.7	236.9	237.1	237.2	237.3	237.4	237.5	238.0
122.5°	253.1	253.4	253.7	254.0	254.3	254.5	254.8	255.1	255.3	255.6	255.9
125°	278.7	279.1	279.5	279.9	280.3	280.7	281.1	281.5	281.9	282.3	282.5
127.5°	304.2	304.6	305.1	305.6	306.0	306.5	307.1	307.7	308.2	308.8	309.0
130°	320.8	321.6	322.3	323.0	323.7	324.2	324.6	325.0	325.4	325.8	326.1
132.5°	338.2	338.8	339.3	339.9	340.4	340.9	341.4	341.9	342.4	342.9	343.1
135°	365.3	365.5	365.7	365.9	366.1	366.4	366.8	367.2	367.6	368.0	368.1
137.5°	389.1	389.5	389.9	390.2	390.6	391.0	391.5	391.9	392.3	392.7	392.5
140°	404.7	405.4	406.1	406.8	407.5	407.9	408.0	408.1	408.2	408.3	408.2
142.5°	420.6	421.2	421.7	422.3	422.8	423.1	423.2	423.3	423.4	423.5	423.4
145°	443.7	444.1	444.5	444.9	445.3	445.5	445.6	445.7	445.8	445.9	445.6
147.5°	464.1	464.7	465.3	466.0	466.6	466.9	466.9	466.9	466.9	466.9	466.6
150°	477.2	477.8	478.4	479.0	479.6	479.9	479.9	479.9	479.9	479.9	479.7
152.5°	489.9	490.4	490.9	491.5	492.0	492.2	492.0	491.8	491.7	491.5	491.4
155°	507.1	507.8	508.5	509.2	509.9	510.1	509.7	509.3	508.9	508.5	508.4
157.5°	522.8	523.3	523.9	524.5	525.0	525.1	524.7	524.3	523.8	523.4	523.3
160°	532.9	533.3	533.7	534.1	534.5	534.5	534.0	533.5	533.0	532.5	532.5
162.5°	540.5	541.2	541.8	542.5	543.1	543.2	542.7	542.2	541.7	541.2	541.1
165°	551.5	552.2	552.9	553.6	554.3	554.4	553.8	553.2	552.6	552.0	552.0
167.5°	560.8	561.5	562.1	562.7	563.3	563.3	562.7	562.1	561.5	560.8	560.8
170°	565.6	566.3	567.0	567.7	568.4	568.4	567.7	567.0	566.3	565.6	565.6
172.5°	569.2	569.9	570.6	571.3	572.0	572.0	571.4	570.8	570.2	569.5	569.5
175°	573.3	574.0	574.7	575.4	576.1	576.1	575.5	574.9	574.3	573.7	573.7
177.5°	575.4	576.0	576.6	577.1	577.7	577.7	577.3	576.8	576.3	575.8	575.8
180°	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9



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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°	8.3	6.9	5.6	4.5	3.5	2.5	1.5	0.5	1.5	2.5	3.5
92.5°	15.9	15.2	14.4	13.7	13.0	12.3	11.7	11.0	11.7	12.3	13.0
95°	31.9	31.1	30.3	29.6	28.9	28.1	27.4	26.7	27.4	28.1	28.9
97.5°	51.3	50.7	50.1	49.6	49.1	48.5	48.0	47.5	48.0	48.5	49.1
100°	65.6	65.1	64.6	64.0	63.4	62.8	62.2	61.6	62.2	62.8	63.4
102.5°	81.2	80.6	79.9	79.4	79.0	78.7	78.3	77.9	78.3	78.7	79.0
105°	105.1	104.2	103.3	102.8	102.6	102.4	102.2	102.0	102.2	102.4	102.6
107.5°	131.3	131.0	130.6	130.4	130.2	130.1	130.0	129.9	130.0	130.1	130.2
110°	148.7	148.5	148.3	148.1	147.9	147.7	147.5	147.3	147.5	147.7	147.9



TEST NUMBER: P332471

CATALOG NUMBER: S123RDIW-S1165D460U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	166.1	166.0	166.0	165.9	165.8	165.7	165.5	165.4	165.5	165.7	165.8
115°	193.5	193.7	193.9	193.8	193.5	193.2	192.9	192.6	192.9	193.2	193.5
117.5°	220.2	220.5	220.7	220.8	220.6	220.4	220.2	220.0	220.2	220.4	220.6
120°	238.5	239.0	239.5	239.4	238.8	238.2	237.6	237.0	237.6	238.2	238.8
122.5°	256.1	256.4	256.6	256.5	256.1	255.7	255.2	254.8	255.2	255.7	256.1
125°	282.7	282.9	283.1	283.1	282.8	282.5	282.2	281.9	282.2	282.5	282.8
127.5°	309.2	309.5	309.7	309.5	308.8	308.2	307.5	306.9	307.5	308.2	308.8
130°	326.4	326.7	327.0	326.8	326.0	325.2	324.4	323.6	324.4	325.2	326.0
132.5°	343.3	343.5	343.8	343.5	342.7	341.9	341.0	340.2	341.0	341.9	342.7
135°	368.2	368.3	368.4	368.1	367.5	366.9	366.3	365.7	366.3	366.9	367.5
137.5°	392.2	391.9	391.7	391.3	390.8	390.3	389.8	389.3	389.8	390.3	390.8
140°	408.1	408.0	407.9	407.6	407.1	406.6	406.1	405.6	406.1	406.6	407.1
142.5°	423.2	423.0	422.8	422.5	422.0	421.5	421.0	420.5	421.0	421.5	422.0
145°	445.3	445.0	444.7	444.5	444.3	444.1	443.9	443.7	443.9	444.1	444.3
147.5°	466.3	466.0	465.7	465.4	465.0	464.7	464.3	464.0	464.3	464.7	465.0
150°	479.5	479.3	479.1	478.9	478.7	478.5	478.3	478.1	478.3	478.5	478.7
152.5°	491.3	491.1	491.0	490.8	490.5	490.3	490.0	489.7	490.0	490.3	490.5
155°	508.3	508.2	508.1	508.0	508.0	508.0	508.0	508.0	508.0	508.0	508.0
157.5°	523.3	523.2	523.1	523.1	523.2	523.4	523.5	523.6	523.5	523.4	523.2
160°	532.5	532.5	532.5	532.6	532.8	533.0	533.2	533.4	533.2	533.0	532.8
162.5°	541.0	540.9	540.9	541.0	541.2	541.5	541.8	542.1	541.8	541.5	541.2
165°	552.0	552.0	552.0	552.1	552.4	552.7	553.0	553.3	553.0	552.7	552.4
167.5°	560.7	560.6	560.5	560.7	561.1	561.5	561.9	562.3	561.9	561.5	561.1
170°	565.6	565.6	565.6	565.8	566.2	566.6	567.0	567.4	567.0	566.6	566.2
172.5°	569.5	569.5	569.5	569.7	570.2	570.6	571.0	571.4	571.0	570.6	570.2
175°	573.7	573.7	573.7	573.9	574.3	574.7	575.1	575.5	575.1	574.7	574.3
177.5°	575.8	575.8	575.8	576.0	576.3	576.6	576.9	577.3	576.9	576.6	576.3
180°	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9



TEST NUMBER: P332471

CATALOG NUMBER: S123RDIW-S1165D460U835-4F0-1E-UDD-A1

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	24.6
90°	4.5	5.6	6.9	8.3	9.6	10.9	11.3	11.7	12.1	12.5	12.8
92.5°	13.7	14.4	15.2	15.9	16.7	17.4	17.7	18.0	18.4	18.7	18.8
95°	29.6	30.3	31.1	31.9	32.7	33.5	33.9	34.3	34.7	35.1	35.3
97.5°	49.6	50.1	50.7	51.3	51.9	52.5	52.9	53.4	53.9	54.3	54.5
100°	64.0	64.6	65.1	65.6	66.1	66.6	66.9	67.2	67.5	67.8	68.1
102.5°	79.4	79.9	80.6	81.2	81.9	82.6	82.9	83.2	83.5	83.8	83.9
105°	102.8	103.3	104.2	105.1	106.0	106.9	106.9	106.9	106.9	106.9	107.0
107.5°	130.4	130.6	131.0	131.3	131.7	132.1	132.4	132.7	133.0	133.3	133.4
110°	148.1	148.3	148.5	148.7	148.9	149.1	149.5	149.9	150.3	150.7	150.8



TEST NUMBER: P332471

CATALOG NUMBER: S123RDIW-S1165D460U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	165.9	166.0	166.0	166.1	166.1	166.1	166.6	167.1	167.6	168.1	168.3
115°	193.8	193.9	193.7	193.5	193.3	193.1	193.2	193.3	193.4	193.5	193.5
117.5°	220.8	220.7	220.5	220.2	220.0	219.7	219.7	219.7	219.6	219.6	219.5
120°	239.4	239.5	239.0	238.5	238.0	237.5	237.4	237.3	237.2	237.1	236.9
122.5°	256.5	256.6	256.4	256.1	255.9	255.6	255.3	255.1	254.8	254.5	254.3
125°	283.1	283.1	282.9	282.7	282.5	282.3	281.9	281.5	281.1	280.7	280.3
127.5°	309.5	309.7	309.5	309.2	309.0	308.8	308.2	307.7	307.1	306.5	306.0
130°	326.8	327.0	326.7	326.4	326.1	325.8	325.4	325.0	324.6	324.2	323.7
132.5°	343.5	343.8	343.5	343.3	343.1	342.9	342.4	341.9	341.4	340.9	340.4
135°	368.1	368.4	368.3	368.2	368.1	368.0	367.6	367.2	366.8	366.4	366.1
137.5°	391.3	391.7	391.9	392.2	392.5	392.7	392.3	391.9	391.5	391.0	390.6
140°	407.6	407.9	408.0	408.1	408.2	408.3	408.2	408.1	408.0	407.9	407.5
142.5°	422.5	422.8	423.0	423.2	423.4	423.5	423.4	423.3	423.2	423.1	422.8
145°	444.5	444.7	445.0	445.3	445.6	445.9	445.8	445.7	445.6	445.5	445.3
147.5°	465.4	465.7	466.0	466.3	466.6	466.9	466.9	466.9	466.9	466.9	466.6
150°	478.9	479.1	479.3	479.5	479.7	479.9	479.9	479.9	479.9	479.9	479.6
152.5°	490.8	491.0	491.1	491.3	491.4	491.5	491.7	491.8	492.0	492.2	492.0
155°	508.0	508.1	508.2	508.3	508.4	508.5	508.9	509.3	509.7	510.1	509.9
157.5°	523.1	523.1	523.2	523.3	523.3	523.4	523.8	524.3	524.7	525.1	525.0
160°	532.6	532.5	532.5	532.5	532.5	532.5	533.0	533.5	534.0	534.5	534.5
162.5°	541.0	540.9	540.9	541.0	541.1	541.2	541.7	542.2	542.7	543.2	543.1
165°	552.1	552.0	552.0	552.0	552.0	552.0	552.6	553.2	553.8	554.4	554.3
167.5°	560.7	560.5	560.6	560.7	560.8	560.8	561.5	562.1	562.7	563.3	563.3
170°	565.8	565.6	565.6	565.6	565.6	565.6	566.3	567.0	567.7	568.4	568.4
172.5°	569.7	569.5	569.5	569.5	569.5	569.5	570.2	570.8	571.4	572.0	572.0
175°	573.9	573.7	573.7	573.7	573.7	573.7	574.3	574.9	575.5	576.1	576.1
177.5°	576.0	575.8	575.8	575.8	575.8	575.8	576.3	576.8	577.3	577.7	577.7
180°	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9



TEST NUMBER: P332471

CATALOG NUMBER: S123RDIW-S1165D460U835-4F0-1E-UDD-A1

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°	25.9	24.6	24.7	25.4	24.7	24.6	25.9	24.6	24.5	24.4	23.7
90°	13.0	13.2	13.4	13.6	13.4	13.2	13.0	12.8	12.5	12.1	11.7
92.5°	18.7	18.5	18.4	18.3	18.4	18.5	18.7	18.8	18.7	18.4	18.0
95°	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.1	34.7	34.3
97.5°	54.5	54.5	54.4	54.4	54.4	54.5	54.5	54.5	54.3	53.9	53.4
100°	68.3	68.5	68.7	68.9	68.7	68.5	68.3	68.1	67.8	67.5	67.2
102.5°	83.9	83.8	83.8	83.7	83.8	83.8	83.9	83.9	83.8	83.5	83.2
105°	107.3	107.5	107.7	107.9	107.7	107.5	107.3	107.0	106.9	106.9	106.9
107.5°	133.3	133.2	133.1	133.0	133.1	133.2	133.3	133.4	133.3	133.0	132.7
110°	150.6	150.4	150.2	150.0	150.2	150.4	150.6	150.8	150.7	150.3	149.9



TEST NUMBER: P332471

CATALOG NUMBER: S123RDIW-S1165D460U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	168.2	168.2	168.2	168.1	168.2	168.2	168.2	168.3	168.1	167.6	167.1
115°	193.4	193.3	193.2	193.1	193.2	193.3	193.4	193.5	193.5	193.4	193.3
117.5°	219.2	218.9	218.6	218.3	218.6	218.9	219.2	219.5	219.6	219.6	219.7
120°	236.7	236.5	236.3	236.1	236.3	236.5	236.7	236.9	237.1	237.2	237.3
122.5°	254.0	253.7	253.4	253.1	253.4	253.7	254.0	254.3	254.5	254.8	255.1
125°	279.9	279.5	279.1	278.7	279.1	279.5	279.9	280.3	280.7	281.1	281.5
127.5°	305.6	305.1	304.6	304.2	304.6	305.1	305.6	306.0	306.5	307.1	307.7
130°	323.0	322.3	321.6	320.8	321.6	322.3	323.0	323.7	324.2	324.6	325.0
132.5°	339.9	339.3	338.8	338.2	338.8	339.3	339.9	340.4	340.9	341.4	341.9
135°	365.9	365.7	365.5	365.3	365.5	365.7	365.9	366.1	366.4	366.8	367.2
137.5°	390.2	389.9	389.5	389.1	389.5	389.9	390.2	390.6	391.0	391.5	391.9
140°	406.8	406.1	405.4	404.7	405.4	406.1	406.8	407.5	407.9	408.0	408.1
142.5°	422.3	421.7	421.2	420.6	421.2	421.7	422.3	422.8	423.1	423.2	423.3
145°	444.9	444.5	444.1	443.7	444.1	444.5	444.9	445.3	445.5	445.6	445.7
147.5°	466.0	465.3	464.7	464.1	464.7	465.3	466.0	466.6	466.9	466.9	466.9
150°	479.0	478.4	477.8	477.2	477.8	478.4	479.0	479.6	479.9	479.9	479.9
152.5°	491.5	490.9	490.4	489.9	490.4	490.9	491.5	492.0	492.2	492.0	491.8
155°	509.2	508.5	507.8	507.1	507.8	508.5	509.2	509.9	510.1	509.7	509.3
157.5°	524.5	523.9	523.3	522.8	523.3	523.9	524.5	525.0	525.1	524.7	524.3
160°	534.1	533.7	533.3	532.9	533.3	533.7	534.1	534.5	534.5	534.0	533.5
162.5°	542.5	541.8	541.2	540.5	541.2	541.8	542.5	543.1	543.2	542.7	542.2
165°	553.6	552.9	552.2	551.5	552.2	552.9	553.6	554.3	554.4	553.8	553.2
167.5°	562.7	562.1	561.5	560.8	561.5	562.1	562.7	563.3	563.3	562.7	562.1
170°	567.7	567.0	566.3	565.6	566.3	567.0	567.7	568.4	568.4	567.7	567.0
172.5°	571.3	570.6	569.9	569.2	569.9	570.6	571.3	572.0	572.0	571.4	570.8
175°	575.4	574.7	574.0	573.3	574.0	574.7	575.4	576.1	576.1	575.5	574.9
177.5°	577.1	576.6	576.0	575.4	576.0	576.6	577.1	577.7	577.7	577.3	576.8
180°	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9



TEST NUMBER: P332471

CATALOG NUMBER: S123RDIW-S1165D460U835-4F0-1E-UDD-A1

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°	11.3	10.9	9.6	8.3	6.9	5.6	4.5	3.5	2.5	1.5	0.5
92.5°	17.7	17.4	16.7	15.9	15.2	14.4	13.7	13.0	12.3	11.7	11.0
95°	33.9	33.5	32.7	31.9	31.1	30.3	29.6	28.9	28.1	27.4	26.7
97.5°	52.9	52.5	51.9	51.3	50.7	50.1	49.6	49.1	48.5	48.0	47.5
100°	66.9	66.6	66.1	65.6	65.1	64.6	64.0	63.4	62.8	62.2	61.6
102.5°	82.9	82.6	81.9	81.2	80.6	79.9	79.4	79.0	78.7	78.3	77.9
105°	106.9	106.9	106.0	105.1	104.2	103.3	102.8	102.6	102.4	102.2	102.0
107.5°	132.4	132.1	131.7	131.3	131.0	130.6	130.4	130.2	130.1	130.0	129.9
110°	149.5	149.1	148.9	148.7	148.5	148.3	148.1	147.9	147.7	147.5	147.3



TEST NUMBER: P332471

CATALOG NUMBER: S123RDIW-S1165D460U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	166.6	166.1	166.1	166.1	166.0	166.0	165.9	165.8	165.7	165.5	165.4
115°	193.2	193.1	193.3	193.5	193.7	193.9	193.8	193.5	193.2	192.9	192.6
117.5°	219.7	219.7	220.0	220.2	220.5	220.7	220.8	220.6	220.4	220.2	220.0
120°	237.4	237.5	238.0	238.5	239.0	239.5	239.4	238.8	238.2	237.6	237.0
122.5°	255.3	255.6	255.9	256.1	256.4	256.6	256.5	256.1	255.7	255.2	254.8
125°	281.9	282.3	282.5	282.7	282.9	283.1	283.1	282.8	282.5	282.2	281.9
127.5°	308.2	308.8	309.0	309.2	309.5	309.7	309.5	308.8	308.2	307.5	306.9
130°	325.4	325.8	326.1	326.4	326.7	327.0	326.8	326.0	325.2	324.4	323.6
132.5°	342.4	342.9	343.1	343.3	343.5	343.8	343.5	342.7	341.9	341.0	340.2
135°	367.6	368.0	368.1	368.2	368.3	368.4	368.1	367.5	366.9	366.3	365.7
137.5°	392.3	392.7	392.5	392.2	391.9	391.7	391.3	390.8	390.3	389.8	389.3
140°	408.2	408.3	408.2	408.1	408.0	407.9	407.6	407.1	406.6	406.1	405.6
142.5°	423.4	423.5	423.4	423.2	423.0	422.8	422.5	422.0	421.5	421.0	420.5
145°	445.8	445.9	445.6	445.3	445.0	444.7	444.5	444.3	444.1	443.9	443.7
147.5°	466.9	466.9	466.6	466.3	466.0	465.7	465.4	465.0	464.7	464.3	464.0
150°	479.9	479.9	479.7	479.5	479.3	479.1	478.9	478.7	478.5	478.3	478.1
152.5°	491.7	491.5	491.4	491.3	491.1	491.0	490.8	490.5	490.3	490.0	489.7
155°	508.9	508.5	508.4	508.3	508.2	508.1	508.0	508.0	508.0	508.0	508.0
157.5°	523.8	523.4	523.3	523.3	523.2	523.1	523.1	523.2	523.4	523.5	523.6
160°	533.0	532.5	532.5	532.5	532.5	532.5	532.6	532.8	533.0	533.2	533.4
162.5°	541.7	541.2	541.1	541.0	540.9	540.9	541.0	541.2	541.5	541.8	542.1
165°	552.6	552.0	552.0	552.0	552.0	552.0	552.1	552.4	552.7	553.0	553.3
167.5°	561.5	560.8	560.8	560.7	560.6	560.5	560.7	561.1	561.5	561.9	562.3
170°	566.3	565.6	565.6	565.6	565.6	565.6	565.8	566.2	566.6	567.0	567.4
172.5°	570.2	569.5	569.5	569.5	569.5	569.5	569.7	570.2	570.6	571.0	571.4
175°	574.3	573.7	573.7	573.7	573.7	573.7	573.9	574.3	574.7	575.1	575.5
177.5°	576.3	575.8	575.8	575.8	575.8	575.8	576.0	576.3	576.6	576.9	577.3
180°	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9



TEST NUMBER: P332471

CATALOG NUMBER: S123RDIW-S1165D460U835-4F0-1E-UDD-A1

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	11.1	9.9
90°	1.5	2.5	3.5	4.5	5.6	6.9	8.3	9.6	10.9	11.3	11.7
92.5°	11.7	12.3	13.0	13.7	14.4	15.2	15.9	16.7	17.4	17.7	18.0
95°	27.4	28.1	28.9	29.6	30.3	31.1	31.9	32.7	33.5	33.9	34.3
97.5°	48.0	48.5	49.1	49.6	50.1	50.7	51.3	51.9	52.5	52.9	53.4
100°	62.2	62.8	63.4	64.0	64.6	65.1	65.6	66.1	66.6	66.9	67.2
102.5°	78.3	78.7	79.0	79.4	79.9	80.6	81.2	81.9	82.6	82.9	83.2
105°	102.2	102.4	102.6	102.8	103.3	104.2	105.1	106.0	106.9	106.9	106.9
107.5°	130.0	130.1	130.2	130.4	130.6	131.0	131.3	131.7	132.1	132.4	132.7
110°	147.5	147.7	147.9	148.1	148.3	148.5	148.7	148.9	149.1	149.5	149.9



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	165.5	165.7	165.8	165.9	166.0	166.0	166.1	166.1	166.1	166.6	167.1
115°	192.9	193.2	193.5	193.8	193.9	193.7	193.5	193.3	193.1	193.2	193.3
117.5°	220.2	220.4	220.6	220.8	220.7	220.5	220.2	220.0	219.7	219.7	219.7
120°	237.6	238.2	238.8	239.4	239.5	239.0	238.5	238.0	237.5	237.4	237.3
122.5°	255.2	255.7	256.1	256.5	256.6	256.4	256.1	255.9	255.6	255.3	255.1
125°	282.2	282.5	282.8	283.1	283.1	282.9	282.7	282.5	282.3	281.9	281.5
127.5°	307.5	308.2	308.8	309.5	309.7	309.5	309.2	309.0	308.8	308.2	307.7
130°	324.4	325.2	326.0	326.8	327.0	326.7	326.4	326.1	325.8	325.4	325.0
132.5°	341.0	341.9	342.7	343.5	343.8	343.5	343.3	343.1	342.9	342.4	341.9
135°	366.3	366.9	367.5	368.1	368.4	368.3	368.2	368.1	368.0	367.6	367.2
137.5°	389.8	390.3	390.8	391.3	391.7	391.9	392.2	392.5	392.7	392.3	391.9
140°	406.1	406.6	407.1	407.6	407.9	408.0	408.1	408.2	408.3	408.2	408.1
142.5°	421.0	421.5	422.0	422.5	422.8	423.0	423.2	423.4	423.5	423.4	423.3
145°	443.9	444.1	444.3	444.5	444.7	445.0	445.3	445.6	445.9	445.8	445.7
147.5°	464.3	464.7	465.0	465.4	465.7	466.0	466.3	466.6	466.9	466.9	466.9
150°	478.3	478.5	478.7	478.9	479.1	479.3	479.5	479.7	479.9	479.9	479.9
152.5°	490.0	490.3	490.5	490.8	491.0	491.1	491.3	491.4	491.5	491.7	491.8
155°	508.0	508.0	508.0	508.0	508.1	508.2	508.3	508.4	508.5	508.9	509.3
157.5°	523.5	523.4	523.2	523.1	523.1	523.2	523.3	523.3	523.4	523.8	524.3
160°	533.2	533.0	532.8	532.6	532.5	532.5	532.5	532.5	532.5	533.0	533.5
162.5°	541.8	541.5	541.2	541.0	540.9	540.9	541.0	541.1	541.2	541.7	542.2
165°	553.0	552.7	552.4	552.1	552.0	552.0	552.0	552.0	552.0	552.6	553.2
167.5°	561.9	561.5	561.1	560.7	560.5	560.6	560.7	560.8	560.8	561.5	562.1
170°	567.0	566.6	566.2	565.8	565.6	565.6	565.6	565.6	565.6	566.3	567.0
172.5°	571.0	570.6	570.2	569.7	569.5	569.5	569.5	569.5	569.5	570.2	570.8
175°	575.1	574.7	574.3	573.9	573.7	573.7	573.7	573.7	573.7	574.3	574.9
177.5°	576.9	576.6	576.3	576.0	575.8	575.8	575.8	575.8	575.8	576.3	576.8
180°	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9	576.9



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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°	10.0	10.0	9.5	9.5	8.9	10.2	9.0
90°	12.1	12.5	12.8	13.0	13.2	13.4	13.6
92.5°	18.4	18.7	18.8	18.7	18.5	18.4	18.3
95°	34.7	35.1	35.3	35.3	35.3	35.3	35.3
97.5°	53.9	54.3	54.5	54.5	54.5	54.4	54.4
100°	67.5	67.8	68.1	68.3	68.5	68.7	68.9
102.5°	83.5	83.8	83.9	83.9	83.8	83.8	83.7
105°	106.9	106.9	107.0	107.3	107.5	107.7	107.9
107.5°	133.0	133.3	133.4	133.3	133.2	133.1	133.0
110°	150.3	150.7	150.8	150.6	150.4	150.2	150.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	167.6	168.1	168.3	168.2	168.2	168.2	168.1
115°	193.4	193.5	193.5	193.4	193.3	193.2	193.1
117.5°	219.6	219.6	219.5	219.2	218.9	218.6	218.3
120°	237.2	237.1	236.9	236.7	236.5	236.3	236.1
122.5°	254.8	254.5	254.3	254.0	253.7	253.4	253.1
125°	281.1	280.7	280.3	279.9	279.5	279.1	278.7
127.5°	307.1	306.5	306.0	305.6	305.1	304.6	304.2
130°	324.6	324.2	323.7	323.0	322.3	321.6	320.8
132.5°	341.4	340.9	340.4	339.9	339.3	338.8	338.2
135°	366.8	366.4	366.1	365.9	365.7	365.5	365.3
137.5°	391.5	391.0	390.6	390.2	389.9	389.5	389.1
140°	408.0	407.9	407.5	406.8	406.1	405.4	404.7
142.5°	423.2	423.1	422.8	422.3	421.7	421.2	420.6
145°	445.6	445.5	445.3	444.9	444.5	444.1	443.7
147.5°	466.9	466.9	466.6	466.0	465.3	464.7	464.1
150°	479.9	479.9	479.6	479.0	478.4	477.8	477.2
152.5°	492.0	492.2	492.0	491.5	490.9	490.4	489.9
155°	509.7	510.1	509.9	509.2	508.5	507.8	507.1
157.5°	524.7	525.1	525.0	524.5	523.9	523.3	522.8
160°	534.0	534.5	534.5	534.1	533.7	533.3	532.9
162.5°	542.7	543.2	543.1	542.5	541.8	541.2	540.5
165°	553.8	554.4	554.3	553.6	552.9	552.2	551.5
167.5°	562.7	563.3	563.3	562.7	562.1	561.5	560.8
170°	567.7	568.4	568.4	567.7	567.0	566.3	565.6
172.5°	571.4	572.0	572.0	571.3	570.6	569.9	569.2
175°	575.5	576.1	576.1	575.4	574.7	574.0	573.3
177.5°	577.3	577.7	577.7	577.1	576.6	576.0	575.4
180°	576.9	576.9	576.9	576.9	576.9	576.9	576.9

(END OF REPORT)