

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: P332471-840

Luminaire Tested: **S123RDIW-S1165D460U840-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332471-840  
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-S1165D460U840-4F0-1E-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**

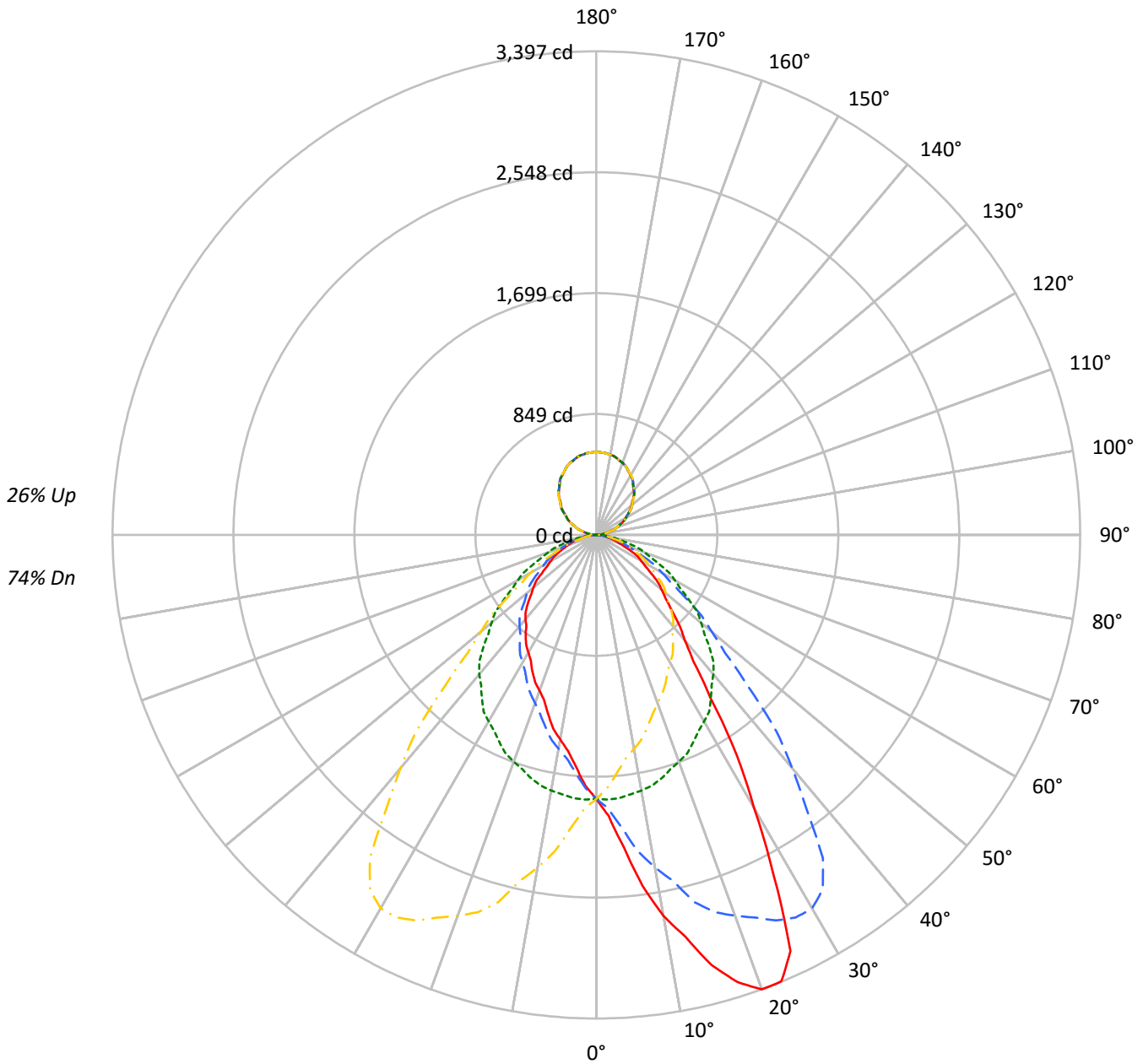
Lumens per Lamp: N/A  
Luminaire Lumens: 6232.4 lumens  
Efficiency: N/A  
Efficacy: 118.9 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.36  
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')  
CIE Type: Semi-Direct  
  
Input Watts (W): 52.4  
Input Voltage (V): 120  
Input Current (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°	19957	19957	19957	19957
5°	23791	20042	17650	20042
10°	29704	19928	15946	19928
15°	34867	19724	14540	19724
20°	38913	19420	13347	19420
25°	38292	19099	12613	19099
30°	27524	18804	11857	18804
35°	18378	18419	11369	18419
40°	13540	17956	10863	17956
45°	11357	17145	10368	17145
50°	10021	16083	9676	16083
55°	8788	14865	8728	14865
60°	7828	13702	7995	13702
65°	6872	12455	7440	12455
70°	5397	11339	6795	11339
75°	4754	9902	6209	9902
80°	4135	8412	6106	8412
85°	3335	6756	6472	6756



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.3	2.9
10°-20°	569.6	9.1
20°-30°	894.9	14.4
30°-40°	933.7	15.0
40°-50°	799.0	12.8
50°-60°	609.0	9.8
60°-70°	390.4	6.3
70°-80°	187.8	3.0
80°-90°	51.4	0.8
90°-100°	37.9	0.6
100°-110°	113.6	1.8
110°-120°	193.2	3.1
120°-130°	254.1	4.1
130°-140°	285.6	4.6
140°-150°	280.8	4.5
150°-160°	236.4	3.8
160°-170°	157.3	2.5
170°-180°	55.1	0.9
0°-30°	1646.9	26.4
0°-40°	2580.6	41.4
0°-60°	3988.6	64.0
0°-90°	4618.2	74.1
90°-120°	344.8	5.5
90°-150°	1165.3	18.7
90°-180°	1614.0	25.9
0°-180°	6232.4	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1854	1854	1854	1854	1854	
5°	2202	1855	1634	1855	2202	227
15°	3129	1770	1305	1770	3129	887
25°	3224	1608	1062	1608	3224	1386
35°	1399	1402	865	1402	1399	917
45°	746	1126	681	1126	746	587
55°	468	792	465	792	468	423
65°	270	489	292	489	270	265
75°	114	238	149	238	114	123
85°	27	55	52	55	27	31
90°	14	0	14	0	14	8
95°	36	27	36	27	36	37
105°	109	103	109	103	109	116
115°	195	194	195	194	195	193
125°	281	285	281	285	281	252
135°	369	369	369	369	369	284
145°	448	448	448	448	448	280
155°	512	513	512	513	512	236
165°	557	559	557	559	557	157
175°	579	581	579	581	579	55
180°	583	583	583	583	583	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1974.8	1977.3	1969.0	1967.8	1958.2	1955.7	1955.7	1942.4	1934.1	1923.4	1917.0
5°	2201.8	2214.5	2208.2	2193.8	2170.0	2164.4	2149.4	2125.6	2098.6	2065.3	2049.4
7.5°	2485.3	2502.6	2496.0	2473.9	2448.9	2428.8	2386.2	2346.7	2291.3	2242.7	2201.1
10°	2717.7	2699.5	2685.1	2663.7	2640.7	2603.4	2559.0	2497.8	2427.2	2371.7	2309.8
12.5°	2891.6	2888.7	2870.5	2848.5	2816.0	2780.6	2725.9	2651.5	2569.4	2489.1	2418.3
15°	3128.9	3133.6	3121.7	3098.7	3052.6	2989.9	2907.4	2876.5	2759.0	2671.7	2584.3
17.5°	3293.0	3292.1	3290.4	3258.5	3211.6	3166.9	3090.4	3009.0	2902.7	2779.7	2662.0
20°	3397.1	3389.2	3390.8	3355.1	3320.1	3268.5	3193.9	3075.6	2988.4	2846.3	2724.8
22.5°	3394.6	3393.0	3399.0	3386.8	3361.4	3321.8	3263.2	3163.3	3051.9	2908.5	2771.9
25°	3224.1	3217.7	3255.1	3265.4	3305.9	3313.0	3295.5	3240.8	3135.2	2987.6	2818.5
27.5°	2698.4	2694.8	2764.1	2850.7	2960.6	3046.0	3128.6	3168.4	3135.2	3029.5	2860.1
30°	2214.5	2289.1	2324.0	2449.4	2589.1	2755.8	2901.8	3040.7	3074.8	3028.9	2889.9
32.5°	1838.6	1903.7	1932.9	2040.5	2170.7	2365.9	2585.0	2781.7	2920.6	2955.8	2872.2
35°	1398.6	1399.4	1466.0	1513.6	1634.3	1835.1	2047.8	2311.3	2573.2	2771.7	2792.3
37.5°	1116.0	1119.9	1160.2	1207.7	1298.2	1404.4	1591.7	1810.8	2113.3	2418.0	2596.6
40°	963.6	970.7	1000.9	1047.7	1112.8	1193.0	1339.0	1545.4	1797.8	2136.7	2413.7
42.5°	865.8	877.4	892.9	929.0	969.3	1044.4	1162.5	1321.9	1551.5	1871.9	2191.5
45°	746.1	752.5	764.4	781.0	817.5	869.9	949.3	1056.4	1247.0	1504.9	1824.7
47.5°	658.1	654.8	667.3	680.9	705.2	740.8	794.1	881.5	1017.4	1224.4	1495.7
50°	598.4	597.6	606.4	616.7	639.7	665.9	709.6	775.5	883.4	1054.9	1303.3
52.5°	542.6	545.6	551.8	564.6	581.3	602.5	641.7	689.1	781.8	929.8	1136.9
55°	468.3	470.7	479.4	486.6	498.5	519.9	544.5	584.2	647.7	750.8	921.5
57.5°	405.5	404.3	412.7	414.4	428.0	445.5	464.4	495.2	541.3	618.0	733.0
60°	363.6	361.1	368.3	373.9	381.0	395.3	411.1	441.3	477.9	534.2	632.6
62.5°	325.4	324.3	329.5	335.1	341.0	354.0	367.3	390.5	419.4	466.9	544.9
65°	269.8	272.3	274.6	277.0	280.1	288.1	300.8	316.7	336.6	369.9	426.3
67.5°	212.1	214.5	215.3	220.2	227.0	232.0	239.7	253.9	267.6	295.8	327.8
70°	171.5	170.7	171.5	173.8	182.6	191.3	201.6	212.0	220.7	240.4	267.5
72.5°	147.3	145.9	147.9	148.5	152.7	155.1	161.6	171.3	182.6	196.0	215.4
75°	114.3	114.3	114.3	114.3	117.4	119.1	121.5	123.8	127.7	134.1	148.5
77.5°	84.4	84.6	85.7	86.5	87.2	88.1	89.6	91.9	93.3	96.6	102.9
80°	66.7	67.5	66.7	67.5	67.5	69.1	69.9	72.2	73.0	77.0	79.4
82.5°	50.2	49.7	50.2	51.0	51.0	52.5	52.7	54.4	54.6	56.7	59.1
85°	27.0	25.4	27.0	26.2	27.8	26.2	27.0	28.6	28.6	29.4	32.5
87.5°	9.1	10.3	9.0	9.6	9.6	10.1	10.1	10.0	11.2	10.4	10.8
90°	13.7	13.5	13.3	13.1	12.9	12.6	12.2	11.8	11.4	11.0	9.7
92.5°	18.5	18.6	18.7	18.9	19.0	18.9	18.6	18.2	17.9	17.6	16.9
95°	35.6	35.6	35.6	35.6	35.6	35.4	35.0	34.6	34.2	33.8	33.0
97.5°	54.9	54.9	55.0	55.0	55.0	54.8	54.4	53.9	53.4	53.0	52.4
100°	69.6	69.4	69.2	69.0	68.8	68.5	68.2	67.9	67.6	67.3	66.8
102.5°	84.5	84.6	84.6	84.7	84.7	84.6	84.3	84.0	83.7	83.4	82.7
105°	109.0	108.8	108.6	108.4	108.1	108.0	108.0	108.0	108.0	108.0	107.0
107.5°	134.3	134.4	134.5	134.6	134.7	134.6	134.3	134.0	133.7	133.4	133.0
110°	151.5	151.7	151.9	152.1	152.3	152.2	151.8	151.4	151.0	150.6	150.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	169.8	169.9	169.9	169.9	170.0	169.8	169.3	168.7	168.2	167.7	167.7
115°	195.0	195.1	195.2	195.3	195.4	195.4	195.3	195.2	195.1	195.0	195.2
117.5°	220.5	220.8	221.1	221.4	221.7	221.8	221.8	221.9	221.9	221.9	222.2
120°	238.4	238.6	238.8	239.0	239.2	239.4	239.5	239.6	239.7	239.8	240.3
122.5°	255.6	255.9	256.2	256.5	256.8	257.0	257.3	257.6	257.8	258.1	258.4
125°	281.4	281.9	282.3	282.7	283.1	283.5	283.9	284.3	284.7	285.1	285.3
127.5°	307.2	307.6	308.1	308.6	309.0	309.5	310.1	310.7	311.2	311.8	312.0
130°	324.0	324.8	325.5	326.2	326.9	327.4	327.8	328.2	328.6	329.0	329.3
132.5°	341.5	342.1	342.6	343.3	343.8	344.3	344.8	345.3	345.8	346.3	346.5
135°	368.9	369.1	369.3	369.5	369.7	370.0	370.4	370.8	371.2	371.6	371.7
137.5°	392.9	393.3	393.7	394.0	394.5	394.9	395.4	395.8	396.2	396.6	396.4
140°	408.7	409.4	410.1	410.8	411.5	411.9	412.0	412.1	412.2	412.3	412.2
142.5°	424.7	425.4	425.9	426.5	427.0	427.3	427.4	427.5	427.6	427.7	427.6
145°	448.1	448.5	448.9	449.3	449.7	449.9	450.0	450.1	450.2	450.3	450.0
147.5°	468.7	469.3	469.9	470.6	471.2	471.5	471.5	471.5	471.5	471.5	471.2
150°	481.9	482.5	483.1	483.7	484.3	484.6	484.6	484.6	484.6	484.6	484.4
152.5°	494.7	495.2	495.7	496.3	496.9	497.1	496.9	496.7	496.6	496.3	496.2
155°	512.1	512.8	513.5	514.2	514.9	515.1	514.7	514.3	513.9	513.5	513.4
157.5°	528.0	528.5	529.1	529.7	530.2	530.3	529.9	529.5	529.0	528.6	528.5
160°	538.2	538.6	539.0	539.4	539.8	539.8	539.3	538.8	538.3	537.8	537.8
162.5°	545.8	546.5	547.1	547.9	548.5	548.6	548.1	547.5	547.0	546.5	546.4
165°	556.9	557.6	558.4	559.1	559.8	559.9	559.3	558.7	558.1	557.4	557.4
167.5°	566.3	567.0	567.6	568.3	568.9	568.9	568.3	567.6	567.0	566.3	566.3
170°	571.2	571.9	572.6	573.3	574.0	574.0	573.3	572.6	571.9	571.2	571.2
172.5°	574.8	575.5	576.2	576.9	577.6	577.6	577.0	576.4	575.8	575.1	575.1
175°	579.0	579.7	580.4	581.1	581.8	581.8	581.2	580.6	580.0	579.4	579.4
177.5°	581.1	581.7	582.3	582.8	583.4	583.4	583.0	582.5	582.0	581.5	581.5
180°	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1914.5	1912.6	1903.7	1893.5	1880.2	1871.3	1864.3	1860.5	1849.1	1835.1	1825.5
5°	2032.8	2008.9	1983.5	1952.6	1924.0	1894.6	1876.3	1854.9	1828.8	1799.4	1778.8
7.5°	2159.4	2112.7	2062.4	2010.5	1959.2	1913.2	1872.6	1837.8	1796.0	1753.9	1724.4
10°	2256.5	2188.3	2117.7	2045.4	1979.5	1917.6	1870.0	1823.2	1773.2	1724.7	1688.3
12.5°	2344.8	2254.9	2173.5	2084.8	2000.5	1926.5	1857.9	1802.8	1742.7	1691.1	1649.5
15°	2456.6	2364.5	2266.0	2131.1	2019.2	1925.6	1842.2	1770.0	1697.0	1633.5	1593.0
17.5°	2561.0	2422.5	2290.2	2177.7	2032.3	1915.2	1813.5	1727.2	1647.0	1579.6	1529.8
20°	2604.2	2470.0	2326.4	2182.7	2039.8	1908.9	1790.6	1695.4	1612.0	1535.8	1489.9
22.5°	2630.2	2478.3	2327.0	2172.6	2020.8	1884.8	1767.8	1663.0	1572.7	1500.3	1443.5
25°	2660.6	2479.6	2312.9	2160.5	2005.7	1858.2	1719.2	1608.1	1510.5	1433.5	1373.1
27.5°	2680.6	2467.7	2270.7	2101.3	1944.3	1797.3	1670.0	1552.2	1453.2	1371.7	1307.0
30°	2684.3	2458.1	2238.3	2055.0	1895.4	1760.5	1625.6	1512.9	1408.1	1321.5	1261.2
32.5°	2689.5	2434.7	2194.4	1999.7	1836.3	1702.7	1580.4	1472.8	1365.5	1280.3	1218.7
35°	2668.5	2421.7	2128.0	1904.1	1740.6	1611.2	1501.0	1401.7	1296.2	1213.6	1150.9
37.5°	2578.3	2370.1	2059.1	1796.5	1625.6	1505.7	1415.8	1329.3	1232.5	1143.5	1084.4
40°	2487.5	2319.3	2005.7	1731.1	1552.6	1429.5	1348.6	1277.9	1184.3	1100.9	1037.4
42.5°	2352.3	2250.1	1954.9	1662.5	1470.0	1351.4	1283.1	1216.9	1134.7	1050.1	990.4
45°	2104.2	2117.7	1851.0	1553.3	1355.6	1236.6	1172.4	1126.3	1053.3	983.4	922.3
47.5°	1793.0	1919.2	1728.9	1436.9	1235.2	1123.5	1067.2	1027.0	977.9	909.3	853.5
50°	1589.8	1770.0	1631.1	1358.9	1159.6	1048.5	992.9	960.4	917.6	863.5	810.4
52.5°	1402.5	1596.0	1513.0	1271.8	1077.7	976.1	921.8	895.0	861.0	810.2	762.1
55°	1143.8	1339.8	1320.8	1140.5	954.8	863.5	822.3	792.1	769.1	731.0	693.0
57.5°	925.1	1111.1	1120.8	994.5	846.6	756.4	720.8	698.1	683.1	654.4	619.1
60°	787.4	958.1	991.4	896.2	769.1	689.7	654.8	636.5	624.7	601.7	574.6
62.5°	673.1	818.3	856.1	787.5	694.8	620.6	593.2	575.6	567.5	547.6	523.8
65°	515.1	635.8	672.3	634.2	585.7	526.2	504.0	489.0	481.8	470.7	453.2
67.5°	387.4	475.2	515.3	488.5	471.0	433.3	419.2	411.1	404.8	397.2	382.5
70°	311.1	376.2	417.5	410.3	396.1	376.2	365.9	360.3	354.0	347.7	335.0
72.5°	250.1	295.0	333.7	337.3	325.6	321.6	312.6	310.2	306.4	298.7	291.8
75°	165.9	196.8	223.8	234.2	238.9	242.9	238.9	238.1	237.3	231.0	227.0
77.5°	108.8	125.4	142.4	160.1	167.4	172.9	174.1	177.0	174.9	171.6	169.7
80°	83.3	87.4	99.2	114.3	126.2	131.0	134.1	135.7	134.9	134.1	131.0
82.5°	60.5	63.8	69.4	80.0	90.0	98.0	99.9	99.6	101.3	101.8	99.2
85°	32.5	33.3	34.9	36.6	42.1	50.8	53.2	54.7	56.4	56.4	51.6
87.5°	11.8	10.9	11.9	11.7	13.4	13.8	17.5	20.4	21.2	18.9	19.1
90°	8.4	7.0	5.7	4.5	3.5	2.5	1.5	0.5	1.5	2.5	3.5
92.5°	16.1	15.3	14.5	13.8	13.1	12.4	11.8	11.1	11.8	12.4	13.1
95°	32.2	31.4	30.6	29.9	29.2	28.4	27.7	27.0	27.7	28.4	29.2
97.5°	51.8	51.2	50.6	50.1	49.6	49.0	48.5	48.0	48.5	49.0	49.6
100°	66.2	65.7	65.2	64.6	64.0	63.4	62.8	62.2	62.8	63.4	64.0
102.5°	82.0	81.4	80.7	80.2	79.8	79.5	79.1	78.7	79.1	79.5	79.8
105°	106.1	105.2	104.3	103.8	103.6	103.4	103.2	103.0	103.2	103.4	103.6
107.5°	132.6	132.3	131.9	131.7	131.5	131.4	131.3	131.2	131.3	131.4	131.5
110°	150.2	150.0	149.8	149.6	149.4	149.2	149.0	148.8	149.0	149.2	149.4





TEST NUMBER: P332471-840

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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	167.7	167.6	167.6	167.5	167.4	167.3	167.1	167.0	167.1	167.3	167.4
115°	195.4	195.6	195.8	195.7	195.4	195.1	194.8	194.5	194.8	195.1	195.4
117.5°	222.4	222.7	222.9	223.0	222.8	222.6	222.4	222.2	222.4	222.6	222.8
120°	240.9	241.4	241.9	241.8	241.2	240.5	239.9	239.3	239.9	240.5	241.2
122.5°	258.6	258.9	259.1	259.0	258.6	258.2	257.7	257.3	257.7	258.2	258.6
125°	285.5	285.7	285.9	285.9	285.6	285.3	285.0	284.7	285.0	285.3	285.6
127.5°	312.3	312.6	312.8	312.6	311.8	311.2	310.5	309.9	310.5	311.2	311.8
130°	329.6	329.9	330.2	330.0	329.2	328.4	327.6	326.8	327.6	328.4	329.2
132.5°	346.7	346.9	347.2	346.9	346.1	345.3	344.4	343.6	344.4	345.3	346.1
135°	371.8	371.9	372.0	371.7	371.1	370.5	369.9	369.3	369.9	370.5	371.1
137.5°	396.1	395.8	395.6	395.2	394.7	394.2	393.6	393.1	393.6	394.2	394.7
140°	412.1	412.0	411.9	411.6	411.1	410.6	410.1	409.6	410.1	410.6	411.1
142.5°	427.4	427.2	427.0	426.7	426.2	425.7	425.2	424.6	425.2	425.7	426.2
145°	449.7	449.4	449.1	448.9	448.7	448.5	448.3	448.1	448.3	448.5	448.7
147.5°	470.9	470.6	470.3	470.0	469.6	469.3	468.9	468.6	468.9	469.3	469.6
150°	484.2	484.0	483.8	483.6	483.4	483.2	483.0	482.8	483.0	483.2	483.4
152.5°	496.1	495.9	495.8	495.6	495.3	495.1	494.8	494.5	494.8	495.1	495.3
155°	513.3	513.2	513.1	513.0	513.0	513.0	513.0	513.0	513.0	513.0	513.0
157.5°	528.5	528.4	528.3	528.3	528.4	528.6	528.7	528.8	528.7	528.6	528.4
160°	537.8	537.8	537.8	537.9	538.1	538.3	538.5	538.7	538.5	538.3	538.1
162.5°	546.3	546.2	546.2	546.3	546.5	546.8	547.1	547.4	547.1	546.8	546.5
165°	557.4	557.4	557.4	557.5	557.8	558.2	558.5	558.8	558.5	558.2	557.8
167.5°	566.2	566.1	566.0	566.2	566.6	567.0	567.4	567.8	567.4	567.0	566.6
170°	571.2	571.2	571.2	571.4	571.8	572.2	572.6	573.0	572.6	572.2	571.8
172.5°	575.1	575.1	575.1	575.3	575.8	576.2	576.6	577.0	576.6	576.2	575.8
175°	579.4	579.4	579.4	579.6	580.0	580.4	580.8	581.2	580.8	580.4	580.0
177.5°	581.5	581.5	581.5	581.7	582.0	582.3	582.6	583.0	582.6	582.3	582.0
180°	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6



TEST NUMBER: P332471-840

CATALOG NUMBER: S123RDIW-S1165D460U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1822.4	1814.1	1808.5	1795.7	1787.5	1778.6	1769.7	1775.4	1774.7	1774.1	1774.1
5°	1761.3	1743.0	1726.4	1705.0	1691.4	1674.8	1662.0	1660.4	1663.7	1652.5	1646.2
7.5°	1700.6	1675.7	1652.0	1628.4	1603.4	1583.4	1570.7	1564.9	1556.8	1549.9	1542.9
10°	1658.1	1628.7	1605.7	1576.3	1549.3	1525.5	1510.5	1500.2	1494.6	1489.0	1478.7
12.5°	1614.3	1585.6	1556.2	1523.0	1497.3	1469.7	1458.3	1446.8	1436.1	1430.0	1415.8
15°	1550.1	1512.9	1481.9	1446.9	1418.4	1391.4	1375.5	1352.5	1349.3	1341.4	1327.1
17.5°	1485.8	1445.3	1402.7	1376.7	1344.5	1316.5	1292.3	1284.5	1261.8	1253.2	1240.9
20°	1435.0	1397.8	1365.2	1331.1	1284.2	1258.1	1239.0	1228.7	1210.4	1199.3	1191.3
22.5°	1391.2	1353.3	1315.7	1275.9	1237.3	1207.9	1194.0	1177.9	1167.9	1152.4	1143.8
25°	1328.7	1287.4	1242.1	1199.3	1171.5	1149.3	1127.1	1112.8	1098.5	1091.4	1075.5
27.5°	1256.0	1212.8	1170.5	1138.0	1103.9	1082.0	1061.9	1049.1	1032.0	1020.0	1011.2
30°	1216.0	1165.2	1128.6	1099.3	1055.6	1035.0	1020.0	1004.1	991.4	978.7	970.0
32.5°	1169.6	1123.3	1088.6	1052.3	1018.9	996.2	976.7	962.8	952.0	939.9	931.2
35°	1096.9	1058.0	1022.3	985.8	961.2	938.2	915.1	903.2	892.9	881.8	873.9
37.5°	1031.2	994.8	960.9	926.2	895.8	877.1	858.5	849.4	835.5	828.0	819.9
40°	990.6	954.8	918.4	885.0	853.2	839.0	822.3	808.8	796.1	790.5	781.8
42.5°	946.1	910.4	879.6	843.7	817.7	798.3	782.9	768.2	758.6	750.5	745.6
45°	880.2	848.5	818.3	782.6	758.0	741.3	723.9	710.3	701.7	696.1	687.3
47.5°	816.3	784.6	753.9	722.8	698.9	679.9	662.5	653.1	641.5	634.7	628.7
50°	769.9	741.3	708.8	680.2	656.4	637.3	623.1	611.2	600.9	592.1	588.1
52.5°	727.4	696.9	668.8	642.1	617.0	595.4	582.4	569.9	562.1	552.1	547.5
55°	657.2	627.8	604.0	577.8	553.2	534.9	519.1	508.0	500.1	489.0	482.6
57.5°	591.3	565.0	536.5	513.8	488.5	473.0	459.9	444.8	435.2	426.4	420.2
60°	546.8	516.7	492.1	470.7	448.5	428.6	416.7	404.8	394.5	385.8	380.2
62.5°	500.5	474.1	450.8	427.5	407.2	389.9	376.1	366.1	357.0	351.4	345.9
65°	429.4	408.8	385.0	365.9	346.9	334.2	323.1	314.3	308.0	304.0	299.2
67.5°	364.0	344.0	323.2	304.5	291.8	282.1	274.8	267.3	264.2	259.0	255.9
70°	321.4	300.8	282.6	268.3	255.6	248.4	243.7	238.1	234.9	228.6	225.4
72.5°	275.1	260.1	247.0	235.3	225.1	218.6	212.6	205.7	200.7	193.7	190.5
75°	216.7	203.2	192.9	184.9	178.5	169.9	161.2	154.0	151.6	149.3	148.5
77.5°	160.5	151.9	144.4	137.7	129.9	123.5	121.6	120.0	119.6	118.3	118.3
80°	126.2	118.3	112.7	104.7	100.0	100.0	100.0	98.5	99.2	99.2	99.2
82.5°	93.8	86.5	83.5	80.7	79.7	80.3	80.3	80.7	80.2	81.4	80.8
85°	48.4	49.2	50.8	50.0	50.8	50.8	52.4	51.6	52.4	50.8	52.4
87.5°	18.7	20.8	21.7	22.6	23.5	23.1	23.8	23.9	24.6	24.7	24.8
90°	4.5	5.7	7.0	8.4	9.7	11.0	11.4	11.8	12.2	12.6	12.9
92.5°	13.8	14.5	15.3	16.1	16.9	17.6	17.9	18.2	18.6	18.9	19.0
95°	29.9	30.6	31.4	32.2	33.0	33.8	34.2	34.6	35.0	35.4	35.6
97.5°	50.1	50.6	51.2	51.8	52.4	53.0	53.4	53.9	54.4	54.8	55.0
100°	64.6	65.2	65.7	66.2	66.8	67.3	67.6	67.9	68.2	68.5	68.8
102.5°	80.2	80.7	81.4	82.0	82.7	83.4	83.7	84.0	84.3	84.6	84.7
105°	103.8	104.3	105.2	106.1	107.0	108.0	108.0	108.0	108.0	108.0	108.1
107.5°	131.7	131.9	132.3	132.6	133.0	133.4	133.7	134.0	134.3	134.6	134.7
110°	149.6	149.8	150.0	150.2	150.4	150.6	151.0	151.4	151.8	152.2	152.3



TEST NUMBER: P332471-840

CATALOG NUMBER: S123RDIW-S1165D460U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	167.5	167.6	167.6	167.7	167.7	167.7	168.2	168.7	169.3	169.8	170.0
115°	195.7	195.8	195.6	195.4	195.2	195.0	195.1	195.2	195.3	195.4	195.4
117.5°	223.0	222.9	222.7	222.4	222.2	221.9	221.9	221.9	221.8	221.8	221.7
120°	241.8	241.9	241.4	240.9	240.3	239.8	239.7	239.6	239.5	239.4	239.2
122.5°	259.0	259.1	258.9	258.6	258.4	258.1	257.8	257.6	257.3	257.0	256.8
125°	285.9	285.9	285.7	285.5	285.3	285.1	284.7	284.3	283.9	283.5	283.1
127.5°	312.6	312.8	312.6	312.3	312.0	311.8	311.2	310.7	310.1	309.5	309.0
130°	330.0	330.2	329.9	329.6	329.3	329.0	328.6	328.2	327.8	327.4	326.9
132.5°	346.9	347.2	346.9	346.7	346.5	346.3	345.8	345.3	344.8	344.3	343.8
135°	371.7	372.0	371.9	371.8	371.7	371.6	371.2	370.8	370.4	370.0	369.7
137.5°	395.2	395.6	395.8	396.1	396.4	396.6	396.2	395.8	395.4	394.9	394.5
140°	411.6	411.9	412.0	412.1	412.2	412.3	412.2	412.1	412.0	411.9	411.5
142.5°	426.7	427.0	427.2	427.4	427.6	427.7	427.6	427.5	427.4	427.3	427.0
145°	448.9	449.1	449.4	449.7	450.0	450.3	450.2	450.1	450.0	449.9	449.7
147.5°	470.0	470.3	470.6	470.9	471.2	471.5	471.5	471.5	471.5	471.5	471.2
150°	483.6	483.8	484.0	484.2	484.4	484.6	484.6	484.6	484.6	484.6	484.3
152.5°	495.6	495.8	495.9	496.1	496.2	496.3	496.6	496.7	496.9	497.1	496.9
155°	513.0	513.1	513.2	513.3	513.4	513.5	513.9	514.3	514.7	515.1	514.9
157.5°	528.3	528.3	528.4	528.5	528.5	528.6	529.0	529.5	529.9	530.3	530.2
160°	537.9	537.8	537.8	537.8	537.8	537.8	538.3	538.8	539.3	539.8	539.8
162.5°	546.3	546.2	546.2	546.3	546.4	546.5	547.0	547.5	548.1	548.6	548.5
165°	557.5	557.4	557.4	557.4	557.4	557.4	558.1	558.7	559.3	559.9	559.8
167.5°	566.2	566.0	566.1	566.2	566.3	566.3	567.0	567.6	568.3	568.9	568.9
170°	571.4	571.2	571.2	571.2	571.2	571.2	571.9	572.6	573.3	574.0	574.0
172.5°	575.3	575.1	575.1	575.1	575.1	575.1	575.8	576.4	577.0	577.6	577.6
175°	579.6	579.4	579.4	579.4	579.4	579.4	580.0	580.6	581.2	581.8	581.8
177.5°	581.7	581.5	581.5	581.5	581.5	581.5	582.0	582.5	583.0	583.4	583.4
180°	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6



TEST NUMBER: P332471-840

CATALOG NUMBER: S123RDIW-S1165D460U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1766.6	1765.8	1766.6	1763.9	1766.6	1765.8	1766.6	1774.1	1774.1	1774.7	1775.4
5°	1643.8	1643.1	1640.6	1633.5	1640.6	1643.1	1643.8	1646.2	1652.5	1663.7	1660.4
7.5°	1536.6	1535.5	1528.5	1528.7	1528.5	1535.5	1536.6	1542.9	1549.9	1556.8	1564.9
10°	1473.2	1473.9	1464.4	1458.9	1464.4	1473.9	1473.2	1478.7	1489.0	1494.6	1500.2
12.5°	1411.6	1408.0	1400.3	1394.1	1400.3	1408.0	1411.6	1415.8	1430.0	1436.1	1446.8
15°	1330.3	1322.3	1303.3	1304.8	1303.3	1322.3	1330.3	1327.1	1341.4	1349.3	1352.5
17.5°	1234.6	1228.7	1228.4	1217.3	1228.4	1228.7	1234.6	1240.9	1253.2	1261.8	1284.5
20°	1178.7	1174.7	1176.3	1165.2	1176.3	1174.7	1178.7	1191.3	1199.3	1210.4	1228.7
22.5°	1134.9	1130.8	1124.2	1120.7	1124.2	1130.8	1134.9	1143.8	1152.4	1167.9	1177.9
25°	1070.8	1064.4	1058.0	1062.0	1058.0	1064.4	1070.8	1075.5	1091.4	1098.5	1112.8
27.5°	1006.6	1001.9	995.5	994.7	995.5	1001.9	1006.6	1011.2	1020.0	1032.0	1049.1
30°	965.9	961.2	958.1	954.0	958.1	961.2	965.9	970.0	978.7	991.4	1004.1
32.5°	924.7	923.7	918.1	917.3	918.1	923.7	924.7	931.2	939.9	952.0	962.8
35°	870.7	866.0	864.3	865.2	864.3	866.0	870.7	873.9	881.8	892.9	903.2
37.5°	819.4	813.0	810.2	807.4	810.2	813.0	819.4	819.9	828.0	835.5	849.4
40°	782.6	776.3	774.7	773.1	774.7	776.3	782.6	781.8	790.5	796.1	808.8
42.5°	741.3	738.8	737.8	735.0	737.8	738.8	741.3	745.6	750.5	758.6	768.2
45°	685.0	684.2	679.4	681.1	679.4	684.2	685.0	687.3	696.1	701.7	710.3
47.5°	625.6	622.1	618.7	621.0	618.7	622.1	625.6	628.7	634.7	641.5	653.1
50°	585.0	583.4	576.2	577.8	576.2	583.4	585.0	588.1	592.1	600.9	611.2
52.5°	544.3	538.3	535.6	534.6	535.6	538.3	544.3	547.5	552.1	562.1	569.9
55°	477.1	469.9	466.7	465.1	466.7	469.9	477.1	482.6	489.0	500.1	508.0
57.5°	411.0	409.1	406.6	408.3	406.6	409.1	411.0	420.2	426.4	435.2	444.8
60°	372.2	372.2	372.2	371.4	372.2	372.2	372.2	380.2	385.8	394.5	404.8
62.5°	342.4	340.5	339.9	341.0	339.9	340.5	342.4	345.9	351.4	357.0	366.1
65°	296.9	296.1	292.9	292.1	292.9	296.1	296.9	299.2	304.0	308.0	314.3
67.5°	253.9	251.0	250.0	248.9	250.0	251.0	253.9	255.9	259.0	264.2	267.3
70°	221.5	219.8	215.1	215.9	215.1	219.8	221.5	225.4	228.6	234.9	238.1
72.5°	186.5	184.9	184.0	182.9	184.0	184.9	186.5	190.5	193.7	200.7	205.7
75°	147.6	146.8	146.0	149.3	146.0	146.8	147.6	148.5	149.3	151.6	154.0
77.5°	118.3	118.3	118.8	117.4	118.8	118.3	118.3	118.3	118.3	119.6	120.0
80°	99.2	99.2	98.5	98.5	98.5	99.2	99.2	99.2	99.2	99.2	98.5
82.5°	79.6	80.2	80.7	79.4	80.7	80.2	79.6	80.8	81.4	80.2	80.7
85°	52.4	51.6	53.2	52.4	53.2	51.6	52.4	52.4	50.8	52.4	51.6
87.5°	26.2	24.8	24.9	25.7	24.9	24.8	26.2	24.8	24.7	24.6	23.9
90°	13.1	13.3	13.5	13.7	13.5	13.3	13.1	12.9	12.6	12.2	11.8
92.5°	18.9	18.7	18.6	18.5	18.6	18.7	18.9	19.0	18.9	18.6	18.2
95°	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.4	35.0	34.6
97.5°	55.0	55.0	54.9	54.9	54.9	55.0	55.0	55.0	54.8	54.4	53.9
100°	69.0	69.2	69.4	69.6	69.4	69.2	69.0	68.8	68.5	68.2	67.9
102.5°	84.7	84.6	84.6	84.5	84.6	84.6	84.7	84.7	84.6	84.3	84.0
105°	108.4	108.6	108.8	109.0	108.8	108.6	108.4	108.1	108.0	108.0	108.0
107.5°	134.6	134.5	134.4	134.3	134.4	134.5	134.6	134.7	134.6	134.3	134.0
110°	152.1	151.9	151.7	151.5	151.7	151.9	152.1	152.3	152.2	151.8	151.4



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CATALOG NUMBER: S123RDIW-S1165D460U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	169.9	169.9	169.9	169.8	169.9	169.9	169.9	170.0	169.8	169.3	168.7
115°	195.3	195.2	195.1	195.0	195.1	195.2	195.3	195.4	195.4	195.3	195.2
117.5°	221.4	221.1	220.8	220.5	220.8	221.1	221.4	221.7	221.8	221.8	221.9
120°	239.0	238.8	238.6	238.4	238.6	238.8	239.0	239.2	239.4	239.5	239.6
122.5°	256.5	256.2	255.9	255.6	255.9	256.2	256.5	256.8	257.0	257.3	257.6
125°	282.7	282.3	281.9	281.4	281.9	282.3	282.7	283.1	283.5	283.9	284.3
127.5°	308.6	308.1	307.6	307.2	307.6	308.1	308.6	309.0	309.5	310.1	310.7
130°	326.2	325.5	324.8	324.0	324.8	325.5	326.2	326.9	327.4	327.8	328.2
132.5°	343.3	342.6	342.1	341.5	342.1	342.6	343.3	343.8	344.3	344.8	345.3
135°	369.5	369.3	369.1	368.9	369.1	369.3	369.5	369.7	370.0	370.4	370.8
137.5°	394.0	393.7	393.3	392.9	393.3	393.7	394.0	394.5	394.9	395.4	395.8
140°	410.8	410.1	409.4	408.7	409.4	410.1	410.8	411.5	411.9	412.0	412.1
142.5°	426.5	425.9	425.4	424.7	425.4	425.9	426.5	427.0	427.3	427.4	427.5
145°	449.3	448.9	448.5	448.1	448.5	448.9	449.3	449.7	449.9	450.0	450.1
147.5°	470.6	469.9	469.3	468.7	469.3	469.9	470.6	471.2	471.5	471.5	471.5
150°	483.7	483.1	482.5	481.9	482.5	483.1	483.7	484.3	484.6	484.6	484.6
152.5°	496.3	495.7	495.2	494.7	495.2	495.7	496.3	496.9	497.1	496.9	496.7
155°	514.2	513.5	512.8	512.1	512.8	513.5	514.2	514.9	515.1	514.7	514.3
157.5°	529.7	529.1	528.5	528.0	528.5	529.1	529.7	530.2	530.3	529.9	529.5
160°	539.4	539.0	538.6	538.2	538.6	539.0	539.4	539.8	539.8	539.3	538.8
162.5°	547.9	547.1	546.5	545.8	546.5	547.1	547.9	548.5	548.6	548.1	547.5
165°	559.1	558.4	557.6	556.9	557.6	558.4	559.1	559.8	559.9	559.3	558.7
167.5°	568.3	567.6	567.0	566.3	567.0	567.6	568.3	568.9	568.9	568.3	567.6
170°	573.3	572.6	571.9	571.2	571.9	572.6	573.3	574.0	574.0	573.3	572.6
172.5°	576.9	576.2	575.5	574.8	575.5	576.2	576.9	577.6	577.6	577.0	576.4
175°	581.1	580.4	579.7	579.0	579.7	580.4	581.1	581.8	581.8	581.2	580.6
177.5°	582.8	582.3	581.7	581.1	581.7	582.3	582.8	583.4	583.4	583.0	582.5
180°	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6



TEST NUMBER: P332471-840

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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1769.7	1778.6	1787.5	1795.7	1808.5	1814.1	1822.4	1825.5	1835.1	1849.1	1860.5
5°	1662.0	1674.8	1691.4	1705.0	1726.4	1743.0	1761.3	1778.8	1799.4	1828.8	1854.9
7.5°	1570.7	1583.4	1603.4	1628.4	1652.0	1675.7	1700.6	1724.4	1753.9	1796.0	1837.8
10°	1510.5	1525.5	1549.3	1576.3	1605.7	1628.7	1658.1	1688.3	1724.7	1773.2	1823.2
12.5°	1458.3	1469.7	1497.3	1523.0	1556.2	1585.6	1614.3	1649.5	1691.1	1742.7	1802.8
15°	1375.5	1391.4	1418.4	1446.9	1481.9	1512.9	1550.1	1593.0	1633.5	1697.0	1770.0
17.5°	1292.3	1316.5	1344.5	1376.7	1402.7	1445.3	1485.8	1529.8	1579.6	1647.0	1727.2
20°	1239.0	1258.1	1284.2	1331.1	1365.2	1397.8	1435.0	1489.9	1535.8	1612.0	1695.4
22.5°	1194.0	1207.9	1237.3	1275.9	1315.7	1353.3	1391.2	1443.5	1500.3	1572.7	1663.0
25°	1127.1	1149.3	1171.5	1199.3	1242.1	1287.4	1328.7	1373.1	1433.5	1510.5	1608.1
27.5°	1061.9	1082.0	1103.9	1138.0	1170.5	1212.8	1256.0	1307.0	1371.7	1453.2	1552.2
30°	1020.0	1035.0	1055.6	1099.3	1128.6	1165.2	1216.0	1261.2	1321.5	1408.1	1512.9
32.5°	976.7	996.2	1018.9	1052.3	1088.6	1123.3	1169.6	1218.7	1280.3	1365.5	1472.8
35°	915.1	938.2	961.2	985.8	1022.3	1058.0	1096.9	1150.9	1213.6	1296.2	1401.7
37.5°	858.5	877.1	895.8	926.2	960.9	994.8	1031.2	1084.4	1143.5	1232.5	1329.3
40°	822.3	839.0	853.2	885.0	918.4	954.8	990.6	1037.4	1100.9	1184.3	1277.9
42.5°	782.9	798.3	817.7	843.7	879.6	910.4	946.1	990.4	1050.1	1134.7	1216.9
45°	723.9	741.3	758.0	782.6	818.3	848.5	880.2	922.3	983.4	1053.3	1126.3
47.5°	662.5	679.9	698.9	722.8	753.9	784.6	816.3	853.5	909.3	977.9	1027.0
50°	623.1	637.3	656.4	680.2	708.8	741.3	769.9	810.4	863.5	917.6	960.4
52.5°	582.4	595.4	617.0	642.1	668.8	696.9	727.4	762.1	810.2	861.0	895.0
55°	519.1	534.9	553.2	577.8	604.0	627.8	657.2	693.0	731.0	769.1	792.1
57.5°	459.9	473.0	488.5	513.8	536.5	565.0	591.3	619.1	654.4	683.1	698.1
60°	416.7	428.6	448.5	470.7	492.1	516.7	546.8	574.6	601.7	624.7	636.5
62.5°	376.1	389.9	407.2	427.5	450.8	474.1	500.5	523.8	547.6	567.5	575.6
65°	323.1	334.2	346.9	365.9	385.0	408.8	429.4	453.2	470.7	481.8	489.0
67.5°	274.8	282.1	291.8	304.5	323.2	344.0	364.0	382.5	397.2	404.8	411.1
70°	243.7	248.4	255.6	268.3	282.6	300.8	321.4	335.0	347.7	354.0	360.3
72.5°	212.6	218.6	225.1	235.3	247.0	260.1	275.1	291.8	298.7	306.4	310.2
75°	161.2	169.9	178.5	184.9	192.9	203.2	216.7	227.0	231.0	237.3	238.1
77.5°	121.6	123.5	129.9	137.7	144.4	151.9	160.5	169.7	171.6	174.9	177.0
80°	100.0	100.0	100.0	104.7	112.7	118.3	126.2	131.0	134.1	134.9	135.7
82.5°	80.3	80.3	79.7	80.7	83.5	86.5	93.8	99.2	101.8	101.3	99.6
85°	52.4	50.8	50.8	50.0	50.8	49.2	48.4	51.6	56.4	56.4	54.7
87.5°	23.8	23.1	23.5	22.6	21.7	20.8	18.7	19.1	18.9	21.2	20.4
90°	11.4	11.0	9.7	8.4	7.0	5.7	4.5	3.5	2.5	1.5	0.5
92.5°	17.9	17.6	16.9	16.1	15.3	14.5	13.8	13.1	12.4	11.8	11.1
95°	34.2	33.8	33.0	32.2	31.4	30.6	29.9	29.2	28.4	27.7	27.0
97.5°	53.4	53.0	52.4	51.8	51.2	50.6	50.1	49.6	49.0	48.5	48.0
100°	67.6	67.3	66.8	66.2	65.7	65.2	64.6	64.0	63.4	62.8	62.2
102.5°	83.7	83.4	82.7	82.0	81.4	80.7	80.2	79.8	79.5	79.1	78.7
105°	108.0	108.0	107.0	106.1	105.2	104.3	103.8	103.6	103.4	103.2	103.0
107.5°	133.7	133.4	133.0	132.6	132.3	131.9	131.7	131.5	131.4	131.3	131.2
110°	151.0	150.6	150.4	150.2	150.0	149.8	149.6	149.4	149.2	149.0	148.8



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CATALOG NUMBER: S123RDIW-S1165D460U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	168.2	167.7	167.7	167.7	167.6	167.6	167.5	167.4	167.3	167.1	167.0
115°	195.1	195.0	195.2	195.4	195.6	195.8	195.7	195.4	195.1	194.8	194.5
117.5°	221.9	221.9	222.2	222.4	222.7	222.9	223.0	222.8	222.6	222.4	222.2
120°	239.7	239.8	240.3	240.9	241.4	241.9	241.8	241.2	240.5	239.9	239.3
122.5°	257.8	258.1	258.4	258.6	258.9	259.1	259.0	258.6	258.2	257.7	257.3
125°	284.7	285.1	285.3	285.5	285.7	285.9	285.9	285.6	285.3	285.0	284.7
127.5°	311.2	311.8	312.0	312.3	312.6	312.8	312.6	311.8	311.2	310.5	309.9
130°	328.6	329.0	329.3	329.6	329.9	330.2	330.0	329.2	328.4	327.6	326.8
132.5°	345.8	346.3	346.5	346.7	346.9	347.2	346.9	346.1	345.3	344.4	343.6
135°	371.2	371.6	371.7	371.8	371.9	372.0	371.7	371.1	370.5	369.9	369.3
137.5°	396.2	396.6	396.4	396.1	395.8	395.6	395.2	394.7	394.2	393.6	393.1
140°	412.2	412.3	412.2	412.1	412.0	411.9	411.6	411.1	410.6	410.1	409.6
142.5°	427.6	427.7	427.6	427.4	427.2	427.0	426.7	426.2	425.7	425.2	424.6
145°	450.2	450.3	450.0	449.7	449.4	449.1	448.9	448.7	448.5	448.3	448.1
147.5°	471.5	471.5	471.2	470.9	470.6	470.3	470.0	469.6	469.3	468.9	468.6
150°	484.6	484.6	484.4	484.2	484.0	483.8	483.6	483.4	483.2	483.0	482.8
152.5°	496.6	496.3	496.2	496.1	495.9	495.8	495.6	495.3	495.1	494.8	494.5
155°	513.9	513.5	513.4	513.3	513.2	513.1	513.0	513.0	513.0	513.0	513.0
157.5°	529.0	528.6	528.5	528.5	528.4	528.3	528.3	528.4	528.6	528.7	528.8
160°	538.3	537.8	537.8	537.8	537.8	537.8	537.9	538.1	538.3	538.5	538.7
162.5°	547.0	546.5	546.4	546.3	546.2	546.2	546.3	546.5	546.8	547.1	547.4
165°	558.1	557.4	557.4	557.4	557.4	557.4	557.5	557.8	558.2	558.5	558.8
167.5°	567.0	566.3	566.3	566.2	566.1	566.0	566.2	566.6	567.0	567.4	567.8
170°	571.9	571.2	571.2	571.2	571.2	571.2	571.4	571.8	572.2	572.6	573.0
172.5°	575.8	575.1	575.1	575.1	575.1	575.1	575.3	575.8	576.2	576.6	577.0
175°	580.0	579.4	579.4	579.4	579.4	579.4	579.6	580.0	580.4	580.8	581.2
177.5°	582.0	581.5	581.5	581.5	581.5	581.5	581.7	582.0	582.3	582.6	583.0
180°	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6



TEST NUMBER: P332471-840

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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1864.3	1871.3	1880.2	1893.5	1903.7	1912.6	1914.5	1917.0	1923.4	1934.1	1942.4
5°	1876.3	1894.6	1924.0	1952.6	1983.5	2008.9	2032.8	2049.4	2065.3	2098.6	2125.6
7.5°	1872.6	1913.2	1959.2	2010.5	2062.4	2112.7	2159.4	2201.1	2242.7	2291.3	2346.7
10°	1870.0	1917.6	1979.5	2045.4	2117.7	2188.3	2256.5	2309.8	2371.7	2427.2	2497.8
12.5°	1857.9	1926.5	2000.5	2084.8	2173.5	2254.9	2344.8	2418.3	2489.1	2569.4	2651.5
15°	1842.2	1925.6	2019.2	2131.1	2266.0	2364.5	2456.6	2584.3	2671.7	2759.0	2876.5
17.5°	1813.5	1915.2	2032.3	2177.7	2290.2	2422.5	2561.0	2662.0	2779.7	2902.7	3009.0
20°	1790.6	1908.9	2039.8	2182.7	2326.4	2470.0	2604.2	2724.8	2846.3	2988.4	3075.6
22.5°	1767.8	1884.8	2020.8	2172.6	2327.0	2478.3	2630.2	2771.9	2908.5	3051.9	3163.3
25°	1719.2	1858.2	2005.7	2160.5	2312.9	2479.6	2660.6	2818.5	2987.6	3135.2	3240.8
27.5°	1670.0	1797.3	1944.3	2101.3	2270.7	2467.7	2680.6	2860.1	3029.5	3135.2	3168.4
30°	1625.6	1760.5	1895.4	2055.0	2238.3	2458.1	2684.3	2889.9	3028.9	3074.8	3040.7
32.5°	1580.4	1702.7	1836.3	1999.7	2194.4	2434.7	2689.5	2872.2	2955.8	2920.6	2781.7
35°	1501.0	1611.2	1740.6	1904.1	2128.0	2421.7	2668.5	2792.3	2771.7	2573.2	2311.3
37.5°	1415.8	1505.7	1625.6	1796.5	2059.1	2370.1	2578.3	2596.6	2418.0	2113.3	1810.8
40°	1348.6	1429.5	1552.6	1731.1	2005.7	2319.3	2487.5	2413.7	2136.7	1797.8	1545.4
42.5°	1283.1	1351.4	1470.0	1662.5	1954.9	2250.1	2352.3	2191.5	1871.9	1551.5	1321.9
45°	1172.4	1236.6	1355.6	1553.3	1851.0	2117.7	2104.2	1824.7	1504.9	1247.0	1056.4
47.5°	1067.2	1123.5	1235.2	1436.9	1728.9	1919.2	1793.0	1495.7	1224.4	1017.4	881.5
50°	992.9	1048.5	1159.6	1358.9	1631.1	1770.0	1589.8	1303.3	1054.9	883.4	775.5
52.5°	921.8	976.1	1077.7	1271.8	1513.0	1596.0	1402.5	1136.9	929.8	781.8	689.1
55°	822.3	863.5	954.8	1140.5	1320.8	1339.8	1143.8	921.5	750.8	647.7	584.2
57.5°	720.8	756.4	846.6	994.5	1120.8	1111.1	925.1	733.0	618.0	541.3	495.2
60°	654.8	689.7	769.1	896.2	991.4	958.1	787.4	632.6	534.2	477.9	441.3
62.5°	593.2	620.6	694.8	787.5	856.1	818.3	673.1	544.9	466.9	419.4	390.5
65°	504.0	526.2	585.7	634.2	672.3	635.8	515.1	426.3	369.9	336.6	316.7
67.5°	419.2	433.3	471.0	488.5	515.3	475.2	387.4	327.8	295.8	267.6	253.9
70°	365.9	376.2	396.1	410.3	417.5	376.2	311.1	267.5	240.4	220.7	212.0
72.5°	312.6	321.6	325.6	337.3	333.7	295.0	250.1	215.4	196.0	182.6	171.3
75°	238.9	242.9	238.9	234.2	223.8	196.8	165.9	148.5	134.1	127.7	123.8
77.5°	174.1	172.9	167.4	160.1	142.4	125.4	108.8	102.9	96.6	93.3	91.9
80°	134.1	131.0	126.2	114.3	99.2	87.4	83.3	79.4	77.0	73.0	72.2
82.5°	99.9	98.0	90.0	80.0	69.4	63.8	60.5	59.1	56.7	54.6	54.4
85°	53.2	50.8	42.1	36.6	34.9	33.3	32.5	32.5	29.4	28.6	28.6
87.5°	17.5	13.8	13.4	11.7	11.9	10.9	11.8	10.8	10.4	11.2	10.0
90°	1.5	2.5	3.5	4.5	5.7	7.0	8.4	9.7	11.0	11.4	11.8
92.5°	11.8	12.4	13.1	13.8	14.5	15.3	16.1	16.9	17.6	17.9	18.2
95°	27.7	28.4	29.2	29.9	30.6	31.4	32.2	33.0	33.8	34.2	34.6
97.5°	48.5	49.0	49.6	50.1	50.6	51.2	51.8	52.4	53.0	53.4	53.9
100°	62.8	63.4	64.0	64.6	65.2	65.7	66.2	66.8	67.3	67.6	67.9
102.5°	79.1	79.5	79.8	80.2	80.7	81.4	82.0	82.7	83.4	83.7	84.0
105°	103.2	103.4	103.6	103.8	104.3	105.2	106.1	107.0	108.0	108.0	108.0
107.5°	131.3	131.4	131.5	131.7	131.9	132.3	132.6	133.0	133.4	133.7	134.0
110°	149.0	149.2	149.4	149.6	149.8	150.0	150.2	150.4	150.6	151.0	151.4





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	167.1	167.3	167.4	167.5	167.6	167.6	167.7	167.7	167.7	168.2	168.7
115°	194.8	195.1	195.4	195.7	195.8	195.6	195.4	195.2	195.0	195.1	195.2
117.5°	222.4	222.6	222.8	223.0	222.9	222.7	222.4	222.2	221.9	221.9	221.9
120°	239.9	240.5	241.2	241.8	241.9	241.4	240.9	240.3	239.8	239.7	239.6
122.5°	257.7	258.2	258.6	259.0	259.1	258.9	258.6	258.4	258.1	257.8	257.6
125°	285.0	285.3	285.6	285.9	285.9	285.7	285.5	285.3	285.1	284.7	284.3
127.5°	310.5	311.2	311.8	312.6	312.8	312.6	312.3	312.0	311.8	311.2	310.7
130°	327.6	328.4	329.2	330.0	330.2	329.9	329.6	329.3	329.0	328.6	328.2
132.5°	344.4	345.3	346.1	346.9	347.2	346.9	346.7	346.5	346.3	345.8	345.3
135°	369.9	370.5	371.1	371.7	372.0	371.9	371.8	371.7	371.6	371.2	370.8
137.5°	393.6	394.2	394.7	395.2	395.6	395.8	396.1	396.4	396.6	396.2	395.8
140°	410.1	410.6	411.1	411.6	411.9	412.0	412.1	412.2	412.3	412.2	412.1
142.5°	425.2	425.7	426.2	426.7	427.0	427.2	427.4	427.6	427.7	427.6	427.5
145°	448.3	448.5	448.7	448.9	449.1	449.4	449.7	450.0	450.3	450.2	450.1
147.5°	468.9	469.3	469.6	470.0	470.3	470.6	470.9	471.2	471.5	471.5	471.5
150°	483.0	483.2	483.4	483.6	483.8	484.0	484.2	484.4	484.6	484.6	484.6
152.5°	494.8	495.1	495.3	495.6	495.8	495.9	496.1	496.2	496.3	496.6	496.7
155°	513.0	513.0	513.0	513.0	513.1	513.2	513.3	513.4	513.5	513.9	514.3
157.5°	528.7	528.6	528.4	528.3	528.3	528.4	528.5	528.5	528.6	529.0	529.5
160°	538.5	538.3	538.1	537.9	537.8	537.8	537.8	537.8	537.8	538.3	538.8
162.5°	547.1	546.8	546.5	546.3	546.2	546.2	546.3	546.4	546.5	547.0	547.5
165°	558.5	558.2	557.8	557.5	557.4	557.4	557.4	557.4	557.4	558.1	558.7
167.5°	567.4	567.0	566.6	566.2	566.0	566.1	566.2	566.3	566.3	567.0	567.6
170°	572.6	572.2	571.8	571.4	571.2	571.2	571.2	571.2	571.2	571.9	572.6
172.5°	576.6	576.2	575.8	575.3	575.1	575.1	575.1	575.1	575.1	575.8	576.4
175°	580.8	580.4	580.0	579.6	579.4	579.4	579.4	579.4	579.4	580.0	580.6
177.5°	582.6	582.3	582.0	581.7	581.5	581.5	581.5	581.5	581.5	582.0	582.5
180°	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1955.7	1955.7	1958.2	1967.8	1969.0	1977.3	1974.8
5°	2149.4	2164.4	2170.0	2193.8	2208.2	2214.5	2201.8
7.5°	2386.2	2428.8	2448.9	2473.9	2496.0	2502.6	2485.3
10°	2559.0	2603.4	2640.7	2663.7	2685.1	2699.5	2717.7
12.5°	2725.9	2780.6	2816.0	2848.5	2870.5	2888.7	2891.6
15°	2907.4	2989.9	3052.6	3098.7	3121.7	3133.6	3128.9
17.5°	3090.4	3166.9	3211.6	3258.5	3290.4	3292.1	3293.0
20°	3193.9	3268.5	3320.1	3355.1	3390.8	3389.2	3397.1
22.5°	3263.2	3321.8	3361.4	3386.8	3399.0	3393.0	3394.6
25°	3295.5	3313.0	3305.9	3265.4	3255.1	3217.7	3224.1
27.5°	3128.6	3046.0	2960.6	2850.7	2764.1	2694.8	2698.4
30°	2901.8	2755.8	2589.1	2449.4	2324.0	2289.1	2214.5
32.5°	2585.0	2365.9	2170.7	2040.5	1932.9	1903.7	1838.6
35°	2047.8	1835.1	1634.3	1513.6	1466.0	1399.4	1398.6
37.5°	1591.7	1404.4	1298.2	1207.7	1160.2	1119.9	1116.0
40°	1339.0	1193.0	1112.8	1047.7	1000.9	970.7	963.6
42.5°	1162.5	1044.4	969.3	929.0	892.9	877.4	865.8
45°	949.3	869.9	817.5	781.0	764.4	752.5	746.1
47.5°	794.1	740.8	705.2	680.9	667.3	654.8	658.1
50°	709.6	665.9	639.7	616.7	606.4	597.6	598.4
52.5°	641.7	602.5	581.3	564.6	551.8	545.6	542.6
55°	544.5	519.9	498.5	486.6	479.4	470.7	468.3
57.5°	464.4	445.5	428.0	414.4	412.7	404.3	405.5
60°	411.1	395.3	381.0	373.9	368.3	361.1	363.6
62.5°	367.3	354.0	341.0	335.1	329.5	324.3	325.4
65°	300.8	288.1	280.1	277.0	274.6	272.3	269.8
67.5°	239.7	232.0	227.0	220.2	215.3	214.5	212.1
70°	201.6	191.3	182.6	173.8	171.5	170.7	171.5
72.5°	161.6	155.1	152.7	148.5	147.9	145.9	147.3
75°	121.5	119.1	117.4	114.3	114.3	114.3	114.3
77.5°	89.6	88.1	87.2	86.5	85.7	84.6	84.4
80°	69.9	69.1	67.5	67.5	66.7	67.5	66.7
82.5°	52.7	52.5	51.0	51.0	50.2	49.7	50.2
85°	27.0	26.2	27.8	26.2	27.0	25.4	27.0
87.5°	10.1	10.1	9.6	9.6	9.0	10.3	9.1
90°	12.2	12.6	12.9	13.1	13.3	13.5	13.7
92.5°	18.6	18.9	19.0	18.9	18.7	18.6	18.5
95°	35.0	35.4	35.6	35.6	35.6	35.6	35.6
97.5°	54.4	54.8	55.0	55.0	55.0	54.9	54.9
100°	68.2	68.5	68.8	69.0	69.2	69.4	69.6
102.5°	84.3	84.6	84.7	84.7	84.6	84.6	84.5
105°	108.0	108.0	108.1	108.4	108.6	108.8	109.0
107.5°	134.3	134.6	134.7	134.6	134.5	134.4	134.3
110°	151.8	152.2	152.3	152.1	151.9	151.7	151.5



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	169.3	169.8	170.0	169.9	169.9	169.9	169.8
115°	195.3	195.4	195.4	195.3	195.2	195.1	195.0
117.5°	221.8	221.8	221.7	221.4	221.1	220.8	220.5
120°	239.5	239.4	239.2	239.0	238.8	238.6	238.4
122.5°	257.3	257.0	256.8	256.5	256.2	255.9	255.6
125°	283.9	283.5	283.1	282.7	282.3	281.9	281.4
127.5°	310.1	309.5	309.0	308.6	308.1	307.6	307.2
130°	327.8	327.4	326.9	326.2	325.5	324.8	324.0
132.5°	344.8	344.3	343.8	343.3	342.6	342.1	341.5
135°	370.4	370.0	369.7	369.5	369.3	369.1	368.9
137.5°	395.4	394.9	394.5	394.0	393.7	393.3	392.9
140°	412.0	411.9	411.5	410.8	410.1	409.4	408.7
142.5°	427.4	427.3	427.0	426.5	425.9	425.4	424.7
145°	450.0	449.9	449.7	449.3	448.9	448.5	448.1
147.5°	471.5	471.5	471.2	470.6	469.9	469.3	468.7
150°	484.6	484.6	484.3	483.7	483.1	482.5	481.9
152.5°	496.9	497.1	496.9	496.3	495.7	495.2	494.7
155°	514.7	515.1	514.9	514.2	513.5	512.8	512.1
157.5°	529.9	530.3	530.2	529.7	529.1	528.5	528.0
160°	539.3	539.8	539.8	539.4	539.0	538.6	538.2
162.5°	548.1	548.6	548.5	547.9	547.1	546.5	545.8
165°	559.3	559.9	559.8	559.1	558.4	557.6	556.9
167.5°	568.3	568.9	568.9	568.3	567.6	567.0	566.3
170°	573.3	574.0	574.0	573.3	572.6	571.9	571.2
172.5°	577.0	577.6	577.6	576.9	576.2	575.5	574.8
175°	581.2	581.8	581.8	581.1	580.4	579.7	579.0
177.5°	583.0	583.4	583.4	582.8	582.3	581.7	581.1
180°	582.6	582.6	582.6	582.6	582.6	582.6	582.6

(END OF REPORT)