

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: P332211-840

Luminaire Tested: **S123DIW-S1165D460U840-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332211-840  
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: S123DIW-S1165D460U840-4F0-1E-UDD-A1  
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 460 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

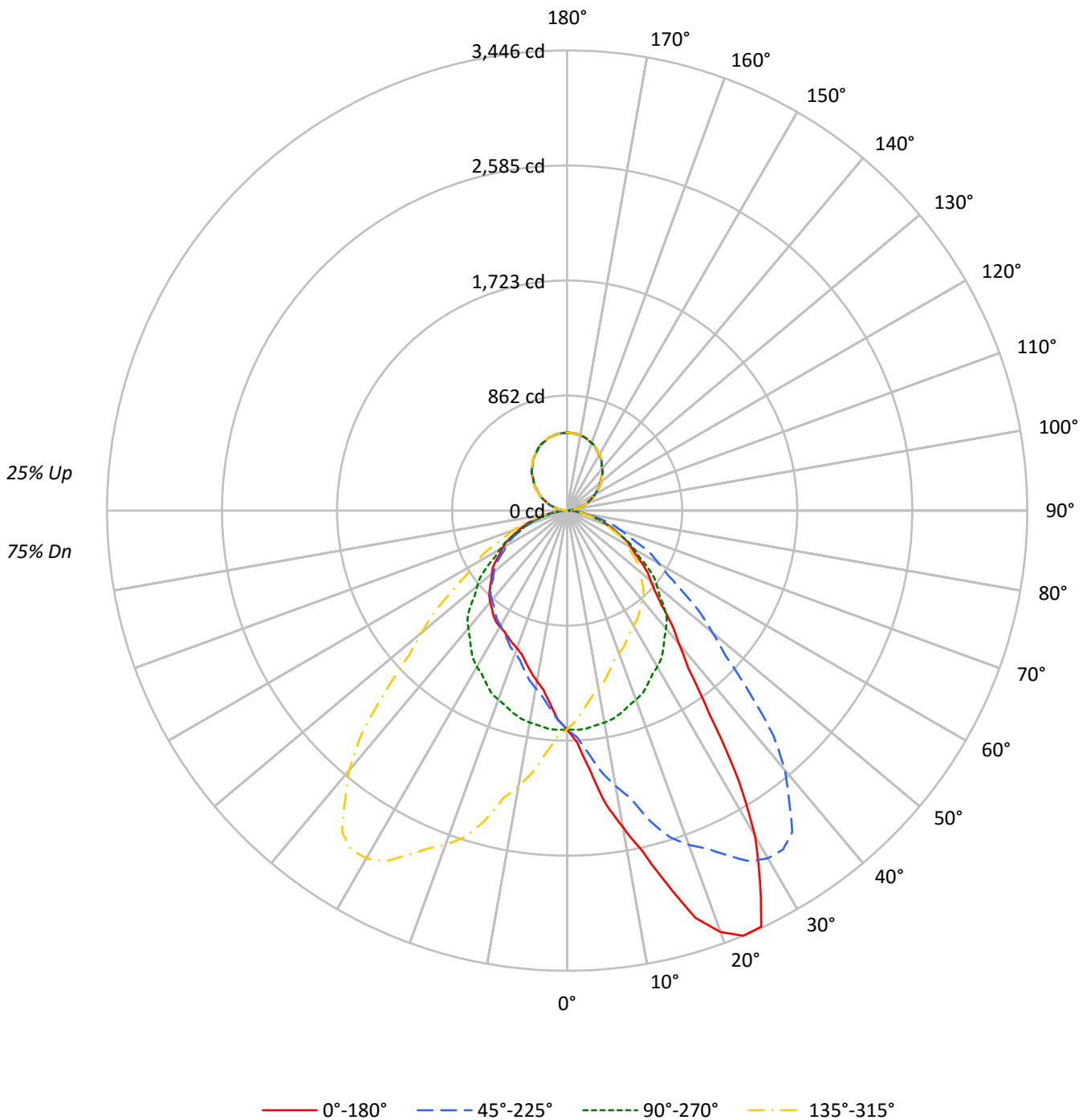
Lumens per Lamp: N/A  
Luminaire Lumens: 6560.1 lumens  
Efficiency: N/A  
Efficacy: 125.2 lumens/watt  
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49  
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')  
CIE Type: Semi-Direct  
  
Input Watts (W): 52.4  
Input Voltage (V): 120  
Input Current (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	113	113	113	113	108	108	108	108	97	97	97	88	88	88	79	79	79	75
1	104	100	96	92	99	95	92	88	86	84	81	78	76	74	71	69	68	64
2	95	87	81	76	90	83	78	73	76	72	68	69	66	63	63	60	58	55
3	87	77	70	64	82	74	67	62	67	62	58	62	57	54	56	53	50	47
4	80	69	61	54	76	66	58	53	60	54	49	55	50	46	50	46	43	40
5	73	61	53	47	70	59	51	46	54	48	43	50	44	40	45	41	38	35
6	68	55	47	41	64	53	46	40	49	43	38	45	40	36	41	37	33	31
7	63	50	42	36	60	48	41	35	45	38	33	41	36	32	38	33	30	27
8	58	46	38	32	56	44	37	31	41	34	30	38	32	28	35	30	27	25
9	55	42	34	29	52	40	33	28	37	31	27	35	29	25	32	28	24	22
10	51	39	31	26	49	37	30	26	35	29	24	32	27	23	30	25	22	20

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	17632	17632	17632	17632
5°	21028	17708	15693	17708
10°	26319	17618	14175	17618
15°	32282	17477	13196	17477
20°	38456	17255	12564	17255
25°	40834	16986	12423	16986
30°	34999	16789	12489	16789
35°	24341	16509	12620	16509
40°	18334	16183	12579	16183
45°	15224	15694	12420	15694
50°	13638	14699	12308	14699
55°	12748	13628	12153	13628
60°	11959	12508	12030	12508
65°	11240	11403	11645	11403
70°	10543	10140	11087	10140
75°	9441	8879	10168	8879
80°	8263	7277	8759	7277
85°	6472	5286	5891	5286



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	161.4	2.5
10°-20°	517.4	7.9
20°-30°	868.4	13.2
30°-40°	983.3	15.0
40°-50°	881.8	13.4
50°-60°	711.6	10.8
60°-70°	495.9	7.6
70°-80°	260.6	4.0
80°-90°	65.5	1.0
90°-100°	37.9	0.6
100°-110°	113.6	1.7
110°-120°	193.2	2.9
120°-130°	254.1	3.9
130°-140°	285.6	4.4
140°-150°	280.8	4.3
150°-160°	236.4	3.6
160°-170°	157.3	2.4
170°-180°	55.1	0.8
0°-30°	1547.2	23.6
0°-40°	2530.6	38.6
0°-60°	4124.0	62.9
0°-90°	4946.0	75.4
90°-120°	344.8	5.3
90°-150°	1165.3	17.8
90°-180°	1614.0	24.6
0°-180°	6560.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1638	1638	1638	1638	1638	
5°	1946	1639	1452	1639	1946	202
15°	2897	1568	1184	1568	2897	836
25°	3438	1430	1046	1430	3438	1508
35°	1852	1256	960	1256	1852	1204
45°	1000	1031	816	1031	1000	791
55°	679	726	648	726	679	610
65°	441	448	457	448	441	439
75°	227	214	244	214	227	243
85°	52	43	48	43	52	62
90°	14	0	14	0	14	9
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°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1738.5	1737.2	1734.0	1736.6	1731.5	1724.4	1723.8	1717.5	1699.1	1697.8	1692.7
5°	1946.1	1939.7	1938.9	1938.1	1927.0	1912.0	1883.4	1881.0	1842.9	1823.8	1800.9
7.5°	2214.9	2218.3	2206.8	2196.6	2162.6	2140.2	2109.6	2070.4	2023.6	1976.1	1944.5
10°	2408.0	2434.2	2401.7	2379.4	2358.8	2319.9	2274.7	2218.3	2161.9	2096.1	2046.1
12.5°	2615.0	2627.9	2621.3	2600.4	2568.3	2509.1	2428.9	2366.9	2315.0	2205.3	2161.0
15°	2896.9	2945.4	2914.4	2843.0	2844.5	2788.1	2683.4	2568.3	2507.2	2411.2	2280.3
17.5°	3197.2	3203.3	3190.1	3130.6	3090.9	3013.4	2916.8	2806.4	2682.6	2566.5	2427.5
20°	3357.2	3352.4	3324.7	3293.8	3225.5	3165.2	3059.6	2936.6	2777.8	2663.6	2511.9
22.5°	3446.2	3438.2	3425.1	3399.1	3342.4	3277.5	3182.8	3048.4	2897.2	2739.8	2564.7
25°	3438.2	3448.5	3450.1	3442.9	3423.1	3384.3	3309.6	3202.5	3051.7	2849.3	2666.8
27.5°	3127.0	3141.7	3184.1	3221.7	3263.8	3306.6	3300.8	3247.7	3136.1	2961.3	2738.1
30°	2815.9	2784.2	2862.8	2962.0	3029.5	3148.5	3215.2	3219.1	3156.4	3006.5	2788.9
32.5°	2384.2	2419.1	2453.9	2576.0	2723.4	2857.1	2989.8	3096.7	3108.9	3009.0	2818.8
35°	1852.4	1896.1	1959.5	2023.1	2181.8	2318.3	2551.6	2754.8	2916.8	2938.2	2821.5
37.5°	1492.8	1514.3	1554.5	1618.1	1721.9	1883.9	2064.4	2321.2	2555.8	2730.3	2737.8
40°	1304.8	1311.1	1356.3	1404.8	1488.9	1622.2	1784.9	2012.0	2292.9	2536.6	2638.2
42.5°	1163.9	1177.8	1197.0	1243.5	1310.5	1410.9	1562.2	1749.7	2007.2	2287.6	2486.4
45°	1000.1	1015.9	1027.8	1058.7	1106.4	1173.9	1279.4	1450.9	1646.9	1936.5	2204.0
47.5°	891.8	893.0	901.9	925.2	957.7	1008.2	1082.9	1193.1	1373.0	1608.0	1882.6
50°	814.4	827.0	830.2	848.4	873.8	911.1	973.0	1066.7	1214.4	1420.7	1673.0
52.5°	759.7	763.6	772.4	785.6	807.8	836.9	890.5	963.8	1079.7	1255.6	1487.6
55°	679.3	679.3	688.1	698.4	711.1	737.3	773.1	827.0	915.1	1051.6	1243.6
57.5°	605.1	609.0	615.2	618.4	629.2	646.5	676.4	717.3	783.0	888.1	1040.9
60°	555.5	562.7	561.9	568.3	577.8	591.3	616.7	650.1	708.7	792.8	921.5
62.5°	512.4	511.9	511.8	519.4	528.9	541.8	558.3	587.1	637.0	711.7	821.1
65°	441.3	439.7	445.2	450.0	453.2	462.7	475.4	500.8	534.1	589.7	674.6
67.5°	378.1	373.5	376.5	378.1	383.5	390.9	402.8	418.6	445.0	489.7	553.7
70°	335.0	330.9	330.1	331.7	336.5	342.0	350.8	365.9	390.5	426.2	473.0
72.5°	290.4	287.8	287.6	291.1	293.4	297.0	303.2	317.0	336.5	363.3	407.0
75°	227.0	227.0	227.0	227.8	230.1	233.4	238.1	245.2	260.3	279.3	308.7
77.5°	170.2	170.0	169.1	168.8	172.4	173.8	174.9	181.6	190.0	202.9	224.3
80°	133.3	129.4	131.0	133.3	134.9	135.7	138.1	139.7	146.8	154.0	169.1
82.5°	99.1	95.7	96.0	99.7	100.0	100.8	103.2	105.4	108.1	114.6	122.7
85°	52.4	52.4	53.2	53.2	53.9	53.2	55.5	56.4	56.4	60.3	65.0
87.5°	21.8	20.5	21.1	21.7	21.0	21.6	22.1	22.7	23.2	23.8	24.1
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°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1688.9	1683.8	1678.8	1669.9	1662.2	1651.4	1648.3	1644.5	1633.1	1623.0	1615.3
5°	1792.1	1773.0	1745.2	1719.9	1699.3	1671.5	1655.6	1638.9	1615.1	1593.7	1576.2
7.5°	1900.1	1862.6	1819.4	1772.7	1729.3	1687.4	1653.6	1623.4	1590.0	1558.4	1533.9
10°	1985.8	1931.8	1871.5	1806.4	1750.8	1696.9	1651.6	1611.9	1569.1	1531.8	1500.9
12.5°	2083.6	2003.6	1920.4	1841.3	1775.6	1700.7	1645.9	1595.5	1546.9	1502.0	1467.2
15°	2199.3	2097.7	1999.2	1890.6	1790.5	1696.9	1631.8	1568.3	1512.0	1465.9	1421.5
17.5°	2304.7	2189.6	2059.9	1927.6	1807.1	1696.0	1604.8	1533.1	1462.6	1406.2	1361.9
20°	2364.4	2233.4	2086.6	1949.2	1815.9	1692.1	1592.2	1506.4	1430.2	1370.7	1320.7
22.5°	2415.8	2262.6	2110.7	1963.9	1815.3	1681.9	1568.6	1480.4	1397.9	1339.6	1286.4
25°	2469.1	2285.8	2133.4	1961.2	1795.3	1657.2	1530.2	1430.2	1347.7	1279.4	1224.7
27.5°	2514.9	2284.2	2103.3	1918.1	1763.8	1625.5	1489.9	1382.6	1294.9	1220.8	1165.3
30°	2545.3	2287.3	2072.2	1889.0	1733.4	1590.5	1458.8	1350.8	1258.8	1183.4	1130.9
32.5°	2564.4	2285.4	2043.7	1848.4	1685.2	1558.7	1425.1	1313.3	1218.8	1144.7	1094.2
35°	2575.5	2271.5	1994.5	1764.3	1607.2	1484.2	1372.3	1256.4	1157.2	1088.1	1031.0
37.5°	2553.2	2242.1	1937.3	1683.3	1511.4	1390.2	1296.1	1197.3	1102.4	1026.4	977.1
40°	2518.3	2223.1	1892.9	1626.3	1445.3	1328.6	1248.5	1151.7	1057.9	985.7	939.7
42.5°	2451.6	2184.3	1844.0	1562.8	1376.7	1260.0	1186.2	1105.3	1016.7	948.9	902.9
45°	2289.0	2100.0	1770.7	1467.5	1275.5	1154.8	1089.7	1031.0	950.8	884.9	845.3
47.5°	2063.3	1973.3	1664.7	1367.1	1169.7	1053.7	986.0	938.8	880.2	827.0	788.9
50°	1906.4	1869.1	1592.9	1298.5	1099.2	985.7	920.7	877.8	835.8	782.5	747.6
52.5°	1725.5	1748.5	1509.1	1227.3	1027.5	915.9	854.6	820.6	782.4	738.7	708.3
55°	1470.7	1554.0	1364.3	1107.9	920.7	814.4	756.4	726.2	704.0	671.5	645.3
57.5°	1232.1	1338.2	1207.8	984.9	815.8	724.0	668.4	635.6	621.3	604.3	583.7
60°	1090.6	1195.3	1096.1	902.4	745.3	657.9	608.7	581.0	566.6	554.8	537.3
62.5°	964.1	1070.2	986.8	818.6	676.0	595.1	552.2	525.1	514.0	507.8	492.9
65°	790.5	881.8	826.2	688.1	577.0	505.5	466.7	447.7	437.3	434.9	425.5
67.5°	643.4	712.9	672.4	570.8	483.3	421.6	388.6	372.4	364.5	363.7	356.5
70°	546.8	611.9	581.0	488.9	413.5	365.1	336.5	322.2	317.5	316.7	312.8
72.5°	471.9	517.4	492.7	415.9	357.6	313.7	292.7	277.8	272.4	273.5	270.8
75°	349.2	383.3	369.1	315.9	269.0	240.4	223.0	213.5	208.7	211.2	207.9
77.5°	251.3	272.9	260.0	223.2	194.3	173.7	160.8	154.9	150.7	150.5	149.1
80°	189.7	202.4	195.2	173.0	149.3	131.8	121.4	117.4	115.1	114.3	113.5
82.5°	135.1	145.9	137.4	122.2	106.0	95.5	89.7	84.4	82.7	83.2	82.4
85°	68.3	72.2	69.1	59.5	53.2	48.4	45.2	42.8	41.3	42.1	40.5
87.5°	25.1	25.5	23.3	20.6	19.1	17.0	16.8	15.3	14.2	14.4	14.0
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: P332211-840

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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: P332211-840

CATALOG NUMBER: S123DIW-S1165D460U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1610.8	1606.4	1600.0	1590.5	1582.9	1570.8	1570.8	1572.8	1572.8	1572.2	1570.8
5°	1562.0	1550.0	1535.8	1519.1	1501.7	1484.2	1481.0	1474.6	1469.9	1466.7	1462.8
7.5°	1510.4	1489.2	1468.4	1445.1	1423.8	1406.2	1394.0	1383.8	1377.4	1370.4	1365.2
10°	1475.4	1449.3	1424.6	1400.1	1373.0	1351.6	1338.2	1328.6	1321.5	1315.1	1311.9
12.5°	1434.2	1404.2	1377.1	1353.7	1324.1	1302.1	1289.3	1284.8	1276.4	1263.0	1256.1
15°	1373.8	1346.0	1313.5	1277.8	1263.5	1236.6	1221.4	1214.4	1209.5	1199.2	1196.1
17.5°	1322.2	1285.9	1249.4	1222.7	1196.2	1174.3	1165.9	1157.0	1150.6	1142.3	1139.7
20°	1281.0	1248.5	1215.1	1186.6	1158.7	1135.0	1127.8	1121.5	1115.1	1111.2	1107.9
22.5°	1239.1	1206.6	1178.9	1152.3	1122.6	1107.0	1099.2	1092.3	1087.8	1085.1	1082.0
25°	1180.2	1151.7	1120.6	1096.8	1073.1	1062.7	1057.9	1054.0	1050.9	1046.8	1046.0
27.5°	1127.5	1096.4	1071.3	1049.0	1032.0	1023.4	1018.8	1016.8	1017.5	1019.0	1019.9
30°	1088.1	1059.6	1038.9	1019.9	1004.0	996.0	995.2	995.2	998.5	999.3	1000.8
32.5°	1052.0	1028.4	1007.8	989.4	977.3	971.9	974.9	974.9	977.4	979.6	982.4
35°	999.3	978.6	962.7	946.8	936.5	938.9	940.5	942.1	946.0	950.8	954.0
37.5°	948.9	931.0	914.4	902.1	897.4	901.6	905.4	908.8	913.3	917.1	920.2
40°	912.7	899.2	883.3	872.2	873.8	876.3	879.4	883.3	887.4	889.7	892.9
42.5°	879.1	864.9	852.9	843.6	845.9	848.9	850.8	852.9	857.5	861.8	863.6
45°	827.8	816.7	805.6	800.0	801.6	803.2	804.8	807.2	811.1	814.4	815.1
47.5°	770.2	762.4	755.0	749.5	752.0	751.4	753.6	758.6	759.8	761.7	766.2
50°	733.4	726.2	717.5	715.9	715.9	715.9	716.7	723.1	723.1	726.2	729.4
52.5°	692.8	688.1	682.6	679.7	678.4	678.4	681.8	685.0	686.2	690.6	693.9
55°	632.6	627.8	623.0	620.7	619.0	620.7	627.0	628.5	632.6	634.9	637.3
57.5°	569.9	566.2	562.4	561.1	560.8	562.9	566.3	571.1	572.1	579.4	583.0
60°	528.6	523.0	519.9	519.9	518.3	525.4	523.8	531.8	533.3	538.2	543.7
62.5°	486.0	478.6	477.4	477.4	479.6	481.6	483.8	487.4	491.4	497.5	501.8
65°	417.5	413.5	419.1	418.3	416.7	421.4	421.4	425.5	430.2	435.8	444.4
67.5°	352.5	350.5	350.9	350.9	353.4	356.1	358.3	361.7	367.5	373.3	379.1
70°	308.7	311.1	307.2	310.3	312.8	313.5	315.1	319.8	326.2	330.1	336.5
72.5°	266.2	266.0	266.5	267.8	270.1	271.6	273.2	278.6	285.6	288.9	294.0
75°	204.8	204.0	206.3	206.3	210.4	211.9	213.5	215.9	222.3	227.0	231.0
77.5°	149.6	150.5	150.0	152.7	151.6	151.9	156.8	159.3	159.9	169.3	171.3
80°	112.7	114.3	115.1	115.8	116.6	115.1	120.7	123.0	123.0	128.6	132.5
82.5°	81.0	81.9	84.0	84.7	84.9	86.5	86.9	88.8	90.7	93.0	98.3
85°	40.5	42.8	43.6	42.8	43.6	42.1	44.4	45.2	46.0	46.0	46.0
87.5°	13.6	14.4	14.1	15.0	14.6	15.6	15.7	14.4	14.5	16.5	14.0
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: P332211-840

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**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: P332211-840

CATALOG NUMBER: S123DIW-S1165D460U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1566.4	1565.8	1570.2	1567.0	1570.2	1565.8	1566.4	1570.8	1572.2	1572.8	1572.8
5°	1457.9	1460.4	1452.4	1452.4	1452.4	1460.4	1457.9	1462.8	1466.7	1469.9	1474.6
7.5°	1361.5	1358.0	1358.3	1354.0	1358.3	1358.0	1361.5	1365.2	1370.4	1377.4	1383.8
10°	1302.4	1297.7	1296.1	1296.9	1296.1	1297.7	1302.4	1311.9	1315.1	1321.5	1328.6
12.5°	1253.5	1252.5	1242.1	1242.2	1242.1	1252.5	1253.5	1256.1	1263.0	1276.4	1284.8
15°	1196.1	1181.0	1179.4	1184.2	1179.4	1181.0	1196.1	1196.1	1199.2	1209.5	1214.4
17.5°	1138.4	1130.5	1130.9	1128.6	1130.9	1130.5	1138.4	1139.7	1142.3	1150.6	1157.0
20°	1107.9	1103.2	1102.4	1096.8	1102.4	1103.2	1107.9	1107.9	1111.2	1115.1	1121.5
22.5°	1080.1	1078.4	1078.9	1072.8	1078.9	1078.4	1080.1	1082.0	1085.1	1087.8	1092.3
25°	1045.3	1049.2	1046.0	1046.0	1046.0	1049.2	1045.3	1046.0	1046.8	1050.9	1054.0
27.5°	1021.8	1021.6	1020.1	1020.1	1020.1	1021.6	1021.8	1019.9	1019.0	1017.5	1016.8
30°	1004.0	1003.2	1004.8	1004.8	1004.8	1003.2	1004.0	1000.8	999.3	998.5	995.2
32.5°	986.2	987.3	987.6	988.3	987.6	987.3	986.2	982.4	979.6	977.4	974.9
35°	958.8	959.6	961.9	960.4	961.9	959.6	958.8	954.0	950.8	946.0	942.1
37.5°	921.6	925.2	924.4	925.7	924.4	925.2	921.6	920.2	917.1	913.3	908.8
40°	893.6	896.1	895.2	895.2	895.2	896.1	893.6	892.9	889.7	887.4	883.3
42.5°	865.2	866.9	864.7	863.5	864.7	866.9	865.2	863.6	861.8	857.5	852.9
45°	818.3	816.7	819.1	815.9	819.1	816.7	818.3	815.1	814.4	811.1	807.2
47.5°	765.9	767.5	768.1	770.5	768.1	767.5	765.9	766.2	761.7	759.8	758.6
50°	730.9	735.7	735.7	735.0	735.7	735.7	730.9	729.4	726.2	723.1	723.1
52.5°	696.7	698.9	702.1	702.0	702.1	698.9	696.7	693.9	690.6	686.2	685.0
55°	643.7	645.3	646.8	647.6	646.8	645.3	643.7	637.3	634.9	632.6	628.5
57.5°	588.8	588.1	591.9	593.0	591.9	588.1	588.8	583.0	579.4	572.1	571.1
60°	550.0	550.0	556.3	558.8	556.3	550.0	550.0	543.7	538.2	533.3	531.8
62.5°	508.8	511.3	517.7	514.3	517.7	511.3	508.8	501.8	497.5	491.4	487.4
65°	448.4	454.7	453.9	457.2	453.9	454.7	448.4	444.4	435.8	430.2	425.5
67.5°	385.4	389.4	395.1	395.6	395.1	389.4	385.4	379.1	373.3	367.5	361.7
70°	342.8	346.8	350.0	352.3	350.0	346.8	342.8	336.5	330.1	326.2	319.8
72.5°	301.6	303.7	311.2	307.9	311.2	303.7	301.6	294.0	288.9	285.6	278.6
75°	236.5	242.1	246.8	244.5	246.8	242.1	236.5	231.0	227.0	222.3	215.9
77.5°	174.9	180.5	182.7	180.7	182.7	180.5	174.9	171.3	169.3	159.9	159.3
80°	138.1	137.3	142.1	141.3	142.1	137.3	138.1	132.5	128.6	123.0	123.0
82.5°	101.3	100.5	102.7	103.2	102.7	100.5	101.3	98.3	93.0	90.7	88.8
85°	49.2	51.6	48.4	47.7	48.4	51.6	49.2	46.0	46.0	46.0	45.2
87.5°	14.0	14.1	13.5	12.9	13.5	14.1	14.0	14.0	16.5	14.5	14.4
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: S123DIW-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



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1570.8	1570.8	1582.9	1590.5	1600.0	1606.4	1610.8	1615.3	1623.0	1633.1	1644.5
5°	1481.0	1484.2	1501.7	1519.1	1535.8	1550.0	1562.0	1576.2	1593.7	1615.1	1638.9
7.5°	1394.0	1406.2	1423.8	1445.1	1468.4	1489.2	1510.4	1533.9	1558.4	1590.0	1623.4
10°	1338.2	1351.6	1373.0	1400.1	1424.6	1449.3	1475.4	1500.9	1531.8	1569.1	1611.9
12.5°	1289.3	1302.1	1324.1	1353.7	1377.1	1404.2	1434.2	1467.2	1502.0	1546.9	1595.5
15°	1221.4	1236.6	1263.5	1277.8	1313.5	1346.0	1373.8	1421.5	1465.9	1512.0	1568.3
17.5°	1165.9	1174.3	1196.2	1222.7	1249.4	1285.9	1322.2	1361.9	1406.2	1462.6	1533.1
20°	1127.8	1135.0	1158.7	1186.6	1215.1	1248.5	1281.0	1320.7	1370.7	1430.2	1506.4
22.5°	1099.2	1107.0	1122.6	1152.3	1178.9	1206.6	1239.1	1286.4	1339.6	1397.9	1480.4
25°	1057.9	1062.7	1073.1	1096.8	1120.6	1151.7	1180.2	1224.7	1279.4	1347.7	1430.2
27.5°	1018.8	1023.4	1032.0	1049.0	1071.3	1096.4	1127.5	1165.3	1220.8	1294.9	1382.6
30°	995.2	996.0	1004.0	1019.9	1038.9	1059.6	1088.1	1130.9	1183.4	1258.8	1350.8
32.5°	974.9	971.9	977.3	989.4	1007.8	1028.4	1052.0	1094.2	1144.7	1218.8	1313.3
35°	940.5	938.9	936.5	946.8	962.7	978.6	999.3	1031.0	1088.1	1157.2	1256.4
37.5°	905.4	901.6	897.4	902.1	914.4	931.0	948.9	977.1	1026.4	1102.4	1197.3
40°	879.4	876.3	873.8	872.2	883.3	899.2	912.7	939.7	985.7	1057.9	1151.7
42.5°	850.8	848.9	845.9	843.6	852.9	864.9	879.1	902.9	948.9	1016.7	1105.3
45°	804.8	803.2	801.6	800.0	805.6	816.7	827.8	845.3	884.9	950.8	1031.0
47.5°	753.6	751.4	752.0	749.5	755.0	762.4	770.2	788.9	827.0	880.2	938.8
50°	716.7	715.9	715.9	715.9	717.5	726.2	733.4	747.6	782.5	835.8	877.8
52.5°	681.8	678.4	678.4	679.7	682.6	688.1	692.8	708.3	738.7	782.4	820.6
55°	627.0	620.7	619.0	620.7	623.0	627.8	632.6	645.3	671.5	704.0	726.2
57.5°	566.3	562.9	560.8	561.1	562.4	566.2	569.9	583.7	604.3	621.3	635.6
60°	523.8	525.4	518.3	519.9	519.9	523.0	528.6	537.3	554.8	566.6	581.0
62.5°	483.8	481.6	479.6	477.4	477.4	478.6	486.0	492.9	507.8	514.0	525.1
65°	421.4	421.4	416.7	418.3	419.1	413.5	417.5	425.5	434.9	437.3	447.7
67.5°	358.3	356.1	353.4	350.9	350.9	350.5	352.5	356.5	363.7	364.5	372.4
70°	315.1	313.5	312.8	310.3	307.2	311.1	308.7	312.8	316.7	317.5	322.2
72.5°	273.2	271.6	270.1	267.8	266.5	266.0	266.2	270.8	273.5	272.4	277.8
75°	213.5	211.9	210.4	206.3	206.3	204.0	204.8	207.9	211.2	208.7	213.5
77.5°	156.8	151.9	151.6	152.7	150.0	150.5	149.6	149.1	150.5	150.7	154.9
80°	120.7	115.1	116.6	115.8	115.1	114.3	112.7	113.5	114.3	115.1	117.4
82.5°	86.9	86.5	84.9	84.7	84.0	81.9	81.0	82.4	83.2	82.7	84.4
85°	44.4	42.1	43.6	42.8	43.6	42.8	40.5	40.5	42.1	41.3	42.8
87.5°	15.7	15.6	14.6	15.0	14.1	14.4	13.6	14.0	14.4	14.2	15.3
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: S123DIW-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: P332211-840

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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1648.3	1651.4	1662.2	1669.9	1678.8	1683.8	1688.9	1692.7	1697.8	1699.1	1717.5
5°	1655.6	1671.5	1699.3	1719.9	1745.2	1773.0	1792.1	1800.9	1823.8	1842.9	1881.0
7.5°	1653.6	1687.4	1729.3	1772.7	1819.4	1862.6	1900.1	1944.5	1976.1	2023.6	2070.4
10°	1651.6	1696.9	1750.8	1806.4	1871.5	1931.8	1985.8	2046.1	2096.1	2161.9	2218.3
12.5°	1645.9	1700.7	1775.6	1841.3	1920.4	2003.6	2083.6	2161.0	2205.3	2315.0	2366.9
15°	1631.8	1696.9	1790.5	1890.6	1999.2	2097.7	2199.3	2280.3	2411.2	2507.2	2568.3
17.5°	1604.8	1696.0	1807.1	1927.6	2059.9	2189.6	2304.7	2427.5	2566.5	2682.6	2806.4
20°	1592.2	1692.1	1815.9	1949.2	2086.6	2233.4	2364.4	2511.9	2663.6	2777.8	2936.6
22.5°	1568.6	1681.9	1815.3	1963.9	2110.7	2262.6	2415.8	2564.7	2739.8	2897.2	3048.4
25°	1530.2	1657.2	1795.3	1961.2	2133.4	2285.8	2469.1	2666.8	2849.3	3051.7	3202.5
27.5°	1489.9	1625.5	1763.8	1918.1	2103.3	2284.2	2514.9	2738.1	2961.3	3136.1	3247.7
30°	1458.8	1590.5	1733.4	1889.0	2072.2	2287.3	2545.3	2788.9	3006.5	3156.4	3219.1
32.5°	1425.1	1558.7	1685.2	1848.4	2043.7	2285.4	2564.4	2818.8	3009.0	3108.9	3096.7
35°	1372.3	1484.2	1607.2	1764.3	1994.5	2271.5	2575.5	2821.5	2938.2	2916.8	2754.8
37.5°	1296.1	1390.2	1511.4	1683.3	1937.3	2242.1	2553.2	2737.8	2730.3	2555.8	2321.2
40°	1248.5	1328.6	1445.3	1626.3	1892.9	2223.1	2518.3	2638.2	2536.6	2292.9	2012.0
42.5°	1186.2	1260.0	1376.7	1562.8	1844.0	2184.3	2451.6	2486.4	2287.6	2007.2	1749.7
45°	1089.7	1154.8	1275.5	1467.5	1770.7	2100.0	2289.0	2204.0	1936.5	1646.9	1450.9
47.5°	986.0	1053.7	1169.7	1367.1	1664.7	1973.3	2063.3	1882.6	1608.0	1373.0	1193.1
50°	920.7	985.7	1099.2	1298.5	1592.9	1869.1	1906.4	1673.0	1420.7	1214.4	1066.7
52.5°	854.6	915.9	1027.5	1227.3	1509.1	1748.5	1725.5	1487.6	1255.6	1079.7	963.8
55°	756.4	814.4	920.7	1107.9	1364.3	1554.0	1470.7	1243.6	1051.6	915.1	827.0
57.5°	668.4	724.0	815.8	984.9	1207.8	1338.2	1232.1	1040.9	888.1	783.0	717.3
60°	608.7	657.9	745.3	902.4	1096.1	1195.3	1090.6	921.5	792.8	708.7	650.1
62.5°	552.2	595.1	676.0	818.6	986.8	1070.2	964.1	821.1	711.7	637.0	587.1
65°	466.7	505.5	577.0	688.1	826.2	881.8	790.5	674.6	589.7	534.1	500.8
67.5°	388.6	421.6	483.3	570.8	672.4	712.9	643.4	553.7	489.7	445.0	418.6
70°	336.5	365.1	413.5	488.9	581.0	611.9	546.8	473.0	426.2	390.5	365.9
72.5°	292.7	313.7	357.6	415.9	492.7	517.4	471.9	407.0	363.3	336.5	317.0
75°	223.0	240.4	269.0	315.9	369.1	383.3	349.2	308.7	279.3	260.3	245.2
77.5°	160.8	173.7	194.3	223.2	260.0	272.9	251.3	224.3	202.9	190.0	181.6
80°	121.4	131.8	149.3	173.0	195.2	202.4	189.7	169.1	154.0	146.8	139.7
82.5°	89.7	95.5	106.0	122.2	137.4	145.9	135.1	122.7	114.6	108.1	105.4
85°	45.2	48.4	53.2	59.5	69.1	72.2	68.3	65.0	60.3	56.4	56.4
87.5°	16.8	17.0	19.1	20.6	23.3	25.5	25.1	24.1	23.8	23.2	22.7
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°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1723.8	1724.4	1731.5	1736.6	1734.0	1737.2	1738.5
5°	1883.4	1912.0	1927.0	1938.1	1938.9	1939.7	1946.1
7.5°	2109.6	2140.2	2162.6	2196.6	2206.8	2218.3	2214.9
10°	2274.7	2319.9	2358.8	2379.4	2401.7	2434.2	2408.0
12.5°	2428.9	2509.1	2568.3	2600.4	2621.3	2627.9	2615.0
15°	2683.4	2788.1	2844.5	2843.0	2914.4	2945.4	2896.9
17.5°	2916.8	3013.4	3090.9	3130.6	3190.1	3203.3	3197.2
20°	3059.6	3165.2	3225.5	3293.8	3324.7	3352.4	3357.2
22.5°	3182.8	3277.5	3342.4	3399.1	3425.1	3438.2	3446.2
25°	3309.6	3384.3	3423.1	3442.9	3450.1	3448.5	3438.2
27.5°	3300.8	3306.6	3263.8	3221.7	3184.1	3141.7	3127.0
30°	3215.2	3148.5	3029.5	2962.0	2862.8	2784.2	2815.9
32.5°	2989.8	2857.1	2723.4	2576.0	2453.9	2419.1	2384.2
35°	2551.6	2318.3	2181.8	2023.1	1959.5	1896.1	1852.4
37.5°	2064.4	1883.9	1721.9	1618.1	1554.5	1514.3	1492.8
40°	1784.9	1622.2	1488.9	1404.8	1356.3	1311.1	1304.8
42.5°	1562.2	1410.9	1310.5	1243.5	1197.0	1177.8	1163.9
45°	1279.4	1173.9	1106.4	1058.7	1027.8	1015.9	1000.1
47.5°	1082.9	1008.2	957.7	925.2	901.9	893.0	891.8
50°	973.0	911.1	873.8	848.4	830.2	827.0	814.4
52.5°	890.5	836.9	807.8	785.6	772.4	763.6	759.7
55°	773.1	737.3	711.1	698.4	688.1	679.3	679.3
57.5°	676.4	646.5	629.2	618.4	615.2	609.0	605.1
60°	616.7	591.3	577.8	568.3	561.9	562.7	555.5
62.5°	558.3	541.8	528.9	519.4	511.8	511.9	512.4
65°	475.4	462.7	453.2	450.0	445.2	439.7	441.3
67.5°	402.8	390.9	383.5	378.1	376.5	373.5	378.1
70°	350.8	342.0	336.5	331.7	330.1	330.9	335.0
72.5°	303.2	297.0	293.4	291.1	287.6	287.8	290.4
75°	238.1	233.4	230.1	227.8	227.0	227.0	227.0
77.5°	174.9	173.8	172.4	168.8	169.1	170.0	170.2
80°	138.1	135.7	134.9	133.3	131.0	129.4	133.3
82.5°	103.2	100.8	100.0	99.7	96.0	95.7	99.1
85°	55.5	53.2	53.9	53.2	53.2	52.4	52.4
87.5°	22.1	21.6	21.0	21.7	21.1	20.5	21.8
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)