

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: P332114

Luminaire Tested: **S123DIW-S340D1535U835-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332114  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123DIW-S340D1535U835-4F0-1E-UDD-A  
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 340 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 1535 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7593.3 lumens  
Efficiency: N/A  
Efficacy: 142.2 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-Indirect

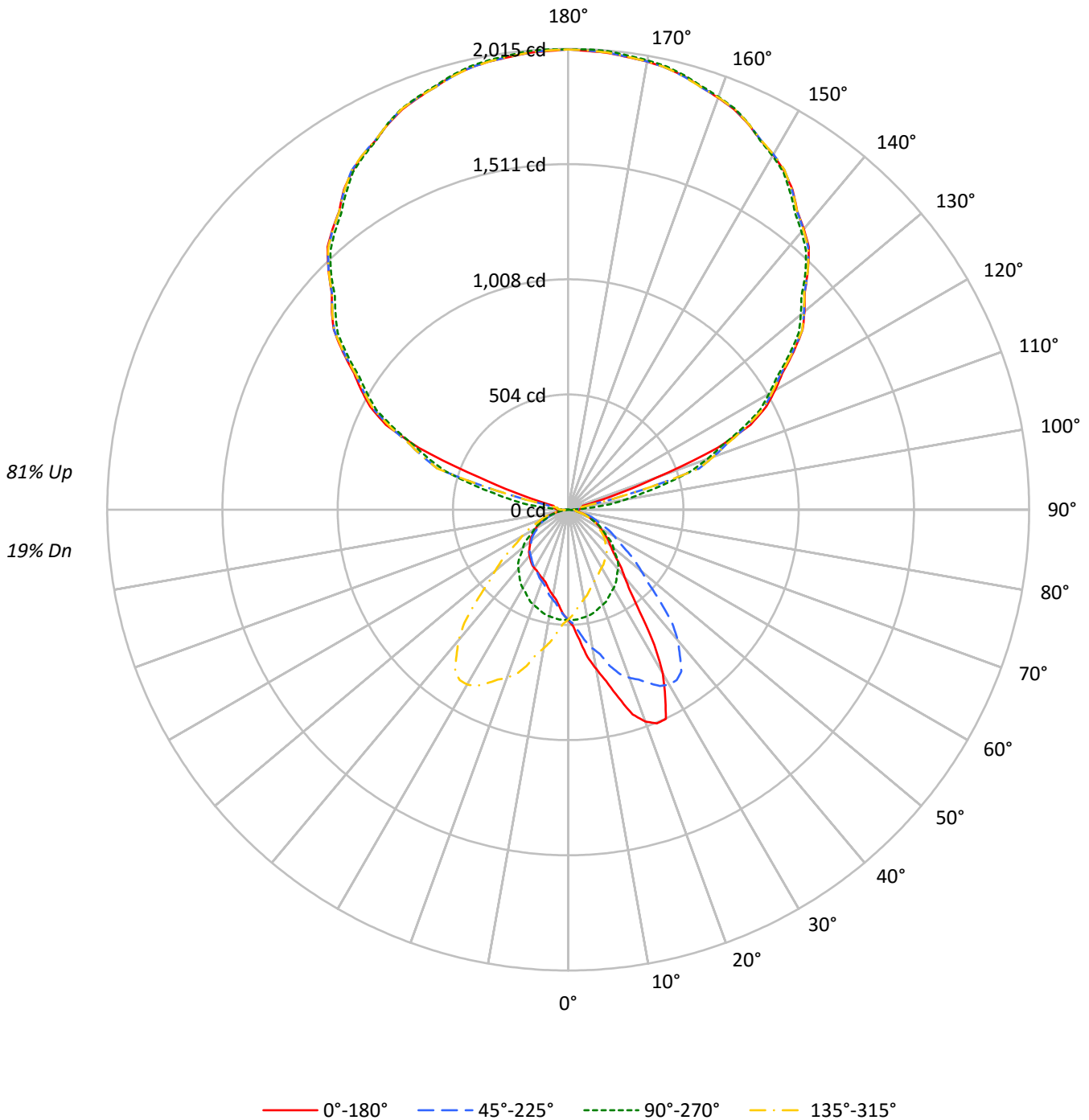
Input Watts (W): 53.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	100	100	100	100	88	88	88	88	66	66	66	46	46	46	28	28	28	19				
1	91	87	83	80	80	77	74	71	58	56	54	41	39	38	25	24	24	16				
2	83	76	70	65	73	67	62	58	51	48	45	36	34	32	22	21	20	14				
3	76	67	60	54	66	59	53	49	45	41	38	32	29	27	19	18	17	12				
4	69	59	52	46	61	52	46	41	40	36	32	28	25	23	17	16	15	10				
5	63	52	45	39	56	46	40	35	35	31	28	25	22	20	16	14	13	9				
6	58	47	39	34	51	42	35	30	32	27	24	23	20	18	14	13	11	8				
7	54	42	34	29	47	37	31	26	29	24	21	21	18	15	13	11	10	7				
8	50	38	31	26	44	34	28	23	26	22	18	19	16	14	12	10	9	6				
9	46	34	27	23	41	31	25	20	24	19	16	17	14	12	11	9	8	6				
10	43	31	25	20	38	28	22	18	22	17	14	16	13	11	10	8	7	5				

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

	0°	90°	180°	270°
0°	5175	5175	5175	5175
5°	6172	5198	4606	5198
10°	7725	5172	4161	5172
15°	9475	5129	3874	5129
20°	11287	5065	3688	5065
25°	11986	4986	3646	4986
30°	10274	4928	3665	4928
35°	7144	4846	3704	4846
40°	5382	4749	3693	4749
45°	4468	4606	3646	4606
50°	4002	4315	3612	4315
55°	3742	4001	3567	4001
60°	3511	3670	3531	3670
65°	3298	3347	3418	3347
70°	3094	2977	3254	2977
75°	2770	2608	2986	2608
80°	2424	2139	2572	2139
85°	1902	1556	1729	1556



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.4	0.6
10°-20°	151.9	2.0
20°-30°	254.9	3.4
30°-40°	288.6	3.8
40°-50°	258.8	3.4
50°-60°	208.9	2.8
60°-70°	145.6	1.9
70°-80°	76.5	1.0
80°-90°	24.3	0.3
90°-100°	73.2	1.0
100°-110°	348.7	4.6
110°-120°	837.5	11.0
120°-130°	1066.5	14.0
130°-140°	1139.5	15.0
140°-150°	1065.6	14.0
150°-160°	859.5	11.3
160°-170°	554.7	7.3
170°-180°	191.2	2.5
0°-30°	454.2	6.0
0°-40°	742.8	9.8
0°-60°	1210.5	15.9
0°-90°	1456.9	19.2
90°-120°	1259.4	16.6
90°-150°	4531.0	59.7
90°-180°	6136.0	80.8
0°-180°	7593.3	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	481	481	481	481	481	
5°	571	481	426	481	571	59
15°	850	460	348	460	850	246
25°	1009	420	307	420	1009	443
35°	544	369	282	369	544	353
45°	294	303	240	303	294	232
55°	199	213	190	213	199	179
65°	130	131	134	131	130	129
75°	67	63	72	63	67	71
85°	15	13	14	13	15	19
90°	45	2	45	2	45	21
95°	57	91	57	91	57	48
105°	66	446	66	446	66	150
115°	879	836	879	836	879	812
125°	1202	1178	1202	1178	1202	1073
135°	1482	1467	1482	1467	1482	1142
145°	1709	1692	1709	1692	1709	1067
155°	1861	1864	1861	1864	1861	858
165°	1961	1966	1961	1966	1961	554
175°	2005	2012	2005	2012	2005	191
180°	2012	2012	2012	2012	2012	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8
2.5°	510.3	509.9	509.0	509.7	508.2	506.2	506.0	504.1	498.7	498.4	496.9
5°	571.2	569.4	569.1	568.9	565.6	561.2	552.8	552.1	540.9	535.4	528.6
7.5°	650.2	651.1	647.7	644.8	634.8	628.2	619.2	607.7	594.0	580.0	570.8
10°	706.8	714.5	705.0	698.4	692.4	681.0	667.7	651.1	634.6	615.3	600.6
12.5°	767.6	771.3	769.4	763.3	753.9	736.5	713.0	694.7	679.5	647.3	634.3
15°	850.3	864.5	855.4	834.5	834.9	818.4	787.7	753.9	735.9	707.7	669.3
17.5°	938.5	940.2	936.4	918.9	907.3	884.5	856.1	823.8	787.4	753.3	712.5
20°	985.4	984.0	975.9	966.8	946.8	929.1	898.1	862.0	815.4	781.8	737.3
22.5°	1011.5	1009.2	1005.3	997.7	981.1	962.1	934.2	894.8	850.4	804.2	752.8
25°	1009.2	1012.2	1012.7	1010.6	1004.8	993.4	971.5	940.0	895.8	836.3	782.8
27.5°	917.9	922.2	934.6	945.7	958.0	970.6	968.9	953.3	920.5	869.2	803.7
30°	826.6	817.2	840.3	869.4	889.2	924.2	943.7	944.9	926.5	882.5	818.6
32.5°	699.8	710.1	720.3	756.1	799.4	838.6	877.6	908.9	912.5	883.2	827.4
35°	543.7	556.6	575.2	593.8	640.4	680.5	749.0	808.6	856.1	862.4	828.2
37.5°	438.2	444.5	456.3	475.0	505.4	553.0	605.9	681.3	750.2	801.4	803.6
40°	383.0	384.9	398.1	412.3	437.0	476.2	523.9	590.6	673.0	744.6	774.4
42.5°	341.6	345.7	351.4	365.0	384.7	414.1	458.5	513.6	589.2	671.5	729.8
45°	293.5	298.2	301.7	310.8	324.8	344.6	375.5	425.9	483.4	568.4	646.9
47.5°	261.8	262.1	264.7	271.6	281.1	296.0	317.9	350.2	403.0	472.0	552.6
50°	239.0	242.7	243.7	249.0	256.5	267.4	285.6	313.1	356.4	417.0	491.1
52.5°	223.0	224.1	226.7	230.6	237.1	245.6	261.4	282.9	316.9	368.6	436.7
55°	199.4	199.4	202.0	205.0	208.7	216.4	226.9	242.7	268.6	308.7	365.1
57.5°	177.6	178.8	180.6	181.5	184.7	189.8	198.5	210.6	229.8	260.7	305.5
60°	163.1	165.2	164.9	166.8	169.6	173.6	181.0	190.8	208.0	232.7	270.5
62.5°	150.4	150.3	150.2	152.5	155.2	159.0	163.9	172.3	187.0	208.9	241.0
65°	129.5	129.1	130.7	132.1	133.0	135.8	139.5	147.0	156.8	173.1	198.0
67.5°	111.0	109.6	110.5	111.0	112.6	114.8	118.3	122.9	130.6	143.7	162.5
70°	98.3	97.1	96.9	97.4	98.8	100.4	103.0	107.4	114.6	125.1	138.8
72.5°	85.3	84.5	84.4	85.5	86.1	87.2	89.0	93.0	98.8	106.7	119.5
75°	66.6	66.6	66.6	66.9	67.6	68.5	69.9	72.0	76.4	82.0	90.6
77.5°	49.9	49.9	49.6	49.6	50.6	51.0	51.3	53.3	55.8	59.5	65.8
80°	39.1	38.0	38.4	39.1	39.6	39.8	40.5	41.0	43.1	45.2	49.6
82.5°	29.1	28.1	28.2	29.3	29.4	29.6	30.3	30.9	31.7	33.6	36.0
85°	15.4	15.4	15.6	15.6	15.8	15.6	16.3	16.5	16.5	17.7	19.1
87.5°	14.6	14.1	14.1	14.2	13.8	13.8	13.8	13.7	13.6	13.5	12.8
90°	44.8	44.2	43.5	42.9	42.2	41.2	39.9	38.5	37.2	35.9	31.6
92.5°	49.6	49.2	48.8	48.4	48.0	46.8	44.7	42.5	40.4	38.3	35.0
95°	56.8	56.8	56.8	56.8	56.8	55.6	53.3	51.0	48.7	46.3	42.7
97.5°	61.6	61.3	60.9	60.6	60.3	58.8	56.1	53.5	50.8	48.1	42.1
100°	62.8	62.5	62.1	61.8	61.5	60.0	57.3	54.6	52.0	49.3	41.2
102.5°	64.0	63.4	62.8	62.2	61.6	60.4	57.7	54.9	52.1	49.4	41.5
105°	65.8	65.1	64.5	63.8	63.1	62.2	59.4	56.6	53.8	51.1	43.3
107.5°	206.6	250.9	295.2	339.6	383.9	427.6	470.7	513.8	557.0	600.1	595.4
110°	411.1	458.6	506.1	553.6	601.1	630.4	641.3	652.3	663.3	674.2	670.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	705.3	715.4	725.4	735.4	745.5	750.4	750.2	750.0	749.8	749.6	745.9
115°	879.1	877.7	876.4	875.1	873.7	871.4	868.1	864.8	861.4	858.1	855.1
117.5°	976.5	976.3	976.0	975.7	975.5	974.0	971.3	968.7	966.0	963.4	961.8
120°	1043.5	1043.5	1043.5	1043.5	1043.5	1042.2	1039.5	1036.9	1034.2	1031.5	1030.5
122.5°	1109.3	1109.0	1108.7	1108.5	1108.2	1107.2	1105.3	1103.4	1101.6	1099.7	1098.4
125°	1202.0	1201.3	1200.6	1200.0	1199.3	1198.6	1198.0	1197.3	1196.7	1196.0	1194.7
127.5°	1291.1	1291.7	1292.4	1293.1	1293.7	1293.5	1292.5	1291.4	1290.3	1289.3	1287.7
130°	1348.5	1349.1	1349.8	1350.5	1351.1	1350.8	1349.5	1348.1	1346.8	1345.5	1344.2
132.5°	1401.1	1402.0	1403.0	1403.9	1404.8	1404.6	1403.3	1402.0	1400.6	1399.3	1398.2
135°	1481.5	1482.5	1483.5	1484.5	1485.5	1485.5	1484.5	1483.5	1482.5	1481.5	1480.2
137.5°	1557.2	1557.8	1558.5	1559.2	1559.8	1559.4	1557.8	1556.2	1554.6	1553.0	1552.3
140°	1602.6	1603.3	1604.0	1604.6	1605.3	1604.9	1603.6	1602.3	1601.0	1599.6	1598.6
142.5°	1644.5	1645.4	1646.3	1647.3	1648.2	1648.1	1647.1	1646.0	1644.9	1643.9	1642.9
145°	1708.8	1708.8	1708.8	1708.8	1708.8	1708.4	1707.8	1707.1	1706.4	1705.8	1705.1
147.5°	1756.6	1758.1	1759.7	1761.2	1762.7	1763.2	1762.5	1761.8	1761.2	1760.5	1759.8
150°	1792.5	1793.5	1794.5	1795.5	1796.5	1796.6	1796.0	1795.3	1794.6	1794.0	1793.3
152.5°	1821.2	1822.7	1824.2	1825.8	1827.3	1827.5	1826.3	1825.1	1823.9	1822.7	1822.3
155°	1861.3	1863.2	1865.2	1867.2	1869.2	1869.4	1867.7	1866.1	1864.4	1862.7	1862.4
157.5°	1895.0	1897.6	1900.2	1902.8	1905.4	1905.7	1903.7	1901.7	1899.7	1897.7	1898.1
160°	1916.6	1918.9	1921.2	1923.5	1925.9	1926.0	1924.0	1922.1	1920.1	1918.1	1918.4
162.5°	1936.9	1939.0	1941.0	1943.1	1945.1	1945.0	1942.8	1940.5	1938.3	1936.0	1936.3
165°	1961.4	1963.7	1966.1	1968.4	1970.7	1970.6	1967.9	1965.2	1962.6	1959.9	1960.3
167.5°	1979.1	1981.7	1984.4	1987.0	1989.7	1989.7	1987.0	1984.4	1981.7	1979.1	1979.1
170°	1989.8	1992.5	1995.1	1997.8	2000.5	2000.5	1997.8	1995.1	1992.5	1989.8	1989.8
172.5°	1995.8	1998.7	2001.7	2004.6	2007.5	2007.6	2005.0	2002.3	1999.7	1997.0	1996.7
175°	2004.8	2007.4	2010.1	2012.7	2015.4	2015.6	2013.2	2010.9	2008.6	2006.3	2005.9
177.5°	2007.5	2010.1	2012.8	2015.4	2018.1	2018.4	2016.2	2014.1	2012.0	2009.9	2009.6
180°	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8
2.5°	495.7	494.3	492.8	490.2	487.9	484.8	483.8	482.7	479.3	476.4	474.1
5°	526.0	520.4	512.3	504.8	498.8	490.6	486.0	481.1	474.1	467.8	462.7
7.5°	557.7	546.7	534.0	520.4	507.6	495.3	485.4	476.5	466.7	457.5	450.2
10°	582.9	567.0	549.3	530.2	513.9	498.1	484.8	473.2	460.6	449.6	440.5
12.5°	611.6	588.1	563.7	540.5	521.2	499.2	483.1	468.3	454.0	440.9	430.7
15°	645.5	615.7	586.8	554.9	525.6	498.1	479.0	460.3	443.8	430.3	417.2
17.5°	676.5	642.7	604.6	565.8	530.4	497.8	471.1	450.0	429.3	412.8	399.8
20°	694.0	655.6	612.5	572.2	533.0	496.7	467.3	442.2	419.8	402.3	387.7
22.5°	709.1	664.1	619.5	576.4	532.8	493.7	460.4	434.5	410.3	393.2	377.6
25°	724.8	670.9	626.2	575.7	527.0	486.4	449.2	419.8	395.6	375.5	359.5
27.5°	738.2	670.5	617.4	563.0	517.7	477.1	437.3	405.8	380.1	358.3	342.0
30°	747.1	671.4	608.3	554.5	508.8	466.9	428.2	396.5	369.5	347.4	332.0
32.5°	752.7	670.8	599.9	542.5	494.6	457.5	418.3	385.5	357.7	336.0	321.2
35°	756.0	666.7	585.4	517.9	471.8	435.6	402.8	368.8	339.7	319.4	302.6
37.5°	749.4	658.1	568.7	494.1	443.6	408.1	380.4	351.5	323.6	301.3	286.8
40°	739.2	652.5	555.6	477.3	424.2	390.0	366.5	338.0	310.5	289.3	275.8
42.5°	719.6	641.2	541.3	458.7	404.1	369.9	348.2	324.4	298.4	278.5	265.0
45°	671.9	616.4	519.7	430.8	374.4	339.0	319.9	302.6	279.1	259.8	248.1
47.5°	605.6	579.2	488.6	401.3	343.3	309.3	289.4	275.6	258.4	242.7	231.6
50°	559.6	548.6	467.6	381.1	322.7	289.3	270.2	257.7	245.3	229.7	219.5
52.5°	506.5	513.2	443.0	360.3	301.6	268.8	250.9	240.9	229.7	216.8	207.9
55°	431.7	456.1	400.5	325.2	270.2	239.0	222.0	213.2	206.6	197.1	189.4
57.5°	361.7	392.8	354.5	289.1	239.4	212.5	196.2	186.6	182.4	177.4	171.3
60°	320.1	350.8	321.7	264.9	218.8	193.1	178.7	170.5	166.3	162.8	157.7
62.5°	283.0	314.1	289.7	240.3	198.4	174.7	162.1	154.1	150.9	149.1	144.7
65°	232.0	258.8	242.5	202.0	169.4	148.4	137.0	131.4	128.4	127.7	124.9
67.5°	188.8	209.2	197.4	167.5	141.9	123.8	114.1	109.3	107.0	106.7	104.6
70°	160.5	179.6	170.5	143.5	121.4	107.2	98.8	94.6	93.2	93.0	91.8
72.5°	138.5	151.8	144.6	122.1	105.0	92.1	85.9	81.5	80.0	80.3	79.5
75°	102.5	112.5	108.3	92.7	79.0	70.6	65.5	62.7	61.3	62.0	61.0
77.5°	73.8	80.1	76.3	65.5	57.0	51.0	47.2	45.5	44.2	44.2	43.8
80°	55.7	59.4	57.3	50.8	43.8	38.7	35.6	34.5	33.8	33.5	33.3
82.5°	39.7	42.8	40.3	35.9	31.1	28.0	26.3	24.8	24.3	24.4	24.2
85°	20.0	21.2	20.3	17.5	15.6	14.2	13.3	12.6	12.1	12.3	11.9
87.5°	12.3	11.7	10.2	8.7	7.7	6.5	5.8	4.8	5.1	5.7	6.2
90°	27.2	22.9	18.6	14.8	11.5	8.1	4.8	1.5	4.8	8.1	11.5
92.5°	31.8	28.5	25.2	24.1	25.0	25.9	26.9	27.8	26.9	25.9	25.0
95°	39.0	35.4	31.7	36.7	50.3	64.0	77.6	91.2	77.6	64.0	50.3
97.5°	96.0	119.9	143.8	158.8	164.9	171.1	177.2	183.3	177.2	171.1	164.9
100°	153.0	204.8	256.6	279.2	272.6	265.9	259.3	252.7	259.3	265.9	272.6
102.5°	211.6	268.2	324.8	350.7	345.9	341.2	336.4	331.6	336.4	341.2	345.9
105°	387.2	417.1	447.0	460.1	456.5	452.8	449.2	445.5	449.2	452.8	456.5
107.5°	590.7	585.9	581.2	577.4	574.5	571.5	568.6	565.7	568.6	571.5	574.5
110°	666.9	663.3	659.6	656.5	653.8	651.1	648.5	645.8	648.5	651.1	653.8





TEST NUMBER: P332114

CATALOG NUMBER: S123DIW-S340D1535U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	742.3	738.6	735.0	731.9	729.6	727.2	724.8	722.4	724.8	727.2	729.6
115°	852.1	849.2	846.2	843.7	841.7	839.7	837.7	835.7	837.7	839.7	841.7
117.5°	960.3	958.8	957.3	955.3	952.8	950.3	947.9	945.4	947.9	950.3	952.8
120°	1029.5	1028.5	1027.6	1025.6	1022.6	1019.6	1016.6	1013.6	1016.6	1019.6	1022.6
122.5°	1097.2	1095.9	1094.7	1092.8	1090.3	1087.9	1085.4	1083.0	1085.4	1087.9	1090.3
125°	1193.3	1192.0	1190.7	1188.7	1186.0	1183.4	1180.7	1178.0	1180.7	1183.4	1186.0
127.5°	1286.1	1284.5	1282.9	1280.8	1278.1	1275.5	1272.8	1270.1	1272.8	1275.5	1278.1
130°	1342.8	1341.5	1340.2	1338.2	1335.5	1332.9	1330.2	1327.5	1330.2	1332.9	1335.5
132.5°	1397.2	1396.1	1395.1	1393.2	1390.5	1387.9	1385.2	1382.6	1385.2	1387.9	1390.5
135°	1478.9	1477.5	1476.2	1474.6	1472.6	1470.6	1468.6	1466.6	1468.6	1470.6	1472.6
137.5°	1551.5	1550.8	1550.1	1548.4	1545.9	1543.4	1540.9	1538.3	1540.9	1543.4	1545.9
140°	1597.6	1596.6	1595.6	1594.2	1592.2	1590.2	1588.2	1586.2	1588.2	1590.2	1592.2
142.5°	1641.9	1640.9	1639.9	1638.4	1636.4	1634.4	1632.4	1630.4	1632.4	1634.4	1636.4
145°	1704.4	1703.8	1703.1	1701.6	1699.3	1697.0	1694.6	1692.3	1694.6	1697.0	1699.3
147.5°	1759.2	1758.5	1757.8	1756.7	1755.2	1753.7	1752.2	1750.6	1752.2	1753.7	1755.2
150°	1792.7	1792.0	1791.3	1790.5	1789.5	1788.5	1787.5	1786.5	1787.5	1788.5	1789.5
152.5°	1821.9	1821.5	1821.1	1820.7	1820.2	1819.7	1819.3	1818.8	1819.3	1819.7	1820.2
155°	1862.1	1861.8	1861.4	1861.6	1862.3	1862.9	1863.6	1864.2	1863.6	1862.9	1862.3
157.5°	1898.4	1898.7	1899.1	1899.3	1899.3	1899.4	1899.5	1899.5	1899.5	1899.4	1899.3
160°	1918.7	1919.1	1919.4	1919.7	1920.1	1920.4	1920.7	1921.1	1920.7	1920.4	1920.1
162.5°	1936.7	1937.0	1937.3	1937.9	1938.8	1939.7	1940.5	1941.4	1940.5	1939.7	1938.8
165°	1960.6	1960.9	1961.3	1961.9	1962.9	1963.9	1964.9	1965.9	1964.9	1963.9	1962.9
167.5°	1979.1	1979.1	1979.1	1979.7	1981.1	1982.4	1983.7	1985.0	1983.7	1982.4	1981.1
170°	1989.8	1989.8	1989.8	1990.5	1991.8	1993.1	1994.5	1995.8	1994.5	1993.1	1991.8
172.5°	1996.5	1996.2	1995.9	1996.6	1998.2	1999.8	2001.4	2003.0	2001.4	1999.8	1998.2
175°	2005.6	2005.3	2004.9	2005.6	2007.3	2008.9	2010.6	2012.2	2010.6	2008.9	2007.3
177.5°	2009.3	2009.1	2008.8	2009.3	2010.7	2012.0	2013.3	2014.6	2013.3	2012.0	2010.7
180°	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2



TEST NUMBER: P332114

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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8
2.5°	472.8	471.5	469.7	466.9	464.6	461.1	461.1	461.6	461.6	461.5	461.1
5°	458.5	455.0	450.8	445.9	440.8	435.6	434.7	432.8	431.5	430.5	429.4
7.5°	443.3	437.1	431.0	424.2	417.9	412.8	409.2	406.2	404.3	402.2	400.7
10°	433.1	425.4	418.2	411.0	403.0	396.7	392.8	390.0	387.9	386.0	385.1
12.5°	421.0	412.2	404.2	397.3	388.7	382.2	378.4	377.1	374.7	370.7	368.7
15°	403.3	395.1	385.6	375.1	370.9	363.0	358.5	356.4	355.0	352.0	351.1
17.5°	388.1	377.5	366.7	358.9	351.1	344.7	342.2	339.6	337.8	335.3	334.5
20°	376.0	366.5	356.7	348.3	340.1	333.1	331.0	329.2	327.3	326.2	325.2
22.5°	363.7	354.2	346.0	338.2	329.5	324.9	322.7	320.6	319.3	318.5	317.6
25°	346.4	338.0	328.9	322.0	315.0	311.9	310.5	309.4	308.4	307.3	307.0
27.5°	331.0	321.8	314.5	307.9	302.9	300.4	299.0	298.5	298.7	299.1	299.4
30°	319.4	311.0	305.0	299.4	294.7	292.4	292.1	292.1	293.1	293.3	293.8
32.5°	308.8	301.9	295.8	290.4	286.9	285.3	286.2	286.2	286.9	287.5	288.4
35°	293.3	287.2	282.6	277.9	274.9	275.6	276.1	276.5	277.7	279.1	280.0
37.5°	278.5	273.3	268.4	264.8	263.4	264.6	265.8	266.7	268.1	269.2	270.1
40°	267.9	263.9	259.3	256.0	256.5	257.2	258.1	259.3	260.5	261.2	262.1
42.5°	258.0	253.9	250.3	247.6	248.3	249.2	249.7	250.3	251.7	253.0	253.5
45°	243.0	239.7	236.5	234.8	235.3	235.8	236.2	236.9	238.1	239.0	239.3
47.5°	226.1	223.8	221.6	220.0	220.8	220.6	221.2	222.7	223.0	223.6	224.9
50°	215.3	213.2	210.6	210.1	210.1	210.1	210.4	212.2	212.2	213.2	214.1
52.5°	203.3	202.0	200.4	199.5	199.1	199.1	200.1	201.0	201.4	202.7	203.7
55°	185.7	184.3	182.9	182.2	181.7	182.2	184.0	184.5	185.7	186.4	187.1
57.5°	167.3	166.2	165.1	164.7	164.6	165.2	166.2	167.6	167.9	170.1	171.1
60°	155.2	153.5	152.6	152.6	152.1	154.2	153.8	156.1	156.6	158.0	159.6
62.5°	142.7	140.5	140.1	140.1	140.8	141.4	142.0	143.0	144.3	146.0	147.3
65°	122.5	121.4	123.0	122.8	122.3	123.7	123.7	124.9	126.3	127.9	130.5
67.5°	103.5	102.9	103.0	103.0	103.7	104.5	105.2	106.2	107.9	109.6	111.3
70°	90.6	91.3	90.2	91.1	91.8	92.0	92.5	93.9	95.7	96.9	98.8
72.5°	78.1	78.1	78.2	78.6	79.3	79.7	80.2	81.8	83.8	84.8	86.3
75°	60.1	59.9	60.6	60.6	61.7	62.2	62.7	63.4	65.2	66.6	67.8
77.5°	43.9	44.2	44.0	44.8	44.5	44.6	46.0	46.7	46.9	49.7	50.3
80°	33.1	33.5	33.8	34.0	34.2	33.8	35.4	36.1	36.1	37.7	38.9
82.5°	23.8	24.0	24.6	24.9	24.9	25.4	25.5	26.0	26.6	27.3	28.8
85°	11.9	12.6	12.8	12.6	12.8	12.3	13.0	13.3	13.5	13.5	13.5
87.5°	6.7	7.6	8.3	9.4	10.0	11.1	11.4	11.2	11.5	12.3	11.8
90°	14.8	18.6	22.9	27.2	31.6	35.9	37.2	38.5	39.9	41.2	42.2
92.5°	24.1	25.2	28.5	31.8	35.0	38.3	40.4	42.5	44.7	46.8	48.0
95°	36.7	31.7	35.4	39.0	42.7	46.3	48.7	51.0	53.3	55.6	56.8
97.5°	158.8	143.8	119.9	96.0	72.1	48.1	50.8	53.5	56.1	58.8	60.3
100°	279.2	256.6	204.8	153.0	101.2	49.3	52.0	54.6	57.3	60.0	61.5
102.5°	350.7	324.8	268.2	211.6	155.0	98.4	90.1	81.9	73.7	65.4	61.6
105°	460.1	447.0	417.1	387.2	357.3	327.4	268.6	209.8	151.0	92.2	63.1
107.5°	577.4	581.2	585.9	590.7	595.4	600.1	557.0	513.8	470.7	427.6	383.9
110°	656.5	659.6	663.3	666.9	670.6	674.2	663.3	652.3	641.3	630.4	601.1



TEST NUMBER: P332114

CATALOG NUMBER: S123DIW-S340D1535U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	731.9	735.0	738.6	742.3	745.9	749.6	749.8	750.0	750.2	750.4	745.5
115°	843.7	846.2	849.2	852.1	855.1	858.1	861.4	864.8	868.1	871.4	873.7
117.5°	955.3	957.3	958.8	960.3	961.8	963.4	966.0	968.7	971.3	974.0	975.5
120°	1025.6	1027.6	1028.5	1029.5	1030.5	1031.5	1034.2	1036.9	1039.5	1042.2	1043.5
122.5°	1092.8	1094.7	1095.9	1097.2	1098.4	1099.7	1101.6	1103.4	1105.3	1107.2	1108.2
125°	1188.7	1190.7	1192.0	1193.3	1194.7	1196.0	1196.7	1197.3	1198.0	1198.6	1199.3
127.5°	1280.8	1282.9	1284.5	1286.1	1287.7	1289.3	1290.3	1291.4	1292.5	1293.5	1293.7
130°	1338.2	1340.2	1341.5	1342.8	1344.2	1345.5	1346.8	1348.1	1349.5	1350.8	1351.1
132.5°	1393.2	1395.1	1396.1	1397.2	1398.2	1399.3	1400.6	1402.0	1403.3	1404.6	1404.8
135°	1474.6	1476.2	1477.5	1478.9	1480.2	1481.5	1482.5	1483.5	1484.5	1485.5	1485.5
137.5°	1548.4	1550.1	1550.8	1551.5	1552.3	1553.0	1554.6	1556.2	1557.8	1559.4	1559.8
140°	1594.2	1595.6	1596.6	1597.6	1598.6	1599.6	1601.0	1602.3	1603.6	1604.9	1605.3
142.5°	1638.4	1639.9	1640.9	1641.9	1642.9	1643.9	1644.9	1646.0	1647.1	1648.1	1648.2
145°	1701.6	1703.1	1703.8	1704.4	1705.1	1705.8	1706.4	1707.1	1707.8	1708.4	1708.8
147.5°	1756.7	1757.8	1758.5	1759.2	1759.8	1760.5	1761.2	1761.8	1762.5	1763.2	1762.7
150°	1790.5	1791.3	1792.0	1792.7	1793.3	1794.0	1794.6	1795.3	1796.0	1796.6	1796.5
152.5°	1820.7	1821.1	1821.5	1821.9	1822.3	1822.7	1823.9	1825.1	1826.3	1827.5	1827.3
155°	1861.6	1861.4	1861.8	1862.1	1862.4	1862.7	1864.4	1866.1	1867.7	1869.4	1869.2
157.5°	1899.3	1899.1	1898.7	1898.4	1898.1	1897.7	1899.7	1901.7	1903.7	1905.7	1905.4
160°	1919.7	1919.4	1919.1	1918.7	1918.4	1918.1	1920.1	1922.1	1924.0	1926.0	1925.9
162.5°	1937.9	1937.3	1937.0	1936.7	1936.3	1936.0	1938.3	1940.5	1942.8	1945.0	1945.1
165°	1961.9	1961.3	1960.9	1960.6	1960.3	1959.9	1962.6	1965.2	1967.9	1970.6	1970.7
167.5°	1979.7	1979.1	1979.1	1979.1	1979.1	1979.1	1981.7	1984.4	1987.0	1989.7	1989.7
170°	1990.5	1989.8	1989.8	1989.8	1989.8	1989.8	1992.5	1995.1	1997.8	2000.5	2000.5
172.5°	1996.6	1995.9	1996.2	1996.5	1996.7	1997.0	1999.7	2002.3	2005.0	2007.6	2007.5
175°	2005.6	2004.9	2005.3	2005.6	2005.9	2006.3	2008.6	2010.9	2013.2	2015.6	2015.4
177.5°	2009.3	2008.8	2009.1	2009.3	2009.6	2009.9	2012.0	2014.1	2016.2	2018.4	2018.1
180°	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2



TEST NUMBER: P332114

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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8
2.5°	459.8	459.6	460.9	460.0	460.9	459.6	459.8	461.1	461.5	461.6	461.6
5°	428.0	428.7	426.3	426.3	426.3	428.7	428.0	429.4	430.5	431.5	432.8
7.5°	399.6	398.6	398.7	397.4	398.7	398.6	399.6	400.7	402.2	404.3	406.2
10°	382.3	380.9	380.4	380.7	380.4	380.9	382.3	385.1	386.0	387.9	390.0
12.5°	367.9	367.7	364.6	364.6	364.6	367.7	367.9	368.7	370.7	374.7	377.1
15°	351.1	346.7	346.2	347.6	346.2	346.7	351.1	351.1	352.0	355.0	356.4
17.5°	334.2	331.8	332.0	331.3	332.0	331.8	334.2	334.5	335.3	337.8	339.6
20°	325.2	323.8	323.6	322.0	323.6	323.8	325.2	325.2	326.2	327.3	329.2
22.5°	317.0	316.6	316.7	314.9	316.7	316.6	317.0	317.6	318.5	319.3	320.6
25°	306.8	308.0	307.0	307.0	307.0	308.0	306.8	307.0	307.3	308.4	309.4
27.5°	299.9	299.9	299.4	299.4	299.4	299.9	299.9	299.4	299.1	298.7	298.5
30°	294.7	294.5	294.9	294.9	294.9	294.5	294.7	293.8	293.3	293.1	292.1
32.5°	289.5	289.8	289.9	290.1	289.9	289.8	289.5	288.4	287.5	286.9	286.2
35°	281.4	281.7	282.4	281.9	282.4	281.7	281.4	280.0	279.1	277.7	276.5
37.5°	270.5	271.6	271.4	271.7	271.4	271.6	270.5	270.1	269.2	268.1	266.7
40°	262.3	263.0	262.8	262.8	262.8	263.0	262.3	262.1	261.2	260.5	259.3
42.5°	253.9	254.4	253.8	253.5	253.8	254.4	253.9	253.5	253.0	251.7	250.3
45°	240.2	239.7	240.4	239.5	240.4	239.7	240.2	239.3	239.0	238.1	236.9
47.5°	224.8	225.3	225.5	226.2	225.5	225.3	224.8	224.9	223.6	223.0	222.7
50°	214.6	216.0	216.0	215.7	216.0	216.0	214.6	214.1	213.2	212.2	212.2
52.5°	204.5	205.1	206.1	206.0	206.1	205.1	204.5	203.7	202.7	201.4	201.0
55°	188.9	189.4	189.9	190.1	189.9	189.4	188.9	187.1	186.4	185.7	184.5
57.5°	172.8	172.6	173.7	174.1	173.7	172.6	172.8	171.1	170.1	167.9	167.6
60°	161.4	161.4	163.3	164.0	163.3	161.4	161.4	159.6	158.0	156.6	156.1
62.5°	149.3	150.1	151.9	151.0	151.9	150.1	149.3	147.3	146.0	144.3	143.0
65°	131.6	133.5	133.3	134.2	133.3	133.5	131.6	130.5	127.9	126.3	124.9
67.5°	113.1	114.3	116.0	116.1	116.0	114.3	113.1	111.3	109.6	107.9	106.2
70°	100.6	101.8	102.7	103.4	102.7	101.8	100.6	98.8	96.9	95.7	93.9
72.5°	88.5	89.1	91.4	90.4	91.4	89.1	88.5	86.3	84.8	83.8	81.8
75°	69.4	71.1	72.5	71.8	72.5	71.1	69.4	67.8	66.6	65.2	63.4
77.5°	51.3	53.0	53.6	53.0	53.6	53.0	51.3	50.3	49.7	46.9	46.7
80°	40.5	40.3	41.7	41.5	41.7	40.3	40.5	38.9	37.7	36.1	36.1
82.5°	29.7	29.5	30.1	30.3	30.1	29.5	29.7	28.8	27.3	26.6	26.0
85°	14.4	15.1	14.2	14.0	14.2	15.1	14.4	13.5	13.5	13.5	13.3
87.5°	11.9	12.1	12.0	12.0	12.0	12.1	11.9	11.8	12.3	11.5	11.2
90°	42.9	43.5	44.2	44.8	44.2	43.5	42.9	42.2	41.2	39.9	38.5
92.5°	48.4	48.8	49.2	49.6	49.2	48.8	48.4	48.0	46.8	44.7	42.5
95°	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	55.6	53.3	51.0
97.5°	60.6	60.9	61.3	61.6	61.3	60.9	60.6	60.3	58.8	56.1	53.5
100°	61.8	62.1	62.5	62.8	62.5	62.1	61.8	61.5	60.0	57.3	54.6
102.5°	62.2	62.8	63.4	64.0	63.4	62.8	62.2	61.6	65.4	73.7	81.9
105°	63.8	64.5	65.1	65.8	65.1	64.5	63.8	63.1	92.2	151.0	209.8
107.5°	339.6	295.2	250.9	206.6	250.9	295.2	339.6	383.9	427.6	470.7	513.8
110°	553.6	506.1	458.6	411.1	458.6	506.1	553.6	601.1	630.4	641.3	652.3



TEST NUMBER: P332114

CATALOG NUMBER: S123DIW-S340D1535U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	735.4	725.4	715.4	705.3	715.4	725.4	735.4	745.5	750.4	750.2	750.0
115°	875.1	876.4	877.7	879.1	877.7	876.4	875.1	873.7	871.4	868.1	864.8
117.5°	975.7	976.0	976.3	976.5	976.3	976.0	975.7	975.5	974.0	971.3	968.7
120°	1043.5	1043.5	1043.5	1043.5	1043.5	1043.5	1043.5	1043.5	1042.2	1039.5	1036.9
122.5°	1108.5	1108.7	1109.0	1109.3	1109.0	1108.7	1108.5	1108.2	1107.2	1105.3	1103.4
125°	1200.0	1200.6	1201.3	1202.0	1201.3	1200.6	1200.0	1199.3	1198.6	1198.0	1197.3
127.5°	1293.1	1292.4	1291.7	1291.1	1291.7	1292.4	1293.1	1293.7	1293.5	1292.5	1291.4
130°	1350.5	1349.8	1349.1	1348.5	1349.1	1349.8	1350.5	1351.1	1350.8	1349.5	1348.1
132.5°	1403.9	1403.0	1402.0	1401.1	1402.0	1403.0	1403.9	1404.8	1404.6	1403.3	1402.0
135°	1484.5	1483.5	1482.5	1481.5	1482.5	1483.5	1484.5	1485.5	1485.5	1484.5	1483.5
137.5°	1559.2	1558.5	1557.8	1557.2	1557.8	1558.5	1559.2	1559.8	1559.4	1557.8	1556.2
140°	1604.6	1604.0	1603.3	1602.6	1603.3	1604.0	1604.6	1605.3	1604.9	1603.6	1602.3
142.5°	1647.3	1646.3	1645.4	1644.5	1645.4	1646.3	1647.3	1648.2	1648.1	1647.1	1646.0
145°	1708.8	1708.8	1708.8	1708.8	1708.8	1708.8	1708.8	1708.8	1708.4	1707.8	1707.1
147.5°	1761.2	1759.7	1758.1	1756.6	1758.1	1759.7	1761.2	1762.7	1763.2	1762.5	1761.8
150°	1795.5	1794.5	1793.5	1792.5	1793.5	1794.5	1795.5	1796.5	1796.6	1796.0	1795.3
152.5°	1825.8	1824.2	1822.7	1821.2	1822.7	1824.2	1825.8	1827.3	1827.5	1826.3	1825.1
155°	1867.2	1865.2	1863.2	1861.3	1863.2	1865.2	1867.2	1869.2	1869.4	1867.7	1866.1
157.5°	1902.8	1900.2	1897.6	1895.0	1897.6	1900.2	1902.8	1905.4	1905.7	1903.7	1901.7
160°	1923.5	1921.2	1918.9	1916.6	1918.9	1921.2	1923.5	1925.9	1926.0	1924.0	1922.1
162.5°	1943.1	1941.0	1939.0	1936.9	1939.0	1941.0	1943.1	1945.1	1945.0	1942.8	1940.5
165°	1968.4	1966.1	1963.7	1961.4	1963.7	1966.1	1968.4	1970.7	1970.6	1967.9	1965.2
167.5°	1987.0	1984.4	1981.7	1979.1	1981.7	1984.4	1987.0	1989.7	1989.7	1987.0	1984.4
170°	1997.8	1995.1	1992.5	1989.8	1992.5	1995.1	1997.8	2000.5	2000.5	1997.8	1995.1
172.5°	2004.6	2001.7	1998.7	1995.8	1998.7	2001.7	2004.6	2007.5	2007.6	2005.0	2002.3
175°	2012.7	2010.1	2007.4	2004.8	2007.4	2010.1	2012.7	2015.4	2015.6	2013.2	2010.9
177.5°	2015.4	2012.8	2010.1	2007.5	2010.1	2012.8	2015.4	2018.1	2018.4	2016.2	2014.1
180°	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2



TEST NUMBER: P332114

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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8
2.5°	461.1	461.1	464.6	466.9	469.7	471.5	472.8	474.1	476.4	479.3	482.7
5°	434.7	435.6	440.8	445.9	450.8	455.0	458.5	462.7	467.8	474.1	481.1
7.5°	409.2	412.8	417.9	424.2	431.0	437.1	443.3	450.2	457.5	466.7	476.5
10°	392.8	396.7	403.0	411.0	418.2	425.4	433.1	440.5	449.6	460.6	473.2
12.5°	378.4	382.2	388.7	397.3	404.2	412.2	421.0	430.7	440.9	454.0	468.3
15°	358.5	363.0	370.9	375.1	385.6	395.1	403.3	417.2	430.3	443.8	460.3
17.5°	342.2	344.7	351.1	358.9	366.7	377.5	388.1	399.8	412.8	429.3	450.0
20°	331.0	333.1	340.1	348.3	356.7	366.5	376.0	387.7	402.3	419.8	442.2
22.5°	322.7	324.9	329.5	338.2	346.0	354.2	363.7	377.6	393.2	410.3	434.5
25°	310.5	311.9	315.0	322.0	328.9	338.0	346.4	359.5	375.5	395.6	419.8
27.5°	299.0	300.4	302.9	307.9	314.5	321.8	331.0	342.0	358.3	380.1	405.8
30°	292.1	292.4	294.7	299.4	305.0	311.0	319.4	332.0	347.4	369.5	396.5
32.5°	286.2	285.3	286.9	290.4	295.8	301.9	308.8	321.2	336.0	357.7	385.5
35°	276.1	275.6	274.9	277.9	282.6	287.2	293.3	302.6	319.4	339.7	368.8
37.5°	265.8	264.6	263.4	264.8	268.4	273.3	278.5	286.8	301.3	323.6	351.5
40°	258.1	257.2	256.5	256.0	259.3	263.9	267.9	275.8	289.3	310.5	338.0
42.5°	249.7	249.2	248.3	247.6	250.3	253.9	258.0	265.0	278.5	298.4	324.4
45°	236.2	235.8	235.3	234.8	236.5	239.7	243.0	248.1	259.8	279.1	302.6
47.5°	221.2	220.6	220.8	220.0	221.6	223.8	226.1	231.6	242.7	258.4	275.6
50°	210.4	210.1	210.1	210.1	210.6	213.2	215.3	219.5	229.7	245.3	257.7
52.5°	200.1	199.1	199.1	199.5	200.4	202.0	203.3	207.9	216.8	229.7	240.9
55°	184.0	182.2	181.7	182.2	182.9	184.3	185.7	189.4	197.1	206.6	213.2
57.5°	166.2	165.2	164.6	164.7	165.1	166.2	167.3	171.3	177.4	182.4	186.6
60°	153.8	154.2	152.1	152.6	152.6	153.5	155.2	157.7	162.8	166.3	170.5
62.5°	142.0	141.4	140.8	140.1	140.1	140.5	142.7	144.7	149.1	150.9	154.1
65°	123.7	123.7	122.3	122.8	123.0	121.4	122.5	124.9	127.7	128.4	131.4
67.5°	105.2	104.5	103.7	103.0	103.0	102.9	103.5	104.6	106.7	107.0	109.3
70°	92.5	92.0	91.8	91.1	90.2	91.3	90.6	91.8	93.0	93.2	94.6
72.5°	80.2	79.7	79.3	78.6	78.2	78.1	78.1	79.5	80.3	80.0	81.5
75°	62.7	62.2	61.7	60.6	60.6	59.9	60.1	61.0	62.0	61.3	62.7
77.5°	46.0	44.6	44.5	44.8	44.0	44.2	43.9	43.8	44.2	44.2	45.5
80°	35.4	33.8	34.2	34.0	33.8	33.5	33.1	33.3	33.5	33.8	34.5
82.5°	25.5	25.4	24.9	24.9	24.6	24.0	23.8	24.2	24.4	24.3	24.8
85°	13.0	12.3	12.8	12.6	12.8	12.6	11.9	11.9	12.3	12.1	12.6
87.5°	11.4	11.1	10.0	9.4	8.3	7.6	6.7	6.2	5.7	5.1	4.8
90°	37.2	35.9	31.6	27.2	22.9	18.6	14.8	11.5	8.1	4.8	1.5
92.5°	40.4	38.3	35.0	31.8	28.5	25.2	24.1	25.0	25.9	26.9	27.8
95°	48.7	46.3	42.7	39.0	35.4	31.7	36.7	50.3	64.0	77.6	91.2
97.5°	50.8	48.1	72.1	96.0	119.9	143.8	158.8	164.9	171.1	177.2	183.3
100°	52.0	49.3	101.2	153.0	204.8	256.6	279.2	272.6	265.9	259.3	252.7
102.5°	90.1	98.4	155.0	211.6	268.2	324.8	350.7	345.9	341.2	336.4	331.6
105°	268.6	327.4	357.3	387.2	417.1	447.0	460.1	456.5	452.8	449.2	445.5
107.5°	557.0	600.1	595.4	590.7	585.9	581.2	577.4	574.5	571.5	568.6	565.7
110°	663.3	674.2	670.6	666.9	663.3	659.6	656.5	653.8	651.1	648.5	645.8



TEST NUMBER: P332114

CATALOG NUMBER: S123DIW-S340D1535U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	749.8	749.6	745.9	742.3	738.6	735.0	731.9	729.6	727.2	724.8	722.4
115°	861.4	858.1	855.1	852.1	849.2	846.2	843.7	841.7	839.7	837.7	835.7
117.5°	966.0	963.4	961.8	960.3	958.8	957.3	955.3	952.8	950.3	947.9	945.4
120°	1034.2	1031.5	1030.5	1029.5	1028.5	1027.6	1025.6	1022.6	1019.6	1016.6	1013.6
122.5°	1101.6	1099.7	1098.4	1097.2	1095.9	1094.7	1092.8	1090.3	1087.9	1085.4	1083.0
125°	1196.7	1196.0	1194.7	1193.3	1192.0	1190.7	1188.7	1186.0	1183.4	1180.7	1178.0
127.5°	1290.3	1289.3	1287.7	1286.1	1284.5	1282.9	1280.8	1278.1	1275.5	1272.8	1270.1
130°	1346.8	1345.5	1344.2	1342.8	1341.5	1340.2	1338.2	1335.5	1332.9	1330.2	1327.5
132.5°	1400.6	1399.3	1398.2	1397.2	1396.1	1395.1	1393.2	1390.5	1387.9	1385.2	1382.6
135°	1482.5	1481.5	1480.2	1478.9	1477.5	1476.2	1474.6	1472.6	1470.6	1468.6	1466.6
137.5°	1554.6	1553.0	1552.3	1551.5	1550.8	1550.1	1548.4	1545.9	1543.4	1540.9	1538.3
140°	1601.0	1599.6	1598.6	1597.6	1596.6	1595.6	1594.2	1592.2	1590.2	1588.2	1586.2
142.5°	1644.9	1643.9	1642.9	1641.9	1640.9	1639.9	1638.4	1636.4	1634.4	1632.4	1630.4
145°	1706.4	1705.8	1705.1	1704.4	1703.8	1703.1	1701.6	1699.3	1697.0	1694.6	1692.3
147.5°	1761.2	1760.5	1759.8	1759.2	1758.5	1757.8	1756.7	1755.2	1753.7	1752.2	1750.6
150°	1794.6	1794.0	1793.3	1792.7	1792.0	1791.3	1790.5	1789.5	1788.5	1787.5	1786.5
152.5°	1823.9	1822.7	1822.3	1821.9	1821.5	1821.1	1820.7	1820.2	1819.7	1819.3	1818.8
155°	1864.4	1862.7	1862.4	1862.1	1861.8	1861.4	1861.6	1862.3	1862.9	1863.6	1864.2
157.5°	1899.7	1897.7	1898.1	1898.4	1898.7	1899.1	1899.3	1899.3	1899.4	1899.5	1899.5
160°	1920.1	1918.1	1918.4	1918.7	1919.1	1919.4	1919.7	1920.1	1920.4	1920.7	1921.1
162.5°	1938.3	1936.0	1936.3	1936.7	1937.0	1937.3	1937.9	1938.8	1939.7	1940.5	1941.4
165°	1962.6	1959.9	1960.3	1960.6	1960.9	1961.3	1961.9	1962.9	1963.9	1964.9	1965.9
167.5°	1981.7	1979.1	1979.1	1979.1	1979.1	1979.1	1979.7	1981.1	1982.4	1983.7	1985.0
170°	1992.5	1989.8	1989.8	1989.8	1989.8	1989.8	1990.5	1991.8	1993.1	1994.5	1995.8
172.5°	1999.7	1997.0	1996.7	1996.5	1996.2	1995.9	1996.6	1998.2	1999.8	2001.4	2003.0
175°	2008.6	2006.3	2005.9	2005.6	2005.3	2004.9	2005.6	2007.3	2008.9	2010.6	2012.2
177.5°	2012.0	2009.9	2009.6	2009.3	2009.1	2008.8	2009.3	2010.7	2012.0	2013.3	2014.6
180°	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2



TEST NUMBER: P332114

CATALOG NUMBER: S123DIW-S340D1535U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8
2.5°	483.8	484.8	487.9	490.2	492.8	494.3	495.7	496.9	498.4	498.7	504.1
5°	486.0	490.6	498.8	504.8	512.3	520.4	526.0	528.6	535.4	540.9	552.1
7.5°	485.4	495.3	507.6	520.4	534.0	546.7	557.7	570.8	580.0	594.0	607.7
10°	484.8	498.1	513.9	530.2	549.3	567.0	582.9	600.6	615.3	634.6	651.1
12.5°	483.1	499.2	521.2	540.5	563.7	588.1	611.6	634.3	647.3	679.5	694.7
15°	479.0	498.1	525.6	554.9	586.8	615.7	645.5	669.3	707.7	735.9	753.9
17.5°	471.1	497.8	530.4	565.8	604.6	642.7	676.5	712.5	753.3	787.4	823.8
20°	467.3	496.7	533.0	572.2	612.5	655.6	694.0	737.3	781.8	815.4	862.0
22.5°	460.4	493.7	532.8	576.4	619.5	664.1	709.1	752.8	804.2	850.4	894.8
25°	449.2	486.4	527.0	575.7	626.2	670.9	724.8	782.8	836.3	895.8	940.0
27.5°	437.3	477.1	517.7	563.0	617.4	670.5	738.2	803.7	869.2	920.5	953.3
30°	428.2	466.9	508.8	554.5	608.3	671.4	747.1	818.6	882.5	926.5	944.9
32.5°	418.3	457.5	494.6	542.5	599.9	670.8	752.7	827.4	883.2	912.5	908.9
35°	402.8	435.6	471.8	517.9	585.4	666.7	756.0	828.2	862.4	856.1	808.6
37.5°	380.4	408.1	443.6	494.1	568.7	658.1	749.4	803.6	801.4	750.2	681.3
40°	366.5	390.0	424.2	477.3	555.6	652.5	739.2	774.4	744.6	673.0	590.6
42.5°	348.2	369.9	404.1	458.7	541.3	641.2	719.6	729.8	671.5	589.2	513.6
45°	319.9	339.0	374.4	430.8	519.7	616.4	671.9	646.9	568.4	483.4	425.9
47.5°	289.4	309.3	343.3	401.3	488.6	579.2	605.6	552.6	472.0	403.0	350.2
50°	270.2	289.3	322.7	381.1	467.6	548.6	559.6	491.1	417.0	356.4	313.1
52.5°	250.9	268.8	301.6	360.3	443.0	513.2	506.5	436.7	368.6	316.9	282.9
55°	222.0	239.0	270.2	325.2	400.5	456.1	431.7	365.1	308.7	268.6	242.7
57.5°	196.2	212.5	239.4	289.1	354.5	392.8	361.7	305.5	260.7	229.8	210.6
60°	178.7	193.1	218.8	264.9	321.7	350.8	320.1	270.5	232.7	208.0	190.8
62.5°	162.1	174.7	198.4	240.3	289.7	314.1	283.0	241.0	208.9	187.0	172.3
65°	137.0	148.4	169.4	202.0	242.5	258.8	232.0	198.0	173.1	156.8	147.0
67.5°	114.1	123.8	141.9	167.5	197.4	209.2	188.8	162.5	143.7	130.6	122.9
70°	98.8	107.2	121.4	143.5	170.5	179.6	160.5	138.8	125.1	114.6	107.4
72.5°	85.9	92.1	105.0	122.1	144.6	151.8	138.5	119.5	106.7	98.8	93.0
75°	65.5	70.6	79.0	92.7	108.3	112.5	102.5	90.6	82.0	76.4	72.0
77.5°	47.2	51.0	57.0	65.5	76.3	80.1	73.8	65.8	59.5	55.8	53.3
80°	35.6	38.7	43.8	50.8	57.3	59.4	55.7	49.6	45.2	43.1	41.0
82.5°	26.3	28.0	31.1	35.9	40.3	42.8	39.7	36.0	33.6	31.7	30.9
85°	13.3	14.2	15.6	17.5	20.3	21.2	20.0	19.1	17.7	16.5	16.5
87.5°	5.8	6.5	7.7	8.7	10.2	11.7	12.3	12.8	13.5	13.6	13.7
90°	4.8	8.1	11.5	14.8	18.6	22.9	27.2	31.6	35.9	37.2	38.5
92.5°	26.9	25.9	25.0	24.1	25.2	28.5	31.8	35.0	38.3	40.4	42.5
95°	77.6	64.0	50.3	36.7	31.7	35.4	39.0	42.7	46.3	48.7	51.0
97.5°	177.2	171.1	164.9	158.8	143.8	119.9	96.0	72.1	48.1	50.8	53.5
100°	259.3	265.9	272.6	279.2	256.6	204.8	153.0	101.2	49.3	52.0	54.6
102.5°	336.4	341.2	345.9	350.7	324.8	268.2	211.6	155.0	98.4	90.1	81.9
105°	449.2	452.8	456.5	460.1	447.0	417.1	387.2	357.3	327.4	268.6	209.8
107.5°	568.6	571.5	574.5	577.4	581.2	585.9	590.7	595.4	600.1	557.0	513.8
110°	648.5	651.1	653.8	656.5	659.6	663.3	666.9	670.6	674.2	663.3	652.3





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	724.8	727.2	729.6	731.9	735.0	738.6	742.3	745.9	749.6	749.8	750.0
115°	837.7	839.7	841.7	843.7	846.2	849.2	852.1	855.1	858.1	861.4	864.8
117.5°	947.9	950.3	952.8	955.3	957.3	958.8	960.3	961.8	963.4	966.0	968.7
120°	1016.6	1019.6	1022.6	1025.6	1027.6	1028.5	1029.5	1030.5	1031.5	1034.2	1036.9
122.5°	1085.4	1087.9	1090.3	1092.8	1094.7	1095.9	1097.2	1098.4	1099.7	1101.6	1103.4
125°	1180.7	1183.4	1186.0	1188.7	1190.7	1192.0	1193.3	1194.7	1196.0	1196.7	1197.3
127.5°	1272.8	1275.5	1278.1	1280.8	1282.9	1284.5	1286.1	1287.7	1289.3	1290.3	1291.4
130°	1330.2	1332.9	1335.5	1338.2	1340.2	1341.5	1342.8	1344.2	1345.5	1346.8	1348.1
132.5°	1385.2	1387.9	1390.5	1393.2	1395.1	1396.1	1397.2	1398.2	1399.3	1400.6	1402.0
135°	1468.6	1470.6	1472.6	1474.6	1476.2	1477.5	1478.9	1480.2	1481.5	1482.5	1483.5
137.5°	1540.9	1543.4	1545.9	1548.4	1550.1	1550.8	1551.5	1552.3	1553.0	1554.6	1556.2
140°	1588.2	1590.2	1592.2	1594.2	1595.6	1596.6	1597.6	1598.6	1599.6	1601.0	1602.3
142.5°	1632.4	1634.4	1636.4	1638.4	1639.9	1640.9	1641.9	1642.9	1643.9	1644.9	1646.0
145°	1694.6	1697.0	1699.3	1701.6	1703.1	1703.8	1704.4	1705.1	1705.8	1706.4	1707.1
147.5°	1752.2	1753.7	1755.2	1756.7	1757.8	1758.5	1759.2	1759.8	1760.5	1761.2	1761.8
150°	1787.5	1788.5	1789.5	1790.5	1791.3	1792.0	1792.7	1793.3	1794.0	1794.6	1795.3
152.5°	1819.3	1819.7	1820.2	1820.7	1821.1	1821.5	1821.9	1822.3	1822.7	1823.9	1825.1
155°	1863.6	1862.9	1862.3	1861.6	1861.4	1861.8	1862.1	1862.4	1862.7	1864.4	1866.1
157.5°	1899.5	1899.4	1899.3	1899.3	1899.1	1898.7	1898.4	1898.1	1897.7	1899.7	1901.7
160°	1920.7	1920.4	1920.1	1919.7	1919.4	1919.1	1918.7	1918.4	1918.1	1920.1	1922.1
162.5°	1940.5	1939.7	1938.8	1937.9	1937.3	1937.0	1936.7	1936.3	1936.0	1938.3	1940.5
165°	1964.9	1963.9	1962.9	1961.9	1961.3	1960.9	1960.6	1960.3	1959.9	1962.6	1965.2
167.5°	1983.7	1982.4	1981.1	1979.7	1979.1	1979.1	1979.1	1979.1	1979.1	1981.7	1984.4
170°	1994.5	1993.1	1991.8	1990.5	1989.8	1989.8	1989.8	1989.8	1989.8	1992.5	1995.1
172.5°	2001.4	1999.8	1998.2	1996.6	1995.9	1996.2	1996.5	1996.7	1997.0	1999.7	2002.3
175°	2010.6	2008.9	2007.3	2005.6	2004.9	2005.3	2005.6	2005.9	2006.3	2008.6	2010.9
177.5°	2013.3	2012.0	2010.7	2009.3	2008.8	2009.1	2009.3	2009.6	2009.9	2012.0	2014.1
180°	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	480.8	480.8	480.8	480.8	480.8	480.8	480.8
2.5°	506.0	506.2	508.2	509.7	509.0	509.9	510.3
5°	552.8	561.2	565.6	568.9	569.1	569.4	571.2
7.5°	619.2	628.2	634.8	644.8	647.7	651.1	650.2
10°	667.7	681.0	692.4	698.4	705.0	714.5	706.8
12.5°	713.0	736.5	753.9	763.3	769.4	771.3	767.6
15°	787.7	818.4	834.9	834.5	855.4	864.5	850.3
17.5°	856.1	884.5	907.3	918.9	936.4	940.2	938.5
20°	898.1	929.1	946.8	966.8	975.9	984.0	985.4
22.5°	934.2	962.1	981.1	997.7	1005.3	1009.2	1011.5
25°	971.5	993.4	1004.8	1010.6	1012.7	1012.2	1009.2
27.5°	968.9	970.6	958.0	945.7	934.6	922.2	917.9
30°	943.7	924.2	889.2	869.4	840.3	817.2	826.6
32.5°	877.6	838.6	799.4	756.1	720.3	710.1	699.8
35°	749.0	680.5	640.4	593.8	575.2	556.6	543.7
37.5°	605.9	553.0	505.4	475.0	456.3	444.5	438.2
40°	523.9	476.2	437.0	412.3	398.1	384.9	383.0
42.5°	458.5	414.1	384.7	365.0	351.4	345.7	341.6
45°	375.5	344.6	324.8	310.8	301.7	298.2	293.5
47.5°	317.9	296.0	281.1	271.6	264.7	262.1	261.8
50°	285.6	267.4	256.5	249.0	243.7	242.7	239.0
52.5°	261.4	245.6	237.1	230.6	226.7	224.1	223.0
55°	226.9	216.4	208.7	205.0	202.0	199.4	199.4
57.5°	198.5	189.8	184.7	181.5	180.6	178.8	177.6
60°	181.0	173.6	169.6	166.8	164.9	165.2	163.1
62.5°	163.9	159.0	155.2	152.5	150.2	150.3	150.4
65°	139.5	135.8	133.0	132.1	130.7	129.1	129.5
67.5°	118.3	114.8	112.6	111.0	110.5	109.6	111.0
70°	103.0	100.4	98.8	97.4	96.9	97.1	98.3
72.5°	89.0	87.2	86.1	85.5	84.4	84.5	85.3
75°	69.9	68.5	67.6	66.9	66.6	66.6	66.6
77.5°	51.3	51.0	50.6	49.6	49.6	49.9	49.9
80°	40.5	39.8	39.6	39.1	38.4	38.0	39.1
82.5°	30.3	29.6	29.4	29.3	28.2	28.1	29.1
85°	16.3	15.6	15.8	15.6	15.6	15.4	15.4
87.5°	13.8	13.8	13.8	14.2	14.1	14.1	14.6
90°	39.9	41.2	42.2	42.9	43.5	44.2	44.8
92.5°	44.7	46.8	48.0	48.4	48.8	49.2	49.6
95°	53.3	55.6	56.8	56.8	56.8	56.8	56.8
97.5°	56.1	58.8	60.3	60.6	60.9	61.3	61.6
100°	57.3	60.0	61.5	61.8	62.1	62.5	62.8
102.5°	73.7	65.4	61.6	62.2	62.8	63.4	64.0
105°	151.0	92.2	63.1	63.8	64.5	65.1	65.8
107.5°	470.7	427.6	383.9	339.6	295.2	250.9	206.6
110°	641.3	630.4	601.1	553.6	506.1	458.6	411.1



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	750.2	750.4	745.5	735.4	725.4	715.4	705.3
115°	868.1	871.4	873.7	875.1	876.4	877.7	879.1
117.5°	971.3	974.0	975.5	975.7	976.0	976.3	976.5
120°	1039.5	1042.2	1043.5	1043.5	1043.5	1043.5	1043.5
122.5°	1105.3	1107.2	1108.2	1108.5	1108.7	1109.0	1109.3
125°	1198.0	1198.6	1199.3	1200.0	1200.6	1201.3	1202.0
127.5°	1292.5	1293.5	1293.7	1293.1	1292.4	1291.7	1291.1
130°	1349.5	1350.8	1351.1	1350.5	1349.8	1349.1	1348.5
132.5°	1403.3	1404.6	1404.8	1403.9	1403.0	1402.0	1401.1
135°	1484.5	1485.5	1485.5	1484.5	1483.5	1482.5	1481.5
137.5°	1557.8	1559.4	1559.8	1559.2	1558.5	1557.8	1557.2
140°	1603.6	1604.9	1605.3	1604.6	1604.0	1603.3	1602.6
142.5°	1647.1	1648.1	1648.2	1647.3	1646.3	1645.4	1644.5
145°	1707.8	1708.4	1708.8	1708.8	1708.8	1708.8	1708.8
147.5°	1762.5	1763.2	1762.7	1761.2	1759.7	1758.1	1756.6
150°	1796.0	1796.6	1796.5	1795.5	1794.5	1793.5	1792.5
152.5°	1826.3	1827.5	1827.3	1825.8	1824.2	1822.7	1821.2
155°	1867.7	1869.4	1869.2	1867.2	1865.2	1863.2	1861.3
157.5°	1903.7	1905.7	1905.4	1902.8	1900.2	1897.6	1895.0
160°	1924.0	1926.0	1925.9	1923.5	1921.2	1918.9	1916.6
162.5°	1942.8	1945.0	1945.1	1943.1	1941.0	1939.0	1936.9
165°	1967.9	1970.6	1970.7	1968.4	1966.1	1963.7	1961.4
167.5°	1987.0	1989.7	1989.7	1987.0	1984.4	1981.7	1979.1
170°	1997.8	2000.5	2000.5	1997.8	1995.1	1992.5	1989.8
172.5°	2005.0	2007.6	2007.5	2004.6	2001.7	1998.7	1995.8
175°	2013.2	2015.6	2015.4	2012.7	2010.1	2007.4	2004.8
177.5°	2016.2	2018.4	2018.1	2015.4	2012.8	2010.1	2007.5
180°	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2	2012.2

(END OF REPORT)