

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: P332406

Luminaire Tested: **S123RDIW-S340D1535U835-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332406  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123RDIW-S340D1535U835-4F0-1E-UDD-A  
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 340 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 1535 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7497.1 lumens  
Efficiency: N/A  
Efficacy: 140.4 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-Indirect

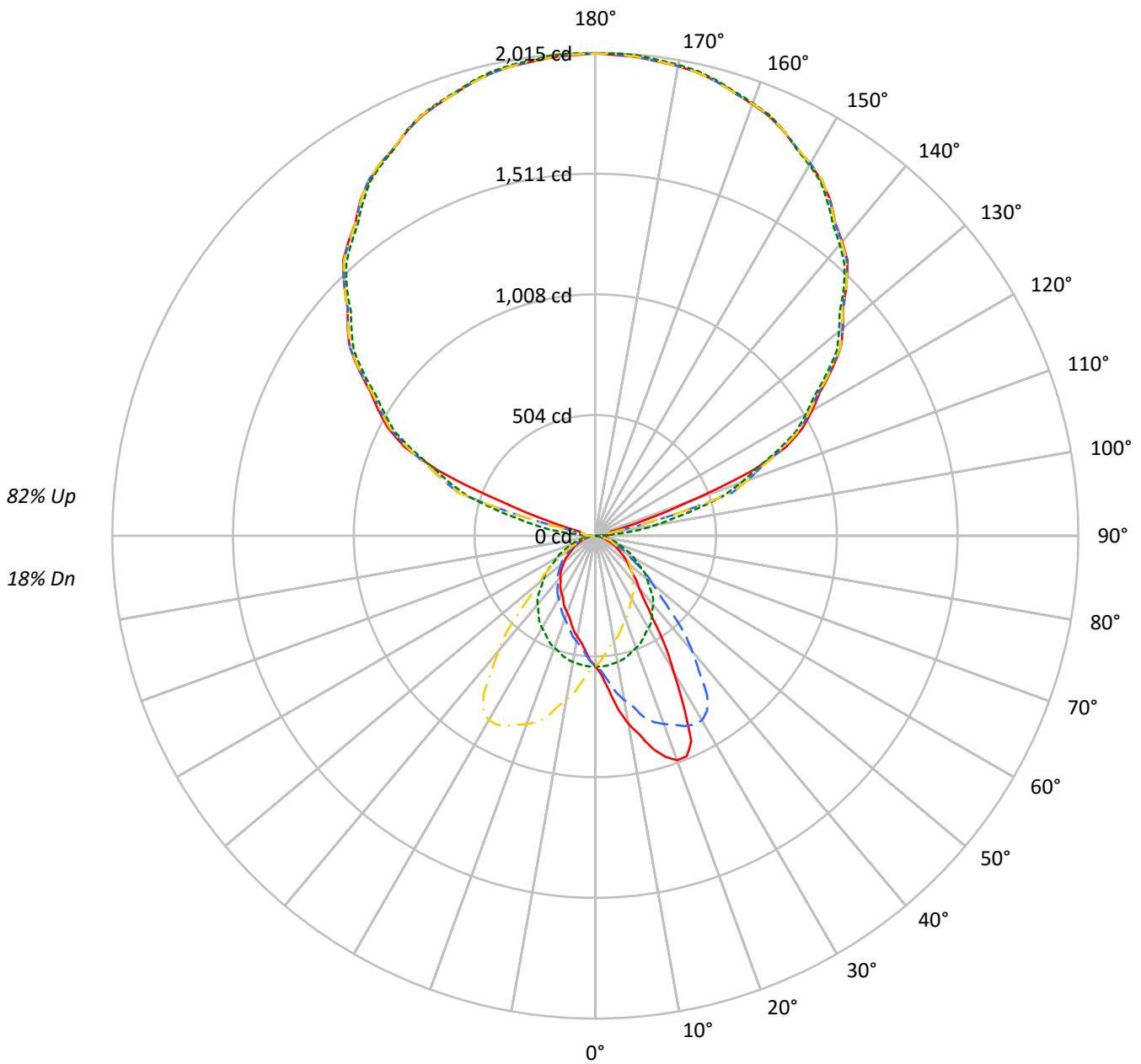
Input Watts (W): 53.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P332406

CATALOG NUMBER: S123RDIW-S340D1535U835-4F0-1E-UDD-A

### Luminous Intensity Polar Plot



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



TEST NUMBER: P332406

CATALOG NUMBER: S123RDIW-S340D1535U835-4F0-1E-UDD-A

**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	45	45	45	27	27	27	18				
1	91	87	83	80	80	77	74	71	58	56	54	40	39	38	24	23	23	16				
2	83	76	70	66	73	67	62	58	51	48	45	35	34	32	21	20	20	13				
3	76	67	60	55	66	59	54	49	45	41	38	31	29	27	19	18	17	12				
4	69	59	52	46	61	52	46	42	40	36	32	28	25	23	17	16	15	10				
5	63	53	45	39	56	47	40	36	36	31	28	25	22	20	15	14	13	9				
6	58	47	39	34	51	42	35	31	32	27	24	23	20	18	14	13	11	8				
7	54	42	35	30	47	38	31	27	29	24	21	21	18	16	13	11	10	7				
8	50	38	31	26	44	34	28	24	26	22	19	19	16	14	12	10	9	6				
9	46	35	28	23	41	31	25	21	24	20	17	17	14	12	11	9	8	6				
10	43	32	25	20	38	28	22	19	22	18	15	16	13	11	10	9	7	5				

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

	0°	90°	180°	270°
0°	5858	5858	5858	5858
5°	6983	5883	5181	5883
10°	8719	5850	4680	5850
15°	10234	5789	4268	5789
20°	11423	5700	3918	5700
25°	11240	5606	3702	5606
30°	8079	5520	3480	5520
35°	5394	5406	3336	5406
40°	3974	5271	3188	5271
45°	3334	5033	3043	5033
50°	2942	4721	2840	4721
55°	2580	4363	2562	4363
60°	2297	4021	2347	4021
65°	2017	3655	2183	3655
70°	1583	3330	1995	3330
75°	1393	2907	1822	2907
80°	1215	2467	1791	2467
85°	976	1988	1902	1988



TEST NUMBER: P332406

CATALOG NUMBER: S123RDIW-S340D1535U835-4F0-1E-UDD-A

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.5	0.7
10°-20°	167.2	2.2
20°-30°	262.7	3.5
30°-40°	274.1	3.7
40°-50°	234.5	3.1
50°-60°	178.8	2.4
60°-70°	114.6	1.5
70°-80°	55.1	0.7
80°-90°	20.2	0.3
90°-100°	73.2	1.0
100°-110°	348.7	4.7
110°-120°	837.5	11.2
120°-130°	1066.5	14.2
130°-140°	1139.5	15.2
140°-150°	1065.6	14.2
150°-160°	859.5	11.5
160°-170°	554.7	7.4
170°-180°	191.2	2.6
0°-30°	483.4	6.4
0°-40°	757.5	10.1
0°-60°	1170.8	15.6
0°-90°	1360.7	18.1
90°-120°	1259.4	16.8
90°-150°	4531.0	60.4
90°-180°	6136.0	81.8
0°-180°	7497.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	544	544	544	544	544	
5°	646	544	480	544	646	67
15°	918	520	383	520	918	260
25°	946	472	312	472	946	407
35°	410	411	254	411	410	269
45°	219	331	200	331	219	172
55°	138	232	136	232	138	124
65°	79	144	86	144	79	78
75°	34	70	44	70	34	36
85°	8	16	15	16	8	10
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	



TEST NUMBER: P332406

CATALOG NUMBER: S123RDIW-S340D1535U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2
2.5°	579.7	580.4	578.0	577.6	574.8	574.1	574.1	570.1	567.7	564.6	562.7
5°	646.3	650.0	648.1	644.0	637.0	635.3	630.9	623.9	616.0	606.2	601.6
7.5°	729.5	734.6	732.6	726.2	718.8	712.9	700.4	688.8	672.6	658.3	646.1
10°	797.7	792.4	788.2	781.9	775.1	764.2	751.1	733.2	712.5	696.1	678.0
12.5°	848.8	847.9	842.6	836.1	826.6	816.2	800.1	778.3	754.2	730.6	709.8
15°	918.4	919.8	916.3	909.6	896.0	877.6	853.4	844.3	809.8	784.2	758.6
17.5°	966.6	966.3	965.8	956.5	942.7	929.6	907.1	883.2	852.0	815.9	781.4
20°	997.2	994.8	995.3	984.8	974.6	959.4	937.5	902.8	877.2	835.5	799.8
22.5°	996.4	995.9	997.7	994.1	986.7	975.1	957.8	928.5	895.8	853.7	813.6
25°	946.4	944.5	955.4	958.5	970.4	972.5	967.3	951.3	920.3	876.9	827.3
27.5°	792.0	791.0	811.3	836.8	869.0	894.1	918.3	930.0	920.3	889.2	839.5
30°	650.0	671.9	682.2	719.0	760.0	808.9	851.8	892.5	902.6	889.0	848.3
32.5°	539.7	558.8	567.4	598.9	637.2	694.5	758.8	816.5	857.3	867.6	843.1
35°	410.5	410.7	430.3	444.3	479.7	538.6	601.1	678.4	755.3	813.6	819.6
37.5°	327.6	328.7	340.6	354.5	381.1	412.2	467.2	531.5	620.3	709.7	762.2
40°	282.8	284.9	293.8	307.5	326.6	350.2	393.0	453.6	527.7	627.2	708.5
42.5°	254.1	257.5	262.1	272.7	284.5	306.6	341.2	388.0	455.4	549.5	643.3
45°	219.0	220.9	224.4	229.3	240.0	255.3	278.6	310.1	366.0	441.7	535.6
47.5°	193.2	192.2	195.9	199.8	207.0	217.5	233.1	258.7	298.6	359.4	439.0
50°	175.7	175.4	178.0	181.0	187.8	195.5	208.3	227.6	259.3	309.6	382.6
52.5°	159.3	160.1	162.0	165.7	170.6	176.8	188.3	202.3	229.5	272.9	333.7
55°	137.5	138.2	140.7	142.8	146.3	152.6	159.8	171.5	190.1	220.4	270.5
57.5°	119.0	118.7	121.1	121.7	125.6	130.7	136.3	145.4	158.9	181.4	215.1
60°	106.7	106.0	108.1	109.7	111.8	116.0	120.7	129.5	140.3	156.8	185.7
62.5°	95.5	95.2	96.7	98.4	100.1	103.9	107.8	114.6	123.1	137.0	160.0
65°	79.2	79.9	80.6	81.3	82.2	84.6	88.3	93.0	98.8	108.6	125.1
67.5°	62.3	63.0	63.2	64.6	66.6	68.1	70.4	74.5	78.6	86.8	96.2
70°	50.3	50.1	50.3	51.0	53.6	56.1	59.2	62.2	64.8	70.6	78.5
72.5°	43.2	42.8	43.4	43.6	44.8	45.5	47.4	50.3	53.6	57.5	63.2
75°	33.5	33.5	33.5	33.5	34.5	34.9	35.6	36.3	37.5	39.4	43.6
77.5°	24.8	24.8	25.2	25.4	25.6	25.9	26.3	27.0	27.4	28.4	30.2
80°	19.6	19.8	19.6	19.8	19.8	20.3	20.5	21.2	21.4	22.6	23.3
82.5°	14.7	14.6	14.7	15.0	15.0	15.4	15.5	16.0	16.0	16.6	17.3
85°	7.9	7.5	7.9	7.7	8.2	7.7	7.9	8.4	8.4	8.6	9.6
87.5°	10.8	11.1	10.6	10.6	10.5	10.5	10.2	9.9	10.1	9.6	8.9
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	65.4	73.7	81.9	90.1	98.4	155.0
105°	65.8	65.1	64.5	63.8	63.1	92.2	151.0	209.8	268.6	327.4	357.3
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



TEST NUMBER: P332406

CATALOG NUMBER: S123RDIW-S340D1535U835-4F0-1E-UDD-A

**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



TEST NUMBER: P332406

CATALOG NUMBER: S123RDIW-S340D1535U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2
2.5°	561.9	561.4	558.8	555.8	551.9	549.3	547.2	546.1	542.7	538.6	535.9
5°	596.7	589.7	582.2	573.1	564.7	556.1	550.8	544.5	536.8	528.2	522.1
7.5°	633.8	620.1	605.4	590.1	575.1	561.6	549.6	539.4	527.2	514.8	506.2
10°	662.4	642.3	621.6	600.4	581.1	562.9	548.9	535.2	520.5	506.3	495.5
12.5°	688.3	661.9	638.0	611.9	587.2	565.5	545.4	529.2	511.5	496.4	484.2
15°	721.1	694.0	665.2	625.5	592.7	565.2	540.7	519.5	498.1	479.5	467.6
17.5°	751.7	711.1	672.2	639.2	596.5	562.2	532.3	507.0	483.4	463.7	449.0
20°	764.4	725.0	682.9	640.7	598.8	560.3	525.6	497.6	473.2	450.8	437.3
22.5°	772.0	727.5	683.0	637.7	593.2	553.2	518.9	488.1	461.6	440.4	423.7
25°	780.9	727.8	678.9	634.2	588.7	545.4	504.6	472.0	443.4	420.8	403.1
27.5°	786.8	724.3	666.5	616.8	570.7	527.6	490.2	455.6	426.5	402.6	383.6
30°	787.9	721.5	657.0	603.2	556.4	516.7	477.1	444.1	413.3	387.9	370.2
32.5°	789.4	714.6	644.1	587.0	539.0	499.8	463.9	432.3	400.8	375.8	357.7
35°	783.3	710.8	624.6	558.9	510.9	472.9	440.6	411.4	380.5	356.2	337.8
37.5°	756.8	695.7	604.4	527.3	477.1	442.0	415.6	390.2	361.8	335.6	318.3
40°	730.2	680.8	588.7	508.1	455.7	419.6	395.8	375.1	347.6	323.1	304.5
42.5°	690.5	660.4	573.8	488.0	431.5	396.7	376.6	357.2	333.1	308.2	290.7
45°	617.6	621.6	543.3	455.9	397.9	363.0	344.1	330.6	309.2	288.7	270.7
47.5°	526.3	563.3	507.5	421.8	362.6	329.8	313.3	301.5	287.0	266.9	250.5
50°	466.7	519.5	478.8	398.9	340.4	307.8	291.5	281.9	269.3	253.5	237.9
52.5°	411.7	468.5	444.1	373.3	316.3	286.5	270.6	262.7	252.7	237.8	223.7
55°	335.7	393.3	387.7	334.8	280.3	253.5	241.4	232.5	225.8	214.6	203.4
57.5°	271.6	326.1	329.0	291.9	248.5	222.0	211.6	204.9	200.5	192.1	181.7
60°	231.1	281.2	291.0	263.0	225.8	202.5	192.2	186.8	183.4	176.6	168.7
62.5°	197.6	240.2	251.3	231.2	204.0	182.1	174.1	169.0	166.6	160.8	153.8
65°	151.2	186.6	197.3	186.2	171.9	154.5	147.9	143.5	141.4	138.2	133.0
67.5°	113.7	139.5	151.3	143.4	138.2	127.2	123.1	120.7	118.8	116.6	112.3
70°	91.3	110.4	122.5	120.5	116.3	110.4	107.4	105.8	103.9	102.0	98.3
72.5°	73.4	86.6	97.9	99.0	95.6	94.4	91.7	91.0	89.9	87.7	85.6
75°	48.7	57.8	65.7	68.7	70.1	71.3	70.1	69.9	69.7	67.8	66.6
77.5°	31.9	36.8	41.8	47.0	49.2	50.7	51.1	52.0	51.3	50.4	49.8
80°	24.5	25.6	29.1	33.5	37.0	38.4	39.4	39.8	39.6	39.4	38.4
82.5°	17.8	18.7	20.4	23.5	26.4	28.7	29.3	29.2	29.7	29.9	29.1
85°	9.6	9.8	10.3	10.7	12.3	14.9	15.6	16.1	16.5	16.5	15.1
87.5°	8.4	7.4	6.9	6.1	6.0	5.5	6.0	6.3	7.1	7.0	7.7
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: P332406

CATALOG NUMBER: S123RDIW-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: P332406

CATALOG NUMBER: S123RDIW-S340D1535U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2
2.5°	534.9	532.5	530.8	527.1	524.7	522.1	519.5	521.1	520.9	520.8	520.8
5°	517.0	511.6	506.7	500.4	496.5	491.6	487.9	487.4	488.3	485.1	483.2
7.5°	499.2	491.9	484.9	478.0	470.6	464.7	461.1	459.3	457.0	455.0	452.9
10°	486.7	478.1	471.3	462.7	454.8	447.8	443.4	440.3	438.7	437.1	434.0
12.5°	473.8	465.4	456.8	447.0	439.5	431.4	428.1	424.7	421.6	419.7	415.6
15°	455.0	444.1	435.0	424.7	416.3	408.4	403.8	397.0	396.1	393.7	389.5
17.5°	436.1	424.3	411.7	404.1	394.7	386.4	379.3	377.1	370.4	367.9	364.2
20°	421.2	410.3	400.7	390.7	377.0	369.3	363.7	360.7	355.3	352.0	349.7
22.5°	408.4	397.2	386.2	374.5	363.2	354.5	350.4	345.7	342.8	338.2	335.7
25°	390.0	377.9	364.6	352.0	343.9	337.4	330.8	326.6	322.4	320.3	315.7
27.5°	368.7	356.0	343.6	334.0	324.0	317.6	311.7	308.0	302.9	299.4	296.8
30°	356.9	342.0	331.3	322.7	309.9	303.8	299.4	294.7	291.0	287.3	284.7
32.5°	343.3	329.7	319.6	308.9	299.1	292.4	286.7	282.6	279.4	275.9	273.3
35°	322.0	310.6	300.1	289.4	282.1	275.4	268.6	265.1	262.1	258.8	256.5
37.5°	302.7	292.0	282.0	271.9	262.9	257.4	252.0	249.3	245.2	243.0	240.7
40°	290.8	280.3	269.6	259.8	250.5	246.3	241.4	237.4	233.7	232.0	229.5
42.5°	277.7	267.2	258.2	247.7	240.0	234.3	229.8	225.5	222.7	220.3	218.9
45°	258.4	249.1	240.2	229.7	222.5	217.6	212.5	208.5	206.0	204.3	201.8
47.5°	239.6	230.3	221.3	212.2	205.2	199.6	194.4	191.7	188.3	186.3	184.6
50°	226.0	217.6	208.1	199.7	192.7	187.1	182.9	179.4	176.4	173.8	172.6
52.5°	213.5	204.6	196.3	188.5	181.1	174.8	171.0	167.3	165.0	162.1	160.7
55°	192.9	184.3	177.3	169.6	162.4	157.0	152.4	149.1	146.8	143.5	141.7
57.5°	173.6	165.8	157.5	150.8	143.4	138.9	135.0	130.6	127.7	125.2	123.3
60°	160.5	151.7	144.4	138.2	131.6	125.8	122.3	118.8	115.8	113.2	111.6
62.5°	146.9	139.2	132.3	125.5	119.5	114.4	110.4	107.5	104.8	103.2	101.5
65°	126.0	120.0	113.0	107.4	101.8	98.1	94.8	92.3	90.4	89.2	87.8
67.5°	106.8	101.0	94.9	89.4	85.6	82.8	80.7	78.5	77.5	76.0	75.1
70°	94.4	88.3	82.9	78.7	75.0	72.9	71.5	69.9	69.0	67.1	66.2
72.5°	80.8	76.4	72.5	69.1	66.1	64.2	62.4	60.4	58.9	56.8	55.9
75°	63.6	59.6	56.6	54.3	52.4	49.9	47.3	45.2	44.5	43.8	43.6
77.5°	47.1	44.6	42.4	40.4	38.1	36.3	35.7	35.2	35.1	34.7	34.7
80°	37.0	34.7	33.1	30.8	29.4	29.4	29.4	28.9	29.1	29.1	29.1
82.5°	27.5	25.4	24.5	23.7	23.4	23.6	23.6	23.7	23.5	23.9	23.7
85°	14.2	14.4	14.9	14.7	14.9	14.9	15.4	15.1	15.4	14.9	15.4
87.5°	8.2	9.5	10.5	11.6	12.6	13.3	13.8	14.0	14.5	14.8	15.0
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: P332406

CATALOG NUMBER: S123RDIW-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: P332406

CATALOG NUMBER: S123RDIW-S340D1535U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2
2.5°	518.5	518.3	518.5	517.8	518.5	518.3	518.5	520.8	520.8	520.9	521.1
5°	482.5	482.3	481.6	479.5	481.6	482.3	482.5	483.2	485.1	488.3	487.4
7.5°	451.0	450.7	448.7	448.7	448.7	450.7	451.0	452.9	455.0	457.0	459.3
10°	432.4	432.6	429.8	428.2	429.8	432.6	432.4	434.0	437.1	438.7	440.3
12.5°	414.3	413.3	411.0	409.2	411.0	413.3	414.3	415.6	419.7	421.6	424.7
15°	390.5	388.1	382.6	383.0	382.6	388.1	390.5	389.5	393.7	396.1	397.0
17.5°	362.4	360.7	360.6	357.3	360.6	360.7	362.4	364.2	367.9	370.4	377.1
20°	346.0	344.8	345.3	342.0	345.3	344.8	346.0	349.7	352.0	355.3	360.7
22.5°	333.1	331.9	330.0	329.0	330.0	331.9	333.1	335.7	338.2	342.8	345.7
25°	314.3	312.4	310.6	311.7	310.6	312.4	314.3	315.7	320.3	322.4	326.6
27.5°	295.5	294.1	292.2	292.0	292.2	294.1	295.5	296.8	299.4	302.9	308.0
30°	283.5	282.1	281.2	280.0	281.2	282.1	283.5	284.7	287.3	291.0	294.7
32.5°	271.4	271.1	269.5	269.2	269.5	271.1	271.4	273.3	275.9	279.4	282.6
35°	255.6	254.2	253.7	253.9	253.7	254.2	255.6	256.5	258.8	262.1	265.1
37.5°	240.5	238.7	237.8	237.0	237.8	238.7	240.5	240.7	243.0	245.2	249.3
40°	229.7	227.9	227.4	226.9	227.4	227.9	229.7	229.5	232.0	233.7	237.4
42.5°	217.6	216.9	216.6	215.7	216.6	216.9	217.6	218.9	220.3	222.7	225.5
45°	201.1	200.8	199.4	199.9	199.4	200.8	201.1	201.8	204.3	206.0	208.5
47.5°	183.6	182.6	181.6	182.3	181.6	182.6	183.6	184.6	186.3	188.3	191.7
50°	171.7	171.2	169.1	169.6	169.1	171.2	171.7	172.6	173.8	176.4	179.4
52.5°	159.8	158.0	157.2	156.9	157.2	158.0	159.8	160.7	162.1	165.0	167.3
55°	140.0	137.9	137.0	136.5	137.0	137.9	140.0	141.7	143.5	146.8	149.1
57.5°	120.6	120.1	119.3	119.8	119.3	120.1	120.6	123.3	125.2	127.7	130.6
60°	109.3	109.3	109.3	109.0	109.3	109.3	109.3	111.6	113.2	115.8	118.8
62.5°	100.5	99.9	99.8	100.1	99.8	99.9	100.5	101.5	103.2	104.8	107.5
65°	87.1	86.9	86.0	85.7	86.0	86.9	87.1	87.8	89.2	90.4	92.3
67.5°	74.5	73.7	73.4	73.1	73.4	73.7	74.5	75.1	76.0	77.5	78.5
70°	65.0	64.5	63.1	63.4	63.1	64.5	65.0	66.2	67.1	69.0	69.9
72.5°	54.8	54.3	54.0	53.7	54.0	54.3	54.8	55.9	56.8	58.9	60.4
75°	43.3	43.1	42.9	43.8	42.9	43.1	43.3	43.6	43.8	44.5	45.2
77.5°	34.7	34.7	34.9	34.5	34.9	34.7	34.7	34.7	34.7	35.1	35.2
80°	29.1	29.1	28.9	28.9	28.9	29.1	29.1	29.1	29.1	29.1	28.9
82.5°	23.3	23.5	23.7	23.3	23.7	23.5	23.3	23.7	23.9	23.5	23.7
85°	15.4	15.1	15.6	15.4	15.6	15.1	15.4	15.4	14.9	15.4	15.1
87.5°	15.5	15.2	15.4	15.7	15.4	15.2	15.5	15.0	14.8	14.5	14.0
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: P332406

CATALOG NUMBER: S123RDIW-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: P332406

CATALOG NUMBER: S123RDIW-S340D1535U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2
2.5°	519.5	522.1	524.7	527.1	530.8	532.5	534.9	535.9	538.6	542.7	546.1
5°	487.9	491.6	496.5	500.4	506.7	511.6	517.0	522.1	528.2	536.8	544.5
7.5°	461.1	464.7	470.6	478.0	484.9	491.9	499.2	506.2	514.8	527.2	539.4
10°	443.4	447.8	454.8	462.7	471.3	478.1	486.7	495.5	506.3	520.5	535.2
12.5°	428.1	431.4	439.5	447.0	456.8	465.4	473.8	484.2	496.4	511.5	529.2
15°	403.8	408.4	416.3	424.7	435.0	444.1	455.0	467.6	479.5	498.1	519.5
17.5°	379.3	386.4	394.7	404.1	411.7	424.3	436.1	449.0	463.7	483.4	507.0
20°	363.7	369.3	377.0	390.7	400.7	410.3	421.2	437.3	450.8	473.2	497.6
22.5°	350.4	354.5	363.2	374.5	386.2	397.2	408.4	423.7	440.4	461.6	488.1
25°	330.8	337.4	343.9	352.0	364.6	377.9	390.0	403.1	420.8	443.4	472.0
27.5°	311.7	317.6	324.0	334.0	343.6	356.0	368.7	383.6	402.6	426.5	455.6
30°	299.4	303.8	309.9	322.7	331.3	342.0	356.9	370.2	387.9	413.3	444.1
32.5°	286.7	292.4	299.1	308.9	319.6	329.7	343.3	357.7	375.8	400.8	432.3
35°	268.6	275.4	282.1	289.4	300.1	310.6	322.0	337.8	356.2	380.5	411.4
37.5°	252.0	257.4	262.9	271.9	282.0	292.0	302.7	318.3	335.6	361.8	390.2
40°	241.4	246.3	250.5	259.8	269.6	280.3	290.8	304.5	323.1	347.6	375.1
42.5°	229.8	234.3	240.0	247.7	258.2	267.2	277.7	290.7	308.2	333.1	357.2
45°	212.5	217.6	222.5	229.7	240.2	249.1	258.4	270.7	288.7	309.2	330.6
47.5°	194.4	199.6	205.2	212.2	221.3	230.3	239.6	250.5	266.9	287.0	301.5
50°	182.9	187.1	192.7	199.7	208.1	217.6	226.0	237.9	253.5	269.3	281.9
52.5°	171.0	174.8	181.1	188.5	196.3	204.6	213.5	223.7	237.8	252.7	262.7
55°	152.4	157.0	162.4	169.6	177.3	184.3	192.9	203.4	214.6	225.8	232.5
57.5°	135.0	138.9	143.4	150.8	157.5	165.8	173.6	181.7	192.1	200.5	204.9
60°	122.3	125.8	131.6	138.2	144.4	151.7	160.5	168.7	176.6	183.4	186.8
62.5°	110.4	114.4	119.5	125.5	132.3	139.2	146.9	153.8	160.8	166.6	169.0
65°	94.8	98.1	101.8	107.4	113.0	120.0	126.0	133.0	138.2	141.4	143.5
67.5°	80.7	82.8	85.6	89.4	94.9	101.0	106.8	112.3	116.6	118.8	120.7
70°	71.5	72.9	75.0	78.7	82.9	88.3	94.4	98.3	102.0	103.9	105.8
72.5°	62.4	64.2	66.1	69.1	72.5	76.4	80.8	85.6	87.7	89.9	91.0
75°	47.3	49.9	52.4	54.3	56.6	59.6	63.6	66.6	67.8	69.7	69.9
77.5°	35.7	36.3	38.1	40.4	42.4	44.6	47.1	49.8	50.4	51.3	52.0
80°	29.4	29.4	29.4	30.8	33.1	34.7	37.0	38.4	39.4	39.6	39.8
82.5°	23.6	23.6	23.4	23.7	24.5	25.4	27.5	29.1	29.9	29.7	29.2
85°	15.4	14.9	14.9	14.7	14.9	14.4	14.2	15.1	16.5	16.5	16.1
87.5°	13.8	13.3	12.6	11.6	10.5	9.5	8.2	7.7	7.0	7.1	6.3
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: P332406

CATALOG NUMBER: S123RDIW-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: P332406

CATALOG NUMBER: S123RDIW-S340D1535U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2	544.2
2.5°	547.2	549.3	551.9	555.8	558.8	561.4	561.9	562.7	564.6	567.7	570.1
5°	550.8	556.1	564.7	573.1	582.2	589.7	596.7	601.6	606.2	616.0	623.9
7.5°	549.6	561.6	575.1	590.1	605.4	620.1	633.8	646.1	658.3	672.6	688.8
10°	548.9	562.9	581.1	600.4	621.6	642.3	662.4	678.0	696.1	712.5	733.2
12.5°	545.4	565.5	587.2	611.9	638.0	661.9	688.3	709.8	730.6	754.2	778.3
15°	540.7	565.2	592.7	625.5	665.2	694.0	721.1	758.6	784.2	809.8	844.3
17.5°	532.3	562.2	596.5	639.2	672.2	711.1	751.7	781.4	815.9	852.0	883.2
20°	525.6	560.3	598.8	640.7	682.9	725.0	764.4	799.8	835.5	877.2	902.8
22.5°	518.9	553.2	593.2	637.7	683.0	727.5	772.0	813.6	853.7	895.8	928.5
25°	504.6	545.4	588.7	634.2	678.9	727.8	780.9	827.3	876.9	920.3	951.3
27.5°	490.2	527.6	570.7	616.8	666.5	724.3	786.8	839.5	889.2	920.3	930.0
30°	477.1	516.7	556.4	603.2	657.0	721.5	787.9	848.3	889.0	902.6	892.5
32.5°	463.9	499.8	539.0	587.0	644.1	714.6	789.4	843.1	867.6	857.3	816.5
35°	440.6	472.9	510.9	558.9	624.6	710.8	783.3	819.6	813.6	755.3	678.4
37.5°	415.6	442.0	477.1	527.3	604.4	695.7	756.8	762.2	709.7	620.3	531.5
40°	395.8	419.6	455.7	508.1	588.7	680.8	730.2	708.5	627.2	527.7	453.6
42.5°	376.6	396.7	431.5	488.0	573.8	660.4	690.5	643.3	549.5	455.4	388.0
45°	344.1	363.0	397.9	455.9	543.3	621.6	617.6	535.6	441.7	366.0	310.1
47.5°	313.3	329.8	362.6	421.8	507.5	563.3	526.3	439.0	359.4	298.6	258.7
50°	291.5	307.8	340.4	398.9	478.8	519.5	466.7	382.6	309.6	259.3	227.6
52.5°	270.6	286.5	316.3	373.3	444.1	468.5	411.7	333.7	272.9	229.5	202.3
55°	241.4	253.5	280.3	334.8	387.7	393.3	335.7	270.5	220.4	190.1	171.5
57.5°	211.6	222.0	248.5	291.9	329.0	326.1	271.6	215.1	181.4	158.9	145.4
60°	192.2	202.5	225.8	263.0	291.0	281.2	231.1	185.7	156.8	140.3	129.5
62.5°	174.1	182.1	204.0	231.2	251.3	240.2	197.6	160.0	137.0	123.1	114.6
65°	147.9	154.5	171.9	186.2	197.3	186.6	151.2	125.1	108.6	98.8	93.0
67.5°	123.1	127.2	138.2	143.4	151.3	139.5	113.7	96.2	86.8	78.6	74.5
70°	107.4	110.4	116.3	120.5	122.5	110.4	91.3	78.5	70.6	64.8	62.2
72.5°	91.7	94.4	95.6	99.0	97.9	86.6	73.4	63.2	57.5	53.6	50.3
75°	70.1	71.3	70.1	68.7	65.7	57.8	48.7	43.6	39.4	37.5	36.3
77.5°	51.1	50.7	49.2	47.0	41.8	36.8	31.9	30.2	28.4	27.4	27.0
80°	39.4	38.4	37.0	33.5	29.1	25.6	24.5	23.3	22.6	21.4	21.2
82.5°	29.3	28.7	26.4	23.5	20.4	18.7	17.8	17.3	16.6	16.0	16.0
85°	15.6	14.9	12.3	10.7	10.3	9.8	9.6	9.6	8.6	8.4	8.4
87.5°	6.0	5.5	6.0	6.1	6.9	7.4	8.4	8.9	9.6	10.1	9.9
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





TEST NUMBER: P332406

CATALOG NUMBER: S123RDIW-S340D1535U835-4F0-1E-UDD-A

**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



TEST NUMBER: P332406

CATALOG NUMBER: S123RDIW-S340D1535U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	544.2	544.2	544.2	544.2	544.2	544.2	544.2
2.5°	574.1	574.1	574.8	577.6	578.0	580.4	579.7
5°	630.9	635.3	637.0	644.0	648.1	650.0	646.3
7.5°	700.4	712.9	718.8	726.2	732.6	734.6	729.5
10°	751.1	764.2	775.1	781.9	788.2	792.4	797.7
12.5°	800.1	816.2	826.6	836.1	842.6	847.9	848.8
15°	853.4	877.6	896.0	909.6	916.3	919.8	918.4
17.5°	907.1	929.6	942.7	956.5	965.8	966.3	966.6
20°	937.5	959.4	974.6	984.8	995.3	994.8	997.2
22.5°	957.8	975.1	986.7	994.1	997.7	995.9	996.4
25°	967.3	972.5	970.4	958.5	955.4	944.5	946.4
27.5°	918.3	894.1	869.0	836.8	811.3	791.0	792.0
30°	851.8	808.9	760.0	719.0	682.2	671.9	650.0
32.5°	758.8	694.5	637.2	598.9	567.4	558.8	539.7
35°	601.1	538.6	479.7	444.3	430.3	410.7	410.5
37.5°	467.2	412.2	381.1	354.5	340.6	328.7	327.6
40°	393.0	350.2	326.6	307.5	293.8	284.9	282.8
42.5°	341.2	306.6	284.5	272.7	262.1	257.5	254.1
45°	278.6	255.3	240.0	229.3	224.4	220.9	219.0
47.5°	233.1	217.5	207.0	199.8	195.9	192.2	193.2
50°	208.3	195.5	187.8	181.0	178.0	175.4	175.7
52.5°	188.3	176.8	170.6	165.7	162.0	160.1	159.3
55°	159.8	152.6	146.3	142.8	140.7	138.2	137.5
57.5°	136.3	130.7	125.6	121.7	121.1	118.7	119.0
60°	120.7	116.0	111.8	109.7	108.1	106.0	106.7
62.5°	107.8	103.9	100.1	98.4	96.7	95.2	95.5
65°	88.3	84.6	82.2	81.3	80.6	79.9	79.2
67.5°	70.4	68.1	66.6	64.6	63.2	63.0	62.3
70°	59.2	56.1	53.6	51.0	50.3	50.1	50.3
72.5°	47.4	45.5	44.8	43.6	43.4	42.8	43.2
75°	35.6	34.9	34.5	33.5	33.5	33.5	33.5
77.5°	26.3	25.9	25.6	25.4	25.2	24.8	24.8
80°	20.5	20.3	19.8	19.8	19.6	19.8	19.6
82.5°	15.5	15.4	15.0	15.0	14.7	14.6	14.7
85°	7.9	7.7	8.2	7.7	7.9	7.5	7.9
87.5°	10.2	10.5	10.5	10.6	10.6	11.1	10.8
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



TEST NUMBER: P332406

CATALOG NUMBER: S123RDIW-S340D1535U835-4F0-1E-UDD-A

**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)