

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: P333096-840

Luminaire Tested: **S124RDIW-S1195D470U840-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333096-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124RDIW-S1195D470U840-4F0-1E-UDD-A1
Description: DEFINE 4 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1195 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6701.9 lumens
Efficiency: N/A
Efficacy: 127.9 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.23 / 1.39
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: Semi-Direct

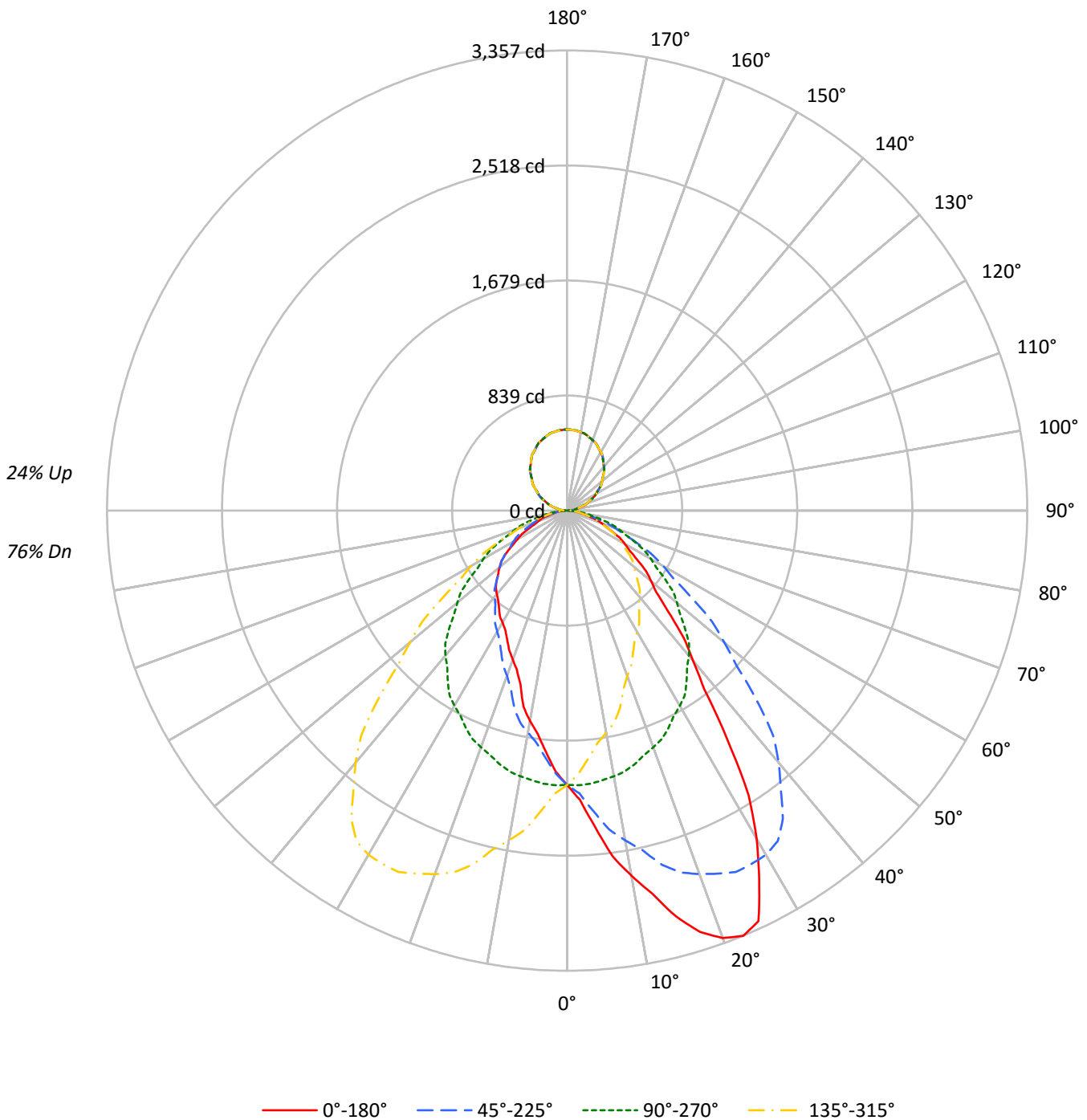
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333096-840

CATALOG NUMBER: S124RDIW-S1195D470U840-4F0-1E-UDD-A1

Luminous Intensity Polar Plot





TEST NUMBER: P333096-840

CATALOG NUMBER: S124RDIW-S1195D470U840-4F0-1E-UDD-A1

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	98	98	98	88	88	88	80	80	80	76
1	104	100	96	93	99	95	92	89	87	84	82	79	77	75	71	70	69	65
2	95	88	82	77	91	84	79	74	77	73	69	70	67	64	64	61	59	56
3	88	78	71	65	83	75	68	63	68	63	59	63	58	55	57	54	51	48
4	81	70	62	56	76	67	60	54	61	55	51	56	51	47	51	48	44	42
5	74	63	54	48	70	60	53	47	55	49	44	51	46	42	47	42	39	36
6	69	56	48	42	65	54	47	41	50	44	39	46	41	37	42	38	35	32
7	64	51	43	38	61	49	42	37	46	39	35	42	37	33	39	34	31	29
8	59	47	39	34	56	45	38	33	42	36	31	39	33	30	36	31	28	26
9	55	43	35	30	53	41	34	30	39	32	28	36	31	27	33	29	25	23
10	52	40	32	27	50	38	31	27	36	30	26	33	28	24	31	26	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	16156	16156	16156	16156
5°	18739	16204	14323	16204
10°	22168	16133	12782	16133
15°	25607	15984	10984	15984
20°	28511	15779	9933	15779
25°	29432	15577	9222	15577
30°	25765	15333	8793	15333
35°	20056	14970	8535	14970
40°	15039	14556	8395	14556
45°	11875	13891	8322	13891
50°	10025	13123	8081	13123
55°	8739	12279	7648	12279
60°	7863	11404	6770	11404
65°	6930	10457	5822	10457
70°	6243	9477	5254	9477
75°	5231	8400	4476	8400
80°	4421	7159	4198	7159
85°	3733	5604	3733	5604



TEST NUMBER: P333096-840

CATALOG NUMBER: S124RDIW-S1195D470U840-4F0-1E-UDD-A1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.9	2.9
10°-20°	584.9	8.7
20°-30°	914.8	13.7
30°-40°	1017.0	15.2
40°-50°	902.3	13.5
50°-60°	703.1	10.5
60°-70°	460.3	6.9
70°-80°	226.4	3.4
80°-90°	57.6	0.9
90°-100°	39.0	0.6
100°-110°	115.6	1.7
110°-120°	196.2	2.9
120°-130°	258.7	3.9
130°-140°	290.6	4.3
140°-150°	285.5	4.3
150°-160°	240.2	3.6
160°-170°	159.8	2.4
170°-180°	56.0	0.8
0°-30°	1693.6	25.3
0°-40°	2710.6	40.4
0°-60°	4316.0	64.4
0°-90°	5060.3	75.5
90°-120°	350.9	5.2
90°-150°	1185.7	17.7
90°-180°	1642.0	24.5
0°-180°	6701.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2001	2001	2001	2001	2001	
5°	2312	2000	1767	2000	2312	234
15°	3064	1912	1314	1912	3064	871
25°	3304	1749	1035	1749	3304	1466
35°	2035	1519	866	1519	2035	1276
45°	1040	1217	729	1217	1040	824
55°	621	872	543	872	621	565
65°	363	547	305	547	363	365
75°	168	269	144	269	168	185
85°	40	60	40	60	40	46
90°	14	1	14	1	14	9
95°	36	28	36	28	36	38
105°	112	107	112	107	112	118
115°	198	200	198	200	198	195
125°	288	290	288	290	288	257
135°	375	375	375	375	375	290
145°	456	455	456	455	456	285
155°	521	522	521	522	521	240
165°	566	568	566	568	566	160
175°	588	591	588	591	588	56
180°	592	592	592	592	592	



TEST NUMBER: P333096-840

CATALOG NUMBER: S124RDIW-S1195D470U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	2110.8	2116.7	2110.8	2110.2	2103.8	2101.8	2099.2	2090.8	2075.4	2066.4	2068.3
5°	2312.4	2332.6	2321.3	2319.7	2302.0	2284.2	2272.9	2247.2	2219.7	2201.2	2185.9
7.5°	2545.6	2557.2	2550.1	2538.8	2510.1	2493.9	2467.7	2433.7	2384.5	2346.9	2312.6
10°	2704.3	2713.9	2710.8	2689.8	2668.8	2626.1	2601.9	2554.4	2492.2	2443.1	2397.1
12.5°	2860.3	2870.7	2842.4	2843.3	2803.6	2770.0	2731.6	2671.7	2600.0	2536.6	2479.0
15°	3063.9	3051.0	3051.0	3034.8	2990.5	2943.8	2904.3	2841.4	2751.1	2675.2	2595.5
17.5°	3223.2	3227.7	3221.1	3183.1	3148.3	3099.9	3027.5	2954.1	2870.2	2768.4	2686.8
20°	3318.7	3318.7	3311.4	3285.6	3240.5	3188.9	3110.7	3030.8	2924.4	2822.0	2730.1
22.5°	3357.4	3359.9	3351.4	3330.1	3289.5	3239.1	3172.6	3091.5	2981.8	2866.5	2752.7
25°	3304.2	3319.5	3321.0	3315.5	3303.4	3272.7	3215.5	3132.4	3034.0	2909.1	2786.5
27.5°	3033.5	3052.9	3069.9	3097.8	3134.8	3154.2	3156.7	3114.5	3028.7	2908.4	2785.1
30°	2763.9	2780.1	2832.5	2901.0	2954.3	3002.6	3044.5	3055.9	3007.5	2899.4	2769.6
32.5°	2464.7	2486.6	2539.0	2612.7	2701.4	2783.3	2877.5	2925.5	2924.3	2859.4	2739.3
35°	2035.1	2051.2	2099.6	2177.0	2283.4	2405.2	2554.4	2670.4	2749.5	2743.8	2670.4
37.5°	1641.2	1659.5	1708.4	1772.5	1875.7	2026.5	2170.8	2330.8	2476.9	2559.0	2534.5
40°	1427.1	1427.9	1475.5	1541.7	1638.4	1769.8	1927.0	2104.4	2267.2	2400.3	2426.1
42.5°	1258.1	1258.3	1289.7	1361.0	1430.7	1554.4	1704.5	1880.6	2071.2	2224.8	2293.2
45°	1040.1	1047.3	1073.2	1115.9	1170.7	1275.6	1395.6	1559.3	1773.0	1955.2	2068.9
47.5°	880.8	891.4	907.9	942.7	986.4	1056.2	1155.6	1302.6	1476.4	1676.9	1838.7
50°	798.2	799.8	820.8	840.1	878.1	933.7	1020.8	1143.3	1302.9	1495.6	1675.5
52.5°	727.3	726.9	739.5	764.1	794.9	838.2	908.5	1020.1	1161.6	1334.4	1520.0
55°	620.9	624.9	634.5	653.9	677.3	707.9	763.6	847.4	958.7	1106.2	1274.8
57.5°	539.9	542.0	549.6	557.7	579.3	601.5	643.3	701.5	795.4	916.1	1073.2
60°	487.0	487.8	490.2	502.3	519.3	540.2	568.5	617.6	696.6	807.1	931.3
62.5°	435.4	436.9	440.6	449.4	462.5	477.0	506.5	546.0	611.5	705.8	817.7
65°	362.8	363.7	369.3	372.5	382.9	395.9	417.7	444.2	489.4	568.5	653.1
67.5°	303.2	303.2	303.5	307.8	315.1	323.7	336.7	358.0	392.0	440.6	515.2
70°	264.5	264.5	266.1	268.5	272.6	279.7	287.0	303.2	328.2	367.7	425.0
72.5°	228.3	228.9	230.6	231.1	233.2	239.1	244.5	254.8	273.4	303.2	349.4
75°	167.7	170.2	174.2	177.4	181.4	180.6	186.2	192.7	198.3	216.1	242.7
77.5°	124.8	123.5	124.0	126.7	127.2	128.1	132.1	137.0	141.3	149.7	159.2
80°	95.1	95.1	97.6	98.4	97.6	98.4	102.4	104.8	106.4	109.7	118.6
82.5°	71.9	73.2	72.4	73.2	73.7	74.5	77.9	78.4	80.0	81.3	85.0
85°	40.3	41.1	41.9	40.3	40.3	40.3	41.9	42.7	44.3	43.5	45.1
87.5°	17.0	16.3	16.9	16.9	17.4	16.7	17.2	18.4	17.0	17.5	17.4
90°	13.7	13.5	13.3	13.1	12.9	12.5	11.9	11.3	10.7	10.1	9.3
92.5°	20.3	20.2	20.1	20.0	19.8	19.6	19.2	18.9	18.5	18.1	17.6
95°	36.2	36.2	36.2	36.2	36.2	36.0	35.6	35.3	35.0	34.7	34.0
97.5°	56.7	56.7	56.7	56.7	56.7	56.5	56.1	55.7	55.3	55.0	54.1
100°	70.9	70.9	70.9	70.9	70.9	70.8	70.6	70.4	70.2	70.0	69.1
102.5°	87.1	86.9	86.8	86.7	86.7	86.5	86.2	85.9	85.6	85.4	84.5
105°	111.7	111.4	111.1	110.8	110.5	110.2	109.9	109.6	109.2	108.9	108.5
107.5°	135.6	135.6	135.7	135.7	135.7	135.6	135.3	135.0	134.7	134.4	134.4
110°	152.8	152.5	152.2	151.9	151.6	151.6	151.8	152.0	152.2	152.4	152.5



TEST NUMBER: P333096-840

CATALOG NUMBER: S124RDIW-S1195D470U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	170.4	170.4	170.3	170.3	170.2	170.2	170.2	170.3	170.3	170.4	170.5
115°	197.7	197.8	197.9	198.0	198.1	198.2	198.3	198.4	198.5	198.6	198.8
117.5°	223.7	223.9	224.1	224.3	224.5	224.8	225.1	225.5	225.8	226.1	226.3
120°	243.5	243.3	243.1	242.9	242.7	242.8	243.3	243.8	244.3	244.8	245.1
122.5°	259.9	260.2	260.6	261.1	261.4	261.8	262.1	262.5	262.8	263.2	263.3
125°	288.3	288.5	288.7	288.9	289.1	289.3	289.5	289.7	289.9	290.1	290.2
127.5°	314.6	314.8	314.9	315.1	315.2	315.4	315.6	315.8	316.0	316.2	316.4
130°	331.7	332.1	332.5	333.0	333.4	333.7	333.9	334.1	334.3	334.5	334.5
132.5°	350.1	350.2	350.4	350.5	350.7	350.9	351.1	351.3	351.5	351.7	351.8
135°	375.3	375.6	375.9	376.2	376.5	376.7	376.9	377.1	377.3	377.5	377.5
137.5°	401.7	401.6	401.5	401.5	401.4	401.5	401.8	402.0	402.3	402.6	402.4
140°	417.8	417.9	418.0	418.1	418.2	418.3	418.4	418.5	418.6	418.7	418.7
142.5°	433.9	433.9	433.9	433.9	433.9	434.0	434.0	434.0	434.0	434.0	434.1
145°	455.8	456.1	456.4	456.7	457.0	457.2	457.3	457.4	457.5	457.6	457.5
147.5°	478.0	478.1	478.2	478.3	478.4	478.5	478.5	478.6	478.7	478.8	478.9
150°	491.5	491.6	491.7	491.8	491.9	491.9	491.9	491.9	491.9	491.9	491.9
152.5°	503.9	504.2	504.4	504.7	504.9	505.0	504.7	504.5	504.2	504.0	503.9
155°	521.2	521.6	522.0	522.4	522.8	522.8	522.4	522.0	521.6	521.2	521.3
157.5°	536.6	537.0	537.3	537.8	538.1	538.1	537.8	537.5	537.1	536.8	536.8
160°	545.4	545.9	546.5	547.0	547.5	547.6	547.3	547.0	546.7	546.4	546.5
162.5°	554.6	555.1	555.6	556.1	556.6	556.6	556.1	555.5	555.0	554.4	554.5
165°	566.5	566.9	567.3	567.7	568.2	568.0	567.4	566.8	566.2	565.6	565.8
167.5°	575.0	575.6	576.3	576.9	577.5	577.5	576.9	576.3	575.7	575.1	575.1
170°	579.8	580.5	581.2	581.9	582.6	582.7	582.1	581.5	580.9	580.3	580.2
172.5°	583.8	584.5	585.2	585.9	586.6	586.6	586.0	585.3	584.6	583.9	583.9
175°	588.0	588.8	589.5	590.2	590.9	590.9	590.2	589.5	588.8	588.0	588.1
177.5°	590.3	590.9	591.6	592.2	592.8	592.9	592.3	591.8	591.2	590.6	590.6
180°	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7



TEST NUMBER: P333096-840

CATALOG NUMBER: S124RDIW-S1195D470U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	2061.8	2052.9	2048.3	2038.0	2025.7	2019.2	2013.5	2005.1	1994.1	1982.5	1974.1
5°	2166.5	2147.2	2122.9	2094.0	2068.1	2043.2	2021.3	1999.6	1974.6	1948.8	1923.0
7.5°	2273.9	2235.8	2194.7	2147.2	2100.8	2058.8	2020.0	1983.0	1941.1	1903.5	1869.3
10°	2348.7	2297.1	2239.9	2179.4	2118.9	2066.5	2014.9	1968.1	1916.5	1870.6	1831.9
12.5°	2409.3	2348.7	2279.9	2204.5	2131.8	2068.4	2009.1	1948.1	1889.5	1839.7	1788.1
15°	2509.9	2426.9	2334.2	2243.9	2149.6	2063.3	1983.5	1912.5	1845.6	1775.4	1726.3
17.5°	2579.2	2480.6	2367.9	2259.4	2148.0	2046.2	1954.1	1869.7	1792.4	1720.8	1662.2
20°	2620.4	2511.5	2386.6	2263.2	2138.3	2029.4	1930.3	1836.7	1756.9	1679.5	1619.0
22.5°	2643.6	2523.1	2386.6	2257.5	2128.0	2010.0	1901.2	1803.8	1716.9	1639.5	1572.6
25°	2651.1	2522.0	2382.6	2234.2	2092.3	1967.3	1854.4	1748.8	1652.0	1574.7	1503.7
27.5°	2640.8	2488.8	2346.0	2193.7	2047.3	1915.6	1797.1	1686.1	1589.2	1506.1	1433.4
30°	2625.2	2462.4	2309.2	2151.2	2002.8	1876.2	1751.2	1644.9	1544.1	1457.7	1384.4
32.5°	2591.7	2430.1	2265.3	2103.4	1953.2	1822.7	1704.1	1597.1	1498.2	1410.1	1332.1
35°	2525.3	2361.6	2182.6	2016.5	1869.0	1733.5	1622.2	1519.0	1424.7	1330.4	1248.1
37.5°	2437.7	2270.5	2092.4	1910.6	1762.8	1635.0	1532.9	1436.0	1343.9	1257.8	1166.7
40°	2355.2	2202.8	2018.9	1838.4	1686.8	1563.4	1469.1	1381.2	1288.5	1203.0	1111.9
42.5°	2255.2	2125.4	1939.6	1758.4	1608.7	1489.9	1402.0	1316.1	1231.7	1148.8	1053.8
45°	2088.3	1989.9	1815.7	1641.6	1490.9	1373.1	1292.5	1216.7	1142.5	1063.5	974.0
47.5°	1897.0	1830.4	1680.1	1501.8	1362.3	1256.4	1178.5	1116.5	1053.8	974.8	896.3
50°	1764.1	1721.4	1576.3	1413.4	1280.4	1182.9	1103.0	1044.9	992.5	916.8	846.6
52.5°	1622.2	1599.5	1476.9	1321.2	1192.7	1097.0	1028.9	976.5	923.5	860.6	795.0
55°	1406.1	1418.3	1314.2	1179.6	1058.6	978.1	915.9	872.4	827.3	774.1	723.3
57.5°	1185.3	1229.4	1159.6	1041.4	928.1	853.5	806.8	770.1	732.3	688.1	644.7
60°	1053.0	1090.0	1050.6	946.5	847.4	778.1	734.6	706.3	668.4	628.1	595.0
62.5°	924.0	963.7	940.3	856.3	764.2	704.6	666.1	639.9	611.7	576.5	542.2
65°	761.9	787.7	776.5	718.4	653.1	602.3	566.8	547.4	521.7	495.8	465.2
67.5°	583.6	633.4	626.8	596.0	539.6	499.9	476.7	459.6	436.1	416.9	396.1
70°	479.8	525.7	524.9	499.9	469.3	432.1	416.1	401.5	380.5	362.0	345.1
72.5°	392.6	434.7	441.0	421.8	400.9	372.8	357.4	347.4	327.0	314.3	300.5
75°	275.0	305.6	313.7	313.7	304.0	289.4	275.8	269.3	254.8	243.5	235.4
77.5°	180.3	199.7	212.2	215.1	216.6	211.8	200.5	195.9	184.8	180.8	173.0
80°	127.3	140.3	154.8	159.7	163.7	162.1	157.2	154.0	143.5	139.5	136.2
82.5°	88.1	95.1	107.0	117.8	116.5	120.8	116.5	114.0	106.1	104.6	101.4
85°	45.9	46.8	48.4	55.6	59.7	61.3	62.1	60.5	58.1	58.1	52.4
87.5°	17.2	16.4	17.5	17.3	17.7	20.1	21.8	22.2	20.5	18.8	17.1
90°	8.5	7.7	6.8	5.9	4.7	3.6	2.5	1.4	2.5	3.6	4.7
92.5°	17.0	16.5	15.9	14.9	13.6	12.3	11.1	9.8	11.1	12.3	13.6
95°	33.3	32.6	31.9	31.1	30.2	29.3	28.4	27.5	28.4	29.3	30.2
97.5°	53.3	52.5	51.7	50.9	50.2	49.4	48.7	48.0	48.7	49.4	50.2
100°	68.2	67.3	66.3	65.7	65.2	64.8	64.4	64.0	64.4	64.8	65.2
102.5°	83.7	82.9	82.1	81.6	81.4	81.2	81.1	80.9	81.1	81.2	81.4
105°	108.1	107.7	107.2	107.0	106.9	106.8	106.7	106.6	106.7	106.8	106.9
107.5°	134.3	134.3	134.2	134.1	134.0	133.9	133.7	133.6	133.7	133.9	134.0
110°	152.6	152.7	152.8	152.7	152.5	152.3	152.1	151.9	152.1	152.3	152.5



TEST NUMBER: P333096-840

CATALOG NUMBER: S124RDIW-S1195D470U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	170.7	170.9	171.1	171.2	171.1	171.1	171.0	171.0	171.0	171.1	171.1
115°	199.0	199.2	199.4	199.5	199.5	199.5	199.5	199.5	199.5	199.5	199.5
117.5°	226.4	226.6	226.7	226.7	226.7	226.6	226.5	226.4	226.5	226.6	226.7
120°	245.4	245.7	246.0	246.0	245.6	245.2	244.8	244.4	244.8	245.2	245.6
122.5°	263.4	263.6	263.7	263.7	263.5	263.4	263.2	263.1	263.2	263.4	263.5
125°	290.3	290.4	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5
127.5°	316.5	316.7	316.9	316.8	316.5	316.2	315.9	315.6	315.9	316.2	316.5
130°	334.5	334.5	334.5	334.4	334.1	333.8	333.5	333.2	333.5	333.8	334.1
132.5°	351.8	351.9	352.0	351.9	351.7	351.5	351.3	351.0	351.3	351.5	351.7
135°	377.5	377.5	377.5	377.2	376.6	376.0	375.4	374.8	375.4	376.0	376.6
137.5°	402.3	402.1	401.9	401.7	401.4	401.1	400.9	400.6	400.9	401.1	401.4
140°	418.7	418.7	418.7	418.6	418.4	418.2	418.0	417.8	418.0	418.2	418.4
142.5°	434.2	434.3	434.4	434.3	434.1	433.9	433.7	433.5	433.7	433.9	434.1
145°	457.4	457.3	457.2	457.0	456.6	456.2	455.8	455.3	455.8	456.2	456.6
147.5°	478.9	479.0	479.1	478.9	478.4	477.9	477.4	477.0	477.4	477.9	478.4
150°	491.9	491.9	491.9	491.7	491.3	490.9	490.5	490.1	490.5	490.9	491.3
152.5°	503.8	503.7	503.7	503.5	503.3	503.0	502.8	502.5	502.8	503.0	503.3
155°	521.4	521.5	521.6	521.7	521.7	521.7	521.7	521.7	521.7	521.7	521.7
157.5°	536.9	536.9	536.9	537.0	537.2	537.5	537.6	537.8	537.6	537.5	537.2
160°	546.6	546.7	546.8	546.9	547.0	547.1	547.2	547.3	547.2	547.1	547.0
162.5°	554.6	554.7	554.8	555.0	555.3	555.5	555.8	556.1	555.8	555.5	555.3
165°	566.0	566.2	566.4	566.6	566.9	567.2	567.5	567.8	567.5	567.2	566.9
167.5°	575.1	575.0	575.0	575.2	575.7	576.1	576.5	576.9	576.5	576.1	575.7
170°	580.1	580.0	579.9	580.1	580.6	581.1	581.6	582.1	581.6	581.1	580.6
172.5°	583.9	583.8	583.8	584.0	584.5	584.9	585.3	585.7	585.3	584.9	584.5
175°	588.2	588.3	588.4	588.8	589.3	589.8	590.3	590.8	590.3	589.8	589.3
177.5°	590.6	590.6	590.6	590.8	591.2	591.6	592.0	592.4	592.0	591.6	591.2
180°	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7



TEST NUMBER: P333096-840

CATALOG NUMBER: S124RDIW-S1195D470U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	1965.1	1958.6	1950.3	1940.6	1928.9	1918.6	1914.1	1918.0	1920.0	1914.8	1914.1
5°	1905.2	1885.1	1869.0	1844.8	1825.4	1809.3	1798.1	1793.2	1794.8	1781.9	1778.7
7.5°	1838.1	1814.1	1787.7	1759.0	1732.2	1708.5	1696.1	1689.3	1675.7	1669.8	1660.0
10°	1794.8	1762.5	1736.8	1702.8	1672.2	1644.1	1630.3	1619.0	1605.3	1598.8	1585.2
12.5°	1750.3	1712.8	1684.5	1649.3	1618.0	1584.1	1570.9	1550.0	1528.5	1515.0	1497.4
15°	1687.6	1642.4	1607.7	1565.8	1528.7	1490.1	1455.3	1416.6	1402.1	1371.5	1353.7
17.5°	1614.2	1568.4	1525.5	1469.3	1412.0	1363.9	1327.0	1289.9	1267.7	1248.1	1239.1
20°	1565.8	1523.9	1464.2	1398.9	1335.2	1282.0	1252.1	1228.0	1203.8	1190.1	1180.4
22.5°	1520.0	1466.4	1397.1	1326.7	1262.9	1221.3	1196.1	1171.2	1151.5	1138.5	1125.6
25°	1443.3	1373.1	1299.7	1219.1	1175.6	1139.3	1111.9	1091.7	1079.6	1062.7	1056.2
27.5°	1364.4	1279.4	1198.5	1144.3	1098.9	1065.7	1041.9	1026.7	1011.4	1000.6	992.2
30°	1303.7	1217.5	1144.9	1093.3	1047.3	1020.0	1000.6	982.9	970.8	961.9	955.4
32.5°	1243.7	1157.5	1096.5	1041.1	1004.8	978.1	957.4	944.1	934.6	923.2	919.3
35°	1157.0	1080.5	1027.2	977.2	940.1	915.9	899.8	886.2	878.1	874.8	872.4
37.5°	1073.7	1010.9	953.7	912.7	879.7	860.6	841.6	834.9	829.3	823.5	826.2
40°	1020.8	961.9	911.1	867.6	840.9	820.0	808.7	800.6	795.8	795.8	795.8
42.5°	974.9	917.4	867.9	828.9	802.2	784.6	771.9	765.2	763.6	763.0	766.8
45°	903.8	850.6	800.6	768.4	745.8	728.1	720.8	715.2	715.2	718.4	719.2
47.5°	833.3	783.6	743.4	707.3	686.6	675.5	669.2	666.3	666.6	669.8	673.6
50°	790.1	740.9	701.5	669.2	649.8	639.3	633.7	632.2	633.7	633.7	639.3
52.5°	743.1	699.0	660.1	633.1	611.2	601.4	598.2	596.0	596.9	599.6	602.0
55°	674.1	634.5	597.4	571.7	555.5	549.1	541.8	542.6	541.0	542.6	542.6
57.5°	604.9	569.4	534.9	514.4	500.2	490.9	482.9	485.2	482.8	482.5	481.2
60°	560.4	521.7	494.2	475.7	459.6	451.5	444.2	445.9	443.4	441.8	438.6
62.5°	512.0	479.8	453.6	435.8	422.8	413.4	406.2	404.6	399.0	393.4	386.4
65°	441.8	415.3	391.8	375.0	362.8	355.6	349.9	345.1	333.0	320.1	313.7
67.5°	373.7	354.5	332.6	318.3	308.5	299.0	288.2	279.9	268.6	261.6	257.5
70°	329.7	311.2	292.7	278.9	268.5	259.6	247.5	241.9	233.8	230.6	226.6
72.5°	287.8	270.5	253.4	241.0	229.7	222.9	213.4	207.7	204.2	202.9	198.8
75°	224.2	210.5	197.5	186.2	177.4	172.6	168.5	164.5	162.9	155.6	151.6
77.5°	163.5	154.5	146.4	138.4	132.1	128.9	121.1	116.4	113.7	110.3	109.5
80°	127.3	121.0	112.9	108.1	99.2	95.9	92.7	91.9	91.1	90.3	89.5
82.5°	95.8	89.4	81.3	78.4	75.9	74.0	72.1	71.3	70.5	71.0	70.8
85°	48.4	45.1	45.1	44.3	43.5	42.7	41.9	41.9	41.1	41.9	41.1
87.5°	17.3	16.9	17.0	15.9	16.7	16.9	16.4	16.5	17.2	16.1	16.2
90°	5.9	6.8	7.7	8.5	9.3	10.1	10.7	11.3	11.9	12.5	12.9
92.5°	14.9	15.9	16.5	17.0	17.6	18.1	18.5	18.9	19.2	19.6	19.8
95°	31.1	31.9	32.6	33.3	34.0	34.7	35.0	35.3	35.6	36.0	36.2
97.5°	50.9	51.7	52.5	53.3	54.1	55.0	55.3	55.7	56.1	56.5	56.7
100°	65.7	66.3	67.3	68.2	69.1	70.0	70.2	70.4	70.6	70.8	70.9
102.5°	81.6	82.1	82.9	83.7	84.5	85.4	85.6	85.9	86.2	86.5	86.7
105°	107.0	107.2	107.7	108.1	108.5	108.9	109.2	109.6	109.9	110.2	110.5
107.5°	134.1	134.2	134.3	134.3	134.4	134.4	134.7	135.0	135.3	135.6	135.7
110°	152.7	152.8	152.7	152.6	152.5	152.4	152.2	152.0	151.8	151.6	151.6



TEST NUMBER: P333096-840

CATALOG NUMBER: S124RDIW-S1195D470U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	171.2	171.1	170.9	170.7	170.5	170.4	170.3	170.3	170.2	170.2	170.2
115°	199.5	199.4	199.2	199.0	198.8	198.6	198.5	198.4	198.3	198.2	198.1
117.5°	226.7	226.7	226.6	226.4	226.3	226.1	225.8	225.5	225.1	224.8	224.5
120°	246.0	246.0	245.7	245.4	245.1	244.8	244.3	243.8	243.3	242.8	242.7
122.5°	263.7	263.7	263.6	263.4	263.3	263.2	262.8	262.5	262.1	261.8	261.4
125°	290.5	290.5	290.4	290.3	290.2	290.1	289.9	289.7	289.5	289.3	289.1
127.5°	316.8	316.9	316.7	316.5	316.4	316.2	316.0	315.8	315.6	315.4	315.2
130°	334.4	334.5	334.5	334.5	334.5	334.5	334.3	334.1	333.9	333.7	333.4
132.5°	351.9	352.0	351.9	351.8	351.8	351.7	351.5	351.3	351.1	350.9	350.7
135°	377.2	377.5	377.5	377.5	377.5	377.5	377.3	377.1	376.9	376.7	376.5
137.5°	401.7	401.9	402.1	402.3	402.4	402.6	402.3	402.0	401.8	401.5	401.4
140°	418.6	418.7	418.7	418.7	418.7	418.7	418.6	418.5	418.4	418.3	418.2
142.5°	434.3	434.4	434.3	434.2	434.1	434.0	434.0	434.0	434.0	434.0	433.9
145°	457.0	457.2	457.3	457.4	457.5	457.6	457.5	457.4	457.3	457.2	457.0
147.5°	478.9	479.1	479.0	478.9	478.9	478.8	478.7	478.6	478.5	478.5	478.4
150°	491.7	491.9	491.9	491.9	491.9	491.9	491.9	491.9	491.9	491.9	491.9
152.5°	503.5	503.7	503.7	503.8	503.9	504.0	504.2	504.5	504.7	505.0	504.9
155°	521.7	521.6	521.5	521.4	521.3	521.2	521.6	522.0	522.4	522.8	522.8
157.5°	537.0	536.9	536.9	536.9	536.8	536.8	537.1	537.5	537.8	538.1	538.1
160°	546.9	546.8	546.7	546.6	546.5	546.4	546.7	547.0	547.3	547.6	547.5
162.5°	555.0	554.8	554.7	554.6	554.5	554.4	555.0	555.5	556.1	556.6	556.6
165°	566.6	566.4	566.2	566.0	565.8	565.6	566.2	566.8	567.4	568.0	568.2
167.5°	575.2	575.0	575.0	575.1	575.1	575.1	575.7	576.3	576.9	577.5	577.5
170°	580.1	579.9	580.0	580.1	580.2	580.3	580.9	581.5	582.1	582.7	582.6
172.5°	584.0	583.8	583.8	583.9	583.9	583.9	584.6	585.3	586.0	586.6	586.6
175°	588.8	588.4	588.3	588.2	588.1	588.0	588.8	589.5	590.2	590.9	590.9
177.5°	590.8	590.6	590.6	590.6	590.6	590.6	591.2	591.8	592.3	592.9	592.8
180°	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7



TEST NUMBER: P333096-840

CATALOG NUMBER: S124RDIW-S1195D470U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	1910.3	1911.6	1907.0	1905.7	1907.0	1911.6	1910.3	1914.1	1914.8	1920.0	1918.0
5°	1772.2	1770.6	1766.6	1767.4	1766.6	1770.6	1772.2	1778.7	1781.9	1794.8	1793.2
7.5°	1654.2	1647.9	1649.6	1643.3	1649.6	1647.9	1654.2	1660.0	1669.8	1675.7	1689.3
10°	1582.0	1573.1	1565.8	1559.3	1565.8	1573.1	1582.0	1585.2	1598.8	1605.3	1619.0
12.5°	1483.3	1475.6	1465.8	1467.7	1465.8	1475.6	1483.3	1497.4	1515.0	1528.5	1550.0
15°	1343.2	1331.2	1311.8	1314.2	1311.8	1331.2	1343.2	1353.7	1371.5	1402.1	1416.6
17.5°	1224.8	1224.9	1216.1	1218.1	1216.1	1224.9	1224.8	1239.1	1248.1	1267.7	1289.9
20°	1163.5	1157.8	1158.6	1156.2	1158.6	1157.8	1163.5	1180.4	1190.1	1203.8	1228.0
22.5°	1120.8	1114.0	1108.3	1103.3	1108.3	1114.0	1120.8	1125.6	1138.5	1151.5	1171.2
25°	1048.9	1044.1	1036.9	1035.3	1036.9	1044.1	1048.9	1056.2	1062.7	1079.6	1091.7
27.5°	985.7	984.8	981.9	978.2	981.9	984.8	985.7	992.2	1000.6	1011.4	1026.7
30°	949.0	947.4	945.7	943.3	945.7	947.4	949.0	955.4	961.9	970.8	982.9
32.5°	916.1	915.1	913.5	913.7	913.5	915.1	916.1	919.3	923.2	934.6	944.1
35°	869.2	868.4	866.8	866.0	866.8	868.4	869.2	872.4	874.8	878.1	886.2
37.5°	825.4	827.4	826.5	826.3	826.5	827.4	825.4	826.2	823.5	829.3	834.9
40°	795.0	795.8	797.4	796.6	797.4	795.8	795.0	795.8	795.8	795.8	800.6
42.5°	769.8	770.0	772.2	769.5	772.2	770.0	769.8	766.8	763.0	763.6	765.2
45°	724.9	729.7	728.9	728.9	728.9	729.7	724.9	719.2	718.4	715.2	715.2
47.5°	675.7	679.8	681.0	680.9	681.0	679.8	675.7	673.6	669.8	666.6	666.3
50°	643.4	641.8	644.2	643.4	644.2	641.8	643.4	639.3	633.7	633.7	632.2
52.5°	604.1	604.4	604.2	603.4	604.2	604.4	604.1	602.0	599.6	596.9	596.0
55°	543.4	544.2	542.6	543.4	542.6	544.2	543.4	542.6	542.6	541.0	542.6
57.5°	477.7	473.7	475.3	473.4	475.3	473.7	477.7	481.2	482.5	482.8	485.2
60°	430.6	424.1	422.5	419.3	422.5	424.1	430.6	438.6	441.8	443.4	445.9
62.5°	377.7	373.1	367.7	370.2	367.7	373.1	377.7	386.4	393.4	399.0	404.6
65°	307.2	304.0	301.5	304.8	301.5	304.0	307.2	313.7	320.1	333.0	345.1
67.5°	254.3	252.6	252.6	251.0	252.6	252.6	254.3	257.5	261.6	268.6	279.9
70°	226.6	224.2	224.2	222.6	224.2	224.2	226.6	226.6	230.6	233.8	241.9
72.5°	198.1	195.8	196.4	195.4	196.4	195.8	198.1	198.8	202.9	204.2	207.7
75°	146.7	142.7	142.7	143.5	142.7	142.7	146.7	151.6	155.6	162.9	164.5
77.5°	109.5	108.7	109.8	108.4	109.8	108.7	109.5	109.5	110.3	113.7	116.4
80°	89.5	88.7	87.9	90.3	87.9	88.7	89.5	89.5	90.3	91.1	91.9
82.5°	69.5	69.4	69.2	72.2	69.2	69.4	69.5	70.8	71.0	70.5	71.3
85°	41.9	40.3	41.9	40.3	41.9	40.3	41.9	41.1	41.9	41.1	41.9
87.5°	17.5	16.9	16.3	17.0	16.3	16.9	17.5	16.2	16.1	17.2	16.5
90°	13.1	13.3	13.5	13.7	13.5	13.3	13.1	12.9	12.5	11.9	11.3
92.5°	20.0	20.1	20.2	20.3	20.2	20.1	20.0	19.8	19.6	19.2	18.9
95°	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.0	35.6	35.3
97.5°	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.5	56.1	55.7
100°	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.8	70.6	70.4
102.5°	86.7	86.8	86.9	87.1	86.9	86.8	86.7	86.7	86.5	86.2	85.9
105°	110.8	111.1	111.4	111.7	111.4	111.1	110.8	110.5	110.2	109.9	109.6
107.5°	135.7	135.7	135.6	135.6	135.6	135.7	135.7	135.7	135.6	135.3	135.0
110°	151.9	152.2	152.5	152.8	152.5	152.2	151.9	151.6	151.6	151.8	152.0



TEST NUMBER: P333096-840

CATALOG NUMBER: S124RDIW-S1195D470U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	170.3	170.3	170.4	170.4	170.4	170.3	170.3	170.2	170.2	170.2	170.3
115°	198.0	197.9	197.8	197.7	197.8	197.9	198.0	198.1	198.2	198.3	198.4
117.5°	224.3	224.1	223.9	223.7	223.9	224.1	224.3	224.5	224.8	225.1	225.5
120°	242.9	243.1	243.3	243.5	243.3	243.1	242.9	242.7	242.8	243.3	243.8
122.5°	261.1	260.6	260.2	259.9	260.2	260.6	261.1	261.4	261.8	262.1	262.5
125°	288.9	288.7	288.5	288.3	288.5	288.7	288.9	289.1	289.3	289.5	289.7
127.5°	315.1	314.9	314.8	314.6	314.8	314.9	315.1	315.2	315.4	315.6	315.8
130°	333.0	332.5	332.1	331.7	332.1	332.5	333.0	333.4	333.7	333.9	334.1
132.5°	350.5	350.4	350.2	350.1	350.2	350.4	350.5	350.7	350.9	351.1	351.3
135°	376.2	375.9	375.6	375.3	375.6	375.9	376.2	376.5	376.7	376.9	377.1
137.5°	401.5	401.5	401.6	401.7	401.6	401.5	401.5	401.4	401.5	401.8	402.0
140°	418.1	418.0	417.9	417.8	417.9	418.0	418.1	418.2	418.3	418.4	418.5
142.5°	433.9	433.9	433.9	433.9	433.9	433.9	433.9	433.9	434.0	434.0	434.0
145°	456.7	456.4	456.1	455.8	456.1	456.4	456.7	457.0	457.2	457.3	457.4
147.5°	478.3	478.2	478.1	478.0	478.1	478.2	478.3	478.4	478.5	478.5	478.6
150°	491.8	491.7	491.6	491.5	491.6	491.7	491.8	491.9	491.9	491.9	491.9
152.5°	504.7	504.4	504.2	503.9	504.2	504.4	504.7	504.9	505.0	504.7	504.5
155°	522.4	522.0	521.6	521.2	521.6	522.0	522.4	522.8	522.8	522.4	522.0
157.5°	537.8	537.3	537.0	536.6	537.0	537.3	537.8	538.1	538.1	537.8	537.5
160°	547.0	546.5	545.9	545.4	545.9	546.5	547.0	547.5	547.6	547.3	547.0
162.5°	556.1	555.6	555.1	554.6	555.1	555.6	556.1	556.6	556.6	556.1	555.5
165°	567.7	567.3	566.9	566.5	566.9	567.3	567.7	568.2	568.0	567.4	566.8
167.5°	576.9	576.3	575.6	575.0	575.6	576.3	576.9	577.5	577.5	576.9	576.3
170°	581.9	581.2	580.5	579.8	580.5	581.2	581.9	582.6	582.7	582.1	581.5
172.5°	585.9	585.2	584.5	583.8	584.5	585.2	585.9	586.6	586.6	586.0	585.3
175°	590.2	589.5	588.8	588.0	588.8	589.5	590.2	590.9	590.9	590.2	589.5
177.5°	592.2	591.6	590.9	590.3	590.9	591.6	592.2	592.8	592.9	592.3	591.8
180°	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7



TEST NUMBER: P333096-840

CATALOG NUMBER: S124RDIW-S1195D470U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	1914.1	1918.6	1928.9	1940.6	1950.3	1958.6	1965.1	1974.1	1982.5	1994.1	2005.1
5°	1798.1	1809.3	1825.4	1844.8	1869.0	1885.1	1905.2	1923.0	1948.8	1974.6	1999.6
7.5°	1696.1	1708.5	1732.2	1759.0	1787.7	1814.1	1838.1	1869.3	1903.5	1941.1	1983.0
10°	1630.3	1644.1	1672.2	1702.8	1736.8	1762.5	1794.8	1831.9	1870.6	1916.5	1968.1
12.5°	1570.9	1584.1	1618.0	1649.3	1684.5	1712.8	1750.3	1788.1	1839.7	1889.5	1948.1
15°	1455.3	1490.1	1528.7	1565.8	1607.7	1642.4	1687.6	1726.3	1775.4	1845.6	1912.5
17.5°	1327.0	1363.9	1412.0	1469.3	1525.5	1568.4	1614.2	1662.2	1720.8	1792.4	1869.7
20°	1252.1	1282.0	1335.2	1398.9	1464.2	1523.9	1565.8	1619.0	1679.5	1756.9	1836.7
22.5°	1196.1	1221.3	1262.9	1326.7	1397.1	1466.4	1520.0	1572.6	1639.5	1716.9	1803.8
25°	1111.9	1139.3	1175.6	1219.1	1299.7	1373.1	1443.3	1503.7	1574.7	1652.0	1748.8
27.5°	1041.9	1065.7	1098.9	1144.3	1198.5	1279.4	1364.4	1433.4	1506.1	1589.2	1686.1
30°	1000.6	1020.0	1047.3	1093.3	1144.9	1217.5	1303.7	1384.4	1457.7	1544.1	1644.9
32.5°	957.4	978.1	1004.8	1041.1	1096.5	1157.5	1243.7	1332.1	1410.1	1498.2	1597.1
35°	899.8	915.9	940.1	977.2	1027.2	1080.5	1157.0	1248.1	1330.4	1424.7	1519.0
37.5°	841.6	860.6	879.7	912.7	953.7	1010.9	1073.7	1166.7	1257.8	1343.9	1436.0
40°	808.7	820.0	840.9	867.6	911.1	961.9	1020.8	1111.9	1203.0	1288.5	1381.2
42.5°	771.9	784.6	802.2	828.9	867.9	917.4	974.9	1053.8	1148.8	1231.7	1316.1
45°	720.8	728.1	745.8	768.4	800.6	850.6	903.8	974.0	1063.5	1142.5	1216.7
47.5°	669.2	675.5	686.6	707.3	743.4	783.6	833.3	896.3	974.8	1053.8	1116.5
50°	633.7	639.3	649.8	669.2	701.5	740.9	790.1	846.6	916.8	992.5	1044.9
52.5°	598.2	601.4	611.2	633.1	660.1	699.0	743.1	795.0	860.6	923.5	976.5
55°	541.8	549.1	555.5	571.7	597.4	634.5	674.1	723.3	774.1	827.3	872.4
57.5°	482.9	490.9	500.2	514.4	534.9	569.4	604.9	644.7	688.1	732.3	770.1
60°	444.2	451.5	459.6	475.7	494.2	521.7	560.4	595.0	628.1	668.4	706.3
62.5°	406.2	413.4	422.8	435.8	453.6	479.8	512.0	542.2	576.5	611.7	639.9
65°	349.9	355.6	362.8	375.0	391.8	415.3	441.8	465.2	495.8	521.7	547.4
67.5°	288.2	299.0	308.5	318.3	332.6	354.5	373.7	396.1	416.9	436.1	459.6
70°	247.5	259.6	268.5	278.9	292.7	311.2	329.7	345.1	362.0	380.5	401.5
72.5°	213.4	222.9	229.7	241.0	253.4	270.5	287.8	300.5	314.3	327.0	347.4
75°	168.5	172.6	177.4	186.2	197.5	210.5	224.2	235.4	243.5	254.8	269.3
77.5°	121.1	128.9	132.1	138.4	146.4	154.5	163.5	173.0	180.8	184.8	195.9
80°	92.7	95.9	99.2	108.1	112.9	121.0	127.3	136.2	139.5	143.5	154.0
82.5°	72.1	74.0	75.9	78.4	81.3	89.4	95.8	101.4	104.6	106.1	114.0
85°	41.9	42.7	43.5	44.3	45.1	45.1	48.4	52.4	58.1	58.1	60.5
87.5°	16.4	16.9	16.7	15.9	17.0	16.9	17.3	17.1	18.8	20.5	22.2
90°	10.7	10.1	9.3	8.5	7.7	6.8	5.9	4.7	3.6	2.5	1.4
92.5°	18.5	18.1	17.6	17.0	16.5	15.9	14.9	13.6	12.3	11.1	9.8
95°	35.0	34.7	34.0	33.3	32.6	31.9	31.1	30.2	29.3	28.4	27.5
97.5°	55.3	55.0	54.1	53.3	52.5	51.7	50.9	50.2	49.4	48.7	48.0
100°	70.2	70.0	69.1	68.2	67.3	66.3	65.7	65.2	64.8	64.4	64.0
102.5°	85.6	85.4	84.5	83.7	82.9	82.1	81.6	81.4	81.2	81.1	80.9
105°	109.2	108.9	108.5	108.1	107.7	107.2	107.0	106.9	106.8	106.7	106.6
107.5°	134.7	134.4	134.4	134.3	134.3	134.2	134.1	134.0	133.9	133.7	133.6
110°	152.2	152.4	152.5	152.6	152.7	152.8	152.7	152.5	152.3	152.1	151.9



TEST NUMBER: P333096-840

CATALOG NUMBER: S124RDIW-S1195D470U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	170.3	170.4	170.5	170.7	170.9	171.1	171.2	171.1	171.1	171.0	171.0
115°	198.5	198.6	198.8	199.0	199.2	199.4	199.5	199.5	199.5	199.5	199.5
117.5°	225.8	226.1	226.3	226.4	226.6	226.7	226.7	226.7	226.6	226.5	226.4
120°	244.3	244.8	245.1	245.4	245.7	246.0	246.0	245.6	245.2	244.8	244.4
122.5°	262.8	263.2	263.3	263.4	263.6	263.7	263.7	263.5	263.4	263.2	263.1
125°	289.9	290.1	290.2	290.3	290.4	290.5	290.5	290.5	290.5	290.5	290.5
127.5°	316.0	316.2	316.4	316.5	316.7	316.9	316.8	316.5	316.2	315.9	315.6
130°	334.3	334.5	334.5	334.5	334.5	334.5	334.4	334.1	333.8	333.5	333.2
132.5°	351.5	351.7	351.8	351.8	351.9	352.0	351.9	351.7	351.5	351.3	351.0
135°	377.3	377.5	377.5	377.5	377.5	377.5	377.2	376.6	376.0	375.4	374.8
137.5°	402.3	402.6	402.4	402.3	402.1	401.9	401.7	401.4	401.1	400.9	400.6
140°	418.6	418.7	418.7	418.7	418.7	418.7	418.6	418.4	418.2	418.0	417.8
142.5°	434.0	434.0	434.1	434.2	434.3	434.4	434.3	434.1	433.9	433.7	433.5
145°	457.5	457.6	457.5	457.4	457.3	457.2	457.0	456.6	456.2	455.8	455.3
147.5°	478.7	478.8	478.9	478.9	479.0	479.1	478.9	478.4	477.9	477.4	477.0
150°	491.9	491.9	491.9	491.9	491.9	491.9	491.7	491.3	490.9	490.5	490.1
152.5°	504.2	504.0	503.9	503.8	503.7	503.7	503.5	503.3	503.0	502.8	502.5
155°	521.6	521.2	521.3	521.4	521.5	521.6	521.7	521.7	521.7	521.7	521.7
157.5°	537.1	536.8	536.8	536.9	536.9	536.9	537.0	537.2	537.5	537.6	537.8
160°	546.7	546.4	546.5	546.6	546.7	546.8	546.9	547.0	547.1	547.2	547.3
162.5°	555.0	554.4	554.5	554.6	554.7	554.8	555.0	555.3	555.5	555.8	556.1
165°	566.2	565.6	565.8	566.0	566.2	566.4	566.6	566.9	567.2	567.5	567.8
167.5°	575.7	575.1	575.1	575.1	575.0	575.0	575.2	575.7	576.1	576.5	576.9
170°	580.9	580.3	580.2	580.1	580.0	579.9	580.1	580.6	581.1	581.6	582.1
172.5°	584.6	583.9	583.9	583.9	583.8	583.8	584.0	584.5	584.9	585.3	585.7
175°	588.8	588.0	588.1	588.2	588.3	588.4	588.8	589.3	589.8	590.3	590.8
177.5°	591.2	590.6	590.6	590.6	590.6	590.6	590.8	591.2	591.6	592.0	592.4
180°	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7



TEST NUMBER: P333096-840

CATALOG NUMBER: S124RDIW-S1195D470U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	2013.5	2019.2	2025.7	2038.0	2048.3	2052.9	2061.8	2068.3	2066.4	2075.4	2090.8
5°	2021.3	2043.2	2068.1	2094.0	2122.9	2147.2	2166.5	2185.9	2201.2	2219.7	2247.2
7.5°	2020.0	2058.8	2100.8	2147.2	2194.7	2235.8	2273.9	2312.6	2346.9	2384.5	2433.7
10°	2014.9	2066.5	2118.9	2179.4	2239.9	2297.1	2348.7	2397.1	2443.1	2492.2	2554.4
12.5°	2009.1	2068.4	2131.8	2204.5	2279.9	2348.7	2409.3	2479.0	2536.6	2600.0	2671.7
15°	1983.5	2063.3	2149.6	2243.9	2334.2	2426.9	2509.9	2595.5	2675.2	2751.1	2841.4
17.5°	1954.1	2046.2	2148.0	2259.4	2367.9	2480.6	2579.2	2686.8	2768.4	2870.2	2954.1
20°	1930.3	2029.4	2138.3	2263.2	2386.6	2511.5	2620.4	2730.1	2822.0	2924.4	3030.8
22.5°	1901.2	2010.0	2128.0	2257.5	2386.6	2523.1	2643.6	2752.7	2866.5	2981.8	3091.5
25°	1854.4	1967.3	2092.3	2234.2	2382.6	2522.0	2651.1	2786.5	2909.1	3034.0	3132.4
27.5°	1797.1	1915.6	2047.3	2193.7	2346.0	2488.8	2640.8	2785.1	2908.4	3028.7	3114.5
30°	1751.2	1876.2	2002.8	2151.2	2309.2	2462.4	2625.2	2769.6	2899.4	3007.5	3055.9
32.5°	1704.1	1822.7	1953.2	2103.4	2265.3	2430.1	2591.7	2739.3	2859.4	2924.3	2925.5
35°	1622.2	1733.5	1869.0	2016.5	2182.6	2361.6	2525.3	2670.4	2743.8	2749.5	2670.4
37.5°	1532.9	1635.0	1762.8	1910.6	2092.4	2270.5	2437.7	2534.5	2559.0	2476.9	2330.8
40°	1469.1	1563.4	1686.8	1838.4	2018.9	2202.8	2355.2	2426.1	2400.3	2267.2	2104.4
42.5°	1402.0	1489.9	1608.7	1758.4	1939.6	2125.4	2255.2	2293.2	2224.8	2071.2	1880.6
45°	1292.5	1373.1	1490.9	1641.6	1815.7	1989.9	2088.3	2068.9	1955.2	1773.0	1559.3
47.5°	1178.5	1256.4	1362.3	1501.8	1680.1	1830.4	1897.0	1838.7	1676.9	1476.4	1302.6
50°	1103.0	1182.9	1280.4	1413.4	1576.3	1721.4	1764.1	1675.5	1495.6	1302.9	1143.3
52.5°	1028.9	1097.0	1192.7	1321.2	1476.9	1599.5	1622.2	1520.0	1334.4	1161.6	1020.1
55°	915.9	978.1	1058.6	1179.6	1314.2	1418.3	1406.1	1274.8	1106.2	958.7	847.4
57.5°	806.8	853.5	928.1	1041.4	1159.6	1229.4	1185.3	1073.2	916.1	795.4	701.5
60°	734.6	778.1	847.4	946.5	1050.6	1090.0	1053.0	931.3	807.1	696.6	617.6
62.5°	666.1	704.6	764.2	856.3	940.3	963.7	924.0	817.7	705.8	611.5	546.0
65°	566.8	602.3	653.1	718.4	776.5	787.7	761.9	653.1	568.5	489.4	444.2
67.5°	476.7	499.9	539.6	596.0	626.8	633.4	583.6	515.2	440.6	392.0	358.0
70°	416.1	432.1	469.3	499.9	524.9	525.7	479.8	425.0	367.7	328.2	303.2
72.5°	357.4	372.8	400.9	421.8	441.0	434.7	392.6	349.4	303.2	273.4	254.8
75°	275.8	289.4	304.0	313.7	313.7	305.6	275.0	242.7	216.1	198.3	192.7
77.5°	200.5	211.8	216.6	215.1	212.2	199.7	180.3	159.2	149.7	141.3	137.0
80°	157.2	162.1	163.7	159.7	154.8	140.3	127.3	118.6	109.7	106.4	104.8
82.5°	116.5	120.8	116.5	117.8	107.0	95.1	88.1	85.0	81.3	80.0	78.4
85°	62.1	61.3	59.7	55.6	48.4	46.8	45.9	45.1	43.5	44.3	42.7
87.5°	21.8	20.1	17.7	17.3	17.5	16.4	17.2	17.4	17.5	17.0	18.4
90°	2.5	3.6	4.7	5.9	6.8	7.7	8.5	9.3	10.1	10.7	11.3
92.5°	11.1	12.3	13.6	14.9	15.9	16.5	17.0	17.6	18.1	18.5	18.9
95°	28.4	29.3	30.2	31.1	31.9	32.6	33.3	34.0	34.7	35.0	35.3
97.5°	48.7	49.4	50.2	50.9	51.7	52.5	53.3	54.1	55.0	55.3	55.7
100°	64.4	64.8	65.2	65.7	66.3	67.3	68.2	69.1	70.0	70.2	70.4
102.5°	81.1	81.2	81.4	81.6	82.1	82.9	83.7	84.5	85.4	85.6	85.9
105°	106.7	106.8	106.9	107.0	107.2	107.7	108.1	108.5	108.9	109.2	109.6
107.5°	133.7	133.9	134.0	134.1	134.2	134.3	134.3	134.4	134.4	134.7	135.0
110°	152.1	152.3	152.5	152.7	152.8	152.7	152.6	152.5	152.4	152.2	152.0



TEST NUMBER: P333096-840

CATALOG NUMBER: S124RDIW-S1195D470U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	171.0	171.1	171.1	171.2	171.1	170.9	170.7	170.5	170.4	170.3	170.3
115°	199.5	199.5	199.5	199.5	199.4	199.2	199.0	198.8	198.6	198.5	198.4
117.5°	226.5	226.6	226.7	226.7	226.7	226.6	226.4	226.3	226.1	225.8	225.5
120°	244.8	245.2	245.6	246.0	246.0	245.7	245.4	245.1	244.8	244.3	243.8
122.5°	263.2	263.4	263.5	263.7	263.7	263.6	263.4	263.3	263.2	262.8	262.5
125°	290.5	290.5	290.5	290.5	290.5	290.4	290.3	290.2	290.1	289.9	289.7
127.5°	315.9	316.2	316.5	316.8	316.9	316.7	316.5	316.4	316.2	316.0	315.8
130°	333.5	333.8	334.1	334.4	334.5	334.5	334.5	334.5	334.5	334.3	334.1
132.5°	351.3	351.5	351.7	351.9	352.0	351.9	351.8	351.8	351.7	351.5	351.3
135°	375.4	376.0	376.6	377.2	377.5	377.5	377.5	377.5	377.5	377.3	377.1
137.5°	400.9	401.1	401.4	401.7	401.9	402.1	402.3	402.4	402.6	402.3	402.0
140°	418.0	418.2	418.4	418.6	418.7	418.7	418.7	418.7	418.7	418.6	418.5
142.5°	433.7	433.9	434.1	434.3	434.4	434.3	434.2	434.1	434.0	434.0	434.0
145°	455.8	456.2	456.6	457.0	457.2	457.3	457.4	457.5	457.6	457.5	457.4
147.5°	477.4	477.9	478.4	478.9	479.1	479.0	478.9	478.9	478.8	478.7	478.6
150°	490.5	490.9	491.3	491.7	491.9	491.9	491.9	491.9	491.9	491.9	491.9
152.5°	502.8	503.0	503.3	503.5	503.7	503.7	503.8	503.9	504.0	504.2	504.5
155°	521.7	521.7	521.7	521.7	521.6	521.5	521.4	521.3	521.2	521.6	522.0
157.5°	537.6	537.5	537.2	537.0	536.9	536.9	536.9	536.8	536.8	537.1	537.5
160°	547.2	547.1	547.0	546.9	546.8	546.7	546.6	546.5	546.4	546.7	547.0
162.5°	555.8	555.5	555.3	555.0	554.8	554.7	554.6	554.5	554.4	555.0	555.5
165°	567.5	567.2	566.9	566.6	566.4	566.2	566.0	565.8	565.6	566.2	566.8
167.5°	576.5	576.1	575.7	575.2	575.0	575.0	575.1	575.1	575.1	575.7	576.3
170°	581.6	581.1	580.6	580.1	579.9	580.0	580.1	580.2	580.3	580.9	581.5
172.5°	585.3	584.9	584.5	584.0	583.8	583.8	583.9	583.9	583.9	584.6	585.3
175°	590.3	589.8	589.3	588.8	588.4	588.3	588.2	588.1	588.0	588.8	589.5
177.5°	592.0	591.6	591.2	590.8	590.6	590.6	590.6	590.6	590.6	591.2	591.8
180°	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7



TEST NUMBER: P333096-840

CATALOG NUMBER: S124RDIW-S1195D470U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	2099.2	2101.8	2103.8	2110.2	2110.8	2116.7	2110.8
5°	2272.9	2284.2	2302.0	2319.7	2321.3	2332.6	2312.4
7.5°	2467.7	2493.9	2510.1	2538.8	2550.1	2557.2	2545.6
10°	2601.9	2626.1	2668.8	2689.8	2710.8	2713.9	2704.3
12.5°	2731.6	2770.0	2803.6	2843.3	2842.4	2870.7	2860.3
15°	2904.3	2943.8	2990.5	3034.8	3051.0	3051.0	3063.9
17.5°	3027.5	3099.9	3148.3	3183.1	3221.1	3227.7	3223.2
20°	3110.7	3188.9	3240.5	3285.6	3311.4	3318.7	3318.7
22.5°	3172.6	3239.1	3289.5	3330.1	3351.4	3359.9	3357.4
25°	3215.5	3272.7	3303.4	3315.5	3321.0	3319.5	3304.2
27.5°	3156.7	3154.2	3134.8	3097.8	3069.9	3052.9	3033.5
30°	3044.5	3002.6	2954.3	2901.0	2832.5	2780.1	2763.9
32.5°	2877.5	2783.3	2701.4	2612.7	2539.0	2486.6	2464.7
35°	2554.4	2405.2	2283.4	2177.0	2099.6	2051.2	2035.1
37.5°	2170.8	2026.5	1875.7	1772.5	1708.4	1659.5	1641.2
40°	1927.0	1769.8	1638.4	1541.7	1475.5	1427.9	1427.1
42.5°	1704.5	1554.4	1430.7	1361.0	1289.7	1258.3	1258.1
45°	1395.6	1275.6	1170.7	1115.9	1073.2	1047.3	1040.1
47.5°	1155.6	1056.2	986.4	942.7	907.9	891.4	880.8
50°	1020.8	933.7	878.1	840.1	820.8	799.8	798.2
52.5°	908.5	838.2	794.9	764.1	739.5	726.9	727.3
55°	763.6	707.9	677.3	653.9	634.5	624.9	620.9
57.5°	643.3	601.5	579.3	557.7	549.6	542.0	539.9
60°	568.5	540.2	519.3	502.3	490.2	487.8	487.0
62.5°	506.5	477.0	462.5	449.4	440.6	436.9	435.4
65°	417.7	395.9	382.9	372.5	369.3	363.7	362.8
67.5°	336.7	323.7	315.1	307.8	303.5	303.2	303.2
70°	287.0	279.7	272.6	268.5	266.1	264.5	264.5
72.5°	244.5	239.1	233.2	231.1	230.6	228.9	228.3
75°	186.2	180.6	181.4	177.4	174.2	170.2	167.7
77.5°	132.1	128.1	127.2	126.7	124.0	123.5	124.8
80°	102.4	98.4	97.6	98.4	97.6	95.1	95.1
82.5°	77.9	74.5	73.7	73.2	72.4	73.2	71.9
85°	41.9	40.3	40.3	40.3	41.9	41.1	40.3
87.5°	17.2	16.7	17.4	16.9	16.9	16.3	17.0
90°	11.9	12.5	12.9	13.1	13.3	13.5	13.7
92.5°	19.2	19.6	19.8	20.0	20.1	20.2	20.3
95°	35.6	36.0	36.2	36.2	36.2	36.2	36.2
97.5°	56.1	56.5	56.7	56.7	56.7	56.7	56.7
100°	70.6	70.8	70.9	70.9	70.9	70.9	70.9
102.5°	86.2	86.5	86.7	86.7	86.8	86.9	87.1
105°	109.9	110.2	110.5	110.8	111.1	111.4	111.7
107.5°	135.3	135.6	135.7	135.7	135.7	135.6	135.6
110°	151.8	151.6	151.6	151.9	152.2	152.5	152.8



TEST NUMBER: P333096-840

CATALOG NUMBER: S124RDIW-S1195D470U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	170.2	170.2	170.2	170.3	170.3	170.4	170.4
115°	198.3	198.2	198.1	198.0	197.9	197.8	197.7
117.5°	225.1	224.8	224.5	224.3	224.1	223.9	223.7
120°	243.3	242.8	242.7	242.9	243.1	243.3	243.5
122.5°	262.1	261.8	261.4	261.1	260.6	260.2	259.9
125°	289.5	289.3	289.1	288.9	288.7	288.5	288.3
127.5°	315.6	315.4	315.2	315.1	314.9	314.8	314.6
130°	333.9	333.7	333.4	333.0	332.5	332.1	331.7
132.5°	351.1	350.9	350.7	350.5	350.4	350.2	350.1
135°	376.9	376.7	376.5	376.2	375.9	375.6	375.3
137.5°	401.8	401.5	401.4	401.5	401.5	401.6	401.7
140°	418.4	418.3	418.2	418.1	418.0	417.9	417.8
142.5°	434.0	434.0	433.9	433.9	433.9	433.9	433.9
145°	457.3	457.2	457.0	456.7	456.4	456.1	455.8
147.5°	478.5	478.5	478.4	478.3	478.2	478.1	478.0
150°	491.9	491.9	491.9	491.8	491.7	491.6	491.5
152.5°	504.7	505.0	504.9	504.7	504.4	504.2	503.9
155°	522.4	522.8	522.8	522.4	522.0	521.6	521.2
157.5°	537.8	538.1	538.1	537.8	537.3	537.0	536.6
160°	547.3	547.6	547.5	547.0	546.5	545.9	545.4
162.5°	556.1	556.6	556.6	556.1	555.6	555.1	554.6
165°	567.4	568.0	568.2	567.7	567.3	566.9	566.5
167.5°	576.9	577.5	577.5	576.9	576.3	575.6	575.0
170°	582.1	582.7	582.6	581.9	581.2	580.5	579.8
172.5°	586.0	586.6	586.6	585.9	585.2	584.5	583.8
175°	590.2	590.9	590.9	590.2	589.5	588.8	588.0
177.5°	592.3	592.9	592.8	592.2	591.6	590.9	590.3
180°	591.7	591.7	591.7	591.7	591.7	591.7	591.7

(END OF REPORT)