

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: P332836-840

Luminaire Tested: **S124DIW-S1195D470U840-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332836-840
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: S124DIW-S1195D470U840-4F0-1E-UDD-A1
Description: DEFINE 4 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1195 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7013.5 lumens
Efficiency: N/A
Efficacy: 133.8 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: Semi-Direct

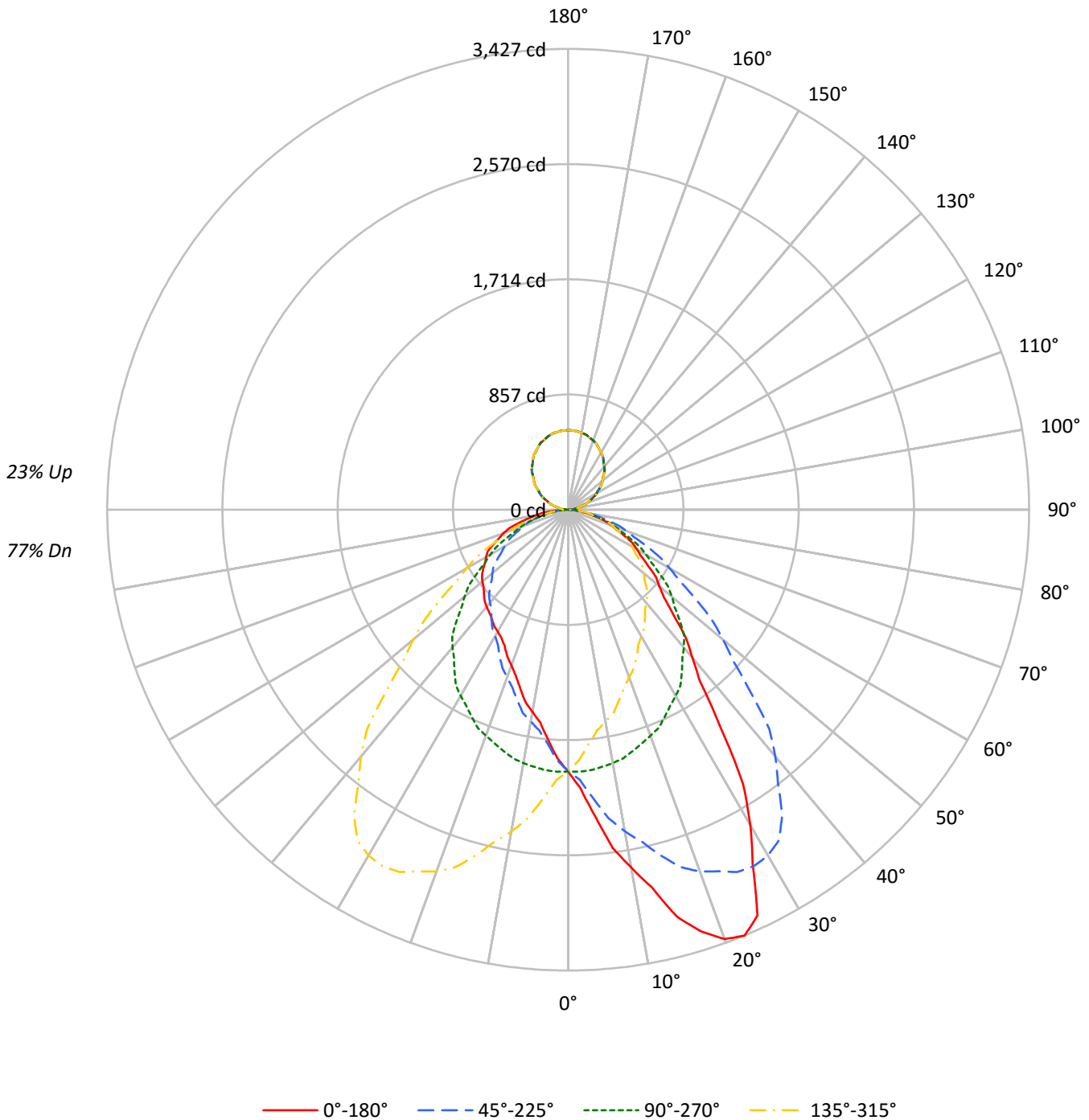
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81	77				
1	104	100	96	92	99	95	92	89	87	84	82	79	77	75	72	70	69	65				
2	95	88	81	76	90	84	78	73	76	72	68	70	66	63	64	61	58	55				
3	87	77	70	64	83	74	67	62	68	62	58	62	58	54	57	53	50	47				
4	80	69	61	54	76	66	59	53	61	54	50	56	51	47	51	47	44	41				
5	74	62	53	47	70	59	51	46	54	48	43	50	45	41	46	42	38	36				
6	68	56	47	41	65	53	46	40	49	43	38	45	40	36	42	37	34	31				
7	63	50	42	36	60	49	41	36	45	38	34	42	36	32	38	34	30	28				
8	59	46	38	33	56	44	37	32	41	35	30	38	33	29	35	31	27	25				
9	55	42	34	29	52	41	33	29	38	32	27	35	30	26	33	28	25	23				
10	51	39	31	26	49	38	31	26	35	29	25	33	27	24	30	26	22	21				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	15713	15713	15713	15713
5°	18504	15754	13904	15754
10°	22155	15684	12518	15684
15°	26213	15525	11496	15525
20°	29190	15364	10584	15364
25°	29661	15126	9954	15126
30°	25239	14897	9755	14897
35°	19404	14526	9758	14526
40°	15125	14089	9941	14089
45°	12611	13431	10107	13431
50°	11099	12627	10451	12627
55°	10169	11667	10871	11667
60°	9529	10805	11378	10805
65°	8871	9841	11798	9841
70°	8108	8889	12066	8889
75°	7243	7820	11918	7820
80°	6072	6406	11544	6406
85°	4483	4631	11060	4631



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.6	2.7
10°-20°	584.5	8.3
20°-30°	926.8	13.2
30°-40°	1031.4	14.7
40°-50°	938.9	13.4
50°-60°	767.2	10.9
60°-70°	547.7	7.8
70°-80°	301.6	4.3
80°-90°	84.1	1.2
90°-100°	39.0	0.6
100°-110°	115.6	1.6
110°-120°	196.2	2.8
120°-130°	258.7	3.7
130°-140°	290.6	4.1
140°-150°	285.5	4.1
150°-160°	240.2	3.4
160°-170°	159.8	2.3
170°-180°	56.0	0.8
0°-30°	1700.9	24.3
0°-40°	2732.3	39.0
0°-60°	4438.4	63.3
0°-90°	5371.9	76.6
90°-120°	350.9	5.0
90°-150°	1185.7	16.9
90°-180°	1642.0	23.4
0°-180°	7013.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1946	1946	1946	1946	1946	
5°	2283	1944	1716	1944	2283	232
15°	3136	1858	1376	1858	3136	886
25°	3330	1698	1118	1698	3330	1468
35°	1969	1474	990	1474	1969	1250
45°	1105	1176	885	1176	1105	870
55°	722	829	772	829	722	653
65°	464	515	618	515	464	460
75°	232	251	382	251	232	247
85°	48	50	119	50	48	59
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	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4
2.5°	2071.5	2070.8	2064.5	2063.2	2058.6	2052.9	2051.5	2041.2	2020.5	2010.8	2008.3
5°	2283.4	2299.6	2278.6	2274.5	2272.1	2245.5	2231.8	2215.6	2178.6	2156.9	2139.9
7.5°	2536.3	2538.2	2529.0	2521.6	2501.1	2477.9	2443.1	2406.0	2361.8	2315.8	2281.2
10°	2702.7	2709.2	2698.7	2697.0	2655.9	2630.1	2578.5	2535.0	2485.0	2429.3	2378.5
12.5°	2878.1	2869.1	2863.8	2829.2	2821.7	2774.6	2714.6	2669.8	2592.7	2528.7	2461.1
15°	3136.4	3118.8	3107.5	3059.9	3036.5	2971.1	2907.5	2858.3	2757.5	2661.6	2589.0
17.5°	3288.0	3305.8	3279.6	3260.1	3199.7	3153.9	3088.8	2985.6	2906.7	2787.5	2695.9
20°	3397.7	3399.3	3384.8	3364.7	3317.1	3259.0	3188.0	3075.1	2980.8	2862.4	2736.5
22.5°	3427.4	3427.7	3421.5	3402.7	3366.7	3319.6	3248.0	3153.9	3039.6	2910.7	2784.9
25°	3329.9	3326.7	3334.0	3355.0	3341.2	3326.7	3285.6	3215.5	3109.1	2972.7	2837.3
27.5°	2968.1	2990.3	3031.3	3082.9	3132.6	3170.5	3181.2	3166.7	3100.8	2988.8	2846.8
30°	2707.5	2734.9	2765.6	2817.1	2917.2	2974.4	3037.3	3084.8	3058.3	2968.8	2836.5
32.5°	2421.2	2427.9	2473.4	2532.0	2623.6	2733.8	2833.5	2930.0	2962.1	2915.2	2804.9
35°	1968.9	1980.2	2029.4	2087.5	2199.6	2334.2	2484.2	2618.0	2728.5	2772.8	2716.3
37.5°	1606.8	1639.2	1673.9	1736.3	1834.9	1956.2	2112.0	2285.2	2449.8	2560.1	2578.8
40°	1435.2	1455.3	1480.4	1527.9	1611.7	1731.1	1864.9	2063.3	2238.3	2396.3	2447.9
42.5°	1299.7	1311.5	1326.9	1369.9	1433.7	1552.5	1674.7	1849.2	2024.8	2213.7	2300.2
45°	1104.6	1116.7	1142.5	1167.5	1215.9	1298.1	1411.8	1555.3	1731.9	1914.1	2073.8
47.5°	963.7	971.4	986.7	1013.5	1054.6	1108.8	1201.3	1321.2	1484.9	1661.7	1831.9
50°	883.7	890.1	902.2	926.5	957.9	1006.2	1082.1	1194.1	1322.3	1500.5	1667.4
52.5°	820.5	823.0	831.9	848.4	873.3	914.0	976.2	1068.9	1188.1	1347.0	1513.3
55°	722.5	725.7	733.8	745.8	767.6	793.3	840.9	910.3	1014.3	1152.2	1296.5
57.5°	641.8	644.1	650.9	655.5	673.4	694.4	730.9	780.5	859.3	976.2	1105.1
60°	590.2	588.5	596.6	600.7	612.8	630.6	658.7	706.3	774.9	869.2	987.7
62.5°	539.9	537.7	544.4	549.8	556.6	571.8	594.9	632.2	687.7	773.1	875.5
65°	464.4	461.2	465.2	471.7	478.2	486.1	503.1	536.1	580.6	641.8	720.0
67.5°	388.6	392.0	392.6	395.9	399.6	410.6	422.1	445.6	476.9	525.8	592.2
70°	343.5	344.3	347.5	347.5	349.9	359.6	369.3	382.9	413.6	458.8	512.8
72.5°	298.3	301.7	300.4	303.0	304.8	311.2	318.3	331.3	357.5	391.0	436.7
75°	232.2	234.6	234.6	235.4	237.8	240.2	245.9	255.6	274.2	299.1	330.5
77.5°	169.4	169.7	170.8	173.7	173.7	177.5	181.8	189.5	198.6	215.8	235.0
80°	130.6	132.2	131.4	133.0	133.0	136.2	137.8	147.5	151.6	162.9	178.1
82.5°	95.8	97.4	97.3	99.5	100.8	101.4	103.7	107.6	111.6	121.6	127.8
85°	48.4	50.0	48.4	50.0	52.4	53.2	55.6	56.5	59.7	62.1	67.8
87.5°	17.0	18.8	18.8	19.4	20.6	21.2	21.7	21.0	23.4	23.9	26.4
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



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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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4
2.5°	2008.9	1999.9	1993.5	1988.3	1974.1	1965.7	1959.2	1950.3	1940.0	1928.9	1915.4
5°	2122.9	2095.6	2075.4	2044.8	2015.7	1991.6	1966.5	1944.0	1916.5	1886.7	1864.9
7.5°	2242.8	2202.0	2149.7	2104.5	2053.5	2009.1	1969.4	1928.8	1886.5	1845.6	1808.1
10°	2318.9	2266.4	2208.4	2139.9	2075.4	2018.1	1964.9	1913.3	1863.3	1813.3	1770.6
12.5°	2400.9	2335.5	2249.7	2169.6	2097.3	2020.7	1956.5	1893.3	1833.0	1780.5	1730.6
15°	2510.8	2416.4	2317.2	2210.0	2114.9	2025.4	1937.5	1857.6	1790.0	1720.6	1672.2
17.5°	2578.4	2461.6	2348.2	2236.1	2121.0	2008.1	1913.3	1821.3	1736.5	1667.6	1606.6
20°	2622.8	2506.8	2365.6	2253.6	2116.5	2000.4	1890.8	1788.4	1699.7	1626.3	1563.4
22.5°	2661.6	2527.4	2386.3	2238.8	2102.3	1979.1	1859.2	1756.1	1665.5	1588.2	1527.9
25°	2682.5	2528.5	2375.3	2228.6	2073.8	1927.8	1819.0	1698.1	1601.2	1519.8	1455.3
27.5°	2684.8	2520.1	2346.8	2183.7	2024.0	1888.0	1750.6	1642.5	1542.1	1456.0	1394.1
30°	2677.7	2506.0	2319.7	2143.1	1982.7	1835.1	1715.8	1598.1	1495.7	1410.2	1345.6
32.5°	2655.1	2476.3	2284.8	2098.0	1931.7	1787.4	1664.2	1552.3	1452.5	1368.3	1300.5
35°	2589.8	2413.2	2209.2	2014.9	1844.8	1698.9	1587.6	1473.9	1373.9	1294.1	1228.8
37.5°	2487.7	2328.0	2120.7	1919.7	1752.5	1606.0	1495.7	1392.9	1302.8	1221.7	1154.8
40°	2398.7	2258.5	2050.4	1854.4	1673.9	1534.4	1431.2	1336.9	1247.3	1170.7	1107.0
42.5°	2296.1	2173.9	1982.1	1774.4	1600.3	1460.2	1359.6	1274.9	1190.5	1119.7	1056.1
45°	2113.2	2032.7	1852.1	1660.1	1478.7	1346.5	1250.5	1176.4	1105.4	1036.1	982.9
47.5°	1903.0	1863.0	1710.9	1528.7	1356.5	1226.2	1143.0	1074.5	1012.2	953.5	906.6
50°	1761.7	1742.4	1610.9	1435.2	1270.7	1148.1	1064.3	1005.4	952.2	900.6	856.3
52.5°	1622.4	1621.7	1503.3	1342.3	1190.1	1072.1	988.9	933.8	887.8	845.8	806.0
55°	1409.4	1432.0	1339.3	1195.7	1059.4	953.0	878.1	828.9	796.6	761.9	732.2
57.5°	1213.8	1251.2	1174.8	1048.3	934.6	836.6	771.3	734.4	700.0	679.0	657.3
60°	1086.1	1121.6	1061.9	955.4	848.2	764.4	702.3	669.2	639.3	624.9	609.6
62.5°	972.5	1004.1	960.0	861.3	768.2	687.6	635.2	603.4	583.3	567.4	557.3
65°	810.3	837.0	799.0	727.3	647.4	583.0	540.2	515.2	495.8	489.4	478.2
67.5°	655.0	679.2	658.7	597.7	533.7	484.9	451.5	427.5	416.1	410.4	402.3
70°	562.8	586.9	565.2	512.0	462.8	421.7	390.2	376.6	364.5	362.0	350.7
72.5°	484.7	501.2	479.4	437.8	395.8	361.0	336.7	322.3	316.1	311.7	305.6
75°	363.7	378.2	363.7	331.3	301.5	277.4	256.4	250.7	243.5	241.1	237.0
77.5°	257.4	269.9	258.8	238.6	216.4	197.7	186.4	179.2	177.5	173.4	175.3
80°	196.7	204.8	194.3	180.6	162.9	150.0	141.9	137.8	133.0	131.4	134.6
82.5°	141.3	144.8	139.5	130.3	117.0	108.7	103.2	98.6	97.6	97.9	97.9
85°	73.4	72.6	71.8	63.7	59.7	54.0	50.8	50.0	49.2	50.8	52.4
87.5°	26.2	26.7	25.9	23.1	20.9	18.8	17.9	17.1	17.9	18.8	19.7
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: P332836-840

CATALOG NUMBER: S124DIW-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: P332836-840

CATALOG NUMBER: S124DIW-S1195D470U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4
2.5°	1908.9	1903.2	1894.8	1883.2	1873.5	1863.2	1860.6	1856.7	1864.4	1858.1	1856.0
5°	1846.4	1829.5	1807.7	1782.7	1768.2	1747.3	1743.2	1735.2	1727.1	1726.3	1718.2
7.5°	1780.1	1755.2	1726.8	1701.2	1677.7	1654.9	1639.8	1636.6	1624.7	1617.7	1609.6
10°	1737.6	1706.9	1673.9	1649.7	1622.2	1598.1	1581.1	1571.5	1563.4	1554.5	1546.5
12.5°	1687.3	1654.7	1627.4	1601.2	1568.7	1550.3	1522.5	1505.7	1504.1	1504.2	1483.3
15°	1628.7	1596.5	1554.5	1517.4	1499.6	1464.2	1448.9	1429.6	1417.4	1405.3	1395.7
17.5°	1561.8	1521.7	1488.8	1446.3	1412.5	1384.2	1364.1	1352.5	1334.2	1317.2	1304.7
20°	1519.8	1477.1	1442.5	1397.2	1360.2	1325.5	1308.6	1292.5	1278.8	1264.3	1250.5
22.5°	1477.2	1432.6	1390.2	1346.4	1311.8	1275.3	1258.9	1237.0	1224.0	1215.9	1202.1
25°	1410.2	1361.8	1313.4	1271.5	1236.1	1203.8	1182.0	1165.1	1150.5	1144.1	1135.3
27.5°	1337.3	1289.3	1242.5	1194.9	1154.6	1131.3	1113.8	1101.1	1092.7	1084.1	1080.2
30°	1290.9	1240.9	1190.9	1146.5	1109.4	1086.1	1070.0	1061.1	1054.6	1050.6	1046.5
32.5°	1243.7	1194.5	1141.9	1101.4	1068.1	1047.3	1035.1	1026.2	1023.0	1021.6	1020.2
35°	1168.3	1118.3	1070.0	1033.7	1002.2	994.1	983.7	978.9	977.2	982.9	985.3
37.5°	1095.3	1048.8	1004.3	969.2	948.6	936.8	933.2	933.3	939.2	944.1	950.0
40°	1048.1	1003.0	961.1	930.5	911.1	903.8	902.2	906.3	912.7	918.4	924.8
42.5°	1002.4	957.9	919.8	891.1	877.6	870.9	871.9	876.0	884.9	891.9	901.6
45°	931.3	894.1	857.1	833.7	822.4	824.0	824.0	831.3	840.1	850.6	861.1
47.5°	864.3	827.0	796.5	776.8	770.9	769.5	774.1	783.6	796.3	809.2	823.8
50°	819.2	783.8	757.1	739.3	733.0	735.4	741.7	750.6	766.0	782.1	797.4
52.5°	773.4	741.1	716.5	700.0	695.5	699.8	706.3	720.3	733.8	751.1	769.7
55°	702.3	674.9	655.5	643.4	641.8	644.2	651.5	666.8	686.1	707.9	725.7
57.5°	631.5	608.5	590.9	582.5	583.3	585.5	597.4	615.7	636.3	659.5	682.5
60°	583.7	562.8	548.3	541.8	542.6	547.4	562.0	579.0	604.7	627.3	651.5
62.5°	538.6	520.2	506.3	500.6	499.4	510.1	523.9	541.5	567.3	592.5	618.5
65°	466.1	451.5	440.2	437.0	439.4	447.5	465.2	488.6	510.4	536.9	564.4
67.5°	395.1	383.1	375.4	376.9	379.8	391.7	406.6	426.7	451.4	479.0	506.0
70°	349.9	338.6	332.1	333.0	337.8	352.3	365.3	385.4	412.0	440.2	462.8
72.5°	303.5	296.1	290.2	293.7	298.5	308.5	324.6	344.8	368.2	394.5	418.3
75°	233.0	233.0	229.7	232.2	239.4	249.1	261.3	282.2	305.6	326.6	345.9
77.5°	172.9	171.1	173.2	176.1	180.3	191.8	205.6	220.6	238.2	259.1	275.1
80°	132.2	133.0	137.0	141.9	143.5	152.4	166.9	180.6	194.3	212.1	227.4
82.5°	99.4	100.2	102.2	108.4	110.0	119.5	128.9	142.6	155.0	166.9	179.7
85°	54.0	54.0	58.1	60.5	64.5	71.0	76.5	84.6	95.9	104.0	116.1
87.5°	21.8	22.0	24.7	26.2	28.3	31.7	33.1	40.3	43.0	46.4	52.2
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: P332836-840

CATALOG NUMBER: S124DIW-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: P332836-840

CATALOG NUMBER: S124DIW-S1195D470U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4
2.5°	1854.8	1853.5	1849.0	1848.4	1849.0	1853.5	1854.8	1856.0	1858.1	1864.4	1856.7
5°	1713.3	1709.3	1706.9	1715.8	1706.9	1709.3	1713.3	1718.2	1726.3	1727.1	1735.2
7.5°	1606.8	1603.6	1596.5	1594.2	1596.5	1603.6	1606.8	1609.6	1617.7	1624.7	1636.6
10°	1538.4	1535.2	1528.7	1527.1	1528.7	1535.2	1538.4	1546.5	1554.5	1563.4	1571.5
12.5°	1472.6	1466.1	1464.9	1466.5	1464.9	1466.1	1472.6	1483.3	1504.2	1504.1	1505.7
15°	1385.2	1382.0	1373.1	1375.5	1373.1	1382.0	1385.2	1395.7	1405.3	1417.4	1429.6
17.5°	1299.1	1295.3	1284.4	1293.9	1284.4	1295.3	1299.1	1304.7	1317.2	1334.2	1352.5
20°	1244.9	1238.5	1232.8	1232.0	1232.8	1238.5	1244.9	1250.5	1264.3	1278.8	1292.5
22.5°	1193.3	1187.5	1187.0	1181.7	1187.0	1187.5	1193.3	1202.1	1215.9	1224.0	1237.0
25°	1128.8	1123.2	1121.6	1117.5	1121.6	1123.2	1128.8	1135.3	1144.1	1150.5	1165.1
27.5°	1079.3	1076.5	1073.7	1074.9	1073.7	1076.5	1079.3	1080.2	1084.1	1092.7	1101.1
30°	1048.9	1048.1	1046.5	1046.5	1046.5	1048.1	1048.9	1046.5	1050.6	1054.6	1061.1
32.5°	1023.8	1023.7	1024.6	1024.6	1024.6	1023.7	1023.8	1020.2	1021.6	1023.0	1026.2
35°	988.6	990.9	992.5	990.1	992.5	990.9	988.6	985.3	982.9	977.2	978.9
37.5°	956.5	959.0	961.3	964.0	961.3	959.0	956.5	950.0	944.1	939.2	933.3
40°	932.1	937.8	939.3	943.3	939.3	937.8	932.1	924.8	918.4	912.7	906.3
42.5°	908.9	915.1	919.3	920.1	919.3	915.1	908.9	901.6	891.9	884.9	876.0
45°	873.2	879.7	885.3	885.3	885.3	879.7	873.2	861.1	850.6	840.1	831.3
47.5°	836.3	845.7	851.3	852.7	851.3	845.7	836.3	823.8	809.2	796.3	783.6
50°	811.1	822.4	828.1	832.1	828.1	822.4	811.1	797.4	782.1	766.0	750.6
52.5°	786.6	797.9	805.5	807.6	805.5	797.9	786.6	769.7	751.1	733.8	720.3
55°	744.2	760.3	769.2	772.4	769.2	760.3	744.2	725.7	707.9	686.1	666.8
57.5°	704.2	719.0	729.3	731.7	729.3	719.0	704.2	682.5	659.5	636.3	615.7
60°	673.3	689.3	702.3	704.7	702.3	689.3	673.3	651.5	627.3	604.7	579.0
62.5°	641.7	658.4	670.0	676.3	670.0	658.4	641.7	618.5	592.5	567.3	541.5
65°	586.9	603.9	615.2	617.6	615.2	603.9	586.9	564.4	536.9	510.4	488.6
67.5°	527.4	544.2	551.7	556.3	551.7	544.2	527.4	506.0	479.0	451.4	426.7
70°	485.3	499.1	507.2	511.2	507.2	499.1	485.3	462.8	440.2	412.0	385.4
72.5°	437.7	452.0	461.4	462.1	461.4	452.0	437.7	418.3	394.5	368.2	344.8
75°	364.5	377.4	382.1	382.1	382.1	377.4	364.5	345.9	326.6	305.6	282.2
77.5°	288.5	295.1	301.2	302.6	301.2	295.1	288.5	275.1	259.1	238.2	220.6
80°	239.4	243.5	248.3	248.3	248.3	243.5	239.4	227.4	212.1	194.3	180.6
82.5°	189.1	192.6	197.4	196.7	197.4	192.6	189.1	179.7	166.9	155.0	142.6
85°	114.5	121.8	121.0	119.4	121.0	121.8	114.5	116.1	104.0	95.9	84.6
87.5°	54.2	54.9	56.9	58.2	56.9	54.9	54.2	52.2	46.4	43.0	40.3
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: P332836-840

CATALOG NUMBER: S124DIW-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: P332836-840

CATALOG NUMBER: S124DIW-S1195D470U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4
2.5°	1860.6	1863.2	1873.5	1883.2	1894.8	1903.2	1908.9	1915.4	1928.9	1940.0	1950.3
5°	1743.2	1747.3	1768.2	1782.7	1807.7	1829.5	1846.4	1864.9	1886.7	1916.5	1944.0
7.5°	1639.8	1654.9	1677.7	1701.2	1726.8	1755.2	1780.1	1808.1	1845.6	1886.5	1928.8
10°	1581.1	1598.1	1622.2	1649.7	1673.9	1706.9	1737.6	1770.6	1813.3	1863.3	1913.3
12.5°	1522.5	1550.3	1568.7	1601.2	1627.4	1654.7	1687.3	1730.6	1780.5	1833.0	1893.3
15°	1448.9	1464.2	1499.6	1517.4	1554.5	1596.5	1628.7	1672.2	1720.6	1790.0	1857.6
17.5°	1364.1	1384.2	1412.5	1446.3	1488.8	1521.7	1561.8	1606.6	1667.6	1736.5	1821.3
20°	1308.6	1325.5	1360.2	1397.2	1442.5	1477.1	1519.8	1563.4	1626.3	1699.7	1788.4
22.5°	1258.9	1275.3	1311.8	1346.4	1390.2	1432.6	1477.2	1527.9	1588.2	1665.5	1756.1
25°	1182.0	1203.8	1236.1	1271.5	1313.4	1361.8	1410.2	1455.3	1519.8	1601.2	1698.1
27.5°	1113.8	1131.3	1154.6	1194.9	1242.5	1289.3	1337.3	1394.1	1456.0	1542.1	1642.5
30°	1070.0	1086.1	1109.4	1146.5	1190.9	1240.9	1290.9	1345.6	1410.2	1495.7	1598.1
32.5°	1035.1	1047.3	1068.1	1101.4	1141.9	1194.5	1243.7	1300.5	1368.3	1452.5	1552.3
35°	983.7	994.1	1002.2	1033.7	1070.0	1118.3	1168.3	1228.8	1294.1	1373.9	1473.9
37.5°	933.2	936.8	948.6	969.2	1004.3	1048.8	1095.3	1154.8	1221.7	1302.8	1392.9
40°	902.2	903.8	911.1	930.5	961.1	1003.0	1048.1	1107.0	1170.7	1247.3	1336.9
42.5°	871.9	870.9	877.6	891.1	919.8	957.9	1002.4	1056.1	1119.7	1190.5	1274.9
45°	824.0	824.0	822.4	833.7	857.1	894.1	931.3	982.9	1036.1	1105.4	1176.4
47.5°	774.1	769.5	770.9	776.8	796.5	827.0	864.3	906.6	953.5	1012.2	1074.5
50°	741.7	735.4	733.0	739.3	757.1	783.8	819.2	856.3	900.6	952.2	1005.4
52.5°	706.3	699.8	695.5	700.0	716.5	741.1	773.4	806.0	845.8	887.8	933.8
55°	651.5	644.2	641.8	643.4	655.5	674.9	702.3	732.2	761.9	796.6	828.9
57.5°	597.4	585.5	583.3	582.5	590.9	608.5	631.5	657.3	679.0	700.0	734.4
60°	562.0	547.4	542.6	541.8	548.3	562.8	583.7	609.6	624.9	639.3	669.2
62.5°	523.9	510.1	499.4	500.6	506.3	520.2	538.6	557.3	567.4	583.3	603.4
65°	465.2	447.5	439.4	437.0	440.2	451.5	466.1	478.2	489.4	495.8	515.2
67.5°	406.6	391.7	379.8	376.9	375.4	383.1	395.1	402.3	410.4	416.1	427.5
70°	365.3	352.3	337.8	333.0	332.1	338.6	349.9	350.7	362.0	364.5	376.6
72.5°	324.6	308.5	298.5	293.7	290.2	296.1	303.5	305.6	311.7	316.1	322.3
75°	261.3	249.1	239.4	232.2	229.7	233.0	233.0	237.0	241.1	243.5	250.7
77.5°	205.6	191.8	180.3	176.1	173.2	171.1	172.9	175.3	173.4	177.5	179.2
80°	166.9	152.4	143.5	141.9	137.0	133.0	132.2	134.6	131.4	133.0	137.8
82.5°	128.9	119.5	110.0	108.4	102.2	100.2	99.4	97.9	97.9	97.6	98.6
85°	76.5	71.0	64.5	60.5	58.1	54.0	54.0	52.4	50.8	49.2	50.0
87.5°	33.1	31.7	28.3	26.2	24.7	22.0	21.8	19.7	18.8	17.9	17.1
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: P332836-840

CATALOG NUMBER: S124DIW-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: P332836-840

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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4
2.5°	1959.2	1965.7	1974.1	1988.3	1993.5	1999.9	2008.9	2008.3	2010.8	2020.5	2041.2
5°	1966.5	1991.6	2015.7	2044.8	2075.4	2095.6	2122.9	2139.9	2156.9	2178.6	2215.6
7.5°	1969.4	2009.1	2053.5	2104.5	2149.7	2202.0	2242.8	2281.2	2315.8	2361.8	2406.0
10°	1964.9	2018.1	2075.4	2139.9	2208.4	2266.4	2318.9	2378.5	2429.3	2485.0	2535.0
12.5°	1956.5	2020.7	2097.3	2169.6	2249.7	2335.5	2400.9	2461.1	2528.7	2592.7	2669.8
15°	1937.5	2025.4	2114.9	2210.0	2317.2	2416.4	2510.8	2589.0	2661.6	2757.5	2858.3
17.5°	1913.3	2008.1	2121.0	2236.1	2348.2	2461.6	2578.4	2695.9	2787.5	2906.7	2985.6
20°	1890.8	2000.4	2116.5	2253.6	2365.6	2506.8	2622.8	2736.5	2862.4	2980.8	3075.1
22.5°	1859.2	1979.1	2102.3	2238.8	2386.3	2527.4	2661.6	2784.9	2910.7	3039.6	3153.9
25°	1819.0	1927.8	2073.8	2228.6	2375.3	2528.5	2682.5	2837.3	2972.7	3109.1	3215.5
27.5°	1750.6	1888.0	2024.0	2183.7	2346.8	2520.1	2684.8	2846.8	2988.8	3100.8	3166.7
30°	1715.8	1835.1	1982.7	2143.1	2319.7	2506.0	2677.7	2836.5	2968.8	3058.3	3084.8
32.5°	1664.2	1787.4	1931.7	2098.0	2284.8	2476.3	2655.1	2804.9	2915.2	2962.1	2930.0
35°	1587.6	1698.9	1844.8	2014.9	2209.2	2413.2	2589.8	2716.3	2772.8	2728.5	2618.0
37.5°	1495.7	1606.0	1752.5	1919.7	2120.7	2328.0	2487.7	2578.8	2560.1	2449.8	2285.2
40°	1431.2	1534.4	1673.9	1854.4	2050.4	2258.5	2398.7	2447.9	2396.3	2238.3	2063.3
42.5°	1359.6	1460.2	1600.3	1774.4	1982.1	2173.9	2296.1	2300.2	2213.7	2024.8	1849.2
45°	1250.5	1346.5	1478.7	1660.1	1852.1	2032.7	2113.2	2073.8	1914.1	1731.9	1555.3
47.5°	1143.0	1226.2	1356.5	1528.7	1710.9	1863.0	1903.0	1831.9	1661.7	1484.9	1321.2
50°	1064.3	1148.1	1270.7	1435.2	1610.9	1742.4	1761.7	1667.4	1500.5	1322.3	1194.1
52.5°	988.9	1072.1	1190.1	1342.3	1503.3	1621.7	1622.4	1513.3	1347.0	1188.1	1068.9
55°	878.1	953.0	1059.4	1195.7	1339.3	1432.0	1409.4	1296.5	1152.2	1014.3	910.3
57.5°	771.3	836.6	934.6	1048.3	1174.8	1251.2	1213.8	1105.1	976.2	859.3	780.5
60°	702.3	764.4	848.2	955.4	1061.9	1121.6	1086.1	987.7	869.2	774.9	706.3
62.5°	635.2	687.6	768.2	861.3	960.0	1004.1	972.5	875.5	773.1	687.7	632.2
65°	540.2	583.0	647.4	727.3	799.0	837.0	810.3	720.0	641.8	580.6	536.1
67.5°	451.5	484.9	533.7	597.7	658.7	679.2	655.0	592.2	525.8	476.9	445.6
70°	390.2	421.7	462.8	512.0	565.2	586.9	562.8	512.8	458.8	413.6	382.9
72.5°	336.7	361.0	395.8	437.8	479.4	501.2	484.7	436.7	391.0	357.5	331.3
75°	256.4	277.4	301.5	331.3	363.7	378.2	363.7	330.5	299.1	274.2	255.6
77.5°	186.4	197.7	216.4	238.6	258.8	269.9	257.4	235.0	215.8	198.6	189.5
80°	141.9	150.0	162.9	180.6	194.3	204.8	196.7	178.1	162.9	151.6	147.5
82.5°	103.2	108.7	117.0	130.3	139.5	144.8	141.3	127.8	121.6	111.6	107.6
85°	50.8	54.0	59.7	63.7	71.8	72.6	73.4	67.8	62.1	59.7	56.5
87.5°	17.9	18.8	20.9	23.1	25.9	26.7	26.2	26.4	23.9	23.4	21.0
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



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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



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4
2.5°	2051.5	2052.9	2058.6	2063.2	2064.5	2070.8	2071.5
5°	2231.8	2245.5	2272.1	2274.5	2278.6	2299.6	2283.4
7.5°	2443.1	2477.9	2501.1	2521.6	2529.0	2538.2	2536.3
10°	2578.5	2630.1	2655.9	2697.0	2698.7	2709.2	2702.7
12.5°	2714.6	2774.6	2821.7	2829.2	2863.8	2869.1	2878.1
15°	2907.5	2971.1	3036.5	3059.9	3107.5	3118.8	3136.4
17.5°	3088.8	3153.9	3199.7	3260.1	3279.6	3305.8	3288.0
20°	3188.0	3259.0	3317.1	3364.7	3384.8	3399.3	3397.7
22.5°	3248.0	3319.6	3366.7	3402.7	3421.5	3427.7	3427.4
25°	3285.6	3326.7	3341.2	3355.0	3334.0	3326.7	3329.9
27.5°	3181.2	3170.5	3132.6	3082.9	3031.3	2990.3	2968.1
30°	3037.3	2974.4	2917.2	2817.1	2765.6	2734.9	2707.5
32.5°	2833.5	2733.8	2623.6	2532.0	2473.4	2427.9	2421.2
35°	2484.2	2334.2	2199.6	2087.5	2029.4	1980.2	1968.9
37.5°	2112.0	1956.2	1834.9	1736.3	1673.9	1639.2	1606.8
40°	1864.9	1731.1	1611.7	1527.9	1480.4	1455.3	1435.2
42.5°	1674.7	1552.5	1433.7	1369.9	1326.9	1311.5	1299.7
45°	1411.8	1298.1	1215.9	1167.5	1142.5	1116.7	1104.6
47.5°	1201.3	1108.8	1054.6	1013.5	986.7	971.4	963.7
50°	1082.1	1006.2	957.9	926.5	902.2	890.1	883.7
52.5°	976.2	914.0	873.3	848.4	831.9	823.0	820.5
55°	840.9	793.3	767.6	745.8	733.8	725.7	722.5
57.5°	730.9	694.4	673.4	655.5	650.9	644.1	641.8
60°	658.7	630.6	612.8	600.7	596.6	588.5	590.2
62.5°	594.9	571.8	556.6	549.8	544.4	537.7	539.9
65°	503.1	486.1	478.2	471.7	465.2	461.2	464.4
67.5°	422.1	410.6	399.6	395.9	392.6	392.0	388.6
70°	369.3	359.6	349.9	347.5	347.5	344.3	343.5
72.5°	318.3	311.2	304.8	303.0	300.4	301.7	298.3
75°	245.9	240.2	237.8	235.4	234.6	234.6	232.2
77.5°	181.8	177.5	173.7	173.7	170.8	169.7	169.4
80°	137.8	136.2	133.0	133.0	131.4	132.2	130.6
82.5°	103.7	101.4	100.8	99.5	97.3	97.4	95.8
85°	55.6	53.2	52.4	50.0	48.4	50.0	48.4
87.5°	21.7	21.2	20.6	19.4	18.8	18.8	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



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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)