

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: P331420-830

Luminaire Tested: **SA2XXDIP-C1005D330U830-4F0-1E-UDD-A**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331420-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-C1005D330U830-4F0-1E-UDD-A
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1005 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 330 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

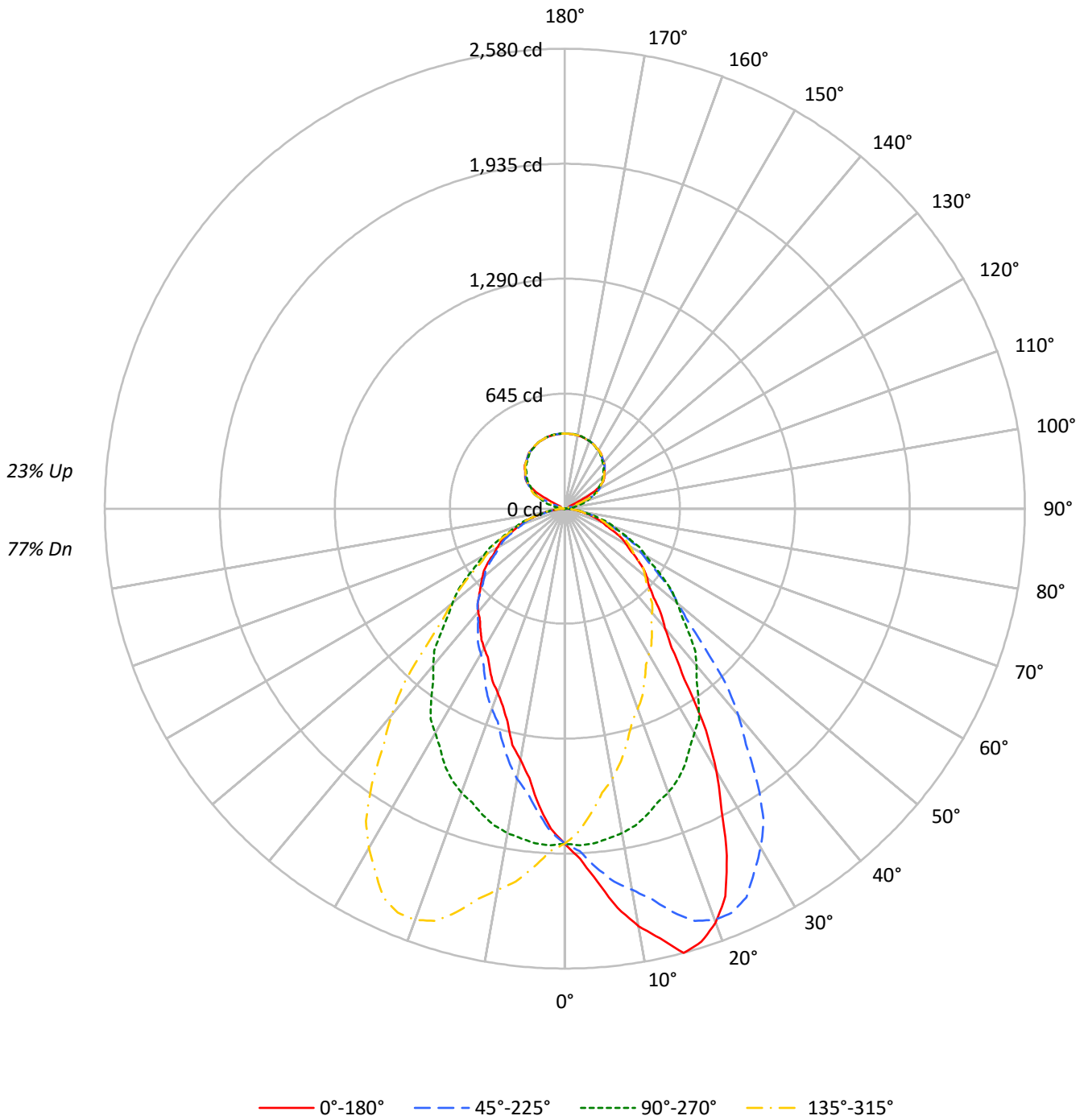
Lumens per Lamp: N/A
Luminaire Lumens: 5381.8 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 49.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	114	114	114	114	108	108	108	108	98	98	98	89	89	89	81	81	81	77
1	105	100	97	93	100	96	93	90	88	85	83	80	78	76	73	71	70	66
2	96	89	83	77	91	85	79	75	78	73	70	71	68	65	65	62	60	57
3	88	79	71	65	84	75	69	63	69	64	59	64	59	56	58	55	52	49
4	81	70	62	56	77	67	60	55	62	56	51	57	52	48	53	49	45	43
5	75	63	55	49	71	61	53	48	56	50	45	52	47	43	48	44	40	38
6	69	57	49	43	66	55	47	42	51	45	40	47	42	38	44	39	36	33
7	64	52	44	38	61	50	43	37	47	40	36	43	38	34	40	36	32	30
8	60	48	40	34	57	46	39	34	43	37	32	40	34	31	37	32	29	27
9	56	44	36	31	54	42	35	30	39	33	29	37	32	28	34	30	26	25
10	53	40	33	28	50	39	32	28	37	31	26	34	29	25	32	27	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	30344	30344	30344	30344
5°	34020	30543	27067	30543
10°	38984	30293	23423	30293
15°	43127	29737	20694	29737
20°	42471	29141	18866	29141
25°	38297	28349	17706	28349
30°	31646	27082	16861	27082
35°	23065	25754	16259	25754
40°	18421	24190	15924	24190
45°	16098	22379	15470	22379
50°	15131	20627	15169	20627
55°	13948	18849	14762	18849
60°	12784	16956	14134	16956
65°	11645	15259	13521	15259
70°	10570	13605	12619	13605
75°	9370	11759	11179	11759
80°	8061	9735	9000	9735
85°	7225	7225	5354	7225



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.0	3.3
10°-20°	520.4	9.7
20°-30°	755.2	14.0
30°-40°	796.9	14.8
40°-50°	705.6	13.1
50°-60°	563.1	10.5
60°-70°	382.7	7.1
70°-80°	196.2	3.6
80°-90°	48.4	0.9
90°-100°	14.0	0.3
100°-110°	51.5	1.0
110°-120°	137.7	2.6
120°-130°	227.3	4.2
130°-140°	241.8	4.5
140°-150°	224.7	4.2
150°-160°	180.7	3.4
160°-170°	116.4	2.2
170°-180°	40.1	0.7
0°-30°	1454.6	27.0
0°-40°	2251.5	41.8
0°-60°	3520.2	65.4
0°-90°	4147.5	77.1
90°-120°	203.3	3.8
90°-150°	897.1	16.7
90°-180°	1234.0	22.9
0°-180°	5381.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1879	1879	1879	1879	1879	
5°	2099	1884	1670	1884	2099	210
15°	2580	1779	1238	1779	2580	712
25°	2150	1591	994	1591	2150	972
35°	1170	1307	825	1307	1170	761
45°	705	980	678	980	705	554
55°	496	670	524	670	496	444
65°	305	399	354	399	305	303
75°	150	188	179	188	150	161
85°	39	39	29	39	39	43
90°	8	0	8	0	8	6
95°	13	20	13	20	13	12
105°	23	93	23	93	23	24
115°	25	175	25	175	25	63
125°	260	248	260	248	260	225
135°	317	307	317	307	317	244
145°	361	356	361	356	361	226
155°	392	392	392	392	392	181
165°	412	413	412	413	412	116
175°	420	422	420	422	420	40
180°	421	421	421	421	421	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4
2.5°	1966.1	1966.7	1967.8	1958.6	1957.5	1957.5	1949.4	1942.5	1934.4	1923.4	1924.6
5°	2099.0	2107.0	2109.9	2101.2	2088.2	2086.8	2074.5	2054.3	2035.5	2020.3	2009.5
7.5°	2257.7	2260.9	2253.8	2242.4	2232.7	2215.4	2192.5	2170.1	2138.8	2110.1	2088.7
10°	2377.8	2382.2	2369.9	2353.3	2339.6	2319.4	2286.1	2252.2	2211.0	2171.3	2139.5
12.5°	2469.2	2479.8	2464.1	2461.9	2438.5	2410.6	2371.1	2353.9	2295.9	2240.6	2206.6
15°	2580.1	2579.4	2580.9	2567.1	2549.8	2545.4	2503.6	2458.1	2376.4	2343.9	2287.6
17.5°	2548.1	2559.0	2564.1	2563.9	2563.5	2560.8	2547.3	2518.6	2477.7	2425.0	2359.9
20°	2471.8	2486.2	2488.4	2505.0	2514.4	2526.7	2531.8	2523.8	2498.5	2454.5	2398.1
22.5°	2353.9	2358.0	2364.7	2390.6	2410.9	2441.8	2457.8	2484.4	2474.8	2453.2	2406.2
25°	2149.7	2142.4	2167.7	2180.7	2227.6	2276.7	2312.2	2351.2	2385.9	2406.8	2393.0
27.5°	1904.3	1893.5	1931.4	1965.9	2004.0	2057.2	2112.3	2177.5	2231.7	2299.4	2322.7
30°	1697.4	1703.9	1740.0	1776.9	1834.7	1909.8	1971.9	2043.4	2120.7	2196.6	2249.3
32.5°	1474.4	1499.4	1522.2	1578.7	1629.6	1713.4	1804.3	1893.8	1990.2	2076.4	2158.0
35°	1170.2	1199.0	1230.9	1272.0	1343.5	1426.5	1515.4	1636.1	1767.6	1885.3	1982.1
37.5°	985.0	980.3	998.5	1028.3	1086.2	1153.3	1255.6	1374.7	1529.5	1667.8	1804.3
40°	874.0	871.1	884.1	911.5	955.6	1004.8	1094.3	1199.0	1342.7	1511.8	1674.3
42.5°	797.8	799.5	806.7	826.0	856.2	896.6	963.7	1052.8	1184.5	1343.7	1518.3
45°	705.0	710.0	718.0	727.4	744.7	778.0	815.5	879.1	983.1	1116.0	1287.9
47.5°	638.2	638.4	646.5	654.7	665.0	683.7	714.4	754.2	827.6	935.9	1083.6
50°	602.4	597.4	603.1	609.6	620.5	633.5	653.7	691.3	740.4	827.7	951.3
52.5°	558.5	558.6	563.8	566.3	576.0	589.0	607.5	633.5	678.0	746.3	847.8
55°	495.5	499.1	502.0	506.3	515.0	524.4	538.9	556.2	590.9	642.2	717.3
57.5°	436.3	437.4	440.4	448.6	454.0	462.7	476.5	492.2	514.7	552.7	609.2
60°	395.9	395.9	401.6	405.2	412.5	421.1	432.0	447.1	467.3	498.4	543.9
62.5°	358.8	358.3	360.6	366.5	372.0	380.1	390.9	403.8	422.8	450.4	487.9
65°	304.8	303.4	307.7	309.2	314.9	322.9	331.6	345.3	360.4	380.7	413.9
67.5°	252.8	254.6	256.8	259.6	262.8	271.2	276.9	286.6	299.4	316.2	338.7
70°	223.9	223.9	223.9	226.1	230.5	234.8	240.5	248.5	260.8	275.2	295.4
72.5°	191.5	193.9	196.1	194.9	200.4	202.9	209.9	214.4	226.1	235.4	253.3
75°	150.2	150.2	150.2	153.8	156.0	158.2	162.5	166.8	172.7	184.2	193.6
77.5°	112.1	111.8	112.5	113.4	115.7	118.3	119.6	123.5	128.8	134.2	142.1
80°	86.7	88.1	88.9	90.3	90.3	91.7	92.5	97.6	101.1	104.7	109.8
82.5°	67.0	67.3	67.5	67.8	68.3	69.2	71.1	72.7	74.0	77.0	80.9
85°	39.0	38.3	38.3	39.7	39.0	39.0	40.4	41.8	41.8	42.6	44.8
87.5°	16.7	16.7	17.2	16.6	16.6	17.1	17.1	16.4	16.9	17.4	17.9
90°	8.2	8.1	7.9	7.8	7.7	7.4	7.1	6.8	6.4	6.1	5.6
92.5°	8.2	8.1	8.1	8.0	7.9	7.7	7.6	7.4	7.3	7.1	6.8
95°	13.1	13.2	13.2	13.3	13.4	13.2	12.9	12.5	12.3	11.9	11.4
97.5°	17.5	17.4	17.3	17.2	17.2	17.0	16.7	16.5	16.2	15.9	14.8
100°	20.5	20.3	20.2	20.0	19.9	19.5	19.0	18.5	17.9	17.3	16.2
102.5°	21.9	21.7	21.5	21.3	21.1	20.6	20.0	19.2	18.6	17.8	27.5
105°	23.2	22.9	22.6	22.3	22.1	21.6	20.8	20.1	19.3	18.6	37.0
107.5°	23.8	23.6	23.3	23.0	22.7	23.0	23.8	24.5	25.3	26.0	48.2
110°	24.0	23.8	23.6	23.3	23.0	26.2	33.0	39.8	46.6	53.3	72.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	24.3	24.1	23.8	23.7	23.5	35.7	60.4	85.1	109.8	134.5	139.3
115°	25.0	29.9	34.8	39.6	44.5	62.6	94.0	125.4	156.7	188.0	186.3
117.5°	102.1	118.1	134.1	150.1	166.2	178.0	185.5	193.1	200.7	208.3	207.1
120°	185.9	195.0	204.2	213.3	222.4	226.6	225.8	225.0	224.2	223.4	222.2
122.5°	232.0	233.8	235.5	237.3	239.0	239.7	239.2	238.7	238.3	237.8	236.5
125°	260.5	260.3	260.1	260.0	259.8	259.4	258.9	258.4	258.0	257.5	256.2
127.5°	278.6	278.5	278.5	278.5	278.4	278.1	277.4	276.7	276.0	275.3	274.4
130°	289.8	289.9	289.9	290.0	290.1	289.7	289.0	288.2	287.5	286.8	286.1
132.5°	300.8	300.9	301.0	301.0	301.0	300.8	300.1	299.5	298.9	298.2	297.5
135°	316.6	316.8	316.9	317.1	317.2	316.9	316.2	315.6	314.9	314.2	313.6
137.5°	331.1	331.3	331.6	331.8	332.0	331.8	331.1	330.5	329.8	329.1	328.5
140°	340.1	340.4	340.8	341.1	341.5	341.3	340.7	340.1	339.5	338.8	338.2
142.5°	348.8	349.2	349.6	349.9	350.2	350.2	349.6	349.0	348.5	347.9	347.0
145°	361.1	361.5	361.8	362.1	362.5	362.4	361.9	361.5	361.0	360.5	359.4
147.5°	371.9	372.2	372.5	372.8	373.1	373.1	372.7	372.3	371.9	371.6	370.5
150°	378.5	378.8	379.2	379.6	379.8	379.8	379.4	379.0	378.6	378.2	377.1
152.5°	384.1	384.6	385.0	385.4	385.9	385.9	385.5	385.1	384.7	384.3	383.2
155°	391.9	392.5	393.0	393.5	394.1	394.2	393.7	393.3	392.9	392.5	391.7
157.5°	399.1	399.5	400.1	400.6	401.1	401.1	400.8	400.3	399.8	399.4	398.8
160°	403.2	403.7	404.2	404.6	405.1	405.1	404.7	404.4	403.9	403.5	403.1
162.5°	406.6	407.2	407.7	408.3	409.0	409.0	408.5	408.0	407.6	407.2	406.8
165°	411.7	412.2	412.6	413.1	413.6	413.6	413.1	412.6	412.2	411.7	411.5
167.5°	414.9	415.6	416.1	416.8	417.4	417.5	417.0	416.5	416.0	415.6	415.4
170°	416.9	417.5	418.1	418.8	419.3	419.4	419.0	418.5	418.0	417.5	417.4
172.5°	418.4	419.0	419.6	420.2	420.8	420.8	420.4	419.9	419.4	419.0	418.9
175°	419.6	420.3	421.0	421.7	422.4	422.4	422.0	421.5	421.0	420.6	420.5
177.5°	420.5	420.9	421.4	421.9	422.4	422.4	422.1	421.7	421.3	420.9	420.8
180°	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4
2.5°	1928.6	1924.0	1921.1	1910.7	1901.4	1892.2	1889.3	1890.5	1877.7	1865.6	1860.4
5°	2003.8	1989.2	1975.6	1956.1	1933.0	1907.6	1894.6	1884.5	1859.3	1831.8	1815.9
7.5°	2071.0	2050.4	2023.9	1987.3	1953.6	1913.8	1888.6	1866.1	1829.2	1790.5	1766.8
10°	2112.0	2083.9	2049.9	2005.2	1964.0	1915.6	1881.6	1847.7	1804.3	1758.1	1729.2
12.5°	2147.3	2109.3	2075.9	2018.5	1969.7	1909.2	1869.0	1821.1	1775.5	1720.5	1692.2
15°	2231.3	2161.2	2097.6	2032.6	1972.6	1888.1	1843.3	1779.0	1719.1	1651.2	1618.7
17.5°	2296.1	2217.3	2117.2	2034.7	1964.7	1871.1	1805.3	1728.3	1657.5	1579.9	1535.7
20°	2333.1	2242.8	2135.1	2036.9	1953.1	1846.3	1774.7	1696.0	1613.0	1525.5	1477.9
22.5°	2355.0	2260.1	2153.7	2028.3	1930.0	1826.0	1736.0	1649.7	1565.6	1471.2	1421.3
25°	2362.0	2275.3	2162.7	2021.1	1901.1	1783.4	1675.1	1591.3	1489.4	1401.3	1328.3
27.5°	2327.6	2265.5	2157.1	2007.4	1867.7	1730.1	1609.3	1514.4	1406.9	1311.3	1237.9
30°	2285.4	2249.3	2143.8	1993.6	1841.2	1693.1	1560.2	1452.6	1345.7	1248.9	1173.7
32.5°	2220.2	2212.3	2119.6	1974.0	1812.9	1646.3	1508.8	1400.0	1281.6	1186.5	1114.8
35°	2091.9	2126.5	2068.0	1930.0	1759.5	1579.7	1430.9	1306.6	1183.9	1092.9	1025.7
37.5°	1920.0	2006.0	1990.7	1865.8	1687.6	1507.2	1342.9	1213.1	1096.1	1004.2	938.3
40°	1801.5	1911.3	1927.1	1816.7	1636.8	1451.1	1277.1	1147.7	1033.6	949.9	883.4
42.5°	1674.3	1802.6	1846.3	1757.7	1581.3	1392.2	1218.1	1084.2	971.2	889.8	830.9
45°	1461.2	1631.0	1709.8	1659.2	1488.7	1295.1	1116.0	980.1	877.6	801.1	755.5
47.5°	1262.1	1447.6	1553.4	1535.5	1385.7	1194.0	1016.9	886.6	786.7	725.7	684.9
50°	1121.1	1311.7	1439.5	1445.4	1311.7	1121.7	944.1	821.2	729.5	672.5	639.2
52.5°	998.5	1180.5	1319.9	1350.6	1229.1	1046.6	878.7	756.6	675.8	623.4	593.6
55°	838.6	992.5	1147.1	1203.3	1105.9	932.6	777.2	669.6	593.7	557.6	531.6
57.5°	697.2	825.5	968.2	1030.5	970.3	822.0	676.4	582.9	521.4	489.7	469.8
60°	622.6	723.8	850.9	925.3	873.3	741.1	614.0	525.1	474.6	446.4	427.6
62.5°	553.3	642.9	750.4	818.4	790.0	665.4	551.6	473.2	429.5	403.0	389.5
65°	456.5	527.3	610.4	673.2	654.4	559.8	466.7	399.4	364.8	343.8	333.0
67.5°	375.9	427.1	484.7	539.7	524.5	457.5	382.7	330.4	304.5	286.4	279.9
70°	325.1	364.0	415.4	459.4	447.1	392.2	333.0	288.2	265.8	250.6	244.1
72.5°	276.5	308.6	347.7	383.7	375.4	329.8	280.4	246.6	229.4	215.4	210.1
75°	208.8	233.3	257.1	281.0	278.8	243.5	214.5	188.5	174.8	164.0	161.8
77.5°	154.1	167.9	184.1	198.2	194.3	174.1	151.4	136.5	126.4	119.1	118.0
80°	117.7	125.6	137.2	147.3	142.3	133.7	115.6	104.7	97.6	90.3	87.4
82.5°	85.4	93.3	100.3	105.8	101.9	93.8	82.7	75.3	71.0	66.0	64.8
85°	44.8	49.1	52.0	53.4	52.0	46.9	41.8	39.0	35.4	33.3	32.5
87.5°	18.4	18.2	18.1	19.1	17.2	17.2	14.6	12.8	12.3	11.9	10.9
90°	5.0	4.4	4.0	3.3	2.5	1.8	1.0	0.3	1.0	1.8	2.5
92.5°	6.5	6.2	6.0	5.8	5.9	6.0	6.1	6.1	6.1	6.0	5.9
95°	10.9	10.5	10.0	10.8	13.1	15.4	17.5	19.8	17.5	15.4	13.1
97.5°	13.7	12.6	11.5	14.1	20.5	26.7	33.0	39.3	33.0	26.7	20.5
100°	15.1	13.9	12.7	16.9	26.1	35.3	44.7	53.9	44.7	35.3	26.1
102.5°	37.1	46.8	56.4	62.2	64.2	66.1	68.1	70.0	68.1	66.1	64.2
105°	55.6	74.1	92.6	100.8	98.8	96.7	94.6	92.7	94.6	96.7	98.8
107.5°	70.4	92.6	114.7	125.0	123.4	121.7	120.1	118.4	120.1	121.7	123.4
110°	92.5	112.1	131.6	140.7	139.3	137.9	136.4	135.0	136.4	137.9	139.3



TEST NUMBER: P331420-830

CATALOG NUMBER: SA2XXDIP-C1005D330U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	144.2	149.0	153.8	155.6	154.4	153.2	151.8	150.6	151.8	153.2	154.4
115°	184.6	182.9	181.3	179.8	178.7	177.6	176.3	175.2	176.3	177.6	178.7
117.5°	205.9	204.8	203.6	202.4	201.1	199.8	198.5	197.3	198.5	199.8	201.1
120°	220.9	219.7	218.5	217.4	216.4	215.4	214.3	213.3	214.3	215.4	216.4
122.5°	235.1	233.8	232.4	231.3	230.2	229.1	228.1	227.0	228.1	229.1	230.2
125°	255.0	253.6	252.4	251.3	250.4	249.5	248.6	247.8	248.6	249.5	250.4
127.5°	273.4	272.4	271.5	270.5	269.6	268.5	267.6	266.6	267.6	268.5	269.6
130°	285.3	284.6	283.8	282.9	281.8	280.7	279.7	278.5	279.7	280.7	281.8
132.5°	296.7	296.0	295.2	294.5	293.5	292.6	291.6	290.8	291.6	292.6	293.5
135°	313.0	312.4	311.8	310.9	309.8	308.8	307.6	306.6	307.6	308.8	309.8
137.5°	327.7	327.1	326.4	325.6	324.9	324.1	323.4	322.6	323.4	324.1	324.9
140°	337.4	336.7	335.9	335.3	334.7	334.1	333.7	333.1	333.7	334.1	334.7
142.5°	346.2	345.3	344.5	343.8	343.4	342.8	342.3	341.9	342.3	342.8	343.4
145°	358.3	357.0	355.9	355.3	355.4	355.5	355.6	355.6	355.6	355.5	355.4
147.5°	369.4	368.2	367.0	366.6	366.8	367.1	367.4	367.7	367.4	367.1	366.8
150°	376.1	374.9	373.9	373.5	374.0	374.5	374.9	375.4	374.9	374.5	374.0
152.5°	382.2	381.2	380.1	379.9	380.4	381.0	381.5	382.0	381.5	381.0	380.4
155°	390.9	390.1	389.3	389.2	389.7	390.4	391.0	391.6	391.0	390.4	389.7
157.5°	398.2	397.7	397.1	397.0	397.6	398.0	398.6	399.1	398.6	398.0	397.6
160°	402.7	402.3	401.9	401.9	402.3	402.7	403.1	403.5	403.1	402.7	402.3
162.5°	406.4	406.0	405.8	405.8	406.1	406.6	407.0	407.4	407.0	406.6	406.1
165°	411.3	411.1	410.9	411.0	411.4	411.8	412.3	412.6	412.3	411.8	411.4
167.5°	415.2	415.0	414.8	414.9	415.3	415.8	416.1	416.5	416.1	415.8	415.3
170°	417.3	417.1	417.0	417.1	417.5	417.9	418.3	418.8	418.3	417.9	417.5
172.5°	418.7	418.6	418.4	418.6	419.0	419.3	419.8	420.2	419.8	419.3	419.0
175°	420.3	420.2	420.0	420.2	420.7	421.1	421.6	422.1	421.6	421.1	420.7
177.5°	420.8	420.8	420.8	420.8	421.2	421.6	422.0	422.4	422.0	421.6	421.2
180°	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1



TEST NUMBER: P331420-830
 CATALOG NUMBER: SA2XXDIP-C1005D330U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4
2.5°	1854.6	1851.2	1839.0	1832.7	1822.3	1812.4	1806.1	1809.0	1811.3	1810.2	1808.4
5°	1801.5	1787.7	1766.8	1748.7	1735.7	1711.9	1701.8	1696.8	1692.4	1687.3	1682.2
7.5°	1738.1	1716.6	1686.5	1660.8	1636.4	1606.8	1590.0	1579.9	1569.4	1558.0	1547.9
10°	1693.1	1662.7	1631.0	1594.9	1566.0	1539.3	1515.4	1499.5	1485.1	1471.4	1461.2
12.5°	1645.8	1610.8	1571.5	1522.1	1490.3	1452.0	1448.4	1420.4	1397.8	1389.3	1377.4
15°	1570.3	1521.2	1471.4	1412.9	1387.6	1352.9	1331.2	1309.6	1290.1	1276.3	1272.7
17.5°	1484.7	1421.1	1371.5	1329.5	1288.1	1252.5	1232.6	1215.2	1199.2	1180.8	1178.4
20°	1419.4	1364.4	1310.3	1273.5	1230.9	1194.7	1170.2	1152.8	1139.1	1128.2	1118.9
22.5°	1357.5	1297.4	1247.8	1207.6	1165.5	1136.3	1117.0	1100.2	1088.8	1076.9	1068.0
25°	1258.3	1211.4	1157.2	1111.6	1076.9	1058.2	1042.3	1027.8	1020.7	1012.7	1002.6
27.5°	1171.5	1119.3	1068.6	1033.3	1002.9	986.3	975.0	965.2	958.4	953.8	948.0
30°	1110.2	1057.4	1017.8	983.1	957.8	941.2	934.0	928.2	920.2	917.4	914.5
32.5°	1051.2	1003.7	969.8	939.7	915.6	904.7	898.1	893.0	886.7	883.8	878.1
35°	967.9	928.2	894.9	878.4	858.8	849.4	844.4	837.2	831.4	828.5	827.7
37.5°	889.5	855.0	833.1	811.7	803.5	797.8	790.8	785.9	784.2	783.7	783.0
40°	838.6	810.4	791.0	773.6	770.0	761.3	755.5	751.2	751.2	752.0	751.2
42.5°	792.4	767.1	749.9	734.9	730.7	725.5	719.7	719.4	720.6	723.0	720.6
45°	722.4	704.3	692.0	684.8	676.8	671.8	671.0	673.2	673.9	674.7	676.8
47.5°	657.9	645.9	634.8	626.8	623.4	622.5	621.6	625.4	628.9	630.2	633.5
50°	619.7	606.1	596.6	591.5	588.7	587.2	588.7	593.0	595.9	599.6	601.7
52.5°	577.0	567.3	560.8	556.9	555.7	556.7	556.9	561.8	566.5	567.8	568.7
55°	517.9	510.7	509.3	502.8	505.6	504.9	508.5	511.4	515.8	520.1	520.8
57.5°	458.9	453.2	449.3	449.9	450.7	453.9	456.9	462.0	466.7	471.3	471.6
60°	419.7	416.8	414.6	414.6	416.0	420.4	424.0	429.0	432.0	434.8	437.0
62.5°	383.8	381.0	378.8	379.9	383.7	386.3	390.5	393.2	396.2	399.0	400.0
65°	327.3	325.7	327.9	329.4	330.1	333.8	338.7	340.9	343.8	345.3	350.3
67.5°	275.0	275.3	275.0	277.1	281.3	282.1	286.9	292.0	292.6	295.3	298.6
70°	239.8	241.3	242.7	244.1	247.8	249.2	252.8	255.0	257.9	260.0	262.2
72.5°	207.5	207.7	209.2	208.9	211.9	215.1	218.1	220.3	223.2	225.9	228.1
75°	159.7	159.7	161.1	161.8	165.4	169.0	168.3	169.8	172.7	175.5	177.0
77.5°	116.6	115.0	116.6	117.3	118.5	121.5	122.1	124.1	127.4	126.4	128.0
80°	88.9	86.7	88.9	89.5	89.5	93.2	93.2	94.6	96.8	94.6	96.8
82.5°	63.4	62.4	64.0	64.2	65.3	65.4	66.6	66.9	69.1	68.1	69.1
85°	31.8	31.1	31.8	31.1	31.8	32.5	32.5	31.8	31.8	33.3	31.1
87.5°	10.5	10.0	9.5	9.7	9.2	8.8	8.2	8.3	8.4	7.3	7.4
90°	3.3	4.0	4.4	5.0	5.6	6.1	6.4	6.8	7.1	7.4	7.7
92.5°	5.8	6.0	6.2	6.5	6.8	7.1	7.3	7.4	7.6	7.7	7.9
95°	10.8	10.0	10.5	10.9	11.4	11.9	12.3	12.5	12.9	13.2	13.4
97.5°	14.1	11.5	12.6	13.7	14.8	15.9	16.2	16.5	16.7	17.0	17.2
100°	16.9	12.7	13.9	15.1	16.2	17.3	17.9	18.5	19.0	19.5	19.9
102.5°	62.2	56.4	46.8	37.1	27.5	17.8	18.6	19.2	20.0	20.6	21.1
105°	100.8	92.6	74.1	55.6	37.0	18.6	19.3	20.1	20.8	21.6	22.1
107.5°	125.0	114.7	92.6	70.4	48.2	26.0	25.3	24.5	23.8	23.0	22.7
110°	140.7	131.6	112.1	92.5	72.9	53.3	46.6	39.8	33.0	26.2	23.0



TEST NUMBER: P331420-830

CATALOG NUMBER: SA2XXDIP-C1005D330U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	155.6	153.8	149.0	144.2	139.3	134.5	109.8	85.1	60.4	35.7	23.5
115°	179.8	181.3	182.9	184.6	186.3	188.0	156.7	125.4	94.0	62.6	44.5
117.5°	202.4	203.6	204.8	205.9	207.1	208.3	200.7	193.1	185.5	178.0	166.2
120°	217.4	218.5	219.7	220.9	222.2	223.4	224.2	225.0	225.8	226.6	222.4
122.5°	231.3	232.4	233.8	235.1	236.5	237.8	238.3	238.7	239.2	239.7	239.0
125°	251.3	252.4	253.6	255.0	256.2	257.5	258.0	258.4	258.9	259.4	259.8
127.5°	270.5	271.5	272.4	273.4	274.4	275.3	276.0	276.7	277.4	278.1	278.4
130°	282.9	283.8	284.6	285.3	286.1	286.8	287.5	288.2	289.0	289.7	290.1
132.5°	294.5	295.2	296.0	296.7	297.5	298.2	298.9	299.5	300.1	300.8	301.0
135°	310.9	311.8	312.4	313.0	313.6	314.2	314.9	315.6	316.2	316.9	317.2
137.5°	325.6	326.4	327.1	327.7	328.5	329.1	329.8	330.5	331.1	331.8	332.0
140°	335.3	335.9	336.7	337.4	338.2	338.8	339.5	340.1	340.7	341.3	341.5
142.5°	343.8	344.5	345.3	346.2	347.0	347.9	348.5	349.0	349.6	350.2	350.2
145°	355.3	355.9	357.0	358.3	359.4	360.5	361.0	361.5	361.9	362.4	362.5
147.5°	366.6	367.0	368.2	369.4	370.5	371.6	371.9	372.3	372.7	373.1	373.1
150°	373.5	373.9	374.9	376.1	377.1	378.2	378.6	379.0	379.4	379.8	379.8
152.5°	379.9	380.1	381.2	382.2	383.2	384.3	384.7	385.1	385.5	385.9	385.9
155°	389.2	389.3	390.1	390.9	391.7	392.5	392.9	393.3	393.7	394.2	394.1
157.5°	397.0	397.1	397.7	398.2	398.8	399.4	399.8	400.3	400.8	401.1	401.1
160°	401.9	401.9	402.3	402.7	403.1	403.5	403.9	404.4	404.7	405.1	405.1
162.5°	405.8	405.8	406.0	406.4	406.8	407.2	407.6	408.0	408.5	409.0	409.0
165°	411.0	410.9	411.1	411.3	411.5	411.7	412.2	412.6	413.1	413.6	413.6
167.5°	414.9	414.8	415.0	415.2	415.4	415.6	416.0	416.5	417.0	417.5	417.4
170°	417.1	417.0	417.1	417.3	417.4	417.5	418.0	418.5	419.0	419.4	419.3
172.5°	418.6	418.4	418.6	418.7	418.9	419.0	419.4	419.9	420.4	420.8	420.8
175°	420.2	420.0	420.2	420.3	420.5	420.6	421.0	421.5	422.0	422.4	422.4
177.5°	420.8	420.8	420.8	420.8	420.8	420.9	421.3	421.7	422.1	422.4	422.4
180°	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1



TEST NUMBER: P331420-830

CATALOG NUMBER: SA2XXDIP-C1005D330U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4
2.5°	1802.6	1801.5	1801.5	1796.3	1801.5	1801.5	1802.6	1808.4	1810.2	1811.3	1809.0
5°	1672.2	1670.0	1666.4	1670.0	1666.4	1670.0	1672.2	1682.2	1687.3	1692.4	1696.8
7.5°	1543.1	1534.5	1533.2	1524.7	1533.2	1534.5	1543.1	1547.9	1558.0	1569.4	1579.9
10°	1449.0	1443.2	1442.5	1428.7	1442.5	1443.2	1449.0	1461.2	1471.4	1485.1	1499.5
12.5°	1377.3	1363.5	1366.2	1358.2	1366.2	1363.5	1377.3	1377.4	1389.3	1397.8	1420.4
15°	1253.2	1253.2	1250.4	1238.0	1250.4	1253.2	1253.2	1272.7	1276.3	1290.1	1309.6
17.5°	1164.1	1162.6	1155.7	1159.1	1155.7	1162.6	1164.1	1178.4	1180.8	1199.2	1215.2
20°	1110.9	1106.6	1098.0	1098.0	1098.0	1106.6	1110.9	1118.9	1128.2	1139.1	1152.8
22.5°	1060.6	1060.4	1051.1	1054.0	1051.1	1060.4	1060.6	1068.0	1076.9	1088.8	1100.2
25°	1001.8	996.1	991.7	993.9	991.7	996.1	1001.8	1002.6	1012.7	1020.7	1027.8
27.5°	946.1	942.9	942.6	936.7	942.6	942.9	946.1	948.0	953.8	958.4	965.2
30°	913.7	906.5	908.0	904.4	908.0	906.5	913.7	914.5	917.4	920.2	928.2
32.5°	876.8	874.1	872.7	869.7	872.7	874.1	876.8	878.1	883.8	886.7	893.0
35°	826.3	827.1	823.4	824.9	823.4	827.1	826.3	827.7	828.5	831.4	837.2
37.5°	782.3	784.6	782.9	783.3	782.9	784.6	782.3	783.0	783.7	784.2	785.9
40°	753.4	753.4	753.4	755.5	753.4	753.4	753.4	751.2	752.0	751.2	751.2
42.5°	725.7	724.5	723.3	723.2	723.3	724.5	725.7	720.6	723.0	720.6	719.4
45°	678.3	680.4	681.2	677.5	681.2	680.4	678.3	676.8	674.7	673.9	673.2
47.5°	635.4	635.7	635.4	638.6	635.4	635.7	635.4	633.5	630.2	628.9	625.4
50°	605.3	603.9	605.3	603.9	605.3	603.9	605.3	601.7	599.6	595.9	593.0
52.5°	573.5	573.8	573.0	572.7	573.0	573.8	573.5	568.7	567.8	566.5	561.8
55°	523.7	525.1	524.4	524.4	524.4	525.1	523.7	520.8	520.1	515.8	511.4
57.5°	472.1	473.4	474.4	471.3	474.4	473.4	472.1	471.6	471.3	466.7	462.0
60°	436.3	439.9	439.1	437.7	439.1	439.9	436.3	437.0	434.8	432.0	429.0
62.5°	403.3	404.6	404.5	404.3	404.5	404.6	403.3	400.0	399.0	396.2	393.2
65°	352.5	353.9	351.8	353.9	351.8	353.9	352.5	350.3	345.3	343.8	340.9
67.5°	297.7	298.2	299.7	300.8	299.7	298.2	297.7	298.6	295.3	292.6	292.0
70°	263.6	263.0	265.1	267.3	265.1	263.0	263.6	262.2	260.0	257.9	255.0
72.5°	227.8	229.4	228.7	230.3	228.7	229.4	227.8	228.1	225.9	223.2	220.3
75°	175.5	177.7	177.0	179.2	177.0	177.7	175.5	177.0	175.5	172.7	169.8
77.5°	126.9	127.1	126.9	128.0	126.9	127.1	126.9	128.0	126.4	127.4	124.1
80°	96.8	95.4	93.9	96.8	93.9	95.4	96.8	96.8	94.6	96.8	94.6
82.5°	67.3	68.1	66.7	66.7	66.7	68.1	67.3	69.1	68.1	69.1	66.9
85°	31.1	30.3	28.9	28.9	28.9	30.3	31.1	31.1	33.3	31.8	31.8
87.5°	7.4	6.8	6.8	6.3	6.8	6.8	7.4	7.4	7.3	8.4	8.3
90°	7.8	7.9	8.1	8.2	8.1	7.9	7.8	7.7	7.4	7.1	6.8
92.5°	8.0	8.1	8.1	8.2	8.1	8.1	8.0	7.9	7.7	7.6	7.4
95°	13.3	13.2	13.2	13.1	13.2	13.2	13.3	13.4	13.2	12.9	12.5
97.5°	17.2	17.3	17.4	17.5	17.4	17.3	17.2	17.2	17.0	16.7	16.5
100°	20.0	20.2	20.3	20.5	20.3	20.2	20.0	19.9	19.5	19.0	18.5
102.5°	21.3	21.5	21.7	21.9	21.7	21.5	21.3	21.1	20.6	20.0	19.2
105°	22.3	22.6	22.9	23.2	22.9	22.6	22.3	22.1	21.6	20.8	20.1
107.5°	23.0	23.3	23.6	23.8	23.6	23.3	23.0	22.7	23.0	23.8	24.5
110°	23.3	23.6	23.8	24.0	23.8	23.6	23.3	23.0	26.2	33.0	39.8



TEST NUMBER: P331420-830

CATALOG NUMBER: SA2XXDIP-C1005D330U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	23.7	23.8	24.1	24.3	24.1	23.8	23.7	23.5	35.7	60.4	85.1
115°	39.6	34.8	29.9	25.0	29.9	34.8	39.6	44.5	62.6	94.0	125.4
117.5°	150.1	134.1	118.1	102.1	118.1	134.1	150.1	166.2	178.0	185.5	193.1
120°	213.3	204.2	195.0	185.9	195.0	204.2	213.3	222.4	226.6	225.8	225.0
122.5°	237.3	235.5	233.8	232.0	233.8	235.5	237.3	239.0	239.7	239.2	238.7
125°	260.0	260.1	260.3	260.5	260.3	260.1	260.0	259.8	259.4	258.9	258.4
127.5°	278.5	278.5	278.5	278.6	278.5	278.5	278.5	278.4	278.1	277.4	276.7
130°	290.0	289.9	289.9	289.8	289.9	289.9	290.0	290.1	289.7	289.0	288.2
132.5°	301.0	301.0	300.9	300.8	300.9	301.0	301.0	301.0	300.8	300.1	299.5
135°	317.1	316.9	316.8	316.6	316.8	316.9	317.1	317.2	316.9	316.2	315.6
137.5°	331.8	331.6	331.3	331.1	331.3	331.6	331.8	332.0	331.8	331.1	330.5
140°	341.1	340.8	340.4	340.1	340.4	340.8	341.1	341.5	341.3	340.7	340.1
142.5°	349.9	349.6	349.2	348.8	349.2	349.6	349.9	350.2	350.2	349.6	349.0
145°	362.1	361.8	361.5	361.1	361.5	361.8	362.1	362.5	362.4	361.9	361.5
147.5°	372.8	372.5	372.2	371.9	372.2	372.5	372.8	373.1	373.1	372.7	372.3
150°	379.6	379.2	378.8	378.5	378.8	379.2	379.6	379.8	379.8	379.4	379.0
152.5°	385.4	385.0	384.6	384.1	384.6	385.0	385.4	385.9	385.9	385.5	385.1
155°	393.5	393.0	392.5	391.9	392.5	393.0	393.5	394.1	394.2	393.7	393.3
157.5°	400.6	400.1	399.5	399.1	399.5	400.1	400.6	401.1	401.1	400.8	400.3
160°	404.6	404.2	403.7	403.2	403.7	404.2	404.6	405.1	405.1	404.7	404.4
162.5°	408.3	407.7	407.2	406.6	407.2	407.7	408.3	409.0	409.0	408.5	408.0
165°	413.1	412.6	412.2	411.7	412.2	412.6	413.1	413.6	413.6	413.1	412.6
167.5°	416.8	416.1	415.6	414.9	415.6	416.1	416.8	417.4	417.5	417.0	416.5
170°	418.8	418.1	417.5	416.9	417.5	418.1	418.8	419.3	419.4	419.0	418.5
172.5°	420.2	419.6	419.0	418.4	419.0	419.6	420.2	420.8	420.8	420.4	419.9
175°	421.7	421.0	420.3	419.6	420.3	421.0	421.7	422.4	422.4	422.0	421.5
177.5°	421.9	421.4	420.9	420.5	420.9	421.4	421.9	422.4	422.4	422.1	421.7
180°	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1



TEST NUMBER: P331420-830

CATALOG NUMBER: SA2XXDIP-C1005D330U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4
2.5°	1806.1	1812.4	1822.3	1832.7	1839.0	1851.2	1854.6	1860.4	1865.6	1877.7	1890.5
5°	1701.8	1711.9	1735.7	1748.7	1766.8	1787.7	1801.5	1815.9	1831.8	1859.3	1884.5
7.5°	1590.0	1606.8	1636.4	1660.8	1686.5	1716.6	1738.1	1766.8	1790.5	1829.2	1866.1
10°	1515.4	1539.3	1566.0	1594.9	1631.0	1662.7	1693.1	1729.2	1758.1	1804.3	1847.7
12.5°	1448.4	1452.0	1490.3	1522.1	1571.5	1610.8	1645.8	1692.2	1720.5	1775.5	1821.1
15°	1331.2	1352.9	1387.6	1412.9	1471.4	1521.2	1570.3	1618.7	1651.2	1719.1	1779.0
17.5°	1232.6	1252.5	1288.1	1329.5	1371.5	1421.1	1484.7	1535.7	1579.9	1657.5	1728.3
20°	1170.2	1194.7	1230.9	1273.5	1310.3	1364.4	1419.4	1477.9	1525.5	1613.0	1696.0
22.5°	1117.0	1136.3	1165.5	1207.6	1247.8	1297.4	1357.5	1421.3	1471.2	1565.6	1649.7
25°	1042.3	1058.2	1076.9	1111.6	1157.2	1211.4	1258.3	1328.3	1401.3	1489.4	1591.3
27.5°	975.0	986.3	1002.9	1033.3	1068.6	1119.3	1171.5	1237.9	1311.3	1406.9	1514.4
30°	934.0	941.2	957.8	983.1	1017.8	1057.4	1110.2	1173.7	1248.9	1345.7	1452.6
32.5°	898.1	904.7	915.6	939.7	969.8	1003.7	1051.2	1114.8	1186.5	1281.6	1400.0
35°	844.4	849.4	858.8	878.4	894.9	928.2	967.9	1025.7	1092.9	1183.9	1306.6
37.5°	790.8	797.8	803.5	811.7	833.1	855.0	889.5	938.3	1004.2	1096.1	1213.1
40°	755.5	761.3	770.0	773.6	791.0	810.4	838.6	883.4	949.9	1033.6	1147.7
42.5°	719.7	725.5	730.7	734.9	749.9	767.1	792.4	830.9	889.8	971.2	1084.2
45°	671.0	671.8	676.8	684.8	692.0	704.3	722.4	755.5	801.1	877.6	980.1
47.5°	621.6	622.5	623.4	626.8	634.8	645.9	657.9	684.9	725.7	786.7	886.6
50°	588.7	587.2	588.7	591.5	596.6	606.1	619.7	639.2	672.5	729.5	821.2
52.5°	556.9	556.7	555.7	556.9	560.8	567.3	577.0	593.6	623.4	675.8	756.6
55°	508.5	504.9	505.6	502.8	509.3	510.7	517.9	531.6	557.6	593.7	669.6
57.5°	456.9	453.9	450.7	449.9	449.3	453.2	458.9	469.8	489.7	521.4	582.9
60°	424.0	420.4	416.0	414.6	414.6	416.8	419.7	427.6	446.4	474.6	525.1
62.5°	390.5	386.3	383.7	379.9	378.8	381.0	383.8	389.5	403.0	429.5	473.2
65°	338.7	333.8	330.1	329.4	327.9	325.7	327.3	333.0	343.8	364.8	399.4
67.5°	286.9	282.1	281.3	277.1	275.0	275.3	275.0	279.9	286.4	304.5	330.4
70°	252.8	249.2	247.8	244.1	242.7	241.3	239.8	244.1	250.6	265.8	288.2
72.5°	218.1	215.1	211.9	208.9	209.2	207.7	207.5	210.1	215.4	229.4	246.6
75°	168.3	169.0	165.4	161.8	161.1	159.7	159.7	161.8	164.0	174.8	188.5
77.5°	122.1	121.5	118.5	117.3	116.6	115.0	116.6	118.0	119.1	126.4	136.5
80°	93.2	93.2	89.5	89.5	88.9	86.7	88.9	87.4	90.3	97.6	104.7
82.5°	66.6	65.4	65.3	64.2	64.0	62.4	63.4	64.8	66.0	71.0	75.3
85°	32.5	32.5	31.8	31.1	31.8	31.1	31.8	32.5	33.3	35.4	39.0
87.5°	8.2	8.8	9.2	9.7	9.5	10.0	10.5	10.9	11.9	12.3	12.8
90°	6.4	6.1	5.6	5.0	4.4	4.0	3.3	2.5	1.8	1.0	0.3
92.5°	7.3	7.1	6.8	6.5	6.2	6.0	5.8	5.9	6.0	6.1	6.1
95°	12.3	11.9	11.4	10.9	10.5	10.0	10.8	13.1	15.4	17.5	19.8
97.5°	16.2	15.9	14.8	13.7	12.6	11.5	14.1	20.5	26.7	33.0	39.3
100°	17.9	17.3	16.2	15.1	13.9	12.7	16.9	26.1	35.3	44.7	53.9
102.5°	18.6	17.8	27.5	37.1	46.8	56.4	62.2	64.2	66.1	68.1	70.0
105°	19.3	18.6	37.0	55.6	74.1	92.6	100.8	98.8	96.7	94.6	92.7
107.5°	25.3	26.0	48.2	70.4	92.6	114.7	125.0	123.4	121.7	120.1	118.4
110°	46.6	53.3	72.9	92.5	112.1	131.6	140.7	139.3	137.9	136.4	135.0



TEST NUMBER: P331420-830

CATALOG NUMBER: SA2XXDIP-C1005D330U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	109.8	134.5	139.3	144.2	149.0	153.8	155.6	154.4	153.2	151.8	150.6
115°	156.7	188.0	186.3	184.6	182.9	181.3	179.8	178.7	177.6	176.3	175.2
117.5°	200.7	208.3	207.1	205.9	204.8	203.6	202.4	201.1	199.8	198.5	197.3
120°	224.2	223.4	222.2	220.9	219.7	218.5	217.4	216.4	215.4	214.3	213.3
122.5°	238.3	237.8	236.5	235.1	233.8	232.4	231.3	230.2	229.1	228.1	227.0
125°	258.0	257.5	256.2	255.0	253.6	252.4	251.3	250.4	249.5	248.6	247.8
127.5°	276.0	275.3	274.4	273.4	272.4	271.5	270.5	269.6	268.5	267.6	266.6
130°	287.5	286.8	286.1	285.3	284.6	283.8	282.9	281.8	280.7	279.7	278.5
132.5°	298.9	298.2	297.5	296.7	296.0	295.2	294.5	293.5	292.6	291.6	290.8
135°	314.9	314.2	313.6	313.0	312.4	311.8	310.9	309.8	308.8	307.6	306.6
137.5°	329.8	329.1	328.5	327.7	327.1	326.4	325.6	324.9	324.1	323.4	322.6
140°	339.5	338.8	338.2	337.4	336.7	335.9	335.3	334.7	334.1	333.7	333.1
142.5°	348.5	347.9	347.0	346.2	345.3	344.5	343.8	343.4	342.8	342.3	341.9
145°	361.0	360.5	359.4	358.3	357.0	355.9	355.3	355.4	355.5	355.6	355.6
147.5°	371.9	371.6	370.5	369.4	368.2	367.0	366.6	366.8	367.1	367.4	367.7
150°	378.6	378.2	377.1	376.1	374.9	373.9	373.5	374.0	374.5	374.9	375.4
152.5°	384.7	384.3	383.2	382.2	381.2	380.1	379.9	380.4	381.0	381.5	382.0
155°	392.9	392.5	391.7	390.9	390.1	389.3	389.2	389.7	390.4	391.0	391.6
157.5°	399.8	399.4	398.8	398.2	397.7	397.1	397.0	397.6	398.0	398.6	399.1
160°	403.9	403.5	403.1	402.7	402.3	401.9	401.9	402.3	402.7	403.1	403.5
162.5°	407.6	407.2	406.8	406.4	406.0	405.8	405.8	406.1	406.6	407.0	407.4
165°	412.2	411.7	411.5	411.3	411.1	410.9	411.0	411.4	411.8	412.3	412.6
167.5°	416.0	415.6	415.4	415.2	415.0	414.8	414.9	415.3	415.8	416.1	416.5
170°	418.0	417.5	417.4	417.3	417.1	417.0	417.1	417.5	417.9	418.3	418.8
172.5°	419.4	419.0	418.9	418.7	418.6	418.4	418.6	419.0	419.3	419.8	420.2
175°	421.0	420.6	420.5	420.3	420.2	420.0	420.2	420.7	421.1	421.6	422.1
177.5°	421.3	420.9	420.8	420.8	420.8	420.8	420.8	421.2	421.6	422.0	422.4
180°	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1



TEST NUMBER: P331420-830

CATALOG NUMBER: SA2XXDIP-C1005D330U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4
2.5°	1889.3	1892.2	1901.4	1910.7	1921.1	1924.0	1928.6	1924.6	1923.4	1934.4	1942.5
5°	1894.6	1907.6	1933.0	1956.1	1975.6	1989.2	2003.8	2009.5	2020.3	2035.5	2054.3
7.5°	1888.6	1913.8	1953.6	1987.3	2023.9	2050.4	2071.0	2088.7	2110.1	2138.8	2170.1
10°	1881.6	1915.6	1964.0	2005.2	2049.9	2083.9	2112.0	2139.5	2171.3	2211.0	2252.2
12.5°	1869.0	1909.2	1969.7	2018.5	2075.9	2109.3	2147.3	2206.6	2240.6	2295.9	2353.9
15°	1843.3	1888.1	1972.6	2032.6	2097.6	2161.2	2231.3	2287.6	2343.9	2376.4	2458.1
17.5°	1805.3	1871.1	1964.7	2034.7	2117.2	2217.3	2296.1	2359.9	2425.0	2477.7	2518.6
20°	1774.7	1846.3	1953.1	2036.9	2135.1	2242.8	2333.1	2398.1	2454.5	2498.5	2523.8
22.5°	1736.0	1826.0	1930.0	2028.3	2153.7	2260.1	2355.0	2406.2	2453.2	2474.8	2484.4
25°	1675.1	1783.4	1901.1	2021.1	2162.7	2275.3	2362.0	2393.0	2406.8	2385.9	2351.2
27.5°	1609.3	1730.1	1867.7	2007.4	2157.1	2265.5	2327.6	2322.7	2299.4	2231.7	2177.5
30°	1560.2	1693.1	1841.2	1993.6	2143.8	2249.3	2285.4	2249.3	2196.6	2120.7	2043.4
32.5°	1508.8	1646.3	1812.9	1974.0	2119.6	2212.3	2220.2	2158.0	2076.4	1990.2	1893.8
35°	1430.9	1579.7	1759.5	1930.0	2068.0	2126.5	2091.9	1982.1	1885.3	1767.6	1636.1
37.5°	1342.9	1507.2	1687.6	1865.8	1990.7	2006.0	1920.0	1804.3	1667.8	1529.5	1374.7
40°	1277.1	1451.1	1636.8	1816.7	1927.1	1911.3	1801.5	1674.3	1511.8	1342.7	1199.0
42.5°	1218.1	1392.2	1581.3	1757.7	1846.3	1802.6	1674.3	1518.3	1343.7	1184.5	1052.8
45°	1116.0	1295.1	1488.7	1659.2	1709.8	1631.0	1461.2	1287.9	1116.0	983.1	879.1
47.5°	1016.9	1194.0	1385.7	1535.5	1553.4	1447.6	1262.1	1083.6	935.9	827.6	754.2
50°	944.1	1121.7	1311.7	1445.4	1439.5	1311.7	1121.1	951.3	827.7	740.4	691.3
52.5°	878.7	1046.6	1229.1	1350.6	1319.9	1180.5	998.5	847.8	746.3	678.0	633.5
55°	777.2	932.6	1105.9	1203.3	1147.1	992.5	838.6	717.3	642.2	590.9	556.2
57.5°	676.4	822.0	970.3	1030.5	968.2	825.5	697.2	609.2	552.7	514.7	492.2
60°	614.0	741.1	873.3	925.3	850.9	723.8	622.6	543.9	498.4	467.3	447.1
62.5°	551.6	665.4	790.0	818.4	750.4	642.9	553.3	487.9	450.4	422.8	403.8
65°	466.7	559.8	654.4	673.2	610.4	527.3	456.5	413.9	380.7	360.4	345.3
67.5°	382.7	457.5	524.5	539.7	484.7	427.1	375.9	338.7	316.2	299.4	286.6
70°	333.0	392.2	447.1	459.4	415.4	364.0	325.1	295.4	275.2	260.8	248.5
72.5°	280.4	329.8	375.4	383.7	347.7	308.6	276.5	253.3	235.4	226.1	214.4
75°	214.5	243.5	278.8	281.0	257.1	233.3	208.8	193.6	184.2	172.7	166.8
77.5°	151.4	174.1	194.3	198.2	184.1	167.9	154.1	142.1	134.2	128.8	123.5
80°	115.6	133.7	142.3	147.3	137.2	125.6	117.7	109.8	104.7	101.1	97.6
82.5°	82.7	93.8	101.9	105.8	100.3	93.3	85.4	80.9	77.0	74.0	72.7
85°	41.8	46.9	52.0	53.4	52.0	49.1	44.8	44.8	42.6	41.8	41.8
87.5°	14.6	17.2	17.2	19.1	18.1	18.2	18.4	17.9	17.4	16.9	16.4
90°	1.0	1.8	2.5	3.3	4.0	4.4	5.0	5.6	6.1	6.4	6.8
92.5°	6.1	6.0	5.9	5.8	6.0	6.2	6.5	6.8	7.1	7.3	7.4
95°	17.5	15.4	13.1	10.8	10.0	10.5	10.9	11.4	11.9	12.3	12.5
97.5°	33.0	26.7	20.5	14.1	11.5	12.6	13.7	14.8	15.9	16.2	16.5
100°	44.7	35.3	26.1	16.9	12.7	13.9	15.1	16.2	17.3	17.9	18.5
102.5°	68.1	66.1	64.2	62.2	56.4	46.8	37.1	27.5	17.8	18.6	19.2
105°	94.6	96.7	98.8	100.8	92.6	74.1	55.6	37.0	18.6	19.3	20.1
107.5°	120.1	121.7	123.4	125.0	114.7	92.6	70.4	48.2	26.0	25.3	24.5
110°	136.4	137.9	139.3	140.7	131.6	112.1	92.5	72.9	53.3	46.6	39.8



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	151.8	153.2	154.4	155.6	153.8	149.0	144.2	139.3	134.5	109.8	85.1
115°	176.3	177.6	178.7	179.8	181.3	182.9	184.6	186.3	188.0	156.7	125.4
117.5°	198.5	199.8	201.1	202.4	203.6	204.8	205.9	207.1	208.3	200.7	193.1
120°	214.3	215.4	216.4	217.4	218.5	219.7	220.9	222.2	223.4	224.2	225.0
122.5°	228.1	229.1	230.2	231.3	232.4	233.8	235.1	236.5	237.8	238.3	238.7
125°	248.6	249.5	250.4	251.3	252.4	253.6	255.0	256.2	257.5	258.0	258.4
127.5°	267.6	268.5	269.6	270.5	271.5	272.4	273.4	274.4	275.3	276.0	276.7
130°	279.7	280.7	281.8	282.9	283.8	284.6	285.3	286.1	286.8	287.5	288.2
132.5°	291.6	292.6	293.5	294.5	295.2	296.0	296.7	297.5	298.2	298.9	299.5
135°	307.6	308.8	309.8	310.9	311.8	312.4	313.0	313.6	314.2	314.9	315.6
137.5°	323.4	324.1	324.9	325.6	326.4	327.1	327.7	328.5	329.1	329.8	330.5
140°	333.7	334.1	334.7	335.3	335.9	336.7	337.4	338.2	338.8	339.5	340.1
142.5°	342.3	342.8	343.4	343.8	344.5	345.3	346.2	347.0	347.9	348.5	349.0
145°	355.6	355.5	355.4	355.3	355.9	357.0	358.3	359.4	360.5	361.0	361.5
147.5°	367.4	367.1	366.8	366.6	367.0	368.2	369.4	370.5	371.6	371.9	372.3
150°	374.9	374.5	374.0	373.5	373.9	374.9	376.1	377.1	378.2	378.6	379.0
152.5°	381.5	381.0	380.4	379.9	380.1	381.2	382.2	383.2	384.3	384.7	385.1
155°	391.0	390.4	389.7	389.2	389.3	390.1	390.9	391.7	392.5	392.9	393.3
157.5°	398.6	398.0	397.6	397.0	397.1	397.7	398.2	398.8	399.4	399.8	400.3
160°	403.1	402.7	402.3	401.9	401.9	402.3	402.7	403.1	403.5	403.9	404.4
162.5°	407.0	406.6	406.1	405.8	405.8	406.0	406.4	406.8	407.2	407.6	408.0
165°	412.3	411.8	411.4	411.0	410.9	411.1	411.3	411.5	411.7	412.2	412.6
167.5°	416.1	415.8	415.3	414.9	414.8	415.0	415.2	415.4	415.6	416.0	416.5
170°	418.3	417.9	417.5	417.1	417.0	417.1	417.3	417.4	417.5	418.0	418.5
172.5°	419.8	419.3	419.0	418.6	418.4	418.6	418.7	418.9	419.0	419.4	419.9
175°	421.6	421.1	420.7	420.2	420.0	420.2	420.3	420.5	420.6	421.0	421.5
177.5°	422.0	421.6	421.2	420.8	420.8	420.8	420.8	420.8	420.9	421.3	421.7
180°	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1	421.1



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4
2.5°	1949.4	1957.5	1957.5	1958.6	1967.8	1966.7	1966.1
5°	2074.5	2086.8	2088.2	2101.2	2109.9	2107.0	2099.0
7.5°	2192.5	2215.4	2232.7	2242.4	2253.8	2260.9	2257.7
10°	2286.1	2319.4	2339.6	2353.3	2369.9	2382.2	2377.8
12.5°	2371.1	2410.6	2438.5	2461.9	2464.1	2479.8	2469.2
15°	2503.6	2545.4	2549.8	2567.1	2580.9	2579.4	2580.1
17.5°	2547.3	2560.8	2563.5	2563.9	2564.1	2559.0	2548.1
20°	2531.8	2526.7	2514.4	2505.0	2488.4	2486.2	2471.8
22.5°	2457.8	2441.8	2410.9	2390.6	2364.7	2358.0	2353.9
25°	2312.2	2276.7	2227.6	2180.7	2167.7	2142.4	2149.7
27.5°	2112.3	2057.2	2004.0	1965.9	1931.4	1893.5	1904.3
30°	1971.9	1909.8	1834.7	1776.9	1740.0	1703.9	1697.4
32.5°	1804.3	1713.4	1629.6	1578.7	1522.2	1499.4	1474.4
35°	1515.4	1426.5	1343.5	1272.0	1230.9	1199.0	1170.2
37.5°	1255.6	1153.3	1086.2	1028.3	998.5	980.3	985.0
40°	1094.3	1004.8	955.6	911.5	884.1	871.1	874.0
42.5°	963.7	896.6	856.2	826.0	806.7	799.5	797.8
45°	815.5	778.0	744.7	727.4	718.0	710.0	705.0
47.5°	714.4	683.7	665.0	654.7	646.5	638.4	638.2
50°	653.7	633.5	620.5	609.6	603.1	597.4	602.4
52.5°	607.5	589.0	576.0	566.3	563.8	558.6	558.5
55°	538.9	524.4	515.0	506.3	502.0	499.1	495.5
57.5°	476.5	462.7	454.0	448.6	440.4	437.4	436.3
60°	432.0	421.1	412.5	405.2	401.6	395.9	395.9
62.5°	390.9	380.1	372.0	366.5	360.6	358.3	358.8
65°	331.6	322.9	314.9	309.2	307.7	303.4	304.8
67.5°	276.9	271.2	262.8	259.6	256.8	254.6	252.8
70°	240.5	234.8	230.5	226.1	223.9	223.9	223.9
72.5°	209.9	202.9	200.4	194.9	196.1	193.9	191.5
75°	162.5	158.2	156.0	153.8	150.2	150.2	150.2
77.5°	119.6	118.3	115.7	113.4	112.5	111.8	112.1
80°	92.5	91.7	90.3	90.3	88.9	88.1	86.7
82.5°	71.1	69.2	68.3	67.8	67.5	67.3	67.0
85°	40.4	39.0	39.0	39.7	38.3	38.3	39.0
87.5°	17.1	17.1	16.6	16.6	17.2	16.7	16.7
90°	7.1	7.4	7.7	7.8	7.9	8.1	8.2
92.5°	7.6	7.7	7.9	8.0	8.1	8.1	8.2
95°	12.9	13.2	13.4	13.3	13.2	13.2	13.1
97.5°	16.7	17.0	17.2	17.2	17.3	17.4	17.5
100°	19.0	19.5	19.9	20.0	20.2	20.3	20.5
102.5°	20.0	20.6	21.1	21.3	21.5	21.7	21.9
105°	20.8	21.6	22.1	22.3	22.6	22.9	23.2
107.5°	23.8	23.0	22.7	23.0	23.3	23.6	23.8
110°	33.0	26.2	23.0	23.3	23.6	23.8	24.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	60.4	35.7	23.5	23.7	23.8	24.1	24.3
115°	94.0	62.6	44.5	39.6	34.8	29.9	25.0
117.5°	185.5	178.0	166.2	150.1	134.1	118.1	102.1
120°	225.8	226.6	222.4	213.3	204.2	195.0	185.9
122.5°	239.2	239.7	239.0	237.3	235.5	233.8	232.0
125°	258.9	259.4	259.8	260.0	260.1	260.3	260.5
127.5°	277.4	278.1	278.4	278.5	278.5	278.5	278.6
130°	289.0	289.7	290.1	290.0	289.9	289.9	289.8
132.5°	300.1	300.8	301.0	301.0	301.0	300.9	300.8
135°	316.2	316.9	317.2	317.1	316.9	316.8	316.6
137.5°	331.1	331.8	332.0	331.8	331.6	331.3	331.1
140°	340.7	341.3	341.5	341.1	340.8	340.4	340.1
142.5°	349.6	350.2	350.2	349.9	349.6	349.2	348.8
145°	361.9	362.4	362.5	362.1	361.8	361.5	361.1
147.5°	372.7	373.1	373.1	372.8	372.5	372.2	371.9
150°	379.4	379.8	379.8	379.6	379.2	378.8	378.5
152.5°	385.5	385.9	385.9	385.4	385.0	384.6	384.1
155°	393.7	394.2	394.1	393.5	393.0	392.5	391.9
157.5°	400.8	401.1	401.1	400.6	400.1	399.5	399.1
160°	404.7	405.1	405.1	404.6	404.2	403.7	403.2
162.5°	408.5	409.0	409.0	408.3	407.7	407.2	406.6
165°	413.1	413.6	413.6	413.1	412.6	412.2	411.7
167.5°	417.0	417.5	417.4	416.8	416.1	415.6	414.9
170°	419.0	419.4	419.3	418.8	418.1	417.5	416.9
172.5°	420.4	420.8	420.8	420.2	419.6	419.0	418.4
175°	422.0	422.4	422.4	421.7	421.0	420.3	419.6
177.5°	422.1	422.4	422.4	421.9	421.4	420.9	420.5
180°	421.1	421.1	421.1	421.1	421.1	421.1	421.1

(END OF REPORT)