

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: P333075-930

Luminaire Tested: **S124RDIW-S1020D470U930-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333075-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124RDIW-S1020D470U930-4F0-1E-UDD-A
Description: DEFINE 4 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 470 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

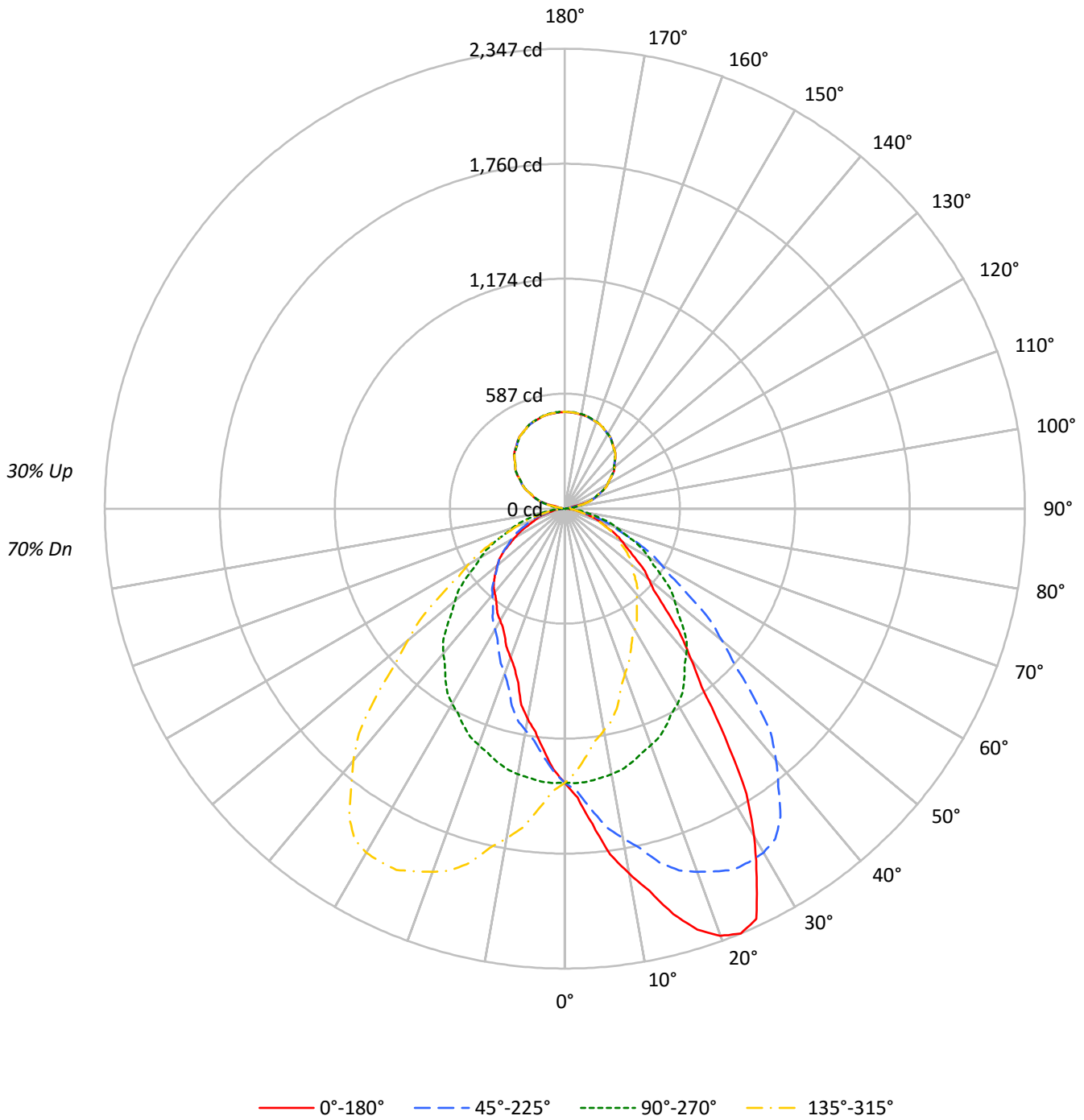
Lumens per Lamp: N/A
Luminaire Lumens: 5065.7 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.23 / 1.39
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 46.2
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	50	30	10	0		
RCR	0	112	112	112	112	106	106	106	106	94	94	94	84	84	84	74	74	74	74	74	74	74	74	70		
	1	103	99	95	92	97	94	90	87	84	81	79	75	73	71	67	65	64	64	64	64	64	64	60		
	2	94	87	81	76	89	83	77	73	74	70	66	67	63	61	60	57	55	55	55	55	55	55	51		
	3	86	77	70	64	81	73	67	61	66	61	57	59	55	52	53	50	47	47	47	47	47	47	44		
	4	79	69	61	55	75	65	58	53	59	53	49	53	49	45	48	44	41	41	41	41	41	41	38		
	5	73	62	53	47	69	59	51	46	53	47	43	48	43	39	44	40	36	36	36	36	36	36	34		
	6	68	56	47	42	64	53	46	40	48	42	38	44	39	35	40	36	32	32	32	32	32	32	30		
	7	63	50	42	37	59	48	41	36	44	38	33	40	35	31	36	32	29	29	29	29	29	29	27		
	8	58	46	38	33	55	44	37	32	40	34	30	37	32	28	33	29	26	26	26	26	26	26	24		
	9	54	42	35	29	52	40	33	29	37	31	27	34	29	25	31	27	24	24	24	24	24	24	22		
	10	51	39	32	27	48	37	30	26	34	28	24	31	27	23	29	25	22	22	22	22	22	22	20		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	11293	11293	11293	11293
5°	13100	11327	10011	11327
10°	15497	11278	8936	11278
15°	17901	11173	7678	11173
20°	19930	11030	6943	11030
25°	20574	10889	6446	10889
30°	18011	10718	6147	10718
35°	14020	10464	5966	10464
40°	10513	10175	5868	10175
45°	8301	9710	5817	9710
50°	7008	9173	5649	9173
55°	6108	8583	5346	8583
60°	5496	7971	4732	7971
65°	4844	7310	4069	7310
70°	4362	6626	3673	6626
75°	3656	5873	3132	5873
80°	3092	5002	2934	5002
85°	2612	3909	2612	3909



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.5	2.7
10°-20°	408.9	8.1
20°-30°	639.5	12.6
30°-40°	710.9	14.0
40°-50°	630.7	12.5
50°-60°	491.5	9.7
60°-70°	321.8	6.4
70°-80°	158.2	3.1
80°-90°	40.5	0.8
90°-100°	16.9	0.3
100°-110°	107.7	2.1
110°-120°	206.1	4.1
120°-130°	261.6	5.2
130°-140°	279.9	5.5
140°-150°	261.7	5.2
150°-160°	211.1	4.2
160°-170°	136.1	2.7
170°-180°	46.9	0.9
0°-30°	1183.9	23.4
0°-40°	1894.8	37.4
0°-60°	3017.0	59.6
0°-90°	3537.5	69.8
90°-120°	330.7	6.5
90°-150°	1134.0	22.4
90°-180°	1528.0	30.2
0°-180°	5065.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1399	1399	1399	1399	1399	
5°	1616	1398	1235	1398	1616	164
15°	2142	1337	919	1337	2142	609
25°	2310	1222	724	1222	2310	1025
35°	1423	1062	605	1062	1423	892
45°	727	850	510	850	727	576
55°	434	610	380	610	434	395
65°	254	383	213	383	254	255
75°	117	188	100	188	117	129
85°	28	42	28	42	28	32
90°	11	1	11	1	11	6
95°	11	20	11	20	11	9
105°	105	111	105	111	105	92
115°	209	208	209	208	209	207
125°	294	292	294	292	294	262
135°	365	362	365	362	365	281
145°	420	418	420	418	420	262
155°	458	458	458	458	458	211
165°	481	483	481	483	481	136
175°	491	494	491	494	491	47
180°	494	494	494	494	494	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9
2.5°	1475.5	1479.6	1475.5	1475.1	1470.6	1469.3	1467.5	1461.6	1450.7	1444.5	1445.8
5°	1616.5	1630.5	1622.7	1621.5	1609.2	1596.8	1588.9	1570.8	1551.7	1538.7	1528.0
7.5°	1779.5	1787.5	1782.7	1774.7	1754.7	1743.3	1725.0	1701.2	1666.9	1640.5	1616.6
10°	1890.4	1897.1	1894.9	1880.2	1865.6	1835.7	1818.8	1785.6	1742.1	1707.8	1675.6
12.5°	1999.5	2006.7	1986.9	1987.5	1959.8	1936.3	1909.4	1867.6	1817.5	1773.1	1732.9
15°	2141.8	2132.7	2132.7	2121.5	2090.4	2057.8	2030.2	1986.2	1923.0	1870.1	1814.3
17.5°	2253.2	2256.3	2251.7	2225.0	2200.7	2166.9	2116.3	2065.0	2006.4	1935.3	1878.2
20°	2319.9	2319.9	2314.8	2296.8	2265.2	2229.1	2174.5	2118.6	2044.3	1972.7	1908.5
22.5°	2346.9	2348.7	2342.8	2327.8	2299.5	2264.2	2217.7	2161.0	2084.4	2003.8	1924.2
25°	2309.7	2320.4	2321.6	2317.6	2309.2	2287.7	2247.7	2189.6	2120.9	2033.5	1947.8
27.5°	2120.6	2134.1	2145.9	2165.4	2191.4	2204.9	2206.7	2177.2	2117.2	2033.1	1946.9
30°	1932.1	1943.3	1980.0	2027.9	2065.1	2098.9	2128.3	2136.1	2102.3	2026.8	1936.0
32.5°	1722.9	1738.2	1774.8	1826.4	1888.3	1945.6	2011.4	2045.0	2044.1	1998.8	1914.8
35°	1422.6	1433.9	1467.7	1521.8	1596.2	1681.3	1785.6	1866.7	1921.9	1918.0	1866.7
37.5°	1147.3	1160.0	1194.2	1239.1	1311.2	1416.6	1517.5	1629.3	1731.5	1788.8	1771.6
40°	997.6	998.2	1031.4	1077.7	1145.3	1237.1	1347.0	1471.0	1584.9	1677.9	1695.9
42.5°	879.5	879.5	901.6	951.4	1000.1	1086.5	1191.5	1314.6	1447.8	1555.3	1603.0
45°	727.1	732.1	750.2	780.1	818.4	891.6	975.6	1090.1	1239.4	1366.8	1446.3
47.5°	615.7	623.1	634.6	659.0	689.5	738.3	807.8	910.6	1032.1	1172.2	1285.3
50°	558.0	559.1	573.7	587.3	613.8	652.6	713.5	799.2	910.8	1045.5	1171.2
52.5°	508.4	508.2	517.0	534.1	555.6	586.0	635.1	713.1	812.0	932.8	1062.5
55°	434.0	436.8	443.6	457.1	473.4	494.9	533.8	592.4	670.2	773.3	891.1
57.5°	377.4	378.9	384.2	389.9	404.9	420.4	449.6	490.3	556.0	640.4	750.2
60°	340.4	341.0	342.7	351.1	363.0	377.6	397.4	431.7	487.0	564.2	651.0
62.5°	304.4	305.3	307.9	314.1	323.3	333.5	354.1	381.7	427.5	493.4	571.6
65°	253.6	254.2	258.1	260.4	267.7	276.7	292.0	310.5	342.1	397.4	456.6
67.5°	211.9	211.9	212.1	215.2	220.3	226.2	235.4	250.2	274.0	307.9	360.1
70°	184.8	184.8	186.0	187.7	190.5	195.6	200.6	211.9	229.4	257.0	297.0
72.5°	159.6	160.0	161.2	161.5	163.0	167.1	170.9	178.1	191.1	211.9	244.3
75°	117.2	119.0	121.7	124.0	126.8	126.3	130.2	134.7	138.7	151.1	169.7
77.5°	87.2	86.3	86.7	88.6	88.9	89.5	92.3	95.8	98.7	104.6	111.3
80°	66.5	66.5	68.2	68.7	68.2	68.7	71.6	73.3	74.4	76.6	82.8
82.5°	50.3	51.2	50.6	51.2	51.5	52.1	54.5	54.8	55.9	56.8	59.4
85°	28.2	28.8	29.3	28.2	28.2	28.2	29.3	29.8	31.0	30.4	31.6
87.5°	12.1	11.7	12.1	12.1	12.5	11.9	12.3	13.1	12.1	12.5	12.3
90°	11.1	10.9	10.8	10.6	10.4	10.1	9.6	9.1	8.6	8.2	7.5
92.5°	10.2	10.2	10.1	10.1	10.0	9.8	9.3	8.8	8.3	7.8	7.2
95°	10.7	10.6	10.5	10.4	10.4	10.1	9.6	9.1	8.6	8.2	8.1
97.5°	10.4	10.3	10.2	10.1	10.0	9.9	9.9	9.9	9.8	9.8	18.9
100°	10.4	10.3	10.2	10.1	10.0	10.7	12.1	13.5	14.8	16.2	27.6
102.5°	10.7	10.6	10.6	10.6	10.6	18.1	33.2	48.2	63.3	78.4	79.8
105°	105.3	108.3	111.2	114.1	117.2	118.2	117.5	116.8	116.0	115.3	114.9
107.5°	146.8	146.4	146.1	145.9	145.5	145.2	144.8	144.5	144.1	143.7	143.2
110°	164.8	164.5	164.3	164.0	163.8	163.6	163.5	163.3	163.1	163.0	162.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	182.8	182.5	182.2	181.9	181.6	181.4	181.5	181.5	181.6	181.6	181.3
115°	209.1	209.1	209.1	209.1	209.1	209.0	208.9	208.7	208.6	208.4	208.5
117.5°	235.9	235.9	235.9	235.9	236.0	236.0	236.1	236.1	236.1	236.2	236.0
120°	252.7	252.9	253.1	253.2	253.4	253.4	253.2	253.1	252.9	252.7	252.8
122.5°	269.3	269.5	269.6	269.8	269.9	269.9	269.9	269.8	269.7	269.6	269.5
125°	294.1	294.0	293.9	293.8	293.8	293.6	293.3	293.1	292.9	292.6	292.8
127.5°	315.9	316.0	316.0	316.1	316.2	316.3	316.3	316.3	316.4	316.4	316.1
130°	330.7	330.7	330.7	330.7	330.7	330.7	330.6	330.5	330.4	330.4	330.1
132.5°	344.3	344.4	344.5	344.5	344.5	344.5	344.5	344.4	344.3	344.2	343.9
135°	364.7	364.5	364.4	364.2	364.0	363.9	363.7	363.5	363.4	363.2	362.9
137.5°	382.1	382.2	382.2	382.3	382.3	382.3	382.0	381.9	381.7	381.6	381.2
140°	394.3	394.2	394.1	394.0	394.0	393.8	393.5	393.3	393.1	392.8	392.6
142.5°	404.3	404.3	404.3	404.2	404.2	404.1	404.0	403.7	403.6	403.4	403.3
145°	419.7	419.6	419.4	419.2	419.1	419.0	418.9	418.8	418.7	418.7	418.7
147.5°	432.5	432.4	432.4	432.3	432.2	432.1	432.0	432.0	431.9	431.9	431.9
150°	440.8	440.8	440.7	440.6	440.5	440.4	440.4	440.4	440.4	440.4	440.5
152.5°	447.9	447.9	448.0	448.1	448.1	448.1	447.9	447.8	447.7	447.5	447.7
155°	457.5	457.7	458.0	458.2	458.4	458.4	458.0	457.7	457.4	457.1	457.3
157.5°	465.5	465.9	466.3	466.7	467.1	467.1	466.7	466.3	465.9	465.5	465.7
160°	470.8	471.2	471.7	472.2	472.7	472.7	472.2	471.7	471.2	470.8	470.8
162.5°	474.9	475.4	476.0	476.5	477.1	477.1	476.6	476.1	475.6	475.2	475.2
165°	480.7	481.4	482.2	482.9	483.6	483.7	483.1	482.4	481.8	481.1	481.1
167.5°	485.1	485.9	486.7	487.5	488.4	488.4	487.7	487.0	486.2	485.5	485.6
170°	487.7	488.5	489.3	490.2	491.1	491.1	490.4	489.8	489.1	488.4	488.4
172.5°	489.2	490.1	491.0	491.9	492.8	492.8	492.2	491.5	490.9	490.2	490.2
175°	491.1	492.0	493.0	494.0	495.0	495.1	494.4	493.7	492.9	492.2	492.1
177.5°	492.3	493.0	493.8	494.6	495.4	495.5	495.0	494.5	493.9	493.4	493.3
180°	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9
2.5°	1441.3	1435.0	1431.8	1424.6	1416.0	1411.5	1407.5	1401.6	1393.9	1385.8	1380.0
5°	1514.4	1500.9	1484.0	1463.7	1445.7	1428.2	1413.0	1397.7	1380.3	1362.3	1344.3
7.5°	1589.5	1562.9	1534.1	1500.9	1468.6	1439.2	1412.1	1386.2	1356.8	1330.6	1306.7
10°	1641.8	1605.7	1565.7	1523.5	1481.2	1444.5	1408.5	1375.8	1339.7	1307.6	1280.5
12.5°	1684.2	1641.8	1593.7	1541.1	1490.2	1445.9	1404.4	1361.8	1320.8	1286.0	1249.9
15°	1754.5	1696.5	1631.7	1568.6	1502.6	1442.3	1386.5	1336.9	1290.1	1241.1	1206.7
17.5°	1802.9	1734.1	1655.2	1579.4	1501.5	1430.4	1366.0	1306.9	1253.0	1202.9	1162.0
20°	1831.7	1755.7	1668.3	1582.1	1494.7	1418.6	1349.3	1283.9	1228.2	1174.0	1131.7
22.5°	1848.0	1763.8	1668.3	1578.0	1487.5	1405.1	1329.0	1260.9	1200.2	1146.1	1099.3
25°	1853.2	1763.0	1665.5	1561.8	1462.6	1375.2	1296.3	1222.5	1154.9	1100.7	1051.2
27.5°	1846.0	1739.8	1639.9	1533.5	1431.2	1339.0	1256.2	1178.7	1110.9	1052.9	1002.0
30°	1835.2	1721.3	1614.2	1503.7	1400.0	1311.6	1224.2	1149.8	1079.3	1019.0	967.8
32.5°	1811.7	1698.8	1583.6	1470.4	1365.3	1274.1	1191.2	1116.4	1047.3	985.7	931.2
35°	1765.3	1650.8	1525.8	1409.7	1306.4	1211.8	1134.0	1061.8	995.9	930.0	872.5
37.5°	1704.1	1587.1	1462.7	1335.5	1232.3	1142.9	1071.5	1003.8	939.5	879.2	815.5
40°	1646.3	1539.8	1411.3	1285.1	1179.1	1092.8	1027.0	965.5	900.7	840.9	777.2
42.5°	1576.5	1485.7	1355.8	1229.1	1124.5	1041.5	980.0	919.9	861.0	803.1	736.6
45°	1459.8	1391.0	1269.3	1147.5	1042.1	959.9	903.5	850.5	798.7	743.4	680.9
47.5°	1326.1	1279.5	1174.4	1049.8	952.3	878.2	823.8	780.5	736.6	681.4	626.6
50°	1233.2	1203.3	1101.9	988.1	895.0	826.8	771.0	730.4	693.8	640.8	591.8
52.5°	1134.0	1118.1	1032.4	923.6	833.7	766.9	719.2	682.7	645.6	601.6	555.7
55°	982.9	991.4	918.7	824.6	740.0	683.7	640.3	609.8	578.3	541.1	505.6
57.5°	828.5	859.4	810.6	728.0	648.7	596.6	563.9	538.3	511.8	481.0	450.7
60°	736.1	762.0	734.4	661.7	592.4	543.9	513.5	493.7	467.2	439.0	416.0
62.5°	645.9	673.6	657.3	598.6	534.2	492.5	465.7	447.3	427.5	403.0	379.0
65°	532.6	550.7	542.7	502.2	456.6	421.0	396.2	382.7	364.7	346.7	325.2
67.5°	408.0	442.8	438.1	416.6	377.2	349.4	333.2	321.2	304.8	291.4	276.9
70°	335.3	367.5	366.9	349.4	328.0	302.1	290.8	280.7	266.0	253.1	241.2
72.5°	274.5	303.9	308.3	294.9	280.2	260.7	249.8	242.8	228.6	219.7	210.1
75°	192.2	213.6	219.2	219.2	212.5	202.4	192.7	188.3	178.1	170.2	164.6
77.5°	126.0	139.6	148.4	150.3	151.4	148.0	140.1	137.0	129.1	126.4	121.0
80°	89.0	98.1	108.2	111.6	114.4	113.3	109.9	107.6	100.4	97.5	95.2
82.5°	61.6	66.5	74.8	82.3	81.5	84.5	81.5	79.7	74.2	73.1	70.9
85°	32.1	32.7	33.8	38.9	41.7	42.8	43.4	42.2	40.6	40.6	36.6
87.5°	12.1	11.6	12.4	12.2	12.5	14.1	15.2	15.6	14.3	13.2	12.1
90°	6.8	6.2	5.5	4.7	3.8	2.9	2.0	1.1	2.0	2.9	3.8
92.5°	6.5	5.9	5.2	4.9	4.8	4.7	4.7	4.6	4.7	4.7	4.8
95°	8.0	7.9	7.8	9.1	12.0	14.8	17.5	20.3	17.5	14.8	12.0
97.5°	28.0	37.3	46.4	50.1	48.3	46.6	44.9	43.1	44.9	46.6	48.3
100°	38.9	50.2	61.6	66.5	65.1	63.6	62.0	60.6	62.0	63.6	65.1
102.5°	81.3	82.8	84.2	84.5	83.3	82.3	81.2	80.1	81.2	82.3	83.3
105°	114.5	114.1	113.7	113.2	112.7	112.2	111.7	111.2	111.7	112.2	112.7
107.5°	142.6	142.0	141.5	141.1	140.9	140.6	140.4	140.1	140.4	140.6	140.9
110°	162.0	161.4	160.9	160.6	160.4	160.1	159.9	159.6	159.9	160.1	160.4



TEST NUMBER: P333075-930

CATALOG NUMBER: S124RDIW-S1020D470U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	181.1	180.9	180.7	180.3	179.9	179.4	179.0	178.6	179.0	179.4	179.9
115°	208.6	208.6	208.7	208.6	208.4	208.1	207.9	207.7	207.9	208.1	208.4
117.5°	235.8	235.6	235.5	235.2	234.9	234.6	234.2	233.9	234.2	234.6	234.9
120°	252.9	253.0	253.1	252.9	252.6	252.3	251.9	251.6	251.9	252.3	252.6
122.5°	269.4	269.2	269.1	269.0	268.8	268.6	268.4	268.2	268.4	268.6	268.8
125°	292.9	293.1	293.3	293.2	292.9	292.5	292.2	291.9	292.2	292.5	292.9
127.5°	315.7	315.3	315.0	314.7	314.6	314.5	314.5	314.4	314.5	314.5	314.6
130°	329.9	329.6	329.4	329.2	329.1	329.1	328.9	328.8	328.9	329.1	329.1
132.5°	343.6	343.3	343.0	342.8	342.6	342.4	342.3	342.2	342.3	342.4	342.6
135°	362.6	362.2	361.9	361.7	361.8	361.9	362.0	362.1	362.0	361.9	361.8
137.5°	380.8	380.4	380.1	379.9	379.8	379.8	379.8	379.8	379.8	379.8	379.8
140°	392.5	392.2	392.1	391.9	391.8	391.6	391.4	391.3	391.4	391.6	391.8
142.5°	403.2	403.1	403.0	402.8	402.5	402.3	401.9	401.6	401.9	402.3	402.5
145°	418.7	418.7	418.7	418.5	418.2	418.0	417.8	417.5	417.8	418.0	418.2
147.5°	432.0	432.1	432.2	432.0	431.5	431.0	430.6	430.2	430.6	431.0	431.5
150°	440.6	440.7	440.8	440.7	440.3	440.0	439.7	439.4	439.7	440.0	440.3
152.5°	447.8	448.0	448.1	448.1	447.8	447.5	447.3	447.0	447.3	447.5	447.8
155°	457.5	457.8	458.0	458.1	458.0	458.0	457.9	457.8	457.9	458.0	458.0
157.5°	465.9	466.3	466.5	466.7	466.8	466.8	466.8	466.9	466.8	466.8	466.8
160°	470.9	471.0	471.1	471.2	471.5	471.7	472.0	472.2	472.0	471.7	471.5
162.5°	475.3	475.4	475.5	475.7	476.0	476.3	476.6	477.0	476.6	476.3	476.0
165°	481.1	481.1	481.1	481.3	481.7	482.1	482.5	482.9	482.5	482.1	481.7
167.5°	485.6	485.7	485.7	485.9	486.4	486.8	487.2	487.6	487.2	486.8	486.4
170°	488.3	488.2	488.1	488.4	488.9	489.3	489.8	490.3	489.8	489.3	488.9
172.5°	490.1	490.0	489.9	490.2	490.6	491.1	491.6	492.1	491.6	491.1	490.6
175°	492.0	492.0	491.9	492.0	492.5	493.0	493.5	494.0	493.5	493.0	492.5
177.5°	493.2	493.0	492.9	493.1	493.5	494.0	494.5	494.9	494.5	494.0	493.5
180°	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0



TEST NUMBER: P333075-930

CATALOG NUMBER: S124RDIW-S1020D470U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9
2.5°	1373.6	1369.1	1363.3	1356.5	1348.4	1341.2	1338.1	1340.8	1342.1	1338.5	1338.1
5°	1331.9	1317.8	1306.4	1289.6	1276.0	1264.8	1256.9	1253.5	1254.6	1245.6	1243.3
7.5°	1284.8	1268.1	1249.7	1229.6	1210.9	1194.3	1185.6	1180.9	1171.3	1167.3	1160.4
10°	1254.6	1232.1	1214.1	1190.3	1169.0	1149.2	1139.6	1131.7	1122.2	1117.7	1108.1
12.5°	1223.5	1197.3	1177.5	1152.9	1131.1	1107.3	1098.1	1083.5	1068.5	1059.1	1046.8
15°	1179.7	1148.1	1123.9	1094.5	1068.6	1041.5	1017.3	990.3	980.2	958.7	946.3
17.5°	1128.4	1096.3	1066.3	1027.0	987.0	953.4	927.6	901.6	886.1	872.5	866.2
20°	1094.5	1065.3	1023.5	977.9	933.4	896.2	875.3	858.4	841.5	831.9	825.2
22.5°	1062.5	1025.1	976.6	927.4	882.9	853.8	836.1	818.7	804.9	795.8	786.8
25°	1008.9	959.9	908.6	852.2	821.7	796.4	777.2	763.1	754.7	742.8	738.3
27.5°	953.7	894.4	837.8	799.9	768.2	745.0	728.3	717.7	707.0	699.4	693.6
30°	911.3	851.1	800.4	764.3	732.1	713.0	699.4	687.1	678.6	672.4	667.9
32.5°	869.4	809.1	766.5	727.7	702.4	683.7	669.3	660.0	653.4	645.3	642.6
35°	808.8	755.2	718.0	683.1	657.2	640.3	629.0	619.4	613.8	611.6	609.8
37.5°	750.5	706.7	666.7	638.1	614.9	601.6	588.3	583.6	579.8	575.7	577.5
40°	713.5	672.4	636.9	606.4	587.8	573.2	565.3	559.7	556.3	556.3	556.3
42.5°	681.5	641.3	606.7	579.4	560.8	548.4	539.6	534.8	533.8	533.3	536.0
45°	631.9	594.6	559.7	537.1	521.4	508.9	503.9	499.9	499.9	502.2	502.7
47.5°	582.5	547.7	519.7	494.4	480.0	472.2	467.8	465.8	466.0	468.2	470.8
50°	552.4	518.0	490.3	467.8	454.3	446.9	443.0	441.9	443.0	443.0	446.9
52.5°	519.4	488.7	461.5	442.5	427.2	420.4	418.2	416.6	417.3	419.1	420.8
55°	471.2	443.6	417.7	399.6	388.3	383.8	378.8	379.3	378.2	379.3	379.3
57.5°	422.8	398.0	373.9	359.6	349.7	343.2	337.6	339.2	337.5	337.3	336.4
60°	391.8	364.7	345.5	332.6	321.2	315.6	310.5	311.7	310.0	308.8	306.6
62.5°	357.9	335.3	317.1	304.6	295.5	289.0	284.0	282.8	278.9	275.1	270.1
65°	308.8	290.2	273.9	262.1	253.6	248.6	244.6	241.2	232.8	223.7	219.2
67.5°	261.2	247.8	232.5	222.5	215.6	209.0	201.5	195.7	187.8	182.9	180.0
70°	230.5	217.5	204.6	195.0	187.7	181.5	173.0	169.1	163.5	161.2	158.4
72.5°	201.2	189.1	177.1	168.4	160.6	155.8	149.1	145.2	142.7	141.8	139.0
75°	156.7	147.1	138.1	130.2	124.0	120.6	117.8	115.0	113.8	108.8	106.0
77.5°	114.3	108.0	102.3	96.7	92.3	90.1	84.6	81.4	79.5	77.1	76.6
80°	89.0	84.5	78.9	75.5	69.3	67.1	64.8	64.2	63.7	63.1	62.5
82.5°	66.9	62.5	56.8	54.8	53.1	51.8	50.4	49.8	49.2	49.6	49.5
85°	33.8	31.6	31.6	31.0	30.4	29.8	29.3	29.3	28.8	29.3	28.8
87.5°	12.2	11.9	12.1	11.3	11.9	12.0	11.7	11.7	12.3	11.5	11.6
90°	4.7	5.5	6.2	6.8	7.5	8.2	8.6	9.1	9.6	10.1	10.4
92.5°	4.9	5.2	5.9	6.5	7.2	7.8	8.3	8.8	9.3	9.8	10.0
95°	9.1	7.8	7.9	8.0	8.1	8.2	8.6	9.1	9.6	10.1	10.4
97.5°	50.1	46.4	37.3	28.0	18.9	9.8	9.8	9.9	9.9	9.9	10.0
100°	66.5	61.6	50.2	38.9	27.6	16.2	14.8	13.5	12.1	10.7	10.0
102.5°	84.5	84.2	82.8	81.3	79.8	78.4	63.3	48.2	33.2	18.1	10.6
105°	113.2	113.7	114.1	114.5	114.9	115.3	116.0	116.8	117.5	118.2	117.2
107.5°	141.1	141.5	142.0	142.6	143.2	143.7	144.1	144.5	144.8	145.2	145.5
110°	160.6	160.9	161.4	162.0	162.5	163.0	163.1	163.3	163.5	163.6	163.8



TEST NUMBER: P333075-930

CATALOG NUMBER: S124RDIW-S1020D470U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	180.3	180.7	180.9	181.1	181.3	181.6	181.6	181.5	181.5	181.4	181.6
115°	208.6	208.7	208.6	208.6	208.5	208.4	208.6	208.7	208.9	209.0	209.1
117.5°	235.2	235.5	235.6	235.8	236.0	236.2	236.1	236.1	236.1	236.0	236.0
120°	252.9	253.1	253.0	252.9	252.8	252.7	252.9	253.1	253.2	253.4	253.4
122.5°	269.0	269.1	269.2	269.4	269.5	269.6	269.7	269.8	269.9	269.9	269.9
125°	293.2	293.3	293.1	292.9	292.8	292.6	292.9	293.1	293.3	293.6	293.8
127.5°	314.7	315.0	315.3	315.7	316.1	316.4	316.4	316.3	316.3	316.3	316.2
130°	329.2	329.4	329.6	329.9	330.1	330.4	330.4	330.5	330.6	330.7	330.7
132.5°	342.8	343.0	343.3	343.6	343.9	344.2	344.3	344.4	344.5	344.5	344.5
135°	361.7	361.9	362.2	362.6	362.9	363.2	363.4	363.5	363.7	363.9	364.0
137.5°	379.9	380.1	380.4	380.8	381.2	381.6	381.7	381.9	382.0	382.3	382.3
140°	391.9	392.1	392.2	392.5	392.6	392.8	393.1	393.3	393.5	393.8	394.0
142.5°	402.8	403.0	403.1	403.2	403.3	403.4	403.6	403.7	404.0	404.1	404.2
145°	418.5	418.7	418.7	418.7	418.7	418.7	418.7	418.8	418.9	419.0	419.1
147.5°	432.0	432.2	432.1	432.0	431.9	431.9	431.9	432.0	432.0	432.1	432.2
150°	440.7	440.8	440.7	440.6	440.5	440.4	440.4	440.4	440.4	440.4	440.5
152.5°	448.1	448.1	448.0	447.8	447.7	447.5	447.7	447.8	447.9	448.1	448.1
155°	458.1	458.0	457.8	457.5	457.3	457.1	457.4	457.7	458.0	458.4	458.4
157.5°	466.7	466.5	466.3	465.9	465.7	465.5	465.9	466.3	466.7	467.1	467.1
160°	471.2	471.1	471.0	470.9	470.8	470.8	471.2	471.7	472.2	472.7	472.7
162.5°	475.7	475.5	475.4	475.3	475.2	475.2	475.6	476.1	476.6	477.1	477.1
165°	481.3	481.1	481.1	481.1	481.1	481.1	481.8	482.4	483.1	483.7	483.6
167.5°	485.9	485.7	485.7	485.6	485.6	485.5	486.2	487.0	487.7	488.4	488.4
170°	488.4	488.1	488.2	488.3	488.4	488.4	489.1	489.8	490.4	491.1	491.1
172.5°	490.2	489.9	490.0	490.1	490.2	490.2	490.9	491.5	492.2	492.8	492.8
175°	492.0	491.9	492.0	492.0	492.1	492.2	492.9	493.7	494.4	495.1	495.0
177.5°	493.1	492.9	493.0	493.2	493.3	493.4	493.9	494.5	495.0	495.5	495.4
180°	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0



TEST NUMBER: P333075-930

CATALOG NUMBER: S124RDIW-S1020D470U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9
2.5°	1335.3	1336.2	1333.1	1332.2	1333.1	1336.2	1335.3	1338.1	1338.5	1342.1	1340.8
5°	1238.8	1237.7	1234.9	1235.4	1234.9	1237.7	1238.8	1243.3	1245.6	1254.6	1253.5
7.5°	1156.3	1151.9	1153.2	1148.7	1153.2	1151.9	1156.3	1160.4	1167.3	1171.3	1180.9
10°	1105.8	1099.6	1094.5	1090.1	1094.5	1099.6	1105.8	1108.1	1117.7	1122.2	1131.7
12.5°	1036.8	1031.5	1024.7	1026.1	1024.7	1031.5	1036.8	1046.8	1059.1	1068.5	1083.5
15°	939.0	930.5	917.0	918.7	917.0	930.5	939.0	946.3	958.7	980.2	990.3
17.5°	856.1	856.2	850.0	851.5	850.0	856.2	856.1	866.2	872.5	886.1	901.6
20°	813.3	809.3	809.9	808.2	809.9	809.3	813.3	825.2	831.9	841.5	858.4
22.5°	783.6	778.7	774.8	771.3	774.8	778.7	783.6	786.8	795.8	804.9	818.7
25°	733.3	729.9	724.8	723.7	724.8	729.9	733.3	738.3	742.8	754.7	763.1
27.5°	689.1	688.4	686.4	683.8	686.4	688.4	689.1	693.6	699.4	707.0	717.7
30°	663.4	662.3	661.1	659.4	661.1	662.3	663.4	667.9	672.4	678.6	687.1
32.5°	640.4	639.7	638.5	638.7	638.5	639.7	640.4	642.6	645.3	653.4	660.0
35°	607.6	607.0	605.9	605.4	605.9	607.0	607.6	609.8	611.6	613.8	619.4
37.5°	576.9	578.4	577.7	577.6	577.7	578.4	576.9	577.5	575.7	579.8	583.6
40°	555.7	556.3	557.4	556.8	557.4	556.3	555.7	556.3	556.3	556.3	559.7
42.5°	538.2	538.3	539.8	537.9	539.8	538.3	538.2	536.0	533.3	533.8	534.8
45°	506.7	510.1	509.5	509.5	509.5	510.1	506.7	502.7	502.2	499.9	499.9
47.5°	472.3	475.2	476.1	475.9	476.1	475.2	472.3	470.8	468.2	466.0	465.8
50°	449.8	448.7	450.4	449.8	450.4	448.7	449.8	446.9	443.0	443.0	441.9
52.5°	422.2	422.5	422.4	421.8	422.4	422.5	422.2	420.8	419.1	417.3	416.6
55°	379.8	380.4	379.3	379.8	379.3	380.4	379.8	379.3	379.3	378.2	379.3
57.5°	333.9	331.2	332.3	330.9	332.3	331.2	333.9	336.4	337.3	337.5	339.2
60°	301.0	296.4	295.3	293.1	295.3	296.4	301.0	306.6	308.8	310.0	311.7
62.5°	264.0	260.8	257.0	258.8	257.0	260.8	264.0	270.1	275.1	278.9	282.8
65°	214.7	212.5	210.8	213.0	210.8	212.5	214.7	219.2	223.7	232.8	241.2
67.5°	177.7	176.5	176.5	175.4	176.5	176.5	177.7	180.0	182.9	187.8	195.7
70°	158.4	156.7	156.7	155.6	156.7	156.7	158.4	158.4	161.2	163.5	169.1
72.5°	138.5	136.8	137.3	136.6	137.3	136.8	138.5	139.0	141.8	142.7	145.2
75°	102.6	99.8	99.8	100.4	99.8	99.8	102.6	106.0	108.8	113.8	115.0
77.5°	76.6	76.0	76.8	75.7	76.8	76.0	76.6	76.6	77.1	79.5	81.4
80°	62.5	62.0	61.5	63.1	61.5	62.0	62.5	62.5	63.1	63.7	64.2
82.5°	48.6	48.5	48.3	50.5	48.3	48.5	48.6	49.5	49.6	49.2	49.8
85°	29.3	28.2	29.3	28.2	29.3	28.2	29.3	28.8	29.3	28.8	29.3
87.5°	12.5	12.1	11.7	12.1	11.7	12.1	12.5	11.6	11.5	12.3	11.7
90°	10.6	10.8	10.9	11.1	10.9	10.8	10.6	10.4	10.1	9.6	9.1
92.5°	10.1	10.1	10.2	10.2	10.2	10.1	10.1	10.0	9.8	9.3	8.8
95°	10.4	10.5	10.6	10.7	10.6	10.5	10.4	10.4	10.1	9.6	9.1
97.5°	10.1	10.2	10.3	10.4	10.3	10.2	10.1	10.0	9.9	9.9	9.9
100°	10.1	10.2	10.3	10.4	10.3	10.2	10.1	10.0	10.7	12.1	13.5
102.5°	10.6	10.6	10.6	10.7	10.6	10.6	10.6	10.6	18.1	33.2	48.2
105°	114.1	111.2	108.3	105.3	108.3	111.2	114.1	117.2	118.2	117.5	116.8
107.5°	145.9	146.1	146.4	146.8	146.4	146.1	145.9	145.5	145.2	144.8	144.5
110°	164.0	164.3	164.5	164.8	164.5	164.3	164.0	163.8	163.6	163.5	163.3



TEST NUMBER: P333075-930

CATALOG NUMBER: S124RDIW-S1020D470U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	181.9	182.2	182.5	182.8	182.5	182.2	181.9	181.6	181.4	181.5	181.5
115°	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.0	208.9	208.7
117.5°	235.9	235.9	235.9	235.9	235.9	235.9	235.9	236.0	236.0	236.1	236.1
120°	253.2	253.1	252.9	252.7	252.9	253.1	253.2	253.4	253.4	253.2	253.1
122.5°	269.8	269.6	269.5	269.3	269.5	269.6	269.8	269.9	269.9	269.9	269.8
125°	293.8	293.9	294.0	294.1	294.0	293.9	293.8	293.8	293.6	293.3	293.1
127.5°	316.1	316.0	316.0	315.9	316.0	316.0	316.1	316.2	316.3	316.3	316.3
130°	330.7	330.7	330.7	330.7	330.7	330.7	330.7	330.7	330.7	330.6	330.5
132.5°	344.5	344.5	344.4	344.3	344.4	344.5	344.5	344.5	344.5	344.5	344.4
135°	364.2	364.4	364.5	364.7	364.5	364.4	364.2	364.0	363.9	363.7	363.5
137.5°	382.3	382.2	382.2	382.1	382.2	382.2	382.3	382.3	382.3	382.0	381.9
140°	394.0	394.1	394.2	394.3	394.2	394.1	394.0	394.0	393.8	393.5	393.3
142.5°	404.2	404.3	404.3	404.3	404.3	404.3	404.2	404.2	404.1	404.0	403.7
145°	419.2	419.4	419.6	419.7	419.6	419.4	419.2	419.1	419.0	418.9	418.8
147.5°	432.3	432.4	432.4	432.5	432.4	432.4	432.3	432.2	432.1	432.0	432.0
150°	440.6	440.7	440.8	440.8	440.8	440.7	440.6	440.5	440.4	440.4	440.4
152.5°	448.1	448.0	447.9	447.9	447.9	448.0	448.1	448.1	448.1	447.9	447.8
155°	458.2	458.0	457.7	457.5	457.7	458.0	458.2	458.4	458.4	458.0	457.7
157.5°	466.7	466.3	465.9	465.5	465.9	466.3	466.7	467.1	467.1	466.7	466.3
160°	472.2	471.7	471.2	470.8	471.2	471.7	472.2	472.7	472.7	472.2	471.7
162.5°	476.5	476.0	475.4	474.9	475.4	476.0	476.5	477.1	477.1	476.6	476.1
165°	482.9	482.2	481.4	480.7	481.4	482.2	482.9	483.6	483.7	483.1	482.4
167.5°	487.5	486.7	485.9	485.1	485.9	486.7	487.5	488.4	488.4	487.7	487.0
170°	490.2	489.3	488.5	487.7	488.5	489.3	490.2	491.1	491.1	490.4	489.8
172.5°	491.9	491.0	490.1	489.2	490.1	491.0	491.9	492.8	492.8	492.2	491.5
175°	494.0	493.0	492.0	491.1	492.0	493.0	494.0	495.0	495.1	494.4	493.7
177.5°	494.6	493.8	493.0	492.3	493.0	493.8	494.6	495.4	495.5	495.0	494.5
180°	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0



TEST NUMBER: P333075-930

CATALOG NUMBER: S124RDIW-S1020D470U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9
2.5°	1338.1	1341.2	1348.4	1356.5	1363.3	1369.1	1373.6	1380.0	1385.8	1393.9	1401.6
5°	1256.9	1264.8	1276.0	1289.6	1306.4	1317.8	1331.9	1344.3	1362.3	1380.3	1397.7
7.5°	1185.6	1194.3	1210.9	1229.6	1249.7	1268.1	1284.8	1306.7	1330.6	1356.8	1386.2
10°	1139.6	1149.2	1169.0	1190.3	1214.1	1232.1	1254.6	1280.5	1307.6	1339.7	1375.8
12.5°	1098.1	1107.3	1131.1	1152.9	1177.5	1197.3	1223.5	1249.9	1286.0	1320.8	1361.8
15°	1017.3	1041.5	1068.6	1094.5	1123.9	1148.1	1179.7	1206.7	1241.1	1290.1	1336.9
17.5°	927.6	953.4	987.0	1027.0	1066.3	1096.3	1128.4	1162.0	1202.9	1253.0	1306.9
20°	875.3	896.2	933.4	977.9	1023.5	1065.3	1094.5	1131.7	1174.0	1228.2	1283.9
22.5°	836.1	853.8	882.9	927.4	976.6	1025.1	1062.5	1099.3	1146.1	1200.2	1260.9
25°	777.2	796.4	821.7	852.2	908.6	959.9	1008.9	1051.2	1100.7	1154.9	1222.5
27.5°	728.3	745.0	768.2	799.9	837.8	894.4	953.7	1002.0	1052.9	1110.9	1178.7
30°	699.4	713.0	732.1	764.3	800.4	851.1	911.3	967.8	1019.0	1079.3	1149.8
32.5°	669.3	683.7	702.4	727.7	766.5	809.1	869.4	931.2	985.7	1047.3	1116.4
35°	629.0	640.3	657.2	683.1	718.0	755.2	808.8	872.5	930.0	995.9	1061.8
37.5°	588.3	601.6	614.9	638.1	666.7	706.7	750.5	815.5	879.2	939.5	1003.8
40°	565.3	573.2	587.8	606.4	636.9	672.4	713.5	777.2	840.9	900.7	965.5
42.5°	539.6	548.4	560.8	579.4	606.7	641.3	681.5	736.6	803.1	861.0	919.9
45°	503.9	508.9	521.4	537.1	559.7	594.6	631.9	680.9	743.4	798.7	850.5
47.5°	467.8	472.2	480.0	494.4	519.7	547.7	582.5	626.6	681.4	736.6	780.5
50°	443.0	446.9	454.3	467.8	490.3	518.0	552.4	591.8	640.8	693.8	730.4
52.5°	418.2	420.4	427.2	442.5	461.5	488.7	519.4	555.7	601.6	645.6	682.7
55°	378.8	383.8	388.3	399.6	417.7	443.6	471.2	505.6	541.1	578.3	609.8
57.5°	337.6	343.2	349.7	359.6	373.9	398.0	422.8	450.7	481.0	511.8	538.3
60°	310.5	315.6	321.2	332.6	345.5	364.7	391.8	416.0	439.0	467.2	493.7
62.5°	284.0	289.0	295.5	304.6	317.1	335.3	357.9	379.0	403.0	427.5	447.3
65°	244.6	248.6	253.6	262.1	273.9	290.2	308.8	325.2	346.7	364.7	382.7
67.5°	201.5	209.0	215.6	222.5	232.5	247.8	261.2	276.9	291.4	304.8	321.2
70°	173.0	181.5	187.7	195.0	204.6	217.5	230.5	241.2	253.1	266.0	280.7
72.5°	149.1	155.8	160.6	168.4	177.1	189.1	201.2	210.1	219.7	228.6	242.8
75°	117.8	120.6	124.0	130.2	138.1	147.1	156.7	164.6	170.2	178.1	188.3
77.5°	84.6	90.1	92.3	96.7	102.3	108.0	114.3	121.0	126.4	129.1	137.0
80°	64.8	67.1	69.3	75.5	78.9	84.5	89.0	95.2	97.5	100.4	107.6
82.5°	50.4	51.8	53.1	54.8	56.8	62.5	66.9	70.9	73.1	74.2	79.7
85°	29.3	29.8	30.4	31.0	31.6	31.6	33.8	36.6	40.6	40.6	42.2
87.5°	11.7	12.0	11.9	11.3	12.1	11.9	12.2	12.1	13.2	14.3	15.6
90°	8.6	8.2	7.5	6.8	6.2	5.5	4.7	3.8	2.9	2.0	1.1
92.5°	8.3	7.8	7.2	6.5	5.9	5.2	4.9	4.8	4.7	4.7	4.6
95°	8.6	8.2	8.1	8.0	7.9	7.8	9.1	12.0	14.8	17.5	20.3
97.5°	9.8	9.8	18.9	28.0	37.3	46.4	50.1	48.3	46.6	44.9	43.1
100°	14.8	16.2	27.6	38.9	50.2	61.6	66.5	65.1	63.6	62.0	60.6
102.5°	63.3	78.4	79.8	81.3	82.8	84.2	84.5	83.3	82.3	81.2	80.1
105°	116.0	115.3	114.9	114.5	114.1	113.7	113.2	112.7	112.2	111.7	111.2
107.5°	144.1	143.7	143.2	142.6	142.0	141.5	141.1	140.9	140.6	140.4	140.1
110°	163.1	163.0	162.5	162.0	161.4	160.9	160.6	160.4	160.1	159.9	159.6



TEST NUMBER: P333075-930

CATALOG NUMBER: S124RDIW-S1020D470U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	181.6	181.6	181.3	181.1	180.9	180.7	180.3	179.9	179.4	179.0	178.6
115°	208.6	208.4	208.5	208.6	208.6	208.7	208.6	208.4	208.1	207.9	207.7
117.5°	236.1	236.2	236.0	235.8	235.6	235.5	235.2	234.9	234.6	234.2	233.9
120°	252.9	252.7	252.8	252.9	253.0	253.1	252.9	252.6	252.3	251.9	251.6
122.5°	269.7	269.6	269.5	269.4	269.2	269.1	269.0	268.8	268.6	268.4	268.2
125°	292.9	292.6	292.8	292.9	293.1	293.3	293.2	292.9	292.5	292.2	291.9
127.5°	316.4	316.4	316.1	315.7	315.3	315.0	314.7	314.6	314.5	314.5	314.4
130°	330.4	330.4	330.1	329.9	329.6	329.4	329.2	329.1	329.1	328.9	328.8
132.5°	344.3	344.2	343.9	343.6	343.3	343.0	342.8	342.6	342.4	342.3	342.2
135°	363.4	363.2	362.9	362.6	362.2	361.9	361.7	361.8	361.9	362.0	362.1
137.5°	381.7	381.6	381.2	380.8	380.4	380.1	379.9	379.8	379.8	379.8	379.8
140°	393.1	392.8	392.6	392.5	392.2	392.1	391.9	391.8	391.6	391.4	391.3
142.5°	403.6	403.4	403.3	403.2	403.1	403.0	402.8	402.5	402.3	401.9	401.6
145°	418.7	418.7	418.7	418.7	418.7	418.7	418.5	418.2	418.0	417.8	417.5
147.5°	431.9	431.9	431.9	432.0	432.1	432.2	432.0	431.5	431.0	430.6	430.2
150°	440.4	440.4	440.5	440.6	440.7	440.8	440.7	440.3	440.0	439.7	439.4
152.5°	447.7	447.5	447.7	447.8	448.0	448.1	448.1	447.8	447.5	447.3	447.0
155°	457.4	457.1	457.3	457.5	457.8	458.0	458.1	458.0	458.0	457.9	457.8
157.5°	465.9	465.5	465.7	465.9	466.3	466.5	466.7	466.8	466.8	466.8	466.9
160°	471.2	470.8	470.8	470.9	471.0	471.1	471.2	471.5	471.7	472.0	472.2
162.5°	475.6	475.2	475.2	475.3	475.4	475.5	475.7	476.0	476.3	476.6	477.0
165°	481.8	481.1	481.1	481.1	481.1	481.1	481.3	481.7	482.1	482.5	482.9
167.5°	486.2	485.5	485.6	485.6	485.7	485.7	485.9	486.4	486.8	487.2	487.6
170°	489.1	488.4	488.4	488.3	488.2	488.1	488.4	488.9	489.3	489.8	490.3
172.5°	490.9	490.2	490.2	490.1	490.0	489.9	490.2	490.6	491.1	491.6	492.1
175°	492.9	492.2	492.1	492.0	492.0	491.9	492.0	492.5	493.0	493.5	494.0
177.5°	493.9	493.4	493.3	493.2	493.0	492.9	493.1	493.5	494.0	494.5	494.9
180°	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0



TEST NUMBER: P333075-930
 CATALOG NUMBER: S124RDIW-S1020D470U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9
2.5°	1407.5	1411.5	1416.0	1424.6	1431.8	1435.0	1441.3	1445.8	1444.5	1450.7	1461.6
5°	1413.0	1428.2	1445.7	1463.7	1484.0	1500.9	1514.4	1528.0	1538.7	1551.7	1570.8
7.5°	1412.1	1439.2	1468.6	1500.9	1534.1	1562.9	1589.5	1616.6	1640.5	1666.9	1701.2
10°	1408.5	1444.5	1481.2	1523.5	1565.7	1605.7	1641.8	1675.6	1707.8	1742.1	1785.6
12.5°	1404.4	1445.9	1490.2	1541.1	1593.7	1641.8	1684.2	1732.9	1773.1	1817.5	1867.6
15°	1386.5	1442.3	1502.6	1568.6	1631.7	1696.5	1754.5	1814.3	1870.1	1923.0	1986.2
17.5°	1366.0	1430.4	1501.5	1579.4	1655.2	1734.1	1802.9	1878.2	1935.3	2006.4	2065.0
20°	1349.3	1418.6	1494.7	1582.1	1668.3	1755.7	1831.7	1908.5	1972.7	2044.3	2118.6
22.5°	1329.0	1405.1	1487.5	1578.0	1668.3	1763.8	1848.0	1924.2	2003.8	2084.4	2161.0
25°	1296.3	1375.2	1462.6	1561.8	1665.5	1763.0	1853.2	1947.8	2033.5	2120.9	2189.6
27.5°	1256.2	1339.0	1431.2	1533.5	1639.9	1739.8	1846.0	1946.9	2033.1	2117.2	2177.2
30°	1224.2	1311.6	1400.0	1503.7	1614.2	1721.3	1835.2	1936.0	2026.8	2102.3	2136.1
32.5°	1191.2	1274.1	1365.3	1470.4	1583.6	1698.8	1811.7	1914.8	1998.8	2044.1	2045.0
35°	1134.0	1211.8	1306.4	1409.7	1525.8	1650.8	1765.3	1866.7	1918.0	1921.9	1866.7
37.5°	1071.5	1142.9	1232.3	1335.5	1462.7	1587.1	1704.1	1771.6	1788.8	1731.5	1629.3
40°	1027.0	1092.8	1179.1	1285.1	1411.3	1539.8	1646.3	1695.9	1677.9	1584.9	1471.0
42.5°	980.0	1041.5	1124.5	1229.1	1355.8	1485.7	1576.5	1603.0	1555.3	1447.8	1314.6
45°	903.5	959.9	1042.1	1147.5	1269.3	1391.0	1459.8	1446.3	1366.8	1239.4	1090.1
47.5°	823.8	878.2	952.3	1049.8	1174.4	1279.5	1326.1	1285.3	1172.2	1032.1	910.6
50°	771.0	826.8	895.0	988.1	1101.9	1203.3	1233.2	1171.2	1045.5	910.8	799.2
52.5°	719.2	766.9	833.7	923.6	1032.4	1118.1	1134.0	1062.5	932.8	812.0	713.1
55°	640.3	683.7	740.0	824.6	918.7	991.4	982.9	891.1	773.3	670.2	592.4
57.5°	563.9	596.6	648.7	728.0	810.6	859.4	828.5	750.2	640.4	556.0	490.3
60°	513.5	543.9	592.4	661.7	734.4	762.0	736.1	651.0	564.2	487.0	431.7
62.5°	465.7	492.5	534.2	598.6	657.3	673.6	645.9	571.6	493.4	427.5	381.7
65°	396.2	421.0	456.6	502.2	542.7	550.7	532.6	456.6	397.4	342.1	310.5
67.5°	333.2	349.4	377.2	416.6	438.1	442.8	408.0	360.1	307.9	274.0	250.2
70°	290.8	302.1	328.0	349.4	366.9	367.5	335.3	297.0	257.0	229.4	211.9
72.5°	249.8	260.7	280.2	294.9	308.3	303.9	274.5	244.3	211.9	191.1	178.1
75°	192.7	202.4	212.5	219.2	219.2	213.6	192.2	169.7	151.1	138.7	134.7
77.5°	140.1	148.0	151.4	150.3	148.4	139.6	126.0	111.3	104.6	98.7	95.8
80°	109.9	113.3	114.4	111.6	108.2	98.1	89.0	82.8	76.6	74.4	73.3
82.5°	81.5	84.5	81.5	82.3	74.8	66.5	61.6	59.4	56.8	55.9	54.8
85°	43.4	42.8	41.7	38.9	33.8	32.7	32.1	31.6	30.4	31.0	29.8
87.5°	15.2	14.1	12.5	12.2	12.4	11.6	12.1	12.3	12.5	12.1	13.1
90°	2.0	2.9	3.8	4.7	5.5	6.2	6.8	7.5	8.2	8.6	9.1
92.5°	4.7	4.7	4.8	4.9	5.2	5.9	6.5	7.2	7.8	8.3	8.8
95°	17.5	14.8	12.0	9.1	7.8	7.9	8.0	8.1	8.2	8.6	9.1
97.5°	44.9	46.6	48.3	50.1	46.4	37.3	28.0	18.9	9.8	9.8	9.9
100°	62.0	63.6	65.1	66.5	61.6	50.2	38.9	27.6	16.2	14.8	13.5
102.5°	81.2	82.3	83.3	84.5	84.2	82.8	81.3	79.8	78.4	63.3	48.2
105°	111.7	112.2	112.7	113.2	113.7	114.1	114.5	114.9	115.3	116.0	116.8
107.5°	140.4	140.6	140.9	141.1	141.5	142.0	142.6	143.2	143.7	144.1	144.5
110°	159.9	160.1	160.4	160.6	160.9	161.4	162.0	162.5	163.0	163.1	163.3



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	179.0	179.4	179.9	180.3	180.7	180.9	181.1	181.3	181.6	181.6	181.5
115°	207.9	208.1	208.4	208.6	208.7	208.6	208.6	208.5	208.4	208.6	208.7
117.5°	234.2	234.6	234.9	235.2	235.5	235.6	235.8	236.0	236.2	236.1	236.1
120°	251.9	252.3	252.6	252.9	253.1	253.0	252.9	252.8	252.7	252.9	253.1
122.5°	268.4	268.6	268.8	269.0	269.1	269.2	269.4	269.5	269.6	269.7	269.8
125°	292.2	292.5	292.9	293.2	293.3	293.1	292.9	292.8	292.6	292.9	293.1
127.5°	314.5	314.5	314.6	314.7	315.0	315.3	315.7	316.1	316.4	316.4	316.3
130°	328.9	329.1	329.1	329.2	329.4	329.6	329.9	330.1	330.4	330.4	330.5
132.5°	342.3	342.4	342.6	342.8	343.0	343.3	343.6	343.9	344.2	344.3	344.4
135°	362.0	361.9	361.8	361.7	361.9	362.2	362.6	362.9	363.2	363.4	363.5
137.5°	379.8	379.8	379.8	379.9	380.1	380.4	380.8	381.2	381.6	381.7	381.9
140°	391.4	391.6	391.8	391.9	392.1	392.2	392.5	392.6	392.8	393.1	393.3
142.5°	401.9	402.3	402.5	402.8	403.0	403.1	403.2	403.3	403.4	403.6	403.7
145°	417.8	418.0	418.2	418.5	418.7	418.7	418.7	418.7	418.7	418.7	418.8
147.5°	430.6	431.0	431.5	432.0	432.2	432.1	432.0	431.9	431.9	431.9	432.0
150°	439.7	440.0	440.3	440.7	440.8	440.7	440.6	440.5	440.4	440.4	440.4
152.5°	447.3	447.5	447.8	448.1	448.1	448.0	447.8	447.7	447.5	447.7	447.8
155°	457.9	458.0	458.0	458.1	458.0	457.8	457.5	457.3	457.1	457.4	457.7
157.5°	466.8	466.8	466.8	466.7	466.5	466.3	465.9	465.7	465.5	465.9	466.3
160°	472.0	471.7	471.5	471.2	471.1	471.0	470.9	470.8	470.8	471.2	471.7
162.5°	476.6	476.3	476.0	475.7	475.5	475.4	475.3	475.2	475.2	475.6	476.1
165°	482.5	482.1	481.7	481.3	481.1	481.1	481.1	481.1	481.1	481.8	482.4
167.5°	487.2	486.8	486.4	485.9	485.7	485.7	485.6	485.6	485.5	486.2	487.0
170°	489.8	489.3	488.9	488.4	488.1	488.2	488.3	488.4	488.4	489.1	489.8
172.5°	491.6	491.1	490.6	490.2	489.9	490.0	490.1	490.2	490.2	490.9	491.5
175°	493.5	493.0	492.5	492.0	491.9	492.0	492.0	492.1	492.2	492.9	493.7
177.5°	494.5	494.0	493.5	493.1	492.9	493.0	493.2	493.3	493.4	493.9	494.5
180°	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9	1398.9
2.5°	1467.5	1469.3	1470.6	1475.1	1475.5	1479.6	1475.5
5°	1588.9	1596.8	1609.2	1621.5	1622.7	1630.5	1616.5
7.5°	1725.0	1743.3	1754.7	1774.7	1782.7	1787.5	1779.5
10°	1818.8	1835.7	1865.6	1880.2	1894.9	1897.1	1890.4
12.5°	1909.4	1936.3	1959.8	1987.5	1986.9	2006.7	1999.5
15°	2030.2	2057.8	2090.4	2121.5	2132.7	2132.7	2141.8
17.5°	2116.3	2166.9	2200.7	2225.0	2251.7	2256.3	2253.2
20°	2174.5	2229.1	2265.2	2296.8	2314.8	2319.9	2319.9
22.5°	2217.7	2264.2	2299.5	2327.8	2342.8	2348.7	2346.9
25°	2247.7	2287.7	2309.2	2317.6	2321.6	2320.4	2309.7
27.5°	2206.7	2204.9	2191.4	2165.4	2145.9	2134.1	2120.6
30°	2128.3	2098.9	2065.1	2027.9	1980.0	1943.3	1932.1
32.5°	2011.4	1945.6	1888.3	1826.4	1774.8	1738.2	1722.9
35°	1785.6	1681.3	1596.2	1521.8	1467.7	1433.9	1422.6
37.5°	1517.5	1416.6	1311.2	1239.1	1194.2	1160.0	1147.3
40°	1347.0	1237.1	1145.3	1077.7	1031.4	998.2	997.6
42.5°	1191.5	1086.5	1000.1	951.4	901.6	879.5	879.5
45°	975.6	891.6	818.4	780.1	750.2	732.1	727.1
47.5°	807.8	738.3	689.5	659.0	634.6	623.1	615.7
50°	713.5	652.6	613.8	587.3	573.7	559.1	558.0
52.5°	635.1	586.0	555.6	534.1	517.0	508.2	508.4
55°	533.8	494.9	473.4	457.1	443.6	436.8	434.0
57.5°	449.6	420.4	404.9	389.9	384.2	378.9	377.4
60°	397.4	377.6	363.0	351.1	342.7	341.0	340.4
62.5°	354.1	333.5	323.3	314.1	307.9	305.3	304.4
65°	292.0	276.7	267.7	260.4	258.1	254.2	253.6
67.5°	235.4	226.2	220.3	215.2	212.1	211.9	211.9
70°	200.6	195.6	190.5	187.7	186.0	184.8	184.8
72.5°	170.9	167.1	163.0	161.5	161.2	160.0	159.6
75°	130.2	126.3	126.8	124.0	121.7	119.0	117.2
77.5°	92.3	89.5	88.9	88.6	86.7	86.3	87.2
80°	71.6	68.7	68.2	68.7	68.2	66.5	66.5
82.5°	54.5	52.1	51.5	51.2	50.6	51.2	50.3
85°	29.3	28.2	28.2	28.2	29.3	28.8	28.2
87.5°	12.3	11.9	12.5	12.1	12.1	11.7	12.1
90°	9.6	10.1	10.4	10.6	10.8	10.9	11.1
92.5°	9.3	9.8	10.0	10.1	10.1	10.2	10.2
95°	9.6	10.1	10.4	10.4	10.5	10.6	10.7
97.5°	9.9	9.9	10.0	10.1	10.2	10.3	10.4
100°	12.1	10.7	10.0	10.1	10.2	10.3	10.4
102.5°	33.2	18.1	10.6	10.6	10.6	10.6	10.7
105°	117.5	118.2	117.2	114.1	111.2	108.3	105.3
107.5°	144.8	145.2	145.5	145.9	146.1	146.4	146.8
110°	163.5	163.6	163.8	164.0	164.3	164.5	164.8



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	181.5	181.4	181.6	181.9	182.2	182.5	182.8
115°	208.9	209.0	209.1	209.1	209.1	209.1	209.1
117.5°	236.1	236.0	236.0	235.9	235.9	235.9	235.9
120°	253.2	253.4	253.4	253.2	253.1	252.9	252.7
122.5°	269.9	269.9	269.9	269.8	269.6	269.5	269.3
125°	293.3	293.6	293.8	293.8	293.9	294.0	294.1
127.5°	316.3	316.3	316.2	316.1	316.0	316.0	315.9
130°	330.6	330.7	330.7	330.7	330.7	330.7	330.7
132.5°	344.5	344.5	344.5	344.5	344.5	344.4	344.3
135°	363.7	363.9	364.0	364.2	364.4	364.5	364.7
137.5°	382.0	382.3	382.3	382.3	382.2	382.2	382.1
140°	393.5	393.8	394.0	394.0	394.1	394.2	394.3
142.5°	404.0	404.1	404.2	404.2	404.3	404.3	404.3
145°	418.9	419.0	419.1	419.2	419.4	419.6	419.7
147.5°	432.0	432.1	432.2	432.3	432.4	432.4	432.5
150°	440.4	440.4	440.5	440.6	440.7	440.8	440.8
152.5°	447.9	448.1	448.1	448.1	448.0	447.9	447.9
155°	458.0	458.4	458.4	458.2	458.0	457.7	457.5
157.5°	466.7	467.1	467.1	466.7	466.3	465.9	465.5
160°	472.2	472.7	472.7	472.2	471.7	471.2	470.8
162.5°	476.6	477.1	477.1	476.5	476.0	475.4	474.9
165°	483.1	483.7	483.6	482.9	482.2	481.4	480.7
167.5°	487.7	488.4	488.4	487.5	486.7	485.9	485.1
170°	490.4	491.1	491.1	490.2	489.3	488.5	487.7
172.5°	492.2	492.8	492.8	491.9	491.0	490.1	489.2
175°	494.4	495.1	495.0	494.0	493.0	492.0	491.1
177.5°	495.0	495.5	495.4	494.6	493.8	493.0	492.3
180°	494.0	494.0	494.0	494.0	494.0	494.0	494.0

(END OF REPORT)