

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: P332963-930

Luminaire Tested: **SA4XXRDIP-C1020D590U930-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332963-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXRDIP-C1020D590U930-4F0-1E-UDD-A4
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5259.1 lumens
Efficiency: N/A
Efficacy: 107.8 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

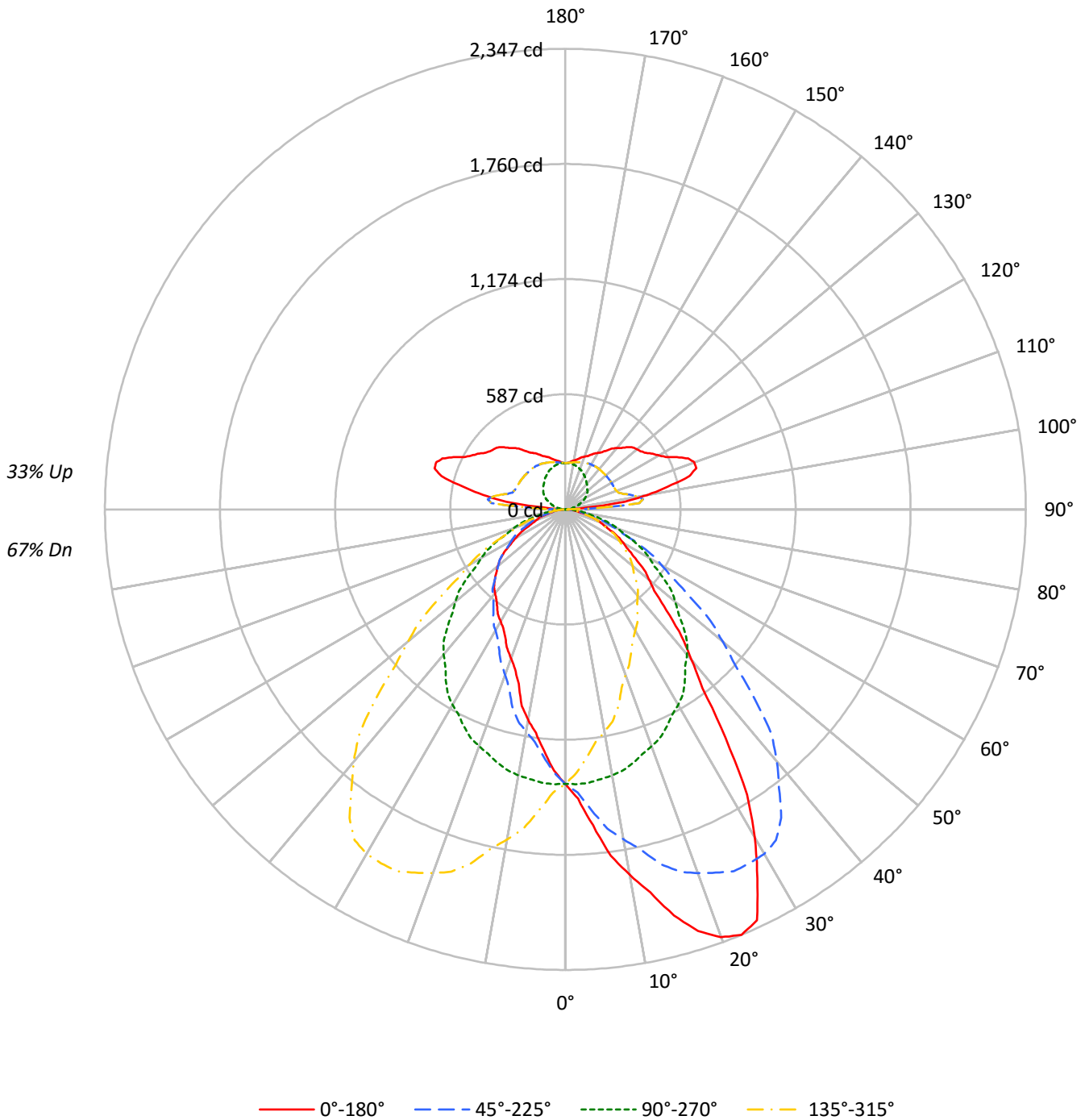
Input Watts (W): 48.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67				
1	102	98	94	91	96	93	89	86	83	80	78	73	71	70	65	63	62	58				
2	94	86	80	75	88	82	76	72	73	69	65	65	62	59	58	55	53	50				
3	86	76	69	64	81	73	66	61	65	60	56	58	54	51	52	49	46	43				
4	79	68	60	54	74	65	58	52	58	53	48	52	48	44	46	43	40	37				
5	73	61	53	47	68	58	51	45	52	46	42	47	42	39	42	38	35	32				
6	67	55	47	41	63	52	45	40	47	41	37	43	38	34	38	34	31	29				
7	62	50	42	36	59	48	40	35	43	37	33	39	34	30	35	31	28	26				
8	58	46	38	32	55	44	36	31	40	34	29	36	31	27	32	28	25	23				
9	54	42	34	29	51	40	33	28	36	31	26	33	28	25	30	26	23	21				
10	51	38	31	26	48	37	30	26	34	28	24	31	26	22	28	24	21	19				

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	2.6
10°-20°	408.9	7.8
20°-30°	639.5	12.2
30°-40°	710.9	13.5
40°-50°	630.7	12.0
50°-60°	491.5	9.3
60°-70°	321.8	6.1
70°-80°	158.2	3.0
80°-90°	40.4	0.8
90°-100°	171.0	3.3
100°-110°	355.9	6.8
110°-120°	318.7	6.1
120°-130°	268.1	5.1
130°-140°	223.6	4.3
140°-150°	170.8	3.2
150°-160°	120.0	2.3
160°-170°	70.6	1.3
170°-180°	23.0	0.4
0°-30°	1183.9	22.5
0°-40°	1894.8	36.0
0°-60°	3017.0	57.4
0°-90°	3537.4	67.3
90°-120°	845.6	16.1
90°-150°	1508.1	28.7
90°-180°	1722.0	32.7
0°-180°	5259.1	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°	10	0	10	0	10	9
95°	114	15	114	15	114	176
105°	654	54	654	54	654	647
115°	628	96	628	96	628	624
125°	501	134	501	134	501	456
135°	448	159	448	159	448	346
145°	366	183	366	183	366	232
155°	306	208	306	208	306	143
165°	267	226	267	226	267	77
175°	241	236	241	236	241	23
180°	237	237	237	237	237	



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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°	11.9	11.4	12.0	11.9	12.2	11.7	12.1	13.0	12.0	12.5	12.3
90°	9.8	9.8	10.2	9.8	9.3	9.3	8.8	8.4	7.9	8.4	7.4
92.5°	35.8	35.8	37.4	39.9	45.4	54.7	68.7	91.3	122.9	147.5	129.1
95°	113.5	119.5	127.9	142.4	165.1	210.2	272.6	344.6	389.7	379.0	286.0
97.5°	303.3	313.0	326.9	355.0	388.3	436.9	482.4	509.2	489.7	399.3	267.7
100°	426.5	430.2	444.2	472.5	513.0	547.4	570.2	560.9	493.0	373.9	242.8
102.5°	533.6	536.6	551.3	571.9	596.7	611.1	604.5	558.3	465.0	342.3	226.0
105°	654.4	657.1	663.7	667.4	666.5	647.4	601.4	520.9	414.4	305.1	211.7
107.5°	699.2	698.0	693.3	682.7	659.7	618.3	553.4	467.8	373.5	284.3	209.0
110°	699.9	695.8	687.4	667.9	634.9	583.7	516.2	435.8	353.0	277.2	209.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	678.0	671.2	659.5	635.9	598.3	547.2	483.5	412.4	341.4	273.9	212.0
115°	628.4	624.6	609.8	581.8	545.1	500.4	446.1	388.8	330.7	272.1	216.3
117.5°	578.0	575.1	560.0	536.6	505.2	467.4	424.6	377.2	325.9	271.6	220.8
120°	549.8	544.6	532.6	512.1	485.5	452.5	415.3	372.1	323.3	271.6	224.2
122.5°	527.4	522.3	512.1	494.6	472.1	443.2	409.4	367.6	320.2	271.3	227.6
125°	501.3	498.6	489.8	476.2	457.6	432.0	400.0	360.0	315.4	270.7	232.5
127.5°	486.1	483.3	475.9	463.9	445.2	420.9	388.9	350.7	308.8	269.6	236.5
130°	477.2	474.4	466.9	455.3	436.3	411.6	380.0	343.2	304.6	269.3	239.5
132.5°	467.2	464.3	457.3	444.2	425.4	400.8	369.9	335.4	300.9	268.9	242.1
135°	448.3	445.6	438.1	425.1	406.5	383.2	354.9	324.7	295.3	268.3	246.1
137.5°	425.1	421.8	415.6	402.8	385.4	364.4	340.5	314.9	290.5	268.2	248.3
140°	408.4	404.6	398.1	387.9	371.6	352.0	331.2	309.2	287.9	267.9	250.2
142.5°	390.4	387.9	382.1	372.6	358.2	341.3	323.3	304.1	285.7	267.9	251.7
145°	366.0	363.7	359.1	351.1	339.5	326.5	312.5	296.7	281.8	266.9	252.6
147.5°	344.4	343.5	340.0	333.2	324.7	314.4	303.2	290.7	278.4	265.3	253.0
150°	332.1	331.6	328.8	322.8	315.4	307.0	297.7	287.0	275.8	264.2	253.0
152.5°	320.9	320.4	318.8	313.8	307.5	300.6	292.0	282.8	272.8	262.3	252.3
155°	306.5	306.5	305.1	301.4	296.7	291.1	284.1	276.7	268.3	259.5	251.1
157.5°	293.8	293.8	293.0	290.2	286.7	282.2	276.4	270.1	263.8	256.7	250.0
160°	286.0	286.0	285.6	282.7	280.0	276.2	271.2	266.0	260.5	254.4	248.8
162.5°	278.6	279.0	278.5	275.7	273.7	270.3	266.3	262.0	257.5	252.2	247.7
165°	267.4	267.9	268.3	266.5	264.6	262.3	259.0	256.2	252.6	248.8	245.6
167.5°	258.6	258.9	259.0	257.9	256.9	255.5	252.9	250.8	248.1	245.5	243.4
170°	253.0	253.0	253.5	253.0	252.1	250.7	248.8	247.4	245.1	243.2	241.8
172.5°	247.4	248.2	248.7	248.2	247.6	246.6	245.5	244.4	242.5	241.0	240.4
175°	240.9	241.8	242.8	241.8	241.8	241.8	240.9	240.4	239.5	238.6	238.6
177.5°	237.1	237.8	238.6	238.2	238.6	238.2	238.2	237.8	237.5	237.1	237.1
180°	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8



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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	11.7	12.0	12.0	12.4	14.1	15.2	15.4	14.3	13.2	11.9
90°	6.5	6.5	3.8	3.8	3.3	2.8	1.4	0.5	1.4	2.8	3.3
92.5°	93.9	57.9	34.2	24.5	17.8	12.1	7.7	5.3	7.7	12.1	17.8
95°	174.9	98.6	58.1	38.6	27.5	21.4	16.7	15.3	16.7	21.4	27.5
97.5°	157.2	94.2	63.1	46.7	37.1	31.6	27.6	27.6	27.6	31.6	37.1
100°	147.9	95.3	67.9	53.0	44.2	38.6	35.4	35.4	35.4	38.6	44.2
102.5°	145.3	99.1	74.2	60.1	51.6	46.4	43.5	42.8	43.5	46.4	51.6
105°	146.5	107.9	85.6	72.1	63.8	58.1	55.8	54.4	55.8	58.1	63.8
107.5°	153.4	118.2	97.8	84.5	76.5	70.5	68.2	67.3	68.2	70.5	76.5
110°	158.6	126.0	105.6	93.0	84.6	79.1	76.7	75.8	76.7	79.1	84.6



TEST NUMBER: P332963-930

CATALOG NUMBER: SA4XXRDIP-C1020D590U930-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	164.2	133.5	113.7	101.2	92.9	87.6	85.0	84.0	85.0	87.6	92.9
115°	173.0	145.1	126.5	114.0	105.1	100.4	97.2	95.8	97.2	100.4	105.1
117.5°	182.1	156.4	138.7	125.6	117.4	112.3	109.4	108.1	109.4	112.3	117.4
120°	188.3	164.2	146.5	133.5	125.6	120.4	117.2	116.3	117.2	120.4	125.6
122.5°	194.3	171.6	153.9	141.3	132.6	127.9	124.7	123.7	124.7	127.9	132.6
125°	203.3	181.8	165.1	152.1	143.2	138.1	135.3	133.5	135.3	138.1	143.2
127.5°	211.0	191.4	175.1	162.0	152.8	147.0	143.7	142.1	143.7	147.0	152.8
130°	215.8	197.6	181.8	168.4	159.6	152.5	148.8	147.0	148.8	152.5	159.6
132.5°	220.6	202.8	187.0	174.3	164.8	158.2	153.3	151.8	153.3	158.2	164.8
135°	227.0	210.2	194.9	182.8	173.0	165.1	160.5	158.6	160.5	165.1	173.0
137.5°	231.5	215.8	201.5	190.0	179.8	172.3	167.1	165.4	167.1	172.3	179.8
140°	234.4	219.6	205.5	194.4	184.7	176.8	171.6	170.2	171.6	176.8	184.7
142.5°	236.6	222.9	209.3	198.5	189.1	181.6	176.8	175.5	176.8	181.6	189.1
145°	239.0	226.5	214.4	204.2	195.3	188.8	184.2	182.8	184.2	188.8	195.3
147.5°	241.2	230.2	218.9	209.7	202.3	195.6	191.5	191.0	191.5	195.6	202.3
150°	242.3	232.1	221.8	213.0	206.0	200.5	196.7	196.2	196.7	200.5	206.0
152.5°	243.0	233.6	224.5	216.4	210.1	204.9	201.2	201.1	201.2	204.9	210.1
155°	243.7	235.8	227.9	220.9	215.8	211.2	208.4	207.9	208.4	211.2	215.8
157.5°	243.7	237.4	230.6	225.2	220.7	217.1	214.5	214.5	214.5	217.1	220.7
160°	243.7	238.1	232.5	227.4	223.7	220.5	218.6	218.6	218.6	220.5	223.7
162.5°	243.7	238.9	233.7	229.7	226.3	223.4	221.9	222.3	221.9	223.4	226.3
165°	242.8	239.0	234.9	232.1	229.8	227.4	226.5	226.5	226.5	227.4	229.8
167.5°	241.7	239.0	235.9	233.7	232.4	230.6	230.2	230.6	230.2	230.6	232.4
170°	240.9	238.6	236.3	234.9	233.9	232.5	232.1	232.5	232.1	232.5	233.9
172.5°	240.2	238.2	236.6	235.6	235.1	234.0	233.9	234.4	233.9	234.0	235.1
175°	239.0	237.7	236.8	236.8	236.3	235.8	235.8	236.3	235.8	235.8	236.3
177.5°	237.8	237.1	236.8	236.8	236.8	236.4	236.8	237.1	236.8	236.4	236.8
180°	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8



TEST NUMBER: P332963-930

CATALOG NUMBER: SA4XXRDIP-C1020D590U930-4F0-1E-UDD-A4

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°	12.0	11.6	12.1	11.3	11.8	12.1	11.5	11.6	12.1	11.3	11.3
90°	3.8	3.8	6.5	6.5	7.4	8.4	7.9	8.4	8.8	9.3	9.3
92.5°	24.5	34.2	57.9	93.9	129.1	147.5	122.9	91.3	68.7	54.7	45.4
95°	38.6	58.1	98.6	174.9	286.0	379.0	389.7	344.6	272.6	210.2	165.1
97.5°	46.7	63.1	94.2	157.2	267.7	399.3	489.7	509.2	482.4	436.9	388.3
100°	53.0	67.9	95.3	147.9	242.8	373.9	493.0	560.9	570.2	547.4	513.0
102.5°	60.1	74.2	99.1	145.3	226.0	342.3	465.0	558.3	604.5	611.1	596.7
105°	72.1	85.6	107.9	146.5	211.7	305.1	414.4	520.9	601.4	647.4	666.5
107.5°	84.5	97.8	118.2	153.4	209.0	284.3	373.5	467.8	553.4	618.3	659.7
110°	93.0	105.6	126.0	158.6	209.8	277.2	353.0	435.8	516.2	583.7	634.9



TEST NUMBER: P332963-930

CATALOG NUMBER: SA4XXRDIP-C1020D590U930-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	101.2	113.7	133.5	164.2	212.0	273.9	341.4	412.4	483.5	547.2	598.3
115°	114.0	126.5	145.1	173.0	216.3	272.1	330.7	388.8	446.1	500.4	545.1
117.5°	125.6	138.7	156.4	182.1	220.8	271.6	325.9	377.2	424.6	467.4	505.2
120°	133.5	146.5	164.2	188.3	224.2	271.6	323.3	372.1	415.3	452.5	485.5
122.5°	141.3	153.9	171.6	194.3	227.6	271.3	320.2	367.6	409.4	443.2	472.1
125°	152.1	165.1	181.8	203.3	232.5	270.7	315.4	360.0	400.0	432.0	457.6
127.5°	162.0	175.1	191.4	211.0	236.5	269.6	308.8	350.7	388.9	420.9	445.2
130°	168.4	181.8	197.6	215.8	239.5	269.3	304.6	343.2	380.0	411.6	436.3
132.5°	174.3	187.0	202.8	220.6	242.1	268.9	300.9	335.4	369.9	400.8	425.4
135°	182.8	194.9	210.2	227.0	246.1	268.3	295.3	324.7	354.9	383.2	406.5
137.5°	190.0	201.5	215.8	231.5	248.3	268.2	290.5	314.9	340.5	364.4	385.4
140°	194.4	205.5	219.6	234.4	250.2	267.9	287.9	309.2	331.2	352.0	371.6
142.5°	198.5	209.3	222.9	236.6	251.7	267.9	285.7	304.1	323.3	341.3	358.2
145°	204.2	214.4	226.5	239.0	252.6	266.9	281.8	296.7	312.5	326.5	339.5
147.5°	209.7	218.9	230.2	241.2	253.0	265.3	278.4	290.7	303.2	314.4	324.7
150°	213.0	221.8	232.1	242.3	253.0	264.2	275.8	287.0	297.7	307.0	315.4
152.5°	216.4	224.5	233.6	243.0	252.3	262.3	272.8	282.8	292.0	300.6	307.5
155°	220.9	227.9	235.8	243.7	251.1	259.5	268.3	276.7	284.1	291.1	296.7
157.5°	225.2	230.6	237.4	243.7	250.0	256.7	263.8	270.1	276.4	282.2	286.7
160°	227.4	232.5	238.1	243.7	248.8	254.4	260.5	266.0	271.2	276.2	280.0
162.5°	229.7	233.7	238.9	243.7	247.7	252.2	257.5	262.0	266.3	270.3	273.7
165°	232.1	234.9	239.0	242.8	245.6	248.8	252.6	256.2	259.0	262.3	264.6
167.5°	233.7	235.9	239.0	241.7	243.4	245.5	248.1	250.8	252.9	255.5	256.9
170°	234.9	236.3	238.6	240.9	241.8	243.2	245.1	247.4	248.8	250.7	252.1
172.5°	235.6	236.6	238.2	240.2	240.4	241.0	242.5	244.4	245.5	246.6	247.6
175°	236.8	236.8	237.7	239.0	238.6	238.6	239.5	240.4	240.9	241.8	241.8
177.5°	236.8	236.8	237.1	237.8	237.1	237.1	237.5	237.8	238.2	238.2	238.6
180°	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8



TEST NUMBER: P332963-930

CATALOG NUMBER: SA4XXRDIP-C1020D590U930-4F0-1E-UDD-A4

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°	12.3	12.0	11.4	11.9	11.4	12.0	12.3	11.3	11.3	12.1	11.6
90°	9.8	10.2	9.8	9.8	9.8	10.2	9.8	9.3	9.3	8.8	8.4
92.5°	39.9	37.4	35.8	35.8	35.8	37.4	39.9	45.4	54.7	68.7	91.3
95°	142.4	127.9	119.5	113.5	119.5	127.9	142.4	165.1	210.2	272.6	344.6
97.5°	355.0	326.9	313.0	303.3	313.0	326.9	355.0	388.3	436.9	482.4	509.2
100°	472.5	444.2	430.2	426.5	430.2	444.2	472.5	513.0	547.4	570.2	560.9
102.5°	571.9	551.3	536.6	533.6	536.6	551.3	571.9	596.7	611.1	604.5	558.3
105°	667.4	663.7	657.1	654.4	657.1	663.7	667.4	666.5	647.4	601.4	520.9
107.5°	682.7	693.3	698.0	699.2	698.0	693.3	682.7	659.7	618.3	553.4	467.8
110°	667.9	687.4	695.8	699.9	695.8	687.4	667.9	634.9	583.7	516.2	435.8



TEST NUMBER: P332963-930

CATALOG NUMBER: SA4XXRDIP-C1020D590U930-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	635.9	659.5	671.2	678.0	671.2	659.5	635.9	598.3	547.2	483.5	412.4
115°	581.8	609.8	624.6	628.4	624.6	609.8	581.8	545.1	500.4	446.1	388.8
117.5°	536.6	560.0	575.1	578.0	575.1	560.0	536.6	505.2	467.4	424.6	377.2
120°	512.1	532.6	544.6	549.8	544.6	532.6	512.1	485.5	452.5	415.3	372.1
122.5°	494.6	512.1	522.3	527.4	522.3	512.1	494.6	472.1	443.2	409.4	367.6
125°	476.2	489.8	498.6	501.3	498.6	489.8	476.2	457.6	432.0	400.0	360.0
127.5°	463.9	475.9	483.3	486.1	483.3	475.9	463.9	445.2	420.9	388.9	350.7
130°	455.3	466.9	474.4	477.2	474.4	466.9	455.3	436.3	411.6	380.0	343.2
132.5°	444.2	457.3	464.3	467.2	464.3	457.3	444.2	425.4	400.8	369.9	335.4
135°	425.1	438.1	445.6	448.3	445.6	438.1	425.1	406.5	383.2	354.9	324.7
137.5°	402.8	415.6	421.8	425.1	421.8	415.6	402.8	385.4	364.4	340.5	314.9
140°	387.9	398.1	404.6	408.4	404.6	398.1	387.9	371.6	352.0	331.2	309.2
142.5°	372.6	382.1	387.9	390.4	387.9	382.1	372.6	358.2	341.3	323.3	304.1
145°	351.1	359.1	363.7	366.0	363.7	359.1	351.1	339.5	326.5	312.5	296.7
147.5°	333.2	340.0	343.5	344.4	343.5	340.0	333.2	324.7	314.4	303.2	290.7
150°	322.8	328.8	331.6	332.1	331.6	328.8	322.8	315.4	307.0	297.7	287.0
152.5°	313.8	318.8	320.4	320.9	320.4	318.8	313.8	307.5	300.6	292.0	282.8
155°	301.4	305.1	306.5	306.5	306.5	305.1	301.4	296.7	291.1	284.1	276.7
157.5°	290.2	293.0	293.8	293.8	293.8	293.0	290.2	286.7	282.2	276.4	270.1
160°	282.7	285.6	286.0	286.0	286.0	285.6	282.7	280.0	276.2	271.2	266.0
162.5°	275.7	278.5	279.0	278.6	279.0	278.5	275.7	273.7	270.3	266.3	262.0
165°	266.5	268.3	267.9	267.4	267.9	268.3	266.5	264.6	262.3	259.0	256.2
167.5°	257.9	259.0	258.9	258.6	258.9	259.0	257.9	256.9	255.5	252.9	250.8
170°	253.0	253.5	253.0	253.0	253.0	253.5	253.0	252.1	250.7	248.8	247.4
172.5°	248.2	248.7	248.2	247.4	248.2	248.7	248.2	247.6	246.6	245.5	244.4
175°	241.8	242.8	241.8	240.9	241.8	242.8	241.8	241.8	241.8	240.9	240.4
177.5°	238.2	238.6	237.8	237.1	237.8	238.6	238.2	238.6	238.2	238.2	237.8
180°	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8



TEST NUMBER: P332963-930

CATALOG NUMBER: SA4XXRDIP-C1020D590U930-4F0-1E-UDD-A4

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°	11.5	12.1	11.8	11.3	12.1	11.6	12.0	11.9	13.2	14.3	15.4
90°	7.9	8.4	7.4	6.5	6.5	3.8	3.8	3.3	2.8	1.4	0.5
92.5°	122.9	147.5	129.1	93.9	57.9	34.2	24.5	17.8	12.1	7.7	5.3
95°	389.7	379.0	286.0	174.9	98.6	58.1	38.6	27.5	21.4	16.7	15.3
97.5°	489.7	399.3	267.7	157.2	94.2	63.1	46.7	37.1	31.6	27.6	27.6
100°	493.0	373.9	242.8	147.9	95.3	67.9	53.0	44.2	38.6	35.4	35.4
102.5°	465.0	342.3	226.0	145.3	99.1	74.2	60.1	51.6	46.4	43.5	42.8
105°	414.4	305.1	211.7	146.5	107.9	85.6	72.1	63.8	58.1	55.8	54.4
107.5°	373.5	284.3	209.0	153.4	118.2	97.8	84.5	76.5	70.5	68.2	67.3
110°	353.0	277.2	209.8	158.6	126.0	105.6	93.0	84.6	79.1	76.7	75.8



TEST NUMBER: P332963-930

CATALOG NUMBER: SA4XXRDIP-C1020D590U930-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	341.4	273.9	212.0	164.2	133.5	113.7	101.2	92.9	87.6	85.0	84.0
115°	330.7	272.1	216.3	173.0	145.1	126.5	114.0	105.1	100.4	97.2	95.8
117.5°	325.9	271.6	220.8	182.1	156.4	138.7	125.6	117.4	112.3	109.4	108.1
120°	323.3	271.6	224.2	188.3	164.2	146.5	133.5	125.6	120.4	117.2	116.3
122.5°	320.2	271.3	227.6	194.3	171.6	153.9	141.3	132.6	127.9	124.7	123.7
125°	315.4	270.7	232.5	203.3	181.8	165.1	152.1	143.2	138.1	135.3	133.5
127.5°	308.8	269.6	236.5	211.0	191.4	175.1	162.0	152.8	147.0	143.7	142.1
130°	304.6	269.3	239.5	215.8	197.6	181.8	168.4	159.6	152.5	148.8	147.0
132.5°	300.9	268.9	242.1	220.6	202.8	187.0	174.3	164.8	158.2	153.3	151.8
135°	295.3	268.3	246.1	227.0	210.2	194.9	182.8	173.0	165.1	160.5	158.6
137.5°	290.5	268.2	248.3	231.5	215.8	201.5	190.0	179.8	172.3	167.1	165.4
140°	287.9	267.9	250.2	234.4	219.6	205.5	194.4	184.7	176.8	171.6	170.2
142.5°	285.7	267.9	251.7	236.6	222.9	209.3	198.5	189.1	181.6	176.8	175.5
145°	281.8	266.9	252.6	239.0	226.5	214.4	204.2	195.3	188.8	184.2	182.8
147.5°	278.4	265.3	253.0	241.2	230.2	218.9	209.7	202.3	195.6	191.5	191.0
150°	275.8	264.2	253.0	242.3	232.1	221.8	213.0	206.0	200.5	196.7	196.2
152.5°	272.8	262.3	252.3	243.0	233.6	224.5	216.4	210.1	204.9	201.2	201.1
155°	268.3	259.5	251.1	243.7	235.8	227.9	220.9	215.8	211.2	208.4	207.9
157.5°	263.8	256.7	250.0	243.7	237.4	230.6	225.2	220.7	217.1	214.5	214.5
160°	260.5	254.4	248.8	243.7	238.1	232.5	227.4	223.7	220.5	218.6	218.6
162.5°	257.5	252.2	247.7	243.7	238.9	233.7	229.7	226.3	223.4	221.9	222.3
165°	252.6	248.8	245.6	242.8	239.0	234.9	232.1	229.8	227.4	226.5	226.5
167.5°	248.1	245.5	243.4	241.7	239.0	235.9	233.7	232.4	230.6	230.2	230.6
170°	245.1	243.2	241.8	240.9	238.6	236.3	234.9	233.9	232.5	232.1	232.5
172.5°	242.5	241.0	240.4	240.2	238.2	236.6	235.6	235.1	234.0	233.9	234.4
175°	239.5	238.6	238.6	239.0	237.7	236.8	236.8	236.3	235.8	235.8	236.3
177.5°	237.5	237.1	237.1	237.8	237.1	236.8	236.8	236.8	236.4	236.8	237.1
180°	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8



TEST NUMBER: P332963-930

CATALOG NUMBER: SA4XXRDIP-C1020D590U930-4F0-1E-UDD-A4

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	12.4	12.0	12.0	11.7	12.1	12.3	12.5	12.0	13.0
90°	1.4	2.8	3.3	3.8	3.8	6.5	6.5	7.4	8.4	7.9	8.4
92.5°	7.7	12.1	17.8	24.5	34.2	57.9	93.9	129.1	147.5	122.9	91.3
95°	16.7	21.4	27.5	38.6	58.1	98.6	174.9	286.0	379.0	389.7	344.6
97.5°	27.6	31.6	37.1	46.7	63.1	94.2	157.2	267.7	399.3	489.7	509.2
100°	35.4	38.6	44.2	53.0	67.9	95.3	147.9	242.8	373.9	493.0	560.9
102.5°	43.5	46.4	51.6	60.1	74.2	99.1	145.3	226.0	342.3	465.0	558.3
105°	55.8	58.1	63.8	72.1	85.6	107.9	146.5	211.7	305.1	414.4	520.9
107.5°	68.2	70.5	76.5	84.5	97.8	118.2	153.4	209.0	284.3	373.5	467.8
110°	76.7	79.1	84.6	93.0	105.6	126.0	158.6	209.8	277.2	353.0	435.8



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	85.0	87.6	92.9	101.2	113.7	133.5	164.2	212.0	273.9	341.4	412.4
115°	97.2	100.4	105.1	114.0	126.5	145.1	173.0	216.3	272.1	330.7	388.8
117.5°	109.4	112.3	117.4	125.6	138.7	156.4	182.1	220.8	271.6	325.9	377.2
120°	117.2	120.4	125.6	133.5	146.5	164.2	188.3	224.2	271.6	323.3	372.1
122.5°	124.7	127.9	132.6	141.3	153.9	171.6	194.3	227.6	271.3	320.2	367.6
125°	135.3	138.1	143.2	152.1	165.1	181.8	203.3	232.5	270.7	315.4	360.0
127.5°	143.7	147.0	152.8	162.0	175.1	191.4	211.0	236.5	269.6	308.8	350.7
130°	148.8	152.5	159.6	168.4	181.8	197.6	215.8	239.5	269.3	304.6	343.2
132.5°	153.3	158.2	164.8	174.3	187.0	202.8	220.6	242.1	268.9	300.9	335.4
135°	160.5	165.1	173.0	182.8	194.9	210.2	227.0	246.1	268.3	295.3	324.7
137.5°	167.1	172.3	179.8	190.0	201.5	215.8	231.5	248.3	268.2	290.5	314.9
140°	171.6	176.8	184.7	194.4	205.5	219.6	234.4	250.2	267.9	287.9	309.2
142.5°	176.8	181.6	189.1	198.5	209.3	222.9	236.6	251.7	267.9	285.7	304.1
145°	184.2	188.8	195.3	204.2	214.4	226.5	239.0	252.6	266.9	281.8	296.7
147.5°	191.5	195.6	202.3	209.7	218.9	230.2	241.2	253.0	265.3	278.4	290.7
150°	196.7	200.5	206.0	213.0	221.8	232.1	242.3	253.0	264.2	275.8	287.0
152.5°	201.2	204.9	210.1	216.4	224.5	233.6	243.0	252.3	262.3	272.8	282.8
155°	208.4	211.2	215.8	220.9	227.9	235.8	243.7	251.1	259.5	268.3	276.7
157.5°	214.5	217.1	220.7	225.2	230.6	237.4	243.7	250.0	256.7	263.8	270.1
160°	218.6	220.5	223.7	227.4	232.5	238.1	243.7	248.8	254.4	260.5	266.0
162.5°	221.9	223.4	226.3	229.7	233.7	238.9	243.7	247.7	252.2	257.5	262.0
165°	226.5	227.4	229.8	232.1	234.9	239.0	242.8	245.6	248.8	252.6	256.2
167.5°	230.2	230.6	232.4	233.7	235.9	239.0	241.7	243.4	245.5	248.1	250.8
170°	232.1	232.5	233.9	234.9	236.3	238.6	240.9	241.8	243.2	245.1	247.4
172.5°	233.9	234.0	235.1	235.6	236.6	238.2	240.2	240.4	241.0	242.5	244.4
175°	235.8	235.8	236.3	236.8	236.8	237.7	239.0	238.6	238.6	239.5	240.4
177.5°	236.8	236.4	236.8	236.8	236.8	237.1	237.8	237.1	237.1	237.5	237.8
180°	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8	236.8



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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°	12.1	11.7	12.2	11.9	12.0	11.4	11.9
90°	8.8	9.3	9.3	9.8	10.2	9.8	9.8
92.5°	68.7	54.7	45.4	39.9	37.4	35.8	35.8
95°	272.6	210.2	165.1	142.4	127.9	119.5	113.5
97.5°	482.4	436.9	388.3	355.0	326.9	313.0	303.3
100°	570.2	547.4	513.0	472.5	444.2	430.2	426.5
102.5°	604.5	611.1	596.7	571.9	551.3	536.6	533.6
105°	601.4	647.4	666.5	667.4	663.7	657.1	654.4
107.5°	553.4	618.3	659.7	682.7	693.3	698.0	699.2
110°	516.2	583.7	634.9	667.9	687.4	695.8	699.9



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	483.5	547.2	598.3	635.9	659.5	671.2	678.0
115°	446.1	500.4	545.1	581.8	609.8	624.6	628.4
117.5°	424.6	467.4	505.2	536.6	560.0	575.1	578.0
120°	415.3	452.5	485.5	512.1	532.6	544.6	549.8
122.5°	409.4	443.2	472.1	494.6	512.1	522.3	527.4
125°	400.0	432.0	457.6	476.2	489.8	498.6	501.3
127.5°	388.9	420.9	445.2	463.9	475.9	483.3	486.1
130°	380.0	411.6	436.3	455.3	466.9	474.4	477.2
132.5°	369.9	400.8	425.4	444.2	457.3	464.3	467.2
135°	354.9	383.2	406.5	425.1	438.1	445.6	448.3
137.5°	340.5	364.4	385.4	402.8	415.6	421.8	425.1
140°	331.2	352.0	371.6	387.9	398.1	404.6	408.4
142.5°	323.3	341.3	358.2	372.6	382.1	387.9	390.4
145°	312.5	326.5	339.5	351.1	359.1	363.7	366.0
147.5°	303.2	314.4	324.7	333.2	340.0	343.5	344.4
150°	297.7	307.0	315.4	322.8	328.8	331.6	332.1
152.5°	292.0	300.6	307.5	313.8	318.8	320.4	320.9
155°	284.1	291.1	296.7	301.4	305.1	306.5	306.5
157.5°	276.4	282.2	286.7	290.2	293.0	293.8	293.8
160°	271.2	276.2	280.0	282.7	285.6	286.0	286.0
162.5°	266.3	270.3	273.7	275.7	278.5	279.0	278.6
165°	259.0	262.3	264.6	266.5	268.3	267.9	267.4
167.5°	252.9	255.5	256.9	257.9	259.0	258.9	258.6
170°	248.8	250.7	252.1	253.0	253.5	253.0	253.0
172.5°	245.5	246.6	247.6	248.2	248.7	248.2	247.4
175°	240.9	241.8	241.8	241.8	242.8	241.8	240.9
177.5°	238.2	238.2	238.6	238.2	238.6	237.8	237.1
180°	236.8	236.8	236.8	236.8	236.8	236.8	236.8

(END OF REPORT)