

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: P332362-840

Luminaire Tested: **S123RDIP-S1165D365U840-4F0-1E-UDD-A4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332362-840  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-17,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123RDIP-S1165D365U840-4F0-1E-UDD-A4  
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5944.2 lumens  
Efficiency: N/A  
Efficacy: 119.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.36  
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')  
CIE Type: Semi-Direct

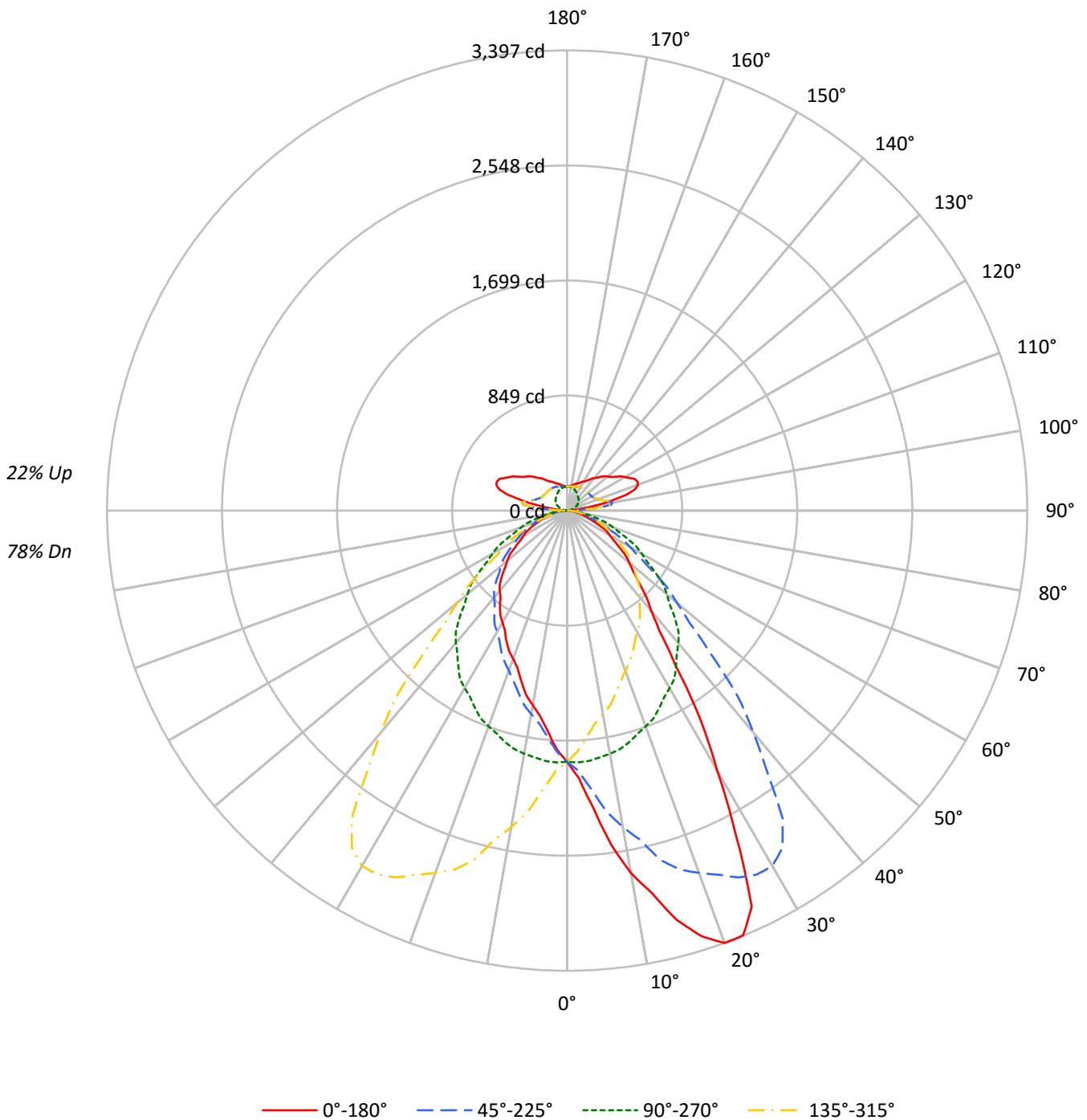
Input Watts (W): 49.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	99	99	99	90	90	90	82	82	82	78
1	105	101	97	94	100	96	93	90	88	86	83	81	79	77	74	72	71	67
2	96	89	83	78	92	85	80	75	78	74	70	72	69	66	66	63	61	58
3	88	79	72	66	84	76	69	64	70	65	60	64	60	57	59	56	53	50
4	81	71	63	57	78	68	61	55	63	57	52	58	53	49	53	50	46	44
5	75	64	56	50	72	61	54	48	57	51	46	53	47	43	49	44	41	38
6	70	58	50	44	66	56	48	43	52	45	41	48	43	39	44	40	37	34
7	65	52	44	39	62	51	43	38	47	41	36	44	38	35	41	36	33	31
8	60	48	40	35	58	46	39	34	43	37	33	40	35	31	38	33	30	28
9	56	44	37	31	54	43	36	31	40	34	29	37	32	28	35	30	27	25
10	53	41	33	29	51	39	33	28	37	31	27	35	29	26	32	28	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	19957	19957	19957	19957
5°	23791	20042	17650	20042
10°	29704	19928	15946	19928
15°	34867	19724	14540	19724
20°	38913	19420	13347	19420
25°	38292	19099	12613	19099
30°	27524	18804	11857	18804
35°	18378	18419	11369	18419
40°	13540	17956	10863	17956
45°	11357	17145	10368	17145
50°	10021	16083	9676	16083
55°	8788	14865	8728	14865
60°	7828	13702	7995	13702
65°	6872	12455	7440	12455
70°	5397	11339	6795	11339
75°	4754	9902	6209	9902
80°	4135	8412	6106	8412
85°	3335	6756	6472	6756



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.3	3.1
10°-20°	569.6	9.6
20°-30°	894.9	15.1
30°-40°	933.7	15.7
40°-50°	799.0	13.4
50°-60°	609.0	10.2
60°-70°	390.4	6.6
70°-80°	187.8	3.2
80°-90°	51.1	0.9
90°-100°	98.1	1.7
100°-110°	277.8	4.7
110°-120°	273.3	4.6
120°-130°	218.0	3.7
130°-140°	171.9	2.9
140°-150°	128.3	2.2
150°-160°	89.4	1.5
160°-170°	52.5	0.9
170°-180°	17.1	0.3
0°-30°	1646.9	27.7
0°-40°	2580.6	43.4
0°-60°	3988.6	67.1
0°-90°	4617.9	77.7
90°-120°	649.2	10.9
90°-150°	1167.3	19.6
90°-180°	1326.0	22.3
0°-180°	5944.2	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1854	1854	1854	1854	1854	
5°	2202	1855	1634	1855	2202	227
15°	3129	1770	1305	1770	3129	887
25°	3224	1608	1062	1608	3224	1386
35°	1399	1402	865	1402	1399	917
45°	746	1126	681	1126	746	587
55°	468	792	465	792	468	423
65°	270	489	292	489	270	265
75°	114	238	149	238	114	123
85°	27	55	52	55	27	31
90°	10	1	10	1	10	6
95°	41	12	41	12	41	75
105°	454	41	454	41	454	448
115°	552	73	552	73	552	536
125°	435	102	435	102	435	395
135°	353	119	353	119	353	274
145°	276	136	276	136	276	175
155°	229	154	229	154	229	107
165°	199	169	199	169	199	57
175°	180	176	180	176	180	17
180°	176	176	176	176	176	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1974.8	1977.3	1969.0	1967.8	1958.2	1955.7	1955.7	1942.4	1934.1	1923.4	1917.0
5°	2201.8	2214.5	2208.2	2193.8	2170.0	2164.4	2149.4	2125.6	2098.6	2065.3	2049.4
7.5°	2485.3	2502.6	2496.0	2473.9	2448.9	2428.8	2386.2	2346.7	2291.3	2242.7	2201.1
10°	2717.7	2699.5	2685.1	2663.7	2640.7	2603.4	2559.0	2497.8	2427.2	2371.7	2309.8
12.5°	2891.6	2888.7	2870.5	2848.5	2816.0	2780.6	2725.9	2651.5	2569.4	2489.1	2418.3
15°	3128.9	3133.6	3121.7	3098.7	3052.6	2989.9	2907.4	2876.5	2759.0	2671.7	2584.3
17.5°	3293.0	3292.1	3290.4	3258.5	3211.6	3166.9	3090.4	3009.0	2902.7	2779.7	2662.0
20°	3397.1	3389.2	3390.8	3355.1	3320.1	3268.5	3193.9	3075.6	2988.4	2846.3	2724.8
22.5°	3394.6	3393.0	3399.0	3386.8	3361.4	3321.8	3263.2	3163.3	3051.9	2908.5	2771.9
25°	3224.1	3217.7	3255.1	3265.4	3305.9	3313.0	3295.5	3240.8	3135.2	2987.6	2818.5
27.5°	2698.4	2694.8	2764.1	2850.7	2960.6	3046.0	3128.6	3168.4	3135.2	3029.5	2860.1
30°	2214.5	2289.1	2324.0	2449.4	2589.1	2755.8	2901.8	3040.7	3074.8	3028.9	2889.9
32.5°	1838.6	1903.7	1932.9	2040.5	2170.7	2365.9	2585.0	2781.7	2920.6	2955.8	2872.2
35°	1398.6	1399.4	1466.0	1513.6	1634.3	1835.1	2047.8	2311.3	2573.2	2771.7	2792.3
37.5°	1116.0	1119.9	1160.2	1207.7	1298.2	1404.4	1591.7	1810.8	2113.3	2418.0	2596.6
40°	963.6	970.7	1000.9	1047.7	1112.8	1193.0	1339.0	1545.4	1797.8	2136.7	2413.7
42.5°	865.8	877.4	892.9	929.0	969.3	1044.4	1162.5	1321.9	1551.5	1871.9	2191.5
45°	746.1	752.5	764.4	781.0	817.5	869.9	949.3	1056.4	1247.0	1504.9	1824.7
47.5°	658.1	654.8	667.3	680.9	705.2	740.8	794.1	881.5	1017.4	1224.4	1495.7
50°	598.4	597.6	606.4	616.7	639.7	665.9	709.6	775.5	883.4	1054.9	1303.3
52.5°	542.6	545.6	551.8	564.6	581.3	602.5	641.7	689.1	781.8	929.8	1136.9
55°	468.3	470.7	479.4	486.6	498.5	519.9	544.5	584.2	647.7	750.8	921.5
57.5°	405.5	404.3	412.7	414.4	428.0	445.5	464.4	495.2	541.3	618.0	733.0
60°	363.6	361.1	368.3	373.9	381.0	395.3	411.1	441.3	477.9	534.2	632.6
62.5°	325.4	324.3	329.5	335.1	341.0	354.0	367.3	390.5	419.4	466.9	544.9
65°	269.8	272.3	274.6	277.0	280.1	288.1	300.8	316.7	336.6	369.9	426.3
67.5°	212.1	214.5	215.3	220.2	227.0	232.0	239.7	253.9	267.6	295.8	327.8
70°	171.5	170.7	171.5	173.8	182.6	191.3	201.6	212.0	220.7	240.4	267.5
72.5°	147.3	145.9	147.9	148.5	152.7	155.1	161.6	171.3	182.6	196.0	215.4
75°	114.3	114.3	114.3	114.3	117.4	119.1	121.5	123.8	127.7	134.1	148.5
77.5°	84.4	84.6	85.7	86.5	87.2	88.1	89.6	91.9	93.3	96.6	102.9
80°	66.7	67.5	66.7	67.5	67.5	69.1	69.9	72.2	73.0	77.0	79.4
82.5°	50.2	49.7	50.2	51.0	51.0	52.5	52.7	54.4	54.6	56.7	59.1
85°	27.0	25.4	27.0	26.2	27.8	26.2	27.0	28.6	28.6	29.4	32.5
87.5°	8.4	9.8	8.4	9.0	9.1	9.6	9.5	9.4	10.6	10.0	10.5
90°	10.3	10.7	10.3	10.0	10.3	9.6	9.3	8.9	8.6	8.9	7.9
92.5°	17.2	17.9	17.5	18.6	19.2	21.0	23.8	30.1	41.4	54.8	60.4
95°	41.4	42.8	45.3	48.6	55.3	68.2	87.1	128.5	171.7	211.7	188.4
97.5°	112.7	115.7	125.4	141.5	167.8	210.5	256.5	320.2	350.8	328.0	240.1
100°	223.8	223.4	237.3	263.4	299.4	350.1	391.8	420.7	408.3	338.0	228.4
102.5°	328.2	336.5	348.1	368.7	396.8	428.9	453.2	454.1	411.1	319.4	211.3
105°	453.9	455.8	467.2	480.7	497.2	506.3	499.6	463.9	389.3	286.9	190.3
107.5°	526.3	529.6	533.4	538.1	537.8	525.0	493.7	435.8	351.2	258.2	176.8
110°	556.0	556.7	557.4	554.6	544.6	519.6	474.6	409.0	327.3	242.0	171.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	562.0	561.9	559.2	550.3	532.0	499.9	449.5	382.4	306.4	231.1	168.7
115°	552.1	550.3	543.1	527.5	500.7	461.8	409.3	347.2	281.2	219.4	167.7
117.5°	520.5	518.1	507.9	489.9	461.9	422.4	375.4	321.7	266.0	212.6	168.3
120°	494.2	492.1	483.5	463.5	435.4	399.3	356.5	308.3	258.0	209.4	169.6
122.5°	469.7	467.0	457.6	439.6	414.5	381.0	341.3	297.8	251.5	207.5	171.5
125°	435.4	432.9	423.9	408.3	385.5	356.9	322.7	283.7	243.1	204.8	174.5
127.5°	407.1	404.9	396.8	383.3	363.0	337.0	306.1	271.5	235.6	203.6	177.9
130°	391.1	388.3	380.8	367.9	349.0	324.8	295.9	263.7	231.6	202.7	180.3
132.5°	375.5	373.4	366.8	354.0	336.2	313.1	286.1	256.6	227.9	202.4	182.0
135°	352.9	350.4	344.1	333.4	315.8	295.5	272.3	246.9	223.1	202.0	184.5
137.5°	329.2	327.5	322.1	311.2	296.6	278.9	258.9	238.1	218.8	201.2	186.2
140°	312.7	313.0	307.3	297.3	283.7	268.3	251.3	233.1	216.2	201.0	187.3
142.5°	297.2	297.5	292.5	283.6	272.0	258.6	243.8	228.2	214.0	200.4	188.2
145°	275.9	275.2	272.3	264.8	255.9	245.5	234.1	222.4	210.9	199.4	188.7
147.5°	258.3	258.0	255.3	250.2	243.5	236.1	226.9	217.5	207.9	198.1	188.7
150°	248.0	248.0	245.9	242.0	236.6	229.8	222.4	214.1	205.9	197.0	188.7
152.5°	239.4	239.4	238.1	234.5	230.4	224.7	218.0	211.0	203.6	195.6	187.9
155°	228.7	228.4	227.7	224.8	221.6	217.3	212.0	206.3	200.2	193.1	187.0
157.5°	218.9	219.0	218.4	216.3	213.6	210.2	206.0	201.3	196.3	190.9	185.8
160°	212.7	213.1	213.1	210.9	208.4	205.9	202.4	198.4	193.8	189.1	185.2
162.5°	207.0	207.3	207.3	205.5	203.9	201.7	198.3	195.0	191.2	187.4	184.1
165°	199.4	199.4	199.9	198.4	197.0	195.2	192.7	190.6	187.7	184.9	182.4
167.5°	192.4	192.4	192.7	191.7	191.1	189.8	188.3	186.7	184.4	182.3	180.7
170°	188.0	188.0	188.4	187.7	187.3	186.6	185.2	184.1	182.4	180.6	179.6
172.5°	184.1	184.4	185.0	184.3	184.2	183.8	182.7	181.9	180.4	179.2	178.6
175°	179.6	179.9	180.3	179.9	179.9	179.9	179.2	178.7	178.0	177.3	177.3
177.5°	176.8	176.8	177.4	177.1	177.4	177.4	177.1	176.8	176.6	176.3	176.6
180°	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1914.5	1912.6	1903.7	1893.5	1880.2	1871.3	1864.3	1860.5	1849.1	1835.1	1825.5
5°	2032.8	2008.9	1983.5	1952.6	1924.0	1894.6	1876.3	1854.9	1828.8	1799.4	1778.8
7.5°	2159.4	2112.7	2062.4	2010.5	1959.2	1913.2	1872.6	1837.8	1796.0	1753.9	1724.4
10°	2256.5	2188.3	2117.7	2045.4	1979.5	1917.6	1870.0	1823.2	1773.2	1724.7	1688.3
12.5°	2344.8	2254.9	2173.5	2084.8	2000.5	1926.5	1857.9	1802.8	1742.7	1691.1	1649.5
15°	2456.6	2364.5	2266.0	2131.1	2019.2	1925.6	1842.2	1770.0	1697.0	1633.5	1593.0
17.5°	2561.0	2422.5	2290.2	2177.7	2032.3	1915.2	1813.5	1727.2	1647.0	1579.6	1529.8
20°	2604.2	2470.0	2326.4	2182.7	2039.8	1908.9	1790.6	1695.4	1612.0	1535.8	1489.9
22.5°	2630.2	2478.3	2327.0	2172.6	2020.8	1884.8	1767.8	1663.0	1572.7	1500.3	1443.5
25°	2660.6	2479.6	2312.9	2160.5	2005.7	1858.2	1719.2	1608.1	1510.5	1433.5	1373.1
27.5°	2680.6	2467.7	2270.7	2101.3	1944.3	1797.3	1670.0	1552.2	1453.2	1371.7	1307.0
30°	2684.3	2458.1	2238.3	2055.0	1895.4	1760.5	1625.6	1512.9	1408.1	1321.5	1261.2
32.5°	2689.5	2434.7	2194.4	1999.7	1836.3	1702.7	1580.4	1472.8	1365.5	1280.3	1218.7
35°	2668.5	2421.7	2128.0	1904.1	1740.6	1611.2	1501.0	1401.7	1296.2	1213.6	1150.9
37.5°	2578.3	2370.1	2059.1	1796.5	1625.6	1505.7	1415.8	1329.3	1232.5	1143.5	1084.4
40°	2487.5	2319.3	2005.7	1731.1	1552.6	1429.5	1348.6	1277.9	1184.3	1100.9	1037.4
42.5°	2352.3	2250.1	1954.9	1662.5	1470.0	1351.4	1283.1	1216.9	1134.7	1050.1	990.4
45°	2104.2	2117.7	1851.0	1553.3	1355.6	1236.6	1172.4	1126.3	1053.3	983.4	922.3
47.5°	1793.0	1919.2	1728.9	1436.9	1235.2	1123.5	1067.2	1027.0	977.9	909.3	853.5
50°	1589.8	1770.0	1631.1	1358.9	1159.6	1048.5	992.9	960.4	917.6	863.5	810.4
52.5°	1402.5	1596.0	1513.0	1271.8	1077.7	976.1	921.8	895.0	861.0	810.2	762.1
55°	1143.8	1339.8	1320.8	1140.5	954.8	863.5	822.3	792.1	769.1	731.0	693.0
57.5°	925.1	1111.1	1120.8	994.5	846.6	756.4	720.8	698.1	683.1	654.4	619.1
60°	787.4	958.1	991.4	896.2	769.1	689.7	654.8	636.5	624.7	601.7	574.6
62.5°	673.1	818.3	856.1	787.5	694.8	620.6	593.2	575.6	567.5	547.6	523.8
65°	515.1	635.8	672.3	634.2	585.7	526.2	504.0	489.0	481.8	470.7	453.2
67.5°	387.4	475.2	515.3	488.5	471.0	433.3	419.2	411.1	404.8	397.2	382.5
70°	311.1	376.2	417.5	410.3	396.1	376.2	365.9	360.3	354.0	347.7	335.0
72.5°	250.1	295.0	333.7	337.3	325.6	321.6	312.6	310.2	306.4	298.7	291.8
75°	165.9	196.8	223.8	234.2	238.9	242.9	238.9	238.1	237.3	231.0	227.0
77.5°	108.8	125.4	142.4	160.1	167.4	172.9	174.1	177.0	174.9	171.6	169.7
80°	83.3	87.4	99.2	114.3	126.2	131.0	134.1	135.7	134.9	134.1	131.0
82.5°	60.5	63.8	69.4	80.0	90.0	98.0	99.9	99.6	101.3	101.8	99.2
85°	32.5	33.3	34.9	36.6	42.1	50.8	53.2	54.7	56.4	56.4	51.6
87.5°	11.5	10.7	11.7	11.6	13.3	13.7	17.5	20.5	21.2	18.9	19.1
90°	6.8	5.8	4.6	3.9	3.2	2.1	1.4	0.7	1.4	2.1	3.2
92.5°	45.3	30.0	20.6	15.3	12.3	9.6	6.6	4.4	6.6	9.6	12.3
95°	129.9	76.7	46.4	32.5	23.2	17.2	13.2	12.1	13.2	17.2	23.2
97.5°	142.5	82.6	53.6	38.6	29.4	24.1	21.0	20.7	21.0	24.1	29.4
100°	134.5	81.7	56.8	42.8	34.2	29.3	26.8	26.5	26.8	29.3	34.2
102.5°	127.6	82.9	60.5	47.7	40.0	35.2	33.0	32.4	33.0	35.2	40.0
105°	122.8	86.0	66.8	55.6	48.9	44.6	42.5	41.4	42.5	44.6	48.9
107.5°	122.4	91.9	74.9	64.6	58.3	54.1	52.0	51.0	52.0	54.1	58.3
110°	123.8	96.7	80.7	70.7	64.6	60.7	58.9	57.8	58.9	60.7	64.6





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CATALOG NUMBER: S123RDIP-S1165D365U840-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	126.7	101.6	86.6	77.0	70.9	67.0	65.1	64.1	65.1	67.0	70.9
115°	131.3	109.6	96.0	86.3	80.3	76.7	74.6	73.1	74.6	76.7	80.3
117.5°	137.4	118.1	104.6	95.7	89.0	85.6	83.8	82.2	83.8	85.6	89.0
120°	142.0	123.5	110.6	101.7	94.9	91.4	89.6	88.5	89.6	91.4	94.9
122.5°	146.3	129.2	116.6	107.1	100.7	96.7	95.0	93.9	95.0	96.7	100.7
125°	153.1	137.4	124.9	115.2	108.5	104.5	102.4	101.7	102.4	104.5	108.5
127.5°	158.6	144.5	132.5	122.8	115.3	111.4	108.7	107.7	108.7	111.4	115.3
130°	162.4	148.9	137.0	127.4	119.9	115.6	112.4	111.4	112.4	115.6	119.9
132.5°	165.8	152.5	141.1	131.7	124.2	119.1	115.5	114.2	115.5	119.1	124.2
135°	170.3	158.0	147.0	137.4	129.9	124.5	120.6	119.2	120.6	124.5	129.9
137.5°	173.5	162.0	151.3	142.4	134.9	129.3	125.4	123.9	125.4	129.3	134.9
140°	175.2	164.5	154.2	145.2	138.1	132.4	128.9	127.0	128.9	132.4	138.1
142.5°	176.9	166.5	156.4	148.1	141.0	135.8	132.0	130.5	132.0	135.8	141.0
145°	178.7	169.2	159.9	151.7	145.6	140.3	137.0	135.9	137.0	140.3	145.6
147.5°	180.0	171.3	162.8	155.8	150.0	145.3	142.2	141.6	142.2	145.3	150.0
150°	180.3	172.7	164.5	158.0	153.1	148.5	145.6	145.2	145.6	148.5	153.1
152.5°	180.8	173.6	166.5	160.4	155.9	151.9	149.1	149.0	149.1	151.9	155.9
155°	181.0	175.2	169.2	164.2	160.3	156.6	154.5	154.5	154.5	156.6	160.3
157.5°	181.3	176.1	171.3	167.4	164.1	161.0	159.3	159.0	159.3	161.0	164.1
160°	181.3	177.0	172.7	169.2	166.6	163.8	162.4	162.4	162.4	163.8	166.6
162.5°	181.0	177.3	173.6	170.6	168.3	166.1	164.9	164.9	164.9	166.1	168.3
165°	180.3	177.7	174.9	172.4	171.0	169.2	168.4	168.7	168.4	169.2	171.0
167.5°	179.7	177.6	175.6	174.0	173.0	171.7	171.3	171.7	171.3	171.7	173.0
170°	178.7	177.3	175.6	174.9	174.1	173.1	172.7	173.4	172.7	173.1	174.1
172.5°	178.5	177.3	175.8	175.4	175.0	174.2	174.1	174.6	174.1	174.2	175.0
175°	177.7	177.0	176.3	175.9	175.9	175.2	175.6	175.9	175.6	175.2	175.9
177.5°	177.1	176.6	176.3	176.3	176.3	176.0	176.3	176.6	176.3	176.0	176.3
180°	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3



TEST NUMBER: P332362-840

CATALOG NUMBER: S123RDIP-S1165D365U840-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1822.4	1814.1	1808.5	1795.7	1787.5	1778.6	1769.7	1775.4	1774.7	1774.1	1774.1
5°	1761.3	1743.0	1726.4	1705.0	1691.4	1674.8	1662.0	1660.4	1663.7	1652.5	1646.2
7.5°	1700.6	1675.7	1652.0	1628.4	1603.4	1583.4	1570.7	1564.9	1556.8	1549.9	1542.9
10°	1658.1	1628.7	1605.7	1576.3	1549.3	1525.5	1510.5	1500.2	1494.6	1489.0	1478.7
12.5°	1614.3	1585.6	1556.2	1523.0	1497.3	1469.7	1458.3	1446.8	1436.1	1430.0	1415.8
15°	1550.1	1512.9	1481.9	1446.9	1418.4	1391.4	1375.5	1352.5	1349.3	1341.4	1327.1
17.5°	1485.8	1445.3	1402.7	1376.7	1344.5	1316.5	1292.3	1284.5	1261.8	1253.2	1240.9
20°	1435.0	1397.8	1365.2	1331.1	1284.2	1258.1	1239.0	1228.7	1210.4	1199.3	1191.3
22.5°	1391.2	1353.3	1315.7	1275.9	1237.3	1207.9	1194.0	1177.9	1167.9	1152.4	1143.8
25°	1328.7	1287.4	1242.1	1199.3	1171.5	1149.3	1127.1	1112.8	1098.5	1091.4	1075.5
27.5°	1256.0	1212.8	1170.5	1138.0	1103.9	1082.0	1061.9	1049.1	1032.0	1020.0	1011.2
30°	1216.0	1165.2	1128.6	1099.3	1055.6	1035.0	1020.0	1004.1	991.4	978.7	970.0
32.5°	1169.6	1123.3	1088.6	1052.3	1018.9	996.2	976.7	962.8	952.0	939.9	931.2
35°	1096.9	1058.0	1022.3	985.8	961.2	938.2	915.1	903.2	892.9	881.8	873.9
37.5°	1031.2	994.8	960.9	926.2	895.8	877.1	858.5	849.4	835.5	828.0	819.9
40°	990.6	954.8	918.4	885.0	853.2	839.0	822.3	808.8	796.1	790.5	781.8
42.5°	946.1	910.4	879.6	843.7	817.7	798.3	782.9	768.2	758.6	750.5	745.6
45°	880.2	848.5	818.3	782.6	758.0	741.3	723.9	710.3	701.7	696.1	687.3
47.5°	816.3	784.6	753.9	722.8	698.9	679.9	662.5	653.1	641.5	634.7	628.7
50°	769.9	741.3	708.8	680.2	656.4	637.3	623.1	611.2	600.9	592.1	588.1
52.5°	727.4	696.9	668.8	642.1	617.0	595.4	582.4	569.9	562.1	552.1	547.5
55°	657.2	627.8	604.0	577.8	553.2	534.9	519.1	508.0	500.1	489.0	482.6
57.5°	591.3	565.0	536.5	513.8	488.5	473.0	459.9	444.8	435.2	426.4	420.2
60°	546.8	516.7	492.1	470.7	448.5	428.6	416.7	404.8	394.5	385.8	380.2
62.5°	500.5	474.1	450.8	427.5	407.2	389.9	376.1	366.1	357.0	351.4	345.9
65°	429.4	408.8	385.0	365.9	346.9	334.2	323.1	314.3	308.0	304.0	299.2
67.5°	364.0	344.0	323.2	304.5	291.8	282.1	274.8	267.3	264.2	259.0	255.9
70°	321.4	300.8	282.6	268.3	255.6	248.4	243.7	238.1	234.9	228.6	225.4
72.5°	275.1	260.1	247.0	235.3	225.1	218.6	212.6	205.7	200.7	193.7	190.5
75°	216.7	203.2	192.9	184.9	178.5	169.9	161.2	154.0	151.6	149.3	148.5
77.5°	160.5	151.9	144.4	137.7	129.9	123.5	121.6	120.0	119.6	118.3	118.3
80°	126.2	118.3	112.7	104.7	100.0	100.0	100.0	98.5	99.2	99.2	99.2
82.5°	93.8	86.5	83.5	80.7	79.7	80.3	80.3	80.7	80.2	81.4	80.8
85°	48.4	49.2	50.8	50.0	50.8	50.8	52.4	51.6	52.4	50.8	52.4
87.5°	18.6	20.6	21.5	22.3	23.1	22.7	23.3	23.3	24.0	24.1	24.3
90°	3.9	4.6	5.8	6.8	7.9	8.9	8.6	8.9	9.3	9.6	10.3
92.5°	15.3	20.6	30.0	45.3	60.4	54.8	41.4	30.1	23.8	21.0	19.2
95°	32.5	46.4	76.7	129.9	188.4	211.7	171.7	128.5	87.1	68.2	55.3
97.5°	38.6	53.6	82.6	142.5	240.1	328.0	350.8	320.2	256.5	210.5	167.8
100°	42.8	56.8	81.7	134.5	228.4	338.0	408.3	420.7	391.8	350.1	299.4
102.5°	47.7	60.5	82.9	127.6	211.3	319.4	411.1	454.1	453.2	428.9	396.8
105°	55.6	66.8	86.0	122.8	190.3	286.9	389.3	463.9	499.6	506.3	497.2
107.5°	64.6	74.9	91.9	122.4	176.8	258.2	351.2	435.8	493.7	525.0	537.8
110°	70.7	80.7	96.7	123.8	171.7	242.0	327.3	409.0	474.6	519.6	544.6



TEST NUMBER: P332362-840

CATALOG NUMBER: S123RDIP-S1165D365U840-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	77.0	86.6	101.6	126.7	168.7	231.1	306.4	382.4	449.5	499.9	532.0
115°	86.3	96.0	109.6	131.3	167.7	219.4	281.2	347.2	409.3	461.8	500.7
117.5°	95.7	104.6	118.1	137.4	168.3	212.6	266.0	321.7	375.4	422.4	461.9
120°	101.7	110.6	123.5	142.0	169.6	209.4	258.0	308.3	356.5	399.3	435.4
122.5°	107.1	116.6	129.2	146.3	171.5	207.5	251.5	297.8	341.3	381.0	414.5
125°	115.2	124.9	137.4	153.1	174.5	204.8	243.1	283.7	322.7	356.9	385.5
127.5°	122.8	132.5	144.5	158.6	177.9	203.6	235.6	271.5	306.1	337.0	363.0
130°	127.4	137.0	148.9	162.4	180.3	202.7	231.6	263.7	295.9	324.8	349.0
132.5°	131.7	141.1	152.5	165.8	182.0	202.4	227.9	256.6	286.1	313.1	336.2
135°	137.4	147.0	158.0	170.3	184.5	202.0	223.1	246.9	272.3	295.5	315.8
137.5°	142.4	151.3	162.0	173.5	186.2	201.2	218.8	238.1	258.9	278.9	296.6
140°	145.2	154.2	164.5	175.2	187.3	201.0	216.2	233.1	251.3	268.3	283.7
142.5°	148.1	156.4	166.5	176.9	188.2	200.4	214.0	228.2	243.8	258.6	272.0
145°	151.7	159.9	169.2	178.7	188.7	199.4	210.9	222.4	234.1	245.5	255.9
147.5°	155.8	162.8	171.3	180.0	188.7	198.1	207.9	217.5	226.9	236.1	243.5
150°	158.0	164.5	172.7	180.3	188.7	197.0	205.9	214.1	222.4	229.8	236.6
152.5°	160.4	166.5	173.6	180.8	187.9	195.6	203.6	211.0	218.0	224.7	230.4
155°	164.2	169.2	175.2	181.0	187.0	193.1	200.2	206.3	212.0	217.3	221.6
157.5°	167.4	171.3	176.1	181.3	185.8	190.9	196.3	201.3	206.0	210.2	213.6
160°	169.2	172.7	177.0	181.3	185.2	189.1	193.8	198.4	202.4	205.9	208.4
162.5°	170.6	173.6	177.3	181.0	184.1	187.4	191.2	195.0	198.3	201.7	203.9
165°	172.4	174.9	177.7	180.3	182.4	184.9	187.7	190.6	192.7	195.2	197.0
167.5°	174.0	175.6	177.6	179.7	180.7	182.3	184.4	186.7	188.3	189.8	191.1
170°	174.9	175.6	177.3	178.7	179.6	180.6	182.4	184.1	185.2	186.6	187.3
172.5°	175.4	175.8	177.3	178.5	178.6	179.2	180.4	181.9	182.7	183.8	184.2
175°	175.9	176.3	177.0	177.7	177.3	177.3	178.0	178.7	179.2	179.9	179.9
177.5°	176.3	176.3	176.6	177.1	176.6	176.3	176.6	176.8	177.1	177.4	177.4
180°	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3



TEST NUMBER: P332362-840

CATALOG NUMBER: S123RDIP-S1165D365U840-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1766.6	1765.8	1766.6	1763.9	1766.6	1765.8	1766.6	1774.1	1774.1	1774.7	1775.4
5°	1643.8	1643.1	1640.6	1633.5	1640.6	1643.1	1643.8	1646.2	1652.5	1663.7	1660.4
7.5°	1536.6	1535.5	1528.5	1528.7	1528.5	1535.5	1536.6	1542.9	1549.9	1556.8	1564.9
10°	1473.2	1473.9	1464.4	1458.9	1464.4	1473.9	1473.2	1478.7	1489.0	1494.6	1500.2
12.5°	1411.6	1408.0	1400.3	1394.1	1400.3	1408.0	1411.6	1415.8	1430.0	1436.1	1446.8
15°	1330.3	1322.3	1303.3	1304.8	1303.3	1322.3	1330.3	1327.1	1341.4	1349.3	1352.5
17.5°	1234.6	1228.7	1228.4	1217.3	1228.4	1228.7	1234.6	1240.9	1253.2	1261.8	1284.5
20°	1178.7	1174.7	1176.3	1165.2	1176.3	1174.7	1178.7	1191.3	1199.3	1210.4	1228.7
22.5°	1134.9	1130.8	1124.2	1120.7	1124.2	1130.8	1134.9	1143.8	1152.4	1167.9	1177.9
25°	1070.8	1064.4	1058.0	1062.0	1058.0	1064.4	1070.8	1075.5	1091.4	1098.5	1112.8
27.5°	1006.6	1001.9	995.5	994.7	995.5	1001.9	1006.6	1011.2	1020.0	1032.0	1049.1
30°	965.9	961.2	958.1	954.0	958.1	961.2	965.9	970.0	978.7	991.4	1004.1
32.5°	924.7	923.7	918.1	917.3	918.1	923.7	924.7	931.2	939.9	952.0	962.8
35°	870.7	866.0	864.3	865.2	864.3	866.0	870.7	873.9	881.8	892.9	903.2
37.5°	819.4	813.0	810.2	807.4	810.2	813.0	819.4	819.9	828.0	835.5	849.4
40°	782.6	776.3	774.7	773.1	774.7	776.3	782.6	781.8	790.5	796.1	808.8
42.5°	741.3	738.8	737.8	735.0	737.8	738.8	741.3	745.6	750.5	758.6	768.2
45°	685.0	684.2	679.4	681.1	679.4	684.2	685.0	687.3	696.1	701.7	710.3
47.5°	625.6	622.1	618.7	621.0	618.7	622.1	625.6	628.7	634.7	641.5	653.1
50°	585.0	583.4	576.2	577.8	576.2	583.4	585.0	588.1	592.1	600.9	611.2
52.5°	544.3	538.3	535.6	534.6	535.6	538.3	544.3	547.5	552.1	562.1	569.9
55°	477.1	469.9	466.7	465.1	466.7	469.9	477.1	482.6	489.0	500.1	508.0
57.5°	411.0	409.1	406.6	408.3	406.6	409.1	411.0	420.2	426.4	435.2	444.8
60°	372.2	372.2	372.2	371.4	372.2	372.2	372.2	380.2	385.8	394.5	404.8
62.5°	342.4	340.5	339.9	341.0	339.9	340.5	342.4	345.9	351.4	357.0	366.1
65°	296.9	296.1	292.9	292.1	292.9	296.1	296.9	299.2	304.0	308.0	314.3
67.5°	253.9	251.0	250.0	248.9	250.0	251.0	253.9	255.9	259.0	264.2	267.3
70°	221.5	219.8	215.1	215.9	215.1	219.8	221.5	225.4	228.6	234.9	238.1
72.5°	186.5	184.9	184.0	182.9	184.0	184.9	186.5	190.5	193.7	200.7	205.7
75°	147.6	146.8	146.0	149.3	146.0	146.8	147.6	148.5	149.3	151.6	154.0
77.5°	118.3	118.3	118.8	117.4	118.8	118.3	118.3	118.3	118.3	119.6	120.0
80°	99.2	99.2	98.5	98.5	98.5	99.2	99.2	99.2	99.2	99.2	98.5
82.5°	79.6	80.2	80.7	79.4	80.7	80.2	79.6	80.8	81.4	80.2	80.7
85°	52.4	51.6	53.2	52.4	53.2	51.6	52.4	52.4	50.8	52.4	51.6
87.5°	25.4	24.3	24.3	24.9	24.3	24.3	25.4	24.3	24.1	24.0	23.3
90°	10.0	10.3	10.7	10.3	10.7	10.3	10.0	10.3	9.6	9.3	8.9
92.5°	18.6	17.5	17.9	17.2	17.9	17.5	18.6	19.2	21.0	23.8	30.1
95°	48.6	45.3	42.8	41.4	42.8	45.3	48.6	55.3	68.2	87.1	128.5
97.5°	141.5	125.4	115.7	112.7	115.7	125.4	141.5	167.8	210.5	256.5	320.2
100°	263.4	237.3	223.4	223.8	223.4	237.3	263.4	299.4	350.1	391.8	420.7
102.5°	368.7	348.1	336.5	328.2	336.5	348.1	368.7	396.8	428.9	453.2	454.1
105°	480.7	467.2	455.8	453.9	455.8	467.2	480.7	497.2	506.3	499.6	463.9
107.5°	538.1	533.4	529.6	526.3	529.6	533.4	538.1	537.8	525.0	493.7	435.8
110°	554.6	557.4	556.7	556.0	556.7	557.4	554.6	544.6	519.6	474.6	409.0



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CATALOG NUMBER: S123RDIP-S1165D365U840-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	550.3	559.2	561.9	562.0	561.9	559.2	550.3	532.0	499.9	449.5	382.4
115°	527.5	543.1	550.3	552.1	550.3	543.1	527.5	500.7	461.8	409.3	347.2
117.5°	489.9	507.9	518.1	520.5	518.1	507.9	489.9	461.9	422.4	375.4	321.7
120°	463.5	483.5	492.1	494.2	492.1	483.5	463.5	435.4	399.3	356.5	308.3
122.5°	439.6	457.6	467.0	469.7	467.0	457.6	439.6	414.5	381.0	341.3	297.8
125°	408.3	423.9	432.9	435.4	432.9	423.9	408.3	385.5	356.9	322.7	283.7
127.5°	383.3	396.8	404.9	407.1	404.9	396.8	383.3	363.0	337.0	306.1	271.5
130°	367.9	380.8	388.3	391.1	388.3	380.8	367.9	349.0	324.8	295.9	263.7
132.5°	354.0	366.8	373.4	375.5	373.4	366.8	354.0	336.2	313.1	286.1	256.6
135°	333.4	344.1	350.4	352.9	350.4	344.1	333.4	315.8	295.5	272.3	246.9
137.5°	311.2	322.1	327.5	329.2	327.5	322.1	311.2	296.6	278.9	258.9	238.1
140°	297.3	307.3	313.0	312.7	313.0	307.3	297.3	283.7	268.3	251.3	233.1
142.5°	283.6	292.5	297.5	297.2	297.5	292.5	283.6	272.0	258.6	243.8	228.2
145°	264.8	272.3	275.2	275.9	275.2	272.3	264.8	255.9	245.5	234.1	222.4
147.5°	250.2	255.3	258.0	258.3	258.0	255.3	250.2	243.5	236.1	226.9	217.5
150°	242.0	245.9	248.0	248.0	248.0	245.9	242.0	236.6	229.8	222.4	214.1
152.5°	234.5	238.1	239.4	239.4	239.4	238.1	234.5	230.4	224.7	218.0	211.0
155°	224.8	227.7	228.4	228.7	228.4	227.7	224.8	221.6	217.3	212.0	206.3
157.5°	216.3	218.4	219.0	218.9	219.0	218.4	216.3	213.6	210.2	206.0	201.3
160°	210.9	213.1	213.1	212.7	213.1	213.1	210.9	208.4	205.9	202.4	198.4
162.5°	205.5	207.3	207.3	207.0	207.3	207.3	205.5	203.9	201.7	198.3	195.0
165°	198.4	199.9	199.4	199.4	199.4	199.9	198.4	197.0	195.2	192.7	190.6
167.5°	191.7	192.7	192.4	192.4	192.4	192.7	191.7	191.1	189.8	188.3	186.7
170°	187.7	188.4	188.0	188.0	188.0	188.4	187.7	187.3	186.6	185.2	184.1
172.5°	184.3	185.0	184.4	184.1	184.4	185.0	184.3	184.2	183.8	182.7	181.9
175°	179.9	180.3	179.9	179.6	179.9	180.3	179.9	179.9	179.9	179.2	178.7
177.5°	177.1	177.4	176.8	176.8	176.8	177.4	177.1	177.4	177.4	177.1	176.8
180°	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3



TEST NUMBER: P332362-840

CATALOG NUMBER: S123RDIP-S1165D365U840-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1769.7	1778.6	1787.5	1795.7	1808.5	1814.1	1822.4	1825.5	1835.1	1849.1	1860.5
5°	1662.0	1674.8	1691.4	1705.0	1726.4	1743.0	1761.3	1778.8	1799.4	1828.8	1854.9
7.5°	1570.7	1583.4	1603.4	1628.4	1652.0	1675.7	1700.6	1724.4	1753.9	1796.0	1837.8
10°	1510.5	1525.5	1549.3	1576.3	1605.7	1628.7	1658.1	1688.3	1724.7	1773.2	1823.2
12.5°	1458.3	1469.7	1497.3	1523.0	1556.2	1585.6	1614.3	1649.5	1691.1	1742.7	1802.8
15°	1375.5	1391.4	1418.4	1446.9	1481.9	1512.9	1550.1	1593.0	1633.5	1697.0	1770.0
17.5°	1292.3	1316.5	1344.5	1376.7	1402.7	1445.3	1485.8	1529.8	1579.6	1647.0	1727.2
20°	1239.0	1258.1	1284.2	1331.1	1365.2	1397.8	1435.0	1489.9	1535.8	1612.0	1695.4
22.5°	1194.0	1207.9	1237.3	1275.9	1315.7	1353.3	1391.2	1443.5	1500.3	1572.7	1663.0
25°	1127.1	1149.3	1171.5	1199.3	1242.1	1287.4	1328.7	1373.1	1433.5	1510.5	1608.1
27.5°	1061.9	1082.0	1103.9	1138.0	1170.5	1212.8	1256.0	1307.0	1371.7	1453.2	1552.2
30°	1020.0	1035.0	1055.6	1099.3	1128.6	1165.2	1216.0	1261.2	1321.5	1408.1	1512.9
32.5°	976.7	996.2	1018.9	1052.3	1088.6	1123.3	1169.6	1218.7	1280.3	1365.5	1472.8
35°	915.1	938.2	961.2	985.8	1022.3	1058.0	1096.9	1150.9	1213.6	1296.2	1401.7
37.5°	858.5	877.1	895.8	926.2	960.9	994.8	1031.2	1084.4	1143.5	1232.5	1329.3
40°	822.3	839.0	853.2	885.0	918.4	954.8	990.6	1037.4	1100.9	1184.3	1277.9
42.5°	782.9	798.3	817.7	843.7	879.6	910.4	946.1	990.4	1050.1	1134.7	1216.9
45°	723.9	741.3	758.0	782.6	818.3	848.5	880.2	922.3	983.4	1053.3	1126.3
47.5°	662.5	679.9	698.9	722.8	753.9	784.6	816.3	853.5	909.3	977.9	1027.0
50°	623.1	637.3	656.4	680.2	708.8	741.3	769.9	810.4	863.5	917.6	960.4
52.5°	582.4	595.4	617.0	642.1	668.8	696.9	727.4	762.1	810.2	861.0	895.0
55°	519.1	534.9	553.2	577.8	604.0	627.8	657.2	693.0	731.0	769.1	792.1
57.5°	459.9	473.0	488.5	513.8	536.5	565.0	591.3	619.1	654.4	683.1	698.1
60°	416.7	428.6	448.5	470.7	492.1	516.7	546.8	574.6	601.7	624.7	636.5
62.5°	376.1	389.9	407.2	427.5	450.8	474.1	500.5	523.8	547.6	567.5	575.6
65°	323.1	334.2	346.9	365.9	385.0	408.8	429.4	453.2	470.7	481.8	489.0
67.5°	274.8	282.1	291.8	304.5	323.2	344.0	364.0	382.5	397.2	404.8	411.1
70°	243.7	248.4	255.6	268.3	282.6	300.8	321.4	335.0	347.7	354.0	360.3
72.5°	212.6	218.6	225.1	235.3	247.0	260.1	275.1	291.8	298.7	306.4	310.2
75°	161.2	169.9	178.5	184.9	192.9	203.2	216.7	227.0	231.0	237.3	238.1
77.5°	121.6	123.5	129.9	137.7	144.4	151.9	160.5	169.7	171.6	174.9	177.0
80°	100.0	100.0	100.0	104.7	112.7	118.3	126.2	131.0	134.1	134.9	135.7
82.5°	80.3	80.3	79.7	80.7	83.5	86.5	93.8	99.2	101.8	101.3	99.6
85°	52.4	50.8	50.8	50.0	50.8	49.2	48.4	51.6	56.4	56.4	54.7
87.5°	23.3	22.7	23.1	22.3	21.5	20.6	18.6	19.1	18.9	21.2	20.5
90°	8.6	8.9	7.9	6.8	5.8	4.6	3.9	3.2	2.1	1.4	0.7
92.5°	41.4	54.8	60.4	45.3	30.0	20.6	15.3	12.3	9.6	6.6	4.4
95°	171.7	211.7	188.4	129.9	76.7	46.4	32.5	23.2	17.2	13.2	12.1
97.5°	350.8	328.0	240.1	142.5	82.6	53.6	38.6	29.4	24.1	21.0	20.7
100°	408.3	338.0	228.4	134.5	81.7	56.8	42.8	34.2	29.3	26.8	26.5
102.5°	411.1	319.4	211.3	127.6	82.9	60.5	47.7	40.0	35.2	33.0	32.4
105°	389.3	286.9	190.3	122.8	86.0	66.8	55.6	48.9	44.6	42.5	41.4
107.5°	351.2	258.2	176.8	122.4	91.9	74.9	64.6	58.3	54.1	52.0	51.0
110°	327.3	242.0	171.7	123.8	96.7	80.7	70.7	64.6	60.7	58.9	57.8



TEST NUMBER: P332362-840

CATALOG NUMBER: S123RDIP-S1165D365U840-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	306.4	231.1	168.7	126.7	101.6	86.6	77.0	70.9	67.0	65.1	64.1
115°	281.2	219.4	167.7	131.3	109.6	96.0	86.3	80.3	76.7	74.6	73.1
117.5°	266.0	212.6	168.3	137.4	118.1	104.6	95.7	89.0	85.6	83.8	82.2
120°	258.0	209.4	169.6	142.0	123.5	110.6	101.7	94.9	91.4	89.6	88.5
122.5°	251.5	207.5	171.5	146.3	129.2	116.6	107.1	100.7	96.7	95.0	93.9
125°	243.1	204.8	174.5	153.1	137.4	124.9	115.2	108.5	104.5	102.4	101.7
127.5°	235.6	203.6	177.9	158.6	144.5	132.5	122.8	115.3	111.4	108.7	107.7
130°	231.6	202.7	180.3	162.4	148.9	137.0	127.4	119.9	115.6	112.4	111.4
132.5°	227.9	202.4	182.0	165.8	152.5	141.1	131.7	124.2	119.1	115.5	114.2
135°	223.1	202.0	184.5	170.3	158.0	147.0	137.4	129.9	124.5	120.6	119.2
137.5°	218.8	201.2	186.2	173.5	162.0	151.3	142.4	134.9	129.3	125.4	123.9
140°	216.2	201.0	187.3	175.2	164.5	154.2	145.2	138.1	132.4	128.9	127.0
142.5°	214.0	200.4	188.2	176.9	166.5	156.4	148.1	141.0	135.8	132.0	130.5
145°	210.9	199.4	188.7	178.7	169.2	159.9	151.7	145.6	140.3	137.0	135.9
147.5°	207.9	198.1	188.7	180.0	171.3	162.8	155.8	150.0	145.3	142.2	141.6
150°	205.9	197.0	188.7	180.3	172.7	164.5	158.0	153.1	148.5	145.6	145.2
152.5°	203.6	195.6	187.9	180.8	173.6	166.5	160.4	155.9	151.9	149.1	149.0
155°	200.2	193.1	187.0	181.0	175.2	169.2	164.2	160.3	156.6	154.5	154.5
157.5°	196.3	190.9	185.8	181.3	176.1	171.3	167.4	164.1	161.0	159.3	159.0
160°	193.8	189.1	185.2	181.3	177.0	172.7	169.2	166.6	163.8	162.4	162.4
162.5°	191.2	187.4	184.1	181.0	177.3	173.6	170.6	168.3	166.1	164.9	164.9
165°	187.7	184.9	182.4	180.3	177.7	174.9	172.4	171.0	169.2	168.4	168.7
167.5°	184.4	182.3	180.7	179.7	177.6	175.6	174.0	173.0	171.7	171.3	171.7
170°	182.4	180.6	179.6	178.7	177.3	175.6	174.9	174.1	173.1	172.7	173.4
172.5°	180.4	179.2	178.6	178.5	177.3	175.8	175.4	175.0	174.2	174.1	174.6
175°	178.0	177.3	177.3	177.7	177.0	176.3	175.9	175.9	175.2	175.6	175.9
177.5°	176.6	176.3	176.6	177.1	176.6	176.3	176.3	176.3	176.0	176.3	176.6
180°	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3



TEST NUMBER: P332362-840

CATALOG NUMBER: S123RDIP-S1165D365U840-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1864.3	1871.3	1880.2	1893.5	1903.7	1912.6	1914.5	1917.0	1923.4	1934.1	1942.4
5°	1876.3	1894.6	1924.0	1952.6	1983.5	2008.9	2032.8	2049.4	2065.3	2098.6	2125.6
7.5°	1872.6	1913.2	1959.2	2010.5	2062.4	2112.7	2159.4	2201.1	2242.7	2291.3	2346.7
10°	1870.0	1917.6	1979.5	2045.4	2117.7	2188.3	2256.5	2309.8	2371.7	2427.2	2497.8
12.5°	1857.9	1926.5	2000.5	2084.8	2173.5	2254.9	2344.8	2418.3	2489.1	2569.4	2651.5
15°	1842.2	1925.6	2019.2	2131.1	2266.0	2364.5	2456.6	2584.3	2671.7	2759.0	2876.5
17.5°	1813.5	1915.2	2032.3	2177.7	2290.2	2422.5	2561.0	2662.0	2779.7	2902.7	3009.0
20°	1790.6	1908.9	2039.8	2182.7	2326.4	2470.0	2604.2	2724.8	2846.3	2988.4	3075.6
22.5°	1767.8	1884.8	2020.8	2172.6	2327.0	2478.3	2630.2	2771.9	2908.5	3051.9	3163.3
25°	1719.2	1858.2	2005.7	2160.5	2312.9	2479.6	2660.6	2818.5	2987.6	3135.2	3240.8
27.5°	1670.0	1797.3	1944.3	2101.3	2270.7	2467.7	2680.6	2860.1	3029.5	3135.2	3168.4
30°	1625.6	1760.5	1895.4	2055.0	2238.3	2458.1	2684.3	2889.9	3028.9	3074.8	3040.7
32.5°	1580.4	1702.7	1836.3	1999.7	2194.4	2434.7	2689.5	2872.2	2955.8	2920.6	2781.7
35°	1501.0	1611.2	1740.6	1904.1	2128.0	2421.7	2668.5	2792.3	2771.7	2573.2	2311.3
37.5°	1415.8	1505.7	1625.6	1796.5	2059.1	2370.1	2578.3	2596.6	2418.0	2113.3	1810.8
40°	1348.6	1429.5	1552.6	1731.1	2005.7	2319.3	2487.5	2413.7	2136.7	1797.8	1545.4
42.5°	1283.1	1351.4	1470.0	1662.5	1954.9	2250.1	2352.3	2191.5	1871.9	1551.5	1321.9
45°	1172.4	1236.6	1355.6	1553.3	1851.0	2117.7	2104.2	1824.7	1504.9	1247.0	1056.4
47.5°	1067.2	1123.5	1235.2	1436.9	1728.9	1919.2	1793.0	1495.7	1224.4	1017.4	881.5
50°	992.9	1048.5	1159.6	1358.9	1631.1	1770.0	1589.8	1303.3	1054.9	883.4	775.5
52.5°	921.8	976.1	1077.7	1271.8	1513.0	1596.0	1402.5	1136.9	929.8	781.8	689.1
55°	822.3	863.5	954.8	1140.5	1320.8	1339.8	1143.8	921.5	750.8	647.7	584.2
57.5°	720.8	756.4	846.6	994.5	1120.8	1111.1	925.1	733.0	618.0	541.3	495.2
60°	654.8	689.7	769.1	896.2	991.4	958.1	787.4	632.6	534.2	477.9	441.3
62.5°	593.2	620.6	694.8	787.5	856.1	818.3	673.1	544.9	466.9	419.4	390.5
65°	504.0	526.2	585.7	634.2	672.3	635.8	515.1	426.3	369.9	336.6	316.7
67.5°	419.2	433.3	471.0	488.5	515.3	475.2	387.4	327.8	295.8	267.6	253.9
70°	365.9	376.2	396.1	410.3	417.5	376.2	311.1	267.5	240.4	220.7	212.0
72.5°	312.6	321.6	325.6	337.3	333.7	295.0	250.1	215.4	196.0	182.6	171.3
75°	238.9	242.9	238.9	234.2	223.8	196.8	165.9	148.5	134.1	127.7	123.8
77.5°	174.1	172.9	167.4	160.1	142.4	125.4	108.8	102.9	96.6	93.3	91.9
80°	134.1	131.0	126.2	114.3	99.2	87.4	83.3	79.4	77.0	73.0	72.2
82.5°	99.9	98.0	90.0	80.0	69.4	63.8	60.5	59.1	56.7	54.6	54.4
85°	53.2	50.8	42.1	36.6	34.9	33.3	32.5	32.5	29.4	28.6	28.6
87.5°	17.5	13.7	13.3	11.6	11.7	10.7	11.5	10.5	10.0	10.6	9.4
90°	1.4	2.1	3.2	3.9	4.6	5.8	6.8	7.9	8.9	8.6	8.9
92.5°	6.6	9.6	12.3	15.3	20.6	30.0	45.3	60.4	54.8	41.4	30.1
95°	13.2	17.2	23.2	32.5	46.4	76.7	129.9	188.4	211.7	171.7	128.5
97.5°	21.0	24.1	29.4	38.6	53.6	82.6	142.5	240.1	328.0	350.8	320.2
100°	26.8	29.3	34.2	42.8	56.8	81.7	134.5	228.4	338.0	408.3	420.7
102.5°	33.0	35.2	40.0	47.7	60.5	82.9	127.6	211.3	319.4	411.1	454.1
105°	42.5	44.6	48.9	55.6	66.8	86.0	122.8	190.3	286.9	389.3	463.9
107.5°	52.0	54.1	58.3	64.6	74.9	91.9	122.4	176.8	258.2	351.2	435.8
110°	58.9	60.7	64.6	70.7	80.7	96.7	123.8	171.7	242.0	327.3	409.0





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	65.1	67.0	70.9	77.0	86.6	101.6	126.7	168.7	231.1	306.4	382.4
115°	74.6	76.7	80.3	86.3	96.0	109.6	131.3	167.7	219.4	281.2	347.2
117.5°	83.8	85.6	89.0	95.7	104.6	118.1	137.4	168.3	212.6	266.0	321.7
120°	89.6	91.4	94.9	101.7	110.6	123.5	142.0	169.6	209.4	258.0	308.3
122.5°	95.0	96.7	100.7	107.1	116.6	129.2	146.3	171.5	207.5	251.5	297.8
125°	102.4	104.5	108.5	115.2	124.9	137.4	153.1	174.5	204.8	243.1	283.7
127.5°	108.7	111.4	115.3	122.8	132.5	144.5	158.6	177.9	203.6	235.6	271.5
130°	112.4	115.6	119.9	127.4	137.0	148.9	162.4	180.3	202.7	231.6	263.7
132.5°	115.5	119.1	124.2	131.7	141.1	152.5	165.8	182.0	202.4	227.9	256.6
135°	120.6	124.5	129.9	137.4	147.0	158.0	170.3	184.5	202.0	223.1	246.9
137.5°	125.4	129.3	134.9	142.4	151.3	162.0	173.5	186.2	201.2	218.8	238.1
140°	128.9	132.4	138.1	145.2	154.2	164.5	175.2	187.3	201.0	216.2	233.1
142.5°	132.0	135.8	141.0	148.1	156.4	166.5	176.9	188.2	200.4	214.0	228.2
145°	137.0	140.3	145.6	151.7	159.9	169.2	178.7	188.7	199.4	210.9	222.4
147.5°	142.2	145.3	150.0	155.8	162.8	171.3	180.0	188.7	198.1	207.9	217.5
150°	145.6	148.5	153.1	158.0	164.5	172.7	180.3	188.7	197.0	205.9	214.1
152.5°	149.1	151.9	155.9	160.4	166.5	173.6	180.8	187.9	195.6	203.6	211.0
155°	154.5	156.6	160.3	164.2	169.2	175.2	181.0	187.0	193.1	200.2	206.3
157.5°	159.3	161.0	164.1	167.4	171.3	176.1	181.3	185.8	190.9	196.3	201.3
160°	162.4	163.8	166.6	169.2	172.7	177.0	181.3	185.2	189.1	193.8	198.4
162.5°	164.9	166.1	168.3	170.6	173.6	177.3	181.0	184.1	187.4	191.2	195.0
165°	168.4	169.2	171.0	172.4	174.9	177.7	180.3	182.4	184.9	187.7	190.6
167.5°	171.3	171.7	173.0	174.0	175.6	177.6	179.7	180.7	182.3	184.4	186.7
170°	172.7	173.1	174.1	174.9	175.6	177.3	178.7	179.6	180.6	182.4	184.1
172.5°	174.1	174.2	175.0	175.4	175.8	177.3	178.5	178.6	179.2	180.4	181.9
175°	175.6	175.2	175.9	175.9	176.3	177.0	177.7	177.3	177.3	178.0	178.7
177.5°	176.3	176.0	176.3	176.3	176.3	176.6	177.1	176.6	176.3	176.6	176.8
180°	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3	176.3



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1955.7	1955.7	1958.2	1967.8	1969.0	1977.3	1974.8
5°	2149.4	2164.4	2170.0	2193.8	2208.2	2214.5	2201.8
7.5°	2386.2	2428.8	2448.9	2473.9	2496.0	2502.6	2485.3
10°	2559.0	2603.4	2640.7	2663.7	2685.1	2699.5	2717.7
12.5°	2725.9	2780.6	2816.0	2848.5	2870.5	2888.7	2891.6
15°	2907.4	2989.9	3052.6	3098.7	3121.7	3133.6	3128.9
17.5°	3090.4	3166.9	3211.6	3258.5	3290.4	3292.1	3293.0
20°	3193.9	3268.5	3320.1	3355.1	3390.8	3389.2	3397.1
22.5°	3263.2	3321.8	3361.4	3386.8	3399.0	3393.0	3394.6
25°	3295.5	3313.0	3305.9	3265.4	3255.1	3217.7	3224.1
27.5°	3128.6	3046.0	2960.6	2850.7	2764.1	2694.8	2698.4
30°	2901.8	2755.8	2589.1	2449.4	2324.0	2289.1	2214.5
32.5°	2585.0	2365.9	2170.7	2040.5	1932.9	1903.7	1838.6
35°	2047.8	1835.1	1634.3	1513.6	1466.0	1399.4	1398.6
37.5°	1591.7	1404.4	1298.2	1207.7	1160.2	1119.9	1116.0
40°	1339.0	1193.0	1112.8	1047.7	1000.9	970.7	963.6
42.5°	1162.5	1044.4	969.3	929.0	892.9	877.4	865.8
45°	949.3	869.9	817.5	781.0	764.4	752.5	746.1
47.5°	794.1	740.8	705.2	680.9	667.3	654.8	658.1
50°	709.6	665.9	639.7	616.7	606.4	597.6	598.4
52.5°	641.7	602.5	581.3	564.6	551.8	545.6	542.6
55°	544.5	519.9	498.5	486.6	479.4	470.7	468.3
57.5°	464.4	445.5	428.0	414.4	412.7	404.3	405.5
60°	411.1	395.3	381.0	373.9	368.3	361.1	363.6
62.5°	367.3	354.0	341.0	335.1	329.5	324.3	325.4
65°	300.8	288.1	280.1	277.0	274.6	272.3	269.8
67.5°	239.7	232.0	227.0	220.2	215.3	214.5	212.1
70°	201.6	191.3	182.6	173.8	171.5	170.7	171.5
72.5°	161.6	155.1	152.7	148.5	147.9	145.9	147.3
75°	121.5	119.1	117.4	114.3	114.3	114.3	114.3
77.5°	89.6	88.1	87.2	86.5	85.7	84.6	84.4
80°	69.9	69.1	67.5	67.5	66.7	67.5	66.7
82.5°	52.7	52.5	51.0	51.0	50.2	49.7	50.2
85°	27.0	26.2	27.8	26.2	27.0	25.4	27.0
87.5°	9.5	9.6	9.1	9.0	8.4	9.8	8.4
90°	9.3	9.6	10.3	10.0	10.3	10.7	10.3
92.5°	23.8	21.0	19.2	18.6	17.5	17.9	17.2
95°	87.1	68.2	55.3	48.6	45.3	42.8	41.4
97.5°	256.5	210.5	167.8	141.5	125.4	115.7	112.7
100°	391.8	350.1	299.4	263.4	237.3	223.4	223.8
102.5°	453.2	428.9	396.8	368.7	348.1	336.5	328.2
105°	499.6	506.3	497.2	480.7	467.2	455.8	453.9
107.5°	493.7	525.0	537.8	538.1	533.4	529.6	526.3
110°	474.6	519.6	544.6	554.6	557.4	556.7	556.0



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	449.5	499.9	532.0	550.3	559.2	561.9	562.0
115°	409.3	461.8	500.7	527.5	543.1	550.3	552.1
117.5°	375.4	422.4	461.9	489.9	507.9	518.1	520.5
120°	356.5	399.3	435.4	463.5	483.5	492.1	494.2
122.5°	341.3	381.0	414.5	439.6	457.6	467.0	469.7
125°	322.7	356.9	385.5	408.3	423.9	432.9	435.4
127.5°	306.1	337.0	363.0	383.3	396.8	404.9	407.1
130°	295.9	324.8	349.0	367.9	380.8	388.3	391.1
132.5°	286.1	313.1	336.2	354.0	366.8	373.4	375.5
135°	272.3	295.5	315.8	333.4	344.1	350.4	352.9
137.5°	258.9	278.9	296.6	311.2	322.1	327.5	329.2
140°	251.3	268.3	283.7	297.3	307.3	313.0	312.7
142.5°	243.8	258.6	272.0	283.6	292.5	297.5	297.2
145°	234.1	245.5	255.9	264.8	272.3	275.2	275.9
147.5°	226.9	236.1	243.5	250.2	255.3	258.0	258.3
150°	222.4	229.8	236.6	242.0	245.9	248.0	248.0
152.5°	218.0	224.7	230.4	234.5	238.1	239.4	239.4
155°	212.0	217.3	221.6	224.8	227.7	228.4	228.7
157.5°	206.0	210.2	213.6	216.3	218.4	219.0	218.9
160°	202.4	205.9	208.4	210.9	213.1	213.1	212.7
162.5°	198.3	201.7	203.9	205.5	207.3	207.3	207.0
165°	192.7	195.2	197.0	198.4	199.9	199.4	199.4
167.5°	188.3	189.8	191.1	191.7	192.7	192.4	192.4
170°	185.2	186.6	187.3	187.7	188.4	188.0	188.0
172.5°	182.7	183.8	184.2	184.3	185.0	184.4	184.1
175°	179.2	179.9	179.9	179.9	180.3	179.9	179.6
177.5°	177.1	177.4	177.4	177.1	177.4	176.8	176.8
180°	176.3	176.3	176.3	176.3	176.3	176.3	176.3

(END OF REPORT)