

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: P332047-840

Luminaire Tested: **S123DIP-S1165D365U840-4F0-1E-UDD-A4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332047-840
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: S123DIP-S1165D365U840-4F0-1E-UDD-A4
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6271.9 lumens
Efficiency: N/A
Efficacy: 125.9 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: Semi-Direct

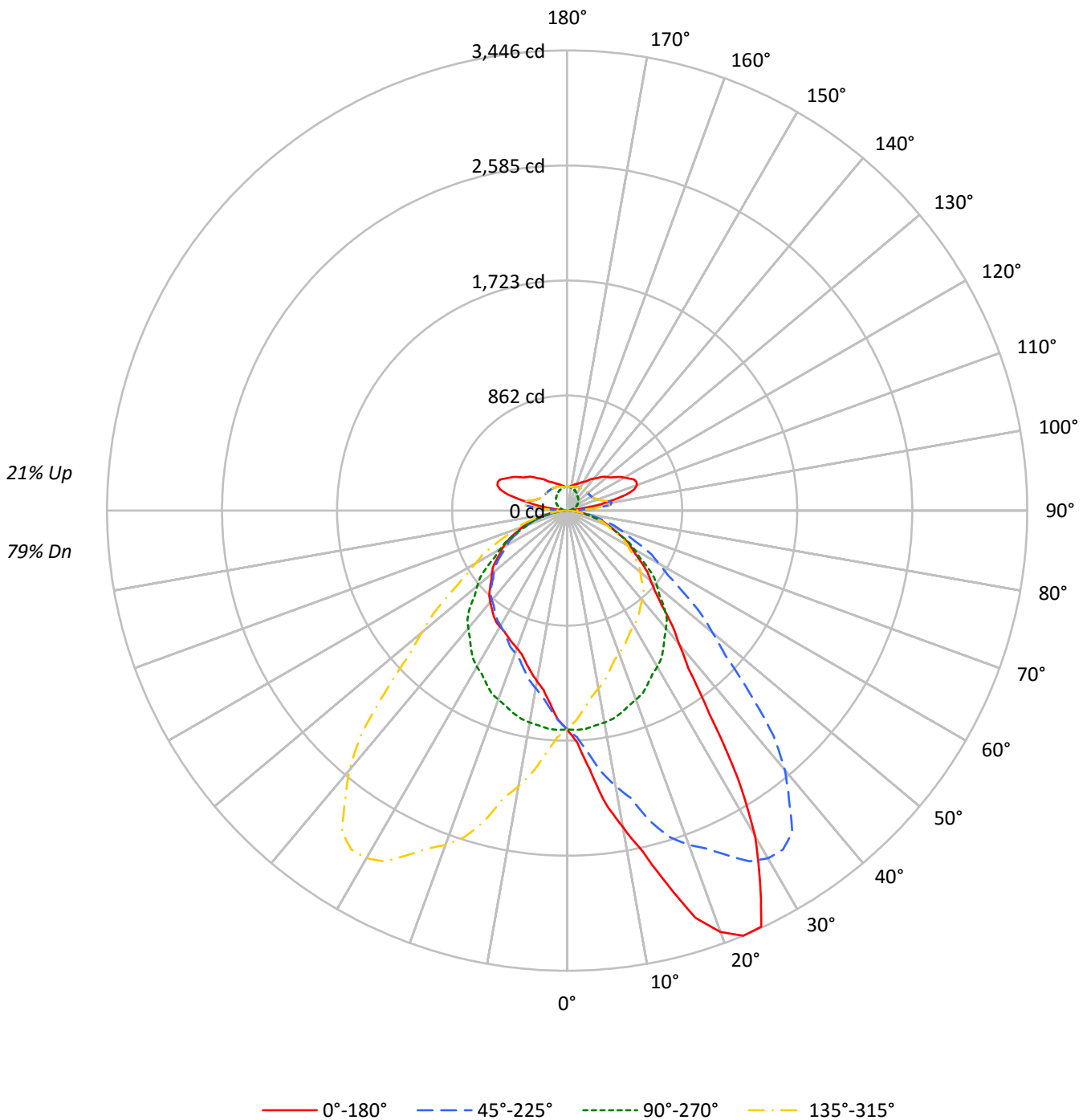
Input Watts (W): 49.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332047-840

CATALOG NUMBER: S123DIP-S1165D365U840-4F0-1E-UDD-A4

Luminous Intensity Polar Plot





TEST NUMBER: P332047-840

CATALOG NUMBER: S123DIP-S1165D365U840-4F0-1E-UDD-A4

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	114	114	114	114	109	109	109	109	99	99	99	91	91	91	83	83	83	79																				
1	105	100	96	93	100	96	93	89	88	85	83	81	79	77	74	72	71	67																				
2	96	88	82	77	91	85	79	74	78	73	69	71	68	65	65	63	60	57																				
3	88	78	70	64	83	75	68	62	69	63	59	63	59	55	58	55	52	49																				
4	80	69	61	55	77	67	59	53	61	55	50	57	52	48	52	48	45	42																				
5	74	62	54	48	71	60	52	46	55	49	44	51	46	42	47	43	39	37																				
6	68	56	48	42	65	54	46	41	50	43	39	46	41	37	43	38	35	32																				
7	63	51	42	37	60	49	41	36	46	39	34	42	37	33	39	35	31	29																				
8	59	46	38	33	56	45	37	32	42	35	31	39	33	29	36	31	28	26																				
9	55	42	35	29	53	41	34	29	38	32	28	36	30	26	33	29	25	23																				
10	52	39	32	27	49	38	31	26	35	29	25	33	28	24	31	26	23	21																				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	17632	17632	17632	17632
5°	21028	17708	15693	17708
10°	26319	17618	14175	17618
15°	32282	17477	13196	17477
20°	38456	17255	12564	17255
25°	40834	16986	12423	16986
30°	34999	16789	12489	16789
35°	24341	16509	12620	16509
40°	18334	16183	12579	16183
45°	15224	15694	12420	15694
50°	13638	14699	12308	14699
55°	12748	13628	12153	13628
60°	11959	12508	12030	12508
65°	11240	11403	11645	11403
70°	10543	10140	11087	10140
75°	9441	8879	10168	8879
80°	8263	7277	8759	7277
85°	6472	5286	5891	5286



TEST NUMBER: P332047-840

CATALOG NUMBER: S123DIP-S1165D365U840-4F0-1E-UDD-A4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.4	2.6
10°-20°	517.4	8.3
20°-30°	868.4	13.8
30°-40°	983.3	15.7
40°-50°	881.8	14.1
50°-60°	711.6	11.3
60°-70°	495.9	7.9
70°-80°	260.6	4.2
80°-90°	65.1	1.0
90°-100°	98.1	1.6
100°-110°	277.8	4.4
110°-120°	273.3	4.4
120°-130°	218.0	3.5
130°-140°	171.9	2.7
140°-150°	128.3	2.0
150°-160°	89.4	1.4
160°-170°	52.5	0.8
170°-180°	17.1	0.3
0°-30°	1547.2	24.7
0°-40°	2530.6	40.3
0°-60°	4124.0	65.8
0°-90°	4945.6	78.9
90°-120°	649.2	10.4
90°-150°	1167.3	18.6
90°-180°	1326.0	21.1
0°-180°	6271.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1638	1638	1638	1638	1638	
5°	1946	1639	1452	1639	1946	202
15°	2897	1568	1184	1568	2897	836
25°	3438	1430	1046	1430	3438	1508
35°	1852	1256	960	1256	1852	1204
45°	1000	1031	816	1031	1000	791
55°	679	726	648	726	679	610
65°	441	448	457	448	441	439
75°	227	214	244	214	227	243
85°	52	43	48	43	52	62
90°	10	1	10	1	10	8
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	



TEST NUMBER: P332047-840

CATALOG NUMBER: S123DIP-S1165D365U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1738.5	1737.2	1734.0	1736.6	1731.5	1724.4	1723.8	1717.5	1699.1	1697.8	1692.7
5°	1946.1	1939.7	1938.9	1938.1	1927.0	1912.0	1883.4	1881.0	1842.9	1823.8	1800.9
7.5°	2214.9	2218.3	2206.8	2196.6	2162.6	2140.2	2109.6	2070.4	2023.6	1976.1	1944.5
10°	2408.0	2434.2	2401.7	2379.4	2358.8	2319.9	2274.7	2218.3	2161.9	2096.1	2046.1
12.5°	2615.0	2627.9	2621.3	2600.4	2568.3	2509.1	2428.9	2366.9	2315.0	2205.3	2161.0
15°	2896.9	2945.4	2914.4	2843.0	2844.5	2788.1	2683.4	2568.3	2507.2	2411.2	2280.3
17.5°	3197.2	3203.3	3190.1	3130.6	3090.9	3013.4	2916.8	2806.4	2682.6	2566.5	2427.5
20°	3357.2	3352.4	3324.7	3293.8	3225.5	3165.2	3059.6	2936.6	2777.8	2663.6	2511.9
22.5°	3446.2	3438.2	3425.1	3399.1	3342.4	3277.5	3182.8	3048.4	2897.2	2739.8	2564.7
25°	3438.2	3448.5	3450.1	3442.9	3423.1	3384.3	3309.6	3202.5	3051.7	2849.3	2666.8
27.5°	3127.0	3141.7	3184.1	3221.7	3263.8	3306.6	3300.8	3247.7	3136.1	2961.3	2738.1
30°	2815.9	2784.2	2862.8	2962.0	3029.5	3148.5	3215.2	3219.1	3156.4	3006.5	2788.9
32.5°	2384.2	2419.1	2453.9	2576.0	2723.4	2857.1	2989.8	3096.7	3108.9	3009.0	2818.8
35°	1852.4	1896.1	1959.5	2023.1	2181.8	2318.3	2551.6	2754.8	2916.8	2938.2	2821.5
37.5°	1492.8	1514.3	1554.5	1618.1	1721.9	1883.9	2064.4	2321.2	2555.8	2730.3	2737.8
40°	1304.8	1311.1	1356.3	1404.8	1488.9	1622.2	1784.9	2012.0	2292.9	2536.6	2638.2
42.5°	1163.9	1177.8	1197.0	1243.5	1310.5	1410.9	1562.2	1749.7	2007.2	2287.6	2486.4
45°	1000.1	1015.9	1027.8	1058.7	1106.4	1173.9	1279.4	1450.9	1646.9	1936.5	2204.0
47.5°	891.8	893.0	901.9	925.2	957.7	1008.2	1082.9	1193.1	1373.0	1608.0	1882.6
50°	814.4	827.0	830.2	848.4	873.8	911.1	973.0	1066.7	1214.4	1420.7	1673.0
52.5°	759.7	763.6	772.4	785.6	807.8	836.9	890.5	963.8	1079.7	1255.6	1487.6
55°	679.3	679.3	688.1	698.4	711.1	737.3	773.1	827.0	915.1	1051.6	1243.6
57.5°	605.1	609.0	615.2	618.4	629.2	646.5	676.4	717.3	783.0	888.1	1040.9
60°	555.5	562.7	561.9	568.3	577.8	591.3	616.7	650.1	708.7	792.8	921.5
62.5°	512.4	511.9	511.8	519.4	528.9	541.8	558.3	587.1	637.0	711.7	821.1
65°	441.3	439.7	445.2	450.0	453.2	462.7	475.4	500.8	534.1	589.7	674.6
67.5°	378.1	373.5	376.5	378.1	383.5	390.9	402.8	418.6	445.0	489.7	553.7
70°	335.0	330.9	330.1	331.7	336.5	342.0	350.8	365.9	390.5	426.2	473.0
72.5°	290.4	287.8	287.6	291.1	293.4	297.0	303.2	317.0	336.5	363.3	407.0
75°	227.0	227.0	227.0	227.8	230.1	233.4	238.1	245.2	260.3	279.3	308.7
77.5°	170.2	170.0	169.1	168.8	172.4	173.8	174.9	181.6	190.0	202.9	224.3
80°	133.3	129.4	131.0	133.3	134.9	135.7	138.1	139.7	146.8	154.0	169.1
82.5°	99.1	95.7	96.0	99.7	100.0	100.8	103.2	105.4	108.1	114.6	122.7
85°	52.4	52.4	53.2	53.2	53.9	53.2	55.5	56.4	56.4	60.3	65.0
87.5°	21.1	19.9	20.5	21.0	20.5	21.0	21.5	22.1	22.6	23.3	23.8
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



TEST NUMBER: P332047-840

CATALOG NUMBER: S123DIP-S1165D365U840-4F0-1E-UDD-A4

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



TEST NUMBER: P332047-840

CATALOG NUMBER: S123DIP-S1165D365U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1688.9	1683.8	1678.8	1669.9	1662.2	1651.4	1648.3	1644.5	1633.1	1623.0	1615.3
5°	1792.1	1773.0	1745.2	1719.9	1699.3	1671.5	1655.6	1638.9	1615.1	1593.7	1576.2
7.5°	1900.1	1862.6	1819.4	1772.7	1729.3	1687.4	1653.6	1623.4	1590.0	1558.4	1533.9
10°	1985.8	1931.8	1871.5	1806.4	1750.8	1696.9	1651.6	1611.9	1569.1	1531.8	1500.9
12.5°	2083.6	2003.6	1920.4	1841.3	1775.6	1700.7	1645.9	1595.5	1546.9	1502.0	1467.2
15°	2199.3	2097.7	1999.2	1890.6	1790.5	1696.9	1631.8	1568.3	1512.0	1465.9	1421.5
17.5°	2304.7	2189.6	2059.9	1927.6	1807.1	1696.0	1604.8	1533.1	1462.6	1406.2	1361.9
20°	2364.4	2233.4	2086.6	1949.2	1815.9	1692.1	1592.2	1506.4	1430.2	1370.7	1320.7
22.5°	2415.8	2262.6	2110.7	1963.9	1815.3	1681.9	1568.6	1480.4	1397.9	1339.6	1286.4
25°	2469.1	2285.8	2133.4	1961.2	1795.3	1657.2	1530.2	1430.2	1347.7	1279.4	1224.7
27.5°	2514.9	2284.2	2103.3	1918.1	1763.8	1625.5	1489.9	1382.6	1294.9	1220.8	1165.3
30°	2545.3	2287.3	2072.2	1889.0	1733.4	1590.5	1458.8	1350.8	1258.8	1183.4	1130.9
32.5°	2564.4	2285.4	2043.7	1848.4	1685.2	1558.7	1425.1	1313.3	1218.8	1144.7	1094.2
35°	2575.5	2271.5	1994.5	1764.3	1607.2	1484.2	1372.3	1256.4	1157.2	1088.1	1031.0
37.5°	2553.2	2242.1	1937.3	1683.3	1511.4	1390.2	1296.1	1197.3	1102.4	1026.4	977.1
40°	2518.3	2223.1	1892.9	1626.3	1445.3	1328.6	1248.5	1151.7	1057.9	985.7	939.7
42.5°	2451.6	2184.3	1844.0	1562.8	1376.7	1260.0	1186.2	1105.3	1016.7	948.9	902.9
45°	2289.0	2100.0	1770.7	1467.5	1275.5	1154.8	1089.7	1031.0	950.8	884.9	845.3
47.5°	2063.3	1973.3	1664.7	1367.1	1169.7	1053.7	986.0	938.8	880.2	827.0	788.9
50°	1906.4	1869.1	1592.9	1298.5	1099.2	985.7	920.7	877.8	835.8	782.5	747.6
52.5°	1725.5	1748.5	1509.1	1227.3	1027.5	915.9	854.6	820.6	782.4	738.7	708.3
55°	1470.7	1554.0	1364.3	1107.9	920.7	814.4	756.4	726.2	704.0	671.5	645.3
57.5°	1232.1	1338.2	1207.8	984.9	815.8	724.0	668.4	635.6	621.3	604.3	583.7
60°	1090.6	1195.3	1096.1	902.4	745.3	657.9	608.7	581.0	566.6	554.8	537.3
62.5°	964.1	1070.2	986.8	818.6	676.0	595.1	552.2	525.1	514.0	507.8	492.9
65°	790.5	881.8	826.2	688.1	577.0	505.5	466.7	447.7	437.3	434.9	425.5
67.5°	643.4	712.9	672.4	570.8	483.3	421.6	388.6	372.4	364.5	363.7	356.5
70°	546.8	611.9	581.0	488.9	413.5	365.1	336.5	322.2	317.5	316.7	312.8
72.5°	471.9	517.4	492.7	415.9	357.6	313.7	292.7	277.8	272.4	273.5	270.8
75°	349.2	383.3	369.1	315.9	269.0	240.4	223.0	213.5	208.7	211.2	207.9
77.5°	251.3	272.9	260.0	223.2	194.3	173.7	160.8	154.9	150.7	150.5	149.1
80°	189.7	202.4	195.2	173.0	149.3	131.8	121.4	117.4	115.1	114.3	113.5
82.5°	135.1	145.9	137.4	122.2	106.0	95.5	89.7	84.4	82.7	83.2	82.4
85°	68.3	72.2	69.1	59.5	53.2	48.4	45.2	42.8	41.3	42.1	40.5
87.5°	24.8	25.2	23.1	20.5	19.1	17.0	16.8	15.3	14.2	14.4	13.9
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



TEST NUMBER: P332047-840

CATALOG NUMBER: S123DIP-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: P332047-840

CATALOG NUMBER: S123DIP-S1165D365U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1610.8	1606.4	1600.0	1590.5	1582.9	1570.8	1570.8	1572.8	1572.8	1572.2	1570.8
5°	1562.0	1550.0	1535.8	1519.1	1501.7	1484.2	1481.0	1474.6	1469.9	1466.7	1462.8
7.5°	1510.4	1489.2	1468.4	1445.1	1423.8	1406.2	1394.0	1383.8	1377.4	1370.4	1365.2
10°	1475.4	1449.3	1424.6	1400.1	1373.0	1351.6	1338.2	1328.6	1321.5	1315.1	1311.9
12.5°	1434.2	1404.2	1377.1	1353.7	1324.1	1302.1	1289.3	1284.8	1276.4	1263.0	1256.1
15°	1373.8	1346.0	1313.5	1277.8	1263.5	1236.6	1221.4	1214.4	1209.5	1199.2	1196.1
17.5°	1322.2	1285.9	1249.4	1222.7	1196.2	1174.3	1165.9	1157.0	1150.6	1142.3	1139.7
20°	1281.0	1248.5	1215.1	1186.6	1158.7	1135.0	1127.8	1121.5	1115.1	1111.2	1107.9
22.5°	1239.1	1206.6	1178.9	1152.3	1122.6	1107.0	1099.2	1092.3	1087.8	1085.1	1082.0
25°	1180.2	1151.7	1120.6	1096.8	1073.1	1062.7	1057.9	1054.0	1050.9	1046.8	1046.0
27.5°	1127.5	1096.4	1071.3	1049.0	1032.0	1023.4	1018.8	1016.8	1017.5	1019.0	1019.9
30°	1088.1	1059.6	1038.9	1019.9	1004.0	996.0	995.2	995.2	998.5	999.3	1000.8
32.5°	1052.0	1028.4	1007.8	989.4	977.3	971.9	974.9	974.9	977.4	979.6	982.4
35°	999.3	978.6	962.7	946.8	936.5	938.9	940.5	942.1	946.0	950.8	954.0
37.5°	948.9	931.0	914.4	902.1	897.4	901.6	905.4	908.8	913.3	917.1	920.2
40°	912.7	899.2	883.3	872.2	873.8	876.3	879.4	883.3	887.4	889.7	892.9
42.5°	879.1	864.9	852.9	843.6	845.9	848.9	850.8	852.9	857.5	861.8	863.6
45°	827.8	816.7	805.6	800.0	801.6	803.2	804.8	807.2	811.1	814.4	815.1
47.5°	770.2	762.4	755.0	749.5	752.0	751.4	753.6	758.6	759.8	761.7	766.2
50°	733.4	726.2	717.5	715.9	715.9	715.9	716.7	723.1	723.1	726.2	729.4
52.5°	692.8	688.1	682.6	679.7	678.4	678.4	681.8	685.0	686.2	690.6	693.9
55°	632.6	627.8	623.0	620.7	619.0	620.7	627.0	628.5	632.6	634.9	637.3
57.5°	569.9	566.2	562.4	561.1	560.8	562.9	566.3	571.1	572.1	579.4	583.0
60°	528.6	523.0	519.9	519.9	518.3	525.4	523.8	531.8	533.3	538.2	543.7
62.5°	486.0	478.6	477.4	477.4	479.6	481.6	483.8	487.4	491.4	497.5	501.8
65°	417.5	413.5	419.1	418.3	416.7	421.4	421.4	425.5	430.2	435.8	444.4
67.5°	352.5	350.5	350.9	350.9	353.4	356.1	358.3	361.7	367.5	373.3	379.1
70°	308.7	311.1	307.2	310.3	312.8	313.5	315.1	319.8	326.2	330.1	336.5
72.5°	266.2	266.0	266.5	267.8	270.1	271.6	273.2	278.6	285.6	288.9	294.0
75°	204.8	204.0	206.3	206.3	210.4	211.9	213.5	215.9	222.3	227.0	231.0
77.5°	149.6	150.5	150.0	152.7	151.6	151.9	156.8	159.3	159.9	169.3	171.3
80°	112.7	114.3	115.1	115.8	116.6	115.1	120.7	123.0	123.0	128.6	132.5
82.5°	81.0	81.9	84.0	84.7	84.9	86.5	86.9	88.8	90.7	93.0	98.3
85°	40.5	42.8	43.6	42.8	43.6	42.1	44.4	45.2	46.0	46.0	46.0
87.5°	13.5	14.2	13.8	14.6	14.2	15.1	15.0	13.8	13.9	15.9	13.5
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: P332047-840

CATALOG NUMBER: S123DIP-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: P332047-840

CATALOG NUMBER: S123DIP-S1165D365U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1566.4	1565.8	1570.2	1567.0	1570.2	1565.8	1566.4	1570.8	1572.2	1572.8	1572.8
5°	1457.9	1460.4	1452.4	1452.4	1452.4	1460.4	1457.9	1462.8	1466.7	1469.9	1474.6
7.5°	1361.5	1358.0	1358.3	1354.0	1358.3	1358.0	1361.5	1365.2	1370.4	1377.4	1383.8
10°	1302.4	1297.7	1296.1	1296.9	1296.1	1297.7	1302.4	1311.9	1315.1	1321.5	1328.6
12.5°	1253.5	1252.5	1242.1	1242.2	1242.1	1252.5	1253.5	1256.1	1263.0	1276.4	1284.8
15°	1196.1	1181.0	1179.4	1184.2	1179.4	1181.0	1196.1	1196.1	1199.2	1209.5	1214.4
17.5°	1138.4	1130.5	1130.9	1128.6	1130.9	1130.5	1138.4	1139.7	1142.3	1150.6	1157.0
20°	1107.9	1103.2	1102.4	1096.8	1102.4	1103.2	1107.9	1107.9	1111.2	1115.1	1121.5
22.5°	1080.1	1078.4	1078.9	1072.8	1078.9	1078.4	1080.1	1082.0	1085.1	1087.8	1092.3
25°	1045.3	1049.2	1046.0	1046.0	1046.0	1049.2	1045.3	1046.0	1046.8	1050.9	1054.0
27.5°	1021.8	1021.6	1020.1	1020.1	1020.1	1021.6	1021.8	1019.9	1019.0	1017.5	1016.8
30°	1004.0	1003.2	1004.8	1004.8	1004.8	1003.2	1004.0	1000.8	999.3	998.5	995.2
32.5°	986.2	987.3	987.6	988.3	987.6	987.3	986.2	982.4	979.6	977.4	974.9
35°	958.8	959.6	961.9	960.4	961.9	959.6	958.8	954.0	950.8	946.0	942.1
37.5°	921.6	925.2	924.4	925.7	924.4	925.2	921.6	920.2	917.1	913.3	908.8
40°	893.6	896.1	895.2	895.2	895.2	896.1	893.6	892.9	889.7	887.4	883.3
42.5°	865.2	866.9	864.7	863.5	864.7	866.9	865.2	863.6	861.8	857.5	852.9
45°	818.3	816.7	819.1	815.9	819.1	816.7	818.3	815.1	814.4	811.1	807.2
47.5°	765.9	767.5	768.1	770.5	768.1	767.5	765.9	766.2	761.7	759.8	758.6
50°	730.9	735.7	735.7	735.0	735.7	735.7	730.9	729.4	726.2	723.1	723.1
52.5°	696.7	698.9	702.1	702.0	702.1	698.9	696.7	693.9	690.6	686.2	685.0
55°	643.7	645.3	646.8	647.6	646.8	645.3	643.7	637.3	634.9	632.6	628.5
57.5°	588.8	588.1	591.9	593.0	591.9	588.1	588.8	583.0	579.4	572.1	571.1
60°	550.0	550.0	556.3	558.8	556.3	550.0	550.0	543.7	538.2	533.3	531.8
62.5°	508.8	511.3	517.7	514.3	517.7	511.3	508.8	501.8	497.5	491.4	487.4
65°	448.4	454.7	453.9	457.2	453.9	454.7	448.4	444.4	435.8	430.2	425.5
67.5°	385.4	389.4	395.1	395.6	395.1	389.4	385.4	379.1	373.3	367.5	361.7
70°	342.8	346.8	350.0	352.3	350.0	346.8	342.8	336.5	330.1	326.2	319.8
72.5°	301.6	303.7	311.2	307.9	311.2	303.7	301.6	294.0	288.9	285.6	278.6
75°	236.5	242.1	246.8	244.5	246.8	242.1	236.5	231.0	227.0	222.3	215.9
77.5°	174.9	180.5	182.7	180.7	182.7	180.5	174.9	171.3	169.3	159.9	159.3
80°	138.1	137.3	142.1	141.3	142.1	137.3	138.1	132.5	128.6	123.0	123.0
82.5°	101.3	100.5	102.7	103.2	102.7	100.5	101.3	98.3	93.0	90.7	88.8
85°	49.2	51.6	48.4	47.7	48.4	51.6	49.2	46.0	46.0	46.0	45.2
87.5°	13.4	13.5	12.9	12.2	12.9	13.5	13.4	13.5	15.9	13.9	13.8
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



TEST NUMBER: P332047-840

CATALOG NUMBER: S123DIP-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: P332047-840

CATALOG NUMBER: S123DIP-S1165D365U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1570.8	1570.8	1582.9	1590.5	1600.0	1606.4	1610.8	1615.3	1623.0	1633.1	1644.5
5°	1481.0	1484.2	1501.7	1519.1	1535.8	1550.0	1562.0	1576.2	1593.7	1615.1	1638.9
7.5°	1394.0	1406.2	1423.8	1445.1	1468.4	1489.2	1510.4	1533.9	1558.4	1590.0	1623.4
10°	1338.2	1351.6	1373.0	1400.1	1424.6	1449.3	1475.4	1500.9	1531.8	1569.1	1611.9
12.5°	1289.3	1302.1	1324.1	1353.7	1377.1	1404.2	1434.2	1467.2	1502.0	1546.9	1595.5
15°	1221.4	1236.6	1263.5	1277.8	1313.5	1346.0	1373.8	1421.5	1465.9	1512.0	1568.3
17.5°	1165.9	1174.3	1196.2	1222.7	1249.4	1285.9	1322.2	1361.9	1406.2	1462.6	1533.1
20°	1127.8	1135.0	1158.7	1186.6	1215.1	1248.5	1281.0	1320.7	1370.7	1430.2	1506.4
22.5°	1099.2	1107.0	1122.6	1152.3	1178.9	1206.6	1239.1	1286.4	1339.6	1397.9	1480.4
25°	1057.9	1062.7	1073.1	1096.8	1120.6	1151.7	1180.2	1224.7	1279.4	1347.7	1430.2
27.5°	1018.8	1023.4	1032.0	1049.0	1071.3	1096.4	1127.5	1165.3	1220.8	1294.9	1382.6
30°	995.2	996.0	1004.0	1019.9	1038.9	1059.6	1088.1	1130.9	1183.4	1258.8	1350.8
32.5°	974.9	971.9	977.3	989.4	1007.8	1028.4	1052.0	1094.2	1144.7	1218.8	1313.3
35°	940.5	938.9	936.5	946.8	962.7	978.6	999.3	1031.0	1088.1	1157.2	1256.4
37.5°	905.4	901.6	897.4	902.1	914.4	931.0	948.9	977.1	1026.4	1102.4	1197.3
40°	879.4	876.3	873.8	872.2	883.3	899.2	912.7	939.7	985.7	1057.9	1151.7
42.5°	850.8	848.9	845.9	843.6	852.9	864.9	879.1	902.9	948.9	1016.7	1105.3
45°	804.8	803.2	801.6	800.0	805.6	816.7	827.8	845.3	884.9	950.8	1031.0
47.5°	753.6	751.4	752.0	749.5	755.0	762.4	770.2	788.9	827.0	880.2	938.8
50°	716.7	715.9	715.9	715.9	717.5	726.2	733.4	747.6	782.5	835.8	877.8
52.5°	681.8	678.4	678.4	679.7	682.6	688.1	692.8	708.3	738.7	782.4	820.6
55°	627.0	620.7	619.0	620.7	623.0	627.8	632.6	645.3	671.5	704.0	726.2
57.5°	566.3	562.9	560.8	561.1	562.4	566.2	569.9	583.7	604.3	621.3	635.6
60°	523.8	525.4	518.3	519.9	519.9	523.0	528.6	537.3	554.8	566.6	581.0
62.5°	483.8	481.6	479.6	477.4	477.4	478.6	486.0	492.9	507.8	514.0	525.1
65°	421.4	421.4	416.7	418.3	419.1	413.5	417.5	425.5	434.9	437.3	447.7
67.5°	358.3	356.1	353.4	350.9	350.9	350.5	352.5	356.5	363.7	364.5	372.4
70°	315.1	313.5	312.8	310.3	307.2	311.1	308.7	312.8	316.7	317.5	322.2
72.5°	273.2	271.6	270.1	267.8	266.5	266.0	266.2	270.8	273.5	272.4	277.8
75°	213.5	211.9	210.4	206.3	206.3	204.0	204.8	207.9	211.2	208.7	213.5
77.5°	156.8	151.9	151.6	152.7	150.0	150.5	149.6	149.1	150.5	150.7	154.9
80°	120.7	115.1	116.6	115.8	115.1	114.3	112.7	113.5	114.3	115.1	117.4
82.5°	86.9	86.5	84.9	84.7	84.0	81.9	81.0	82.4	83.2	82.7	84.4
85°	44.4	42.1	43.6	42.8	43.6	42.8	40.5	40.5	42.1	41.3	42.8
87.5°	15.0	15.1	14.2	14.6	13.8	14.2	13.5	13.9	14.4	14.2	15.3
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: P332047-840

CATALOG NUMBER: S123DIP-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: P332047-840

CATALOG NUMBER: S123DIP-S1165D365U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1648.3	1651.4	1662.2	1669.9	1678.8	1683.8	1688.9	1692.7	1697.8	1699.1	1717.5
5°	1655.6	1671.5	1699.3	1719.9	1745.2	1773.0	1792.1	1800.9	1823.8	1842.9	1881.0
7.5°	1653.6	1687.4	1729.3	1772.7	1819.4	1862.6	1900.1	1944.5	1976.1	2023.6	2070.4
10°	1651.6	1696.9	1750.8	1806.4	1871.5	1931.8	1985.8	2046.1	2096.1	2161.9	2218.3
12.5°	1645.9	1700.7	1775.6	1841.3	1920.4	2003.6	2083.6	2161.0	2205.3	2315.0	2366.9
15°	1631.8	1696.9	1790.5	1890.6	1999.2	2097.7	2199.3	2280.3	2411.2	2507.2	2568.3
17.5°	1604.8	1696.0	1807.1	1927.6	2059.9	2189.6	2304.7	2427.5	2566.5	2682.6	2806.4
20°	1592.2	1692.1	1815.9	1949.2	2086.6	2233.4	2364.4	2511.9	2663.6	2777.8	2936.6
22.5°	1568.6	1681.9	1815.3	1963.9	2110.7	2262.6	2415.8	2564.7	2739.8	2897.2	3048.4
25°	1530.2	1657.2	1795.3	1961.2	2133.4	2285.8	2469.1	2666.8	2849.3	3051.7	3202.5
27.5°	1489.9	1625.5	1763.8	1918.1	2103.3	2284.2	2514.9	2738.1	2961.3	3136.1	3247.7
30°	1458.8	1590.5	1733.4	1889.0	2072.2	2287.3	2545.3	2788.9	3006.5	3156.4	3219.1
32.5°	1425.1	1558.7	1685.2	1848.4	2043.7	2285.4	2564.4	2818.8	3009.0	3108.9	3096.7
35°	1372.3	1484.2	1607.2	1764.3	1994.5	2271.5	2575.5	2821.5	2938.2	2916.8	2754.8
37.5°	1296.1	1390.2	1511.4	1683.3	1937.3	2242.1	2553.2	2737.8	2730.3	2555.8	2321.2
40°	1248.5	1328.6	1445.3	1626.3	1892.9	2223.1	2518.3	2638.2	2536.6	2292.9	2012.0
42.5°	1186.2	1260.0	1376.7	1562.8	1844.0	2184.3	2451.6	2486.4	2287.6	2007.2	1749.7
45°	1089.7	1154.8	1275.5	1467.5	1770.7	2100.0	2289.0	2204.0	1936.5	1646.9	1450.9
47.5°	986.0	1053.7	1169.7	1367.1	1664.7	1973.3	2063.3	1882.6	1608.0	1373.0	1193.1
50°	920.7	985.7	1099.2	1298.5	1592.9	1869.1	1906.4	1673.0	1420.7	1214.4	1066.7
52.5°	854.6	915.9	1027.5	1227.3	1509.1	1748.5	1725.5	1487.6	1255.6	1079.7	963.8
55°	756.4	814.4	920.7	1107.9	1364.3	1554.0	1470.7	1243.6	1051.6	915.1	827.0
57.5°	668.4	724.0	815.8	984.9	1207.8	1338.2	1232.1	1040.9	888.1	783.0	717.3
60°	608.7	657.9	745.3	902.4	1096.1	1195.3	1090.6	921.5	792.8	708.7	650.1
62.5°	552.2	595.1	676.0	818.6	986.8	1070.2	964.1	821.1	711.7	637.0	587.1
65°	466.7	505.5	577.0	688.1	826.2	881.8	790.5	674.6	589.7	534.1	500.8
67.5°	388.6	421.6	483.3	570.8	672.4	712.9	643.4	553.7	489.7	445.0	418.6
70°	336.5	365.1	413.5	488.9	581.0	611.9	546.8	473.0	426.2	390.5	365.9
72.5°	292.7	313.7	357.6	415.9	492.7	517.4	471.9	407.0	363.3	336.5	317.0
75°	223.0	240.4	269.0	315.9	369.1	383.3	349.2	308.7	279.3	260.3	245.2
77.5°	160.8	173.7	194.3	223.2	260.0	272.9	251.3	224.3	202.9	190.0	181.6
80°	121.4	131.8	149.3	173.0	195.2	202.4	189.7	169.1	154.0	146.8	139.7
82.5°	89.7	95.5	106.0	122.2	137.4	145.9	135.1	122.7	114.6	108.1	105.4
85°	45.2	48.4	53.2	59.5	69.1	72.2	68.3	65.0	60.3	56.4	56.4
87.5°	16.8	17.0	19.1	20.5	23.1	25.2	24.8	23.8	23.3	22.6	22.1
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



TEST NUMBER: P332047-840

CATALOG NUMBER: S123DIP-S1165D365U840-4F0-1E-UDD-A4

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



TEST NUMBER: P332047-840

CATALOG NUMBER: S123DIP-S1165D365U840-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1723.8	1724.4	1731.5	1736.6	1734.0	1737.2	1738.5
5°	1883.4	1912.0	1927.0	1938.1	1938.9	1939.7	1946.1
7.5°	2109.6	2140.2	2162.6	2196.6	2206.8	2218.3	2214.9
10°	2274.7	2319.9	2358.8	2379.4	2401.7	2434.2	2408.0
12.5°	2428.9	2509.1	2568.3	2600.4	2621.3	2627.9	2615.0
15°	2683.4	2788.1	2844.5	2843.0	2914.4	2945.4	2896.9
17.5°	2916.8	3013.4	3090.9	3130.6	3190.1	3203.3	3197.2
20°	3059.6	3165.2	3225.5	3293.8	3324.7	3352.4	3357.2
22.5°	3182.8	3277.5	3342.4	3399.1	3425.1	3438.2	3446.2
25°	3309.6	3384.3	3423.1	3442.9	3450.1	3448.5	3438.2
27.5°	3300.8	3306.6	3263.8	3221.7	3184.1	3141.7	3127.0
30°	3215.2	3148.5	3029.5	2962.0	2862.8	2784.2	2815.9
32.5°	2989.8	2857.1	2723.4	2576.0	2453.9	2419.1	2384.2
35°	2551.6	2318.3	2181.8	2023.1	1959.5	1896.1	1852.4
37.5°	2064.4	1883.9	1721.9	1618.1	1554.5	1514.3	1492.8
40°	1784.9	1622.2	1488.9	1404.8	1356.3	1311.1	1304.8
42.5°	1562.2	1410.9	1310.5	1243.5	1197.0	1177.8	1163.9
45°	1279.4	1173.9	1106.4	1058.7	1027.8	1015.9	1000.1
47.5°	1082.9	1008.2	957.7	925.2	901.9	893.0	891.8
50°	973.0	911.1	873.8	848.4	830.2	827.0	814.4
52.5°	890.5	836.9	807.8	785.6	772.4	763.6	759.7
55°	773.1	737.3	711.1	698.4	688.1	679.3	679.3
57.5°	676.4	646.5	629.2	618.4	615.2	609.0	605.1
60°	616.7	591.3	577.8	568.3	561.9	562.7	555.5
62.5°	558.3	541.8	528.9	519.4	511.8	511.9	512.4
65°	475.4	462.7	453.2	450.0	445.2	439.7	441.3
67.5°	402.8	390.9	383.5	378.1	376.5	373.5	378.1
70°	350.8	342.0	336.5	331.7	330.1	330.9	335.0
72.5°	303.2	297.0	293.4	291.1	287.6	287.8	290.4
75°	238.1	233.4	230.1	227.8	227.0	227.0	227.0
77.5°	174.9	173.8	172.4	168.8	169.1	170.0	170.2
80°	138.1	135.7	134.9	133.3	131.0	129.4	133.3
82.5°	103.2	100.8	100.0	99.7	96.0	95.7	99.1
85°	55.5	53.2	53.9	53.2	53.2	52.4	52.4
87.5°	21.5	21.0	20.5	21.0	20.5	19.9	21.1
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



TEST NUMBER: P332047-840

CATALOG NUMBER: S123DIP-S1165D365U840-4F0-1E-UDD-A4

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)