

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: P331948-830

Luminaire Tested: **S123DIP-S560D1195U830-4F0-1E-UDD-A4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331948-830
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-S560D1195U830-4F0-1E-UDD-A4
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 560 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1195 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

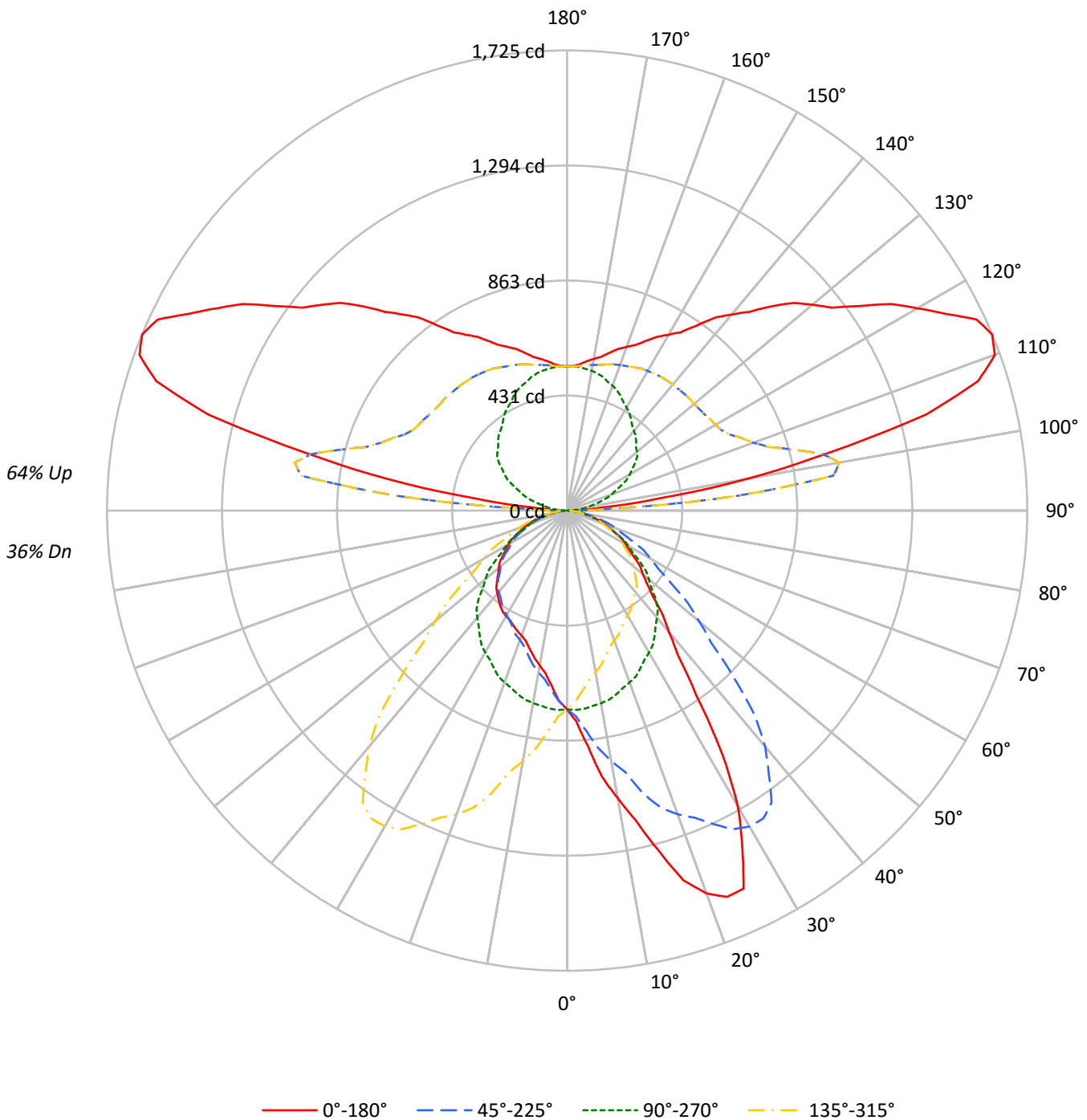
Lumens per Lamp: N/A
Luminaire Lumens: 6323.0 lumens
Efficiency: N/A
Efficacy: 128.0 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 49.4
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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	36
1	95	91	87	83	86	82	79	76	66	64	62	52	50	49	38	37	37	30
2	86	79	73	68	78	72	67	63	58	55	52	46	43	41	34	32	31	26
3	79	70	63	57	71	63	57	53	51	47	44	40	37	35	30	28	27	22
4	72	62	54	48	65	56	50	45	46	41	37	36	33	30	27	25	23	19
5	66	55	47	41	60	50	43	38	41	36	32	32	29	26	24	22	20	17
6	61	49	41	36	55	45	38	33	37	32	28	29	26	23	22	20	18	15
7	56	44	37	31	51	41	34	29	33	28	25	27	23	20	20	18	16	13
8	52	40	33	28	47	37	30	26	30	25	22	24	21	18	18	16	14	12
9	48	37	29	24	44	34	27	23	28	23	19	22	19	16	17	15	13	10
10	45	33	26	22	41	31	25	20	25	21	17	20	17	14	16	13	12	9

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8020	8020	8020	8020
5°	9564	8055	7138	8055
10°	11970	8014	6446	8014
15°	14683	7949	6002	7949
20°	17491	7848	5715	7848
25°	18573	7726	5651	7726
30°	15919	7636	5680	7636
35°	11071	7510	5740	7510
40°	8338	7360	5722	7360
45°	6925	7138	5649	7138
50°	6203	6687	5598	6687
55°	5799	6199	5527	6199
60°	5440	5690	5470	5690
65°	5112	5186	5295	5186
70°	4793	4614	5042	4614
75°	4292	4038	4625	4038
80°	3756	3310	3986	3310
85°	2939	2408	2680	2408



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.4	1.2
10°-20°	235.3	3.7
20°-30°	395.0	6.2
30°-40°	447.2	7.1
40°-50°	401.1	6.3
50°-60°	323.7	5.1
60°-70°	225.5	3.6
70°-80°	118.5	1.9
80°-90°	33.2	0.5
90°-100°	301.1	4.8
100°-110°	852.5	13.5
110°-120°	838.6	13.3
120°-130°	668.9	10.6
130°-140°	527.4	8.3
140°-150°	393.6	6.2
150°-160°	274.4	4.3
160°-170°	161.2	2.5
170°-180°	52.4	0.8
0°-30°	703.7	11.1
0°-40°	1151.0	18.2
0°-60°	1875.7	29.7
0°-90°	2253.0	35.6
90°-120°	1992.1	31.5
90°-150°	3582.0	56.7
90°-180°	4070.0	64.4
0°-180°	6323.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	745	745	745	745	745	
5°	885	746	661	746	885	92
15°	1318	713	539	713	1318	380
25°	1564	650	476	650	1564	686
35°	842	572	437	572	842	547
45°	455	469	371	469	455	360
55°	309	330	294	330	309	277
65°	201	204	208	204	201	200
75°	103	97	111	97	103	110
85°	24	20	22	20	24	29
90°	32	2	32	2	32	18
95°	127	37	127	37	127	229
105°	1393	127	1393	127	1393	1374
115°	1694	224	1694	224	1694	1646
125°	1336	312	1336	312	1336	1211
135°	1083	366	1083	366	1083	840
145°	846	417	846	417	846	538
155°	702	474	702	474	702	327
165°	612	518	612	518	612	175
175°	551	540	551	540	551	54
180°	541	541	541	541	541	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	790.7	790.1	788.7	789.9	787.5	784.4	784.1	781.2	772.8	772.2	770.0
5°	885.1	882.2	881.9	881.6	876.5	869.6	856.6	855.5	838.2	829.5	819.1
7.5°	1007.5	1009.0	1003.7	999.1	983.6	973.5	959.5	941.7	920.4	898.8	884.4
10°	1095.2	1107.1	1092.3	1082.2	1072.9	1055.2	1034.6	1009.0	983.4	953.4	930.7
12.5°	1189.4	1195.2	1192.3	1182.7	1168.2	1141.2	1104.8	1076.6	1052.9	1003.1	982.9
15°	1317.6	1339.6	1325.6	1293.1	1293.8	1268.2	1220.5	1168.2	1140.4	1096.6	1037.1
17.5°	1454.2	1457.0	1451.0	1423.9	1405.8	1370.6	1326.6	1276.5	1220.1	1167.3	1104.1
20°	1527.0	1524.8	1512.2	1498.1	1467.1	1439.6	1391.6	1335.7	1263.5	1211.4	1142.6
22.5°	1567.4	1563.8	1557.8	1546.1	1520.2	1490.7	1447.7	1386.5	1317.8	1246.1	1166.5
25°	1563.8	1568.5	1569.2	1565.9	1557.0	1539.3	1505.3	1456.6	1388.0	1296.0	1213.0
27.5°	1422.3	1428.9	1448.2	1465.4	1484.5	1503.9	1501.4	1477.2	1426.4	1346.9	1245.4
30°	1280.8	1266.3	1302.1	1347.2	1377.9	1432.0	1462.4	1464.1	1435.7	1367.4	1268.5
32.5°	1084.4	1100.3	1116.1	1171.6	1238.7	1299.5	1359.8	1408.4	1414.0	1368.6	1282.0
35°	842.5	862.4	891.3	920.2	992.4	1054.4	1160.6	1253.0	1326.6	1336.3	1283.3
37.5°	678.9	688.8	707.0	735.9	783.2	856.9	939.0	1055.7	1162.4	1241.8	1245.3
40°	593.4	596.3	616.9	638.9	677.2	737.8	811.9	915.1	1042.9	1153.8	1200.0
42.5°	529.3	535.7	544.4	565.6	596.1	641.7	710.5	795.9	912.9	1040.5	1130.9
45°	454.9	462.0	467.5	481.5	503.2	533.9	581.9	659.9	749.0	880.8	1002.5
47.5°	405.6	406.1	410.2	420.8	435.5	458.6	492.6	542.6	624.5	731.3	856.3
50°	370.4	376.2	377.6	385.9	397.5	414.4	442.6	485.1	552.3	646.2	761.0
52.5°	345.5	347.2	351.3	357.3	367.4	380.6	405.0	438.4	491.1	571.1	676.7
55°	309.0	309.0	313.0	317.6	323.5	335.4	351.6	376.2	416.2	478.3	565.7
57.5°	275.2	277.0	279.8	281.3	286.2	294.1	307.6	326.3	356.2	404.0	473.4
60°	252.7	255.9	255.6	258.4	262.8	268.9	280.5	295.7	322.3	360.6	419.1
62.5°	233.1	232.8	232.8	236.2	240.5	246.4	253.9	267.0	289.7	323.7	373.4
65°	200.7	200.0	202.6	204.7	206.1	210.5	216.2	227.8	243.0	268.2	306.8
67.5°	172.0	169.8	171.3	172.0	174.5	177.9	183.2	190.4	202.5	222.7	251.8
70°	152.3	150.5	150.1	150.9	153.1	155.6	159.6	166.5	177.6	193.9	215.2
72.5°	132.1	130.9	130.8	132.4	133.5	135.1	137.9	144.2	153.1	165.2	185.1
75°	103.2	103.2	103.2	103.6	104.7	106.1	108.3	111.5	118.4	127.1	140.4
77.5°	77.4	77.3	76.9	76.8	78.4	79.1	79.6	82.6	86.4	92.3	102.0
80°	60.6	58.8	59.6	60.6	61.4	61.7	62.8	63.5	66.8	70.0	76.9
82.5°	45.1	43.5	43.6	45.3	45.5	45.8	46.9	48.0	49.2	52.1	55.8
85°	23.8	23.8	24.2	24.2	24.5	24.2	25.3	25.6	25.6	27.4	29.6
87.5°	15.0	14.7	14.7	14.8	14.7	14.6	14.6	14.7	14.8	15.3	14.9
90°	31.8	32.9	31.8	30.6	31.8	29.6	28.5	27.3	26.3	27.3	24.1
92.5°	52.8	54.8	53.6	56.9	58.9	64.6	73.1	92.2	127.1	168.4	185.3
95°	127.1	131.4	139.1	148.9	169.8	209.2	267.2	394.3	526.7	649.4	578.2
97.5°	345.8	355.2	384.8	434.1	514.9	645.9	787.1	982.7	1076.7	1006.4	736.8
100°	686.6	685.5	728.2	808.1	918.8	1074.3	1202.4	1291.1	1252.8	1037.1	700.9
102.5°	1007.3	1032.5	1068.2	1131.4	1217.5	1316.1	1390.7	1393.6	1261.5	980.1	648.3
105°	1393.0	1398.5	1433.5	1475.1	1525.5	1554.0	1533.1	1423.6	1194.8	880.4	583.7
107.5°	1615.0	1625.1	1636.9	1651.0	1650.1	1611.1	1515.1	1337.3	1077.8	792.4	542.5
110°	1706.2	1708.4	1710.5	1701.8	1671.1	1594.5	1456.5	1255.0	1004.2	742.4	526.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1724.6	1724.1	1715.8	1688.7	1632.6	1534.0	1379.4	1173.5	940.3	709.2	518.0
115°	1694.1	1688.7	1666.7	1618.5	1536.4	1417.0	1256.0	1065.5	862.9	673.4	514.7
117.5°	1597.3	1589.9	1558.3	1503.2	1417.5	1296.4	1151.8	987.3	816.2	652.4	516.7
120°	1516.7	1510.1	1483.8	1422.5	1336.1	1225.4	1094.0	946.1	791.7	642.8	520.2
122.5°	1441.3	1433.0	1404.1	1349.0	1272.1	1169.3	1047.5	913.7	771.6	636.7	526.3
125°	1336.1	1328.3	1301.0	1252.8	1182.7	1095.0	990.0	870.6	745.7	628.6	535.5
127.5°	1249.2	1242.3	1217.5	1176.4	1113.9	1034.2	939.3	832.9	723.0	624.6	546.0
130°	1200.2	1191.5	1168.5	1129.1	1071.0	996.6	907.9	809.3	710.7	622.0	553.0
132.5°	1152.1	1145.9	1125.5	1086.1	1031.6	960.6	878.1	787.4	699.4	621.1	558.3
135°	1083.1	1075.3	1055.6	1022.8	969.1	906.7	835.6	757.8	684.5	619.8	566.2
137.5°	1010.1	1005.0	988.4	955.2	910.0	855.9	794.6	730.8	671.5	617.4	571.5
140°	959.3	960.4	942.9	912.2	870.6	823.5	770.9	715.1	663.6	616.5	575.0
142.5°	912.0	913.0	897.3	870.2	834.7	793.7	748.2	700.2	656.6	614.8	577.6
145°	846.5	844.3	835.6	812.6	785.1	753.5	718.4	682.2	647.2	612.2	579.3
147.5°	792.6	791.7	783.4	767.9	747.1	724.5	696.3	667.6	638.0	608.0	579.3
150°	761.1	761.1	754.5	742.4	726.0	705.2	682.2	657.0	631.9	604.5	579.3
152.5°	734.8	734.8	730.8	719.7	706.8	689.5	669.1	647.4	624.9	600.1	576.6
155°	701.9	700.9	698.7	689.9	680.0	666.9	650.4	632.9	614.3	592.5	573.8
157.5°	671.9	672.1	670.4	663.8	655.3	645.0	632.4	617.6	602.5	585.7	570.1
160°	652.7	653.7	653.7	647.2	639.5	631.9	620.9	608.9	594.7	580.4	568.4
162.5°	635.2	636.2	636.2	630.6	625.5	618.7	608.7	598.3	586.7	575.1	564.9
165°	612.2	612.2	613.2	608.9	604.5	599.0	591.4	584.8	576.0	567.2	559.6
167.5°	590.2	590.2	591.4	588.2	586.4	582.4	578.0	573.0	565.7	559.4	554.3
170°	577.1	577.1	578.2	576.0	575.0	572.7	568.4	565.1	559.6	554.1	550.8
172.5°	564.9	565.7	567.7	565.5	565.2	564.0	560.4	558.1	553.5	549.7	548.2
175°	550.8	552.0	553.0	552.0	552.0	552.0	549.7	548.7	546.5	544.2	544.2
177.5°	542.7	542.7	544.5	543.6	544.5	544.5	543.6	542.7	541.9	541.0	541.9
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	768.2	765.9	763.6	759.5	756.0	751.1	749.7	748.0	742.8	738.1	734.7
5°	815.1	806.4	793.8	782.2	772.9	760.3	753.0	745.5	734.6	724.9	716.9
7.5°	864.2	847.2	827.6	806.3	786.6	767.4	752.1	738.4	723.2	708.8	697.7
10°	903.2	878.6	851.2	821.6	796.4	771.8	751.2	733.2	713.7	696.7	682.6
12.5°	947.6	911.3	873.5	837.4	807.6	773.5	748.7	725.7	703.6	683.2	667.3
15°	1000.3	954.1	909.4	859.9	814.4	771.8	742.2	713.3	687.7	666.8	646.5
17.5°	1048.2	995.9	936.9	876.8	821.9	771.4	729.9	697.3	665.2	639.6	619.4
20°	1075.3	1015.8	949.0	886.6	826.0	769.6	724.2	685.1	650.5	623.4	600.7
22.5°	1098.8	1029.1	960.0	893.2	825.7	765.0	713.5	673.4	635.7	609.3	585.1
25°	1123.0	1039.6	970.3	892.0	816.5	753.8	696.0	650.5	612.9	581.9	557.0
27.5°	1143.9	1039.0	956.7	872.4	802.3	739.3	677.7	628.9	589.0	555.3	530.0
30°	1157.7	1040.4	942.5	859.1	788.4	723.4	663.5	614.4	572.5	538.2	514.4
32.5°	1166.4	1039.5	929.5	840.7	766.5	709.0	648.2	597.4	554.3	520.7	497.7
35°	1171.4	1033.1	907.2	802.5	731.0	675.0	624.2	571.5	526.3	494.9	468.9
37.5°	1161.3	1019.8	881.2	765.6	687.4	632.4	589.5	544.6	501.4	466.8	444.4
40°	1145.4	1011.2	860.9	739.7	657.3	604.3	567.9	523.8	481.2	448.4	427.4
42.5°	1115.1	993.5	838.8	710.8	626.1	573.1	539.5	502.8	462.4	431.6	410.7
45°	1041.1	955.2	805.4	667.5	580.1	525.3	495.7	468.9	432.4	402.5	384.5
47.5°	938.4	897.5	757.1	621.8	532.1	479.3	448.5	427.0	400.3	376.2	358.8
50°	867.1	850.2	724.5	590.6	499.9	448.4	418.8	399.3	380.1	355.9	340.1
52.5°	784.8	795.2	686.4	558.3	467.3	416.6	388.7	373.2	355.9	336.0	322.2
55°	668.9	706.8	620.6	504.0	418.8	370.4	344.0	330.3	320.2	305.4	293.5
57.5°	560.4	608.6	549.3	448.0	371.0	329.3	304.1	289.1	282.6	274.8	265.5
60°	496.0	543.7	498.5	410.5	338.9	299.3	276.9	264.3	257.8	252.3	244.4
62.5°	438.6	486.7	448.8	372.3	307.5	270.7	251.2	238.8	233.8	230.9	224.1
65°	359.6	401.1	375.8	313.0	262.4	230.0	212.3	203.6	198.9	197.8	193.5
67.5°	292.7	324.2	305.9	259.6	219.8	191.7	176.7	169.4	165.8	165.4	162.1
70°	248.7	278.3	264.3	222.3	188.0	166.1	153.1	146.6	144.4	144.0	142.2
72.5°	214.6	235.3	224.1	189.2	162.7	142.7	133.1	126.3	123.9	124.4	123.2
75°	158.8	174.4	167.9	143.6	122.3	109.3	101.4	97.1	94.9	96.0	94.5
77.5°	114.3	124.1	118.3	101.5	88.4	79.0	73.1	70.5	68.5	68.4	67.8
80°	86.2	92.1	88.8	78.7	67.9	59.9	55.2	53.4	52.3	52.0	51.7
82.5°	61.5	66.4	62.5	55.6	48.3	43.5	40.8	38.5	37.6	37.8	37.5
85°	31.0	32.9	31.4	27.1	24.2	22.1	20.5	19.5	18.8	19.1	18.4
87.5°	14.9	14.5	12.9	11.4	10.4	8.9	8.4	7.4	7.3	7.6	8.0
90°	20.8	17.5	14.2	12.1	9.9	6.6	4.3	2.2	4.3	6.6	9.9
92.5°	139.1	92.0	63.3	47.1	37.9	29.3	20.2	13.6	20.2	29.3	37.9
95°	398.6	235.4	142.3	99.6	71.2	52.6	40.5	37.2	40.5	52.6	71.2
97.5°	437.3	253.4	164.5	118.3	90.2	74.0	64.6	63.5	64.6	74.0	90.2
100°	412.8	250.8	174.1	131.4	105.1	89.8	82.1	81.1	82.1	89.8	105.1
102.5°	391.8	254.3	185.5	146.3	122.6	108.2	101.4	99.4	101.4	108.2	122.6
105°	376.7	263.9	204.8	170.8	150.1	136.9	130.4	127.1	130.4	136.9	150.1
107.5°	375.6	281.9	230.0	198.4	178.9	166.0	159.7	156.4	159.7	166.0	178.9
110°	380.0	296.8	247.5	216.8	198.2	186.2	180.7	177.4	180.7	186.2	198.2



TEST NUMBER: P331948-830

CATALOG NUMBER: S123DIP-S560D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	388.8	311.7	265.9	236.1	217.4	205.5	200.0	196.7	200.0	205.5	217.4
115°	403.0	336.2	294.5	265.0	246.4	235.4	228.8	224.5	228.8	235.4	246.4
117.5°	421.8	362.2	321.1	293.7	272.9	262.8	257.3	252.3	257.3	262.8	272.9
120°	435.8	378.9	339.5	312.1	291.3	280.3	274.8	271.5	274.8	280.3	291.3
122.5°	449.0	396.4	357.9	328.8	308.8	297.0	291.5	288.2	291.5	297.0	308.8
125°	469.8	421.6	383.2	353.7	332.9	320.8	314.3	312.1	314.3	320.8	332.9
127.5°	486.9	443.5	406.5	376.9	353.9	341.7	333.6	330.3	333.6	341.7	353.9
130°	498.2	456.7	420.5	391.0	368.0	354.8	345.0	341.7	345.0	354.8	368.0
132.5°	508.8	468.1	432.8	404.1	381.1	365.3	354.6	350.4	354.6	365.3	381.1
135°	522.4	485.1	451.2	421.6	398.6	382.2	370.1	365.8	370.1	382.2	398.6
137.5°	532.4	496.9	464.3	437.0	414.2	396.6	384.8	380.2	384.8	396.6	414.2
140°	537.7	504.8	473.1	445.7	423.8	406.2	395.3	389.8	395.3	406.2	423.8
142.5°	542.9	511.0	480.1	454.5	432.5	416.8	405.0	400.4	405.0	416.8	432.5
145°	548.7	519.1	490.6	465.4	446.8	430.4	420.5	417.3	420.5	430.4	446.8
147.5°	552.1	525.7	499.5	478.2	460.1	445.9	436.3	434.3	436.3	445.9	460.1
150°	553.0	530.0	504.8	485.1	469.8	455.5	446.8	445.7	446.8	455.5	469.8
152.5°	554.8	532.6	511.0	492.1	478.5	466.1	457.3	457.1	457.3	466.1	478.5
155°	555.3	537.7	519.1	503.7	491.7	480.8	474.2	474.2	474.2	480.8	491.7
157.5°	556.3	540.5	525.7	513.8	503.5	493.9	488.6	487.8	488.6	493.9	503.5
160°	556.3	543.2	530.0	519.1	511.4	502.7	498.2	498.2	498.2	502.7	511.4
162.5°	555.4	544.0	532.6	523.5	516.7	509.6	506.1	506.1	506.1	509.6	516.7
165°	553.0	545.4	536.6	529.0	524.5	519.1	516.9	518.0	516.9	519.1	524.5
167.5°	551.3	545.2	538.8	534.0	530.9	526.7	525.7	527.0	525.7	526.7	530.9
170°	548.7	544.2	538.8	536.6	534.4	531.1	530.0	532.3	530.0	531.1	534.4
172.5°	547.8	544.2	539.7	538.4	537.1	534.6	534.4	535.7	534.4	534.6	537.1
175°	545.4	543.2	541.0	539.9	539.9	537.7	538.8	539.9	538.8	537.7	539.9
177.5°	543.6	541.9	541.0	541.0	541.0	540.1	541.0	541.9	541.0	540.1	541.0
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



TEST NUMBER: P331948-830

CATALOG NUMBER: S123DIP-S560D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	732.6	730.7	727.7	723.4	719.9	714.4	714.4	715.3	715.3	715.0	714.4
5°	710.4	705.0	698.5	691.0	683.0	675.0	673.6	670.7	668.5	667.1	665.3
7.5°	686.9	677.4	667.9	657.3	647.6	639.6	634.0	629.4	626.4	623.3	620.9
10°	671.1	659.1	648.0	636.8	624.5	614.7	608.6	604.3	601.1	598.1	596.7
12.5°	652.3	638.7	626.3	615.7	602.3	592.2	586.4	584.4	580.5	574.5	571.3
15°	624.9	612.3	597.5	581.2	574.7	562.4	555.5	552.3	550.2	545.4	544.0
17.5°	601.4	584.8	568.3	556.1	544.0	534.1	530.3	526.2	523.4	519.5	518.4
20°	582.7	567.9	552.7	539.7	527.1	516.2	512.9	510.1	507.2	505.4	504.0
22.5°	563.5	548.7	536.2	524.1	510.6	503.5	499.9	496.8	494.7	493.5	492.1
25°	536.8	523.8	509.7	498.9	488.0	483.3	481.2	479.4	478.0	476.2	475.8
27.5°	512.8	498.7	487.3	477.1	469.4	465.4	463.4	462.5	462.8	463.4	463.8
30°	494.9	481.9	472.5	463.8	456.7	453.1	452.7	452.7	454.1	454.5	455.2
32.5°	478.4	467.8	458.4	450.0	444.5	442.1	443.5	443.5	444.6	445.5	446.9
35°	454.5	445.1	437.9	430.6	425.9	427.1	427.7	428.5	430.3	432.4	433.9
37.5°	431.6	423.5	415.9	410.3	408.1	410.1	411.8	413.3	415.5	417.1	418.5
40°	415.1	409.0	401.8	396.7	397.5	398.5	400.0	401.8	403.6	404.6	406.1
42.5°	399.8	393.4	388.0	383.7	384.7	386.2	387.0	388.0	390.0	392.0	392.9
45°	376.5	371.5	366.4	363.9	364.6	365.3	366.1	367.1	368.9	370.4	370.7
47.5°	350.3	346.8	343.4	340.9	342.0	341.8	342.7	345.1	345.6	346.5	348.5
50°	333.6	330.3	326.3	325.6	325.6	325.6	325.9	328.9	328.9	330.3	331.8
52.5°	315.1	313.0	310.5	309.2	308.6	308.6	310.1	311.5	312.1	314.1	315.6
55°	287.7	285.5	283.4	282.3	281.5	282.3	285.2	285.9	287.7	288.8	289.8
57.5°	259.2	257.5	255.8	255.2	255.1	256.0	257.6	259.8	260.2	263.5	265.1
60°	240.4	237.9	236.5	236.5	235.7	238.9	238.3	241.9	242.6	244.8	247.3
62.5°	221.0	217.6	217.1	217.1	218.1	219.0	220.1	221.7	223.6	226.3	228.2
65°	189.9	188.0	190.6	190.2	189.5	191.7	191.7	193.5	195.7	198.2	202.2
67.5°	160.3	159.4	159.7	159.7	160.7	161.9	163.0	164.6	167.1	169.8	172.4
70°	140.4	141.5	139.7	141.2	142.2	142.6	143.3	145.4	148.4	150.1	153.1
72.5°	121.1	121.0	121.2	121.8	122.9	123.6	124.2	126.7	129.9	131.4	133.7
75°	93.1	92.7	93.9	93.9	95.7	96.4	97.1	98.2	101.0	103.2	105.1
77.5°	68.1	68.4	68.2	69.5	69.0	69.1	71.4	72.4	72.7	77.0	77.9
80°	51.3	52.0	52.3	52.7	53.1	52.3	54.9	56.0	56.0	58.4	60.3
82.5°	36.9	37.2	38.2	38.5	38.6	39.3	39.6	40.3	41.2	42.3	44.7
85°	18.4	19.5	19.9	19.5	19.9	19.1	20.2	20.5	20.9	20.9	20.9
87.5°	8.2	9.0	9.2	10.2	10.6	11.5	11.3	10.9	11.2	12.3	11.6
90°	12.1	14.2	17.5	20.8	24.1	27.3	26.3	27.3	28.5	29.6	31.8
92.5°	47.1	63.3	92.0	139.1	185.3	168.4	127.1	92.2	73.1	64.6	58.9
95°	99.6	142.3	235.4	398.6	578.2	649.4	526.7	394.3	267.2	209.2	169.8
97.5°	118.3	164.5	253.4	437.3	736.8	1006.4	1076.7	982.7	787.1	645.9	514.9
100°	131.4	174.1	250.8	412.8	700.9	1037.1	1252.8	1291.1	1202.4	1074.3	918.8
102.5°	146.3	185.5	254.3	391.8	648.3	980.1	1261.5	1393.6	1390.7	1316.1	1217.5
105°	170.8	204.8	263.9	376.7	583.7	880.4	1194.8	1423.6	1533.1	1554.0	1525.5
107.5°	198.4	230.0	281.9	375.6	542.5	792.4	1077.8	1337.3	1515.1	1611.1	1650.1
110°	216.8	247.5	296.8	380.0	526.7	742.4	1004.2	1255.0	1456.5	1594.5	1671.1



TEST NUMBER: P331948-830

CATALOG NUMBER: S123DIP-S560D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	236.1	265.9	311.7	388.8	518.0	709.2	940.3	1173.5	1379.4	1534.0	1632.6
115°	265.0	294.5	336.2	403.0	514.7	673.4	862.9	1065.5	1256.0	1417.0	1536.4
117.5°	293.7	321.1	362.2	421.8	516.7	652.4	816.2	987.3	1151.8	1296.4	1417.5
120°	312.1	339.5	378.9	435.8	520.2	642.8	791.7	946.1	1094.0	1225.4	1336.1
122.5°	328.8	357.9	396.4	449.0	526.3	636.7	771.6	913.7	1047.5	1169.3	1272.1
125°	353.7	383.2	421.6	469.8	535.5	628.6	745.7	870.6	990.0	1095.0	1182.7
127.5°	376.9	406.5	443.5	486.9	546.0	624.6	723.0	832.9	939.3	1034.2	1113.9
130°	391.0	420.5	456.7	498.2	553.0	622.0	710.7	809.3	907.9	996.6	1071.0
132.5°	404.1	432.8	468.1	508.8	558.3	621.1	699.4	787.4	878.1	960.6	1031.6
135°	421.6	451.2	485.1	522.4	566.2	619.8	684.5	757.8	835.6	906.7	969.1
137.5°	437.0	464.3	496.9	532.4	571.5	617.4	671.5	730.8	794.6	855.9	910.0
140°	445.7	473.1	504.8	537.7	575.0	616.5	663.6	715.1	770.9	823.5	870.6
142.5°	454.5	480.1	511.0	542.9	577.6	614.8	656.6	700.2	748.2	793.7	834.7
145°	465.4	490.6	519.1	548.7	579.3	612.2	647.2	682.2	718.4	753.5	785.1
147.5°	478.2	499.5	525.7	552.1	579.3	608.0	638.0	667.6	696.3	724.5	747.1
150°	485.1	504.8	530.0	553.0	579.3	604.5	631.9	657.0	682.2	705.2	726.0
152.5°	492.1	511.0	532.6	554.8	576.6	600.1	624.9	647.4	669.1	689.5	706.8
155°	503.7	519.1	537.7	555.3	573.8	592.5	614.3	632.9	650.4	666.9	680.0
157.5°	513.8	525.7	540.5	556.3	570.1	585.7	602.5	617.6	632.4	645.0	655.3
160°	519.1	530.0	543.2	556.3	568.4	580.4	594.7	608.9	620.9	631.9	639.5
162.5°	523.5	532.6	544.0	555.4	564.9	575.1	586.7	598.3	608.7	618.7	625.5
165°	529.0	536.6	545.4	553.0	559.6	567.2	576.0	584.8	591.4	599.0	604.5
167.5°	534.0	538.8	545.2	551.3	554.3	559.4	565.7	573.0	578.0	582.4	586.4
170°	536.6	538.8	544.2	548.7	550.8	554.1	559.6	565.1	568.4	572.7	575.0
172.5°	538.4	539.7	544.2	547.8	548.2	549.7	553.5	558.1	560.4	564.0	565.2
175°	539.9	541.0	543.2	545.4	544.2	544.2	546.5	548.7	549.7	552.0	552.0
177.5°	541.0	541.0	541.9	543.6	541.9	541.0	541.9	542.7	543.6	544.5	544.5
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



TEST NUMBER: P331948-830

CATALOG NUMBER: S123DIP-S560D1195U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	712.5	712.2	714.2	712.8	714.2	712.2	712.5	714.4	715.0	715.3	715.3
5°	663.2	664.2	660.6	660.6	660.6	664.2	663.2	665.3	667.1	668.5	670.7
7.5°	619.3	617.6	617.8	615.9	617.8	617.6	619.3	620.9	623.3	626.4	629.4
10°	592.4	590.2	589.5	589.8	589.5	590.2	592.4	596.7	598.1	601.1	604.3
12.5°	570.1	569.7	565.0	565.1	565.0	569.7	570.1	571.3	574.5	580.5	584.4
15°	544.0	537.2	536.4	538.6	536.4	537.2	544.0	544.0	545.4	550.2	552.3
17.5°	517.8	514.2	514.4	513.3	514.4	514.2	517.8	518.4	519.5	523.4	526.2
20°	504.0	501.8	501.4	498.9	501.4	501.8	504.0	504.0	505.4	507.2	510.1
22.5°	491.3	490.5	490.7	488.0	490.7	490.5	491.3	492.1	493.5	494.7	496.8
25°	475.4	477.2	475.8	475.8	475.8	477.2	475.4	475.8	476.2	478.0	479.4
27.5°	464.8	464.7	463.9	463.9	463.9	464.7	464.8	463.8	463.4	462.8	462.5
30°	456.7	456.3	457.0	457.0	457.0	456.3	456.7	455.2	454.5	454.1	452.7
32.5°	448.6	449.0	449.2	449.5	449.2	449.0	448.6	446.9	445.5	444.6	443.5
35°	436.1	436.4	437.5	436.8	437.5	436.4	436.1	433.9	432.4	430.3	428.5
37.5°	419.1	420.8	420.5	421.0	420.5	420.8	419.1	418.5	417.1	415.5	413.3
40°	406.5	407.6	407.2	407.2	407.2	407.6	406.5	406.1	404.6	403.6	401.8
42.5°	393.5	394.3	393.3	392.8	393.3	394.3	393.5	392.9	392.0	390.0	388.0
45°	372.2	371.5	372.6	371.1	372.6	371.5	372.2	370.7	370.4	368.9	367.1
47.5°	348.4	349.1	349.4	350.4	349.4	349.1	348.4	348.5	346.5	345.6	345.1
50°	332.4	334.6	334.6	334.3	334.6	334.6	332.4	331.8	330.3	328.9	328.9
52.5°	316.9	317.9	319.3	319.2	319.3	317.9	316.9	315.6	314.1	312.1	311.5
55°	292.8	293.5	294.2	294.5	294.2	293.5	292.8	289.8	288.8	287.7	285.9
57.5°	267.8	267.5	269.2	269.8	269.2	267.5	267.8	265.1	263.5	260.2	259.8
60°	250.2	250.2	253.1	254.1	253.1	250.2	250.2	247.3	244.8	242.6	241.9
62.5°	231.4	232.5	235.4	233.9	235.4	232.5	231.4	228.2	226.3	223.6	221.7
65°	204.0	206.9	206.5	207.9	206.5	206.9	204.0	202.2	198.2	195.7	193.5
67.5°	175.3	177.1	179.7	179.9	179.7	177.1	175.3	172.4	169.8	167.1	164.6
70°	156.0	157.8	159.2	160.2	159.2	157.8	156.0	153.1	150.1	148.4	145.4
72.5°	137.1	138.1	141.6	140.1	141.6	138.1	137.1	133.7	131.4	129.9	126.7
75°	107.5	110.1	112.3	111.2	112.3	110.1	107.5	105.1	103.2	101.0	98.2
77.5°	79.6	82.1	83.1	82.2	83.1	82.1	79.6	77.9	77.0	72.7	72.4
80°	62.8	62.5	64.7	64.3	64.7	62.5	62.8	60.3	58.4	56.0	56.0
82.5°	46.1	45.7	46.8	46.9	46.8	45.7	46.1	44.7	42.3	41.2	40.3
85°	22.3	23.5	22.1	21.7	22.1	23.5	22.3	20.9	20.9	20.9	20.5
87.5°	11.3	11.6	11.5	10.9	11.5	11.6	11.3	11.6	12.3	11.2	10.9
90°	30.6	31.8	32.9	31.8	32.9	31.8	30.6	31.8	29.6	28.5	27.3
92.5°	56.9	53.6	54.8	52.8	54.8	53.6	56.9	58.9	64.6	73.1	92.2
95°	148.9	139.1	131.4	127.1	131.4	139.1	148.9	169.8	209.2	267.2	394.3
97.5°	434.1	384.8	355.2	345.8	355.2	384.8	434.1	514.9	645.9	787.1	982.7
100°	808.1	728.2	685.5	686.6	685.5	728.2	808.1	918.8	1074.3	1202.4	1291.1
102.5°	1131.4	1068.2	1032.5	1007.3	1032.5	1068.2	1131.4	1217.5	1316.1	1390.7	1393.6
105°	1475.1	1433.5	1398.5	1393.0	1398.5	1433.5	1475.1	1525.5	1554.0	1533.1	1423.6
107.5°	1651.0	1636.9	1625.1	1615.0	1625.1	1636.9	1651.0	1650.1	1611.1	1515.1	1337.3
110°	1701.8	1710.5	1708.4	1706.2	1708.4	1710.5	1701.8	1671.1	1594.5	1456.5	1255.0



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1688.7	1715.8	1724.1	1724.6	1724.1	1715.8	1688.7	1632.6	1534.0	1379.4	1173.5
115°	1618.5	1666.7	1688.7	1694.1	1688.7	1666.7	1618.5	1536.4	1417.0	1256.0	1065.5
117.5°	1503.2	1558.3	1589.9	1597.3	1589.9	1558.3	1503.2	1417.5	1296.4	1151.8	987.3
120°	1422.5	1483.8	1510.1	1516.7	1510.1	1483.8	1422.5	1336.1	1225.4	1094.0	946.1
122.5°	1349.0	1404.1	1433.0	1441.3	1433.0	1404.1	1349.0	1272.1	1169.3	1047.5	913.7
125°	1252.8	1301.0	1328.3	1336.1	1328.3	1301.0	1252.8	1182.7	1095.0	990.0	870.6
127.5°	1176.4	1217.5	1242.3	1249.2	1242.3	1217.5	1176.4	1113.9	1034.2	939.3	832.9
130°	1129.1	1168.5	1191.5	1200.2	1191.5	1168.5	1129.1	1071.0	996.6	907.9	809.3
132.5°	1086.1	1125.5	1145.9	1152.1	1145.9	1125.5	1086.1	1031.6	960.6	878.1	787.4
135°	1022.8	1055.6	1075.3	1083.1	1075.3	1055.6	1022.8	969.1	906.7	835.6	757.8
137.5°	955.2	988.4	1005.0	1010.1	1005.0	988.4	955.2	910.0	855.9	794.6	730.8
140°	912.2	942.9	960.4	959.3	960.4	942.9	912.2	870.6	823.5	770.9	715.1
142.5°	870.2	897.3	913.0	912.0	913.0	897.3	870.2	834.7	793.7	748.2	700.2
145°	812.6	835.6	844.3	846.5	844.3	835.6	812.6	785.1	753.5	718.4	682.2
147.5°	767.9	783.4	791.7	792.6	791.7	783.4	767.9	747.1	724.5	696.3	667.6
150°	742.4	754.5	761.1	761.1	761.1	754.5	742.4	726.0	705.2	682.2	657.0
152.5°	719.7	730.8	734.8	734.8	734.8	730.8	719.7	706.8	689.5	669.1	647.4
155°	689.9	698.7	700.9	701.9	700.9	698.7	689.9	680.0	666.9	650.4	632.9
157.5°	663.8	670.4	672.1	671.9	672.1	670.4	663.8	655.3	645.0	632.4	617.6
160°	647.2	653.7	653.7	652.7	653.7	653.7	647.2	639.5	631.9	620.9	608.9
162.5°	630.6	636.2	636.2	635.2	636.2	636.2	630.6	625.5	618.7	608.7	598.3
165°	608.9	613.2	612.2	612.2	612.2	613.2	608.9	604.5	599.0	591.4	584.8
167.5°	588.2	591.4	590.2	590.2	590.2	591.4	588.2	586.4	582.4	578.0	573.0
170°	576.0	578.2	577.1	577.1	577.1	578.2	576.0	575.0	572.7	568.4	565.1
172.5°	565.5	567.7	565.7	564.9	565.7	567.7	565.5	565.2	564.0	560.4	558.1
175°	552.0	553.0	552.0	550.8	552.0	553.0	552.0	552.0	552.0	549.7	548.7
177.5°	543.6	544.5	542.7	542.7	542.7	544.5	543.6	544.5	544.5	543.6	542.7
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



TEST NUMBER: P331948-830

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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	714.4	714.4	719.9	723.4	727.7	730.7	732.6	734.7	738.1	742.8	748.0
5°	673.6	675.0	683.0	691.0	698.5	705.0	710.4	716.9	724.9	734.6	745.5
7.5°	634.0	639.6	647.6	657.3	667.9	677.4	686.9	697.7	708.8	723.2	738.4
10°	608.6	614.7	624.5	636.8	648.0	659.1	671.1	682.6	696.7	713.7	733.2
12.5°	586.4	592.2	602.3	615.7	626.3	638.7	652.3	667.3	683.2	703.6	725.7
15°	555.5	562.4	574.7	581.2	597.5	612.3	624.9	646.5	666.8	687.7	713.3
17.5°	530.3	534.1	544.0	556.1	568.3	584.8	601.4	619.4	639.6	665.2	697.3
20°	512.9	516.2	527.1	539.7	552.7	567.9	582.7	600.7	623.4	650.5	685.1
22.5°	499.9	503.5	510.6	524.1	536.2	548.7	563.5	585.1	609.3	635.7	673.4
25°	481.2	483.3	488.0	498.9	509.7	523.8	536.8	557.0	581.9	612.9	650.5
27.5°	463.4	465.4	469.4	477.1	487.3	498.7	512.8	530.0	555.3	589.0	628.9
30°	452.7	453.1	456.7	463.8	472.5	481.9	494.9	514.4	538.2	572.5	614.4
32.5°	443.5	442.1	444.5	450.0	458.4	467.8	478.4	497.7	520.7	554.3	597.4
35°	427.7	427.1	425.9	430.6	437.9	445.1	454.5	468.9	494.9	526.3	571.5
37.5°	411.8	410.1	408.1	410.3	415.9	423.5	431.6	444.4	466.8	501.4	544.6
40°	400.0	398.5	397.5	396.7	401.8	409.0	415.1	427.4	448.4	481.2	523.8
42.5°	387.0	386.2	384.7	383.7	388.0	393.4	399.8	410.7	431.6	462.4	502.8
45°	366.1	365.3	364.6	363.9	366.4	371.5	376.5	384.5	402.5	432.4	468.9
47.5°	342.7	341.8	342.0	340.9	343.4	346.8	350.3	358.8	376.2	400.3	427.0
50°	325.9	325.6	325.6	325.6	326.3	330.3	333.6	340.1	355.9	380.1	399.3
52.5°	310.1	308.6	308.6	309.2	310.5	313.0	315.1	322.2	336.0	355.9	373.2
55°	285.2	282.3	281.5	282.3	283.4	285.5	287.7	293.5	305.4	320.2	330.3
57.5°	257.6	256.0	255.1	255.2	255.8	257.5	259.2	265.5	274.8	282.6	289.1
60°	238.3	238.9	235.7	236.5	236.5	237.9	240.4	244.4	252.3	257.8	264.3
62.5°	220.1	219.0	218.1	217.1	217.1	217.6	221.0	224.1	230.9	233.8	238.8
65°	191.7	191.7	189.5	190.2	190.6	188.0	189.9	193.5	197.8	198.9	203.6
67.5°	163.0	161.9	160.7	159.7	159.7	159.4	160.3	162.1	165.4	165.8	169.4
70°	143.3	142.6	142.2	141.2	139.7	141.5	140.4	142.2	144.0	144.4	146.6
72.5°	124.2	123.6	122.9	121.8	121.2	121.0	121.1	123.2	124.4	123.9	126.3
75°	97.1	96.4	95.7	93.9	93.9	92.7	93.1	94.5	96.0	94.9	97.1
77.5°	71.4	69.1	69.0	69.5	68.2	68.4	68.1	67.8	68.4	68.5	70.5
80°	54.9	52.3	53.1	52.7	52.3	52.0	51.3	51.7	52.0	52.3	53.4
82.5°	39.6	39.3	38.6	38.5	38.2	37.2	36.9	37.5	37.8	37.6	38.5
85°	20.2	19.1	19.9	19.5	19.9	19.5	18.4	18.4	19.1	18.8	19.5
87.5°	11.3	11.5	10.6	10.2	9.2	9.0	8.2	8.0	7.6	7.3	7.4
90°	26.3	27.3	24.1	20.8	17.5	14.2	12.1	9.9	6.6	4.3	2.2
92.5°	127.1	168.4	185.3	139.1	92.0	63.3	47.1	37.9	29.3	20.2	13.6
95°	526.7	649.4	578.2	398.6	235.4	142.3	99.6	71.2	52.6	40.5	37.2
97.5°	1076.7	1006.4	736.8	437.3	253.4	164.5	118.3	90.2	74.0	64.6	63.5
100°	1252.8	1037.1	700.9	412.8	250.8	174.1	131.4	105.1	89.8	82.1	81.1
102.5°	1261.5	980.1	648.3	391.8	254.3	185.5	146.3	122.6	108.2	101.4	99.4
105°	1194.8	880.4	583.7	376.7	263.9	204.8	170.8	150.1	136.9	130.4	127.1
107.5°	1077.8	792.4	542.5	375.6	281.9	230.0	198.4	178.9	166.0	159.7	156.4
110°	1004.2	742.4	526.7	380.0	296.8	247.5	216.8	198.2	186.2	180.7	177.4



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	940.3	709.2	518.0	388.8	311.7	265.9	236.1	217.4	205.5	200.0	196.7
115°	862.9	673.4	514.7	403.0	336.2	294.5	265.0	246.4	235.4	228.8	224.5
117.5°	816.2	652.4	516.7	421.8	362.2	321.1	293.7	272.9	262.8	257.3	252.3
120°	791.7	642.8	520.2	435.8	378.9	339.5	312.1	291.3	280.3	274.8	271.5
122.5°	771.6	636.7	526.3	449.0	396.4	357.9	328.8	308.8	297.0	291.5	288.2
125°	745.7	628.6	535.5	469.8	421.6	383.2	353.7	332.9	320.8	314.3	312.1
127.5°	723.0	624.6	546.0	486.9	443.5	406.5	376.9	353.9	341.7	333.6	330.3
130°	710.7	622.0	553.0	498.2	456.7	420.5	391.0	368.0	354.8	345.0	341.7
132.5°	699.4	621.1	558.3	508.8	468.1	432.8	404.1	381.1	365.3	354.6	350.4
135°	684.5	619.8	566.2	522.4	485.1	451.2	421.6	398.6	382.2	370.1	365.8
137.5°	671.5	617.4	571.5	532.4	496.9	464.3	437.0	414.2	396.6	384.8	380.2
140°	663.6	616.5	575.0	537.7	504.8	473.1	445.7	423.8	406.2	395.3	389.8
142.5°	656.6	614.8	577.6	542.9	511.0	480.1	454.5	432.5	416.8	405.0	400.4
145°	647.2	612.2	579.3	548.7	519.1	490.6	465.4	446.8	430.4	420.5	417.3
147.5°	638.0	608.0	579.3	552.1	525.7	499.5	478.2	460.1	445.9	436.3	434.3
150°	631.9	604.5	579.3	553.0	530.0	504.8	485.1	469.8	455.5	446.8	445.7
152.5°	624.9	600.1	576.6	554.8	532.6	511.0	492.1	478.5	466.1	457.3	457.1
155°	614.3	592.5	573.8	555.3	537.7	519.1	503.7	491.7	480.8	474.2	474.2
157.5°	602.5	585.7	570.1	556.3	540.5	525.7	513.8	503.5	493.9	488.6	487.8
160°	594.7	580.4	568.4	556.3	543.2	530.0	519.1	511.4	502.7	498.2	498.2
162.5°	586.7	575.1	564.9	555.4	544.0	532.6	523.5	516.7	509.6	506.1	506.1
165°	576.0	567.2	559.6	553.0	545.4	536.6	529.0	524.5	519.1	516.9	518.0
167.5°	565.7	559.4	554.3	551.3	545.2	538.8	534.0	530.9	526.7	525.7	527.0
170°	559.6	554.1	550.8	548.7	544.2	538.8	536.6	534.4	531.1	530.0	532.3
172.5°	553.5	549.7	548.2	547.8	544.2	539.7	538.4	537.1	534.6	534.4	535.7
175°	546.5	544.2	544.2	545.4	543.2	541.0	539.9	539.9	537.7	538.8	539.9
177.5°	541.9	541.0	541.9	543.6	541.9	541.0	541.0	541.0	540.1	541.0	541.9
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



TEST NUMBER: P331948-830

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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	749.7	751.1	756.0	759.5	763.6	765.9	768.2	770.0	772.2	772.8	781.2
5°	753.0	760.3	772.9	782.2	793.8	806.4	815.1	819.1	829.5	838.2	855.5
7.5°	752.1	767.4	786.6	806.3	827.6	847.2	864.2	884.4	898.8	920.4	941.7
10°	751.2	771.8	796.4	821.6	851.2	878.6	903.2	930.7	953.4	983.4	1009.0
12.5°	748.7	773.5	807.6	837.4	873.5	911.3	947.6	982.9	1003.1	1052.9	1076.6
15°	742.2	771.8	814.4	859.9	909.4	954.1	1000.3	1037.1	1096.6	1140.4	1168.2
17.5°	729.9	771.4	821.9	876.8	936.9	995.9	1048.2	1104.1	1167.3	1220.1	1276.5
20°	724.2	769.6	826.0	886.6	949.0	1015.8	1075.3	1142.6	1211.4	1263.5	1335.7
22.5°	713.5	765.0	825.7	893.2	960.0	1029.1	1098.8	1166.5	1246.1	1317.8	1386.5
25°	696.0	753.8	816.5	892.0	970.3	1039.6	1123.0	1213.0	1296.0	1388.0	1456.6
27.5°	677.7	739.3	802.3	872.4	956.7	1039.0	1143.9	1245.4	1346.9	1426.4	1477.2
30°	663.5	723.4	788.4	859.1	942.5	1040.4	1157.7	1268.5	1367.4	1435.7	1464.1
32.5°	648.2	709.0	766.5	840.7	929.5	1039.5	1166.4	1282.0	1368.6	1414.0	1408.4
35°	624.2	675.0	731.0	802.5	907.2	1033.1	1171.4	1283.3	1336.3	1326.6	1253.0
37.5°	589.5	632.4	687.4	765.6	881.2	1019.8	1161.3	1245.3	1241.8	1162.4	1055.7
40°	567.9	604.3	657.3	739.7	860.9	1011.2	1145.4	1200.0	1153.8	1042.9	915.1
42.5°	539.5	573.1	626.1	710.8	838.8	993.5	1115.1	1130.9	1040.5	912.9	795.9
45°	495.7	525.3	580.1	667.5	805.4	955.2	1041.1	1002.5	880.8	749.0	659.9
47.5°	448.5	479.3	532.1	621.8	757.1	897.5	938.4	856.3	731.3	624.5	542.6
50°	418.8	448.4	499.9	590.6	724.5	850.2	867.1	761.0	646.2	552.3	485.1
52.5°	388.7	416.6	467.3	558.3	686.4	795.2	784.8	676.7	571.1	491.1	438.4
55°	344.0	370.4	418.8	504.0	620.6	706.8	668.9	565.7	478.3	416.2	376.2
57.5°	304.1	329.3	371.0	448.0	549.3	608.6	560.4	473.4	404.0	356.2	326.3
60°	276.9	299.3	338.9	410.5	498.5	543.7	496.0	419.1	360.6	322.3	295.7
62.5°	251.2	270.7	307.5	372.3	448.8	486.7	438.6	373.4	323.7	289.7	267.0
65°	212.3	230.0	262.4	313.0	375.8	401.1	359.6	306.8	268.2	243.0	227.8
67.5°	176.7	191.7	219.8	259.6	305.9	324.2	292.7	251.8	222.7	202.5	190.4
70°	153.1	166.1	188.0	222.3	264.3	278.3	248.7	215.2	193.9	177.6	166.5
72.5°	133.1	142.7	162.7	189.2	224.1	235.3	214.6	185.1	165.2	153.1	144.2
75°	101.4	109.3	122.3	143.6	167.9	174.4	158.8	140.4	127.1	118.4	111.5
77.5°	73.1	79.0	88.4	101.5	118.3	124.1	114.3	102.0	92.3	86.4	82.6
80°	55.2	59.9	67.9	78.7	88.8	92.1	86.2	76.9	70.0	66.8	63.5
82.5°	40.8	43.5	48.3	55.6	62.5	66.4	61.5	55.8	52.1	49.2	48.0
85°	20.5	22.1	24.2	27.1	31.4	32.9	31.0	29.6	27.4	25.6	25.6
87.5°	8.4	8.9	10.4	11.4	12.9	14.5	14.9	14.9	15.3	14.8	14.7
90°	4.3	6.6	9.9	12.1	14.2	17.5	20.8	24.1	27.3	26.3	27.3
92.5°	20.2	29.3	37.9	47.1	63.3	92.0	139.1	185.3	168.4	127.1	92.2
95°	40.5	52.6	71.2	99.6	142.3	235.4	398.6	578.2	649.4	526.7	394.3
97.5°	64.6	74.0	90.2	118.3	164.5	253.4	437.3	736.8	1006.4	1076.7	982.7
100°	82.1	89.8	105.1	131.4	174.1	250.8	412.8	700.9	1037.1	1252.8	1291.1
102.5°	101.4	108.2	122.6	146.3	185.5	254.3	391.8	648.3	980.1	1261.5	1393.6
105°	130.4	136.9	150.1	170.8	204.8	263.9	376.7	583.7	880.4	1194.8	1423.6
107.5°	159.7	166.0	178.9	198.4	230.0	281.9	375.6	542.5	792.4	1077.8	1337.3
110°	180.7	186.2	198.2	216.8	247.5	296.8	380.0	526.7	742.4	1004.2	1255.0



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	200.0	205.5	217.4	236.1	265.9	311.7	388.8	518.0	709.2	940.3	1173.5
115°	228.8	235.4	246.4	265.0	294.5	336.2	403.0	514.7	673.4	862.9	1065.5
117.5°	257.3	262.8	272.9	293.7	321.1	362.2	421.8	516.7	652.4	816.2	987.3
120°	274.8	280.3	291.3	312.1	339.5	378.9	435.8	520.2	642.8	791.7	946.1
122.5°	291.5	297.0	308.8	328.8	357.9	396.4	449.0	526.3	636.7	771.6	913.7
125°	314.3	320.8	332.9	353.7	383.2	421.6	469.8	535.5	628.6	745.7	870.6
127.5°	333.6	341.7	353.9	376.9	406.5	443.5	486.9	546.0	624.6	723.0	832.9
130°	345.0	354.8	368.0	391.0	420.5	456.7	498.2	553.0	622.0	710.7	809.3
132.5°	354.6	365.3	381.1	404.1	432.8	468.1	508.8	558.3	621.1	699.4	787.4
135°	370.1	382.2	398.6	421.6	451.2	485.1	522.4	566.2	619.8	684.5	757.8
137.5°	384.8	396.6	414.2	437.0	464.3	496.9	532.4	571.5	617.4	671.5	730.8
140°	395.3	406.2	423.8	445.7	473.1	504.8	537.7	575.0	616.5	663.6	715.1
142.5°	405.0	416.8	432.5	454.5	480.1	511.0	542.9	577.6	614.8	656.6	700.2
145°	420.5	430.4	446.8	465.4	490.6	519.1	548.7	579.3	612.2	647.2	682.2
147.5°	436.3	445.9	460.1	478.2	499.5	525.7	552.1	579.3	608.0	638.0	667.6
150°	446.8	455.5	469.8	485.1	504.8	530.0	553.0	579.3	604.5	631.9	657.0
152.5°	457.3	466.1	478.5	492.1	511.0	532.6	554.8	576.6	600.1	624.9	647.4
155°	474.2	480.8	491.7	503.7	519.1	537.7	555.3	573.8	592.5	614.3	632.9
157.5°	488.6	493.9	503.5	513.8	525.7	540.5	556.3	570.1	585.7	602.5	617.6
160°	498.2	502.7	511.4	519.1	530.0	543.2	556.3	568.4	580.4	594.7	608.9
162.5°	506.1	509.6	516.7	523.5	532.6	544.0	555.4	564.9	575.1	586.7	598.3
165°	516.9	519.1	524.5	529.0	536.6	545.4	553.0	559.6	567.2	576.0	584.8
167.5°	525.7	526.7	530.9	534.0	538.8	545.2	551.3	554.3	559.4	565.7	573.0
170°	530.0	531.1	534.4	536.6	538.8	544.2	548.7	550.8	554.1	559.6	565.1
172.5°	534.4	534.6	537.1	538.4	539.7	544.2	547.8	548.2	549.7	553.5	558.1
175°	538.8	537.7	539.9	539.9	541.0	543.2	545.4	544.2	544.2	546.5	548.7
177.5°	541.0	540.1	541.0	541.0	541.0	541.9	543.6	541.9	541.0	541.9	542.7
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	784.1	784.4	787.5	789.9	788.7	790.1	790.7
5°	856.6	869.6	876.5	881.6	881.9	882.2	885.1
7.5°	959.5	973.5	983.6	999.1	1003.7	1009.0	1007.5
10°	1034.6	1055.2	1072.9	1082.2	1092.3	1107.1	1095.2
12.5°	1104.8	1141.2	1168.2	1182.7	1192.3	1195.2	1189.4
15°	1220.5	1268.2	1293.8	1293.1	1325.6	1339.6	1317.6
17.5°	1326.6	1370.6	1405.8	1423.9	1451.0	1457.0	1454.2
20°	1391.6	1439.6	1467.1	1498.1	1512.2	1524.8	1527.0
22.5°	1447.7	1490.7	1520.2	1546.1	1557.8	1563.8	1567.4
25°	1505.3	1539.3	1557.0	1565.9	1569.2	1568.5	1563.8
27.5°	1501.4	1503.9	1484.5	1465.4	1448.2	1428.9	1422.3
30°	1462.4	1432.0	1377.9	1347.2	1302.1	1266.3	1280.8
32.5°	1359.8	1299.5	1238.7	1171.6	1116.1	1100.3	1084.4
35°	1160.6	1054.4	992.4	920.2	891.3	862.4	842.5
37.5°	939.0	856.9	783.2	735.9	707.0	688.8	678.9
40°	811.9	737.8	677.2	638.9	616.9	596.3	593.4
42.5°	710.5	641.7	596.1	565.6	544.4	535.7	529.3
45°	581.9	533.9	503.2	481.5	467.5	462.0	454.9
47.5°	492.6	458.6	435.5	420.8	410.2	406.1	405.6
50°	442.6	414.4	397.5	385.9	377.6	376.2	370.4
52.5°	405.0	380.6	367.4	357.3	351.3	347.2	345.5
55°	351.6	335.4	323.5	317.6	313.0	309.0	309.0
57.5°	307.6	294.1	286.2	281.3	279.8	277.0	275.2
60°	280.5	268.9	262.8	258.4	255.6	255.9	252.7
62.5°	253.9	246.4	240.5	236.2	232.8	232.8	233.1
65°	216.2	210.5	206.1	204.7	202.6	200.0	200.7
67.5°	183.2	177.9	174.5	172.0	171.3	169.8	172.0
70°	159.6	155.6	153.1	150.9	150.1	150.5	152.3
72.5°	137.9	135.1	133.5	132.4	130.8	130.9	132.1
75°	108.3	106.1	104.7	103.6	103.2	103.2	103.2
77.5°	79.6	79.1	78.4	76.8	76.9	77.3	77.4
80°	62.8	61.7	61.4	60.6	59.6	58.8	60.6
82.5°	46.9	45.8	45.5	45.3	43.6	43.5	45.1
85°	25.3	24.2	24.5	24.2	24.2	23.8	23.8
87.5°	14.6	14.6	14.7	14.8	14.7	14.7	15.0
90°	28.5	29.6	31.8	30.6	31.8	32.9	31.8
92.5°	73.1	64.6	58.9	56.9	53.6	54.8	52.8
95°	267.2	209.2	169.8	148.9	139.1	131.4	127.1
97.5°	787.1	645.9	514.9	434.1	384.8	355.2	345.8
100°	1202.4	1074.3	918.8	808.1	728.2	685.5	686.6
102.5°	1390.7	1316.1	1217.5	1131.4	1068.2	1032.5	1007.3
105°	1533.1	1554.0	1525.5	1475.1	1433.5	1398.5	1393.0
107.5°	1515.1	1611.1	1650.1	1651.0	1636.9	1625.1	1615.0
110°	1456.5	1594.5	1671.1	1701.8	1710.5	1708.4	1706.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	1379.4	1534.0	1632.6	1688.7	1715.8	1724.1	1724.6
115°	1256.0	1417.0	1536.4	1618.5	1666.7	1688.7	1694.1
117.5°	1151.8	1296.4	1417.5	1503.2	1558.3	1589.9	1597.3
120°	1094.0	1225.4	1336.1	1422.5	1483.8	1510.1	1516.7
122.5°	1047.5	1169.3	1272.1	1349.0	1404.1	1433.0	1441.3
125°	990.0	1095.0	1182.7	1252.8	1301.0	1328.3	1336.1
127.5°	939.3	1034.2	1113.9	1176.4	1217.5	1242.3	1249.2
130°	907.9	996.6	1071.0	1129.1	1168.5	1191.5	1200.2
132.5°	878.1	960.6	1031.6	1086.1	1125.5	1145.9	1152.1
135°	835.6	906.7	969.1	1022.8	1055.6	1075.3	1083.1
137.5°	794.6	855.9	910.0	955.2	988.4	1005.0	1010.1
140°	770.9	823.5	870.6	912.2	942.9	960.4	959.3
142.5°	748.2	793.7	834.7	870.2	897.3	913.0	912.0
145°	718.4	753.5	785.1	812.6	835.6	844.3	846.5
147.5°	696.3	724.5	747.1	767.9	783.4	791.7	792.6
150°	682.2	705.2	726.0	742.4	754.5	761.1	761.1
152.5°	669.1	689.5	706.8	719.7	730.8	734.8	734.8
155°	650.4	666.9	680.0	689.9	698.7	700.9	701.9
157.5°	632.4	645.0	655.3	663.8	670.4	672.1	671.9
160°	620.9	631.9	639.5	647.2	653.7	653.7	652.7
162.5°	608.7	618.7	625.5	630.6	636.2	636.2	635.2
165°	591.4	599.0	604.5	608.9	613.2	612.2	612.2
167.5°	578.0	582.4	586.4	588.2	591.4	590.2	590.2
170°	568.4	572.7	575.0	576.0	578.2	577.1	577.1
172.5°	560.4	564.0	565.2	565.5	567.7	565.7	564.9
175°	549.7	552.0	552.0	552.0	553.0	552.0	550.8
177.5°	543.6	544.5	544.5	543.6	544.5	542.7	542.7
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0

(END OF REPORT)