

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: P332210-927

Luminaire Tested: **S123DIW-S1165D460U927-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332210-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DIW-S1165D460U927-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 460 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5340.7 lumens
Efficiency: N/A
Efficacy: 101.9 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

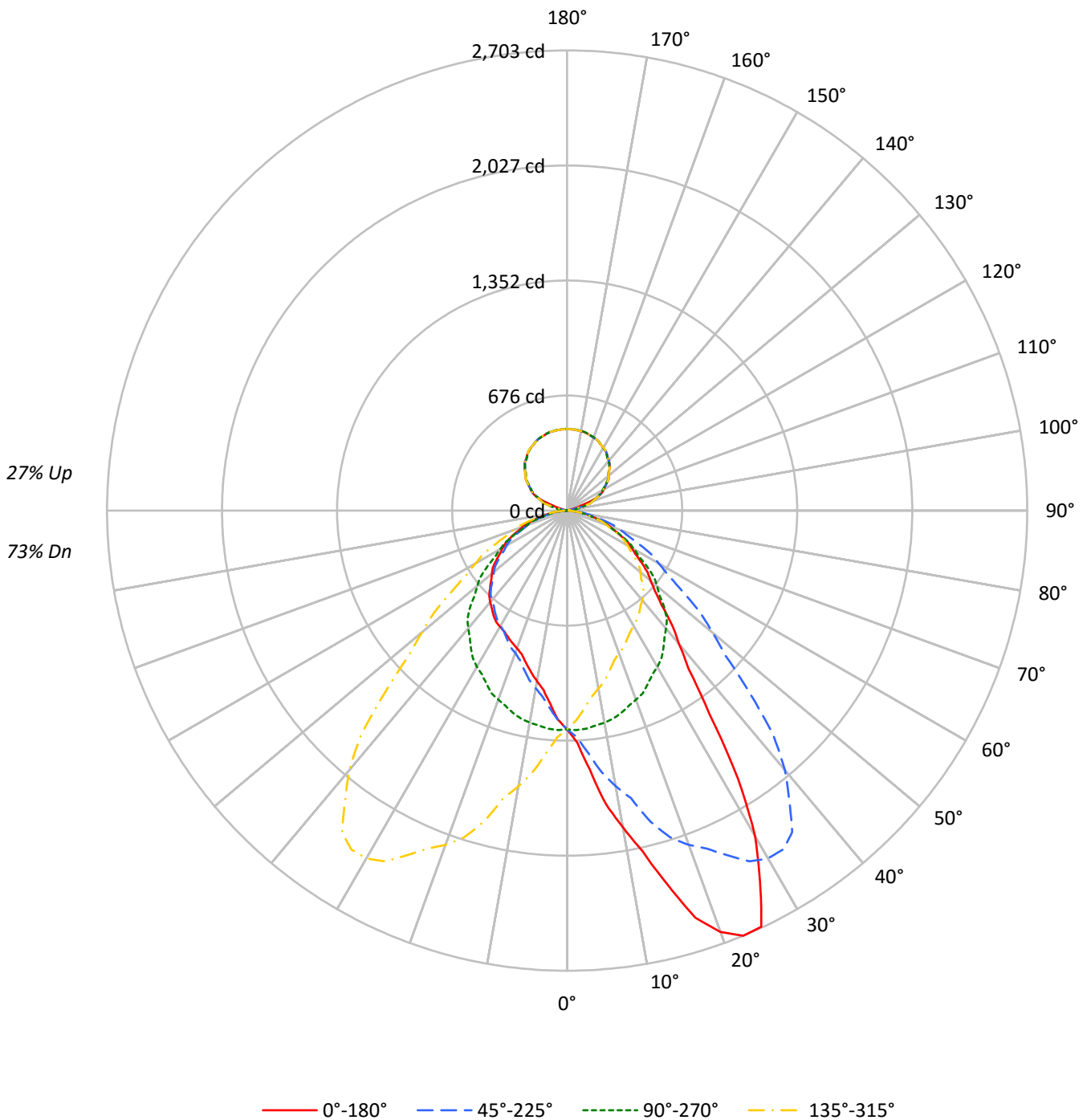
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77	77	77	77	73	
1	103	99	95	92	98	94	91	88	85	82	80	76	74	73	69	67	66	66	66	66	62	
2	94	87	81	75	89	83	77	73	75	71	67	68	64	61	61	58	56	56	56	56	53	
3	86	77	69	63	82	73	66	61	66	61	57	60	56	52	54	51	48	48	48	48	45	
4	79	68	60	54	75	65	58	52	59	53	49	54	49	45	49	45	42	42	42	42	39	
5	73	61	53	47	69	58	51	45	53	47	42	48	43	39	44	40	37	37	37	37	34	
6	67	55	47	41	64	53	45	39	48	42	37	44	39	35	40	36	32	32	32	32	30	
7	62	50	42	36	59	48	40	35	44	37	33	40	35	31	37	32	29	29	29	29	26	
8	58	45	37	32	55	44	36	31	40	34	29	37	31	28	34	29	26	26	26	26	24	
9	54	42	34	29	51	40	33	28	37	31	26	34	29	25	31	27	23	23	23	23	21	
10	51	38	31	26	48	37	30	25	34	28	24	31	26	23	29	24	21	21	21	21	19	

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	13832	13832	13832	13832
5°	16495	13891	12310	13891
10°	20647	13821	11119	13821
15°	25324	13710	10351	13710
20°	30166	13536	9856	13536
25°	32033	13324	9745	13324
30°	27455	13170	9797	13170
35°	19094	12951	9900	12951
40°	14383	12694	9868	12694
45°	11942	12310	9742	12310
50°	10697	11531	9656	11531
55°	10001	10691	9533	10691
60°	9382	9810	9436	9810
65°	8818	8945	9133	8945
70°	8271	7956	8699	7956
75°	7407	6966	7977	6966
80°	6484	5709	6868	5709
85°	5076	4150	4619	4150



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.6	2.4
10°-20°	405.9	7.6
20°-30°	681.2	12.8
30°-40°	771.4	14.4
40°-50°	691.7	13.0
50°-60°	558.2	10.5
60°-70°	389.0	7.3
70°-80°	204.5	3.8
80°-90°	51.3	1.0
90°-100°	17.4	0.3
100°-110°	83.0	1.6
110°-120°	199.4	3.7
120°-130°	253.9	4.8
130°-140°	271.3	5.1
140°-150°	253.7	4.7
150°-160°	204.6	3.8
160°-170°	132.1	2.5
170°-180°	45.5	0.9
0°-30°	1213.7	22.7
0°-40°	1985.1	37.2
0°-60°	3235.0	60.6
0°-90°	3879.8	72.6
90°-120°	299.8	5.6
90°-150°	1078.7	20.2
90°-180°	1461.0	27.4
0°-180°	5340.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1285	1285	1285	1285	1285	
5°	1527	1286	1139	1286	1527	158
15°	2272	1230	929	1230	2272	656
25°	2697	1122	820	1122	2697	1183
35°	1453	986	753	986	1453	944
45°	784	809	640	809	784	621
55°	533	570	508	570	533	478
65°	346	351	359	351	346	345
75°	178	168	192	168	178	191
85°	41	34	37	34	41	49
90°	11	0	11	0	11	7
95°	14	22	14	22	14	11
105°	16	106	16	106	16	36
115°	209	199	209	199	209	193
125°	286	280	286	280	286	256
135°	353	349	353	349	353	272
145°	407	403	407	403	407	254
155°	443	444	443	444	443	204
165°	467	468	467	468	467	132
175°	477	479	477	479	477	45
180°	479	479	479	479	479	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0
2.5°	1363.7	1362.7	1360.3	1362.2	1358.3	1352.7	1352.3	1347.3	1332.8	1331.8	1327.9
5°	1526.6	1521.6	1521.0	1520.4	1511.6	1499.8	1477.4	1475.5	1445.7	1430.7	1412.7
7.5°	1737.5	1740.1	1731.1	1723.1	1696.5	1678.9	1654.9	1624.1	1587.4	1550.1	1525.3
10°	1889.0	1909.5	1884.0	1866.5	1850.4	1819.8	1784.4	1740.1	1695.9	1644.3	1605.0
12.5°	2051.4	2061.4	2056.3	2039.9	2014.7	1968.3	1905.4	1856.7	1816.0	1730.0	1695.2
15°	2272.5	2310.5	2286.2	2230.2	2231.3	2187.1	2105.0	2014.7	1966.8	1891.4	1788.7
17.5°	2508.0	2512.8	2502.4	2455.8	2424.6	2363.9	2288.1	2201.5	2104.4	2013.3	1904.2
20°	2633.5	2629.8	2608.0	2583.8	2530.2	2482.9	2400.1	2303.6	2179.1	2089.5	1970.5
22.5°	2703.3	2697.1	2686.8	2666.4	2621.9	2571.0	2496.7	2391.3	2272.7	2149.2	2011.8
25°	2697.1	2705.1	2706.4	2700.8	2685.3	2654.8	2596.2	2512.2	2393.9	2235.1	2091.9
27.5°	2453.0	2464.5	2497.8	2527.2	2560.3	2593.8	2589.3	2547.7	2460.1	2323.0	2147.9
30°	2208.9	2184.0	2245.7	2323.5	2376.5	2469.8	2522.1	2525.2	2476.0	2358.4	2187.8
32.5°	1870.3	1897.7	1924.9	2020.7	2136.4	2241.2	2345.3	2429.1	2438.7	2360.4	2211.2
35°	1453.1	1487.4	1537.2	1587.0	1711.5	1818.6	2001.6	2161.0	2288.1	2304.9	2213.3
37.5°	1171.0	1187.9	1219.4	1269.3	1350.8	1477.8	1619.4	1820.8	2004.9	2141.7	2147.7
40°	1023.6	1028.5	1064.0	1102.0	1168.0	1272.6	1400.2	1578.3	1798.6	1989.8	2069.5
42.5°	913.0	923.9	939.0	975.5	1028.0	1106.8	1225.4	1372.5	1574.5	1794.5	1950.4
45°	784.5	796.9	806.3	830.5	867.9	920.8	1003.6	1138.1	1291.9	1519.1	1728.9
47.5°	699.6	700.5	707.5	725.8	751.2	790.9	849.5	935.9	1077.1	1261.4	1476.8
50°	638.8	648.7	651.3	665.5	685.5	714.7	763.3	836.8	952.6	1114.4	1312.4
52.5°	596.0	599.0	605.9	616.2	633.7	656.5	698.5	756.1	847.0	984.9	1167.0
55°	532.9	532.9	539.8	547.9	557.9	578.4	606.4	648.7	717.9	824.9	975.6
57.5°	474.7	477.8	482.6	485.1	493.6	507.2	530.6	562.7	614.3	696.6	816.5
60°	435.8	441.4	440.8	445.8	453.3	463.8	483.8	509.9	556.0	621.9	722.9
62.5°	402.0	401.6	401.5	407.4	414.9	425.0	437.9	460.6	499.7	558.3	644.1
65°	346.2	344.9	349.3	353.0	355.5	363.0	373.0	392.8	419.0	462.6	529.2
67.5°	296.6	293.0	295.3	296.6	300.9	306.7	316.0	328.4	349.1	384.1	434.4
70°	262.8	259.6	259.0	260.2	264.0	268.3	275.2	287.0	306.3	334.3	371.1
72.5°	227.8	225.8	225.6	228.4	230.1	233.0	237.8	248.7	264.0	285.0	319.2
75°	178.1	178.1	178.1	178.7	180.5	183.1	186.8	192.3	204.2	219.1	242.2
77.5°	133.5	133.3	132.6	132.5	135.2	136.3	137.2	142.4	149.0	159.1	175.9
80°	104.6	101.5	102.7	104.6	105.8	106.5	108.4	109.6	115.2	120.8	132.6
82.5°	77.7	75.1	75.3	78.2	78.4	79.1	81.0	82.7	84.8	89.9	96.3
85°	41.1	41.1	41.7	41.7	42.3	41.7	43.6	44.2	44.2	47.3	51.0
87.5°	17.1	16.1	16.5	17.0	16.5	16.9	17.3	17.7	18.2	18.6	18.9
90°	10.7	10.5	10.4	10.2	10.1	9.8	9.5	9.2	8.9	8.6	7.5
92.5°	11.8	11.7	11.6	11.6	11.4	11.2	10.6	10.1	9.6	9.1	8.3
95°	13.5	13.5	13.5	13.5	13.5	13.2	12.7	12.1	11.6	11.0	10.1
97.5°	14.7	14.6	14.5	14.4	14.3	14.0	13.4	12.8	12.1	11.5	17.2
100°	15.0	14.9	14.8	14.7	14.7	14.3	13.6	13.0	12.4	11.7	24.1
102.5°	15.2	15.1	15.0	14.8	14.7	15.6	17.5	19.5	21.5	23.4	36.9
105°	15.7	15.5	15.4	15.2	15.1	21.9	36.0	49.9	63.9	78.0	85.1
107.5°	49.2	59.7	70.3	80.8	91.4	101.8	112.1	122.3	132.6	142.8	141.7
110°	97.9	109.2	120.5	131.8	143.1	150.0	152.7	155.3	157.9	160.5	159.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	167.9	170.3	172.7	175.1	177.4	178.6	178.6	178.6	178.5	178.5	177.6
115°	209.3	209.0	208.7	208.3	208.0	207.5	206.7	205.9	205.1	204.3	203.6
117.5°	232.5	232.4	232.3	232.3	232.2	231.9	231.2	230.6	230.0	229.3	229.0
120°	248.4	248.4	248.4	248.4	248.4	248.1	247.5	246.8	246.2	245.6	245.3
122.5°	264.1	264.0	264.0	263.9	263.8	263.6	263.2	262.7	262.2	261.8	261.5
125°	286.1	286.0	285.8	285.7	285.5	285.3	285.2	285.0	284.9	284.7	284.4
127.5°	307.4	307.5	307.7	307.8	308.0	307.9	307.7	307.4	307.2	307.0	306.6
130°	321.0	321.2	321.3	321.5	321.6	321.5	321.2	320.9	320.6	320.3	320.0
132.5°	333.6	333.7	334.0	334.2	334.5	334.4	334.1	333.7	333.4	333.1	332.9
135°	352.7	352.9	353.2	353.4	353.6	353.6	353.4	353.2	352.9	352.7	352.4
137.5°	370.7	370.9	371.1	371.2	371.4	371.2	370.8	370.5	370.1	369.7	369.6
140°	381.5	381.7	381.8	382.0	382.1	382.1	381.8	381.4	381.1	380.8	380.6
142.5°	391.5	391.7	392.0	392.1	392.4	392.4	392.1	391.9	391.6	391.3	391.1
145°	406.8	406.8	406.8	406.8	406.8	406.7	406.5	406.4	406.2	406.1	405.9
147.5°	418.2	418.6	418.9	419.3	419.6	419.8	419.6	419.5	419.3	419.1	419.0
150°	426.7	427.0	427.2	427.5	427.7	427.7	427.5	427.4	427.2	427.1	426.9
152.5°	433.6	434.0	434.3	434.7	435.0	435.1	434.7	434.5	434.2	434.0	433.8
155°	443.1	443.5	444.0	444.5	445.0	445.0	444.7	444.3	443.9	443.5	443.4
157.5°	451.1	451.8	452.4	453.0	453.6	453.7	453.2	452.7	452.3	451.8	451.9
160°	456.3	456.9	457.4	458.0	458.5	458.5	458.0	457.6	457.1	456.6	456.7
162.5°	461.1	461.6	462.1	462.6	463.1	463.0	462.6	462.0	461.4	460.9	461.0
165°	467.0	467.5	468.1	468.6	469.1	469.1	468.5	467.9	467.2	466.6	466.7
167.5°	471.2	471.8	472.5	473.0	473.6	473.6	473.0	472.5	471.8	471.2	471.2
170°	473.7	474.4	475.0	475.6	476.3	476.3	475.6	475.0	474.4	473.7	473.7
172.5°	475.2	475.9	476.5	477.2	477.9	477.9	477.3	476.7	476.0	475.4	475.4
175°	477.3	477.9	478.6	479.2	479.8	479.8	479.3	478.7	478.2	477.6	477.5
177.5°	477.9	478.6	479.2	479.8	480.5	480.5	480.0	479.5	479.0	478.5	478.4
180°	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0
2.5°	1324.8	1320.9	1316.9	1310.0	1303.9	1295.5	1293.0	1290.0	1281.0	1273.1	1267.1
5°	1405.8	1390.8	1369.0	1349.2	1333.0	1311.2	1298.7	1285.6	1266.9	1250.1	1236.4
7.5°	1490.5	1461.1	1427.2	1390.6	1356.5	1323.7	1297.1	1273.4	1247.3	1222.5	1203.2
10°	1557.7	1515.4	1468.1	1417.1	1373.4	1331.1	1295.6	1264.5	1230.9	1201.6	1177.3
12.5°	1634.4	1571.7	1506.4	1444.4	1392.9	1334.1	1291.1	1251.6	1213.5	1178.2	1151.0
15°	1725.2	1645.5	1568.3	1483.0	1404.5	1331.1	1280.1	1230.3	1186.1	1149.9	1115.1
17.5°	1807.9	1717.6	1615.9	1512.1	1417.5	1330.4	1258.9	1202.6	1147.3	1103.1	1068.3
20°	1854.7	1752.0	1636.8	1529.1	1424.5	1327.4	1249.0	1181.7	1121.9	1075.2	1036.0
22.5°	1895.1	1774.9	1655.7	1540.6	1424.0	1319.4	1230.5	1161.3	1096.5	1050.8	1009.1
25°	1936.9	1793.1	1673.6	1538.4	1408.3	1300.0	1200.4	1121.9	1057.2	1003.6	960.7
27.5°	1972.8	1791.8	1650.0	1504.7	1383.6	1275.1	1168.7	1084.6	1015.8	957.7	914.1
30°	1996.6	1794.3	1625.6	1481.8	1359.8	1247.7	1144.3	1059.6	987.5	928.3	887.2
32.5°	2011.6	1792.8	1603.1	1449.9	1321.9	1222.7	1117.9	1030.2	956.1	897.9	858.3
35°	2020.3	1781.9	1564.6	1384.0	1260.8	1164.3	1076.5	985.6	907.8	853.6	808.7
37.5°	2002.9	1758.8	1519.7	1320.5	1185.6	1090.5	1016.7	939.2	864.7	805.2	766.5
40°	1975.5	1743.9	1484.9	1275.7	1133.8	1042.2	979.4	903.4	829.9	773.2	737.1
42.5°	1923.2	1713.5	1446.5	1225.9	1080.0	988.4	930.5	867.0	797.6	744.3	708.3
45°	1795.6	1647.3	1389.0	1151.2	1000.5	905.9	854.8	808.7	745.8	694.2	663.1
47.5°	1618.5	1547.9	1305.8	1072.4	917.6	826.6	773.5	736.4	690.5	648.7	618.9
50°	1495.5	1466.2	1249.5	1018.6	862.3	773.2	722.2	688.6	655.6	613.9	586.5
52.5°	1353.5	1371.6	1183.8	962.7	806.0	718.5	670.4	643.7	613.8	579.5	555.6
55°	1153.7	1219.0	1070.2	869.1	722.2	638.8	593.3	569.7	552.2	526.7	506.2
57.5°	966.5	1049.7	947.5	772.6	639.9	567.9	524.3	498.6	487.4	474.0	457.9
60°	855.5	937.6	859.8	707.9	584.6	516.1	477.5	455.7	444.5	435.2	421.5
62.5°	756.3	839.5	774.1	642.1	530.3	466.8	433.2	411.9	403.2	398.3	386.7
65°	620.1	691.7	648.1	539.8	452.7	396.6	366.1	351.2	343.0	341.2	333.7
67.5°	504.7	559.2	527.4	447.7	379.1	330.7	304.8	292.2	285.9	285.3	279.6
70°	429.0	480.0	455.7	383.5	324.4	286.4	264.0	252.8	249.1	248.4	245.3
72.5°	370.2	405.8	386.5	326.2	280.5	246.1	229.6	217.9	213.7	214.5	212.5
75°	273.9	300.7	289.5	247.8	211.0	188.6	174.9	167.5	163.7	165.6	163.1
77.5°	197.1	214.0	204.0	175.1	152.4	136.3	126.1	121.5	118.2	118.0	116.9
80°	148.8	158.8	153.1	135.7	117.1	103.4	95.2	92.1	90.3	89.7	89.0
82.5°	106.0	114.5	107.8	95.9	83.2	74.9	70.3	66.2	64.9	65.3	64.6
85°	53.6	56.6	54.2	46.7	41.7	37.9	35.5	33.6	32.4	33.0	31.8
87.5°	19.7	20.0	18.3	16.2	15.0	13.3	13.2	12.0	11.2	11.3	11.0
90°	6.5	5.5	4.4	3.5	2.7	1.9	1.1	0.3	1.1	1.9	2.7
92.5°	7.5	6.8	6.0	5.7	5.9	6.2	6.4	6.7	6.4	6.2	5.9
95°	9.3	8.4	7.5	8.7	12.0	15.2	18.5	21.7	18.5	15.2	12.0
97.5°	22.8	28.5	34.2	37.8	39.3	40.7	42.1	43.6	42.1	40.7	39.3
100°	36.4	48.8	61.1	66.5	64.9	63.3	61.7	60.1	61.7	63.3	64.9
102.5°	50.4	63.8	77.3	83.5	82.4	81.2	80.1	78.9	80.1	81.2	82.4
105°	92.2	99.3	106.4	109.6	108.7	107.8	106.9	106.1	106.9	107.8	108.7
107.5°	140.6	139.5	138.4	137.4	136.7	136.1	135.4	134.7	135.4	136.1	136.7
110°	158.8	157.9	157.0	156.3	155.7	155.0	154.4	153.8	154.4	155.0	155.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	176.7	175.9	175.0	174.3	173.6	173.1	172.5	172.0	172.5	173.1	173.6
115°	202.9	202.2	201.5	200.8	200.3	199.9	199.4	198.9	199.4	199.9	200.3
117.5°	228.6	228.2	227.9	227.4	226.8	226.2	225.7	225.1	225.7	226.2	226.8
120°	245.1	244.9	244.6	244.2	243.4	242.7	242.0	241.3	242.0	242.7	243.4
122.5°	261.2	260.9	260.6	260.2	259.6	259.0	258.4	257.9	258.4	259.0	259.6
125°	284.1	283.8	283.4	283.0	282.3	281.7	281.1	280.4	281.1	281.7	282.3
127.5°	306.2	305.8	305.4	304.9	304.3	303.6	303.0	302.4	303.0	303.6	304.3
130°	319.7	319.4	319.1	318.6	318.0	317.3	316.7	316.1	316.7	317.3	318.0
132.5°	332.6	332.4	332.1	331.7	331.1	330.4	329.8	329.2	329.8	330.4	331.1
135°	352.0	351.7	351.4	351.0	350.5	350.1	349.6	349.1	349.6	350.1	350.5
137.5°	369.4	369.2	369.0	368.6	368.0	367.4	366.9	366.2	366.9	367.4	368.0
140°	380.3	380.1	379.9	379.5	379.1	378.6	378.1	377.6	378.1	378.6	379.1
142.5°	390.9	390.6	390.4	390.1	389.6	389.1	388.6	388.2	388.6	389.1	389.6
145°	405.8	405.6	405.4	405.1	404.6	404.0	403.5	402.9	403.5	404.0	404.6
147.5°	418.8	418.7	418.5	418.2	417.9	417.5	417.2	416.8	417.2	417.5	417.9
150°	426.7	426.6	426.4	426.3	426.0	425.8	425.6	425.3	425.6	425.8	426.0
152.5°	433.7	433.6	433.6	433.5	433.3	433.2	433.1	433.0	433.1	433.2	433.3
155°	443.3	443.2	443.1	443.2	443.4	443.5	443.6	443.8	443.6	443.5	443.4
157.5°	451.9	452.0	452.1	452.2	452.2	452.2	452.2	452.3	452.2	452.2	452.2
160°	456.8	456.9	456.9	457.0	457.1	457.2	457.2	457.3	457.2	457.2	457.1
162.5°	461.1	461.1	461.2	461.4	461.6	461.8	462.0	462.2	462.0	461.8	461.6
165°	466.8	466.8	466.9	467.1	467.3	467.5	467.8	468.0	467.8	467.5	467.3
167.5°	471.2	471.2	471.2	471.3	471.7	472.0	472.3	472.6	472.3	472.0	471.7
170°	473.7	473.7	473.7	473.9	474.2	474.5	474.8	475.2	474.8	474.5	474.2
172.5°	475.3	475.2	475.2	475.3	475.7	476.1	476.5	476.8	476.5	476.1	475.7
175°	477.4	477.4	477.3	477.4	477.8	478.2	478.6	479.0	478.6	478.2	477.8
177.5°	478.3	478.3	478.2	478.3	478.6	479.0	479.3	479.6	479.3	479.0	478.6
180°	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0



TEST NUMBER: P332210-927

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0
2.5°	1263.6	1260.1	1255.1	1247.7	1241.7	1232.2	1232.2	1233.7	1233.7	1233.3	1232.2
5°	1225.3	1215.9	1204.8	1191.7	1178.0	1164.3	1161.7	1156.7	1153.0	1150.6	1147.5
7.5°	1184.8	1168.2	1151.9	1133.6	1116.9	1103.1	1093.5	1085.5	1080.5	1075.0	1071.0
10°	1157.4	1136.9	1117.5	1098.3	1077.1	1060.3	1049.7	1042.2	1036.6	1031.7	1029.1
12.5°	1125.1	1101.5	1080.2	1061.9	1038.7	1021.4	1011.4	1007.8	1001.2	990.8	985.3
15°	1077.7	1055.9	1030.4	1002.3	991.2	970.0	958.1	952.6	948.8	940.7	938.3
17.5°	1037.2	1008.7	980.1	959.2	938.3	921.1	914.6	907.6	902.6	896.0	894.1
20°	1004.9	979.4	953.2	930.8	908.9	890.3	884.7	879.7	874.7	871.6	869.1
22.5°	972.0	946.5	924.8	903.9	880.6	868.4	862.3	856.8	853.3	851.2	848.7
25°	925.8	903.4	879.1	860.4	841.8	833.6	829.9	826.8	824.3	821.2	820.5
27.5°	884.5	860.1	840.3	822.9	809.5	802.8	799.2	797.6	798.2	799.3	800.0
30°	853.6	831.2	815.0	800.0	787.6	781.3	780.7	780.7	783.2	783.9	785.1
32.5°	825.2	806.8	790.6	776.1	766.7	762.4	764.8	764.8	766.8	768.4	770.6
35°	783.9	767.6	755.2	742.8	734.7	736.5	737.8	739.0	742.1	745.8	748.4
37.5°	744.3	730.3	717.3	707.7	703.9	707.3	710.3	712.9	716.4	719.4	721.8
40°	716.0	705.4	692.9	684.2	685.5	687.4	689.8	692.9	696.1	697.9	700.4
42.5°	689.6	678.5	669.1	661.8	663.5	665.9	667.4	669.1	672.6	676.0	677.5
45°	649.4	640.6	631.9	627.6	628.8	630.1	631.3	633.2	636.3	638.8	639.4
47.5°	604.2	598.1	592.2	588.0	589.9	589.5	591.1	595.1	596.0	597.5	601.0
50°	575.3	569.7	562.8	561.6	561.6	561.6	562.2	567.2	567.2	569.7	572.2
52.5°	543.4	539.8	535.4	533.2	532.2	532.2	534.8	537.3	538.3	541.8	544.3
55°	496.2	492.5	488.7	486.9	485.6	486.9	491.9	493.1	496.2	498.0	499.9
57.5°	447.0	444.2	441.2	440.1	439.9	441.6	444.3	448.0	448.8	454.5	457.3
60°	414.6	410.3	407.8	407.8	406.5	412.2	410.9	417.2	418.4	422.2	426.5
62.5°	381.3	375.4	374.5	374.5	376.2	377.8	379.5	382.3	385.5	390.2	393.6
65°	327.5	324.4	328.8	328.1	326.9	330.6	330.6	333.7	337.5	341.8	348.6
67.5°	276.6	275.0	275.3	275.3	277.2	279.3	281.1	283.8	288.3	292.9	297.4
70°	242.2	244.1	241.0	243.4	245.3	245.9	247.2	250.9	255.9	259.0	264.0
72.5°	208.8	208.7	209.1	210.1	211.9	213.0	214.3	218.6	224.0	226.6	230.6
75°	160.7	160.0	161.8	161.8	165.0	166.2	167.5	169.4	174.4	178.1	181.2
77.5°	117.3	118.0	117.6	119.8	118.9	119.1	123.0	124.9	125.4	132.8	134.4
80°	88.4	89.7	90.3	90.9	91.5	90.3	94.7	96.5	96.5	100.8	103.9
82.5°	63.5	64.2	65.9	66.5	66.6	67.9	68.2	69.6	71.1	73.0	77.1
85°	31.8	33.6	34.2	33.6	34.2	33.0	34.9	35.5	36.1	36.1	36.1
87.5°	10.7	11.3	11.1	11.7	11.5	12.2	12.2	11.3	11.3	12.9	11.0
90°	3.5	4.4	5.5	6.5	7.5	8.6	8.9	9.2	9.5	9.8	10.1
92.5°	5.7	6.0	6.8	7.5	8.3	9.1	9.6	10.1	10.6	11.2	11.4
95°	8.7	7.5	8.4	9.3	10.1	11.0	11.6	12.1	12.7	13.2	13.5
97.5°	37.8	34.2	28.5	22.8	17.2	11.5	12.1	12.8	13.4	14.0	14.3
100°	66.5	61.1	48.8	36.4	24.1	11.7	12.4	13.0	13.6	14.3	14.7
102.5°	83.5	77.3	63.8	50.4	36.9	23.4	21.5	19.5	17.5	15.6	14.7
105°	109.6	106.4	99.3	92.2	85.1	78.0	63.9	49.9	36.0	21.9	15.1
107.5°	137.4	138.4	139.5	140.6	141.7	142.8	132.6	122.3	112.1	101.8	91.4
110°	156.3	157.0	157.9	158.8	159.6	160.5	157.9	155.3	152.7	150.0	143.1



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	174.3	175.0	175.9	176.7	177.6	178.5	178.5	178.6	178.6	178.6	177.4
115°	200.8	201.5	202.2	202.9	203.6	204.3	205.1	205.9	206.7	207.5	208.0
117.5°	227.4	227.9	228.2	228.6	229.0	229.3	230.0	230.6	231.2	231.9	232.2
120°	244.2	244.6	244.9	245.1	245.3	245.6	246.2	246.8	247.5	248.1	248.4
122.5°	260.2	260.6	260.9	261.2	261.5	261.8	262.2	262.7	263.2	263.6	263.8
125°	283.0	283.4	283.8	284.1	284.4	284.7	284.9	285.0	285.2	285.3	285.5
127.5°	304.9	305.4	305.8	306.2	306.6	307.0	307.2	307.4	307.7	307.9	308.0
130°	318.6	319.1	319.4	319.7	320.0	320.3	320.6	320.9	321.2	321.5	321.6
132.5°	331.7	332.1	332.4	332.6	332.9	333.1	333.4	333.7	334.1	334.4	334.5
135°	351.0	351.4	351.7	352.0	352.4	352.7	352.9	353.2	353.4	353.6	353.6
137.5°	368.6	369.0	369.2	369.4	369.6	369.7	370.1	370.5	370.8	371.2	371.4
140°	379.5	379.9	380.1	380.3	380.6	380.8	381.1	381.4	381.8	382.1	382.1
142.5°	390.1	390.4	390.6	390.9	391.1	391.3	391.6	391.9	392.1	392.4	392.4
145°	405.1	405.4	405.6	405.8	405.9	406.1	406.2	406.4	406.5	406.7	406.8
147.5°	418.2	418.5	418.7	418.8	419.0	419.1	419.3	419.5	419.6	419.8	419.6
150°	426.3	426.4	426.6	426.7	426.9	427.1	427.2	427.4	427.5	427.7	427.7
152.5°	433.5	433.6	433.6	433.7	433.8	434.0	434.2	434.5	434.7	435.1	435.0
155°	443.2	443.1	443.2	443.3	443.4	443.5	443.9	444.3	444.7	445.0	445.0
157.5°	452.2	452.1	452.0	451.9	451.9	451.8	452.3	452.7	453.2	453.7	453.6
160°	457.0	456.9	456.9	456.8	456.7	456.6	457.1	457.6	458.0	458.5	458.5
162.5°	461.4	461.2	461.1	461.1	461.0	460.9	461.4	462.0	462.6	463.0	463.1
165°	467.1	466.9	466.8	466.8	466.7	466.6	467.2	467.9	468.5	469.1	469.1
167.5°	471.3	471.2	471.2	471.2	471.2	471.2	471.8	472.5	473.0	473.6	473.6
170°	473.9	473.7	473.7	473.7	473.7	473.7	474.4	475.0	475.6	476.3	476.3
172.5°	475.3	475.2	475.2	475.3	475.4	475.4	476.0	476.7	477.3	477.9	477.9
175°	477.4	477.3	477.4	477.4	477.5	477.6	478.2	478.7	479.3	479.8	479.8
177.5°	478.3	478.2	478.3	478.3	478.4	478.5	479.0	479.5	480.0	480.5	480.5
180°	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0
2.5°	1228.8	1228.3	1231.8	1229.2	1231.8	1228.3	1228.8	1232.2	1233.3	1233.7	1233.7
5°	1143.7	1145.6	1139.3	1139.3	1139.3	1145.6	1143.7	1147.5	1150.6	1153.0	1156.7
7.5°	1068.0	1065.2	1065.5	1062.2	1065.5	1065.2	1068.0	1071.0	1075.0	1080.5	1085.5
10°	1021.7	1018.0	1016.7	1017.3	1016.7	1018.0	1021.7	1029.1	1031.7	1036.6	1042.2
12.5°	983.3	982.5	974.4	974.5	974.4	982.5	983.3	985.3	990.8	1001.2	1007.8
15°	938.3	926.5	925.2	928.9	925.2	926.5	938.3	938.3	940.7	948.8	952.6
17.5°	893.0	886.8	887.2	885.3	887.2	886.8	893.0	894.1	896.0	902.6	907.6
20°	869.1	865.4	864.7	860.4	864.7	865.4	869.1	869.1	871.6	874.7	879.7
22.5°	847.2	846.0	846.4	841.5	846.4	846.0	847.2	848.7	851.2	853.3	856.8
25°	820.0	823.1	820.5	820.5	820.5	823.1	820.0	820.5	821.2	824.3	826.8
27.5°	801.5	801.4	800.2	800.2	800.2	801.4	801.5	800.0	799.3	798.2	797.6
30°	787.6	787.0	788.2	788.2	788.2	787.0	787.6	785.1	783.9	783.2	780.7
32.5°	773.6	774.5	774.8	775.2	774.8	774.5	773.6	770.6	768.4	766.8	764.8
35°	752.1	752.7	754.6	753.4	754.6	752.7	752.1	748.4	745.8	742.1	739.0
37.5°	722.9	725.8	725.2	726.2	725.2	725.8	722.9	721.8	719.4	716.4	712.9
40°	701.0	702.9	702.3	702.3	702.3	702.9	701.0	700.4	697.9	696.1	692.9
42.5°	678.7	680.0	678.3	677.4	678.3	680.0	678.7	677.5	676.0	672.6	669.1
45°	641.9	640.6	642.5	640.0	642.5	640.6	641.9	639.4	638.8	636.3	633.2
47.5°	600.8	602.1	602.5	604.4	602.5	602.1	600.8	601.0	597.5	596.0	595.1
50°	573.4	577.1	577.1	576.6	577.1	577.1	573.4	572.2	569.7	567.2	567.2
52.5°	546.5	548.3	550.7	550.6	550.7	548.3	546.5	544.3	541.8	538.3	537.3
55°	504.9	506.2	507.4	508.0	507.4	506.2	504.9	499.9	498.0	496.2	493.1
57.5°	461.8	461.4	464.3	465.2	464.3	461.4	461.8	457.3	454.5	448.8	448.0
60°	431.4	431.4	436.4	438.3	436.4	431.4	431.4	426.5	422.2	418.4	417.2
62.5°	399.1	401.1	406.1	403.5	406.1	401.1	399.1	393.6	390.2	385.5	382.3
65°	351.7	356.7	356.1	358.6	356.1	356.7	351.7	348.6	341.8	337.5	333.7
67.5°	302.3	305.5	309.9	310.3	309.9	305.5	302.3	297.4	292.9	288.3	283.8
70°	268.9	272.0	274.6	276.4	274.6	272.0	268.9	264.0	259.0	255.9	250.9
72.5°	236.6	238.2	244.2	241.5	244.2	238.2	236.6	230.6	226.6	224.0	218.6
75°	185.5	189.9	193.6	191.8	193.6	189.9	185.5	181.2	178.1	174.4	169.4
77.5°	137.2	141.6	143.3	141.7	143.3	141.6	137.2	134.4	132.8	125.4	124.9
80°	108.4	107.7	111.5	110.8	111.5	107.7	108.4	103.9	100.8	96.5	96.5
82.5°	79.5	78.8	80.6	81.0	80.6	78.8	79.5	77.1	73.0	71.1	69.6
85°	38.6	40.5	37.9	37.4	37.9	40.5	38.6	36.1	36.1	36.1	35.5
87.5°	11.0	11.0	10.5	10.1	10.5	11.0	11.0	11.0	12.9	11.3	11.3
90°	10.2	10.4	10.5	10.7	10.5	10.4	10.2	10.1	9.8	9.5	9.2
92.5°	11.6	11.6	11.7	11.8	11.7	11.6	11.6	11.4	11.2	10.6	10.1
95°	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.2	12.7	12.1
97.5°	14.4	14.5	14.6	14.7	14.6	14.5	14.4	14.3	14.0	13.4	12.8
100°	14.7	14.8	14.9	15.0	14.9	14.8	14.7	14.7	14.3	13.6	13.0
102.5°	14.8	15.0	15.1	15.2	15.1	15.0	14.8	14.7	15.6	17.5	19.5
105°	15.2	15.4	15.5	15.7	15.5	15.4	15.2	15.1	21.9	36.0	49.9
107.5°	80.8	70.3	59.7	49.2	59.7	70.3	80.8	91.4	101.8	112.1	122.3
110°	131.8	120.5	109.2	97.9	109.2	120.5	131.8	143.1	150.0	152.7	155.3



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	175.1	172.7	170.3	167.9	170.3	172.7	175.1	177.4	178.6	178.6	178.6
115°	208.3	208.7	209.0	209.3	209.0	208.7	208.3	208.0	207.5	206.7	205.9
117.5°	232.3	232.3	232.4	232.5	232.4	232.3	232.3	232.2	231.9	231.2	230.6
120°	248.4	248.4	248.4	248.4	248.4	248.4	248.4	248.4	248.1	247.5	246.8
122.5°	263.9	264.0	264.0	264.1	264.0	264.0	263.9	263.8	263.6	263.2	262.7
125°	285.7	285.8	286.0	286.1	286.0	285.8	285.7	285.5	285.3	285.2	285.0
127.5°	307.8	307.7	307.5	307.4	307.5	307.7	307.8	308.0	307.9	307.7	307.4
130°	321.5	321.3	321.2	321.0	321.2	321.3	321.5	321.6	321.5	321.2	320.9
132.5°	334.2	334.0	333.7	333.6	333.7	334.0	334.2	334.5	334.4	334.1	333.7
135°	353.4	353.2	352.9	352.7	352.9	353.2	353.4	353.6	353.6	353.4	353.2
137.5°	371.2	371.1	370.9	370.7	370.9	371.1	371.2	371.4	371.2	370.8	370.5
140°	382.0	381.8	381.7	381.5	381.7	381.8	382.0	382.1	382.1	381.8	381.4
142.5°	392.1	392.0	391.7	391.5	391.7	392.0	392.1	392.4	392.4	392.1	391.9
145°	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.7	406.5	406.4
147.5°	419.3	418.9	418.6	418.2	418.6	418.9	419.3	419.6	419.8	419.6	419.5
150°	427.5	427.2	427.0	426.7	427.0	427.2	427.5	427.7	427.7	427.5	427.4
152.5°	434.7	434.3	434.0	433.6	434.0	434.3	434.7	435.0	435.1	434.7	434.5
155°	444.5	444.0	443.5	443.1	443.5	444.0	444.5	445.0	445.0	444.7	444.3
157.5°	453.0	452.4	451.8	451.1	451.8	452.4	453.0	453.6	453.7	453.2	452.7
160°	458.0	457.4	456.9	456.3	456.9	457.4	458.0	458.5	458.5	458.0	457.6
162.5°	462.6	462.1	461.6	461.1	461.6	462.1	462.6	463.1	463.0	462.6	462.0
165°	468.6	468.1	467.5	467.0	467.5	468.1	468.6	469.1	469.1	468.5	467.9
167.5°	473.0	472.5	471.8	471.2	471.8	472.5	473.0	473.6	473.6	473.0	472.5
170°	475.6	475.0	474.4	473.7	474.4	475.0	475.6	476.3	476.3	475.6	475.0
172.5°	477.2	476.5	475.9	475.2	475.9	476.5	477.2	477.9	477.9	477.3	476.7
175°	479.2	478.6	477.9	477.3	477.9	478.6	479.2	479.8	479.8	479.3	478.7
177.5°	479.8	479.2	478.6	477.9	478.6	479.2	479.8	480.5	480.5	480.0	479.5
180°	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0



TEST NUMBER: P332210-927

CATALOG NUMBER: S123DIW-S1165D460U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0
2.5°	1232.2	1232.2	1241.7	1247.7	1255.1	1260.1	1263.6	1267.1	1273.1	1281.0	1290.0
5°	1161.7	1164.3	1178.0	1191.7	1204.8	1215.9	1225.3	1236.4	1250.1	1266.9	1285.6
7.5°	1093.5	1103.1	1116.9	1133.6	1151.9	1168.2	1184.8	1203.2	1222.5	1247.3	1273.4
10°	1049.7	1060.3	1077.1	1098.3	1117.5	1136.9	1157.4	1177.3	1201.6	1230.9	1264.5
12.5°	1011.4	1021.4	1038.7	1061.9	1080.2	1101.5	1125.1	1151.0	1178.2	1213.5	1251.6
15°	958.1	970.0	991.2	1002.3	1030.4	1055.9	1077.7	1115.1	1149.9	1186.1	1230.3
17.5°	914.6	921.1	938.3	959.2	980.1	1008.7	1037.2	1068.3	1103.1	1147.3	1202.6
20°	884.7	890.3	908.9	930.8	953.2	979.4	1004.9	1036.0	1075.2	1121.9	1181.7
22.5°	862.3	868.4	880.6	903.9	924.8	946.5	972.0	1009.1	1050.8	1096.5	1161.3
25°	829.9	833.6	841.8	860.4	879.1	903.4	925.8	960.7	1003.6	1057.2	1121.9
27.5°	799.2	802.8	809.5	822.9	840.3	860.1	884.5	914.1	957.7	1015.8	1084.6
30°	780.7	781.3	787.6	800.0	815.0	831.2	853.6	887.2	928.3	987.5	1059.6
32.5°	764.8	762.4	766.7	776.1	790.6	806.8	825.2	858.3	897.9	956.1	1030.2
35°	737.8	736.5	734.7	742.8	755.2	767.6	783.9	808.7	853.6	907.8	985.6
37.5°	710.3	707.3	703.9	707.7	717.3	730.3	744.3	766.5	805.2	864.7	939.2
40°	689.8	687.4	685.5	684.2	692.9	705.4	716.0	737.1	773.2	829.9	903.4
42.5°	667.4	665.9	663.5	661.8	669.1	678.5	689.6	708.3	744.3	797.6	867.0
45°	631.3	630.1	628.8	627.6	631.9	640.6	649.4	663.1	694.2	745.8	808.7
47.5°	591.1	589.5	589.9	588.0	592.2	598.1	604.2	618.9	648.7	690.5	736.4
50°	562.2	561.6	561.6	561.6	562.8	569.7	575.3	586.5	613.9	655.6	688.6
52.5°	534.8	532.2	532.2	533.2	535.4	539.8	543.4	555.6	579.5	613.8	643.7
55°	491.9	486.9	485.6	486.9	488.7	492.5	496.2	506.2	526.7	552.2	569.7
57.5°	444.3	441.6	439.9	440.1	441.2	444.2	447.0	457.9	474.0	487.4	498.6
60°	410.9	412.2	406.5	407.8	407.8	410.3	414.6	421.5	435.2	444.5	455.7
62.5°	379.5	377.8	376.2	374.5	374.5	375.4	381.3	386.7	398.3	403.2	411.9
65°	330.6	330.6	326.9	328.1	328.8	324.4	327.5	333.7	341.2	343.0	351.2
67.5°	281.1	279.3	277.2	275.3	275.3	275.0	276.6	279.6	285.3	285.9	292.2
70°	247.2	245.9	245.3	243.4	241.0	244.1	242.2	245.3	248.4	249.1	252.8
72.5°	214.3	213.0	211.9	210.1	209.1	208.7	208.8	212.5	214.5	213.7	217.9
75°	167.5	166.2	165.0	161.8	161.8	160.0	160.7	163.1	165.6	163.7	167.5
77.5°	123.0	119.1	118.9	119.8	117.6	118.0	117.3	116.9	118.0	118.2	121.5
80°	94.7	90.3	91.5	90.9	90.3	89.7	88.4	89.0	89.7	90.3	92.1
82.5°	68.2	67.9	66.6	66.5	65.9	64.2	63.5	64.6	65.3	64.9	66.2
85°	34.9	33.0	34.2	33.6	34.2	33.6	31.8	31.8	33.0	32.4	33.6
87.5°	12.2	12.2	11.5	11.7	11.1	11.3	10.7	11.0	11.3	11.2	12.0
90°	8.9	8.6	7.5	6.5	5.5	4.4	3.5	2.7	1.9	1.1	0.3
92.5°	9.6	9.1	8.3	7.5	6.8	6.0	5.7	5.9	6.2	6.4	6.7
95°	11.6	11.0	10.1	9.3	8.4	7.5	8.7	12.0	15.2	18.5	21.7
97.5°	12.1	11.5	17.2	22.8	28.5	34.2	37.8	39.3	40.7	42.1	43.6
100°	12.4	11.7	24.1	36.4	48.8	61.1	66.5	64.9	63.3	61.7	60.1
102.5°	21.5	23.4	36.9	50.4	63.8	77.3	83.5	82.4	81.2	80.1	78.9
105°	63.9	78.0	85.1	92.2	99.3	106.4	109.6	108.7	107.8	106.9	106.1
107.5°	132.6	142.8	141.7	140.6	139.5	138.4	137.4	136.7	136.1	135.4	134.7
110°	157.9	160.5	159.6	158.8	157.9	157.0	156.3	155.7	155.0	154.4	153.8



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	178.5	178.5	177.6	176.7	175.9	175.0	174.3	173.6	173.1	172.5	172.0
115°	205.1	204.3	203.6	202.9	202.2	201.5	200.8	200.3	199.9	199.4	198.9
117.5°	230.0	229.3	229.0	228.6	228.2	227.9	227.4	226.8	226.2	225.7	225.1
120°	246.2	245.6	245.3	245.1	244.9	244.6	244.2	243.4	242.7	242.0	241.3
122.5°	262.2	261.8	261.5	261.2	260.9	260.6	260.2	259.6	259.0	258.4	257.9
125°	284.9	284.7	284.4	284.1	283.8	283.4	283.0	282.3	281.7	281.1	280.4
127.5°	307.2	307.0	306.6	306.2	305.8	305.4	304.9	304.3	303.6	303.0	302.4
130°	320.6	320.3	320.0	319.7	319.4	319.1	318.6	318.0	317.3	316.7	316.1
132.5°	333.4	333.1	332.9	332.6	332.4	332.1	331.7	331.1	330.4	329.8	329.2
135°	352.9	352.7	352.4	352.0	351.7	351.4	351.0	350.5	350.1	349.6	349.1
137.5°	370.1	369.7	369.6	369.4	369.2	369.0	368.6	368.0	367.4	366.9	366.2
140°	381.1	380.8	380.6	380.3	380.1	379.9	379.5	379.1	378.6	378.1	377.6
142.5°	391.6	391.3	391.1	390.9	390.6	390.4	390.1	389.6	389.1	388.6	388.2
145°	406.2	406.1	405.9	405.8	405.6	405.4	405.1	404.6	404.0	403.5	402.9
147.5°	419.3	419.1	419.0	418.8	418.7	418.5	418.2	417.9	417.5	417.2	416.8
150°	427.2	427.1	426.9	426.7	426.6	426.4	426.3	426.0	425.8	425.6	425.3
152.5°	434.2	434.0	433.8	433.7	433.6	433.6	433.5	433.3	433.2	433.1	433.0
155°	443.9	443.5	443.4	443.3	443.2	443.1	443.2	443.4	443.5	443.6	443.8
157.5°	452.3	451.8	451.9	451.9	452.0	452.1	452.2	452.2	452.2	452.2	452.3
160°	457.1	456.6	456.7	456.8	456.9	456.9	457.0	457.1	457.2	457.2	457.3
162.5°	461.4	460.9	461.0	461.1	461.1	461.2	461.4	461.6	461.8	462.0	462.2
165°	467.2	466.6	466.7	466.8	466.8	466.9	467.1	467.3	467.5	467.8	468.0
167.5°	471.8	471.2	471.2	471.2	471.2	471.2	471.3	471.7	472.0	472.3	472.6
170°	474.4	473.7	473.7	473.7	473.7	473.7	473.9	474.2	474.5	474.8	475.2
172.5°	476.0	475.4	475.4	475.3	475.2	475.2	475.3	475.7	476.1	476.5	476.8
175°	478.2	477.6	477.5	477.4	477.4	477.3	477.4	477.8	478.2	478.6	479.0
177.5°	479.0	478.5	478.4	478.3	478.3	478.2	478.3	478.6	479.0	479.3	479.6
180°	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0



TEST NUMBER: P332210-927

CATALOG NUMBER: S123DIW-S1165D460U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0
2.5°	1293.0	1295.5	1303.9	1310.0	1316.9	1320.9	1324.8	1327.9	1331.8	1332.8	1347.3
5°	1298.7	1311.2	1333.0	1349.2	1369.0	1390.8	1405.8	1412.7	1430.7	1445.7	1475.5
7.5°	1297.1	1323.7	1356.5	1390.6	1427.2	1461.1	1490.5	1525.3	1550.1	1587.4	1624.1
10°	1295.6	1331.1	1373.4	1417.1	1468.1	1515.4	1557.7	1605.0	1644.3	1695.9	1740.1
12.5°	1291.1	1334.1	1392.9	1444.4	1506.4	1571.7	1634.4	1695.2	1730.0	1816.0	1856.7
15°	1280.1	1331.1	1404.5	1483.0	1568.3	1645.5	1725.2	1788.7	1891.4	1966.8	2014.7
17.5°	1258.9	1330.4	1417.5	1512.1	1615.9	1717.6	1807.9	1904.2	2013.3	2104.4	2201.5
20°	1249.0	1327.4	1424.5	1529.1	1636.8	1752.0	1854.7	1970.5	2089.5	2179.1	2303.6
22.5°	1230.5	1319.4	1424.0	1540.6	1655.7	1774.9	1895.1	2011.8	2149.2	2272.7	2391.3
25°	1200.4	1300.0	1408.3	1538.4	1673.6	1793.1	1936.9	2091.9	2235.1	2393.9	2512.2
27.5°	1168.7	1275.1	1383.6	1504.7	1650.0	1791.8	1972.8	2147.9	2323.0	2460.1	2547.7
30°	1144.3	1247.7	1359.8	1481.8	1625.6	1794.3	1996.6	2187.8	2358.4	2476.0	2525.2
32.5°	1117.9	1222.7	1321.9	1449.9	1603.1	1792.8	2011.6	2211.2	2360.4	2438.7	2429.1
35°	1076.5	1164.3	1260.8	1384.0	1564.6	1781.9	2020.3	2213.3	2304.9	2288.1	2161.0
37.5°	1016.7	1090.5	1185.6	1320.5	1519.7	1758.8	2002.9	2147.7	2141.7	2004.9	1820.8
40°	979.4	1042.2	1133.8	1275.7	1484.9	1743.9	1975.5	2069.5	1989.8	1798.6	1578.3
42.5°	930.5	988.4	1080.0	1225.9	1446.5	1713.5	1923.2	1950.4	1794.5	1574.5	1372.5
45°	854.8	905.9	1000.5	1151.2	1389.0	1647.3	1795.6	1728.9	1519.1	1291.9	1138.1
47.5°	773.5	826.6	917.6	1072.4	1305.8	1547.9	1618.5	1476.8	1261.4	1077.1	935.9
50°	722.2	773.2	862.3	1018.6	1249.5	1466.2	1495.5	1312.4	1114.4	952.6	836.8
52.5°	670.4	718.5	806.0	962.7	1183.8	1371.6	1353.5	1167.0	984.9	847.0	756.1
55°	593.3	638.8	722.2	869.1	1070.2	1219.0	1153.7	975.6	824.9	717.9	648.7
57.5°	524.3	567.9	639.9	772.6	947.5	1049.7	966.5	816.5	696.6	614.3	562.7
60°	477.5	516.1	584.6	707.9	859.8	937.6	855.5	722.9	621.9	556.0	509.9
62.5°	433.2	466.8	530.3	642.1	774.1	839.5	756.3	644.1	558.3	499.7	460.6
65°	366.1	396.6	452.7	539.8	648.1	691.7	620.1	529.2	462.6	419.0	392.8
67.5°	304.8	330.7	379.1	447.7	527.4	559.2	504.7	434.4	384.1	349.1	328.4
70°	264.0	286.4	324.4	383.5	455.7	480.0	429.0	371.1	334.3	306.3	287.0
72.5°	229.6	246.1	280.5	326.2	386.5	405.8	370.2	319.2	285.0	264.0	248.7
75°	174.9	188.6	211.0	247.8	289.5	300.7	273.9	242.2	219.1	204.2	192.3
77.5°	126.1	136.3	152.4	175.1	204.0	214.0	197.1	175.9	159.1	149.0	142.4
80°	95.2	103.4	117.1	135.7	153.1	158.8	148.8	132.6	120.8	115.2	109.6
82.5°	70.3	74.9	83.2	95.9	107.8	114.5	106.0	96.3	89.9	84.8	82.7
85°	35.5	37.9	41.7	46.7	54.2	56.6	53.6	51.0	47.3	44.2	44.2
87.5°	13.2	13.3	15.0	16.2	18.3	20.0	19.7	18.9	18.6	18.2	17.7
90°	1.1	1.9	2.7	3.5	4.4	5.5	6.5	7.5	8.6	8.9	9.2
92.5°	6.4	6.2	5.9	5.7	6.0	6.8	7.5	8.3	9.1	9.6	10.1
95°	18.5	15.2	12.0	8.7	7.5	8.4	9.3	10.1	11.0	11.6	12.1
97.5°	42.1	40.7	39.3	37.8	34.2	28.5	22.8	17.2	11.5	12.1	12.8
100°	61.7	63.3	64.9	66.5	61.1	48.8	36.4	24.1	11.7	12.4	13.0
102.5°	80.1	81.2	82.4	83.5	77.3	63.8	50.4	36.9	23.4	21.5	19.5
105°	106.9	107.8	108.7	109.6	106.4	99.3	92.2	85.1	78.0	63.9	49.9
107.5°	135.4	136.1	136.7	137.4	138.4	139.5	140.6	141.7	142.8	132.6	122.3
110°	154.4	155.0	155.7	156.3	157.0	157.9	158.8	159.6	160.5	157.9	155.3



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	172.5	173.1	173.6	174.3	175.0	175.9	176.7	177.6	178.5	178.5	178.6
115°	199.4	199.9	200.3	200.8	201.5	202.2	202.9	203.6	204.3	205.1	205.9
117.5°	225.7	226.2	226.8	227.4	227.9	228.2	228.6	229.0	229.3	230.0	230.6
120°	242.0	242.7	243.4	244.2	244.6	244.9	245.1	245.3	245.6	246.2	246.8
122.5°	258.4	259.0	259.6	260.2	260.6	260.9	261.2	261.5	261.8	262.2	262.7
125°	281.1	281.7	282.3	283.0	283.4	283.8	284.1	284.4	284.7	284.9	285.0
127.5°	303.0	303.6	304.3	304.9	305.4	305.8	306.2	306.6	307.0	307.2	307.4
130°	316.7	317.3	318.0	318.6	319.1	319.4	319.7	320.0	320.3	320.6	320.9
132.5°	329.8	330.4	331.1	331.7	332.1	332.4	332.6	332.9	333.1	333.4	333.7
135°	349.6	350.1	350.5	351.0	351.4	351.7	352.0	352.4	352.7	352.9	353.2
137.5°	366.9	367.4	368.0	368.6	369.0	369.2	369.4	369.6	369.7	370.1	370.5
140°	378.1	378.6	379.1	379.5	379.9	380.1	380.3	380.6	380.8	381.1	381.4
142.5°	388.6	389.1	389.6	390.1	390.4	390.6	390.9	391.1	391.3	391.6	391.9
145°	403.5	404.0	404.6	405.1	405.4	405.6	405.8	405.9	406.1	406.2	406.4
147.5°	417.2	417.5	417.9	418.2	418.5	418.7	418.8	419.0	419.1	419.3	419.5
150°	425.6	425.8	426.0	426.3	426.4	426.6	426.7	426.9	427.1	427.2	427.4
152.5°	433.1	433.2	433.3	433.5	433.6	433.6	433.7	433.8	434.0	434.2	434.5
155°	443.6	443.5	443.4	443.2	443.1	443.2	443.3	443.4	443.5	443.9	444.3
157.5°	452.2	452.2	452.2	452.2	452.1	452.0	451.9	451.9	451.8	452.3	452.7
160°	457.2	457.2	457.1	457.0	456.9	456.9	456.8	456.7	456.6	457.1	457.6
162.5°	462.0	461.8	461.6	461.4	461.2	461.1	461.1	461.0	460.9	461.4	462.0
165°	467.8	467.5	467.3	467.1	466.9	466.8	466.8	466.7	466.6	467.2	467.9
167.5°	472.3	472.0	471.7	471.3	471.2	471.2	471.2	471.2	471.2	471.8	472.5
170°	474.8	474.5	474.2	473.9	473.7	473.7	473.7	473.7	473.7	474.4	475.0
172.5°	476.5	476.1	475.7	475.3	475.2	475.2	475.3	475.4	475.4	476.0	476.7
175°	478.6	478.2	477.8	477.4	477.3	477.4	477.4	477.5	477.6	478.2	478.7
177.5°	479.3	479.0	478.6	478.3	478.2	478.3	478.3	478.4	478.5	479.0	479.5
180°	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0	479.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0	1285.0
2.5°	1352.3	1352.7	1358.3	1362.2	1360.3	1362.7	1363.7
5°	1477.4	1499.8	1511.6	1520.4	1521.0	1521.6	1526.6
7.5°	1654.9	1678.9	1696.5	1723.1	1731.1	1740.1	1737.5
10°	1784.4	1819.8	1850.4	1866.5	1884.0	1909.5	1889.0
12.5°	1905.4	1968.3	2014.7	2039.9	2056.3	2061.4	2051.4
15°	2105.0	2187.1	2231.3	2230.2	2286.2	2310.5	2272.5
17.5°	2288.1	2363.9	2424.6	2455.8	2502.4	2512.8	2508.0
20°	2400.1	2482.9	2530.2	2583.8	2608.0	2629.8	2633.5
22.5°	2496.7	2571.0	2621.9	2666.4	2686.8	2697.1	2703.3
25°	2596.2	2654.8	2685.3	2700.8	2706.4	2705.1	2697.1
27.5°	2589.3	2593.8	2560.3	2527.2	2497.8	2464.5	2453.0
30°	2522.1	2469.8	2376.5	2323.5	2245.7	2184.0	2208.9
32.5°	2345.3	2241.2	2136.4	2020.7	1924.9	1897.7	1870.3
35°	2001.6	1818.6	1711.5	1587.0	1537.2	1487.4	1453.1
37.5°	1619.4	1477.8	1350.8	1269.3	1219.4	1187.9	1171.0
40°	1400.2	1272.6	1168.0	1102.0	1064.0	1028.5	1023.6
42.5°	1225.4	1106.8	1028.0	975.5	939.0	923.9	913.0
45°	1003.6	920.8	867.9	830.5	806.3	796.9	784.5
47.5°	849.5	790.9	751.2	725.8	707.5	700.5	699.6
50°	763.3	714.7	685.5	665.5	651.3	648.7	638.8
52.5°	698.5	656.5	633.7	616.2	605.9	599.0	596.0
55°	606.4	578.4	557.9	547.9	539.8	532.9	532.9
57.5°	530.6	507.2	493.6	485.1	482.6	477.8	474.7
60°	483.8	463.8	453.3	445.8	440.8	441.4	435.8
62.5°	437.9	425.0	414.9	407.4	401.5	401.6	402.0
65°	373.0	363.0	355.5	353.0	349.3	344.9	346.2
67.5°	316.0	306.7	300.9	296.6	295.3	293.0	296.6
70°	275.2	268.3	264.0	260.2	259.0	259.6	262.8
72.5°	237.8	233.0	230.1	228.4	225.6	225.8	227.8
75°	186.8	183.1	180.5	178.7	178.1	178.1	178.1
77.5°	137.2	136.3	135.2	132.5	132.6	133.3	133.5
80°	108.4	106.5	105.8	104.6	102.7	101.5	104.6
82.5°	81.0	79.1	78.4	78.2	75.3	75.1	77.7
85°	43.6	41.7	42.3	41.7	41.7	41.1	41.1
87.5°	17.3	16.9	16.5	17.0	16.5	16.1	17.1
90°	9.5	9.8	10.1	10.2	10.4	10.5	10.7
92.5°	10.6	11.2	11.4	11.6	11.6	11.7	11.8
95°	12.7	13.2	13.5	13.5	13.5	13.5	13.5
97.5°	13.4	14.0	14.3	14.4	14.5	14.6	14.7
100°	13.6	14.3	14.7	14.7	14.8	14.9	15.0
102.5°	17.5	15.6	14.7	14.8	15.0	15.1	15.2
105°	36.0	21.9	15.1	15.2	15.4	15.5	15.7
107.5°	112.1	101.8	91.4	80.8	70.3	59.7	49.2
110°	152.7	150.0	143.1	131.8	120.5	109.2	97.9



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	178.6	178.6	177.4	175.1	172.7	170.3	167.9
115°	206.7	207.5	208.0	208.3	208.7	209.0	209.3
117.5°	231.2	231.9	232.2	232.3	232.3	232.4	232.5
120°	247.5	248.1	248.4	248.4	248.4	248.4	248.4
122.5°	263.2	263.6	263.8	263.9	264.0	264.0	264.1
125°	285.2	285.3	285.5	285.7	285.8	286.0	286.1
127.5°	307.7	307.9	308.0	307.8	307.7	307.5	307.4
130°	321.2	321.5	321.6	321.5	321.3	321.2	321.0
132.5°	334.1	334.4	334.5	334.2	334.0	333.7	333.6
135°	353.4	353.6	353.6	353.4	353.2	352.9	352.7
137.5°	370.8	371.2	371.4	371.2	371.1	370.9	370.7
140°	381.8	382.1	382.1	382.0	381.8	381.7	381.5
142.5°	392.1	392.4	392.4	392.1	392.0	391.7	391.5
145°	406.5	406.7	406.8	406.8	406.8	406.8	406.8
147.5°	419.6	419.8	419.6	419.3	418.9	418.6	418.2
150°	427.5	427.7	427.7	427.5	427.2	427.0	426.7
152.5°	434.7	435.1	435.0	434.7	434.3	434.0	433.6
155°	444.7	445.0	445.0	444.5	444.0	443.5	443.1
157.5°	453.2	453.7	453.6	453.0	452.4	451.8	451.1
160°	458.0	458.5	458.5	458.0	457.4	456.9	456.3
162.5°	462.6	463.0	463.1	462.6	462.1	461.6	461.1
165°	468.5	469.1	469.1	468.6	468.1	467.5	467.0
167.5°	473.0	473.6	473.6	473.0	472.5	471.8	471.2
170°	475.6	476.3	476.3	475.6	475.0	474.4	473.7
172.5°	477.3	477.9	477.9	477.2	476.5	475.9	475.2
175°	479.3	479.8	479.8	479.2	478.6	477.9	477.3
177.5°	480.0	480.5	480.5	479.8	479.2	478.6	477.9
180°	479.0	479.0	479.0	479.0	479.0	479.0	479.0

(END OF REPORT)