

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: P331477-930

Luminaire Tested: **S122DIW-S290D970U930-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P331477-930  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122DIW-S290D970U930-4F0-1E-UDD-A  
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 970 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4221.0 lumens  
Efficiency: N/A  
Efficacy: 111.1 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: Semi-Indirect

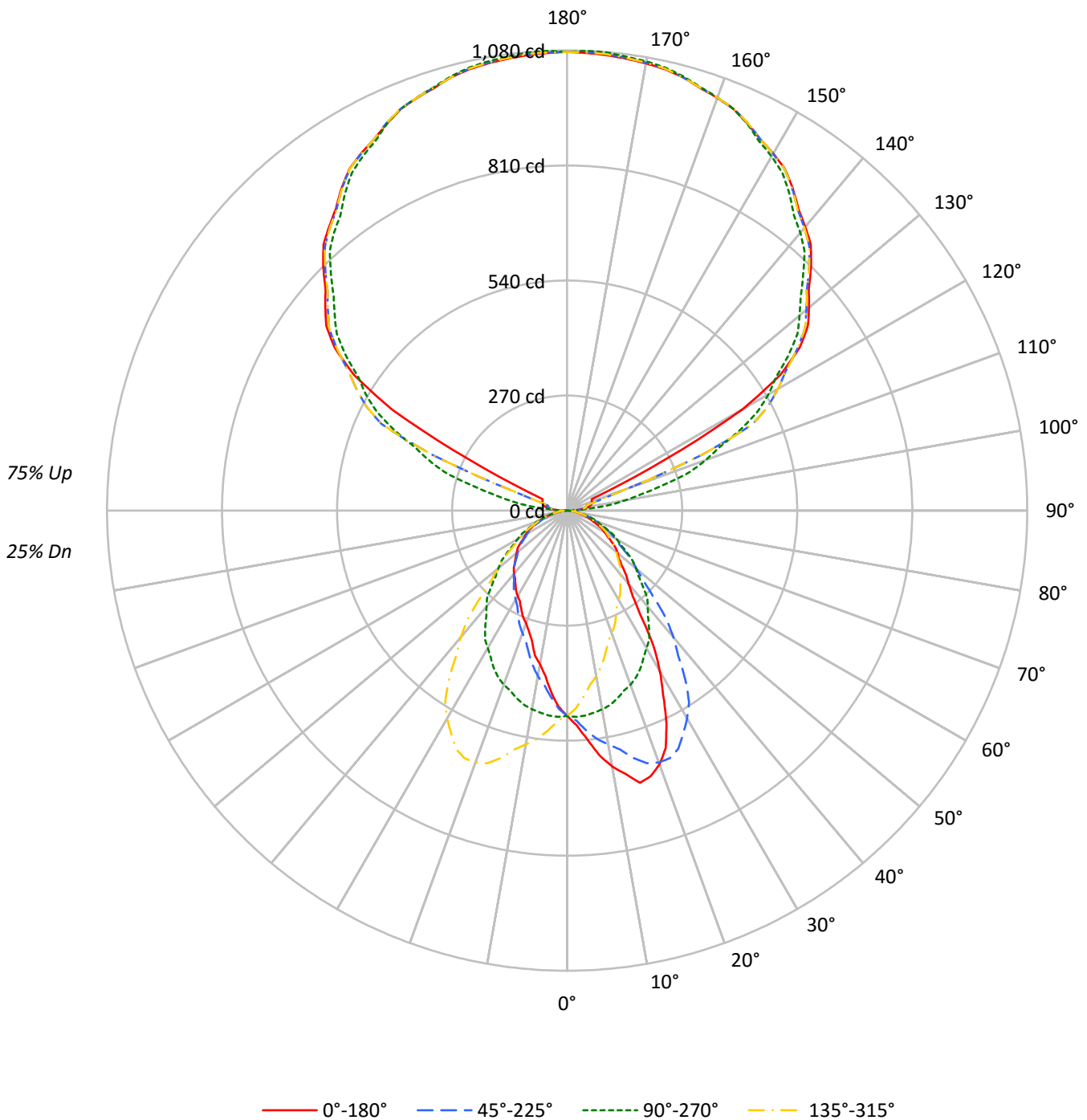
Input Watts (W): 38  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P331477-930

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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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	33	33	33	25				
1	92	88	85	81	82	79	76	73	61	59	57	45	44	43	30	29	29	22				
2	84	77	72	67	75	69	64	60	54	51	48	40	38	36	27	25	24	19				
3	77	68	61	56	68	61	55	51	48	44	40	35	33	31	24	22	21	16				
4	71	60	53	47	63	54	48	43	42	38	35	31	29	26	21	20	18	14				
5	65	54	46	40	57	48	42	37	38	33	30	28	25	23	19	17	16	12				
6	60	48	40	35	53	43	37	32	34	29	26	26	22	20	18	16	14	11				
7	55	43	36	31	49	39	33	28	31	26	23	23	20	18	16	14	13	10				
8	51	39	32	27	45	35	29	25	28	23	20	21	18	16	15	13	11	9				
9	47	36	29	24	42	32	26	22	26	21	18	20	16	14	14	12	10	8				
10	44	33	26	21	39	30	24	20	24	19	16	18	15	13	13	11	9	7				

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

	0°	90°	180°	270°
0°	7781	7781	7781	7781
5°	8723	7831	6940	7831
10°	9996	7768	6005	7768
15°	11057	7626	5307	7626
20°	10890	7472	4837	7472
25°	9818	7269	4541	7269
30°	8114	6943	4323	6943
35°	5913	6603	4169	6603
40°	4723	6203	4083	6203
45°	4128	5740	3966	5740
50°	3881	5290	3888	5290
55°	3575	4833	3783	4833
60°	3278	4346	3626	4346
65°	2988	3912	3465	3912
70°	2710	3489	3238	3489
75°	2408	3013	2863	3013
80°	2073	2492	2306	2492
85°	1853	1853	1371	1853



TEST NUMBER: P331477-930

CATALOG NUMBER: S122DIW-S290D970U930-4F0-1E-UDD-A

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.9	1.1
10°-20°	133.4	3.2
20°-30°	193.6	4.6
30°-40°	204.3	4.8
40°-50°	180.9	4.3
50°-60°	144.4	3.4
60°-70°	98.1	2.3
70°-80°	50.3	1.2
80°-90°	14.8	0.4
90°-100°	35.9	0.9
100°-110°	131.7	3.1
110°-120°	352.0	8.3
120°-130°	581.1	13.8
130°-140°	618.0	14.6
140°-150°	574.4	13.6
150°-160°	461.8	10.9
160°-170°	297.6	7.1
170°-180°	102.4	2.4
0°-30°	373.0	8.8
0°-40°	577.3	13.7
0°-60°	902.6	21.4
0°-90°	1065.8	25.3
90°-120°	519.7	12.3
90°-150°	2293.2	54.3
90°-180°	3155.0	74.7
0°-180°	4221.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	482	482	482	482	482	
5°	538	483	428	483	538	54
15°	662	456	318	456	662	183
25°	551	408	255	408	551	249
35°	300	335	212	335	300	195
45°	181	251	174	251	181	142
55°	127	172	134	172	127	114
65°	78	102	91	102	78	78
75°	39	48	46	48	39	41
85°	10	10	7	10	10	12
90°	21	1	21	1	21	10
95°	34	51	34	51	34	31
105°	59	237	59	237	59	62
115°	64	448	64	448	64	160
125°	666	633	666	633	666	576
135°	809	784	809	784	809	624
145°	923	909	923	909	923	577
155°	1002	1001	1002	1001	1002	462
165°	1052	1055	1052	1055	1052	297
175°	1073	1079	1073	1079	1073	102
180°	1077	1077	1077	1077	1077	



TEST NUMBER: P331477-930

CATALOG NUMBER: S122DIW-S290D970U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	504.1	504.3	504.6	502.2	501.9	501.9	499.9	498.1	495.9	493.2	493.5
5°	538.2	540.2	541.0	538.7	535.4	535.1	531.9	526.8	521.9	518.0	515.3
7.5°	578.9	579.7	577.9	574.9	572.5	568.0	562.1	556.4	548.4	541.0	535.6
10°	609.7	610.8	607.6	603.4	599.9	594.7	586.2	577.5	567.0	556.8	548.6
12.5°	633.1	635.9	631.8	631.3	625.3	618.1	608.0	603.6	588.7	574.5	565.7
15°	661.5	661.4	661.8	658.2	653.8	652.6	642.0	630.2	609.4	601.0	586.5
17.5°	653.3	656.2	657.5	657.4	657.3	656.6	653.1	645.8	635.3	621.7	605.1
20°	633.8	637.5	638.1	642.3	644.7	647.8	649.1	647.1	640.7	629.3	614.9
22.5°	603.6	604.6	606.3	612.9	618.2	626.1	630.1	637.1	634.5	629.0	616.9
25°	551.1	549.3	555.8	559.1	571.2	583.8	592.9	602.8	611.7	617.1	613.6
27.5°	488.3	485.5	495.2	504.1	513.8	527.5	541.6	558.3	572.2	589.6	595.6
30°	435.2	436.9	446.1	455.6	470.4	489.7	505.6	523.9	543.8	563.2	576.7
32.5°	378.1	384.4	390.3	404.8	417.8	439.3	462.7	485.6	510.3	532.4	553.3
35°	300.0	307.4	315.6	326.1	344.5	365.7	388.6	419.5	453.2	483.4	508.2
37.5°	252.6	251.4	256.0	263.7	278.5	295.7	322.0	352.5	392.2	427.6	462.7
40°	224.1	223.4	226.7	233.7	245.0	257.6	280.6	307.4	344.3	387.7	429.3
42.5°	204.6	205.0	206.8	211.8	219.6	229.9	247.1	269.9	303.7	344.5	389.3
45°	180.8	182.1	184.1	186.5	190.9	199.5	209.1	225.4	252.1	286.2	330.2
47.5°	163.6	163.7	165.8	167.9	170.5	175.3	183.2	193.4	212.2	239.9	277.9
50°	154.5	153.2	154.7	156.3	159.1	162.4	167.6	177.2	189.8	212.2	243.9
52.5°	143.2	143.2	144.6	145.2	147.7	151.0	155.7	162.4	173.8	191.4	217.4
55°	127.0	128.0	128.7	129.8	132.1	134.4	138.2	142.6	151.5	164.6	183.9
57.5°	111.9	112.2	112.9	115.0	116.4	118.6	122.1	126.2	132.0	141.7	156.2
60°	101.5	101.5	103.0	103.9	105.7	107.9	110.7	114.6	119.8	127.8	139.5
62.5°	92.0	91.9	92.5	94.0	95.4	97.4	100.2	103.5	108.4	115.5	125.1
65°	78.2	77.8	78.9	79.2	80.7	82.8	85.0	88.5	92.5	97.6	106.2
67.5°	64.8	65.3	65.9	66.5	67.3	69.5	71.0	73.5	76.8	81.1	86.8
70°	57.4	57.4	57.4	58.0	59.1	60.2	61.6	63.7	66.9	70.5	75.7
72.5°	49.1	49.7	50.3	50.0	51.4	52.0	53.8	55.0	58.0	60.3	64.9
75°	38.6	38.6	38.6	39.5	40.0	40.5	41.7	42.8	44.3	47.2	49.7
77.5°	28.8	28.7	28.9	29.1	29.7	30.3	30.7	31.6	33.0	34.4	36.4
80°	22.3	22.6	22.7	23.2	23.2	23.5	23.7	25.0	25.9	26.8	28.1
82.5°	17.2	17.3	17.3	17.4	17.5	17.8	18.3	18.7	19.0	19.7	20.7
85°	10.0	9.8	9.8	10.2	10.0	10.0	10.4	10.8	10.8	10.9	11.5
87.5°	8.1	8.0	8.1	7.8	7.7	7.8	7.7	7.3	7.3	7.3	7.2
90°	21.0	20.7	20.3	20.0	19.6	19.1	18.2	17.3	16.5	15.6	14.2
92.5°	21.0	20.8	20.6	20.4	20.2	19.9	19.4	19.0	18.5	18.1	17.4
95°	33.5	33.7	33.8	34.0	34.2	33.8	33.0	32.1	31.2	30.4	29.2
97.5°	44.7	44.5	44.3	44.1	43.9	43.5	42.7	42.1	41.3	40.7	37.8
100°	52.2	51.9	51.5	51.1	50.8	50.0	48.6	47.2	45.8	44.4	41.5
102.5°	55.9	55.4	55.0	54.5	54.0	52.8	51.0	49.2	47.5	45.7	40.3
105°	59.2	58.5	57.8	57.2	56.4	55.1	53.2	51.4	49.4	47.5	44.8
107.5°	60.9	60.3	59.5	58.9	58.1	58.8	60.7	62.6	64.6	66.5	123.2
110°	61.6	60.8	60.2	59.4	58.8	67.1	84.4	101.7	119.0	136.3	186.4



TEST NUMBER: P331477-930

CATALOG NUMBER: S122DIW-S290D970U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	62.2	61.6	61.1	60.5	59.9	91.2	154.4	217.5	280.7	343.9	356.2
115°	63.9	76.3	88.8	101.3	113.7	160.0	240.2	320.3	400.5	480.7	476.4
117.5°	260.8	301.8	342.8	383.7	424.7	454.9	474.3	493.6	513.0	532.4	529.5
120°	475.2	498.6	522.0	545.4	568.7	579.4	577.2	575.2	573.2	571.0	567.9
122.5°	593.0	597.5	602.1	606.6	611.1	612.8	611.6	610.3	609.0	607.8	604.4
125°	666.1	665.5	665.0	664.6	664.0	663.2	661.9	660.7	659.5	658.3	655.0
127.5°	712.2	712.1	712.0	711.9	711.8	710.9	709.1	707.4	705.6	703.8	701.3
130°	740.9	741.0	741.2	741.4	741.6	740.7	738.8	736.9	735.0	733.1	731.2
132.5°	768.9	769.1	769.2	769.4	769.6	768.9	767.3	765.6	764.0	762.4	760.4
135°	809.4	809.8	810.1	810.5	810.8	810.1	808.4	806.7	804.9	803.2	801.6
137.5°	846.4	846.9	847.5	848.2	848.7	848.2	846.4	844.7	843.1	841.4	839.6
140°	869.4	870.3	871.1	872.0	872.9	872.5	871.0	869.4	867.9	866.3	864.4
142.5°	891.9	892.8	893.6	894.5	895.3	895.0	893.6	892.2	890.8	889.3	887.2
145°	923.2	924.1	924.9	925.8	926.7	926.4	925.3	924.1	922.8	921.6	918.7
147.5°	950.7	951.5	952.2	952.9	953.7	953.6	952.7	951.8	950.9	950.0	947.1
150°	967.6	968.4	969.3	970.2	971.0	970.9	969.9	968.9	967.8	966.8	964.0
152.5°	981.9	983.1	984.2	985.4	986.5	986.5	985.5	984.5	983.4	982.4	979.7
155°	1001.8	1003.2	1004.6	1006.0	1007.4	1007.5	1006.5	1005.5	1004.4	1003.4	1001.4
157.5°	1020.1	1021.4	1022.8	1024.1	1025.5	1025.6	1024.4	1023.2	1022.1	1020.8	1019.4
160°	1030.7	1031.9	1033.1	1034.3	1035.5	1035.6	1034.5	1033.6	1032.5	1031.4	1030.5
162.5°	1039.4	1040.9	1042.4	1043.8	1045.4	1045.5	1044.3	1043.2	1042.0	1040.8	1039.9
165°	1052.5	1053.7	1054.9	1056.1	1057.4	1057.4	1056.1	1054.9	1053.7	1052.5	1052.0
167.5°	1060.8	1062.3	1063.9	1065.4	1067.0	1067.1	1065.9	1064.7	1063.5	1062.3	1061.8
170°	1065.8	1067.3	1068.9	1070.4	1072.0	1072.1	1070.9	1069.8	1068.5	1067.3	1067.0
172.5°	1069.5	1071.1	1072.6	1074.2	1075.7	1075.9	1074.6	1073.4	1072.3	1071.1	1070.7
175°	1072.8	1074.5	1076.2	1077.9	1079.7	1079.9	1078.7	1077.5	1076.3	1075.1	1074.7
177.5°	1074.8	1076.0	1077.3	1078.5	1079.8	1079.9	1078.9	1078.0	1077.0	1076.0	1075.9
180°	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6



TEST NUMBER: P331477-930

CATALOG NUMBER: S122DIW-S290D970U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	494.5	493.3	492.6	489.9	487.5	485.2	484.5	484.7	481.4	478.3	477.0
5°	513.8	510.1	506.5	501.6	495.6	489.1	485.8	483.2	476.7	469.7	465.6
7.5°	531.0	525.7	518.9	509.6	500.9	490.7	484.2	478.5	469.0	459.1	453.0
10°	541.5	534.3	525.6	514.1	503.6	491.1	482.5	473.8	462.7	450.8	443.4
12.5°	550.6	540.9	532.3	517.6	505.1	489.5	479.2	466.9	455.3	441.2	433.9
15°	572.1	554.2	537.9	521.1	505.8	484.1	472.6	456.2	440.8	423.4	415.1
17.5°	588.7	568.5	542.9	521.7	503.8	479.7	462.9	443.2	425.0	405.1	393.8
20°	598.2	575.0	547.5	522.3	500.8	473.4	455.0	434.9	413.6	391.2	379.0
22.5°	603.8	579.5	552.2	520.1	494.9	468.2	445.2	423.0	401.5	377.2	364.4
25°	605.6	583.4	554.5	518.2	487.5	457.3	429.5	408.0	381.9	359.3	340.6
27.5°	596.8	580.9	553.1	514.7	478.9	443.6	412.6	388.3	360.8	336.2	317.4
30°	586.0	576.7	549.7	511.2	472.1	434.1	400.1	372.4	345.0	320.2	300.9
32.5°	569.2	567.3	543.5	506.1	464.8	422.2	386.9	359.0	328.6	304.2	285.8
35°	536.4	545.3	530.3	494.9	451.2	405.0	366.9	335.0	303.5	280.2	263.0
37.5°	492.3	514.4	510.5	478.4	432.7	386.5	344.3	311.0	281.0	257.5	240.6
40°	461.9	490.1	494.2	465.8	419.7	372.1	327.4	294.3	265.1	243.5	226.5
42.5°	429.3	462.2	473.4	450.7	405.4	356.9	312.3	278.0	249.0	228.1	213.0
45°	374.7	418.2	438.4	425.4	381.7	332.1	286.2	251.4	225.0	205.4	193.7
47.5°	323.6	371.1	398.3	393.7	355.3	306.1	260.7	227.3	201.7	186.1	175.6
50°	287.5	336.3	369.1	370.6	336.3	287.6	242.1	210.6	187.0	172.4	163.9
52.5°	256.0	302.7	338.4	346.3	315.1	268.4	225.3	194.0	173.3	159.8	152.2
55°	215.0	254.5	294.1	308.6	283.6	239.1	199.3	171.7	152.2	143.0	136.3
57.5°	178.8	211.7	248.3	264.2	248.8	210.8	173.4	149.4	133.7	125.6	120.4
60°	159.6	185.6	218.2	237.3	223.9	190.0	157.4	134.6	121.6	114.5	109.7
62.5°	141.9	164.9	192.4	209.9	202.6	170.6	141.5	121.3	110.1	103.4	99.9
65°	117.1	135.2	156.5	172.6	167.8	143.6	119.6	102.4	93.5	88.1	85.4
67.5°	96.4	109.5	124.3	138.4	134.5	117.3	98.2	84.7	78.1	73.5	71.7
70°	83.3	93.4	106.5	117.8	114.6	100.6	85.4	73.9	68.2	64.2	62.6
72.5°	70.9	79.1	89.2	98.4	96.3	84.5	71.9	63.3	58.8	55.2	53.9
75°	53.6	59.8	66.0	72.1	71.5	62.5	55.0	48.3	44.8	42.1	41.5
77.5°	39.5	43.0	47.2	50.8	49.8	44.6	38.8	35.0	32.4	30.6	30.2
80°	30.2	32.2	35.2	37.7	36.5	34.2	29.6	26.8	25.0	23.2	22.4
82.5°	21.9	23.9	25.7	27.1	26.1	24.1	21.2	19.3	18.2	17.0	16.6
85°	11.5	12.6	13.4	13.7	13.4	12.1	10.8	10.0	9.0	8.5	8.3
87.5°	7.0	6.8	6.4	6.4	5.6	5.2	4.2	3.4	3.7	3.9	4.0
90°	12.8	11.4	10.0	8.4	6.5	4.6	2.7	0.8	2.7	4.6	6.5
92.5°	16.7	16.0	15.3	15.1	15.2	15.4	15.6	15.7	15.6	15.4	15.2
95°	28.0	26.7	25.5	27.8	33.5	39.2	44.9	50.6	44.9	39.2	33.5
97.5°	35.1	32.3	29.4	36.1	52.2	68.3	84.4	100.5	84.4	68.3	52.2
100°	38.5	35.5	32.6	43.0	66.8	90.4	114.1	137.9	114.1	90.4	66.8
102.5°	94.9	119.5	144.1	158.9	164.0	169.0	174.0	179.0	174.0	169.0	164.0
105°	142.0	189.3	236.6	257.6	252.4	247.2	242.1	236.8	242.1	247.2	252.4
107.5°	179.9	236.6	293.3	319.5	315.3	311.1	307.0	302.7	307.0	311.1	315.3
110°	236.4	286.4	336.5	359.6	356.0	352.4	348.8	345.1	348.8	352.4	356.0





TEST NUMBER: P331477-930

CATALOG NUMBER: S122DIW-S290D970U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	368.6	381.0	393.3	397.9	394.7	391.4	388.2	385.0	388.2	391.4	394.7
115°	472.0	467.7	463.3	459.7	456.8	453.9	450.9	447.9	450.9	453.9	456.8
117.5°	526.4	523.5	520.5	517.4	514.0	510.8	507.5	504.2	507.5	510.8	514.0
120°	564.8	561.7	558.6	555.7	553.1	550.5	548.0	545.4	548.0	550.5	553.1
122.5°	601.0	597.6	594.3	591.2	588.4	585.7	582.9	580.2	582.9	585.7	588.4
125°	651.8	648.4	645.1	642.4	640.1	637.9	635.6	633.3	635.6	637.9	640.1
127.5°	698.9	696.4	694.0	691.5	689.0	686.5	684.0	681.5	684.0	686.5	689.0
130°	729.3	727.3	725.5	723.1	720.3	717.6	714.9	712.1	714.9	717.6	720.3
132.5°	758.6	756.7	754.7	752.6	750.2	748.0	745.6	743.2	745.6	748.0	750.2
135°	800.1	798.5	797.0	794.8	792.1	789.3	786.5	783.7	786.5	789.3	792.1
137.5°	837.8	836.1	834.3	832.4	830.5	828.6	826.6	824.7	826.6	828.6	830.5
140°	862.5	860.5	858.7	857.0	855.7	854.3	852.9	851.5	852.9	854.3	855.7
142.5°	885.0	882.8	880.6	878.9	877.7	876.4	875.1	873.9	875.1	876.4	877.7
145°	915.7	912.8	909.9	908.5	908.7	908.8	909.0	909.1	909.0	908.8	908.7
147.5°	944.1	941.3	938.3	937.2	937.8	938.5	939.1	939.9	939.1	938.5	937.8
150°	961.2	958.5	955.7	955.0	956.2	957.3	958.5	959.8	958.5	957.3	956.2
152.5°	977.1	974.4	971.8	971.2	972.6	973.9	975.3	976.6	975.3	973.9	972.6
155°	999.2	997.2	995.1	994.8	996.4	997.9	999.5	1001.1	999.5	997.9	996.4
157.5°	1018.0	1016.5	1015.0	1015.0	1016.3	1017.6	1019.0	1020.3	1019.0	1017.6	1016.3
160°	1029.4	1028.3	1027.3	1027.3	1028.3	1029.4	1030.5	1031.4	1030.5	1029.4	1028.3
162.5°	1039.0	1038.1	1037.2	1037.3	1038.3	1039.3	1040.4	1041.5	1040.4	1039.3	1038.3
165°	1051.4	1050.9	1050.4	1050.7	1051.7	1052.7	1053.8	1054.8	1053.8	1052.7	1051.7
167.5°	1061.4	1060.9	1060.4	1060.6	1061.7	1062.7	1063.7	1064.8	1063.7	1062.7	1061.7
170°	1066.6	1066.2	1065.9	1066.2	1067.3	1068.4	1069.3	1070.4	1069.3	1068.4	1067.3
172.5°	1070.3	1070.0	1069.7	1070.0	1071.1	1072.0	1073.1	1074.2	1073.1	1072.0	1071.1
175°	1074.4	1074.1	1073.7	1074.2	1075.4	1076.5	1077.7	1079.0	1077.7	1076.5	1075.4
177.5°	1075.7	1075.6	1075.5	1075.9	1076.8	1077.8	1078.8	1079.8	1078.8	1077.8	1076.8
180°	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6



TEST NUMBER: P331477-930

CATALOG NUMBER: S122DIW-S290D970U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	475.6	474.7	471.6	469.9	467.2	464.7	463.1	463.8	464.4	464.1	463.7
5°	461.9	458.4	453.0	448.4	445.1	439.0	436.3	435.0	433.9	432.7	431.4
7.5°	445.6	440.1	432.4	425.8	419.6	412.0	407.6	405.1	402.4	399.5	396.9
10°	434.1	426.3	418.2	409.0	401.5	394.7	388.6	384.5	380.7	377.2	374.7
12.5°	422.0	413.0	402.9	390.3	382.1	372.3	371.4	364.2	358.4	356.2	353.2
15°	402.7	390.0	377.2	362.2	355.8	346.9	341.4	335.7	330.8	327.3	326.4
17.5°	380.7	364.4	351.6	340.9	330.3	321.1	316.0	311.6	307.4	302.8	302.1
20°	363.9	349.8	336.0	326.5	315.6	306.3	300.0	295.6	292.0	289.3	286.9
22.5°	348.1	332.6	319.9	309.7	298.9	291.4	286.4	282.1	279.2	276.1	273.9
25°	322.6	310.6	296.7	285.0	276.1	271.3	267.3	263.6	261.7	259.7	257.1
27.5°	300.4	287.0	274.0	265.0	257.1	252.9	250.0	247.4	245.7	244.5	243.0
30°	284.7	271.2	261.0	252.1	245.6	241.3	239.5	238.0	235.9	235.2	234.5
32.5°	269.5	257.4	248.7	240.9	234.8	232.0	230.3	228.9	227.4	226.7	225.1
35°	248.2	238.0	229.5	225.2	220.2	217.8	216.5	214.7	213.2	212.5	212.2
37.5°	228.0	219.2	213.6	208.1	206.0	204.6	202.8	201.5	201.1	201.0	200.7
40°	215.0	207.8	202.8	198.4	197.5	195.2	193.7	192.7	192.7	192.8	192.7
42.5°	203.2	196.7	192.2	188.4	187.4	186.1	184.5	184.5	184.7	185.4	184.7
45°	185.2	180.6	177.4	175.6	173.6	172.3	172.0	172.6	172.8	173.0	173.6
47.5°	168.7	165.6	162.7	160.7	159.8	159.6	159.4	160.4	161.3	161.6	162.4
50°	158.9	155.4	153.0	151.6	150.9	150.6	150.9	152.1	152.8	153.7	154.3
52.5°	148.0	145.4	143.8	142.8	142.5	142.8	142.8	144.1	145.2	145.6	145.9
55°	132.8	130.9	130.6	128.9	129.6	129.5	130.4	131.1	132.2	133.4	133.5
57.5°	117.6	116.2	115.2	115.4	115.6	116.4	117.2	118.5	119.6	120.8	120.9
60°	107.6	106.9	106.3	106.3	106.6	107.8	108.7	110.0	110.7	111.5	112.0
62.5°	98.4	97.7	97.1	97.4	98.4	99.1	100.1	100.9	101.6	102.3	102.6
65°	83.9	83.6	84.1	84.5	84.6	85.5	86.8	87.4	88.1	88.5	89.8
67.5°	70.5	70.6	70.5	71.0	72.2	72.3	73.5	74.8	75.0	75.7	76.6
70°	61.5	61.9	62.2	62.6	63.5	63.9	64.8	65.4	66.1	66.7	67.3
72.5°	53.2	53.2	53.6	53.6	54.4	55.1	55.9	56.5	57.2	58.0	58.5
75°	40.9	40.9	41.3	41.5	42.4	43.4	43.1	43.5	44.3	45.0	45.4
77.5°	29.9	29.5	29.9	30.1	30.4	31.1	31.3	31.8	32.7	32.4	32.9
80°	22.7	22.3	22.7	23.0	23.0	23.9	23.9	24.3	24.8	24.3	24.8
82.5°	16.2	16.0	16.4	16.5	16.7	16.8	17.0	17.1	17.7	17.4	17.7
85°	8.2	8.0	8.2	8.0	8.2	8.3	8.3	8.2	8.2	8.5	8.0
87.5°	4.2	4.4	4.5	4.8	4.9	5.1	5.1	5.2	5.4	5.3	5.4
90°	8.4	10.0	11.4	12.8	14.2	15.6	16.5	17.3	18.2	19.1	19.6
92.5°	15.1	15.3	16.0	16.7	17.4	18.1	18.5	19.0	19.4	19.9	20.2
95°	27.8	25.5	26.7	28.0	29.2	30.4	31.2	32.1	33.0	33.8	34.2
97.5°	36.1	29.4	32.3	35.1	37.8	40.7	41.3	42.1	42.7	43.5	43.9
100°	43.0	32.6	35.5	38.5	41.5	44.4	45.8	47.2	48.6	50.0	50.8
102.5°	158.9	144.1	119.5	94.9	70.3	45.7	47.5	49.2	51.0	52.8	54.0
105°	257.6	236.6	189.3	142.0	94.8	47.5	49.4	51.4	53.2	55.1	56.4
107.5°	319.5	293.3	236.6	179.9	123.2	66.5	64.6	62.6	60.7	58.8	58.1
110°	359.6	336.5	286.4	236.4	186.4	136.3	119.0	101.7	84.4	67.1	58.8



TEST NUMBER: P331477-930

CATALOG NUMBER: S122DIW-S290D970U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	397.9	393.3	381.0	368.6	356.2	343.9	280.7	217.5	154.4	91.2	59.9
115°	459.7	463.3	467.7	472.0	476.4	480.7	400.5	320.3	240.2	160.0	113.7
117.5°	517.4	520.5	523.5	526.4	529.5	532.4	513.0	493.6	474.3	454.9	424.7
120°	555.7	558.6	561.7	564.8	567.9	571.0	573.2	575.2	577.2	579.4	568.7
122.5°	591.2	594.3	597.6	601.0	604.4	607.8	609.0	610.3	611.6	612.8	611.1
125°	642.4	645.1	648.4	651.8	655.0	658.3	659.5	660.7	661.9	663.2	664.0
127.5°	691.5	694.0	696.4	698.9	701.3	703.8	705.6	707.4	709.1	710.9	711.8
130°	723.1	725.5	727.3	729.3	731.2	733.1	735.0	736.9	738.8	740.7	741.6
132.5°	752.6	754.7	756.7	758.6	760.4	762.4	764.0	765.6	767.3	768.9	769.6
135°	794.8	797.0	798.5	800.1	801.6	803.2	804.9	806.7	808.4	810.1	810.8
137.5°	832.4	834.3	836.1	837.8	839.6	841.4	843.1	844.7	846.4	848.2	848.7
140°	857.0	858.7	860.5	862.5	864.4	866.3	867.9	869.4	871.0	872.5	872.9
142.5°	878.9	880.6	882.8	885.0	887.2	889.3	890.8	892.2	893.6	895.0	895.3
145°	908.5	909.9	912.8	915.7	918.7	921.6	922.8	924.1	925.3	926.4	926.7
147.5°	937.2	938.3	941.3	944.1	947.1	950.0	950.9	951.8	952.7	953.6	953.7
150°	955.0	955.7	958.5	961.2	964.0	966.8	967.8	968.9	969.9	970.9	971.0
152.5°	971.2	971.8	974.4	977.1	979.7	982.4	983.4	984.5	985.5	986.5	986.5
155°	994.8	995.1	997.2	999.2	1001.4	1003.4	1004.4	1005.5	1006.5	1007.5	1007.4
157.5°	1015.0	1015.0	1016.5	1018.0	1019.4	1020.8	1022.1	1023.2	1024.4	1025.6	1025.5
160°	1027.3	1027.3	1028.3	1029.4	1030.5	1031.4	1032.5	1033.6	1034.5	1035.6	1035.5
162.5°	1037.3	1037.2	1038.1	1039.0	1039.9	1040.8	1042.0	1043.2	1044.3	1045.5	1045.4
165°	1050.7	1050.4	1050.9	1051.4	1052.0	1052.5	1053.7	1054.9	1056.1	1057.4	1057.4
167.5°	1060.6	1060.4	1060.9	1061.4	1061.8	1062.3	1063.5	1064.7	1065.9	1067.1	1067.0
170°	1066.2	1065.9	1066.2	1066.6	1067.0	1067.3	1068.5	1069.8	1070.9	1072.1	1072.0
172.5°	1070.0	1069.7	1070.0	1070.3	1070.7	1071.1	1072.3	1073.4	1074.6	1075.9	1075.7
175°	1074.2	1073.7	1074.1	1074.4	1074.7	1075.1	1076.3	1077.5	1078.7	1079.9	1079.7
177.5°	1075.9	1075.5	1075.6	1075.7	1075.9	1076.0	1077.0	1078.0	1078.9	1079.9	1079.8
180°	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6



TEST NUMBER: P331477-930

CATALOG NUMBER: S122DIW-S290D970U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	462.2	461.9	461.9	460.6	461.9	461.9	462.2	463.7	464.1	464.4	463.8
5°	428.8	428.2	427.3	428.2	427.3	428.2	428.8	431.4	432.7	433.9	435.0
7.5°	395.7	393.5	393.1	390.9	393.1	393.5	395.7	396.9	399.5	402.4	405.1
10°	371.5	370.1	369.8	366.3	369.8	370.1	371.5	374.7	377.2	380.7	384.5
12.5°	353.2	349.6	350.3	348.3	350.3	349.6	353.2	353.2	356.2	358.4	364.2
15°	321.3	321.3	320.6	317.5	320.6	321.3	321.3	326.4	327.3	330.8	335.7
17.5°	298.5	298.1	296.4	297.3	296.4	298.1	298.5	302.1	302.8	307.4	311.6
20°	284.9	283.7	281.5	281.5	281.5	283.7	284.9	286.9	289.3	292.0	295.6
22.5°	272.0	271.9	269.5	270.3	269.5	271.9	272.0	273.9	276.1	279.2	282.1
25°	256.9	255.4	254.3	254.9	254.3	255.4	256.9	257.1	259.7	261.7	263.6
27.5°	242.6	241.7	241.7	240.2	241.7	241.7	242.6	243.0	244.5	245.7	247.4
30°	234.3	232.4	232.8	231.9	232.8	232.4	234.3	234.5	235.2	235.9	238.0
32.5°	224.8	224.1	223.8	223.0	223.8	224.1	224.8	225.1	226.7	227.4	228.9
35°	211.9	212.1	211.2	211.5	211.2	212.1	211.9	212.2	212.5	213.2	214.7
37.5°	200.6	201.1	200.7	200.8	200.7	201.1	200.6	200.7	201.0	201.1	201.5
40°	193.1	193.1	193.1	193.7	193.1	193.1	193.1	192.7	192.8	192.7	192.7
42.5°	186.1	185.7	185.5	185.4	185.5	185.7	186.1	184.7	185.4	184.7	184.5
45°	173.9	174.5	174.6	173.7	174.6	174.5	173.9	173.6	173.0	172.8	172.6
47.5°	162.9	163.0	162.9	163.7	162.9	163.0	162.9	162.4	161.6	161.3	160.4
50°	155.2	154.8	155.2	154.8	155.2	154.8	155.2	154.3	153.7	152.8	152.1
52.5°	147.1	147.2	146.9	146.8	146.9	147.2	147.1	145.9	145.6	145.2	144.1
55°	134.3	134.6	134.4	134.4	134.4	134.6	134.3	133.5	133.4	132.2	131.1
57.5°	121.1	121.4	121.6	120.8	121.6	121.4	121.1	120.9	120.8	119.6	118.5
60°	111.9	112.8	112.6	112.3	112.6	112.8	111.9	112.0	111.5	110.7	110.0
62.5°	103.4	103.8	103.7	103.6	103.7	103.8	103.4	102.6	102.3	101.6	100.9
65°	90.4	90.7	90.2	90.7	90.2	90.7	90.4	89.8	88.5	88.1	87.4
67.5°	76.3	76.5	76.9	77.1	76.9	76.5	76.3	76.6	75.7	75.0	74.8
70°	67.6	67.4	68.0	68.6	68.0	67.4	67.6	67.3	66.7	66.1	65.4
72.5°	58.4	58.8	58.6	59.0	58.6	58.8	58.4	58.5	58.0	57.2	56.5
75°	45.0	45.6	45.4	45.9	45.4	45.6	45.0	45.4	45.0	44.3	43.5
77.5°	32.5	32.6	32.5	32.9	32.5	32.6	32.5	32.9	32.4	32.7	31.8
80°	24.8	24.5	24.1	24.8	24.1	24.5	24.8	24.8	24.3	24.8	24.3
82.5°	17.3	17.4	17.1	17.1	17.1	17.4	17.3	17.7	17.4	17.7	17.1
85°	8.0	7.7	7.4	7.4	7.4	7.7	8.0	8.0	8.5	8.2	8.2
87.5°	5.5	5.4	5.5	5.4	5.5	5.4	5.5	5.4	5.3	5.4	5.2
90°	20.0	20.3	20.7	21.0	20.7	20.3	20.0	19.6	19.1	18.2	17.3
92.5°	20.4	20.6	20.8	21.0	20.8	20.6	20.4	20.2	19.9	19.4	19.0
95°	34.0	33.8	33.7	33.5	33.7	33.8	34.0	34.2	33.8	33.0	32.1
97.5°	44.1	44.3	44.5	44.7	44.5	44.3	44.1	43.9	43.5	42.7	42.1
100°	51.1	51.5	51.9	52.2	51.9	51.5	51.1	50.8	50.0	48.6	47.2
102.5°	54.5	55.0	55.4	55.9	55.4	55.0	54.5	54.0	52.8	51.0	49.2
105°	57.2	57.8	58.5	59.2	58.5	57.8	57.2	56.4	55.1	53.2	51.4
107.5°	58.9	59.5	60.3	60.9	60.3	59.5	58.9	58.1	58.8	60.7	62.6
110°	59.4	60.2	60.8	61.6	60.8	60.2	59.4	58.8	67.1	84.4	101.7



TEST NUMBER: P331477-930

CATALOG NUMBER: S122DIW-S290D970U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	60.5	61.1	61.6	62.2	61.6	61.1	60.5	59.9	91.2	154.4	217.5
115°	101.3	88.8	76.3	63.9	76.3	88.8	101.3	113.7	160.0	240.2	320.3
117.5°	383.7	342.8	301.8	260.8	301.8	342.8	383.7	424.7	454.9	474.3	493.6
120°	545.4	522.0	498.6	475.2	498.6	522.0	545.4	568.7	579.4	577.2	575.2
122.5°	606.6	602.1	597.5	593.0	597.5	602.1	606.6	611.1	612.8	611.6	610.3
125°	664.6	665.0	665.5	666.1	665.5	665.0	664.6	664.0	663.2	661.9	660.7
127.5°	711.9	712.0	712.1	712.2	712.1	712.0	711.9	711.8	710.9	709.1	707.4
130°	741.4	741.2	741.0	740.9	741.0	741.2	741.4	741.6	740.7	738.8	736.9
132.5°	769.4	769.2	769.1	768.9	769.1	769.2	769.4	769.6	768.9	767.3	765.6
135°	810.5	810.1	809.8	809.4	809.8	810.1	810.5	810.8	810.1	808.4	806.7
137.5°	848.2	847.5	846.9	846.4	846.9	847.5	848.2	848.7	848.2	846.4	844.7
140°	872.0	871.1	870.3	869.4	870.3	871.1	872.0	872.9	872.5	871.0	869.4
142.5°	894.5	893.6	892.8	891.9	892.8	893.6	894.5	895.3	895.0	893.6	892.2
145°	925.8	924.9	924.1	923.2	924.1	924.9	925.8	926.7	926.4	925.3	924.1
147.5°	952.9	952.2	951.5	950.7	951.5	952.2	952.9	953.7	953.6	952.7	951.8
150°	970.2	969.3	968.4	967.6	968.4	969.3	970.2	971.0	970.9	969.9	968.9
152.5°	985.4	984.2	983.1	981.9	983.1	984.2	985.4	986.5	986.5	985.5	984.5
155°	1006.0	1004.6	1003.2	1001.8	1003.2	1004.6	1006.0	1007.4	1007.5	1006.5	1005.5
157.5°	1024.1	1022.8	1021.4	1020.1	1021.4	1022.8	1024.1	1025.5	1025.6	1024.4	1023.2
160°	1034.3	1033.1	1031.9	1030.7	1031.9	1033.1	1034.3	1035.5	1035.6	1034.5	1033.6
162.5°	1043.8	1042.4	1040.9	1039.4	1040.9	1042.4	1043.8	1045.4	1045.5	1044.3	1043.2
165°	1056.1	1054.9	1053.7	1052.5	1053.7	1054.9	1056.1	1057.4	1057.4	1056.1	1054.9
167.5°	1065.4	1063.9	1062.3	1060.8	1062.3	1063.9	1065.4	1067.0	1067.1	1065.9	1064.7
170°	1070.4	1068.9	1067.3	1065.8	1067.3	1068.9	1070.4	1072.0	1072.1	1070.9	1069.8
172.5°	1074.2	1072.6	1071.1	1069.5	1071.1	1072.6	1074.2	1075.7	1075.9	1074.6	1073.4
175°	1077.9	1076.2	1074.5	1072.8	1074.5	1076.2	1077.9	1079.7	1079.9	1078.7	1077.5
177.5°	1078.5	1077.3	1076.0	1074.8	1076.0	1077.3	1078.5	1079.8	1079.9	1078.9	1078.0
180°	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6



TEST NUMBER: P331477-930

CATALOG NUMBER: S122DIW-S290D970U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	463.1	464.7	467.2	469.9	471.6	474.7	475.6	477.0	478.3	481.4	484.7
5°	436.3	439.0	445.1	448.4	453.0	458.4	461.9	465.6	469.7	476.7	483.2
7.5°	407.6	412.0	419.6	425.8	432.4	440.1	445.6	453.0	459.1	469.0	478.5
10°	388.6	394.7	401.5	409.0	418.2	426.3	434.1	443.4	450.8	462.7	473.8
12.5°	371.4	372.3	382.1	390.3	402.9	413.0	422.0	433.9	441.2	455.3	466.9
15°	341.4	346.9	355.8	362.2	377.2	390.0	402.7	415.1	423.4	440.8	456.2
17.5°	316.0	321.1	330.3	340.9	351.6	364.4	380.7	393.8	405.1	425.0	443.2
20°	300.0	306.3	315.6	326.5	336.0	349.8	363.9	379.0	391.2	413.6	434.9
22.5°	286.4	291.4	298.9	309.7	319.9	332.6	348.1	364.4	377.2	401.5	423.0
25°	267.3	271.3	276.1	285.0	296.7	310.6	322.6	340.6	359.3	381.9	408.0
27.5°	250.0	252.9	257.1	265.0	274.0	287.0	300.4	317.4	336.2	360.8	388.3
30°	239.5	241.3	245.6	252.1	261.0	271.2	284.7	300.9	320.2	345.0	372.4
32.5°	230.3	232.0	234.8	240.9	248.7	257.4	269.5	285.8	304.2	328.6	359.0
35°	216.5	217.8	220.2	225.2	229.5	238.0	248.2	263.0	280.2	303.5	335.0
37.5°	202.8	204.6	206.0	208.1	213.6	219.2	228.0	240.6	257.5	281.0	311.0
40°	193.7	195.2	197.5	198.4	202.8	207.8	215.0	226.5	243.5	265.1	294.3
42.5°	184.5	186.1	187.4	188.4	192.2	196.7	203.2	213.0	228.1	249.0	278.0
45°	172.0	172.3	173.6	175.6	177.4	180.6	185.2	193.7	205.4	225.0	251.4
47.5°	159.4	159.6	159.8	160.7	162.7	165.6	168.7	175.6	186.1	201.7	227.3
50°	150.9	150.6	150.9	151.6	153.0	155.4	158.9	163.9	172.4	187.0	210.6
52.5°	142.8	142.8	142.5	142.8	143.8	145.4	148.0	152.2	159.8	173.3	194.0
55°	130.4	129.5	129.6	128.9	130.6	130.9	132.8	136.3	143.0	152.2	171.7
57.5°	117.2	116.4	115.6	115.4	115.2	116.2	117.6	120.4	125.6	133.7	149.4
60°	108.7	107.8	106.6	106.3	106.3	106.9	107.6	109.7	114.5	121.6	134.6
62.5°	100.1	99.1	98.4	97.4	97.1	97.7	98.4	99.9	103.4	110.1	121.3
65°	86.8	85.5	84.6	84.5	84.1	83.6	83.9	85.4	88.1	93.5	102.4
67.5°	73.5	72.3	72.2	71.0	70.5	70.6	70.5	71.7	73.5	78.1	84.7
70°	64.8	63.9	63.5	62.6	62.2	61.9	61.5	62.6	64.2	68.2	73.9
72.5°	55.9	55.1	54.4	53.6	53.6	53.2	53.2	53.9	55.2	58.8	63.3
75°	43.1	43.4	42.4	41.5	41.3	40.9	40.9	41.5	42.1	44.8	48.3
77.5°	31.3	31.1	30.4	30.1	29.9	29.5	29.9	30.2	30.6	32.4	35.0
80°	23.9	23.9	23.0	23.0	22.7	22.3	22.7	22.4	23.2	25.0	26.8
82.5°	17.0	16.8	16.7	16.5	16.4	16.0	16.2	16.6	17.0	18.2	19.3
85°	8.3	8.3	8.2	8.0	8.2	8.0	8.2	8.3	8.5	9.0	10.0
87.5°	5.1	5.1	4.9	4.8	4.5	4.4	4.2	4.0	3.9	3.7	3.4
90°	16.5	15.6	14.2	12.8	11.4	10.0	8.4	6.5	4.6	2.7	0.8
92.5°	18.5	18.1	17.4	16.7	16.0	15.3	15.1	15.2	15.4	15.6	15.7
95°	31.2	30.4	29.2	28.0	26.7	25.5	27.8	33.5	39.2	44.9	50.6
97.5°	41.3	40.7	37.8	35.1	32.3	29.4	36.1	52.2	68.3	84.4	100.5
100°	45.8	44.4	41.5	38.5	35.5	32.6	43.0	66.8	90.4	114.1	137.9
102.5°	47.5	45.7	70.3	94.9	119.5	144.1	158.9	164.0	169.0	174.0	179.0
105°	49.4	47.5	94.8	142.0	189.3	236.6	257.6	252.4	247.2	242.1	236.8
107.5°	64.6	66.5	123.2	179.9	236.6	293.3	319.5	315.3	311.1	307.0	302.7
110°	119.0	136.3	186.4	236.4	286.4	336.5	359.6	356.0	352.4	348.8	345.1



TEST NUMBER: P331477-930

CATALOG NUMBER: S122DIW-S290D970U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	280.7	343.9	356.2	368.6	381.0	393.3	397.9	394.7	391.4	388.2	385.0
115°	400.5	480.7	476.4	472.0	467.7	463.3	459.7	456.8	453.9	450.9	447.9
117.5°	513.0	532.4	529.5	526.4	523.5	520.5	517.4	514.0	510.8	507.5	504.2
120°	573.2	571.0	567.9	564.8	561.7	558.6	555.7	553.1	550.5	548.0	545.4
122.5°	609.0	607.8	604.4	601.0	597.6	594.3	591.2	588.4	585.7	582.9	580.2
125°	659.5	658.3	655.0	651.8	648.4	645.1	642.4	640.1	637.9	635.6	633.3
127.5°	705.6	703.8	701.3	698.9	696.4	694.0	691.5	689.0	686.5	684.0	681.5
130°	735.0	733.1	731.2	729.3	727.3	725.5	723.1	720.3	717.6	714.9	712.1
132.5°	764.0	762.4	760.4	758.6	756.7	754.7	752.6	750.2	748.0	745.6	743.2
135°	804.9	803.2	801.6	800.1	798.5	797.0	794.8	792.1	789.3	786.5	783.7
137.5°	843.1	841.4	839.6	837.8	836.1	834.3	832.4	830.5	828.6	826.6	824.7
140°	867.9	866.3	864.4	862.5	860.5	858.7	857.0	855.7	854.3	852.9	851.5
142.5°	890.8	889.3	887.2	885.0	882.8	880.6	878.9	877.7	876.4	875.1	873.9
145°	922.8	921.6	918.7	915.7	912.8	909.9	908.5	908.7	908.8	909.0	909.1
147.5°	950.9	950.0	947.1	944.1	941.3	938.3	937.2	937.8	938.5	939.1	939.9
150°	967.8	966.8	964.0	961.2	958.5	955.7	955.0	956.2	957.3	958.5	959.8
152.5°	983.4	982.4	979.7	977.1	974.4	971.8	971.2	972.6	973.9	975.3	976.6
155°	1004.4	1003.4	1001.4	999.2	997.2	995.1	994.8	996.4	997.9	999.5	1001.1
157.5°	1022.1	1020.8	1019.4	1018.0	1016.5	1015.0	1015.0	1016.3	1017.6	1019.0	1020.3
160°	1032.5	1031.4	1030.5	1029.4	1028.3	1027.3	1027.3	1028.3	1029.4	1030.5	1031.4
162.5°	1042.0	1040.8	1039.9	1039.0	1038.1	1037.2	1037.3	1038.3	1039.3	1040.4	1041.5
165°	1053.7	1052.5	1052.0	1051.4	1050.9	1050.4	1050.7	1051.7	1052.7	1053.8	1054.8
167.5°	1063.5	1062.3	1061.8	1061.4	1060.9	1060.4	1060.6	1061.7	1062.7	1063.7	1064.8
170°	1068.5	1067.3	1067.0	1066.6	1066.2	1065.9	1066.2	1067.3	1068.4	1069.3	1070.4
172.5°	1072.3	1071.1	1070.7	1070.3	1070.0	1069.7	1070.0	1071.1	1072.0	1073.1	1074.2
175°	1076.3	1075.1	1074.7	1074.4	1074.1	1073.7	1074.2	1075.4	1076.5	1077.7	1079.0
177.5°	1077.0	1076.0	1075.9	1075.7	1075.6	1075.5	1075.9	1076.8	1077.8	1078.8	1079.8
180°	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6



TEST NUMBER: P331477-930

CATALOG NUMBER: S122DIW-S290D970U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	484.5	485.2	487.5	489.9	492.6	493.3	494.5	493.5	493.2	495.9	498.1
5°	485.8	489.1	495.6	501.6	506.5	510.1	513.8	515.3	518.0	521.9	526.8
7.5°	484.2	490.7	500.9	509.6	518.9	525.7	531.0	535.6	541.0	548.4	556.4
10°	482.5	491.1	503.6	514.1	525.6	534.3	541.5	548.6	556.8	567.0	577.5
12.5°	479.2	489.5	505.1	517.6	532.3	540.9	550.6	565.7	574.5	588.7	603.6
15°	472.6	484.1	505.8	521.1	537.9	554.2	572.1	586.5	601.0	609.4	630.2
17.5°	462.9	479.7	503.8	521.7	542.9	568.5	588.7	605.1	621.7	635.3	645.8
20°	455.0	473.4	500.8	522.3	547.5	575.0	598.2	614.9	629.3	640.7	647.1
22.5°	445.2	468.2	494.9	520.1	552.2	579.5	603.8	616.9	629.0	634.5	637.1
25°	429.5	457.3	487.5	518.2	554.5	583.4	605.6	613.6	617.1	611.7	602.8
27.5°	412.6	443.6	478.9	514.7	553.1	580.9	596.8	595.6	589.6	572.2	558.3
30°	400.1	434.1	472.1	511.2	549.7	576.7	586.0	576.7	563.2	543.8	523.9
32.5°	386.9	422.2	464.8	506.1	543.5	567.3	569.2	553.3	532.4	510.3	485.6
35°	366.9	405.0	451.2	494.9	530.3	545.3	536.4	508.2	483.4	453.2	419.5
37.5°	344.3	386.5	432.7	478.4	510.5	514.4	492.3	462.7	427.6	392.2	352.5
40°	327.4	372.1	419.7	465.8	494.2	490.1	461.9	429.3	387.7	344.3	307.4
42.5°	312.3	356.9	405.4	450.7	473.4	462.2	429.3	389.3	344.5	303.7	269.9
45°	286.2	332.1	381.7	425.4	438.4	418.2	374.7	330.2	286.2	252.1	225.4
47.5°	260.7	306.1	355.3	393.7	398.3	371.1	323.6	277.9	239.9	212.2	193.4
50°	242.1	287.6	336.3	370.6	369.1	336.3	287.5	243.9	212.2	189.8	177.2
52.5°	225.3	268.4	315.1	346.3	338.4	302.7	256.0	217.4	191.4	173.8	162.4
55°	199.3	239.1	283.6	308.6	294.1	254.5	215.0	183.9	164.6	151.5	142.6
57.5°	173.4	210.8	248.8	264.2	248.3	211.7	178.8	156.2	141.7	132.0	126.2
60°	157.4	190.0	223.9	237.3	218.2	185.6	159.6	139.5	127.8	119.8	114.6
62.5°	141.5	170.6	202.6	209.9	192.4	164.9	141.9	125.1	115.5	108.4	103.5
65°	119.6	143.6	167.8	172.6	156.5	135.2	117.1	106.2	97.6	92.5	88.5
67.5°	98.2	117.3	134.5	138.4	124.3	109.5	96.4	86.8	81.1	76.8	73.5
70°	85.4	100.6	114.6	117.8	106.5	93.4	83.3	75.7	70.5	66.9	63.7
72.5°	71.9	84.5	96.3	98.4	89.2	79.1	70.9	64.9	60.3	58.0	55.0
75°	55.0	62.5	71.5	72.1	66.0	59.8	53.6	49.7	47.2	44.3	42.8
77.5°	38.8	44.6	49.8	50.8	47.2	43.0	39.5	36.4	34.4	33.0	31.6
80°	29.6	34.2	36.5	37.7	35.2	32.2	30.2	28.1	26.8	25.9	25.0
82.5°	21.2	24.1	26.1	27.1	25.7	23.9	21.9	20.7	19.7	19.0	18.7
85°	10.8	12.1	13.4	13.7	13.4	12.6	11.5	11.5	10.9	10.8	10.8
87.5°	4.2	5.2	5.6	6.4	6.4	6.8	7.0	7.2	7.3	7.3	7.3
90°	2.7	4.6	6.5	8.4	10.0	11.4	12.8	14.2	15.6	16.5	17.3
92.5°	15.6	15.4	15.2	15.1	15.3	16.0	16.7	17.4	18.1	18.5	19.0
95°	44.9	39.2	33.5	27.8	25.5	26.7	28.0	29.2	30.4	31.2	32.1
97.5°	84.4	68.3	52.2	36.1	29.4	32.3	35.1	37.8	40.7	41.3	42.1
100°	114.1	90.4	66.8	43.0	32.6	35.5	38.5	41.5	44.4	45.8	47.2
102.5°	174.0	169.0	164.0	158.9	144.1	119.5	94.9	70.3	45.7	47.5	49.2
105°	242.1	247.2	252.4	257.6	236.6	189.3	142.0	94.8	47.5	49.4	51.4
107.5°	307.0	311.1	315.3	319.5	293.3	236.6	179.9	123.2	66.5	64.6	62.6
110°	348.8	352.4	356.0	359.6	336.5	286.4	236.4	186.4	136.3	119.0	101.7





TEST NUMBER: P331477-930

CATALOG NUMBER: S122DIW-S290D970U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	388.2	391.4	394.7	397.9	393.3	381.0	368.6	356.2	343.9	280.7	217.5
115°	450.9	453.9	456.8	459.7	463.3	467.7	472.0	476.4	480.7	400.5	320.3
117.5°	507.5	510.8	514.0	517.4	520.5	523.5	526.4	529.5	532.4	513.0	493.6
120°	548.0	550.5	553.1	555.7	558.6	561.7	564.8	567.9	571.0	573.2	575.2
122.5°	582.9	585.7	588.4	591.2	594.3	597.6	601.0	604.4	607.8	609.0	610.3
125°	635.6	637.9	640.1	642.4	645.1	648.4	651.8	655.0	658.3	659.5	660.7
127.5°	684.0	686.5	689.0	691.5	694.0	696.4	698.9	701.3	703.8	705.6	707.4
130°	714.9	717.6	720.3	723.1	725.5	727.3	729.3	731.2	733.1	735.0	736.9
132.5°	745.6	748.0	750.2	752.6	754.7	756.7	758.6	760.4	762.4	764.0	765.6
135°	786.5	789.3	792.1	794.8	797.0	798.5	800.1	801.6	803.2	804.9	806.7
137.5°	826.6	828.6	830.5	832.4	834.3	836.1	837.8	839.6	841.4	843.1	844.7
140°	852.9	854.3	855.7	857.0	858.7	860.5	862.5	864.4	866.3	867.9	869.4
142.5°	875.1	876.4	877.7	878.9	880.6	882.8	885.0	887.2	889.3	890.8	892.2
145°	909.0	908.8	908.7	908.5	909.9	912.8	915.7	918.7	921.6	922.8	924.1
147.5°	939.1	938.5	937.8	937.2	938.3	941.3	944.1	947.1	950.0	950.9	951.8
150°	958.5	957.3	956.2	955.0	955.7	958.5	961.2	964.0	966.8	967.8	968.9
152.5°	975.3	973.9	972.6	971.2	971.8	974.4	977.1	979.7	982.4	983.4	984.5
155°	999.5	997.9	996.4	994.8	995.1	997.2	999.2	1001.4	1003.4	1004.4	1005.5
157.5°	1019.0	1017.6	1016.3	1015.0	1015.0	1016.5	1018.0	1019.4	1020.8	1022.1	1023.2
160°	1030.5	1029.4	1028.3	1027.3	1027.3	1028.3	1029.4	1030.5	1031.4	1032.5	1033.6
162.5°	1040.4	1039.3	1038.3	1037.3	1037.2	1038.1	1039.0	1039.9	1040.8	1042.0	1043.2
165°	1053.8	1052.7	1051.7	1050.7	1050.4	1050.9	1051.4	1052.0	1052.5	1053.7	1054.9
167.5°	1063.7	1062.7	1061.7	1060.6	1060.4	1060.9	1061.4	1061.8	1062.3	1063.5	1064.7
170°	1069.3	1068.4	1067.3	1066.2	1065.9	1066.2	1066.6	1067.0	1067.3	1068.5	1069.8
172.5°	1073.1	1072.0	1071.1	1070.0	1069.7	1070.0	1070.3	1070.7	1071.1	1072.3	1073.4
175°	1077.7	1076.5	1075.4	1074.2	1073.7	1074.1	1074.4	1074.7	1075.1	1076.3	1077.5
177.5°	1078.8	1077.8	1076.8	1075.9	1075.5	1075.6	1075.7	1075.9	1076.0	1077.0	1078.0
180°	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6



TEST NUMBER: P331477-930

CATALOG NUMBER: S122DIW-S290D970U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	499.9	501.9	501.9	502.2	504.6	504.3	504.1
5°	531.9	535.1	535.4	538.7	541.0	540.2	538.2
7.5°	562.1	568.0	572.5	574.9	577.9	579.7	578.9
10°	586.2	594.7	599.9	603.4	607.6	610.8	609.7
12.5°	608.0	618.1	625.3	631.3	631.8	635.9	633.1
15°	642.0	652.6	653.8	658.2	661.8	661.4	661.5
17.5°	653.1	656.6	657.3	657.4	657.5	656.2	653.3
20°	649.1	647.8	644.7	642.3	638.1	637.5	633.8
22.5°	630.1	626.1	618.2	612.9	606.3	604.6	603.6
25°	592.9	583.8	571.2	559.1	555.8	549.3	551.1
27.5°	541.6	527.5	513.8	504.1	495.2	485.5	488.3
30°	505.6	489.7	470.4	455.6	446.1	436.9	435.2
32.5°	462.7	439.3	417.8	404.8	390.3	384.4	378.1
35°	388.6	365.7	344.5	326.1	315.6	307.4	300.0
37.5°	322.0	295.7	278.5	263.7	256.0	251.4	252.6
40°	280.6	257.6	245.0	233.7	226.7	223.4	224.1
42.5°	247.1	229.9	219.6	211.8	206.8	205.0	204.6
45°	209.1	199.5	190.9	186.5	184.1	182.1	180.8
47.5°	183.2	175.3	170.5	167.9	165.8	163.7	163.6
50°	167.6	162.4	159.1	156.3	154.7	153.2	154.5
52.5°	155.7	151.0	147.7	145.2	144.6	143.2	143.2
55°	138.2	134.4	132.1	129.8	128.7	128.0	127.0
57.5°	122.1	118.6	116.4	115.0	112.9	112.2	111.9
60°	110.7	107.9	105.7	103.9	103.0	101.5	101.5
62.5°	100.2	97.4	95.4	94.0	92.5	91.9	92.0
65°	85.0	82.8	80.7	79.2	78.9	77.8	78.2
67.5°	71.0	69.5	67.3	66.5	65.9	65.3	64.8
70°	61.6	60.2	59.1	58.0	57.4	57.4	57.4
72.5°	53.8	52.0	51.4	50.0	50.3	49.7	49.1
75°	41.7	40.5	40.0	39.5	38.6	38.6	38.6
77.5°	30.7	30.3	29.7	29.1	28.9	28.7	28.8
80°	23.7	23.5	23.2	23.2	22.7	22.6	22.3
82.5°	18.3	17.8	17.5	17.4	17.3	17.3	17.2
85°	10.4	10.0	10.0	10.2	9.8	9.8	10.0
87.5°	7.7	7.8	7.7	7.8	8.1	8.0	8.1
90°	18.2	19.1	19.6	20.0	20.3	20.7	21.0
92.5°	19.4	19.9	20.2	20.4	20.6	20.8	21.0
95°	33.0	33.8	34.2	34.0	33.8	33.7	33.5
97.5°	42.7	43.5	43.9	44.1	44.3	44.5	44.7
100°	48.6	50.0	50.8	51.1	51.5	51.9	52.2
102.5°	51.0	52.8	54.0	54.5	55.0	55.4	55.9
105°	53.2	55.1	56.4	57.2	57.8	58.5	59.2
107.5°	60.7	58.8	58.1	58.9	59.5	60.3	60.9
110°	84.4	67.1	58.8	59.4	60.2	60.8	61.6



TEST NUMBER: P331477-930

CATALOG NUMBER: S122DIW-S290D970U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	154.4	91.2	59.9	60.5	61.1	61.6	62.2
115°	240.2	160.0	113.7	101.3	88.8	76.3	63.9
117.5°	474.3	454.9	424.7	383.7	342.8	301.8	260.8
120°	577.2	579.4	568.7	545.4	522.0	498.6	475.2
122.5°	611.6	612.8	611.1	606.6	602.1	597.5	593.0
125°	661.9	663.2	664.0	664.6	665.0	665.5	666.1
127.5°	709.1	710.9	711.8	711.9	712.0	712.1	712.2
130°	738.8	740.7	741.6	741.4	741.2	741.0	740.9
132.5°	767.3	768.9	769.6	769.4	769.2	769.1	768.9
135°	808.4	810.1	810.8	810.5	810.1	809.8	809.4
137.5°	846.4	848.2	848.7	848.2	847.5	846.9	846.4
140°	871.0	872.5	872.9	872.0	871.1	870.3	869.4
142.5°	893.6	895.0	895.3	894.5	893.6	892.8	891.9
145°	925.3	926.4	926.7	925.8	924.9	924.1	923.2
147.5°	952.7	953.6	953.7	952.9	952.2	951.5	950.7
150°	969.9	970.9	971.0	970.2	969.3	968.4	967.6
152.5°	985.5	986.5	986.5	985.4	984.2	983.1	981.9
155°	1006.5	1007.5	1007.4	1006.0	1004.6	1003.2	1001.8
157.5°	1024.4	1025.6	1025.5	1024.1	1022.8	1021.4	1020.1
160°	1034.5	1035.6	1035.5	1034.3	1033.1	1031.9	1030.7
162.5°	1044.3	1045.5	1045.4	1043.8	1042.4	1040.9	1039.4
165°	1056.1	1057.4	1057.4	1056.1	1054.9	1053.7	1052.5
167.5°	1065.9	1067.1	1067.0	1065.4	1063.9	1062.3	1060.8
170°	1070.9	1072.1	1072.0	1070.4	1068.9	1067.3	1065.8
172.5°	1074.6	1075.9	1075.7	1074.2	1072.6	1071.1	1069.5
175°	1078.7	1079.9	1079.7	1077.9	1076.2	1074.5	1072.8
177.5°	1078.9	1079.9	1079.8	1078.5	1077.3	1076.0	1074.8
180°	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6	1076.6

(END OF REPORT)