

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: P331640-935

Luminaire Tested: **SA2XXRDIP-C290D1080U935-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331640-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA2XXRDIP-C290D1080U935-4F0-1E-UDD-A1
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1080 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4291.4 lumens
Efficiency: N/A
Efficacy: 101.7 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Semi-Indirect

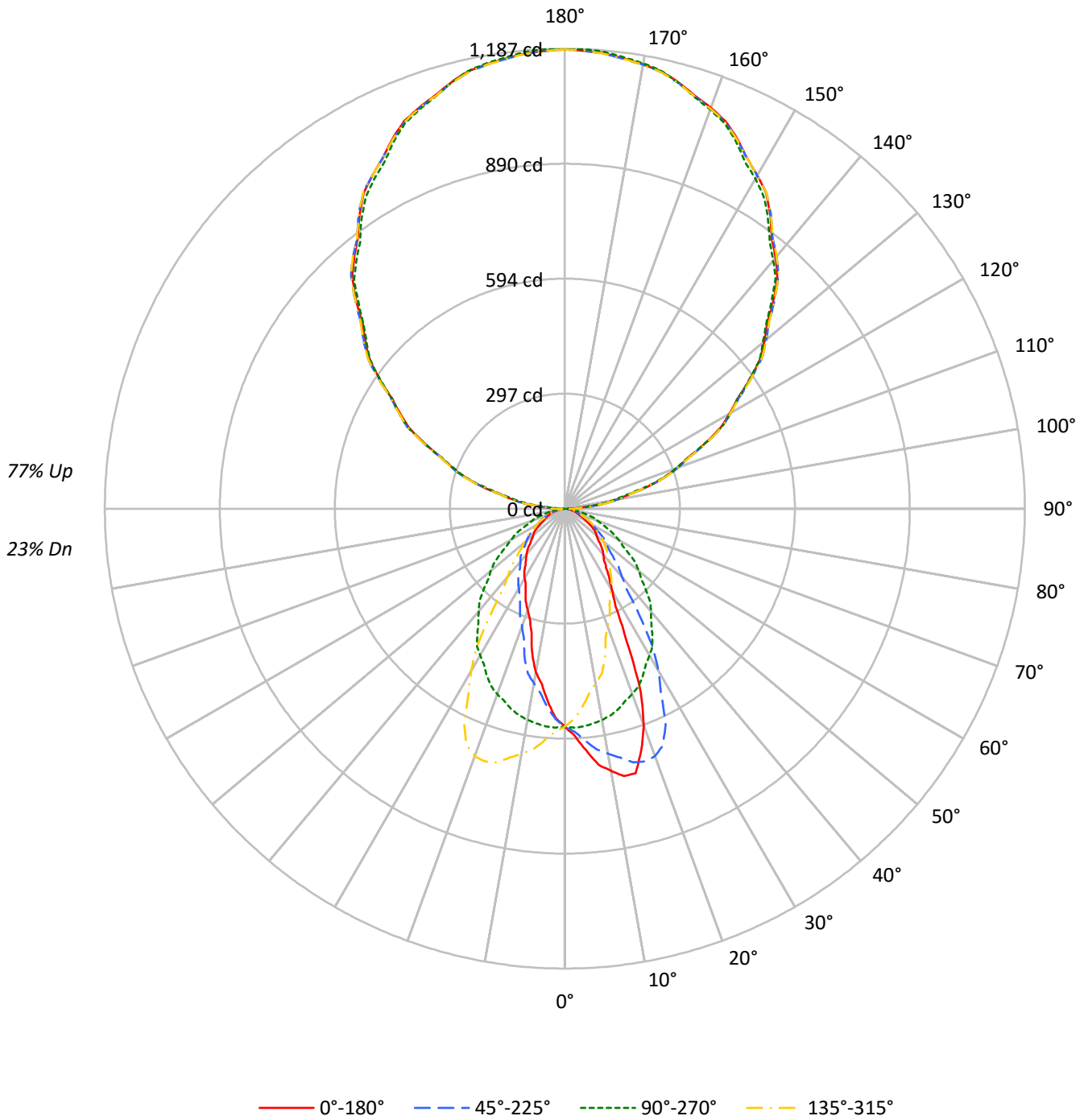
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31	23
1	92	88	84	81	82	78	75	73	60	58	56	43	42	41	28	27	27	20
2	84	77	72	67	74	69	64	60	53	50	47	38	37	35	25	24	23	17
3	77	68	61	56	68	61	55	51	47	43	40	34	32	30	23	21	20	15
4	70	60	53	48	62	54	48	43	42	38	34	31	28	26	20	19	18	13
5	65	54	46	41	57	48	42	37	38	33	30	28	25	23	19	17	16	12
6	60	48	41	35	53	43	37	32	34	29	26	25	22	20	17	15	14	11
7	55	44	36	31	49	39	33	28	31	26	23	23	20	18	16	14	13	10
8	51	40	32	27	45	36	29	25	28	24	20	21	18	16	14	13	11	9
9	47	36	29	24	42	32	26	22	26	21	18	19	16	14	13	12	10	8
10	44	33	26	22	39	30	24	20	24	19	16	18	15	13	12	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	9087	9087	9087	9087
5°	10149	9144	8109	9144
10°	11262	9081	7029	9081
15°	11814	8948	5538	8948
20°	10244	8751	4792	8751
25°	6716	8480	4277	8480
30°	4521	8153	3872	8153
35°	3662	7740	3493	7740
40°	3256	7290	3231	7290
45°	2948	6766	2884	6766
50°	2683	6244	2673	6244
55°	2519	5664	2488	5664
60°	2109	5134	2086	5134
65°	1780	4661	2017	4661
70°	1643	4164	1902	4164
75°	1535	3624	1759	3624
80°	1413	2985	1562	2985
85°	1315	2353	1371	2353



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.4	1.2
10°-20°	148.7	3.5
20°-30°	191.6	4.5
30°-40°	182.1	4.2
40°-50°	156.0	3.6
50°-60°	118.8	2.8
60°-70°	75.1	1.7
70°-80°	37.5	0.9
80°-90°	14.5	0.3
90°-100°	75.1	1.7
100°-110°	233.2	5.4
110°-120°	398.7	9.3
120°-130°	524.3	12.2
130°-140°	588.5	13.7
140°-150°	577.0	13.4
150°-160°	484.0	11.3
160°-170°	321.0	7.5
170°-180°	112.2	2.6
0°-30°	393.6	9.2
0°-40°	575.7	13.4
0°-60°	850.4	19.8
0°-90°	977.5	22.8
90°-120°	707.0	16.5
90°-150°	2396.8	55.9
90°-180°	3314.0	77.2
0°-180°	4291.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	563	563	563	563	563	
5°	626	564	500	564	626	62
15°	707	535	331	535	707	191
25°	377	476	240	476	377	179
35°	186	393	177	393	186	119
45°	129	296	126	296	129	100
55°	90	201	88	201	90	79
65°	47	122	53	122	47	47
75°	25	58	28	58	25	26
85°	7	13	7	13	7	8
90°	34	1	34	1	34	15
95°	62	52	62	52	62	69
105°	222	215	222	215	222	234
115°	400	400	400	400	400	395
125°	584	582	584	582	584	521
135°	762	753	762	753	762	587
145°	924	914	924	914	924	577
155°	1053	1045	1053	1045	1053	485
165°	1138	1137	1138	1137	1138	321
175°	1179	1183	1179	1183	1179	112
180°	1185	1185	1185	1185	1185	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8
2.5°	585.7	586.2	586.7	585.6	585.6	584.6	582.6	581.0	576.6	576.0	576.0
5°	626.2	625.9	626.6	624.1	620.6	619.7	616.0	611.1	606.1	600.5	599.3
7.5°	666.5	665.9	664.3	663.9	661.2	655.3	649.4	643.0	634.6	626.3	622.2
10°	686.9	693.4	689.4	682.6	683.9	674.8	669.9	661.4	654.4	642.0	639.4
12.5°	706.9	709.5	708.2	704.3	702.6	696.2	689.6	682.3	669.3	658.2	648.6
15°	706.8	710.5	711.5	710.3	711.3	710.9	707.4	701.4	690.0	677.9	667.3
17.5°	654.6	657.2	663.7	668.0	673.5	685.0	690.8	692.9	691.3	684.3	676.9
20°	596.2	591.9	609.8	619.0	626.8	646.4	663.2	669.7	680.0	679.8	677.9
22.5°	513.2	514.2	531.2	542.2	565.0	584.6	603.7	628.0	648.1	661.3	669.1
25°	377.0	384.5	401.5	416.4	441.8	478.2	511.3	549.6	585.7	614.3	641.5
27.5°	283.2	283.8	297.2	311.0	326.1	355.9	397.5	443.2	494.8	537.4	586.3
30°	242.5	241.3	247.0	255.5	268.4	291.4	322.7	367.6	419.1	483.3	540.4
32.5°	213.7	213.8	218.1	224.3	235.0	250.6	272.0	308.6	357.1	420.3	487.2
35°	185.8	185.6	188.7	193.2	197.7	207.7	222.4	241.5	275.0	333.8	402.3
37.5°	165.7	166.6	168.2	171.0	175.9	181.5	190.3	203.2	227.0	261.8	319.3
40°	154.5	154.9	157.0	159.4	162.3	166.6	173.8	184.3	201.6	229.4	271.5
42.5°	144.2	144.6	146.1	148.3	150.6	154.9	160.9	169.9	184.0	205.6	240.3
45°	129.1	129.1	130.4	131.4	134.0	137.8	142.8	150.2	160.0	176.0	199.1
47.5°	114.9	114.9	115.9	117.5	119.2	122.2	127.0	133.1	140.2	152.6	172.3
50°	106.8	107.0	107.5	108.9	109.9	112.6	116.4	121.7	129.1	138.7	155.1
52.5°	100.2	100.1	100.8	101.4	102.1	104.0	106.9	111.5	118.1	126.5	140.1
55°	89.5	88.8	90.0	90.9	91.5	92.3	93.8	96.8	102.5	109.5	119.7
57.5°	76.3	75.9	76.8	77.7	79.6	81.6	83.0	84.8	87.7	92.8	102.9
60°	65.3	65.3	67.1	67.7	69.8	72.6	75.3	76.9	79.8	83.1	90.6
62.5°	55.6	55.8	56.6	57.2	58.4	61.7	65.6	69.1	71.8	75.0	79.9
65°	46.6	46.9	46.9	47.4	48.1	48.9	50.5	53.2	58.1	62.6	66.3
67.5°	39.5	39.6	39.8	40.1	40.3	41.2	41.8	43.0	44.2	48.4	53.0
70°	34.8	35.4	35.2	35.6	35.8	36.2	36.9	37.5	39.3	40.3	43.0
72.5°	30.4	30.8	30.8	31.1	31.6	31.7	32.3	32.9	34.0	34.8	36.3
75°	24.6	24.5	24.6	25.1	25.2	25.4	25.4	26.2	26.8	27.6	28.6
77.5°	19.0	19.2	19.2	19.2	19.3	19.6	19.5	19.9	20.5	20.9	21.4
80°	15.2	15.4	15.2	15.4	15.7	15.8	15.7	15.8	16.4	16.8	16.8
82.5°	11.8	11.9	12.0	12.0	12.1	12.1	12.4	12.4	12.8	12.7	12.9
85°	7.1	6.9	6.9	6.9	7.1	7.2	7.1	7.1	7.2	7.2	7.2
87.5°	9.3	9.4	9.4	9.3	9.3	9.3	9.4	9.6	9.6	9.8	8.7
90°	34.0	33.8	33.6	33.3	33.1	33.2	33.7	34.1	34.5	35.0	30.1
92.5°	32.4	32.4	32.3	32.3	32.2	32.2	32.0	31.9	31.9	31.8	30.7
95°	62.0	62.4	62.9	63.4	63.8	64.0	64.0	64.0	64.0	64.0	63.5
97.5°	107.5	107.5	107.5	107.5	107.6	107.6	107.6	107.6	107.6	107.6	106.8
100°	137.0	137.2	137.5	137.7	137.9	138.0	138.0	138.0	138.0	138.0	137.3
102.5°	170.7	170.8	171.1	171.3	171.5	171.5	171.3	171.2	171.0	170.8	170.0
105°	222.1	222.1	222.1	222.1	222.1	221.8	221.4	220.9	220.5	220.0	219.6
107.5°	270.4	271.5	272.5	273.5	274.5	274.9	274.7	274.6	274.4	274.2	274.2
110°	308.1	308.7	309.4	310.0	310.7	311.1	311.1	311.1	311.1	311.1	311.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	344.1	344.6	345.0	345.5	346.0	346.6	347.1	347.6	348.1	348.6	348.8
115°	400.0	400.7	401.4	402.1	402.7	403.1	403.4	403.6	403.8	404.1	404.5
117.5°	453.5	454.1	454.8	455.5	456.2	456.8	457.3	457.8	458.3	458.8	460.1
120°	491.0	491.7	492.4	493.1	493.7	494.0	494.0	494.0	494.0	494.0	495.8
122.5°	527.9	528.4	528.8	529.3	529.9	530.3	530.9	531.4	531.9	532.4	533.7
125°	584.1	584.3	584.5	584.7	585.0	585.4	586.1	586.8	587.4	588.1	588.8
127.5°	635.2	636.0	636.7	637.4	638.1	638.9	639.6	640.5	641.3	642.0	642.9
130°	672.1	673.0	673.8	674.8	675.6	676.3	676.7	677.2	677.6	678.1	678.6
132.5°	707.3	708.0	708.7	709.5	710.2	711.0	712.0	712.9	713.9	714.9	714.8
135°	762.1	762.8	763.4	764.1	764.7	765.2	765.4	765.7	765.9	766.1	765.7
137.5°	811.7	812.6	813.5	814.3	815.3	815.8	816.0	816.1	816.3	816.5	815.9
140°	846.1	847.0	847.9	848.8	849.6	850.1	850.1	850.1	850.1	850.1	849.0
142.5°	877.3	878.2	879.1	879.9	880.9	881.2	881.1	880.9	880.7	880.5	879.8
145°	924.1	925.0	925.9	926.8	927.6	928.0	927.8	927.6	927.3	927.1	925.7
147.5°	966.0	966.7	967.6	968.5	969.3	969.5	969.0	968.5	968.0	967.5	966.6
150°	993.2	993.8	994.5	995.1	995.8	995.8	995.1	994.5	993.8	993.2	992.2
152.5°	1018.7	1019.6	1020.5	1021.2	1022.1	1022.1	1021.2	1020.5	1019.6	1018.7	1017.7
155°	1053.1	1053.8	1054.5	1055.2	1055.8	1055.6	1054.5	1053.3	1052.2	1051.1	1050.5
157.5°	1082.7	1083.8	1084.9	1085.9	1087.0	1086.8	1085.3	1083.7	1082.3	1080.7	1080.3
160°	1101.1	1102.0	1102.9	1103.8	1104.7	1104.5	1103.1	1101.8	1100.4	1099.2	1098.9
162.5°	1117.1	1118.2	1119.3	1120.3	1121.4	1121.2	1119.6	1118.2	1116.6	1115.2	1114.9
165°	1138.2	1139.3	1140.4	1141.5	1142.5	1142.4	1140.8	1139.3	1137.7	1136.2	1136.2
167.5°	1155.4	1156.5	1157.6	1158.8	1159.9	1159.8	1158.2	1156.7	1155.1	1153.6	1153.6
170°	1164.2	1165.4	1166.8	1168.1	1169.5	1169.3	1167.8	1166.2	1164.7	1163.1	1163.4
172.5°	1171.3	1172.7	1174.0	1175.4	1176.6	1176.6	1175.0	1173.5	1171.9	1170.4	1170.5
175°	1179.1	1180.5	1181.8	1183.2	1184.5	1184.4	1182.8	1181.3	1179.7	1178.1	1178.6
177.5°	1182.8	1183.8	1184.9	1185.9	1187.0	1187.0	1185.9	1184.9	1183.8	1182.8	1183.1
180°	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8
2.5°	576.4	575.1	573.9	571.2	569.7	566.6	566.2	566.0	562.0	558.0	556.9
5°	596.2	593.0	588.3	582.8	577.1	571.3	567.4	564.2	556.4	549.0	544.7
7.5°	616.0	609.3	601.2	590.9	582.2	572.6	565.3	558.9	547.8	537.1	529.9
10°	630.9	620.0	609.2	595.0	583.8	572.8	562.7	553.9	541.4	527.3	517.3
12.5°	640.2	628.1	613.3	599.3	584.9	570.9	557.3	546.0	531.3	516.8	505.0
15°	652.6	639.7	621.7	601.8	583.2	565.0	549.4	535.3	516.2	498.7	484.2
17.5°	662.9	645.1	625.8	602.7	581.2	558.1	538.0	520.0	498.6	477.6	460.5
20°	666.2	648.5	626.2	603.1	577.7	550.5	528.8	509.3	486.4	463.5	443.9
22.5°	664.1	650.4	625.6	598.0	572.0	543.5	519.0	496.3	470.9	447.5	424.9
25°	650.3	645.6	622.2	592.0	562.3	529.3	500.8	476.0	447.1	422.1	397.4
27.5°	618.1	628.3	613.7	581.6	548.5	513.2	481.2	453.0	422.9	394.8	370.2
30°	587.1	610.4	604.2	574.4	537.4	502.7	466.8	437.3	405.3	376.3	352.1
32.5°	544.8	583.2	589.3	564.4	526.2	487.9	450.4	421.0	387.5	357.1	333.4
35°	477.2	534.7	561.1	545.3	507.0	465.6	427.0	392.7	359.0	329.0	305.5
37.5°	396.7	475.0	519.0	520.1	484.9	442.0	399.8	365.8	331.4	301.9	276.5
40°	344.4	429.3	486.6	499.3	469.6	423.3	380.6	345.9	312.4	283.4	254.3
42.5°	297.5	382.0	452.5	474.6	451.0	404.9	362.1	326.0	293.3	265.9	236.1
45°	240.6	314.5	392.1	431.6	418.5	375.9	330.7	296.3	265.6	241.9	213.4
47.5°	202.9	255.0	330.2	383.6	383.4	344.5	300.0	267.1	238.6	216.4	193.3
50°	181.5	226.9	290.4	351.0	356.1	323.5	281.2	248.6	222.0	198.7	180.1
52.5°	162.2	199.7	256.8	315.0	329.4	301.1	260.1	230.0	204.1	182.7	166.9
55°	137.1	166.1	209.5	263.8	285.8	265.8	229.4	201.2	180.3	162.3	148.6
57.5°	116.0	137.7	172.5	216.3	241.8	229.3	199.2	176.3	158.4	142.2	131.4
60°	102.7	120.5	150.0	186.6	214.7	206.0	180.3	159.0	143.8	129.7	119.5
62.5°	90.1	105.5	130.8	160.5	186.2	182.6	161.7	143.8	130.4	117.6	109.0
65°	72.6	83.7	103.5	126.7	147.5	149.2	134.1	122.0	110.1	100.0	92.3
67.5°	57.8	65.1	79.0	98.6	114.1	119.7	110.5	101.2	91.7	83.9	77.2
70°	48.7	54.6	64.7	80.6	94.9	100.7	95.4	88.2	80.0	73.5	67.8
72.5°	39.4	45.2	52.7	64.3	76.5	82.9	81.0	75.9	69.2	63.8	58.5
75°	29.7	31.5	36.6	44.4	54.0	59.5	60.8	58.1	52.8	48.7	45.5
77.5°	22.0	23.1	25.5	29.5	35.8	40.7	42.7	42.4	38.7	36.4	33.4
80°	17.6	18.2	19.4	21.1	25.8	30.7	32.1	32.1	29.5	28.6	25.7
82.5°	13.3	13.8	14.6	15.5	17.7	22.0	23.5	23.8	22.2	20.9	18.6
85°	7.7	7.4	7.8	8.4	8.8	10.0	12.3	12.7	12.3	10.8	10.2
87.5°	7.7	6.9	5.9	5.0	4.6	4.2	4.5	4.7	4.6	4.7	4.9
90°	25.2	20.3	15.4	11.7	9.0	6.4	3.7	1.0	3.7	6.4	9.0
92.5°	29.5	28.3	27.2	25.7	23.7	21.7	19.7	17.8	19.7	21.7	23.7
95°	63.1	62.7	62.3	60.9	58.6	56.5	54.2	52.0	54.2	56.5	58.6
97.5°	105.9	105.0	104.3	102.8	100.9	98.9	96.9	95.1	96.9	98.9	100.9
100°	136.6	136.0	135.3	134.1	132.3	130.6	128.8	127.0	128.8	130.6	132.3
102.5°	169.1	168.3	167.5	166.3	164.9	163.5	162.0	160.7	162.0	163.5	164.9
105°	219.1	218.7	218.3	217.7	217.1	216.4	215.7	215.0	215.7	216.4	217.1
107.5°	274.2	274.2	274.2	273.7	272.8	271.8	270.8	269.8	270.8	271.8	272.8
110°	311.1	311.1	311.1	310.4	309.0	307.7	306.3	305.1	306.3	307.7	309.0



TEST NUMBER: P331640-935

CATALOG NUMBER: SA2XXRDIP-C290D1080U935-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	349.0	349.1	349.4	348.8	347.4	346.1	344.7	343.5	344.7	346.1	347.4
115°	404.9	405.4	405.8	405.4	404.1	402.7	401.4	400.0	401.4	402.7	404.1
117.5°	461.3	462.6	463.8	463.6	461.8	460.0	458.2	456.4	458.2	460.0	461.8
120°	497.7	499.4	501.2	501.2	499.4	497.7	495.8	494.0	495.8	497.7	499.4
122.5°	534.9	536.2	537.4	537.0	534.9	532.7	530.6	528.5	530.6	532.7	534.9
125°	589.4	590.0	590.7	590.0	588.1	586.1	584.1	582.0	584.1	586.1	588.1
127.5°	643.7	644.5	645.3	644.4	641.9	639.4	636.8	634.3	636.8	639.4	641.9
130°	679.0	679.4	679.8	678.6	675.7	672.9	669.9	667.1	669.9	672.9	675.7
132.5°	714.7	714.6	714.5	713.3	710.9	708.6	706.3	703.9	706.3	708.6	710.9
135°	765.2	764.7	764.3	762.8	760.4	758.0	755.5	753.1	755.5	758.0	760.4
137.5°	815.4	814.8	814.2	812.9	810.9	808.9	806.9	804.9	806.9	808.9	810.9
140°	847.9	846.8	845.7	844.1	842.1	840.1	838.1	836.1	838.1	840.1	842.1
142.5°	879.0	878.2	877.4	876.1	874.1	872.1	870.1	868.1	870.1	872.1	874.1
145°	924.5	923.1	921.8	920.3	918.8	917.2	915.7	914.1	915.7	917.2	918.8
147.5°	965.8	964.8	964.0	962.6	960.7	958.8	957.0	955.1	957.0	958.8	960.7
150°	991.4	990.5	989.5	988.4	987.1	985.8	984.5	983.1	984.5	985.8	987.1
152.5°	1016.6	1015.5	1014.4	1013.2	1011.9	1010.6	1009.3	1007.9	1009.3	1010.6	1011.9
155°	1049.8	1049.1	1048.4	1047.8	1047.1	1046.5	1045.8	1045.2	1045.8	1046.5	1047.1
157.5°	1080.0	1079.5	1079.1	1078.7	1078.2	1077.8	1077.4	1076.9	1077.4	1077.8	1078.2
160°	1098.7	1098.5	1098.2	1097.9	1097.4	1097.0	1096.6	1096.1	1096.6	1097.0	1097.4
162.5°	1114.7	1114.5	1114.2	1114.1	1114.0	1113.9	1113.8	1113.7	1113.8	1113.9	1114.0
165°	1136.2	1136.2	1136.2	1136.3	1136.4	1136.7	1137.0	1137.1	1137.0	1136.7	1136.4
167.5°	1153.7	1153.7	1153.7	1154.1	1154.8	1155.4	1156.1	1156.8	1156.1	1155.4	1154.8
170°	1163.6	1163.8	1164.1	1164.5	1165.1	1165.8	1166.5	1167.2	1166.5	1165.8	1165.1
172.5°	1170.8	1171.0	1171.2	1171.6	1172.3	1173.0	1173.7	1174.3	1173.7	1173.0	1172.3
175°	1179.1	1179.5	1179.9	1180.5	1181.1	1181.8	1182.5	1183.2	1182.5	1181.8	1181.1
177.5°	1183.4	1183.8	1184.1	1184.6	1185.2	1185.7	1186.2	1186.7	1186.2	1185.7	1185.2
180°	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2



TEST NUMBER: P331640-935

CATALOG NUMBER: SA2XXRDIP-C290D1080U935-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8
2.5°	554.9	553.8	551.7	548.6	546.7	543.5	541.3	542.5	542.9	542.5	542.3
5°	540.0	535.9	530.2	524.7	519.6	514.2	511.0	509.7	507.0	505.4	504.5
7.5°	521.9	514.9	506.9	497.3	489.2	480.7	476.4	474.2	468.6	465.6	463.0
10°	508.5	497.3	489.3	476.8	469.2	458.1	450.4	450.6	443.0	438.7	435.6
12.5°	493.6	481.4	468.0	456.8	446.2	437.2	428.0	424.3	416.2	412.1	403.6
15°	469.0	454.7	440.7	425.4	414.7	400.7	387.4	371.2	358.1	346.7	343.6
17.5°	442.1	424.4	410.3	392.4	373.9	350.6	335.2	325.7	317.9	311.9	307.4
20°	423.6	405.6	390.5	363.6	338.7	322.9	311.6	304.3	296.1	289.6	286.1
22.5°	404.2	385.5	364.9	334.8	315.4	302.7	292.7	284.3	278.7	273.7	270.4
25°	376.7	356.1	322.3	301.6	285.9	272.6	265.6	260.5	254.7	247.8	244.7
27.5°	347.6	315.0	290.6	275.2	260.3	251.7	245.3	237.7	232.5	229.4	226.1
30°	325.8	293.2	274.2	257.4	246.8	237.2	229.8	225.5	220.4	215.2	213.0
32.5°	301.6	275.5	257.3	243.3	232.6	224.4	218.5	211.5	207.9	204.7	200.2
35°	271.5	251.7	235.1	223.8	213.5	206.9	200.1	196.0	189.3	186.6	184.9
37.5°	246.0	228.9	216.5	204.5	196.4	189.1	184.9	178.3	175.5	171.6	167.9
40°	231.5	214.7	202.9	193.0	184.0	178.6	173.3	168.0	163.7	162.0	157.5
42.5°	216.9	203.2	191.2	180.6	174.5	168.7	162.0	158.2	153.7	150.8	148.1
45°	196.6	184.4	174.3	165.5	158.8	152.7	148.4	142.0	139.5	133.8	131.4
47.5°	178.7	167.5	157.7	149.4	142.9	139.0	132.7	127.6	123.6	120.0	117.0
50°	166.1	156.6	147.2	139.8	134.0	128.3	121.8	119.3	113.0	111.2	109.5
52.5°	154.5	145.5	137.0	129.7	123.8	118.3	112.6	109.3	105.0	103.3	102.0
55°	138.3	129.7	121.5	115.0	109.2	103.5	100.0	95.8	93.8	92.5	90.9
57.5°	122.0	114.3	108.0	101.4	95.5	91.0	87.0	84.5	82.5	80.7	78.8
60°	111.7	104.3	98.6	92.5	86.4	82.7	79.6	76.6	74.3	71.5	70.8
62.5°	100.7	94.2	89.0	83.1	77.8	74.5	71.5	68.7	65.9	61.9	60.8
65°	85.7	80.6	75.1	70.2	65.5	62.2	57.9	54.8	53.6	53.2	53.0
67.5°	72.1	67.2	62.5	57.5	53.3	50.2	48.0	47.5	46.7	46.5	45.9
70°	62.9	58.5	53.8	49.1	44.9	44.4	43.7	42.8	41.8	41.5	41.1
72.5°	54.8	50.2	45.5	41.8	40.0	39.3	38.5	37.6	37.0	36.6	36.4
75°	42.0	37.7	34.6	33.2	32.3	31.7	30.5	30.0	29.5	28.9	28.8
77.5°	30.3	27.8	26.4	25.6	24.5	23.9	23.2	22.6	22.2	22.1	21.8
80°	23.1	21.9	20.9	19.7	19.4	18.6	18.4	17.8	18.0	17.4	17.4
82.5°	17.9	16.4	15.6	15.1	14.6	14.0	13.9	13.6	13.6	13.2	13.2
85°	9.2	8.8	8.4	8.0	8.0	7.4	7.7	7.4	7.4	7.1	6.9
87.5°	5.3	5.9	6.5	7.6	8.5	9.4	9.3	9.0	9.0	8.9	8.7
90°	11.7	15.4	20.3	25.2	30.1	35.0	34.5	34.1	33.7	33.2	33.1
92.5°	25.7	27.2	28.3	29.5	30.7	31.8	31.9	31.9	32.0	32.2	32.2
95°	60.9	62.3	62.7	63.1	63.5	64.0	64.0	64.0	64.0	64.0	63.8
97.5°	102.8	104.3	105.0	105.9	106.8	107.6	107.6	107.6	107.6	107.6	107.6
100°	134.1	135.3	136.0	136.6	137.3	138.0	138.0	138.0	138.0	138.0	137.9
102.5°	166.3	167.5	168.3	169.1	170.0	170.8	171.0	171.2	171.3	171.5	171.5
105°	217.7	218.3	218.7	219.1	219.6	220.0	220.5	220.9	221.4	221.8	222.1
107.5°	273.7	274.2	274.2	274.2	274.2	274.2	274.4	274.6	274.7	274.9	274.5
110°	310.4	311.1	311.1	311.1	311.1	311.1	311.1	311.1	311.1	311.1	310.7



TEST NUMBER: P331640-935

CATALOG NUMBER: SA2XXRDIP-C290D1080U935-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	348.8	349.4	349.1	349.0	348.8	348.6	348.1	347.6	347.1	346.6	346.0
115°	405.4	405.8	405.4	404.9	404.5	404.1	403.8	403.6	403.4	403.1	402.7
117.5°	463.6	463.8	462.6	461.3	460.1	458.8	458.3	457.8	457.3	456.8	456.2
120°	501.2	501.2	499.4	497.7	495.8	494.0	494.0	494.0	494.0	494.0	493.7
122.5°	537.0	537.4	536.2	534.9	533.7	532.4	531.9	531.4	530.9	530.3	529.9
125°	590.0	590.7	590.0	589.4	588.8	588.1	587.4	586.8	586.1	585.4	585.0
127.5°	644.4	645.3	644.5	643.7	642.9	642.0	641.3	640.5	639.6	638.9	638.1
130°	678.6	679.8	679.4	679.0	678.6	678.1	677.6	677.2	676.7	676.3	675.6
132.5°	713.3	714.5	714.6	714.7	714.8	714.9	713.9	712.9	712.0	711.0	710.2
135°	762.8	764.3	764.7	765.2	765.7	766.1	765.9	765.7	765.4	765.2	764.7
137.5°	812.9	814.2	814.8	815.4	815.9	816.5	816.3	816.1	816.0	815.8	815.3
140°	844.1	845.7	846.8	847.9	849.0	850.1	850.1	850.1	850.1	850.1	849.6
142.5°	876.1	877.4	878.2	879.0	879.8	880.5	880.7	880.9	881.1	881.2	880.9
145°	920.3	921.8	923.1	924.5	925.7	927.1	927.3	927.6	927.8	928.0	927.6
147.5°	962.6	964.0	964.8	965.8	966.6	967.5	968.0	968.5	969.0	969.5	969.3
150°	988.4	989.5	990.5	991.4	992.2	993.2	993.8	994.5	995.1	995.8	995.8
152.5°	1013.2	1014.4	1015.5	1016.6	1017.7	1018.7	1019.6	1020.5	1021.2	1022.1	1022.1
155°	1047.8	1048.4	1049.1	1049.8	1050.5	1051.1	1052.2	1053.3	1054.5	1055.6	1055.8
157.5°	1078.7	1079.1	1079.5	1080.0	1080.3	1080.7	1082.3	1083.7	1085.3	1086.8	1087.0
160°	1097.9	1098.2	1098.5	1098.7	1098.9	1099.2	1100.4	1101.8	1103.1	1104.5	1104.7
162.5°	1114.1	1114.2	1114.5	1114.7	1114.9	1115.2	1116.6	1118.2	1119.6	1121.2	1121.4
165°	1136.3	1136.2	1136.2	1136.2	1136.2	1136.2	1137.7	1139.3	1140.8	1142.4	1142.5
167.5°	1154.1	1153.7	1153.7	1153.7	1153.6	1153.6	1155.1	1156.7	1158.2	1159.8	1159.9
170°	1164.5	1164.1	1163.8	1163.6	1163.4	1163.1	1164.7	1166.2	1167.8	1169.3	1169.5
172.5°	1171.6	1171.2	1171.0	1170.8	1170.5	1170.4	1171.9	1173.5	1175.0	1176.6	1176.6
175°	1180.5	1179.9	1179.5	1179.1	1178.6	1178.1	1179.7	1181.3	1182.8	1184.4	1184.5
177.5°	1184.6	1184.1	1183.8	1183.4	1183.1	1182.8	1183.8	1184.9	1185.9	1187.0	1187.0
180°	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2



TEST NUMBER: P331640-935

CATALOG NUMBER: SA2XXRDIP-C290D1080U935-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8
2.5°	540.5	540.8	540.4	540.6	540.4	540.8	540.5	542.3	542.5	542.9	542.5
5°	503.6	501.3	500.8	500.3	500.8	501.3	503.6	504.5	505.4	507.0	509.7
7.5°	459.6	459.3	458.2	456.8	458.2	459.3	459.6	463.0	465.6	468.6	474.2
10°	431.3	430.2	430.1	428.7	430.1	430.2	431.3	435.6	438.7	443.0	450.6
12.5°	398.0	391.8	391.2	387.7	391.2	391.8	398.0	403.6	412.1	416.2	424.3
15°	339.0	337.8	333.8	331.3	333.8	337.8	339.0	343.6	346.7	358.1	371.2
17.5°	305.1	301.3	300.1	299.5	300.1	301.3	305.1	307.4	311.9	317.9	325.7
20°	283.4	279.9	279.3	278.9	279.3	279.9	283.4	286.1	289.6	296.1	304.3
22.5°	268.4	264.7	263.2	262.0	263.2	264.7	268.4	270.4	273.7	278.7	284.3
25°	242.7	241.3	240.6	240.1	240.6	241.3	242.7	244.7	247.8	254.7	260.5
27.5°	222.7	219.6	219.0	218.0	219.0	219.6	222.7	226.1	229.4	232.5	237.7
30°	211.2	210.3	208.9	207.7	208.9	210.3	211.2	213.0	215.2	220.4	225.5
32.5°	197.8	196.9	195.7	195.2	195.7	196.9	197.8	200.2	204.7	207.9	211.5
35°	182.9	180.1	178.9	177.2	178.9	180.1	182.9	184.9	186.6	189.3	196.0
37.5°	167.1	165.7	164.0	164.6	164.0	165.7	167.1	167.9	171.6	175.5	178.3
40°	154.9	153.9	153.5	153.3	153.5	153.9	154.9	157.5	162.0	163.7	168.0
42.5°	145.2	142.5	141.5	141.5	141.5	142.5	145.2	148.1	150.8	153.7	158.2
45°	130.4	127.9	126.1	126.3	126.1	127.9	130.4	131.4	133.8	139.5	142.0
47.5°	115.4	115.3	114.2	114.5	114.2	115.3	115.4	117.0	120.0	123.6	127.6
50°	108.1	107.0	106.2	106.4	106.2	107.0	108.1	109.5	111.2	113.0	119.3
52.5°	101.3	100.2	99.6	100.5	99.6	100.2	101.3	102.0	103.3	105.0	109.3
55°	90.0	88.8	88.6	88.4	88.6	88.8	90.0	90.9	92.5	93.8	95.8
57.5°	77.3	76.5	75.3	74.9	75.3	76.5	77.3	78.8	80.7	82.5	84.5
60°	68.3	66.7	64.7	64.6	64.7	66.7	68.3	70.8	71.5	74.3	76.6
62.5°	59.9	59.7	59.2	59.2	59.2	59.7	59.9	60.8	61.9	65.9	68.7
65°	52.6	52.4	52.6	52.8	52.6	52.4	52.6	53.0	53.2	53.6	54.8
67.5°	45.8	45.5	45.1	45.3	45.1	45.5	45.8	45.9	46.5	46.7	47.5
70°	40.6	40.5	40.3	40.3	40.3	40.5	40.6	41.1	41.5	41.8	42.8
72.5°	35.6	35.6	35.5	35.3	35.5	35.6	35.6	36.4	36.6	37.0	37.6
75°	28.6	28.2	28.2	28.2	28.2	28.2	28.6	28.8	28.9	29.5	30.0
77.5°	21.8	21.5	21.4	21.2	21.4	21.5	21.8	21.8	22.1	22.2	22.6
80°	17.2	17.0	16.8	16.8	16.8	17.0	17.2	17.4	17.4	18.0	17.8
82.5°	13.2	12.9	12.9	12.7	12.9	12.9	13.2	13.2	13.2	13.6	13.6
85°	7.1	7.2	7.1	7.4	7.1	7.2	7.1	6.9	7.1	7.4	7.4
87.5°	8.7	8.6	8.8	8.7	8.8	8.6	8.7	8.7	8.9	9.0	9.0
90°	33.3	33.6	33.8	34.0	33.8	33.6	33.3	33.1	33.2	33.7	34.1
92.5°	32.3	32.3	32.4	32.4	32.4	32.3	32.3	32.2	32.2	32.0	31.9
95°	63.4	62.9	62.4	62.0	62.4	62.9	63.4	63.8	64.0	64.0	64.0
97.5°	107.5	107.5	107.5	107.5	107.5	107.5	107.5	107.6	107.6	107.6	107.6
100°	137.7	137.5	137.2	137.0	137.2	137.5	137.7	137.9	138.0	138.0	138.0
102.5°	171.3	171.1	170.8	170.7	170.8	171.1	171.3	171.5	171.5	171.3	171.2
105°	222.1	222.1	222.1	222.1	222.1	222.1	222.1	222.1	221.8	221.4	220.9
107.5°	273.5	272.5	271.5	270.4	271.5	272.5	273.5	274.5	274.9	274.7	274.6
110°	310.0	309.4	308.7	308.1	308.7	309.4	310.0	310.7	311.1	311.1	311.1



TEST NUMBER: P331640-935

CATALOG NUMBER: SA2XXRDIP-C290D1080U935-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	345.5	345.0	344.6	344.1	344.6	345.0	345.5	346.0	346.6	347.1	347.6
115°	402.1	401.4	400.7	400.0	400.7	401.4	402.1	402.7	403.1	403.4	403.6
117.5°	455.5	454.8	454.1	453.5	454.1	454.8	455.5	456.2	456.8	457.3	457.8
120°	493.1	492.4	491.7	491.0	491.7	492.4	493.1	493.7	494.0	494.0	494.0
122.5°	529.3	528.8	528.4	527.9	528.4	528.8	529.3	529.9	530.3	530.9	531.4
125°	584.7	584.5	584.3	584.1	584.3	584.5	584.7	585.0	585.4	586.1	586.8
127.5°	637.4	636.7	636.0	635.2	636.0	636.7	637.4	638.1	638.9	639.6	640.5
130°	674.8	673.8	673.0	672.1	673.0	673.8	674.8	675.6	676.3	676.7	677.2
132.5°	709.5	708.7	708.0	707.3	708.0	708.7	709.5	710.2	711.0	712.0	712.9
135°	764.1	763.4	762.8	762.1	762.8	763.4	764.1	764.7	765.2	765.4	765.7
137.5°	814.3	813.5	812.6	811.7	812.6	813.5	814.3	815.3	815.8	816.0	816.1
140°	848.8	847.9	847.0	846.1	847.0	847.9	848.8	849.6	850.1	850.1	850.1
142.5°	879.9	879.1	878.2	877.3	878.2	879.1	879.9	880.9	881.2	881.1	880.9
145°	926.8	925.9	925.0	924.1	925.0	925.9	926.8	927.6	928.0	927.8	927.6
147.5°	968.5	967.6	966.7	966.0	966.7	967.6	968.5	969.3	969.5	969.0	968.5
150°	995.1	994.5	993.8	993.2	993.8	994.5	995.1	995.8	995.8	995.1	994.5
152.5°	1021.2	1020.5	1019.6	1018.7	1019.6	1020.5	1021.2	1022.1	1022.1	1021.2	1020.5
155°	1055.2	1054.5	1053.8	1053.1	1053.8	1054.5	1055.2	1055.8	1055.6	1054.5	1053.3
157.5°	1085.9	1084.9	1083.8	1082.7	1083.8	1084.9	1085.9	1087.0	1086.8	1085.3	1083.7
160°	1103.8	1102.9	1102.0	1101.1	1102.0	1102.9	1103.8	1104.7	1104.5	1103.1	1101.8
162.5°	1120.3	1119.3	1118.2	1117.1	1118.2	1119.3	1120.3	1121.4	1121.2	1119.6	1118.2
165°	1141.5	1140.4	1139.3	1138.2	1139.3	1140.4	1141.5	1142.5	1142.4	1140.8	1139.3
167.5°	1158.8	1157.6	1156.5	1155.4	1156.5	1157.6	1158.8	1159.9	1159.8	1158.2	1156.7
170°	1168.1	1166.8	1165.4	1164.2	1165.4	1166.8	1168.1	1169.5	1169.3	1167.8	1166.2
172.5°	1175.4	1174.0	1172.7	1171.3	1172.7	1174.0	1175.4	1176.6	1176.6	1175.0	1173.5
175°	1183.2	1181.8	1180.5	1179.1	1180.5	1181.8	1183.2	1184.5	1184.4	1182.8	1181.3
177.5°	1185.9	1184.9	1183.8	1182.8	1183.8	1184.9	1185.9	1187.0	1187.0	1185.9	1184.9
180°	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2



TEST NUMBER: P331640-935

CATALOG NUMBER: SA2XXRDIP-C290D1080U935-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8
2.5°	541.3	543.5	546.7	548.6	551.7	553.8	554.9	556.9	558.0	562.0	566.0
5°	511.0	514.2	519.6	524.7	530.2	535.9	540.0	544.7	549.0	556.4	564.2
7.5°	476.4	480.7	489.2	497.3	506.9	514.9	521.9	529.9	537.1	547.8	558.9
10°	450.4	458.1	469.2	476.8	489.3	497.3	508.5	517.3	527.3	541.4	553.9
12.5°	428.0	437.2	446.2	456.8	468.0	481.4	493.6	505.0	516.8	531.3	546.0
15°	387.4	400.7	414.7	425.4	440.7	454.7	469.0	484.2	498.7	516.2	535.3
17.5°	335.2	350.6	373.9	392.4	410.3	424.4	442.1	460.5	477.6	498.6	520.0
20°	311.6	322.9	338.7	363.6	390.5	405.6	423.6	443.9	463.5	486.4	509.3
22.5°	292.7	302.7	315.4	334.8	364.9	385.5	404.2	424.9	447.5	470.9	496.3
25°	265.6	272.6	285.9	301.6	322.3	356.1	376.7	397.4	422.1	447.1	476.0
27.5°	245.3	251.7	260.3	275.2	290.6	315.0	347.6	370.2	394.8	422.9	453.0
30°	229.8	237.2	246.8	257.4	274.2	293.2	325.8	352.1	376.3	405.3	437.3
32.5°	218.5	224.4	232.6	243.3	257.3	275.5	301.6	333.4	357.1	387.5	421.0
35°	200.1	206.9	213.5	223.8	235.1	251.7	271.5	305.5	329.0	359.0	392.7
37.5°	184.9	189.1	196.4	204.5	216.5	228.9	246.0	276.5	301.9	331.4	365.8
40°	173.3	178.6	184.0	193.0	202.9	214.7	231.5	254.3	283.4	312.4	345.9
42.5°	162.0	168.7	174.5	180.6	191.2	203.2	216.9	236.1	265.9	293.3	326.0
45°	148.4	152.7	158.8	165.5	174.3	184.4	196.6	213.4	241.9	265.6	296.3
47.5°	132.7	139.0	142.9	149.4	157.7	167.5	178.7	193.3	216.4	238.6	267.1
50°	121.8	128.3	134.0	139.8	147.2	156.6	166.1	180.1	198.7	222.0	248.6
52.5°	112.6	118.3	123.8	129.7	137.0	145.5	154.5	166.9	182.7	204.1	230.0
55°	100.0	103.5	109.2	115.0	121.5	129.7	138.3	148.6	162.3	180.3	201.2
57.5°	87.0	91.0	95.5	101.4	108.0	114.3	122.0	131.4	142.2	158.4	176.3
60°	79.6	82.7	86.4	92.5	98.6	104.3	111.7	119.5	129.7	143.8	159.0
62.5°	71.5	74.5	77.8	83.1	89.0	94.2	100.7	109.0	117.6	130.4	143.8
65°	57.9	62.2	65.5	70.2	75.1	80.6	85.7	92.3	100.0	110.1	122.0
67.5°	48.0	50.2	53.3	57.5	62.5	67.2	72.1	77.2	83.9	91.7	101.2
70°	43.7	44.4	44.9	49.1	53.8	58.5	62.9	67.8	73.5	80.0	88.2
72.5°	38.5	39.3	40.0	41.8	45.5	50.2	54.8	58.5	63.8	69.2	75.9
75°	30.5	31.7	32.3	33.2	34.6	37.7	42.0	45.5	48.7	52.8	58.1
77.5°	23.2	23.9	24.5	25.6	26.4	27.8	30.3	33.4	36.4	38.7	42.4
80°	18.4	18.6	19.4	19.7	20.9	21.9	23.1	25.7	28.6	29.5	32.1
82.5°	13.9	14.0	14.6	15.1	15.6	16.4	17.9	18.6	20.9	22.2	23.8
85°	7.7	7.4	8.0	8.0	8.4	8.8	9.2	10.2	10.8	12.3	12.7
87.5°	9.3	9.4	8.5	7.6	6.5	5.9	5.3	4.9	4.7	4.6	4.7
90°	34.5	35.0	30.1	25.2	20.3	15.4	11.7	9.0	6.4	3.7	1.0
92.5°	31.9	31.8	30.7	29.5	28.3	27.2	25.7	23.7	21.7	19.7	17.8
95°	64.0	64.0	63.5	63.1	62.7	62.3	60.9	58.6	56.5	54.2	52.0
97.5°	107.6	107.6	106.8	105.9	105.0	104.3	102.8	100.9	98.9	96.9	95.1
100°	138.0	138.0	137.3	136.6	136.0	135.3	134.1	132.3	130.6	128.8	127.0
102.5°	171.0	170.8	170.0	169.1	168.3	167.5	166.3	164.9	163.5	162.0	160.7
105°	220.5	220.0	219.6	219.1	218.7	218.3	217.7	217.1	216.4	215.7	215.0
107.5°	274.4	274.2	274.2	274.2	274.2	274.2	273.7	272.8	271.8	270.8	269.8
110°	311.1	311.1	311.1	311.1	311.1	311.1	310.4	309.0	307.7	306.3	305.1



TEST NUMBER: P331640-935

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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	348.1	348.6	348.8	349.0	349.1	349.4	348.8	347.4	346.1	344.7	343.5
115°	403.8	404.1	404.5	404.9	405.4	405.8	405.4	404.1	402.7	401.4	400.0
117.5°	458.3	458.8	460.1	461.3	462.6	463.8	463.6	461.8	460.0	458.2	456.4
120°	494.0	494.0	495.8	497.7	499.4	501.2	501.2	499.4	497.7	495.8	494.0
122.5°	531.9	532.4	533.7	534.9	536.2	537.4	537.0	534.9	532.7	530.6	528.5
125°	587.4	588.1	588.8	589.4	590.0	590.7	590.0	588.1	586.1	584.1	582.0
127.5°	641.3	642.0	642.9	643.7	644.5	645.3	644.4	641.9	639.4	636.8	634.3
130°	677.6	678.1	678.6	679.0	679.4	679.8	678.6	675.7	672.9	669.9	667.1
132.5°	713.9	714.9	714.8	714.7	714.6	714.5	713.3	710.9	708.6	706.3	703.9
135°	765.9	766.1	765.7	765.2	764.7	764.3	762.8	760.4	758.0	755.5	753.1
137.5°	816.3	816.5	815.9	815.4	814.8	814.2	812.9	810.9	808.9	806.9	804.9
140°	850.1	850.1	849.0	847.9	846.8	845.7	844.1	842.1	840.1	838.1	836.1
142.5°	880.7	880.5	879.8	879.0	878.2	877.4	876.1	874.1	872.1	870.1	868.1
145°	927.3	927.1	925.7	924.5	923.1	921.8	920.3	918.8	917.2	915.7	914.1
147.5°	968.0	967.5	966.6	965.8	964.8	964.0	962.6	960.7	958.8	957.0	955.1
150°	993.8	993.2	992.2	991.4	990.5	989.5	988.4	987.1	985.8	984.5	983.1
152.5°	1019.6	1018.7	1017.7	1016.6	1015.5	1014.4	1013.2	1011.9	1010.6	1009.3	1007.9
155°	1052.2	1051.1	1050.5	1049.8	1049.1	1048.4	1047.8	1047.1	1046.5	1045.8	1045.2
157.5°	1082.3	1080.7	1080.3	1080.0	1079.5	1079.1	1078.7	1078.2	1077.8	1077.4	1076.9
160°	1100.4	1099.2	1098.9	1098.7	1098.5	1098.2	1097.9	1097.4	1097.0	1096.6	1096.1
162.5°	1116.6	1115.2	1114.9	1114.7	1114.5	1114.2	1114.1	1114.0	1113.9	1113.8	1113.7
165°	1137.7	1136.2	1136.2	1136.2	1136.2	1136.2	1136.3	1136.4	1136.7	1137.0	1137.1
167.5°	1155.1	1153.6	1153.6	1153.7	1153.7	1153.7	1154.1	1154.8	1155.4	1156.1	1156.8
170°	1164.7	1163.1	1163.4	1163.6	1163.8	1164.1	1164.5	1165.1	1165.8	1166.5	1167.2
172.5°	1171.9	1170.4	1170.5	1170.8	1171.0	1171.2	1171.6	1172.3	1173.0	1173.7	1174.3
175°	1179.7	1178.1	1178.6	1179.1	1179.5	1179.9	1180.5	1181.1	1181.8	1182.5	1183.2
177.5°	1183.8	1182.8	1183.1	1183.4	1183.8	1184.1	1184.6	1185.2	1185.7	1186.2	1186.7
180°	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2



TEST NUMBER: P331640-935

CATALOG NUMBER: SA2XXRDIP-C290D1080U935-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8
2.5°	566.2	566.6	569.7	571.2	573.9	575.1	576.4	576.0	576.0	576.6	581.0
5°	567.4	571.3	577.1	582.8	588.3	593.0	596.2	599.3	600.5	606.1	611.1
7.5°	565.3	572.6	582.2	590.9	601.2	609.3	616.0	622.2	626.3	634.6	643.0
10°	562.7	572.8	583.8	595.0	609.2	620.0	630.9	639.4	642.0	654.4	661.4
12.5°	557.3	570.9	584.9	599.3	613.3	628.1	640.2	648.6	658.2	669.3	682.3
15°	549.4	565.0	583.2	601.8	621.7	639.7	652.6	667.3	677.9	690.0	701.4
17.5°	538.0	558.1	581.2	602.7	625.8	645.1	662.9	676.9	684.3	691.3	692.9
20°	528.8	550.5	577.7	603.1	626.2	648.5	666.2	677.9	679.8	680.0	669.7
22.5°	519.0	543.5	572.0	598.0	625.6	650.4	664.1	669.1	661.3	648.1	628.0
25°	500.8	529.3	562.3	592.0	622.2	645.6	650.3	641.5	614.3	585.7	549.6
27.5°	481.2	513.2	548.5	581.6	613.7	628.3	618.1	586.3	537.4	494.8	443.2
30°	466.8	502.7	537.4	574.4	604.2	610.4	587.1	540.4	483.3	419.1	367.6
32.5°	450.4	487.9	526.2	564.4	589.3	583.2	544.8	487.2	420.3	357.1	308.6
35°	427.0	465.6	507.0	545.3	561.1	534.7	477.2	402.3	333.8	275.0	241.5
37.5°	399.8	442.0	484.9	520.1	519.0	475.0	396.7	319.3	261.8	227.0	203.2
40°	380.6	423.3	469.6	499.3	486.6	429.3	344.4	271.5	229.4	201.6	184.3
42.5°	362.1	404.9	451.0	474.6	452.5	382.0	297.5	240.3	205.6	184.0	169.9
45°	330.7	375.9	418.5	431.6	392.1	314.5	240.6	199.1	176.0	160.0	150.2
47.5°	300.0	344.5	383.4	383.6	330.2	255.0	202.9	172.3	152.6	140.2	133.1
50°	281.2	323.5	356.1	351.0	290.4	226.9	181.5	155.1	138.7	129.1	121.7
52.5°	260.1	301.1	329.4	315.0	256.8	199.7	162.2	140.1	126.5	118.1	111.5
55°	229.4	265.8	285.8	263.8	209.5	166.1	137.1	119.7	109.5	102.5	96.8
57.5°	199.2	229.3	241.8	216.3	172.5	137.7	116.0	102.9	92.8	87.7	84.8
60°	180.3	206.0	214.7	186.6	150.0	120.5	102.7	90.6	83.1	79.8	76.9
62.5°	161.7	182.6	186.2	160.5	130.8	105.5	90.1	79.9	75.0	71.8	69.1
65°	134.1	149.2	147.5	126.7	103.5	83.7	72.6	66.3	62.6	58.1	53.2
67.5°	110.5	119.7	114.1	98.6	79.0	65.1	57.8	53.0	48.4	44.2	43.0
70°	95.4	100.7	94.9	80.6	64.7	54.6	48.7	43.0	40.3	39.3	37.5
72.5°	81.0	82.9	76.5	64.3	52.7	45.2	39.4	36.3	34.8	34.0	32.9
75°	60.8	59.5	54.0	44.4	36.6	31.5	29.7	28.6	27.6	26.8	26.2
77.5°	42.7	40.7	35.8	29.5	25.5	23.1	22.0	21.4	20.9	20.5	19.9
80°	32.1	30.7	25.8	21.1	19.4	18.2	17.6	16.8	16.8	16.4	15.8
82.5°	23.5	22.0	17.7	15.5	14.6	13.8	13.3	12.9	12.7	12.8	12.4
85°	12.3	10.0	8.8	8.4	7.8	7.4	7.7	7.2	7.2	7.2	7.1
87.5°	4.5	4.2	4.6	5.0	5.9	6.9	7.7	8.7	9.8	9.6	9.6
90°	3.7	6.4	9.0	11.7	15.4	20.3	25.2	30.1	35.0	34.5	34.1
92.5°	19.7	21.7	23.7	25.7	27.2	28.3	29.5	30.7	31.8	31.9	31.9
95°	54.2	56.5	58.6	60.9	62.3	62.7	63.1	63.5	64.0	64.0	64.0
97.5°	96.9	98.9	100.9	102.8	104.3	105.0	105.9	106.8	107.6	107.6	107.6
100°	128.8	130.6	132.3	134.1	135.3	136.0	136.6	137.3	138.0	138.0	138.0
102.5°	162.0	163.5	164.9	166.3	167.5	168.3	169.1	170.0	170.8	171.0	171.2
105°	215.7	216.4	217.1	217.7	218.3	218.7	219.1	219.6	220.0	220.5	220.9
107.5°	270.8	271.8	272.8	273.7	274.2	274.2	274.2	274.2	274.2	274.4	274.6
110°	306.3	307.7	309.0	310.4	311.1	311.1	311.1	311.1	311.1	311.1	311.1



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	344.7	346.1	347.4	348.8	349.4	349.1	349.0	348.8	348.6	348.1	347.6
115°	401.4	402.7	404.1	405.4	405.8	405.4	404.9	404.5	404.1	403.8	403.6
117.5°	458.2	460.0	461.8	463.6	463.8	462.6	461.3	460.1	458.8	458.3	457.8
120°	495.8	497.7	499.4	501.2	501.2	499.4	497.7	495.8	494.0	494.0	494.0
122.5°	530.6	532.7	534.9	537.0	537.4	536.2	534.9	533.7	532.4	531.9	531.4
125°	584.1	586.1	588.1	590.0	590.7	590.0	589.4	588.8	588.1	587.4	586.8
127.5°	636.8	639.4	641.9	644.4	645.3	644.5	643.7	642.9	642.0	641.3	640.5
130°	669.9	672.9	675.7	678.6	679.8	679.4	679.0	678.6	678.1	677.6	677.2
132.5°	706.3	708.6	710.9	713.3	714.5	714.6	714.7	714.8	714.9	713.9	712.9
135°	755.5	758.0	760.4	762.8	764.3	764.7	765.2	765.7	766.1	765.9	765.7
137.5°	806.9	808.9	810.9	812.9	814.2	814.8	815.4	815.9	816.5	816.3	816.1
140°	838.1	840.1	842.1	844.1	845.7	846.8	847.9	849.0	850.1	850.1	850.1
142.5°	870.1	872.1	874.1	876.1	877.4	878.2	879.0	879.8	880.5	880.7	880.9
145°	915.7	917.2	918.8	920.3	921.8	923.1	924.5	925.7	927.1	927.3	927.6
147.5°	957.0	958.8	960.7	962.6	964.0	964.8	965.8	966.6	967.5	968.0	968.5
150°	984.5	985.8	987.1	988.4	989.5	990.5	991.4	992.2	993.2	993.8	994.5
152.5°	1009.3	1010.6	1011.9	1013.2	1014.4	1015.5	1016.6	1017.7	1018.7	1019.6	1020.5
155°	1045.8	1046.5	1047.1	1047.8	1048.4	1049.1	1049.8	1050.5	1051.1	1052.2	1053.3
157.5°	1077.4	1077.8	1078.2	1078.7	1079.1	1079.5	1080.0	1080.3	1080.7	1082.3	1083.7
160°	1096.6	1097.0	1097.4	1097.9	1098.2	1098.5	1098.7	1098.9	1099.2	1100.4	1101.8
162.5°	1113.8	1113.9	1114.0	1114.1	1114.2	1114.5	1114.7	1114.9	1115.2	1116.6	1118.2
165°	1137.0	1136.7	1136.4	1136.3	1136.2	1136.2	1136.2	1136.2	1136.2	1137.7	1139.3
167.5°	1156.1	1155.4	1154.8	1154.1	1153.7	1153.7	1153.7	1153.6	1153.6	1155.1	1156.7
170°	1166.5	1165.8	1165.1	1164.5	1164.1	1163.8	1163.6	1163.4	1163.1	1164.7	1166.2
172.5°	1173.7	1173.0	1172.3	1171.6	1171.2	1171.0	1170.8	1170.5	1170.4	1171.9	1173.5
175°	1182.5	1181.8	1181.1	1180.5	1179.9	1179.5	1179.1	1178.6	1178.1	1179.7	1181.3
177.5°	1186.2	1185.7	1185.2	1184.6	1184.1	1183.8	1183.4	1183.1	1182.8	1183.8	1184.9
180°	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	562.8	562.8	562.8	562.8	562.8	562.8	562.8
2.5°	582.6	584.6	585.6	585.6	586.7	586.2	585.7
5°	616.0	619.7	620.6	624.1	626.6	625.9	626.2
7.5°	649.4	655.3	661.2	663.9	664.3	665.9	666.5
10°	669.9	674.8	683.9	682.6	689.4	693.4	686.9
12.5°	689.6	696.2	702.6	704.3	708.2	709.5	706.9
15°	707.4	710.9	711.3	710.3	711.5	710.5	706.8
17.5°	690.8	685.0	673.5	668.0	663.7	657.2	654.6
20°	663.2	646.4	626.8	619.0	609.8	591.9	596.2
22.5°	603.7	584.6	565.0	542.2	531.2	514.2	513.2
25°	511.3	478.2	441.8	416.4	401.5	384.5	377.0
27.5°	397.5	355.9	326.1	311.0	297.2	283.8	283.2
30°	322.7	291.4	268.4	255.5	247.0	241.3	242.5
32.5°	272.0	250.6	235.0	224.3	218.1	213.8	213.7
35°	222.4	207.7	197.7	193.2	188.7	185.6	185.8
37.5°	190.3	181.5	175.9	171.0	168.2	166.6	165.7
40°	173.8	166.6	162.3	159.4	157.0	154.9	154.5
42.5°	160.9	154.9	150.6	148.3	146.1	144.6	144.2
45°	142.8	137.8	134.0	131.4	130.4	129.1	129.1
47.5°	127.0	122.2	119.2	117.5	115.9	114.9	114.9
50°	116.4	112.6	109.9	108.9	107.5	107.0	106.8
52.5°	106.9	104.0	102.1	101.4	100.8	100.1	100.2
55°	93.8	92.3	91.5	90.9	90.0	88.8	89.5
57.5°	83.0	81.6	79.6	77.7	76.8	75.9	76.3
60°	75.3	72.6	69.8	67.7	67.1	65.3	65.3
62.5°	65.6	61.7	58.4	57.2	56.6	55.8	55.6
65°	50.5	48.9	48.1	47.4	46.9	46.9	46.6
67.5°	41.8	41.2	40.3	40.1	39.8	39.6	39.5
70°	36.9	36.2	35.8	35.6	35.2	35.4	34.8
72.5°	32.3	31.7	31.6	31.1	30.8	30.8	30.4
75°	25.4	25.4	25.2	25.1	24.6	24.5	24.6
77.5°	19.5	19.6	19.3	19.2	19.2	19.2	19.0
80°	15.7	15.8	15.7	15.4	15.2	15.4	15.2
82.5°	12.4	12.1	12.1	12.0	12.0	11.9	11.8
85°	7.1	7.2	7.1	6.9	6.9	6.9	7.1
87.5°	9.4	9.3	9.3	9.3	9.4	9.4	9.3
90°	33.7	33.2	33.1	33.3	33.6	33.8	34.0
92.5°	32.0	32.2	32.2	32.3	32.3	32.4	32.4
95°	64.0	64.0	63.8	63.4	62.9	62.4	62.0
97.5°	107.6	107.6	107.6	107.5	107.5	107.5	107.5
100°	138.0	138.0	137.9	137.7	137.5	137.2	137.0
102.5°	171.3	171.5	171.5	171.3	171.1	170.8	170.7
105°	221.4	221.8	222.1	222.1	222.1	222.1	222.1
107.5°	274.7	274.9	274.5	273.5	272.5	271.5	270.4
110°	311.1	311.1	310.7	310.0	309.4	308.7	308.1



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	347.1	346.6	346.0	345.5	345.0	344.6	344.1
115°	403.4	403.1	402.7	402.1	401.4	400.7	400.0
117.5°	457.3	456.8	456.2	455.5	454.8	454.1	453.5
120°	494.0	494.0	493.7	493.1	492.4	491.7	491.0
122.5°	530.9	530.3	529.9	529.3	528.8	528.4	527.9
125°	586.1	585.4	585.0	584.7	584.5	584.3	584.1
127.5°	639.6	638.9	638.1	637.4	636.7	636.0	635.2
130°	676.7	676.3	675.6	674.8	673.8	673.0	672.1
132.5°	712.0	711.0	710.2	709.5	708.7	708.0	707.3
135°	765.4	765.2	764.7	764.1	763.4	762.8	762.1
137.5°	816.0	815.8	815.3	814.3	813.5	812.6	811.7
140°	850.1	850.1	849.6	848.8	847.9	847.0	846.1
142.5°	881.1	881.2	880.9	879.9	879.1	878.2	877.3
145°	927.8	928.0	927.6	926.8	925.9	925.0	924.1
147.5°	969.0	969.5	969.3	968.5	967.6	966.7	966.0
150°	995.1	995.8	995.8	995.1	994.5	993.8	993.2
152.5°	1021.2	1022.1	1022.1	1021.2	1020.5	1019.6	1018.7
155°	1054.5	1055.6	1055.8	1055.2	1054.5	1053.8	1053.1
157.5°	1085.3	1086.8	1087.0	1085.9	1084.9	1083.8	1082.7
160°	1103.1	1104.5	1104.7	1103.8	1102.9	1102.0	1101.1
162.5°	1119.6	1121.2	1121.4	1120.3	1119.3	1118.2	1117.1
165°	1140.8	1142.4	1142.5	1141.5	1140.4	1139.3	1138.2
167.5°	1158.2	1159.8	1159.9	1158.8	1157.6	1156.5	1155.4
170°	1167.8	1169.3	1169.5	1168.1	1166.8	1165.4	1164.2
172.5°	1175.0	1176.6	1176.6	1175.4	1174.0	1172.7	1171.3
175°	1182.8	1184.4	1184.5	1183.2	1181.8	1180.5	1179.1
177.5°	1185.9	1187.0	1187.0	1185.9	1184.9	1183.8	1182.8
180°	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2

(END OF REPORT)