

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: P331640-930

Luminaire Tested: **SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P331640-930  
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-C290D1080U930-4F0-1E-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: 4063.6 lumens  
Efficiency: N/A  
Efficacy: 96.3 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

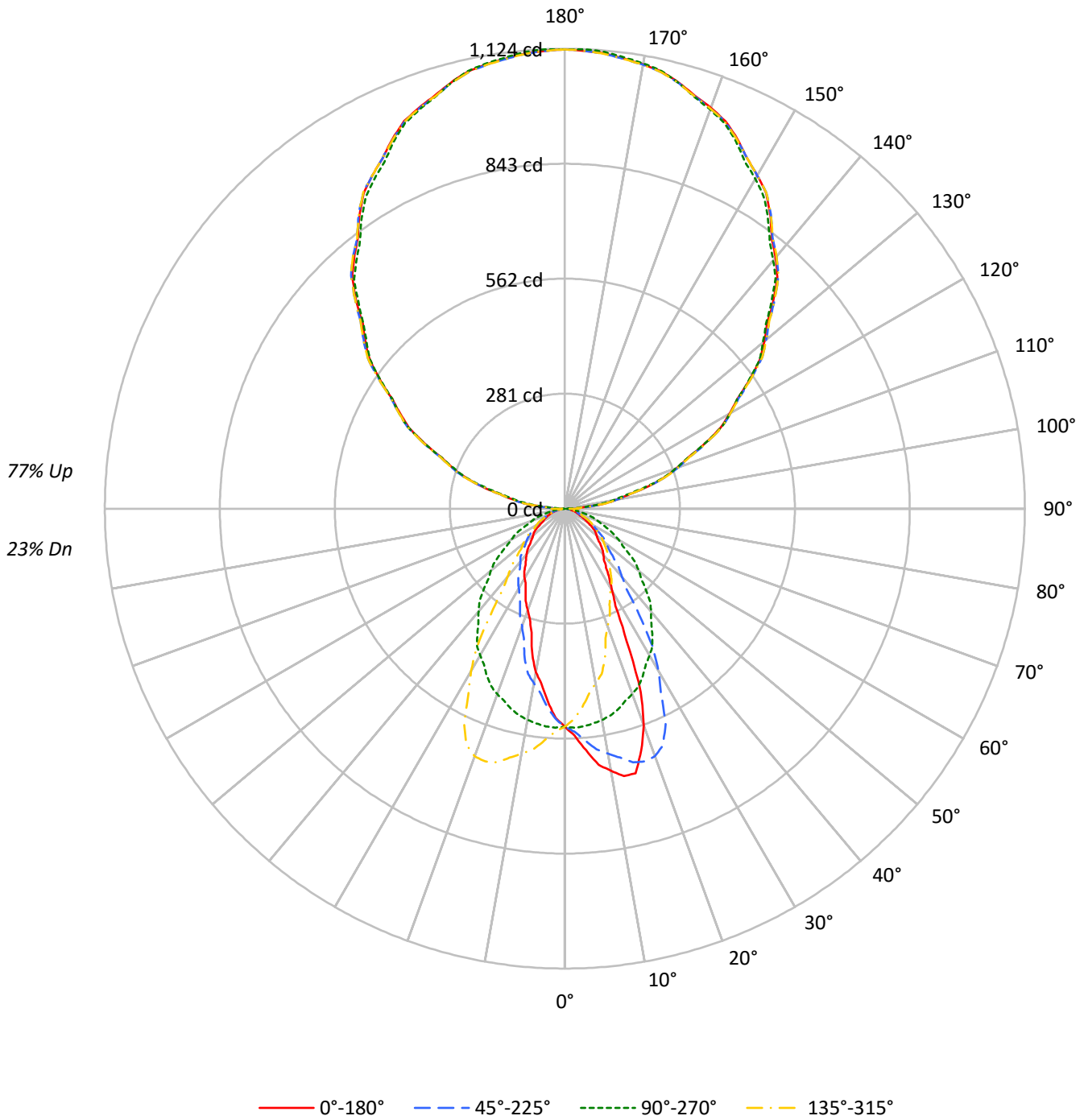
Input Watts (W): 42.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P331640-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A1

### Luminous Intensity Polar Plot





TEST NUMBER: P331640-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A1

**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°	8606	8606	8606	8606
5°	9611	8660	7679	8660
10°	10663	8599	6655	8599
15°	11188	8473	5244	8473
20°	9699	8285	4538	8285
25°	6360	8031	4051	8031
30°	4282	7720	3667	7720
35°	3467	7330	3307	7330
40°	3084	6905	3060	6905
45°	2790	6405	2731	6405
50°	2539	5913	2532	5913
55°	2387	5362	2356	5362
60°	1999	4863	1973	4863
65°	1685	4413	1910	4413
70°	1553	3942	1803	3942
75°	1454	3431	1666	3431
80°	1339	2827	1478	2827
85°	1241	2242	1297	2242



TEST NUMBER: P331640-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.5	1.2
10°-20°	140.8	3.5
20°-30°	181.4	4.5
30°-40°	172.4	4.2
40°-50°	147.7	3.6
50°-60°	112.5	2.8
60°-70°	71.1	1.7
70°-80°	35.5	0.9
80°-90°	13.7	0.3
90°-100°	71.1	1.7
100°-110°	220.9	5.4
110°-120°	377.5	9.3
120°-130°	496.5	12.2
130°-140°	557.2	13.7
140°-150°	546.4	13.4
150°-160°	458.3	11.3
160°-170°	304.0	7.5
170°-180°	106.2	2.6
0°-30°	372.7	9.2
0°-40°	545.1	13.4
0°-60°	805.3	19.8
0°-90°	925.6	22.8
90°-120°	669.5	16.5
90°-150°	2269.5	55.9
90°-180°	3138.0	77.2
0°-180°	4063.6	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	533	533	533	533	533	
5°	593	534	474	534	593	59
15°	669	507	314	507	669	181
25°	357	451	227	451	357	169
35°	176	372	168	372	176	113
45°	122	280	120	280	122	95
55°	85	190	84	190	85	74
65°	44	116	50	116	44	45
75°	23	55	27	55	23	25
85°	7	12	7	12	7	8
90°	32	1	32	1	32	14
95°	59	49	59	49	59	65
105°	210	204	210	204	210	221
115°	379	379	379	379	379	374
125°	553	551	553	551	553	493
135°	722	713	722	713	722	555
145°	875	866	875	866	875	546
155°	997	990	997	990	997	459
165°	1078	1077	1078	1077	1078	304
175°	1117	1120	1117	1120	1117	106
180°	1122	1122	1122	1122	1122	



TEST NUMBER: P331640-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	554.6	555.1	555.5	554.5	554.5	553.6	551.6	550.2	546.0	545.4	545.4
5°	593.0	592.6	593.4	590.9	587.7	586.9	583.3	578.7	573.9	568.6	567.4
7.5°	631.1	630.6	629.1	628.7	626.1	620.5	614.9	608.9	600.9	593.0	589.1
10°	650.4	656.6	652.8	646.4	647.6	639.0	634.3	626.3	619.6	608.0	605.4
12.5°	669.4	671.8	670.6	666.9	665.3	659.3	653.0	646.0	633.7	623.3	614.2
15°	669.3	672.8	673.8	672.6	673.5	673.2	669.8	664.1	653.4	641.9	631.9
17.5°	619.9	622.3	628.4	632.5	637.7	648.7	654.1	656.2	654.6	648.0	641.0
20°	564.5	560.4	577.5	586.1	593.5	612.0	628.0	634.1	643.9	643.8	641.9
22.5°	485.9	486.9	503.0	513.4	535.0	553.6	571.7	594.7	613.7	626.2	633.6
25°	357.0	364.1	380.2	394.3	418.3	452.8	484.1	520.4	554.6	581.7	607.5
27.5°	268.2	268.7	281.4	294.5	308.8	337.0	376.4	419.7	468.6	508.9	555.2
30°	229.7	228.5	233.9	241.9	254.1	276.0	305.6	348.1	396.9	457.6	511.7
32.5°	202.4	202.4	206.5	212.4	222.5	237.3	257.6	292.2	338.2	397.9	461.3
35°	175.9	175.8	178.7	183.0	187.2	196.7	210.6	228.7	260.4	316.1	380.9
37.5°	156.9	157.8	159.2	161.9	166.6	171.9	180.2	192.4	214.9	247.9	302.4
40°	146.3	146.7	148.7	150.9	153.7	157.8	164.6	174.5	190.9	217.2	257.1
42.5°	136.6	136.9	138.4	140.4	142.6	146.7	152.4	160.9	174.2	194.7	227.6
45°	122.2	122.2	123.5	124.4	126.9	130.5	135.2	142.3	151.5	166.6	188.5
47.5°	108.8	108.8	109.7	111.3	112.8	115.7	120.3	126.0	132.7	144.5	163.1
50°	101.1	101.3	101.8	103.1	104.1	106.6	110.2	115.2	122.2	131.3	146.8
52.5°	94.9	94.8	95.5	96.0	96.7	98.5	101.2	105.6	111.9	119.8	132.6
55°	84.8	84.1	85.2	86.1	86.7	87.4	88.9	91.6	97.0	103.7	113.3
57.5°	72.2	71.9	72.7	73.5	75.3	77.3	78.6	80.3	83.1	87.9	97.4
60°	61.9	61.9	63.5	64.1	66.1	68.7	71.3	72.8	75.6	78.7	85.8
62.5°	52.7	52.8	53.6	54.1	55.3	58.5	62.1	65.4	68.0	71.0	75.7
65°	44.1	44.4	44.4	44.8	45.6	46.3	47.8	50.4	55.0	59.3	62.8
67.5°	37.4	37.5	37.7	38.0	38.2	39.0	39.6	40.8	41.8	45.8	50.2
70°	32.9	33.5	33.3	33.7	33.9	34.2	35.0	35.5	37.3	38.2	40.8
72.5°	28.8	29.2	29.2	29.4	29.9	30.0	30.6	31.1	32.2	32.9	34.4
75°	23.3	23.2	23.3	23.7	23.9	24.1	24.1	24.8	25.4	26.1	27.1
77.5°	18.0	18.2	18.2	18.2	18.3	18.6	18.5	18.8	19.4	19.8	20.2
80°	14.4	14.6	14.4	14.6	14.8	15.0	14.8	15.0	15.6	15.9	15.9
82.5°	11.2	11.3	11.3	11.3	11.4	11.4	11.7	11.7	12.1	12.1	12.2
85°	6.7	6.5	6.5	6.5	6.7	6.8	6.7	6.7	6.8	6.8	6.8
87.5°	8.8	8.9	8.9	8.8	8.8	8.8	8.9	9.1	9.0	9.3	8.2
90°	32.2	32.0	31.8	31.6	31.4	31.5	31.9	32.3	32.7	33.2	28.5
92.5°	30.7	30.7	30.6	30.6	30.5	30.5	30.3	30.2	30.2	30.1	29.0
95°	58.7	59.1	59.6	60.0	60.4	60.6	60.6	60.6	60.6	60.6	60.2
97.5°	101.7	101.7	101.8	101.8	101.9	101.9	101.9	101.9	101.9	101.9	101.1
100°	129.7	130.0	130.2	130.4	130.6	130.7	130.7	130.7	130.7	130.7	130.0
102.5°	161.6	161.8	162.0	162.2	162.4	162.4	162.2	162.1	161.9	161.8	160.9
105°	210.3	210.3	210.3	210.3	210.3	210.0	209.6	209.2	208.8	208.3	207.9
107.5°	256.1	257.1	258.0	259.0	259.9	260.3	260.2	260.0	259.8	259.7	259.7
110°	291.7	292.3	292.9	293.6	294.2	294.6	294.6	294.6	294.6	294.6	294.6



TEST NUMBER: P331640-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	325.8	326.3	326.7	327.2	327.7	328.2	328.6	329.1	329.6	330.1	330.3
115°	378.8	379.4	380.1	380.7	381.3	381.7	382.0	382.2	382.4	382.6	383.0
117.5°	429.4	430.0	430.6	431.3	431.9	432.5	433.0	433.5	434.0	434.5	435.7
120°	465.0	465.6	466.3	466.9	467.5	467.8	467.8	467.8	467.8	467.8	469.5
122.5°	499.9	500.3	500.8	501.2	501.7	502.1	502.7	503.2	503.7	504.2	505.4
125°	553.1	553.3	553.5	553.7	553.9	554.3	555.0	555.6	556.2	556.8	557.5
127.5°	601.5	602.3	602.9	603.6	604.2	605.0	605.7	606.5	607.2	608.0	608.8
130°	636.4	637.2	638.1	639.0	639.8	640.4	640.8	641.2	641.6	642.1	642.5
132.5°	669.8	670.4	671.1	671.8	672.5	673.3	674.2	675.1	676.0	676.9	676.9
135°	721.6	722.3	722.9	723.5	724.1	724.6	724.8	725.0	725.2	725.5	725.0
137.5°	768.6	769.5	770.3	771.1	772.0	772.5	772.7	772.8	773.0	773.1	772.6
140°	801.2	802.0	802.9	803.7	804.5	804.9	804.9	804.9	804.9	804.9	804.0
142.5°	830.7	831.6	832.4	833.2	834.1	834.5	834.3	834.1	834.0	833.8	833.1
145°	875.1	875.9	876.8	877.6	878.4	878.7	878.6	878.3	878.1	877.9	876.6
147.5°	914.7	915.4	916.2	917.0	917.9	918.0	917.5	917.1	916.6	916.2	915.3
150°	940.4	941.0	941.7	942.3	943.0	943.0	942.3	941.7	941.0	940.4	939.6
152.5°	964.7	965.5	966.3	967.0	967.8	967.8	967.0	966.3	965.5	964.7	963.7
155°	997.2	997.8	998.5	999.1	999.7	999.6	998.5	997.4	996.4	995.3	994.7
157.5°	1025.2	1026.3	1027.3	1028.3	1029.3	1029.1	1027.7	1026.2	1024.8	1023.4	1023.0
160°	1042.7	1043.5	1044.4	1045.2	1046.0	1045.9	1044.6	1043.3	1042.0	1040.8	1040.6
162.5°	1057.9	1058.8	1059.9	1060.9	1061.8	1061.7	1060.2	1058.8	1057.4	1056.0	1055.7
165°	1077.7	1078.8	1079.9	1080.9	1081.9	1081.7	1080.3	1078.8	1077.3	1075.9	1075.9
167.5°	1094.1	1095.1	1096.2	1097.3	1098.4	1098.2	1096.7	1095.3	1093.8	1092.3	1092.3
170°	1102.4	1103.6	1104.9	1106.1	1107.4	1107.3	1105.8	1104.3	1102.9	1101.4	1101.6
172.5°	1109.1	1110.4	1111.7	1113.0	1114.2	1114.1	1112.6	1111.2	1109.7	1108.2	1108.4
175°	1116.6	1117.9	1119.1	1120.4	1121.6	1121.5	1120.1	1118.6	1117.1	1115.6	1116.1
177.5°	1120.0	1121.0	1122.0	1123.0	1124.0	1124.0	1123.0	1122.0	1121.0	1120.0	1120.3
180°	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3



TEST NUMBER: P331640-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	545.8	544.5	543.5	540.9	539.5	536.5	536.1	536.0	532.1	528.4	527.3
5°	564.5	561.5	557.1	551.9	546.5	541.0	537.3	534.3	526.8	519.8	515.8
7.5°	583.3	577.0	569.3	559.5	551.3	542.2	535.3	529.2	518.7	508.6	501.8
10°	597.5	587.1	576.9	563.4	552.8	542.4	532.8	524.5	512.7	499.3	489.8
12.5°	606.2	594.8	580.7	567.5	553.8	540.6	527.7	517.1	503.1	489.3	478.2
15°	618.0	605.8	588.7	569.8	552.3	535.0	520.2	506.9	488.8	472.2	458.5
17.5°	627.7	610.8	592.6	570.7	550.3	528.5	509.4	492.4	472.1	452.2	436.1
20°	630.8	614.1	593.0	571.1	547.1	521.3	500.8	482.2	460.6	438.9	420.4
22.5°	628.8	615.9	592.4	566.2	541.6	514.7	491.5	469.9	445.9	423.8	402.4
25°	615.8	611.3	589.1	560.6	532.5	501.2	474.3	450.8	423.4	399.7	376.3
27.5°	585.3	594.9	581.1	550.7	519.4	485.9	455.7	428.9	400.5	373.8	350.6
30°	556.0	578.0	572.1	543.9	508.9	476.0	442.1	414.1	383.8	356.3	333.4
32.5°	515.8	552.2	558.0	534.4	498.2	462.0	426.5	398.7	367.0	338.1	315.7
35°	451.8	506.3	531.3	516.3	480.0	440.9	404.3	371.9	340.0	311.5	289.3
37.5°	375.6	449.8	491.5	492.5	459.2	418.6	378.6	346.4	313.8	285.8	261.8
40°	326.1	406.5	460.8	472.8	444.7	400.8	360.4	327.6	295.8	268.3	240.8
42.5°	281.7	361.7	428.4	449.4	427.1	383.4	342.9	308.7	277.7	251.8	223.6
45°	227.8	297.8	371.3	408.7	396.3	356.0	313.2	280.5	251.5	229.1	202.0
47.5°	192.2	241.5	312.7	363.2	363.1	326.2	284.1	252.9	225.9	204.9	183.0
50°	171.9	214.8	275.0	332.4	337.2	306.3	266.3	235.4	210.2	188.2	170.6
52.5°	153.6	189.1	243.1	298.2	311.9	285.1	246.3	217.8	193.3	173.0	158.0
55°	129.8	157.3	198.4	249.8	270.6	251.7	217.2	190.5	170.7	153.7	140.7
57.5°	109.8	130.4	163.4	204.8	228.9	217.1	188.7	167.0	150.0	134.6	124.4
60°	97.3	114.1	142.0	176.7	203.3	195.0	170.7	150.6	136.2	122.8	113.2
62.5°	85.4	99.9	123.8	152.0	176.3	172.9	153.1	136.2	123.5	111.4	103.2
65°	68.7	79.2	98.0	120.0	139.7	141.3	127.0	115.5	104.3	94.7	87.4
67.5°	54.7	61.6	74.8	93.4	108.0	113.3	104.6	95.8	86.8	79.4	73.1
70°	46.1	51.7	61.3	76.3	89.8	95.4	90.3	83.5	75.7	69.6	64.2
72.5°	37.3	42.8	49.9	60.9	72.5	78.5	76.7	71.8	65.6	60.4	55.4
75°	28.1	29.8	34.7	42.1	51.1	56.3	57.6	55.0	50.0	46.1	43.1
77.5°	20.8	21.9	24.1	28.0	33.9	38.6	40.4	40.1	36.7	34.5	31.6
80°	16.6	17.2	18.3	20.0	24.5	29.1	30.4	30.4	28.0	27.1	24.3
82.5°	12.6	13.0	13.8	14.7	16.7	20.8	22.3	22.5	21.0	19.8	17.6
85°	7.3	7.0	7.4	8.0	8.3	9.5	11.7	12.1	11.7	10.2	9.6
87.5°	7.3	6.5	5.6	4.7	4.4	4.0	4.2	4.5	4.4	4.5	4.6
90°	23.9	19.2	14.6	11.1	8.6	6.0	3.5	1.0	3.5	6.0	8.6
92.5°	28.0	26.8	25.8	24.3	22.4	20.5	18.7	16.9	18.7	20.5	22.4
95°	59.8	59.4	58.9	57.6	55.5	53.5	51.4	49.2	51.4	53.5	55.5
97.5°	100.3	99.5	98.7	97.3	95.6	93.7	91.8	90.0	91.8	93.7	95.6
100°	129.4	128.8	128.2	127.0	125.3	123.7	122.0	120.3	122.0	123.7	125.3
102.5°	160.1	159.4	158.6	157.5	156.1	154.8	153.4	152.1	153.4	154.8	156.1
105°	207.5	207.1	206.7	206.1	205.5	204.9	204.2	203.6	204.2	204.9	205.5
107.5°	259.7	259.7	259.7	259.2	258.3	257.4	256.4	255.5	256.4	257.4	258.3
110°	294.6	294.6	294.6	293.9	292.6	291.4	290.1	288.9	290.1	291.4	292.6





TEST NUMBER: P331640-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	330.4	330.6	330.8	330.3	329.0	327.8	326.4	325.2	326.4	327.8	329.0
115°	383.4	383.8	384.3	383.8	382.6	381.3	380.1	378.8	380.1	381.3	382.6
117.5°	436.8	438.1	439.2	439.0	437.2	435.6	433.9	432.2	433.9	435.6	437.2
120°	471.2	472.9	474.6	474.6	472.9	471.2	469.5	467.8	469.5	471.2	472.9
122.5°	506.5	507.8	508.9	508.5	506.5	504.4	502.5	500.4	502.5	504.4	506.5
125°	558.2	558.7	559.4	558.7	556.8	555.0	553.1	551.1	553.1	555.0	556.8
127.5°	609.5	610.3	611.1	610.2	607.8	605.4	603.0	600.6	603.0	605.4	607.8
130°	642.9	643.4	643.8	642.6	639.8	637.2	634.4	631.7	634.4	637.2	639.8
132.5°	676.8	676.7	676.6	675.5	673.2	671.0	668.8	666.5	668.8	671.0	673.2
135°	724.6	724.1	723.7	722.4	720.1	717.8	715.4	713.1	715.4	717.8	720.1
137.5°	772.1	771.5	770.9	769.7	767.8	766.0	764.1	762.1	764.1	766.0	767.8
140°	802.9	801.8	800.8	799.3	797.4	795.5	793.6	791.7	793.6	795.5	797.4
142.5°	832.3	831.6	830.9	829.6	827.7	825.8	823.9	822.1	823.9	825.8	827.7
145°	875.4	874.1	872.9	871.5	870.0	868.5	867.1	865.6	867.1	868.5	870.0
147.5°	914.5	913.6	912.8	911.5	909.7	907.9	906.2	904.4	906.2	907.9	909.7
150°	938.7	937.9	937.0	936.0	934.7	933.4	932.2	930.9	932.2	933.4	934.7
152.5°	962.6	961.6	960.6	959.4	958.2	956.9	955.7	954.4	955.7	956.9	958.2
155°	994.1	993.4	992.8	992.2	991.6	990.9	990.3	989.7	990.3	990.9	991.6
157.5°	1022.6	1022.2	1021.8	1021.5	1021.0	1020.6	1020.2	1019.8	1020.2	1020.6	1021.0
160°	1040.4	1040.2	1039.9	1039.7	1039.2	1038.8	1038.4	1038.0	1038.4	1038.8	1039.2
162.5°	1055.5	1055.3	1055.1	1055.0	1054.8	1054.8	1054.7	1054.6	1054.7	1054.8	1054.8
165°	1075.9	1075.9	1075.9	1076.0	1076.1	1076.4	1076.6	1076.8	1076.6	1076.4	1076.1
167.5°	1092.4	1092.4	1092.5	1092.8	1093.5	1094.1	1094.7	1095.4	1094.7	1094.1	1093.5
170°	1101.8	1102.0	1102.3	1102.7	1103.3	1103.9	1104.6	1105.2	1104.6	1103.9	1103.3
172.5°	1108.6	1108.9	1109.1	1109.5	1110.1	1110.8	1111.4	1112.0	1111.4	1110.8	1110.1
175°	1116.5	1116.9	1117.3	1117.9	1118.4	1119.1	1119.7	1120.4	1119.7	1119.1	1118.4
177.5°	1120.6	1121.0	1121.3	1121.8	1122.3	1122.7	1123.2	1123.7	1123.2	1122.7	1122.3
180°	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3



TEST NUMBER: P331640-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	525.5	524.4	522.4	519.5	517.7	514.6	512.6	513.7	514.0	513.7	513.5
5°	511.4	507.4	502.1	496.8	492.0	486.9	483.9	482.7	480.0	478.6	477.8
7.5°	494.2	487.5	480.0	470.9	463.3	455.2	451.1	449.1	443.8	440.9	438.4
10°	481.5	470.9	463.3	451.5	444.3	433.7	426.5	426.7	419.5	415.4	412.5
12.5°	467.4	455.8	443.2	432.5	422.5	414.0	405.3	401.8	394.1	390.2	382.2
15°	444.1	430.6	417.3	402.8	392.6	379.4	366.9	351.5	339.1	328.3	325.4
17.5°	418.7	401.9	388.5	371.5	354.1	332.0	317.4	308.4	301.0	295.3	291.1
20°	401.1	384.1	369.8	344.3	320.7	305.7	295.1	288.1	280.4	274.3	270.9
22.5°	382.8	365.0	345.5	317.0	298.6	286.7	277.1	269.2	263.9	259.2	256.1
25°	356.7	337.2	305.2	285.6	270.8	258.1	251.5	246.7	241.2	234.6	231.7
27.5°	329.1	298.2	275.2	260.6	246.5	238.3	232.3	225.1	220.1	217.2	214.1
30°	308.5	277.6	259.7	243.7	233.7	224.6	217.6	213.5	208.7	203.7	201.7
32.5°	285.6	260.9	243.6	230.4	220.2	212.5	206.9	200.3	196.9	193.8	189.6
35°	257.1	238.3	222.6	211.9	202.2	195.9	189.5	185.6	179.3	176.7	175.0
37.5°	232.9	216.7	205.0	193.6	186.0	179.0	175.0	168.8	166.2	162.5	159.0
40°	219.2	203.3	192.1	182.8	174.2	169.1	164.1	159.1	155.0	153.4	149.1
42.5°	205.4	192.4	181.1	171.0	165.3	159.7	153.4	149.8	145.5	142.8	140.2
45°	186.1	174.6	165.0	156.7	150.3	144.6	140.6	134.4	132.1	126.7	124.4
47.5°	169.3	158.6	149.4	141.5	135.3	131.6	125.6	120.8	117.0	113.7	110.8
50°	157.3	148.3	139.4	132.4	126.9	121.5	115.4	113.0	107.0	105.3	103.7
52.5°	146.3	137.8	129.7	122.8	117.2	112.0	106.6	103.5	99.5	97.8	96.6
55°	130.9	122.8	115.0	108.9	103.4	98.0	94.7	90.7	88.9	87.6	86.1
57.5°	115.5	108.2	102.2	96.0	90.4	86.2	82.3	80.0	78.1	76.4	74.6
60°	105.7	98.7	93.4	87.6	81.9	78.4	75.4	72.6	70.4	67.8	67.0
62.5°	95.4	89.2	84.3	78.7	73.7	70.5	67.7	65.1	62.4	58.6	57.6
65°	81.1	76.3	71.1	66.4	62.0	58.9	54.8	51.9	50.7	50.4	50.2
67.5°	68.2	63.7	59.2	54.5	50.5	47.5	45.4	45.0	44.2	44.0	43.5
70°	59.6	55.4	51.0	46.5	42.6	42.1	41.3	40.5	39.6	39.3	38.9
72.5°	51.9	47.5	43.0	39.5	37.8	37.2	36.4	35.6	35.1	34.7	34.5
75°	39.8	35.7	32.8	31.5	30.6	30.0	28.9	28.4	28.0	27.4	27.2
77.5°	28.7	26.3	25.0	24.2	23.2	22.7	22.0	21.4	21.0	21.0	20.6
80°	21.9	20.7	19.8	18.7	18.3	17.6	17.4	16.9	17.0	16.5	16.5
82.5°	17.0	15.6	14.8	14.3	13.9	13.3	13.1	12.9	12.9	12.5	12.5
85°	8.7	8.3	8.0	7.6	7.6	7.0	7.3	7.0	7.0	6.7	6.5
87.5°	5.1	5.6	6.2	7.2	8.1	8.9	8.8	8.6	8.5	8.4	8.2
90°	11.1	14.6	19.2	23.9	28.5	33.2	32.7	32.3	31.9	31.5	31.4
92.5°	24.3	25.8	26.8	28.0	29.0	30.1	30.2	30.2	30.3	30.5	30.5
95°	57.6	58.9	59.4	59.8	60.2	60.6	60.6	60.6	60.6	60.6	60.4
97.5°	97.3	98.7	99.5	100.3	101.1	101.9	101.9	101.9	101.9	101.9	101.9
100°	127.0	128.2	128.8	129.4	130.0	130.7	130.7	130.7	130.7	130.7	130.6
102.5°	157.5	158.6	159.4	160.1	160.9	161.8	161.9	162.1	162.2	162.4	162.4
105°	206.1	206.7	207.1	207.5	207.9	208.3	208.8	209.2	209.6	210.0	210.3
107.5°	259.2	259.7	259.7	259.7	259.7	259.7	259.8	260.0	260.2	260.3	259.9
110°	293.9	294.6	294.6	294.6	294.6	294.6	294.6	294.6	294.6	294.6	294.2



TEST NUMBER: P331640-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	330.3	330.8	330.6	330.4	330.3	330.1	329.6	329.1	328.6	328.2	327.7
115°	383.8	384.3	383.8	383.4	383.0	382.6	382.4	382.2	382.0	381.7	381.3
117.5°	439.0	439.2	438.1	436.8	435.7	434.5	434.0	433.5	433.0	432.5	431.9
120°	474.6	474.6	472.9	471.2	469.5	467.8	467.8	467.8	467.8	467.8	467.5
122.5°	508.5	508.9	507.8	506.5	505.4	504.2	503.7	503.2	502.7	502.1	501.7
125°	558.7	559.4	558.7	558.2	557.5	556.8	556.2	555.6	555.0	554.3	553.9
127.5°	610.2	611.1	610.3	609.5	608.8	608.0	607.2	606.5	605.7	605.0	604.2
130°	642.6	643.8	643.4	642.9	642.5	642.1	641.6	641.2	640.8	640.4	639.8
132.5°	675.5	676.6	676.7	676.8	676.9	676.9	676.0	675.1	674.2	673.3	672.5
135°	722.4	723.7	724.1	724.6	725.0	725.5	725.2	725.0	724.8	724.6	724.1
137.5°	769.7	770.9	771.5	772.1	772.6	773.1	773.0	772.8	772.7	772.5	772.0
140°	799.3	800.8	801.8	802.9	804.0	804.9	804.9	804.9	804.9	804.9	804.5
142.5°	829.6	830.9	831.6	832.3	833.1	833.8	834.0	834.1	834.3	834.5	834.1
145°	871.5	872.9	874.1	875.4	876.6	877.9	878.1	878.3	878.6	878.7	878.4
147.5°	911.5	912.8	913.6	914.5	915.3	916.2	916.6	917.1	917.5	918.0	917.9
150°	936.0	937.0	937.9	938.7	939.6	940.4	941.0	941.7	942.3	943.0	943.0
152.5°	959.4	960.6	961.6	962.6	963.7	964.7	965.5	966.3	967.0	967.8	967.8
155°	992.2	992.8	993.4	994.1	994.7	995.3	996.4	997.4	998.5	999.6	999.7
157.5°	1021.5	1021.8	1022.2	1022.6	1023.0	1023.4	1024.8	1026.2	1027.7	1029.1	1029.3
160°	1039.7	1039.9	1040.2	1040.4	1040.6	1040.8	1042.0	1043.3	1044.6	1045.9	1046.0
162.5°	1055.0	1055.1	1055.3	1055.5	1055.7	1056.0	1057.4	1058.8	1060.2	1061.7	1061.8
165°	1076.0	1075.9	1075.9	1075.9	1075.9	1075.9	1077.3	1078.8	1080.3	1081.7	1081.9
167.5°	1092.8	1092.5	1092.4	1092.4	1092.3	1092.3	1093.8	1095.3	1096.7	1098.2	1098.4
170°	1102.7	1102.3	1102.0	1101.8	1101.6	1101.4	1102.9	1104.3	1105.8	1107.3	1107.4
172.5°	1109.5	1109.1	1108.9	1108.6	1108.4	1108.2	1109.7	1111.2	1112.6	1114.1	1114.2
175°	1117.9	1117.3	1116.9	1116.5	1116.1	1115.6	1117.1	1118.6	1120.1	1121.5	1121.6
177.5°	1121.8	1121.3	1121.0	1120.6	1120.3	1120.0	1121.0	1122.0	1123.0	1124.0	1124.0
180°	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3



TEST NUMBER: P331640-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	511.8	512.1	511.7	511.9	511.7	512.1	511.8	513.5	513.7	514.0	513.7
5°	476.9	474.7	474.3	473.8	474.3	474.7	476.9	477.8	478.6	480.0	482.7
7.5°	435.2	434.9	433.9	432.6	433.9	434.9	435.2	438.4	440.9	443.8	449.1
10°	408.4	407.4	407.2	405.9	407.2	407.4	408.4	412.5	415.4	419.5	426.7
12.5°	376.9	371.0	370.4	367.1	370.4	371.0	376.9	382.2	390.2	394.1	401.8
15°	321.0	319.8	316.1	313.7	316.1	319.8	321.0	325.4	328.3	339.1	351.5
17.5°	288.9	285.3	284.1	283.6	284.1	285.3	288.9	291.1	295.3	301.0	308.4
20°	268.3	265.1	264.5	264.1	264.5	265.1	268.3	270.9	274.3	280.4	288.1
22.5°	254.1	250.6	249.2	248.1	249.2	250.6	254.1	256.1	259.2	263.9	269.2
25°	229.8	228.5	227.8	227.4	227.8	228.5	229.8	231.7	234.6	241.2	246.7
27.5°	210.8	208.0	207.4	206.4	207.4	208.0	210.8	214.1	217.2	220.1	225.1
30°	200.0	199.1	197.8	196.7	197.8	199.1	200.0	201.7	203.7	208.7	213.5
32.5°	187.3	186.5	185.3	184.8	185.3	186.5	187.3	189.6	193.8	196.9	200.3
35°	173.2	170.6	169.4	167.8	169.4	170.6	173.2	175.0	176.7	179.3	185.6
37.5°	158.2	156.9	155.3	155.9	155.3	156.9	158.2	159.0	162.5	166.2	168.8
40°	146.7	145.8	145.4	145.2	145.4	145.8	146.7	149.1	153.4	155.0	159.1
42.5°	137.5	134.9	134.0	134.0	134.0	134.9	137.5	140.2	142.8	145.5	149.8
45°	123.5	121.2	119.4	119.6	119.4	121.2	123.5	124.4	126.7	132.1	134.4
47.5°	109.3	109.2	108.1	108.4	108.1	109.2	109.3	110.8	113.7	117.0	120.8
50°	102.4	101.3	100.5	100.8	100.5	101.3	102.4	103.7	105.3	107.0	113.0
52.5°	95.9	94.9	94.3	95.1	94.3	94.9	95.9	96.6	97.8	99.5	103.5
55°	85.2	84.1	83.9	83.7	83.9	84.1	85.2	86.1	87.6	88.9	90.7
57.5°	73.2	72.5	71.3	70.9	71.3	72.5	73.2	74.6	76.4	78.1	80.0
60°	64.7	63.2	61.3	61.1	61.3	63.2	64.7	67.0	67.8	70.4	72.6
62.5°	56.7	56.5	56.1	56.1	56.1	56.5	56.7	57.6	58.6	62.4	65.1
65°	49.8	49.7	49.8	50.0	49.8	49.7	49.8	50.2	50.4	50.7	51.9
67.5°	43.4	43.0	42.7	42.9	42.7	43.0	43.4	43.5	44.0	44.2	45.0
70°	38.5	38.3	38.2	38.2	38.2	38.3	38.5	38.9	39.3	39.6	40.5
72.5°	33.8	33.8	33.6	33.4	33.6	33.8	33.8	34.5	34.7	35.1	35.6
75°	27.1	26.7	26.7	26.7	26.7	26.7	27.1	27.2	27.4	28.0	28.4
77.5°	20.6	20.4	20.2	20.1	20.2	20.4	20.6	20.6	21.0	21.0	21.4
80°	16.3	16.1	15.9	15.9	15.9	16.1	16.3	16.5	16.5	17.0	16.9
82.5°	12.5	12.2	12.2	12.1	12.2	12.2	12.5	12.5	12.5	12.9	12.9
85°	6.7	6.8	6.7	7.0	6.7	6.8	6.7	6.5	6.7	7.0	7.0
87.5°	8.2	8.2	8.3	8.2	8.3	8.2	8.2	8.2	8.4	8.5	8.6
90°	31.6	31.8	32.0	32.2	32.0	31.8	31.6	31.4	31.5	31.9	32.3
92.5°	30.6	30.6	30.7	30.7	30.7	30.6	30.6	30.5	30.5	30.3	30.2
95°	60.0	59.6	59.1	58.7	59.1	59.6	60.0	60.4	60.6	60.6	60.6
97.5°	101.8	101.8	101.7	101.7	101.7	101.8	101.8	101.9	101.9	101.9	101.9
100°	130.4	130.2	130.0	129.7	130.0	130.2	130.4	130.6	130.7	130.7	130.7
102.5°	162.2	162.0	161.8	161.6	161.8	162.0	162.2	162.4	162.4	162.2	162.1
105°	210.3	210.3	210.3	210.3	210.3	210.3	210.3	210.3	210.0	209.6	209.2
107.5°	259.0	258.0	257.1	256.1	257.1	258.0	259.0	259.9	260.3	260.2	260.0
110°	293.6	292.9	292.3	291.7	292.3	292.9	293.6	294.2	294.6	294.6	294.6



TEST NUMBER: P331640-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	327.2	326.7	326.3	325.8	326.3	326.7	327.2	327.7	328.2	328.6	329.1
115°	380.7	380.1	379.4	378.8	379.4	380.1	380.7	381.3	381.7	382.0	382.2
117.5°	431.3	430.6	430.0	429.4	430.0	430.6	431.3	431.9	432.5	433.0	433.5
120°	466.9	466.3	465.6	465.0	465.6	466.3	466.9	467.5	467.8	467.8	467.8
122.5°	501.2	500.8	500.3	499.9	500.3	500.8	501.2	501.7	502.1	502.7	503.2
125°	553.7	553.5	553.3	553.1	553.3	553.5	553.7	553.9	554.3	555.0	555.6
127.5°	603.6	602.9	602.3	601.5	602.3	602.9	603.6	604.2	605.0	605.7	606.5
130°	639.0	638.1	637.2	636.4	637.2	638.1	639.0	639.8	640.4	640.8	641.2
132.5°	671.8	671.1	670.4	669.8	670.4	671.1	671.8	672.5	673.3	674.2	675.1
135°	723.5	722.9	722.3	721.6	722.3	722.9	723.5	724.1	724.6	724.8	725.0
137.5°	771.1	770.3	769.5	768.6	769.5	770.3	771.1	772.0	772.5	772.7	772.8
140°	803.7	802.9	802.0	801.2	802.0	802.9	803.7	804.5	804.9	804.9	804.9
142.5°	833.2	832.4	831.6	830.7	831.6	832.4	833.2	834.1	834.5	834.3	834.1
145°	877.6	876.8	875.9	875.1	875.9	876.8	877.6	878.4	878.7	878.6	878.3
147.5°	917.0	916.2	915.4	914.7	915.4	916.2	917.0	917.9	918.0	917.5	917.1
150°	942.3	941.7	941.0	940.4	941.0	941.7	942.3	943.0	943.0	942.3	941.7
152.5°	967.0	966.3	965.5	964.7	965.5	966.3	967.0	967.8	967.8	967.0	966.3
155°	999.1	998.5	997.8	997.2	997.8	998.5	999.1	999.7	999.6	998.5	997.4
157.5°	1028.3	1027.3	1026.3	1025.2	1026.3	1027.3	1028.3	1029.3	1029.1	1027.7	1026.2
160°	1045.2	1044.4	1043.5	1042.7	1043.5	1044.4	1045.2	1046.0	1045.9	1044.6	1043.3
162.5°	1060.9	1059.9	1058.8	1057.9	1058.8	1059.9	1060.9	1061.8	1061.7	1060.2	1058.8
165°	1080.9	1079.9	1078.8	1077.7	1078.8	1079.9	1080.9	1081.9	1081.7	1080.3	1078.8
167.5°	1097.3	1096.2	1095.1	1094.1	1095.1	1096.2	1097.3	1098.4	1098.2	1096.7	1095.3
170°	1106.1	1104.9	1103.6	1102.4	1103.6	1104.9	1106.1	1107.4	1107.3	1105.8	1104.3
172.5°	1113.0	1111.7	1110.4	1109.1	1110.4	1111.7	1113.0	1114.2	1114.1	1112.6	1111.2
175°	1120.4	1119.1	1117.9	1116.6	1117.9	1119.1	1120.4	1121.6	1121.5	1120.1	1118.6
177.5°	1123.0	1122.0	1121.0	1120.0	1121.0	1122.0	1123.0	1124.0	1124.0	1123.0	1122.0
180°	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3



TEST NUMBER: P331640-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	512.6	514.6	517.7	519.5	522.4	524.4	525.5	527.3	528.4	532.1	536.0
5°	483.9	486.9	492.0	496.8	502.1	507.4	511.4	515.8	519.8	526.8	534.3
7.5°	451.1	455.2	463.3	470.9	480.0	487.5	494.2	501.8	508.6	518.7	529.2
10°	426.5	433.7	444.3	451.5	463.3	470.9	481.5	489.8	499.3	512.7	524.5
12.5°	405.3	414.0	422.5	432.5	443.2	455.8	467.4	478.2	489.3	503.1	517.1
15°	366.9	379.4	392.6	402.8	417.3	430.6	444.1	458.5	472.2	488.8	506.9
17.5°	317.4	332.0	354.1	371.5	388.5	401.9	418.7	436.1	452.2	472.1	492.4
20°	295.1	305.7	320.7	344.3	369.8	384.1	401.1	420.4	438.9	460.6	482.2
22.5°	277.1	286.7	298.6	317.0	345.5	365.0	382.8	402.4	423.8	445.9	469.9
25°	251.5	258.1	270.8	285.6	305.2	337.2	356.7	376.3	399.7	423.4	450.8
27.5°	232.3	238.3	246.5	260.6	275.2	298.2	329.1	350.6	373.8	400.5	428.9
30°	217.6	224.6	233.7	243.7	259.7	277.6	308.5	333.4	356.3	383.8	414.1
32.5°	206.9	212.5	220.2	230.4	243.6	260.9	285.6	315.7	338.1	367.0	398.7
35°	189.5	195.9	202.2	211.9	222.6	238.3	257.1	289.3	311.5	340.0	371.9
37.5°	175.0	179.0	186.0	193.6	205.0	216.7	232.9	261.8	285.8	313.8	346.4
40°	164.1	169.1	174.2	182.8	192.1	203.3	219.2	240.8	268.3	295.8	327.6
42.5°	153.4	159.7	165.3	171.0	181.1	192.4	205.4	223.6	251.8	277.7	308.7
45°	140.6	144.6	150.3	156.7	165.0	174.6	186.1	202.0	229.1	251.5	280.5
47.5°	125.6	131.6	135.3	141.5	149.4	158.6	169.3	183.0	204.9	225.9	252.9
50°	115.4	121.5	126.9	132.4	139.4	148.3	157.3	170.6	188.2	210.2	235.4
52.5°	106.6	112.0	117.2	122.8	129.7	137.8	146.3	158.0	173.0	193.3	217.8
55°	94.7	98.0	103.4	108.9	115.0	122.8	130.9	140.7	153.7	170.7	190.5
57.5°	82.3	86.2	90.4	96.0	102.2	108.2	115.5	124.4	134.6	150.0	167.0
60°	75.4	78.4	81.9	87.6	93.4	98.7	105.7	113.2	122.8	136.2	150.6
62.5°	67.7	70.5	73.7	78.7	84.3	89.2	95.4	103.2	111.4	123.5	136.2
65°	54.8	58.9	62.0	66.4	71.1	76.3	81.1	87.4	94.7	104.3	115.5
67.5°	45.4	47.5	50.5	54.5	59.2	63.7	68.2	73.1	79.4	86.8	95.8
70°	41.3	42.1	42.6	46.5	51.0	55.4	59.6	64.2	69.6	75.7	83.5
72.5°	36.4	37.2	37.8	39.5	43.0	47.5	51.9	55.4	60.4	65.6	71.8
75°	28.9	30.0	30.6	31.5	32.8	35.7	39.8	43.1	46.1	50.0	55.0
77.5°	22.0	22.7	23.2	24.2	25.0	26.3	28.7	31.6	34.5	36.7	40.1
80°	17.4	17.6	18.3	18.7	19.8	20.7	21.9	24.3	27.1	28.0	30.4
82.5°	13.1	13.3	13.9	14.3	14.8	15.6	17.0	17.6	19.8	21.0	22.5
85°	7.3	7.0	7.6	7.6	8.0	8.3	8.7	9.6	10.2	11.7	12.1
87.5°	8.8	8.9	8.1	7.2	6.2	5.6	5.1	4.6	4.5	4.4	4.5
90°	32.7	33.2	28.5	23.9	19.2	14.6	11.1	8.6	6.0	3.5	1.0
92.5°	30.2	30.1	29.0	28.0	26.8	25.8	24.3	22.4	20.5	18.7	16.9
95°	60.6	60.6	60.2	59.8	59.4	58.9	57.6	55.5	53.5	51.4	49.2
97.5°	101.9	101.9	101.1	100.3	99.5	98.7	97.3	95.6	93.7	91.8	90.0
100°	130.7	130.7	130.0	129.4	128.8	128.2	127.0	125.3	123.7	122.0	120.3
102.5°	161.9	161.8	160.9	160.1	159.4	158.6	157.5	156.1	154.8	153.4	152.1
105°	208.8	208.3	207.9	207.5	207.1	206.7	206.1	205.5	204.9	204.2	203.6
107.5°	259.8	259.7	259.7	259.7	259.7	259.7	259.2	258.3	257.4	256.4	255.5
110°	294.6	294.6	294.6	294.6	294.6	294.6	293.9	292.6	291.4	290.1	288.9



TEST NUMBER: P331640-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	329.6	330.1	330.3	330.4	330.6	330.8	330.3	329.0	327.8	326.4	325.2
115°	382.4	382.6	383.0	383.4	383.8	384.3	383.8	382.6	381.3	380.1	378.8
117.5°	434.0	434.5	435.7	436.8	438.1	439.2	439.0	437.2	435.6	433.9	432.2
120°	467.8	467.8	469.5	471.2	472.9	474.6	474.6	472.9	471.2	469.5	467.8
122.5°	503.7	504.2	505.4	506.5	507.8	508.9	508.5	506.5	504.4	502.5	500.4
125°	556.2	556.8	557.5	558.2	558.7	559.4	558.7	556.8	555.0	553.1	551.1
127.5°	607.2	608.0	608.8	609.5	610.3	611.1	610.2	607.8	605.4	603.0	600.6
130°	641.6	642.1	642.5	642.9	643.4	643.8	642.6	639.8	637.2	634.4	631.7
132.5°	676.0	676.9	676.9	676.8	676.7	676.6	675.5	673.2	671.0	668.8	666.5
135°	725.2	725.5	725.0	724.6	724.1	723.7	722.4	720.1	717.8	715.4	713.1
137.5°	773.0	773.1	772.6	772.1	771.5	770.9	769.7	767.8	766.0	764.1	762.1
140°	804.9	804.9	804.0	802.9	801.8	800.8	799.3	797.4	795.5	793.6	791.7
142.5°	834.0	833.8	833.1	832.3	831.6	830.9	829.6	827.7	825.8	823.9	822.1
145°	878.1	877.9	876.6	875.4	874.1	872.9	871.5	870.0	868.5	867.1	865.6
147.5°	916.6	916.2	915.3	914.5	913.6	912.8	911.5	909.7	907.9	906.2	904.4
150°	941.0	940.4	939.6	938.7	937.9	937.0	936.0	934.7	933.4	932.2	930.9
152.5°	965.5	964.7	963.7	962.6	961.6	960.6	959.4	958.2	956.9	955.7	954.4
155°	996.4	995.3	994.7	994.1	993.4	992.8	992.2	991.6	990.9	990.3	989.7
157.5°	1024.8	1023.4	1023.0	1022.6	1022.2	1021.8	1021.5	1021.0	1020.6	1020.2	1019.8
160°	1042.0	1040.8	1040.6	1040.4	1040.2	1039.9	1039.7	1039.2	1038.8	1038.4	1038.0
162.5°	1057.4	1056.0	1055.7	1055.5	1055.3	1055.1	1055.0	1054.8	1054.8	1054.7	1054.6
165°	1077.3	1075.9	1075.9	1075.9	1075.9	1075.9	1076.0	1076.1	1076.4	1076.6	1076.8
167.5°	1093.8	1092.3	1092.3	1092.4	1092.4	1092.5	1092.8	1093.5	1094.1	1094.7	1095.4
170°	1102.9	1101.4	1101.6	1101.8	1102.0	1102.3	1102.7	1103.3	1103.9	1104.6	1105.2
172.5°	1109.7	1108.2	1108.4	1108.6	1108.9	1109.1	1109.5	1110.1	1110.8	1111.4	1112.0
175°	1117.1	1115.6	1116.1	1116.5	1116.9	1117.3	1117.9	1118.4	1119.1	1119.7	1120.4
177.5°	1121.0	1120.0	1120.3	1120.6	1121.0	1121.3	1121.8	1122.3	1122.7	1123.2	1123.7
180°	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3



TEST NUMBER: P331640-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	536.1	536.5	539.5	540.9	543.5	544.5	545.8	545.4	545.4	546.0	550.2
5°	537.3	541.0	546.5	551.9	557.1	561.5	564.5	567.4	568.6	573.9	578.7
7.5°	535.3	542.2	551.3	559.5	569.3	577.0	583.3	589.1	593.0	600.9	608.9
10°	532.8	542.4	552.8	563.4	576.9	587.1	597.5	605.4	608.0	619.6	626.3
12.5°	527.7	540.6	553.8	567.5	580.7	594.8	606.2	614.2	623.3	633.7	646.0
15°	520.2	535.0	552.3	569.8	588.7	605.8	618.0	631.9	641.9	653.4	664.1
17.5°	509.4	528.5	550.3	570.7	592.6	610.8	627.7	641.0	648.0	654.6	656.2
20°	500.8	521.3	547.1	571.1	593.0	614.1	630.8	641.9	643.8	643.9	634.1
22.5°	491.5	514.7	541.6	566.2	592.4	615.9	628.8	633.6	626.2	613.7	594.7
25°	474.3	501.2	532.5	560.6	589.1	611.3	615.8	607.5	581.7	554.6	520.4
27.5°	455.7	485.9	519.4	550.7	581.1	594.9	585.3	555.2	508.9	468.6	419.7
30°	442.1	476.0	508.9	543.9	572.1	578.0	556.0	511.7	457.6	396.9	348.1
32.5°	426.5	462.0	498.2	534.4	558.0	552.2	515.8	461.3	397.9	338.2	292.2
35°	404.3	440.9	480.0	516.3	531.3	506.3	451.8	380.9	316.1	260.4	228.7
37.5°	378.6	418.6	459.2	492.5	491.5	449.8	375.6	302.4	247.9	214.9	192.4
40°	360.4	400.8	444.7	472.8	460.8	406.5	326.1	257.1	217.2	190.9	174.5
42.5°	342.9	383.4	427.1	449.4	428.4	361.7	281.7	227.6	194.7	174.2	160.9
45°	313.2	356.0	396.3	408.7	371.3	297.8	227.8	188.5	166.6	151.5	142.3
47.5°	284.1	326.2	363.1	363.2	312.7	241.5	192.2	163.1	144.5	132.7	126.0
50°	266.3	306.3	337.2	332.4	275.0	214.8	171.9	146.8	131.3	122.2	115.2
52.5°	246.3	285.1	311.9	298.2	243.1	189.1	153.6	132.6	119.8	111.9	105.6
55°	217.2	251.7	270.6	249.8	198.4	157.3	129.8	113.3	103.7	97.0	91.6
57.5°	188.7	217.1	228.9	204.8	163.4	130.4	109.8	97.4	87.9	83.1	80.3
60°	170.7	195.0	203.3	176.7	142.0	114.1	97.3	85.8	78.7	75.6	72.8
62.5°	153.1	172.9	176.3	152.0	123.8	99.9	85.4	75.7	71.0	68.0	65.4
65°	127.0	141.3	139.7	120.0	98.0	79.2	68.7	62.8	59.3	55.0	50.4
67.5°	104.6	113.3	108.0	93.4	74.8	61.6	54.7	50.2	45.8	41.8	40.8
70°	90.3	95.4	89.8	76.3	61.3	51.7	46.1	40.8	38.2	37.3	35.5
72.5°	76.7	78.5	72.5	60.9	49.9	42.8	37.3	34.4	32.9	32.2	31.1
75°	57.6	56.3	51.1	42.1	34.7	29.8	28.1	27.1	26.1	25.4	24.8
77.5°	40.4	38.6	33.9	28.0	24.1	21.9	20.8	20.2	19.8	19.4	18.8
80°	30.4	29.1	24.5	20.0	18.3	17.2	16.6	15.9	15.9	15.6	15.0
82.5°	22.3	20.8	16.7	14.7	13.8	13.0	12.6	12.2	12.1	12.1	11.7
85°	11.7	9.5	8.3	8.0	7.4	7.0	7.3	6.8	6.8	6.8	6.7
87.5°	4.2	4.0	4.4	4.7	5.6	6.5	7.3	8.2	9.3	9.0	9.1
90°	3.5	6.0	8.6	11.1	14.6	19.2	23.9	28.5	33.2	32.7	32.3
92.5°	18.7	20.5	22.4	24.3	25.8	26.8	28.0	29.0	30.1	30.2	30.2
95°	51.4	53.5	55.5	57.6	58.9	59.4	59.8	60.2	60.6	60.6	60.6
97.5°	91.8	93.7	95.6	97.3	98.7	99.5	100.3	101.1	101.9	101.9	101.9
100°	122.0	123.7	125.3	127.0	128.2	128.8	129.4	130.0	130.7	130.7	130.7
102.5°	153.4	154.8	156.1	157.5	158.6	159.4	160.1	160.9	161.8	161.9	162.1
105°	204.2	204.9	205.5	206.1	206.7	207.1	207.5	207.9	208.3	208.8	209.2
107.5°	256.4	257.4	258.3	259.2	259.7	259.7	259.7	259.7	259.7	259.8	260.0
110°	290.1	291.4	292.6	293.9	294.6	294.6	294.6	294.6	294.6	294.6	294.6





TEST NUMBER: P331640-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	326.4	327.8	329.0	330.3	330.8	330.6	330.4	330.3	330.1	329.6	329.1
115°	380.1	381.3	382.6	383.8	384.3	383.8	383.4	383.0	382.6	382.4	382.2
117.5°	433.9	435.6	437.2	439.0	439.2	438.1	436.8	435.7	434.5	434.0	433.5
120°	469.5	471.2	472.9	474.6	474.6	472.9	471.2	469.5	467.8	467.8	467.8
122.5°	502.5	504.4	506.5	508.5	508.9	507.8	506.5	505.4	504.2	503.7	503.2
125°	553.1	555.0	556.8	558.7	559.4	558.7	558.2	557.5	556.8	556.2	555.6
127.5°	603.0	605.4	607.8	610.2	611.1	610.3	609.5	608.8	608.0	607.2	606.5
130°	634.4	637.2	639.8	642.6	643.8	643.4	642.9	642.5	642.1	641.6	641.2
132.5°	668.8	671.0	673.2	675.5	676.6	676.7	676.8	676.9	676.9	676.0	675.1
135°	715.4	717.8	720.1	722.4	723.7	724.1	724.6	725.0	725.5	725.2	725.0
137.5°	764.1	766.0	767.8	769.7	770.9	771.5	772.1	772.6	773.1	773.0	772.8
140°	793.6	795.5	797.4	799.3	800.8	801.8	802.9	804.0	804.9	804.9	804.9
142.5°	823.9	825.8	827.7	829.6	830.9	831.6	832.3	833.1	833.8	834.0	834.1
145°	867.1	868.5	870.0	871.5	872.9	874.1	875.4	876.6	877.9	878.1	878.3
147.5°	906.2	907.9	909.7	911.5	912.8	913.6	914.5	915.3	916.2	916.6	917.1
150°	932.2	933.4	934.7	936.0	937.0	937.9	938.7	939.6	940.4	941.0	941.7
152.5°	955.7	956.9	958.2	959.4	960.6	961.6	962.6	963.7	964.7	965.5	966.3
155°	990.3	990.9	991.6	992.2	992.8	993.4	994.1	994.7	995.3	996.4	997.4
157.5°	1020.2	1020.6	1021.0	1021.5	1021.8	1022.2	1022.6	1023.0	1023.4	1024.8	1026.2
160°	1038.4	1038.8	1039.2	1039.7	1039.9	1040.2	1040.4	1040.6	1040.8	1042.0	1043.3
162.5°	1054.7	1054.8	1054.8	1055.0	1055.1	1055.3	1055.5	1055.7	1056.0	1057.4	1058.8
165°	1076.6	1076.4	1076.1	1076.0	1075.9	1075.9	1075.9	1075.9	1075.9	1077.3	1078.8
167.5°	1094.7	1094.1	1093.5	1092.8	1092.5	1092.4	1092.4	1092.3	1092.3	1093.8	1095.3
170°	1104.6	1103.9	1103.3	1102.7	1102.3	1102.0	1101.8	1101.6	1101.4	1102.9	1104.3
172.5°	1111.4	1110.8	1110.1	1109.5	1109.1	1108.9	1108.6	1108.4	1108.2	1109.7	1111.2
175°	1119.7	1119.1	1118.4	1117.9	1117.3	1116.9	1116.5	1116.1	1115.6	1117.1	1118.6
177.5°	1123.2	1122.7	1122.3	1121.8	1121.3	1121.0	1120.6	1120.3	1120.0	1121.0	1122.0
180°	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3



TEST NUMBER: P331640-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	551.6	553.6	554.5	554.5	555.5	555.1	554.6
5°	583.3	586.9	587.7	590.9	593.4	592.6	593.0
7.5°	614.9	620.5	626.1	628.7	629.1	630.6	631.1
10°	634.3	639.0	647.6	646.4	652.8	656.6	650.4
12.5°	653.0	659.3	665.3	666.9	670.6	671.8	669.4
15°	669.8	673.2	673.5	672.6	673.8	672.8	669.3
17.5°	654.1	648.7	637.7	632.5	628.4	622.3	619.9
20°	628.0	612.0	593.5	586.1	577.5	560.4	564.5
22.5°	571.7	553.6	535.0	513.4	503.0	486.9	485.9
25°	484.1	452.8	418.3	394.3	380.2	364.1	357.0
27.5°	376.4	337.0	308.8	294.5	281.4	268.7	268.2
30°	305.6	276.0	254.1	241.9	233.9	228.5	229.7
32.5°	257.6	237.3	222.5	212.4	206.5	202.4	202.4
35°	210.6	196.7	187.2	183.0	178.7	175.8	175.9
37.5°	180.2	171.9	166.6	161.9	159.2	157.8	156.9
40°	164.6	157.8	153.7	150.9	148.7	146.7	146.3
42.5°	152.4	146.7	142.6	140.4	138.4	136.9	136.6
45°	135.2	130.5	126.9	124.4	123.5	122.2	122.2
47.5°	120.3	115.7	112.8	111.3	109.7	108.8	108.8
50°	110.2	106.6	104.1	103.1	101.8	101.3	101.1
52.5°	101.2	98.5	96.7	96.0	95.5	94.8	94.9
55°	88.9	87.4	86.7	86.1	85.2	84.1	84.8
57.5°	78.6	77.3	75.3	73.5	72.7	71.9	72.2
60°	71.3	68.7	66.1	64.1	63.5	61.9	61.9
62.5°	62.1	58.5	55.3	54.1	53.6	52.8	52.7
65°	47.8	46.3	45.6	44.8	44.4	44.4	44.1
67.5°	39.6	39.0	38.2	38.0	37.7	37.5	37.4
70°	35.0	34.2	33.9	33.7	33.3	33.5	32.9
72.5°	30.6	30.0	29.9	29.4	29.2	29.2	28.8
75°	24.1	24.1	23.9	23.7	23.3	23.2	23.3
77.5°	18.5	18.6	18.3	18.2	18.2	18.2	18.0
80°	14.8	15.0	14.8	14.6	14.4	14.6	14.4
82.5°	11.7	11.4	11.4	11.3	11.3	11.3	11.2
85°	6.7	6.8	6.7	6.5	6.5	6.5	6.7
87.5°	8.9	8.8	8.8	8.8	8.9	8.9	8.8
90°	31.9	31.5	31.4	31.6	31.8	32.0	32.2
92.5°	30.3	30.5	30.5	30.6	30.6	30.7	30.7
95°	60.6	60.6	60.4	60.0	59.6	59.1	58.7
97.5°	101.9	101.9	101.9	101.8	101.8	101.7	101.7
100°	130.7	130.7	130.6	130.4	130.2	130.0	129.7
102.5°	162.2	162.4	162.4	162.2	162.0	161.8	161.6
105°	209.6	210.0	210.3	210.3	210.3	210.3	210.3
107.5°	260.2	260.3	259.9	259.0	258.0	257.1	256.1
110°	294.6	294.6	294.2	293.6	292.9	292.3	291.7



TEST NUMBER: P331640-930

CATALOG NUMBER: SA2XXRDIP-C290D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	328.6	328.2	327.7	327.2	326.7	326.3	325.8
115°	382.0	381.7	381.3	380.7	380.1	379.4	378.8
117.5°	433.0	432.5	431.9	431.3	430.6	430.0	429.4
120°	467.8	467.8	467.5	466.9	466.3	465.6	465.0
122.5°	502.7	502.1	501.7	501.2	500.8	500.3	499.9
125°	555.0	554.3	553.9	553.7	553.5	553.3	553.1
127.5°	605.7	605.0	604.2	603.6	602.9	602.3	601.5
130°	640.8	640.4	639.8	639.0	638.1	637.2	636.4
132.5°	674.2	673.3	672.5	671.8	671.1	670.4	669.8
135°	724.8	724.6	724.1	723.5	722.9	722.3	721.6
137.5°	772.7	772.5	772.0	771.1	770.3	769.5	768.6
140°	804.9	804.9	804.5	803.7	802.9	802.0	801.2
142.5°	834.3	834.5	834.1	833.2	832.4	831.6	830.7
145°	878.6	878.7	878.4	877.6	876.8	875.9	875.1
147.5°	917.5	918.0	917.9	917.0	916.2	915.4	914.7
150°	942.3	943.0	943.0	942.3	941.7	941.0	940.4
152.5°	967.0	967.8	967.8	967.0	966.3	965.5	964.7
155°	998.5	999.6	999.7	999.1	998.5	997.8	997.2
157.5°	1027.7	1029.1	1029.3	1028.3	1027.3	1026.3	1025.2
160°	1044.6	1045.9	1046.0	1045.2	1044.4	1043.5	1042.7
162.5°	1060.2	1061.7	1061.8	1060.9	1059.9	1058.8	1057.9
165°	1080.3	1081.7	1081.9	1080.9	1079.9	1078.8	1077.7
167.5°	1096.7	1098.2	1098.4	1097.3	1096.2	1095.1	1094.1
170°	1105.8	1107.3	1107.4	1106.1	1104.9	1103.6	1102.4
172.5°	1112.6	1114.1	1114.2	1113.0	1111.7	1110.4	1109.1
175°	1120.1	1121.5	1121.6	1120.4	1119.1	1117.9	1116.6
177.5°	1123.0	1124.0	1124.0	1123.0	1122.0	1121.0	1120.0
180°	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3

(END OF REPORT)