

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: P331640-940

Luminaire Tested: **SA2XXRDIP-C290D1080U940-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331640-940
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-C290D1080U940-4F0-1E-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: 4444.5 lumens
Efficiency: N/A
Efficacy: 105.3 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

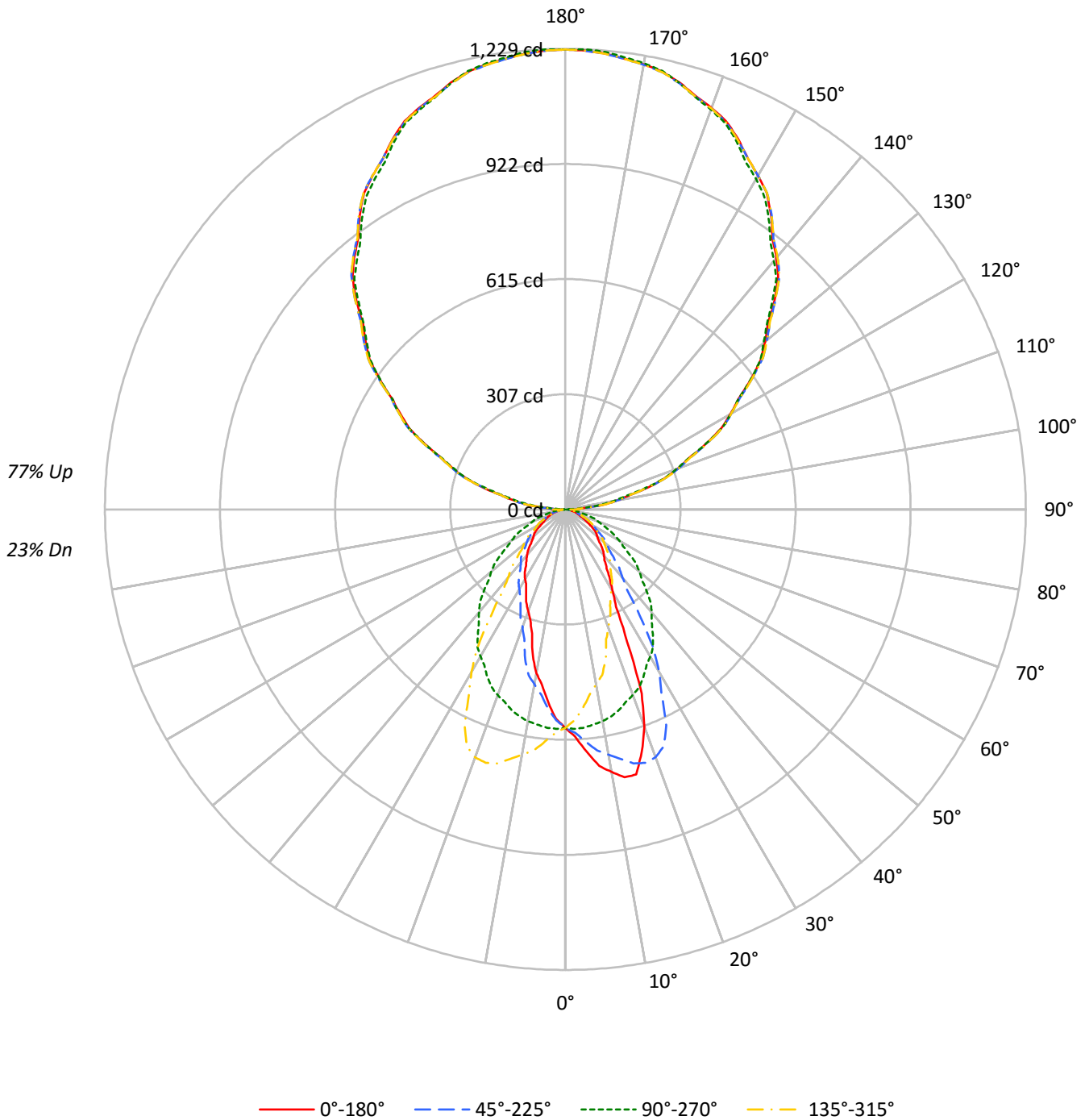
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	9411	9411	9411	9411
5°	10511	9470	8399	9470
10°	11663	9404	7279	9404
15°	12236	9267	5735	9267
20°	10608	9062	4962	9062
25°	6957	8783	4431	8783
30°	4683	8444	4010	8444
35°	3792	8016	3617	8016
40°	3372	7552	3347	7552
45°	3053	7005	2987	7005
50°	2778	6465	2768	6465
55°	2609	5866	2578	5866
60°	2186	5318	2160	5318
65°	1841	4829	2090	4829
70°	1699	4310	1969	4310
75°	1591	3755	1822	3755
80°	1469	3096	1618	3096
85°	1352	2445	1426	2445



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.3	1.2
10°-20°	154.0	3.5
20°-30°	198.4	4.5
30°-40°	188.6	4.2
40°-50°	161.5	3.6
50°-60°	123.0	2.8
60°-70°	77.8	1.7
70°-80°	38.8	0.9
80°-90°	15.0	0.3
90°-100°	77.8	1.7
100°-110°	241.6	5.4
110°-120°	412.9	9.3
120°-130°	543.0	12.2
130°-140°	609.4	13.7
140°-150°	597.6	13.4
150°-160°	501.2	11.3
160°-170°	332.4	7.5
170°-180°	116.2	2.6
0°-30°	407.7	9.2
0°-40°	596.2	13.4
0°-60°	880.8	19.8
0°-90°	1012.4	22.8
90°-120°	732.3	16.5
90°-150°	2482.3	55.9
90°-180°	3432.0	77.2
0°-180°	4444.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	583	583	583	583	583	
5°	648	584	518	584	648	64
15°	732	554	343	554	732	197
25°	390	493	249	493	390	185
35°	192	407	184	407	192	123
45°	134	307	131	307	134	103
55°	93	208	92	208	93	81
65°	48	126	55	126	48	49
75°	26	60	29	60	26	27
85°	7	13	8	13	7	9
90°	35	1	35	1	35	16
95°	64	54	64	54	64	72
105°	230	223	230	223	230	242
115°	414	414	414	414	414	409
125°	605	603	605	603	605	539
135°	789	780	789	780	789	608
145°	957	947	957	947	957	598
155°	1091	1082	1091	1082	1091	502
165°	1179	1178	1179	1178	1179	332
175°	1221	1225	1221	1225	1221	116
180°	1227	1227	1227	1227	1227	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9
2.5°	606.6	607.1	607.6	606.5	606.5	605.5	603.3	601.7	597.2	596.6	596.6
5°	648.5	648.2	649.0	646.3	642.7	641.9	638.0	632.9	627.7	621.9	620.6
7.5°	690.3	689.6	688.0	687.6	684.8	678.7	672.5	665.9	657.2	648.6	644.4
10°	711.4	718.1	714.0	706.9	708.3	698.8	693.8	685.0	677.7	664.9	662.2
12.5°	732.1	734.8	733.4	729.4	727.6	721.0	714.2	706.6	693.1	681.7	671.7
15°	732.0	735.8	736.9	735.7	736.6	736.3	732.6	726.4	714.6	702.0	691.1
17.5°	678.0	680.6	687.3	691.8	697.5	709.4	715.4	717.6	716.0	708.7	701.1
20°	617.4	613.0	631.6	641.1	649.2	669.4	686.9	693.6	704.3	704.1	702.0
22.5°	531.5	532.5	550.2	561.5	585.1	605.5	625.3	650.4	671.2	684.9	692.9
25°	390.5	398.2	415.8	431.2	457.5	495.3	529.5	569.2	606.6	636.2	664.4
27.5°	293.3	293.9	307.8	322.1	337.7	368.5	411.7	459.1	512.5	556.6	607.3
30°	251.2	249.9	255.8	264.6	277.9	301.8	334.2	380.8	434.1	500.5	559.6
32.5°	221.3	221.4	225.9	232.3	243.3	259.5	281.7	319.6	369.9	435.2	504.5
35°	192.4	192.3	195.5	200.1	204.7	215.1	230.3	250.1	284.8	345.7	416.6
37.5°	171.7	172.5	174.2	177.1	182.2	188.0	197.1	210.4	235.1	271.2	330.7
40°	160.0	160.4	162.6	165.1	168.1	172.5	180.0	190.8	208.8	237.6	281.2
42.5°	149.4	149.7	151.3	153.6	156.0	160.4	166.7	175.9	190.6	212.9	248.9
45°	133.7	133.7	135.1	136.1	138.8	142.8	147.8	155.6	165.7	182.3	206.2
47.5°	119.0	119.0	120.0	121.7	123.4	126.5	131.5	137.9	145.2	158.0	178.4
50°	110.6	110.8	111.4	112.8	113.9	116.6	120.6	126.0	133.7	143.7	160.6
52.5°	103.8	103.7	104.4	105.0	105.8	107.7	110.7	115.5	122.3	131.0	145.1
55°	92.7	91.9	93.2	94.2	94.8	95.6	97.2	100.2	106.1	113.4	123.9
57.5°	79.0	78.6	79.5	80.4	82.4	84.5	86.0	87.8	90.9	96.1	106.6
60°	67.7	67.7	69.5	70.1	72.3	75.2	78.0	79.6	82.7	86.1	93.8
62.5°	57.6	57.8	58.6	59.2	60.5	63.9	67.9	71.5	74.4	77.7	82.8
65°	48.2	48.6	48.6	49.0	49.8	50.6	52.3	55.1	60.2	64.8	68.7
67.5°	40.9	41.0	41.2	41.6	41.7	42.6	43.3	44.6	45.7	50.1	54.9
70°	36.0	36.6	36.5	36.8	37.1	37.5	38.3	38.9	40.8	41.7	44.6
72.5°	31.5	31.9	31.9	32.2	32.7	32.8	33.4	34.1	35.2	36.0	37.6
75°	25.5	25.3	25.5	25.9	26.1	26.3	26.3	27.1	27.7	28.5	29.6
77.5°	19.7	19.9	19.9	19.9	20.0	20.3	20.2	20.6	21.2	21.7	22.1
80°	15.8	16.0	15.8	16.0	16.2	16.4	16.2	16.4	17.0	17.4	17.4
82.5°	12.2	12.3	12.4	12.4	12.5	12.5	12.8	12.8	13.3	13.2	13.4
85°	7.3	7.1	7.1	7.1	7.3	7.5	7.3	7.3	7.5	7.5	7.5
87.5°	9.6	9.7	9.7	9.6	9.6	9.6	9.7	10.0	9.9	10.2	9.0
90°	35.2	35.0	34.8	34.5	34.3	34.4	34.9	35.3	35.8	36.3	31.2
92.5°	33.5	33.5	33.4	33.4	33.3	33.3	33.2	33.1	33.0	32.9	31.7
95°	64.2	64.6	65.2	65.6	66.1	66.3	66.3	66.3	66.3	66.3	65.8
97.5°	111.3	111.3	111.4	111.4	111.5	111.5	111.5	111.5	111.5	111.5	110.6
100°	141.9	142.1	142.4	142.6	142.9	142.9	142.9	142.9	142.9	142.9	142.2
102.5°	176.7	176.9	177.2	177.4	177.6	177.6	177.5	177.3	177.1	176.9	176.0
105°	230.0	230.0	230.0	230.0	230.0	229.7	229.3	228.8	228.4	227.8	227.4
107.5°	280.1	281.2	282.2	283.3	284.3	284.7	284.5	284.4	284.2	284.0	284.0
110°	319.1	319.7	320.4	321.1	321.8	322.2	322.2	322.2	322.2	322.2	322.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	356.3	356.9	357.3	357.8	358.4	358.9	359.4	360.0	360.5	361.1	361.2
115°	414.3	415.0	415.7	416.4	417.1	417.5	417.8	418.0	418.2	418.5	418.9
117.5°	469.7	470.3	471.0	471.7	472.4	473.1	473.6	474.1	474.7	475.2	476.5
120°	508.5	509.3	510.0	510.7	511.3	511.7	511.7	511.7	511.7	511.7	513.5
122.5°	546.7	547.2	547.7	548.2	548.8	549.2	549.8	550.4	550.9	551.4	552.8
125°	604.9	605.1	605.4	605.6	605.8	606.3	607.0	607.7	608.3	609.0	609.8
127.5°	657.9	658.7	659.4	660.1	660.8	661.6	662.5	663.3	664.1	664.9	665.8
130°	696.1	697.0	697.9	698.8	699.7	700.4	700.9	701.3	701.8	702.3	702.8
132.5°	732.5	733.3	734.0	734.8	735.5	736.4	737.4	738.3	739.4	740.4	740.3
135°	789.3	790.0	790.7	791.3	792.0	792.5	792.7	793.0	793.2	793.4	793.0
137.5°	840.6	841.6	842.5	843.4	844.4	844.9	845.1	845.3	845.4	845.6	845.0
140°	876.3	877.2	878.2	879.0	879.9	880.4	880.4	880.4	880.4	880.4	879.3
142.5°	908.6	909.5	910.4	911.3	912.3	912.7	912.5	912.3	912.1	912.0	911.2
145°	957.1	958.0	958.9	959.8	960.7	961.1	960.9	960.6	960.4	960.2	958.8
147.5°	1000.4	1001.2	1002.1	1003.0	1003.9	1004.1	1003.5	1003.1	1002.6	1002.0	1001.1
150°	1028.6	1029.2	1029.9	1030.6	1031.4	1031.4	1030.6	1029.9	1029.2	1028.6	1027.6
152.5°	1055.1	1056.0	1056.9	1057.7	1058.5	1058.5	1057.7	1056.9	1056.0	1055.1	1054.0
155°	1090.7	1091.4	1092.1	1092.8	1093.4	1093.2	1092.1	1090.9	1089.8	1088.6	1088.0
157.5°	1121.3	1122.5	1123.6	1124.6	1125.8	1125.5	1124.0	1122.4	1120.9	1119.3	1118.8
160°	1140.4	1141.3	1142.3	1143.2	1144.1	1143.9	1142.5	1141.1	1139.7	1138.4	1138.1
162.5°	1157.0	1158.1	1159.2	1160.3	1161.4	1161.2	1159.6	1158.1	1156.5	1154.9	1154.7
165°	1178.8	1179.9	1181.1	1182.2	1183.3	1183.1	1181.5	1179.9	1178.3	1176.7	1176.7
167.5°	1196.6	1197.7	1198.9	1200.2	1201.3	1201.1	1199.5	1197.9	1196.3	1194.7	1194.7
170°	1205.7	1207.0	1208.4	1209.8	1211.2	1211.0	1209.4	1207.8	1206.2	1204.6	1204.9
172.5°	1213.1	1214.5	1215.8	1217.3	1218.6	1218.5	1216.9	1215.3	1213.7	1212.1	1212.3
175°	1221.2	1222.6	1224.0	1225.4	1226.7	1226.6	1225.0	1223.4	1221.8	1220.1	1220.7
177.5°	1224.9	1226.0	1227.2	1228.2	1229.3	1229.3	1228.2	1227.2	1226.0	1224.9	1225.3
180°	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9
2.5°	596.9	595.6	594.4	591.6	590.0	586.8	586.4	586.2	582.0	577.9	576.8
5°	617.4	614.1	609.3	603.6	597.7	591.7	587.6	584.3	576.2	568.6	564.1
7.5°	638.0	631.1	622.7	612.0	603.0	593.0	585.5	578.8	567.3	556.2	548.8
10°	653.4	642.1	631.0	616.2	604.6	593.3	582.7	573.6	560.7	546.1	535.7
12.5°	663.0	650.5	635.2	620.7	605.7	591.3	577.2	565.5	550.3	535.2	523.0
15°	675.9	662.5	643.9	623.2	604.0	585.1	569.0	554.4	534.6	516.5	501.5
17.5°	686.5	668.1	648.1	624.2	601.9	578.0	557.1	538.5	516.4	494.6	477.0
20°	689.9	671.6	648.5	624.6	598.3	570.2	547.7	527.4	503.7	480.0	459.8
22.5°	687.8	673.6	647.9	619.3	592.4	562.9	537.5	514.0	487.7	463.5	440.1
25°	673.5	668.6	644.4	613.1	582.4	548.1	518.7	493.0	463.1	437.1	411.6
27.5°	640.2	650.7	635.6	602.4	568.1	531.5	498.4	469.1	438.0	408.8	383.4
30°	608.1	632.1	625.7	594.9	556.6	520.6	483.5	452.9	419.7	389.7	364.6
32.5°	564.2	604.0	610.3	584.5	544.9	505.3	466.5	436.0	401.4	369.8	345.3
35°	494.2	553.8	581.1	564.7	525.0	482.2	442.2	406.7	371.8	340.7	316.4
37.5°	410.8	492.0	537.5	538.7	502.2	457.8	414.1	378.9	343.2	312.6	286.3
40°	356.7	444.6	504.0	517.1	486.3	438.4	394.1	358.3	323.5	293.5	263.3
42.5°	308.1	395.7	468.6	491.5	467.1	419.4	375.1	337.6	303.7	275.4	244.5
45°	249.1	325.7	406.1	447.0	433.5	389.3	342.5	306.8	275.1	250.6	221.0
47.5°	210.2	264.1	342.0	397.3	397.1	356.8	310.7	276.6	247.1	224.1	200.2
50°	188.0	235.0	300.8	363.6	368.8	335.0	291.2	257.4	229.9	205.8	186.5
52.5°	168.0	206.8	265.9	326.2	341.2	311.8	269.4	238.2	211.4	189.2	172.8
55°	142.0	172.0	217.0	273.2	296.0	275.3	237.6	208.4	186.7	168.1	153.9
57.5°	120.1	142.6	178.7	224.0	250.4	237.5	206.3	182.6	164.1	147.2	136.1
60°	106.4	124.8	155.3	193.2	222.4	213.3	186.7	164.7	148.9	134.3	123.8
62.5°	93.4	109.2	135.5	166.2	192.9	189.1	167.5	148.9	135.1	121.8	112.9
65°	75.2	86.7	107.2	131.3	152.8	154.5	138.9	126.4	114.0	103.5	95.6
67.5°	59.8	67.4	81.8	102.1	118.2	123.9	114.4	104.8	95.0	86.9	80.0
70°	50.5	56.5	67.1	83.5	98.3	104.3	98.8	91.3	82.8	76.2	70.3
72.5°	40.8	46.8	54.6	66.6	79.3	85.9	83.9	78.6	71.7	66.1	60.5
75°	30.8	32.6	37.9	46.0	55.9	61.6	63.0	60.2	54.7	50.5	47.2
77.5°	22.7	23.9	26.4	30.6	37.1	42.2	44.2	43.9	40.1	37.7	34.6
80°	18.2	18.8	20.1	21.8	26.8	31.8	33.3	33.3	30.6	29.6	26.6
82.5°	13.8	14.3	15.1	16.1	18.3	22.7	24.3	24.6	23.0	21.7	19.3
85°	7.9	7.7	8.1	8.7	9.1	10.3	12.8	13.2	12.8	11.1	10.5
87.5°	7.9	7.1	6.2	5.2	4.8	4.4	4.6	4.9	4.8	4.9	5.1
90°	26.1	21.0	16.0	12.1	9.4	6.6	3.8	1.1	3.8	6.6	9.4
92.5°	30.6	29.3	28.2	26.6	24.5	22.5	20.4	18.5	20.4	22.5	24.5
95°	65.4	64.9	64.5	63.0	60.7	58.5	56.2	53.9	56.2	58.5	60.7
97.5°	109.7	108.8	108.0	106.5	104.5	102.5	100.4	98.4	100.4	102.5	104.5
100°	141.5	140.9	140.2	138.9	137.1	135.3	133.4	131.5	133.4	135.3	137.1
102.5°	175.1	174.3	173.4	172.3	170.8	169.3	167.8	166.4	167.8	169.3	170.8
105°	226.9	226.5	226.0	225.4	224.8	224.1	223.4	222.7	223.4	224.1	224.8
107.5°	284.0	284.0	284.0	283.5	282.5	281.5	280.4	279.5	280.4	281.5	282.5
110°	322.2	322.2	322.2	321.5	320.0	318.7	317.3	315.9	317.3	318.7	320.0



TEST NUMBER: P331640-940

CATALOG NUMBER: SA2XXRDIP-C290D1080U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	361.4	361.6	361.9	361.2	359.8	358.5	357.0	355.7	357.0	358.5	359.8
115°	419.4	419.8	420.3	419.8	418.5	417.1	415.7	414.3	415.7	417.1	418.5
117.5°	477.8	479.1	480.4	480.1	478.2	476.4	474.6	472.7	474.6	476.4	478.2
120°	515.4	517.2	519.1	519.1	517.2	515.4	513.5	511.7	513.5	515.4	517.2
122.5°	554.0	555.4	556.6	556.2	553.9	551.7	549.6	547.3	549.6	551.7	553.9
125°	610.5	611.1	611.8	611.1	609.0	607.0	604.9	602.8	604.9	607.0	609.0
127.5°	666.6	667.4	668.3	667.4	664.8	662.2	659.5	656.9	659.5	662.2	664.8
130°	703.2	703.6	704.1	702.8	699.8	696.9	693.8	690.9	693.8	696.9	699.8
132.5°	740.2	740.1	740.0	738.8	736.3	733.9	731.5	729.0	731.5	733.9	736.3
135°	792.5	792.0	791.6	790.1	787.6	785.1	782.5	780.0	782.5	785.1	787.6
137.5°	844.5	843.8	843.2	841.9	839.8	837.8	835.7	833.6	835.7	837.8	839.8
140°	878.2	877.0	875.8	874.2	872.2	870.0	868.0	865.9	868.0	870.0	872.2
142.5°	910.3	909.5	908.7	907.3	905.3	903.2	901.2	899.1	901.2	903.2	905.3
145°	957.4	956.0	954.7	953.1	951.5	949.9	948.3	946.7	948.3	949.9	951.5
147.5°	1000.2	999.3	998.4	996.9	995.0	993.0	991.1	989.2	991.1	993.0	995.0
150°	1026.7	1025.8	1024.8	1023.7	1022.3	1020.9	1019.6	1018.2	1019.6	1020.9	1022.3
152.5°	1052.8	1051.8	1050.6	1049.4	1048.0	1046.6	1045.3	1043.8	1045.3	1046.6	1048.0
155°	1087.3	1086.5	1085.8	1085.2	1084.5	1083.8	1083.1	1082.4	1083.1	1083.8	1084.5
157.5°	1118.5	1118.0	1117.6	1117.2	1116.7	1116.2	1115.8	1115.4	1115.8	1116.2	1116.7
160°	1137.9	1137.6	1137.4	1137.1	1136.6	1136.1	1135.7	1135.2	1135.7	1136.1	1136.6
162.5°	1154.4	1154.2	1154.0	1153.9	1153.7	1153.6	1153.5	1153.4	1153.5	1153.6	1153.7
165°	1176.7	1176.7	1176.7	1176.8	1177.0	1177.2	1177.5	1177.7	1177.5	1177.2	1177.0
167.5°	1194.8	1194.8	1194.9	1195.2	1196.0	1196.6	1197.3	1198.0	1197.3	1196.6	1196.0
170°	1205.1	1205.3	1205.6	1206.0	1206.7	1207.4	1208.1	1208.8	1208.1	1207.4	1206.7
172.5°	1212.5	1212.8	1213.0	1213.4	1214.2	1214.9	1215.6	1216.2	1215.6	1214.9	1214.2
175°	1221.1	1221.6	1222.0	1222.6	1223.2	1224.0	1224.7	1225.4	1224.7	1224.0	1223.2
177.5°	1225.7	1226.0	1226.4	1226.9	1227.4	1228.0	1228.5	1229.0	1228.5	1228.0	1227.4
180°	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4



TEST NUMBER: P331640-940

CATALOG NUMBER: SA2XXRDIP-C290D1080U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9
2.5°	574.7	573.5	571.4	568.2	566.2	562.8	560.6	561.9	562.2	561.9	561.6
5°	559.3	555.0	549.1	543.4	538.1	532.5	529.2	527.9	525.0	523.4	522.5
7.5°	540.6	533.2	525.0	515.1	506.7	497.8	493.4	491.2	485.4	482.2	479.5
10°	526.6	515.1	506.8	493.8	485.9	474.4	466.5	466.7	458.8	454.3	451.1
12.5°	511.2	498.6	484.7	473.1	462.1	452.8	443.3	439.4	431.1	426.8	418.0
15°	485.7	470.9	456.4	440.6	429.4	415.0	401.3	384.4	370.9	359.1	355.9
17.5°	457.9	439.5	424.9	406.4	387.3	363.1	347.1	337.3	329.2	323.0	318.3
20°	438.7	420.1	404.5	376.6	350.8	334.4	322.7	315.1	306.7	300.0	296.3
22.5°	418.7	399.2	377.9	346.7	326.6	313.5	303.1	294.4	288.6	283.5	280.1
25°	390.1	368.8	333.8	312.4	296.1	282.3	275.1	269.8	263.8	256.6	253.4
27.5°	360.0	326.2	301.0	285.0	269.6	260.6	254.0	246.2	240.8	237.6	234.2
30°	337.4	303.6	284.0	266.5	255.7	245.7	238.0	233.5	228.3	222.8	220.6
32.5°	312.4	285.3	266.4	252.0	240.9	232.4	226.3	219.1	215.3	212.0	207.3
35°	281.2	260.6	243.4	231.8	221.1	214.3	207.2	203.0	196.1	193.2	191.5
37.5°	254.8	237.0	224.2	211.8	203.4	195.8	191.5	184.7	181.7	177.7	173.9
40°	239.8	222.4	210.1	199.9	190.6	184.9	179.5	174.0	169.5	167.7	163.1
42.5°	224.6	210.4	198.0	187.0	180.7	174.7	167.8	163.8	159.2	156.2	153.4
45°	203.6	191.0	180.5	171.4	164.4	158.2	153.7	147.0	144.5	138.6	136.1
47.5°	185.1	173.4	163.4	154.7	148.0	143.9	137.4	132.2	128.0	124.3	121.2
50°	172.0	162.2	152.5	144.8	138.8	132.9	126.2	123.6	117.1	115.2	113.4
52.5°	160.0	150.7	141.9	134.3	128.2	122.5	116.6	113.2	108.8	107.0	105.7
55°	143.2	134.3	125.8	119.1	113.1	107.2	103.5	99.2	97.2	95.8	94.2
57.5°	126.4	118.3	111.8	105.0	98.9	94.3	90.1	87.5	85.4	83.6	81.6
60°	115.7	108.0	102.1	95.8	89.5	85.7	82.5	79.4	77.0	74.1	73.3
62.5°	104.3	97.6	92.2	86.1	80.6	77.1	74.0	71.2	68.2	64.1	63.0
65°	88.7	83.5	77.8	72.7	67.9	64.4	59.9	56.7	55.5	55.1	54.9
67.5°	74.6	69.6	64.7	59.6	55.2	52.0	49.7	49.2	48.3	48.2	47.5
70°	65.2	60.5	55.7	50.8	46.5	46.0	45.2	44.3	43.3	43.0	42.5
72.5°	56.8	52.0	47.1	43.2	41.4	40.7	39.9	39.0	38.3	37.9	37.7
75°	43.5	39.1	35.8	34.4	33.4	32.8	31.6	31.0	30.6	30.0	29.8
77.5°	31.4	28.8	27.4	26.5	25.4	24.8	24.1	23.5	23.0	22.9	22.6
80°	23.9	22.6	21.7	20.4	20.1	19.3	19.1	18.5	18.6	18.0	18.0
82.5°	18.5	17.0	16.1	15.6	15.2	14.5	14.4	14.1	14.1	13.6	13.6
85°	9.5	9.1	8.7	8.3	8.3	7.7	7.9	7.7	7.7	7.3	7.1
87.5°	5.5	6.2	6.8	7.8	8.8	9.7	9.6	9.4	9.3	9.2	9.0
90°	12.1	16.0	21.0	26.1	31.2	36.3	35.8	35.3	34.9	34.4	34.3
92.5°	26.6	28.2	29.3	30.6	31.7	32.9	33.0	33.1	33.2	33.3	33.3
95°	63.0	64.5	64.9	65.4	65.8	66.3	66.3	66.3	66.3	66.3	66.1
97.5°	106.5	108.0	108.8	109.7	110.6	111.5	111.5	111.5	111.5	111.5	111.5
100°	138.9	140.2	140.9	141.5	142.2	142.9	142.9	142.9	142.9	142.9	142.9
102.5°	172.3	173.4	174.3	175.1	176.0	176.9	177.1	177.3	177.5	177.6	177.6
105°	225.4	226.0	226.5	226.9	227.4	227.8	228.4	228.8	229.3	229.7	230.0
107.5°	283.5	284.0	284.0	284.0	284.0	284.0	284.2	284.4	284.5	284.7	284.3
110°	321.5	322.2	322.2	322.2	322.2	322.2	322.2	322.2	322.2	322.2	321.8



TEST NUMBER: P331640-940

CATALOG NUMBER: SA2XXRDIP-C290D1080U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	361.2	361.9	361.6	361.4	361.2	361.1	360.5	360.0	359.4	358.9	358.4
115°	419.8	420.3	419.8	419.4	418.9	418.5	418.2	418.0	417.8	417.5	417.1
117.5°	480.1	480.4	479.1	477.8	476.5	475.2	474.7	474.1	473.6	473.1	472.4
120°	519.1	519.1	517.2	515.4	513.5	511.7	511.7	511.7	511.7	511.7	511.3
122.5°	556.2	556.6	555.4	554.0	552.8	551.4	550.9	550.4	549.8	549.2	548.8
125°	611.1	611.8	611.1	610.5	609.8	609.0	608.3	607.7	607.0	606.3	605.8
127.5°	667.4	668.3	667.4	666.6	665.8	664.9	664.1	663.3	662.5	661.6	660.8
130°	702.8	704.1	703.6	703.2	702.8	702.3	701.8	701.3	700.9	700.4	699.7
132.5°	738.8	740.0	740.1	740.2	740.3	740.4	739.4	738.3	737.4	736.4	735.5
135°	790.1	791.6	792.0	792.5	793.0	793.4	793.2	793.0	792.7	792.5	792.0
137.5°	841.9	843.2	843.8	844.5	845.0	845.6	845.4	845.3	845.1	844.9	844.4
140°	874.2	875.8	877.0	878.2	879.3	880.4	880.4	880.4	880.4	880.4	879.9
142.5°	907.3	908.7	909.5	910.3	911.2	912.0	912.1	912.3	912.5	912.7	912.3
145°	953.1	954.7	956.0	957.4	958.8	960.2	960.4	960.6	960.9	961.1	960.7
147.5°	996.9	998.4	999.3	1000.2	1001.1	1002.0	1002.6	1003.1	1003.5	1004.1	1003.9
150°	1023.7	1024.8	1025.8	1026.7	1027.6	1028.6	1029.2	1029.9	1030.6	1031.4	1031.4
152.5°	1049.4	1050.6	1051.8	1052.8	1054.0	1055.1	1056.0	1056.9	1057.7	1058.5	1058.5
155°	1085.2	1085.8	1086.5	1087.3	1088.0	1088.6	1089.8	1090.9	1092.1	1093.2	1093.4
157.5°	1117.2	1117.6	1118.0	1118.5	1118.8	1119.3	1120.9	1122.4	1124.0	1125.5	1125.8
160°	1137.1	1137.4	1137.6	1137.9	1138.1	1138.4	1139.7	1141.1	1142.5	1143.9	1144.1
162.5°	1153.9	1154.0	1154.2	1154.4	1154.7	1154.9	1156.5	1158.1	1159.6	1161.2	1161.4
165°	1176.8	1176.7	1176.7	1176.7	1176.7	1176.7	1178.3	1179.9	1181.5	1183.1	1183.3
167.5°	1195.2	1194.9	1194.8	1194.8	1194.7	1194.7	1196.3	1197.9	1199.5	1201.1	1201.3
170°	1206.0	1205.6	1205.3	1205.1	1204.9	1204.6	1206.2	1207.8	1209.4	1211.0	1211.2
172.5°	1213.4	1213.0	1212.8	1212.5	1212.3	1212.1	1213.7	1215.3	1216.9	1218.5	1218.6
175°	1222.6	1222.0	1221.6	1221.1	1220.7	1220.1	1221.8	1223.4	1225.0	1226.6	1226.7
177.5°	1226.9	1226.4	1226.0	1225.7	1225.3	1224.9	1226.0	1227.2	1228.2	1229.3	1229.3
180°	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4



TEST NUMBER: P331640-940

CATALOG NUMBER: SA2XXRDIP-C290D1080U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9
2.5°	559.8	560.1	559.6	559.9	559.6	560.1	559.8	561.6	561.9	562.2	561.9
5°	521.6	519.2	518.7	518.2	518.7	519.2	521.6	522.5	523.4	525.0	527.9
7.5°	476.0	475.6	474.6	473.1	474.6	475.6	476.0	479.5	482.2	485.4	491.2
10°	446.7	445.6	445.4	444.0	445.4	445.6	446.7	451.1	454.3	458.8	466.7
12.5°	412.2	405.7	405.1	401.5	405.1	405.7	412.2	418.0	426.8	431.1	439.4
15°	351.1	349.8	345.7	343.1	345.7	349.8	351.1	355.9	359.1	370.9	384.4
17.5°	316.0	312.0	310.8	310.2	310.8	312.0	316.0	318.3	323.0	329.2	337.3
20°	293.5	289.9	289.3	288.8	289.3	289.9	293.5	296.3	300.0	306.7	315.1
22.5°	277.9	274.1	272.6	271.3	272.6	274.1	277.9	280.1	283.5	288.6	294.4
25°	251.4	249.9	249.1	248.7	249.1	249.9	251.4	253.4	256.6	263.8	269.8
27.5°	230.6	227.5	226.9	225.8	226.9	227.5	230.6	234.2	237.6	240.8	246.2
30°	218.7	217.8	216.3	215.1	216.3	217.8	218.7	220.6	222.8	228.3	233.5
32.5°	204.8	203.9	202.7	202.2	202.7	203.9	204.8	207.3	212.0	215.3	219.1
35°	189.4	186.5	185.3	183.5	185.3	186.5	189.4	191.5	193.2	196.1	203.0
37.5°	173.1	171.6	169.9	170.5	169.9	171.6	173.1	173.9	177.7	181.7	184.7
40°	160.4	159.4	159.0	158.8	159.0	159.4	160.4	163.1	167.7	169.5	174.0
42.5°	150.3	147.6	146.5	146.5	146.5	147.6	150.3	153.4	156.2	159.2	163.8
45°	135.1	132.5	130.6	130.8	130.6	132.5	135.1	136.1	138.6	144.5	147.0
47.5°	119.5	119.4	118.2	118.6	118.2	119.4	119.5	121.2	124.3	128.0	132.2
50°	112.0	110.8	109.9	110.2	109.9	110.8	112.0	113.4	115.2	117.1	123.6
52.5°	104.9	103.8	103.2	104.1	103.2	103.8	104.9	105.7	107.0	108.8	113.2
55°	93.2	91.9	91.8	91.6	91.8	91.9	93.2	94.2	95.8	97.2	99.2
57.5°	80.1	79.3	78.0	77.6	78.0	79.3	80.1	81.6	83.6	85.4	87.5
60°	70.7	69.1	67.1	66.9	67.1	69.1	70.7	73.3	74.1	77.0	79.4
62.5°	62.1	61.8	61.3	61.3	61.3	61.8	62.1	63.0	64.1	68.2	71.2
65°	54.5	54.3	54.5	54.7	54.5	54.3	54.5	54.9	55.1	55.5	56.7
67.5°	47.4	47.1	46.7	46.9	46.7	47.1	47.4	47.5	48.2	48.3	49.2
70°	42.1	41.9	41.7	41.7	41.7	41.9	42.1	42.5	43.0	43.3	44.3
72.5°	36.9	36.9	36.7	36.6	36.7	36.9	36.9	37.7	37.9	38.3	39.0
75°	29.6	29.2	29.2	29.2	29.2	29.2	29.6	29.8	30.0	30.6	31.0
77.5°	22.6	22.3	22.1	21.9	22.1	22.3	22.6	22.6	22.9	23.0	23.5
80°	17.8	17.7	17.4	17.4	17.4	17.7	17.8	18.0	18.0	18.6	18.5
82.5°	13.6	13.4	13.4	13.2	13.4	13.4	13.6	13.6	13.6	14.1	14.1
85°	7.3	7.5	7.3	7.7	7.3	7.5	7.3	7.1	7.3	7.7	7.7
87.5°	9.0	8.9	9.1	9.0	9.1	8.9	9.0	9.0	9.2	9.3	9.4
90°	34.5	34.8	35.0	35.2	35.0	34.8	34.5	34.3	34.4	34.9	35.3
92.5°	33.4	33.4	33.5	33.5	33.5	33.4	33.4	33.3	33.3	33.2	33.1
95°	65.6	65.2	64.6	64.2	64.6	65.2	65.6	66.1	66.3	66.3	66.3
97.5°	111.4	111.4	111.3	111.3	111.3	111.4	111.4	111.5	111.5	111.5	111.5
100°	142.6	142.4	142.1	141.9	142.1	142.4	142.6	142.9	142.9	142.9	142.9
102.5°	177.4	177.2	176.9	176.7	176.9	177.2	177.4	177.6	177.6	177.5	177.3
105°	230.0	230.0	230.0	230.0	230.0	230.0	230.0	230.0	229.7	229.3	228.8
107.5°	283.3	282.2	281.2	280.1	281.2	282.2	283.3	284.3	284.7	284.5	284.4
110°	321.1	320.4	319.7	319.1	319.7	320.4	321.1	321.8	322.2	322.2	322.2



TEST NUMBER: P331640-940

CATALOG NUMBER: SA2XXRDIP-C290D1080U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	357.8	357.3	356.9	356.3	356.9	357.3	357.8	358.4	358.9	359.4	360.0
115°	416.4	415.7	415.0	414.3	415.0	415.7	416.4	417.1	417.5	417.8	418.0
117.5°	471.7	471.0	470.3	469.7	470.3	471.0	471.7	472.4	473.1	473.6	474.1
120°	510.7	510.0	509.3	508.5	509.3	510.0	510.7	511.3	511.7	511.7	511.7
122.5°	548.2	547.7	547.2	546.7	547.2	547.7	548.2	548.8	549.2	549.8	550.4
125°	605.6	605.4	605.1	604.9	605.1	605.4	605.6	605.8	606.3	607.0	607.7
127.5°	660.1	659.4	658.7	657.9	658.7	659.4	660.1	660.8	661.6	662.5	663.3
130°	698.8	697.9	697.0	696.1	697.0	697.9	698.8	699.7	700.4	700.9	701.3
132.5°	734.8	734.0	733.3	732.5	733.3	734.0	734.8	735.5	736.4	737.4	738.3
135°	791.3	790.7	790.0	789.3	790.0	790.7	791.3	792.0	792.5	792.7	793.0
137.5°	843.4	842.5	841.6	840.6	841.6	842.5	843.4	844.4	844.9	845.1	845.3
140°	879.0	878.2	877.2	876.3	877.2	878.2	879.0	879.9	880.4	880.4	880.4
142.5°	911.3	910.4	909.5	908.6	909.5	910.4	911.3	912.3	912.7	912.5	912.3
145°	959.8	958.9	958.0	957.1	958.0	958.9	959.8	960.7	961.1	960.9	960.6
147.5°	1003.0	1002.1	1001.2	1000.4	1001.2	1002.1	1003.0	1003.9	1004.1	1003.5	1003.1
150°	1030.6	1029.9	1029.2	1028.6	1029.2	1029.9	1030.6	1031.4	1031.4	1030.6	1029.9
152.5°	1057.7	1056.9	1056.0	1055.1	1056.0	1056.9	1057.7	1058.5	1058.5	1057.7	1056.9
155°	1092.8	1092.1	1091.4	1090.7	1091.4	1092.1	1092.8	1093.4	1093.2	1092.1	1090.9
157.5°	1124.6	1123.6	1122.5	1121.3	1122.5	1123.6	1124.6	1125.8	1125.5	1124.0	1122.4
160°	1143.2	1142.3	1141.3	1140.4	1141.3	1142.3	1143.2	1144.1	1143.9	1142.5	1141.1
162.5°	1160.3	1159.2	1158.1	1157.0	1158.1	1159.2	1160.3	1161.4	1161.2	1159.6	1158.1
165°	1182.2	1181.1	1179.9	1178.8	1179.9	1181.1	1182.2	1183.3	1183.1	1181.5	1179.9
167.5°	1200.2	1198.9	1197.7	1196.6	1197.7	1198.9	1200.2	1201.3	1201.1	1199.5	1197.9
170°	1209.8	1208.4	1207.0	1205.7	1207.0	1208.4	1209.8	1211.2	1211.0	1209.4	1207.8
172.5°	1217.3	1215.8	1214.5	1213.1	1214.5	1215.8	1217.3	1218.6	1218.5	1216.9	1215.3
175°	1225.4	1224.0	1222.6	1221.2	1222.6	1224.0	1225.4	1226.7	1226.6	1225.0	1223.4
177.5°	1228.2	1227.2	1226.0	1224.9	1226.0	1227.2	1228.2	1229.3	1229.3	1228.2	1227.2
180°	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4



TEST NUMBER: P331640-940

CATALOG NUMBER: SA2XXRDIP-C290D1080U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9
2.5°	560.6	562.8	566.2	568.2	571.4	573.5	574.7	576.8	577.9	582.0	586.2
5°	529.2	532.5	538.1	543.4	549.1	555.0	559.3	564.1	568.6	576.2	584.3
7.5°	493.4	497.8	506.7	515.1	525.0	533.2	540.6	548.8	556.2	567.3	578.8
10°	466.5	474.4	485.9	493.8	506.8	515.1	526.6	535.7	546.1	560.7	573.6
12.5°	443.3	452.8	462.1	473.1	484.7	498.6	511.2	523.0	535.2	550.3	565.5
15°	401.3	415.0	429.4	440.6	456.4	470.9	485.7	501.5	516.5	534.6	554.4
17.5°	347.1	363.1	387.3	406.4	424.9	439.5	457.9	477.0	494.6	516.4	538.5
20°	322.7	334.4	350.8	376.6	404.5	420.1	438.7	459.8	480.0	503.7	527.4
22.5°	303.1	313.5	326.6	346.7	377.9	399.2	418.7	440.1	463.5	487.7	514.0
25°	275.1	282.3	296.1	312.4	333.8	368.8	390.1	411.6	437.1	463.1	493.0
27.5°	254.0	260.6	269.6	285.0	301.0	326.2	360.0	383.4	408.8	438.0	469.1
30°	238.0	245.7	255.7	266.5	284.0	303.6	337.4	364.6	389.7	419.7	452.9
32.5°	226.3	232.4	240.9	252.0	266.4	285.3	312.4	345.3	369.8	401.4	436.0
35°	207.2	214.3	221.1	231.8	243.4	260.6	281.2	316.4	340.7	371.8	406.7
37.5°	191.5	195.8	203.4	211.8	224.2	237.0	254.8	286.3	312.6	343.2	378.9
40°	179.5	184.9	190.6	199.9	210.1	222.4	239.8	263.3	293.5	323.5	358.3
42.5°	167.8	174.7	180.7	187.0	198.0	210.4	224.6	244.5	275.4	303.7	337.6
45°	153.7	158.2	164.4	171.4	180.5	191.0	203.6	221.0	250.6	275.1	306.8
47.5°	137.4	143.9	148.0	154.7	163.4	173.4	185.1	200.2	224.1	247.1	276.6
50°	126.2	132.9	138.8	144.8	152.5	162.2	172.0	186.5	205.8	229.9	257.4
52.5°	116.6	122.5	128.2	134.3	141.9	150.7	160.0	172.8	189.2	211.4	238.2
55°	103.5	107.2	113.1	119.1	125.8	134.3	143.2	153.9	168.1	186.7	208.4
57.5°	90.1	94.3	98.9	105.0	111.8	118.3	126.4	136.1	147.2	164.1	182.6
60°	82.5	85.7	89.5	95.8	102.1	108.0	115.7	123.8	134.3	148.9	164.7
62.5°	74.0	77.1	80.6	86.1	92.2	97.6	104.3	112.9	121.8	135.1	148.9
65°	59.9	64.4	67.9	72.7	77.8	83.5	88.7	95.6	103.5	114.0	126.4
67.5°	49.7	52.0	55.2	59.6	64.7	69.6	74.6	80.0	86.9	95.0	104.8
70°	45.2	46.0	46.5	50.8	55.7	60.5	65.2	70.3	76.2	82.8	91.3
72.5°	39.9	40.7	41.4	43.2	47.1	52.0	56.8	60.5	66.1	71.7	78.6
75°	31.6	32.8	33.4	34.4	35.8	39.1	43.5	47.2	50.5	54.7	60.2
77.5°	24.1	24.8	25.4	26.5	27.4	28.8	31.4	34.6	37.7	40.1	43.9
80°	19.1	19.3	20.1	20.4	21.7	22.6	23.9	26.6	29.6	30.6	33.3
82.5°	14.4	14.5	15.2	15.6	16.1	17.0	18.5	19.3	21.7	23.0	24.6
85°	7.9	7.7	8.3	8.3	8.7	9.1	9.5	10.5	11.1	12.8	13.2
87.5°	9.6	9.7	8.8	7.8	6.8	6.2	5.5	5.1	4.9	4.8	4.9
90°	35.8	36.3	31.2	26.1	21.0	16.0	12.1	9.4	6.6	3.8	1.1
92.5°	33.0	32.9	31.7	30.6	29.3	28.2	26.6	24.5	22.5	20.4	18.5
95°	66.3	66.3	65.8	65.4	64.9	64.5	63.0	60.7	58.5	56.2	53.9
97.5°	111.5	111.5	110.6	109.7	108.8	108.0	106.5	104.5	102.5	100.4	98.4
100°	142.9	142.9	142.2	141.5	140.9	140.2	138.9	137.1	135.3	133.4	131.5
102.5°	177.1	176.9	176.0	175.1	174.3	173.4	172.3	170.8	169.3	167.8	166.4
105°	228.4	227.8	227.4	226.9	226.5	226.0	225.4	224.8	224.1	223.4	222.7
107.5°	284.2	284.0	284.0	284.0	284.0	284.0	283.5	282.5	281.5	280.4	279.5
110°	322.2	322.2	322.2	322.2	322.2	322.2	321.5	320.0	318.7	317.3	315.9



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	360.5	361.1	361.2	361.4	361.6	361.9	361.2	359.8	358.5	357.0	355.7
115°	418.2	418.5	418.9	419.4	419.8	420.3	419.8	418.5	417.1	415.7	414.3
117.5°	474.7	475.2	476.5	477.8	479.1	480.4	480.1	478.2	476.4	474.6	472.7
120°	511.7	511.7	513.5	515.4	517.2	519.1	519.1	517.2	515.4	513.5	511.7
122.5°	550.9	551.4	552.8	554.0	555.4	556.6	556.2	553.9	551.7	549.6	547.3
125°	608.3	609.0	609.8	610.5	611.1	611.8	611.1	609.0	607.0	604.9	602.8
127.5°	664.1	664.9	665.8	666.6	667.4	668.3	667.4	664.8	662.2	659.5	656.9
130°	701.8	702.3	702.8	703.2	703.6	704.1	702.8	699.8	696.9	693.8	690.9
132.5°	739.4	740.4	740.3	740.2	740.1	740.0	738.8	736.3	733.9	731.5	729.0
135°	793.2	793.4	793.0	792.5	792.0	791.6	790.1	787.6	785.1	782.5	780.0
137.5°	845.4	845.6	845.0	844.5	843.8	843.2	841.9	839.8	837.8	835.7	833.6
140°	880.4	880.4	879.3	878.2	877.0	875.8	874.2	872.2	870.0	868.0	865.9
142.5°	912.1	912.0	911.2	910.3	909.5	908.7	907.3	905.3	903.2	901.2	899.1
145°	960.4	960.2	958.8	957.4	956.0	954.7	953.1	951.5	949.9	948.3	946.7
147.5°	1002.6	1002.0	1001.1	1000.2	999.3	998.4	996.9	995.0	993.0	991.1	989.2
150°	1029.2	1028.6	1027.6	1026.7	1025.8	1024.8	1023.7	1022.3	1020.9	1019.6	1018.2
152.5°	1056.0	1055.1	1054.0	1052.8	1051.8	1050.6	1049.4	1048.0	1046.6	1045.3	1043.8
155°	1089.8	1088.6	1088.0	1087.3	1086.5	1085.8	1085.2	1084.5	1083.8	1083.1	1082.4
157.5°	1120.9	1119.3	1118.8	1118.5	1118.0	1117.6	1117.2	1116.7	1116.2	1115.8	1115.4
160°	1139.7	1138.4	1138.1	1137.9	1137.6	1137.4	1137.1	1136.6	1136.1	1135.7	1135.2
162.5°	1156.5	1154.9	1154.7	1154.4	1154.2	1154.0	1153.9	1153.7	1153.6	1153.5	1153.4
165°	1178.3	1176.7	1176.7	1176.7	1176.7	1176.7	1176.8	1177.0	1177.2	1177.5	1177.7
167.5°	1196.3	1194.7	1194.7	1194.8	1194.8	1194.9	1195.2	1196.0	1196.6	1197.3	1198.0
170°	1206.2	1204.6	1204.9	1205.1	1205.3	1205.6	1206.0	1206.7	1207.4	1208.1	1208.8
172.5°	1213.7	1212.1	1212.3	1212.5	1212.8	1213.0	1213.4	1214.2	1214.9	1215.6	1216.2
175°	1221.8	1220.1	1220.7	1221.1	1221.6	1222.0	1222.6	1223.2	1224.0	1224.7	1225.4
177.5°	1226.0	1224.9	1225.3	1225.7	1226.0	1226.4	1226.9	1227.4	1228.0	1228.5	1229.0
180°	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4



TEST NUMBER: P331640-940

CATALOG NUMBER: SA2XXRDIP-C290D1080U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9
2.5°	586.4	586.8	590.0	591.6	594.4	595.6	596.9	596.6	596.6	597.2	601.7
5°	587.6	591.7	597.7	603.6	609.3	614.1	617.4	620.6	621.9	627.7	632.9
7.5°	585.5	593.0	603.0	612.0	622.7	631.1	638.0	644.4	648.6	657.2	665.9
10°	582.7	593.3	604.6	616.2	631.0	642.1	653.4	662.2	664.9	677.7	685.0
12.5°	577.2	591.3	605.7	620.7	635.2	650.5	663.0	671.7	681.7	693.1	706.6
15°	569.0	585.1	604.0	623.2	643.9	662.5	675.9	691.1	702.0	714.6	726.4
17.5°	557.1	578.0	601.9	624.2	648.1	668.1	686.5	701.1	708.7	716.0	717.6
20°	547.7	570.2	598.3	624.6	648.5	671.6	689.9	702.0	704.1	704.3	693.6
22.5°	537.5	562.9	592.4	619.3	647.9	673.6	687.8	692.9	684.9	671.2	650.4
25°	518.7	548.1	582.4	613.1	644.4	668.6	673.5	664.4	636.2	606.6	569.2
27.5°	498.4	531.5	568.1	602.4	635.6	650.7	640.2	607.3	556.6	512.5	459.1
30°	483.5	520.6	556.6	594.9	625.7	632.1	608.1	559.6	500.5	434.1	380.8
32.5°	466.5	505.3	544.9	584.5	610.3	604.0	564.2	504.5	435.2	369.9	319.6
35°	442.2	482.2	525.0	564.7	581.1	553.8	494.2	416.6	345.7	284.8	250.1
37.5°	414.1	457.8	502.2	538.7	537.5	492.0	410.8	330.7	271.2	235.1	210.4
40°	394.1	438.4	486.3	517.1	504.0	444.6	356.7	281.2	237.6	208.8	190.8
42.5°	375.1	419.4	467.1	491.5	468.6	395.7	308.1	248.9	212.9	190.6	175.9
45°	342.5	389.3	433.5	447.0	406.1	325.7	249.1	206.2	182.3	165.7	155.6
47.5°	310.7	356.8	397.1	397.3	342.0	264.1	210.2	178.4	158.0	145.2	137.9
50°	291.2	335.0	368.8	363.6	300.8	235.0	188.0	160.6	143.7	133.7	126.0
52.5°	269.4	311.8	341.2	326.2	265.9	206.8	168.0	145.1	131.0	122.3	115.5
55°	237.6	275.3	296.0	273.2	217.0	172.0	142.0	123.9	113.4	106.1	100.2
57.5°	206.3	237.5	250.4	224.0	178.7	142.6	120.1	106.6	96.1	90.9	87.8
60°	186.7	213.3	222.4	193.2	155.3	124.8	106.4	93.8	86.1	82.7	79.6
62.5°	167.5	189.1	192.9	166.2	135.5	109.2	93.4	82.8	77.7	74.4	71.5
65°	138.9	154.5	152.8	131.3	107.2	86.7	75.2	68.7	64.8	60.2	55.1
67.5°	114.4	123.9	118.2	102.1	81.8	67.4	59.8	54.9	50.1	45.7	44.6
70°	98.8	104.3	98.3	83.5	67.1	56.5	50.5	44.6	41.7	40.8	38.9
72.5°	83.9	85.9	79.3	66.6	54.6	46.8	40.8	37.6	36.0	35.2	34.1
75°	63.0	61.6	55.9	46.0	37.9	32.6	30.8	29.6	28.5	27.7	27.1
77.5°	44.2	42.2	37.1	30.6	26.4	23.9	22.7	22.1	21.7	21.2	20.6
80°	33.3	31.8	26.8	21.8	20.1	18.8	18.2	17.4	17.4	17.0	16.4
82.5°	24.3	22.7	18.3	16.1	15.1	14.3	13.8	13.4	13.2	13.3	12.8
85°	12.8	10.3	9.1	8.7	8.1	7.7	7.9	7.5	7.5	7.5	7.3
87.5°	4.6	4.4	4.8	5.2	6.2	7.1	7.9	9.0	10.2	9.9	10.0
90°	3.8	6.6	9.4	12.1	16.0	21.0	26.1	31.2	36.3	35.8	35.3
92.5°	20.4	22.5	24.5	26.6	28.2	29.3	30.6	31.7	32.9	33.0	33.1
95°	56.2	58.5	60.7	63.0	64.5	64.9	65.4	65.8	66.3	66.3	66.3
97.5°	100.4	102.5	104.5	106.5	108.0	108.8	109.7	110.6	111.5	111.5	111.5
100°	133.4	135.3	137.1	138.9	140.2	140.9	141.5	142.2	142.9	142.9	142.9
102.5°	167.8	169.3	170.8	172.3	173.4	174.3	175.1	176.0	176.9	177.1	177.3
105°	223.4	224.1	224.8	225.4	226.0	226.5	226.9	227.4	227.8	228.4	228.8
107.5°	280.4	281.5	282.5	283.5	284.0	284.0	284.0	284.0	284.0	284.2	284.4
110°	317.3	318.7	320.0	321.5	322.2	322.2	322.2	322.2	322.2	322.2	322.2



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	357.0	358.5	359.8	361.2	361.9	361.6	361.4	361.2	361.1	360.5	360.0
115°	415.7	417.1	418.5	419.8	420.3	419.8	419.4	418.9	418.5	418.2	418.0
117.5°	474.6	476.4	478.2	480.1	480.4	479.1	477.8	476.5	475.2	474.7	474.1
120°	513.5	515.4	517.2	519.1	519.1	517.2	515.4	513.5	511.7	511.7	511.7
122.5°	549.6	551.7	553.9	556.2	556.6	555.4	554.0	552.8	551.4	550.9	550.4
125°	604.9	607.0	609.0	611.1	611.8	611.1	610.5	609.8	609.0	608.3	607.7
127.5°	659.5	662.2	664.8	667.4	668.3	667.4	666.6	665.8	664.9	664.1	663.3
130°	693.8	696.9	699.8	702.8	704.1	703.6	703.2	702.8	702.3	701.8	701.3
132.5°	731.5	733.9	736.3	738.8	740.0	740.1	740.2	740.3	740.4	739.4	738.3
135°	782.5	785.1	787.6	790.1	791.6	792.0	792.5	793.0	793.4	793.2	793.0
137.5°	835.7	837.8	839.8	841.9	843.2	843.8	844.5	845.0	845.6	845.4	845.3
140°	868.0	870.0	872.2	874.2	875.8	877.0	878.2	879.3	880.4	880.4	880.4
142.5°	901.2	903.2	905.3	907.3	908.7	909.5	910.3	911.2	912.0	912.1	912.3
145°	948.3	949.9	951.5	953.1	954.7	956.0	957.4	958.8	960.2	960.4	960.6
147.5°	991.1	993.0	995.0	996.9	998.4	999.3	1000.2	1001.1	1002.0	1002.6	1003.1
150°	1019.6	1020.9	1022.3	1023.7	1024.8	1025.8	1026.7	1027.6	1028.6	1029.2	1029.9
152.5°	1045.3	1046.6	1048.0	1049.4	1050.6	1051.8	1052.8	1054.0	1055.1	1056.0	1056.9
155°	1083.1	1083.8	1084.5	1085.2	1085.8	1086.5	1087.3	1088.0	1088.6	1089.8	1090.9
157.5°	1115.8	1116.2	1116.7	1117.2	1117.6	1118.0	1118.5	1118.8	1119.3	1120.9	1122.4
160°	1135.7	1136.1	1136.6	1137.1	1137.4	1137.6	1137.9	1138.1	1138.4	1139.7	1141.1
162.5°	1153.5	1153.6	1153.7	1153.9	1154.0	1154.2	1154.4	1154.7	1154.9	1156.5	1158.1
165°	1177.5	1177.2	1177.0	1176.8	1176.7	1176.7	1176.7	1176.7	1176.7	1178.3	1179.9
167.5°	1197.3	1196.6	1196.0	1195.2	1194.9	1194.8	1194.8	1194.7	1194.7	1196.3	1197.9
170°	1208.1	1207.4	1206.7	1206.0	1205.6	1205.3	1205.1	1204.9	1204.6	1206.2	1207.8
172.5°	1215.6	1214.9	1214.2	1213.4	1213.0	1212.8	1212.5	1212.3	1212.1	1213.7	1215.3
175°	1224.7	1224.0	1223.2	1222.6	1222.0	1221.6	1221.1	1220.7	1220.1	1221.8	1223.4
177.5°	1228.5	1228.0	1227.4	1226.9	1226.4	1226.0	1225.7	1225.3	1224.9	1226.0	1227.2
180°	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	582.9	582.9	582.9	582.9	582.9	582.9	582.9
2.5°	603.3	605.5	606.5	606.5	607.6	607.1	606.6
5°	638.0	641.9	642.7	646.3	649.0	648.2	648.5
7.5°	672.5	678.7	684.8	687.6	688.0	689.6	690.3
10°	693.8	698.8	708.3	706.9	714.0	718.1	711.4
12.5°	714.2	721.0	727.6	729.4	733.4	734.8	732.1
15°	732.6	736.3	736.6	735.7	736.9	735.8	732.0
17.5°	715.4	709.4	697.5	691.8	687.3	680.6	678.0
20°	686.9	669.4	649.2	641.1	631.6	613.0	617.4
22.5°	625.3	605.5	585.1	561.5	550.2	532.5	531.5
25°	529.5	495.3	457.5	431.2	415.8	398.2	390.5
27.5°	411.7	368.5	337.7	322.1	307.8	293.9	293.3
30°	334.2	301.8	277.9	264.6	255.8	249.9	251.2
32.5°	281.7	259.5	243.3	232.3	225.9	221.4	221.3
35°	230.3	215.1	204.7	200.1	195.5	192.3	192.4
37.5°	197.1	188.0	182.2	177.1	174.2	172.5	171.7
40°	180.0	172.5	168.1	165.1	162.6	160.4	160.0
42.5°	166.7	160.4	156.0	153.6	151.3	149.7	149.4
45°	147.8	142.8	138.8	136.1	135.1	133.7	133.7
47.5°	131.5	126.5	123.4	121.7	120.0	119.0	119.0
50°	120.6	116.6	113.9	112.8	111.4	110.8	110.6
52.5°	110.7	107.7	105.8	105.0	104.4	103.7	103.8
55°	97.2	95.6	94.8	94.2	93.2	91.9	92.7
57.5°	86.0	84.5	82.4	80.4	79.5	78.6	79.0
60°	78.0	75.2	72.3	70.1	69.5	67.7	67.7
62.5°	67.9	63.9	60.5	59.2	58.6	57.8	57.6
65°	52.3	50.6	49.8	49.0	48.6	48.6	48.2
67.5°	43.3	42.6	41.7	41.6	41.2	41.0	40.9
70°	38.3	37.5	37.1	36.8	36.5	36.6	36.0
72.5°	33.4	32.8	32.7	32.2	31.9	31.9	31.5
75°	26.3	26.3	26.1	25.9	25.5	25.3	25.5
77.5°	20.2	20.3	20.0	19.9	19.9	19.9	19.7
80°	16.2	16.4	16.2	16.0	15.8	16.0	15.8
82.5°	12.8	12.5	12.5	12.4	12.4	12.3	12.2
85°	7.3	7.5	7.3	7.1	7.1	7.1	7.3
87.5°	9.7	9.6	9.6	9.6	9.7	9.7	9.6
90°	34.9	34.4	34.3	34.5	34.8	35.0	35.2
92.5°	33.2	33.3	33.3	33.4	33.4	33.5	33.5
95°	66.3	66.3	66.1	65.6	65.2	64.6	64.2
97.5°	111.5	111.5	111.5	111.4	111.4	111.3	111.3
100°	142.9	142.9	142.9	142.6	142.4	142.1	141.9
102.5°	177.5	177.6	177.6	177.4	177.2	176.9	176.7
105°	229.3	229.7	230.0	230.0	230.0	230.0	230.0
107.5°	284.5	284.7	284.3	283.3	282.2	281.2	280.1
110°	322.2	322.2	321.8	321.1	320.4	319.7	319.1



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	359.4	358.9	358.4	357.8	357.3	356.9	356.3
115°	417.8	417.5	417.1	416.4	415.7	415.0	414.3
117.5°	473.6	473.1	472.4	471.7	471.0	470.3	469.7
120°	511.7	511.7	511.3	510.7	510.0	509.3	508.5
122.5°	549.8	549.2	548.8	548.2	547.7	547.2	546.7
125°	607.0	606.3	605.8	605.6	605.4	605.1	604.9
127.5°	662.5	661.6	660.8	660.1	659.4	658.7	657.9
130°	700.9	700.4	699.7	698.8	697.9	697.0	696.1
132.5°	737.4	736.4	735.5	734.8	734.0	733.3	732.5
135°	792.7	792.5	792.0	791.3	790.7	790.0	789.3
137.5°	845.1	844.9	844.4	843.4	842.5	841.6	840.6
140°	880.4	880.4	879.9	879.0	878.2	877.2	876.3
142.5°	912.5	912.7	912.3	911.3	910.4	909.5	908.6
145°	960.9	961.1	960.7	959.8	958.9	958.0	957.1
147.5°	1003.5	1004.1	1003.9	1003.0	1002.1	1001.2	1000.4
150°	1030.6	1031.4	1031.4	1030.6	1029.9	1029.2	1028.6
152.5°	1057.7	1058.5	1058.5	1057.7	1056.9	1056.0	1055.1
155°	1092.1	1093.2	1093.4	1092.8	1092.1	1091.4	1090.7
157.5°	1124.0	1125.5	1125.8	1124.6	1123.6	1122.5	1121.3
160°	1142.5	1143.9	1144.1	1143.2	1142.3	1141.3	1140.4
162.5°	1159.6	1161.2	1161.4	1160.3	1159.2	1158.1	1157.0
165°	1181.5	1183.1	1183.3	1182.2	1181.1	1179.9	1178.8
167.5°	1199.5	1201.1	1201.3	1200.2	1198.9	1197.7	1196.6
170°	1209.4	1211.0	1211.2	1209.8	1208.4	1207.0	1205.7
172.5°	1216.9	1218.5	1218.6	1217.3	1215.8	1214.5	1213.1
175°	1225.0	1226.6	1226.7	1225.4	1224.0	1222.6	1221.2
177.5°	1228.2	1229.3	1229.3	1228.2	1227.2	1226.0	1224.9
180°	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4

(END OF REPORT)