

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: P331616-930

Luminaire Tested: **SA2XXRDIP-C290D330U930-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331616-930
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-C290D330U930-4F0-1E-UDD-A1
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 330 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

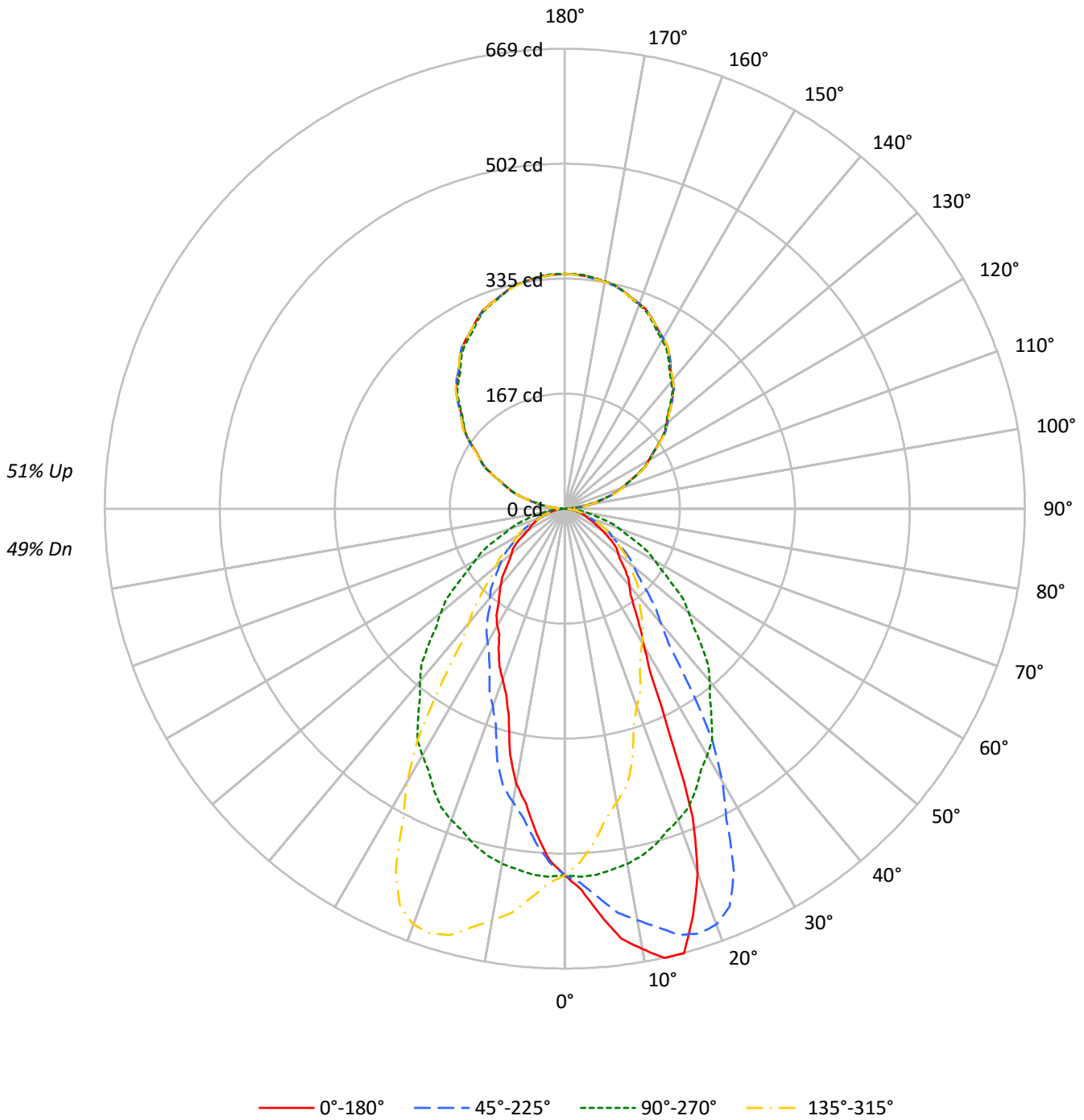
Lumens per Lamp: N/A
Luminaire Lumens: 1876.9 lumens
Efficiency: N/A
Efficacy: 92.5 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 20.3
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	55	55	55	49						
1	98	94	91	87	91	87	84	81	74	72	70	61	60	59	50	49	48	43						
2	90	83	78	73	83	77	72	68	66	62	59	55	52	50	45	43	42	37						
3	83	74	67	62	76	69	63	58	59	54	50	49	46	43	41	38	37	33						
4	76	66	59	53	70	61	55	50	53	48	44	45	41	38	37	34	32	29						
5	70	59	52	46	65	55	48	43	48	42	38	40	37	34	34	31	29	26						
6	65	54	46	40	60	50	43	38	43	38	34	37	33	30	31	28	26	23						
7	60	49	41	36	56	46	39	34	40	34	30	34	30	27	29	26	23	21						
8	56	44	37	32	52	42	35	30	36	31	27	31	27	24	26	23	21	19						
9	53	41	34	29	49	38	32	27	33	28	25	29	25	22	25	22	19	17						
10	49	38	31	26	46	35	29	25	31	26	23	27	23	20	23	20	18	16						

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.5	2.7
10°-20°	140.8	7.5
20°-30°	181.4	9.7
30°-40°	172.4	9.2
40°-50°	147.7	7.9
50°-60°	112.5	6.0
60°-70°	71.1	3.8
70°-80°	35.5	1.9
80°-90°	10.6	0.6
90°-100°	21.6	1.2
100°-110°	67.2	3.6
110°-120°	114.8	6.1
120°-130°	151.0	8.0
130°-140°	169.5	9.0
140°-150°	166.2	8.9
150°-160°	139.4	7.4
160°-170°	92.4	4.9
170°-180°	32.3	1.7
0°-30°	372.7	19.9
0°-40°	545.1	29.0
0°-60°	805.3	42.9
0°-90°	922.5	49.1
90°-120°	203.6	10.8
90°-150°	690.3	36.8
90°-180°	954.0	50.8
0°-180°	1876.9	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	7
90°	10	0	10	0	10	5
95°	18	15	18	15	18	20
105°	64	62	64	62	64	67
115°	115	115	115	115	115	114
125°	168	168	168	168	168	150
135°	220	217	220	217	220	169
145°	266	263	266	263	266	166
155°	303	301	303	301	303	140
165°	328	328	328	328	328	92
175°	340	341	340	341	340	32
180°	341	341	341	341	341	



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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°	4.3	4.5	4.5	4.4	4.4	4.4	4.5	4.6	4.5	4.6	4.2
90°	9.8	9.7	9.7	9.6	9.5	9.5	9.7	9.9	9.9	10.1	8.6
92.5°	9.3	9.3	9.3	9.3	9.3	9.3	9.2	9.2	9.2	9.1	8.8
95°	17.9	18.0	18.1	18.3	18.3	18.4	18.4	18.4	18.4	18.4	18.3
97.5°	30.9	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	30.7
100°	39.5	39.5	39.6	39.6	39.7	39.8	39.8	39.8	39.8	39.8	39.5
102.5°	49.2	49.2	49.2	49.3	49.4	49.4	49.3	49.3	49.2	49.2	48.9
105°	63.9	63.9	63.9	63.9	63.9	63.9	63.8	63.6	63.5	63.3	63.3
107.5°	77.9	78.2	78.5	78.8	79.1	79.2	79.2	79.1	79.0	79.0	79.0
110°	88.7	88.9	89.1	89.3	89.5	89.6	89.6	89.6	89.6	89.6	89.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	99.1	99.2	99.4	99.5	99.6	99.8	100.0	100.1	100.3	100.4	100.4
115°	115.2	115.4	115.6	115.8	116.0	116.1	116.2	116.3	116.3	116.3	116.5
117.5°	130.6	130.8	131.0	131.2	131.3	131.5	131.7	131.8	132.0	132.2	132.5
120°	141.5	141.6	141.8	142.0	142.2	142.3	142.3	142.3	142.3	142.3	142.8
122.5°	152.1	152.1	152.3	152.5	152.6	152.7	152.9	153.0	153.2	153.4	153.7
125°	168.2	168.3	168.4	168.4	168.4	168.6	168.8	169.0	169.2	169.3	169.6
127.5°	183.0	183.2	183.4	183.6	183.8	184.0	184.3	184.5	184.7	184.9	185.2
130°	193.6	193.8	194.0	194.4	194.6	194.8	194.9	195.0	195.2	195.3	195.4
132.5°	203.7	203.9	204.2	204.3	204.6	204.8	205.0	205.3	205.6	205.9	205.9
135°	219.5	219.7	219.9	220.0	220.3	220.4	220.5	220.5	220.5	220.6	220.5
137.5°	233.7	234.1	234.3	234.6	234.8	235.0	235.0	235.1	235.1	235.1	235.0
140°	243.7	243.9	244.2	244.4	244.7	244.8	244.8	244.8	244.8	244.8	244.5
142.5°	252.7	252.9	253.2	253.5	253.7	253.8	253.7	253.7	253.6	253.6	253.4
145°	266.1	266.4	266.7	266.9	267.2	267.3	267.2	267.2	267.1	267.0	266.6
147.5°	278.2	278.4	278.7	278.9	279.2	279.2	279.1	278.9	278.8	278.7	278.4
150°	286.0	286.3	286.4	286.6	286.8	286.8	286.6	286.4	286.3	286.0	285.8
152.5°	293.4	293.7	293.9	294.2	294.4	294.4	294.2	293.9	293.7	293.4	293.1
155°	303.3	303.5	303.7	303.9	304.1	304.0	303.7	303.4	303.0	302.7	302.6
157.5°	311.9	312.2	312.4	312.7	313.1	313.0	312.6	312.1	311.7	311.3	311.1
160°	317.2	317.4	317.6	317.9	318.1	318.1	317.7	317.3	316.9	316.6	316.5
162.5°	321.7	322.0	322.4	322.7	322.9	322.9	322.5	322.0	321.6	321.1	321.1
165°	327.8	328.1	328.4	328.7	329.1	329.0	328.6	328.1	327.7	327.2	327.2
167.5°	332.7	333.0	333.4	333.8	334.1	334.0	333.5	333.1	332.6	332.2	332.2
170°	335.3	335.7	336.1	336.5	336.8	336.8	336.3	335.9	335.4	335.0	335.1
172.5°	337.4	337.8	338.1	338.5	338.9	338.8	338.4	337.9	337.5	337.0	337.1
175°	339.6	340.0	340.4	340.8	341.1	341.1	340.6	340.2	339.7	339.3	339.4
177.5°	340.6	341.0	341.3	341.5	341.9	341.9	341.5	341.3	341.0	340.6	340.7
180°	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4



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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°	4.0	3.8	3.6	3.2	3.2	3.2	3.8	4.3	3.9	3.6	3.5
90°	7.3	5.9	4.5	3.3	2.6	1.8	1.1	0.3	1.1	1.8	2.6
92.5°	8.5	8.2	7.8	7.4	6.8	6.3	5.7	5.1	5.7	6.3	6.8
95°	18.2	18.0	17.9	17.5	16.9	16.2	15.7	15.0	15.7	16.2	16.9
97.5°	30.5	30.2	30.0	29.6	29.0	28.5	28.0	27.4	28.0	28.5	29.0
100°	39.4	39.1	39.0	38.6	38.2	37.6	37.1	36.6	37.1	37.6	38.2
102.5°	48.7	48.4	48.3	47.9	47.5	47.0	46.6	46.2	46.6	47.0	47.5
105°	63.1	63.0	62.9	62.7	62.5	62.3	62.1	62.0	62.1	62.3	62.5
107.5°	79.0	79.0	79.0	78.8	78.6	78.3	78.0	77.7	78.0	78.3	78.6
110°	89.6	89.6	89.6	89.4	89.0	88.6	88.2	87.9	88.2	88.6	89.0



TEST NUMBER: P331616-930
 CATALOG NUMBER: SA2XXRDIP-C290D330U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	100.5	100.5	100.6	100.4	100.0	99.7	99.3	98.9	99.3	99.7	100.0
115°	116.6	116.8	116.9	116.8	116.3	116.0	115.6	115.2	115.6	116.0	116.3
117.5°	132.9	133.2	133.6	133.5	133.0	132.5	132.0	131.4	132.0	132.5	133.0
120°	143.3	143.8	144.3	144.3	143.8	143.3	142.8	142.3	142.8	143.3	143.8
122.5°	154.1	154.4	154.8	154.7	154.0	153.4	152.8	152.2	152.8	153.4	154.0
125°	169.7	169.9	170.2	169.9	169.3	168.8	168.2	167.6	168.2	168.8	169.3
127.5°	185.4	185.6	185.8	185.6	184.8	184.2	183.4	182.7	183.4	184.2	184.8
130°	195.6	195.7	195.8	195.4	194.6	193.8	193.0	192.2	193.0	193.8	194.6
132.5°	205.9	205.8	205.8	205.5	204.7	204.1	203.4	202.8	203.4	204.1	204.7
135°	220.4	220.3	220.1	219.7	219.0	218.3	217.6	216.9	217.6	218.3	219.0
137.5°	234.8	234.6	234.5	234.2	233.6	232.9	232.4	231.8	232.4	232.9	233.6
140°	244.2	243.9	243.5	243.1	242.6	242.0	241.4	240.8	241.4	242.0	242.6
142.5°	253.2	252.9	252.7	252.3	251.8	251.2	250.6	250.1	250.6	251.2	251.8
145°	266.3	265.9	265.5	265.1	264.6	264.2	263.7	263.3	263.7	264.2	264.6
147.5°	278.2	277.9	277.6	277.2	276.7	276.1	275.7	275.1	275.7	276.1	276.7
150°	285.5	285.3	285.0	284.7	284.3	283.9	283.6	283.2	283.6	283.9	284.3
152.5°	292.8	292.4	292.2	291.8	291.5	291.1	290.7	290.3	290.7	291.1	291.5
155°	302.3	302.1	302.0	301.7	301.6	301.4	301.2	301.0	301.2	301.4	301.6
157.5°	311.0	311.0	310.8	310.7	310.5	310.4	310.3	310.1	310.3	310.4	310.5
160°	316.4	316.3	316.3	316.2	316.1	315.9	315.8	315.7	315.8	315.9	316.1
162.5°	321.1	321.0	320.9	320.9	320.8	320.8	320.8	320.7	320.8	320.8	320.8
165°	327.2	327.2	327.2	327.3	327.3	327.3	327.4	327.5	327.4	327.3	327.3
167.5°	332.2	332.2	332.3	332.4	332.6	332.8	333.0	333.1	333.0	332.8	332.6
170°	335.1	335.2	335.3	335.4	335.6	335.7	336.0	336.1	336.0	335.7	335.6
172.5°	337.2	337.3	337.3	337.5	337.6	337.9	338.0	338.2	338.0	337.9	337.6
175°	339.6	339.7	339.8	340.0	340.1	340.4	340.6	340.8	340.6	340.4	340.1
177.5°	340.9	341.0	341.0	341.2	341.4	341.4	341.6	341.8	341.6	341.4	341.4
180°	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4



TEST NUMBER: P331616-930

CATALOG NUMBER: SA2XXRDIP-C290D330U930-4F0-1E-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°	3.5	3.6	3.5	3.8	4.1	4.2	4.2	4.1	4.0	4.0	3.8
90°	3.3	4.5	5.9	7.3	8.6	10.1	9.9	9.9	9.7	9.5	9.5
92.5°	7.4	7.8	8.2	8.5	8.8	9.1	9.2	9.2	9.2	9.3	9.3
95°	17.5	17.9	18.0	18.2	18.3	18.4	18.4	18.4	18.4	18.4	18.3
97.5°	29.6	30.0	30.2	30.5	30.7	31.0	31.0	31.0	31.0	31.0	31.0
100°	38.6	39.0	39.1	39.4	39.5	39.8	39.8	39.8	39.8	39.8	39.7
102.5°	47.9	48.3	48.4	48.7	48.9	49.2	49.2	49.3	49.3	49.4	49.4
105°	62.7	62.9	63.0	63.1	63.3	63.3	63.5	63.6	63.8	63.9	63.9
107.5°	78.8	79.0	79.0	79.0	79.0	79.0	79.0	79.1	79.2	79.2	79.1
110°	89.4	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.5



TEST NUMBER: P331616-930
 CATALOG NUMBER: SA2XXRDIP-C290D330U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	100.4	100.6	100.5	100.5	100.4	100.4	100.3	100.1	100.0	99.8	99.6
115°	116.8	116.9	116.8	116.6	116.5	116.3	116.3	116.3	116.2	116.1	116.0
117.5°	133.5	133.6	133.2	132.9	132.5	132.2	132.0	131.8	131.7	131.5	131.3
120°	144.3	144.3	143.8	143.3	142.8	142.3	142.3	142.3	142.3	142.3	142.2
122.5°	154.7	154.8	154.4	154.1	153.7	153.4	153.2	153.0	152.9	152.7	152.6
125°	169.9	170.2	169.9	169.7	169.6	169.3	169.2	169.0	168.8	168.6	168.4
127.5°	185.6	185.8	185.6	185.4	185.2	184.9	184.7	184.5	184.3	184.0	183.8
130°	195.4	195.8	195.7	195.6	195.4	195.3	195.2	195.0	194.9	194.8	194.6
132.5°	205.5	205.8	205.8	205.9	205.9	205.9	205.6	205.3	205.0	204.8	204.6
135°	219.7	220.1	220.3	220.4	220.5	220.6	220.5	220.5	220.5	220.4	220.3
137.5°	234.2	234.5	234.6	234.8	235.0	235.1	235.1	235.1	235.0	235.0	234.8
140°	243.1	243.5	243.9	244.2	244.5	244.8	244.8	244.8	244.8	244.8	244.7
142.5°	252.3	252.7	252.9	253.2	253.4	253.6	253.6	253.7	253.7	253.8	253.7
145°	265.1	265.5	265.9	266.3	266.6	267.0	267.1	267.2	267.2	267.3	267.2
147.5°	277.2	277.6	277.9	278.2	278.4	278.7	278.8	278.9	279.1	279.2	279.2
150°	284.7	285.0	285.3	285.5	285.8	286.0	286.3	286.4	286.6	286.8	286.8
152.5°	291.8	292.2	292.4	292.8	293.1	293.4	293.7	293.9	294.2	294.4	294.4
155°	301.7	302.0	302.1	302.3	302.6	302.7	303.0	303.4	303.7	304.0	304.1
157.5°	310.7	310.8	311.0	311.0	311.1	311.3	311.7	312.1	312.6	313.0	313.1
160°	316.2	316.3	316.3	316.4	316.5	316.6	316.9	317.3	317.7	318.1	318.1
162.5°	320.9	320.9	321.0	321.1	321.1	321.1	321.6	322.0	322.5	322.9	322.9
165°	327.3	327.2	327.2	327.2	327.2	327.2	327.7	328.1	328.6	329.0	329.1
167.5°	332.4	332.3	332.2	332.2	332.2	332.2	332.6	333.1	333.5	334.0	334.1
170°	335.4	335.3	335.2	335.1	335.1	335.0	335.4	335.9	336.3	336.8	336.8
172.5°	337.5	337.3	337.3	337.2	337.1	337.0	337.5	337.9	338.4	338.8	338.9
175°	340.0	339.8	339.7	339.6	339.4	339.3	339.7	340.2	340.6	341.1	341.1
177.5°	341.2	341.0	341.0	340.9	340.7	340.6	341.0	341.3	341.5	341.9	341.9
180°	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4



TEST NUMBER: P331616-930

CATALOG NUMBER: SA2XXRDIP-C290D330U930-4F0-1E-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°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	4.0	4.0	4.1
90°	9.6	9.7	9.7	9.8	9.7	9.7	9.6	9.5	9.5	9.7	9.9
92.5°	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.2	9.2
95°	18.3	18.1	18.0	17.9	18.0	18.1	18.3	18.3	18.4	18.4	18.4
97.5°	31.0	31.0	31.0	30.9	31.0	31.0	31.0	31.0	31.0	31.0	31.0
100°	39.6	39.6	39.5	39.5	39.5	39.6	39.6	39.7	39.8	39.8	39.8
102.5°	49.3	49.2	49.2	49.2	49.2	49.2	49.3	49.4	49.4	49.3	49.3
105°	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.8	63.6
107.5°	78.8	78.5	78.2	77.9	78.2	78.5	78.8	79.1	79.2	79.2	79.1
110°	89.3	89.1	88.9	88.7	88.9	89.1	89.3	89.5	89.6	89.6	89.6



TEST NUMBER: P331616-930

CATALOG NUMBER: SA2XXRDIP-C290D330U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	99.5	99.4	99.2	99.1	99.2	99.4	99.5	99.6	99.8	100.0	100.1
115°	115.8	115.6	115.4	115.2	115.4	115.6	115.8	116.0	116.1	116.2	116.3
117.5°	131.2	131.0	130.8	130.6	130.8	131.0	131.2	131.3	131.5	131.7	131.8
120°	142.0	141.8	141.6	141.5	141.6	141.8	142.0	142.2	142.3	142.3	142.3
122.5°	152.5	152.3	152.1	152.1	152.1	152.3	152.5	152.6	152.7	152.9	153.0
125°	168.4	168.4	168.3	168.2	168.3	168.4	168.4	168.4	168.6	168.8	169.0
127.5°	183.6	183.4	183.2	183.0	183.2	183.4	183.6	183.8	184.0	184.3	184.5
130°	194.4	194.0	193.8	193.6	193.8	194.0	194.4	194.6	194.8	194.9	195.0
132.5°	204.3	204.2	203.9	203.7	203.9	204.2	204.3	204.6	204.8	205.0	205.3
135°	220.0	219.9	219.7	219.5	219.7	219.9	220.0	220.3	220.4	220.5	220.5
137.5°	234.6	234.3	234.1	233.7	234.1	234.3	234.6	234.8	235.0	235.0	235.1
140°	244.4	244.2	243.9	243.7	243.9	244.2	244.4	244.7	244.8	244.8	244.8
142.5°	253.5	253.2	252.9	252.7	252.9	253.2	253.5	253.7	253.8	253.7	253.7
145°	266.9	266.7	266.4	266.1	266.4	266.7	266.9	267.2	267.3	267.2	267.2
147.5°	278.9	278.7	278.4	278.2	278.4	278.7	278.9	279.2	279.2	279.1	278.9
150°	286.6	286.4	286.3	286.0	286.3	286.4	286.6	286.8	286.8	286.6	286.4
152.5°	294.2	293.9	293.7	293.4	293.7	293.9	294.2	294.4	294.4	294.2	293.9
155°	303.9	303.7	303.5	303.3	303.5	303.7	303.9	304.1	304.0	303.7	303.4
157.5°	312.7	312.4	312.2	311.9	312.2	312.4	312.7	313.1	313.0	312.6	312.1
160°	317.9	317.6	317.4	317.2	317.4	317.6	317.9	318.1	318.1	317.7	317.3
162.5°	322.7	322.4	322.0	321.7	322.0	322.4	322.7	322.9	322.9	322.5	322.0
165°	328.7	328.4	328.1	327.8	328.1	328.4	328.7	329.1	329.0	328.6	328.1
167.5°	333.8	333.4	333.0	332.7	333.0	333.4	333.8	334.1	334.0	333.5	333.1
170°	336.5	336.1	335.7	335.3	335.7	336.1	336.5	336.8	336.8	336.3	335.9
172.5°	338.5	338.1	337.8	337.4	337.8	338.1	338.5	338.9	338.8	338.4	337.9
175°	340.8	340.4	340.0	339.6	340.0	340.4	340.8	341.1	341.1	340.6	340.2
177.5°	341.5	341.3	341.0	340.6	341.0	341.3	341.5	341.9	341.9	341.5	341.3
180°	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4



TEST NUMBER: P331616-930
 CATALOG NUMBER: SA2XXRDIP-C290D330U930-4F0-1E-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°	4.2	4.2	4.1	3.8	3.5	3.6	3.5	3.5	3.6	3.9	4.3
90°	9.9	10.1	8.6	7.3	5.9	4.5	3.3	2.6	1.8	1.1	0.3
92.5°	9.2	9.1	8.8	8.5	8.2	7.8	7.4	6.8	6.3	5.7	5.1
95°	18.4	18.4	18.3	18.2	18.0	17.9	17.5	16.9	16.2	15.7	15.0
97.5°	31.0	31.0	30.7	30.5	30.2	30.0	29.6	29.0	28.5	28.0	27.4
100°	39.8	39.8	39.5	39.4	39.1	39.0	38.6	38.2	37.6	37.1	36.6
102.5°	49.2	49.2	48.9	48.7	48.4	48.3	47.9	47.5	47.0	46.6	46.2
105°	63.5	63.3	63.3	63.1	63.0	62.9	62.7	62.5	62.3	62.1	62.0
107.5°	79.0	79.0	79.0	79.0	79.0	79.0	78.8	78.6	78.3	78.0	77.7
110°	89.6	89.6	89.6	89.6	89.6	89.6	89.4	89.0	88.6	88.2	87.9



TEST NUMBER: P331616-930
 CATALOG NUMBER: SA2XXRDIP-C290D330U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	100.3	100.4	100.4	100.5	100.5	100.6	100.4	100.0	99.7	99.3	98.9
115°	116.3	116.3	116.5	116.6	116.8	116.9	116.8	116.3	116.0	115.6	115.2
117.5°	132.0	132.2	132.5	132.9	133.2	133.6	133.5	133.0	132.5	132.0	131.4
120°	142.3	142.3	142.8	143.3	143.8	144.3	144.3	143.8	143.3	142.8	142.3
122.5°	153.2	153.4	153.7	154.1	154.4	154.8	154.7	154.0	153.4	152.8	152.2
125°	169.2	169.3	169.6	169.7	169.9	170.2	169.9	169.3	168.8	168.2	167.6
127.5°	184.7	184.9	185.2	185.4	185.6	185.8	185.6	184.8	184.2	183.4	182.7
130°	195.2	195.3	195.4	195.6	195.7	195.8	195.4	194.6	193.8	193.0	192.2
132.5°	205.6	205.9	205.9	205.9	205.8	205.8	205.5	204.7	204.1	203.4	202.8
135°	220.5	220.6	220.5	220.4	220.3	220.1	219.7	219.0	218.3	217.6	216.9
137.5°	235.1	235.1	235.0	234.8	234.6	234.5	234.2	233.6	232.9	232.4	231.8
140°	244.8	244.8	244.5	244.2	243.9	243.5	243.1	242.6	242.0	241.4	240.8
142.5°	253.6	253.6	253.4	253.2	252.9	252.7	252.3	251.8	251.2	250.6	250.1
145°	267.1	267.0	266.6	266.3	265.9	265.5	265.1	264.6	264.2	263.7	263.3
147.5°	278.8	278.7	278.4	278.2	277.9	277.6	277.2	276.7	276.1	275.7	275.1
150°	286.3	286.0	285.8	285.5	285.3	285.0	284.7	284.3	283.9	283.6	283.2
152.5°	293.7	293.4	293.1	292.8	292.4	292.2	291.8	291.5	291.1	290.7	290.3
155°	303.0	302.7	302.6	302.3	302.1	302.0	301.7	301.6	301.4	301.2	301.0
157.5°	311.7	311.3	311.1	311.0	311.0	310.8	310.7	310.5	310.4	310.3	310.1
160°	316.9	316.6	316.5	316.4	316.3	316.3	316.2	316.1	315.9	315.8	315.7
162.5°	321.6	321.1	321.1	321.1	321.0	320.9	320.9	320.8	320.8	320.8	320.7
165°	327.7	327.2	327.2	327.2	327.2	327.2	327.3	327.3	327.3	327.4	327.5
167.5°	332.6	332.2	332.2	332.2	332.2	332.3	332.4	332.6	332.8	333.0	333.1
170°	335.4	335.0	335.1	335.1	335.2	335.3	335.4	335.6	335.7	336.0	336.1
172.5°	337.5	337.0	337.1	337.2	337.3	337.3	337.5	337.6	337.9	338.0	338.2
175°	339.7	339.3	339.4	339.6	339.7	339.8	340.0	340.1	340.4	340.6	340.8
177.5°	341.0	340.6	340.7	340.9	341.0	341.0	341.2	341.4	341.4	341.6	341.8
180°	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4



TEST NUMBER: P331616-930

CATALOG NUMBER: SA2XXRDIP-C290D330U930-4F0-1E-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°	3.8	3.2	3.2	3.2	3.6	3.8	4.0	4.2	4.6	4.5	4.6
90°	1.1	1.8	2.6	3.3	4.5	5.9	7.3	8.6	10.1	9.9	9.9
92.5°	5.7	6.3	6.8	7.4	7.8	8.2	8.5	8.8	9.1	9.2	9.2
95°	15.7	16.2	16.9	17.5	17.9	18.0	18.2	18.3	18.4	18.4	18.4
97.5°	28.0	28.5	29.0	29.6	30.0	30.2	30.5	30.7	31.0	31.0	31.0
100°	37.1	37.6	38.2	38.6	39.0	39.1	39.4	39.5	39.8	39.8	39.8
102.5°	46.6	47.0	47.5	47.9	48.3	48.4	48.7	48.9	49.2	49.2	49.3
105°	62.1	62.3	62.5	62.7	62.9	63.0	63.1	63.3	63.3	63.5	63.6
107.5°	78.0	78.3	78.6	78.8	79.0	79.0	79.0	79.0	79.0	79.0	79.1
110°	88.2	88.6	89.0	89.4	89.6	89.6	89.6	89.6	89.6	89.6	89.6



TEST NUMBER: P331616-930

CATALOG NUMBER: SA2XXRDIP-C290D330U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	99.3	99.7	100.0	100.4	100.6	100.5	100.5	100.4	100.4	100.3	100.1
115°	115.6	116.0	116.3	116.8	116.9	116.8	116.6	116.5	116.3	116.3	116.3
117.5°	132.0	132.5	133.0	133.5	133.6	133.2	132.9	132.5	132.2	132.0	131.8
120°	142.8	143.3	143.8	144.3	144.3	143.8	143.3	142.8	142.3	142.3	142.3
122.5°	152.8	153.4	154.0	154.7	154.8	154.4	154.1	153.7	153.4	153.2	153.0
125°	168.2	168.8	169.3	169.9	170.2	169.9	169.7	169.6	169.3	169.2	169.0
127.5°	183.4	184.2	184.8	185.6	185.8	185.6	185.4	185.2	184.9	184.7	184.5
130°	193.0	193.8	194.6	195.4	195.8	195.7	195.6	195.4	195.3	195.2	195.0
132.5°	203.4	204.1	204.7	205.5	205.8	205.8	205.9	205.9	205.9	205.6	205.3
135°	217.6	218.3	219.0	219.7	220.1	220.3	220.4	220.5	220.6	220.5	220.5
137.5°	232.4	232.9	233.6	234.2	234.5	234.6	234.8	235.0	235.1	235.1	235.1
140°	241.4	242.0	242.6	243.1	243.5	243.9	244.2	244.5	244.8	244.8	244.8
142.5°	250.6	251.2	251.8	252.3	252.7	252.9	253.2	253.4	253.6	253.6	253.7
145°	263.7	264.2	264.6	265.1	265.5	265.9	266.3	266.6	267.0	267.1	267.2
147.5°	275.7	276.1	276.7	277.2	277.6	277.9	278.2	278.4	278.7	278.8	278.9
150°	283.6	283.9	284.3	284.7	285.0	285.3	285.5	285.8	286.0	286.3	286.4
152.5°	290.7	291.1	291.5	291.8	292.2	292.4	292.8	293.1	293.4	293.7	293.9
155°	301.2	301.4	301.6	301.7	302.0	302.1	302.3	302.6	302.7	303.0	303.4
157.5°	310.3	310.4	310.5	310.7	310.8	311.0	311.0	311.1	311.3	311.7	312.1
160°	315.8	315.9	316.1	316.2	316.3	316.3	316.4	316.5	316.6	316.9	317.3
162.5°	320.8	320.8	320.8	320.9	320.9	321.0	321.1	321.1	321.1	321.6	322.0
165°	327.4	327.3	327.3	327.3	327.2	327.2	327.2	327.2	327.2	327.7	328.1
167.5°	333.0	332.8	332.6	332.4	332.3	332.2	332.2	332.2	332.2	332.6	333.1
170°	336.0	335.7	335.6	335.4	335.3	335.2	335.1	335.1	335.0	335.4	335.9
172.5°	338.0	337.9	337.6	337.5	337.3	337.3	337.2	337.1	337.0	337.5	337.9
175°	340.6	340.4	340.1	340.0	339.8	339.7	339.6	339.4	339.3	339.7	340.2
177.5°	341.6	341.4	341.4	341.2	341.0	341.0	340.9	340.7	340.6	341.0	341.3
180°	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4	341.4



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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°	4.5	4.4	4.4	4.4	4.5	4.5	4.3
90°	9.7	9.5	9.5	9.6	9.7	9.7	9.8
92.5°	9.2	9.3	9.3	9.3	9.3	9.3	9.3
95°	18.4	18.4	18.3	18.3	18.1	18.0	17.9
97.5°	31.0	31.0	31.0	31.0	31.0	31.0	30.9
100°	39.8	39.8	39.7	39.6	39.6	39.5	39.5
102.5°	49.3	49.4	49.4	49.3	49.2	49.2	49.2
105°	63.8	63.9	63.9	63.9	63.9	63.9	63.9
107.5°	79.2	79.2	79.1	78.8	78.5	78.2	77.9
110°	89.6	89.6	89.5	89.3	89.1	88.9	88.7



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	100.0	99.8	99.6	99.5	99.4	99.2	99.1
115°	116.2	116.1	116.0	115.8	115.6	115.4	115.2
117.5°	131.7	131.5	131.3	131.2	131.0	130.8	130.6
120°	142.3	142.3	142.2	142.0	141.8	141.6	141.5
122.5°	152.9	152.7	152.6	152.5	152.3	152.1	152.1
125°	168.8	168.6	168.4	168.4	168.4	168.3	168.2
127.5°	184.3	184.0	183.8	183.6	183.4	183.2	183.0
130°	194.9	194.8	194.6	194.4	194.0	193.8	193.6
132.5°	205.0	204.8	204.6	204.3	204.2	203.9	203.7
135°	220.5	220.4	220.3	220.0	219.9	219.7	219.5
137.5°	235.0	235.0	234.8	234.6	234.3	234.1	233.7
140°	244.8	244.8	244.7	244.4	244.2	243.9	243.7
142.5°	253.7	253.8	253.7	253.5	253.2	252.9	252.7
145°	267.2	267.3	267.2	266.9	266.7	266.4	266.1
147.5°	279.1	279.2	279.2	278.9	278.7	278.4	278.2
150°	286.6	286.8	286.8	286.6	286.4	286.3	286.0
152.5°	294.2	294.4	294.4	294.2	293.9	293.7	293.4
155°	303.7	304.0	304.1	303.9	303.7	303.5	303.3
157.5°	312.6	313.0	313.1	312.7	312.4	312.2	311.9
160°	317.7	318.1	318.1	317.9	317.6	317.4	317.2
162.5°	322.5	322.9	322.9	322.7	322.4	322.0	321.7
165°	328.6	329.0	329.1	328.7	328.4	328.1	327.8
167.5°	333.5	334.0	334.1	333.8	333.4	333.0	332.7
170°	336.3	336.8	336.8	336.5	336.1	335.7	335.3
172.5°	338.4	338.8	338.9	338.5	338.1	337.8	337.4
175°	340.6	341.1	341.1	340.8	340.4	340.0	339.6
177.5°	341.5	341.9	341.9	341.5	341.3	341.0	340.6
180°	341.4	341.4	341.4	341.4	341.4	341.4	341.4

(END OF REPORT)