

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: P331627-840

Luminaire Tested: **SA2XXRDIP-C290D725U840-4F0-1E-UDD-A**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331627-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA2XXRDIP-C290D725U840-4F0-1E-UDD-A
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 725 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

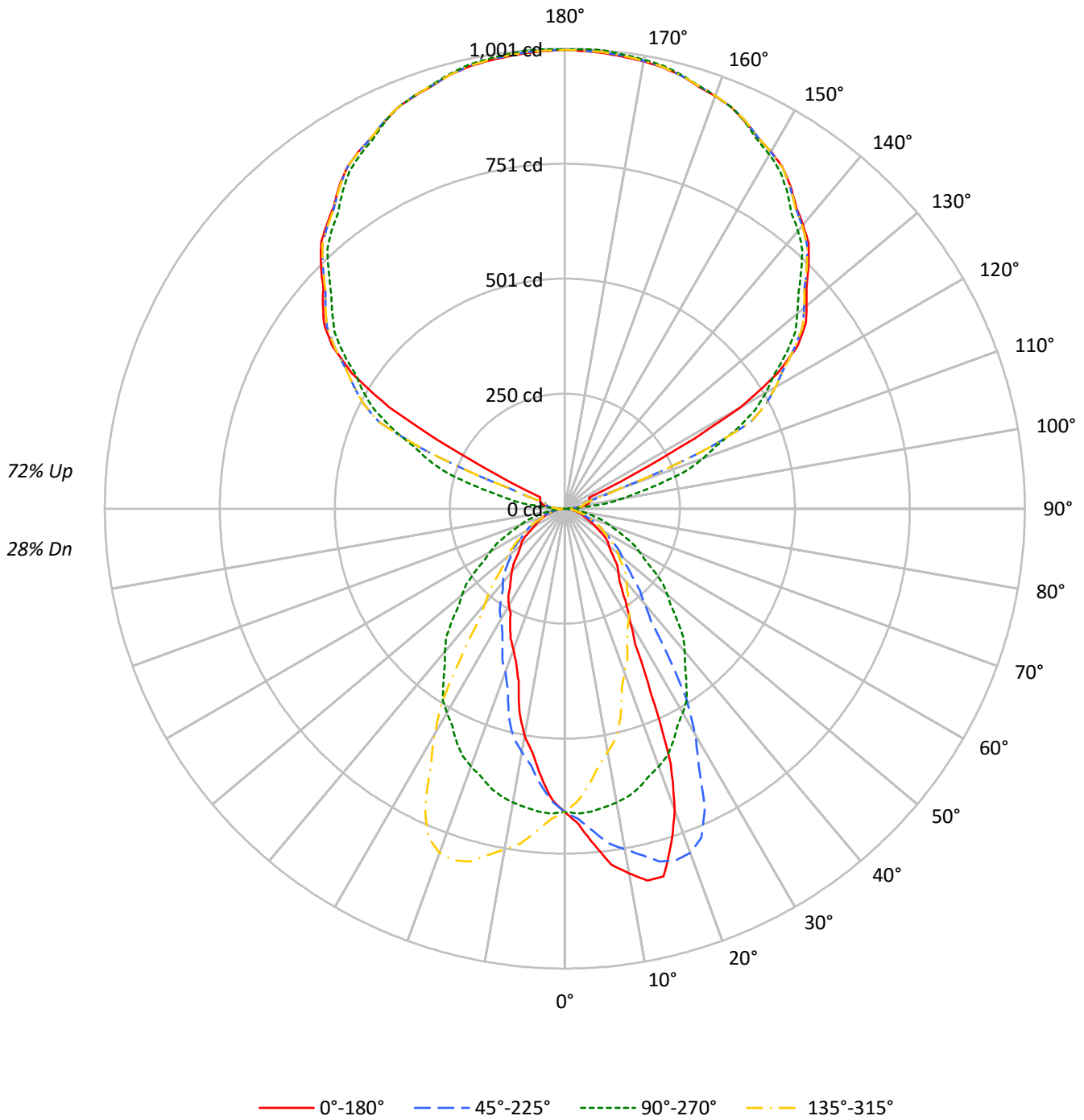
Lumens per Lamp: N/A
Luminaire Lumens: 4069.1 lumens
Efficiency: N/A
Efficacy: 130.4 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 31.2
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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28				
1	93	89	86	82	83	80	77	74	63	61	59	47	46	45	32	32	31	24				
2	85	78	73	68	76	70	66	62	56	52	50	42	40	38	29	28	27	21				
3	78	69	63	57	70	62	57	52	49	45	42	37	35	33	26	25	23	19				
4	72	62	54	49	64	56	49	44	44	40	36	34	31	28	24	22	21	16				
5	66	55	47	42	59	50	43	38	40	35	32	30	27	25	22	20	18	15				
6	61	49	42	36	54	45	38	33	36	31	28	28	24	22	20	18	16	13				
7	56	45	37	32	50	40	34	29	33	28	24	25	22	20	18	16	15	12				
8	52	41	33	28	47	37	31	26	30	25	22	23	20	18	17	15	13	11				
9	48	37	30	25	44	34	28	23	27	23	20	21	18	16	16	14	12	10				
10	45	34	27	23	41	31	25	21	25	21	18	20	17	14	15	13	11	9				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	10658	10658	10658	10658
5°	11904	10726	9511	10726
10°	13209	10650	8243	10650
15°	13857	10494	6496	10494
20°	12014	10263	5620	10263
25°	7878	9948	5018	9948
30°	5304	9562	4542	9562
35°	4295	9079	4096	9079
40°	3819	8553	3792	8553
45°	3457	7935	3382	7935
50°	3145	7322	3135	7322
55°	2956	6643	2919	6643
60°	2474	6022	2444	6022
65°	2086	5467	2365	5467
70°	1926	4881	2233	4881
75°	1803	4255	2059	4255
80°	1664	3505	1832	3505
85°	1538	2760	1612	2760



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.6	1.5
10°-20°	174.4	4.3
20°-30°	224.7	5.5
30°-40°	213.5	5.2
40°-50°	182.9	4.5
50°-60°	139.3	3.4
60°-70°	88.1	2.2
70°-80°	44.0	1.1
80°-90°	13.9	0.3
90°-100°	33.3	0.8
100°-110°	122.1	3.0
110°-120°	326.4	8.0
120°-130°	538.9	13.2
130°-140°	573.1	14.1
140°-150°	532.7	13.1
150°-160°	428.3	10.5
160°-170°	276.0	6.8
170°-180°	95.0	2.3
0°-30°	461.7	11.3
0°-40°	675.2	16.6
0°-60°	997.5	24.5
0°-90°	1143.4	28.1
90°-120°	481.9	11.8
90°-150°	2126.5	52.3
90°-180°	2926.0	71.9
0°-180°	4069.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	660	660	660	660	660	
5°	734	662	587	662	734	72
15°	829	628	389	628	829	224
25°	442	558	282	558	442	210
35°	218	461	208	461	218	139
45°	151	348	148	348	151	117
55°	105	236	104	236	105	92
65°	55	143	62	143	55	56
75°	29	68	33	68	29	31
85°	8	15	9	15	8	9
90°	20	1	20	1	20	9
95°	31	47	31	47	31	29
105°	55	220	55	220	55	57
115°	59	415	59	415	59	148
125°	618	587	618	587	618	534
135°	750	727	750	727	750	578
145°	856	843	856	843	856	535
155°	929	928	929	928	929	429
165°	976	978	976	978	976	276
175°	995	1000	995	1000	995	95
180°	998	998	998	998	998	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1
2.5°	687.0	687.5	688.1	686.8	686.8	685.7	683.3	681.5	676.3	675.6	675.6
5°	734.5	734.1	735.0	732.0	727.9	726.9	722.6	716.8	710.8	704.3	702.9
7.5°	781.7	781.0	779.2	778.7	775.6	768.6	761.6	754.2	744.3	734.6	729.7
10°	805.7	813.2	808.6	800.6	802.1	791.4	785.7	775.8	767.5	753.1	749.9
12.5°	829.1	832.1	830.6	826.1	824.0	816.6	808.8	800.2	785.0	772.0	760.7
15°	829.0	833.3	834.6	833.1	834.2	833.8	829.7	822.6	809.3	795.1	782.6
17.5°	767.8	770.8	778.4	783.5	789.9	803.4	810.2	812.7	810.8	802.6	794.0
20°	699.2	694.2	715.3	726.0	735.2	758.1	777.9	785.5	797.6	797.4	795.1
22.5°	601.9	603.1	623.1	635.9	662.7	685.7	708.1	736.6	760.1	775.7	784.8
25°	442.2	451.0	470.9	488.4	518.2	560.9	599.7	644.6	687.0	720.5	752.5
27.5°	332.1	332.9	348.6	364.8	382.4	417.4	466.3	519.9	580.4	630.4	687.7
30°	284.5	283.1	289.7	299.6	314.8	341.8	378.5	431.2	491.6	566.8	633.8
32.5°	250.6	250.7	255.8	263.1	275.6	293.9	319.0	361.9	418.9	492.9	571.4
35°	217.9	217.7	221.4	226.6	231.9	243.6	260.8	283.3	322.6	391.5	471.8
37.5°	194.4	195.4	197.2	200.6	206.3	212.9	223.2	238.3	266.2	307.1	374.6
40°	181.2	181.7	184.2	186.9	190.4	195.4	203.9	216.1	236.5	269.0	318.4
42.5°	169.2	169.6	171.4	173.9	176.6	181.7	188.7	199.2	215.8	241.2	281.9
45°	151.4	151.4	153.0	154.1	157.1	161.7	167.4	176.2	187.6	206.4	233.5
47.5°	134.8	134.8	135.9	137.8	139.8	143.3	149.0	156.1	164.4	178.9	202.1
50°	125.2	125.5	126.1	127.7	129.0	132.1	136.5	142.7	151.4	162.7	181.9
52.5°	117.5	117.4	118.3	119.0	119.8	122.0	125.3	130.8	138.6	148.3	164.3
55°	105.0	104.1	105.5	106.6	107.3	108.3	110.1	113.5	120.2	128.5	140.4
57.5°	89.5	89.1	90.1	91.1	93.3	95.7	97.4	99.5	102.9	108.9	120.7
60°	76.6	76.6	78.7	79.4	81.9	85.1	88.4	90.2	93.6	97.5	106.2
62.5°	65.2	65.4	66.3	67.1	68.5	72.4	77.0	81.0	84.2	88.0	93.7
65°	54.6	55.0	55.0	55.5	56.5	57.4	59.2	62.4	68.2	73.4	77.8
67.5°	46.4	46.5	46.7	47.1	47.3	48.3	49.1	50.5	51.8	56.8	62.2
70°	40.8	41.5	41.3	41.7	42.0	42.4	43.3	44.0	46.2	47.3	50.5
72.5°	35.6	36.2	36.2	36.5	37.1	37.2	37.9	38.6	39.9	40.8	42.6
75°	28.9	28.7	28.9	29.4	29.6	29.8	29.8	30.7	31.4	32.3	33.5
77.5°	22.3	22.5	22.5	22.5	22.6	23.0	22.9	23.3	24.0	24.5	25.0
80°	17.9	18.1	17.9	18.1	18.4	18.6	18.4	18.6	19.3	19.7	19.7
82.5°	13.8	13.9	14.0	14.0	14.1	14.1	14.5	14.5	15.0	14.9	15.1
85°	8.3	8.1	8.1	8.1	8.3	8.5	8.3	8.3	8.5	8.5	8.5
87.5°	6.9	7.0	6.9	6.9	6.8	6.7	6.5	6.6	6.2	6.2	5.8
90°	19.5	19.2	18.9	18.6	18.2	17.7	16.9	16.1	15.2	14.4	13.1
92.5°	19.5	19.3	19.1	18.9	18.8	18.4	18.0	17.6	17.2	16.8	16.2
95°	31.1	31.2	31.4	31.5	31.7	31.4	30.6	29.8	29.0	28.2	27.1
97.5°	41.5	41.3	41.1	40.9	40.7	40.3	39.6	39.0	38.4	37.7	35.1
100°	48.4	48.1	47.8	47.5	47.2	46.4	45.0	43.7	42.4	41.2	38.5
102.5°	51.9	51.4	51.0	50.5	50.1	49.0	47.4	45.6	44.0	42.3	35.1
105°	54.9	54.2	53.6	53.0	52.3	51.1	49.4	47.6	45.8	44.0	37.9
107.5°	56.5	55.8	55.2	54.5	53.9	54.5	56.2	58.1	59.9	61.7	114.2
110°	57.1	56.5	55.7	55.1	54.5	62.2	78.3	94.3	110.4	126.4	172.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	57.7	57.2	56.7	56.1	55.5	84.6	143.2	201.8	260.3	318.8	330.3
115°	59.3	70.8	82.3	93.9	105.4	148.5	222.8	297.1	371.4	445.8	441.7
117.5°	241.9	279.8	317.8	355.8	393.7	421.7	439.7	457.8	475.7	493.7	490.9
120°	440.7	462.3	484.0	505.6	527.4	537.2	535.3	533.4	531.4	529.5	526.6
122.5°	549.9	554.1	558.3	562.5	566.7	568.3	567.0	565.9	564.7	563.6	560.5
125°	617.6	617.1	616.7	616.2	615.7	614.9	613.8	612.7	611.6	610.5	607.3
127.5°	660.5	660.4	660.2	660.1	660.0	659.1	657.5	655.9	654.3	652.6	650.4
130°	687.0	687.1	687.3	687.5	687.6	686.8	685.1	683.3	681.6	679.7	678.0
132.5°	713.0	713.2	713.4	713.5	713.7	713.0	711.4	709.9	708.4	706.9	705.2
135°	750.5	750.8	751.2	751.5	751.8	751.2	749.6	748.0	746.4	744.8	743.4
137.5°	784.8	785.4	785.9	786.5	787.0	786.5	784.9	783.4	781.7	780.2	778.5
140°	806.2	807.0	807.8	808.6	809.4	809.1	807.6	806.2	804.8	803.3	801.5
142.5°	827.0	827.8	828.6	829.4	830.2	829.9	828.6	827.3	826.0	824.7	822.6
145°	856.1	856.9	857.7	858.5	859.2	859.1	858.0	856.9	855.8	854.5	851.8
147.5°	881.6	882.3	882.9	883.6	884.3	884.2	883.4	882.5	881.7	880.9	878.2
150°	897.2	898.0	898.8	899.6	900.4	900.3	899.4	898.4	897.5	896.5	893.9
152.5°	910.5	911.6	912.6	913.7	914.7	914.8	913.8	912.8	911.9	910.9	908.5
155°	929.0	930.3	931.6	932.8	934.1	934.3	933.3	932.4	931.4	930.4	928.5
157.5°	945.9	947.2	948.4	949.7	950.9	951.0	949.9	948.8	947.8	946.6	945.2
160°	955.7	956.8	958.0	959.1	960.2	960.3	959.4	958.4	957.5	956.4	955.4
162.5°	963.8	965.2	966.5	968.0	969.4	969.5	968.4	967.2	966.2	965.1	964.3
165°	975.9	977.0	978.2	979.4	980.5	980.5	979.4	978.2	977.0	975.9	975.4
167.5°	983.6	985.0	986.5	988.0	989.4	989.6	988.5	987.3	986.1	985.0	984.6
170°	988.3	989.7	991.1	992.6	994.0	994.2	993.0	991.9	990.8	989.7	989.4
172.5°	991.7	993.1	994.6	996.0	997.4	997.6	996.5	995.4	994.3	993.1	992.8
175°	994.7	996.3	997.9	999.6	1001.2	1001.4	1000.3	999.2	998.0	996.9	996.5
177.5°	996.6	997.7	999.0	1000.1	1001.3	1001.4	1000.5	999.6	998.7	997.7	997.6
180°	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1
2.5°	676.0	674.5	673.2	669.9	668.2	664.6	664.1	663.9	659.1	654.5	653.2
5°	699.2	695.5	690.0	683.6	676.9	670.0	665.5	661.8	652.6	643.9	638.8
7.5°	722.6	714.7	705.2	693.1	682.9	671.6	663.1	655.5	642.5	630.0	621.6
10°	740.0	727.2	714.6	697.8	684.7	671.9	659.9	649.6	635.0	618.4	606.7
12.5°	750.8	736.7	719.3	703.0	686.0	669.6	653.7	640.5	623.2	606.1	592.3
15°	765.5	750.3	729.2	705.8	684.1	662.7	644.4	627.8	605.4	584.9	567.9
17.5°	777.5	756.6	734.0	706.9	681.7	654.6	631.0	609.9	584.8	560.2	540.2
20°	781.3	760.6	734.5	707.4	677.6	645.7	620.3	597.3	570.5	543.6	520.7
22.5°	778.9	762.9	733.8	701.4	670.9	637.5	608.7	582.1	552.3	524.9	498.4
25°	762.8	757.2	729.7	694.4	659.5	620.8	587.4	558.4	524.4	495.0	466.2
27.5°	725.0	736.9	719.8	682.2	643.4	601.9	564.4	531.3	496.0	463.0	434.2
30°	688.6	715.9	708.6	673.7	630.4	589.6	547.5	512.9	475.3	441.3	412.9
32.5°	638.9	684.0	691.2	662.0	617.1	572.3	528.3	493.8	454.5	418.8	391.0
35°	559.7	627.1	658.1	639.5	594.6	546.1	500.8	460.6	421.1	385.9	358.3
37.5°	465.2	557.1	608.7	610.1	568.8	518.5	469.0	429.1	388.7	354.1	324.3
40°	403.9	503.5	570.8	585.6	550.8	496.4	446.4	405.8	366.4	332.3	298.2
42.5°	348.9	448.1	530.7	556.6	529.0	474.9	424.7	382.3	344.0	311.8	276.9
45°	282.2	368.9	459.9	506.2	490.9	440.9	387.9	347.5	311.5	283.8	250.2
47.5°	238.0	299.1	387.3	449.9	449.7	404.0	351.8	313.3	279.8	253.8	226.7
50°	212.9	266.1	340.6	411.7	417.7	379.4	329.8	291.5	260.3	233.1	211.3
52.5°	190.3	234.2	301.1	369.4	386.4	353.1	305.1	269.7	239.4	214.3	195.7
55°	160.8	194.8	245.7	309.4	335.2	311.7	269.0	236.0	211.5	190.4	174.3
57.5°	136.0	161.5	202.4	253.7	283.6	268.9	233.7	206.8	185.8	166.7	154.1
60°	120.5	141.3	175.9	218.8	251.9	241.6	211.5	186.5	168.6	152.1	140.2
62.5°	105.7	123.7	153.4	188.2	218.4	214.2	189.7	168.6	153.0	137.9	127.8
65°	85.1	98.2	121.4	148.7	173.0	175.0	157.3	143.1	129.2	117.2	108.3
67.5°	67.8	76.3	92.6	115.6	133.8	140.4	129.6	118.7	107.6	98.4	90.6
70°	57.2	64.0	75.9	94.5	111.3	118.2	111.9	103.4	93.8	86.2	79.6
72.5°	46.3	53.0	61.8	75.4	89.8	97.3	95.0	89.0	81.2	74.8	68.6
75°	34.8	37.0	42.9	52.1	63.3	69.8	71.3	68.2	61.9	57.2	53.4
77.5°	25.8	27.1	29.9	34.6	42.0	47.8	50.1	49.7	45.4	42.7	39.2
80°	20.6	21.3	22.7	24.7	30.3	36.1	37.7	37.7	34.6	33.5	30.1
82.5°	15.7	16.2	17.1	18.2	20.7	25.8	27.6	27.9	26.1	24.5	21.8
85°	9.0	8.7	9.2	9.9	10.3	11.7	14.4	14.9	14.4	12.6	11.9
87.5°	5.5	5.5	5.2	4.6	4.5	4.3	4.9	5.5	5.0	4.8	4.8
90°	11.9	10.6	9.3	7.8	6.1	4.2	2.5	0.7	2.5	4.2	6.1
92.5°	15.5	14.8	14.2	13.9	14.1	14.2	14.4	14.5	14.4	14.2	14.1
95°	26.0	24.8	23.6	25.8	31.1	36.4	41.7	47.0	41.7	36.4	31.1
97.5°	32.5	29.9	27.3	33.4	48.4	63.3	78.3	93.2	78.3	63.3	48.4
100°	35.7	33.0	30.3	39.9	61.9	83.9	105.8	127.8	105.8	83.9	61.9
102.5°	88.0	110.8	133.6	147.3	152.1	156.7	161.4	166.0	161.4	156.7	152.1
105°	131.7	175.5	219.3	238.8	234.1	229.2	224.4	219.6	224.4	229.2	234.1
107.5°	166.8	219.3	272.0	296.3	292.4	288.5	284.6	280.7	284.6	288.5	292.4
110°	219.2	265.6	311.9	333.5	330.1	326.8	323.4	320.0	323.4	326.8	330.1



TEST NUMBER: P331627-840

CATALOG NUMBER: SA2XXRDIP-C290D725U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	341.7	353.3	364.7	368.9	366.0	362.9	360.0	357.0	360.0	362.9	366.0
115°	437.7	433.6	429.7	426.3	423.5	420.8	418.1	415.4	418.1	420.8	423.5
117.5°	488.2	485.4	482.6	479.7	476.7	473.6	470.6	467.6	470.6	473.6	476.7
120°	523.7	520.9	518.0	515.3	512.9	510.5	508.1	505.6	508.1	510.5	512.9
122.5°	557.3	554.2	551.0	548.2	545.6	543.1	540.6	538.1	540.6	543.1	545.6
125°	604.3	601.3	598.2	595.6	593.6	591.5	589.4	587.3	589.4	591.5	593.6
127.5°	648.0	645.8	643.5	641.2	638.8	636.6	634.3	632.0	634.3	636.6	638.8
130°	676.2	674.5	672.7	670.6	667.9	665.4	662.9	660.2	662.9	665.4	667.9
132.5°	703.4	701.7	699.8	697.9	695.7	693.6	691.4	689.1	691.4	693.6	695.7
135°	741.8	740.4	739.0	737.0	734.5	731.8	729.3	726.7	729.3	731.8	734.5
137.5°	776.9	775.3	773.7	771.9	770.1	768.3	766.5	764.8	766.5	768.3	770.1
140°	799.8	798.0	796.3	794.7	793.5	792.1	790.8	789.6	790.8	792.1	793.5
142.5°	820.6	818.6	816.6	815.0	813.9	812.7	811.5	810.4	811.5	812.7	813.9
145°	849.1	846.4	843.6	842.4	842.5	842.7	842.8	843.0	842.8	842.7	842.5
147.5°	875.5	872.8	870.1	869.1	869.7	870.3	870.9	871.5	870.9	870.3	869.7
150°	891.3	888.8	886.3	885.4	886.7	887.8	888.9	890.0	888.9	887.8	886.7
152.5°	906.1	903.6	901.2	900.6	901.8	903.1	904.3	905.5	904.3	903.1	901.8
155°	926.6	924.6	922.7	922.5	923.9	925.3	926.9	928.3	926.9	925.3	923.9
157.5°	943.9	942.6	941.2	941.2	942.4	943.6	944.8	946.0	944.8	943.6	942.4
160°	954.5	953.5	952.6	952.6	953.5	954.5	955.4	956.4	955.4	954.5	953.5
162.5°	963.4	962.6	961.8	961.8	962.8	963.8	964.7	965.7	964.7	963.8	962.8
165°	975.0	974.5	974.0	974.2	975.2	976.2	977.1	978.2	977.1	976.2	975.2
167.5°	984.1	983.7	983.2	983.5	984.5	985.4	986.4	987.3	986.4	985.4	984.5
170°	989.1	988.8	988.4	988.8	989.7	990.7	991.6	992.6	991.6	990.7	989.7
172.5°	992.5	992.2	991.9	992.2	993.1	994.1	995.0	996.0	995.0	994.1	993.1
175°	996.2	995.9	995.6	996.0	997.1	998.3	999.4	1000.5	999.4	998.3	997.1
177.5°	997.5	997.3	997.2	997.6	998.6	999.5	1000.4	1001.3	1000.4	999.5	998.6
180°	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4



TEST NUMBER: P331627-840

CATALOG NUMBER: SA2XXRDIP-C290D725U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1
2.5°	650.9	649.5	647.1	643.5	641.3	637.4	634.9	636.3	636.7	636.3	636.0
5°	633.4	628.5	621.9	615.4	609.5	603.1	599.4	597.8	594.6	592.8	591.8
7.5°	612.2	603.9	594.5	583.3	573.8	563.8	558.8	556.2	549.7	546.1	543.0
10°	596.4	583.3	573.9	559.3	550.3	537.2	528.3	528.6	519.6	514.5	510.9
12.5°	579.0	564.6	549.0	535.7	523.3	512.8	502.0	497.7	488.2	483.3	473.4
15°	550.1	533.3	516.8	499.0	486.4	470.0	454.4	435.4	420.0	406.7	403.0
17.5°	518.6	497.8	481.2	460.2	438.6	411.2	393.1	382.0	372.8	365.8	360.5
20°	496.9	475.7	458.1	426.5	397.3	378.7	365.5	356.9	347.3	339.7	335.6
22.5°	474.1	452.1	428.0	392.6	369.9	355.1	343.3	333.5	326.9	321.0	317.2
25°	441.8	417.7	378.0	353.8	335.4	319.7	311.5	305.6	298.7	290.6	287.0
27.5°	407.7	369.4	340.8	322.8	305.3	295.2	287.7	278.8	272.7	269.0	265.2
30°	382.1	343.9	321.6	301.8	289.5	278.2	269.5	264.5	258.5	252.4	249.8
32.5°	353.8	323.2	301.7	285.4	272.8	263.2	256.3	248.1	243.9	240.0	234.8
35°	318.4	295.2	275.7	262.5	250.4	242.7	234.7	229.8	222.1	218.8	216.8
37.5°	288.5	268.4	253.9	239.8	230.4	221.8	216.8	209.1	205.8	201.3	196.9
40°	271.6	251.9	237.9	226.4	215.8	209.4	203.3	197.0	192.0	190.0	184.7
42.5°	254.4	238.3	224.3	211.8	204.7	197.8	190.1	185.5	180.3	176.9	173.7
45°	230.6	216.3	204.4	194.1	186.2	179.2	174.1	166.5	163.6	156.9	154.1
47.5°	209.6	196.4	185.0	175.2	167.6	163.0	155.6	149.7	144.9	140.8	137.2
50°	194.8	183.7	172.7	164.0	157.1	150.5	142.9	140.0	132.6	130.5	128.5
52.5°	181.2	170.7	160.7	152.1	145.2	138.8	132.1	128.2	123.2	121.2	119.7
55°	162.2	152.1	142.5	134.9	128.1	121.4	117.2	112.4	110.1	108.5	106.6
57.5°	143.1	134.0	126.6	119.0	112.0	106.7	102.0	99.1	96.7	94.6	92.4
60°	131.0	122.3	115.6	108.5	101.4	97.0	93.4	89.9	87.2	83.9	83.0
62.5°	118.2	110.5	104.4	97.5	91.3	87.4	83.8	80.6	77.3	72.6	71.3
65°	100.5	94.5	88.1	82.3	76.9	72.9	67.9	64.2	62.8	62.4	62.2
67.5°	84.5	78.9	73.3	67.5	62.5	58.9	56.2	55.7	54.7	54.5	53.8
70°	73.8	68.6	63.1	57.6	52.7	52.1	51.2	50.2	49.1	48.7	48.2
72.5°	64.3	58.9	53.3	49.0	46.9	46.0	45.1	44.1	43.4	42.9	42.7
75°	49.3	44.2	40.6	39.0	37.9	37.2	35.7	35.1	34.6	33.9	33.7
77.5°	35.5	32.6	31.0	30.0	28.8	28.1	27.3	26.6	26.1	26.0	25.5
80°	27.1	25.7	24.5	23.1	22.7	21.8	21.6	20.9	21.1	20.4	20.4
82.5°	21.0	19.3	18.3	17.7	17.2	16.5	16.3	16.0	16.0	15.5	15.5
85°	10.8	10.3	9.9	9.4	9.4	8.7	9.0	8.7	8.7	8.3	8.1
87.5°	5.0	5.2	5.0	5.4	5.6	5.7	5.8	5.8	6.0	6.1	6.1
90°	7.8	9.3	10.6	11.9	13.1	14.4	15.2	16.1	16.9	17.7	18.2
92.5°	13.9	14.2	14.8	15.5	16.2	16.8	17.2	17.6	18.0	18.4	18.8
95°	25.8	23.6	24.8	26.0	27.1	28.2	29.0	29.8	30.6	31.4	31.7
97.5°	33.4	27.3	29.9	32.5	35.1	37.7	38.4	39.0	39.6	40.3	40.7
100°	39.9	30.3	33.0	35.7	38.5	41.2	42.4	43.7	45.0	46.4	47.2
102.5°	147.3	133.6	110.8	88.0	65.1	42.3	44.0	45.6	47.4	49.0	50.1
105°	238.8	219.3	175.5	131.7	87.9	44.0	45.8	47.6	49.4	51.1	52.3
107.5°	296.3	272.0	219.3	166.8	114.2	61.7	59.9	58.1	56.2	54.5	53.9
110°	333.5	311.9	265.6	219.2	172.8	126.4	110.4	94.3	78.3	62.2	54.5



TEST NUMBER: P331627-840

CATALOG NUMBER: SA2XXRDIP-C290D725U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	368.9	364.7	353.3	341.7	330.3	318.8	260.3	201.8	143.2	84.6	55.5
115°	426.3	429.7	433.6	437.7	441.7	445.8	371.4	297.1	222.8	148.5	105.4
117.5°	479.7	482.6	485.4	488.2	490.9	493.7	475.7	457.8	439.7	421.7	393.7
120°	515.3	518.0	520.9	523.7	526.6	529.5	531.4	533.4	535.3	537.2	527.4
122.5°	548.2	551.0	554.2	557.3	560.5	563.6	564.7	565.9	567.0	568.3	566.7
125°	595.6	598.2	601.3	604.3	607.3	610.5	611.6	612.7	613.8	614.9	615.7
127.5°	641.2	643.5	645.8	648.0	650.4	652.6	654.3	655.9	657.5	659.1	660.0
130°	670.6	672.7	674.5	676.2	678.0	679.7	681.6	683.3	685.1	686.8	687.6
132.5°	697.9	699.8	701.7	703.4	705.2	706.9	708.4	709.9	711.4	713.0	713.7
135°	737.0	739.0	740.4	741.8	743.4	744.8	746.4	748.0	749.6	751.2	751.8
137.5°	771.9	773.7	775.3	776.9	778.5	780.2	781.7	783.4	784.9	786.5	787.0
140°	794.7	796.3	798.0	799.8	801.5	803.3	804.8	806.2	807.6	809.1	809.4
142.5°	815.0	816.6	818.6	820.6	822.6	824.7	826.0	827.3	828.6	829.9	830.2
145°	842.4	843.6	846.4	849.1	851.8	854.5	855.8	856.9	858.0	859.1	859.2
147.5°	869.1	870.1	872.8	875.5	878.2	880.9	881.7	882.5	883.4	884.2	884.3
150°	885.4	886.3	888.8	891.3	893.9	896.5	897.5	898.4	899.4	900.3	900.4
152.5°	900.6	901.2	903.6	906.1	908.5	910.9	911.9	912.8	913.8	914.8	914.7
155°	922.5	922.7	924.6	926.6	928.5	930.4	931.4	932.4	933.3	934.3	934.1
157.5°	941.2	941.2	942.6	943.9	945.2	946.6	947.8	948.8	949.9	951.0	950.9
160°	952.6	952.6	953.5	954.5	955.4	956.4	957.5	958.4	959.4	960.3	960.2
162.5°	961.8	961.8	962.6	963.4	964.3	965.1	966.2	967.2	968.4	969.5	969.4
165°	974.2	974.0	974.5	975.0	975.4	975.9	977.0	978.2	979.4	980.5	980.5
167.5°	983.5	983.2	983.7	984.1	984.6	985.0	986.1	987.3	988.5	989.6	989.4
170°	988.8	988.4	988.8	989.1	989.4	989.7	990.8	991.9	993.0	994.2	994.0
172.5°	992.2	991.9	992.2	992.5	992.8	993.1	994.3	995.4	996.5	997.6	997.4
175°	996.0	995.6	995.9	996.2	996.5	996.9	998.0	999.2	1000.3	1001.4	1001.2
177.5°	997.6	997.2	997.3	997.5	997.6	997.7	998.7	999.6	1000.5	1001.4	1001.3
180°	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4



TEST NUMBER: P331627-840

CATALOG NUMBER: SA2XXRDIP-C290D725U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1
2.5°	634.0	634.3	633.8	634.1	633.8	634.3	634.0	636.0	636.3	636.7	636.3
5°	590.7	587.9	587.4	586.8	587.4	587.9	590.7	591.8	592.8	594.6	597.8
7.5°	539.1	538.7	537.5	535.8	537.5	538.7	539.1	543.0	546.1	549.7	556.2
10°	505.8	504.6	504.4	502.8	504.4	504.6	505.8	510.9	514.5	519.6	528.6
12.5°	466.9	459.5	458.8	454.7	458.8	459.5	466.9	473.4	483.3	488.2	497.7
15°	397.6	396.2	391.5	388.6	391.5	396.2	397.6	403.0	406.7	420.0	435.4
17.5°	357.9	353.4	351.9	351.3	351.9	353.4	357.9	360.5	365.8	372.8	382.0
20°	332.3	328.3	327.6	327.1	327.6	328.3	332.3	335.6	339.7	347.3	356.9
22.5°	314.8	310.4	308.7	307.3	308.7	310.4	314.8	317.2	321.0	326.9	333.5
25°	284.7	283.1	282.2	281.7	282.2	283.1	284.7	287.0	290.6	298.7	305.6
27.5°	261.2	257.6	256.9	255.7	256.9	257.6	261.2	265.2	269.0	272.7	278.8
30°	247.7	246.6	245.0	243.6	245.0	246.6	247.7	249.8	252.4	258.5	264.5
32.5°	232.0	231.0	229.5	228.9	229.5	231.0	232.0	234.8	240.0	243.9	248.1
35°	214.5	211.3	209.8	207.8	209.8	211.3	214.5	216.8	218.8	222.1	229.8
37.5°	196.0	194.3	192.4	193.1	192.4	194.3	196.0	196.9	201.3	205.8	209.1
40°	181.7	180.6	180.1	179.9	180.1	180.6	181.7	184.7	190.0	192.0	197.0
42.5°	170.3	167.1	165.9	165.9	165.9	167.1	170.3	173.7	176.9	180.3	185.5
45°	153.0	150.1	147.9	148.1	147.9	150.1	153.0	154.1	156.9	163.6	166.5
47.5°	135.3	135.2	133.9	134.3	133.9	135.2	135.3	137.2	140.8	144.9	149.7
50°	126.8	125.5	124.5	124.8	124.5	125.5	126.8	128.5	130.5	132.6	140.0
52.5°	118.8	117.5	116.8	117.9	116.8	117.5	118.8	119.7	121.2	123.2	128.2
55°	105.5	104.1	103.9	103.7	103.9	104.1	105.5	106.6	108.5	110.1	112.4
57.5°	90.7	89.8	88.4	87.9	88.4	89.8	90.7	92.4	94.6	96.7	99.1
60°	80.1	78.3	75.9	75.7	75.9	78.3	80.1	83.0	83.9	87.2	89.9
62.5°	70.3	70.0	69.5	69.5	69.5	70.0	70.3	71.3	72.6	77.3	80.6
65°	61.7	61.5	61.7	61.9	61.7	61.5	61.7	62.2	62.4	62.8	64.2
67.5°	53.7	53.3	52.9	53.1	52.9	53.3	53.7	53.8	54.5	54.7	55.7
70°	47.7	47.5	47.3	47.3	47.3	47.5	47.7	48.2	48.7	49.1	50.2
72.5°	41.8	41.8	41.6	41.4	41.6	41.8	41.8	42.7	42.9	43.4	44.1
75°	33.5	33.0	33.0	33.0	33.0	33.0	33.5	33.7	33.9	34.6	35.1
77.5°	25.5	25.2	25.0	24.8	25.0	25.2	25.5	25.5	26.0	26.1	26.6
80°	20.2	20.0	19.7	19.7	19.7	20.0	20.2	20.4	20.4	21.1	20.9
82.5°	15.5	15.1	15.1	14.9	15.1	15.1	15.5	15.5	15.5	16.0	16.0
85°	8.3	8.5	8.3	8.7	8.3	8.5	8.3	8.1	8.3	8.7	8.7
87.5°	6.1	6.0	6.3	6.1	6.3	6.0	6.1	6.1	6.1	6.0	5.8
90°	18.6	18.9	19.2	19.5	19.2	18.9	18.6	18.2	17.7	16.9	16.1
92.5°	18.9	19.1	19.3	19.5	19.3	19.1	18.9	18.8	18.4	18.0	17.6
95°	31.5	31.4	31.2	31.1	31.2	31.4	31.5	31.7	31.4	30.6	29.8
97.5°	40.9	41.1	41.3	41.5	41.3	41.1	40.9	40.7	40.3	39.6	39.0
100°	47.5	47.8	48.1	48.4	48.1	47.8	47.5	47.2	46.4	45.0	43.7
102.5°	50.5	51.0	51.4	51.9	51.4	51.0	50.5	50.1	49.0	47.4	45.6
105°	53.0	53.6	54.2	54.9	54.2	53.6	53.0	52.3	51.1	49.4	47.6
107.5°	54.5	55.2	55.8	56.5	55.8	55.2	54.5	53.9	54.5	56.2	58.1
110°	55.1	55.7	56.5	57.1	56.5	55.7	55.1	54.5	62.2	78.3	94.3



TEST NUMBER: P331627-840

CATALOG NUMBER: SA2XXRDIP-C290D725U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	56.1	56.7	57.2	57.7	57.2	56.7	56.1	55.5	84.6	143.2	201.8
115°	93.9	82.3	70.8	59.3	70.8	82.3	93.9	105.4	148.5	222.8	297.1
117.5°	355.8	317.8	279.8	241.9	279.8	317.8	355.8	393.7	421.7	439.7	457.8
120°	505.6	484.0	462.3	440.7	462.3	484.0	505.6	527.4	537.2	535.3	533.4
122.5°	562.5	558.3	554.1	549.9	554.1	558.3	562.5	566.7	568.3	567.0	565.9
125°	616.2	616.7	617.1	617.6	617.1	616.7	616.2	615.7	614.9	613.8	612.7
127.5°	660.1	660.2	660.4	660.5	660.4	660.2	660.1	660.0	659.1	657.5	655.9
130°	687.5	687.3	687.1	687.0	687.1	687.3	687.5	687.6	686.8	685.1	683.3
132.5°	713.5	713.4	713.2	713.0	713.2	713.4	713.5	713.7	713.0	711.4	709.9
135°	751.5	751.2	750.8	750.5	750.8	751.2	751.5	751.8	751.2	749.6	748.0
137.5°	786.5	785.9	785.4	784.8	785.4	785.9	786.5	787.0	786.5	784.9	783.4
140°	808.6	807.8	807.0	806.2	807.0	807.8	808.6	809.4	809.1	807.6	806.2
142.5°	829.4	828.6	827.8	827.0	827.8	828.6	829.4	830.2	829.9	828.6	827.3
145°	858.5	857.7	856.9	856.1	856.9	857.7	858.5	859.2	859.1	858.0	856.9
147.5°	883.6	882.9	882.3	881.6	882.3	882.9	883.6	884.3	884.2	883.4	882.5
150°	899.6	898.8	898.0	897.2	898.0	898.8	899.6	900.4	900.3	899.4	898.4
152.5°	913.7	912.6	911.6	910.5	911.6	912.6	913.7	914.7	914.8	913.8	912.8
155°	932.8	931.6	930.3	929.0	930.3	931.6	932.8	934.1	934.3	933.3	932.4
157.5°	949.7	948.4	947.2	945.9	947.2	948.4	949.7	950.9	951.0	949.9	948.8
160°	959.1	958.0	956.8	955.7	956.8	958.0	959.1	960.2	960.3	959.4	958.4
162.5°	968.0	966.5	965.2	963.8	965.2	966.5	968.0	969.4	969.5	968.4	967.2
165°	979.4	978.2	977.0	975.9	977.0	978.2	979.4	980.5	980.5	979.4	978.2
167.5°	988.0	986.5	985.0	983.6	985.0	986.5	988.0	989.4	989.6	988.5	987.3
170°	992.6	991.1	989.7	988.3	989.7	991.1	992.6	994.0	994.2	993.0	991.9
172.5°	996.0	994.6	993.1	991.7	993.1	994.6	996.0	997.4	997.6	996.5	995.4
175°	999.6	997.9	996.3	994.7	996.3	997.9	999.6	1001.2	1001.4	1000.3	999.2
177.5°	1000.1	999.0	997.7	996.6	997.7	999.0	1000.1	1001.3	1001.4	1000.5	999.6
180°	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4



TEST NUMBER: P331627-840

CATALOG NUMBER: SA2XXRDIP-C290D725U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1
2.5°	634.9	637.4	641.3	643.5	647.1	649.5	650.9	653.2	654.5	659.1	663.9
5°	599.4	603.1	609.5	615.4	621.9	628.5	633.4	638.8	643.9	652.6	661.8
7.5°	558.8	563.8	573.8	583.3	594.5	603.9	612.2	621.6	630.0	642.5	655.5
10°	528.3	537.2	550.3	559.3	573.9	583.3	596.4	606.7	618.4	635.0	649.6
12.5°	502.0	512.8	523.3	535.7	549.0	564.6	579.0	592.3	606.1	623.2	640.5
15°	454.4	470.0	486.4	499.0	516.8	533.3	550.1	567.9	584.9	605.4	627.8
17.5°	393.1	411.2	438.6	460.2	481.2	497.8	518.6	540.2	560.2	584.8	609.9
20°	365.5	378.7	397.3	426.5	458.1	475.7	496.9	520.7	543.6	570.5	597.3
22.5°	343.3	355.1	369.9	392.6	428.0	452.1	474.1	498.4	524.9	552.3	582.1
25°	311.5	319.7	335.4	353.8	378.0	417.7	441.8	466.2	495.0	524.4	558.4
27.5°	287.7	295.2	305.3	322.8	340.8	369.4	407.7	434.2	463.0	496.0	531.3
30°	269.5	278.2	289.5	301.8	321.6	343.9	382.1	412.9	441.3	475.3	512.9
32.5°	256.3	263.2	272.8	285.4	301.7	323.2	353.8	391.0	418.8	454.5	493.8
35°	234.7	242.7	250.4	262.5	275.7	295.2	318.4	358.3	385.9	421.1	460.6
37.5°	216.8	221.8	230.4	239.8	253.9	268.4	288.5	324.3	354.1	388.7	429.1
40°	203.3	209.4	215.8	226.4	237.9	251.9	271.6	298.2	332.3	366.4	405.8
42.5°	190.1	197.8	204.7	211.8	224.3	238.3	254.4	276.9	311.8	344.0	382.3
45°	174.1	179.2	186.2	194.1	204.4	216.3	230.6	250.2	283.8	311.5	347.5
47.5°	155.6	163.0	167.6	175.2	185.0	196.4	209.6	226.7	253.8	279.8	313.3
50°	142.9	150.5	157.1	164.0	172.7	183.7	194.8	211.3	233.1	260.3	291.5
52.5°	132.1	138.8	145.2	152.1	160.7	170.7	181.2	195.7	214.3	239.4	269.7
55°	117.2	121.4	128.1	134.9	142.5	152.1	162.2	174.3	190.4	211.5	236.0
57.5°	102.0	106.7	112.0	119.0	126.6	134.0	143.1	154.1	166.7	185.8	206.8
60°	93.4	97.0	101.4	108.5	115.6	122.3	131.0	140.2	152.1	168.6	186.5
62.5°	83.8	87.4	91.3	97.5	104.4	110.5	118.2	127.8	137.9	153.0	168.6
65°	67.9	72.9	76.9	82.3	88.1	94.5	100.5	108.3	117.2	129.2	143.1
67.5°	56.2	58.9	62.5	67.5	73.3	78.9	84.5	90.6	98.4	107.6	118.7
70°	51.2	52.1	52.7	57.6	63.1	68.6	73.8	79.6	86.2	93.8	103.4
72.5°	45.1	46.0	46.9	49.0	53.3	58.9	64.3	68.6	74.8	81.2	89.0
75°	35.7	37.2	37.9	39.0	40.6	44.2	49.3	53.4	57.2	61.9	68.2
77.5°	27.3	28.1	28.8	30.0	31.0	32.6	35.5	39.2	42.7	45.4	49.7
80°	21.6	21.8	22.7	23.1	24.5	25.7	27.1	30.1	33.5	34.6	37.7
82.5°	16.3	16.5	17.2	17.7	18.3	19.3	21.0	21.8	24.5	26.1	27.9
85°	9.0	8.7	9.4	9.4	9.9	10.3	10.8	11.9	12.6	14.4	14.9
87.5°	5.8	5.7	5.6	5.4	5.0	5.2	5.0	4.8	4.8	5.0	5.5
90°	15.2	14.4	13.1	11.9	10.6	9.3	7.8	6.1	4.2	2.5	0.7
92.5°	17.2	16.8	16.2	15.5	14.8	14.2	13.9	14.1	14.2	14.4	14.5
95°	29.0	28.2	27.1	26.0	24.8	23.6	25.8	31.1	36.4	41.7	47.0
97.5°	38.4	37.7	35.1	32.5	29.9	27.3	33.4	48.4	63.3	78.3	93.2
100°	42.4	41.2	38.5	35.7	33.0	30.3	39.9	61.9	83.9	105.8	127.8
102.5°	44.0	42.3	65.1	88.0	110.8	133.6	147.3	152.1	156.7	161.4	166.0
105°	45.8	44.0	87.9	131.7	175.5	219.3	238.8	234.1	229.2	224.4	219.6
107.5°	59.9	61.7	114.2	166.8	219.3	272.0	296.3	292.4	288.5	284.6	280.7
110°	110.4	126.4	172.8	219.2	265.6	311.9	333.5	330.1	326.8	323.4	320.0



TEST NUMBER: P331627-840

CATALOG NUMBER: SA2XXRDIP-C290D725U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	260.3	318.8	330.3	341.7	353.3	364.7	368.9	366.0	362.9	360.0	357.0
115°	371.4	445.8	441.7	437.7	433.6	429.7	426.3	423.5	420.8	418.1	415.4
117.5°	475.7	493.7	490.9	488.2	485.4	482.6	479.7	476.7	473.6	470.6	467.6
120°	531.4	529.5	526.6	523.7	520.9	518.0	515.3	512.9	510.5	508.1	505.6
122.5°	564.7	563.6	560.5	557.3	554.2	551.0	548.2	545.6	543.1	540.6	538.1
125°	611.6	610.5	607.3	604.3	601.3	598.2	595.6	593.6	591.5	589.4	587.3
127.5°	654.3	652.6	650.4	648.0	645.8	643.5	641.2	638.8	636.6	634.3	632.0
130°	681.6	679.7	678.0	676.2	674.5	672.7	670.6	667.9	665.4	662.9	660.2
132.5°	708.4	706.9	705.2	703.4	701.7	699.8	697.9	695.7	693.6	691.4	689.1
135°	746.4	744.8	743.4	741.8	740.4	739.0	737.0	734.5	731.8	729.3	726.7
137.5°	781.7	780.2	778.5	776.9	775.3	773.7	771.9	770.1	768.3	766.5	764.8
140°	804.8	803.3	801.5	799.8	798.0	796.3	794.7	793.5	792.1	790.8	789.6
142.5°	826.0	824.7	822.6	820.6	818.6	816.6	815.0	813.9	812.7	811.5	810.4
145°	855.8	854.5	851.8	849.1	846.4	843.6	842.4	842.5	842.7	842.8	843.0
147.5°	881.7	880.9	878.2	875.5	872.8	870.1	869.1	869.7	870.3	870.9	871.5
150°	897.5	896.5	893.9	891.3	888.8	886.3	885.4	886.7	887.8	888.9	890.0
152.5°	911.9	910.9	908.5	906.1	903.6	901.2	900.6	901.8	903.1	904.3	905.5
155°	931.4	930.4	928.5	926.6	924.6	922.7	922.5	923.9	925.3	926.9	928.3
157.5°	947.8	946.6	945.2	943.9	942.6	941.2	941.2	942.4	943.6	944.8	946.0
160°	957.5	956.4	955.4	954.5	953.5	952.6	952.6	953.5	954.5	955.4	956.4
162.5°	966.2	965.1	964.3	963.4	962.6	961.8	961.8	962.8	963.8	964.7	965.7
165°	977.0	975.9	975.4	975.0	974.5	974.0	974.2	975.2	976.2	977.1	978.2
167.5°	986.1	985.0	984.6	984.1	983.7	983.2	983.5	984.5	985.4	986.4	987.3
170°	990.8	989.7	989.4	989.1	988.8	988.4	988.8	989.7	990.7	991.6	992.6
172.5°	994.3	993.1	992.8	992.5	992.2	991.9	992.2	993.1	994.1	995.0	996.0
175°	998.0	996.9	996.5	996.2	995.9	995.6	996.0	997.1	998.3	999.4	1000.5
177.5°	998.7	997.7	997.6	997.5	997.3	997.2	997.6	998.6	999.5	1000.4	1001.3
180°	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4



TEST NUMBER: P331627-840

CATALOG NUMBER: SA2XXRDIP-C290D725U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1	660.1
2.5°	664.1	664.6	668.2	669.9	673.2	674.5	676.0	675.6	675.6	676.3	681.5
5°	665.5	670.0	676.9	683.6	690.0	695.5	699.2	702.9	704.3	710.8	716.8
7.5°	663.1	671.6	682.9	693.1	705.2	714.7	722.6	729.7	734.6	744.3	754.2
10°	659.9	671.9	684.7	697.8	714.6	727.2	740.0	749.9	753.1	767.5	775.8
12.5°	653.7	669.6	686.0	703.0	719.3	736.7	750.8	760.7	772.0	785.0	800.2
15°	644.4	662.7	684.1	705.8	729.2	750.3	765.5	782.6	795.1	809.3	822.6
17.5°	631.0	654.6	681.7	706.9	734.0	756.6	777.5	794.0	802.6	810.8	812.7
20°	620.3	645.7	677.6	707.4	734.5	760.6	781.3	795.1	797.4	797.6	785.5
22.5°	608.7	637.5	670.9	701.4	733.8	762.9	778.9	784.8	775.7	760.1	736.6
25°	587.4	620.8	659.5	694.4	729.7	757.2	762.8	752.5	720.5	687.0	644.6
27.5°	564.4	601.9	643.4	682.2	719.8	736.9	725.0	687.7	630.4	580.4	519.9
30°	547.5	589.6	630.4	673.7	708.6	715.9	688.6	633.8	566.8	491.6	431.2
32.5°	528.3	572.3	617.1	662.0	691.2	684.0	638.9	571.4	492.9	418.9	361.9
35°	500.8	546.1	594.6	639.5	658.1	627.1	559.7	471.8	391.5	322.6	283.3
37.5°	469.0	518.5	568.8	610.1	608.7	557.1	465.2	374.6	307.1	266.2	238.3
40°	446.4	496.4	550.8	585.6	570.8	503.5	403.9	318.4	269.0	236.5	216.1
42.5°	424.7	474.9	529.0	556.6	530.7	448.1	348.9	281.9	241.2	215.8	199.2
45°	387.9	440.9	490.9	506.2	459.9	368.9	282.2	233.5	206.4	187.6	176.2
47.5°	351.8	404.0	449.7	449.9	387.3	299.1	238.0	202.1	178.9	164.4	156.1
50°	329.8	379.4	417.7	411.7	340.6	266.1	212.9	181.9	162.7	151.4	142.7
52.5°	305.1	353.1	386.4	369.4	301.1	234.2	190.3	164.3	148.3	138.6	130.8
55°	269.0	311.7	335.2	309.4	245.7	194.8	160.8	140.4	128.5	120.2	113.5
57.5°	233.7	268.9	283.6	253.7	202.4	161.5	136.0	120.7	108.9	102.9	99.5
60°	211.5	241.6	251.9	218.8	175.9	141.3	120.5	106.2	97.5	93.6	90.2
62.5°	189.7	214.2	218.4	188.2	153.4	123.7	105.7	93.7	88.0	84.2	81.0
65°	157.3	175.0	173.0	148.7	121.4	98.2	85.1	77.8	73.4	68.2	62.4
67.5°	129.6	140.4	133.8	115.6	92.6	76.3	67.8	62.2	56.8	51.8	50.5
70°	111.9	118.2	111.3	94.5	75.9	64.0	57.2	50.5	47.3	46.2	44.0
72.5°	95.0	97.3	89.8	75.4	61.8	53.0	46.3	42.6	40.8	39.9	38.6
75°	71.3	69.8	63.3	52.1	42.9	37.0	34.8	33.5	32.3	31.4	30.7
77.5°	50.1	47.8	42.0	34.6	29.9	27.1	25.8	25.0	24.5	24.0	23.3
80°	37.7	36.1	30.3	24.7	22.7	21.3	20.6	19.7	19.7	19.3	18.6
82.5°	27.6	25.8	20.7	18.2	17.1	16.2	15.7	15.1	14.9	15.0	14.5
85°	14.4	11.7	10.3	9.9	9.2	8.7	9.0	8.5	8.5	8.5	8.3
87.5°	4.9	4.3	4.5	4.6	5.2	5.5	5.5	5.8	6.2	6.2	6.6
90°	2.5	4.2	6.1	7.8	9.3	10.6	11.9	13.1	14.4	15.2	16.1
92.5°	14.4	14.2	14.1	13.9	14.2	14.8	15.5	16.2	16.8	17.2	17.6
95°	41.7	36.4	31.1	25.8	23.6	24.8	26.0	27.1	28.2	29.0	29.8
97.5°	78.3	63.3	48.4	33.4	27.3	29.9	32.5	35.1	37.7	38.4	39.0
100°	105.8	83.9	61.9	39.9	30.3	33.0	35.7	38.5	41.2	42.4	43.7
102.5°	161.4	156.7	152.1	147.3	133.6	110.8	88.0	65.1	42.3	44.0	45.6
105°	224.4	229.2	234.1	238.8	219.3	175.5	131.7	87.9	44.0	45.8	47.6
107.5°	284.6	288.5	292.4	296.3	272.0	219.3	166.8	114.2	61.7	59.9	58.1
110°	323.4	326.8	330.1	333.5	311.9	265.6	219.2	172.8	126.4	110.4	94.3



TEST NUMBER: P331627-840

CATALOG NUMBER: SA2XXRDIP-C290D725U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	360.0	362.9	366.0	368.9	364.7	353.3	341.7	330.3	318.8	260.3	201.8
115°	418.1	420.8	423.5	426.3	429.7	433.6	437.7	441.7	445.8	371.4	297.1
117.5°	470.6	473.6	476.7	479.7	482.6	485.4	488.2	490.9	493.7	475.7	457.8
120°	508.1	510.5	512.9	515.3	518.0	520.9	523.7	526.6	529.5	531.4	533.4
122.5°	540.6	543.1	545.6	548.2	551.0	554.2	557.3	560.5	563.6	564.7	565.9
125°	589.4	591.5	593.6	595.6	598.2	601.3	604.3	607.3	610.5	611.6	612.7
127.5°	634.3	636.6	638.8	641.2	643.5	645.8	648.0	650.4	652.6	654.3	655.9
130°	662.9	665.4	667.9	670.6	672.7	674.5	676.2	678.0	679.7	681.6	683.3
132.5°	691.4	693.6	695.7	697.9	699.8	701.7	703.4	705.2	706.9	708.4	709.9
135°	729.3	731.8	734.5	737.0	739.0	740.4	741.8	743.4	744.8	746.4	748.0
137.5°	766.5	768.3	770.1	771.9	773.7	775.3	776.9	778.5	780.2	781.7	783.4
140°	790.8	792.1	793.5	794.7	796.3	798.0	799.8	801.5	803.3	804.8	806.2
142.5°	811.5	812.7	813.9	815.0	816.6	818.6	820.6	822.6	824.7	826.0	827.3
145°	842.8	842.7	842.5	842.4	843.6	846.4	849.1	851.8	854.5	855.8	856.9
147.5°	870.9	870.3	869.7	869.1	870.1	872.8	875.5	878.2	880.9	881.7	882.5
150°	888.9	887.8	886.7	885.4	886.3	888.8	891.3	893.9	896.5	897.5	898.4
152.5°	904.3	903.1	901.8	900.6	901.2	903.6	906.1	908.5	910.9	911.9	912.8
155°	926.9	925.3	923.9	922.5	922.7	924.6	926.6	928.5	930.4	931.4	932.4
157.5°	944.8	943.6	942.4	941.2	941.2	942.6	943.9	945.2	946.6	947.8	948.8
160°	955.4	954.5	953.5	952.6	952.6	953.5	954.5	955.4	956.4	957.5	958.4
162.5°	964.7	963.8	962.8	961.8	961.8	962.6	963.4	964.3	965.1	966.2	967.2
165°	977.1	976.2	975.2	974.2	974.0	974.5	975.0	975.4	975.9	977.0	978.2
167.5°	986.4	985.4	984.5	983.5	983.2	983.7	984.1	984.6	985.0	986.1	987.3
170°	991.6	990.7	989.7	988.8	988.4	988.8	989.1	989.4	989.7	990.8	991.9
172.5°	995.0	994.1	993.1	992.2	991.9	992.2	992.5	992.8	993.1	994.3	995.4
175°	999.4	998.3	997.1	996.0	995.6	995.9	996.2	996.5	996.9	998.0	999.2
177.5°	1000.4	999.5	998.6	997.6	997.2	997.3	997.5	997.6	997.7	998.7	999.6
180°	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	660.1	660.1	660.1	660.1	660.1	660.1	660.1
2.5°	683.3	685.7	686.8	686.8	688.1	687.5	687.0
5°	722.6	726.9	727.9	732.0	735.0	734.1	734.5
7.5°	761.6	768.6	775.6	778.7	779.2	781.0	781.7
10°	785.7	791.4	802.1	800.6	808.6	813.2	805.7
12.5°	808.8	816.6	824.0	826.1	830.6	832.1	829.1
15°	829.7	833.8	834.2	833.1	834.6	833.3	829.0
17.5°	810.2	803.4	789.9	783.5	778.4	770.8	767.8
20°	777.9	758.1	735.2	726.0	715.3	694.2	699.2
22.5°	708.1	685.7	662.7	635.9	623.1	603.1	601.9
25°	599.7	560.9	518.2	488.4	470.9	451.0	442.2
27.5°	466.3	417.4	382.4	364.8	348.6	332.9	332.1
30°	378.5	341.8	314.8	299.6	289.7	283.1	284.5
32.5°	319.0	293.9	275.6	263.1	255.8	250.7	250.6
35°	260.8	243.6	231.9	226.6	221.4	217.7	217.9
37.5°	223.2	212.9	206.3	200.6	197.2	195.4	194.4
40°	203.9	195.4	190.4	186.9	184.2	181.7	181.2
42.5°	188.7	181.7	176.6	173.9	171.4	169.6	169.2
45°	167.4	161.7	157.1	154.1	153.0	151.4	151.4
47.5°	149.0	143.3	139.8	137.8	135.9	134.8	134.8
50°	136.5	132.1	129.0	127.7	126.1	125.5	125.2
52.5°	125.3	122.0	119.8	119.0	118.3	117.4	117.5
55°	110.1	108.3	107.3	106.6	105.5	104.1	105.0
57.5°	97.4	95.7	93.3	91.1	90.1	89.1	89.5
60°	88.4	85.1	81.9	79.4	78.7	76.6	76.6
62.5°	77.0	72.4	68.5	67.1	66.3	65.4	65.2
65°	59.2	57.4	56.5	55.5	55.0	55.0	54.6
67.5°	49.1	48.3	47.3	47.1	46.7	46.5	46.4
70°	43.3	42.4	42.0	41.7	41.3	41.5	40.8
72.5°	37.9	37.2	37.1	36.5	36.2	36.2	35.6
75°	29.8	29.8	29.6	29.4	28.9	28.7	28.9
77.5°	22.9	23.0	22.6	22.5	22.5	22.5	22.3
80°	18.4	18.6	18.4	18.1	17.9	18.1	17.9
82.5°	14.5	14.1	14.1	14.0	14.0	13.9	13.8
85°	8.3	8.5	8.3	8.1	8.1	8.1	8.3
87.5°	6.5	6.7	6.8	6.9	6.9	7.0	6.9
90°	16.9	17.7	18.2	18.6	18.9	19.2	19.5
92.5°	18.0	18.4	18.8	18.9	19.1	19.3	19.5
95°	30.6	31.4	31.7	31.5	31.4	31.2	31.1
97.5°	39.6	40.3	40.7	40.9	41.1	41.3	41.5
100°	45.0	46.4	47.2	47.5	47.8	48.1	48.4
102.5°	47.4	49.0	50.1	50.5	51.0	51.4	51.9
105°	49.4	51.1	52.3	53.0	53.6	54.2	54.9
107.5°	56.2	54.5	53.9	54.5	55.2	55.8	56.5
110°	78.3	62.2	54.5	55.1	55.7	56.5	57.1



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	143.2	84.6	55.5	56.1	56.7	57.2	57.7
115°	222.8	148.5	105.4	93.9	82.3	70.8	59.3
117.5°	439.7	421.7	393.7	355.8	317.8	279.8	241.9
120°	535.3	537.2	527.4	505.6	484.0	462.3	440.7
122.5°	567.0	568.3	566.7	562.5	558.3	554.1	549.9
125°	613.8	614.9	615.7	616.2	616.7	617.1	617.6
127.5°	657.5	659.1	660.0	660.1	660.2	660.4	660.5
130°	685.1	686.8	687.6	687.5	687.3	687.1	687.0
132.5°	711.4	713.0	713.7	713.5	713.4	713.2	713.0
135°	749.6	751.2	751.8	751.5	751.2	750.8	750.5
137.5°	784.9	786.5	787.0	786.5	785.9	785.4	784.8
140°	807.6	809.1	809.4	808.6	807.8	807.0	806.2
142.5°	828.6	829.9	830.2	829.4	828.6	827.8	827.0
145°	858.0	859.1	859.2	858.5	857.7	856.9	856.1
147.5°	883.4	884.2	884.3	883.6	882.9	882.3	881.6
150°	899.4	900.3	900.4	899.6	898.8	898.0	897.2
152.5°	913.8	914.8	914.7	913.7	912.6	911.6	910.5
155°	933.3	934.3	934.1	932.8	931.6	930.3	929.0
157.5°	949.9	951.0	950.9	949.7	948.4	947.2	945.9
160°	959.4	960.3	960.2	959.1	958.0	956.8	955.7
162.5°	968.4	969.5	969.4	968.0	966.5	965.2	963.8
165°	979.4	980.5	980.5	979.4	978.2	977.0	975.9
167.5°	988.5	989.6	989.4	988.0	986.5	985.0	983.6
170°	993.0	994.2	994.0	992.6	991.1	989.7	988.3
172.5°	996.5	997.6	997.4	996.0	994.6	993.1	991.7
175°	1000.3	1001.4	1001.2	999.6	997.9	996.3	994.7
177.5°	1000.5	1001.4	1001.3	1000.1	999.0	997.7	996.6
180°	998.4	998.4	998.4	998.4	998.4	998.4	998.4

(END OF REPORT)