

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: P331617

Luminaire Tested: **SA2XXRDIP-C290D330U835-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P331617  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-16,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A4  
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 330 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

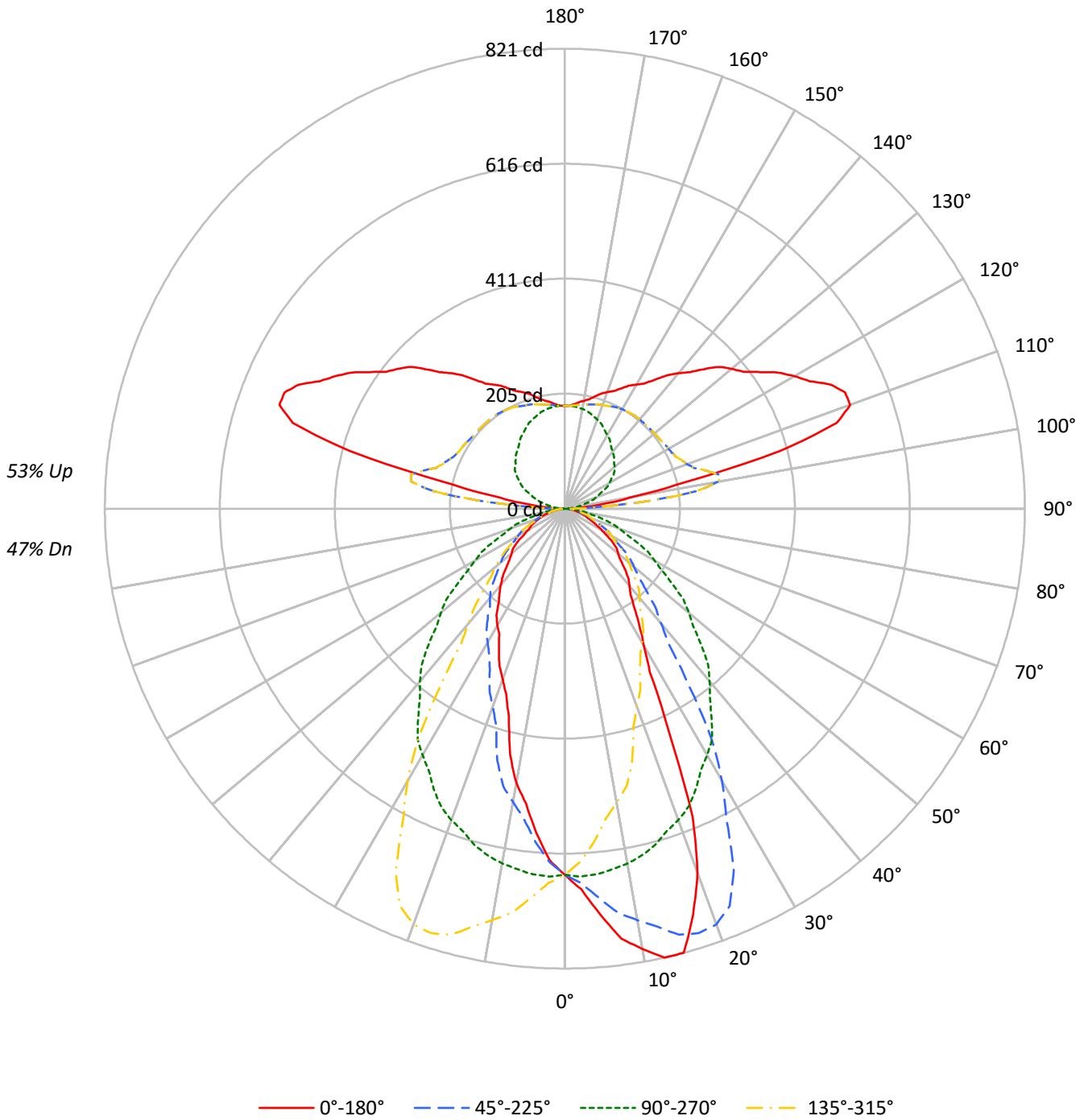
Lumens per Lamp: N/A  
Luminaire Lumens: 2410.0 lumens  
Efficiency: N/A  
Efficacy: 118.7 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: General Diffuse

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



TEST NUMBER: P331617  
CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A4

### Luminous Intensity Polar Plot





TEST NUMBER: P331617

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A4

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47
1	98	94	90	87	90	86	83	81	73	70	68	60	58	57	48	47	46	41
2	90	83	77	72	82	76	72	67	65	61	58	54	51	49	43	42	40	36
3	82	73	67	61	76	68	62	57	58	53	50	48	45	42	39	37	35	31
4	76	66	58	52	70	61	54	49	52	47	43	43	40	37	36	33	31	27
5	70	59	51	46	64	55	48	43	47	42	38	39	36	33	32	30	28	24
6	65	53	45	40	59	49	43	38	42	37	33	36	32	29	30	27	25	22
7	60	48	41	35	55	45	38	34	39	34	30	33	29	26	27	25	22	20
8	56	44	37	32	51	41	35	30	36	30	27	30	26	24	25	23	20	18
9	52	40	33	28	48	38	31	27	33	28	24	28	24	21	24	21	19	17
10	49	37	30	26	45	35	29	24	30	25	22	26	22	20	22	19	17	15

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	10555	10555	10555	10555
5°	11788	10621	9418	10621
10°	13080	10547	8163	10547
15°	13722	10392	6432	10392
20°	11897	10163	5565	10163
25°	7801	9850	4969	9850
30°	5252	9469	4497	9469
35°	4254	8990	4056	8990
40°	3781	8469	3754	8469
45°	3423	7857	3350	7857
50°	3115	7252	3105	7252
55°	2928	6579	2891	6579
60°	2451	5964	2422	5964
65°	2067	5414	2342	5414
70°	1907	4834	2209	4834
75°	1784	4211	2040	4211
80°	1646	3468	1813	3468
85°	1519	2742	1593	2742



TEST NUMBER: P331617

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.0	2.6
10°-20°	172.7	7.2
20°-30°	222.5	9.2
30°-40°	211.5	8.8
40°-50°	181.1	7.5
50°-60°	137.9	5.7
60°-70°	87.2	3.6
70°-80°	43.5	1.8
80°-90°	13.0	0.5
90°-100°	73.5	3.0
100°-110°	249.3	10.3
110°-120°	264.8	11.0
120°-130°	218.0	9.0
130°-140°	175.1	7.3
140°-150°	132.3	5.5
150°-160°	93.0	3.9
160°-170°	54.7	2.3
170°-180°	17.8	0.7
0°-30°	457.2	19.0
0°-40°	668.6	27.7
0°-60°	987.7	41.0
0°-90°	1131.5	46.9
90°-120°	587.6	24.4
90°-150°	1113.0	46.2
90°-180°	1279.0	53.1
0°-180°	2410.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	654	654	654	654	654	
5°	727	655	581	655	727	72
15°	821	622	385	622	821	221
25°	438	553	279	553	438	208
35°	216	456	206	456	216	138
45°	150	344	147	344	150	116
55°	104	234	103	234	104	91
65°	54	142	61	142	54	55
75°	29	68	33	68	29	30
85°	8	15	9	15	8	9
90°	12	0	12	0	12	7
95°	40	12	40	12	40	52
105°	398	43	398	43	398	385
115°	524	76	524	76	524	513
125°	425	106	425	106	425	384
135°	352	124	352	124	352	274
145°	281	142	281	142	281	179
155°	236	162	236	162	236	110
165°	207	176	207	176	207	59
175°	187	183	187	183	187	18
180°	184	184	184	184	184	



TEST NUMBER: P331617

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7
2.5°	680.3	680.8	681.4	680.1	680.1	679.0	676.6	674.8	669.7	669.0	669.0
5°	727.3	726.9	727.8	724.8	720.8	719.8	715.5	709.8	703.9	697.4	696.0
7.5°	774.1	773.4	771.6	771.1	768.0	761.1	754.2	746.8	737.0	727.4	722.6
10°	797.8	805.3	800.7	792.8	794.3	783.7	778.0	768.2	760.0	745.7	742.6
12.5°	821.0	824.0	822.5	818.0	816.0	808.6	800.9	792.4	777.3	764.5	753.3
15°	820.9	825.2	826.4	825.0	826.1	825.7	821.6	814.6	801.4	787.3	775.0
17.5°	760.3	763.3	770.8	775.8	782.2	795.6	802.3	804.8	802.9	794.8	786.2
20°	692.4	687.4	708.3	718.9	728.0	750.7	770.3	777.8	789.8	789.6	787.3
22.5°	596.0	597.2	617.0	629.7	656.2	679.0	701.2	729.4	752.7	768.1	777.1
25°	437.9	446.6	466.3	483.6	513.1	555.4	593.8	638.3	680.3	713.5	745.1
27.5°	328.9	329.6	345.2	361.2	378.7	413.3	461.7	514.8	574.7	624.2	681.0
30°	281.7	280.3	286.9	296.7	311.7	338.5	374.8	427.0	486.8	561.3	627.6
32.5°	248.2	248.3	253.3	260.5	272.9	291.0	315.9	358.4	414.8	488.1	565.8
35°	215.8	215.6	219.2	224.4	229.6	241.2	258.3	280.5	319.4	387.7	467.2
37.5°	192.5	193.5	195.3	198.6	204.3	210.8	221.0	236.0	263.6	304.1	370.9
40°	179.4	179.9	182.4	185.1	188.5	193.5	201.9	214.0	234.2	266.4	315.3
42.5°	167.5	167.9	169.7	172.2	174.9	179.9	186.9	197.3	213.7	238.8	279.1
45°	149.9	149.9	151.5	152.6	155.6	160.1	165.8	174.5	185.8	204.4	231.2
47.5°	133.5	133.5	134.6	136.5	138.4	141.9	147.5	154.6	162.8	177.2	200.1
50°	124.0	124.3	124.9	126.5	127.7	130.8	135.2	141.3	149.9	161.1	180.1
52.5°	116.4	116.3	117.1	117.8	118.6	120.8	124.1	129.5	137.2	146.9	162.7
55°	104.0	103.1	104.5	105.6	106.3	107.2	109.0	112.4	119.0	127.2	139.0
57.5°	88.6	88.2	89.2	90.2	92.4	94.8	96.4	98.5	101.9	107.8	119.5
60°	75.9	75.9	77.9	78.6	81.1	84.3	87.5	89.3	92.7	96.5	105.2
62.5°	64.6	64.8	65.7	66.4	67.8	71.7	76.2	80.2	83.4	87.1	92.8
65°	54.1	54.5	54.5	55.0	55.9	56.8	58.6	61.8	67.5	72.7	77.0
67.5°	45.9	46.0	46.2	46.6	46.8	47.8	48.6	50.0	51.3	56.2	61.6
70°	40.4	41.1	40.9	41.3	41.6	42.0	42.9	43.6	45.7	46.8	50.0
72.5°	35.3	35.8	35.8	36.1	36.7	36.8	37.5	38.2	39.5	40.4	42.2
75°	28.6	28.4	28.6	29.1	29.3	29.5	29.5	30.4	31.1	32.0	33.2
77.5°	22.1	22.3	22.3	22.3	22.4	22.8	22.7	23.1	23.8	24.3	24.8
80°	17.7	17.9	17.7	17.9	18.2	18.4	18.2	18.4	19.1	19.5	19.5
82.5°	13.7	13.8	13.9	13.9	14.0	14.0	14.4	14.4	14.9	14.8	15.0
85°	8.2	8.0	8.0	8.0	8.2	8.4	8.2	8.2	8.4	8.4	8.4
87.5°	5.2	5.4	5.4	5.4	5.4	5.4	5.2	5.5	5.4	5.7	5.4
90°	11.7	11.7	11.7	11.7	11.7	11.3	10.6	11.3	11.7	12.0	11.7
92.5°	19.6	20.1	19.9	21.0	21.3	23.5	26.4	30.8	38.8	45.9	45.3
95°	40.3	39.9	41.0	43.8	48.4	56.2	71.0	92.6	121.2	138.5	122.6
97.5°	79.3	82.3	87.4	96.1	113.0	138.5	176.7	216.0	248.0	236.4	178.1
100°	126.5	132.9	143.1	158.3	187.6	230.4	278.8	322.6	330.0	279.1	192.2
102.5°	222.6	231.2	244.0	269.9	301.8	347.1	382.5	392.4	360.5	280.5	186.8
105°	398.2	403.1	418.3	440.2	462.2	473.8	469.2	429.3	355.8	261.8	176.3
107.5°	508.7	515.2	518.3	519.5	516.7	499.6	462.9	402.7	324.8	241.7	171.1
110°	542.0	542.4	539.2	532.5	517.3	488.3	443.1	379.8	305.3	232.1	170.0



TEST NUMBER: P331617

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	541.4	539.5	533.5	522.3	501.2	467.9	419.6	358.9	291.7	225.9	170.2
115°	524.0	520.8	511.6	495.4	470.3	433.9	387.6	333.2	274.9	219.1	171.7
117.5°	492.8	490.1	480.5	463.3	437.7	403.6	361.6	313.8	264.3	215.7	174.3
120°	472.8	469.2	459.0	442.4	417.6	385.5	348.0	304.2	258.6	213.8	176.0
122.5°	451.8	448.9	439.8	423.4	401.2	372.2	336.7	296.6	253.8	212.6	177.9
125°	425.1	422.2	413.4	400.0	379.5	353.0	321.9	285.5	247.0	210.6	180.9
127.5°	401.6	399.3	391.7	379.1	361.2	336.8	307.5	274.5	240.6	209.4	183.9
130°	388.3	385.5	378.4	366.4	349.1	325.8	297.9	267.5	236.4	208.8	186.2
132.5°	374.5	371.9	365.4	353.4	336.4	314.5	288.8	260.7	233.0	208.5	188.5
135°	352.3	350.9	344.5	332.8	317.6	297.9	274.5	251.2	228.2	208.1	191.2
137.5°	330.5	328.4	322.8	312.8	298.9	281.7	263.2	243.7	224.9	208.0	193.6
140°	315.5	313.4	308.1	298.9	287.6	272.1	255.8	238.8	222.9	207.8	194.7
142.5°	300.5	300.1	295.4	287.0	276.3	263.3	249.3	234.9	221.0	207.8	195.5
145°	281.2	280.2	276.7	270.6	262.2	251.9	241.0	229.3	218.4	207.0	196.4
147.5°	265.1	264.4	262.0	257.2	250.2	242.7	234.2	225.0	215.7	205.8	196.7
150°	255.5	255.1	253.0	248.7	243.4	237.1	229.7	221.9	213.4	204.9	196.4
152.5°	247.3	247.2	245.6	242.0	237.8	232.3	226.0	218.8	211.4	203.5	195.9
155°	236.4	237.1	235.7	233.2	229.3	225.4	220.1	214.5	207.8	201.0	195.0
157.5°	227.1	227.1	226.5	224.4	221.7	218.6	214.2	209.5	204.3	198.5	193.4
160°	221.2	221.2	220.8	219.1	216.6	214.1	210.2	206.3	201.7	196.8	192.6
162.5°	215.5	215.8	215.5	214.3	211.8	209.9	206.6	203.2	199.5	195.4	191.7
165°	207.4	207.8	207.8	206.3	204.9	203.5	201.0	198.6	195.7	192.6	190.1
167.5°	199.9	200.3	200.4	199.6	199.0	197.7	196.0	194.1	192.1	190.1	188.5
170°	195.4	196.1	196.4	195.4	195.0	194.3	192.9	191.9	190.1	188.7	187.6
172.5°	191.7	192.1	192.5	192.0	191.6	191.2	190.1	189.3	188.1	187.0	186.5
175°	186.9	187.6	188.0	187.6	187.6	187.3	186.9	186.6	185.5	185.1	184.8
177.5°	184.0	184.6	184.9	184.9	184.9	184.9	184.6	184.6	184.0	183.7	184.0
180°	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7



TEST NUMBER: P331617

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7
2.5°	669.4	667.9	666.6	663.4	661.7	658.1	657.6	657.4	652.7	648.1	646.8
5°	692.4	688.7	683.3	676.9	670.3	663.5	659.0	655.3	646.2	637.6	632.6
7.5°	715.5	707.7	698.3	686.3	676.2	665.0	656.6	649.1	636.2	623.8	615.5
10°	732.8	720.1	707.6	691.0	678.0	665.3	653.5	643.3	628.8	612.4	600.8
12.5°	743.5	729.5	712.3	696.1	679.3	663.1	647.3	634.2	617.1	600.2	586.5
15°	758.0	743.0	722.1	698.9	677.4	656.2	638.1	621.7	599.5	579.2	562.4
17.5°	769.9	749.2	726.8	700.0	675.0	648.2	624.8	603.9	579.1	554.7	534.9
20°	773.7	753.2	727.3	700.5	671.0	639.4	614.2	591.5	564.9	538.3	515.6
22.5°	771.3	755.4	726.6	694.5	664.3	631.3	602.8	576.4	546.9	519.8	493.5
25°	755.3	749.8	722.6	687.6	653.1	614.7	581.7	552.9	519.3	490.2	461.6
27.5°	717.9	729.7	712.8	675.5	637.1	596.0	558.9	526.1	491.2	458.5	430.0
30°	681.9	708.9	701.7	667.1	624.2	583.8	542.2	507.9	470.7	437.0	408.9
32.5°	632.7	677.3	684.4	655.5	611.1	566.7	523.1	489.0	450.1	414.7	387.2
35°	554.2	621.0	651.7	633.3	588.8	540.8	495.9	456.1	417.0	382.1	354.8
37.5°	460.7	551.7	602.8	604.1	563.2	513.4	464.4	424.9	384.9	350.6	321.1
40°	400.0	498.6	565.2	579.9	545.4	491.6	442.0	401.8	362.8	329.1	295.3
42.5°	345.5	443.7	525.5	551.2	523.8	470.3	420.6	378.6	340.6	308.8	274.2
45°	279.4	365.3	455.4	501.3	486.1	436.6	384.1	344.1	308.5	281.0	247.8
47.5°	235.7	296.2	383.5	445.5	445.3	400.1	348.4	310.2	277.1	251.3	224.5
50°	210.8	263.5	337.3	407.7	413.6	375.7	326.6	288.7	257.8	230.8	209.2
52.5°	188.4	231.9	298.2	365.8	382.6	349.7	302.1	267.1	237.1	212.2	193.8
55°	159.2	192.9	243.3	306.4	331.9	308.7	266.4	233.7	209.4	188.5	172.6
57.5°	134.7	159.9	200.4	251.2	280.8	266.3	231.4	204.8	184.0	165.1	152.6
60°	119.3	139.9	174.2	216.7	249.4	239.2	209.4	184.7	167.0	150.6	138.8
62.5°	104.7	122.5	151.9	186.4	216.3	212.1	187.8	167.0	151.5	136.6	126.6
65°	84.3	97.2	120.2	147.2	171.3	173.3	155.8	141.7	127.9	116.1	107.2
67.5°	67.1	75.6	91.7	114.5	132.5	139.0	128.3	117.5	106.5	97.4	89.7
70°	56.6	63.4	75.2	93.6	110.2	117.0	110.8	102.4	92.9	85.4	78.8
72.5°	45.8	52.5	61.2	74.7	88.9	96.3	94.1	88.1	80.4	74.1	67.9
75°	34.5	36.6	42.5	51.6	62.7	69.1	70.6	67.5	61.3	56.6	52.9
77.5°	25.5	26.8	29.6	34.3	41.6	47.3	49.6	49.2	45.0	42.3	38.8
80°	20.4	21.1	22.5	24.5	30.0	35.7	37.3	37.3	34.3	33.2	29.8
82.5°	15.5	16.0	16.9	18.0	20.5	25.5	27.3	27.6	25.8	24.3	21.6
85°	8.9	8.6	9.1	9.8	10.2	11.6	14.3	14.8	14.3	12.5	11.8
87.5°	5.0	4.7	4.3	3.9	4.0	4.0	4.6	5.3	4.8	4.6	4.3
90°	9.5	7.1	5.3	4.2	3.5	2.8	1.4	0.4	1.4	2.8	3.5
92.5°	35.3	24.0	16.0	12.7	10.3	8.8	6.2	4.3	6.2	8.8	10.3
95°	81.6	50.9	34.6	26.1	20.5	17.3	13.8	12.4	13.8	17.3	20.5
97.5°	110.0	67.1	46.7	37.1	30.6	25.8	22.0	20.1	22.0	25.8	30.6
100°	115.9	72.8	54.1	44.2	37.1	31.4	28.3	27.2	28.3	31.4	37.1
102.5°	116.2	77.9	60.6	50.7	43.3	37.7	34.5	33.7	34.5	37.7	43.3
105°	118.0	86.6	70.0	60.1	52.3	47.0	44.5	43.1	44.5	47.0	52.3
107.5°	122.9	95.5	79.4	69.4	61.7	56.8	54.4	53.3	54.4	56.8	61.7
110°	126.8	101.4	85.9	75.6	68.2	63.6	61.5	60.1	61.5	63.6	68.2





TEST NUMBER: P331617

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	131.1	107.1	92.1	81.5	74.4	70.1	67.7	66.3	67.7	70.1	74.4
115°	137.4	115.9	100.7	91.2	84.1	79.9	77.7	76.0	77.7	79.9	84.1
117.5°	144.2	124.0	110.0	100.1	93.3	89.5	87.4	86.0	87.4	89.5	93.3
120°	148.8	129.7	115.9	106.0	98.9	95.8	93.6	92.2	93.6	95.8	98.9
122.5°	152.7	135.0	122.1	111.9	104.9	101.4	99.3	98.2	99.3	101.4	104.9
125°	159.0	143.1	130.4	120.5	113.4	109.2	107.1	106.0	107.1	109.2	113.4
127.5°	164.9	150.6	138.2	128.0	121.3	116.6	113.6	112.2	113.6	116.6	121.3
130°	168.5	155.1	142.7	132.9	125.8	120.8	117.3	115.9	117.3	120.8	125.8
132.5°	172.2	159.1	147.3	137.4	130.0	124.8	121.0	119.3	121.0	124.8	130.0
135°	177.0	164.7	153.3	143.5	135.3	130.0	125.8	124.4	125.8	130.0	135.3
137.5°	180.7	169.2	158.0	148.8	140.8	135.1	130.9	129.2	130.9	135.1	140.8
140°	182.7	171.7	161.1	151.9	144.2	138.5	134.3	132.9	134.3	138.5	144.2
142.5°	184.4	173.7	163.4	154.8	147.3	141.6	137.7	136.5	137.7	141.6	147.3
145°	186.6	176.7	167.1	159.4	152.3	147.0	143.5	142.0	143.5	147.0	152.3
147.5°	187.8	179.1	170.1	163.2	157.3	152.4	149.0	148.0	149.0	152.4	157.3
150°	188.3	180.2	172.1	165.7	160.4	155.8	153.0	151.9	153.0	155.8	160.4
152.5°	188.6	181.3	174.0	168.3	163.2	159.2	156.4	155.9	156.4	159.2	163.2
155°	189.0	183.0	177.0	171.7	167.8	163.9	161.8	161.5	161.8	163.9	167.8
157.5°	189.0	184.2	179.1	174.7	171.6	168.2	166.5	166.1	166.5	168.2	171.6
160°	189.0	184.8	180.6	176.7	173.8	171.0	169.6	169.2	169.6	171.0	173.8
162.5°	188.7	185.1	181.4	178.4	175.8	173.6	172.1	172.4	172.1	173.6	175.8
165°	188.0	185.5	182.3	180.2	178.4	176.3	175.6	176.0	175.6	176.3	178.4
167.5°	187.5	185.4	183.1	181.8	180.5	179.1	178.5	178.9	178.5	179.1	180.5
170°	186.9	185.1	183.4	182.3	181.6	180.6	180.2	180.9	180.2	180.6	181.6
172.5°	186.1	184.9	183.7	182.9	182.5	181.4	181.6	182.0	181.6	181.4	182.5
175°	185.1	184.4	183.7	183.4	183.4	182.7	183.0	183.4	183.0	182.7	183.4
177.5°	184.6	184.0	183.7	183.7	183.7	183.2	183.4	184.0	183.4	183.2	183.7
180°	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7



TEST NUMBER: P331617

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7
2.5°	644.5	643.2	640.8	637.2	635.0	631.2	628.7	630.1	630.5	630.1	629.8
5°	627.2	622.4	615.8	609.4	603.5	597.2	593.5	592.0	588.8	587.0	586.0
7.5°	606.2	598.0	588.7	577.6	568.2	558.3	553.3	550.8	544.3	540.8	537.7
10°	590.6	577.6	568.3	553.8	544.9	532.0	523.1	523.4	514.5	509.5	505.9
12.5°	573.3	559.1	543.6	530.5	518.2	507.8	497.1	492.8	483.4	478.6	468.8
15°	544.7	528.1	511.8	494.1	481.6	465.4	450.0	431.1	415.9	402.7	399.1
17.5°	513.5	492.9	476.5	455.7	434.3	407.2	389.3	378.3	369.2	362.2	357.0
20°	492.0	471.1	453.6	422.3	393.4	375.0	361.9	353.4	343.9	336.4	332.3
22.5°	469.5	447.7	423.8	388.8	366.3	351.6	339.9	330.2	323.7	317.9	314.1
25°	437.5	413.6	374.3	350.3	332.1	316.6	308.5	302.6	295.8	287.8	284.2
27.5°	403.7	365.8	337.5	319.6	302.3	292.3	284.9	276.1	270.0	266.4	262.6
30°	378.4	340.5	318.5	298.9	286.7	275.5	266.9	261.9	256.0	249.9	247.4
32.5°	350.3	320.0	298.8	282.6	270.1	260.6	253.8	245.7	241.5	237.7	232.5
35°	315.3	292.3	273.0	259.9	248.0	240.3	232.4	227.6	219.9	216.7	214.7
37.5°	285.7	265.8	251.4	237.5	228.1	219.6	214.7	207.1	203.8	199.3	195.0
40°	268.9	249.4	235.6	224.2	213.7	207.4	201.3	195.1	190.1	188.1	182.9
42.5°	251.9	236.0	222.1	209.7	202.7	195.9	188.2	183.7	178.5	175.2	172.0
45°	228.3	214.2	202.4	192.2	184.4	177.4	172.4	164.9	162.0	155.4	152.6
47.5°	207.6	194.5	183.2	173.5	166.0	161.4	154.1	148.2	143.5	139.4	135.9
50°	192.9	181.9	171.0	162.4	155.6	149.0	141.5	138.6	131.3	129.2	127.2
52.5°	179.4	169.0	159.1	150.6	143.8	137.4	130.8	126.9	122.0	120.0	118.5
55°	160.6	150.6	141.1	133.6	126.8	120.2	116.1	111.3	109.0	107.4	105.6
57.5°	141.7	132.7	125.4	117.8	110.9	105.7	101.0	98.1	95.8	93.7	91.5
60°	129.7	121.1	114.5	107.4	100.4	96.1	92.5	89.0	86.3	83.1	82.2
62.5°	117.0	109.4	103.4	96.5	90.4	86.5	83.0	79.8	76.5	71.9	70.6
65°	99.5	93.6	87.2	81.5	76.1	72.2	67.2	63.6	62.2	61.8	61.6
67.5°	83.7	78.1	72.6	66.8	61.9	58.3	55.7	55.2	54.2	54.0	53.3
70°	73.1	67.9	62.5	57.0	52.2	51.6	50.7	49.7	48.6	48.2	47.7
72.5°	63.7	58.3	52.8	48.5	46.4	45.6	44.7	43.7	43.0	42.5	42.3
75°	48.8	43.8	40.2	38.6	37.5	36.8	35.4	34.8	34.3	33.6	33.4
77.5°	35.2	32.3	30.7	29.7	28.5	27.8	27.0	26.3	25.8	25.7	25.3
80°	26.8	25.4	24.3	22.9	22.5	21.6	21.4	20.7	20.9	20.2	20.2
82.5°	20.8	19.1	18.1	17.5	17.0	16.3	16.1	15.8	15.8	15.3	15.3
85°	10.7	10.2	9.8	9.3	9.3	8.6	8.9	8.6	8.6	8.2	8.0
87.5°	4.3	4.3	4.3	4.8	5.2	5.1	5.1	4.8	4.7	4.8	4.7
90°	4.2	5.3	7.1	9.5	11.7	12.0	11.7	11.3	10.6	11.3	11.7
92.5°	12.7	16.0	24.0	35.3	45.3	45.9	38.8	30.8	26.4	23.5	21.3
95°	26.1	34.6	50.9	81.6	122.6	138.5	121.2	92.6	71.0	56.2	48.4
97.5°	37.1	46.7	67.1	110.0	178.1	236.4	248.0	216.0	176.7	138.5	113.0
100°	44.2	54.1	72.8	115.9	192.2	279.1	330.0	322.6	278.8	230.4	187.6
102.5°	50.7	60.6	77.9	116.2	186.8	280.5	360.5	392.4	382.5	347.1	301.8
105°	60.1	70.0	86.6	118.0	176.3	261.8	355.8	429.3	469.2	473.8	462.2
107.5°	69.4	79.4	95.5	122.9	171.1	241.7	324.8	402.7	462.9	499.6	516.7
110°	75.6	85.9	101.4	126.8	170.0	232.1	305.3	379.8	443.1	488.3	517.3



TEST NUMBER: P331617

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	81.5	92.1	107.1	131.1	170.2	225.9	291.7	358.9	419.6	467.9	501.2
115°	91.2	100.7	115.9	137.4	171.7	219.1	274.9	333.2	387.6	433.9	470.3
117.5°	100.1	110.0	124.0	144.2	174.3	215.7	264.3	313.8	361.6	403.6	437.7
120°	106.0	115.9	129.7	148.8	176.0	213.8	258.6	304.2	348.0	385.5	417.6
122.5°	111.9	122.1	135.0	152.7	177.9	212.6	253.8	296.6	336.7	372.2	401.2
125°	120.5	130.4	143.1	159.0	180.9	210.6	247.0	285.5	321.9	353.0	379.5
127.5°	128.0	138.2	150.6	164.9	183.9	209.4	240.6	274.5	307.5	336.8	361.2
130°	132.9	142.7	155.1	168.5	186.2	208.8	236.4	267.5	297.9	325.8	349.1
132.5°	137.4	147.3	159.1	172.2	188.5	208.5	233.0	260.7	288.8	314.5	336.4
135°	143.5	153.3	164.7	177.0	191.2	208.1	228.2	251.2	274.5	297.9	317.6
137.5°	148.8	158.0	169.2	180.7	193.6	208.0	224.9	243.7	263.2	281.7	298.9
140°	151.9	161.1	171.7	182.7	194.7	207.8	222.9	238.8	255.8	272.1	287.6
142.5°	154.8	163.4	173.7	184.4	195.5	207.8	221.0	234.9	249.3	263.3	276.3
145°	159.4	167.1	176.7	186.6	196.4	207.0	218.4	229.3	241.0	251.9	262.2
147.5°	163.2	170.1	179.1	187.8	196.7	205.8	215.7	225.0	234.2	242.7	250.2
150°	165.7	172.1	180.2	188.3	196.4	204.9	213.4	221.9	229.7	237.1	243.4
152.5°	168.3	174.0	181.3	188.6	195.9	203.5	211.4	218.8	226.0	232.3	237.8
155°	171.7	177.0	183.0	189.0	195.0	201.0	207.8	214.5	220.1	225.4	229.3
157.5°	174.7	179.1	184.2	189.0	193.4	198.5	204.3	209.5	214.2	218.6	221.7
160°	176.7	180.6	184.8	189.0	192.6	196.8	201.7	206.3	210.2	214.1	216.6
162.5°	178.4	181.4	185.1	188.7	191.7	195.4	199.5	203.2	206.6	209.9	211.8
165°	180.2	182.3	185.5	188.0	190.1	192.6	195.7	198.6	201.0	203.5	204.9
167.5°	181.8	183.1	185.4	187.5	188.5	190.1	192.1	194.1	196.0	197.7	199.0
170°	182.3	183.4	185.1	186.9	187.6	188.7	190.1	191.9	192.9	194.3	195.0
172.5°	182.9	183.7	184.9	186.1	186.5	187.0	188.1	189.3	190.1	191.2	191.6
175°	183.4	183.7	184.4	185.1	184.8	185.1	185.5	186.6	186.9	187.3	187.6
177.5°	183.7	183.7	184.0	184.6	184.0	183.7	184.0	184.6	184.6	184.9	184.9
180°	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7



TEST NUMBER: P331617

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7
2.5°	627.8	628.1	627.6	627.9	627.6	628.1	627.8	629.8	630.1	630.5	630.1
5°	584.9	582.2	581.7	581.1	581.7	582.2	584.9	586.0	587.0	588.8	592.0
7.5°	533.8	533.4	532.2	530.6	532.2	533.4	533.8	537.7	540.8	544.3	550.8
10°	500.9	499.7	499.5	497.9	499.5	499.7	500.9	505.9	509.5	514.5	523.4
12.5°	462.3	455.0	454.3	450.3	454.3	455.0	462.3	468.8	478.6	483.4	492.8
15°	393.7	392.3	387.7	384.8	387.7	392.3	393.7	399.1	402.7	415.9	431.1
17.5°	354.4	349.9	348.5	347.9	348.5	349.9	354.4	357.0	362.2	369.2	378.3
20°	329.1	325.1	324.4	323.9	324.4	325.1	329.1	332.3	336.4	343.9	353.4
22.5°	311.7	307.4	305.7	304.3	305.7	307.4	311.7	314.1	317.9	323.7	330.2
25°	281.9	280.3	279.4	278.9	279.4	280.3	281.9	284.2	287.8	295.8	302.6
27.5°	258.6	255.1	254.4	253.2	254.4	255.1	258.6	262.6	266.4	270.0	276.1
30°	245.3	244.2	242.6	241.2	242.6	244.2	245.3	247.4	249.9	256.0	261.9
32.5°	229.7	228.7	227.3	226.7	227.3	228.7	229.7	232.5	237.7	241.5	245.7
35°	212.4	209.2	207.8	205.8	207.8	209.2	212.4	214.7	216.7	219.9	227.6
37.5°	194.1	192.4	190.5	191.2	190.5	192.4	194.1	195.0	199.3	203.8	207.1
40°	179.9	178.8	178.3	178.1	178.3	178.8	179.9	182.9	188.1	190.1	195.1
42.5°	168.6	165.5	164.3	164.3	164.3	165.5	168.6	172.0	175.2	178.5	183.7
45°	151.5	148.6	146.5	146.7	146.5	148.6	151.5	152.6	155.4	162.0	164.9
47.5°	134.0	133.9	132.6	133.0	132.6	133.9	134.0	135.9	139.4	143.5	148.2
50°	125.6	124.3	123.3	123.6	123.3	124.3	125.6	127.2	129.2	131.3	138.6
52.5°	117.6	116.4	115.7	116.7	115.7	116.4	117.6	118.5	120.0	122.0	126.9
55°	104.5	103.1	102.9	102.7	102.9	103.1	104.5	105.6	107.4	109.0	111.3
57.5°	89.8	88.9	87.5	87.0	87.5	88.9	89.8	91.5	93.7	95.8	98.1
60°	79.3	77.5	75.2	75.0	75.2	77.5	79.3	82.2	83.1	86.3	89.0
62.5°	69.6	69.3	68.8	68.8	68.8	69.3	69.6	70.6	71.9	76.5	79.8
65°	61.1	60.9	61.1	61.3	61.1	60.9	61.1	61.6	61.8	62.2	63.6
67.5°	53.2	52.8	52.4	52.6	52.4	52.8	53.2	53.3	54.0	54.2	55.2
70°	47.2	47.0	46.8	46.8	46.8	47.0	47.2	47.7	48.2	48.6	49.7
72.5°	41.4	41.4	41.2	41.0	41.2	41.4	41.4	42.3	42.5	43.0	43.7
75°	33.2	32.7	32.7	32.7	32.7	32.7	33.2	33.4	33.6	34.3	34.8
77.5°	25.3	25.0	24.8	24.6	24.8	25.0	25.3	25.3	25.7	25.8	26.3
80°	20.0	19.8	19.5	19.5	19.5	19.8	20.0	20.2	20.2	20.9	20.7
82.5°	15.3	15.0	15.0	14.8	15.0	15.0	15.3	15.3	15.3	15.8	15.8
85°	8.2	8.4	8.2	8.6	8.2	8.4	8.2	8.0	8.2	8.6	8.6
87.5°	4.7	4.5	4.7	4.5	4.7	4.5	4.7	4.7	4.8	4.7	4.8
90°	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.3	10.6	11.3
92.5°	21.0	19.9	20.1	19.6	20.1	19.9	21.0	21.3	23.5	26.4	30.8
95°	43.8	41.0	39.9	40.3	39.9	41.0	43.8	48.4	56.2	71.0	92.6
97.5°	96.1	87.4	82.3	79.3	82.3	87.4	96.1	113.0	138.5	176.7	216.0
100°	158.3	143.1	132.9	126.5	132.9	143.1	158.3	187.6	230.4	278.8	322.6
102.5°	269.9	244.0	231.2	222.6	231.2	244.0	269.9	301.8	347.1	382.5	392.4
105°	440.2	418.3	403.1	398.2	403.1	418.3	440.2	462.2	473.8	469.2	429.3
107.5°	519.5	518.3	515.2	508.7	515.2	518.3	519.5	516.7	499.6	462.9	402.7
110°	532.5	539.2	542.4	542.0	542.4	539.2	532.5	517.3	488.3	443.1	379.8



TEST NUMBER: P331617

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	522.3	533.5	539.5	541.4	539.5	533.5	522.3	501.2	467.9	419.6	358.9
115°	495.4	511.6	520.8	524.0	520.8	511.6	495.4	470.3	433.9	387.6	333.2
117.5°	463.3	480.5	490.1	492.8	490.1	480.5	463.3	437.7	403.6	361.6	313.8
120°	442.4	459.0	469.2	472.8	469.2	459.0	442.4	417.6	385.5	348.0	304.2
122.5°	423.4	439.8	448.9	451.8	448.9	439.8	423.4	401.2	372.2	336.7	296.6
125°	400.0	413.4	422.2	425.1	422.2	413.4	400.0	379.5	353.0	321.9	285.5
127.5°	379.1	391.7	399.3	401.6	399.3	391.7	379.1	361.2	336.8	307.5	274.5
130°	366.4	378.4	385.5	388.3	385.5	378.4	366.4	349.1	325.8	297.9	267.5
132.5°	353.4	365.4	371.9	374.5	371.9	365.4	353.4	336.4	314.5	288.8	260.7
135°	332.8	344.5	350.9	352.3	350.9	344.5	332.8	317.6	297.9	274.5	251.2
137.5°	312.8	322.8	328.4	330.5	328.4	322.8	312.8	298.9	281.7	263.2	243.7
140°	298.9	308.1	313.4	315.5	313.4	308.1	298.9	287.6	272.1	255.8	238.8
142.5°	287.0	295.4	300.1	300.5	300.1	295.4	287.0	276.3	263.3	249.3	234.9
145°	270.6	276.7	280.2	281.2	280.2	276.7	270.6	262.2	251.9	241.0	229.3
147.5°	257.2	262.0	264.4	265.1	264.4	262.0	257.2	250.2	242.7	234.2	225.0
150°	248.7	253.0	255.1	255.5	255.1	253.0	248.7	243.4	237.1	229.7	221.9
152.5°	242.0	245.6	247.2	247.3	247.2	245.6	242.0	237.8	232.3	226.0	218.8
155°	233.2	235.7	237.1	236.4	237.1	235.7	233.2	229.3	225.4	220.1	214.5
157.5°	224.4	226.5	227.1	227.1	227.1	226.5	224.4	221.7	218.6	214.2	209.5
160°	219.1	220.8	221.2	221.2	221.2	220.8	219.1	216.6	214.1	210.2	206.3
162.5°	214.3	215.5	215.8	215.5	215.8	215.5	214.3	211.8	209.9	206.6	203.2
165°	206.3	207.8	207.8	207.4	207.8	207.8	206.3	204.9	203.5	201.0	198.6
167.5°	199.6	200.4	200.3	199.9	200.3	200.4	199.6	199.0	197.7	196.0	194.1
170°	195.4	196.4	196.1	195.4	196.1	196.4	195.4	195.0	194.3	192.9	191.9
172.5°	192.0	192.5	192.1	191.7	192.1	192.5	192.0	191.6	191.2	190.1	189.3
175°	187.6	188.0	187.6	186.9	187.6	188.0	187.6	187.6	187.3	186.9	186.6
177.5°	184.9	184.9	184.6	184.0	184.6	184.9	184.9	184.9	184.9	184.6	184.6
180°	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7



TEST NUMBER: P331617

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7
2.5°	628.7	631.2	635.0	637.2	640.8	643.2	644.5	646.8	648.1	652.7	657.4
5°	593.5	597.2	603.5	609.4	615.8	622.4	627.2	632.6	637.6	646.2	655.3
7.5°	553.3	558.3	568.2	577.6	588.7	598.0	606.2	615.5	623.8	636.2	649.1
10°	523.1	532.0	544.9	553.8	568.3	577.6	590.6	600.8	612.4	628.8	643.3
12.5°	497.1	507.8	518.2	530.5	543.6	559.1	573.3	586.5	600.2	617.1	634.2
15°	450.0	465.4	481.6	494.1	511.8	528.1	544.7	562.4	579.2	599.5	621.7
17.5°	389.3	407.2	434.3	455.7	476.5	492.9	513.5	534.9	554.7	579.1	603.9
20°	361.9	375.0	393.4	422.3	453.6	471.1	492.0	515.6	538.3	564.9	591.5
22.5°	339.9	351.6	366.3	388.8	423.8	447.7	469.5	493.5	519.8	546.9	576.4
25°	308.5	316.6	332.1	350.3	374.3	413.6	437.5	461.6	490.2	519.3	552.9
27.5°	284.9	292.3	302.3	319.6	337.5	365.8	403.7	430.0	458.5	491.2	526.1
30°	266.9	275.5	286.7	298.9	318.5	340.5	378.4	408.9	437.0	470.7	507.9
32.5°	253.8	260.6	270.1	282.6	298.8	320.0	350.3	387.2	414.7	450.1	489.0
35°	232.4	240.3	248.0	259.9	273.0	292.3	315.3	354.8	382.1	417.0	456.1
37.5°	214.7	219.6	228.1	237.5	251.4	265.8	285.7	321.1	350.6	384.9	424.9
40°	201.3	207.4	213.7	224.2	235.6	249.4	268.9	295.3	329.1	362.8	401.8
42.5°	188.2	195.9	202.7	209.7	222.1	236.0	251.9	274.2	308.8	340.6	378.6
45°	172.4	177.4	184.4	192.2	202.4	214.2	228.3	247.8	281.0	308.5	344.1
47.5°	154.1	161.4	166.0	173.5	183.2	194.5	207.6	224.5	251.3	277.1	310.2
50°	141.5	149.0	155.6	162.4	171.0	181.9	192.9	209.2	230.8	257.8	288.7
52.5°	130.8	137.4	143.8	150.6	159.1	169.0	179.4	193.8	212.2	237.1	267.1
55°	116.1	120.2	126.8	133.6	141.1	150.6	160.6	172.6	188.5	209.4	233.7
57.5°	101.0	105.7	110.9	117.8	125.4	132.7	141.7	152.6	165.1	184.0	204.8
60°	92.5	96.1	100.4	107.4	114.5	121.1	129.7	138.8	150.6	167.0	184.7
62.5°	83.0	86.5	90.4	96.5	103.4	109.4	117.0	126.6	136.6	151.5	167.0
65°	67.2	72.2	76.1	81.5	87.2	93.6	99.5	107.2	116.1	127.9	141.7
67.5°	55.7	58.3	61.9	66.8	72.6	78.1	83.7	89.7	97.4	106.5	117.5
70°	50.7	51.6	52.2	57.0	62.5	67.9	73.1	78.8	85.4	92.9	102.4
72.5°	44.7	45.6	46.4	48.5	52.8	58.3	63.7	67.9	74.1	80.4	88.1
75°	35.4	36.8	37.5	38.6	40.2	43.8	48.8	52.9	56.6	61.3	67.5
77.5°	27.0	27.8	28.5	29.7	30.7	32.3	35.2	38.8	42.3	45.0	49.2
80°	21.4	21.6	22.5	22.9	24.3	25.4	26.8	29.8	33.2	34.3	37.3
82.5°	16.1	16.3	17.0	17.5	18.1	19.1	20.8	21.6	24.3	25.8	27.6
85°	8.9	8.6	9.3	9.3	9.8	10.2	10.7	11.8	12.5	14.3	14.8
87.5°	5.1	5.1	5.2	4.8	4.3	4.3	4.3	4.3	4.6	4.8	5.3
90°	11.7	12.0	11.7	9.5	7.1	5.3	4.2	3.5	2.8	1.4	0.4
92.5°	38.8	45.9	45.3	35.3	24.0	16.0	12.7	10.3	8.8	6.2	4.3
95°	121.2	138.5	122.6	81.6	50.9	34.6	26.1	20.5	17.3	13.8	12.4
97.5°	248.0	236.4	178.1	110.0	67.1	46.7	37.1	30.6	25.8	22.0	20.1
100°	330.0	279.1	192.2	115.9	72.8	54.1	44.2	37.1	31.4	28.3	27.2
102.5°	360.5	280.5	186.8	116.2	77.9	60.6	50.7	43.3	37.7	34.5	33.7
105°	355.8	261.8	176.3	118.0	86.6	70.0	60.1	52.3	47.0	44.5	43.1
107.5°	324.8	241.7	171.1	122.9	95.5	79.4	69.4	61.7	56.8	54.4	53.3
110°	305.3	232.1	170.0	126.8	101.4	85.9	75.6	68.2	63.6	61.5	60.1



TEST NUMBER: P331617

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	291.7	225.9	170.2	131.1	107.1	92.1	81.5	74.4	70.1	67.7	66.3
115°	274.9	219.1	171.7	137.4	115.9	100.7	91.2	84.1	79.9	77.7	76.0
117.5°	264.3	215.7	174.3	144.2	124.0	110.0	100.1	93.3	89.5	87.4	86.0
120°	258.6	213.8	176.0	148.8	129.7	115.9	106.0	98.9	95.8	93.6	92.2
122.5°	253.8	212.6	177.9	152.7	135.0	122.1	111.9	104.9	101.4	99.3	98.2
125°	247.0	210.6	180.9	159.0	143.1	130.4	120.5	113.4	109.2	107.1	106.0
127.5°	240.6	209.4	183.9	164.9	150.6	138.2	128.0	121.3	116.6	113.6	112.2
130°	236.4	208.8	186.2	168.5	155.1	142.7	132.9	125.8	120.8	117.3	115.9
132.5°	233.0	208.5	188.5	172.2	159.1	147.3	137.4	130.0	124.8	121.0	119.3
135°	228.2	208.1	191.2	177.0	164.7	153.3	143.5	135.3	130.0	125.8	124.4
137.5°	224.9	208.0	193.6	180.7	169.2	158.0	148.8	140.8	135.1	130.9	129.2
140°	222.9	207.8	194.7	182.7	171.7	161.1	151.9	144.2	138.5	134.3	132.9
142.5°	221.0	207.8	195.5	184.4	173.7	163.4	154.8	147.3	141.6	137.7	136.5
145°	218.4	207.0	196.4	186.6	176.7	167.1	159.4	152.3	147.0	143.5	142.0
147.5°	215.7	205.8	196.7	187.8	179.1	170.1	163.2	157.3	152.4	149.0	148.0
150°	213.4	204.9	196.4	188.3	180.2	172.1	165.7	160.4	155.8	153.0	151.9
152.5°	211.4	203.5	195.9	188.6	181.3	174.0	168.3	163.2	159.2	156.4	155.9
155°	207.8	201.0	195.0	189.0	183.0	177.0	171.7	167.8	163.9	161.8	161.5
157.5°	204.3	198.5	193.4	189.0	184.2	179.1	174.7	171.6	168.2	166.5	166.1
160°	201.7	196.8	192.6	189.0	184.8	180.6	176.7	173.8	171.0	169.6	169.2
162.5°	199.5	195.4	191.7	188.7	185.1	181.4	178.4	175.8	173.6	172.1	172.4
165°	195.7	192.6	190.1	188.0	185.5	182.3	180.2	178.4	176.3	175.6	176.0
167.5°	192.1	190.1	188.5	187.5	185.4	183.1	181.8	180.5	179.1	178.5	178.9
170°	190.1	188.7	187.6	186.9	185.1	183.4	182.3	181.6	180.6	180.2	180.9
172.5°	188.1	187.0	186.5	186.1	184.9	183.7	182.9	182.5	181.4	181.6	182.0
175°	185.5	185.1	184.8	185.1	184.4	183.7	183.4	183.4	182.7	183.0	183.4
177.5°	184.0	183.7	184.0	184.6	184.0	183.7	183.7	183.7	183.2	183.4	184.0
180°	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7



TEST NUMBER: P331617

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7
2.5°	657.6	658.1	661.7	663.4	666.6	667.9	669.4	669.0	669.0	669.7	674.8
5°	659.0	663.5	670.3	676.9	683.3	688.7	692.4	696.0	697.4	703.9	709.8
7.5°	656.6	665.0	676.2	686.3	698.3	707.7	715.5	722.6	727.4	737.0	746.8
10°	653.5	665.3	678.0	691.0	707.6	720.1	732.8	742.6	745.7	760.0	768.2
12.5°	647.3	663.1	679.3	696.1	712.3	729.5	743.5	753.3	764.5	777.3	792.4
15°	638.1	656.2	677.4	698.9	722.1	743.0	758.0	775.0	787.3	801.4	814.6
17.5°	624.8	648.2	675.0	700.0	726.8	749.2	769.9	786.2	794.8	802.9	804.8
20°	614.2	639.4	671.0	700.5	727.3	753.2	773.7	787.3	789.6	789.8	777.8
22.5°	602.8	631.3	664.3	694.5	726.6	755.4	771.3	777.1	768.1	752.7	729.4
25°	581.7	614.7	653.1	687.6	722.6	749.8	755.3	745.1	713.5	680.3	638.3
27.5°	558.9	596.0	637.1	675.5	712.8	729.7	717.9	681.0	624.2	574.7	514.8
30°	542.2	583.8	624.2	667.1	701.7	708.9	681.9	627.6	561.3	486.8	427.0
32.5°	523.1	566.7	611.1	655.5	684.4	677.3	632.7	565.8	488.1	414.8	358.4
35°	495.9	540.8	588.8	633.3	651.7	621.0	554.2	467.2	387.7	319.4	280.5
37.5°	464.4	513.4	563.2	604.1	602.8	551.7	460.7	370.9	304.1	263.6	236.0
40°	442.0	491.6	545.4	579.9	565.2	498.6	400.0	315.3	266.4	234.2	214.0
42.5°	420.6	470.3	523.8	551.2	525.5	443.7	345.5	279.1	238.8	213.7	197.3
45°	384.1	436.6	486.1	501.3	455.4	365.3	279.4	231.2	204.4	185.8	174.5
47.5°	348.4	400.1	445.3	445.5	383.5	296.2	235.7	200.1	177.2	162.8	154.6
50°	326.6	375.7	413.6	407.7	337.3	263.5	210.8	180.1	161.1	149.9	141.3
52.5°	302.1	349.7	382.6	365.8	298.2	231.9	188.4	162.7	146.9	137.2	129.5
55°	266.4	308.7	331.9	306.4	243.3	192.9	159.2	139.0	127.2	119.0	112.4
57.5°	231.4	266.3	280.8	251.2	200.4	159.9	134.7	119.5	107.8	101.9	98.5
60°	209.4	239.2	249.4	216.7	174.2	139.9	119.3	105.2	96.5	92.7	89.3
62.5°	187.8	212.1	216.3	186.4	151.9	122.5	104.7	92.8	87.1	83.4	80.2
65°	155.8	173.3	171.3	147.2	120.2	97.2	84.3	77.0	72.7	67.5	61.8
67.5°	128.3	139.0	132.5	114.5	91.7	75.6	67.1	61.6	56.2	51.3	50.0
70°	110.8	117.0	110.2	93.6	75.2	63.4	56.6	50.0	46.8	45.7	43.6
72.5°	94.1	96.3	88.9	74.7	61.2	52.5	45.8	42.2	40.4	39.5	38.2
75°	70.6	69.1	62.7	51.6	42.5	36.6	34.5	33.2	32.0	31.1	30.4
77.5°	49.6	47.3	41.6	34.3	29.6	26.8	25.5	24.8	24.3	23.8	23.1
80°	37.3	35.7	30.0	24.5	22.5	21.1	20.4	19.5	19.5	19.1	18.4
82.5°	27.3	25.5	20.5	18.0	16.9	16.0	15.5	15.0	14.8	14.9	14.4
85°	14.3	11.6	10.2	9.8	9.1	8.6	8.9	8.4	8.4	8.4	8.2
87.5°	4.6	4.0	4.0	3.9	4.3	4.7	5.0	5.4	5.7	5.4	5.5
90°	1.4	2.8	3.5	4.2	5.3	7.1	9.5	11.7	12.0	11.7	11.3
92.5°	6.2	8.8	10.3	12.7	16.0	24.0	35.3	45.3	45.9	38.8	30.8
95°	13.8	17.3	20.5	26.1	34.6	50.9	81.6	122.6	138.5	121.2	92.6
97.5°	22.0	25.8	30.6	37.1	46.7	67.1	110.0	178.1	236.4	248.0	216.0
100°	28.3	31.4	37.1	44.2	54.1	72.8	115.9	192.2	279.1	330.0	322.6
102.5°	34.5	37.7	43.3	50.7	60.6	77.9	116.2	186.8	280.5	360.5	392.4
105°	44.5	47.0	52.3	60.1	70.0	86.6	118.0	176.3	261.8	355.8	429.3
107.5°	54.4	56.8	61.7	69.4	79.4	95.5	122.9	171.1	241.7	324.8	402.7
110°	61.5	63.6	68.2	75.6	85.9	101.4	126.8	170.0	232.1	305.3	379.8





TEST NUMBER: P331617

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	67.7	70.1	74.4	81.5	92.1	107.1	131.1	170.2	225.9	291.7	358.9
115°	77.7	79.9	84.1	91.2	100.7	115.9	137.4	171.7	219.1	274.9	333.2
117.5°	87.4	89.5	93.3	100.1	110.0	124.0	144.2	174.3	215.7	264.3	313.8
120°	93.6	95.8	98.9	106.0	115.9	129.7	148.8	176.0	213.8	258.6	304.2
122.5°	99.3	101.4	104.9	111.9	122.1	135.0	152.7	177.9	212.6	253.8	296.6
125°	107.1	109.2	113.4	120.5	130.4	143.1	159.0	180.9	210.6	247.0	285.5
127.5°	113.6	116.6	121.3	128.0	138.2	150.6	164.9	183.9	209.4	240.6	274.5
130°	117.3	120.8	125.8	132.9	142.7	155.1	168.5	186.2	208.8	236.4	267.5
132.5°	121.0	124.8	130.0	137.4	147.3	159.1	172.2	188.5	208.5	233.0	260.7
135°	125.8	130.0	135.3	143.5	153.3	164.7	177.0	191.2	208.1	228.2	251.2
137.5°	130.9	135.1	140.8	148.8	158.0	169.2	180.7	193.6	208.0	224.9	243.7
140°	134.3	138.5	144.2	151.9	161.1	171.7	182.7	194.7	207.8	222.9	238.8
142.5°	137.7	141.6	147.3	154.8	163.4	173.7	184.4	195.5	207.8	221.0	234.9
145°	143.5	147.0	152.3	159.4	167.1	176.7	186.6	196.4	207.0	218.4	229.3
147.5°	149.0	152.4	157.3	163.2	170.1	179.1	187.8	196.7	205.8	215.7	225.0
150°	153.0	155.8	160.4	165.7	172.1	180.2	188.3	196.4	204.9	213.4	221.9
152.5°	156.4	159.2	163.2	168.3	174.0	181.3	188.6	195.9	203.5	211.4	218.8
155°	161.8	163.9	167.8	171.7	177.0	183.0	189.0	195.0	201.0	207.8	214.5
157.5°	166.5	168.2	171.6	174.7	179.1	184.2	189.0	193.4	198.5	204.3	209.5
160°	169.6	171.0	173.8	176.7	180.6	184.8	189.0	192.6	196.8	201.7	206.3
162.5°	172.1	173.6	175.8	178.4	181.4	185.1	188.7	191.7	195.4	199.5	203.2
165°	175.6	176.3	178.4	180.2	182.3	185.5	188.0	190.1	192.6	195.7	198.6
167.5°	178.5	179.1	180.5	181.8	183.1	185.4	187.5	188.5	190.1	192.1	194.1
170°	180.2	180.6	181.6	182.3	183.4	185.1	186.9	187.6	188.7	190.1	191.9
172.5°	181.6	181.4	182.5	182.9	183.7	184.9	186.1	186.5	187.0	188.1	189.3
175°	183.0	182.7	183.4	183.4	183.7	184.4	185.1	184.8	185.1	185.5	186.6
177.5°	183.4	183.2	183.7	183.7	183.7	184.0	184.6	184.0	183.7	184.0	184.6
180°	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7



TEST NUMBER: P331617

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	653.7	653.7	653.7	653.7	653.7	653.7	653.7
2.5°	676.6	679.0	680.1	680.1	681.4	680.8	680.3
5°	715.5	719.8	720.8	724.8	727.8	726.9	727.3
7.5°	754.2	761.1	768.0	771.1	771.6	773.4	774.1
10°	778.0	783.7	794.3	792.8	800.7	805.3	797.8
12.5°	800.9	808.6	816.0	818.0	822.5	824.0	821.0
15°	821.6	825.7	826.1	825.0	826.4	825.2	820.9
17.5°	802.3	795.6	782.2	775.8	770.8	763.3	760.3
20°	770.3	750.7	728.0	718.9	708.3	687.4	692.4
22.5°	701.2	679.0	656.2	629.7	617.0	597.2	596.0
25°	593.8	555.4	513.1	483.6	466.3	446.6	437.9
27.5°	461.7	413.3	378.7	361.2	345.2	329.6	328.9
30°	374.8	338.5	311.7	296.7	286.9	280.3	281.7
32.5°	315.9	291.0	272.9	260.5	253.3	248.3	248.2
35°	258.3	241.2	229.6	224.4	219.2	215.6	215.8
37.5°	221.0	210.8	204.3	198.6	195.3	193.5	192.5
40°	201.9	193.5	188.5	185.1	182.4	179.9	179.4
42.5°	186.9	179.9	174.9	172.2	169.7	167.9	167.5
45°	165.8	160.1	155.6	152.6	151.5	149.9	149.9
47.5°	147.5	141.9	138.4	136.5	134.6	133.5	133.5
50°	135.2	130.8	127.7	126.5	124.9	124.3	124.0
52.5°	124.1	120.8	118.6	117.8	117.1	116.3	116.4
55°	109.0	107.2	106.3	105.6	104.5	103.1	104.0
57.5°	96.4	94.8	92.4	90.2	89.2	88.2	88.6
60°	87.5	84.3	81.1	78.6	77.9	75.9	75.9
62.5°	76.2	71.7	67.8	66.4	65.7	64.8	64.6
65°	58.6	56.8	55.9	55.0	54.5	54.5	54.1
67.5°	48.6	47.8	46.8	46.6	46.2	46.0	45.9
70°	42.9	42.0	41.6	41.3	40.9	41.1	40.4
72.5°	37.5	36.8	36.7	36.1	35.8	35.8	35.3
75°	29.5	29.5	29.3	29.1	28.6	28.4	28.6
77.5°	22.7	22.8	22.4	22.3	22.3	22.3	22.1
80°	18.2	18.4	18.2	17.9	17.7	17.9	17.7
82.5°	14.4	14.0	14.0	13.9	13.9	13.8	13.7
85°	8.2	8.4	8.2	8.0	8.0	8.0	8.2
87.5°	5.2	5.4	5.4	5.4	5.4	5.4	5.2
90°	10.6	11.3	11.7	11.7	11.7	11.7	11.7
92.5°	26.4	23.5	21.3	21.0	19.9	20.1	19.6
95°	71.0	56.2	48.4	43.8	41.0	39.9	40.3
97.5°	176.7	138.5	113.0	96.1	87.4	82.3	79.3
100°	278.8	230.4	187.6	158.3	143.1	132.9	126.5
102.5°	382.5	347.1	301.8	269.9	244.0	231.2	222.6
105°	469.2	473.8	462.2	440.2	418.3	403.1	398.2
107.5°	462.9	499.6	516.7	519.5	518.3	515.2	508.7
110°	443.1	488.3	517.3	532.5	539.2	542.4	542.0



TEST NUMBER: P331617

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	419.6	467.9	501.2	522.3	533.5	539.5	541.4
115°	387.6	433.9	470.3	495.4	511.6	520.8	524.0
117.5°	361.6	403.6	437.7	463.3	480.5	490.1	492.8
120°	348.0	385.5	417.6	442.4	459.0	469.2	472.8
122.5°	336.7	372.2	401.2	423.4	439.8	448.9	451.8
125°	321.9	353.0	379.5	400.0	413.4	422.2	425.1
127.5°	307.5	336.8	361.2	379.1	391.7	399.3	401.6
130°	297.9	325.8	349.1	366.4	378.4	385.5	388.3
132.5°	288.8	314.5	336.4	353.4	365.4	371.9	374.5
135°	274.5	297.9	317.6	332.8	344.5	350.9	352.3
137.5°	263.2	281.7	298.9	312.8	322.8	328.4	330.5
140°	255.8	272.1	287.6	298.9	308.1	313.4	315.5
142.5°	249.3	263.3	276.3	287.0	295.4	300.1	300.5
145°	241.0	251.9	262.2	270.6	276.7	280.2	281.2
147.5°	234.2	242.7	250.2	257.2	262.0	264.4	265.1
150°	229.7	237.1	243.4	248.7	253.0	255.1	255.5
152.5°	226.0	232.3	237.8	242.0	245.6	247.2	247.3
155°	220.1	225.4	229.3	233.2	235.7	237.1	236.4
157.5°	214.2	218.6	221.7	224.4	226.5	227.1	227.1
160°	210.2	214.1	216.6	219.1	220.8	221.2	221.2
162.5°	206.6	209.9	211.8	214.3	215.5	215.8	215.5
165°	201.0	203.5	204.9	206.3	207.8	207.8	207.4
167.5°	196.0	197.7	199.0	199.6	200.4	200.3	199.9
170°	192.9	194.3	195.0	195.4	196.4	196.1	195.4
172.5°	190.1	191.2	191.6	192.0	192.5	192.1	191.7
175°	186.9	187.3	187.6	187.6	188.0	187.6	186.9
177.5°	184.6	184.9	184.9	184.9	184.9	184.6	184.0
180°	183.7	183.7	183.7	183.7	183.7	183.7	183.7

(END OF REPORT)