

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

Luminaire Tested: **SA2XXRDIP-C290D330U835-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P331616  
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-C290D330U835-4F0-1E-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**

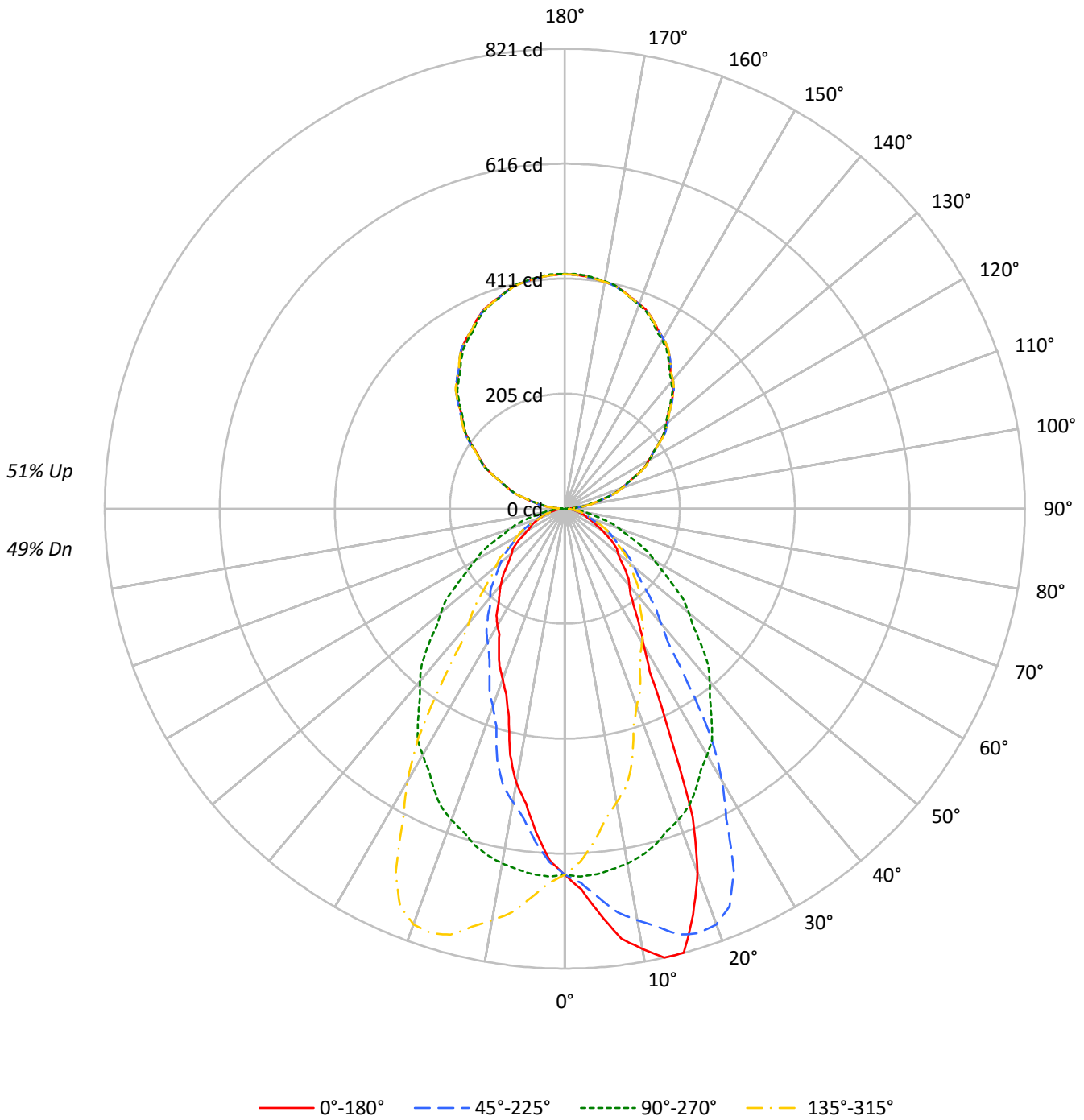
Lumens per Lamp: N/A  
Luminaire Lumens: 2302.1 lumens  
Efficiency: N/A  
Efficacy: 113.4 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: General Diffuse

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	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°	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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.0	2.7
10°-20°	172.7	7.5
20°-30°	222.5	9.7
30°-40°	211.5	9.2
40°-50°	181.1	7.9
50°-60°	137.9	6.0
60°-70°	87.2	3.8
70°-80°	43.5	1.9
80°-90°	13.0	0.6
90°-100°	26.5	1.2
100°-110°	82.4	3.6
110°-120°	140.8	6.1
120°-130°	185.2	8.0
130°-140°	207.9	9.0
140°-150°	203.8	8.9
150°-160°	171.0	7.4
160°-170°	113.4	4.9
170°-180°	39.6	1.7
0°-30°	457.2	19.9
0°-40°	668.6	29.0
0°-60°	987.7	42.9
0°-90°	1131.5	49.1
90°-120°	249.8	10.8
90°-150°	846.7	36.8
90°-180°	1171.0	50.9
0°-180°	2302.1	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	6
95°	22	18	22	18	22	24
105°	78	76	78	76	78	82
115°	141	141	141	141	141	140
125°	206	206	206	206	206	184
135°	269	266	269	266	269	207
145°	326	323	326	323	326	204
155°	372	369	372	369	372	171
165°	402	402	402	402	402	113
175°	416	418	416	418	416	40
180°	419	419	419	419	419	



TEST NUMBER: P331616

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**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°	5.3	5.5	5.5	5.4	5.4	5.4	5.5	5.7	5.5	5.7	5.2
90°	12.0	11.9	11.9	11.8	11.7	11.7	11.9	12.1	12.2	12.4	10.6
92.5°	11.4	11.4	11.4	11.4	11.4	11.4	11.3	11.3	11.3	11.2	10.8
95°	21.9	22.1	22.2	22.4	22.5	22.6	22.6	22.6	22.6	22.6	22.5
97.5°	37.9	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	37.7
100°	48.4	48.5	48.6	48.6	48.7	48.8	48.8	48.8	48.8	48.8	48.5
102.5°	60.3	60.4	60.4	60.5	60.6	60.6	60.5	60.5	60.4	60.3	60.0
105°	78.4	78.4	78.4	78.4	78.4	78.4	78.2	78.0	77.9	77.7	77.6
107.5°	95.5	95.9	96.3	96.6	97.0	97.1	97.1	97.0	96.9	96.9	96.9
110°	108.8	109.1	109.3	109.5	109.8	109.9	109.9	109.9	109.9	109.9	109.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	121.5	121.7	121.9	122.1	122.2	122.4	122.6	122.8	123.0	123.2	123.2
115°	141.3	141.6	141.8	142.0	142.3	142.4	142.5	142.6	142.7	142.7	142.9
117.5°	160.2	160.4	160.7	160.9	161.1	161.3	161.5	161.7	161.9	162.1	162.5
120°	173.5	173.7	173.9	174.2	174.4	174.5	174.5	174.5	174.5	174.5	175.2
122.5°	186.5	186.6	186.8	187.0	187.2	187.3	187.5	187.7	187.9	188.1	188.5
125°	206.3	206.4	206.5	206.6	206.6	206.8	207.0	207.3	207.5	207.7	208.0
127.5°	224.4	224.7	224.9	225.2	225.4	225.7	226.0	226.3	226.5	226.8	227.1
130°	237.4	237.7	238.0	238.4	238.7	238.9	239.1	239.2	239.4	239.5	239.7
132.5°	249.9	250.1	250.4	250.6	250.9	251.2	251.5	251.8	252.2	252.5	252.5
135°	269.2	269.5	269.7	269.9	270.2	270.3	270.4	270.5	270.5	270.6	270.5
137.5°	286.7	287.1	287.4	287.7	288.0	288.2	288.2	288.3	288.4	288.4	288.2
140°	298.9	299.2	299.5	299.8	300.1	300.3	300.3	300.3	300.3	300.3	299.9
142.5°	309.9	310.2	310.5	310.9	311.2	311.3	311.2	311.2	311.1	311.0	310.8
145°	326.4	326.8	327.1	327.4	327.7	327.8	327.7	327.7	327.6	327.5	327.0
147.5°	341.2	341.5	341.8	342.1	342.4	342.5	342.3	342.1	342.0	341.8	341.5
150°	350.8	351.1	351.3	351.5	351.8	351.8	351.5	351.3	351.1	350.8	350.5
152.5°	359.9	360.2	360.5	360.8	361.1	361.1	360.8	360.5	360.2	359.9	359.5
155°	372.0	372.3	372.5	372.7	373.0	372.9	372.5	372.1	371.7	371.3	371.1
157.5°	382.5	382.9	383.2	383.6	384.0	383.9	383.4	382.8	382.3	381.8	381.6
160°	389.0	389.3	389.6	389.9	390.2	390.2	389.7	389.2	388.7	388.3	388.2
162.5°	394.6	395.0	395.4	395.8	396.1	396.1	395.5	395.0	394.5	393.9	393.9
165°	402.1	402.4	402.8	403.2	403.6	403.5	403.0	402.4	401.9	401.3	401.3
167.5°	408.1	408.5	408.9	409.4	409.8	409.7	409.1	408.6	408.0	407.5	407.5
170°	411.2	411.7	412.2	412.7	413.1	413.1	412.5	412.0	411.4	410.9	411.0
172.5°	413.8	414.3	414.7	415.2	415.7	415.6	415.1	414.5	414.0	413.4	413.5
175°	416.5	417.0	417.5	418.0	418.4	418.4	417.8	417.3	416.7	416.2	416.3
177.5°	417.8	418.2	418.6	418.9	419.3	419.3	418.9	418.6	418.2	417.8	417.9
180°	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7



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**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°	4.9	4.7	4.4	3.9	3.9	3.9	4.6	5.3	4.8	4.4	4.3
90°	8.9	7.2	5.5	4.1	3.2	2.2	1.3	0.4	1.3	2.2	3.2
92.5°	10.4	10.0	9.6	9.1	8.4	7.7	7.0	6.3	7.0	7.7	8.4
95°	22.3	22.1	22.0	21.5	20.7	19.9	19.2	18.4	19.2	19.9	20.7
97.5°	37.4	37.1	36.8	36.3	35.6	34.9	34.3	33.6	34.3	34.9	35.6
100°	48.3	48.0	47.8	47.4	46.8	46.1	45.5	44.9	45.5	46.1	46.8
102.5°	59.7	59.4	59.2	58.7	58.2	57.7	57.2	56.7	57.2	57.7	58.2
105°	77.4	77.3	77.1	76.9	76.7	76.4	76.2	76.0	76.2	76.4	76.7
107.5°	96.9	96.9	96.9	96.7	96.4	96.0	95.7	95.3	95.7	96.0	96.4
110°	109.9	109.9	109.9	109.6	109.2	108.7	108.2	107.8	108.2	108.7	109.2





TEST NUMBER: P331616

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	123.3	123.3	123.4	123.2	122.7	122.3	121.8	121.3	121.8	122.3	122.7
115°	143.0	143.2	143.4	143.2	142.7	142.3	141.8	141.3	141.8	142.3	142.7
117.5°	163.0	163.4	163.9	163.8	163.1	162.5	161.9	161.2	161.9	162.5	163.1
120°	175.8	176.4	177.0	177.0	176.4	175.8	175.2	174.5	175.2	175.8	176.4
122.5°	189.0	189.4	189.9	189.7	188.9	188.2	187.4	186.7	187.4	188.2	188.9
125°	208.2	208.4	208.7	208.4	207.7	207.0	206.3	205.6	206.3	207.0	207.7
127.5°	227.4	227.7	227.9	227.6	226.7	225.9	225.0	224.1	225.0	225.9	226.7
130°	239.9	240.0	240.2	239.7	238.7	237.7	236.7	235.7	236.7	237.7	238.7
132.5°	252.5	252.4	252.4	252.0	251.1	250.3	249.5	248.7	249.5	250.3	251.1
135°	270.3	270.2	270.0	269.5	268.6	267.8	266.9	266.0	266.9	267.8	268.6
137.5°	288.0	287.8	287.6	287.2	286.5	285.7	285.0	284.3	285.0	285.7	286.5
140°	299.5	299.1	298.7	298.2	297.5	296.8	296.1	295.4	296.1	296.8	297.5
142.5°	310.5	310.2	310.0	309.5	308.8	308.1	307.4	306.7	307.4	308.1	308.8
145°	326.6	326.1	325.6	325.1	324.6	324.0	323.5	322.9	323.5	324.0	324.6
147.5°	341.2	340.8	340.5	340.0	339.4	338.7	338.1	337.4	338.1	338.7	339.4
150°	350.2	349.9	349.6	349.2	348.7	348.2	347.8	347.3	347.8	348.2	348.7
152.5°	359.1	358.7	358.4	357.9	357.5	357.0	356.5	356.1	356.5	357.0	357.5
155°	370.8	370.6	370.4	370.1	369.9	369.7	369.4	369.2	369.4	369.7	369.9
157.5°	381.5	381.4	381.2	381.1	380.9	380.7	380.6	380.4	380.6	380.7	380.9
160°	388.1	388.0	388.0	387.8	387.7	387.5	387.4	387.2	387.4	387.5	387.7
162.5°	393.8	393.7	393.6	393.6	393.5	393.5	393.5	393.4	393.5	393.5	393.5
165°	401.3	401.3	401.3	401.4	401.5	401.5	401.6	401.7	401.6	401.5	401.5
167.5°	407.5	407.5	407.6	407.7	407.9	408.2	408.4	408.6	408.4	408.2	407.9
170°	411.0	411.1	411.2	411.4	411.6	411.8	412.1	412.3	412.1	411.8	411.6
172.5°	413.6	413.7	413.7	413.9	414.1	414.4	414.6	414.8	414.6	414.4	414.1
175°	416.5	416.7	416.8	417.0	417.2	417.5	417.7	418.0	417.7	417.5	417.2
177.5°	418.1	418.2	418.3	418.5	418.7	418.8	419.0	419.2	419.0	418.8	418.7
180°	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7



TEST NUMBER: P331616

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A1

**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	4.4	4.3	4.7	5.0	5.2	5.2	5.0	4.9	4.9	4.7
90°	4.1	5.5	7.2	8.9	10.6	12.4	12.2	12.1	11.9	11.7	11.7
92.5°	9.1	9.6	10.0	10.4	10.8	11.2	11.3	11.3	11.3	11.4	11.4
95°	21.5	22.0	22.1	22.3	22.5	22.6	22.6	22.6	22.6	22.6	22.5
97.5°	36.3	36.8	37.1	37.4	37.7	38.0	38.0	38.0	38.0	38.0	38.0
100°	47.4	47.8	48.0	48.3	48.5	48.8	48.8	48.8	48.8	48.8	48.7
102.5°	58.7	59.2	59.4	59.7	60.0	60.3	60.4	60.5	60.5	60.6	60.6
105°	76.9	77.1	77.3	77.4	77.6	77.7	77.9	78.0	78.2	78.4	78.4
107.5°	96.7	96.9	96.9	96.9	96.9	96.9	96.9	97.0	97.1	97.1	97.0
110°	109.6	109.9	109.9	109.9	109.9	109.9	109.9	109.9	109.9	109.9	109.8



TEST NUMBER: P331616

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	123.2	123.4	123.3	123.3	123.2	123.2	123.0	122.8	122.6	122.4	122.2
115°	143.2	143.4	143.2	143.0	142.9	142.7	142.7	142.6	142.5	142.4	142.3
117.5°	163.8	163.9	163.4	163.0	162.5	162.1	161.9	161.7	161.5	161.3	161.1
120°	177.0	177.0	176.4	175.8	175.2	174.5	174.5	174.5	174.5	174.5	174.4
122.5°	189.7	189.9	189.4	189.0	188.5	188.1	187.9	187.7	187.5	187.3	187.2
125°	208.4	208.7	208.4	208.2	208.0	207.7	207.5	207.3	207.0	206.8	206.6
127.5°	227.6	227.9	227.7	227.4	227.1	226.8	226.5	226.3	226.0	225.7	225.4
130°	239.7	240.2	240.0	239.9	239.7	239.5	239.4	239.2	239.1	238.9	238.7
132.5°	252.0	252.4	252.4	252.5	252.5	252.5	252.2	251.8	251.5	251.2	250.9
135°	269.5	270.0	270.2	270.3	270.5	270.6	270.5	270.5	270.4	270.3	270.2
137.5°	287.2	287.6	287.8	288.0	288.2	288.4	288.4	288.3	288.2	288.2	288.0
140°	298.2	298.7	299.1	299.5	299.9	300.3	300.3	300.3	300.3	300.3	300.1
142.5°	309.5	310.0	310.2	310.5	310.8	311.0	311.1	311.2	311.2	311.3	311.2
145°	325.1	325.6	326.1	326.6	327.0	327.5	327.6	327.7	327.7	327.8	327.7
147.5°	340.0	340.5	340.8	341.2	341.5	341.8	342.0	342.1	342.3	342.5	342.4
150°	349.2	349.6	349.9	350.2	350.5	350.8	351.1	351.3	351.5	351.8	351.8
152.5°	357.9	358.4	358.7	359.1	359.5	359.9	360.2	360.5	360.8	361.1	361.1
155°	370.1	370.4	370.6	370.8	371.1	371.3	371.7	372.1	372.5	372.9	373.0
157.5°	381.1	381.2	381.4	381.5	381.6	381.8	382.3	382.8	383.4	383.9	384.0
160°	387.8	388.0	388.0	388.1	388.2	388.3	388.7	389.2	389.7	390.2	390.2
162.5°	393.6	393.6	393.7	393.8	393.9	393.9	394.5	395.0	395.5	396.1	396.1
165°	401.4	401.3	401.3	401.3	401.3	401.3	401.9	402.4	403.0	403.5	403.6
167.5°	407.7	407.6	407.5	407.5	407.5	407.5	408.0	408.6	409.1	409.7	409.8
170°	411.4	411.2	411.1	411.0	411.0	410.9	411.4	412.0	412.5	413.1	413.1
172.5°	413.9	413.7	413.7	413.6	413.5	413.4	414.0	414.5	415.1	415.6	415.7
175°	417.0	416.8	416.7	416.5	416.3	416.2	416.7	417.3	417.8	418.4	418.4
177.5°	418.5	418.3	418.2	418.1	417.9	417.8	418.2	418.6	418.9	419.3	419.3
180°	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7



TEST NUMBER: P331616

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A1

**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	4.6	4.7	4.6	4.7	4.6	4.7	4.7	4.9	4.9	5.0
90°	11.8	11.9	11.9	12.0	11.9	11.9	11.8	11.7	11.7	11.9	12.1
92.5°	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.3	11.3
95°	22.4	22.2	22.1	21.9	22.1	22.2	22.4	22.5	22.6	22.6	22.6
97.5°	38.0	38.0	38.0	37.9	38.0	38.0	38.0	38.0	38.0	38.0	38.0
100°	48.6	48.6	48.5	48.4	48.5	48.6	48.6	48.7	48.8	48.8	48.8
102.5°	60.5	60.4	60.4	60.3	60.4	60.4	60.5	60.6	60.6	60.5	60.5
105°	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.2	78.0
107.5°	96.6	96.3	95.9	95.5	95.9	96.3	96.6	97.0	97.1	97.1	97.0
110°	109.5	109.3	109.1	108.8	109.1	109.3	109.5	109.8	109.9	109.9	109.9



TEST NUMBER: P331616

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	122.1	121.9	121.7	121.5	121.7	121.9	122.1	122.2	122.4	122.6	122.8
115°	142.0	141.8	141.6	141.3	141.6	141.8	142.0	142.3	142.4	142.5	142.6
117.5°	160.9	160.7	160.4	160.2	160.4	160.7	160.9	161.1	161.3	161.5	161.7
120°	174.2	173.9	173.7	173.5	173.7	173.9	174.2	174.4	174.5	174.5	174.5
122.5°	187.0	186.8	186.6	186.5	186.6	186.8	187.0	187.2	187.3	187.5	187.7
125°	206.6	206.5	206.4	206.3	206.4	206.5	206.6	206.6	206.8	207.0	207.3
127.5°	225.2	224.9	224.7	224.4	224.7	224.9	225.2	225.4	225.7	226.0	226.3
130°	238.4	238.0	237.7	237.4	237.7	238.0	238.4	238.7	238.9	239.1	239.2
132.5°	250.6	250.4	250.1	249.9	250.1	250.4	250.6	250.9	251.2	251.5	251.8
135°	269.9	269.7	269.5	269.2	269.5	269.7	269.9	270.2	270.3	270.4	270.5
137.5°	287.7	287.4	287.1	286.7	287.1	287.4	287.7	288.0	288.2	288.2	288.3
140°	299.8	299.5	299.2	298.9	299.2	299.5	299.8	300.1	300.3	300.3	300.3
142.5°	310.9	310.5	310.2	309.9	310.2	310.5	310.9	311.2	311.3	311.2	311.2
145°	327.4	327.1	326.8	326.4	326.8	327.1	327.4	327.7	327.8	327.7	327.7
147.5°	342.1	341.8	341.5	341.2	341.5	341.8	342.1	342.4	342.5	342.3	342.1
150°	351.5	351.3	351.1	350.8	351.1	351.3	351.5	351.8	351.8	351.5	351.3
152.5°	360.8	360.5	360.2	359.9	360.2	360.5	360.8	361.1	361.1	360.8	360.5
155°	372.7	372.5	372.3	372.0	372.3	372.5	372.7	373.0	372.9	372.5	372.1
157.5°	383.6	383.2	382.9	382.5	382.9	383.2	383.6	384.0	383.9	383.4	382.8
160°	389.9	389.6	389.3	389.0	389.3	389.6	389.9	390.2	390.2	389.7	389.2
162.5°	395.8	395.4	395.0	394.6	395.0	395.4	395.8	396.1	396.1	395.5	395.0
165°	403.2	402.8	402.4	402.1	402.4	402.8	403.2	403.6	403.5	403.0	402.4
167.5°	409.4	408.9	408.5	408.1	408.5	408.9	409.4	409.8	409.7	409.1	408.6
170°	412.7	412.2	411.7	411.2	411.7	412.2	412.7	413.1	413.1	412.5	412.0
172.5°	415.2	414.7	414.3	413.8	414.3	414.7	415.2	415.7	415.6	415.1	414.5
175°	418.0	417.5	417.0	416.5	417.0	417.5	418.0	418.4	418.4	417.8	417.3
177.5°	418.9	418.6	418.2	417.8	418.2	418.6	418.9	419.3	419.3	418.9	418.6
180°	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7



TEST NUMBER: P331616

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A1

**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°	5.2	5.2	5.0	4.7	4.3	4.4	4.3	4.3	4.4	4.8	5.3
90°	12.2	12.4	10.6	8.9	7.2	5.5	4.1	3.2	2.2	1.3	0.4
92.5°	11.3	11.2	10.8	10.4	10.0	9.6	9.1	8.4	7.7	7.0	6.3
95°	22.6	22.6	22.5	22.3	22.1	22.0	21.5	20.7	19.9	19.2	18.4
97.5°	38.0	38.0	37.7	37.4	37.1	36.8	36.3	35.6	34.9	34.3	33.6
100°	48.8	48.8	48.5	48.3	48.0	47.8	47.4	46.8	46.1	45.5	44.9
102.5°	60.4	60.3	60.0	59.7	59.4	59.2	58.7	58.2	57.7	57.2	56.7
105°	77.9	77.7	77.6	77.4	77.3	77.1	76.9	76.7	76.4	76.2	76.0
107.5°	96.9	96.9	96.9	96.9	96.9	96.9	96.7	96.4	96.0	95.7	95.3
110°	109.9	109.9	109.9	109.9	109.9	109.9	109.6	109.2	108.7	108.2	107.8



TEST NUMBER: P331616

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	123.0	123.2	123.2	123.3	123.3	123.4	123.2	122.7	122.3	121.8	121.3
115°	142.7	142.7	142.9	143.0	143.2	143.4	143.2	142.7	142.3	141.8	141.3
117.5°	161.9	162.1	162.5	163.0	163.4	163.9	163.8	163.1	162.5	161.9	161.2
120°	174.5	174.5	175.2	175.8	176.4	177.0	177.0	176.4	175.8	175.2	174.5
122.5°	187.9	188.1	188.5	189.0	189.4	189.9	189.7	188.9	188.2	187.4	186.7
125°	207.5	207.7	208.0	208.2	208.4	208.7	208.4	207.7	207.0	206.3	205.6
127.5°	226.5	226.8	227.1	227.4	227.7	227.9	227.6	226.7	225.9	225.0	224.1
130°	239.4	239.5	239.7	239.9	240.0	240.2	239.7	238.7	237.7	236.7	235.7
132.5°	252.2	252.5	252.5	252.5	252.4	252.4	252.0	251.1	250.3	249.5	248.7
135°	270.5	270.6	270.5	270.3	270.2	270.0	269.5	268.6	267.8	266.9	266.0
137.5°	288.4	288.4	288.2	288.0	287.8	287.6	287.2	286.5	285.7	285.0	284.3
140°	300.3	300.3	299.9	299.5	299.1	298.7	298.2	297.5	296.8	296.1	295.4
142.5°	311.1	311.0	310.8	310.5	310.2	310.0	309.5	308.8	308.1	307.4	306.7
145°	327.6	327.5	327.0	326.6	326.1	325.6	325.1	324.6	324.0	323.5	322.9
147.5°	342.0	341.8	341.5	341.2	340.8	340.5	340.0	339.4	338.7	338.1	337.4
150°	351.1	350.8	350.5	350.2	349.9	349.6	349.2	348.7	348.2	347.8	347.3
152.5°	360.2	359.9	359.5	359.1	358.7	358.4	357.9	357.5	357.0	356.5	356.1
155°	371.7	371.3	371.1	370.8	370.6	370.4	370.1	369.9	369.7	369.4	369.2
157.5°	382.3	381.8	381.6	381.5	381.4	381.2	381.1	380.9	380.7	380.6	380.4
160°	388.7	388.3	388.2	388.1	388.0	388.0	387.8	387.7	387.5	387.4	387.2
162.5°	394.5	393.9	393.9	393.8	393.7	393.6	393.6	393.5	393.5	393.5	393.4
165°	401.9	401.3	401.3	401.3	401.3	401.3	401.4	401.5	401.5	401.6	401.7
167.5°	408.0	407.5	407.5	407.5	407.5	407.6	407.7	407.9	408.2	408.4	408.6
170°	411.4	410.9	411.0	411.0	411.1	411.2	411.4	411.6	411.8	412.1	412.3
172.5°	414.0	413.4	413.5	413.6	413.7	413.7	413.9	414.1	414.4	414.6	414.8
175°	416.7	416.2	416.3	416.5	416.7	416.8	417.0	417.2	417.5	417.7	418.0
177.5°	418.2	417.8	417.9	418.1	418.2	418.3	418.5	418.7	418.8	419.0	419.2
180°	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7



TEST NUMBER: P331616

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A1

**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	3.9	3.9	3.9	4.4	4.7	4.9	5.2	5.7	5.5	5.7
90°	1.3	2.2	3.2	4.1	5.5	7.2	8.9	10.6	12.4	12.2	12.1
92.5°	7.0	7.7	8.4	9.1	9.6	10.0	10.4	10.8	11.2	11.3	11.3
95°	19.2	19.9	20.7	21.5	22.0	22.1	22.3	22.5	22.6	22.6	22.6
97.5°	34.3	34.9	35.6	36.3	36.8	37.1	37.4	37.7	38.0	38.0	38.0
100°	45.5	46.1	46.8	47.4	47.8	48.0	48.3	48.5	48.8	48.8	48.8
102.5°	57.2	57.7	58.2	58.7	59.2	59.4	59.7	60.0	60.3	60.4	60.5
105°	76.2	76.4	76.7	76.9	77.1	77.3	77.4	77.6	77.7	77.9	78.0
107.5°	95.7	96.0	96.4	96.7	96.9	96.9	96.9	96.9	96.9	96.9	97.0
110°	108.2	108.7	109.2	109.6	109.9	109.9	109.9	109.9	109.9	109.9	109.9





TEST NUMBER: P331616

CATALOG NUMBER: SA2XXRDIP-C290D330U835-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	121.8	122.3	122.7	123.2	123.4	123.3	123.3	123.2	123.2	123.0	122.8
115°	141.8	142.3	142.7	143.2	143.4	143.2	143.0	142.9	142.7	142.7	142.6
117.5°	161.9	162.5	163.1	163.8	163.9	163.4	163.0	162.5	162.1	161.9	161.7
120°	175.2	175.8	176.4	177.0	177.0	176.4	175.8	175.2	174.5	174.5	174.5
122.5°	187.4	188.2	188.9	189.7	189.9	189.4	189.0	188.5	188.1	187.9	187.7
125°	206.3	207.0	207.7	208.4	208.7	208.4	208.2	208.0	207.7	207.5	207.3
127.5°	225.0	225.9	226.7	227.6	227.9	227.7	227.4	227.1	226.8	226.5	226.3
130°	236.7	237.7	238.7	239.7	240.2	240.0	239.9	239.7	239.5	239.4	239.2
132.5°	249.5	250.3	251.1	252.0	252.4	252.4	252.5	252.5	252.5	252.2	251.8
135°	266.9	267.8	268.6	269.5	270.0	270.2	270.3	270.5	270.6	270.5	270.5
137.5°	285.0	285.7	286.5	287.2	287.6	287.8	288.0	288.2	288.4	288.4	288.3
140°	296.1	296.8	297.5	298.2	298.7	299.1	299.5	299.9	300.3	300.3	300.3
142.5°	307.4	308.1	308.8	309.5	310.0	310.2	310.5	310.8	311.0	311.1	311.2
145°	323.5	324.0	324.6	325.1	325.6	326.1	326.6	327.0	327.5	327.6	327.7
147.5°	338.1	338.7	339.4	340.0	340.5	340.8	341.2	341.5	341.8	342.0	342.1
150°	347.8	348.2	348.7	349.2	349.6	349.9	350.2	350.5	350.8	351.1	351.3
152.5°	356.5	357.0	357.5	357.9	358.4	358.7	359.1	359.5	359.9	360.2	360.5
155°	369.4	369.7	369.9	370.1	370.4	370.6	370.8	371.1	371.3	371.7	372.1
157.5°	380.6	380.7	380.9	381.1	381.2	381.4	381.5	381.6	381.8	382.3	382.8
160°	387.4	387.5	387.7	387.8	388.0	388.0	388.1	388.2	388.3	388.7	389.2
162.5°	393.5	393.5	393.5	393.6	393.6	393.7	393.8	393.9	393.9	394.5	395.0
165°	401.6	401.5	401.5	401.4	401.3	401.3	401.3	401.3	401.3	401.9	402.4
167.5°	408.4	408.2	407.9	407.7	407.6	407.5	407.5	407.5	407.5	408.0	408.6
170°	412.1	411.8	411.6	411.4	411.2	411.1	411.0	411.0	410.9	411.4	412.0
172.5°	414.6	414.4	414.1	413.9	413.7	413.7	413.6	413.5	413.4	414.0	414.5
175°	417.7	417.5	417.2	417.0	416.8	416.7	416.5	416.3	416.2	416.7	417.3
177.5°	419.0	418.8	418.7	418.5	418.3	418.2	418.1	417.9	417.8	418.2	418.6
180°	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7



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**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°	5.5	5.4	5.4	5.4	5.5	5.5	5.3
90°	11.9	11.7	11.7	11.8	11.9	11.9	12.0
92.5°	11.3	11.4	11.4	11.4	11.4	11.4	11.4
95°	22.6	22.6	22.5	22.4	22.2	22.1	21.9
97.5°	38.0	38.0	38.0	38.0	38.0	38.0	37.9
100°	48.8	48.8	48.7	48.6	48.6	48.5	48.4
102.5°	60.5	60.6	60.6	60.5	60.4	60.4	60.3
105°	78.2	78.4	78.4	78.4	78.4	78.4	78.4
107.5°	97.1	97.1	97.0	96.6	96.3	95.9	95.5
110°	109.9	109.9	109.8	109.5	109.3	109.1	108.8



TEST NUMBER: P331616

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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	122.6	122.4	122.2	122.1	121.9	121.7	121.5
115°	142.5	142.4	142.3	142.0	141.8	141.6	141.3
117.5°	161.5	161.3	161.1	160.9	160.7	160.4	160.2
120°	174.5	174.5	174.4	174.2	173.9	173.7	173.5
122.5°	187.5	187.3	187.2	187.0	186.8	186.6	186.5
125°	207.0	206.8	206.6	206.6	206.5	206.4	206.3
127.5°	226.0	225.7	225.4	225.2	224.9	224.7	224.4
130°	239.1	238.9	238.7	238.4	238.0	237.7	237.4
132.5°	251.5	251.2	250.9	250.6	250.4	250.1	249.9
135°	270.4	270.3	270.2	269.9	269.7	269.5	269.2
137.5°	288.2	288.2	288.0	287.7	287.4	287.1	286.7
140°	300.3	300.3	300.1	299.8	299.5	299.2	298.9
142.5°	311.2	311.3	311.2	310.9	310.5	310.2	309.9
145°	327.7	327.8	327.7	327.4	327.1	326.8	326.4
147.5°	342.3	342.5	342.4	342.1	341.8	341.5	341.2
150°	351.5	351.8	351.8	351.5	351.3	351.1	350.8
152.5°	360.8	361.1	361.1	360.8	360.5	360.2	359.9
155°	372.5	372.9	373.0	372.7	372.5	372.3	372.0
157.5°	383.4	383.9	384.0	383.6	383.2	382.9	382.5
160°	389.7	390.2	390.2	389.9	389.6	389.3	389.0
162.5°	395.5	396.1	396.1	395.8	395.4	395.0	394.6
165°	403.0	403.5	403.6	403.2	402.8	402.4	402.1
167.5°	409.1	409.7	409.8	409.4	408.9	408.5	408.1
170°	412.5	413.1	413.1	412.7	412.2	411.7	411.2
172.5°	415.1	415.6	415.7	415.2	414.7	414.3	413.8
175°	417.8	418.4	418.4	418.0	417.5	417.0	416.5
177.5°	418.9	419.3	419.3	418.9	418.6	418.2	417.8
180°	418.7	418.7	418.7	418.7	418.7	418.7	418.7

(END OF REPORT)