

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: P331465-927

Luminaire Tested: **S122DIW-S290D435U927-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P331465-927  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122DIW-S290D435U927-4F0-1E-UDD-A  
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 435 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2405.5 lumens  
Efficiency: N/A  
Efficacy: 104.6 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: General Diffuse

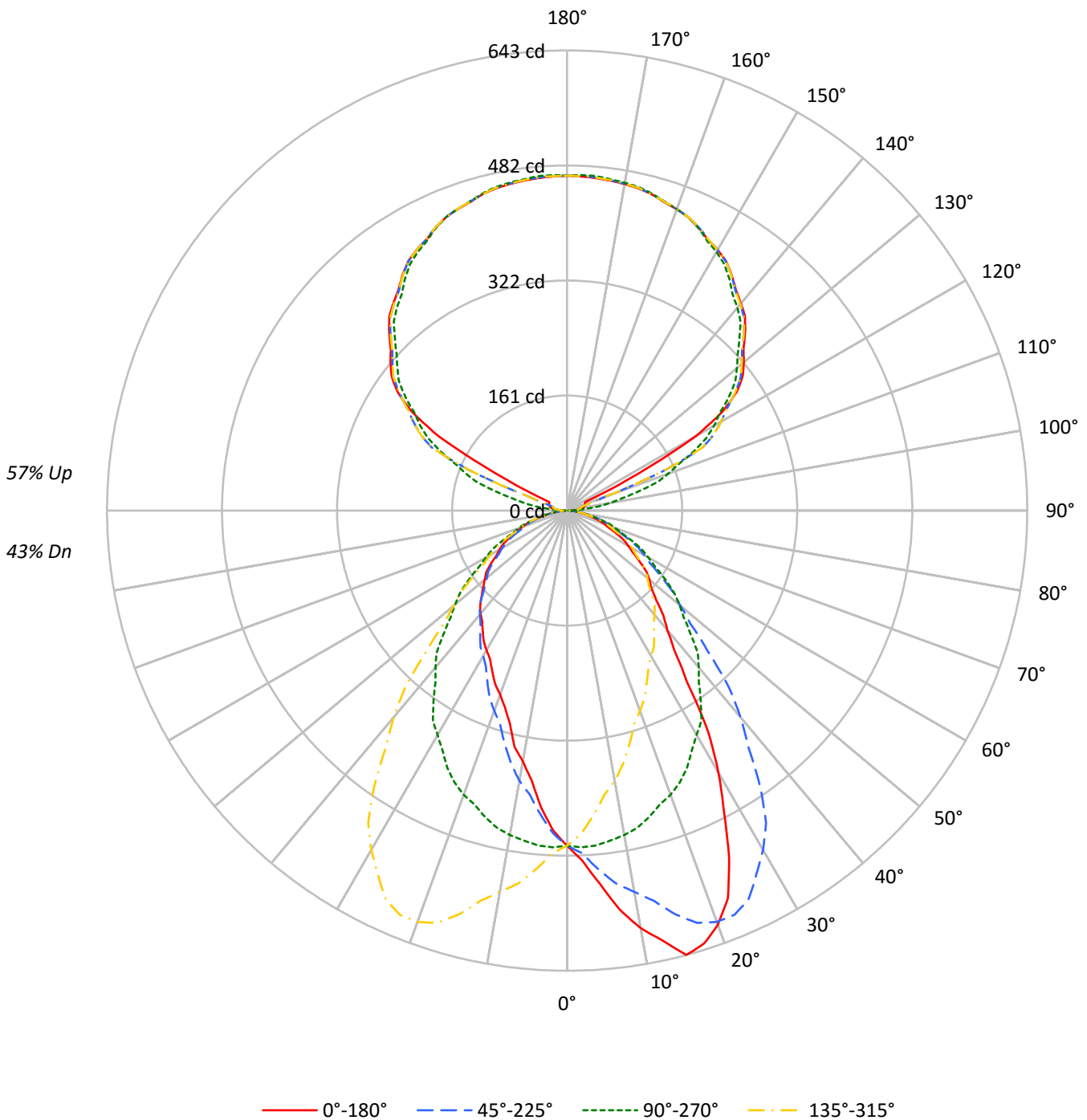
Input Watts (W): 23  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20										
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	50	30	10	0														
RCR																																						
0	105	105	105	105	96	96	96	96	79	79	79	64	64	64	50	50	50	43																				
1	97	92	89	85	88	85	82	79	70	68	66	57	55	54	45	44	43	37																				
2	88	81	75	70	81	75	70	65	62	58	55	50	48	46	40	38	37	32																				
3	81	72	65	59	74	66	60	55	55	51	47	45	42	39	36	33	32	27																				
4	74	64	56	50	68	59	52	47	49	44	40	40	37	34	32	30	28	24																				
5	68	57	49	43	62	53	46	41	44	39	35	36	33	30	29	26	24	21																				
6	63	51	43	38	57	47	40	35	40	35	31	33	29	26	26	24	22	19																				
7	58	46	39	33	53	43	36	31	36	31	27	30	26	23	24	21	19	17																				
8	54	42	35	29	49	39	32	28	33	28	24	28	24	21	22	20	17	15																				
9	50	38	31	26	46	36	29	25	30	25	22	25	22	19	21	18	16	14																				
10	47	35	28	24	43	33	27	22	28	23	20	24	20	17	19	17	14	13																				

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

	0°	90°	180°	270°
0°	7561	7561	7561	7561
5°	8475	7609	6744	7609
10°	9712	7547	5835	7547
15°	10745	7408	5157	7408
20°	10581	7261	4699	7261
25°	9540	7062	4411	7062
30°	7884	6747	4200	6747
35°	5746	6416	4050	6416
40°	4591	6028	3967	6028
45°	4010	5576	3854	5576
50°	3770	5139	3778	5139
55°	3474	4695	3676	4695
60°	3184	4224	3523	4224
65°	2904	3801	3370	3801
70°	2634	3389	3144	3389
75°	2339	2932	2782	2932
80°	2008	2427	2241	2427
85°	1797	1797	1334	1797



TEST NUMBER: P331465-927

CATALOG NUMBER: S122DIW-S290D435U927-4F0-1E-UDD-A

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.6	1.9
10°-20°	129.6	5.4
20°-30°	188.1	7.8
30°-40°	198.5	8.3
40°-50°	175.8	7.3
50°-60°	140.3	5.8
60°-70°	95.4	4.0
70°-80°	48.9	2.0
80°-90°	12.9	0.5
90°-100°	15.6	0.6
100°-110°	57.2	2.4
110°-120°	153.0	6.4
120°-130°	252.6	10.5
130°-140°	268.6	11.2
140°-150°	249.7	10.4
150°-160°	200.7	8.3
160°-170°	129.3	5.4
170°-180°	44.5	1.9
0°-30°	362.4	15.1
0°-40°	560.9	23.3
0°-60°	877.0	36.5
0°-90°	1034.2	43.0
90°-120°	225.9	9.4
90°-150°	996.7	41.4
90°-180°	1371.0	57.0
0°-180°	2405.5	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	468	468	468	468	468	
5°	523	470	416	470	523	52
15°	643	443	308	443	643	177
25°	536	396	248	396	536	242
35°	292	326	206	326	292	190
45°	176	244	169	244	176	138
55°	123	167	131	167	123	111
65°	76	100	88	100	76	76
75°	38	47	45	47	38	40
85°	10	10	7	10	10	11
90°	9	0	9	0	9	4
95°	15	22	15	22	15	14
105°	26	103	26	103	26	27
115°	28	195	28	195	28	70
125°	290	275	290	275	290	250
135°	352	341	352	341	352	271
145°	401	395	401	395	401	251
155°	436	435	436	435	436	201
165°	457	458	457	458	457	129
175°	466	469	466	469	466	44
180°	468	468	468	468	468	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3
2.5°	489.8	490.0	490.3	488.0	487.7	487.7	485.7	483.9	481.9	479.2	479.5
5°	522.9	524.9	525.6	523.5	520.2	519.9	516.8	511.8	507.1	503.4	500.7
7.5°	562.4	563.2	561.5	558.6	556.3	551.9	546.2	540.7	532.8	525.7	520.4
10°	592.4	593.5	590.4	586.3	582.9	577.8	569.6	561.1	550.9	541.0	533.1
12.5°	615.1	617.8	613.9	613.4	607.5	600.6	590.7	586.5	572.0	558.3	549.7
15°	642.8	642.6	643.0	639.5	635.3	634.1	623.8	612.4	592.1	583.9	569.9
17.5°	634.8	637.5	638.8	638.7	638.7	637.9	634.6	627.5	617.3	604.1	588.0
20°	615.8	619.4	620.0	624.1	626.5	629.5	630.7	628.8	622.5	611.5	597.5
22.5°	586.5	587.5	589.1	595.6	600.6	608.3	612.3	619.0	616.6	611.2	599.4
25°	535.5	533.8	540.0	543.3	555.0	567.2	576.1	585.7	594.4	599.6	596.2
27.5°	474.4	471.7	481.2	489.8	499.2	512.5	526.2	542.5	556.0	572.9	578.7
30°	422.9	424.5	433.5	442.7	457.1	475.8	491.3	509.1	528.4	547.2	560.4
32.5°	367.3	373.5	379.2	393.3	406.0	426.8	449.6	471.8	495.8	517.3	537.7
35°	291.5	298.7	306.7	316.9	334.7	355.4	377.6	407.6	440.4	469.7	493.8
37.5°	245.4	244.2	248.7	256.2	270.6	287.3	312.8	342.5	381.0	415.5	449.6
40°	217.8	217.1	220.2	227.1	238.1	250.3	272.7	298.7	334.5	376.7	417.2
42.5°	198.8	199.2	201.0	205.8	213.3	223.4	240.1	262.3	295.1	334.8	378.3
45°	175.6	176.9	178.9	181.3	185.5	193.8	203.2	219.0	244.9	278.1	320.8
47.5°	159.0	159.1	161.1	163.1	165.6	170.3	178.0	187.9	206.2	233.1	270.0
50°	150.1	148.9	150.3	151.9	154.6	157.8	162.9	172.2	184.4	206.2	237.0
52.5°	139.1	139.2	140.5	141.1	143.5	146.7	151.3	157.8	168.9	185.9	211.2
55°	123.4	124.4	125.1	126.1	128.3	130.6	134.3	138.6	147.2	159.9	178.7
57.5°	108.7	109.0	109.7	111.8	113.1	115.3	118.7	122.6	128.3	137.7	151.8
60°	98.6	98.6	100.1	100.9	102.7	104.9	107.6	111.4	116.5	124.1	135.5
62.5°	89.4	89.3	89.8	91.3	92.7	94.7	97.4	100.6	105.4	112.3	121.5
65°	76.0	75.6	76.7	77.0	78.4	80.4	82.6	86.0	89.8	94.8	103.1
67.5°	63.0	63.5	64.0	64.6	65.4	67.6	69.0	71.4	74.6	78.8	84.4
70°	55.8	55.8	55.8	56.3	57.4	58.5	59.9	61.9	65.0	68.5	73.6
72.5°	47.7	48.3	48.9	48.6	49.9	50.5	52.3	53.4	56.3	58.6	63.1
75°	37.5	37.5	37.5	38.3	38.9	39.4	40.5	41.6	43.0	45.9	48.2
77.5°	28.0	27.9	28.0	28.3	28.8	29.5	29.8	30.7	32.1	33.4	35.4
80°	21.6	21.9	22.1	22.5	22.5	22.8	23.1	24.3	25.2	26.1	27.3
82.5°	16.7	16.8	16.8	16.9	17.0	17.3	17.7	18.1	18.5	19.2	20.1
85°	9.7	9.5	9.5	9.9	9.7	9.7	10.1	10.5	10.5	10.6	11.2
87.5°	5.5	5.5	5.6	5.5	5.5	5.5	5.5	5.2	5.3	5.4	5.4
90°	9.1	9.0	8.9	8.7	8.6	8.2	7.9	7.5	7.1	6.7	6.2
92.5°	9.1	9.0	9.0	8.9	8.8	8.6	8.5	8.2	8.1	7.8	7.5
95°	14.6	14.7	14.7	14.8	14.9	14.7	14.3	13.9	13.5	13.2	12.7
97.5°	19.4	19.3	19.3	19.2	19.1	18.9	18.6	18.3	18.0	17.7	16.5
100°	22.7	22.5	22.4	22.3	22.1	21.7	21.1	20.5	19.9	19.3	18.0
102.5°	24.3	24.1	23.9	23.7	23.4	23.0	22.2	21.4	20.6	19.8	30.6
105°	25.7	25.4	25.1	24.8	24.6	24.0	23.1	22.3	21.5	20.7	41.2
107.5°	26.5	26.1	25.9	25.6	25.3	25.5	26.4	27.3	28.0	28.9	53.6
110°	26.8	26.5	26.1	25.8	25.5	29.2	36.7	44.2	51.7	59.3	81.0



TEST NUMBER: P331465-927

CATALOG NUMBER: S122DIW-S290D435U927-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	27.0	26.8	26.5	26.3	26.1	39.7	67.1	94.6	122.0	149.5	154.8
115°	27.7	33.2	38.6	44.0	49.4	69.6	104.4	139.3	174.0	208.9	207.0
117.5°	113.4	131.2	148.9	166.8	184.6	197.6	206.1	214.5	223.0	231.4	230.1
120°	206.5	216.7	226.9	237.0	247.2	251.8	250.9	250.0	249.1	248.2	246.8
122.5°	257.7	259.7	261.7	263.6	265.6	266.3	265.8	265.2	264.7	264.2	262.7
125°	289.5	289.3	289.1	288.8	288.6	288.2	287.7	287.2	286.6	286.1	284.7
127.5°	309.5	309.5	309.4	309.4	309.3	309.0	308.2	307.4	306.7	305.9	304.8
130°	322.0	322.1	322.2	322.3	322.3	321.9	321.1	320.3	319.4	318.6	317.8
132.5°	334.2	334.3	334.3	334.4	334.5	334.1	333.4	332.8	332.1	331.4	330.5
135°	351.8	352.0	352.1	352.3	352.4	352.1	351.3	350.6	349.8	349.1	348.4
137.5°	367.8	368.1	368.4	368.6	368.8	368.6	367.9	367.2	366.4	365.7	364.9
140°	377.9	378.3	378.6	379.0	379.4	379.2	378.6	377.9	377.2	376.5	375.7
142.5°	387.6	388.0	388.4	388.7	389.1	389.0	388.4	387.8	387.1	386.5	385.6
145°	401.2	401.6	402.0	402.3	402.7	402.7	402.1	401.6	401.1	400.5	399.3
147.5°	413.2	413.5	413.8	414.2	414.5	414.5	414.1	413.7	413.3	412.9	411.6
150°	420.6	420.9	421.3	421.7	422.1	422.0	421.5	421.1	420.6	420.2	419.0
152.5°	426.7	427.2	427.8	428.3	428.7	428.8	428.3	427.9	427.4	427.0	425.8
155°	435.5	436.0	436.7	437.2	437.8	437.9	437.4	437.0	436.6	436.1	435.2
157.5°	443.4	443.9	444.5	445.1	445.7	445.8	445.2	444.7	444.2	443.7	443.1
160°	448.0	448.5	449.0	449.6	450.0	450.1	449.6	449.2	448.8	448.3	447.8
162.5°	451.8	452.4	453.0	453.7	454.3	454.4	453.9	453.4	452.9	452.3	451.9
165°	457.4	458.0	458.5	459.0	459.5	459.5	459.0	458.5	458.0	457.4	457.2
167.5°	461.1	461.7	462.4	463.0	463.7	463.8	463.3	462.8	462.2	461.7	461.5
170°	463.2	463.9	464.5	465.2	465.9	466.0	465.5	464.9	464.4	463.9	463.7
172.5°	464.9	465.5	466.2	466.8	467.5	467.6	467.1	466.5	466.0	465.5	465.3
175°	466.3	467.0	467.8	468.5	469.3	469.4	468.8	468.3	467.8	467.2	467.1
177.5°	467.1	467.6	468.2	468.7	469.3	469.4	468.9	468.5	468.1	467.6	467.6
180°	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9



TEST NUMBER: P331465-927

CATALOG NUMBER: S122DIW-S290D435U927-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3
2.5°	480.5	479.3	478.6	476.0	473.7	471.4	470.7	471.0	467.8	464.8	463.5
5°	499.2	495.6	492.2	487.4	481.6	475.2	472.1	469.5	463.2	456.4	452.4
7.5°	515.9	510.8	504.2	495.1	486.7	476.8	470.5	464.9	455.7	446.1	440.1
10°	526.2	519.2	510.7	499.6	489.3	477.2	468.8	460.3	449.6	438.0	430.8
12.5°	535.0	525.5	517.2	502.9	490.8	475.6	465.6	453.7	442.4	428.6	421.6
15°	555.9	538.4	522.6	506.4	491.5	470.4	459.2	443.2	428.3	411.4	403.3
17.5°	572.0	552.4	527.5	506.9	489.5	466.1	449.8	430.6	413.0	393.6	382.6
20°	581.2	558.7	532.0	507.5	486.6	459.9	442.1	422.6	401.9	380.1	368.2
22.5°	586.7	563.1	536.5	505.3	480.9	455.0	432.5	411.0	390.1	366.5	354.1
25°	588.4	566.9	538.8	503.5	473.6	444.3	417.3	396.4	371.1	349.1	331.0
27.5°	579.9	564.4	537.4	500.1	465.3	431.0	400.9	377.3	350.5	326.7	308.4
30°	569.3	560.4	534.1	496.7	458.7	421.8	388.7	361.9	335.3	311.2	292.4
32.5°	553.1	551.2	528.1	491.8	451.6	410.2	375.9	348.8	319.2	295.6	277.7
35°	521.2	529.8	515.2	480.9	438.4	393.6	356.5	325.5	294.9	272.3	255.6
37.5°	478.3	499.8	496.0	464.9	420.4	375.5	334.5	302.2	273.1	250.2	233.8
40°	448.8	476.2	480.1	452.6	407.8	361.6	318.1	286.0	257.5	236.6	220.1
42.5°	417.2	449.1	459.9	437.9	394.0	346.8	303.5	270.1	241.9	221.7	207.0
45°	364.1	406.3	426.0	413.4	370.9	322.7	278.1	244.2	218.6	199.6	188.2
47.5°	314.4	360.6	387.0	382.5	345.2	297.5	253.3	220.9	196.0	180.8	170.6
50°	279.3	326.8	358.6	360.1	326.8	279.5	235.2	204.6	181.7	167.5	159.2
52.5°	248.7	294.1	328.8	336.5	306.2	260.8	219.0	188.5	168.3	155.3	147.9
55°	208.9	247.2	285.7	299.8	275.5	232.3	193.6	166.8	147.9	138.9	132.5
57.5°	173.7	205.7	241.2	256.7	241.8	204.8	168.5	145.2	129.9	122.0	117.0
60°	155.1	180.3	212.0	230.5	217.5	184.7	153.0	130.8	118.2	111.2	106.5
62.5°	137.8	160.2	187.0	203.9	196.9	165.8	137.4	117.9	107.0	100.4	97.0
65°	113.8	131.3	152.1	167.7	163.0	139.5	116.2	99.5	90.9	85.6	82.9
67.5°	93.6	106.4	120.7	134.4	130.7	114.0	95.4	82.3	75.9	71.4	69.7
70°	81.0	90.7	103.5	114.5	111.4	97.8	82.9	71.8	66.2	62.4	60.8
72.5°	68.9	76.8	86.7	95.6	93.6	82.1	69.9	61.5	57.1	53.6	52.4
75°	52.0	58.1	64.1	70.0	69.5	60.7	53.5	47.0	43.6	40.9	40.3
77.5°	38.4	41.8	45.9	49.4	48.4	43.3	37.7	34.0	31.5	29.7	29.4
80°	29.3	31.3	34.2	36.7	35.5	33.3	28.8	26.1	24.3	22.5	21.8
82.5°	21.3	23.2	25.0	26.4	25.3	23.4	20.6	18.8	17.7	16.5	16.2
85°	11.2	12.2	13.0	13.3	13.0	11.7	10.5	9.7	8.8	8.2	8.1
87.5°	5.5	5.3	5.2	5.3	4.8	4.6	3.8	3.2	3.2	3.2	3.2
90°	5.5	5.0	4.4	3.6	2.9	2.0	1.2	0.3	1.2	2.0	2.9
92.5°	7.3	7.0	6.7	6.6	6.6	6.7	6.7	6.8	6.7	6.7	6.6
95°	12.1	11.6	11.1	12.0	14.6	17.0	19.5	22.0	19.5	17.0	14.6
97.5°	15.2	14.0	12.8	15.7	22.7	29.7	36.7	43.6	36.7	29.7	22.7
100°	16.7	15.4	14.2	18.7	29.0	39.3	49.6	60.0	49.6	39.3	29.0
102.5°	41.3	52.0	62.7	69.1	71.3	73.4	75.7	77.8	75.7	73.4	71.3
105°	61.7	82.3	102.8	111.9	109.7	107.4	105.2	102.9	105.2	107.4	109.7
107.5°	78.2	102.8	127.5	138.9	137.0	135.2	133.4	131.6	133.4	135.2	137.0
110°	102.7	124.5	146.2	156.3	154.7	153.1	151.5	150.0	151.5	153.1	154.7





TEST NUMBER: P331465-927

CATALOG NUMBER: S122DIW-S290D435U927-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	160.2	165.6	171.0	172.9	171.5	170.2	168.7	167.3	168.7	170.2	171.5
115°	205.2	203.3	201.4	199.8	198.5	197.3	196.0	194.7	196.0	197.3	198.5
117.5°	228.8	227.5	226.2	224.8	223.4	222.0	220.5	219.1	220.5	222.0	223.4
120°	245.5	244.2	242.8	241.5	240.4	239.2	238.1	237.0	238.1	239.2	240.4
122.5°	261.2	259.8	258.3	256.9	255.7	254.5	253.3	252.2	253.3	254.5	255.7
125°	283.3	281.9	280.4	279.2	278.2	277.3	276.2	275.3	276.2	277.3	278.2
127.5°	303.7	302.7	301.6	300.6	299.4	298.3	297.3	296.2	297.3	298.3	299.4
130°	317.0	316.2	315.3	314.3	313.1	311.9	310.7	309.5	310.7	311.9	313.1
132.5°	329.7	328.8	328.0	327.1	326.1	325.0	324.0	323.1	324.0	325.0	326.1
135°	347.8	347.1	346.3	345.5	344.2	343.0	341.8	340.6	341.8	343.0	344.2
137.5°	364.2	363.4	362.6	361.8	361.0	360.1	359.3	358.5	359.3	360.1	361.0
140°	374.9	374.1	373.2	372.5	371.9	371.3	370.7	370.1	370.7	371.3	371.9
142.5°	384.6	383.7	382.8	382.0	381.4	380.9	380.4	379.9	380.4	380.9	381.4
145°	398.0	396.7	395.5	394.8	394.9	395.0	395.1	395.1	395.1	395.0	394.9
147.5°	410.4	409.1	407.8	407.3	407.7	407.9	408.2	408.4	408.2	407.9	407.7
150°	417.8	416.6	415.3	415.0	415.6	416.1	416.6	417.2	416.6	416.1	415.6
152.5°	424.7	423.5	422.4	422.1	422.7	423.3	423.9	424.5	423.9	423.3	422.7
155°	434.3	433.4	432.5	432.4	433.1	433.7	434.4	435.1	434.4	433.7	433.1
157.5°	442.4	441.8	441.2	441.2	441.7	442.3	442.8	443.4	442.8	442.3	441.7
160°	447.4	446.9	446.5	446.5	446.9	447.4	447.8	448.3	447.8	447.4	446.9
162.5°	451.5	451.1	450.8	450.8	451.3	451.7	452.2	452.7	452.2	451.7	451.3
165°	457.0	456.8	456.5	456.6	457.1	457.6	458.0	458.4	458.0	457.6	457.1
167.5°	461.3	461.1	460.9	461.0	461.4	461.9	462.3	462.8	462.3	461.9	461.4
170°	463.6	463.4	463.3	463.4	463.9	464.3	464.8	465.2	464.8	464.3	463.9
172.5°	465.2	465.0	464.9	465.0	465.5	466.0	466.4	466.8	466.4	466.0	465.5
175°	467.0	466.8	466.7	466.8	467.4	467.9	468.4	469.0	468.4	467.9	467.4
177.5°	467.5	467.5	467.4	467.6	468.0	468.4	468.9	469.3	468.9	468.4	468.0
180°	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9



TEST NUMBER: P331465-927

CATALOG NUMBER: S122DIW-S290D435U927-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3
2.5°	462.1	461.2	458.2	456.6	454.0	451.5	450.0	450.7	451.2	451.0	450.5
5°	448.8	445.4	440.1	435.7	432.5	426.5	424.0	422.7	421.6	420.4	419.1
7.5°	433.0	427.6	420.2	413.8	407.7	400.3	396.1	393.6	391.0	388.2	385.6
10°	421.8	414.2	406.3	397.4	390.1	383.5	377.6	373.6	369.9	366.5	364.1
12.5°	410.0	401.3	391.5	379.2	371.3	361.7	360.8	353.9	348.2	346.1	343.2
15°	391.3	379.0	366.5	352.0	345.7	337.1	331.7	326.2	321.4	318.0	317.1
17.5°	369.9	354.0	341.7	331.2	320.9	312.0	307.0	302.8	298.7	294.2	293.6
20°	353.6	339.9	326.5	317.3	306.7	297.6	291.5	287.2	283.8	281.1	278.8
22.5°	338.2	323.2	310.9	300.9	290.4	283.1	278.3	274.1	271.2	268.3	266.1
25°	313.5	301.8	288.3	276.9	268.3	263.6	259.7	256.1	254.3	252.3	249.8
27.5°	291.8	278.8	266.3	257.5	249.9	245.7	242.9	240.4	238.8	237.6	236.1
30°	276.6	263.5	253.6	244.9	238.6	234.5	232.7	231.2	229.3	228.5	227.8
32.5°	261.9	250.1	241.6	234.1	228.1	225.4	223.8	222.4	220.9	220.2	218.7
35°	241.1	231.2	223.0	218.8	214.0	211.6	210.4	208.6	207.2	206.4	206.2
37.5°	221.6	213.0	207.6	202.2	200.2	198.8	197.0	195.8	195.4	195.3	195.0
40°	208.9	201.9	197.0	192.7	191.9	189.6	188.2	187.2	187.2	187.4	187.2
42.5°	197.4	191.1	186.8	183.1	182.0	180.8	179.3	179.3	179.5	180.1	179.5
45°	180.0	175.5	172.4	170.6	168.7	167.4	167.2	167.7	167.9	168.1	168.7
47.5°	163.9	160.9	158.1	156.1	155.3	155.1	154.9	155.8	156.7	157.0	157.8
50°	154.4	151.0	148.6	147.3	146.6	146.3	146.6	147.7	148.5	149.3	149.9
52.5°	143.8	141.3	139.7	138.7	138.5	138.7	138.7	140.0	141.1	141.5	141.7
55°	129.0	127.2	126.9	125.2	126.0	125.8	126.7	127.4	128.5	129.6	129.8
57.5°	114.3	112.9	111.9	112.1	112.3	113.1	113.8	115.1	116.2	117.4	117.5
60°	104.6	103.9	103.3	103.3	103.6	104.7	105.6	106.9	107.6	108.4	108.8
62.5°	95.6	94.9	94.3	94.7	95.6	96.3	97.3	98.0	98.7	99.4	99.7
65°	81.5	81.2	81.7	82.1	82.2	83.1	84.4	84.9	85.6	86.0	87.3
67.5°	68.5	68.6	68.5	69.0	70.1	70.3	71.5	72.7	72.9	73.6	74.4
70°	59.7	60.1	60.4	60.8	61.7	62.1	63.0	63.5	64.2	64.8	65.4
72.5°	51.7	51.7	52.1	52.0	52.8	53.6	54.3	54.9	55.6	56.3	56.8
75°	39.8	39.8	40.2	40.3	41.2	42.1	41.9	42.3	43.0	43.7	44.1
77.5°	29.1	28.7	29.1	29.2	29.5	30.3	30.4	30.9	31.8	31.5	31.9
80°	22.1	21.6	22.1	22.3	22.3	23.2	23.2	23.6	24.1	23.6	24.1
82.5°	15.8	15.5	15.9	16.0	16.2	16.3	16.6	16.6	17.2	17.0	17.2
85°	7.9	7.8	7.9	7.8	7.9	8.1	8.1	7.9	7.9	8.2	7.8
87.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.3	3.1	3.2
90°	3.6	4.4	5.0	5.5	6.2	6.7	7.1	7.5	7.9	8.2	8.6
92.5°	6.6	6.7	7.0	7.3	7.5	7.8	8.1	8.2	8.5	8.6	8.8
95°	12.0	11.1	11.6	12.1	12.7	13.2	13.5	13.9	14.3	14.7	14.9
97.5°	15.7	12.8	14.0	15.2	16.5	17.7	18.0	18.3	18.6	18.9	19.1
100°	18.7	14.2	15.4	16.7	18.0	19.3	19.9	20.5	21.1	21.7	22.1
102.5°	69.1	62.7	52.0	41.3	30.6	19.8	20.6	21.4	22.2	23.0	23.4
105°	111.9	102.8	82.3	61.7	41.2	20.7	21.5	22.3	23.1	24.0	24.6
107.5°	138.9	127.5	102.8	78.2	53.6	28.9	28.0	27.3	26.4	25.5	25.3
110°	156.3	146.2	124.5	102.7	81.0	59.3	51.7	44.2	36.7	29.2	25.5



TEST NUMBER: P331465-927

CATALOG NUMBER: S122DIW-S290D435U927-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	172.9	171.0	165.6	160.2	154.8	149.5	122.0	94.6	67.1	39.7	26.1
115°	199.8	201.4	203.3	205.2	207.0	208.9	174.0	139.3	104.4	69.6	49.4
117.5°	224.8	226.2	227.5	228.8	230.1	231.4	223.0	214.5	206.1	197.6	184.6
120°	241.5	242.8	244.2	245.5	246.8	248.2	249.1	250.0	250.9	251.8	247.2
122.5°	256.9	258.3	259.8	261.2	262.7	264.2	264.7	265.2	265.8	266.3	265.6
125°	279.2	280.4	281.9	283.3	284.7	286.1	286.6	287.2	287.7	288.2	288.6
127.5°	300.6	301.6	302.7	303.7	304.8	305.9	306.7	307.4	308.2	309.0	309.3
130°	314.3	315.3	316.2	317.0	317.8	318.6	319.4	320.3	321.1	321.9	322.3
132.5°	327.1	328.0	328.8	329.7	330.5	331.4	332.1	332.8	333.4	334.1	334.5
135°	345.5	346.3	347.1	347.8	348.4	349.1	349.8	350.6	351.3	352.1	352.4
137.5°	361.8	362.6	363.4	364.2	364.9	365.7	366.4	367.2	367.9	368.6	368.8
140°	372.5	373.2	374.1	374.9	375.7	376.5	377.2	377.9	378.6	379.2	379.4
142.5°	382.0	382.8	383.7	384.6	385.6	386.5	387.1	387.8	388.4	389.0	389.1
145°	394.8	395.5	396.7	398.0	399.3	400.5	401.1	401.6	402.1	402.7	402.7
147.5°	407.3	407.8	409.1	410.4	411.6	412.9	413.3	413.7	414.1	414.5	414.5
150°	415.0	415.3	416.6	417.8	419.0	420.2	420.6	421.1	421.5	422.0	422.1
152.5°	422.1	422.4	423.5	424.7	425.8	427.0	427.4	427.9	428.3	428.8	428.7
155°	432.4	432.5	433.4	434.3	435.2	436.1	436.6	437.0	437.4	437.9	437.8
157.5°	441.2	441.2	441.8	442.4	443.1	443.7	444.2	444.7	445.2	445.8	445.7
160°	446.5	446.5	446.9	447.4	447.8	448.3	448.8	449.2	449.6	450.1	450.0
162.5°	450.8	450.8	451.1	451.5	451.9	452.3	452.9	453.4	453.9	454.4	454.3
165°	456.6	456.5	456.8	457.0	457.2	457.4	458.0	458.5	459.0	459.5	459.5
167.5°	461.0	460.9	461.1	461.3	461.5	461.7	462.2	462.8	463.3	463.8	463.7
170°	463.4	463.3	463.4	463.6	463.7	463.9	464.4	464.9	465.5	466.0	465.9
172.5°	465.0	464.9	465.0	465.2	465.3	465.5	466.0	466.5	467.1	467.6	467.5
175°	466.8	466.7	466.8	467.0	467.1	467.2	467.8	468.3	468.8	469.4	469.3
177.5°	467.6	467.4	467.5	467.5	467.6	467.6	468.1	468.5	468.9	469.4	469.3
180°	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9



TEST NUMBER: P331465-927

CATALOG NUMBER: S122DIW-S290D435U927-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3
2.5°	449.1	448.8	448.8	447.5	448.8	448.8	449.1	450.5	451.0	451.2	450.7
5°	416.6	416.1	415.2	416.1	415.2	416.1	416.6	419.1	420.4	421.6	422.7
7.5°	384.4	382.3	382.0	379.9	382.0	382.3	384.4	385.6	388.2	391.0	393.6
10°	361.0	359.6	359.3	355.9	359.3	359.6	361.0	364.1	366.5	369.9	373.6
12.5°	343.2	339.7	340.4	338.4	340.4	339.7	343.2	343.2	346.1	348.2	353.9
15°	312.2	312.2	311.5	308.5	311.5	312.2	312.2	317.1	318.0	321.4	326.2
17.5°	290.0	289.6	288.0	288.8	288.0	289.6	290.0	293.6	294.2	298.7	302.8
20°	276.8	275.7	273.5	273.5	273.5	275.7	276.8	278.8	281.1	283.8	287.2
22.5°	264.3	264.2	261.9	262.6	261.9	264.2	264.3	266.1	268.3	271.2	274.1
25°	249.6	248.2	247.1	247.6	247.1	248.2	249.6	249.8	252.3	254.3	256.1
27.5°	235.7	234.9	234.8	233.4	234.8	234.9	235.7	236.1	237.6	238.8	240.4
30°	227.7	225.9	226.2	225.3	226.2	225.9	227.7	227.8	228.5	229.3	231.2
32.5°	218.4	217.8	217.5	216.7	217.5	217.8	218.4	218.7	220.2	220.9	222.4
35°	205.9	206.0	205.2	205.5	205.2	206.0	205.9	206.2	206.4	207.2	208.6
37.5°	194.9	195.4	195.0	195.1	195.0	195.4	194.9	195.0	195.3	195.4	195.8
40°	187.7	187.7	187.7	188.2	187.7	187.7	187.7	187.2	187.4	187.2	187.2
42.5°	180.8	180.5	180.2	180.1	180.2	180.5	180.8	179.5	180.1	179.5	179.3
45°	169.0	169.5	169.7	168.8	169.7	169.5	169.0	168.7	168.1	167.9	167.7
47.5°	158.3	158.4	158.3	159.1	158.3	158.4	158.3	157.8	157.0	156.7	155.8
50°	150.8	150.4	150.8	150.4	150.8	150.4	150.8	149.9	149.3	148.5	147.7
52.5°	142.9	143.0	142.8	142.7	142.8	143.0	142.9	141.7	141.5	141.1	140.0
55°	130.5	130.8	130.6	130.6	130.6	130.8	130.5	129.8	129.6	128.5	127.4
57.5°	117.6	118.0	118.2	117.4	118.2	118.0	117.6	117.5	117.4	116.2	115.1
60°	108.7	109.6	109.4	109.1	109.4	109.6	108.7	108.8	108.4	107.6	106.9
62.5°	100.4	100.8	100.8	100.7	100.8	100.8	100.4	99.7	99.4	98.7	98.0
65°	87.9	88.2	87.6	88.2	87.6	88.2	87.9	87.3	86.0	85.6	84.9
67.5°	74.1	74.3	74.7	74.9	74.7	74.3	74.1	74.4	73.6	72.9	72.7
70°	65.7	65.5	66.1	66.6	66.1	65.5	65.7	65.4	64.8	64.2	63.5
72.5°	56.7	57.1	57.0	57.4	57.0	57.1	56.7	56.8	56.3	55.6	54.9
75°	43.7	44.3	44.1	44.6	44.1	44.3	43.7	44.1	43.7	43.0	42.3
77.5°	31.6	31.7	31.6	31.9	31.6	31.7	31.6	31.9	31.5	31.8	30.9
80°	24.1	23.8	23.4	24.1	23.4	23.8	24.1	24.1	23.6	24.1	23.6
82.5°	16.8	17.0	16.6	16.6	16.6	17.0	16.8	17.2	17.0	17.2	16.6
85°	7.8	7.5	7.2	7.2	7.2	7.5	7.8	7.8	8.2	7.9	7.9
87.5°	3.2	3.1	3.1	3.0	3.1	3.1	3.2	3.2	3.1	3.3	3.2
90°	8.7	8.9	9.0	9.1	9.0	8.9	8.7	8.6	8.2	7.9	7.5
92.5°	8.9	9.0	9.0	9.1	9.0	9.0	8.9	8.8	8.6	8.5	8.2
95°	14.8	14.7	14.7	14.6	14.7	14.7	14.8	14.9	14.7	14.3	13.9
97.5°	19.2	19.3	19.3	19.4	19.3	19.3	19.2	19.1	18.9	18.6	18.3
100°	22.3	22.4	22.5	22.7	22.5	22.4	22.3	22.1	21.7	21.1	20.5
102.5°	23.7	23.9	24.1	24.3	24.1	23.9	23.7	23.4	23.0	22.2	21.4
105°	24.8	25.1	25.4	25.7	25.4	25.1	24.8	24.6	24.0	23.1	22.3
107.5°	25.6	25.9	26.1	26.5	26.1	25.9	25.6	25.3	25.5	26.4	27.3
110°	25.8	26.1	26.5	26.8	26.5	26.1	25.8	25.5	29.2	36.7	44.2



TEST NUMBER: P331465-927

CATALOG NUMBER: S122DIW-S290D435U927-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	26.3	26.5	26.8	27.0	26.8	26.5	26.3	26.1	39.7	67.1	94.6
115°	44.0	38.6	33.2	27.7	33.2	38.6	44.0	49.4	69.6	104.4	139.3
117.5°	166.8	148.9	131.2	113.4	131.2	148.9	166.8	184.6	197.6	206.1	214.5
120°	237.0	226.9	216.7	206.5	216.7	226.9	237.0	247.2	251.8	250.9	250.0
122.5°	263.6	261.7	259.7	257.7	259.7	261.7	263.6	265.6	266.3	265.8	265.2
125°	288.8	289.1	289.3	289.5	289.3	289.1	288.8	288.6	288.2	287.7	287.2
127.5°	309.4	309.4	309.5	309.5	309.5	309.4	309.4	309.3	309.0	308.2	307.4
130°	322.3	322.2	322.1	322.0	322.1	322.2	322.3	322.3	321.9	321.1	320.3
132.5°	334.4	334.3	334.3	334.2	334.3	334.3	334.4	334.5	334.1	333.4	332.8
135°	352.3	352.1	352.0	351.8	352.0	352.1	352.3	352.4	352.1	351.3	350.6
137.5°	368.6	368.4	368.1	367.8	368.1	368.4	368.6	368.8	368.6	367.9	367.2
140°	379.0	378.6	378.3	377.9	378.3	378.6	379.0	379.4	379.2	378.6	377.9
142.5°	388.7	388.4	388.0	387.6	388.0	388.4	388.7	389.1	389.0	388.4	387.8
145°	402.3	402.0	401.6	401.2	401.6	402.0	402.3	402.7	402.7	402.1	401.6
147.5°	414.2	413.8	413.5	413.2	413.5	413.8	414.2	414.5	414.5	414.1	413.7
150°	421.7	421.3	420.9	420.6	420.9	421.3	421.7	422.1	422.0	421.5	421.1
152.5°	428.3	427.8	427.2	426.7	427.2	427.8	428.3	428.7	428.8	428.3	427.9
155°	437.2	436.7	436.0	435.5	436.0	436.7	437.2	437.8	437.9	437.4	437.0
157.5°	445.1	444.5	443.9	443.4	443.9	444.5	445.1	445.7	445.8	445.2	444.7
160°	449.6	449.0	448.5	448.0	448.5	449.0	449.6	450.0	450.1	449.6	449.2
162.5°	453.7	453.0	452.4	451.8	452.4	453.0	453.7	454.3	454.4	453.9	453.4
165°	459.0	458.5	458.0	457.4	458.0	458.5	459.0	459.5	459.5	459.0	458.5
167.5°	463.0	462.4	461.7	461.1	461.7	462.4	463.0	463.7	463.8	463.3	462.8
170°	465.2	464.5	463.9	463.2	463.9	464.5	465.2	465.9	466.0	465.5	464.9
172.5°	466.8	466.2	465.5	464.9	465.5	466.2	466.8	467.5	467.6	467.1	466.5
175°	468.5	467.8	467.0	466.3	467.0	467.8	468.5	469.3	469.4	468.8	468.3
177.5°	468.7	468.2	467.6	467.1	467.6	468.2	468.7	469.3	469.4	468.9	468.5
180°	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9



TEST NUMBER: P331465-927

CATALOG NUMBER: S122DIW-S290D435U927-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3
2.5°	450.0	451.5	454.0	456.6	458.2	461.2	462.1	463.5	464.8	467.8	471.0
5°	424.0	426.5	432.5	435.7	440.1	445.4	448.8	452.4	456.4	463.2	469.5
7.5°	396.1	400.3	407.7	413.8	420.2	427.6	433.0	440.1	446.1	455.7	464.9
10°	377.6	383.5	390.1	397.4	406.3	414.2	421.8	430.8	438.0	449.6	460.3
12.5°	360.8	361.7	371.3	379.2	391.5	401.3	410.0	421.6	428.6	442.4	453.7
15°	331.7	337.1	345.7	352.0	366.5	379.0	391.3	403.3	411.4	428.3	443.2
17.5°	307.0	312.0	320.9	331.2	341.7	354.0	369.9	382.6	393.6	413.0	430.6
20°	291.5	297.6	306.7	317.3	326.5	339.9	353.6	368.2	380.1	401.9	422.6
22.5°	278.3	283.1	290.4	300.9	310.9	323.2	338.2	354.1	366.5	390.1	411.0
25°	259.7	263.6	268.3	276.9	288.3	301.8	313.5	331.0	349.1	371.1	396.4
27.5°	242.9	245.7	249.9	257.5	266.3	278.8	291.8	308.4	326.7	350.5	377.3
30°	232.7	234.5	238.6	244.9	253.6	263.5	276.6	292.4	311.2	335.3	361.9
32.5°	223.8	225.4	228.1	234.1	241.6	250.1	261.9	277.7	295.6	319.2	348.8
35°	210.4	211.6	214.0	218.8	223.0	231.2	241.1	255.6	272.3	294.9	325.5
37.5°	197.0	198.8	200.2	202.2	207.6	213.0	221.6	233.8	250.2	273.1	302.2
40°	188.2	189.6	191.9	192.7	197.0	201.9	208.9	220.1	236.6	257.5	286.0
42.5°	179.3	180.8	182.0	183.1	186.8	191.1	197.4	207.0	221.7	241.9	270.1
45°	167.2	167.4	168.7	170.6	172.4	175.5	180.0	188.2	199.6	218.6	244.2
47.5°	154.9	155.1	155.3	156.1	158.1	160.9	163.9	170.6	180.8	196.0	220.9
50°	146.6	146.3	146.6	147.3	148.6	151.0	154.4	159.2	167.5	181.7	204.6
52.5°	138.7	138.7	138.5	138.7	139.7	141.3	143.8	147.9	155.3	168.3	188.5
55°	126.7	125.8	126.0	125.2	126.9	127.2	129.0	132.5	138.9	147.9	166.8
57.5°	113.8	113.1	112.3	112.1	111.9	112.9	114.3	117.0	122.0	129.9	145.2
60°	105.6	104.7	103.6	103.3	103.3	103.9	104.6	106.5	111.2	118.2	130.8
62.5°	97.3	96.3	95.6	94.7	94.3	94.9	95.6	97.0	100.4	107.0	117.9
65°	84.4	83.1	82.2	82.1	81.7	81.2	81.5	82.9	85.6	90.9	99.5
67.5°	71.5	70.3	70.1	69.0	68.5	68.6	68.5	69.7	71.4	75.9	82.3
70°	63.0	62.1	61.7	60.8	60.4	60.1	59.7	60.8	62.4	66.2	71.8
72.5°	54.3	53.6	52.8	52.0	52.1	51.7	51.7	52.4	53.6	57.1	61.5
75°	41.9	42.1	41.2	40.3	40.2	39.8	39.8	40.3	40.9	43.6	47.0
77.5°	30.4	30.3	29.5	29.2	29.1	28.7	29.1	29.4	29.7	31.5	34.0
80°	23.2	23.2	22.3	22.3	22.1	21.6	22.1	21.8	22.5	24.3	26.1
82.5°	16.6	16.3	16.2	16.0	15.9	15.5	15.8	16.2	16.5	17.7	18.8
85°	8.1	8.1	7.9	7.8	7.9	7.8	7.9	8.1	8.2	8.8	9.7
87.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
90°	7.1	6.7	6.2	5.5	5.0	4.4	3.6	2.9	2.0	1.2	0.3
92.5°	8.1	7.8	7.5	7.3	7.0	6.7	6.6	6.6	6.7	6.7	6.8
95°	13.5	13.2	12.7	12.1	11.6	11.1	12.0	14.6	17.0	19.5	22.0
97.5°	18.0	17.7	16.5	15.2	14.0	12.8	15.7	22.7	29.7	36.7	43.6
100°	19.9	19.3	18.0	16.7	15.4	14.2	18.7	29.0	39.3	49.6	60.0
102.5°	20.6	19.8	30.6	41.3	52.0	62.7	69.1	71.3	73.4	75.7	77.8
105°	21.5	20.7	41.2	61.7	82.3	102.8	111.9	109.7	107.4	105.2	102.9
107.5°	28.0	28.9	53.6	78.2	102.8	127.5	138.9	137.0	135.2	133.4	131.6
110°	51.7	59.3	81.0	102.7	124.5	146.2	156.3	154.7	153.1	151.5	150.0



TEST NUMBER: P331465-927

CATALOG NUMBER: S122DIW-S290D435U927-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	122.0	149.5	154.8	160.2	165.6	171.0	172.9	171.5	170.2	168.7	167.3
115°	174.0	208.9	207.0	205.2	203.3	201.4	199.8	198.5	197.3	196.0	194.7
117.5°	223.0	231.4	230.1	228.8	227.5	226.2	224.8	223.4	222.0	220.5	219.1
120°	249.1	248.2	246.8	245.5	244.2	242.8	241.5	240.4	239.2	238.1	237.0
122.5°	264.7	264.2	262.7	261.2	259.8	258.3	256.9	255.7	254.5	253.3	252.2
125°	286.6	286.1	284.7	283.3	281.9	280.4	279.2	278.2	277.3	276.2	275.3
127.5°	306.7	305.9	304.8	303.7	302.7	301.6	300.6	299.4	298.3	297.3	296.2
130°	319.4	318.6	317.8	317.0	316.2	315.3	314.3	313.1	311.9	310.7	309.5
132.5°	332.1	331.4	330.5	329.7	328.8	328.0	327.1	326.1	325.0	324.0	323.1
135°	349.8	349.1	348.4	347.8	347.1	346.3	345.5	344.2	343.0	341.8	340.6
137.5°	366.4	365.7	364.9	364.2	363.4	362.6	361.8	361.0	360.1	359.3	358.5
140°	377.2	376.5	375.7	374.9	374.1	373.2	372.5	371.9	371.3	370.7	370.1
142.5°	387.1	386.5	385.6	384.6	383.7	382.8	382.0	381.4	380.9	380.4	379.9
145°	401.1	400.5	399.3	398.0	396.7	395.5	394.8	394.9	395.0	395.1	395.1
147.5°	413.3	412.9	411.6	410.4	409.1	407.8	407.3	407.7	407.9	408.2	408.4
150°	420.6	420.2	419.0	417.8	416.6	415.3	415.0	415.6	416.1	416.6	417.2
152.5°	427.4	427.0	425.8	424.7	423.5	422.4	422.1	422.7	423.3	423.9	424.5
155°	436.6	436.1	435.2	434.3	433.4	432.5	432.4	433.1	433.7	434.4	435.1
157.5°	444.2	443.7	443.1	442.4	441.8	441.2	441.2	441.7	442.3	442.8	443.4
160°	448.8	448.3	447.8	447.4	446.9	446.5	446.5	446.9	447.4	447.8	448.3
162.5°	452.9	452.3	451.9	451.5	451.1	450.8	450.8	451.3	451.7	452.2	452.7
165°	458.0	457.4	457.2	457.0	456.8	456.5	456.6	457.1	457.6	458.0	458.4
167.5°	462.2	461.7	461.5	461.3	461.1	460.9	461.0	461.4	461.9	462.3	462.8
170°	464.4	463.9	463.7	463.6	463.4	463.3	463.4	463.9	464.3	464.8	465.2
172.5°	466.0	465.5	465.3	465.2	465.0	464.9	465.0	465.5	466.0	466.4	466.8
175°	467.8	467.2	467.1	467.0	466.8	466.7	466.8	467.4	467.9	468.4	469.0
177.5°	468.1	467.6	467.6	467.5	467.5	467.4	467.6	468.0	468.4	468.9	469.3
180°	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9



TEST NUMBER: P331465-927

CATALOG NUMBER: S122DIW-S290D435U927-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3
2.5°	470.7	471.4	473.7	476.0	478.6	479.3	480.5	479.5	479.2	481.9	483.9
5°	472.1	475.2	481.6	487.4	492.2	495.6	499.2	500.7	503.4	507.1	511.8
7.5°	470.5	476.8	486.7	495.1	504.2	510.8	515.9	520.4	525.7	532.8	540.7
10°	468.8	477.2	489.3	499.6	510.7	519.2	526.2	533.1	541.0	550.9	561.1
12.5°	465.6	475.6	490.8	502.9	517.2	525.5	535.0	549.7	558.3	572.0	586.5
15°	459.2	470.4	491.5	506.4	522.6	538.4	555.9	569.9	583.9	592.1	612.4
17.5°	449.8	466.1	489.5	506.9	527.5	552.4	572.0	588.0	604.1	617.3	627.5
20°	442.1	459.9	486.6	507.5	532.0	558.7	581.2	597.5	611.5	622.5	628.8
22.5°	432.5	455.0	480.9	505.3	536.5	563.1	586.7	599.4	611.2	616.6	619.0
25°	417.3	444.3	473.6	503.5	538.8	566.9	588.4	596.2	599.6	594.4	585.7
27.5°	400.9	431.0	465.3	500.1	537.4	564.4	579.9	578.7	572.9	556.0	542.5
30°	388.7	421.8	458.7	496.7	534.1	560.4	569.3	560.4	547.2	528.4	509.1
32.5°	375.9	410.2	451.6	491.8	528.1	551.2	553.1	537.7	517.3	495.8	471.8
35°	356.5	393.6	438.4	480.9	515.2	529.8	521.2	493.8	469.7	440.4	407.6
37.5°	334.5	375.5	420.4	464.9	496.0	499.8	478.3	449.6	415.5	381.0	342.5
40°	318.1	361.6	407.8	452.6	480.1	476.2	448.8	417.2	376.7	334.5	298.7
42.5°	303.5	346.8	394.0	437.9	459.9	449.1	417.2	378.3	334.8	295.1	262.3
45°	278.1	322.7	370.9	413.4	426.0	406.3	364.1	320.8	278.1	244.9	219.0
47.5°	253.3	297.5	345.2	382.5	387.0	360.6	314.4	270.0	233.1	206.2	187.9
50°	235.2	279.5	326.8	360.1	358.6	326.8	279.3	237.0	206.2	184.4	172.2
52.5°	219.0	260.8	306.2	336.5	328.8	294.1	248.7	211.2	185.9	168.9	157.8
55°	193.6	232.3	275.5	299.8	285.7	247.2	208.9	178.7	159.9	147.2	138.6
57.5°	168.5	204.8	241.8	256.7	241.2	205.7	173.7	151.8	137.7	128.3	122.6
60°	153.0	184.7	217.5	230.5	212.0	180.3	155.1	135.5	124.1	116.5	111.4
62.5°	137.4	165.8	196.9	203.9	187.0	160.2	137.8	121.5	112.3	105.4	100.6
65°	116.2	139.5	163.0	167.7	152.1	131.3	113.8	103.1	94.8	89.8	86.0
67.5°	95.4	114.0	130.7	134.4	120.7	106.4	93.6	84.4	78.8	74.6	71.4
70°	82.9	97.8	111.4	114.5	103.5	90.7	81.0	73.6	68.5	65.0	61.9
72.5°	69.9	82.1	93.6	95.6	86.7	76.8	68.9	63.1	58.6	56.3	53.4
75°	53.5	60.7	69.5	70.0	64.1	58.1	52.0	48.2	45.9	43.0	41.6
77.5°	37.7	43.3	48.4	49.4	45.9	41.8	38.4	35.4	33.4	32.1	30.7
80°	28.8	33.3	35.5	36.7	34.2	31.3	29.3	27.3	26.1	25.2	24.3
82.5°	20.6	23.4	25.3	26.4	25.0	23.2	21.3	20.1	19.2	18.5	18.1
85°	10.5	11.7	13.0	13.3	13.0	12.2	11.2	11.2	10.6	10.5	10.5
87.5°	3.8	4.6	4.8	5.3	5.2	5.3	5.5	5.4	5.4	5.3	5.2
90°	1.2	2.0	2.9	3.6	4.4	5.0	5.5	6.2	6.7	7.1	7.5
92.5°	6.7	6.7	6.6	6.6	6.7	7.0	7.3	7.5	7.8	8.1	8.2
95°	19.5	17.0	14.6	12.0	11.1	11.6	12.1	12.7	13.2	13.5	13.9
97.5°	36.7	29.7	22.7	15.7	12.8	14.0	15.2	16.5	17.7	18.0	18.3
100°	49.6	39.3	29.0	18.7	14.2	15.4	16.7	18.0	19.3	19.9	20.5
102.5°	75.7	73.4	71.3	69.1	62.7	52.0	41.3	30.6	19.8	20.6	21.4
105°	105.2	107.4	109.7	111.9	102.8	82.3	61.7	41.2	20.7	21.5	22.3
107.5°	133.4	135.2	137.0	138.9	127.5	102.8	78.2	53.6	28.9	28.0	27.3
110°	151.5	153.1	154.7	156.3	146.2	124.5	102.7	81.0	59.3	51.7	44.2





TEST NUMBER: P331465-927

CATALOG NUMBER: S122DIW-S290D435U927-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	168.7	170.2	171.5	172.9	171.0	165.6	160.2	154.8	149.5	122.0	94.6
115°	196.0	197.3	198.5	199.8	201.4	203.3	205.2	207.0	208.9	174.0	139.3
117.5°	220.5	222.0	223.4	224.8	226.2	227.5	228.8	230.1	231.4	223.0	214.5
120°	238.1	239.2	240.4	241.5	242.8	244.2	245.5	246.8	248.2	249.1	250.0
122.5°	253.3	254.5	255.7	256.9	258.3	259.8	261.2	262.7	264.2	264.7	265.2
125°	276.2	277.3	278.2	279.2	280.4	281.9	283.3	284.7	286.1	286.6	287.2
127.5°	297.3	298.3	299.4	300.6	301.6	302.7	303.7	304.8	305.9	306.7	307.4
130°	310.7	311.9	313.1	314.3	315.3	316.2	317.0	317.8	318.6	319.4	320.3
132.5°	324.0	325.0	326.1	327.1	328.0	328.8	329.7	330.5	331.4	332.1	332.8
135°	341.8	343.0	344.2	345.5	346.3	347.1	347.8	348.4	349.1	349.8	350.6
137.5°	359.3	360.1	361.0	361.8	362.6	363.4	364.2	364.9	365.7	366.4	367.2
140°	370.7	371.3	371.9	372.5	373.2	374.1	374.9	375.7	376.5	377.2	377.9
142.5°	380.4	380.9	381.4	382.0	382.8	383.7	384.6	385.6	386.5	387.1	387.8
145°	395.1	395.0	394.9	394.8	395.5	396.7	398.0	399.3	400.5	401.1	401.6
147.5°	408.2	407.9	407.7	407.3	407.8	409.1	410.4	411.6	412.9	413.3	413.7
150°	416.6	416.1	415.6	415.0	415.3	416.6	417.8	419.0	420.2	420.6	421.1
152.5°	423.9	423.3	422.7	422.1	422.4	423.5	424.7	425.8	427.0	427.4	427.9
155°	434.4	433.7	433.1	432.4	432.5	433.4	434.3	435.2	436.1	436.6	437.0
157.5°	442.8	442.3	441.7	441.2	441.2	441.8	442.4	443.1	443.7	444.2	444.7
160°	447.8	447.4	446.9	446.5	446.5	446.9	447.4	447.8	448.3	448.8	449.2
162.5°	452.2	451.7	451.3	450.8	450.8	451.1	451.5	451.9	452.3	452.9	453.4
165°	458.0	457.6	457.1	456.6	456.5	456.8	457.0	457.2	457.4	458.0	458.5
167.5°	462.3	461.9	461.4	461.0	460.9	461.1	461.3	461.5	461.7	462.2	462.8
170°	464.8	464.3	463.9	463.4	463.3	463.4	463.6	463.7	463.9	464.4	464.9
172.5°	466.4	466.0	465.5	465.0	464.9	465.0	465.2	465.3	465.5	466.0	466.5
175°	468.4	467.9	467.4	466.8	466.7	466.8	467.0	467.1	467.2	467.8	468.3
177.5°	468.9	468.4	468.0	467.6	467.4	467.5	467.5	467.6	467.6	468.1	468.5
180°	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9	467.9



TEST NUMBER: P331465-927

CATALOG NUMBER: S122DIW-S290D435U927-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	468.3	468.3	468.3	468.3	468.3	468.3	468.3
2.5°	485.7	487.7	487.7	488.0	490.3	490.0	489.8
5°	516.8	519.9	520.2	523.5	525.6	524.9	522.9
7.5°	546.2	551.9	556.3	558.6	561.5	563.2	562.4
10°	569.6	577.8	582.9	586.3	590.4	593.5	592.4
12.5°	590.7	600.6	607.5	613.4	613.9	617.8	615.1
15°	623.8	634.1	635.3	639.5	643.0	642.6	642.8
17.5°	634.6	637.9	638.7	638.7	638.8	637.5	634.8
20°	630.7	629.5	626.5	624.1	620.0	619.4	615.8
22.5°	612.3	608.3	600.6	595.6	589.1	587.5	586.5
25°	576.1	567.2	555.0	543.3	540.0	533.8	535.5
27.5°	526.2	512.5	499.2	489.8	481.2	471.7	474.4
30°	491.3	475.8	457.1	442.7	433.5	424.5	422.9
32.5°	449.6	426.8	406.0	393.3	379.2	373.5	367.3
35°	377.6	355.4	334.7	316.9	306.7	298.7	291.5
37.5°	312.8	287.3	270.6	256.2	248.7	244.2	245.4
40°	272.7	250.3	238.1	227.1	220.2	217.1	217.8
42.5°	240.1	223.4	213.3	205.8	201.0	199.2	198.8
45°	203.2	193.8	185.5	181.3	178.9	176.9	175.6
47.5°	178.0	170.3	165.6	163.1	161.1	159.1	159.0
50°	162.9	157.8	154.6	151.9	150.3	148.9	150.1
52.5°	151.3	146.7	143.5	141.1	140.5	139.2	139.1
55°	134.3	130.6	128.3	126.1	125.1	124.4	123.4
57.5°	118.7	115.3	113.1	111.8	109.7	109.0	108.7
60°	107.6	104.9	102.7	100.9	100.1	98.6	98.6
62.5°	97.4	94.7	92.7	91.3	89.8	89.3	89.4
65°	82.6	80.4	78.4	77.0	76.7	75.6	76.0
67.5°	69.0	67.6	65.4	64.6	64.0	63.5	63.0
70°	59.9	58.5	57.4	56.3	55.8	55.8	55.8
72.5°	52.3	50.5	49.9	48.6	48.9	48.3	47.7
75°	40.5	39.4	38.9	38.3	37.5	37.5	37.5
77.5°	29.8	29.5	28.8	28.3	28.0	27.9	28.0
80°	23.1	22.8	22.5	22.5	22.1	21.9	21.6
82.5°	17.7	17.3	17.0	16.9	16.8	16.8	16.7
85°	10.1	9.7	9.7	9.9	9.5	9.5	9.7
87.5°	5.5	5.5	5.5	5.5	5.6	5.5	5.5
90°	7.9	8.2	8.6	8.7	8.9	9.0	9.1
92.5°	8.5	8.6	8.8	8.9	9.0	9.0	9.1
95°	14.3	14.7	14.9	14.8	14.7	14.7	14.6
97.5°	18.6	18.9	19.1	19.2	19.3	19.3	19.4
100°	21.1	21.7	22.1	22.3	22.4	22.5	22.7
102.5°	22.2	23.0	23.4	23.7	23.9	24.1	24.3
105°	23.1	24.0	24.6	24.8	25.1	25.4	25.7
107.5°	26.4	25.5	25.3	25.6	25.9	26.1	26.5
110°	36.7	29.2	25.5	25.8	26.1	26.5	26.8



TEST NUMBER: P331465-927

CATALOG NUMBER: S122DIW-S290D435U927-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	67.1	39.7	26.1	26.3	26.5	26.8	27.0
115°	104.4	69.6	49.4	44.0	38.6	33.2	27.7
117.5°	206.1	197.6	184.6	166.8	148.9	131.2	113.4
120°	250.9	251.8	247.2	237.0	226.9	216.7	206.5
122.5°	265.8	266.3	265.6	263.6	261.7	259.7	257.7
125°	287.7	288.2	288.6	288.8	289.1	289.3	289.5
127.5°	308.2	309.0	309.3	309.4	309.4	309.5	309.5
130°	321.1	321.9	322.3	322.3	322.2	322.1	322.0
132.5°	333.4	334.1	334.5	334.4	334.3	334.3	334.2
135°	351.3	352.1	352.4	352.3	352.1	352.0	351.8
137.5°	367.9	368.6	368.8	368.6	368.4	368.1	367.8
140°	378.6	379.2	379.4	379.0	378.6	378.3	377.9
142.5°	388.4	389.0	389.1	388.7	388.4	388.0	387.6
145°	402.1	402.7	402.7	402.3	402.0	401.6	401.2
147.5°	414.1	414.5	414.5	414.2	413.8	413.5	413.2
150°	421.5	422.0	422.1	421.7	421.3	420.9	420.6
152.5°	428.3	428.8	428.7	428.3	427.8	427.2	426.7
155°	437.4	437.9	437.8	437.2	436.7	436.0	435.5
157.5°	445.2	445.8	445.7	445.1	444.5	443.9	443.4
160°	449.6	450.1	450.0	449.6	449.0	448.5	448.0
162.5°	453.9	454.4	454.3	453.7	453.0	452.4	451.8
165°	459.0	459.5	459.5	459.0	458.5	458.0	457.4
167.5°	463.3	463.8	463.7	463.0	462.4	461.7	461.1
170°	465.5	466.0	465.9	465.2	464.5	463.9	463.2
172.5°	467.1	467.6	467.5	466.8	466.2	465.5	464.9
175°	468.8	469.4	469.3	468.5	467.8	467.0	466.3
177.5°	468.9	469.4	469.3	468.7	468.2	467.6	467.1
180°	467.9	467.9	467.9	467.9	467.9	467.9	467.9

(END OF REPORT)