

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: P331465-930

Luminaire Tested: **S122DIW-S290D435U930-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P331465-930  
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-S290D435U930-4F0-1E-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: 2475.7 lumens  
Efficiency: N/A  
Efficacy: 107.6 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

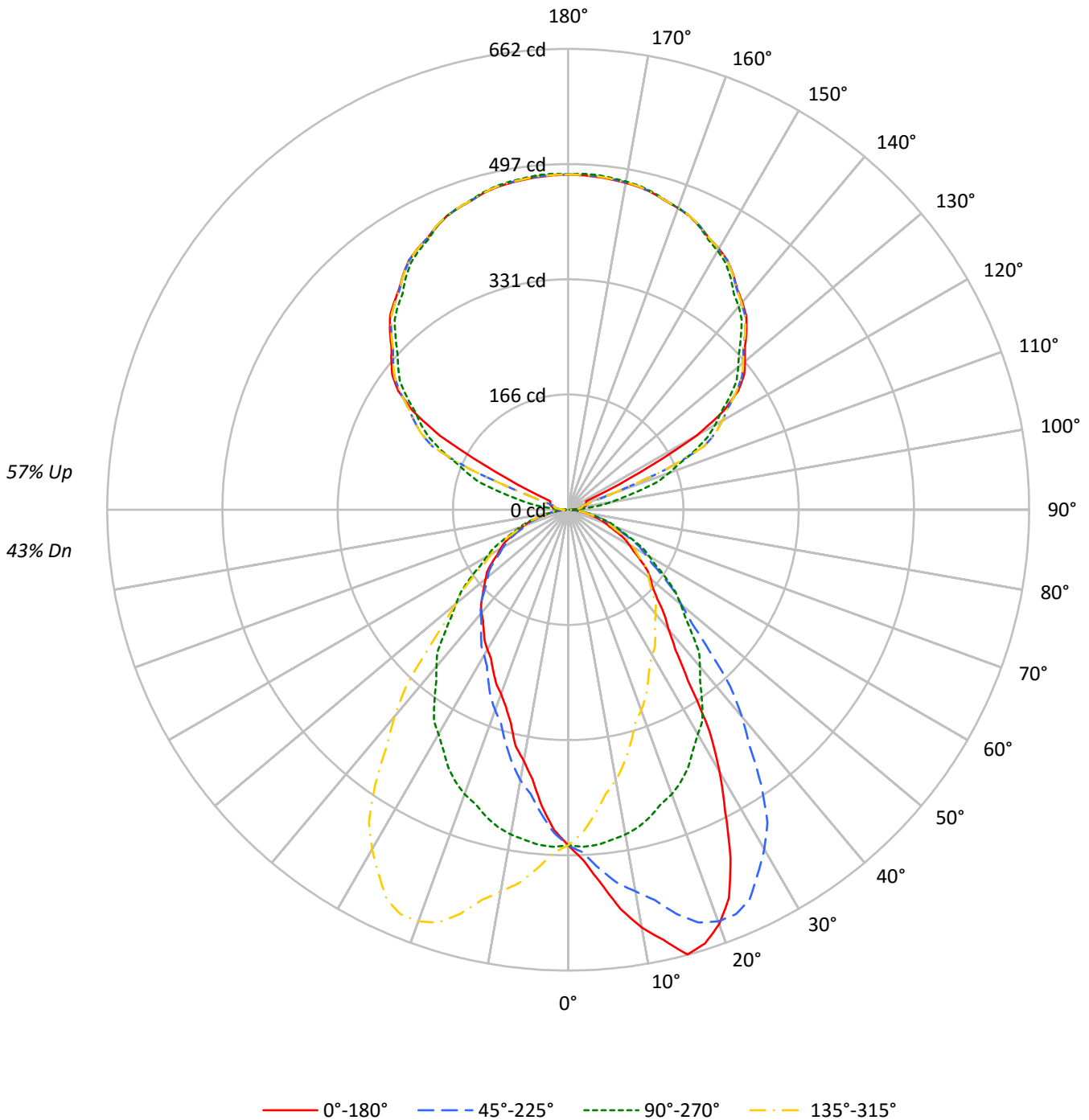
Input Watts (W): 23  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P331465-930

CATALOG NUMBER: S122DIW-S290D435U930-4F0-1E-UDD-A

### Luminous Intensity Polar Plot





TEST NUMBER: P331465-930

CATALOG NUMBER: S122DIW-S290D435U930-4F0-1E-UDD-A

**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	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°	7781	7781	7781	7781
5°	8723	7831	6940	7831
10°	9996	7768	6005	7768
15°	11057	7626	5307	7626
20°	10890	7472	4837	7472
25°	9818	7269	4541	7269
30°	8114	6943	4323	6943
35°	5913	6603	4169	6603
40°	4723	6203	4083	6203
45°	4128	5740	3966	5740
50°	3881	5290	3888	5290
55°	3575	4833	3783	4833
60°	3278	4346	3626	4346
65°	2988	3912	3465	3912
70°	2710	3489	3238	3489
75°	2408	3013	2863	3013
80°	2073	2492	2306	2492
85°	1853	1853	1371	1853



TEST NUMBER: P331465-930

CATALOG NUMBER: S122DIW-S290D435U930-4F0-1E-UDD-A

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.9	1.9
10°-20°	133.4	5.4
20°-30°	193.6	7.8
30°-40°	204.3	8.3
40°-50°	180.9	7.3
50°-60°	144.4	5.8
60°-70°	98.1	4.0
70°-80°	50.3	2.0
80°-90°	13.3	0.5
90°-100°	16.1	0.6
100°-110°	58.9	2.4
110°-120°	157.5	6.4
120°-130°	259.9	10.5
130°-140°	276.4	11.2
140°-150°	256.9	10.4
150°-160°	206.6	8.3
160°-170°	133.1	5.4
170°-180°	45.8	1.9
0°-30°	373.0	15.1
0°-40°	577.3	23.3
0°-60°	902.6	36.5
0°-90°	1064.4	43.0
90°-120°	232.4	9.4
90°-150°	1025.8	41.4
90°-180°	1411.0	57.0
0°-180°	2475.7	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	482	482	482	482	482	
5°	538	483	428	483	538	54
15°	662	456	318	456	662	183
25°	551	408	255	408	551	249
35°	300	335	212	335	300	195
45°	181	251	174	251	181	142
55°	127	172	134	172	127	114
65°	78	102	91	102	78	78
75°	39	48	46	48	39	41
85°	10	10	7	10	10	11
90°	9	0	9	0	9	5
95°	15	23	15	23	15	14
105°	26	106	26	106	26	28
115°	28	200	28	200	28	72
125°	298	283	298	283	298	258
135°	362	351	362	351	362	279
145°	413	407	413	407	413	258
155°	448	448	448	448	448	207
165°	471	472	471	472	471	133
175°	480	483	480	483	480	46
180°	482	482	482	482	482	



TEST NUMBER: P331465-930

CATALOG NUMBER: S122DIW-S290D435U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	504.1	504.3	504.6	502.2	501.9	501.9	499.9	498.1	495.9	493.2	493.5
5°	538.2	540.2	541.0	538.7	535.4	535.1	531.9	526.8	521.9	518.0	515.3
7.5°	578.9	579.7	577.9	574.9	572.5	568.0	562.1	556.4	548.4	541.0	535.6
10°	609.7	610.8	607.6	603.4	599.9	594.7	586.2	577.5	567.0	556.8	548.6
12.5°	633.1	635.9	631.8	631.3	625.3	618.1	608.0	603.6	588.7	574.5	565.7
15°	661.5	661.4	661.8	658.2	653.8	652.6	642.0	630.2	609.4	601.0	586.5
17.5°	653.3	656.2	657.5	657.4	657.3	656.6	653.1	645.8	635.3	621.7	605.1
20°	633.8	637.5	638.1	642.3	644.7	647.8	649.1	647.1	640.7	629.3	614.9
22.5°	603.6	604.6	606.3	612.9	618.2	626.1	630.1	637.1	634.5	629.0	616.9
25°	551.1	549.3	555.8	559.1	571.2	583.8	592.9	602.8	611.7	617.1	613.6
27.5°	488.3	485.5	495.2	504.1	513.8	527.5	541.6	558.3	572.2	589.6	595.6
30°	435.2	436.9	446.1	455.6	470.4	489.7	505.6	523.9	543.8	563.2	576.7
32.5°	378.1	384.4	390.3	404.8	417.8	439.3	462.7	485.6	510.3	532.4	553.3
35°	300.0	307.4	315.6	326.1	344.5	365.7	388.6	419.5	453.2	483.4	508.2
37.5°	252.6	251.4	256.0	263.7	278.5	295.7	322.0	352.5	392.2	427.6	462.7
40°	224.1	223.4	226.7	233.7	245.0	257.6	280.6	307.4	344.3	387.7	429.3
42.5°	204.6	205.0	206.8	211.8	219.6	229.9	247.1	269.9	303.7	344.5	389.3
45°	180.8	182.1	184.1	186.5	190.9	199.5	209.1	225.4	252.1	286.2	330.2
47.5°	163.6	163.7	165.8	167.9	170.5	175.3	183.2	193.4	212.2	239.9	277.9
50°	154.5	153.2	154.7	156.3	159.1	162.4	167.6	177.2	189.8	212.2	243.9
52.5°	143.2	143.2	144.6	145.2	147.7	151.0	155.7	162.4	173.8	191.4	217.4
55°	127.0	128.0	128.7	129.8	132.1	134.4	138.2	142.6	151.5	164.6	183.9
57.5°	111.9	112.2	112.9	115.0	116.4	118.6	122.1	126.2	132.0	141.7	156.2
60°	101.5	101.5	103.0	103.9	105.7	107.9	110.7	114.6	119.8	127.8	139.5
62.5°	92.0	91.9	92.5	94.0	95.4	97.4	100.2	103.5	108.4	115.5	125.1
65°	78.2	77.8	78.9	79.2	80.7	82.8	85.0	88.5	92.5	97.6	106.2
67.5°	64.8	65.3	65.9	66.5	67.3	69.5	71.0	73.5	76.8	81.1	86.8
70°	57.4	57.4	57.4	58.0	59.1	60.2	61.6	63.7	66.9	70.5	75.7
72.5°	49.1	49.7	50.3	50.0	51.4	52.0	53.8	55.0	58.0	60.3	64.9
75°	38.6	38.6	38.6	39.5	40.0	40.5	41.7	42.8	44.3	47.2	49.7
77.5°	28.8	28.7	28.9	29.1	29.7	30.3	30.7	31.6	33.0	34.4	36.4
80°	22.3	22.6	22.7	23.2	23.2	23.5	23.7	25.0	25.9	26.8	28.1
82.5°	17.2	17.3	17.3	17.4	17.5	17.8	18.3	18.7	19.0	19.7	20.7
85°	10.0	9.8	9.8	10.2	10.0	10.0	10.4	10.8	10.8	10.9	11.5
87.5°	5.7	5.7	5.8	5.6	5.6	5.7	5.6	5.4	5.5	5.5	5.5
90°	9.4	9.3	9.1	9.0	8.8	8.5	8.2	7.7	7.3	6.9	6.4
92.5°	9.4	9.3	9.2	9.1	9.0	8.9	8.7	8.5	8.3	8.1	7.7
95°	15.0	15.1	15.2	15.2	15.3	15.2	14.8	14.3	13.9	13.6	13.0
97.5°	20.0	19.9	19.8	19.7	19.6	19.4	19.2	18.8	18.5	18.2	17.0
100°	23.3	23.2	23.1	22.9	22.7	22.3	21.7	21.1	20.5	19.9	18.5
102.5°	25.0	24.8	24.6	24.4	24.1	23.6	22.8	22.0	21.2	20.4	31.5
105°	26.5	26.2	25.8	25.5	25.3	24.7	23.8	23.0	22.1	21.3	42.4
107.5°	27.2	26.9	26.7	26.3	26.0	26.3	27.1	28.0	28.9	29.8	55.1
110°	27.6	27.2	26.9	26.6	26.3	30.0	37.7	45.5	53.2	61.0	83.3



TEST NUMBER: P331465-930

CATALOG NUMBER: S122DIW-S290D435U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	27.8	27.6	27.3	27.1	26.8	40.8	69.1	97.3	125.6	153.8	159.3
115°	28.5	34.2	39.7	45.3	50.9	71.6	107.5	143.3	179.1	215.0	213.0
117.5°	116.7	135.0	153.3	171.6	190.0	203.4	212.1	220.8	229.5	238.1	236.8
120°	212.5	223.0	233.5	243.9	254.4	259.2	258.2	257.3	256.3	255.4	254.0
122.5°	265.2	267.3	269.3	271.3	273.4	274.1	273.5	273.0	272.5	271.9	270.4
125°	297.9	297.7	297.5	297.3	297.0	296.6	296.1	295.5	295.0	294.5	293.0
127.5°	318.5	318.5	318.5	318.5	318.4	318.0	317.2	316.4	315.6	314.8	313.7
130°	331.4	331.5	331.6	331.7	331.7	331.3	330.4	329.6	328.7	327.9	327.1
132.5°	344.0	344.1	344.1	344.1	344.2	343.9	343.2	342.5	341.8	341.0	340.1
135°	362.1	362.2	362.4	362.6	362.6	362.4	361.6	360.9	360.0	359.3	358.6
137.5°	378.5	378.9	379.1	379.4	379.6	379.4	378.6	377.9	377.1	376.3	375.5
140°	388.9	389.3	389.6	390.0	390.4	390.3	389.6	388.9	388.2	387.5	386.6
142.5°	398.9	399.3	399.7	400.1	400.5	400.4	399.7	399.1	398.4	397.8	396.8
145°	412.9	413.4	413.7	414.1	414.5	414.4	413.8	413.4	412.8	412.2	410.9
147.5°	425.3	425.6	425.9	426.2	426.6	426.6	426.2	425.7	425.3	424.9	423.6
150°	432.8	433.2	433.6	434.0	434.4	434.3	433.8	433.4	432.9	432.4	431.2
152.5°	439.2	439.7	440.3	440.8	441.2	441.3	440.8	440.3	439.9	439.4	438.2
155°	448.2	448.7	449.4	450.0	450.6	450.7	450.2	449.8	449.3	448.8	447.9
157.5°	456.3	456.9	457.5	458.1	458.7	458.8	458.2	457.7	457.1	456.6	456.0
160°	461.1	461.5	462.1	462.7	463.2	463.3	462.8	462.3	461.9	461.4	460.9
162.5°	465.0	465.6	466.3	466.9	467.6	467.7	467.2	466.6	466.1	465.5	465.1
165°	470.8	471.3	471.9	472.4	473.0	473.0	472.4	471.9	471.3	470.8	470.6
167.5°	474.5	475.2	475.9	476.5	477.3	477.4	476.8	476.3	475.7	475.2	475.0
170°	476.7	477.4	478.1	478.8	479.5	479.6	479.1	478.5	477.9	477.4	477.3
172.5°	478.4	479.1	479.8	480.5	481.2	481.3	480.7	480.1	479.6	479.1	478.9
175°	479.9	480.6	481.4	482.2	483.0	483.1	482.5	482.0	481.4	480.9	480.7
177.5°	480.8	481.3	481.8	482.4	483.0	483.1	482.6	482.2	481.8	481.3	481.3
180°	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6



TEST NUMBER: P331465-930

CATALOG NUMBER: S122DIW-S290D435U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	494.5	493.3	492.6	489.9	487.5	485.2	484.5	484.7	481.4	478.3	477.0
5°	513.8	510.1	506.5	501.6	495.6	489.1	485.8	483.2	476.7	469.7	465.6
7.5°	531.0	525.7	518.9	509.6	500.9	490.7	484.2	478.5	469.0	459.1	453.0
10°	541.5	534.3	525.6	514.1	503.6	491.1	482.5	473.8	462.7	450.8	443.4
12.5°	550.6	540.9	532.3	517.6	505.1	489.5	479.2	466.9	455.3	441.2	433.9
15°	572.1	554.2	537.9	521.1	505.8	484.1	472.6	456.2	440.8	423.4	415.1
17.5°	588.7	568.5	542.9	521.7	503.8	479.7	462.9	443.2	425.0	405.1	393.8
20°	598.2	575.0	547.5	522.3	500.8	473.4	455.0	434.9	413.6	391.2	379.0
22.5°	603.8	579.5	552.2	520.1	494.9	468.2	445.2	423.0	401.5	377.2	364.4
25°	605.6	583.4	554.5	518.2	487.5	457.3	429.5	408.0	381.9	359.3	340.6
27.5°	596.8	580.9	553.1	514.7	478.9	443.6	412.6	388.3	360.8	336.2	317.4
30°	586.0	576.7	549.7	511.2	472.1	434.1	400.1	372.4	345.0	320.2	300.9
32.5°	569.2	567.3	543.5	506.1	464.8	422.2	386.9	359.0	328.6	304.2	285.8
35°	536.4	545.3	530.3	494.9	451.2	405.0	366.9	335.0	303.5	280.2	263.0
37.5°	492.3	514.4	510.5	478.4	432.7	386.5	344.3	311.0	281.0	257.5	240.6
40°	461.9	490.1	494.2	465.8	419.7	372.1	327.4	294.3	265.1	243.5	226.5
42.5°	429.3	462.2	473.4	450.7	405.4	356.9	312.3	278.0	249.0	228.1	213.0
45°	374.7	418.2	438.4	425.4	381.7	332.1	286.2	251.4	225.0	205.4	193.7
47.5°	323.6	371.1	398.3	393.7	355.3	306.1	260.7	227.3	201.7	186.1	175.6
50°	287.5	336.3	369.1	370.6	336.3	287.6	242.1	210.6	187.0	172.4	163.9
52.5°	256.0	302.7	338.4	346.3	315.1	268.4	225.3	194.0	173.3	159.8	152.2
55°	215.0	254.5	294.1	308.6	283.6	239.1	199.3	171.7	152.2	143.0	136.3
57.5°	178.8	211.7	248.3	264.2	248.8	210.8	173.4	149.4	133.7	125.6	120.4
60°	159.6	185.6	218.2	237.3	223.9	190.0	157.4	134.6	121.6	114.5	109.7
62.5°	141.9	164.9	192.4	209.9	202.6	170.6	141.5	121.3	110.1	103.4	99.9
65°	117.1	135.2	156.5	172.6	167.8	143.6	119.6	102.4	93.5	88.1	85.4
67.5°	96.4	109.5	124.3	138.4	134.5	117.3	98.2	84.7	78.1	73.5	71.7
70°	83.3	93.4	106.5	117.8	114.6	100.6	85.4	73.9	68.2	64.2	62.6
72.5°	70.9	79.1	89.2	98.4	96.3	84.5	71.9	63.3	58.8	55.2	53.9
75°	53.6	59.8	66.0	72.1	71.5	62.5	55.0	48.3	44.8	42.1	41.5
77.5°	39.5	43.0	47.2	50.8	49.8	44.6	38.8	35.0	32.4	30.6	30.2
80°	30.2	32.2	35.2	37.7	36.5	34.2	29.6	26.8	25.0	23.2	22.4
82.5°	21.9	23.9	25.7	27.1	26.1	24.1	21.2	19.3	18.2	17.0	16.6
85°	11.5	12.6	13.4	13.7	13.4	12.1	10.8	10.0	9.0	8.5	8.3
87.5°	5.6	5.5	5.4	5.5	4.9	4.7	3.9	3.3	3.3	3.3	3.3
90°	5.7	5.1	4.5	3.8	2.9	2.0	1.2	0.3	1.2	2.0	2.9
92.5°	7.5	7.2	6.8	6.8	6.8	6.8	6.9	7.0	6.9	6.8	6.8
95°	12.5	12.0	11.4	12.4	15.0	17.5	20.1	22.7	20.1	17.5	15.0
97.5°	15.7	14.4	13.2	16.1	23.3	30.6	37.7	44.9	37.7	30.6	23.3
100°	17.2	15.9	14.6	19.2	29.8	40.4	51.0	61.7	51.0	40.4	29.8
102.5°	42.5	53.5	64.5	71.1	73.4	75.6	77.9	80.1	77.9	75.6	73.4
105°	63.5	84.7	105.8	115.2	112.9	110.6	108.3	105.9	108.3	110.6	112.9
107.5°	80.5	105.8	131.2	142.9	141.0	139.2	137.3	135.4	137.3	139.2	141.0
110°	105.7	128.1	150.5	160.9	159.2	157.6	156.0	154.3	156.0	157.6	159.2





TEST NUMBER: P331465-930

CATALOG NUMBER: S122DIW-S290D435U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	164.9	170.4	175.9	178.0	176.5	175.1	173.7	172.2	173.7	175.1	176.5
115°	211.2	209.2	207.2	205.6	204.3	203.0	201.7	200.4	201.7	203.0	204.3
117.5°	235.5	234.2	232.8	231.4	229.9	228.4	227.0	225.5	227.0	228.4	229.9
120°	252.7	251.3	249.9	248.6	247.4	246.2	245.1	243.9	245.1	246.2	247.4
122.5°	268.8	267.3	265.8	264.4	263.2	262.0	260.7	259.5	260.7	262.0	263.2
125°	291.6	290.1	288.5	287.3	286.3	285.4	284.3	283.3	284.3	285.4	286.3
127.5°	312.6	311.5	310.4	309.3	308.2	307.0	306.0	304.8	306.0	307.0	308.2
130°	326.2	325.4	324.5	323.4	322.2	321.0	319.8	318.5	319.8	321.0	322.2
132.5°	339.3	338.4	337.6	336.6	335.6	334.5	333.5	332.5	333.5	334.5	335.6
135°	357.9	357.2	356.4	355.6	354.2	353.0	351.8	350.6	351.8	353.0	354.2
137.5°	374.8	374.0	373.2	372.3	371.5	370.6	369.7	368.9	369.7	370.6	371.5
140°	385.8	385.0	384.1	383.4	382.7	382.1	381.5	380.9	381.5	382.1	382.7
142.5°	395.8	394.8	394.0	393.1	392.6	392.0	391.5	390.9	391.5	392.0	392.6
145°	409.6	408.3	407.0	406.3	406.4	406.5	406.6	406.7	406.6	406.5	406.4
147.5°	422.3	421.0	419.7	419.2	419.6	419.8	420.1	420.4	420.1	419.8	419.6
150°	430.0	428.8	427.5	427.1	427.7	428.2	428.8	429.3	428.8	428.2	427.7
152.5°	437.1	435.9	434.7	434.4	435.0	435.6	436.3	436.8	436.3	435.6	435.0
155°	446.9	446.1	445.2	445.0	445.7	446.4	447.1	447.8	447.1	446.4	445.7
157.5°	455.3	454.7	454.0	454.0	454.6	455.2	455.8	456.3	455.8	455.2	454.6
160°	460.5	460.0	459.5	459.5	460.0	460.5	460.9	461.4	460.9	460.5	460.0
162.5°	464.7	464.3	464.0	464.0	464.5	464.9	465.4	465.9	465.4	464.9	464.5
165°	470.3	470.1	469.9	469.9	470.4	470.9	471.4	471.8	471.4	470.9	470.4
167.5°	474.7	474.5	474.3	474.4	474.9	475.4	475.8	476.3	475.8	475.4	474.9
170°	477.1	477.0	476.8	477.0	477.4	477.8	478.3	478.8	478.3	477.8	477.4
172.5°	478.7	478.6	478.5	478.6	479.1	479.6	480.0	480.5	480.0	479.6	479.1
175°	480.6	480.5	480.3	480.5	481.0	481.5	482.1	482.7	482.1	481.5	481.0
177.5°	481.2	481.1	481.0	481.3	481.7	482.1	482.6	483.0	482.6	482.1	481.7
180°	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6



TEST NUMBER: P331465-930

CATALOG NUMBER: S122DIW-S290D435U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	475.6	474.7	471.6	469.9	467.2	464.7	463.1	463.8	464.4	464.1	463.7
5°	461.9	458.4	453.0	448.4	445.1	439.0	436.3	435.0	433.9	432.7	431.4
7.5°	445.6	440.1	432.4	425.8	419.6	412.0	407.6	405.1	402.4	399.5	396.9
10°	434.1	426.3	418.2	409.0	401.5	394.7	388.6	384.5	380.7	377.2	374.7
12.5°	422.0	413.0	402.9	390.3	382.1	372.3	371.4	364.2	358.4	356.2	353.2
15°	402.7	390.0	377.2	362.2	355.8	346.9	341.4	335.7	330.8	327.3	326.4
17.5°	380.7	364.4	351.6	340.9	330.3	321.1	316.0	311.6	307.4	302.8	302.1
20°	363.9	349.8	336.0	326.5	315.6	306.3	300.0	295.6	292.0	289.3	286.9
22.5°	348.1	332.6	319.9	309.7	298.9	291.4	286.4	282.1	279.2	276.1	273.9
25°	322.6	310.6	296.7	285.0	276.1	271.3	267.3	263.6	261.7	259.7	257.1
27.5°	300.4	287.0	274.0	265.0	257.1	252.9	250.0	247.4	245.7	244.5	243.0
30°	284.7	271.2	261.0	252.1	245.6	241.3	239.5	238.0	235.9	235.2	234.5
32.5°	269.5	257.4	248.7	240.9	234.8	232.0	230.3	228.9	227.4	226.7	225.1
35°	248.2	238.0	229.5	225.2	220.2	217.8	216.5	214.7	213.2	212.5	212.2
37.5°	228.0	219.2	213.6	208.1	206.0	204.6	202.8	201.5	201.1	201.0	200.7
40°	215.0	207.8	202.8	198.4	197.5	195.2	193.7	192.7	192.7	192.8	192.7
42.5°	203.2	196.7	192.2	188.4	187.4	186.1	184.5	184.5	184.7	185.4	184.7
45°	185.2	180.6	177.4	175.6	173.6	172.3	172.0	172.6	172.8	173.0	173.6
47.5°	168.7	165.6	162.7	160.7	159.8	159.6	159.4	160.4	161.3	161.6	162.4
50°	158.9	155.4	153.0	151.6	150.9	150.6	150.9	152.1	152.8	153.7	154.3
52.5°	148.0	145.4	143.8	142.8	142.5	142.8	142.8	144.1	145.2	145.6	145.9
55°	132.8	130.9	130.6	128.9	129.6	129.5	130.4	131.1	132.2	133.4	133.5
57.5°	117.6	116.2	115.2	115.4	115.6	116.4	117.2	118.5	119.6	120.8	120.9
60°	107.6	106.9	106.3	106.3	106.6	107.8	108.7	110.0	110.7	111.5	112.0
62.5°	98.4	97.7	97.1	97.4	98.4	99.1	100.1	100.9	101.6	102.3	102.6
65°	83.9	83.6	84.1	84.5	84.6	85.5	86.8	87.4	88.1	88.5	89.8
67.5°	70.5	70.6	70.5	71.0	72.2	72.3	73.5	74.8	75.0	75.7	76.6
70°	61.5	61.9	62.2	62.6	63.5	63.9	64.8	65.4	66.1	66.7	67.3
72.5°	53.2	53.2	53.6	53.6	54.4	55.1	55.9	56.5	57.2	58.0	58.5
75°	40.9	40.9	41.3	41.5	42.4	43.4	43.1	43.5	44.3	45.0	45.4
77.5°	29.9	29.5	29.9	30.1	30.4	31.1	31.3	31.8	32.7	32.4	32.9
80°	22.7	22.3	22.7	23.0	23.0	23.9	23.9	24.3	24.8	24.3	24.8
82.5°	16.2	16.0	16.4	16.5	16.7	16.8	17.0	17.1	17.7	17.4	17.7
85°	8.2	8.0	8.2	8.0	8.2	8.3	8.3	8.2	8.2	8.5	8.0
87.5°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.4	3.2	3.3
90°	3.8	4.5	5.1	5.7	6.4	6.9	7.3	7.7	8.2	8.5	8.8
92.5°	6.8	6.8	7.2	7.5	7.7	8.1	8.3	8.5	8.7	8.9	9.0
95°	12.4	11.4	12.0	12.5	13.0	13.6	13.9	14.3	14.8	15.2	15.3
97.5°	16.1	13.2	14.4	15.7	17.0	18.2	18.5	18.8	19.2	19.4	19.6
100°	19.2	14.6	15.9	17.2	18.5	19.9	20.5	21.1	21.7	22.3	22.7
102.5°	71.1	64.5	53.5	42.5	31.5	20.4	21.2	22.0	22.8	23.6	24.1
105°	115.2	105.8	84.7	63.5	42.4	21.3	22.1	23.0	23.8	24.7	25.3
107.5°	142.9	131.2	105.8	80.5	55.1	29.8	28.9	28.0	27.1	26.3	26.0
110°	160.9	150.5	128.1	105.7	83.3	61.0	53.2	45.5	37.7	30.0	26.3



TEST NUMBER: P331465-930

CATALOG NUMBER: S122DIW-S290D435U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	178.0	175.9	170.4	164.9	159.3	153.8	125.6	97.3	69.1	40.8	26.8
115°	205.6	207.2	209.2	211.2	213.0	215.0	179.1	143.3	107.5	71.6	50.9
117.5°	231.4	232.8	234.2	235.5	236.8	238.1	229.5	220.8	212.1	203.4	190.0
120°	248.6	249.9	251.3	252.7	254.0	255.4	256.3	257.3	258.2	259.2	254.4
122.5°	264.4	265.8	267.3	268.8	270.4	271.9	272.5	273.0	273.5	274.1	273.4
125°	287.3	288.5	290.1	291.6	293.0	294.5	295.0	295.5	296.1	296.6	297.0
127.5°	309.3	310.4	311.5	312.6	313.7	314.8	315.6	316.4	317.2	318.0	318.4
130°	323.4	324.5	325.4	326.2	327.1	327.9	328.7	329.6	330.4	331.3	331.7
132.5°	336.6	337.6	338.4	339.3	340.1	341.0	341.8	342.5	343.2	343.9	344.2
135°	355.6	356.4	357.2	357.9	358.6	359.3	360.0	360.9	361.6	362.4	362.6
137.5°	372.3	373.2	374.0	374.8	375.5	376.3	377.1	377.9	378.6	379.4	379.6
140°	383.4	384.1	385.0	385.8	386.6	387.5	388.2	388.9	389.6	390.3	390.4
142.5°	393.1	394.0	394.8	395.8	396.8	397.8	398.4	399.1	399.7	400.4	400.5
145°	406.3	407.0	408.3	409.6	410.9	412.2	412.8	413.4	413.8	414.4	414.5
147.5°	419.2	419.7	421.0	422.3	423.6	424.9	425.3	425.7	426.2	426.6	426.6
150°	427.1	427.5	428.8	430.0	431.2	432.4	432.9	433.4	433.8	434.3	434.4
152.5°	434.4	434.7	435.9	437.1	438.2	439.4	439.9	440.3	440.8	441.3	441.2
155°	445.0	445.2	446.1	446.9	447.9	448.8	449.3	449.8	450.2	450.7	450.6
157.5°	454.0	454.0	454.7	455.3	456.0	456.6	457.1	457.7	458.2	458.8	458.7
160°	459.5	459.5	460.0	460.5	460.9	461.4	461.9	462.3	462.8	463.3	463.2
162.5°	464.0	464.0	464.3	464.7	465.1	465.5	466.1	466.6	467.2	467.7	467.6
165°	469.9	469.9	470.1	470.3	470.6	470.8	471.3	471.9	472.4	473.0	473.0
167.5°	474.4	474.3	474.5	474.7	475.0	475.2	475.7	476.3	476.8	477.4	477.3
170°	477.0	476.8	477.0	477.1	477.3	477.4	477.9	478.5	479.1	479.6	479.5
172.5°	478.6	478.5	478.6	478.7	478.9	479.1	479.6	480.1	480.7	481.3	481.2
175°	480.5	480.3	480.5	480.6	480.7	480.9	481.4	482.0	482.5	483.1	483.0
177.5°	481.3	481.0	481.1	481.2	481.3	481.3	481.8	482.2	482.6	483.1	483.0
180°	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6



TEST NUMBER: P331465-930

CATALOG NUMBER: S122DIW-S290D435U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	462.2	461.9	461.9	460.6	461.9	461.9	462.2	463.7	464.1	464.4	463.8
5°	428.8	428.2	427.3	428.2	427.3	428.2	428.8	431.4	432.7	433.9	435.0
7.5°	395.7	393.5	393.1	390.9	393.1	393.5	395.7	396.9	399.5	402.4	405.1
10°	371.5	370.1	369.8	366.3	369.8	370.1	371.5	374.7	377.2	380.7	384.5
12.5°	353.2	349.6	350.3	348.3	350.3	349.6	353.2	353.2	356.2	358.4	364.2
15°	321.3	321.3	320.6	317.5	320.6	321.3	321.3	326.4	327.3	330.8	335.7
17.5°	298.5	298.1	296.4	297.3	296.4	298.1	298.5	302.1	302.8	307.4	311.6
20°	284.9	283.7	281.5	281.5	281.5	283.7	284.9	286.9	289.3	292.0	295.6
22.5°	272.0	271.9	269.5	270.3	269.5	271.9	272.0	273.9	276.1	279.2	282.1
25°	256.9	255.4	254.3	254.9	254.3	255.4	256.9	257.1	259.7	261.7	263.6
27.5°	242.6	241.7	241.7	240.2	241.7	241.7	242.6	243.0	244.5	245.7	247.4
30°	234.3	232.4	232.8	231.9	232.8	232.4	234.3	234.5	235.2	235.9	238.0
32.5°	224.8	224.1	223.8	223.0	223.8	224.1	224.8	225.1	226.7	227.4	228.9
35°	211.9	212.1	211.2	211.5	211.2	212.1	211.9	212.2	212.5	213.2	214.7
37.5°	200.6	201.1	200.7	200.8	200.7	201.1	200.6	200.7	201.0	201.1	201.5
40°	193.1	193.1	193.1	193.7	193.1	193.1	193.1	192.7	192.8	192.7	192.7
42.5°	186.1	185.7	185.5	185.4	185.5	185.7	186.1	184.7	185.4	184.7	184.5
45°	173.9	174.5	174.6	173.7	174.6	174.5	173.9	173.6	173.0	172.8	172.6
47.5°	162.9	163.0	162.9	163.7	162.9	163.0	162.9	162.4	161.6	161.3	160.4
50°	155.2	154.8	155.2	154.8	155.2	154.8	155.2	154.3	153.7	152.8	152.1
52.5°	147.1	147.2	146.9	146.8	146.9	147.2	147.1	145.9	145.6	145.2	144.1
55°	134.3	134.6	134.4	134.4	134.4	134.6	134.3	133.5	133.4	132.2	131.1
57.5°	121.1	121.4	121.6	120.8	121.6	121.4	121.1	120.9	120.8	119.6	118.5
60°	111.9	112.8	112.6	112.3	112.6	112.8	111.9	112.0	111.5	110.7	110.0
62.5°	103.4	103.8	103.7	103.6	103.7	103.8	103.4	102.6	102.3	101.6	100.9
65°	90.4	90.7	90.2	90.7	90.2	90.7	90.4	89.8	88.5	88.1	87.4
67.5°	76.3	76.5	76.9	77.1	76.9	76.5	76.3	76.6	75.7	75.0	74.8
70°	67.6	67.4	68.0	68.6	68.0	67.4	67.6	67.3	66.7	66.1	65.4
72.5°	58.4	58.8	58.6	59.0	58.6	58.8	58.4	58.5	58.0	57.2	56.5
75°	45.0	45.6	45.4	45.9	45.4	45.6	45.0	45.4	45.0	44.3	43.5
77.5°	32.5	32.6	32.5	32.9	32.5	32.6	32.5	32.9	32.4	32.7	31.8
80°	24.8	24.5	24.1	24.8	24.1	24.5	24.8	24.8	24.3	24.8	24.3
82.5°	17.3	17.4	17.1	17.1	17.1	17.4	17.3	17.7	17.4	17.7	17.1
85°	8.0	7.7	7.4	7.4	7.4	7.7	8.0	8.0	8.5	8.2	8.2
87.5°	3.3	3.2	3.2	3.1	3.2	3.2	3.3	3.3	3.2	3.4	3.3
90°	9.0	9.1	9.3	9.4	9.3	9.1	9.0	8.8	8.5	8.2	7.7
92.5°	9.1	9.2	9.3	9.4	9.3	9.2	9.1	9.0	8.9	8.7	8.5
95°	15.2	15.2	15.1	15.0	15.1	15.2	15.2	15.3	15.2	14.8	14.3
97.5°	19.7	19.8	19.9	20.0	19.9	19.8	19.7	19.6	19.4	19.2	18.8
100°	22.9	23.1	23.2	23.3	23.2	23.1	22.9	22.7	22.3	21.7	21.1
102.5°	24.4	24.6	24.8	25.0	24.8	24.6	24.4	24.1	23.6	22.8	22.0
105°	25.5	25.8	26.2	26.5	26.2	25.8	25.5	25.3	24.7	23.8	23.0
107.5°	26.3	26.7	26.9	27.2	26.9	26.7	26.3	26.0	26.3	27.1	28.0
110°	26.6	26.9	27.2	27.6	27.2	26.9	26.6	26.3	30.0	37.7	45.5



TEST NUMBER: P331465-930

CATALOG NUMBER: S122DIW-S290D435U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	27.1	27.3	27.6	27.8	27.6	27.3	27.1	26.8	40.8	69.1	97.3
115°	45.3	39.7	34.2	28.5	34.2	39.7	45.3	50.9	71.6	107.5	143.3
117.5°	171.6	153.3	135.0	116.7	135.0	153.3	171.6	190.0	203.4	212.1	220.8
120°	243.9	233.5	223.0	212.5	223.0	233.5	243.9	254.4	259.2	258.2	257.3
122.5°	271.3	269.3	267.3	265.2	267.3	269.3	271.3	273.4	274.1	273.5	273.0
125°	297.3	297.5	297.7	297.9	297.7	297.5	297.3	297.0	296.6	296.1	295.5
127.5°	318.5	318.5	318.5	318.5	318.5	318.5	318.5	318.4	318.0	317.2	316.4
130°	331.7	331.6	331.5	331.4	331.5	331.6	331.7	331.7	331.3	330.4	329.6
132.5°	344.1	344.1	344.1	344.0	344.1	344.1	344.1	344.2	343.9	343.2	342.5
135°	362.6	362.4	362.2	362.1	362.2	362.4	362.6	362.6	362.4	361.6	360.9
137.5°	379.4	379.1	378.9	378.5	378.9	379.1	379.4	379.6	379.4	378.6	377.9
140°	390.0	389.6	389.3	388.9	389.3	389.6	390.0	390.4	390.3	389.6	388.9
142.5°	400.1	399.7	399.3	398.9	399.3	399.7	400.1	400.5	400.4	399.7	399.1
145°	414.1	413.7	413.4	412.9	413.4	413.7	414.1	414.5	414.4	413.8	413.4
147.5°	426.2	425.9	425.6	425.3	425.6	425.9	426.2	426.6	426.6	426.2	425.7
150°	434.0	433.6	433.2	432.8	433.2	433.6	434.0	434.4	434.3	433.8	433.4
152.5°	440.8	440.3	439.7	439.2	439.7	440.3	440.8	441.2	441.3	440.8	440.3
155°	450.0	449.4	448.7	448.2	448.7	449.4	450.0	450.6	450.7	450.2	449.8
157.5°	458.1	457.5	456.9	456.3	456.9	457.5	458.1	458.7	458.8	458.2	457.7
160°	462.7	462.1	461.5	461.1	461.5	462.1	462.7	463.2	463.3	462.8	462.3
162.5°	466.9	466.3	465.6	465.0	465.6	466.3	466.9	467.6	467.7	467.2	466.6
165°	472.4	471.9	471.3	470.8	471.3	471.9	472.4	473.0	473.0	472.4	471.9
167.5°	476.5	475.9	475.2	474.5	475.2	475.9	476.5	477.3	477.4	476.8	476.3
170°	478.8	478.1	477.4	476.7	477.4	478.1	478.8	479.5	479.6	479.1	478.5
172.5°	480.5	479.8	479.1	478.4	479.1	479.8	480.5	481.2	481.3	480.7	480.1
175°	482.2	481.4	480.6	479.9	480.6	481.4	482.2	483.0	483.1	482.5	482.0
177.5°	482.4	481.8	481.3	480.8	481.3	481.8	482.4	483.0	483.1	482.6	482.2
180°	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6



TEST NUMBER: P331465-930

CATALOG NUMBER: S122DIW-S290D435U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	463.1	464.7	467.2	469.9	471.6	474.7	475.6	477.0	478.3	481.4	484.7
5°	436.3	439.0	445.1	448.4	453.0	458.4	461.9	465.6	469.7	476.7	483.2
7.5°	407.6	412.0	419.6	425.8	432.4	440.1	445.6	453.0	459.1	469.0	478.5
10°	388.6	394.7	401.5	409.0	418.2	426.3	434.1	443.4	450.8	462.7	473.8
12.5°	371.4	372.3	382.1	390.3	402.9	413.0	422.0	433.9	441.2	455.3	466.9
15°	341.4	346.9	355.8	362.2	377.2	390.0	402.7	415.1	423.4	440.8	456.2
17.5°	316.0	321.1	330.3	340.9	351.6	364.4	380.7	393.8	405.1	425.0	443.2
20°	300.0	306.3	315.6	326.5	336.0	349.8	363.9	379.0	391.2	413.6	434.9
22.5°	286.4	291.4	298.9	309.7	319.9	332.6	348.1	364.4	377.2	401.5	423.0
25°	267.3	271.3	276.1	285.0	296.7	310.6	322.6	340.6	359.3	381.9	408.0
27.5°	250.0	252.9	257.1	265.0	274.0	287.0	300.4	317.4	336.2	360.8	388.3
30°	239.5	241.3	245.6	252.1	261.0	271.2	284.7	300.9	320.2	345.0	372.4
32.5°	230.3	232.0	234.8	240.9	248.7	257.4	269.5	285.8	304.2	328.6	359.0
35°	216.5	217.8	220.2	225.2	229.5	238.0	248.2	263.0	280.2	303.5	335.0
37.5°	202.8	204.6	206.0	208.1	213.6	219.2	228.0	240.6	257.5	281.0	311.0
40°	193.7	195.2	197.5	198.4	202.8	207.8	215.0	226.5	243.5	265.1	294.3
42.5°	184.5	186.1	187.4	188.4	192.2	196.7	203.2	213.0	228.1	249.0	278.0
45°	172.0	172.3	173.6	175.6	177.4	180.6	185.2	193.7	205.4	225.0	251.4
47.5°	159.4	159.6	159.8	160.7	162.7	165.6	168.7	175.6	186.1	201.7	227.3
50°	150.9	150.6	150.9	151.6	153.0	155.4	158.9	163.9	172.4	187.0	210.6
52.5°	142.8	142.8	142.5	142.8	143.8	145.4	148.0	152.2	159.8	173.3	194.0
55°	130.4	129.5	129.6	128.9	130.6	130.9	132.8	136.3	143.0	152.2	171.7
57.5°	117.2	116.4	115.6	115.4	115.2	116.2	117.6	120.4	125.6	133.7	149.4
60°	108.7	107.8	106.6	106.3	106.3	106.9	107.6	109.7	114.5	121.6	134.6
62.5°	100.1	99.1	98.4	97.4	97.1	97.7	98.4	99.9	103.4	110.1	121.3
65°	86.8	85.5	84.6	84.5	84.1	83.6	83.9	85.4	88.1	93.5	102.4
67.5°	73.5	72.3	72.2	71.0	70.5	70.6	70.5	71.7	73.5	78.1	84.7
70°	64.8	63.9	63.5	62.6	62.2	61.9	61.5	62.6	64.2	68.2	73.9
72.5°	55.9	55.1	54.4	53.6	53.6	53.2	53.2	53.9	55.2	58.8	63.3
75°	43.1	43.4	42.4	41.5	41.3	40.9	40.9	41.5	42.1	44.8	48.3
77.5°	31.3	31.1	30.4	30.1	29.9	29.5	29.9	30.2	30.6	32.4	35.0
80°	23.9	23.9	23.0	23.0	22.7	22.3	22.7	22.4	23.2	25.0	26.8
82.5°	17.0	16.8	16.7	16.5	16.4	16.0	16.2	16.6	17.0	18.2	19.3
85°	8.3	8.3	8.2	8.0	8.2	8.0	8.2	8.3	8.5	9.0	10.0
87.5°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
90°	7.3	6.9	6.4	5.7	5.1	4.5	3.8	2.9	2.0	1.2	0.3
92.5°	8.3	8.1	7.7	7.5	7.2	6.8	6.8	6.8	6.8	6.9	7.0
95°	13.9	13.6	13.0	12.5	12.0	11.4	12.4	15.0	17.5	20.1	22.7
97.5°	18.5	18.2	17.0	15.7	14.4	13.2	16.1	23.3	30.6	37.7	44.9
100°	20.5	19.9	18.5	17.2	15.9	14.6	19.2	29.8	40.4	51.0	61.7
102.5°	21.2	20.4	31.5	42.5	53.5	64.5	71.1	73.4	75.6	77.9	80.1
105°	22.1	21.3	42.4	63.5	84.7	105.8	115.2	112.9	110.6	108.3	105.9
107.5°	28.9	29.8	55.1	80.5	105.8	131.2	142.9	141.0	139.2	137.3	135.4
110°	53.2	61.0	83.3	105.7	128.1	150.5	160.9	159.2	157.6	156.0	154.3



TEST NUMBER: P331465-930

CATALOG NUMBER: S122DIW-S290D435U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	125.6	153.8	159.3	164.9	170.4	175.9	178.0	176.5	175.1	173.7	172.2
115°	179.1	215.0	213.0	211.2	209.2	207.2	205.6	204.3	203.0	201.7	200.4
117.5°	229.5	238.1	236.8	235.5	234.2	232.8	231.4	229.9	228.4	227.0	225.5
120°	256.3	255.4	254.0	252.7	251.3	249.9	248.6	247.4	246.2	245.1	243.9
122.5°	272.5	271.9	270.4	268.8	267.3	265.8	264.4	263.2	262.0	260.7	259.5
125°	295.0	294.5	293.0	291.6	290.1	288.5	287.3	286.3	285.4	284.3	283.3
127.5°	315.6	314.8	313.7	312.6	311.5	310.4	309.3	308.2	307.0	306.0	304.8
130°	328.7	327.9	327.1	326.2	325.4	324.5	323.4	322.2	321.0	319.8	318.5
132.5°	341.8	341.0	340.1	339.3	338.4	337.6	336.6	335.6	334.5	333.5	332.5
135°	360.0	359.3	358.6	357.9	357.2	356.4	355.6	354.2	353.0	351.8	350.6
137.5°	377.1	376.3	375.5	374.8	374.0	373.2	372.3	371.5	370.6	369.7	368.9
140°	388.2	387.5	386.6	385.8	385.0	384.1	383.4	382.7	382.1	381.5	380.9
142.5°	398.4	397.8	396.8	395.8	394.8	394.0	393.1	392.6	392.0	391.5	390.9
145°	412.8	412.2	410.9	409.6	408.3	407.0	406.3	406.4	406.5	406.6	406.7
147.5°	425.3	424.9	423.6	422.3	421.0	419.7	419.2	419.6	419.8	420.1	420.4
150°	432.9	432.4	431.2	430.0	428.8	427.5	427.1	427.7	428.2	428.8	429.3
152.5°	439.9	439.4	438.2	437.1	435.9	434.7	434.4	435.0	435.6	436.3	436.8
155°	449.3	448.8	447.9	446.9	446.1	445.2	445.0	445.7	446.4	447.1	447.8
157.5°	457.1	456.6	456.0	455.3	454.7	454.0	454.0	454.6	455.2	455.8	456.3
160°	461.9	461.4	460.9	460.5	460.0	459.5	459.5	460.0	460.5	460.9	461.4
162.5°	466.1	465.5	465.1	464.7	464.3	464.0	464.0	464.5	464.9	465.4	465.9
165°	471.3	470.8	470.6	470.3	470.1	469.9	469.9	470.4	470.9	471.4	471.8
167.5°	475.7	475.2	475.0	474.7	474.5	474.3	474.4	474.9	475.4	475.8	476.3
170°	477.9	477.4	477.3	477.1	477.0	476.8	477.0	477.4	477.8	478.3	478.8
172.5°	479.6	479.1	478.9	478.7	478.6	478.5	478.6	479.1	479.6	480.0	480.5
175°	481.4	480.9	480.7	480.6	480.5	480.3	480.5	481.0	481.5	482.1	482.7
177.5°	481.8	481.3	481.3	481.2	481.1	481.0	481.3	481.7	482.1	482.6	483.0
180°	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6



TEST NUMBER: P331465-930

CATALOG NUMBER: S122DIW-S290D435U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	484.5	485.2	487.5	489.9	492.6	493.3	494.5	493.5	493.2	495.9	498.1
5°	485.8	489.1	495.6	501.6	506.5	510.1	513.8	515.3	518.0	521.9	526.8
7.5°	484.2	490.7	500.9	509.6	518.9	525.7	531.0	535.6	541.0	548.4	556.4
10°	482.5	491.1	503.6	514.1	525.6	534.3	541.5	548.6	556.8	567.0	577.5
12.5°	479.2	489.5	505.1	517.6	532.3	540.9	550.6	565.7	574.5	588.7	603.6
15°	472.6	484.1	505.8	521.1	537.9	554.2	572.1	586.5	601.0	609.4	630.2
17.5°	462.9	479.7	503.8	521.7	542.9	568.5	588.7	605.1	621.7	635.3	645.8
20°	455.0	473.4	500.8	522.3	547.5	575.0	598.2	614.9	629.3	640.7	647.1
22.5°	445.2	468.2	494.9	520.1	552.2	579.5	603.8	616.9	629.0	634.5	637.1
25°	429.5	457.3	487.5	518.2	554.5	583.4	605.6	613.6	617.1	611.7	602.8
27.5°	412.6	443.6	478.9	514.7	553.1	580.9	596.8	595.6	589.6	572.2	558.3
30°	400.1	434.1	472.1	511.2	549.7	576.7	586.0	576.7	563.2	543.8	523.9
32.5°	386.9	422.2	464.8	506.1	543.5	567.3	569.2	553.3	532.4	510.3	485.6
35°	366.9	405.0	451.2	494.9	530.3	545.3	536.4	508.2	483.4	453.2	419.5
37.5°	344.3	386.5	432.7	478.4	510.5	514.4	492.3	462.7	427.6	392.2	352.5
40°	327.4	372.1	419.7	465.8	494.2	490.1	461.9	429.3	387.7	344.3	307.4
42.5°	312.3	356.9	405.4	450.7	473.4	462.2	429.3	389.3	344.5	303.7	269.9
45°	286.2	332.1	381.7	425.4	438.4	418.2	374.7	330.2	286.2	252.1	225.4
47.5°	260.7	306.1	355.3	393.7	398.3	371.1	323.6	277.9	239.9	212.2	193.4
50°	242.1	287.6	336.3	370.6	369.1	336.3	287.5	243.9	212.2	189.8	177.2
52.5°	225.3	268.4	315.1	346.3	338.4	302.7	256.0	217.4	191.4	173.8	162.4
55°	199.3	239.1	283.6	308.6	294.1	254.5	215.0	183.9	164.6	151.5	142.6
57.5°	173.4	210.8	248.8	264.2	248.3	211.7	178.8	156.2	141.7	132.0	126.2
60°	157.4	190.0	223.9	237.3	218.2	185.6	159.6	139.5	127.8	119.8	114.6
62.5°	141.5	170.6	202.6	209.9	192.4	164.9	141.9	125.1	115.5	108.4	103.5
65°	119.6	143.6	167.8	172.6	156.5	135.2	117.1	106.2	97.6	92.5	88.5
67.5°	98.2	117.3	134.5	138.4	124.3	109.5	96.4	86.8	81.1	76.8	73.5
70°	85.4	100.6	114.6	117.8	106.5	93.4	83.3	75.7	70.5	66.9	63.7
72.5°	71.9	84.5	96.3	98.4	89.2	79.1	70.9	64.9	60.3	58.0	55.0
75°	55.0	62.5	71.5	72.1	66.0	59.8	53.6	49.7	47.2	44.3	42.8
77.5°	38.8	44.6	49.8	50.8	47.2	43.0	39.5	36.4	34.4	33.0	31.6
80°	29.6	34.2	36.5	37.7	35.2	32.2	30.2	28.1	26.8	25.9	25.0
82.5°	21.2	24.1	26.1	27.1	25.7	23.9	21.9	20.7	19.7	19.0	18.7
85°	10.8	12.1	13.4	13.7	13.4	12.6	11.5	11.5	10.9	10.8	10.8
87.5°	3.9	4.7	4.9	5.5	5.4	5.5	5.6	5.5	5.5	5.5	5.4
90°	1.2	2.0	2.9	3.8	4.5	5.1	5.7	6.4	6.9	7.3	7.7
92.5°	6.9	6.8	6.8	6.8	6.8	7.2	7.5	7.7	8.1	8.3	8.5
95°	20.1	17.5	15.0	12.4	11.4	12.0	12.5	13.0	13.6	13.9	14.3
97.5°	37.7	30.6	23.3	16.1	13.2	14.4	15.7	17.0	18.2	18.5	18.8
100°	51.0	40.4	29.8	19.2	14.6	15.9	17.2	18.5	19.9	20.5	21.1
102.5°	77.9	75.6	73.4	71.1	64.5	53.5	42.5	31.5	20.4	21.2	22.0
105°	108.3	110.6	112.9	115.2	105.8	84.7	63.5	42.4	21.3	22.1	23.0
107.5°	137.3	139.2	141.0	142.9	131.2	105.8	80.5	55.1	29.8	28.9	28.0
110°	156.0	157.6	159.2	160.9	150.5	128.1	105.7	83.3	61.0	53.2	45.5





TEST NUMBER: P331465-930

CATALOG NUMBER: S122DIW-S290D435U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	173.7	175.1	176.5	178.0	175.9	170.4	164.9	159.3	153.8	125.6	97.3
115°	201.7	203.0	204.3	205.6	207.2	209.2	211.2	213.0	215.0	179.1	143.3
117.5°	227.0	228.4	229.9	231.4	232.8	234.2	235.5	236.8	238.1	229.5	220.8
120°	245.1	246.2	247.4	248.6	249.9	251.3	252.7	254.0	255.4	256.3	257.3
122.5°	260.7	262.0	263.2	264.4	265.8	267.3	268.8	270.4	271.9	272.5	273.0
125°	284.3	285.4	286.3	287.3	288.5	290.1	291.6	293.0	294.5	295.0	295.5
127.5°	306.0	307.0	308.2	309.3	310.4	311.5	312.6	313.7	314.8	315.6	316.4
130°	319.8	321.0	322.2	323.4	324.5	325.4	326.2	327.1	327.9	328.7	329.6
132.5°	333.5	334.5	335.6	336.6	337.6	338.4	339.3	340.1	341.0	341.8	342.5
135°	351.8	353.0	354.2	355.6	356.4	357.2	357.9	358.6	359.3	360.0	360.9
137.5°	369.7	370.6	371.5	372.3	373.2	374.0	374.8	375.5	376.3	377.1	377.9
140°	381.5	382.1	382.7	383.4	384.1	385.0	385.8	386.6	387.5	388.2	388.9
142.5°	391.5	392.0	392.6	393.1	394.0	394.8	395.8	396.8	397.8	398.4	399.1
145°	406.6	406.5	406.4	406.3	407.0	408.3	409.6	410.9	412.2	412.8	413.4
147.5°	420.1	419.8	419.6	419.2	419.7	421.0	422.3	423.6	424.9	425.3	425.7
150°	428.8	428.2	427.7	427.1	427.5	428.8	430.0	431.2	432.4	432.9	433.4
152.5°	436.3	435.6	435.0	434.4	434.7	435.9	437.1	438.2	439.4	439.9	440.3
155°	447.1	446.4	445.7	445.0	445.2	446.1	446.9	447.9	448.8	449.3	449.8
157.5°	455.8	455.2	454.6	454.0	454.0	454.7	455.3	456.0	456.6	457.1	457.7
160°	460.9	460.5	460.0	459.5	459.5	460.0	460.5	460.9	461.4	461.9	462.3
162.5°	465.4	464.9	464.5	464.0	464.0	464.3	464.7	465.1	465.5	466.1	466.6
165°	471.4	470.9	470.4	469.9	469.9	470.1	470.3	470.6	470.8	471.3	471.9
167.5°	475.8	475.4	474.9	474.4	474.3	474.5	474.7	475.0	475.2	475.7	476.3
170°	478.3	477.8	477.4	477.0	476.8	477.0	477.1	477.3	477.4	477.9	478.5
172.5°	480.0	479.6	479.1	478.6	478.5	478.6	478.7	478.9	479.1	479.6	480.1
175°	482.1	481.5	481.0	480.5	480.3	480.5	480.6	480.7	480.9	481.4	482.0
177.5°	482.6	482.1	481.7	481.3	481.0	481.1	481.2	481.3	481.3	481.8	482.2
180°	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6	481.6



TEST NUMBER: P331465-930

CATALOG NUMBER: S122DIW-S290D435U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	499.9	501.9	501.9	502.2	504.6	504.3	504.1
5°	531.9	535.1	535.4	538.7	541.0	540.2	538.2
7.5°	562.1	568.0	572.5	574.9	577.9	579.7	578.9
10°	586.2	594.7	599.9	603.4	607.6	610.8	609.7
12.5°	608.0	618.1	625.3	631.3	631.8	635.9	633.1
15°	642.0	652.6	653.8	658.2	661.8	661.4	661.5
17.5°	653.1	656.6	657.3	657.4	657.5	656.2	653.3
20°	649.1	647.8	644.7	642.3	638.1	637.5	633.8
22.5°	630.1	626.1	618.2	612.9	606.3	604.6	603.6
25°	592.9	583.8	571.2	559.1	555.8	549.3	551.1
27.5°	541.6	527.5	513.8	504.1	495.2	485.5	488.3
30°	505.6	489.7	470.4	455.6	446.1	436.9	435.2
32.5°	462.7	439.3	417.8	404.8	390.3	384.4	378.1
35°	388.6	365.7	344.5	326.1	315.6	307.4	300.0
37.5°	322.0	295.7	278.5	263.7	256.0	251.4	252.6
40°	280.6	257.6	245.0	233.7	226.7	223.4	224.1
42.5°	247.1	229.9	219.6	211.8	206.8	205.0	204.6
45°	209.1	199.5	190.9	186.5	184.1	182.1	180.8
47.5°	183.2	175.3	170.5	167.9	165.8	163.7	163.6
50°	167.6	162.4	159.1	156.3	154.7	153.2	154.5
52.5°	155.7	151.0	147.7	145.2	144.6	143.2	143.2
55°	138.2	134.4	132.1	129.8	128.7	128.0	127.0
57.5°	122.1	118.6	116.4	115.0	112.9	112.2	111.9
60°	110.7	107.9	105.7	103.9	103.0	101.5	101.5
62.5°	100.2	97.4	95.4	94.0	92.5	91.9	92.0
65°	85.0	82.8	80.7	79.2	78.9	77.8	78.2
67.5°	71.0	69.5	67.3	66.5	65.9	65.3	64.8
70°	61.6	60.2	59.1	58.0	57.4	57.4	57.4
72.5°	53.8	52.0	51.4	50.0	50.3	49.7	49.1
75°	41.7	40.5	40.0	39.5	38.6	38.6	38.6
77.5°	30.7	30.3	29.7	29.1	28.9	28.7	28.8
80°	23.7	23.5	23.2	23.2	22.7	22.6	22.3
82.5°	18.3	17.8	17.5	17.4	17.3	17.3	17.2
85°	10.4	10.0	10.0	10.2	9.8	9.8	10.0
87.5°	5.6	5.7	5.6	5.6	5.8	5.7	5.7
90°	8.2	8.5	8.8	9.0	9.1	9.3	9.4
92.5°	8.7	8.9	9.0	9.1	9.2	9.3	9.4
95°	14.8	15.2	15.3	15.2	15.2	15.1	15.0
97.5°	19.2	19.4	19.6	19.7	19.8	19.9	20.0
100°	21.7	22.3	22.7	22.9	23.1	23.2	23.3
102.5°	22.8	23.6	24.1	24.4	24.6	24.8	25.0
105°	23.8	24.7	25.3	25.5	25.8	26.2	26.5
107.5°	27.1	26.3	26.0	26.3	26.7	26.9	27.2
110°	37.7	30.0	26.3	26.6	26.9	27.2	27.6



TEST NUMBER: P331465-930

CATALOG NUMBER: S122DIW-S290D435U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	69.1	40.8	26.8	27.1	27.3	27.6	27.8
115°	107.5	71.6	50.9	45.3	39.7	34.2	28.5
117.5°	212.1	203.4	190.0	171.6	153.3	135.0	116.7
120°	258.2	259.2	254.4	243.9	233.5	223.0	212.5
122.5°	273.5	274.1	273.4	271.3	269.3	267.3	265.2
125°	296.1	296.6	297.0	297.3	297.5	297.7	297.9
127.5°	317.2	318.0	318.4	318.5	318.5	318.5	318.5
130°	330.4	331.3	331.7	331.7	331.6	331.5	331.4
132.5°	343.2	343.9	344.2	344.1	344.1	344.1	344.0
135°	361.6	362.4	362.6	362.6	362.4	362.2	362.1
137.5°	378.6	379.4	379.6	379.4	379.1	378.9	378.5
140°	389.6	390.3	390.4	390.0	389.6	389.3	388.9
142.5°	399.7	400.4	400.5	400.1	399.7	399.3	398.9
145°	413.8	414.4	414.5	414.1	413.7	413.4	412.9
147.5°	426.2	426.6	426.6	426.2	425.9	425.6	425.3
150°	433.8	434.3	434.4	434.0	433.6	433.2	432.8
152.5°	440.8	441.3	441.2	440.8	440.3	439.7	439.2
155°	450.2	450.7	450.6	450.0	449.4	448.7	448.2
157.5°	458.2	458.8	458.7	458.1	457.5	456.9	456.3
160°	462.8	463.3	463.2	462.7	462.1	461.5	461.1
162.5°	467.2	467.7	467.6	466.9	466.3	465.6	465.0
165°	472.4	473.0	473.0	472.4	471.9	471.3	470.8
167.5°	476.8	477.4	477.3	476.5	475.9	475.2	474.5
170°	479.1	479.6	479.5	478.8	478.1	477.4	476.7
172.5°	480.7	481.3	481.2	480.5	479.8	479.1	478.4
175°	482.5	483.1	483.0	482.2	481.4	480.6	479.9
177.5°	482.6	483.1	483.0	482.4	481.8	481.3	480.8
180°	481.6	481.6	481.6	481.6	481.6	481.6	481.6

(END OF REPORT)