

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: P331765-930

Luminaire Tested: **S122RDIW-S290D435U930-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P331765-930  
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: S122RDIW-S290D435U930-4F0-1E-UDD-A  
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 435 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2333.6 lumens  
Efficiency: N/A  
Efficacy: 101.5 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: Semi-Indirect

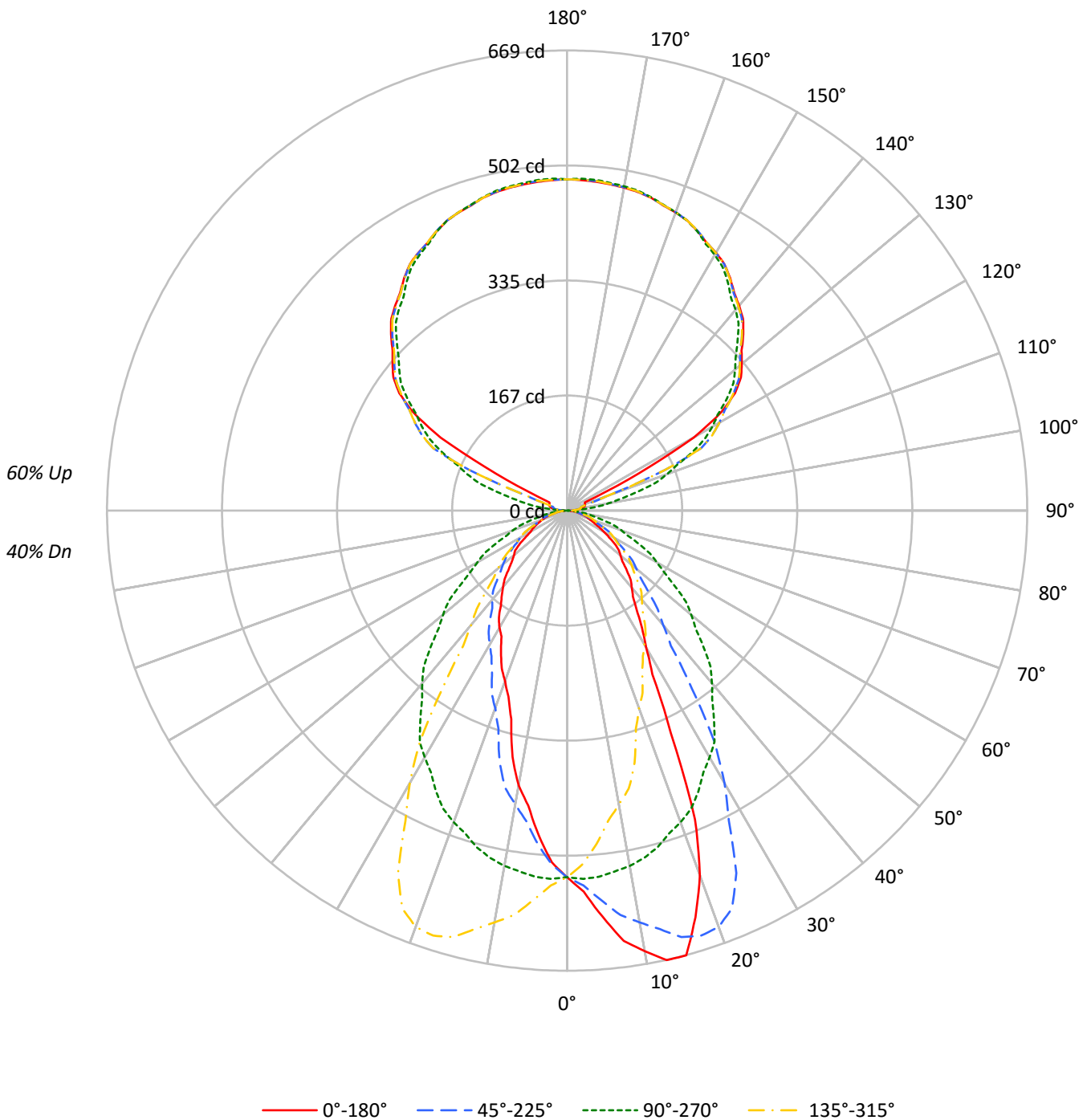
Input Watts (W): 23  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				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	95	95	95	95	78	78	78	61	61	61	47	47	47	40
1	96	92	88	85	87	84	81	78	69	67	65	55	53	52	42	41	40	34
2	88	81	75	71	80	74	69	65	61	58	55	49	47	45	38	36	35	30
3	81	72	65	60	73	66	60	55	54	50	47	44	41	38	34	32	31	26
4	74	64	57	51	67	59	52	47	49	44	40	40	36	34	31	29	27	23
5	68	57	50	44	62	53	46	41	44	39	35	36	32	30	28	26	24	21
6	63	52	44	39	57	48	41	36	40	35	31	33	29	26	26	23	21	18
7	58	47	39	34	53	43	37	32	36	31	28	30	26	23	24	21	19	17
8	54	43	35	30	50	39	33	28	33	28	25	28	24	21	22	20	18	15
9	51	39	32	27	46	36	30	26	31	26	22	25	22	19	21	18	16	14
10	47	36	29	25	43	33	27	23	28	24	20	24	20	18	19	17	15	13

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

	0°	90°	180°	270°
0°	8606	8606	8606	8606
5°	9611	8660	7679	8660
10°	10663	8599	6655	8599
15°	11188	8473	5244	8473
20°	9699	8285	4538	8285
25°	6360	8031	4051	8031
30°	4282	7720	3667	7720
35°	3467	7330	3307	7330
40°	3084	6905	3060	6905
45°	2790	6405	2731	6405
50°	2539	5913	2532	5913
55°	2387	5362	2356	5362
60°	1999	4863	1973	4863
65°	1685	4413	1910	4413
70°	1553	3942	1803	3942
75°	1454	3431	1666	3431
80°	1339	2827	1478	2827
85°	1241	2242	1297	2242



TEST NUMBER: P331765-930

CATALOG NUMBER: S122RDIW-S290D435U930-4F0-1E-UDD-A

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.5	2.2
10°-20°	140.8	6.0
20°-30°	181.4	7.8
30°-40°	172.4	7.4
40°-50°	147.7	6.3
50°-60°	112.5	4.8
60°-70°	71.1	3.0
70°-80°	35.5	1.5
80°-90°	10.4	0.4
90°-100°	16.1	0.7
100°-110°	58.9	2.5
110°-120°	157.5	6.7
120°-130°	259.9	11.1
130°-140°	276.4	11.8
140°-150°	256.9	11.0
150°-160°	206.6	8.9
160°-170°	133.1	5.7
170°-180°	45.8	2.0
0°-30°	372.7	16.0
0°-40°	545.1	23.4
0°-60°	805.3	34.5
0°-90°	922.3	39.5
90°-120°	232.4	10.0
90°-150°	1025.8	44.0
90°-180°	1411.0	60.5
0°-180°	2333.6	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	533	533	533	533	533	
5°	593	534	474	534	593	59
15°	669	507	314	507	669	181
25°	357	451	227	451	357	169
35°	176	372	168	372	176	113
45°	122	280	120	280	122	95
55°	85	190	84	190	85	74
65°	44	116	50	116	44	45
75°	23	55	27	55	23	25
85°	7	12	7	12	7	7
90°	9	0	9	0	9	4
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: P331765-930

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	554.6	555.1	555.5	554.5	554.5	553.6	551.6	550.2	546.0	545.4	545.4
5°	593.0	592.6	593.4	590.9	587.7	586.9	583.3	578.7	573.9	568.6	567.4
7.5°	631.1	630.6	629.1	628.7	626.1	620.5	614.9	608.9	600.9	593.0	589.1
10°	650.4	656.6	652.8	646.4	647.6	639.0	634.3	626.3	619.6	608.0	605.4
12.5°	669.4	671.8	670.6	666.9	665.3	659.3	653.0	646.0	633.7	623.3	614.2
15°	669.3	672.8	673.8	672.6	673.5	673.2	669.8	664.1	653.4	641.9	631.9
17.5°	619.9	622.3	628.4	632.5	637.7	648.7	654.1	656.2	654.6	648.0	641.0
20°	564.5	560.4	577.5	586.1	593.5	612.0	628.0	634.1	643.9	643.8	641.9
22.5°	485.9	486.9	503.0	513.4	535.0	553.6	571.7	594.7	613.7	626.2	633.6
25°	357.0	364.1	380.2	394.3	418.3	452.8	484.1	520.4	554.6	581.7	607.5
27.5°	268.2	268.7	281.4	294.5	308.8	337.0	376.4	419.7	468.6	508.9	555.2
30°	229.7	228.5	233.9	241.9	254.1	276.0	305.6	348.1	396.9	457.6	511.7
32.5°	202.4	202.4	206.5	212.4	222.5	237.3	257.6	292.2	338.2	397.9	461.3
35°	175.9	175.8	178.7	183.0	187.2	196.7	210.6	228.7	260.4	316.1	380.9
37.5°	156.9	157.8	159.2	161.9	166.6	171.9	180.2	192.4	214.9	247.9	302.4
40°	146.3	146.7	148.7	150.9	153.7	157.8	164.6	174.5	190.9	217.2	257.1
42.5°	136.6	136.9	138.4	140.4	142.6	146.7	152.4	160.9	174.2	194.7	227.6
45°	122.2	122.2	123.5	124.4	126.9	130.5	135.2	142.3	151.5	166.6	188.5
47.5°	108.8	108.8	109.7	111.3	112.8	115.7	120.3	126.0	132.7	144.5	163.1
50°	101.1	101.3	101.8	103.1	104.1	106.6	110.2	115.2	122.2	131.3	146.8
52.5°	94.9	94.8	95.5	96.0	96.7	98.5	101.2	105.6	111.9	119.8	132.6
55°	84.8	84.1	85.2	86.1	86.7	87.4	88.9	91.6	97.0	103.7	113.3
57.5°	72.2	71.9	72.7	73.5	75.3	77.3	78.6	80.3	83.1	87.9	97.4
60°	61.9	61.9	63.5	64.1	66.1	68.7	71.3	72.8	75.6	78.7	85.8
62.5°	52.7	52.8	53.6	54.1	55.3	58.5	62.1	65.4	68.0	71.0	75.7
65°	44.1	44.4	44.4	44.8	45.6	46.3	47.8	50.4	55.0	59.3	62.8
67.5°	37.4	37.5	37.7	38.0	38.2	39.0	39.6	40.8	41.8	45.8	50.2
70°	32.9	33.5	33.3	33.7	33.9	34.2	35.0	35.5	37.3	38.2	40.8
72.5°	28.8	29.2	29.2	29.4	29.9	30.0	30.6	31.1	32.2	32.9	34.4
75°	23.3	23.2	23.3	23.7	23.9	24.1	24.1	24.8	25.4	26.1	27.1
77.5°	18.0	18.2	18.2	18.2	18.3	18.6	18.5	18.8	19.4	19.8	20.2
80°	14.4	14.6	14.4	14.6	14.8	15.0	14.8	15.0	15.6	15.9	15.9
82.5°	11.2	11.3	11.3	11.3	11.4	11.4	11.7	11.7	12.1	12.1	12.2
85°	6.7	6.5	6.5	6.5	6.7	6.8	6.7	6.7	6.8	6.8	6.8
87.5°	4.2	4.4	4.3	4.3	4.2	4.2	4.2	4.2	4.0	4.1	3.8
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: P331765-930

CATALOG NUMBER: S122RDIW-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: P331765-930

CATALOG NUMBER: S122RDIW-S290D435U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	545.8	544.5	543.5	540.9	539.5	536.5	536.1	536.0	532.1	528.4	527.3
5°	564.5	561.5	557.1	551.9	546.5	541.0	537.3	534.3	526.8	519.8	515.8
7.5°	583.3	577.0	569.3	559.5	551.3	542.2	535.3	529.2	518.7	508.6	501.8
10°	597.5	587.1	576.9	563.4	552.8	542.4	532.8	524.5	512.7	499.3	489.8
12.5°	606.2	594.8	580.7	567.5	553.8	540.6	527.7	517.1	503.1	489.3	478.2
15°	618.0	605.8	588.7	569.8	552.3	535.0	520.2	506.9	488.8	472.2	458.5
17.5°	627.7	610.8	592.6	570.7	550.3	528.5	509.4	492.4	472.1	452.2	436.1
20°	630.8	614.1	593.0	571.1	547.1	521.3	500.8	482.2	460.6	438.9	420.4
22.5°	628.8	615.9	592.4	566.2	541.6	514.7	491.5	469.9	445.9	423.8	402.4
25°	615.8	611.3	589.1	560.6	532.5	501.2	474.3	450.8	423.4	399.7	376.3
27.5°	585.3	594.9	581.1	550.7	519.4	485.9	455.7	428.9	400.5	373.8	350.6
30°	556.0	578.0	572.1	543.9	508.9	476.0	442.1	414.1	383.8	356.3	333.4
32.5°	515.8	552.2	558.0	534.4	498.2	462.0	426.5	398.7	367.0	338.1	315.7
35°	451.8	506.3	531.3	516.3	480.0	440.9	404.3	371.9	340.0	311.5	289.3
37.5°	375.6	449.8	491.5	492.5	459.2	418.6	378.6	346.4	313.8	285.8	261.8
40°	326.1	406.5	460.8	472.8	444.7	400.8	360.4	327.6	295.8	268.3	240.8
42.5°	281.7	361.7	428.4	449.4	427.1	383.4	342.9	308.7	277.7	251.8	223.6
45°	227.8	297.8	371.3	408.7	396.3	356.0	313.2	280.5	251.5	229.1	202.0
47.5°	192.2	241.5	312.7	363.2	363.1	326.2	284.1	252.9	225.9	204.9	183.0
50°	171.9	214.8	275.0	332.4	337.2	306.3	266.3	235.4	210.2	188.2	170.6
52.5°	153.6	189.1	243.1	298.2	311.9	285.1	246.3	217.8	193.3	173.0	158.0
55°	129.8	157.3	198.4	249.8	270.6	251.7	217.2	190.5	170.7	153.7	140.7
57.5°	109.8	130.4	163.4	204.8	228.9	217.1	188.7	167.0	150.0	134.6	124.4
60°	97.3	114.1	142.0	176.7	203.3	195.0	170.7	150.6	136.2	122.8	113.2
62.5°	85.4	99.9	123.8	152.0	176.3	172.9	153.1	136.2	123.5	111.4	103.2
65°	68.7	79.2	98.0	120.0	139.7	141.3	127.0	115.5	104.3	94.7	87.4
67.5°	54.7	61.6	74.8	93.4	108.0	113.3	104.6	95.8	86.8	79.4	73.1
70°	46.1	51.7	61.3	76.3	89.8	95.4	90.3	83.5	75.7	69.6	64.2
72.5°	37.3	42.8	49.9	60.9	72.5	78.5	76.7	71.8	65.6	60.4	55.4
75°	28.1	29.8	34.7	42.1	51.1	56.3	57.6	55.0	50.0	46.1	43.1
77.5°	20.8	21.9	24.1	28.0	33.9	38.6	40.4	40.1	36.7	34.5	31.6
80°	16.6	17.2	18.3	20.0	24.5	29.1	30.4	30.4	28.0	27.1	24.3
82.5°	12.6	13.0	13.8	14.7	16.7	20.8	22.3	22.5	21.0	19.8	17.6
85°	7.3	7.0	7.4	8.0	8.3	9.5	11.7	12.1	11.7	10.2	9.6
87.5°	3.7	3.7	3.6	3.3	3.3	3.3	3.8	4.4	3.9	3.7	3.5
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: P331765-930

CATALOG NUMBER: S122RDIW-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: P331765-930

CATALOG NUMBER: S122RDIW-S290D435U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	525.5	524.4	522.4	519.5	517.7	514.6	512.6	513.7	514.0	513.7	513.5
5°	511.4	507.4	502.1	496.8	492.0	486.9	483.9	482.7	480.0	478.6	477.8
7.5°	494.2	487.5	480.0	470.9	463.3	455.2	451.1	449.1	443.8	440.9	438.4
10°	481.5	470.9	463.3	451.5	444.3	433.7	426.5	426.7	419.5	415.4	412.5
12.5°	467.4	455.8	443.2	432.5	422.5	414.0	405.3	401.8	394.1	390.2	382.2
15°	444.1	430.6	417.3	402.8	392.6	379.4	366.9	351.5	339.1	328.3	325.4
17.5°	418.7	401.9	388.5	371.5	354.1	332.0	317.4	308.4	301.0	295.3	291.1
20°	401.1	384.1	369.8	344.3	320.7	305.7	295.1	288.1	280.4	274.3	270.9
22.5°	382.8	365.0	345.5	317.0	298.6	286.7	277.1	269.2	263.9	259.2	256.1
25°	356.7	337.2	305.2	285.6	270.8	258.1	251.5	246.7	241.2	234.6	231.7
27.5°	329.1	298.2	275.2	260.6	246.5	238.3	232.3	225.1	220.1	217.2	214.1
30°	308.5	277.6	259.7	243.7	233.7	224.6	217.6	213.5	208.7	203.7	201.7
32.5°	285.6	260.9	243.6	230.4	220.2	212.5	206.9	200.3	196.9	193.8	189.6
35°	257.1	238.3	222.6	211.9	202.2	195.9	189.5	185.6	179.3	176.7	175.0
37.5°	232.9	216.7	205.0	193.6	186.0	179.0	175.0	168.8	166.2	162.5	159.0
40°	219.2	203.3	192.1	182.8	174.2	169.1	164.1	159.1	155.0	153.4	149.1
42.5°	205.4	192.4	181.1	171.0	165.3	159.7	153.4	149.8	145.5	142.8	140.2
45°	186.1	174.6	165.0	156.7	150.3	144.6	140.6	134.4	132.1	126.7	124.4
47.5°	169.3	158.6	149.4	141.5	135.3	131.6	125.6	120.8	117.0	113.7	110.8
50°	157.3	148.3	139.4	132.4	126.9	121.5	115.4	113.0	107.0	105.3	103.7
52.5°	146.3	137.8	129.7	122.8	117.2	112.0	106.6	103.5	99.5	97.8	96.6
55°	130.9	122.8	115.0	108.9	103.4	98.0	94.7	90.7	88.9	87.6	86.1
57.5°	115.5	108.2	102.2	96.0	90.4	86.2	82.3	80.0	78.1	76.4	74.6
60°	105.7	98.7	93.4	87.6	81.9	78.4	75.4	72.6	70.4	67.8	67.0
62.5°	95.4	89.2	84.3	78.7	73.7	70.5	67.7	65.1	62.4	58.6	57.6
65°	81.1	76.3	71.1	66.4	62.0	58.9	54.8	51.9	50.7	50.4	50.2
67.5°	68.2	63.7	59.2	54.5	50.5	47.5	45.4	45.0	44.2	44.0	43.5
70°	59.6	55.4	51.0	46.5	42.6	42.1	41.3	40.5	39.6	39.3	38.9
72.5°	51.9	47.5	43.0	39.5	37.8	37.2	36.4	35.6	35.1	34.7	34.5
75°	39.8	35.7	32.8	31.5	30.6	30.0	28.9	28.4	28.0	27.4	27.2
77.5°	28.7	26.3	25.0	24.2	23.2	22.7	22.0	21.4	21.0	21.0	20.6
80°	21.9	20.7	19.8	18.7	18.3	17.6	17.4	16.9	17.0	16.5	16.5
82.5°	17.0	15.6	14.8	14.3	13.9	13.3	13.1	12.9	12.9	12.5	12.5
85°	8.7	8.3	8.0	7.6	7.6	7.0	7.3	7.0	7.0	6.7	6.5
87.5°	3.6	3.6	3.4	3.5	3.7	3.6	3.7	3.6	3.7	3.8	3.7
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: P331765-930

CATALOG NUMBER: S122RDIW-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: P331765-930

CATALOG NUMBER: S122RDIW-S290D435U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	511.8	512.1	511.7	511.9	511.7	512.1	511.8	513.5	513.7	514.0	513.7
5°	476.9	474.7	474.3	473.8	474.3	474.7	476.9	477.8	478.6	480.0	482.7
7.5°	435.2	434.9	433.9	432.6	433.9	434.9	435.2	438.4	440.9	443.8	449.1
10°	408.4	407.4	407.2	405.9	407.2	407.4	408.4	412.5	415.4	419.5	426.7
12.5°	376.9	371.0	370.4	367.1	370.4	371.0	376.9	382.2	390.2	394.1	401.8
15°	321.0	319.8	316.1	313.7	316.1	319.8	321.0	325.4	328.3	339.1	351.5
17.5°	288.9	285.3	284.1	283.6	284.1	285.3	288.9	291.1	295.3	301.0	308.4
20°	268.3	265.1	264.5	264.1	264.5	265.1	268.3	270.9	274.3	280.4	288.1
22.5°	254.1	250.6	249.2	248.1	249.2	250.6	254.1	256.1	259.2	263.9	269.2
25°	229.8	228.5	227.8	227.4	227.8	228.5	229.8	231.7	234.6	241.2	246.7
27.5°	210.8	208.0	207.4	206.4	207.4	208.0	210.8	214.1	217.2	220.1	225.1
30°	200.0	199.1	197.8	196.7	197.8	199.1	200.0	201.7	203.7	208.7	213.5
32.5°	187.3	186.5	185.3	184.8	185.3	186.5	187.3	189.6	193.8	196.9	200.3
35°	173.2	170.6	169.4	167.8	169.4	170.6	173.2	175.0	176.7	179.3	185.6
37.5°	158.2	156.9	155.3	155.9	155.3	156.9	158.2	159.0	162.5	166.2	168.8
40°	146.7	145.8	145.4	145.2	145.4	145.8	146.7	149.1	153.4	155.0	159.1
42.5°	137.5	134.9	134.0	134.0	134.0	134.9	137.5	140.2	142.8	145.5	149.8
45°	123.5	121.2	119.4	119.6	119.4	121.2	123.5	124.4	126.7	132.1	134.4
47.5°	109.3	109.2	108.1	108.4	108.1	109.2	109.3	110.8	113.7	117.0	120.8
50°	102.4	101.3	100.5	100.8	100.5	101.3	102.4	103.7	105.3	107.0	113.0
52.5°	95.9	94.9	94.3	95.1	94.3	94.9	95.9	96.6	97.8	99.5	103.5
55°	85.2	84.1	83.9	83.7	83.9	84.1	85.2	86.1	87.6	88.9	90.7
57.5°	73.2	72.5	71.3	70.9	71.3	72.5	73.2	74.6	76.4	78.1	80.0
60°	64.7	63.2	61.3	61.1	61.3	63.2	64.7	67.0	67.8	70.4	72.6
62.5°	56.7	56.5	56.1	56.1	56.1	56.5	56.7	57.6	58.6	62.4	65.1
65°	49.8	49.7	49.8	50.0	49.8	49.7	49.8	50.2	50.4	50.7	51.9
67.5°	43.4	43.0	42.7	42.9	42.7	43.0	43.4	43.5	44.0	44.2	45.0
70°	38.5	38.3	38.2	38.2	38.2	38.3	38.5	38.9	39.3	39.6	40.5
72.5°	33.8	33.8	33.6	33.4	33.6	33.8	33.8	34.5	34.7	35.1	35.6
75°	27.1	26.7	26.7	26.7	26.7	26.7	27.1	27.2	27.4	28.0	28.4
77.5°	20.6	20.4	20.2	20.1	20.2	20.4	20.6	20.6	21.0	21.0	21.4
80°	16.3	16.1	15.9	15.9	15.9	16.1	16.3	16.5	16.5	17.0	16.9
82.5°	12.5	12.2	12.2	12.1	12.2	12.2	12.5	12.5	12.5	12.9	12.9
85°	6.7	6.8	6.7	7.0	6.7	6.8	6.7	6.5	6.7	7.0	7.0
87.5°	3.8	3.6	3.8	3.7	3.8	3.6	3.8	3.7	3.8	3.7	3.6
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: P331765-930

CATALOG NUMBER: S122RDIW-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: P331765-930

CATALOG NUMBER: S122RDIW-S290D435U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	512.6	514.6	517.7	519.5	522.4	524.4	525.5	527.3	528.4	532.1	536.0
5°	483.9	486.9	492.0	496.8	502.1	507.4	511.4	515.8	519.8	526.8	534.3
7.5°	451.1	455.2	463.3	470.9	480.0	487.5	494.2	501.8	508.6	518.7	529.2
10°	426.5	433.7	444.3	451.5	463.3	470.9	481.5	489.8	499.3	512.7	524.5
12.5°	405.3	414.0	422.5	432.5	443.2	455.8	467.4	478.2	489.3	503.1	517.1
15°	366.9	379.4	392.6	402.8	417.3	430.6	444.1	458.5	472.2	488.8	506.9
17.5°	317.4	332.0	354.1	371.5	388.5	401.9	418.7	436.1	452.2	472.1	492.4
20°	295.1	305.7	320.7	344.3	369.8	384.1	401.1	420.4	438.9	460.6	482.2
22.5°	277.1	286.7	298.6	317.0	345.5	365.0	382.8	402.4	423.8	445.9	469.9
25°	251.5	258.1	270.8	285.6	305.2	337.2	356.7	376.3	399.7	423.4	450.8
27.5°	232.3	238.3	246.5	260.6	275.2	298.2	329.1	350.6	373.8	400.5	428.9
30°	217.6	224.6	233.7	243.7	259.7	277.6	308.5	333.4	356.3	383.8	414.1
32.5°	206.9	212.5	220.2	230.4	243.6	260.9	285.6	315.7	338.1	367.0	398.7
35°	189.5	195.9	202.2	211.9	222.6	238.3	257.1	289.3	311.5	340.0	371.9
37.5°	175.0	179.0	186.0	193.6	205.0	216.7	232.9	261.8	285.8	313.8	346.4
40°	164.1	169.1	174.2	182.8	192.1	203.3	219.2	240.8	268.3	295.8	327.6
42.5°	153.4	159.7	165.3	171.0	181.1	192.4	205.4	223.6	251.8	277.7	308.7
45°	140.6	144.6	150.3	156.7	165.0	174.6	186.1	202.0	229.1	251.5	280.5
47.5°	125.6	131.6	135.3	141.5	149.4	158.6	169.3	183.0	204.9	225.9	252.9
50°	115.4	121.5	126.9	132.4	139.4	148.3	157.3	170.6	188.2	210.2	235.4
52.5°	106.6	112.0	117.2	122.8	129.7	137.8	146.3	158.0	173.0	193.3	217.8
55°	94.7	98.0	103.4	108.9	115.0	122.8	130.9	140.7	153.7	170.7	190.5
57.5°	82.3	86.2	90.4	96.0	102.2	108.2	115.5	124.4	134.6	150.0	167.0
60°	75.4	78.4	81.9	87.6	93.4	98.7	105.7	113.2	122.8	136.2	150.6
62.5°	67.7	70.5	73.7	78.7	84.3	89.2	95.4	103.2	111.4	123.5	136.2
65°	54.8	58.9	62.0	66.4	71.1	76.3	81.1	87.4	94.7	104.3	115.5
67.5°	45.4	47.5	50.5	54.5	59.2	63.7	68.2	73.1	79.4	86.8	95.8
70°	41.3	42.1	42.6	46.5	51.0	55.4	59.6	64.2	69.6	75.7	83.5
72.5°	36.4	37.2	37.8	39.5	43.0	47.5	51.9	55.4	60.4	65.6	71.8
75°	28.9	30.0	30.6	31.5	32.8	35.7	39.8	43.1	46.1	50.0	55.0
77.5°	22.0	22.7	23.2	24.2	25.0	26.3	28.7	31.6	34.5	36.7	40.1
80°	17.4	17.6	18.3	18.7	19.8	20.7	21.9	24.3	27.1	28.0	30.4
82.5°	13.1	13.3	13.9	14.3	14.8	15.6	17.0	17.6	19.8	21.0	22.5
85°	7.3	7.0	7.6	7.6	8.0	8.3	8.7	9.6	10.2	11.7	12.1
87.5°	3.7	3.6	3.7	3.5	3.4	3.6	3.6	3.5	3.7	3.9	4.4
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: P331765-930

CATALOG NUMBER: S122RDIW-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: P331765-930

CATALOG NUMBER: S122RDIW-S290D435U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	536.1	536.5	539.5	540.9	543.5	544.5	545.8	545.4	545.4	546.0	550.2
5°	537.3	541.0	546.5	551.9	557.1	561.5	564.5	567.4	568.6	573.9	578.7
7.5°	535.3	542.2	551.3	559.5	569.3	577.0	583.3	589.1	593.0	600.9	608.9
10°	532.8	542.4	552.8	563.4	576.9	587.1	597.5	605.4	608.0	619.6	626.3
12.5°	527.7	540.6	553.8	567.5	580.7	594.8	606.2	614.2	623.3	633.7	646.0
15°	520.2	535.0	552.3	569.8	588.7	605.8	618.0	631.9	641.9	653.4	664.1
17.5°	509.4	528.5	550.3	570.7	592.6	610.8	627.7	641.0	648.0	654.6	656.2
20°	500.8	521.3	547.1	571.1	593.0	614.1	630.8	641.9	643.8	643.9	634.1
22.5°	491.5	514.7	541.6	566.2	592.4	615.9	628.8	633.6	626.2	613.7	594.7
25°	474.3	501.2	532.5	560.6	589.1	611.3	615.8	607.5	581.7	554.6	520.4
27.5°	455.7	485.9	519.4	550.7	581.1	594.9	585.3	555.2	508.9	468.6	419.7
30°	442.1	476.0	508.9	543.9	572.1	578.0	556.0	511.7	457.6	396.9	348.1
32.5°	426.5	462.0	498.2	534.4	558.0	552.2	515.8	461.3	397.9	338.2	292.2
35°	404.3	440.9	480.0	516.3	531.3	506.3	451.8	380.9	316.1	260.4	228.7
37.5°	378.6	418.6	459.2	492.5	491.5	449.8	375.6	302.4	247.9	214.9	192.4
40°	360.4	400.8	444.7	472.8	460.8	406.5	326.1	257.1	217.2	190.9	174.5
42.5°	342.9	383.4	427.1	449.4	428.4	361.7	281.7	227.6	194.7	174.2	160.9
45°	313.2	356.0	396.3	408.7	371.3	297.8	227.8	188.5	166.6	151.5	142.3
47.5°	284.1	326.2	363.1	363.2	312.7	241.5	192.2	163.1	144.5	132.7	126.0
50°	266.3	306.3	337.2	332.4	275.0	214.8	171.9	146.8	131.3	122.2	115.2
52.5°	246.3	285.1	311.9	298.2	243.1	189.1	153.6	132.6	119.8	111.9	105.6
55°	217.2	251.7	270.6	249.8	198.4	157.3	129.8	113.3	103.7	97.0	91.6
57.5°	188.7	217.1	228.9	204.8	163.4	130.4	109.8	97.4	87.9	83.1	80.3
60°	170.7	195.0	203.3	176.7	142.0	114.1	97.3	85.8	78.7	75.6	72.8
62.5°	153.1	172.9	176.3	152.0	123.8	99.9	85.4	75.7	71.0	68.0	65.4
65°	127.0	141.3	139.7	120.0	98.0	79.2	68.7	62.8	59.3	55.0	50.4
67.5°	104.6	113.3	108.0	93.4	74.8	61.6	54.7	50.2	45.8	41.8	40.8
70°	90.3	95.4	89.8	76.3	61.3	51.7	46.1	40.8	38.2	37.3	35.5
72.5°	76.7	78.5	72.5	60.9	49.9	42.8	37.3	34.4	32.9	32.2	31.1
75°	57.6	56.3	51.1	42.1	34.7	29.8	28.1	27.1	26.1	25.4	24.8
77.5°	40.4	38.6	33.9	28.0	24.1	21.9	20.8	20.2	19.8	19.4	18.8
80°	30.4	29.1	24.5	20.0	18.3	17.2	16.6	15.9	15.9	15.6	15.0
82.5°	22.3	20.8	16.7	14.7	13.8	13.0	12.6	12.2	12.1	12.1	11.7
85°	11.7	9.5	8.3	8.0	7.4	7.0	7.3	6.8	6.8	6.8	6.7
87.5°	3.8	3.3	3.3	3.3	3.6	3.7	3.7	3.8	4.1	4.0	4.2
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: P331765-930

CATALOG NUMBER: S122RDIW-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: P331765-930

CATALOG NUMBER: S122RDIW-S290D435U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	551.6	553.6	554.5	554.5	555.5	555.1	554.6
5°	583.3	586.9	587.7	590.9	593.4	592.6	593.0
7.5°	614.9	620.5	626.1	628.7	629.1	630.6	631.1
10°	634.3	639.0	647.6	646.4	652.8	656.6	650.4
12.5°	653.0	659.3	665.3	666.9	670.6	671.8	669.4
15°	669.8	673.2	673.5	672.6	673.8	672.8	669.3
17.5°	654.1	648.7	637.7	632.5	628.4	622.3	619.9
20°	628.0	612.0	593.5	586.1	577.5	560.4	564.5
22.5°	571.7	553.6	535.0	513.4	503.0	486.9	485.9
25°	484.1	452.8	418.3	394.3	380.2	364.1	357.0
27.5°	376.4	337.0	308.8	294.5	281.4	268.7	268.2
30°	305.6	276.0	254.1	241.9	233.9	228.5	229.7
32.5°	257.6	237.3	222.5	212.4	206.5	202.4	202.4
35°	210.6	196.7	187.2	183.0	178.7	175.8	175.9
37.5°	180.2	171.9	166.6	161.9	159.2	157.8	156.9
40°	164.6	157.8	153.7	150.9	148.7	146.7	146.3
42.5°	152.4	146.7	142.6	140.4	138.4	136.9	136.6
45°	135.2	130.5	126.9	124.4	123.5	122.2	122.2
47.5°	120.3	115.7	112.8	111.3	109.7	108.8	108.8
50°	110.2	106.6	104.1	103.1	101.8	101.3	101.1
52.5°	101.2	98.5	96.7	96.0	95.5	94.8	94.9
55°	88.9	87.4	86.7	86.1	85.2	84.1	84.8
57.5°	78.6	77.3	75.3	73.5	72.7	71.9	72.2
60°	71.3	68.7	66.1	64.1	63.5	61.9	61.9
62.5°	62.1	58.5	55.3	54.1	53.6	52.8	52.7
65°	47.8	46.3	45.6	44.8	44.4	44.4	44.1
67.5°	39.6	39.0	38.2	38.0	37.7	37.5	37.4
70°	35.0	34.2	33.9	33.7	33.3	33.5	32.9
72.5°	30.6	30.0	29.9	29.4	29.2	29.2	28.8
75°	24.1	24.1	23.9	23.7	23.3	23.2	23.3
77.5°	18.5	18.6	18.3	18.2	18.2	18.2	18.0
80°	14.8	15.0	14.8	14.6	14.4	14.6	14.4
82.5°	11.7	11.4	11.4	11.3	11.3	11.3	11.2
85°	6.7	6.8	6.7	6.5	6.5	6.5	6.7
87.5°	4.2	4.2	4.2	4.3	4.3	4.4	4.2
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: P331765-930

CATALOG NUMBER: S122RDIW-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)