

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: P331471-930

Luminaire Tested: **S122DIW-S290D710U930-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P331471-930  
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-S290D710U930-4F0-1E-UDD-A  
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 710 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3376.7 lumens  
Efficiency: N/A  
Efficacy: 111.1 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: Semi-Indirect

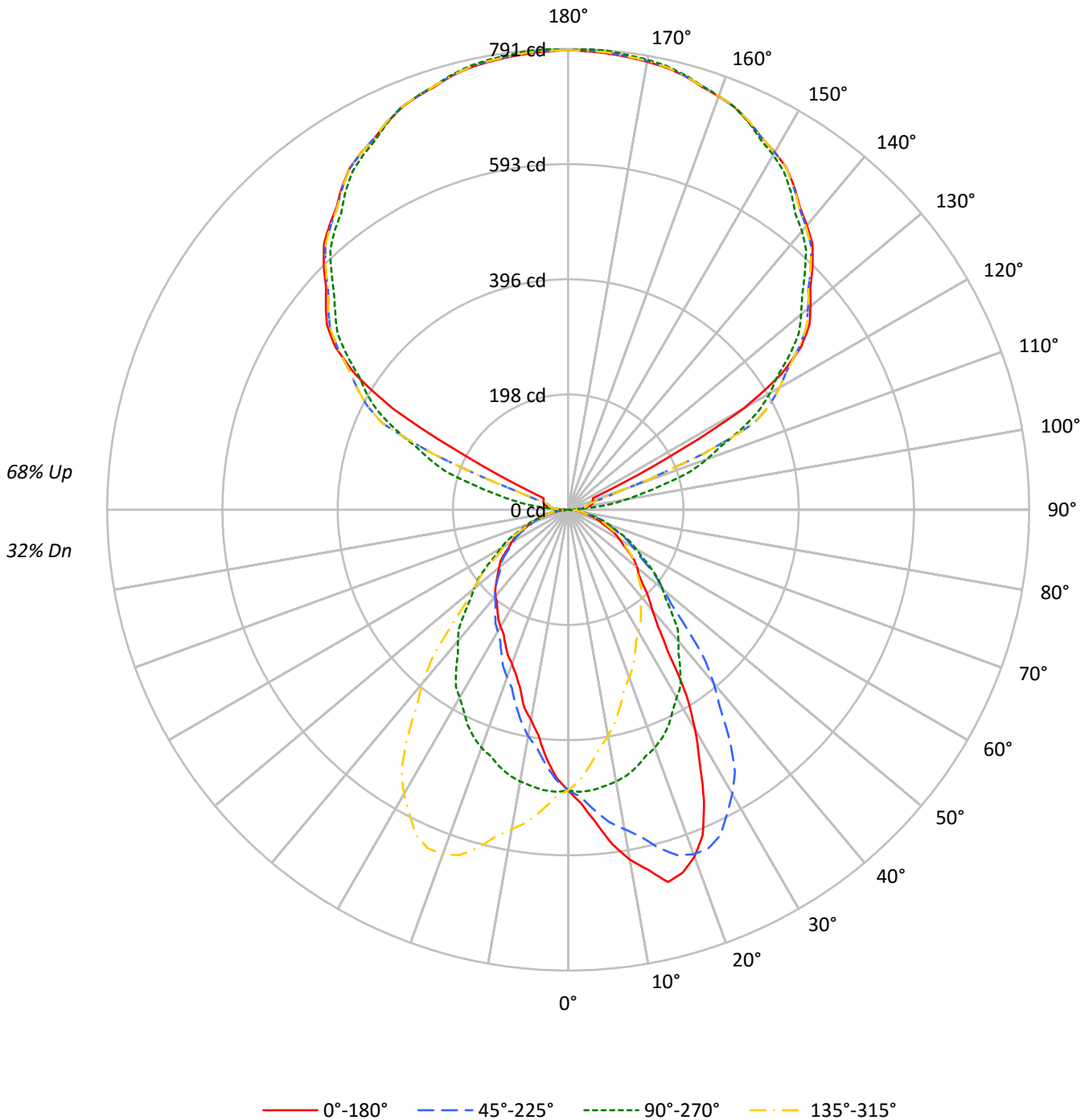
Input Watts (W): 30.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	32
1	94	90	86	83	84	81	78	75	64	62	60	49	48	47	35	34	34	27
2	86	79	73	68	77	71	66	62	57	53	50	43	41	39	31	30	29	23
3	78	69	63	57	70	63	57	52	50	46	43	39	36	34	28	26	25	20
4	72	62	54	48	64	56	49	44	45	40	37	35	31	29	25	23	22	17
5	66	55	47	41	59	50	43	38	40	35	32	31	28	25	23	21	19	15
6	61	49	42	36	54	45	38	33	36	31	28	28	25	22	21	19	17	14
7	56	44	37	32	50	40	34	29	33	28	24	26	22	20	19	17	15	12
8	52	40	33	28	47	37	30	26	30	25	22	24	20	18	17	15	14	11
9	48	37	30	25	44	34	27	23	27	23	19	22	18	16	16	14	12	10
10	45	34	27	22	41	31	25	21	25	21	17	20	17	14	15	13	11	9

**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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.9	1.4
10°-20°	133.4	4.0
20°-30°	193.6	5.7
30°-40°	204.3	6.1
40°-50°	180.9	5.4
50°-60°	144.4	4.3
60°-70°	98.1	2.9
70°-80°	50.3	1.5
80°-90°	14.1	0.4
90°-100°	26.3	0.8
100°-110°	96.5	2.9
110°-120°	257.9	7.6
120°-130°	425.7	12.6
130°-140°	452.8	13.4
140°-150°	420.8	12.5
150°-160°	338.4	10.0
160°-170°	218.0	6.5
170°-180°	75.1	2.2
0°-30°	373.0	11.0
0°-40°	577.3	17.1
0°-60°	902.6	26.7
0°-90°	1065.1	31.5
90°-120°	380.7	11.3
90°-150°	1680.1	49.8
90°-180°	2312.0	68.5
0°-180°	3376.7	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°	15	1	15	1	15	7
95°	24	37	24	37	24	23
105°	43	174	43	174	43	45
115°	47	328	47	328	47	117
125°	488	464	488	464	488	422
135°	593	574	593	574	593	457
145°	676	666	676	666	676	423
155°	734	733	734	733	734	339
165°	771	773	771	773	771	218
175°	786	790	786	790	786	75
180°	789	789	789	789	789	



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**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°	6.9	6.8	7.0	6.8	6.8	6.8	6.7	6.4	6.4	6.4	6.4
90°	15.4	15.2	14.9	14.7	14.4	13.9	13.3	12.7	12.1	11.4	10.4
92.5°	15.4	15.2	15.1	14.9	14.8	14.6	14.3	13.9	13.5	13.2	12.7
95°	24.5	24.7	24.8	24.9	25.0	24.8	24.1	23.6	22.9	22.3	21.4
97.5°	32.8	32.6	32.4	32.3	32.1	31.8	31.3	30.8	30.3	29.8	27.7
100°	38.2	38.0	37.7	37.5	37.3	36.6	35.5	34.6	33.5	32.5	30.4
102.5°	41.0	40.6	40.3	39.9	39.5	38.7	37.4	36.1	34.7	33.4	31.4
105°	43.4	42.9	42.4	41.8	41.3	40.4	39.0	37.6	36.2	34.8	32.5
107.5°	44.6	44.1	43.6	43.1	42.6	43.0	44.5	45.9	47.3	48.8	49.3
110°	45.1	44.6	44.1	43.5	43.0	49.2	61.8	74.5	87.2	99.9	136.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	45.6	45.2	44.8	44.4	43.9	66.9	113.2	159.4	205.7	251.9	261.0
115°	46.8	55.9	65.1	74.2	83.3	117.2	175.9	234.7	293.4	352.1	348.9
117.5°	191.1	221.1	251.1	281.1	311.1	333.2	347.4	361.7	375.9	390.0	387.8
120°	348.1	365.3	382.4	399.5	416.6	424.4	422.9	421.4	419.9	418.3	416.0
122.5°	434.5	437.8	441.1	444.4	447.8	449.0	448.0	447.1	446.2	445.3	442.8
125°	488.0	487.6	487.2	486.8	486.5	485.8	484.9	484.0	483.1	482.2	479.9
127.5°	521.8	521.7	521.6	521.5	521.5	520.8	519.5	518.2	516.9	515.6	513.8
130°	542.8	542.9	543.1	543.2	543.3	542.7	541.3	539.9	538.5	537.1	535.7
132.5°	563.4	563.5	563.6	563.7	563.9	563.3	562.1	560.9	559.7	558.6	557.2
135°	593.0	593.3	593.5	593.8	594.0	593.5	592.2	591.0	589.7	588.5	587.3
137.5°	620.0	620.5	620.9	621.3	621.8	621.4	620.1	618.9	617.7	616.4	615.1
140°	637.0	637.6	638.2	638.9	639.5	639.3	638.1	637.0	635.9	634.7	633.2
142.5°	653.4	654.0	654.7	655.3	655.9	655.7	654.7	653.6	652.6	651.6	650.0
145°	676.4	676.9	677.6	678.2	678.9	678.7	677.8	676.9	676.1	675.2	673.0
147.5°	696.5	697.1	697.7	698.1	698.7	698.6	698.0	697.3	696.7	695.9	693.8
150°	708.9	709.5	710.1	710.8	711.4	711.3	710.6	709.8	709.1	708.3	706.3
152.5°	719.3	720.2	721.1	721.9	722.8	722.8	722.0	721.2	720.5	719.7	717.8
155°	734.0	735.0	736.1	737.0	738.0	738.2	737.4	736.6	735.9	735.2	733.6
157.5°	747.3	748.4	749.3	750.3	751.3	751.4	750.5	749.7	748.8	747.9	746.8
160°	755.1	756.0	756.8	757.7	758.6	758.7	758.0	757.2	756.4	755.7	754.9
162.5°	761.5	762.5	763.7	764.8	765.9	766.0	765.1	764.3	763.4	762.5	761.9
165°	771.1	772.0	772.9	773.7	774.6	774.6	773.7	772.9	772.0	771.1	770.7
167.5°	777.1	778.3	779.4	780.6	781.7	781.8	781.0	780.1	779.2	778.3	778.0
170°	780.8	782.0	783.1	784.2	785.4	785.5	784.6	783.7	782.9	782.0	781.7
172.5°	783.5	784.6	785.8	786.9	788.1	788.2	787.3	786.4	785.5	784.6	784.4
175°	785.9	787.2	788.5	789.7	791.0	791.2	790.3	789.5	788.6	787.7	787.4
177.5°	787.4	788.3	789.2	790.2	791.1	791.2	790.4	789.8	789.0	788.3	788.2
180°	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8



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**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°	6.4	6.1	6.0	6.0	5.2	5.0	4.1	3.3	3.5	3.7	3.6
90°	9.4	8.4	7.3	6.1	4.7	3.3	2.0	0.6	2.0	3.3	4.7
92.5°	12.2	11.7	11.3	11.0	11.2	11.3	11.4	11.5	11.4	11.3	11.2
95°	20.5	19.6	18.7	20.4	24.5	28.7	32.9	37.1	32.9	28.7	24.5
97.5°	25.7	23.6	21.6	26.4	38.2	50.1	61.8	73.6	61.8	50.1	38.2
100°	28.2	26.1	23.9	31.6	48.9	66.3	83.6	101.0	83.6	66.3	48.9
102.5°	69.5	87.6	105.6	116.4	120.1	123.8	127.5	131.2	127.5	123.8	120.1
105°	104.0	138.7	173.3	188.7	184.9	181.2	177.3	173.5	177.3	181.2	184.9
107.5°	131.8	173.3	214.8	234.1	231.0	228.0	224.9	221.8	224.9	228.0	231.0
110°	173.2	209.9	246.5	263.5	260.8	258.2	255.5	252.8	255.5	258.2	260.8





TEST NUMBER: P331471-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	270.0	279.1	288.1	291.5	289.1	286.8	284.5	282.1	284.5	286.8	289.1
115°	345.8	342.7	339.5	336.8	334.7	332.5	330.4	328.2	330.4	332.5	334.7
117.5°	385.7	383.5	381.3	379.0	376.6	374.2	371.8	369.4	371.8	374.2	376.6
120°	413.8	411.5	409.2	407.2	405.2	403.3	401.5	399.5	401.5	403.3	405.2
122.5°	440.3	437.8	435.4	433.1	431.1	429.1	427.1	425.1	427.1	429.1	431.1
125°	477.4	475.1	472.6	470.6	469.0	467.3	465.7	464.0	465.7	467.3	469.0
127.5°	512.0	510.2	508.4	506.6	504.8	503.0	501.1	499.3	501.1	503.0	504.8
130°	534.3	532.9	531.5	529.8	527.7	525.7	523.7	521.6	523.7	525.7	527.7
132.5°	555.7	554.3	552.9	551.4	549.7	548.0	546.3	544.5	546.3	548.0	549.7
135°	586.2	585.1	583.9	582.3	580.2	578.2	576.2	574.2	576.2	578.2	580.2
137.5°	613.8	612.5	611.2	609.8	608.5	607.1	605.6	604.2	605.6	607.1	608.5
140°	631.9	630.5	629.1	627.9	626.9	625.8	624.8	623.9	624.8	625.8	626.9
142.5°	648.4	646.8	645.1	643.9	643.0	642.1	641.2	640.3	641.2	642.1	643.0
145°	670.9	668.7	666.6	665.5	665.7	665.9	665.9	666.1	665.9	665.9	665.7
147.5°	691.7	689.6	687.5	686.6	687.1	687.6	688.1	688.5	688.1	687.6	687.1
150°	704.3	702.2	700.2	699.6	700.5	701.4	702.3	703.2	702.3	701.4	700.5
152.5°	715.8	714.0	712.0	711.5	712.5	713.5	714.5	715.5	714.5	713.5	712.5
155°	732.1	730.6	729.0	728.9	730.0	731.2	732.3	733.4	732.3	731.2	730.0
157.5°	745.8	744.7	743.6	743.6	744.5	745.5	746.5	747.5	746.5	745.5	744.5
160°	754.2	753.4	752.6	752.6	753.4	754.2	754.9	755.7	754.9	754.2	753.4
162.5°	761.2	760.5	759.9	759.9	760.7	761.5	762.2	763.0	762.2	761.5	760.7
165°	770.3	770.0	769.6	769.7	770.5	771.3	772.0	772.8	772.0	771.3	770.5
167.5°	777.6	777.2	776.9	777.1	777.8	778.6	779.3	780.1	779.3	778.6	777.8
170°	781.5	781.1	780.9	781.1	782.0	782.7	783.4	784.2	783.4	782.7	782.0
172.5°	784.2	783.9	783.7	783.9	784.6	785.5	786.2	786.9	786.2	785.5	784.6
175°	787.2	786.8	786.6	786.9	787.8	788.7	789.6	790.5	789.6	788.7	787.8
177.5°	788.1	788.0	787.9	788.2	789.0	789.6	790.4	791.1	790.4	789.6	789.0
180°	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8



TEST NUMBER: P331471-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-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°	3.8	3.8	3.9	4.1	4.2	4.2	4.2	4.3	4.4	4.2	4.3
90°	6.1	7.3	8.4	9.4	10.4	11.4	12.1	12.7	13.3	13.9	14.4
92.5°	11.0	11.3	11.7	12.2	12.7	13.2	13.5	13.9	14.3	14.6	14.8
95°	20.4	18.7	19.6	20.5	21.4	22.3	22.9	23.6	24.1	24.8	25.0
97.5°	26.4	21.6	23.6	25.7	27.7	29.8	30.3	30.8	31.3	31.8	32.1
100°	31.6	23.9	26.1	28.2	30.4	32.5	33.5	34.6	35.5	36.6	37.3
102.5°	116.4	105.6	87.6	69.5	51.4	33.4	34.7	36.1	37.4	38.7	39.5
105°	188.7	173.3	138.7	104.0	69.5	34.8	36.2	37.6	39.0	40.4	41.3
107.5°	234.1	214.8	173.3	131.8	90.3	48.8	47.3	45.9	44.5	43.0	42.6
110°	263.5	246.5	209.9	173.2	136.6	99.9	87.2	74.5	61.8	49.2	43.0



TEST NUMBER: P331471-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	291.5	288.1	279.1	270.0	261.0	251.9	205.7	159.4	113.2	66.9	43.9
115°	336.8	339.5	342.7	345.8	348.9	352.1	293.4	234.7	175.9	117.2	83.3
117.5°	379.0	381.3	383.5	385.7	387.8	390.0	375.9	361.7	347.4	333.2	311.1
120°	407.2	409.2	411.5	413.8	416.0	418.3	419.9	421.4	422.9	424.4	416.6
122.5°	433.1	435.4	437.8	440.3	442.8	445.3	446.2	447.1	448.0	449.0	447.8
125°	470.6	472.6	475.1	477.4	479.9	482.2	483.1	484.0	484.9	485.8	486.5
127.5°	506.6	508.4	510.2	512.0	513.8	515.6	516.9	518.2	519.5	520.8	521.5
130°	529.8	531.5	532.9	534.3	535.7	537.1	538.5	539.9	541.3	542.7	543.3
132.5°	551.4	552.9	554.3	555.7	557.2	558.6	559.7	560.9	562.1	563.3	563.9
135°	582.3	583.9	585.1	586.2	587.3	588.5	589.7	591.0	592.2	593.5	594.0
137.5°	609.8	611.2	612.5	613.8	615.1	616.4	617.7	618.9	620.1	621.4	621.8
140°	627.9	629.1	630.5	631.9	633.2	634.7	635.9	637.0	638.1	639.3	639.5
142.5°	643.9	645.1	646.8	648.4	650.0	651.6	652.6	653.6	654.7	655.7	655.9
145°	665.5	666.6	668.7	670.9	673.0	675.2	676.1	676.9	677.8	678.7	678.9
147.5°	686.6	687.5	689.6	691.7	693.8	695.9	696.7	697.3	698.0	698.6	698.7
150°	699.6	700.2	702.2	704.3	706.3	708.3	709.1	709.8	710.6	711.3	711.4
152.5°	711.5	712.0	714.0	715.8	717.8	719.7	720.5	721.2	722.0	722.8	722.8
155°	728.9	729.0	730.6	732.1	733.6	735.2	735.9	736.6	737.4	738.2	738.0
157.5°	743.6	743.6	744.7	745.8	746.8	747.9	748.8	749.7	750.5	751.4	751.3
160°	752.6	752.6	753.4	754.2	754.9	755.7	756.4	757.2	758.0	758.7	758.6
162.5°	759.9	759.9	760.5	761.2	761.9	762.5	763.4	764.3	765.1	766.0	765.9
165°	769.7	769.6	770.0	770.3	770.7	771.1	772.0	772.9	773.7	774.6	774.6
167.5°	777.1	776.9	777.2	777.6	778.0	778.3	779.2	780.1	781.0	781.8	781.7
170°	781.1	780.9	781.1	781.5	781.7	782.0	782.9	783.7	784.6	785.5	785.4
172.5°	783.9	783.7	783.9	784.2	784.4	784.6	785.5	786.4	787.3	788.2	788.1
175°	786.9	786.6	786.8	787.2	787.4	787.7	788.6	789.5	790.3	791.2	791.0
177.5°	788.2	787.9	788.0	788.1	788.2	788.3	789.0	789.8	790.4	791.2	791.1
180°	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8



TEST NUMBER: P331471-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-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°	4.4	4.3	4.4	4.2	4.4	4.3	4.4	4.3	4.2	4.4	4.3
90°	14.7	14.9	15.2	15.4	15.2	14.9	14.7	14.4	13.9	13.3	12.7
92.5°	14.9	15.1	15.2	15.4	15.2	15.1	14.9	14.8	14.6	14.3	13.9
95°	24.9	24.8	24.7	24.5	24.7	24.8	24.9	25.0	24.8	24.1	23.6
97.5°	32.3	32.4	32.6	32.8	32.6	32.4	32.3	32.1	31.8	31.3	30.8
100°	37.5	37.7	38.0	38.2	38.0	37.7	37.5	37.3	36.6	35.5	34.6
102.5°	39.9	40.3	40.6	41.0	40.6	40.3	39.9	39.5	38.7	37.4	36.1
105°	41.8	42.4	42.9	43.4	42.9	42.4	41.8	41.3	40.4	39.0	37.6
107.5°	43.1	43.6	44.1	44.6	44.1	43.6	43.1	42.6	43.0	44.5	45.9
110°	43.5	44.1	44.6	45.1	44.6	44.1	43.5	43.0	49.2	61.8	74.5



TEST NUMBER: P331471-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	44.4	44.8	45.2	45.6	45.2	44.8	44.4	43.9	66.9	113.2	159.4
115°	74.2	65.1	55.9	46.8	55.9	65.1	74.2	83.3	117.2	175.9	234.7
117.5°	281.1	251.1	221.1	191.1	221.1	251.1	281.1	311.1	333.2	347.4	361.7
120°	399.5	382.4	365.3	348.1	365.3	382.4	399.5	416.6	424.4	422.9	421.4
122.5°	444.4	441.1	437.8	434.5	437.8	441.1	444.4	447.8	449.0	448.0	447.1
125°	486.8	487.2	487.6	488.0	487.6	487.2	486.8	486.5	485.8	484.9	484.0
127.5°	521.5	521.6	521.7	521.8	521.7	521.6	521.5	521.5	520.8	519.5	518.2
130°	543.2	543.1	542.9	542.8	542.9	543.1	543.2	543.3	542.7	541.3	539.9
132.5°	563.7	563.6	563.5	563.4	563.5	563.6	563.7	563.9	563.3	562.1	560.9
135°	593.8	593.5	593.3	593.0	593.3	593.5	593.8	594.0	593.5	592.2	591.0
137.5°	621.3	620.9	620.5	620.0	620.5	620.9	621.3	621.8	621.4	620.1	618.9
140°	638.9	638.2	637.6	637.0	637.6	638.2	638.9	639.5	639.3	638.1	637.0
142.5°	655.3	654.7	654.0	653.4	654.0	654.7	655.3	655.9	655.7	654.7	653.6
145°	678.2	677.6	676.9	676.4	676.9	677.6	678.2	678.9	678.7	677.8	676.9
147.5°	698.1	697.7	697.1	696.5	697.1	697.7	698.1	698.7	698.6	698.0	697.3
150°	710.8	710.1	709.5	708.9	709.5	710.1	710.8	711.4	711.3	710.6	709.8
152.5°	721.9	721.1	720.2	719.3	720.2	721.1	721.9	722.8	722.8	722.0	721.2
155°	737.0	736.1	735.0	734.0	735.0	736.1	737.0	738.0	738.2	737.4	736.6
157.5°	750.3	749.3	748.4	747.3	748.4	749.3	750.3	751.3	751.4	750.5	749.7
160°	757.7	756.8	756.0	755.1	756.0	756.8	757.7	758.6	758.7	758.0	757.2
162.5°	764.8	763.7	762.5	761.5	762.5	763.7	764.8	765.9	766.0	765.1	764.3
165°	773.7	772.9	772.0	771.1	772.0	772.9	773.7	774.6	774.6	773.7	772.9
167.5°	780.6	779.4	778.3	777.1	778.3	779.4	780.6	781.7	781.8	781.0	780.1
170°	784.2	783.1	782.0	780.8	782.0	783.1	784.2	785.4	785.5	784.6	783.7
172.5°	786.9	785.8	784.6	783.5	784.6	785.8	786.9	788.1	788.2	787.3	786.4
175°	789.7	788.5	787.2	785.9	787.2	788.5	789.7	791.0	791.2	790.3	789.5
177.5°	790.2	789.2	788.3	787.4	788.3	789.2	790.2	791.1	791.2	790.4	789.8
180°	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8



TEST NUMBER: P331471-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-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°	4.2	4.2	4.2	4.1	3.9	3.8	3.8	3.6	3.7	3.5	3.3
90°	12.1	11.4	10.4	9.4	8.4	7.3	6.1	4.7	3.3	2.0	0.6
92.5°	13.5	13.2	12.7	12.2	11.7	11.3	11.0	11.2	11.3	11.4	11.5
95°	22.9	22.3	21.4	20.5	19.6	18.7	20.4	24.5	28.7	32.9	37.1
97.5°	30.3	29.8	27.7	25.7	23.6	21.6	26.4	38.2	50.1	61.8	73.6
100°	33.5	32.5	30.4	28.2	26.1	23.9	31.6	48.9	66.3	83.6	101.0
102.5°	34.7	33.4	51.4	69.5	87.6	105.6	116.4	120.1	123.8	127.5	131.2
105°	36.2	34.8	69.5	104.0	138.7	173.3	188.7	184.9	181.2	177.3	173.5
107.5°	47.3	48.8	90.3	131.8	173.3	214.8	234.1	231.0	228.0	224.9	221.8
110°	87.2	99.9	136.6	173.2	209.9	246.5	263.5	260.8	258.2	255.5	252.8



TEST NUMBER: P331471-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	205.7	251.9	261.0	270.0	279.1	288.1	291.5	289.1	286.8	284.5	282.1
115°	293.4	352.1	348.9	345.8	342.7	339.5	336.8	334.7	332.5	330.4	328.2
117.5°	375.9	390.0	387.8	385.7	383.5	381.3	379.0	376.6	374.2	371.8	369.4
120°	419.9	418.3	416.0	413.8	411.5	409.2	407.2	405.2	403.3	401.5	399.5
122.5°	446.2	445.3	442.8	440.3	437.8	435.4	433.1	431.1	429.1	427.1	425.1
125°	483.1	482.2	479.9	477.4	475.1	472.6	470.6	469.0	467.3	465.7	464.0
127.5°	516.9	515.6	513.8	512.0	510.2	508.4	506.6	504.8	503.0	501.1	499.3
130°	538.5	537.1	535.7	534.3	532.9	531.5	529.8	527.7	525.7	523.7	521.6
132.5°	559.7	558.6	557.2	555.7	554.3	552.9	551.4	549.7	548.0	546.3	544.5
135°	589.7	588.5	587.3	586.2	585.1	583.9	582.3	580.2	578.2	576.2	574.2
137.5°	617.7	616.4	615.1	613.8	612.5	611.2	609.8	608.5	607.1	605.6	604.2
140°	635.9	634.7	633.2	631.9	630.5	629.1	627.9	626.9	625.8	624.8	623.9
142.5°	652.6	651.6	650.0	648.4	646.8	645.1	643.9	643.0	642.1	641.2	640.3
145°	676.1	675.2	673.0	670.9	668.7	666.6	665.5	665.7	665.9	665.9	666.1
147.5°	696.7	695.9	693.8	691.7	689.6	687.5	686.6	687.1	687.6	688.1	688.5
150°	709.1	708.3	706.3	704.3	702.2	700.2	699.6	700.5	701.4	702.3	703.2
152.5°	720.5	719.7	717.8	715.8	714.0	712.0	711.5	712.5	713.5	714.5	715.5
155°	735.9	735.2	733.6	732.1	730.6	729.0	728.9	730.0	731.2	732.3	733.4
157.5°	748.8	747.9	746.8	745.8	744.7	743.6	743.6	744.5	745.5	746.5	747.5
160°	756.4	755.7	754.9	754.2	753.4	752.6	752.6	753.4	754.2	754.9	755.7
162.5°	763.4	762.5	761.9	761.2	760.5	759.9	759.9	760.7	761.5	762.2	763.0
165°	772.0	771.1	770.7	770.3	770.0	769.6	769.7	770.5	771.3	772.0	772.8
167.5°	779.2	778.3	778.0	777.6	777.2	776.9	777.1	777.8	778.6	779.3	780.1
170°	782.9	782.0	781.7	781.5	781.1	780.9	781.1	782.0	782.7	783.4	784.2
172.5°	785.5	784.6	784.4	784.2	783.9	783.7	783.9	784.6	785.5	786.2	786.9
175°	788.6	787.7	787.4	787.2	786.8	786.6	786.9	787.8	788.7	789.6	790.5
177.5°	789.0	788.3	788.2	788.1	788.0	787.9	788.2	789.0	789.6	790.4	791.1
180°	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8



TEST NUMBER: P331471-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-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°	4.1	5.0	5.2	6.0	6.0	6.1	6.4	6.4	6.4	6.4	6.4
90°	2.0	3.3	4.7	6.1	7.3	8.4	9.4	10.4	11.4	12.1	12.7
92.5°	11.4	11.3	11.2	11.0	11.3	11.7	12.2	12.7	13.2	13.5	13.9
95°	32.9	28.7	24.5	20.4	18.7	19.6	20.5	21.4	22.3	22.9	23.6
97.5°	61.8	50.1	38.2	26.4	21.6	23.6	25.7	27.7	29.8	30.3	30.8
100°	83.6	66.3	48.9	31.6	23.9	26.1	28.2	30.4	32.5	33.5	34.6
102.5°	127.5	123.8	120.1	116.4	105.6	87.6	69.5	51.4	33.4	34.7	36.1
105°	177.3	181.2	184.9	188.7	173.3	138.7	104.0	69.5	34.8	36.2	37.6
107.5°	224.9	228.0	231.0	234.1	214.8	173.3	131.8	90.3	48.8	47.3	45.9
110°	255.5	258.2	260.8	263.5	246.5	209.9	173.2	136.6	99.9	87.2	74.5





TEST NUMBER: P331471-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	284.5	286.8	289.1	291.5	288.1	279.1	270.0	261.0	251.9	205.7	159.4
115°	330.4	332.5	334.7	336.8	339.5	342.7	345.8	348.9	352.1	293.4	234.7
117.5°	371.8	374.2	376.6	379.0	381.3	383.5	385.7	387.8	390.0	375.9	361.7
120°	401.5	403.3	405.2	407.2	409.2	411.5	413.8	416.0	418.3	419.9	421.4
122.5°	427.1	429.1	431.1	433.1	435.4	437.8	440.3	442.8	445.3	446.2	447.1
125°	465.7	467.3	469.0	470.6	472.6	475.1	477.4	479.9	482.2	483.1	484.0
127.5°	501.1	503.0	504.8	506.6	508.4	510.2	512.0	513.8	515.6	516.9	518.2
130°	523.7	525.7	527.7	529.8	531.5	532.9	534.3	535.7	537.1	538.5	539.9
132.5°	546.3	548.0	549.7	551.4	552.9	554.3	555.7	557.2	558.6	559.7	560.9
135°	576.2	578.2	580.2	582.3	583.9	585.1	586.2	587.3	588.5	589.7	591.0
137.5°	605.6	607.1	608.5	609.8	611.2	612.5	613.8	615.1	616.4	617.7	618.9
140°	624.8	625.8	626.9	627.9	629.1	630.5	631.9	633.2	634.7	635.9	637.0
142.5°	641.2	642.1	643.0	643.9	645.1	646.8	648.4	650.0	651.6	652.6	653.6
145°	665.9	665.9	665.7	665.5	666.6	668.7	670.9	673.0	675.2	676.1	676.9
147.5°	688.1	687.6	687.1	686.6	687.5	689.6	691.7	693.8	695.9	696.7	697.3
150°	702.3	701.4	700.5	699.6	700.2	702.2	704.3	706.3	708.3	709.1	709.8
152.5°	714.5	713.5	712.5	711.5	712.0	714.0	715.8	717.8	719.7	720.5	721.2
155°	732.3	731.2	730.0	728.9	729.0	730.6	732.1	733.6	735.2	735.9	736.6
157.5°	746.5	745.5	744.5	743.6	743.6	744.7	745.8	746.8	747.9	748.8	749.7
160°	754.9	754.2	753.4	752.6	752.6	753.4	754.2	754.9	755.7	756.4	757.2
162.5°	762.2	761.5	760.7	759.9	759.9	760.5	761.2	761.9	762.5	763.4	764.3
165°	772.0	771.3	770.5	769.7	769.6	770.0	770.3	770.7	771.1	772.0	772.9
167.5°	779.3	778.6	777.8	777.1	776.9	777.2	777.6	778.0	778.3	779.2	780.1
170°	783.4	782.7	782.0	781.1	780.9	781.1	781.5	781.7	782.0	782.9	783.7
172.5°	786.2	785.5	784.6	783.9	783.7	783.9	784.2	784.4	784.6	785.5	786.4
175°	789.6	788.7	787.8	786.9	786.6	786.8	787.2	787.4	787.7	788.6	789.5
177.5°	790.4	789.6	789.0	788.2	787.9	788.0	788.1	788.2	788.3	789.0	789.8
180°	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8	788.8



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**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°	6.7	6.8	6.8	6.8	7.0	6.8	6.9
90°	13.3	13.9	14.4	14.7	14.9	15.2	15.4
92.5°	14.3	14.6	14.8	14.9	15.1	15.2	15.4
95°	24.1	24.8	25.0	24.9	24.8	24.7	24.5
97.5°	31.3	31.8	32.1	32.3	32.4	32.6	32.8
100°	35.5	36.6	37.3	37.5	37.7	38.0	38.2
102.5°	37.4	38.7	39.5	39.9	40.3	40.6	41.0
105°	39.0	40.4	41.3	41.8	42.4	42.9	43.4
107.5°	44.5	43.0	42.6	43.1	43.6	44.1	44.6
110°	61.8	49.2	43.0	43.5	44.1	44.6	45.1



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	113.2	66.9	43.9	44.4	44.8	45.2	45.6
115°	175.9	117.2	83.3	74.2	65.1	55.9	46.8
117.5°	347.4	333.2	311.1	281.1	251.1	221.1	191.1
120°	422.9	424.4	416.6	399.5	382.4	365.3	348.1
122.5°	448.0	449.0	447.8	444.4	441.1	437.8	434.5
125°	484.9	485.8	486.5	486.8	487.2	487.6	488.0
127.5°	519.5	520.8	521.5	521.5	521.6	521.7	521.8
130°	541.3	542.7	543.3	543.2	543.1	542.9	542.8
132.5°	562.1	563.3	563.9	563.7	563.6	563.5	563.4
135°	592.2	593.5	594.0	593.8	593.5	593.3	593.0
137.5°	620.1	621.4	621.8	621.3	620.9	620.5	620.0
140°	638.1	639.3	639.5	638.9	638.2	637.6	637.0
142.5°	654.7	655.7	655.9	655.3	654.7	654.0	653.4
145°	677.8	678.7	678.9	678.2	677.6	676.9	676.4
147.5°	698.0	698.6	698.7	698.1	697.7	697.1	696.5
150°	710.6	711.3	711.4	710.8	710.1	709.5	708.9
152.5°	722.0	722.8	722.8	721.9	721.1	720.2	719.3
155°	737.4	738.2	738.0	737.0	736.1	735.0	734.0
157.5°	750.5	751.4	751.3	750.3	749.3	748.4	747.3
160°	758.0	758.7	758.6	757.7	756.8	756.0	755.1
162.5°	765.1	766.0	765.9	764.8	763.7	762.5	761.5
165°	773.7	774.6	774.6	773.7	772.9	772.0	771.1
167.5°	781.0	781.8	781.7	780.6	779.4	778.3	777.1
170°	784.6	785.5	785.4	784.2	783.1	782.0	780.8
172.5°	787.3	788.2	788.1	786.9	785.8	784.6	783.5
175°	790.3	791.2	791.0	789.7	788.5	787.2	785.9
177.5°	790.4	791.2	791.1	790.2	789.2	788.3	787.4
180°	788.8	788.8	788.8	788.8	788.8	788.8	788.8

(END OF REPORT)