

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: P331472-930

Luminaire Tested: **S122DIW-S290D710U930-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P331472-930  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,  
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-A1  
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 710 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3070.7 lumens  
Efficiency: N/A  
Efficacy: 101.0 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

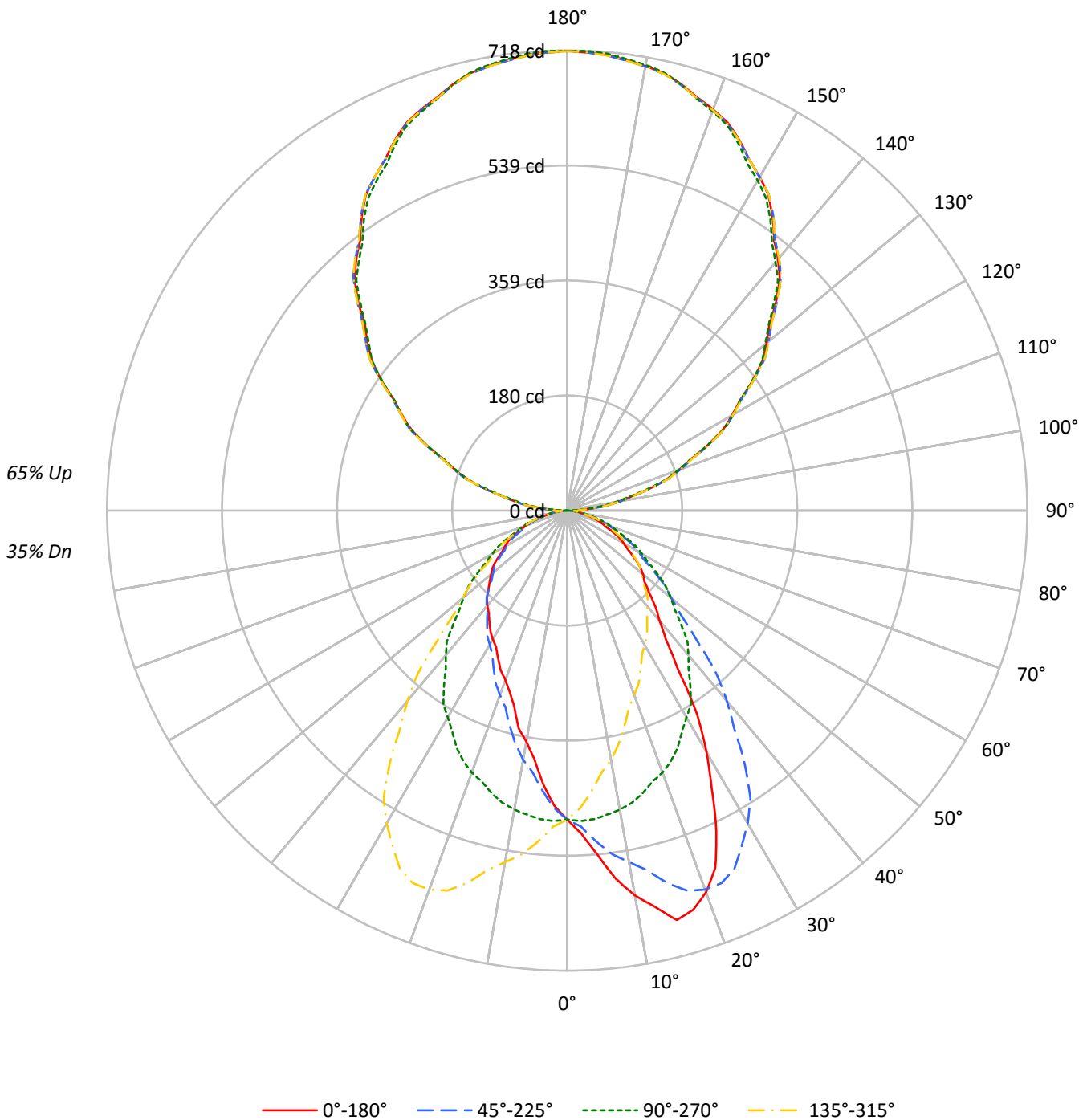
Input Watts (W): 30.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P331472-930

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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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35
1	95	91	87	84	85	82	79	76	66	64	62	51	50	49	38	37	36	30
2	86	79	74	69	78	72	67	63	58	55	52	45	43	41	34	32	31	26
3	79	70	63	58	71	64	58	53	52	47	44	40	38	35	30	28	27	22
4	72	62	55	49	65	57	50	45	46	41	38	36	33	30	27	25	23	19
5	67	55	48	42	60	51	44	39	41	36	33	33	29	26	24	22	20	17
6	61	50	42	36	55	45	39	34	37	32	28	30	26	23	22	20	18	15
7	57	45	37	32	51	41	34	30	34	29	25	27	23	21	20	18	16	13
8	53	41	33	28	48	37	31	26	31	26	22	25	21	18	19	16	15	12
9	49	37	30	25	44	34	28	23	28	23	20	23	19	17	17	15	13	11
10	46	34	27	23	41	31	25	21	26	21	18	21	17	15	16	14	12	10

**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: P331472-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-UDD-A1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.9	1.5
10°-20°	133.4	4.3
20°-30°	193.6	6.3
30°-40°	204.3	6.7
40°-50°	180.9	5.9
50°-60°	144.4	4.7
60°-70°	98.1	3.2
70°-80°	50.3	1.6
80°-90°	15.0	0.5
90°-100°	45.4	1.5
100°-110°	141.1	4.6
110°-120°	241.2	7.9
120°-130°	317.1	10.3
130°-140°	356.0	11.6
140°-150°	349.0	11.4
150°-160°	292.8	9.5
160°-170°	194.2	6.3
170°-180°	67.9	2.2
0°-30°	373.0	12.1
0°-40°	577.3	18.8
0°-60°	902.6	29.4
0°-90°	1066.0	34.7
90°-120°	427.7	13.9
90°-150°	1449.8	47.2
90°-180°	2005.0	65.3
0°-180°	3070.7	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	12
90°	20	1	20	1	20	9
95°	38	32	38	32	38	42
105°	134	130	134	130	134	141
115°	242	242	242	242	242	239
125°	353	352	353	352	353	315
135°	461	456	461	456	461	355
145°	559	553	559	553	559	349
155°	637	632	637	632	637	293
165°	688	688	688	688	688	194
175°	713	716	713	716	713	68
180°	717	717	717	717	717	



TEST NUMBER: P331472-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-UDD-A1

**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°	8.0	7.9	8.1	7.9	7.8	8.0	8.1	8.0	8.2	8.4	7.9
90°	20.5	20.5	20.3	20.1	20.1	20.1	20.4	20.6	20.9	21.2	18.2
92.5°	19.6	19.6	19.6	19.5	19.5	19.5	19.4	19.3	19.3	19.2	18.5
95°	37.5	37.7	38.1	38.3	38.6	38.7	38.7	38.7	38.7	38.7	38.5
97.5°	65.0	65.0	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	64.6
100°	82.9	83.0	83.2	83.3	83.4	83.5	83.5	83.5	83.5	83.5	83.1
102.5°	103.2	103.4	103.5	103.6	103.8	103.8	103.6	103.5	103.5	103.3	102.8
105°	134.3	134.3	134.3	134.3	134.3	134.2	133.9	133.6	133.4	133.1	132.8
107.5°	163.6	164.2	164.9	165.4	166.1	166.3	166.2	166.1	166.0	165.9	165.9
110°	186.4	186.7	187.1	187.5	187.9	188.2	188.2	188.2	188.2	188.2	188.2



TEST NUMBER: P331472-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	208.1	208.4	208.7	209.0	209.3	209.6	209.9	210.3	210.6	210.9	211.0
115°	242.0	242.4	242.8	243.2	243.6	243.9	244.0	244.2	244.3	244.4	244.7
117.5°	274.3	274.7	275.1	275.5	275.9	276.3	276.6	277.0	277.3	277.6	278.3
120°	297.0	297.4	297.8	298.2	298.6	298.9	298.9	298.9	298.9	298.9	299.9
122.5°	319.4	319.6	319.9	320.2	320.5	320.8	321.1	321.5	321.8	322.1	322.9
125°	353.4	353.4	353.6	353.8	353.8	354.1	354.5	354.9	355.3	355.7	356.1
127.5°	384.3	384.7	385.1	385.6	386.0	386.5	386.9	387.4	387.9	388.4	388.9
130°	406.6	407.1	407.6	408.1	408.7	409.1	409.4	409.7	409.9	410.2	410.4
132.5°	427.9	428.3	428.7	429.2	429.6	430.1	430.6	431.3	431.9	432.4	432.4
135°	461.0	461.4	461.8	462.2	462.6	462.9	463.0	463.2	463.3	463.4	463.2
137.5°	491.0	491.5	492.1	492.6	493.2	493.5	493.6	493.7	493.8	493.9	493.6
140°	511.8	512.3	512.9	513.5	514.0	514.2	514.2	514.2	514.2	514.2	513.6
142.5°	530.7	531.2	531.7	532.3	532.9	533.0	533.0	532.9	532.7	532.6	532.1
145°	559.1	559.5	560.1	560.6	561.2	561.3	561.3	561.1	560.9	560.8	560.0
147.5°	584.3	584.8	585.3	585.9	586.4	586.4	586.1	585.9	585.5	585.3	584.7
150°	600.8	601.2	601.5	601.9	602.3	602.3	601.9	601.5	601.2	600.8	600.2
152.5°	616.3	616.8	617.3	617.8	618.3	618.3	617.8	617.3	616.8	616.3	615.6
155°	637.1	637.5	637.9	638.3	638.7	638.5	637.9	637.2	636.5	635.9	635.4
157.5°	654.9	655.6	656.2	656.9	657.5	657.4	656.5	655.6	654.7	653.8	653.5
160°	666.1	666.7	667.2	667.7	668.2	668.1	667.3	666.5	665.7	664.9	664.7
162.5°	675.8	676.5	677.1	677.7	678.3	678.2	677.4	676.4	675.5	674.6	674.4
165°	688.5	689.2	689.8	690.5	691.2	691.0	690.1	689.2	688.2	687.3	687.3
167.5°	698.9	699.6	700.3	701.0	701.6	701.6	700.6	699.7	698.7	697.8	697.8
170°	704.2	705.0	705.8	706.6	707.4	707.4	706.5	705.5	704.6	703.6	703.8
172.5°	708.6	709.4	710.2	711.0	711.8	711.8	710.8	709.9	708.9	707.9	708.1
175°	713.3	714.1	714.9	715.7	716.5	716.5	715.5	714.5	713.6	712.7	713.0
177.5°	715.4	716.1	716.7	717.4	718.0	718.0	717.4	716.7	716.1	715.4	715.7
180°	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9



TEST NUMBER: P331472-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-UDD-A1

**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°	7.5	6.9	6.3	6.1	5.4	5.1	4.2	3.3	3.6	3.8	3.8
90°	15.2	12.3	9.4	7.1	5.5	3.8	2.2	0.6	2.2	3.8	5.5
92.5°	17.9	17.1	16.5	15.5	14.3	13.1	12.0	10.8	12.0	13.1	14.3
95°	38.2	37.9	37.7	36.9	35.5	34.2	32.8	31.5	32.8	34.2	35.5
97.5°	64.1	63.6	63.0	62.2	61.0	59.8	58.6	57.5	58.6	59.8	61.0
100°	82.7	82.3	81.9	81.1	80.1	79.0	77.9	76.8	77.9	79.0	80.1
102.5°	102.3	101.8	101.3	100.6	99.7	98.9	98.0	97.2	98.0	98.9	99.7
105°	132.6	132.3	132.0	131.7	131.3	130.9	130.4	130.0	130.4	130.9	131.3
107.5°	165.9	165.9	165.9	165.6	165.0	164.4	163.8	163.2	163.8	164.4	165.0
110°	188.2	188.2	188.2	187.8	186.9	186.1	185.3	184.5	185.3	186.1	186.9





TEST NUMBER: P331472-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	211.1	211.2	211.3	211.0	210.2	209.4	208.6	207.7	208.6	209.4	210.2
115°	244.9	245.2	245.5	245.2	244.4	243.6	242.8	242.0	242.8	243.6	244.4
117.5°	279.1	279.8	280.5	280.4	279.3	278.3	277.2	276.1	277.2	278.3	279.3
120°	301.0	302.1	303.1	303.1	302.1	301.0	299.9	298.9	299.9	301.0	302.1
122.5°	323.6	324.3	325.1	324.8	323.5	322.3	321.0	319.7	321.0	322.3	323.5
125°	356.5	356.9	357.3	356.9	355.7	354.5	353.4	352.1	353.4	354.5	355.7
127.5°	389.4	389.9	390.4	389.8	388.2	386.8	385.2	383.7	385.2	386.8	388.2
130°	410.7	411.0	411.2	410.5	408.8	407.0	405.3	403.5	405.3	407.0	408.8
132.5°	432.4	432.3	432.3	431.5	430.1	428.7	427.2	425.8	427.2	428.7	430.1
135°	462.9	462.6	462.4	461.5	460.0	458.5	457.1	455.6	457.1	458.5	460.0
137.5°	493.3	492.8	492.5	491.7	490.6	489.3	488.1	486.9	488.1	489.3	490.6
140°	512.9	512.3	511.5	510.6	509.4	508.2	507.0	505.8	507.0	508.2	509.4
142.5°	531.7	531.2	530.8	529.9	528.8	527.6	526.4	525.1	526.4	527.6	528.8
145°	559.2	558.4	557.6	556.8	555.8	554.8	553.9	552.9	553.9	554.8	555.8
147.5°	584.2	583.7	583.1	582.3	581.1	580.0	578.9	577.8	578.9	580.0	581.1
150°	599.7	599.2	598.6	597.9	597.1	596.3	595.5	594.7	595.5	596.3	597.1
152.5°	615.0	614.3	613.7	612.9	612.1	611.3	610.5	609.7	610.5	611.3	612.1
155°	635.0	634.6	634.2	633.8	633.4	633.0	632.6	632.2	632.6	633.0	633.4
157.5°	653.3	653.1	652.8	652.6	652.2	652.0	651.8	651.4	651.8	652.0	652.2
160°	664.6	664.5	664.4	664.1	663.9	663.6	663.3	663.1	663.3	663.6	663.9
162.5°	674.3	674.2	674.0	673.9	673.8	673.8	673.8	673.7	673.8	673.8	673.8
165°	687.3	687.3	687.3	687.4	687.5	687.6	687.7	687.9	687.7	687.6	687.5
167.5°	697.8	697.9	697.9	698.1	698.5	699.0	699.4	699.8	699.4	699.0	698.5
170°	703.8	704.0	704.2	704.4	704.8	705.2	705.6	706.0	705.6	705.2	704.8
172.5°	708.3	708.3	708.5	708.7	709.1	709.6	710.0	710.4	710.0	709.6	709.1
175°	713.2	713.5	713.8	714.1	714.5	714.9	715.3	715.7	715.3	714.9	714.5
177.5°	715.9	716.1	716.3	716.6	716.9	717.2	717.5	717.9	717.5	717.2	716.9
180°	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9



TEST NUMBER: P331472-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-UDD-A1

**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°	3.9	4.2	4.6	5.3	5.7	6.2	6.0	5.9	5.9	5.5	5.5
90°	7.1	9.4	12.3	15.2	18.2	21.2	20.9	20.6	20.4	20.1	20.1
92.5°	15.5	16.5	17.1	17.9	18.5	19.2	19.3	19.3	19.4	19.5	19.5
95°	36.9	37.7	37.9	38.2	38.5	38.7	38.7	38.7	38.7	38.7	38.6
97.5°	62.2	63.0	63.6	64.1	64.6	65.1	65.1	65.1	65.1	65.1	65.1
100°	81.1	81.9	82.3	82.7	83.1	83.5	83.5	83.5	83.5	83.5	83.4
102.5°	100.6	101.3	101.8	102.3	102.8	103.3	103.5	103.5	103.6	103.8	103.8
105°	131.7	132.0	132.3	132.6	132.8	133.1	133.4	133.6	133.9	134.2	134.3
107.5°	165.6	165.9	165.9	165.9	165.9	165.9	166.0	166.1	166.2	166.3	166.1
110°	187.8	188.2	188.2	188.2	188.2	188.2	188.2	188.2	188.2	188.2	187.9



TEST NUMBER: P331472-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	211.0	211.3	211.2	211.1	211.0	210.9	210.6	210.3	209.9	209.6	209.3
115°	245.2	245.5	245.2	244.9	244.7	244.4	244.3	244.2	244.0	243.9	243.6
117.5°	280.4	280.5	279.8	279.1	278.3	277.6	277.3	277.0	276.6	276.3	275.9
120°	303.1	303.1	302.1	301.0	299.9	298.9	298.9	298.9	298.9	298.9	298.6
122.5°	324.8	325.1	324.3	323.6	322.9	322.1	321.8	321.5	321.1	320.8	320.5
125°	356.9	357.3	356.9	356.5	356.1	355.7	355.3	354.9	354.5	354.1	353.8
127.5°	389.8	390.4	389.9	389.4	388.9	388.4	387.9	387.4	386.9	386.5	386.0
130°	410.5	411.2	411.0	410.7	410.4	410.2	409.9	409.7	409.4	409.1	408.7
132.5°	431.5	432.3	432.3	432.4	432.4	432.4	431.9	431.3	430.6	430.1	429.6
135°	461.5	462.4	462.6	462.9	463.2	463.4	463.3	463.2	463.0	462.9	462.6
137.5°	491.7	492.5	492.8	493.3	493.6	493.9	493.8	493.7	493.6	493.5	493.2
140°	510.6	511.5	512.3	512.9	513.6	514.2	514.2	514.2	514.2	514.2	514.0
142.5°	529.9	530.8	531.2	531.7	532.1	532.6	532.7	532.9	533.0	533.0	532.9
145°	556.8	557.6	558.4	559.2	560.0	560.8	560.9	561.1	561.3	561.3	561.2
147.5°	582.3	583.1	583.7	584.2	584.7	585.3	585.5	585.9	586.1	586.4	586.4
150°	597.9	598.6	599.2	599.7	600.2	600.8	601.2	601.5	601.9	602.3	602.3
152.5°	612.9	613.7	614.3	615.0	615.6	616.3	616.8	617.3	617.8	618.3	618.3
155°	633.8	634.2	634.6	635.0	635.4	635.9	636.5	637.2	637.9	638.5	638.7
157.5°	652.6	652.8	653.1	653.3	653.5	653.8	654.7	655.6	656.5	657.4	657.5
160°	664.1	664.4	664.5	664.6	664.7	664.9	665.7	666.5	667.3	668.1	668.2
162.5°	673.9	674.0	674.2	674.3	674.4	674.6	675.5	676.4	677.4	678.2	678.3
165°	687.4	687.3	687.3	687.3	687.3	687.3	688.2	689.2	690.1	691.0	691.2
167.5°	698.1	697.9	697.9	697.8	697.8	697.8	698.7	699.7	700.6	701.6	701.6
170°	704.4	704.2	704.0	703.8	703.8	703.6	704.6	705.5	706.5	707.4	707.4
172.5°	708.7	708.5	708.3	708.3	708.1	707.9	708.9	709.9	710.8	711.8	711.8
175°	714.1	713.8	713.5	713.2	713.0	712.7	713.6	714.5	715.5	716.5	716.5
177.5°	716.6	716.3	716.1	715.9	715.7	715.4	716.1	716.7	717.4	718.0	718.0
180°	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9



TEST NUMBER: P331472-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-UDD-A1

**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°	5.5	5.4	5.4	5.3	5.4	5.4	5.5	5.5	5.5	5.9	5.9
90°	20.1	20.3	20.5	20.5	20.5	20.3	20.1	20.1	20.1	20.4	20.6
92.5°	19.5	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.4	19.3
95°	38.3	38.1	37.7	37.5	37.7	38.1	38.3	38.6	38.7	38.7	38.7
97.5°	65.1	65.1	65.0	65.0	65.0	65.1	65.1	65.1	65.1	65.1	65.1
100°	83.3	83.2	83.0	82.9	83.0	83.2	83.3	83.4	83.5	83.5	83.5
102.5°	103.6	103.5	103.4	103.2	103.4	103.5	103.6	103.8	103.8	103.6	103.5
105°	134.3	134.3	134.3	134.3	134.3	134.3	134.3	134.3	134.2	133.9	133.6
107.5°	165.4	164.9	164.2	163.6	164.2	164.9	165.4	166.1	166.3	166.2	166.1
110°	187.5	187.1	186.7	186.4	186.7	187.1	187.5	187.9	188.2	188.2	188.2



TEST NUMBER: P331472-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	209.0	208.7	208.4	208.1	208.4	208.7	209.0	209.3	209.6	209.9	210.3
115°	243.2	242.8	242.4	242.0	242.4	242.8	243.2	243.6	243.9	244.0	244.2
117.5°	275.5	275.1	274.7	274.3	274.7	275.1	275.5	275.9	276.3	276.6	277.0
120°	298.2	297.8	297.4	297.0	297.4	297.8	298.2	298.6	298.9	298.9	298.9
122.5°	320.2	319.9	319.6	319.4	319.6	319.9	320.2	320.5	320.8	321.1	321.5
125°	353.8	353.6	353.4	353.4	353.4	353.6	353.8	353.8	354.1	354.5	354.9
127.5°	385.6	385.1	384.7	384.3	384.7	385.1	385.6	386.0	386.5	386.9	387.4
130°	408.1	407.6	407.1	406.6	407.1	407.6	408.1	408.7	409.1	409.4	409.7
132.5°	429.2	428.7	428.3	427.9	428.3	428.7	429.2	429.6	430.1	430.6	431.3
135°	462.2	461.8	461.4	461.0	461.4	461.8	462.2	462.6	462.9	463.0	463.2
137.5°	492.6	492.1	491.5	491.0	491.5	492.1	492.6	493.2	493.5	493.6	493.7
140°	513.5	512.9	512.3	511.8	512.3	512.9	513.5	514.0	514.2	514.2	514.2
142.5°	532.3	531.7	531.2	530.7	531.2	531.7	532.3	532.9	533.0	533.0	532.9
145°	560.6	560.1	559.5	559.1	559.5	560.1	560.6	561.2	561.3	561.3	561.1
147.5°	585.9	585.3	584.8	584.3	584.8	585.3	585.9	586.4	586.4	586.1	585.9
150°	601.9	601.5	601.2	600.8	601.2	601.5	601.9	602.3	602.3	601.9	601.5
152.5°	617.8	617.3	616.8	616.3	616.8	617.3	617.8	618.3	618.3	617.8	617.3
155°	638.3	637.9	637.5	637.1	637.5	637.9	638.3	638.7	638.5	637.9	637.2
157.5°	656.9	656.2	655.6	654.9	655.6	656.2	656.9	657.5	657.4	656.5	655.6
160°	667.7	667.2	666.7	666.1	666.7	667.2	667.7	668.2	668.1	667.3	666.5
162.5°	677.7	677.1	676.5	675.8	676.5	677.1	677.7	678.3	678.2	677.4	676.4
165°	690.5	689.8	689.2	688.5	689.2	689.8	690.5	691.2	691.0	690.1	689.2
167.5°	701.0	700.3	699.6	698.9	699.6	700.3	701.0	701.6	701.6	700.6	699.7
170°	706.6	705.8	705.0	704.2	705.0	705.8	706.6	707.4	707.4	706.5	705.5
172.5°	711.0	710.2	709.4	708.6	709.4	710.2	711.0	711.8	711.8	710.8	709.9
175°	715.7	714.9	714.1	713.3	714.1	714.9	715.7	716.5	716.5	715.5	714.5
177.5°	717.4	716.7	716.1	715.4	716.1	716.7	717.4	718.0	718.0	717.4	716.7
180°	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9



TEST NUMBER: P331472-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-UDD-A1

**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°	6.0	6.2	5.7	5.3	4.6	4.2	3.9	3.8	3.8	3.6	3.3
90°	20.9	21.2	18.2	15.2	12.3	9.4	7.1	5.5	3.8	2.2	0.6
92.5°	19.3	19.2	18.5	17.9	17.1	16.5	15.5	14.3	13.1	12.0	10.8
95°	38.7	38.7	38.5	38.2	37.9	37.7	36.9	35.5	34.2	32.8	31.5
97.5°	65.1	65.1	64.6	64.1	63.6	63.0	62.2	61.0	59.8	58.6	57.5
100°	83.5	83.5	83.1	82.7	82.3	81.9	81.1	80.1	79.0	77.9	76.8
102.5°	103.5	103.3	102.8	102.3	101.8	101.3	100.6	99.7	98.9	98.0	97.2
105°	133.4	133.1	132.8	132.6	132.3	132.0	131.7	131.3	130.9	130.4	130.0
107.5°	166.0	165.9	165.9	165.9	165.9	165.9	165.6	165.0	164.4	163.8	163.2
110°	188.2	188.2	188.2	188.2	188.2	188.2	187.8	186.9	186.1	185.3	184.5



TEST NUMBER: P331472-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	210.6	210.9	211.0	211.1	211.2	211.3	211.0	210.2	209.4	208.6	207.7
115°	244.3	244.4	244.7	244.9	245.2	245.5	245.2	244.4	243.6	242.8	242.0
117.5°	277.3	277.6	278.3	279.1	279.8	280.5	280.4	279.3	278.3	277.2	276.1
120°	298.9	298.9	299.9	301.0	302.1	303.1	303.1	302.1	301.0	299.9	298.9
122.5°	321.8	322.1	322.9	323.6	324.3	325.1	324.8	323.5	322.3	321.0	319.7
125°	355.3	355.7	356.1	356.5	356.9	357.3	356.9	355.7	354.5	353.4	352.1
127.5°	387.9	388.4	388.9	389.4	389.9	390.4	389.8	388.2	386.8	385.2	383.7
130°	409.9	410.2	410.4	410.7	411.0	411.2	410.5	408.8	407.0	405.3	403.5
132.5°	431.9	432.4	432.4	432.4	432.3	432.3	431.5	430.1	428.7	427.2	425.8
135°	463.3	463.4	463.2	462.9	462.6	462.4	461.5	460.0	458.5	457.1	455.6
137.5°	493.8	493.9	493.6	493.3	492.8	492.5	491.7	490.6	489.3	488.1	486.9
140°	514.2	514.2	513.6	512.9	512.3	511.5	510.6	509.4	508.2	507.0	505.8
142.5°	532.7	532.6	532.1	531.7	531.2	530.8	529.9	528.8	527.6	526.4	525.1
145°	560.9	560.8	560.0	559.2	558.4	557.6	556.8	555.8	554.8	553.9	552.9
147.5°	585.5	585.3	584.7	584.2	583.7	583.1	582.3	581.1	580.0	578.9	577.8
150°	601.2	600.8	600.2	599.7	599.2	598.6	597.9	597.1	596.3	595.5	594.7
152.5°	616.8	616.3	615.6	615.0	614.3	613.7	612.9	612.1	611.3	610.5	609.7
155°	636.5	635.9	635.4	635.0	634.6	634.2	633.8	633.4	633.0	632.6	632.2
157.5°	654.7	653.8	653.5	653.3	653.1	652.8	652.6	652.2	652.0	651.8	651.4
160°	665.7	664.9	664.7	664.6	664.5	664.4	664.1	663.9	663.6	663.3	663.1
162.5°	675.5	674.6	674.4	674.3	674.2	674.0	673.9	673.8	673.8	673.8	673.7
165°	688.2	687.3	687.3	687.3	687.3	687.3	687.3	687.4	687.5	687.6	687.9
167.5°	698.7	697.8	697.8	697.8	697.9	697.9	698.1	698.5	699.0	699.4	699.8
170°	704.6	703.6	703.8	703.8	704.0	704.2	704.4	704.8	705.2	705.6	706.0
172.5°	708.9	707.9	708.1	708.3	708.3	708.5	708.7	709.1	709.6	710.0	710.4
175°	713.6	712.7	713.0	713.2	713.5	713.8	714.1	714.5	714.9	715.3	715.7
177.5°	716.1	715.4	715.7	715.9	716.1	716.3	716.6	716.9	717.2	717.5	717.9
180°	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9



TEST NUMBER: P331472-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-UDD-A1

**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°	4.2	5.1	5.4	6.1	6.3	6.9	7.5	7.9	8.4	8.2	8.0
90°	2.2	3.8	5.5	7.1	9.4	12.3	15.2	18.2	21.2	20.9	20.6
92.5°	12.0	13.1	14.3	15.5	16.5	17.1	17.9	18.5	19.2	19.3	19.3
95°	32.8	34.2	35.5	36.9	37.7	37.9	38.2	38.5	38.7	38.7	38.7
97.5°	58.6	59.8	61.0	62.2	63.0	63.6	64.1	64.6	65.1	65.1	65.1
100°	77.9	79.0	80.1	81.1	81.9	82.3	82.7	83.1	83.5	83.5	83.5
102.5°	98.0	98.9	99.7	100.6	101.3	101.8	102.3	102.8	103.3	103.5	103.5
105°	130.4	130.9	131.3	131.7	132.0	132.3	132.6	132.8	133.1	133.4	133.6
107.5°	163.8	164.4	165.0	165.6	165.9	165.9	165.9	165.9	165.9	166.0	166.1
110°	185.3	186.1	186.9	187.8	188.2	188.2	188.2	188.2	188.2	188.2	188.2





TEST NUMBER: P331472-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	208.6	209.4	210.2	211.0	211.3	211.2	211.1	211.0	210.9	210.6	210.3
115°	242.8	243.6	244.4	245.2	245.5	245.2	244.9	244.7	244.4	244.3	244.2
117.5°	277.2	278.3	279.3	280.4	280.5	279.8	279.1	278.3	277.6	277.3	277.0
120°	299.9	301.0	302.1	303.1	303.1	302.1	301.0	299.9	298.9	298.9	298.9
122.5°	321.0	322.3	323.5	324.8	325.1	324.3	323.6	322.9	322.1	321.8	321.5
125°	353.4	354.5	355.7	356.9	357.3	356.9	356.5	356.1	355.7	355.3	354.9
127.5°	385.2	386.8	388.2	389.8	390.4	389.9	389.4	388.9	388.4	387.9	387.4
130°	405.3	407.0	408.8	410.5	411.2	411.0	410.7	410.4	410.2	409.9	409.7
132.5°	427.2	428.7	430.1	431.5	432.3	432.3	432.4	432.4	432.4	431.9	431.3
135°	457.1	458.5	460.0	461.5	462.4	462.6	462.9	463.2	463.4	463.3	463.2
137.5°	488.1	489.3	490.6	491.7	492.5	492.8	493.3	493.6	493.9	493.8	493.7
140°	507.0	508.2	509.4	510.6	511.5	512.3	512.9	513.6	514.2	514.2	514.2
142.5°	526.4	527.6	528.8	529.9	530.8	531.2	531.7	532.1	532.6	532.7	532.9
145°	553.9	554.8	555.8	556.8	557.6	558.4	559.2	560.0	560.8	560.9	561.1
147.5°	578.9	580.0	581.1	582.3	583.1	583.7	584.2	584.7	585.3	585.5	585.9
150°	595.5	596.3	597.1	597.9	598.6	599.2	599.7	600.2	600.8	601.2	601.5
152.5°	610.5	611.3	612.1	612.9	613.7	614.3	615.0	615.6	616.3	616.8	617.3
155°	632.6	633.0	633.4	633.8	634.2	634.6	635.0	635.4	635.9	636.5	637.2
157.5°	651.8	652.0	652.2	652.6	652.8	653.1	653.3	653.5	653.8	654.7	655.6
160°	663.3	663.6	663.9	664.1	664.4	664.5	664.6	664.7	664.9	665.7	666.5
162.5°	673.8	673.8	673.8	673.9	674.0	674.2	674.3	674.4	674.6	675.5	676.4
165°	687.7	687.6	687.5	687.4	687.3	687.3	687.3	687.3	687.3	688.2	689.2
167.5°	699.4	699.0	698.5	698.1	697.9	697.9	697.8	697.8	697.8	698.7	699.7
170°	705.6	705.2	704.8	704.4	704.2	704.0	703.8	703.8	703.6	704.6	705.5
172.5°	710.0	709.6	709.1	708.7	708.5	708.3	708.3	708.1	707.9	708.9	709.9
175°	715.3	714.9	714.5	714.1	713.8	713.5	713.2	713.0	712.7	713.6	714.5
177.5°	717.5	717.2	716.9	716.6	716.3	716.1	715.9	715.7	715.4	716.1	716.7
180°	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9	716.9



TEST NUMBER: P331472-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-UDD-A1

**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°	8.1	8.0	7.8	7.9	8.1	7.9	8.0
90°	20.4	20.1	20.1	20.1	20.3	20.5	20.5
92.5°	19.4	19.5	19.5	19.5	19.6	19.6	19.6
95°	38.7	38.7	38.6	38.3	38.1	37.7	37.5
97.5°	65.1	65.1	65.1	65.1	65.1	65.0	65.0
100°	83.5	83.5	83.4	83.3	83.2	83.0	82.9
102.5°	103.6	103.8	103.8	103.6	103.5	103.4	103.2
105°	133.9	134.2	134.3	134.3	134.3	134.3	134.3
107.5°	166.2	166.3	166.1	165.4	164.9	164.2	163.6
110°	188.2	188.2	187.9	187.5	187.1	186.7	186.4



TEST NUMBER: P331472-930

CATALOG NUMBER: S122DIW-S290D710U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	209.9	209.6	209.3	209.0	208.7	208.4	208.1
115°	244.0	243.9	243.6	243.2	242.8	242.4	242.0
117.5°	276.6	276.3	275.9	275.5	275.1	274.7	274.3
120°	298.9	298.9	298.6	298.2	297.8	297.4	297.0
122.5°	321.1	320.8	320.5	320.2	319.9	319.6	319.4
125°	354.5	354.1	353.8	353.8	353.6	353.4	353.4
127.5°	386.9	386.5	386.0	385.6	385.1	384.7	384.3
130°	409.4	409.1	408.7	408.1	407.6	407.1	406.6
132.5°	430.6	430.1	429.6	429.2	428.7	428.3	427.9
135°	463.0	462.9	462.6	462.2	461.8	461.4	461.0
137.5°	493.6	493.5	493.2	492.6	492.1	491.5	491.0
140°	514.2	514.2	514.0	513.5	512.9	512.3	511.8
142.5°	533.0	533.0	532.9	532.3	531.7	531.2	530.7
145°	561.3	561.3	561.2	560.6	560.1	559.5	559.1
147.5°	586.1	586.4	586.4	585.9	585.3	584.8	584.3
150°	601.9	602.3	602.3	601.9	601.5	601.2	600.8
152.5°	617.8	618.3	618.3	617.8	617.3	616.8	616.3
155°	637.9	638.5	638.7	638.3	637.9	637.5	637.1
157.5°	656.5	657.4	657.5	656.9	656.2	655.6	654.9
160°	667.3	668.1	668.2	667.7	667.2	666.7	666.1
162.5°	677.4	678.2	678.3	677.7	677.1	676.5	675.8
165°	690.1	691.0	691.2	690.5	689.8	689.2	688.5
167.5°	700.6	701.6	701.6	701.0	700.3	699.6	698.9
170°	706.5	707.4	707.4	706.6	705.8	705.0	704.2
172.5°	710.8	711.8	711.8	711.0	710.2	709.4	708.6
175°	715.5	716.5	716.5	715.7	714.9	714.1	713.3
177.5°	717.4	718.0	718.0	717.4	716.7	716.1	715.4
180°	716.9	716.9	716.9	716.9	716.9	716.9	716.9

(END OF REPORT)