

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: P332715-930

Luminaire Tested: **S124DIW-S350D470U930-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332715-930  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124DIW-S350D470U930-4F0-1E-UDD-A  
Description: DEFINE 4 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 350 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 470 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2814.7 lumens  
Efficiency: N/A  
Efficacy: 122.4 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41  
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')  
CIE Type: General Diffuse

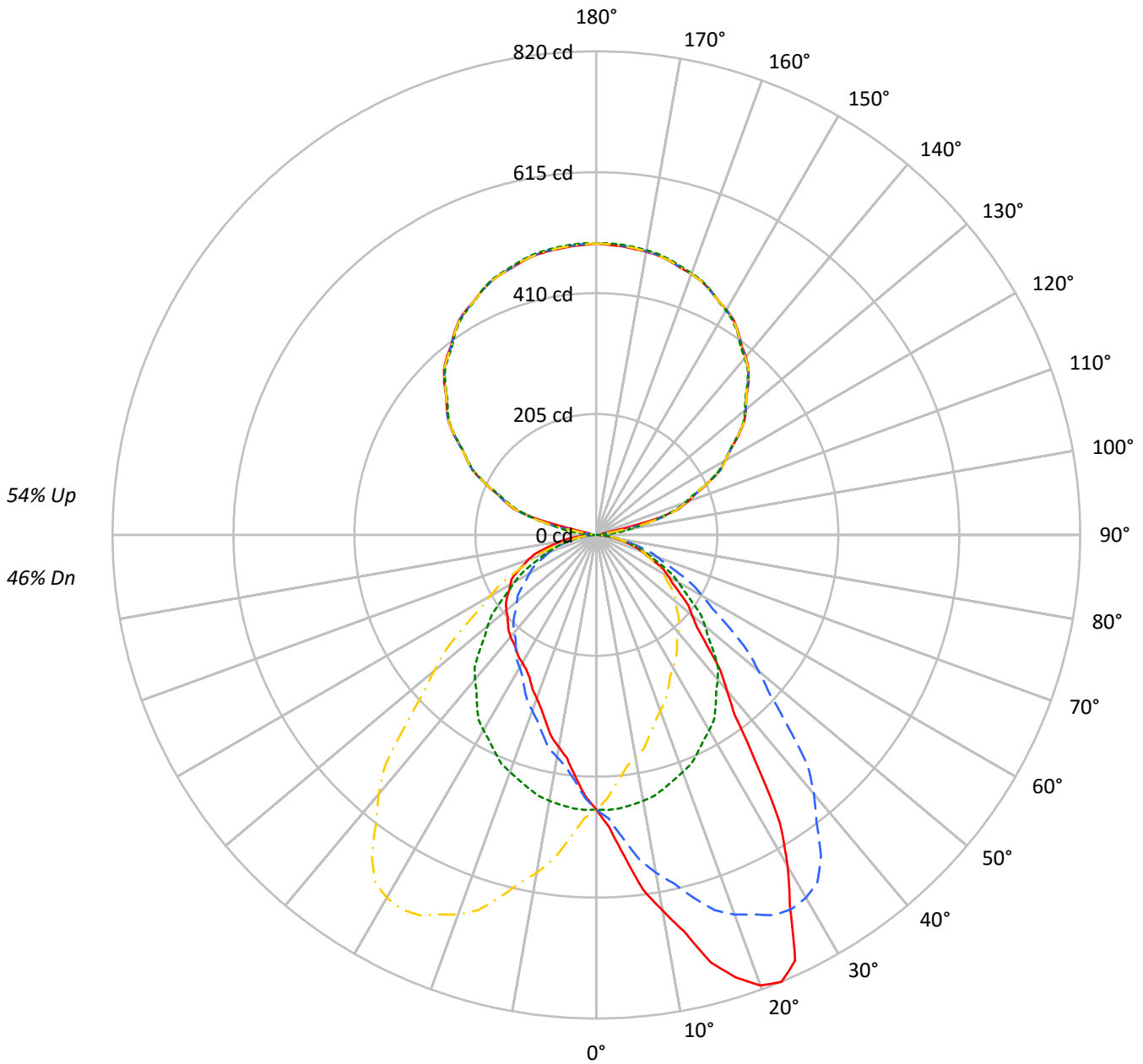
Input Watts (W): 23  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot



— 0°-180°    - - 45°-225°    - · - · 90°-270°    - · - · 135°-315°



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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	50	30	10	0	
RCR																						
0	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46				46
1	97	93	89	86	89	85	82	79	71	69	67	58	57	55	46	45	44				39	
2	88	81	75	70	81	75	70	65	63	59	56	51	49	46	41	39	38				33	
3	81	72	64	59	74	66	60	55	55	51	47	46	42	40	37	34	32				28	
4	74	63	56	50	68	59	52	47	49	44	40	41	37	34	33	30	28				24	
5	68	57	49	43	62	52	45	40	44	39	35	37	33	30	30	27	25				21	
6	63	51	43	37	57	47	40	35	40	34	30	33	29	26	27	24	22				19	
7	58	46	38	33	53	43	36	31	36	31	27	30	26	23	25	22	19				17	
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	17				15	
9	50	38	31	26	46	35	29	24	30	25	21	25	21	18	21	18	16				13	
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	19	16	14				12	

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

	0°	90°	180°	270°
0°	3760	3760	3760	3760
5°	4428	3770	3327	3770
10°	5302	3754	2995	3754
15°	6273	3716	2751	3716
20°	6985	3677	2533	3677
25°	7098	3619	2382	3619
30°	6040	3566	2335	3566
35°	4644	3476	2335	3476
40°	3620	3371	2380	3371
45°	3017	3214	2419	3214
50°	2656	3022	2501	3022
55°	2434	2792	2601	2792
60°	2280	2585	2722	2585
65°	2122	2355	2823	2355
70°	1940	2127	2887	2127
75°	1734	1871	2854	1871
80°	1450	1534	2762	1534
85°	1074	1112	2640	1112



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.4	1.6
10°-20°	139.9	5.0
20°-30°	221.8	7.9
30°-40°	246.8	8.8
40°-50°	224.7	8.0
50°-60°	183.6	6.5
60°-70°	131.1	4.7
70°-80°	72.2	2.6
80°-90°	21.1	0.8
90°-100°	16.9	0.6
100°-110°	107.7	3.8
110°-120°	206.1	7.3
120°-130°	261.6	9.3
130°-140°	279.9	9.9
140°-150°	261.7	9.3
150°-160°	211.1	7.5
160°-170°	136.1	4.8
170°-180°	46.9	1.7
0°-30°	407.0	14.5
0°-40°	653.9	23.2
0°-60°	1062.2	37.7
0°-90°	1286.6	45.7
90°-120°	330.7	11.7
90°-150°	1134.0	40.3
90°-180°	1528.0	54.3
0°-180°	2814.7	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	466	466	466	466	466	
5°	546	465	411	465	546	56
15°	751	445	329	445	751	212
25°	797	406	267	406	797	351
35°	471	353	237	353	471	299
45°	264	282	212	282	264	208
55°	173	198	185	198	173	156
65°	111	123	148	123	111	110
75°	56	60	92	60	56	59
85°	12	12	28	12	12	14
90°	11	1	11	1	11	5
95°	11	20	11	20	11	9
105°	105	111	105	111	105	92
115°	209	208	209	208	209	207
125°	294	292	294	292	294	262
135°	365	362	365	362	365	281
145°	420	418	420	418	420	262
155°	458	458	458	458	458	211
165°	481	483	481	483	481	136
175°	491	494	491	494	491	47
180°	494	494	494	494	494	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8
2.5°	495.7	495.6	494.1	493.7	492.7	491.3	491.0	488.4	483.6	481.2	480.6
5°	546.4	550.3	545.3	544.3	543.7	537.4	534.1	530.3	521.4	516.2	512.1
7.5°	607.0	607.4	605.2	603.5	598.5	593.0	584.7	575.8	565.2	554.2	545.9
10°	646.8	648.3	645.8	645.5	635.6	629.4	617.1	606.7	594.7	581.4	569.2
12.5°	688.8	686.6	685.3	677.1	675.2	664.0	649.6	639.0	620.4	605.1	589.0
15°	750.6	746.3	743.6	732.3	726.7	711.0	695.8	684.0	659.9	636.9	619.5
17.5°	786.8	791.1	784.9	780.2	765.7	754.7	739.2	714.4	695.6	667.1	645.1
20°	813.1	813.5	810.0	805.2	793.9	779.9	763.0	736.0	713.4	685.0	654.8
22.5°	820.2	820.3	818.8	814.3	805.7	794.4	777.3	754.7	727.4	696.6	666.4
25°	796.9	796.1	797.9	802.9	799.6	796.1	786.3	769.5	744.0	711.4	679.0
27.5°	710.3	715.7	725.5	737.8	749.7	758.7	761.2	757.8	742.1	715.3	681.3
30°	647.9	654.5	661.9	674.2	698.1	711.8	726.8	738.3	731.9	710.5	678.8
32.5°	579.4	581.1	591.9	605.9	627.9	654.2	678.1	701.2	708.9	697.7	671.2
35°	471.2	473.9	485.7	499.5	526.4	558.6	594.5	626.6	653.0	663.6	650.0
37.5°	384.5	392.2	400.6	415.5	439.1	468.1	505.4	546.9	586.3	612.7	617.2
40°	343.5	348.3	354.2	365.7	385.7	414.3	446.3	493.7	535.7	573.5	585.8
42.5°	311.0	313.9	317.6	327.8	343.1	371.5	400.8	442.5	484.5	529.8	550.5
45°	264.3	267.3	273.5	279.4	291.0	310.6	337.9	372.2	414.5	458.0	496.3
47.5°	230.6	232.4	236.1	242.6	252.4	265.4	287.5	316.2	355.3	397.7	438.4
50°	211.5	213.0	215.9	221.7	229.3	240.8	258.9	285.8	316.4	359.1	399.0
52.5°	196.3	197.0	199.1	203.0	209.0	218.7	233.7	255.8	284.4	322.4	362.2
55°	172.9	173.7	175.6	178.5	183.7	189.9	201.2	217.8	242.7	275.7	310.3
57.5°	153.6	154.2	155.7	156.9	161.2	166.2	175.0	186.8	205.6	233.7	264.5
60°	141.2	140.9	142.8	143.7	146.7	150.9	157.7	169.0	185.4	208.0	236.4
62.5°	129.2	128.7	130.3	131.6	133.2	136.8	142.4	151.2	164.6	185.0	209.5
65°	111.1	110.4	111.4	112.9	114.4	116.3	120.4	128.3	138.9	153.6	172.3
67.5°	93.0	93.8	94.0	94.7	95.6	98.2	101.0	106.6	114.1	125.9	141.7
70°	82.2	82.4	83.2	83.2	83.7	86.1	88.4	91.6	99.0	109.8	122.7
72.5°	71.4	72.2	71.9	72.5	73.0	74.5	76.1	79.3	85.5	93.6	104.5
75°	55.6	56.2	56.2	56.3	56.9	57.5	58.9	61.1	65.6	71.6	79.1
77.5°	40.5	40.6	40.8	41.6	41.6	42.5	43.5	45.3	47.5	51.6	56.3
80°	31.2	31.6	31.5	31.9	31.9	32.6	33.0	35.3	36.3	39.0	42.6
82.5°	22.9	23.3	23.2	23.8	24.1	24.3	24.8	25.8	26.7	29.1	30.6
85°	11.6	12.0	11.6	12.0	12.6	12.7	13.3	13.5	14.3	14.8	16.2
87.5°	5.6	6.0	6.0	6.1	6.4	6.5	6.5	6.3	6.8	6.8	7.3
90°	11.1	10.9	10.8	10.6	10.4	10.1	9.6	9.1	8.6	8.2	7.5
92.5°	10.2	10.2	10.1	10.1	10.0	9.8	9.3	8.8	8.3	7.8	7.2
95°	10.7	10.6	10.5	10.4	10.4	10.1	9.6	9.1	8.6	8.2	8.1
97.5°	10.4	10.3	10.2	10.1	10.0	9.9	9.9	9.9	9.8	9.8	18.9
100°	10.4	10.3	10.2	10.1	10.0	10.7	12.1	13.5	14.8	16.2	27.6
102.5°	10.7	10.6	10.6	10.6	10.6	18.1	33.2	48.2	63.3	78.4	79.8
105°	105.3	108.3	111.2	114.1	117.2	118.2	117.5	116.8	116.0	115.3	114.9
107.5°	146.8	146.4	146.1	145.9	145.5	145.2	144.8	144.5	144.1	143.7	143.2
110°	164.8	164.5	164.3	164.0	163.8	163.6	163.5	163.3	163.1	163.0	162.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	182.8	182.5	182.2	181.9	181.6	181.4	181.5	181.5	181.6	181.6	181.3
115°	209.1	209.1	209.1	209.1	209.1	209.0	208.9	208.7	208.6	208.4	208.5
117.5°	235.9	235.9	235.9	235.9	236.0	236.0	236.1	236.1	236.1	236.2	236.0
120°	252.7	252.9	253.1	253.2	253.4	253.4	253.2	253.1	252.9	252.7	252.8
122.5°	269.3	269.5	269.6	269.8	269.9	269.9	269.9	269.8	269.7	269.6	269.5
125°	294.1	294.0	293.9	293.8	293.8	293.6	293.3	293.1	292.9	292.6	292.8
127.5°	315.9	316.0	316.0	316.1	316.2	316.3	316.3	316.3	316.4	316.4	316.1
130°	330.7	330.7	330.7	330.7	330.7	330.7	330.6	330.5	330.4	330.4	330.1
132.5°	344.3	344.4	344.5	344.5	344.5	344.5	344.5	344.4	344.3	344.2	343.9
135°	364.7	364.5	364.4	364.2	364.0	363.9	363.7	363.5	363.4	363.2	362.9
137.5°	382.1	382.2	382.2	382.3	382.3	382.3	382.0	381.9	381.7	381.6	381.2
140°	394.3	394.2	394.1	394.0	394.0	393.8	393.5	393.3	393.1	392.8	392.6
142.5°	404.3	404.3	404.3	404.2	404.2	404.1	404.0	403.7	403.6	403.4	403.3
145°	419.7	419.6	419.4	419.2	419.1	419.0	418.9	418.8	418.7	418.7	418.7
147.5°	432.5	432.4	432.4	432.3	432.2	432.1	432.0	432.0	431.9	431.9	431.9
150°	440.8	440.8	440.7	440.6	440.5	440.4	440.4	440.4	440.4	440.4	440.5
152.5°	447.9	447.9	448.0	448.1	448.1	448.1	447.9	447.8	447.7	447.5	447.7
155°	457.5	457.7	458.0	458.2	458.4	458.4	458.0	457.7	457.4	457.1	457.3
157.5°	465.5	465.9	466.3	466.7	467.1	467.1	466.7	466.3	465.9	465.5	465.7
160°	470.8	471.2	471.7	472.2	472.7	472.7	472.2	471.7	471.2	470.8	470.8
162.5°	474.9	475.4	476.0	476.5	477.1	477.1	476.6	476.1	475.6	475.2	475.2
165°	480.7	481.4	482.2	482.9	483.6	483.7	483.1	482.4	481.8	481.1	481.1
167.5°	485.1	485.9	486.7	487.5	488.4	488.4	487.7	487.0	486.2	485.5	485.6
170°	487.7	488.5	489.3	490.2	491.1	491.1	490.4	489.8	489.1	488.4	488.4
172.5°	489.2	490.1	491.0	491.9	492.8	492.8	492.2	491.5	490.9	490.2	490.2
175°	491.1	492.0	493.0	494.0	495.0	495.1	494.4	493.7	492.9	492.2	492.1
177.5°	492.3	493.0	493.8	494.6	495.4	495.5	495.0	494.5	493.9	493.4	493.3
180°	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8
2.5°	480.8	478.6	477.0	475.8	472.5	470.4	468.9	466.8	464.2	461.6	458.4
5°	508.0	501.5	496.7	489.3	482.4	476.6	470.6	465.2	458.7	451.5	446.3
7.5°	536.7	526.9	514.5	503.6	491.4	480.8	471.3	461.6	451.5	441.6	432.7
10°	555.0	542.4	528.5	512.1	496.7	483.0	470.3	457.9	445.9	434.0	423.7
12.5°	574.5	558.9	538.3	519.2	501.9	483.6	468.2	453.1	438.6	426.1	414.2
15°	600.9	578.3	554.6	528.9	506.1	484.7	463.7	444.6	428.4	411.7	400.1
17.5°	617.0	589.1	562.0	535.2	507.6	480.5	457.9	435.9	415.6	399.1	384.5
20°	627.7	599.9	566.1	539.3	506.5	478.7	452.5	428.0	406.8	389.2	374.1
22.5°	636.9	604.9	571.0	535.7	503.1	473.6	444.9	420.3	398.6	380.1	365.7
25°	642.0	605.1	568.4	533.3	496.3	461.4	435.3	406.3	383.2	363.7	348.3
27.5°	642.5	603.1	561.6	522.6	484.4	451.8	419.0	393.1	369.1	348.5	333.6
30°	640.8	599.7	555.1	512.9	474.5	439.2	410.6	382.5	357.9	337.5	322.0
32.5°	635.4	592.6	546.8	502.1	462.3	427.7	398.3	371.5	347.6	327.4	311.2
35°	619.8	577.5	528.7	482.2	441.5	406.6	379.9	352.7	328.8	309.7	294.1
37.5°	595.3	557.2	507.5	459.4	419.4	384.3	357.9	333.4	311.8	292.4	276.4
40°	574.1	540.5	490.6	443.8	400.6	367.2	342.5	319.9	298.5	280.1	264.9
42.5°	549.5	520.2	474.3	424.7	382.9	349.4	325.4	305.1	284.9	268.0	252.7
45°	505.7	486.4	443.2	397.3	353.8	322.2	299.3	281.5	264.6	247.9	235.2
47.5°	455.4	445.8	409.4	365.8	324.7	293.4	273.5	257.1	242.2	228.2	217.0
50°	421.6	416.9	385.6	343.5	304.1	274.8	254.7	240.6	227.9	215.6	204.9
52.5°	388.2	388.1	359.7	321.2	284.8	256.6	236.6	223.5	212.5	202.4	192.9
55°	337.3	342.7	320.5	286.2	253.6	228.0	210.1	198.4	190.6	182.4	175.2
57.5°	290.5	299.5	281.1	250.9	223.6	200.2	184.6	175.8	167.5	162.5	157.3
60°	259.9	268.4	254.1	228.7	203.0	183.0	168.0	160.1	153.0	149.5	145.9
62.5°	232.8	240.3	229.8	206.1	183.8	164.5	152.0	144.4	139.6	135.8	133.4
65°	194.0	200.3	191.2	174.1	154.9	139.5	129.3	123.3	118.7	117.2	114.4
67.5°	156.8	162.6	157.7	143.1	127.8	116.0	108.0	102.3	99.5	98.2	96.3
70°	134.7	140.5	135.3	122.5	110.7	100.9	93.4	90.1	87.2	86.7	84.0
72.5°	116.0	119.9	114.7	104.8	94.7	86.4	80.6	77.1	75.7	74.6	73.1
75°	87.0	90.5	87.0	79.3	72.2	66.4	61.4	60.0	58.3	57.7	56.7
77.5°	61.6	64.6	62.0	57.2	51.8	47.3	44.6	42.9	42.5	41.5	42.0
80°	47.0	49.0	46.5	43.2	39.0	35.9	34.0	33.0	31.9	31.5	32.2
82.5°	33.8	34.7	33.3	31.1	28.0	26.0	24.7	23.6	23.3	23.4	23.4
85°	17.5	17.4	17.2	15.2	14.3	13.0	12.1	12.0	11.7	12.1	12.6
87.5°	7.3	7.3	6.9	6.2	5.5	4.9	4.6	4.2	4.6	4.9	5.2
90°	6.8	6.2	5.5	4.7	3.8	2.9	2.0	1.1	2.0	2.9	3.8
92.5°	6.5	5.9	5.2	4.9	4.8	4.7	4.7	4.6	4.7	4.7	4.8
95°	8.0	7.9	7.8	9.1	12.0	14.8	17.5	20.3	17.5	14.8	12.0
97.5°	28.0	37.3	46.4	50.1	48.3	46.6	44.9	43.1	44.9	46.6	48.3
100°	38.9	50.2	61.6	66.5	65.1	63.6	62.0	60.6	62.0	63.6	65.1
102.5°	81.3	82.8	84.2	84.5	83.3	82.3	81.2	80.1	81.2	82.3	83.3
105°	114.5	114.1	113.7	113.2	112.7	112.2	111.7	111.2	111.7	112.2	112.7
107.5°	142.6	142.0	141.5	141.1	140.9	140.6	140.4	140.1	140.4	140.6	140.9
110°	162.0	161.4	160.9	160.6	160.4	160.1	159.9	159.6	159.9	160.1	160.4





TEST NUMBER: P332715-930

CATALOG NUMBER: S124DIW-S350D470U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	181.1	180.9	180.7	180.3	179.9	179.4	179.0	178.6	179.0	179.4	179.9
115°	208.6	208.6	208.7	208.6	208.4	208.1	207.9	207.7	207.9	208.1	208.4
117.5°	235.8	235.6	235.5	235.2	234.9	234.6	234.2	233.9	234.2	234.6	234.9
120°	252.9	253.0	253.1	252.9	252.6	252.3	251.9	251.6	251.9	252.3	252.6
122.5°	269.4	269.2	269.1	269.0	268.8	268.6	268.4	268.2	268.4	268.6	268.8
125°	292.9	293.1	293.3	293.2	292.9	292.5	292.2	291.9	292.2	292.5	292.9
127.5°	315.7	315.3	315.0	314.7	314.6	314.5	314.5	314.4	314.5	314.5	314.6
130°	329.9	329.6	329.4	329.2	329.1	329.1	328.9	328.8	328.9	329.1	329.1
132.5°	343.6	343.3	343.0	342.8	342.6	342.4	342.3	342.2	342.3	342.4	342.6
135°	362.6	362.2	361.9	361.7	361.8	361.9	362.0	362.1	362.0	361.9	361.8
137.5°	380.8	380.4	380.1	379.9	379.8	379.8	379.8	379.8	379.8	379.8	379.8
140°	392.5	392.2	392.1	391.9	391.8	391.6	391.4	391.3	391.4	391.6	391.8
142.5°	403.2	403.1	403.0	402.8	402.5	402.3	401.9	401.6	401.9	402.3	402.5
145°	418.7	418.7	418.7	418.5	418.2	418.0	417.8	417.5	417.8	418.0	418.2
147.5°	432.0	432.1	432.2	432.0	431.5	431.0	430.6	430.2	430.6	431.0	431.5
150°	440.6	440.7	440.8	440.7	440.3	440.0	439.7	439.4	439.7	440.0	440.3
152.5°	447.8	448.0	448.1	448.1	447.8	447.5	447.3	447.0	447.3	447.5	447.8
155°	457.5	457.8	458.0	458.1	458.0	458.0	457.9	457.8	457.9	458.0	458.0
157.5°	465.9	466.3	466.5	466.7	466.8	466.8	466.8	466.9	466.8	466.8	466.8
160°	470.9	471.0	471.1	471.2	471.5	471.7	472.0	472.2	472.0	471.7	471.5
162.5°	475.3	475.4	475.5	475.7	476.0	476.3	476.6	477.0	476.6	476.3	476.0
165°	481.1	481.1	481.1	481.3	481.7	482.1	482.5	482.9	482.5	482.1	481.7
167.5°	485.6	485.7	485.7	485.9	486.4	486.8	487.2	487.6	487.2	486.8	486.4
170°	488.3	488.2	488.1	488.4	488.9	489.3	489.8	490.3	489.8	489.3	488.9
172.5°	490.1	490.0	489.9	490.2	490.6	491.1	491.6	492.1	491.6	491.1	490.6
175°	492.0	492.0	491.9	492.0	492.5	493.0	493.5	494.0	493.5	493.0	492.5
177.5°	493.2	493.0	492.9	493.1	493.5	494.0	494.5	494.9	494.5	494.0	493.5
180°	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0



TEST NUMBER: P332715-930

CATALOG NUMBER: S124DIW-S350D470U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8
2.5°	456.8	455.4	453.5	450.7	448.3	445.9	445.2	444.3	446.2	444.7	444.2
5°	441.9	437.8	432.6	426.6	423.1	418.2	417.2	415.2	413.3	413.1	411.2
7.5°	426.0	420.0	413.2	407.2	401.5	396.0	392.4	391.7	388.8	387.1	385.2
10°	415.8	408.5	400.6	394.8	388.2	382.5	378.4	376.1	374.1	372.0	370.1
12.5°	403.8	396.0	389.5	383.2	375.4	371.0	364.4	360.4	360.0	360.0	355.0
15°	389.8	382.0	372.0	363.1	358.9	350.4	346.7	342.1	339.2	336.3	334.0
17.5°	373.7	364.1	356.3	346.1	338.0	331.3	326.4	323.7	319.3	315.2	312.3
20°	363.7	353.5	345.2	334.4	325.5	317.2	313.2	309.3	306.1	302.6	299.3
22.5°	353.5	342.8	332.7	322.2	314.0	305.2	301.3	296.0	292.9	291.0	287.7
25°	337.5	325.9	314.3	304.3	295.8	288.0	282.9	278.8	275.3	273.8	271.7
27.5°	320.0	308.5	297.3	285.9	276.3	270.7	266.5	263.5	261.5	259.4	258.4
30°	308.9	296.9	285.0	274.3	265.5	259.9	256.1	254.0	252.4	251.4	250.5
32.5°	297.7	285.8	273.3	263.6	255.6	250.6	247.7	245.6	244.8	244.5	244.1
35°	279.6	267.7	256.1	247.4	239.9	237.9	235.4	234.2	233.8	235.2	235.8
37.5°	262.1	251.0	240.4	232.0	227.0	224.2	223.3	223.4	224.8	225.9	227.3
40°	250.9	240.0	230.0	222.7	218.0	216.3	215.9	216.9	218.4	219.8	221.4
42.5°	239.9	229.3	220.1	213.3	210.0	208.4	208.6	209.6	211.8	213.4	215.7
45°	222.9	214.0	205.1	199.5	196.8	197.2	197.2	198.9	201.1	203.6	206.1
47.5°	206.8	197.9	190.6	185.9	184.5	184.2	185.2	187.5	190.5	193.6	197.1
50°	196.1	187.5	181.2	176.9	175.4	175.9	177.5	179.6	183.3	187.2	190.9
52.5°	185.1	177.3	171.5	167.5	166.4	167.5	169.0	172.4	175.6	179.8	184.2
55°	168.0	161.5	156.9	154.0	153.6	154.2	155.9	159.6	164.2	169.4	173.7
57.5°	151.2	145.6	141.4	139.4	139.6	140.1	143.0	147.3	152.3	157.8	163.3
60°	139.7	134.7	131.2	129.6	129.9	131.0	134.5	138.5	144.7	150.1	155.9
62.5°	128.9	124.5	121.2	119.8	119.5	122.1	125.4	129.6	135.7	141.8	148.1
65°	111.5	108.0	105.3	104.6	105.2	107.1	111.4	116.9	122.1	128.5	135.1
67.5°	94.6	91.7	89.8	90.2	90.9	93.8	97.3	102.1	108.0	114.6	121.1
70°	83.7	81.0	79.5	79.7	80.9	84.3	87.4	92.2	98.6	105.3	110.7
72.5°	72.6	70.8	69.5	70.3	71.4	73.8	77.7	82.5	88.1	94.4	100.1
75°	55.8	55.8	55.0	55.6	57.3	59.6	62.5	67.5	73.1	78.2	82.8
77.5°	41.3	40.9	41.4	42.2	43.1	45.9	49.2	52.8	57.0	62.0	65.9
80°	31.6	31.9	32.8	34.0	34.3	36.4	39.9	43.2	46.5	50.7	54.4
82.5°	23.8	24.0	24.5	25.9	26.3	28.6	30.8	34.1	37.1	39.9	43.0
85°	13.0	13.0	13.9	14.5	15.4	17.0	18.3	20.3	23.0	24.9	27.8
87.5°	5.9	6.0	6.8	7.3	7.8	8.7	9.1	10.9	11.7	12.6	13.9
90°	4.7	5.5	6.2	6.8	7.5	8.2	8.6	9.1	9.6	10.1	10.4
92.5°	4.9	5.2	5.9	6.5	7.2	7.8	8.3	8.8	9.3	9.8	10.0
95°	9.1	7.8	7.9	8.0	8.1	8.2	8.6	9.1	9.6	10.1	10.4
97.5°	50.1	46.4	37.3	28.0	18.9	9.8	9.8	9.9	9.9	9.9	10.0
100°	66.5	61.6	50.2	38.9	27.6	16.2	14.8	13.5	12.1	10.7	10.0
102.5°	84.5	84.2	82.8	81.3	79.8	78.4	63.3	48.2	33.2	18.1	10.6
105°	113.2	113.7	114.1	114.5	114.9	115.3	116.0	116.8	117.5	118.2	117.2
107.5°	141.1	141.5	142.0	142.6	143.2	143.7	144.1	144.5	144.8	145.2	145.5
110°	160.6	160.9	161.4	162.0	162.5	163.0	163.1	163.3	163.5	163.6	163.8



TEST NUMBER: P332715-930

CATALOG NUMBER: S124DIW-S350D470U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	180.3	180.7	180.9	181.1	181.3	181.6	181.6	181.5	181.5	181.4	181.6
115°	208.6	208.7	208.6	208.6	208.5	208.4	208.6	208.7	208.9	209.0	209.1
117.5°	235.2	235.5	235.6	235.8	236.0	236.2	236.1	236.1	236.1	236.0	236.0
120°	252.9	253.1	253.0	252.9	252.8	252.7	252.9	253.1	253.2	253.4	253.4
122.5°	269.0	269.1	269.2	269.4	269.5	269.6	269.7	269.8	269.9	269.9	269.9
125°	293.2	293.3	293.1	292.9	292.8	292.6	292.9	293.1	293.3	293.6	293.8
127.5°	314.7	315.0	315.3	315.7	316.1	316.4	316.4	316.3	316.3	316.3	316.2
130°	329.2	329.4	329.6	329.9	330.1	330.4	330.4	330.5	330.6	330.7	330.7
132.5°	342.8	343.0	343.3	343.6	343.9	344.2	344.3	344.4	344.5	344.5	344.5
135°	361.7	361.9	362.2	362.6	362.9	363.2	363.4	363.5	363.7	363.9	364.0
137.5°	379.9	380.1	380.4	380.8	381.2	381.6	381.7	381.9	382.0	382.3	382.3
140°	391.9	392.1	392.2	392.5	392.6	392.8	393.1	393.3	393.5	393.8	394.0
142.5°	402.8	403.0	403.1	403.2	403.3	403.4	403.6	403.7	404.0	404.1	404.2
145°	418.5	418.7	418.7	418.7	418.7	418.7	418.7	418.8	418.9	419.0	419.1
147.5°	432.0	432.2	432.1	432.0	431.9	431.9	431.9	432.0	432.0	432.1	432.2
150°	440.7	440.8	440.7	440.6	440.5	440.4	440.4	440.4	440.4	440.4	440.5
152.5°	448.1	448.1	448.0	447.8	447.7	447.5	447.7	447.8	447.9	448.1	448.1
155°	458.1	458.0	457.8	457.5	457.3	457.1	457.4	457.7	458.0	458.4	458.4
157.5°	466.7	466.5	466.3	465.9	465.7	465.5	465.9	466.3	466.7	467.1	467.1
160°	471.2	471.1	471.0	470.9	470.8	470.8	471.2	471.7	472.2	472.7	472.7
162.5°	475.7	475.5	475.4	475.3	475.2	475.2	475.6	476.1	476.6	477.1	477.1
165°	481.3	481.1	481.1	481.1	481.1	481.1	481.8	482.4	483.1	483.7	483.6
167.5°	485.9	485.7	485.7	485.6	485.6	485.5	486.2	487.0	487.7	488.4	488.4
170°	488.4	488.1	488.2	488.3	488.4	488.4	489.1	489.8	490.4	491.1	491.1
172.5°	490.2	489.9	490.0	490.1	490.2	490.2	490.9	491.5	492.2	492.8	492.8
175°	492.0	491.9	492.0	492.0	492.1	492.2	492.9	493.7	494.4	495.1	495.0
177.5°	493.1	492.9	493.0	493.2	493.3	493.4	493.9	494.5	495.0	495.5	495.4
180°	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0



TEST NUMBER: P332715-930

CATALOG NUMBER: S124DIW-S350D470U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8
2.5°	443.8	443.6	442.5	442.3	442.5	443.6	443.8	444.2	444.7	446.2	444.3
5°	410.0	409.0	408.5	410.6	408.5	409.0	410.0	411.2	413.1	413.3	415.2
7.5°	384.5	383.8	382.0	381.5	382.0	383.8	384.5	385.2	387.1	388.8	391.7
10°	368.2	367.4	365.8	365.4	365.8	367.4	368.2	370.1	372.0	374.1	376.1
12.5°	352.4	350.9	350.6	351.0	350.6	350.9	352.4	355.0	360.0	360.0	360.4
15°	331.5	330.7	328.6	329.2	328.6	330.7	331.5	334.0	336.3	339.2	342.1
17.5°	310.9	310.0	307.4	309.7	307.4	310.0	310.9	312.3	315.2	319.3	323.7
20°	297.9	296.4	295.1	294.8	295.1	296.4	297.9	299.3	302.6	306.1	309.3
22.5°	285.6	284.2	284.1	282.8	284.1	284.2	285.6	287.7	291.0	292.9	296.0
25°	270.1	268.8	268.4	267.4	268.4	268.8	270.1	271.7	273.8	275.3	278.8
27.5°	258.3	257.6	256.9	257.2	256.9	257.6	258.3	258.4	259.4	261.5	263.5
30°	251.0	250.9	250.5	250.5	250.5	250.9	251.0	250.5	251.4	252.4	254.0
32.5°	245.0	245.0	245.2	245.2	245.2	245.0	245.0	244.1	244.5	244.8	245.6
35°	236.6	237.2	237.5	236.9	237.5	237.2	236.6	235.8	235.2	233.8	234.2
37.5°	228.9	229.5	230.1	230.7	230.1	229.5	228.9	227.3	225.9	224.8	223.4
40°	223.1	224.4	224.8	225.8	224.8	224.4	223.1	221.4	219.8	218.4	216.9
42.5°	217.5	219.0	220.0	220.2	220.0	219.0	217.5	215.7	213.4	211.8	209.6
45°	209.0	210.5	211.9	211.9	211.9	210.5	209.0	206.1	203.6	201.1	198.9
47.5°	200.2	202.4	203.7	204.1	203.7	202.4	200.2	197.1	193.6	190.5	187.5
50°	194.1	196.8	198.2	199.1	198.2	196.8	194.1	190.9	187.2	183.3	179.6
52.5°	188.3	190.9	192.7	193.2	192.7	190.9	188.3	184.2	179.8	175.6	172.4
55°	178.1	182.0	184.1	184.8	184.1	182.0	178.1	173.7	169.4	164.2	159.6
57.5°	168.5	172.1	174.6	175.1	174.6	172.1	168.5	163.3	157.8	152.3	147.3
60°	161.1	165.0	168.0	168.6	168.0	165.0	161.1	155.9	150.1	144.7	138.5
62.5°	153.5	157.6	160.4	161.8	160.4	157.6	153.5	148.1	141.8	135.7	129.6
65°	140.5	144.6	147.2	147.8	147.2	144.6	140.5	135.1	128.5	122.1	116.9
67.5°	126.2	130.3	132.0	133.1	132.0	130.3	126.2	121.1	114.6	108.0	102.1
70°	116.2	119.4	121.4	122.3	121.4	119.4	116.2	110.7	105.3	98.6	92.2
72.5°	104.8	108.2	110.4	110.6	110.4	108.2	104.8	100.1	94.4	88.1	82.5
75°	87.2	90.3	91.5	91.5	91.5	90.3	87.2	82.8	78.2	73.1	67.5
77.5°	69.1	70.6	72.1	72.4	72.1	70.6	69.1	65.9	62.0	57.0	52.8
80°	57.3	58.3	59.4	59.4	59.4	58.3	57.3	54.4	50.7	46.5	43.2
82.5°	45.2	46.1	47.2	47.0	47.2	46.1	45.2	43.0	39.9	37.1	34.1
85°	27.4	29.1	28.9	28.5	28.9	29.1	27.4	27.8	24.9	23.0	20.3
87.5°	14.4	14.7	15.2	15.5	15.2	14.7	14.4	13.9	12.6	11.7	10.9
90°	10.6	10.8	10.9	11.1	10.9	10.8	10.6	10.4	10.1	9.6	9.1
92.5°	10.1	10.1	10.2	10.2	10.2	10.1	10.1	10.0	9.8	9.3	8.8
95°	10.4	10.5	10.6	10.7	10.6	10.5	10.4	10.4	10.1	9.6	9.1
97.5°	10.1	10.2	10.3	10.4	10.3	10.2	10.1	10.0	9.9	9.9	9.9
100°	10.1	10.2	10.3	10.4	10.3	10.2	10.1	10.0	10.7	12.1	13.5
102.5°	10.6	10.6	10.6	10.7	10.6	10.6	10.6	10.6	18.1	33.2	48.2
105°	114.1	111.2	108.3	105.3	108.3	111.2	114.1	117.2	118.2	117.5	116.8
107.5°	145.9	146.1	146.4	146.8	146.4	146.1	145.9	145.5	145.2	144.8	144.5
110°	164.0	164.3	164.5	164.8	164.5	164.3	164.0	163.8	163.6	163.5	163.3



TEST NUMBER: P332715-930

CATALOG NUMBER: S124DIW-S350D470U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	181.9	182.2	182.5	182.8	182.5	182.2	181.9	181.6	181.4	181.5	181.5
115°	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.0	208.9	208.7
117.5°	235.9	235.9	235.9	235.9	235.9	235.9	235.9	236.0	236.0	236.1	236.1
120°	253.2	253.1	252.9	252.7	252.9	253.1	253.2	253.4	253.4	253.2	253.1
122.5°	269.8	269.6	269.5	269.3	269.5	269.6	269.8	269.9	269.9	269.9	269.8
125°	293.8	293.9	294.0	294.1	294.0	293.9	293.8	293.8	293.6	293.3	293.1
127.5°	316.1	316.0	316.0	315.9	316.0	316.0	316.1	316.2	316.3	316.3	316.3
130°	330.7	330.7	330.7	330.7	330.7	330.7	330.7	330.7	330.7	330.6	330.5
132.5°	344.5	344.5	344.4	344.3	344.4	344.5	344.5	344.5	344.5	344.5	344.4
135°	364.2	364.4	364.5	364.7	364.5	364.4	364.2	364.0	363.9	363.7	363.5
137.5°	382.3	382.2	382.2	382.1	382.2	382.2	382.3	382.3	382.3	382.0	381.9
140°	394.0	394.1	394.2	394.3	394.2	394.1	394.0	394.0	393.8	393.5	393.3
142.5°	404.2	404.3	404.3	404.3	404.3	404.3	404.2	404.2	404.1	404.0	403.7
145°	419.2	419.4	419.6	419.7	419.6	419.4	419.2	419.1	419.0	418.9	418.8
147.5°	432.3	432.4	432.4	432.5	432.4	432.4	432.3	432.2	432.1	432.0	432.0
150°	440.6	440.7	440.8	440.8	440.8	440.7	440.6	440.5	440.4	440.4	440.4
152.5°	448.1	448.0	447.9	447.9	447.9	448.0	448.1	448.1	448.1	447.9	447.8
155°	458.2	458.0	457.7	457.5	457.7	458.0	458.2	458.4	458.4	458.0	457.7
157.5°	466.7	466.3	465.9	465.5	465.9	466.3	466.7	467.1	467.1	466.7	466.3
160°	472.2	471.7	471.2	470.8	471.2	471.7	472.2	472.7	472.7	472.2	471.7
162.5°	476.5	476.0	475.4	474.9	475.4	476.0	476.5	477.1	477.1	476.6	476.1
165°	482.9	482.2	481.4	480.7	481.4	482.2	482.9	483.6	483.7	483.1	482.4
167.5°	487.5	486.7	485.9	485.1	485.9	486.7	487.5	488.4	488.4	487.7	487.0
170°	490.2	489.3	488.5	487.7	488.5	489.3	490.2	491.1	491.1	490.4	489.8
172.5°	491.9	491.0	490.1	489.2	490.1	491.0	491.9	492.8	492.8	492.2	491.5
175°	494.0	493.0	492.0	491.1	492.0	493.0	494.0	495.0	495.1	494.4	493.7
177.5°	494.6	493.8	493.0	492.3	493.0	493.8	494.6	495.4	495.5	495.0	494.5
180°	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0



TEST NUMBER: P332715-930

CATALOG NUMBER: S124DIW-S350D470U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8
2.5°	445.2	445.9	448.3	450.7	453.5	455.4	456.8	458.4	461.6	464.2	466.8
5°	417.2	418.2	423.1	426.6	432.6	437.8	441.9	446.3	451.5	458.7	465.2
7.5°	392.4	396.0	401.5	407.2	413.2	420.0	426.0	432.7	441.6	451.5	461.6
10°	378.4	382.5	388.2	394.8	400.6	408.5	415.8	423.7	434.0	445.9	457.9
12.5°	364.4	371.0	375.4	383.2	389.5	396.0	403.8	414.2	426.1	438.6	453.1
15°	346.7	350.4	358.9	363.1	372.0	382.0	389.8	400.1	411.7	428.4	444.6
17.5°	326.4	331.3	338.0	346.1	356.3	364.1	373.7	384.5	399.1	415.6	435.9
20°	313.2	317.2	325.5	334.4	345.2	353.5	363.7	374.1	389.2	406.8	428.0
22.5°	301.3	305.2	314.0	322.2	332.7	342.8	353.5	365.7	380.1	398.6	420.3
25°	282.9	288.0	295.8	304.3	314.3	325.9	337.5	348.3	363.7	383.2	406.3
27.5°	266.5	270.7	276.3	285.9	297.3	308.5	320.0	333.6	348.5	369.1	393.1
30°	256.1	259.9	265.5	274.3	285.0	296.9	308.9	322.0	337.5	357.9	382.5
32.5°	247.7	250.6	255.6	263.6	273.3	285.8	297.7	311.2	327.4	347.6	371.5
35°	235.4	237.9	239.9	247.4	256.1	267.7	279.6	294.1	309.7	328.8	352.7
37.5°	223.3	224.2	227.0	232.0	240.4	251.0	262.1	276.4	292.4	311.8	333.4
40°	215.9	216.3	218.0	222.7	230.0	240.0	250.9	264.9	280.1	298.5	319.9
42.5°	208.6	208.4	210.0	213.3	220.1	229.3	239.9	252.7	268.0	284.9	305.1
45°	197.2	197.2	196.8	199.5	205.1	214.0	222.9	235.2	247.9	264.6	281.5
47.5°	185.2	184.2	184.5	185.9	190.6	197.9	206.8	217.0	228.2	242.2	257.1
50°	177.5	175.9	175.4	176.9	181.2	187.5	196.1	204.9	215.6	227.9	240.6
52.5°	169.0	167.5	166.4	167.5	171.5	177.3	185.1	192.9	202.4	212.5	223.5
55°	155.9	154.2	153.6	154.0	156.9	161.5	168.0	175.2	182.4	190.6	198.4
57.5°	143.0	140.1	139.6	139.4	141.4	145.6	151.2	157.3	162.5	167.5	175.8
60°	134.5	131.0	129.9	129.6	131.2	134.7	139.7	145.9	149.5	153.0	160.1
62.5°	125.4	122.1	119.5	119.8	121.2	124.5	128.9	133.4	135.8	139.6	144.4
65°	111.4	107.1	105.2	104.6	105.3	108.0	111.5	114.4	117.2	118.7	123.3
67.5°	97.3	93.8	90.9	90.2	89.8	91.7	94.6	96.3	98.2	99.5	102.3
70°	87.4	84.3	80.9	79.7	79.5	81.0	83.7	84.0	86.7	87.2	90.1
72.5°	77.7	73.8	71.4	70.3	69.5	70.8	72.6	73.1	74.6	75.7	77.1
75°	62.5	59.6	57.3	55.6	55.0	55.8	55.8	56.7	57.7	58.3	60.0
77.5°	49.2	45.9	43.1	42.2	41.4	40.9	41.3	42.0	41.5	42.5	42.9
80°	39.9	36.4	34.3	34.0	32.8	31.9	31.6	32.2	31.5	31.9	33.0
82.5°	30.8	28.6	26.3	25.9	24.5	24.0	23.8	23.4	23.4	23.3	23.6
85°	18.3	17.0	15.4	14.5	13.9	13.0	13.0	12.6	12.1	11.7	12.0
87.5°	9.1	8.7	7.8	7.3	6.8	6.0	5.9	5.2	4.9	4.6	4.2
90°	8.6	8.2	7.5	6.8	6.2	5.5	4.7	3.8	2.9	2.0	1.1
92.5°	8.3	7.8	7.2	6.5	5.9	5.2	4.9	4.8	4.7	4.7	4.6
95°	8.6	8.2	8.1	8.0	7.9	7.8	9.1	12.0	14.8	17.5	20.3
97.5°	9.8	9.8	18.9	28.0	37.3	46.4	50.1	48.3	46.6	44.9	43.1
100°	14.8	16.2	27.6	38.9	50.2	61.6	66.5	65.1	63.6	62.0	60.6
102.5°	63.3	78.4	79.8	81.3	82.8	84.2	84.5	83.3	82.3	81.2	80.1
105°	116.0	115.3	114.9	114.5	114.1	113.7	113.2	112.7	112.2	111.7	111.2
107.5°	144.1	143.7	143.2	142.6	142.0	141.5	141.1	140.9	140.6	140.4	140.1
110°	163.1	163.0	162.5	162.0	161.4	160.9	160.6	160.4	160.1	159.9	159.6



TEST NUMBER: P332715-930

CATALOG NUMBER: S124DIW-S350D470U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	181.6	181.6	181.3	181.1	180.9	180.7	180.3	179.9	179.4	179.0	178.6
115°	208.6	208.4	208.5	208.6	208.6	208.7	208.6	208.4	208.1	207.9	207.7
117.5°	236.1	236.2	236.0	235.8	235.6	235.5	235.2	234.9	234.6	234.2	233.9
120°	252.9	252.7	252.8	252.9	253.0	253.1	252.9	252.6	252.3	251.9	251.6
122.5°	269.7	269.6	269.5	269.4	269.2	269.1	269.0	268.8	268.6	268.4	268.2
125°	292.9	292.6	292.8	292.9	293.1	293.3	293.2	292.9	292.5	292.2	291.9
127.5°	316.4	316.4	316.1	315.7	315.3	315.0	314.7	314.6	314.5	314.5	314.4
130°	330.4	330.4	330.1	329.9	329.6	329.4	329.2	329.1	329.1	328.9	328.8
132.5°	344.3	344.2	343.9	343.6	343.3	343.0	342.8	342.6	342.4	342.3	342.2
135°	363.4	363.2	362.9	362.6	362.2	361.9	361.7	361.8	361.9	362.0	362.1
137.5°	381.7	381.6	381.2	380.8	380.4	380.1	379.9	379.8	379.8	379.8	379.8
140°	393.1	392.8	392.6	392.5	392.2	392.1	391.9	391.8	391.6	391.4	391.3
142.5°	403.6	403.4	403.3	403.2	403.1	403.0	402.8	402.5	402.3	401.9	401.6
145°	418.7	418.7	418.7	418.7	418.7	418.7	418.5	418.2	418.0	417.8	417.5
147.5°	431.9	431.9	431.9	432.0	432.1	432.2	432.0	431.5	431.0	430.6	430.2
150°	440.4	440.4	440.5	440.6	440.7	440.8	440.7	440.3	440.0	439.7	439.4
152.5°	447.7	447.5	447.7	447.8	448.0	448.1	448.1	447.8	447.5	447.3	447.0
155°	457.4	457.1	457.3	457.5	457.8	458.0	458.1	458.0	458.0	457.9	457.8
157.5°	465.9	465.5	465.7	465.9	466.3	466.5	466.7	466.8	466.8	466.8	466.9
160°	471.2	470.8	470.8	470.9	471.0	471.1	471.2	471.5	471.7	472.0	472.2
162.5°	475.6	475.2	475.2	475.3	475.4	475.5	475.7	476.0	476.3	476.6	477.0
165°	481.8	481.1	481.1	481.1	481.1	481.1	481.3	481.7	482.1	482.5	482.9
167.5°	486.2	485.5	485.6	485.6	485.7	485.7	485.9	486.4	486.8	487.2	487.6
170°	489.1	488.4	488.4	488.3	488.2	488.1	488.4	488.9	489.3	489.8	490.3
172.5°	490.9	490.2	490.2	490.1	490.0	489.9	490.2	490.6	491.1	491.6	492.1
175°	492.9	492.2	492.1	492.0	492.0	491.9	492.0	492.5	493.0	493.5	494.0
177.5°	493.9	493.4	493.3	493.2	493.0	492.9	493.1	493.5	494.0	494.5	494.9
180°	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0



TEST NUMBER: P332715-930

CATALOG NUMBER: S124DIW-S350D470U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8	465.8
2.5°	468.9	470.4	472.5	475.8	477.0	478.6	480.8	480.6	481.2	483.6	488.4
5°	470.6	476.6	482.4	489.3	496.7	501.5	508.0	512.1	516.2	521.4	530.3
7.5°	471.3	480.8	491.4	503.6	514.5	526.9	536.7	545.9	554.2	565.2	575.8
10°	470.3	483.0	496.7	512.1	528.5	542.4	555.0	569.2	581.4	594.7	606.7
12.5°	468.2	483.6	501.9	519.2	538.3	558.9	574.5	589.0	605.1	620.4	639.0
15°	463.7	484.7	506.1	528.9	554.6	578.3	600.9	619.5	636.9	659.9	684.0
17.5°	457.9	480.5	507.6	535.2	562.0	589.1	617.0	645.1	667.1	695.6	714.4
20°	452.5	478.7	506.5	539.3	566.1	599.9	627.7	654.8	685.0	713.4	736.0
22.5°	444.9	473.6	503.1	535.7	571.0	604.9	636.9	666.4	696.6	727.4	754.7
25°	435.3	461.4	496.3	533.3	568.4	605.1	642.0	679.0	711.4	744.0	769.5
27.5°	419.0	451.8	484.4	522.6	561.6	603.1	642.5	681.3	715.3	742.1	757.8
30°	410.6	439.2	474.5	512.9	555.1	599.7	640.8	678.8	710.5	731.9	738.3
32.5°	398.3	427.7	462.3	502.1	546.8	592.6	635.4	671.2	697.7	708.9	701.2
35°	379.9	406.6	441.5	482.2	528.7	577.5	619.8	650.0	663.6	653.0	626.6
37.5°	357.9	384.3	419.4	459.4	507.5	557.2	595.3	617.2	612.7	586.3	546.9
40°	342.5	367.2	400.6	443.8	490.6	540.5	574.1	585.8	573.5	535.7	493.7
42.5°	325.4	349.4	382.9	424.7	474.3	520.2	549.5	550.5	529.8	484.5	442.5
45°	299.3	322.2	353.8	397.3	443.2	486.4	505.7	496.3	458.0	414.5	372.2
47.5°	273.5	293.4	324.7	365.8	409.4	445.8	455.4	438.4	397.7	355.3	316.2
50°	254.7	274.8	304.1	343.5	385.6	416.9	421.6	399.0	359.1	316.4	285.8
52.5°	236.6	256.6	284.8	321.2	359.7	388.1	388.2	362.2	322.4	284.4	255.8
55°	210.1	228.0	253.6	286.2	320.5	342.7	337.3	310.3	275.7	242.7	217.8
57.5°	184.6	200.2	223.6	250.9	281.1	299.5	290.5	264.5	233.7	205.6	186.8
60°	168.0	183.0	203.0	228.7	254.1	268.4	259.9	236.4	208.0	185.4	169.0
62.5°	152.0	164.5	183.8	206.1	229.8	240.3	232.8	209.5	185.0	164.6	151.2
65°	129.3	139.5	154.9	174.1	191.2	200.3	194.0	172.3	153.6	138.9	128.3
67.5°	108.0	116.0	127.8	143.1	157.7	162.6	156.8	141.7	125.9	114.1	106.6
70°	93.4	100.9	110.7	122.5	135.3	140.5	134.7	122.7	109.8	99.0	91.6
72.5°	80.6	86.4	94.7	104.8	114.7	119.9	116.0	104.5	93.6	85.5	79.3
75°	61.4	66.4	72.2	79.3	87.0	90.5	87.0	79.1	71.6	65.6	61.1
77.5°	44.6	47.3	51.8	57.2	62.0	64.6	61.6	56.3	51.6	47.5	45.3
80°	34.0	35.9	39.0	43.2	46.5	49.0	47.0	42.6	39.0	36.3	35.3
82.5°	24.7	26.0	28.0	31.1	33.3	34.7	33.8	30.6	29.1	26.7	25.8
85°	12.1	13.0	14.3	15.2	17.2	17.4	17.5	16.2	14.8	14.3	13.5
87.5°	4.6	4.9	5.5	6.2	6.9	7.3	7.3	7.3	6.8	6.8	6.3
90°	2.0	2.9	3.8	4.7	5.5	6.2	6.8	7.5	8.2	8.6	9.1
92.5°	4.7	4.7	4.8	4.9	5.2	5.9	6.5	7.2	7.8	8.3	8.8
95°	17.5	14.8	12.0	9.1	7.8	7.9	8.0	8.1	8.2	8.6	9.1
97.5°	44.9	46.6	48.3	50.1	46.4	37.3	28.0	18.9	9.8	9.8	9.9
100°	62.0	63.6	65.1	66.5	61.6	50.2	38.9	27.6	16.2	14.8	13.5
102.5°	81.2	82.3	83.3	84.5	84.2	82.8	81.3	79.8	78.4	63.3	48.2
105°	111.7	112.2	112.7	113.2	113.7	114.1	114.5	114.9	115.3	116.0	116.8
107.5°	140.4	140.6	140.9	141.1	141.5	142.0	142.6	143.2	143.7	144.1	144.5
110°	159.9	160.1	160.4	160.6	160.9	161.4	162.0	162.5	163.0	163.1	163.3





TEST NUMBER: P332715-930

CATALOG NUMBER: S124DIW-S350D470U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	179.0	179.4	179.9	180.3	180.7	180.9	181.1	181.3	181.6	181.6	181.5
115°	207.9	208.1	208.4	208.6	208.7	208.6	208.6	208.5	208.4	208.6	208.7
117.5°	234.2	234.6	234.9	235.2	235.5	235.6	235.8	236.0	236.2	236.1	236.1
120°	251.9	252.3	252.6	252.9	253.1	253.0	252.9	252.8	252.7	252.9	253.1
122.5°	268.4	268.6	268.8	269.0	269.1	269.2	269.4	269.5	269.6	269.7	269.8
125°	292.2	292.5	292.9	293.2	293.3	293.1	292.9	292.8	292.6	292.9	293.1
127.5°	314.5	314.5	314.6	314.7	315.0	315.3	315.7	316.1	316.4	316.4	316.3
130°	328.9	329.1	329.1	329.2	329.4	329.6	329.9	330.1	330.4	330.4	330.5
132.5°	342.3	342.4	342.6	342.8	343.0	343.3	343.6	343.9	344.2	344.3	344.4
135°	362.0	361.9	361.8	361.7	361.9	362.2	362.6	362.9	363.2	363.4	363.5
137.5°	379.8	379.8	379.8	379.9	380.1	380.4	380.8	381.2	381.6	381.7	381.9
140°	391.4	391.6	391.8	391.9	392.1	392.2	392.5	392.6	392.8	393.1	393.3
142.5°	401.9	402.3	402.5	402.8	403.0	403.1	403.2	403.3	403.4	403.6	403.7
145°	417.8	418.0	418.2	418.5	418.7	418.7	418.7	418.7	418.7	418.7	418.8
147.5°	430.6	431.0	431.5	432.0	432.2	432.1	432.0	431.9	431.9	431.9	432.0
150°	439.7	440.0	440.3	440.7	440.8	440.7	440.6	440.5	440.4	440.4	440.4
152.5°	447.3	447.5	447.8	448.1	448.1	448.0	447.8	447.7	447.5	447.7	447.8
155°	457.9	458.0	458.0	458.1	458.0	457.8	457.5	457.3	457.1	457.4	457.7
157.5°	466.8	466.8	466.8	466.7	466.5	466.3	465.9	465.7	465.5	465.9	466.3
160°	472.0	471.7	471.5	471.2	471.1	471.0	470.9	470.8	470.8	471.2	471.7
162.5°	476.6	476.3	476.0	475.7	475.5	475.4	475.3	475.2	475.2	475.6	476.1
165°	482.5	482.1	481.7	481.3	481.1	481.1	481.1	481.1	481.1	481.8	482.4
167.5°	487.2	486.8	486.4	485.9	485.7	485.7	485.6	485.6	485.5	486.2	487.0
170°	489.8	489.3	488.9	488.4	488.1	488.2	488.3	488.4	488.4	489.1	489.8
172.5°	491.6	491.1	490.6	490.2	489.9	490.0	490.1	490.2	490.2	490.9	491.5
175°	493.5	493.0	492.5	492.0	491.9	492.0	492.0	492.1	492.2	492.9	493.7
177.5°	494.5	494.0	493.5	493.1	492.9	493.0	493.2	493.3	493.4	493.9	494.5
180°	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	465.8	465.8	465.8	465.8	465.8	465.8	465.8
2.5°	491.0	491.3	492.7	493.7	494.1	495.6	495.7
5°	534.1	537.4	543.7	544.3	545.3	550.3	546.4
7.5°	584.7	593.0	598.5	603.5	605.2	607.4	607.0
10°	617.1	629.4	635.6	645.5	645.8	648.3	646.8
12.5°	649.6	664.0	675.2	677.1	685.3	686.6	688.8
15°	695.8	711.0	726.7	732.3	743.6	746.3	750.6
17.5°	739.2	754.7	765.7	780.2	784.9	791.1	786.8
20°	763.0	779.9	793.9	805.2	810.0	813.5	813.1
22.5°	777.3	794.4	805.7	814.3	818.8	820.3	820.2
25°	786.3	796.1	799.6	802.9	797.9	796.1	796.9
27.5°	761.2	758.7	749.7	737.8	725.5	715.7	710.3
30°	726.8	711.8	698.1	674.2	661.9	654.5	647.9
32.5°	678.1	654.2	627.9	605.9	591.9	581.1	579.4
35°	594.5	558.6	526.4	499.5	485.7	473.9	471.2
37.5°	505.4	468.1	439.1	415.5	400.6	392.2	384.5
40°	446.3	414.3	385.7	365.7	354.2	348.3	343.5
42.5°	400.8	371.5	343.1	327.8	317.6	313.9	311.0
45°	337.9	310.6	291.0	279.4	273.5	267.3	264.3
47.5°	287.5	265.4	252.4	242.6	236.1	232.4	230.6
50°	258.9	240.8	229.3	221.7	215.9	213.0	211.5
52.5°	233.7	218.7	209.0	203.0	199.1	197.0	196.3
55°	201.2	189.9	183.7	178.5	175.6	173.7	172.9
57.5°	175.0	166.2	161.2	156.9	155.7	154.2	153.6
60°	157.7	150.9	146.7	143.7	142.8	140.9	141.2
62.5°	142.4	136.8	133.2	131.6	130.3	128.7	129.2
65°	120.4	116.3	114.4	112.9	111.4	110.4	111.1
67.5°	101.0	98.2	95.6	94.7	94.0	93.8	93.0
70°	88.4	86.1	83.7	83.2	83.2	82.4	82.2
72.5°	76.1	74.5	73.0	72.5	71.9	72.2	71.4
75°	58.9	57.5	56.9	56.3	56.2	56.2	55.6
77.5°	43.5	42.5	41.6	41.6	40.8	40.6	40.5
80°	33.0	32.6	31.9	31.9	31.5	31.6	31.2
82.5°	24.8	24.3	24.1	23.8	23.2	23.3	22.9
85°	13.3	12.7	12.6	12.0	11.6	12.0	11.6
87.5°	6.5	6.5	6.4	6.1	6.0	6.0	5.6
90°	9.6	10.1	10.4	10.6	10.8	10.9	11.1
92.5°	9.3	9.8	10.0	10.1	10.1	10.2	10.2
95°	9.6	10.1	10.4	10.4	10.5	10.6	10.7
97.5°	9.9	9.9	10.0	10.1	10.2	10.3	10.4
100°	12.1	10.7	10.0	10.1	10.2	10.3	10.4
102.5°	33.2	18.1	10.6	10.6	10.6	10.6	10.7
105°	117.5	118.2	117.2	114.1	111.2	108.3	105.3
107.5°	144.8	145.2	145.5	145.9	146.1	146.4	146.8
110°	163.5	163.6	163.8	164.0	164.3	164.5	164.8



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	181.5	181.4	181.6	181.9	182.2	182.5	182.8
115°	208.9	209.0	209.1	209.1	209.1	209.1	209.1
117.5°	236.1	236.0	236.0	235.9	235.9	235.9	235.9
120°	253.2	253.4	253.4	253.2	253.1	252.9	252.7
122.5°	269.9	269.9	269.9	269.8	269.6	269.5	269.3
125°	293.3	293.6	293.8	293.8	293.9	294.0	294.1
127.5°	316.3	316.3	316.2	316.1	316.0	316.0	315.9
130°	330.6	330.7	330.7	330.7	330.7	330.7	330.7
132.5°	344.5	344.5	344.5	344.5	344.5	344.4	344.3
135°	363.7	363.9	364.0	364.2	364.4	364.5	364.7
137.5°	382.0	382.3	382.3	382.3	382.2	382.2	382.1
140°	393.5	393.8	394.0	394.0	394.1	394.2	394.3
142.5°	404.0	404.1	404.2	404.2	404.3	404.3	404.3
145°	418.9	419.0	419.1	419.2	419.4	419.6	419.7
147.5°	432.0	432.1	432.2	432.3	432.4	432.4	432.5
150°	440.4	440.4	440.5	440.6	440.7	440.8	440.8
152.5°	447.9	448.1	448.1	448.1	448.0	447.9	447.9
155°	458.0	458.4	458.4	458.2	458.0	457.7	457.5
157.5°	466.7	467.1	467.1	466.7	466.3	465.9	465.5
160°	472.2	472.7	472.7	472.2	471.7	471.2	470.8
162.5°	476.6	477.1	477.1	476.5	476.0	475.4	474.9
165°	483.1	483.7	483.6	482.9	482.2	481.4	480.7
167.5°	487.7	488.4	488.4	487.5	486.7	485.9	485.1
170°	490.4	491.1	491.1	490.2	489.3	488.5	487.7
172.5°	492.2	492.8	492.8	491.9	491.0	490.1	489.2
175°	494.4	495.1	495.0	494.0	493.0	492.0	491.1
177.5°	495.0	495.5	495.4	494.6	493.8	493.0	492.3
180°	494.0	494.0	494.0	494.0	494.0	494.0	494.0

(END OF REPORT)