

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: P332090-930

Luminaire Tested: **S123DIW-S340D460U930-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332090-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DIW-S340D460U930-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 340 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 460 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2688.1 lumens
Efficiency: N/A
Efficacy: 116.9 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: General Diffuse

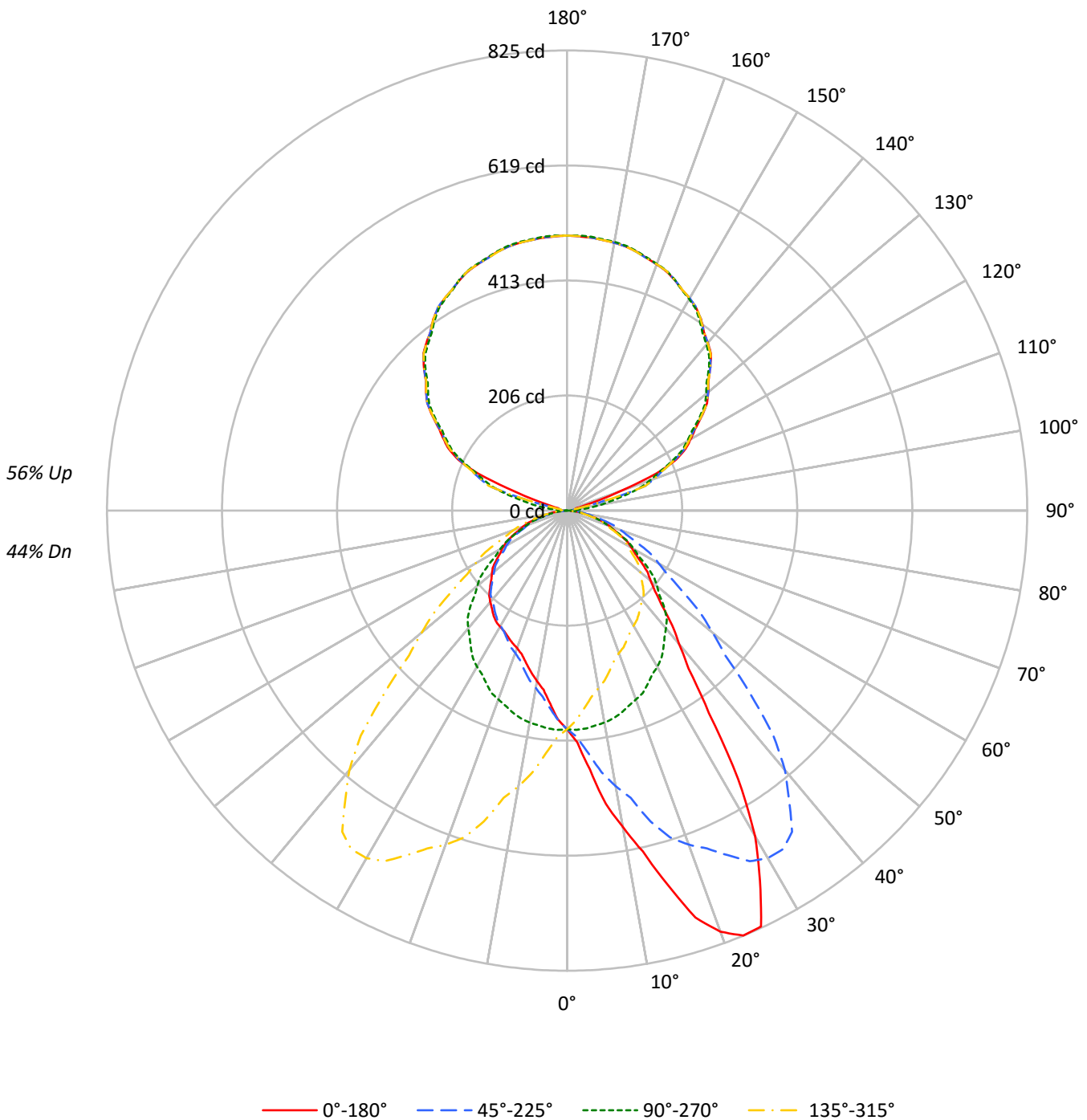
Input Watts (W): 23
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332090-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A

Luminous Intensity Polar Plot





TEST NUMBER: P332090-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44				
1	97	93	89	85	88	85	82	79	70	68	66	57	56	54	45	44	43	38				
2	88	81	75	70	81	74	69	65	62	58	55	51	48	46	40	38	37	32				
3	81	71	64	59	74	66	59	54	55	50	47	45	42	39	36	33	32	27				
4	74	63	56	50	67	58	52	46	49	44	40	40	36	33	32	29	27	23				
5	68	56	48	43	62	52	45	40	44	38	34	36	32	29	29	26	24	21				
6	62	51	43	37	57	47	40	35	39	34	30	33	29	25	26	23	21	18				
7	58	46	38	32	53	42	35	30	36	30	26	30	26	23	24	21	19	16				
8	53	41	34	29	49	38	32	27	33	27	23	27	23	20	22	19	17	14				
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	20	17	15	13				
10	46	35	27	23	43	32	26	21	27	22	19	23	19	16	19	16	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	4219	4219	4219	4219
5°	5032	4238	3756	4238
10°	6299	4217	3393	4217
15°	7725	4182	3158	4182
20°	9203	4129	3007	4129
25°	9772	4065	2973	4065
30°	8376	4018	2988	4018
35°	5825	3951	3020	3951
40°	4388	3873	3011	3873
45°	3643	3755	2973	3755
50°	3264	3518	2946	3518
55°	3051	3262	2909	3262
60°	2863	2992	2878	2992
65°	2690	2728	2786	2728
70°	2521	2426	2653	2426
75°	2258	2125	2433	2125
80°	1977	1742	2095	1742
85°	1556	1272	1408	1272



TEST NUMBER: P332090-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.6	1.4
10°-20°	123.8	4.6
20°-30°	207.8	7.7
30°-40°	235.3	8.8
40°-50°	211.0	7.9
50°-60°	170.3	6.3
60°-70°	118.7	4.4
70°-80°	62.4	2.3
80°-90°	16.6	0.6
90°-100°	17.9	0.7
100°-110°	85.4	3.2
110°-120°	205.2	7.6
120°-130°	261.3	9.7
130°-140°	279.2	10.4
140°-150°	261.1	9.7
150°-160°	210.6	7.8
160°-170°	135.9	5.1
170°-180°	46.8	1.7
0°-30°	370.3	13.8
0°-40°	605.6	22.5
0°-60°	986.9	36.7
0°-90°	1184.6	44.1
90°-120°	308.6	11.5
90°-150°	1110.2	41.3
90°-180°	1504.0	56.0
0°-180°	2688.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	392	392	392	392	392	
5°	466	392	348	392	466	48
15°	693	375	283	375	693	200
25°	823	342	250	342	823	361
35°	443	301	230	301	443	288
45°	239	247	195	247	239	189
55°	163	174	155	174	163	146
65°	106	107	109	107	106	105
75°	54	51	58	51	54	58
85°	13	10	11	10	13	15
90°	11	0	11	0	11	6
95°	14	22	14	22	14	12
105°	16	109	16	109	16	37
115°	215	205	215	205	215	199
125°	294	289	294	289	294	263
135°	363	359	363	359	363	280
145°	419	415	419	415	419	261
155°	456	457	456	457	456	210
165°	481	482	481	482	481	136
175°	491	493	491	493	491	47
180°	493	493	493	493	493	



TEST NUMBER: P332090-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0
2.5°	416.0	415.7	415.0	415.6	414.3	412.7	412.5	411.0	406.6	406.3	405.1
5°	465.7	464.2	464.0	463.8	461.1	457.5	450.7	450.1	441.0	436.5	431.0
7.5°	530.1	530.8	528.1	525.7	517.6	512.2	504.8	495.5	484.3	472.9	465.4
10°	576.3	582.5	574.8	569.4	564.5	555.2	544.4	530.8	517.4	501.7	489.7
12.5°	625.8	628.8	627.3	622.3	614.7	600.5	581.3	566.4	554.0	527.7	517.1
15°	693.2	704.8	697.4	680.4	680.7	667.2	642.2	614.7	600.0	577.0	545.7
17.5°	765.2	766.5	763.4	749.2	739.7	721.1	698.0	671.6	642.0	614.2	580.9
20°	803.4	802.3	795.7	788.2	771.9	757.5	732.2	702.8	664.8	637.4	601.1
22.5°	824.7	822.8	819.6	813.4	799.9	784.4	761.7	729.5	693.3	655.7	613.8
25°	822.8	825.2	825.7	823.9	819.2	809.9	792.1	766.4	730.3	681.8	638.2
27.5°	748.4	751.9	762.0	771.0	781.1	791.3	789.9	777.2	750.5	708.7	655.3
30°	673.9	666.3	685.1	708.8	725.0	753.5	769.4	770.4	755.4	719.5	667.4
32.5°	570.5	578.9	587.3	616.4	651.8	683.7	715.5	741.0	744.0	720.1	674.6
35°	443.3	453.8	469.0	484.1	522.1	554.8	610.7	659.3	698.0	703.1	675.2
37.5°	357.3	362.4	372.0	387.3	412.1	450.9	494.0	555.5	611.6	653.4	655.2
40°	312.3	313.8	324.6	336.1	356.3	388.2	427.1	481.5	548.7	607.1	631.4
42.5°	278.5	281.8	286.5	297.6	313.6	337.6	373.8	418.7	480.4	547.5	595.0
45°	239.3	243.1	246.0	253.4	264.8	281.0	306.1	347.2	394.1	463.4	527.4
47.5°	213.4	213.7	215.8	221.4	229.2	241.3	259.2	285.5	328.6	384.8	450.5
50°	194.9	197.9	198.7	203.0	209.1	218.0	232.8	255.3	290.6	340.0	400.4
52.5°	181.8	182.7	184.8	188.0	193.3	200.2	213.1	230.6	258.4	300.5	356.0
55°	162.6	162.6	164.7	167.1	170.2	176.4	185.0	197.9	219.0	251.7	297.7
57.5°	144.8	145.8	147.2	148.0	150.6	154.7	161.8	171.7	187.4	212.5	249.1
60°	133.0	134.7	134.4	136.0	138.3	141.5	147.6	155.6	169.6	189.7	220.5
62.5°	122.6	122.5	122.5	124.3	126.5	129.6	133.6	140.5	152.5	170.3	196.5
65°	105.6	105.3	106.6	107.7	108.4	110.7	113.7	119.8	127.8	141.1	161.4
67.5°	90.5	89.4	90.1	90.5	91.8	93.6	96.4	100.2	106.5	117.2	132.5
70°	80.1	79.2	79.0	79.4	80.6	81.9	84.0	87.6	93.4	102.0	113.2
72.5°	69.5	68.9	68.8	69.7	70.2	71.1	72.6	75.8	80.6	87.0	97.4
75°	54.3	54.3	54.3	54.5	55.1	55.8	57.0	58.7	62.3	66.9	73.9
77.5°	40.7	40.7	40.4	40.4	41.3	41.6	41.8	43.5	45.5	48.5	53.6
80°	31.9	31.0	31.3	31.9	32.3	32.4	33.0	33.4	35.1	36.9	40.4
82.5°	23.7	22.9	23.0	23.9	24.0	24.1	24.7	25.2	25.8	27.4	29.4
85°	12.6	12.6	12.7	12.7	12.9	12.7	13.3	13.5	13.5	14.4	15.6
87.5°	6.8	6.4	6.5	6.7	6.4	6.6	6.7	6.8	6.8	6.9	6.8
90°	11.0	10.8	10.7	10.5	10.4	10.1	9.8	9.5	9.1	8.8	7.7
92.5°	12.1	12.1	12.0	11.9	11.7	11.5	10.9	10.4	9.9	9.4	8.6
95°	13.9	13.9	13.9	13.9	13.9	13.6	13.0	12.5	11.9	11.3	10.4
97.5°	15.1	15.0	14.9	14.8	14.8	14.4	13.8	13.1	12.5	11.8	17.7
100°	15.4	15.3	15.2	15.2	15.1	14.7	14.0	13.4	12.7	12.1	24.8
102.5°	15.7	15.5	15.4	15.2	15.1	16.1	18.0	20.1	22.1	24.1	38.0
105°	16.1	16.0	15.8	15.7	15.5	22.6	37.0	51.4	65.8	80.2	87.6
107.5°	50.6	61.5	72.3	83.2	94.1	104.8	115.4	125.9	136.5	147.0	145.9
110°	100.8	112.3	124.0	135.7	147.3	154.4	157.1	159.8	162.5	165.2	164.3



TEST NUMBER: P332090-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	172.8	175.3	177.7	180.2	182.6	183.8	183.8	183.8	183.7	183.7	182.8
115°	215.4	215.1	214.7	214.4	214.1	213.5	212.7	211.9	211.1	210.3	209.5
117.5°	239.3	239.2	239.1	239.0	239.0	238.6	238.0	237.3	236.7	236.0	235.7
120°	255.7	255.7	255.7	255.7	255.7	255.4	254.7	254.0	253.4	252.7	252.5
122.5°	271.8	271.7	271.7	271.6	271.5	271.3	270.8	270.4	269.9	269.5	269.1
125°	294.5	294.3	294.2	294.0	293.8	293.7	293.5	293.3	293.2	293.0	292.7
127.5°	316.3	316.5	316.7	316.8	317.0	316.9	316.7	316.4	316.2	315.9	315.5
130°	330.4	330.5	330.7	330.8	331.0	330.9	330.6	330.3	330.0	329.6	329.4
132.5°	343.3	343.5	343.7	344.0	344.2	344.1	343.8	343.5	343.2	342.8	342.6
135°	363.0	363.2	363.5	363.7	363.9	363.9	363.7	363.5	363.2	363.0	362.6
137.5°	381.6	381.7	381.9	382.0	382.2	382.0	381.6	381.3	380.9	380.5	380.3
140°	392.6	392.8	393.0	393.1	393.3	393.2	392.9	392.6	392.2	391.9	391.7
142.5°	402.9	403.2	403.4	403.6	403.8	403.8	403.6	403.3	403.0	402.8	402.5
145°	418.7	418.7	418.7	418.7	418.7	418.6	418.4	418.2	418.1	417.9	417.8
147.5°	430.4	430.8	431.1	431.5	431.9	432.0	431.9	431.7	431.5	431.4	431.2
150°	439.2	439.4	439.7	439.9	440.2	440.2	440.0	439.9	439.7	439.5	439.4
152.5°	446.2	446.6	446.9	447.4	447.7	447.8	447.4	447.2	446.9	446.6	446.5
155°	456.1	456.5	457.0	457.5	458.0	458.0	457.6	457.2	456.8	456.4	456.3
157.5°	464.3	465.0	465.6	466.2	466.8	466.9	466.4	465.9	465.5	465.0	465.0
160°	469.6	470.2	470.8	471.3	471.9	471.9	471.4	470.9	470.4	469.9	470.0
162.5°	474.6	475.1	475.6	476.1	476.6	476.5	476.1	475.5	474.9	474.3	474.4
165°	480.6	481.2	481.8	482.2	482.8	482.8	482.2	481.5	480.9	480.2	480.3
167.5°	484.9	485.6	486.2	486.8	487.5	487.5	486.8	486.2	485.6	484.9	484.9
170°	487.5	488.2	488.9	489.5	490.2	490.2	489.5	488.9	488.2	487.5	487.5
172.5°	489.0	489.8	490.4	491.1	491.9	491.9	491.2	490.6	489.9	489.3	489.3
175°	491.2	491.9	492.5	493.2	493.8	493.8	493.3	492.7	492.1	491.5	491.5
177.5°	491.9	492.5	493.2	493.8	494.5	494.6	494.0	493.5	492.9	492.4	492.4
180°	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0



TEST NUMBER: P332090-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0
2.5°	404.1	403.0	401.8	399.7	397.8	395.3	394.4	393.5	390.8	388.4	386.5
5°	428.8	424.3	417.7	411.6	406.7	400.0	396.2	392.2	386.5	381.4	377.2
7.5°	454.7	445.7	435.4	424.3	413.8	403.8	395.7	388.5	380.5	373.0	367.0
10°	475.2	462.3	447.8	432.3	419.0	406.1	395.3	385.8	375.5	366.6	359.1
12.5°	498.6	479.5	459.6	440.7	424.9	407.0	393.9	381.8	370.1	359.5	351.1
15°	526.3	502.0	478.4	452.4	428.5	406.1	390.5	375.3	361.8	350.8	340.1
17.5°	551.5	524.0	492.9	461.3	432.4	405.9	384.1	366.9	350.0	336.6	326.0
20°	565.8	534.5	499.4	466.5	434.6	405.0	381.0	360.5	342.3	328.0	316.1
22.5°	578.1	541.4	505.1	469.9	434.4	402.5	375.4	354.2	334.5	320.6	307.9
25°	590.9	547.0	510.5	469.4	429.7	396.6	366.2	342.3	322.5	306.1	293.1
27.5°	601.9	546.7	503.4	459.0	422.1	389.0	356.5	330.8	309.9	292.1	278.8
30°	609.1	547.4	495.9	452.1	414.8	380.7	349.1	323.3	301.3	283.2	270.7
32.5°	613.7	546.9	489.1	442.3	403.2	373.0	341.0	314.3	291.6	273.9	261.9
35°	616.4	543.6	477.3	422.2	384.7	355.1	328.4	300.7	277.0	260.4	246.7
37.5°	611.0	536.5	463.7	402.8	361.7	332.7	310.1	286.6	263.8	245.6	233.8
40°	602.7	532.0	453.0	389.1	345.8	318.0	298.8	275.6	253.2	235.9	224.9
42.5°	586.7	522.8	441.3	374.0	329.5	301.6	283.9	264.5	243.3	227.1	216.1
45°	547.8	502.6	423.7	351.2	305.2	276.4	260.8	246.7	227.6	211.8	202.3
47.5°	493.7	472.2	398.4	327.2	279.9	252.2	235.9	224.7	210.7	197.9	188.8
50°	456.2	447.3	381.2	310.7	263.1	235.9	220.3	210.1	200.0	187.3	179.0
52.5°	412.9	418.4	361.2	293.8	245.9	219.2	204.6	196.4	187.3	176.8	169.5
55°	352.0	371.9	326.5	265.1	220.3	194.9	181.0	173.8	168.4	160.7	154.4
57.5°	294.9	320.2	289.0	235.7	195.2	173.3	160.0	152.1	148.7	144.6	139.7
60°	261.0	286.0	262.3	216.0	178.4	157.4	145.7	139.0	135.6	132.7	128.6
62.5°	230.7	256.1	236.2	195.9	161.8	142.4	132.2	125.6	123.0	121.6	118.0
65°	189.1	211.0	197.7	164.7	138.1	121.0	111.7	107.1	104.7	104.1	101.8
67.5°	153.9	170.6	160.9	136.6	115.7	100.9	93.0	89.1	87.2	87.0	85.3
70°	130.9	146.4	139.0	117.0	99.0	87.4	80.6	77.1	76.0	75.8	74.8
72.5°	112.9	123.8	117.9	99.5	85.6	75.1	70.0	66.4	65.2	65.5	64.8
75°	83.6	91.7	88.3	75.6	64.4	57.6	53.4	51.1	50.0	50.5	49.7
77.5°	60.2	65.3	62.2	53.4	46.5	41.6	38.5	37.1	36.0	36.0	35.7
80°	45.4	48.4	46.7	41.4	35.7	31.6	29.0	28.1	27.6	27.3	27.1
82.5°	32.4	34.9	32.9	29.3	25.4	22.8	21.4	20.2	19.8	19.9	19.7
85°	16.3	17.3	16.6	14.3	12.7	11.6	10.8	10.3	9.9	10.0	9.7
87.5°	6.9	6.9	6.2	5.5	5.0	4.3	4.2	3.8	3.6	3.8	3.8
90°	6.7	5.6	4.6	3.6	2.8	2.0	1.1	0.3	1.1	2.0	2.8
92.5°	7.7	7.0	6.2	5.9	6.1	6.4	6.6	6.8	6.6	6.4	6.1
95°	9.5	8.6	7.7	9.0	12.3	15.7	19.0	22.3	19.0	15.7	12.3
97.5°	23.5	29.4	35.2	38.9	40.4	41.9	43.4	44.9	43.4	41.9	40.4
100°	37.5	50.2	62.9	68.4	66.8	65.1	63.5	61.9	63.5	65.1	66.8
102.5°	51.9	65.7	79.6	85.9	84.8	83.6	82.4	81.2	82.4	83.6	84.8
105°	94.9	102.2	109.5	112.8	111.9	111.0	110.1	109.2	110.1	111.0	111.9
107.5°	144.7	143.6	142.4	141.5	140.7	140.1	139.3	138.6	139.3	140.1	140.7
110°	163.4	162.5	161.6	160.9	160.2	159.6	158.9	158.2	158.9	159.6	160.2



TEST NUMBER: P332090-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	181.9	181.0	180.1	179.4	178.7	178.1	177.6	177.0	177.6	178.1	178.7
115°	208.8	208.1	207.3	206.7	206.2	205.7	205.2	204.7	205.2	205.7	206.2
117.5°	235.3	234.9	234.6	234.1	233.4	232.8	232.3	231.6	232.3	232.8	233.4
120°	252.3	252.0	251.8	251.3	250.5	249.8	249.1	248.3	249.1	249.8	250.5
122.5°	268.8	268.6	268.2	267.7	267.2	266.5	266.0	265.4	266.0	266.5	267.2
125°	292.4	292.0	291.7	291.2	290.6	289.9	289.3	288.6	289.3	289.9	290.6
127.5°	315.1	314.7	314.3	313.8	313.2	312.5	311.9	311.2	311.9	312.5	313.2
130°	329.1	328.7	328.4	327.9	327.3	326.6	326.0	325.3	326.0	326.6	327.3
132.5°	342.3	342.1	341.8	341.4	340.7	340.1	339.4	338.8	339.4	340.1	340.7
135°	362.3	362.0	361.7	361.3	360.8	360.3	359.8	359.3	359.8	360.3	360.8
137.5°	380.2	380.0	379.8	379.4	378.8	378.1	377.6	376.9	377.6	378.1	378.8
140°	391.4	391.2	390.9	390.6	390.1	389.6	389.1	388.7	389.1	389.6	390.1
142.5°	402.3	402.0	401.8	401.5	401.0	400.5	400.0	399.5	400.0	400.5	401.0
145°	417.6	417.4	417.3	416.9	416.4	415.8	415.2	414.7	415.2	415.8	416.4
147.5°	431.0	430.9	430.7	430.4	430.1	429.7	429.3	428.9	429.3	429.7	430.1
150°	439.2	439.0	438.9	438.7	438.5	438.2	438.0	437.7	438.0	438.2	438.5
152.5°	446.4	446.3	446.2	446.1	446.0	445.9	445.7	445.6	445.7	445.9	446.0
155°	456.2	456.2	456.1	456.2	456.3	456.4	456.6	456.7	456.6	456.4	456.3
157.5°	465.1	465.2	465.3	465.4	465.4	465.4	465.4	465.5	465.4	465.4	465.4
160°	470.1	470.2	470.3	470.3	470.4	470.5	470.6	470.7	470.6	470.5	470.4
162.5°	474.5	474.6	474.7	474.8	475.1	475.2	475.5	475.6	475.5	475.2	475.1
165°	480.4	480.5	480.5	480.7	480.9	481.2	481.4	481.7	481.4	481.2	480.9
167.5°	484.9	484.9	484.9	485.1	485.4	485.8	486.1	486.4	486.1	485.8	485.4
170°	487.5	487.5	487.5	487.7	488.0	488.4	488.7	489.0	488.7	488.4	488.0
172.5°	489.2	489.1	489.0	489.2	489.6	490.0	490.4	490.7	490.4	490.0	489.6
175°	491.4	491.3	491.2	491.4	491.8	492.2	492.6	493.0	492.6	492.2	491.8
177.5°	492.3	492.3	492.2	492.3	492.6	492.9	493.3	493.6	493.3	492.9	492.6
180°	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0



TEST NUMBER: P332090-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0
2.5°	385.5	384.4	382.9	380.7	378.8	375.9	375.9	376.3	376.3	376.3	375.9
5°	373.8	371.0	367.5	363.5	359.4	355.1	354.4	352.9	351.8	351.0	350.1
7.5°	361.4	356.4	351.4	345.8	340.7	336.6	333.6	331.2	329.6	327.9	326.7
10°	353.1	346.8	341.0	335.1	328.6	323.4	320.2	318.0	316.3	314.7	314.0
12.5°	343.2	336.1	329.5	323.9	316.9	311.6	308.5	307.4	305.5	302.2	300.6
15°	328.8	322.1	314.4	305.8	302.4	296.0	292.3	290.6	289.4	287.0	286.3
17.5°	316.4	307.8	299.0	292.6	286.3	281.0	279.0	276.9	275.4	273.4	272.7
20°	306.6	298.8	290.8	284.0	277.3	271.6	269.9	268.4	266.8	266.0	265.1
22.5°	296.5	288.8	282.1	275.7	268.6	264.9	263.1	261.4	260.3	259.7	258.9
25°	282.4	275.6	268.2	262.5	256.8	254.3	253.2	252.3	251.4	250.5	250.3
27.5°	269.9	262.4	256.4	251.0	247.0	244.9	243.8	243.4	243.5	243.9	244.1
30°	260.4	253.6	248.7	244.1	240.3	238.4	238.1	238.1	239.0	239.1	239.5
32.5°	251.8	246.1	241.2	236.8	233.9	232.6	233.3	233.3	233.9	234.4	235.1
35°	239.1	234.2	230.4	226.6	224.1	224.7	225.1	225.4	226.4	227.6	228.3
37.5°	227.1	222.8	218.8	215.9	214.7	215.7	216.7	217.4	218.6	219.5	220.2
40°	218.4	215.2	211.4	208.7	209.1	209.7	210.4	211.4	212.4	213.0	213.7
42.5°	210.3	207.0	204.1	201.9	202.4	203.2	203.6	204.1	205.2	206.3	206.7
45°	198.1	195.4	192.8	191.4	191.8	192.2	192.6	193.1	194.1	194.9	195.1
47.5°	184.3	182.5	180.7	179.4	180.0	179.9	180.3	181.6	181.8	182.3	183.4
50°	175.5	173.8	171.7	171.3	171.3	171.3	171.5	173.0	173.0	173.8	174.6
52.5°	165.8	164.7	163.4	162.7	162.3	162.3	163.1	163.9	164.2	165.3	166.1
55°	151.4	150.3	149.1	148.5	148.1	148.5	150.0	150.4	151.4	152.0	152.5
57.5°	136.4	135.5	134.6	134.3	134.2	134.7	135.5	136.6	136.9	138.7	139.5
60°	126.5	125.1	124.4	124.4	124.0	125.7	125.4	127.3	127.7	128.8	130.1
62.5°	116.3	114.5	114.2	114.2	114.8	115.3	115.8	116.6	117.6	119.0	120.1
65°	99.9	99.0	100.3	100.1	99.7	100.9	100.9	101.8	103.0	104.3	106.4
67.5°	84.4	83.9	84.0	84.0	84.5	85.2	85.8	86.6	88.0	89.4	90.7
70°	73.9	74.4	73.5	74.3	74.8	75.0	75.4	76.6	78.0	79.0	80.6
72.5°	63.7	63.7	63.8	64.1	64.7	65.0	65.4	66.7	68.3	69.1	70.4
75°	49.0	48.8	49.4	49.4	50.3	50.7	51.1	51.7	53.2	54.3	55.3
77.5°	35.8	36.0	35.9	36.5	36.3	36.4	37.5	38.1	38.2	40.5	41.0
80°	27.0	27.3	27.6	27.7	27.9	27.6	28.9	29.4	29.4	30.7	31.7
82.5°	19.4	19.6	20.1	20.3	20.3	20.7	20.8	21.2	21.7	22.3	23.5
85°	9.7	10.3	10.4	10.3	10.4	10.0	10.6	10.8	11.0	11.0	11.0
87.5°	3.8	4.1	4.2	4.6	4.6	5.0	5.1	4.8	4.8	5.4	4.8
90°	3.6	4.6	5.6	6.7	7.7	8.8	9.1	9.5	9.8	10.1	10.4
92.5°	5.9	6.2	7.0	7.7	8.6	9.4	9.9	10.4	10.9	11.5	11.7
95°	9.0	7.7	8.6	9.5	10.4	11.3	11.9	12.5	13.0	13.6	13.9
97.5°	38.9	35.2	29.4	23.5	17.7	11.8	12.5	13.1	13.8	14.4	14.8
100°	68.4	62.9	50.2	37.5	24.8	12.1	12.7	13.4	14.0	14.7	15.1
102.5°	85.9	79.6	65.7	51.9	38.0	24.1	22.1	20.1	18.0	16.1	15.1
105°	112.8	109.5	102.2	94.9	87.6	80.2	65.8	51.4	37.0	22.6	15.5
107.5°	141.5	142.4	143.6	144.7	145.9	147.0	136.5	125.9	115.4	104.8	94.1
110°	160.9	161.6	162.5	163.4	164.3	165.2	162.5	159.8	157.1	154.4	147.3



TEST NUMBER: P332090-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	179.4	180.1	181.0	181.9	182.8	183.7	183.7	183.8	183.8	183.8	182.6
115°	206.7	207.3	208.1	208.8	209.5	210.3	211.1	211.9	212.7	213.5	214.1
117.5°	234.1	234.6	234.9	235.3	235.7	236.0	236.7	237.3	238.0	238.6	239.0
120°	251.3	251.8	252.0	252.3	252.5	252.7	253.4	254.0	254.7	255.4	255.7
122.5°	267.7	268.2	268.6	268.8	269.1	269.5	269.9	270.4	270.8	271.3	271.5
125°	291.2	291.7	292.0	292.4	292.7	293.0	293.2	293.3	293.5	293.7	293.8
127.5°	313.8	314.3	314.7	315.1	315.5	315.9	316.2	316.4	316.7	316.9	317.0
130°	327.9	328.4	328.7	329.1	329.4	329.6	330.0	330.3	330.6	330.9	331.0
132.5°	341.4	341.8	342.1	342.3	342.6	342.8	343.2	343.5	343.8	344.1	344.2
135°	361.3	361.7	362.0	362.3	362.6	363.0	363.2	363.5	363.7	363.9	363.9
137.5°	379.4	379.8	380.0	380.2	380.3	380.5	380.9	381.3	381.6	382.0	382.2
140°	390.6	390.9	391.2	391.4	391.7	391.9	392.2	392.6	392.9	393.2	393.3
142.5°	401.5	401.8	402.0	402.3	402.5	402.8	403.0	403.3	403.6	403.8	403.8
145°	416.9	417.3	417.4	417.6	417.8	417.9	418.1	418.2	418.4	418.6	418.7
147.5°	430.4	430.7	430.9	431.0	431.2	431.4	431.5	431.7	431.9	432.0	431.9
150°	438.7	438.9	439.0	439.2	439.4	439.5	439.7	439.9	440.0	440.2	440.2
152.5°	446.1	446.2	446.3	446.4	446.5	446.6	446.9	447.2	447.4	447.8	447.7
155°	456.2	456.1	456.2	456.2	456.3	456.4	456.8	457.2	457.6	458.0	458.0
157.5°	465.4	465.3	465.2	465.1	465.0	465.0	465.5	465.9	466.4	466.9	466.8
160°	470.3	470.3	470.2	470.1	470.0	469.9	470.4	470.9	471.4	471.9	471.9
162.5°	474.8	474.7	474.6	474.5	474.4	474.3	474.9	475.5	476.1	476.5	476.6
165°	480.7	480.5	480.5	480.4	480.3	480.2	480.9	481.5	482.2	482.8	482.8
167.5°	485.1	484.9	484.9	484.9	484.9	484.9	485.6	486.2	486.8	487.5	487.5
170°	487.7	487.5	487.5	487.5	487.5	487.5	488.2	488.9	489.5	490.2	490.2
172.5°	489.2	489.0	489.1	489.2	489.3	489.3	489.9	490.6	491.2	491.9	491.9
175°	491.4	491.2	491.3	491.4	491.5	491.5	492.1	492.7	493.3	493.8	493.8
177.5°	492.3	492.2	492.3	492.3	492.4	492.4	492.9	493.5	494.0	494.6	494.5
180°	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0



TEST NUMBER: P332090-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0
2.5°	374.9	374.7	375.8	375.0	375.8	374.7	374.9	375.9	376.3	376.3	376.3
5°	348.9	349.5	347.6	347.6	347.6	349.5	348.9	350.1	351.0	351.8	352.9
7.5°	325.8	325.0	325.1	324.0	325.1	325.0	325.8	326.7	327.9	329.6	331.2
10°	311.7	310.5	310.1	310.4	310.1	310.5	311.7	314.0	314.7	316.3	318.0
12.5°	299.9	299.8	297.3	297.3	297.3	299.8	299.9	300.6	302.2	305.5	307.4
15°	286.3	282.7	282.3	283.4	282.3	282.7	286.3	286.3	287.0	289.4	290.6
17.5°	272.5	270.5	270.7	270.1	270.7	270.5	272.5	272.7	273.4	275.4	276.9
20°	265.1	264.0	263.8	262.5	263.8	264.0	265.1	265.1	266.0	266.8	268.4
22.5°	258.4	258.1	258.2	256.7	258.2	258.1	258.4	258.9	259.7	260.3	261.4
25°	250.1	251.1	250.3	250.3	250.3	251.1	250.1	250.3	250.5	251.4	252.3
27.5°	244.5	244.5	244.1	244.1	244.1	244.5	244.5	244.1	243.9	243.5	243.4
30°	240.3	240.1	240.4	240.4	240.4	240.1	240.3	239.5	239.1	239.0	238.1
32.5°	236.0	236.3	236.4	236.5	236.4	236.3	236.0	235.1	234.4	233.9	233.3
35°	229.4	229.7	230.2	229.8	230.2	229.7	229.4	228.3	227.6	226.4	225.4
37.5°	220.5	221.4	221.3	221.5	221.3	221.4	220.5	220.2	219.5	218.6	217.4
40°	213.9	214.4	214.3	214.3	214.3	214.4	213.9	213.7	213.0	212.4	211.4
42.5°	207.0	207.4	206.9	206.7	206.9	207.4	207.0	206.7	206.3	205.2	204.1
45°	195.8	195.4	196.0	195.3	196.0	195.4	195.8	195.1	194.9	194.1	193.1
47.5°	183.3	183.7	183.8	184.4	183.8	183.7	183.3	183.4	182.3	181.8	181.6
50°	175.0	176.1	176.1	175.9	176.1	176.1	175.0	174.6	173.8	173.0	173.0
52.5°	166.7	167.2	168.0	168.0	168.0	167.2	166.7	166.1	165.3	164.2	163.9
55°	154.0	154.4	154.8	155.0	154.8	154.4	154.0	152.5	152.0	151.4	150.4
57.5°	140.9	140.7	141.6	141.9	141.6	140.7	140.9	139.5	138.7	136.9	136.6
60°	131.6	131.6	133.1	133.7	133.1	131.6	131.6	130.1	128.8	127.7	127.3
62.5°	121.7	122.4	123.8	123.1	123.8	122.4	121.7	120.1	119.0	117.6	116.6
65°	107.3	108.8	108.7	109.4	108.7	108.8	107.3	106.4	104.3	103.0	101.8
67.5°	92.2	93.2	94.6	94.7	94.6	93.2	92.2	90.7	89.4	88.0	86.6
70°	82.0	83.0	83.7	84.3	83.7	83.0	82.0	80.6	79.0	78.0	76.6
72.5°	72.2	72.6	74.5	73.7	74.5	72.6	72.2	70.4	69.1	68.3	66.7
75°	56.6	58.0	59.1	58.5	59.1	58.0	56.6	55.3	54.3	53.2	51.7
77.5°	41.8	43.2	43.7	43.2	43.7	43.2	41.8	41.0	40.5	38.2	38.1
80°	33.0	32.9	34.0	33.8	34.0	32.9	33.0	31.7	30.7	29.4	29.4
82.5°	24.2	24.1	24.5	24.7	24.5	24.1	24.2	23.5	22.3	21.7	21.2
85°	11.7	12.3	11.6	11.4	11.6	12.3	11.7	11.0	11.0	11.0	10.8
87.5°	4.8	4.9	4.7	4.6	4.7	4.9	4.8	4.8	5.4	4.8	4.8
90°	10.5	10.7	10.8	11.0	10.8	10.7	10.5	10.4	10.1	9.8	9.5
92.5°	11.9	12.0	12.1	12.1	12.1	12.0	11.9	11.7	11.5	10.9	10.4
95°	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.6	13.0	12.5
97.5°	14.8	14.9	15.0	15.1	15.0	14.9	14.8	14.8	14.4	13.8	13.1
100°	15.2	15.2	15.3	15.4	15.3	15.2	15.2	15.1	14.7	14.0	13.4
102.5°	15.2	15.4	15.5	15.7	15.5	15.4	15.2	15.1	16.1	18.0	20.1
105°	15.7	15.8	16.0	16.1	16.0	15.8	15.7	15.5	22.6	37.0	51.4
107.5°	83.2	72.3	61.5	50.6	61.5	72.3	83.2	94.1	104.8	115.4	125.9
110°	135.7	124.0	112.3	100.8	112.3	124.0	135.7	147.3	154.4	157.1	159.8



TEST NUMBER: P332090-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	180.2	177.7	175.3	172.8	175.3	177.7	180.2	182.6	183.8	183.8	183.8
115°	214.4	214.7	215.1	215.4	215.1	214.7	214.4	214.1	213.5	212.7	211.9
117.5°	239.0	239.1	239.2	239.3	239.2	239.1	239.0	239.0	238.6	238.0	237.3
120°	255.7	255.7	255.7	255.7	255.7	255.7	255.7	255.7	255.4	254.7	254.0
122.5°	271.6	271.7	271.7	271.8	271.7	271.7	271.6	271.5	271.3	270.8	270.4
125°	294.0	294.2	294.3	294.5	294.3	294.2	294.0	293.8	293.7	293.5	293.3
127.5°	316.8	316.7	316.5	316.3	316.5	316.7	316.8	317.0	316.9	316.7	316.4
130°	330.8	330.7	330.5	330.4	330.5	330.7	330.8	331.0	330.9	330.6	330.3
132.5°	344.0	343.7	343.5	343.3	343.5	343.7	344.0	344.2	344.1	343.8	343.5
135°	363.7	363.5	363.2	363.0	363.2	363.5	363.7	363.9	363.9	363.7	363.5
137.5°	382.0	381.9	381.7	381.6	381.7	381.9	382.0	382.2	382.0	381.6	381.3
140°	393.1	393.0	392.8	392.6	392.8	393.0	393.1	393.3	393.2	392.9	392.6
142.5°	403.6	403.4	403.2	402.9	403.2	403.4	403.6	403.8	403.8	403.6	403.3
145°	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.7	418.6	418.4	418.2
147.5°	431.5	431.1	430.8	430.4	430.8	431.1	431.5	431.9	432.0	431.9	431.7
150°	439.9	439.7	439.4	439.2	439.4	439.7	439.9	440.2	440.2	440.0	439.9
152.5°	447.4	446.9	446.6	446.2	446.6	446.9	447.4	447.7	447.8	447.4	447.2
155°	457.5	457.0	456.5	456.1	456.5	457.0	457.5	458.0	458.0	457.6	457.2
157.5°	466.2	465.6	465.0	464.3	465.0	465.6	466.2	466.8	466.9	466.4	465.9
160°	471.3	470.8	470.2	469.6	470.2	470.8	471.3	471.9	471.9	471.4	470.9
162.5°	476.1	475.6	475.1	474.6	475.1	475.6	476.1	476.6	476.5	476.1	475.5
165°	482.2	481.8	481.2	480.6	481.2	481.8	482.2	482.8	482.8	482.2	481.5
167.5°	486.8	486.2	485.6	484.9	485.6	486.2	486.8	487.5	487.5	486.8	486.2
170°	489.5	488.9	488.2	487.5	488.2	488.9	489.5	490.2	490.2	489.5	488.9
172.5°	491.1	490.4	489.8	489.0	489.8	490.4	491.1	491.9	491.9	491.2	490.6
175°	493.2	492.5	491.9	491.2	491.9	492.5	493.2	493.8	493.8	493.3	492.7
177.5°	493.8	493.2	492.5	491.9	492.5	493.2	493.8	494.5	494.6	494.0	493.5
180°	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0



TEST NUMBER: P332090-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0
2.5°	375.9	375.9	378.8	380.7	382.9	384.4	385.5	386.5	388.4	390.8	393.5
5°	354.4	355.1	359.4	363.5	367.5	371.0	373.8	377.2	381.4	386.5	392.2
7.5°	333.6	336.6	340.7	345.8	351.4	356.4	361.4	367.0	373.0	380.5	388.5
10°	320.2	323.4	328.6	335.1	341.0	346.8	353.1	359.1	366.6	375.5	385.8
12.5°	308.5	311.6	316.9	323.9	329.5	336.1	343.2	351.1	359.5	370.1	381.8
15°	292.3	296.0	302.4	305.8	314.4	322.1	328.8	340.1	350.8	361.8	375.3
17.5°	279.0	281.0	286.3	292.6	299.0	307.8	316.4	326.0	336.6	350.0	366.9
20°	269.9	271.6	277.3	284.0	290.8	298.8	306.6	316.1	328.0	342.3	360.5
22.5°	263.1	264.9	268.6	275.7	282.1	288.8	296.5	307.9	320.6	334.5	354.2
25°	253.2	254.3	256.8	262.5	268.2	275.6	282.4	293.1	306.1	322.5	342.3
27.5°	243.8	244.9	247.0	251.0	256.4	262.4	269.9	278.8	292.1	309.9	330.8
30°	238.1	238.4	240.3	244.1	248.7	253.6	260.4	270.7	283.2	301.3	323.3
32.5°	233.3	232.6	233.9	236.8	241.2	246.1	251.8	261.9	273.9	291.6	314.3
35°	225.1	224.7	224.1	226.6	230.4	234.2	239.1	246.7	260.4	277.0	300.7
37.5°	216.7	215.7	214.7	215.9	218.8	222.8	227.1	233.8	245.6	263.8	286.6
40°	210.4	209.7	209.1	208.7	211.4	215.2	218.4	224.9	235.9	253.2	275.6
42.5°	203.6	203.2	202.4	201.9	204.1	207.0	210.3	216.1	227.1	243.3	264.5
45°	192.6	192.2	191.8	191.4	192.8	195.4	198.1	202.3	211.8	227.6	246.7
47.5°	180.3	179.9	180.0	179.4	180.7	182.5	184.3	188.8	197.9	210.7	224.7
50°	171.5	171.3	171.3	171.3	171.7	173.8	175.5	179.0	187.3	200.0	210.1
52.5°	163.1	162.3	162.3	162.7	163.4	164.7	165.8	169.5	176.8	187.3	196.4
55°	150.0	148.5	148.1	148.5	149.1	150.3	151.4	154.4	160.7	168.4	173.8
57.5°	135.5	134.7	134.2	134.3	134.6	135.5	136.4	139.7	144.6	148.7	152.1
60°	125.4	125.7	124.0	124.4	124.4	125.1	126.5	128.6	132.7	135.6	139.0
62.5°	115.8	115.3	114.8	114.2	114.2	114.5	116.3	118.0	121.6	123.0	125.6
65°	100.9	100.9	99.7	100.1	100.3	99.0	99.9	101.8	104.1	104.7	107.1
67.5°	85.8	85.2	84.5	84.0	84.0	83.9	84.4	85.3	87.0	87.2	89.1
70°	75.4	75.0	74.8	74.3	73.5	74.4	73.9	74.8	75.8	76.0	77.1
72.5°	65.4	65.0	64.7	64.1	63.8	63.7	63.7	64.8	65.5	65.2	66.4
75°	51.1	50.7	50.3	49.4	49.4	48.8	49.0	49.7	50.5	50.0	51.1
77.5°	37.5	36.4	36.3	36.5	35.9	36.0	35.8	35.7	36.0	36.0	37.1
80°	28.9	27.6	27.9	27.7	27.6	27.3	27.0	27.1	27.3	27.6	28.1
82.5°	20.8	20.7	20.3	20.3	20.1	19.6	19.4	19.7	19.9	19.8	20.2
85°	10.6	10.0	10.4	10.3	10.4	10.3	9.7	9.7	10.0	9.9	10.3
87.5°	5.1	5.0	4.6	4.6	4.2	4.1	3.8	3.8	3.8	3.6	3.8
90°	9.1	8.8	7.7	6.7	5.6	4.6	3.6	2.8	2.0	1.1	0.3
92.5°	9.9	9.4	8.6	7.7	7.0	6.2	5.9	6.1	6.4	6.6	6.8
95°	11.9	11.3	10.4	9.5	8.6	7.7	9.0	12.3	15.7	19.0	22.3
97.5°	12.5	11.8	17.7	23.5	29.4	35.2	38.9	40.4	41.9	43.4	44.9
100°	12.7	12.1	24.8	37.5	50.2	62.9	68.4	66.8	65.1	63.5	61.9
102.5°	22.1	24.1	38.0	51.9	65.7	79.6	85.9	84.8	83.6	82.4	81.2
105°	65.8	80.2	87.6	94.9	102.2	109.5	112.8	111.9	111.0	110.1	109.2
107.5°	136.5	147.0	145.9	144.7	143.6	142.4	141.5	140.7	140.1	139.3	138.6
110°	162.5	165.2	164.3	163.4	162.5	161.6	160.9	160.2	159.6	158.9	158.2



TEST NUMBER: P332090-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	183.7	183.7	182.8	181.9	181.0	180.1	179.4	178.7	178.1	177.6	177.0
115°	211.1	210.3	209.5	208.8	208.1	207.3	206.7	206.2	205.7	205.2	204.7
117.5°	236.7	236.0	235.7	235.3	234.9	234.6	234.1	233.4	232.8	232.3	231.6
120°	253.4	252.7	252.5	252.3	252.0	251.8	251.3	250.5	249.8	249.1	248.3
122.5°	269.9	269.5	269.1	268.8	268.6	268.2	267.7	267.2	266.5	266.0	265.4
125°	293.2	293.0	292.7	292.4	292.0	291.7	291.2	290.6	289.9	289.3	288.6
127.5°	316.2	315.9	315.5	315.1	314.7	314.3	313.8	313.2	312.5	311.9	311.2
130°	330.0	329.6	329.4	329.1	328.7	328.4	327.9	327.3	326.6	326.0	325.3
132.5°	343.2	342.8	342.6	342.3	342.1	341.8	341.4	340.7	340.1	339.4	338.8
135°	363.2	363.0	362.6	362.3	362.0	361.7	361.3	360.8	360.3	359.8	359.3
137.5°	380.9	380.5	380.3	380.2	380.0	379.8	379.4	378.8	378.1	377.6	376.9
140°	392.2	391.9	391.7	391.4	391.2	390.9	390.6	390.1	389.6	389.1	388.7
142.5°	403.0	402.8	402.5	402.3	402.0	401.8	401.5	401.0	400.5	400.0	399.5
145°	418.1	417.9	417.8	417.6	417.4	417.3	416.9	416.4	415.8	415.2	414.7
147.5°	431.5	431.4	431.2	431.0	430.9	430.7	430.4	430.1	429.7	429.3	428.9
150°	439.7	439.5	439.4	439.2	439.0	438.9	438.7	438.5	438.2	438.0	437.7
152.5°	446.9	446.6	446.5	446.4	446.3	446.2	446.1	446.0	445.9	445.7	445.6
155°	456.8	456.4	456.3	456.2	456.2	456.1	456.2	456.3	456.4	456.6	456.7
157.5°	465.5	465.0	465.0	465.1	465.2	465.3	465.4	465.4	465.4	465.4	465.5
160°	470.4	469.9	470.0	470.1	470.2	470.3	470.3	470.4	470.5	470.6	470.7
162.5°	474.9	474.3	474.4	474.5	474.6	474.7	474.8	475.1	475.2	475.5	475.6
165°	480.9	480.2	480.3	480.4	480.5	480.5	480.7	480.9	481.2	481.4	481.7
167.5°	485.6	484.9	484.9	484.9	484.9	484.9	485.1	485.4	485.8	486.1	486.4
170°	488.2	487.5	487.5	487.5	487.5	487.5	487.7	488.0	488.4	488.7	489.0
172.5°	489.9	489.3	489.3	489.2	489.1	489.0	489.2	489.6	490.0	490.4	490.7
175°	492.1	491.5	491.5	491.4	491.3	491.2	491.4	491.8	492.2	492.6	493.0
177.5°	492.9	492.4	492.4	492.3	492.3	492.2	492.3	492.6	492.9	493.3	493.6
180°	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0



TEST NUMBER: P332090-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0	392.0
2.5°	394.4	395.3	397.8	399.7	401.8	403.0	404.1	405.1	406.3	406.6	411.0
5°	396.2	400.0	406.7	411.6	417.7	424.3	428.8	431.0	436.5	441.0	450.1
7.5°	395.7	403.8	413.8	424.3	435.4	445.7	454.7	465.4	472.9	484.3	495.5
10°	395.3	406.1	419.0	432.3	447.8	462.3	475.2	489.7	501.7	517.4	530.8
12.5°	393.9	407.0	424.9	440.7	459.6	479.5	498.6	517.1	527.7	554.0	566.4
15°	390.5	406.1	428.5	452.4	478.4	502.0	526.3	545.7	577.0	600.0	614.7
17.5°	384.1	405.9	432.4	461.3	492.9	524.0	551.5	580.9	614.2	642.0	671.6
20°	381.0	405.0	434.6	466.5	499.4	534.5	565.8	601.1	637.4	664.8	702.8
22.5°	375.4	402.5	434.4	469.9	505.1	541.4	578.1	613.8	655.7	693.3	729.5
25°	366.2	396.6	429.7	469.4	510.5	547.0	590.9	638.2	681.8	730.3	766.4
27.5°	356.5	389.0	422.1	459.0	503.4	546.7	601.9	655.3	708.7	750.5	777.2
30°	349.1	380.7	414.8	452.1	495.9	547.4	609.1	667.4	719.5	755.4	770.4
32.5°	341.0	373.0	403.2	442.3	489.1	546.9	613.7	674.6	720.1	744.0	741.0
35°	328.4	355.1	384.7	422.2	477.3	543.6	616.4	675.2	703.1	698.0	659.3
37.5°	310.1	332.7	361.7	402.8	463.7	536.5	611.0	655.2	653.4	611.6	555.5
40°	298.8	318.0	345.8	389.1	453.0	532.0	602.7	631.4	607.1	548.7	481.5
42.5°	283.9	301.6	329.5	374.0	441.3	522.8	586.7	595.0	547.5	480.4	418.7
45°	260.8	276.4	305.2	351.2	423.7	502.6	547.8	527.4	463.4	394.1	347.2
47.5°	235.9	252.2	279.9	327.2	398.4	472.2	493.7	450.5	384.8	328.6	285.5
50°	220.3	235.9	263.1	310.7	381.2	447.3	456.2	400.4	340.0	290.6	255.3
52.5°	204.6	219.2	245.9	293.8	361.2	418.4	412.9	356.0	300.5	258.4	230.6
55°	181.0	194.9	220.3	265.1	326.5	371.9	352.0	297.7	251.7	219.0	197.9
57.5°	160.0	173.3	195.2	235.7	289.0	320.2	294.9	249.1	212.5	187.4	171.7
60°	145.7	157.4	178.4	216.0	262.3	286.0	261.0	220.5	189.7	169.6	155.6
62.5°	132.2	142.4	161.8	195.9	236.2	256.1	230.7	196.5	170.3	152.5	140.5
65°	111.7	121.0	138.1	164.7	197.7	211.0	189.1	161.4	141.1	127.8	119.8
67.5°	93.0	100.9	115.7	136.6	160.9	170.6	153.9	132.5	117.2	106.5	100.2
70°	80.6	87.4	99.0	117.0	139.0	146.4	130.9	113.2	102.0	93.4	87.6
72.5°	70.0	75.1	85.6	99.5	117.9	123.8	112.9	97.4	87.0	80.6	75.8
75°	53.4	57.6	64.4	75.6	88.3	91.7	83.6	73.9	66.9	62.3	58.7
77.5°	38.5	41.6	46.5	53.4	62.2	65.3	60.2	53.6	48.5	45.5	43.5
80°	29.0	31.6	35.7	41.4	46.7	48.4	45.4	40.4	36.9	35.1	33.4
82.5°	21.4	22.8	25.4	29.3	32.9	34.9	32.4	29.4	27.4	25.8	25.2
85°	10.8	11.6	12.7	14.3	16.6	17.3	16.3	15.6	14.4	13.5	13.5
87.5°	4.2	4.3	5.0	5.5	6.2	6.9	6.9	6.8	6.9	6.8	6.8
90°	1.1	2.0	2.8	3.6	4.6	5.6	6.7	7.7	8.8	9.1	9.5
92.5°	6.6	6.4	6.1	5.9	6.2	7.0	7.7	8.6	9.4	9.9	10.4
95°	19.0	15.7	12.3	9.0	7.7	8.6	9.5	10.4	11.3	11.9	12.5
97.5°	43.4	41.9	40.4	38.9	35.2	29.4	23.5	17.7	11.8	12.5	13.1
100°	63.5	65.1	66.8	68.4	62.9	50.2	37.5	24.8	12.1	12.7	13.4
102.5°	82.4	83.6	84.8	85.9	79.6	65.7	51.9	38.0	24.1	22.1	20.1
105°	110.1	111.0	111.9	112.8	109.5	102.2	94.9	87.6	80.2	65.8	51.4
107.5°	139.3	140.1	140.7	141.5	142.4	143.6	144.7	145.9	147.0	136.5	125.9
110°	158.9	159.6	160.2	160.9	161.6	162.5	163.4	164.3	165.2	162.5	159.8



TEST NUMBER: P332090-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	177.6	178.1	178.7	179.4	180.1	181.0	181.9	182.8	183.7	183.7	183.8
115°	205.2	205.7	206.2	206.7	207.3	208.1	208.8	209.5	210.3	211.1	211.9
117.5°	232.3	232.8	233.4	234.1	234.6	234.9	235.3	235.7	236.0	236.7	237.3
120°	249.1	249.8	250.5	251.3	251.8	252.0	252.3	252.5	252.7	253.4	254.0
122.5°	266.0	266.5	267.2	267.7	268.2	268.6	268.8	269.1	269.5	269.9	270.4
125°	289.3	289.9	290.6	291.2	291.7	292.0	292.4	292.7	293.0	293.2	293.3
127.5°	311.9	312.5	313.2	313.8	314.3	314.7	315.1	315.5	315.9	316.2	316.4
130°	326.0	326.6	327.3	327.9	328.4	328.7	329.1	329.4	329.6	330.0	330.3
132.5°	339.4	340.1	340.7	341.4	341.8	342.1	342.3	342.6	342.8	343.2	343.5
135°	359.8	360.3	360.8	361.3	361.7	362.0	362.3	362.6	363.0	363.2	363.5
137.5°	377.6	378.1	378.8	379.4	379.8	380.0	380.2	380.3	380.5	380.9	381.3
140°	389.1	389.6	390.1	390.6	390.9	391.2	391.4	391.7	391.9	392.2	392.6
142.5°	400.0	400.5	401.0	401.5	401.8	402.0	402.3	402.5	402.8	403.0	403.3
145°	415.2	415.8	416.4	416.9	417.3	417.4	417.6	417.8	417.9	418.1	418.2
147.5°	429.3	429.7	430.1	430.4	430.7	430.9	431.0	431.2	431.4	431.5	431.7
150°	438.0	438.2	438.5	438.7	438.9	439.0	439.2	439.4	439.5	439.7	439.9
152.5°	445.7	445.9	446.0	446.1	446.2	446.3	446.4	446.5	446.6	446.9	447.2
155°	456.6	456.4	456.3	456.2	456.1	456.2	456.2	456.3	456.4	456.8	457.2
157.5°	465.4	465.4	465.4	465.4	465.3	465.2	465.1	465.0	465.0	465.5	465.9
160°	470.6	470.5	470.4	470.3	470.3	470.2	470.1	470.0	469.9	470.4	470.9
162.5°	475.5	475.2	475.1	474.8	474.7	474.6	474.5	474.4	474.3	474.9	475.5
165°	481.4	481.2	480.9	480.7	480.5	480.5	480.4	480.3	480.2	480.9	481.5
167.5°	486.1	485.8	485.4	485.1	484.9	484.9	484.9	484.9	484.9	485.6	486.2
170°	488.7	488.4	488.0	487.7	487.5	487.5	487.5	487.5	487.5	488.2	488.9
172.5°	490.4	490.0	489.6	489.2	489.0	489.1	489.2	489.3	489.3	489.9	490.6
175°	492.6	492.2	491.8	491.4	491.2	491.3	491.4	491.5	491.5	492.1	492.7
177.5°	493.3	492.9	492.6	492.3	492.2	492.3	492.3	492.4	492.4	492.9	493.5
180°	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0



TEST NUMBER: P332090-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	392.0	392.0	392.0	392.0	392.0	392.0	392.0
2.5°	412.5	412.7	414.3	415.6	415.0	415.7	416.0
5°	450.7	457.5	461.1	463.8	464.0	464.2	465.7
7.5°	504.8	512.2	517.6	525.7	528.1	530.8	530.1
10°	544.4	555.2	564.5	569.4	574.8	582.5	576.3
12.5°	581.3	600.5	614.7	622.3	627.3	628.8	625.8
15°	642.2	667.2	680.7	680.4	697.4	704.8	693.2
17.5°	698.0	721.1	739.7	749.2	763.4	766.5	765.2
20°	732.2	757.5	771.9	788.2	795.7	802.3	803.4
22.5°	761.7	784.4	799.9	813.4	819.6	822.8	824.7
25°	792.1	809.9	819.2	823.9	825.7	825.2	822.8
27.5°	789.9	791.3	781.1	771.0	762.0	751.9	748.4
30°	769.4	753.5	725.0	708.8	685.1	666.3	673.9
32.5°	715.5	683.7	651.8	616.4	587.3	578.9	570.5
35°	610.7	554.8	522.1	484.1	469.0	453.8	443.3
37.5°	494.0	450.9	412.1	387.3	372.0	362.4	357.3
40°	427.1	388.2	356.3	336.1	324.6	313.8	312.3
42.5°	373.8	337.6	313.6	297.6	286.5	281.8	278.5
45°	306.1	281.0	264.8	253.4	246.0	243.1	239.3
47.5°	259.2	241.3	229.2	221.4	215.8	213.7	213.4
50°	232.8	218.0	209.1	203.0	198.7	197.9	194.9
52.5°	213.1	200.2	193.3	188.0	184.8	182.7	181.8
55°	185.0	176.4	170.2	167.1	164.7	162.6	162.6
57.5°	161.8	154.7	150.6	148.0	147.2	145.8	144.8
60°	147.6	141.5	138.3	136.0	134.4	134.7	133.0
62.5°	133.6	129.6	126.5	124.3	122.5	122.5	122.6
65°	113.7	110.7	108.4	107.7	106.6	105.3	105.6
67.5°	96.4	93.6	91.8	90.5	90.1	89.4	90.5
70°	84.0	81.9	80.6	79.4	79.0	79.2	80.1
72.5°	72.6	71.1	70.2	69.7	68.8	68.9	69.5
75°	57.0	55.8	55.1	54.5	54.3	54.3	54.3
77.5°	41.8	41.6	41.3	40.4	40.4	40.7	40.7
80°	33.0	32.4	32.3	31.9	31.3	31.0	31.9
82.5°	24.7	24.1	24.0	23.9	23.0	22.9	23.7
85°	13.3	12.7	12.9	12.7	12.7	12.6	12.6
87.5°	6.7	6.6	6.4	6.7	6.5	6.4	6.8
90°	9.8	10.1	10.4	10.5	10.7	10.8	11.0
92.5°	10.9	11.5	11.7	11.9	12.0	12.1	12.1
95°	13.0	13.6	13.9	13.9	13.9	13.9	13.9
97.5°	13.8	14.4	14.8	14.8	14.9	15.0	15.1
100°	14.0	14.7	15.1	15.2	15.2	15.3	15.4
102.5°	18.0	16.1	15.1	15.2	15.4	15.5	15.7
105°	37.0	22.6	15.5	15.7	15.8	16.0	16.1
107.5°	115.4	104.8	94.1	83.2	72.3	61.5	50.6
110°	157.1	154.4	147.3	135.7	124.0	112.3	100.8



TEST NUMBER: P332090-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	183.8	183.8	182.6	180.2	177.7	175.3	172.8
115°	212.7	213.5	214.1	214.4	214.7	215.1	215.4
117.5°	238.0	238.6	239.0	239.0	239.1	239.2	239.3
120°	254.7	255.4	255.7	255.7	255.7	255.7	255.7
122.5°	270.8	271.3	271.5	271.6	271.7	271.7	271.8
125°	293.5	293.7	293.8	294.0	294.2	294.3	294.5
127.5°	316.7	316.9	317.0	316.8	316.7	316.5	316.3
130°	330.6	330.9	331.0	330.8	330.7	330.5	330.4
132.5°	343.8	344.1	344.2	344.0	343.7	343.5	343.3
135°	363.7	363.9	363.9	363.7	363.5	363.2	363.0
137.5°	381.6	382.0	382.2	382.0	381.9	381.7	381.6
140°	392.9	393.2	393.3	393.1	393.0	392.8	392.6
142.5°	403.6	403.8	403.8	403.6	403.4	403.2	402.9
145°	418.4	418.6	418.7	418.7	418.7	418.7	418.7
147.5°	431.9	432.0	431.9	431.5	431.1	430.8	430.4
150°	440.0	440.2	440.2	439.9	439.7	439.4	439.2
152.5°	447.4	447.8	447.7	447.4	446.9	446.6	446.2
155°	457.6	458.0	458.0	457.5	457.0	456.5	456.1
157.5°	466.4	466.9	466.8	466.2	465.6	465.0	464.3
160°	471.4	471.9	471.9	471.3	470.8	470.2	469.6
162.5°	476.1	476.5	476.6	476.1	475.6	475.1	474.6
165°	482.2	482.8	482.8	482.2	481.8	481.2	480.6
167.5°	486.8	487.5	487.5	486.8	486.2	485.6	484.9
170°	489.5	490.2	490.2	489.5	488.9	488.2	487.5
172.5°	491.2	491.9	491.9	491.1	490.4	489.8	489.0
175°	493.3	493.8	493.8	493.2	492.5	491.9	491.2
177.5°	494.0	494.6	494.5	493.8	493.2	492.5	491.9
180°	493.0	493.0	493.0	493.0	493.0	493.0	493.0

(END OF REPORT)