

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: P332091-930

Luminaire Tested: **S123DIW-S340D460U930-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332091-930  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9,  
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-A1  
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 340 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 460 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2487.7 lumens  
Efficiency: N/A  
Efficacy: 108.2 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

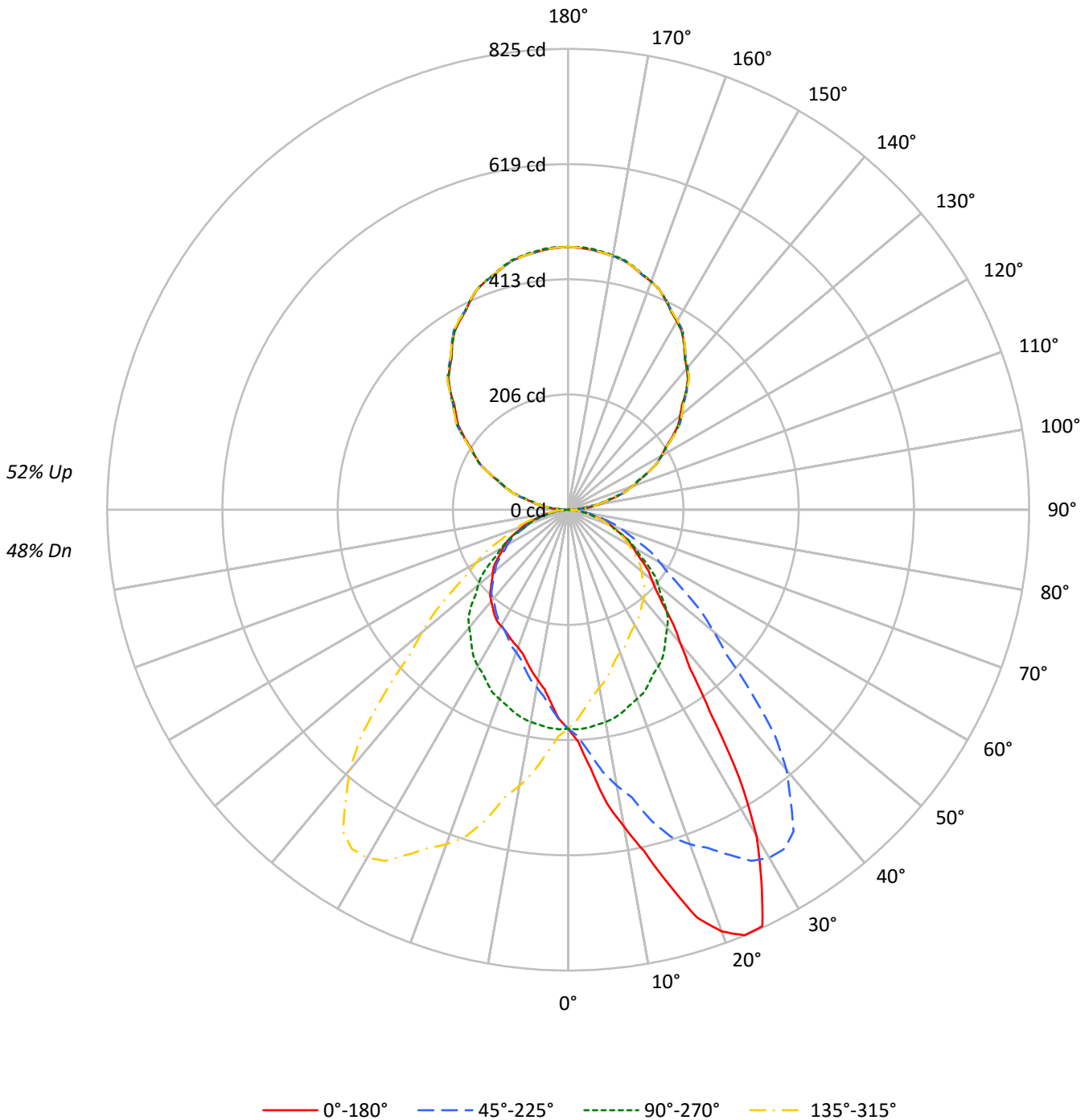
Input Watts (W): 23  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	48				48
1	98	93	90	86	90	86	83	80	72	70	68	60	58	57	48	47	46	41				41
2	89	82	76	71	82	75	70	66	64	60	57	53	50	48	43	41	39	34				34
3	81	72	65	59	75	67	60	55	56	52	48	47	43	41	38	36	34	29				29
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	31	29	25				25
5	68	57	49	43	63	53	46	40	45	39	35	38	34	30	31	28	25	22				22
6	63	51	43	37	58	47	40	35	40	35	31	34	30	27	28	25	22	20				20
7	58	46	38	33	53	43	36	31	37	31	27	31	27	24	25	22	20	17				17
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18	16				16
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	22	18	16	14				14
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15	13				13

**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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.6	1.6
10°-20°	123.8	5.0
20°-30°	207.8	8.4
30°-40°	235.3	9.5
40°-50°	211.0	8.5
50°-60°	170.3	6.8
60°-70°	118.7	4.8
70°-80°	62.4	2.5
80°-90°	16.6	0.7
90°-100°	30.6	1.2
100°-110°	91.7	3.7
110°-120°	156.0	6.3
120°-130°	205.2	8.2
130°-140°	230.6	9.3
140°-150°	226.7	9.1
150°-160°	190.8	7.7
160°-170°	127.0	5.1
170°-180°	44.5	1.8
0°-30°	370.3	14.9
0°-40°	605.6	24.3
0°-60°	986.9	39.7
0°-90°	1184.6	47.6
90°-120°	278.3	11.2
90°-150°	940.8	37.8
90°-180°	1303.0	52.4
0°-180°	2487.7	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°	29	22	29	22	29	30
105°	88	83	88	83	88	93
115°	157	157	157	157	157	156
125°	227	230	227	230	227	203
135°	298	298	298	298	298	229
145°	362	362	362	362	362	226
155°	413	414	413	414	413	190
165°	450	451	450	451	450	127
175°	467	469	467	469	467	44
180°	470	470	470	470	470	



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**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	6.5	6.6	6.7	6.8	6.8	6.9	6.8
90°	11.1	10.9	10.8	10.6	10.4	10.2	9.9	9.5	9.2	8.9	7.8
92.5°	14.9	15.0	15.1	15.2	15.3	15.2	15.0	14.7	14.4	14.2	13.6
95°	28.8	28.8	28.8	28.8	28.8	28.6	28.3	28.0	27.6	27.3	26.7
97.5°	44.4	44.4	44.4	44.4	44.4	44.3	43.9	43.5	43.1	42.8	42.3
100°	56.2	56.0	55.8	55.7	55.5	55.3	55.0	54.8	54.5	54.3	53.9
102.5°	68.2	68.3	68.3	68.4	68.4	68.3	68.1	67.8	67.6	67.3	66.8
105°	88.0	87.8	87.6	87.5	87.2	87.2	87.2	87.2	87.2	87.2	86.4
107.5°	108.4	108.5	108.6	108.7	108.8	108.7	108.4	108.2	107.9	107.7	107.4
110°	122.3	122.5	122.6	122.8	122.9	122.9	122.5	122.2	121.9	121.6	121.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	137.1	137.1	137.1	137.1	137.2	137.1	136.6	136.2	135.8	135.4	135.4
115°	157.4	157.5	157.6	157.7	157.8	157.8	157.7	157.6	157.5	157.4	157.6
117.5°	178.0	178.2	178.5	178.7	179.0	179.0	179.0	179.1	179.1	179.1	179.4
120°	192.5	192.7	192.8	193.0	193.1	193.3	193.4	193.5	193.6	193.6	194.0
122.5°	206.4	206.6	206.8	207.1	207.3	207.5	207.7	208.0	208.1	208.4	208.6
125°	227.2	227.6	227.9	228.2	228.5	228.9	229.2	229.5	229.8	230.2	230.3
127.5°	248.0	248.3	248.7	249.2	249.5	249.9	250.4	250.9	251.3	251.8	251.9
130°	261.5	262.2	262.8	263.3	263.9	264.3	264.6	265.0	265.3	265.6	265.9
132.5°	275.7	276.2	276.6	277.1	277.5	277.9	278.3	278.8	279.2	279.6	279.7
135°	297.8	298.0	298.2	298.3	298.5	298.7	299.1	299.4	299.7	300.0	300.1
137.5°	317.2	317.6	317.9	318.1	318.5	318.8	319.2	319.5	319.8	320.2	320.0
140°	330.0	330.5	331.1	331.7	332.2	332.6	332.6	332.7	332.8	332.9	332.8
142.5°	342.9	343.4	343.8	344.3	344.7	345.0	345.0	345.1	345.2	345.3	345.2
145°	361.7	362.1	362.4	362.7	363.1	363.2	363.3	363.4	363.5	363.5	363.3
147.5°	378.4	378.9	379.4	379.9	380.4	380.7	380.7	380.7	380.7	380.7	380.4
150°	389.1	389.6	390.0	390.5	391.0	391.3	391.3	391.3	391.3	391.3	391.1
152.5°	399.4	399.8	400.2	400.7	401.1	401.3	401.1	401.0	400.9	400.7	400.6
155°	413.4	414.0	414.6	415.2	415.7	415.9	415.6	415.2	414.9	414.6	414.5
157.5°	426.2	426.6	427.1	427.6	428.0	428.1	427.8	427.5	427.1	426.7	426.6
160°	434.5	434.8	435.1	435.5	435.8	435.8	435.4	435.0	434.6	434.1	434.1
162.5°	440.7	441.2	441.7	442.3	442.8	442.9	442.5	442.1	441.6	441.2	441.2
165°	449.6	450.2	450.8	451.3	451.9	452.0	451.5	451.0	450.5	450.0	450.0
167.5°	457.2	457.8	458.3	458.8	459.3	459.3	458.8	458.3	457.8	457.2	457.2
170°	461.1	461.7	462.3	462.8	463.4	463.4	462.8	462.3	461.7	461.1	461.1
172.5°	464.1	464.6	465.2	465.8	466.4	466.4	465.9	465.4	464.9	464.3	464.3
175°	467.4	468.0	468.6	469.1	469.7	469.7	469.2	468.7	468.2	467.7	467.7
177.5°	469.1	469.6	470.1	470.5	471.0	471.0	470.7	470.3	469.9	469.4	469.4
180°	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3



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**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	6.3	5.5	5.0	4.3	4.2	3.8	3.6	3.8	3.8
90°	6.8	5.6	4.6	3.7	2.9	2.0	1.2	0.4	1.2	2.0	2.9
92.5°	13.0	12.4	11.7	11.2	10.6	10.0	9.5	9.0	9.5	10.0	10.6
95°	26.0	25.4	24.7	24.1	23.6	22.9	22.3	21.8	22.3	22.9	23.6
97.5°	41.8	41.3	40.8	40.4	40.0	39.5	39.1	38.7	39.1	39.5	40.0
100°	53.5	53.1	52.7	52.2	51.7	51.2	50.7	50.2	50.7	51.2	51.7
102.5°	66.2	65.7	65.1	64.7	64.4	64.2	63.8	63.5	63.8	64.2	64.4
105°	85.7	85.0	84.2	83.8	83.6	83.5	83.3	83.2	83.3	83.5	83.6
107.5°	107.0	106.8	106.5	106.3	106.2	106.1	106.0	105.9	106.0	106.1	106.2
110°	121.2	121.1	120.9	120.7	120.6	120.4	120.3	120.1	120.3	120.4	120.6





TEST NUMBER: P332091-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	135.4	135.3	135.3	135.3	135.2	135.1	134.9	134.9	134.9	135.1	135.2
115°	157.8	157.9	158.1	158.0	157.8	157.5	157.3	157.0	157.3	157.5	157.8
117.5°	179.5	179.8	179.9	180.0	179.9	179.7	179.5	179.4	179.5	179.7	179.9
120°	194.4	194.9	195.3	195.2	194.7	194.2	193.7	193.2	193.7	194.2	194.7
122.5°	208.8	209.0	209.2	209.1	208.8	208.5	208.1	207.7	208.1	208.5	208.8
125°	230.5	230.6	230.8	230.8	230.6	230.3	230.1	229.8	230.1	230.3	230.6
127.5°	252.1	252.3	252.5	252.3	251.8	251.3	250.7	250.2	250.7	251.3	251.8
130°	266.1	266.4	266.6	266.4	265.8	265.1	264.5	263.8	264.5	265.1	265.8
132.5°	279.9	280.1	280.3	280.1	279.4	278.8	278.0	277.4	278.0	278.8	279.4
135°	300.2	300.3	300.4	300.1	299.6	299.1	298.6	298.2	298.6	299.1	299.6
137.5°	319.8	319.5	319.4	319.0	318.6	318.2	317.8	317.4	317.8	318.2	318.6
140°	332.7	332.6	332.6	332.3	331.9	331.5	331.1	330.7	331.1	331.5	331.9
142.5°	345.0	344.9	344.7	344.5	344.1	343.6	343.2	342.8	343.2	343.6	344.1
145°	363.1	362.8	362.6	362.4	362.2	362.1	361.9	361.7	361.9	362.1	362.2
147.5°	380.2	379.9	379.7	379.4	379.1	378.9	378.5	378.3	378.5	378.9	379.1
150°	390.9	390.8	390.6	390.4	390.3	390.1	390.0	389.8	390.0	390.1	390.3
152.5°	400.6	400.4	400.3	400.1	399.9	399.7	399.5	399.3	399.5	399.7	399.9
155°	414.4	414.3	414.3	414.2	414.2	414.2	414.2	414.2	414.2	414.2	414.2
157.5°	426.6	426.6	426.5	426.5	426.6	426.7	426.8	426.9	426.8	426.7	426.6
160°	434.1	434.1	434.1	434.2	434.4	434.6	434.7	434.9	434.7	434.6	434.4
162.5°	441.1	441.0	441.0	441.1	441.2	441.5	441.7	442.0	441.7	441.5	441.2
165°	450.0	450.0	450.0	450.1	450.4	450.6	450.9	451.1	450.9	450.6	450.4
167.5°	457.1	457.1	457.0	457.1	457.5	457.8	458.1	458.4	458.1	457.8	457.5
170°	461.1	461.1	461.1	461.3	461.6	461.9	462.3	462.6	462.3	461.9	461.6
172.5°	464.3	464.3	464.3	464.5	464.9	465.2	465.5	465.9	465.5	465.2	464.9
175°	467.7	467.7	467.7	467.9	468.2	468.6	468.9	469.2	468.9	468.6	468.2
177.5°	469.4	469.4	469.4	469.6	469.9	470.1	470.3	470.7	470.3	470.1	469.9
180°	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3



TEST NUMBER: P332091-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A1

**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	4.9	5.4	4.8
90°	3.7	4.6	5.6	6.8	7.8	8.9	9.2	9.5	9.9	10.2	10.4
92.5°	11.2	11.7	12.4	13.0	13.6	14.2	14.4	14.7	15.0	15.2	15.3
95°	24.1	24.7	25.4	26.0	26.7	27.3	27.6	28.0	28.3	28.6	28.8
97.5°	40.4	40.8	41.3	41.8	42.3	42.8	43.1	43.5	43.9	44.3	44.4
100°	52.2	52.7	53.1	53.5	53.9	54.3	54.5	54.8	55.0	55.3	55.5
102.5°	64.7	65.1	65.7	66.2	66.8	67.3	67.6	67.8	68.1	68.3	68.4
105°	83.8	84.2	85.0	85.7	86.4	87.2	87.2	87.2	87.2	87.2	87.2
107.5°	106.3	106.5	106.8	107.0	107.4	107.7	107.9	108.2	108.4	108.7	108.8
110°	120.7	120.9	121.1	121.2	121.4	121.6	121.9	122.2	122.5	122.9	122.9



TEST NUMBER: P332091-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	135.3	135.3	135.3	135.4	135.4	135.4	135.8	136.2	136.6	137.1	137.2
115°	158.0	158.1	157.9	157.8	157.6	157.4	157.5	157.6	157.7	157.8	157.8
117.5°	180.0	179.9	179.8	179.5	179.4	179.1	179.1	179.1	179.0	179.0	179.0
120°	195.2	195.3	194.9	194.4	194.0	193.6	193.6	193.5	193.4	193.3	193.1
122.5°	209.1	209.2	209.0	208.8	208.6	208.4	208.1	208.0	207.7	207.5	207.3
125°	230.8	230.8	230.6	230.5	230.3	230.2	229.8	229.5	229.2	228.9	228.5
127.5°	252.3	252.5	252.3	252.1	251.9	251.8	251.3	250.9	250.4	249.9	249.5
130°	266.4	266.6	266.4	266.1	265.9	265.6	265.3	265.0	264.6	264.3	263.9
132.5°	280.1	280.3	280.1	279.9	279.7	279.6	279.2	278.8	278.3	277.9	277.5
135°	300.1	300.4	300.3	300.2	300.1	300.0	299.7	299.4	299.1	298.7	298.5
137.5°	319.0	319.4	319.5	319.8	320.0	320.2	319.8	319.5	319.2	318.8	318.5
140°	332.3	332.6	332.6	332.7	332.8	332.9	332.8	332.7	332.6	332.6	332.2
142.5°	344.5	344.7	344.9	345.0	345.2	345.3	345.2	345.1	345.0	345.0	344.7
145°	362.4	362.6	362.8	363.1	363.3	363.5	363.5	363.4	363.3	363.2	363.1
147.5°	379.4	379.7	379.9	380.2	380.4	380.7	380.7	380.7	380.7	380.7	380.4
150°	390.4	390.6	390.8	390.9	391.1	391.3	391.3	391.3	391.3	391.3	391.0
152.5°	400.1	400.3	400.4	400.6	400.6	400.7	400.9	401.0	401.1	401.3	401.1
155°	414.2	414.3	414.3	414.4	414.5	414.6	414.9	415.2	415.6	415.9	415.7
157.5°	426.5	426.5	426.6	426.6	426.6	426.7	427.1	427.5	427.8	428.1	428.0
160°	434.2	434.1	434.1	434.1	434.1	434.1	434.6	435.0	435.4	435.8	435.8
162.5°	441.1	441.0	441.0	441.1	441.2	441.2	441.6	442.1	442.5	442.9	442.8
165°	450.1	450.0	450.0	450.0	450.0	450.0	450.5	451.0	451.5	452.0	451.9
167.5°	457.1	457.0	457.1	457.1	457.2	457.2	457.8	458.3	458.8	459.3	459.3
170°	461.3	461.1	461.1	461.1	461.1	461.1	461.7	462.3	462.8	463.4	463.4
172.5°	464.5	464.3	464.3	464.3	464.3	464.3	464.9	465.4	465.9	466.4	466.4
175°	467.9	467.7	467.7	467.7	467.7	467.7	468.2	468.7	469.2	469.7	469.7
177.5°	469.6	469.4	469.4	469.4	469.4	469.4	469.9	470.3	470.7	471.0	471.0
180°	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3



TEST NUMBER: P332091-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A1

**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°	4.9	4.9	4.7	4.6	4.7	4.9	4.9	4.8	5.4	4.9	4.8
90°	10.6	10.8	10.9	11.1	10.9	10.8	10.6	10.4	10.2	9.9	9.5
92.5°	15.2	15.1	15.0	14.9	15.0	15.1	15.2	15.3	15.2	15.0	14.7
95°	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.6	28.3	28.0
97.5°	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.3	43.9	43.5
100°	55.7	55.8	56.0	56.2	56.0	55.8	55.7	55.5	55.3	55.0	54.8
102.5°	68.4	68.3	68.3	68.2	68.3	68.3	68.4	68.4	68.3	68.1	67.8
105°	87.5	87.6	87.8	88.0	87.8	87.6	87.5	87.2	87.2	87.2	87.2
107.5°	108.7	108.6	108.5	108.4	108.5	108.6	108.7	108.8	108.7	108.4	108.2
110°	122.8	122.6	122.5	122.3	122.5	122.6	122.8	122.9	122.9	122.5	122.2



TEST NUMBER: P332091-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.2	137.1	136.6	136.2
115°	157.7	157.6	157.5	157.4	157.5	157.6	157.7	157.8	157.8	157.7	157.6
117.5°	178.7	178.5	178.2	178.0	178.2	178.5	178.7	179.0	179.0	179.0	179.1
120°	193.0	192.8	192.7	192.5	192.7	192.8	193.0	193.1	193.3	193.4	193.5
122.5°	207.1	206.8	206.6	206.4	206.6	206.8	207.1	207.3	207.5	207.7	208.0
125°	228.2	227.9	227.6	227.2	227.6	227.9	228.2	228.5	228.9	229.2	229.5
127.5°	249.2	248.7	248.3	248.0	248.3	248.7	249.2	249.5	249.9	250.4	250.9
130°	263.3	262.8	262.2	261.5	262.2	262.8	263.3	263.9	264.3	264.6	265.0
132.5°	277.1	276.6	276.2	275.7	276.2	276.6	277.1	277.5	277.9	278.3	278.8
135°	298.3	298.2	298.0	297.8	298.0	298.2	298.3	298.5	298.7	299.1	299.4
137.5°	318.1	317.9	317.6	317.2	317.6	317.9	318.1	318.5	318.8	319.2	319.5
140°	331.7	331.1	330.5	330.0	330.5	331.1	331.7	332.2	332.6	332.6	332.7
142.5°	344.3	343.8	343.4	342.9	343.4	343.8	344.3	344.7	345.0	345.0	345.1
145°	362.7	362.4	362.1	361.7	362.1	362.4	362.7	363.1	363.2	363.3	363.4
147.5°	379.9	379.4	378.9	378.4	378.9	379.4	379.9	380.4	380.7	380.7	380.7
150°	390.5	390.0	389.6	389.1	389.6	390.0	390.5	391.0	391.3	391.3	391.3
152.5°	400.7	400.2	399.8	399.4	399.8	400.2	400.7	401.1	401.3	401.1	401.0
155°	415.2	414.6	414.0	413.4	414.0	414.6	415.2	415.7	415.9	415.6	415.2
157.5°	427.6	427.1	426.6	426.2	426.6	427.1	427.6	428.0	428.1	427.8	427.5
160°	435.5	435.1	434.8	434.5	434.8	435.1	435.5	435.8	435.8	435.4	435.0
162.5°	442.3	441.7	441.2	440.7	441.2	441.7	442.3	442.8	442.9	442.5	442.1
165°	451.3	450.8	450.2	449.6	450.2	450.8	451.3	451.9	452.0	451.5	451.0
167.5°	458.8	458.3	457.8	457.2	457.8	458.3	458.8	459.3	459.3	458.8	458.3
170°	462.8	462.3	461.7	461.1	461.7	462.3	462.8	463.4	463.4	462.8	462.3
172.5°	465.8	465.2	464.6	464.1	464.6	465.2	465.8	466.4	466.4	465.9	465.4
175°	469.1	468.6	468.0	467.4	468.0	468.6	469.1	469.7	469.7	469.2	468.7
177.5°	470.5	470.1	469.6	469.1	469.6	470.1	470.5	471.0	471.0	470.7	470.3
180°	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3



TEST NUMBER: P332091-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A1

**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°	9.2	8.9	7.8	6.8	5.6	4.6	3.7	2.9	2.0	1.2	0.4
92.5°	14.4	14.2	13.6	13.0	12.4	11.7	11.2	10.6	10.0	9.5	9.0
95°	27.6	27.3	26.7	26.0	25.4	24.7	24.1	23.6	22.9	22.3	21.8
97.5°	43.1	42.8	42.3	41.8	41.3	40.8	40.4	40.0	39.5	39.1	38.7
100°	54.5	54.3	53.9	53.5	53.1	52.7	52.2	51.7	51.2	50.7	50.2
102.5°	67.6	67.3	66.8	66.2	65.7	65.1	64.7	64.4	64.2	63.8	63.5
105°	87.2	87.2	86.4	85.7	85.0	84.2	83.8	83.6	83.5	83.3	83.2
107.5°	107.9	107.7	107.4	107.0	106.8	106.5	106.3	106.2	106.1	106.0	105.9
110°	121.9	121.6	121.4	121.2	121.1	120.9	120.7	120.6	120.4	120.3	120.1



TEST NUMBER: P332091-930

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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	135.8	135.4	135.4	135.4	135.3	135.3	135.3	135.2	135.1	134.9	134.9
115°	157.5	157.4	157.6	157.8	157.9	158.1	158.0	157.8	157.5	157.3	157.0
117.5°	179.1	179.1	179.4	179.5	179.8	179.9	180.0	179.9	179.7	179.5	179.4
120°	193.6	193.6	194.0	194.4	194.9	195.3	195.2	194.7	194.2	193.7	193.2
122.5°	208.1	208.4	208.6	208.8	209.0	209.2	209.1	208.8	208.5	208.1	207.7
125°	229.8	230.2	230.3	230.5	230.6	230.8	230.8	230.6	230.3	230.1	229.8
127.5°	251.3	251.8	251.9	252.1	252.3	252.5	252.3	251.8	251.3	250.7	250.2
130°	265.3	265.6	265.9	266.1	266.4	266.6	266.4	265.8	265.1	264.5	263.8
132.5°	279.2	279.6	279.7	279.9	280.1	280.3	280.1	279.4	278.8	278.0	277.4
135°	299.7	300.0	300.1	300.2	300.3	300.4	300.1	299.6	299.1	298.6	298.2
137.5°	319.8	320.2	320.0	319.8	319.5	319.4	319.0	318.6	318.2	317.8	317.4
140°	332.8	332.9	332.8	332.7	332.6	332.6	332.3	331.9	331.5	331.1	330.7
142.5°	345.2	345.3	345.2	345.0	344.9	344.7	344.5	344.1	343.6	343.2	342.8
145°	363.5	363.5	363.3	363.1	362.8	362.6	362.4	362.2	362.1	361.9	361.7
147.5°	380.7	380.7	380.4	380.2	379.9	379.7	379.4	379.1	378.9	378.5	378.3
150°	391.3	391.3	391.1	390.9	390.8	390.6	390.4	390.3	390.1	390.0	389.8
152.5°	400.9	400.7	400.6	400.6	400.4	400.3	400.1	399.9	399.7	399.5	399.3
155°	414.9	414.6	414.5	414.4	414.3	414.3	414.2	414.2	414.2	414.2	414.2
157.5°	427.1	426.7	426.6	426.6	426.6	426.5	426.5	426.6	426.7	426.8	426.9
160°	434.6	434.1	434.1	434.1	434.1	434.1	434.2	434.4	434.6	434.7	434.9
162.5°	441.6	441.2	441.2	441.1	441.0	441.0	441.1	441.2	441.5	441.7	442.0
165°	450.5	450.0	450.0	450.0	450.0	450.0	450.1	450.4	450.6	450.9	451.1
167.5°	457.8	457.2	457.2	457.1	457.1	457.0	457.1	457.5	457.8	458.1	458.4
170°	461.7	461.1	461.1	461.1	461.1	461.1	461.3	461.6	461.9	462.3	462.6
172.5°	464.9	464.3	464.3	464.3	464.3	464.3	464.5	464.9	465.2	465.5	465.9
175°	468.2	467.7	467.7	467.7	467.7	467.7	467.9	468.2	468.6	468.9	469.2
177.5°	469.9	469.4	469.4	469.4	469.4	469.4	469.6	469.9	470.1	470.3	470.7
180°	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3



TEST NUMBER: P332091-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A1

**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	6.3	6.9	6.9	6.8	6.9	6.8	6.8
90°	1.2	2.0	2.9	3.7	4.6	5.6	6.8	7.8	8.9	9.2	9.5
92.5°	9.5	10.0	10.6	11.2	11.7	12.4	13.0	13.6	14.2	14.4	14.7
95°	22.3	22.9	23.6	24.1	24.7	25.4	26.0	26.7	27.3	27.6	28.0
97.5°	39.1	39.5	40.0	40.4	40.8	41.3	41.8	42.3	42.8	43.1	43.5
100°	50.7	51.2	51.7	52.2	52.7	53.1	53.5	53.9	54.3	54.5	54.8
102.5°	63.8	64.2	64.4	64.7	65.1	65.7	66.2	66.8	67.3	67.6	67.8
105°	83.3	83.5	83.6	83.8	84.2	85.0	85.7	86.4	87.2	87.2	87.2
107.5°	106.0	106.1	106.2	106.3	106.5	106.8	107.0	107.4	107.7	107.9	108.2
110°	120.3	120.4	120.6	120.7	120.9	121.1	121.2	121.4	121.6	121.9	122.2





TEST NUMBER: P332091-930

CATALOG NUMBER: S123DIW-S340D460U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	134.9	135.1	135.2	135.3	135.3	135.3	135.4	135.4	135.4	135.8	136.2
115°	157.3	157.5	157.8	158.0	158.1	157.9	157.8	157.6	157.4	157.5	157.6
117.5°	179.5	179.7	179.9	180.0	179.9	179.8	179.5	179.4	179.1	179.1	179.1
120°	193.7	194.2	194.7	195.2	195.3	194.9	194.4	194.0	193.6	193.6	193.5
122.5°	208.1	208.5	208.8	209.1	209.2	209.0	208.8	208.6	208.4	208.1	208.0
125°	230.1	230.3	230.6	230.8	230.8	230.6	230.5	230.3	230.2	229.8	229.5
127.5°	250.7	251.3	251.8	252.3	252.5	252.3	252.1	251.9	251.8	251.3	250.9
130°	264.5	265.1	265.8	266.4	266.6	266.4	266.1	265.9	265.6	265.3	265.0
132.5°	278.0	278.8	279.4	280.1	280.3	280.1	279.9	279.7	279.6	279.2	278.8
135°	298.6	299.1	299.6	300.1	300.4	300.3	300.2	300.1	300.0	299.7	299.4
137.5°	317.8	318.2	318.6	319.0	319.4	319.5	319.8	320.0	320.2	319.8	319.5
140°	331.1	331.5	331.9	332.3	332.6	332.6	332.7	332.8	332.9	332.8	332.7
142.5°	343.2	343.6	344.1	344.5	344.7	344.9	345.0	345.2	345.3	345.2	345.1
145°	361.9	362.1	362.2	362.4	362.6	362.8	363.1	363.3	363.5	363.5	363.4
147.5°	378.5	378.9	379.1	379.4	379.7	379.9	380.2	380.4	380.7	380.7	380.7
150°	390.0	390.1	390.3	390.4	390.6	390.8	390.9	391.1	391.3	391.3	391.3
152.5°	399.5	399.7	399.9	400.1	400.3	400.4	400.6	400.6	400.7	400.9	401.0
155°	414.2	414.2	414.2	414.2	414.3	414.3	414.4	414.5	414.6	414.9	415.2
157.5°	426.8	426.7	426.6	426.5	426.5	426.6	426.6	426.6	426.7	427.1	427.5
160°	434.7	434.6	434.4	434.2	434.1	434.1	434.1	434.1	434.1	434.6	435.0
162.5°	441.7	441.5	441.2	441.1	441.0	441.0	441.1	441.2	441.2	441.6	442.1
165°	450.9	450.6	450.4	450.1	450.0	450.0	450.0	450.0	450.0	450.5	451.0
167.5°	458.1	457.8	457.5	457.1	457.0	457.1	457.1	457.2	457.2	457.8	458.3
170°	462.3	461.9	461.6	461.3	461.1	461.1	461.1	461.1	461.1	461.7	462.3
172.5°	465.5	465.2	464.9	464.5	464.3	464.3	464.3	464.3	464.3	464.9	465.4
175°	468.9	468.6	468.2	467.9	467.7	467.7	467.7	467.7	467.7	468.2	468.7
177.5°	470.3	470.1	469.9	469.6	469.4	469.4	469.4	469.4	469.4	469.9	470.3
180°	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3



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**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	6.5	6.7	6.5	6.4	6.8
90°	9.9	10.2	10.4	10.6	10.8	10.9	11.1
92.5°	15.0	15.2	15.3	15.2	15.1	15.0	14.9
95°	28.3	28.6	28.8	28.8	28.8	28.8	28.8
97.5°	43.9	44.3	44.4	44.4	44.4	44.4	44.4
100°	55.0	55.3	55.5	55.7	55.8	56.0	56.2
102.5°	68.1	68.3	68.4	68.4	68.3	68.3	68.2
105°	87.2	87.2	87.2	87.5	87.6	87.8	88.0
107.5°	108.4	108.7	108.8	108.7	108.6	108.5	108.4
110°	122.5	122.9	122.9	122.8	122.6	122.5	122.3



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	136.6	137.1	137.2	137.1	137.1	137.1	137.1
115°	157.7	157.8	157.8	157.7	157.6	157.5	157.4
117.5°	179.0	179.0	179.0	178.7	178.5	178.2	178.0
120°	193.4	193.3	193.1	193.0	192.8	192.7	192.5
122.5°	207.7	207.5	207.3	207.1	206.8	206.6	206.4
125°	229.2	228.9	228.5	228.2	227.9	227.6	227.2
127.5°	250.4	249.9	249.5	249.2	248.7	248.3	248.0
130°	264.6	264.3	263.9	263.3	262.8	262.2	261.5
132.5°	278.3	277.9	277.5	277.1	276.6	276.2	275.7
135°	299.1	298.7	298.5	298.3	298.2	298.0	297.8
137.5°	319.2	318.8	318.5	318.1	317.9	317.6	317.2
140°	332.6	332.6	332.2	331.7	331.1	330.5	330.0
142.5°	345.0	345.0	344.7	344.3	343.8	343.4	342.9
145°	363.3	363.2	363.1	362.7	362.4	362.1	361.7
147.5°	380.7	380.7	380.4	379.9	379.4	378.9	378.4
150°	391.3	391.3	391.0	390.5	390.0	389.6	389.1
152.5°	401.1	401.3	401.1	400.7	400.2	399.8	399.4
155°	415.6	415.9	415.7	415.2	414.6	414.0	413.4
157.5°	427.8	428.1	428.0	427.6	427.1	426.6	426.2
160°	435.4	435.8	435.8	435.5	435.1	434.8	434.5
162.5°	442.5	442.9	442.8	442.3	441.7	441.2	440.7
165°	451.5	452.0	451.9	451.3	450.8	450.2	449.6
167.5°	458.8	459.3	459.3	458.8	458.3	457.8	457.2
170°	462.8	463.4	463.4	462.8	462.3	461.7	461.1
172.5°	465.9	466.4	466.4	465.8	465.2	464.6	464.1
175°	469.2	469.7	469.7	469.1	468.6	468.0	467.4
177.5°	470.7	471.0	471.0	470.5	470.1	469.6	469.1
180°	470.3	470.3	470.3	470.3	470.3	470.3	470.3

(END OF REPORT)