

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

Luminaire Tested: **S123DIW-S340D460U835-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332090  
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-S340D460U835-4F0-1E-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: 3297.1 lumens  
Efficiency: N/A  
Efficacy: 143.4 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

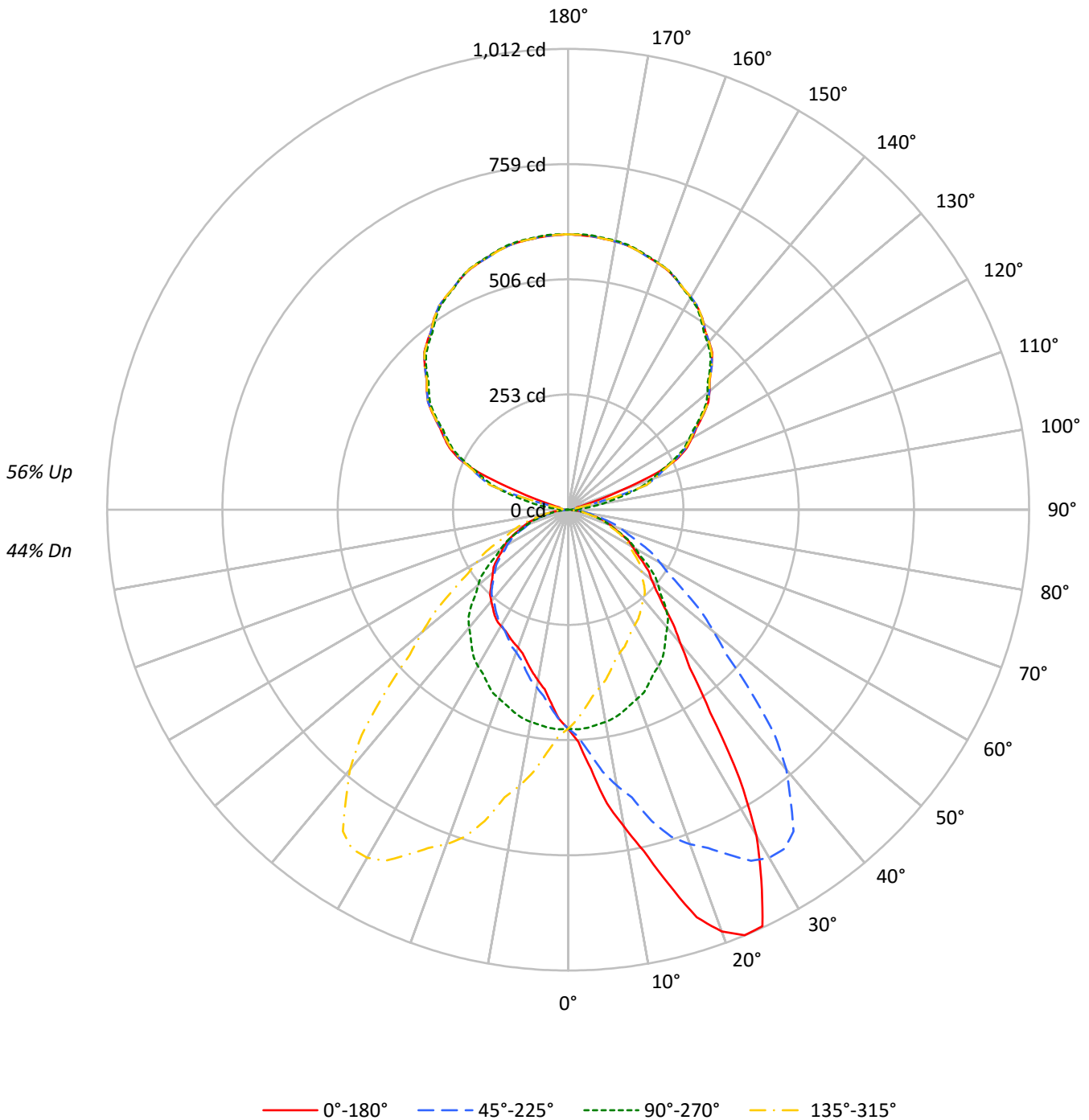
Input Watts (W): 23  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	5175	5175	5175	5175
5°	6172	5198	4606	5198
10°	7725	5172	4161	5172
15°	9475	5129	3874	5129
20°	11287	5065	3688	5065
25°	11986	4986	3646	4986
30°	10274	4928	3665	4928
35°	7144	4846	3704	4846
40°	5382	4749	3693	4749
45°	4468	4606	3646	4606
50°	4002	4315	3612	4315
55°	3742	4001	3567	4001
60°	3511	3670	3531	3670
65°	3298	3347	3418	3347
70°	3094	2977	3254	2977
75°	2770	2608	2986	2608
80°	2424	2139	2572	2139
85°	1902	1556	1729	1556



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.4	1.4
10°-20°	151.9	4.6
20°-30°	254.9	7.7
30°-40°	288.6	8.8
40°-50°	258.8	7.9
50°-60°	208.9	6.3
60°-70°	145.6	4.4
70°-80°	76.5	2.3
80°-90°	20.4	0.6
90°-100°	22.0	0.7
100°-110°	104.8	3.2
110°-120°	251.7	7.6
120°-130°	320.5	9.7
130°-140°	342.4	10.4
140°-150°	320.2	9.7
150°-160°	258.3	7.8
160°-170°	166.7	5.1
170°-180°	57.5	1.7
0°-30°	454.2	13.8
0°-40°	742.8	22.5
0°-60°	1210.5	36.7
0°-90°	1453.0	44.1
90°-120°	378.5	11.5
90°-150°	1361.6	41.3
90°-180°	1844.0	55.9
0°-180°	3297.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	481	481	481	481	481	
5°	571	481	426	481	571	59
15°	850	460	348	460	850	246
25°	1009	420	307	420	1009	443
35°	544	369	282	369	544	353
45°	294	303	240	303	294	232
55°	199	213	190	213	199	179
65°	130	131	134	131	130	129
75°	67	63	72	63	67	71
85°	15	13	14	13	15	19
90°	14	0	14	0	14	7
95°	17	27	17	27	17	14
105°	20	134	20	134	20	45
115°	264	251	264	251	264	244
125°	361	354	361	354	361	323
135°	445	441	445	441	445	343
145°	514	509	514	509	514	321
155°	559	560	559	560	559	258
165°	590	591	590	591	590	166
175°	602	605	602	605	602	57
180°	605	605	605	605	605	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8
2.5°	510.3	509.9	509.0	509.7	508.2	506.2	506.0	504.1	498.7	498.4	496.9
5°	571.2	569.4	569.1	568.9	565.6	561.2	552.8	552.1	540.9	535.4	528.6
7.5°	650.2	651.1	647.7	644.8	634.8	628.2	619.2	607.7	594.0	580.0	570.8
10°	706.8	714.5	705.0	698.4	692.4	681.0	667.7	651.1	634.6	615.3	600.6
12.5°	767.6	771.3	769.4	763.3	753.9	736.5	713.0	694.7	679.5	647.3	634.3
15°	850.3	864.5	855.4	834.5	834.9	818.4	787.7	753.9	735.9	707.7	669.3
17.5°	938.5	940.2	936.4	918.9	907.3	884.5	856.1	823.8	787.4	753.3	712.5
20°	985.4	984.0	975.9	966.8	946.8	929.1	898.1	862.0	815.4	781.8	737.3
22.5°	1011.5	1009.2	1005.3	997.7	981.1	962.1	934.2	894.8	850.4	804.2	752.8
25°	1009.2	1012.2	1012.7	1010.6	1004.8	993.4	971.5	940.0	895.8	836.3	782.8
27.5°	917.9	922.2	934.6	945.7	958.0	970.6	968.9	953.3	920.5	869.2	803.7
30°	826.6	817.2	840.3	869.4	889.2	924.2	943.7	944.9	926.5	882.5	818.6
32.5°	699.8	710.1	720.3	756.1	799.4	838.6	877.6	908.9	912.5	883.2	827.4
35°	543.7	556.6	575.2	593.8	640.4	680.5	749.0	808.6	856.1	862.4	828.2
37.5°	438.2	444.5	456.3	475.0	505.4	553.0	605.9	681.3	750.2	801.4	803.6
40°	383.0	384.9	398.1	412.3	437.0	476.2	523.9	590.6	673.0	744.6	774.4
42.5°	341.6	345.7	351.4	365.0	384.7	414.1	458.5	513.6	589.2	671.5	729.8
45°	293.5	298.2	301.7	310.8	324.8	344.6	375.5	425.9	483.4	568.4	646.9
47.5°	261.8	262.1	264.7	271.6	281.1	296.0	317.9	350.2	403.0	472.0	552.6
50°	239.0	242.7	243.7	249.0	256.5	267.4	285.6	313.1	356.4	417.0	491.1
52.5°	223.0	224.1	226.7	230.6	237.1	245.6	261.4	282.9	316.9	368.6	436.7
55°	199.4	199.4	202.0	205.0	208.7	216.4	226.9	242.7	268.6	308.7	365.1
57.5°	177.6	178.8	180.6	181.5	184.7	189.8	198.5	210.6	229.8	260.7	305.5
60°	163.1	165.2	164.9	166.8	169.6	173.6	181.0	190.8	208.0	232.7	270.5
62.5°	150.4	150.3	150.2	152.5	155.2	159.0	163.9	172.3	187.0	208.9	241.0
65°	129.5	129.1	130.7	132.1	133.0	135.8	139.5	147.0	156.8	173.1	198.0
67.5°	111.0	109.6	110.5	111.0	112.6	114.8	118.3	122.9	130.6	143.7	162.5
70°	98.3	97.1	96.9	97.4	98.8	100.4	103.0	107.4	114.6	125.1	138.8
72.5°	85.3	84.5	84.4	85.5	86.1	87.2	89.0	93.0	98.8	106.7	119.5
75°	66.6	66.6	66.6	66.9	67.6	68.5	69.9	72.0	76.4	82.0	90.6
77.5°	49.9	49.9	49.6	49.6	50.6	51.0	51.3	53.3	55.8	59.5	65.8
80°	39.1	38.0	38.4	39.1	39.6	39.8	40.5	41.0	43.1	45.2	49.6
82.5°	29.1	28.1	28.2	29.3	29.4	29.6	30.3	30.9	31.7	33.6	36.0
85°	15.4	15.4	15.6	15.6	15.8	15.6	16.3	16.5	16.5	17.7	19.1
87.5°	8.3	7.9	8.0	8.2	7.9	8.1	8.2	8.3	8.4	8.5	8.4
90°	13.5	13.3	13.1	12.9	12.7	12.4	12.0	11.6	11.2	10.8	9.5
92.5°	14.9	14.8	14.7	14.6	14.4	14.1	13.4	12.8	12.1	11.5	10.5
95°	17.1	17.1	17.1	17.1	17.1	16.7	16.0	15.3	14.6	13.9	12.8
97.5°	18.5	18.4	18.3	18.2	18.1	17.7	16.9	16.1	15.3	14.5	21.7
100°	18.9	18.8	18.7	18.6	18.5	18.0	17.2	16.4	15.6	14.8	30.4
102.5°	19.2	19.0	18.9	18.7	18.5	19.7	22.1	24.6	27.1	29.6	46.6
105°	19.8	19.6	19.4	19.2	19.0	27.7	45.4	63.0	80.7	98.4	107.4
107.5°	62.1	75.4	88.7	102.0	115.4	128.5	141.5	154.4	167.4	180.3	178.9
110°	123.6	137.8	152.1	166.4	180.7	189.4	192.7	196.0	199.3	202.6	201.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	212.0	215.0	218.0	221.0	224.0	225.5	225.4	225.4	225.3	225.3	224.2
115°	264.2	263.8	263.4	263.0	262.6	261.9	260.9	259.9	258.9	257.9	257.0
117.5°	293.5	293.4	293.3	293.2	293.1	292.7	291.9	291.1	290.3	289.5	289.1
120°	313.6	313.6	313.6	313.6	313.6	313.2	312.4	311.6	310.8	310.0	309.7
122.5°	333.4	333.3	333.2	333.1	333.0	332.7	332.2	331.6	331.0	330.5	330.1
125°	361.2	361.0	360.8	360.6	360.4	360.2	360.0	359.8	359.6	359.4	359.0
127.5°	388.0	388.2	388.4	388.6	388.8	388.7	388.4	388.1	387.8	387.5	387.0
130°	405.2	405.4	405.6	405.8	406.0	405.9	405.5	405.1	404.7	404.3	404.0
132.5°	421.1	421.3	421.6	421.9	422.2	422.1	421.7	421.3	420.9	420.5	420.2
135°	445.2	445.5	445.8	446.1	446.4	446.4	446.1	445.8	445.5	445.2	444.8
137.5°	468.0	468.2	468.4	468.6	468.8	468.6	468.1	467.7	467.2	466.7	466.5
140°	481.6	481.8	482.0	482.2	482.4	482.3	481.9	481.5	481.1	480.7	480.4
142.5°	494.2	494.5	494.8	495.0	495.3	495.3	495.0	494.7	494.3	494.0	493.7
145°	513.5	513.5	513.5	513.5	513.5	513.4	513.2	513.0	512.8	512.6	512.4
147.5°	527.9	528.4	528.8	529.3	529.7	529.9	529.7	529.5	529.3	529.1	528.9
150°	538.7	539.0	539.3	539.6	539.9	539.9	539.7	539.5	539.3	539.1	538.9
152.5°	547.3	547.8	548.2	548.7	549.1	549.2	548.8	548.5	548.1	547.8	547.6
155°	559.4	559.9	560.5	561.1	561.7	561.8	561.3	560.8	560.3	559.8	559.7
157.5°	569.5	570.3	571.1	571.8	572.6	572.7	572.1	571.5	570.9	570.3	570.4
160°	576.0	576.7	577.4	578.1	578.8	578.8	578.2	577.6	577.0	576.4	576.5
162.5°	582.1	582.7	583.3	583.9	584.6	584.5	583.9	583.2	582.5	581.8	581.9
165°	589.5	590.2	590.9	591.5	592.2	592.2	591.4	590.6	589.8	589.0	589.1
167.5°	594.8	595.6	596.4	597.1	597.9	597.9	597.1	596.4	595.6	594.8	594.8
170°	598.0	598.8	599.6	600.4	601.2	601.2	600.4	599.6	598.8	598.0	598.0
172.5°	599.8	600.7	601.5	602.4	603.3	603.3	602.5	601.7	600.9	600.1	600.1
175°	602.5	603.3	604.1	604.9	605.7	605.7	605.0	604.3	603.6	602.9	602.8
177.5°	603.3	604.1	604.9	605.7	606.5	606.6	605.9	605.3	604.6	604.0	603.9
180°	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8
2.5°	495.7	494.3	492.8	490.2	487.9	484.8	483.8	482.7	479.3	476.4	474.1
5°	526.0	520.4	512.3	504.8	498.8	490.6	486.0	481.1	474.1	467.8	462.7
7.5°	557.7	546.7	534.0	520.4	507.6	495.3	485.4	476.5	466.7	457.5	450.2
10°	582.9	567.0	549.3	530.2	513.9	498.1	484.8	473.2	460.6	449.6	440.5
12.5°	611.6	588.1	563.7	540.5	521.2	499.2	483.1	468.3	454.0	440.9	430.7
15°	645.5	615.7	586.8	554.9	525.6	498.1	479.0	460.3	443.8	430.3	417.2
17.5°	676.5	642.7	604.6	565.8	530.4	497.8	471.1	450.0	429.3	412.8	399.8
20°	694.0	655.6	612.5	572.2	533.0	496.7	467.3	442.2	419.8	402.3	387.7
22.5°	709.1	664.1	619.5	576.4	532.8	493.7	460.4	434.5	410.3	393.2	377.6
25°	724.8	670.9	626.2	575.7	527.0	486.4	449.2	419.8	395.6	375.5	359.5
27.5°	738.2	670.5	617.4	563.0	517.7	477.1	437.3	405.8	380.1	358.3	342.0
30°	747.1	671.4	608.3	554.5	508.8	466.9	428.2	396.5	369.5	347.4	332.0
32.5°	752.7	670.8	599.9	542.5	494.6	457.5	418.3	385.5	357.7	336.0	321.2
35°	756.0	666.7	585.4	517.9	471.8	435.6	402.8	368.8	339.7	319.4	302.6
37.5°	749.4	658.1	568.7	494.1	443.6	408.1	380.4	351.5	323.6	301.3	286.8
40°	739.2	652.5	555.6	477.3	424.2	390.0	366.5	338.0	310.5	289.3	275.8
42.5°	719.6	641.2	541.3	458.7	404.1	369.9	348.2	324.4	298.4	278.5	265.0
45°	671.9	616.4	519.7	430.8	374.4	339.0	319.9	302.6	279.1	259.8	248.1
47.5°	605.6	579.2	488.6	401.3	343.3	309.3	289.4	275.6	258.4	242.7	231.6
50°	559.6	548.6	467.6	381.1	322.7	289.3	270.2	257.7	245.3	229.7	219.5
52.5°	506.5	513.2	443.0	360.3	301.6	268.8	250.9	240.9	229.7	216.8	207.9
55°	431.7	456.1	400.5	325.2	270.2	239.0	222.0	213.2	206.6	197.1	189.4
57.5°	361.7	392.8	354.5	289.1	239.4	212.5	196.2	186.6	182.4	177.4	171.3
60°	320.1	350.8	321.7	264.9	218.8	193.1	178.7	170.5	166.3	162.8	157.7
62.5°	283.0	314.1	289.7	240.3	198.4	174.7	162.1	154.1	150.9	149.1	144.7
65°	232.0	258.8	242.5	202.0	169.4	148.4	137.0	131.4	128.4	127.7	124.9
67.5°	188.8	209.2	197.4	167.5	141.9	123.8	114.1	109.3	107.0	106.7	104.6
70°	160.5	179.6	170.5	143.5	121.4	107.2	98.8	94.6	93.2	93.0	91.8
72.5°	138.5	151.8	144.6	122.1	105.0	92.1	85.9	81.5	80.0	80.3	79.5
75°	102.5	112.5	108.3	92.7	79.0	70.6	65.5	62.7	61.3	62.0	61.0
77.5°	73.8	80.1	76.3	65.5	57.0	51.0	47.2	45.5	44.2	44.2	43.8
80°	55.7	59.4	57.3	50.8	43.8	38.7	35.6	34.5	33.8	33.5	33.3
82.5°	39.7	42.8	40.3	35.9	31.1	28.0	26.3	24.8	24.3	24.4	24.2
85°	20.0	21.2	20.3	17.5	15.6	14.2	13.3	12.6	12.1	12.3	11.9
87.5°	8.5	8.5	7.6	6.7	6.1	5.3	5.1	4.6	4.4	4.6	4.6
90°	8.2	6.9	5.6	4.4	3.4	2.4	1.4	0.4	1.4	2.4	3.4
92.5°	9.5	8.6	7.6	7.2	7.5	7.8	8.1	8.4	8.1	7.8	7.5
95°	11.7	10.6	9.5	11.0	15.1	19.2	23.3	27.4	23.3	19.2	15.1
97.5°	28.8	36.0	43.2	47.7	49.6	51.4	53.2	55.1	53.2	51.4	49.6
100°	46.0	61.6	77.1	83.9	81.9	79.9	77.9	75.9	77.9	79.9	81.9
102.5°	63.6	80.6	97.6	105.4	104.0	102.5	101.1	99.6	101.1	102.5	104.0
105°	116.4	125.3	134.3	138.3	137.2	136.1	135.0	133.9	135.0	136.1	137.2
107.5°	177.5	176.1	174.7	173.5	172.6	171.8	170.9	170.0	170.9	171.8	172.6
110°	200.4	199.3	198.2	197.3	196.5	195.7	194.9	194.1	194.9	195.7	196.5





TEST NUMBER: P332090

CATALOG NUMBER: S123DIW-S340D460U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	223.1	222.0	220.9	220.0	219.2	218.5	217.8	217.1	217.8	218.5	219.2
115°	256.1	255.2	254.3	253.5	252.9	252.3	251.7	251.1	251.7	252.3	252.9
117.5°	288.6	288.1	287.7	287.1	286.3	285.6	284.9	284.1	284.9	285.6	286.3
120°	309.4	309.1	308.8	308.2	307.3	306.4	305.5	304.6	305.5	306.4	307.3
122.5°	329.7	329.4	329.0	328.4	327.7	326.9	326.2	325.5	326.2	326.9	327.7
125°	358.6	358.2	357.8	357.2	356.4	355.6	354.8	354.0	354.8	355.6	356.4
127.5°	386.5	386.0	385.5	384.9	384.1	383.3	382.5	381.7	382.5	383.3	384.1
130°	403.6	403.2	402.8	402.2	401.4	400.6	399.8	399.0	399.8	400.6	401.4
132.5°	419.9	419.6	419.2	418.7	417.9	417.1	416.3	415.5	416.3	417.1	417.9
135°	444.4	444.0	443.6	443.1	442.5	441.9	441.3	440.7	441.3	441.9	442.5
137.5°	466.3	466.1	465.8	465.3	464.6	463.8	463.1	462.3	463.1	463.8	464.6
140°	480.1	479.8	479.5	479.1	478.5	477.9	477.3	476.7	477.3	477.9	478.5
142.5°	493.4	493.1	492.8	492.4	491.8	491.2	490.6	490.0	490.6	491.2	491.8
145°	512.2	512.0	511.8	511.4	510.7	510.0	509.3	508.6	509.3	510.0	510.7
147.5°	528.7	528.5	528.3	527.9	527.5	527.0	526.6	526.1	526.6	527.0	527.5
150°	538.7	538.5	538.3	538.1	537.8	537.5	537.2	536.9	537.2	537.5	537.8
152.5°	547.5	547.4	547.3	547.2	547.0	546.9	546.7	546.6	546.7	546.9	547.0
155°	559.6	559.5	559.4	559.5	559.7	559.8	560.0	560.2	560.0	559.8	559.7
157.5°	570.5	570.6	570.7	570.8	570.8	570.8	570.8	570.9	570.8	570.8	570.8
160°	576.6	576.7	576.8	576.9	577.0	577.1	577.2	577.3	577.2	577.1	577.0
162.5°	582.0	582.1	582.2	582.4	582.7	582.9	583.2	583.4	583.2	582.9	582.7
165°	589.2	589.3	589.4	589.6	589.9	590.2	590.5	590.8	590.5	590.2	589.9
167.5°	594.8	594.8	594.8	595.0	595.4	595.8	596.2	596.6	596.2	595.8	595.4
170°	598.0	598.0	598.0	598.2	598.6	599.0	599.4	599.8	599.4	599.0	598.6
172.5°	600.0	599.9	599.8	600.0	600.5	601.0	601.5	601.9	601.5	601.0	600.5
175°	602.7	602.6	602.5	602.7	603.2	603.7	604.2	604.7	604.2	603.7	603.2
177.5°	603.8	603.8	603.7	603.8	604.2	604.6	605.0	605.4	605.0	604.6	604.2
180°	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7



TEST NUMBER: P332090

CATALOG NUMBER: S123DIW-S340D460U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8
2.5°	472.8	471.5	469.7	466.9	464.6	461.1	461.1	461.6	461.6	461.5	461.1
5°	458.5	455.0	450.8	445.9	440.8	435.6	434.7	432.8	431.5	430.5	429.4
7.5°	443.3	437.1	431.0	424.2	417.9	412.8	409.2	406.2	404.3	402.2	400.7
10°	433.1	425.4	418.2	411.0	403.0	396.7	392.8	390.0	387.9	386.0	385.1
12.5°	421.0	412.2	404.2	397.3	388.7	382.2	378.4	377.1	374.7	370.7	368.7
15°	403.3	395.1	385.6	375.1	370.9	363.0	358.5	356.4	355.0	352.0	351.1
17.5°	388.1	377.5	366.7	358.9	351.1	344.7	342.2	339.6	337.8	335.3	334.5
20°	376.0	366.5	356.7	348.3	340.1	333.1	331.0	329.2	327.3	326.2	325.2
22.5°	363.7	354.2	346.0	338.2	329.5	324.9	322.7	320.6	319.3	318.5	317.6
25°	346.4	338.0	328.9	322.0	315.0	311.9	310.5	309.4	308.4	307.3	307.0
27.5°	331.0	321.8	314.5	307.9	302.9	300.4	299.0	298.5	298.7	299.1	299.4
30°	319.4	311.0	305.0	299.4	294.7	292.4	292.1	292.1	293.1	293.3	293.8
32.5°	308.8	301.9	295.8	290.4	286.9	285.3	286.2	286.2	286.9	287.5	288.4
35°	293.3	287.2	282.6	277.9	274.9	275.6	276.1	276.5	277.7	279.1	280.0
37.5°	278.5	273.3	268.4	264.8	263.4	264.6	265.8	266.7	268.1	269.2	270.1
40°	267.9	263.9	259.3	256.0	256.5	257.2	258.1	259.3	260.5	261.2	262.1
42.5°	258.0	253.9	250.3	247.6	248.3	249.2	249.7	250.3	251.7	253.0	253.5
45°	243.0	239.7	236.5	234.8	235.3	235.8	236.2	236.9	238.1	239.0	239.3
47.5°	226.1	223.8	221.6	220.0	220.8	220.6	221.2	222.7	223.0	223.6	224.9
50°	215.3	213.2	210.6	210.1	210.1	210.1	210.4	212.2	212.2	213.2	214.1
52.5°	203.3	202.0	200.4	199.5	199.1	199.1	200.1	201.0	201.4	202.7	203.7
55°	185.7	184.3	182.9	182.2	181.7	182.2	184.0	184.5	185.7	186.4	187.1
57.5°	167.3	166.2	165.1	164.7	164.6	165.2	166.2	167.6	167.9	170.1	171.1
60°	155.2	153.5	152.6	152.6	152.1	154.2	153.8	156.1	156.6	158.0	159.6
62.5°	142.7	140.5	140.1	140.1	140.8	141.4	142.0	143.0	144.3	146.0	147.3
65°	122.5	121.4	123.0	122.8	122.3	123.7	123.7	124.9	126.3	127.9	130.5
67.5°	103.5	102.9	103.0	103.0	103.7	104.5	105.2	106.2	107.9	109.6	111.3
70°	90.6	91.3	90.2	91.1	91.8	92.0	92.5	93.9	95.7	96.9	98.8
72.5°	78.1	78.1	78.2	78.6	79.3	79.7	80.2	81.8	83.8	84.8	86.3
75°	60.1	59.9	60.6	60.6	61.7	62.2	62.7	63.4	65.2	66.6	67.8
77.5°	43.9	44.2	44.0	44.8	44.5	44.6	46.0	46.7	46.9	49.7	50.3
80°	33.1	33.5	33.8	34.0	34.2	33.8	35.4	36.1	36.1	37.7	38.9
82.5°	23.8	24.0	24.6	24.9	24.9	25.4	25.5	26.0	26.6	27.3	28.8
85°	11.9	12.6	12.8	12.6	12.8	12.3	13.0	13.3	13.5	13.5	13.5
87.5°	4.6	5.0	5.1	5.6	5.6	6.1	6.2	5.9	5.9	6.6	5.9
90°	4.4	5.6	6.9	8.2	9.5	10.8	11.2	11.6	12.0	12.4	12.7
92.5°	7.2	7.6	8.6	9.5	10.5	11.5	12.1	12.8	13.4	14.1	14.4
95°	11.0	9.5	10.6	11.7	12.8	13.9	14.6	15.3	16.0	16.7	17.1
97.5°	47.7	43.2	36.0	28.8	21.7	14.5	15.3	16.1	16.9	17.7	18.1
100°	83.9	77.1	61.6	46.0	30.4	14.8	15.6	16.4	17.2	18.0	18.5
102.5°	105.4	97.6	80.6	63.6	46.6	29.6	27.1	24.6	22.1	19.7	18.5
105°	138.3	134.3	125.3	116.4	107.4	98.4	80.7	63.0	45.4	27.7	19.0
107.5°	173.5	174.7	176.1	177.5	178.9	180.3	167.4	154.4	141.5	128.5	115.4
110°	197.3	198.2	199.3	200.4	201.5	202.6	199.3	196.0	192.7	189.4	180.7



TEST NUMBER: P332090

CATALOG NUMBER: S123DIW-S340D460U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	220.0	220.9	222.0	223.1	224.2	225.3	225.3	225.4	225.4	225.5	224.0
115°	253.5	254.3	255.2	256.1	257.0	257.9	258.9	259.9	260.9	261.9	262.6
117.5°	287.1	287.7	288.1	288.6	289.1	289.5	290.3	291.1	291.9	292.7	293.1
120°	308.2	308.8	309.1	309.4	309.7	310.0	310.8	311.6	312.4	313.2	313.6
122.5°	328.4	329.0	329.4	329.7	330.1	330.5	331.0	331.6	332.2	332.7	333.0
125°	357.2	357.8	358.2	358.6	359.0	359.4	359.6	359.8	360.0	360.2	360.4
127.5°	384.9	385.5	386.0	386.5	387.0	387.5	387.8	388.1	388.4	388.7	388.8
130°	402.2	402.8	403.2	403.6	404.0	404.3	404.7	405.1	405.5	405.9	406.0
132.5°	418.7	419.2	419.6	419.9	420.2	420.5	420.9	421.3	421.7	422.1	422.2
135°	443.1	443.6	444.0	444.4	444.8	445.2	445.5	445.8	446.1	446.4	446.4
137.5°	465.3	465.8	466.1	466.3	466.5	466.7	467.2	467.7	468.1	468.6	468.8
140°	479.1	479.5	479.8	480.1	480.4	480.7	481.1	481.5	481.9	482.3	482.4
142.5°	492.4	492.8	493.1	493.4	493.7	494.0	494.3	494.7	495.0	495.3	495.3
145°	511.4	511.8	512.0	512.2	512.4	512.6	512.8	513.0	513.2	513.4	513.5
147.5°	527.9	528.3	528.5	528.7	528.9	529.1	529.3	529.5	529.7	529.9	529.7
150°	538.1	538.3	538.5	538.7	538.9	539.1	539.3	539.5	539.7	539.9	539.9
152.5°	547.2	547.3	547.4	547.5	547.6	547.8	548.1	548.5	548.8	549.2	549.1
155°	559.5	559.4	559.5	559.6	559.7	559.8	560.3	560.8	561.3	561.8	561.7
157.5°	570.8	570.7	570.6	570.5	570.4	570.3	570.9	571.5	572.1	572.7	572.6
160°	576.9	576.8	576.7	576.6	576.5	576.4	577.0	577.6	578.2	578.8	578.8
162.5°	582.4	582.2	582.1	582.0	581.9	581.8	582.5	583.2	583.9	584.5	584.6
165°	589.6	589.4	589.3	589.2	589.1	589.0	589.8	590.6	591.4	592.2	592.2
167.5°	595.0	594.8	594.8	594.8	594.8	594.8	595.6	596.4	597.1	597.9	597.9
170°	598.2	598.0	598.0	598.0	598.0	598.0	598.8	599.6	600.4	601.2	601.2
172.5°	600.0	599.8	599.9	600.0	600.1	600.1	600.9	601.7	602.5	603.3	603.3
175°	602.7	602.5	602.6	602.7	602.8	602.9	603.6	604.3	605.0	605.7	605.7
177.5°	603.8	603.7	603.8	603.8	603.9	604.0	604.6	605.3	605.9	606.6	606.5
180°	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7



TEST NUMBER: P332090

CATALOG NUMBER: S123DIW-S340D460U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8
2.5°	459.8	459.6	460.9	460.0	460.9	459.6	459.8	461.1	461.5	461.6	461.6
5°	428.0	428.7	426.3	426.3	426.3	428.7	428.0	429.4	430.5	431.5	432.8
7.5°	399.6	398.6	398.7	397.4	398.7	398.6	399.6	400.7	402.2	404.3	406.2
10°	382.3	380.9	380.4	380.7	380.4	380.9	382.3	385.1	386.0	387.9	390.0
12.5°	367.9	367.7	364.6	364.6	364.6	367.7	367.9	368.7	370.7	374.7	377.1
15°	351.1	346.7	346.2	347.6	346.2	346.7	351.1	351.1	352.0	355.0	356.4
17.5°	334.2	331.8	332.0	331.3	332.0	331.8	334.2	334.5	335.3	337.8	339.6
20°	325.2	323.8	323.6	322.0	323.6	323.8	325.2	325.2	326.2	327.3	329.2
22.5°	317.0	316.6	316.7	314.9	316.7	316.6	317.0	317.6	318.5	319.3	320.6
25°	306.8	308.0	307.0	307.0	307.0	308.0	306.8	307.0	307.3	308.4	309.4
27.5°	299.9	299.9	299.4	299.4	299.4	299.9	299.9	299.4	299.1	298.7	298.5
30°	294.7	294.5	294.9	294.9	294.9	294.5	294.7	293.8	293.3	293.1	292.1
32.5°	289.5	289.8	289.9	290.1	289.9	289.8	289.5	288.4	287.5	286.9	286.2
35°	281.4	281.7	282.4	281.9	282.4	281.7	281.4	280.0	279.1	277.7	276.5
37.5°	270.5	271.6	271.4	271.7	271.4	271.6	270.5	270.1	269.2	268.1	266.7
40°	262.3	263.0	262.8	262.8	262.8	263.0	262.3	262.1	261.2	260.5	259.3
42.5°	253.9	254.4	253.8	253.5	253.8	254.4	253.9	253.5	253.0	251.7	250.3
45°	240.2	239.7	240.4	239.5	240.4	239.7	240.2	239.3	239.0	238.1	236.9
47.5°	224.8	225.3	225.5	226.2	225.5	225.3	224.8	224.9	223.6	223.0	222.7
50°	214.6	216.0	216.0	215.7	216.0	216.0	214.6	214.1	213.2	212.2	212.2
52.5°	204.5	205.1	206.1	206.0	206.1	205.1	204.5	203.7	202.7	201.4	201.0
55°	188.9	189.4	189.9	190.1	189.9	189.4	188.9	187.1	186.4	185.7	184.5
57.5°	172.8	172.6	173.7	174.1	173.7	172.6	172.8	171.1	170.1	167.9	167.6
60°	161.4	161.4	163.3	164.0	163.3	161.4	161.4	159.6	158.0	156.6	156.1
62.5°	149.3	150.1	151.9	151.0	151.9	150.1	149.3	147.3	146.0	144.3	143.0
65°	131.6	133.5	133.3	134.2	133.3	133.5	131.6	130.5	127.9	126.3	124.9
67.5°	113.1	114.3	116.0	116.1	116.0	114.3	113.1	111.3	109.6	107.9	106.2
70°	100.6	101.8	102.7	103.4	102.7	101.8	100.6	98.8	96.9	95.7	93.9
72.5°	88.5	89.1	91.4	90.4	91.4	89.1	88.5	86.3	84.8	83.8	81.8
75°	69.4	71.1	72.5	71.8	72.5	71.1	69.4	67.8	66.6	65.2	63.4
77.5°	51.3	53.0	53.6	53.0	53.6	53.0	51.3	50.3	49.7	46.9	46.7
80°	40.5	40.3	41.7	41.5	41.7	40.3	40.5	38.9	37.7	36.1	36.1
82.5°	29.7	29.5	30.1	30.3	30.1	29.5	29.7	28.8	27.3	26.6	26.0
85°	14.4	15.1	14.2	14.0	14.2	15.1	14.4	13.5	13.5	13.5	13.3
87.5°	5.9	6.0	5.8	5.7	5.8	6.0	5.9	5.9	6.6	5.9	5.9
90°	12.9	13.1	13.3	13.5	13.3	13.1	12.9	12.7	12.4	12.0	11.6
92.5°	14.6	14.7	14.8	14.9	14.8	14.7	14.6	14.4	14.1	13.4	12.8
95°	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	16.7	16.0	15.3
97.5°	18.2	18.3	18.4	18.5	18.4	18.3	18.2	18.1	17.7	16.9	16.1
100°	18.6	18.7	18.8	18.9	18.8	18.7	18.6	18.5	18.0	17.2	16.4
102.5°	18.7	18.9	19.0	19.2	19.0	18.9	18.7	18.5	19.7	22.1	24.6
105°	19.2	19.4	19.6	19.8	19.6	19.4	19.2	19.0	27.7	45.4	63.0
107.5°	102.0	88.7	75.4	62.1	75.4	88.7	102.0	115.4	128.5	141.5	154.4
110°	166.4	152.1	137.8	123.6	137.8	152.1	166.4	180.7	189.4	192.7	196.0



TEST NUMBER: P332090

CATALOG NUMBER: S123DIW-S340D460U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	221.0	218.0	215.0	212.0	215.0	218.0	221.0	224.0	225.5	225.4	225.4
115°	263.0	263.4	263.8	264.2	263.8	263.4	263.0	262.6	261.9	260.9	259.9
117.5°	293.2	293.3	293.4	293.5	293.4	293.3	293.2	293.1	292.7	291.9	291.1
120°	313.6	313.6	313.6	313.6	313.6	313.6	313.6	313.6	313.2	312.4	311.6
122.5°	333.1	333.2	333.3	333.4	333.3	333.2	333.1	333.0	332.7	332.2	331.6
125°	360.6	360.8	361.0	361.2	361.0	360.8	360.6	360.4	360.2	360.0	359.8
127.5°	388.6	388.4	388.2	388.0	388.2	388.4	388.6	388.8	388.7	388.4	388.1
130°	405.8	405.6	405.4	405.2	405.4	405.6	405.8	406.0	405.9	405.5	405.1
132.5°	421.9	421.6	421.3	421.1	421.3	421.6	421.9	422.2	422.1	421.7	421.3
135°	446.1	445.8	445.5	445.2	445.5	445.8	446.1	446.4	446.4	446.1	445.8
137.5°	468.6	468.4	468.2	468.0	468.2	468.4	468.6	468.8	468.6	468.1	467.7
140°	482.2	482.0	481.8	481.6	481.8	482.0	482.2	482.4	482.3	481.9	481.5
142.5°	495.0	494.8	494.5	494.2	494.5	494.8	495.0	495.3	495.3	495.0	494.7
145°	513.5	513.5	513.5	513.5	513.5	513.5	513.5	513.5	513.4	513.2	513.0
147.5°	529.3	528.8	528.4	527.9	528.4	528.8	529.3	529.7	529.9	529.7	529.5
150°	539.6	539.3	539.0	538.7	539.0	539.3	539.6	539.9	539.9	539.7	539.5
152.5°	548.7	548.2	547.8	547.3	547.8	548.2	548.7	549.1	549.2	548.8	548.5
155°	561.1	560.5	559.9	559.4	559.9	560.5	561.1	561.7	561.8	561.3	560.8
157.5°	571.8	571.1	570.3	569.5	570.3	571.1	571.8	572.6	572.7	572.1	571.5
160°	578.1	577.4	576.7	576.0	576.7	577.4	578.1	578.8	578.8	578.2	577.6
162.5°	583.9	583.3	582.7	582.1	582.7	583.3	583.9	584.6	584.5	583.9	583.2
165°	591.5	590.9	590.2	589.5	590.2	590.9	591.5	592.2	592.2	591.4	590.6
167.5°	597.1	596.4	595.6	594.8	595.6	596.4	597.1	597.9	597.9	597.1	596.4
170°	600.4	599.6	598.8	598.0	598.8	599.6	600.4	601.2	601.2	600.4	599.6
172.5°	602.4	601.5	600.7	599.8	600.7	601.5	602.4	603.3	603.3	602.5	601.7
175°	604.9	604.1	603.3	602.5	603.3	604.1	604.9	605.7	605.7	605.0	604.3
177.5°	605.7	604.9	604.1	603.3	604.1	604.9	605.7	606.5	606.6	605.9	605.3
180°	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7



TEST NUMBER: P332090

CATALOG NUMBER: S123DIW-S340D460U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8
2.5°	461.1	461.1	464.6	466.9	469.7	471.5	472.8	474.1	476.4	479.3	482.7
5°	434.7	435.6	440.8	445.9	450.8	455.0	458.5	462.7	467.8	474.1	481.1
7.5°	409.2	412.8	417.9	424.2	431.0	437.1	443.3	450.2	457.5	466.7	476.5
10°	392.8	396.7	403.0	411.0	418.2	425.4	433.1	440.5	449.6	460.6	473.2
12.5°	378.4	382.2	388.7	397.3	404.2	412.2	421.0	430.7	440.9	454.0	468.3
15°	358.5	363.0	370.9	375.1	385.6	395.1	403.3	417.2	430.3	443.8	460.3
17.5°	342.2	344.7	351.1	358.9	366.7	377.5	388.1	399.8	412.8	429.3	450.0
20°	331.0	333.1	340.1	348.3	356.7	366.5	376.0	387.7	402.3	419.8	442.2
22.5°	322.7	324.9	329.5	338.2	346.0	354.2	363.7	377.6	393.2	410.3	434.5
25°	310.5	311.9	315.0	322.0	328.9	338.0	346.4	359.5	375.5	395.6	419.8
27.5°	299.0	300.4	302.9	307.9	314.5	321.8	331.0	342.0	358.3	380.1	405.8
30°	292.1	292.4	294.7	299.4	305.0	311.0	319.4	332.0	347.4	369.5	396.5
32.5°	286.2	285.3	286.9	290.4	295.8	301.9	308.8	321.2	336.0	357.7	385.5
35°	276.1	275.6	274.9	277.9	282.6	287.2	293.3	302.6	319.4	339.7	368.8
37.5°	265.8	264.6	263.4	264.8	268.4	273.3	278.5	286.8	301.3	323.6	351.5
40°	258.1	257.2	256.5	256.0	259.3	263.9	267.9	275.8	289.3	310.5	338.0
42.5°	249.7	249.2	248.3	247.6	250.3	253.9	258.0	265.0	278.5	298.4	324.4
45°	236.2	235.8	235.3	234.8	236.5	239.7	243.0	248.1	259.8	279.1	302.6
47.5°	221.2	220.6	220.8	220.0	221.6	223.8	226.1	231.6	242.7	258.4	275.6
50°	210.4	210.1	210.1	210.1	210.6	213.2	215.3	219.5	229.7	245.3	257.7
52.5°	200.1	199.1	199.1	199.5	200.4	202.0	203.3	207.9	216.8	229.7	240.9
55°	184.0	182.2	181.7	182.2	182.9	184.3	185.7	189.4	197.1	206.6	213.2
57.5°	166.2	165.2	164.6	164.7	165.1	166.2	167.3	171.3	177.4	182.4	186.6
60°	153.8	154.2	152.1	152.6	152.6	153.5	155.2	157.7	162.8	166.3	170.5
62.5°	142.0	141.4	140.8	140.1	140.1	140.5	142.7	144.7	149.1	150.9	154.1
65°	123.7	123.7	122.3	122.8	123.0	121.4	122.5	124.9	127.7	128.4	131.4
67.5°	105.2	104.5	103.7	103.0	103.0	102.9	103.5	104.6	106.7	107.0	109.3
70°	92.5	92.0	91.8	91.1	90.2	91.3	90.6	91.8	93.0	93.2	94.6
72.5°	80.2	79.7	79.3	78.6	78.2	78.1	78.1	79.5	80.3	80.0	81.5
75°	62.7	62.2	61.7	60.6	60.6	59.9	60.1	61.0	62.0	61.3	62.7
77.5°	46.0	44.6	44.5	44.8	44.0	44.2	43.9	43.8	44.2	44.2	45.5
80°	35.4	33.8	34.2	34.0	33.8	33.5	33.1	33.3	33.5	33.8	34.5
82.5°	25.5	25.4	24.9	24.9	24.6	24.0	23.8	24.2	24.4	24.3	24.8
85°	13.0	12.3	12.8	12.6	12.8	12.6	11.9	11.9	12.3	12.1	12.6
87.5°	6.2	6.1	5.6	5.6	5.1	5.0	4.6	4.6	4.6	4.4	4.6
90°	11.2	10.8	9.5	8.2	6.9	5.6	4.4	3.4	2.4	1.4	0.4
92.5°	12.1	11.5	10.5	9.5	8.6	7.6	7.2	7.5	7.8	8.1	8.4
95°	14.6	13.9	12.8	11.7	10.6	9.5	11.0	15.1	19.2	23.3	27.4
97.5°	15.3	14.5	21.7	28.8	36.0	43.2	47.7	49.6	51.4	53.2	55.1
100°	15.6	14.8	30.4	46.0	61.6	77.1	83.9	81.9	79.9	77.9	75.9
102.5°	27.1	29.6	46.6	63.6	80.6	97.6	105.4	104.0	102.5	101.1	99.6
105°	80.7	98.4	107.4	116.4	125.3	134.3	138.3	137.2	136.1	135.0	133.9
107.5°	167.4	180.3	178.9	177.5	176.1	174.7	173.5	172.6	171.8	170.9	170.0
110°	199.3	202.6	201.5	200.4	199.3	198.2	197.3	196.5	195.7	194.9	194.1



TEST NUMBER: P332090

CATALOG NUMBER: S123DIW-S340D460U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	225.3	225.3	224.2	223.1	222.0	220.9	220.0	219.2	218.5	217.8	217.1
115°	258.9	257.9	257.0	256.1	255.2	254.3	253.5	252.9	252.3	251.7	251.1
117.5°	290.3	289.5	289.1	288.6	288.1	287.7	287.1	286.3	285.6	284.9	284.1
120°	310.8	310.0	309.7	309.4	309.1	308.8	308.2	307.3	306.4	305.5	304.6
122.5°	331.0	330.5	330.1	329.7	329.4	329.0	328.4	327.7	326.9	326.2	325.5
125°	359.6	359.4	359.0	358.6	358.2	357.8	357.2	356.4	355.6	354.8	354.0
127.5°	387.8	387.5	387.0	386.5	386.0	385.5	384.9	384.1	383.3	382.5	381.7
130°	404.7	404.3	404.0	403.6	403.2	402.8	402.2	401.4	400.6	399.8	399.0
132.5°	420.9	420.5	420.2	419.9	419.6	419.2	418.7	417.9	417.1	416.3	415.5
135°	445.5	445.2	444.8	444.4	444.0	443.6	443.1	442.5	441.9	441.3	440.7
137.5°	467.2	466.7	466.5	466.3	466.1	465.8	465.3	464.6	463.8	463.1	462.3
140°	481.1	480.7	480.4	480.1	479.8	479.5	479.1	478.5	477.9	477.3	476.7
142.5°	494.3	494.0	493.7	493.4	493.1	492.8	492.4	491.8	491.2	490.6	490.0
145°	512.8	512.6	512.4	512.2	512.0	511.8	511.4	510.7	510.0	509.3	508.6
147.5°	529.3	529.1	528.9	528.7	528.5	528.3	527.9	527.5	527.0	526.6	526.1
150°	539.3	539.1	538.9	538.7	538.5	538.3	538.1	537.8	537.5	537.2	536.9
152.5°	548.1	547.8	547.6	547.5	547.4	547.3	547.2	547.0	546.9	546.7	546.6
155°	560.3	559.8	559.7	559.6	559.5	559.4	559.5	559.7	559.8	560.0	560.2
157.5°	570.9	570.3	570.4	570.5	570.6	570.7	570.8	570.8	570.8	570.8	570.9
160°	577.0	576.4	576.5	576.6	576.7	576.8	576.9	577.0	577.1	577.2	577.3
162.5°	582.5	581.8	581.9	582.0	582.1	582.2	582.4	582.7	582.9	583.2	583.4
165°	589.8	589.0	589.1	589.2	589.3	589.4	589.6	589.9	590.2	590.5	590.8
167.5°	595.6	594.8	594.8	594.8	594.8	594.8	595.0	595.4	595.8	596.2	596.6
170°	598.8	598.0	598.0	598.0	598.0	598.0	598.2	598.6	599.0	599.4	599.8
172.5°	600.9	600.1	600.1	600.0	599.9	599.8	600.0	600.5	601.0	601.5	601.9
175°	603.6	602.9	602.8	602.7	602.6	602.5	602.7	603.2	603.7	604.2	604.7
177.5°	604.6	604.0	603.9	603.8	603.8	603.7	603.8	604.2	604.6	605.0	605.4
180°	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7



TEST NUMBER: P332090

CATALOG NUMBER: S123DIW-S340D460U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8	480.8
2.5°	483.8	484.8	487.9	490.2	492.8	494.3	495.7	496.9	498.4	498.7	504.1
5°	486.0	490.6	498.8	504.8	512.3	520.4	526.0	528.6	535.4	540.9	552.1
7.5°	485.4	495.3	507.6	520.4	534.0	546.7	557.7	570.8	580.0	594.0	607.7
10°	484.8	498.1	513.9	530.2	549.3	567.0	582.9	600.6	615.3	634.6	651.1
12.5°	483.1	499.2	521.2	540.5	563.7	588.1	611.6	634.3	647.3	679.5	694.7
15°	479.0	498.1	525.6	554.9	586.8	615.7	645.5	669.3	707.7	735.9	753.9
17.5°	471.1	497.8	530.4	565.8	604.6	642.7	676.5	712.5	753.3	787.4	823.8
20°	467.3	496.7	533.0	572.2	612.5	655.6	694.0	737.3	781.8	815.4	862.0
22.5°	460.4	493.7	532.8	576.4	619.5	664.1	709.1	752.8	804.2	850.4	894.8
25°	449.2	486.4	527.0	575.7	626.2	670.9	724.8	782.8	836.3	895.8	940.0
27.5°	437.3	477.1	517.7	563.0	617.4	670.5	738.2	803.7	869.2	920.5	953.3
30°	428.2	466.9	508.8	554.5	608.3	671.4	747.1	818.6	882.5	926.5	944.9
32.5°	418.3	457.5	494.6	542.5	599.9	670.8	752.7	827.4	883.2	912.5	908.9
35°	402.8	435.6	471.8	517.9	585.4	666.7	756.0	828.2	862.4	856.1	808.6
37.5°	380.4	408.1	443.6	494.1	568.7	658.1	749.4	803.6	801.4	750.2	681.3
40°	366.5	390.0	424.2	477.3	555.6	652.5	739.2	774.4	744.6	673.0	590.6
42.5°	348.2	369.9	404.1	458.7	541.3	641.2	719.6	729.8	671.5	589.2	513.6
45°	319.9	339.0	374.4	430.8	519.7	616.4	671.9	646.9	568.4	483.4	425.9
47.5°	289.4	309.3	343.3	401.3	488.6	579.2	605.6	552.6	472.0	403.0	350.2
50°	270.2	289.3	322.7	381.1	467.6	548.6	559.6	491.1	417.0	356.4	313.1
52.5°	250.9	268.8	301.6	360.3	443.0	513.2	506.5	436.7	368.6	316.9	282.9
55°	222.0	239.0	270.2	325.2	400.5	456.1	431.7	365.1	308.7	268.6	242.7
57.5°	196.2	212.5	239.4	289.1	354.5	392.8	361.7	305.5	260.7	229.8	210.6
60°	178.7	193.1	218.8	264.9	321.7	350.8	320.1	270.5	232.7	208.0	190.8
62.5°	162.1	174.7	198.4	240.3	289.7	314.1	283.0	241.0	208.9	187.0	172.3
65°	137.0	148.4	169.4	202.0	242.5	258.8	232.0	198.0	173.1	156.8	147.0
67.5°	114.1	123.8	141.9	167.5	197.4	209.2	188.8	162.5	143.7	130.6	122.9
70°	98.8	107.2	121.4	143.5	170.5	179.6	160.5	138.8	125.1	114.6	107.4
72.5°	85.9	92.1	105.0	122.1	144.6	151.8	138.5	119.5	106.7	98.8	93.0
75°	65.5	70.6	79.0	92.7	108.3	112.5	102.5	90.6	82.0	76.4	72.0
77.5°	47.2	51.0	57.0	65.5	76.3	80.1	73.8	65.8	59.5	55.8	53.3
80°	35.6	38.7	43.8	50.8	57.3	59.4	55.7	49.6	45.2	43.1	41.0
82.5°	26.3	28.0	31.1	35.9	40.3	42.8	39.7	36.0	33.6	31.7	30.9
85°	13.3	14.2	15.6	17.5	20.3	21.2	20.0	19.1	17.7	16.5	16.5
87.5°	5.1	5.3	6.1	6.7	7.6	8.5	8.5	8.4	8.5	8.4	8.3
90°	1.4	2.4	3.4	4.4	5.6	6.9	8.2	9.5	10.8	11.2	11.6
92.5°	8.1	7.8	7.5	7.2	7.6	8.6	9.5	10.5	11.5	12.1	12.8
95°	23.3	19.2	15.1	11.0	9.5	10.6	11.7	12.8	13.9	14.6	15.3
97.5°	53.2	51.4	49.6	47.7	43.2	36.0	28.8	21.7	14.5	15.3	16.1
100°	77.9	79.9	81.9	83.9	77.1	61.6	46.0	30.4	14.8	15.6	16.4
102.5°	101.1	102.5	104.0	105.4	97.6	80.6	63.6	46.6	29.6	27.1	24.6
105°	135.0	136.1	137.2	138.3	134.3	125.3	116.4	107.4	98.4	80.7	63.0
107.5°	170.9	171.8	172.6	173.5	174.7	176.1	177.5	178.9	180.3	167.4	154.4
110°	194.9	195.7	196.5	197.3	198.2	199.3	200.4	201.5	202.6	199.3	196.0





TEST NUMBER: P332090

CATALOG NUMBER: S123DIW-S340D460U835-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	217.8	218.5	219.2	220.0	220.9	222.0	223.1	224.2	225.3	225.3	225.4
115°	251.7	252.3	252.9	253.5	254.3	255.2	256.1	257.0	257.9	258.9	259.9
117.5°	284.9	285.6	286.3	287.1	287.7	288.1	288.6	289.1	289.5	290.3	291.1
120°	305.5	306.4	307.3	308.2	308.8	309.1	309.4	309.7	310.0	310.8	311.6
122.5°	326.2	326.9	327.7	328.4	329.0	329.4	329.7	330.1	330.5	331.0	331.6
125°	354.8	355.6	356.4	357.2	357.8	358.2	358.6	359.0	359.4	359.6	359.8
127.5°	382.5	383.3	384.1	384.9	385.5	386.0	386.5	387.0	387.5	387.8	388.1
130°	399.8	400.6	401.4	402.2	402.8	403.2	403.6	404.0	404.3	404.7	405.1
132.5°	416.3	417.1	417.9	418.7	419.2	419.6	419.9	420.2	420.5	420.9	421.3
135°	441.3	441.9	442.5	443.1	443.6	444.0	444.4	444.8	445.2	445.5	445.8
137.5°	463.1	463.8	464.6	465.3	465.8	466.1	466.3	466.5	466.7	467.2	467.7
140°	477.3	477.9	478.5	479.1	479.5	479.8	480.1	480.4	480.7	481.1	481.5
142.5°	490.6	491.2	491.8	492.4	492.8	493.1	493.4	493.7	494.0	494.3	494.7
145°	509.3	510.0	510.7	511.4	511.8	512.0	512.2	512.4	512.6	512.8	513.0
147.5°	526.6	527.0	527.5	527.9	528.3	528.5	528.7	528.9	529.1	529.3	529.5
150°	537.2	537.5	537.8	538.1	538.3	538.5	538.7	538.9	539.1	539.3	539.5
152.5°	546.7	546.9	547.0	547.2	547.3	547.4	547.5	547.6	547.8	548.1	548.5
155°	560.0	559.8	559.7	559.5	559.4	559.5	559.6	559.7	559.8	560.3	560.8
157.5°	570.8	570.8	570.8	570.8	570.7	570.6	570.5	570.4	570.3	570.9	571.5
160°	577.2	577.1	577.0	576.9	576.8	576.7	576.6	576.5	576.4	577.0	577.6
162.5°	583.2	582.9	582.7	582.4	582.2	582.1	582.0	581.9	581.8	582.5	583.2
165°	590.5	590.2	589.9	589.6	589.4	589.3	589.2	589.1	589.0	589.8	590.6
167.5°	596.2	595.8	595.4	595.0	594.8	594.8	594.8	594.8	594.8	595.6	596.4
170°	599.4	599.0	598.6	598.2	598.0	598.0	598.0	598.0	598.0	598.8	599.6
172.5°	601.5	601.0	600.5	600.0	599.8	599.9	600.0	600.1	600.1	600.9	601.7
175°	604.2	603.7	603.2	602.7	602.5	602.6	602.7	602.8	602.9	603.6	604.3
177.5°	605.0	604.6	604.2	603.8	603.7	603.8	603.8	603.9	604.0	604.6	605.3
180°	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	480.8	480.8	480.8	480.8	480.8	480.8	480.8
2.5°	506.0	506.2	508.2	509.7	509.0	509.9	510.3
5°	552.8	561.2	565.6	568.9	569.1	569.4	571.2
7.5°	619.2	628.2	634.8	644.8	647.7	651.1	650.2
10°	667.7	681.0	692.4	698.4	705.0	714.5	706.8
12.5°	713.0	736.5	753.9	763.3	769.4	771.3	767.6
15°	787.7	818.4	834.9	834.5	855.4	864.5	850.3
17.5°	856.1	884.5	907.3	918.9	936.4	940.2	938.5
20°	898.1	929.1	946.8	966.8	975.9	984.0	985.4
22.5°	934.2	962.1	981.1	997.7	1005.3	1009.2	1011.5
25°	971.5	993.4	1004.8	1010.6	1012.7	1012.2	1009.2
27.5°	968.9	970.6	958.0	945.7	934.6	922.2	917.9
30°	943.7	924.2	889.2	869.4	840.3	817.2	826.6
32.5°	877.6	838.6	799.4	756.1	720.3	710.1	699.8
35°	749.0	680.5	640.4	593.8	575.2	556.6	543.7
37.5°	605.9	553.0	505.4	475.0	456.3	444.5	438.2
40°	523.9	476.2	437.0	412.3	398.1	384.9	383.0
42.5°	458.5	414.1	384.7	365.0	351.4	345.7	341.6
45°	375.5	344.6	324.8	310.8	301.7	298.2	293.5
47.5°	317.9	296.0	281.1	271.6	264.7	262.1	261.8
50°	285.6	267.4	256.5	249.0	243.7	242.7	239.0
52.5°	261.4	245.6	237.1	230.6	226.7	224.1	223.0
55°	226.9	216.4	208.7	205.0	202.0	199.4	199.4
57.5°	198.5	189.8	184.7	181.5	180.6	178.8	177.6
60°	181.0	173.6	169.6	166.8	164.9	165.2	163.1
62.5°	163.9	159.0	155.2	152.5	150.2	150.3	150.4
65°	139.5	135.8	133.0	132.1	130.7	129.1	129.5
67.5°	118.3	114.8	112.6	111.0	110.5	109.6	111.0
70°	103.0	100.4	98.8	97.4	96.9	97.1	98.3
72.5°	89.0	87.2	86.1	85.5	84.4	84.5	85.3
75°	69.9	68.5	67.6	66.9	66.6	66.6	66.6
77.5°	51.3	51.0	50.6	49.6	49.6	49.9	49.9
80°	40.5	39.8	39.6	39.1	38.4	38.0	39.1
82.5°	30.3	29.6	29.4	29.3	28.2	28.1	29.1
85°	16.3	15.6	15.8	15.6	15.6	15.4	15.4
87.5°	8.2	8.1	7.9	8.2	8.0	7.9	8.3
90°	12.0	12.4	12.7	12.9	13.1	13.3	13.5
92.5°	13.4	14.1	14.4	14.6	14.7	14.8	14.9
95°	16.0	16.7	17.1	17.1	17.1	17.1	17.1
97.5°	16.9	17.7	18.1	18.2	18.3	18.4	18.5
100°	17.2	18.0	18.5	18.6	18.7	18.8	18.9
102.5°	22.1	19.7	18.5	18.7	18.9	19.0	19.2
105°	45.4	27.7	19.0	19.2	19.4	19.6	19.8
107.5°	141.5	128.5	115.4	102.0	88.7	75.4	62.1
110°	192.7	189.4	180.7	166.4	152.1	137.8	123.6



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	225.4	225.5	224.0	221.0	218.0	215.0	212.0
115°	260.9	261.9	262.6	263.0	263.4	263.8	264.2
117.5°	291.9	292.7	293.1	293.2	293.3	293.4	293.5
120°	312.4	313.2	313.6	313.6	313.6	313.6	313.6
122.5°	332.2	332.7	333.0	333.1	333.2	333.3	333.4
125°	360.0	360.2	360.4	360.6	360.8	361.0	361.2
127.5°	388.4	388.7	388.8	388.6	388.4	388.2	388.0
130°	405.5	405.9	406.0	405.8	405.6	405.4	405.2
132.5°	421.7	422.1	422.2	421.9	421.6	421.3	421.1
135°	446.1	446.4	446.4	446.1	445.8	445.5	445.2
137.5°	468.1	468.6	468.8	468.6	468.4	468.2	468.0
140°	481.9	482.3	482.4	482.2	482.0	481.8	481.6
142.5°	495.0	495.3	495.3	495.0	494.8	494.5	494.2
145°	513.2	513.4	513.5	513.5	513.5	513.5	513.5
147.5°	529.7	529.9	529.7	529.3	528.8	528.4	527.9
150°	539.7	539.9	539.9	539.6	539.3	539.0	538.7
152.5°	548.8	549.2	549.1	548.7	548.2	547.8	547.3
155°	561.3	561.8	561.7	561.1	560.5	559.9	559.4
157.5°	572.1	572.7	572.6	571.8	571.1	570.3	569.5
160°	578.2	578.8	578.8	578.1	577.4	576.7	576.0
162.5°	583.9	584.5	584.6	583.9	583.3	582.7	582.1
165°	591.4	592.2	592.2	591.5	590.9	590.2	589.5
167.5°	597.1	597.9	597.9	597.1	596.4	595.6	594.8
170°	600.4	601.2	601.2	600.4	599.6	598.8	598.0
172.5°	602.5	603.3	603.3	602.4	601.5	600.7	599.8
175°	605.0	605.7	605.7	604.9	604.1	603.3	602.5
177.5°	605.9	606.6	606.5	605.7	604.9	604.1	603.3
180°	604.7	604.7	604.7	604.7	604.7	604.7	604.7

(END OF REPORT)