

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: P332090-840

Luminaire Tested: **S123DIW-S340D460U840-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332090-840
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-S340D460U840-4F0-1E-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: 3329.6 lumens
Efficiency: N/A
Efficacy: 144.8 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

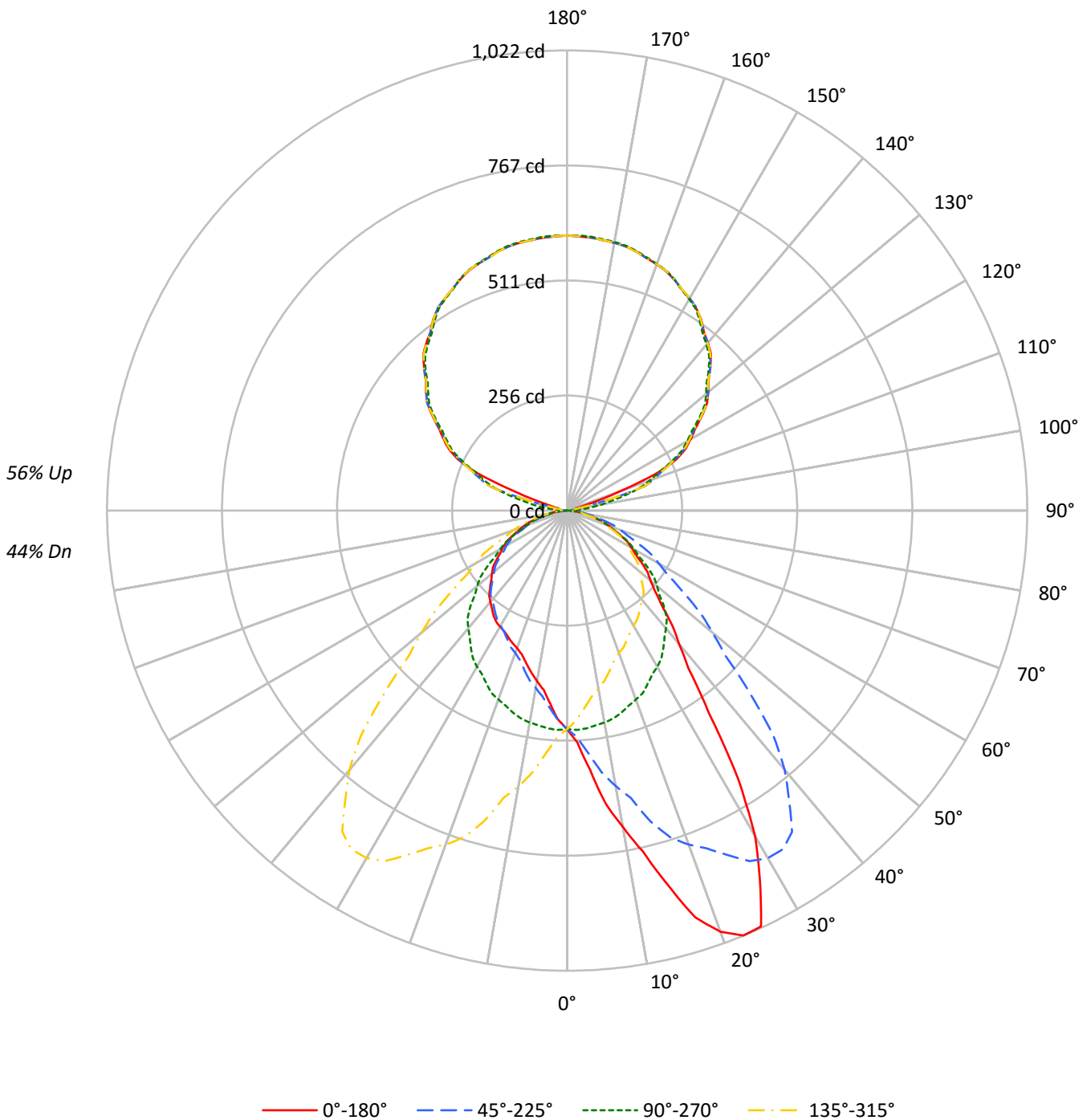
Input Watts (W): 23
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332090-840

CATALOG NUMBER: S123DIW-S340D460U840-4F0-1E-UDD-A

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°	5226	5226	5226	5226
5°	6232	5249	4652	5249
10°	7802	5223	4203	5223
15°	9569	5180	3911	5180
20°	11399	5116	3725	5116
25°	12105	5035	3682	5035
30°	10376	4977	3701	4977
35°	7215	4893	3741	4893
40°	5435	4796	3729	4796
45°	4512	4652	3682	4652
50°	4042	4357	3647	4357
55°	3780	4040	3603	4040
60°	3546	3707	3565	3707
65°	3331	3380	3451	3380
70°	3125	3006	3286	3006
75°	2799	2633	3015	2633
80°	2448	2157	2597	2157
85°	1927	1568	1741	1568



TEST NUMBER: P332090-840

CATALOG NUMBER: S123DIW-S340D460U840-4F0-1E-UDD-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.8	1.4
10°-20°	153.4	4.6
20°-30°	257.4	7.7
30°-40°	291.5	8.8
40°-50°	261.4	7.9
50°-60°	210.9	6.3
60°-70°	147.0	4.4
70°-80°	77.3	2.3
80°-90°	20.6	0.6
90°-100°	22.2	0.7
100°-110°	105.8	3.2
110°-120°	254.2	7.6
120°-130°	323.7	9.7
130°-140°	345.8	10.4
140°-150°	323.4	9.7
150°-160°	260.8	7.8
160°-170°	168.4	5.1
170°-180°	58.0	1.7
0°-30°	458.6	13.8
0°-40°	750.1	22.5
0°-60°	1222.4	36.7
0°-90°	1467.3	44.1
90°-120°	382.2	11.5
90°-150°	1375.1	41.3
90°-180°	1862.0	55.9
0°-180°	3329.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	486	486	486	486	486	
5°	577	486	430	486	577	60
15°	859	465	351	465	859	248
25°	1019	424	310	424	1019	447
35°	549	372	285	372	549	357
45°	296	306	242	306	296	235
55°	201	215	192	215	201	181
65°	131	133	136	133	131	130
75°	67	63	72	63	67	72
85°	16	13	14	13	16	19
90°	14	0	14	0	14	7
95°	17	28	17	28	17	14
105°	20	135	20	135	20	46
115°	267	254	267	254	267	247
125°	365	358	365	358	365	326
135°	450	445	450	445	450	347
145°	519	514	519	514	519	324
155°	565	566	565	566	565	260
165°	595	597	595	597	595	168
175°	608	611	608	611	608	58
180°	611	611	611	611	611	



TEST NUMBER: P332090-840

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5
2.5°	515.3	514.9	514.0	514.7	513.2	511.2	511.0	509.1	503.6	503.3	501.8
5°	576.8	575.0	574.7	574.5	571.2	566.7	558.3	557.5	546.2	540.7	533.8
7.5°	656.6	657.5	654.1	651.2	641.1	634.4	625.3	613.7	599.9	585.7	576.4
10°	713.8	721.5	712.0	705.3	699.2	687.7	674.3	657.5	640.9	621.4	606.5
12.5°	775.2	778.9	777.0	770.8	761.3	743.8	720.0	701.6	686.2	653.7	640.6
15°	858.7	873.0	863.8	842.7	843.1	826.5	795.5	761.3	743.2	714.7	675.9
17.5°	947.8	949.5	945.6	928.0	916.3	893.2	864.5	831.9	795.2	760.7	719.5
20°	995.1	993.7	985.5	976.3	956.1	938.3	907.0	870.5	823.4	789.5	744.6
22.5°	1021.5	1019.2	1015.2	1007.5	990.8	971.6	943.4	903.6	858.8	812.1	760.2
25°	1019.2	1022.2	1022.7	1020.6	1014.7	1003.2	981.1	949.3	904.6	844.6	790.5
27.5°	927.0	931.3	943.8	955.0	967.5	980.2	978.5	962.7	929.6	877.8	811.6
30°	834.8	825.3	848.6	878.0	898.0	933.3	953.0	954.2	935.6	891.2	826.7
32.5°	706.7	717.1	727.4	763.6	807.3	846.9	886.3	917.9	921.5	891.9	835.6
35°	549.1	562.1	580.9	599.7	646.7	687.2	756.4	816.6	864.5	870.9	836.4
37.5°	442.5	448.9	460.8	479.7	510.4	558.5	611.9	688.0	757.6	809.3	811.5
40°	386.8	388.7	402.0	416.4	441.3	480.9	529.1	596.4	679.6	751.9	782.0
42.5°	345.0	349.1	354.9	368.6	388.5	418.2	463.0	518.7	595.0	678.1	737.0
45°	296.4	301.1	304.7	313.9	328.0	348.0	379.2	430.1	488.2	574.0	653.3
47.5°	264.4	264.7	267.3	274.3	283.9	298.9	321.0	353.7	407.0	476.7	558.1
50°	241.4	245.1	246.1	251.5	259.0	270.0	288.4	316.2	359.9	421.1	495.9
52.5°	225.2	226.3	228.9	232.9	239.4	248.0	264.0	285.7	320.0	372.2	441.0
55°	201.4	201.4	204.0	207.0	210.8	218.5	229.1	245.1	271.2	311.7	368.7
57.5°	179.4	180.6	182.4	183.3	186.5	191.7	200.5	212.7	232.1	263.3	308.5
60°	164.7	166.8	166.5	168.4	171.3	175.3	182.8	192.7	210.1	235.0	273.2
62.5°	151.9	151.8	151.7	154.0	156.7	160.6	165.5	174.0	188.8	211.0	243.4
65°	130.8	130.4	132.0	133.4	134.3	137.1	140.9	148.5	158.3	174.8	200.0
67.5°	112.1	110.7	111.6	112.1	113.7	115.9	119.5	124.1	131.9	145.1	164.1
70°	99.3	98.1	97.9	98.4	99.8	101.4	104.0	108.5	115.7	126.3	140.2
72.5°	86.1	85.3	85.2	86.3	86.9	88.1	89.9	93.9	99.8	107.8	120.7
75°	67.3	67.3	67.3	67.6	68.3	69.2	70.6	72.7	77.2	82.8	91.5
77.5°	50.4	50.4	50.1	50.1	51.1	51.5	51.8	53.8	56.4	60.1	66.4
80°	39.5	38.4	38.8	39.5	40.0	40.2	40.9	41.4	43.5	45.6	50.1
82.5°	29.4	28.4	28.5	29.6	29.7	29.9	30.6	31.2	32.0	33.9	36.4
85°	15.6	15.6	15.8	15.8	16.0	15.8	16.5	16.7	16.7	17.9	19.3
87.5°	8.4	8.0	8.1	8.3	8.0	8.2	8.3	8.4	8.5	8.6	8.5
90°	13.6	13.4	13.2	13.0	12.8	12.5	12.1	11.7	11.3	10.9	9.6
92.5°	15.0	14.9	14.8	14.7	14.5	14.2	13.5	12.9	12.2	11.6	10.6
95°	17.3	17.3	17.3	17.3	17.3	16.9	16.2	15.5	14.7	14.0	12.9
97.5°	18.7	18.6	18.5	18.4	18.3	17.9	17.1	16.3	15.5	14.6	21.9
100°	19.1	19.0	18.9	18.8	18.7	18.2	17.4	16.6	15.8	14.9	30.7
102.5°	19.4	19.2	19.1	18.9	18.7	19.9	22.3	24.8	27.4	29.9	47.1
105°	20.0	19.8	19.6	19.4	19.2	28.0	45.8	63.6	81.5	99.4	108.5
107.5°	62.7	76.1	89.6	103.0	116.5	129.8	142.9	155.9	169.1	182.1	180.7
110°	124.8	139.2	153.6	168.0	182.5	191.3	194.6	197.9	201.3	204.6	203.5



TEST NUMBER: P332090-840

CATALOG NUMBER: S123DIW-S340D460U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	214.1	217.1	220.2	223.2	226.2	227.7	227.6	227.6	227.5	227.5	226.4
115°	266.8	266.4	266.0	265.6	265.2	264.5	263.5	262.5	261.5	260.4	259.5
117.5°	296.4	296.3	296.2	296.1	296.0	295.6	294.8	294.0	293.2	292.4	292.0
120°	316.7	316.7	316.7	316.7	316.7	316.3	315.5	314.7	313.9	313.1	312.8
122.5°	336.7	336.6	336.5	336.4	336.3	336.0	335.5	334.9	334.3	333.8	333.4
125°	364.8	364.6	364.4	364.2	364.0	363.8	363.6	363.3	363.1	362.9	362.5
127.5°	391.8	392.0	392.2	392.4	392.6	392.5	392.2	391.9	391.6	391.3	390.8
130°	409.2	409.4	409.6	409.8	410.0	409.9	409.5	409.1	408.7	408.3	408.0
132.5°	425.3	425.5	425.8	426.1	426.4	426.3	425.9	425.5	425.1	424.6	424.3
135°	449.6	449.9	450.2	450.5	450.8	450.8	450.5	450.2	449.9	449.6	449.2
137.5°	472.6	472.8	473.0	473.2	473.4	473.2	472.7	472.3	471.8	471.3	471.1
140°	486.4	486.6	486.8	487.0	487.2	487.1	486.7	486.3	485.8	485.4	485.1
142.5°	499.1	499.4	499.7	499.9	500.2	500.2	499.9	499.6	499.2	498.9	498.6
145°	518.6	518.6	518.6	518.6	518.6	518.5	518.3	518.1	517.9	517.7	517.5
147.5°	533.1	533.6	534.0	534.5	534.9	535.1	534.9	534.7	534.5	534.3	534.1
150°	544.0	544.3	544.6	544.9	545.2	545.2	545.0	544.8	544.6	544.4	544.2
152.5°	552.7	553.2	553.6	554.1	554.5	554.6	554.2	553.9	553.5	553.2	553.0
155°	564.9	565.4	566.0	566.6	567.2	567.3	566.8	566.3	565.8	565.3	565.2
157.5°	575.1	575.9	576.7	577.4	578.2	578.3	577.7	577.1	576.5	575.9	576.0
160°	581.7	582.4	583.1	583.8	584.5	584.5	583.9	583.3	582.7	582.1	582.2
162.5°	587.8	588.4	589.1	589.7	590.4	590.3	589.7	589.0	588.2	587.5	587.6
165°	595.3	596.0	596.7	597.3	598.0	598.0	597.2	596.4	595.6	594.8	594.9
167.5°	600.7	601.5	602.3	603.0	603.8	603.8	603.0	602.3	601.5	600.7	600.7
170°	603.9	604.7	605.5	606.3	607.1	607.1	606.3	605.5	604.7	603.9	603.9
172.5°	605.7	606.6	607.4	608.3	609.3	609.3	608.4	607.6	606.8	606.0	606.0
175°	608.4	609.3	610.1	610.9	611.7	611.7	611.0	610.3	609.6	608.8	608.7
177.5°	609.3	610.1	610.9	611.7	612.5	612.6	611.9	611.3	610.6	610.0	609.9
180°	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7



TEST NUMBER: P332090-840

CATALOG NUMBER: S123DIW-S340D460U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5
2.5°	500.6	499.2	497.7	495.0	492.7	489.6	488.6	487.5	484.0	481.1	478.8
5°	531.2	525.5	517.4	509.8	503.7	495.4	490.8	485.8	478.8	472.4	467.3
7.5°	563.2	552.1	539.3	525.5	512.6	500.2	490.2	481.2	471.3	462.0	454.6
10°	588.7	572.6	554.7	535.4	519.0	503.0	489.6	477.9	465.1	454.0	444.8
12.5°	617.6	593.9	569.3	545.8	526.3	504.1	487.9	472.9	458.5	445.2	434.9
15°	651.9	621.8	592.6	560.4	530.8	503.0	483.7	464.8	448.2	434.5	421.3
17.5°	683.2	649.0	610.6	571.4	535.6	502.7	475.7	454.4	433.5	416.9	403.7
20°	700.8	662.1	618.5	577.8	538.3	501.6	471.9	446.6	423.9	406.3	391.5
22.5°	716.1	670.7	625.6	582.1	538.1	498.6	464.9	438.8	414.3	397.1	381.3
25°	732.0	677.5	632.4	581.4	532.2	491.2	453.6	423.9	399.5	379.2	363.0
27.5°	745.5	677.1	623.5	568.6	522.8	481.8	441.6	409.8	383.8	361.8	345.4
30°	754.5	678.0	614.3	560.0	513.8	471.5	432.4	400.4	373.1	350.8	335.3
32.5°	760.1	677.4	605.8	547.9	499.5	462.0	422.4	389.3	361.2	339.3	324.4
35°	763.5	673.3	591.2	523.0	476.5	439.9	406.8	372.4	343.1	322.6	305.6
37.5°	756.8	664.6	574.3	499.0	448.0	412.1	384.2	355.0	326.8	304.3	289.6
40°	746.5	658.9	561.1	482.0	428.4	393.8	370.1	341.3	313.6	292.2	278.5
42.5°	726.7	647.5	546.6	463.2	408.1	373.5	351.6	327.6	301.3	281.2	267.6
45°	678.5	622.5	524.8	435.0	378.1	342.3	323.1	305.6	281.9	262.4	250.5
47.5°	611.6	584.9	493.4	405.3	346.7	312.4	292.3	278.3	260.9	245.1	233.9
50°	565.1	554.0	472.2	384.9	325.9	292.2	272.9	260.2	247.7	232.0	221.7
52.5°	511.5	518.3	447.4	363.9	304.6	271.5	253.4	243.3	232.0	218.9	210.0
55°	436.0	460.6	404.5	328.4	272.9	241.4	224.2	215.3	208.6	199.0	191.3
57.5°	365.3	396.7	358.0	292.0	241.8	214.6	198.1	188.4	184.2	179.2	173.0
60°	323.3	354.3	324.9	267.5	221.0	195.0	180.5	172.2	167.9	164.4	159.3
62.5°	285.8	317.2	292.6	242.7	200.4	176.4	163.7	155.6	152.4	150.6	146.1
65°	234.3	261.4	244.9	204.0	171.1	149.9	138.4	132.7	129.7	129.0	126.1
67.5°	190.7	211.3	199.3	169.2	143.3	125.0	115.2	110.4	108.1	107.8	105.6
70°	162.1	181.4	172.2	144.9	122.6	108.3	99.8	95.5	94.1	93.9	92.7
72.5°	139.9	153.3	146.0	123.3	106.0	93.0	86.7	82.3	80.8	81.1	80.3
75°	103.5	113.6	109.4	93.6	79.8	71.3	66.1	63.3	61.9	62.6	61.6
77.5°	74.5	80.9	77.1	66.1	57.6	51.5	47.7	45.9	44.6	44.6	44.2
80°	56.2	60.0	57.9	51.3	44.2	39.1	36.0	34.8	34.1	33.8	33.6
82.5°	40.1	43.2	40.7	36.3	31.4	28.3	26.6	25.0	24.5	24.6	24.4
85°	20.2	21.4	20.5	17.7	15.8	14.3	13.4	12.7	12.2	12.4	12.0
87.5°	8.6	8.6	7.7	6.8	6.2	5.4	5.2	4.6	4.4	4.6	4.6
90°	8.3	7.0	5.7	4.4	3.4	2.4	1.4	0.4	1.4	2.4	3.4
92.5°	9.6	8.7	7.7	7.3	7.6	7.9	8.2	8.5	8.2	7.9	7.6
95°	11.8	10.7	9.6	11.1	15.2	19.4	23.5	27.7	23.5	19.4	15.2
97.5°	29.1	36.4	43.6	48.2	50.1	51.9	53.7	55.6	53.7	51.9	50.1
100°	46.5	62.2	77.9	84.7	82.7	80.7	78.7	76.6	78.7	80.7	82.7
102.5°	64.2	81.4	98.6	106.4	105.0	103.5	102.1	100.6	102.1	103.5	105.0
105°	117.5	126.5	135.6	139.7	138.6	137.4	136.3	135.2	136.3	137.4	138.6
107.5°	179.3	177.8	176.4	175.2	174.3	173.5	172.6	171.7	172.6	173.5	174.3
110°	202.4	201.3	200.2	199.2	198.4	197.6	196.8	196.0	196.8	197.6	198.4



TEST NUMBER: P332090-840

CATALOG NUMBER: S123DIW-S340D460U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	225.3	224.2	223.1	222.2	221.4	220.7	219.9	219.2	219.9	220.7	221.4
115°	258.6	257.7	256.8	256.0	255.4	254.8	254.2	253.6	254.2	254.8	255.4
117.5°	291.4	290.9	290.5	289.9	289.1	288.4	287.7	286.9	287.7	288.4	289.1
120°	312.5	312.1	311.8	311.2	310.3	309.4	308.5	307.6	308.5	309.4	310.3
122.5°	333.0	332.6	332.2	331.6	330.9	330.1	329.4	328.7	329.4	330.1	330.9
125°	362.1	361.7	361.3	360.7	359.9	359.1	358.3	357.5	358.3	359.1	359.9
127.5°	390.3	389.8	389.3	388.7	387.9	387.1	386.3	385.5	386.3	387.1	387.9
130°	407.6	407.2	406.8	406.2	405.4	404.6	403.7	402.9	403.7	404.6	405.4
132.5°	424.0	423.7	423.3	422.8	422.0	421.2	420.4	419.6	420.4	421.2	422.0
135°	448.8	448.4	448.0	447.5	446.9	446.3	445.7	445.0	445.7	446.3	446.9
137.5°	470.9	470.7	470.4	469.9	469.2	468.4	467.7	466.9	467.7	468.4	469.2
140°	484.8	484.5	484.2	483.8	483.2	482.6	482.0	481.4	482.0	482.6	483.2
142.5°	498.3	498.0	497.7	497.3	496.7	496.0	495.4	494.8	495.4	496.0	496.7
145°	517.3	517.1	516.8	516.4	515.7	515.0	514.3	513.6	514.3	515.0	515.7
147.5°	533.9	533.7	533.5	533.1	532.7	532.2	531.8	531.3	531.8	532.2	532.7
150°	544.0	543.8	543.6	543.4	543.1	542.8	542.5	542.2	542.5	542.8	543.1
152.5°	552.9	552.8	552.7	552.6	552.4	552.3	552.1	552.0	552.1	552.3	552.4
155°	565.1	565.0	564.9	565.0	565.2	565.3	565.5	565.7	565.5	565.3	565.2
157.5°	576.1	576.2	576.3	576.4	576.4	576.4	576.4	576.5	576.4	576.4	576.4
160°	582.3	582.4	582.5	582.6	582.7	582.8	582.9	583.0	582.9	582.8	582.7
162.5°	587.7	587.8	587.9	588.1	588.4	588.7	589.0	589.2	589.0	588.7	588.4
165°	595.0	595.1	595.2	595.4	595.7	596.0	596.3	596.6	596.3	596.0	595.7
167.5°	600.7	600.7	600.7	600.9	601.3	601.7	602.1	602.5	602.1	601.7	601.3
170°	603.9	603.9	603.9	604.1	604.5	604.9	605.3	605.7	605.3	604.9	604.5
172.5°	605.9	605.8	605.7	605.9	606.4	606.9	607.4	607.8	607.4	606.9	606.4
175°	608.6	608.5	608.4	608.6	609.2	609.7	610.2	610.7	610.2	609.7	609.2
177.5°	609.8	609.8	609.7	609.8	610.2	610.6	611.0	611.4	611.0	610.6	610.2
180°	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7



TEST NUMBER: P332090-840

CATALOG NUMBER: S123DIW-S340D460U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5
2.5°	477.5	476.2	474.3	471.5	469.2	465.6	465.6	466.2	466.2	466.1	465.6
5°	463.0	459.5	455.2	450.3	445.1	439.9	439.0	437.1	435.8	434.7	433.6
7.5°	447.7	441.4	435.3	428.4	422.0	416.9	413.2	410.2	408.3	406.2	404.7
10°	437.4	429.6	422.3	415.1	407.0	400.6	396.7	393.8	391.7	389.8	388.9
12.5°	425.2	416.3	408.2	401.2	392.5	386.0	382.1	380.8	378.4	374.4	372.3
15°	407.3	399.0	389.4	378.8	374.6	366.6	362.0	359.9	358.5	355.5	354.6
17.5°	391.9	381.2	370.3	362.4	354.6	348.1	345.6	343.0	341.1	338.6	337.8
20°	379.7	370.1	360.2	351.7	343.5	336.4	334.3	332.4	330.5	329.4	328.4
22.5°	367.3	357.7	349.4	341.5	332.8	328.1	325.9	323.8	322.4	321.6	320.7
25°	349.8	341.3	332.1	325.2	318.1	315.0	313.6	312.5	311.4	310.3	310.0
27.5°	334.3	325.0	317.6	310.9	305.9	303.4	301.9	301.4	301.6	302.1	302.4
30°	322.6	314.1	308.0	302.4	297.6	295.3	295.0	295.0	296.0	296.2	296.7
32.5°	311.8	304.9	298.7	293.3	289.7	288.1	289.0	289.0	289.7	290.3	291.2
35°	296.2	290.0	285.4	280.6	277.6	278.3	278.8	279.2	280.4	281.9	282.8
37.5°	281.2	276.0	271.0	267.4	266.0	267.2	268.4	269.3	270.7	271.9	272.8
40°	270.5	266.5	261.9	258.5	259.0	259.7	260.6	261.9	263.1	263.8	264.7
42.5°	260.5	256.4	252.8	250.0	250.7	251.7	252.2	252.8	254.2	255.5	256.0
45°	245.4	242.1	238.8	237.1	237.6	238.1	238.5	239.2	240.4	241.4	241.7
47.5°	228.3	226.0	223.8	222.2	223.0	222.8	223.4	224.9	225.2	225.8	227.1
50°	217.4	215.3	212.7	212.2	212.2	212.2	212.5	214.3	214.3	215.3	216.2
52.5°	205.3	204.0	202.4	201.5	201.1	201.1	202.1	203.0	203.4	204.7	205.7
55°	187.5	186.1	184.7	184.0	183.5	184.0	185.8	186.3	187.5	188.2	188.9
57.5°	169.0	167.8	166.7	166.3	166.2	166.8	167.8	169.3	169.6	171.8	172.8
60°	156.7	155.0	154.1	154.1	153.6	155.7	155.3	157.6	158.1	159.6	161.2
62.5°	144.1	141.9	141.5	141.5	142.2	142.8	143.4	144.4	145.7	147.4	148.8
65°	123.7	122.6	124.2	124.0	123.5	124.9	124.9	126.1	127.5	129.2	131.8
67.5°	104.5	103.9	104.0	104.0	104.7	105.5	106.2	107.2	109.0	110.7	112.4
70°	91.5	92.2	91.1	92.0	92.7	92.9	93.4	94.8	96.6	97.9	99.8
72.5°	78.9	78.9	79.0	79.4	80.1	80.5	81.0	82.6	84.6	85.6	87.2
75°	60.7	60.5	61.2	61.2	62.3	62.8	63.3	64.0	65.8	67.3	68.5
77.5°	44.3	44.6	44.4	45.2	44.9	45.0	46.5	47.2	47.4	50.2	50.8
80°	33.4	33.8	34.1	34.3	34.5	34.1	35.7	36.5	36.5	38.1	39.3
82.5°	24.0	24.2	24.8	25.1	25.1	25.7	25.8	26.3	26.9	27.6	29.1
85°	12.0	12.7	12.9	12.7	12.9	12.4	13.1	13.4	13.6	13.6	13.6
87.5°	4.6	5.0	5.2	5.7	5.7	6.2	6.3	6.0	6.0	6.7	6.0
90°	4.4	5.7	7.0	8.3	9.6	10.9	11.3	11.7	12.1	12.5	12.8
92.5°	7.3	7.7	8.7	9.6	10.6	11.6	12.2	12.9	13.5	14.2	14.5
95°	11.1	9.6	10.7	11.8	12.9	14.0	14.7	15.5	16.2	16.9	17.3
97.5°	48.2	43.6	36.4	29.1	21.9	14.6	15.5	16.3	17.1	17.9	18.3
100°	84.7	77.9	62.2	46.5	30.7	14.9	15.8	16.6	17.4	18.2	18.7
102.5°	106.4	98.6	81.4	64.2	47.1	29.9	27.4	24.8	22.3	19.9	18.7
105°	139.7	135.6	126.5	117.5	108.5	99.4	81.5	63.6	45.8	28.0	19.2
107.5°	175.2	176.4	177.8	179.3	180.7	182.1	169.1	155.9	142.9	129.8	116.5
110°	199.2	200.2	201.3	202.4	203.5	204.6	201.3	197.9	194.6	191.3	182.5



TEST NUMBER: P332090-840

CATALOG NUMBER: S123DIW-S340D460U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	222.2	223.1	224.2	225.3	226.4	227.5	227.5	227.6	227.6	227.7	226.2
115°	256.0	256.8	257.7	258.6	259.5	260.4	261.5	262.5	263.5	264.5	265.2
117.5°	289.9	290.5	290.9	291.4	292.0	292.4	293.2	294.0	294.8	295.6	296.0
120°	311.2	311.8	312.1	312.5	312.8	313.1	313.9	314.7	315.5	316.3	316.7
122.5°	331.6	332.2	332.6	333.0	333.4	333.8	334.3	334.9	335.5	336.0	336.3
125°	360.7	361.3	361.7	362.1	362.5	362.9	363.1	363.3	363.6	363.8	364.0
127.5°	388.7	389.3	389.8	390.3	390.8	391.3	391.6	391.9	392.2	392.5	392.6
130°	406.2	406.8	407.2	407.6	408.0	408.3	408.7	409.1	409.5	409.9	410.0
132.5°	422.8	423.3	423.7	424.0	424.3	424.6	425.1	425.5	425.9	426.3	426.4
135°	447.5	448.0	448.4	448.8	449.2	449.6	449.9	450.2	450.5	450.8	450.8
137.5°	469.9	470.4	470.7	470.9	471.1	471.3	471.8	472.3	472.7	473.2	473.4
140°	483.8	484.2	484.5	484.8	485.1	485.4	485.8	486.3	486.7	487.1	487.2
142.5°	497.3	497.7	498.0	498.3	498.6	498.9	499.2	499.6	499.9	500.2	500.2
145°	516.4	516.8	517.1	517.3	517.5	517.7	517.9	518.1	518.3	518.5	518.6
147.5°	533.1	533.5	533.7	533.9	534.1	534.3	534.5	534.7	534.9	535.1	534.9
150°	543.4	543.6	543.8	544.0	544.2	544.4	544.6	544.8	545.0	545.2	545.2
152.5°	552.6	552.7	552.8	552.9	553.0	553.2	553.5	553.9	554.2	554.6	554.5
155°	565.0	564.9	565.0	565.1	565.2	565.3	565.8	566.3	566.8	567.3	567.2
157.5°	576.4	576.3	576.2	576.1	576.0	575.9	576.5	577.1	577.7	578.3	578.2
160°	582.6	582.5	582.4	582.3	582.2	582.1	582.7	583.3	583.9	584.5	584.5
162.5°	588.1	587.9	587.8	587.7	587.6	587.5	588.2	589.0	589.7	590.3	590.4
165°	595.4	595.2	595.1	595.0	594.9	594.8	595.6	596.4	597.2	598.0	598.0
167.5°	600.9	600.7	600.7	600.7	600.7	600.7	601.5	602.3	603.0	603.8	603.8
170°	604.1	603.9	603.9	603.9	603.9	603.9	604.7	605.5	606.3	607.1	607.1
172.5°	605.9	605.7	605.8	605.9	606.0	606.0	606.8	607.6	608.4	609.3	609.3
175°	608.6	608.4	608.5	608.6	608.7	608.8	609.6	610.3	611.0	611.7	611.7
177.5°	609.8	609.7	609.8	609.8	609.9	610.0	610.6	611.3	611.9	612.6	612.5
180°	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7



TEST NUMBER: P332090-840

CATALOG NUMBER: S123DIW-S340D460U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5
2.5°	464.3	464.1	465.4	464.5	465.4	464.1	464.3	465.6	466.1	466.2	466.2
5°	432.2	432.9	430.5	430.5	430.5	432.9	432.2	433.6	434.7	435.8	437.1
7.5°	403.5	402.5	402.6	401.3	402.6	402.5	403.5	404.7	406.2	408.3	410.2
10°	386.1	384.7	384.2	384.5	384.2	384.7	386.1	388.9	389.8	391.7	393.8
12.5°	371.5	371.3	368.2	368.2	368.2	371.3	371.5	372.3	374.4	378.4	380.8
15°	354.6	350.1	349.6	351.0	349.6	350.1	354.6	354.6	355.5	358.5	359.9
17.5°	337.5	335.1	335.3	334.6	335.3	335.1	337.5	337.8	338.6	341.1	343.0
20°	328.4	327.0	326.8	325.2	326.8	327.0	328.4	328.4	329.4	330.5	332.4
22.5°	320.1	319.7	319.8	318.0	319.8	319.7	320.1	320.7	321.6	322.4	323.8
25°	309.8	311.0	310.0	310.0	310.0	311.0	309.8	310.0	310.3	311.4	312.5
27.5°	302.9	302.9	302.4	302.4	302.4	302.9	302.9	302.4	302.1	301.6	301.4
30°	297.6	297.4	297.8	297.8	297.8	297.4	297.6	296.7	296.2	296.0	295.0
32.5°	292.4	292.7	292.8	293.0	292.8	292.7	292.4	291.2	290.3	289.7	289.0
35°	284.2	284.5	285.2	284.7	285.2	284.5	284.2	282.8	281.9	280.4	279.2
37.5°	273.2	274.3	274.1	274.4	274.1	274.3	273.2	272.8	271.9	270.7	269.3
40°	264.9	265.6	265.4	265.4	265.4	265.6	264.9	264.7	263.8	263.1	261.9
42.5°	256.4	256.9	256.3	256.0	256.3	256.9	256.4	256.0	255.5	254.2	252.8
45°	242.6	242.1	242.8	241.9	242.8	242.1	242.6	241.7	241.4	240.4	239.2
47.5°	227.0	227.5	227.7	228.4	227.7	227.5	227.0	227.1	225.8	225.2	224.9
50°	216.7	218.1	218.1	217.8	218.1	218.1	216.7	216.2	215.3	214.3	214.3
52.5°	206.5	207.1	208.1	208.0	208.1	207.1	206.5	205.7	204.7	203.4	203.0
55°	190.8	191.3	191.8	192.0	191.8	191.3	190.8	188.9	188.2	187.5	186.3
57.5°	174.5	174.3	175.4	175.8	175.4	174.3	174.5	172.8	171.8	169.6	169.3
60°	163.0	163.0	164.9	165.6	164.9	163.0	163.0	161.2	159.6	158.1	157.6
62.5°	150.8	151.6	153.4	152.5	153.4	151.6	150.8	148.8	147.4	145.7	144.4
65°	132.9	134.8	134.6	135.5	134.6	134.8	132.9	131.8	129.2	127.5	126.1
67.5°	114.2	115.4	117.1	117.2	117.1	115.4	114.2	112.4	110.7	109.0	107.2
70°	101.6	102.8	103.7	104.4	103.7	102.8	101.6	99.8	97.9	96.6	94.8
72.5°	89.4	90.0	92.3	91.3	92.3	90.0	89.4	87.2	85.6	84.6	82.6
75°	70.1	71.8	73.2	72.5	73.2	71.8	70.1	68.5	67.3	65.8	64.0
77.5°	51.8	53.5	54.1	53.5	54.1	53.5	51.8	50.8	50.2	47.4	47.2
80°	40.9	40.7	42.1	41.9	42.1	40.7	40.9	39.3	38.1	36.5	36.5
82.5°	30.0	29.8	30.4	30.6	30.4	29.8	30.0	29.1	27.6	26.9	26.3
85°	14.5	15.2	14.3	14.1	14.3	15.2	14.5	13.6	13.6	13.6	13.4
87.5°	6.0	6.1	5.9	5.8	5.9	6.1	6.0	6.0	6.7	6.0	6.0
90°	13.0	13.2	13.4	13.6	13.4	13.2	13.0	12.8	12.5	12.1	11.7
92.5°	14.7	14.8	14.9	15.0	14.9	14.8	14.7	14.5	14.2	13.5	12.9
95°	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	16.9	16.2	15.5
97.5°	18.4	18.5	18.6	18.7	18.6	18.5	18.4	18.3	17.9	17.1	16.3
100°	18.8	18.9	19.0	19.1	19.0	18.9	18.8	18.7	18.2	17.4	16.6
102.5°	18.9	19.1	19.2	19.4	19.2	19.1	18.9	18.7	19.9	22.3	24.8
105°	19.4	19.6	19.8	20.0	19.8	19.6	19.4	19.2	28.0	45.8	63.6
107.5°	103.0	89.6	76.1	62.7	76.1	89.6	103.0	116.5	129.8	142.9	155.9
110°	168.0	153.6	139.2	124.8	139.2	153.6	168.0	182.5	191.3	194.6	197.9



TEST NUMBER: P332090-840

CATALOG NUMBER: S123DIW-S340D460U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	223.2	220.2	217.1	214.1	217.1	220.2	223.2	226.2	227.7	227.6	227.6
115°	265.6	266.0	266.4	266.8	266.4	266.0	265.6	265.2	264.5	263.5	262.5
117.5°	296.1	296.2	296.3	296.4	296.3	296.2	296.1	296.0	295.6	294.8	294.0
120°	316.7	316.7	316.7	316.7	316.7	316.7	316.7	316.7	316.3	315.5	314.7
122.5°	336.4	336.5	336.6	336.7	336.6	336.5	336.4	336.3	336.0	335.5	334.9
125°	364.2	364.4	364.6	364.8	364.6	364.4	364.2	364.0	363.8	363.6	363.3
127.5°	392.4	392.2	392.0	391.8	392.0	392.2	392.4	392.6	392.5	392.2	391.9
130°	409.8	409.6	409.4	409.2	409.4	409.6	409.8	410.0	409.9	409.5	409.1
132.5°	426.1	425.8	425.5	425.3	425.5	425.8	426.1	426.4	426.3	425.9	425.5
135°	450.5	450.2	449.9	449.6	449.9	450.2	450.5	450.8	450.8	450.5	450.2
137.5°	473.2	473.0	472.8	472.6	472.8	473.0	473.2	473.4	473.2	472.7	472.3
140°	487.0	486.8	486.6	486.4	486.6	486.8	487.0	487.2	487.1	486.7	486.3
142.5°	499.9	499.7	499.4	499.1	499.4	499.7	499.9	500.2	500.2	499.9	499.6
145°	518.6	518.6	518.6	518.6	518.6	518.6	518.6	518.6	518.5	518.3	518.1
147.5°	534.5	534.0	533.6	533.1	533.6	534.0	534.5	534.9	535.1	534.9	534.7
150°	544.9	544.6	544.3	544.0	544.3	544.6	544.9	545.2	545.2	545.0	544.8
152.5°	554.1	553.6	553.2	552.7	553.2	553.6	554.1	554.5	554.6	554.2	553.9
155°	566.6	566.0	565.4	564.9	565.4	566.0	566.6	567.2	567.3	566.8	566.3
157.5°	577.4	576.7	575.9	575.1	575.9	576.7	577.4	578.2	578.3	577.7	577.1
160°	583.8	583.1	582.4	581.7	582.4	583.1	583.8	584.5	584.5	583.9	583.3
162.5°	589.7	589.1	588.4	587.8	588.4	589.1	589.7	590.4	590.3	589.7	589.0
165°	597.3	596.7	596.0	595.3	596.0	596.7	597.3	598.0	598.0	597.2	596.4
167.5°	603.0	602.3	601.5	600.7	601.5	602.3	603.0	603.8	603.8	603.0	602.3
170°	606.3	605.5	604.7	603.9	604.7	605.5	606.3	607.1	607.1	606.3	605.5
172.5°	608.3	607.4	606.6	605.7	606.6	607.4	608.3	609.3	609.3	608.4	607.6
175°	610.9	610.1	609.3	608.4	609.3	610.1	610.9	611.7	611.7	611.0	610.3
177.5°	611.7	610.9	610.1	609.3	610.1	610.9	611.7	612.5	612.6	611.9	611.3
180°	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7



TEST NUMBER: P332090-840

CATALOG NUMBER: S123DIW-S340D460U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5
2.5°	465.6	465.6	469.2	471.5	474.3	476.2	477.5	478.8	481.1	484.0	487.5
5°	439.0	439.9	445.1	450.3	455.2	459.5	463.0	467.3	472.4	478.8	485.8
7.5°	413.2	416.9	422.0	428.4	435.3	441.4	447.7	454.6	462.0	471.3	481.2
10°	396.7	400.6	407.0	415.1	422.3	429.6	437.4	444.8	454.0	465.1	477.9
12.5°	382.1	386.0	392.5	401.2	408.2	416.3	425.2	434.9	445.2	458.5	472.9
15°	362.0	366.6	374.6	378.8	389.4	399.0	407.3	421.3	434.5	448.2	464.8
17.5°	345.6	348.1	354.6	362.4	370.3	381.2	391.9	403.7	416.9	433.5	454.4
20°	334.3	336.4	343.5	351.7	360.2	370.1	379.7	391.5	406.3	423.9	446.6
22.5°	325.9	328.1	332.8	341.5	349.4	357.7	367.3	381.3	397.1	414.3	438.8
25°	313.6	315.0	318.1	325.2	332.1	341.3	349.8	363.0	379.2	399.5	423.9
27.5°	301.9	303.4	305.9	310.9	317.6	325.0	334.3	345.4	361.8	383.8	409.8
30°	295.0	295.3	297.6	302.4	308.0	314.1	322.6	335.3	350.8	373.1	400.4
32.5°	289.0	288.1	289.7	293.3	298.7	304.9	311.8	324.4	339.3	361.2	389.3
35°	278.8	278.3	277.6	280.6	285.4	290.0	296.2	305.6	322.6	343.1	372.4
37.5°	268.4	267.2	266.0	267.4	271.0	276.0	281.2	289.6	304.3	326.8	355.0
40°	260.6	259.7	259.0	258.5	261.9	266.5	270.5	278.5	292.2	313.6	341.3
42.5°	252.2	251.7	250.7	250.0	252.8	256.4	260.5	267.6	281.2	301.3	327.6
45°	238.5	238.1	237.6	237.1	238.8	242.1	245.4	250.5	262.4	281.9	305.6
47.5°	223.4	222.8	223.0	222.2	223.8	226.0	228.3	233.9	245.1	260.9	278.3
50°	212.5	212.2	212.2	212.2	212.7	215.3	217.4	221.7	232.0	247.7	260.2
52.5°	202.1	201.1	201.1	201.5	202.4	204.0	205.3	210.0	218.9	232.0	243.3
55°	185.8	184.0	183.5	184.0	184.7	186.1	187.5	191.3	199.0	208.6	215.3
57.5°	167.8	166.8	166.2	166.3	166.7	167.8	169.0	173.0	179.2	184.2	188.4
60°	155.3	155.7	153.6	154.1	154.1	155.0	156.7	159.3	164.4	167.9	172.2
62.5°	143.4	142.8	142.2	141.5	141.5	141.9	144.1	146.1	150.6	152.4	155.6
65°	124.9	124.9	123.5	124.0	124.2	122.6	123.7	126.1	129.0	129.7	132.7
67.5°	106.2	105.5	104.7	104.0	104.0	103.9	104.5	105.6	107.8	108.1	110.4
70°	93.4	92.9	92.7	92.0	91.1	92.2	91.5	92.7	93.9	94.1	95.5
72.5°	81.0	80.5	80.1	79.4	79.0	78.9	78.9	80.3	81.1	80.8	82.3
75°	63.3	62.8	62.3	61.2	61.2	60.5	60.7	61.6	62.6	61.9	63.3
77.5°	46.5	45.0	44.9	45.2	44.4	44.6	44.3	44.2	44.6	44.6	45.9
80°	35.7	34.1	34.5	34.3	34.1	33.8	33.4	33.6	33.8	34.1	34.8
82.5°	25.8	25.7	25.1	25.1	24.8	24.2	24.0	24.4	24.6	24.5	25.0
85°	13.1	12.4	12.9	12.7	12.9	12.7	12.0	12.0	12.4	12.2	12.7
87.5°	6.3	6.2	5.7	5.7	5.2	5.0	4.6	4.6	4.6	4.4	4.6
90°	11.3	10.9	9.6	8.3	7.0	5.7	4.4	3.4	2.4	1.4	0.4
92.5°	12.2	11.6	10.6	9.6	8.7	7.7	7.3	7.6	7.9	8.2	8.5
95°	14.7	14.0	12.9	11.8	10.7	9.6	11.1	15.2	19.4	23.5	27.7
97.5°	15.5	14.6	21.9	29.1	36.4	43.6	48.2	50.1	51.9	53.7	55.6
100°	15.8	14.9	30.7	46.5	62.2	77.9	84.7	82.7	80.7	78.7	76.6
102.5°	27.4	29.9	47.1	64.2	81.4	98.6	106.4	105.0	103.5	102.1	100.6
105°	81.5	99.4	108.5	117.5	126.5	135.6	139.7	138.6	137.4	136.3	135.2
107.5°	169.1	182.1	180.7	179.3	177.8	176.4	175.2	174.3	173.5	172.6	171.7
110°	201.3	204.6	203.5	202.4	201.3	200.2	199.2	198.4	197.6	196.8	196.0



TEST NUMBER: P332090-840

CATALOG NUMBER: S123DIW-S340D460U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	227.5	227.5	226.4	225.3	224.2	223.1	222.2	221.4	220.7	219.9	219.2
115°	261.5	260.4	259.5	258.6	257.7	256.8	256.0	255.4	254.8	254.2	253.6
117.5°	293.2	292.4	292.0	291.4	290.9	290.5	289.9	289.1	288.4	287.7	286.9
120°	313.9	313.1	312.8	312.5	312.1	311.8	311.2	310.3	309.4	308.5	307.6
122.5°	334.3	333.8	333.4	333.0	332.6	332.2	331.6	330.9	330.1	329.4	328.7
125°	363.1	362.9	362.5	362.1	361.7	361.3	360.7	359.9	359.1	358.3	357.5
127.5°	391.6	391.3	390.8	390.3	389.8	389.3	388.7	387.9	387.1	386.3	385.5
130°	408.7	408.3	408.0	407.6	407.2	406.8	406.2	405.4	404.6	403.7	402.9
132.5°	425.1	424.6	424.3	424.0	423.7	423.3	422.8	422.0	421.2	420.4	419.6
135°	449.9	449.6	449.2	448.8	448.4	448.0	447.5	446.9	446.3	445.7	445.0
137.5°	471.8	471.3	471.1	470.9	470.7	470.4	469.9	469.2	468.4	467.7	466.9
140°	485.8	485.4	485.1	484.8	484.5	484.2	483.8	483.2	482.6	482.0	481.4
142.5°	499.2	498.9	498.6	498.3	498.0	497.7	497.3	496.7	496.0	495.4	494.8
145°	517.9	517.7	517.5	517.3	517.1	516.8	516.4	515.7	515.0	514.3	513.6
147.5°	534.5	534.3	534.1	533.9	533.7	533.5	533.1	532.7	532.2	531.8	531.3
150°	544.6	544.4	544.2	544.0	543.8	543.6	543.4	543.1	542.8	542.5	542.2
152.5°	553.5	553.2	553.0	552.9	552.8	552.7	552.6	552.4	552.3	552.1	552.0
155°	565.8	565.3	565.2	565.1	565.0	564.9	565.0	565.2	565.3	565.5	565.7
157.5°	576.5	575.9	576.0	576.1	576.2	576.3	576.4	576.4	576.4	576.4	576.5
160°	582.7	582.1	582.2	582.3	582.4	582.5	582.6	582.7	582.8	582.9	583.0
162.5°	588.2	587.5	587.6	587.7	587.8	587.9	588.1	588.4	588.7	589.0	589.2
165°	595.6	594.8	594.9	595.0	595.1	595.2	595.4	595.7	596.0	596.3	596.6
167.5°	601.5	600.7	600.7	600.7	600.7	600.7	600.9	601.3	601.7	602.1	602.5
170°	604.7	603.9	603.9	603.9	603.9	603.9	604.1	604.5	604.9	605.3	605.7
172.5°	606.8	606.0	606.0	605.9	605.8	605.7	605.9	606.4	606.9	607.4	607.8
175°	609.6	608.8	608.7	608.6	608.5	608.4	608.6	609.2	609.7	610.2	610.7
177.5°	610.6	610.0	609.9	609.8	609.8	609.7	609.8	610.2	610.6	611.0	611.4
180°	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7



TEST NUMBER: P332090-840

CATALOG NUMBER: S123DIW-S340D460U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5	485.5
2.5°	488.6	489.6	492.7	495.0	497.7	499.2	500.6	501.8	503.3	503.6	509.1
5°	490.8	495.4	503.7	509.8	517.4	525.5	531.2	533.8	540.7	546.2	557.5
7.5°	490.2	500.2	512.6	525.5	539.3	552.1	563.2	576.4	585.7	599.9	613.7
10°	489.6	503.0	519.0	535.4	554.7	572.6	588.7	606.5	621.4	640.9	657.5
12.5°	487.9	504.1	526.3	545.8	569.3	593.9	617.6	640.6	653.7	686.2	701.6
15°	483.7	503.0	530.8	560.4	592.6	621.8	651.9	675.9	714.7	743.2	761.3
17.5°	475.7	502.7	535.6	571.4	610.6	649.0	683.2	719.5	760.7	795.2	831.9
20°	471.9	501.6	538.3	577.8	618.5	662.1	700.8	744.6	789.5	823.4	870.5
22.5°	464.9	498.6	538.1	582.1	625.6	670.7	716.1	760.2	812.1	858.8	903.6
25°	453.6	491.2	532.2	581.4	632.4	677.5	732.0	790.5	844.6	904.6	949.3
27.5°	441.6	481.8	522.8	568.6	623.5	677.1	745.5	811.6	877.8	929.6	962.7
30°	432.4	471.5	513.8	560.0	614.3	678.0	754.5	826.7	891.2	935.6	954.2
32.5°	422.4	462.0	499.5	547.9	605.8	677.4	760.1	835.6	891.9	921.5	917.9
35°	406.8	439.9	476.5	523.0	591.2	673.3	763.5	836.4	870.9	864.5	816.6
37.5°	384.2	412.1	448.0	499.0	574.3	664.6	756.8	811.5	809.3	757.6	688.0
40°	370.1	393.8	428.4	482.0	561.1	658.9	746.5	782.0	751.9	679.6	596.4
42.5°	351.6	373.5	408.1	463.2	546.6	647.5	726.7	737.0	678.1	595.0	518.7
45°	323.1	342.3	378.1	435.0	524.8	622.5	678.5	653.3	574.0	488.2	430.1
47.5°	292.3	312.4	346.7	405.3	493.4	584.9	611.6	558.1	476.7	407.0	353.7
50°	272.9	292.2	325.9	384.9	472.2	554.0	565.1	495.9	421.1	359.9	316.2
52.5°	253.4	271.5	304.6	363.9	447.4	518.3	511.5	441.0	372.2	320.0	285.7
55°	224.2	241.4	272.9	328.4	404.5	460.6	436.0	368.7	311.7	271.2	245.1
57.5°	198.1	214.6	241.8	292.0	358.0	396.7	365.3	308.5	263.3	232.1	212.7
60°	180.5	195.0	221.0	267.5	324.9	354.3	323.3	273.2	235.0	210.1	192.7
62.5°	163.7	176.4	200.4	242.7	292.6	317.2	285.8	243.4	211.0	188.8	174.0
65°	138.4	149.9	171.1	204.0	244.9	261.4	234.3	200.0	174.8	158.3	148.5
67.5°	115.2	125.0	143.3	169.2	199.3	211.3	190.7	164.1	145.1	131.9	124.1
70°	99.8	108.3	122.6	144.9	172.2	181.4	162.1	140.2	126.3	115.7	108.5
72.5°	86.7	93.0	106.0	123.3	146.0	153.3	139.9	120.7	107.8	99.8	93.9
75°	66.1	71.3	79.8	93.6	109.4	113.6	103.5	91.5	82.8	77.2	72.7
77.5°	47.7	51.5	57.6	66.1	77.1	80.9	74.5	66.4	60.1	56.4	53.8
80°	36.0	39.1	44.2	51.3	57.9	60.0	56.2	50.1	45.6	43.5	41.4
82.5°	26.6	28.3	31.4	36.3	40.7	43.2	40.1	36.4	33.9	32.0	31.2
85°	13.4	14.3	15.8	17.7	20.5	21.4	20.2	19.3	17.9	16.7	16.7
87.5°	5.2	5.4	6.2	6.8	7.7	8.6	8.6	8.5	8.6	8.5	8.4
90°	1.4	2.4	3.4	4.4	5.7	7.0	8.3	9.6	10.9	11.3	11.7
92.5°	8.2	7.9	7.6	7.3	7.7	8.7	9.6	10.6	11.6	12.2	12.9
95°	23.5	19.4	15.2	11.1	9.6	10.7	11.8	12.9	14.0	14.7	15.5
97.5°	53.7	51.9	50.1	48.2	43.6	36.4	29.1	21.9	14.6	15.5	16.3
100°	78.7	80.7	82.7	84.7	77.9	62.2	46.5	30.7	14.9	15.8	16.6
102.5°	102.1	103.5	105.0	106.4	98.6	81.4	64.2	47.1	29.9	27.4	24.8
105°	136.3	137.4	138.6	139.7	135.6	126.5	117.5	108.5	99.4	81.5	63.6
107.5°	172.6	173.5	174.3	175.2	176.4	177.8	179.3	180.7	182.1	169.1	155.9
110°	196.8	197.6	198.4	199.2	200.2	201.3	202.4	203.5	204.6	201.3	197.9



TEST NUMBER: P332090-840

CATALOG NUMBER: S123DIW-S340D460U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	219.9	220.7	221.4	222.2	223.1	224.2	225.3	226.4	227.5	227.5	227.6
115°	254.2	254.8	255.4	256.0	256.8	257.7	258.6	259.5	260.4	261.5	262.5
117.5°	287.7	288.4	289.1	289.9	290.5	290.9	291.4	292.0	292.4	293.2	294.0
120°	308.5	309.4	310.3	311.2	311.8	312.1	312.5	312.8	313.1	313.9	314.7
122.5°	329.4	330.1	330.9	331.6	332.2	332.6	333.0	333.4	333.8	334.3	334.9
125°	358.3	359.1	359.9	360.7	361.3	361.7	362.1	362.5	362.9	363.1	363.3
127.5°	386.3	387.1	387.9	388.7	389.3	389.8	390.3	390.8	391.3	391.6	391.9
130°	403.7	404.6	405.4	406.2	406.8	407.2	407.6	408.0	408.3	408.7	409.1
132.5°	420.4	421.2	422.0	422.8	423.3	423.7	424.0	424.3	424.6	425.1	425.5
135°	445.7	446.3	446.9	447.5	448.0	448.4	448.8	449.2	449.6	449.9	450.2
137.5°	467.7	468.4	469.2	469.9	470.4	470.7	470.9	471.1	471.3	471.8	472.3
140°	482.0	482.6	483.2	483.8	484.2	484.5	484.8	485.1	485.4	485.8	486.3
142.5°	495.4	496.0	496.7	497.3	497.7	498.0	498.3	498.6	498.9	499.2	499.6
145°	514.3	515.0	515.7	516.4	516.8	517.1	517.3	517.5	517.7	517.9	518.1
147.5°	531.8	532.2	532.7	533.1	533.5	533.7	533.9	534.1	534.3	534.5	534.7
150°	542.5	542.8	543.1	543.4	543.6	543.8	544.0	544.2	544.4	544.6	544.8
152.5°	552.1	552.3	552.4	552.6	552.7	552.8	552.9	553.0	553.2	553.5	553.9
155°	565.5	565.3	565.2	565.0	564.9	565.0	565.1	565.2	565.3	565.8	566.3
157.5°	576.4	576.4	576.4	576.4	576.3	576.2	576.1	576.0	575.9	576.5	577.1
160°	582.9	582.8	582.7	582.6	582.5	582.4	582.3	582.2	582.1	582.7	583.3
162.5°	589.0	588.7	588.4	588.1	587.9	587.8	587.7	587.6	587.5	588.2	589.0
165°	596.3	596.0	595.7	595.4	595.2	595.1	595.0	594.9	594.8	595.6	596.4
167.5°	602.1	601.7	601.3	600.9	600.7	600.7	600.7	600.7	600.7	601.5	602.3
170°	605.3	604.9	604.5	604.1	603.9	603.9	603.9	603.9	603.9	604.7	605.5
172.5°	607.4	606.9	606.4	605.9	605.7	605.8	605.9	606.0	606.0	606.8	607.6
175°	610.2	609.7	609.2	608.6	608.4	608.5	608.6	608.7	608.8	609.6	610.3
177.5°	611.0	610.6	610.2	609.8	609.7	609.8	609.8	609.9	610.0	610.6	611.3
180°	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7	610.7



TEST NUMBER: P332090-840

CATALOG NUMBER: S123DIW-S340D460U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	485.5	485.5	485.5	485.5	485.5	485.5	485.5
2.5°	511.0	511.2	513.2	514.7	514.0	514.9	515.3
5°	558.3	566.7	571.2	574.5	574.7	575.0	576.8
7.5°	625.3	634.4	641.1	651.2	654.1	657.5	656.6
10°	674.3	687.7	699.2	705.3	712.0	721.5	713.8
12.5°	720.0	743.8	761.3	770.8	777.0	778.9	775.2
15°	795.5	826.5	843.1	842.7	863.8	873.0	858.7
17.5°	864.5	893.2	916.3	928.0	945.6	949.5	947.8
20°	907.0	938.3	956.1	976.3	985.5	993.7	995.1
22.5°	943.4	971.6	990.8	1007.5	1015.2	1019.2	1021.5
25°	981.1	1003.2	1014.7	1020.6	1022.7	1022.2	1019.2
27.5°	978.5	980.2	967.5	955.0	943.8	931.3	927.0
30°	953.0	933.3	898.0	878.0	848.6	825.3	834.8
32.5°	886.3	846.9	807.3	763.6	727.4	717.1	706.7
35°	756.4	687.2	646.7	599.7	580.9	562.1	549.1
37.5°	611.9	558.5	510.4	479.7	460.8	448.9	442.5
40°	529.1	480.9	441.3	416.4	402.0	388.7	386.8
42.5°	463.0	418.2	388.5	368.6	354.9	349.1	345.0
45°	379.2	348.0	328.0	313.9	304.7	301.1	296.4
47.5°	321.0	298.9	283.9	274.3	267.3	264.7	264.4
50°	288.4	270.0	259.0	251.5	246.1	245.1	241.4
52.5°	264.0	248.0	239.4	232.9	228.9	226.3	225.2
55°	229.1	218.5	210.8	207.0	204.0	201.4	201.4
57.5°	200.5	191.7	186.5	183.3	182.4	180.6	179.4
60°	182.8	175.3	171.3	168.4	166.5	166.8	164.7
62.5°	165.5	160.6	156.7	154.0	151.7	151.8	151.9
65°	140.9	137.1	134.3	133.4	132.0	130.4	130.8
67.5°	119.5	115.9	113.7	112.1	111.6	110.7	112.1
70°	104.0	101.4	99.8	98.4	97.9	98.1	99.3
72.5°	89.9	88.1	86.9	86.3	85.2	85.3	86.1
75°	70.6	69.2	68.3	67.6	67.3	67.3	67.3
77.5°	51.8	51.5	51.1	50.1	50.1	50.4	50.4
80°	40.9	40.2	40.0	39.5	38.8	38.4	39.5
82.5°	30.6	29.9	29.7	29.6	28.5	28.4	29.4
85°	16.5	15.8	16.0	15.8	15.8	15.6	15.6
87.5°	8.3	8.2	8.0	8.3	8.1	8.0	8.4
90°	12.1	12.5	12.8	13.0	13.2	13.4	13.6
92.5°	13.5	14.2	14.5	14.7	14.8	14.9	15.0
95°	16.2	16.9	17.3	17.3	17.3	17.3	17.3
97.5°	17.1	17.9	18.3	18.4	18.5	18.6	18.7
100°	17.4	18.2	18.7	18.8	18.9	19.0	19.1
102.5°	22.3	19.9	18.7	18.9	19.1	19.2	19.4
105°	45.8	28.0	19.2	19.4	19.6	19.8	20.0
107.5°	142.9	129.8	116.5	103.0	89.6	76.1	62.7
110°	194.6	191.3	182.5	168.0	153.6	139.2	124.8



TEST NUMBER: P332090-840

CATALOG NUMBER: S123DIW-S340D460U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	227.6	227.7	226.2	223.2	220.2	217.1	214.1
115°	263.5	264.5	265.2	265.6	266.0	266.4	266.8
117.5°	294.8	295.6	296.0	296.1	296.2	296.3	296.4
120°	315.5	316.3	316.7	316.7	316.7	316.7	316.7
122.5°	335.5	336.0	336.3	336.4	336.5	336.6	336.7
125°	363.6	363.8	364.0	364.2	364.4	364.6	364.8
127.5°	392.2	392.5	392.6	392.4	392.2	392.0	391.8
130°	409.5	409.9	410.0	409.8	409.6	409.4	409.2
132.5°	425.9	426.3	426.4	426.1	425.8	425.5	425.3
135°	450.5	450.8	450.8	450.5	450.2	449.9	449.6
137.5°	472.7	473.2	473.4	473.2	473.0	472.8	472.6
140°	486.7	487.1	487.2	487.0	486.8	486.6	486.4
142.5°	499.9	500.2	500.2	499.9	499.7	499.4	499.1
145°	518.3	518.5	518.6	518.6	518.6	518.6	518.6
147.5°	534.9	535.1	534.9	534.5	534.0	533.6	533.1
150°	545.0	545.2	545.2	544.9	544.6	544.3	544.0
152.5°	554.2	554.6	554.5	554.1	553.6	553.2	552.7
155°	566.8	567.3	567.2	566.6	566.0	565.4	564.9
157.5°	577.7	578.3	578.2	577.4	576.7	575.9	575.1
160°	583.9	584.5	584.5	583.8	583.1	582.4	581.7
162.5°	589.7	590.3	590.4	589.7	589.1	588.4	587.8
165°	597.2	598.0	598.0	597.3	596.7	596.0	595.3
167.5°	603.0	603.8	603.8	603.0	602.3	601.5	600.7
170°	606.3	607.1	607.1	606.3	605.5	604.7	603.9
172.5°	608.4	609.3	609.3	608.3	607.4	606.6	605.7
175°	611.0	611.7	611.7	610.9	610.1	609.3	608.4
177.5°	611.9	612.6	612.5	611.7	610.9	610.1	609.3
180°	610.7	610.7	610.7	610.7	610.7	610.7	610.7

(END OF REPORT)