

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: P332091-840

Luminaire Tested: **S123DIW-S340D460U840-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332091-840  
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-S340D460U840-4F0-1E-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: 3081.5 lumens  
Efficiency: N/A  
Efficacy: 134.0 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

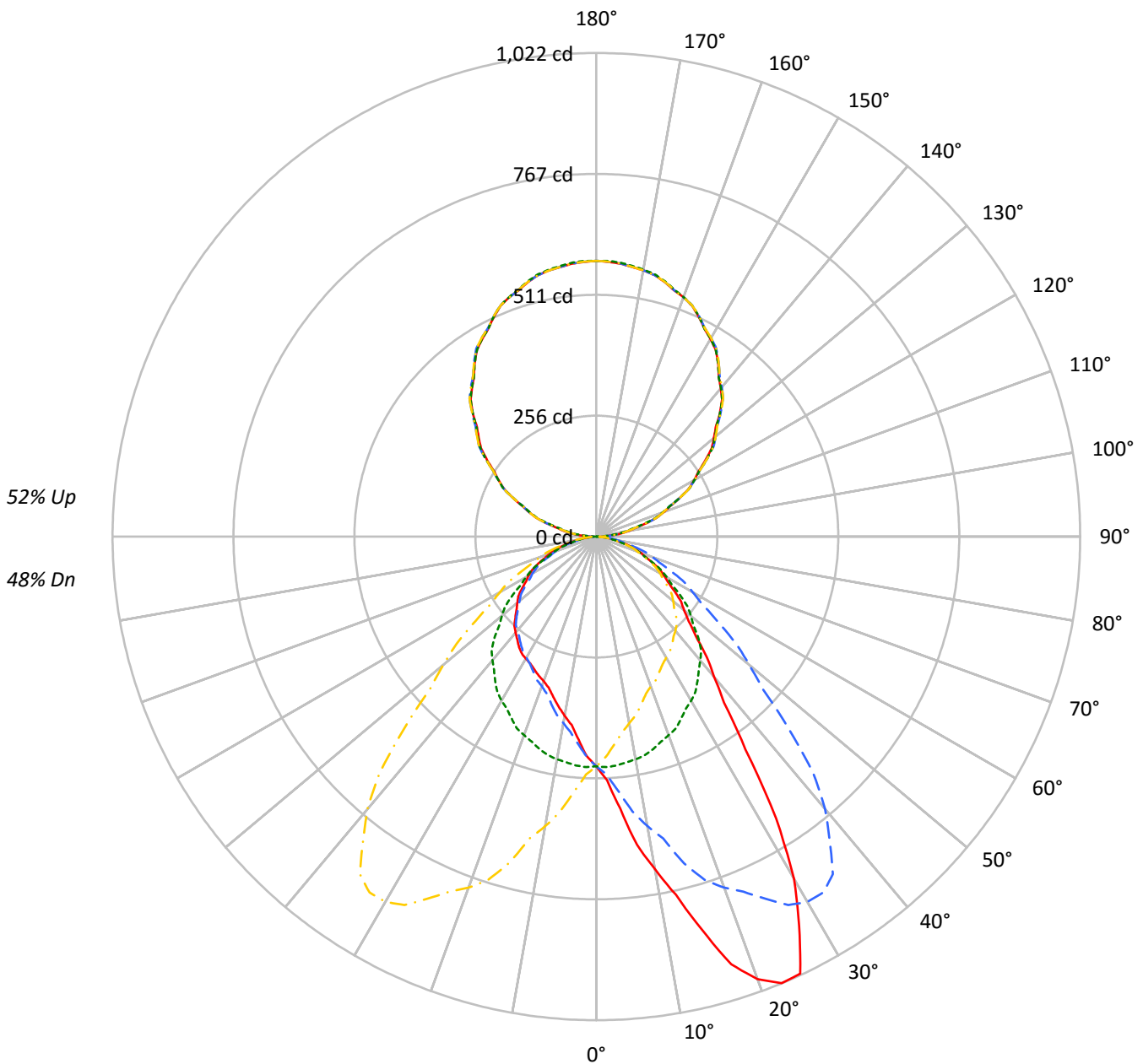
Input Watts (W): 23  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot



52% Up

48% Dn

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



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

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

**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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.8	1.6
10°-20°	153.4	5.0
20°-30°	257.4	8.4
30°-40°	291.5	9.5
40°-50°	261.4	8.5
50°-60°	210.9	6.8
60°-70°	147.0	4.8
70°-80°	77.3	2.5
80°-90°	20.6	0.7
90°-100°	37.9	1.2
100°-110°	113.6	3.7
110°-120°	193.2	6.3
120°-130°	254.1	8.2
130°-140°	285.6	9.3
140°-150°	280.8	9.1
150°-160°	236.4	7.7
160°-170°	157.3	5.1
170°-180°	55.1	1.8
0°-30°	458.6	14.9
0°-40°	750.1	24.3
0°-60°	1222.4	39.7
0°-90°	1467.3	47.6
90°-120°	344.8	11.2
90°-150°	1165.3	37.8
90°-180°	1614.0	52.4
0°-180°	3081.5	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°	36	27	36	27	36	37
105°	109	103	109	103	109	116
115°	195	194	195	194	195	193
125°	281	285	281	285	281	252
135°	369	369	369	369	369	284
145°	448	448	448	448	448	280
155°	512	513	512	513	512	236
165°	557	559	557	559	557	157
175°	579	581	579	581	579	55
180°	583	583	583	583	583	



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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	8.1	8.2	8.3	8.4	8.5	8.6	8.5
90°	13.7	13.5	13.3	13.1	12.9	12.6	12.2	11.8	11.4	11.0	9.7
92.5°	18.5	18.6	18.7	18.9	19.0	18.9	18.6	18.2	17.9	17.6	16.9
95°	35.6	35.6	35.6	35.6	35.6	35.4	35.0	34.6	34.2	33.8	33.0
97.5°	54.9	54.9	55.0	55.0	55.0	54.8	54.4	53.9	53.4	53.0	52.4
100°	69.6	69.4	69.2	69.0	68.8	68.5	68.2	67.9	67.6	67.3	66.8
102.5°	84.5	84.6	84.6	84.7	84.7	84.6	84.3	84.0	83.7	83.4	82.7
105°	109.0	108.8	108.6	108.4	108.1	108.0	108.0	108.0	108.0	108.0	107.0
107.5°	134.3	134.4	134.5	134.6	134.7	134.6	134.3	134.0	133.7	133.4	133.0
110°	151.5	151.7	151.9	152.1	152.3	152.2	151.8	151.4	151.0	150.6	150.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	169.8	169.9	169.9	169.9	170.0	169.8	169.3	168.7	168.2	167.7	167.7
115°	195.0	195.1	195.2	195.3	195.4	195.4	195.3	195.2	195.1	195.0	195.2
117.5°	220.5	220.8	221.1	221.4	221.7	221.8	221.8	221.9	221.9	221.9	222.2
120°	238.4	238.6	238.8	239.0	239.2	239.4	239.5	239.6	239.7	239.8	240.3
122.5°	255.6	255.9	256.2	256.5	256.8	257.0	257.3	257.6	257.8	258.1	258.4
125°	281.4	281.9	282.3	282.7	283.1	283.5	283.9	284.3	284.7	285.1	285.3
127.5°	307.2	307.6	308.1	308.6	309.0	309.5	310.1	310.7	311.2	311.8	312.0
130°	324.0	324.8	325.5	326.2	326.9	327.4	327.8	328.2	328.6	329.0	329.3
132.5°	341.5	342.1	342.6	343.3	343.8	344.3	344.8	345.3	345.8	346.3	346.5
135°	368.9	369.1	369.3	369.5	369.7	370.0	370.4	370.8	371.2	371.6	371.7
137.5°	392.9	393.3	393.7	394.0	394.5	394.9	395.4	395.8	396.2	396.6	396.4
140°	408.7	409.4	410.1	410.8	411.5	411.9	412.0	412.1	412.2	412.3	412.2
142.5°	424.7	425.4	425.9	426.5	427.0	427.3	427.4	427.5	427.6	427.7	427.6
145°	448.1	448.5	448.9	449.3	449.7	449.9	450.0	450.1	450.2	450.3	450.0
147.5°	468.7	469.3	469.9	470.6	471.2	471.5	471.5	471.5	471.5	471.5	471.2
150°	481.9	482.5	483.1	483.7	484.3	484.6	484.6	484.6	484.6	484.6	484.4
152.5°	494.7	495.2	495.7	496.3	496.9	497.1	496.9	496.7	496.6	496.3	496.2
155°	512.1	512.8	513.5	514.2	514.9	515.1	514.7	514.3	513.9	513.5	513.4
157.5°	528.0	528.5	529.1	529.7	530.2	530.3	529.9	529.5	529.0	528.6	528.5
160°	538.2	538.6	539.0	539.4	539.8	539.8	539.3	538.8	538.3	537.8	537.8
162.5°	545.8	546.5	547.1	547.9	548.5	548.6	548.1	547.5	547.0	546.5	546.4
165°	556.9	557.6	558.4	559.1	559.8	559.9	559.3	558.7	558.1	557.4	557.4
167.5°	566.3	567.0	567.6	568.3	568.9	568.9	568.3	567.6	567.0	566.3	566.3
170°	571.2	571.9	572.6	573.3	574.0	574.0	573.3	572.6	571.9	571.2	571.2
172.5°	574.8	575.5	576.2	576.9	577.6	577.6	577.0	576.4	575.8	575.1	575.1
175°	579.0	579.7	580.4	581.1	581.8	581.8	581.2	580.6	580.0	579.4	579.4
177.5°	581.1	581.7	582.3	582.8	583.4	583.4	583.0	582.5	582.0	581.5	581.5
180°	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6



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**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	7.8	6.8	6.2	5.4	5.2	4.6	4.4	4.6	4.6
90°	8.4	7.0	5.7	4.5	3.5	2.5	1.5	0.5	1.5	2.5	3.5
92.5°	16.1	15.3	14.5	13.8	13.1	12.4	11.8	11.1	11.8	12.4	13.1
95°	32.2	31.4	30.6	29.9	29.2	28.4	27.7	27.0	27.7	28.4	29.2
97.5°	51.8	51.2	50.6	50.1	49.6	49.0	48.5	48.0	48.5	49.0	49.6
100°	66.2	65.7	65.2	64.6	64.0	63.4	62.8	62.2	62.8	63.4	64.0
102.5°	82.0	81.4	80.7	80.2	79.8	79.5	79.1	78.7	79.1	79.5	79.8
105°	106.1	105.2	104.3	103.8	103.6	103.4	103.2	103.0	103.2	103.4	103.6
107.5°	132.6	132.3	131.9	131.7	131.5	131.4	131.3	131.2	131.3	131.4	131.5
110°	150.2	150.0	149.8	149.6	149.4	149.2	149.0	148.8	149.0	149.2	149.4





TEST NUMBER: P332091-840

CATALOG NUMBER: S123DIW-S340D460U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	167.7	167.6	167.6	167.5	167.4	167.3	167.1	167.0	167.1	167.3	167.4
115°	195.4	195.6	195.8	195.7	195.4	195.1	194.8	194.5	194.8	195.1	195.4
117.5°	222.4	222.7	222.9	223.0	222.8	222.6	222.4	222.2	222.4	222.6	222.8
120°	240.9	241.4	241.9	241.8	241.2	240.5	239.9	239.3	239.9	240.5	241.2
122.5°	258.6	258.9	259.1	259.0	258.6	258.2	257.7	257.3	257.7	258.2	258.6
125°	285.5	285.7	285.9	285.9	285.6	285.3	285.0	284.7	285.0	285.3	285.6
127.5°	312.3	312.6	312.8	312.6	311.8	311.2	310.5	309.9	310.5	311.2	311.8
130°	329.6	329.9	330.2	330.0	329.2	328.4	327.6	326.8	327.6	328.4	329.2
132.5°	346.7	346.9	347.2	346.9	346.1	345.3	344.4	343.6	344.4	345.3	346.1
135°	371.8	371.9	372.0	371.7	371.1	370.5	369.9	369.3	369.9	370.5	371.1
137.5°	396.1	395.8	395.6	395.2	394.7	394.2	393.6	393.1	393.6	394.2	394.7
140°	412.1	412.0	411.9	411.6	411.1	410.6	410.1	409.6	410.1	410.6	411.1
142.5°	427.4	427.2	427.0	426.7	426.2	425.7	425.2	424.6	425.2	425.7	426.2
145°	449.7	449.4	449.1	448.9	448.7	448.5	448.3	448.1	448.3	448.5	448.7
147.5°	470.9	470.6	470.3	470.0	469.6	469.3	468.9	468.6	468.9	469.3	469.6
150°	484.2	484.0	483.8	483.6	483.4	483.2	483.0	482.8	483.0	483.2	483.4
152.5°	496.1	495.9	495.8	495.6	495.3	495.1	494.8	494.5	494.8	495.1	495.3
155°	513.3	513.2	513.1	513.0	513.0	513.0	513.0	513.0	513.0	513.0	513.0
157.5°	528.5	528.4	528.3	528.3	528.4	528.6	528.7	528.8	528.7	528.6	528.4
160°	537.8	537.8	537.8	537.9	538.1	538.3	538.5	538.7	538.5	538.3	538.1
162.5°	546.3	546.2	546.2	546.3	546.5	546.8	547.1	547.4	547.1	546.8	546.5
165°	557.4	557.4	557.4	557.5	557.8	558.2	558.5	558.8	558.5	558.2	557.8
167.5°	566.2	566.1	566.0	566.2	566.6	567.0	567.4	567.8	567.4	567.0	566.6
170°	571.2	571.2	571.2	571.4	571.8	572.2	572.6	573.0	572.6	572.2	571.8
172.5°	575.1	575.1	575.1	575.3	575.8	576.2	576.6	577.0	576.6	576.2	575.8
175°	579.4	579.4	579.4	579.6	580.0	580.4	580.8	581.2	580.8	580.4	580.0
177.5°	581.5	581.5	581.5	581.7	582.0	582.3	582.6	583.0	582.6	582.3	582.0
180°	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6



TEST NUMBER: P332091-840

CATALOG NUMBER: S123DIW-S340D460U840-4F0-1E-UDD-A1

**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	6.1	6.7	6.0
90°	4.5	5.7	7.0	8.4	9.7	11.0	11.4	11.8	12.2	12.6	12.9
92.5°	13.8	14.5	15.3	16.1	16.9	17.6	17.9	18.2	18.6	18.9	19.0
95°	29.9	30.6	31.4	32.2	33.0	33.8	34.2	34.6	35.0	35.4	35.6
97.5°	50.1	50.6	51.2	51.8	52.4	53.0	53.4	53.9	54.4	54.8	55.0
100°	64.6	65.2	65.7	66.2	66.8	67.3	67.6	67.9	68.2	68.5	68.8
102.5°	80.2	80.7	81.4	82.0	82.7	83.4	83.7	84.0	84.3	84.6	84.7
105°	103.8	104.3	105.2	106.1	107.0	108.0	108.0	108.0	108.0	108.0	108.1
107.5°	131.7	131.9	132.3	132.6	133.0	133.4	133.7	134.0	134.3	134.6	134.7
110°	149.6	149.8	150.0	150.2	150.4	150.6	151.0	151.4	151.8	152.2	152.3



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	167.5	167.6	167.6	167.7	167.7	167.7	168.2	168.7	169.3	169.8	170.0
115°	195.7	195.8	195.6	195.4	195.2	195.0	195.1	195.2	195.3	195.4	195.4
117.5°	223.0	222.9	222.7	222.4	222.2	221.9	221.9	221.9	221.8	221.8	221.7
120°	241.8	241.9	241.4	240.9	240.3	239.8	239.7	239.6	239.5	239.4	239.2
122.5°	259.0	259.1	258.9	258.6	258.4	258.1	257.8	257.6	257.3	257.0	256.8
125°	285.9	285.9	285.7	285.5	285.3	285.1	284.7	284.3	283.9	283.5	283.1
127.5°	312.6	312.8	312.6	312.3	312.0	311.8	311.2	310.7	310.1	309.5	309.0
130°	330.0	330.2	329.9	329.6	329.3	329.0	328.6	328.2	327.8	327.4	326.9
132.5°	346.9	347.2	346.9	346.7	346.5	346.3	345.8	345.3	344.8	344.3	343.8
135°	371.7	372.0	371.9	371.8	371.7	371.6	371.2	370.8	370.4	370.0	369.7
137.5°	395.2	395.6	395.8	396.1	396.4	396.6	396.2	395.8	395.4	394.9	394.5
140°	411.6	411.9	412.0	412.1	412.2	412.3	412.2	412.1	412.0	411.9	411.5
142.5°	426.7	427.0	427.2	427.4	427.6	427.7	427.6	427.5	427.4	427.3	427.0
145°	448.9	449.1	449.4	449.7	450.0	450.3	450.2	450.1	450.0	449.9	449.7
147.5°	470.0	470.3	470.6	470.9	471.2	471.5	471.5	471.5	471.5	471.5	471.2
150°	483.6	483.8	484.0	484.2	484.4	484.6	484.6	484.6	484.6	484.6	484.3
152.5°	495.6	495.8	495.9	496.1	496.2	496.3	496.6	496.7	496.9	497.1	496.9
155°	513.0	513.1	513.2	513.3	513.4	513.5	513.9	514.3	514.7	515.1	514.9
157.5°	528.3	528.3	528.4	528.5	528.5	528.6	529.0	529.5	529.9	530.3	530.2
160°	537.9	537.8	537.8	537.8	537.8	537.8	538.3	538.8	539.3	539.8	539.8
162.5°	546.3	546.2	546.2	546.3	546.4	546.5	547.0	547.5	548.1	548.6	548.5
165°	557.5	557.4	557.4	557.4	557.4	557.4	558.1	558.7	559.3	559.9	559.8
167.5°	566.2	566.0	566.1	566.2	566.3	566.3	567.0	567.6	568.3	568.9	568.9
170°	571.4	571.2	571.2	571.2	571.2	571.2	571.9	572.6	573.3	574.0	574.0
172.5°	575.3	575.1	575.1	575.1	575.1	575.1	575.8	576.4	577.0	577.6	577.6
175°	579.6	579.4	579.4	579.4	579.4	579.4	580.0	580.6	581.2	581.8	581.8
177.5°	581.7	581.5	581.5	581.5	581.5	581.5	582.0	582.5	583.0	583.4	583.4
180°	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6



TEST NUMBER: P332091-840

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**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°	6.1	6.1	5.9	5.8	5.9	6.1	6.1	6.0	6.7	6.1	6.0
90°	13.1	13.3	13.5	13.7	13.5	13.3	13.1	12.9	12.6	12.2	11.8
92.5°	18.9	18.7	18.6	18.5	18.6	18.7	18.9	19.0	18.9	18.6	18.2
95°	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.4	35.0	34.6
97.5°	55.0	55.0	54.9	54.9	54.9	55.0	55.0	55.0	54.8	54.4	53.9
100°	69.0	69.2	69.4	69.6	69.4	69.2	69.0	68.8	68.5	68.2	67.9
102.5°	84.7	84.6	84.6	84.5	84.6	84.6	84.7	84.7	84.6	84.3	84.0
105°	108.4	108.6	108.8	109.0	108.8	108.6	108.4	108.1	108.0	108.0	108.0
107.5°	134.6	134.5	134.4	134.3	134.4	134.5	134.6	134.7	134.6	134.3	134.0
110°	152.1	151.9	151.7	151.5	151.7	151.9	152.1	152.3	152.2	151.8	151.4



TEST NUMBER: P332091-840

CATALOG NUMBER: S123DIW-S340D460U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	169.9	169.9	169.9	169.8	169.9	169.9	169.9	170.0	169.8	169.3	168.7
115°	195.3	195.2	195.1	195.0	195.1	195.2	195.3	195.4	195.4	195.3	195.2
117.5°	221.4	221.1	220.8	220.5	220.8	221.1	221.4	221.7	221.8	221.8	221.9
120°	239.0	238.8	238.6	238.4	238.6	238.8	239.0	239.2	239.4	239.5	239.6
122.5°	256.5	256.2	255.9	255.6	255.9	256.2	256.5	256.8	257.0	257.3	257.6
125°	282.7	282.3	281.9	281.4	281.9	282.3	282.7	283.1	283.5	283.9	284.3
127.5°	308.6	308.1	307.6	307.2	307.6	308.1	308.6	309.0	309.5	310.1	310.7
130°	326.2	325.5	324.8	324.0	324.8	325.5	326.2	326.9	327.4	327.8	328.2
132.5°	343.3	342.6	342.1	341.5	342.1	342.6	343.3	343.8	344.3	344.8	345.3
135°	369.5	369.3	369.1	368.9	369.1	369.3	369.5	369.7	370.0	370.4	370.8
137.5°	394.0	393.7	393.3	392.9	393.3	393.7	394.0	394.5	394.9	395.4	395.8
140°	410.8	410.1	409.4	408.7	409.4	410.1	410.8	411.5	411.9	412.0	412.1
142.5°	426.5	425.9	425.4	424.7	425.4	425.9	426.5	427.0	427.3	427.4	427.5
145°	449.3	448.9	448.5	448.1	448.5	448.9	449.3	449.7	449.9	450.0	450.1
147.5°	470.6	469.9	469.3	468.7	469.3	469.9	470.6	471.2	471.5	471.5	471.5
150°	483.7	483.1	482.5	481.9	482.5	483.1	483.7	484.3	484.6	484.6	484.6
152.5°	496.3	495.7	495.2	494.7	495.2	495.7	496.3	496.9	497.1	496.9	496.7
155°	514.2	513.5	512.8	512.1	512.8	513.5	514.2	514.9	515.1	514.7	514.3
157.5°	529.7	529.1	528.5	528.0	528.5	529.1	529.7	530.2	530.3	529.9	529.5
160°	539.4	539.0	538.6	538.2	538.6	539.0	539.4	539.8	539.8	539.3	538.8
162.5°	547.9	547.1	546.5	545.8	546.5	547.1	547.9	548.5	548.6	548.1	547.5
165°	559.1	558.4	557.6	556.9	557.6	558.4	559.1	559.8	559.9	559.3	558.7
167.5°	568.3	567.6	567.0	566.3	567.0	567.6	568.3	568.9	568.9	568.3	567.6
170°	573.3	572.6	571.9	571.2	571.9	572.6	573.3	574.0	574.0	573.3	572.6
172.5°	576.9	576.2	575.5	574.8	575.5	576.2	576.9	577.6	577.6	577.0	576.4
175°	581.1	580.4	579.7	579.0	579.7	580.4	581.1	581.8	581.8	581.2	580.6
177.5°	582.8	582.3	581.7	581.1	581.7	582.3	582.8	583.4	583.4	583.0	582.5
180°	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6



TEST NUMBER: P332091-840

CATALOG NUMBER: S123DIW-S340D460U840-4F0-1E-UDD-A1

**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°	11.4	11.0	9.7	8.4	7.0	5.7	4.5	3.5	2.5	1.5	0.5
92.5°	17.9	17.6	16.9	16.1	15.3	14.5	13.8	13.1	12.4	11.8	11.1
95°	34.2	33.8	33.0	32.2	31.4	30.6	29.9	29.2	28.4	27.7	27.0
97.5°	53.4	53.0	52.4	51.8	51.2	50.6	50.1	49.6	49.0	48.5	48.0
100°	67.6	67.3	66.8	66.2	65.7	65.2	64.6	64.0	63.4	62.8	62.2
102.5°	83.7	83.4	82.7	82.0	81.4	80.7	80.2	79.8	79.5	79.1	78.7
105°	108.0	108.0	107.0	106.1	105.2	104.3	103.8	103.6	103.4	103.2	103.0
107.5°	133.7	133.4	133.0	132.6	132.3	131.9	131.7	131.5	131.4	131.3	131.2
110°	151.0	150.6	150.4	150.2	150.0	149.8	149.6	149.4	149.2	149.0	148.8



TEST NUMBER: P332091-840

CATALOG NUMBER: S123DIW-S340D460U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	168.2	167.7	167.7	167.7	167.6	167.6	167.5	167.4	167.3	167.1	167.0
115°	195.1	195.0	195.2	195.4	195.6	195.8	195.7	195.4	195.1	194.8	194.5
117.5°	221.9	221.9	222.2	222.4	222.7	222.9	223.0	222.8	222.6	222.4	222.2
120°	239.7	239.8	240.3	240.9	241.4	241.9	241.8	241.2	240.5	239.9	239.3
122.5°	257.8	258.1	258.4	258.6	258.9	259.1	259.0	258.6	258.2	257.7	257.3
125°	284.7	285.1	285.3	285.5	285.7	285.9	285.9	285.6	285.3	285.0	284.7
127.5°	311.2	311.8	312.0	312.3	312.6	312.8	312.6	311.8	311.2	310.5	309.9
130°	328.6	329.0	329.3	329.6	329.9	330.2	330.0	329.2	328.4	327.6	326.8
132.5°	345.8	346.3	346.5	346.7	346.9	347.2	346.9	346.1	345.3	344.4	343.6
135°	371.2	371.6	371.7	371.8	371.9	372.0	371.7	371.1	370.5	369.9	369.3
137.5°	396.2	396.6	396.4	396.1	395.8	395.6	395.2	394.7	394.2	393.6	393.1
140°	412.2	412.3	412.2	412.1	412.0	411.9	411.6	411.1	410.6	410.1	409.6
142.5°	427.6	427.7	427.6	427.4	427.2	427.0	426.7	426.2	425.7	425.2	424.6
145°	450.2	450.3	450.0	449.7	449.4	449.1	448.9	448.7	448.5	448.3	448.1
147.5°	471.5	471.5	471.2	470.9	470.6	470.3	470.0	469.6	469.3	468.9	468.6
150°	484.6	484.6	484.4	484.2	484.0	483.8	483.6	483.4	483.2	483.0	482.8
152.5°	496.6	496.3	496.2	496.1	495.9	495.8	495.6	495.3	495.1	494.8	494.5
155°	513.9	513.5	513.4	513.3	513.2	513.1	513.0	513.0	513.0	513.0	513.0
157.5°	529.0	528.6	528.5	528.5	528.4	528.3	528.3	528.4	528.6	528.7	528.8
160°	538.3	537.8	537.8	537.8	537.8	537.8	537.9	538.1	538.3	538.5	538.7
162.5°	547.0	546.5	546.4	546.3	546.2	546.2	546.3	546.5	546.8	547.1	547.4
165°	558.1	557.4	557.4	557.4	557.4	557.4	557.5	557.8	558.2	558.5	558.8
167.5°	567.0	566.3	566.3	566.2	566.1	566.0	566.2	566.6	567.0	567.4	567.8
170°	571.9	571.2	571.2	571.2	571.2	571.2	571.4	571.8	572.2	572.6	573.0
172.5°	575.8	575.1	575.1	575.1	575.1	575.1	575.3	575.8	576.2	576.6	577.0
175°	580.0	579.4	579.4	579.4	579.4	579.4	579.6	580.0	580.4	580.8	581.2
177.5°	582.0	581.5	581.5	581.5	581.5	581.5	581.7	582.0	582.3	582.6	583.0
180°	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6



TEST NUMBER: P332091-840

CATALOG NUMBER: S123DIW-S340D460U840-4F0-1E-UDD-A1

**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	7.8	8.6	8.6	8.5	8.6	8.5	8.4
90°	1.5	2.5	3.5	4.5	5.7	7.0	8.4	9.7	11.0	11.4	11.8
92.5°	11.8	12.4	13.1	13.8	14.5	15.3	16.1	16.9	17.6	17.9	18.2
95°	27.7	28.4	29.2	29.9	30.6	31.4	32.2	33.0	33.8	34.2	34.6
97.5°	48.5	49.0	49.6	50.1	50.6	51.2	51.8	52.4	53.0	53.4	53.9
100°	62.8	63.4	64.0	64.6	65.2	65.7	66.2	66.8	67.3	67.6	67.9
102.5°	79.1	79.5	79.8	80.2	80.7	81.4	82.0	82.7	83.4	83.7	84.0
105°	103.2	103.4	103.6	103.8	104.3	105.2	106.1	107.0	108.0	108.0	108.0
107.5°	131.3	131.4	131.5	131.7	131.9	132.3	132.6	133.0	133.4	133.7	134.0
110°	149.0	149.2	149.4	149.6	149.8	150.0	150.2	150.4	150.6	151.0	151.4





TEST NUMBER: P332091-840

CATALOG NUMBER: S123DIW-S340D460U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	167.1	167.3	167.4	167.5	167.6	167.6	167.7	167.7	167.7	168.2	168.7
115°	194.8	195.1	195.4	195.7	195.8	195.6	195.4	195.2	195.0	195.1	195.2
117.5°	222.4	222.6	222.8	223.0	222.9	222.7	222.4	222.2	221.9	221.9	221.9
120°	239.9	240.5	241.2	241.8	241.9	241.4	240.9	240.3	239.8	239.7	239.6
122.5°	257.7	258.2	258.6	259.0	259.1	258.9	258.6	258.4	258.1	257.8	257.6
125°	285.0	285.3	285.6	285.9	285.9	285.7	285.5	285.3	285.1	284.7	284.3
127.5°	310.5	311.2	311.8	312.6	312.8	312.6	312.3	312.0	311.8	311.2	310.7
130°	327.6	328.4	329.2	330.0	330.2	329.9	329.6	329.3	329.0	328.6	328.2
132.5°	344.4	345.3	346.1	346.9	347.2	346.9	346.7	346.5	346.3	345.8	345.3
135°	369.9	370.5	371.1	371.7	372.0	371.9	371.8	371.7	371.6	371.2	370.8
137.5°	393.6	394.2	394.7	395.2	395.6	395.8	396.1	396.4	396.6	396.2	395.8
140°	410.1	410.6	411.1	411.6	411.9	412.0	412.1	412.2	412.3	412.2	412.1
142.5°	425.2	425.7	426.2	426.7	427.0	427.2	427.4	427.6	427.7	427.6	427.5
145°	448.3	448.5	448.7	448.9	449.1	449.4	449.7	450.0	450.3	450.2	450.1
147.5°	468.9	469.3	469.6	470.0	470.3	470.6	470.9	471.2	471.5	471.5	471.5
150°	483.0	483.2	483.4	483.6	483.8	484.0	484.2	484.4	484.6	484.6	484.6
152.5°	494.8	495.1	495.3	495.6	495.8	495.9	496.1	496.2	496.3	496.6	496.7
155°	513.0	513.0	513.0	513.0	513.1	513.2	513.3	513.4	513.5	513.9	514.3
157.5°	528.7	528.6	528.4	528.3	528.3	528.4	528.5	528.5	528.6	529.0	529.5
160°	538.5	538.3	538.1	537.9	537.8	537.8	537.8	537.8	537.8	538.3	538.8
162.5°	547.1	546.8	546.5	546.3	546.2	546.2	546.3	546.4	546.5	547.0	547.5
165°	558.5	558.2	557.8	557.5	557.4	557.4	557.4	557.4	557.4	558.1	558.7
167.5°	567.4	567.0	566.6	566.2	566.0	566.1	566.2	566.3	566.3	567.0	567.6
170°	572.6	572.2	571.8	571.4	571.2	571.2	571.2	571.2	571.2	571.9	572.6
172.5°	576.6	576.2	575.8	575.3	575.1	575.1	575.1	575.1	575.1	575.8	576.4
175°	580.8	580.4	580.0	579.6	579.4	579.4	579.4	579.4	579.4	580.0	580.6
177.5°	582.6	582.3	582.0	581.7	581.5	581.5	581.5	581.5	581.5	582.0	582.5
180°	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6	582.6



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**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	8.1	8.3	8.1	8.0	8.4
90°	12.2	12.6	12.9	13.1	13.3	13.5	13.7
92.5°	18.6	18.9	19.0	18.9	18.7	18.6	18.5
95°	35.0	35.4	35.6	35.6	35.6	35.6	35.6
97.5°	54.4	54.8	55.0	55.0	55.0	54.9	54.9
100°	68.2	68.5	68.8	69.0	69.2	69.4	69.6
102.5°	84.3	84.6	84.7	84.7	84.6	84.6	84.5
105°	108.0	108.0	108.1	108.4	108.6	108.8	109.0
107.5°	134.3	134.6	134.7	134.6	134.5	134.4	134.3
110°	151.8	152.2	152.3	152.1	151.9	151.7	151.5



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	169.3	169.8	170.0	169.9	169.9	169.9	169.8
115°	195.3	195.4	195.4	195.3	195.2	195.1	195.0
117.5°	221.8	221.8	221.7	221.4	221.1	220.8	220.5
120°	239.5	239.4	239.2	239.0	238.8	238.6	238.4
122.5°	257.3	257.0	256.8	256.5	256.2	255.9	255.6
125°	283.9	283.5	283.1	282.7	282.3	281.9	281.4
127.5°	310.1	309.5	309.0	308.6	308.1	307.6	307.2
130°	327.8	327.4	326.9	326.2	325.5	324.8	324.0
132.5°	344.8	344.3	343.8	343.3	342.6	342.1	341.5
135°	370.4	370.0	369.7	369.5	369.3	369.1	368.9
137.5°	395.4	394.9	394.5	394.0	393.7	393.3	392.9
140°	412.0	411.9	411.5	410.8	410.1	409.4	408.7
142.5°	427.4	427.3	427.0	426.5	425.9	425.4	424.7
145°	450.0	449.9	449.7	449.3	448.9	448.5	448.1
147.5°	471.5	471.5	471.2	470.6	469.9	469.3	468.7
150°	484.6	484.6	484.3	483.7	483.1	482.5	481.9
152.5°	496.9	497.1	496.9	496.3	495.7	495.2	494.7
155°	514.7	515.1	514.9	514.2	513.5	512.8	512.1
157.5°	529.9	530.3	530.2	529.7	529.1	528.5	528.0
160°	539.3	539.8	539.8	539.4	539.0	538.6	538.2
162.5°	548.1	548.6	548.5	547.9	547.1	546.5	545.8
165°	559.3	559.9	559.8	559.1	558.4	557.6	556.9
167.5°	568.3	568.9	568.9	568.3	567.6	567.0	566.3
170°	573.3	574.0	574.0	573.3	572.6	571.9	571.2
172.5°	577.0	577.6	577.6	576.9	576.2	575.5	574.8
175°	581.2	581.8	581.8	581.1	580.4	579.7	579.0
177.5°	583.0	583.4	583.4	582.8	582.3	581.7	581.1
180°	582.6	582.6	582.6	582.6	582.6	582.6	582.6

(END OF REPORT)