

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: P332120-930

Luminaire Tested: **S123DIW-S560D460U930-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332120-930  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123DIW-S560D460U930-4F0-1E-UDD-A  
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 560 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: 3450.1 lumens  
Efficiency: N/A  
Efficacy: 114.2 lumens/watt  
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49  
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')  
CIE Type: General Diffuse

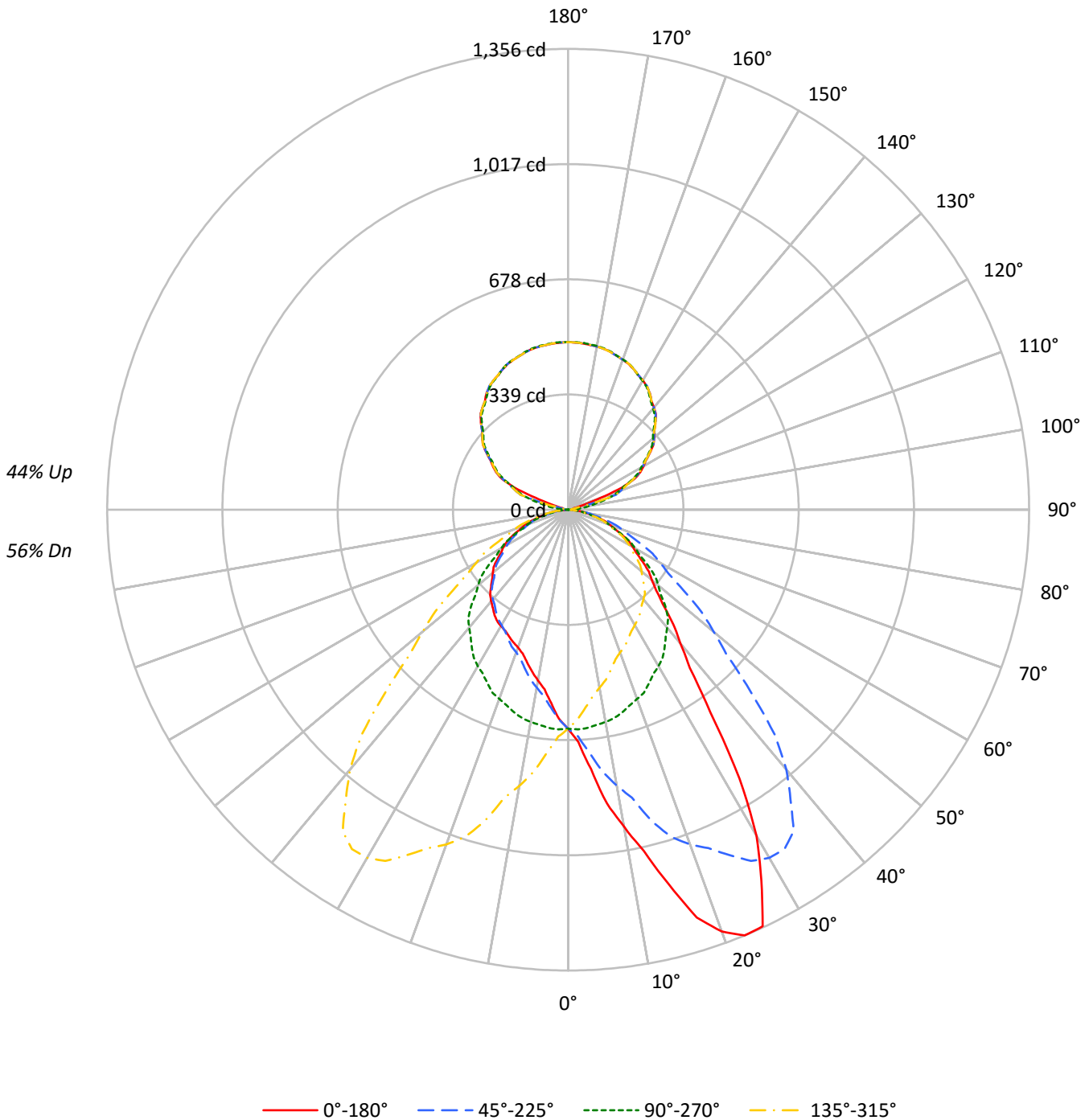
Input Watts (W): 30.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	56
1	100	95	91	88	92	89	86	83	77	74	72	66	64	62	55	54	53	48
2	91	84	77	72	84	78	73	68	68	64	60	58	55	52	49	47	45	41
3	83	74	66	61	77	69	62	57	60	55	51	51	48	45	44	41	39	35
4	76	65	58	52	71	61	54	49	53	48	44	46	42	38	39	36	34	30
5	70	58	50	44	65	55	48	42	48	42	38	41	37	33	35	32	29	26
6	65	52	44	39	60	49	42	37	43	37	33	37	33	29	32	29	26	23
7	60	47	39	34	55	45	37	32	39	33	29	34	30	26	29	26	23	21
8	55	43	35	30	52	41	34	29	36	30	26	31	27	23	27	23	21	18
9	52	39	32	27	48	37	30	26	33	27	23	29	24	21	25	21	19	17
10	48	36	29	24	45	34	28	23	30	25	21	27	22	19	23	20	17	15

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	6937	6937	6937	6937
5°	8272	6967	6174	6967
10°	10355	6932	5576	6932
15°	12700	6876	5192	6876
20°	15131	6788	4943	6788
25°	16066	6683	4888	6683
30°	13770	6606	4913	6606
35°	9577	6495	4964	6495
40°	7213	6367	4949	6367
45°	5990	6174	4886	6174
50°	5365	5784	4843	5784
55°	5016	5362	4782	5362
60°	4706	4921	4732	4921
65°	4422	4485	4582	4485
70°	4148	3991	4362	3991
75°	3714	3493	4001	3493
80°	3248	2864	3446	2864
85°	2544	2087	2322	2087



TEST NUMBER: P332120-930

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.5	1.8
10°-20°	203.6	5.9
20°-30°	341.7	9.9
30°-40°	386.9	11.2
40°-50°	346.9	10.1
50°-60°	280.0	8.1
60°-70°	195.1	5.7
70°-80°	102.5	3.0
80°-90°	26.5	0.8
90°-100°	17.9	0.5
100°-110°	85.4	2.5
110°-120°	205.2	5.9
120°-130°	261.3	7.6
130°-140°	279.2	8.1
140°-150°	261.1	7.6
150°-160°	210.6	6.1
160°-170°	135.9	3.9
170°-180°	46.8	1.4
0°-30°	608.7	17.6
0°-40°	995.6	28.9
0°-60°	1622.5	47.0
0°-90°	1946.6	56.4
90°-120°	308.6	8.9
90°-150°	1110.2	32.2
90°-180°	1504.0	43.6
0°-180°	3450.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	644	644	644	644	644	
5°	766	645	571	645	766	79
15°	1140	617	466	617	1140	329
25°	1353	563	412	563	1353	593
35°	729	494	378	494	729	473
45°	394	406	321	406	394	311
55°	267	286	255	286	267	240
65°	174	176	180	176	174	173
75°	89	84	96	84	89	96
85°	21	17	19	17	21	25
90°	11	0	11	0	11	6
95°	14	22	14	22	14	12
105°	16	109	16	109	16	37
115°	215	205	215	205	215	199
125°	294	289	294	289	294	263
135°	363	359	363	359	363	280
145°	419	415	419	415	419	261
155°	456	457	456	457	456	210
165°	481	482	481	482	481	136
175°	491	493	491	493	491	47
180°	493	493	493	493	493	



TEST NUMBER: P332120-930

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5
2.5°	684.0	683.5	682.2	683.2	681.2	678.5	678.2	675.7	668.5	668.0	666.0
5°	765.6	763.1	762.9	762.5	758.1	752.2	740.9	740.0	725.0	717.5	708.5
7.5°	871.5	872.8	868.2	864.2	850.8	842.0	830.0	814.6	796.1	777.5	765.0
10°	947.4	957.7	944.9	936.1	928.1	912.7	895.0	872.8	850.6	824.7	805.0
12.5°	1028.8	1033.9	1031.4	1023.0	1010.5	987.2	955.6	931.2	910.8	867.6	850.2
15°	1139.7	1158.8	1146.6	1118.5	1119.2	1097.0	1055.7	1010.5	986.4	948.6	897.1
17.5°	1257.9	1260.3	1255.1	1231.7	1216.0	1185.6	1147.5	1104.2	1055.4	1009.7	955.0
20°	1320.9	1319.0	1308.1	1295.8	1269.0	1245.3	1203.7	1155.4	1092.9	1047.9	988.3
22.5°	1355.8	1352.7	1347.5	1337.3	1315.0	1289.5	1252.2	1199.3	1139.9	1077.9	1009.0
25°	1352.7	1356.7	1357.4	1354.5	1346.8	1331.5	1302.1	1260.0	1200.6	1121.0	1049.2
27.5°	1230.3	1236.0	1252.7	1267.5	1284.1	1300.9	1298.7	1277.7	1233.9	1165.1	1077.3
30°	1107.9	1095.4	1126.3	1165.3	1191.9	1238.7	1264.9	1266.5	1241.9	1182.8	1097.2
32.5°	938.0	951.8	965.4	1013.4	1071.5	1124.1	1176.2	1218.3	1223.1	1183.8	1109.0
35°	728.8	746.0	770.9	796.0	858.4	912.1	1003.9	1083.9	1147.5	1155.9	1110.0
37.5°	587.3	595.8	611.6	636.6	677.4	741.2	812.2	913.2	1005.5	1074.2	1077.2
40°	513.3	515.8	533.6	552.7	585.8	638.2	702.3	791.6	902.1	998.0	1038.0
42.5°	457.9	463.4	470.9	489.3	515.6	555.1	614.6	688.4	789.7	900.0	978.2
45°	393.5	399.7	404.4	416.5	435.3	461.8	503.4	570.8	647.9	761.9	867.2
47.5°	350.8	351.3	354.8	364.0	376.7	396.7	426.1	469.4	540.2	632.6	740.7
50°	320.4	325.4	326.6	333.8	343.8	358.5	382.9	419.6	477.8	559.0	658.3
52.5°	298.9	300.4	303.9	309.1	317.8	329.2	350.3	379.2	424.8	494.0	585.3
55°	267.3	267.3	270.8	274.8	279.8	290.1	304.1	325.4	360.0	413.8	489.3
57.5°	238.1	239.6	242.1	243.3	247.5	254.4	266.1	282.3	308.1	349.4	409.5
60°	218.6	221.4	221.1	223.6	227.3	232.6	242.6	255.8	278.8	311.9	362.6
62.5°	201.6	201.4	201.4	204.3	208.1	213.1	219.6	231.0	250.6	280.0	323.0
65°	173.6	173.0	175.2	177.1	178.3	182.1	187.0	197.1	210.2	232.0	265.4
67.5°	148.8	146.9	148.1	148.8	150.9	153.8	158.5	164.7	175.1	192.7	217.8
70°	131.8	130.2	129.9	130.5	132.4	134.6	138.0	144.0	153.6	167.7	186.1
72.5°	114.3	113.2	113.2	114.5	115.4	116.8	119.3	124.7	132.4	142.9	160.1
75°	89.3	89.3	89.3	89.6	90.6	91.8	93.7	96.4	102.4	109.9	121.5
77.5°	66.9	66.9	66.5	66.4	67.8	68.4	68.8	71.4	74.8	79.8	88.2
80°	52.4	50.9	51.5	52.4	53.1	53.4	54.3	55.0	57.8	60.6	66.5
82.5°	39.0	37.7	37.7	39.2	39.4	39.6	40.6	41.5	42.6	45.1	48.3
85°	20.6	20.6	21.0	21.0	21.2	21.0	21.9	22.2	22.2	23.7	25.6
87.5°	9.7	9.1	9.4	9.6	9.3	9.5	9.7	9.9	10.0	10.3	10.3
90°	11.0	10.8	10.7	10.5	10.4	10.1	9.8	9.5	9.1	8.8	7.7
92.5°	12.1	12.1	12.0	11.9	11.7	11.5	10.9	10.4	9.9	9.4	8.6
95°	13.9	13.9	13.9	13.9	13.9	13.6	13.0	12.5	11.9	11.3	10.4
97.5°	15.1	15.0	14.9	14.8	14.8	14.4	13.8	13.1	12.5	11.8	17.7
100°	15.4	15.3	15.2	15.2	15.1	14.7	14.0	13.4	12.7	12.1	24.8
102.5°	15.7	15.5	15.4	15.2	15.1	16.1	18.0	20.1	22.1	24.1	38.0
105°	16.1	16.0	15.8	15.7	15.5	22.6	37.0	51.4	65.8	80.2	87.6
107.5°	50.6	61.5	72.3	83.2	94.1	104.8	115.4	125.9	136.5	147.0	145.9
110°	100.8	112.3	124.0	135.7	147.3	154.4	157.1	159.8	162.5	165.2	164.3



TEST NUMBER: P332120-930

CATALOG NUMBER: S123DIW-S560D460U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

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



TEST NUMBER: P332120-930

CATALOG NUMBER: S123DIW-S560D460U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5
2.5°	664.5	662.5	660.5	657.0	654.0	649.7	648.5	647.0	642.5	638.5	635.5
5°	705.1	697.6	686.6	676.6	668.5	657.6	651.3	644.8	635.4	627.0	620.1
7.5°	747.5	732.8	715.8	697.5	680.4	663.8	650.5	638.7	625.6	613.1	603.5
10°	781.3	760.0	736.3	710.7	688.8	667.6	649.8	634.2	617.3	602.7	590.4
12.5°	819.7	788.2	755.5	724.4	698.5	669.1	647.6	627.7	608.6	590.9	577.2
15°	865.3	825.3	786.6	743.8	704.4	667.6	642.0	617.0	594.8	576.7	559.2
17.5°	906.7	861.4	810.4	758.4	710.9	667.2	631.4	603.2	575.4	553.3	535.8
20°	930.2	878.6	820.9	766.9	714.4	665.7	626.4	592.6	562.7	539.2	519.6
22.5°	950.5	890.1	830.4	772.7	714.2	661.7	617.2	582.4	549.9	527.0	506.1
25°	971.4	899.3	839.4	771.6	706.3	652.0	602.0	562.7	530.2	503.4	481.8
27.5°	989.4	898.7	827.5	754.6	694.0	639.5	586.2	544.0	509.5	480.3	458.4
30°	1001.4	899.9	815.3	743.1	682.0	625.7	573.9	531.5	495.2	465.5	445.0
32.5°	1008.9	899.2	804.0	727.2	663.0	613.3	560.7	516.7	479.5	450.4	430.5
35°	1013.3	893.6	784.7	694.1	632.3	583.9	539.9	494.3	455.3	428.1	405.6
37.5°	1004.5	882.2	762.2	662.3	594.6	547.0	509.9	471.1	433.7	403.8	384.4
40°	990.8	874.7	744.7	639.8	568.6	522.7	491.2	453.1	416.2	387.8	369.7
42.5°	964.6	859.4	725.5	614.8	541.6	495.7	466.7	434.9	400.0	373.3	355.2
45°	900.6	826.2	696.7	577.4	501.8	454.4	428.8	405.6	374.1	348.1	332.6
47.5°	811.7	776.3	654.9	537.9	460.2	414.6	387.9	369.3	346.3	325.4	310.4
50°	750.1	735.4	626.7	510.9	432.4	387.8	362.2	345.4	328.8	307.9	294.2
52.5°	678.8	687.9	593.7	482.9	404.2	360.4	336.2	322.9	307.9	290.7	278.7
55°	578.6	611.4	536.8	435.9	362.2	320.4	297.6	285.7	277.0	264.2	253.9
57.5°	484.8	526.4	475.2	387.5	320.9	284.9	263.0	250.1	244.4	237.7	229.7
60°	429.0	470.3	431.2	355.1	293.2	258.9	239.5	228.6	223.0	218.3	211.4
62.5°	379.4	421.0	388.2	322.0	266.0	234.2	217.3	206.6	202.2	199.7	193.9
65°	311.0	346.9	325.1	270.8	227.0	198.9	183.6	176.1	172.0	171.1	167.4
67.5°	253.2	280.5	264.6	224.5	190.1	165.8	152.9	146.5	143.4	143.1	140.2
70°	215.2	240.8	228.6	192.3	162.7	143.7	132.4	126.8	124.9	124.6	123.0
72.5°	185.6	203.5	193.9	163.6	140.7	123.4	115.1	109.3	107.1	107.6	106.6
75°	137.4	150.8	145.2	124.3	105.8	94.6	87.7	84.0	82.1	83.1	81.8
77.5°	98.9	107.4	102.3	87.8	76.5	68.3	63.3	61.0	59.3	59.2	58.6
80°	74.6	79.7	76.8	68.1	58.7	51.9	47.8	46.2	45.2	45.0	44.7
82.5°	53.2	57.4	54.1	48.1	41.7	37.6	35.3	33.3	32.5	32.7	32.4
85°	26.8	28.5	27.1	23.4	21.0	19.1	17.8	16.9	16.2	16.6	15.9
87.5°	10.6	10.6	9.6	8.5	7.8	6.9	6.8	6.0	5.7	5.9	5.8
90°	6.7	5.6	4.6	3.6	2.8	2.0	1.1	0.3	1.1	2.0	2.8
92.5°	7.7	7.0	6.2	5.9	6.1	6.4	6.6	6.8	6.6	6.4	6.1
95°	9.5	8.6	7.7	9.0	12.3	15.7	19.0	22.3	19.0	15.7	12.3
97.5°	23.5	29.4	35.2	38.9	40.4	41.9	43.4	44.9	43.4	41.9	40.4
100°	37.5	50.2	62.9	68.4	66.8	65.1	63.5	61.9	63.5	65.1	66.8
102.5°	51.9	65.7	79.6	85.9	84.8	83.6	82.4	81.2	82.4	83.6	84.8
105°	94.9	102.2	109.5	112.8	111.9	111.0	110.1	109.2	110.1	111.0	111.9
107.5°	144.7	143.6	142.4	141.5	140.7	140.1	139.3	138.6	139.3	140.1	140.7
110°	163.4	162.5	161.6	160.9	160.2	159.6	158.9	158.2	158.9	159.6	160.2





TEST NUMBER: P332120-930

CATALOG NUMBER: S123DIW-S560D460U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

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



TEST NUMBER: P332120-930

CATALOG NUMBER: S123DIW-S560D460U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5
2.5°	633.7	632.0	629.5	625.7	622.7	618.0	618.0	618.7	618.7	618.5	618.0
5°	614.5	609.8	604.2	597.7	590.8	583.9	582.7	580.2	578.3	577.1	575.5
7.5°	594.2	586.0	577.7	568.6	560.2	553.3	548.5	544.5	541.8	539.2	537.1
10°	580.5	570.1	560.5	550.8	540.2	531.7	526.4	522.7	519.9	517.4	516.2
12.5°	564.3	552.4	541.8	532.6	521.0	512.3	507.2	505.5	502.1	496.9	494.2
15°	540.5	529.6	516.8	502.7	497.1	486.5	480.5	477.8	475.9	471.8	470.6
17.5°	520.2	505.9	491.5	481.0	470.6	462.0	458.7	455.2	452.7	449.4	448.4
20°	504.0	491.2	478.1	466.8	455.9	446.5	443.7	441.2	438.7	437.2	435.9
22.5°	487.5	474.7	463.8	453.3	441.6	435.5	432.4	429.7	428.0	426.9	425.7
25°	464.3	453.1	440.9	431.5	422.2	418.1	416.2	414.7	413.4	411.9	411.6
27.5°	443.6	431.4	421.5	412.7	406.0	402.6	400.8	400.1	400.3	400.9	401.2
30°	428.1	416.9	408.7	401.2	395.0	391.9	391.6	391.6	392.8	393.1	393.8
32.5°	413.8	404.6	396.5	389.2	384.5	382.4	383.6	383.6	384.6	385.4	386.5
35°	393.1	385.0	378.8	372.5	368.4	369.4	370.0	370.6	372.2	374.1	375.4
37.5°	373.3	366.3	359.8	354.9	353.0	354.7	356.2	357.5	359.4	360.8	362.0
40°	359.1	353.8	347.6	343.2	343.8	344.7	346.0	347.6	349.1	350.0	351.3
42.5°	345.8	340.3	335.6	331.9	332.8	334.0	334.8	335.6	337.4	339.1	339.8
45°	325.7	321.3	316.9	314.8	315.4	316.0	316.7	317.6	319.1	320.4	320.7
47.5°	303.0	299.9	297.0	294.9	295.9	295.6	296.4	298.5	299.0	299.7	301.4
50°	288.5	285.7	282.3	281.7	281.7	281.7	281.9	284.5	284.5	285.7	287.0
52.5°	272.6	270.8	268.6	267.4	266.9	266.9	268.2	269.5	269.9	271.7	273.0
55°	248.8	247.0	245.2	244.2	243.5	244.2	246.7	247.3	248.8	249.8	250.7
57.5°	224.2	222.7	221.3	220.8	220.6	221.4	222.8	224.7	225.1	228.0	229.3
60°	208.0	205.8	204.6	204.6	203.9	206.7	206.1	209.2	209.9	211.7	213.9
62.5°	191.2	188.3	187.8	187.8	188.7	189.5	190.4	191.8	193.4	195.8	197.4
65°	164.3	162.7	164.9	164.5	164.0	165.8	165.8	167.4	169.3	171.5	174.9
67.5°	138.7	137.9	138.1	138.1	139.0	140.1	141.0	142.4	144.6	146.9	149.1
70°	121.5	122.4	120.8	122.1	123.0	123.4	123.9	125.8	128.3	129.9	132.4
72.5°	104.8	104.7	104.8	105.3	106.3	106.9	107.5	109.6	112.3	113.7	115.7
75°	80.6	80.2	81.2	81.2	82.8	83.4	84.0	85.0	87.4	89.3	90.9
77.5°	58.9	59.2	59.0	60.1	59.7	59.8	61.7	62.6	62.9	66.6	67.4
80°	44.4	45.0	45.2	45.6	45.9	45.2	47.5	48.4	48.4	50.5	52.2
82.5°	31.9	32.2	33.0	33.3	33.4	34.0	34.2	34.9	35.6	36.6	38.6
85°	15.9	16.9	17.2	16.9	17.2	16.6	17.4	17.8	18.1	18.1	18.1
87.5°	5.7	6.2	6.1	6.6	6.5	7.0	7.1	6.6	6.7	7.5	6.6
90°	3.6	4.6	5.6	6.7	7.7	8.8	9.1	9.5	9.8	10.1	10.4
92.5°	5.9	6.2	7.0	7.7	8.6	9.4	9.9	10.4	10.9	11.5	11.7
95°	9.0	7.7	8.6	9.5	10.4	11.3	11.9	12.5	13.0	13.6	13.9
97.5°	38.9	35.2	29.4	23.5	17.7	11.8	12.5	13.1	13.8	14.4	14.8
100°	68.4	62.9	50.2	37.5	24.8	12.1	12.7	13.4	14.0	14.7	15.1
102.5°	85.9	79.6	65.7	51.9	38.0	24.1	22.1	20.1	18.0	16.1	15.1
105°	112.8	109.5	102.2	94.9	87.6	80.2	65.8	51.4	37.0	22.6	15.5
107.5°	141.5	142.4	143.6	144.7	145.9	147.0	136.5	125.9	115.4	104.8	94.1
110°	160.9	161.6	162.5	163.4	164.3	165.2	162.5	159.8	157.1	154.4	147.3



TEST NUMBER: P332120-930

CATALOG NUMBER: S123DIW-S560D460U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

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



TEST NUMBER: P332120-930

CATALOG NUMBER: S123DIW-S560D460U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5
2.5°	616.3	616.0	617.8	616.5	617.8	616.0	616.3	618.0	618.5	618.7	618.7
5°	573.6	574.5	571.4	571.4	571.4	574.5	573.6	575.5	577.1	578.3	580.2
7.5°	535.7	534.3	534.4	532.7	534.4	534.3	535.7	537.1	539.2	541.8	544.5
10°	512.4	510.5	509.9	510.2	509.9	510.5	512.4	516.2	517.4	519.9	522.7
12.5°	493.2	492.8	488.7	488.8	488.7	492.8	493.2	494.2	496.9	502.1	505.5
15°	470.6	464.6	464.0	465.9	464.0	464.6	470.6	470.6	471.8	475.9	477.8
17.5°	447.9	444.7	445.0	444.0	445.0	444.7	447.9	448.4	449.4	452.7	455.2
20°	435.9	434.1	433.7	431.5	433.7	434.1	435.9	435.9	437.2	438.7	441.2
22.5°	424.9	424.3	424.4	422.1	424.4	424.3	424.9	425.7	426.9	428.0	429.7
25°	411.2	412.8	411.6	411.6	411.6	412.8	411.2	411.6	411.9	413.4	414.7
27.5°	402.0	401.9	401.3	401.3	401.3	401.9	402.0	401.2	400.9	400.3	400.1
30°	395.0	394.7	395.3	395.3	395.3	394.7	395.0	393.8	393.1	392.8	391.6
32.5°	388.0	388.4	388.6	388.8	388.6	388.4	388.0	386.5	385.4	384.6	383.6
35°	377.2	377.5	378.5	377.8	378.5	377.5	377.2	375.4	374.1	372.2	370.6
37.5°	362.6	364.0	363.7	364.2	363.7	364.0	362.6	362.0	360.8	359.4	357.5
40°	351.6	352.5	352.2	352.2	352.2	352.5	351.6	351.3	350.0	349.1	347.6
42.5°	340.4	341.0	340.2	339.7	340.2	341.0	340.4	339.8	339.1	337.4	335.6
45°	322.0	321.3	322.3	321.0	322.3	321.3	322.0	320.7	320.4	319.1	317.6
47.5°	301.3	302.0	302.2	303.1	302.2	302.0	301.3	301.4	299.7	299.0	298.5
50°	287.6	289.4	289.4	289.2	289.4	289.4	287.6	287.0	285.7	284.5	284.5
52.5°	274.1	275.0	276.2	276.1	276.2	275.0	274.1	273.0	271.7	269.9	269.5
55°	253.2	253.9	254.5	254.8	254.5	253.9	253.2	250.7	249.8	248.8	247.3
57.5°	231.6	231.4	232.8	233.3	232.8	231.4	231.6	229.3	228.0	225.1	224.7
60°	216.4	216.4	218.9	219.8	218.9	216.4	216.4	213.9	211.7	209.9	209.2
62.5°	200.2	201.1	203.7	202.4	203.7	201.1	200.2	197.4	195.8	193.4	191.8
65°	176.4	179.0	178.6	179.9	178.6	179.0	176.4	174.9	171.5	169.3	167.4
67.5°	151.6	153.2	155.5	155.6	155.5	153.2	151.6	149.1	146.9	144.6	142.4
70°	134.9	136.5	137.7	138.6	137.7	136.5	134.9	132.4	129.9	128.3	125.8
72.5°	118.6	119.4	122.5	121.2	122.5	119.4	118.6	115.7	113.7	112.3	109.6
75°	93.0	95.2	97.1	96.2	97.1	95.2	93.0	90.9	89.3	87.4	85.0
77.5°	68.8	71.0	71.9	71.1	71.9	71.0	68.8	67.4	66.6	62.9	62.6
80°	54.3	54.1	55.9	55.6	55.9	54.1	54.3	52.2	50.5	48.4	48.4
82.5°	39.9	39.5	40.4	40.6	40.4	39.5	39.9	38.6	36.6	35.6	34.9
85°	19.3	20.3	19.1	18.8	19.1	20.3	19.3	18.1	18.1	18.1	17.8
87.5°	6.6	6.6	6.4	6.2	6.4	6.6	6.6	6.6	7.5	6.7	6.6
90°	10.5	10.7	10.8	11.0	10.8	10.7	10.5	10.4	10.1	9.8	9.5
92.5°	11.9	12.0	12.1	12.1	12.1	12.0	11.9	11.7	11.5	10.9	10.4
95°	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.6	13.0	12.5
97.5°	14.8	14.9	15.0	15.1	15.0	14.9	14.8	14.8	14.4	13.8	13.1
100°	15.2	15.2	15.3	15.4	15.3	15.2	15.2	15.1	14.7	14.0	13.4
102.5°	15.2	15.4	15.5	15.7	15.5	15.4	15.2	15.1	16.1	18.0	20.1
105°	15.7	15.8	16.0	16.1	16.0	15.8	15.7	15.5	22.6	37.0	51.4
107.5°	83.2	72.3	61.5	50.6	61.5	72.3	83.2	94.1	104.8	115.4	125.9
110°	135.7	124.0	112.3	100.8	112.3	124.0	135.7	147.3	154.4	157.1	159.8



TEST NUMBER: P332120-930

CATALOG NUMBER: S123DIW-S560D460U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

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



TEST NUMBER: P332120-930

CATALOG NUMBER: S123DIW-S560D460U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5
2.5°	618.0	618.0	622.7	625.7	629.5	632.0	633.7	635.5	638.5	642.5	647.0
5°	582.7	583.9	590.8	597.7	604.2	609.8	614.5	620.1	627.0	635.4	644.8
7.5°	548.5	553.3	560.2	568.6	577.7	586.0	594.2	603.5	613.1	625.6	638.7
10°	526.4	531.7	540.2	550.8	560.5	570.1	580.5	590.4	602.7	617.3	634.2
12.5°	507.2	512.3	521.0	532.6	541.8	552.4	564.3	577.2	590.9	608.6	627.7
15°	480.5	486.5	497.1	502.7	516.8	529.6	540.5	559.2	576.7	594.8	617.0
17.5°	458.7	462.0	470.6	481.0	491.5	505.9	520.2	535.8	553.3	575.4	603.2
20°	443.7	446.5	455.9	466.8	478.1	491.2	504.0	519.6	539.2	562.7	592.6
22.5°	432.4	435.5	441.6	453.3	463.8	474.7	487.5	506.1	527.0	549.9	582.4
25°	416.2	418.1	422.2	431.5	440.9	453.1	464.3	481.8	503.4	530.2	562.7
27.5°	400.8	402.6	406.0	412.7	421.5	431.4	443.6	458.4	480.3	509.5	544.0
30°	391.6	391.9	395.0	401.2	408.7	416.9	428.1	445.0	465.5	495.2	531.5
32.5°	383.6	382.4	384.5	389.2	396.5	404.6	413.8	430.5	450.4	479.5	516.7
35°	370.0	369.4	368.4	372.5	378.8	385.0	393.1	405.6	428.1	455.3	494.3
37.5°	356.2	354.7	353.0	354.9	359.8	366.3	373.3	384.4	403.8	433.7	471.1
40°	346.0	344.7	343.8	343.2	347.6	353.8	359.1	369.7	387.8	416.2	453.1
42.5°	334.8	334.0	332.8	331.9	335.6	340.3	345.8	355.2	373.3	400.0	434.9
45°	316.7	316.0	315.4	314.8	316.9	321.3	325.7	332.6	348.1	374.1	405.6
47.5°	296.4	295.6	295.9	294.9	297.0	299.9	303.0	310.4	325.4	346.3	369.3
50°	281.9	281.7	281.7	281.7	282.3	285.7	288.5	294.2	307.9	328.8	345.4
52.5°	268.2	266.9	266.9	267.4	268.6	270.8	272.6	278.7	290.7	307.9	322.9
55°	246.7	244.2	243.5	244.2	245.2	247.0	248.8	253.9	264.2	277.0	285.7
57.5°	222.8	221.4	220.6	220.8	221.3	222.7	224.2	229.7	237.7	244.4	250.1
60°	206.1	206.7	203.9	204.6	204.6	205.8	208.0	211.4	218.3	223.0	228.6
62.5°	190.4	189.5	188.7	187.8	187.8	188.3	191.2	193.9	199.7	202.2	206.6
65°	165.8	165.8	164.0	164.5	164.9	162.7	164.3	167.4	171.1	172.0	176.1
67.5°	141.0	140.1	139.0	138.1	138.1	137.9	138.7	140.2	143.1	143.4	146.5
70°	123.9	123.4	123.0	122.1	120.8	122.4	121.5	123.0	124.6	124.9	126.8
72.5°	107.5	106.9	106.3	105.3	104.8	104.7	104.8	106.6	107.6	107.1	109.3
75°	84.0	83.4	82.8	81.2	81.2	80.2	80.6	81.8	83.1	82.1	84.0
77.5°	61.7	59.8	59.7	60.1	59.0	59.2	58.9	58.6	59.2	59.3	61.0
80°	47.5	45.2	45.9	45.6	45.2	45.0	44.4	44.7	45.0	45.2	46.2
82.5°	34.2	34.0	33.4	33.3	33.0	32.2	31.9	32.4	32.7	32.5	33.3
85°	17.4	16.6	17.2	16.9	17.2	16.9	15.9	15.9	16.6	16.2	16.9
87.5°	7.1	7.0	6.5	6.6	6.1	6.2	5.7	5.8	5.9	5.7	6.0
90°	9.1	8.8	7.7	6.7	5.6	4.6	3.6	2.8	2.0	1.1	0.3
92.5°	9.9	9.4	8.6	7.7	7.0	6.2	5.9	6.1	6.4	6.6	6.8
95°	11.9	11.3	10.4	9.5	8.6	7.7	9.0	12.3	15.7	19.0	22.3
97.5°	12.5	11.8	17.7	23.5	29.4	35.2	38.9	40.4	41.9	43.4	44.9
100°	12.7	12.1	24.8	37.5	50.2	62.9	68.4	66.8	65.1	63.5	61.9
102.5°	22.1	24.1	38.0	51.9	65.7	79.6	85.9	84.8	83.6	82.4	81.2
105°	65.8	80.2	87.6	94.9	102.2	109.5	112.8	111.9	111.0	110.1	109.2
107.5°	136.5	147.0	145.9	144.7	143.6	142.4	141.5	140.7	140.1	139.3	138.6
110°	162.5	165.2	164.3	163.4	162.5	161.6	160.9	160.2	159.6	158.9	158.2



TEST NUMBER: P332120-930

CATALOG NUMBER: S123DIW-S560D460U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

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



TEST NUMBER: P332120-930

CATALOG NUMBER: S123DIW-S560D460U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5	644.5
2.5°	648.5	649.7	654.0	657.0	660.5	662.5	664.5	666.0	668.0	668.5	675.7
5°	651.3	657.6	668.5	676.6	686.6	697.6	705.1	708.5	717.5	725.0	740.0
7.5°	650.5	663.8	680.4	697.5	715.8	732.8	747.5	765.0	777.5	796.1	814.6
10°	649.8	667.6	688.8	710.7	736.3	760.0	781.3	805.0	824.7	850.6	872.8
12.5°	647.6	669.1	698.5	724.4	755.5	788.2	819.7	850.2	867.6	910.8	931.2
15°	642.0	667.6	704.4	743.8	786.6	825.3	865.3	897.1	948.6	986.4	1010.5
17.5°	631.4	667.2	710.9	758.4	810.4	861.4	906.7	955.0	1009.7	1055.4	1104.2
20°	626.4	665.7	714.4	766.9	820.9	878.6	930.2	988.3	1047.9	1092.9	1155.4
22.5°	617.2	661.7	714.2	772.7	830.4	890.1	950.5	1009.0	1077.9	1139.9	1199.3
25°	602.0	652.0	706.3	771.6	839.4	899.3	971.4	1049.2	1121.0	1200.6	1260.0
27.5°	586.2	639.5	694.0	754.6	827.5	898.7	989.4	1077.3	1165.1	1233.9	1277.7
30°	573.9	625.7	682.0	743.1	815.3	899.9	1001.4	1097.2	1182.8	1241.9	1266.5
32.5°	560.7	613.3	663.0	727.2	804.0	899.2	1008.9	1109.0	1183.8	1223.1	1218.3
35°	539.9	583.9	632.3	694.1	784.7	893.6	1013.3	1110.0	1155.9	1147.5	1083.9
37.5°	509.9	547.0	594.6	662.3	762.2	882.2	1004.5	1077.2	1074.2	1005.5	913.2
40°	491.2	522.7	568.6	639.8	744.7	874.7	990.8	1038.0	998.0	902.1	791.6
42.5°	466.7	495.7	541.6	614.8	725.5	859.4	964.6	978.2	900.0	789.7	688.4
45°	428.8	454.4	501.8	577.4	696.7	826.2	900.6	867.2	761.9	647.9	570.8
47.5°	387.9	414.6	460.2	537.9	654.9	776.3	811.7	740.7	632.6	540.2	469.4
50°	362.2	387.8	432.4	510.9	626.7	735.4	750.1	658.3	559.0	477.8	419.6
52.5°	336.2	360.4	404.2	482.9	593.7	687.9	678.8	585.3	494.0	424.8	379.2
55°	297.6	320.4	362.2	435.9	536.8	611.4	578.6	489.3	413.8	360.0	325.4
57.5°	263.0	284.9	320.9	387.5	475.2	526.4	484.8	409.5	349.4	308.1	282.3
60°	239.5	258.9	293.2	355.1	431.2	470.3	429.0	362.6	311.9	278.8	255.8
62.5°	217.3	234.2	266.0	322.0	388.2	421.0	379.4	323.0	280.0	250.6	231.0
65°	183.6	198.9	227.0	270.8	325.1	346.9	311.0	265.4	232.0	210.2	197.1
67.5°	152.9	165.8	190.1	224.5	264.6	280.5	253.2	217.8	192.7	175.1	164.7
70°	132.4	143.7	162.7	192.3	228.6	240.8	215.2	186.1	167.7	153.6	144.0
72.5°	115.1	123.4	140.7	163.6	193.9	203.5	185.6	160.1	142.9	132.4	124.7
75°	87.7	94.6	105.8	124.3	145.2	150.8	137.4	121.5	109.9	102.4	96.4
77.5°	63.3	68.3	76.5	87.8	102.3	107.4	98.9	88.2	79.8	74.8	71.4
80°	47.8	51.9	58.7	68.1	76.8	79.7	74.6	66.5	60.6	57.8	55.0
82.5°	35.3	37.6	41.7	48.1	54.1	57.4	53.2	48.3	45.1	42.6	41.5
85°	17.8	19.1	21.0	23.4	27.1	28.5	26.8	25.6	23.7	22.2	22.2
87.5°	6.8	6.9	7.8	8.5	9.6	10.6	10.6	10.3	10.3	10.0	9.9
90°	1.1	2.0	2.8	3.6	4.6	5.6	6.7	7.7	8.8	9.1	9.5
92.5°	6.6	6.4	6.1	5.9	6.2	7.0	7.7	8.6	9.4	9.9	10.4
95°	19.0	15.7	12.3	9.0	7.7	8.6	9.5	10.4	11.3	11.9	12.5
97.5°	43.4	41.9	40.4	38.9	35.2	29.4	23.5	17.7	11.8	12.5	13.1
100°	63.5	65.1	66.8	68.4	62.9	50.2	37.5	24.8	12.1	12.7	13.4
102.5°	82.4	83.6	84.8	85.9	79.6	65.7	51.9	38.0	24.1	22.1	20.1
105°	110.1	111.0	111.9	112.8	109.5	102.2	94.9	87.6	80.2	65.8	51.4
107.5°	139.3	140.1	140.7	141.5	142.4	143.6	144.7	145.9	147.0	136.5	125.9
110°	158.9	159.6	160.2	160.9	161.6	162.5	163.4	164.3	165.2	162.5	159.8





TEST NUMBER: P332120-930

CATALOG NUMBER: S123DIW-S560D460U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

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



TEST NUMBER: P332120-930

CATALOG NUMBER: S123DIW-S560D460U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	644.5	644.5	644.5	644.5	644.5	644.5	644.5
2.5°	678.2	678.5	681.2	683.2	682.2	683.5	684.0
5°	740.9	752.2	758.1	762.5	762.9	763.1	765.6
7.5°	830.0	842.0	850.8	864.2	868.2	872.8	871.5
10°	895.0	912.7	928.1	936.1	944.9	957.7	947.4
12.5°	955.6	987.2	1010.5	1023.0	1031.4	1033.9	1028.8
15°	1055.7	1097.0	1119.2	1118.5	1146.6	1158.8	1139.7
17.5°	1147.5	1185.6	1216.0	1231.7	1255.1	1260.3	1257.9
20°	1203.7	1245.3	1269.0	1295.8	1308.1	1319.0	1320.9
22.5°	1252.2	1289.5	1315.0	1337.3	1347.5	1352.7	1355.8
25°	1302.1	1331.5	1346.8	1354.5	1357.4	1356.7	1352.7
27.5°	1298.7	1300.9	1284.1	1267.5	1252.7	1236.0	1230.3
30°	1264.9	1238.7	1191.9	1165.3	1126.3	1095.4	1107.9
32.5°	1176.2	1124.1	1071.5	1013.4	965.4	951.8	938.0
35°	1003.9	912.1	858.4	796.0	770.9	746.0	728.8
37.5°	812.2	741.2	677.4	636.6	611.6	595.8	587.3
40°	702.3	638.2	585.8	552.7	533.6	515.8	513.3
42.5°	614.6	555.1	515.6	489.3	470.9	463.4	457.9
45°	503.4	461.8	435.3	416.5	404.4	399.7	393.5
47.5°	426.1	396.7	376.7	364.0	354.8	351.3	350.8
50°	382.9	358.5	343.8	333.8	326.6	325.4	320.4
52.5°	350.3	329.2	317.8	309.1	303.9	300.4	298.9
55°	304.1	290.1	279.8	274.8	270.8	267.3	267.3
57.5°	266.1	254.4	247.5	243.3	242.1	239.6	238.1
60°	242.6	232.6	227.3	223.6	221.1	221.4	218.6
62.5°	219.6	213.1	208.1	204.3	201.4	201.4	201.6
65°	187.0	182.1	178.3	177.1	175.2	173.0	173.6
67.5°	158.5	153.8	150.9	148.8	148.1	146.9	148.8
70°	138.0	134.6	132.4	130.5	129.9	130.2	131.8
72.5°	119.3	116.8	115.4	114.5	113.2	113.2	114.3
75°	93.7	91.8	90.6	89.6	89.3	89.3	89.3
77.5°	68.8	68.4	67.8	66.4	66.5	66.9	66.9
80°	54.3	53.4	53.1	52.4	51.5	50.9	52.4
82.5°	40.6	39.6	39.4	39.2	37.7	37.7	39.0
85°	21.9	21.0	21.2	21.0	21.0	20.6	20.6
87.5°	9.7	9.5	9.3	9.6	9.4	9.1	9.7
90°	9.8	10.1	10.4	10.5	10.7	10.8	11.0
92.5°	10.9	11.5	11.7	11.9	12.0	12.1	12.1
95°	13.0	13.6	13.9	13.9	13.9	13.9	13.9
97.5°	13.8	14.4	14.8	14.8	14.9	15.0	15.1
100°	14.0	14.7	15.1	15.2	15.2	15.3	15.4
102.5°	18.0	16.1	15.1	15.2	15.4	15.5	15.7
105°	37.0	22.6	15.5	15.7	15.8	16.0	16.1
107.5°	115.4	104.8	94.1	83.2	72.3	61.5	50.6
110°	157.1	154.4	147.3	135.7	124.0	112.3	100.8



TEST NUMBER: P332120-930

CATALOG NUMBER: S123DIW-S560D460U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

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

(END OF REPORT)