

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: P332121-830

Luminaire Tested: **S123DIW-S560D460U830-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332121-830
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-S560D460U830-4F0-1E-UDD-A1
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 560 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: 3757.0 lumens
Efficiency: N/A
Efficacy: 124.4 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: General Diffuse

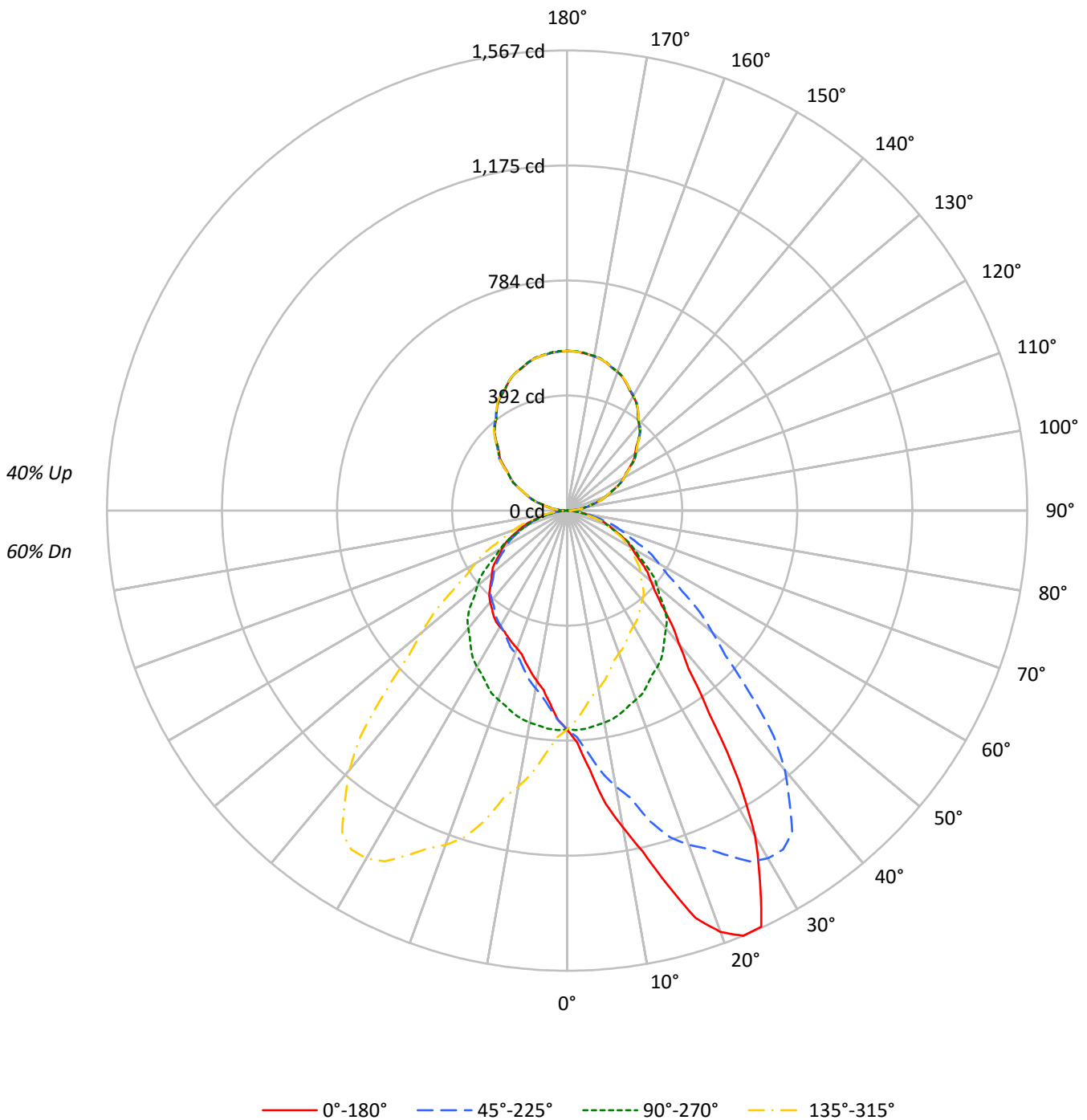
Input Watts (W): 30.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20						20								20		
RC	80					70						30								10	0	
RW	70	50	30	10		70	50	30	10		50	30	10		50	30	10		50	30	10	0
RCR																						
0	110	110	110	110		102	102	102	102		89	89	89		77	77	77		65	65	65	60
1	100	96	92	89		94	90	87	84		78	76	74		68	66	64		58	57	56	51
2	92	84	78	73		85	79	74	69		69	65	62		60	57	54		52	49	47	43
3	84	74	67	61		78	70	63	58		61	56	52		53	49	46		46	43	41	37
4	77	66	58	52		72	62	55	50		55	49	45		48	43	40		41	38	35	32
5	71	59	51	45		66	56	48	43		49	43	39		43	38	35		37	34	31	28
6	65	53	45	39		61	50	43	37		44	38	34		39	34	31		34	30	27	25
7	60	48	40	34		56	45	38	33		40	34	30		35	31	27		31	27	24	22
8	56	44	36	30		52	41	34	29		37	31	27		32	28	24		28	25	22	20
9	52	40	32	27		49	38	31	26		34	28	24		30	25	22		26	22	20	18
10	49	37	29	24		46	35	28	24		31	25	22		28	23	20		24	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8020	8020	8020	8020
5°	9564	8055	7138	8055
10°	11970	8014	6446	8014
15°	14683	7949	6002	7949
20°	17491	7848	5715	7848
25°	18573	7726	5651	7726
30°	15919	7636	5680	7636
35°	11071	7510	5740	7510
40°	8338	7360	5722	7360
45°	6925	7138	5649	7138
50°	6203	6687	5598	6687
55°	5799	6199	5527	6199
60°	5440	5690	5470	5690
65°	5112	5186	5295	5186
70°	4793	4614	5042	4614
75°	4292	4038	4625	4038
80°	3756	3310	3986	3310
85°	2939	2408	2680	2408



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.4	2.0
10°-20°	235.3	6.3
20°-30°	395.0	10.5
30°-40°	447.2	11.9
40°-50°	401.1	10.7
50°-60°	323.7	8.6
60°-70°	225.5	6.0
70°-80°	118.5	3.2
80°-90°	30.6	0.8
90°-100°	35.4	0.9
100°-110°	106.0	2.8
110°-120°	180.3	4.8
120°-130°	237.2	6.3
130°-140°	266.6	7.1
140°-150°	262.1	7.0
150°-160°	220.6	5.9
160°-170°	146.9	3.9
170°-180°	51.4	1.4
0°-30°	703.7	18.7
0°-40°	1151.0	30.6
0°-60°	1875.7	49.9
0°-90°	2250.4	59.9
90°-120°	321.8	8.6
90°-150°	1087.6	29.0
90°-180°	1507.0	40.1
0°-180°	3757.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	745	745	745	745	745	
5°	885	746	661	746	885	92
15°	1318	713	539	713	1318	380
25°	1564	650	476	650	1564	686
35°	842	572	437	572	842	547
45°	455	469	371	469	455	360
55°	309	330	294	330	309	277
65°	201	204	208	204	201	200
75°	103	97	111	97	103	110
85°	24	20	22	20	24	28
90°	13	0	13	0	13	7
95°	33	25	33	25	33	34
105°	102	96	102	96	102	108
115°	182	182	182	182	182	180
125°	263	266	263	266	263	235
135°	344	345	344	345	344	265
145°	418	418	418	418	418	261
155°	478	479	478	479	478	220
165°	520	522	520	522	520	147
175°	540	542	540	542	540	51
180°	544	544	544	544	544	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	790.7	790.1	788.7	789.9	787.5	784.4	784.1	781.2	772.8	772.2	770.0
5°	885.1	882.2	881.9	881.6	876.5	869.6	856.6	855.5	838.2	829.5	819.1
7.5°	1007.5	1009.0	1003.7	999.1	983.6	973.5	959.5	941.7	920.4	898.8	884.4
10°	1095.2	1107.1	1092.3	1082.2	1072.9	1055.2	1034.6	1009.0	983.4	953.4	930.7
12.5°	1189.4	1195.2	1192.3	1182.7	1168.2	1141.2	1104.8	1076.6	1052.9	1003.1	982.9
15°	1317.6	1339.6	1325.6	1293.1	1293.8	1268.2	1220.5	1168.2	1140.4	1096.6	1037.1
17.5°	1454.2	1457.0	1451.0	1423.9	1405.8	1370.6	1326.6	1276.5	1220.1	1167.3	1104.1
20°	1527.0	1524.8	1512.2	1498.1	1467.1	1439.6	1391.6	1335.7	1263.5	1211.4	1142.6
22.5°	1567.4	1563.8	1557.8	1546.1	1520.2	1490.7	1447.7	1386.5	1317.8	1246.1	1166.5
25°	1563.8	1568.5	1569.2	1565.9	1557.0	1539.3	1505.3	1456.6	1388.0	1296.0	1213.0
27.5°	1422.3	1428.9	1448.2	1465.4	1484.5	1503.9	1501.4	1477.2	1426.4	1346.9	1245.4
30°	1280.8	1266.3	1302.1	1347.2	1377.9	1432.0	1462.4	1464.1	1435.7	1367.4	1268.5
32.5°	1084.4	1100.3	1116.1	1171.6	1238.7	1299.5	1359.8	1408.4	1414.0	1368.6	1282.0
35°	842.5	862.4	891.3	920.2	992.4	1054.4	1160.6	1253.0	1326.6	1336.3	1283.3
37.5°	678.9	688.8	707.0	735.9	783.2	856.9	939.0	1055.7	1162.4	1241.8	1245.3
40°	593.4	596.3	616.9	638.9	677.2	737.8	811.9	915.1	1042.9	1153.8	1200.0
42.5°	529.3	535.7	544.4	565.6	596.1	641.7	710.5	795.9	912.9	1040.5	1130.9
45°	454.9	462.0	467.5	481.5	503.2	533.9	581.9	659.9	749.0	880.8	1002.5
47.5°	405.6	406.1	410.2	420.8	435.5	458.6	492.6	542.6	624.5	731.3	856.3
50°	370.4	376.2	377.6	385.9	397.5	414.4	442.6	485.1	552.3	646.2	761.0
52.5°	345.5	347.2	351.3	357.3	367.4	380.6	405.0	438.4	491.1	571.1	676.7
55°	309.0	309.0	313.0	317.6	323.5	335.4	351.6	376.2	416.2	478.3	565.7
57.5°	275.2	277.0	279.8	281.3	286.2	294.1	307.6	326.3	356.2	404.0	473.4
60°	252.7	255.9	255.6	258.4	262.8	268.9	280.5	295.7	322.3	360.6	419.1
62.5°	233.1	232.8	232.8	236.2	240.5	246.4	253.9	267.0	289.7	323.7	373.4
65°	200.7	200.0	202.6	204.7	206.1	210.5	216.2	227.8	243.0	268.2	306.8
67.5°	172.0	169.8	171.3	172.0	174.5	177.9	183.2	190.4	202.5	222.7	251.8
70°	152.3	150.5	150.1	150.9	153.1	155.6	159.6	166.5	177.6	193.9	215.2
72.5°	132.1	130.9	130.8	132.4	133.5	135.1	137.9	144.2	153.1	165.2	185.1
75°	103.2	103.2	103.2	103.6	104.7	106.1	108.3	111.5	118.4	127.1	140.4
77.5°	77.4	77.3	76.9	76.8	78.4	79.1	79.6	82.6	86.4	92.3	102.0
80°	60.6	58.8	59.6	60.6	61.4	61.7	62.8	63.5	66.8	70.0	76.9
82.5°	45.1	43.5	43.6	45.3	45.5	45.8	46.9	48.0	49.2	52.1	55.8
85°	23.8	23.8	24.2	24.2	24.5	24.2	25.3	25.6	25.6	27.4	29.6
87.5°	11.2	10.7	10.8	11.1	10.7	11.0	11.2	11.4	11.7	11.9	11.9
90°	12.8	12.6	12.4	12.3	12.1	11.8	11.4	11.0	10.7	10.3	9.0
92.5°	17.2	17.3	17.4	17.6	17.7	17.6	17.3	17.0	16.7	16.4	15.7
95°	33.3	33.3	33.3	33.3	33.3	33.1	32.7	32.3	32.0	31.6	30.8
97.5°	51.3	51.3	51.4	51.4	51.4	51.2	50.8	50.3	49.9	49.5	48.9
100°	64.9	64.8	64.6	64.4	64.2	63.9	63.6	63.3	63.1	62.8	62.3
102.5°	78.9	79.0	79.0	79.1	79.1	79.0	78.7	78.4	78.1	77.9	77.2
105°	101.7	101.5	101.3	101.1	100.9	100.8	100.8	100.8	100.8	100.8	99.9
107.5°	125.4	125.5	125.5	125.6	125.7	125.6	125.4	125.1	124.8	124.5	124.1
110°	141.4	141.6	141.8	141.9	142.1	142.0	141.7	141.3	140.9	140.5	140.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	158.4	158.5	158.5	158.5	158.6	158.4	158.0	157.5	157.0	156.6	156.6
115°	182.0	182.1	182.2	182.3	182.4	182.4	182.3	182.2	182.1	182.0	182.2
117.5°	205.8	206.0	206.3	206.6	206.9	207.0	207.0	207.1	207.1	207.1	207.4
120°	222.5	222.7	222.9	223.1	223.3	223.5	223.6	223.7	223.8	223.9	224.3
122.5°	238.6	238.8	239.1	239.4	239.7	239.9	240.2	240.4	240.6	240.9	241.2
125°	262.7	263.1	263.4	263.8	264.2	264.6	264.9	265.3	265.7	266.1	266.3
127.5°	286.7	287.1	287.6	288.0	288.4	288.9	289.5	290.0	290.5	291.1	291.2
130°	302.4	303.1	303.8	304.4	305.1	305.6	305.9	306.3	306.7	307.1	307.4
132.5°	318.8	319.3	319.8	320.4	320.8	321.3	321.8	322.3	322.7	323.2	323.4
135°	344.3	344.5	344.7	344.9	345.1	345.3	345.7	346.1	346.5	346.9	346.9
137.5°	366.7	367.1	367.5	367.8	368.2	368.5	369.0	369.4	369.8	370.1	369.9
140°	381.4	382.1	382.8	383.4	384.1	384.5	384.6	384.7	384.7	384.8	384.7
142.5°	396.4	397.0	397.5	398.0	398.5	398.8	398.9	399.0	399.1	399.2	399.1
145°	418.2	418.6	419.0	419.3	419.7	419.9	420.0	420.1	420.2	420.3	420.0
147.5°	437.4	438.0	438.6	439.2	439.8	440.1	440.1	440.1	440.1	440.1	439.8
150°	449.8	450.3	450.9	451.5	452.0	452.3	452.3	452.3	452.3	452.3	452.1
152.5°	461.8	462.2	462.7	463.3	463.7	463.9	463.7	463.5	463.4	463.3	463.2
155°	478.0	478.6	479.3	479.9	480.6	480.8	480.4	480.0	479.7	479.3	479.2
157.5°	492.8	493.2	493.8	494.4	494.8	494.9	494.6	494.2	493.7	493.3	493.2
160°	502.3	502.7	503.0	503.4	503.8	503.8	503.3	502.8	502.4	501.9	501.9
162.5°	509.4	510.1	510.7	511.3	511.9	512.0	511.5	511.0	510.6	510.1	510.0
165°	519.8	520.5	521.1	521.8	522.5	522.5	522.0	521.4	520.8	520.3	520.3
167.5°	528.6	529.2	529.8	530.4	530.9	530.9	530.4	529.8	529.2	528.6	528.6
170°	533.1	533.8	534.4	535.1	535.7	535.7	535.1	534.4	533.8	533.1	533.1
172.5°	536.5	537.2	537.8	538.5	539.1	539.1	538.6	538.0	537.4	536.8	536.8
175°	540.4	541.0	541.7	542.3	543.0	543.0	542.4	541.9	541.3	540.7	540.7
177.5°	542.3	542.9	543.5	543.9	544.5	544.5	544.1	543.7	543.2	542.7	542.7
180°	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	768.2	765.9	763.6	759.5	756.0	751.1	749.7	748.0	742.8	738.1	734.7
5°	815.1	806.4	793.8	782.2	772.9	760.3	753.0	745.5	734.6	724.9	716.9
7.5°	864.2	847.2	827.6	806.3	786.6	767.4	752.1	738.4	723.2	708.8	697.7
10°	903.2	878.6	851.2	821.6	796.4	771.8	751.2	733.2	713.7	696.7	682.6
12.5°	947.6	911.3	873.5	837.4	807.6	773.5	748.7	725.7	703.6	683.2	667.3
15°	1000.3	954.1	909.4	859.9	814.4	771.8	742.2	713.3	687.7	666.8	646.5
17.5°	1048.2	995.9	936.9	876.8	821.9	771.4	729.9	697.3	665.2	639.6	619.4
20°	1075.3	1015.8	949.0	886.6	826.0	769.6	724.2	685.1	650.5	623.4	600.7
22.5°	1098.8	1029.1	960.0	893.2	825.7	765.0	713.5	673.4	635.7	609.3	585.1
25°	1123.0	1039.6	970.3	892.0	816.5	753.8	696.0	650.5	612.9	581.9	557.0
27.5°	1143.9	1039.0	956.7	872.4	802.3	739.3	677.7	628.9	589.0	555.3	530.0
30°	1157.7	1040.4	942.5	859.1	788.4	723.4	663.5	614.4	572.5	538.2	514.4
32.5°	1166.4	1039.5	929.5	840.7	766.5	709.0	648.2	597.4	554.3	520.7	497.7
35°	1171.4	1033.1	907.2	802.5	731.0	675.0	624.2	571.5	526.3	494.9	468.9
37.5°	1161.3	1019.8	881.2	765.6	687.4	632.4	589.5	544.6	501.4	466.8	444.4
40°	1145.4	1011.2	860.9	739.7	657.3	604.3	567.9	523.8	481.2	448.4	427.4
42.5°	1115.1	993.5	838.8	710.8	626.1	573.1	539.5	502.8	462.4	431.6	410.7
45°	1041.1	955.2	805.4	667.5	580.1	525.3	495.7	468.9	432.4	402.5	384.5
47.5°	938.4	897.5	757.1	621.8	532.1	479.3	448.5	427.0	400.3	376.2	358.8
50°	867.1	850.2	724.5	590.6	499.9	448.4	418.8	399.3	380.1	355.9	340.1
52.5°	784.8	795.2	686.4	558.3	467.3	416.6	388.7	373.2	355.9	336.0	322.2
55°	668.9	706.8	620.6	504.0	418.8	370.4	344.0	330.3	320.2	305.4	293.5
57.5°	560.4	608.6	549.3	448.0	371.0	329.3	304.1	289.1	282.6	274.8	265.5
60°	496.0	543.7	498.5	410.5	338.9	299.3	276.9	264.3	257.8	252.3	244.4
62.5°	438.6	486.7	448.8	372.3	307.5	270.7	251.2	238.8	233.8	230.9	224.1
65°	359.6	401.1	375.8	313.0	262.4	230.0	212.3	203.6	198.9	197.8	193.5
67.5°	292.7	324.2	305.9	259.6	219.8	191.7	176.7	169.4	165.8	165.4	162.1
70°	248.7	278.3	264.3	222.3	188.0	166.1	153.1	146.6	144.4	144.0	142.2
72.5°	214.6	235.3	224.1	189.2	162.7	142.7	133.1	126.3	123.9	124.4	123.2
75°	158.8	174.4	167.9	143.6	122.3	109.3	101.4	97.1	94.9	96.0	94.5
77.5°	114.3	124.1	118.3	101.5	88.4	79.0	73.1	70.5	68.5	68.4	67.8
80°	86.2	92.1	88.8	78.7	67.9	59.9	55.2	53.4	52.3	52.0	51.7
82.5°	61.5	66.4	62.5	55.6	48.3	43.5	40.8	38.5	37.6	37.8	37.5
85°	31.0	32.9	31.4	27.1	24.2	22.1	20.5	19.5	18.8	19.1	18.4
87.5°	12.3	12.3	11.2	9.8	9.0	8.0	7.8	7.0	6.6	6.8	6.7
90°	7.8	6.5	5.3	4.2	3.3	2.4	1.4	0.5	1.4	2.4	3.3
92.5°	15.0	14.3	13.6	12.9	12.3	11.6	11.0	10.4	11.0	11.6	12.3
95°	30.1	29.3	28.6	27.9	27.2	26.5	25.8	25.2	25.8	26.5	27.2
97.5°	48.4	47.8	47.2	46.8	46.3	45.7	45.2	44.8	45.2	45.7	46.3
100°	61.8	61.4	60.9	60.3	59.8	59.2	58.6	58.1	58.6	59.2	59.8
102.5°	76.5	76.0	75.3	74.8	74.5	74.2	73.8	73.4	73.8	74.2	74.5
105°	99.1	98.2	97.4	96.9	96.7	96.5	96.3	96.1	96.3	96.5	96.7
107.5°	123.8	123.5	123.1	122.9	122.7	122.6	122.5	122.4	122.5	122.6	122.7
110°	140.2	140.0	139.8	139.6	139.4	139.2	139.0	138.8	139.0	139.2	139.4



TEST NUMBER: P332121-830

CATALOG NUMBER: S123DIW-S560D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	156.6	156.5	156.5	156.4	156.3	156.2	156.0	155.9	156.0	156.2	156.3
115°	182.4	182.6	182.8	182.7	182.4	182.1	181.8	181.5	181.8	182.1	182.4
117.5°	207.5	207.8	208.0	208.1	207.9	207.7	207.5	207.4	207.5	207.7	207.9
120°	224.8	225.3	225.7	225.6	225.1	224.5	223.9	223.4	223.9	224.5	225.1
122.5°	241.4	241.7	241.9	241.8	241.4	241.0	240.5	240.2	240.5	241.0	241.4
125°	266.5	266.6	266.8	266.8	266.6	266.3	266.0	265.7	266.0	266.3	266.6
127.5°	291.4	291.7	291.9	291.7	291.1	290.5	289.8	289.3	289.8	290.5	291.1
130°	307.6	307.9	308.2	308.0	307.3	306.5	305.8	305.0	305.8	306.5	307.3
132.5°	323.6	323.8	324.0	323.8	323.0	322.3	321.4	320.7	321.4	322.3	323.0
135°	347.0	347.1	347.2	346.9	346.4	345.8	345.3	344.7	345.3	345.8	346.4
137.5°	369.7	369.4	369.2	368.8	368.3	367.9	367.4	366.9	367.4	367.9	368.3
140°	384.7	384.6	384.5	384.2	383.7	383.2	382.8	382.3	382.8	383.2	383.7
142.5°	398.9	398.7	398.5	398.2	397.8	397.3	396.8	396.3	396.8	397.3	397.8
145°	419.7	419.4	419.1	419.0	418.8	418.6	418.4	418.2	418.4	418.6	418.8
147.5°	439.5	439.2	438.9	438.7	438.3	438.0	437.6	437.3	437.6	438.0	438.3
150°	451.9	451.8	451.6	451.4	451.2	451.0	450.8	450.6	450.8	451.0	451.2
152.5°	463.1	462.9	462.8	462.6	462.3	462.1	461.8	461.6	461.8	462.1	462.3
155°	479.1	479.0	478.9	478.8	478.8	478.8	478.8	478.8	478.8	478.8	478.8
157.5°	493.2	493.1	493.0	493.0	493.1	493.3	493.4	493.5	493.4	493.3	493.1
160°	501.9	501.9	501.9	502.0	502.2	502.4	502.6	502.8	502.6	502.4	502.2
162.5°	509.9	509.8	509.8	509.9	510.1	510.4	510.7	511.0	510.7	510.4	510.1
165°	520.3	520.3	520.3	520.4	520.7	520.9	521.2	521.5	521.2	520.9	520.7
167.5°	528.5	528.4	528.3	528.5	528.9	529.2	529.6	530.0	529.6	529.2	528.9
170°	533.1	533.1	533.1	533.3	533.7	534.0	534.4	534.8	534.4	534.0	533.7
172.5°	536.8	536.8	536.8	537.0	537.4	537.8	538.2	538.6	538.2	537.8	537.4
175°	540.7	540.7	540.7	540.9	541.3	541.7	542.1	542.4	542.1	541.7	541.3
177.5°	542.7	542.7	542.7	542.9	543.2	543.5	543.8	544.1	543.8	543.5	543.2
180°	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8



TEST NUMBER: P332121-830

CATALOG NUMBER: S123DIW-S560D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	732.6	730.7	727.7	723.4	719.9	714.4	714.4	715.3	715.3	715.0	714.4
5°	710.4	705.0	698.5	691.0	683.0	675.0	673.6	670.7	668.5	667.1	665.3
7.5°	686.9	677.4	667.9	657.3	647.6	639.6	634.0	629.4	626.4	623.3	620.9
10°	671.1	659.1	648.0	636.8	624.5	614.7	608.6	604.3	601.1	598.1	596.7
12.5°	652.3	638.7	626.3	615.7	602.3	592.2	586.4	584.4	580.5	574.5	571.3
15°	624.9	612.3	597.5	581.2	574.7	562.4	555.5	552.3	550.2	545.4	544.0
17.5°	601.4	584.8	568.3	556.1	544.0	534.1	530.3	526.2	523.4	519.5	518.4
20°	582.7	567.9	552.7	539.7	527.1	516.2	512.9	510.1	507.2	505.4	504.0
22.5°	563.5	548.7	536.2	524.1	510.6	503.5	499.9	496.8	494.7	493.5	492.1
25°	536.8	523.8	509.7	498.9	488.0	483.3	481.2	479.4	478.0	476.2	475.8
27.5°	512.8	498.7	487.3	477.1	469.4	465.4	463.4	462.5	462.8	463.4	463.8
30°	494.9	481.9	472.5	463.8	456.7	453.1	452.7	452.7	454.1	454.5	455.2
32.5°	478.4	467.8	458.4	450.0	444.5	442.1	443.5	443.5	444.6	445.5	446.9
35°	454.5	445.1	437.9	430.6	425.9	427.1	427.7	428.5	430.3	432.4	433.9
37.5°	431.6	423.5	415.9	410.3	408.1	410.1	411.8	413.3	415.5	417.1	418.5
40°	415.1	409.0	401.8	396.7	397.5	398.5	400.0	401.8	403.6	404.6	406.1
42.5°	399.8	393.4	388.0	383.7	384.7	386.2	387.0	388.0	390.0	392.0	392.9
45°	376.5	371.5	366.4	363.9	364.6	365.3	366.1	367.1	368.9	370.4	370.7
47.5°	350.3	346.8	343.4	340.9	342.0	341.8	342.7	345.1	345.6	346.5	348.5
50°	333.6	330.3	326.3	325.6	325.6	325.6	325.9	328.9	328.9	330.3	331.8
52.5°	315.1	313.0	310.5	309.2	308.6	308.6	310.1	311.5	312.1	314.1	315.6
55°	287.7	285.5	283.4	282.3	281.5	282.3	285.2	285.9	287.7	288.8	289.8
57.5°	259.2	257.5	255.8	255.2	255.1	256.0	257.6	259.8	260.2	263.5	265.1
60°	240.4	237.9	236.5	236.5	235.7	238.9	238.3	241.9	242.6	244.8	247.3
62.5°	221.0	217.6	217.1	217.1	218.1	219.0	220.1	221.7	223.6	226.3	228.2
65°	189.9	188.0	190.6	190.2	189.5	191.7	191.7	193.5	195.7	198.2	202.2
67.5°	160.3	159.4	159.7	159.7	160.7	161.9	163.0	164.6	167.1	169.8	172.4
70°	140.4	141.5	139.7	141.2	142.2	142.6	143.3	145.4	148.4	150.1	153.1
72.5°	121.1	121.0	121.2	121.8	122.9	123.6	124.2	126.7	129.9	131.4	133.7
75°	93.1	92.7	93.9	93.9	95.7	96.4	97.1	98.2	101.0	103.2	105.1
77.5°	68.1	68.4	68.2	69.5	69.0	69.1	71.4	72.4	72.7	77.0	77.9
80°	51.3	52.0	52.3	52.7	53.1	52.3	54.9	56.0	56.0	58.4	60.3
82.5°	36.9	37.2	38.2	38.5	38.6	39.3	39.6	40.3	41.2	42.3	44.7
85°	18.4	19.5	19.9	19.5	19.9	19.1	20.2	20.5	20.9	20.9	20.9
87.5°	6.6	7.2	7.1	7.6	7.5	8.1	8.2	7.7	7.7	8.7	7.6
90°	4.2	5.3	6.5	7.8	9.0	10.3	10.7	11.0	11.4	11.8	12.1
92.5°	12.9	13.6	14.3	15.0	15.7	16.4	16.7	17.0	17.3	17.6	17.7
95°	27.9	28.6	29.3	30.1	30.8	31.6	32.0	32.3	32.7	33.1	33.3
97.5°	46.8	47.2	47.8	48.4	48.9	49.5	49.9	50.3	50.8	51.2	51.4
100°	60.3	60.9	61.4	61.8	62.3	62.8	63.1	63.3	63.6	63.9	64.2
102.5°	74.8	75.3	76.0	76.5	77.2	77.9	78.1	78.4	78.7	79.0	79.1
105°	96.9	97.4	98.2	99.1	99.9	100.8	100.8	100.8	100.8	100.8	100.9
107.5°	122.9	123.1	123.5	123.8	124.1	124.5	124.8	125.1	125.4	125.6	125.7
110°	139.6	139.8	140.0	140.2	140.3	140.5	140.9	141.3	141.7	142.0	142.1



TEST NUMBER: P332121-830

CATALOG NUMBER: S123DIW-S560D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	156.4	156.5	156.5	156.6	156.6	156.6	157.0	157.5	158.0	158.4	158.6
115°	182.7	182.8	182.6	182.4	182.2	182.0	182.1	182.2	182.3	182.4	182.4
117.5°	208.1	208.0	207.8	207.5	207.4	207.1	207.1	207.1	207.0	207.0	206.9
120°	225.6	225.7	225.3	224.8	224.3	223.9	223.8	223.7	223.6	223.5	223.3
122.5°	241.8	241.9	241.7	241.4	241.2	240.9	240.6	240.4	240.2	239.9	239.7
125°	266.8	266.8	266.6	266.5	266.3	266.1	265.7	265.3	264.9	264.6	264.2
127.5°	291.7	291.9	291.7	291.4	291.2	291.1	290.5	290.0	289.5	288.9	288.4
130°	308.0	308.2	307.9	307.6	307.4	307.1	306.7	306.3	305.9	305.6	305.1
132.5°	323.8	324.0	323.8	323.6	323.4	323.2	322.7	322.3	321.8	321.3	320.8
135°	346.9	347.2	347.1	347.0	346.9	346.9	346.5	346.1	345.7	345.3	345.1
137.5°	368.8	369.2	369.4	369.7	369.9	370.1	369.8	369.4	369.0	368.5	368.2
140°	384.2	384.5	384.6	384.7	384.7	384.8	384.7	384.7	384.6	384.5	384.1
142.5°	398.2	398.5	398.7	398.9	399.1	399.2	399.1	399.0	398.9	398.8	398.5
145°	419.0	419.1	419.4	419.7	420.0	420.3	420.2	420.1	420.0	419.9	419.7
147.5°	438.7	438.9	439.2	439.5	439.8	440.1	440.1	440.1	440.1	440.1	439.8
150°	451.4	451.6	451.8	451.9	452.1	452.3	452.3	452.3	452.3	452.3	452.0
152.5°	462.6	462.8	462.9	463.1	463.2	463.3	463.4	463.5	463.7	463.9	463.7
155°	478.8	478.9	479.0	479.1	479.2	479.3	479.7	480.0	480.4	480.8	480.6
157.5°	493.0	493.0	493.1	493.2	493.2	493.3	493.7	494.2	494.6	494.9	494.8
160°	502.0	501.9	501.9	501.9	501.9	501.9	502.4	502.8	503.3	503.8	503.8
162.5°	509.9	509.8	509.8	509.9	510.0	510.1	510.6	511.0	511.5	512.0	511.9
165°	520.4	520.3	520.3	520.3	520.3	520.3	520.8	521.4	522.0	522.5	522.5
167.5°	528.5	528.3	528.4	528.5	528.6	528.6	529.2	529.8	530.4	530.9	530.9
170°	533.3	533.1	533.1	533.1	533.1	533.1	533.8	534.4	535.1	535.7	535.7
172.5°	537.0	536.8	536.8	536.8	536.8	536.8	537.4	538.0	538.6	539.1	539.1
175°	540.9	540.7	540.7	540.7	540.7	540.7	541.3	541.9	542.4	543.0	543.0
177.5°	542.9	542.7	542.7	542.7	542.7	542.7	543.2	543.7	544.1	544.5	544.5
180°	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8



TEST NUMBER: P332121-830

CATALOG NUMBER: S123DIW-S560D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	712.5	712.2	714.2	712.8	714.2	712.2	712.5	714.4	715.0	715.3	715.3
5°	663.2	664.2	660.6	660.6	660.6	664.2	663.2	665.3	667.1	668.5	670.7
7.5°	619.3	617.6	617.8	615.9	617.8	617.6	619.3	620.9	623.3	626.4	629.4
10°	592.4	590.2	589.5	589.8	589.5	590.2	592.4	596.7	598.1	601.1	604.3
12.5°	570.1	569.7	565.0	565.1	565.0	569.7	570.1	571.3	574.5	580.5	584.4
15°	544.0	537.2	536.4	538.6	536.4	537.2	544.0	544.0	545.4	550.2	552.3
17.5°	517.8	514.2	514.4	513.3	514.4	514.2	517.8	518.4	519.5	523.4	526.2
20°	504.0	501.8	501.4	498.9	501.4	501.8	504.0	504.0	505.4	507.2	510.1
22.5°	491.3	490.5	490.7	488.0	490.7	490.5	491.3	492.1	493.5	494.7	496.8
25°	475.4	477.2	475.8	475.8	475.8	477.2	475.4	475.8	476.2	478.0	479.4
27.5°	464.8	464.7	463.9	463.9	463.9	464.7	464.8	463.8	463.4	462.8	462.5
30°	456.7	456.3	457.0	457.0	457.0	456.3	456.7	455.2	454.5	454.1	452.7
32.5°	448.6	449.0	449.2	449.5	449.2	449.0	448.6	446.9	445.5	444.6	443.5
35°	436.1	436.4	437.5	436.8	437.5	436.4	436.1	433.9	432.4	430.3	428.5
37.5°	419.1	420.8	420.5	421.0	420.5	420.8	419.1	418.5	417.1	415.5	413.3
40°	406.5	407.6	407.2	407.2	407.2	407.6	406.5	406.1	404.6	403.6	401.8
42.5°	393.5	394.3	393.3	392.8	393.3	394.3	393.5	392.9	392.0	390.0	388.0
45°	372.2	371.5	372.6	371.1	372.6	371.5	372.2	370.7	370.4	368.9	367.1
47.5°	348.4	349.1	349.4	350.4	349.4	349.1	348.4	348.5	346.5	345.6	345.1
50°	332.4	334.6	334.6	334.3	334.6	334.6	332.4	331.8	330.3	328.9	328.9
52.5°	316.9	317.9	319.3	319.2	319.3	317.9	316.9	315.6	314.1	312.1	311.5
55°	292.8	293.5	294.2	294.5	294.2	293.5	292.8	289.8	288.8	287.7	285.9
57.5°	267.8	267.5	269.2	269.8	269.2	267.5	267.8	265.1	263.5	260.2	259.8
60°	250.2	250.2	253.1	254.1	253.1	250.2	250.2	247.3	244.8	242.6	241.9
62.5°	231.4	232.5	235.4	233.9	235.4	232.5	231.4	228.2	226.3	223.6	221.7
65°	204.0	206.9	206.5	207.9	206.5	206.9	204.0	202.2	198.2	195.7	193.5
67.5°	175.3	177.1	179.7	179.9	179.7	177.1	175.3	172.4	169.8	167.1	164.6
70°	156.0	157.8	159.2	160.2	159.2	157.8	156.0	153.1	150.1	148.4	145.4
72.5°	137.1	138.1	141.6	140.1	141.6	138.1	137.1	133.7	131.4	129.9	126.7
75°	107.5	110.1	112.3	111.2	112.3	110.1	107.5	105.1	103.2	101.0	98.2
77.5°	79.6	82.1	83.1	82.2	83.1	82.1	79.6	77.9	77.0	72.7	72.4
80°	62.8	62.5	64.7	64.3	64.7	62.5	62.8	60.3	58.4	56.0	56.0
82.5°	46.1	45.7	46.8	46.9	46.8	45.7	46.1	44.7	42.3	41.2	40.3
85°	22.3	23.5	22.1	21.7	22.1	23.5	22.3	20.9	20.9	20.9	20.5
87.5°	7.6	7.7	7.4	7.2	7.4	7.7	7.6	7.6	8.7	7.7	7.7
90°	12.3	12.4	12.6	12.8	12.6	12.4	12.3	12.1	11.8	11.4	11.0
92.5°	17.6	17.4	17.3	17.2	17.3	17.4	17.6	17.7	17.6	17.3	17.0
95°	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.1	32.7	32.3
97.5°	51.4	51.4	51.3	51.3	51.3	51.4	51.4	51.4	51.2	50.8	50.3
100°	64.4	64.6	64.8	64.9	64.8	64.6	64.4	64.2	63.9	63.6	63.3
102.5°	79.1	79.0	79.0	78.9	79.0	79.0	79.1	79.1	79.0	78.7	78.4
105°	101.1	101.3	101.5	101.7	101.5	101.3	101.1	100.9	100.8	100.8	100.8
107.5°	125.6	125.5	125.5	125.4	125.5	125.5	125.6	125.7	125.6	125.4	125.1
110°	141.9	141.8	141.6	141.4	141.6	141.8	141.9	142.1	142.0	141.7	141.3



TEST NUMBER: P332121-830

CATALOG NUMBER: S123DIW-S560D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	158.5	158.5	158.5	158.4	158.5	158.5	158.5	158.6	158.4	158.0	157.5
115°	182.3	182.2	182.1	182.0	182.1	182.2	182.3	182.4	182.4	182.3	182.2
117.5°	206.6	206.3	206.0	205.8	206.0	206.3	206.6	206.9	207.0	207.0	207.1
120°	223.1	222.9	222.7	222.5	222.7	222.9	223.1	223.3	223.5	223.6	223.7
122.5°	239.4	239.1	238.8	238.6	238.8	239.1	239.4	239.7	239.9	240.2	240.4
125°	263.8	263.4	263.1	262.7	263.1	263.4	263.8	264.2	264.6	264.9	265.3
127.5°	288.0	287.6	287.1	286.7	287.1	287.6	288.0	288.4	288.9	289.5	290.0
130°	304.4	303.8	303.1	302.4	303.1	303.8	304.4	305.1	305.6	305.9	306.3
132.5°	320.4	319.8	319.3	318.8	319.3	319.8	320.4	320.8	321.3	321.8	322.3
135°	344.9	344.7	344.5	344.3	344.5	344.7	344.9	345.1	345.3	345.7	346.1
137.5°	367.8	367.5	367.1	366.7	367.1	367.5	367.8	368.2	368.5	369.0	369.4
140°	383.4	382.8	382.1	381.4	382.1	382.8	383.4	384.1	384.5	384.6	384.7
142.5°	398.0	397.5	397.0	396.4	397.0	397.5	398.0	398.5	398.8	398.9	399.0
145°	419.3	419.0	418.6	418.2	418.6	419.0	419.3	419.7	419.9	420.0	420.1
147.5°	439.2	438.6	438.0	437.4	438.0	438.6	439.2	439.8	440.1	440.1	440.1
150°	451.5	450.9	450.3	449.8	450.3	450.9	451.5	452.0	452.3	452.3	452.3
152.5°	463.3	462.7	462.2	461.8	462.2	462.7	463.3	463.7	463.9	463.7	463.5
155°	479.9	479.3	478.6	478.0	478.6	479.3	479.9	480.6	480.8	480.4	480.0
157.5°	494.4	493.8	493.2	492.8	493.2	493.8	494.4	494.8	494.9	494.6	494.2
160°	503.4	503.0	502.7	502.3	502.7	503.0	503.4	503.8	503.8	503.3	502.8
162.5°	511.3	510.7	510.1	509.4	510.1	510.7	511.3	511.9	512.0	511.5	511.0
165°	521.8	521.1	520.5	519.8	520.5	521.1	521.8	522.5	522.5	522.0	521.4
167.5°	530.4	529.8	529.2	528.6	529.2	529.8	530.4	530.9	530.9	530.4	529.8
170°	535.1	534.4	533.8	533.1	533.8	534.4	535.1	535.7	535.7	535.1	534.4
172.5°	538.5	537.8	537.2	536.5	537.2	537.8	538.5	539.1	539.1	538.6	538.0
175°	542.3	541.7	541.0	540.4	541.0	541.7	542.3	543.0	543.0	542.4	541.9
177.5°	543.9	543.5	542.9	542.3	542.9	543.5	543.9	544.5	544.5	544.1	543.7
180°	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8



TEST NUMBER: P332121-830

CATALOG NUMBER: S123DIW-S560D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	714.4	714.4	719.9	723.4	727.7	730.7	732.6	734.7	738.1	742.8	748.0
5°	673.6	675.0	683.0	691.0	698.5	705.0	710.4	716.9	724.9	734.6	745.5
7.5°	634.0	639.6	647.6	657.3	667.9	677.4	686.9	697.7	708.8	723.2	738.4
10°	608.6	614.7	624.5	636.8	648.0	659.1	671.1	682.6	696.7	713.7	733.2
12.5°	586.4	592.2	602.3	615.7	626.3	638.7	652.3	667.3	683.2	703.6	725.7
15°	555.5	562.4	574.7	581.2	597.5	612.3	624.9	646.5	666.8	687.7	713.3
17.5°	530.3	534.1	544.0	556.1	568.3	584.8	601.4	619.4	639.6	665.2	697.3
20°	512.9	516.2	527.1	539.7	552.7	567.9	582.7	600.7	623.4	650.5	685.1
22.5°	499.9	503.5	510.6	524.1	536.2	548.7	563.5	585.1	609.3	635.7	673.4
25°	481.2	483.3	488.0	498.9	509.7	523.8	536.8	557.0	581.9	612.9	650.5
27.5°	463.4	465.4	469.4	477.1	487.3	498.7	512.8	530.0	555.3	589.0	628.9
30°	452.7	453.1	456.7	463.8	472.5	481.9	494.9	514.4	538.2	572.5	614.4
32.5°	443.5	442.1	444.5	450.0	458.4	467.8	478.4	497.7	520.7	554.3	597.4
35°	427.7	427.1	425.9	430.6	437.9	445.1	454.5	468.9	494.9	526.3	571.5
37.5°	411.8	410.1	408.1	410.3	415.9	423.5	431.6	444.4	466.8	501.4	544.6
40°	400.0	398.5	397.5	396.7	401.8	409.0	415.1	427.4	448.4	481.2	523.8
42.5°	387.0	386.2	384.7	383.7	388.0	393.4	399.8	410.7	431.6	462.4	502.8
45°	366.1	365.3	364.6	363.9	366.4	371.5	376.5	384.5	402.5	432.4	468.9
47.5°	342.7	341.8	342.0	340.9	343.4	346.8	350.3	358.8	376.2	400.3	427.0
50°	325.9	325.6	325.6	325.6	326.3	330.3	333.6	340.1	355.9	380.1	399.3
52.5°	310.1	308.6	308.6	309.2	310.5	313.0	315.1	322.2	336.0	355.9	373.2
55°	285.2	282.3	281.5	282.3	283.4	285.5	287.7	293.5	305.4	320.2	330.3
57.5°	257.6	256.0	255.1	255.2	255.8	257.5	259.2	265.5	274.8	282.6	289.1
60°	238.3	238.9	235.7	236.5	236.5	237.9	240.4	244.4	252.3	257.8	264.3
62.5°	220.1	219.0	218.1	217.1	217.1	217.6	221.0	224.1	230.9	233.8	238.8
65°	191.7	191.7	189.5	190.2	190.6	188.0	189.9	193.5	197.8	198.9	203.6
67.5°	163.0	161.9	160.7	159.7	159.7	159.4	160.3	162.1	165.4	165.8	169.4
70°	143.3	142.6	142.2	141.2	139.7	141.5	140.4	142.2	144.0	144.4	146.6
72.5°	124.2	123.6	122.9	121.8	121.2	121.0	121.1	123.2	124.4	123.9	126.3
75°	97.1	96.4	95.7	93.9	93.9	92.7	93.1	94.5	96.0	94.9	97.1
77.5°	71.4	69.1	69.0	69.5	68.2	68.4	68.1	67.8	68.4	68.5	70.5
80°	54.9	52.3	53.1	52.7	52.3	52.0	51.3	51.7	52.0	52.3	53.4
82.5°	39.6	39.3	38.6	38.5	38.2	37.2	36.9	37.5	37.8	37.6	38.5
85°	20.2	19.1	19.9	19.5	19.9	19.5	18.4	18.4	19.1	18.8	19.5
87.5°	8.2	8.1	7.5	7.6	7.1	7.2	6.6	6.7	6.8	6.6	7.0
90°	10.7	10.3	9.0	7.8	6.5	5.3	4.2	3.3	2.4	1.4	0.5
92.5°	16.7	16.4	15.7	15.0	14.3	13.6	12.9	12.3	11.6	11.0	10.4
95°	32.0	31.6	30.8	30.1	29.3	28.6	27.9	27.2	26.5	25.8	25.2
97.5°	49.9	49.5	48.9	48.4	47.8	47.2	46.8	46.3	45.7	45.2	44.8
100°	63.1	62.8	62.3	61.8	61.4	60.9	60.3	59.8	59.2	58.6	58.1
102.5°	78.1	77.9	77.2	76.5	76.0	75.3	74.8	74.5	74.2	73.8	73.4
105°	100.8	100.8	99.9	99.1	98.2	97.4	96.9	96.7	96.5	96.3	96.1
107.5°	124.8	124.5	124.1	123.8	123.5	123.1	122.9	122.7	122.6	122.5	122.4
110°	140.9	140.5	140.3	140.2	140.0	139.8	139.6	139.4	139.2	139.0	138.8



TEST NUMBER: P332121-830

CATALOG NUMBER: S123DIW-S560D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	157.0	156.6	156.6	156.6	156.5	156.5	156.4	156.3	156.2	156.0	155.9
115°	182.1	182.0	182.2	182.4	182.6	182.8	182.7	182.4	182.1	181.8	181.5
117.5°	207.1	207.1	207.4	207.5	207.8	208.0	208.1	207.9	207.7	207.5	207.4
120°	223.8	223.9	224.3	224.8	225.3	225.7	225.6	225.1	224.5	223.9	223.4
122.5°	240.6	240.9	241.2	241.4	241.7	241.9	241.8	241.4	241.0	240.5	240.2
125°	265.7	266.1	266.3	266.5	266.6	266.8	266.8	266.6	266.3	266.0	265.7
127.5°	290.5	291.1	291.2	291.4	291.7	291.9	291.7	291.1	290.5	289.8	289.3
130°	306.7	307.1	307.4	307.6	307.9	308.2	308.0	307.3	306.5	305.8	305.0
132.5°	322.7	323.2	323.4	323.6	323.8	324.0	323.8	323.0	322.3	321.4	320.7
135°	346.5	346.9	346.9	347.0	347.1	347.2	346.9	346.4	345.8	345.3	344.7
137.5°	369.8	370.1	369.9	369.7	369.4	369.2	368.8	368.3	367.9	367.4	366.9
140°	384.7	384.8	384.7	384.7	384.6	384.5	384.2	383.7	383.2	382.8	382.3
142.5°	399.1	399.2	399.1	398.9	398.7	398.5	398.2	397.8	397.3	396.8	396.3
145°	420.2	420.3	420.0	419.7	419.4	419.1	419.0	418.8	418.6	418.4	418.2
147.5°	440.1	440.1	439.8	439.5	439.2	438.9	438.7	438.3	438.0	437.6	437.3
150°	452.3	452.3	452.1	451.9	451.8	451.6	451.4	451.2	451.0	450.8	450.6
152.5°	463.4	463.3	463.2	463.1	462.9	462.8	462.6	462.3	462.1	461.8	461.6
155°	479.7	479.3	479.2	479.1	479.0	478.9	478.8	478.8	478.8	478.8	478.8
157.5°	493.7	493.3	493.2	493.2	493.1	493.0	493.0	493.1	493.3	493.4	493.5
160°	502.4	501.9	501.9	501.9	501.9	501.9	502.0	502.2	502.4	502.6	502.8
162.5°	510.6	510.1	510.0	509.9	509.8	509.8	509.9	510.1	510.4	510.7	511.0
165°	520.8	520.3	520.3	520.3	520.3	520.3	520.4	520.7	520.9	521.2	521.5
167.5°	529.2	528.6	528.6	528.5	528.4	528.3	528.5	528.9	529.2	529.6	530.0
170°	533.8	533.1	533.1	533.1	533.1	533.1	533.3	533.7	534.0	534.4	534.8
172.5°	537.4	536.8	536.8	536.8	536.8	536.8	537.0	537.4	537.8	538.2	538.6
175°	541.3	540.7	540.7	540.7	540.7	540.7	540.9	541.3	541.7	542.1	542.4
177.5°	543.2	542.7	542.7	542.7	542.7	542.7	542.9	543.2	543.5	543.8	544.1
180°	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8



TEST NUMBER: P332121-830

CATALOG NUMBER: S123DIW-S560D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	749.7	751.1	756.0	759.5	763.6	765.9	768.2	770.0	772.2	772.8	781.2
5°	753.0	760.3	772.9	782.2	793.8	806.4	815.1	819.1	829.5	838.2	855.5
7.5°	752.1	767.4	786.6	806.3	827.6	847.2	864.2	884.4	898.8	920.4	941.7
10°	751.2	771.8	796.4	821.6	851.2	878.6	903.2	930.7	953.4	983.4	1009.0
12.5°	748.7	773.5	807.6	837.4	873.5	911.3	947.6	982.9	1003.1	1052.9	1076.6
15°	742.2	771.8	814.4	859.9	909.4	954.1	1000.3	1037.1	1096.6	1140.4	1168.2
17.5°	729.9	771.4	821.9	876.8	936.9	995.9	1048.2	1104.1	1167.3	1220.1	1276.5
20°	724.2	769.6	826.0	886.6	949.0	1015.8	1075.3	1142.6	1211.4	1263.5	1335.7
22.5°	713.5	765.0	825.7	893.2	960.0	1029.1	1098.8	1166.5	1246.1	1317.8	1386.5
25°	696.0	753.8	816.5	892.0	970.3	1039.6	1123.0	1213.0	1296.0	1388.0	1456.6
27.5°	677.7	739.3	802.3	872.4	956.7	1039.0	1143.9	1245.4	1346.9	1426.4	1477.2
30°	663.5	723.4	788.4	859.1	942.5	1040.4	1157.7	1268.5	1367.4	1435.7	1464.1
32.5°	648.2	709.0	766.5	840.7	929.5	1039.5	1166.4	1282.0	1368.6	1414.0	1408.4
35°	624.2	675.0	731.0	802.5	907.2	1033.1	1171.4	1283.3	1336.3	1326.6	1253.0
37.5°	589.5	632.4	687.4	765.6	881.2	1019.8	1161.3	1245.3	1241.8	1162.4	1055.7
40°	567.9	604.3	657.3	739.7	860.9	1011.2	1145.4	1200.0	1153.8	1042.9	915.1
42.5°	539.5	573.1	626.1	710.8	838.8	993.5	1115.1	1130.9	1040.5	912.9	795.9
45°	495.7	525.3	580.1	667.5	805.4	955.2	1041.1	1002.5	880.8	749.0	659.9
47.5°	448.5	479.3	532.1	621.8	757.1	897.5	938.4	856.3	731.3	624.5	542.6
50°	418.8	448.4	499.9	590.6	724.5	850.2	867.1	761.0	646.2	552.3	485.1
52.5°	388.7	416.6	467.3	558.3	686.4	795.2	784.8	676.7	571.1	491.1	438.4
55°	344.0	370.4	418.8	504.0	620.6	706.8	668.9	565.7	478.3	416.2	376.2
57.5°	304.1	329.3	371.0	448.0	549.3	608.6	560.4	473.4	404.0	356.2	326.3
60°	276.9	299.3	338.9	410.5	498.5	543.7	496.0	419.1	360.6	322.3	295.7
62.5°	251.2	270.7	307.5	372.3	448.8	486.7	438.6	373.4	323.7	289.7	267.0
65°	212.3	230.0	262.4	313.0	375.8	401.1	359.6	306.8	268.2	243.0	227.8
67.5°	176.7	191.7	219.8	259.6	305.9	324.2	292.7	251.8	222.7	202.5	190.4
70°	153.1	166.1	188.0	222.3	264.3	278.3	248.7	215.2	193.9	177.6	166.5
72.5°	133.1	142.7	162.7	189.2	224.1	235.3	214.6	185.1	165.2	153.1	144.2
75°	101.4	109.3	122.3	143.6	167.9	174.4	158.8	140.4	127.1	118.4	111.5
77.5°	73.1	79.0	88.4	101.5	118.3	124.1	114.3	102.0	92.3	86.4	82.6
80°	55.2	59.9	67.9	78.7	88.8	92.1	86.2	76.9	70.0	66.8	63.5
82.5°	40.8	43.5	48.3	55.6	62.5	66.4	61.5	55.8	52.1	49.2	48.0
85°	20.5	22.1	24.2	27.1	31.4	32.9	31.0	29.6	27.4	25.6	25.6
87.5°	7.8	8.0	9.0	9.8	11.2	12.3	12.3	11.9	11.9	11.7	11.4
90°	1.4	2.4	3.3	4.2	5.3	6.5	7.8	9.0	10.3	10.7	11.0
92.5°	11.0	11.6	12.3	12.9	13.6	14.3	15.0	15.7	16.4	16.7	17.0
95°	25.8	26.5	27.2	27.9	28.6	29.3	30.1	30.8	31.6	32.0	32.3
97.5°	45.2	45.7	46.3	46.8	47.2	47.8	48.4	48.9	49.5	49.9	50.3
100°	58.6	59.2	59.8	60.3	60.9	61.4	61.8	62.3	62.8	63.1	63.3
102.5°	73.8	74.2	74.5	74.8	75.3	76.0	76.5	77.2	77.9	78.1	78.4
105°	96.3	96.5	96.7	96.9	97.4	98.2	99.1	99.9	100.8	100.8	100.8
107.5°	122.5	122.6	122.7	122.9	123.1	123.5	123.8	124.1	124.5	124.8	125.1
110°	139.0	139.2	139.4	139.6	139.8	140.0	140.2	140.3	140.5	140.9	141.3



TEST NUMBER: P332121-830

CATALOG NUMBER: S123DIW-S560D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	156.0	156.2	156.3	156.4	156.5	156.5	156.6	156.6	156.6	157.0	157.5
115°	181.8	182.1	182.4	182.7	182.8	182.6	182.4	182.2	182.0	182.1	182.2
117.5°	207.5	207.7	207.9	208.1	208.0	207.8	207.5	207.4	207.1	207.1	207.1
120°	223.9	224.5	225.1	225.6	225.7	225.3	224.8	224.3	223.9	223.8	223.7
122.5°	240.5	241.0	241.4	241.8	241.9	241.7	241.4	241.2	240.9	240.6	240.4
125°	266.0	266.3	266.6	266.8	266.8	266.6	266.5	266.3	266.1	265.7	265.3
127.5°	289.8	290.5	291.1	291.7	291.9	291.7	291.4	291.2	291.1	290.5	290.0
130°	305.8	306.5	307.3	308.0	308.2	307.9	307.6	307.4	307.1	306.7	306.3
132.5°	321.4	322.3	323.0	323.8	324.0	323.8	323.6	323.4	323.2	322.7	322.3
135°	345.3	345.8	346.4	346.9	347.2	347.1	347.0	346.9	346.9	346.5	346.1
137.5°	367.4	367.9	368.3	368.8	369.2	369.4	369.7	369.9	370.1	369.8	369.4
140°	382.8	383.2	383.7	384.2	384.5	384.6	384.7	384.7	384.8	384.7	384.7
142.5°	396.8	397.3	397.8	398.2	398.5	398.7	398.9	399.1	399.2	399.1	399.0
145°	418.4	418.6	418.8	419.0	419.1	419.4	419.7	420.0	420.3	420.2	420.1
147.5°	437.6	438.0	438.3	438.7	438.9	439.2	439.5	439.8	440.1	440.1	440.1
150°	450.8	451.0	451.2	451.4	451.6	451.8	451.9	452.1	452.3	452.3	452.3
152.5°	461.8	462.1	462.3	462.6	462.8	462.9	463.1	463.2	463.3	463.4	463.5
155°	478.8	478.8	478.8	478.8	478.9	479.0	479.1	479.2	479.3	479.7	480.0
157.5°	493.4	493.3	493.1	493.0	493.0	493.1	493.2	493.2	493.3	493.7	494.2
160°	502.6	502.4	502.2	502.0	501.9	501.9	501.9	501.9	501.9	502.4	502.8
162.5°	510.7	510.4	510.1	509.9	509.8	509.8	509.9	510.0	510.1	510.6	511.0
165°	521.2	520.9	520.7	520.4	520.3	520.3	520.3	520.3	520.3	520.8	521.4
167.5°	529.6	529.2	528.9	528.5	528.3	528.4	528.5	528.6	528.6	529.2	529.8
170°	534.4	534.0	533.7	533.3	533.1	533.1	533.1	533.1	533.1	533.8	534.4
172.5°	538.2	537.8	537.4	537.0	536.8	536.8	536.8	536.8	536.8	537.4	538.0
175°	542.1	541.7	541.3	540.9	540.7	540.7	540.7	540.7	540.7	541.3	541.9
177.5°	543.8	543.5	543.2	542.9	542.7	542.7	542.7	542.7	542.7	543.2	543.7
180°	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	784.1	784.4	787.5	789.9	788.7	790.1	790.7
5°	856.6	869.6	876.5	881.6	881.9	882.2	885.1
7.5°	959.5	973.5	983.6	999.1	1003.7	1009.0	1007.5
10°	1034.6	1055.2	1072.9	1082.2	1092.3	1107.1	1095.2
12.5°	1104.8	1141.2	1168.2	1182.7	1192.3	1195.2	1189.4
15°	1220.5	1268.2	1293.8	1293.1	1325.6	1339.6	1317.6
17.5°	1326.6	1370.6	1405.8	1423.9	1451.0	1457.0	1454.2
20°	1391.6	1439.6	1467.1	1498.1	1512.2	1524.8	1527.0
22.5°	1447.7	1490.7	1520.2	1546.1	1557.8	1563.8	1567.4
25°	1505.3	1539.3	1557.0	1565.9	1569.2	1568.5	1563.8
27.5°	1501.4	1503.9	1484.5	1465.4	1448.2	1428.9	1422.3
30°	1462.4	1432.0	1377.9	1347.2	1302.1	1266.3	1280.8
32.5°	1359.8	1299.5	1238.7	1171.6	1116.1	1100.3	1084.4
35°	1160.6	1054.4	992.4	920.2	891.3	862.4	842.5
37.5°	939.0	856.9	783.2	735.9	707.0	688.8	678.9
40°	811.9	737.8	677.2	638.9	616.9	596.3	593.4
42.5°	710.5	641.7	596.1	565.6	544.4	535.7	529.3
45°	581.9	533.9	503.2	481.5	467.5	462.0	454.9
47.5°	492.6	458.6	435.5	420.8	410.2	406.1	405.6
50°	442.6	414.4	397.5	385.9	377.6	376.2	370.4
52.5°	405.0	380.6	367.4	357.3	351.3	347.2	345.5
55°	351.6	335.4	323.5	317.6	313.0	309.0	309.0
57.5°	307.6	294.1	286.2	281.3	279.8	277.0	275.2
60°	280.5	268.9	262.8	258.4	255.6	255.9	252.7
62.5°	253.9	246.4	240.5	236.2	232.8	232.8	233.1
65°	216.2	210.5	206.1	204.7	202.6	200.0	200.7
67.5°	183.2	177.9	174.5	172.0	171.3	169.8	172.0
70°	159.6	155.6	153.1	150.9	150.1	150.5	152.3
72.5°	137.9	135.1	133.5	132.4	130.8	130.9	132.1
75°	108.3	106.1	104.7	103.6	103.2	103.2	103.2
77.5°	79.6	79.1	78.4	76.8	76.9	77.3	77.4
80°	62.8	61.7	61.4	60.6	59.6	58.8	60.6
82.5°	46.9	45.8	45.5	45.3	43.6	43.5	45.1
85°	25.3	24.2	24.5	24.2	24.2	23.8	23.8
87.5°	11.2	11.0	10.7	11.1	10.8	10.7	11.2
90°	11.4	11.8	12.1	12.3	12.4	12.6	12.8
92.5°	17.3	17.6	17.7	17.6	17.4	17.3	17.2
95°	32.7	33.1	33.3	33.3	33.3	33.3	33.3
97.5°	50.8	51.2	51.4	51.4	51.4	51.3	51.3
100°	63.6	63.9	64.2	64.4	64.6	64.8	64.9
102.5°	78.7	79.0	79.1	79.1	79.0	79.0	78.9
105°	100.8	100.8	100.9	101.1	101.3	101.5	101.7
107.5°	125.4	125.6	125.7	125.6	125.5	125.5	125.4
110°	141.7	142.0	142.1	141.9	141.8	141.6	141.4



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	158.0	158.4	158.6	158.5	158.5	158.5	158.4
115°	182.3	182.4	182.4	182.3	182.2	182.1	182.0
117.5°	207.0	207.0	206.9	206.6	206.3	206.0	205.8
120°	223.6	223.5	223.3	223.1	222.9	222.7	222.5
122.5°	240.2	239.9	239.7	239.4	239.1	238.8	238.6
125°	264.9	264.6	264.2	263.8	263.4	263.1	262.7
127.5°	289.5	288.9	288.4	288.0	287.6	287.1	286.7
130°	305.9	305.6	305.1	304.4	303.8	303.1	302.4
132.5°	321.8	321.3	320.8	320.4	319.8	319.3	318.8
135°	345.7	345.3	345.1	344.9	344.7	344.5	344.3
137.5°	369.0	368.5	368.2	367.8	367.5	367.1	366.7
140°	384.6	384.5	384.1	383.4	382.8	382.1	381.4
142.5°	398.9	398.8	398.5	398.0	397.5	397.0	396.4
145°	420.0	419.9	419.7	419.3	419.0	418.6	418.2
147.5°	440.1	440.1	439.8	439.2	438.6	438.0	437.4
150°	452.3	452.3	452.0	451.5	450.9	450.3	449.8
152.5°	463.7	463.9	463.7	463.3	462.7	462.2	461.8
155°	480.4	480.8	480.6	479.9	479.3	478.6	478.0
157.5°	494.6	494.9	494.8	494.4	493.8	493.2	492.8
160°	503.3	503.8	503.8	503.4	503.0	502.7	502.3
162.5°	511.5	512.0	511.9	511.3	510.7	510.1	509.4
165°	522.0	522.5	522.5	521.8	521.1	520.5	519.8
167.5°	530.4	530.9	530.9	530.4	529.8	529.2	528.6
170°	535.1	535.7	535.7	535.1	534.4	533.8	533.1
172.5°	538.6	539.1	539.1	538.5	537.8	537.2	536.5
175°	542.4	543.0	543.0	542.3	541.7	541.0	540.4
177.5°	544.1	544.5	544.5	543.9	543.5	542.9	542.3
180°	543.8	543.8	543.8	543.8	543.8	543.8	543.8

(END OF REPORT)