

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: P332411-830

Luminaire Tested: **S123RDIW-S560D460U830-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332411-830
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: S123RDIW-S560D460U830-4F0-1E-UDD-A1
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 560 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 460 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3607.9 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.36
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: General Diffuse

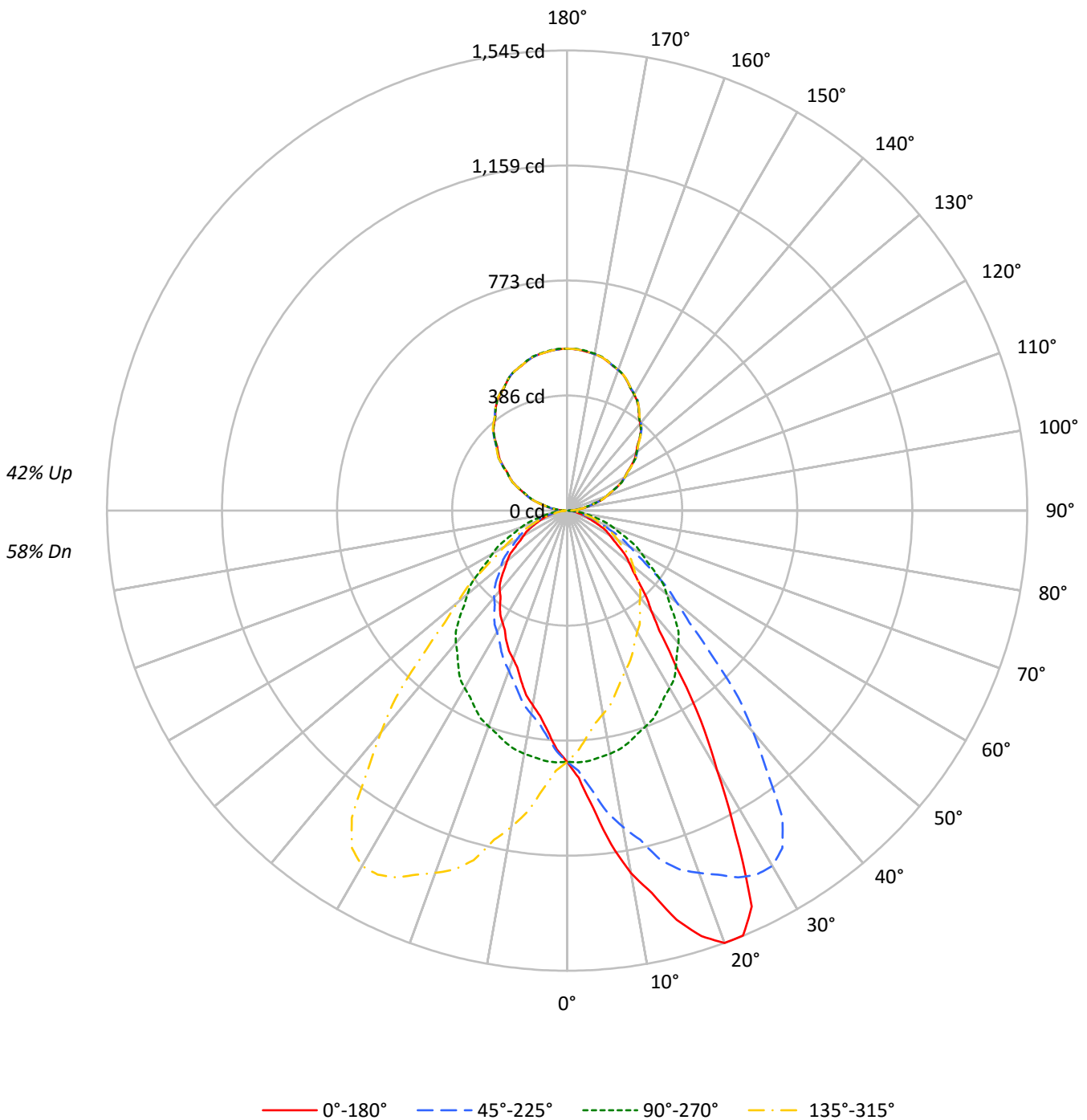
Input Watts (W): 30.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	102	102	102	102	88	88	88	75	75	75	64	64	64	58
1	100	96	93	89	93	90	87	84	78	76	74	67	66	64	57	56	55	50
2	92	85	79	74	86	79	74	70	69	65	62	60	57	55	51	49	47	43
3	84	75	68	62	78	70	64	59	62	57	53	54	50	47	46	43	41	37
4	77	67	59	53	72	63	56	51	55	50	46	48	44	41	42	39	36	33
5	71	60	52	46	66	57	49	44	50	44	40	44	39	36	38	34	32	29
6	66	54	46	41	61	51	44	39	45	39	35	40	35	32	35	31	28	26
7	61	49	41	36	57	46	39	34	41	35	31	36	32	28	32	28	25	23
8	57	45	37	32	53	42	35	31	38	32	28	33	29	25	29	26	23	21
9	53	41	34	29	50	39	32	28	35	29	25	31	26	23	27	23	21	19
10	50	38	31	26	46	36	29	25	32	27	23	28	24	21	25	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	9077	9077	9077	9077
5°	10821	9116	8028	9116
10°	13511	9063	7252	9063
15°	15858	8971	6614	8971
20°	17699	8833	6071	8833
25°	17416	8687	5738	8687
30°	12519	8552	5393	8552
35°	8359	8377	5171	8377
40°	6159	8168	4942	8168
45°	5165	7798	4714	7798
50°	4558	7316	4401	7316
55°	3997	6762	3969	6762
60°	3559	6232	3638	6232
65°	3125	5662	3385	5662
70°	2452	5158	3091	5158
75°	2163	4504	2824	4504
80°	1878	3825	2777	3825
85°	1519	3075	2939	3075



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	2.3
10°-20°	259.1	7.2
20°-30°	407.0	11.3
30°-40°	424.7	11.8
40°-50°	363.4	10.1
50°-60°	277.0	7.7
60°-70°	177.6	4.9
70°-80°	85.4	2.4
80°-90°	24.2	0.7
90°-100°	35.4	1.0
100°-110°	106.0	2.9
110°-120°	180.3	5.0
120°-130°	237.2	6.6
130°-140°	266.6	7.4
140°-150°	262.1	7.3
150°-160°	220.6	6.1
160°-170°	146.9	4.1
170°-180°	51.4	1.4
0°-30°	749.1	20.8
0°-40°	1173.7	32.5
0°-60°	1814.2	50.3
0°-90°	2101.4	58.2
90°-120°	321.8	8.9
90°-150°	1087.6	30.1
90°-180°	1507.0	41.8
0°-180°	3607.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	843	843	843	843	843	
5°	1002	844	743	844	1002	103
15°	1423	805	594	805	1423	404
25°	1466	731	483	731	1466	630
35°	636	638	394	638	636	417
45°	339	512	310	512	339	267
55°	213	360	212	360	213	193
65°	123	222	133	222	123	121
75°	52	108	68	108	52	56
85°	12	25	24	25	12	14
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°	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	898.1	899.4	895.6	895.0	890.7	889.6	889.6	883.4	879.7	874.8	871.9
5°	1001.5	1007.2	1004.4	997.9	987.0	984.5	977.6	966.8	954.5	939.3	932.2
7.5°	1130.4	1138.3	1135.2	1125.2	1113.9	1104.7	1085.3	1067.3	1042.2	1020.1	1001.2
10°	1236.1	1227.8	1221.3	1211.5	1201.1	1184.1	1163.9	1136.1	1104.0	1078.7	1050.6
12.5°	1315.2	1313.9	1305.6	1295.6	1280.8	1264.7	1239.8	1206.0	1168.7	1132.1	1099.9
15°	1423.1	1425.3	1419.8	1409.4	1388.5	1359.9	1322.4	1308.3	1254.9	1215.1	1175.4
17.5°	1497.8	1497.3	1496.6	1482.1	1460.8	1440.4	1405.6	1368.6	1320.2	1264.2	1210.8
20°	1545.1	1541.5	1542.3	1526.0	1510.1	1486.7	1452.7	1398.9	1359.2	1294.6	1239.3
22.5°	1544.0	1543.2	1546.0	1540.4	1528.9	1510.9	1484.2	1438.8	1388.1	1322.9	1260.7
25°	1466.4	1463.6	1480.5	1485.2	1503.6	1506.8	1498.9	1474.0	1426.0	1358.9	1282.0
27.5°	1227.3	1225.7	1257.2	1296.6	1346.6	1385.4	1423.0	1441.1	1426.0	1377.9	1300.9
30°	1007.2	1041.1	1057.1	1114.1	1177.6	1253.4	1319.8	1383.0	1398.5	1377.6	1314.5
32.5°	836.2	865.8	879.1	928.1	987.3	1076.1	1175.7	1265.2	1328.4	1344.4	1306.4
35°	636.1	636.5	666.8	688.4	743.3	834.6	931.4	1051.2	1170.4	1260.7	1270.1
37.5°	507.6	509.3	527.7	549.3	590.5	638.8	724.0	823.6	961.2	1099.8	1181.0
40°	438.3	441.5	455.2	476.5	506.1	542.6	609.1	702.9	817.7	971.9	1097.9
42.5°	393.8	399.1	406.1	422.5	440.8	475.0	528.8	601.2	705.6	851.4	996.7
45°	339.3	342.2	347.6	355.2	371.8	395.7	431.8	480.5	567.1	684.5	830.0
47.5°	299.4	297.8	303.5	309.7	320.7	337.0	361.2	401.0	462.8	556.9	680.3
50°	272.2	271.8	275.8	280.5	291.0	302.9	322.7	352.7	401.8	479.8	592.8
52.5°	246.8	248.2	251.0	256.8	264.4	274.0	291.8	313.4	355.6	422.9	517.1
55°	213.0	214.1	218.0	221.3	226.7	236.5	247.7	265.7	294.5	341.5	419.1
57.5°	184.4	183.9	187.8	188.5	194.6	202.6	211.2	225.3	246.2	281.1	333.4
60°	165.3	164.3	167.5	170.0	173.2	179.7	187.0	200.8	217.4	243.0	287.8
62.5°	148.0	147.5	149.9	152.4	155.0	161.0	167.1	177.6	190.8	212.4	247.9
65°	122.7	123.9	124.9	126.0	127.4	131.0	136.9	144.0	153.1	168.2	193.9
67.5°	96.4	97.6	97.9	100.1	103.2	105.5	109.1	115.5	121.8	134.5	149.1
70°	77.9	77.6	77.9	79.1	83.0	87.0	91.7	96.4	100.4	109.4	121.7
72.5°	67.0	66.4	67.3	67.5	69.5	70.5	73.5	77.9	83.0	89.2	98.0
75°	52.0	52.0	52.0	52.0	53.4	54.2	55.2	56.4	58.2	61.0	67.5
77.5°	38.5	38.5	39.0	39.3	39.7	40.1	40.7	41.8	42.4	44.0	46.8
80°	30.3	30.7	30.3	30.7	30.7	31.4	31.8	32.9	33.2	35.1	36.1
82.5°	22.8	22.6	22.8	23.2	23.2	23.9	23.9	24.8	24.9	25.7	26.9
85°	12.3	11.6	12.3	11.9	12.6	11.9	12.3	13.0	13.0	13.4	14.8
87.5°	5.5	6.0	5.4	5.7	5.6	5.8	5.7	5.7	6.1	5.8	5.8
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°	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	870.7	869.9	865.8	861.2	855.2	851.1	847.9	846.2	841.0	834.6	830.3
5°	924.5	913.7	902.2	888.1	875.1	861.8	853.5	843.7	831.8	818.4	809.0
7.5°	982.1	960.9	938.0	914.5	891.1	870.2	851.7	835.8	816.9	797.8	784.3
10°	1026.3	995.3	963.2	930.3	900.3	872.2	850.6	829.2	806.5	784.5	767.9
12.5°	1066.5	1025.7	988.6	948.2	909.9	876.3	845.1	820.0	792.7	769.2	750.3
15°	1117.3	1075.4	1030.7	969.3	918.4	875.8	837.9	805.0	771.8	743.0	724.5
17.5°	1164.8	1101.8	1041.7	990.4	924.4	871.1	824.8	785.5	749.1	718.5	695.8
20°	1184.5	1123.5	1058.1	992.8	927.8	868.3	814.5	771.1	733.2	698.5	677.6
22.5°	1196.3	1127.2	1058.4	988.2	919.2	857.2	804.1	756.4	715.3	682.4	656.6
25°	1210.1	1127.8	1052.0	982.7	912.3	845.1	781.9	731.4	687.0	652.0	624.5
27.5°	1219.2	1122.4	1032.7	955.7	884.3	817.5	759.6	706.0	660.9	623.9	594.5
30°	1221.0	1118.0	1018.0	934.6	862.0	800.7	739.3	688.1	640.5	601.1	573.6
32.5°	1223.2	1107.4	998.2	909.6	835.3	774.5	718.9	669.9	621.0	582.3	554.3
35°	1213.7	1101.5	967.9	866.1	791.7	732.8	682.7	637.5	589.6	552.0	523.5
37.5°	1172.7	1078.0	936.5	817.1	739.3	684.9	643.9	604.6	560.6	520.1	493.2
40°	1131.4	1054.9	912.3	787.4	706.2	650.2	613.3	581.3	538.7	500.7	471.8
42.5°	1069.9	1023.4	889.2	756.2	668.5	614.6	583.6	553.5	516.1	477.6	450.4
45°	957.1	963.2	841.9	706.5	616.6	562.4	533.2	512.3	479.1	447.3	419.5
47.5°	815.5	872.9	786.4	653.6	561.8	511.0	485.4	467.1	444.8	413.6	388.2
50°	723.1	805.0	741.9	618.0	527.4	476.9	451.7	436.9	417.4	392.8	368.6
52.5°	637.9	725.9	688.2	578.4	490.2	443.9	419.2	407.1	391.6	368.5	346.7
55°	520.2	609.4	600.7	518.8	434.3	392.8	374.0	360.3	349.8	332.5	315.2
57.5°	420.8	505.3	509.8	452.3	385.0	344.0	327.9	317.5	310.7	297.7	281.6
60°	358.2	435.7	450.9	407.6	349.8	313.7	297.8	289.5	284.1	273.6	261.4
62.5°	306.1	372.2	389.4	358.2	316.0	282.2	269.8	261.8	258.2	249.1	238.3
65°	234.3	289.2	305.8	288.4	266.5	239.3	229.2	222.3	219.1	214.1	206.1
67.5°	176.2	216.2	234.4	222.2	214.2	197.1	190.7	187.0	184.1	180.7	174.0
70°	141.5	171.2	189.9	186.6	180.1	171.2	166.5	163.9	161.0	158.2	152.3
72.5°	113.8	134.1	151.7	153.4	148.1	146.3	142.1	141.1	139.3	135.9	132.7
75°	75.5	89.5	101.8	106.5	108.7	110.5	108.7	108.3	107.9	105.1	103.2
77.5°	49.5	57.0	64.8	72.8	76.2	78.6	79.2	80.5	79.6	78.0	77.2
80°	37.9	39.7	45.1	52.0	57.4	59.6	61.0	61.7	61.4	61.0	59.6
82.5°	27.5	29.0	31.6	36.4	40.9	44.6	45.4	45.2	46.1	46.3	45.1
85°	14.8	15.2	15.9	16.6	19.1	23.1	24.2	24.9	25.6	25.6	23.5
87.5°	6.2	5.7	5.9	5.7	6.4	6.5	8.1	9.3	9.8	8.9	9.0
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: P332411-830

CATALOG NUMBER: S123RDIW-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: P332411-830

CATALOG NUMBER: S123RDIW-S560D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	828.9	825.1	822.6	816.7	813.0	809.0	804.9	807.5	807.2	806.9	806.9
5°	801.1	792.8	785.2	775.4	769.3	761.8	755.9	755.3	756.7	751.6	748.8
7.5°	773.5	762.1	751.4	740.6	729.2	720.1	714.4	711.8	708.1	705.0	701.7
10°	754.1	740.8	730.3	717.0	704.7	693.9	687.0	682.3	679.8	677.2	672.6
12.5°	734.2	721.1	707.8	692.7	681.0	668.5	663.4	658.1	653.2	650.4	643.9
15°	705.0	688.1	674.0	658.1	645.2	632.8	625.7	615.2	613.7	610.1	603.6
17.5°	675.8	657.4	638.0	626.2	611.5	598.8	587.8	584.3	573.9	570.0	564.4
20°	652.7	635.7	620.9	605.4	584.1	572.2	563.5	558.8	550.5	545.4	541.9
22.5°	632.8	615.5	598.4	580.3	562.7	549.4	543.0	535.7	531.2	524.1	520.2
25°	604.4	585.6	565.0	545.4	532.8	522.7	512.6	506.1	499.6	496.3	489.2
27.5°	571.3	551.7	532.4	517.6	502.1	492.1	483.0	477.2	469.4	463.9	460.0
30°	553.1	530.0	513.4	500.0	480.1	470.8	463.9	456.7	450.9	445.2	441.1
32.5°	532.0	510.9	495.1	478.6	463.4	453.2	444.2	437.9	433.0	427.5	423.6
35°	498.9	481.3	465.0	448.4	437.2	426.7	416.2	410.9	406.1	401.1	397.5
37.5°	469.0	452.5	437.1	421.3	407.5	398.9	390.5	386.3	380.0	376.6	373.0
40°	450.5	434.3	417.7	402.6	388.0	381.6	374.0	367.9	362.1	359.6	355.6
42.5°	430.4	414.1	400.1	383.7	371.9	363.1	356.1	349.4	345.1	341.4	339.1
45°	400.4	385.9	372.2	356.0	344.8	337.1	329.2	323.1	319.1	316.6	312.6
47.5°	371.3	356.8	342.9	328.8	317.9	309.2	301.3	297.0	291.8	288.7	286.0
50°	350.2	337.1	322.3	309.3	298.6	289.9	283.4	278.0	273.2	269.3	267.5
52.5°	330.8	317.0	304.2	292.1	280.7	270.8	264.9	259.2	255.7	251.1	249.0
55°	298.9	285.6	274.8	262.8	251.7	243.4	236.1	231.0	227.4	222.3	219.5
57.5°	268.9	256.9	244.0	233.8	222.2	215.2	209.2	202.3	197.9	194.0	191.1
60°	248.7	235.0	223.9	214.1	204.0	194.9	189.5	184.1	179.5	175.4	173.0
62.5°	227.6	215.7	205.1	194.4	185.2	177.3	171.1	166.5	162.4	159.9	157.3
65°	195.3	186.0	175.1	166.5	157.8	152.0	146.9	143.0	140.1	138.3	136.1
67.5°	165.6	156.5	147.0	138.5	132.7	128.3	125.0	121.6	120.2	117.8	116.4
70°	146.2	136.9	128.6	122.1	116.2	113.0	110.8	108.3	106.9	104.0	102.5
72.5°	125.2	118.4	112.4	107.0	102.4	99.4	96.7	93.6	91.2	88.1	86.6
75°	98.6	92.5	87.8	84.1	81.2	77.3	73.3	70.0	69.0	67.9	67.5
77.5°	73.0	69.1	65.7	62.7	59.1	56.2	55.3	54.6	54.4	53.8	53.8
80°	57.4	53.8	51.3	47.7	45.5	45.5	45.5	44.8	45.1	45.1	45.1
82.5°	42.7	39.3	38.0	36.7	36.3	36.6	36.6	36.7	36.5	37.0	36.8
85°	22.1	22.3	23.1	22.7	23.1	23.1	23.8	23.5	23.8	23.1	23.8
87.5°	9.0	10.0	10.6	11.1	11.6	11.6	12.0	12.1	12.3	12.4	12.5
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: P332411-830

CATALOG NUMBER: S123RDIW-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: P332411-830

CATALOG NUMBER: S123RDIW-S560D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	803.4	803.1	803.4	802.3	803.4	803.1	803.4	806.9	806.9	807.2	807.5
5°	747.6	747.2	746.2	743.0	746.2	747.2	747.6	748.8	751.6	756.7	755.3
7.5°	698.9	698.4	695.2	695.3	695.2	698.4	698.9	701.7	705.0	708.1	711.8
10°	670.1	670.4	666.1	663.5	666.1	670.4	670.1	672.6	677.2	679.8	682.3
12.5°	642.1	640.4	636.9	634.0	636.9	640.4	642.1	643.9	650.4	653.2	658.1
15°	605.0	601.4	592.8	593.5	592.8	601.4	605.0	603.6	610.1	613.7	615.2
17.5°	561.5	558.8	558.7	553.6	558.7	558.8	561.5	564.4	570.0	573.9	584.3
20°	536.1	534.3	535.0	530.0	535.0	534.3	536.1	541.9	545.4	550.5	558.8
22.5°	516.1	514.3	511.3	509.7	511.3	514.3	516.1	520.2	524.1	531.2	535.7
25°	487.0	484.1	481.3	483.1	481.3	484.1	487.0	489.2	496.3	499.6	506.1
27.5°	457.8	455.6	452.8	452.4	452.8	455.6	457.8	460.0	463.9	469.4	477.2
30°	439.3	437.2	435.7	433.9	435.7	437.2	439.3	441.1	445.2	450.9	456.7
32.5°	420.6	420.2	417.5	417.2	417.5	420.2	420.6	423.6	427.5	433.0	437.9
35°	396.1	393.9	393.1	393.5	393.1	393.9	396.1	397.5	401.1	406.1	410.9
37.5°	372.7	369.9	368.5	367.2	368.5	369.9	372.7	373.0	376.6	380.0	386.3
40°	356.0	353.1	352.3	351.7	352.3	353.1	356.0	355.6	359.6	362.1	367.9
42.5°	337.1	336.0	335.6	334.3	335.6	336.0	337.1	339.1	341.4	345.1	349.4
45°	311.5	311.2	309.1	309.7	309.1	311.2	311.5	312.6	316.6	319.1	323.1
47.5°	284.6	283.0	281.4	282.5	281.4	283.0	284.6	286.0	288.7	291.8	297.0
50°	266.1	265.3	262.1	262.8	262.1	265.3	266.1	267.5	269.3	273.2	278.0
52.5°	247.6	244.9	243.6	243.2	243.6	244.9	247.6	249.0	251.1	255.7	259.2
55°	217.0	213.7	212.3	211.5	212.3	213.7	217.0	219.5	222.3	227.4	231.0
57.5°	186.9	186.1	184.9	185.7	184.9	186.1	186.9	191.1	194.0	197.9	202.3
60°	169.3	169.3	169.3	169.0	169.3	169.3	169.3	173.0	175.4	179.5	184.1
62.5°	155.7	154.9	154.6	155.0	154.6	154.9	155.7	157.3	159.9	162.4	166.5
65°	135.0	134.7	133.2	132.9	133.2	134.7	135.0	136.1	138.3	140.1	143.0
67.5°	115.5	114.1	113.8	113.2	113.8	114.1	115.5	116.4	117.8	120.2	121.6
70°	100.8	100.0	97.8	98.2	97.8	100.0	100.8	102.5	104.0	106.9	108.3
72.5°	84.8	84.1	83.7	83.1	83.7	84.1	84.8	86.6	88.1	91.2	93.6
75°	67.1	66.8	66.4	67.9	66.4	66.8	67.1	67.5	67.9	69.0	70.0
77.5°	53.8	53.8	54.0	53.4	54.0	53.8	53.8	53.8	53.8	54.4	54.6
80°	45.1	45.1	44.8	44.8	44.8	45.1	45.1	45.1	45.1	45.1	44.8
82.5°	36.2	36.5	36.7	36.1	36.7	36.5	36.2	36.8	37.0	36.5	36.7
85°	23.8	23.5	24.2	23.8	24.2	23.5	23.8	23.8	23.1	23.8	23.5
87.5°	13.1	12.6	12.6	12.9	12.6	12.6	13.1	12.5	12.4	12.3	12.1
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: P332411-830

CATALOG NUMBER: S123RDIW-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: P332411-830

CATALOG NUMBER: S123RDIW-S560D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	804.9	809.0	813.0	816.7	822.6	825.1	828.9	830.3	834.6	841.0	846.2
5°	755.9	761.8	769.3	775.4	785.2	792.8	801.1	809.0	818.4	831.8	843.7
7.5°	714.4	720.1	729.2	740.6	751.4	762.1	773.5	784.3	797.8	816.9	835.8
10°	687.0	693.9	704.7	717.0	730.3	740.8	754.1	767.9	784.5	806.5	829.2
12.5°	663.4	668.5	681.0	692.7	707.8	721.1	734.2	750.3	769.2	792.7	820.0
15°	625.7	632.8	645.2	658.1	674.0	688.1	705.0	724.5	743.0	771.8	805.0
17.5°	587.8	598.8	611.5	626.2	638.0	657.4	675.8	695.8	718.5	749.1	785.5
20°	563.5	572.2	584.1	605.4	620.9	635.7	652.7	677.6	698.5	733.2	771.1
22.5°	543.0	549.4	562.7	580.3	598.4	615.5	632.8	656.6	682.4	715.3	756.4
25°	512.6	522.7	532.8	545.4	565.0	585.6	604.4	624.5	652.0	687.0	731.4
27.5°	483.0	492.1	502.1	517.6	532.4	551.7	571.3	594.5	623.9	660.9	706.0
30°	463.9	470.8	480.1	500.0	513.4	530.0	553.1	573.6	601.1	640.5	688.1
32.5°	444.2	453.2	463.4	478.6	495.1	510.9	532.0	554.3	582.3	621.0	669.9
35°	416.2	426.7	437.2	448.4	465.0	481.3	498.9	523.5	552.0	589.6	637.5
37.5°	390.5	398.9	407.5	421.3	437.1	452.5	469.0	493.2	520.1	560.6	604.6
40°	374.0	381.6	388.0	402.6	417.7	434.3	450.5	471.8	500.7	538.7	581.3
42.5°	356.1	363.1	371.9	383.7	400.1	414.1	430.4	450.4	477.6	516.1	553.5
45°	329.2	337.1	344.8	356.0	372.2	385.9	400.4	419.5	447.3	479.1	512.3
47.5°	301.3	309.2	317.9	328.8	342.9	356.8	371.3	388.2	413.6	444.8	467.1
50°	283.4	289.9	298.6	309.3	322.3	337.1	350.2	368.6	392.8	417.4	436.9
52.5°	264.9	270.8	280.7	292.1	304.2	317.0	330.8	346.7	368.5	391.6	407.1
55°	236.1	243.4	251.7	262.8	274.8	285.6	298.9	315.2	332.5	349.8	360.3
57.5°	209.2	215.2	222.2	233.8	244.0	256.9	268.9	281.6	297.7	310.7	317.5
60°	189.5	194.9	204.0	214.1	223.9	235.0	248.7	261.4	273.6	284.1	289.5
62.5°	171.1	177.3	185.2	194.4	205.1	215.7	227.6	238.3	249.1	258.2	261.8
65°	146.9	152.0	157.8	166.5	175.1	186.0	195.3	206.1	214.1	219.1	222.3
67.5°	125.0	128.3	132.7	138.5	147.0	156.5	165.6	174.0	180.7	184.1	187.0
70°	110.8	113.0	116.2	122.1	128.6	136.9	146.2	152.3	158.2	161.0	163.9
72.5°	96.7	99.4	102.4	107.0	112.4	118.4	125.2	132.7	135.9	139.3	141.1
75°	73.3	77.3	81.2	84.1	87.8	92.5	98.6	103.2	105.1	107.9	108.3
77.5°	55.3	56.2	59.1	62.7	65.7	69.1	73.0	77.2	78.0	79.6	80.5
80°	45.5	45.5	45.5	47.7	51.3	53.8	57.4	59.6	61.0	61.4	61.7
82.5°	36.6	36.6	36.3	36.7	38.0	39.3	42.7	45.1	46.3	46.1	45.2
85°	23.8	23.1	23.1	22.7	23.1	22.3	22.1	23.5	25.6	25.6	24.9
87.5°	12.0	11.6	11.6	11.1	10.6	10.0	9.0	9.0	8.9	9.8	9.3
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: P332411-830

CATALOG NUMBER: S123RDIW-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: P332411-830

CATALOG NUMBER: S123RDIW-S560D460U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	847.9	851.1	855.2	861.2	865.8	869.9	870.7	871.9	874.8	879.7	883.4
5°	853.5	861.8	875.1	888.1	902.2	913.7	924.5	932.2	939.3	954.5	966.8
7.5°	851.7	870.2	891.1	914.5	938.0	960.9	982.1	1001.2	1020.1	1042.2	1067.3
10°	850.6	872.2	900.3	930.3	963.2	995.3	1026.3	1050.6	1078.7	1104.0	1136.1
12.5°	845.1	876.3	909.9	948.2	988.6	1025.7	1066.5	1099.9	1132.1	1168.7	1206.0
15°	837.9	875.8	918.4	969.3	1030.7	1075.4	1117.3	1175.4	1215.1	1254.9	1308.3
17.5°	824.8	871.1	924.4	990.4	1041.7	1101.8	1164.8	1210.8	1264.2	1320.2	1368.6
20°	814.5	868.3	927.8	992.8	1058.1	1123.5	1184.5	1239.3	1294.6	1359.2	1398.9
22.5°	804.1	857.2	919.2	988.2	1058.4	1127.2	1196.3	1260.7	1322.9	1388.1	1438.8
25°	781.9	845.1	912.3	982.7	1052.0	1127.8	1210.1	1282.0	1358.9	1426.0	1474.0
27.5°	759.6	817.5	884.3	955.7	1032.7	1122.4	1219.2	1300.9	1377.9	1426.0	1441.1
30°	739.3	800.7	862.0	934.6	1018.0	1118.0	1221.0	1314.5	1377.6	1398.5	1383.0
32.5°	718.9	774.5	835.3	909.6	998.2	1107.4	1223.2	1306.4	1344.4	1328.4	1265.2
35°	682.7	732.8	791.7	866.1	967.9	1101.5	1213.7	1270.1	1260.7	1170.4	1051.2
37.5°	643.9	684.9	739.3	817.1	936.5	1078.0	1172.7	1181.0	1099.8	961.2	823.6
40°	613.3	650.2	706.2	787.4	912.3	1054.9	1131.4	1097.9	971.9	817.7	702.9
42.5°	583.6	614.6	668.5	756.2	889.2	1023.4	1069.9	996.7	851.4	705.6	601.2
45°	533.2	562.4	616.6	706.5	841.9	963.2	957.1	830.0	684.5	567.1	480.5
47.5°	485.4	511.0	561.8	653.6	786.4	872.9	815.5	680.3	556.9	462.8	401.0
50°	451.7	476.9	527.4	618.0	741.9	805.0	723.1	592.8	479.8	401.8	352.7
52.5°	419.2	443.9	490.2	578.4	688.2	725.9	637.9	517.1	422.9	355.6	313.4
55°	374.0	392.8	434.3	518.8	600.7	609.4	520.2	419.1	341.5	294.5	265.7
57.5°	327.9	344.0	385.0	452.3	509.8	505.3	420.8	333.4	281.1	246.2	225.3
60°	297.8	313.7	349.8	407.6	450.9	435.7	358.2	287.8	243.0	217.4	200.8
62.5°	269.8	282.2	316.0	358.2	389.4	372.2	306.1	247.9	212.4	190.8	177.6
65°	229.2	239.3	266.5	288.4	305.8	289.2	234.3	193.9	168.2	153.1	144.0
67.5°	190.7	197.1	214.2	222.2	234.4	216.2	176.2	149.1	134.5	121.8	115.5
70°	166.5	171.2	180.1	186.6	189.9	171.2	141.5	121.7	109.4	100.4	96.4
72.5°	142.1	146.3	148.1	153.4	151.7	134.1	113.8	98.0	89.2	83.0	77.9
75°	108.7	110.5	108.7	106.5	101.8	89.5	75.5	67.5	61.0	58.2	56.4
77.5°	79.2	78.6	76.2	72.8	64.8	57.0	49.5	46.8	44.0	42.4	41.8
80°	61.0	59.6	57.4	52.0	45.1	39.7	37.9	36.1	35.1	33.2	32.9
82.5°	45.4	44.6	40.9	36.4	31.6	29.0	27.5	26.9	25.7	24.9	24.8
85°	24.2	23.1	19.1	16.6	15.9	15.2	14.8	14.8	13.4	13.0	13.0
87.5°	8.1	6.5	6.4	5.7	5.9	5.7	6.2	5.8	5.8	6.1	5.7
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: P332411-830

CATALOG NUMBER: S123RDIW-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°	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	889.6	889.6	890.7	895.0	895.6	899.4	898.1
5°	977.6	984.5	987.0	997.9	1004.4	1007.2	1001.5
7.5°	1085.3	1104.7	1113.9	1125.2	1135.2	1138.3	1130.4
10°	1163.9	1184.1	1201.1	1211.5	1221.3	1227.8	1236.1
12.5°	1239.8	1264.7	1280.8	1295.6	1305.6	1313.9	1315.2
15°	1322.4	1359.9	1388.5	1409.4	1419.8	1425.3	1423.1
17.5°	1405.6	1440.4	1460.8	1482.1	1496.6	1497.3	1497.8
20°	1452.7	1486.7	1510.1	1526.0	1542.3	1541.5	1545.1
22.5°	1484.2	1510.9	1528.9	1540.4	1546.0	1543.2	1544.0
25°	1498.9	1506.8	1503.6	1485.2	1480.5	1463.6	1466.4
27.5°	1423.0	1385.4	1346.6	1296.6	1257.2	1225.7	1227.3
30°	1319.8	1253.4	1177.6	1114.1	1057.1	1041.1	1007.2
32.5°	1175.7	1076.1	987.3	928.1	879.1	865.8	836.2
35°	931.4	834.6	743.3	688.4	666.8	636.5	636.1
37.5°	724.0	638.8	590.5	549.3	527.7	509.3	507.6
40°	609.1	542.6	506.1	476.5	455.2	441.5	438.3
42.5°	528.8	475.0	440.8	422.5	406.1	399.1	393.8
45°	431.8	395.7	371.8	355.2	347.6	342.2	339.3
47.5°	361.2	337.0	320.7	309.7	303.5	297.8	299.4
50°	322.7	302.9	291.0	280.5	275.8	271.8	272.2
52.5°	291.8	274.0	264.4	256.8	251.0	248.2	246.8
55°	247.7	236.5	226.7	221.3	218.0	214.1	213.0
57.5°	211.2	202.6	194.6	188.5	187.8	183.9	184.4
60°	187.0	179.7	173.2	170.0	167.5	164.3	165.3
62.5°	167.1	161.0	155.0	152.4	149.9	147.5	148.0
65°	136.9	131.0	127.4	126.0	124.9	123.9	122.7
67.5°	109.1	105.5	103.2	100.1	97.9	97.6	96.4
70°	91.7	87.0	83.0	79.1	77.9	77.6	77.9
72.5°	73.5	70.5	69.5	67.5	67.3	66.4	67.0
75°	55.2	54.2	53.4	52.0	52.0	52.0	52.0
77.5°	40.7	40.1	39.7	39.3	39.0	38.5	38.5
80°	31.8	31.4	30.7	30.7	30.3	30.7	30.3
82.5°	23.9	23.9	23.2	23.2	22.8	22.6	22.8
85°	12.3	11.9	12.6	11.9	12.3	11.6	12.3
87.5°	5.7	5.8	5.6	5.7	5.4	6.0	5.5
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)