

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: P332390-830

Luminaire Tested: **S123RDIW-S340D460U830-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332390-830
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: S123RDIW-S340D460U830-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 340 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 460 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3016.9 lumens
Efficiency: N/A
Efficacy: 131.2 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

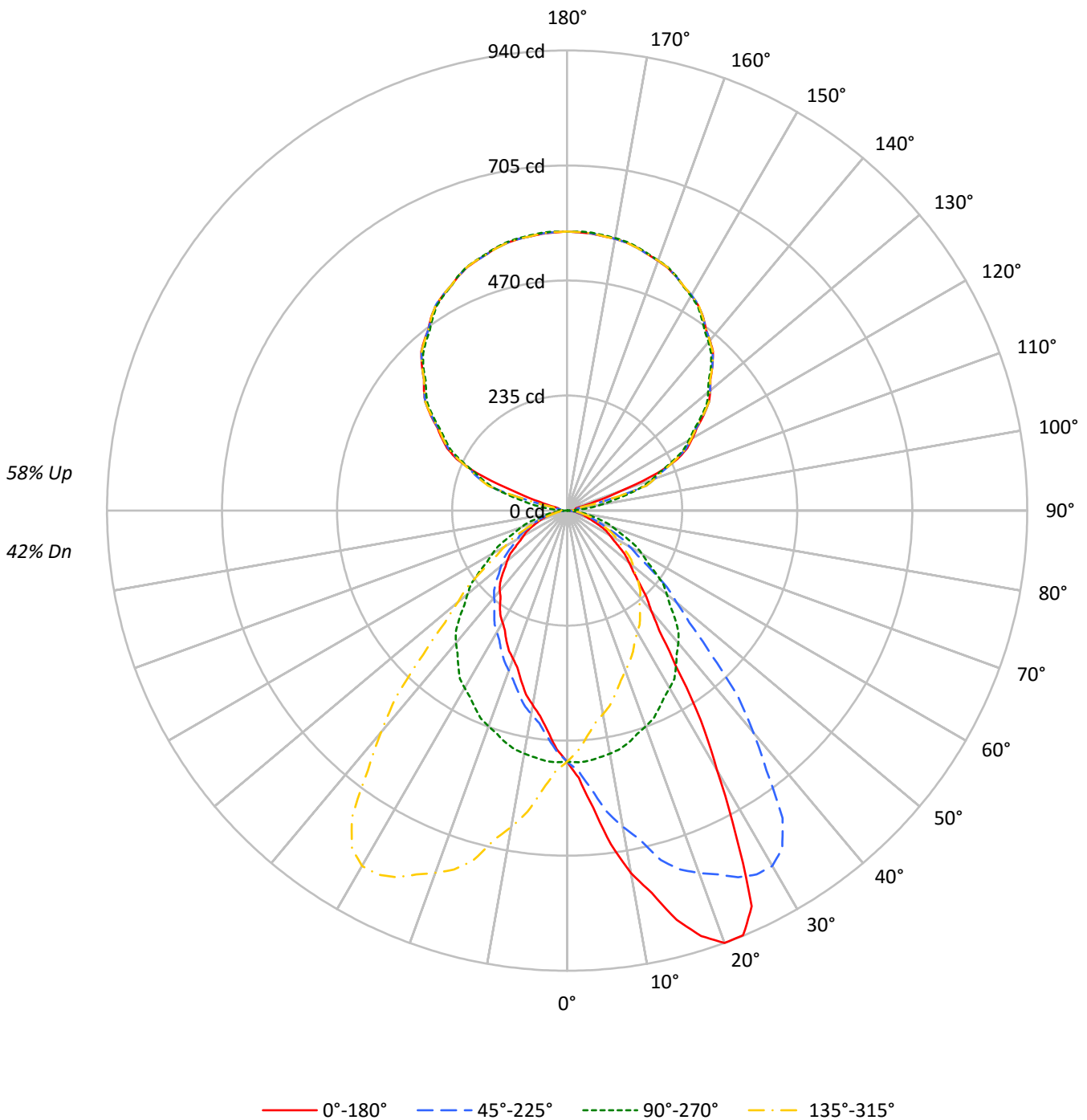
Input Watts (W): 23
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	50	30	10	50	30	10	50	30	10	0																			
RCR																																														
0	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49	42																												
1	97	92	89	86	88	85	82	79	70	68	66	57	55	54	44	43	42	37																												
2	88	81	76	71	81	75	70	65	62	58	55	50	48	46	39	38	36	32																												
3	81	72	65	59	74	66	60	55	55	51	47	45	42	39	35	33	32	27																												
4	74	64	56	51	68	59	52	47	49	44	40	40	37	34	32	30	28	24																												
5	68	57	49	44	62	53	46	41	44	39	35	36	33	30	29	26	24	21																												
6	63	51	44	38	57	47	41	36	40	35	31	33	29	26	26	24	22	19																												
7	58	46	39	33	53	43	36	31	36	31	27	30	26	23	24	21	19	17																												
8	54	42	35	30	49	39	32	28	33	28	24	28	24	21	22	20	17	15																												
9	50	39	31	26	46	36	29	25	30	25	22	25	22	19	21	18	16	14																												
10	47	35	28	24	43	33	27	22	28	23	20	23	20	17	19	16	14	12																												

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5521	5521	5521	5521
5°	6582	5545	4883	5545
10°	8218	5513	4411	5513
15°	9646	5457	4023	5457
20°	10766	5372	3692	5372
25°	10594	5284	3489	5284
30°	7615	5203	3280	5203
35°	5084	5096	3144	5096
40°	3746	4967	3006	4967
45°	3142	4743	2868	4743
50°	2773	4449	2678	4449
55°	2432	4112	2415	4112
60°	2166	3791	2211	3791
65°	1900	3446	2058	3446
70°	1492	3138	1882	3138
75°	1314	2741	1718	2741
80°	1147	2325	1686	2325
85°	914	1877	1791	1877



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.4	1.7
10°-20°	157.6	5.2
20°-30°	247.6	8.2
30°-40°	258.3	8.6
40°-50°	221.1	7.3
50°-60°	168.5	5.6
60°-70°	108.0	3.6
70°-80°	52.0	1.7
80°-90°	15.3	0.5
90°-100°	20.7	0.7
100°-110°	98.8	3.3
110°-120°	237.2	7.9
120°-130°	302.1	10.0
130°-140°	322.8	10.7
140°-150°	301.8	10.0
150°-160°	243.5	8.1
160°-170°	157.1	5.2
170°-180°	54.2	1.8
0°-30°	455.6	15.1
0°-40°	714.0	23.7
0°-60°	1103.5	36.6
0°-90°	1278.8	42.4
90°-120°	356.7	11.8
90°-150°	1283.4	42.5
90°-180°	1738.0	57.6
0°-180°	3016.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	513	513	513	513	513	
5°	609	513	452	513	609	63
15°	866	490	361	490	866	245
25°	892	445	294	445	892	383
35°	387	388	239	388	387	254
45°	206	312	188	312	206	162
55°	130	219	129	219	130	117
65°	75	135	81	135	75	73
75°	32	66	41	66	32	34
85°	7	15	14	15	7	9
90°	13	0	13	0	13	6
95°	16	26	16	26	16	13
105°	19	126	19	126	19	43
115°	249	237	249	237	249	230
125°	340	334	340	334	340	304
135°	420	415	420	415	420	324
145°	484	479	484	479	484	302
155°	527	528	527	528	527	243
165°	556	557	556	557	556	157
175°	568	570	568	570	568	54
180°	570	570	570	570	570	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9
2.5°	546.4	547.1	544.8	544.4	541.8	541.1	541.1	537.3	535.1	532.2	530.4
5°	609.2	612.7	610.9	607.0	600.4	598.8	594.7	588.1	580.6	571.4	567.0
7.5°	687.6	692.4	690.5	684.5	677.5	671.9	660.2	649.2	634.0	620.5	609.0
10°	751.9	746.9	742.9	737.0	730.6	720.3	707.9	691.1	671.6	656.1	639.0
12.5°	800.0	799.2	794.2	788.1	779.1	769.3	754.1	733.6	710.9	688.6	669.0
15°	865.6	867.0	863.7	857.3	844.5	827.2	804.4	795.8	763.3	739.1	715.0
17.5°	911.1	910.8	910.3	901.5	888.5	876.2	855.0	832.5	803.0	769.0	736.5
20°	939.9	937.6	938.1	928.2	918.6	904.3	883.6	850.9	826.8	787.5	753.8
22.5°	939.1	938.7	940.4	937.0	930.0	919.1	902.8	875.2	844.3	804.6	766.9
25°	892.0	890.2	900.5	903.4	914.6	916.6	911.7	896.6	867.4	826.5	779.8
27.5°	746.5	745.6	764.7	788.7	819.1	842.7	865.5	876.6	867.4	838.1	791.3
30°	612.7	633.3	643.0	677.7	716.3	762.4	802.9	841.2	850.7	837.9	799.6
32.5°	508.7	526.7	534.8	564.5	600.6	654.6	715.2	769.6	808.0	817.7	794.7
35°	386.9	387.1	405.6	418.8	452.1	507.7	566.6	639.4	711.9	766.9	772.5
37.5°	308.8	309.8	321.0	334.1	359.2	388.5	440.4	501.0	584.7	668.9	718.4
40°	266.6	268.5	276.9	289.8	307.8	330.1	370.4	427.5	497.4	591.2	667.8
42.5°	239.5	242.7	247.0	257.0	268.2	289.0	321.6	365.7	429.2	517.9	606.3
45°	206.4	208.2	211.5	216.1	226.2	240.6	262.6	292.3	345.0	416.3	504.8
47.5°	182.1	181.2	184.6	188.3	195.1	205.0	219.7	243.8	281.4	338.7	413.8
50°	165.6	165.3	167.8	170.6	177.0	184.3	196.3	214.5	244.4	291.8	360.6
52.5°	150.1	150.9	152.7	156.2	160.8	166.6	177.5	190.7	216.3	257.2	314.5
55°	129.6	130.3	132.6	134.6	137.9	143.8	150.6	161.6	179.2	207.7	255.0
57.5°	112.2	111.9	114.1	114.7	118.4	123.2	128.5	137.0	149.8	171.0	202.7
60°	100.6	99.9	101.9	103.4	105.4	109.3	113.8	122.1	132.2	147.8	175.0
62.5°	90.0	89.7	91.1	92.7	94.3	97.9	101.6	108.0	116.0	129.1	150.8
65°	74.6	75.3	76.0	76.6	77.5	79.7	83.2	87.7	93.1	102.4	117.9
67.5°	58.7	59.4	59.6	60.9	62.8	64.2	66.4	70.2	74.1	81.8	90.7
70°	47.4	47.2	47.4	48.1	50.5	52.9	55.8	58.6	61.1	66.5	74.0
72.5°	40.7	40.3	40.9	41.1	42.2	42.9	44.7	47.4	50.5	54.2	59.6
75°	31.6	31.6	31.6	31.6	32.5	32.9	33.6	34.2	35.3	37.1	41.1
77.5°	23.4	23.4	23.8	23.9	24.1	24.4	24.8	25.4	25.8	26.8	28.5
80°	18.5	18.7	18.5	18.7	18.7	19.1	19.3	20.0	20.2	21.3	22.0
82.5°	13.9	13.8	13.9	14.1	14.1	14.5	14.6	15.1	15.1	15.6	16.3
85°	7.4	7.1	7.4	7.3	7.7	7.3	7.4	7.9	7.9	8.1	9.0
87.5°	4.3	4.6	4.2	4.3	4.3	4.4	4.3	4.3	4.5	4.3	4.2
90°	12.7	12.5	12.3	12.2	12.0	11.7	11.3	10.9	10.6	10.2	9.0
92.5°	14.0	13.9	13.9	13.8	13.6	13.3	12.6	12.1	11.4	10.8	9.9
95°	16.1	16.1	16.1	16.1	16.1	15.7	15.1	14.4	13.8	13.1	12.1
97.5°	17.4	17.3	17.2	17.2	17.1	16.7	15.9	15.2	14.4	13.7	20.5
100°	17.8	17.7	17.6	17.5	17.4	17.0	16.2	15.5	14.7	13.9	28.7
102.5°	18.1	17.9	17.8	17.6	17.4	18.6	20.8	23.2	25.5	27.9	43.9
105°	18.7	18.5	18.3	18.1	17.9	26.1	42.8	59.4	76.1	92.7	101.2
107.5°	58.5	71.1	83.6	96.1	108.8	121.1	133.4	145.5	157.8	169.9	168.6
110°	116.5	129.9	143.4	156.8	170.3	178.5	181.6	184.7	187.8	191.0	189.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	199.8	202.6	205.5	208.3	211.1	212.5	212.4	212.4	212.4	212.4	211.3
115°	249.0	248.6	248.3	247.9	247.5	246.9	245.9	245.0	244.0	243.1	242.2
117.5°	276.6	276.5	276.4	276.4	276.3	275.9	275.1	274.4	273.6	272.9	272.5
120°	295.6	295.6	295.6	295.6	295.6	295.2	294.5	293.7	292.9	292.2	291.9
122.5°	314.2	314.1	314.1	314.0	313.9	313.6	313.1	312.5	312.0	311.5	311.1
125°	340.4	340.3	340.1	339.9	339.7	339.5	339.3	339.1	338.9	338.7	338.4
127.5°	365.7	365.9	366.1	366.3	366.5	366.4	366.1	365.8	365.5	365.2	364.8
130°	381.9	382.1	382.3	382.5	382.7	382.6	382.2	381.8	381.4	381.1	380.8
132.5°	396.9	397.1	397.4	397.7	397.9	397.8	397.5	397.1	396.7	396.3	396.1
135°	419.6	419.9	420.2	420.5	420.8	420.8	420.5	420.2	419.9	419.6	419.2
137.5°	441.1	441.3	441.5	441.7	441.9	441.7	441.2	440.8	440.4	439.9	439.7
140°	453.9	454.1	454.3	454.5	454.7	454.6	454.2	453.8	453.5	453.1	452.8
142.5°	465.8	466.1	466.4	466.6	466.8	466.8	466.6	466.3	465.9	465.6	465.3
145°	484.0	484.0	484.0	484.0	484.0	483.9	483.7	483.5	483.3	483.1	483.0
147.5°	497.6	498.0	498.4	498.9	499.3	499.5	499.3	499.1	498.9	498.7	498.5
150°	507.7	508.0	508.3	508.6	508.9	508.9	508.7	508.5	508.3	508.1	507.9
152.5°	515.9	516.3	516.7	517.2	517.6	517.6	517.3	517.0	516.6	516.3	516.1
155°	527.3	527.7	528.3	528.9	529.4	529.5	529.0	528.6	528.1	527.6	527.5
157.5°	536.8	537.5	538.3	538.9	539.7	539.8	539.2	538.7	538.1	537.5	537.6
160°	542.9	543.6	544.2	544.9	545.5	545.5	545.0	544.4	543.8	543.3	543.4
162.5°	548.7	549.2	549.8	550.4	551.0	550.9	550.4	549.7	549.0	548.4	548.5
165°	555.6	556.3	556.9	557.5	558.2	558.2	557.4	556.7	555.9	555.2	555.3
167.5°	560.6	561.4	562.1	562.8	563.5	563.5	562.8	562.1	561.4	560.6	560.6
170°	563.6	564.4	565.1	565.9	566.7	566.7	565.9	565.1	564.4	563.6	563.6
172.5°	565.3	566.2	566.9	567.8	568.6	568.6	567.9	567.1	566.4	565.6	565.6
175°	567.9	568.6	569.4	570.1	570.9	570.9	570.2	569.6	568.9	568.3	568.2
177.5°	568.6	569.4	570.1	570.9	571.7	571.7	571.1	570.5	569.9	569.3	569.2
180°	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9
2.5°	529.6	529.1	526.7	523.9	520.2	517.7	515.8	514.7	511.5	507.7	505.1
5°	562.4	555.8	548.7	540.2	532.3	524.1	519.2	513.2	506.0	497.9	492.1
7.5°	597.4	584.5	570.6	556.2	542.1	529.3	518.0	508.4	496.9	485.2	477.1
10°	624.3	605.4	585.9	565.9	547.7	530.6	517.4	504.4	490.6	477.2	467.0
12.5°	648.8	623.9	601.3	576.7	553.5	533.0	514.1	498.8	482.1	467.9	456.4
15°	679.7	654.1	627.0	589.6	558.6	532.7	509.6	489.7	469.5	451.9	440.7
17.5°	708.5	670.2	633.6	602.5	562.2	529.9	501.7	477.9	455.6	437.1	423.2
20°	720.5	683.3	643.7	603.9	564.4	528.1	495.4	469.0	446.0	424.9	412.2
22.5°	727.6	685.7	643.8	601.1	559.1	521.4	489.1	460.1	435.1	415.1	399.4
25°	736.0	686.0	639.9	597.8	554.9	514.1	475.6	444.9	417.9	396.6	379.9
27.5°	741.6	682.7	628.2	581.4	537.9	497.3	462.0	429.4	402.0	379.5	361.6
30°	742.6	680.0	619.3	568.5	524.4	487.0	449.7	418.6	389.6	365.6	348.9
32.5°	744.0	673.5	607.1	553.3	508.0	471.1	437.2	407.5	377.8	354.2	337.1
35°	738.3	670.0	588.7	526.8	481.5	445.7	415.3	387.8	358.6	335.7	318.4
37.5°	713.3	655.7	569.7	497.0	449.7	416.6	391.7	367.8	341.0	316.3	300.0
40°	688.2	641.7	554.9	478.9	429.5	395.5	373.1	353.5	327.6	304.5	287.0
42.5°	650.8	622.5	540.8	460.0	406.7	373.9	355.0	336.7	314.0	290.5	274.0
45°	582.1	585.9	512.1	429.7	375.0	342.1	324.3	311.6	291.4	272.1	255.1
47.5°	496.1	530.9	478.3	397.6	341.8	310.9	295.3	284.2	270.5	251.6	236.1
50°	439.9	489.7	451.3	376.0	320.8	290.1	274.8	265.7	253.8	238.9	224.2
52.5°	388.0	441.6	418.6	351.9	298.1	270.0	255.1	247.6	238.2	224.1	210.8
55°	316.4	370.7	365.4	315.6	264.2	238.9	227.5	219.1	212.8	202.3	191.7
57.5°	256.0	307.4	310.1	275.1	234.2	209.2	199.4	193.1	189.0	181.1	171.3
60°	217.8	265.0	274.3	247.9	212.8	190.9	181.2	176.1	172.9	166.5	159.0
62.5°	186.2	226.4	236.9	217.9	192.3	171.6	164.1	159.3	157.0	151.6	145.0
65°	142.5	175.9	186.0	175.5	162.0	145.6	139.4	135.3	133.3	130.3	125.4
67.5°	107.2	131.5	142.6	135.2	130.3	119.9	116.0	113.8	112.0	109.9	105.8
70°	86.1	104.1	115.5	113.6	109.6	104.1	101.2	99.7	97.9	96.1	92.7
72.5°	69.2	81.6	92.3	93.3	90.1	89.0	86.4	85.8	84.7	82.7	80.7
75°	45.9	54.5	61.9	64.8	66.1	67.2	66.1	65.9	65.7	63.9	62.8
77.5°	30.1	34.7	39.4	44.3	46.4	47.8	48.2	49.0	48.4	47.5	46.9
80°	23.1	24.1	27.4	31.6	34.9	36.2	37.1	37.5	37.3	37.1	36.2
82.5°	16.8	17.6	19.2	22.1	24.9	27.1	27.6	27.5	28.0	28.2	27.4
85°	9.0	9.2	9.7	10.1	11.6	14.0	14.7	15.2	15.6	15.6	14.2
87.5°	4.3	4.0	4.1	3.9	4.1	4.1	5.0	5.7	6.0	5.6	5.7
90°	7.7	6.5	5.3	4.1	3.2	2.3	1.3	0.4	1.3	2.3	3.2
92.5°	9.0	8.1	7.2	6.8	7.1	7.4	7.6	7.9	7.6	7.4	7.1
95°	11.0	10.0	9.0	10.4	14.2	18.1	22.0	25.8	22.0	18.1	14.2
97.5°	27.1	33.9	40.7	45.0	46.8	48.4	50.1	51.9	50.1	48.4	46.8
100°	43.4	58.1	72.7	79.1	77.2	75.3	73.4	71.5	73.4	75.3	77.2
102.5°	59.9	76.0	92.0	99.3	98.0	96.6	95.3	93.9	95.3	96.6	98.0
105°	109.7	118.1	126.6	130.4	129.3	128.3	127.2	126.2	127.2	128.3	129.3
107.5°	167.3	166.0	164.7	163.5	162.7	161.9	161.1	160.2	161.1	161.9	162.7
110°	188.9	187.8	186.8	186.0	185.2	184.5	183.7	182.9	183.7	184.5	185.2



TEST NUMBER: P332390-830

CATALOG NUMBER: S123RDIW-S340D460U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	210.3	209.2	208.2	207.4	206.6	205.9	205.3	204.6	205.3	205.9	206.6
115°	241.4	240.5	239.7	238.9	238.4	237.8	237.2	236.7	237.2	237.8	238.4
117.5°	272.0	271.5	271.2	270.6	269.8	269.2	268.5	267.8	268.5	269.2	269.8
120°	291.6	291.3	291.1	290.5	289.6	288.8	287.9	287.1	287.9	288.8	289.6
122.5°	310.8	310.5	310.1	309.5	308.9	308.1	307.5	306.8	307.5	308.1	308.9
125°	338.0	337.6	337.2	336.7	335.9	335.2	334.4	333.7	334.4	335.2	335.9
127.5°	364.3	363.8	363.4	362.8	362.0	361.3	360.5	359.8	360.5	361.3	362.0
130°	380.4	380.0	379.7	379.1	378.3	377.6	376.8	376.1	376.8	377.6	378.3
132.5°	395.8	395.5	395.1	394.6	393.9	393.1	392.4	391.6	392.4	393.1	393.9
135°	418.9	418.5	418.1	417.6	417.1	416.5	415.9	415.4	415.9	416.5	417.1
137.5°	439.5	439.3	439.0	438.6	437.9	437.2	436.5	435.7	436.5	437.2	437.9
140°	452.5	452.2	451.9	451.6	451.0	450.4	449.9	449.3	449.9	450.4	451.0
142.5°	465.1	464.8	464.5	464.1	463.5	463.0	462.4	461.8	462.4	463.0	463.5
145°	482.8	482.6	482.4	482.0	481.4	480.7	480.0	479.4	480.0	480.7	481.4
147.5°	498.3	498.1	497.9	497.6	497.2	496.7	496.3	495.9	496.3	496.7	497.2
150°	507.7	507.6	507.4	507.2	506.9	506.6	506.3	506.1	506.3	506.6	506.9
152.5°	516.0	515.9	515.9	515.8	515.6	515.5	515.3	515.2	515.3	515.5	515.6
155°	527.4	527.4	527.3	527.4	527.5	527.6	527.8	528.0	527.8	527.6	527.5
157.5°	537.7	537.8	537.9	538.0	538.0	538.0	538.0	538.1	538.0	538.0	538.0
160°	543.5	543.6	543.7	543.8	543.8	543.9	544.0	544.1	544.0	543.9	543.8
162.5°	548.6	548.7	548.7	548.9	549.2	549.4	549.7	549.9	549.7	549.4	549.2
165°	555.3	555.4	555.5	555.7	556.0	556.3	556.6	556.9	556.6	556.3	556.0
167.5°	560.6	560.6	560.6	560.8	561.2	561.6	561.9	562.3	561.9	561.6	561.2
170°	563.6	563.6	563.6	563.8	564.2	564.6	565.0	565.3	565.0	564.6	564.2
172.5°	565.5	565.4	565.3	565.5	566.0	566.5	566.9	567.3	566.9	566.5	566.0
175°	568.1	568.0	567.9	568.1	568.5	569.0	569.5	570.0	569.5	569.0	568.5
177.5°	569.1	569.1	569.0	569.1	569.5	569.9	570.2	570.6	570.2	569.9	569.5
180°	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0



TEST NUMBER: P332390-830

CATALOG NUMBER: S123RDIW-S340D460U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9
2.5°	504.2	501.9	500.3	496.8	494.6	492.1	489.7	491.2	491.0	490.9	490.9
5°	487.3	482.2	477.6	471.6	468.0	463.4	459.9	459.4	460.2	457.2	455.4
7.5°	470.5	463.6	457.0	450.5	443.6	438.0	434.6	432.9	430.7	428.9	426.9
10°	458.7	450.6	444.2	436.1	428.7	422.1	417.9	415.0	413.5	412.0	409.1
12.5°	446.6	438.7	430.6	421.3	414.2	406.6	403.5	400.3	397.4	395.6	391.7
15°	428.9	418.6	410.0	400.3	392.4	384.9	380.6	374.2	373.3	371.1	367.1
17.5°	411.0	399.9	388.0	380.9	372.0	364.2	357.5	355.4	349.1	346.8	343.3
20°	397.0	386.7	377.7	368.3	355.3	348.1	342.8	340.0	334.9	331.8	329.6
22.5°	384.9	374.4	364.0	353.0	342.3	334.1	330.3	325.8	323.1	318.8	316.4
25°	367.6	356.2	343.7	331.8	324.1	318.0	311.8	307.8	303.9	301.9	297.6
27.5°	347.5	335.5	323.9	314.8	305.4	299.4	293.8	290.3	285.5	282.2	279.7
30°	336.4	322.3	312.3	304.2	292.1	286.3	282.2	277.8	274.3	270.8	268.3
32.5°	323.6	310.8	301.2	291.2	281.9	275.6	270.2	266.4	263.3	260.0	257.6
35°	303.5	292.8	282.9	272.8	265.9	259.6	253.2	249.9	247.0	243.9	241.8
37.5°	285.3	275.2	265.8	256.3	247.8	242.6	237.5	235.0	231.1	229.0	226.9
40°	274.1	264.2	254.1	244.9	236.1	232.1	227.5	223.8	220.3	218.7	216.3
42.5°	261.7	251.8	243.4	233.5	226.2	220.8	216.6	212.5	209.9	207.6	206.3
45°	243.6	234.8	226.4	216.5	209.7	205.1	200.3	196.5	194.2	192.6	190.2
47.5°	225.8	217.1	208.6	200.0	193.4	188.1	183.2	180.7	177.5	175.6	174.0
50°	213.0	205.1	196.1	188.2	181.6	176.3	172.4	169.1	166.3	163.8	162.7
52.5°	201.2	192.8	185.0	177.7	170.7	164.8	161.2	157.7	155.5	152.8	151.5
55°	181.8	173.7	167.1	159.9	153.1	148.0	143.6	140.5	138.4	135.3	133.6
57.5°	163.6	156.3	148.5	142.1	135.2	130.9	127.2	123.1	120.4	118.0	116.2
60°	151.3	143.0	136.1	130.3	124.0	118.6	115.3	112.0	109.1	106.7	105.2
62.5°	138.5	131.2	124.7	118.3	112.6	107.8	104.1	101.3	98.8	97.3	95.7
65°	118.8	113.1	106.5	101.2	96.0	92.5	89.4	87.0	85.2	84.1	82.8
67.5°	100.7	95.2	89.4	84.3	80.7	78.0	76.1	74.0	73.0	71.6	70.8
70°	89.0	83.2	78.1	74.2	70.7	68.7	67.4	65.9	65.0	63.2	62.4
72.5°	76.2	72.0	68.3	65.1	62.3	60.5	58.8	56.9	55.5	53.5	52.7
75°	59.9	56.2	53.3	51.2	49.4	47.0	44.6	42.6	41.9	41.3	41.1
77.5°	44.4	42.0	40.0	38.1	35.9	34.2	33.6	33.2	33.1	32.7	32.7
80°	34.9	32.7	31.2	29.0	27.7	27.7	27.7	27.2	27.4	27.4	27.4
82.5°	25.9	23.9	23.1	22.3	22.1	22.2	22.2	22.3	22.1	22.5	22.3
85°	13.4	13.6	14.0	13.9	14.0	14.0	14.5	14.2	14.5	14.0	14.5
87.5°	5.7	6.5	6.9	7.4	7.7	7.8	8.1	8.2	8.4	8.5	8.6
90°	4.1	5.3	6.5	7.7	9.0	10.2	10.6	10.9	11.3	11.7	12.0
92.5°	6.8	7.2	8.1	9.0	9.9	10.8	11.4	12.1	12.6	13.3	13.6
95°	10.4	9.0	10.0	11.0	12.1	13.1	13.8	14.4	15.1	15.7	16.1
97.5°	45.0	40.7	33.9	27.1	20.5	13.7	14.4	15.2	15.9	16.7	17.1
100°	79.1	72.7	58.1	43.4	28.7	13.9	14.7	15.5	16.2	17.0	17.4
102.5°	99.3	92.0	76.0	59.9	43.9	27.9	25.5	23.2	20.8	18.6	17.4
105°	130.4	126.6	118.1	109.7	101.2	92.7	76.1	59.4	42.8	26.1	17.9
107.5°	163.5	164.7	166.0	167.3	168.6	169.9	157.8	145.5	133.4	121.1	108.8
110°	186.0	186.8	187.8	188.9	189.9	191.0	187.8	184.7	181.6	178.5	170.3



TEST NUMBER: P332390-830

CATALOG NUMBER: S123RDIW-S340D460U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	207.4	208.2	209.2	210.3	211.3	212.4	212.4	212.4	212.4	212.5	211.1
115°	238.9	239.7	240.5	241.4	242.2	243.1	244.0	245.0	245.9	246.9	247.5
117.5°	270.6	271.2	271.5	272.0	272.5	272.9	273.6	274.4	275.1	275.9	276.3
120°	290.5	291.1	291.3	291.6	291.9	292.2	292.9	293.7	294.5	295.2	295.6
122.5°	309.5	310.1	310.5	310.8	311.1	311.5	312.0	312.5	313.1	313.6	313.9
125°	336.7	337.2	337.6	338.0	338.4	338.7	338.9	339.1	339.3	339.5	339.7
127.5°	362.8	363.4	363.8	364.3	364.8	365.2	365.5	365.8	366.1	366.4	366.5
130°	379.1	379.7	380.0	380.4	380.8	381.1	381.4	381.8	382.2	382.6	382.7
132.5°	394.6	395.1	395.5	395.8	396.1	396.3	396.7	397.1	397.5	397.8	397.9
135°	417.6	418.1	418.5	418.9	419.2	419.6	419.9	420.2	420.5	420.8	420.8
137.5°	438.6	439.0	439.3	439.5	439.7	439.9	440.4	440.8	441.2	441.7	441.9
140°	451.6	451.9	452.2	452.5	452.8	453.1	453.5	453.8	454.2	454.6	454.7
142.5°	464.1	464.5	464.8	465.1	465.3	465.6	465.9	466.3	466.6	466.8	466.8
145°	482.0	482.4	482.6	482.8	483.0	483.1	483.3	483.5	483.7	483.9	484.0
147.5°	497.6	497.9	498.1	498.3	498.5	498.7	498.9	499.1	499.3	499.5	499.3
150°	507.2	507.4	507.6	507.7	507.9	508.1	508.3	508.5	508.7	508.9	508.9
152.5°	515.8	515.9	515.9	516.0	516.1	516.3	516.6	517.0	517.3	517.6	517.6
155°	527.4	527.3	527.4	527.4	527.5	527.6	528.1	528.6	529.0	529.5	529.4
157.5°	538.0	537.9	537.8	537.7	537.6	537.5	538.1	538.7	539.2	539.8	539.7
160°	543.8	543.7	543.6	543.5	543.4	543.3	543.8	544.4	545.0	545.5	545.5
162.5°	548.9	548.7	548.7	548.6	548.5	548.4	549.0	549.7	550.4	550.9	551.0
165°	555.7	555.5	555.4	555.3	555.3	555.2	555.9	556.7	557.4	558.2	558.2
167.5°	560.8	560.6	560.6	560.6	560.6	560.6	561.4	562.1	562.8	563.5	563.5
170°	563.8	563.6	563.6	563.6	563.6	563.6	564.4	565.1	565.9	566.7	566.7
172.5°	565.5	565.3	565.4	565.5	565.6	565.6	566.4	567.1	567.9	568.6	568.6
175°	568.1	567.9	568.0	568.1	568.2	568.3	568.9	569.6	570.2	570.9	570.9
177.5°	569.1	569.0	569.1	569.1	569.2	569.3	569.9	570.5	571.1	571.7	571.7
180°	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0



TEST NUMBER: P332390-830

CATALOG NUMBER: S123RDIW-S340D460U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9
2.5°	488.7	488.5	488.7	488.0	488.7	488.5	488.7	490.9	490.9	491.0	491.2
5°	454.8	454.6	453.9	451.9	453.9	454.6	454.8	455.4	457.2	460.2	459.4
7.5°	425.1	424.8	422.9	422.9	422.9	424.8	425.1	426.9	428.9	430.7	432.9
10°	407.6	407.7	405.1	403.6	405.1	407.7	407.6	409.1	412.0	413.5	415.0
12.5°	390.5	389.6	387.4	385.7	387.4	389.6	390.5	391.7	395.6	397.4	400.3
15°	368.1	365.8	360.6	361.0	360.6	365.8	368.1	367.1	371.1	373.3	374.2
17.5°	341.6	340.0	339.9	336.8	339.9	340.0	341.6	343.3	346.8	349.1	355.4
20°	326.1	325.0	325.5	322.3	325.5	325.0	326.1	329.6	331.8	334.9	340.0
22.5°	314.0	312.8	311.0	310.1	311.0	312.8	314.0	316.4	318.8	323.1	325.8
25°	296.2	294.5	292.8	293.8	292.8	294.5	296.2	297.6	301.9	303.9	307.8
27.5°	278.5	277.2	275.4	275.2	275.4	277.2	278.5	279.7	282.2	285.5	290.3
30°	267.2	265.9	265.0	263.9	265.0	265.9	267.2	268.3	270.8	274.3	277.8
32.5°	255.8	255.5	254.0	253.7	254.0	255.5	255.8	257.6	260.0	263.3	266.4
35°	240.9	239.6	239.1	239.3	239.1	239.6	240.9	241.8	243.9	247.0	249.9
37.5°	226.7	225.0	224.1	223.4	224.1	225.0	226.7	226.9	229.0	231.1	235.0
40°	216.5	214.8	214.3	213.9	214.3	214.8	216.5	216.3	218.7	220.3	223.8
42.5°	205.1	204.4	204.2	203.3	204.2	204.4	205.1	206.3	207.6	209.9	212.5
45°	189.5	189.3	187.9	188.4	187.9	189.3	189.5	190.2	192.6	194.2	196.5
47.5°	173.1	172.1	171.2	171.8	171.2	172.1	173.1	174.0	175.6	177.5	180.7
50°	161.8	161.4	159.4	159.9	159.4	161.4	161.8	162.7	163.8	166.3	169.1
52.5°	150.6	148.9	148.2	147.9	148.2	148.9	150.6	151.5	152.8	155.5	157.7
55°	132.0	130.0	129.1	128.7	129.1	130.0	132.0	133.6	135.3	138.4	140.5
57.5°	113.7	113.2	112.4	112.9	112.4	113.2	113.7	116.2	118.0	120.4	123.1
60°	103.0	103.0	103.0	102.7	103.0	103.0	103.0	105.2	106.7	109.1	112.0
62.5°	94.7	94.2	94.1	94.3	94.1	94.2	94.7	95.7	97.3	98.8	101.3
65°	82.1	81.9	81.1	80.8	81.1	81.9	82.1	82.8	84.1	85.2	87.0
67.5°	70.2	69.5	69.2	68.9	69.2	69.5	70.2	70.8	71.6	73.0	74.0
70°	61.3	60.8	59.5	59.8	59.5	60.8	61.3	62.4	63.2	65.0	65.9
72.5°	51.7	51.2	50.9	50.6	50.9	51.2	51.7	52.7	53.5	55.5	56.9
75°	40.8	40.6	40.4	41.3	40.4	40.6	40.8	41.1	41.3	41.9	42.6
77.5°	32.7	32.7	32.9	32.5	32.9	32.7	32.7	32.7	32.7	33.1	33.2
80°	27.4	27.4	27.2	27.2	27.2	27.4	27.4	27.4	27.4	27.4	27.2
82.5°	22.0	22.1	22.3	22.0	22.3	22.1	22.0	22.3	22.5	22.1	22.3
85°	14.5	14.2	14.7	14.5	14.7	14.2	14.5	14.5	14.0	14.5	14.2
87.5°	9.0	8.6	8.7	8.9	8.7	8.6	9.0	8.6	8.5	8.4	8.2
90°	12.2	12.3	12.5	12.7	12.5	12.3	12.2	12.0	11.7	11.3	10.9
92.5°	13.8	13.9	13.9	14.0	13.9	13.9	13.8	13.6	13.3	12.6	12.1
95°	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	15.7	15.1	14.4
97.5°	17.2	17.2	17.3	17.4	17.3	17.2	17.2	17.1	16.7	15.9	15.2
100°	17.5	17.6	17.7	17.8	17.7	17.6	17.5	17.4	17.0	16.2	15.5
102.5°	17.6	17.8	17.9	18.1	17.9	17.8	17.6	17.4	18.6	20.8	23.2
105°	18.1	18.3	18.5	18.7	18.5	18.3	18.1	17.9	26.1	42.8	59.4
107.5°	96.1	83.6	71.1	58.5	71.1	83.6	96.1	108.8	121.1	133.4	145.5
110°	156.8	143.4	129.9	116.5	129.9	143.4	156.8	170.3	178.5	181.6	184.7



TEST NUMBER: P332390-830

CATALOG NUMBER: S123RDIW-S340D460U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	208.3	205.5	202.6	199.8	202.6	205.5	208.3	211.1	212.5	212.4	212.4
115°	247.9	248.3	248.6	249.0	248.6	248.3	247.9	247.5	246.9	245.9	245.0
117.5°	276.4	276.4	276.5	276.6	276.5	276.4	276.4	276.3	275.9	275.1	274.4
120°	295.6	295.6	295.6	295.6	295.6	295.6	295.6	295.6	295.2	294.5	293.7
122.5°	314.0	314.1	314.1	314.2	314.1	314.1	314.0	313.9	313.6	313.1	312.5
125°	339.9	340.1	340.3	340.4	340.3	340.1	339.9	339.7	339.5	339.3	339.1
127.5°	366.3	366.1	365.9	365.7	365.9	366.1	366.3	366.5	366.4	366.1	365.8
130°	382.5	382.3	382.1	381.9	382.1	382.3	382.5	382.7	382.6	382.2	381.8
132.5°	397.7	397.4	397.1	396.9	397.1	397.4	397.7	397.9	397.8	397.5	397.1
135°	420.5	420.2	419.9	419.6	419.9	420.2	420.5	420.8	420.8	420.5	420.2
137.5°	441.7	441.5	441.3	441.1	441.3	441.5	441.7	441.9	441.7	441.2	440.8
140°	454.5	454.3	454.1	453.9	454.1	454.3	454.5	454.7	454.6	454.2	453.8
142.5°	466.6	466.4	466.1	465.8	466.1	466.4	466.6	466.8	466.8	466.6	466.3
145°	484.0	484.0	484.0	484.0	484.0	484.0	484.0	484.0	483.9	483.7	483.5
147.5°	498.9	498.4	498.0	497.6	498.0	498.4	498.9	499.3	499.5	499.3	499.1
150°	508.6	508.3	508.0	507.7	508.0	508.3	508.6	508.9	508.9	508.7	508.5
152.5°	517.2	516.7	516.3	515.9	516.3	516.7	517.2	517.6	517.6	517.3	517.0
155°	528.9	528.3	527.7	527.3	527.7	528.3	528.9	529.4	529.5	529.0	528.6
157.5°	538.9	538.3	537.5	536.8	537.5	538.3	538.9	539.7	539.8	539.2	538.7
160°	544.9	544.2	543.6	542.9	543.6	544.2	544.9	545.5	545.5	545.0	544.4
162.5°	550.4	549.8	549.2	548.7	549.2	549.8	550.4	551.0	550.9	550.4	549.7
165°	557.5	556.9	556.3	555.6	556.3	556.9	557.5	558.2	558.2	557.4	556.7
167.5°	562.8	562.1	561.4	560.6	561.4	562.1	562.8	563.5	563.5	562.8	562.1
170°	565.9	565.1	564.4	563.6	564.4	565.1	565.9	566.7	566.7	565.9	565.1
172.5°	567.8	566.9	566.2	565.3	566.2	566.9	567.8	568.6	568.6	567.9	567.1
175°	570.1	569.4	568.6	567.9	568.6	569.4	570.1	570.9	570.9	570.2	569.6
177.5°	570.9	570.1	569.4	568.6	569.4	570.1	570.9	571.7	571.7	571.1	570.5
180°	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0



TEST NUMBER: P332390-830

CATALOG NUMBER: S123RDIW-S340D460U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9
2.5°	489.7	492.1	494.6	496.8	500.3	501.9	504.2	505.1	507.7	511.5	514.7
5°	459.9	463.4	468.0	471.6	477.6	482.2	487.3	492.1	497.9	506.0	513.2
7.5°	434.6	438.0	443.6	450.5	457.0	463.6	470.5	477.1	485.2	496.9	508.4
10°	417.9	422.1	428.7	436.1	444.2	450.6	458.7	467.0	477.2	490.6	504.4
12.5°	403.5	406.6	414.2	421.3	430.6	438.7	446.6	456.4	467.9	482.1	498.8
15°	380.6	384.9	392.4	400.3	410.0	418.6	428.9	440.7	451.9	469.5	489.7
17.5°	357.5	364.2	372.0	380.9	388.0	399.9	411.0	423.2	437.1	455.6	477.9
20°	342.8	348.1	355.3	368.3	377.7	386.7	397.0	412.2	424.9	446.0	469.0
22.5°	330.3	334.1	342.3	353.0	364.0	374.4	384.9	399.4	415.1	435.1	460.1
25°	311.8	318.0	324.1	331.8	343.7	356.2	367.6	379.9	396.6	417.9	444.9
27.5°	293.8	299.4	305.4	314.8	323.9	335.5	347.5	361.6	379.5	402.0	429.4
30°	282.2	286.3	292.1	304.2	312.3	322.3	336.4	348.9	365.6	389.6	418.6
32.5°	270.2	275.6	281.9	291.2	301.2	310.8	323.6	337.1	354.2	377.8	407.5
35°	253.2	259.6	265.9	272.8	282.9	292.8	303.5	318.4	335.7	358.6	387.8
37.5°	237.5	242.6	247.8	256.3	265.8	275.2	285.3	300.0	316.3	341.0	367.8
40°	227.5	232.1	236.1	244.9	254.1	264.2	274.1	287.0	304.5	327.6	353.5
42.5°	216.6	220.8	226.2	233.5	243.4	251.8	261.7	274.0	290.5	314.0	336.7
45°	200.3	205.1	209.7	216.5	226.4	234.8	243.6	255.1	272.1	291.4	311.6
47.5°	183.2	188.1	193.4	200.0	208.6	217.1	225.8	236.1	251.6	270.5	284.2
50°	172.4	176.3	181.6	188.2	196.1	205.1	213.0	224.2	238.9	253.8	265.7
52.5°	161.2	164.8	170.7	177.7	185.0	192.8	201.2	210.8	224.1	238.2	247.6
55°	143.6	148.0	153.1	159.9	167.1	173.7	181.8	191.7	202.3	212.8	219.1
57.5°	127.2	130.9	135.2	142.1	148.5	156.3	163.6	171.3	181.1	189.0	193.1
60°	115.3	118.6	124.0	130.3	136.1	143.0	151.3	159.0	166.5	172.9	176.1
62.5°	104.1	107.8	112.6	118.3	124.7	131.2	138.5	145.0	151.6	157.0	159.3
65°	89.4	92.5	96.0	101.2	106.5	113.1	118.8	125.4	130.3	133.3	135.3
67.5°	76.1	78.0	80.7	84.3	89.4	95.2	100.7	105.8	109.9	112.0	113.8
70°	67.4	68.7	70.7	74.2	78.1	83.2	89.0	92.7	96.1	97.9	99.7
72.5°	58.8	60.5	62.3	65.1	68.3	72.0	76.2	80.7	82.7	84.7	85.8
75°	44.6	47.0	49.4	51.2	53.3	56.2	59.9	62.8	63.9	65.7	65.9
77.5°	33.6	34.2	35.9	38.1	40.0	42.0	44.4	46.9	47.5	48.4	49.0
80°	27.7	27.7	27.7	29.0	31.2	32.7	34.9	36.2	37.1	37.3	37.5
82.5°	22.2	22.2	22.1	22.3	23.1	23.9	25.9	27.4	28.2	28.0	27.5
85°	14.5	14.0	14.0	13.9	14.0	13.6	13.4	14.2	15.6	15.6	15.2
87.5°	8.1	7.8	7.7	7.4	6.9	6.5	5.7	5.7	5.6	6.0	5.7
90°	10.6	10.2	9.0	7.7	6.5	5.3	4.1	3.2	2.3	1.3	0.4
92.5°	11.4	10.8	9.9	9.0	8.1	7.2	6.8	7.1	7.4	7.6	7.9
95°	13.8	13.1	12.1	11.0	10.0	9.0	10.4	14.2	18.1	22.0	25.8
97.5°	14.4	13.7	20.5	27.1	33.9	40.7	45.0	46.8	48.4	50.1	51.9
100°	14.7	13.9	28.7	43.4	58.1	72.7	79.1	77.2	75.3	73.4	71.5
102.5°	25.5	27.9	43.9	59.9	76.0	92.0	99.3	98.0	96.6	95.3	93.9
105°	76.1	92.7	101.2	109.7	118.1	126.6	130.4	129.3	128.3	127.2	126.2
107.5°	157.8	169.9	168.6	167.3	166.0	164.7	163.5	162.7	161.9	161.1	160.2
110°	187.8	191.0	189.9	188.9	187.8	186.8	186.0	185.2	184.5	183.7	182.9



TEST NUMBER: P332390-830

CATALOG NUMBER: S123RDIW-S340D460U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	212.4	212.4	211.3	210.3	209.2	208.2	207.4	206.6	205.9	205.3	204.6
115°	244.0	243.1	242.2	241.4	240.5	239.7	238.9	238.4	237.8	237.2	236.7
117.5°	273.6	272.9	272.5	272.0	271.5	271.2	270.6	269.8	269.2	268.5	267.8
120°	292.9	292.2	291.9	291.6	291.3	291.1	290.5	289.6	288.8	287.9	287.1
122.5°	312.0	311.5	311.1	310.8	310.5	310.1	309.5	308.9	308.1	307.5	306.8
125°	338.9	338.7	338.4	338.0	337.6	337.2	336.7	335.9	335.2	334.4	333.7
127.5°	365.5	365.2	364.8	364.3	363.8	363.4	362.8	362.0	361.3	360.5	359.8
130°	381.4	381.1	380.8	380.4	380.0	379.7	379.1	378.3	377.6	376.8	376.1
132.5°	396.7	396.3	396.1	395.8	395.5	395.1	394.6	393.9	393.1	392.4	391.6
135°	419.9	419.6	419.2	418.9	418.5	418.1	417.6	417.1	416.5	415.9	415.4
137.5°	440.4	439.9	439.7	439.5	439.3	439.0	438.6	437.9	437.2	436.5	435.7
140°	453.5	453.1	452.8	452.5	452.2	451.9	451.6	451.0	450.4	449.9	449.3
142.5°	465.9	465.6	465.3	465.1	464.8	464.5	464.1	463.5	463.0	462.4	461.8
145°	483.3	483.1	483.0	482.8	482.6	482.4	482.0	481.4	480.7	480.0	479.4
147.5°	498.9	498.7	498.5	498.3	498.1	497.9	497.6	497.2	496.7	496.3	495.9
150°	508.3	508.1	507.9	507.7	507.6	507.4	507.2	506.9	506.6	506.3	506.1
152.5°	516.6	516.3	516.1	516.0	515.9	515.9	515.8	515.6	515.5	515.3	515.2
155°	528.1	527.6	527.5	527.4	527.4	527.3	527.4	527.5	527.6	527.8	528.0
157.5°	538.1	537.5	537.6	537.7	537.8	537.9	538.0	538.0	538.0	538.0	538.1
160°	543.8	543.3	543.4	543.5	543.6	543.7	543.8	543.8	543.9	544.0	544.1
162.5°	549.0	548.4	548.5	548.6	548.7	548.7	548.9	549.2	549.4	549.7	549.9
165°	555.9	555.2	555.3	555.3	555.4	555.5	555.7	556.0	556.3	556.6	556.9
167.5°	561.4	560.6	560.6	560.6	560.6	560.6	560.8	561.2	561.6	561.9	562.3
170°	564.4	563.6	563.6	563.6	563.6	563.6	563.8	564.2	564.6	565.0	565.3
172.5°	566.4	565.6	565.6	565.5	565.4	565.3	565.5	566.0	566.5	566.9	567.3
175°	568.9	568.3	568.2	568.1	568.0	567.9	568.1	568.5	569.0	569.5	570.0
177.5°	569.9	569.3	569.2	569.1	569.1	569.0	569.1	569.5	569.9	570.2	570.6
180°	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0



TEST NUMBER: P332390-830

CATALOG NUMBER: S123RDIW-S340D460U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9	512.9
2.5°	515.8	517.7	520.2	523.9	526.7	529.1	529.6	530.4	532.2	535.1	537.3
5°	519.2	524.1	532.3	540.2	548.7	555.8	562.4	567.0	571.4	580.6	588.1
7.5°	518.0	529.3	542.1	556.2	570.6	584.5	597.4	609.0	620.5	634.0	649.2
10°	517.4	530.6	547.7	565.9	585.9	605.4	624.3	639.0	656.1	671.6	691.1
12.5°	514.1	533.0	553.5	576.7	601.3	623.9	648.8	669.0	688.6	710.9	733.6
15°	509.6	532.7	558.6	589.6	627.0	654.1	679.7	715.0	739.1	763.3	795.8
17.5°	501.7	529.9	562.2	602.5	633.6	670.2	708.5	736.5	769.0	803.0	832.5
20°	495.4	528.1	564.4	603.9	643.7	683.3	720.5	753.8	787.5	826.8	850.9
22.5°	489.1	521.4	559.1	601.1	643.8	685.7	727.6	766.9	804.6	844.3	875.2
25°	475.6	514.1	554.9	597.8	639.9	686.0	736.0	779.8	826.5	867.4	896.6
27.5°	462.0	497.3	537.9	581.4	628.2	682.7	741.6	791.3	838.1	867.4	876.6
30°	449.7	487.0	524.4	568.5	619.3	680.0	742.6	799.6	837.9	850.7	841.2
32.5°	437.2	471.1	508.0	553.3	607.1	673.5	744.0	794.7	817.7	808.0	769.6
35°	415.3	445.7	481.5	526.8	588.7	670.0	738.3	772.5	766.9	711.9	639.4
37.5°	391.7	416.6	449.7	497.0	569.7	655.7	713.3	718.4	668.9	584.7	501.0
40°	373.1	395.5	429.5	478.9	554.9	641.7	688.2	667.8	591.2	497.4	427.5
42.5°	355.0	373.9	406.7	460.0	540.8	622.5	650.8	606.3	517.9	429.2	365.7
45°	324.3	342.1	375.0	429.7	512.1	585.9	582.1	504.8	416.3	345.0	292.3
47.5°	295.3	310.9	341.8	397.6	478.3	530.9	496.1	413.8	338.7	281.4	243.8
50°	274.8	290.1	320.8	376.0	451.3	489.7	439.9	360.6	291.8	244.4	214.5
52.5°	255.1	270.0	298.1	351.9	418.6	441.6	388.0	314.5	257.2	216.3	190.7
55°	227.5	238.9	264.2	315.6	365.4	370.7	316.4	255.0	207.7	179.2	161.6
57.5°	199.4	209.2	234.2	275.1	310.1	307.4	256.0	202.7	171.0	149.8	137.0
60°	181.2	190.9	212.8	247.9	274.3	265.0	217.8	175.0	147.8	132.2	122.1
62.5°	164.1	171.6	192.3	217.9	236.9	226.4	186.2	150.8	129.1	116.0	108.0
65°	139.4	145.6	162.0	175.5	186.0	175.9	142.5	117.9	102.4	93.1	87.7
67.5°	116.0	119.9	130.3	135.2	142.6	131.5	107.2	90.7	81.8	74.1	70.2
70°	101.2	104.1	109.6	113.6	115.5	104.1	86.1	74.0	66.5	61.1	58.6
72.5°	86.4	89.0	90.1	93.3	92.3	81.6	69.2	59.6	54.2	50.5	47.4
75°	66.1	67.2	66.1	64.8	61.9	54.5	45.9	41.1	37.1	35.3	34.2
77.5°	48.2	47.8	46.4	44.3	39.4	34.7	30.1	28.5	26.8	25.8	25.4
80°	37.1	36.2	34.9	31.6	27.4	24.1	23.1	22.0	21.3	20.2	20.0
82.5°	27.6	27.1	24.9	22.1	19.2	17.6	16.8	16.3	15.6	15.1	15.1
85°	14.7	14.0	11.6	10.1	9.7	9.2	9.0	9.0	8.1	7.9	7.9
87.5°	5.0	4.1	4.1	3.9	4.1	4.0	4.3	4.2	4.3	4.5	4.3
90°	1.3	2.3	3.2	4.1	5.3	6.5	7.7	9.0	10.2	10.6	10.9
92.5°	7.6	7.4	7.1	6.8	7.2	8.1	9.0	9.9	10.8	11.4	12.1
95°	22.0	18.1	14.2	10.4	9.0	10.0	11.0	12.1	13.1	13.8	14.4
97.5°	50.1	48.4	46.8	45.0	40.7	33.9	27.1	20.5	13.7	14.4	15.2
100°	73.4	75.3	77.2	79.1	72.7	58.1	43.4	28.7	13.9	14.7	15.5
102.5°	95.3	96.6	98.0	99.3	92.0	76.0	59.9	43.9	27.9	25.5	23.2
105°	127.2	128.3	129.3	130.4	126.6	118.1	109.7	101.2	92.7	76.1	59.4
107.5°	161.1	161.9	162.7	163.5	164.7	166.0	167.3	168.6	169.9	157.8	145.5
110°	183.7	184.5	185.2	186.0	186.8	187.8	188.9	189.9	191.0	187.8	184.7



TEST NUMBER: P332390-830

CATALOG NUMBER: S123RDIW-S340D460U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	205.3	205.9	206.6	207.4	208.2	209.2	210.3	211.3	212.4	212.4	212.4
115°	237.2	237.8	238.4	238.9	239.7	240.5	241.4	242.2	243.1	244.0	245.0
117.5°	268.5	269.2	269.8	270.6	271.2	271.5	272.0	272.5	272.9	273.6	274.4
120°	287.9	288.8	289.6	290.5	291.1	291.3	291.6	291.9	292.2	292.9	293.7
122.5°	307.5	308.1	308.9	309.5	310.1	310.5	310.8	311.1	311.5	312.0	312.5
125°	334.4	335.2	335.9	336.7	337.2	337.6	338.0	338.4	338.7	338.9	339.1
127.5°	360.5	361.3	362.0	362.8	363.4	363.8	364.3	364.8	365.2	365.5	365.8
130°	376.8	377.6	378.3	379.1	379.7	380.0	380.4	380.8	381.1	381.4	381.8
132.5°	392.4	393.1	393.9	394.6	395.1	395.5	395.8	396.1	396.3	396.7	397.1
135°	415.9	416.5	417.1	417.6	418.1	418.5	418.9	419.2	419.6	419.9	420.2
137.5°	436.5	437.2	437.9	438.6	439.0	439.3	439.5	439.7	439.9	440.4	440.8
140°	449.9	450.4	451.0	451.6	451.9	452.2	452.5	452.8	453.1	453.5	453.8
142.5°	462.4	463.0	463.5	464.1	464.5	464.8	465.1	465.3	465.6	465.9	466.3
145°	480.0	480.7	481.4	482.0	482.4	482.6	482.8	483.0	483.1	483.3	483.5
147.5°	496.3	496.7	497.2	497.6	497.9	498.1	498.3	498.5	498.7	498.9	499.1
150°	506.3	506.6	506.9	507.2	507.4	507.6	507.7	507.9	508.1	508.3	508.5
152.5°	515.3	515.5	515.6	515.8	515.9	515.9	516.0	516.1	516.3	516.6	517.0
155°	527.8	527.6	527.5	527.4	527.3	527.4	527.4	527.5	527.6	528.1	528.6
157.5°	538.0	538.0	538.0	538.0	537.9	537.8	537.7	537.6	537.5	538.1	538.7
160°	544.0	543.9	543.8	543.8	543.7	543.6	543.5	543.4	543.3	543.8	544.4
162.5°	549.7	549.4	549.2	548.9	548.7	548.7	548.6	548.5	548.4	549.0	549.7
165°	556.6	556.3	556.0	555.7	555.5	555.4	555.3	555.3	555.2	555.9	556.7
167.5°	561.9	561.6	561.2	560.8	560.6	560.6	560.6	560.6	560.6	561.4	562.1
170°	565.0	564.6	564.2	563.8	563.6	563.6	563.6	563.6	563.6	564.4	565.1
172.5°	566.9	566.5	566.0	565.5	565.3	565.4	565.5	565.6	565.6	566.4	567.1
175°	569.5	569.0	568.5	568.1	567.9	568.0	568.1	568.2	568.3	568.9	569.6
177.5°	570.2	569.9	569.5	569.1	569.0	569.1	569.1	569.2	569.3	569.9	570.5
180°	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	512.9	512.9	512.9	512.9	512.9	512.9	512.9
2.5°	541.1	541.1	541.8	544.4	544.8	547.1	546.4
5°	594.7	598.8	600.4	607.0	610.9	612.7	609.2
7.5°	660.2	671.9	677.5	684.5	690.5	692.4	687.6
10°	707.9	720.3	730.6	737.0	742.9	746.9	751.9
12.5°	754.1	769.3	779.1	788.1	794.2	799.2	800.0
15°	804.4	827.2	844.5	857.3	863.7	867.0	865.6
17.5°	855.0	876.2	888.5	901.5	910.3	910.8	911.1
20°	883.6	904.3	918.6	928.2	938.1	937.6	939.9
22.5°	902.8	919.1	930.0	937.0	940.4	938.7	939.1
25°	911.7	916.6	914.6	903.4	900.5	890.2	892.0
27.5°	865.5	842.7	819.1	788.7	764.7	745.6	746.5
30°	802.9	762.4	716.3	677.7	643.0	633.3	612.7
32.5°	715.2	654.6	600.6	564.5	534.8	526.7	508.7
35°	566.6	507.7	452.1	418.8	405.6	387.1	386.9
37.5°	440.4	388.5	359.2	334.1	321.0	309.8	308.8
40°	370.4	330.1	307.8	289.8	276.9	268.5	266.6
42.5°	321.6	289.0	268.2	257.0	247.0	242.7	239.5
45°	262.6	240.6	226.2	216.1	211.5	208.2	206.4
47.5°	219.7	205.0	195.1	188.3	184.6	181.2	182.1
50°	196.3	184.3	177.0	170.6	167.8	165.3	165.6
52.5°	177.5	166.6	160.8	156.2	152.7	150.9	150.1
55°	150.6	143.8	137.9	134.6	132.6	130.3	129.6
57.5°	128.5	123.2	118.4	114.7	114.1	111.9	112.2
60°	113.8	109.3	105.4	103.4	101.9	99.9	100.6
62.5°	101.6	97.9	94.3	92.7	91.1	89.7	90.0
65°	83.2	79.7	77.5	76.6	76.0	75.3	74.6
67.5°	66.4	64.2	62.8	60.9	59.6	59.4	58.7
70°	55.8	52.9	50.5	48.1	47.4	47.2	47.4
72.5°	44.7	42.9	42.2	41.1	40.9	40.3	40.7
75°	33.6	32.9	32.5	31.6	31.6	31.6	31.6
77.5°	24.8	24.4	24.1	23.9	23.8	23.4	23.4
80°	19.3	19.1	18.7	18.7	18.5	18.7	18.5
82.5°	14.6	14.5	14.1	14.1	13.9	13.8	13.9
85°	7.4	7.3	7.7	7.3	7.4	7.1	7.4
87.5°	4.3	4.4	4.3	4.3	4.2	4.6	4.3
90°	11.3	11.7	12.0	12.2	12.3	12.5	12.7
92.5°	12.6	13.3	13.6	13.8	13.9	13.9	14.0
95°	15.1	15.7	16.1	16.1	16.1	16.1	16.1
97.5°	15.9	16.7	17.1	17.2	17.2	17.3	17.4
100°	16.2	17.0	17.4	17.5	17.6	17.7	17.8
102.5°	20.8	18.6	17.4	17.6	17.8	17.9	18.1
105°	42.8	26.1	17.9	18.1	18.3	18.5	18.7
107.5°	133.4	121.1	108.8	96.1	83.6	71.1	58.5
110°	181.6	178.5	170.3	156.8	143.4	129.9	116.5



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	212.4	212.5	211.1	208.3	205.5	202.6	199.8
115°	245.9	246.9	247.5	247.9	248.3	248.6	249.0
117.5°	275.1	275.9	276.3	276.4	276.4	276.5	276.6
120°	294.5	295.2	295.6	295.6	295.6	295.6	295.6
122.5°	313.1	313.6	313.9	314.0	314.1	314.1	314.2
125°	339.3	339.5	339.7	339.9	340.1	340.3	340.4
127.5°	366.1	366.4	366.5	366.3	366.1	365.9	365.7
130°	382.2	382.6	382.7	382.5	382.3	382.1	381.9
132.5°	397.5	397.8	397.9	397.7	397.4	397.1	396.9
135°	420.5	420.8	420.8	420.5	420.2	419.9	419.6
137.5°	441.2	441.7	441.9	441.7	441.5	441.3	441.1
140°	454.2	454.6	454.7	454.5	454.3	454.1	453.9
142.5°	466.6	466.8	466.8	466.6	466.4	466.1	465.8
145°	483.7	483.9	484.0	484.0	484.0	484.0	484.0
147.5°	499.3	499.5	499.3	498.9	498.4	498.0	497.6
150°	508.7	508.9	508.9	508.6	508.3	508.0	507.7
152.5°	517.3	517.6	517.6	517.2	516.7	516.3	515.9
155°	529.0	529.5	529.4	528.9	528.3	527.7	527.3
157.5°	539.2	539.8	539.7	538.9	538.3	537.5	536.8
160°	545.0	545.5	545.5	544.9	544.2	543.6	542.9
162.5°	550.4	550.9	551.0	550.4	549.8	549.2	548.7
165°	557.4	558.2	558.2	557.5	556.9	556.3	555.6
167.5°	562.8	563.5	563.5	562.8	562.1	561.4	560.6
170°	565.9	566.7	566.7	565.9	565.1	564.4	563.6
172.5°	567.9	568.6	568.6	567.8	566.9	566.2	565.3
175°	570.2	570.9	570.9	570.1	569.4	568.6	567.9
177.5°	571.1	571.7	571.7	570.9	570.1	569.4	568.6
180°	570.0	570.0	570.0	570.0	570.0	570.0	570.0

(END OF REPORT)