

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: P332501-830

Luminaire Tested: **SA4XXDIP-C350D590U830-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332501-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-C350D590U830-4F0-1E-UDD-A4
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 350 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

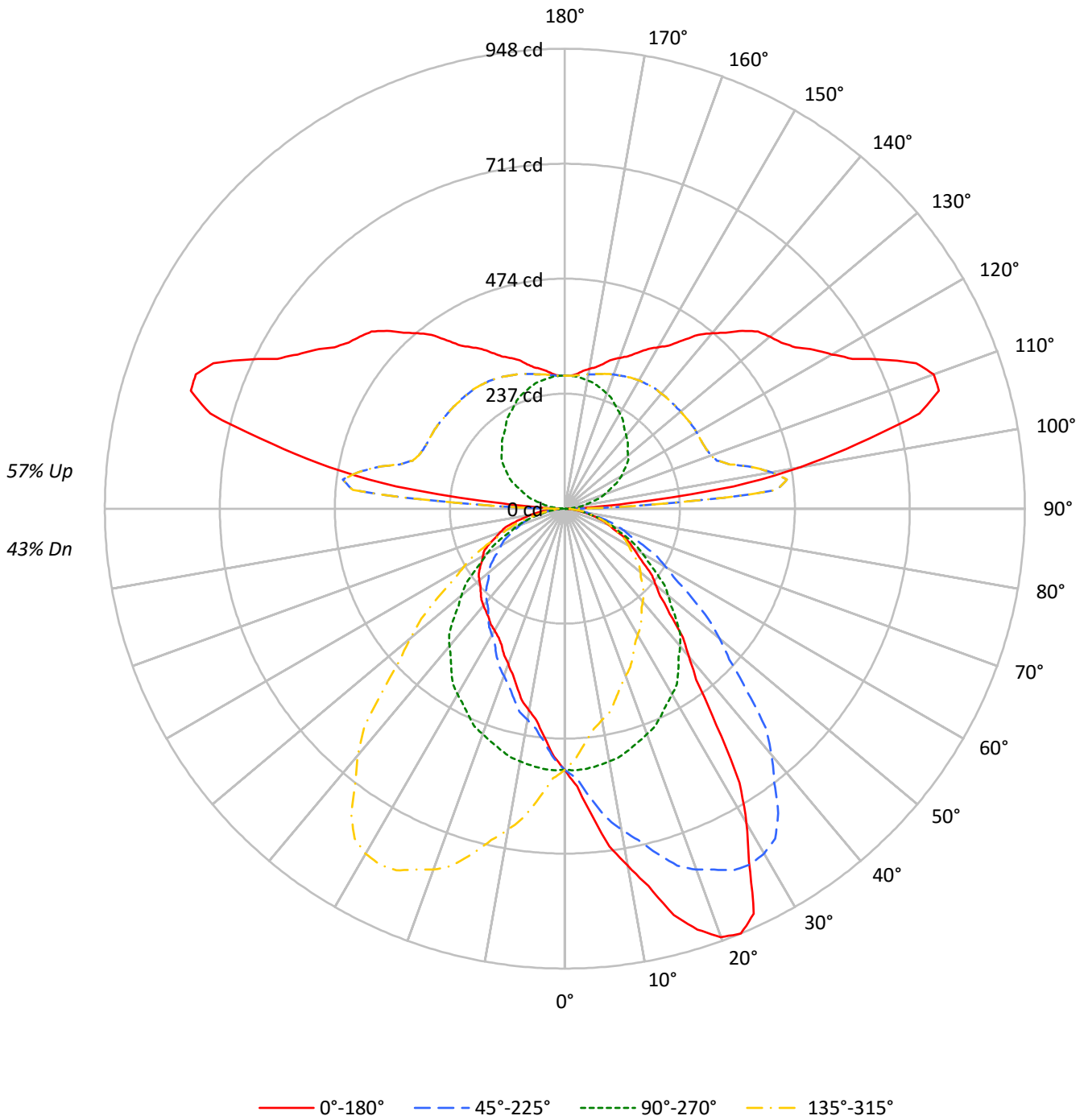
Lumens per Lamp: N/A
Luminaire Lumens: 3477.6 lumens
Efficiency: N/A
Efficacy: 135.8 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 25.6
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	43
1	96	92	88	85	88	84	81	78	70	67	65	56	55	53	44	43	42	36
2	88	81	75	70	80	74	69	64	61	58	54	50	47	45	39	37	36	31
3	80	71	64	58	73	65	59	54	54	50	46	44	41	38	35	32	31	26
4	73	63	55	49	67	58	51	46	48	43	39	39	36	33	31	29	27	23
5	67	56	48	42	61	52	45	40	43	38	34	35	32	29	28	25	23	20
6	62	50	42	37	57	46	39	34	39	34	30	32	28	25	26	23	21	18
7	57	45	38	32	52	42	35	30	35	30	26	29	25	22	23	20	18	16
8	53	41	34	28	49	38	31	27	32	27	23	27	23	20	21	19	16	14
9	50	38	30	25	45	35	28	24	30	24	21	25	21	18	20	17	15	13
10	46	34	27	23	42	32	26	21	27	22	19	23	19	16	18	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	4347	4347	4347	4347
5°	5119	4358	3847	4358
10°	6129	4339	3463	4339
15°	7252	4296	3181	4296
20°	8076	4250	2928	4250
25°	8206	4185	2754	4185
30°	6982	4121	2699	4121
35°	5368	4018	2699	4018
40°	4185	3898	2751	3898
45°	3489	3716	2797	3716
50°	3071	3493	2891	3493
55°	2814	3227	3008	3227
60°	2635	2989	3147	2989
65°	2455	2722	3265	2722
70°	2242	2460	3338	2460
75°	2006	2165	3300	2165
80°	1678	1776	3194	1776
85°	1241	1288	3057	1288



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.5	1.5
10°-20°	161.7	4.6
20°-30°	256.4	7.4
30°-40°	285.4	8.2
40°-50°	259.8	7.5
50°-60°	212.3	6.1
60°-70°	151.5	4.4
70°-80°	83.4	2.4
80°-90°	24.3	0.7
90°-100°	197.7	5.7
100°-110°	411.4	11.8
110°-120°	368.5	10.6
120°-130°	310.0	8.9
130°-140°	258.4	7.4
140°-150°	197.4	5.7
150°-160°	138.8	4.0
160°-170°	81.6	2.3
170°-180°	26.6	0.8
0°-30°	470.6	13.5
0°-40°	755.9	21.7
0°-60°	1227.9	35.3
0°-90°	1487.2	42.8
90°-120°	977.6	28.1
90°-150°	1743.4	50.1
90°-180°	1990.0	57.2
0°-180°	3477.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	538	538	538	538	538	
5°	632	538	475	538	632	64
15°	868	514	381	514	868	245
25°	921	470	309	470	921	406
35°	545	408	274	408	545	346
45°	306	326	245	326	306	241
55°	200	229	214	229	200	181
65°	128	142	171	142	128	127
75°	64	69	106	69	64	68
85°	13	14	33	14	13	17
90°	11	1	11	1	11	10
95°	131	18	131	18	131	204
105°	756	63	756	63	756	748
115°	726	111	726	111	726	721
125°	580	154	580	154	580	527
135°	518	183	518	183	518	400
145°	423	211	423	211	423	268
155°	354	240	354	240	354	165
165°	309	262	309	262	309	89
175°	278	273	278	273	278	27
180°	274	274	274	274	274	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5
2.5°	573.1	573.0	571.2	570.8	569.6	568.0	567.6	564.7	559.0	556.3	555.6
5°	631.7	636.2	630.4	629.2	628.6	621.2	617.5	613.0	602.8	596.7	592.0
7.5°	701.7	702.2	699.6	697.7	691.9	685.5	675.9	665.6	653.4	640.7	631.1
10°	747.7	749.5	746.6	746.2	734.8	727.6	713.4	701.3	687.5	672.1	658.1
12.5°	796.3	793.8	792.3	782.8	780.6	767.6	751.0	738.7	717.3	699.6	680.9
15°	867.7	862.8	859.7	846.6	840.1	822.0	804.4	790.8	762.9	736.3	716.2
17.5°	909.6	914.5	907.4	901.9	885.2	872.5	854.5	826.0	804.2	771.2	745.8
20°	940.0	940.5	936.4	930.9	917.8	901.6	882.0	850.8	824.7	791.9	757.1
22.5°	948.2	948.3	946.6	941.4	931.4	918.4	898.6	872.5	840.9	805.3	770.4
25°	921.2	920.4	922.4	928.2	924.4	920.4	909.0	889.6	860.2	822.5	784.9
27.5°	821.1	827.4	838.7	852.9	866.7	877.1	880.1	876.1	857.9	826.9	787.6
30°	749.0	756.7	765.2	779.4	807.1	822.9	840.3	853.5	846.1	821.3	784.8
32.5°	669.9	671.8	684.3	700.5	725.9	756.3	783.9	810.7	819.5	806.5	776.0
35°	544.7	547.9	561.5	577.5	608.5	645.8	687.3	724.3	754.9	767.1	751.5
37.5°	444.5	453.5	463.1	480.3	507.7	541.2	584.3	632.3	677.8	708.3	713.5
40°	397.1	402.7	409.5	422.7	445.9	478.9	515.9	570.8	619.3	663.0	677.2
42.5°	359.6	362.9	367.1	379.0	396.6	429.5	463.4	511.6	560.2	612.5	636.4
45°	305.6	309.0	316.1	323.0	336.4	359.1	390.6	430.3	479.2	529.5	573.7
47.5°	266.6	268.7	273.0	280.4	291.8	306.8	332.3	365.5	410.8	459.8	506.8
50°	244.5	246.3	249.6	256.3	265.0	278.4	299.4	330.4	365.8	415.1	461.3
52.5°	227.0	227.7	230.2	234.7	241.7	252.9	270.1	295.8	328.8	372.7	418.7
55°	199.9	200.8	203.0	206.3	212.4	219.5	232.6	251.8	280.6	318.8	358.7
57.5°	177.6	178.2	180.0	181.3	186.3	192.1	202.3	215.9	237.7	270.1	305.8
60°	163.2	162.9	165.0	166.2	169.6	174.5	182.3	195.4	214.3	240.4	273.2
62.5°	149.4	148.7	150.6	152.1	154.0	158.2	164.6	174.8	190.3	213.9	242.2
65°	128.5	127.6	128.8	130.5	132.2	134.5	139.2	148.4	160.6	177.6	199.2
67.5°	107.5	108.5	108.7	109.5	110.6	113.6	116.8	123.3	132.0	145.5	163.8
70°	95.0	95.3	96.1	96.1	96.8	99.5	102.2	105.9	114.4	127.0	141.9
72.5°	82.6	83.5	83.1	83.8	84.4	86.1	88.0	91.7	98.9	108.2	120.8
75°	64.3	64.9	64.9	65.1	65.8	66.4	68.1	70.7	75.9	82.8	91.4
77.5°	46.8	46.9	47.2	48.1	48.1	49.1	50.2	52.4	55.0	59.7	65.0
80°	36.1	36.6	36.4	36.9	36.9	37.7	38.2	40.8	41.9	45.1	49.3
82.5°	26.5	27.0	26.9	27.5	27.9	28.1	28.7	29.8	30.9	33.6	35.3
85°	13.4	13.9	13.4	13.9	14.5	14.7	15.4	15.6	16.5	17.2	18.8
87.5°	6.2	6.7	6.8	6.9	7.2	7.4	7.4	7.1	7.7	8.0	8.5
90°	11.3	11.3	11.8	11.3	10.7	10.7	10.2	9.7	9.1	9.7	8.6
92.5°	41.4	41.4	43.3	46.1	52.5	63.2	79.5	105.6	142.0	170.5	149.3
95°	131.2	138.2	147.9	164.6	190.9	243.0	315.1	398.4	450.5	438.2	330.6
97.5°	350.6	361.8	378.0	410.4	448.9	505.1	557.7	588.6	566.1	461.6	309.5
100°	493.0	497.4	513.5	546.3	593.0	632.8	659.2	648.5	570.0	432.3	280.7
102.5°	616.9	620.4	637.3	661.1	689.8	706.4	698.8	645.5	537.6	395.8	261.3
105°	756.5	759.7	767.2	771.6	770.5	748.5	695.2	602.2	479.1	352.7	244.7
107.5°	808.3	806.9	801.5	789.3	762.7	714.8	639.8	540.8	431.8	328.7	241.7
110°	809.2	804.4	794.7	772.1	734.0	674.8	596.8	503.8	408.1	320.5	242.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	783.8	776.0	762.4	735.1	691.7	632.6	558.9	476.7	394.7	316.6	245.1
115°	726.4	722.1	704.9	672.6	630.2	578.5	515.7	449.5	382.3	314.5	250.1
117.5°	668.3	664.9	647.4	620.4	584.1	540.4	490.9	436.1	376.7	314.0	255.2
120°	635.6	629.6	615.7	592.0	561.3	523.1	480.1	430.2	373.7	314.0	259.2
122.5°	609.7	603.8	592.0	571.7	545.8	512.4	473.3	425.0	370.2	313.6	263.1
125°	579.6	576.4	566.2	550.5	529.0	499.5	462.4	416.1	364.6	312.9	268.8
127.5°	561.9	558.7	550.2	536.3	514.6	486.6	449.6	405.4	356.9	311.7	273.4
130°	551.7	548.5	539.8	526.4	504.4	475.8	439.3	396.8	352.1	311.3	276.9
132.5°	540.1	536.8	528.7	513.5	491.8	463.4	427.6	387.8	347.9	310.9	279.9
135°	518.3	515.1	506.5	491.4	470.0	443.0	410.3	375.3	341.4	310.2	284.5
137.5°	491.4	487.6	480.5	465.6	445.5	421.2	393.6	364.0	335.8	310.1	287.1
140°	472.1	467.8	460.2	448.5	429.6	407.0	382.9	357.5	332.8	309.7	289.3
142.5°	451.4	448.5	441.8	430.7	414.2	394.5	373.8	351.6	330.3	309.7	291.0
145°	423.1	420.5	415.1	406.0	392.5	377.5	361.3	343.0	325.8	308.6	292.0
147.5°	398.1	397.1	393.0	385.2	375.3	363.4	350.5	336.0	321.9	306.7	292.5
150°	383.9	383.3	380.1	373.2	364.6	354.9	344.1	331.8	318.9	305.4	292.5
152.5°	371.0	370.4	368.5	362.8	355.5	347.5	337.6	327.0	315.4	303.2	291.6
155°	354.3	354.3	352.7	348.5	343.0	336.6	328.5	319.9	310.2	300.0	290.3
157.5°	339.7	339.7	338.7	335.5	331.4	326.2	319.5	312.3	305.0	296.7	289.0
160°	330.6	330.6	330.2	326.9	323.7	319.3	313.5	307.6	301.1	294.1	287.7
162.5°	322.1	322.5	322.0	318.8	316.4	312.5	307.8	302.8	297.7	291.5	286.3
165°	309.2	309.7	310.2	308.1	305.9	303.2	299.4	296.2	292.0	287.7	283.9
167.5°	299.0	299.4	299.4	298.1	297.0	295.4	292.4	289.9	286.8	283.8	281.3
170°	292.5	292.5	293.0	292.5	291.4	289.8	287.7	286.1	283.3	281.2	279.6
172.5°	286.1	286.9	287.5	286.9	286.3	285.1	283.8	282.6	280.3	278.6	277.9
175°	278.5	279.6	280.7	279.6	279.6	279.6	278.5	278.0	276.9	275.8	275.8
177.5°	274.1	274.9	275.8	275.4	275.8	275.4	275.4	274.9	274.6	274.1	274.1
180°	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5
2.5°	555.8	553.3	551.5	550.1	546.2	543.8	542.1	539.6	536.7	533.7	529.9
5°	587.3	579.8	574.2	565.7	557.7	551.0	544.0	537.8	530.3	522.0	515.9
7.5°	620.5	609.2	594.7	582.2	568.1	555.8	544.9	533.7	522.0	510.6	500.2
10°	641.6	627.1	611.0	592.0	574.2	558.4	543.7	529.3	515.5	501.7	489.8
12.5°	664.2	646.1	622.4	600.2	580.2	559.0	541.3	523.8	507.1	492.6	478.8
15°	694.7	668.5	641.1	611.4	585.1	560.3	536.0	514.0	495.2	476.0	462.6
17.5°	713.3	681.0	649.7	618.7	586.8	555.5	529.3	503.9	480.4	461.4	444.5
20°	725.7	693.5	654.5	623.5	585.6	553.5	523.1	494.7	470.2	450.0	432.5
22.5°	736.3	699.3	660.2	619.3	581.6	547.5	514.3	485.9	460.8	439.4	422.7
25°	742.2	699.6	657.1	616.5	573.7	533.4	503.2	469.8	443.0	420.5	402.7
27.5°	742.8	697.2	649.2	604.2	560.0	522.4	484.4	454.4	426.7	402.8	385.7
30°	740.8	693.3	641.8	593.0	548.6	507.7	474.7	442.1	413.8	390.1	372.3
32.5°	734.5	685.1	632.2	580.4	534.4	494.5	460.4	429.4	401.8	378.5	359.8
35°	716.5	667.6	611.2	557.4	510.4	470.0	439.2	407.7	380.1	358.1	340.0
37.5°	688.2	644.1	586.7	531.1	484.8	444.3	413.8	385.4	360.4	338.0	319.5
40°	663.6	624.8	567.2	513.0	463.1	424.5	396.0	369.9	345.1	323.9	306.2
42.5°	635.3	601.4	548.4	491.0	442.7	404.0	376.2	352.7	329.4	309.8	292.2
45°	584.7	562.3	512.4	459.3	409.1	372.5	346.0	325.5	305.9	286.6	271.9
47.5°	526.5	515.4	473.3	422.9	375.3	339.2	316.2	297.3	280.0	263.8	250.8
50°	487.4	482.0	445.7	397.1	351.6	317.6	294.5	278.1	263.4	249.2	236.9
52.5°	448.8	448.7	415.8	371.4	329.2	296.6	273.5	258.4	245.6	234.0	223.0
55°	389.9	396.2	370.5	330.8	293.1	263.6	242.9	229.3	220.4	210.8	202.6
57.5°	335.8	346.2	325.0	290.0	258.5	231.5	213.4	203.2	193.7	187.8	181.8
60°	300.5	310.3	293.8	264.4	234.7	211.5	194.3	185.1	176.9	172.9	168.6
62.5°	269.1	277.8	265.6	238.3	212.5	190.2	175.7	166.9	161.4	157.0	154.2
65°	224.2	231.6	221.0	201.2	179.1	161.3	149.5	142.5	137.2	135.4	132.2
67.5°	181.3	187.9	182.3	165.4	147.7	134.1	124.9	118.3	115.1	113.6	111.3
70°	155.7	162.4	156.4	141.7	128.0	116.7	107.9	104.2	100.9	100.2	97.1
72.5°	134.1	138.6	132.6	121.1	109.5	99.9	93.1	89.2	87.5	86.2	84.5
75°	100.6	104.6	100.6	91.7	83.4	76.7	71.0	69.4	67.4	66.7	65.6
77.5°	71.2	74.6	71.6	66.1	59.9	54.7	51.6	49.6	49.1	48.0	48.5
80°	54.4	56.6	53.7	50.0	45.1	41.5	39.3	38.2	36.9	36.4	37.2
82.5°	39.1	40.1	38.5	36.0	32.4	30.1	28.6	27.2	27.0	27.1	27.1
85°	20.3	20.1	19.9	17.6	16.5	15.0	14.0	13.9	13.6	14.0	14.5
87.5°	8.3	8.5	7.6	7.0	6.3	5.7	5.2	4.7	5.2	5.7	5.9
90°	7.5	7.5	4.3	4.3	3.8	3.2	1.6	0.6	1.6	3.2	3.8
92.5°	108.6	66.9	39.6	28.4	20.5	13.9	9.0	6.1	9.0	13.9	20.5
95°	202.2	114.0	67.2	44.6	31.8	24.7	19.3	17.7	19.3	24.7	31.8
97.5°	181.7	109.0	73.0	54.0	42.9	36.5	31.9	31.9	31.9	36.5	42.9
100°	171.0	110.2	78.5	61.3	51.1	44.6	40.9	40.9	40.9	44.6	51.1
102.5°	168.0	114.5	85.8	69.5	59.7	53.6	50.3	49.5	50.3	53.6	59.7
105°	169.4	124.7	99.0	83.3	73.7	67.2	64.6	62.9	64.6	67.2	73.7
107.5°	177.3	136.7	113.0	97.6	88.4	81.5	78.8	77.8	78.8	81.5	88.4
110°	183.3	145.7	122.1	107.5	97.8	91.4	88.7	87.7	88.7	91.4	97.8



TEST NUMBER: P332501-830

CATALOG NUMBER: SA4XXDIP-C350D590U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	189.8	154.3	131.5	117.0	107.4	101.3	98.2	97.1	98.2	101.3	107.4
115°	200.0	167.8	146.3	131.8	121.5	116.1	112.4	110.7	112.4	116.1	121.5
117.5°	210.5	180.8	160.3	145.2	135.7	129.8	126.5	125.0	126.5	129.8	135.7
120°	217.7	189.8	169.4	154.3	145.2	139.2	135.5	134.4	135.5	139.2	145.2
122.5°	224.6	198.4	178.0	163.3	153.4	147.9	144.1	143.0	144.1	147.9	153.4
125°	235.0	210.2	190.9	175.8	165.6	159.7	156.5	154.3	156.5	159.7	165.6
127.5°	243.9	221.2	202.5	187.3	176.6	169.9	166.1	164.3	166.1	169.9	176.6
130°	249.5	228.5	210.2	194.6	184.5	176.3	172.0	169.9	172.0	176.3	184.5
132.5°	255.1	234.5	216.2	201.5	190.5	182.9	177.2	175.5	177.2	182.9	190.5
135°	262.4	243.0	225.3	211.3	200.0	190.9	185.5	183.3	185.5	190.9	200.0
137.5°	267.6	249.5	232.9	219.6	207.8	199.2	193.2	191.2	193.2	199.2	207.8
140°	271.0	253.8	237.6	224.7	213.5	204.3	198.4	196.8	198.4	204.3	213.5
142.5°	273.5	257.7	242.0	229.5	218.6	209.9	204.4	202.8	204.4	209.9	218.6
145°	276.4	261.8	247.9	236.0	225.8	218.3	212.9	211.3	212.9	218.3	225.8
147.5°	278.8	266.2	253.1	242.4	233.8	226.1	221.4	220.8	221.4	226.1	233.8
150°	280.1	268.3	256.5	246.3	238.2	231.8	227.4	226.9	227.4	231.8	238.2
152.5°	281.0	270.0	259.5	250.2	242.9	236.9	232.6	232.5	232.6	236.9	242.9
155°	281.7	272.6	263.4	255.4	249.5	244.1	240.9	240.3	240.9	244.1	249.5
157.5°	281.7	274.5	266.6	260.3	255.1	251.0	248.0	248.0	248.0	251.0	255.1
160°	281.7	275.3	268.8	262.9	258.6	254.9	252.7	252.7	252.7	254.9	258.6
162.5°	281.7	276.2	270.1	265.5	261.6	258.3	256.6	257.0	256.6	258.3	261.6
165°	280.7	276.4	271.5	268.3	265.6	262.9	261.8	261.8	261.8	262.9	265.6
167.5°	279.4	276.3	272.7	270.2	268.7	266.6	266.2	266.6	266.2	266.6	268.7
170°	278.5	275.8	273.1	271.5	270.4	268.8	268.3	268.8	268.3	268.8	270.4
172.5°	277.7	275.4	273.5	272.4	271.7	270.5	270.4	271.0	270.4	270.5	271.7
175°	276.4	274.8	273.7	273.7	273.1	272.6	272.6	273.1	272.6	272.6	273.1
177.5°	274.9	274.1	273.7	273.7	273.7	273.2	273.7	274.1	273.7	273.2	273.7
180°	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7



TEST NUMBER: P332501-830

CATALOG NUMBER: SA4XXDIP-C350D590U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5
2.5°	528.1	526.5	524.2	521.0	518.3	515.5	514.7	513.7	515.9	514.1	513.5
5°	510.9	506.1	500.1	493.2	489.2	483.4	482.3	480.0	477.8	477.6	475.3
7.5°	492.5	485.6	477.7	470.7	464.2	457.8	453.6	452.8	449.5	447.5	445.4
10°	480.7	472.2	463.1	456.4	448.8	442.1	437.4	434.8	432.5	430.1	427.8
12.5°	466.8	457.8	450.3	443.0	434.0	429.0	421.2	416.6	416.1	416.1	410.4
15°	450.6	441.7	430.1	419.8	414.9	405.1	400.9	395.5	392.2	388.8	386.2
17.5°	432.1	420.9	411.9	400.1	390.8	383.0	377.4	374.2	369.1	364.4	361.0
20°	420.5	408.7	399.1	386.5	376.4	366.7	362.0	357.6	353.8	349.8	346.0
22.5°	408.7	396.3	384.7	372.5	363.0	352.8	348.3	342.2	338.7	336.4	332.6
25°	390.1	376.7	363.4	351.8	342.0	333.0	327.1	322.3	318.3	316.5	314.1
27.5°	369.9	356.7	343.7	330.5	319.4	312.9	308.1	304.6	302.3	299.9	298.8
30°	357.1	343.3	329.5	317.2	307.0	300.5	296.1	293.6	291.8	290.7	289.5
32.5°	344.1	330.5	315.9	304.7	295.5	289.7	286.3	283.9	283.0	282.7	282.2
35°	323.2	309.4	296.1	286.0	277.3	275.0	272.1	270.8	270.3	271.9	272.6
37.5°	303.0	290.2	277.9	268.2	262.4	259.2	258.2	258.3	259.9	261.2	262.8
40°	290.0	277.5	265.9	257.4	252.0	250.1	249.6	250.7	252.5	254.1	255.9
42.5°	277.3	265.0	254.5	246.6	242.8	240.9	241.2	242.3	244.9	246.8	249.4
45°	257.7	247.4	237.1	230.6	227.5	228.0	228.0	230.0	232.4	235.4	238.3
47.5°	239.1	228.8	220.4	214.9	213.3	212.9	214.1	216.8	220.3	223.9	227.9
50°	226.7	216.8	209.4	204.5	202.7	203.4	205.2	207.6	211.9	216.4	220.6
52.5°	214.0	205.0	198.2	193.7	192.4	193.6	195.4	199.3	203.0	207.8	212.9
55°	194.3	186.7	181.3	178.0	177.6	178.2	180.2	184.5	189.8	195.9	200.8
57.5°	174.7	168.3	163.4	161.2	161.4	162.0	165.3	170.3	176.1	182.5	188.8
60°	161.5	155.7	151.7	149.9	150.1	151.5	155.5	160.1	167.3	173.5	180.2
62.5°	149.0	143.9	140.1	138.5	138.2	141.1	145.0	149.8	156.9	163.9	171.2
65°	128.9	124.9	121.8	120.9	121.6	123.9	128.8	135.2	141.2	148.5	156.2
67.5°	109.3	106.0	103.9	104.2	105.1	108.4	112.4	118.0	124.9	132.5	140.0
70°	96.8	93.7	91.9	92.1	93.5	97.5	101.0	106.6	114.0	121.8	128.0
72.5°	84.0	81.9	80.3	81.2	82.6	85.3	89.8	95.4	101.9	109.1	115.7
75°	64.5	64.5	63.6	64.3	66.3	68.9	72.3	78.0	84.5	90.4	95.7
77.5°	47.8	47.3	47.9	48.7	49.9	53.1	56.9	61.1	65.9	71.7	76.2
80°	36.6	36.9	37.9	39.3	39.7	42.1	46.2	50.0	53.7	58.6	62.9
82.5°	27.5	27.7	28.3	30.0	30.4	33.1	35.6	39.4	42.9	46.2	49.7
85°	15.0	15.0	16.0	16.8	17.8	19.6	21.2	23.5	26.6	28.7	32.1
87.5°	6.6	6.6	7.9	8.3	9.0	10.2	10.4	12.4	13.3	14.3	15.9
90°	4.3	4.3	7.5	7.5	8.6	9.7	9.1	9.7	10.2	10.7	10.7
92.5°	28.4	39.6	66.9	108.6	149.3	170.5	142.0	105.6	79.5	63.2	52.5
95°	44.6	67.2	114.0	202.2	330.6	438.2	450.5	398.4	315.1	243.0	190.9
97.5°	54.0	73.0	109.0	181.7	309.5	461.6	566.1	588.6	557.7	505.1	448.9
100°	61.3	78.5	110.2	171.0	280.7	432.3	570.0	648.5	659.2	632.8	593.0
102.5°	69.5	85.8	114.5	168.0	261.3	395.8	537.6	645.5	698.8	706.4	689.8
105°	83.3	99.0	124.7	169.4	244.7	352.7	479.1	602.2	695.2	748.5	770.5
107.5°	97.6	113.0	136.7	177.3	241.7	328.7	431.8	540.8	639.8	714.8	762.7
110°	107.5	122.1	145.7	183.3	242.5	320.5	408.1	503.8	596.8	674.8	734.0



TEST NUMBER: P332501-830

CATALOG NUMBER: SA4XXDIP-C350D590U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	117.0	131.5	154.3	189.8	245.1	316.6	394.7	476.7	558.9	632.6	691.7
115°	131.8	146.3	167.8	200.0	250.1	314.5	382.3	449.5	515.7	578.5	630.2
117.5°	145.2	160.3	180.8	210.5	255.2	314.0	376.7	436.1	490.9	540.4	584.1
120°	154.3	169.4	189.8	217.7	259.2	314.0	373.7	430.2	480.1	523.1	561.3
122.5°	163.3	178.0	198.4	224.6	263.1	313.6	370.2	425.0	473.3	512.4	545.8
125°	175.8	190.9	210.2	235.0	268.8	312.9	364.6	416.1	462.4	499.5	529.0
127.5°	187.3	202.5	221.2	243.9	273.4	311.7	356.9	405.4	449.6	486.6	514.6
130°	194.6	210.2	228.5	249.5	276.9	311.3	352.1	396.8	439.3	475.8	504.4
132.5°	201.5	216.2	234.5	255.1	279.9	310.9	347.9	387.8	427.6	463.4	491.8
135°	211.3	225.3	243.0	262.4	284.5	310.2	341.4	375.3	410.3	443.0	470.0
137.5°	219.6	232.9	249.5	267.6	287.1	310.1	335.8	364.0	393.6	421.2	445.5
140°	224.7	237.6	253.8	271.0	289.3	309.7	332.8	357.5	382.9	407.0	429.6
142.5°	229.5	242.0	257.7	273.5	291.0	309.7	330.3	351.6	373.8	394.5	414.2
145°	236.0	247.9	261.8	276.4	292.0	308.6	325.8	343.0	361.3	377.5	392.5
147.5°	242.4	253.1	266.2	278.8	292.5	306.7	321.9	336.0	350.5	363.4	375.3
150°	246.3	256.5	268.3	280.1	292.5	305.4	318.9	331.8	344.1	354.9	364.6
152.5°	250.2	259.5	270.0	281.0	291.6	303.2	315.4	327.0	337.6	347.5	355.5
155°	255.4	263.4	272.6	281.7	290.3	300.0	310.2	319.9	328.5	336.6	343.0
157.5°	260.3	266.6	274.5	281.7	289.0	296.7	305.0	312.3	319.5	326.2	331.4
160°	262.9	268.8	275.3	281.7	287.7	294.1	301.1	307.6	313.5	319.3	323.7
162.5°	265.5	270.1	276.2	281.7	286.3	291.5	297.7	302.8	307.8	312.5	316.4
165°	268.3	271.5	276.4	280.7	283.9	287.7	292.0	296.2	299.4	303.2	305.9
167.5°	270.2	272.7	276.3	279.4	281.3	283.8	286.8	289.9	292.4	295.4	297.0
170°	271.5	273.1	275.8	278.5	279.6	281.2	283.3	286.1	287.7	289.8	291.4
172.5°	272.4	273.5	275.4	277.7	277.9	278.6	280.3	282.6	283.8	285.1	286.3
175°	273.7	273.7	274.8	276.4	275.8	275.8	276.9	278.0	278.5	279.6	279.6
177.5°	273.7	273.7	274.1	274.9	274.1	274.1	274.6	274.9	275.4	275.4	275.8
180°	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7



TEST NUMBER: P332501-830

CATALOG NUMBER: SA4XXDIP-C350D590U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5
2.5°	513.1	512.8	511.5	511.3	511.5	512.8	513.1	513.5	514.1	515.9	513.7
5°	474.0	472.9	472.2	474.7	472.2	472.9	474.0	475.3	477.6	477.8	480.0
7.5°	444.5	443.7	441.7	441.0	441.7	443.7	444.5	445.4	447.5	449.5	452.8
10°	425.7	424.7	422.9	422.4	422.9	424.7	425.7	427.8	430.1	432.5	434.8
12.5°	407.4	405.7	405.3	405.8	405.3	405.7	407.4	410.4	416.1	416.1	416.6
15°	383.2	382.3	379.8	380.6	379.8	382.3	383.2	386.2	388.8	392.2	395.5
17.5°	359.4	358.4	355.3	358.0	355.3	358.4	359.4	361.0	364.4	369.1	374.2
20°	344.4	342.6	341.1	340.8	341.1	342.6	344.4	346.0	349.8	353.8	357.6
22.5°	330.2	328.6	328.4	327.0	328.4	328.6	330.2	332.6	336.4	338.7	342.2
25°	312.3	310.8	310.3	309.2	310.3	310.8	312.3	314.1	316.5	318.3	322.3
27.5°	298.6	297.8	297.0	297.4	297.0	297.8	298.6	298.8	299.9	302.3	304.6
30°	290.2	290.0	289.5	289.5	289.5	290.0	290.2	289.5	290.7	291.8	293.6
32.5°	283.2	283.2	283.5	283.5	283.5	283.2	283.2	282.2	282.7	283.0	283.9
35°	273.5	274.2	274.6	273.9	274.6	274.2	273.5	272.6	271.9	270.3	270.8
37.5°	264.7	265.3	266.0	266.7	266.0	265.3	264.7	262.8	261.2	259.9	258.3
40°	257.9	259.4	259.9	261.0	259.9	259.4	257.9	255.9	254.1	252.5	250.7
42.5°	251.5	253.2	254.3	254.6	254.3	253.2	251.5	249.4	246.8	244.9	242.3
45°	241.6	243.4	245.0	245.0	245.0	243.4	241.6	238.3	235.4	232.4	230.0
47.5°	231.4	233.9	235.5	235.9	235.5	233.9	231.4	227.9	223.9	220.3	216.8
50°	224.4	227.5	229.1	230.2	229.1	227.5	224.4	220.6	216.4	211.9	207.6
52.5°	217.6	220.7	222.8	223.4	222.8	220.7	217.6	212.9	207.8	203.0	199.3
55°	205.9	210.4	212.8	213.7	212.8	210.4	205.9	200.8	195.9	189.8	184.5
57.5°	194.8	199.0	201.8	202.5	201.8	199.0	194.8	188.8	182.5	176.1	170.3
60°	186.2	190.8	194.3	194.9	194.3	190.8	186.2	180.2	173.5	167.3	160.1
62.5°	177.5	182.2	185.4	187.1	185.4	182.2	177.5	171.2	163.9	156.9	149.8
65°	162.4	167.1	170.2	170.9	170.2	167.1	162.4	156.2	148.5	141.2	135.2
67.5°	145.9	150.6	152.6	153.9	152.6	150.6	145.9	140.0	132.5	124.9	118.0
70°	134.3	138.1	140.3	141.4	140.3	138.1	134.3	128.0	121.8	114.0	106.6
72.5°	121.1	125.1	127.6	127.9	127.6	125.1	121.1	115.7	109.1	101.9	95.4
75°	100.9	104.4	105.8	105.8	105.8	104.4	100.9	95.7	90.4	84.5	78.0
77.5°	79.8	81.6	83.3	83.7	83.3	81.6	79.8	76.2	71.7	65.9	61.1
80°	66.3	67.4	68.7	68.7	68.7	67.4	66.3	62.9	58.6	53.7	50.0
82.5°	52.3	53.3	54.6	54.4	54.6	53.3	52.3	49.7	46.2	42.9	39.4
85°	31.7	33.6	33.5	33.0	33.5	33.6	31.7	32.1	28.7	26.6	23.5
87.5°	16.5	16.8	17.2	17.6	17.2	16.8	16.5	15.9	14.3	13.3	12.4
90°	11.3	11.8	11.3	11.3	11.3	11.8	11.3	10.7	10.7	10.2	9.7
92.5°	46.1	43.3	41.4	41.4	41.4	43.3	46.1	52.5	63.2	79.5	105.6
95°	164.6	147.9	138.2	131.2	138.2	147.9	164.6	190.9	243.0	315.1	398.4
97.5°	410.4	378.0	361.8	350.6	361.8	378.0	410.4	448.9	505.1	557.7	588.6
100°	546.3	513.5	497.4	493.0	497.4	513.5	546.3	593.0	632.8	659.2	648.5
102.5°	661.1	637.3	620.4	616.9	620.4	637.3	661.1	689.8	706.4	698.8	645.5
105°	771.6	767.2	759.7	756.5	759.7	767.2	771.6	770.5	748.5	695.2	602.2
107.5°	789.3	801.5	806.9	808.3	806.9	801.5	789.3	762.7	714.8	639.8	540.8
110°	772.1	794.7	804.4	809.2	804.4	794.7	772.1	734.0	674.8	596.8	503.8



TEST NUMBER: P332501-830
 CATALOG NUMBER: SA4XXDIP-C350D590U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	735.1	762.4	776.0	783.8	776.0	762.4	735.1	691.7	632.6	558.9	476.7
115°	672.6	704.9	722.1	726.4	722.1	704.9	672.6	630.2	578.5	515.7	449.5
117.5°	620.4	647.4	664.9	668.3	664.9	647.4	620.4	584.1	540.4	490.9	436.1
120°	592.0	615.7	629.6	635.6	629.6	615.7	592.0	561.3	523.1	480.1	430.2
122.5°	571.7	592.0	603.8	609.7	603.8	592.0	571.7	545.8	512.4	473.3	425.0
125°	550.5	566.2	576.4	579.6	576.4	566.2	550.5	529.0	499.5	462.4	416.1
127.5°	536.3	550.2	558.7	561.9	558.7	550.2	536.3	514.6	486.6	449.6	405.4
130°	526.4	539.8	548.5	551.7	548.5	539.8	526.4	504.4	475.8	439.3	396.8
132.5°	513.5	528.7	536.8	540.1	536.8	528.7	513.5	491.8	463.4	427.6	387.8
135°	491.4	506.5	515.1	518.3	515.1	506.5	491.4	470.0	443.0	410.3	375.3
137.5°	465.6	480.5	487.6	491.4	487.6	480.5	465.6	445.5	421.2	393.6	364.0
140°	448.5	460.2	467.8	472.1	467.8	460.2	448.5	429.6	407.0	382.9	357.5
142.5°	430.7	441.8	448.5	451.4	448.5	441.8	430.7	414.2	394.5	373.8	351.6
145°	406.0	415.1	420.5	423.1	420.5	415.1	406.0	392.5	377.5	361.3	343.0
147.5°	385.2	393.0	397.1	398.1	397.1	393.0	385.2	375.3	363.4	350.5	336.0
150°	373.2	380.1	383.3	383.9	383.3	380.1	373.2	364.6	354.9	344.1	331.8
152.5°	362.8	368.5	370.4	371.0	370.4	368.5	362.8	355.5	347.5	337.6	327.0
155°	348.5	352.7	354.3	354.3	354.3	352.7	348.5	343.0	336.6	328.5	319.9
157.5°	335.5	338.7	339.7	339.7	339.7	338.7	335.5	331.4	326.2	319.5	312.3
160°	326.9	330.2	330.6	330.6	330.6	330.2	326.9	323.7	319.3	313.5	307.6
162.5°	318.8	322.0	322.5	322.1	322.5	322.0	318.8	316.4	312.5	307.8	302.8
165°	308.1	310.2	309.7	309.2	309.7	310.2	308.1	305.9	303.2	299.4	296.2
167.5°	298.1	299.4	299.4	299.0	299.4	299.4	298.1	297.0	295.4	292.4	289.9
170°	292.5	293.0	292.5	292.5	292.5	293.0	292.5	291.4	289.8	287.7	286.1
172.5°	286.9	287.5	286.9	286.1	286.9	287.5	286.9	286.3	285.1	283.8	282.6
175°	279.6	280.7	279.6	278.5	279.6	280.7	279.6	279.6	279.6	278.5	278.0
177.5°	275.4	275.8	274.9	274.1	274.9	275.8	275.4	275.8	275.4	275.4	274.9
180°	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7



TEST NUMBER: P332501-830
 CATALOG NUMBER: SA4XXDIP-C350D590U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5
2.5°	514.7	515.5	518.3	521.0	524.2	526.5	528.1	529.9	533.7	536.7	539.6
5°	482.3	483.4	489.2	493.2	500.1	506.1	510.9	515.9	522.0	530.3	537.8
7.5°	453.6	457.8	464.2	470.7	477.7	485.6	492.5	500.2	510.6	522.0	533.7
10°	437.4	442.1	448.8	456.4	463.1	472.2	480.7	489.8	501.7	515.5	529.3
12.5°	421.2	429.0	434.0	443.0	450.3	457.8	466.8	478.8	492.6	507.1	523.8
15°	400.9	405.1	414.9	419.8	430.1	441.7	450.6	462.6	476.0	495.2	514.0
17.5°	377.4	383.0	390.8	400.1	411.9	420.9	432.1	444.5	461.4	480.4	503.9
20°	362.0	366.7	376.4	386.5	399.1	408.7	420.5	432.5	450.0	470.2	494.7
22.5°	348.3	352.8	363.0	372.5	384.7	396.3	408.7	422.7	439.4	460.8	485.9
25°	327.1	333.0	342.0	351.8	363.4	376.7	390.1	402.7	420.5	443.0	469.8
27.5°	308.1	312.9	319.4	330.5	343.7	356.7	369.9	385.7	402.8	426.7	454.4
30°	296.1	300.5	307.0	317.2	329.5	343.3	357.1	372.3	390.1	413.8	442.1
32.5°	286.3	289.7	295.5	304.7	315.9	330.5	344.1	359.8	378.5	401.8	429.4
35°	272.1	275.0	277.3	286.0	296.1	309.4	323.2	340.0	358.1	380.1	407.7
37.5°	258.2	259.2	262.4	268.2	277.9	290.2	303.0	319.5	338.0	360.4	385.4
40°	249.6	250.1	252.0	257.4	265.9	277.5	290.0	306.2	323.9	345.1	369.9
42.5°	241.2	240.9	242.8	246.6	254.5	265.0	277.3	292.2	309.8	329.4	352.7
45°	228.0	228.0	227.5	230.6	237.1	247.4	257.7	271.9	286.6	305.9	325.5
47.5°	214.1	212.9	213.3	214.9	220.4	228.8	239.1	250.8	263.8	280.0	297.3
50°	205.2	203.4	202.7	204.5	209.4	216.8	226.7	236.9	249.2	263.4	278.1
52.5°	195.4	193.6	192.4	193.7	198.2	205.0	214.0	223.0	234.0	245.6	258.4
55°	180.2	178.2	177.6	178.0	181.3	186.7	194.3	202.6	210.8	220.4	229.3
57.5°	165.3	162.0	161.4	161.2	163.4	168.3	174.7	181.8	187.8	193.7	203.2
60°	155.5	151.5	150.1	149.9	151.7	155.7	161.5	168.6	172.9	176.9	185.1
62.5°	145.0	141.1	138.2	138.5	140.1	143.9	149.0	154.2	157.0	161.4	166.9
65°	128.8	123.9	121.6	120.9	121.8	124.9	128.9	132.2	135.4	137.2	142.5
67.5°	112.4	108.4	105.1	104.2	103.9	106.0	109.3	111.3	113.6	115.1	118.3
70°	101.0	97.5	93.5	92.1	91.9	93.7	96.8	97.1	100.2	100.9	104.2
72.5°	89.8	85.3	82.6	81.2	80.3	81.9	84.0	84.5	86.2	87.5	89.2
75°	72.3	68.9	66.3	64.3	63.6	64.5	64.5	65.6	66.7	67.4	69.4
77.5°	56.9	53.1	49.9	48.7	47.9	47.3	47.8	48.5	48.0	49.1	49.6
80°	46.2	42.1	39.7	39.3	37.9	36.9	36.6	37.2	36.4	36.9	38.2
82.5°	35.6	33.1	30.4	30.0	28.3	27.7	27.5	27.1	27.1	27.0	27.2
85°	21.2	19.6	17.8	16.8	16.0	15.0	15.0	14.5	14.0	13.6	13.9
87.5°	10.4	10.2	9.0	8.3	7.9	6.6	6.6	5.9	5.7	5.2	4.7
90°	9.1	9.7	8.6	7.5	7.5	4.3	4.3	3.8	3.2	1.6	0.6
92.5°	142.0	170.5	149.3	108.6	66.9	39.6	28.4	20.5	13.9	9.0	6.1
95°	450.5	438.2	330.6	202.2	114.0	67.2	44.6	31.8	24.7	19.3	17.7
97.5°	566.1	461.6	309.5	181.7	109.0	73.0	54.0	42.9	36.5	31.9	31.9
100°	570.0	432.3	280.7	171.0	110.2	78.5	61.3	51.1	44.6	40.9	40.9
102.5°	537.6	395.8	261.3	168.0	114.5	85.8	69.5	59.7	53.6	50.3	49.5
105°	479.1	352.7	244.7	169.4	124.7	99.0	83.3	73.7	67.2	64.6	62.9
107.5°	431.8	328.7	241.7	177.3	136.7	113.0	97.6	88.4	81.5	78.8	77.8
110°	408.1	320.5	242.5	183.3	145.7	122.1	107.5	97.8	91.4	88.7	87.7



TEST NUMBER: P332501-830

CATALOG NUMBER: SA4XXDIP-C350D590U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	394.7	316.6	245.1	189.8	154.3	131.5	117.0	107.4	101.3	98.2	97.1
115°	382.3	314.5	250.1	200.0	167.8	146.3	131.8	121.5	116.1	112.4	110.7
117.5°	376.7	314.0	255.2	210.5	180.8	160.3	145.2	135.7	129.8	126.5	125.0
120°	373.7	314.0	259.2	217.7	189.8	169.4	154.3	145.2	139.2	135.5	134.4
122.5°	370.2	313.6	263.1	224.6	198.4	178.0	163.3	153.4	147.9	144.1	143.0
125°	364.6	312.9	268.8	235.0	210.2	190.9	175.8	165.6	159.7	156.5	154.3
127.5°	356.9	311.7	273.4	243.9	221.2	202.5	187.3	176.6	169.9	166.1	164.3
130°	352.1	311.3	276.9	249.5	228.5	210.2	194.6	184.5	176.3	172.0	169.9
132.5°	347.9	310.9	279.9	255.1	234.5	216.2	201.5	190.5	182.9	177.2	175.5
135°	341.4	310.2	284.5	262.4	243.0	225.3	211.3	200.0	190.9	185.5	183.3
137.5°	335.8	310.1	287.1	267.6	249.5	232.9	219.6	207.8	199.2	193.2	191.2
140°	332.8	309.7	289.3	271.0	253.8	237.6	224.7	213.5	204.3	198.4	196.8
142.5°	330.3	309.7	291.0	273.5	257.7	242.0	229.5	218.6	209.9	204.4	202.8
145°	325.8	308.6	292.0	276.4	261.8	247.9	236.0	225.8	218.3	212.9	211.3
147.5°	321.9	306.7	292.5	278.8	266.2	253.1	242.4	233.8	226.1	221.4	220.8
150°	318.9	305.4	292.5	280.1	268.3	256.5	246.3	238.2	231.8	227.4	226.9
152.5°	315.4	303.2	291.6	281.0	270.0	259.5	250.2	242.9	236.9	232.6	232.5
155°	310.2	300.0	290.3	281.7	272.6	263.4	255.4	249.5	244.1	240.9	240.3
157.5°	305.0	296.7	289.0	281.7	274.5	266.6	260.3	255.1	251.0	248.0	248.0
160°	301.1	294.1	287.7	281.7	275.3	268.8	262.9	258.6	254.9	252.7	252.7
162.5°	297.7	291.5	286.3	281.7	276.2	270.1	265.5	261.6	258.3	256.6	257.0
165°	292.0	287.7	283.9	280.7	276.4	271.5	268.3	265.6	262.9	261.8	261.8
167.5°	286.8	283.8	281.3	279.4	276.3	272.7	270.2	268.7	266.6	266.2	266.6
170°	283.3	281.2	279.6	278.5	275.8	273.1	271.5	270.4	268.8	268.3	268.8
172.5°	280.3	278.6	277.9	277.7	275.4	273.5	272.4	271.7	270.5	270.4	271.0
175°	276.9	275.8	275.8	276.4	274.8	273.7	273.7	273.1	272.6	272.6	273.1
177.5°	274.6	274.1	274.1	274.9	274.1	273.7	273.7	273.7	273.2	273.7	274.1
180°	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7



TEST NUMBER: P332501-830

CATALOG NUMBER: SA4XXDIP-C350D590U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5
2.5°	542.1	543.8	546.2	550.1	551.5	553.3	555.8	555.6	556.3	559.0	564.7
5°	544.0	551.0	557.7	565.7	574.2	579.8	587.3	592.0	596.7	602.8	613.0
7.5°	544.9	555.8	568.1	582.2	594.7	609.2	620.5	631.1	640.7	653.4	665.6
10°	543.7	558.4	574.2	592.0	611.0	627.1	641.6	658.1	672.1	687.5	701.3
12.5°	541.3	559.0	580.2	600.2	622.4	646.1	664.2	680.9	699.6	717.3	738.7
15°	536.0	560.3	585.1	611.4	641.1	668.5	694.7	716.2	736.3	762.9	790.8
17.5°	529.3	555.5	586.8	618.7	649.7	681.0	713.3	745.8	771.2	804.2	826.0
20°	523.1	553.5	585.6	623.5	654.5	693.5	725.7	757.1	791.9	824.7	850.8
22.5°	514.3	547.5	581.6	619.3	660.2	699.3	736.3	770.4	805.3	840.9	872.5
25°	503.2	533.4	573.7	616.5	657.1	699.6	742.2	784.9	822.5	860.2	889.6
27.5°	484.4	522.4	560.0	604.2	649.2	697.2	742.8	787.6	826.9	857.9	876.1
30°	474.7	507.7	548.6	593.0	641.8	693.3	740.8	784.8	821.3	846.1	853.5
32.5°	460.4	494.5	534.4	580.4	632.2	685.1	734.5	776.0	806.5	819.5	810.7
35°	439.2	470.0	510.4	557.4	611.2	667.6	716.5	751.5	767.1	754.9	724.3
37.5°	413.8	444.3	484.8	531.1	586.7	644.1	688.2	713.5	708.3	677.8	632.3
40°	396.0	424.5	463.1	513.0	567.2	624.8	663.6	677.2	663.0	619.3	570.8
42.5°	376.2	404.0	442.7	491.0	548.4	601.4	635.3	636.4	612.5	560.2	511.6
45°	346.0	372.5	409.1	459.3	512.4	562.3	584.7	573.7	529.5	479.2	430.3
47.5°	316.2	339.2	375.3	422.9	473.3	515.4	526.5	506.8	459.8	410.8	365.5
50°	294.5	317.6	351.6	397.1	445.7	482.0	487.4	461.3	415.1	365.8	330.4
52.5°	273.5	296.6	329.2	371.4	415.8	448.7	448.8	418.7	372.7	328.8	295.8
55°	242.9	263.6	293.1	330.8	370.5	396.2	389.9	358.7	318.8	280.6	251.8
57.5°	213.4	231.5	258.5	290.0	325.0	346.2	335.8	305.8	270.1	237.7	215.9
60°	194.3	211.5	234.7	264.4	293.8	310.3	300.5	273.2	240.4	214.3	195.4
62.5°	175.7	190.2	212.5	238.3	265.6	277.8	269.1	242.2	213.9	190.3	174.8
65°	149.5	161.3	179.1	201.2	221.0	231.6	224.2	199.2	177.6	160.6	148.4
67.5°	124.9	134.1	147.7	165.4	182.3	187.9	181.3	163.8	145.5	132.0	123.3
70°	107.9	116.7	128.0	141.7	156.4	162.4	155.7	141.9	127.0	114.4	105.9
72.5°	93.1	99.9	109.5	121.1	132.6	138.6	134.1	120.8	108.2	98.9	91.7
75°	71.0	76.7	83.4	91.7	100.6	104.6	100.6	91.4	82.8	75.9	70.7
77.5°	51.6	54.7	59.9	66.1	71.6	74.6	71.2	65.0	59.7	55.0	52.4
80°	39.3	41.5	45.1	50.0	53.7	56.6	54.4	49.3	45.1	41.9	40.8
82.5°	28.6	30.1	32.4	36.0	38.5	40.1	39.1	35.3	33.6	30.9	29.8
85°	14.0	15.0	16.5	17.6	19.9	20.1	20.3	18.8	17.2	16.5	15.6
87.5°	5.2	5.7	6.3	7.0	7.6	8.5	8.3	8.5	8.0	7.7	7.1
90°	1.6	3.2	3.8	4.3	4.3	7.5	7.5	8.6	9.7	9.1	9.7
92.5°	9.0	13.9	20.5	28.4	39.6	66.9	108.6	149.3	170.5	142.0	105.6
95°	19.3	24.7	31.8	44.6	67.2	114.0	202.2	330.6	438.2	450.5	398.4
97.5°	31.9	36.5	42.9	54.0	73.0	109.0	181.7	309.5	461.6	566.1	588.6
100°	40.9	44.6	51.1	61.3	78.5	110.2	171.0	280.7	432.3	570.0	648.5
102.5°	50.3	53.6	59.7	69.5	85.8	114.5	168.0	261.3	395.8	537.6	645.5
105°	64.6	67.2	73.7	83.3	99.0	124.7	169.4	244.7	352.7	479.1	602.2
107.5°	78.8	81.5	88.4	97.6	113.0	136.7	177.3	241.7	328.7	431.8	540.8
110°	88.7	91.4	97.8	107.5	122.1	145.7	183.3	242.5	320.5	408.1	503.8



TEST NUMBER: P332501-830

CATALOG NUMBER: SA4XXDIP-C350D590U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	98.2	101.3	107.4	117.0	131.5	154.3	189.8	245.1	316.6	394.7	476.7
115°	112.4	116.1	121.5	131.8	146.3	167.8	200.0	250.1	314.5	382.3	449.5
117.5°	126.5	129.8	135.7	145.2	160.3	180.8	210.5	255.2	314.0	376.7	436.1
120°	135.5	139.2	145.2	154.3	169.4	189.8	217.7	259.2	314.0	373.7	430.2
122.5°	144.1	147.9	153.4	163.3	178.0	198.4	224.6	263.1	313.6	370.2	425.0
125°	156.5	159.7	165.6	175.8	190.9	210.2	235.0	268.8	312.9	364.6	416.1
127.5°	166.1	169.9	176.6	187.3	202.5	221.2	243.9	273.4	311.7	356.9	405.4
130°	172.0	176.3	184.5	194.6	210.2	228.5	249.5	276.9	311.3	352.1	396.8
132.5°	177.2	182.9	190.5	201.5	216.2	234.5	255.1	279.9	310.9	347.9	387.8
135°	185.5	190.9	200.0	211.3	225.3	243.0	262.4	284.5	310.2	341.4	375.3
137.5°	193.2	199.2	207.8	219.6	232.9	249.5	267.6	287.1	310.1	335.8	364.0
140°	198.4	204.3	213.5	224.7	237.6	253.8	271.0	289.3	309.7	332.8	357.5
142.5°	204.4	209.9	218.6	229.5	242.0	257.7	273.5	291.0	309.7	330.3	351.6
145°	212.9	218.3	225.8	236.0	247.9	261.8	276.4	292.0	308.6	325.8	343.0
147.5°	221.4	226.1	233.8	242.4	253.1	266.2	278.8	292.5	306.7	321.9	336.0
150°	227.4	231.8	238.2	246.3	256.5	268.3	280.1	292.5	305.4	318.9	331.8
152.5°	232.6	236.9	242.9	250.2	259.5	270.0	281.0	291.6	303.2	315.4	327.0
155°	240.9	244.1	249.5	255.4	263.4	272.6	281.7	290.3	300.0	310.2	319.9
157.5°	248.0	251.0	255.1	260.3	266.6	274.5	281.7	289.0	296.7	305.0	312.3
160°	252.7	254.9	258.6	262.9	268.8	275.3	281.7	287.7	294.1	301.1	307.6
162.5°	256.6	258.3	261.6	265.5	270.1	276.2	281.7	286.3	291.5	297.7	302.8
165°	261.8	262.9	265.6	268.3	271.5	276.4	280.7	283.9	287.7	292.0	296.2
167.5°	266.2	266.6	268.7	270.2	272.7	276.3	279.4	281.3	283.8	286.8	289.9
170°	268.3	268.8	270.4	271.5	273.1	275.8	278.5	279.6	281.2	283.3	286.1
172.5°	270.4	270.5	271.7	272.4	273.5	275.4	277.7	277.9	278.6	280.3	282.6
175°	272.6	272.6	273.1	273.7	273.7	274.8	276.4	275.8	275.8	276.9	278.0
177.5°	273.7	273.2	273.7	273.7	273.7	274.1	274.9	274.1	274.1	274.6	274.9
180°	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	538.5	538.5	538.5	538.5	538.5	538.5	538.5
2.5°	567.6	568.0	569.6	570.8	571.2	573.0	573.1
5°	617.5	621.2	628.6	629.2	630.4	636.2	631.7
7.5°	675.9	685.5	691.9	697.7	699.6	702.2	701.7
10°	713.4	727.6	734.8	746.2	746.6	749.5	747.7
12.5°	751.0	767.6	780.6	782.8	792.3	793.8	796.3
15°	804.4	822.0	840.1	846.6	859.7	862.8	867.7
17.5°	854.5	872.5	885.2	901.9	907.4	914.5	909.6
20°	882.0	901.6	917.8	930.9	936.4	940.5	940.0
22.5°	898.6	918.4	931.4	941.4	946.6	948.3	948.2
25°	909.0	920.4	924.4	928.2	922.4	920.4	921.2
27.5°	880.1	877.1	866.7	852.9	838.7	827.4	821.1
30°	840.3	822.9	807.1	779.4	765.2	756.7	749.0
32.5°	783.9	756.3	725.9	700.5	684.3	671.8	669.9
35°	687.3	645.8	608.5	577.5	561.5	547.9	544.7
37.5°	584.3	541.2	507.7	480.3	463.1	453.5	444.5
40°	515.9	478.9	445.9	422.7	409.5	402.7	397.1
42.5°	463.4	429.5	396.6	379.0	367.1	362.9	359.6
45°	390.6	359.1	336.4	323.0	316.1	309.0	305.6
47.5°	332.3	306.8	291.8	280.4	273.0	268.7	266.6
50°	299.4	278.4	265.0	256.3	249.6	246.3	244.5
52.5°	270.1	252.9	241.7	234.7	230.2	227.7	227.0
55°	232.6	219.5	212.4	206.3	203.0	200.8	199.9
57.5°	202.3	192.1	186.3	181.3	180.0	178.2	177.6
60°	182.3	174.5	169.6	166.2	165.0	162.9	163.2
62.5°	164.6	158.2	154.0	152.1	150.6	148.7	149.4
65°	139.2	134.5	132.2	130.5	128.8	127.6	128.5
67.5°	116.8	113.6	110.6	109.5	108.7	108.5	107.5
70°	102.2	99.5	96.8	96.1	96.1	95.3	95.0
72.5°	88.0	86.1	84.4	83.8	83.1	83.5	82.6
75°	68.1	66.4	65.8	65.1	64.9	64.9	64.3
77.5°	50.2	49.1	48.1	48.1	47.2	46.9	46.8
80°	38.2	37.7	36.9	36.9	36.4	36.6	36.1
82.5°	28.7	28.1	27.9	27.5	26.9	27.0	26.5
85°	15.4	14.7	14.5	13.9	13.4	13.9	13.4
87.5°	7.4	7.4	7.2	6.9	6.8	6.7	6.2
90°	10.2	10.7	10.7	11.3	11.8	11.3	11.3
92.5°	79.5	63.2	52.5	46.1	43.3	41.4	41.4
95°	315.1	243.0	190.9	164.6	147.9	138.2	131.2
97.5°	557.7	505.1	448.9	410.4	378.0	361.8	350.6
100°	659.2	632.8	593.0	546.3	513.5	497.4	493.0
102.5°	698.8	706.4	689.8	661.1	637.3	620.4	616.9
105°	695.2	748.5	770.5	771.6	767.2	759.7	756.5
107.5°	639.8	714.8	762.7	789.3	801.5	806.9	808.3
110°	596.8	674.8	734.0	772.1	794.7	804.4	809.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	558.9	632.6	691.7	735.1	762.4	776.0	783.8
115°	515.7	578.5	630.2	672.6	704.9	722.1	726.4
117.5°	490.9	540.4	584.1	620.4	647.4	664.9	668.3
120°	480.1	523.1	561.3	592.0	615.7	629.6	635.6
122.5°	473.3	512.4	545.8	571.7	592.0	603.8	609.7
125°	462.4	499.5	529.0	550.5	566.2	576.4	579.6
127.5°	449.6	486.6	514.6	536.3	550.2	558.7	561.9
130°	439.3	475.8	504.4	526.4	539.8	548.5	551.7
132.5°	427.6	463.4	491.8	513.5	528.7	536.8	540.1
135°	410.3	443.0	470.0	491.4	506.5	515.1	518.3
137.5°	393.6	421.2	445.5	465.6	480.5	487.6	491.4
140°	382.9	407.0	429.6	448.5	460.2	467.8	472.1
142.5°	373.8	394.5	414.2	430.7	441.8	448.5	451.4
145°	361.3	377.5	392.5	406.0	415.1	420.5	423.1
147.5°	350.5	363.4	375.3	385.2	393.0	397.1	398.1
150°	344.1	354.9	364.6	373.2	380.1	383.3	383.9
152.5°	337.6	347.5	355.5	362.8	368.5	370.4	371.0
155°	328.5	336.6	343.0	348.5	352.7	354.3	354.3
157.5°	319.5	326.2	331.4	335.5	338.7	339.7	339.7
160°	313.5	319.3	323.7	326.9	330.2	330.6	330.6
162.5°	307.8	312.5	316.4	318.8	322.0	322.5	322.1
165°	299.4	303.2	305.9	308.1	310.2	309.7	309.2
167.5°	292.4	295.4	297.0	298.1	299.4	299.4	299.0
170°	287.7	289.8	291.4	292.5	293.0	292.5	292.5
172.5°	283.8	285.1	286.3	286.9	287.5	286.9	286.1
175°	278.5	279.6	279.6	279.6	280.7	279.6	278.5
177.5°	275.4	275.4	275.8	275.4	275.8	274.9	274.1
180°	273.7	273.7	273.7	273.7	273.7	273.7	273.7

(END OF REPORT)