

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: P332510-830

Luminaire Tested: **SA4XXDIP-C350D810U830-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332510-830
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-C350D810U830-4F0-1E-UDD-A4
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 350 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

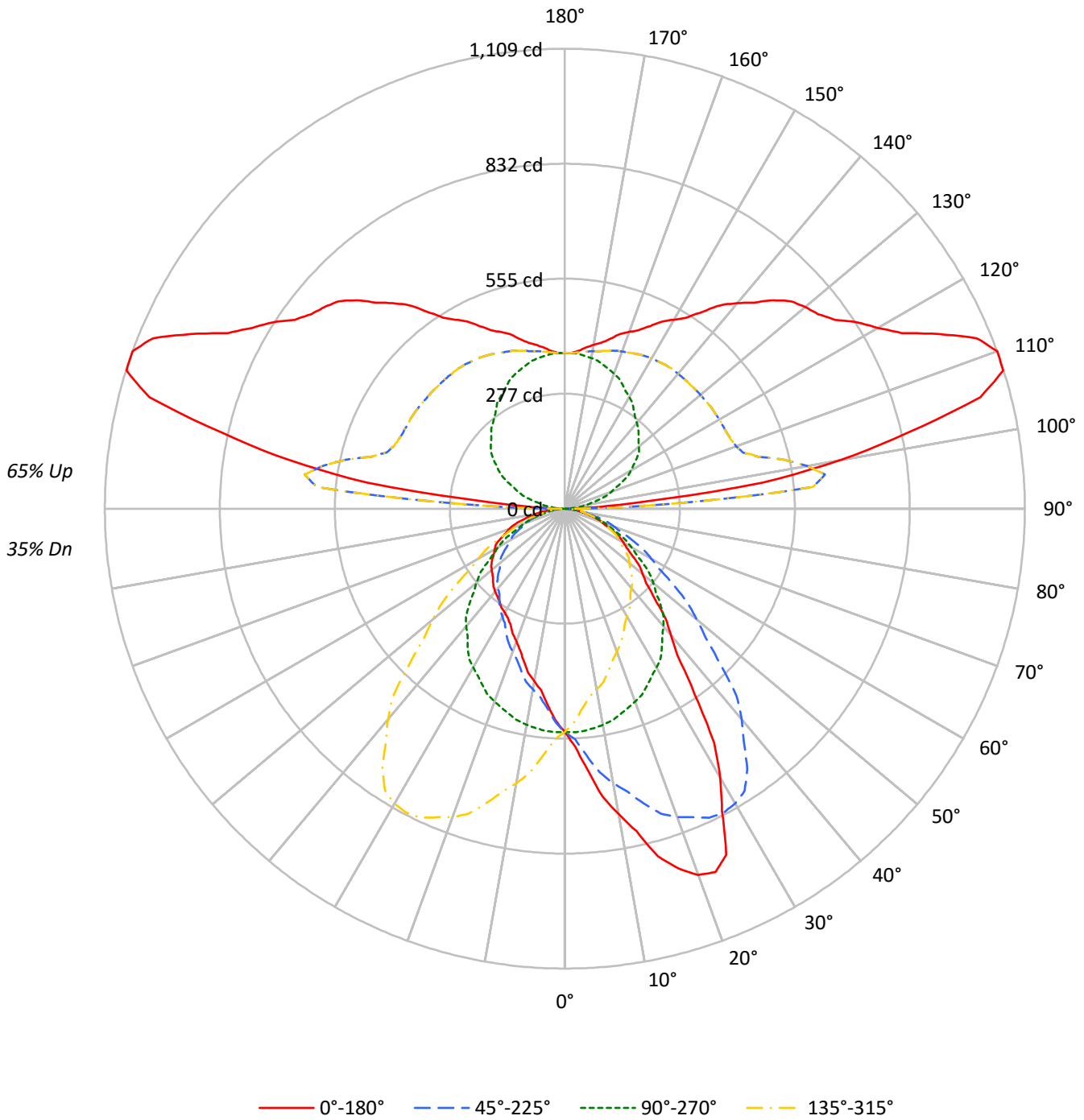
Lumens per Lamp: N/A
Luminaire Lumens: 4216.1 lumens
Efficiency: N/A
Efficacy: 135.1 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 31.2
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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	35
1	95	90	87	83	85	82	79	76	66	64	62	51	50	49	38	37	36	30
2	86	79	73	68	78	72	67	63	58	54	51	45	43	41	33	32	31	25
3	79	70	63	57	71	63	57	52	51	47	43	40	37	35	30	28	26	22
4	72	62	54	48	65	56	50	44	46	41	37	36	32	30	27	25	23	19
5	66	55	47	41	60	50	43	38	41	36	32	32	29	26	24	22	20	16
6	61	49	41	36	55	45	38	33	37	32	28	29	25	23	22	19	18	14
7	56	44	37	31	51	41	34	29	33	28	24	26	23	20	20	18	16	13
8	52	40	33	28	47	37	30	26	30	25	22	24	20	18	18	16	14	12
9	48	37	29	24	44	34	27	23	28	23	19	22	19	16	17	14	13	10
10	45	34	27	22	41	31	25	20	25	21	17	20	17	14	16	13	11	9

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



TEST NUMBER: P332510-830

CATALOG NUMBER: SA4XXDIP-C350D810U830-4F0-1E-UDD-A4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.5	1.2
10°-20°	161.7	3.8
20°-30°	256.4	6.1
30°-40°	285.4	6.8
40°-50°	259.8	6.2
50°-60°	212.3	5.0
60°-70°	151.5	3.6
70°-80°	83.4	2.0
80°-90°	24.9	0.6
90°-100°	270.9	6.4
100°-110°	563.9	13.4
110°-120°	505.1	12.0
120°-130°	424.9	10.1
130°-140°	354.3	8.4
140°-150°	270.6	6.4
150°-160°	190.2	4.5
160°-170°	111.9	2.7
170°-180°	36.4	0.9
0°-30°	470.6	11.2
0°-40°	755.9	17.9
0°-60°	1227.9	29.1
0°-90°	1487.8	35.3
90°-120°	1340.0	31.8
90°-150°	2389.7	56.7
90°-180°	2728.0	64.7
0°-180°	4216.1	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°	16	1	16	1	16	13
95°	180	24	180	24	180	279
105°	1037	86	1037	86	1037	1025
115°	996	152	996	152	996	988
125°	794	212	794	212	794	722
135°	710	251	710	251	710	548
145°	580	290	580	290	580	368
155°	486	329	486	329	486	227
165°	424	359	424	359	424	121
175°	382	374	382	374	382	37
180°	375	375	375	375	375	



TEST NUMBER: P332510-830

CATALOG NUMBER: SA4XXDIP-C350D810U830-4F0-1E-UDD-A4

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°	7.0	7.5	7.7	7.7	7.9	8.1	8.2	7.8	8.4	8.8	9.1
90°	15.5	15.5	16.2	15.5	14.7	14.7	14.0	13.3	12.5	13.3	11.8
92.5°	56.7	56.7	59.3	63.2	71.9	86.7	109.0	144.8	194.7	233.8	204.6
95°	179.8	189.5	202.6	225.6	261.6	333.1	431.9	546.1	617.6	600.7	453.3
97.5°	480.7	496.0	518.1	562.5	615.4	692.3	764.4	806.8	775.9	632.6	424.2
100°	675.8	681.7	703.8	748.8	812.9	867.4	903.5	888.8	781.2	592.6	384.7
102.5°	845.6	850.4	873.6	906.3	945.6	968.3	957.8	884.7	737.0	542.4	358.2
105°	1037.0	1041.4	1051.7	1057.6	1056.1	1025.9	952.9	825.5	656.7	483.4	335.4
107.5°	1108.0	1106.1	1098.7	1081.9	1045.5	979.8	877.0	741.3	591.8	450.4	331.2
110°	1109.2	1102.6	1089.3	1058.3	1006.0	924.9	818.0	690.6	559.4	439.2	332.3



TEST NUMBER: P332510-830

CATALOG NUMBER: SA4XXDIP-C350D810U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1074.4	1063.7	1045.1	1007.6	948.2	867.1	766.2	653.5	541.1	433.9	335.9
115°	995.7	989.8	966.2	922.0	863.7	793.0	706.8	616.1	524.0	431.1	342.7
117.5°	916.0	911.3	887.5	850.4	800.7	740.6	672.9	597.9	516.3	430.4	350.0
120°	871.1	863.0	843.9	811.4	769.4	717.1	658.2	589.6	512.2	430.4	355.2
122.5°	835.8	827.6	811.4	783.7	748.2	702.4	648.7	582.5	507.5	429.8	360.5
125°	794.5	790.0	776.1	754.7	725.2	684.7	633.9	570.4	499.6	429.0	368.5
127.5°	770.3	765.9	754.1	735.1	705.5	666.9	616.2	555.7	489.2	427.3	374.8
130°	756.2	751.8	740.0	721.5	691.3	652.2	602.1	543.9	482.8	426.7	379.6
132.5°	740.3	735.8	724.6	703.8	674.2	635.2	586.2	531.5	476.8	426.1	383.7
135°	710.5	706.1	694.3	673.6	644.1	607.3	562.3	514.4	468.0	425.3	389.8
137.5°	673.6	668.3	658.6	638.2	610.7	577.4	539.5	499.0	460.3	425.1	393.5
140°	647.1	641.2	630.8	614.6	588.9	557.9	524.7	490.1	456.2	424.5	396.5
142.5°	618.8	614.6	605.5	590.5	567.6	540.8	512.4	481.8	452.7	424.5	398.9
145°	580.0	576.4	568.9	556.5	538.0	517.4	495.3	470.2	446.6	423.0	400.2
147.5°	545.6	544.3	538.8	528.0	514.4	498.2	480.5	460.6	441.2	420.4	401.0
150°	526.2	525.5	521.0	511.5	499.6	486.4	471.6	454.7	437.1	418.6	401.0
152.5°	508.5	507.7	505.1	497.3	487.3	476.4	462.8	448.3	432.3	415.7	399.7
155°	485.7	485.7	483.4	477.6	470.2	461.4	450.3	438.5	425.3	411.2	397.9
157.5°	465.6	465.6	464.3	459.9	454.3	447.2	437.9	428.0	418.0	406.7	396.1
160°	453.3	453.3	452.5	448.1	443.7	437.8	429.7	421.6	412.7	403.1	394.3
162.5°	441.5	442.1	441.3	436.9	433.7	428.4	422.0	415.1	408.0	399.6	392.6
165°	423.8	424.5	425.3	422.3	419.3	415.7	410.5	406.0	400.2	394.3	389.2
167.5°	409.7	410.4	410.5	408.6	407.1	404.9	400.8	397.4	393.1	389.0	385.6
170°	401.0	401.0	401.6	401.0	399.4	397.3	394.3	392.1	388.4	385.4	383.2
172.5°	392.1	393.2	394.0	393.2	392.4	390.8	389.0	387.4	384.3	381.9	380.9
175°	381.7	383.2	384.7	383.2	383.2	383.2	381.7	381.1	379.6	378.1	378.1
177.5°	375.7	376.9	378.1	377.5	378.1	377.5	377.5	376.9	376.3	375.7	375.7
180°	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1



TEST NUMBER: P332510-830

CATALOG NUMBER: SA4XXDIP-C350D810U830-4F0-1E-UDD-A4

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°	8.9	9.0	7.9	7.3	6.6	5.8	5.3	4.8	5.3	5.8	6.2
90°	10.3	10.3	5.9	5.9	5.2	4.4	2.2	0.8	2.2	4.4	5.2
92.5°	148.8	91.7	54.2	38.9	28.2	19.1	12.3	8.4	12.3	19.1	28.2
95°	277.1	156.3	92.1	61.2	43.5	33.9	26.5	24.3	26.5	33.9	43.5
97.5°	249.1	149.3	99.9	74.0	58.8	50.0	43.6	43.6	43.6	50.0	58.8
100°	234.4	151.1	107.6	84.0	70.0	61.2	56.0	56.0	56.0	61.2	70.0
102.5°	230.3	156.9	117.6	95.2	81.8	73.5	69.0	67.8	69.0	73.5	81.8
105°	232.1	171.0	135.6	114.2	100.9	92.1	88.4	86.2	88.4	92.1	100.9
107.5°	243.1	187.4	155.0	133.8	121.1	111.7	108.0	106.6	108.0	111.7	121.1
110°	251.3	199.7	167.3	147.4	134.1	125.3	121.6	120.2	121.6	125.3	134.1



TEST NUMBER: P332510-830

CATALOG NUMBER: SA4XXDIP-C350D810U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	260.1	211.5	180.3	160.3	147.1	138.8	134.6	133.1	134.6	138.8	147.1
115°	274.2	230.0	200.5	180.6	166.5	159.2	154.0	151.8	154.0	159.2	166.5
117.5°	288.4	247.8	219.8	199.2	186.1	178.0	173.3	171.3	173.3	178.0	186.1
120°	298.5	260.1	232.1	211.5	199.0	190.9	185.7	184.3	185.7	190.9	199.0
122.5°	307.9	271.9	243.9	223.9	210.2	202.6	197.6	196.0	197.6	202.6	210.2
125°	322.1	288.1	261.6	241.0	227.0	218.9	214.4	211.5	214.4	218.9	227.0
127.5°	334.3	303.2	277.6	256.7	242.1	232.9	227.6	225.3	227.6	232.9	242.1
130°	342.0	313.2	288.1	266.8	252.8	241.8	235.8	232.9	235.8	241.8	252.8
132.5°	349.6	321.5	296.4	276.3	261.1	250.6	242.9	240.5	242.9	250.6	261.1
135°	359.7	333.1	308.8	289.6	274.2	261.6	254.3	251.3	254.3	261.6	274.2
137.5°	366.7	342.0	319.2	301.0	284.9	273.0	264.9	262.1	264.9	273.0	284.9
140°	371.5	347.9	325.7	308.0	292.6	280.0	271.9	269.8	271.9	280.0	292.6
142.5°	374.9	353.2	331.7	314.5	299.6	287.8	280.2	278.0	280.2	287.8	299.6
145°	378.8	358.9	339.8	323.6	309.5	299.3	291.8	289.6	291.8	299.3	309.5
147.5°	382.2	364.9	346.9	332.2	320.6	310.0	303.5	302.7	303.5	310.0	320.6
150°	384.0	367.8	351.6	337.5	326.5	317.6	311.8	311.0	311.8	317.6	326.5
152.5°	385.1	370.1	355.7	342.9	333.0	324.7	318.9	318.7	318.9	324.7	333.0
155°	386.2	373.6	361.1	350.1	342.0	334.6	330.2	329.4	330.2	334.6	342.0
157.5°	386.2	376.2	365.5	356.8	349.8	344.0	339.9	339.9	339.9	344.0	349.8
160°	386.2	377.3	368.5	360.4	354.5	349.3	346.4	346.4	346.4	349.3	354.5
162.5°	386.2	378.5	370.2	363.9	358.6	354.0	351.7	352.3	351.7	354.0	358.6
165°	384.7	378.8	372.2	367.8	364.1	360.4	358.9	358.9	358.9	360.4	364.1
167.5°	383.0	378.7	373.8	370.4	368.3	365.5	364.9	365.5	364.9	365.5	368.3
170°	381.7	378.1	374.4	372.2	370.7	368.5	367.8	368.5	367.8	368.5	370.7
172.5°	380.6	377.5	374.9	373.3	372.5	370.9	370.7	371.5	370.7	370.9	372.5
175°	378.8	376.6	375.1	375.1	374.4	373.6	373.6	374.4	373.6	373.6	374.4
177.5°	376.9	375.7	375.1	375.1	375.1	374.6	375.1	375.7	375.1	374.6	375.1
180°	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1



TEST NUMBER: P332510-830

CATALOG NUMBER: SA4XXDIP-C350D810U830-4F0-1E-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°	6.9	6.9	8.5	8.9	9.7	10.8	11.0	13.2	14.0	15.1	16.7
90°	5.9	5.9	10.3	10.3	11.8	13.3	12.5	13.3	14.0	14.7	14.7
92.5°	38.9	54.2	91.7	148.8	204.6	233.8	194.7	144.8	109.0	86.7	71.9
95°	61.2	92.1	156.3	277.1	453.3	600.7	617.6	546.1	431.9	333.1	261.6
97.5°	74.0	99.9	149.3	249.1	424.2	632.6	775.9	806.8	764.4	692.3	615.4
100°	84.0	107.6	151.1	234.4	384.7	592.6	781.2	888.8	903.5	867.4	812.9
102.5°	95.2	117.6	156.9	230.3	358.2	542.4	737.0	884.7	957.8	968.3	945.6
105°	114.2	135.6	171.0	232.1	335.4	483.4	656.7	825.5	952.9	1025.9	1056.1
107.5°	133.8	155.0	187.4	243.1	331.2	450.4	591.8	741.3	877.0	979.8	1045.5
110°	147.4	167.3	199.7	251.3	332.3	439.2	559.4	690.6	818.0	924.9	1006.0



TEST NUMBER: P332510-830

CATALOG NUMBER: SA4XXDIP-C350D810U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	160.3	180.3	211.5	260.1	335.9	433.9	541.1	653.5	766.2	867.1	948.2
115°	180.6	200.5	230.0	274.2	342.7	431.1	524.0	616.1	706.8	793.0	863.7
117.5°	199.2	219.8	247.8	288.4	350.0	430.4	516.3	597.9	672.9	740.6	800.7
120°	211.5	232.1	260.1	298.5	355.2	430.4	512.2	589.6	658.2	717.1	769.4
122.5°	223.9	243.9	271.9	307.9	360.5	429.8	507.5	582.5	648.7	702.4	748.2
125°	241.0	261.6	288.1	322.1	368.5	429.0	499.6	570.4	633.9	684.7	725.2
127.5°	256.7	277.6	303.2	334.3	374.8	427.3	489.2	555.7	616.2	666.9	705.5
130°	266.8	288.1	313.2	342.0	379.6	426.7	482.8	543.9	602.1	652.2	691.3
132.5°	276.3	296.4	321.5	349.6	383.7	426.1	476.8	531.5	586.2	635.2	674.2
135°	289.6	308.8	333.1	359.7	389.8	425.3	468.0	514.4	562.3	607.3	644.1
137.5°	301.0	319.2	342.0	366.7	393.5	425.1	460.3	499.0	539.5	577.4	610.7
140°	308.0	325.7	347.9	371.5	396.5	424.5	456.2	490.1	524.7	557.9	588.9
142.5°	314.5	331.7	353.2	374.9	398.9	424.5	452.7	481.8	512.4	540.8	567.6
145°	323.6	339.8	358.9	378.8	400.2	423.0	446.6	470.2	495.3	517.4	538.0
147.5°	332.2	346.9	364.9	382.2	401.0	420.4	441.2	460.6	480.5	498.2	514.4
150°	337.5	351.6	367.8	384.0	401.0	418.6	437.1	454.7	471.6	486.4	499.6
152.5°	342.9	355.7	370.1	385.1	399.7	415.7	432.3	448.3	462.8	476.4	487.3
155°	350.1	361.1	373.6	386.2	397.9	411.2	425.3	438.5	450.3	461.4	470.2
157.5°	356.8	365.5	376.2	386.2	396.1	406.7	418.0	428.0	437.9	447.2	454.3
160°	360.4	368.5	377.3	386.2	394.3	403.1	412.7	421.6	429.7	437.8	443.7
162.5°	363.9	370.2	378.5	386.2	392.6	399.6	408.0	415.1	422.0	428.4	433.7
165°	367.8	372.2	378.8	384.7	389.2	394.3	400.2	406.0	410.5	415.7	419.3
167.5°	370.4	373.8	378.7	383.0	385.6	389.0	393.1	397.4	400.8	404.9	407.1
170°	372.2	374.4	378.1	381.7	383.2	385.4	388.4	392.1	394.3	397.3	399.4
172.5°	373.3	374.9	377.5	380.6	380.9	381.9	384.3	387.4	389.0	390.8	392.4
175°	375.1	375.1	376.6	378.8	378.1	378.1	379.6	381.1	381.7	383.2	383.2
177.5°	375.1	375.1	375.7	376.9	375.7	375.7	376.3	376.9	377.5	377.5	378.1
180°	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1



TEST NUMBER: P332510-830

CATALOG NUMBER: SA4XXDIP-C350D810U830-4F0-1E-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°	17.3	17.7	18.1	18.5	18.1	17.7	17.3	16.7	15.1	14.0	13.2
90°	15.5	16.2	15.5	15.5	15.5	16.2	15.5	14.7	14.7	14.0	13.3
92.5°	63.2	59.3	56.7	56.7	56.7	59.3	63.2	71.9	86.7	109.0	144.8
95°	225.6	202.6	189.5	179.8	189.5	202.6	225.6	261.6	333.1	431.9	546.1
97.5°	562.5	518.1	496.0	480.7	496.0	518.1	562.5	615.4	692.3	764.4	806.8
100°	748.8	703.8	681.7	675.8	681.7	703.8	748.8	812.9	867.4	903.5	888.8
102.5°	906.3	873.6	850.4	845.6	850.4	873.6	906.3	945.6	968.3	957.8	884.7
105°	1057.6	1051.7	1041.4	1037.0	1041.4	1051.7	1057.6	1056.1	1025.9	952.9	825.5
107.5°	1081.9	1098.7	1106.1	1108.0	1106.1	1098.7	1081.9	1045.5	979.8	877.0	741.3
110°	1058.3	1089.3	1102.6	1109.2	1102.6	1089.3	1058.3	1006.0	924.9	818.0	690.6



TEST NUMBER: P332510-830

CATALOG NUMBER: SA4XXDIP-C350D810U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1007.6	1045.1	1063.7	1074.4	1063.7	1045.1	1007.6	948.2	867.1	766.2	653.5
115°	922.0	966.2	989.8	995.7	989.8	966.2	922.0	863.7	793.0	706.8	616.1
117.5°	850.4	887.5	911.3	916.0	911.3	887.5	850.4	800.7	740.6	672.9	597.9
120°	811.4	843.9	863.0	871.1	863.0	843.9	811.4	769.4	717.1	658.2	589.6
122.5°	783.7	811.4	827.6	835.8	827.6	811.4	783.7	748.2	702.4	648.7	582.5
125°	754.7	776.1	790.0	794.5	790.0	776.1	754.7	725.2	684.7	633.9	570.4
127.5°	735.1	754.1	765.9	770.3	765.9	754.1	735.1	705.5	666.9	616.2	555.7
130°	721.5	740.0	751.8	756.2	751.8	740.0	721.5	691.3	652.2	602.1	543.9
132.5°	703.8	724.6	735.8	740.3	735.8	724.6	703.8	674.2	635.2	586.2	531.5
135°	673.6	694.3	706.1	710.5	706.1	694.3	673.6	644.1	607.3	562.3	514.4
137.5°	638.2	658.6	668.3	673.6	668.3	658.6	638.2	610.7	577.4	539.5	499.0
140°	614.6	630.8	641.2	647.1	641.2	630.8	614.6	588.9	557.9	524.7	490.1
142.5°	590.5	605.5	614.6	618.8	614.6	605.5	590.5	567.6	540.8	512.4	481.8
145°	556.5	568.9	576.4	580.0	576.4	568.9	556.5	538.0	517.4	495.3	470.2
147.5°	528.0	538.8	544.3	545.6	544.3	538.8	528.0	514.4	498.2	480.5	460.6
150°	511.5	521.0	525.5	526.2	525.5	521.0	511.5	499.6	486.4	471.6	454.7
152.5°	497.3	505.1	507.7	508.5	507.7	505.1	497.3	487.3	476.4	462.8	448.3
155°	477.6	483.4	485.7	485.7	485.7	483.4	477.6	470.2	461.4	450.3	438.5
157.5°	459.9	464.3	465.6	465.6	465.6	464.3	459.9	454.3	447.2	437.9	428.0
160°	448.1	452.5	453.3	453.3	453.3	452.5	448.1	443.7	437.8	429.7	421.6
162.5°	436.9	441.3	442.1	441.5	442.1	441.3	436.9	433.7	428.4	422.0	415.1
165°	422.3	425.3	424.5	423.8	424.5	425.3	422.3	419.3	415.7	410.5	406.0
167.5°	408.6	410.5	410.4	409.7	410.4	410.5	408.6	407.1	404.9	400.8	397.4
170°	401.0	401.6	401.0	401.0	401.0	401.6	401.0	399.4	397.3	394.3	392.1
172.5°	393.2	394.0	393.2	392.1	393.2	394.0	393.2	392.4	390.8	389.0	387.4
175°	383.2	384.7	383.2	381.7	383.2	384.7	383.2	383.2	383.2	381.7	381.1
177.5°	377.5	378.1	376.9	375.7	376.9	378.1	377.5	378.1	377.5	377.5	376.9
180°	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1



TEST NUMBER: P332510-830

CATALOG NUMBER: SA4XXDIP-C350D810U830-4F0-1E-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°	11.0	10.8	9.7	8.9	8.5	6.9	6.9	6.2	5.8	5.3	4.8
90°	12.5	13.3	11.8	10.3	10.3	5.9	5.9	5.2	4.4	2.2	0.8
92.5°	194.7	233.8	204.6	148.8	91.7	54.2	38.9	28.2	19.1	12.3	8.4
95°	617.6	600.7	453.3	277.1	156.3	92.1	61.2	43.5	33.9	26.5	24.3
97.5°	775.9	632.6	424.2	249.1	149.3	99.9	74.0	58.8	50.0	43.6	43.6
100°	781.2	592.6	384.7	234.4	151.1	107.6	84.0	70.0	61.2	56.0	56.0
102.5°	737.0	542.4	358.2	230.3	156.9	117.6	95.2	81.8	73.5	69.0	67.8
105°	656.7	483.4	335.4	232.1	171.0	135.6	114.2	100.9	92.1	88.4	86.2
107.5°	591.8	450.4	331.2	243.1	187.4	155.0	133.8	121.1	111.7	108.0	106.6
110°	559.4	439.2	332.3	251.3	199.7	167.3	147.4	134.1	125.3	121.6	120.2



TEST NUMBER: P332510-830

CATALOG NUMBER: SA4XXDIP-C350D810U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	541.1	433.9	335.9	260.1	211.5	180.3	160.3	147.1	138.8	134.6	133.1
115°	524.0	431.1	342.7	274.2	230.0	200.5	180.6	166.5	159.2	154.0	151.8
117.5°	516.3	430.4	350.0	288.4	247.8	219.8	199.2	186.1	178.0	173.3	171.3
120°	512.2	430.4	355.2	298.5	260.1	232.1	211.5	199.0	190.9	185.7	184.3
122.5°	507.5	429.8	360.5	307.9	271.9	243.9	223.9	210.2	202.6	197.6	196.0
125°	499.6	429.0	368.5	322.1	288.1	261.6	241.0	227.0	218.9	214.4	211.5
127.5°	489.2	427.3	374.8	334.3	303.2	277.6	256.7	242.1	232.9	227.6	225.3
130°	482.8	426.7	379.6	342.0	313.2	288.1	266.8	252.8	241.8	235.8	232.9
132.5°	476.8	426.1	383.7	349.6	321.5	296.4	276.3	261.1	250.6	242.9	240.5
135°	468.0	425.3	389.8	359.7	333.1	308.8	289.6	274.2	261.6	254.3	251.3
137.5°	460.3	425.1	393.5	366.7	342.0	319.2	301.0	284.9	273.0	264.9	262.1
140°	456.2	424.5	396.5	371.5	347.9	325.7	308.0	292.6	280.0	271.9	269.8
142.5°	452.7	424.5	398.9	374.9	353.2	331.7	314.5	299.6	287.8	280.2	278.0
145°	446.6	423.0	400.2	378.8	358.9	339.8	323.6	309.5	299.3	291.8	289.6
147.5°	441.2	420.4	401.0	382.2	364.9	346.9	332.2	320.6	310.0	303.5	302.7
150°	437.1	418.6	401.0	384.0	367.8	351.6	337.5	326.5	317.6	311.8	311.0
152.5°	432.3	415.7	399.7	385.1	370.1	355.7	342.9	333.0	324.7	318.9	318.7
155°	425.3	411.2	397.9	386.2	373.6	361.1	350.1	342.0	334.6	330.2	329.4
157.5°	418.0	406.7	396.1	386.2	376.2	365.5	356.8	349.8	344.0	339.9	339.9
160°	412.7	403.1	394.3	386.2	377.3	368.5	360.4	354.5	349.3	346.4	346.4
162.5°	408.0	399.6	392.6	386.2	378.5	370.2	363.9	358.6	354.0	351.7	352.3
165°	400.2	394.3	389.2	384.7	378.8	372.2	367.8	364.1	360.4	358.9	358.9
167.5°	393.1	389.0	385.6	383.0	378.7	373.8	370.4	368.3	365.5	364.9	365.5
170°	388.4	385.4	383.2	381.7	378.1	374.4	372.2	370.7	368.5	367.8	368.5
172.5°	384.3	381.9	380.9	380.6	377.5	374.9	373.3	372.5	370.9	370.7	371.5
175°	379.6	378.1	378.1	378.8	376.6	375.1	375.1	374.4	373.6	373.6	374.4
177.5°	376.3	375.7	375.7	376.9	375.7	375.1	375.1	375.1	374.6	375.1	375.7
180°	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1



TEST NUMBER: P332510-830

CATALOG NUMBER: SA4XXDIP-C350D810U830-4F0-1E-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°	5.3	5.8	6.6	7.3	7.9	9.0	8.9	9.1	8.8	8.4	7.8
90°	2.2	4.4	5.2	5.9	5.9	10.3	10.3	11.8	13.3	12.5	13.3
92.5°	12.3	19.1	28.2	38.9	54.2	91.7	148.8	204.6	233.8	194.7	144.8
95°	26.5	33.9	43.5	61.2	92.1	156.3	277.1	453.3	600.7	617.6	546.1
97.5°	43.6	50.0	58.8	74.0	99.9	149.3	249.1	424.2	632.6	775.9	806.8
100°	56.0	61.2	70.0	84.0	107.6	151.1	234.4	384.7	592.6	781.2	888.8
102.5°	69.0	73.5	81.8	95.2	117.6	156.9	230.3	358.2	542.4	737.0	884.7
105°	88.4	92.1	100.9	114.2	135.6	171.0	232.1	335.4	483.4	656.7	825.5
107.5°	108.0	111.7	121.1	133.8	155.0	187.4	243.1	331.2	450.4	591.8	741.3
110°	121.6	125.3	134.1	147.4	167.3	199.7	251.3	332.3	439.2	559.4	690.6



TEST NUMBER: P332510-830

CATALOG NUMBER: SA4XXDIP-C350D810U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	134.6	138.8	147.1	160.3	180.3	211.5	260.1	335.9	433.9	541.1	653.5
115°	154.0	159.2	166.5	180.6	200.5	230.0	274.2	342.7	431.1	524.0	616.1
117.5°	173.3	178.0	186.1	199.2	219.8	247.8	288.4	350.0	430.4	516.3	597.9
120°	185.7	190.9	199.0	211.5	232.1	260.1	298.5	355.2	430.4	512.2	589.6
122.5°	197.6	202.6	210.2	223.9	243.9	271.9	307.9	360.5	429.8	507.5	582.5
125°	214.4	218.9	227.0	241.0	261.6	288.1	322.1	368.5	429.0	499.6	570.4
127.5°	227.6	232.9	242.1	256.7	277.6	303.2	334.3	374.8	427.3	489.2	555.7
130°	235.8	241.8	252.8	266.8	288.1	313.2	342.0	379.6	426.7	482.8	543.9
132.5°	242.9	250.6	261.1	276.3	296.4	321.5	349.6	383.7	426.1	476.8	531.5
135°	254.3	261.6	274.2	289.6	308.8	333.1	359.7	389.8	425.3	468.0	514.4
137.5°	264.9	273.0	284.9	301.0	319.2	342.0	366.7	393.5	425.1	460.3	499.0
140°	271.9	280.0	292.6	308.0	325.7	347.9	371.5	396.5	424.5	456.2	490.1
142.5°	280.2	287.8	299.6	314.5	331.7	353.2	374.9	398.9	424.5	452.7	481.8
145°	291.8	299.3	309.5	323.6	339.8	358.9	378.8	400.2	423.0	446.6	470.2
147.5°	303.5	310.0	320.6	332.2	346.9	364.9	382.2	401.0	420.4	441.2	460.6
150°	311.8	317.6	326.5	337.5	351.6	367.8	384.0	401.0	418.6	437.1	454.7
152.5°	318.9	324.7	333.0	342.9	355.7	370.1	385.1	399.7	415.7	432.3	448.3
155°	330.2	334.6	342.0	350.1	361.1	373.6	386.2	397.9	411.2	425.3	438.5
157.5°	339.9	344.0	349.8	356.8	365.5	376.2	386.2	396.1	406.7	418.0	428.0
160°	346.4	349.3	354.5	360.4	368.5	377.3	386.2	394.3	403.1	412.7	421.6
162.5°	351.7	354.0	358.6	363.9	370.2	378.5	386.2	392.6	399.6	408.0	415.1
165°	358.9	360.4	364.1	367.8	372.2	378.8	384.7	389.2	394.3	400.2	406.0
167.5°	364.9	365.5	368.3	370.4	373.8	378.7	383.0	385.6	389.0	393.1	397.4
170°	367.8	368.5	370.7	372.2	374.4	378.1	381.7	383.2	385.4	388.4	392.1
172.5°	370.7	370.9	372.5	373.3	374.9	377.5	380.6	380.9	381.9	384.3	387.4
175°	373.6	373.6	374.4	375.1	375.1	376.6	378.8	378.1	378.1	379.6	381.1
177.5°	375.1	374.6	375.1	375.1	375.1	375.7	376.9	375.7	375.7	376.3	376.9
180°	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1	375.1



TEST NUMBER: P332510-830
 CATALOG NUMBER: SA4XXDIP-C350D810U830-4F0-1E-UDD-A4

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°	8.2	8.1	7.9	7.7	7.7	7.5	7.0
90°	14.0	14.7	14.7	15.5	16.2	15.5	15.5
92.5°	109.0	86.7	71.9	63.2	59.3	56.7	56.7
95°	431.9	333.1	261.6	225.6	202.6	189.5	179.8
97.5°	764.4	692.3	615.4	562.5	518.1	496.0	480.7
100°	903.5	867.4	812.9	748.8	703.8	681.7	675.8
102.5°	957.8	968.3	945.6	906.3	873.6	850.4	845.6
105°	952.9	1025.9	1056.1	1057.6	1051.7	1041.4	1037.0
107.5°	877.0	979.8	1045.5	1081.9	1098.7	1106.1	1108.0
110°	818.0	924.9	1006.0	1058.3	1089.3	1102.6	1109.2



TEST NUMBER: P332510-830

CATALOG NUMBER: SA4XXDIP-C350D810U830-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	766.2	867.1	948.2	1007.6	1045.1	1063.7	1074.4
115°	706.8	793.0	863.7	922.0	966.2	989.8	995.7
117.5°	672.9	740.6	800.7	850.4	887.5	911.3	916.0
120°	658.2	717.1	769.4	811.4	843.9	863.0	871.1
122.5°	648.7	702.4	748.2	783.7	811.4	827.6	835.8
125°	633.9	684.7	725.2	754.7	776.1	790.0	794.5
127.5°	616.2	666.9	705.5	735.1	754.1	765.9	770.3
130°	602.1	652.2	691.3	721.5	740.0	751.8	756.2
132.5°	586.2	635.2	674.2	703.8	724.6	735.8	740.3
135°	562.3	607.3	644.1	673.6	694.3	706.1	710.5
137.5°	539.5	577.4	610.7	638.2	658.6	668.3	673.6
140°	524.7	557.9	588.9	614.6	630.8	641.2	647.1
142.5°	512.4	540.8	567.6	590.5	605.5	614.6	618.8
145°	495.3	517.4	538.0	556.5	568.9	576.4	580.0
147.5°	480.5	498.2	514.4	528.0	538.8	544.3	545.6
150°	471.6	486.4	499.6	511.5	521.0	525.5	526.2
152.5°	462.8	476.4	487.3	497.3	505.1	507.7	508.5
155°	450.3	461.4	470.2	477.6	483.4	485.7	485.7
157.5°	437.9	447.2	454.3	459.9	464.3	465.6	465.6
160°	429.7	437.8	443.7	448.1	452.5	453.3	453.3
162.5°	422.0	428.4	433.7	436.9	441.3	442.1	441.5
165°	410.5	415.7	419.3	422.3	425.3	424.5	423.8
167.5°	400.8	404.9	407.1	408.6	410.5	410.4	409.7
170°	394.3	397.3	399.4	401.0	401.6	401.0	401.0
172.5°	389.0	390.8	392.4	393.2	394.0	393.2	392.1
175°	381.7	383.2	383.2	383.2	384.7	383.2	381.7
177.5°	377.5	377.5	378.1	377.5	378.1	376.9	375.7
180°	375.1	375.1	375.1	375.1	375.1	375.1	375.1

(END OF REPORT)