

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: P331472-830

Luminaire Tested: **S122DIW-S290D710U830-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331472-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DIW-S290D710U830-4F0-1E-UDD-A1
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 710 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3549.9 lumens
Efficiency: N/A
Efficacy: 116.8 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Semi-Indirect

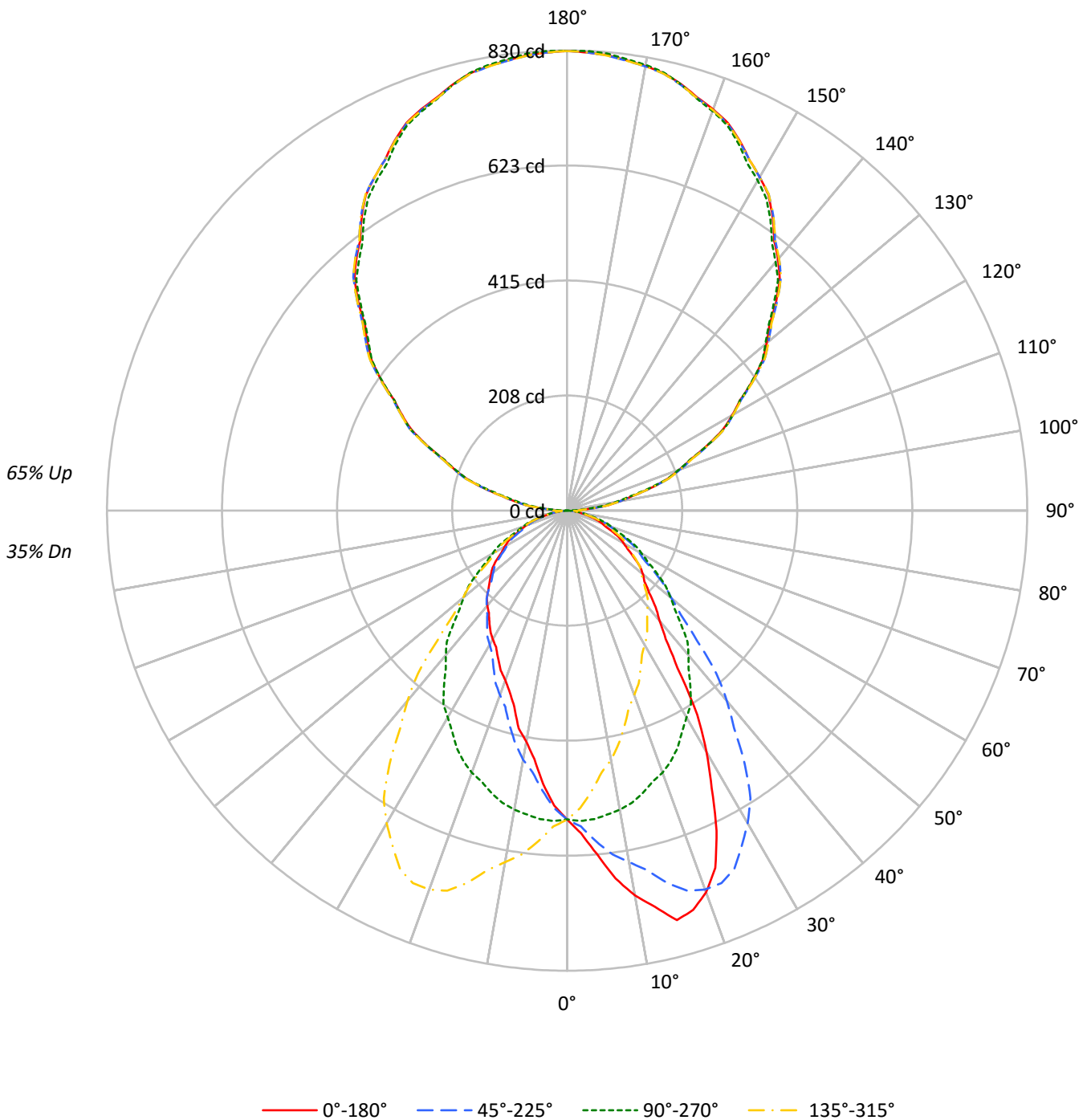
Input Watts (W): 30.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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	0
RCR																					
0	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35			35
1	95	91	87	84	85	82	79	76	66	64	62	51	50	49	38	37	36	30			30
2	86	79	74	69	78	72	67	63	58	55	52	45	43	41	34	32	31	26			26
3	79	70	63	58	71	64	58	53	52	47	44	40	38	35	30	28	27	22			22
4	72	62	55	49	65	57	50	45	46	41	38	36	33	30	27	25	23	19			19
5	67	55	48	42	60	51	44	39	41	36	33	33	29	26	24	22	20	17			17
6	61	50	42	36	55	45	39	34	37	32	28	30	26	23	22	20	18	15			15
7	57	45	37	32	51	41	34	30	34	29	25	27	23	21	20	18	16	13			13
8	53	41	33	28	48	37	31	26	31	26	22	25	21	18	19	16	15	12			12
9	49	37	30	25	44	34	28	23	28	23	20	23	19	17	17	15	13	11			11
10	46	34	27	23	41	31	25	21	26	21	18	21	17	15	16	14	12	10			10

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8995	8995	8995	8995
5°	10084	9054	8023	9054
10°	11555	8979	6943	8979
15°	12784	8816	6135	8816
20°	12589	8639	5593	8639
25°	11352	8402	5248	8402
30°	9380	8028	4998	8028
35°	6838	7634	4819	7634
40°	5461	7172	4719	7172
45°	4772	6635	4587	6635
50°	4486	6116	4496	6116
55°	4132	5588	4374	5588
60°	3788	5025	4191	5025
65°	3454	4523	4008	4523
70°	3135	4032	3744	4032
75°	2782	3487	3313	3487
80°	2390	2882	2669	2882
85°	2149	2149	1593	2149



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.1	1.5
10°-20°	154.2	4.3
20°-30°	223.9	6.3
30°-40°	236.2	6.7
40°-50°	209.2	5.9
50°-60°	166.9	4.7
60°-70°	113.4	3.2
70°-80°	58.2	1.6
80°-90°	17.3	0.5
90°-100°	52.5	1.5
100°-110°	163.1	4.6
110°-120°	278.8	7.9
120°-130°	366.6	10.3
130°-140°	411.5	11.6
140°-150°	403.5	11.4
150°-160°	338.4	9.5
160°-170°	224.5	6.3
170°-180°	78.5	2.2
0°-30°	431.2	12.1
0°-40°	667.4	18.8
0°-60°	1043.5	29.4
0°-90°	1232.4	34.7
90°-120°	494.4	13.9
90°-150°	1676.1	47.2
90°-180°	2317.0	65.3
0°-180°	3549.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	557	557	557	557	557	
5°	622	559	495	559	622	62
15°	765	527	367	527	765	211
25°	637	472	295	472	637	288
35°	347	387	244	387	347	226
45°	209	291	201	291	209	164
55°	147	198	155	198	147	132
65°	90	118	105	118	90	90
75°	45	56	53	56	45	48
85°	12	12	9	12	12	13
90°	24	1	24	1	24	11
95°	43	36	43	36	43	48
105°	155	150	155	150	155	163
115°	280	280	280	280	280	276
125°	408	407	408	407	408	364
135°	533	527	533	527	533	410
145°	646	639	646	639	646	404
155°	736	731	736	731	736	339
165°	796	795	796	795	796	224
175°	825	827	825	827	825	78
180°	829	829	829	829	829	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	582.8	583.0	583.3	580.6	580.2	580.2	577.9	575.8	573.3	570.1	570.5
5°	622.2	624.5	625.4	622.8	619.0	618.6	614.9	609.0	603.3	598.9	595.7
7.5°	669.2	670.1	668.1	664.7	661.9	656.7	649.9	643.3	634.0	625.5	619.2
10°	704.8	706.2	702.5	697.6	693.5	687.5	677.7	667.6	655.4	643.7	634.2
12.5°	731.9	735.1	730.4	729.8	722.8	714.5	702.9	697.8	680.6	664.2	654.0
15°	764.8	764.6	765.1	760.9	755.8	754.5	742.2	728.6	704.5	694.7	678.1
17.5°	755.3	758.6	760.1	760.0	759.9	759.0	755.1	746.6	734.4	718.8	699.6
20°	732.7	737.0	737.6	742.5	745.4	748.9	750.5	748.1	740.6	727.5	710.9
22.5°	697.8	699.0	701.0	708.6	714.6	723.8	728.5	736.5	733.6	727.2	713.2
25°	637.2	635.1	642.5	646.4	660.3	674.9	685.4	696.9	707.2	713.4	709.4
27.5°	564.5	561.3	572.5	582.8	594.0	609.8	626.1	645.5	661.5	681.6	688.5
30°	503.1	505.1	515.8	526.7	543.8	566.1	584.6	605.7	628.7	651.1	666.8
32.5°	437.1	444.4	451.2	468.0	483.1	507.8	534.9	561.4	589.9	615.5	639.7
35°	346.9	355.4	364.9	377.0	398.2	422.8	449.2	484.9	524.0	558.8	587.5
37.5°	292.0	290.6	296.0	304.8	322.0	341.9	372.2	407.5	453.4	494.4	534.9
40°	259.1	258.3	262.0	270.2	283.2	297.8	324.4	355.4	398.0	448.2	496.3
42.5°	236.5	237.0	239.1	244.9	253.8	265.8	285.7	312.1	351.1	398.3	450.1
45°	209.0	210.5	212.8	215.7	220.7	230.6	241.8	260.6	291.4	330.8	381.7
47.5°	189.2	189.3	191.6	194.1	197.1	202.6	211.8	223.6	245.3	277.4	321.2
50°	178.6	177.1	178.8	180.7	183.9	187.8	193.8	204.9	219.4	245.3	282.0
52.5°	165.5	165.6	167.1	167.9	170.7	174.6	180.0	187.8	201.0	221.2	251.3
55°	146.8	148.0	148.8	150.1	152.7	155.4	159.8	164.9	175.1	190.3	212.6
57.5°	129.3	129.7	130.5	133.0	134.6	137.1	141.2	145.9	152.6	163.8	180.6
60°	117.3	117.3	119.0	120.1	122.2	124.8	128.0	132.5	138.6	147.7	161.3
62.5°	106.4	106.2	106.9	108.7	110.3	112.6	115.8	119.7	125.4	133.6	144.6
65°	90.4	89.9	91.2	91.6	93.3	95.7	98.3	102.4	106.9	112.8	122.7
67.5°	74.9	75.5	76.2	76.9	77.9	80.4	82.1	84.9	88.8	93.8	100.4
70°	66.4	66.4	66.4	67.0	68.3	69.6	71.3	73.6	77.3	81.5	87.6
72.5°	56.7	57.5	58.2	57.8	59.4	60.1	62.2	63.5	67.0	69.7	75.0
75°	44.6	44.6	44.6	45.6	46.3	46.8	48.2	49.5	51.2	54.6	57.4
77.5°	33.3	33.2	33.4	33.6	34.3	35.1	35.4	36.6	38.2	39.8	42.1
80°	25.7	26.1	26.3	26.8	26.8	27.1	27.4	28.9	30.0	31.0	32.5
82.5°	19.9	20.0	20.0	20.1	20.3	20.5	21.1	21.6	22.0	22.8	23.9
85°	11.6	11.3	11.3	11.8	11.6	11.6	12.0	12.4	12.4	12.6	13.3
87.5°	9.2	9.1	9.3	9.1	9.0	9.2	9.3	9.2	9.4	9.7	9.1
90°	23.8	23.7	23.5	23.3	23.2	23.3	23.6	23.8	24.1	24.5	21.0
92.5°	22.6	22.6	22.6	22.5	22.5	22.5	22.4	22.3	22.3	22.2	21.4
95°	43.4	43.6	44.0	44.3	44.6	44.8	44.8	44.8	44.8	44.8	44.5
97.5°	75.1	75.1	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	74.6
100°	95.9	96.0	96.1	96.3	96.4	96.5	96.5	96.5	96.5	96.5	96.0
102.5°	119.3	119.5	119.6	119.8	120.0	120.0	119.8	119.7	119.6	119.4	118.9
105°	155.2	155.2	155.2	155.2	155.2	155.1	154.8	154.5	154.2	153.9	153.5
107.5°	189.2	189.8	190.6	191.2	192.0	192.3	192.2	192.0	191.9	191.8	191.8
110°	215.5	215.8	216.3	216.8	217.3	217.5	217.5	217.5	217.5	217.5	217.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	240.6	240.9	241.3	241.7	242.0	242.3	242.7	243.1	243.5	243.8	243.9
115°	279.7	280.2	280.7	281.2	281.6	281.9	282.1	282.3	282.4	282.6	282.9
117.5°	317.1	317.5	318.0	318.5	319.0	319.4	319.8	320.2	320.6	320.9	321.8
120°	343.4	343.8	344.3	344.8	345.3	345.5	345.5	345.5	345.5	345.5	346.8
122.5°	369.2	369.5	369.9	370.1	370.5	370.9	371.3	371.6	372.0	372.4	373.2
125°	408.5	408.6	408.8	409.0	409.1	409.3	409.8	410.3	410.8	411.2	411.7
127.5°	444.3	444.8	445.3	445.7	446.3	446.8	447.3	447.9	448.5	449.0	449.6
130°	470.0	470.6	471.3	471.8	472.5	473.0	473.3	473.6	473.9	474.2	474.5
132.5°	494.6	495.1	495.6	496.2	496.6	497.2	497.9	498.6	499.3	499.9	499.9
135°	532.9	533.4	533.9	534.3	534.8	535.2	535.3	535.5	535.6	535.7	535.5
137.5°	567.6	568.3	568.9	569.5	570.1	570.5	570.6	570.7	570.9	571.0	570.6
140°	591.7	592.3	593.0	593.6	594.2	594.5	594.5	594.5	594.5	594.5	593.7
142.5°	613.5	614.2	614.7	615.4	616.0	616.2	616.1	616.0	615.9	615.8	615.2
145°	646.3	646.9	647.5	648.1	648.8	648.9	648.8	648.7	648.5	648.4	647.4
147.5°	675.5	676.1	676.7	677.3	677.9	678.0	677.6	677.3	676.9	676.7	676.0
150°	694.6	695.0	695.4	695.9	696.4	696.4	695.9	695.4	695.0	694.6	693.9
152.5°	712.5	713.0	713.6	714.2	714.8	714.8	714.2	713.6	713.0	712.5	711.7
155°	736.5	737.0	737.4	737.9	738.4	738.2	737.4	736.6	735.8	735.1	734.6
157.5°	757.1	757.9	758.7	759.4	760.2	760.0	758.9	757.9	756.9	755.8	755.5
160°	770.1	770.7	771.3	771.9	772.5	772.4	771.5	770.5	769.6	768.6	768.5
162.5°	781.3	782.0	782.8	783.4	784.2	784.1	783.1	781.9	780.9	779.9	779.7
165°	796.0	796.7	797.5	798.2	799.1	798.9	797.8	796.7	795.6	794.6	794.6
167.5°	807.9	808.8	809.5	810.4	811.2	811.1	809.9	808.9	807.8	806.7	806.7
170°	814.1	815.0	816.0	816.9	817.8	817.7	816.7	815.6	814.5	813.4	813.6
172.5°	819.2	820.1	821.0	822.0	822.8	822.8	821.7	820.7	819.5	818.4	818.6
175°	824.6	825.6	826.5	827.4	828.3	828.3	827.2	826.0	825.0	823.9	824.3
177.5°	827.1	827.8	828.6	829.3	830.1	830.1	829.3	828.6	827.8	827.1	827.4
180°	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	571.7	570.3	569.5	566.4	563.6	560.9	560.1	560.3	556.6	553.0	551.5
5°	594.0	589.7	585.6	579.9	573.0	565.4	561.7	558.6	551.1	543.0	538.3
7.5°	613.9	607.8	599.9	589.1	579.1	567.3	559.8	553.2	542.2	530.7	523.7
10°	626.0	617.7	607.7	594.4	582.2	567.8	557.8	547.7	534.9	521.1	512.6
12.5°	636.5	625.3	615.4	598.3	583.9	565.9	554.0	539.8	526.3	510.0	501.6
15°	661.4	640.6	621.8	602.5	584.8	559.7	546.4	527.4	509.6	489.5	479.8
17.5°	680.6	657.2	627.6	603.1	582.4	554.6	535.2	512.4	491.3	468.3	455.2
20°	691.5	664.8	632.9	603.8	579.0	547.2	526.0	502.8	478.2	452.2	438.1
22.5°	698.0	670.0	638.4	601.2	572.1	541.3	514.6	489.0	464.1	436.1	421.3
25°	700.1	674.5	641.0	599.1	563.5	528.7	496.5	471.6	441.5	415.4	393.8
27.5°	689.9	671.6	639.4	595.0	553.6	512.8	477.0	448.9	417.1	388.7	366.9
30°	677.4	666.8	635.5	591.0	545.7	501.9	462.5	430.6	398.9	370.2	347.9
32.5°	658.1	655.8	628.3	585.1	537.3	488.0	447.2	415.0	379.8	351.7	330.5
35°	620.1	630.4	613.0	572.1	521.6	468.3	424.1	387.3	350.9	324.0	304.1
37.5°	569.1	594.7	590.1	553.1	500.2	446.8	398.0	359.6	324.9	297.7	278.1
40°	534.0	566.6	571.3	538.5	485.2	430.2	378.5	340.3	306.4	281.5	261.8
42.5°	496.3	534.3	547.2	521.0	468.7	412.6	361.1	321.4	287.9	263.7	246.3
45°	433.2	483.4	506.8	491.8	441.3	383.9	330.8	290.6	260.1	237.4	223.9
47.5°	374.1	429.0	460.4	455.2	410.8	353.9	301.4	262.8	233.2	215.1	203.0
50°	332.3	388.8	426.7	428.5	388.8	332.5	279.8	243.5	216.2	199.3	189.5
52.5°	296.0	350.0	391.2	400.4	364.3	310.3	260.5	224.2	200.3	184.7	176.0
55°	248.5	294.2	340.0	356.8	327.8	276.4	230.4	198.5	176.0	165.3	157.6
57.5°	206.7	244.7	287.0	305.5	287.7	243.6	200.5	172.8	154.6	145.2	139.2
60°	184.5	214.5	252.2	274.3	258.8	219.7	182.0	155.6	140.6	132.3	126.8
62.5°	164.0	190.6	222.4	242.6	234.2	197.3	163.5	140.3	127.3	119.5	115.5
65°	135.3	156.3	181.0	199.5	194.0	166.0	138.3	118.4	108.1	101.9	98.7
67.5°	111.4	126.6	143.6	159.9	155.5	135.6	113.5	97.9	90.3	84.9	82.9
70°	96.3	107.9	123.1	136.2	132.5	116.3	98.7	85.4	78.8	74.3	72.4
72.5°	82.0	91.4	103.1	113.8	111.3	97.7	83.1	73.1	68.0	63.8	62.3
75°	61.9	69.2	76.3	83.3	82.7	72.2	63.6	55.9	51.8	48.6	48.0
77.5°	45.7	49.8	54.6	58.7	57.6	51.6	44.9	40.4	37.5	35.3	35.0
80°	34.9	37.2	40.7	43.6	42.2	39.6	34.2	31.0	28.9	26.8	25.9
82.5°	25.4	27.6	29.7	31.4	30.2	27.8	24.5	22.3	21.0	19.6	19.2
85°	13.3	14.5	15.5	15.8	15.5	13.9	12.4	11.6	10.5	9.8	9.6
87.5°	8.7	8.0	7.3	7.1	6.2	5.8	4.8	3.9	4.1	4.3	4.3
90°	17.6	14.2	10.8	8.2	6.3	4.4	2.5	0.7	2.5	4.4	6.3
92.5°	20.6	19.8	19.0	17.9	16.6	15.2	13.9	12.4	13.9	15.2	16.6
95°	44.1	43.8	43.5	42.6	41.0	39.5	37.9	36.4	37.9	39.5	41.0
97.5°	74.1	73.5	72.9	71.9	70.5	69.2	67.8	66.4	67.8	69.2	70.5
100°	95.6	95.1	94.6	93.8	92.6	91.3	90.1	88.8	90.1	91.3	92.6
102.5°	118.3	117.7	117.1	116.3	115.3	114.3	113.3	112.4	113.3	114.3	115.3
105°	153.3	153.0	152.6	152.2	151.7	151.3	150.8	150.3	150.8	151.3	151.7
107.5°	191.8	191.8	191.8	191.4	190.8	190.1	189.4	188.7	189.4	190.1	190.8
110°	217.5	217.5	217.5	217.1	216.1	215.2	214.2	213.3	214.2	215.2	216.1



TEST NUMBER: P331472-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	244.0	244.2	244.3	243.9	243.0	242.0	241.1	240.2	241.1	242.0	243.0
115°	283.1	283.5	283.8	283.5	282.6	281.6	280.7	279.7	280.7	281.6	282.6
117.5°	322.6	323.5	324.3	324.1	322.9	321.7	320.5	319.2	320.5	321.7	322.9
120°	348.0	349.2	350.4	350.4	349.2	348.0	346.8	345.5	346.8	348.0	349.2
122.5°	374.1	374.9	375.9	375.5	374.0	372.6	371.1	369.6	371.1	372.6	374.0
125°	412.2	412.6	413.1	412.6	411.2	409.8	408.5	407.1	408.5	409.8	411.2
127.5°	450.2	450.7	451.3	450.6	448.8	447.1	445.4	443.6	445.4	447.1	448.8
130°	474.9	475.1	475.4	474.6	472.6	470.5	468.5	466.5	468.5	470.5	472.6
132.5°	499.8	499.7	499.7	498.8	497.2	495.6	493.9	492.3	493.9	495.6	497.2
135°	535.2	534.8	534.5	533.5	531.8	530.1	528.4	526.7	528.4	530.1	531.8
137.5°	570.2	569.8	569.4	568.4	567.1	565.7	564.3	562.9	564.3	565.7	567.1
140°	593.0	592.2	591.4	590.3	588.9	587.5	586.1	584.8	586.1	587.5	588.9
142.5°	614.7	614.2	613.7	612.7	611.3	609.9	608.5	607.1	608.5	609.9	611.3
145°	646.5	645.5	644.6	643.7	642.5	641.4	640.4	639.2	640.4	641.4	642.5
147.5°	675.3	674.8	674.1	673.2	671.8	670.5	669.2	668.0	669.2	670.5	671.8
150°	693.2	692.7	692.0	691.3	690.3	689.4	688.4	687.5	688.4	689.4	690.3
152.5°	711.0	710.2	709.5	708.6	707.7	706.7	705.8	704.8	705.8	706.7	707.7
155°	734.1	733.7	733.2	732.7	732.3	731.8	731.3	730.8	731.3	731.8	732.3
157.5°	755.3	755.0	754.7	754.4	754.0	753.8	753.5	753.1	753.5	753.8	754.0
160°	768.4	768.2	768.1	767.8	767.5	767.1	766.9	766.6	766.9	767.1	767.5
162.5°	779.6	779.4	779.2	779.1	779.0	779.0	778.9	778.8	778.9	779.0	779.0
165°	794.6	794.6	794.6	794.7	794.8	794.9	795.0	795.2	795.0	794.9	794.8
167.5°	806.7	806.8	806.8	807.1	807.6	808.0	808.5	809.0	808.5	808.0	807.6
170°	813.7	813.9	814.1	814.4	814.8	815.3	815.8	816.2	815.8	815.3	814.8
172.5°	818.8	818.9	819.1	819.4	819.8	820.3	820.8	821.2	820.8	820.3	819.8
175°	824.5	824.8	825.2	825.6	826.0	826.5	827.0	827.4	827.0	826.5	826.0
177.5°	827.6	827.8	828.1	828.4	828.8	829.2	829.5	829.9	829.5	829.2	828.8
180°	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8



TEST NUMBER: P331472-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	549.8	548.7	545.2	543.3	540.2	537.2	535.4	536.2	536.9	536.6	536.0
5°	534.0	529.9	523.7	518.4	514.5	507.5	504.4	502.9	501.6	500.2	498.7
7.5°	515.2	508.8	499.9	492.3	485.1	476.3	471.3	468.3	465.2	461.8	458.8
10°	501.9	492.9	483.4	472.8	464.2	456.3	449.2	444.5	440.2	436.1	433.2
12.5°	487.9	477.5	465.8	451.2	441.8	430.4	429.3	421.0	414.3	411.8	408.3
15°	465.5	450.9	436.1	418.8	411.3	401.1	394.6	388.1	382.4	378.3	377.3
17.5°	440.1	421.2	406.5	394.1	381.8	371.3	365.3	360.2	355.4	350.1	349.3
20°	420.8	404.4	388.4	377.5	364.9	354.1	346.9	341.8	337.6	334.4	331.7
22.5°	402.4	384.6	369.9	358.0	345.5	336.9	331.1	326.1	322.7	319.2	316.6
25°	373.0	359.1	343.0	329.5	319.2	313.7	309.0	304.7	302.6	300.2	297.2
27.5°	347.2	331.8	316.8	306.3	297.3	292.4	289.0	286.1	284.1	282.7	281.0
30°	329.1	313.5	301.7	291.4	283.9	279.0	276.8	275.1	272.8	271.9	271.1
32.5°	311.6	297.6	287.5	278.5	271.5	268.2	266.3	264.7	262.9	262.0	260.2
35°	286.9	275.1	265.3	260.3	254.6	251.8	250.3	248.2	246.5	245.6	245.3
37.5°	263.6	253.4	246.9	240.6	238.2	236.5	234.4	233.0	232.4	232.3	232.1
40°	248.5	240.3	234.4	229.3	228.3	225.6	223.9	222.7	222.7	222.9	222.7
42.5°	234.9	227.3	222.3	217.8	216.6	215.1	213.3	213.3	213.6	214.3	213.6
45°	214.1	208.8	205.1	203.0	200.7	199.2	198.9	199.5	199.7	200.0	200.7
47.5°	195.0	191.4	188.1	185.8	184.7	184.5	184.3	185.4	186.4	186.8	187.8
50°	183.7	179.6	176.8	175.3	174.5	174.1	174.5	175.8	176.6	177.7	178.3
52.5°	171.1	168.1	166.3	165.0	164.8	165.0	165.0	166.5	167.9	168.3	168.6
55°	153.5	151.4	151.0	149.0	149.9	149.7	150.7	151.6	152.9	154.2	154.4
57.5°	136.0	134.3	133.2	133.4	133.7	134.6	135.4	137.0	138.3	139.7	139.8
60°	124.4	123.6	122.9	122.9	123.3	124.6	125.6	127.1	128.0	128.9	129.5
62.5°	113.8	112.9	112.3	112.6	113.8	114.5	115.7	116.6	117.4	118.3	118.6
65°	97.0	96.6	97.2	97.6	97.8	98.9	100.4	101.0	101.9	102.4	103.9
67.5°	81.5	81.6	81.5	82.1	83.4	83.6	85.0	86.5	86.7	87.6	88.5
70°	71.1	71.5	71.9	72.4	73.4	73.9	74.9	75.6	76.4	77.1	77.8
72.5°	61.5	61.5	62.0	61.9	62.9	63.7	64.7	65.3	66.2	67.0	67.6
75°	47.3	47.3	47.8	48.0	49.0	50.1	49.9	50.3	51.2	52.0	52.5
77.5°	34.6	34.1	34.6	34.8	35.2	36.0	36.2	36.8	37.8	37.5	38.0
80°	26.3	25.7	26.3	26.6	26.6	27.6	27.6	28.1	28.7	28.1	28.7
82.5°	18.8	18.5	18.9	19.0	19.3	19.4	19.7	19.8	20.5	20.2	20.5
85°	9.4	9.2	9.4	9.2	9.4	9.6	9.6	9.4	9.4	9.8	9.2
87.5°	4.5	4.9	5.4	6.1	6.6	7.2	6.9	6.8	6.8	6.3	6.3
90°	8.2	10.8	14.2	17.6	21.0	24.5	24.1	23.8	23.6	23.3	23.2
92.5°	17.9	19.0	19.8	20.6	21.4	22.2	22.3	22.3	22.4	22.5	22.5
95°	42.6	43.5	43.8	44.1	44.5	44.8	44.8	44.8	44.8	44.8	44.6
97.5°	71.9	72.9	73.5	74.1	74.6	75.2	75.2	75.2	75.2	75.2	75.2
100°	93.8	94.6	95.1	95.6	96.0	96.5	96.5	96.5	96.5	96.5	96.4
102.5°	116.3	117.1	117.7	118.3	118.9	119.4	119.6	119.7	119.8	120.0	120.0
105°	152.2	152.6	153.0	153.3	153.5	153.9	154.2	154.5	154.8	155.1	155.2
107.5°	191.4	191.8	191.8	191.8	191.8	191.8	191.9	192.0	192.2	192.3	192.0
110°	217.1	217.5	217.5	217.5	217.5	217.5	217.5	217.5	217.5	217.5	217.3



TEST NUMBER: P331472-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	243.9	244.3	244.2	244.0	243.9	243.8	243.5	243.1	242.7	242.3	242.0
115°	283.5	283.8	283.5	283.1	282.9	282.6	282.4	282.3	282.1	281.9	281.6
117.5°	324.1	324.3	323.5	322.6	321.8	320.9	320.6	320.2	319.8	319.4	319.0
120°	350.4	350.4	349.2	348.0	346.8	345.5	345.5	345.5	345.5	345.5	345.3
122.5°	375.5	375.9	374.9	374.1	373.2	372.4	372.0	371.6	371.3	370.9	370.5
125°	412.6	413.1	412.6	412.2	411.7	411.2	410.8	410.3	409.8	409.3	409.1
127.5°	450.6	451.3	450.7	450.2	449.6	449.0	448.5	447.9	447.3	446.8	446.3
130°	474.6	475.4	475.1	474.9	474.5	474.2	473.9	473.6	473.3	473.0	472.5
132.5°	498.8	499.7	499.7	499.8	499.9	499.9	499.3	498.6	497.9	497.2	496.6
135°	533.5	534.5	534.8	535.2	535.5	535.7	535.6	535.5	535.3	535.2	534.8
137.5°	568.4	569.4	569.8	570.2	570.6	571.0	570.9	570.7	570.6	570.5	570.1
140°	590.3	591.4	592.2	593.0	593.7	594.5	594.5	594.5	594.5	594.5	594.2
142.5°	612.7	613.7	614.2	614.7	615.2	615.8	615.9	616.0	616.1	616.2	616.0
145°	643.7	644.6	645.5	646.5	647.4	648.4	648.5	648.7	648.8	648.9	648.8
147.5°	673.2	674.1	674.8	675.3	676.0	676.7	676.9	677.3	677.6	678.0	677.9
150°	691.3	692.0	692.7	693.2	693.9	694.6	695.0	695.4	695.9	696.4	696.4
152.5°	708.6	709.5	710.2	711.0	711.7	712.5	713.0	713.6	714.2	714.8	714.8
155°	732.7	733.2	733.7	734.1	734.6	735.1	735.8	736.6	737.4	738.2	738.4
157.5°	754.4	754.7	755.0	755.3	755.5	755.8	756.9	757.9	758.9	760.0	760.2
160°	767.8	768.1	768.2	768.4	768.5	768.6	769.6	770.5	771.5	772.4	772.5
162.5°	779.1	779.2	779.4	779.6	779.7	779.9	780.9	781.9	783.1	784.1	784.2
165°	794.7	794.6	794.6	794.6	794.6	794.6	795.6	796.7	797.8	798.9	799.1
167.5°	807.1	806.8	806.8	806.7	806.7	806.7	807.8	808.9	809.9	811.1	811.2
170°	814.4	814.1	813.9	813.7	813.6	813.4	814.5	815.6	816.7	817.7	817.8
172.5°	819.4	819.1	818.9	818.8	818.6	818.4	819.5	820.7	821.7	822.8	822.8
175°	825.6	825.2	824.8	824.5	824.3	823.9	825.0	826.0	827.2	828.3	828.3
177.5°	828.4	828.1	827.8	827.6	827.4	827.1	827.8	828.6	829.3	830.1	830.1
180°	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8



TEST NUMBER: P331472-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	534.3	534.0	534.0	532.4	534.0	534.0	534.3	536.0	536.6	536.9	536.2
5°	495.7	495.0	494.0	495.0	494.0	495.0	495.7	498.7	500.2	501.6	502.9
7.5°	457.4	454.9	454.5	451.9	454.5	454.9	457.4	458.8	461.8	465.2	468.3
10°	429.5	427.8	427.5	423.5	427.5	427.8	429.5	433.2	436.1	440.2	444.5
12.5°	408.3	404.2	405.0	402.7	405.0	404.2	408.3	408.3	411.8	414.3	421.0
15°	371.5	371.5	370.6	367.0	370.6	371.5	371.5	377.3	378.3	382.4	388.1
17.5°	345.1	344.6	342.6	343.7	342.6	344.6	345.1	349.3	350.1	355.4	360.2
20°	329.3	328.0	325.5	325.5	325.5	328.0	329.3	331.7	334.4	337.6	341.8
22.5°	314.4	314.3	311.6	312.5	311.6	314.3	314.4	316.6	319.2	322.7	326.1
25°	297.0	295.3	294.0	294.6	294.0	295.3	297.0	297.2	300.2	302.6	304.7
27.5°	280.4	279.5	279.4	277.7	279.4	279.5	280.4	281.0	282.7	284.1	286.1
30°	270.9	268.7	269.1	268.1	269.1	268.7	270.9	271.1	271.9	272.8	275.1
32.5°	259.9	259.1	258.7	257.8	258.7	259.1	259.9	260.2	262.0	262.9	264.7
35°	245.0	245.2	244.1	244.5	244.1	245.2	245.0	245.3	245.6	246.5	248.2
37.5°	231.9	232.5	232.1	232.1	232.1	232.5	231.9	232.1	232.3	232.4	233.0
40°	223.3	223.3	223.3	223.9	223.3	223.3	223.3	222.7	222.9	222.7	222.7
42.5°	215.1	214.7	214.4	214.3	214.4	214.7	215.1	213.6	214.3	213.6	213.3
45°	201.0	201.7	201.9	200.9	201.9	201.7	201.0	200.7	200.0	199.7	199.5
47.5°	188.3	188.4	188.3	189.3	188.3	188.4	188.3	187.8	186.8	186.4	185.4
50°	179.5	179.0	179.5	179.0	179.5	179.0	179.5	178.3	177.7	176.6	175.8
52.5°	170.0	170.1	169.8	169.8	169.8	170.1	170.0	168.6	168.3	167.9	166.5
55°	155.2	155.6	155.4	155.4	155.4	155.6	155.2	154.4	154.2	152.9	151.6
57.5°	140.0	140.3	140.6	139.7	140.6	140.3	140.0	139.8	139.7	138.3	137.0
60°	129.3	130.4	130.2	129.8	130.2	130.4	129.3	129.5	128.9	128.0	127.1
62.5°	119.5	120.0	119.9	119.8	119.9	120.0	119.5	118.6	118.3	117.4	116.6
65°	104.5	104.9	104.2	104.9	104.2	104.9	104.5	103.9	102.4	101.9	101.0
67.5°	88.2	88.4	88.9	89.2	88.9	88.4	88.2	88.5	87.6	86.7	86.5
70°	78.1	77.9	78.6	79.3	78.6	77.9	78.1	77.8	77.1	76.4	75.6
72.5°	67.5	68.0	67.8	68.2	67.8	68.0	67.5	67.6	67.0	66.2	65.3
75°	52.0	52.7	52.5	53.1	52.5	52.7	52.0	52.5	52.0	51.2	50.3
77.5°	37.6	37.7	37.6	38.0	37.6	37.7	37.6	38.0	37.5	37.8	36.8
80°	28.7	28.3	27.8	28.7	27.8	28.3	28.7	28.7	28.1	28.7	28.1
82.5°	20.0	20.2	19.8	19.8	19.8	20.2	20.0	20.5	20.2	20.5	19.8
85°	9.2	9.0	8.6	8.6	8.6	9.0	9.2	9.2	9.8	9.4	9.4
87.5°	6.4	6.2	6.2	6.1	6.2	6.2	6.4	6.3	6.3	6.8	6.8
90°	23.3	23.5	23.7	23.8	23.7	23.5	23.3	23.2	23.3	23.6	23.8
92.5°	22.5	22.6	22.6	22.6	22.6	22.6	22.5	22.5	22.5	22.4	22.3
95°	44.3	44.0	43.6	43.4	43.6	44.0	44.3	44.6	44.8	44.8	44.8
97.5°	75.2	75.2	75.1	75.1	75.1	75.2	75.2	75.2	75.2	75.2	75.2
100°	96.3	96.1	96.0	95.9	96.0	96.1	96.3	96.4	96.5	96.5	96.5
102.5°	119.8	119.6	119.5	119.3	119.5	119.6	119.8	120.0	120.0	119.8	119.7
105°	155.2	155.2	155.2	155.2	155.2	155.2	155.2	155.2	155.1	154.8	154.5
107.5°	191.2	190.6	189.8	189.2	189.8	190.6	191.2	192.0	192.3	192.2	192.0
110°	216.8	216.3	215.8	215.5	215.8	216.3	216.8	217.3	217.5	217.5	217.5



TEST NUMBER: P331472-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	241.7	241.3	240.9	240.6	240.9	241.3	241.7	242.0	242.3	242.7	243.1
115°	281.2	280.7	280.2	279.7	280.2	280.7	281.2	281.6	281.9	282.1	282.3
117.5°	318.5	318.0	317.5	317.1	317.5	318.0	318.5	319.0	319.4	319.8	320.2
120°	344.8	344.3	343.8	343.4	343.8	344.3	344.8	345.3	345.5	345.5	345.5
122.5°	370.1	369.9	369.5	369.2	369.5	369.9	370.1	370.5	370.9	371.3	371.6
125°	409.0	408.8	408.6	408.5	408.6	408.8	409.0	409.1	409.3	409.8	410.3
127.5°	445.7	445.3	444.8	444.3	444.8	445.3	445.7	446.3	446.8	447.3	447.9
130°	471.8	471.3	470.6	470.0	470.6	471.3	471.8	472.5	473.0	473.3	473.6
132.5°	496.2	495.6	495.1	494.6	495.1	495.6	496.2	496.6	497.2	497.9	498.6
135°	534.3	533.9	533.4	532.9	533.4	533.9	534.3	534.8	535.2	535.3	535.5
137.5°	569.5	568.9	568.3	567.6	568.3	568.9	569.5	570.1	570.5	570.6	570.7
140°	593.6	593.0	592.3	591.7	592.3	593.0	593.6	594.2	594.5	594.5	594.5
142.5°	615.4	614.7	614.2	613.5	614.2	614.7	615.4	616.0	616.2	616.1	616.0
145°	648.1	647.5	646.9	646.3	646.9	647.5	648.1	648.8	648.9	648.8	648.7
147.5°	677.3	676.7	676.1	675.5	676.1	676.7	677.3	677.9	678.0	677.6	677.3
150°	695.9	695.4	695.0	694.6	695.0	695.4	695.9	696.4	696.4	695.9	695.4
152.5°	714.2	713.6	713.0	712.5	713.0	713.6	714.2	714.8	714.8	714.2	713.6
155°	737.9	737.4	737.0	736.5	737.0	737.4	737.9	738.4	738.2	737.4	736.6
157.5°	759.4	758.7	757.9	757.1	757.9	758.7	759.4	760.2	760.0	758.9	757.9
160°	771.9	771.3	770.7	770.1	770.7	771.3	771.9	772.5	772.4	771.5	770.5
162.5°	783.4	782.8	782.0	781.3	782.0	782.8	783.4	784.2	784.1	783.1	781.9
165°	798.2	797.5	796.7	796.0	796.7	797.5	798.2	799.1	798.9	797.8	796.7
167.5°	810.4	809.5	808.8	807.9	808.8	809.5	810.4	811.2	811.1	809.9	808.9
170°	816.9	816.0	815.0	814.1	815.0	816.0	816.9	817.8	817.7	816.7	815.6
172.5°	822.0	821.0	820.1	819.2	820.1	821.0	822.0	822.8	822.8	821.7	820.7
175°	827.4	826.5	825.6	824.6	825.6	826.5	827.4	828.3	828.3	827.2	826.0
177.5°	829.3	828.6	827.8	827.1	827.8	828.6	829.3	830.1	830.1	829.3	828.6
180°	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8



TEST NUMBER: P331472-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	535.4	537.2	540.2	543.3	545.2	548.7	549.8	551.5	553.0	556.6	560.3
5°	504.4	507.5	514.5	518.4	523.7	529.9	534.0	538.3	543.0	551.1	558.6
7.5°	471.3	476.3	485.1	492.3	499.9	508.8	515.2	523.7	530.7	542.2	553.2
10°	449.2	456.3	464.2	472.8	483.4	492.9	501.9	512.6	521.1	534.9	547.7
12.5°	429.3	430.4	441.8	451.2	465.8	477.5	487.9	501.6	510.0	526.3	539.8
15°	394.6	401.1	411.3	418.8	436.1	450.9	465.5	479.8	489.5	509.6	527.4
17.5°	365.3	371.3	381.8	394.1	406.5	421.2	440.1	455.2	468.3	491.3	512.4
20°	346.9	354.1	364.9	377.5	388.4	404.4	420.8	438.1	452.2	478.2	502.8
22.5°	331.1	336.9	345.5	358.0	369.9	384.6	402.4	421.3	436.1	464.1	489.0
25°	309.0	313.7	319.2	329.5	343.0	359.1	373.0	393.8	415.4	441.5	471.6
27.5°	289.0	292.4	297.3	306.3	316.8	331.8	347.2	366.9	388.7	417.1	448.9
30°	276.8	279.0	283.9	291.4	301.7	313.5	329.1	347.9	370.2	398.9	430.6
32.5°	266.3	268.2	271.5	278.5	287.5	297.6	311.6	330.5	351.7	379.8	415.0
35°	250.3	251.8	254.6	260.3	265.3	275.1	286.9	304.1	324.0	350.9	387.3
37.5°	234.4	236.5	238.2	240.6	246.9	253.4	263.6	278.1	297.7	324.9	359.6
40°	223.9	225.6	228.3	229.3	234.4	240.3	248.5	261.8	281.5	306.4	340.3
42.5°	213.3	215.1	216.6	217.8	222.3	227.3	234.9	246.3	263.7	287.9	321.4
45°	198.9	199.2	200.7	203.0	205.1	208.8	214.1	223.9	237.4	260.1	290.6
47.5°	184.3	184.5	184.7	185.8	188.1	191.4	195.0	203.0	215.1	233.2	262.8
50°	174.5	174.1	174.5	175.3	176.8	179.6	183.7	189.5	199.3	216.2	243.5
52.5°	165.0	165.0	164.8	165.0	166.3	168.1	171.1	176.0	184.7	200.3	224.2
55°	150.7	149.7	149.9	149.0	151.0	151.4	153.5	157.6	165.3	176.0	198.5
57.5°	135.4	134.6	133.7	133.4	133.2	134.3	136.0	139.2	145.2	154.6	172.8
60°	125.6	124.6	123.3	122.9	122.9	123.6	124.4	126.8	132.3	140.6	155.6
62.5°	115.7	114.5	113.8	112.6	112.3	112.9	113.8	115.5	119.5	127.3	140.3
65°	100.4	98.9	97.8	97.6	97.2	96.6	97.0	98.7	101.9	108.1	118.4
67.5°	85.0	83.6	83.4	82.1	81.5	81.6	81.5	82.9	84.9	90.3	97.9
70°	74.9	73.9	73.4	72.4	71.9	71.5	71.1	72.4	74.3	78.8	85.4
72.5°	64.7	63.7	62.9	61.9	62.0	61.5	61.5	62.3	63.8	68.0	73.1
75°	49.9	50.1	49.0	48.0	47.8	47.3	47.3	48.0	48.6	51.8	55.9
77.5°	36.2	36.0	35.2	34.8	34.6	34.1	34.6	35.0	35.3	37.5	40.4
80°	27.6	27.6	26.6	26.6	26.3	25.7	26.3	25.9	26.8	28.9	31.0
82.5°	19.7	19.4	19.3	19.0	18.9	18.5	18.8	19.2	19.6	21.0	22.3
85°	9.6	9.6	9.4	9.2	9.4	9.2	9.4	9.6	9.8	10.5	11.6
87.5°	6.9	7.2	6.6	6.1	5.4	4.9	4.5	4.3	4.3	4.1	3.9
90°	24.1	24.5	21.0	17.6	14.2	10.8	8.2	6.3	4.4	2.5	0.7
92.5°	22.3	22.2	21.4	20.6	19.8	19.0	17.9	16.6	15.2	13.9	12.4
95°	44.8	44.8	44.5	44.1	43.8	43.5	42.6	41.0	39.5	37.9	36.4
97.5°	75.2	75.2	74.6	74.1	73.5	72.9	71.9	70.5	69.2	67.8	66.4
100°	96.5	96.5	96.0	95.6	95.1	94.6	93.8	92.6	91.3	90.1	88.8
102.5°	119.6	119.4	118.9	118.3	117.7	117.1	116.3	115.3	114.3	113.3	112.4
105°	154.2	153.9	153.5	153.3	153.0	152.6	152.2	151.7	151.3	150.8	150.3
107.5°	191.9	191.8	191.8	191.8	191.8	191.8	191.4	190.8	190.1	189.4	188.7
110°	217.5	217.5	217.5	217.5	217.5	217.5	217.1	216.1	215.2	214.2	213.3



TEST NUMBER: P331472-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	243.5	243.8	243.9	244.0	244.2	244.3	243.9	243.0	242.0	241.1	240.2
115°	282.4	282.6	282.9	283.1	283.5	283.8	283.5	282.6	281.6	280.7	279.7
117.5°	320.6	320.9	321.8	322.6	323.5	324.3	324.1	322.9	321.7	320.5	319.2
120°	345.5	345.5	346.8	348.0	349.2	350.4	350.4	349.2	348.0	346.8	345.5
122.5°	372.0	372.4	373.2	374.1	374.9	375.9	375.5	374.0	372.6	371.1	369.6
125°	410.8	411.2	411.7	412.2	412.6	413.1	412.6	411.2	409.8	408.5	407.1
127.5°	448.5	449.0	449.6	450.2	450.7	451.3	450.6	448.8	447.1	445.4	443.6
130°	473.9	474.2	474.5	474.9	475.1	475.4	474.6	472.6	470.5	468.5	466.5
132.5°	499.3	499.9	499.9	499.8	499.7	499.7	498.8	497.2	495.6	493.9	492.3
135°	535.6	535.7	535.5	535.2	534.8	534.5	533.5	531.8	530.1	528.4	526.7
137.5°	570.9	571.0	570.6	570.2	569.8	569.4	568.4	567.1	565.7	564.3	562.9
140°	594.5	594.5	593.7	593.0	592.2	591.4	590.3	588.9	587.5	586.1	584.8
142.5°	615.9	615.8	615.2	614.7	614.2	613.7	612.7	611.3	609.9	608.5	607.1
145°	648.5	648.4	647.4	646.5	645.5	644.6	643.7	642.5	641.4	640.4	639.2
147.5°	676.9	676.7	676.0	675.3	674.8	674.1	673.2	671.8	670.5	669.2	668.0
150°	695.0	694.6	693.9	693.2	692.7	692.0	691.3	690.3	689.4	688.4	687.5
152.5°	713.0	712.5	711.7	711.0	710.2	709.5	708.6	707.7	706.7	705.8	704.8
155°	735.8	735.1	734.6	734.1	733.7	733.2	732.7	732.3	731.8	731.3	730.8
157.5°	756.9	755.8	755.5	755.3	755.0	754.7	754.4	754.0	753.8	753.5	753.1
160°	769.6	768.6	768.5	768.4	768.2	768.1	767.8	767.5	767.1	766.9	766.6
162.5°	780.9	779.9	779.7	779.6	779.4	779.2	779.1	779.0	779.0	778.9	778.8
165°	795.6	794.6	794.6	794.6	794.6	794.6	794.7	794.8	794.9	795.0	795.2
167.5°	807.8	806.7	806.7	806.7	806.8	806.8	807.1	807.6	808.0	808.5	809.0
170°	814.5	813.4	813.6	813.7	813.9	814.1	814.4	814.8	815.3	815.8	816.2
172.5°	819.5	818.4	818.6	818.8	818.9	819.1	819.4	819.8	820.3	820.8	821.2
175°	825.0	823.9	824.3	824.5	824.8	825.2	825.6	826.0	826.5	827.0	827.4
177.5°	827.8	827.1	827.4	827.6	827.8	828.1	828.4	828.8	829.2	829.5	829.9
180°	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8



TEST NUMBER: P331472-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	560.1	560.9	563.6	566.4	569.5	570.3	571.7	570.5	570.1	573.3	575.8
5°	561.7	565.4	573.0	579.9	585.6	589.7	594.0	595.7	598.9	603.3	609.0
7.5°	559.8	567.3	579.1	589.1	599.9	607.8	613.9	619.2	625.5	634.0	643.3
10°	557.8	567.8	582.2	594.4	607.7	617.7	626.0	634.2	643.7	655.4	667.6
12.5°	554.0	565.9	583.9	598.3	615.4	625.3	636.5	654.0	664.2	680.6	697.8
15°	546.4	559.7	584.8	602.5	621.8	640.6	661.4	678.1	694.7	704.5	728.6
17.5°	535.2	554.6	582.4	603.1	627.6	657.2	680.6	699.6	718.8	734.4	746.6
20°	526.0	547.2	579.0	603.8	632.9	664.8	691.5	710.9	727.5	740.6	748.1
22.5°	514.6	541.3	572.1	601.2	638.4	670.0	698.0	713.2	727.2	733.6	736.5
25°	496.5	528.7	563.5	599.1	641.0	674.5	700.1	709.4	713.4	707.2	696.9
27.5°	477.0	512.8	553.6	595.0	639.4	671.6	689.9	688.5	681.6	661.5	645.5
30°	462.5	501.9	545.7	591.0	635.5	666.8	677.4	666.8	651.1	628.7	605.7
32.5°	447.2	488.0	537.3	585.1	628.3	655.8	658.1	639.7	615.5	589.9	561.4
35°	424.1	468.3	521.6	572.1	613.0	630.4	620.1	587.5	558.8	524.0	484.9
37.5°	398.0	446.8	500.2	553.1	590.1	594.7	569.1	534.9	494.4	453.4	407.5
40°	378.5	430.2	485.2	538.5	571.3	566.6	534.0	496.3	448.2	398.0	355.4
42.5°	361.1	412.6	468.7	521.0	547.2	534.3	496.3	450.1	398.3	351.1	312.1
45°	330.8	383.9	441.3	491.8	506.8	483.4	433.2	381.7	330.8	291.4	260.6
47.5°	301.4	353.9	410.8	455.2	460.4	429.0	374.1	321.2	277.4	245.3	223.6
50°	279.8	332.5	388.8	428.5	426.7	388.8	332.3	282.0	245.3	219.4	204.9
52.5°	260.5	310.3	364.3	400.4	391.2	350.0	296.0	251.3	221.2	201.0	187.8
55°	230.4	276.4	327.8	356.8	340.0	294.2	248.5	212.6	190.3	175.1	164.9
57.5°	200.5	243.6	287.7	305.5	287.0	244.7	206.7	180.6	163.8	152.6	145.9
60°	182.0	219.7	258.8	274.3	252.2	214.5	184.5	161.3	147.7	138.6	132.5
62.5°	163.5	197.3	234.2	242.6	222.4	190.6	164.0	144.6	133.6	125.4	119.7
65°	138.3	166.0	194.0	199.5	181.0	156.3	135.3	122.7	112.8	106.9	102.4
67.5°	113.5	135.6	155.5	159.9	143.6	126.6	111.4	100.4	93.8	88.8	84.9
70°	98.7	116.3	132.5	136.2	123.1	107.9	96.3	87.6	81.5	77.3	73.6
72.5°	83.1	97.7	111.3	113.8	103.1	91.4	82.0	75.0	69.7	67.0	63.5
75°	63.6	72.2	82.7	83.3	76.3	69.2	61.9	57.4	54.6	51.2	49.5
77.5°	44.9	51.6	57.6	58.7	54.6	49.8	45.7	42.1	39.8	38.2	36.6
80°	34.2	39.6	42.2	43.6	40.7	37.2	34.9	32.5	31.0	30.0	28.9
82.5°	24.5	27.8	30.2	31.4	29.7	27.6	25.4	23.9	22.8	22.0	21.6
85°	12.4	13.9	15.5	15.8	15.5	14.5	13.3	13.3	12.6	12.4	12.4
87.5°	4.8	5.8	6.2	7.1	7.3	8.0	8.7	9.1	9.7	9.4	9.2
90°	2.5	4.4	6.3	8.2	10.8	14.2	17.6	21.0	24.5	24.1	23.8
92.5°	13.9	15.2	16.6	17.9	19.0	19.8	20.6	21.4	22.2	22.3	22.3
95°	37.9	39.5	41.0	42.6	43.5	43.8	44.1	44.5	44.8	44.8	44.8
97.5°	67.8	69.2	70.5	71.9	72.9	73.5	74.1	74.6	75.2	75.2	75.2
100°	90.1	91.3	92.6	93.8	94.6	95.1	95.6	96.0	96.5	96.5	96.5
102.5°	113.3	114.3	115.3	116.3	117.1	117.7	118.3	118.9	119.4	119.6	119.7
105°	150.8	151.3	151.7	152.2	152.6	153.0	153.3	153.5	153.9	154.2	154.5
107.5°	189.4	190.1	190.8	191.4	191.8	191.8	191.8	191.8	191.8	191.9	192.0
110°	214.2	215.2	216.1	217.1	217.5	217.5	217.5	217.5	217.5	217.5	217.5



TEST NUMBER: P331472-830

CATALOG NUMBER: S122DIW-S290D710U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	241.1	242.0	243.0	243.9	244.3	244.2	244.0	243.9	243.8	243.5	243.1
115°	280.7	281.6	282.6	283.5	283.8	283.5	283.1	282.9	282.6	282.4	282.3
117.5°	320.5	321.7	322.9	324.1	324.3	323.5	322.6	321.8	320.9	320.6	320.2
120°	346.8	348.0	349.2	350.4	350.4	349.2	348.0	346.8	345.5	345.5	345.5
122.5°	371.1	372.6	374.0	375.5	375.9	374.9	374.1	373.2	372.4	372.0	371.6
125°	408.5	409.8	411.2	412.6	413.1	412.6	412.2	411.7	411.2	410.8	410.3
127.5°	445.4	447.1	448.8	450.6	451.3	450.7	450.2	449.6	449.0	448.5	447.9
130°	468.5	470.5	472.6	474.6	475.4	475.1	474.9	474.5	474.2	473.9	473.6
132.5°	493.9	495.6	497.2	498.8	499.7	499.7	499.8	499.9	499.9	499.3	498.6
135°	528.4	530.1	531.8	533.5	534.5	534.8	535.2	535.5	535.7	535.6	535.5
137.5°	564.3	565.7	567.1	568.4	569.4	569.8	570.2	570.6	571.0	570.9	570.7
140°	586.1	587.5	588.9	590.3	591.4	592.2	593.0	593.7	594.5	594.5	594.5
142.5°	608.5	609.9	611.3	612.7	613.7	614.2	614.7	615.2	615.8	615.9	616.0
145°	640.4	641.4	642.5	643.7	644.6	645.5	646.5	647.4	648.4	648.5	648.7
147.5°	669.2	670.5	671.8	673.2	674.1	674.8	675.3	676.0	676.7	676.9	677.3
150°	688.4	689.4	690.3	691.3	692.0	692.7	693.2	693.9	694.6	695.0	695.4
152.5°	705.8	706.7	707.7	708.6	709.5	710.2	711.0	711.7	712.5	713.0	713.6
155°	731.3	731.8	732.3	732.7	733.2	733.7	734.1	734.6	735.1	735.8	736.6
157.5°	753.5	753.8	754.0	754.4	754.7	755.0	755.3	755.5	755.8	756.9	757.9
160°	766.9	767.1	767.5	767.8	768.1	768.2	768.4	768.5	768.6	769.6	770.5
162.5°	778.9	779.0	779.0	779.1	779.2	779.4	779.6	779.7	779.9	780.9	781.9
165°	795.0	794.9	794.8	794.7	794.6	794.6	794.6	794.6	794.6	795.6	796.7
167.5°	808.5	808.0	807.6	807.1	806.8	806.8	806.7	806.7	806.7	807.8	808.9
170°	815.8	815.3	814.8	814.4	814.1	813.9	813.7	813.6	813.4	814.5	815.6
172.5°	820.8	820.3	819.8	819.4	819.1	818.9	818.8	818.6	818.4	819.5	820.7
175°	827.0	826.5	826.0	825.6	825.2	824.8	824.5	824.3	823.9	825.0	826.0
177.5°	829.5	829.2	828.8	828.4	828.1	827.8	827.6	827.4	827.1	827.8	828.6
180°	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	557.1	557.1	557.1	557.1	557.1	557.1	557.1
2.5°	577.9	580.2	580.2	580.6	583.3	583.0	582.8
5°	614.9	618.6	619.0	622.8	625.4	624.5	622.2
7.5°	649.9	656.7	661.9	664.7	668.1	670.1	669.2
10°	677.7	687.5	693.5	697.6	702.5	706.2	704.8
12.5°	702.9	714.5	722.8	729.8	730.4	735.1	731.9
15°	742.2	754.5	755.8	760.9	765.1	764.6	764.8
17.5°	755.1	759.0	759.9	760.0	760.1	758.6	755.3
20°	750.5	748.9	745.4	742.5	737.6	737.0	732.7
22.5°	728.5	723.8	714.6	708.6	701.0	699.0	697.8
25°	685.4	674.9	660.3	646.4	642.5	635.1	637.2
27.5°	626.1	609.8	594.0	582.8	572.5	561.3	564.5
30°	584.6	566.1	543.8	526.7	515.8	505.1	503.1
32.5°	534.9	507.8	483.1	468.0	451.2	444.4	437.1
35°	449.2	422.8	398.2	377.0	364.9	355.4	346.9
37.5°	372.2	341.9	322.0	304.8	296.0	290.6	292.0
40°	324.4	297.8	283.2	270.2	262.0	258.3	259.1
42.5°	285.7	265.8	253.8	244.9	239.1	237.0	236.5
45°	241.8	230.6	220.7	215.7	212.8	210.5	209.0
47.5°	211.8	202.6	197.1	194.1	191.6	189.3	189.2
50°	193.8	187.8	183.9	180.7	178.8	177.1	178.6
52.5°	180.0	174.6	170.7	167.9	167.1	165.6	165.5
55°	159.8	155.4	152.7	150.1	148.8	148.0	146.8
57.5°	141.2	137.1	134.6	133.0	130.5	129.7	129.3
60°	128.0	124.8	122.2	120.1	119.0	117.3	117.3
62.5°	115.8	112.6	110.3	108.7	106.9	106.2	106.4
65°	98.3	95.7	93.3	91.6	91.2	89.9	90.4
67.5°	82.1	80.4	77.9	76.9	76.2	75.5	74.9
70°	71.3	69.6	68.3	67.0	66.4	66.4	66.4
72.5°	62.2	60.1	59.4	57.8	58.2	57.5	56.7
75°	48.2	46.8	46.3	45.6	44.6	44.6	44.6
77.5°	35.4	35.1	34.3	33.6	33.4	33.2	33.3
80°	27.4	27.1	26.8	26.8	26.3	26.1	25.7
82.5°	21.1	20.5	20.3	20.1	20.0	20.0	19.9
85°	12.0	11.6	11.6	11.8	11.3	11.3	11.6
87.5°	9.3	9.2	9.0	9.1	9.3	9.1	9.2
90°	23.6	23.3	23.2	23.3	23.5	23.7	23.8
92.5°	22.4	22.5	22.5	22.5	22.6	22.6	22.6
95°	44.8	44.8	44.6	44.3	44.0	43.6	43.4
97.5°	75.2	75.2	75.2	75.2	75.2	75.1	75.1
100°	96.5	96.5	96.4	96.3	96.1	96.0	95.9
102.5°	119.8	120.0	120.0	119.8	119.6	119.5	119.3
105°	154.8	155.1	155.2	155.2	155.2	155.2	155.2
107.5°	192.2	192.3	192.0	191.2	190.6	189.8	189.2
110°	217.5	217.5	217.3	216.8	216.3	215.8	215.5



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	242.7	242.3	242.0	241.7	241.3	240.9	240.6
115°	282.1	281.9	281.6	281.2	280.7	280.2	279.7
117.5°	319.8	319.4	319.0	318.5	318.0	317.5	317.1
120°	345.5	345.5	345.3	344.8	344.3	343.8	343.4
122.5°	371.3	370.9	370.5	370.1	369.9	369.5	369.2
125°	409.8	409.3	409.1	409.0	408.8	408.6	408.5
127.5°	447.3	446.8	446.3	445.7	445.3	444.8	444.3
130°	473.3	473.0	472.5	471.8	471.3	470.6	470.0
132.5°	497.9	497.2	496.6	496.2	495.6	495.1	494.6
135°	535.3	535.2	534.8	534.3	533.9	533.4	532.9
137.5°	570.6	570.5	570.1	569.5	568.9	568.3	567.6
140°	594.5	594.5	594.2	593.6	593.0	592.3	591.7
142.5°	616.1	616.2	616.0	615.4	614.7	614.2	613.5
145°	648.8	648.9	648.8	648.1	647.5	646.9	646.3
147.5°	677.6	678.0	677.9	677.3	676.7	676.1	675.5
150°	695.9	696.4	696.4	695.9	695.4	695.0	694.6
152.5°	714.2	714.8	714.8	714.2	713.6	713.0	712.5
155°	737.4	738.2	738.4	737.9	737.4	737.0	736.5
157.5°	758.9	760.0	760.2	759.4	758.7	757.9	757.1
160°	771.5	772.4	772.5	771.9	771.3	770.7	770.1
162.5°	783.1	784.1	784.2	783.4	782.8	782.0	781.3
165°	797.8	798.9	799.1	798.2	797.5	796.7	796.0
167.5°	809.9	811.1	811.2	810.4	809.5	808.8	807.9
170°	816.7	817.7	817.8	816.9	816.0	815.0	814.1
172.5°	821.7	822.8	822.8	822.0	821.0	820.1	819.2
175°	827.2	828.3	828.3	827.4	826.5	825.6	824.6
177.5°	829.3	830.1	830.1	829.3	828.6	827.8	827.1
180°	828.8	828.8	828.8	828.8	828.8	828.8	828.8

(END OF REPORT)