

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: P332716-830

Luminaire Tested: **S124DIW-S350D470U830-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332716-830  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124DIW-S350D470U830-4F0-1E-UDD-A1  
Description: DEFINE 4 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 350 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3019.5 lumens  
Efficiency: N/A  
Efficacy: 131.3 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

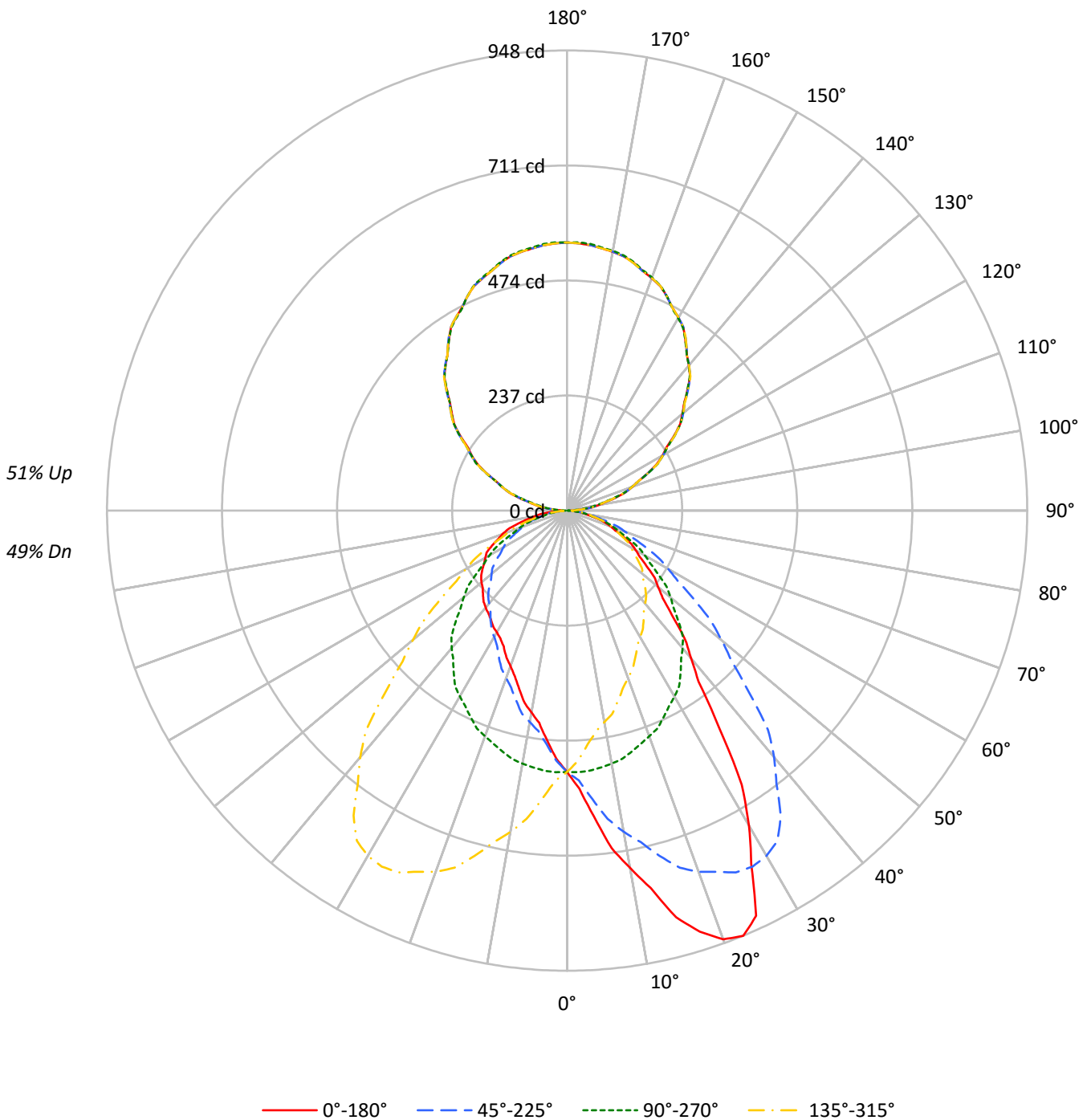
Input Watts (W): 23  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	55	55	55	49				49
1	98	94	90	86	90	86	83	80	73	71	68	61	59	58	49	48	47				42	
2	89	82	76	71	82	76	71	66	64	60	57	54	51	48	44	42	40				35	
3	82	72	65	59	75	67	61	56	57	52	48	48	44	41	39	36	34				30	
4	75	64	56	50	69	59	53	47	51	45	41	42	39	35	35	32	30				26	
5	69	57	49	43	63	53	46	41	45	40	36	38	34	31	32	29	26				23	
6	63	51	43	38	58	48	41	35	41	35	31	35	30	27	29	26	23				20	
7	59	46	39	33	54	43	36	31	37	32	28	32	27	24	26	23	21				18	
8	54	42	34	29	50	39	32	28	34	28	25	29	25	21	24	21	18				16	
9	51	38	31	26	47	36	29	25	31	26	22	27	22	19	22	19	17				15	
10	47	35	28	23	44	33	27	22	29	23	20	25	20	17	21	17	15				13	

**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	1.7
10°-20°	161.7	5.4
20°-30°	256.4	8.5
30°-40°	285.4	9.5
40°-50°	259.8	8.6
50°-60°	212.3	7.0
60°-70°	151.5	5.0
70°-80°	83.4	2.8
80°-90°	24.4	0.8
90°-100°	36.4	1.2
100°-110°	107.9	3.6
110°-120°	183.1	6.1
120°-130°	241.5	8.0
130°-140°	271.2	9.0
140°-150°	266.5	8.8
150°-160°	224.1	7.4
160°-170°	149.1	4.9
170°-180°	52.2	1.7
0°-30°	470.6	15.6
0°-40°	755.9	25.0
0°-60°	1227.9	40.7
0°-90°	1487.4	49.3
90°-120°	327.5	10.8
90°-150°	1106.7	36.7
90°-180°	1532.0	50.7
0°-180°	3019.5	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°	13	1	13	1	13	7
95°	34	26	34	26	34	35
105°	104	100	104	100	104	110
115°	184	186	184	186	184	182
125°	269	271	269	271	269	240
135°	350	350	350	350	350	270
145°	425	425	425	425	425	266
155°	486	487	486	487	486	224
165°	529	530	529	530	529	149
175°	549	551	549	551	549	52
180°	552	552	552	552	552	

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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°	6.5	7.0	7.0	7.1	7.4	7.5	7.5	7.3	7.9	7.9	8.5
90°	12.8	12.6	12.4	12.3	12.1	11.7	11.1	10.6	10.0	9.4	8.7
92.5°	18.9	18.9	18.8	18.7	18.5	18.3	17.9	17.6	17.2	16.9	16.4
95°	33.7	33.7	33.7	33.7	33.7	33.6	33.3	33.0	32.7	32.4	31.8
97.5°	52.9	52.9	52.9	52.9	52.9	52.7	52.4	52.0	51.7	51.4	50.5
100°	66.2	66.2	66.2	66.2	66.2	66.1	65.9	65.7	65.5	65.3	64.5
102.5°	81.2	81.2	81.1	81.0	81.0	80.8	80.5	80.2	79.9	79.7	78.9
105°	104.2	104.0	103.7	103.4	103.1	102.8	102.5	102.3	101.9	101.6	101.2
107.5°	126.6	126.6	126.7	126.7	126.7	126.6	126.3	126.0	125.7	125.5	125.5
110°	142.6	142.3	142.0	141.8	141.5	141.5	141.7	141.9	142.0	142.2	142.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	159.0	159.0	158.9	158.9	158.8	158.8	158.8	158.9	158.9	159.0	159.1
115°	184.5	184.6	184.7	184.8	184.9	185.0	185.1	185.2	185.3	185.4	185.6
117.5°	208.8	209.0	209.2	209.3	209.5	209.8	210.1	210.5	210.8	211.0	211.2
120°	227.2	227.1	226.9	226.7	226.5	226.6	227.1	227.5	228.0	228.5	228.8
122.5°	242.6	242.9	243.3	243.6	243.9	244.3	244.6	245.0	245.2	245.6	245.7
125°	269.1	269.3	269.5	269.7	269.8	270.0	270.2	270.4	270.6	270.8	270.9
127.5°	293.6	293.8	293.9	294.1	294.2	294.4	294.5	294.7	294.9	295.1	295.3
130°	309.6	310.0	310.4	310.8	311.1	311.4	311.6	311.8	312.0	312.2	312.2
132.5°	326.8	326.9	327.1	327.2	327.3	327.5	327.7	327.9	328.1	328.3	328.4
135°	350.2	350.5	350.8	351.1	351.4	351.6	351.8	351.9	352.1	352.3	352.3
137.5°	374.9	374.8	374.8	374.8	374.7	374.8	375.0	375.2	375.5	375.8	375.6
140°	389.9	390.0	390.1	390.2	390.3	390.4	390.5	390.6	390.7	390.8	390.8
142.5°	405.0	405.0	405.0	405.0	405.0	405.1	405.1	405.1	405.1	405.1	405.2
145°	425.4	425.7	425.9	426.2	426.5	426.7	426.8	426.9	427.0	427.1	427.0
147.5°	446.1	446.2	446.3	446.4	446.5	446.6	446.6	446.7	446.8	446.9	447.0
150°	458.7	458.8	458.9	459.0	459.1	459.1	459.1	459.1	459.1	459.1	459.1
152.5°	470.3	470.6	470.8	471.1	471.3	471.4	471.1	470.9	470.6	470.4	470.3
155°	486.4	486.8	487.2	487.6	488.0	488.0	487.6	487.2	486.8	486.4	486.5
157.5°	500.9	501.2	501.5	501.9	502.2	502.2	501.9	501.6	501.3	501.1	501.1
160°	509.1	509.5	510.1	510.6	511.0	511.1	510.9	510.6	510.3	510.0	510.1
162.5°	517.6	518.1	518.6	519.1	519.5	519.5	519.1	518.5	518.0	517.5	517.6
165°	528.8	529.1	529.5	529.9	530.3	530.2	529.6	529.0	528.5	527.9	528.1
167.5°	536.7	537.2	537.9	538.5	539.0	539.0	538.5	537.9	537.3	536.8	536.8
170°	541.1	541.8	542.4	543.1	543.8	543.8	543.3	542.7	542.2	541.6	541.5
172.5°	544.9	545.5	546.2	546.9	547.5	547.5	547.0	546.3	545.6	545.0	545.0
175°	548.8	549.5	550.2	550.8	551.5	551.5	550.8	550.2	549.5	548.8	548.9
177.5°	550.9	551.5	552.1	552.7	553.3	553.4	552.8	552.3	551.8	551.2	551.2
180°	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2



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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°	8.4	8.4	8.0	7.2	6.4	5.7	5.3	4.9	5.3	5.7	6.0
90°	7.9	7.2	6.3	5.5	4.4	3.4	2.4	1.3	2.4	3.4	4.4
92.5°	15.8	15.4	14.8	13.9	12.7	11.5	10.4	9.1	10.4	11.5	12.7
95°	31.1	30.4	29.8	29.0	28.2	27.3	26.5	25.6	26.5	27.3	28.2
97.5°	49.8	49.0	48.3	47.5	46.8	46.1	45.4	44.8	45.4	46.1	46.8
100°	63.6	62.8	61.9	61.4	60.9	60.5	60.1	59.8	60.1	60.5	60.9
102.5°	78.1	77.4	76.6	76.2	76.0	75.8	75.7	75.5	75.7	75.8	76.0
105°	100.9	100.5	100.1	99.9	99.8	99.7	99.6	99.5	99.6	99.7	99.8
107.5°	125.4	125.4	125.3	125.2	125.1	125.0	124.8	124.7	124.8	125.0	125.1
110°	142.4	142.5	142.6	142.5	142.3	142.1	141.9	141.8	141.9	142.1	142.3





TEST NUMBER: P332716-830

CATALOG NUMBER: S124DIW-S350D470U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	159.3	159.5	159.7	159.8	159.7	159.7	159.6	159.6	159.6	159.7	159.7
115°	185.8	186.0	186.2	186.2	186.2	186.2	186.2	186.2	186.2	186.2	186.2
117.5°	211.3	211.5	211.6	211.6	211.6	211.5	211.4	211.3	211.4	211.5	211.6
120°	229.0	229.3	229.6	229.6	229.2	228.8	228.5	228.1	228.5	228.8	229.2
122.5°	245.8	246.0	246.1	246.1	245.9	245.8	245.6	245.5	245.6	245.8	245.9
125°	271.0	271.1	271.2	271.2	271.2	271.2	271.2	271.2	271.2	271.2	271.2
127.5°	295.4	295.6	295.8	295.7	295.4	295.1	294.8	294.5	294.8	295.1	295.4
130°	312.2	312.2	312.2	312.1	311.8	311.5	311.2	310.9	311.2	311.5	311.8
132.5°	328.4	328.5	328.6	328.5	328.3	328.1	327.9	327.6	327.9	328.1	328.3
135°	352.3	352.3	352.3	352.0	351.5	350.9	350.3	349.8	350.3	350.9	351.5
137.5°	375.5	375.3	375.1	374.9	374.7	374.4	374.2	373.9	374.2	374.4	374.7
140°	390.8	390.8	390.8	390.7	390.5	390.3	390.1	389.9	390.1	390.3	390.5
142.5°	405.3	405.4	405.5	405.4	405.2	405.0	404.8	404.6	404.8	405.0	405.2
145°	426.9	426.8	426.7	426.5	426.1	425.7	425.4	425.0	425.4	425.7	426.1
147.5°	447.0	447.0	447.1	447.0	446.5	446.0	445.5	445.2	445.5	446.0	446.5
150°	459.1	459.1	459.1	458.9	458.5	458.2	457.8	457.4	457.8	458.2	458.5
152.5°	470.2	470.1	470.1	470.0	469.8	469.5	469.3	469.0	469.3	469.5	469.8
155°	486.6	486.7	486.8	486.9	486.9	486.9	486.9	486.9	486.9	486.9	486.9
157.5°	501.1	501.1	501.1	501.2	501.4	501.6	501.7	501.9	501.7	501.6	501.4
160°	510.2	510.3	510.4	510.5	510.6	510.7	510.8	510.9	510.8	510.7	510.6
162.5°	517.6	517.7	517.8	518.0	518.3	518.5	518.8	519.1	518.8	518.5	518.3
165°	528.3	528.5	528.7	528.9	529.1	529.4	529.7	530.0	529.7	529.4	529.1
167.5°	536.8	536.7	536.7	536.9	537.3	537.7	538.1	538.5	538.1	537.7	537.3
170°	541.4	541.3	541.2	541.4	541.9	542.3	542.8	543.3	542.8	542.3	541.9
172.5°	545.0	544.9	544.9	545.1	545.5	545.9	546.3	546.7	546.3	545.9	545.5
175°	549.0	549.1	549.2	549.5	550.0	550.4	550.9	551.4	550.9	550.4	550.0
177.5°	551.2	551.2	551.2	551.4	551.8	552.1	552.5	552.9	552.5	552.1	551.8
180°	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2



TEST NUMBER: P332716-830

CATALOG NUMBER: S124DIW-S350D470U830-4F0-1E-UDD-A1

**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°	6.8	7.0	7.8	8.4	9.0	10.1	10.6	12.6	13.5	14.5	16.1
90°	5.5	6.3	7.2	7.9	8.7	9.4	10.0	10.6	11.1	11.7	12.1
92.5°	13.9	14.8	15.4	15.8	16.4	16.9	17.2	17.6	17.9	18.3	18.5
95°	29.0	29.8	30.4	31.1	31.8	32.4	32.7	33.0	33.3	33.6	33.7
97.5°	47.5	48.3	49.0	49.8	50.5	51.4	51.7	52.0	52.4	52.7	52.9
100°	61.4	61.9	62.8	63.6	64.5	65.3	65.5	65.7	65.9	66.1	66.2
102.5°	76.2	76.6	77.4	78.1	78.9	79.7	79.9	80.2	80.5	80.8	81.0
105°	99.9	100.1	100.5	100.9	101.2	101.6	101.9	102.3	102.5	102.8	103.1
107.5°	125.2	125.3	125.4	125.4	125.5	125.5	125.7	126.0	126.3	126.6	126.7
110°	142.5	142.6	142.5	142.4	142.3	142.2	142.0	141.9	141.7	141.5	141.5



TEST NUMBER: P332716-830

CATALOG NUMBER: S124DIW-S350D470U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	159.8	159.7	159.5	159.3	159.1	159.0	158.9	158.9	158.8	158.8	158.8
115°	186.2	186.2	186.0	185.8	185.6	185.4	185.3	185.2	185.1	185.0	184.9
117.5°	211.6	211.6	211.5	211.3	211.2	211.0	210.8	210.5	210.1	209.8	209.5
120°	229.6	229.6	229.3	229.0	228.8	228.5	228.0	227.5	227.1	226.6	226.5
122.5°	246.1	246.1	246.0	245.8	245.7	245.6	245.2	245.0	244.6	244.3	243.9
125°	271.2	271.2	271.1	271.0	270.9	270.8	270.6	270.4	270.2	270.0	269.8
127.5°	295.7	295.8	295.6	295.4	295.3	295.1	294.9	294.7	294.5	294.4	294.2
130°	312.1	312.2	312.2	312.2	312.2	312.2	312.0	311.8	311.6	311.4	311.1
132.5°	328.5	328.6	328.5	328.4	328.4	328.3	328.1	327.9	327.7	327.5	327.3
135°	352.0	352.3	352.3	352.3	352.3	352.3	352.1	351.9	351.8	351.6	351.4
137.5°	374.9	375.1	375.3	375.5	375.6	375.8	375.5	375.2	375.0	374.8	374.7
140°	390.7	390.8	390.8	390.8	390.8	390.8	390.7	390.6	390.5	390.4	390.3
142.5°	405.4	405.5	405.4	405.3	405.2	405.1	405.1	405.1	405.1	405.1	405.0
145°	426.5	426.7	426.8	426.9	427.0	427.1	427.0	426.9	426.8	426.7	426.5
147.5°	447.0	447.1	447.0	447.0	447.0	446.9	446.8	446.7	446.6	446.6	446.5
150°	458.9	459.1	459.1	459.1	459.1	459.1	459.1	459.1	459.1	459.1	459.1
152.5°	470.0	470.1	470.1	470.2	470.3	470.4	470.6	470.9	471.1	471.4	471.3
155°	486.9	486.8	486.7	486.6	486.5	486.4	486.8	487.2	487.6	488.0	488.0
157.5°	501.2	501.1	501.1	501.1	501.1	501.1	501.3	501.6	501.9	502.2	502.2
160°	510.5	510.4	510.3	510.2	510.1	510.0	510.3	510.6	510.9	511.1	511.0
162.5°	518.0	517.8	517.7	517.6	517.6	517.5	518.0	518.5	519.1	519.5	519.5
165°	528.9	528.7	528.5	528.3	528.1	527.9	528.5	529.0	529.6	530.2	530.3
167.5°	536.9	536.7	536.7	536.8	536.8	536.8	537.3	537.9	538.5	539.0	539.0
170°	541.4	541.2	541.3	541.4	541.5	541.6	542.2	542.7	543.3	543.8	543.8
172.5°	545.1	544.9	544.9	545.0	545.0	545.0	545.6	546.3	547.0	547.5	547.5
175°	549.5	549.2	549.1	549.0	548.9	548.8	549.5	550.2	550.8	551.5	551.5
177.5°	551.4	551.2	551.2	551.2	551.2	551.2	551.8	552.3	552.8	553.4	553.3
180°	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2



TEST NUMBER: P332716-830

CATALOG NUMBER: S124DIW-S350D470U830-4F0-1E-UDD-A1

**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°	16.7	17.0	17.5	17.9	17.5	17.0	16.7	16.1	14.5	13.5	12.6
90°	12.3	12.4	12.6	12.8	12.6	12.4	12.3	12.1	11.7	11.1	10.6
92.5°	18.7	18.8	18.9	18.9	18.9	18.8	18.7	18.5	18.3	17.9	17.6
95°	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.6	33.3	33.0
97.5°	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.7	52.4	52.0
100°	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.1	65.9	65.7
102.5°	81.0	81.1	81.2	81.2	81.2	81.1	81.0	81.0	80.8	80.5	80.2
105°	103.4	103.7	104.0	104.2	104.0	103.7	103.4	103.1	102.8	102.5	102.3
107.5°	126.7	126.7	126.6	126.6	126.6	126.7	126.7	126.7	126.6	126.3	126.0
110°	141.8	142.0	142.3	142.6	142.3	142.0	141.8	141.5	141.5	141.7	141.9



TEST NUMBER: P332716-830

CATALOG NUMBER: S124DIW-S350D470U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	158.9	158.9	159.0	159.0	159.0	158.9	158.9	158.8	158.8	158.8	158.9
115°	184.8	184.7	184.6	184.5	184.6	184.7	184.8	184.9	185.0	185.1	185.2
117.5°	209.3	209.2	209.0	208.8	209.0	209.2	209.3	209.5	209.8	210.1	210.5
120°	226.7	226.9	227.1	227.2	227.1	226.9	226.7	226.5	226.6	227.1	227.5
122.5°	243.6	243.3	242.9	242.6	242.9	243.3	243.6	243.9	244.3	244.6	245.0
125°	269.7	269.5	269.3	269.1	269.3	269.5	269.7	269.8	270.0	270.2	270.4
127.5°	294.1	293.9	293.8	293.6	293.8	293.9	294.1	294.2	294.4	294.5	294.7
130°	310.8	310.4	310.0	309.6	310.0	310.4	310.8	311.1	311.4	311.6	311.8
132.5°	327.2	327.1	326.9	326.8	326.9	327.1	327.2	327.3	327.5	327.7	327.9
135°	351.1	350.8	350.5	350.2	350.5	350.8	351.1	351.4	351.6	351.8	351.9
137.5°	374.8	374.8	374.8	374.9	374.8	374.8	374.8	374.7	374.8	375.0	375.2
140°	390.2	390.1	390.0	389.9	390.0	390.1	390.2	390.3	390.4	390.5	390.6
142.5°	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.1	405.1	405.1
145°	426.2	425.9	425.7	425.4	425.7	425.9	426.2	426.5	426.7	426.8	426.9
147.5°	446.4	446.3	446.2	446.1	446.2	446.3	446.4	446.5	446.6	446.6	446.7
150°	459.0	458.9	458.8	458.7	458.8	458.9	459.0	459.1	459.1	459.1	459.1
152.5°	471.1	470.8	470.6	470.3	470.6	470.8	471.1	471.3	471.4	471.1	470.9
155°	487.6	487.2	486.8	486.4	486.8	487.2	487.6	488.0	488.0	487.6	487.2
157.5°	501.9	501.5	501.2	500.9	501.2	501.5	501.9	502.2	502.2	501.9	501.6
160°	510.6	510.1	509.5	509.1	509.5	510.1	510.6	511.0	511.1	510.9	510.6
162.5°	519.1	518.6	518.1	517.6	518.1	518.6	519.1	519.5	519.5	519.1	518.5
165°	529.9	529.5	529.1	528.8	529.1	529.5	529.9	530.3	530.2	529.6	529.0
167.5°	538.5	537.9	537.2	536.7	537.2	537.9	538.5	539.0	539.0	538.5	537.9
170°	543.1	542.4	541.8	541.1	541.8	542.4	543.1	543.8	543.8	543.3	542.7
172.5°	546.9	546.2	545.5	544.9	545.5	546.2	546.9	547.5	547.5	547.0	546.3
175°	550.8	550.2	549.5	548.8	549.5	550.2	550.8	551.5	551.5	550.8	550.2
177.5°	552.7	552.1	551.5	550.9	551.5	552.1	552.7	553.3	553.4	552.8	552.3
180°	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2



TEST NUMBER: P332716-830

CATALOG NUMBER: S124DIW-S350D470U830-4F0-1E-UDD-A1

**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°	10.6	10.1	9.0	8.4	7.8	7.0	6.8	6.0	5.7	5.3	4.9
90°	10.0	9.4	8.7	7.9	7.2	6.3	5.5	4.4	3.4	2.4	1.3
92.5°	17.2	16.9	16.4	15.8	15.4	14.8	13.9	12.7	11.5	10.4	9.1
95°	32.7	32.4	31.8	31.1	30.4	29.8	29.0	28.2	27.3	26.5	25.6
97.5°	51.7	51.4	50.5	49.8	49.0	48.3	47.5	46.8	46.1	45.4	44.8
100°	65.5	65.3	64.5	63.6	62.8	61.9	61.4	60.9	60.5	60.1	59.8
102.5°	79.9	79.7	78.9	78.1	77.4	76.6	76.2	76.0	75.8	75.7	75.5
105°	101.9	101.6	101.2	100.9	100.5	100.1	99.9	99.8	99.7	99.6	99.5
107.5°	125.7	125.5	125.5	125.4	125.4	125.3	125.2	125.1	125.0	124.8	124.7
110°	142.0	142.2	142.3	142.4	142.5	142.6	142.5	142.3	142.1	141.9	141.8



TEST NUMBER: P332716-830

CATALOG NUMBER: S124DIW-S350D470U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	158.9	159.0	159.1	159.3	159.5	159.7	159.8	159.7	159.7	159.6	159.6
115°	185.3	185.4	185.6	185.8	186.0	186.2	186.2	186.2	186.2	186.2	186.2
117.5°	210.8	211.0	211.2	211.3	211.5	211.6	211.6	211.6	211.5	211.4	211.3
120°	228.0	228.5	228.8	229.0	229.3	229.6	229.6	229.2	228.8	228.5	228.1
122.5°	245.2	245.6	245.7	245.8	246.0	246.1	246.1	245.9	245.8	245.6	245.5
125°	270.6	270.8	270.9	271.0	271.1	271.2	271.2	271.2	271.2	271.2	271.2
127.5°	294.9	295.1	295.3	295.4	295.6	295.8	295.7	295.4	295.1	294.8	294.5
130°	312.0	312.2	312.2	312.2	312.2	312.2	312.1	311.8	311.5	311.2	310.9
132.5°	328.1	328.3	328.4	328.4	328.5	328.6	328.5	328.3	328.1	327.9	327.6
135°	352.1	352.3	352.3	352.3	352.3	352.3	352.0	351.5	350.9	350.3	349.8
137.5°	375.5	375.8	375.6	375.5	375.3	375.1	374.9	374.7	374.4	374.2	373.9
140°	390.7	390.8	390.8	390.8	390.8	390.8	390.7	390.5	390.3	390.1	389.9
142.5°	405.1	405.1	405.2	405.3	405.4	405.5	405.4	405.2	405.0	404.8	404.6
145°	427.0	427.1	427.0	426.9	426.8	426.7	426.5	426.1	425.7	425.4	425.0
147.5°	446.8	446.9	447.0	447.0	447.0	447.1	447.0	446.5	446.0	445.5	445.2
150°	459.1	459.1	459.1	459.1	459.1	459.1	458.9	458.5	458.2	457.8	457.4
152.5°	470.6	470.4	470.3	470.2	470.1	470.1	470.0	469.8	469.5	469.3	469.0
155°	486.8	486.4	486.5	486.6	486.7	486.8	486.9	486.9	486.9	486.9	486.9
157.5°	501.3	501.1	501.1	501.1	501.1	501.1	501.2	501.4	501.6	501.7	501.9
160°	510.3	510.0	510.1	510.2	510.3	510.4	510.5	510.6	510.7	510.8	510.9
162.5°	518.0	517.5	517.6	517.6	517.7	517.8	518.0	518.3	518.5	518.8	519.1
165°	528.5	527.9	528.1	528.3	528.5	528.7	528.9	529.1	529.4	529.7	530.0
167.5°	537.3	536.8	536.8	536.8	536.7	536.7	536.9	537.3	537.7	538.1	538.5
170°	542.2	541.6	541.5	541.4	541.3	541.2	541.4	541.9	542.3	542.8	543.3
172.5°	545.6	545.0	545.0	545.0	544.9	544.9	545.1	545.5	545.9	546.3	546.7
175°	549.5	548.8	548.9	549.0	549.1	549.2	549.5	550.0	550.4	550.9	551.4
177.5°	551.8	551.2	551.2	551.2	551.2	551.2	551.4	551.8	552.1	552.5	552.9
180°	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2



TEST NUMBER: P332716-830

CATALOG NUMBER: S124DIW-S350D470U830-4F0-1E-UDD-A1

**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	5.7	6.4	7.2	8.0	8.4	8.4	8.5	7.9	7.9	7.3
90°	2.4	3.4	4.4	5.5	6.3	7.2	7.9	8.7	9.4	10.0	10.6
92.5°	10.4	11.5	12.7	13.9	14.8	15.4	15.8	16.4	16.9	17.2	17.6
95°	26.5	27.3	28.2	29.0	29.8	30.4	31.1	31.8	32.4	32.7	33.0
97.5°	45.4	46.1	46.8	47.5	48.3	49.0	49.8	50.5	51.4	51.7	52.0
100°	60.1	60.5	60.9	61.4	61.9	62.8	63.6	64.5	65.3	65.5	65.7
102.5°	75.7	75.8	76.0	76.2	76.6	77.4	78.1	78.9	79.7	79.9	80.2
105°	99.6	99.7	99.8	99.9	100.1	100.5	100.9	101.2	101.6	101.9	102.3
107.5°	124.8	125.0	125.1	125.2	125.3	125.4	125.4	125.5	125.5	125.7	126.0
110°	141.9	142.1	142.3	142.5	142.6	142.5	142.4	142.3	142.2	142.0	141.9





TEST NUMBER: P332716-830

CATALOG NUMBER: S124DIW-S350D470U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	159.6	159.7	159.7	159.8	159.7	159.5	159.3	159.1	159.0	158.9	158.9
115°	186.2	186.2	186.2	186.2	186.2	186.0	185.8	185.6	185.4	185.3	185.2
117.5°	211.4	211.5	211.6	211.6	211.6	211.5	211.3	211.2	211.0	210.8	210.5
120°	228.5	228.8	229.2	229.6	229.6	229.3	229.0	228.8	228.5	228.0	227.5
122.5°	245.6	245.8	245.9	246.1	246.1	246.0	245.8	245.7	245.6	245.2	245.0
125°	271.2	271.2	271.2	271.2	271.2	271.1	271.0	270.9	270.8	270.6	270.4
127.5°	294.8	295.1	295.4	295.7	295.8	295.6	295.4	295.3	295.1	294.9	294.7
130°	311.2	311.5	311.8	312.1	312.2	312.2	312.2	312.2	312.2	312.0	311.8
132.5°	327.9	328.1	328.3	328.5	328.6	328.5	328.4	328.4	328.3	328.1	327.9
135°	350.3	350.9	351.5	352.0	352.3	352.3	352.3	352.3	352.3	352.1	351.9
137.5°	374.2	374.4	374.7	374.9	375.1	375.3	375.5	375.6	375.8	375.5	375.2
140°	390.1	390.3	390.5	390.7	390.8	390.8	390.8	390.8	390.8	390.7	390.6
142.5°	404.8	405.0	405.2	405.4	405.5	405.4	405.3	405.2	405.1	405.1	405.1
145°	425.4	425.7	426.1	426.5	426.7	426.8	426.9	427.0	427.1	427.0	426.9
147.5°	445.5	446.0	446.5	447.0	447.1	447.0	447.0	447.0	446.9	446.8	446.7
150°	457.8	458.2	458.5	458.9	459.1	459.1	459.1	459.1	459.1	459.1	459.1
152.5°	469.3	469.5	469.8	470.0	470.1	470.1	470.2	470.3	470.4	470.6	470.9
155°	486.9	486.9	486.9	486.9	486.8	486.7	486.6	486.5	486.4	486.8	487.2
157.5°	501.7	501.6	501.4	501.2	501.1	501.1	501.1	501.1	501.1	501.3	501.6
160°	510.8	510.7	510.6	510.5	510.4	510.3	510.2	510.1	510.0	510.3	510.6
162.5°	518.8	518.5	518.3	518.0	517.8	517.7	517.6	517.6	517.5	518.0	518.5
165°	529.7	529.4	529.1	528.9	528.7	528.5	528.3	528.1	527.9	528.5	529.0
167.5°	538.1	537.7	537.3	536.9	536.7	536.7	536.8	536.8	536.8	537.3	537.9
170°	542.8	542.3	541.9	541.4	541.2	541.3	541.4	541.5	541.6	542.2	542.7
172.5°	546.3	545.9	545.5	545.1	544.9	544.9	545.0	545.0	545.0	545.6	546.3
175°	550.9	550.4	550.0	549.5	549.2	549.1	549.0	548.9	548.8	549.5	550.2
177.5°	552.5	552.1	551.8	551.4	551.2	551.2	551.2	551.2	551.2	551.8	552.3
180°	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2	552.2



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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°	7.5	7.5	7.4	7.1	7.0	7.0	6.5
90°	11.1	11.7	12.1	12.3	12.4	12.6	12.8
92.5°	17.9	18.3	18.5	18.7	18.8	18.9	18.9
95°	33.3	33.6	33.7	33.7	33.7	33.7	33.7
97.5°	52.4	52.7	52.9	52.9	52.9	52.9	52.9
100°	65.9	66.1	66.2	66.2	66.2	66.2	66.2
102.5°	80.5	80.8	81.0	81.0	81.1	81.2	81.2
105°	102.5	102.8	103.1	103.4	103.7	104.0	104.2
107.5°	126.3	126.6	126.7	126.7	126.7	126.6	126.6
110°	141.7	141.5	141.5	141.8	142.0	142.3	142.6



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	158.8	158.8	158.8	158.9	158.9	159.0	159.0
115°	185.1	185.0	184.9	184.8	184.7	184.6	184.5
117.5°	210.1	209.8	209.5	209.3	209.2	209.0	208.8
120°	227.1	226.6	226.5	226.7	226.9	227.1	227.2
122.5°	244.6	244.3	243.9	243.6	243.3	242.9	242.6
125°	270.2	270.0	269.8	269.7	269.5	269.3	269.1
127.5°	294.5	294.4	294.2	294.1	293.9	293.8	293.6
130°	311.6	311.4	311.1	310.8	310.4	310.0	309.6
132.5°	327.7	327.5	327.3	327.2	327.1	326.9	326.8
135°	351.8	351.6	351.4	351.1	350.8	350.5	350.2
137.5°	375.0	374.8	374.7	374.8	374.8	374.8	374.9
140°	390.5	390.4	390.3	390.2	390.1	390.0	389.9
142.5°	405.1	405.1	405.0	405.0	405.0	405.0	405.0
145°	426.8	426.7	426.5	426.2	425.9	425.7	425.4
147.5°	446.6	446.6	446.5	446.4	446.3	446.2	446.1
150°	459.1	459.1	459.1	459.0	458.9	458.8	458.7
152.5°	471.1	471.4	471.3	471.1	470.8	470.6	470.3
155°	487.6	488.0	488.0	487.6	487.2	486.8	486.4
157.5°	501.9	502.2	502.2	501.9	501.5	501.2	500.9
160°	510.9	511.1	511.0	510.6	510.1	509.5	509.1
162.5°	519.1	519.5	519.5	519.1	518.6	518.1	517.6
165°	529.6	530.2	530.3	529.9	529.5	529.1	528.8
167.5°	538.5	539.0	539.0	538.5	537.9	537.2	536.7
170°	543.3	543.8	543.8	543.1	542.4	541.8	541.1
172.5°	547.0	547.5	547.5	546.9	546.2	545.5	544.9
175°	550.8	551.5	551.5	550.8	550.2	549.5	548.8
177.5°	552.8	553.4	553.3	552.7	552.1	551.5	550.9
180°	552.2	552.2	552.2	552.2	552.2	552.2	552.2

(END OF REPORT)