SANS Experiment Worksheet

IPTS #	Cycle	Experiment #	Sample Thickness:
Flood Pattern:	Dark Current:		Sample-Si Window Distance
Standard:	Standard Scan #		Aperture-Si Window Distance

Configurations	
Short:	**Medium:**
Detector Distance:	Detector Distance:
SDD=	SDD=
Number of Guides:	Number of Guides:
SSD=	SSD=
Attenuation:	Attenuation:
Wavelength:	Wavelength:
Source Aperture Radius:	Source Aperture Radius:
Sample Aperture Radius:	Sample Aperture Radius:
Beam Trap Radius:	Beam Trap Radius:
Background:	Background:
Empty Beam:	Empty Beam:
Long:	**Trans:**
Detector Distance:	Detector Distance:
SDD=	SDD=
Number of Guides:	Number of Guides:
SSD=	SSD=
Attenuation:	Wavelength:
Wavelength:	Source Aperture Radius:
Source Aperture Radius:	Sample Aperture Radius:
Sample Aperture Radius:	Empty Beam:
Beam Trap Radius:	
Background:	**Flood:**
Empty Beam:	Detector Distance:
	SDD=
Long-Medium SF:	Medium-Short SF:

Tables and Equations

Sample - Detector Distance (SDD) Calculation
SDD = Spice Detector Position (mm) + 711mm + Sample-Si Window (mm)
Source Aperture - Sample Aperture (SSD) Calculation
SSD = Source Aperture to Si Window (mm) - Sample Aperture to Si Window (mm)

Number of Guides	Source Aperture to Si Window
0	17495 mm
1	15473 mm
2	13454 mm
3	11434 mm
4	9399 mm

Attenuator Efficiency Chart			
Attenuator	4.75 Å (5319 rpm)	6 Å (4185 rpm)	12 Å (1995 rpm)
open (apercent)	1	1	1
x3 (bpercent)	0.348969	0.336153	0.211102
x30 (cpercent)	0.041883	0.036888	0.009784
x300 (dpercent)	0.00475871	0.0038403	0.000443
x2k (epercent)	0.000991763	0.0006339	
x10k (fpercent)	0.000209721	0.000141878	
x100k (gpercent)	4.53E-05	4.35E-05	
close (hpercent)	0	0	0