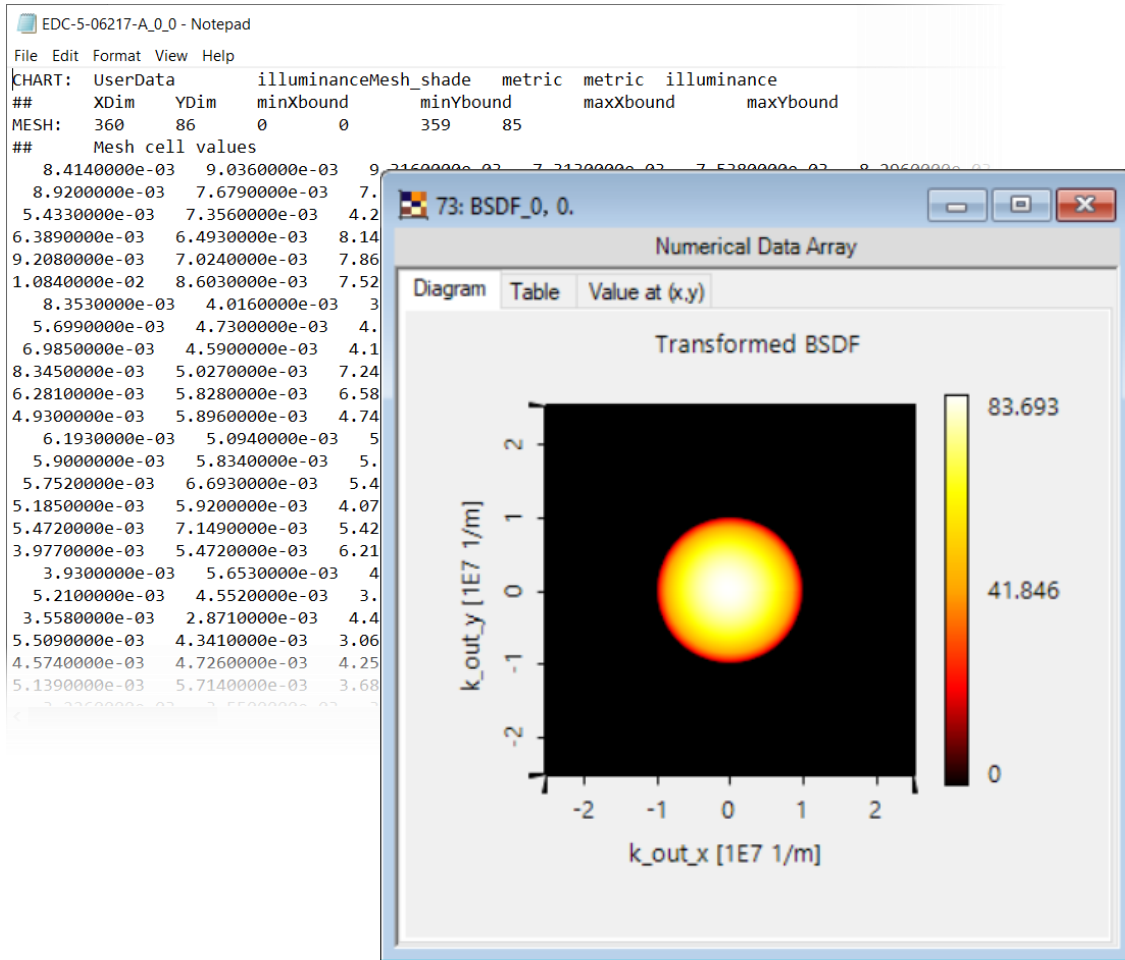


VLF Demo

# Importing BSDF data into VirtualLab Fusion

# Abstract



In this demo, we illustrate the workflow of how to import the BxDF measurement data into VirtualLab Fusion.

# Download the BSDF Files

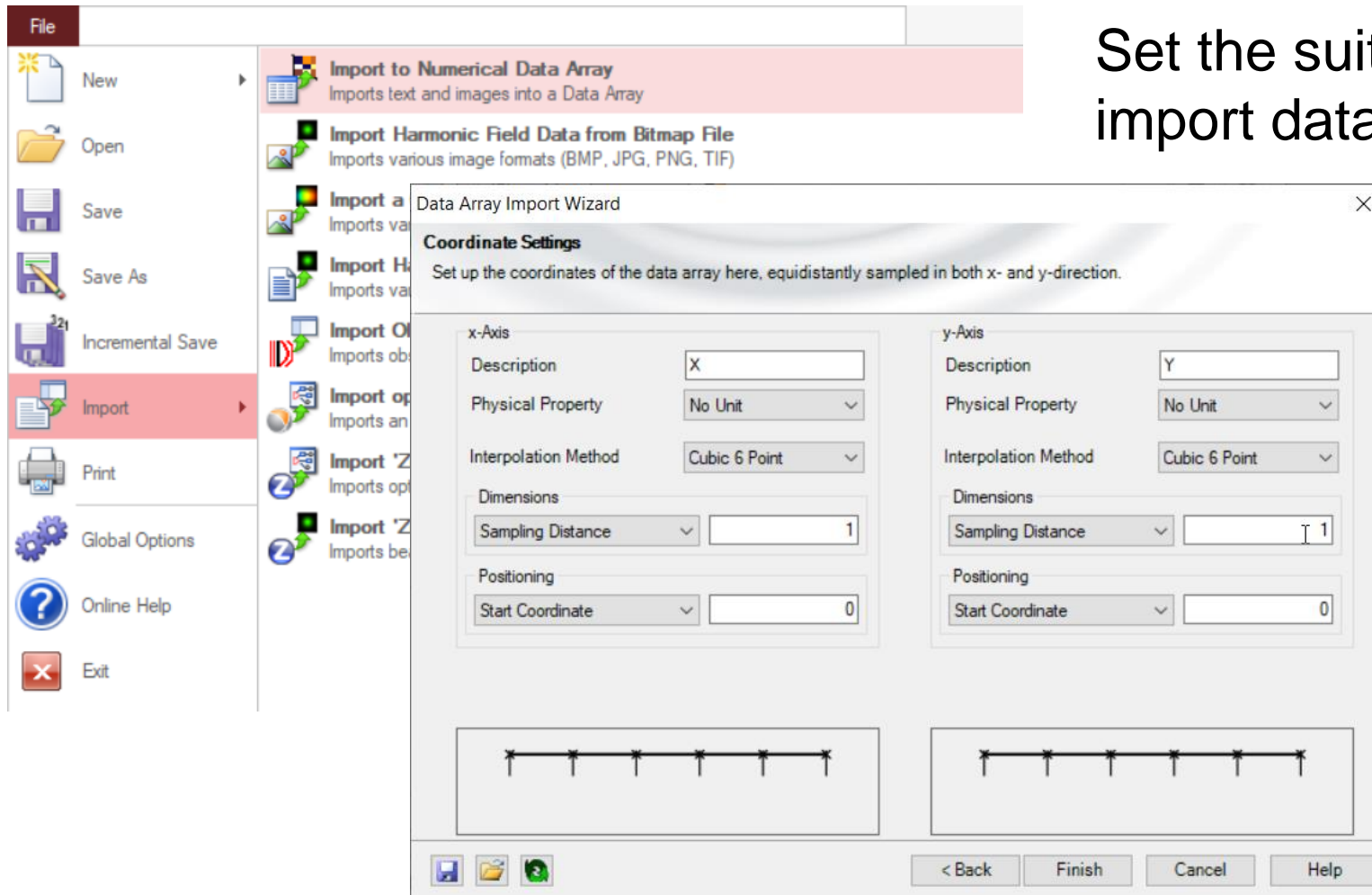
## BSDF File Downloads

Raw data	ASAP™	Zemax™ Tabular	Zemax™ DLL	LightTools™
<b>EDC</b>	<b>EDS</b>	<b>EDR</b>	<b>EDL</b>	
EDC-0.25-07118	EDS-10-06201	EDR-60×45-15219	EDL-10-07268	
EDC-0.5-07101	EDS-20-05584	EDR-60×45-16391	EDL-100	
EDC-1-07108	EDS-40-10392	EDR-72×55-17118		
EDC-2-07331	EDS-50-09039	EDR-120×90-16518		
EDC-4-09042	EDS-60-16143	<b>EDRG</b>		
EDC-5-06217	<b>EDF</b>	EDRG-10-10-07317		
EDC-10-08368	EDF-C1-56			
EDC-15-08160	EDF-L1-56			
EDC-15-15132	EDF-S1-20			
EDC-20-09211				
EDC-30-07210				
EDC-50				
EDC-60-06397				
EDC-120-12103				

The import module requires BSDF data in the same file format like LightTools.

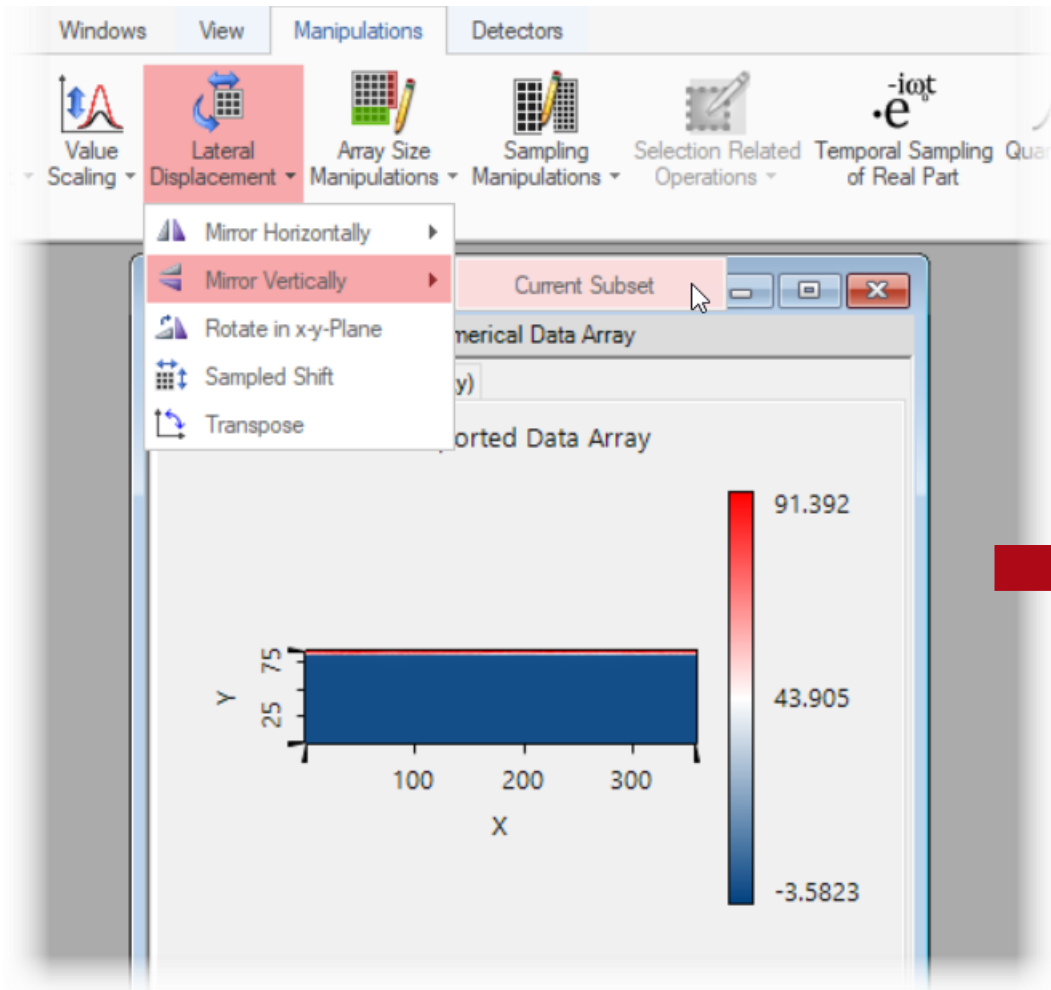
<https://www.rpc Photonics.com/bsdf-data-optical-diffusers/>

# Import the BSDF File into VirtualLab Fusion

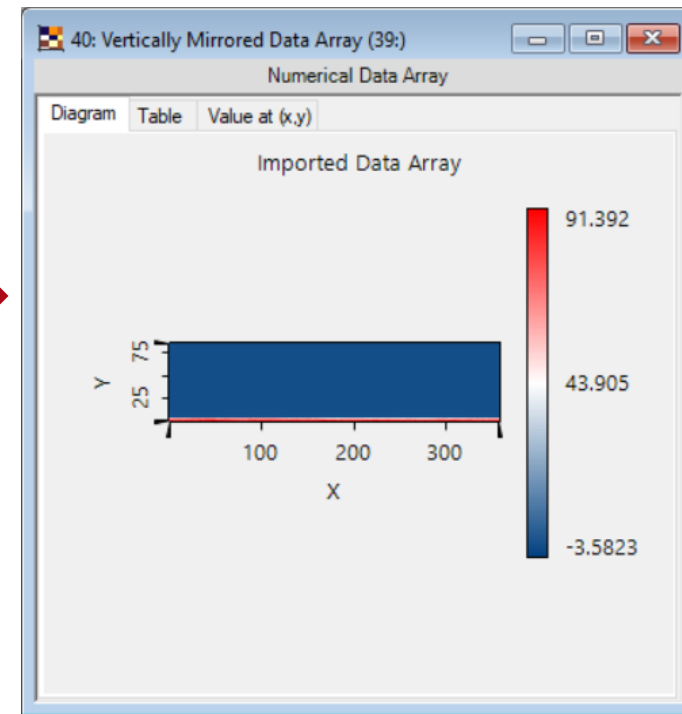


Set the suitable parameters of the import data array.

# Manipulate the Imported Data

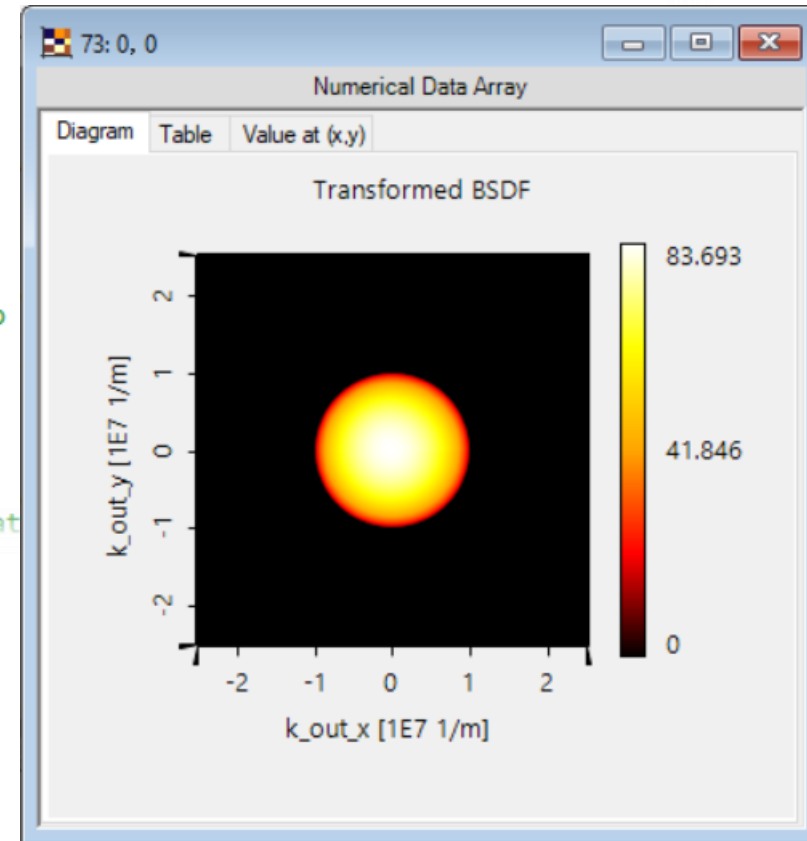


Flip the imported data array vertically for the module to read.



# Module for the Coordinate Transformation

```
Source Code  Advanced Settings
16 using VirtualLabAPI.Core.Numerics;
17 using VirtualLabAPI.Core.Numerics.Region2D;
18 using VirtualLabAPI.Core.OpticalSystems;
19 using VirtualLabAPI.Core.Propagation;
20
21 namespace OwnCode {
22     public class VLModule : IVLModule {
23         //define size of k-window
24         VectorD sizeInKDomain = new VectorD(50e6, 50e6);
25         //define number of k-samples
26         Vector numberkSamples = new Vector(1001, 1001);
27         //define wavelength for coordinate transformation from kx,ky to
28         double wavelength = 633e-9;
29         //define refractive index
30         double refractiveIndex = 1;
31
32         public void Run() {
33             //initially we ask for the data which shall be re-interpolat
```



Define the sampling points and range according to the dimension of the imported data, then run the module.

# Document Information

---

title	Importing BSDF data into VirtualLab Fusion
document code	Demo.0033
version	1.0
toolbox(es)	
VL version used for simulations	2020.1 (Build 1.238)
category	Demo

---