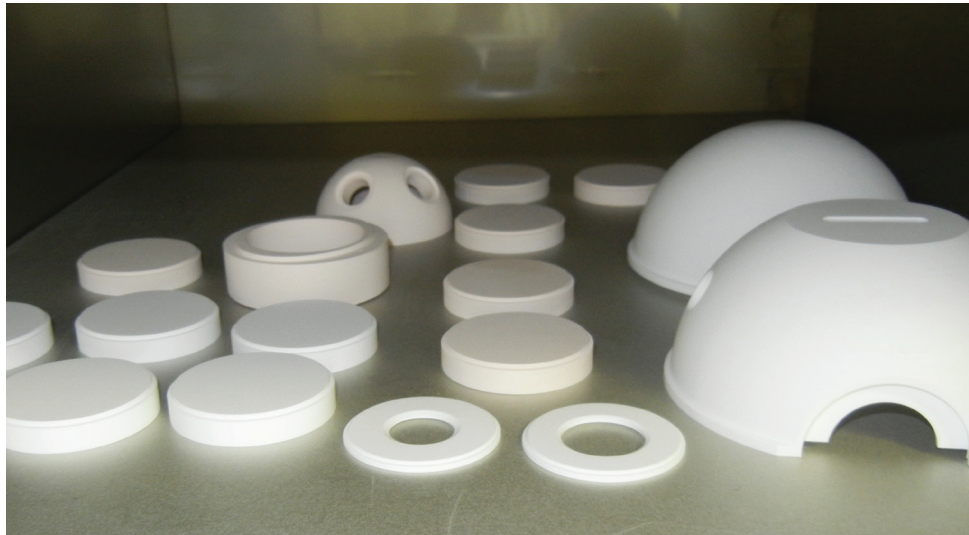


Spectralon® EPV

Spectralon for Extreme Physics and Vacuum



The World Standard in Diffuse Reflectance

Optical Grade Spectralon® has been an industry standard material for over twenty-five years and continues to find new niches every day as optical technology continues to expand. A perfectly white and diffuse material - a Lambertian >99% reflector - can be of great benefit to radiometric problems. The premier example of this is Labsphere flagship Space Grade Spectralon. This ultra-purified product is now on orbit in over 20 major optical satellite systems as a fundamental element in the absolute calibration chain for the science of those projects.

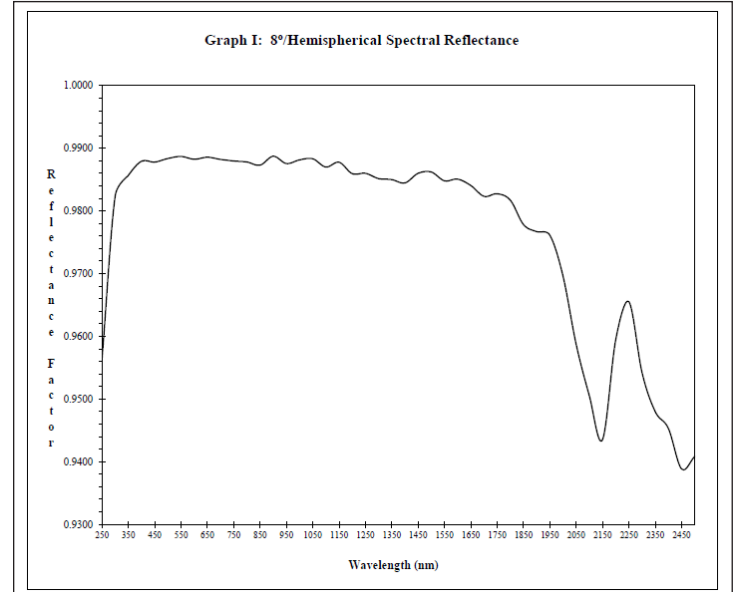
A Process for Extreme Applications

In recent years, more and more applications have arisen on the terrestrial scene where not only is there need for a great diffuse reflector, but the material also needs a level of purity driven by energy levels or special environments. Labsphere has developed a new production and handling process that provides a purified output product for ground-based applications. We call this innovation, **Spectralon EPV: Spectralon for Extreme Physics and Vacuum.**

Applications for Spectralon EPV

- High energy levels where low contamination will lead to longer product lifetimes
 - Laser pump chambers
 - Fission and fusion reactors (Examples: JET, NIF, PPPL)
 - “Ghosting” material for diffusion of high energy stray light
- Particle accelerators & physics experiments (Examples: CERN, PPPL)
- Medical applications requiring low contamination
- Dark matter detection chambers: low particulate contamination and low radiological background levels
- Vacuum chambers for optical spectroscopy or sensor testing
- High UV (<300nm) stability
 - UV LED measurement
 - UV water sanitization
 - Deep UV spectroscopy
 - Curing and drying of UV polymers materials
 - 3D printing curing
- Service life prediction – rapid weathering of materials using UV, temperature and humidity
 - Spectralon has the triple benefit of being extremely impervious to each of these items

Typical 8° Hemispherical Reflectance of Spectralon EPV



| Part Number | Model | Description |
|--------------|-----------------|---|
| AA-01451-000 | SRS-99-010-EPV | Standards, Diffuse Reflectance, Ind., 1" - 99% - NVLAP ACCREDITED |
| AA-01451-100 | USRS-99-010-EPV | Uncalibrated Diffuse Reflectance Standard, 1" - 99% |
| AA-01451-200 | SRS-99-020-EPV | Standards, Diffuse Reflectance, Ind., 2" - 99% - NVLAP ACCREDITED |
| AA-01451-300 | USRS-99-020-EPV | Uncalibrated Diffuse Reflectance Standard, 2" - 99% |
| AA-01451-400 | SRT-99-020-EPV | Targets, Spectralon Diffuse Reflectance UV-VIS-NIR, 2" - 99% Single Center-Point Calibration 250 - 2500 nm |
| AA-01451-500 | USRT-99-020-EPV | Targets, Reflectance, UnCal, 2" - 99% |
| AA-01451-600 | SRT-99-050-EPV | Targets, Spectralon Diffuse Reflectance UV-VIS-NIR, 5" - 99% Single Center-Point Calibration 250 - 2500 nm |
| AA-01451-700 | USRT-99-050-EPV | Targets, Reflectance, UnCal, 5" - 99% |

All models include nickel-plate aluminum holder and cover.