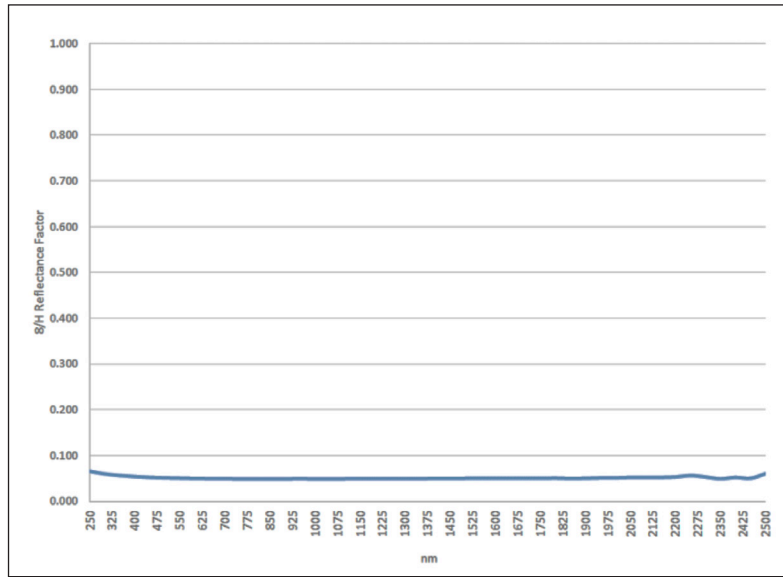
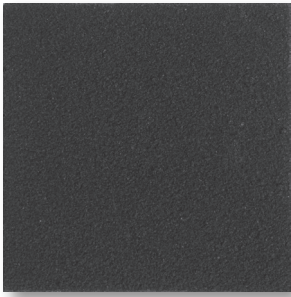


# Permaflect-05 5% Diffuse Reflectance Coating



Typical 8/H Spectral Reflectance Factor

Wavelength (nm)	Typical 8/H Reflectance Factor
250	0.066
300	0.060
350	0.057
400	0.054
450	0.052
500	0.051
550	0.051
600	0.050
650	0.050
700	0.049
750	0.049
800	0.049
850	0.049
900	0.049
950	0.049
1000	0.049
1050	0.049
1100	0.049
1150	0.050
1200	0.050
1250	0.050
1300	0.050
1350	0.050
1400	0.050
1450	0.050
1500	0.050
1550	0.050
1600	0.050
1650	0.051
1700	0.051
1750	0.050
1800	0.051
1850	0.050
1900	0.050
1950	0.051
2000	0.051
2050	0.052
2100	0.052
2150	0.052
2200	0.053
2250	0.056
2300	0.053
2350	0.049
2400	0.052
2450	0.050
2500	0.061

## Versatile

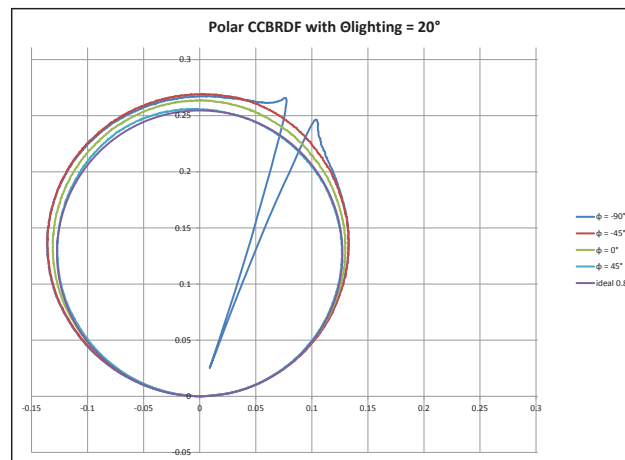
Permaflect-05 is used in applications in the UV-VIS and NIR from 250 nm to 2500 nm and is applied by spraying the coating onto a specially prepared surface. For best results, Permaflect-05 should be applied to metal or glass substrates.\*

## BRDF

The Bidirectional Reflectance Distribution Function (BRDF) is defined as the ratio of the radiance of a sample to the irradiance upon that sample, for a given direction of incidence and direction of scatter. Presented are the cosine corrected BRDF with 20° incident beam.

The BRDF data key are:

- $\theta$ lighting is the incident beam angle of illumination
- $\Phi = -90^\circ$  is in-plane data collection
- $\Phi = 0^\circ$  is cross-plane data collection
- $\Phi = -45^\circ$  is a plane halfway in-between  $0^\circ$  and  $-90^\circ$
- The backscatter direction in-plane is where the sensor obscures the light source (section with no data)
- This is on the right side of the plot as the incident light angle increases from 0 to 90
- The specular direction is to the left



Permaflect-05 BRDF at 20° Incident Beam

## Tolerance

Reflectance at 600 nm: 5% +/- 2%  
Spectral Flatness from 350 nm to 950 nm: <-2%

\* Permaflect-05 is best suited for applications that do not require aggressive cleaning or constant exposure to water.