

CO 2202E ZnS Multispectral

Wiper Resistant multispectral antireflection coating for Zinc Sulphide visible - 12 μm

DESCRIPTION

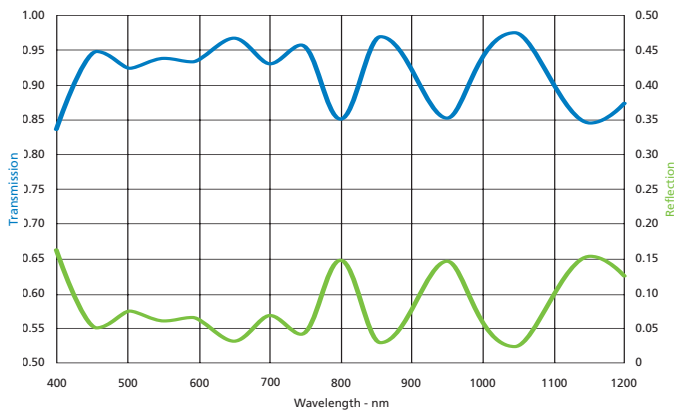
An improved abrasion resistant coating for external surfaces, for use at wavelengths in the visible - 12 μm region. The specification is similar to that of CO 2202, except that this coating offers windscreen wiper resistance.

SPECTRAL PERFORMANCE

Transmission values are for a 1 mm thick Zinc Sulphide substrate which has been coated on one surface with 2202E and on the second surface with CO 2202.
 TRANSMISSION > 90% (average) from 450 - 650 nm
 TRANSMISSION > 95% (absolute) at 1064 or 1540 nm
 TRANSMISSION > 93% (average) from 8 - 11.5 μm
 Performance can be re-optimized to meet specific customer requirements.

ENVIRONMENTAL PERFORMANCE

The coating will withstand the following environmental tests which will be carried out on a representative witness piece coated in the same batch.



As CO 2202 with the following additional tests

WIPER ABRASION TS1888 para 5.4.3
5000 wipes

Rain Erosion Resistance will meet the following values as a minimum:-
 TRANSMISSION LOSS < 4% (average) from 8.0-11.5 μm
 Under the following test conditions:

PERIOD OF EROSION: 1 hour
 RAIN DROPS: 2 mm mean diameter
 IMPACT ANGLE: 60° to the surface
 SPEED: 500 mph/223 m/s
 RATE OF RAIN: 25 mm/hour

