

# CO 2204 ZnS Dual band

Dual band antireflection coating  
for Zinc Sulphide  
3 - 5  $\mu\text{m}$  and 7.5 - 11  $\mu\text{m}$

## DESCRIPTION

This coating is designed for applications requiring transmission in both thermal imaging spectral bands.  
This coating does not contain any radioactive materials.

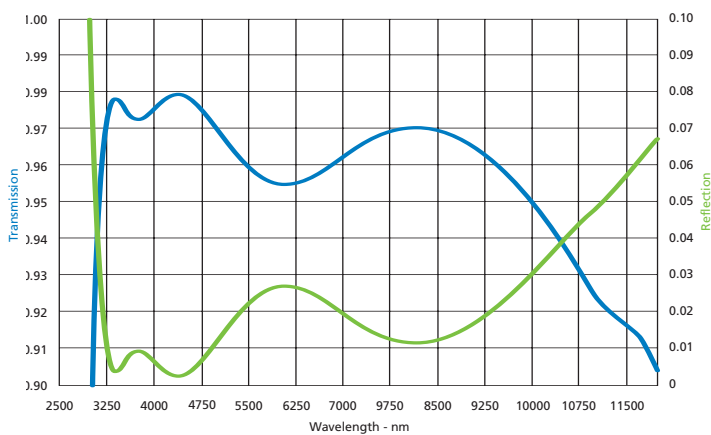
## SPECTRAL PERFORMANCE

Transmission values are for a 2 mm thick Zinc Sulphide substrate which has been coated on both surfaces with CO 2204.  
TRANSMISSION > 96% (average) from 3 - 5  $\mu\text{m}$   
TRANSMISSION > 95% (average) from 7.5 - 11  $\mu\text{m}$

Reflection values are for a single Zinc Sulphide surface coated with CO 2204.  
REFLECTION < 2% (average) from 3 - 5  $\mu\text{m}$   
REFLECTION < 2% (average) from 7.5 - 11  $\mu\text{m}$

## 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.



ADHESION	MIL-C-48497 TS1888	para 4.5.3.1 para 5.1
HUMIDITY	MIL-C-48497 TS1888	para 4.5.3.2 para 5.2.1.2
ABRASION	MIL-C-48497 TS1888	para 4.5.5.1 para 5.4.2
SALT SOLUTION	MIL-C-48497 TS1888	para 4.5.5.2 para 5.2.1.1

# CO 2204E ZnS Dual band

Wiper Resistant dual band antireflection coating for Zinc Sulphide  
3 - 5  $\mu\text{m}$  and 7.5 - 11  $\mu\text{m}$

## DESCRIPTION

An improved abrasion resistant coating for external surfaces, offering high transmission in both thermal imaging spectral bands. The specification is similar to that of CO 2204, except that this coating offers windscreen wiper resistance. This coating does not contain any radioactive materials.

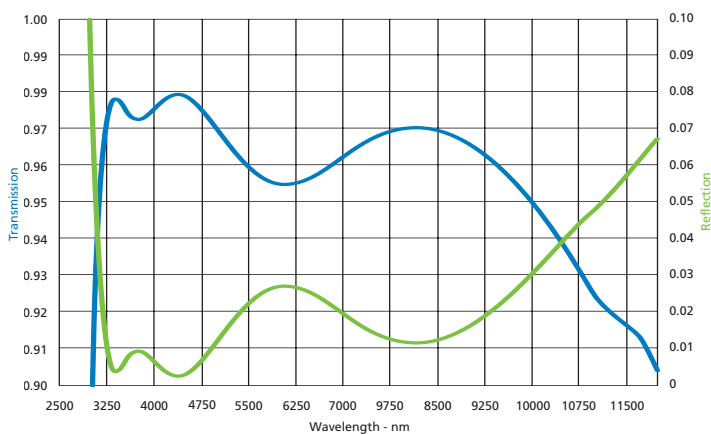
## SPECTRAL PERFORMANCE

Transmission values are for a 1 mm thick Zinc Sulphide substrate which has been coated with on one surface with CO 2204E and on the second surface with CO 2204.  
TRANSMISSION > 95% (average) from 3 - 5  $\mu\text{m}$   
TRANSMISSION > 95% (average) from 7.5 - 11  $\mu\text{m}$

Reflection values are for a single Zinc Sulphide surface coated with CO 2204E.  
REFLECTION < 3% (average) from 3 - 5  $\mu\text{m}$   
REFLECTION < 2% (average) from 7.5 - 11  $\mu\text{m}$

## 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.



ADHESION	MIL-C-48497 TS1888	para 4.5.3.1 para 5.1
HUMIDITY	MIL-C-48497 TS1888	para 4.5.3.2 para 5.2.1.2
SALT SOLUTION	MIL-C-48497 TS1888	para 4.5.5.2 para 5.2.1.1
WIPER ABRASION 5000 wipes	TS1888	para 5.4.3

## CO 2404 ZnSe Dual band

Dual band antireflection coating  
for Zinc Selenide  
3 - 5  $\mu\text{m}$  and 8 - 12  $\mu\text{m}$

### DESCRIPTION

This coating is designed for applications requiring transmission in both thermal imaging spectral bands.  
This coating does not contain any radioactive materials.

### SPECTRAL PERFORMANCE

Transmission values are for a 2 mm thick Zinc Selenide substrate which has been coated on both surfaces with CO 2404.

TRANSMISSION > 95% (average) from 3 - 5  $\mu\text{m}$

TRANSMISSION > 96% (average) from 8 - 12  $\mu\text{m}$

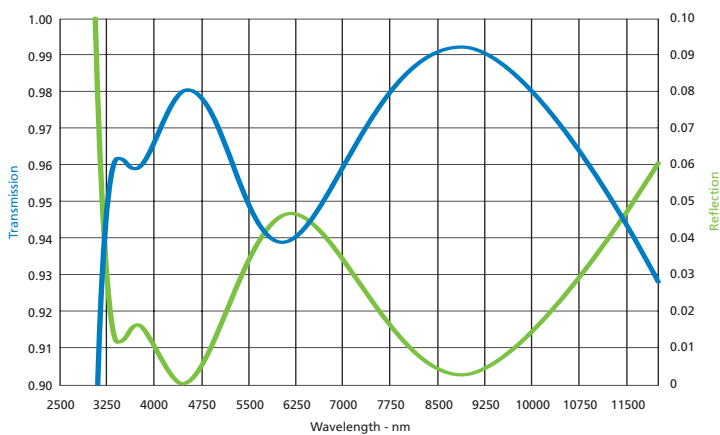
Reflection values are for a single Zinc Selenide surface coated with CO 2404.

REFLECTION < 2% (average) from 3 - 5  $\mu\text{m}$

REFLECTION < 2% (average) from 8 - 12  $\mu\text{m}$

### 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.



ADHESION	MIL-C-48497 TS1888	para 4.5.3.1 para 5.1
HUMIDITY	MIL-C-48497 TS1888	para 4.5.3.2 para 5.2.1.2
ABRASION	MIL-C-48497 TS1888	para 4.5.5.1 para 5.4.2
SALT SOLUTION	MIL-C-48497 TS1888	para 4.5.5.2 para 5.2.1.1

# CO 2404E ZnSe Dual band

Wiper Resistant Dual band antireflection coating for Zinc Selenide  
3 - 5  $\mu\text{m}$  and 8 - 12  $\mu\text{m}$

## DESCRIPTION

An improved abrasion resistant coating for external surfaces, offering high transmission in both thermal imaging spectral bands. The specification is similar to that of CO 2404, except that this coating offers windscreen wiper resistance. This coating does not contain any radioactive materials.

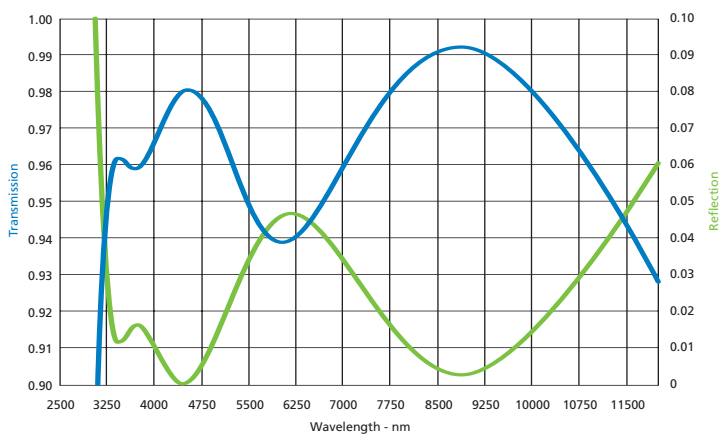
## SPECTRAL PERFORMANCE

Transmission values are for a 2 mm thick Zinc Selenide substrate which has been coated on one surface with CO 2404E and on the second surface with CO 2404.  
TRANSMISSION > 95% (average) from 3 - 5  $\mu\text{m}$   
TRANSMISSION > 96% (average) from 8 - 12  $\mu\text{m}$

Reflection values are for a single Zinc Selenide surface coated with CO 2404E.  
REFLECTION < 2% (average) from 3 - 5  $\mu\text{m}$   
REFLECTION < 2% (average) from 8 - 12  $\mu\text{m}$

## 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.



ADHESION	MIL-C-48497 TS1888	para 4.5.3.1 para 5.1
HUMIDITY	MIL-C-48497 TS1888	para 4.5.3.2 para 5.2.1.2
ABRASION	MIL-C-48497 TS1888	para 4.5.5.1 para 5.4.2
SALT SOLUTION	MIL-C-48497 TS1888	para 4.5.5.2 para 5.2.1.1
WIPER ABRASION 5000 wipes	TS1888	para 5.4.3

# CO 4008 Ge Dual band

Dual band antireflection coating  
for Germanium  
3 - 5  $\mu\text{m}$  and 8 - 12  $\mu\text{m}$

## DESCRIPTION

This coating is designed for applications requiring transmission in both thermal imaging spectral bands.  
This coating does not contain any radioactive materials.

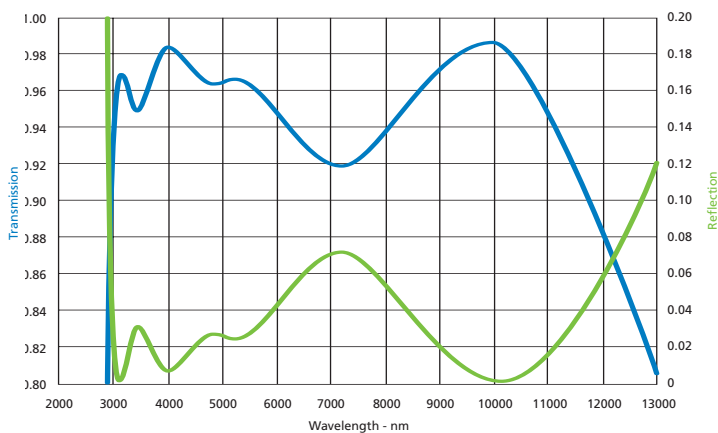
## SPECTRAL PERFORMANCE

Transmission values are for a 1 mm thick Germanium substrate which has been coated on both surfaces with CO 4008  
TRANSMISSION > 95% (average) from 3 - 5  $\mu\text{m}$   
TRANSMISSION > 94% (average) from 8 - 12  $\mu\text{m}$

Reflection values are for a single Germanium surface coated with CO 4008.  
REFLECTION < 2% (average) from 3 - 5  $\mu\text{m}$   
REFLECTION < 2% (average) from 8 - 12  $\mu\text{m}$

## 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



ADHESION	MIL-C-48497 TS1888	para 4.5.3.1 para 5.1
HUMIDITY	MIL-C-48497 TS1888	para 4.5.3.2 para 5.2.1.2
ABRASION	MIL-C-48497 TS1888	para 4.5.3.3 para 5.4.1