

TEST REPORT N° 2011B COU 12592

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Mons, May 11th, 2011

REQUESTED BY : AGC Glass Europe - R&D Centre
2 rue de l'Aurore
B-6040 Jumet
Belgium

REFERENCE OF THE REQUEST : Madame Marenne 12/04/2011

CONCERNED MANUFACTURER: AGC GLASS EUROPE
Chaussée de la Hulpe, 166
1170 BRUXELLES
BELGIUM

NUMBER OF SAMPLES AND IDENTIFICATION : Ultravision 50
See page 2

PURPOSE OF THE REQUESTED : Initial Type Test
Determination of the photo-energetic properties
according to EN 1096-1.*

SAMPLES RECEIVED ON : 13/04/2011

TESTING DATE : 14/04/2011

REMARKS : * Test under accreditation



Notified body (Id.N°1174)
according to ART.18 of the « Construction Products Directive » CPD 89/106/EEC

DESCRIPTION OF THE SAMPLES

Concerned manufacturer	: AGC GLASS EUROPE Chaussée de la Hulpe, 166 1170 BRUXELLES BELGIUM
Production site	: Lodelinsart
Commercial name of the product	: Ultravision 50
Customer's references	: /
Internal reference	: CCOU 12592
Sampling	: Under responsibility of the applicant
Sampling information	: Traceability of the samples is under responsibility of the manufacturer.
Class of Coating	: C
Coating position	: 2
Low emissivity	: yes
Glass Substrate	: low Iron Float Glass
Normal emissivity of clear glass (ϵ_n)	: 0.89
Samples	:
Number of samples	: 1 (60 * 100 mm)
Nominal Thickness	: 6 mm

PHOTO-ENERGETIC PROPERTIES - EN 1096-1

Instruments Description	For emissivity	For optical properties
Spectrophotometer	PerkinElmer SPECTRUM 100	PerkinElmer LAMDA 19
Type	Single Beam (FTIR)	Double Beam
Reflectance accessory	PerkinElmer	
Type of references	SnO ₂ Coated Glass Gold Mirror	Primary surface Ag Mirrors Secondary surface Ag Mirrors
Measurement Responsible	DL	DL

Notes : Uncertainty calculated on emissivity measurement is ± 0.01

Reproducibility on emissivity measurement is estimated to ± 0.005

Considered parameters for the calculation of g and Ug	
Composition of the insulating glass	: 5.85/15/5.85
Position of the coating	: 2
Filling up	: 90% Ar

12592 : 5.84 mm

		COATED GLASS (EN 1096-1)	IGU (EN 673)
U.V. range (280 – 380 nm)			
• Transmission	τ_{uv}	10.2 %	7.0 %
Visible range (380 – 780 nm) – Ill D65/obs 2°			
• Transmission	τ_v	54.5 %	49.0 %
• Reflection coated side	ρ_v	6.4 %	/
• Reflection opposite side	ρ'_v	15.9 %	/
Solar range (300 – 2500 nm)			
• Transmission	τ_e	24.4 %	21.7 %
• Reflection coated side	ρ_e	48.2 %	/
• Reflection opposite side	ρ'_e	44.2 %	/
• Solar factor	g	0.31	0.24
Thermal range (5000 – 50000 nm)			
• Emissivity	ϵ_n	0.024	/
• Thermal coefficient	Ug	/	1.09 W/m ² °K


 D. LIBERT
 Head of Department
 Glazing and Components - INISMa