

TEST REPORT : N° 2011B COU 14349

Mons, November 16th, 2011

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

REFERENCE OF THE REQUEST : Ingrid Marenne, 25/11/2011

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

NUMBER OF SAMPLES AND IDENTIFICATION : Vision 60
See page 2

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

SAMPLES RECEIVED ON : 19/10/2011

TESTING DATE : 10/11/2011

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	: Vision 60
Customer's references	: Code AGC PE72738
Internal reference	: CCOU 14349
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	: Clear Float Glass
Normal emissivity of clear glass (ϵ_n)	: 0.89
Samples	:
Number of samples	: 3 (100 * 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	Primary surface Ag Mirrors
	Gold Mirror	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	: 5.85/15/3.85
Position of the coating	: 2
Filling up	: 90% Ar

14349 : 5.84 mm

		COATED GLASS (EN 1096-1)	IGU (EN 673)
U.V. range (280 – 380 nm)			
• Transmission	τ_{uv}	7.47 %	5.9 %
Visible range (380 – 780 nm) – III D65/obs 2°			
• Transmission	τ_v	66.1 %	60.3 %
• Reflection coated side	ρ_v	11.8 %	/
• Reflection opposite side	ρ'_v	12.8 %	/
Solar range (300 – 2500 nm)			
• Transmission	τ_e	36.5 %	32.8 %
• Reflection coated side	ρ_e	39.0 %	/
• Reflection opposite side	ρ'_e	30.4 %	/
• Solar factor	g	0.42	0.35
Thermal range (5000 – 50000 nm)			
• Emissivity	ϵ_n	0.024	/
• Thermal coefficient	Ug	/	1.08 W/m ² °K


D. LIBERT
Head of Department

Glazing and Components - INISMa