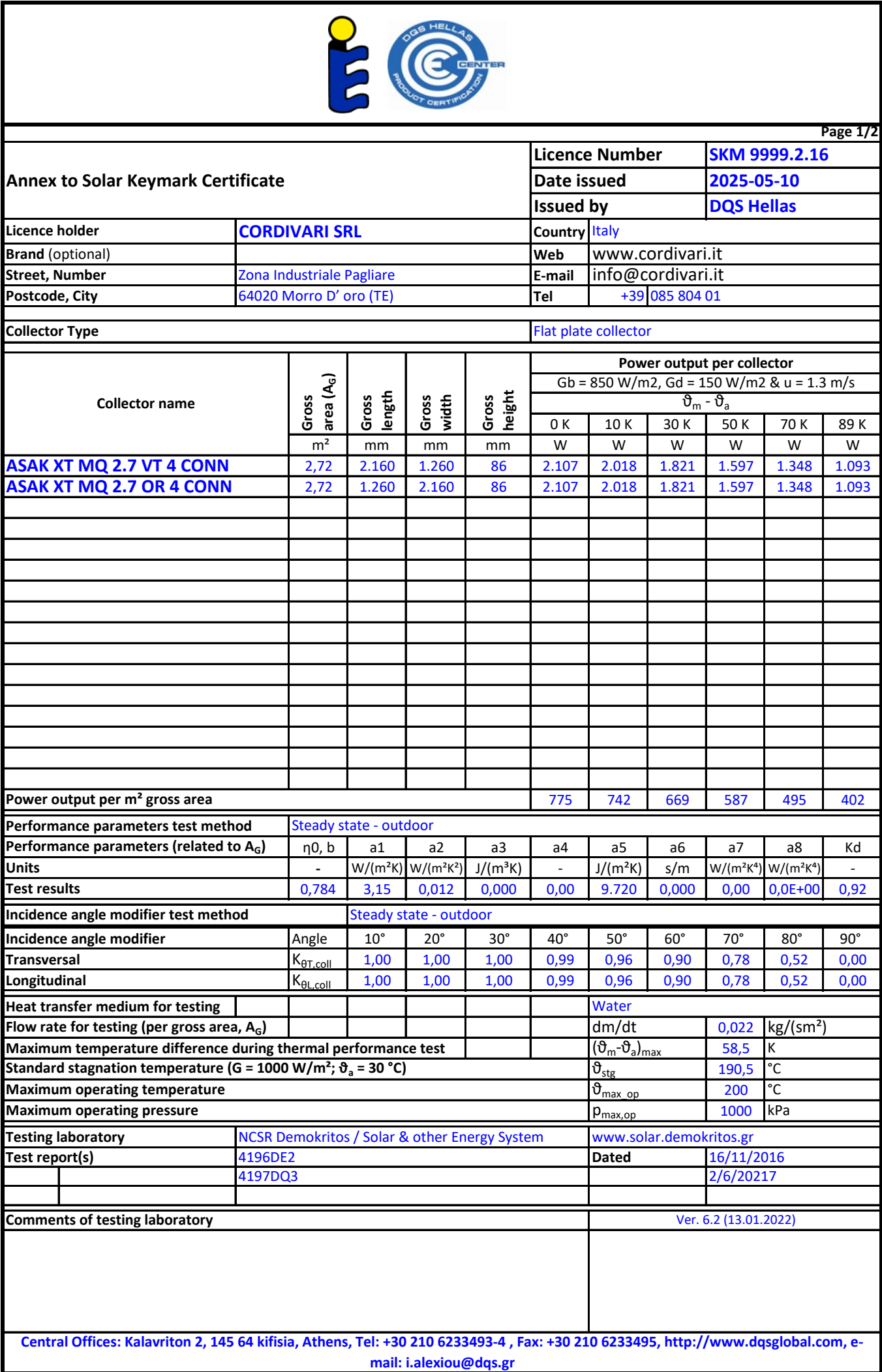




Gross Thermal Yield in kWh/collector at mean fluid temperature ϑ_m

The collector is operated at constant temperature ϑ_m (mean of in- and outlet temperatures). The calculation of the annual collector performance is performed with the official Solar Keymark spreadsheet tool Scenocalc Ver. 6.2 (13.01.2022). A detailed description of the calculations is available at <http://www.estif.org/solarkeymarknew/>

The collector was tested successfully under the following conditions:

Hail resistance using steel ball (maximum drop height)	2	m
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[illegible]

Remark: Collector efficiency (η_{col}) is defined in CDR (EU) No 811/2013 as collector efficiency of the solar collector at a temperature difference between the solar collector and the surrounding air of 40 K and a global solar irradiance of 1000 W/m ² , expressed in % and rounded to the nearest integer. Deviating from the regulation η_{col} is based on reference area (A_{sol}) which is aperture area for values according to EN 12975-2 or gross area for ISO 9806:2017.	First-order coefficient (a_1)	0,12	W/(m ² K)
	Second-order coefficient (a_2)	0,012	W/(m ² K ²)
	Incidence angle modifier IAM (50°)	0,96	--
	Remark: The data given in this section are related to collector reference area (A_{sol}) which is aperture area for values according to EN 12975-2 or gross area for ISO 9806. Consistent data sets for either aperture or gross area can be used in calculations like in the regulation 811 and 812 and simulation programs.		

Central Offices: Kalavriton 2, 145 64 kifisia, Athens, Tel: +30 210 6233493-4 , Fax: +30 210 6233495, <http://www.dqsglobal.com>, e-mail: i.alexiou@dqsglobal.com