

TÜV Rheinland Energie und Umwelt GmbH  
51101 Köln

NARVA Lichtquellen GmbH + Co. KG  
Erzstraße 22  
09618 Brand-Erbisdorf  
Germany

Jürgen Sommer  
Phone +49 221 806-2021  
Fax +49 221 806-1350  
Mail juergen.sommer@de.tuv.com  
Web www.tuv.com/st

Cologne, 30 May 2014

## Declaration

### - VR-Typ 1301 - Hail impact resistance-

Manufacturer: NARVA Lichtquellen GmbH + Co. KG  
Erzstraße 22  
09618 Brand-Erbisdorf

Product: Evacuated tube

**Type: VR-Typ 1301**

The evacuated tube **VR-Typ 1301** passed hail impact resistance tests according to EN 9806:2013 **with 35 mm-iceballs** successfully.

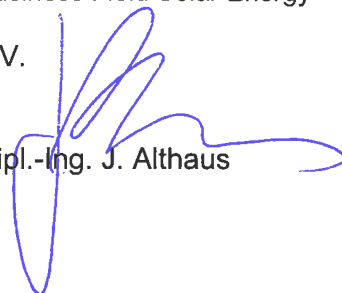
The tube was also pre-tested for class "**HW4**" according to "*VKF-Hagelregister*", following "*Prüfbestimmung Nr. 19*" **with 40 mm-iceballs**, without visual damages.

The regular tests are scheduled within June 2014.

Business Field Solar Energy

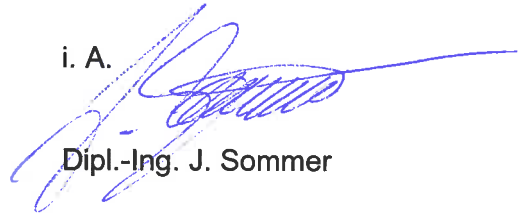
i. V.

Dipl.-Ing. J. Althaus



i. A.

Dipl.-Ing. J. Sommer



TÜV Rheinland  
Energie und Umwelt GmbH

Am Grauen Stein  
51105 Köln

Tel. +49 221 806-5222  
Fax +49 221 806-1350  
Mail eneratest@de.tuv.com  
www.tuv.com/solarpower

Managing Director  
Marcus Staude

Amtsgericht Köln HRB 56171