

# Abstract

of report no. : SKP 14-06-01

## Usability Test

– water tightness under heavy rain and storm –



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Sponsor: Lamilux Heinrich Strunz GmbH  
Product: Rooflight Dome F 100  
System: LAMILUX-Ci System Rooflight Dome F100  
Outer dimensions: (W x L): 1200 mm x 1200 mm  
Project manager: Dipl.-Ing. Jorge Gomez



Minimum rainfall rate per m <sup>2</sup> area	230 l/(h m <sup>2</sup> )
Maximum rainfall rate per m <sup>2</sup> area	460 l/(h m <sup>2</sup> )
Maximum wind speed	32 m/s
Beaufort-Scale	Bft 11: violent storm
Minimum tested rain index per m <sup>2</sup> area	DRI 4.6 m <sup>2</sup> /s
Maximum tested rain index per m <sup>2</sup> area	DRI 14.7 m <sup>2</sup> /s (DRI: Driving Rain Index)

Test setup	Parts tested
	<ul style="list-style-type: none"> <li>complete light dome</li> <li>upstand</li> </ul>

Test results				
oncoming flow	total amount of water l/h	wind speed u [m/s]	leakage rate m [l/(h m <sup>2</sup> )]	DRI [m <sup>2</sup> /s]
perpendicular to the dome	330	20 (Bft 8: gale)	0	4.60
perpendicular to the dome	330	25 (Bft 10: storm)	0	5.75
over the edge of the dome	330	25 (Bft 10: storm)	0	5.75
perpendicular to the dome	660	32 (Bft 11: violent storm)	0	14.70
over the edge of the dome	660	32 (Bft 11: violent storm)	0	14.70

Aachen August 15, 2014

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Test engineer

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