



Confirmation of Test Result

IEC DTS 63342 TS IEC 2022

Light and elevated temperature induced degradation (LeTID) test
for c-Si Photovoltaic (PV) modules: Detection

Reference:	10002_2022-40327		
Applicant:	aleo solar GmbH, Marius-Eriksen-Straße 1, 17291 Prenzlau		
Manufacturer:	aleo solar GmbH, Marius-Eriksen-Straße 1, 17291 Prenzlau		
Product:	Crystalline silicon Photovoltaic (PV)-Modules		
Type(s):	LEO L62YXXX	LEO L64YXXX	
	LEO Black L82YXXX	LEO Black L84YXXX	
	LEO Sol S82YXXX		
Standard:	Fraunhofer LETID test procedure based on IEC DTS 63342 TS IEC 2022 (82/2008/DTS)		
Test procedure:	Boron Oxygen LID Preconditioning (CID)		
	Exposure time:		24 h
	Module temperature:		< 30 °C ± 3 K
	Applied current		1 x (I _{sc} - I _{mp})
	LETID Testing		
	Cycle time:		162 h
	Module temperature:		75 °C ± 3 K
	Applied current		2 cycles 1 x (I _{sc} - I _{mp}) 1 cycle 2 x (I _{sc} - I _{mp})
Pass criterion:	Power degradation after LETID:		< 3 %
Test results Module 1:	Number of cycles (LETID Testing)		3
	Power (initial)		395,88 W
	Power after CID		396,20 W
	Power after 3 cycles LETID		393,99 W
	Measured degradation CID / LETID		+0,08 % / 0,56 %
Test results Module 2:	Number of cycles (LETID Testing)		3
	Power (initial)		396,39 W
	Power after CID		396,13 W
	Power after 3 cycles LETID		394,19 W
	Measured degradation CID / LETID		0,07 % / 0,49 %
Maximum power degradation:	allowed		max. 3 %
	measured		max. 0,56 %

The measured degradation is below the allowed degradation. The modules are rated to be not sensitive to LETID.

The complete test results and the relevant bill of materials are given in files
Report_FUE22985_LETID and *20220519_10002_2022-40327_BOM*.

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