



# TEST REPORT



Project Details			
Client	Solar Tester B.V.	Test Date	vrijdag 7 februari 2020
Test Location	Uw locatie	Operator	Rogier Vugts
Address	Overall 1234 AA AnyWhere in Netherlands, Belgium or Germany		

Module Details			
Module Brand	AnyBrand	Number of modules tested	50
Module Type	Mono Modules 375Wp	Number of Modules in project	1250
Nominal power STC (nameplate)	375	Percentage of batch/Container	4%
Number of cells per module	72		
Calibration module	No		

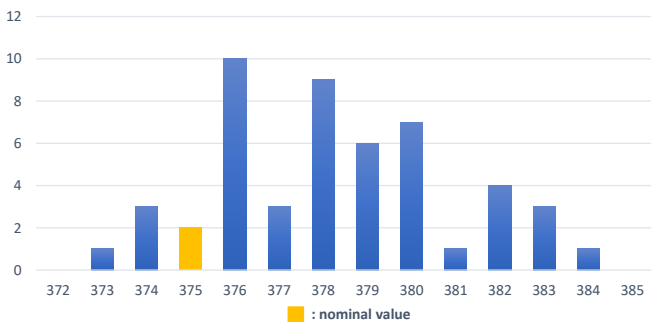
**Average power at STC**  
377,82 Watt  
100,8% of nom  
↑ 0,75% deviation

**Lowest STC power**  
372,81 Watt  
99,4% of nom  
↓ -0,58% deviation

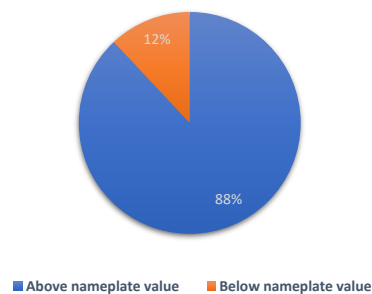
**Highest STC power**  
383,26 Watt  
102,2% of nom  
↑ 2,20% deviation

**Module classification**  
90,00% Class A  
4,00% Class B  
4,00% Class C  
2,00% Class D

Power measurement distribution



MPP versus Nameplate value



Conclusion	
Power Measurement	This is a demo report
Electroluminescence imaging	This is a demo report

Detailed test results Electroluminescence imaging			
Evaluation protocol:		Standard MBJ / TÜV version 3.4 - <a href="http://www.solartester.nl/downloads">www.solartester.nl/downloads</a>	
Cell classification		# cells found	percentage
Unmarked	No abnormalities	3572	99,22%
EL green	Uncritical cracks; do not lead directly to a degradation of the module. Other cracks and cell breaks are acceptable if they are not able to disconnect cell areas larger than 1 %.	10	0,28%
EL yellow	Critical: All cell areas that can potentially disconnect cell areas larger 1 % and smaller 20 % from power supply or which already do so.	14	0,39%
EL red	Very critical: Cell breaks that can potentially disconnect more than 20% of the cell area from the power supply are classified in the 'very critical' category and marked red. This category includes above all comminuted or fan-like breaks. Red cells lead directly to the classification of a PV module in the class C	4	0,11%
EL blue	Other EL abnormalities (shunts, dark cells, printing failures, edge contamination, ...). This category includes all defects which have occurred in the module manufacturing process and which have no negative impact on performance within the lifetime of the photovoltaic module. Such defects are normally uncritical and marked blue, since the power loss of the cell is already entered in the performance specified by the manufacturer. Consequential damages are not expected.	0	0,00%

Module Classification			
		# of modules	percentage
A	less than 10% green marked cells, no yellow or red	45	90,00%
B	less than 20% green marked cells, less than 10% yellow, no red, total # marked cells less than 20%	2	4,00%
C	more than 20% green marked, more than 10% yellow marked, less than 10% red marked, total # marked cells less than 30%	2	4,00%
D	more than 10% red marked, total # marked cells more than 30%	1	2,00%

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