

## Supplementary Material

Table S1. Efficiencies from all modules under study prior outdoor exposure.

Module	Efficiency (%)
Module A1	9.74
Module A2	8.45
Module A3	14.34
Module B1	9.73
Module B2	15.72
Module B3	13.29

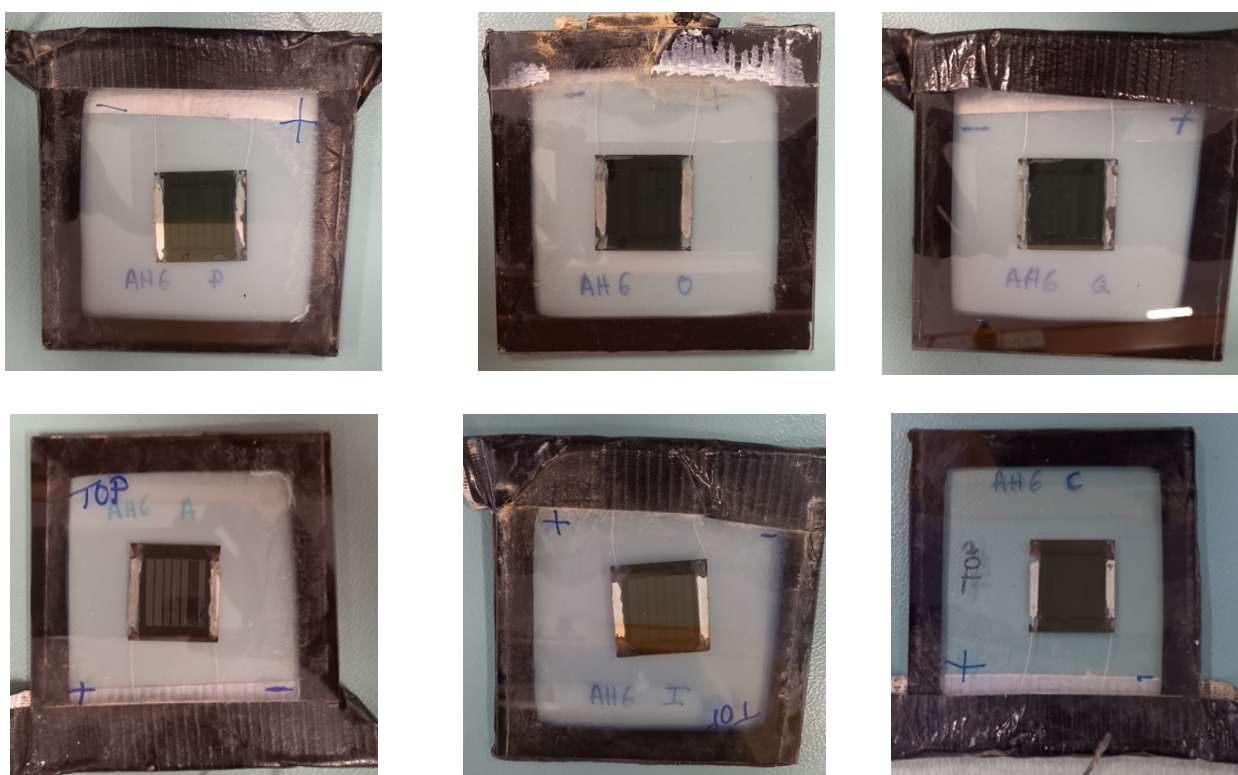
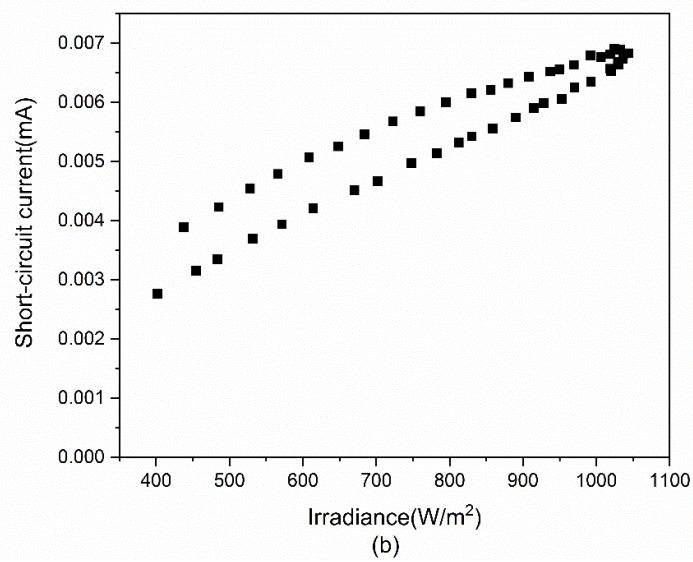
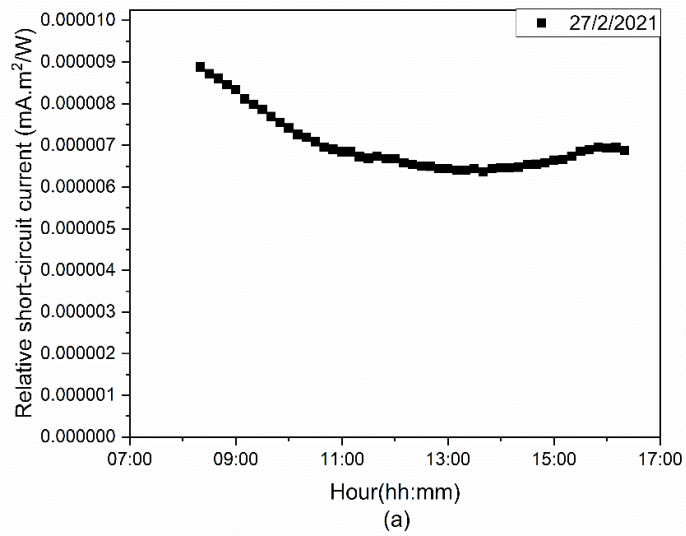


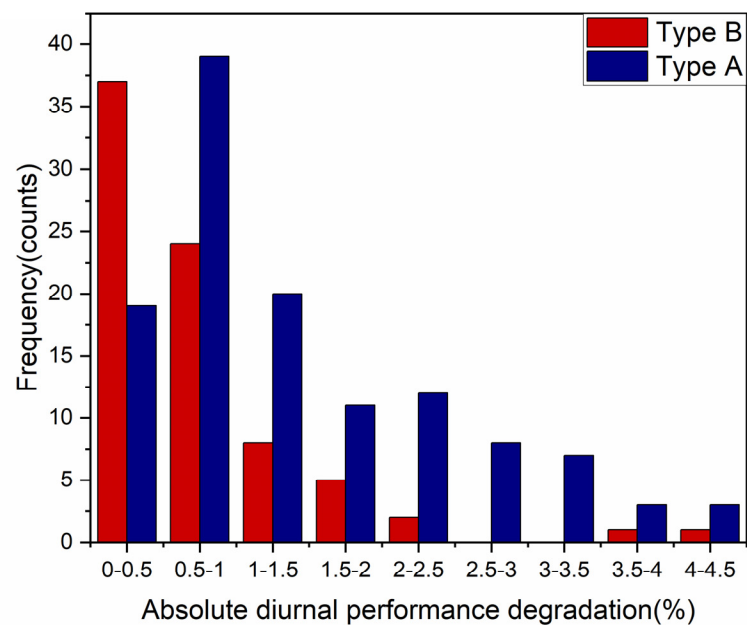
Figure S1. Pictures of the tested samples just after outdoor testing. Degradation due to humidity ingress is not obtained in the samples.

**Table S2. Open-circuit voltage coefficient for each week of outdoor exposure and for all type A modules.**

<b>Week of exposure</b>	<b>Module A2</b>	<b>Module A3</b>	<b>Module A1</b>
<b>1</b>	-0.0138	-0.01734	-0.0161
<b>2</b>	-0.01373	-0.01615	-0.00762
<b>4</b>	-0.01309	-0.0134	-0.00152
<b>5</b>	-0.01335	-0.01593	8.04826E-4
<b>6</b>	-0.01061	-0.01131	3.49785E-4
<b>7</b>	-0.00707	-0.00378	-0.00699
<b>9</b>	-0.00918	-0.0067	-0.00873
<b>10</b>	-0.01275	-0.0123	-0.00801
<b>14</b>	-0.00617	-0.01185	-0.00711
<b>Mean</b>	<b>-0.01108 V/°C</b>	<b>-0.01208 V/°C</b>	<b>-0.0061 V/°C</b>



**Figure S2. (a) Relative short-circuit current over time for the 27<sup>th</sup> of February 2021 and (b) Short-circuit current against irradiance on the same day. Results correspond to Module A1.**



**Figure S3. Frequency of occurrence for the absolute diurnal performance degradation in the range 0%-4.5%.**

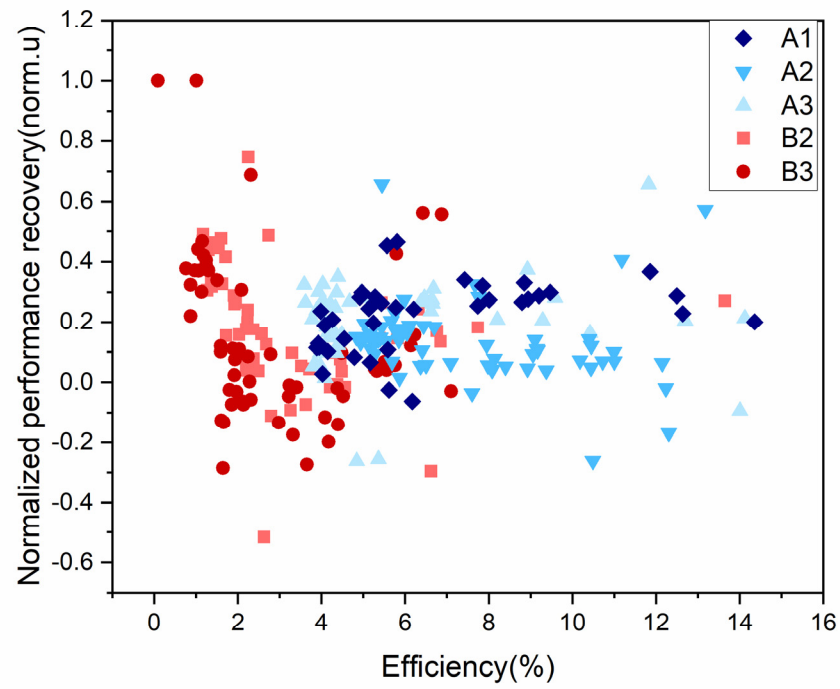
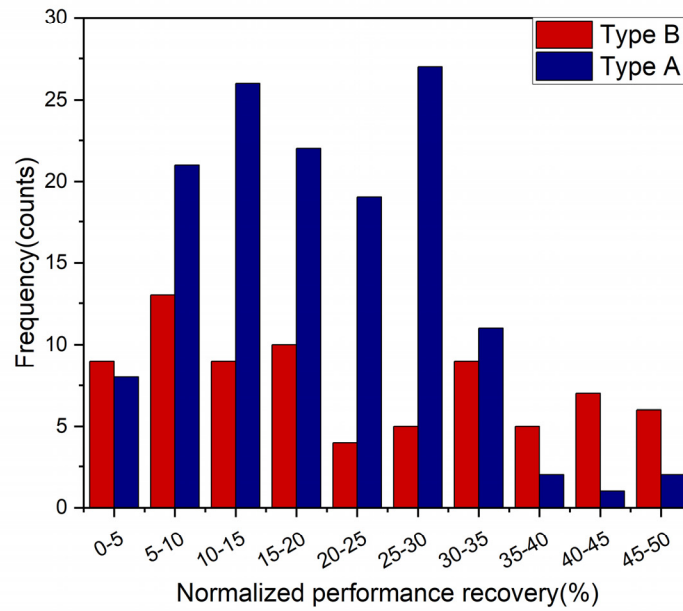


Figure S4. Normalized performance recovery against efficiency for all modules under studied.



**Figure S5.** Frequency of occurrence for the normalized performance recovery in the range 0%-50%. Normalized performance recovery values were separated into bins of 5%.

**Table S3.** Temperature of the two main hotspots within modules before and after outdoor exposure.

# Module	Hotspot #1 Average Temperature			Hotspot #2 Average Temperature		
	Before	After	Location	Before	After	Location
Module A2	15.41mK	23.87mk	Interconnection	11.26mK	11.75mK	Inside cell
Module A3	-	14.31mK	Interconnection	-	-	-
Module A1	30.07mK	32.09mK	Inside cell	-	-	-
Module B3	40.17mK	29.26mK	Inside cell	27.56mK	18.59mK	Interconnection
Module B2	26.33mK	21.55mk	Interconnection	24.36mK	13.37mK	Interconnection