

Supplementary Material

Table S1: Collected experimental data.

Date	Δt (hours)	E_{PV1} (Wh)	E_{PV2} (Wh)	Filter	η_r (%)	$\bar{P}$ (W)	Radiation level
16/10/2015	4h35'40"	48.037	51.471	no filter	107.15	10.455	medium-high
19/10/2015	5h49'11"	39.170	38.313	no filter	97.81	6.731	medium-low
20/10/2015	5h00'08"	69.729	66.060	Visible Light	94.74	13.940	high
21/10/2015	6h00'00"	28.973	6.190	Red	21.36	4.829	low
23/10/2015	1h10'51"	14.525	2.359	Green	16.24	12.301	high
26/10/2015	5h27'04"	56.182	13.241	Blue	23.57	10.307	medium-high
27/10/2015	6h02'30"	36.650	31.661	Visible Light	86.39	6.066	medium-low
28/10/2015	5h48'35"	38.726	7.990	Red	20.63	6.666	medium-low
29/10/2015	5h23'49"	44.388	49.844	no filter	112.29	8.225	medium-low
4/11/2015	4h51'10"	35.302	6.493	Green	18.39	7.275	medium-low
5/11/2015	5h39'40"	18.059	18.713	no filter	103.62	3.190	low
6/11/2015	1h40'16"	3.573	0.702	Blue	19.65	2.138	very low
17/11/2015	6h04'56"	67.970	32.070	Visible Light	91.32	11.175	high
18/11/2015	6h00'03"	59.805	14.250	Red	23.83	9.966	medium-high
19/11/2015	5h19'09"	57.580	62.764	no filter	109.00	10.825	medium-high
20/11/2015	4h29'48"	13.289	13.813	no filter	103.94	2.955	low
24/11/2015	6h10'52"	20.824	3.037	Green	14.58	3.369	low
25/11/2015	5h56'35"	12.182	2.438	Blue	20.01	2.050	very low
26/11/2015	5h28'46"	44.758	47.192	no filter	105.44	8.168	medium-low
27/11/2015	5h07'47"	65.771	62.111	Visible Light	94.44	12.822	high
1/12/2015	5h58'47"	34.137	7.062	Red	20.69	5.709	medium-low
2/12/2015	5h49'29"	21.053	3.352	Green	15.92	3.614	low
4/12/2015	4h05'00"	41.746	10.304	Blue	24.68	10.224	medium-high
9/12/2015	4h38'53"	36.330	31.159	Visible Light	85.77	7.816	medium-low
11/12/2015	4h26'54"	31.956	8.237	Red	25.78	7.184	medium-low
15/12/2015	6h16'31"	56.766	10.393	Green	18.31	9.046	medium-high
16/12/2015	5h39'22"	34.577	7.338	Blue	21.22	6.113	medium-low
17/12/2015	5h53'02"	38.438	33.651	Visible Light	87.55	6.533	medium-low
18/12/2015	5h31'53"	49.812	11.066	Red	22.22	9.028	medium-high
12/01/2016	5h22'41"	16.827	17.767	no filter	105.59	3.129	low
13/01/2016	5h51'35"	33.502	4.942	Green	14.75	5.717	medium-low
14/01/2016	4h47'37"	17.343	18.146	no filter	104.63	3.618	low
15/01/2016	5h17'47"	9.294	9.797	no filter	105.41	1.755	very low
18/01/2016	5h56'23"	34.253	6.738	Blue	19.67	5.767	medium-low
21/01/2016	5h23'12"	18.587	16.163	Visible Light	86.96	3.451	low
22/01/2016	4h37'50"	34.003	8.003	Red	23.54	7.343	medium-low
25/01/2016	5h00'02"	52.353	10.779	Green	20.59	10.469	medium-high
26/01/2016	5h07'07"	66.006	17.210	Blue	26.07	12.895	high
27/01/2016	5h35'23"	62.196	55.694	Visible Light	89.55	11.127	high

Date	Δt (hours)	E_{PV1} (Wh)	E_{PV2} (Wh)	Filter	η_r (%)	$\overline{P}$ (W)	Radiation level
28/01/2016	5h21'42"	17.623	3.356	Red	19.04	3.287	low
1/02/2016	6h03'48"	77.882	15.162	Green	19.47	12.845	high
3/02/2016	5h33'12"	65.915	16.402	Blue	24.88	11.869	high
4/02/2016	6h03'07"	74.358	68.459	Visible Light	92.07	12.287	high
11/02/2016	4h21'05"	9.005	1.752	Red	19.46	2.669	very low
15/02/2016	5h44'11"	56.341	10.963	Green	19.46	9.822	medium-high
17/02/2016	5h53'40"	64.724	15.719	Blue	24.29	10.981	medium-high
18/02/2016	4h53'50"	65.098	59.706	Visible Light	91.72	13.293	high
19/02/2016	5h11'46"	50.133	11.903	Red	23.74	9.648	medium-high
22/02/2016	5h08'29"	44.482	8.016	Green	18.02	8.652	medium-low
23/02/2016	5h35'29"	18.007	3.548	Blue	19.70	3.220	low
24/02/2016	4h54'13"	66.498	58.282	Visible Light	87.64	13.561	high
4/03/2016	4h51'57"	33.954	24.534	Yellow	72.26	6.978	medium-low
7/03/2016	5h10'54"	63.616	17.819	Red	28.01	12.277	high
8/03/2016	4h54'10"	61.656	54.713	Frost	88.74	12.576	high
9/03/2016	5h33'43"	80.612	14.980	Green	18.58	14.493	high
10/03/2016	4h41'30"	8.607	2.994	Amber	34.79	1.835	very low
11/03/2016	4h54'56"	28.093	6.977	Blue	24.84	6.362	medium-low
15/03/2016	4h59'24"	54.102	20.079	Lavender	37.11	10.842	medium-high
17/03/2016	4h33'22"	32.034	25.664	Visible Light	80.11	7.031	medium-low
18/03/2016	5h31'10"	77.890	58.504	Yellow	75.11	14.112	high
21/03/2016	5h07'05"	76.547	21.164	Red	27.65	14.956	high
22/03/2016	5h18'03"	68.599	58.251	Frost	84.29	12.941	high
23/03/2016	5h33'39"	50.646	8.363	Green	16.51	9.108	medium-high
24/03/2016	4h50'08"	67.848	31.921	Amber	47.05	14.031	high
29/03/2016	5h28'51"	74.883	17.553	Blue	23.44	13.663	high
30/03/2016	5h34'50"	59.708	24.366	Lavender	40.81	10.699	medium-high
31/03/2016	4h28'21"	43.370	42.071	Visible Light	97.00	9.697	medium-high
1/04/2016	4h52'26"	68.492	51.787	Yellow	75.61	14.053	high
5/04/2016	5h33'05"	77.716	22.447	Red	28.88	13.999	high
6/04/2016	5h36'00"	81.753	70.891	Frost	86.71	14.599	high
11/04/2016	5h37'21"	80.750	16.266	Green	20.14	14.362	high
12/04/2016	5h26'27"	70.153	34.021	Amber	48.50	12.894	high
13/04/2016	5h31'55"	80.554	81.845	no filter	101.73	14.562	high
14/04/2016	4h11'51"	57.483	16.352	Blue	28.45	13.695	high
15/04/2016	5h20'50"	76.924	29.856	Lavender	38.81	14.386	high
18/04/2016	5h11'58"	77.184	70.081	Visible Light	90.80	14.845	high
19/04/2016	5h16'02"	78.641	57.745	Yellow	73.43	14.930	high
20/04/2016	5h20'16"	78.073	21.376	Red	27.38	14.626	high
25/04/2016	5h19'31"	75.733	64.197	Frost	84.77	14.221	high
26/04/2016	5h19'53"	42.083	6.949	Green	16.51	7.893	medium-low
27/04/2016	3h31'19"	2.282	0.824	Amber	36.11	0.647	very low

Date	Δt (hours)	E_{PV1} (Wh)	E_{PV2} (Wh)	Filter	η_r (%)	$\overline{P}$ (W)	Radiation level
28/04/2016	4h04'10"	5.150	0.904	Blue	17.55	1.266	very low
29/04/2016	5h06'52"	2.990	0.846	Lavender	28.29	0.585	very low
2/05/2016	5h23'08"	84.823	78.669	Visible Light	92.74	15.750	high
3/05/2016	4h59'19"	75.409	55.318	Yellow	73.36	15.116	high
4/05/2016	5h24'23"	61.840	14.999	Red	24.25	11.438	high
5/05/2016	1h24'30"	17.897	13.515	Frost	75.52	12.708	high
6/05/2016	4h53'26"	53.769	9.727	Green	18.09	10.994	medium-high
9/05/2016	5h03'03"	55.056	24.531	Amber	44.56	10.900	medium-high
10/05/2016	5h19'03"	22.600	4.831	Blue	21.38	4.250	low
11/05/2016	5h21'50"	48.344	14.790	Lavender	30.59	9.013	medium-low
12/05/2016	5h34'20"	37.202	31.685	Visible Light	85.17	6.676	medium-low
13/05/2016	5h10'06"	47.148	32.824	Yellow	69.62	9.122	medium-high
16/05/2016	5h11'38"	38.455	10.453	Red	27.18	7.404	medium-low
18/05/2016	5h27'46"	2.436	1.894	Frost	77.75	0.446	very low
19/05/2016	3h30'08"	2.121	0.287	Green	13.53	0.606	very low
20/05/2016	5h07'19"	66.880	31.311	Amber	46.82	13.058	high
23/05/2016	5h02'17"	25.395	5.597	Blue	22.04	5.041	medium-low
24/05/2016	5h08'08"	53.368	18.718	Lavender	35.07	10.392	medium-high
30/05/2016	4h45'43"	37.936	32.455	Visible Light	85.55	7.966	medium-low
6/06/2016	5h11'40"	40.448	27.546	Yellow	68.10	7.787	medium-low
7/06/2016	4h52'24"	6.869	1.180	Red	17.18	1.410	very low
8/06/2016	5h24'43"	75.751	63.115	Frost	83.32	13.997	high
9/06/2016	5h09'20"	51.704	8.480	Green	16.40	10.029	medium-high
10/06/2016	5h04'13"	37.551	14.383	Amber	38.30	7.406	medium-low
14/06/2016	3h37'28"	56.255	13.399	Blue	23.82	15.521	high
15/06/2016	4h52'13"	75.275	27.950	Lavender	37.13	15.456	high
16/06/2016	4h48'02"	72.447	61.007	Visible Light	84.21	15.091	high
17/06/2016	5h08'22"	75.633	51.702	Yellow	68.36	14.716	high
20/06/2016	4h33'21"	1.373	0.275	Red	20.03	0.301	very low
21/06/2016	2h31'06"	2.160	1.648	Frost	76.30	0.858	very low
22/06/2016	4h41'31"	64.508	66.818	no filter	103.58	13.749	high
24/06/2016	4h32'20"	67.034	11.903	Green	17.76	14.769	high
28/06/2016	4h22'20"	58.595	26.692	Amber	45.55	13.402	high
29/06/2016	4h34'43"	65.686	62.977	no filter	95.88	14.346	high
30/06/2016	3h40'50"	28.486	5.508	Blue	19.34	13.595	high
1/07/2016	4h52'36"	32.171	11.866	Lavender	36.88	6.597	medium-low
4/07/2016	4h29'23"	68.041	56.445	Visible Light	82.96	15.155	high
5/07/2016	4h00'36"	60.333	15.337	Red	25.42	15.046	high
6/07/2016	4h34'32"	63.881	12.447	Green	19.48	13.961	high
7/07/2016	4h34'57"	67.963	16.543	Blue	24.34	14.831	high
4/08/2016	5h26'09"	70.219	51.650	Yellow	73.56	12.911	high
5/08/2016	5h22'05"	79.204	66.923	Visible Light	84.49	14.715	high

Date	Δt (hours)	E_{PV1} (Wh)	E_{PV2} (Wh)	Filter	η_r (%)	$\overline{P}$ (W)	Radiation level
8/08/2016	5h17'41"	70.633	16.478	Red	23.33	13.340	high
9/08/2016	5h21'02"	67.966	52.789	Frost	77.67	12.703	high
10/08/2016	4h16'35"	1.488	0.212	Green	14.25	0.348	very low
11/08/2016	5h11'51"	8.655	3.159	Amber	36.50	1.655	very low
12/08/2016	5h18'31"	82.992	22.031	Blue	26.55	15.633	high
15/08/2016	5h11'54"	45.511	15.163	Lavender	33.32	8.755	medium-low
16/08/2016	4h45'19"	29.736	23.702	Visible Light	79.71	6.253	medium-low
18/08/2016	4h32'12"	62.073	42.122	Yellow	67.86	13.683	high
22/08/2016	5h11'37"	36.131	9.265	Red	25.64	6.957	medium-low
23/08/2016	5h14'12"	56.740	50.009	Frost	88.14	10.835	medium-high
24/08/2016	4h45'54"	76.245	16.215	Green	21.27	16.001	high
25/08/2016	5h20'15"	82.786	41.588	Amber	50.24	15.510	high
26/08/2016	4h46'04"	74.152	21.009	Blue	28.33	15.553	high
29/08/2016	4h44'31"	70.681	28.179	Lavender	39.87	14.905	high
30/08/2016	5h31'37"	75.137	60.604	Visible Light	80.66	13.595	high
31/08/2016	5h18'21"	3.022	0.543	Red	17.97	0.570	very low
5/09/2016	5h04'41"	54.882	10.469	Green	19.08	10.808	medium-high
6/09/2016	5h30'30"	1.661	0.298	Blue	17.94	0.302	very low
8/09/2016	5h11'52"	46.739	40.265	Visible Light	86.15	8.992	medium-low
9/09/2016	5h14'07"	55.155	13.990	Red	25.36	10.535	medium-high
12/09/2016	5h18'19"	79.823	80.541	no filter	100.90	15.046	high
13/09/2016	5h27'11"	77.426	15.325	Green	19.79	14.199	high
14/09/2016	5h22'07"	45.800	9.625	Blue	21.02	8.531	medium-low
15/09/2016	5h26'01"	60.952	48.135	Visible Light	78.97	11.218	high
16/09/2016	5h18'46"	21.476	4.505	Red	20.98	4.042	low
19/09/2016	5h17'34"	75.897	13.908	Green	18.32	14.340	high
20/09/2016	5h09'51"	30.042	5.892	Blue	19.61	5.817	medium-low
21/09/2016	5h19'50"	70.595	64.117	Visible Light	90.82	13.243	high
22/09/2016	4h39'02"	62.672	16.568	Red	26.44	13.476	high
23/09/2016	5h09'54"	80.341	16.545	Green	20.59	15.555	high
26/09/2016	5h12'55"	20.014	3.608	Blue	18.03	3.838	low
27/09/2016	5h09'48"	67.628	68.648	no filter	101.51	13.098	high