

**Table S1. Lighting characteristics of the Concordia polar station (Dome C), as determined via irradiance measurements at multiple locations**

Concordia locations	Irradiance mean values (mW/m <sup>2</sup> /s)							
	Blue		Green		Red		IR	
	SW	BE	SW	BE	SW	BE	SW	BE
Astro Lab1	1.6	6.2	5.5	6.0	5.8	2.1	0.3	0.3
Astro Lab2	0.9	2.9	2.7	2.8	2.8	1.0	0.2	0.2
Atmos Lab	1.5	6.1	4.9	5.7	4.4	1.8	0.3	0.2
Female Bathroom	0.9	7.0	3.8	7.0	3.8	1.9	0.4	0.2
Male Bathroom	1.5	7.5	4.0	7.0	2.6	1.9	0.3	0.2
S1 Bedroom	0.6	3.0	1.7	2.8	1.7	0.9	1.6	1.2
Biomedical Lab	1.7	7.6	6.9	7.7	6.4	3.0	0.3	0.3
Bureau Technique Dome C	1.3	7.5	5.4	7.3	5.4	2.2	0.3	0.2
Consultation	1.5	9.3	6.3	8.2	6.5	2.3	0.4	0.2
Corridor 1	1.3	3.7	3.8	5.5	2.9	2.7	0.3	0.2
Corridor 3 calm	1.7	8.5	6.9	9.1	7.1	3.8	0.5	0.4
Corridor 3 noisy	1.0	5.2	3.3	5.3	3.4	2.2	1.1	0.4
Doc Bedroom	1.1	3.6	3.5	3.4	3.6	1.2	0.4	0.5
GlacioLab	1.3	8.1	5.2	7.8	5.5	2.4	0.3	0.3
Grey Water Treatment Unit	1.3	6.8	5.7	6.6	5.5	1.5	0.4	0.2
Kitchen	1.3	6.9	4.9	6.9	4.3	1.9	0.4	0.4
S2 Bedroom	1.1	4.5	3.2	4.3	3.1	1.4	0.3	0.1
Salle Manger	1.0	5.9	3.8	5.8	3.8	1.7	0.3	0.4
Salon	1.0	5.8	3.7	5.7	3.8	1.6	0.3	0.3
Seismo Lab	1.2	5.8	5.1	5.7	5.2	1.8	0.3	0.2
Usine	1.3	4.1	3.3	4.1	2.3	1.2	0.3	0.2
Vaisselle	1.5	4.8	4.2	4.8	2.8	1.3	0.3	0.3