



## Activity 3.2: Shade Test

Team  
#3344

### Task 1: LunaSat Set-Up

- ☒ Install P8 and P6 Jumpers
- ☒ Connect the LunaSat to the FTDI
- ☒ Select the correct board, processor and port
- ☒ Load the "LunaSat\_Solar\_Panel\_Voltage.ino" file onto your LunaSat
- ☒ Verify and Upload the code
- ☒ Enable the serial plotter in Arduino IDE (tools → serial plotter)

### Task 2: Changing the Angle

- ☒ Turn off ambient lights in the room
- ☒ Put the LunaSat under a strong source of direct light
- ☒ Manipulate the LunaSat and light source to observe different relative angles
- ☒ Record your findings below

Trial	Angle of Light	Voltage Output
01	0	2,2 V
02	30	1,8 V
03	45	1,7 V
04	60	1,5 V
05	90	0,7 V

### Task 3: Changing the Amount of Light

Test out different materials to shield the solar panels and record your findings.

Trial	Material	Voltage Output
01	Nothing	1.6 V
02	Paper	0.68 V
03	Foil bag	1.32 V
04	Glass	1.23 V
05	Foil bag with regolit	0.38 V