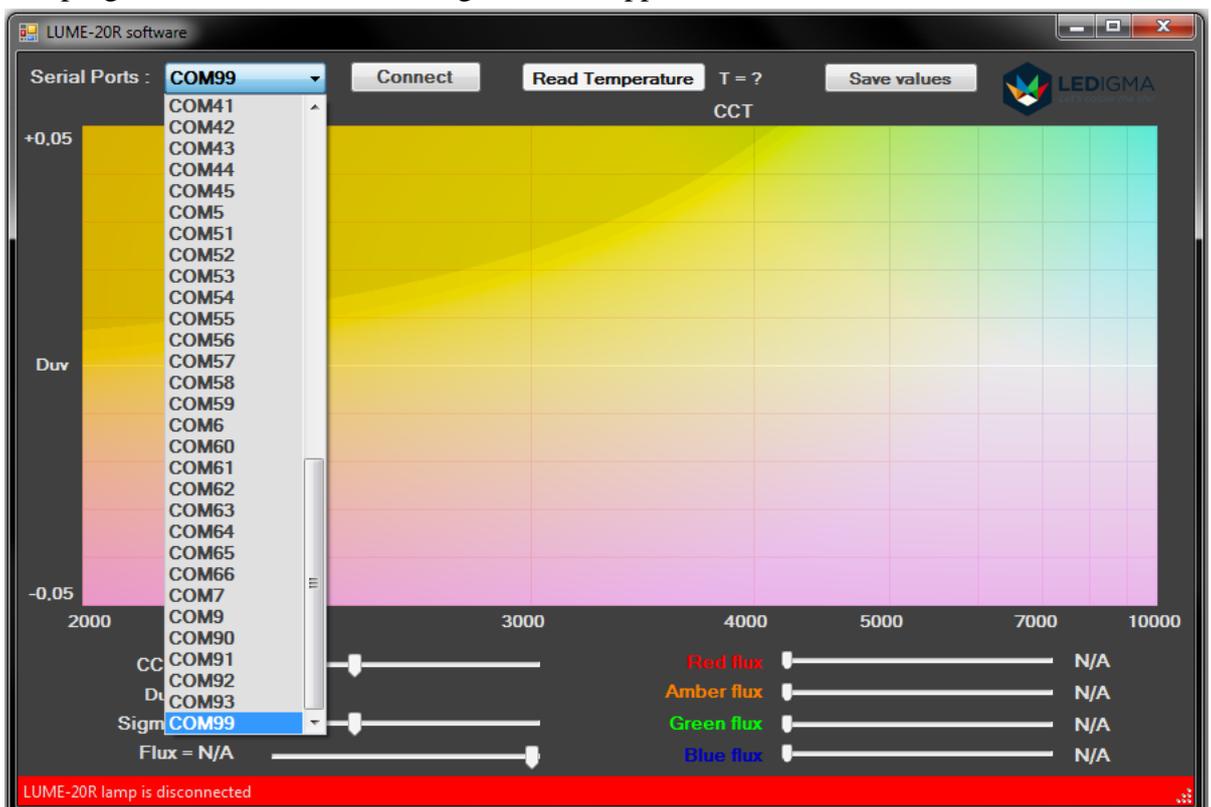
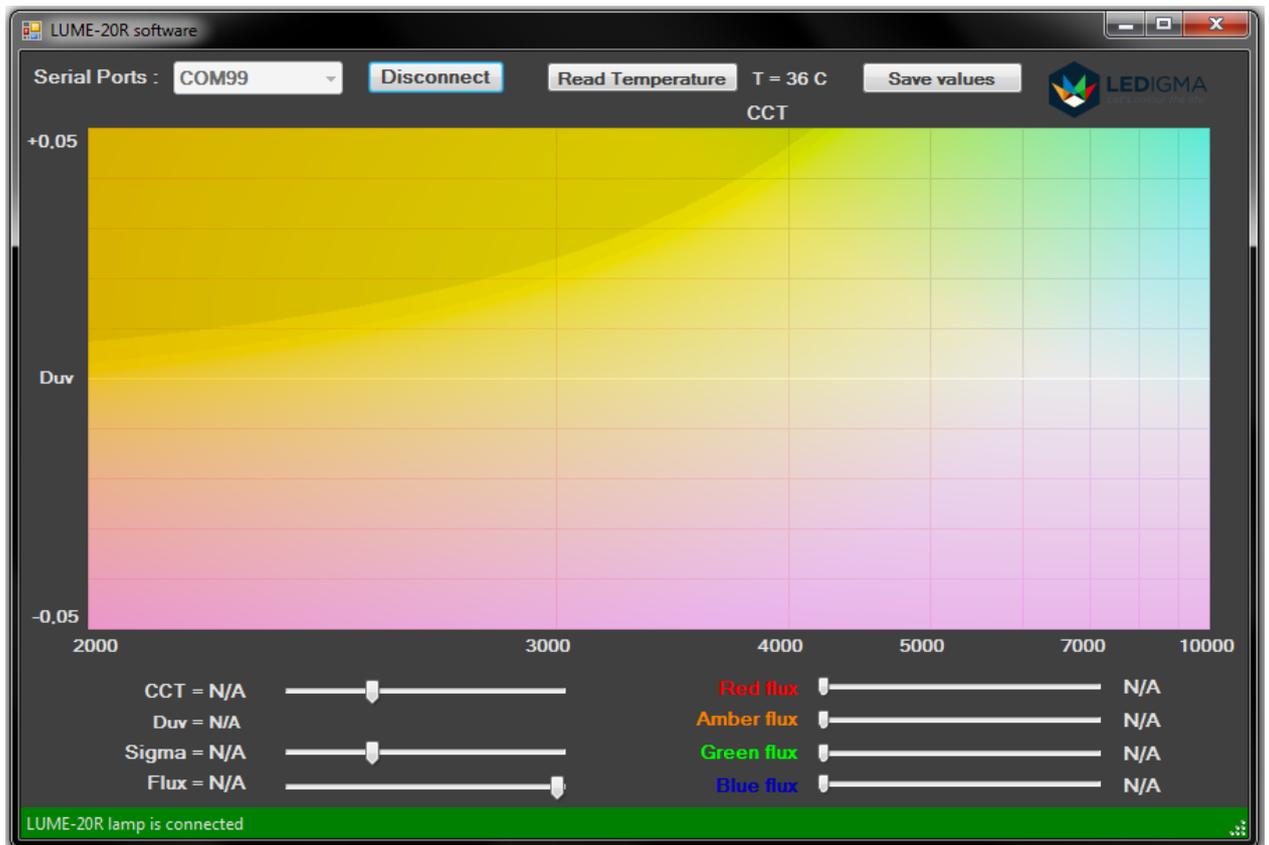




Lume-20R software manual for Windows

1. Download the software from our website: <http://www.ledigma.lt/news/software/> It is below the first picture. Press **Download** and save it to your device. Your security may inform, that .exe file is not trusted to download, but trust it (us).
2. Plug the power supply to the Lume-20R luminaire and turn on Bluetooth connection on your device. For the first time, pair the luminaire with your device using pairing code **1234**. Bluetooth drivers will be installed and remember (write down) the first communication port number: COMxx. xx is digits. Use this port to connect to the Lume-20R luminaire.
3. Run the **LUME-20R-software.exe** file. Windows versions with the highest protection may not allow running programs from unknown sources. In this case, lower the protection (using **User Account Control**) and program will be able run. You must have "administrator" user rights on your machine.
4. Select the same serial port (COMxx) which was shown during pairing. Press **Connect** button. If the lamp is connected, you will see a green line "LUME-20R lamp is connected" at the bottom of the program. In other cases, message box will appear with text: "Can't connect to Lume-20R".



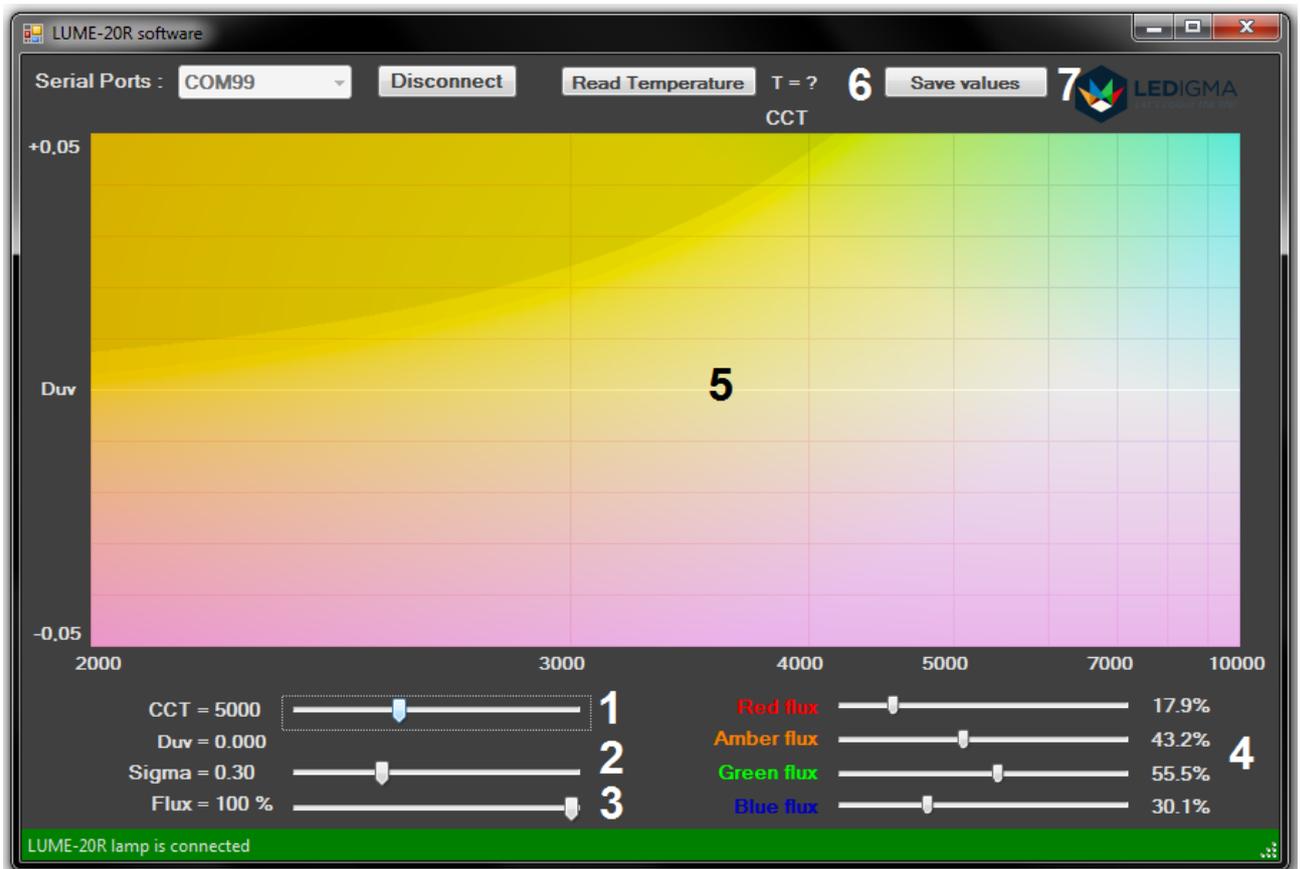


5. If the the lamp is connected, skip this step. If luminaire is not connected, check the power supply and indicator LED at the back side of luminaire. When 24V voltage is applied, you should see green LED turned on. This shows applied correct voltage. Second problem can be bad Bluetooth connection between your device and Lume-20R lamp. Best connection is established then back side of the luminaire is directed to your device. Change the orientation of the luminaire and try to connect again. Please **note** that Bluetooth connection has a very limited operation range (<5 m).
6. When lume-20R is connected, software can be used:
 - 1 – Correlated colour temperature (CCT) control mode.** Lume-20R can render CCTs from 2100 K to 10000 K. Then this scroll bar is used to set the light output, constant luminous flux is applied. For precise control of this CCT, arrows from the keyboard can be used.
 - 2 – Sigma (colour quality) control.** This scroll bar changes the output spectrum at previously set constant colour coordinates (like CCT bar). Sigma 0 means colour dulling with lower gamut area, colour rendition quality and attractiveness. Sigma 1 means saturated colours with higher colour gamut and attractiveness. Between sigma 0 and sigma 1 is natural lighting depended on CCT. While this mode is used in any case, luminous flux is constant at output.
 - 3 – Luminous flux control.** Lume-20R can be dimmed using this scroll bar.
 - 4 – Colour control scroll bars.** Separate colours can be controlled by using 4 different scroll bars. Then CCT, Sigma and other parameters have no meaning. Luminous flux control can dim all colours together.
 - 5 – Colour control mode.** Lume-20R luminaire is designed to render almost any colour in selected picture. Press or press and drag on any colour of this picture and luminaire will set this output. In this mode, constant luminous flux is not applied and total radiant power is lower. Sigma control and luminous flux control still can be used. Black circle will appear where colour point is selected. Duv text (below CCT scroll bar) will change depending on selected chromaticity. Positive Duv shows chromaticity above Planckian locus, negative – below

Planckian locus. If colour point can't be rendered, luminaire will turn of the light output. Then select different point. To change mode back to CCT, select any value with CCT scroll bar.

6 – Read LED pad temperature. Lume-20R has a thermal feedback to maintain constant luminous flux. LED pad temperature is shown for 2 seconds after pressing the button.

7 – Write selected colour parameters to EEPROM. When any colour output is selected, those values can be written to lume-20R memory. If voltage is applied, luminaire will set output parameters from the memory. No software is needed to turn on the luminaire in this case.



7. Luminaire is disconnected by pressing “**Disconnect**” button. Lamp can be powered down before pressing disconnect or closing the program. Order is not important.

8. **Important!** If connection range is insufficient, message box will appear with a text: “Range is limited” and program will disconnect from Lume-20R luminaire. Change the position of the luminaire and try to connect again.

Lume-20R can make some noise (similar to honey bee) when operating. It is normal due to power electronics and coils inside the luminaire.

We wish you a pleasant experience of vivid colours !



LEDIGMA
Let's colour the life!

Support: andrius.petrulis@ledigma.lt