

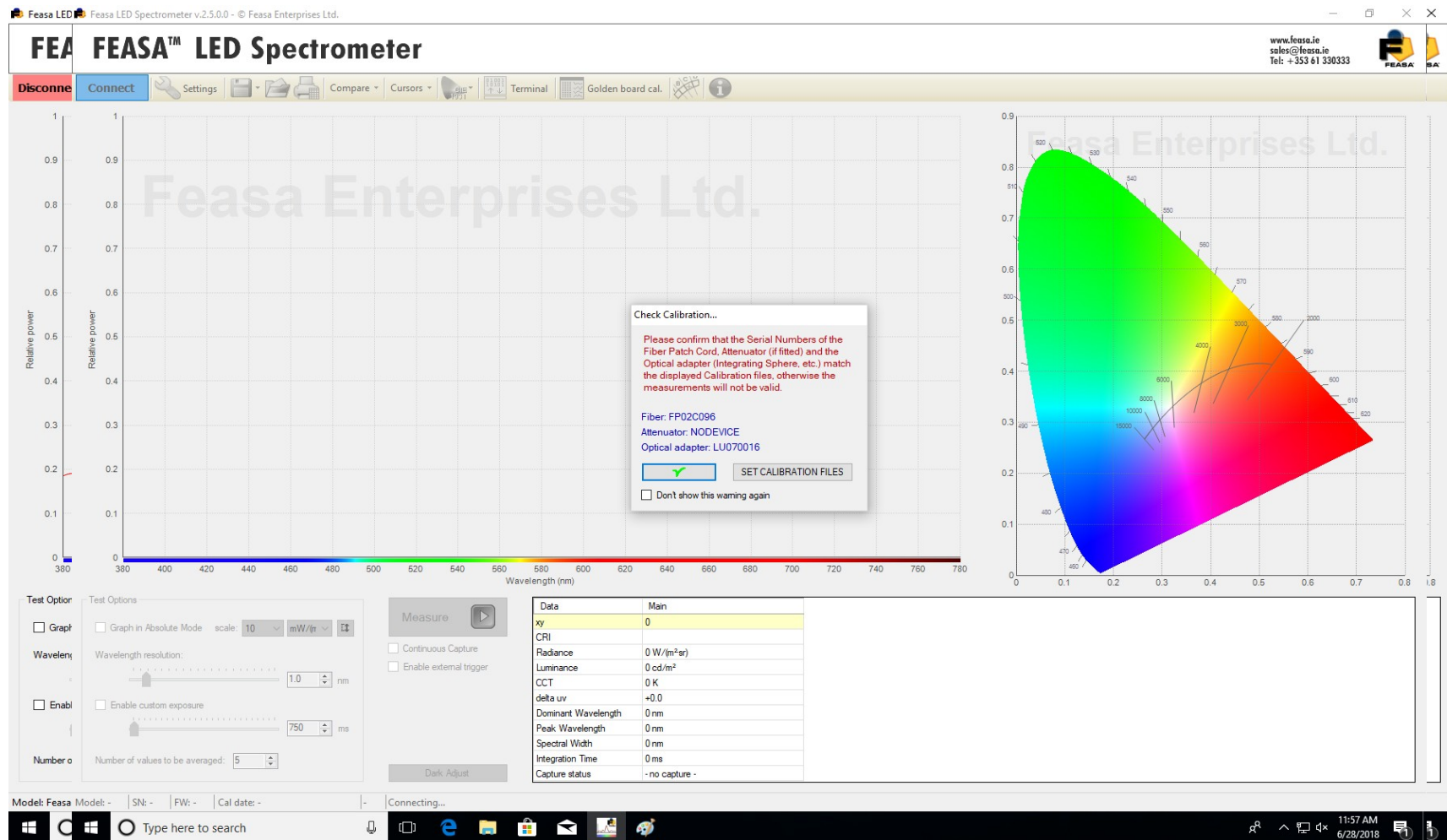
Measuring Luminance

How to measure Luminance cd/m^2
with the Feasa LED Spectrometer
and Luminance Adaptor LU07.

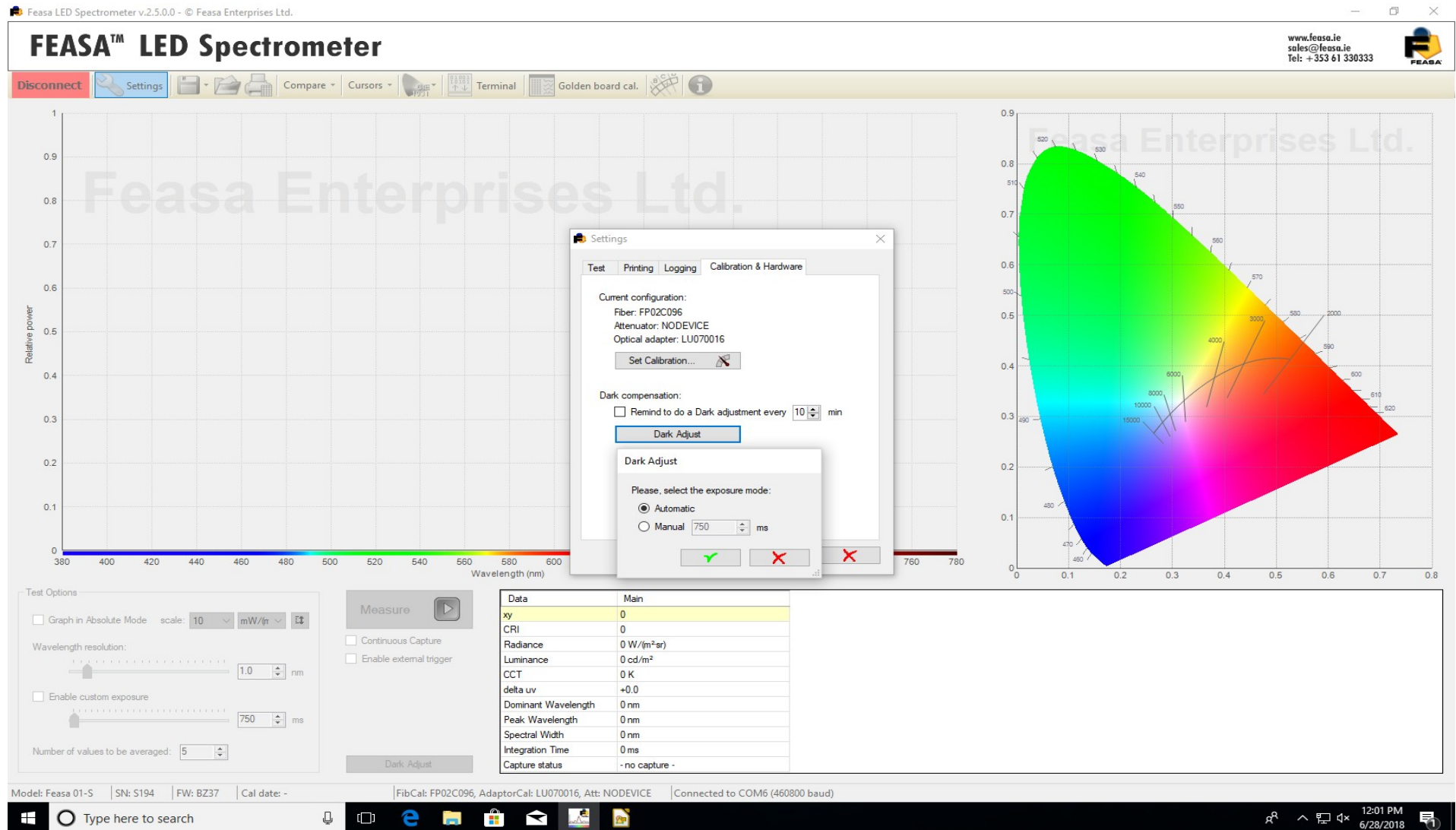
+

How to Calibrate the Low Light
Analyser for Luminance.

Connect the LU07 to the Spectrometer



Perform Dark Adjust with LU07 covered to prevent light entering.



Cover the Input Port of the LU07

Feasa LED Spectrometer v.2.5.0.0 - © Feasa Enterprises Ltd.

FEASA™ LED Spectrometer

www.feasa.ie
sales@feasa.ie
Tel: +353 61 330333

Disconnect Settings Compare Cursors Terminal Golden board cal.

Relative power

Wavelength (nm)

Settings

Test Printing Logging Calibration & Hardware

Current configuration:
Fiber: FP02C096
Attenuator: NODEVICE
Optical adapter: LU070016

Set Calibration...

Cover input

Please, ensure that the Input Port of the Optical Adapter is covered to prevent any light from entering the device.

OK Cancel

Test Options

☐ Graph in Absolute Mode scale: 10 mW/m

Wavelength resolution: 1.0 nm

☐ Enable custom exposure 750 ms

Number of values to be averaged: 5

Measure

☐ Continuous Capture
☐ Enable external trigger

Dark Adjust

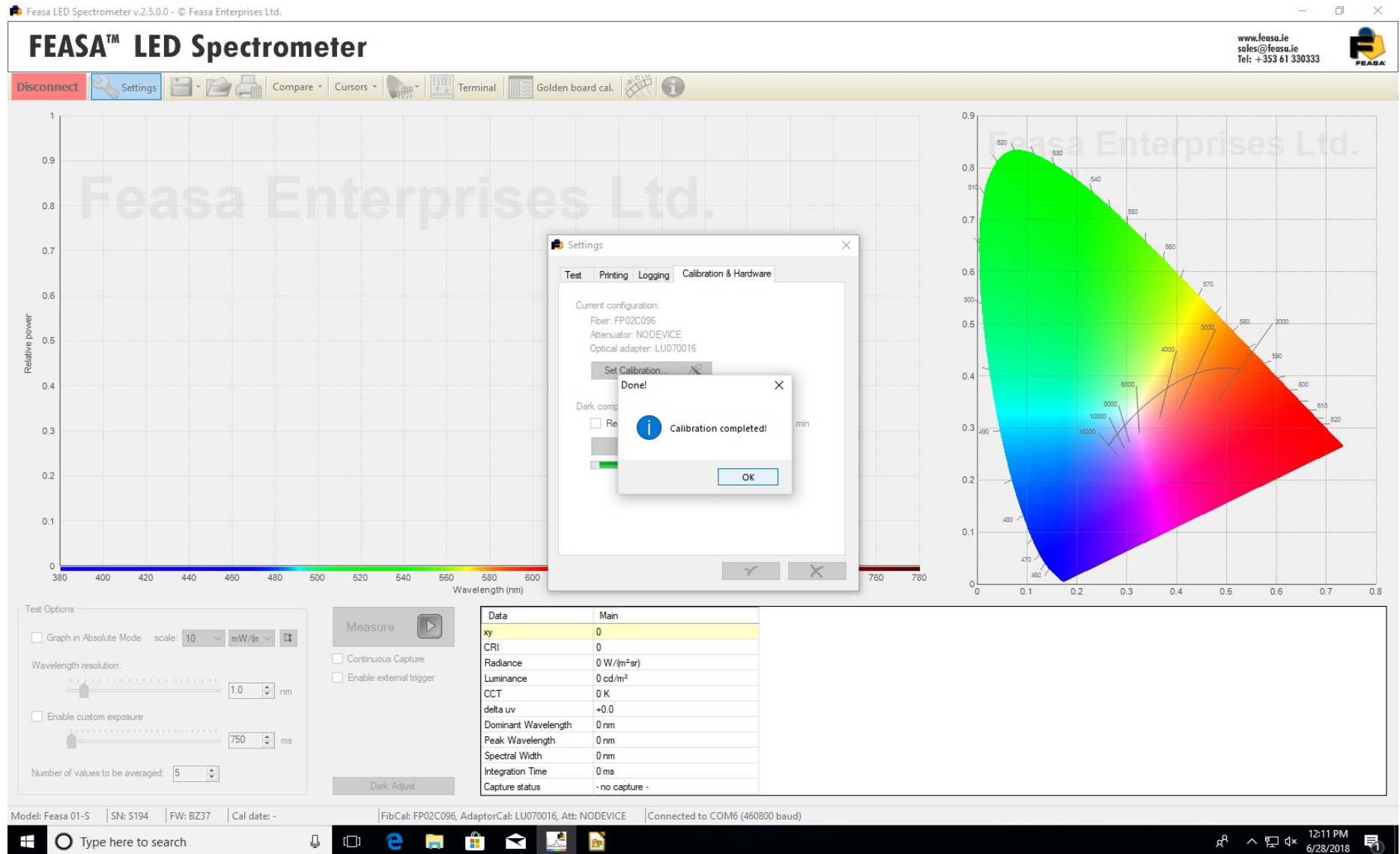
Data	Main
xy	0
CRI	0
Radiance	0 W/(m²sr)
Luminance	0 cd/m²
CCT	0 K
delta uv	+0.0
Dominant Wavelength	0 nm
Peak Wavelength	0 nm
Spectral Width	0 nm
Integration Time	0 ms
Capture status	- no capture -

Model: Feasa 01-S | SN: S194 | FW: BZ37 | Cal date: - | FibCal: FP02C096, AdaptorCal: LU070016, Att: NODEVICE | Connected to COM6 (460800 baud)

Type here to search

12:02 PM 6/28/2018

Wait until the Dark Calibration is completed



Position LU07 in front of Display



Click Measure

Feasa LED Spectrometer v.2.5.0.0 - © Feasa Enterprises Ltd.

FEASA™ LED Spectrometer

www.feasa.ie
sales@feasa.ie
Tel: +353 61 330333



Disconnect



Settings



Compare



Cursors



Terminal



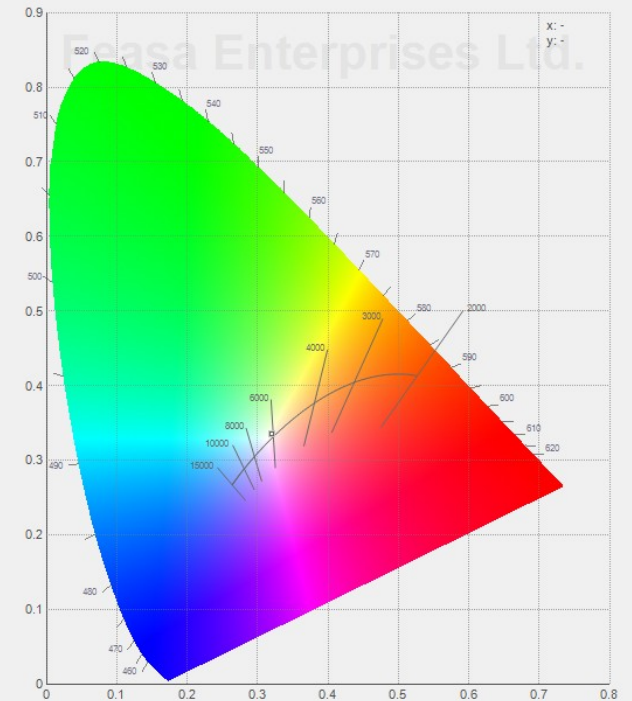
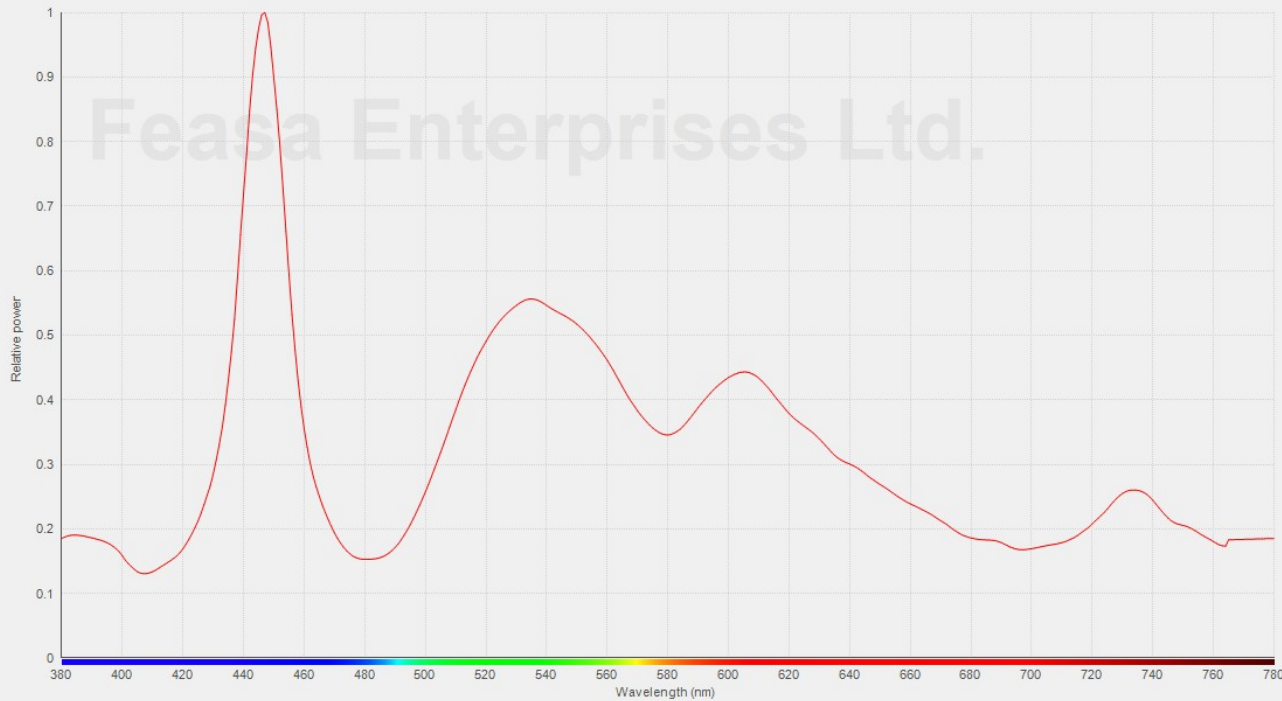
Golden board cal.



Help



Information



Test Options

☐ Graph in Absolute Mode scale: 10 mW/(m²)

Wavelength resolution: 1.0 nm

☐ Enable custom exposure 750 ms

Number of values to be averaged: 5

Measure

- ☐ Continuous Capture
- ☐ Enable external trigger

Dark Adjust

Data	Main
xy	0.3205; 0.3347
CRI	Ra=083.56
Radiance	201.9626 mW/(sr.m²)
Luminance	049.8502 cd/m²
CCT	06068 K
delta uv	+0.0022
Dominant Wavelength	493.14 nm
Peak Wavelength	446.66 nm
Spectral Width	020.17 nm
Integration Time	9217.000 ms
Capture status	OK

Model: Feasa 01-S | SN: S194 | FW: BZ37 | Cal date: -

FibCal: FP02C096, AdaptorCal: LU070016, Att: NODEVICE

Connected to COM6 (460800 baud)



Type here to search



12:25 PM
6/28/2018

Luminance value is 49.8 cd/m²

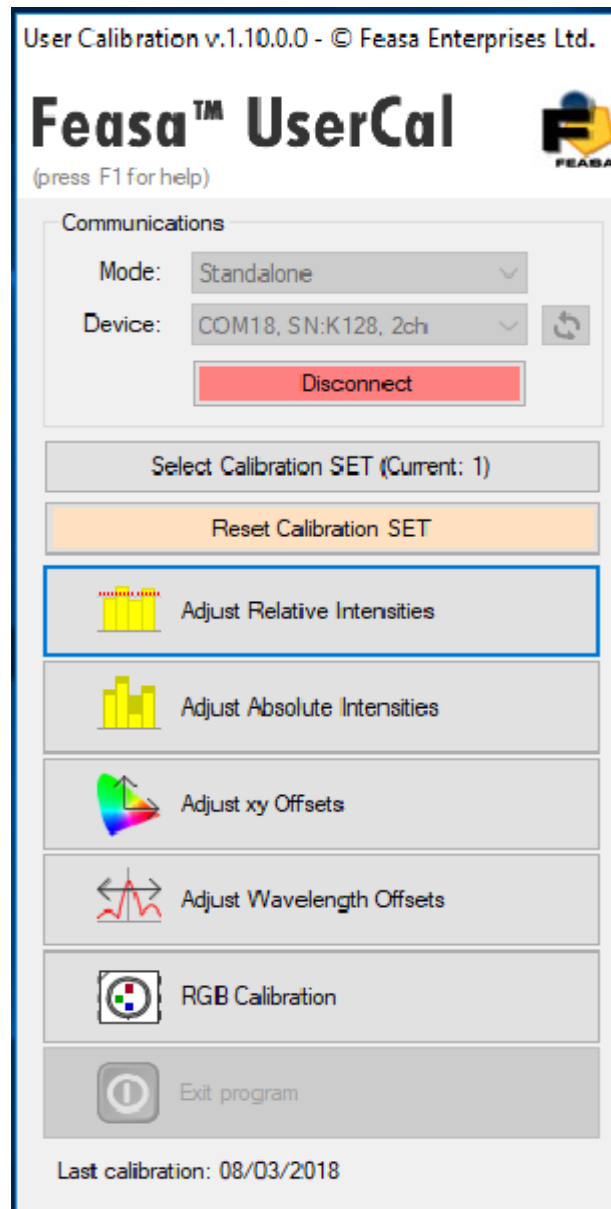
Data	Main
xy	0.3205; 0.3347
CRI	Ra=083.56
Radiance	201.9626 mW/(sr.m ²)
Luminance	049.8502 cd/m ²
CCT	06068 K
delta uv	+0.0022
Dominant Wavelength	493.14 nm
Peak Wavelength	446.66 nm
Spectral Width	020.17 nm
Integration Time	9217.000 ms
Capture status	OK



Connect Low Light Analyser and mount OH-16 Optical Head in front of Display



Start UserCal and Connect to Low Light LED Analyser



Click Adjust Relative Intensities

Select the Capture Range

Check Relative Intensity value

User Gains v.1.10.0.0 - © Feasa Enterprises Ltd.

Fiber	Active	Intensity	Gain	Cal
1	☒	39566	100	
2	☐	0	100	

www.feasa.ie
sales@feasa.ie
Tel: +353 61 330333

FEASA

Capture

Range: 2 Medium ▾ Int mode: Linear

Capture

Exposure factor: 1

Averages: 5

☐ PWM

Status: OK

Select Calibration SET (current: 1)

Intensity gains

Balance Intensities

Reset gains << Read Write >>

Gain Limits: Max=200, Min=50

Import /Export

<< Import to SpreadSheet from file (CSV)

Save SpreadSheet values to file (CSV) >>

Back to main menu

Select all Select none Invert selection RGB -> STD Mode I (press F1 for STD RGB)

Idle... COM18 HW:Feasa 02-A

Medium Range C2
Average set to 5

Select Adjust Absolute Intensities on the Main Menu

Enter value measured with the Spectrometer

Click Adjust to desired values

User Calibration v.1.10.0.0 - © Feasa Enterprises Ltd.

Fiber	Active	Absolute intensity	Desired Abs intensity	Designator	Cal
1	☒	0	49.8	-	
2	☐	0	0	-	

www.feasa.ie
sales@feasa.ie
Tel: +353 61 330333

Capture

Range: 2 Medium Int mode: Linear

Capture

Exposure factor: 1

Averages: 5

☐ PWM

Status: -

Select Calibration SET (current: 1)

Absolute intensity

Adjust to desired values

Reset values to factory defaults

Import /Export

<< Import to SpreadSheet from file (CSV)

Save SpreadSheet values to file (CSV) >>

Back to main menu

Select all Select none Invert selection RGB -> STD Mode key: STD RGB (press F1 for help)

COM18 HW:Feasa 02-A SN:K128 FW:A012

Enter value measured with the Spectrometer and click Adjust to desired values

Enter value measured
With the Spectrometer

Click Adjust to desired
values

User Calibration v.1.10.0.0 - © Feasa Enterprises Ltd.

Fiber	Active	Absolute intensity	Desired Abs intensity	Designator	Cal
1	☒	0	49.8	-	
2	☐	0	0	-	

www.feasa.ie
sales@feasa.ie
Tel: +353 61 330333

Capture

Range: 2 Medium Int mode: Linear

Capture

Exposure factor: 1

Averages: 5

☐ PWM

Status: -

Select Calibration SET (current: 1)

Absolute intensity

Adjust to desired values

Reset values to factory defaults

Import /Export

<< Import to SpreadSheet from file (CSV)

Save SpreadSheet values to file (CSV) >>

Back to main menu

Select all Select none Invert selection RGB -> STD Mode key: STD RGB (press F1 for help)

COM18 HW:Feasa 02-A SN:K128 FW:A012

Click Capture to measure Display

Measured value

User Calibration v.1.10.0.0 - © Feasa Enterprises Ltd.

Fiber	Active	Absolute intensity	Desired Abs intensity	Designator	Cal
1	☒	49.857	49.8	-	
2	☐	0	0	-	

www.feasa.ie
sales@feasa.ie
Tel: +353 61 330333



Capture

Range: 2 Medium Int mode: Linear

Capture

Exposure factor: 1

Averages: 5

☐ PWM

Status: OK

Select Calibration SET (current: 1)

Absolute intensity

Adjust to desired values

Reset values to factory defaults

Import /Export

<< Import to SpreadSheet from file (CSV)

Save SpreadSheet values to file (CSV) >>

Back to main menu

Select all Select none Invert selection RGB -> STD Mode key: STD RGB (press F1 for help)

Idle... COM18 HW:Feasa 02-A SN:K128 FW:A012

Disconnect UserCal and connect Feasa Terminal to verify measurements

C2 Medium →
Luminance →
49.68 cd/m²

