

# 100G bandwidth 1545-1555nm 10nm tunable filter (3dB bandwidth 0.8nm)



## ● Product Description

The core component of the filter is an optical fiber Bragg grating (FBG) with a periodic variation in refractive index. When a broadband light beam is passed through the fiber Bragg grating, each small section of the fiber with the altered refractive index reflects only a specific wavelength of light, called the Bragg wavelength, while other wavelengths of light pass through. The change in strain simultaneously affects the effective refractive index of the fiber Bragg grating and the grating period, allowing for tuning of the reflected wavelength. In this device, the Bragg wavelength can be tuned to the desired wavelength by simply adjusting the grating with a fine-threaded screw.

## ● Part Number

UNLF-1550-FP

## ● Product features

Extremely Narrow Filter Bandwidth: 0.8nm、 Wide Tunable Wavelength Range: 10nm、  
 Ultra-High Signal-to-Noise Ratio: Up to 100dB、 Excellent Filter Response、  
 Ultra-Low Insertion Loss、 Customizable Based on Customer Requirements

## ● Application area

Optical Signal Selection and Filtering、 Background Noise Suppression、  
 Tunable Lasers and Other Applications

## Parameters

### General Parameters

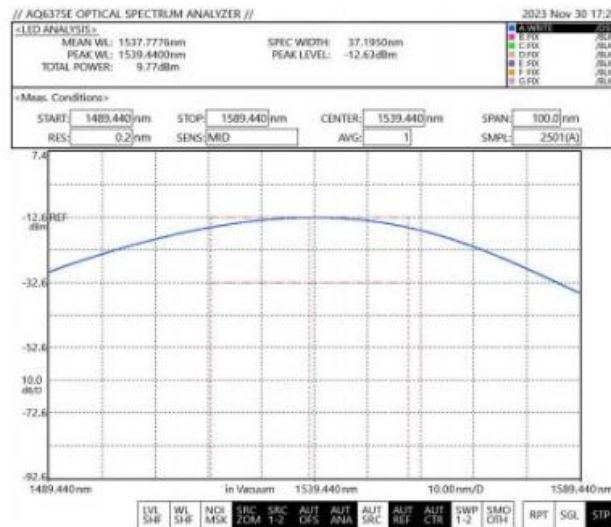
#### Model Parameters

Optional Wavelengths	1545nm-1555nm
Tuning Range	SMF28e : 10nm ; PM Fiber : 5nm
3dB Bandwidth	3dB bandwidth: 0.8nm (1545-1555nm)
Fiber Connector	FC/APC or FC/PC ; SC/APC or SC/PC or patch cord
Operating Temperature	0-45℃
Packaging Dimensions	H : 48mm; L : 125mm + 10mm(Connectors); W : 105mm
Weight	450g

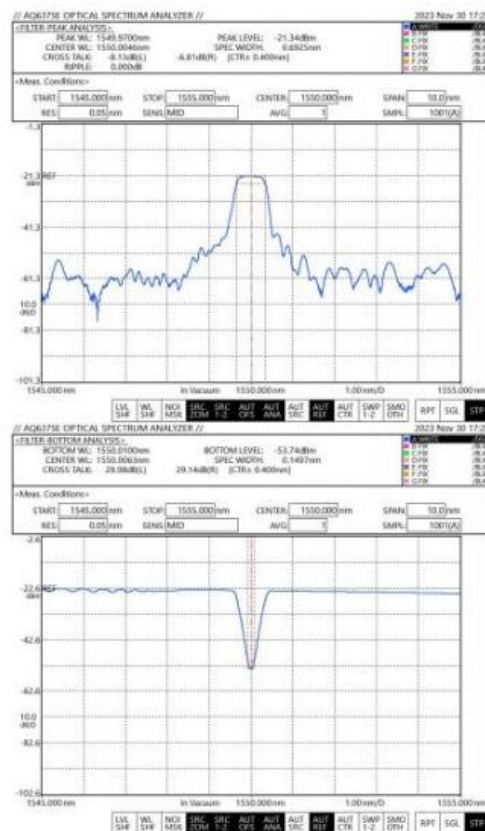
## Test Light Source Spectrum

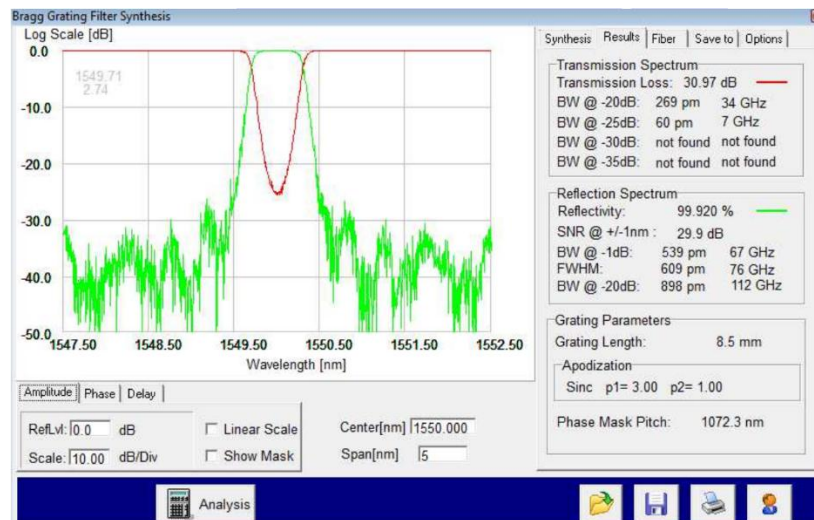
PN: LP-SLD-1550-B-15-40-SM

SN: LP00005



## Measured Spectrum





Ordering information:

Optional wavelengths

1305nm-1315nm

1535nm-1545nm

1545nm-1555nm

1555nm-1565nm