

RFFM-16B6



Key parameters:

- White light LED、660nm LD, 785nm LD
- White light $R_a \geq 90$
- White light CCT=5700 $\pm$ 500 K
- Back focus length: 23.6mm
- Output flux of white light 2200lm
- Output power of 660nm 5600mW
- Output power of 785nm 5600mW

Application features:

- Endoscopic illumination and fluorescence imaging
- White light & Fluorescence imaging
- Pass EMC test
- 7 types of light output modes

Work mode

7 types of light output modes

Monochromatic light output	White light
	660nm
	785nm
Composite light output	White light+785nm
	White light+660nm
	660nm+785nm
	White light+660nm+785nm

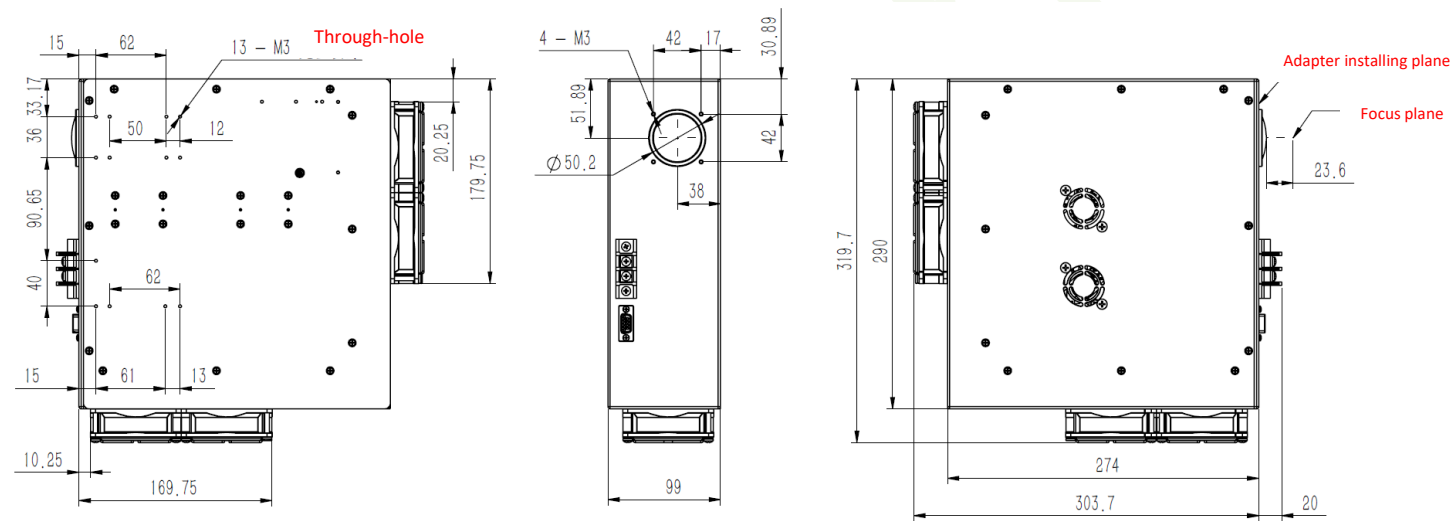
Technical Data

Parameter		Min	Typical	Max	Remarks/Conditions
Optical Data					
light source		White light LED + 660nmLD + 785nmLD			
White light	CCT	5200 K	5700 K	6200 K	After fiber of 1m, Φ 5mm, NA=0.62 White light mode
	Ra	90			
	blue/green light radiance ratio		125%		
	red/green light radiance ratio		72%		
	Infrared cutoff performance		3.5 mW/1m		
	Luminous flux		2200 lm		Mod output value
660nm	Luminous flux		5600 mW		Mod output value
	Predominance wavelength	655 nm	660 nm	665 nm	
	FWHM		3 nm	4 nm	

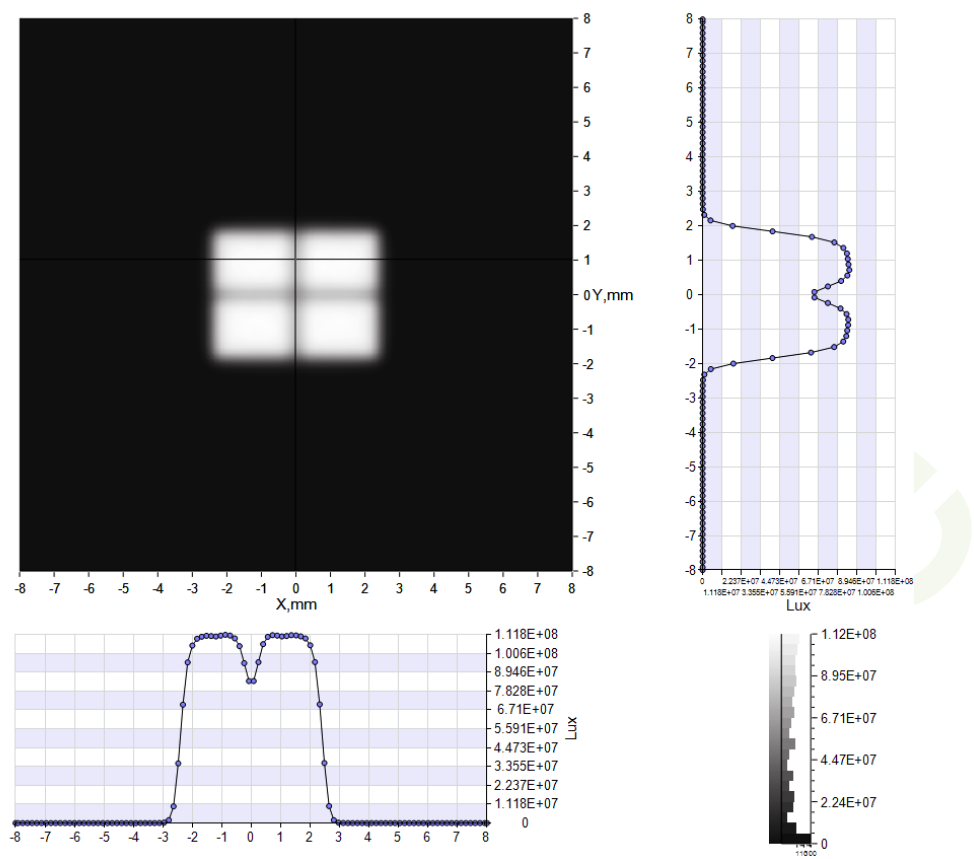
785nm	Luminous flux		5600mW		Mod output value
	Predominance wavelength	780 nm	785 nm	790 nm	
	FWHM		3 nm	4 nm	
Back focus length			23.6mm		From the last lens vertex
Electric Data					
Input voltage		-10%	12V DC	+10%	
Input power			320W		Power supply to the driver board
Recommend selected power of source		420 W			The source power should be selected based on this value
White light current adjustment range		5%		100%	RS232, current accuracy±10%
660nm Current adjustment range		5%		100%	
785nm Current adjustment range		5%		100%	
Dimensions and Weight					
Dimensions			As drawing		
Weight			6000g		Estimated, not measured
Conditions					
Working temperature		-20℃		35℃	
Relative humidity				95%	
Transportation and storage		-20℃		70℃	
Reliability					
Life of LED			30,000h		Tj of LED ≤125℃
Life of LD			20,000h		Tc of LD ≤30℃
Compliances					
IEC 60601-1:2005		Medical electrical equipment - Part 1: General requirements for basic safety and essential performance			
IEC 60601-1-2:2014		Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral standard: Electromagnetic compatibility - Requirements and tests			
IEC 61000-4-2:2009		Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test			
IEC 61000-4-3:2020		Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test			
EN 55011:2016+A2:2021		Industrial, scientific and medical equipment - Radio-frequency disturbance			
GB9706.1-2007		Medical electrical equipment - Part 1: General requirements for basic safety			

YY 1081-2011	Medical endoscope- Endoscope function supply device, cold light source
IEC 62321-3-1:2013	RoHS
IEC 62321-4:2013+AMD1:2017	
IEC 62321-5:2013	
IEC 62321-6:2013	
IEC 62321-7-1:2015	
IEC 62321-7-2:2017	
IEC 62321-8:2017	

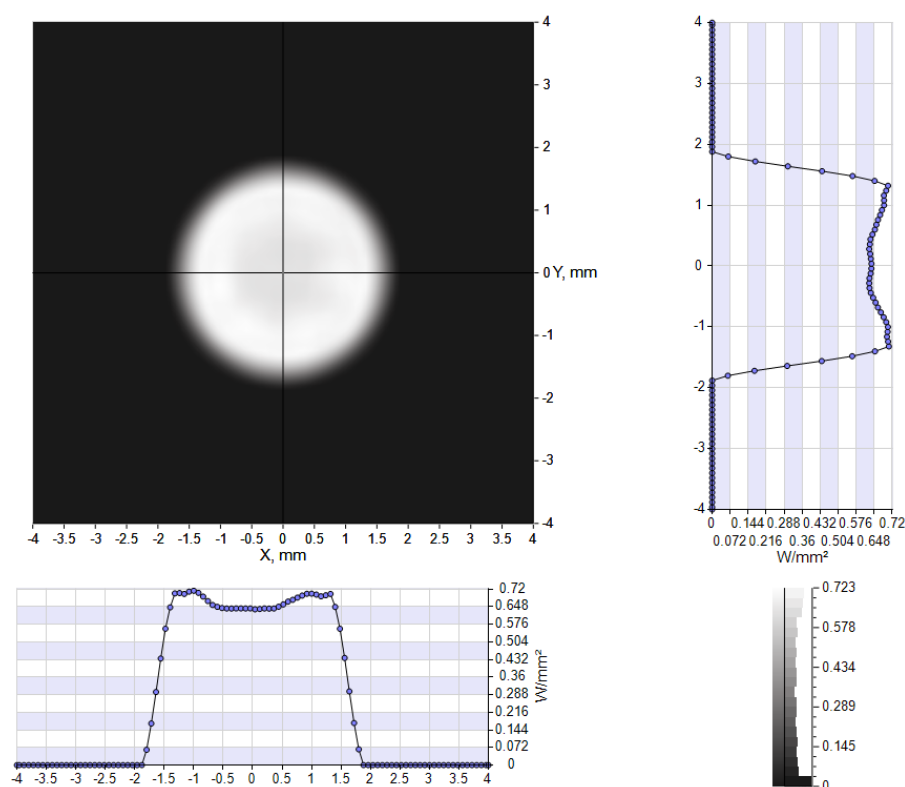
Dimensions of product:



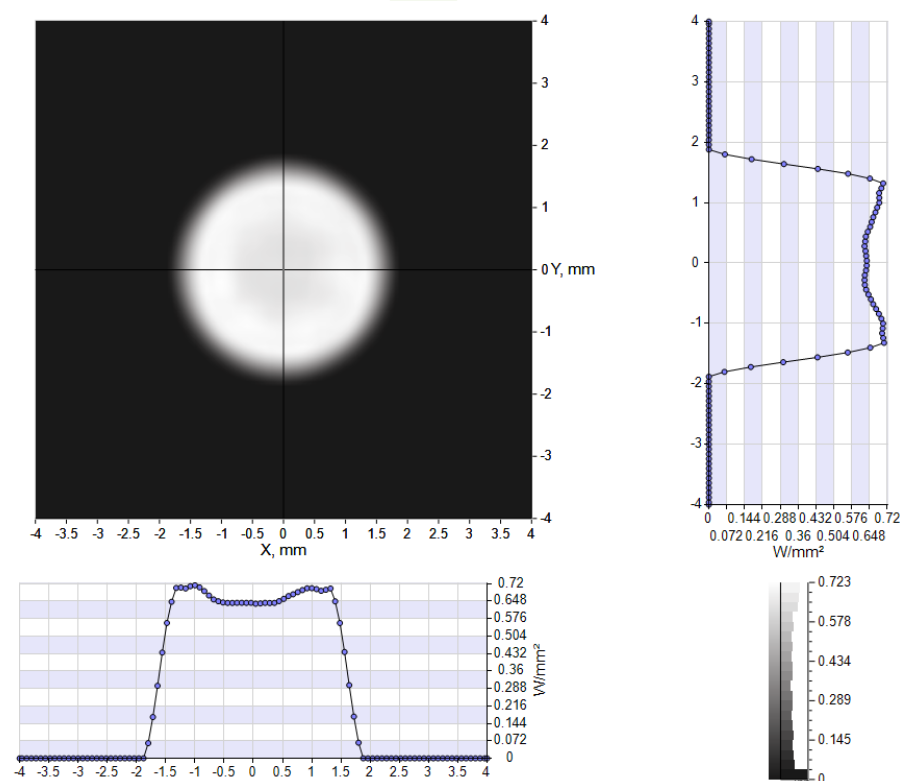
White light illuminance distribution at focal plane:



660nm red-light irradiance distribution at focal plane:



785nm Near-infrared irradiance distribution at focal plane:

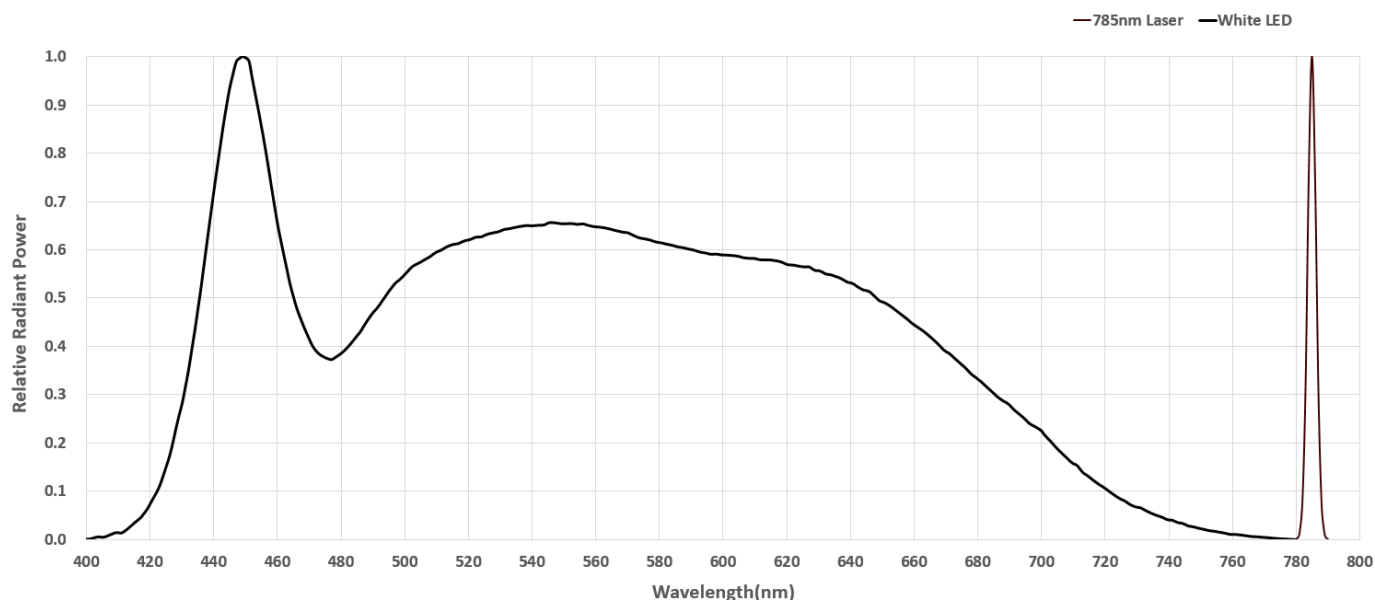


Warning ! Keep away from the focus of light, it's easily get burned!

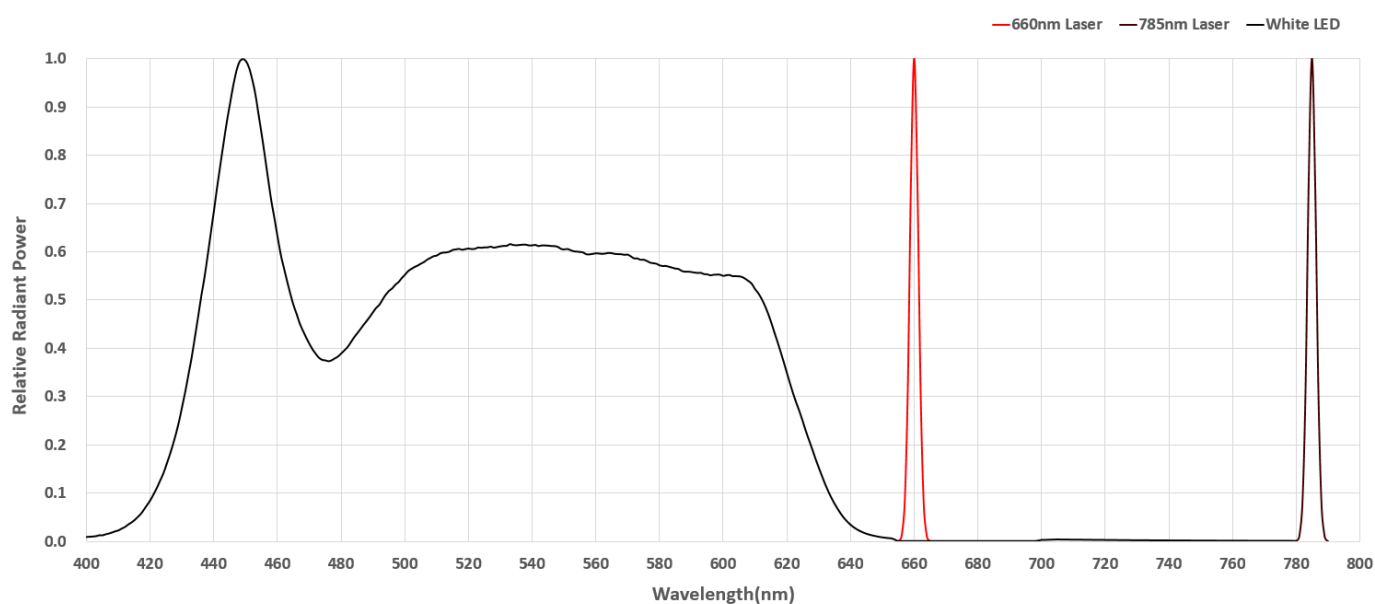
Warning ! Choose refractory fiber, otherwise may cause module damage due to fiber scorification !

Spectrum:

White LED + 785nm Laser



White LED + 660nmLaser + 785nmLaser



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