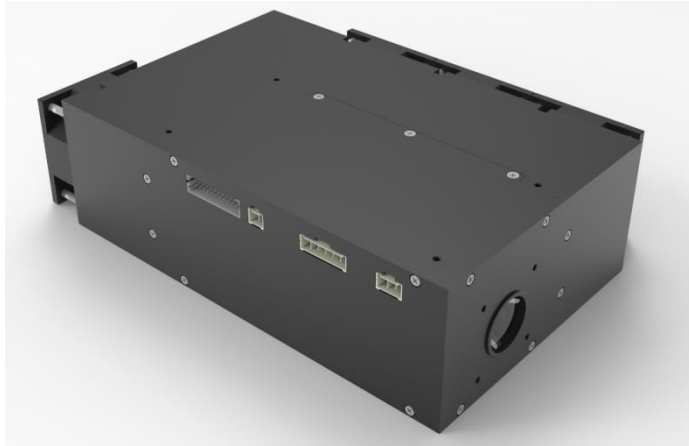


RFFM-16N2



Key parameters:

- 405nm、450nm、520nm、590nm、631nmLED
- Mixed white light $Ra \geq 85$
- Output power of violet light 5400mW
- Output power of blue light 3500mW
- Output power of wide green light 1850mW
- Output power of amber light 815mW
- Output power of red light 4700mW

➤ Back focus length: 7.5mm

Application features:

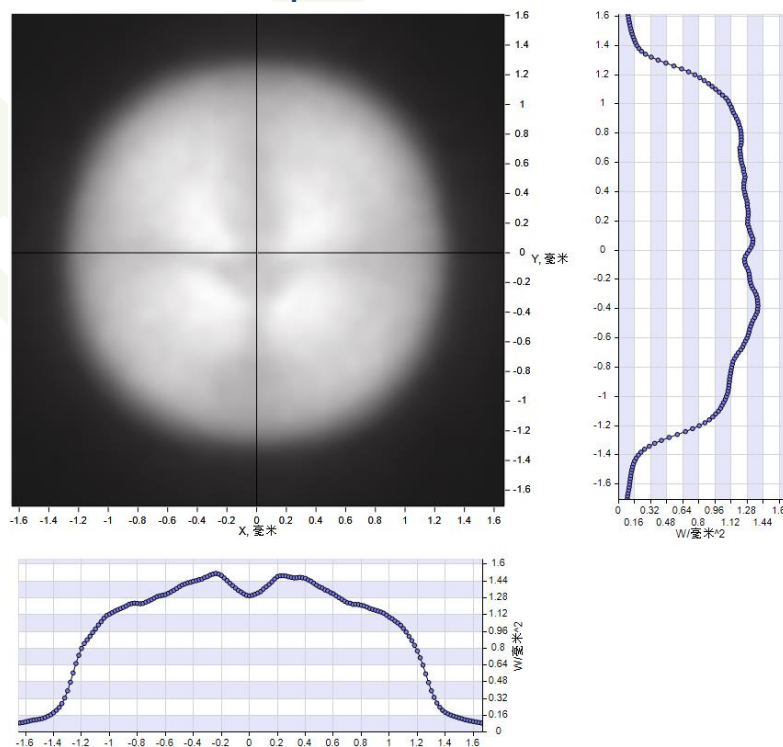
- White light & NBI endoscope imaging
- Adapted fiber $NA \geq 0.77$
- Multiple light combinations, support five-color light output with custom ratio
- Peak spectral ratio adaptive calibration
- Dimming light range up to 1%~100%

Technical Data					
Parameter		Min	Typical	Max	Remarks/Conditions
Optical Data					
light source		405nm+450nm+520nm+590nm+631nm LED			
Mixed white light	CCT	Defined by custom light ratio			
	Ra			>85	Output data of module
Violet light	Output power		5400mW		
	Peak wavelength	400nm	405nm	410nm	
	FWHM		15nm		
Blue light	Output power		3500mW		
	Luminous Flux		1451m		
	Predominance wavelength	440nm	450nm	470nm	
	FWHM		23nm		
Wide green light	Output power		1850mW		
	Luminous Flux		9301m		
	Predominance wavelength		535nm		
	FWHM		50nm		
Amber light	Output power		815mW		
	Luminous Flux		3901m		

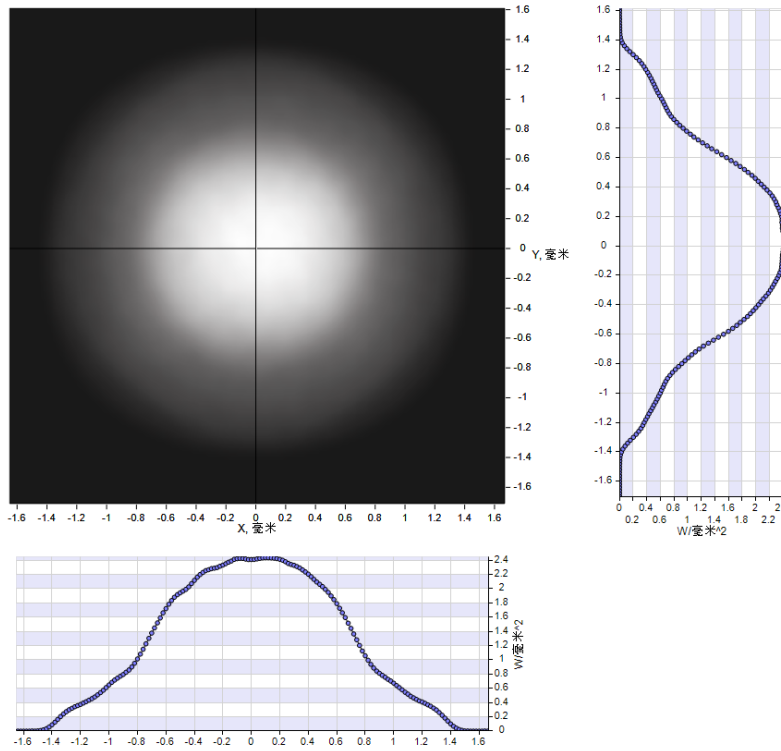
	Predominance wavelength	580nm	590nm	600nm	
	FWHM		20nm		
Red light	Output power		4700mW		
	Luminous Flux		720lm		
	Predominance wavelength	621nm	631nm	641nm	
	FWHM		20nm		
Back focus length			7.5mm		From the last lens vertex
divergence angle			100°		Adapted fiber NA \geq 0.77
Electric Data					
Input voltage			DC 12V		Input voltage of driver
Violet light power				70W	Supply power to the driver board
Blue light power				90W	Supply power to the driver board
Wide green light power				70W	Supply power to the driver board
Amber light power				30W	Supply power to the driver board
Red light power				85W	Supply power to the driver board
Recommend selected power of source		450W			The source power should be selected based on this value, which is recommended power when four light sources are at maximum
Dimming of single light		1%		100%	PWM+RS232, Current accuracy \pm 10%
Dimensions and Weight					
Dimensions			As drawing		
Conditions					
Relative humidity				95%	
Transportation and storage		-20°C		80°C	
Reliability					
Life of LED			30,000h		T _j of LED \leq 125°C
Compliances					
IEC 60601-1:2005+AMD1:2012+AMD2:2020		Medical electrical equipment - Part 1: General requirements for basic safety and essential performance			
IEC 60601-1-2:2014+AMD1:2020		Medical electrical equipment - Part 1-2: General requirements for basic safety and essential			

	performance - Collateral standard: Electromagnetic compatibility - Requirements and tests
IEC 61000-4-2:2008	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+A1:2017+A11:2020+A2:2021	Industrial, scientific, and medical equipment - Limitation and measurement methods for radio-frequency interference characteristics
GB9706.1-2020	Medical electrical equipment - Part 1: General safety and basic specifications
YY/T 1081-2011	Medical endoscope - endoscopic functional supply device cold light source
IEC 62321-3-1:2013	RoHS
IEC 62321-4:2013+AMD1:2017	
IEC 62321-5:2013	
IEC 62321-6:2015	
IEC 62321-7-1:2015	
IEC 62321-7-2:2017	
IEC 62321-8:2017	

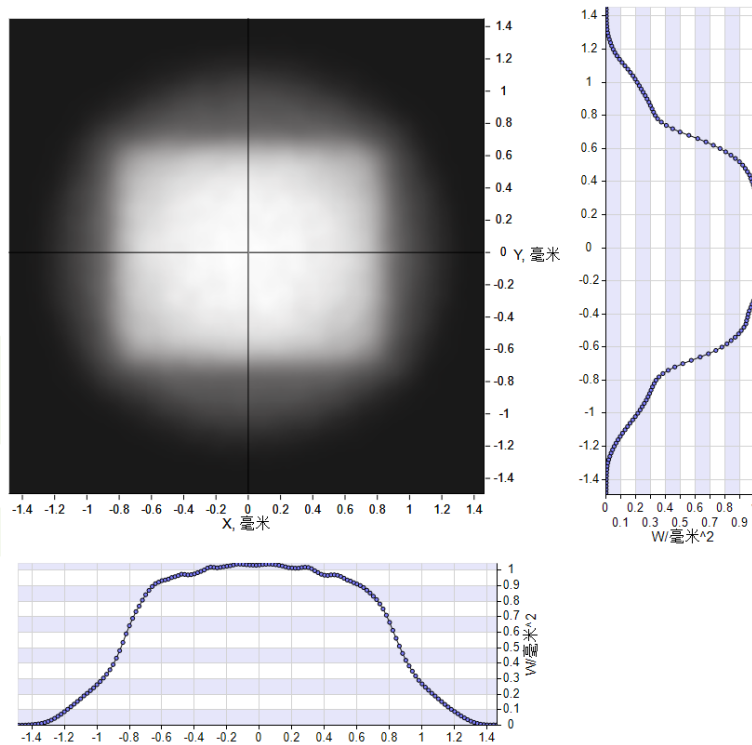
Violet light illuminance irradiance at focal plane:



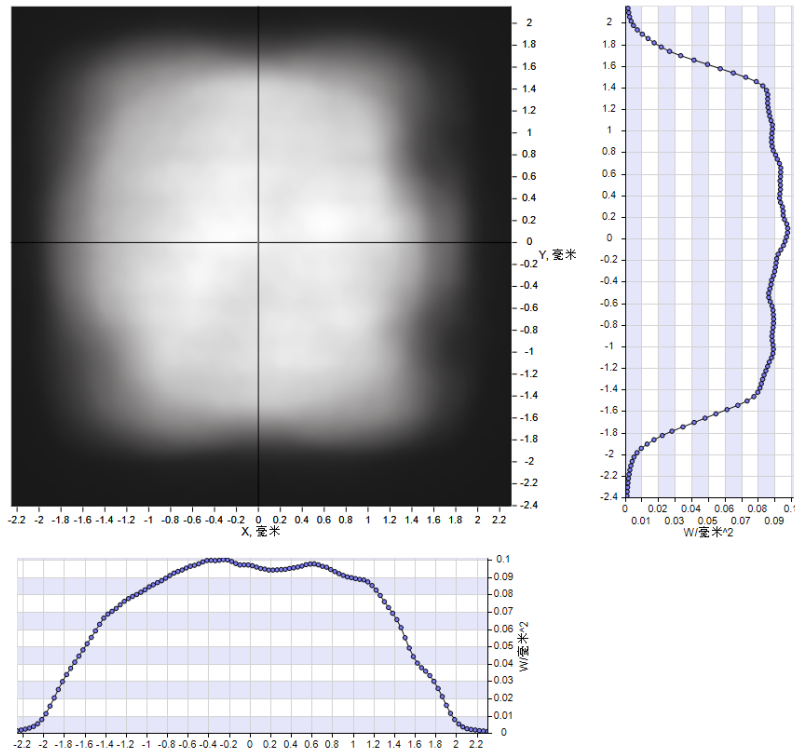
Blue light illuminance irradiance at focal plane:



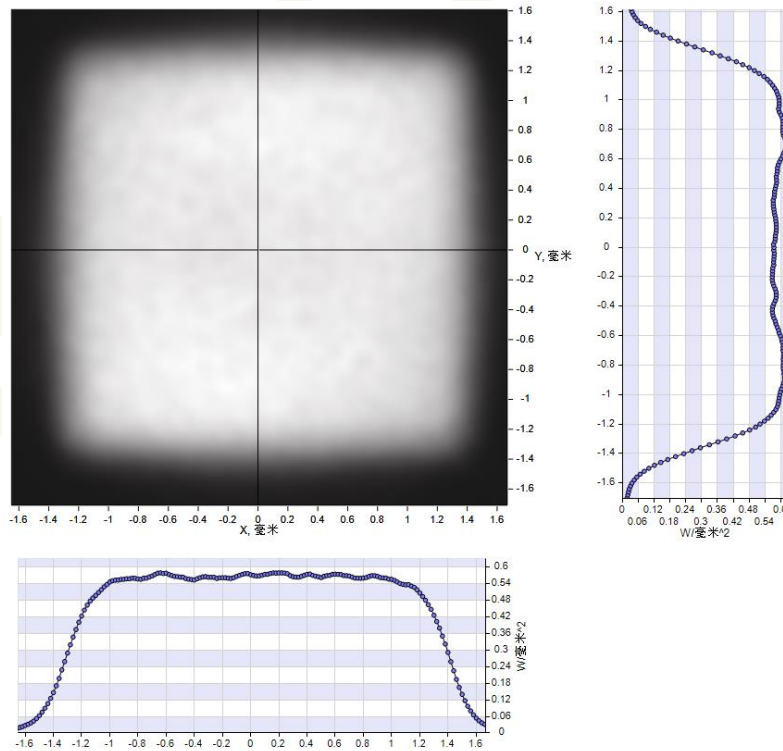
Wide green light illuminance irradiance at focal plane:



Amber light illuminance irradiance at focal plane:

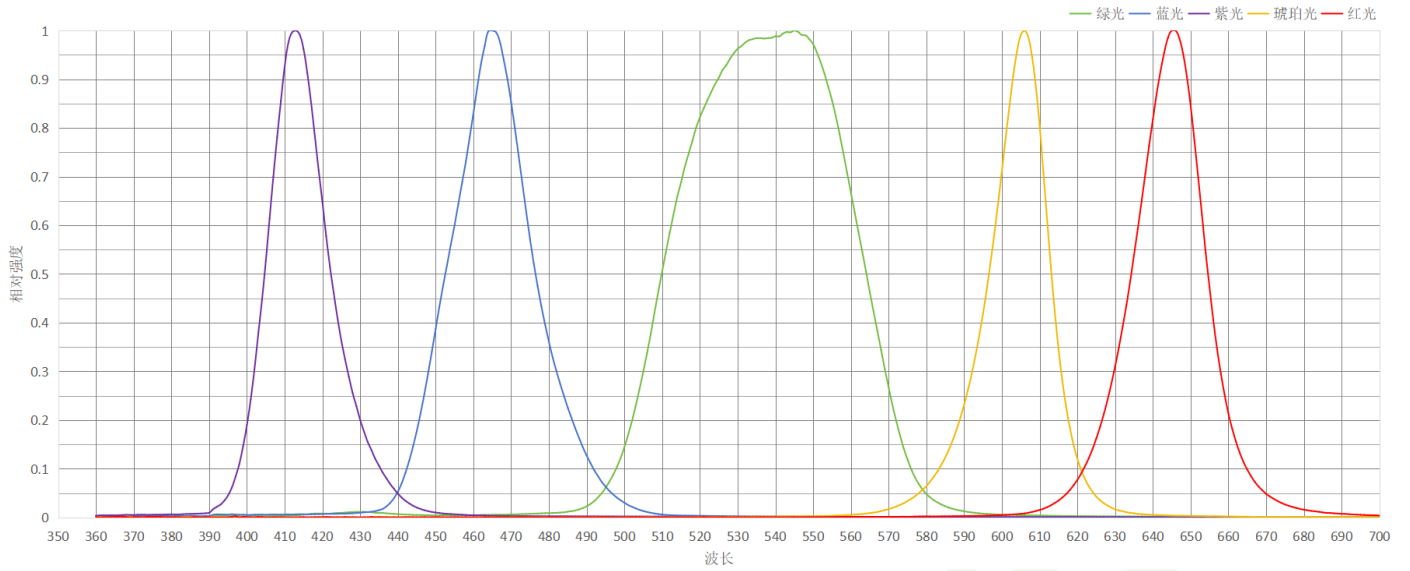


Red light illuminance irradiance at focal plane:



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

Spectrum:



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