



SuZhou ZhongWei Photonics

- 公司介绍/Company Introduction
- 激光雷达滤光片/Laser LiDAR Filter
 - 1550nm Filter
 - 905nm Filter
 - HR 反射镜

联系人/ Contact: 苏炎/Yan Su

联系电话/Phone: 15280167059

E-mail: yan.su@fb-photonic.com

苏州枫桥光电研究院•苏州众为光电有限公司

Suzhou Feng bridge Photonic Research Institute • Suzhou Zhongwei Photonics Co., Ltd

江苏省苏州市虎丘区枫桥街道向街 8 号

No.8 Xiangjie, Fengqiao Street, Huqiu District, Suzhou City, Jiangsu Province, China

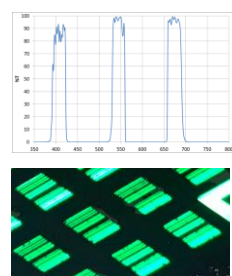
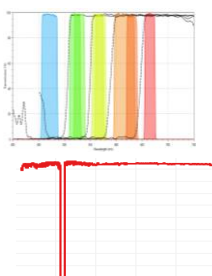
目录

一、公司介绍/Company Introduction	2
二、激光雷达滤光片/Laser LiDAR Filter	3
【窄带 Filter】	4
BP1064-0.4	4
BP1550-4	5
BP1550-0.4_10Deg.....	6
BP1550-0.4_15Deg.....	7
【905nmFilter】	8
BP940-20	8
【HR 反射镜】	10
HR905_0-80Deg	10
HR1550_0-80Deg	11

一、公司介绍/Company Introduction

苏州众为光电有限公司是一家以生产光通讯高端光学薄膜产品为主的高科技公司。公司项目团队具有鲜明的技术特色和优势，核心成员均具有较强的专业知识背景、视野开阔、经验丰富，分别在工艺优化、产品设计、销售等方面拥有很强的专业背景。公司专注于光学薄膜产品的制造与服务，致力成为光学薄膜滤光片的全球领导者之一。

Suzhou Zhongwei Photonics Co., Ltd. is a high-tech company specializing in the production of high-end optical film products for optical communication. The project team of the company has distinct technical characteristics and advantages, and the core members all have strong professional background, broad vision, rich experience, and have strong professional background in process optimization, product design, sales and other aspects. The company focuses on the manufacturing and service of optical thin film products, and is committed to become one of the world leaders in optical thin film filters.



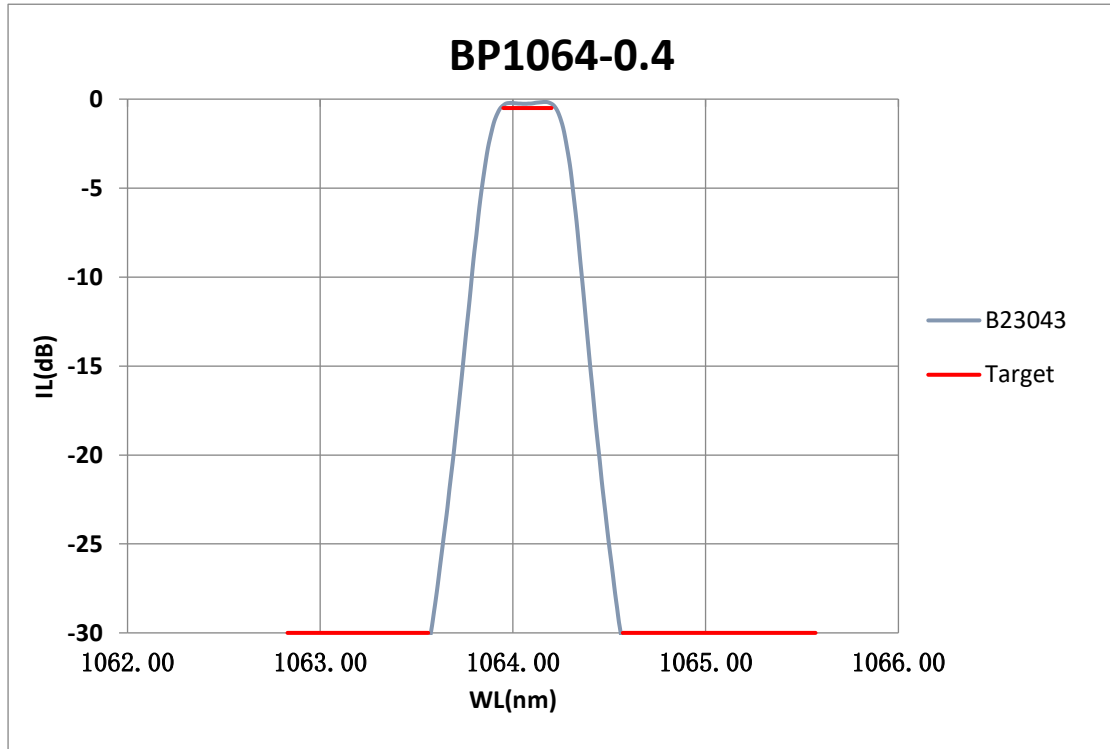
二、激光雷达滤光片/Laser LiDAR Filter

激光雷达中决定光源技术路线的主要可以归纳于发光波长、激光器结构两大指标。按照波长划分，最主要的 905nm 波长和 1550nm 波长。1550nm 激光器由于采用光纤能够放大激光，因此其功率更大，瞬时发光功率可达 1KW 级别，905nm 则只有 100W 级别。1550nm 激光器的短板是其成本更高。

目前 LiDAR 按照工作模式分为：机械式旋转扫描激光雷达、MEMS 激光雷达、相控阵列激光雷达以及 Flash 激光雷达。其中，机械式旋转扫描激光雷达是发展较为成熟的方案，其中多需要采用 905nm 滤光片和 1550nm 滤光片作为探测滤光片。由于激光雷达回波信号的准确性，要求滤光片必须实现超窄带实现高透过，以隔离返回信号，并在大波长范围内实现深度带外截止，以衰减阳光和其他外来光，以最大限度地提高信噪比。

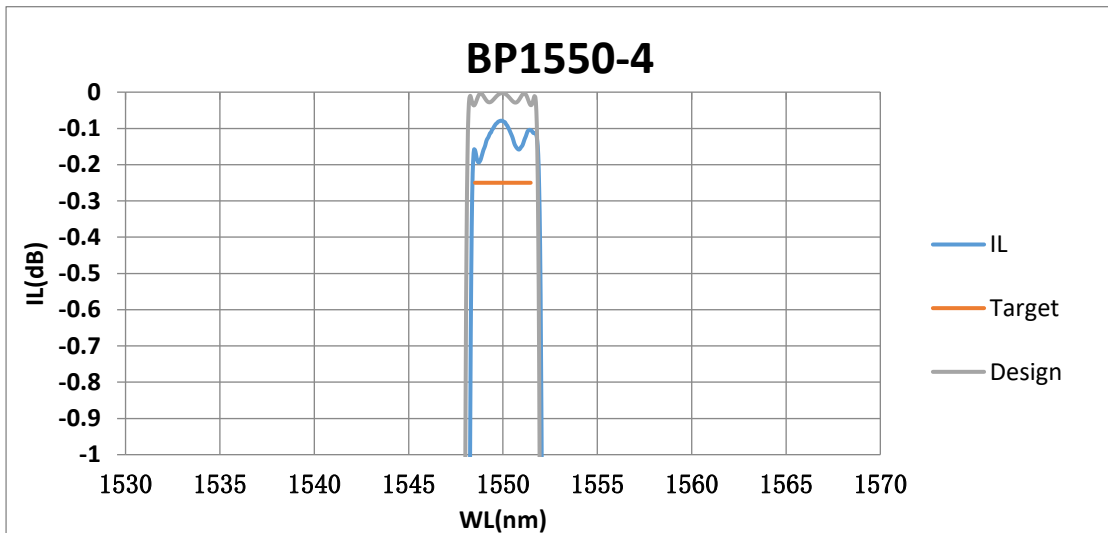
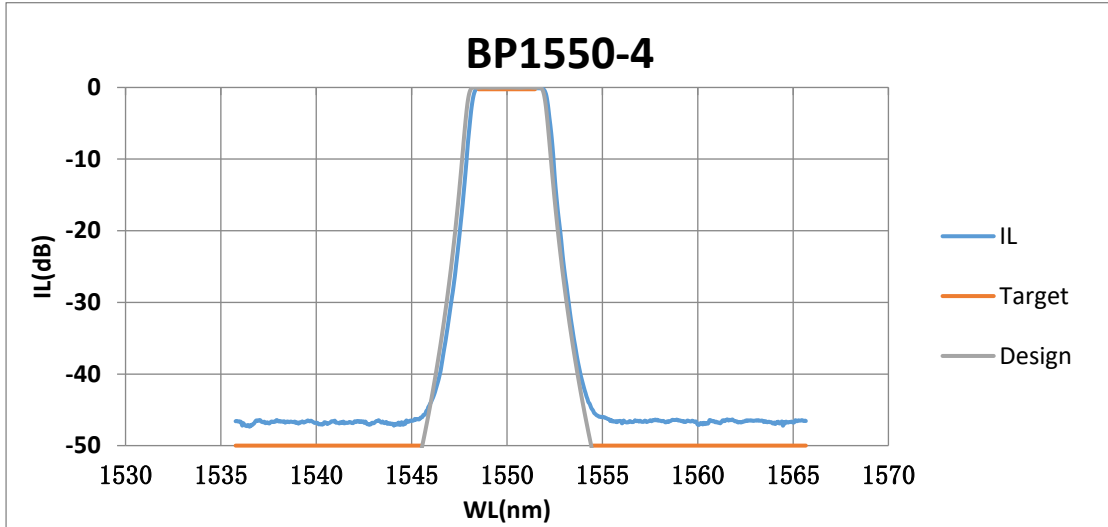
【窄带 Filter】

BP1064-0.4



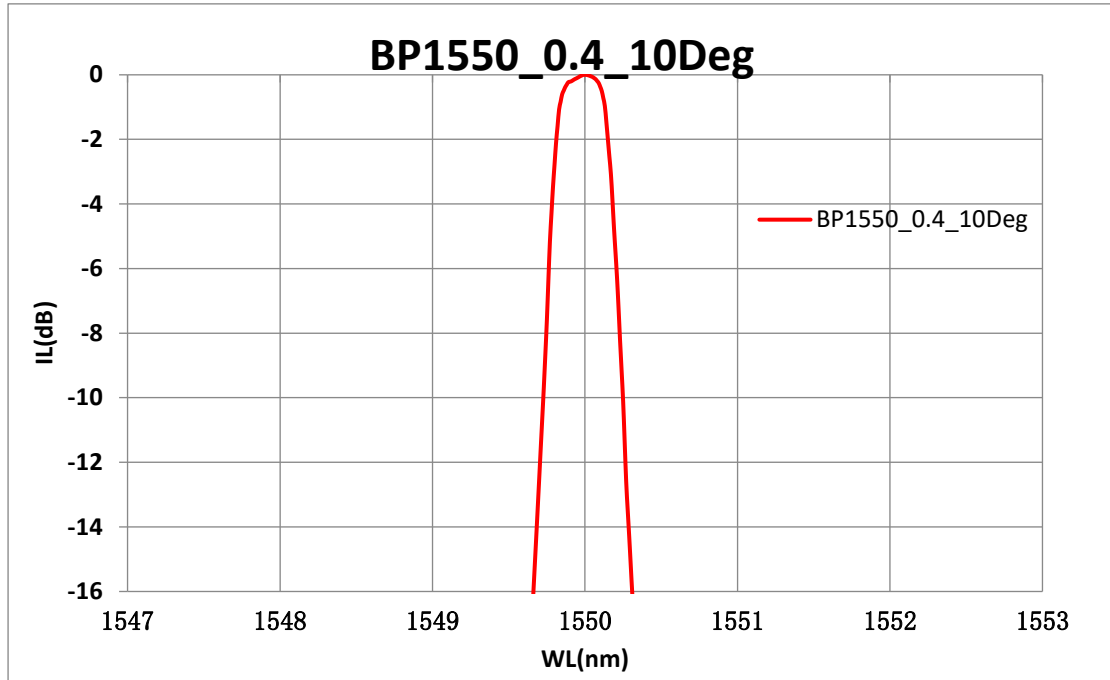
CWL	DeltaCenterWave	BW_0.5dB	BW_30dB	Ripple
	±0.3nm	>0.25nm	<1.1nm	<0.3dB
1064.06	-0.24	0.32	0.97	0.28

BP1550-4



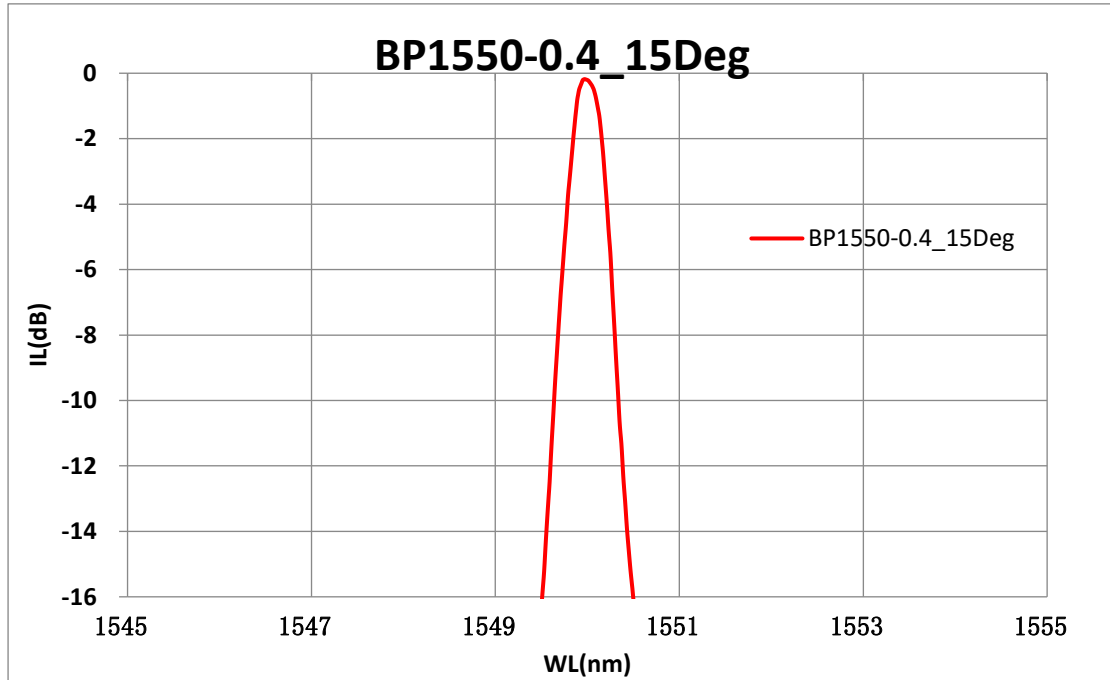
Parameters	Specification	图例
CWL	1550+0.0~+0.4nm	1550.27nm
Passband WL Range	1550±1.5nm	
Ripple@Passband	<0.3dB	0.15nm
BW@0.5dB	>3nm	3.46nm
BW@20dB	<6nm	5.3nm
ReflectBand WL Range	1520- 1545.5&1554.5- 1570	
Transmit ISO	>50dB	由于测试光源原因，无法测试到 50dB

BP1550-0.4_10Deg



Parameters	Specification	图例
CWL	1550nm	
Ripple@PassBand	<0.3dB	0.15nm
BW@0.5dB	>0.15nm	0.25nm
BW@15dB	<1nm	0.64nm
AOI	10.75Deg+/-0.3Deg	在该角度范围内调节

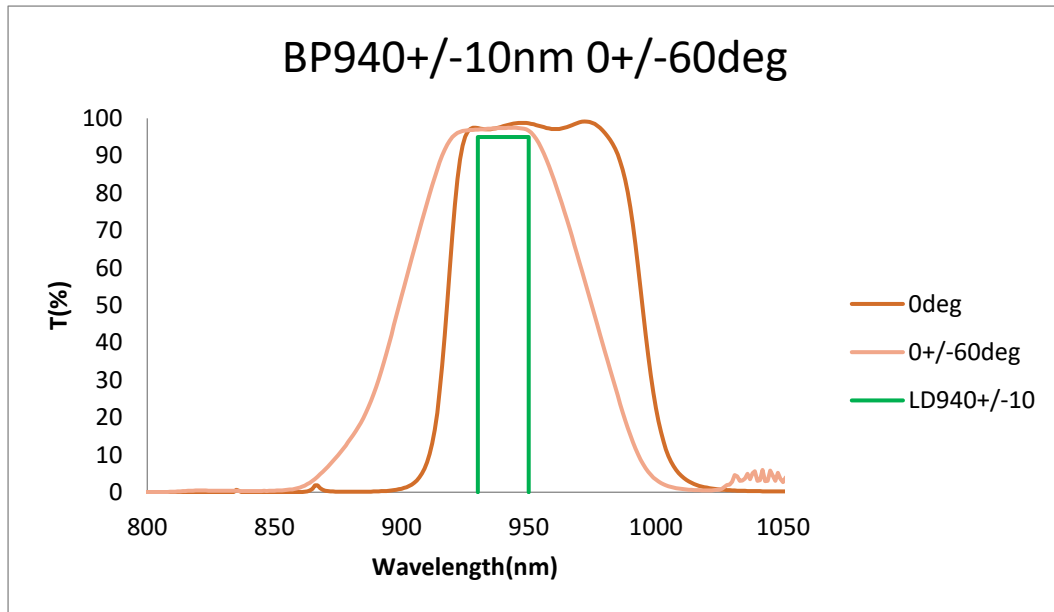
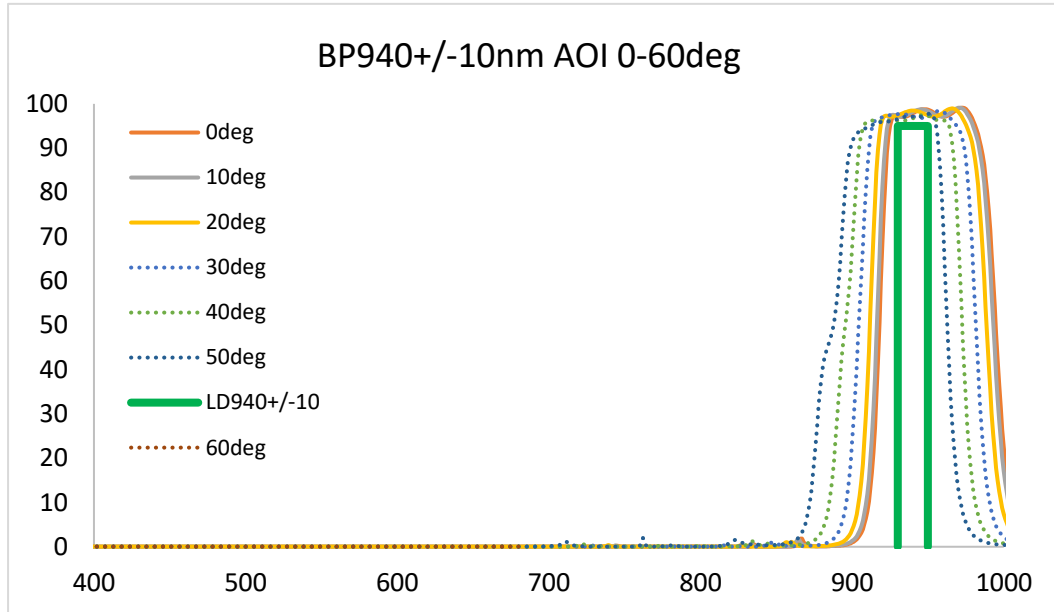
BP1550-0.4_15Deg

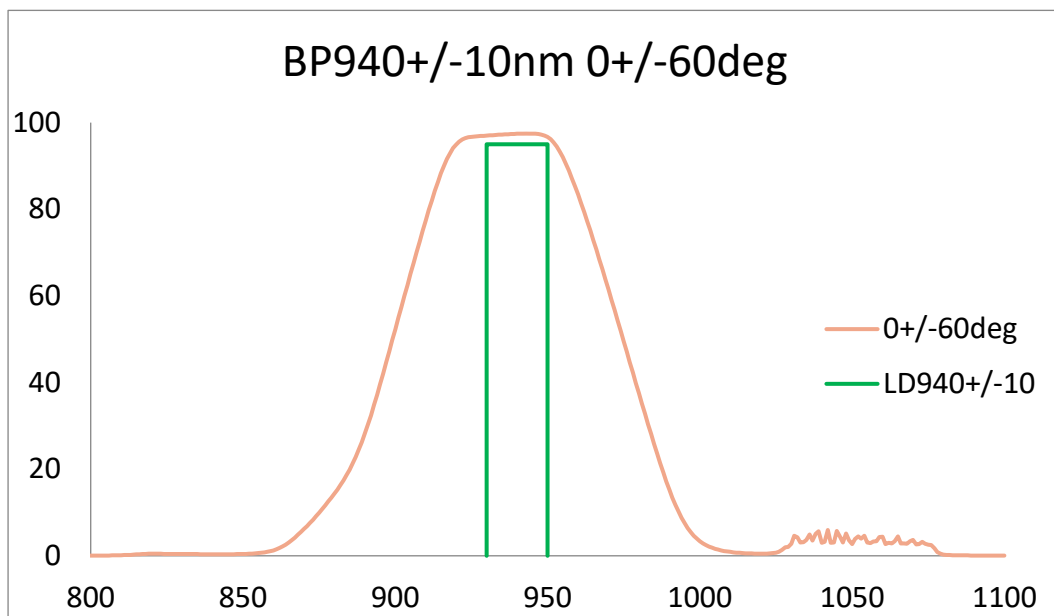


Parameters	Specification	图例
CWL	1550nm	
BW@0.5dB	>0.13nm	0.21nm
BW@3dB	>0.45nm	0.4nm
BW@15dB	<1.2nm	0.64nm
AOI	15Deg+/-0.3Deg	在该角度范围内调节

【905nmFilter】

BP940-20



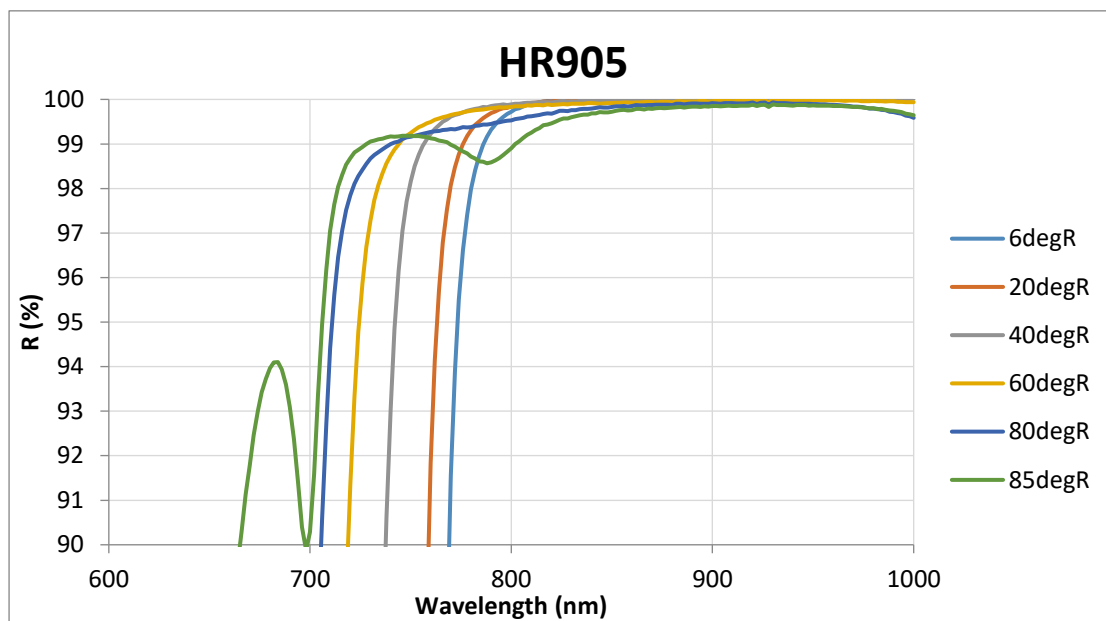


Parameters	Specification
PassBand	940+/-10nm
BlockingBand	400-1100nm

AOI (deg)	WL Shift (nm)
10	-1.2
20	-6.4
30	-13
40	-21.6
50	-27.2
60	-32

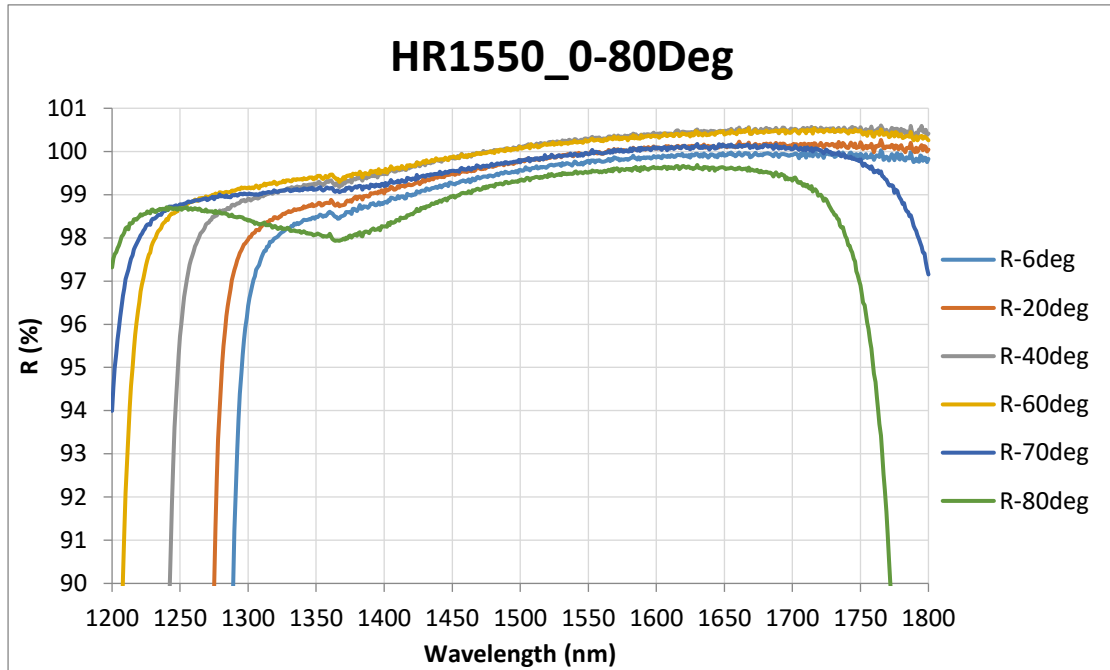
【HR 反射镜】

HR905_0-80Deg



Parameters	Specification
R@905nm	>99%
AOI	0-80Deg

HR1550_0-80Deg



Parameters	Specification
R@1550nm	>99%
AOI	0-80Deg