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# TECHNICAL REPORT



Fibre optic interconnecting devices and passive components – Part 08: Study of optical power blocking measurement methods for adaptors with an optical power blocking shutter

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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## CONTENTS

FC	OREWO	RD	4		
IN	INTRODUCTION				
1	Scop	e	7		
2	Norm	ative references	7		
3	Terms and definitions				
4	Background to the measurement method of blocking characteristics for adaptors with an optical power blocking shutter				
	4.1	Laser safety requirement for optical fibre communication systems	7		
	4.2	Required performance of the power blocking shutter	8		
	4.3	Standard measurement conditions used to determine laser safety for optical fibre communication systems	8		
5	Meas	urement methods used in this Technical Report	8		
	5.1	Background	8		
	5.2	Test	8		
	5.2.1	Measurement set-up	8		
	5.2.2				
	5.2.3	5			
	5.2.4				
	5.3	Measurement of the maximum emitted optical power			
	5.4	Measuring system dynamic range			
	5.5	Measuring the level of optical power blocking			
6		onstration of measurement			
	6.1	Common measurement conditions			
	6.2	Measurement set-up			
	6.2.1	Method 1			
	6.2.2				
	6.3 6.3.1	Dynamic range Method 1			
	6.3.1				
	6.3.3		-		
		Measurement results			
	6.5	Study of the factors affecting measurement uncertainty			
7		nary			
Ar		informative) Observation of emitted light using a visible light source			
Ar	nex B (	informative) Detailed measured levels of blocking characteristics (Measured light quantity shielded by adaptors with an optical power blocking shutter)			
		hy			
ы	bilograp	лту	24		
Fi	gure 1 -	- Example of measurement set-up for Method 1	9		
Fi	gure 2 -	- Example of measurement set-up for Method 2	9		
Fi	Figure 3 – Measurement set-up, Method 11				
Fi	Figure 4 – Measurement set-up, Method 214				
		- Comparison between average of optical power blocking and the standard (Type SC, wavelength of 1 310 nm)	16		
ue	viations	( i ype 00, wavelength of 1 510 min)	10		

Figure 6 – Comparison between average of optical power blocking and the standard deviations (Type SC, wavelength of 1 550 nm)	16
Figure 7 – Comparison between average of optical power blocking and the standard deviations (Type LC, wavelength of 1 310 nm)	17
Figure 8 – Comparison between average of optical power blocking and the standard deviations (Type LC, wavelength of 1 550 nm)	17
Figure A.1 – Example of off-axis emitted visible light (Type LC duplex adaptor with an optical power blocking shutter)	19
Table 1 – Common measurement conditions	11
Table 2 – Details of apparatus used for Method 1	
Table 3 – Details of apparatus used for Method 2	
Table 4 – Adaptors with an optical power blocking shutter	
Table B.1 – Measured values of optical power blocking (Type SC, measured wavelength of 1 310 nm)	20
Table B.2 – Measured values of optical power blocking (Type SC, measuredwavelength of 1 550 nm)	21
Table B.3 – Measured values of optical power blocking (Type LC, measuredwavelength of 1 310 nm) for non-angled PC end face	21
Table B.4 – Measured values of optical power blocking (Type LC, measuredwavelength of 1 310 nm) for 8 degree-angled PC end face	22
Table B.5 – Measured values of optical power blocking (Type LC, measuredwavelength of 1 550 nm) for non-angled PC end face	22
Table B.6 – Measured values of optical power blocking (Type LC, measuredwavelength of 1 550 nm) for 8 degree-angled PC end face	23

#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

### FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS –

# Part 08: Study of optical power blocking measurement methods for adaptors with an optical power blocking shutter

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IEC TR 62627-08, which is a Technical Report, has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

The text of this Technical Report is based on the following documents:

Enquiry draft	Report on voting
86B/3931/DTR	86B/3945/RVC

Full information on the voting for the approval of this Technical Report can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 62627 series, published under the general title *Fibre optic interconnecting devices and passive components*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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#### INTRODUCTION

In recent years, optical communication networks have made greater use of optical fibre amplifiers and distributed Raman amplifiers. Optical communication equipment usually has an adaptor on the front of the board as an optical input/output terminal. These adaptors sometimes emit 100 mW or higher optical power. For the purpose of blocking such optical power, an adaptor with an optical power blocking shutter is sometimes used.

This Technical Report details the proposed methods to evaluate the efficacy of these adaptor shutters.

This Technical Report is based on Optoelectronic Industry and Technology Development Association (OITDA) – Technical Paper (TP), TP19/CN-2014, *Investigation of examinations and measurements* – *Light-blocking performance of optical adaptor with shutter*.

### FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS –

# Part 08: Study of optical power blocking measurement methods for adaptors with an optical power blocking shutter

#### 1 Scope

This part of IEC 62627, which is a Technical Report, describes two methods used to measure the blocking characteristics of adaptors with an optical power blocking shutter. This document focuses on singlemode fibre (SMF) and two wavelengths, 1 310 nm and 1 550 nm.

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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