# EIA COMPONENT BULLETIN

Reference Guide for Fiber Optic Test Procedures

CB9-F
(REVISION OF CB9-E)

**MARCH 1987** 

**ELECTRONIC INDUSTRIES ASSOCIATION** 

**ENGINEERING DEPARTMENT** 



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#### FOREWORD

This Component Bulletin is published to assist users of EIA Fiber Optic Test Procedures (FOTPs) to identify appropriate test procedure references in the most expeditious manner. It also serves to identify the publication status of various documents.

For document prices and ordering information, the user is referred to the annual "Catalog of EIA and JEDEC Standards and Engineering Publications", published in the spring of each year by EIA. Since Component Bulletin No. 9 is normally revised more frequently than once a year, there will usually be documents listed here that are not listed in the EIA catalog; in such cases, this bulletin takes precedence over the catalog, insofar as document availability is concerned. (Refer to EIA Publications Department for prices of affected documents.)

Suggestions for improving this publication (or for improving any of the documents referenced in this publication) are always welcome and may be submitted direct to EIA, marked for the attention of "Staff Engineer - Fiber Optics."

H. Marvin McNeil Chairman, EIA SC FO-6.4 Sub-Committee on Fiber Optic Test Methods and Instrumentation

Component Bulletin No. 9

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Component Bulletin No. 9

SUMMARY OF KEY CHANGES MADE TO COMPONENT BULLETIN NO. 9
BETWEEN THE LAST ISSUE (CB9-E) AND THIS REVISION (CB9-F)

 Document numbers are given in Part I for the following FOTPS published since the last issue:

FOTPs -53, -57, -75, -91, -94, -95, -164, -165, -166 and -172

2. The following FOTPs have been revised and re-issued under other document numbers, as indicated:

FOTP Number	Published As	Formerly Published In	
27	EIA-455-27A	RS-455-4	
28	EIA-455-28A	RS-455-4	
36	EIA-455-36A	RS-455-5	
55	EIA-455-55A	RS-455-5	
87	EIA-455-87A	RS-455-87	

3. The following FOTPs have been cancelled, with cancellation dates shown in Part I:

FOTPs -7, -8, -64 and -97.

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- 4. FOTP-9 has been rescinded, with recission date shown in Part I.
- 5. Title changes are reflected for the following:

- 6. FOTPs -59A and -59B have been combined.
- 7. Title information has been added for the following new FOTPs:

- Title changes shown in Part I are incorporated into Parts II and III of the list.
- 9. The following new key words were used to expand Part III:

Interferometry Knife-Edge Scanning

- 10. Minor changes have been made to Part IV, Section A (DOD-STD-1678 Cross Reference).
- 11. Part V has been revised to reflect current FOTP revision schedules.
- 12. Part VI has been revised to reflect the latest list of FOTPs adopted by DOD.

PART I: NUMERICAL CONTENTS LIST BY FOTP NUMBER\*

Test Procedure Number	<u>Title</u>	Document
FOTP-1	Cable Flexing for Fiber Optic Connectors	RS-455 <sup>2</sup>
FOTP-2	Impact Test Measurements For Fiber Optic Devices	EIA-455-2A
FOTP-3	Temperature Cycling of Fiber Optic Connectors (Thermal Shock)	RS-455-1 <sup>2</sup>
FOTP-4	Fiber Optic Connector/Component Temperature Life	RS-455-4A
FOTP-5	Humidity Test Procedure for Fiber Optic Connecting Devices	RS-455 <sup>2</sup>
FOTP-6	Cable Retention Test Procedure for Fiber Optic Cable Interconnecting Devices	RS-455 <sup>2</sup>
FOTP-7	Flammability Testing of Optical Fiber Components	CANCELLED 1/16/86
FOTP-8	Radiant Power Measurements	CANCELLED 7/10/86
FOTP-9	Test Procedure for Fiber Optics Bundle Connector Insertion Loss	RESCINDED <sup>3</sup> 11/5/86
FOTP-10	Acceptance Pattern Measurement for Fiber Optic Devices	CANCELLED 8/18/82
FOTP-11	Vibration Test Procedure for Fiber Optic Connecting Devices	RS-455-3 <sup>2</sup>
FOTP-12	Fluid Immersion Test Procedure for Fiber Optic Connecting Devices	RS-455-4 <sup>2</sup>

<sup>\*</sup>This document is current as of its publication date. It will be updated and revised as necessary.

<sup>1</sup> IP = In process of Preparation

Revision of Published document in Process of Preparation

<sup>3</sup> Use FOTP-34

Test Procedure Number	<u>Title</u>	Document
FOTP-13	Visual and Mechanical Inspection of Fibers, Cables, Connectors and/or other Fiber Optic Devices	RS-455-13
FOTP-14	Fiber Optic Shock Test (Specified Pulse)	RS-455-14
FOTP-15	Altitude Immersion	RS-455-15
FOTP-16	Salt Spray (Corrosion) Test for Fiber Optic Components	RS-455-16
FOTP-17	Maintenance Aging	RS-455-3
FOTP-18	Acceleration Testing of Fiber Optic Components and Assemblies	EIA-455-18A
FOTP-19	Flowing Gas Simulated Industrial Atmosphere Test	On Hold
FOTP-20	Measurement of Change in Optical Transmittance	RS-455-20
FOTP-21	Mating Durability for Fiber Optic Interconnecting Devices	EIA-455-21
FOTP-22	Ambient Light Susceptibility	RS-455-22 <sup>2</sup>
FOTP-23	Air Leakage Testing of Fiber Optic Component Seals	RS-455-23A
FOTP-24	Relative Power Measurements	CANCELLED 1/21/82
FOTP-25	Impact Testing of Fiber Optic Cables and Cable Assemblies	RS-455-3 <sup>2</sup>
FOTP-26	Crush Resistance of Fiber Optic Interconnecting Devices	RS-455-26A
FOTP-27	Methods for Measuring Outside (Uncoated) Diameter of Optical Waveguide Fibers	EIA-455-27A
FOTP-28	Method for Measuring Tensile Failure Point of Optical Waveguide Fibers	EIA-455-28A

Test Procedure Number	<u>Title</u>	Document
FOTP-29	Refractive Index Profile Transverse Interference Method	RS-455-4 <sup>2</sup>
FOTP-30	Frequency Domain Measurement of Multimode Optical Fiber Information Transmission Capacity	RS-455-5 <sup>2</sup>
FOTP-31	Fiber Tensile Proof Test Method	RS-455-3 <sup>2</sup>
FOTP-32	Fiber Optic Circuit Discontinuities	RS-455-32
FOTP-33	Fiber Optic Cable Tensile Loading and Bending Test	RS-455-5 <sup>2</sup>
FOTP-34	Interconnection Device Insertion Loss Test	EIA-455-34
FOTP-35	Fiber Optic Connector Dust (Fine Sand) Test	RS-455-35
FOTP-36	Twist Test for Fiber Optic Cable Assemblies	EIA-455-36A
FOTP-37	Fiber Optic Cable Bend Test Low and High Temperature	RS-455-37
FOTP-38	High Temperature Flexibility Test for Fiber Optic Cable	CANCELLED 6/24/82
FOTP-39	Fiber Optic Cable Wicking Test	RS-455-39
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FOTP-43	Output Near-Field Radiation Pattern Measurement of Optical Waveguide Fibers	EIA-455-43
FOTP-44	Refractive Index Profile, Refracted Ray Method	RS-455-44
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FOTP-47	Output Far-Field Radiation Pattern Measurement	RS-455-47
FOTP-48	On-Line Diameter Measurement of Optical Waveguides	RS-455-48 <sup>2</sup>
FOTP-49	Procedure to Measure Nuclear Radiation Effects in Fiber Optic Components	RS-455-49 <sup>2</sup>
FOTP-50	Light-Launch Conditions for Long- Length Graded-Index Optical Fiber Spectral Attenuation Measurements	RS-455-50 <sup>2</sup>
FOTP-51	Pulse Distortion Measurement of MultiMode Glass Optical Fiber Information Transmission Capacity	RS-455-51 <sup>2</sup>
FOTP-52	Method for Measuring Temperature Dependence of Attenuation for Optical Waveguide Fibers	RS-455-52 <sup>2</sup>
FOTP-53	Attenuation by Substitution Measurement For Multimode Graded-Index Optical Fibers or Fiber Assemblies Used in Long Length Communications Systems	EIA-455-53
FOTP-54	Mode Scrambler Launch Requirements for Information Transmission Capacity Measurements	RS-455-5 <sup>2</sup>
FOTP-55	Methods for Measuring the Coating Geometry of Optical Fibers	EIA-455-55A
FOTP-56	Test Method for Evaluating Fungus Resistance of Optical Waveguide Fiber	RS-455-56 <sup>2</sup>
FOTP-57	Optical Fiber End Preparation and Examination	EIA-455-57
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PART I: NUMERICAL CONTENTS LIST BY FOTP NUMBER\*

Test Procedure Number	<u>Title</u>	Document
FOTP-59	Fiber and Cable Attenuation and Interconnection Loss via Optical Time-Domain Reflectometry (OTDR)	IP <sup>1</sup>
FOTP-60	Fiber Length by Time-of-Flight Measurement	IP <sup>1</sup>
FOTP-61	Nuclear Thermal Blast Resistance	IP <sup>1</sup>
FOTP-62	Obtical Fiber Macrobend Attenuation	IP <sup>1</sup>
FOTP-63	Torsion Test for Optical Waveguide Fiber	RS-455-63
FOTP-64	Optical Fiber Vibration Test	CANCELLED 1/16/86
FOTP-65	Optical Fiber Flexure Test	$IP^1$
FOTP-66	Test Method for Measuring Relative Abrasion Resistance of Optical Waveguide Coatings and Buffers	RS-455-66
FOTP-67	Self-Sticking (Blocking) Test for Coated Fiber	IP <sup>1</sup>
FOTP-68	Microbend Test Procedure	IP <sup>1</sup>
FOTP-69	Test Procedure for Maximum and Minimum Use Temperature Evaluation of Optical Waveguide Fibers	IP <sup>1</sup>
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FOTP-71	Procedure to Measure Temperature Shock Effects on Fiber Optic Components	IP <sup>1</sup>
FOTP-72	Procedure to Measure Temperature Cycling Effects on Fiber Optic Components	IP <sup>1</sup>
FOTP-73	Procedure to Measure Temperature and Humidity Cycling Effects on Optical Fibers	IP <sup>1</sup>
FOTP-74	Humidity Testing of Fibers	$IP^1$

Test Procedure Number	<u>Title</u>	Document
FOTP-75	Fluid Immersion Test for Optical Waveguide Fibers	EIA-455-75
FOTP-76	Atmospheric Contamination	CANCELLED 6/12/84
FOTP-77	Flammability	CANCELLED 1/30/85
FOTP-78	Spectral Attenuation Cutback Measurement for Single-Mode Optical Fibers	IP <sup>1</sup>
FOTP-79	(Unassigned) (Applicable to Fiber)	
FOTP-80	Cutoff Wavelength of Uncabled Single-Mode Fiber By Transmitted Power	IP <sup>1</sup>
FOTP-81	Compound Flow (Drip) Test for Filled Fiber Optic Cable	EIA-455-81
FOTP-82	Fluid Penetration Test for Filled Fiber Optic Cable	RS-455-5 <sup>2</sup>
FOTP-83	Cable to Interconnecting Device Axial Compressive Loading	RS-455-83 <sup>2</sup>
FOTP-84	Jacket Self-Adhesion (Blocking) Test for Fiber Optic Cable	RS-455-84
FOTP-85	Fiber Optic Cable Twist Test	RS-455-85
FOTP-86	Fiber Optic Cable Jacket Shrinkage	RS-455-86
FOTP-87	Fiber Optic Cable Knot Test	EIA-455-87A
FOTP-88	Fiber Optic Cable Bend Test	$IP^1$
FOTP-89	Fiber Optic Cable Jacket Elongation and Tensile Strength	RS-455-89
FOTP-90	Fiber Optic Cable Jacket Abrasion Test	CANCELLED 1/12/84
FOTP-91	Fiber Optic Cable Twist-Bend Test	EIA-455-91
FOTP-92	Simulated Roadway Survival Test for Fiber Optic Cable	CANCELLED 1/21/82

Test Procedure Number	<u>Title</u>	Document
FOTP-93	Fiber Optic Cable Jacket Porosity	CANCELLED 1/27/83
FOTP-94	Fiber Optic Cable Stuffing Tube Compression	EIA-455-94
FOTP-95	Absolute Optical Power Test for Optical Fibers and Cables	EIA-455-95
FOTP-96	Fiber Optic Cable Storage Temperature/Humidity Test	IP <sup>1</sup>
FOTP-97	Fiber Optic Cable Solar Radiation (Ultraviolet) Resistance Test	CANCELLED 7/10/86
FOTP-98	Fiber Optic Cable External Freezing Test	RS-455-98
FOTP-99	Gas Flame Test for Special Purpose Fiber Optic Cable	RS-455-99
FOTP-100	Gas Leakage Test for Gas-Blocked Fiber Optic Cables	RS-455-100
FOTP-101	Accelerated Oxygen Aging	RS-455-101 <sup>2</sup>
FOTP-102	Water Pressure Cycling	${\tt IP}^1$
FOTP-103	Buffered Fiber Bend Test	RS-455-103 <sup>2</sup>
FOTP-104	Fiber Optic Cable Cyclic Flexing Test	IP <sup>1</sup>
FOTP-105	Marking Durability	CANCELLED 1/12/84
FOTP-106	Fiber Adhesion	CANCELLED 1/12/84
FOTP-107	Return Loss	$IP^1$
FOTP-108	Mud Test	CANCELLED 1/12/84
FOTP-109	Reference Point Temperature	$IP^1$
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FOTP-162		Fiber Optic Cable Temperature-Humidity Cycling	IP <sup>1</sup>

PART I: NUMERICAL CONTENTS LIST BY FOTP NUMBER\*

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FOTP-163	Test Method for Evaluating Fungus Resistance of Fiber Optic Cable	IP <sup>1</sup>
FOTP-164	Single-Mode Fiber, Measurement of Mode Field Diameter by Far-Field Scanning	EIA-455-164
FOTP-165	Single-Mode Fiber, Measurement of Mode Field Diameter by Near-Field Scanning	EIA-455-165
FOTP-166	Single-Mode Fiber, Measurement of Mode Field Diameter by Transverse Offset	EIA-455-166
FOTP-167	Mode Field Diameter Measurement - Variable Aperture Method in the Farfield	IP <sup>1</sup>
FOTP-168	Chromatic Dispersion Measurement of Multimode Graded-Index and Single- Mode Optical Fibers by Spectral Group Delay Measurement in the Time Domain	IP <sup>1</sup>
FOTP-169	Chromatic Dispersion Measurement of Single-Mode Optical Fibers by the Phase-Shift Method	IP <sup>1</sup>
FOTP-170	Cutoff Wavelength of Single-Mode Fiber Cable by Transmitted Power	IP <sup>1</sup>
FOTP-171	Attenuation by Substitution MeasurementFor Short-Length Multimode Graded-Index and Single- Mode Optical Fiber Assemblies	IP <sup>1</sup>
FOTP-172	Flame Resistance of Firewall Connector	EIA-455-172
FOTP 173	(Unassigned) (Applicable to Fiber)	
FOTP-174	Mode Field Diameter of Single-Mode Optical Fiber by Knife-Edge Scanning In the Far Field	IP <sup>1</sup>
FOTP-175	Chromatic Dispersion, Differential Phase Shift	IP <sup>1</sup>

Test Procedure Number	<u>Title</u>	Document
FOTP-176	Measurement Method For Optical Fiber Geometry By Automated Grey- Scale Analysis	IP <sup>1</sup>
FOTP-177 And FOTP-178	(Unassigned) (Applicable to Fiber)	
FOTP-179	Inspection of Cleaved Fiber End Faces by Interferometry	IP <sup>1</sup>

PART II: NUMERIC CONTENTS LIST CLASSIFIED BY APPLICABILITY AND SUB-CLASSIFIED BY TEST TYPE\*

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FOTP-20	Measurement of Change in Optical Transmittance
FOTP-29	Refractive Index Profile Transverse Interference Method
FOTP-30	Frequency Domain Measurement of Multimode Optical Fiber Information Transmission Capacity
FOTP-32	Fiber Optic Circuit Discontinuities
FOTP-43	Output Near-Field Radiation Pattern Measurement of Optical Waveguide Fibers
FOTP-44	Refractive Index Profile, Refracted Ray Method
FOTP-46	Spectral Attenuation Measurement for Long-Length, Graded-Index Optical Fibers
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FOTP-51	Pulse Distortion Measurement of MultiMode Glass Optical Fiber Information Transmission Capacity
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FOTP-54	Mode Scrambler Launch Requirements for Information Transmission Capacity Measurements
FOTP-57	Optical Fiber End Preparation and Examination

<sup>\*</sup>This document is current as of its publication date. It will be updated and revised as necessary.

PART II: NUMERIC CONTENTS LIST CLASSIFIED BY APPLICABILITY AND SUB-CLASSIFIED BY TEST TYPE\*

Test Procedure Number	Title
FOTP-59	Fiber and Cable Attenuation and Interconnection Loss Via Optical Time-Domain Reflectometry (OTDR)
FOTP-78	Spectral Attenuation Cutback Measurement for Single-Mode Optical Fibers
FOTP-80	Cutoff Wavelength of Uncabled Single-Mode Fiber by Transmitted Power
FOTP-95	Absolute Optical Power Test for Optical Fibers and Cables
FOTP-164	Single-Mode Fiber, Measurement of Mode Field Diameter by Far-Field Scanning
FOTP-165	Single-Mode Fiber, Measurement of Mode Field Diameter by Near-Field Scanning
FOTP-166	Single-Mode Fiber, Measurement of Mode Field Diameter by Transverse Offset
FOTP-167	Mode Field Diameter Measurement - Variable Aperture Method in the Farfield
FOTP-168	Chromatic Dispersion Measurement of Multimode Graded-Index and Single-Mode Optical Fibers by Spectral Group Delay Measurement in the Time Domain
FOTP-169	Chromatic Dispersion Measurement of Single-Mode Optical Fibers by the Phase-Shift Method
FOTP-170	Cutoff Wavelength of Single-Mode Fiber Cable by Transmitted Power
FOTP-174	Mode Field Diameter of Single-Mode Optical Fiber by Knife-edge Scanning in the Far Field
FOTP-175	Chromatic Dispersion, Differential Phase Shift
FOTP-179	Inspection of Cleaved Fiber End Faces by Interferometry

est Procedure Number	Title
	2. Physical and Mechanical Tests
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FOTP-28	Method for Measuring Tensile Failure Point of Optical Waveguide Fibers
FOTP-31	Fiber Tensile Proof Test Method
FOTP-45	Microscopic Method for Measuring Fiber Geometry of Optical Waveguide Fibers
FOTP-48	On-Line Diameter Measurement of Optical Waveguides
FOTP-55	Methods for Measuring the Coating Geometry of Optical Fibers
FOTP-58	Core Diameter Measurement of Graded-Index Optical Fibers
FOTP-60	Fiber Length by Time-of-Flight Measurement
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FOTP-63	Torsion Test for Optical Waveguide Fiber
FOTP-64	Optical Fiber Vibration Test
FOTP-65	Optical Fiber Flexure Test
FOTP-66	Test Method for Measuring Relative Abrasion Resustance of Optical Waveguide Coatings and Buffers
FOTP-67	Self-Sticking (Blocking) Test for Coated Fiber
FOTP-68	Microbend Test Procedure
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FOTP-52	Method for Measuring Temperature Dependence of Attenuation for Optical Waveguide Fibers
FOTP-56	Test Method for Evaluating Fungus Resistance of Optical Waveguide Fiber
FOTP-69	Test Procedure for Maximum and Minimum Use Temperature Evaluation of Optical Waveguide Fibers
FOTP-70	Advanced Aging (Temperature) for Optical Fibers
FOTP-71	Procedure to Measure Temperature Shock Effects on Fiber Optic Components
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Test Procedure Number	Title
	B. FIBER OPTIC CABLE AND CABLE ASSEMBLIES TEST PROCEDURES
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FOTP-20	Measurement of Change in Optical Transmittance
FOTP-22	Ambient Light Susceptibility
FOTP-32	Fiber Optic Circuit Discontinuities
FOTP-42	Optical Crosstalk in Fiber Optic Components
FOTP-47	Output Far-Field Radiation Pattern Measurement
FOTP-50	Light-Launch Conditions for Long-Length Graded- Index Optical Fiber Spectral Attenuation Measurements
FOTP-51	Pulse Distortion Measurement of MultiMode Glass Optical Fiber Information Transmission Capacity
FOTP-53	Attenuation by Substitution Measruement For Multimode Graded-Index Optical Fibers or Fiber Assemblies Used in Long Length Communications Systems
FOTP-59	Fiber and Cable Attenuation and Interconnection Loss via Optical Time-Domain Reflectometry (OTDR)
FOTP-95	Absolute Optical Power Test for Optical Fibers and Cables
FOTP-107	Return Loss
FOTP-171	Attenuation by Substitution Measurement For Short-Length Multimode Graded-Index and Singlemode Optical Fiber Assemblies

Test Procedure Number	Title
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FOTP-6	Cable Retention Test Procedure for Fiber Optic Cable Interconnecting Devices
FOTP-11	Vibration Test Procedure for Fiber Optic Connecting Devices
FOTP-13	Visual and Mechanical Inspection of Fibers, Cables, Connectors and/or other Fiber Optic Devices
FOTP-25	Impact Testing of Fiber Optic Cables and Cable Assemblies
FOTP-33	Fiber Optic Cable Tensile Loading and Bending Test
FOTP-36	Twist Test for Fiber Optic Cable Assemblies
FOTP-37	Fiber Optic Cable Bend Test Low and High Temperature
FOTP-38	High Temperature Flexibility Test for Fiber Optic Cable
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FOTP-41	Compressive Loading Resistance of Fiber Optic Cables
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FOTP-83	Cable to Interconnecting Device Axial Compressive Loading
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Test Procedure Number	Title
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FOTP-89	Fiber Optic Cable Jacket Elongation and Tensile Strength
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FOTP-91	Fiber Optic Cable Twist-Bend Test
FOTP-93	Fiber Optic Cable Jacket Porosity
FOTP-94	Fiber Optic Cable Stuffing Tube Compression
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	3. Environmental Tests
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FOTP-16	Salt Spray (Corrosion) Test for Fiber Optic Components
FOTP-18	Acceleration Testing of Fiber Optic Components and Assemblies
FOTP-19	Flowing Gas Simulated Industrial Atmosphere Test
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FOTP-25	Impact Testing of Fiber Optic Cables and Cable Assemblies
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Test Procedure Number	Title
FOTP-49	Procedure to Measure Nuclear Radiation Effects in Fiber Optic Components
FOTP-50	Light Launch Conditions for Long-Length Graded-Index Optical Fiber Spectral Attenuation Measurements
FOTP-52	Method for Measuring Temperature Dependence of Attenuation for Optical Waveguide Fibers
FOTP-61	Nuclear Thermal Blast Resistance
FOTP-71	Procedure to Measure Temperature Shock Effects on Fiber Optic Components
FOTP-72	Procedure to Measure Temperature Cycling Effects on Fiber Optic Components
FOTP-96	Fiber Optic Cable Storage Temperature/Humidity Test
FOTP-97	Fiber Optic Cable Solar Radiation (Ultraviolet) Resistance Test
FOTP-98	Fiber Optic Cable External Freezing Test
FOTP-99	Gas Flame Test for Special Purpose Fiber Optic Cable
FOTP-100	Gas Leakage Test for Gas Blocked Fiber Optic Cable
FOTP-101	Accelerated Oxygen Aging
FOTP-102	Water Pressure Cycling
FOTP-160	Fiber Optic Cable Temperature Shock Test
FOTP-161	Temperature Cycling For Fiber Optic Cable
FOTP-162	Fiber Optic Cable Temperature-Humidity Cycling
FOTP-163	Test Method for Evaluating Fungus Resistance of Fiber Optic Cable

Test Procedure Number	Title
	C. FIBER OPTIC CONNECTOR AND SPLICE TEST PROCEDURES
	1. Optical Tests
FOTP-9	Test Procedure for Fiber Optics Bundle Connector Insertion Loss
FOTP-20	Measurement of Change in Optical Transmittance
FOTP-22	Ambient Light Susceptibility
FOTP-34	Interconnection Device Insertion Loss Test
FOTP-42	Optical Crosstalk in Fiber Optic Components
FOTP-171	Attenuation By Substitution Measurement For Short-Length Multimode Graded-Index and Singlemode Optical Fiber Assemblies
	2. Physical and Mechanical Tests
FOTP-1	Cable Flexing for Fiber Optic Connectors
FOTP-2	Impact Test Measurements for Fiber Optic Devices
FOTP-6	Cable Retention Test Procedures for Fiber Optic Cable Interconnecting Devices
FOTP-11	Vibration Test Procedure for Fiber Optic Connecting Devices
FOTP-13	Visual and Mechanical Inspection of Fibers, Cables, Connectors and/or other Fiber Optic Devices
FOTP-36	Twist Test for Fiber Optic Cable Assemblies
FOTP-83	Cable to Interconnecting Device Axial Compressive Loading
	3. Environmental Tests
FOTP-3	Temperature Cycling of Fiber Optic Connectors (Thermal Shock)
FOTP-4	Fiber Optic Connector/Component Temperature Life

st Procedure Number	Title
FOTP-5	Humidity Test Procedure for Fiber Optic Connecting Devices
FOTP-7	Flammability Testing of Optical Fiber Components
FOTP-12	Fluid Immersion Test Procedure for Fiber Optic Connecting Devices
FOTP-14	Fiber Optic Shock Test (Specified Pulse)
FOTP-15	Altitude Immersion
FOTP-16	Salt Spray (Corrosion) Test for Fiber Optic Components
FOTP-17	Maintenance Aging
FOTP-18	Acceleration Testing of Fiber Optic Components and Assemblies
FOTP-19	Flowing Gas Simulated Industrial Atmosphere Test
FOTP-21	Mating Durability For Fiber Optic Interconnecting Devices
FOTP-26	Crush Resistance of Fiber Optic Cable Interconnecting Devices
FOTP-35	Fiber Optic Connector Dust (Fine Sand) Test
FOTP-49	Procedure to Measure Nuclear Radiation Effects in Fiber Optic Components
FOTP-71	Procedure to Measure Temperature Shock Effects on Fiber Optic Components
FOTP-72	Procedure to Measure Temperature Cycling Effects on Fiber Optic Components
FOTP-108	Mud Test
FOTP-172	Flame Resistance of Firewall Connector

Test Procedure Number	Title
	D. FIBER OPTIC TRANSDUCER TEST PROCEDURES
	1. Optical Tests
FOTP-42	Optical Crosstalk in Fiber Optic Components
FOTP-117	Optical Output Power
FOTP-118	Output Propagation Delay
FOTP-119	Optical Sensitivity and Dynamic Range
FOTP-120	Optical Output Power
FOTP-121	Output Propagation Delay
FOTP-122	Effective Optical Responsivity and RMS Output Noise Voltage
FOTP-125	Detector Numerical Aperture
	2. Physical and Mechanical Tests
FOTP-13	Visual and Mechanical Inspection of Fibers, Cables, Connectors and/or other Fiber Optic Devices
FOTP-109	Reference Point Temperature
	3. Environmental Tests
FOTP-16	Salt Spray (Corrosion)Test For Fiber Optic Components
FOTP-49	Procedure to Measure Nuclear Radiation Effects in Fiber Optic Components
FOTP-71	Procedure to Measure Temperature Shock Effects on Fiber Optic Components
FOTP-72	Procedure to Measure Temperature Cycling Effects on Fiber Optic Components

Test Procedure Number	Title
	4. Other Tests
FOTP-110	Verification of Type of Fiber Optic Transmitter
FOTP-111	Verification of Type of Fiber Optic Receiver
FOTP-112	Power Supply Current(s)
FOTP-113	Digital F.O. Terminal Devices General Measurement Requirements
FOTP-114	Data Input Current(s)
FOTP-115	Control Input Current(s) or Voltages
FOTP-116	Data Output Voltage(s) or Current(s)
FOTP-123	Output Voltage and Switching Times
FOTP-124	Dark Current(s)
FOTP-126	Modulation Factor and/or Index

Test Procedure Number	Title
	E. FIBER OPTIC BRANCHING DEVICE TEST PROCEDURES
	1. Optical Tests
FOTP-42	Optical Crosstalk in Fiber Optic Components
	2. Physical and Mechanical Tests
FOTP-13	Visual and Mechanical Inspection of Fibers, Cables, Connectors and/or other Fiber Optic Devices
	3. Environmental Tests
FOTP-16	Salt Spray (Corrosion) Test for Fiber Optic Components
FOTP-49	Procedure to Measure Nuclear Radiation Effects in Fiber Optic Components
FOTP-71	Procedure to Measure Temperature Shock Effects on Fiber Optic Components
FOTP-72	Procedure to Measure Temperature Cycling Effects on Fiber Optic Components

# LIST OF FIBER OPTIC TEST PROCEDURES PART III: ALPHABETIC INDEX BY TITLE KEY WORDS\*

Test Procedure Number	Title
Air	
FOTP-23	Air Leakage Testing of Fiber Optic Seals
Abrasion	
FOTP-66	Test Method for Measuring Relative Abrasive Resistance of Optical Waveguide Coatings and Buffers
FOTP-90	Fiber Optic Cable Jacket Abrasion Test
Absolute Optical Po	<u>wer</u>
FOTP-95	Absolute Optical Power Test for Optical Fibers and Cables
Accelerated	
FOTP-10.1	Accelerated Oxygen Aging
Acceleration	
FOTP-18	Acceleration Testing of Fiber Optic Components and Assemblies
Acceptance Pattern	
FOTP-10	Acceptance Pattern Measurement for Fiber Optic Devices
Adhesion	
FOTP-84	Jacket Self-Adhesion (Blocking) Test for Fiber Optic Cable
FOTP-106	Fiber Adhesion
Advanced	
FOTP-70	Advanced Aging (Temperature) for Optical Fibers

<sup>\*</sup> This document is current as of its publication date. It will be updated and revised as necessary.

Test Procedure Number	Title
Aging	
FOTP-17	Maintenance Aging
FOTP-70	Advanced Aging (Temperature) for Optical Fibers
FOTP-101	Accelerated Oxygen Aging
Altitude	
FOTP-15	Altitude Immersion
Ambient	
FOTP-22	Ambient Light Susceptibility
	See also Para. 4, Standard Atmospheric Conditions," appearing on Page 2 of RS-455
<u>Aperture</u>	
FOTP-125	Detector Numerical Aperture
FOTP-167	Mode Field Diameter Measurement - Variable Aperture in Far-Field
Atmosphere or Atm	mospheric
FOTP-76	Atmospheric Contamination
Attenuation	
FOTP-46	Spectral Attenuation Measurement for Long-Length, Graded-Index Optical Fibers
FOTP-50	Light Launch Conditions for Long-Length Graded-Index Optical Fiber Spectral Attenuation Measurements
FOTP-52	Method for Measuring Temperature Dependence of Attenuation for Optical Waveguide Fibers
FOTP-53	Attenuation by Substitution Measurment - For Multimode Graded-Index Optical Fibers or Fiber Assemblies Used in Long Length Communications Systems

Test Procedure Number	Title
Attenuation (Conti	nued)
FOTP-59	Fiber and Cable Attenuation and Interconnection Loss via Optical Time-Domain Reflectometry (OTDR)
FOTP-62	Optical Fiber Macrobend Attenuation
FOTP-78	Speectral Attenuation Cutback Measurement for Single-Mode Optical Fibers
FOTP-171	Attenuation By Substitution Measurement For Short-Length Multimode Graded-Index and Singlemode Optical Fiber Assemblies.
Assembly or Assemb	lies
	Refer to FOTP List, Part II, Fiber Optic Cable and Cable Assemblies Test Procedures
Axial	
FOTP-83	Cable to Interconnecting Device Axial Compressive Loading
Bend or Bending	
FOTP-33	Fiber Optic Cable Tensile Loading and Bending Test
FOTP-37	Fiber Optic Cable Bend Test
FOTP-62	Optical Fiber Macrobend Attenuation
FOTP-88	Fiber Optic Cable Bend Test
FOTP-91	Fiber Optic Cable Twist-Bend Test
FOTP-103	Buffered Fiber Bend Test
Blocked	
FOTP-100	Gas Leakage Test for Gas-Blocked Fiber Optic Cables
Blocking	
FOTP-67	Self-Sticking (Blocking) Test for Coated Fiber
FOTP-84	Jacket Self-Adhesion (Blocking) Test for Fiber Optic Cable

Test Procedure Number	Title
Buffer(s)	
FOTP-66	Test Method for Measuring Relative Abrasion Resistance of Optical Waveguide Coatings and Buffers
Buffered Fiber	
FOTP-103	Buffered Fiber Bend Test
Bundle	
FOTP-9	Test Procedure for Fiber Optics Bundle Connector Insertion Loss
<pre>Cable(s)</pre>	
	Refer to FOTP List, Part II, Fiber Optic Cable and Cable Assemblies Test Procedures
Change	
FOTP-20	Measurement of Change in Optical Transmittance
Chromatic	
FOTP-168	Chromatic Dispersion Measurement of Multimode Graded-Index and Single-Mode Optical Fibers by Spectral Group Delay Measurement in the Time Domain
FOTP-169	Chromatic Dispersion Measurement of Single-mode Optical Fibers by the Phase-Shift Method
FOTP-175	Chromatic Dispersion, Differential Phase Shift
Circuit	
FOTP-32	Fiber Optic Circuit Discontinuities
Coated or Coating(s	<u>s)</u>
FOTP-55	Methods for Measuring the Coating Geometry of Optical Fibers
FOTP-66	Test Method for Measuring Relative Abrasion Resistance of Optical Waveguide Coatings and Buffers

Test Procedure Number	Title
Compound	
FOTP-81	Compound Flow (Drip) Test for Filled Fiber Optic Cable
Compression	
FOTP-94	Fiber Optic Cable Stuffing Tube Compression
Compressive	
FOTP-41	Compressive Loading Resistance of Fiber Optic Cables
FOTP-83	Cable to Interconnecting Device Axial Compressive Loading
Connector(s)	
	Refer to FOTP List, Part II, Fiber Optic Connector and Splice Test Procedures
Connecting Devices	
· :	Refer to FOTP List, Part II, Fiber Optic Connector and Splice Test Procedures
Contamination	
FOTP-76	Atmospheric Contamination
Control	
FOTP-115	Control Input Current(s) or Voltages
Core	
FOTP-58	Core Diameter Measurement of Graded-Index Optical Fibers
Corrosion	
FOTP-16	Salt Spray (Corrosion) Test for Fiber Optic Components
Crosstalk	
FOTP-42	Optical Crosstalk in Fiber Optic Components

Test Procedure Number	Title
Crush	
FOTP-26	Crush Resistance of Fiber Optic Interconnecting Devices
<pre>Current(s)</pre>	
FOTP-112	Power Supply Current(s)
FOTP-114	Data Input Current(s)
FOTP-115	Control Input Current(s) or Voltages
FOTP-116	Data Output Voltage(s) or Current(s)
FOTP-124	Dark Current(s)
Cutback	
FOTP-78	Spectral Attenuation Cutback Measurement for Single-Mode Optical Fibers
Cutoff	<b>5211,020</b> 110222 <b>1</b>
FOTP-80	Cutoff Wavelength of Uncabled Single-Mode Fiber By Transmitted Power
FOTP-170	Cutoff Wavelength of Single-Mode Fiber Cable by Transmitted Power
Cyclic	
FOTP-104	Fiber Optic Cable Cyclic Flexing Test
Cycling	
FOTP-3	Temperature Cycling of Fiber Optic Connectors
FOTP-72	Procedure to Measure Temperature Cycling Effects on Fiber Optic Components
FOTP-73	Procedure to Measure Temperature and Humidity Cycling Effects on Optical Fiber
FOTP-102	Water Pressure Cycling
FOTP-161	Temperature Cycling for Fiber Optic Cable
FOTP-162	Fiber Optic Cable Temperature-Humidity Cycling

Test Procedure Number	Title
<u>Data</u>	
FOTP-114	Data Input Current(s)
FOTP-116	Data Output Voltage(s) or Current(s)
<u>Dark</u>	
FOTP-124	Dark Current(s)
Dependence	
FOTP-52	Method for Measuring Temperature Dependence of Attenuation for Optical Waveguide Fibers
Detector	
FOTP-125	Detector Numerical Aperture
<pre>Device(s)</pre>	
FOTP-5	Humidity Test Procedure for Fiber Optic Connecting Devices
FOTP-6	Cable Retention Test Procedure for Fiber Optic Cable Interconnecting Devices
FOTP-10	Acceptance Pattern Measurement for Fiber Optic Devices
FOTP-11	Vibration Test Procedure for Fiber Optic Connecting Devices
FOTP-12	Fluid Immersion Test Procedure for Fiber Optic Connecting Devices
FOTP-13	Visual and Mechanical Inspection of Fibers, Cables, Connectors and/or other Fiber Optic Devices
FOTP-34	Interconnection Device Insertion Loss Test
FOTP-113	Digital F.O. Terminal Devices General Measurement Requirements
<u>Diameter</u>	
FOTP-27	Methods for Measuring Outside (Uncoated) Diameter of Optical Waveguide Fibers
FOTP-48	On-Line Diameter Measurement of Optical Waveguides

Test Procedure Number	Title
Diameter (Continu	ned)
FOTP-58	Core Diameter Measurement of Graded Index Optical Fibers
FOTP-164	Single-Mode Fiber, Measurement of Mode Field Diameter by Far-Field Scanning
FOTP-165	Single-Mode Fiber, Measurement of Mode Field Diameter by Near-Field Scanning
FOTP-166	Single-Mode Fiber, Measurement of Mode Field Diameter by Transverse Offset
FOTP-167	Mode Field Diameter Measurement - Variable Aperture Method in the Farfield
FOTP-174	Mode Field Diameter of Single-Mode Optical Fiber by Knife-edge Scanning in the Far Field
<u>Digital</u>	
FOTP-113	Digital F.O. Terminal Devices General Measurement Requirements
<u>Discontinuities</u>	
FOTP-32	Fiber Optic Circuit Discontinuities
Dispersion	
FOTP-168	Chromatic Dispersion Measurement of Multimode Graded-Index and Single-Mode Optical Fibers by Spectral Group Delay Measurement in the Time Domain
FOTP-169	Chromatic Dispersion Measurement of Single-Mode Optical Fibers by the Phase-Shift Method
FOTP-175	Chromatic Dispersion, Differential Phase Shift
Distortion	
FOTP-51	Pulse Distortion Measurement of MultiMode Glass Optical Fiber Information Transmission Capacity

Test Procedure Number	Title
Domain	
FOTP-30	Frequency Domain Measurement of Multimode Optical Fiber Information Transmission Capacity
FOTP-168	Chromatic Dispersion Measurement of Multimode Graded-Index and Singlemode Optical Fibers by Spectral Group Delay Measurment in the Time Domain
Drip	
FOTP-81	Compound Flow (Drip) Test for Filled Fiber Optic Cable
Durability	
FOTP-21	Mating Durability for Fiber Optic Interconnecting Devices
FOTP-105	Marking Durability
Dust	
FOTP-35	Fiber Optic Connector Dust (Fine Sand) Test
Dynamic Range	4
FOTP-119	Optical Sensitivity and Dynamic Range
Elongation	
FOTP-89	Fiber Optic Cable Jacket Elongation and Tensile Strength
<u>End</u>	
FOTP-57	Optical Fiber End Preparation
FOTP-179	Inspection of Cleaved Fiber End Faces by Interferometry
External	
FOTP-98	Fiber Optic Cable External Freezing Test
Factor	
FOTP-126	Modulation Factor and/or Index

Test Procedure Number	Title
<u>Failure</u>	
FOTP-28	Method for Measuring Tensile Failure Point of Optical Waveguide Fibers
Far-Field	
FOTP-47	Output Far-Field Radiation Pattern Measurement
FOTP-164	Single-Mode Fiber, Measurement of Mode Field Diameter by Far-Field Scanning
FOTP-167	Mode Field Diameter Measurement - Variable Aperture Method in Far Field
FOTP-174	Mode Field Diameter of Single-Mode Optical Fiber by Knife-edge Scanning in the Far Field
Fiber(s)	
	Refer to FOTP List, Part II-A, Optical Fiber Test Procedures
<u>Filled</u>	
FOTP-81	Compound Flow (Drip) Test for Filled Fiber Optic Cable
FOTP-82	Fluid Penetration Test for Filled Fiber Optic Cable
<u>Firewall</u>	
FOTP-172	Flame Resistance of Firewall Connector
Flame	
FOTP-99	Gas Flame Test for Special Purpose Fiber Optic Cable
FOTP-172	Flame Resistance of Firewall Connector
Flammability	
FOTP-7	Flammability Testing of Optical Fiber Components
FOTP-77	Flammability

Test Procedure Number	Title
Flexing	
FOTP-1	Cable Flexing for Fiber Optic Connectors
FOTP-104	Fiber Optic Cable Cyclic Flexing Test
<u>Flexure</u>	
FOTP-65	Optical Fiber Flexure Test
Flow(ing)	·
FOTP-19	Flowing Gas Simulated Industrial Atmosphere Test
FOTP-81.	Compound Flow (Drip) Test for Filled Fiber Optic Cable
Fluid	
FOTP-12	Fluid Immersion Test Procedure for Fiber Optic Connecting Devices
FOTP-40	Fluid Immersion Test for Fiber Optic Cable
FOTP-75	Fluid Immersion Test for Optical Waveguide Fibers
FOTP-82	Fluid Penetration Test for Filled Fiber Optic Cable
Freezing	
FOTP-98	Fiber Optic Cable External Freezing Test
Frequency	
FOTP-30	Frequency Domain Measurement of Multimode Optical Fiber Information Transmission Capacity
<u>Fungus</u>	
FOTP-56	Test Method for Evaluating Fungus Resistance of Optical Waveguide Fiber
FOTP-163	Test Method for Evaluating Fungus Resistance of Fiber Optic Cable

Test Procedure Number	Title
Gas	
FOTP-19	Flowing Gas Simulated Industrial Atmosphere Test
FOTP-99	Gas Flame Test for Special Purpose Fiber Optic Cable
FOTP-100	Gas Leakage Test for Gas-Blocked Fiber Optic Cables
Gas Flame	
FOTP-99	Gas Flame Test for Special Purpose Fiber Optic Cable
Gas Leakage	
FOTP-100	Gas Leakage Test for Gas-Blocked Fiber Optic Cables
<u>Geometry</u>	
FOTP-45	Microscopic Method for Measuring Fiber Geometry of Optical Waveguide Fibers
FOTP-55	Methods for Measuring the Coating Geometry of Optical Fibers
FOTP-176	Measurement Method For Optical Fiber Geometry By Automated Grey-Scale Analysis
Graded-Index	
FOTP-46	Spectral Attenuation Measurement for Long-Length, Graded-Index Optical Fibers
FOTP-50	Light Launch Conditions for Long-Length Graded-Index Optical Fiber Spectral Attenuation Measurements
FOTP-53	Attenuation by Substitution Measurement - For Multimode Graded-Index Optical Fibers or Fiber Assemblies used in Long Length Communications Systems
FOTP-58	Core Diameter Measurement of Graded Index Optical Fibers
FOTP-168	Chromatic Dispersion Measurement of Multimode Graded-Index and Single-Mode Fibers by Spectral Group Delay Measurement in the Time Domain
FOTP-171	Attenuation By Substitution Measurement For Short-Length Multimode Graded-Index And Singlemode Optical Fiber Assemblies

Test Procedure Number	Title
High	
FOTP-37	Fiber Optic Cable Bend Test Low and High Temperature
FOTP-38	High Temperature Flexibility Test for Fiber Optic Cable
Humidity	
FOTP-5	Humidity Test Procedure for Fiber Optic Connecting Devices
FOTP-73	Procedure to Measure Temperature and Humidity Cycling Effects on Optical Fiber
FOTP-74	Humidity
FOTP-96	Fiber Optic Cable Storage Temperature/Humidity Test
FOTP-162	Fiber Optic Cable Temperature-Humidity Cycling
Immersion	•
FOTP-12	Fluid Immersion Test Procedure for Fiber Optic Connecting Devices
FOTP-15	Altitude Immersion
FOTP-40	Fluid Immersion Test for Fiber Optic Cable
FOTP-75	Fluid Immersion Test for Optical Waveguide Fibers
Impact	
FOTP-2	Impact Test Measurements for Fiber Optic Devices
FOTP-25	Impact Testing of Fiber Optic Cables and Cable Assemblies
<u>Index</u>	Assemblies
FOTP-126	Modulation Factor and/or Index
Industrial Atmosp	<u>here</u>
FOTP-19	Flowing Gas Simulated Industrial Atmosphere Test

Test Procedure Number	Title
Information Trans	mission Capacity
FOTP-30	Frequency Domain Measurement of Multimode Optical Fiber Information Transmission Capacity
FOTP-51	Pulse Distortion Measurement of MultiMode Glass Optical Fiber Information Transmission Capacity
FOTP-54	Mode Scrambler Launch Requirements for Information Transmission Capacity Measurements
Input	
FOTP-114	Data Input Current(s)
FOTP-115	Control Input Current(s) or Voltages
Insertion Loss	
FOTP-9	Test Procedure for Fiber Optics Bundle Connector Insertion Loss
FOTP-34	Interconnection Device Insertion Loss Test
Inspection	
FOTP-13	Visual and Mechanical Inspection of Fibers, Cables, Connectors and/or other Fiber Optic Devices
FOTP-179	Inspection of Cleaved Fiber End Faces by Interferometry
Interconnecting o	r Interconnection Device(s)
	(See "Connecting Devices" or "Connectors")
Interferometry	
FOTP-179	Inspection of Cleaved Fiber End Faces by Interferometry
<u>Jacket</u>	Intellelometry
FOTP-84	Jacket Self-Adhesion (Blocking) Test for Fiber Optic Cable
FOTP-86	Fiber Optic Cable Jacket Shrinkage
FOTP-89	Fiber Optic Cable Jacket Elongation and Tensile Strength

Test Procedure Number	Title
Jacket (Continued)	•
FOTP-90	Fiber Optic Cable Jacket Abrasion Test
FOTP-93	Fiber Optic Cable Jacket Porosity
Knife-Edge	
FOTP-174	Mode Field Diameter of Single-Mode Optical Fiber by Knife-Edge Scanning in the Far Field
Knot	
FOTP-87	Fiber Optic Cable Knot Test
Launch	
FOTP-50	Light Launch Conditions for Long-Length Graded-Index Optical Fiber Spectral Attenuation Measurements
FOTP-54	Mode Scrambler Launch Requirements for Information Transmission Capacity Measurements
Leakage	
FOTP-23	Air Leakage Testing of Fiber Optic Component Seals
FOTP-100	Gas Leakage Test for Gas-Blocked Fiber Optic Cables
Length	
FOTP-46	Spectral Attenuation Measurement for Long-Length, Graded-Index Optical Fibers
FOTP-50	Light Launch Conditions for Long-Length Graded-Index Optical Fiber Spectral Attenuation Measurements
FOTP-53	Attenuation by Substitution Measurement - For Multimode Graded-Index Optical Fibers or Fiber Assemblies Used in Long Length Communications Systems
FOTP-60	Fiber Length by Time-of-Flight Measurement
Light	
FOTP-22	Ambient Light Susceptibility
FOTP-50	Light Launch Conditions for Long-Length Graded-Index Optical Fiber Spectral Attenuation Measurements

Test Procedure Number	Title
<u>Life</u>	
FOTP-4	Fiber Optic Connector/Component Temperature Life
Loading	
FOTP-33	Fiber Optic Cable Tensile Loading and Bending Test
FOTP-41	Compressive Loading Resistance of Fiber Optic Cables
FOTP-83	Cable to Interconnecting Device Axial Compressive Loading
Long Length(s)	
FOTP-46	Spectral Attenuation Measurement for Long-Length, Graded-Index Optical Fibers
FOTP-50	Light Launch Conditions for Long-Length Graded-Index Optical Fiber Spectral Attenuation Measurements
FOTP-53	Attenuation By Substitution Measurement - For Multimode Graded-Index Optical Fibers or Fiber Assemblies Used in Long Length Communications Systems
Loss	
FOTP-34	Interconnection Device Insertion Loss Test
FOTP-59	Fiber and Cable Attenuation and Interconnection Loss via Optical Time-Domain Reflectometry (OTDR)
FOTP-107	Return Loss
Low	
FOTP-37	Fiber Optic Cable Bend Test Low and High Temperature
Mating	
FOTP-21	Mating Durability For Fiber Optic Interconnecting Devices
<u>Maintenance</u>	•
FOTP-17	Maintenance Aging
Marking	
FOTP-105	Marking Durability

Test ProcedureNumber	Title
Maximum	
FOTP-69	Test Procedure for Maximum and Minimum Use Temperature Evaluatin of Optical Waveguide Fibers
Mechanical	
FOTP-13	Visual and Mechanical Inspection of Fibers, Cables, Connectors and/or other Fiber Optic Devices
Microbend or Micr	obending
FOTP-68	Microbend Test Procedure
Microscopic	
FOTP-45	Microscopic Method for Measuring Fiber Geometry of Optical Waveguide Fibers
Minimum	
FOTP-69	Test Procedure for Maximum and Minimum Use Temperature Evaluation of Optical Waveguide Fibers
Mode Field	
FOTP-164	Single-Mode Fiber, Measurement of Mode Field Diameter by Far-Field Scanning
FOTP-165	Single-Mode Fiber, Measurement of Mode Field Diameter by Near-Field Scanning
FOTP-166	Single-Mode Fiber, Measurement of Mode Field Diameter by Far-Field Scanning
FOTP-167	Mode Field Diameter Measurement - Variable Aperture Method in the Farfield
FOTP-174	Mode Field Diameter of Single-Mode Optical Fiber by Knife-edge Scanning in the Far Field
Mode Scrambler	
FOTP-54	Mode Scrambler Launch Requirements for Information Transmission Capacity Measurements
Modulation	
FOTP-126	Modulation Factor and/or Index

Test Procedure Number	Title	
Mud		
FOTP-108	Mud Test	
<u>Multimode</u>		
FOTP-30	Frequency Domain Measurement of Multimode Optical Fiber Information Transmission Capacity	
FOTP-51	Pulse Distortion Measurement of Multimode Glass Optical Fiber Information Transmission Capacity	
FOTP-53	Attenuation by Substitution Measurement - For Multimode Graded-Index Optical Fibers or Fiber Assemblies Used in Long Length Communications Systems	
FOTP-168	Chromatic Dispersion Measurement of Multimode Graded-Index and Single-Mode Optical Fibers by Spectral Group Delay Measurement in the Time Domain	
FOTP-171	Attenuation By Substitution Measurement For Short-Length MultiMode Graded-Index And Singlemode Optical Fiber Assemblies	
Near-Field		
FOTP-43	Output Near-Field Radiation Pattern Measurement of Optical Waveguide Fibers	
FOTP-165	Single-Mode Fiber, Measurement of Mode Field Diameter By Near-Field Scanning	
Noise		
FOTP-122	Effective Optical Responsivity and RMS Output Noise Voltage	
Nuclear Radiation		
FOTP-49	Procedure to Measure Nuclear Radiation Effects in Fiber Optic Components	
Nuclear Thermal Blast		
FOTP-61	Nuclear Thermal Blast Resistance	
Numerical Aperture		
FOTP-125	Detector Numerical Aperture	

Test Procedure Number	Title
On-Line	
FOTP-48	On-Line Diameter Measurement of Optical Waveguides
Optical Optical	
FOTP-20	Measurement of Change in Optical Transmittance
FOTP-42	Optical Crosstalk in Fiber Optic Components
FOTP-59	Fiber and Cable Attenuation and Interconnection Loss Via Optical Time-Domain Reflectometry (OTDR)
	Refer to FOTP List, Part II-A, Optical Fiber Test Procedures
Output	
FOTP-43	Output Near-Field Radiation Pattern Measurement of Optical Waveguide Fibers
FOTP-47	Output Far-Field Radiation Pattern Measurement
FOTP-116	Data Output Voltage(s) or Current(s)
FOTP-117	Optical Output Power
FOTP-118	Output Propagation Delay
FOTP-120	Optical Output Power
FOTP-121	Output Propagation Delay
FOTP-122	Effective Optical Responsivity and RMS Output Noise Voltage
FOTP-123	Output Voltage and Switching Times
0xygen	
FOTP-101	Accelerated Oxygen Aging
Penetration	
FOTP-82	Fluid Penetration Test for Filled Fiber Optic Cable

Test Procedure Number	Title
Phase-Shift	
FOTP-169	Chromatic Dispersion Measurement of Single-Mode Optical Fiber by the Phase-Shift Method
FOTP-175	Chromatic Dispersion, Differential Phase Shift
Porosity	
FOTP-93	Fiber Optic Cable Jacket Porosity
Power	
FOTP-8	Radiant Power Measurements
FOTP-24	Relative Power Measurements
FOTP-80	Cutoff Wavelength of Uncabled Single-Mode Fiber By Transmitted Power
FOTP-95	Absolute Optical Power Test for Optical Fibers and Cables
FOTP-112	Power Supply Current(s)
FOTP-117	Optical Output Power
FOTP-120	Optical Output Power
FOTP-170	Cutoff Wavelength of Single-Mode Fiber Cable by Tramsmitted Power
Power Supply	
FOTP-112	Power Supply Current(s)
Preparation	
FOTP-57	Optical Fiber End Preparation and Examination
Pressure	
FOTP-102	Water Pressure Cycling

PART III: ALPHABETIC INDEX BY TITLE KEY WORDS\*

Test Procedure Number	Title
Profile	
FOTP-29	Refractive Index Profile Transverse Interference Method
FOTP-44	Refractive Index Profile, Refracted Ray Method
FOTP-58	Core Diameter Measurement of Graded-Index Optical Fibers
Proof	
FOTP-31	Fiber Tensile Proof Test Method
Propagation Delay	
FOTP-118	Output Propagation Delay
FOTP-121	Output Propagation Delay
Pulse	
FOTP-14	Fiber Optic Shock Test (Specified Pulse)
FOTP-51	Pulse Distortion Measurement of Multimode Glass Optical Fiber Information Transmission Capacity
Radiation	
FOTP-43	Output Near-Field Radiation Pattern Measurement of Optical Waveguide Fibers
FOTP-49	Procedure to Measure Nuclear Radiation Effects in Fiber Optic Components
FOTP-97	Fiber Optic Cable Solar Radiation (Ultra Violet) Resistance Test
Radiant Power	
FOTP-8	Radiant Power Measurements
Radiation Pattern	
FOTP-43	Output Near-Field Radiation Pattern Measurement of Optical Waveguide Fibers
FOTP-47	Output Far-Field Radiation Pattern Measurement

Test Procedure Number	Title					
Receiver						
FOTP-111	Verification of Type of Fiber Optic Receiver					
Reference Point						
FOTP-109	Reference Point Temperature					
Reflectometry						
FOTP-59	Fiber and Cable Attenuation and Interconnection Loss Via Optical Time-Domain Reflectometry (OTDR)					
Refractive Index/R	efractive Index Profile					
FOTP-29	Refractive Index Profile Transverse Interference Method					
FOTP-44	Refractive Index Profile, Refracted Ray Method					
Relative Power						
FOTP-24	Relative Power Measurements					
Retention						
FOTP-6	Cable Retention Test Procedure for Fiber Optic Cable Interconnecting Devices					
Return Loss						
FOTP-107	Return Loss					
Resistance						
FOTP-26	Crush Resistance of Fiber Optic Interconnecting Devices					
FOTP-41	Compressive Loading Resistance of Fiber Optic Cables					
FOTP-56	Test Method for Evaluating Fungus Resistance of Optical Waveguide Fiber					
FOTP-61	Nuclear Thermal Blast Resistance					
FOTP-66	Test Method for Measuring Relative Abrasion Resistance of Optical Waveguide Coatings and Buffers					

Test Procedure Number	Title
Resistance (Contin	nued)
FOTP-97	Fiber Optic Cable Solar Radiation (Ultra Violet) Resistance Test
FOTP-163	Test Method for Evaluating Fungus Resistance of Fiber Optic Cable
Responsivity	
FOTP-122	Effective Optical Responsivity and RMS Output Noise Voltage
Roadway	
FOTP-92	Simulated Roadway Survival Test forFiber Optic Cable
<u>Salt</u>	
FOTP-16	Salt Spray (Corrosion) Test for Fiber Optic
Sand	
FOTP-35	Fiber Optic Connector Dust (Fine Sand) Test
Scanning	
FOTP-164	Single-Mode Fiber, Measurement of Mode Field Diameter by Far-Field Scanning
FOTP-165	Single-Mode Fiber, Measurement of Mode Field Diameter by Near-Field Scanning
FOTP-174	Mode Field Diameter of Single-Mode Optical Fiber by Knife-edge Scanning
<u>Sensitivity</u>	
FOTP-119	Optical Sensitivity and Dynamic Range

Test Procedure Number	Title				
Shock					
FOTP-3	Temperature Cycling of Fiber Optic Connectors (Thermal Shock)				
FOTP-14	Shock (Specified Pulse)				
FOTP-71	Procedure to Measure Temperature Shock Effects on Fiber Optic Components				
FOTP-160	Fiber Optic Cable Temperature Shock Test				
Short Length(s)					
FOTP-171	Attenuation By Substitution Measurement For Short-Length Multimode Graded-Index And Singlemode Optical Fiber Assemblies				
Shrinkage					
FOTP-86	Fiber Optic Cable Jacket Shrinkage				
<u>Simulated</u>					
FOTP-92	Simulated Roadway Survival Test for Fiber Optic Cable				
Single Mode					
FOTP-78	Spectral Attenuation Cutback Measurement for Single-Mode Optical Fibers				
FOTP-80	Cutoff Wavelength of Uncabled Single-Mode Fiber By Transmitted Power				
FOTP-164	Single-Mode Fiber, Measurement of Mode Field Diameter by Far-Field Scanning				
FOTP-165	Single-Mode Fiber, Measurement of Mode Field Diameter by Near-Field Scanning				
FOTP-166	Single-Mode Fiber, Measurement of Mode Field Diameter by Transverse Offset				
FOTP-168	Chromatic Dispersion Measurement of Multimode Graded-Index and Single-Mode Optical Fibers by Spectral Group Delay Measurement in the Time Domain				
FOTP-169	Chromatic Dispersion Measurement of Single-Mode Optical Fibers by the Phase-Shift Method				

Test Procedure Number	Title			
Single Mode (Con	tinued)			
FOTP-170	Cutoff Wavelength of Single-Mode Fiber Cable by Transmitted Power			
FOTP-171	Attenuation By Substitution MeasurementFor Short-Length Multimode Graded-Index And Singlemode Optical Fiber Assemblies			
FOTP-174	Mode Field Diameter of Single-Mode Optical Fiber by Knife-edge Scanning			
Solar				
FOTP-97	Fiber Optic Cable Solar Radiation (Ultraviolet) Resistance Test			
<u>Spectral</u>	ACCIDENT 1000			
FOTP-46	Spectral Attenuation Measurement for Long-Length, Graded-Index Optical Fibers			
FOTP-50	Light Launch Conditions for Long-Length Graded-Index Optical Fiber Spectral Attenuation Measurements			
FOTP-78	Spectral Attenuation Cutback Measurement for Single-Mode Optical Fibers			
FOTP-168	Chromatic Dispersion Measurement of Multimode Graded-Index and Single-Mode Optical Fibers by			
Spray	Spectral Group Delay Measurement in the Time Domain			
FOTP-16	Salt Spray (Corrosion) Test for Fiber Optic Components			
Storage				
FOTP-96	Fiber Optic Cable Storage Temperature/Humidity Test			
Strength				
FOTP-89	Fiber Optic Cable Jacket Elongation and Tensile Strength			
Stuffing Tube				
FOTP-94	Fiber Optic Cable Stuffing Tube Compression			

Test Procedure Number	Title			
Substitution				
FOTP-53	Attenuation by Substitution Measurement - For Multimode Graded-Index Optical Fibers of Fiber Assemblies Used in Long Length Communications Systems			
FOTP-171	Attenuation By Substitution Measurement For Short-Length Multimode Graded-Index And Singlemode Optical Fiber Assemblies			
Survival				
FOTP-92	Simulated Roadway Survival Test for Fiber Optic Cable			
Susceptibility				
FOTP-22	Ambient Light Susceptibility			
Switching	·			
FOTP-123	Output Voltage and Switching Times			
<u>Temperature</u>				
FOTP-3	Temperature Cycling of Fiber Optic Connectors (Thermal Shock)			
FOTP-4	Fiber Optic Connector/Component Temperature Life			
FOTP-37	Fiber Optic Cable Bend Test Low and High Temperature			
FOTP-38	High Temperature Flexibility Test for Fiber Optic Cable			
FOTP-52	Method for Measuring Temperature Dependence of Attenuation for Optical Waveguide Fibers			
FOTP-69	Test Procedure for Maximum and Minimum Use Temperature Evaluation of Optical Waveguide Fibers			
FOTP-70	Advanced Aging (Temperature) For Optical Fibers			
FOTP-71	Procedure to Measure Temperature Shock Effects on Fiber Optic Components			
FOTP-72	Procedure to Measure Temperature Cycling Effects on Fiber Optic Components			
FOTP-73	Procedure to Measure Temperature and Humidity Cycling Effects on Optical Fiber			

Test Procedure Number	Title				
Temperature (Con	tinued)				
FOTP-96	Fiber Optic Cable Storage Temperature/Humidity Test				
FOTP-109	Reference Point Temperature				
FOTP-160	Fiber Optic Cable Temperature Shock Test				
FOTP-161	Temperature Cycling for Fiber Optic Cable				
FOTP-162	Fiber Optic Cable Temperature-Humidity Cycling				
Tensile					
FOTP-28	Method for Measuring Tensile Failure Point of Optical Waveguide Fibers				
FOTP-31	Fiber Tensile Proof Test Method				
FOTP-33	Fiber Optic Cable Tensile Loading and Bending Test				
FOTP-89	Fiber Optic Cable Jacket Elongation and Tensile				
Terminal	Strength				
FOTP-113	Digital F.O. Terminal Devices General Measurement Requirements				
Terminus					
mb 1					
<u>Thermal</u>					
FOTP-3	Temperature Cycling (Thermal Shock)				
Time-Domain					
FOTP-59	Fiber and Cable Attenuation and Interconnection Loss Via Optical Time-Domain Reflectometry (OTDR)				
Time-of-Flight					
FOTP-60	Fiber Length by Time-of-Flight Measurement				
Torsion					
FOTP-63	Torsion Test for Optical Waveguide Fiber				

Test Procedure Number	Title
Transmittance	
FOTP-20	Measurement of Change in Optical Transmittance
Transmitter	
FOTP-110	Verification of Type of Fiber Optic Transmitter
Transverse Interfe	rence
FOTP-29	Refractive Index Profile Transverse Interference Method
Transverse Offset	
FOTP-166	Single-Mode Fiber, Measurement of Mode Field Diameter by Transverse Offset
Twist	
FOTP-36	Twist Test for Fiber Optic Cable Assemblies
FOTP-85	Fiber Optic Cable Twist Test
FOTP-91	Fiber Optic Cable Twist-Bend Test
Twist-Bend	
FOTP-91	Fiber Optic Cable Twist-Bend Test
Ultraviolet	
FOTP-97	Fiber Optic Cable Solar Radiation (Ultraviolet) Resistance Test
<u>Use</u>	
FOTP-69	Maximum and Minimum Use Temperature
Vibration	
FOTP-11	Vibration Test Procedure for Fiber Optic Connecting Devices
FOTP-64	Optical Fiber Vibration Test
Visual	
FOTP-13	Visual and Mechanical Inspection of Fibers, Cables, Connectors and/or other Fiber Optic Device

Test Procedure Number	Title				
Voltage(s)					
FOTP-115	Control Input Current(s) or Voltages				
FOTP-116	Data Output Voltage(s) or Current(s)				
FOTP-122	Effective Optical Responsivity and RMS Output Noise Voltage				
FOTP-123	Output Voltage and Switching Times				
Water					
FOTP-102	Water Pressure Cycling				
Waveguide					
	Refer to FOTP List, Part II-A, Optical Fiber Test Procedures				
Wavelength	lest Procedures				
FOTP-80	Cutoff Wavelength of Uncabled Single-Mode Fiber By Transmitted Power				
FOTP-170	Cutoff Wavelength of Single-Mode Fiber Cable by Transmitted Power				
Wicking					
FOTP-39	Fiber Optic Cable Wicking Test				

#### PART III: ALPHABETICAL INDEX BY TITLE KEYWORDS

#### KEY WORDS LIST FOR PART III

Air Abrasion Absolute Optical Power Accelerated

Acceleration Acceptance Pattern

Acceptance
Adhesion
Advanced
Aging
Altitude
Ambient
Aperture

Atmosphere or Atmospheric

Attenuation

Assembly or Assemblies

Axial

Bend or Bending

Blocked Blocking Buffered Fiber Bundle Buffers

Cable(s)
Change
Chromatic
Circuit

Coated or Coating(s)

Compound
Compression
Compressive
Connector(s)
Connecting Devices
Contamination

Control
Core
Corrosion
Crosstalk
Crush
Current(s)

Cutoff Cyclic Cycling

Cutback

Dark Data

Dependence Detector Device(s) Diameter Digital

Discontinuities

Dipersion
Domain
Drip
Durability
Dust

Dust Dynamic Range

Elongation

End External

Failure
Factor
Far-Field
Fiber(s)
Filled
Firewall
Flame

Flammability
Flexing
Flexure
Flow(ing)
Fluid
Freezing
Frequency
Fungus

Gas
Gas Flame
Gas Leakage
Geometry
Graded-Index

High Humidity

#### PART III: ALPHABETICAL INDEX BY TITLE KEYWORDS

#### KEY WORDS LIST FOR PART III

ImmersionOn-IImpactOpt:IndexOut:Industrial AtmosphereOxy;

Information Transmission Capacity

Input
Insertion Loss

Inspection
Interconnecting or

Interconnection Device(s)

Interferometry

Jacket

Knife-Edge

Knot

Launch
Leakage
Length
Light
Life
Loading
Long Length(s)

Loss

Mating Maintenance Marking Maximum Mechanical

Microbend or Microbending

Microscopic Minimum Mode Field Mode Scrambler Modulation Mud Multimode

Near-Field Noise

Nuclear Radiation Nuclear Thermal Blast Numerical Aperture On-Line Optical Output Oxygen

Phase-Shift
Porosity
Power
Power Supply
Preparation
Pressure
Profile
Proof

Penetration

Propagation Delay

Pulse

Radiation Radiant Power Radiation Pattern

Receiver

Reference Point Reflectometry

Refractive Index/Refractive Index

Relative Power Retention Return Loss Resistance Responsivity Roadway

Salt Sand Scanning Sensitivity Shock

Short Length(s)
Shrinkage
Simulated
Single Mode
Solar
Spectral
Spray

Spray Storage Strength

#### PART III: ALPHABETICAL INDEX BY TITLE KEYWORDS

#### KEY WORDS LIST FOR PART III

Stuffing Tube Substitution Survival Susceptibility Switching

Temperature
Tensile
Terminal
Terminus
Thermal
Time-Domain
Time-of-flight
Torsion
Transmittance
Transmitter
Tranverse Inteference
Tranverse Offset
Twist
Twist-Bend

Ultra Violet Use

Vibration Visual Voltage(s)

Water Waveguide Wavelength Wicking

# LIST OF FIBER OPTIC TEST PROCEDURES PART IV: CROSS-INDEX REFERENCE TO OTHER COMPARABLE TEST PROCEDURE REFERENCES

# A. DOD-STD-1678, Military Standard, Fiber Optics Test Methods and Instrumentation

1010   Fiber size measurement	OOD-STD-1678 METHOD TITLE Method No			Closest EIA RS-455 Equivalent FOTP No. (a)		
1030   Number of fibers   D	1010	Fiber size measurement				
1030   Number of fibers   D	1020	Fiber bundle diameter measurement (b)				
1040		Number of fibers (b)				
Cyclic flexing	1040	Number of transmitting fibers (b)		_		
2020   Low temperature flexibility (cold bend)   -37, -65 (c) (d)	2010	Cyclic flexing	-1,	-65 C, -104		
Compressive strength	2020	Low temperature flexibility (cold bend)		-37, -65 (c) (d)		
Cable twist	2030					
2050   Cable twist   -36, -63 (c), -85	2040	Compressive strength		-41		
Cable Tensile Load	2050		-36,	-63(c), -85		
A020	2060	Cable twist bend		-91		
A020	3010	Cable Tensile Load		-28 ©		
A030	4010			-52 (c)		
Tensile loading vs humidity   4050	4020	Power transmission vs temperature cyclin	ng	-		
4050 Freezing water immersion - Ice crush 4060 Dimensional stability 5010 Flammability -7 6010 Radiant power measurements -8, -46, -50, -95 6020 Attenuation measurements -46, -50, -53 6030 Radiation pattern measurement -29, -43, -44, -47 6040 Acceptance pattern measurement -10 (f) 6050 Pulse spreading -51, -54 6060 Far-end crosstalk -42 6070 Fiber (bundle) transfer function -30 (e) 6080 Refractive index profile (Interferometric Method) -29 6090 Refractive index profile (Near Field Method) -43 6100 Refractive index profile (Reflection Method) -44 8010 Insulation blocking, fiber optics cable -67 (c), -84 8020 Wicking -39 8030 Fluid immersion -40, -75	4030	Power transmission vs humidity		-74		
4060 Dimensional stability 5010 Flammability -7 6010 Radiant power measurements -8, -46, -50, -95 6020 Attenuation measurements -46, -50, -53 6030 Radiation pattern measurement -29, -43, -44, -47 6040 Acceptance pattern measurement -10, (f) 6050 Pulse spreading -51, -54 6060 Far-end crosstalk -42 6070 Fiber (bundle) transfer function -30 (e) 6080 Refractive index profile (Interferometric Method) -29 6090 Refractive index profile (Near Field Method) -43 6100 Refractive index profile (Reflection Method) -43 8010 Insulation blocking, fiber optics cable -67 (c), -84 8020 Wicking -39 8030 Fluid immersion -40, -75	4040					
Tammability	4050	Freezing water immersion - Ice crush		-98		
6020         Attenuation measurements         -46, -50, -53           6030         Radiation pattern measurement         -29, -43, -44, -47           6040         Acceptance pattern measurement         -10, (f)           6050         Pulse spreading         -51, -54           6060         Far-end crosstalk         -42           6070         Fiber (bundle) transfer function         -30 (e)           6080         Refractive index profile (Interferometric Method)         -29           6090         Refractive index profile (Near Field Method)         -43           6100         Refractive index profile (Reflection Method)         -44           8010         Insulation blocking, fiber optics cable Method         -67 (c), -84           8020         Wicking         -39           8030         Fluid immersion         -40, -75	4060	Dimensional stability				
6020         Attenuation measurements         -46, -50, -53           6030         Radiation pattern measurement         -29, -43, -44, -47           6040         Acceptance pattern measurement         -10, f           6050         Pulse spreading         -51, -54           6060         Far-end crosstalk         -42           6070         Fiber (bundle) transfer function         -30 @           6080         Refractive index profile (Interferometric Method)         -29           6090         Refractive index profile (Near Field Method)         -43           6100         Refractive index profile (Reflection Method)         -44           8010         Insulation blocking, fiber optics cable Method         -67 ©, -84           8020         Wicking         -39           8030         Fluid immersion         -40, -75	5010			<u>-7</u>		
6030 Radiation pattern measurement -29, -43, -44, -47  6040 Acceptance pattern measurement -10 (f)  6050 Pulse spreading -51, -54  6060 Far-end crosstalk -42  6070 Fiber (bundle) transfer function -30 (e)  6080 Refractive index profile (Interferometric Method) -29  6090 Refractive index profile (Near Field Method) -43  6100 Refractive index profile (Reflection Method) -44  8010 Insulation blocking, fiber optics cable -67 (c), -84  8020 Wicking -39  8030 Fluid immersion -40, -75	6010	Radiant power measurements	-8,			
6080 Refractive index profile (Interferometric Method) -29  6090 Refractive index profile (Near Field Method) -43  6100 Refractive index profile (Reflection Method) -44  8010 Insulation blocking, fiber optics cable -67 ©, -84 8020 Wicking -39  8030 Fluid immersion -40, -75	6020	Attenuation measurements		-46, -50, -53		
6080 Refractive index profile (Interferometric Method) -29  6090 Refractive index profile (Near Field Method) -43  6100 Refractive index profile (Reflection Method) -44  8010 Insulation blocking, fiber optics cable -67 ©, -84 8020 Wicking -39  8030 Fluid immersion -40, -75	6030	Radiation pattern measurement	-29,	-43, -44, -47		
6080 Refractive index profile (Interferometric Method) -29  6090 Refractive index profile (Near Field Method) -43  6100 Refractive index profile (Reflection Method) -44  8010 Insulation blocking, fiber optics cable -67 ©, -84 8020 Wicking -39  8030 Fluid immersion -40, -75	6040	Acceptance pattern measurement		-10 <sub>,</sub> <b>(f</b> )		
6080 Refractive index profile (Interferometric Method) -29  6090 Refractive index profile (Near Field Method) -43  6100 Refractive index profile (Reflection Method) -44  8010 Insulation blocking, fiber optics cable -67 ©, -84 8020 Wicking -39  8030 Fluid immersion -40, -75	6050			-51, -54		
6080 Refractive index profile (Interferometric Method) -29  6090 Refractive index profile (Near Field Method) -43  6100 Refractive index profile (Reflection Method) -44  8010 Insulation blocking, fiber optics cable -67 ©, -84 8020 Wicking -39  8030 Fluid immersion -40, -75	6060	Far-end crosstalk		-42		
6080 Refractive index profile (Interferometric Method) -29  6090 Refractive index profile (Near Field Method) -43  6100 Refractive index profile (Reflection Method) -44  8010 Insulation blocking, fiber optics cable -67 ©, -84 8020 Wicking -39  8030 Fluid immersion -40, -75	6070	Fiber (bundle) transfer function		-30 (e)		
Method)  6100 Refractive index profile (Reflection Method)  8010 Insulation blocking, fiber optics cable 8020 Wicking  8030 Fluid immersion  -43  -44  -67 ©, -84  -39  -40, -75	6080	Method)	ic			
Refractive index profile (Reflection Method)  8010 Insulation blocking, fiber optics cable 8020 Wicking  8030 Fluid immersion  -44  -67 ©, -84  -39  -40, -75	· 6090	Refractive index profile (Near Field				
Method)  8010 Insulation blocking, fiber optics cable -67 ©, -84  8020 Wicking -39  8030 Fluid immersion -40, -75		Method)		-43		
8010 Insulation blocking, fiber optics cable -67 ©, -84 8020 Wicking -39 8030 Fluid immersion -40, -75	6100	Refractive index profile (Reflection				
8020 Wicking -39 8030 Fluid immersion -40, -75				-44		
8020 Wicking -39 8030 Fluid immersion -40, -75	8010	Insulation blocking, fiber optics cable		-67 (c), -84		
77				-39		
<del>_</del> <del> </del>		Fluid immersion				
0040 Fiber and bandic end preparation	8040	Fiber and bundle end preparation		-57		
8070 Jacket flaw detection and leak test -93 f	8070	Jacket flaw detection and leak test	<del> </del>	-93 (f)		

#### Notes:

- Degree of comparability between the DOD Method and the FOTP varies. A comparison of each document by inspection will probably be needed to determine document suitability in each case.
- Applies to bundles of fibers only.
- c) Applies to fiber.
- d Could apply with proper test temperatures specified.
- e Used with -56 and -57, this is a close equivalent.
- f) FOTP has been cancelled

LIST OF FIBER OPTIC TEST PROCEDURES

PART IV: CROSS-INDEX REFERENCE TO OTHER COMPARABLE TEST PROCEDURE REFERENCES

#### B. IEC REFERENCES

IEC DOCUMENT METHOD TITLE		METHOD TITLE	CLOSEST EIA/RS-455 EQUIVALENT FOTP NO.
Pub	<u>Clause</u>		
793-1	11	Method IEC 793-1-A2-Near-field light distribution and imaging	\$48] 
793-1	12	Method IEC 793-1-A3-Four concentric circles	
793-1.	16	Method IEC 793-1-A7-Length measurement by del measurement of the transmitted pulse and/or reflected pulse	<b>-</b> 60
793-1	30	Method IEC 793-1-C1-Cut-back method	
793-1	31	Method IEC 793-1-C2-Insertion loss	
793-1	32	Method IEC 793-1-C3-Backscattering technique	
793-1	33	Method IEC 793-1-C4-Impulse response	
793-1	34	Method IEC 793-1-C5-Frequency response	
794-1	11	Method IEC 794-1-E1-Tensile strength	
794-1	13	Method IEC 794-1-E3-Crush	-41
794-1	14	Method IEC 794-1-E4-Impact	-25
794-1	. 16	Method IEC 794-1-E6-Bending	-1
794-1	19	Method IEC 794-1-E9-Flexing	

#### PART V: REVIEW AND REVISION SCHEDULE FOR EIA RS-455 FOTPs

The normal review schedule for ANSI/EIA documents is five years. During scheduled reviews, each document is considered for (a) Re-affirmation without change, (b) Revision and re-publication, or (c) Cancellation. In the case of Fiber Optic documents, however, the technology and associated documentation is developing so quickly that a five-year review cycle is not practical. Accordingly, at this time and for the foreseeable future, FOTPs will be cycled through review on an accelerated schedule of approximately 18-month intervals.

As of the date of this revision of Component Bulletin No. 9, the status of published FOTPs is as follows:

FOTP	Current Pu	blication	Scheduled	Next	Current Review Status			
Refer. No.	Document Reference EIA/RS-	Issue Date	18-Month Review Date	Review Date	No Action Needed	Re- affirmed Date	Review or Revision in Process	Revision/Review Reference PN/SP
1	455-	3/80	9/81			<del>.</del>		1605
2	455-2A	1/85	7/86			•	x	1003
3	455-1	2/81	8/82				x	1768
4	455-4A	9/85	3/87		x		<del></del>	
5	455-	3/80	9/81		•		x	1770
6	455 <b>-</b>	3/80	9/81				x	1771
11	455-3	5/81	11/82				x	1606
12	455-4	8/81	2/83				×	1790
13	455-13	3/84	9/85	3/89	x	7/86	••	2.,,0
14	455-14	10/83	4/85	10/88	×	6/85		
15	455-15	5/83	11/84	5/88	×	6/85		
16	455-16	2/84	8/85	2, 22	-	-,	×	
17	455-3	5/81	11/82	5/86		1/84	<u> </u>	1841
18	455-18A	11/84	5/86	0, 00		-, -	×	
20	455-20	2/83	8/84	2/88	×	1/86		
21	455-21	11/84	5/86			-,	x	1983
22	455-22	11/83	5/85				x	1846
23	455-23A	8/85	2/87		×		**	
25	455-3	5/81	11/82	5/86		1/84	×	1842
26	455-26A	8/85	2/87	-,	×	-,	-	
27	455-27A	4/86	10/87		x			
28	455-28A	5/86	11/87		×		······································	
29	455-4	8/81	2/83				×	1767
30	455-5	9/82	3/84				x	1784
31	455-3	5/81	11/82	5/86		1/84	X	1843
.32	455-32	1/83	7/84	-•		•	x	1893
33	455-5	9/82	3/84				x	1785
34	455-34	5/85	11/86		×			
35	455-35	1/83	7/84				x	1894
36	455-36A	12/86	6/88		×			
37	455-37	3/83	9/84				×	1895
39	455-39	1/83	7/84				x	1901
40	455-40	8/83	2/85				×	
41	455-41	2/85	8/86				x	
42	455-42	5/85	11/86		×			
43	455-43	12/84	6/86	12/89	x	7/86		

# PART V: REVIEW AND REVISION SCHEDULE OF EIA/RS-455 FOTPs

#### (Continued)

FOTP	Current Pu	blication	Scheduled	Next	Cur	rent Revie	w Status	
Refer. No.	Document Reference EIA/RS-	Issue Date	18-Month Review Date	Review Date	No Action Needed	Re- affirmed Date	Review or Revision in Process	Revision/Review Reference PN/SP
44	455-44	1/84	7/85				x	
45	455-45	9/84	3/86				×	1929
46	455-46	5/83	11/84	5/88		1/86		
47	455-47	9/83	3/85				×	1854
48	455-48	12/83	6/85				×	1855
49	455-49	12/83	6/85				x	1897
50	455-50	2/83	8/84				x	1856
51	455-51	9/83	3/85				×	1857
52	455-52	10/83	4/85				×	1858
53	455-53	4/86	10/87		×			
54	455-5	9/82	3/84				x	1787
55	455-55A	11/86	5/88		x			
56	455-56	8/83	2/85				×	1859
57 ·	455-57	2/87	8/88		x			
58	455-58	12/84	6/86	12/89	x	7/86		
63	455-63	4/84	10/85	4/89	х	1/86		
66	455-66	4/84	10/85	4/89	×	1/86		
75	455-75	6/86	12/87	·	x	-		
81	455-81	3/85	9/86		×			
82	455-5	9/82	3/84				x	1789
83	455-83	3/83	9/84				x	1847
84	455-84	6/83	12/84				X	1898
85	455-85	9/84	3/86				×	
86 ·	455-86	1/83	7/84	1/88	×	6/85		
87	455-87A	6/86	12/87		×			
89	455-89	1/83	7/84				×	1899
91	455-91	1/86	7/87		x			
94	455-94	8/86	2/88				x	-
95	455-95	6/86	12/87		x			
98	455-98	12/83	6/85				x	1900
99	455-99	3/83	9/84		x	6/85		
100	455-100	6/84	12/85				×	
101	455-101	2/84	8/85				хх	1921
103	455-103	7/84	1/86				x	
164	455-164	12/86	6/88		x			
165	455-165	12/86	6/88		×			
166	455-166	12/86	6/88		×			
172	455-172	4/86	10/87		×			

#### PART VI. FOTPs ADOPTED BY THE DOD

As of the date of this revision of Component Bulletin No. 9, the DOD has adopted a total of forty-eight FOTPs, as listed below:

ADOPTED FOTP NO.	EIA <u>PUBLICATION</u>	ACCEPTANCE NOTICE DATED PENDING	
•	/== 0.1	^ <b>~</b> ~ ~	
2	455- 2A	3 Dec 85	
3	455- 1	12 Aug 82	
4	455- 3	12 Aug 82*	
4	455- 4A	17 Sep 86	
5	455	12 Aug 82	
6	455	12 Aug 82	
11	455- 3	12 Aug 82	
13	455-13	29 Jan 85	
14	455-14	19 Mar 85	
15	455-15	15 Jul 85	
17	455- 3	12 Aug 82	
18	455-18A	3 Dec 85	
20	455-20	14 Feb 86	
21	455-21	15 Jul 85	
22	455-22	15 Jul 85	
23	455-23A	14 Feb 86	
25	455- 3	12 Aug 82	
26	455-26A	14 Feb 86	
27	455-27A	X	15 August 1986
28	455-28A	X	15 August 1986
30	455- 5	14 Feb 86	
31	455- 3	12 Aug 82	
32	455-32	3 Dec 85	
34	455-34	14 Feb 86	
39	455-39	19 Mar 85	
40	455-40	15 Jul 85	
41	455-41	15 Jul 85	
43	455-43	14 Feb 86	
44	455-44	29 Jan 85	
45	455-45	15 Jul 85	
46	455-46	27 Mar 86	
47	455-47	15 Jul 85	
50	455-50	27 Mar 86	
51	455-51	15 Jul 85	
53	455-53	X	15 August 1986
58	455-58	3 Dec 85	
63	455-63	29 Jan 85	
66	455-66	29 Jan 85	
81	455-81	15 Jul 85	
84	455-84	3 Dec 85	
85	455-85	15 Jul 85	
86	455-86	19 Mar 85	
87	455-87A	X	15 August 1986
89	455-89	3 Dec 85	
91	455-91	17 Sep 86	
95	455-95	X	15 August 1986
99	455-99	19 Mar 85	
100	455-100	29 Jan 85	<u>, , , , , , , , , , , , , , , , , , , </u>
101	455-101	29 Jan 85	

<sup>\*</sup> To be cancelled later.

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