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3.1.2	2
3.1.3	4
3.1.4	12
3.1.5	15
3.2	-	17
3.2.1	17
3.2.2	17
3.2.3	18
3.2.4	20
3.2.5	22
4	24
4.1	24
4.2	24
4.2.1	24
4.2.2	24
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Information technologies. Structured cabling systems. Main system elements installation. Test methods

— 2010 — 01 — 01

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- 2.3 : (TIA).
- 2.4 : -
- 2.5 : , (CENELEC).
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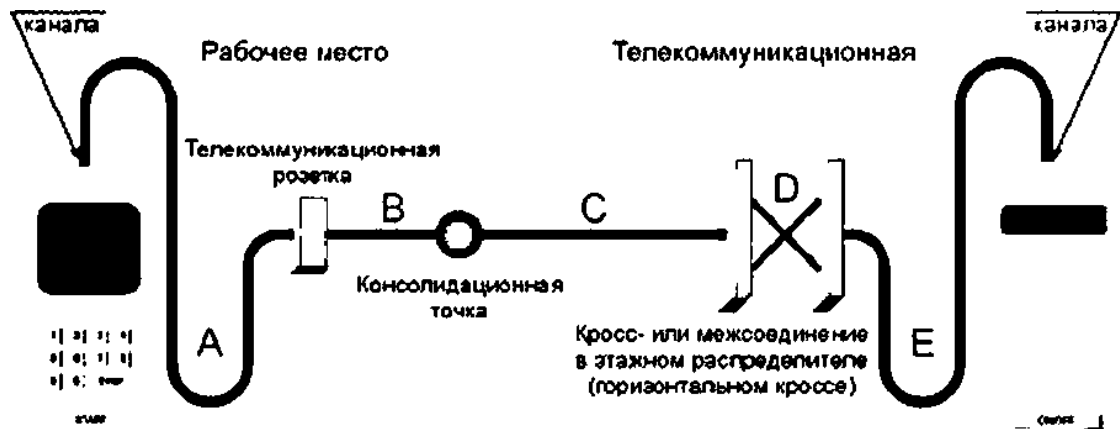
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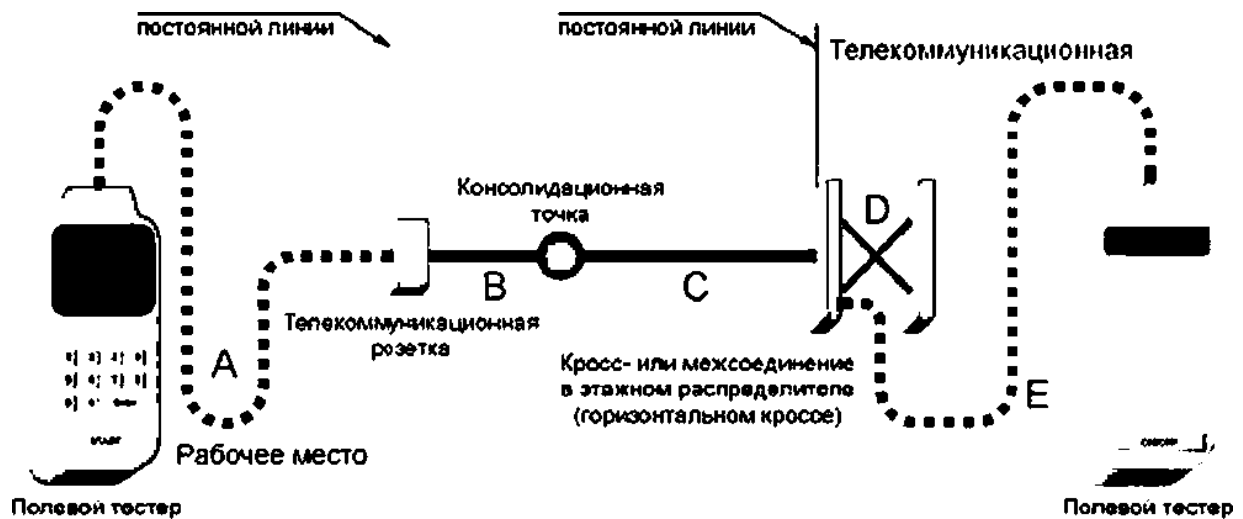
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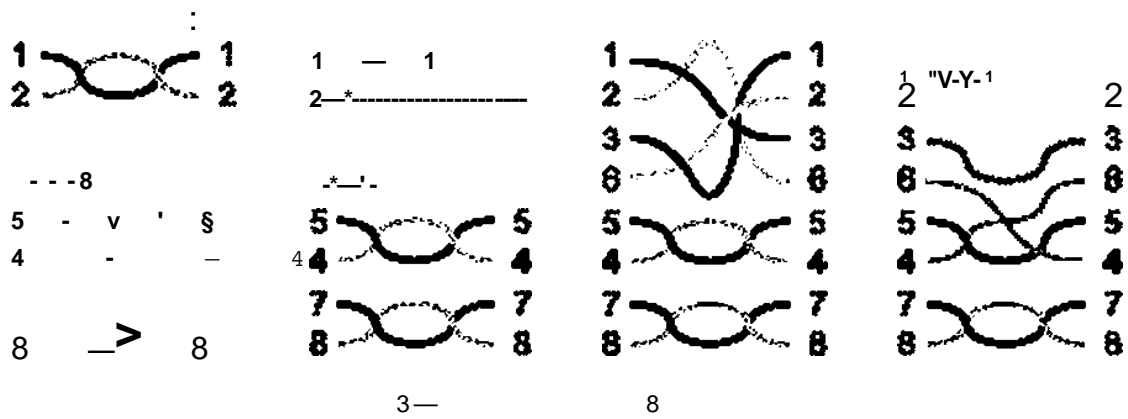
3.1.3.1

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• (568 / 563)
• (L);
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• , - (NEXT);
• , (PSNEXT);
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• , (PSELFEXT);
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3.1.3.2

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3.1.3.3

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Pass/Fail.

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Pass/Fail

(NVP) 10%.

(Nominal Velocity of Propagation. NVP).

NVP

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$$\text{NEXT} \text{rbcto}^* \text{k}^* \text{.asn}^* \text{**ie} - 20 \text{ IOQ} \quad 10^{\cdot} \gg +10 \quad \text{NEXT} \text{temWtoJW} \quad \text{«} \sim \text{,} \text{.} \quad (4)$$

	. NEXT. .			
	5		\$	6
1.0	>60	65.0	>60	65.0
4.0	53.5	63.0	54.8	64.1
	48.6	58.2	50.0	59.4
10.0	47.0	56.6	48.5	57.8
16.0	43.6	53.2	45.2	54.6
20.0	42.0	51.6	43.7	53.1
25.0	40.3	50.0	42.1	51.5
31.25	38.7	48.4	40.5	50.0
62.5	33.6	43.4	35.7	45.1
100.0	30.1	39.9	32.3	41.8
200.0	—	34.8	—	36.9
250.0	—	33.1	—	35.3

$$PSNEXT = 10 \log_{10} \frac{1}{1 + 10^{10} \cdot (PSNEXT)^4} \quad (5)$$

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NEXT
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PSNEXT*^,
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$$\frac{\text{PSNEXTnoccaMHj, } -20 \log' \quad 10 \gg \quad 0 \quad 20 \quad . \quad .}{V \quad /} \quad (7)$$

	PSNEXT	57	57
PSNEXT			3.

3— PSNEXT

	PSNEXT.			
	Se		So	6
1.0	>57	62.0	>57	62.0
4.0	50.5	60.5	51.8	61.8
8.0	45.6	55.6	47.0	57.0
10.0	44.0	54.0	45.5	55.5
16.0	40.6	50.6	42.2	52.2
20.0	39.0	49.0	40.7	50.7
25.0	37.3	47.3	39.1	49.1
31.25	35.7	45.7	37.5	47.5
62.5	30.6	40.6	32.7	42.7
100.0	27.1	37.1	29.3	39.3
200.0	—	31.9	—	34.3
250.0	—	30.2	—	32.7

3.1.3.7	(FEXT)	-
(ELFEXT)	-	

$$\text{ELFEXT} = \text{FEXT} - \text{IL} \quad (8)$$

ELFEXT	-	12	-
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ELFEXT. .

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	» ELFEXT.			
	Se		So	
16.0	33.3	39.2	34.5	40.1
20.0	31.4	37,2	32.6	38.2
25.0	29.4	35.3	30.7	36.2
31.25	27.5	33.4	28.7	34.3
62.5	21.5	27.3	22.7	28.3
100.0	17.4	23.3	18.6	24.2
200.0	—	17.2	—	18.2
250.0	—	15.3	—	16.2

3.1.3.8 (PSELFEXT)
PSELFEXT —

PSELFEXT 4- -
(
PSELFEXT
PSELFEXT
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» PSELFEXT

ELFEXT.	: 8 <4 4)
ELFEXT. : {L}	ELFEXT. - ,
PSELFEXT _(napa1·L)	ELFEXT _(fapa2·R napa1-L) . <%»oa3.R. napa1-L). { -R -1)
P3SELFEXT _(nep2.i)	ELFEXT ^{pj^n} 2-1) (-R. 2-). (-R 2-1)
PSELFEXT _(napa3·L)	ELFEXT ^{p^j.g} _ .) naoa2-R. -L). { - -1)
PSELFEXT _(MpaJ·t)	EL ^{^T} <nap*I-R. 4- . naoa2-R. .). (-R. -1)
ELFEXT. (R)	
PSELFEXT{ -R}	ELFEXT _(napa2.L, napai-R) . -4. napa1*R). {napa4-i. naoai.R)
PSELFEXT _{IMpa2^}	ELFEXT _{tfapa1·L nepaj.R)} . .. napa2-R). <napa4.i. naoa2-R)
PSELFEXT()	ELFEXT _{IMp^*i.} (. -R). < 2-4. -). <napa4-L. -R)
PSELFEXT{)	ELFEXT _(Mpa1-L. .R) . 2 . napa1-R). (-L. naoaa-R)
«L» — («Local»). «R» — («Remote»). ELFEXT. FEXT PSELFEXT.	

1 PSELFEXT -

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$$PSELFEXT_{KelMaf} = f(PSELFEXT^{**}) - 20 \log 10 + 4 - 10 \cdot 20$$

(11)

$$PSELFEXT^{**} = 10 \cdot \left(\frac{pseifext^{**}}{56} \right)^{+3} \cdot 10$$

(12)

7. PSELFEXT

7— PSELFEXT

	PSELFEXT. ,			
	5		\$	
10	54.4	60.3	55.6	61.2
4.0	42.4	48.2	43.6	49.1
8.0	36.3	42.2	37.5	43.1
10.0	34.4	40.3	35.6	41.2
16.0	30.3	36.2	31.5	37.1
20.0	28.4	34.2	29.6	35.2
25.0	26.4	32.3	27.7	33.2
31.25	24.5	30.4	25.7	31.3
62.5	18.5	24.3	19.7	25.3
100.0	14.4	20.3	15.6	21.2
200.0	—	14.2	—	15.2
250.0	—	12.3	—	13.2

3.13.9

100BASE-T4.100VGAnyLAN. 10003ASE-T .),

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	5	6	\$	
10	17.0	19.0	19.0	19.1
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8.0	17.0	19.0	19.0	210
10.0	17.0	19.0	19.0	21.0

	Se	6	So	
16.0	17.0	16.0	19.0	20.0
20.0	17.0	17.5	19.0	19,5
25.0	16,0	17.0	18.0	19.0
31.25	15.1	16.5	17.1	18.5
62.5	12.1	14.0	14.1	16.0
100.0	10,0	12.0	12.0	14.0
200.0	—	9.0	—	11.0
250.0	—		—	10.0

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3.1.3.10 — , -

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3.1.3.11 — « -

» (³D) « » (PD) -

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3.1.4

3.1.4.1

3.1.4.2

3.1.4.3

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3.1.4.4

3.1.4.5

3.1.4.6

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Level - —

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Level III —

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III

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IL, NEXT. PSNEXT, ELFEXT. PSELFEXT RL.

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5 6 (TIA)

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	±1.9	±1.4
NEXT	±3.6	±2.9
PSNEXT	±3.9	±3.2
ELFEXT	±4.4	±3.4
PSELFEXT	±4.7	±3.7
	±2.7	±2.9

PD, PDS, L DCR

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	. PDS. L. OCR. .	
	-	III
(PD) (%)	$\pm 5 \{ \pm 4 \}$	$\pm 5 \{ \pm 4 \}$
(PDS).	± 10	± 10
(L). (%)	$\pm 1 \{ \pm 4 \}$	$\pm 1 \{ \pm 4 \}$
» (OCR). (%)	$\pm 1 \{ \pm 1 \}$	$\pm 1 \{ \pm 1 \}$

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RL
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II- —
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3.1.5

3.1.5.1

Pass/Fail

Pass/Fail («

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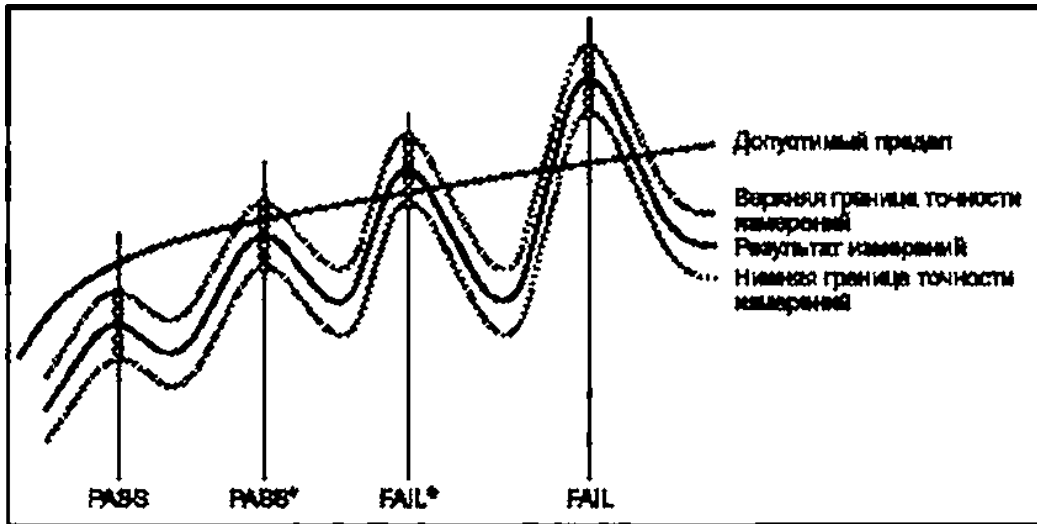
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Условные обозначения:

PASS — «

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»; FAIL* — «

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PASS. PASS*. FAIL, FAIL*

Pass

Fail

FAIL,

FAIL.

PASS

PASS.

PASS

PASS*. FAIL*

FAIL —

«(*)».

3.1.5.2

3.1.5.3

PASS FAIL.

11.

11 —

-	PASSFAIL		PASS/FA1L
-	() - PASSFAIL	-	PASS/FA1L
-	() - PASSFAIL		() - PASS/FA1L
NEXT. -	() - PASSFAIL	NEXT.	() - PASSFAIL
	() - -		() - -

ELFEXT. -	() - - - - - RASS/FAIL	ELFEXT.	() - - - - - PASS/FA1L
	() - - - -		(). - - -

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LED 850 1300

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WDM 1310 1550 1310 1550

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(OTDR. Optical Time Domain Refiectometer)

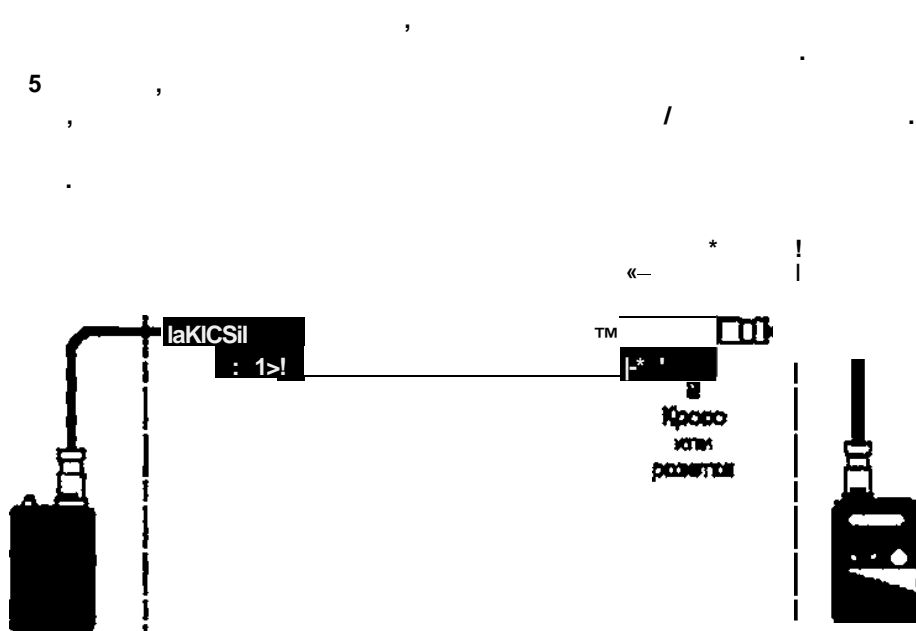
3.2.2
3.2.2.1

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[C]; [CD] ([]) [BD]

[FD] ([]); [BD] ([C])

[CD] ([]) [FD]



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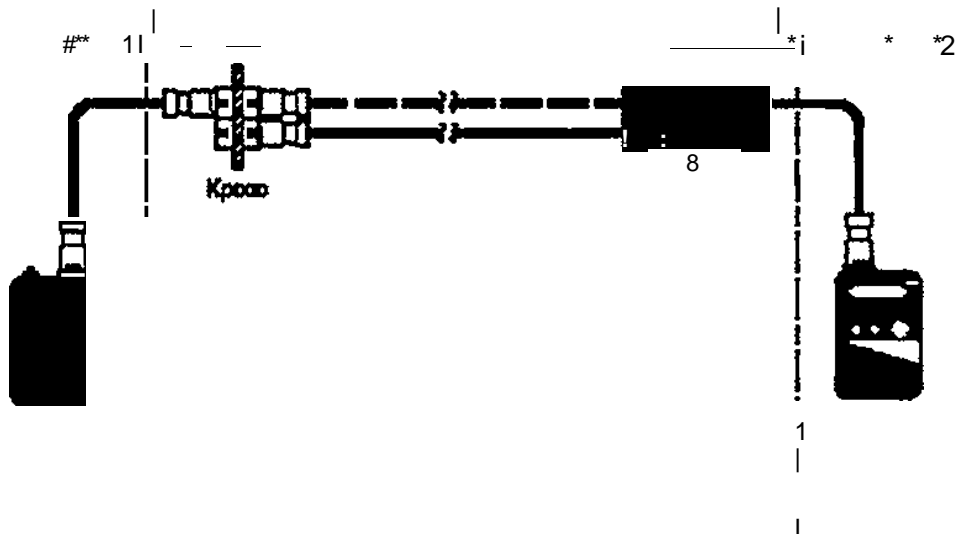
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(13)

$$L_{\text{Катоды}} = \begin{matrix} 3.5 / \text{—} & 850 \\ 1.5 / \text{—} & 1300 \\ 0.5 / \text{—} & 1310 \\ 0.5 / \text{—} & 1550 \\ 1.0 / \text{—} & 1310 \\ 1.0 / \text{—} & 1550 \end{matrix}$$

11- 10 ~ ^ « » »0«

(14)

$$L_{\text{Катоды}} = \begin{matrix} 3.5 / \text{—} & 850 \\ 1.5 / \text{—} & 1300 \\ 0.5 / \text{—} & 1310 \\ 0.5 / \text{—} & 1550 \\ 1.0 / \text{—} & 1310 \\ 1.0 / \text{—} & 1550 \end{matrix}$$

(15)

0.3

3.2.4.6

3.2.5

3.2.5.1

3.2.5.2

3.2.5.3

3.2.5.4

3.2.5.5

(OTOR)

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(OTDR)

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OLTS (Optical Loss Test Set)

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4.2.2.1

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)—«FAIL*»;

—«FAIL».

4.2.2.2

3.2.5.

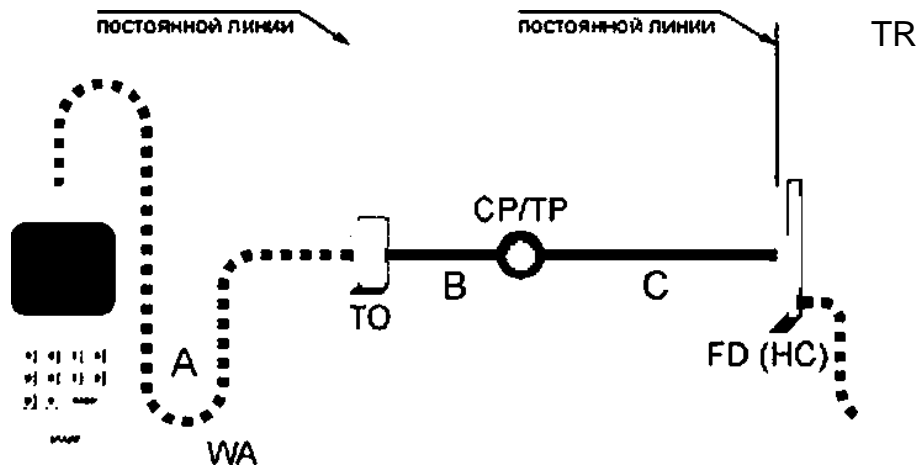
4.2.2.3

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point):

FD(HC) —
TR —

(work — group area):
(leCecuinniuiatiuii uullet),
(consolidation point) /

(transition

(floor distributor):
(— telecommunication room)

+ £90

.1 —

TR/ER/EF

TR/ER/EF

CD(MC)
BD (1C)

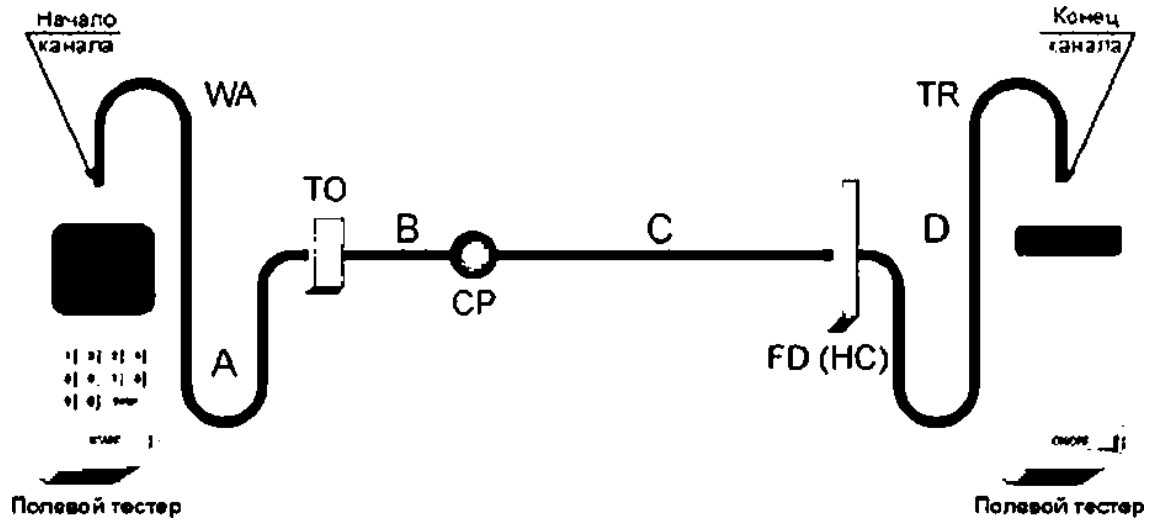


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BD(IC)
FD ()*

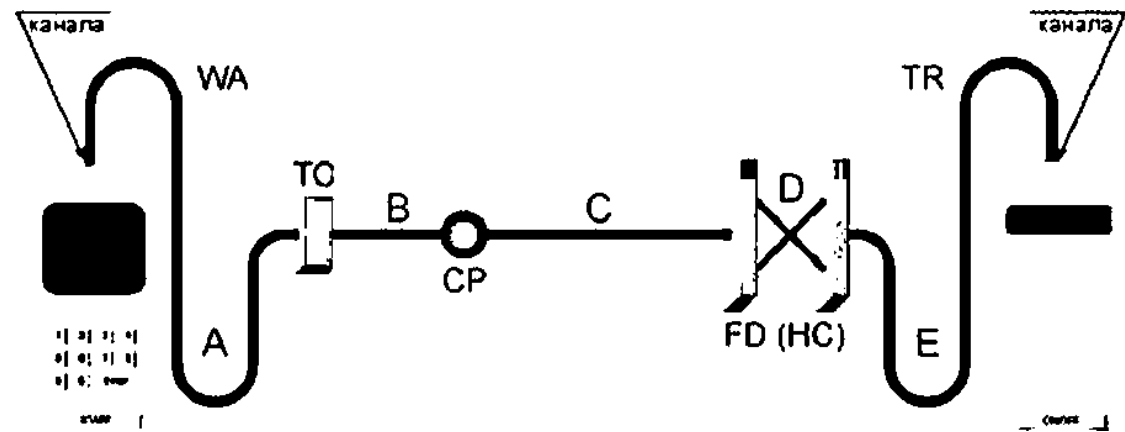
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TR — { — telecommunication room);
ER — (— equipment room);
EF — {entrance faciity):
 () — (— campus distrtoutor);
 (1C) — (building distributor);
FO () — (floor distributor)
 .2 —

£ 90



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 — ;
 WA — (work — group area);
 — {telecommunication
 outlet);
 / — {consolidation point) /
 (transition point);
 FD(HC) — (floor distributor):
 TR — (, —
 telecommunication room)
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 (TR)

+	£ 90	
A+B+C+D	£ 100	
	£ 5	£ 22
D	£ 5	
A+D	10	£ 27



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WA — (work — group area);

— {telecommunication

outlet):

/ — (consolidation point) / -

(transition point):

FD(HC) — (floor distributor);

TR — (, -

— telecommunication room)

A.4 — 'ft 2

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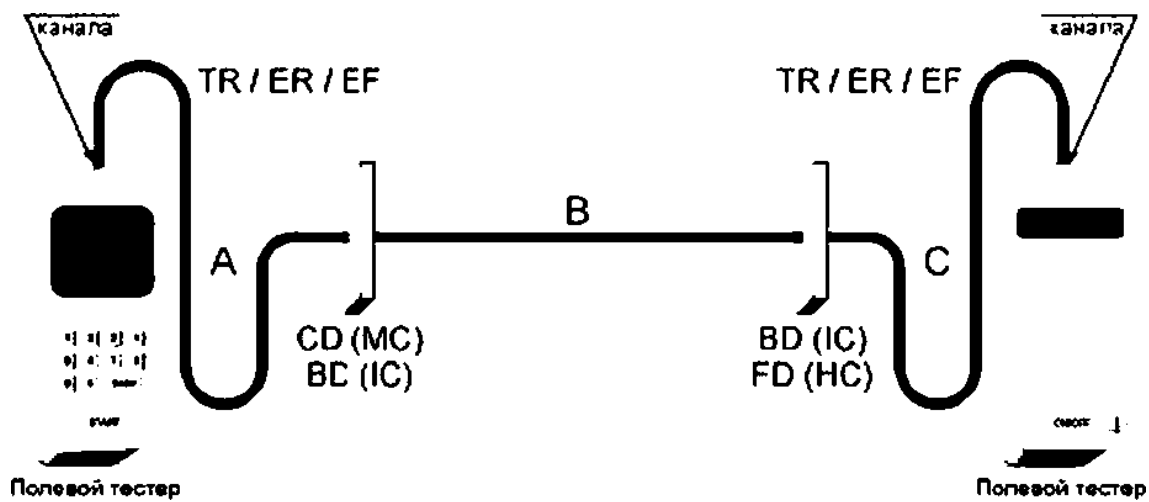
B+C £90

A+B+C+D+E £ 100

A £ 5 £ 22

D+E £ 5

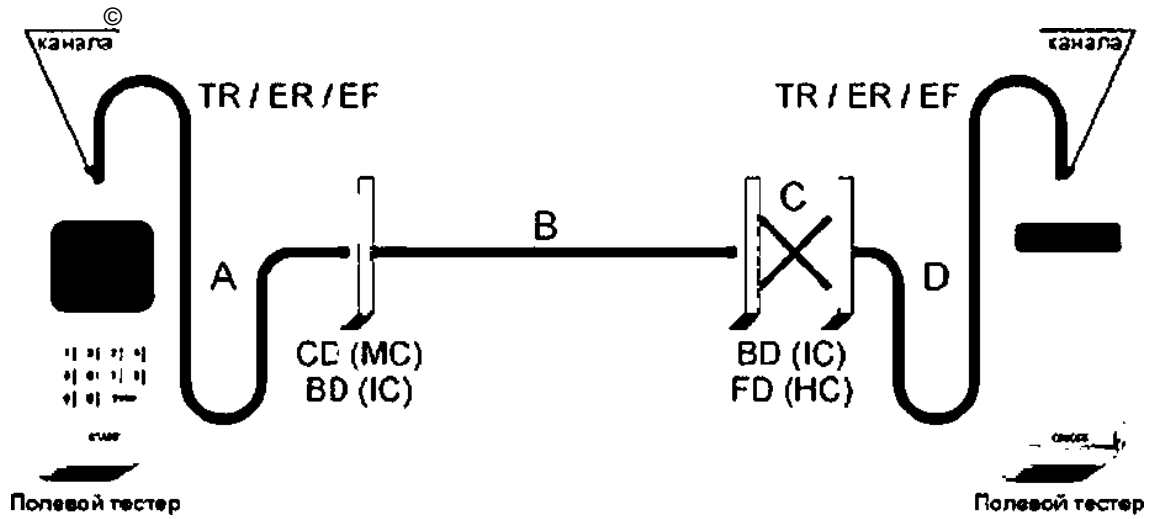
A+O+E £ 10 £ 27



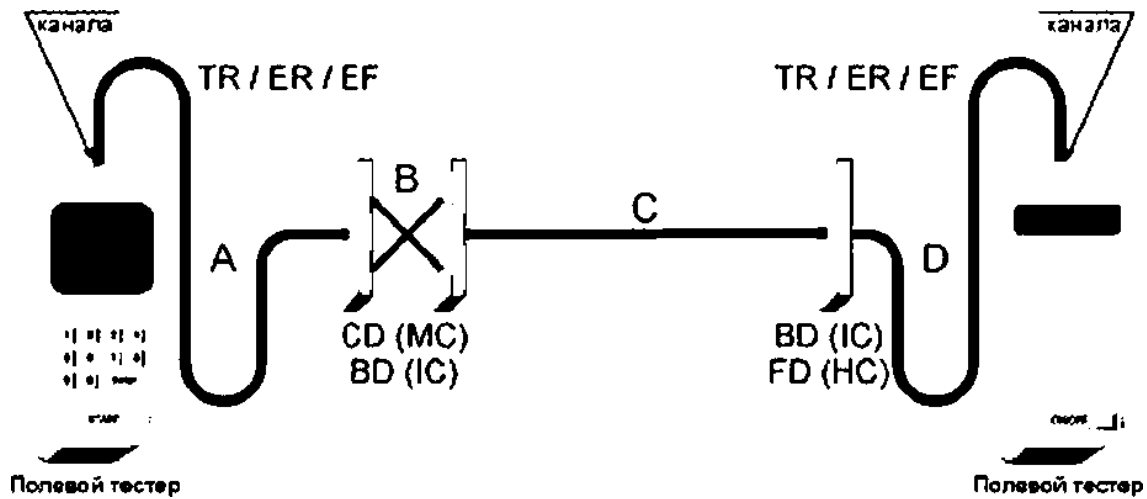
— : / : £ 90
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TR — (, —
telecommunication room);
ER — (—
equipment room);
EF — (entrance facility);
CD (MC) — (, —
— campus distributor);
BD (IC) — (building distributor);
FD () — (floor distributor)

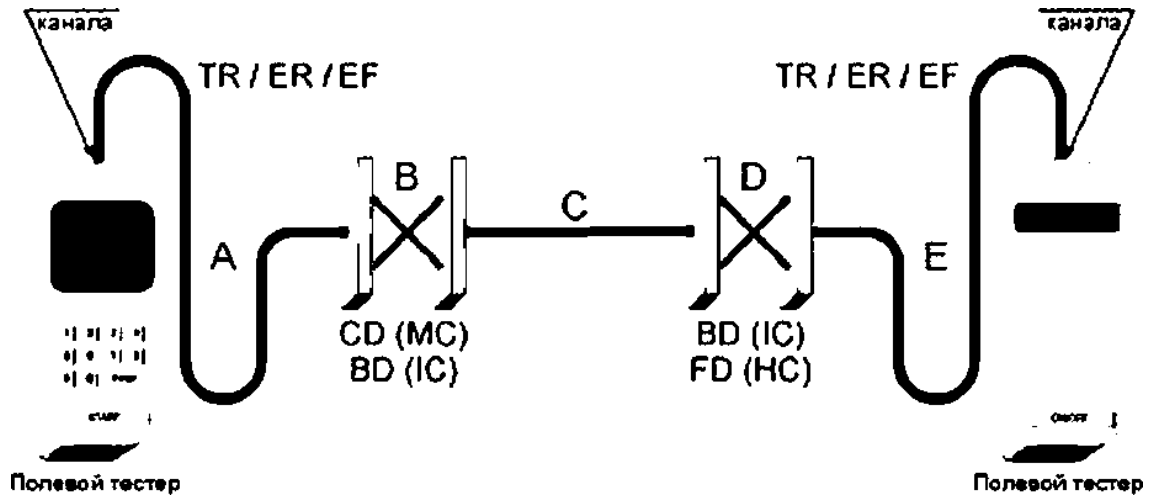
.5 — 1 () (IC) (IC) FO ()



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 — ; A+C+D & 10 & 27
 D — / :
 TR — (, —
 telecommunication room);
 ER — (—
 equipment room);
 EF — (entrance facility):
 () — (,
 — campus distributor);
 (1C) — (building distributor):
 FO () — (floor distributor)
 .6 — Me 2
 (CD () BD (IC) - (IC) FD ()



— : 8 / : & 90
— ; : A+B+C+D £ 100
— : A+B+D £ 10 £ 27
— / :
TR — { , —
telecommunication room):
ER — (—
equipment room);
EF — {entrance facility):
CD (MC) — (,
— campus distributor;:
BD (IC) — (building distributor):
FD () — (floor distributor)
— .7 — 3
(- CD () (IC) 8 BD (IC) FD ()



— : : £ 90
 — : : A+B+C+D+E S 100
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 D— ; / ;
 TR— (, -
 — telecommunication);
 ER— (—
 equipment room);
 EF— (entrance facility):
 ()— (,
 — campus distributor):
 (1C)— (building distributor):
 FO ()— (floor distributor)

.8 — Me 4
 (- () (1C) (1C) FD ()

ISO/IEC 11801 Information Tecfnotogy Generic Cabling for Customer Premises¹¹

ANSI/TIA/EIA-526-14-A Optical Power Loss Measurements of Installed Multimode Fiber Cable Plant — OFSTP-14

ANSI/T1A/EIA-526-7 Optical Power Loss Measurement of Installed Single-Mode Fiber Cable Plant — OFSTP-7

19.03.2009 06.08.2009 60x84%.
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 vxw1v.90st1nfo.ru <nfo@goelinfo.ru
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