

ISO/IEC 11801
(Second edition – 2002)
Amendment 1 (2008)

Information technology –
Generic cabling for customer premises

CORRIGENDUM 1

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Replace the existing Table 17 by the following new Table 17:

Table 17 – Propagation delay for channel

Class	Frequency MHz	Maximum propagation delay μs
A	$f = 0,1$	20,000
B	$0,1 \leq f \leq 1$	5,000
C, D, E, E _A , F, F _A	$1 \leq f \leq \text{NOTE}$	$0,534 + 0,036/\sqrt{f} + 4 \times 0,0025$
NOTE The equation for propagation delay applies to the upper frequency of the class.		

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6.4.14.4 Coupling attenuation

Move the existing third paragraph from before Table 22 to after Table 22:

It is possible to assess coupling attenuation by laboratory measurements of representative samples of channels assembled using their component and connector termination practices.

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6.4.15.1 General

Replace the existing second paragraph by the following new second paragraph:

If coupling attenuation for Class E_A or F channels is 10 dB better than Table 22 or for Class F_A channels is 25 dB better than Table 22, then the requirements of 6.4.15 are met by design.

6.4.15.2 Power sum alien NEXT (PS ANEXT)

Replace the last identifier by the following identifier:

$ANEXT_{i,k}$ is the alien near-end crosstalk loss coupled from pair i of disturbing channel (Δ) to the pair k of the disturbed channel.

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Table 23 – PS ANEXT for channel

Replace the last line of footnote ^b by the following line:

$IL_{100\text{MHz},i}$ is the insertion loss of a pair i at 100 MHz.

6.4.15.5 PS AFEXT for Class E_A channels

Replace the fourth identifier for equation 9 by the following identifier:

$AFEXT_{l,i,k}$ is the alien far-end crosstalk loss coupled from pair i of disturbing channel (l) to the pair k of the disturbed channel;

Replace the last identifier for equation 9 by the following identifier:

$IL_{l,i}$ is the measured insertion loss of pair i of disturbing channel l .

6.4.15.6 PS AFEXT for Class F_A channels

Replace the last identifier by the following identifier:

$AFEXT_{l,i,k}$ is the alien far-end crosstalk loss coupled from pair i of disturbing channel (l) to the pair k of the disturbed channel.

6.4.15.7 PS AACR-F for Class E_A and Class F_A channels

Change the following from font size 9 to font size 10:

The PS AACR-F requirements shall be met at both ends of the channel.

$PS AFEXT_k$ is the power sum alien far-end crosstalk loss coupled to pair k .

Replace the existing Table 27 by the following new Table 27:

Table 27 – PS AACR-F for channel

Class	Frequency MHz	Minimum PS AACR-F ^{a, b} dB
E _A	$1 \leq f \leq 500$	$77 - 20 \lg(f)$
F _A	$1 \leq f \leq 1\,000$	$92 - 20 \lg(f)$

^a PS AACR-F at frequencies that correspond to calculated values of greater than 67,0 dB shall revert to a minimum requirement of 67,0 dB.
^b PS AACR-F at frequencies that correspond to calculated PS AFEXT values of greater than 67,0 dB or $102 - 15 \cdot \lg(f)$ dB shall be for information only.

Replace the existing Table 28 by the following new Table 28:

Table 28 – Informative PS AACR-F values for channel at key frequencies

Frequency MHz	Minimum PS AACR-F dB	
	Class E _A	Class F _A
1	67,0	67,0
100	37,0	52,0
250	29,0	44,0
500	23,0	38,0
1 000	N/A	32,0

Replace the existing Table 29 by the following new Table 29:

Table 29 – PS AACR- F_{avg} for channel

Class	Frequency MHz	Minimum PS AACR- F_{avg} ^{a, b, c} dB
E _A	$1 \leq f \leq 500$	$81 - 20 \lg(f)$
^a PS AACR- F_{avg} at frequencies that correspond to calculated values of greater than 67,0 dB shall revert to a minimum requirement of 67,0 dB. ^b PS AACR- F_{avg} at frequencies that correspond to PS AFEXT values of greater than 67,0 dB or $102 - 15 \cdot \lg(f)$ dB shall be for information only. ^c The PS AACR- F_{avg} limit for Class F _A channels is equal to PS AACR-F specified in Table 27.		

Replace the existing Table 30 by the following new Table 30:

Table 30 – Informative PS AACR- F_{avg} values for channel at key frequencies

Frequency MHz	Minimum Class E _A PS AACR- F_{avg} dB
1	67,0
100	41,0
250	33,0
500	27,0

7.2.2.1 Component choice

Replace the text for the last two bullets by the following:

- Category 6_A components (under consideration) provide Class E_A balanced cabling performance
- Category 7_A components (under consideration) provide Class F_A balanced cabling performance

Replace the existing Table 31 by the following new Table 31:

Table 31 – Minimum and maximum length

Segment	Minimum length m	Maximum length m
FD-CP	15	85
CP-TO	5	-
FD-TO (no CP)	15	90
Work area cord	2 ^a	5
Patch cord	2	-
Equipment cord	2 ^b	5
All cords	-	10
^a If there is no CP, the minimum length of the work area cord is 1 m.		
^b If there is no cross-connect, the minimum length of the equipment cord is 1 m.		

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In Table 33, replace the existing NOTE 1 by the following NOTE 1:

Where channels contain a different number of connections than in the model shown in Figure 13, the fixed cable length shall be reduced (where more connections exist) or may be increased (where fewer connections exist) by 2 m per connection for category 5 cables and 1 m per connection for Category 6 and 7 cables. Additionally, the *NEXT*, Return Loss (*RL*) and *ACR-F* performance should be verified.