

## DTX Series CableAnalyzer Limit Line Values



### Software Version 1.2 July 2005

Notes:

- If Insertion Loss is less than 3 dB, the value is recorded but not used for PASS/FAIL criteria.
- If Insertion Loss is less than 4 dB, the value is recorded but not used for PASS/FAIL criteria.
- The value is recorded but not used for PASS/FAIL criteria.

- DRAFT Augmented Category 6 limits have been updated to reflect the June 2005 TIA meeting
- DRAFT Augmented Class E limits have been added to reflect JTC1/SC25/WG3N746, collation of comments on working draft TR24750 and working draft of ISO/IEC 11801 2nd Edition Amendment 1.
- In the application directory, entries have been added to allow testing of mid span PoE, details of which can be found at <http://kb.flukenetworks.com/link.asp?sid=5&rid=9832>
- DTX PL Selftest ELFEXT limits have been corrected

## TIA Standards

**TIA Cat 3 Channel**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	100 m	555	50	1	4.2	39.1		34.9				
					4	7.3	29.3		22.0				
					8	10.2	24.3		14.0				
12345678S 12345678S					10	11.5	22.7		11.2				
					16	14.9	19.2		4.3				

**TIA Cat 5e Channel**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	100 m	555	50	1	3	60.0	17.0	57.0	57.4	57.0	54.0	54.4
					4	4.5	53.5	17.0	49.1	45.4	50.5	46.1	42.4
					8	6.3	48.6	17.0	42.3	39.3	45.6	39.3	36.3
12345678S 12345678S					10	7.1	47.0	17.0	39.9	37.4	44.0	36.9	34.4
					16	9.1	43.6	17.0	34.5	33.3	40.6	31.5	30.3
					20	10.2	42.0	17.0	31.8	31.4	39.0	28.8	28.4
					25	11.4	40.3	16.0	28.9	29.4	37.3	25.9	26.4
					31.25	12.9	38.7	15.1	25.9	27.5	35.7	22.9	24.5
					62.5	18.6	33.6	12.1	15.0	21.5	30.6	12.0	18.5
					100	24	30.1	10.0	6.1	17.4	27.1	3.1	14.4

**TIA Cat 6 Channel**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	100 m	555	50	1	3	65.0	19.0	62.0	63.3	62.0	59.0	60.3
					4	4	63.0	19.0	59.0	51.2	60.5	56.5	48.2
					8	5.7	58.2	19.0	52.5	45.2	55.6	49.9	42.2
12345678S 12345678S					10	6.3	56.6	19.0	50.2	43.3	54.0	47.7	40.3
					16	8	53.2	18.0	45.2	39.2	50.6	42.6	36.2
					20	9	51.6	17.5	42.6	37.2	49.0	39.9	34.2
					25	10.1	50.0	17.0	39.9	35.3	47.3	37.2	32.3
					31.25	11.4	48.4	16.5	37.0	33.4	45.7	34.3	30.4
					62.5	16.5	43.4	14.0	26.9	27.3	40.6	24.1	24.3
					100	21.3	39.9	12.0	18.6	23.3	37.1	15.8	20.3
					200	31.5	34.8	9.0	3.3	17.2	31.9	0.3	14.2
					250	35.9	33.1	8.0	-2.8	15.3	30.2	-5.8	12.3

TIA AugCat 6 Ch dr 1.4b

DRAFT STANDARD - For Verification Purposes ONLY

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	i	100 m	555	50	1	3	65.0	19.0		63.3	62.0		60.3
12345678					4	4.1	63.0	19.0		51.2	60.5		48.2
					8	5.7	58.2	19.0		45.2	55.6		42.2
12345678S					10	6.4	56.6	19.0		43.3	54.0		40.3
12345678S					16	8.1	53.2	18.0		39.2	50.6		36.2
					20	9.1	51.6	17.5		37.2	49.0		34.2
					25	10.2	50.0	17.0		35.3	47.3		32.3
					31.25	11.4	48.4	16.5		33.4	45.7		30.4
					62.5	16.3	43.4	14.0		27.3	40.6		24.3
					100	20.8	39.9	12.0		23.3	37.1		20.3
					200	30	34.8	9.0		17.2	31.9		14.2
					250	33.8	33.1	8.0		15.3	30.2		12.3
					350	40.5	30.2	6.6		12.4	27.2		9.4
					500	49.3	24.9	6.0		9.3	21.8		6.3

TIA TSB155 Ch dr 1.3.2 0-55m

DRAFT STANDARD - For Verification Purposes ONLY

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	i	i	555	50	1	3	65.0	19.0		63.3	62.0		60.3
12345678					4	3	63.0	19.0		51.2	60.5		48.2
					8	3.3	58.2	19.0		45.2	55.6		42.2
12345678S					10	3.7	56.6	19.0		43.3	54.0		40.3
12345678S					16	4.7	53.2	18.0		39.2	50.6		36.2
					20	5.3	51.6	17.5		37.2	49.0		34.2
					25	5.9	50.0	17.0		35.3	47.3		32.3
					31.25	6.7	48.4	16.5		33.4	45.7		30.4
					62.5	9.6	43.4	14.0		27.3	40.6		24.3
					100	12.3	39.9	12.0		23.3	37.1		20.3
					200	18	34.8	9.0		17.2	31.9		14.2
					250	20.3	33.1	8.0		15.3	30.2		12.3
					350	24.6	29.7	6.6		12.4	26.9		9.4
					500	30.2	22.0	6.0		9.3	20.4		6.3

TIA TSB155 Ch dr1.3.2 55-100m

DRAFT STANDARD - For Verification Purposes ONLY

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	i	100 m	555	50	1	3	65.0	19.0		63.3	62.0		60.3
12345678					4	4	63.0	19.0		51.2	60.5		48.2
					8	5.7	58.2	19.0		45.2	55.6		42.2
12345678S					10	6.3	56.6	19.0		43.3	54.0		40.3
12345678S					16	8	53.2	18.0		39.2	50.6		36.2
					20	9	51.6	17.5		37.2	49.0		34.2
					25	10.1	50.0	17.0		35.3	47.3		32.3
					31.25	11.4	48.4	16.5		33.4	45.7		30.4
					62.5	16.5	43.4	14.0		27.3	40.6		24.3
					100	21.3	39.9	12.0		23.3	37.1		20.3
					200	31.5	34.8	9.0		17.2	31.9		14.2
					250	36	33.1	8.0		15.3	30.2		12.3
					350	43.5	29.7	6.6		12.4	26.9		9.4
					500	53.4	22.0	6.0		9.3	20.4		6.3

**TIA Cat 3 Perm. Link**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	i	90 m	498	44	1	3.5	40.1		36.6				
12345678					4	6.2	30.6		24.4				
					8	8.8	25.8		17.0				
12345678S					10	9.9	24.3		14.3				
12345678S					16	13	21.0		8.0				

**TIA Cat 5e Perm. Link**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	i	90 m	498	44	1	3	60.0	19.0	57.0	58.6	57.0	54.0	55.6
12345678					4	3.9	54.8	19.0	50.9	46.6	51.8	47.9	43.6
					8	5.5	50.0	19.0	44.5	40.6	47.0	41.5	37.6
12345678S					10	6.2	48.5	19.0	42.3	38.6	45.5	39.3	35.6
12345678S					16	7.9	45.2	19.0	37.3	34.5	42.2	34.3	31.5
					20	8.9	43.7	19.0	34.8	32.6	40.7	31.8	29.6
					25	10	42.1	18.0	32.1	30.7	39.1	29.1	27.7
					31.25	11.2	40.5	17.1	29.3	28.7	37.5	26.3	25.7
					62.5	16.2	35.7	14.1	19.4	22.7	32.7	16.4	19.7
					100	21	32.3	12.0	11.3	18.6	29.3	8.3	15.6

**TIA Cat 6 Perm. Link**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	i	90 m	498	44	1	3	65.0	19.1	62.0	64.2	62.0	59.0	61.2
12345678					4	3.5	64.1	21.0	60.6	52.1	61.8	58.3	49.1
					8	5	59.4	21.0	54.4	46.1	57.0	52.1	43.1
12345678S					10	5.5	57.8	21.0	52.3	44.2	55.5	49.9	41.2
12345678S					16	7	54.6	20.0	47.6	40.1	52.2	45.2	37.1
					20	7.9	53.1	19.5	45.2	38.2	50.7	42.8	35.2
					25	8.9	51.5	19.0	42.7	36.2	49.1	40.2	33.2
					31.25	10	50.0	18.5	40.0	34.3	47.5	37.6	31.3
					62.5	14.4	45.1	16.0	30.8	28.3	42.7	28.3	25.3
					100	18.6	41.8	14.0	23.3	24.2	39.3	20.7	21.2
					200	27.4	36.9	11.0	9.6	18.2	34.3	7.0	15.2
					250	31.1	35.3	10.0	4.2	16.2	32.7	1.6	13.2

TIA AugCat 6 PL dr 1.4b

**DRAFT STANDARD - For Verification Purposes ONLY**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	i	90 m	498	44	1	3	65.0	19.1		64.2	62.0		61.2
12345678					4	3.5	64.1	21.0		52.1	61.8		49.1
					8	4.9	59.4	21.0		46.1	57.0		43.1
12345678S					10	5.5	57.8	21.0		44.2	55.5		41.2
12345678S					16	6.9	54.6	20.0		40.1	52.2		37.1
					20	7.7	53.1	19.5		38.2	50.7		35.2
					25	8.7	51.5	19.0		36.2	49.1		33.2
					31.25	9.7	50.0	18.5		34.3	47.5		31.3
					62.5	13.9	45.1	16.0		28.3	42.7		25.3
					100	17.9	41.8	14.0		24.2	39.3		21.2
					200	26	36.9	11.0		18.2	34.3		15.2
					250	29.4	35.3	10.0		16.2	32.7		13.2
					350	35.6	31.8	7.1		13.3	29.1		10.3
					500	43.8	26.7	6.0		10.2	23.8		7.2

TIA TSB155 PL dr 1.3.2 0-45m

**DRAFT STANDARD - For Verification Purposes ONLY**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	i	90 m	498	44	1	3	65.0	19.1		64.2	62.0		61.2
12345678					4	3	64.1	21.0		52.1	61.8		49.1
					8	3	59.4	21.0		46.1	57.0		43.1
12345678S					10	3	57.8	21.0		44.2	55.5		41.2
12345678S					16	3.6	54.6	20.0		40.1	52.2		37.1
					20	4.1	53.1	19.5		38.2	50.7		35.2
					25	4.6	51.5	19.0		36.2	49.1		33.2
					31.25	5.2	50.0	18.5		34.3	47.5		31.3
					62.5	7.5	45.1	16.0		28.3	42.7		25.3
					100	9.7	41.8	14.0		24.2	39.3		21.2
					200	14.3	36.9	11.0		18.2	34.3		15.2
					250	16.3	35.3	10.0		16.2	32.7		13.2
					350	20	30.8	7.1		13.3	28.7		10.3
					500	25	23.4	6.0		10.2	22.5		7.2

TIA TSB155 PL dr 1.3.2 45-90m

**DRAFT STANDARD - For Verification Purposes ONLY**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	i	90 m	498	44	1	3	65.0	19.1		64.2	62.0		61.2
12345678					4	3.5	64.1	21.0		52.1	61.8		49.1
					8	5	59.4	21.0		46.1	57.0		43.1
12345678S					10	5.6	57.8	21.0		44.2	55.5		41.2
12345678S					16	7	54.6	20.0		40.1	52.2		37.1
					20	7.9	53.1	19.5		38.2	50.7		35.2
					25	8.9	51.5	19.0		36.2	49.1		33.2
					31.25	10	50.0	18.5		34.3	47.5		31.3
					62.5	14.4	45.1	16.0		28.3	42.7		25.3
					100	18.6	41.8	14.0		24.2	39.3		21.2
					200	27.4	36.9	11.0		18.2	34.3		15.2
					250	31.1	35.3	10.0		16.2	32.7		13.2
					350	37.9	30.8	7.1		13.3	28.7		10.3
					500	47.1	23.4	6.0		10.2	22.5		7.2

**TIA Cat 5 Ch (TSB-95)**
**OBSOLETE STANDARD**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	i	100 m	555	50	1	3	60.0	15.0	57.0	57.0			54.4
12345678					4	4.5	50.6	15.0	46.1	45.0			42.4
					8	6.3	45.6	15.0	39.3	38.9			36.3
12345678S					10	7.1	44.0	15.0	36.9	37.0			34.4
12345678S					16	9.1	40.6	15.0	31.6	32.9			30.3
					20	10.2	39.0	15.0	28.8	31.0			28.4
					25	11.4	37.4	14.0	26.0	29.0			26.4
					31.25	12.9	35.7	13.1	22.9	27.1			24.5
					62.5	18.6	30.6	10.1	12.0	21.1			18.5
					100	24	27.1	8.0	3.1	17.0			14.4

**TIA Cat 5 Ch (TSB-67)**
**OBSOLETE STANDARD**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	i	90 m	498	44	1	3	60.3						
12345678					4	4.5	50.6						
					8	6.3	45.6						
12345678S					10	7	44.0						
12345678S					16	9.2	40.6						
					20	10.3	39.0						
					25	11.4	37.4						
					31.25	12.8	35.7						
					62.5	18.5	30.6						
					100	24	27.1						

**TIA Cat 5 Ch (TSB-67)**
**OBSOLETE STANDARD**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	i	100 m	555	50	1	3	60.3						
12345678					4	4.5	50.6						
					8	6.3	45.6						
12345678S					10	7	44.0						
12345678S					16	9.2	40.6						
					20	10.3	39.0						
					25	11.4	37.4						
					31.25	12.8	35.7						
					62.5	18.5	30.6						
					100	24	27.1						

TIA Cat 5 BL (TSB-67)

**OBSOLETE STANDARD**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT		
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB		
12345678	i	94 m	i	50 ns	1	3	61.3								
12345678					4	4	51.8								
					8	5.7	47.1								
12345678S					10	6.3	45.5								
12345678S					16	8.2	42.3								
					20	9.2	40.7								
					25	10.3	39.1								
					31.25	11.5	37.6								
					62.5	16.7	32.7								
					100	21.6	29.3								

# ISO Standards

## ISO11801 Channel Class C

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	40	i	555	50	1	4.2	39.1	15.0	34.9				
12345678					4	7.6	29.2	15.0	21.6				
					8	10.4	24.3	15.0	13.9				
12345678S					10	11.5	22.7	15.0	11.2				
12345678S					16	14.4	19.4	15.0	5.0				

## ISO11801 Channel Class D

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	25	i	555	50	1	4	60.0	17.0	56.0	57.4	57.0	53.0	54.4
12345678					4	4.5	53.5	17.0	49.0	45.4	50.5	46.0	42.4
					8	6.4	48.6	17.0	42.2	39.3	45.6	39.2	36.3
12345678S					10	7.2	47.0	17.0	39.8	37.4	44.0	36.8	34.4
12345678S					16	9.1	43.6	17.0	34.5	33.3	40.6	31.5	30.3
					20	10.2	42.0	17.0	31.8	31.4	39.0	28.8	28.4
					25	11.5	40.3	16.0	28.9	29.4	37.3	25.9	26.4
					31.25	12.9	38.7	15.1	25.8	27.5	35.7	22.8	24.5
					62.5	18.6	33.6	12.0	15.0	21.5	30.6	12.0	18.5
					100	24	30.1	10.0	6.1	17.4	27.1	3.1	14.4

## ISO11801 Channel Class E

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	25	i	555	50	1	4	65.0	19.0	61.0	63.3	62.0	58.0	60.3
12345678					4	4.2	63.0	19.0	58.9	51.2	60.5	56.4	48.2
					8	5.9	58.2	19.0	52.3	45.2	55.6	49.7	42.2
12345678S					10	6.6	56.6	19.0	50.0	43.3	54.0	47.4	40.3
12345678S					16	8.3	53.2	18.0	44.9	39.2	50.6	42.3	36.2
					20	9.3	51.6	17.5	42.3	37.2	49.0	39.7	34.2
					25	10.5	50.0	17.0	39.6	35.3	47.3	36.9	32.3
					31.25	11.7	48.4	16.5	36.7	33.4	45.7	34.0	30.4
					62.5	16.9	43.4	14.0	26.5	27.3	40.6	23.7	24.3
					100	21.7	39.9	12.0	18.2	23.3	37.1	15.4	20.3
					200	31.7	34.8	9.0	3.1	17.2	31.9	0.1	14.2
					250	35.9	33.1	8.0	-2.8	15.3	30.2	-5.8	12.3



**ISO11801 Channel Class F**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	25	i	555	50	1	4	65.0	19.0	61.0	65.0	62.0	58.0	62.0
12345678					4	4.1	65.0	19.0	60.9	65.0	62.0	57.9	62.0
					8	5.7	65.0	19.0	59.3	62.4	62.0	56.3	59.4
12345678S					10	6.4	65.0	19.0	58.6	60.8	62.0	55.6	57.8
12345678S					16	8.1	65.0	18.0	56.9	57.5	62.0	53.9	54.5
					20	9.1	65.0	17.5	55.9	55.9	62.0	52.9	52.9
					25	10.2	65.0	17.0	54.8	54.4	62.0	51.8	51.4
					31.25	11.4	65.0	16.5	53.6	52.8	62.0	50.6	49.8
					62.5	16.3	65.0	14.0	48.7	47.8	62.0	45.7	44.8
					100	20.8	62.9	12.0	42.1	44.4	59.9	39.1	41.4
					200	30	58.3	9.0	28.4	39.4	55.3	25.4	36.4
					250	33.8	56.9	8.0	23.1	37.8	53.9	20.1	34.8
					600	54.6	51.2	8.0	-3.4	31.3	48.2	-6.4	28.3

**ISO TR24750 Ch 3N746 0-55m**

**DRAFT STANDARD - For Verification Purposes ONLY**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	25	i	555	50	1	4	65.0	19.0	61.0	63.3	62.0	58.0	60.3
12345678					4	4	63.0	19.0	59.0	51.2	60.5	56.5	48.2
					8	4	58.2	19.0	54.2	45.2	55.6	51.6	42.2
12345678S					10	4	56.6	19.0	52.6	43.3	54.0	50.0	40.3
12345678S					16	4.7	53.2	18.0	48.5	39.2	50.6	45.9	36.2
					20	5.3	51.6	17.5	46.3	37.2	49.0	43.7	34.2
					25	5.9	50.0	17.0	44.1	35.3	47.3	41.4	32.3
					31.25	6.7	48.4	16.5	41.8	33.4	45.7	39.1	30.4
					62.5	9.6	43.4	14.0	33.8	27.3	40.6	31.0	24.3
					100	12.3	39.9	12.0	27.6	23.3	37.1	24.8	20.3
					200	18	34.8	9.0	16.8	17.2	31.9	13.9	14.2
					250	20.3	33.1	8.0	12.8	15.3	30.2	9.8	12.3
					350	24.6	29.7	6.6	5.1	12.4	26.9	2.3	9.4
	500	30.2	22.0	6.0	-8.2	9.3	20.4	-9.8	6.3				

**ISO TR24750 Ch 3N746 55-100m**

**DRAFT STANDARD - For Verification Purposes ONLY**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	25	i	555	50	1	4	65.0	19.0	61.0	63.3	62.0	58.0	60.3
12345678					4	4.2	63.0	19.0	58.9	51.2	60.5	56.4	48.2
					8	5.9	58.2	19.0	52.3	45.2	55.6	49.7	42.2
12345678S					10	6.6	56.6	19.0	50.0	43.3	54.0	47.4	40.3
12345678S					16	8.3	53.2	18.0	44.9	39.2	50.6	42.3	36.2
					20	9.3	51.6	17.5	42.3	37.2	49.0	39.7	34.2
					25	10.5	50.0	17.0	39.6	35.3	47.3	36.9	32.3
					31.25	11.7	48.4	16.5	36.7	33.4	45.7	34.0	30.4
					62.5	16.9	43.4	14.0	26.5	27.3	40.6	23.7	24.3
					100	21.7	39.9	12.0	18.2	23.3	37.1	15.4	20.3
					200	31.7	34.8	9.0	3.1	17.2	31.9	0.1	14.2
					250	35.9	33.1	8.0	-2.8	15.3	30.2	-5.8	12.3
					350	43.5	29.7	6.6	-13.8	12.4	26.9	-16.5	9.4
	500	53.4	22.0	6.0	-31.4	9.3	20.4	-33.0	6.3				

**ISO AugCI E Ch 3N753**
**DRAFT STANDARD - For Verification Purposes ONLY**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	25	i	555	50	1	4	65.0	19.0	61.0	63.3	62.0	58.0	60.3
12345678					4	4.1	63.0	19.0	59.0	51.2	60.5	56.5	48.2
					8	5.7	58.2	19.0	52.4	45.2	55.6	49.9	42.2
12345678S					10	6.4	56.6	19.0	50.2	43.3	54.0	47.6	40.3
12345678S					16	8.1	53.2	18.0	45.1	39.2	50.6	42.5	36.2
					20	9.1	51.6	17.5	42.6	37.2	49.0	39.9	34.2
					25	10.2	50.0	17.0	39.9	35.3	47.3	37.2	32.3
					31.25	11.4	48.4	16.5	37.0	33.4	45.7	34.3	30.4
					62.5	16.3	43.4	14.0	27.1	27.3	40.6	24.3	24.3
					100	20.8	39.9	12.0	19.2	23.3	37.1	16.3	20.3
					200	30	34.8	9.0	4.8	17.2	31.9	1.9	14.2
					250	33.8	33.1	8.0	-0.7	15.3	30.2	-3.6	12.3
					350	40.5	30.6	8.0	-10.0	12.4	27.6	-13.0	9.4
					500	49.3	27.9	8.0	-21.4	9.3	24.8	-24.5	6.3

**ISO11801 PL max Class C**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	34	i	498	44	1	4	40.1	15.0	36.1				
12345678					4	6.4	30.6	15.0	24.2				
					8	8.8	25.8	15.0	17.0				
12345678S					10	9.8	24.3	15.0	14.5				
12345678S					16	12.2	21.1	15.0	8.8				

**ISO11801 PL max Class D**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	21	i	498	44	1	4	60.0	19.0	56.0	58.6	57.0	53.0	55.6
12345678					4	4	54.8	19.0	50.8	46.6	51.8	47.8	43.6
					8	5.4	50.0	19.0	44.6	40.6	47.0	41.6	37.6
12345678S					10	6.1	48.5	19.0	42.4	38.6	45.5	39.4	35.6
12345678S					16	7.7	45.2	19.0	37.5	34.5	42.2	34.5	31.5
					20	8.7	43.7	19.0	35.0	32.6	40.7	32.0	29.6
					25	9.7	42.1	18.0	32.4	30.7	39.1	29.4	27.7
					31.25	10.9	40.5	17.1	29.6	28.7	37.5	26.6	25.7
					62.5	15.8	35.7	14.0	19.8	22.7	32.7	16.8	19.7
					100	20.4	32.3	12.0	11.9	18.6	29.3	8.9	15.6

**ISO11801 PL max Class E**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	21	i	498	44	1	4	65.0	21.0	61.0	64.2	62.0	58.0	61.2
12345678					4	4	64.1	21.0	60.1	52.1	61.8	57.8	49.1
					8	5	59.4	21.0	54.4	46.1	57.0	52.0	43.1
12345678S					10	5.6	57.8	21.0	52.2	44.2	55.5	49.9	41.2
12345678S					16	7.1	54.6	20.0	47.5	40.1	52.2	45.1	37.1
					20	7.9	53.1	19.5	45.1	38.2	50.7	42.7	35.2
					25	8.9	51.5	19.0	42.6	36.2	49.1	40.2	33.2
					31.25	10	50.0	18.5	40.0	34.3	47.5	37.5	31.3
					62.5	14.4	45.1	16.0	30.7	28.3	42.7	28.2	25.3
					100	18.5	41.8	14.0	23.3	24.2	39.3	20.8	21.2
					200	27.1	36.9	11.0	9.9	18.2	34.3	7.2	15.2
					250	30.7	35.3	10.0	4.7	16.2	32.7	2.0	13.2

**ISO11801 PL max Class F**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	21	i	498	44	1	4	65.0	21.0	61.0	65.0	62.0	58.0	62.0
12345678					4	4	65.0	21.0	61.0	65.0	62.0	58.0	62.0
					8	4.9	65.0	21.0	60.1	64.3	62.0	57.1	61.3
12345678S					10	5.5	65.0	21.0	59.5	62.7	62.0	56.5	59.7
12345678S					16	6.9	65.0	20.0	58.1	59.3	62.0	55.1	56.3
					20	7.7	65.0	19.5	57.3	57.7	62.0	54.3	54.7
					25	8.7	65.0	19.0	56.3	56.1	62.0	53.3	53.1
					31.25	9.7	65.0	18.5	55.3	54.5	62.0	52.3	51.5
					62.5	13.9	65.0	16.0	51.1	49.5	62.0	48.1	46.5
					100	17.7	65.0	14.0	47.3	46.0	62.0	44.3	43.0
					200	25.6	61.9	11.0	36.3	40.9	58.9	33.3	37.9
					250	28.8	60.4	10.0	31.6	39.2	57.4	28.6	36.2
					600	46.6	54.7	10.0	8.1	32.6	51.7	5.1	29.6

**ISO AugCI E PL 3N753**
**DRAFT STANDARD - For Verification Purposes ONLY**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	21	i	498	44	1	4	65.0	19.1	61.0	64.2	62.0	58.0	61.2
12345678					4	4	64.1	21.0	60.1	52.1	61.8	57.8	49.1
					8	4.9	59.4	21.0	54.5	46.1	57.0	52.1	43.1
12345678S					10	5.5	57.8	21.0	52.4	44.2	55.5	50.0	41.2
12345678S					16	6.9	54.6	20.0	47.7	40.1	52.2	45.3	37.1
					20	7.7	53.1	19.5	45.3	38.2	50.7	42.9	35.2
					25	8.7	51.5	19.0	42.9	36.2	49.1	40.4	33.2
					31.25	9.7	50.0	18.5	40.3	34.3	47.5	37.8	31.3
					62.5	13.9	45.1	16.0	31.3	28.3	42.7	28.8	25.3
					100	17.7	41.8	14.0	24.1	24.2	39.3	21.6	21.2
					200	25.6	36.9	11.0	11.4	18.2	34.3	8.7	15.2
					250	28.8	35.3	10.0	6.5	16.2	32.7	3.9	13.2
					350	34.6	32.9	10.0	-1.7	13.3	30.3	-4.3	10.3
					500	42.1	30.4	10.0	-11.7	10.2	27.6	-14.4	7.2

**ISO11801 Class D (1995)**

**OBSOLETE STANDARD**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT			
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB			
12345678	40	100	1000	50	1	2.5	54.0									
12345678					4	4.8	45.0									
					8	6.7	41.0									
12345678S					10	7.5	39.0									
12345678S					16	9.4	36.0									
					20	10.5	35.0									
					25	11.7	33.7									
					31.25	13.1	32.0									
					62.5	18.4	27.0									
					100	23.2	24.0									

## Aus/NZ Standards

### Aus/NZ Channel Class C

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	40	i	555	50	1	4.2	39.1	15.0	34.9				
12345678					4	7.6	29.2	15.0	21.6				
					8	10.4	24.3	15.0	13.9				
12345678S					10	11.5	22.7	15.0	11.2				
12345678S					16	14.4	19.4	15.0	5.0				

### Aus/NZ Channel Class D

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	25	i	555	50	1	4	60.0	17.0	56.0	57.4	57.0	53.0	54.4
12345678					4	4.5	53.5	17.0	49.0	45.4	50.5	46.0	42.4
					8	6.4	48.6	17.0	42.2	39.3	45.6	39.2	36.3
12345678S					10	7.2	47.0	17.0	39.8	37.4	44.0	36.8	34.4
12345678S					16	9.1	43.6	17.0	34.5	33.3	40.6	31.5	30.3
					20	10.2	42.0	17.0	31.8	31.4	39.0	28.8	28.4
					25	11.5	40.3	16.0	28.9	29.4	37.3	25.9	26.4
					31.25	12.9	38.7	15.1	25.8	27.5	35.7	22.8	24.5
					62.5	18.6	33.6	12.0	15.0	21.5	30.6	12.0	18.5
					100	24	30.1	10.0	6.1	17.4	27.1	3.1	14.4

### Aus/NZ Channel Class E

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	25	i	555	50	1	4	65.0	19.0	61.0	63.3	62.0	58.0	60.3
12345678					4	4.2	63.0	19.0	58.9	51.2	60.5	56.4	48.2
					8	5.9	58.2	19.0	52.3	45.2	55.6	49.7	42.2
12345678S					10	6.6	56.6	19.0	50.0	43.3	54.0	47.4	40.3
12345678S					16	8.3	53.2	18.0	44.9	39.2	50.6	42.3	36.2
					20	9.3	51.6	17.5	42.3	37.2	49.0	39.7	34.2
					25	10.5	50.0	17.0	39.6	35.3	47.3	36.9	32.3
					31.25	11.7	48.4	16.5	36.7	33.4	45.7	34.0	30.4
					62.5	16.9	43.4	14.0	26.5	27.3	40.6	23.7	24.3
					100	21.7	39.9	12.0	18.2	23.3	37.1	15.4	20.3
					200	31.7	34.8	9.0	3.1	17.2	31.9	0.1	14.2
					250	35.9	33.1	8.0	-2.8	15.3	30.2	-5.8	12.3

**Aus/NZ PL max Class C**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	34	i	498	44	1	4	40.1	15.0	36.1				
12345678					4	6.4	30.6	15.0	24.2				
					8	8.8	25.8	15.0	17.0				
12345678S					10	9.8	24.3	15.0	14.5				
12345678S					16	12.2	21.1	15.0	8.8				

**Aus/NZ PL max Class D**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	21	i	498	44	1	4	60.0	19.0	56.0	58.6	57.0	53.0	55.6
12345678					4	4	54.8	19.0	50.8	46.6	51.8	47.8	43.6
					8	5.4	50.0	19.0	44.6	40.6	47.0	41.6	37.6
12345678S					10	6.1	48.5	19.0	42.4	38.6	45.5	39.4	35.6
12345678S					16	7.7	45.2	19.0	37.5	34.5	42.2	34.5	31.5
					20	8.7	43.7	19.0	35.0	32.6	40.7	32.0	29.6
					25	9.7	42.1	18.0	32.4	30.7	39.1	29.4	27.7
					31.25	10.9	40.5	17.1	29.6	28.7	37.5	26.6	25.7
					62.5	15.8	35.7	14.0	19.8	22.7	32.7	16.8	19.7
					100	20.4	32.3	12.0	11.9	18.6	29.3	8.9	15.6

**Aus/NZ PL max Class E**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	21	i	498	44	1	4	65.0	21.0	61.0	64.2	62.0	58.0	61.2
12345678					4	4	64.1	21.0	60.1	52.1	61.8	57.8	49.1
					8	5	59.4	21.0	54.4	46.1	57.0	52.0	43.1
12345678S					10	5.6	57.8	21.0	52.2	44.2	55.5	49.9	41.2
12345678S					16	7.1	54.6	20.0	47.5	40.1	52.2	45.1	37.1
					20	7.9	53.1	19.5	45.1	38.2	50.7	42.7	35.2
					25	8.9	51.5	19.0	42.6	36.2	49.1	40.2	33.2
					31.25	10	50.0	18.5	40.0	34.3	47.5	37.5	31.3
					62.5	14.4	45.1	16.0	30.7	28.3	42.7	28.2	25.3
					100	18.5	41.8	14.0	23.3	24.2	39.3	20.8	21.2
					200	27.1	36.9	11.0	9.9	18.2	34.3	7.2	15.2
					250	30.7	35.3	10.0	4.7	16.2	32.7	2.0	13.2

## Chinese Standards

China GBT 50312-2k Cat 3

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	i	90	i	45	1	3.2	40.1						
12345678					4	6.1	30.7						
12345678S					8	8.8	25.9						
12345678S					10	10	24.3						
12345678S					16	13.2	21.0						

China GBT 50312-2k Cat 5

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	i	90	498	44	1	3	60.0	15.0	57.0	57.0			54.4
12345678					4	4	51.8	15.0	47.8	45.0			42.4
12345678S					8	5.7	47.1	15.0	41.4	38.9			36.3
12345678S					10	6.4	45.5	15.0	39.1	37.0			34.4
12345678S					16	8.1	42.3	15.0	34.1	32.9			30.3
					20	9.1	40.7	15.0	31.6	31.0			28.4
					25	10.3	39.1	14.3	28.9	29.0			26.4
					31.25	11.6	37.6	13.6	26.0	27.1			24.5
					62.5	16.7	32.7	11.5	15.9	21.1			18.5
					100	21.6	29.3	10.1	7.7	17.0			14.4

## EN (European) Standards

EN50173 Channel Class C

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	40	i	555	50	1	4.2	39.1	15.0	34.9				
12345678					4	7.6	29.2	15.0	21.6				
					8	10.4	24.3	15.0	13.9				
12345678S					10	11.5	22.7	15.0	11.2				
12345678S					16	14.4	19.4	15.0	5.0				

EN50173 Channel Class D

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	25	i	555	50	1	4	60.0	17.0	56.0	57.4	57.0	53.0	54.4
12345678					4	4.5	53.5	17.0	49.0	45.4	50.5	46.0	42.4
					8	6.4	48.6	17.0	42.2	39.3	45.6	39.2	36.3
12345678S					10	7.2	47.0	17.0	39.8	37.4	44.0	36.8	34.4
12345678S					16	9.1	43.6	17.0	34.5	33.3	40.6	31.5	30.3
					20	10.2	42.0	17.0	31.8	31.4	39.0	28.8	28.4
					25	11.5	40.3	16.0	28.9	29.4	37.3	25.9	26.4
					31.25	12.9	38.7	15.1	25.8	27.5	35.7	22.8	24.5
					62.5	18.6	33.6	12.0	15.0	21.5	30.6	12.0	18.5
					100	24	30.1	10.0	6.1	17.4	27.1	3.1	14.4

EN50173 Channel Class E

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	25	i	555	50	1	4	65.0	19.0	61.0	63.3	62.0	58.0	60.3
12345678					4	4.2	63.0	19.0	58.9	51.2	60.5	56.4	48.2
					8	5.9	58.2	19.0	52.3	45.2	55.6	49.7	42.2
12345678S					10	6.6	56.6	19.0	50.0	43.3	54.0	47.4	40.3
12345678S					16	8.3	53.2	18.0	44.9	39.2	50.6	42.3	36.2
					20	9.3	51.6	17.5	42.3	37.2	49.0	39.7	34.2
					25	10.5	50.0	17.0	39.6	35.3	47.3	36.9	32.3
					31.25	11.7	48.4	16.5	36.7	33.4	45.7	34.0	30.4
					62.5	16.9	43.4	14.0	26.5	27.3	40.6	23.7	24.3
					100	21.7	39.9	12.0	18.2	23.3	37.1	15.4	20.3
	200	31.7	34.8	9.0	3.1	17.2	31.9	0.1	14.2				
	250	35.9	33.1	8.0	-2.8	15.3	30.2	-5.8	12.3				



**EN50173 Channel Class F**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	25	i	555	50	1	4	65.0	19.0	61.0	65.0	62.0	58.0	62.0
12345678					4	4.1	65.0	19.0	60.9	65.0	62.0	57.9	62.0
					8	5.7	65.0	19.0	59.3	62.4	62.0	56.3	59.4
12345678S					10	6.4	65.0	19.0	58.6	60.8	62.0	55.6	57.8
12345678S					16	8.1	65.0	18.0	56.9	57.5	62.0	53.9	54.5
					20	9.1	65.0	17.5	55.9	55.9	62.0	52.9	52.9
					25	10.2	65.0	17.0	54.8	54.4	62.0	51.8	51.4
					31.25	11.4	65.0	16.5	53.6	52.8	62.0	50.6	49.8
					62.5	16.3	65.0	14.0	48.7	47.8	62.0	45.7	44.8
					100	20.8	62.9	12.0	42.1	44.4	59.9	39.1	41.4
					200	30	58.3	9.0	28.4	39.4	55.3	25.4	36.4
					250	33.8	56.9	8.0	23.1	37.8	53.9	20.1	34.8
					600	54.6	51.2	8.0	-3.4	31.3	48.2	-6.4	28.3

**EN50173 PL Class C**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	34	i	498	44	1	4	40.1	15.0	36.1				
12345678					4	6.4	30.6	15.0	24.2				
					8	8.8	25.8	15.0	17.0				
12345678S					10	9.8	24.3	15.0	14.5				
12345678S					16	12.2	21.1	15.0	8.8				

**EN50173 PL Class D**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	21	i	498	44	1	4	60.0	19.0	56.0	58.6	57.0	53.0	55.6
12345678					4	4	54.8	19.0	50.8	46.6	51.8	47.8	43.6
					8	5.4	50.0	19.0	44.6	40.6	47.0	41.6	37.6
12345678S					10	6.1	48.5	19.0	42.4	38.6	45.5	39.4	35.6
12345678S					16	7.7	45.2	19.0	37.5	34.5	42.2	34.5	31.5
					20	8.7	43.7	19.0	35.0	32.6	40.7	32.0	29.6
					25	9.7	42.1	18.0	32.4	30.7	39.1	29.4	27.7
					31.25	10.9	40.5	17.1	29.6	28.7	37.5	26.6	25.7
					62.5	15.8	35.7	14.0	19.8	22.7	32.7	16.8	19.7
					100	20.4	32.3	12.0	11.9	18.6	29.3	8.9	15.6

**EN50173 PL Class E**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	21	i	498	44	1	4	65.0	21.0	61.0	64.2	62.0	58.0	61.2
12345678					4	4	64.1	21.0	60.1	52.1	61.8	57.8	49.1
					8	5	59.4	21.0	54.4	46.1	57.0	52.0	43.1
12345678S					10	5.6	57.8	21.0	52.2	44.2	55.5	49.9	41.2
12345678S					16	7.1	54.6	20.0	47.5	40.1	52.2	45.1	37.1
					20	7.9	53.1	19.5	45.1	38.2	50.7	42.7	35.2
					25	8.9	51.5	19.0	42.6	36.2	49.1	40.2	33.2
					31.25	10	50.0	18.5	40.0	34.3	47.5	37.5	31.3
					62.5	14.4	45.1	16.0	30.7	28.3	42.7	28.2	25.3
					100	18.5	41.8	14.0	23.3	24.2	39.3	20.8	21.2
					200	27.1	36.9	11.0	9.9	18.2	34.3	7.2	15.2
					250	30.7	35.3	10.0	4.7	16.2	32.7	2.0	13.2

**EN50173 PL Class F**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	21	i	498	44	1	4	65.0	21.0	61.0	65.0	62.0	58.0	62.0
12345678					4	4	65.0	21.0	61.0	65.0	62.0	58.0	62.0
					8	4.9	65.0	21.0	60.1	64.3	62.0	57.1	61.3
12345678S					10	5.5	65.0	21.0	59.5	62.7	62.0	56.5	59.7
12345678S					16	6.9	65.0	20.0	58.1	59.3	62.0	55.1	56.3
					20	7.7	65.0	19.5	57.3	57.7	62.0	54.3	54.7
					25	8.7	65.0	19.0	56.3	56.1	62.0	53.3	53.1
					31.25	9.7	65.0	18.5	55.3	54.5	62.0	52.3	51.5
					62.5	13.9	65.0	16.0	51.1	49.5	62.0	48.1	46.5
					100	17.7	65.0	14.0	47.3	46.0	62.0	44.3	43.0
					200	25.6	61.9	11.0	36.3	40.9	58.9	33.3	37.9
					250	28.8	60.4	10.0	31.6	39.2	57.4	28.6	36.2
					600	46.6	54.7	10.0	8.1	32.6	51.7	5.1	29.6

# Japanese Standards

**JIS X5150:2004 Cl. D Channel**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	25	i	555	50	1	4	60.0	17.0	56.0	57.4	57.0	53.0	54.4
12345678					4	4.5	53.5	17.0	49.0	45.4	50.5	46.0	42.4
					8	6.4	48.6	17.0	42.2	39.3	45.6	39.2	36.3
12345678S					10	7.2	47.0	17.0	39.8	37.4	44.0	36.8	34.4
12345678S					16	9.1	43.6	17.0	34.5	33.3	40.6	31.5	30.3
					20	10.2	42.0	17.0	31.8	31.4	39.0	28.8	28.4
					25	11.5	40.3	16.0	28.9	29.4	37.3	25.9	26.4
					31.25	12.9	38.7	15.1	25.8	27.5	35.7	22.8	24.5
					62.5	18.6	33.6	12.0	15.0	21.5	30.6	12.0	18.5
	100	24	30.1	10.0	6.1	17.4	27.1	3.1	14.4				

**JIS X5150:2004 Cl. E Channel**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	25	i	555	50	1	4	65.0	19.0	61.0	63.3	62.0	58.0	60.3
12345678					4	4.2	63.0	19.0	58.9	51.2	60.5	56.4	48.2
					8	5.9	58.2	19.0	52.3	45.2	55.6	49.7	42.2
12345678S					10	6.6	56.6	19.0	50.0	43.3	54.0	47.4	40.3
12345678S					16	8.3	53.2	18.0	44.9	39.2	50.6	42.3	36.2
					20	9.3	51.6	17.5	42.3	37.2	49.0	39.7	34.2
					25	10.5	50.0	17.0	39.6	35.3	47.3	36.9	32.3
					31.25	11.7	48.4	16.5	36.7	33.4	45.7	34.0	30.4
					62.5	16.9	43.4	14.0	26.5	27.3	40.6	23.7	24.3
					100	21.7	39.9	12.0	18.2	23.3	37.1	15.4	20.3
					200	31.7	34.8	9.0	3.1	17.2	31.9	0.1	14.2
					250	35.9	33.1	8.0	-2.8	15.3	30.2	-5.8	12.3

**JIS X5150:2004 Cl. F Channel**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	25	i	555	50	1	4	65.0	19.0	61.0	65.0	62.0	58.0	62.0
12345678					4	4.1	65.0	19.0	60.9	65.0	62.0	57.9	62.0
					8	5.7	65.0	19.0	59.3	62.4	62.0	56.3	59.4
12345678S					10	6.4	65.0	19.0	58.6	60.8	62.0	55.6	57.8
12345678S					16	8.1	65.0	18.0	56.9	57.5	62.0	53.9	54.5
					20	9.1	65.0	17.5	55.9	55.9	62.0	52.9	52.9
					25	10.2	65.0	17.0	54.8	54.4	62.0	51.8	51.4
					31.25	11.4	65.0	16.5	53.6	52.8	62.0	50.6	49.8
					62.5	16.3	65.0	14.0	48.7	47.8	62.0	45.7	44.8
					100	20.8	62.9	12.0	42.1	44.4	59.9	39.1	41.4
					200	30	58.3	9.0	28.4	39.4	55.3	25.4	36.4
					250	33.8	56.9	8.0	23.1	37.8	53.9	20.1	34.8
	600	54.6	51.2	8.0	-3.4	31.3	48.2	-6.4	28.3				

**JIS X5150:2004 CI. D PL**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	21	i	498	44	1	4	60.0	19.0	56.0	58.6	57.0	53.0	55.6
12345678					4	4	54.8	19.0	50.8	46.6	51.8	47.8	43.6
					8	5.4	50.0	19.0	44.6	40.6	47.0	41.6	37.6
12345678S					10	6.1	48.5	19.0	42.4	38.6	45.5	39.4	35.6
12345678S					16	7.7	45.2	19.0	37.5	34.5	42.2	34.5	31.5
					20	8.7	43.7	19.0	35.0	32.6	40.7	32.0	29.6
					25	9.7	42.1	18.0	32.4	30.7	39.1	29.4	27.7
					31.25	10.9	40.5	17.1	29.6	28.7	37.5	26.6	25.7
					62.5	15.8	35.7	14.0	19.8	22.7	32.7	16.8	19.7
					100	20.4	32.3	12.0	11.9	18.6	29.3	8.9	15.6

**JIS X5150:2004 CI. E PL**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	21	i	498	44	1	4	65.0	21.0	61.0	64.2	62.0	58.0	61.2
12345678					4	4	64.1	21.0	60.1	52.1	61.8	57.8	49.1
					8	5	59.4	21.0	54.4	46.1	57.0	52.0	43.1
12345678S					10	5.6	57.8	21.0	52.2	44.2	55.5	49.9	41.2
12345678S					16	7.1	54.6	20.0	47.5	40.1	52.2	45.1	37.1
					20	7.9	53.1	19.5	45.1	38.2	50.7	42.7	35.2
					25	8.9	51.5	19.0	42.6	36.2	49.1	40.2	33.2
					31.25	10	50.0	18.5	40.0	34.3	47.5	37.5	31.3
					62.5	14.4	45.1	16.0	30.7	28.3	42.7	28.2	25.3
					100	18.5	41.8	14.0	23.3	24.2	39.3	20.8	21.2
					200	27.1	36.9	11.0	9.9	18.2	34.3	7.2	15.2
					250	30.7	35.3	10.0	4.7	16.2	32.7	2.0	13.2

**JIS X5150:2004 CI. F PL**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	21	i	498	44	1	4	65.0	21.0	61.0	65.0	62.0	58.0	62.0
12345678					4	4	65.0	21.0	61.0	65.0	62.0	58.0	62.0
					8	4.9	65.0	21.0	60.1	64.3	62.0	57.1	61.3
12345678S					10	5.5	65.0	21.0	59.5	62.7	62.0	56.5	59.7
12345678S					16	6.9	65.0	20.0	58.1	59.3	62.0	55.1	56.3
					20	7.7	65.0	19.5	57.3	57.7	62.0	54.3	54.7
					25	8.7	65.0	19.0	56.3	56.1	62.0	53.3	53.1
					31.25	9.7	65.0	18.5	55.3	54.5	62.0	52.3	51.5
					62.5	13.9	65.0	16.0	51.1	49.5	62.0	48.1	46.5
					100	17.7	65.0	14.0	47.3	46.0	62.0	44.3	43.0
					200	25.6	61.9	11.0	36.3	40.9	58.9	33.3	37.9
					250	28.8	60.4	10.0	31.6	39.2	57.4	28.6	36.2
					600	46.6	54.7	10.0	8.1	32.6	51.7	5.1	29.6

## Korean Standards

### Korean Cat 5e Channel

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	40	100 m	555	50	1	2.2	60.0	17.0		57.4	57.0		54.4
12345678					4	4.5	53.5	17.0		45.4	50.5		42.4
					8	6.3	48.6	17.0		39.3	45.6		36.3
12345678S					10	7.1	47.0	17.0		37.4	44.0		34.4
12345678S					16	9.2	43.6	17.0		33.3	40.6		30.3
					100	24	30.1	10.0		17.4	27.1		14.4

### Korean Cat 3 Channel

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	25	100 m	555	50	1	4.2	39.1						
12345678					4	7.3	29.3						
					8	10.2	24.3						
12345678S					10	11.5	22.7						
12345678S					16	14.9	19.2						

### Korean Pre-Deploy Comm

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	i	i	i	i	1	3.7	39.0	18.0					
12345678					4	6.6	29.0	18.0					
					8	9.3	25.0	18.0					
12345678S					10	10.7	23.0	18.0					
12345678S					16	14	19.0	15.0					

### Korean Pre-Deploy Res.

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT		
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB		
12345678	i	i	i	i	1	5.8	25.0								
12345678															
12345678S															

# Patch Cord Standards

ISO - ISO/IEC 11802:2002  
TIA - ANSI/TIA/EIA-568-B.2-1  
CLC - EN50173:2002

## ISO Patch Cord Cat5e 0.5m

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0	19.8					
					4		65.0	21.6					
					8		62.1	22.5					
					10		60.2	22.8					
					16		56.2	23.4					
					20		54.2	23.7					
					25		52.3	24.0					
					31.25		50.4	23.0					
					62.5		44.5	20.0					
					100		40.6	18.0					

## ISO Patch Cord Cat5e 1.0m

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0	19.8					
					4		65.0	21.6					
					8		61.3	22.5					
					10		59.4	22.8					
					16		55.4	23.4					
					20		53.5	23.7					
					25		51.6	24.0					
					31.25		49.7	23.0					
					62.5		43.9	20.0					
					100		39.9	18.0					

## ISO Patch Cord Cat5e 1.5m

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0	19.8					
					4		65.0	21.6					
					8		60.7	22.5					
					10		58.8	22.8					
					16		54.8	23.4					
					20		52.9	23.7					
					25		51.0	24.0					
					31.25		49.1	23.0					
					62.5		43.3	20.0					
					100		39.4	18.0					

**ISO Patch Cord Cat5e 2.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		65.0	21.6						
					8		60.2	22.5						
					10		58.3	22.8						
					16		54.3	23.4						
					20		52.4	23.7						
					25		50.5	24.0						
					31.25		48.6	23.0						
					62.5		42.9	20.0						
					100		39.0	18.0						

**ISO Patch Cord Cat5e 2.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		65.0	21.6						
					8		59.7	22.5						
					10		57.8	22.8						
					16		53.8	23.4						
					20		52.0	23.7						
					25		50.1	24.0						
					31.25		48.2	23.0						
					62.5		42.5	20.0						
					100		38.6	18.0						

**ISO Patch Cord Cat5e 3.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		65.0	21.6						
					8		59.3	22.5						
					10		57.4	22.8						
					16		53.4	23.4						
					20		51.6	23.7						
					25		49.7	24.0						
					31.25		47.8	23.0						
					62.5		42.1	20.0						
					100		38.3	18.0						

**ISO Patch Cord Cat5e 3.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		64.6	21.6						
					8		58.9	22.5						
					10		57.0	22.8						
					16		53.1	23.4						
					20		51.2	23.7						
					25		49.4	24.0						
					31.25		47.5	23.0						
					62.5		41.8	20.0						
					100		38.0	18.0						

**ISO Patch Cord Cat5e 4.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		64.3	21.6						
					8		58.5	22.5						
					10		56.7	22.8						
					16		52.8	23.4						
					20		50.9	23.7						
					25		49.1	24.0						
					31.25		47.2	23.0						
					62.5		41.6	20.0						
					100		37.8	18.0						

**ISO Patch Cord Cat5e 5.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		63.7	21.6						
					8		58.0	22.5						
					10		56.1	22.8						
					16		52.2	23.4						
					20		50.4	23.7						
					25		48.5	24.0						
					31.25		46.7	23.0						
					62.5		41.1	20.0						
					100		37.4	18.0						



**ISO Patch Cord Cat5e 7.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		62.4	21.6						
					8		56.8	22.5						
					10		55.0	22.8						
					16		51.2	23.4						
					20		49.4	23.7						
					25		47.6	24.0						
					31.25		45.8	23.0						
					62.5		40.3	20.0						
					100		36.8	18.0						

**ISO Patch Cord Cat5e 10.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		61.6	21.6						
					8		56.0	22.5						
					10		54.2	22.8						
					16		50.4	23.4						
					20		48.7	23.7						
					25		46.9	24.0						
					31.25		45.1	23.0						
					62.5		39.8	20.0						
					100		36.4	18.0						

**ISO Patch Cord Cat5e 20.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		59.5	21.6						
					8		54.1	22.5						
					10		52.4	22.8						
					16		48.8	23.4						
					20		47.2	23.7						
					25		45.5	24.0						
					31.25		43.9	23.0						
					62.5		39.0	20.0						
					100		35.8	18.0						

**ISO Patch Cord Cat6 0.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		65.0	21.6						
					8		65.0	22.5						
					10		65.0	22.8						
					16		62.9	23.4						
					20		61.0	23.7						
					25		59.1	24.0						
					31.25		57.2	23.0						
					62.5		51.2	20.0						
					100		47.2	18.0						
					200		41.3	15.0						
					250		39.4	14.0						

**ISO Patch Cord Cat6 1.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0	19.8					
					4		65.0	21.6					
					8		65.0	22.5					
					10		65.0	22.8					
					16		62.4	23.4					
					20		60.5	23.7					
					25		58.6	24.0					
					31.25		56.7	23.0					
					62.5		50.8	20.0					
					100		46.8	18.0					
					200		41.0	15.0					
					250		39.1	14.0					

**ISO Patch Cord Cat6 1.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0	19.8					
					4		65.0	21.6					
					8		65.0	22.5					
					10		65.0	22.8					
					16		62.0	23.4					
					20		60.1	23.7					
					25		58.2	24.0					
					31.25		56.3	23.0					
					62.5		50.4	20.0					
					100		46.5	18.0					
					200		40.7	15.0					
					250		38.9	14.0					

**ISO Patch Cord Cat6 2.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		65.0	21.6						
					8		65.0	22.5						
					10		65.0	22.8						
					16		61.6	23.4						
					20		59.7	23.7						
					25		57.8	24.0						
					31.25		56.0	23.0						
					62.5		50.1	20.0						
					100		46.2	18.0						
					200		40.5	15.0						
					250		38.6	14.0						

**ISO Patch Cord Cat6 2.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0	19.8					
					4		65.0	21.6					
					8		65.0	22.5					
					10		65.0	22.8					
					16		61.3	23.4					
					20		59.4	23.7					
					25		57.5	24.0					
					31.25		55.6	23.0					
					62.5		49.8	20.0					
					100		45.9	18.0					
					200		40.3	15.0					
					250		38.5	14.0					

**ISO Patch Cord Cat6 3.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0	19.8					
					4		65.0	21.6					
					8		65.0	22.5					
					10		65.0	22.8					
					16		61.0	23.4					
					20		59.1	23.7					
					25		57.2	24.0					
					31.25		55.4	23.0					
					62.5		49.6	20.0					
					100		45.7	18.0					
					200		40.1	15.0					
					250		38.3	14.0					

**ISO Patch Cord Cat6 3.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		65.0	21.6						
					8		65.0	22.5						
					10		64.7	22.8						
					16		60.7	23.4						
					20		58.9	23.7						
					25		57.0	24.0						
					31.25		55.1	23.0						
					62.5		49.3	20.0						
					100		45.5	18.0						
					200		39.9	15.0						
					250		38.2	14.0						

**ISO Patch Cord Cat6 4.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0	19.8					
					4		65.0	21.6					
					8		65.0	22.5					
					10		64.4	22.8					
					16		60.5	23.4					
					20		58.6	23.7					
					25		56.7	24.0					
					31.25		54.9	23.0					
					62.5		49.1	20.0					
					100		45.3	18.0					
					200		39.8	15.0					
					250		38.1	14.0					

**ISO Patch Cord Cat6 5.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0	19.8					
					4		65.0	21.6					
					8		65.0	22.5					
					10		63.9	22.8					
					16		60.0	23.4					
					20		58.2	23.7					
					25		56.3	24.0					
					31.25		54.5	23.0					
					62.5		48.8	20.0					
					100		45.0	18.0					
					200		39.6	15.0					
					250		37.9	14.0					

**ISO Patch Cord Cat6 7.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		65.0	21.6						
					8		64.8	22.5						
					10		63.0	22.8						
					16		59.2	23.4						
					20		57.3	23.7						
					25		55.5	24.0						
					31.25		53.7	23.0						
					62.5		48.2	20.0						
					100		44.5	18.0						
					200		39.3	15.0						
					250		37.7	14.0						

**ISO Patch Cord Cat6 10.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0	19.8					
					4		65.0	21.6					
					8		64.1	22.5					
					10		62.3	22.8					
					16		58.5	23.4					
					20		56.7	23.7					
					25		54.9	24.0					
					31.25		53.1	23.0					
					62.5		47.7	20.0					
					100		44.2	18.0					
					200		39.1	15.0					
					250		37.6	14.0					

**ISO Patch Cord Cat6 20.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0	19.8					
					4		65.0	21.6					
					8		62.4	22.5					
					10		60.7	22.8					
					16		57.1	23.4					
					20		55.4	23.7					
					25		53.7	24.0					
					31.25		52.0	23.0					
					62.5		47.0	20.0					
					100		43.7	18.0					
					200		39.1	15.0					
					250		37.6	14.0					

**TIA Patch Cord Cat5e 0.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		65.0	21.6						
					8		62.3	22.5						
					10		60.3	22.8						
					16		56.3	23.4						
					20		54.4	23.7						
					25		52.5	24.0						
					31.25		50.6	23.0						
					62.5		44.7	20.0						
					100		40.7	18.0						

**TIA Patch Cord Cat5e 1.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		65.0	21.6						
					8		61.6	22.5						
					10		59.7	22.8						
					16		55.7	23.4						
					20		53.8	23.7						
					25		51.9	24.0						
					31.25		50.0	23.0						
					62.5		44.1	20.0						
					100		40.1	18.0						

**TIA Patch Cord Cat5e 1.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		65.0	21.6						
					8		61.1	22.5						
					10		59.2	22.8						
					16		55.1	23.4						
					20		53.2	23.7						
					25		51.3	24.0						
					31.25		49.4	23.0						
					62.5		43.6	20.0						
					100		39.7	18.0						

**TIA Patch Cord Cat5e 2.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		65.0	21.6						
					8		60.6	22.5						
					10		58.7	22.8						
					16		54.7	23.4						
					20		52.8	23.7						
					25		50.9	24.0						
					31.25		49.0	23.0						
					62.5		43.2	20.0						
					100		39.3	18.0						

**TIA Patch Cord Cat5e 2.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		65.0	21.6						
					8		60.2	22.5						
					10		58.3	22.8						
					16		54.3	23.4						
					20		52.4	23.7						
					25		50.5	24.0						
					31.25		48.6	23.0						
					62.5		42.8	20.0						
					100		38.9	18.0						

**TIA Patch Cord Cat5e 3.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		65.0	21.6						
					8		59.8	22.5						
					10		57.9	22.8						
					16		53.9	23.4						
					20		52.0	23.7						
					25		50.1	24.0						
					31.25		48.2	23.0						
					62.5		42.5	20.0						
					100		38.6	18.0						

**TIA Patch Cord Cat5e 3.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		65.0	21.6						
					8		59.4	22.5						
					10		57.5	22.8						
					16		53.6	23.4						
					20		51.7	23.7						
					25		49.8	24.0						
					31.25		47.9	23.0						
					62.5		42.2	20.0						
					100		38.4	18.0						

**TIA Patch Cord Cat5e 4.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		65.0	21.6						
					8		59.1	22.5						
					10		57.2	22.8						
					16		53.3	23.4						
					20		51.4	23.7						
					25		49.5	24.0						
					31.25		47.7	23.0						
					62.5		41.9	20.0						
					100		38.1	18.0						

**TIA Patch Cord Cat5e 5.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		64.4	21.6						
					8		58.6	22.5						
					10		56.7	22.8						
					16		52.7	23.4						
					20		50.9	23.7						
					25		49.0	24.0						
					31.25		47.2	23.0						
					62.5		41.5	20.0						
					100		37.8	18.0						



**TIA Patch Cord Cat5e 7.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		63.3	21.6						
					8		57.5	22.5						
					10		55.6	22.8						
					16		51.7	23.4						
					20		49.9	23.7						
					25		48.0	24.0						
					31.25		46.2	23.0						
					62.5		40.7	20.0						
					100		37.1	18.0						

**TIA Patch Cord Cat5e 10.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		62.4	21.6						
					8		56.7	22.5						
					10		54.8	22.8						
					16		51.0	23.4						
					20		49.1	23.7						
					25		47.4	24.0						
					31.25		45.6	23.0						
					62.5		40.2	20.0						
					100		36.6	18.0						

**TIA Patch Cord Cat5e 20.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		60.3	21.6						
					8		54.7	22.5						
					10		53.0	22.8						
					16		49.3	23.4						
					20		47.6	23.7						
					25		45.9	24.0						
					31.25		44.2	23.0						
					62.5		39.2	20.0						
					100		35.9	18.0						

**TIA Patch Cord Cat6 0.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		65.0	21.6						
					8		65.0	22.5						
					10		65.0	22.8						
					16		63.0	23.4						
					20		61.1	23.7						
					25		59.2	24.0						
					31.25		57.3	23.0						
					62.5		51.3	20.0						
					100		47.3	18.0						
					200		41.4	15.0						
					250		39.5	14.0						

**TIA Patch Cord Cat6 1.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0	19.8					
					4		65.0	21.6					
					8		65.0	22.5					
					10		65.0	22.8					
					16		62.6	23.4					
					20		60.7	23.7					
					25		58.8	24.0					
					31.25		56.9	23.0					
					62.5		51.0	20.0					
					100		47.0	18.0					
					200		41.1	15.0					
					250		39.2	14.0					

**TIA Patch Cord Cat6 1.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0	19.8					
					4		65.0	21.6					
					8		65.0	22.5					
					10		65.0	22.8					
					16		62.3	23.4					
					20		60.4	23.7					
					25		58.5	24.0					
					31.25		56.5	23.0					
					62.5		50.6	20.0					
					100		46.7	18.0					
					200		40.9	15.0					
					250		39.0	14.0					

**TIA Patch Cord Cat6 2.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		65.0	21.6						
					8		65.0	22.5						
					10		65.0	22.8						
					16		62.0	23.4						
					20		60.0	23.7						
					25		58.1	24.0						
					31.25		56.2	23.0						
					62.5		50.4	20.0						
					100		46.4	18.0						
					200		40.6	15.0						
					250		38.8	14.0						

**TIA Patch Cord Cat6 2.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0	19.8					
					4		65.0	21.6					
					8		65.0	22.5					
					10		65.0	22.8					
					16		61.7	23.4					
					20		59.8	23.7					
					25		57.9	24.0					
					31.25		56.0	23.0					
					62.5		50.1	20.0					
					100		46.2	18.0					
					200		40.5	15.0					
					250		38.6	14.0					

**TIA Patch Cord Cat6 3.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0	19.8					
					4		65.0	21.6					
					8		65.0	22.5					
					10		65.0	22.8					
					16		61.4	23.4					
					20		59.5	23.7					
					25		57.6	24.0					
					31.25		55.7	23.0					
					62.5		49.9	20.0					
					100		46.0	18.0					
					200		40.3	15.0					
					250		38.5	14.0					

**TIA Patch Cord Cat6 3.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		65.0	21.6						
					8		65.0	22.5						
					10		65.0	22.8						
					16		61.1	23.4						
					20		59.3	23.7						
					25		57.4	24.0						
					31.25		55.5	23.0						
					62.5		49.7	20.0						
					100		45.8	18.0						
					200		40.2	15.0						
					250		38.4	14.0						

**TIA Patch Cord Cat6 5.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0	19.8					
					4		65.0	21.6					
					8		65.0	22.5					
					10		64.5	22.8					
					16		60.5	23.4					
					20		58.6	23.7					
					25		56.8	24.0					
					31.25		54.9	23.0					
					62.5		49.2	20.0					
					100		45.3	18.0					
					200		39.8	15.0					
					250		38.1	14.0					

**TIA Patch Cord Cat6 7.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0	19.8					
					4		65.0	21.6					
					8		65.0	22.5					
					10		63.6	22.8					
					16		59.7	23.4					
					20		57.8	23.7					
					25		56.0	24.0					
					31.25		54.1	23.0					
					62.5		48.5	20.0					
					100		44.8	18.0					
					200		39.5	15.0					
					250		37.8	14.0					

**TIA Patch Cord Cat6 10.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678 12345678	i	i	i	i	1		65.0	19.8						
					4		65.0	21.6						
					8		64.8	22.5						
					10		62.9	22.8						
					16		59.0	23.4						
					20		57.2	23.7						
					25		55.4	24.0						
					31.25		53.6	23.0						
					62.5		48.1	20.0						
					100		44.4	18.0						
					200		39.3	15.0						
					250		37.6	14.0						

**TIA Patch Cord Cat6 20.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0	19.8					
					4		65.0	21.6					
					8		63.1	22.5					
					10		61.3	22.8					
					16		57.5	23.4					
					20		55.8	23.7					
					25		54.1	24.0					
					31.25		52.3	23.0					
					62.5		47.2	20.0					
					100		43.8	18.0					
					200		39.0	15.0					
					250		37.6	14.0					

**CLC Patch Cord Cat5e 0.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		65.0	21.6					
					8		62.1	22.5					
					10		60.2	22.8					
					16		56.2	23.4					
					20		54.2	23.7					
					25		52.3	24.0					
					31.25		50.4	23.0					
					62.5		44.5	20.0					
					100		40.6	18.0					

**CLC Patch Cord Cat5e 1.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		65.0	21.6					
					8		61.3	22.5					
					10		59.4	22.8					
					16		55.4	23.4					
					20		53.5	23.7					
					25		51.6	24.0					
					31.25		49.7	23.0					
					62.5		43.9	20.0					
					100		39.9	18.0					

**CLC Patch Cord Cat5e 1.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		65.0	21.6					
					8		60.7	22.5					
					10		58.8	22.8					
					16		54.8	23.4					
					20		52.9	23.7					
					25		51.0	24.0					
					31.25		49.1	23.0					
					62.5		43.3	20.0					
					100		39.4	18.0					

**CLC Patch Cord Cat5e 2.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		65.0	21.6					
					8		60.2	22.5					
					10		58.3	22.8					
					16		54.3	23.4					
					20		52.4	23.7					
					25		50.5	24.0					
					31.25		48.6	23.0					
					62.5		42.9	20.0					
					100		39.0	18.0					

**CLC Patch Cord Cat5e 2.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		65.0	21.6					
					8		59.7	22.5					
					10		57.8	22.8					
					16		53.8	23.4					
					20		52.0	23.7					
					25		50.1	24.0					
					31.25		48.2	23.0					
					62.5		42.5	20.0					
					100		38.6	18.0					

**CLC Patch Cord Cat5e 3.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		65.0	21.6					
					8		59.3	22.5					
					10		57.4	22.8					
					16		53.4	23.4					
					20		51.6	23.7					
					25		49.7	24.0					
					31.25		47.8	23.0					
					62.5		42.1	20.0					
					100		38.3	18.0					

**CLC Patch Cord Cat5e 3.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		64.6	21.6					
					8		58.9	22.5					
					10		57.0	22.8					
					16		53.1	23.4					
					20		51.2	23.7					
					25		49.4	24.0					
					31.25		47.5	23.0					
					62.5		41.8	20.0					
					100		38.0	18.0					

**CLC Patch Cord Cat5e 4.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		64.3	21.6					
					8		58.5	22.5					
					10		56.7	22.8					
					16		52.8	23.4					
					20		50.9	23.7					
					25		49.1	24.0					
					31.25		47.2	23.0					
					62.5		41.6	20.0					
					100		37.8	18.0					

**CLC Patch Cord Cat5e 5.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		63.7	21.6					
					8		58.0	22.5					
					10		56.1	22.8					
					16		52.2	23.4					
					20		50.4	23.7					
					25		48.5	24.0					
					31.25		46.7	23.0					
					62.5		41.1	20.0					
					100		37.4	18.0					

**CLC Patch Cord Cat5e 7.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		62.4	21.6					
					8		56.8	22.5					
					10		55.0	22.8					
					16		51.2	23.4					
					20		49.4	23.7					
					25		47.6	24.0					
					31.25		45.8	23.0					
					62.5		40.3	20.0					
					100		36.8	18.0					



**CLC Patch Cord Cat5e 10.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		61.6	21.6					
					8		56.0	22.5					
					10		54.2	22.8					
					16		50.4	23.4					
					20		48.7	23.7					
					25		46.9	24.0					
					31.25		45.1	23.0					
					62.5		39.8	20.0					
					100		36.4	18.0					

**CLC Patch Cord Cat5e 20.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		59.5	21.6					
					8		54.1	22.5					
					10		52.4	22.8					
					16		48.8	23.4					
					20		47.2	23.7					
					25		45.5	24.0					
					31.25		43.9	23.0					
					62.5		39.0	20.0					
					100		35.8	18.0					

**CLC Patch Cord Cat6 0.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		65.0	21.6					
					8		65.0	22.5					
					10		65.0	22.8					
					16		62.9	23.4					
					20		61.0	23.7					
					25		59.1	24.0					
					31.25		57.2	23.0					
					62.5		51.2	20.0					
					100		47.2	18.0					
					200		41.3	15.0					
					250		39.4	14.0					

**CLC Patch Cord Cat6 0.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		65.0	21.6					
					8		65.0	22.5					
					10		65.0	22.8					
					16		62.9	23.4					
					20		61.0	23.7					
					25		59.1	24.0					
					31.25		57.2	23.0					
					62.5		51.2	20.0					
					100		47.2	18.0					
					200		41.3	15.0					
					250		39.4	14.0					

**CLC Patch Cord Cat6 1.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		65.0	21.6					
					8		65.0	22.5					
					10		65.0	22.8					
					16		62.4	23.4					
					20		60.5	23.7					
					25		58.6	24.0					
					31.25		56.7	23.0					
					62.5		50.8	20.0					
					100		46.8	18.0					
					200		41.0	15.0					
					250		39.1	14.0					

**CLC Patch Cord Cat6 1.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		65.0	21.6					
					8		65.0	22.5					
					10		65.0	22.8					
					16		62.0	23.4					
					20		60.1	23.7					
					25		58.2	24.0					
					31.25		56.3	23.0					
					62.5		50.4	20.0					
					100		46.5	18.0					
					200		40.7	15.0					
					250		38.9	14.0					

**CLC Patch Cord Cat6 2.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		65.0	21.6					
					8		65.0	22.5					
					10		65.0	22.8					
					16		61.6	23.4					
					20		59.7	23.7					
					25		57.8	24.0					
					31.25		56.0	23.0					
					62.5		50.1	20.0					
					100		46.2	18.0					
					200		40.5	15.0					
					250		38.6	14.0					

**CLC Patch Cord Cat6 2.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		65.0	21.6					
					8		65.0	22.5					
					10		65.0	22.8					
					16		61.3	23.4					
					20		59.4	23.7					
					25		57.5	24.0					
					31.25		55.6	23.0					
					62.5		49.8	20.0					
					100		45.9	18.0					
					200		40.3	15.0					
					250		38.5	14.0					

**CLC Patch Cord Cat6 3.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		65.0	21.6					
					8		65.0	22.5					
					10		65.0	22.8					
					16		61.0	23.4					
					20		59.1	23.7					
					25		57.2	24.0					
					31.25		55.4	23.0					
					62.5		49.6	20.0					
					100		45.7	18.0					
					200		40.1	15.0					
					250		38.3	14.0					

**CLC Patch Cord Cat6 3.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		65.0	21.6					
					8		65.0	22.5					
					10		64.7	22.8					
					16		60.7	23.4					
					20		58.9	23.7					
					25		57.0	24.0					
					31.25		55.1	23.0					
					62.5		49.3	20.0					
					100		45.5	18.0					
					200		39.9	15.0					
					250		38.2	14.0					

**CLC Patch Cord Cat6 3.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		65.0	21.6					
					8		65.0	22.5					
					10		64.7	22.8					
					16		60.7	23.4					
					20		58.9	23.7					
					25		57.0	24.0					
					31.25		55.1	23.0					
					62.5		49.3	20.0					
					100		45.5	18.0					
					200		39.9	15.0					
					250		38.2	14.0					

**CLC Patch Cord Cat6 4.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		65.0	21.6					
					8		65.0	22.5					
					10		64.4	22.8					
					16		60.5	23.4					
					20		58.6	23.7					
					25		56.7	24.0					
					31.25		54.9	23.0					
					62.5		49.1	20.0					
					100		45.3	18.0					
					200		39.8	15.0					
					250		38.1	14.0					

**CLC Patch Cord Cat6 5.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		65.0	21.6					
					8		65.0	22.5					
					10		63.9	22.8					
					16		60.0	23.4					
					20		58.2	23.7					
					25		56.3	24.0					
					31.25		54.5	23.0					
					62.5		48.8	20.0					
					100		45.0	18.0					
					200		39.6	15.0					
					250		37.9	14.0					

**CLC Patch Cord Cat6 7.5m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		65.0	21.6					
					8		64.8	22.5					
					10		63.0	22.8					
					16		59.2	23.4					
					20		57.3	23.7					
					25		55.5	24.0					
					31.25		53.7	23.0					
					62.5		48.2	20.0					
					100		44.5	18.0					
					200		39.3	15.0					
					250		37.7	14.0					

**CLC Patch Cord Cat6 10.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	i	i	i	1		65.0						
					4		65.0	21.6					
					8		64.1	22.5					
					10		62.3	22.8					
					16		58.5	23.4					
					20		56.7	23.7					
					25		54.9	24.0					
					31.25		53.1	23.0					
					62.5		47.7	20.0					
					100		44.2	18.0					
					200		39.1	15.0					
					250		37.6	14.0					

**CLC Patch Cord Cat6 20.0m**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	i	i	i	i	1		65.0						
12345678					4		65.0	21.6					
					8		62.4	22.5					
					10		60.7	22.8					
					16		57.1	23.4					
					20		55.4	23.7					
					25		53.7	24.0					
					31.25		52.0	23.0					
					62.5		47.0	20.0					
					100		43.7	18.0					
					200		39.1	15.0					
					250		37.6	14.0					

## Application Standards

### 10BASE-T

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
123 6 123 6	i	100 m	i	i									
					8	11.5	27.5						
123 6 S 123 6 S					10	11.5	26.0						

### 100BASE-TX

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	100 m	570	50	1	2.5	60.7	15.0					
					4	4.5	50.6	15.0					
					8	6.4	45.5	15.0					
12345678S 12345678S					10	7.1	43.9	15.0					
					16	9.1	40.5	15.0					
					20	10.3	38.8	15.0					
					25	11.5	37.2	14.0					
					31.25	13	35.6	13.1					
					62.5	18.7	30.5	10.1					
					100	24	27.1	8.0					

### 1000BASE-T

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678	i	100 m	570	50	1	2.5	60.7	15.0		57.0			54.4
					4	4.5	50.6	15.0		45.0			42.4
					8	6.4	45.5	15.0		38.9			36.3
12345678S 12345678S					10	7.1	43.9	15.0		37.0			34.4
					16	9.1	40.5	15.0		32.9			30.3
					20	10.3	38.8	15.0		31.0			28.4
					25	11.5	37.2	14.0		29.0			26.4
					31.25	13	35.6	13.1		27.1			24.5
					62.5	18.7	30.5	10.1		21.1			18.5
					100	24	27.1	8.0		17.0			14.4

**10GBASE-T Ch CI E 55-100m**

**DRAFT STANDARD - For Verification Purposes ONLY**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	i	100 m	555	50	1	4	65.0	19.0		63.3	62.0		60.3
12345678					4	4.2	63.0	19.0		51.2	60.5		48.2
					8	5.9	58.2	19.0		45.2	55.6		42.2
12345678S					10	6.6	56.6	19.0		43.3	54.0		40.3
12345678S					16	8.3	53.2	18.0		39.2	50.6		36.2
					20	9.3	51.6	17.5		37.2	49.0		34.2
					25	10.5	50.0	17.0		35.3	47.3		32.3
					31.25	11.7	48.4	16.5		33.4	45.7		30.4
					62.5	16.9	43.4	14.0		27.3	40.6		24.3
					100	21.7	39.9	12.0		23.3	37.1		20.3
					200	31.7	34.8	9.0		17.2	31.9		14.2
					250	35.9	33.1	8.0		15.3	30.2		12.3
					350	43.5	29.7	6.6		12.4	26.9		9.4
					500	53.4	22.0	6.0		9.3	20.4		6.3

**10GBASE-T Ch CI E 0-55m**

**DRAFT STANDARD - For Verification Purposes ONLY**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	i	i	555	50	1	4	65.0	19.0		63.3	62.0		60.3
12345678					4	4	63.0	19.0		51.2	60.5		48.2
					8	4	58.2	19.0		45.2	55.6		42.2
12345678S					10	4	56.6	19.0		43.3	54.0		40.3
12345678S					16	4.7	53.2	18.0		39.2	50.6		36.2
					20	5.3	51.6	17.5		37.2	49.0		34.2
					25	5.9	50.0	17.0		35.3	47.3		32.3
					31.25	6.7	48.4	16.5		33.4	45.7		30.4
					62.5	9.6	43.4	14.0		27.3	40.6		24.3
					100	12.3	39.9	12.0		23.3	37.1		20.3
					200	18	34.8	9.0		17.2	31.9		14.2
					250	20.3	33.1	8.0		15.3	30.2		12.3
					350	24.6	29.7	6.6		12.4	26.9		9.4
					500	30.2	22.0	6.0		9.3	20.4		6.3

**10GBASE-T Ch CI F 0-100m**

**DRAFT STANDARD - For Verification Purposes ONLY**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678	i	100 m	555	50	1	4	65.0	19.0		65.0	62.0		62.0
12345678					4	4.1	65.0	19.0		65.0	62.0		62.0
					8	5.7	65.0	19.0		62.4	62.0		59.4
12345678S					10	6.4	65.0	19.0		60.8	62.0		57.8
12345678S					16	8.1	65.0	18.0		57.5	62.0		54.5
					20	9.1	65.0	17.5		55.9	62.0		52.9
					25	10.2	65.0	17.0		54.4	62.0		51.4
					31.25	11.4	65.0	16.5		52.8	62.0		49.8
					62.5	16.3	65.0	14.0		47.8	62.0		44.8
					100	20.8	62.9	12.0		44.4	59.9		41.4
					200	30	58.3	9.0		39.4	55.3		36.4
					250	33.8	56.9	8.0		37.8	53.9		34.8
					350	40.5	54.7	8.0		35.3	51.7		32.3
					500	49.3	52.4	8.0		32.6	49.4		29.6



**CATV Broadband**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT			
	Ω	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB			
12345678	i	90 m	498	44	1	3	i	i	i	i	i	i	i			
12345678					4	4	i	i	i	i	i	i	i	i	i	
					8	5.7	i	i	i	i	i	i	i	i	i	i
12345678S					10	6.3	i	i	i	i	i	i	i	i	i	i
12345678S					16	8	i	i	i	i	i	i	i	i	i	i
					20	9	i	i	i	i	i	i	i	i	i	i
					25	10.1	i	i	i	i	i	i	i	i	i	i
					31.25	11.4	i	i	i	i	i	i	i	i	i	i
					62.5	16.5	i	i	i	i	i	i	i	i	i	i
					100	21.3	i	i	i	i	i	i	i	i	i	i
					200	31.5	i	i	i	i	i	i	i	i	i	i
					250	35.9	i	i	i	i	i	i	i	i	i	i
					600	55	i	i	i	i	i	i	i	i	i	i
					700	55	i	i	i	i	i	i	i	i	i	i
					800	55	i	i	i	i	i	i	i	i	i	i
	865	55	i	i	i	i	i	i	i	i	i	i				

**Cat6 Selftest**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	Ω	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678	2	i	10	3	1	1	65.0	19.0		65.0				
12345678					4	1	64.0	19.0		65.0				
					8	1	57.9	19.0		63.9				
12345678S					10	1	56.0	19.0		62.0				
12345678S					16	1	51.9	19.0		57.9				
					20	1	50.0	19.0		56.0				
					25	1	48.0	19.0		54.0				
					31.25	1	46.1	17.8		52.1				
					62.5	1	40.1	14.2		46.1				
					100	1	36.0	11.8		42.0				
					200	1	27.0	8.2		36.0				
					250	1	24.1	7.0		34.0				

**Class F Selftest**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	Ω	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678	2	i	10	3	1	1	75.0	20.0		75.0				
12345678					4	1	75.0	20.0		75.0				
					8	1	75.0	20.0		74.5				
12345678S					10	1	75.0	20.0		73.0				
12345678S					16	1	75.0	20.0		69.9				
					20	1	75.0	20.0		68.5				
					25	1	75.0	20.0		67.0				
					31.25	1	75.0	18.9		65.6				
					62.5	1	70.5	15.6		61.1				
					100	1	66.0	13.4		58.0				
					200	1	59.4	10.1		53.5				
					250	1	57.2	9.0		52.0				
					600	1	48.9	9.0		46.3				

**DTX-PL Selftest**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12345678	2	i	10	3	1	0.6	79.0			79.0				
12345678					4	0.6	79.0	25.0		79.0				
					8	0.6	78.9	25.0		79.0				
12345678S					10	0.7	77.0	25.0		79.0				
12345678S					16	0.7	72.9	25.0		74.9				
					20	0.7	71.0	25.0		73.0				
					25	0.7	69.0	25.0		71.0				
					31.25	0.8	67.1	23.6		69.1				
					62.5	0.9	61.1	19.1		63.1				
					100	1.1	57.0	16.0		59.0				
					200	1.6	51.0	11.5		53.0				
					250	1.9	49.0	10.0		51.0				

**TokenRing, 4Mb/s**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
3456	i	100 m	i	i	1				26.5				
3456					4	19		17.5					
					8		13.0						
3456 S					10		11.5						
3456 S													

**TokenRing, 16Mb/s, Active**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
3456	i	100 m	i	i	1				32.1				
3456					4		23.0						
					8		18.5						
3456 S					10		17.1						
3456 S					16	16	14.0						
					20		12.5						
					25		11.1						

**TokenRing, 16Mb/s, Passive**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
3456	i	100 m	i	i	1				33.6				
3456					4		24.5						
					8		20.0						
3456 S					10		18.6						
3456 S					16	19	15.5						
					20		14.0						
					25		12.6						

**TP-PMD**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT	
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB	
12 78	i	100 m	i	i	1		51.1		48.6					
12 78					4		42.0		39.5					
					8		37.5		35.0					
12 78S					10		36.1		33.6					
12 78S					16	10	33.0		30.5					
					20		31.5		29.0					
					25		30.1		27.6					
					31.25		28.6		26.1					
					62.5		24.1		21.6					

**POE 2-Pair Cat 5e Channel**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
123--6--	i	100 m	555	50	1	3	60.0	17.0	57.0	57.4	57.0	54.0	54.4
123--6--					4	4.5	53.5	17.0	49.1	45.4	50.5	46.1	42.4
					8	6.3	48.6	17.0	42.3	39.3	45.6	39.3	36.3
123--6--S					10	7.1	47.0	17.0	39.9	37.4	44.0	36.9	34.4
123--6--S					16	9.1	43.6	17.0	34.5	33.3	40.6	31.5	30.3
					20	10.2	42.0	17.0	31.8	31.4	39.0	28.8	28.4
					25	11.4	40.3	16.0	28.9	29.4	37.3	25.9	26.4
					31.25	12.9	38.7	15.1	25.9	27.5	35.7	22.9	24.5
					62.5	18.6	33.6	12.1	15.0	21.5	30.6	12.0	18.5
					100	24	30.1	10.0	6.1	17.4	27.1	3.1	14.4

**POE 2-Pair Cat 6 Channel**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
123--6--	i	100 m	555	50	1	3	65.0	19.0	62.0	63.3	62.0	59.0	60.3
123--6--					4	4	63.0	19.0	59.0	51.2	60.5	56.5	48.2
					8	5.7	58.2	19.0	52.5	45.2	55.6	49.9	42.2
123--6--S					10	6.3	56.6	19.0	50.2	43.3	54.0	47.7	40.3
123--6--S					16	8	53.2	18.0	45.2	39.2	50.6	42.6	36.2
					20	9	51.6	17.5	42.6	37.2	49.0	39.9	34.2
					25	10.1	50.0	17.0	39.9	35.3	47.3	37.2	32.3
					31.25	11.4	48.4	16.5	37.0	33.4	45.7	34.3	30.4
					62.5	16.5	43.4	14.0	26.9	27.3	40.6	24.1	24.3
					100	21.3	39.9	12.0	18.6	23.3	37.1	15.8	20.3
					200	31.5	34.8	9.0	3.3	17.2	31.9	0.3	14.2
					250	35.9	33.1	8.0	-2.8	15.3	30.2	-5.8	12.3

**POE 2-Pair Cat 5e Perm. Link**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
123--6--	i	100 m	555	50	1	3	60.0	19.0	57.0	58.6	57.0	54.0	55.6
123--6--					4	3.9	54.8	19.0	50.9	46.6	51.8	47.9	43.6
					8	5.5	50.0	19.0	44.5	40.6	47.0	41.5	37.6
123--6--S					10	6.2	48.5	19.0	42.3	38.6	45.5	39.3	35.6
123--6--S					16	7.9	45.2	19.0	37.3	34.5	42.2	34.3	31.5
					20	8.9	43.7	19.0	34.8	32.6	40.7	31.8	29.6
					25	10	42.1	18.0	32.1	30.7	39.1	29.1	27.7
					31.25	11.2	40.5	17.1	29.3	28.7	37.5	26.3	25.7
					62.5	16.2	35.7	14.1	19.4	22.7	32.7	16.4	19.7
					100	21	32.3	12.0	11.3	18.6	29.3	8.3	15.6

**POE 2-Pair Cat 6 Perm. Link**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
123--6--	i	100 m	555	50	1	3	65.0	19.1	62.0	64.2	62.0	59.0	61.2
123--6--					4	3.5	64.1	21.0	60.6	52.1	61.8	58.3	49.1
					8	5	59.4	21.0	54.4	46.1	57.0	52.1	43.1
123--6--S					10	5.5	57.8	21.0	52.3	44.2	55.5	49.9	41.2
123--6--S					16	7	54.6	20.0	47.6	40.1	52.2	45.2	37.1
					20	7.9	53.1	19.5	45.2	38.2	50.7	42.8	35.2
					25	8.9	51.5	19.0	42.7	36.2	49.1	40.2	33.2
					31.25	10	50.0	18.5	40.0	34.3	47.5	37.6	31.3
					62.5	14.4	45.1	16.0	30.8	28.3	42.7	28.3	25.3
					100	18.6	41.8	14.0	23.3	24.2	39.3	20.7	21.2
					200	27.4	36.9	11.0	9.6	18.2	34.3	7.0	15.2
					250	31.1	35.3	10.0	4.2	16.2	32.7	1.6	13.2

**Voice - 1 Pair**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
45	i	i	i	N/A	X								
45					X								
45 S					X								
45 S					X								

**Voice - 2 Pair**

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Atten.	NEXT	RL	ACR	ELFEXT	PS NEXT	PS ACR	PS ELFEXT
	$\Omega$	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
3456	i	i	i	i	X								
3456					X								
3456 S					X								
3456 S					X								