

Survey of ~60,000 installed and tested cabling links

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Fluke Networks

Totals by Category and Test

Count	all	%	TIA	ISO
Cat 5e	28352	47%	27474	344
Cat 6	18000	30%	14214	1101
Cat 6A	12368	21%	10320	1488
Cat 7	1049	2%	107	24
Cat 7A	167	0%	11	34
	59936		52126	2991

Length

Length (m)	all		TIA		ISO	
	avg value	std dev	avg value	std dev	avg value	std dev
Cat 5e	43.8	21.6	44.2	21.5	23.4	20.2
Cat 6	38.7	21.2	38.9	20.6	37.6	20.7
Cat 6A	29	20.9	29.3	21.3	27.7	16
Cat 7	15.1	19.7	49.2	44	31.1	31
Cat 7A	26.7	20.7	23.2	32.7	23.7	20.8

Resistance

Resistance	all		TIA		ISO	
	avg value	std dev	avg value	std dev	avg value	std dev
Cat 5e	8.4	6.6	8.4	5.8	4.8	4
Cat 6	6.4	4.7	6.4	4.8	6.8	3.6
Cat 6A	4.9	3.8	5	3.8	4.5	3.3
Cat 7	2.6	4.2	7	6.1	7.4	7.6
Cat 7A	3.8	2.9	4.3	4.3	3.6	2.9

Insertion Loss

IL	all		TIA		ISO	
	avg margin	std dev	avg margin	std dev	avg margin	std dev
Cat 5e	12	6.5	12	6.3	16.2	5.9
Cat 6	19	8.7	19	8.9	19.6	7.3
Cat 6A	25.4	11.7	24.9	11.8	28.1	8.9
Cat 7	33.9	8.2	16.3	13.2	27.5	16.9
Cat 7A	29.6	9.4	29.5	13.6	33	11.9

NEXT

NEXT	all		TIA		ISO	
	avg margin	std dev	avg margin	std dev	avg margin	std dev
Cat 5e	7.9	3.5	7.9	3.4	7.6	6.4
Cat 6	5.3	4.3	4.9	3.7	7.8	6.3
Cat 6A	6.3	5.8	6.5	5.7	4.8	5.7
Cat 7	4	7.8	18.1	16.2	-5.1	19.5
Cat 7A	6.9	3.8	2.3	2.5	8.5	3.6

Return Loss

RL	all		TIA		ISO	
	avg margin	std dev	avg margin	std dev	avg margin	std dev
Cat 5e	5.3	2.9	5.3	2.9	5.4	2.3
Cat 6	5.6	2.7	5.5	2.7	7	2.3
Cat 6A	5.3	2.6	5	2.5	7.5	2.8
Cat 7	7.2	1.8	6.8	4.3	3.9	3.8
Cat 7A	5.5	1.9	1.1	3.2	5.2	1

Attenuation Cross-talk Ratio

Forward direction

ACRF	all		TIA		ISO	
	avg margin	std dev	avg margin	std dev	avg margin	std dev
Cat 5e	16.2	5.9	16.3	5.7	12.6	4.9
Cat 6	14.6	6.4	14.3	6.8	16.2	4.3
Cat 6A	15.1	6.7	15.1	6.8	15.6	6.1
Cat 7	15.4	3.7	13.4	1.2	2.8	20.2
Cat 7A	13.2	3.5	13.8	2.3	18.3	3.8

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THANK YOU