LP-CE001CP CAT5E Bi-Metallic UTP Cable.

LPCE001CP_SS_ENB02W

- For structured UTP cable installations in indoors.

- Enables wiring of all kinds of network equipment based in the Cat5e standard.

- Power distribution to remote data equipment based in the PoE technology, limited to 75m. For 100m runs, we recommend our traditional 100% copper Cat5e cable.

LP-CE001CP
CAT5E Bi-Metallic UTP Cable.

This cable is manufactured with bi-metallic technology, with the purpose of lowering cost without compromising performance and certification for most of the structured cabling applications in the market.

The technology of Bi-metallic cables is based in the high frequency skin effect in which most of the current flows near the surface of the conductor and much less in the core that is why the core is aluminum and the surface is copper.

Excellent handling characteristics for the installer, with a jacket made with CMX© material, a very though and abrassion resistant material.

With its AWG 24 wires, it gives better characteristics to the user.

A Copper/Aluminum ratio of 41/59, warrants the user excellent characteristics for the Price. Malleability, resistivity per meter, permit true certification as a Cat5e UTP cable for 100 m runs.

An uniform structure along the length of the cable, by means of uniform wire twist machining in the fabrication process that reduce cross talk between pairs to values that ensure certification.

We have subjected this cable to open flame and taken a photo of the cable extinguishing features in figure 1.

LANPRO

Cabling - Copper Solutions - Cat5E - LP-CE001CP Bi-Metallic UTP Cable.
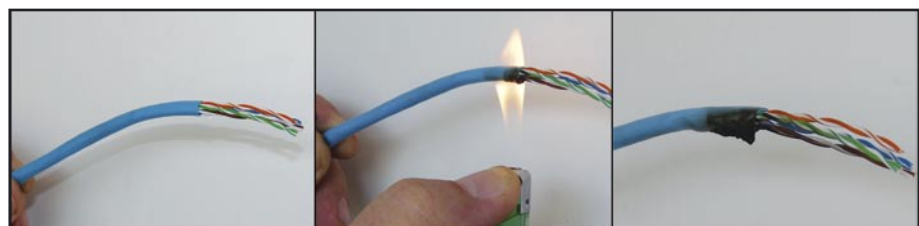
A Certification shown in figure 2, result in a cable with excellent characteristics for it's Price. It was performed with a model OMNIScanner2.

Figure 2

LINKWARE
CABLE TEST MANAGEMENT SOFTWARE

Cable ID: 100 Mts.   Test Summary: PASS

Date / Time: 01/11/2010 12:23:00pm   Operator: LanPro America   Model: OMNIScanner2
Headroom: 3.6 dB (NEXT 36-45)   Software Version: V06.12   Main S/N: 50D04C00038
Test Limit: Cat 5e Chan   NVP: 72%   Remote S/N: 50E04C00019
Cable Type: Cat 5e UTP   Main Adapter: CHAN 5/5E/6
    Remote Adapter: CHAN 5/5E/6

Wire Map		Expected	Actual
PASS	Omni:	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
	Remote:	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8

Length (ft), Limit 328		[Pair 78]	332
Prop. Delay (ns), Limit 555		[Pair 45]	484
Delay Skew (ns), Limit 50		[Pair 45]	15
Resistance (ohms)			N/A
Insertion Loss Margin (dB)		[Pair 45]	3.7
Frequency (MHz)		[Pair 45]	99.7
Limit (dB)		[Pair 45]	24.0
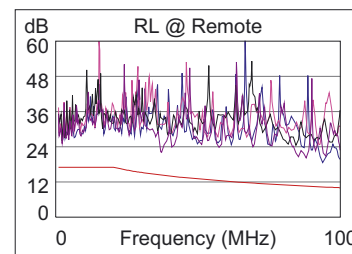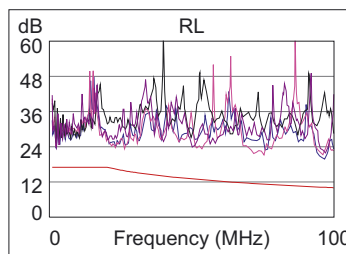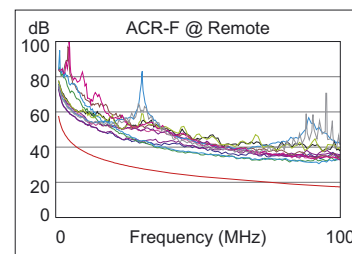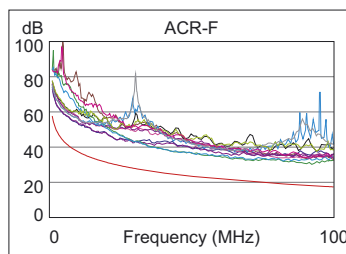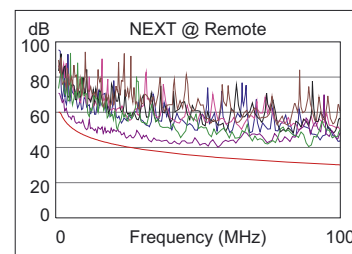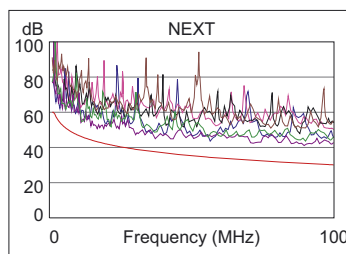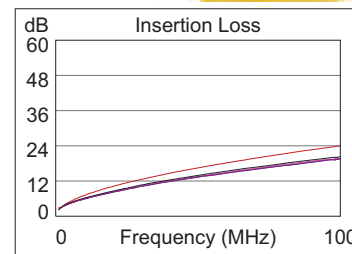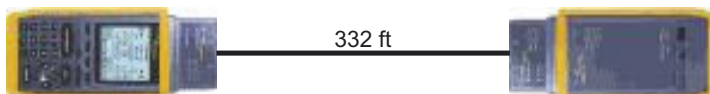
Worst Case Margin

PASS	MAIN	SR
Worst Pair	36-45	36-45
NEXT (dB)	7.1	3.6
Freq. (MHz)	16.7	10.9
Limit (dB)	43.3	46.5
Worst Pair	36	36
PS NEXT (dB)	7.7	6.1
Freq. (MHz)	36.9	11.1
Limit (dB)	34.5	43.4

PASS	MAIN	SR
Worst Pair	36-45	36-45
ACR-F (dB)	11.7	11.7
Freq. (MHz)	69.3	69.3
Limit (dB)	20.6	20.6
Worst Pair	45	45
PS ACR-F (dB)	12.7	12.3
Freq. (MHz)	63.7	69.3
Limit (dB)	18.4	17.6

PASS	MAIN	SR
Worst Pair	12	12
RL (dB)	6.3	7.8
Freq. (MHz)	2.5	2.5
Limit (dB)	17.0	17.0

Compliant Network Standards:
10BASE-T	100BASE-TX	100BASE-T4
1000BASE-T	ATM-25	ATM-51
ATM-155	100VG-AnyLan	TR-4
TR-16 Active	TR-16 Passive	

332 ft

Insertion Loss — dB (60, 48, 36, 24, 12, 0) vs Frequency (MHz) 0–100

NEXT — dB (100, 80, 60, 40, 20, 0) vs Frequency (MHz) 0–100

NEXT @ Remote — dB (100, 80, 60, 40, 20, 0) vs Frequency (MHz) 0–100

ACR-F — dB (100, 80, 60, 40, 20, 0) vs Frequency (MHz) 0–100

ACR-F @ Remote — dB (100, 80, 60, 40, 20, 0) vs Frequency (MHz) 0–100

RL — dB (60, 48, 36, 24, 12, 0) vs Frequency (MHz) 0–100

RL @ Remote — dB (60, 48, 36, 24, 12, 0) vs Frequency (MHz) 0–100

LinkWare Version 6.0

Project: UTP Cat5e LANPRO BM

FLUKE
networks

UNTITLED.flw

B Technical Especifications

Characteristics	Value
Attenuation (dB/100m)	0.772MHz 2.20dB/100m 1 MHz 2.30dB/100m 4 MHz 4.30dB/100m 10 MHz 6.60dB/100m 16 MHz 8.20dB/100m 20 MHz 9.30dB/100m 31.25MHz 11.7dB/100m 62.5 MHz 17.0dB/100m 100 MHz 22.0dB/100m
Crosstalk (dB/100m)	0.772MHz 67.0dB/100m 1 MHz 65.3dB/100m 4 MHz 56.3dB/100m 10 MHz 50.3dB/100m 16 MHz 47.3dB/100m 20 MHz 45.8dB/100m 31.25MHz 42.9dB/100m 62.5 MHz 38.4dB/100m 100 MHz 35.3dB/100m
Resistivity (Ohm/100m)	≤13 OHM/100m
Impedance (Ohm)	100 OHM±15 OHM
Capacitance (nF/m)	≤5.6nF/100m
Max Speed (Mbps)	≥100Mbps
Jacket Material	CMX
Isolation Material	HDPE
Cooper/Aluminum Ratio	41:59
Dielectric capability (KV/MIN)	≤1.0 KV/MIN
Diameter	AWG 24

C Mechanical Specs

Performance Spec.	Value
Minimum bending radius	120 mm
Weight (Kg/m)	0.023kg/m
Range of operation (ºC)	-15 ºC -70ºC

D How to order

LP-CE001CP Bi-Metallic Cat5e UTP Solid Cable CMX Jacket.

T	
T	Type
0--	UTP Solid
1--	UTP Stranded
2--	FTP Stranded AWG26
3--	FTP Solid
4--	SFTP Stranded AWG26
5--	SFTP Solid
-0-	CMX
-1-	CM
-2-	CMR
-3-	PLENUM
--0	100% Copper
--1	Bi-Metallic

C	
BL	Blue
GR	Gray

P	
B	1000ft box
S	100m spool

e.g.
LP-CE001BLB Bi-Metallic Cat5e UTP Solid Cable, CMX Jacket, Blue Color, 1000ft box