

# CAT 6 F/UTP CABLE PVC+PE SHEATH

108-61005

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## Overview

- Category: CAT6
- Construction Type: F/UTP (Foiled Unshielded Twisted Pair)
- Suitable for structured cabling systems, networking applications, and environments requiring high-performance data transmission.

## Industry Standard

- ANSI/TIA 568.2-D
  - ISO/IEC 11801
  - EN 13501-6:2014
  - IEC 61156-5
- EN 50288-2-1
  - IEEE 802.3bt level 3 & 4
  - EN 60332-1-2

## Applications

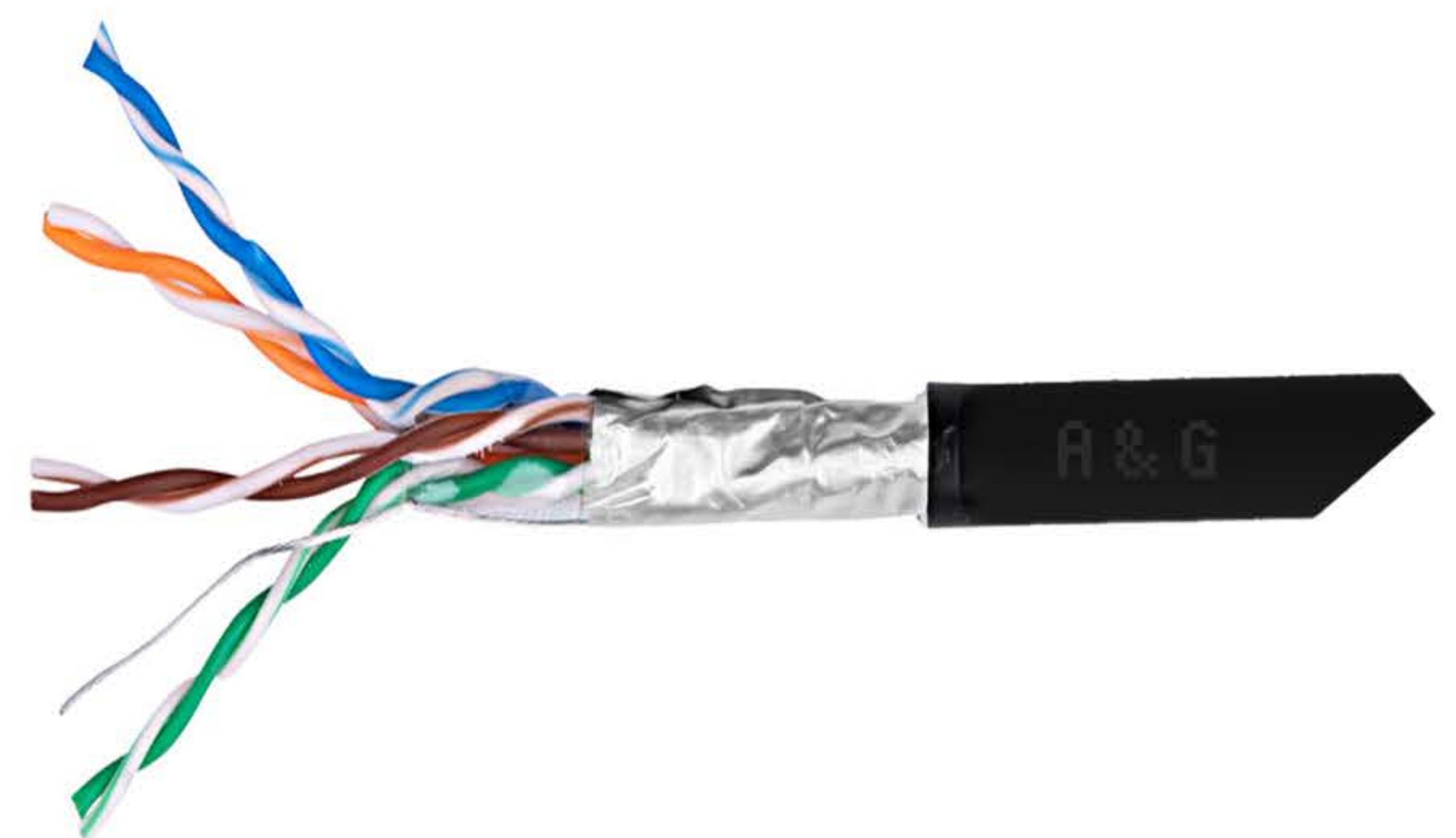
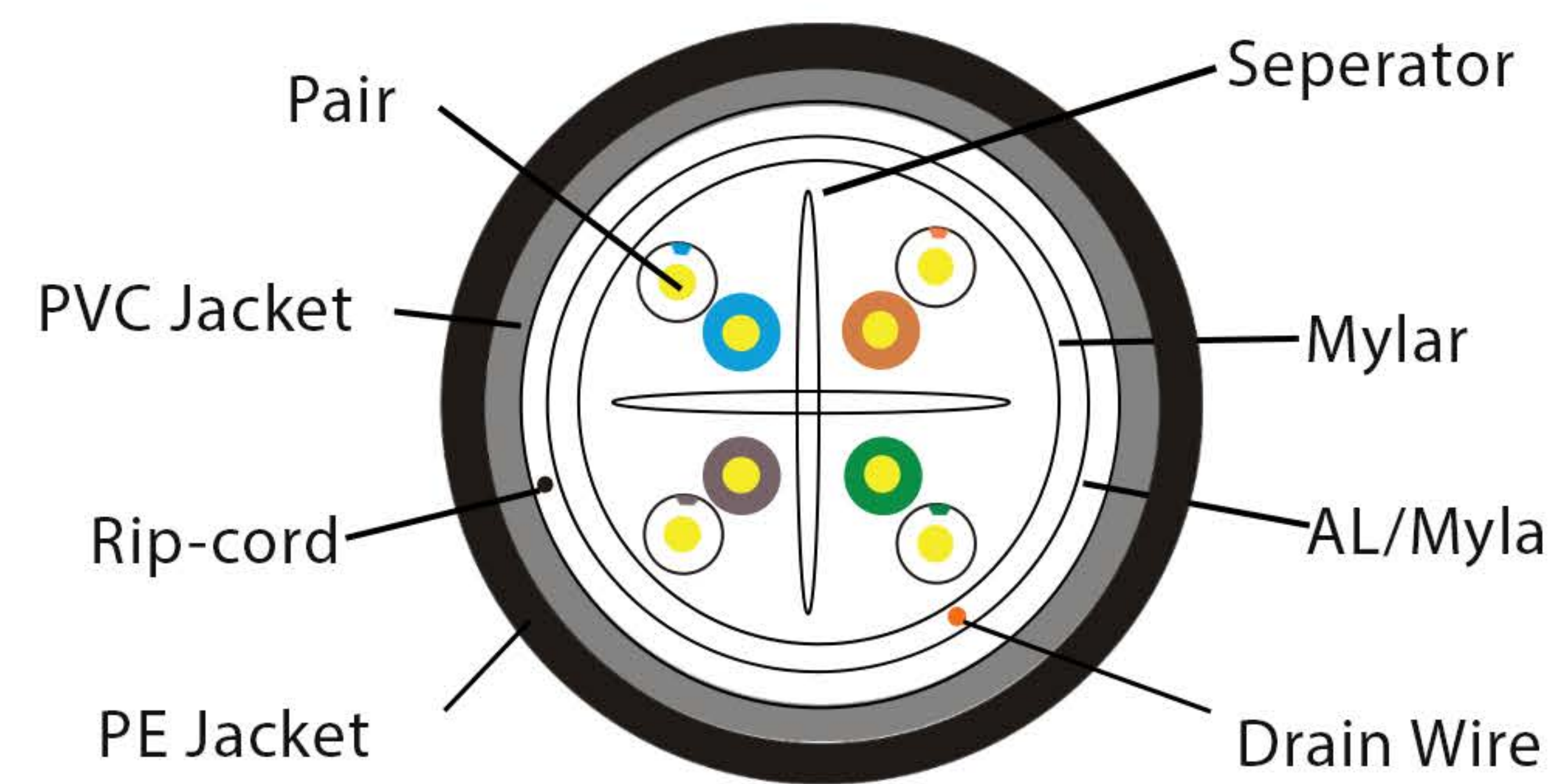
- 10/100/1000Base T
  - Telecommunications
- LAN
  - Premise Wiring

## Ordering Information

| Part Number | Description                     |
|-------------|---------------------------------|
| 108-61005   | CAT 6 F/UTP CABLE PVC+PE SHEATH |

## General Information

- Conductor Material: Solid Bare Copper
- Nominal Outer Diameter of Conductor: 0.520mm  
(up +0.005mm, down -0.005mm)
- Insulation Material: HDPE (High-Density Polyethylene)
- Insulation Diameter: 1.05 ± 0.05mm
- Screening Material: Mylar + Al/Mylar
- Inner Jacket Material: PVC
- Inner Jacket Outer Diameter: 6.9mm (nominal)
- Inner Jacket Thickness: 0.6 ± 0.05mm
- Outer Sheath Material: LDPE (Low-Density Polyethylene)
- Outer Sheath Color: Black
- Outer Sheath Diameter: 8.2 ± 0.5mm
- Core Color Code:
  1. White-Blue/Blue
  2. White-Orange/Orange
  3. White-Green/Green
  4. White-Brown/Brown
- Surface Printing: Letter Height: 3.0 ± 0.3mm, Color: White, Print Error & Space: ≤ ±0.5%
- Packing: Wooden Tray & Carton
- Packing Length: 305 ± 1.5m



PRODUCT TECHNICAL SPECIFICATION | CAT 6 F/UTP CABLE PVC+PE SHEATH

Product Electrical Characteristics:

- Impedance: 100 ± 15 Ω (1.0-250.0MHz)
- Delay Skew: ≤45 ns/100m (1.0-250.0MHz)
- Unbalanced-to-ground Capacitance: ≤330 pf/100m (max)
- DC Resistance: ≤9.5 Ω/100m (20°C)
- DC Conductor Resistance Unbalance: ≤5.0%

Sheath Physical Properties:

- Tensile Strength Before Aging: ≥10.0 Mpa
- Elongation Before Aging: ≥350%
- Aging Period: 100°C x 24h x 10d
- Elongation After Aging: ≥300%
- Cold Bend: -20 ± 2°C x 4h, 8 x Cable Outer Diameter,  
No Visible Cracks
- Installation Temperature: 0°C to +50°C
- Operating Temperature: -20°C to +60°C

Technical Performance (100m)

| Frequency (MHz) | RL (≥dB) | Attenuation (≤dB) | NEXT (≥dB) | Delay (≤ns) |
|-----------------|----------|-------------------|------------|-------------|
| 1.0             | 20.0     | --                | 74.3       | 570.00      |
| 4.0             | 23.0     | 3.78              | 65.3       | 552.00      |
| 8.0             | 24.5     | 5.32              | 60.8       | 546.73      |
| 10.0            | 25.0     | 5.95              | 59.3       | 545.38      |
| 16.0            | 25.0     | 7.55              | 56.2       | 543.00      |
| 20.0            | 25.0     | 8.47              | 54.8       | 542.05      |
| 25.0            | 24.3     | 9.51              | 53.3       | 541.20      |
| 31.25           | 23.6     | 10.67             | 51.9       | 540.44      |
| 62.5            | 21.5     | 15.38             | 47.7       | 538.55      |
| 100             | 20.1     | 19.80             | 44.3       | 537.60      |
| 200             | 18.0     | 28.98             | 39.8       | 536.54      |
| 250             | 17.3     | 32.85             | 38.3       | 536.27      |

| Frequency (MHz) | PSNEXT (db) ≥ | ELFEXT (dB) ≥ | PSELFEXT (dB) ≥ |
|-----------------|---------------|---------------|-----------------|
| 1.0             | 72.3          | 67.8          | 64.8            |
| 4.0             | 63.3          | 55.8          | 52.8            |
| 8.0             | 58.8          | 49.7          | 46.7            |
| 10.0            | 57.3          | 47.8          | 44.8            |
| 16.0            | 54.4          | 43.7          | 40.7            |
| 20.0            | 52.8          | 37.8          | 38.8            |
| 25.0            | 41.3          | 39.8          | 36.8            |
| 31.25           | 49.9          | 37.9          | 34.9            |
| 62.5            | 45.4          | 31.9          | 28.9            |
| 100             | 42.3          | 27.8          | 24.8            |
| 200             | 37.8          | 21.8          | 18.8            |
| 250             | 36.3          | 19.8          | 16.8            |