Attribute	Specification / Typical Value	Standard / Notes
Product Name	Carbon Fiber Angle Profile (L- Section)	Pultruded or molded CFRP
Material Composition	100% Carbon Fiber (T300/T700) + Epoxy Resin	Aerospace/industrial grade fiber & matrix
Leg Length (A × B)	10 mm × 10 mm – 200 mm × 200 mm	Custom legs in 1 mm increments
Wall / Web Thickness (t)	1.0 mm – 10 mm	Uniform thickness; tolerance ± 0.1 mm
Length	Up to 3000 mm continuous	Cut- to- length service
Dimensional Tolerance	± 0.1 mm	ISO 2768- m general tolerances
Straightness	≤ 0.3 mm/m	ISO 5286- 2 for pultruded FRP
Density	1.55 g/cm³	ASTM D792
Tensile Strength (Longitudinal)	≥ 900 MPa	ASTM D3039
Tensile Modulus	≥ 70 GPa	ASTM D3039
Flexural Strength	≥ 600 MPa	ASTM D790
Flexural Modulus	≥ 60 GPa	ASTM D790
Interlaminar Shear Strength	≥ 60 MPa	ASTM D2344
Moment of Inertia (about centroidal axes)	Calculated per cross- section	Can be provided on request
Section Modulus	Calculated per cross- section	For design calculations
Coefficient of Thermal Expansion	≈ 0 × 10^{-6}/° C (in- plane)	ASTM E228
Service Temperature Range	-40 ° C to +120 ° C (continuous); short- term up to 150 ° C	Dependent on resin system
Surface Finish	Matte or Gloss UV- resistant clear coat	One- or two- sided finish
Fire Resistance (optional)	UL 94 V- 0 epoxy system available	For electronics & aerospace
Electrical Conductivity	Conductive in- plane	EMI/RFI shielding potential
Corrosion Resistance	Excellent (non- metallic)	Ideal for marine/chemical environments
Certifications	ISO 9001, RoHS, REACH, MSDS	Test reports available upon request
Typical Applications	Structural bracing, machine frames, robotic supports, architectural trim	Where high stiffness- to- weight and precise L- section needed