Duality for certain multi-Frobenius nonclassical curves in higher dimensional spaces

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We show how a type of multi-Frobenius nonclassicality of a curve defined over a finite field $\mathbb{F}_q$ of characteristic p reflects on the geometry of its strict dual curve. In particular, in such cases we may describe all the possible intersection multiplicities of its strict dual curve with the linear system of hyperplanes. Among other consequence, using a result by Homma, we are able to construct nonreflexive space curves such that their tangent surfaces are nonreflexive as well, and the image of a generic point by a Frobenius map is in its osculating hyperplane.