Order preserving maps on the poset of upper triangular idempotent matrices

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We obtain the general form of bijective order and orthogonality preserving maps on the poset of all $n \times n$ upper triangular idempotent matrices over an arbitrary field $\mathbb{F}$. We also show that the assumption of surjectivity can be removed if every nonzero homomorphism $g : \mathbb{F} \to \mathbb{F}$ is surjective.