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*Direct-sum decompositions over one-dimensional reduced local rings.*

Let  $R$  be a local (commutative, Noetherian) ring with completion  $\hat{R}$ , and let  $V(R\text{-mod})$  be the additive monoid of all isomorphism classes of finitely generated  $R$ -modules. We give a complete set of invariants for  $V(R\text{-mod})$  in case  $R$  is also one-dimensional and reduced. In particular, we show that the structure of  $V(R\text{-mod})$  depends only on the cardinality of the residue field of  $R$ , on the “splitting number”  $|\text{Spec}(\hat{R})| - |\text{Spec}(R)|$ , and on whether or not  $R$  is a discrete valuation ring or the pullback of two discrete valuation rings mapping onto a field. (Received August 24, 2005)