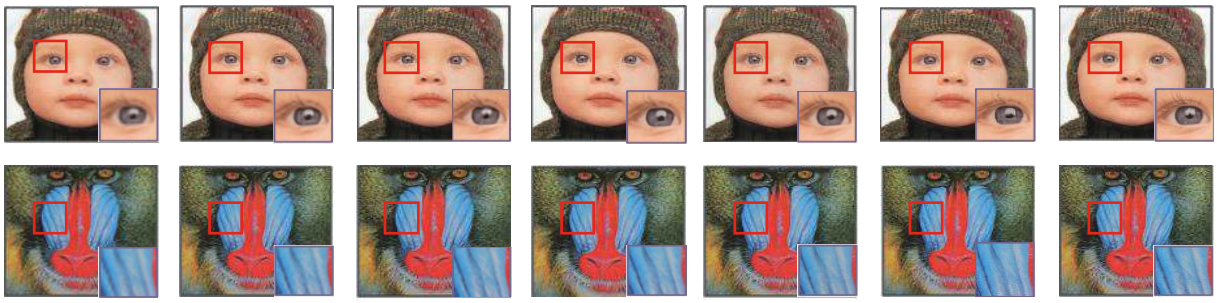
决梯度消失的问题. 注意力机制可以充分利用 LR 图像的特征, 重点关注对图像超分辨率有用的特征, 忽略无用的特征, 有效提高网络的收敛速度, 降低参数量. 由实验验证可知, 本文提出的基于密集残差注意力网络的图像超分辨率算法参数量少, 网络收敛速度快. 因此, 基于密集残差注意力网络的图像超分辨率算法在图像重建质量和网络性能上均优于其他主流超分辨率算法.



(a) Bicubic (b) SRCNN (c) VDSR (d) LapSRN (e) RCAN (f) MCAN (g) 本文

图 5 视觉效果对比

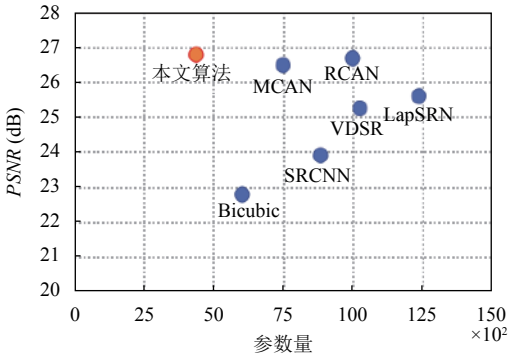


图 6 参数量分析

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