Revised Conclusion

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We designed a DTI tilt 0.9-µm CIS. Therefore, we shifted ML by d1 and CF by d2, and tilt DTI by . We performed FDTD simulation of the tilted DTI CIS. The optimal setting is d1 = 510 nm, d2 = 230 nm, and . The tilted DTI CIS has higher QE 3.80 %p in red, 4.70 %p in green, 0.30 %p in blue, and 2.70 %p in white than the shifted CIS. Also, X-talk decreased 0.05 %p in red, 0.20 %p in green, and 0.10 %p in blue, but it is less (< 0.2%) than amount we want. The tilted DTI CIS can get clearer images than the shifted CIS when incident light is oblique.