$$\epsilon = \cot\phi + \tan(\phi-\alpha)$$
$$= \frac{\cos\phi}{\sin\phi} + \frac{\sin(\phi-\alpha)}{\cos(\phi-\alpha)}$$
$$= \frac{\cos\phi\cdot(\cos\phi\cdot\cos\alpha + \sin\phi\cdot\sin\alpha) + \sin\phi\cdot(\sin\phi\cdot\cos\alpha - \cos\phi\cdot\sin\alpha)}{\sin\phi\cdot\cos(\phi-\alpha)}$$
$$= \frac{\cos^2\phi\cdot\cos\alpha + \sin\phi\cdot\cos\phi\cdot\sin\alpha + \sin^2\phi\cdot\cos\alpha - \sin\phi\cdot\cos\phi\cdot\sin\alpha}{\sin\phi\cdot\cos(\phi-\alpha)}$$
$$= \frac{\cos\alpha\cdot(\cos^2\phi+\sin^2\phi)}{\sin\phi\cdot\cos(\phi-\alpha)} = \frac{\cos\alpha}{\sin\phi\cdot\cos(\phi-\alpha)}$$