We study a class of polynomial planar systems with a singularity at the origin of degenerate focus type and without characteristic directions. This class is obtained using a simple transformation of a class of systems having weak foci, which is related to the normal form for the Hopf-Takens bifurcation. The class is given by
\[
\begin{align*}
\dot{x} &= -y^{2n-1} \pm x^n y^{n-1} (x^{2n} + y^{2n})^k \\
\dot{y} &= x^{2n-1} \pm x^{n-1} y^n (x^{2n} + y^{2n})^k,
\end{align*}
\]
where parameters \(k, n \in \mathbb{N}\).

For this class we show that the box dimension of any spiral trajectory \(\Gamma\) is nontrivial and
\[
\dim_B \Gamma = 2 \left(1 - \frac{1}{2nk + 1}\right).
\]

Also, we show the connection to the previous work done by Darko Žubrinić and Vesna Županović, regarding fractal analysis of spiral trajectories near the origin of a system
\[
\begin{align*}
\dot{x} &= -y + p(x, y) \\
\dot{y} &= x + q(x, y),
\end{align*}
\]
where \(p(x, y)\) and \(q(x, y)\) are analytic functions with all terms of degree 2 or more. (Received December 18, 2018)