|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ANALOG MULTIPLIER- in case of AC INPUT( SINE WAVE )** | | | | | | |
| **Various Detected Faults in MULTIPLIER in the presence of MULTIPLE faults with deviations** | | | | | | |
| **Injected Faults** | **=500, = 0.0098**  **Optimal Order – 18th** | | **=1000, = 0.0097**  **Optimal Order – 18th** | | **=2000, = 0.0097**  **Optimal Order – 22nd** | |
| **No. of Coefficients Out of Bound** | **Fault Detection Status** | **No. of Coefficients Out of Bound** | **Fault Detection Status** | **No. of Coefficients Out of Bound** | **Fault Detection Status** |
| R11 8%**↑**  R12 10% **↑** | 15 | **√** | 13 | **√** | 17 | **√** |
| R21 20% **↑**  R22 15% **↓** | 25 | **√** | 21 | **√** | 38 | **√** |
| R31 20% **↓**  R32 20% **↑**  R41 10% **↑** | 18 | **√** | 17 | **√** | 16 | **√** |
| R52 30%**↓**  R51 20% **↑** | 21 | **√** | 16 | **√** | 23 | **√** |
| R11 15% **↑**  R12 20% **↓**  R42 18 % **↑** | 34 | **√** | 31 | **√** | 55 | **√** |