1 Example `FoxH-Lommel_2_9_22.wls`

File content

Fox H-function

$$H_{1,3}^{3,1} \left(\cdot \left| \begin{array}{c} \left(\frac{\mu+1}{2}, 1 \right) \\ \left(\frac{\mu+1}{2}, 1 \right), \left(\frac{\eta}{2}, 1 \right), \left(-\frac{\eta}{2}, 1 \right) \end{array} \right. \right)$$

$$H_{1,3}^{3,1} \left(\cdot \left| \frac{\left(\frac{\mu+1}{2}, 1 \right)}{\left(\frac{\mu+1}{2}, 1 \right), \left(\frac{\eta}{2}, 1 \right), \left(-\frac{\eta}{2}, 1 \right)} \right| \right)$$

Summary

$$a^* = 4$$
$$\Delta = 2$$
$$\delta = 1$$
$$\mu = -1$$
$$a_1^* = 3$$
$$a_2^* = 1$$
$$\xi = \mu + 1$$
$$c^* = 2$$

Poles 1. First eight poles from upper front list

$$a_{i,k} = \begin{pmatrix} \frac{1-\mu}{2} \\[2mm] \frac{3-\mu}{2} \\[2mm] \frac{5-\mu}{2} \\[2mm] \frac{7-\mu}{2} \\[2mm] \frac{9-\mu}{2} \\[2mm] \frac{11-\mu}{2} \\[2mm] \frac{13-\mu}{2} \\[2mm] \frac{15-\mu}{2} \end{pmatrix}^T$$

2. First eight poles from lower front list

$$b_{j,\ell} = \begin{pmatrix} \frac{1}{2}(-\mu - 1) & -\frac{\eta}{2} & \frac{\eta}{2} \\[2mm] \frac{1}{2}(-\mu - 3) & -\frac{\eta}{2} - 1 & \frac{\eta-2}{2} \\[2mm] \frac{1}{2}(-\mu - 5) & -\frac{\eta}{2} - 2 & \frac{\eta-4}{2} \\[2mm] \frac{1}{2}(-\mu - 7) & -\frac{\eta}{2} - 3 & \frac{\eta-6}{2} \\[2mm] \frac{1}{2}(-\mu - 9) & -\frac{\eta}{2} - 4 & \frac{\eta-8}{2} \\[2mm] \frac{1}{2}(-\mu - 11) & -\frac{\eta}{2} - 5 & \frac{\eta}{2} - 5 \\[2mm] \frac{1}{2}(-\mu - 13) & -\frac{\eta}{2} - 6 & \frac{\eta}{2} - 6 \\[2mm] \frac{1}{2}(-\mu - 15) & -\frac{\eta}{2} - 7 & \frac{\eta}{2} - 7 \end{pmatrix}^T$$