The design for Wilkinson power divider

The parameters of the initial draft with two stage Wilkinson power divide:

N = 2, f0 = 3.5 GHz, BW = 2.8 GHz,

W1 = 28.7 mils, Z1 =61.64 ohms, R1 =200 Ohm, /4=506.4 mils;

W2 = 15.7 mils, Z2 =81.10 ohms, R2 =100 Ohm, /4=516.1mils;

W = 41.9 mils, Z0 =50 ohms;

Position trace 2

W\_pad\_x = 25.2;

W\_pad\_y = 21.26;

Width\_50 = 41.9;

Width\_81 = 15.7;

Y2\_right = 18;

X2\_right =0 ;

L2 = 516.1;

L2\_m = L2 -2\* Y2\_right= 480.1000

R2\_m =L2\_m/pi= 152.8206

X2\_left = -2\*R2\_m= -305.6412

X\_in = X2\_left - Width\_50/2+Width\_81/2 = -318.7412

Position trace 1

Width\_61 = 28.7;

L1 = 506.4;

L1\_m =L1 - 2\* Y2\_right -X1\_left= 443.4500

R1\_m = L1\_m /pi= 141.1545

X1\_left=W\_pad\_x/2+Width\_61/2= 26.9500

Y1\_left = yc\_pad-W\_pad\_y/2+Width\_61/2= 23.8

Y1\_right= Y1\_left= 23.8

X1\_right= X1\_left + 2\*R1\_m= 309.2590

X1\_C= X1\_left + R1\_m = 168.1045

N = 2, f0 = 5.85 GHz, BW = 1.7 GHz,

W1 = mils, Z1 =59.73 ohms, R1 =200 Ohm, /4=mils;

W2 = mils, Z2 =83.71 ohms, R2 =100 Ohm, /4=mils;

W = 41.9 mils, Z0 =50 ohms;