$Z_L = 100 + j\,100\ \Omega$

$Z_0 = 50\ \Omega$

$Z_{LN} = 2 + j2$

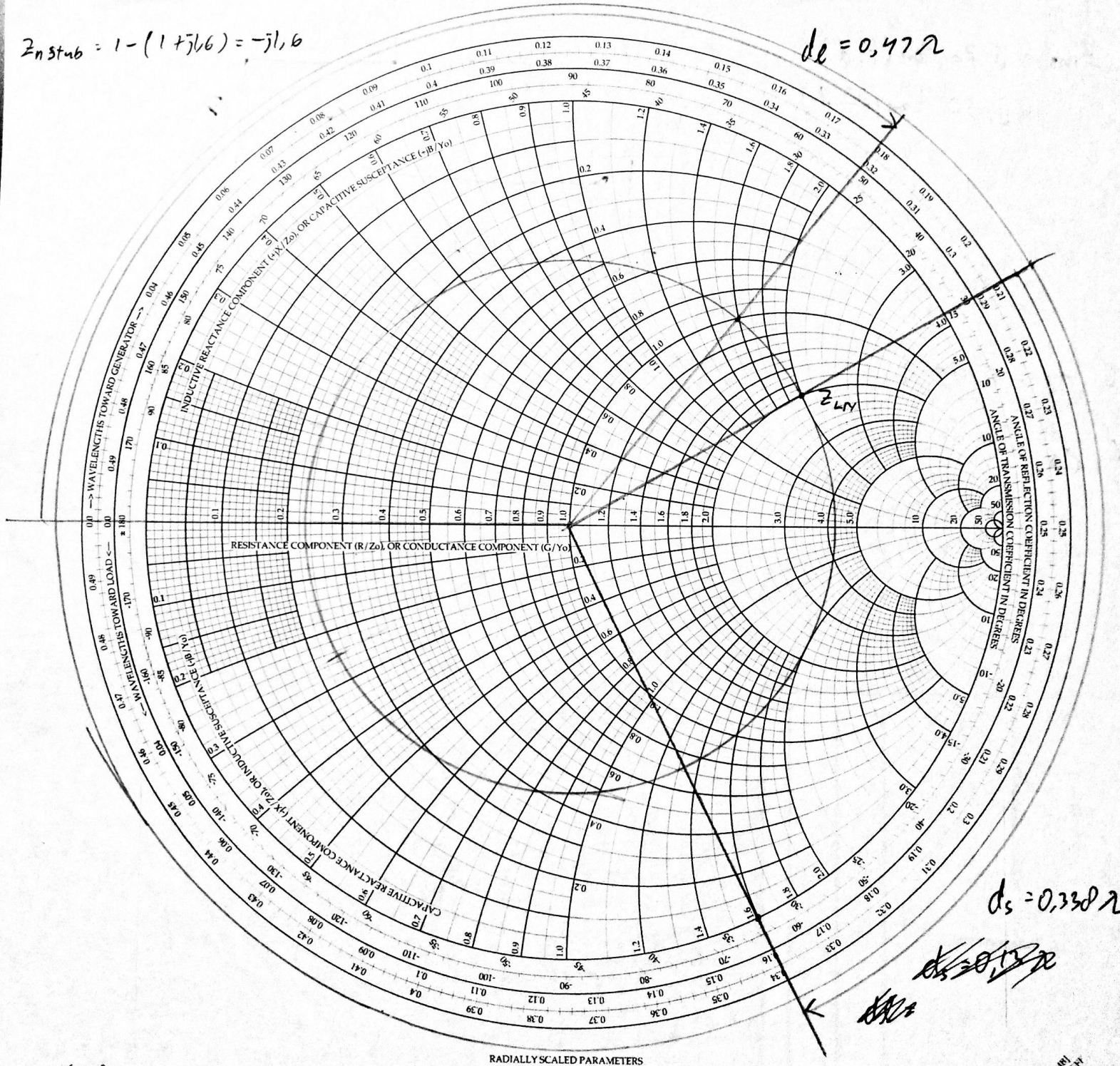
M. Maisyam Abdullah B.
110491095

The Complete Smith Chart TT-93-11

Black Magic Design

$Z_{n\,stub} = 1 - (1 + j1.6) = -j1.6$

$d_\ell = 0,477\lambda$



$d_s = 0,330\lambda$

~~$d_s = 0,152\lambda$~~

~~$d_{\ell\ell} =$~~

RADIALLY SCALED PARAMETERS

SWR

RTN. LOSS [dB]

REFL. COEFF. ρ

REFL. COEFF. E or I

TOWARD LOAD —> <— TOWARD GENERATOR

ATTEN. [dB]

SW. LOSS COEFF.

REFL. LOSS [dB]

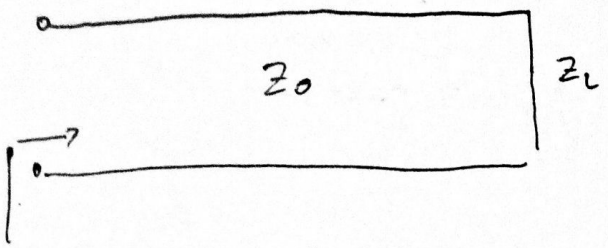
SW. PEAK EFF. (INST. P)

TRANSM. COEFF. P

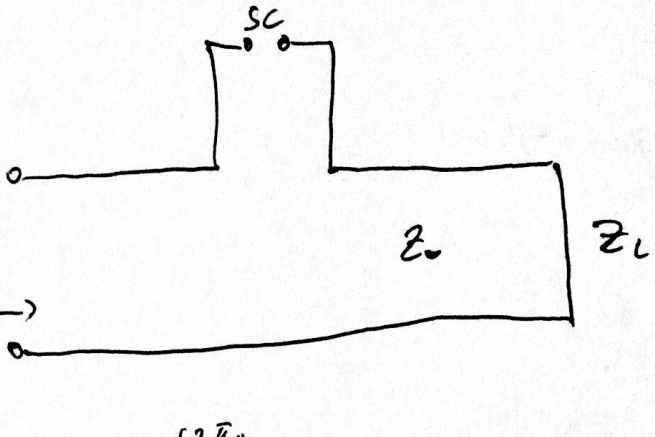
TRANSM. COEFF. E or I

ORIGIN ▲ CENTER ▲

a.



$$Z_{ins} = j\, Z_0 \tan(\beta \cdot d)$$
$$= j \cdot 50 \tan\left(\frac{2\pi}{\lambda} \cdot d\right)$$



$$Z_{ins} = j\,50 \tan\left(\frac{2\pi}{\lambda} d\right)$$

b. $d_L = 0{,}47\,\lambda$

c. $d_S = 0{,}330\,\lambda$