

Chakradulae Isaac
 Elect/Elect
 17/EN604/016

$$13-1) \text{VSWR} = \frac{1 + |\Gamma_v|}{1 - |\Gamma_v|}$$

$$\Gamma_v = \frac{Z_L - Z_0}{Z_L + Z_0} = \frac{100 - j100 + 50}{100 + j100 + 50}$$

$$= \frac{50 + j100}{150 + j100}$$

$$= \frac{11.8 \angle 63.43^\circ}{180.3 \angle 33.69^\circ} = 0.62 \angle 29.74^\circ$$

Reflection = $|\Gamma_v| = 0.62$

voltage
 coefficient

$$\text{VSWR} = \frac{1 + |\Gamma_v|}{1 - |\Gamma_v|} = \frac{1.62}{0.38}$$

$$= 4.2$$

$$= \frac{1.62}{0.38} = \frac{V_{max}}{V_{min}}$$

$$\Gamma^+ = 0.62$$

~~Transmission~~
~~reflection~~

~~Reflection~~

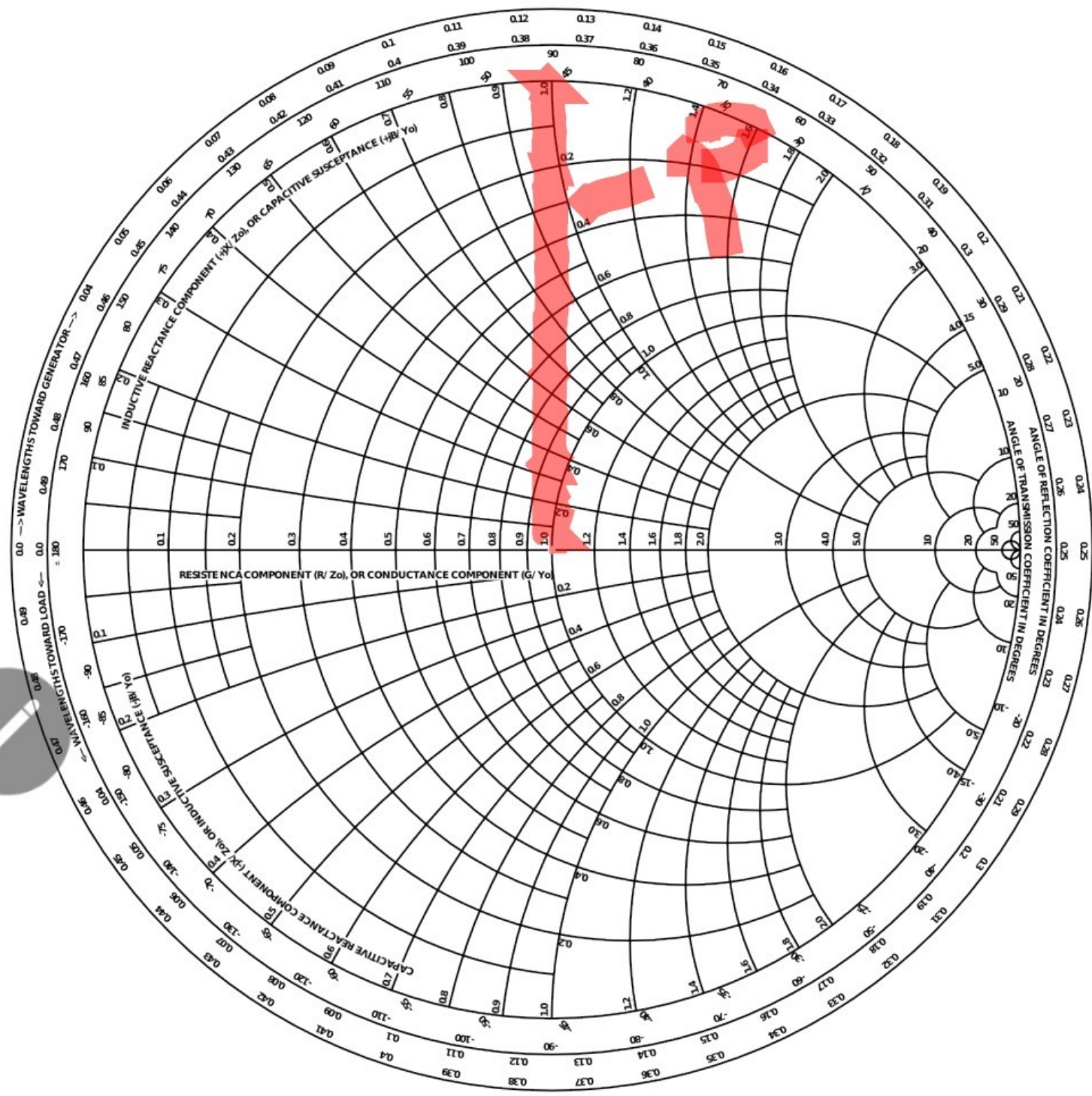
Normalized Load = $P^+ =$
 impedance



~~Reflection voltage coefficient~~

Normalized Load impedance = $Z^N = \frac{100}{100} + j \frac{100}{100} = 1 + j1$

29.74



RADIALLY SCALED PARAMETERS

		TOWARD LOAD →															← TOWARD GENERATOR														
		10	7	5	4	3	2	1.5	1.2	1.1	1	1	1.1	1.2	1.5	2	3	4	5	7	10	1	2	3	4	5	6	10	15	∞	
SWR	∞	10	7	5	4	3	2	1.5	1.2	1.1	1	1	1.1	1.2	1.5	2	3	4	5	7	10	1	2	3	4	5	6	10	15	∞	
ATTEN. (dB)	∞	10	7	5	4	3	2	1.5	1.2	1.1	1	1	1.1	1.2	1.5	2	3	4	5	7	10	1	2	3	4	5	6	10	15	∞	
SW LOSS COEFF	∞	10	7	5	4	3	2	1.5	1.2	1.1	1	1	1.1	1.2	1.5	2	3	4	5	7	10	1	2	3	4	5	6	10	15	∞	
RFL. COEFF. P	∞	10	7	5	4	3	2	1.5	1.2	1.1	1	1	1.1	1.2	1.5	2	3	4	5	7	10	1	2	3	4	5	6	10	15	∞	
TRANSM. COEFF. P	∞	10	7	5	4	3	2	1.5	1.2	1.1	1	1	1.1	1.2	1.5	2	3	4	5	7	10	1	2	3	4	5	6	10	15	∞	
TRANSM. COEFF. E or I	∞	10	7	5	4	3	2	1.5	1.2	1.1	1	1	1.1	1.2	1.5	2	3	4	5	7	10	1	2	3	4	5	6	10	15	∞	
ORIGIN	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2										