

ET3122 Antennas and Propagation
Intake 39 – Academic Year 2024 – Semester 5

Assignment (Individual) – Cylindrical Dipole Design

You are provided with an aluminum tube with a radius of 3mm. Assuming you have no restrictions on the length of the tube, determine the maximum bandwidth that can be achieved for the given resonance frequency and voltage standing wave ratio (VSWR). Each student is provided with a different resonance frequency and VSWR in decibels.

Registration No	Name	Freq. (MHz)	VSWR (dB)
C/ENG/22/6378/ET	RRGSN Senarathna	800	1.5
D/ENG/22/0001/ET	JAS Sanjana	850	1.5
D/ENG/22/0002/ET	GSS Senevirathne	900	1.5
D/ENG/22/0029/ET	KASH Jayawardhana	950	1.5
D/ENG/22/0036/ET	LU Vithanage	1050	1.5
D/ENG/22/0041/ET	KBRYD Bandara	1100	1.5
D/ENG/22/0046/ET	ASP Mohammed	1150	1.5
D/ENG/22/0047/ET	MA Sulakshana	1200	1.5
D/ENG/22/0049/ET	J Kalistan	1250	1.5
D/ENG/22/0052/ET	GR Ilamperuma	800	1.8
D/ENG/22/0057/ET	MMA Ahmath	850	1.8
D/ENG/22/0066/ET	AMAK Prathibhath	900	1.8
D/ENG/22/0068/ET	HRS Michael	950	1.8
D/ENG/22/0070/ET	Subasinghe AD	1050	1.8
D/ENG/22/0072/ET	RP Munasinghe	1100	1.8
D/ENG/22/0077/ET	KWID Indrajith	1150	1.8
D/ENG/22/0078/ET	HMIC Herath	1200	1.8
D/ENG/22/0079/ET	GD Wijesekara	1250	1.8
D/ENG/22/0085/ET	Danthanarayana P	800	2
D/ENG/22/0087/ET	HNL Gunawardhana	850	2
D/ENG/22/0090/ET	MSS Ahamed	900	2
D/ENG/22/0093/ET	SL Wickramarathne	950	2
D/ENG/22/0103/ET	HWA Thathsarani	1050	2
D/ENG/22/0111/ET	JSNS Jayasooriya	1100	2
D/ENG/22/0120/ET	MAE Wijesuriya	1150	2
D/ENG/22/0137/ET	ABSU Premachandra	1200	2

Due: 2024.05.24 (1 week after all semester examinations are over)
This assignment accounts for 30% of the module assessment.

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