

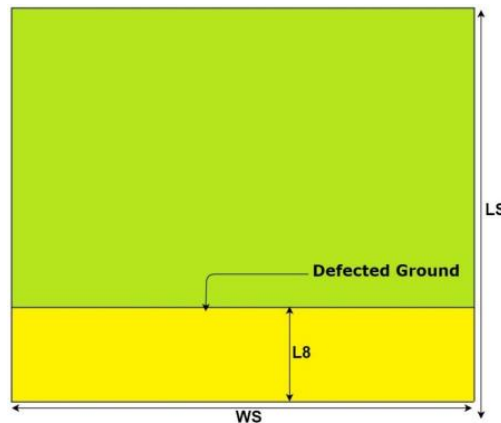
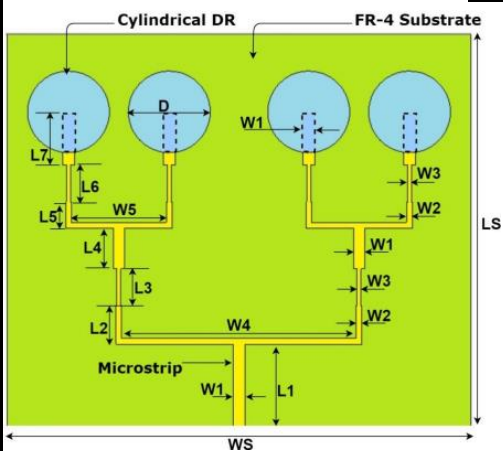
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Report5:Triple Band Antenna Array Using Power Divider Network Technique

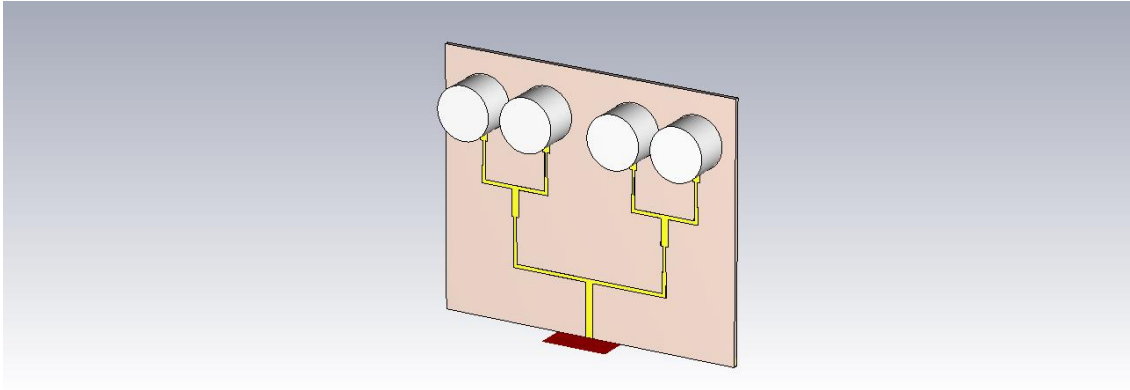


Given Dimensions&Design



Parameter	Value (mm)	Parameter	Value (mm)	Parameter	Value (mm)
WS	113	L3	9	D	20
LS	96	L4	10	W1	2.8
DH	14	L5	6.4	W2	1.4
HS	1.6	L6	9	W3	1.00
L1	20	L7	12	W4	57
L2	9.4	L8	23	W5	23

1) Structure



2) S-Parameter

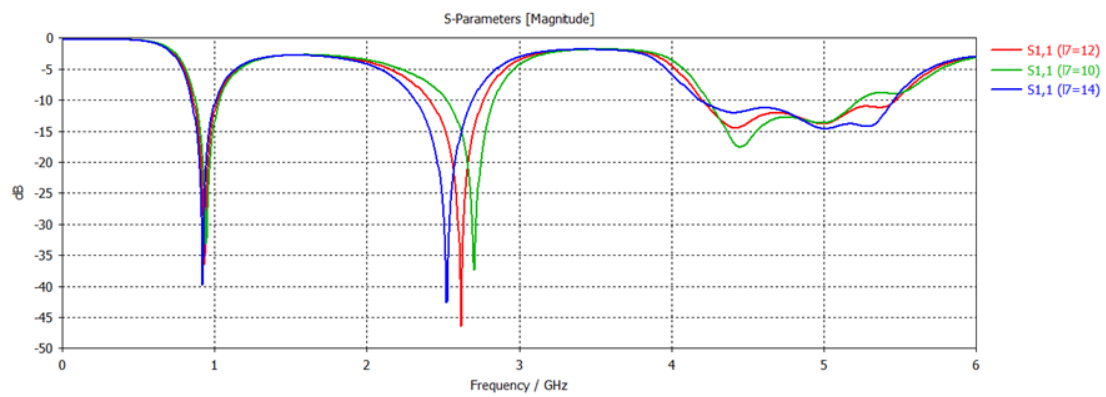


Figure 1: S_{11} with various length of microstrip feed (L_7)

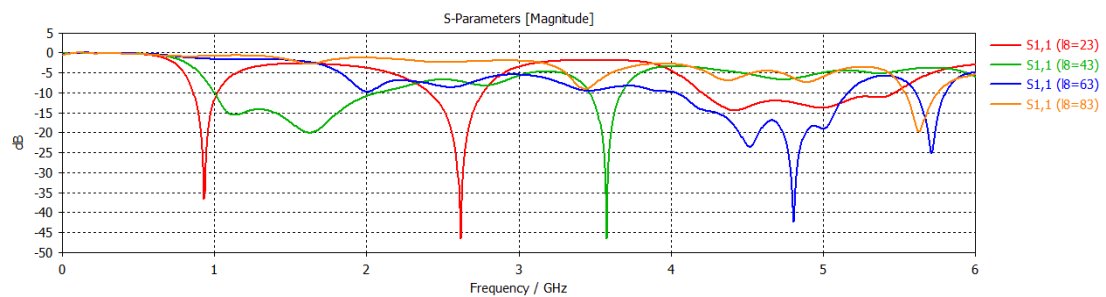


Figure 2: S_{11} with varying in DGS length (L_8)

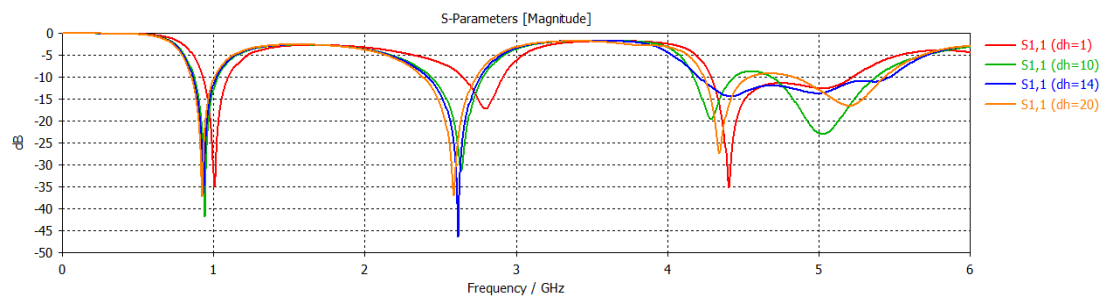
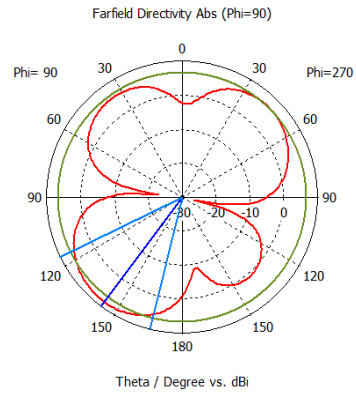


Figure 3: S_{11} with varying the height of the CDR (D_h)

3) Radiation Pattern (1D/3D)



— farfield (f=3) [1]

Frequency = 3 GHz
Main lobe magnitude = 8.32 dBi
Main lobe direction = 143.0 deg.
Angular width (3 dB) = 50.2 deg.
Side lobe level = -1.7 dB

