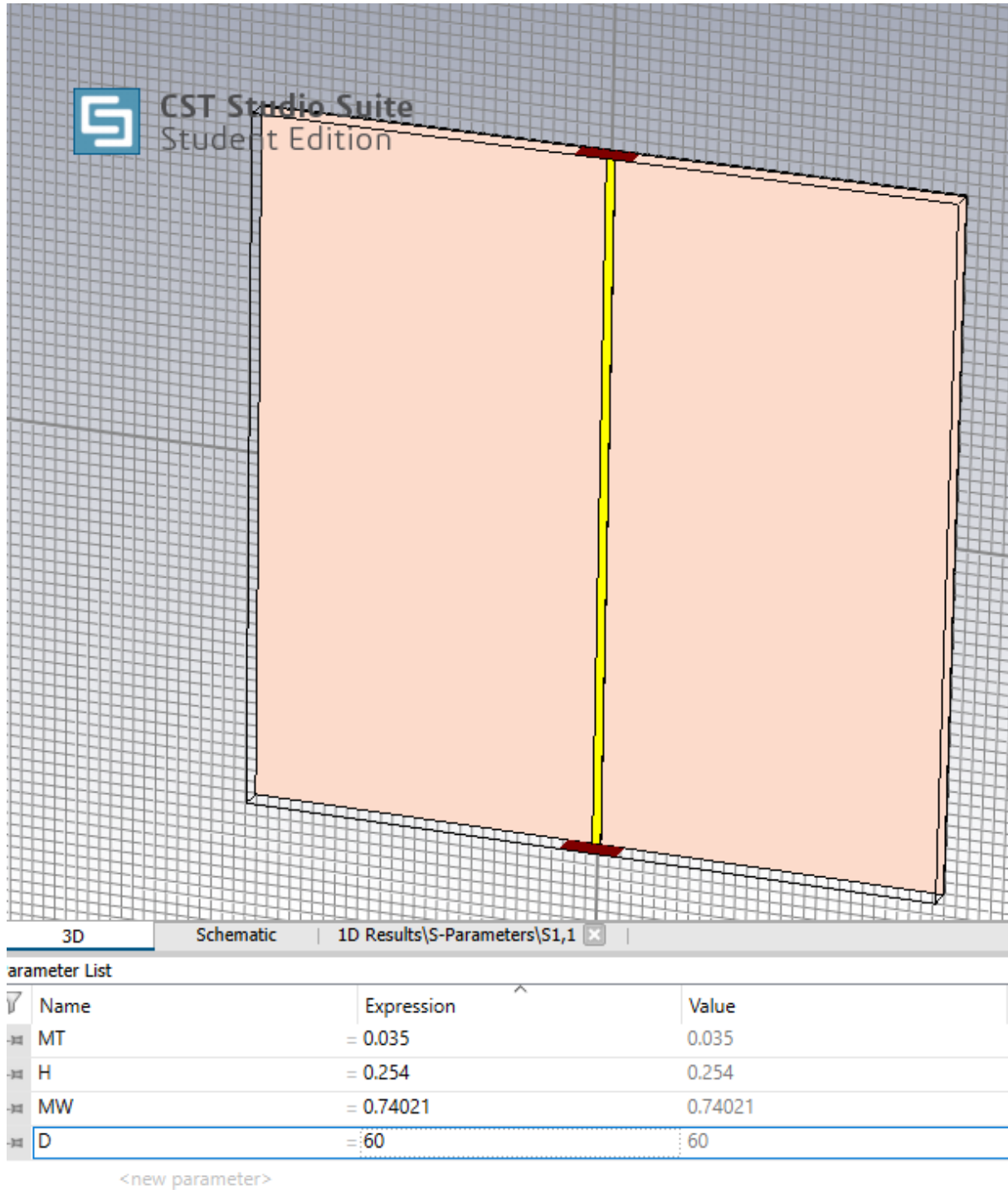


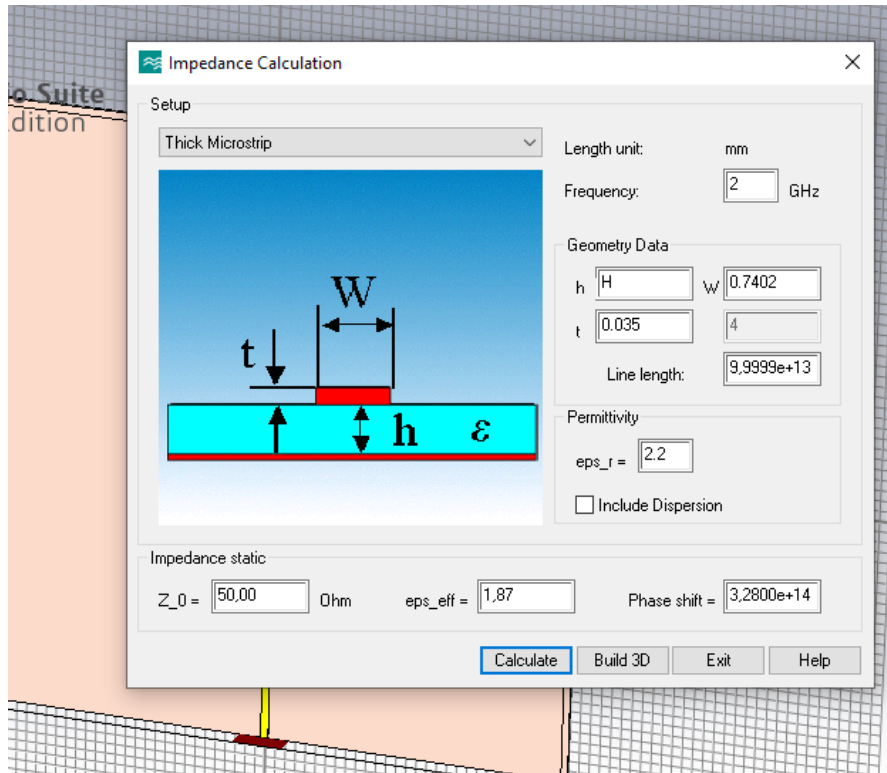
GAZI UNIVERSITY FACULTY OF ENGINEERING & ARCHITECTURE
DEPARTMENT OF ELECTRICAL & ELECTRONIC ENGINEERING EM427

MICROWAVE TECHNIQUE TRANSMISSION LINE DESIGN

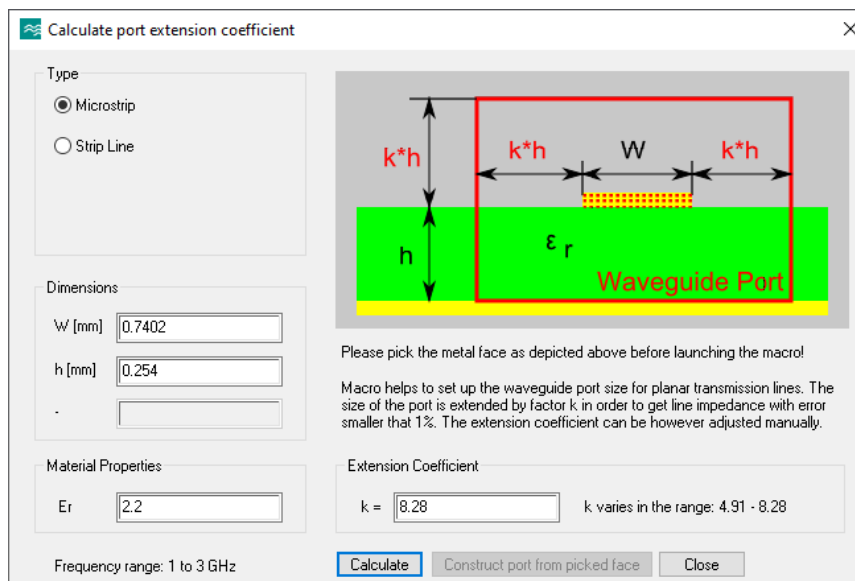
ALTTAŞ 60



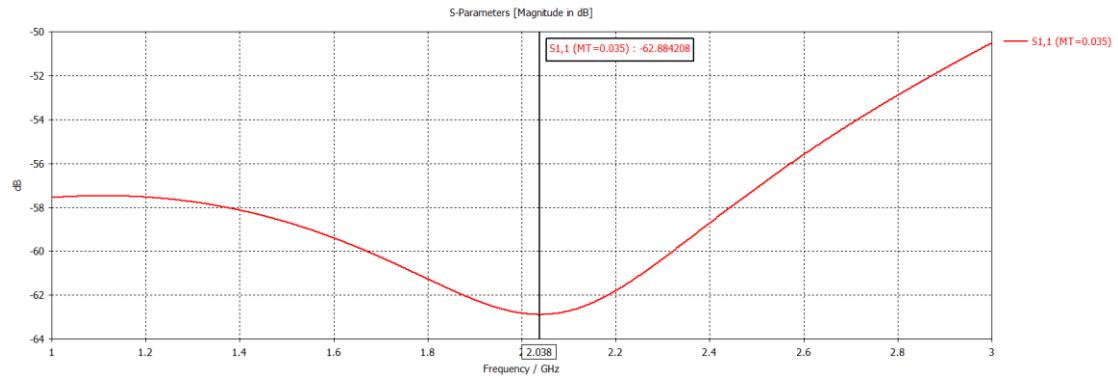
IMPEDANCE CALCULATION



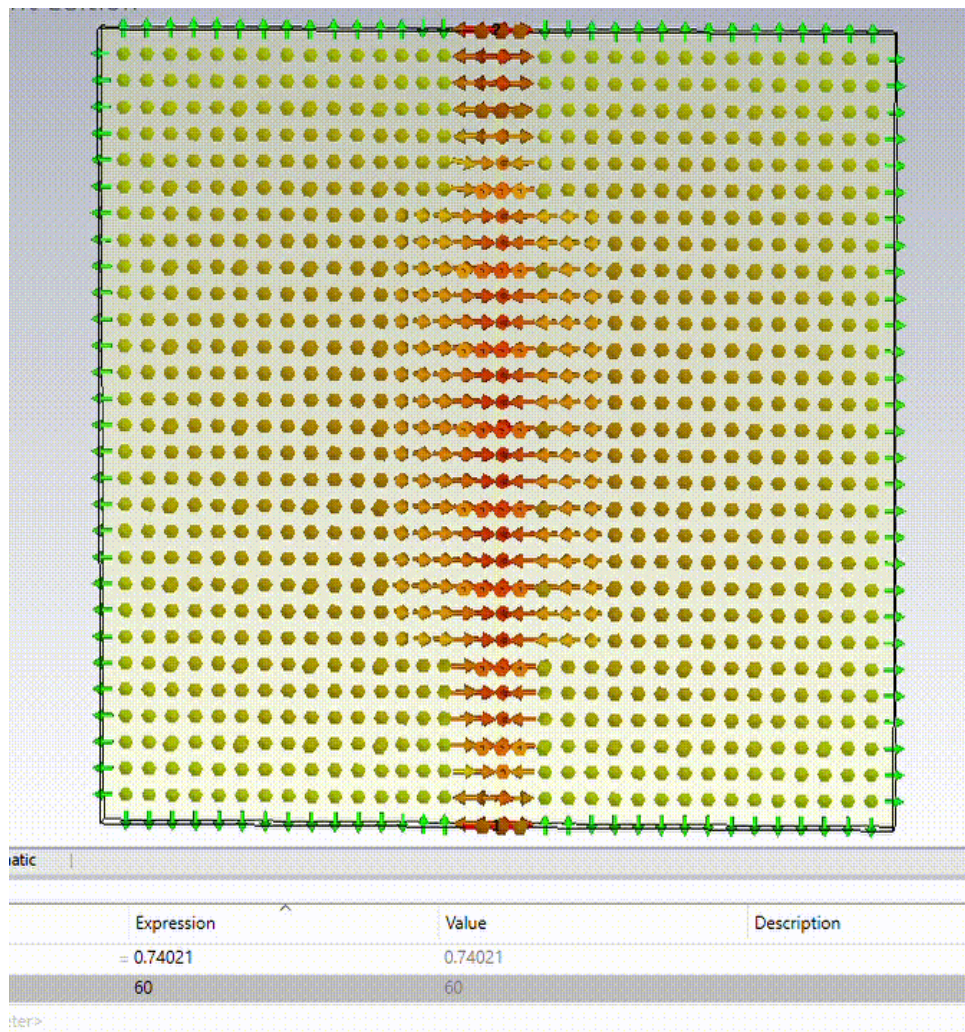
PORT DESIGN



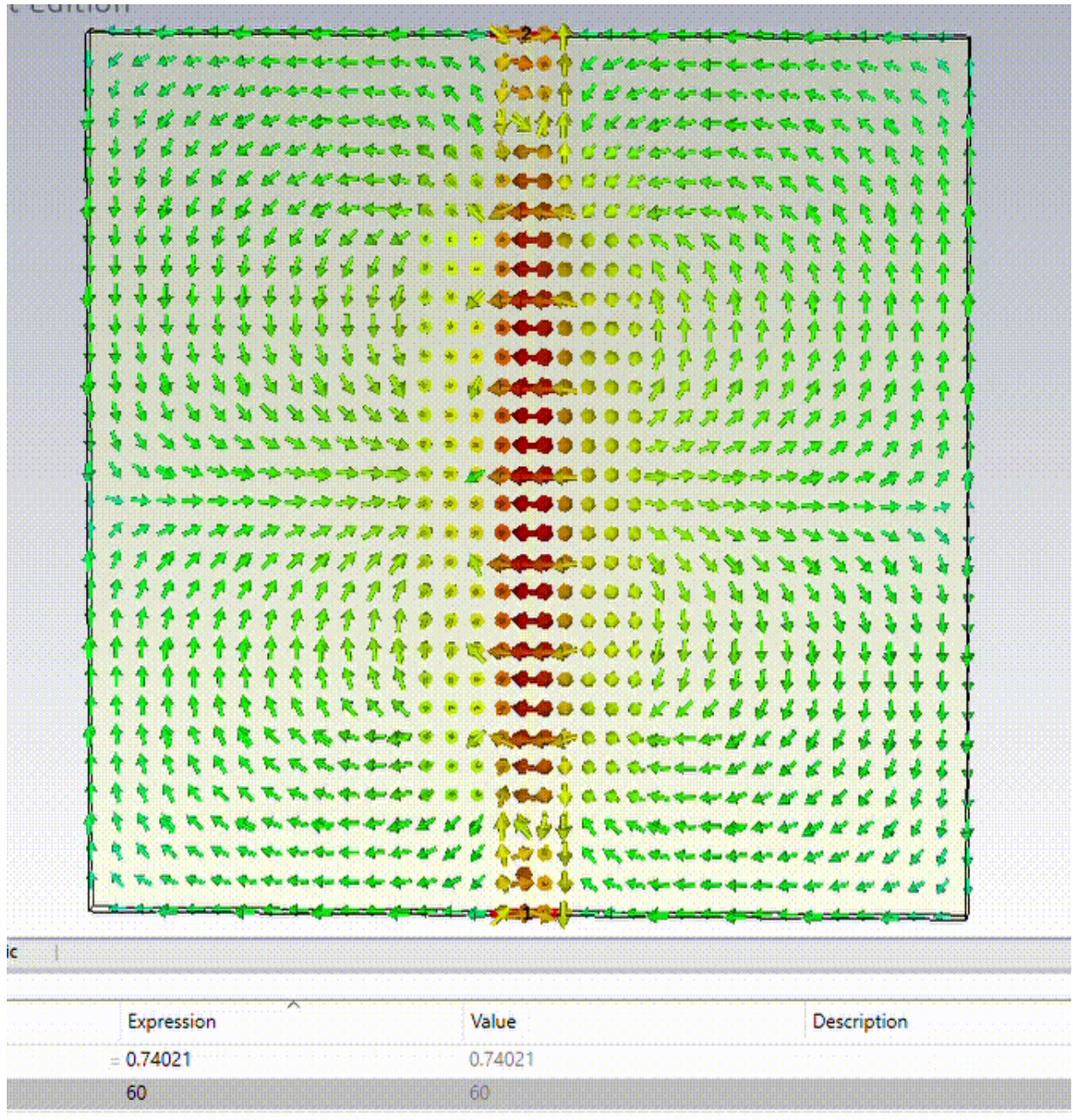
S11 PARAMETRESİ SONUÇLARI



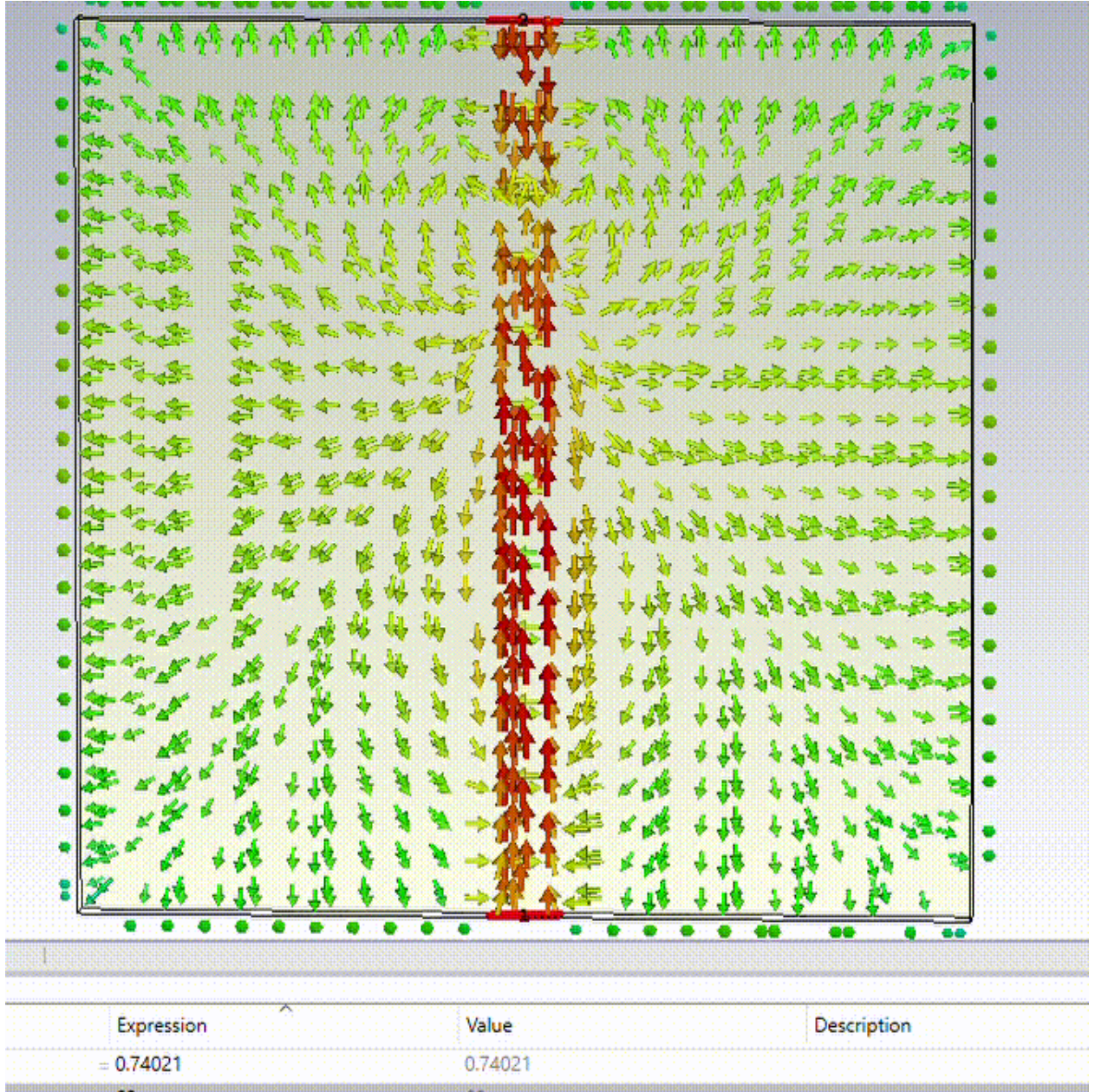
E-FIELD



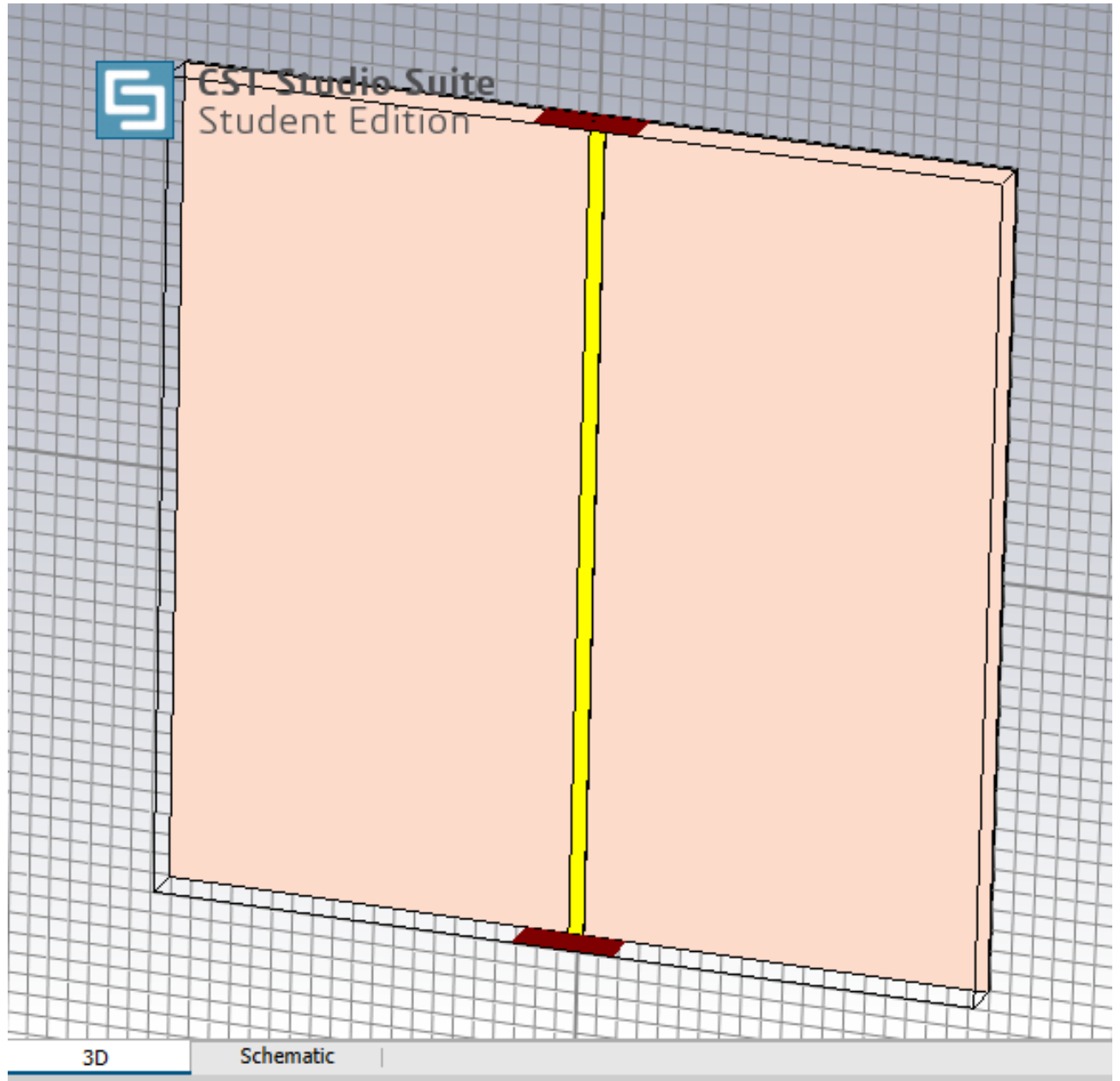
H-FIELD



YÜZEY AKIMLARI



ALTTAŞ 40



ESI Studio Suite
Student Edition

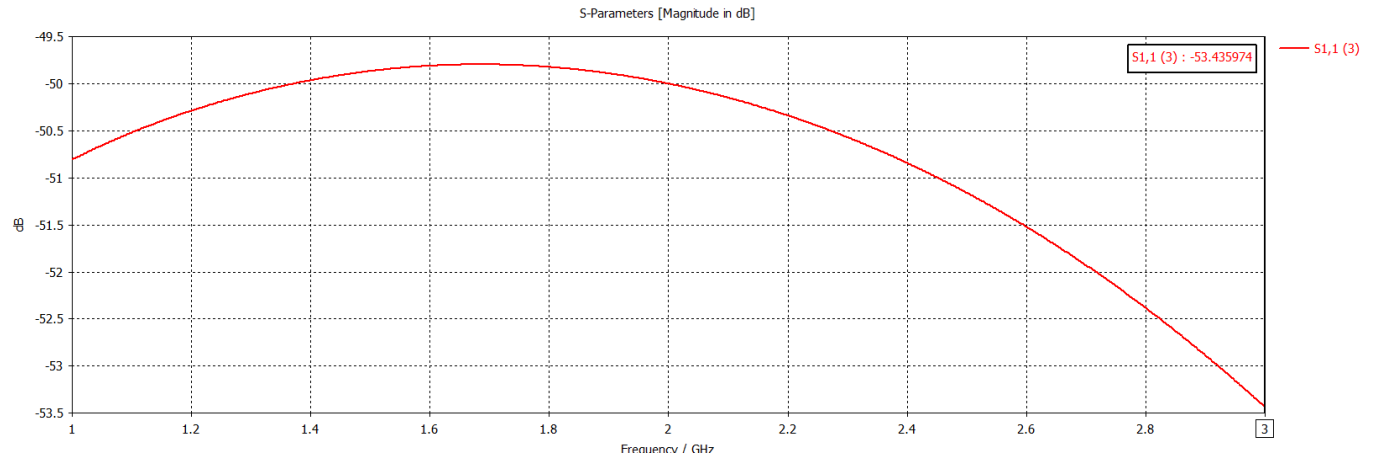
3D | Schematic

Parameter List

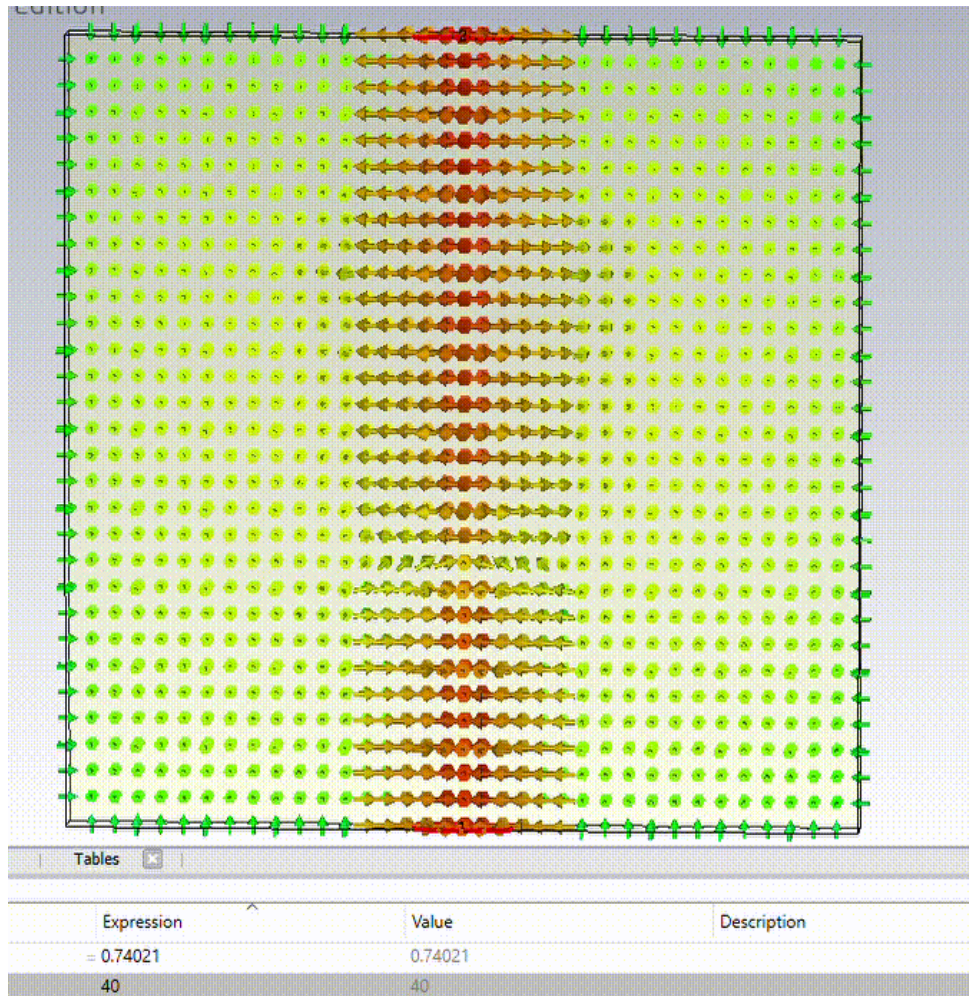
Name	Expression	Value
MT	= 0.035	0.035
H	= 0.254	0.254
MW	= 0.74021	0.74021
D	40	40

< new parameter >

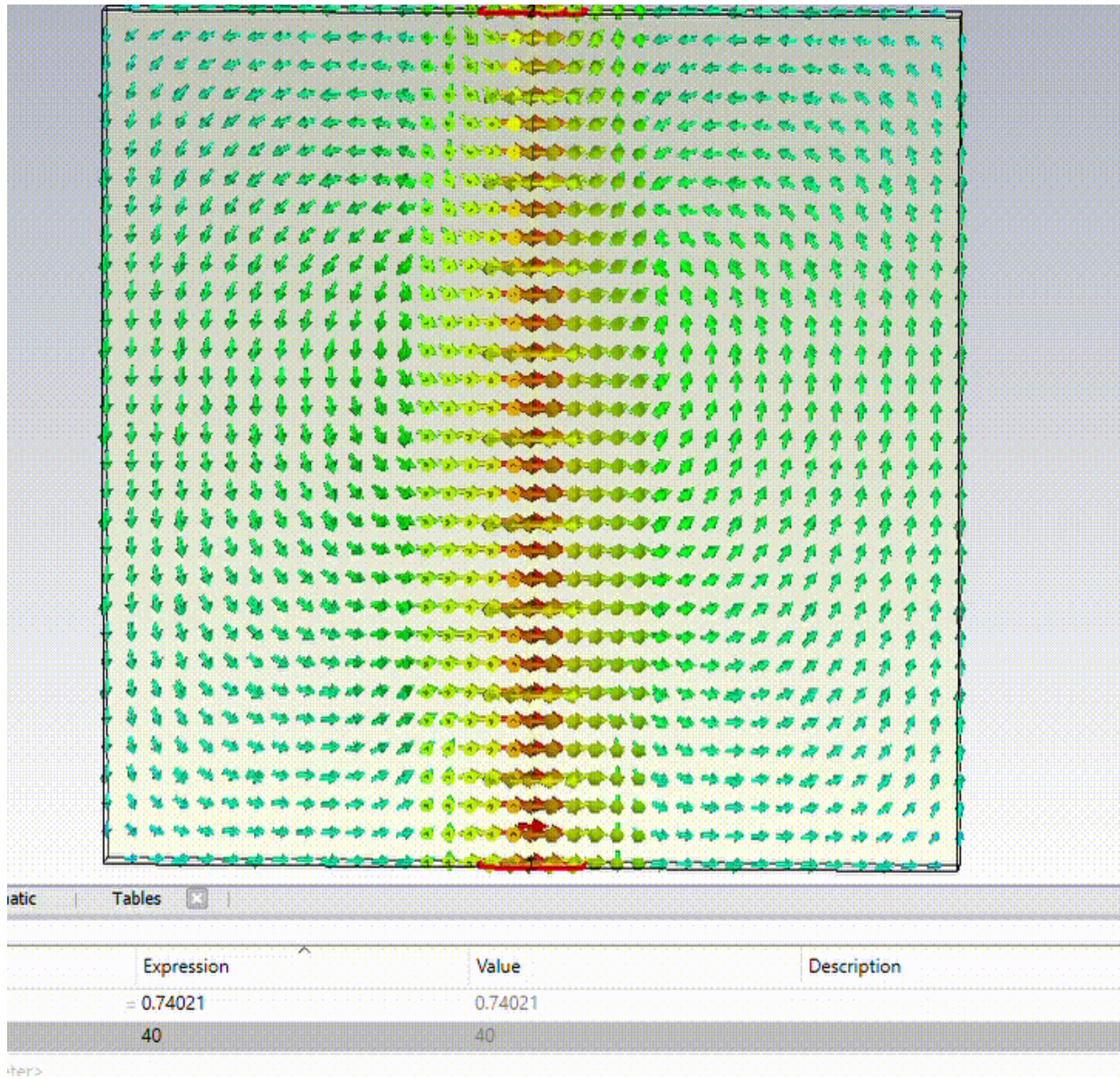
S11 PARAMETRESİ SONUÇLARI



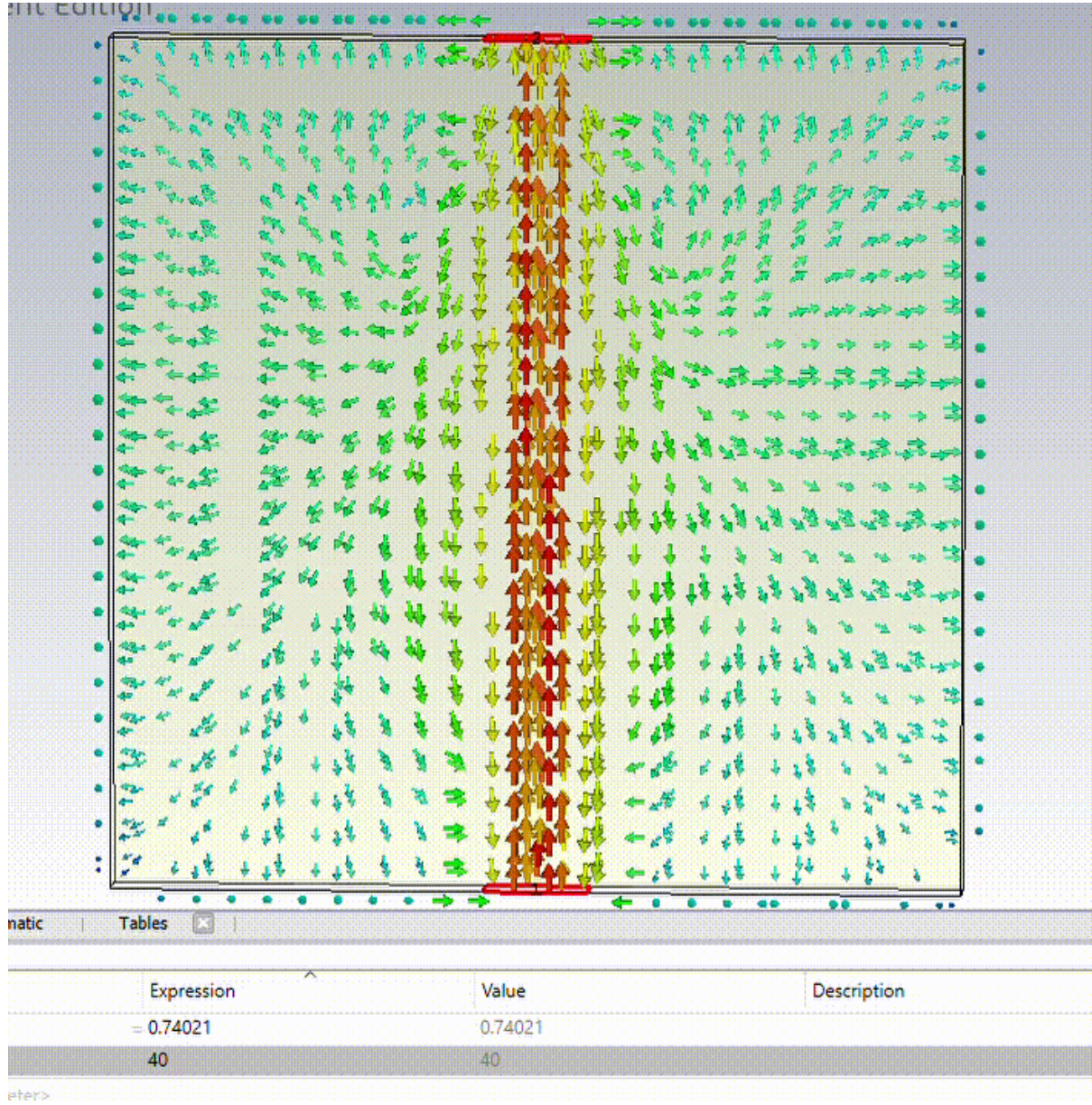
E-FIELD



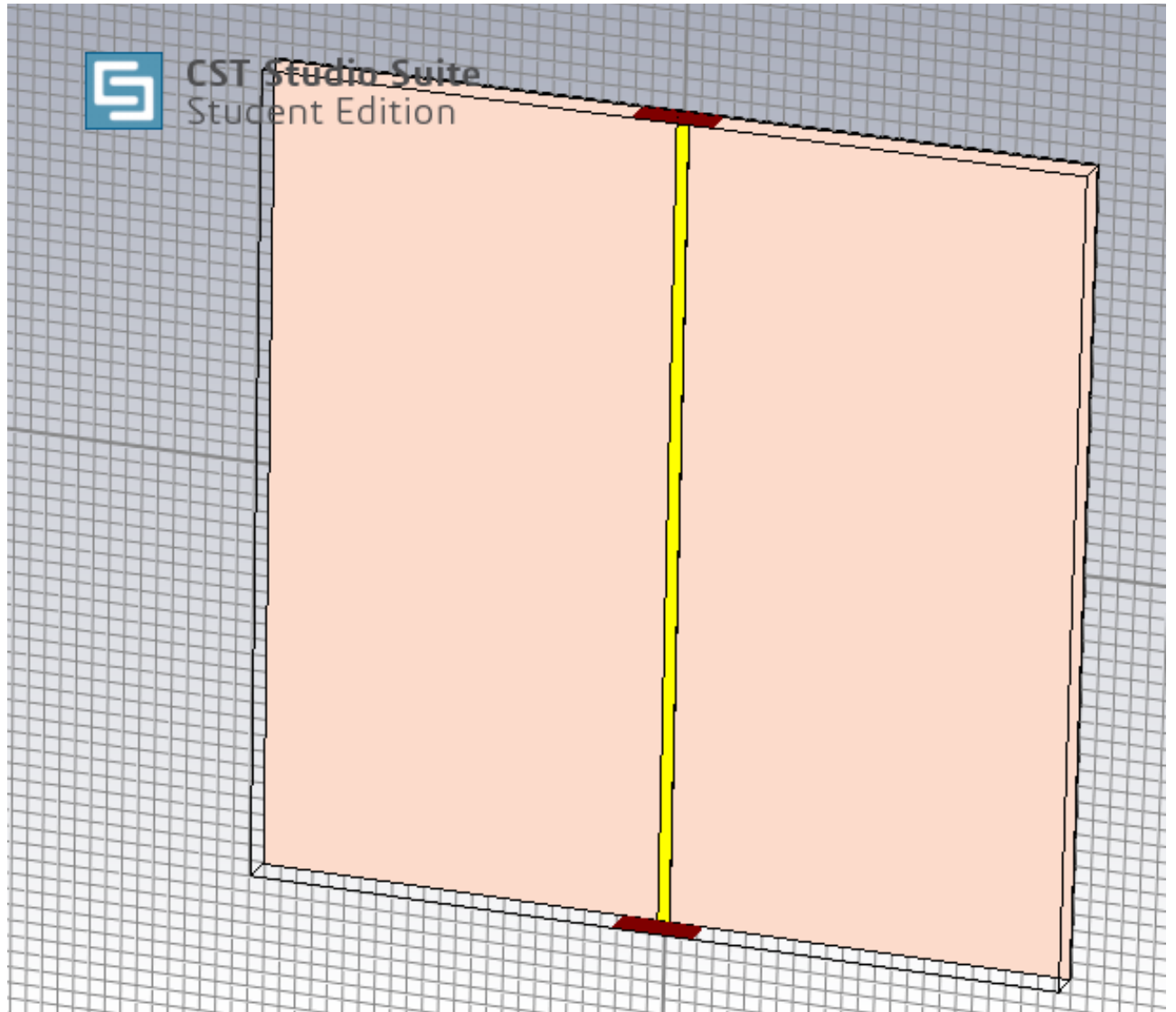
H-FIELD



YÜZEY AKIMLARI



ALTTAŞ 50



CST Studio Suite
Student Edition

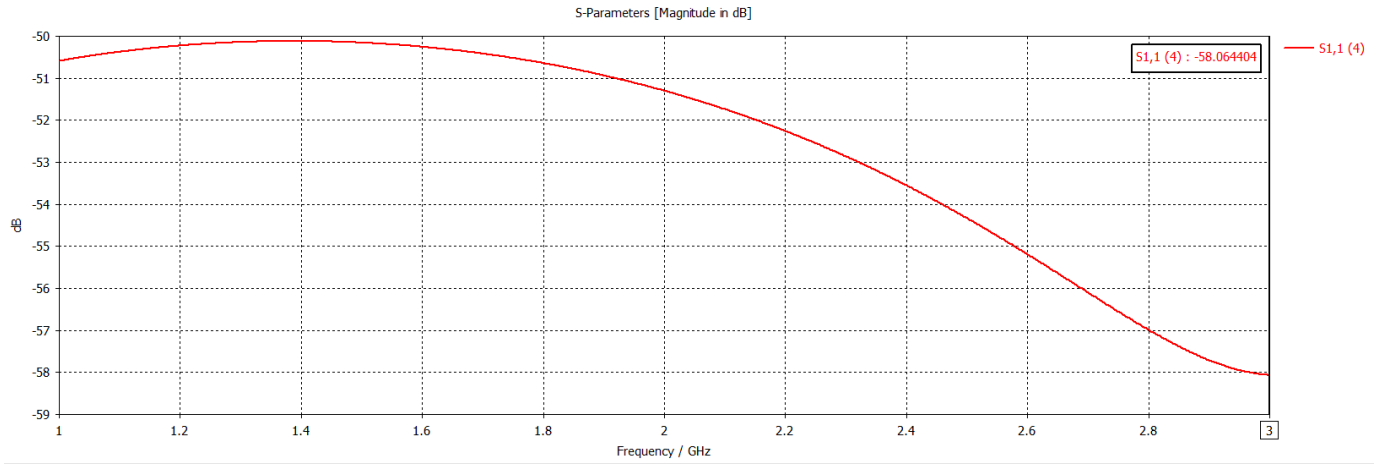
3D | Schematic | 1D Results\S-Parameters\S1,1

Parameter List

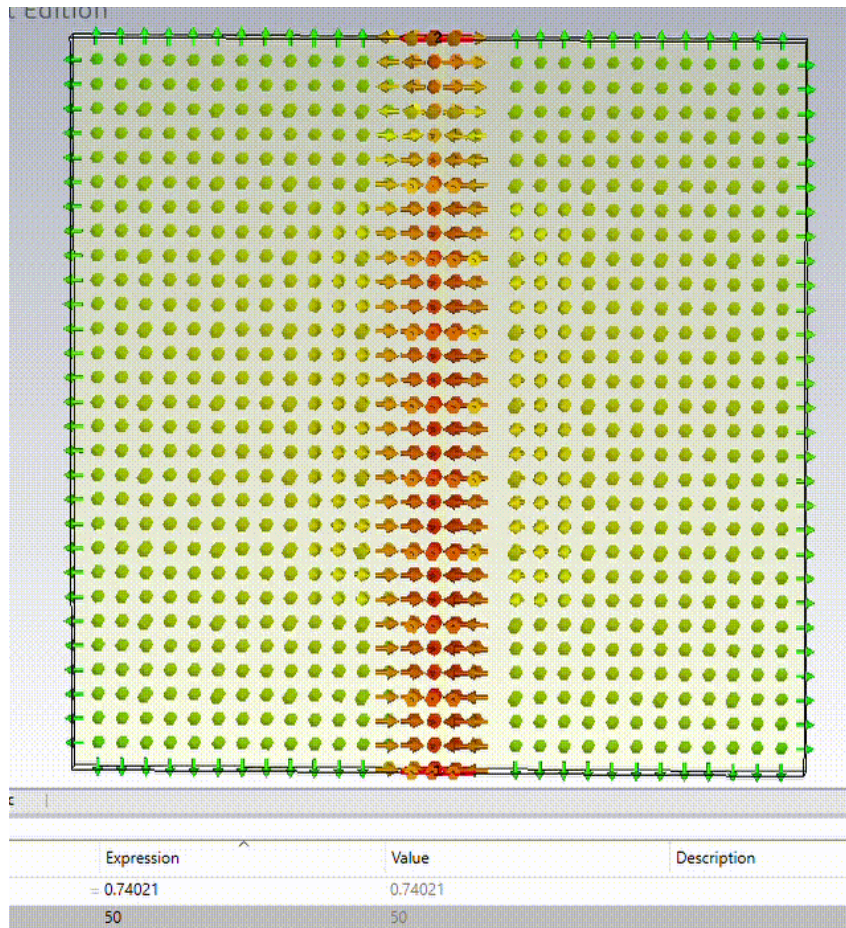
Name	Expression	Value
MT	= 0.035	0.035
H	= 0.254	0.254
MW	= 0.74021	0.74021
D	50	50

<new parameter>

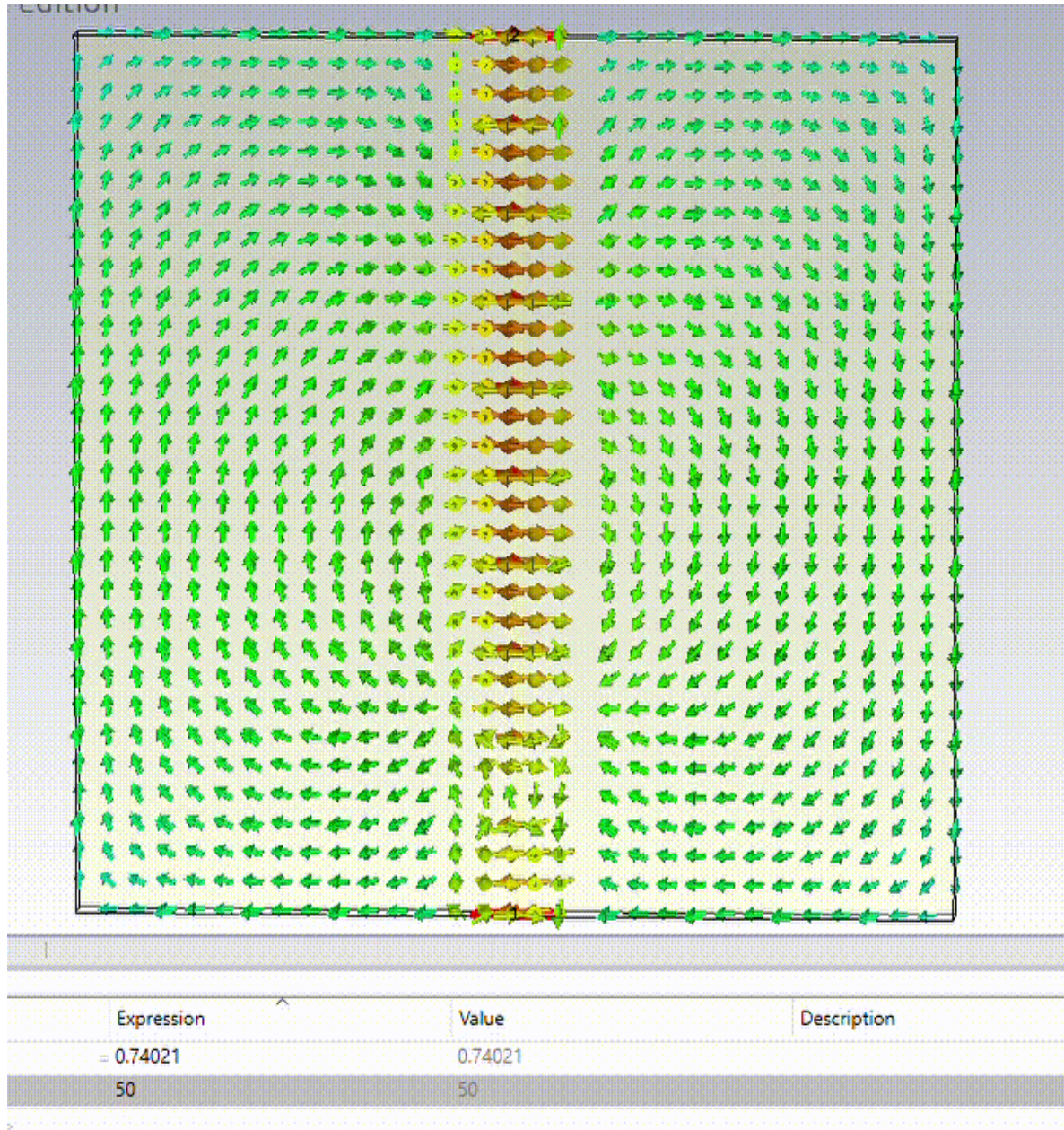
S11 PARAMETRESİ SONUÇLARI



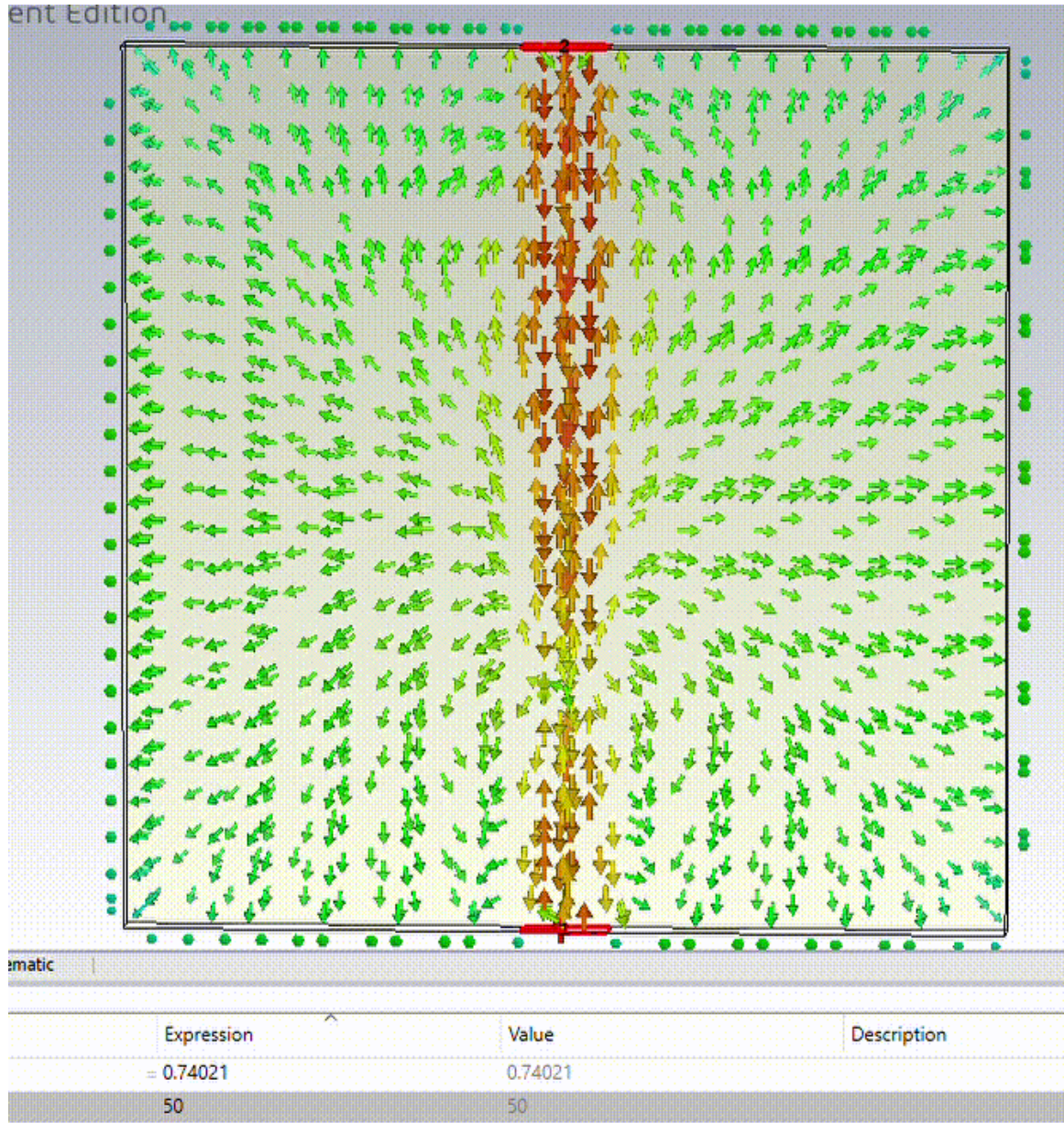
E-FIELD



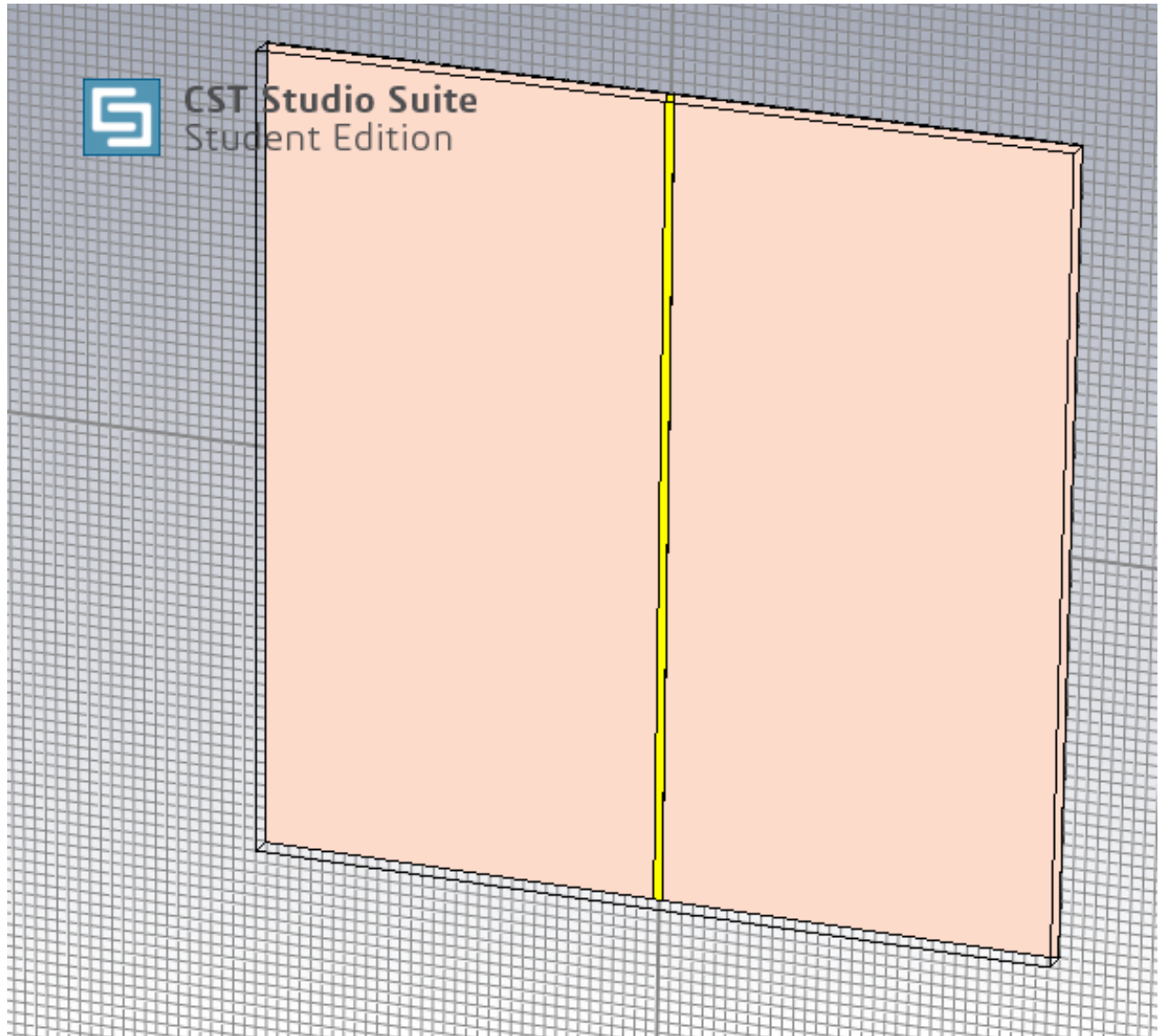
H-FIELD



YÜZEY AKIMLARI



ALTTAŞ 70



CST Studio Suite
Student Edition

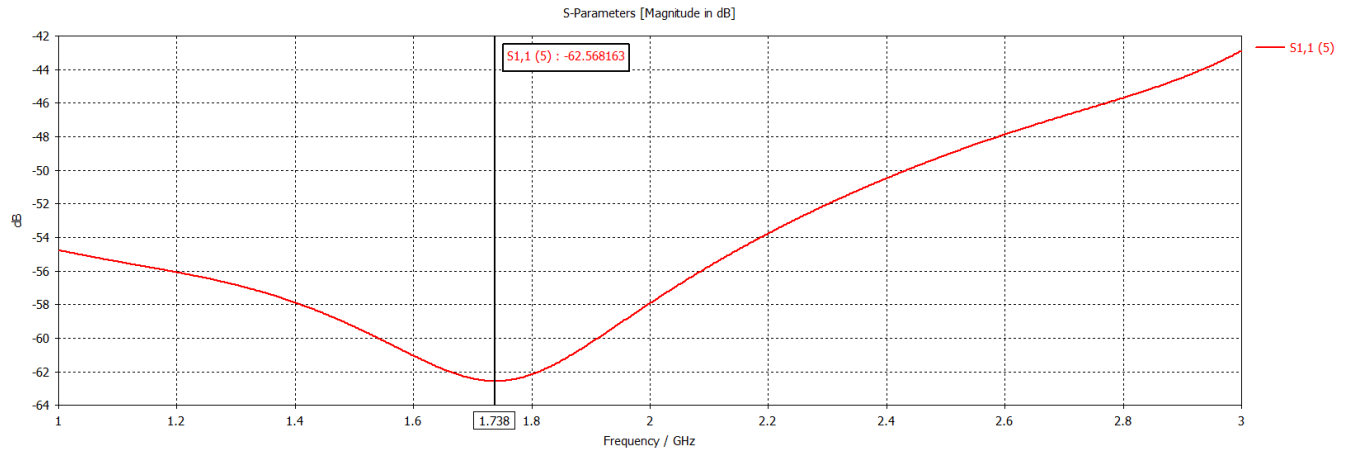
3D | Schematic | 1D Results\S-Parameters\S1,1

Parameter List

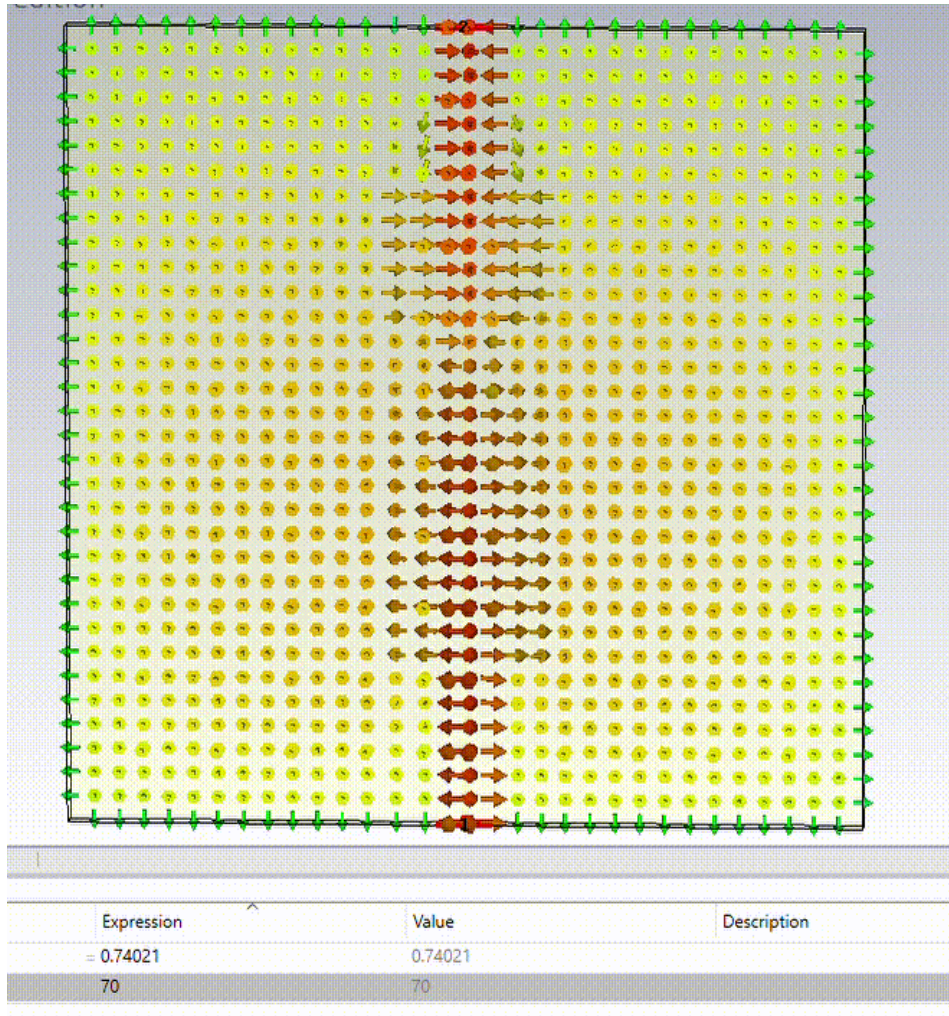
Name	Expression	Value
MT	= 0.035	0.035
H	= 0.254	0.254
MW	= 0.74021	0.74021
D	70	70

<new parameter>

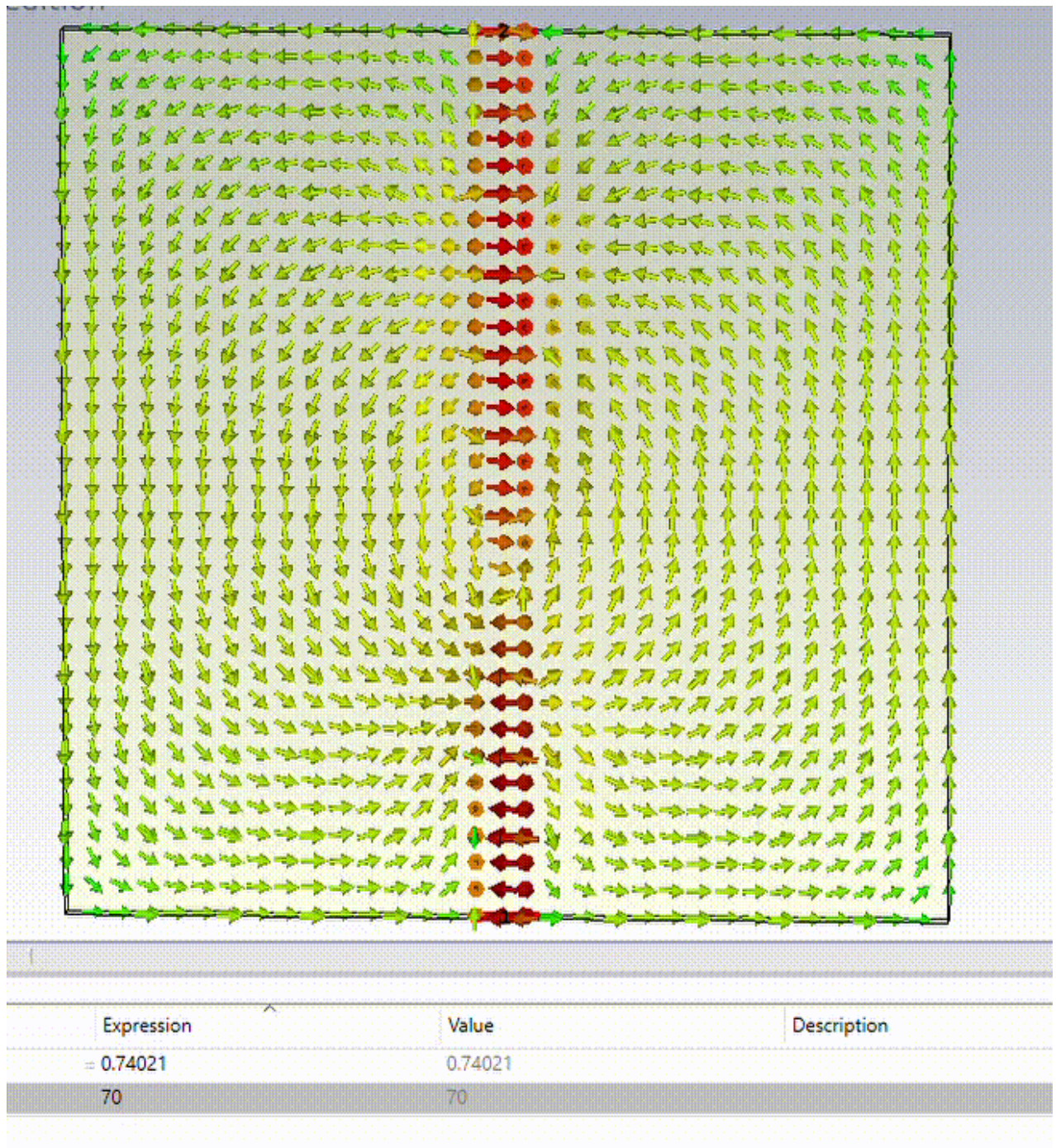
S11 PARAMETRESİ SONUÇLARI



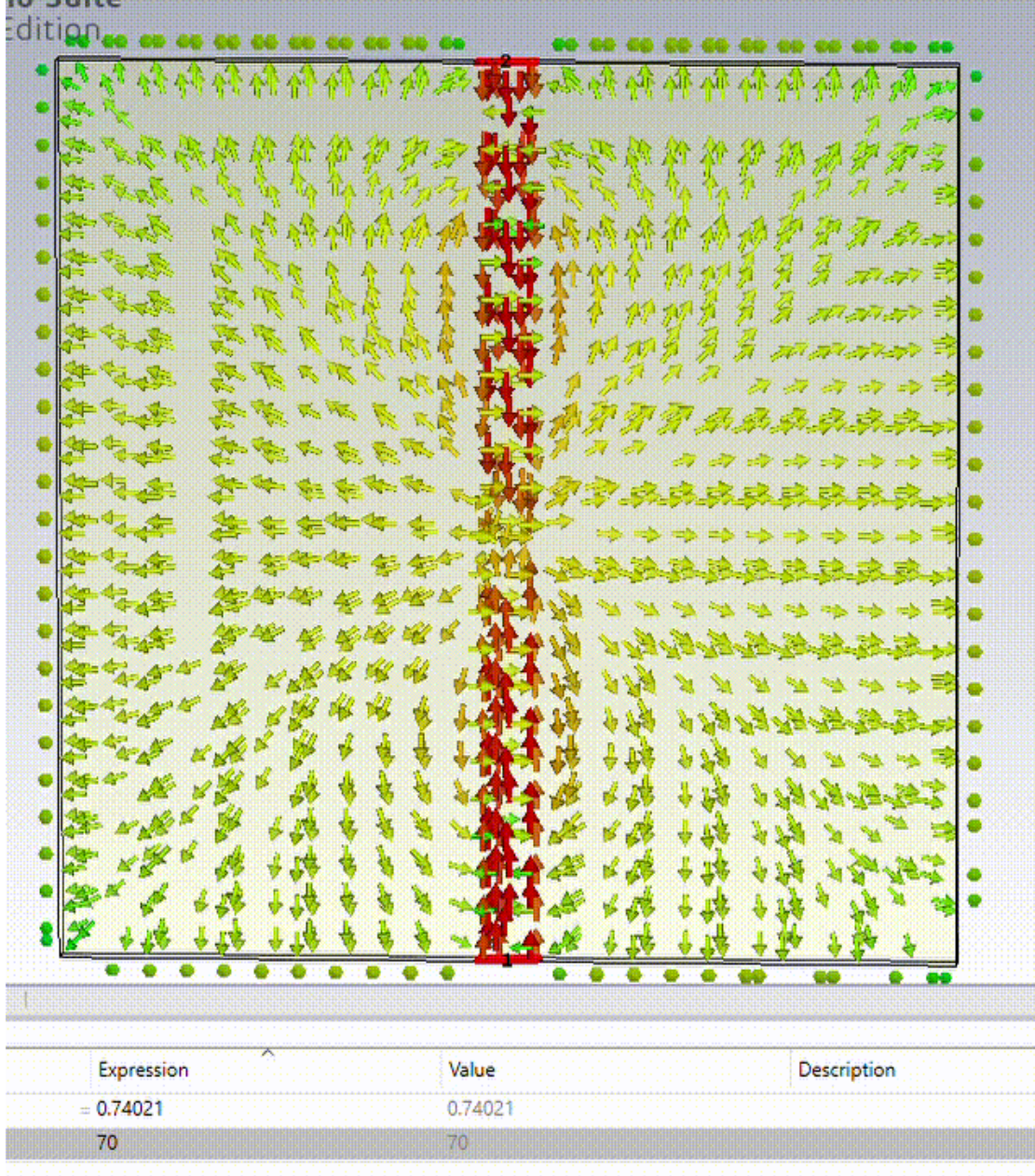
E-FIELD



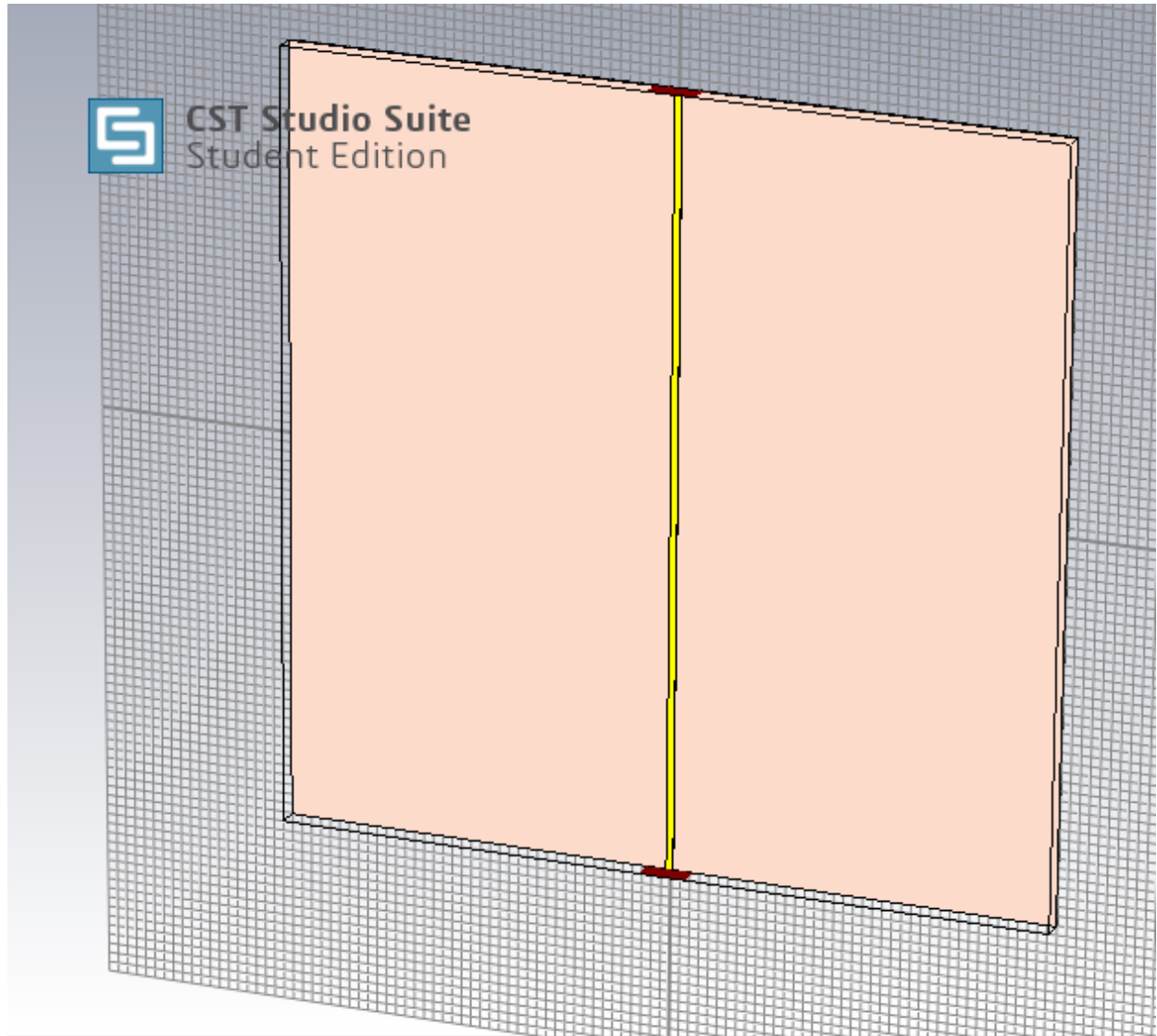
H-FIELD



YÜZEY AKIMLARI



ALTTAŞ 80



CST Studio Suite
Student Edition

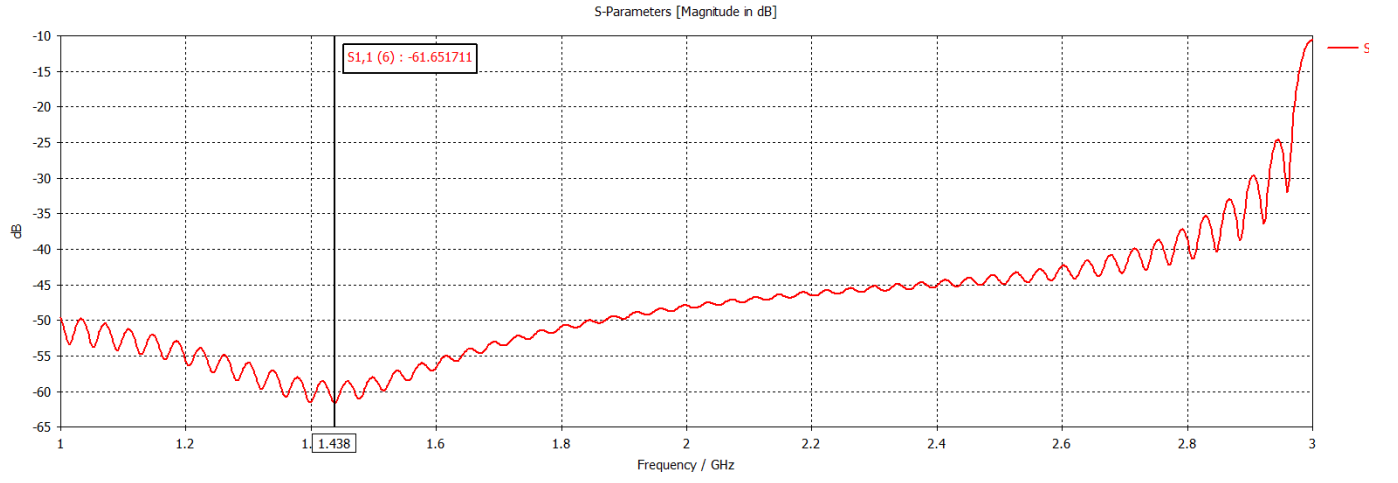
3D | Schematic | 1D Results\S-Parameters\S1,1

Parameter List

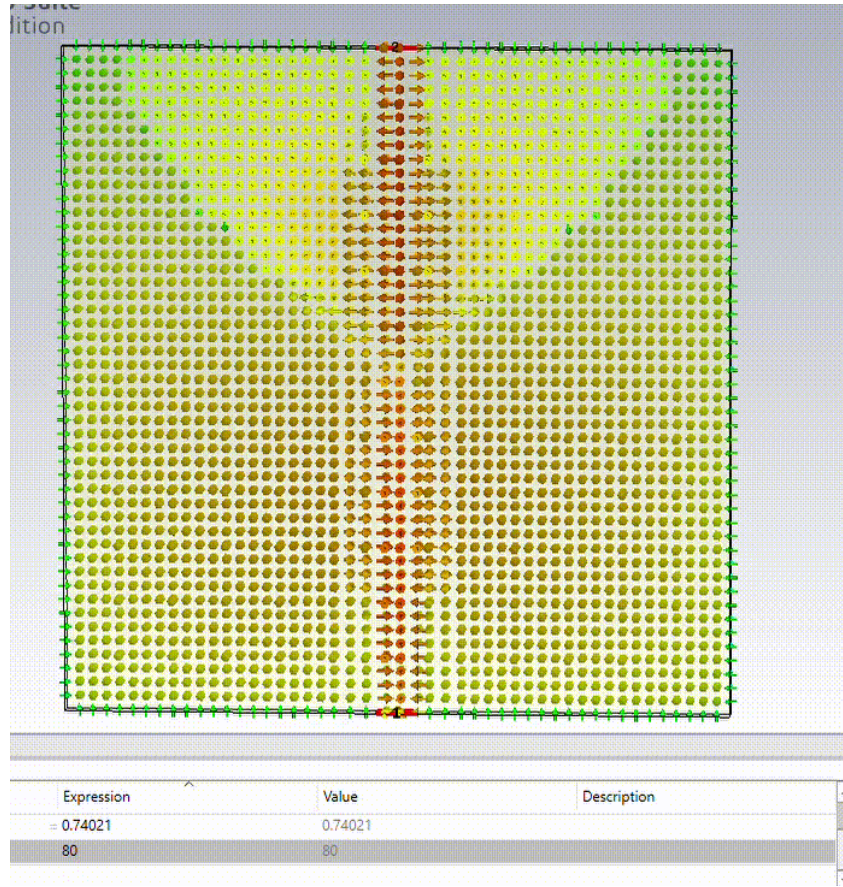
Name	Expression	Value
MT	= 0.035	0.035
H	= 0.254	0.254
MW	= 0.74021	0.74021
D	80	80

<new parameter>

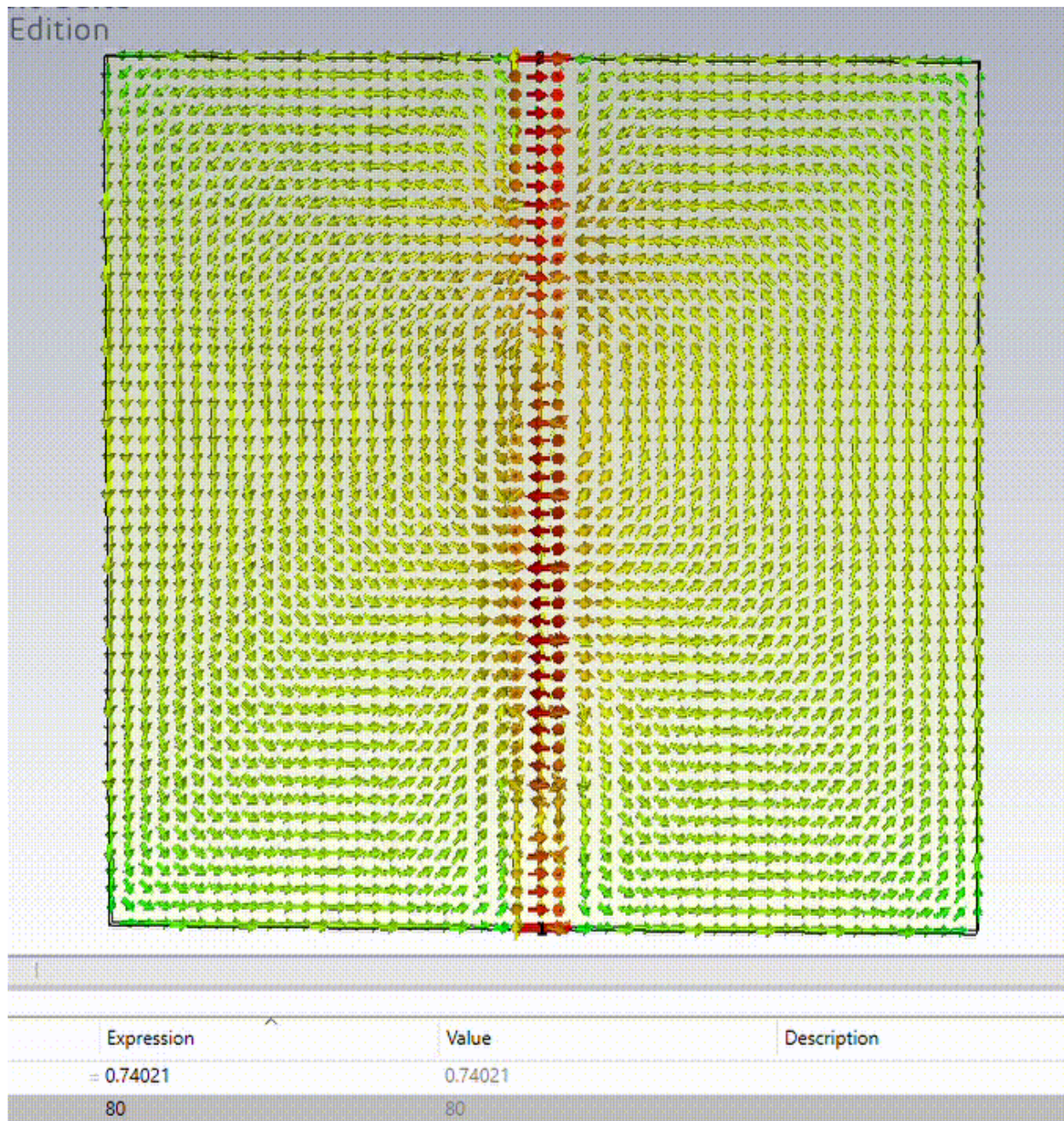
S11 PARAMETRESİ SONUÇLARI



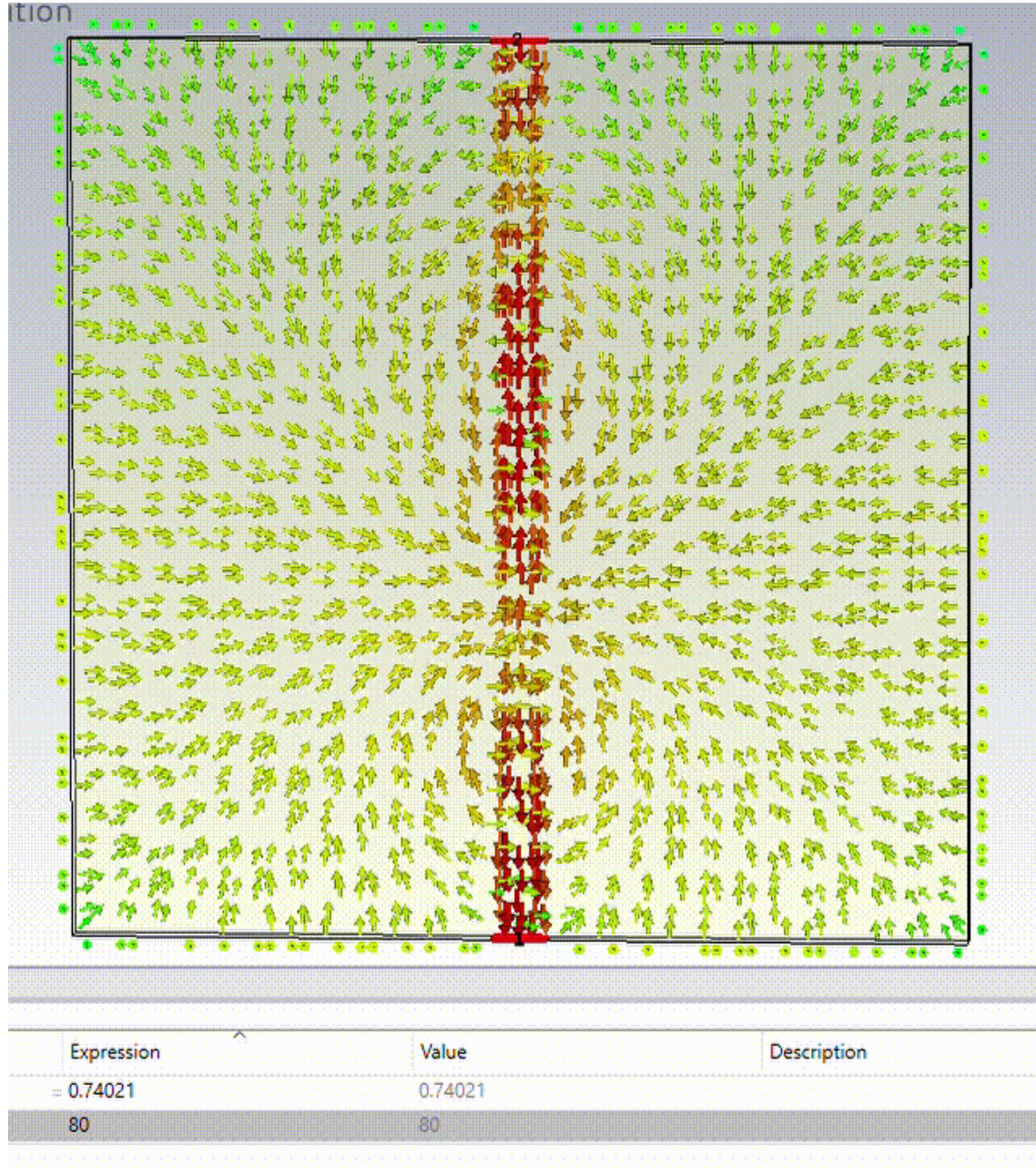
E-FIELD



E-FIELD



YÜZEY AKIMLARI



YORUM

- Altaşdaki değişim Z_0 ayarlamasına W değeri olan 0.7402 değerini değiştirmede bu yüzden aynı W kullanıldı.
- $k = 8.28$ değerinin aynı kaldığı gözlemlenmiştir. Bu yüzden port değişimine portlar değiştirilmedi
- S_{11} grafiginde; frekans 2GHz olması gerekiyordu bu yüzden altaşın artırılması ile doğrusal olmayan bir grafik oluşturdu ve çok küçük değişimlere sebebiyet verdi. Ayrıca minimum noktaya daha erken bir frekansa ulaştık.
- S_{11} grafiginde; altaşın artırılması 2 Ghz frekansdan daha uzakda bir yerde minimum noktaya ulaşmamızı sağladı. Altaşın 40 olması beklenmeyecek türde bir grafik oluşmasına neden oldu.