Problem info

Problem type: Transient Magnetics (integration time:

1.4999996210681E-05 s.)

Geometry model class: Plane-Parallel

Problem database file names:

• Problem: *TEMagn2.pbm*

• Geometry: *Temagn2.mod*

• Material Data: *Temagn2.dms*

• Material Data 2 (library): *none*

• Electric circuit: none

Results taken from other problems:

none

Geometry model

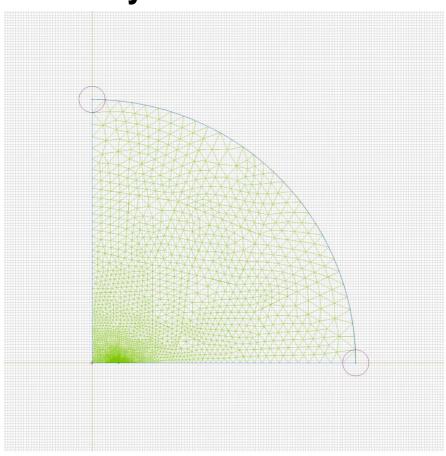


Table 1. Geometry model statistics

	With Label	Total
Blocks	2	2
Edges	3	6
Vertices	0	5

Number of nodes: 4959.

Labelled objects

There are following labelled objects in the geometry model (Material Data file could contain more labels, but only those labels that assigned to geometric objects are listed)

Blocks:	Edges:	Vertices:
aircopper	<u>a0</u><u>symmetry</u><u>far away</u>	

Detailed information about each label is listed below.

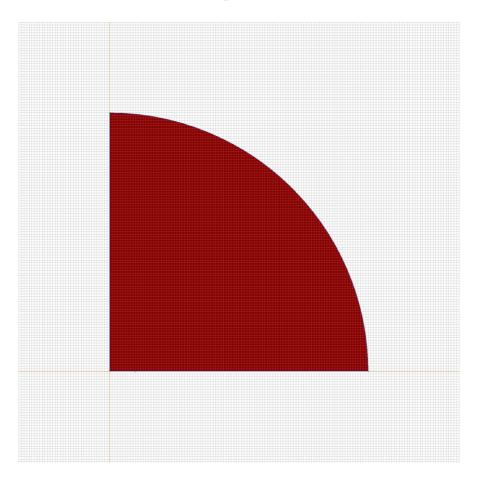
Labelled objects: block "air"

There are (1) objects with this label

Relative magnetic permeability: mu_x=1, mu_y=1

Current density: j=0 [A/m2]

Conductor's connection: in parallel

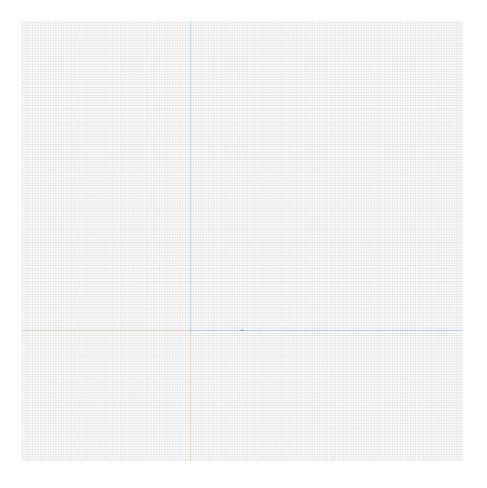


Labelled objects: block "copper"
There are (1) objects with this label

Relative magnetic permeability: mu_x=1, mu_y=1 Electric conductivity: sigma(T)=56000000 [S/m]

Voltage: U=0.001 [V]

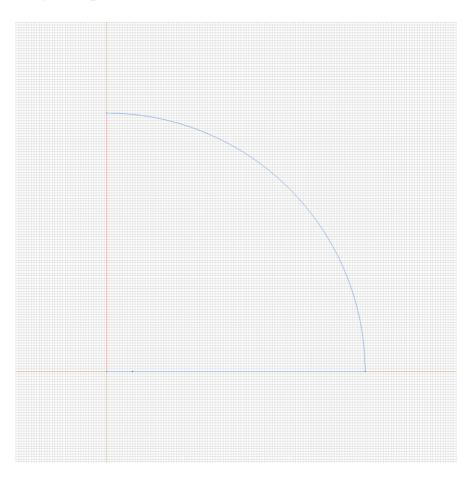
Conductor's connection: in parallel



Labelled objects: edge "a0"

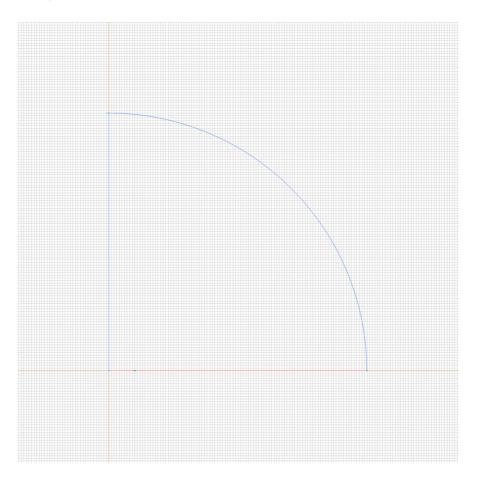
There are (1) objects with this label

Magnetic potential: A=0 [Wb/m]



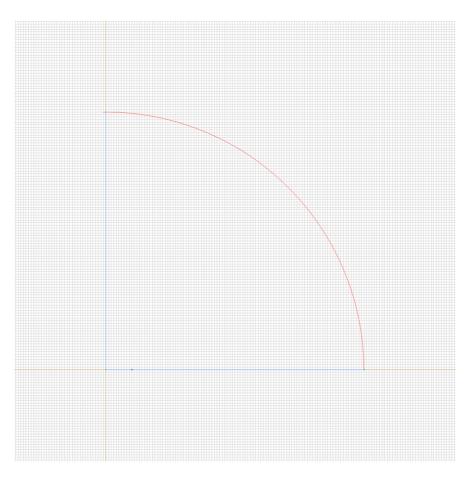
Labelled objects: edge "symmetry"
There are (3) objects with this label

Tangential field: H_t=0 [A/m]



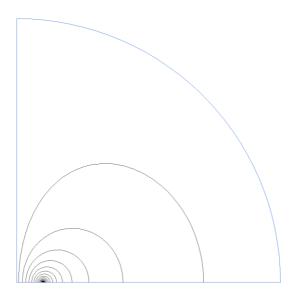
Labelled objects: edge "far away"
There are (1) objects with this label

Magnetic potential: A=0 [Wb/m]



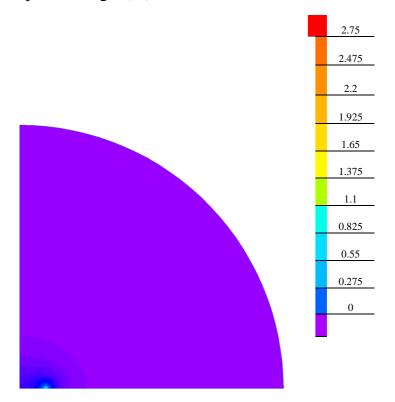
Results

Field lines



Results

Color map of Strength |H| [A/m]



Nonlinear dependencies

No non-linear dependencies are used in this problem data