

DESCRIPTION OF PLANET ANTENNA DATAFILE

The antenna pattern file is an ASCII Text file.

The MSI antenna file contains the general information, horizontal data points and vertical data point in one file.

The format of antenna files is as follows:

NAME	CXL
MAKE	Amphenol Procom
FREQUENCY	XXX MHz
H WIDTH	XX
V WIDTH	XX
FRONT TO BACK	XX.XX
GAIN	X dBi

HORIZONTAL 360

0.0 0.0
1.0 0.0
2.0 0.0
3.0 0.0
4.0 0.0
5.0 0.0
6.0 0.1
7.0 0.1
8.0 0.1
9.0 0.1
10.0 0.1
11.0 0.2
12.0 0.2
.
..
355.0 0.1
356.0 0.1
357.0 0.1
358.0 0.1
359.0 0.0

VERTICAL 360

0.0 0.0
1.0 0.0
2.0 0.0
3.0 0.1
4.0 0.2
5.0 0.3
6.0 0.4
7.0 0.5
8.0 0.7
9.0 0.9
10.0 1.1
11.0 1.3
12.0 1.5
.
..
355.0 0.3
356.0 0.2
357.0 0.1
358.0 0.0
359.0 0.0

NAME	Name of the antenna.
MAKE	The manufacturer name.
FREQUENCY	Design frequency of the antenna.
H WIDTH	The horizontal beamwidth of the antenna.
V WIDTH	The vertical beamwidth of the antenna.
FRONT TO BACK	The ratio of power gain between the front and rear of a directional antenna.
GAIN	Antenna gain followed by dBi (isotropic).
HORIZONTAL	The number ,n' following indicates that the next ,n' lines of data correspond to the horizontal radiation pattern.
VERTICAL	The number ,n' following indicates that the next ,n' lines of data correspond to the vertical radiation pattern.

The antenna values are in the form:

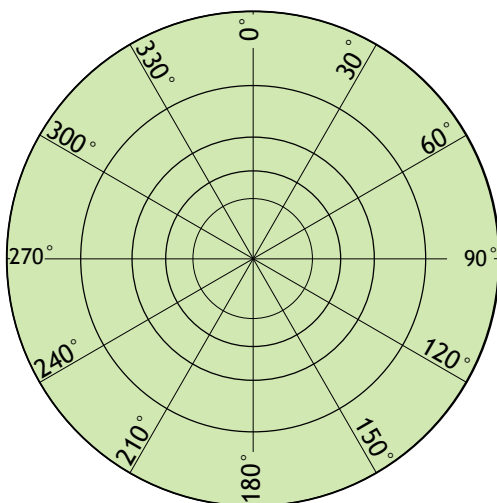
Angle [deg] Loss [dB]

Where the angle must be from 0 to 360 degrees.

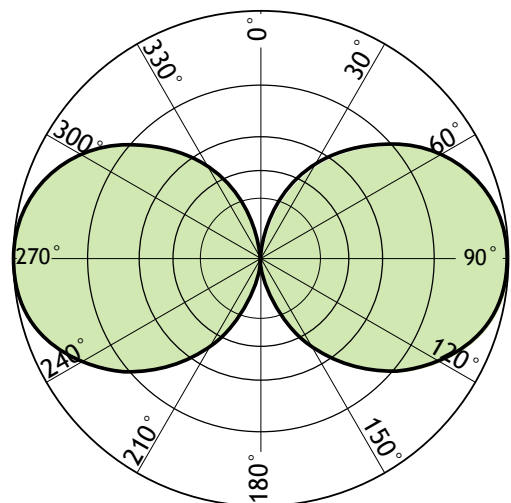
The interval may vary but is not be smaller than 0.5 degrees.

The loss values is normalized to maximum gain being zero and must be positive.

The diagrams below should help clarify the meaning of each field:



Horizontal (Plan View)



Vertical (Plan View)

The azimuth angle starts at 0° and goes clockwise for both horizontal and vertical data.