Regulatory WWAN Antenna Information

Antenna Information

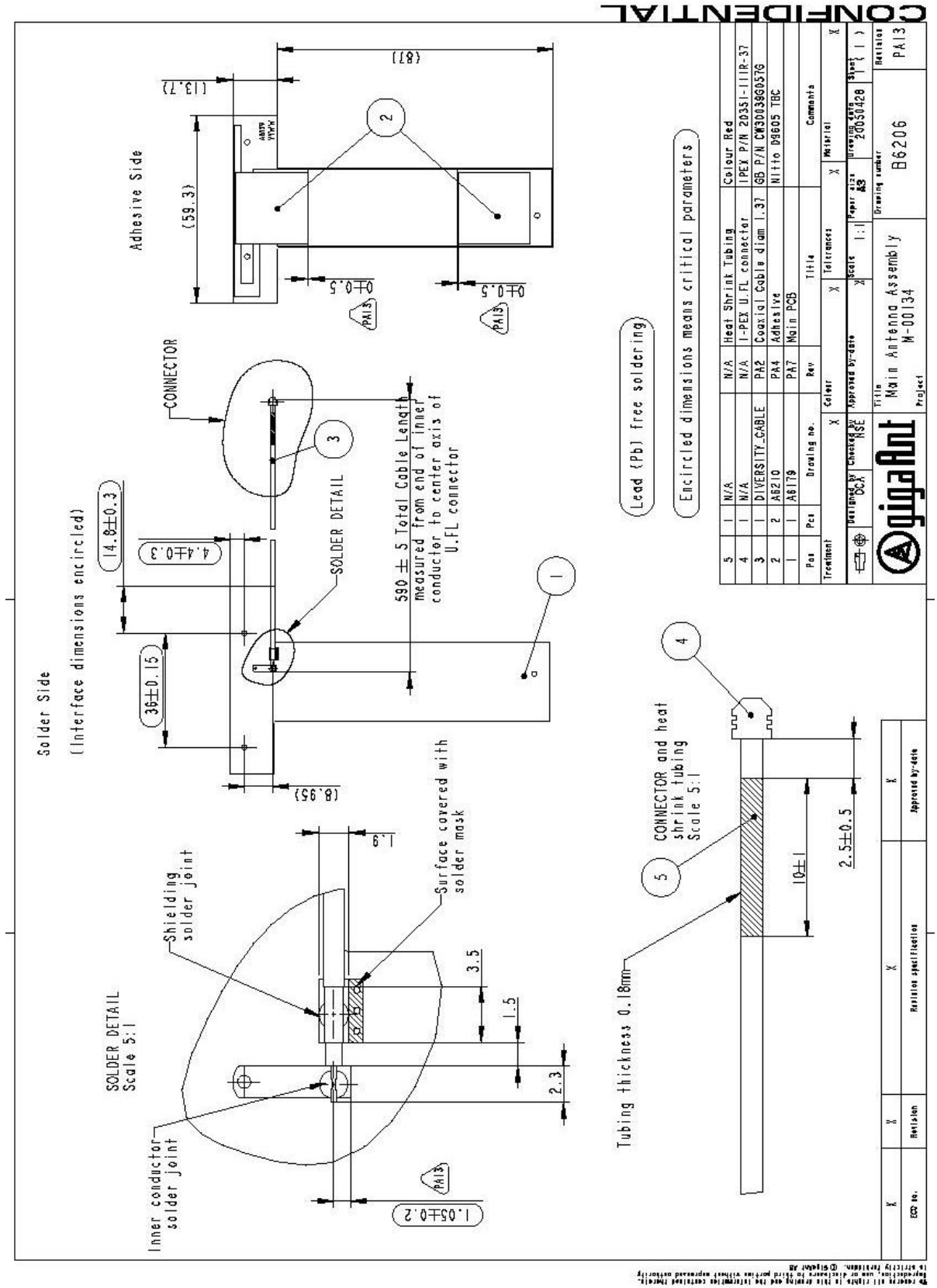
Section 1. Antenna Assembly Specifications

Antenna Assembly Summary:

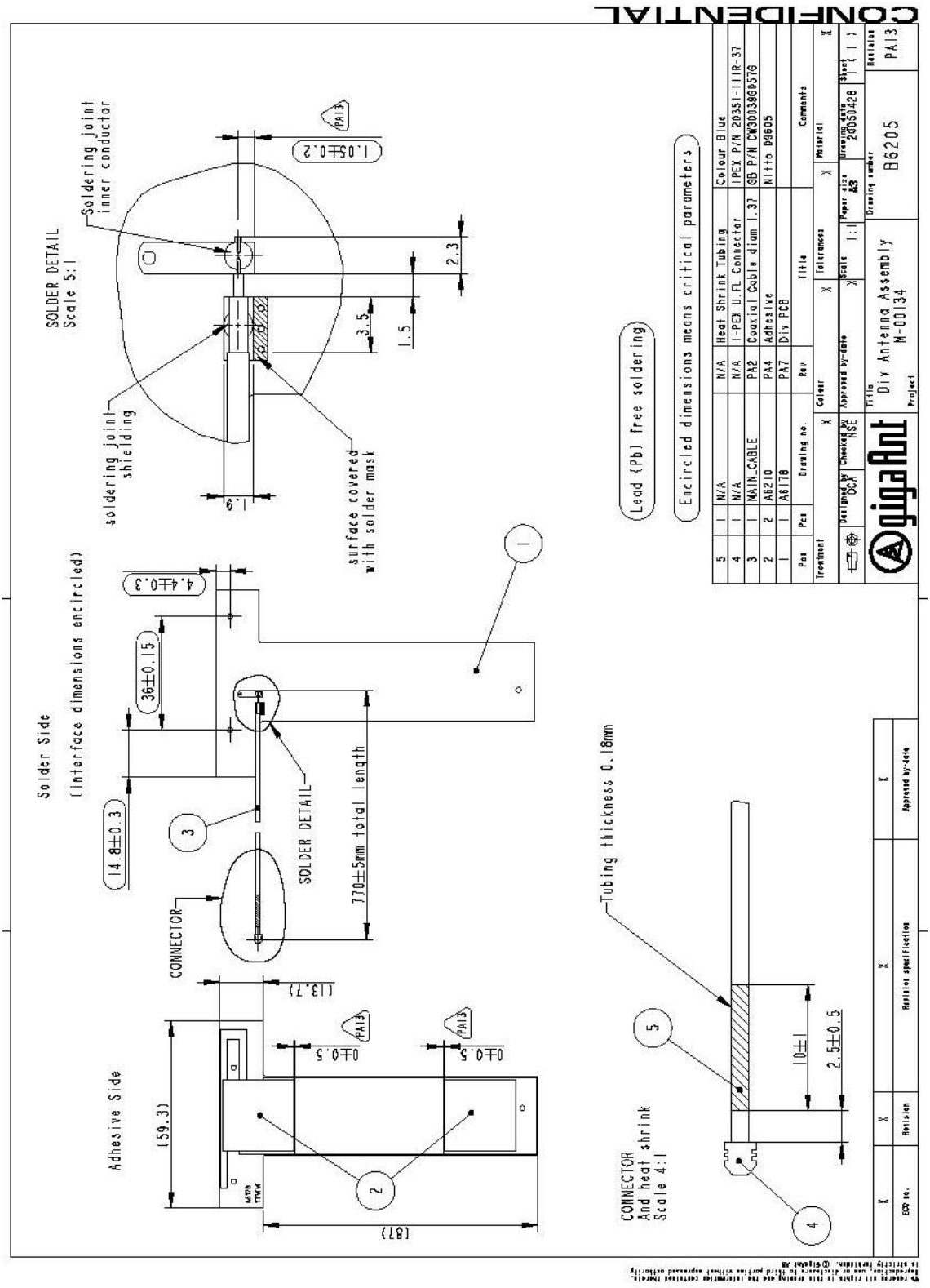
1A Antenna Part Number	1B Manufacture	1C Antenna Type	1D Cable Assembly Part Number and Information	1E Peak Gain w/ Cable loss (dBi) (3D peak)	1F Peak Gain w/o Cable Loss (dBi)	1G VSWR	1H Cable Loss (dBi)
P/N:B6206 Main Antenna (including cable)	Perlos AB	F-antenna	50 ohm Coaxial. Length: 59 cm diameter: 1.37mm Connector: U.FL	824-849MHz 2.03 dBi (peak)	824-849MHz 2.84 dBi (peak)	824-849MHz 1.70 max	824-849MHz 0.81 dB (peak)
				869-894MHz 3.29 dBi (peak)	869-894MHz 4.12 dBi (peak)	869-894MHz 1.95 max	869-894MHz 0.83 dB (peak)
				1850-1910MHz 3.33 dBi (peak)	1850-1910MHz 4.61 dBi (peak)	1850-1910MHz 1.20 max	1850-1910MHz 1.28 dB (peak)
				1930-1990MHz 3.22 dBi (peak)	1930-1990MHz 4.51 dBi (peak)	1930-1990MHz 1.70 max	1930-1990MHz 1.29 dB (peak)
P/N: B6205 Diversity antenna (including cable)	Perlos AB	F-antenna	50 ohm Coaxial. Length: 77 cm diameter: 1.37mm Connector: U.FL	824-849MHz 2.40 dBi (peak)	824-849MHz 3.49 dBi (peak)	824-849MHz 2.86 max	824-849MHz 1.06 dB (peak)
				869-894MHz 3.57 dBi (peak)	869-894MHz 4.65 dBi (peak)	869-894MHz 1.57 max	869-894MHz 1.08 dB (peak)
				1850-1910MHz 3.17 dBi (peak)	1850-1910MHz 4.82 dBi (peak)	1850-1910MHz 1.37 max	1850-1910MHz 1.65 dB (peak)
				1930-1990MHz 3.29 dBi (peak)	1930-1990MHz 4.95 dBi (peak)	1930-1990MHz 1.41 max	1930-1990MHz 1.66 dB (peak)

Section 2. Dimensioned Photos or Drawings of Antennas

Main Antenna Drawing



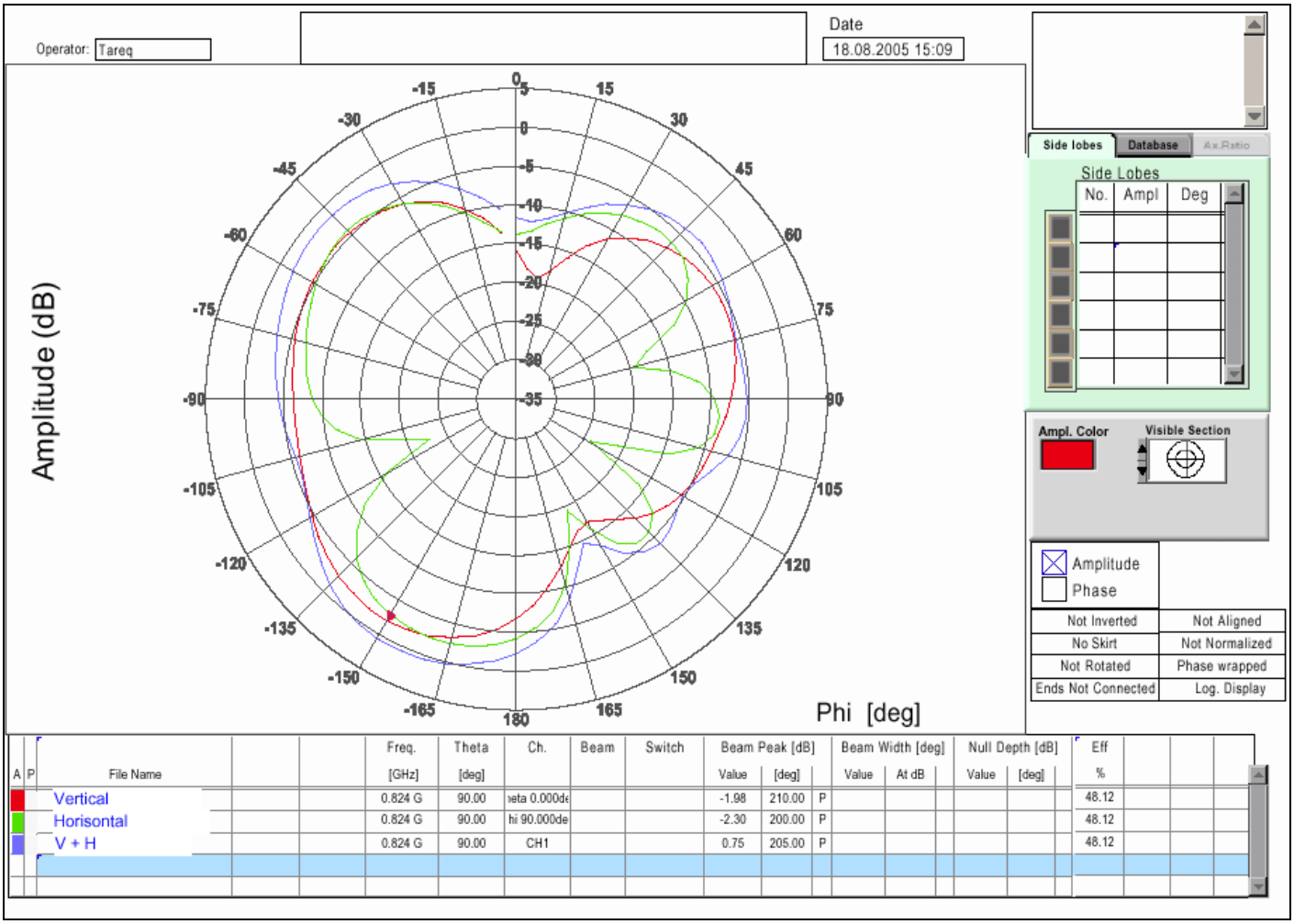
Diversity Antenna Drawing



Section 3. Radiation Characteristics of Antennae Loaded in Host Platform

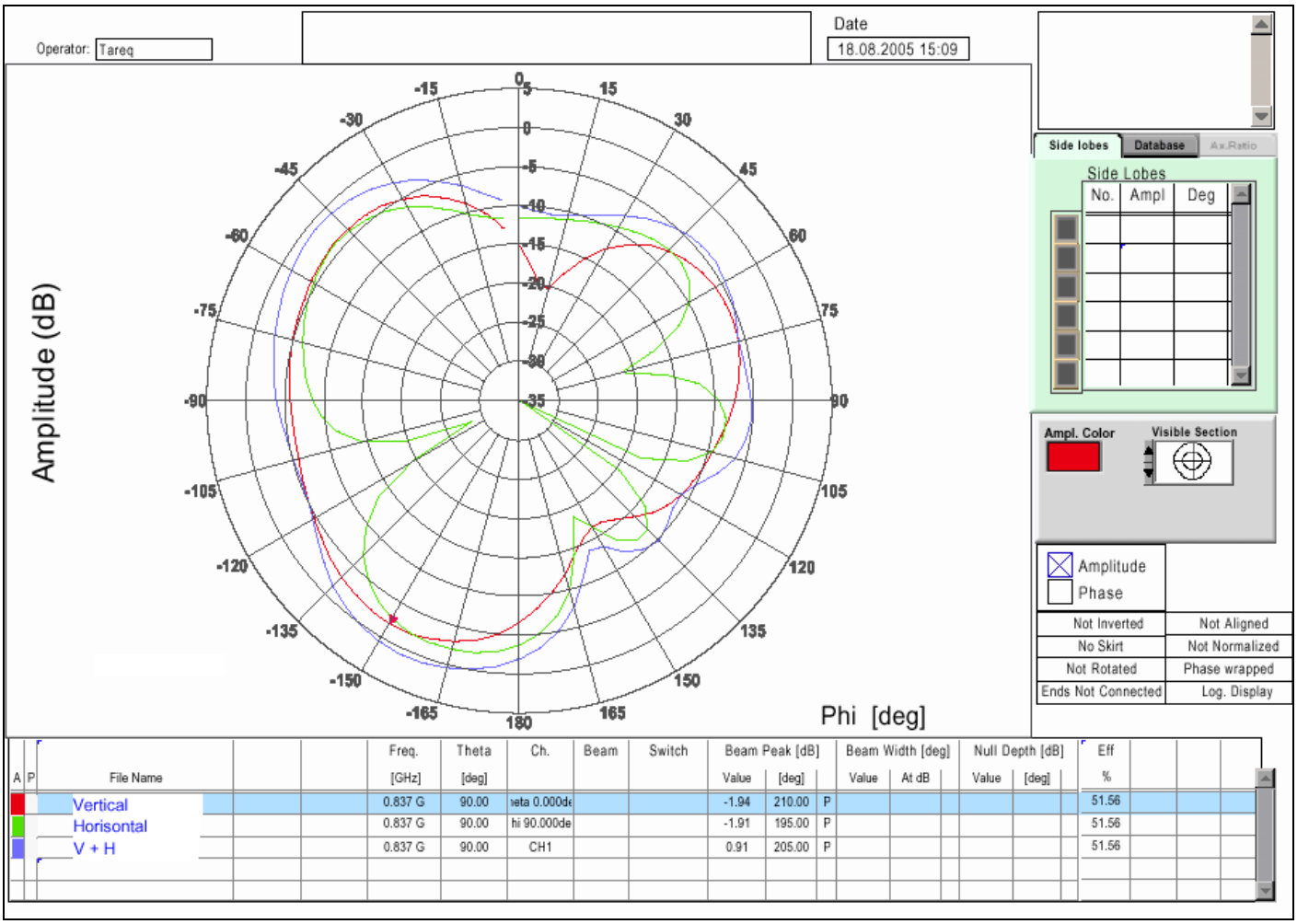
824-894MHz radiation characteristic

Main antenna: 824.2 MHz



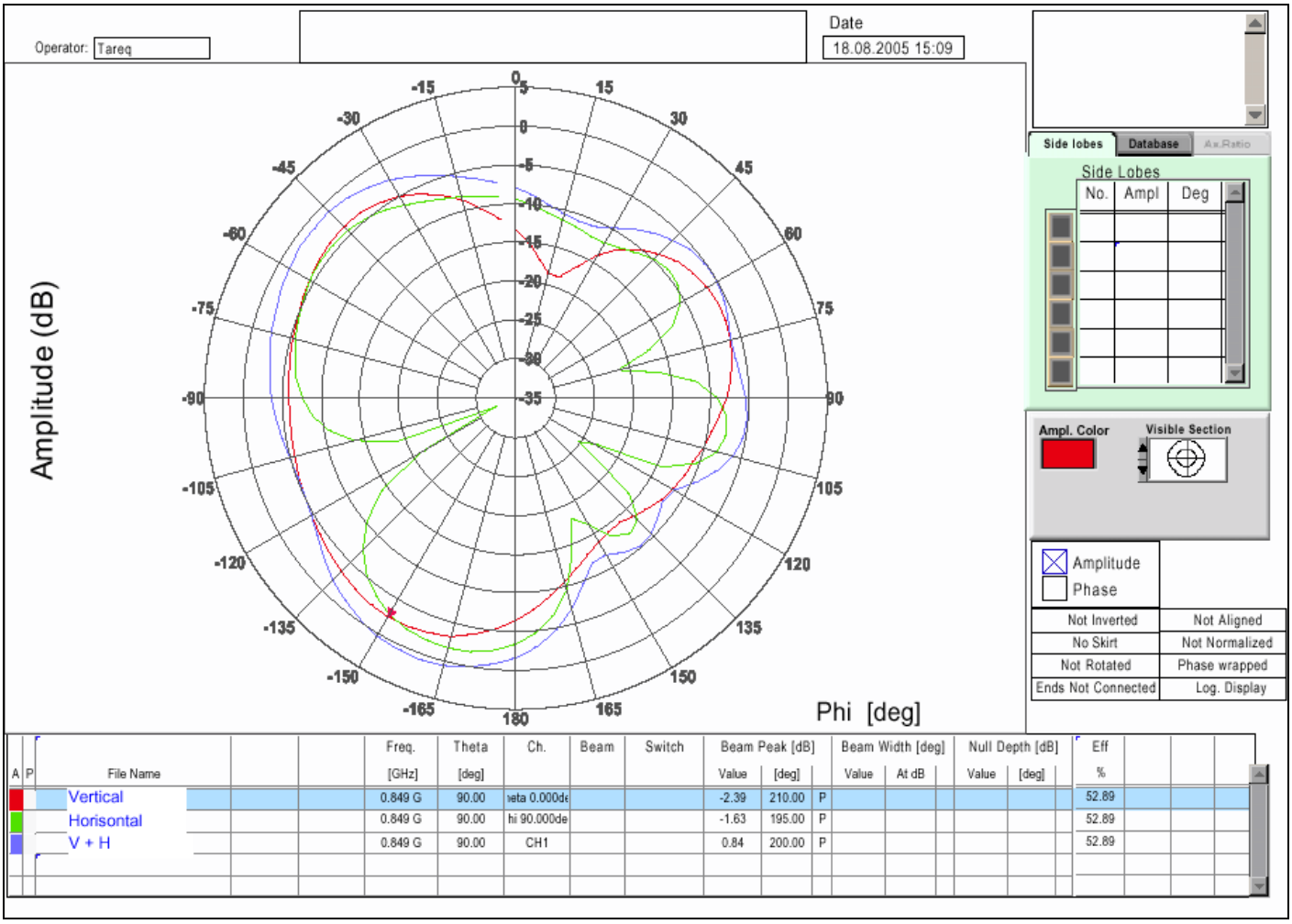
Center Frequency	**824 MHz**
Horizontal (dBi) peak	**-2.30**
Vertical (dBi) peak	**-1.98**
Horz+Vert (dBi) peak	**0.75**

Main antenna: 836.6 MHz



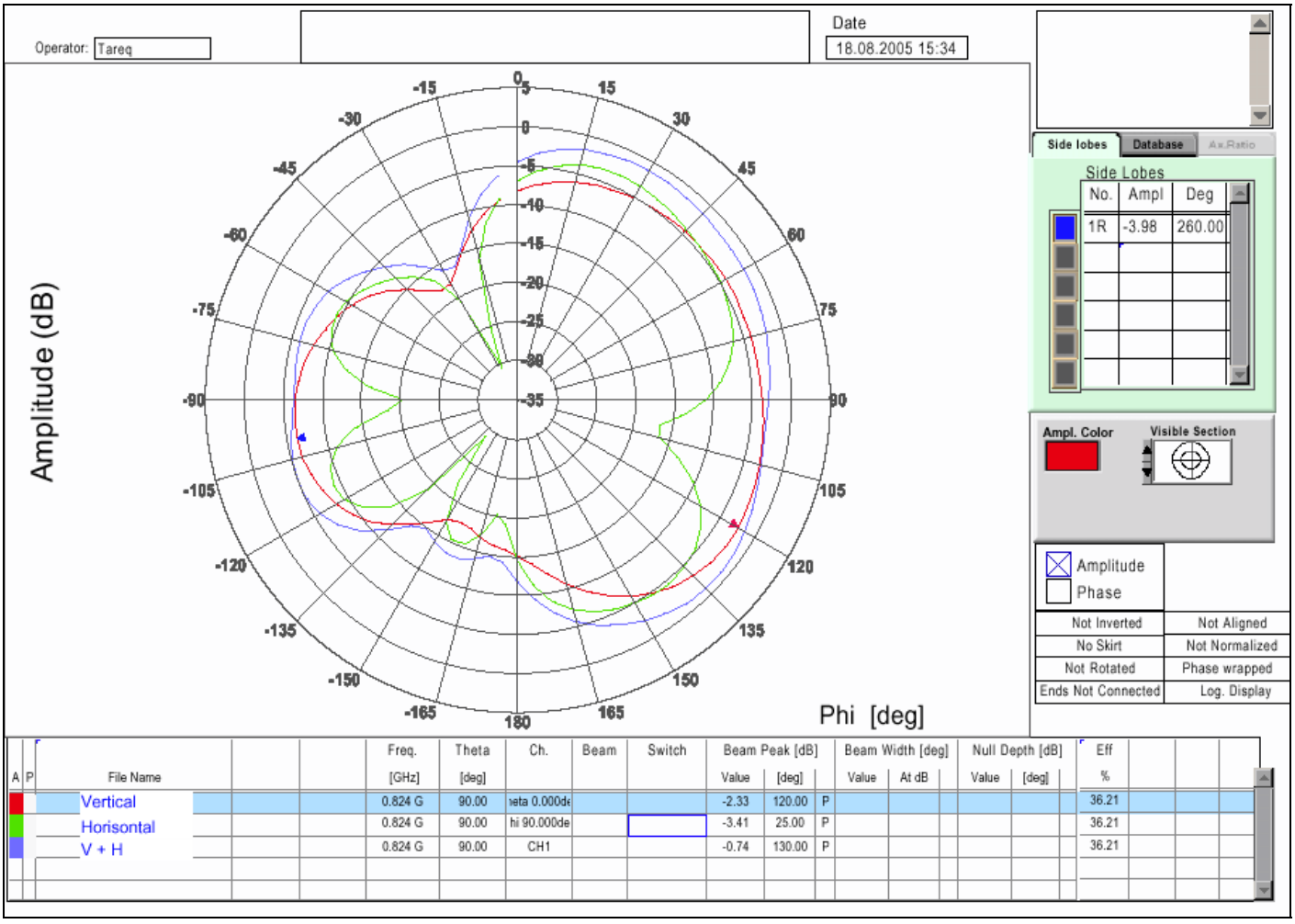
Center Frequency	**836.6 MHz**
Horizontal (dBi) peak	**-1.91**
Vertical (dBi) peak	**-1.94**
Horz+Vert (dBi) peak	**0.91**

Main antenna: 848.8 MHz



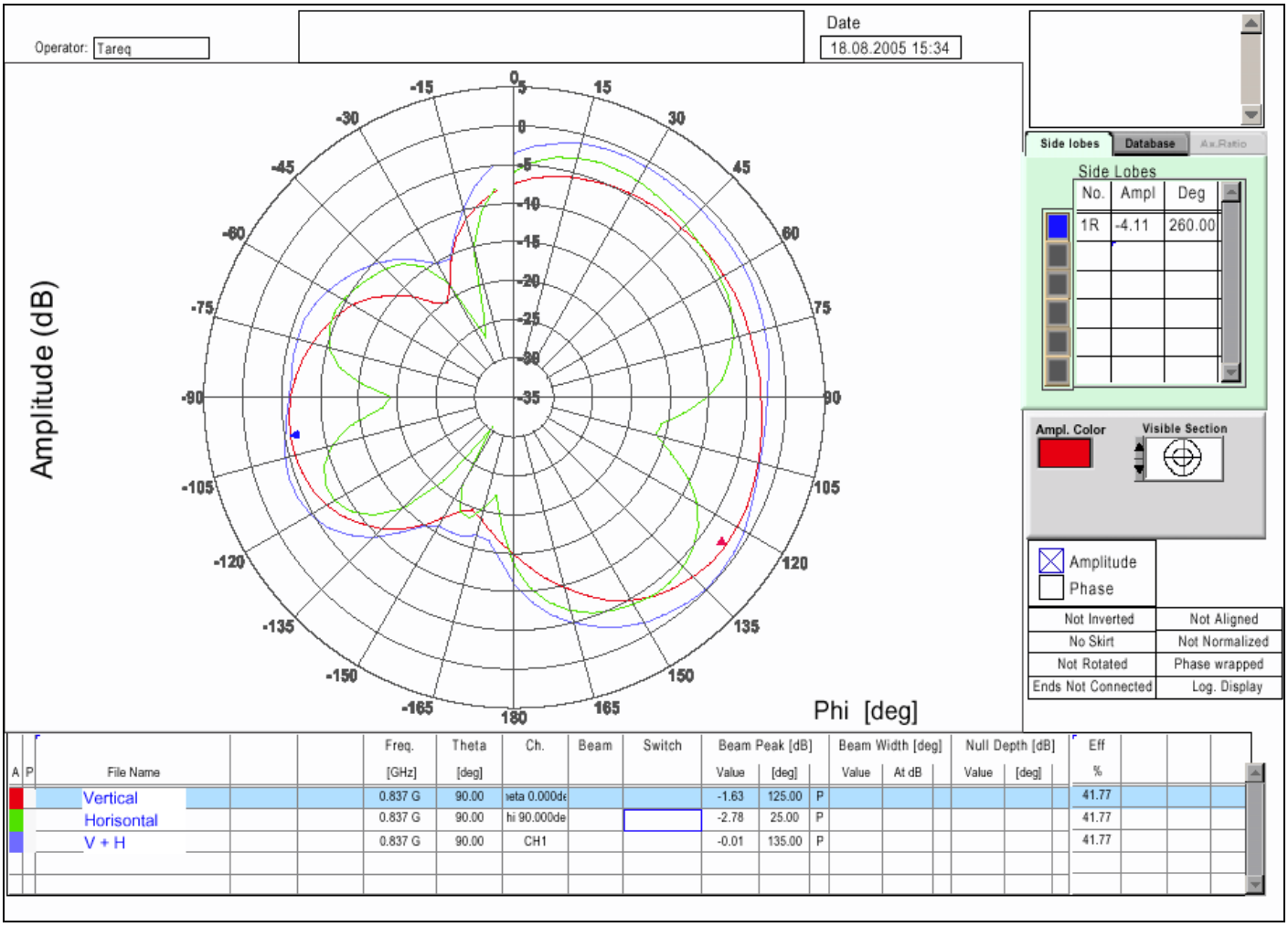
Center Frequency	**848.8 MHz**
Horizontal (dBi) peak	**-1.63**
Vertical (dBi) peak	**-2.39**
Horz+Vert (dBi) peak	**0.84**

Diversity antenna: 824.2 MHz



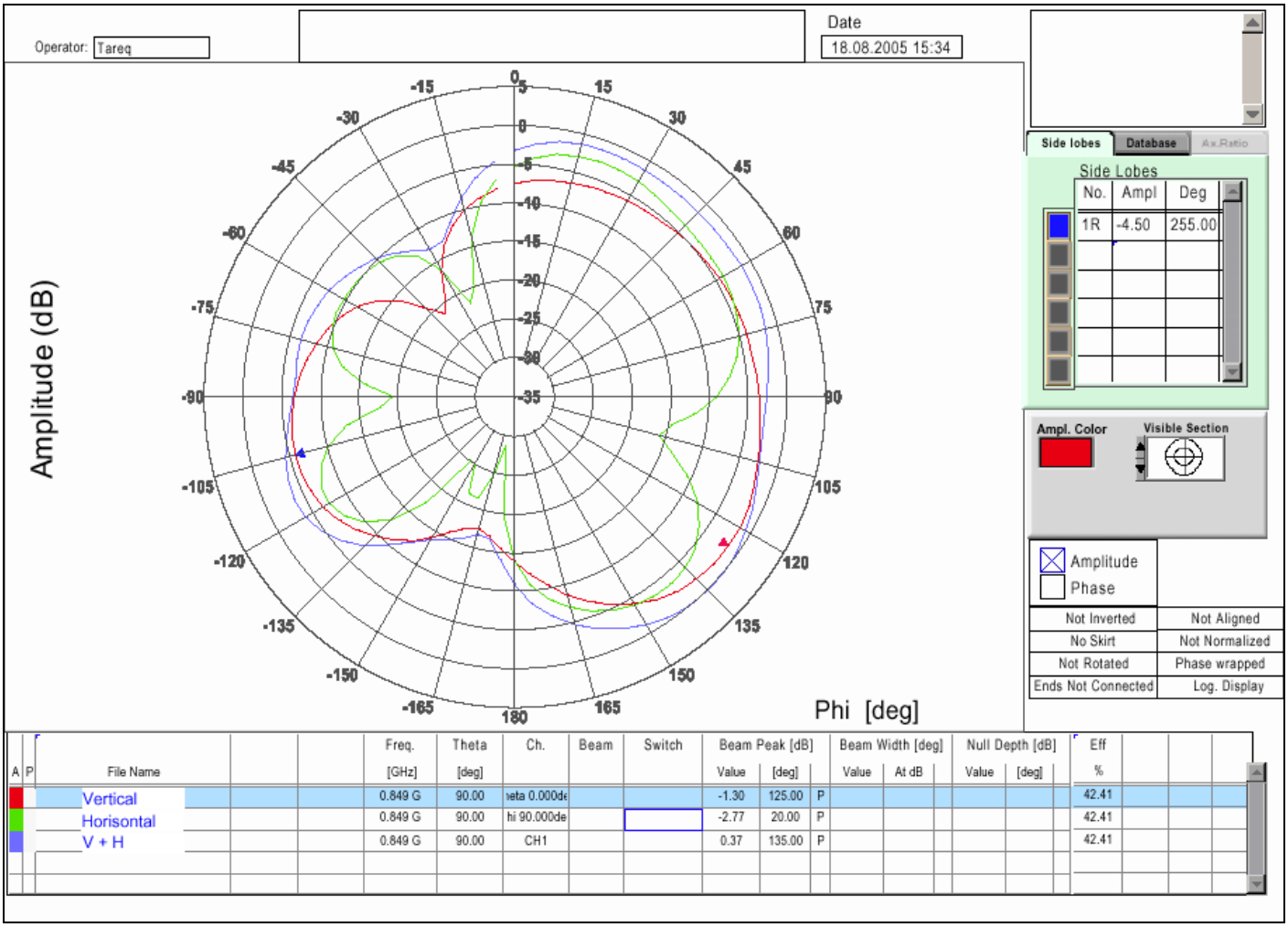
Center Frequency	**824.4 MHz**
Horizontal (dBi) peak	**-3.41**
Vertical (dBi) peak	**-2.33**
Horz+Vert (dBi) peak	**-0.74**

Diversity antenna: 836.6 MHz



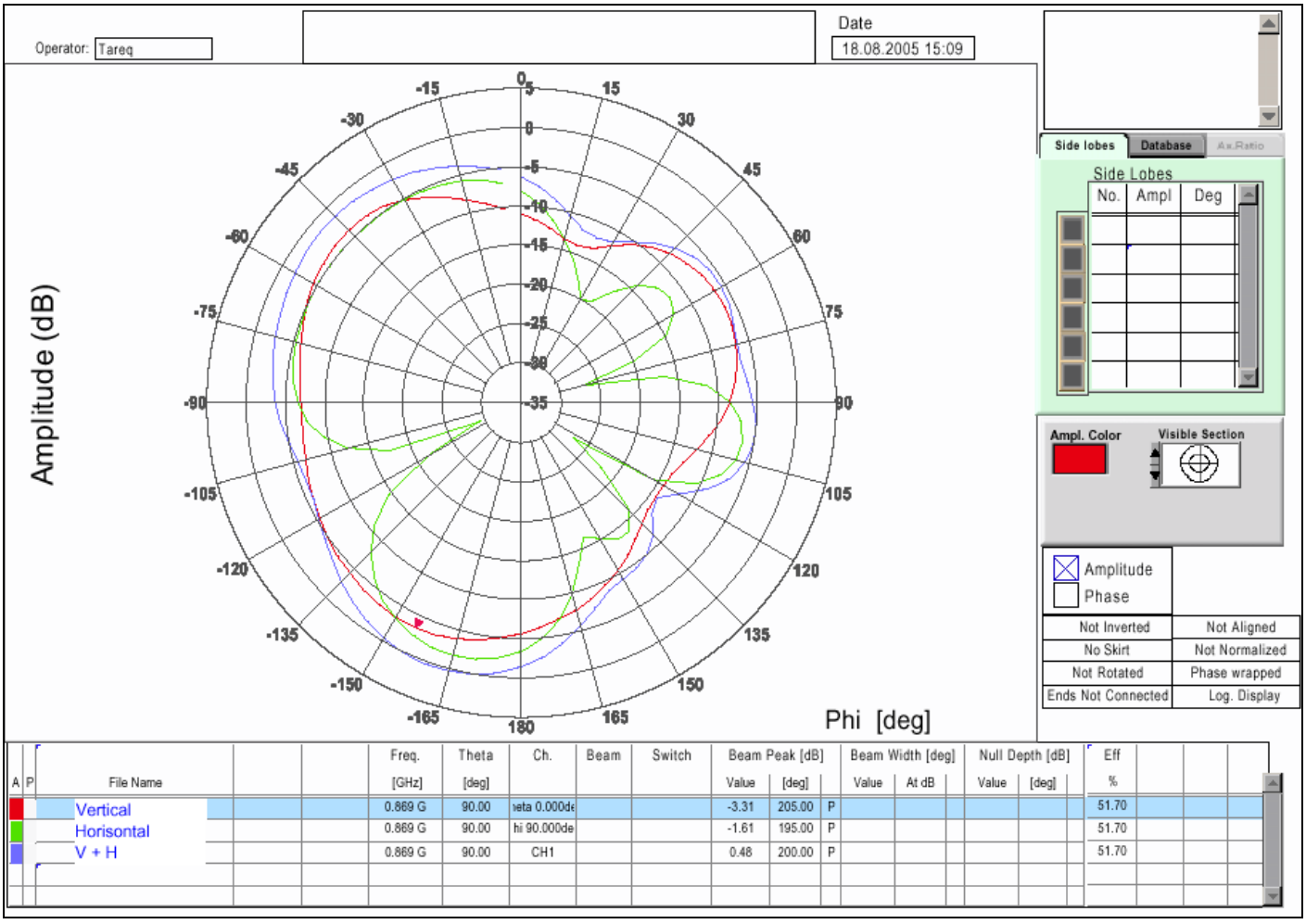
Center Frequency	**836.6 MHz**
Horizontal (dBi) peak	**-2.78**
Vertical (dBi) peak	**-1.63**
Horz+Vert (dBi) peak	**-0.01**

Diversity antenna: 848.8 MHz



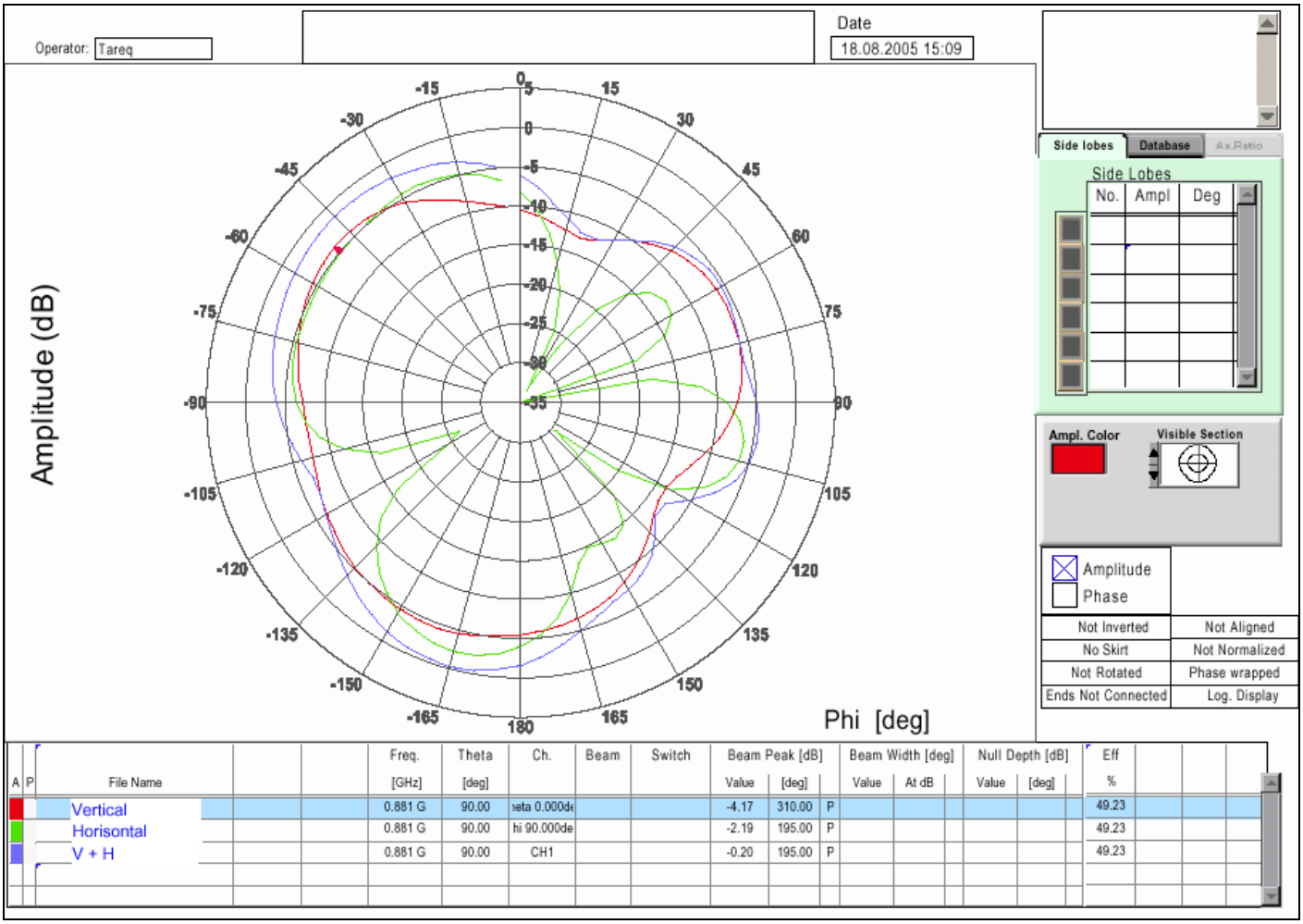
Center Frequency	**848.8 MHz**
Horizontal (dBi) peak	**-2.77**
Vertical (dBi) peak	**-1.30**
Horz+Vert (dBi) peak	**0.37**

Main antenna: 869.2 MHz



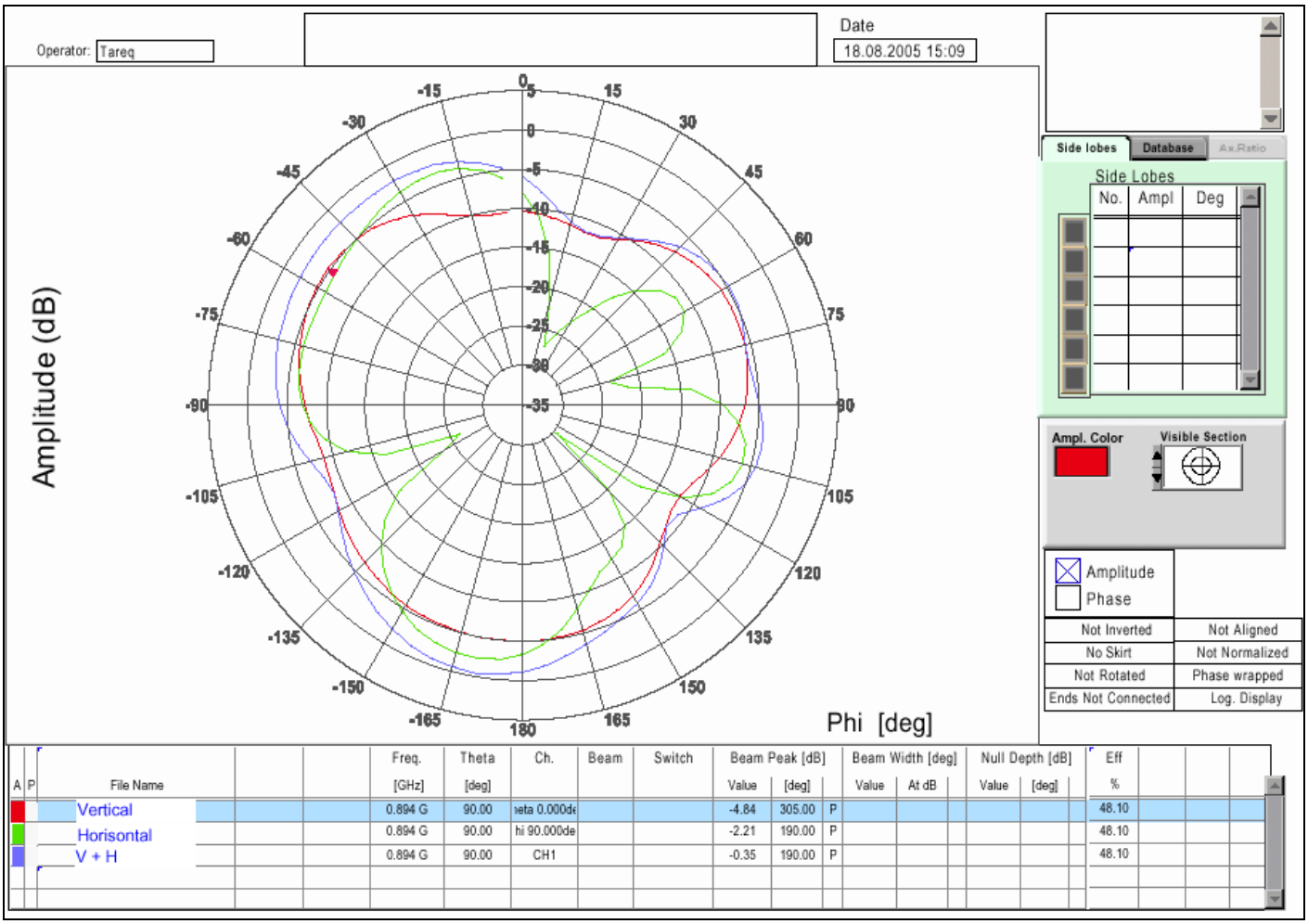
Center Frequency	**869.2 MHz**
Horizontal (dBi) peak	**-1.61**
Vertical (dBi) peak	**-3.31**
Horz+Vert (dBi) peak	**0.48**

Main antenna: 881.6 MHz



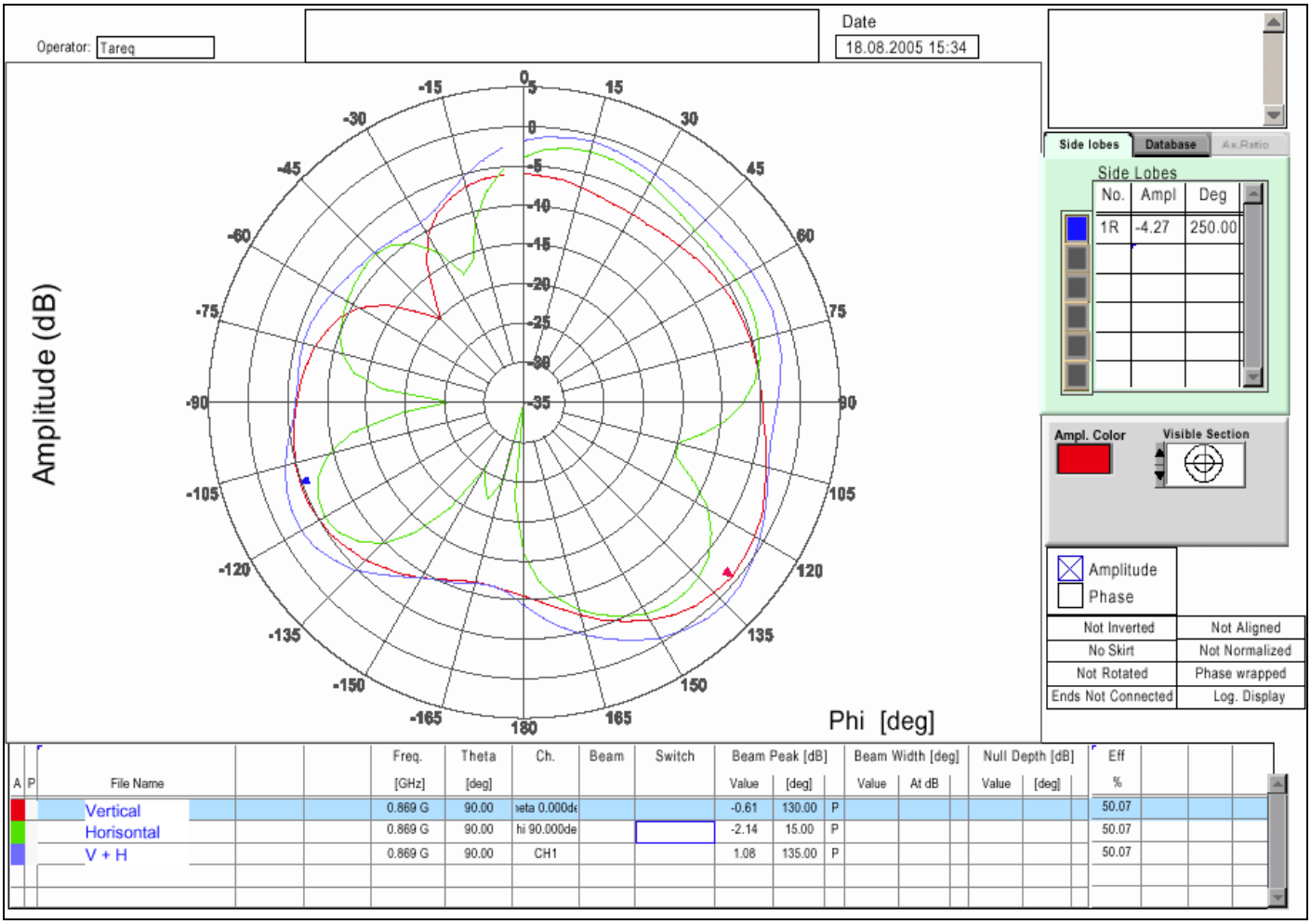
Center Frequency	**881.6 MHz**
Horizontal (dBi) peak	**-2.19**
Vertical (dBi) peak	**-4.17**
Horz+Vert (dBi) peak	**-0.20**

Main antenna: 893.8 MHz



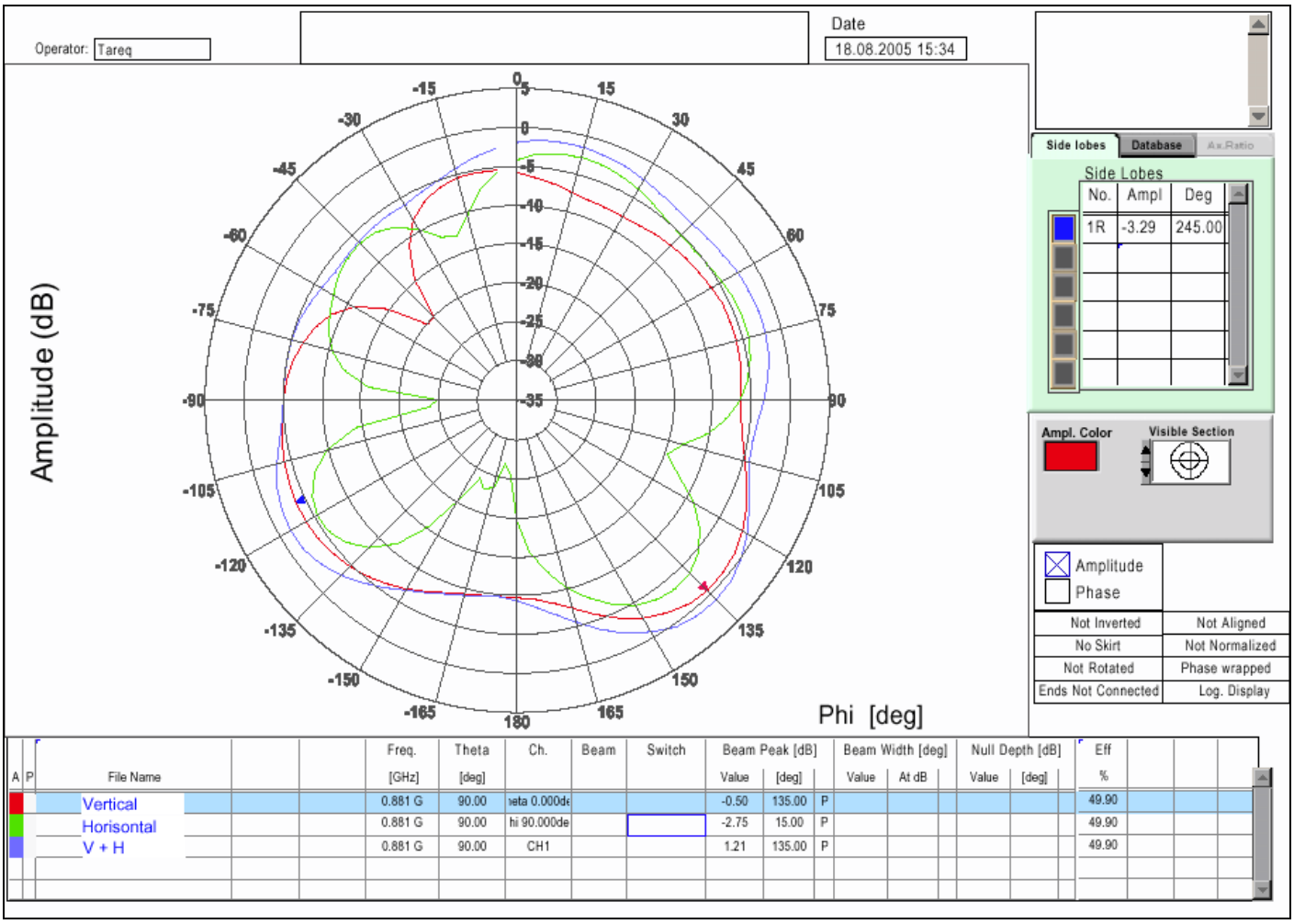
Center Frequency	**893.8 MHz**
Horizontal (dBi) peak	**-2.21**
Vertical (dBi) peak	**-4.84**
Horz+Vert (dBi) peak	**-0.35**

Diversity antenna: 869.2 MHz



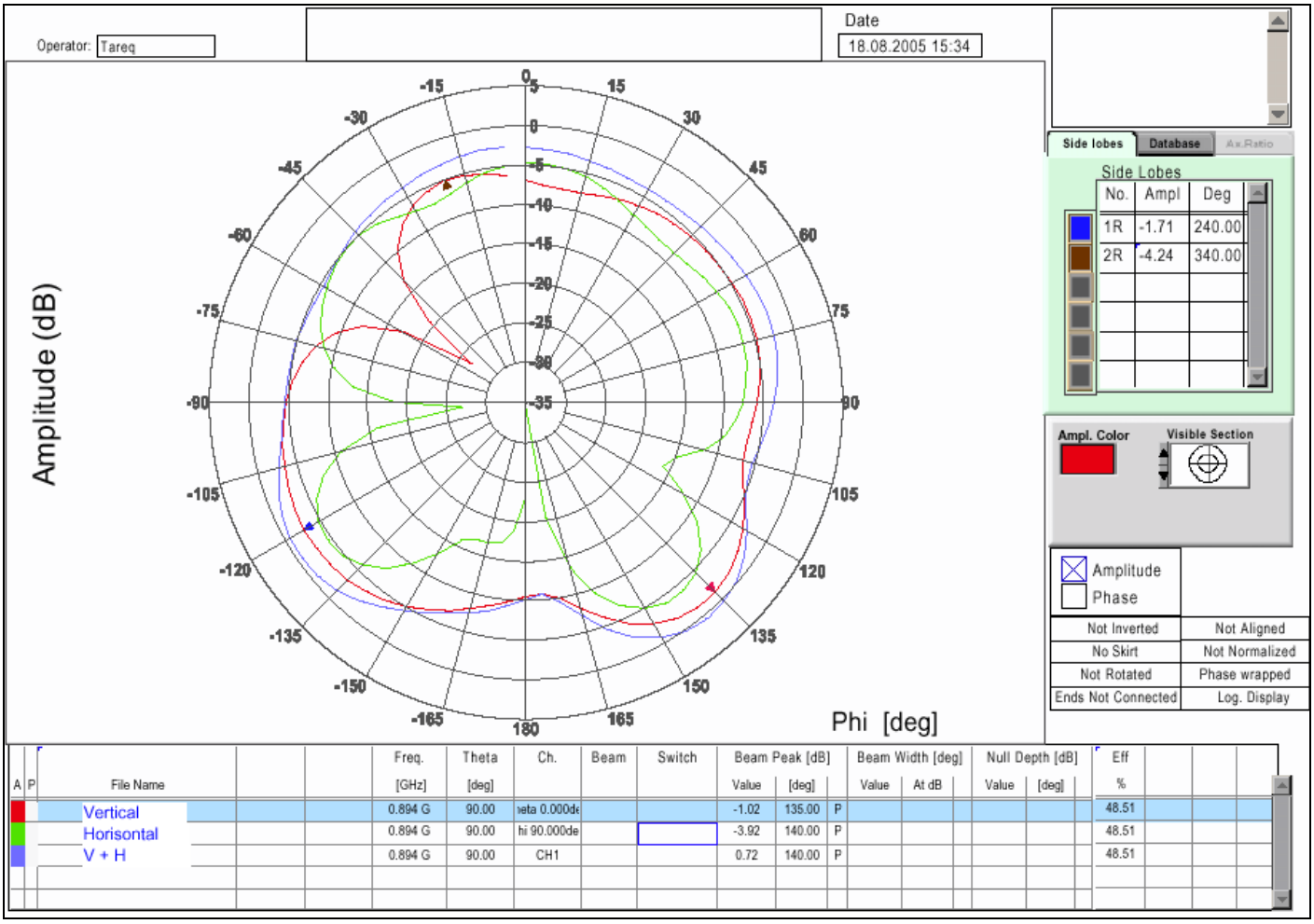
Center Frequency	**869.2 MHz**
Horizontal (dBi) peak	**-2.14**
Vertical (dBi) peak	**-0.61**
Horz+Vert (dBi) peak	**1.08**

Diversity antenna: 881.6 MHz



Center Frequency	**881.6 MHz**
Horizontal (dBi) peak	**-2.75**
Vertical (dBi) peak	**-0.50**
Horz+Vert (dBi) peak	**1.21**

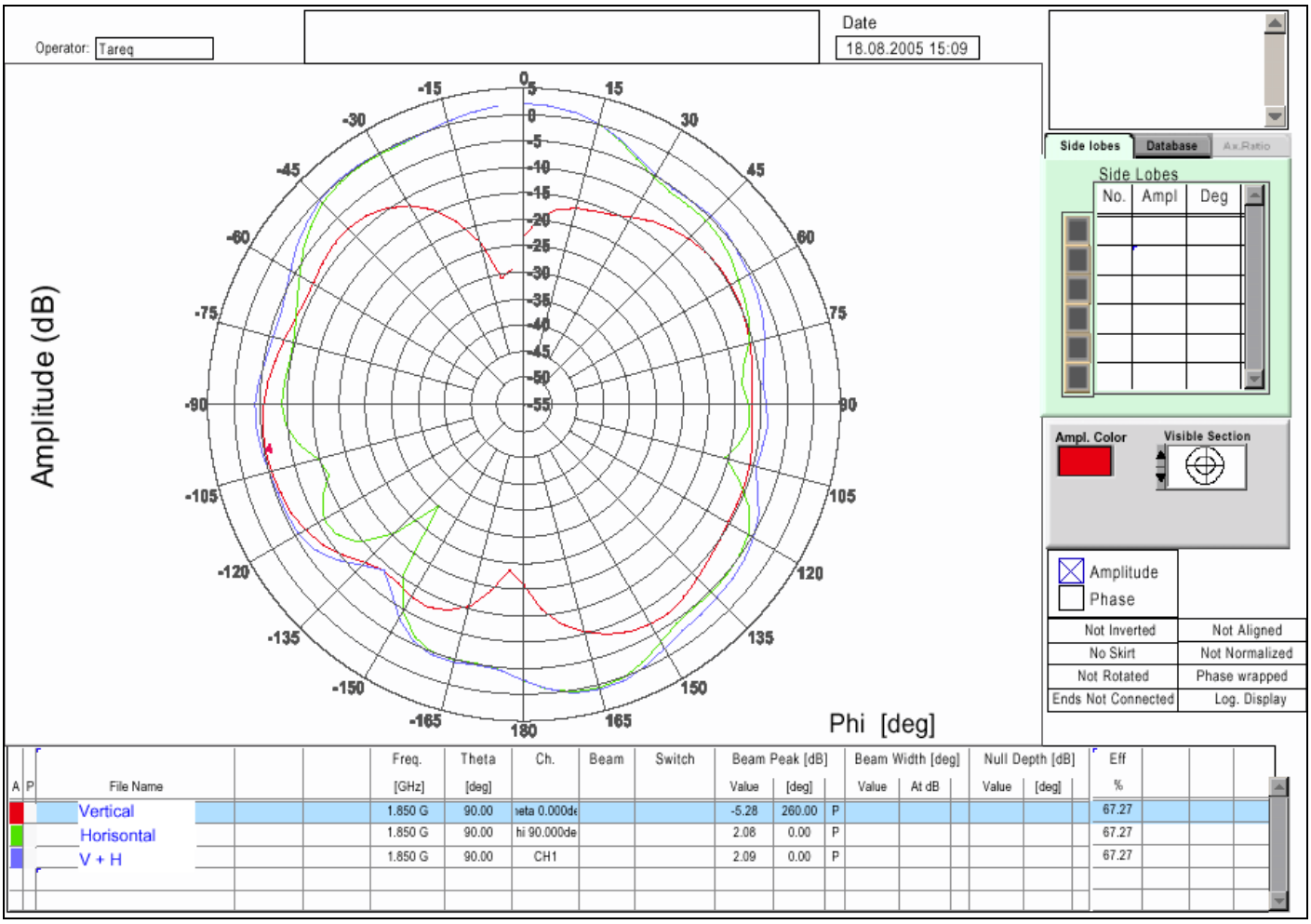
Diversity antenna: 893.8 MHz



Center Frequency	**893.8 MHz**
Horizontal (dBi) peak	**-3.92**
Vertical (dBi) peak	**-1.02**
Horz+Vert (dBi) peak	**0.72**

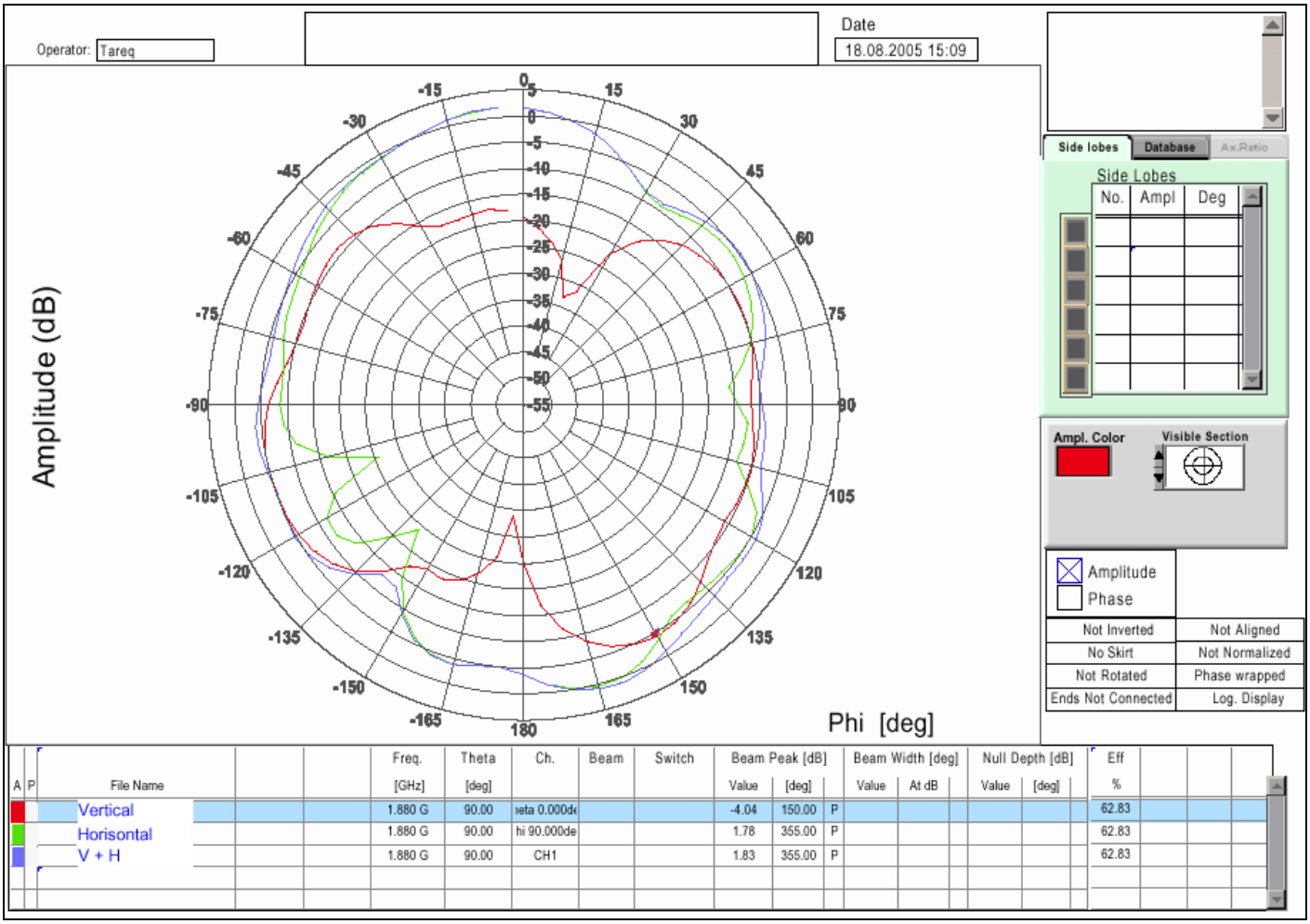
1850-1990 MHz radiation characteristic

Main antenna: 1850.2 MHz



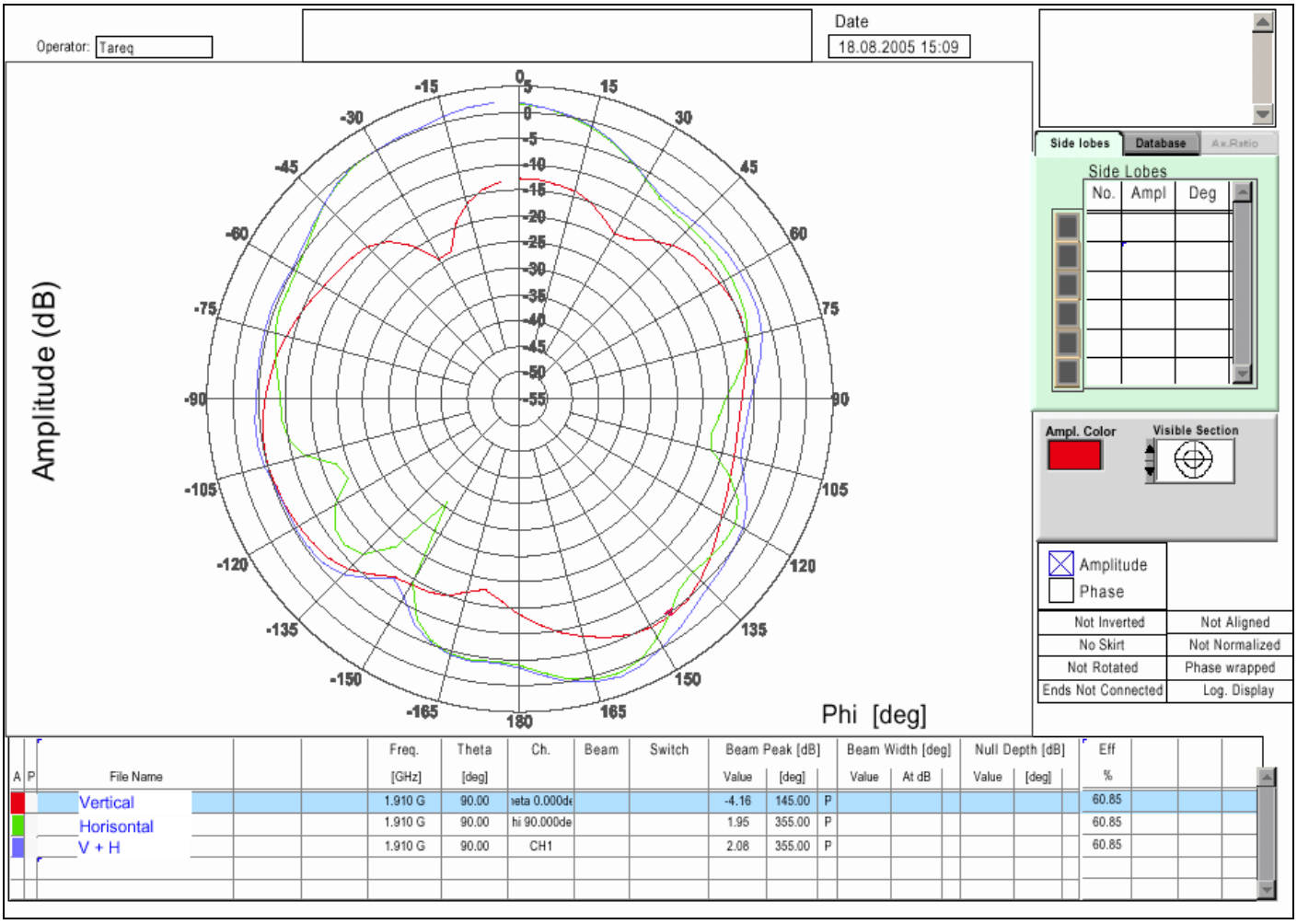
Center Frequency	**1850.2 MHz**
Horizontal (dBi) peak	**2.08**
Vertical (dBi) peak	**-5.28**
Horz+Vert (dBi) peak	**2.09**

Main antenna: 1880.0 MHz



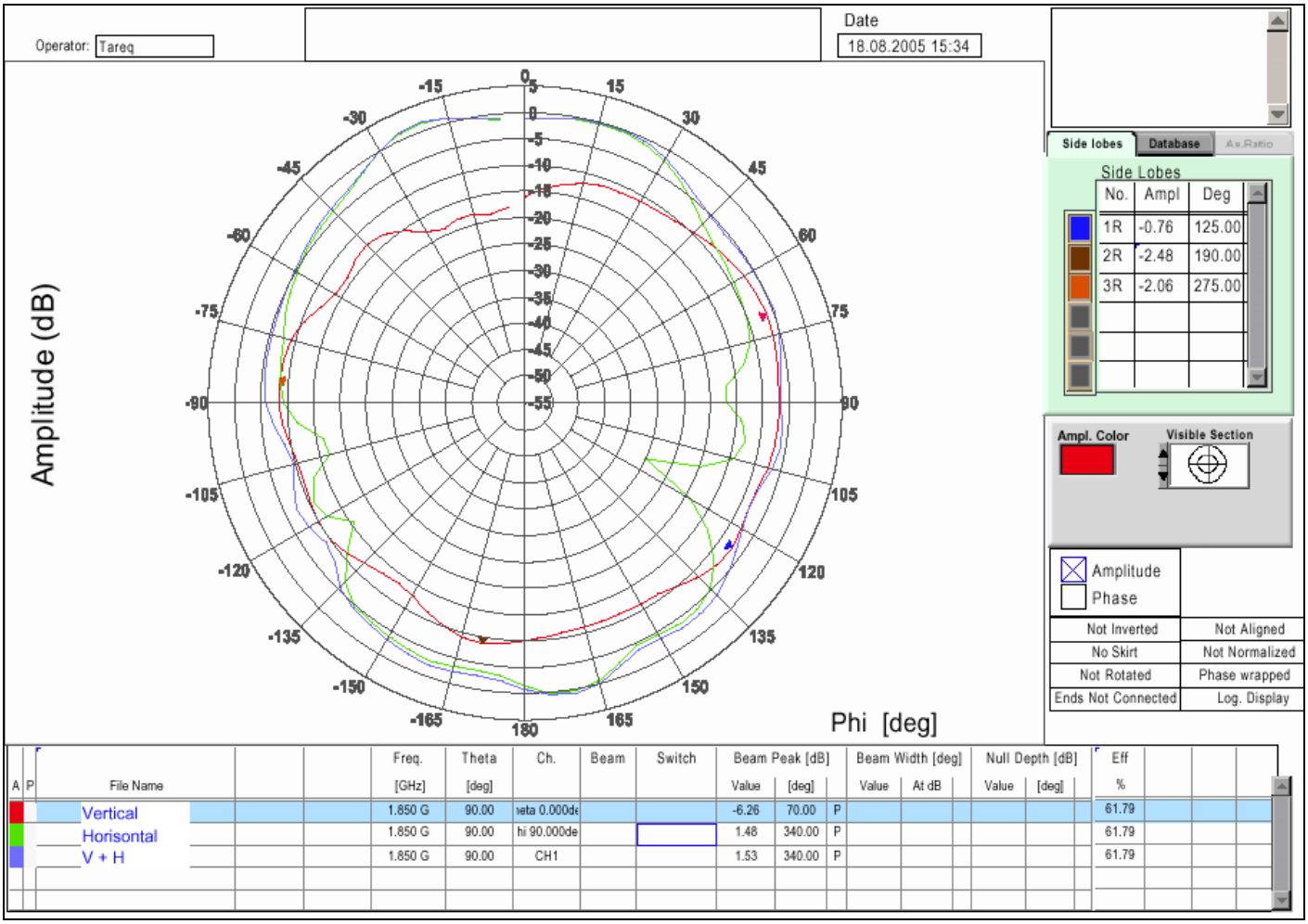
Center Frequency	**1880.0 MHz**
Horizontal (dBi) peak	**1.78**
Vertical (dBi) peak	**-4.04**
Horz+Vert (dBi) peak	**1.83**

Main antenna: 1909.8 MHz



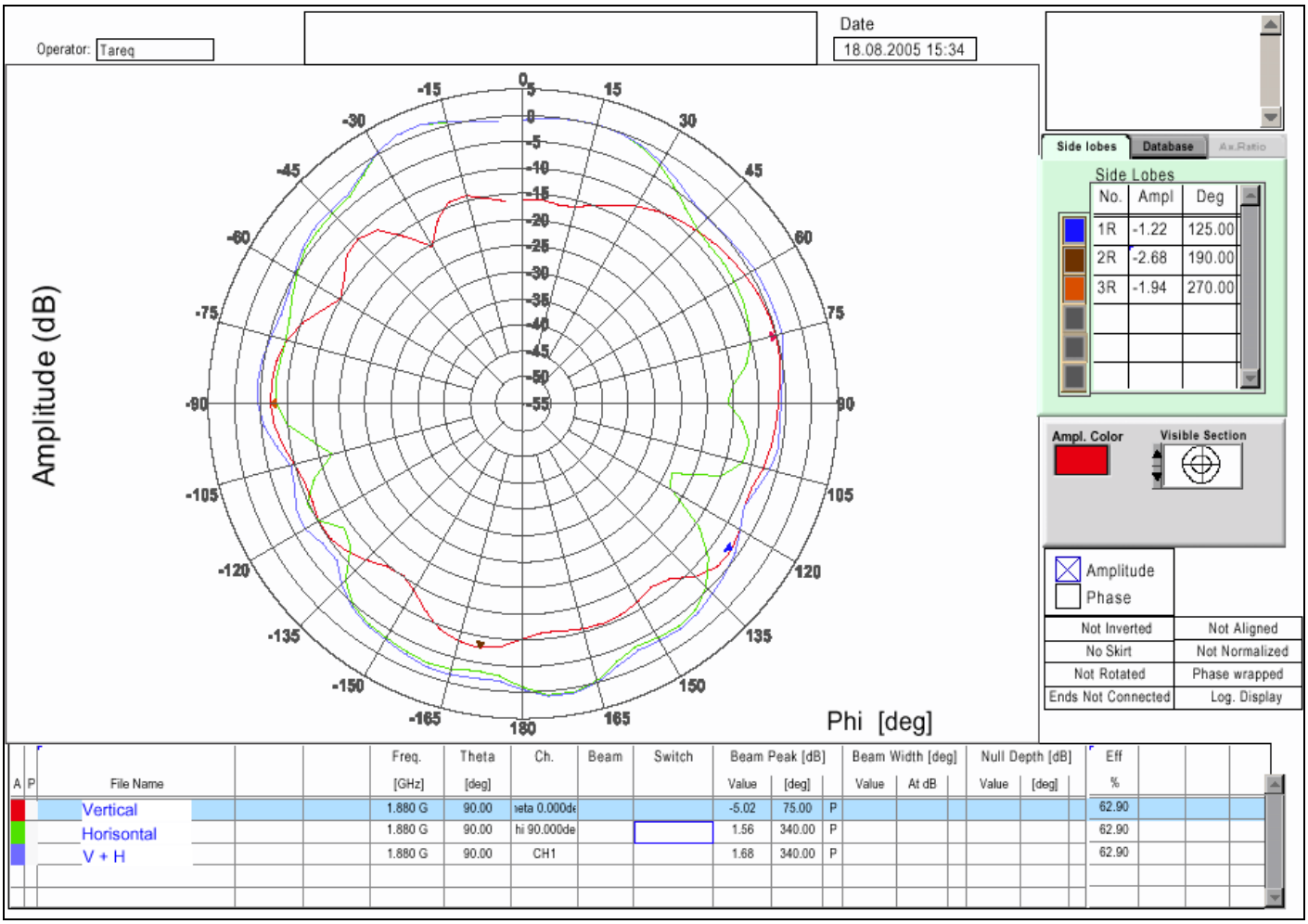
Center Frequency	**1909.8 MHz**
Horizontal (dBi) peak	**1.95**
Vertical (dBi) peak	**-4.16**
Horz+Vert (dBi) peak	**2.08**

Diversity antenna: 1850.2 MHz



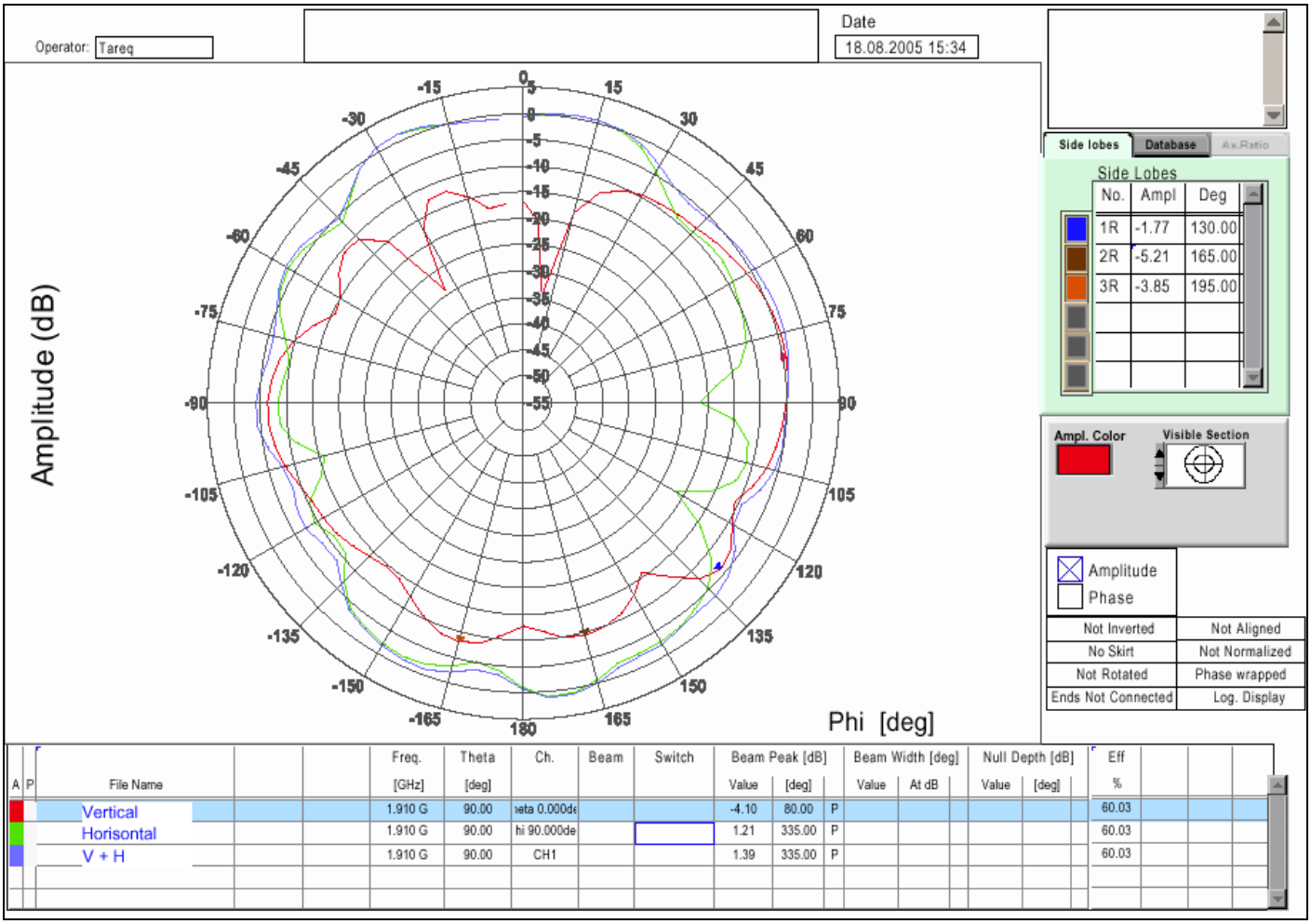
Center Frequency	**1850.2 MHz**
Horizontal (dBi) peak	**1.48**
Vertical (dBi) peak	**-6.26**
Horz+Vert (dBi) peak	**1.53**

Diversity antenna: 1880.0 MHz



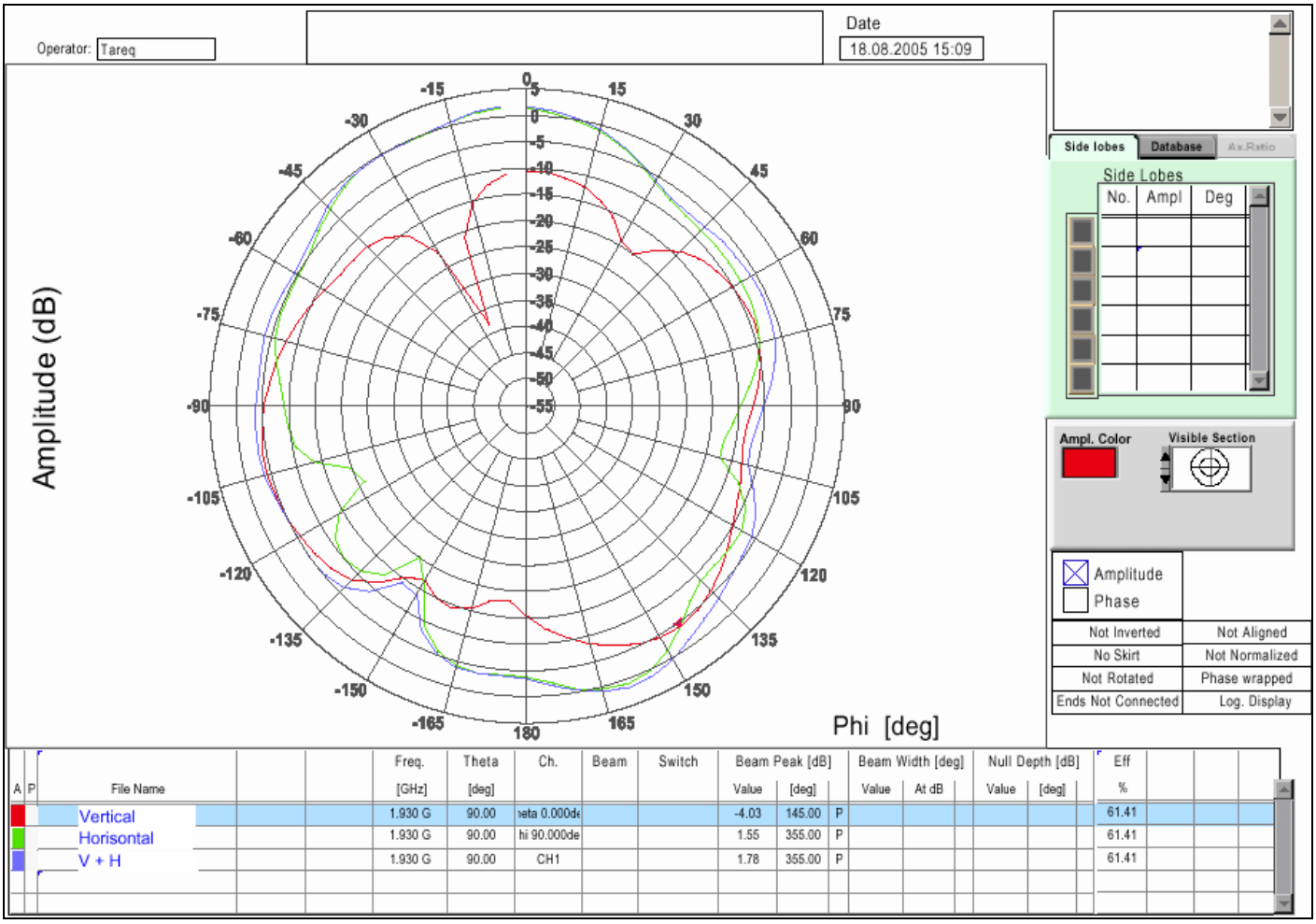
Center Frequency	**1880.0 MHz**
Horizontal (dBi) peak	**1.56**
Vertical (dBi) peak	**-5.02**
Horz+Vert (dBi) peak	**1.68**

Diversity antenna: 1909.8 MHz



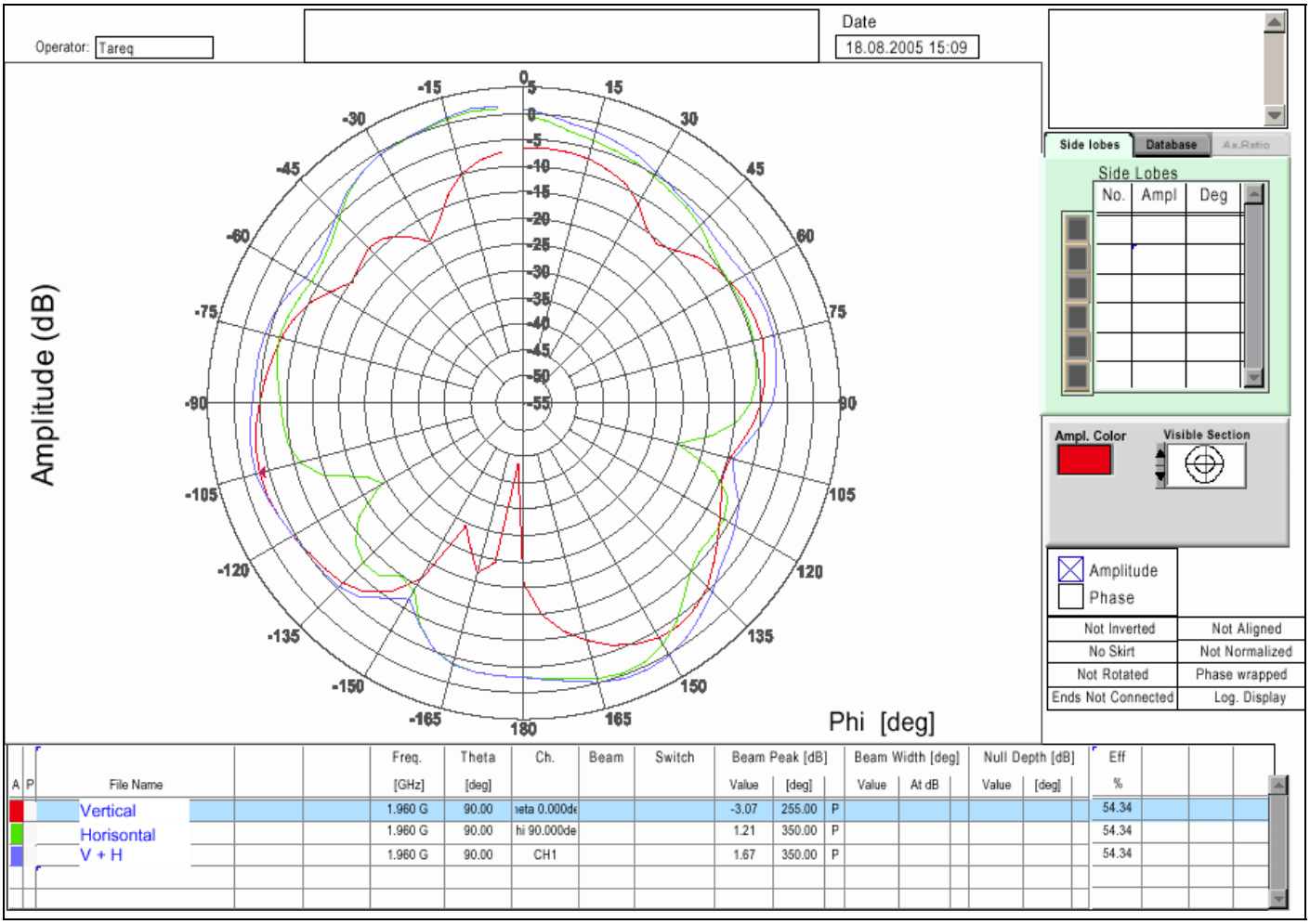
Center Frequency	**1909.8 MHz**
Horizontal (dBi) peak	**1.21**
Vertical (dBi) peak	**-4.10**
Horz+Vert (dBi) peak	**1.39**

Main antenna: 1930.2 MHz



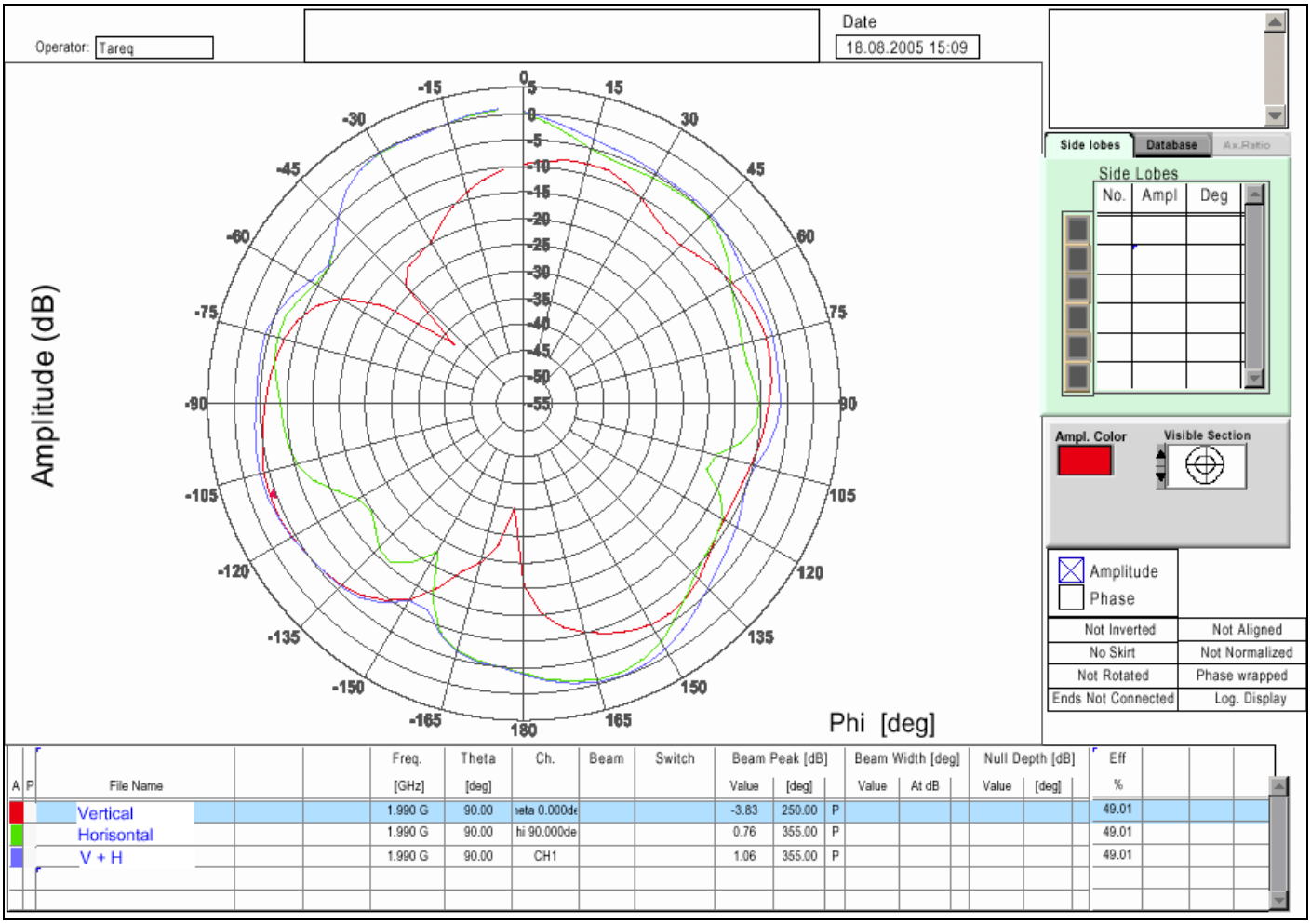
Center Frequency	**1930.2 MHz**
Horizontal (dBi) peak	**1.55**
Vertical (dBi) peak	**-4.03**
Horz+Vert (dBi) peak	**1.78**

Main antenna: 1960.0 MHz



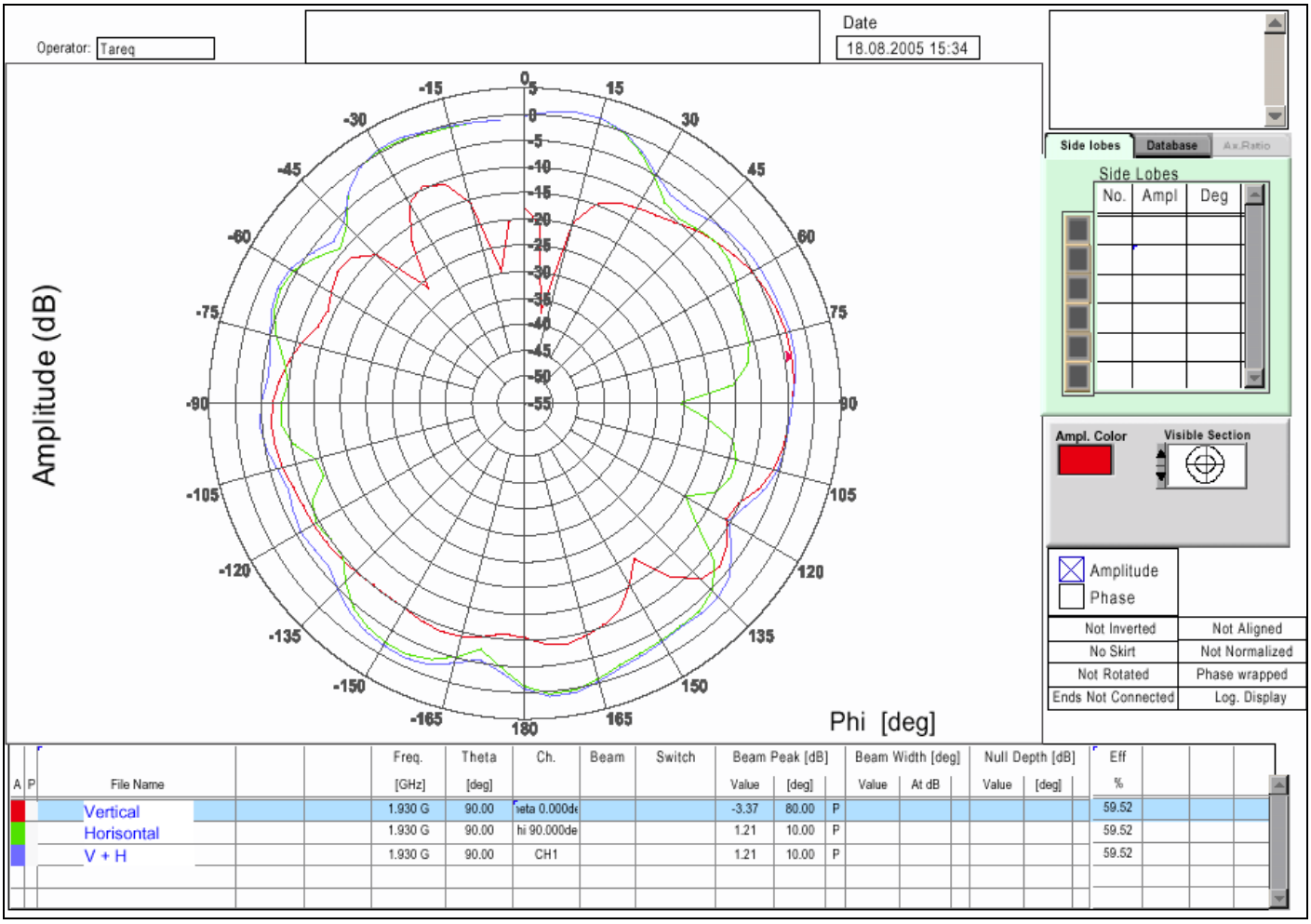
Center Frequency	**1960.0 MHz**
Horizontal (dBi) peak	**1.21**
Vertical (dBi) peak	**-3.07**
Horz+Vert (dBi) peak	**1.67**

Main antenna: 1989.8 MHz



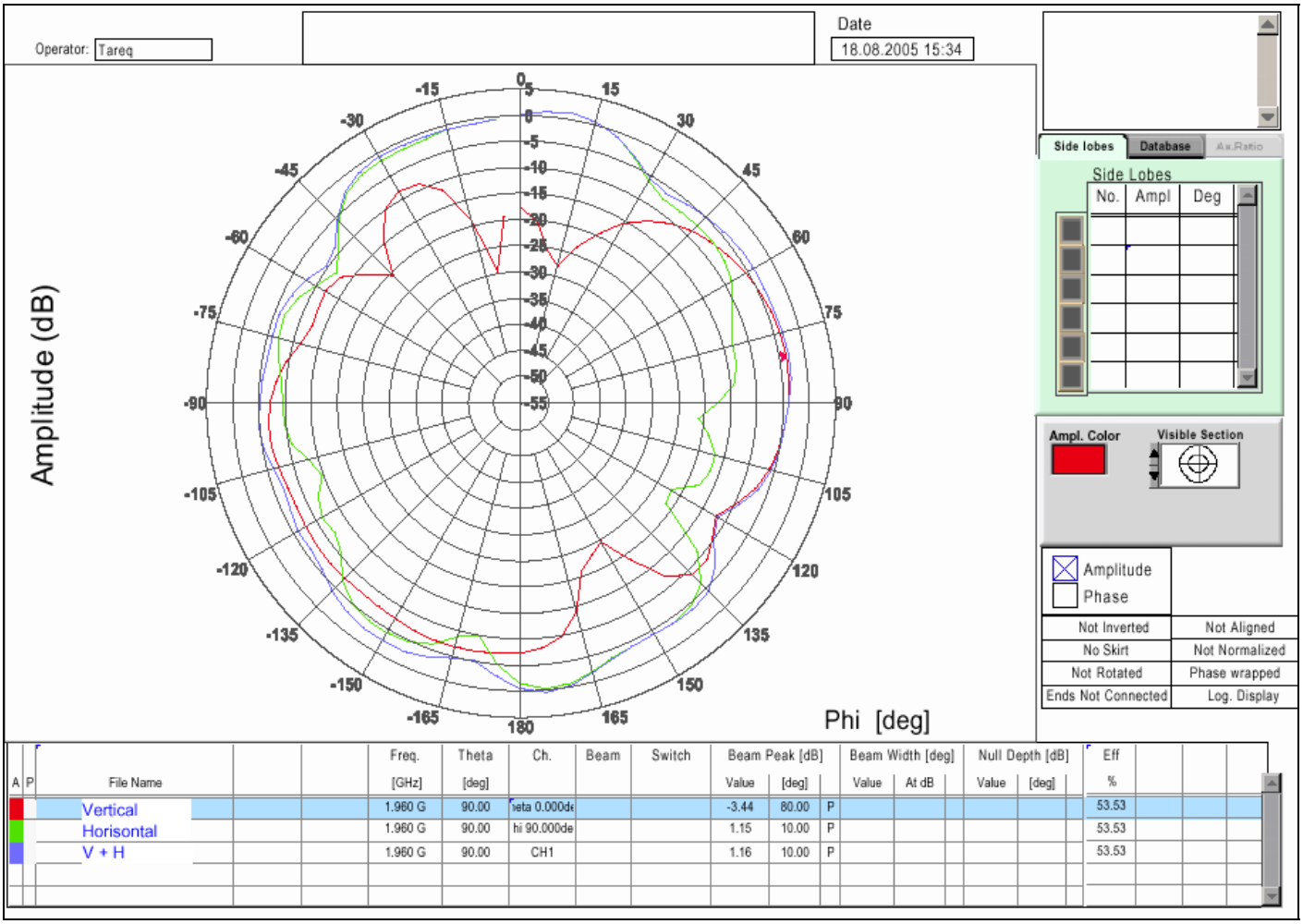
Center Frequency	**1989.8 MHz**
Horizontal (dBi) peak	**0.76**
Vertical (dBi) peak	**-3.83**
Horz+Vert (dBi) peak	**1.06**

Diversity antenna: 1930.2 MHz



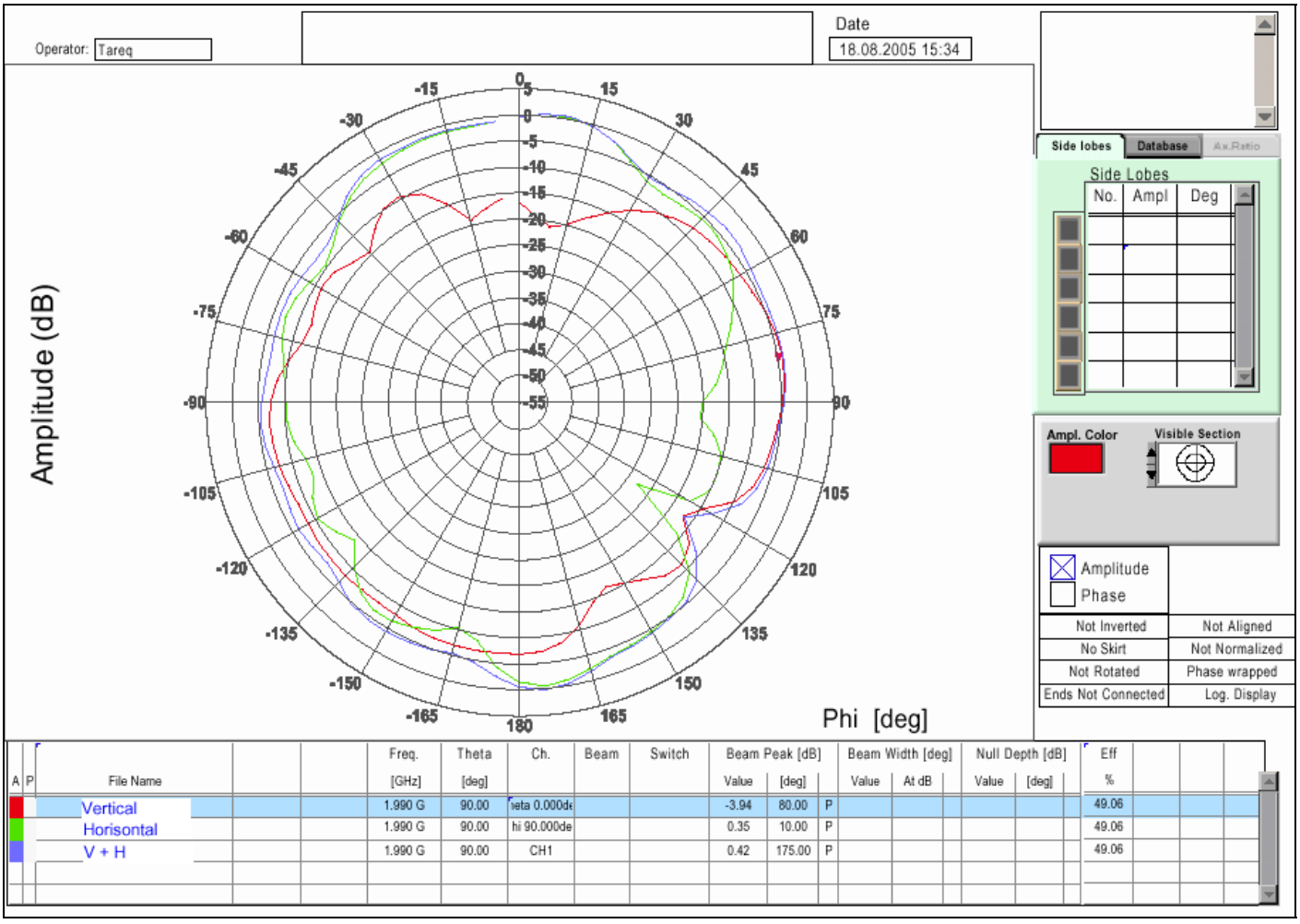
Center Frequency	**1930.2 MHz**
Horizontal (dBi) peak	**1.21**
Vertical (dBi) peak	**-3.37**
Horz+Vert (dBi) peak	**1.21**

Diversity antenna: 1960.0 MHz



Center Frequency	**1960.0 MHz**
Horizontal (dBi) peak	**1.15**
Vertical (dBi) peak	**-3.44**
Horz+Vert (dBi) peak	**1.16**

Diversity antenna: 1989.8 MHz



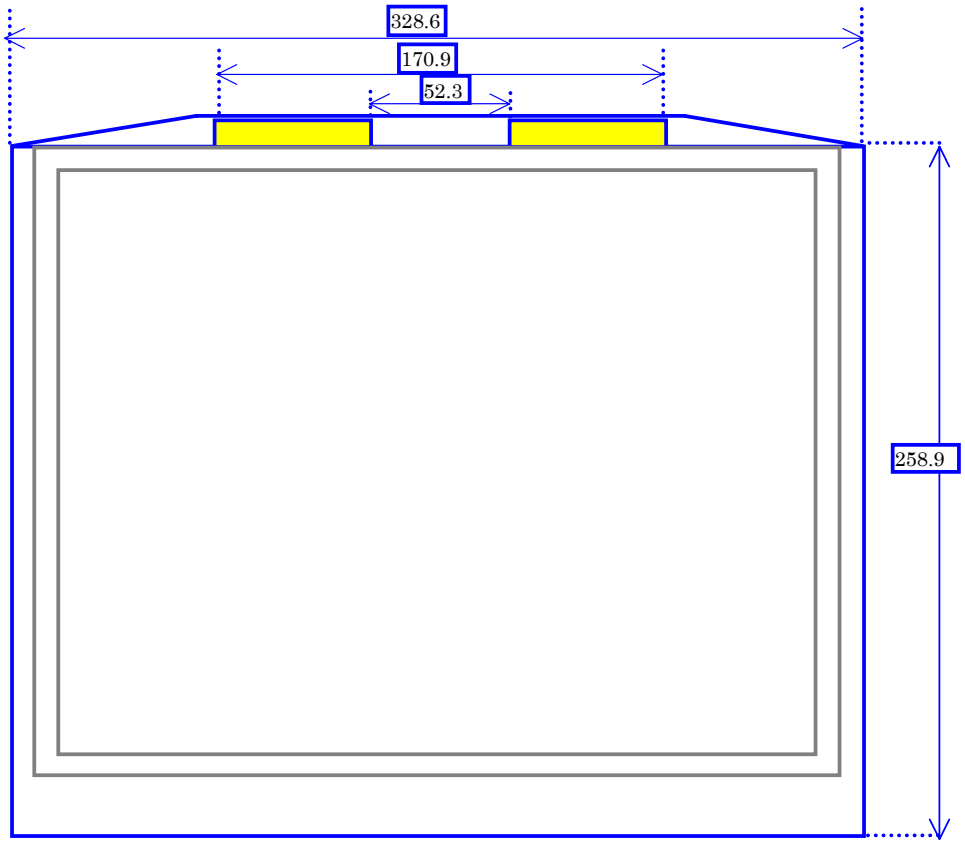
Center Frequency	**1989.8 MHz**
Horizontal (dBi) peak	**0.35**
Vertical (dBi) peak	**-3.94**
Horz+Vert (dBi) peak	**0.42**

Section 4. Host Platform Information

OEM / ODM Host platform: HP Compaq nc6140, HSTNN-I05C

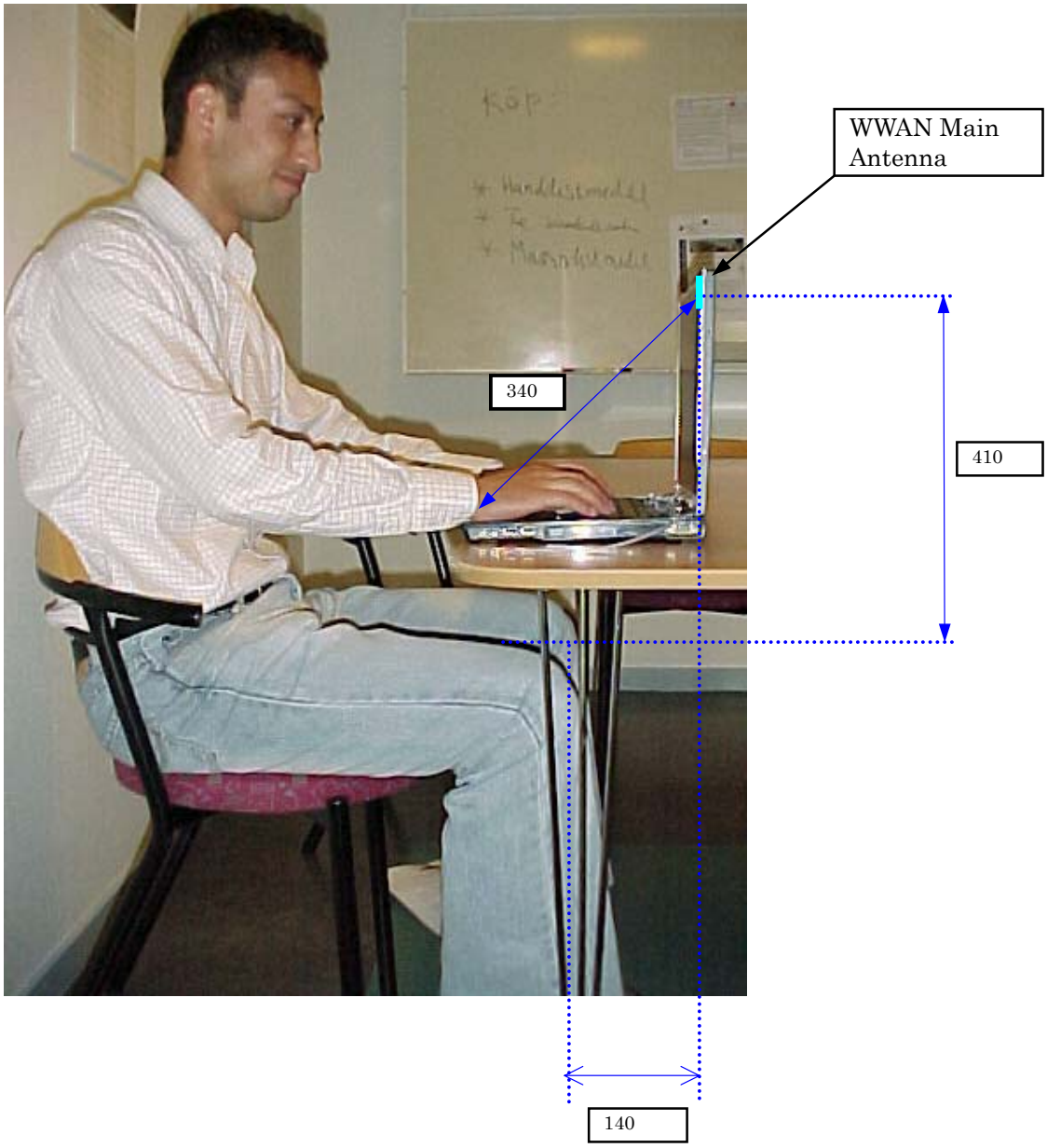
Section 5. Antenna Host Platform Location Information

WWAN Antenna Placements. Dimensions in mm.



Section 6. Antenna dimensional information for SAR evaluation

Distance between user and transmitting antenna. Dimensions in mm.



Section 7. Diagram Example of Co-Location Antenna Separation

Indicate distance between WLAN module antennas and Bluetooth/other radio antenna element. Dimensions in mm. (Note: Due to the evolving rules regarding co-location, each platform will need to be reviewed on a case by case basis)