Aplikacje dla urządzeń pomiarowych i automatyki.

- Automatyzacja pomiarów, wizualizacja pomiarów z wykorzystaniem GPIB/HPIB, sieci Ethernet.
- Dzięki naszym aplikacjom tworzonym zgodnie z wymaganiami klienta zamawiający uzyskuje możliwość kontroli swojego, nawet wiekowego sprzętu pomiarowego lub automatyki przez komputer PC bez inwestowania w drogie uniwersalne środowiska programistyczne.

- Najprostsze aplikacje to zapis wyników do plików tekstowych w celu dalszej obróbki przez klienta np. w xls

Przykładowa aplikacja zrealizowana przez nas (projekt www.nf2ff.com)

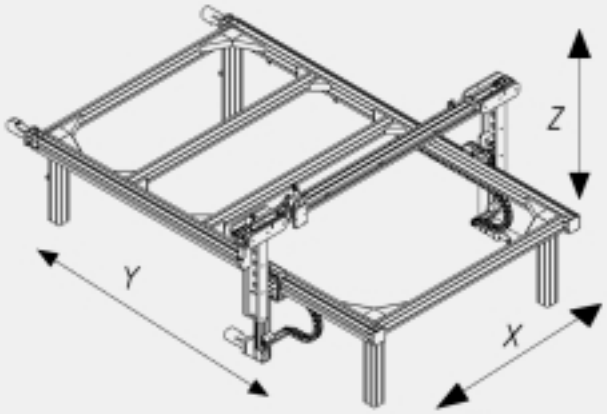
Stanowisko robocze

Strony: 1-10

NF2FF

Configuration | Measurement | Far Field Calc. | Manual Control | About

Scanner Layout



TCP/IP Configuration

Server port: 2100

Dummy PLC Controllers

TCP/IP Connection

Start | Stop

GPIB Configuration

Board ID: 0

Address: 17

Dummy GPIB Instrument

GPIB Connection

Start | Stop

Commands Syntax (Analyzer)

SCPI (Standard Commands fo

Hewlett Packard (obsolete)

Type (Analyzer)

Vector Network Analyzer

Scalar Network Analyzer

Frequency (Analyzer)

Marker 1 frequency=

Marker 2 frequency=

Marker 3 frequency=

Marker 4 frequency=

Gears (Scanner)

Axis X full motor rotation distar

steps per full rota

Axis Y full motor rotation distar

steps per full rota

Axis Z full motor rotation distar

steps per full rota

Measurement Area (Scanner)

Axis X start=

1 point step=

stop=

Axis Y start=

1 point step=

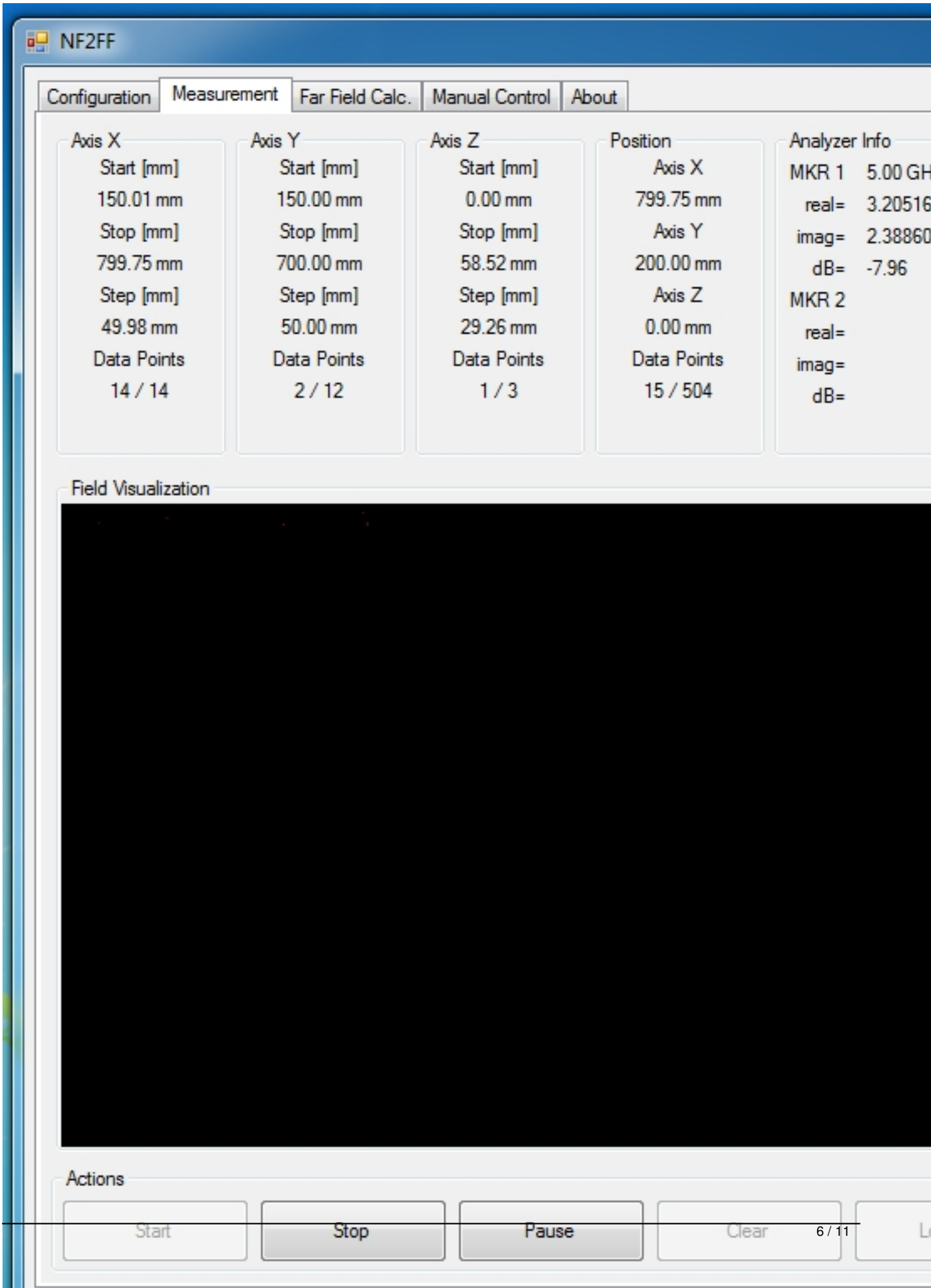
stop=

Axis Z start=

1 point step=

stop=

Wprowadzanie danych


NF2FF
Configuration
Measurement
Far Field Calc.
Manual Control
About
Axis X
Start [mm]
150.01 mm
Stop [mm]
799.75 mm
Step [mm]
49.98 mm
Data Points
14 / 14
Axis Y
Start [mm]
150.00 mm
Stop [mm]
700.00 mm
Step [mm]
50.00 mm
Data Points
2 / 12
Axis Z
Start [mm]
0.00 mm
Stop [mm]
58.52 mm
Step [mm]
29.26 mm
Data Points
1 / 3
Position
Axis X
799.75 mm
Axis Y
200.00 mm
Axis Z
0.00 mm
Data Points
15 / 504
Analyzer Info
MKR 1
5.00 GH
real=
3.20516
imag=
2.38860
dB=
-7.96
MKR 2
real=
imag=
dB=
Field Visualization
Actions
Start
Stop
Pause
Clear

wizualizacja pomiarów

NF2FF

Configuration (1) | Configuration (2) | Measurement | Near Field Viewer | Far Field Calc. | Far Field Viewer | Mar

Axis X
Start [mm]: 350.00 mm
Stop [mm]: 518.98 mm
Step [mm]: 4.97 mm
Data Points: 35

Axis Y
Start [mm]: 220.00 mm
Stop [mm]: 700.00 mm
Step [mm]: 5.00 mm
Data Points: 97

Axis Z
Start [mm]: 5.39 mm
Stop [mm]: 90.09 mm
Step [mm]: 84.70 mm
Data Points: 2

Data
Data File 1 : Sec5ghz_z1z2_c
Data File 2 :
Phi Probe File :
Theta Probe File :
Calibration File 1 :
Calibration File 2 :
Noise File 1 :
Noise File 2 :

Far Field Calculation Parameters

Frequency
Freq. [GHz] : 5.30 GHz

Z plane
Z1 plane [mm] : 5.39 mm
Z2 plane [mm] : 90.09 mm

Field Component
File 1

Method
SA (opt.), NF->FF
Delta : 0.10
Start point : zero
Nmax : 10000
k : 1
T : 1.00
T0 : 1.00
eta : 0.999
c : 0.10
scale_amp : 2.00
scale_phs : 2.00

Theta range
Min : -90
Max : 90
Points : 181

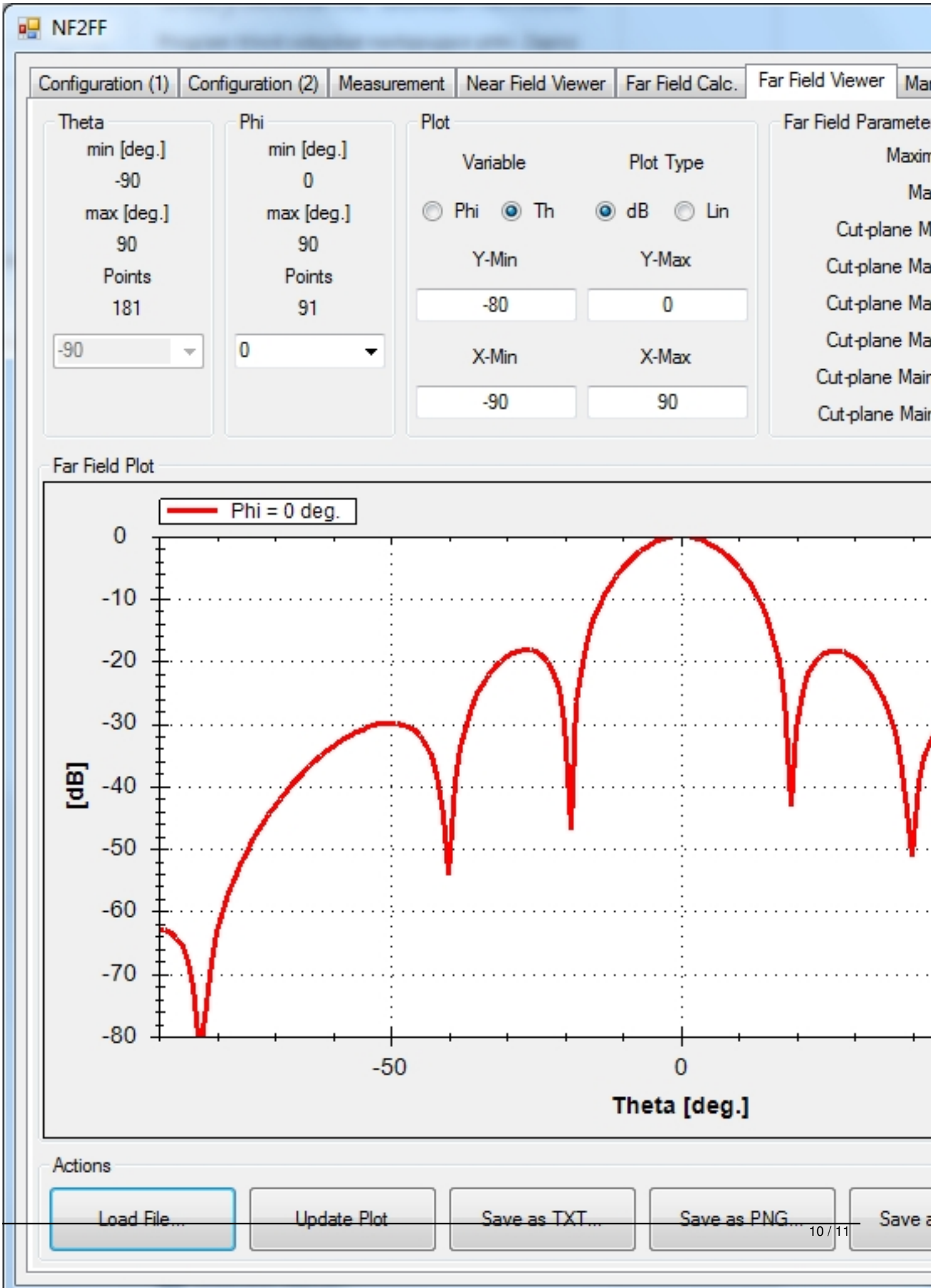
Phi range
Min : 0
Max : 90
Points : 2

Probe Correction
Probe Correction
PhProbe | ThProbe
Calibrate Data
De-noise data

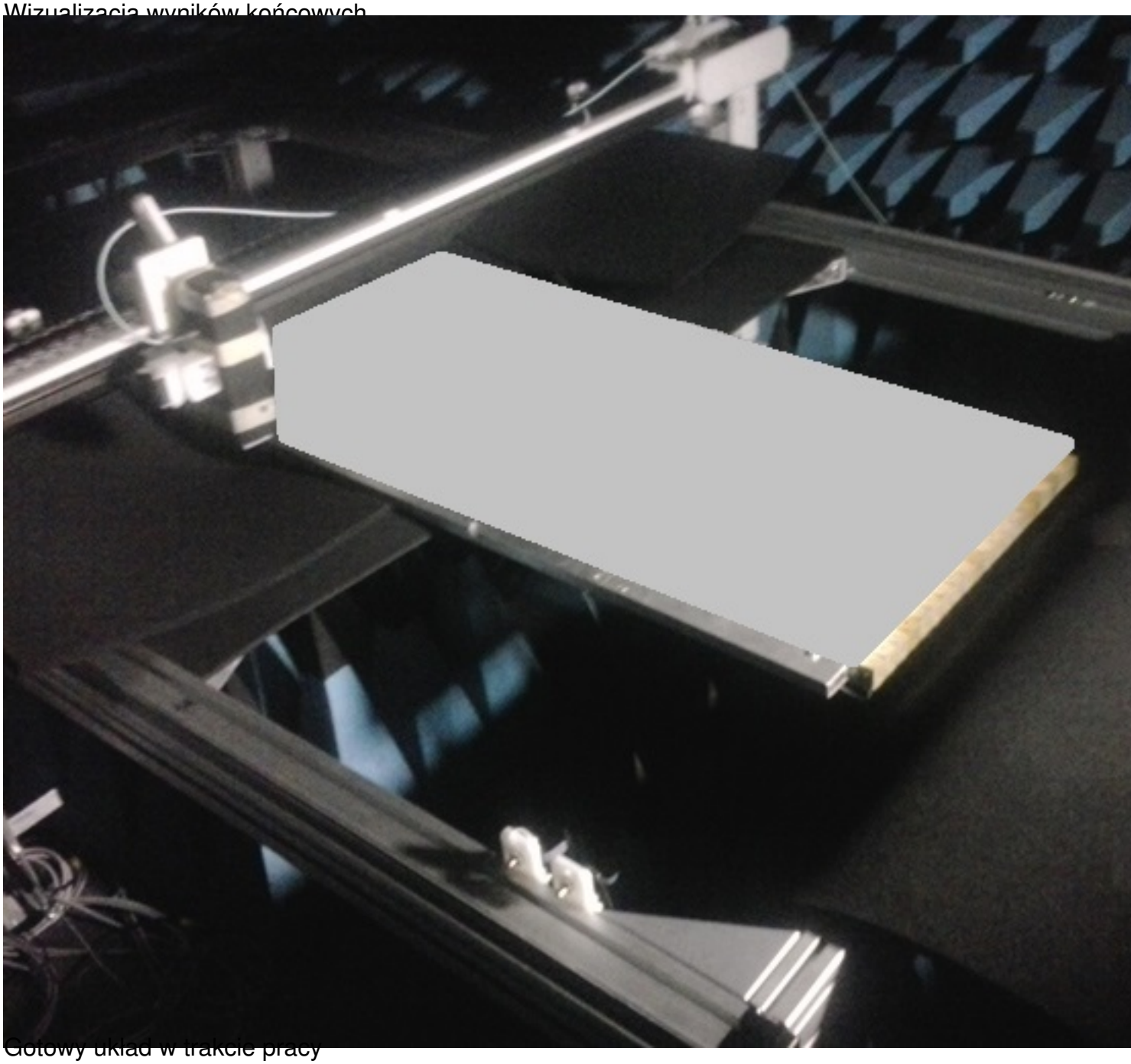
Apertures Specifica
Create Single A
X0
350.00
Manually Specif
X0
1 0
2 0
3 0
4 0
5 0
6 0

Actions
Load File 1... | Load File 2... | Calculate FF | Debug

Interfejs kalkulatora wyników pomiarów


NF2FF
Configuration (1)
Configuration (2)
Measurement
Near Field Viewer
Far Field Calc.
Far Field Viewer
Theta
min [deg.]
-90
max [deg.]
90
Points
181
-90
Phi
min [deg.]
0
max [deg.]
90
Points
91
0
Plot
Variable
Phi
Th
Plot Type
dB
Lin
Y-Min
-80
Y-Max
0
X-Min
-90
X-Max
90
Far Field Plot
Phi = 0 deg.
0
-10
-20
-30
-40
-50
-60
-70
-80
[dB]
-50
0
Theta [deg.]
Actions
Load File...
Update Plot
Save as TXT...
Save as PNG...

Wizualizacja wyników końcowych



Gotowy układ w trakcie pracy