

FAMILY MAIN FEATURES:

- FOR PROFESSIONAL APPLICATION
- 2.4 or 5 GHz
- H or V POLARIZATION
- **HIGH POLARIZATION PURITY - EXTREMELY EFFICIENT FOR POLARIZATION DIVERSITY SYSTEMS**
- 14 to 17 dBi
- 60 to 160* deg. FOR **3DB** HORIZONTAL HPBW
- VERY WIDEBAND
- **VERY GOOD VSWR**
- **RSLL - SUPPRESSED SIDELobe LEVELS**
- **ZERO_SQUINT**
- 5 YEARS GUARANTEE
- PATENTS PENDING - IMPORTANT INFORMATION

RED - important_feature

Elboxrf has released a brand new family of advanced sector antennas, TetraAnt_Pro - developed using leading 2.5D and 3D EM tools as well as the sophisticated measurement equipment - by the same person who designed in 2004/2005 bestselling TetraAnt sectors and panels - Przemyslaw Fert, principal electrical engineer, who also is the company founder and owner. (Visit www.elboxrf.com to learn more about ELBOXRF™)

The TetraAnt family of antennas were found by clients as an excellent choice because of their electrical and mechanical parameters and extraordinary overall parameters consistency over the years. There is no measured difference in quality between antennas manufactured in 2005 and now - the only difference you can find is the serial number and the date of manufacture.

And - as for any human product, that was found excellent - the TetraAnt series, sectors and directional panels were widely "cited" by individuals and even companies. But never equalled.

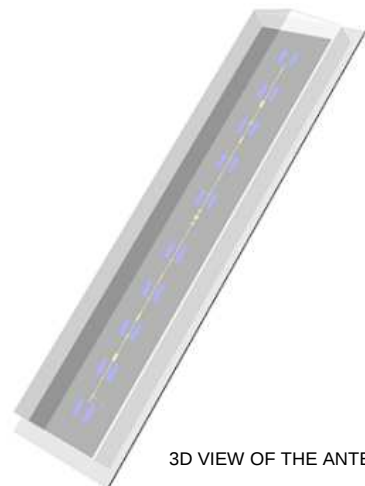
Now, after developing and patent work, new antennas to occur - the TetraAnt_Pro antennas family using developed in house proprietary and patented technology.

New antennas family features high cross-polarization rejection in the whole band 5.15 - 5.95GHz, that suppress the orthogonal polarized signal at least 30dB, great realized gain and the gain flatness and the exceptional range of horizontal HPBW; from 60 deg. by 120 deg. and even 160 deg. Of course, antennas have suppressed sidelobe levels - RSLL, like other ELBOXRF™ antennas.

TetraAnt_Pro - the advanced 5/2 GHz sector antennas.

The following antennas are available. Please note, that only some antennas are in the stock.					
MODEL	BAND [GHZ]	POLARIZATION	HPBW [DEG] @ -3dB	GAIN [dB]	
TETRAANT_PRO 5 60 17 V	5	V	60	17	
TETRAANT_PRO 5 90 16 V	5	V	90	16	
TETRAANT_PRO 5 120 15 V	5	V	120	15	
TETRAANT_PRO 5 160 14 V	5	V	160*	14	
TETRAANT_PRO 5 60 17 H	5	H	60	17	
TETRAANT_PRO 5 90 16 H	5	H	90	16	
TETRAANT_PRO 5 110 15 H	5	H	110	15	
TETRAANT_PRO 2 90 14 V	2	V	90	14	
TETRAANT_PRO 2 120 12 V	2	V	120	12	

* 180° at -6 dB



3D VIEW OF THE ANTENNA

ANTENNA NAME FREQUENCY HOR. HPBW GAIN POLARIZATION

TETRAANT_PRO_5_60_17_V

Specifications in tables are common for all family members.

The following parameters will be shown in details, as figures, for the each antenna model:

- | | |
|-----------------------------|------------|
| 1. Copol_Pattern_Horizontal | see Fig. 1 |
| 2. Copol_Pattern_Vertical | see Fig. 1 |
| 3. Sidelobe_Suppression | see Fig. 1 |
| 4. Front_to_Back_Ratio | see Fig. 1 |
| 5. Crosspolar_Patterns | see Fig. 3 |
| 6. VSWR | see Fig. 2 |
| 7. Gain_Flatness | see Fig. 4 |

Please note that all characteristics reflect real parameters at important points of the band. They worth a hundred words to the experienced eye.

But if you have additional questions, please ask the designer: fert@elboxrf.com

Electrical Specifications	
Frequency band	5150 - 5950 MHz
Nominal impedance	50 Ω
VSWR	Fig. 2
Realized Gain and Gain Flatness	Fig. 4
Squint error	0 deg.
Polarization	Linear, vertical or horizontal
Half Power Beamwidth - HPBW, Horizontal	Fig. 1
Half Power Beamwidth - HPBW, Vertical	Fig. 1
Sidelobe suppression	Fig. 1
Front/Back ratio	Fig. 1
Crosspolar rejection	Fig. 3
Lightning protection	DC grounded

Mechanical Specifications	
Technology	microstrip
Input Connector	N, Female
Dimensions	475x116x40 mm, with the connector
Radome	White UV resistant plastic
Base	High strength aluminum alloy
Construction	Completely weatherproof
Mounting Kit	On the kit, allows elevation adjust. The pipe diameter: 20 – 50 mm
Antenna Weight	0.8 - 1 kg, depends on the model Incl. the mounting kit
Packing	Carton, 10x13x55 cm 1.05 - 1.20 kg ready to shipment

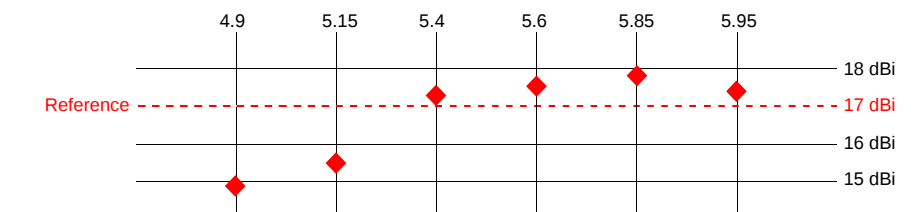
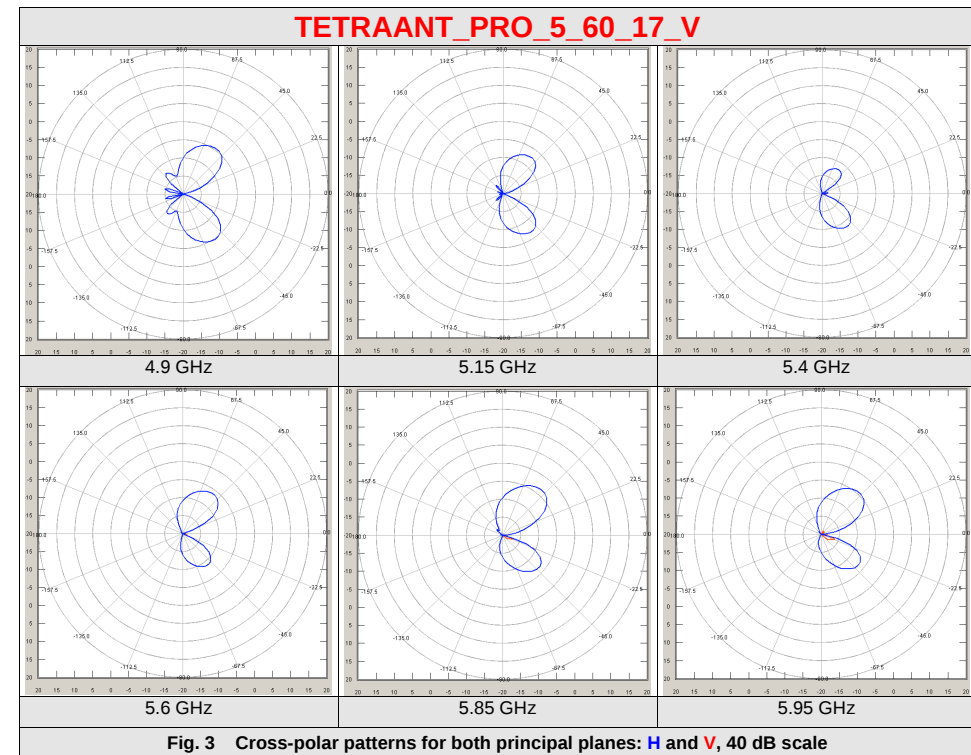
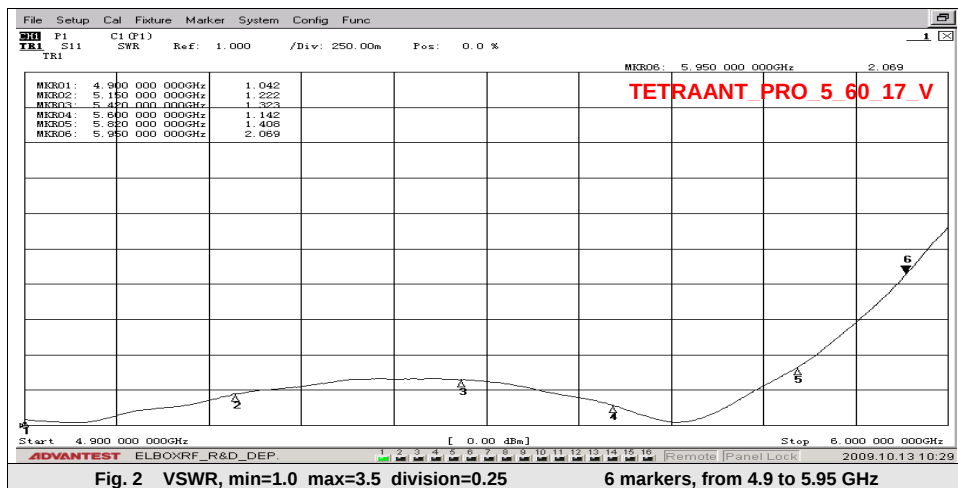
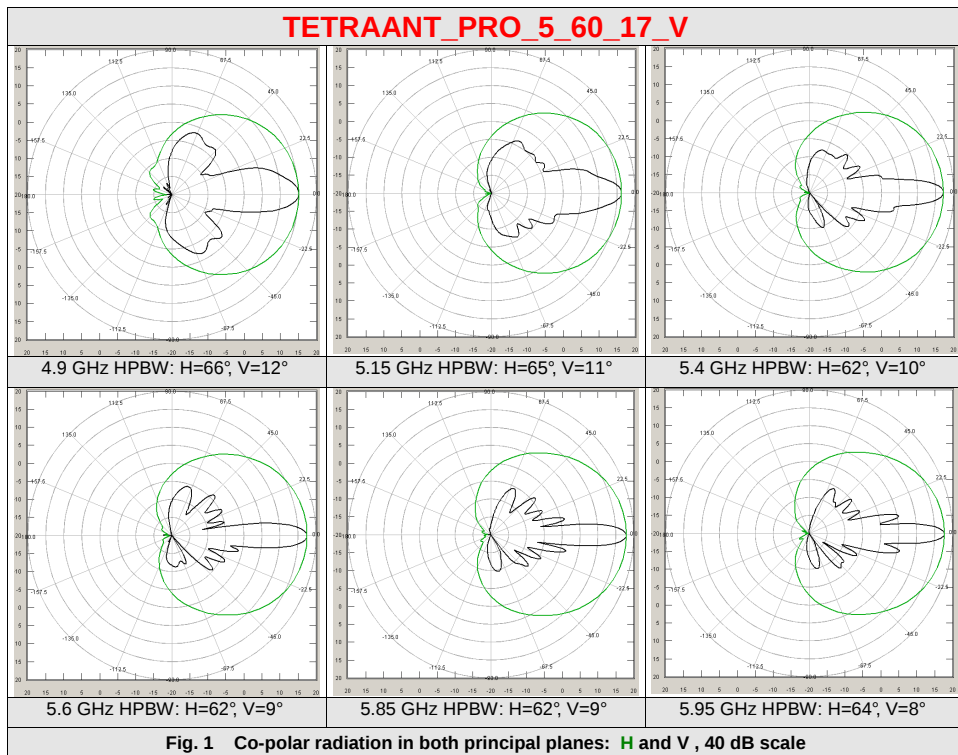


Fig. 4 Realized Gain Flatness - measurement

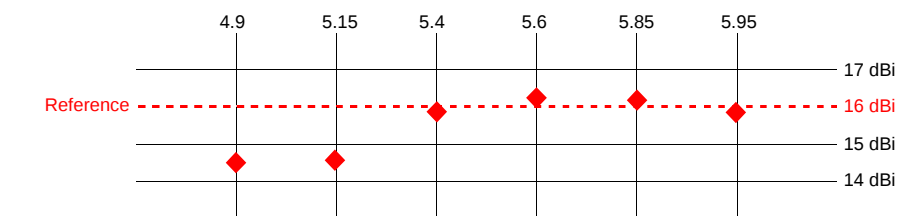
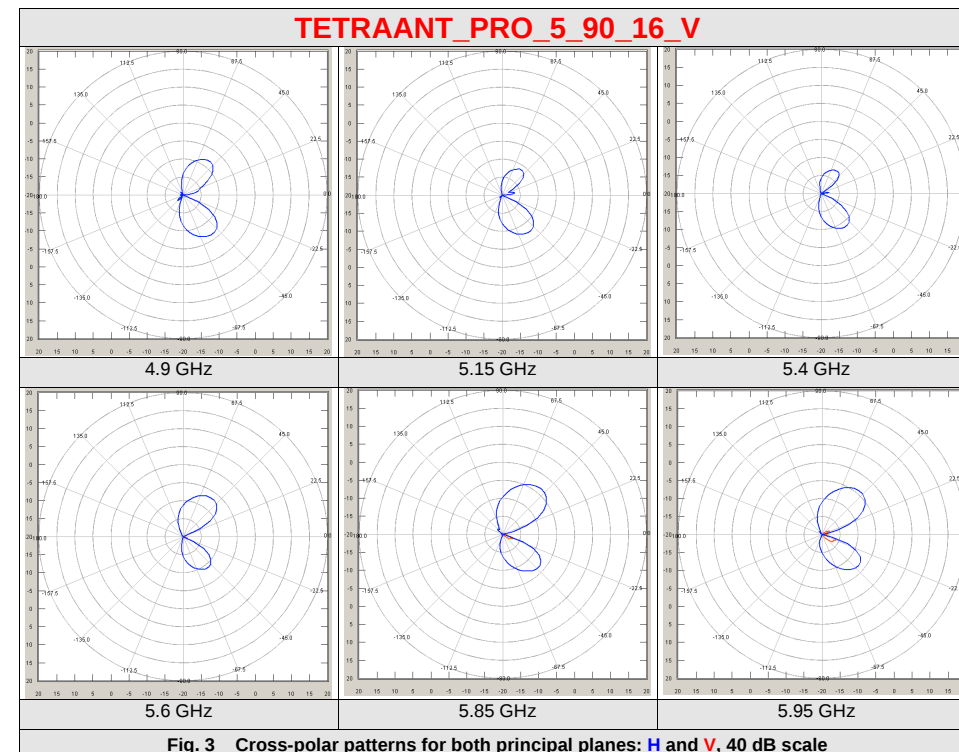
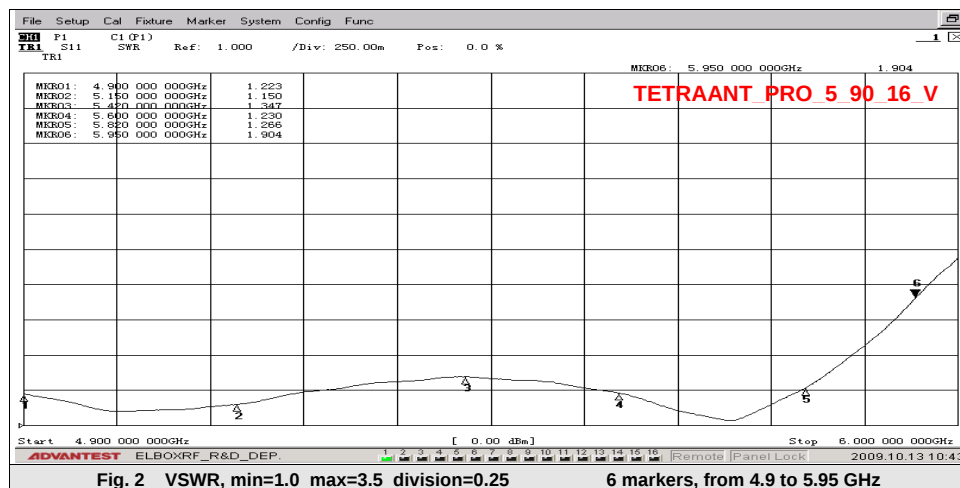
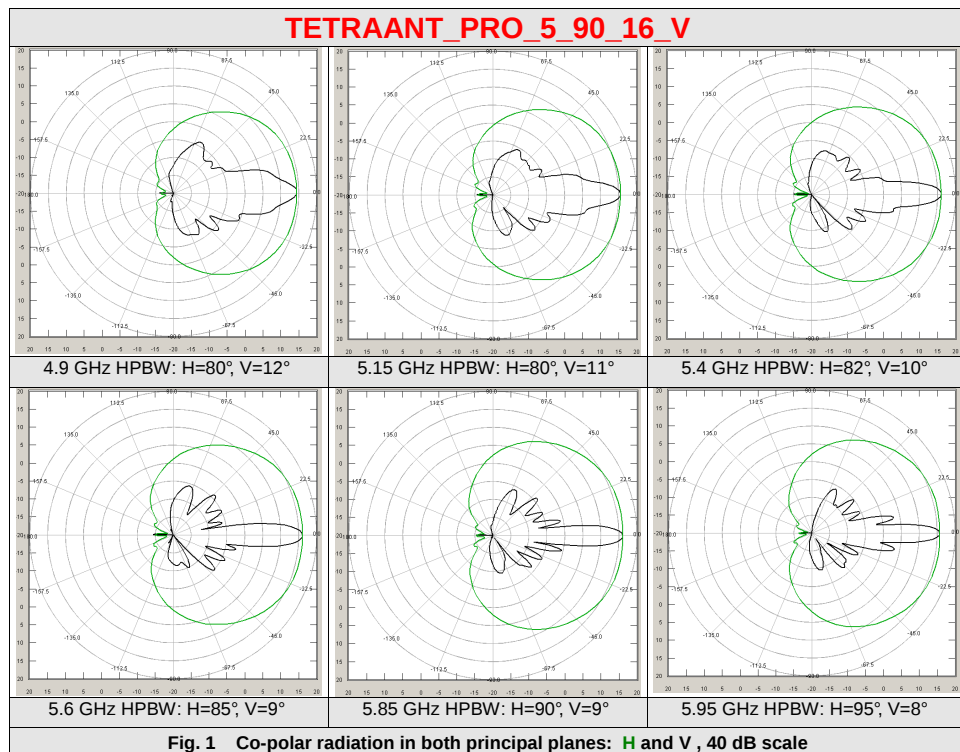
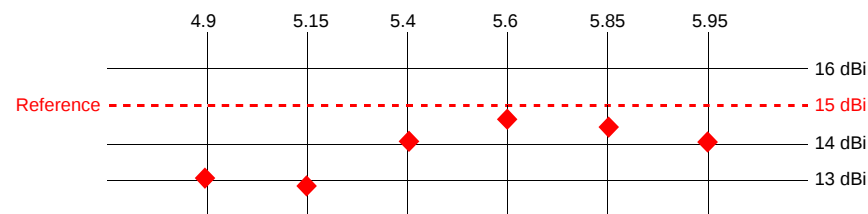
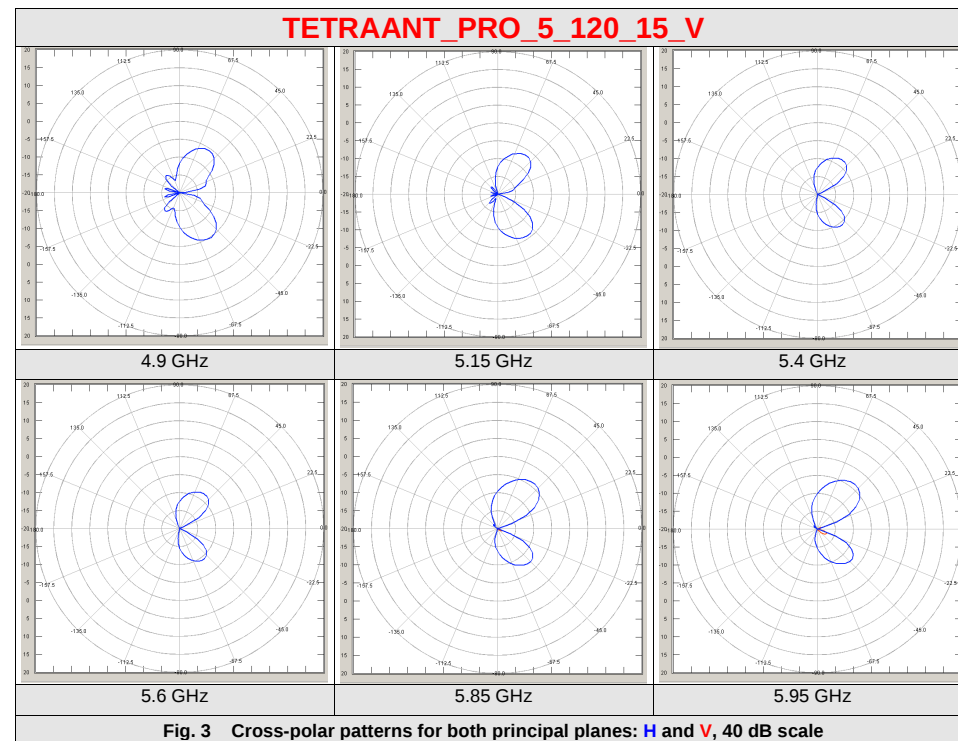
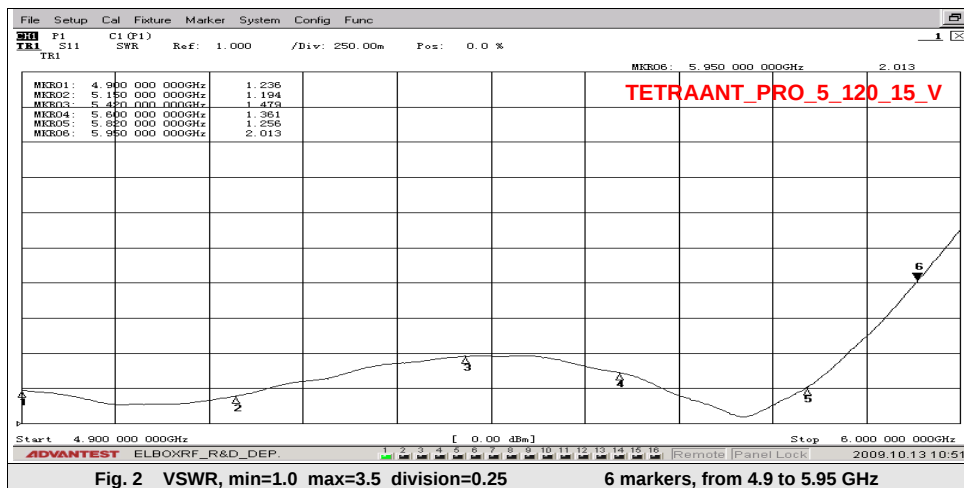
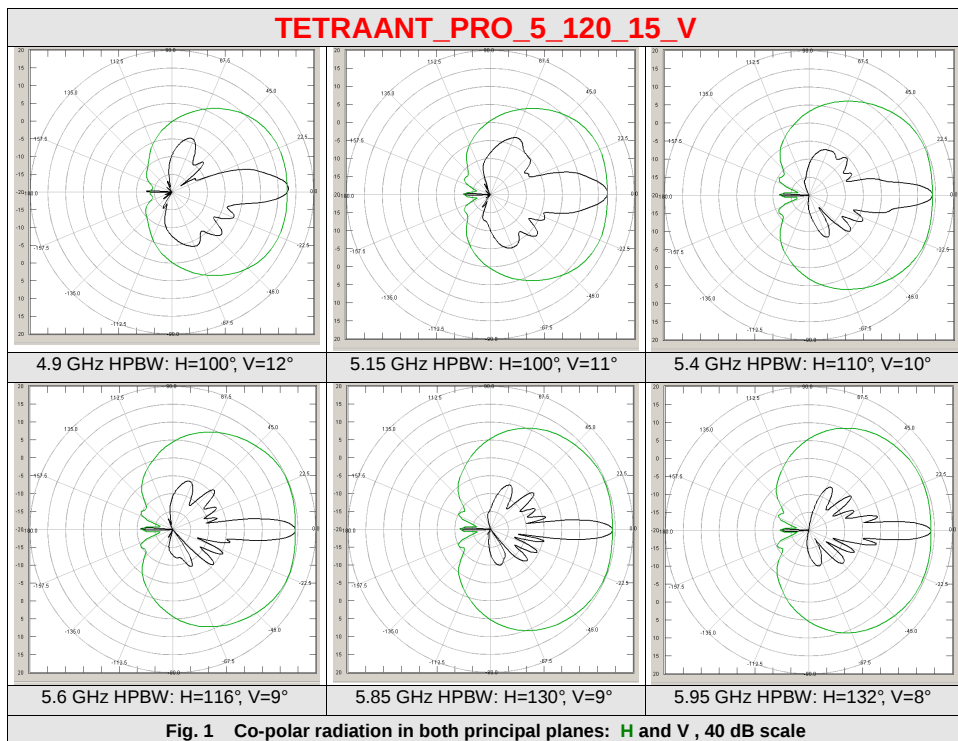
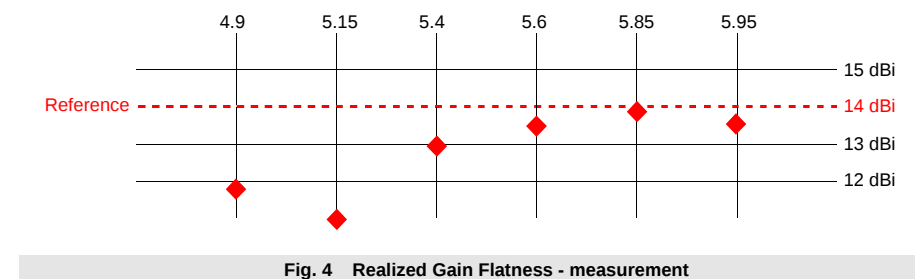
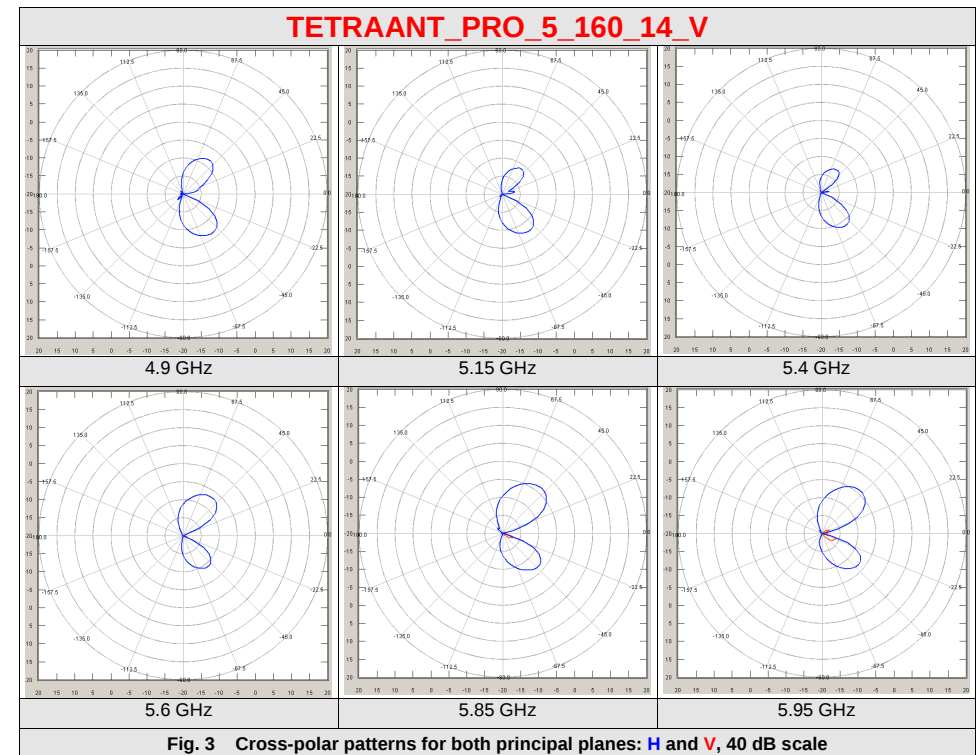
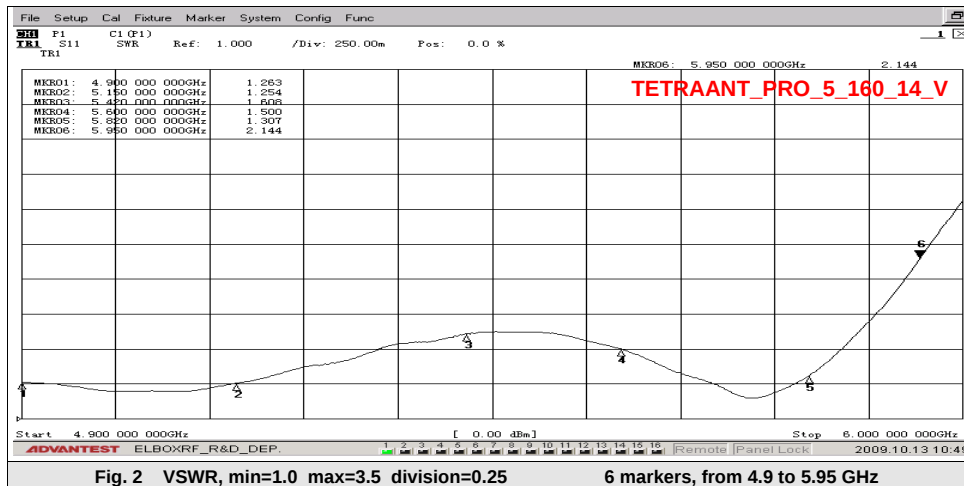
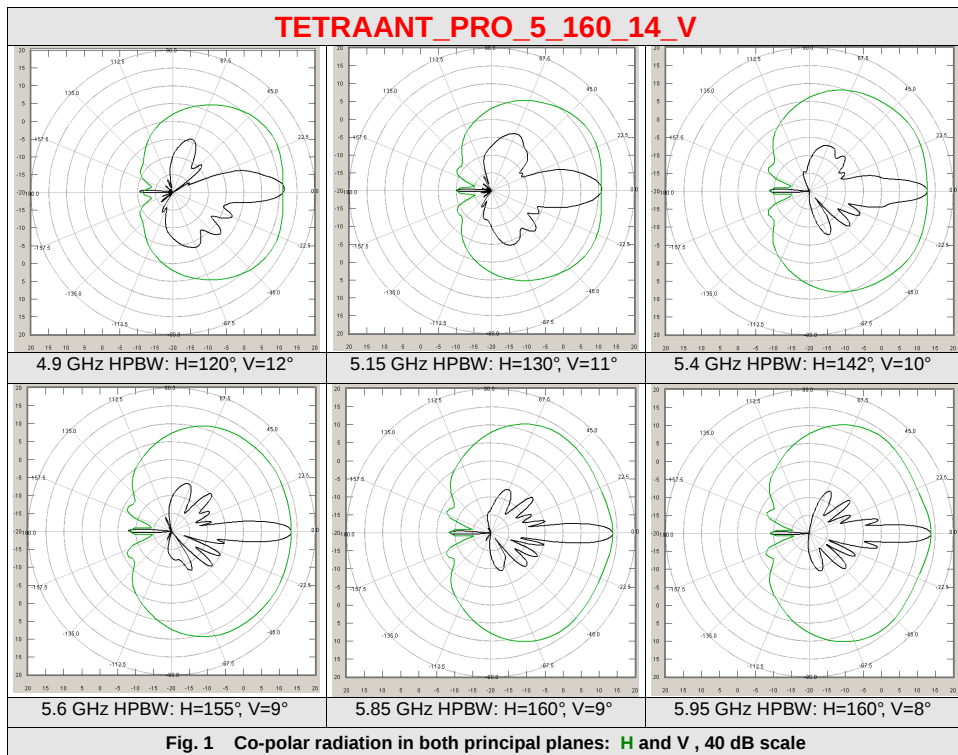
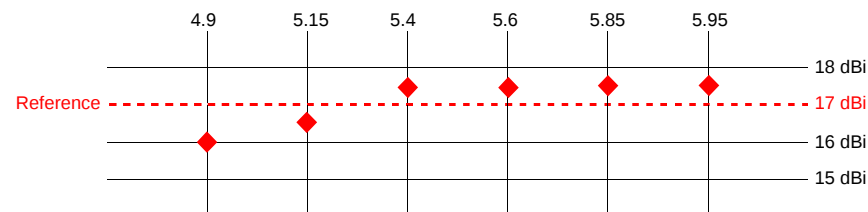
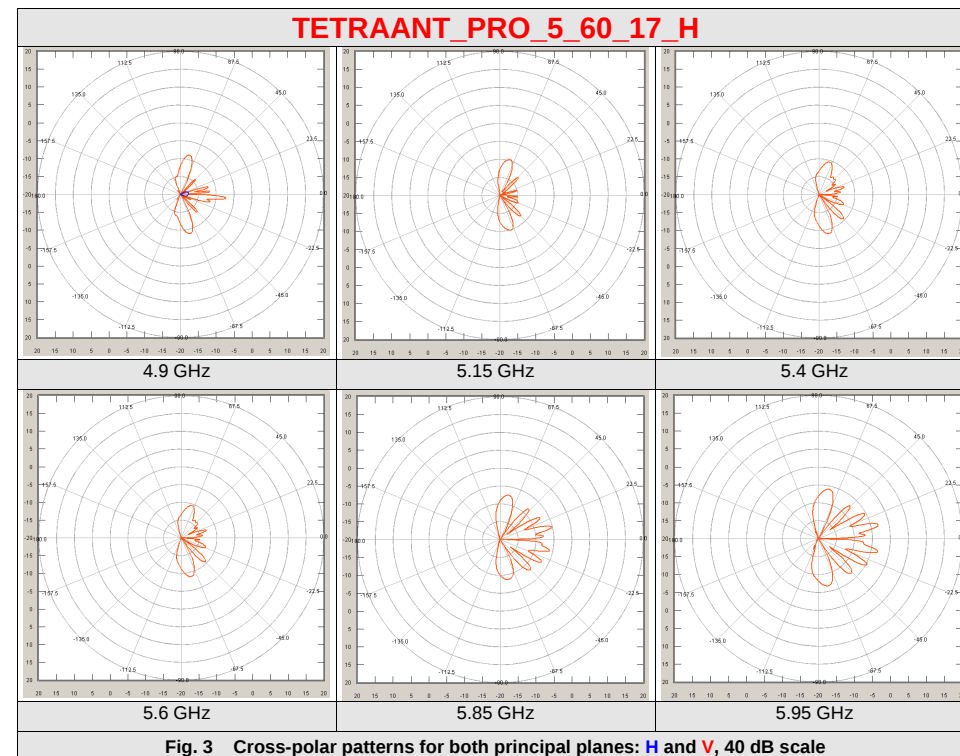
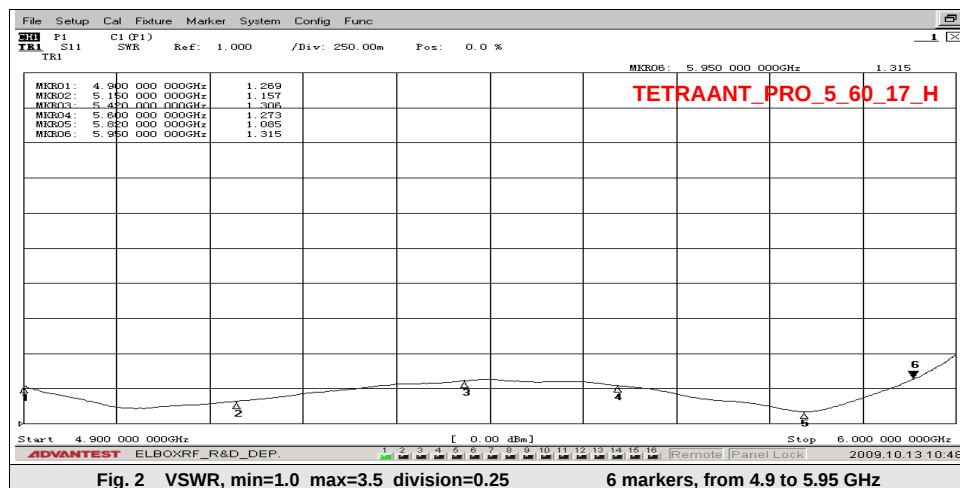
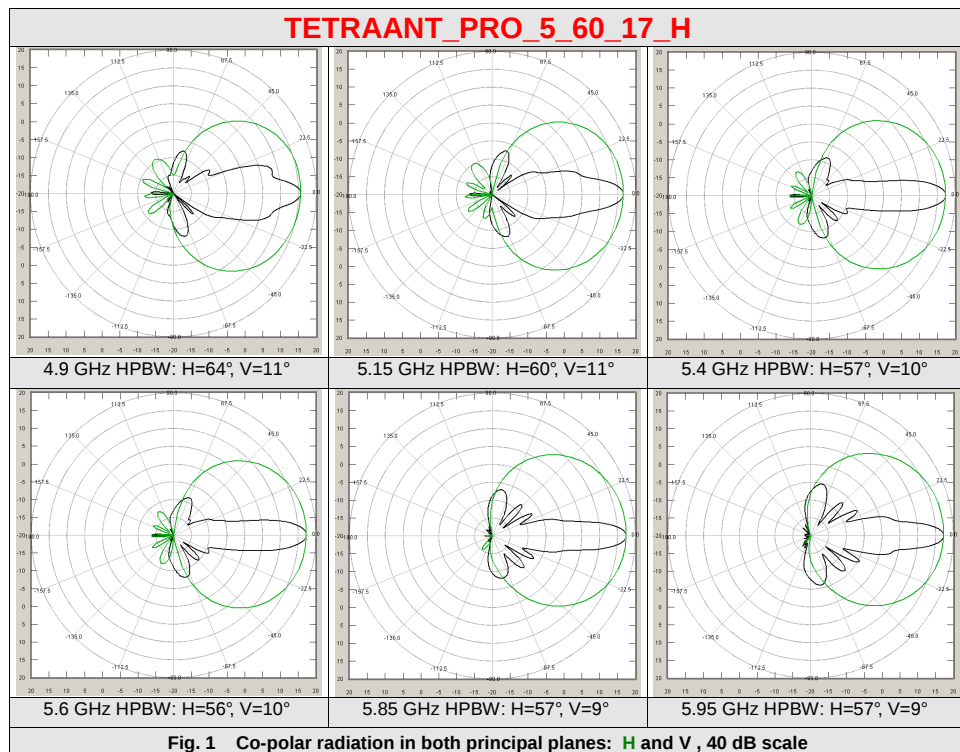
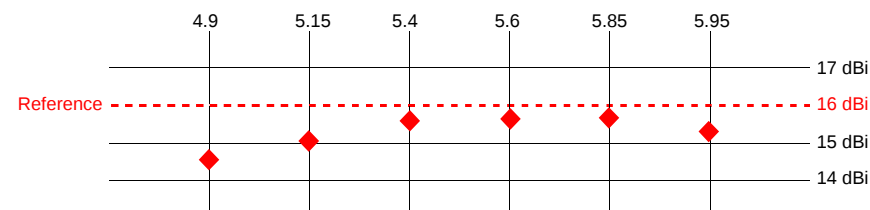
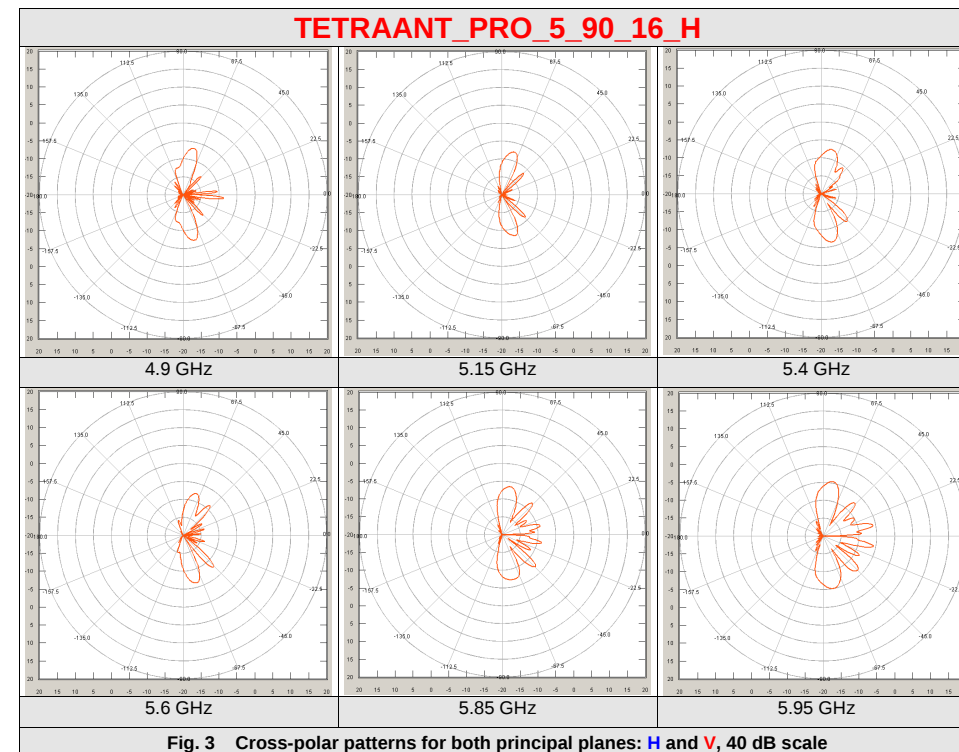
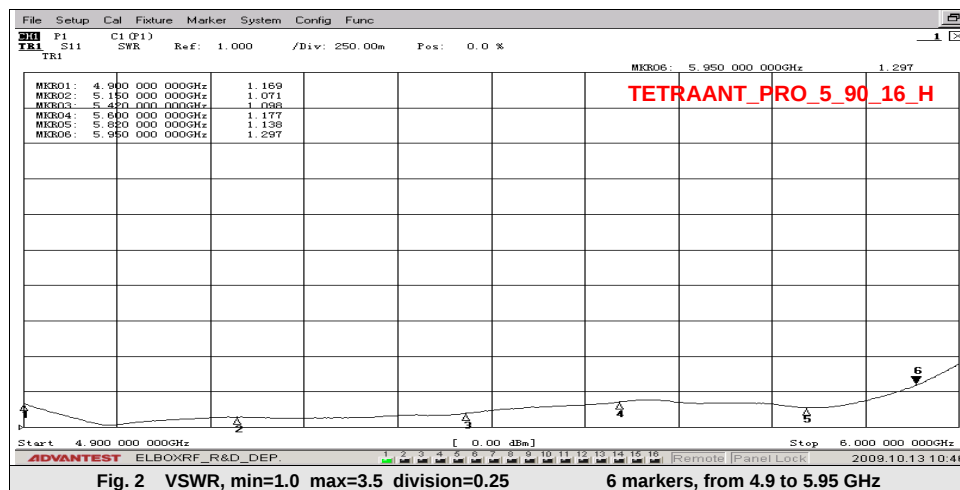
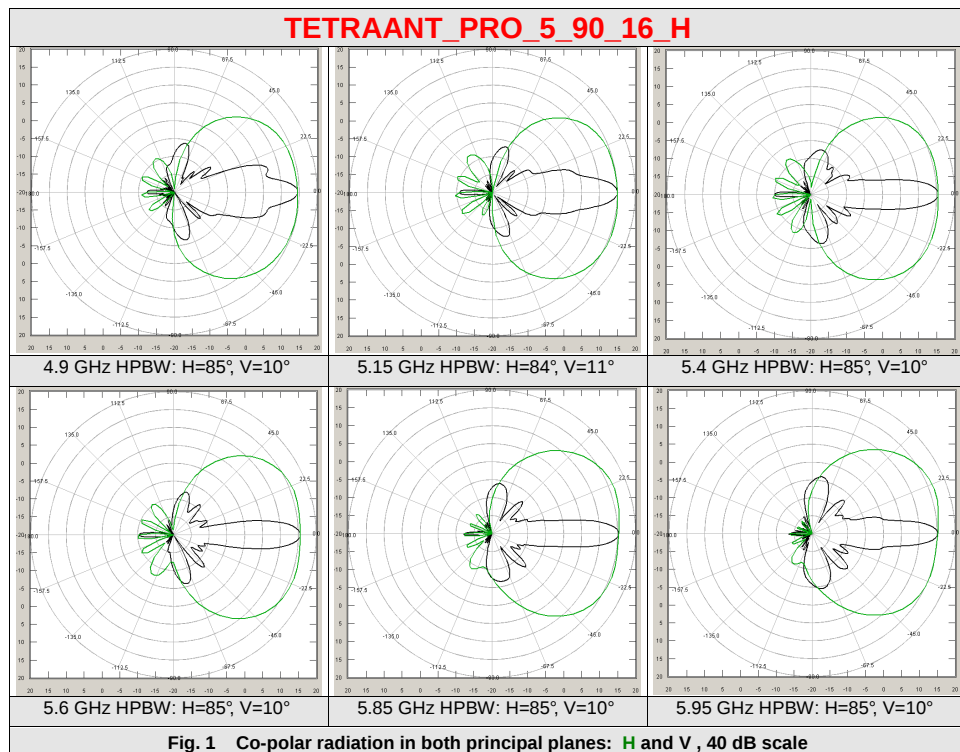


Fig. 4 Realized Gain Flatness - measurement









All specifications presented here are subject to change without notice.
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