

Document No. Curitel _PN-218_Summary20060320A	Date Mar .20, 2006
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## ELECTRICAL PERFORMANCE REPORT

### PN-218 DCS/PCS ANTENNA

PREPARED BY  
**CENTURION ELECTRONICS  
SHANGHAI, LTD.**

Mar. 2006

General Information			
Customer	Curitel		
Location	Korea		
Frequency Band, MHz	DCS(824~894), PCS(1850~1990)		
Antenna Type:	Retractable		
Input Connection:	Screw in		
Prepared by:	GaryYang	File	G:\\CHAMBER\\ Curitel_PN-218_Summary20060320Adoc
Comments: Two kinds antennas were used in this measurement, Nature color resin painted antenna and Black color resin painted antenna, matching circuit as below.			

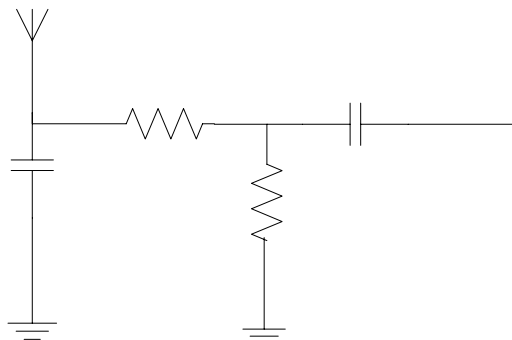
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## 1. Matching circuit

In this measurement, the following matching circuit is used.



Matching circuit

## 2. VSWR

Electrical Performance Summary: VSWR			
Specification:	Unspecified		
Measurement Configuration	Data		
- Fixture No.: - Free Space	Freq. (MHz)	VSWR	
		Nature	Black
	824	1.5	1.4
	894	1.8	1.8
	1850	2.5	2.8
	1990	2.5	2.4

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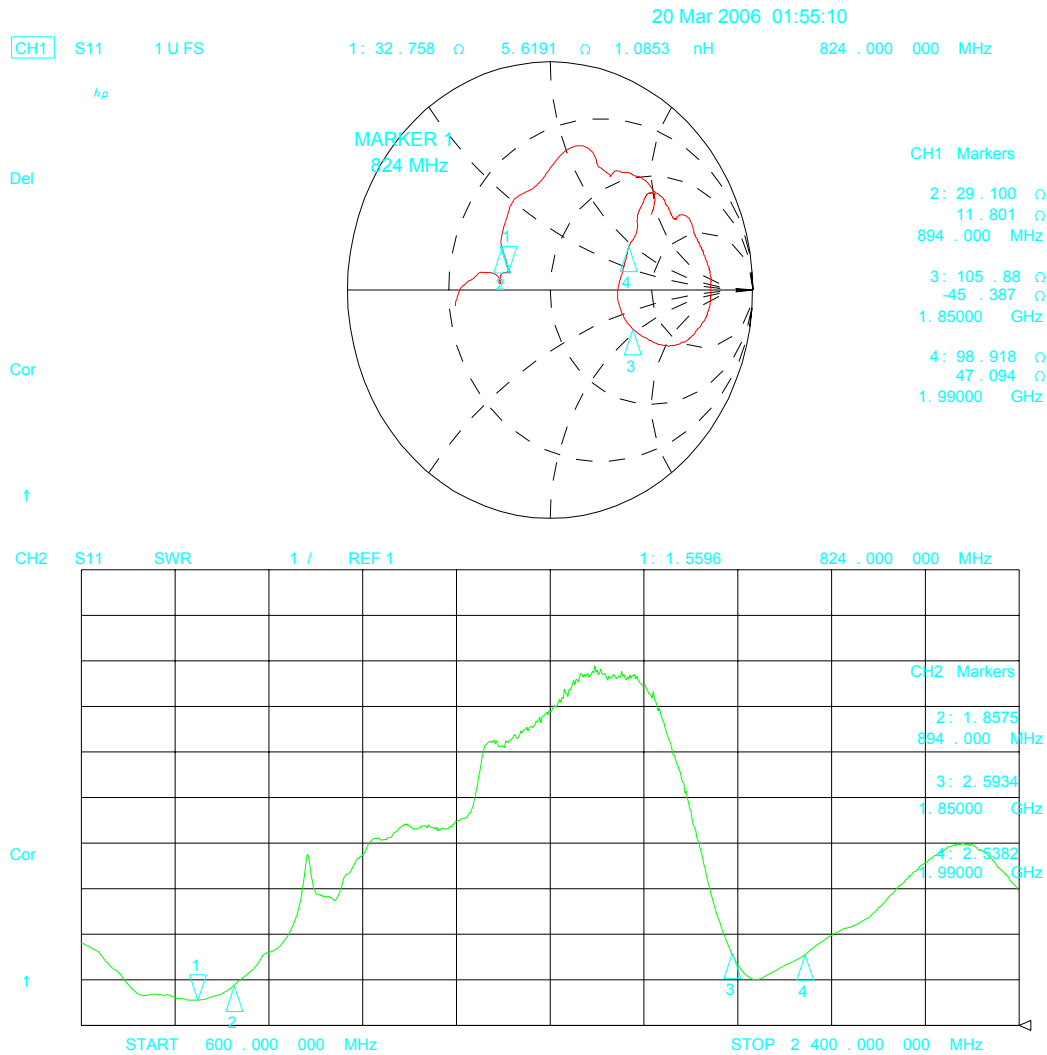
### 3. Gain

Electrical Performance Summary: Average & Peak Gain (dBi)					
Specification:	Unspecified				
Measurement Configuration	Data				
- Fixture No.: - Free Space - <b>Elevation Phi=0 Plane</b> - <b>THETA=0° to 360°</b>	Freq. (MHz)	Peak Gain (dBi)		Average Gain (dBi)	
		Nature	Black	Nature	Black
	824	-0.0	0.0	-3.5	-3.5
	849	0.3	0.4	-3.4	-3.3
	869	-0.1	-0.1	-3.8	-3.8
	894	0.2	0.2	-3.2	-3.3
	1850	0.4	0.1	-4.3	-4.5
	1910	1.2	1.1	-3.4	-3.3
	1930	1.5	1.4	-3.0	-3.0
	1990	2.1	1.8	-2.6	-2.6
- Fixture No.: - Free Space - <b>Elevation Phi=90 Plane</b> - <b>THETA=0° to 360°</b> -	Freq. (MHz)				
	824	0.2	0.2	-3.8	-3.8
	849	0.2	0.1	-3.7	-3.8
	869	-0.2	-0.2	-4.1	-4.1
	894	0.6	0.6	-3.4	-3.4
	1850	-1.5	-1.8	-6.1	-6.3
	1910	-0.4	-0.5	-5.0	-5.1
	1930	0.1	-0.1	-4.5	-4.6
	1990	0.3	0.3	-4.5	-4.6
- Fixture No.: - Free Space: - <b>Azimuth Plane</b> - <b>THETA=0° to 360°</b> -	Freq. (MHz)				
	824	0.6	0.6	-1.1	-1.1
	849	0.6	0.5	-0.9	-1.0
	869	0.3	0.2	-1.2	-1.3
	894	0.9	0.8	-0.5	-0.5
	1850	-0.2	-0.4	-4.1	-4.3
	1910	1.5	1.4	-2.6	-2.7
	1930	1.7	1.6	-2.5	-2.6
	1990	2.0	1.8	-2.5	-2.6

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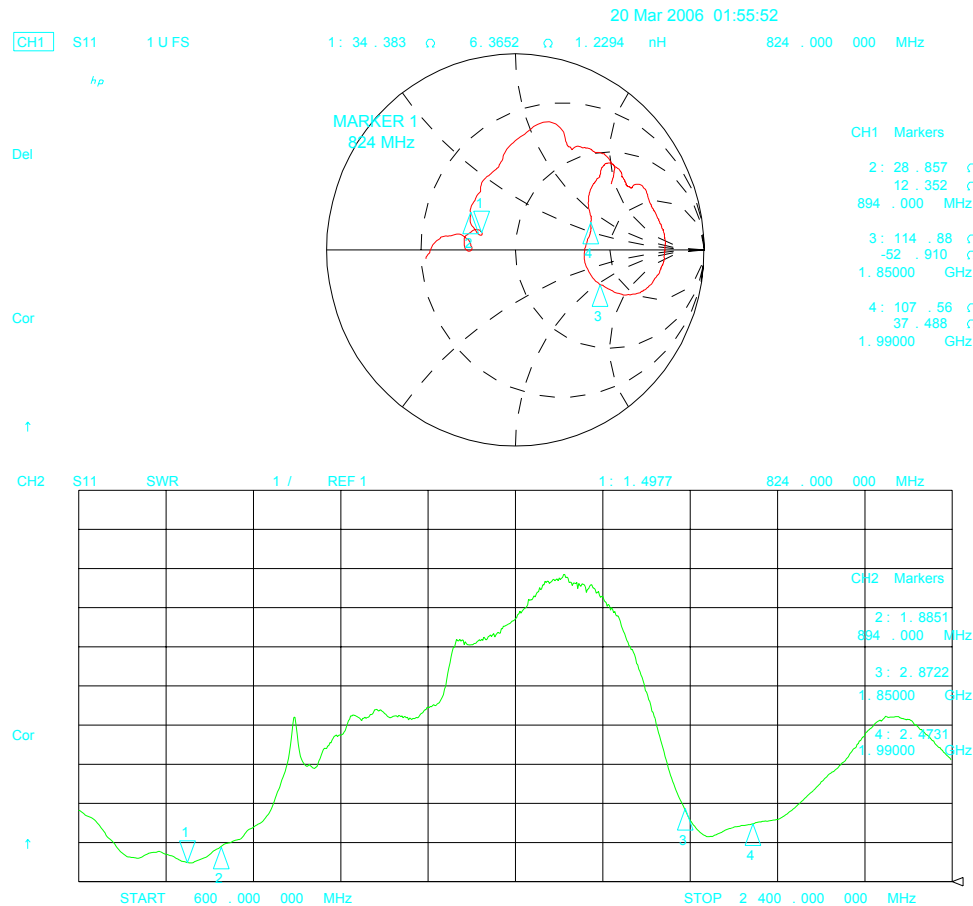
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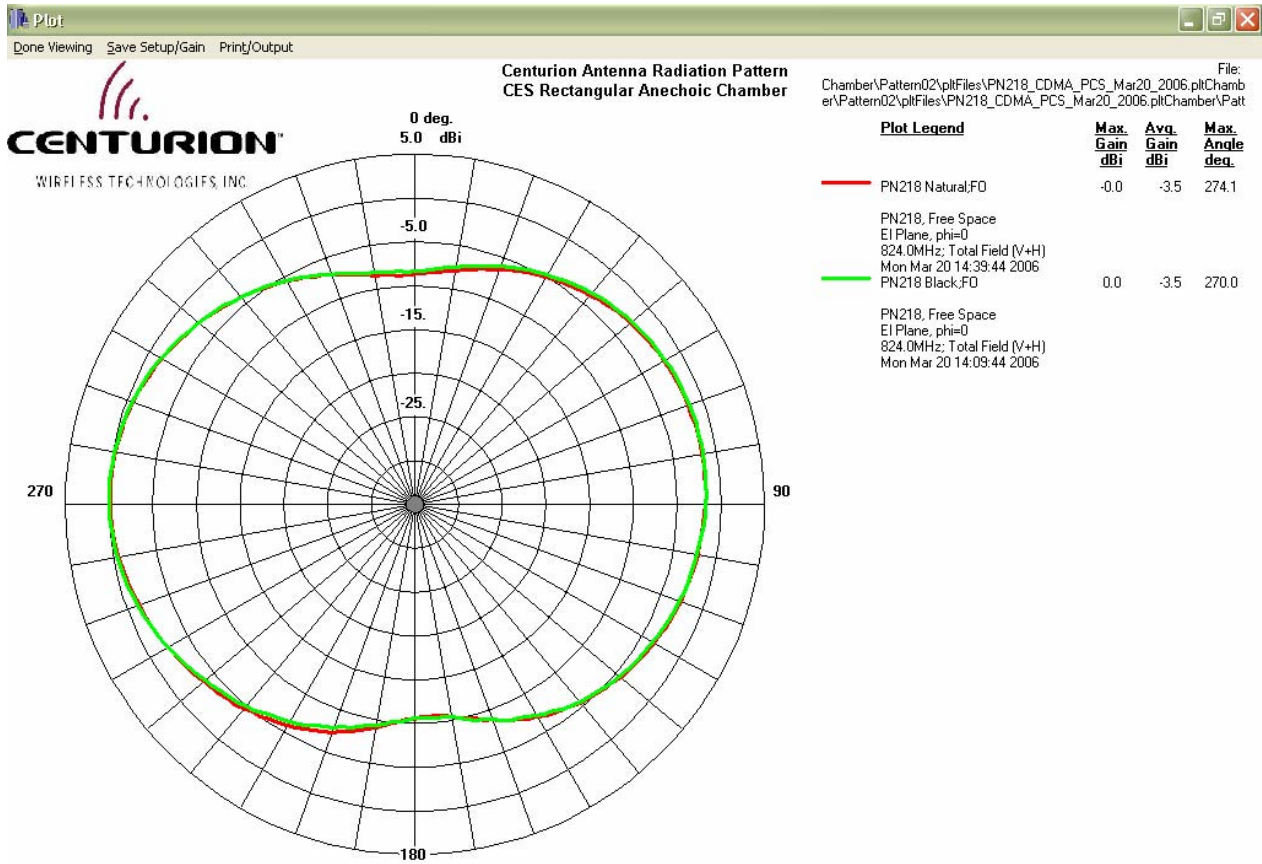
**Return loss vs. frequency (Flip Open)**

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**Return loss vs. frequency (Flip Close)**

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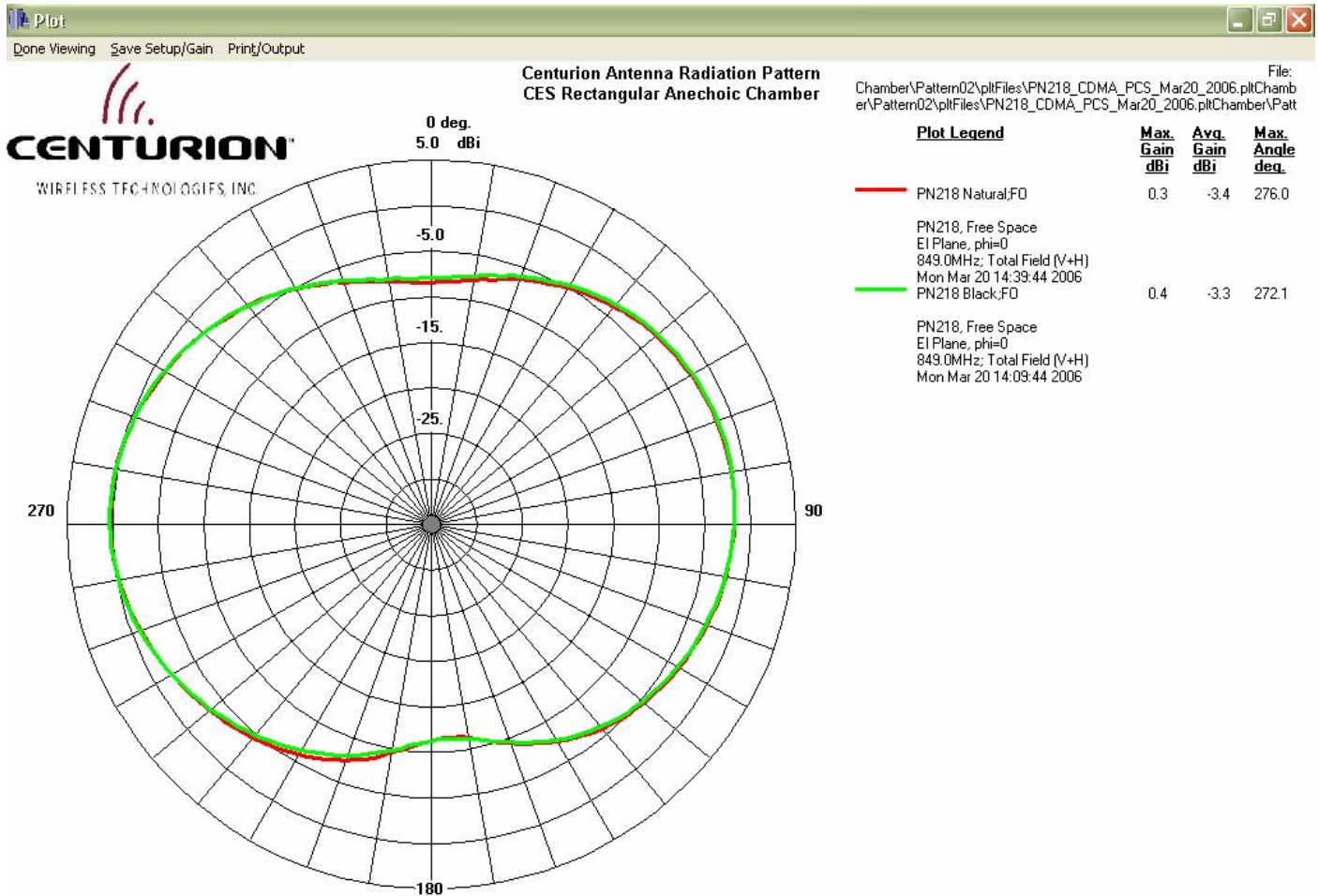
**Extended and open position(824Mhz)-EL0**

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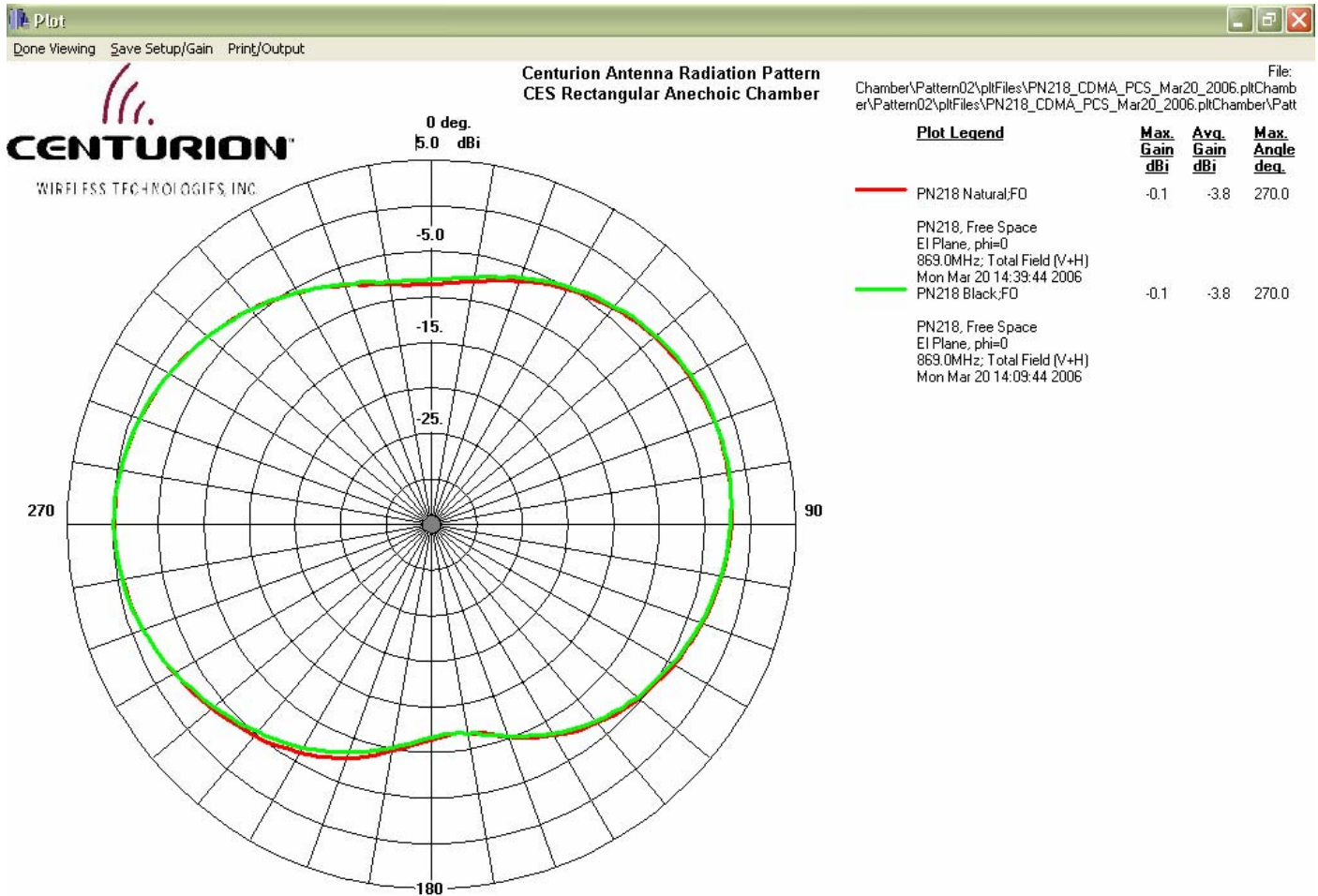
**Extended and open position(849Mhz)-EL0**

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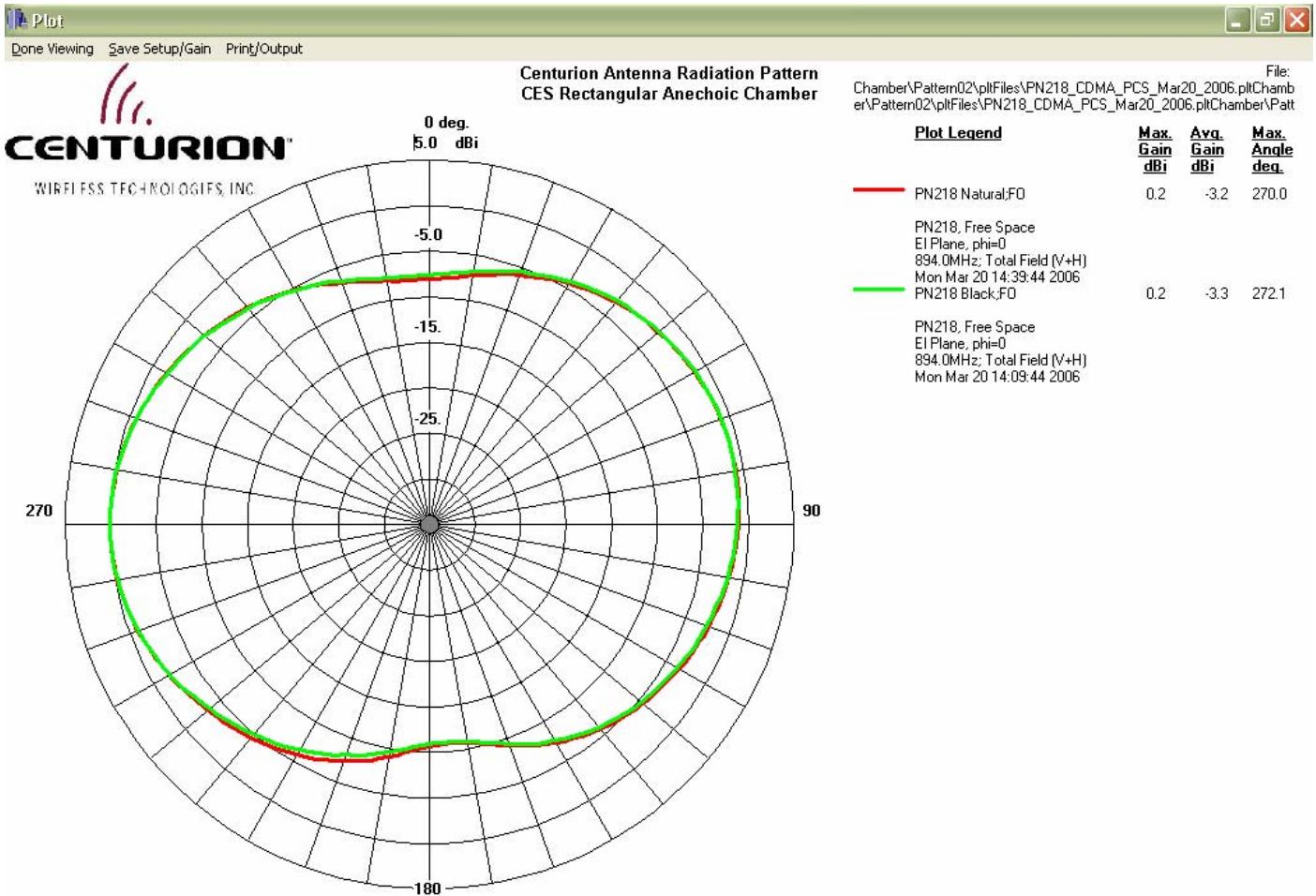
**Extended and open position(869Mhz)-EL0**

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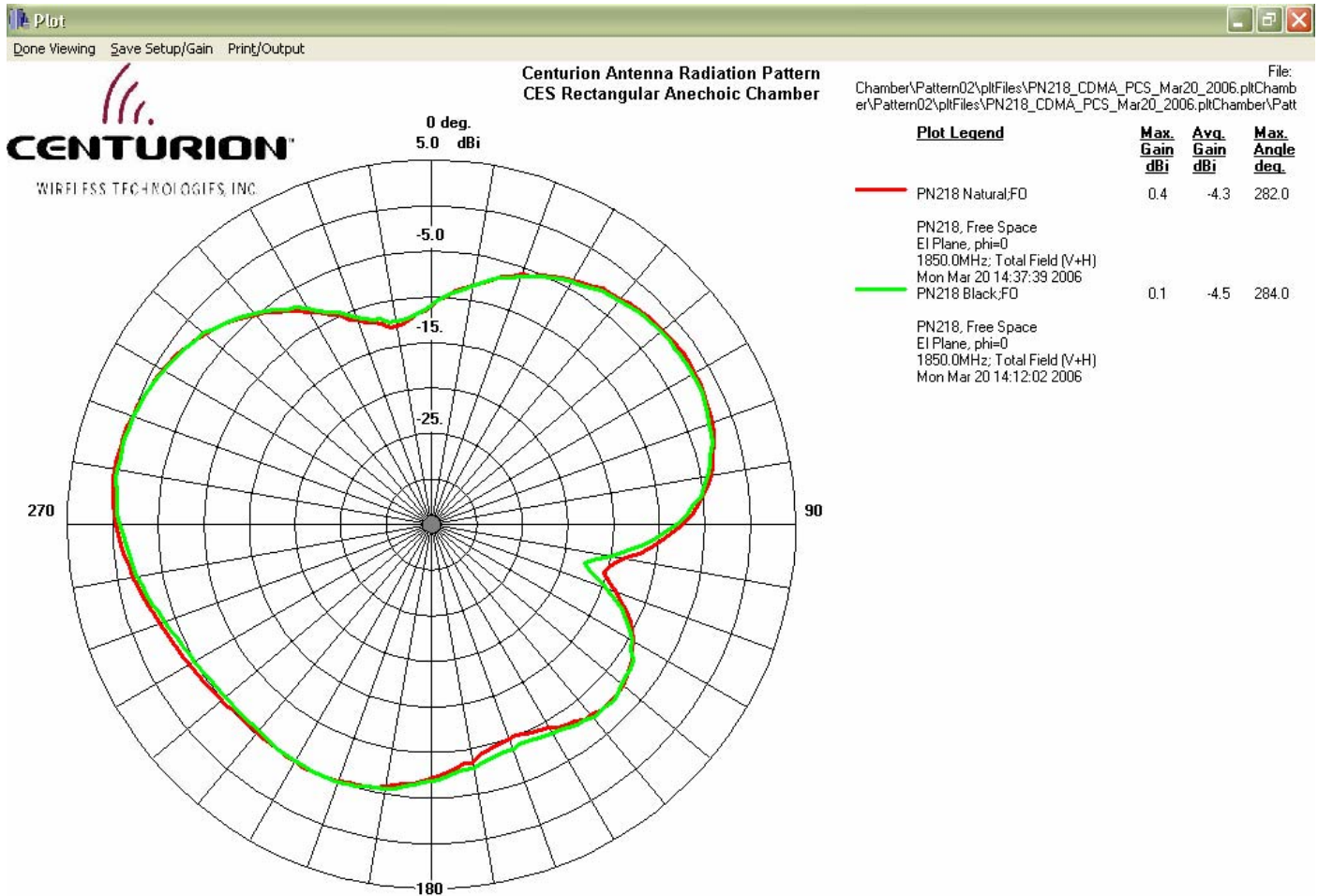
**Extended and open position(894Mhz)-EL0**

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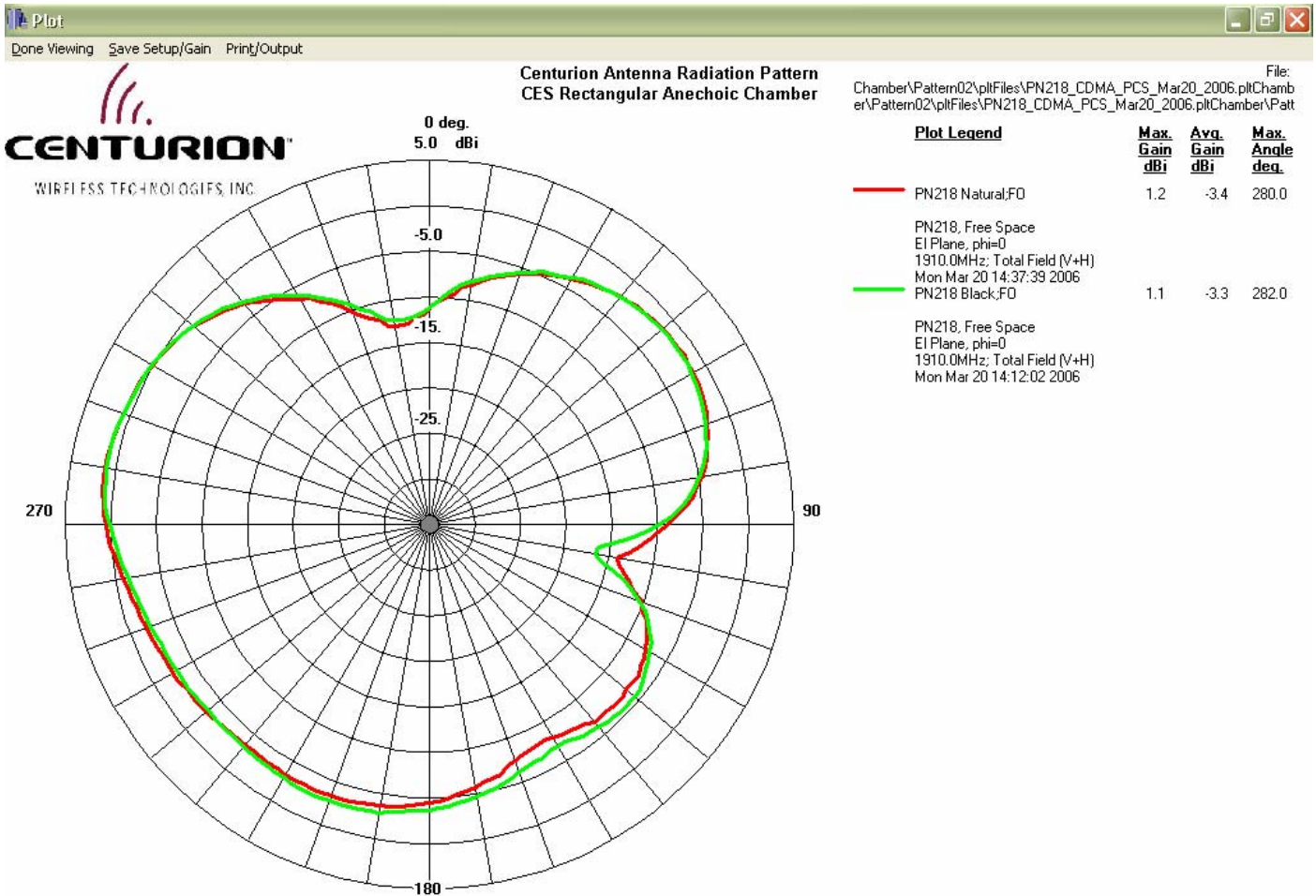
**Extended and open position(1850Mhz)-EL0**

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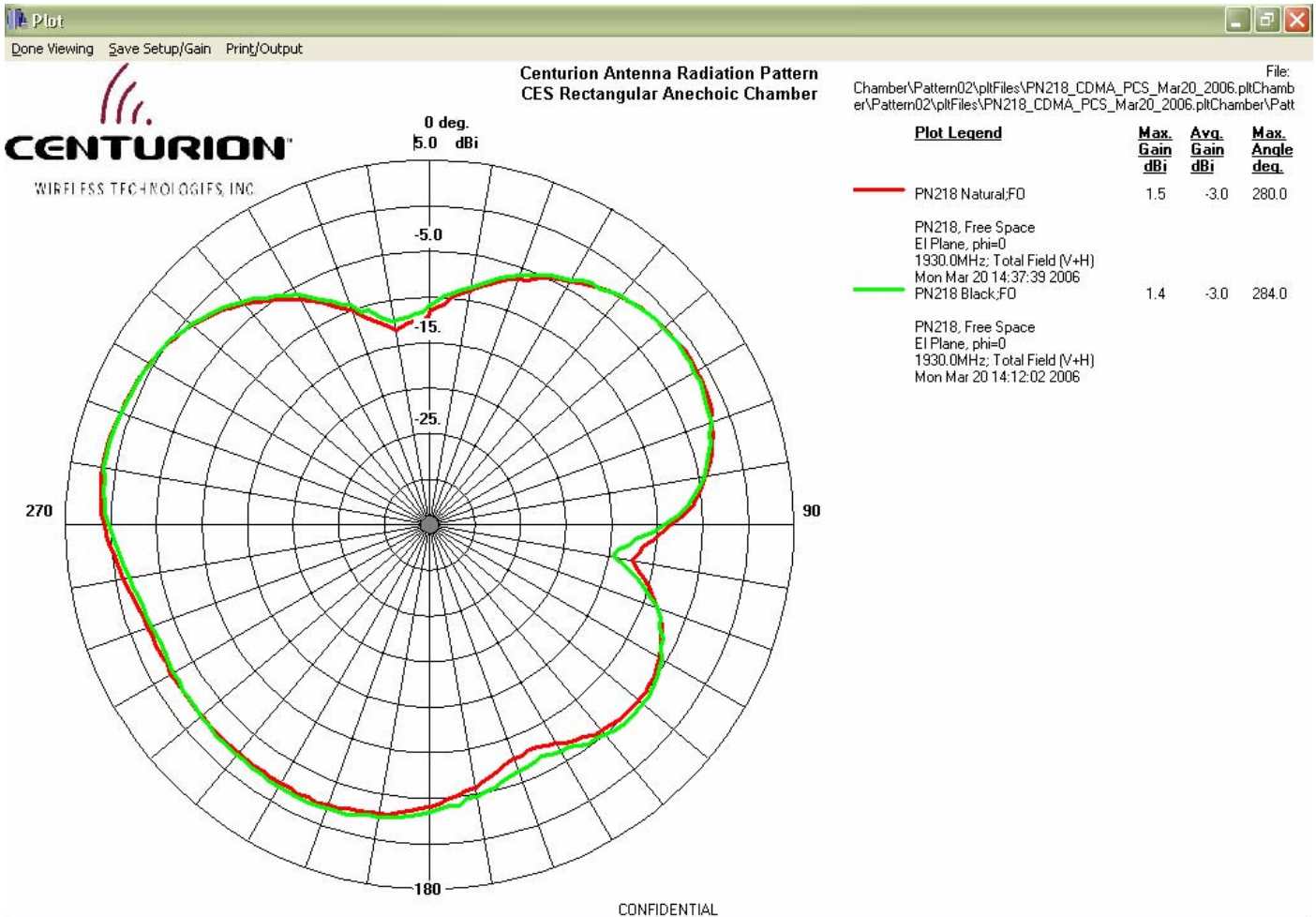
**Extended and open position(1910Mhz)-EL0**

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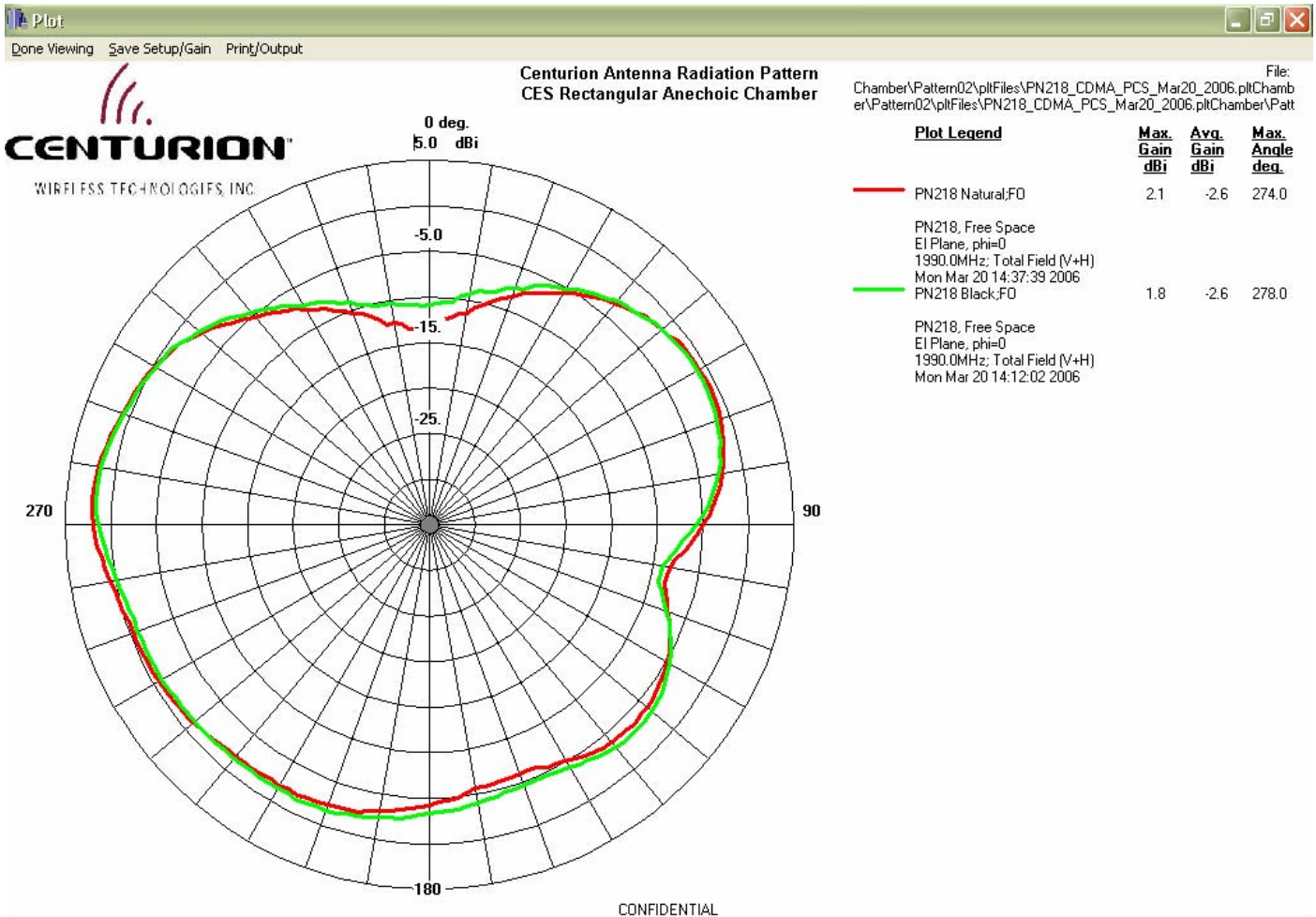
**Extended and open position(1930Mhz)-EL0**

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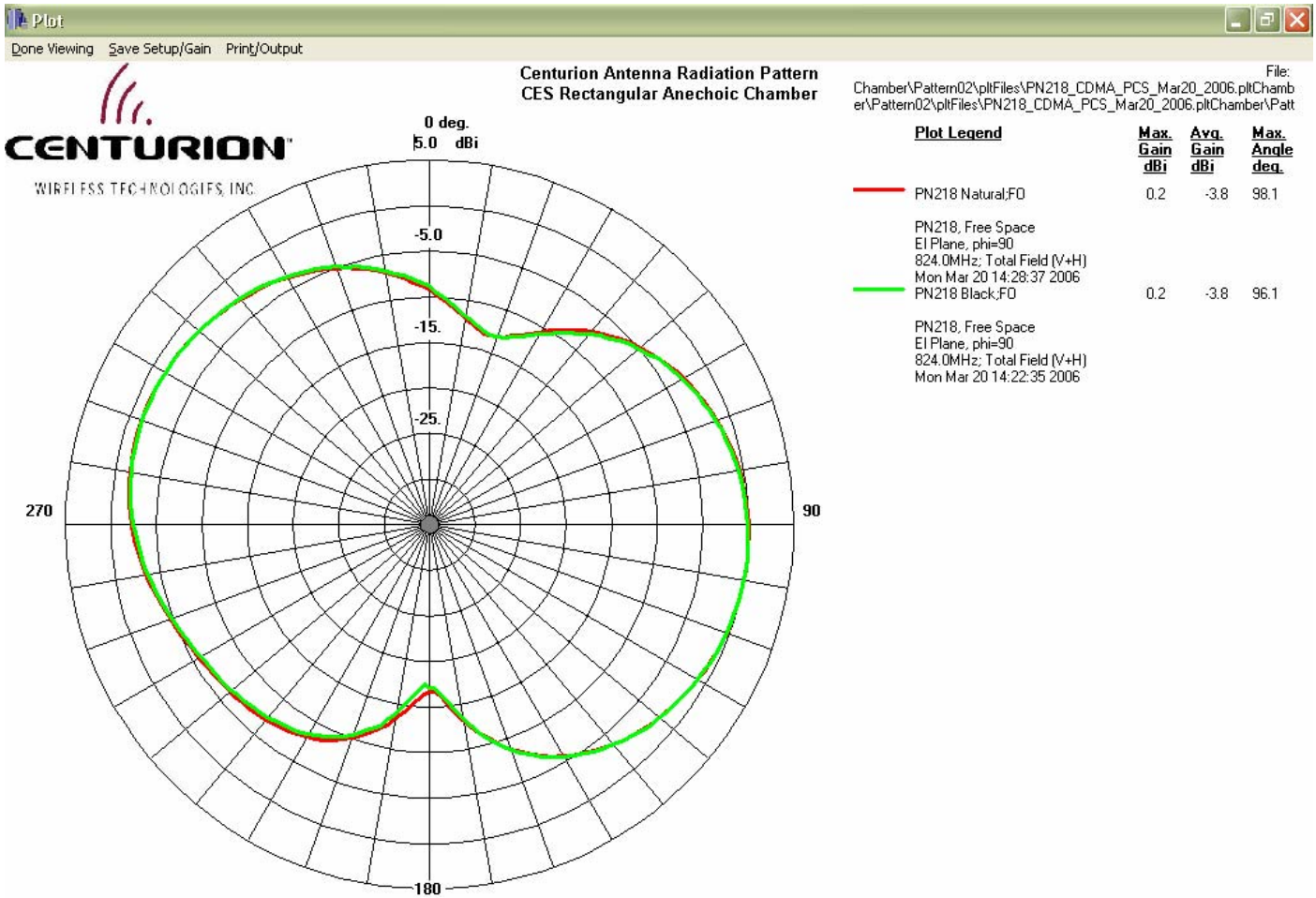
**Extended and open position(1990Mhz)-EL0**

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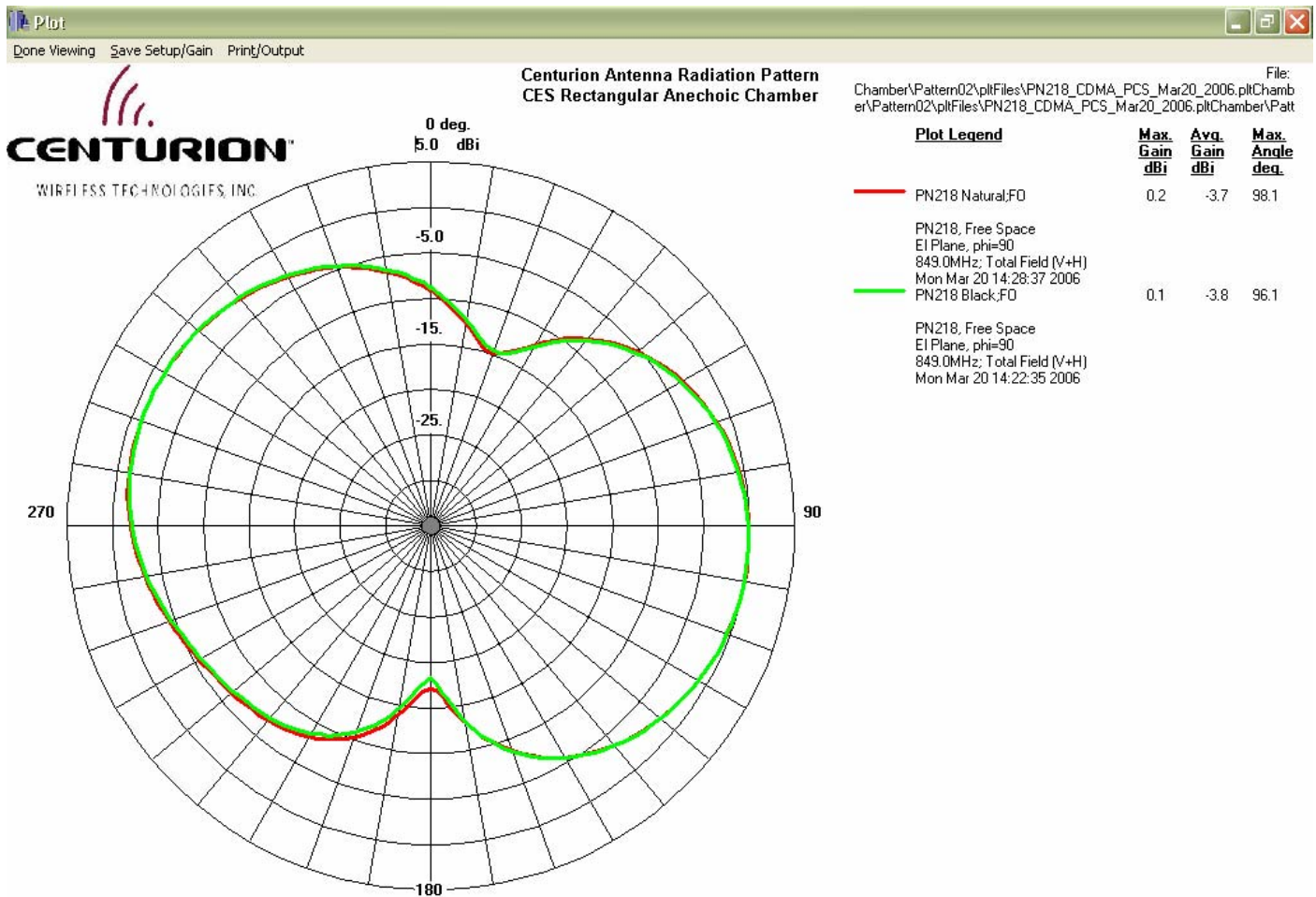
**Extended and open position(824Mhz)-EL90**

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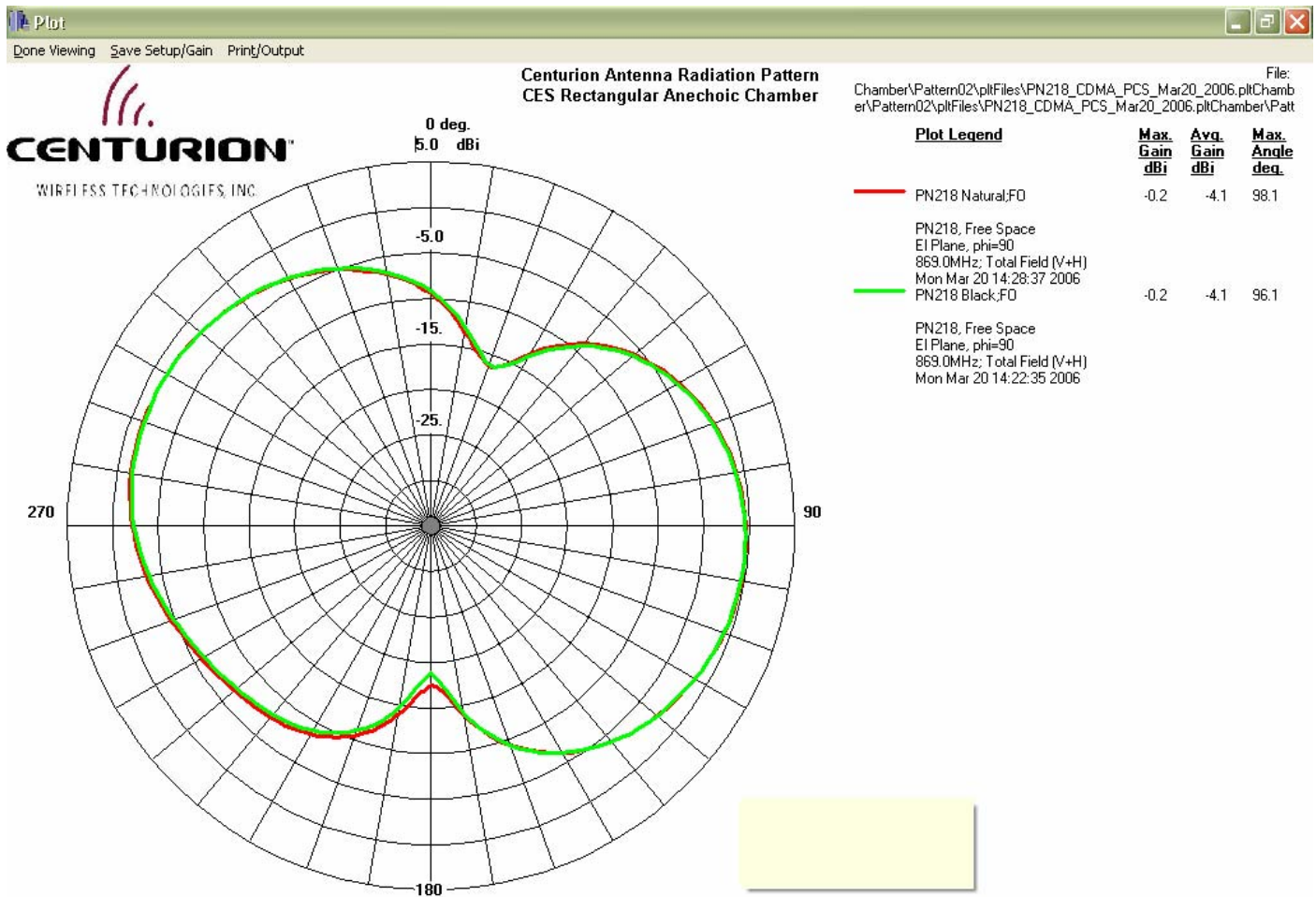
**Extended and open position(849Mhz)-EL90**

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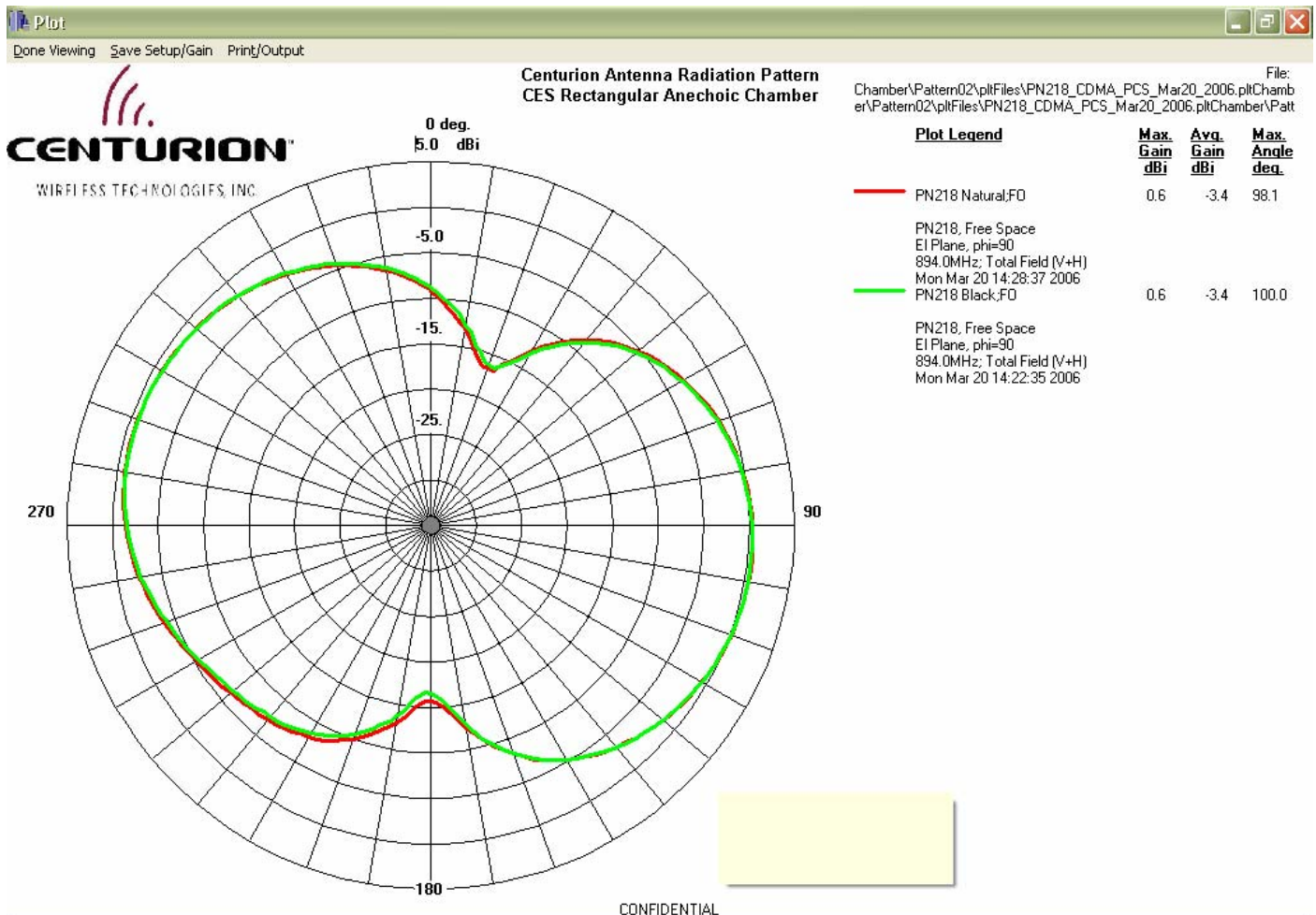
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**Extended and open position(869Mhz)-EL90**

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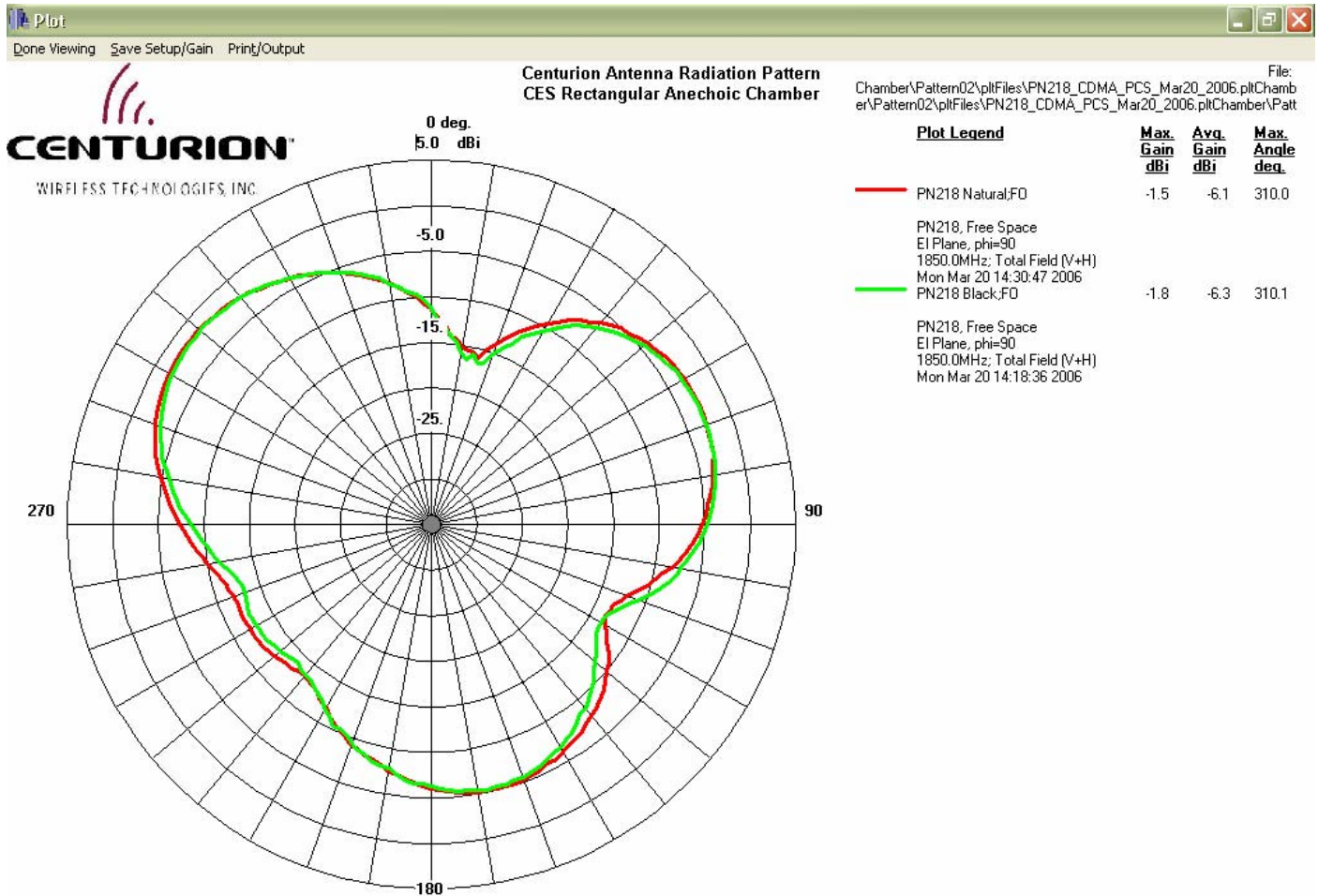
**Extended and open position(894Mhz)-EL90**

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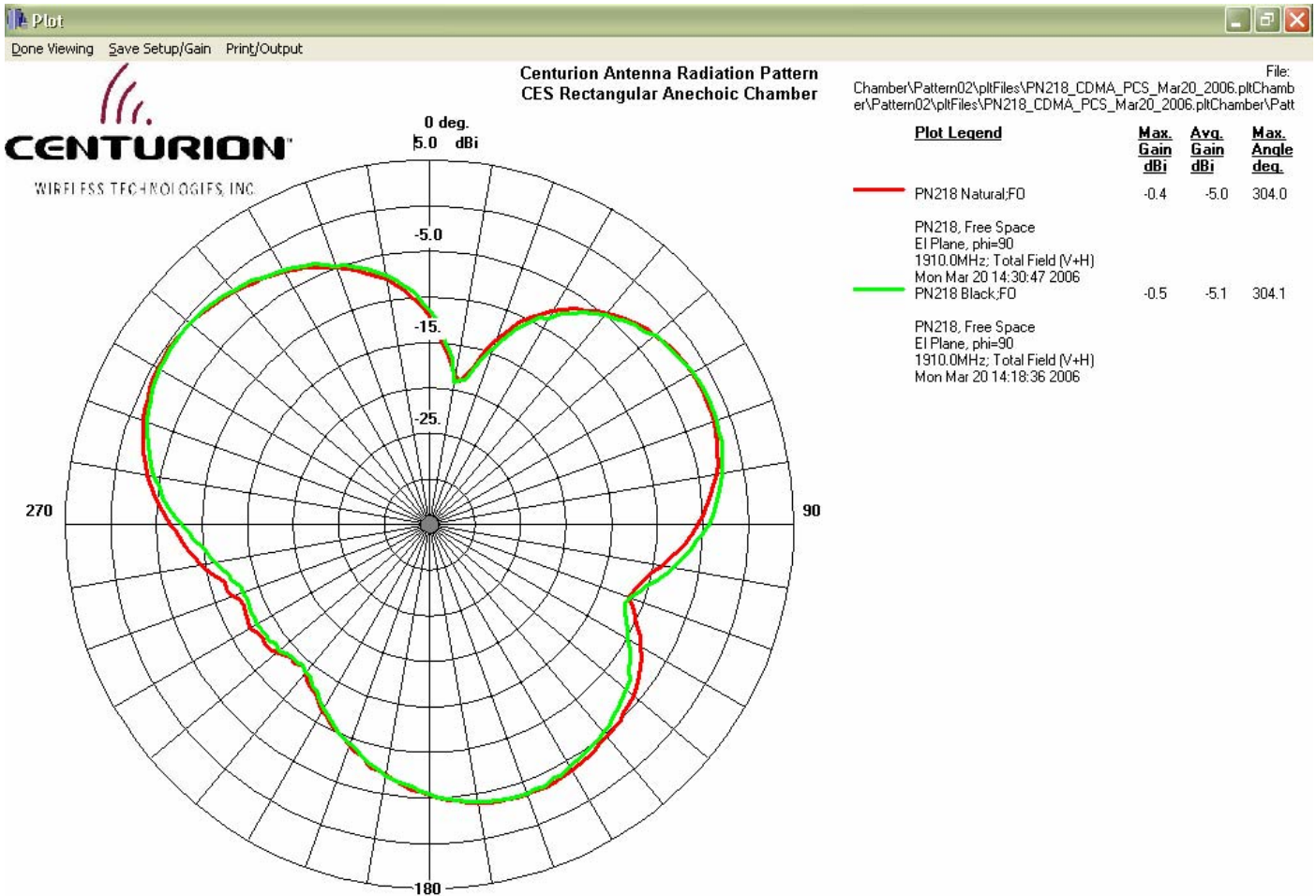
**Extended and open position(1850Mhz)-EL90**

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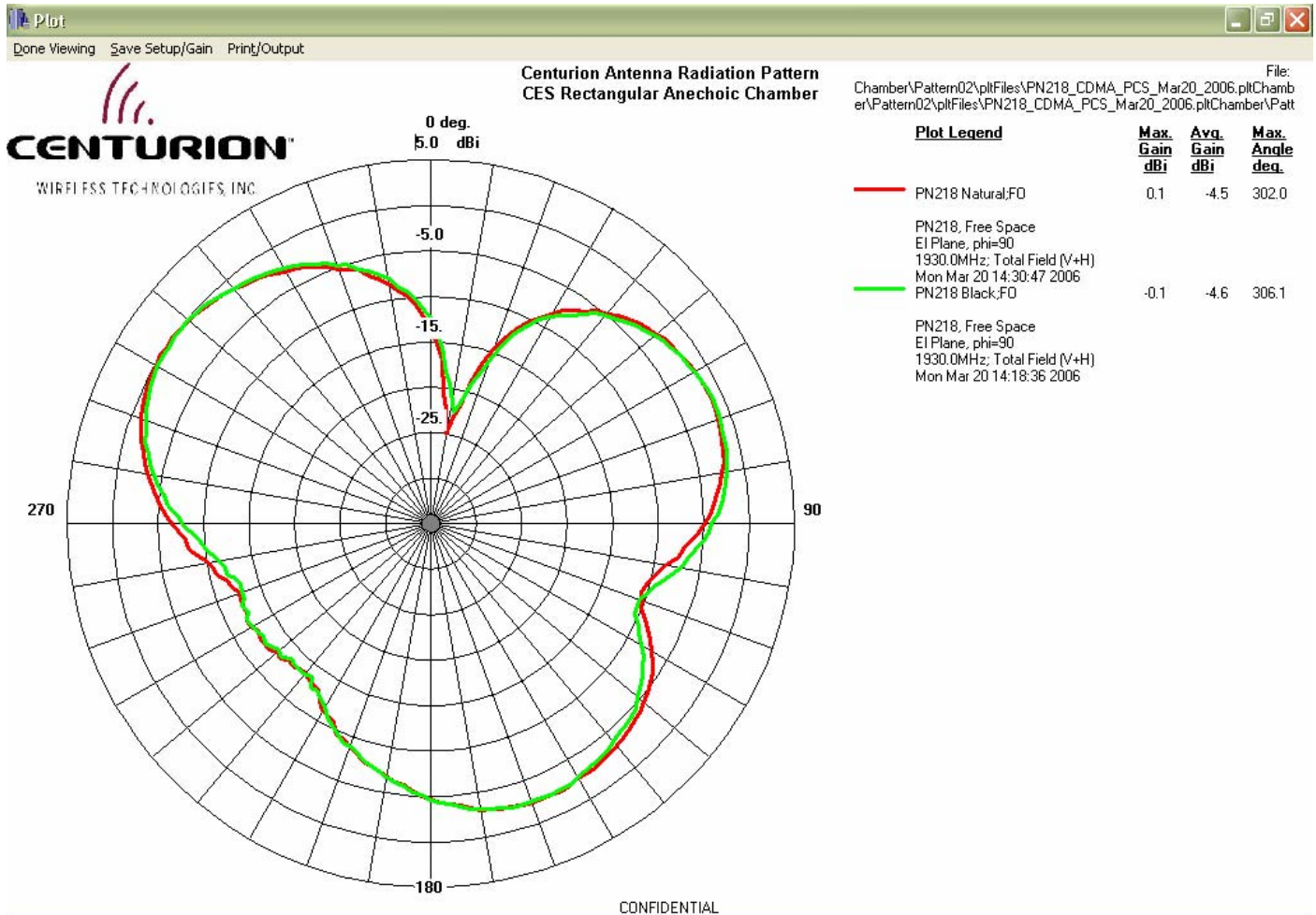
**Extended and open position(1910Mhz)-EL90**

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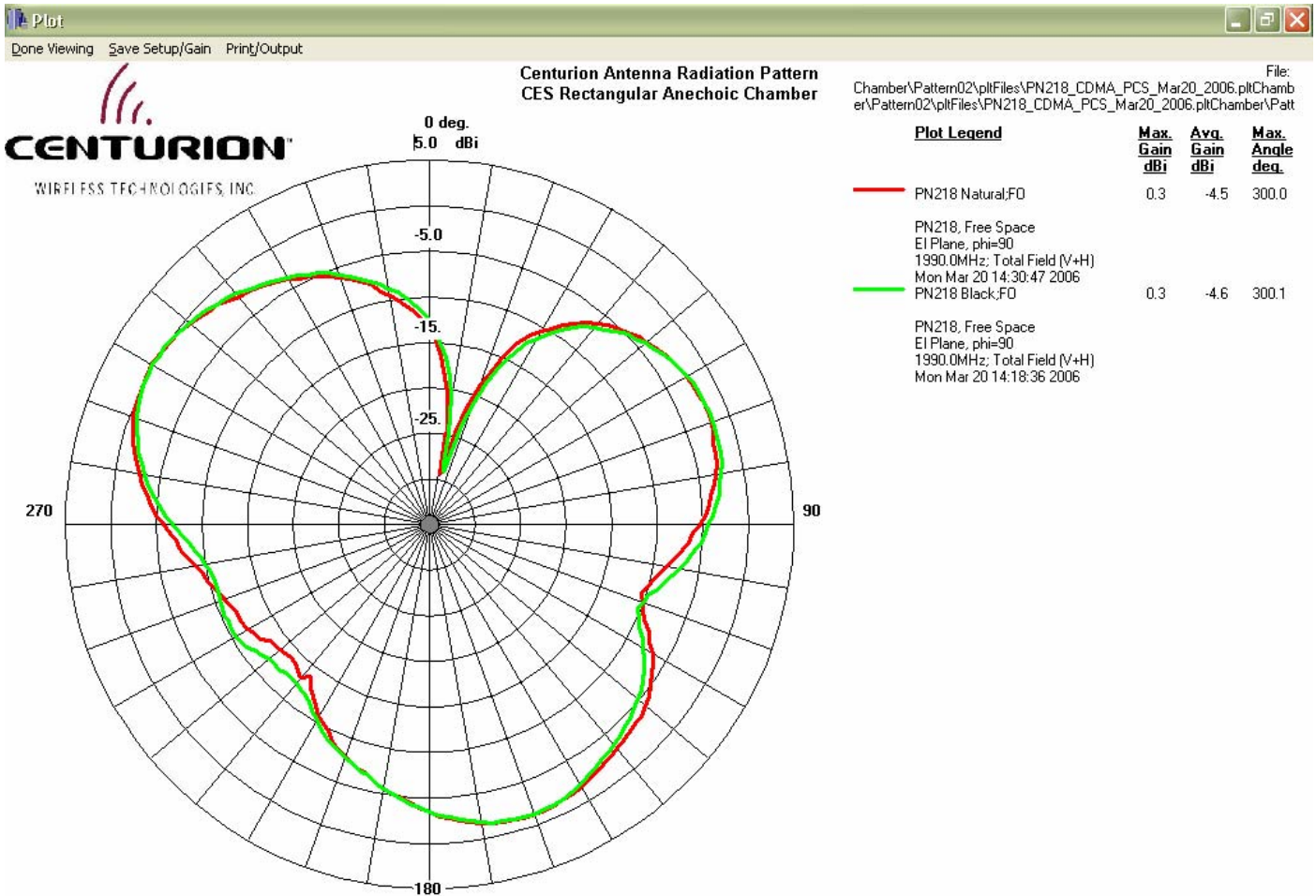
**Extended and open position(1930Mhz)-EL90**

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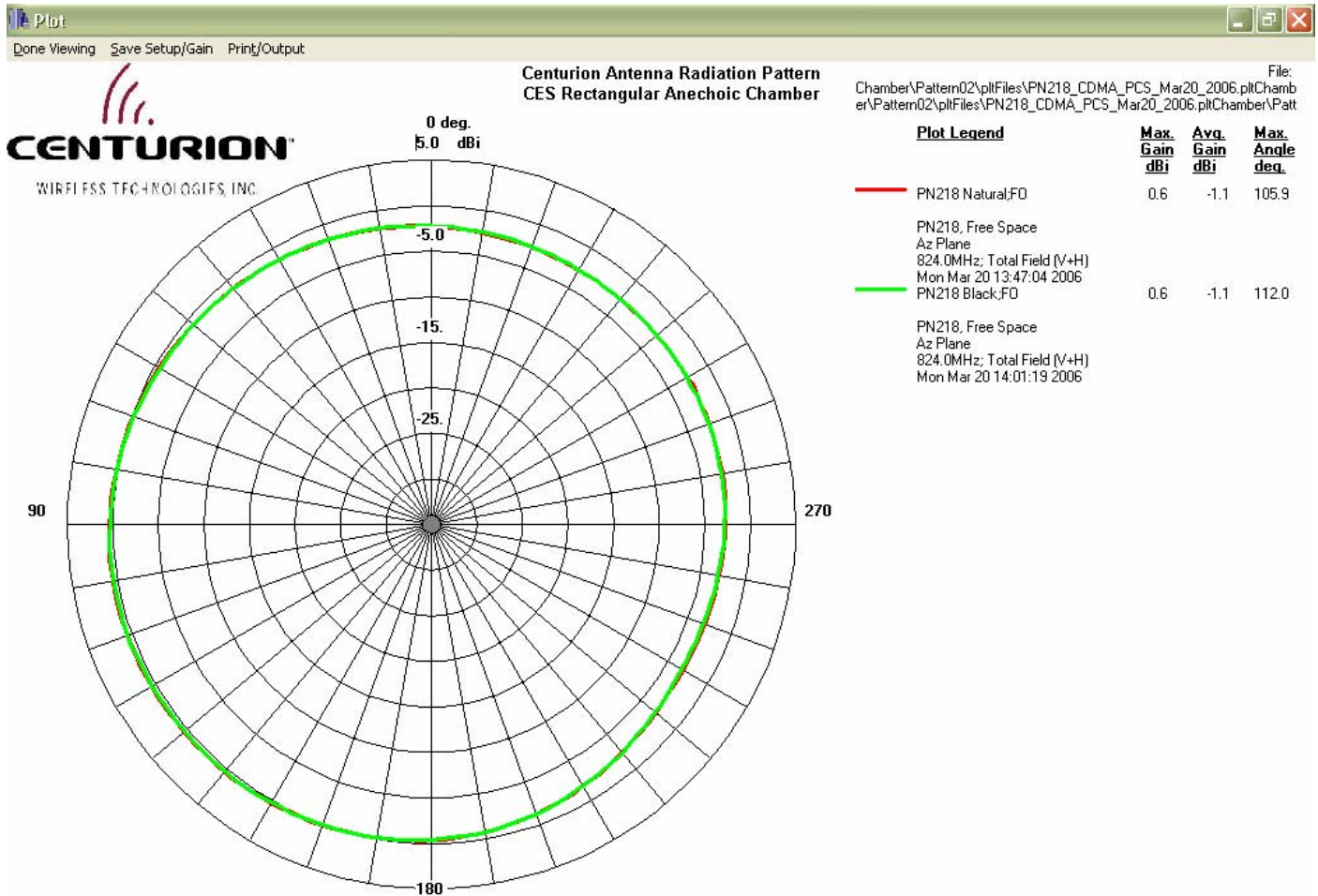
**Extended and open position(1990Mhz)-EL90**

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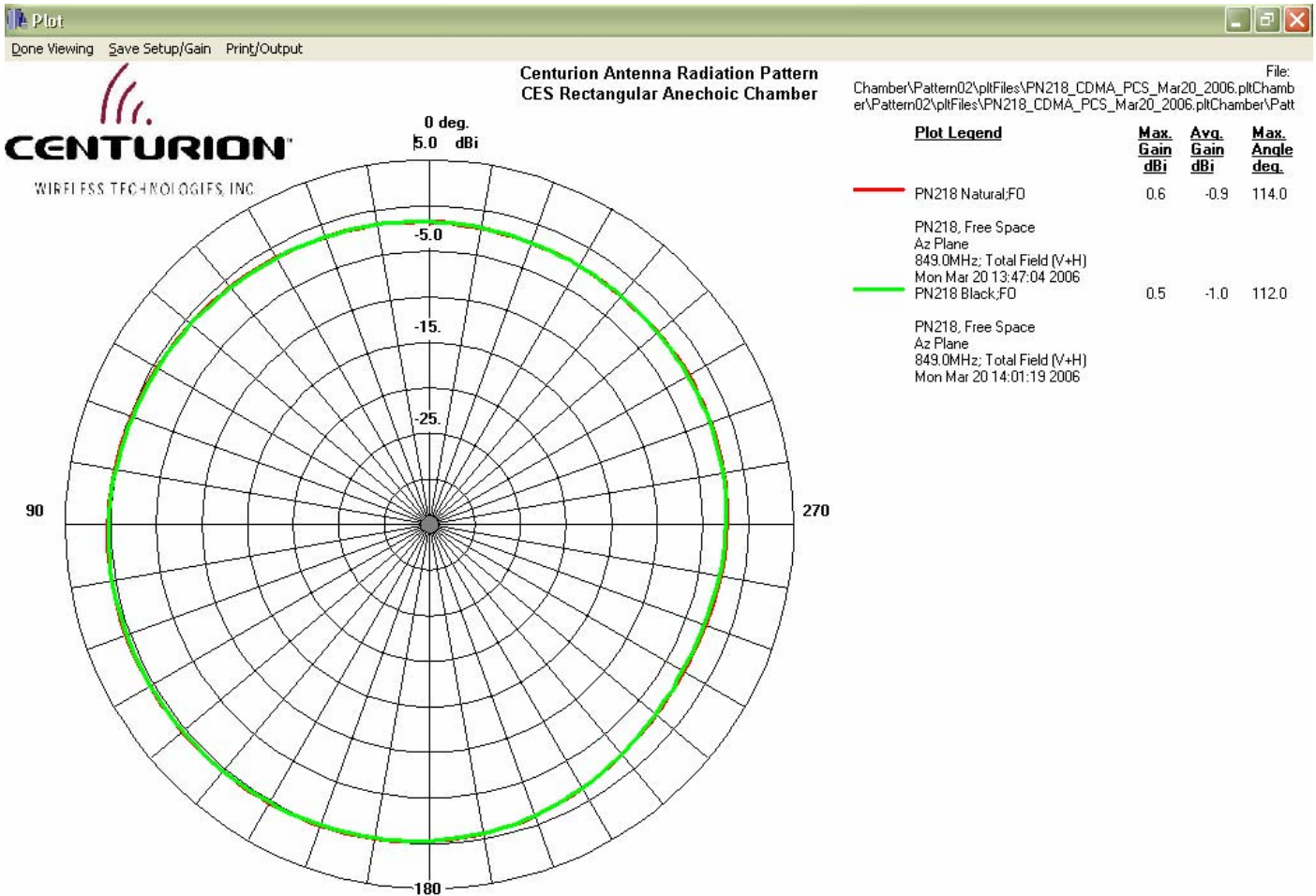
**Extended and open position(824Mhz)-AZ**

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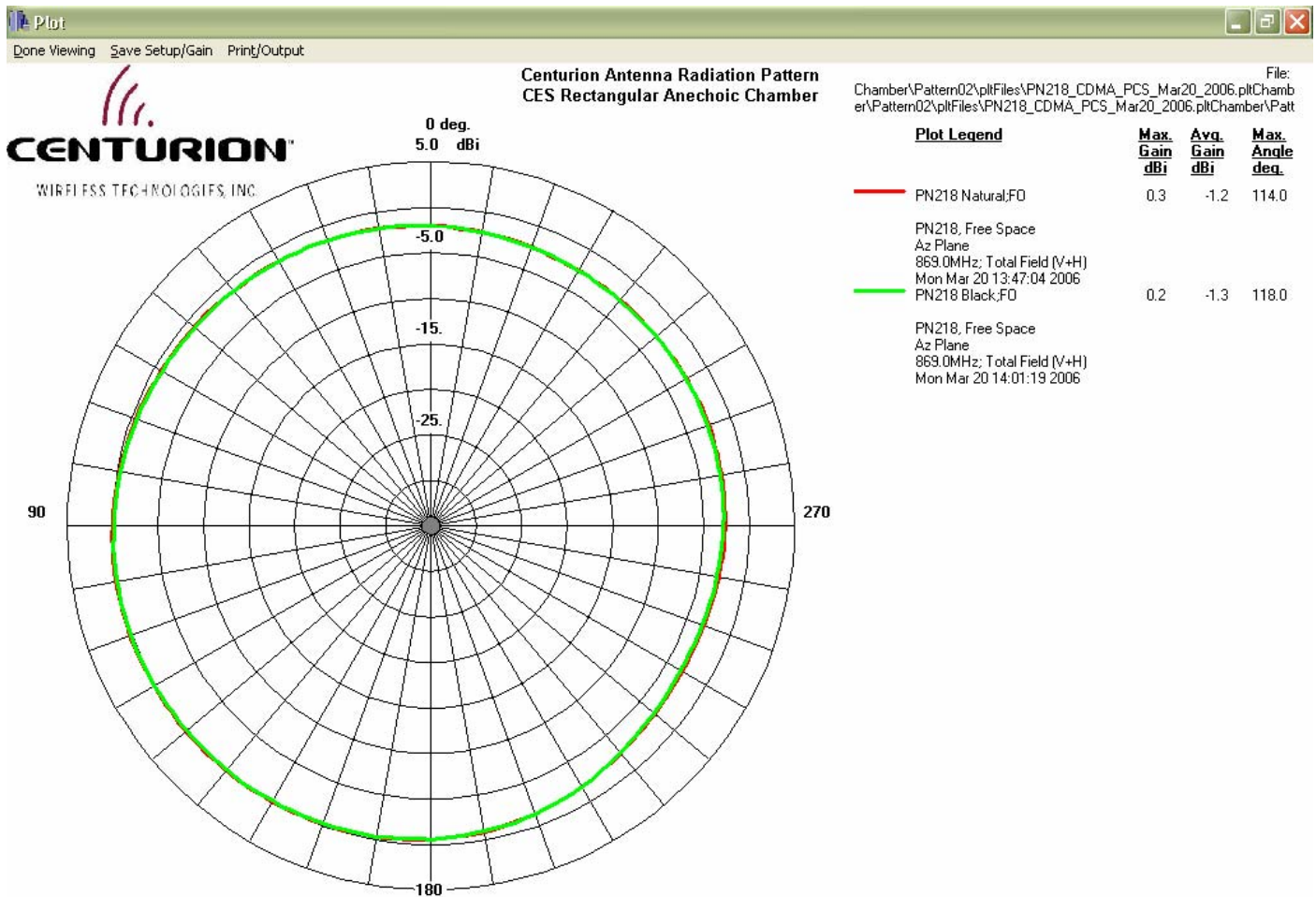
**Extended and open position(849Mhz)-AZ**

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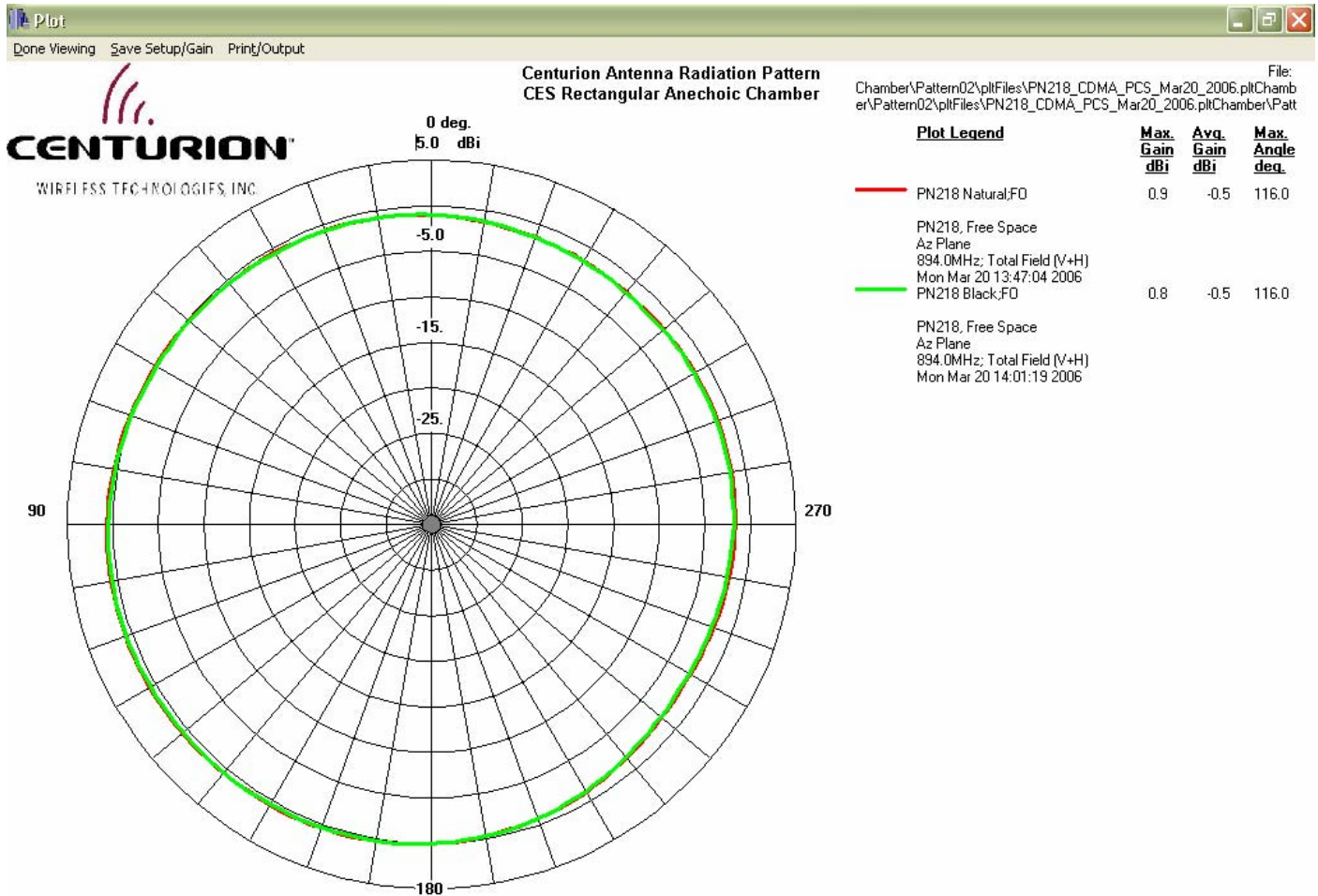
**Extended and open position(869Mhz)-AZ**

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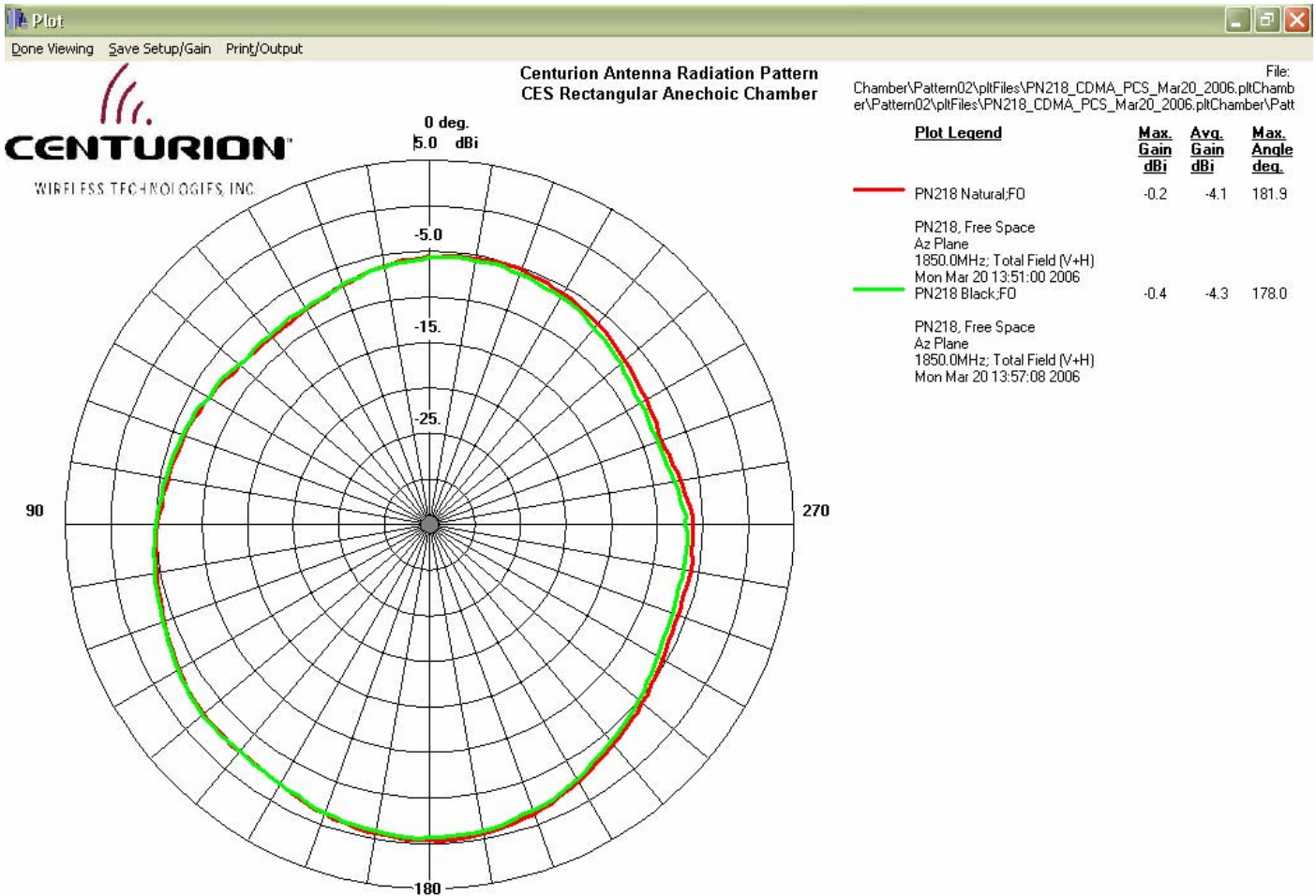
**Extended and open position(894Mhz)-AZ**

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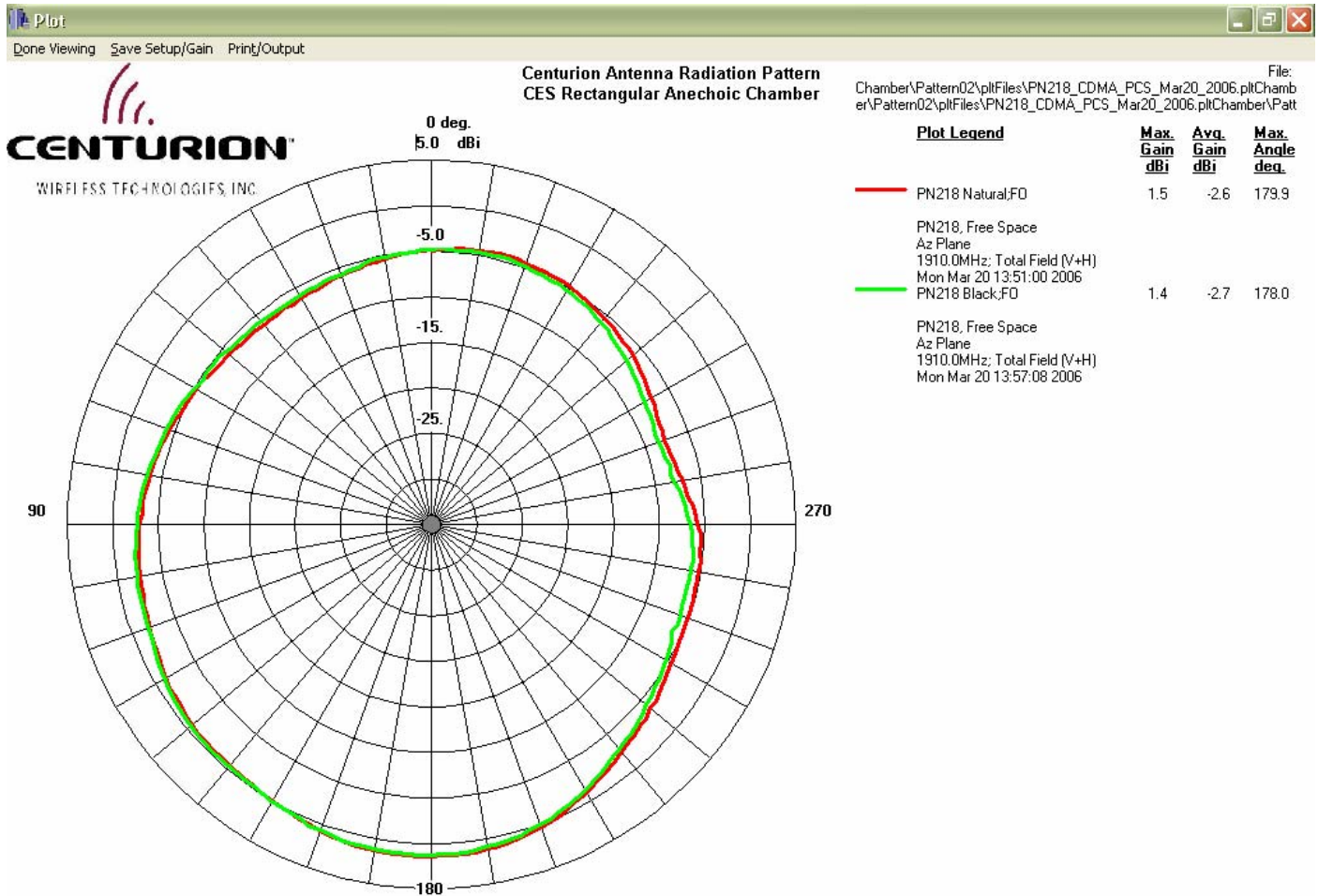
**Extended and open position(1850Mhz)-AZ**

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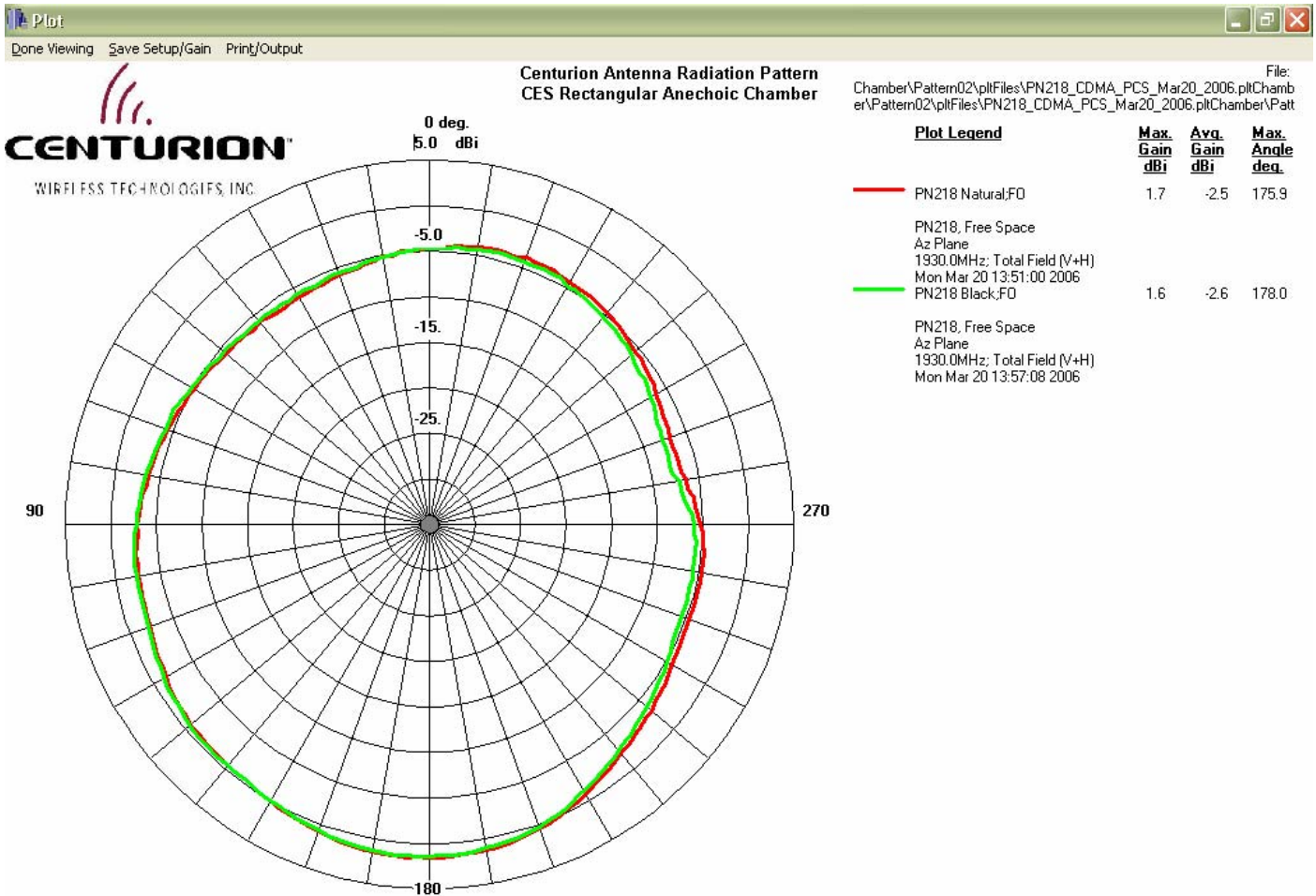
**Extended and open position(1910Mhz)-AZ**

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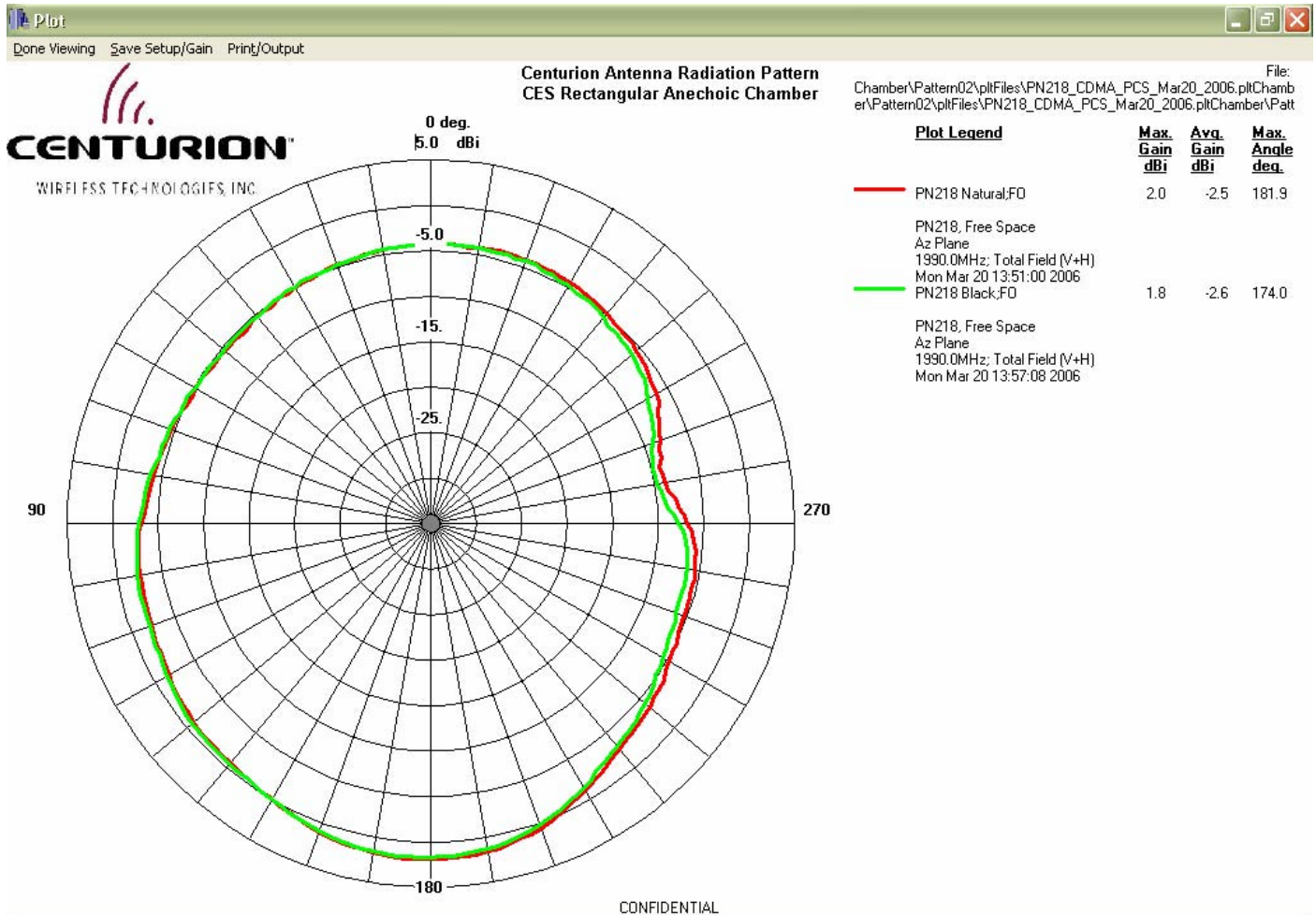
**Extended and open position(1930Mhz)-AZ**

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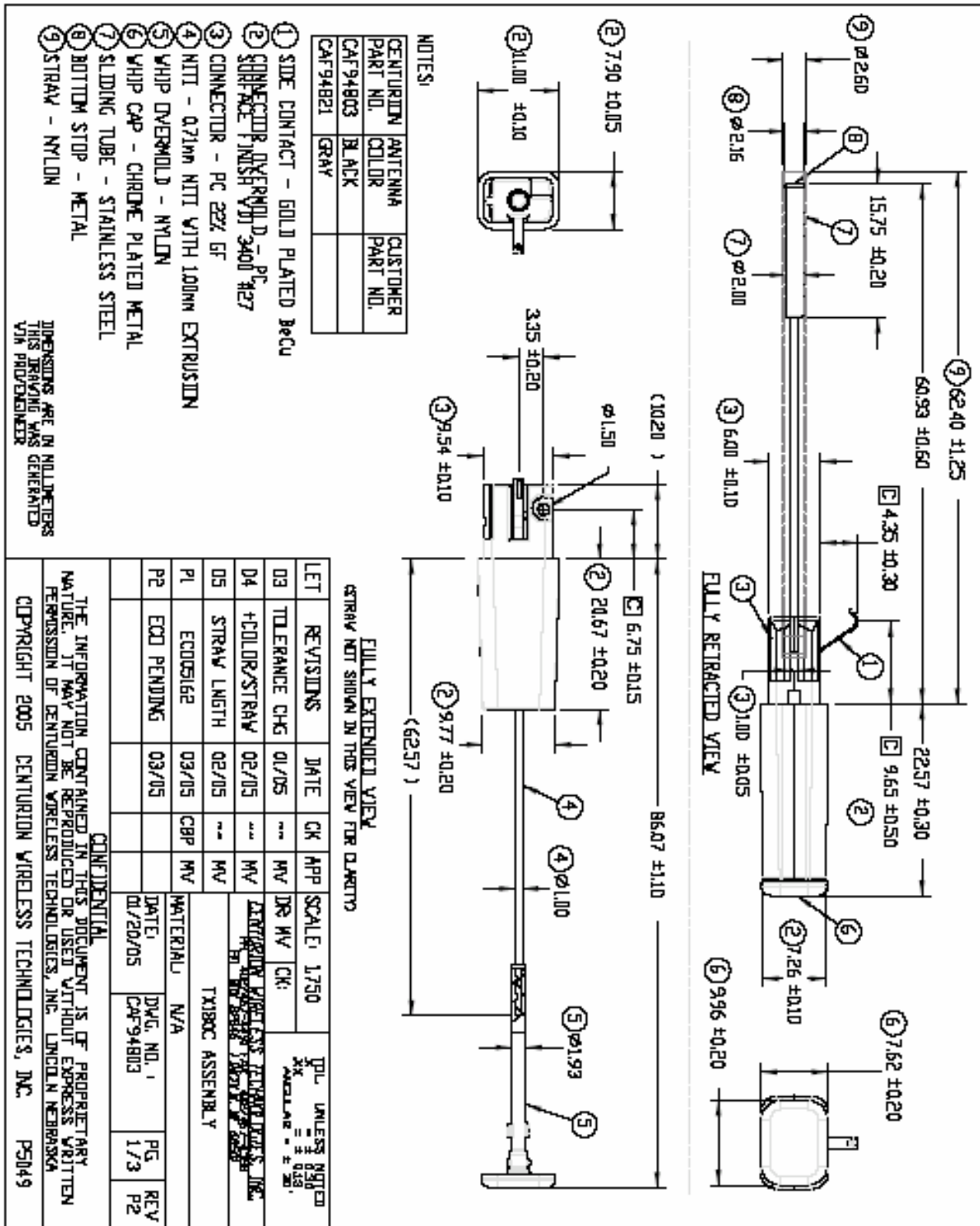
**Extended and open position(1990Mhz)-AZ**

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## 4. Specifications Drawing



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