
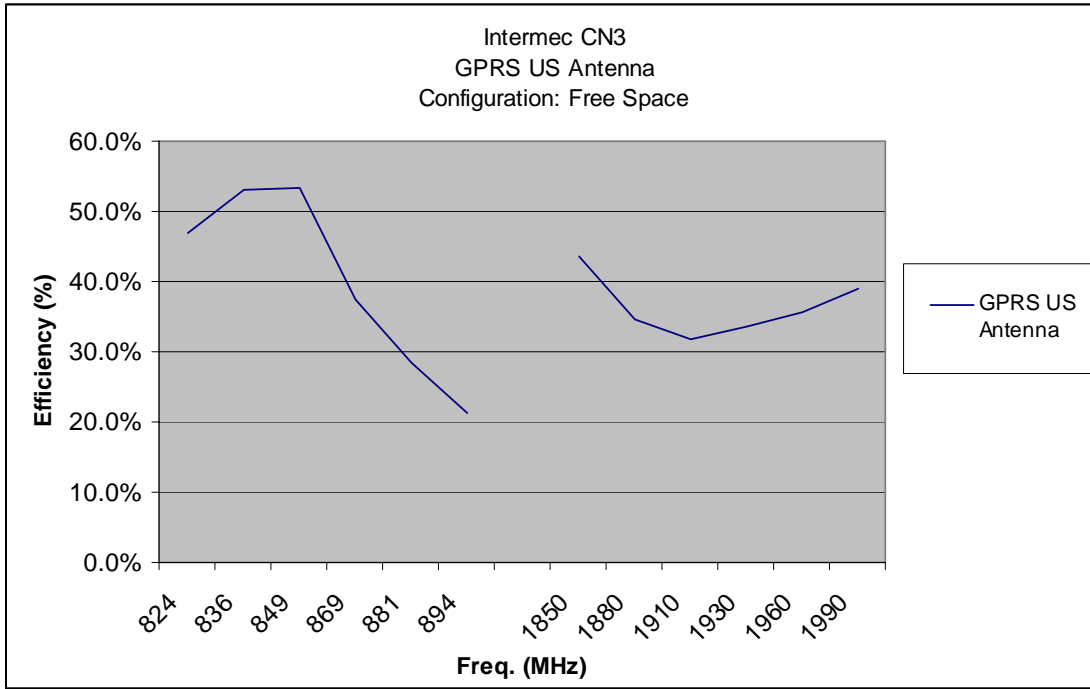


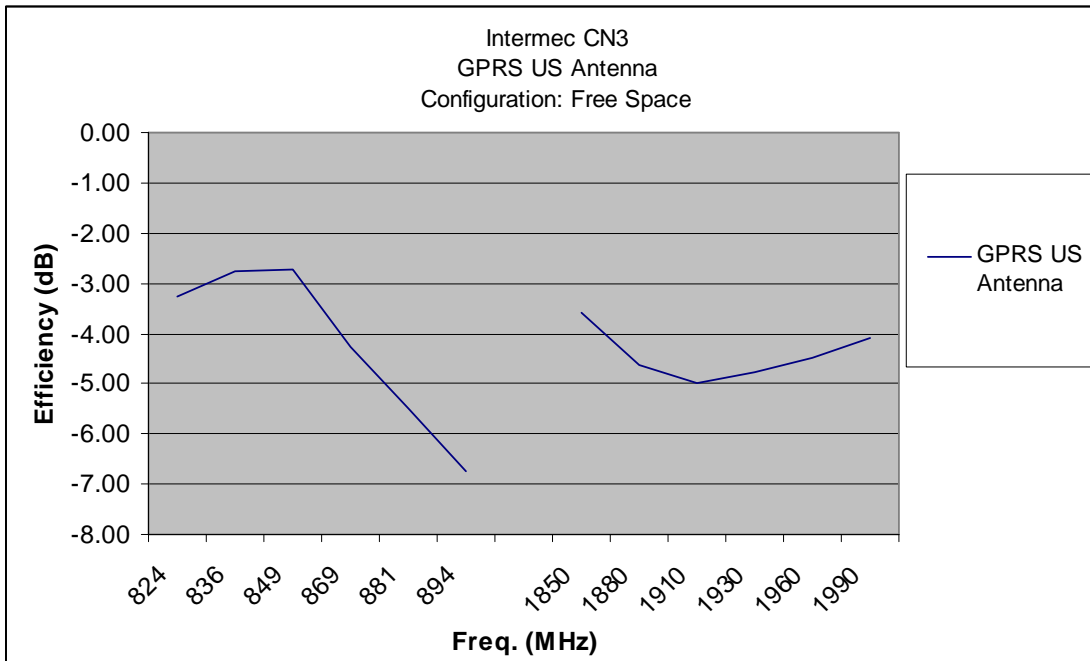
LAIRD PROPRIETARY, CONFIDENTIAL, OR SECRET

<p><u>Willis Hardy</u> <u>08/23/2006</u></p> <p>AUTHOR DATE</p> <p>CONCUR</p>	<p> Laird Product Engineering</p>	<p>Place dates per Record Retention Policy</p> <p>REPORT NUMBER: <u>XXXXXX</u></p>
<p>TO: Requester: <u>Intermec</u> Manager: <u> </u> COPY:</p>		
<p><u>EXECUTIVE SUMMARY:</u> Performance of Intermec CN3 GPRS US version were measured, provide for Intermec FCC filings.</p> <p><u>SCOPE:</u> Performance of US version of the GPRS antenna</p> <p><u>DESIGN OF EXPERIMENT:</u> Return Loss, Efficiency and Gain Patterns were measured on a CN3 GPRS fixture.</p> <p><u>CONCLUSIONS:</u> The Return Loss, Efficiency, Peak Gain, Average Gain and Gain Patterns are provided.</p> <p><u>RECOMMENDATIONS:</u> None</p> <p><u>ACTIONS:</u> None</p> <p><u>APPENDIX:</u> None</p>		
<p>KEY WORDS: Words that the report can be found under; Program, Part(s), Subject of work, Method(s) of solution, Software(s) used (list in alphabetical order)</p>		

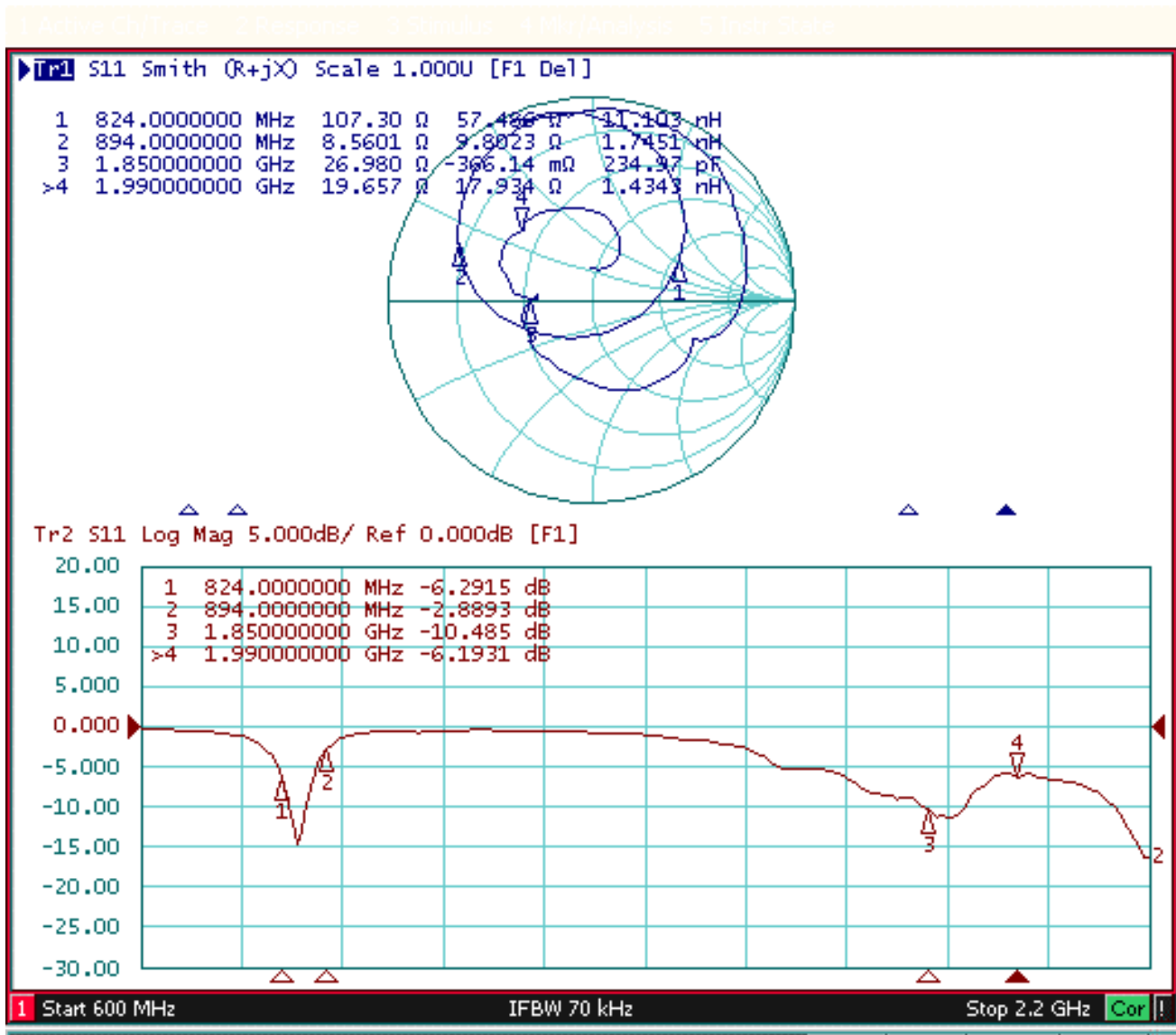
Efficiency in Free Space



Efficiency		
Freq. (MHz)	Eff. (%)	Eff. (dB)
824	47.0%	-3.28
836	53.0%	-2.76
849	53.5%	-2.72
869	37.4%	-4.27
881	28.3%	-5.47
894	21.2%	-6.74
1850	43.6%	-3.60
1880	34.6%	-4.61
1910	31.7%	-4.98
1930	33.5%	-4.75
1960	35.7%	-4.47
1990	39.0%	-4.09



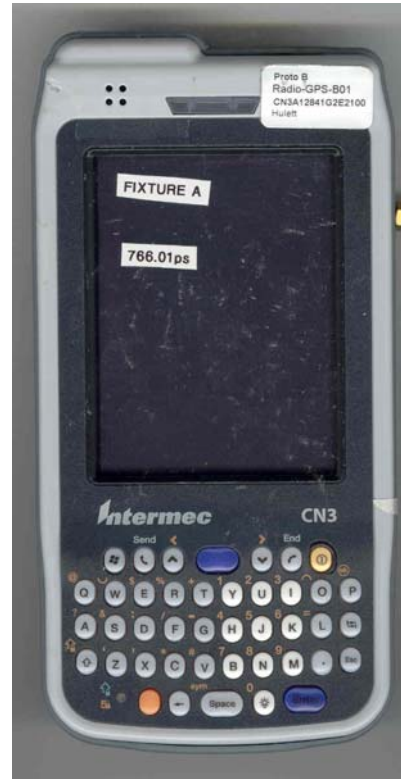
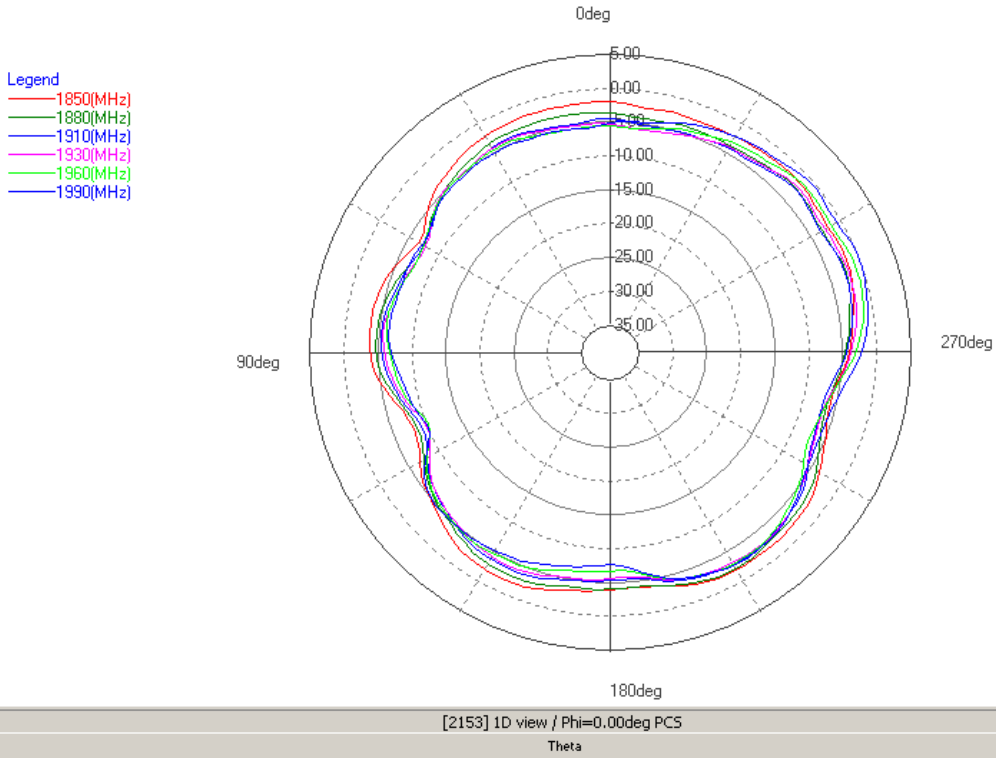
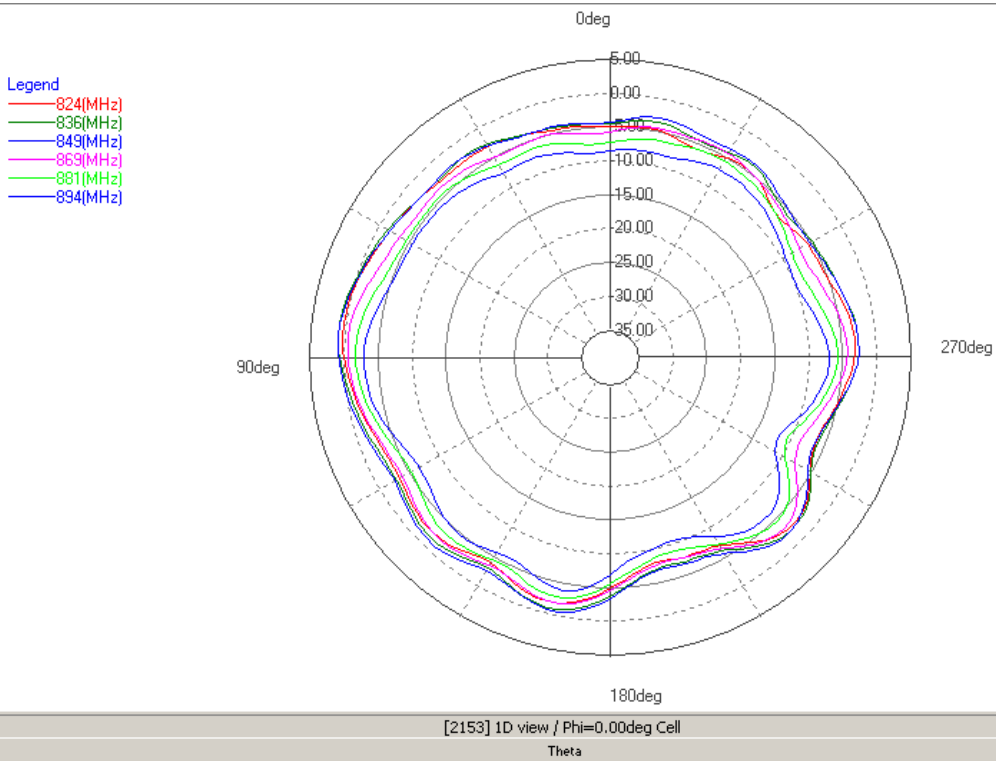
Return Loss, Free Space



Gain Patterns, Phi=0, Free Space

Phi=0

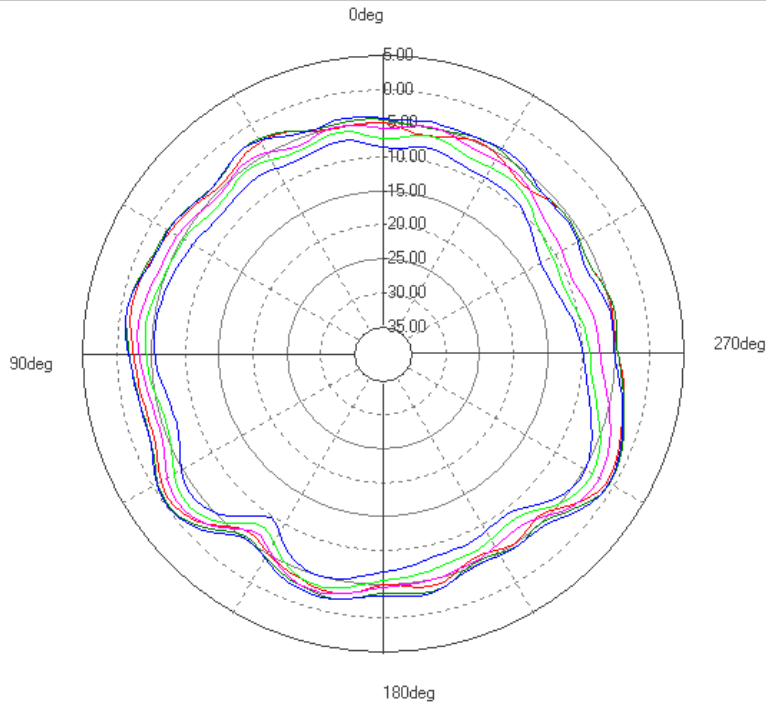
Freq. (MHz)	Peak Gain	Average Gain
824	0.33	-3.54
836	0.91	-2.91
849	0.99	-2.76
869	-0.48	-4.14
881	-1.68	-5.37
894	-2.90	-6.68
1850	-1.67	-3.27
1880	-2.27	-4.18
1910	-2.67	-4.81
1930	-2.11	-4.83
1960	-0.84	-4.65
1990	-0.02	-4.23



Gain Patterns, Phi=90, Free Space

Phi=90

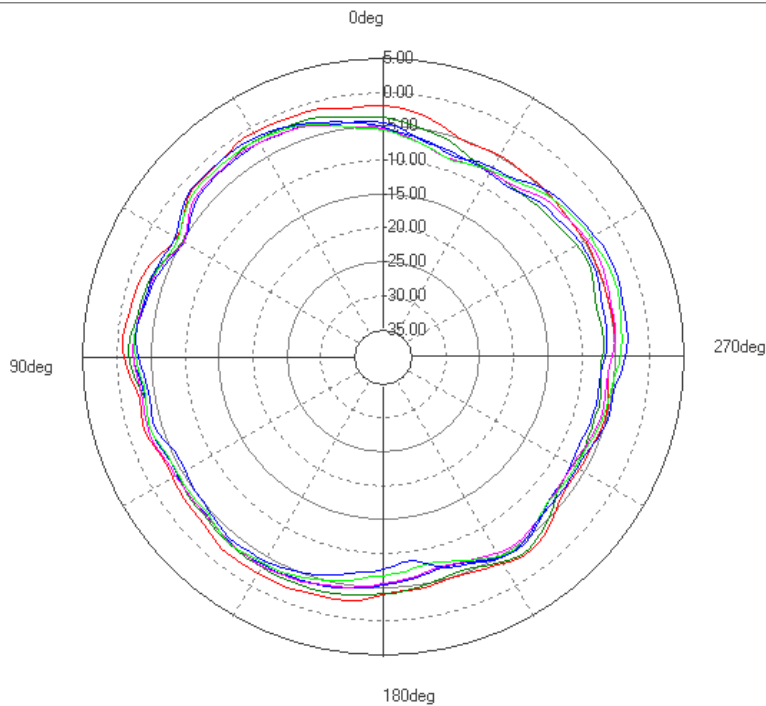
- Legend
- 824(MHz)
 - 836(MHz)
 - 849(MHz)
 - 869(MHz)
 - 881(MHz)
 - 894(MHz)



Freq. (MHz)	Peak Gain	Average Gain
824	-1.00	-3.91
836	-0.38	-3.36
849	-0.27	-3.28
869	-1.78	-4.84
881	-2.87	-6.01
894	-4.15	-7.35
1850	-0.78	-3.30
1880	-1.69	-4.40
1910	-2.28	-4.86
1930	-2.27	-4.67
1960	-2.16	-4.56
1990	-1.61	-4.43

[2155] 1D view / Phi=90.00deg Cell
0.52
Theta

- Legend
- 1850(MHz)
 - 1880(MHz)
 - 1910(MHz)
 - 1930(MHz)
 - 1960(MHz)
 - 1990(MHz)



[2155] 1D view / Phi=90.00deg PCS
0.52
Theta

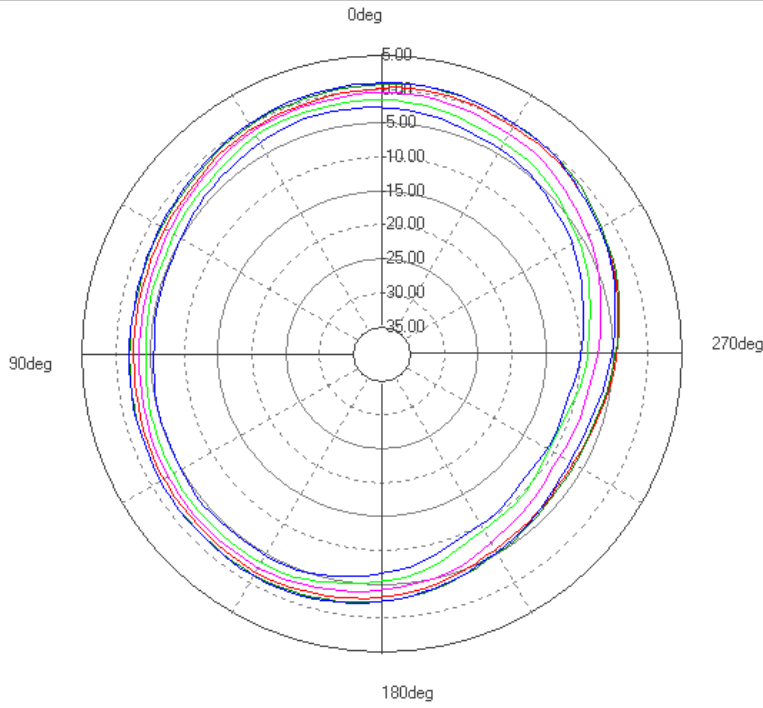


Gain Patterns, Theta, Free Space

Theta=90

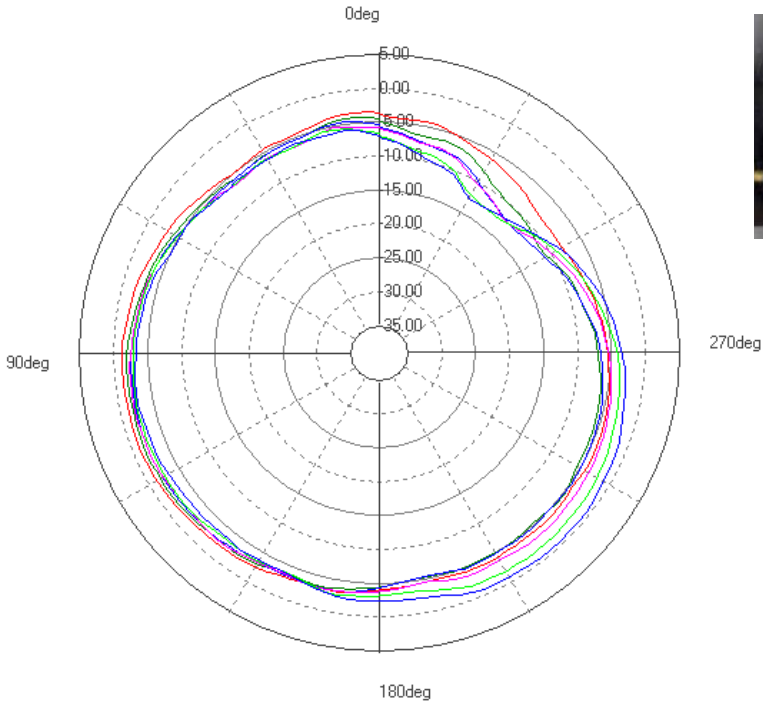
Freq. (MHz)	Peak Gain	Average Gain
824	0.16	-2.33
836	0.71	-1.82
849	0.74	-1.79
869	-0.62	-3.33
881	-1.72	-4.46
894	-2.70	-5.58
1850	-1.10	-3.82
1880	-1.78	-4.69
1910	-2.32	-4.95
1930	-2.14	-4.62
1960	-1.87	-4.28
1990	-0.70	-3.92

- Legend
- 824(MHz)
 - 836(MHz)
 - 849(MHz)
 - 869(MHz)
 - 881(MHz)
 - 894(MHz)



[2158] 1D view / Theta=90.00deg Cell
Phi

- Legend
- 1850(MHz)
 - 1880(MHz)
 - 1910(MHz)
 - 1930(MHz)
 - 1960(MHz)
 - 1990(MHz)



[2158] 1D view / Theta=90.00deg PCS
Phi

