Shenzhen Yunzhishang Electronics Co., Ltd

Customers：Zhong Rui Ke

Project name：P40A-US

RF engineer：Xu Long

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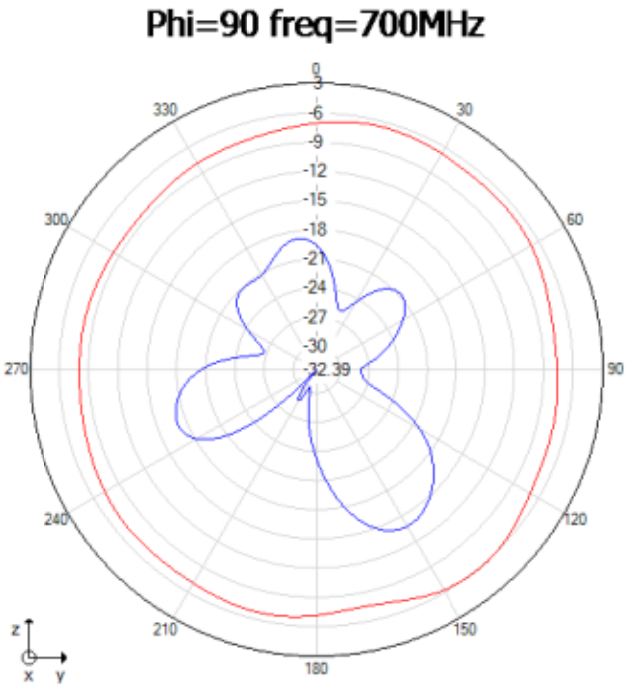
Huaning Road, Dalang Street, Longhua District, Shenzhen

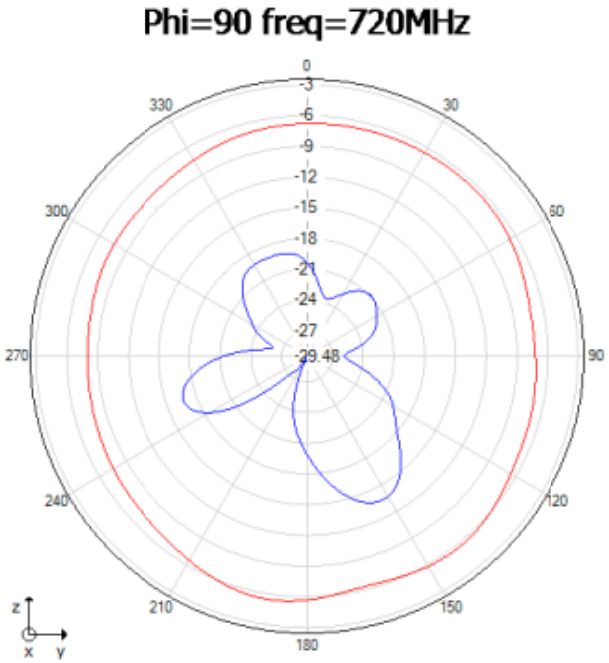
A Brief Introduction to debugging the project

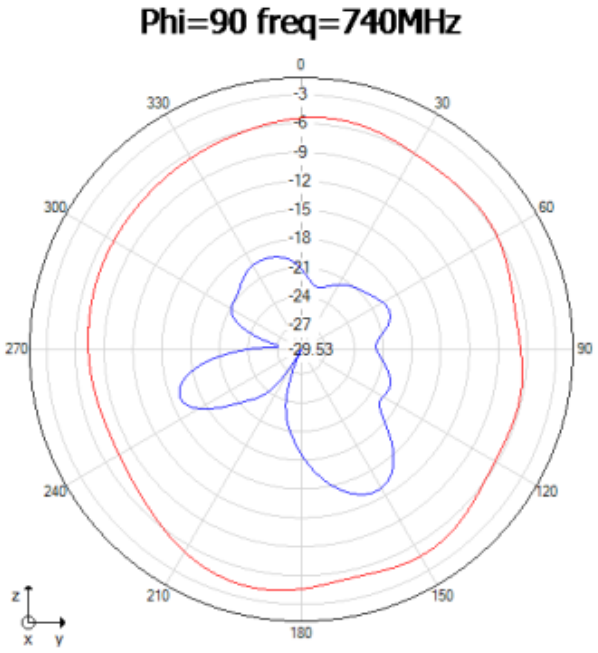
<table>
<tr><th>Plate type</th><th colspan="5">The whole machine</th></tr>
<tr><td rowspan="8">Antenna Overview</td><td rowspan="5">The main antenna</td><td colspan="2">Frequency band</td><td>Antenna form</td><td>Design area</td></tr>
<tr><td>2G</td><td rowspan="2">G2/3/5/8
W1/2/4/5</td><td rowspan="4">PIFA</td><td rowspan="4">The bottom of the phone</td></tr>
<tr><td>3G</td></tr>
<tr><td>4G</td><td>2/4/5/7/12/17/66/38</td></tr>
<tr><td>5G</td><td>N/A</td></tr>
<tr><td rowspan="3">Other antennas</td><td>BT/WIFI</td><td>2.4G/5G</td><td rowspan="2">PIFA</td><td rowspan="2">Top of the phone</td></tr>
<tr><td>GNSS</td><td>1559-1610MHz</td></tr>
<tr><td>Diversity</td><td>N/A</td><td>PIFA</td><td>Top of the phone</td></tr>
<tr><td>Prototype status</td><td colspan="2">P40A-US Debugging machine</td><td>Environmental treatment</td><td colspan="2"></td></tr>
</table>

Operation Bands	Frequency	Antenna Gain (dBi)
GSM 850	824-894MHz	-0.62
GSM 900	880-960MHz	-0.64
DCS 1800	1710-1880MHz	-0.28
PCS 1900	1850-1990MHz	-0.31
WCDMA B1	1920-2170MHz	-0.34
WCDMA B2	1850-1990MHz	-0.31
WCDMA B4	1710-2155MHz	-0.27
WCDMA B5	824-894MHz	-0.62
LTE B2	1850-1990MHz	-0.31
LTE B4	1710-2155MHz	-0.27
LTE B5	824-894MHz	-0.62
LTE B7	2500-2690MHz	0.21
LTE B12	699-746MHz	-0.71
LTE B17	704-746MHz	-0.73
LTE B38	2570-2620MHz	0.25
LTE B66	1710-2200MHz	-0.24
BT&BLE&2.4G Wi-Fi	2400-2500 MHz	1.35
5G Wi-Fi	5150-5850MHz	1.84
GNSS	1559-1610MHz	-0.51

Lobe diagram (Ephi, Etheta **)**



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90
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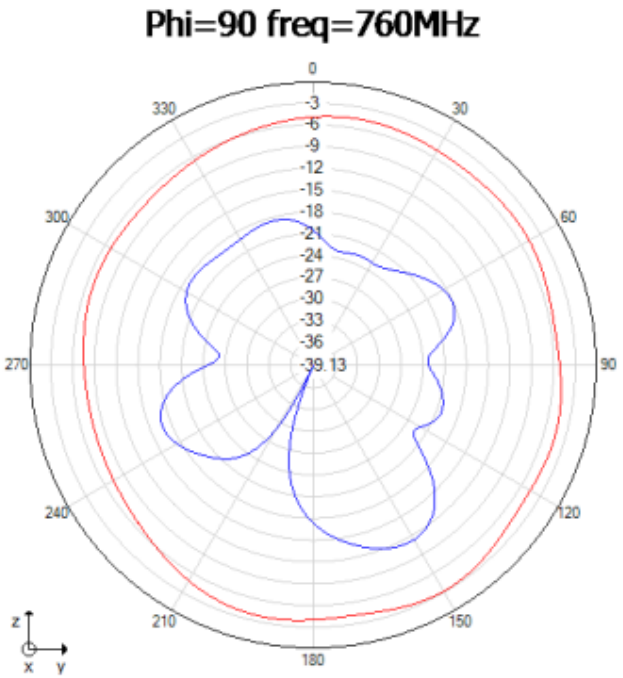
-18
-21
-24
-27
-29.53
z
x
y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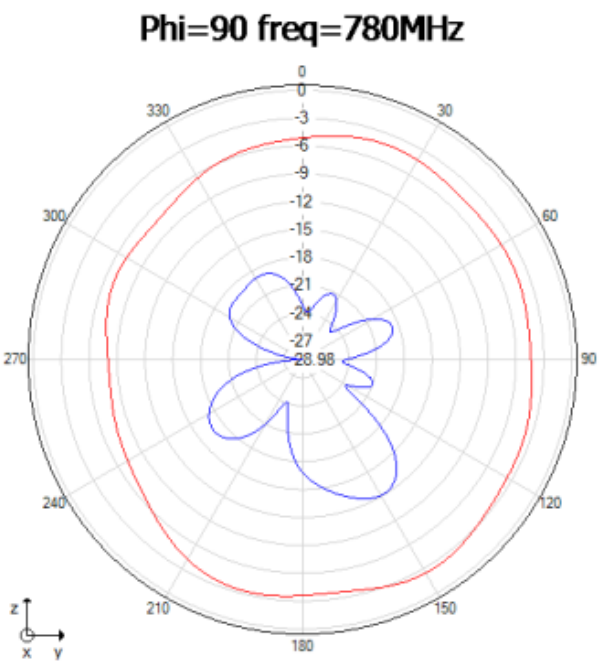
-24
-27
-30
-33
-36
-39.13
z
x
y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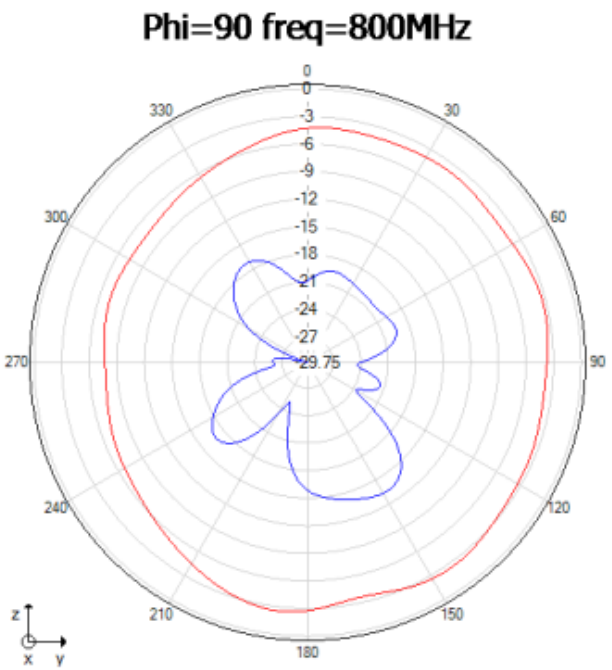
-21
-24
-27
-28.98
z
x
y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0
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-15
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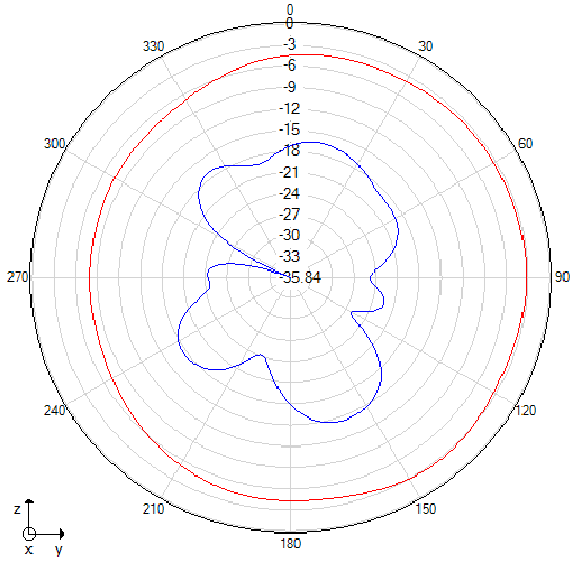
-24
-27
-29.75
z
x
y

Phi=90 freq=820MHz



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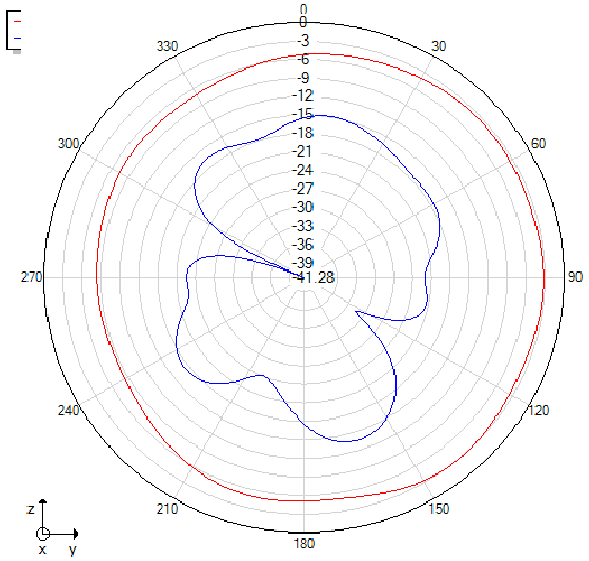

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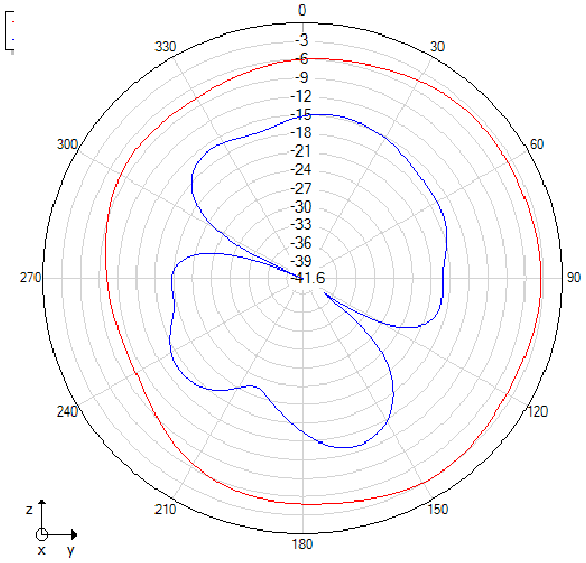

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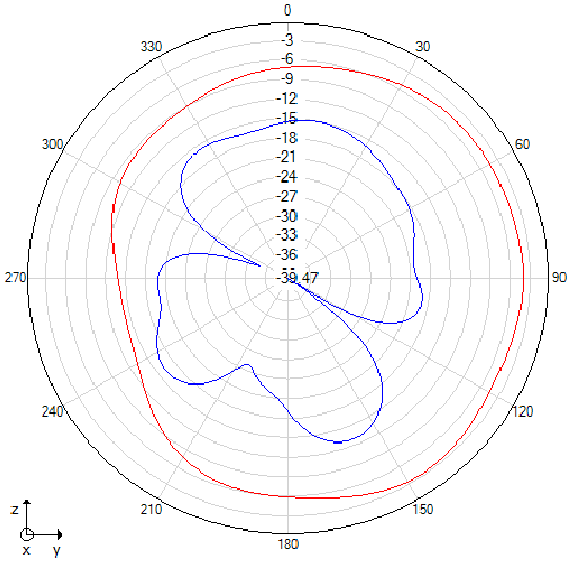

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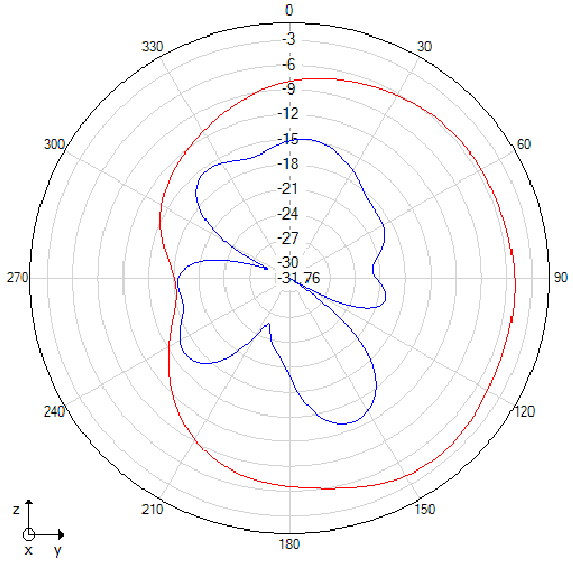

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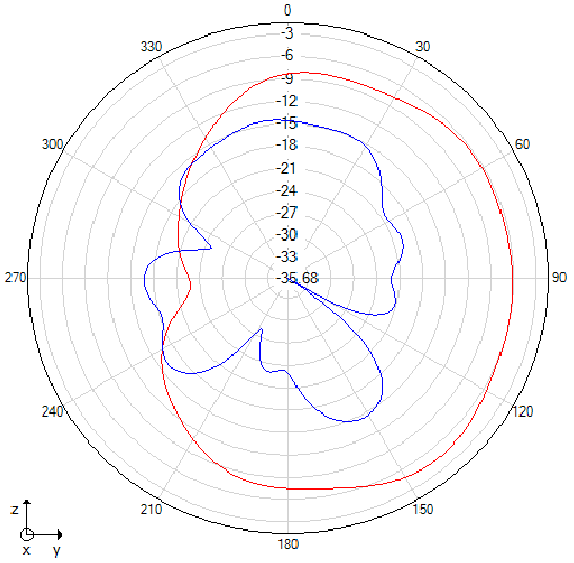

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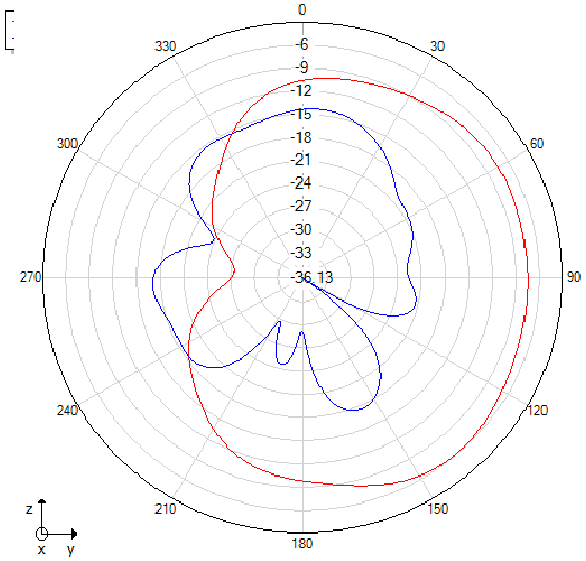

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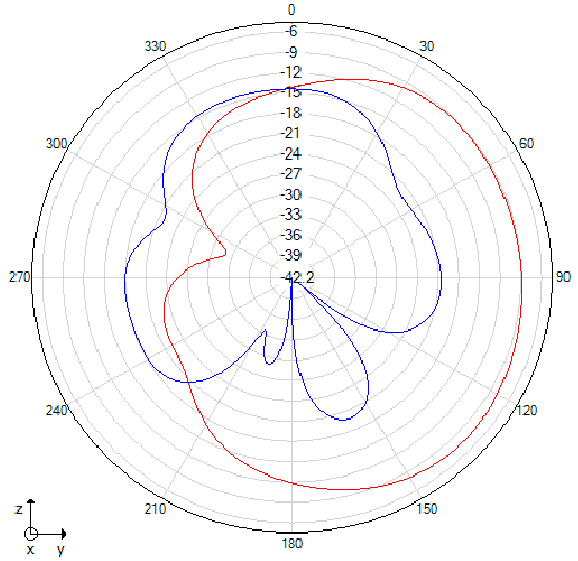
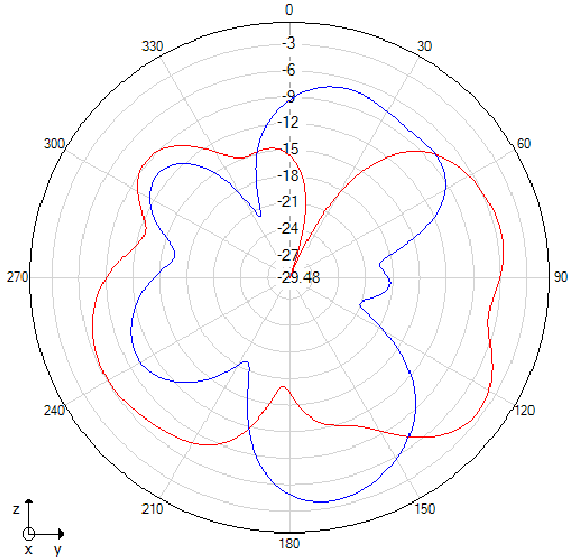


Phi=90 freq=1700MHz



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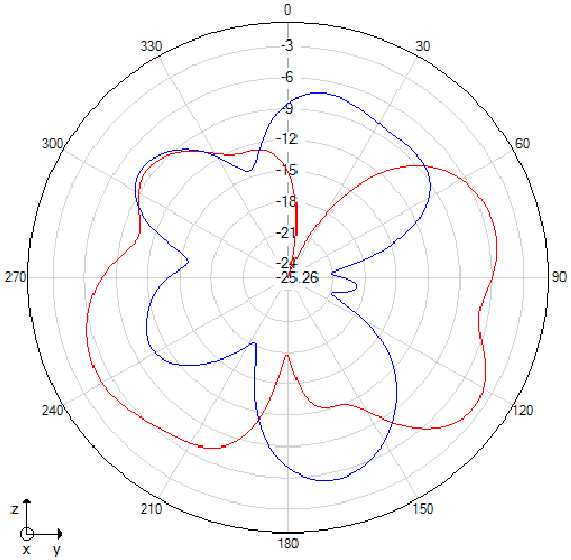

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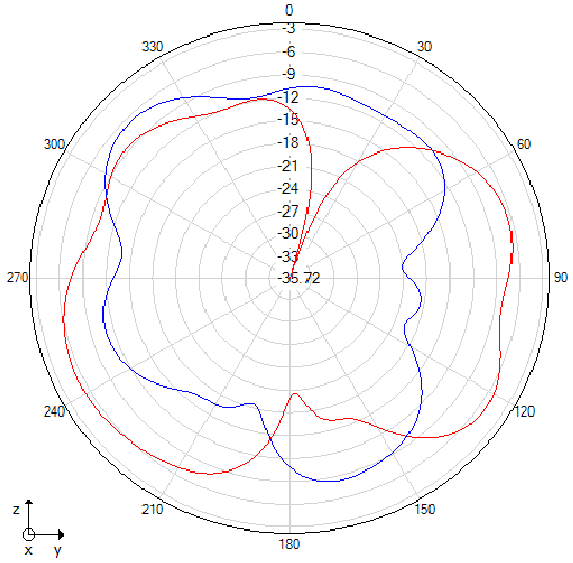

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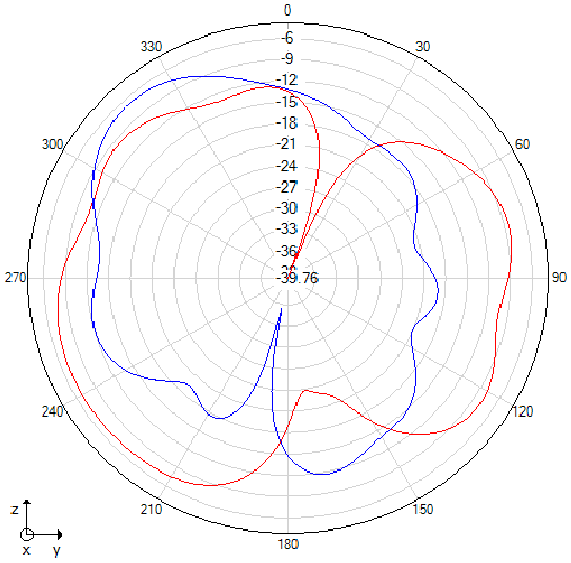

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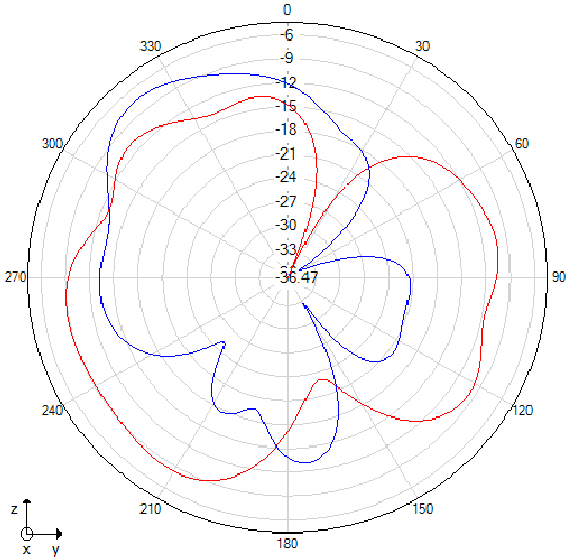

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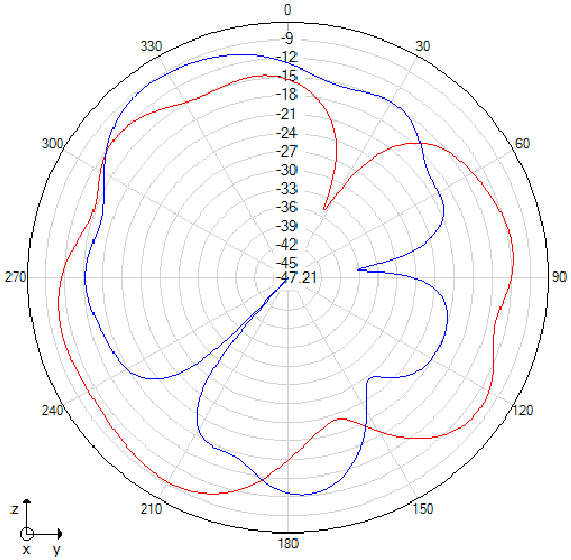
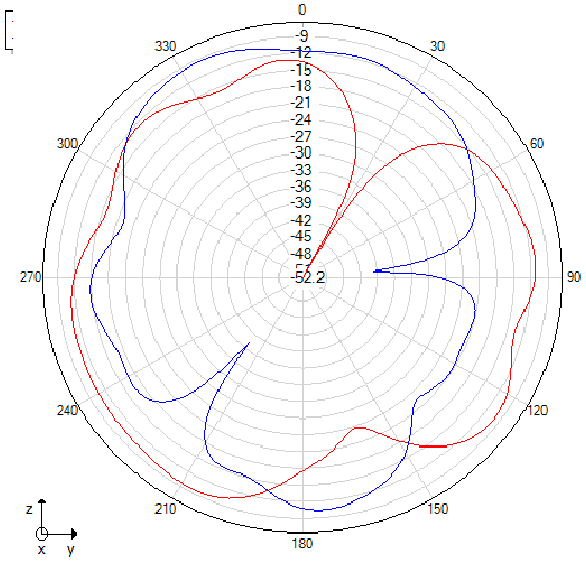
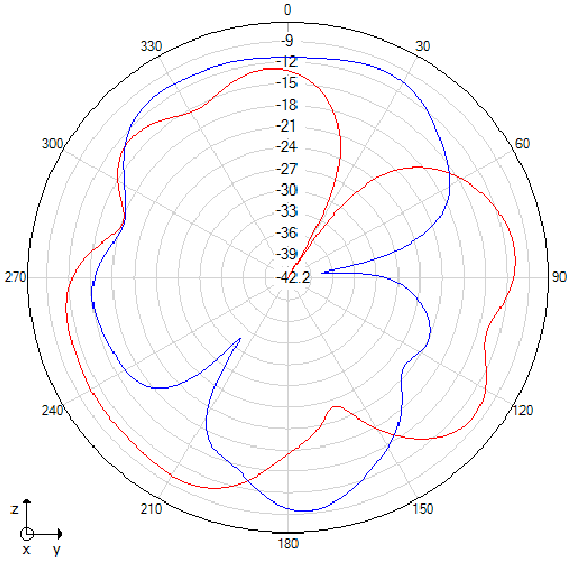


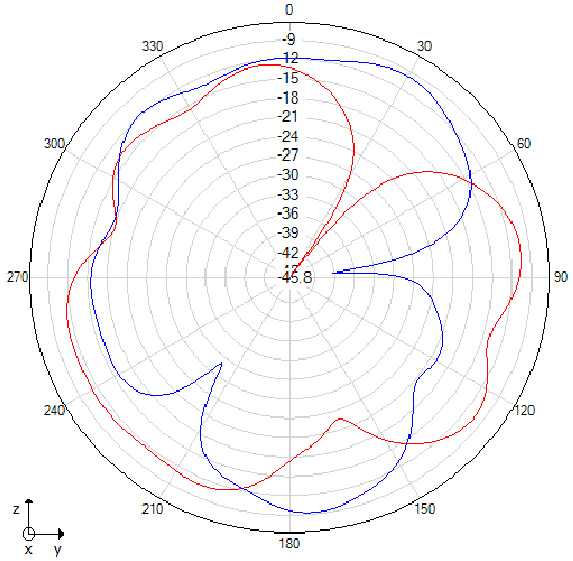
Phi=90 freq=1820MHz



Phi=90 freq=1840MHz



Phi=90 freq=1860MHz



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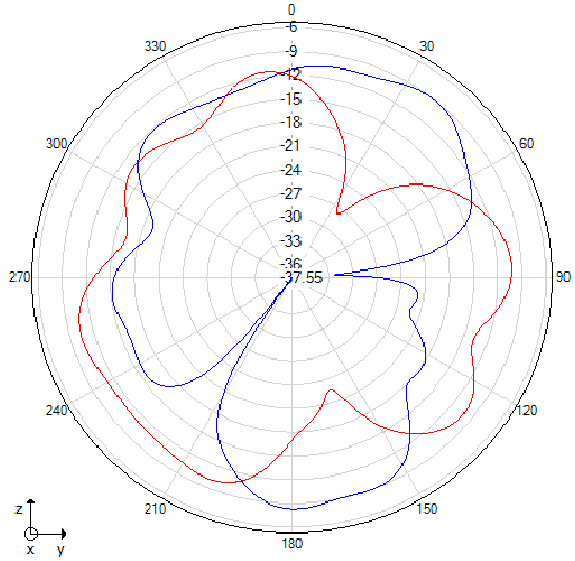

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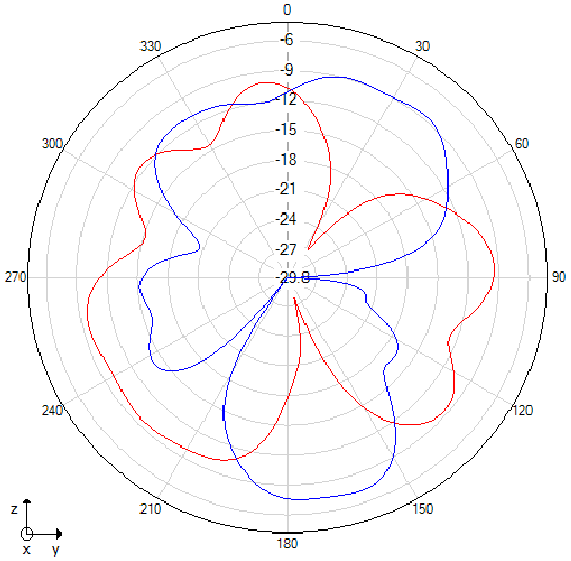
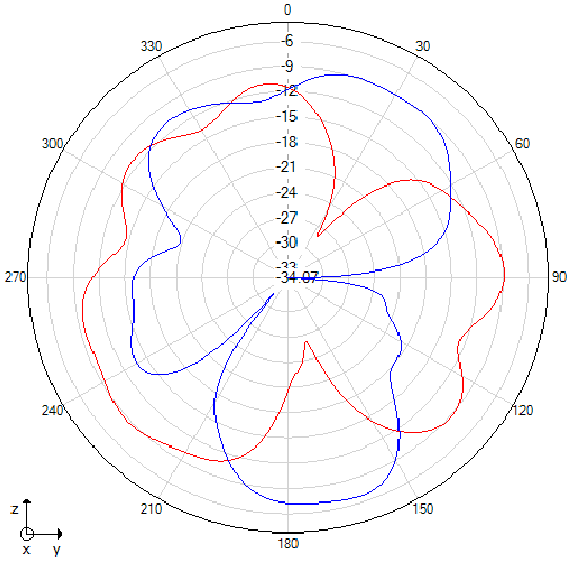


Phi=90 freq=1920MHz



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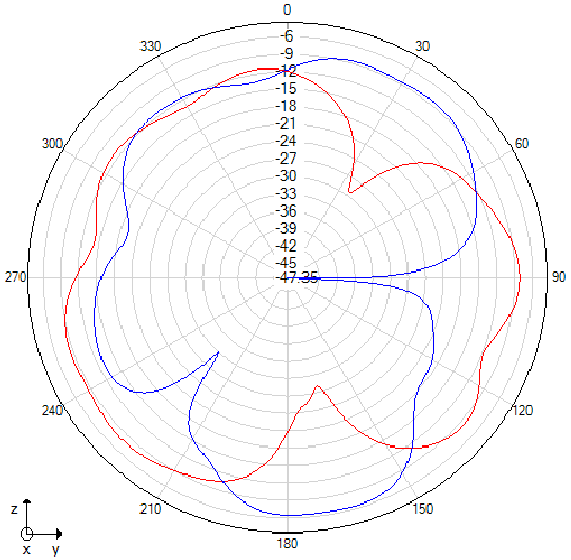

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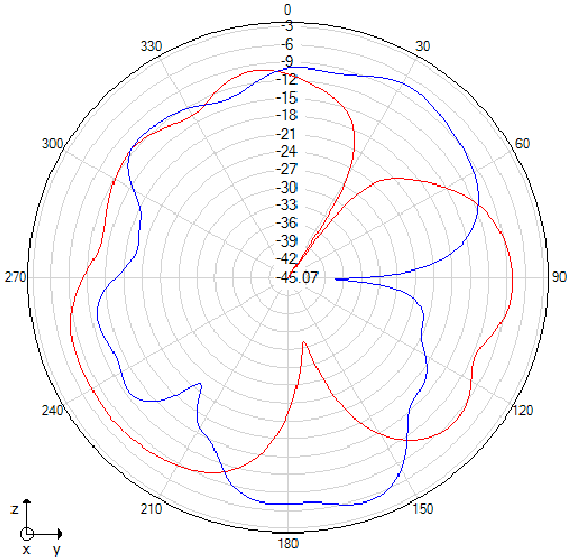

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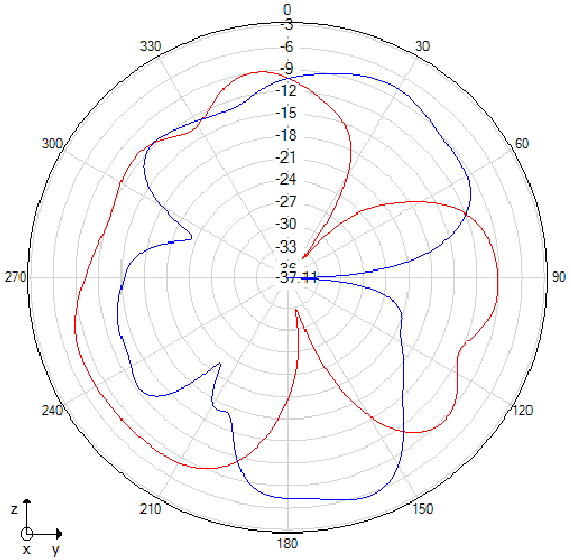

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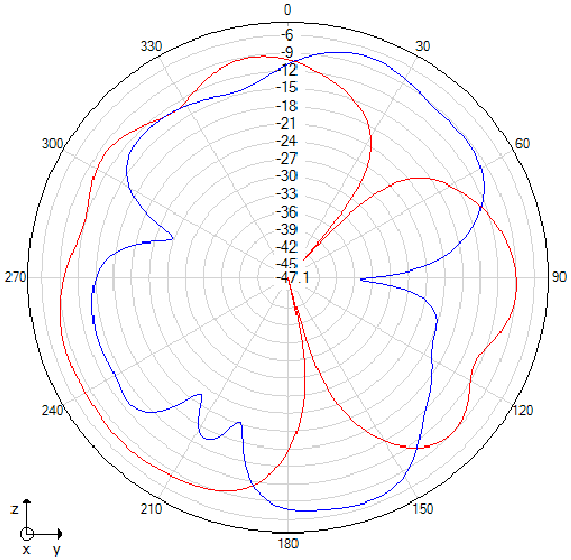

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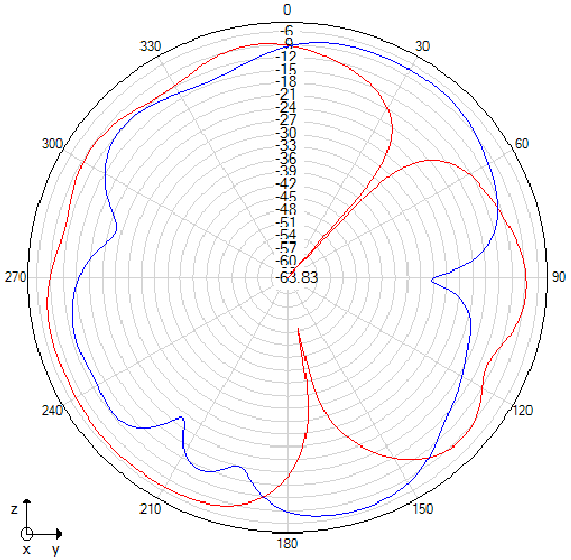
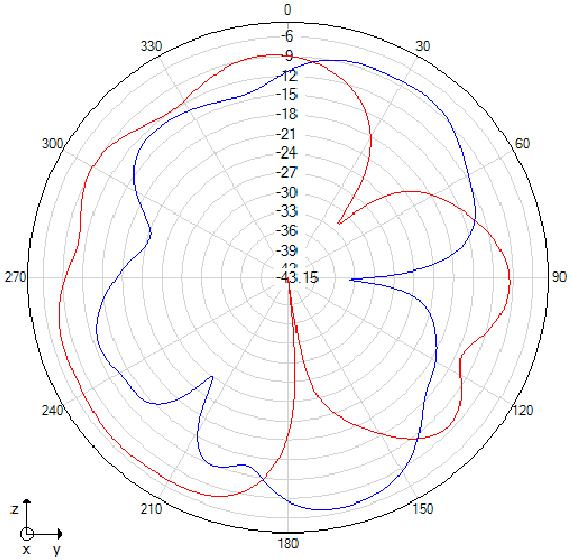


Phi=90 freq=2040MHz



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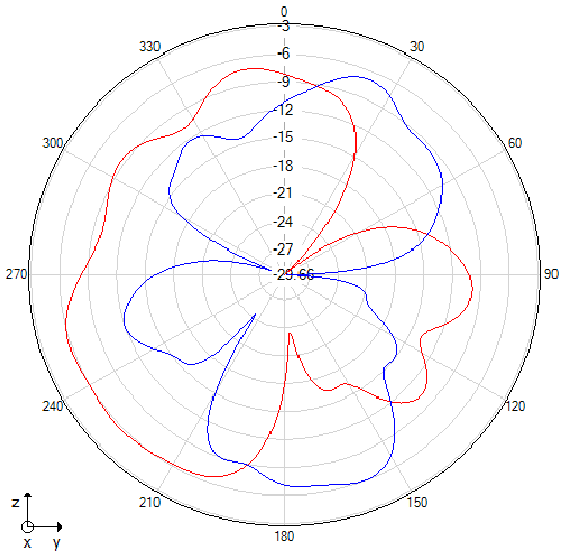

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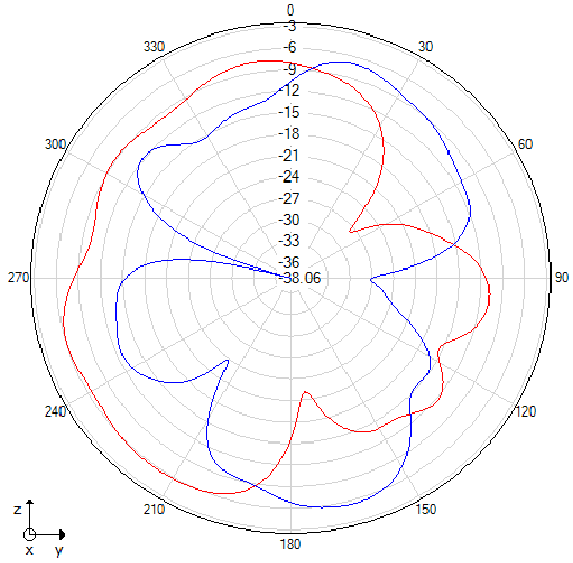

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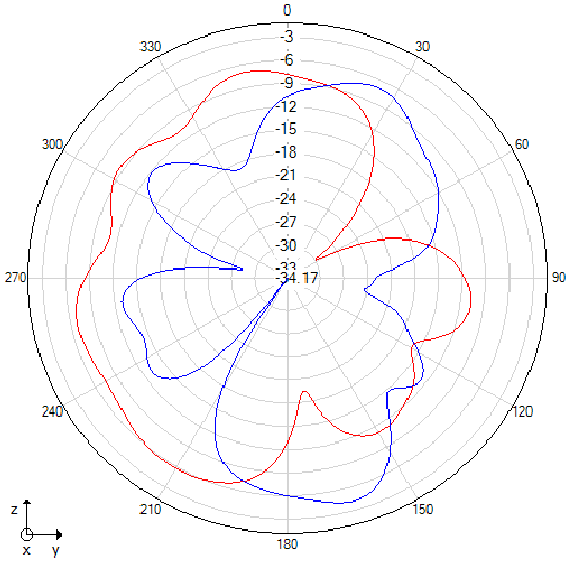

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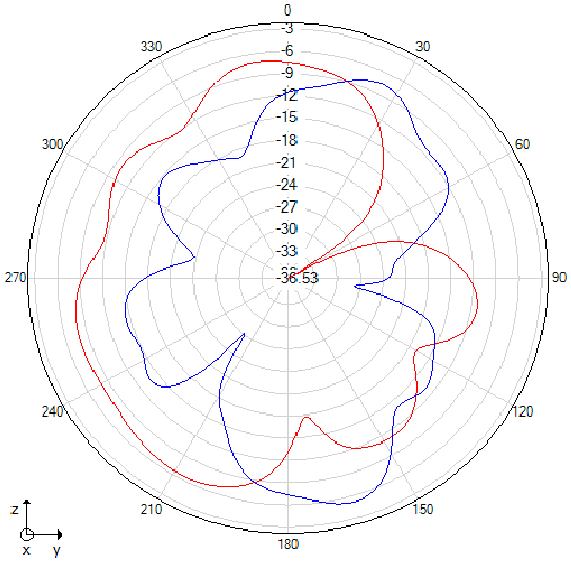

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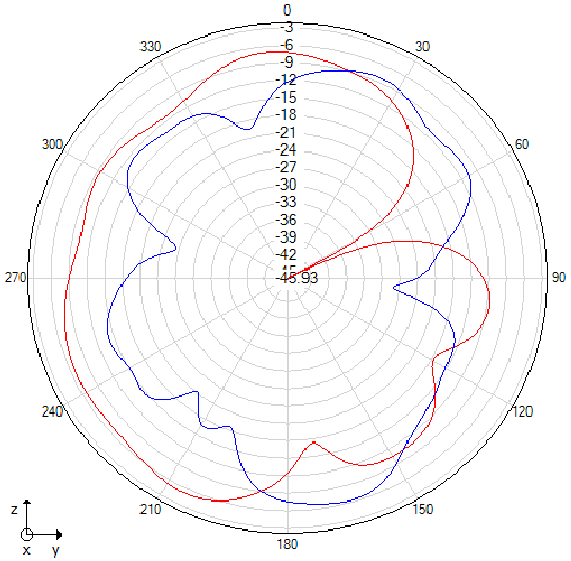

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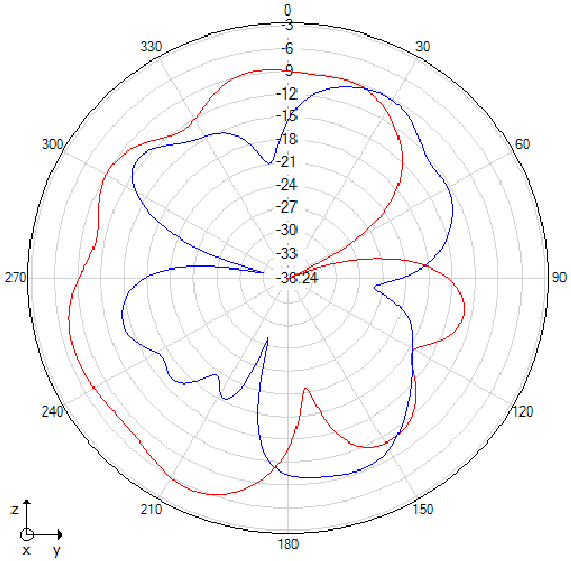

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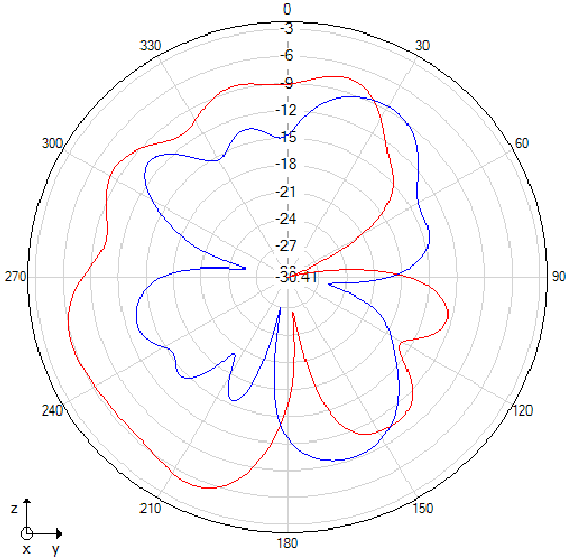

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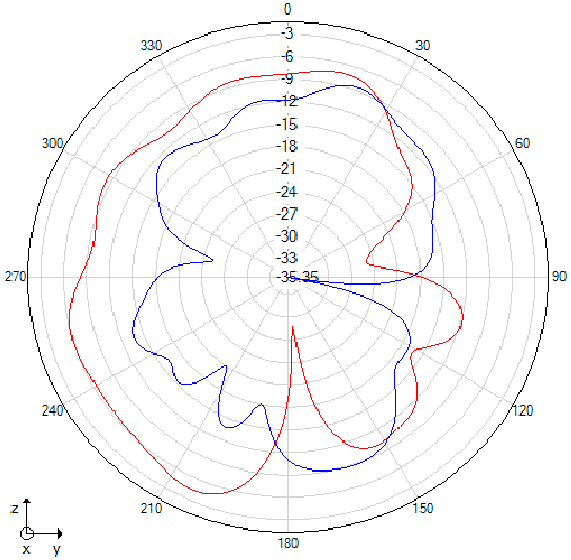
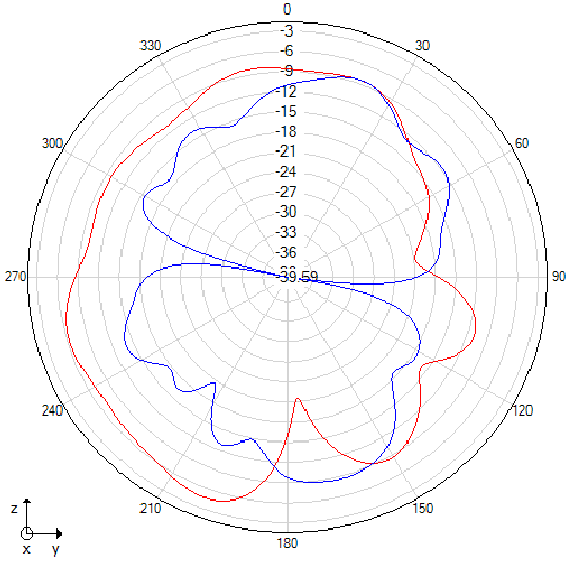


Phi=90 freq=2220MHz



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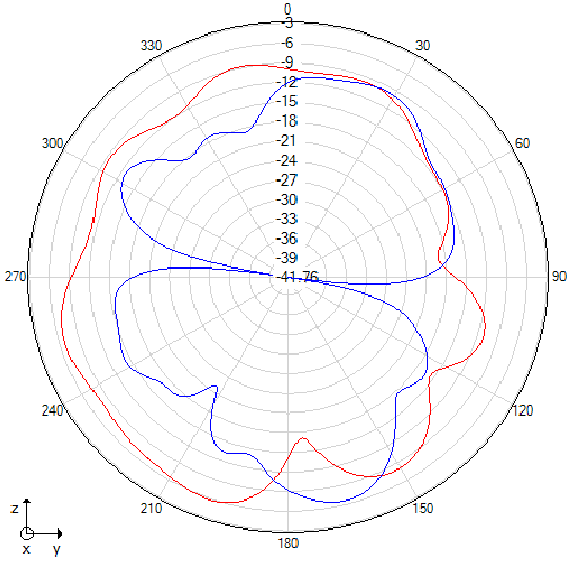

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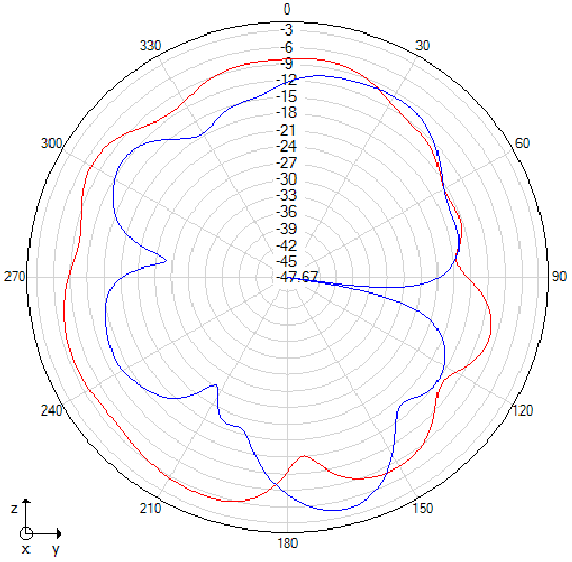

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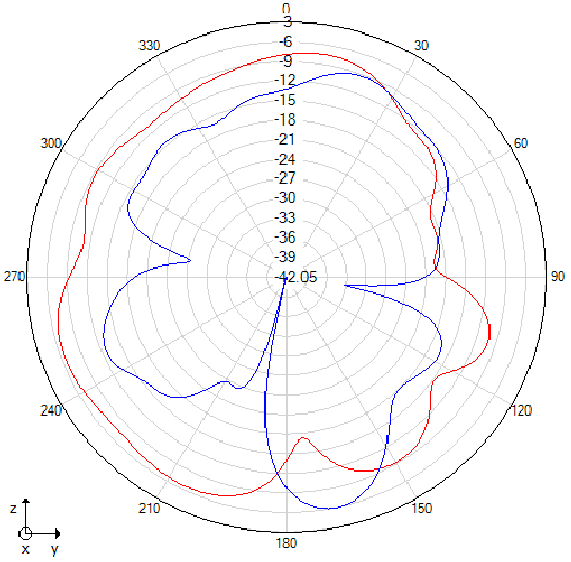
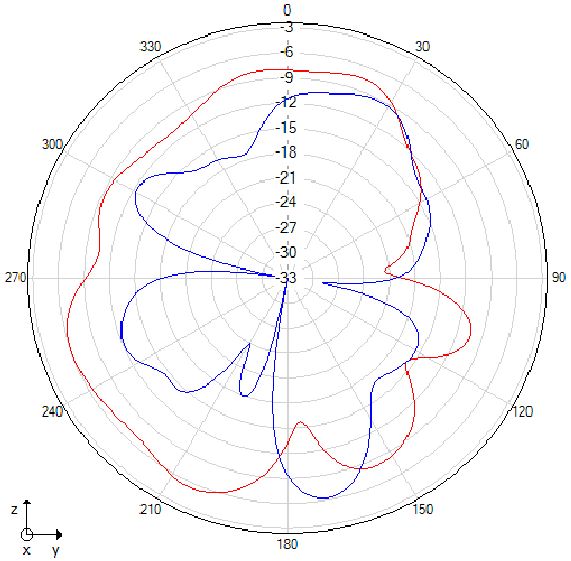
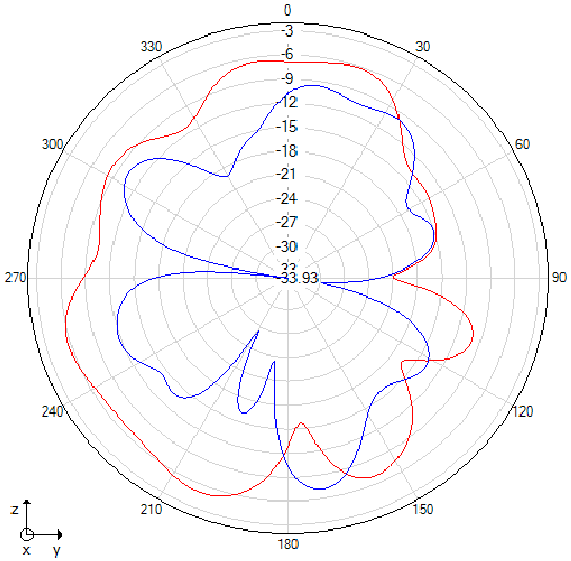


Phi=90 freq=2300MHz



Phi=90 freq=2320MHz