

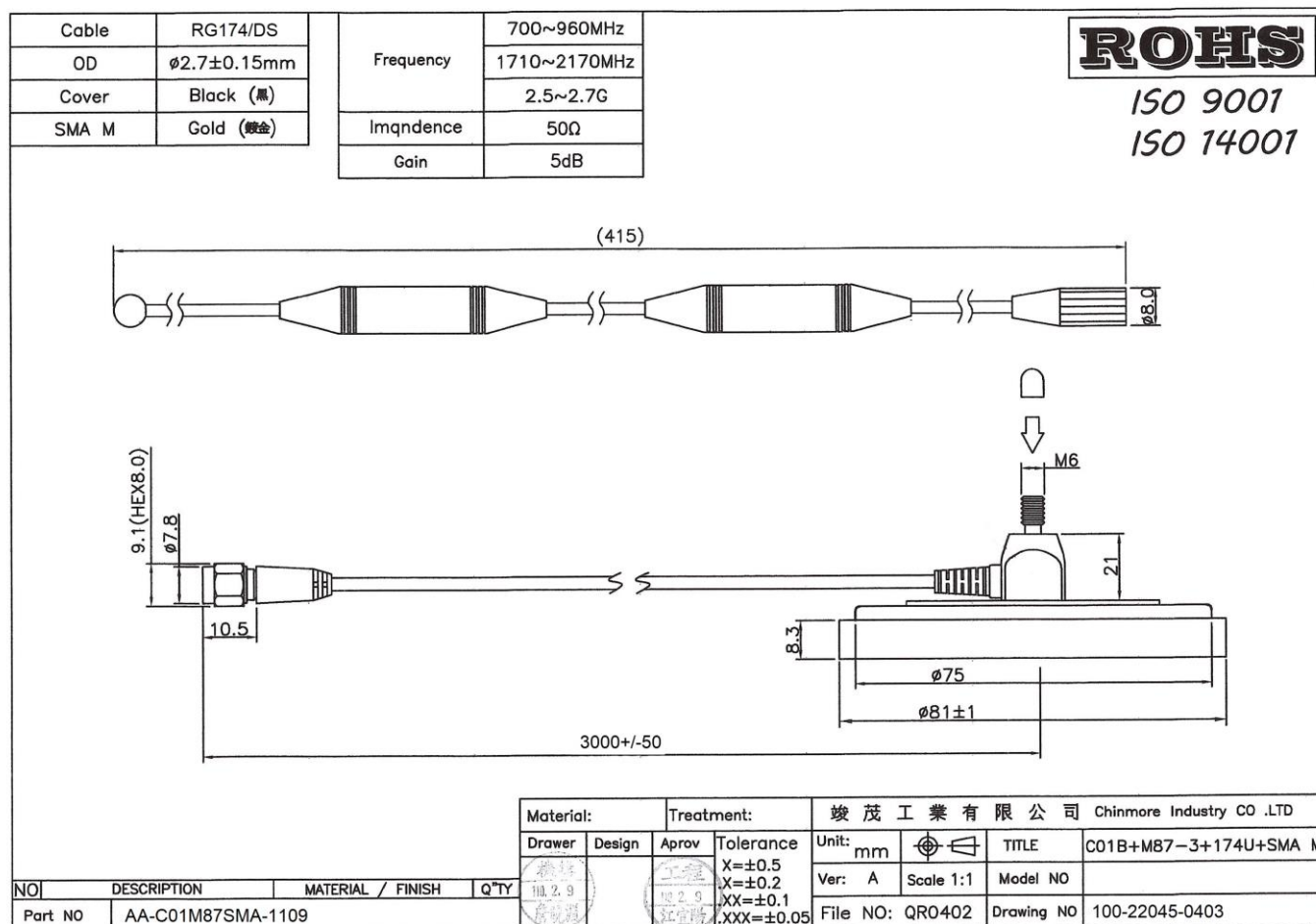


CHINMORE INDUSTRY CO.,LTD

## Specification

Magnetic Mount Base with Whip Antenna for 4G/LTE

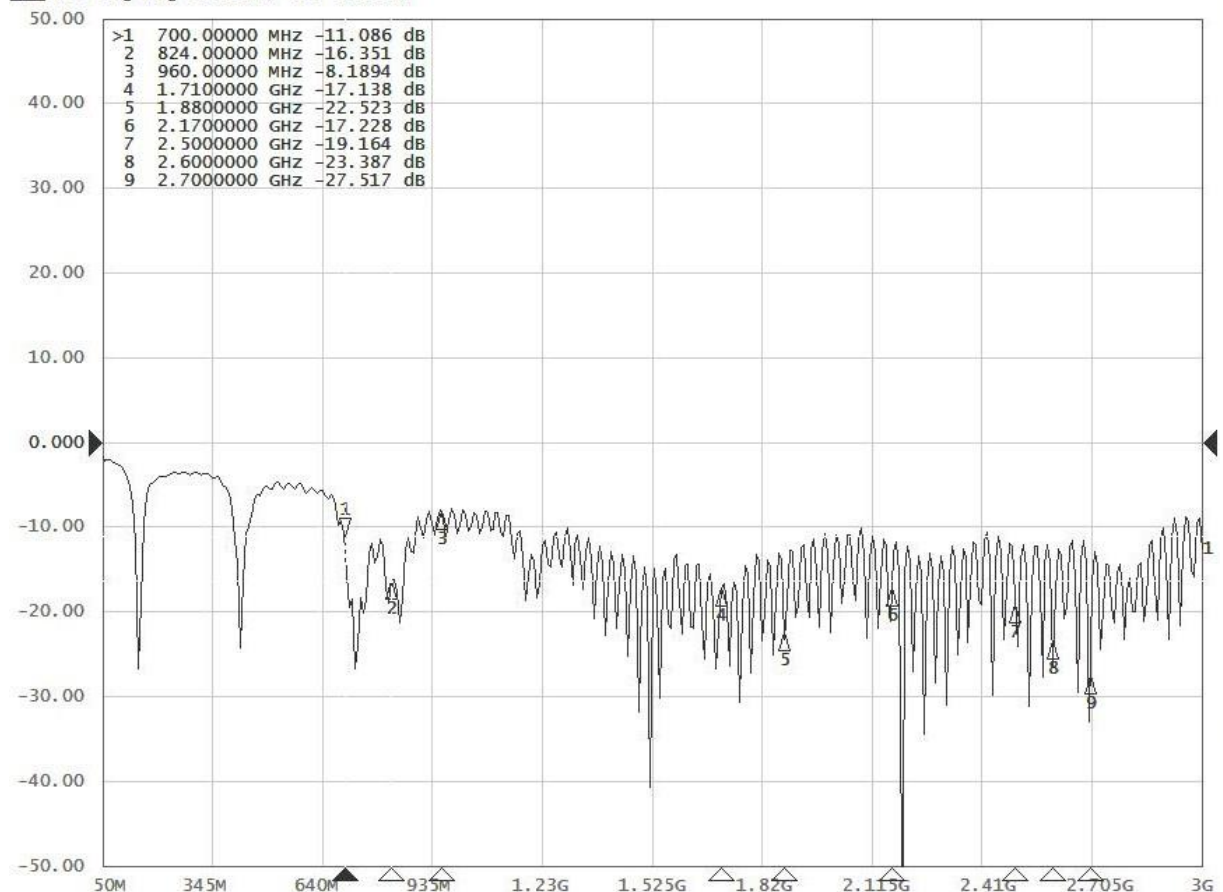
1. Chinmore's No: AA-C01M87SMA-1109
2. Frequency: 700~960 MHz/ 1710~2170 MHz/ 2.5~2.7 GHz
3. VSWR: 2.0:1
4. Cable: RG-174/DS 3M
5. Connector: SMA M
6. Polarization: Vertical
7. ✕RoHS Compliant



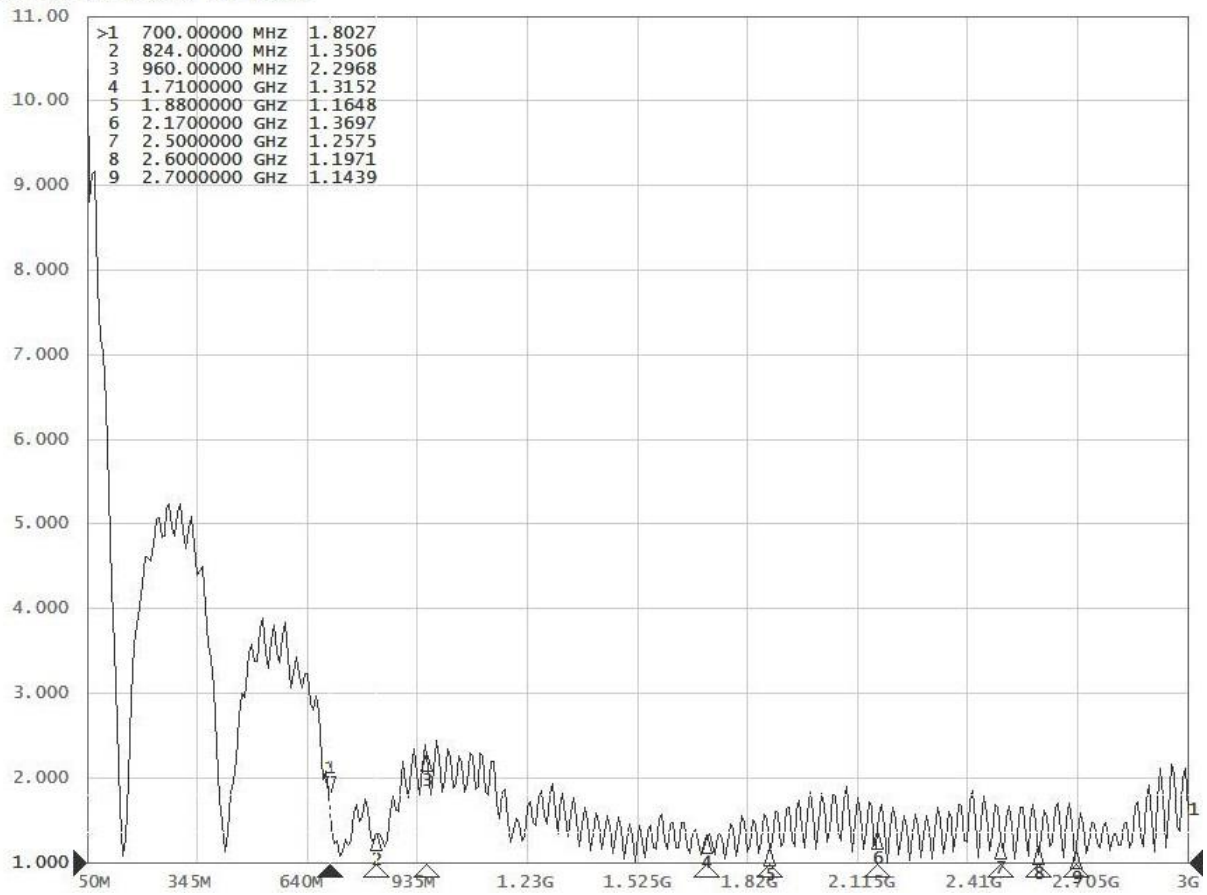
| Frequency (MHz) | Return Loss (dB) | VSWR |
|-----------------|------------------|------|
| 700             | -11.08           | 1.80 |
| 824             | -16.35           | 1.35 |
| 960             | -8.18            | 2.29 |
| 1710            | -17.13           | 1.31 |
| 1880            | -22.52           | 1.16 |
| 2170            | -17.22           | 1.36 |
| 2500            | -19.16           | 1.25 |
| 2600            | -23.38           | 1.19 |
| 2700            | -27.51           | 1.14 |

## Test Data (Return Loss & VSWR)

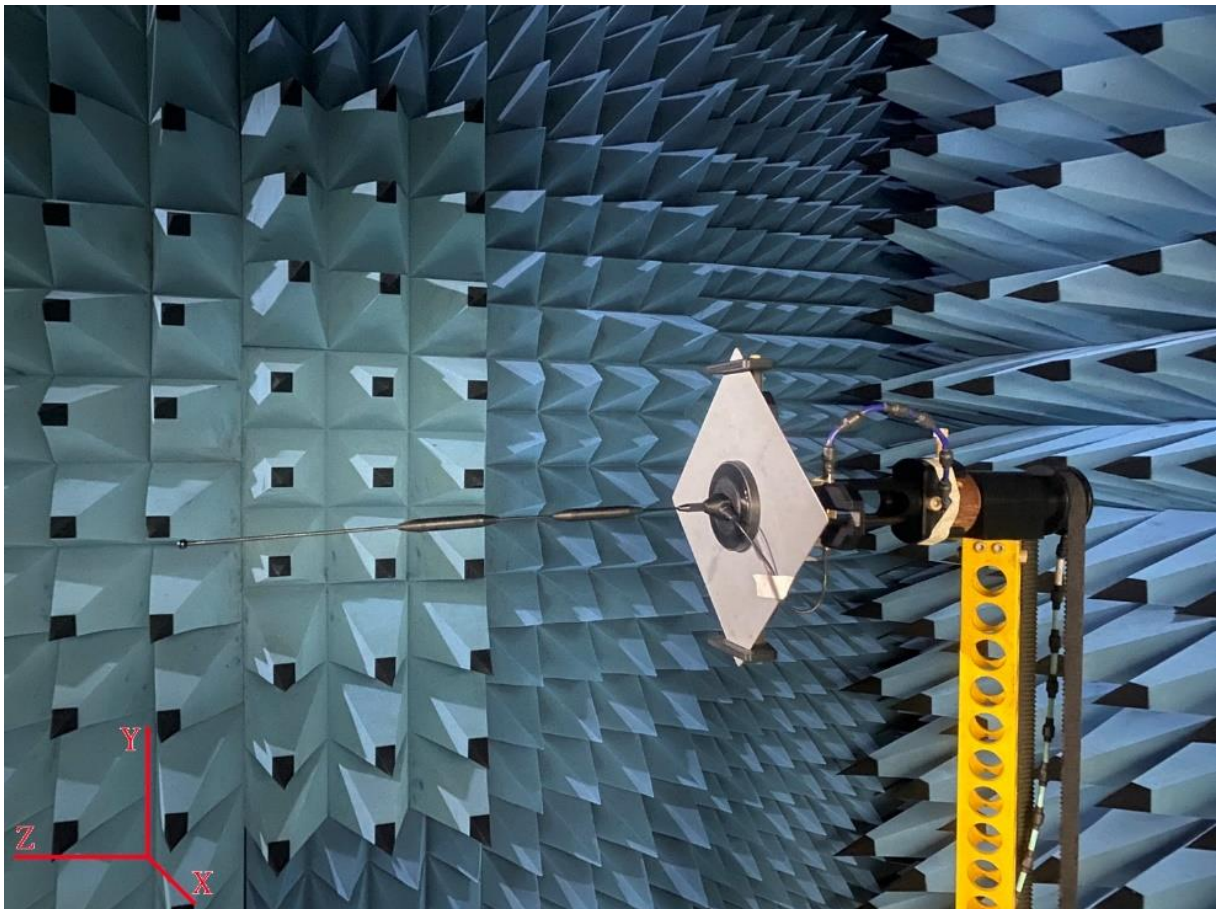
TP1 S11 Log Mag 10.00dB/ Ret 0.000dB



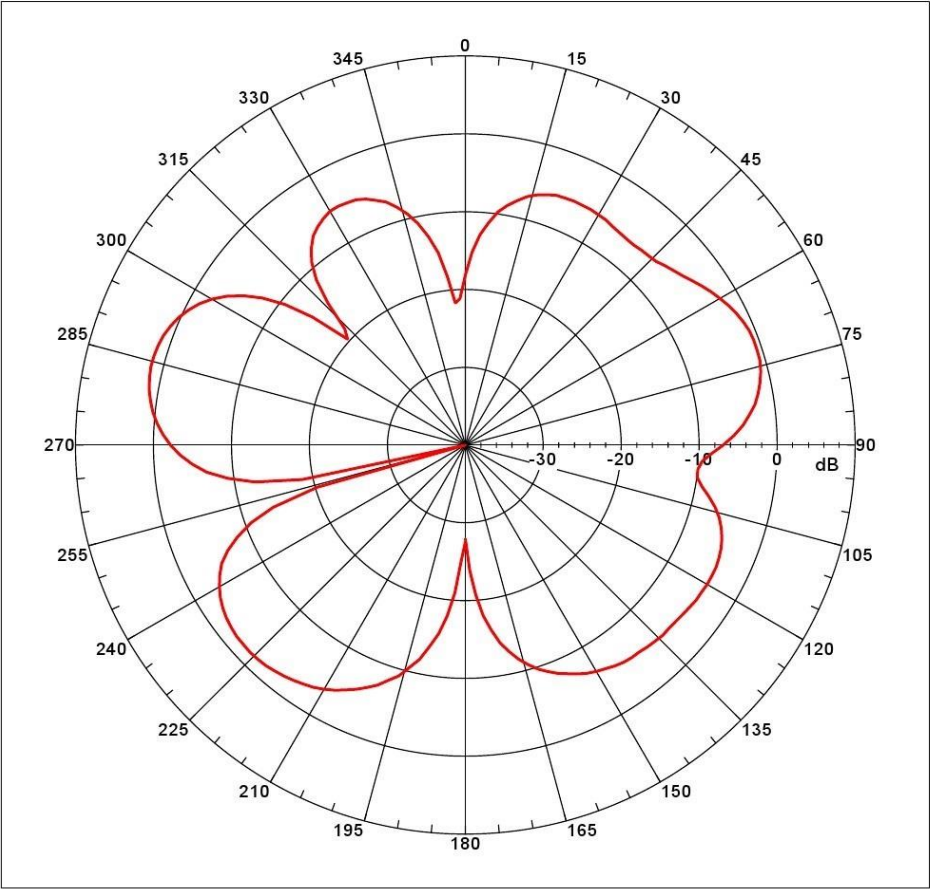
Tr1 S11 SWR 1.000/ Ref 1.000



3D Test Photo



Test Data



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg  
Gain = 1.5514 dBi  
Max far-field (global) = -41.44794 dB, Max far-field (plot) = -41.44798 dB  
Normalization: Reference, Network offset = 0.000 dB  
Hpeak at: -76.00001 deg, Vpeak at: 0.000 deg  
Plot centering: On

COLB+M87-3+RG174-1A-3M-E

NSI2000 V4.0.124, Filename: C:\Documents and Settings\NSI\Desktop\COLB+M87-3+RG174-1A-3M-E.nsi  
Measurement date/time: 6/30/2017 1:58:06 PM, Filetype: NSI-97

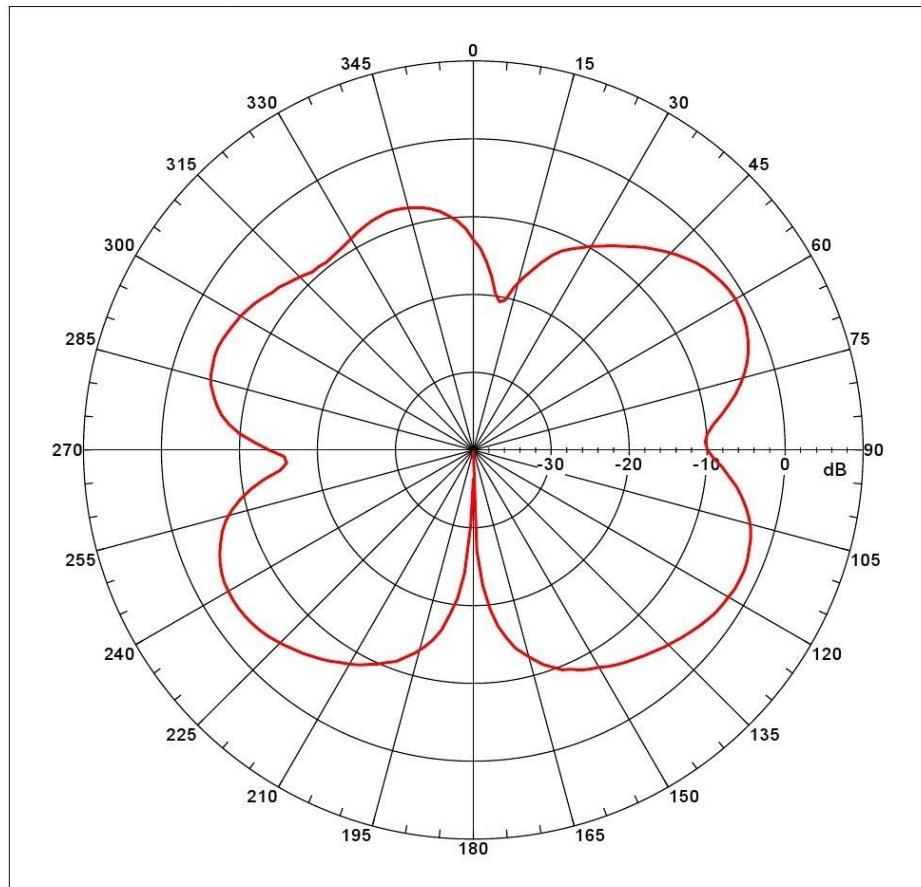
Far-field Cut Analysis:  
Avg Value: -5.623 dB  
-3. dB beam width: 26.76 deg  
-6. dB beam width: 36.21 deg  
-10. dB beam width: 44.05 deg  
Left Sidelobe: -3.20 dB at -133.743 deg  
Right Sidelobe: -6.81 dB at -27.151 deg

Far-field display setup  
Azimuth (deg)  
Span = 360.00001 deg, Center = 0.000 deg, #pts = 181  
Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg  
Elevation (deg)  
Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 7

| Beam | Frequency | Azimuth | Elevation | Pol        |
|------|-----------|---------|-----------|------------|
| 1    | 0.824 GHz | Azimuth | Elevation | Single-pol |





Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg  
Gain = -1.18934 dBi  
Max far-field (global) = -43.81901 dB, Max far-field (plot) = -43.81905 dB  
Normalization: Reference, Network offset = 0.000 dB  
Hpeak at: 59.99999 deg, Vpeak at: 0.000 deg  
Plot centering: On

C01B+M87-3+RG174-1A-3M-E

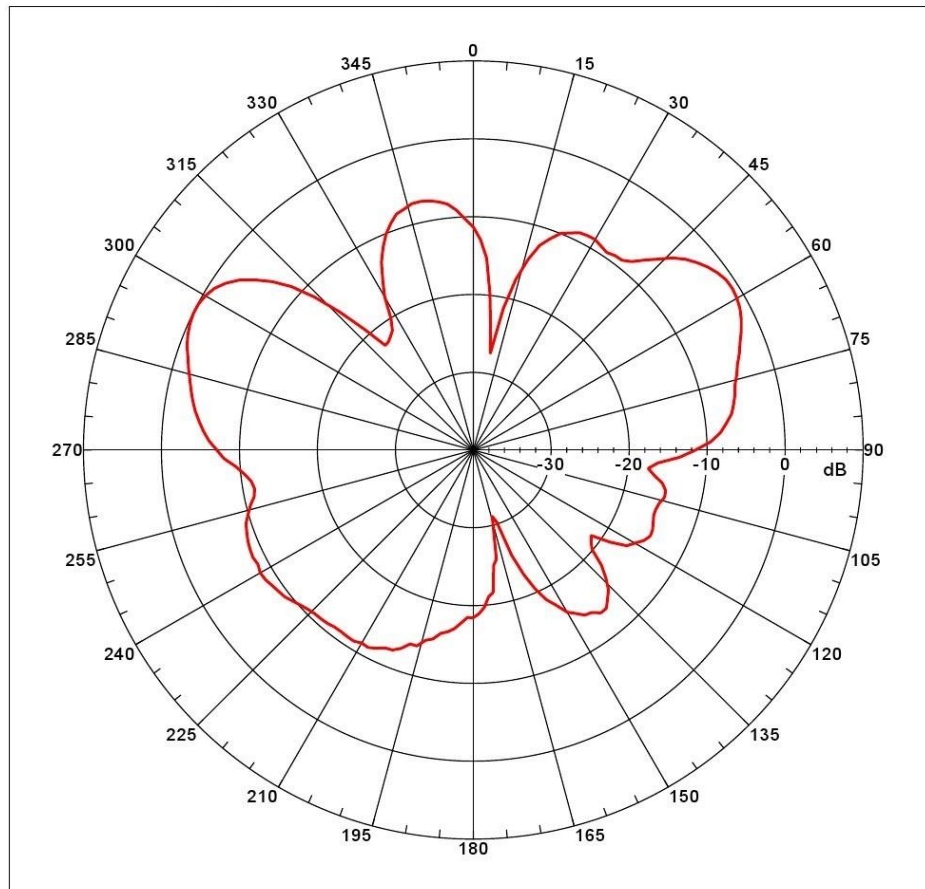
NSI2000 V4.0.124, Filename: C:\Documents and Settings\NSI\Desktop\C01B+M87-3+RG174-1A\C01B+M87-3+RG174-1A-3M-E.nsi  
Measurement date/time: 6/30/2017 1:58:06 PM, Filetype: NSI-97

Far-field Cut Analysis:  
Avg value: -7.155 dB  
-3. dB beam width: 30.05 deg  
-6. dB beam width: 43.87 deg  
-10. dB beam width: 136.96 deg  
Left Sidelobe: -6.35 dB at -15.106 deg  
Right Sidelobe: -0.77 dB at 115.643 deg

Far-field display setup  
Azimuth (deg)  
Span = 360.00001 deg, Center = 0.000 deg, #pts = 181  
Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg  
Elevation (deg)  
Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 7

| Beam | Frequency | Azimuth | Elevation | Pol        |
|------|-----------|---------|-----------|------------|
| 2    | 0.960 GHz | Azimuth | Elevation | Single-pol |



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg  
Gain = -0.06954 dBi  
Max far-field (global) = -45.26213 dB, Max far-field (plot) = -45.26215 dB  
Normalization: Reference, Network offset = 0.000 dB  
Hpeak at: -64.00001 deg, Vpeak at: 0.000 deg  
Plot centering: On

C01B+M87-3+RG174-1A-3M-E

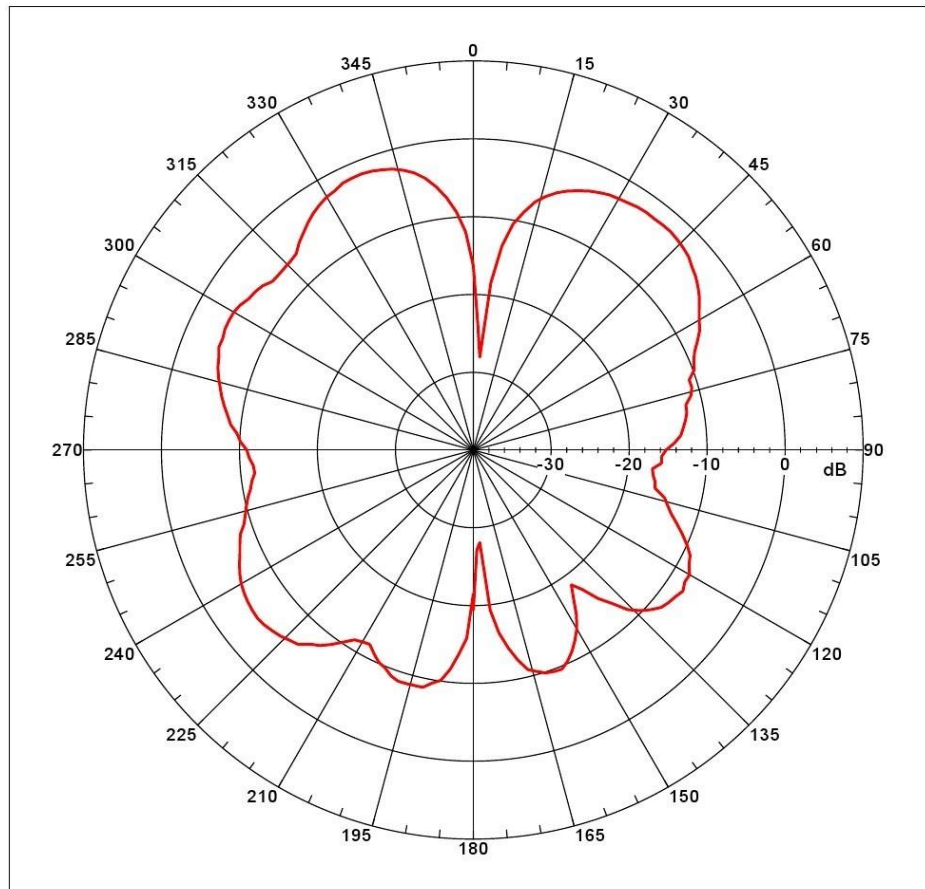
NSI2000 V4.0.124, Filename: C:\Documents and Settings\NSI\Desktop\C01B+M87-3+RG174-1A\C01B+M87-3+RG174-1A-3M-E.nsi  
Measurement date/time: 6/30/2017 1:58:06 PM, Filetype: NSI-97

Far-field Cut Analysis:  
Avg value: -9.326 dB  
-3. dB beam width: 24.66 deg  
-6. dB beam width: 37.86 deg  
-10. dB beam width: 48.41 deg  
Left Sidelobe: -8.47 dB at -115.643 deg  
Right Sidelobe: -7.27 dB at -11.061 deg

Far-field display setup  
Azimuth (deg)  
Span = 360.00001 deg, Center = 0.000 deg, #pts = 181  
Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg  
Elevation (deg)  
Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 7

| Beam | Frequency | Azimuth | Elevation | Pol        |
|------|-----------|---------|-----------|------------|
| 3    | 1.710 GHz | Azimuth | Elevation | Single-pol |



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg  
Gain = -1.74033 dB  
Max far-field (global) = -48.4089 dB, Max far-field (plot) = -48.40891 dB  
Normalization: Reference, Network offset = 0.000 dB  
Hpeak at: -22.00001 deg, Vpeak at: 0.000 deg  
Plot centering: On

C01B+M87-3+RG174-1A-3M-E

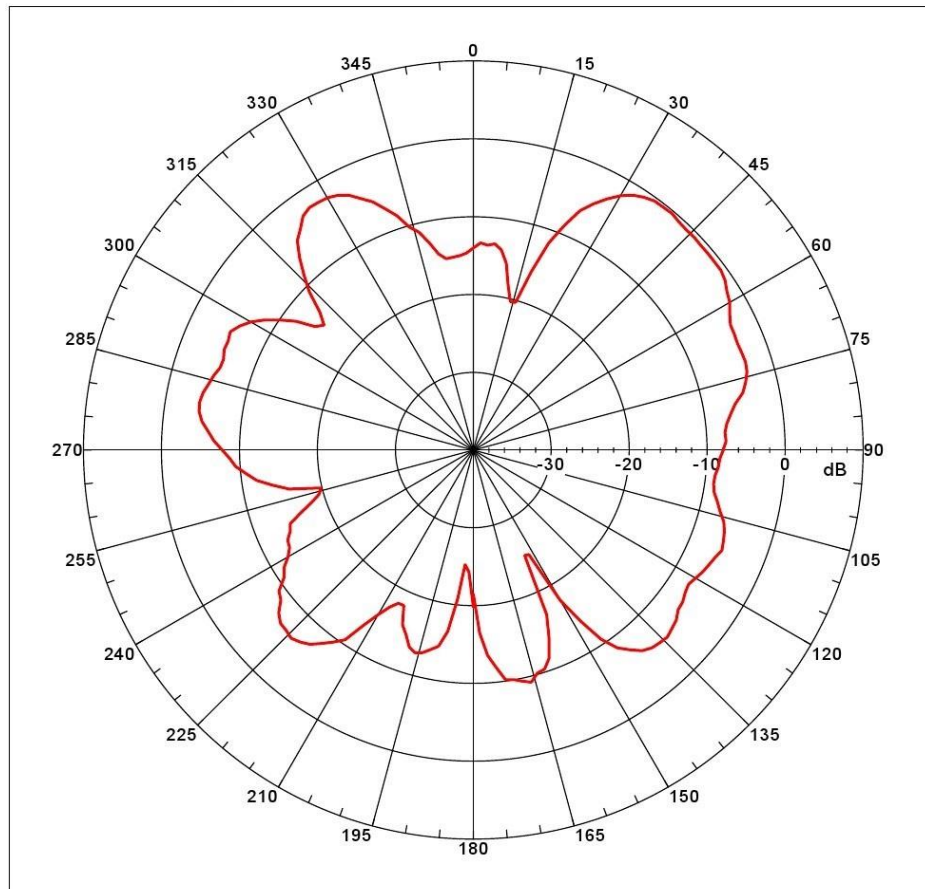
NSI2000 V4.0.124, Filename: C:\Documents and Settings\NSI\Desktop\C01B+M87-3+RG174-1A\C01B+M87-3+RG174-1A-3M-E.nsi  
Measurement date/time: 6/30/2017 1:58:06 PM, Filetype: NSI-97

Far-field Cut Analysis:  
Avg value: -7.765 dB  
-3. dB beam width: 28.79 deg  
-6. dB beam width: 75.24 deg  
-10. dB beam width: 92.90 deg  
Left Sidelobe: -2.80 dB at -59.330 deg  
Right Sidelobe: -0.52 dB at 37.207 deg

Far-field display setup  
Azimuth (deg)  
Span = 360.00001 deg, Center = 0.000 deg, #pts = 181  
Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg  
Elevation (deg)  
Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 7

| Beam | Frequency | Azimuth | Elevation | Pol        |
|------|-----------|---------|-----------|------------|
| 4    | 1.880 GHz | Azimuth | Elevation | Single-pol |



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg  
Gain = -0.35026 dBi  
Max far-field (global) = -47.88237 dB, Max far-field (plot) = -47.88238 dB  
Normalization: Reference, Network offset = 0.000 dB  
Hpeak at: 39.99999 deg, Vpeak at: 0.000 deg  
Plot centering: On

C01B+M87-3+RG174-1A-3M-E

NSI2000 V4.0.124, Filename: C:\Documents and Settings\NSI\Desktop\C01B+M87-3+RG174-1A\C01B+M87-3+RG174-1A-3M-E.nsi  
Measurement date/time: 6/30/2017 1:58:06 PM, Filetype: NSI-97

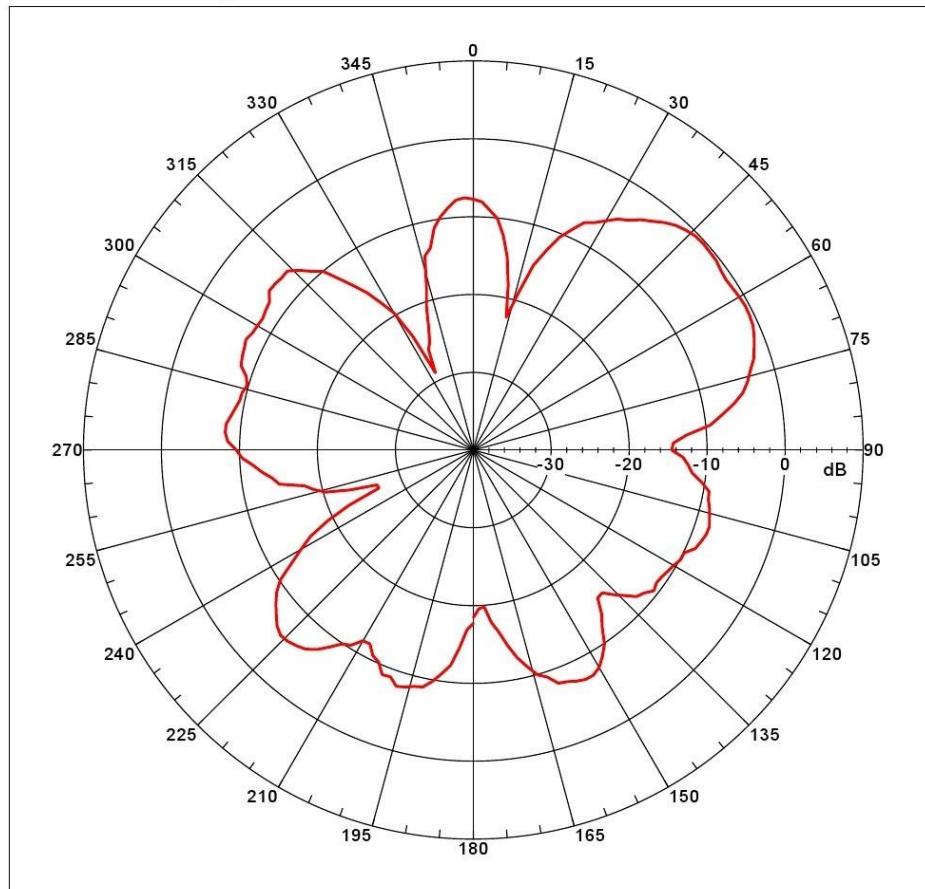
Far-field Cut Analysis:  
Avg value: -7.713 dB  
-3. dB beam width: 37.08 deg  
-6. dB beam width: 57.55 deg  
-10. dB beam width: 125.40 deg  
Left Sidelobe: -13.02 dB at 7.039 deg  
Right Sidelobe: -5.26 dB at 113.631 deg

Far-field display setup  
Azimuth (deg)  
Span = 360.00001 deg, Center = 0.000 deg, #pts = 181  
Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg  
Elevation (deg)  
Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 7

| Beam | Frequency | Azimuth | Elevation | Pol        |
|------|-----------|---------|-----------|------------|
| 5    | 2.170 GHz | Azimuth | Elevation | Single-pol |





Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg  
Gain = -0.34006 dBi  
Max far-field (global) = -50.47605 dB, Max far-field (plot) = -50.47607 dB  
Normalization: Reference, Network offset = 0.000 dB  
Hpeak at: 47.99999 deg, Vpeak at: 0.000 deg  
Plot centering: On

C01B+M87-3+RG174-1A-3M-E

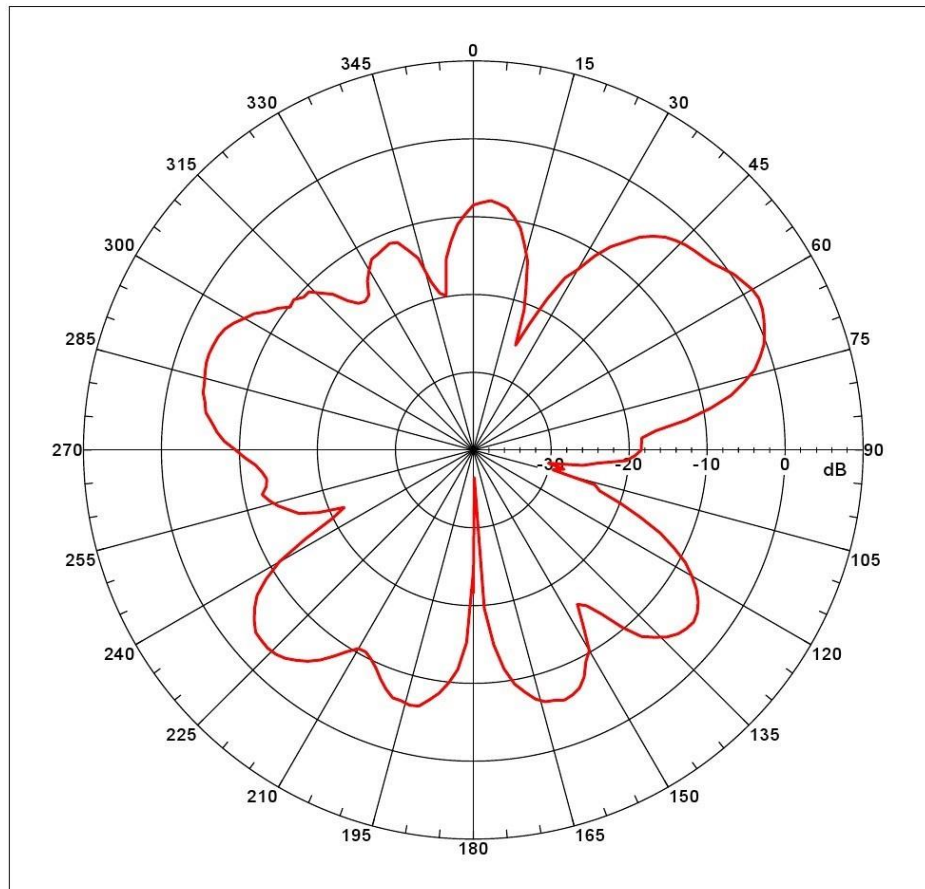
NSI2000 V4.0.124, Filename: C:\Documents and Settings\NSI\Desktop\C01B+M87-3+RG174-1A\C01B+M87-3+RG174-1A-3M-E.nsi  
Measurement date/time: 6/30/2017 1:58:06 PM, Filetype: NSI-97

Far-field Cut Analysis:  
Avg value: -0.809 dB  
-3. dB beam width: 38.76 deg  
-6. dB beam width: 51.31 deg  
-10. dB beam width: 62.63 deg  
Left Sidelobe: -7.24 dB at -1.006 deg  
Right Sidelobe: -7.80 dB at 109.609 deg

Far-field display setup  
Azimuth (deg)  
Span = 360.00001 deg, Center = 0.000 deg, #pts = 181  
Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg  
Elevation (deg)  
Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 7

| Beam | Frequency | Azimuth | Elevation | Pol        |
|------|-----------|---------|-----------|------------|
| 6    | 2.500 GHz | Azimuth | Elevation | Single-pol |



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg  
Gain = 1.480 dBi  
Max far-field (global) = -48.83679 dB, Max far-field (plot) = -48.83685 dB  
Normalization: Reference, Network offset = 0.000 dB  
Hpeak at: 61.99999 deg, Vpeak at: 0.000 deg  
Plot centering: On

C01B+M87-3+RG174-1A-3M-E

NSI2000 V4.0.124, Filename: C:\Documents and Settings\NSI\Desktop\CO1B+M87-3+RG174-1A\C01B+M87-3+RG174-1A-3M-E.nsi  
Measurement date/time: 6/30/2017 1:58:06 PM, Filetype: NSI-97

Far-field Cut Analysis:  
Avg value: -8.275 dB  
-3. dB beam width: 22.77 deg  
-6. dB beam width: 37.14 deg  
-10. dB beam width: 45.87 deg  
Left Sidelobe: -9.37 dB at 5.028 deg  
Right Sidelobe: -28.55 dB at 103.575 deg

Far-field display setup  
Azimuth (deg)  
Span = 360.00001 deg, Center = 0.000 deg, #pts = 181  
Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg  
Elevation (deg)  
Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 7

| Beam | Frequency | Azimuth | Elevation | Pol        |
|------|-----------|---------|-----------|------------|
| 7    | 2.600 GHz | Azimuth | Elevation | Single-pol |