### Technical Specification

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Without Radome</th>
<th>With Radome</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Polarization</strong></td>
<td>RHCP or LHCP</td>
<td></td>
</tr>
<tr>
<td><strong>Frequency Range (GHz)</strong></td>
<td>1.0 - 8.0</td>
<td></td>
</tr>
<tr>
<td><strong>Gain (dBic)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Without Radome</td>
<td>-6.46@1GHz</td>
<td>-6.50@1GHz</td>
</tr>
<tr>
<td>With Radome</td>
<td>4.76@8GHz</td>
<td>4.81@8GHz</td>
</tr>
<tr>
<td><strong>Axial Ratio (dB)</strong></td>
<td>1.0 Typ., 3.0 Max.</td>
<td></td>
</tr>
<tr>
<td><strong>3dB Beamwidth (deg)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Without Radome</td>
<td>E: 90-65</td>
<td></td>
</tr>
<tr>
<td></td>
<td>H: 90-65</td>
<td></td>
</tr>
<tr>
<td><strong>VSWR</strong></td>
<td>1.5:1 Typ.</td>
<td>2.0:1 Max</td>
</tr>
<tr>
<td><strong>Connector</strong></td>
<td>SMA- Female</td>
<td></td>
</tr>
<tr>
<td><strong>Material</strong></td>
<td>Al</td>
<td></td>
</tr>
<tr>
<td><strong>Size (mm)</strong></td>
<td>Φ120 x 89.4</td>
<td>Φ132 x 94.6</td>
</tr>
<tr>
<td></td>
<td>(Without Radome)</td>
<td>(With Radome)</td>
</tr>
<tr>
<td><strong>Net Weight (Kg)</strong></td>
<td>0.85 Around</td>
<td>0.87 Around</td>
</tr>
<tr>
<td></td>
<td>(Without Radome)</td>
<td>(With Radome)</td>
</tr>
<tr>
<td><strong>Material For Radome</strong></td>
<td>Rigid Foam</td>
<td></td>
</tr>
<tr>
<td><strong>Operating Environment For Radome</strong></td>
<td>Outdoor Application; Water Proof &amp; Dust Proof</td>
<td></td>
</tr>
</tbody>
</table>
Outline Drawing (Size: mm)

With SMA-Female Output

With SMA-Female Output & Round Mounting Bracket

AINFO Inc.
With SMA-Female Output & L Type Mounting Bracket

With SMA-Female Output & Radome
LX-1080
1 - 8GHz Cavity Backed Spiral Antenna

With SMA-Female Output & Round Mounting Bracket & Radome

With SMA-Female Output & L Type Mounting Bracket & Radome

AINFO Inc.  Page 4 of 9
China(Beijing): Tel: (+86) 10-6266-7326, (+86) 10-6266-7327  Fax: (+86) 10-6266-7379
China(Chengdu): Tel: (+86) 28-8519-2786, (+86) 28-8519-3044  Fax: (+86) 28-8519-3068
USA : Tel: (+1) 949-639-9688, (+1) 949-639-9608 Fax: (+1) 949-639-9670
Website: www.ainfoinc.com  Email: sales@ainfoinc.com

Data subject to change without notice. For current data sheets, please contact: Sales@ainfoinc.com
Test Results

1. Gain

<table>
<thead>
<tr>
<th>Frequency (GHz)</th>
<th>Gain (dBiC)</th>
<th>With Radome</th>
<th>Without Radome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>1.0</td>
<td>1.5</td>
<td>1.0</td>
</tr>
<tr>
<td>2.0</td>
<td>2.0</td>
<td>2.5</td>
<td>2.0</td>
</tr>
<tr>
<td>3.0</td>
<td>3.0</td>
<td>3.5</td>
<td>3.0</td>
</tr>
<tr>
<td>4.0</td>
<td>4.0</td>
<td>4.5</td>
<td>4.0</td>
</tr>
<tr>
<td>5.0</td>
<td>5.0</td>
<td>5.5</td>
<td>5.0</td>
</tr>
<tr>
<td>6.0</td>
<td>6.0</td>
<td>6.5</td>
<td>6.0</td>
</tr>
<tr>
<td>7.0</td>
<td>7.0</td>
<td>7.5</td>
<td>7.0</td>
</tr>
<tr>
<td>8.0</td>
<td>8.0</td>
<td>8.5</td>
<td>8.0</td>
</tr>
</tbody>
</table>

2. Antenna Factor

<table>
<thead>
<tr>
<th>Frequency (GHz)</th>
<th>Antenna Factor (dB/m)</th>
<th>With Radome</th>
<th>Without Radome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>1.0</td>
<td>1.5</td>
<td>1.0</td>
</tr>
<tr>
<td>2.0</td>
<td>2.0</td>
<td>2.5</td>
<td>2.0</td>
</tr>
<tr>
<td>3.0</td>
<td>3.0</td>
<td>3.5</td>
<td>3.0</td>
</tr>
<tr>
<td>4.0</td>
<td>4.0</td>
<td>4.5</td>
<td>4.0</td>
</tr>
<tr>
<td>5.0</td>
<td>5.0</td>
<td>5.5</td>
<td>5.0</td>
</tr>
<tr>
<td>6.0</td>
<td>6.0</td>
<td>6.5</td>
<td>6.0</td>
</tr>
<tr>
<td>7.0</td>
<td>7.0</td>
<td>7.5</td>
<td>7.0</td>
</tr>
<tr>
<td>8.0</td>
<td>8.0</td>
<td>8.5</td>
<td>8.0</td>
</tr>
</tbody>
</table>
3. Axial Ratio

![Axial Ratio Graph]

4. VSWR (DATA: With Radome; MEM: Without Radome)

<table>
<thead>
<tr>
<th>Frequency (GHz)</th>
<th>VSWR (With Radome)</th>
<th>VSWR (Without Radome)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.000 GHz</td>
<td>1.05</td>
<td>1.02</td>
</tr>
<tr>
<td>3.400 GHz</td>
<td>1.07</td>
<td>1.05</td>
</tr>
<tr>
<td>5.700 GHz</td>
<td>1.06</td>
<td>1.05</td>
</tr>
<tr>
<td>8.000 GHz</td>
<td>1.02</td>
<td>1.04</td>
</tr>
<tr>
<td>&gt; 6.845 GHz</td>
<td>1.04</td>
<td>1.04</td>
</tr>
</tbody>
</table>
5. Pattern

Frequency: 1.00GHz

H-Plane 3dB Beamwidth(deg): 87.20
E-Plane 3dB Beamwidth(deg): 89.89

Frequency: 1.60GHz

H-Plane 3dB Beamwidth(deg): 84.26
E-Plane 3dB Beamwidth(deg): 89.18

Frequency: 2.00GHz

H-Plane 3dB Beamwidth(deg): 78.50
E-Plane 3dB Beamwidth(deg): 82.45

Frequency: 2.50GHz

H-Plane 3dB Beamwidth(deg): 65.23
E-Plane 3dB Beamwidth(deg): 68.30

Frequency: 3.00GHz

H-Plane 3dB Beamwidth(deg): 65.59
E-Plane 3dB Beamwidth(deg): 72.95

Frequency: 3.50GHz

H-Plane 3dB Beamwidth(deg): 82.10
E-Plane 3dB Beamwidth(deg): 88.66

Data subject to change without notice. For current data sheets, please contact: Sales@ainfoinc.com
Frequency: 7.00GHz

H-Plane
3dB Beamwidth(deg): 68.63

E-Plane
3dB Beamwidth(deg): 74.32

Frequency: 7.50GHz

H-Plane
3dB Beamwidth(deg): 71.69

E-Plane
3dB Beamwidth(deg): 77.63

Frequency: 8.00GHz

H-Plane
3dB Beamwidth(deg): 76.77

E-Plane
3dB Beamwidth(deg): 74.44

LX-1080
1 - 8GHz Cavity Backed Spiral Antenna

China (Beijing): Tel: (+86) 10-6266-7326, (+86) 10-6266-7327 Fax: (+86) 10-6266-7379
China (Chengdu): Tel: (+86) 28-8519-2786, (+86) 28-8519-3044 Fax: (+86) 28-8519-3068
USA: Tel: (+1) 949-639-9688, (+1) 949-639-9608 Fax: (+1) 949-639-9670
Website: www.ainfoinc.com
Email: sales@ainfoinc.com