COMPENSATED COMPACT RANGE (CCR) ANTENNA MEASUREMENT FACILITIES
50 Years Experience in High-End Antenna Measurement Techniques
ANTENNA MEASUREMENT FACILITIES

General Description
The AIRBUS Defence and Space Compensated Compact Range Program represents the world-standard in antenna test facilities for the space industry due to its unique design and the outstanding quality.

The extreme long equivalent focal lengths of AIRBUS’s CCRs allow complete satellite payload testing by applying scanned quiet zone measurements. For testing of frequency reuse performance of satellite transponders the Compensated Compact Range design delivers highest cross-polar purity.

Therefore the Compensated Compact Range Program is a preferred choice for the Aerospace and Defence industry in the areas of research, development and production testing.

Key Features
- Real-time indoor measurements under far-field conditions
- Frequency range 1.0 – 650 GHz
- Cross-polar compensated system / beam-squint-free
- Test zone size up to 8.0 m
- Enlargement of test zone size by Quiet Zone Extension
- Excellent amplitude and phase uniformity
- Steerable & multiple test zones for real-time end-to-end payload testing
- Extreme high azimuth resolution of up to 1/10.000 degree due to scanned quiet zone capability
- Long-term reflector stability
- Well-proven manufacturing process

Typical Key Data

<table>
<thead>
<tr>
<th></th>
<th>CCR 120/100</th>
<th>CCR 75/60</th>
<th>CCR 20/17</th>
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</thead>
<tbody>
<tr>
<td>Frequency Range1</td>
<td>1.0 – 100 GHz</td>
<td>1.5 – 650 GHz</td>
<td>3.5 – 650 GHz</td>
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<tr>
<td>Diameter of Test Zone</td>
<td>up to 8.0 m</td>
<td>up to 5.0 m*</td>
<td>up to 1.5 m</td>
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<tr>
<td>Pattern Measurement Accuracy</td>
<td>±0.75 dB @ -30 dB SLL</td>
<td>±0.75 dB @ -30 dB SLL</td>
<td>±0.75 dB @ -30 dB SL</td>
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<tr>
<td>Cross-Polarization</td>
<td>-45 dB</td>
<td>-45 dB</td>
<td>-45 dB</td>
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<tr>
<td>Gain Accuracy</td>
<td>±0.2 dB</td>
<td>±0.2 dB</td>
<td>±0.2 dB</td>
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</tbody>
</table>

Custom-tailored designs are available on request.* 6.0 m x 5.0 m by Quiet Zone Extension upgrade.