

## DESCRIPTION

Ascan CRL series compact range is based on SilentRIM™ Lens which provides equivalent performance compared to conventional rolled back reflector compact range with low cost and large quiet zone. Paired with Ascan roll over azimuth spherical positioner. It provides a turnkey solution ideal for over the air, passive antenna and RF immunity qualification and test. Frequency cover wide range from radio frequency to millimeter wave frequency.

## FEAUTRES

- Cover from 8GHz to mmWave frequency range up to 50GHz
- Full spherical scan capability
- Automatic scan and control setup
- Paired with optional viewing and analysis software
- 3D and 2D radiation pattern

## TYPICAL APPLICATIONS

- Over the air test platform
- Electronic warfare and jamming test bed
- General broad pattern antennas
- RCS test platform
- Millimeter wave Antennas and arrays

## SPECIFICATIONS

Systems	CRL-220	CRL-400	CRL-700
SilentRIM Lens Type	AP440-U7	AP800-U7	AP1400-U7
Geometry	In Axis Feed	In Axis Feed	In Axis Feed
Frequency range	8-50GHz	4-50GHz	2-8GHz
Quiet zone shape	Cylinder	Cylinder	Cylinder
Quiet zone size	220mm	400mm	700mm
Cross polarization (typ)	>30dB	>30dB	>30dB
Amplitude variation (typ)	1.5dB	1.5dB	1.5dB
Phase variation (typ)	12°	12°	12°
Lens diameter	440mm	800mm	1400mm
Maximum payload <sup>1</sup>	7kg	15kg	20kg

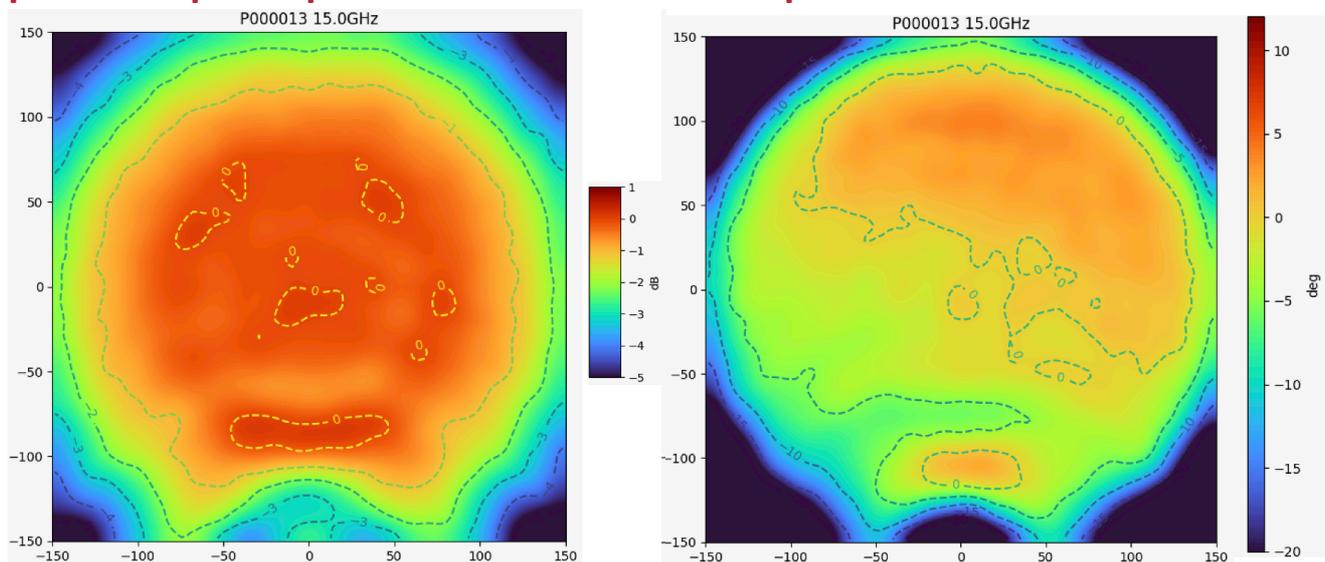
### Positioning Subsystem

DUT positioner	Roll over AZ; manual slide 250mm	Roll over AZ; manual slide 500mm	Roll over AZ; manual slide 800mm
Feed positioner	Pol axis automation	Pol axis automation	Pol axis automation
RF cables (optional)	18, 26.5, 40, 50 GHz		
VNA compatibility	Keysight, Rohde & Schwarz (other VNA please contact Ascan)		

### Weights and Dimensions

Installation Envelope W×L×H	1m×2m×0.6 m	1.5m×3.5m×1.2m	2m×5m×2m
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### Typical field probe performance cross section plane



1. The maximum payload/weight depends on the shape of the AUT, stated as maximum weight when gravity centre of AUT is at the rotation centre of roll axis.

## DELIVERABLES

### Positioning and Scanning subsystem

- Roll over azimuth scanner
- Phase centre offset slider
- Probe Tower with automated pol axis control
- Absorber kit
- SilentRIM™ Lens and holder

### Motion Control

- Ascan controller
- Controller cables
- Ascan FieldScanner-- control and data acquisition software

### RF subsystem

- Positioner cable
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### Site Deliverables

- Hardware, system and software manual
- Anchoring kit
- Shipping crates

## OPTIONS AND ACCESSORIES

### Software add-on

Spatial digital filter

### RF Components

Waveguide probe and its fixtures

Standard gain horn and associated fixtures

Range RF cable (optional)

Rotary joint—theta, phi and pol axes (optional)

### Additional scanning modes

Floor slide

Planar scanner

Cylindrical scanner

### On Site Services

Installation

Training

Notes: This datasheet is not used as a contractual document. It is a general introduction of the system. Please contact Ascan for more information.