



FEATURES

- Focal Lengths from 0.8 m (2.5 ft) - 14.6 m (48 ft)
- Achievable Frequency Range of 0.35 - 200 GHz
- Modular Design is Easily Configurable
- Superior Thermal Properties

DESCRIPTION

The Compact Range Reflector (CRR) product line continues NSI-MI Technologies' heritage and leadership in the design, fabrication, integration, and delivery of compact range test systems. Each Compact Range Reflector is made to exacting standards for optimum illumination and field uniformity. The reflector's main body is the structural backbone of the composite assembly and provides the structural integrity. The serrated or rolled edges are fabricated of lightweight materials reducing the unit's overall weight. All NSI-MI reflectors have a life expectancy exceeding 20 years.

Offering three optional feed layouts; center fed, corner fed, and side fed, NSI-MI's Compact Range Reflectors allow the most flexibility for your test range design. Standard CRR offerings have serrated or rolled edge treatments. Custom models are available and typically include specially sized reflectors or edge treatments to address specific electromagnetic requirements. NSI-MI Technologies can provide Dual Reflector Compact Range Systems, Portable Compact Ranges, and other creative solutions to meet customer requirements. Compact ranges with quiet zones up to 11.56 m (38 ft) wide, for example, have been delivered by NSI-MI's experienced engineering and manufacturing teams.

GENERAL SPECIFICATIONS

Model	Description	Test Zone (HxWxD) m (ft)	Frequency* (GHz)	Focal Length m (ft)
CRR-CSC-0.3	0.3 m Circular Quiet Zone, Center Fed, Serrated	0.3x0.3x0.3 (1x1x1)	8 - 200	1 (3)
CRR-CSC-0.6	0.6 m Circular Quiet Zone, Center Fed, Serrated	0.6x0.6x0.6 (2x2x2)	4 - 200	1.8 (6)
CRR-CSC-1	1 m Circular Quiet Zone, Center Fed, Serrated	1x1x1 (3x3x3)	4 - 200	1.8 (6)
CRR-CSC-1.2	1.2 m Circular Quiet Zone, Center Fed, Serrated	1.2x1.2x1.2 (4x4x4)	2 - 200	3.7 (12)
CRR-CSC-1.5	1.5 m Circular Quiet Zone, Center Fed, Serrated	1.5x1.5x1.5 (5x5x5)	2 - 200	3.7 (12)
CRR-CSC-1.8	1.8 m Circular Quiet Zone, Center Fed, Serrated	1.8x1.8x1.8 (6x6x6)	2 - 200	3.7 (12)
CRR-CSC-2	2 m Circular Quiet Zone, Center Fed, Serrated	2x2x2 (6.6x6.6x6.6)	1.5 - 200	4.3 (14)
CRR-CSC-2.4	2.4 m Circular Quiet Zone, Center Fed, Serrated	2.4x2.4x2.4 (8x8x8)	1 - 200	7.3 (24)
CRR-CSC-3	3 m Circular Quiet Zone, Center Fed, Serrated	3x3x3 (10x10x10)	1 - 200	7.3 (24)
CRR-CSC-3.7	3.7 m Circular Quiet Zone, Center Fed, Serrated	3.7x3.7x3.7 (12x12x12)	1 - 200	7.3 (24)
CRR-CSC-5	5 m Circular Quiet Zone, Center Fed, Serrated	5x5x5 (16x16x16)	0.35 - 40	12.2 (40)
CRR-CSC-6	6 m Circular Quiet Zone, Center Fed, Serrated	6x6x6 (20x20x20)	0.5 - 40	14.6 (48)
CRR-ESC-1.2x1.8	1.2 m x 1.8 m Elliptical Quiet Zone, Center Fed, Serrated	1.2x1.8x1.8 (4x6x6)	2 - 200	3.7 (12)
CRR-ESC-1.8x2.7	1.8 m x 2.7 m Elliptical Quiet Zone, Center Fed, Serrated	1.8x2.7x2.7 (6x9x9)	1 - 200	7.3 (24)
CRR-ESC-2.4x3.7	2.4 m x 3.7 m Elliptical Quiet Zone, Center Fed, Serrated	2.4x3.7x3.7 (8x12x12)	1 - 200	7.3 (24)
CRR-CSD-0.6	0.6 m Circular Quiet Zone, Diagonally Fed, Serrated	0.6x0.6x0.6 (2x2x2)	4 - 200	1.8 (6)
CRR-CSD-1	1 m Circular Quiet Zone, Diagonally Fed, Serrated	1x1x1 (3x3x3)	4 - 200	2.7 (9)
CRR-CSD-1.2	1.2 m Circular Quiet Zone, Diagonally Fed, Serrated	1.2x1.2x1.2 (4x4x4)	2 - 200	3.7 (12)
CRR-CSD-1.5	1.5 m Circular Quiet Zone, Diagonally Fed, Serrated	1.5x1.5x1.5 (5x5x5)	2 - 200	3.7 (12)
CRR-CSD-1.8	1.8 m Circular Quiet Zone, Diagonally Fed, Serrated	1.8x1.8x1.8 (6x6x6)	1.5 - 200	5.5 (18)
CRR-CSD-2.4	2.4 m Circular Quiet Zone, Diagonally Fed, Serrated	2.4x2.4x2.4 (8x8x8)	1 - 200	7.3 (24)
CRR-CSD-3	3 m Circular Quiet Zone, Diagonally Fed, Serrated	3x3x3 (10x10x10)	1 - 200	7.3 (24)
CRR-CSD-3.7	3.7 m Circular Quiet Zone, Diagonally Fed, Serrated	3.7x3.7x3.7 (12x12x12)	1 - 200	7.3 (24)
CRR-ESS-0.6x1	0.6 m x 1 m Circular Quiet Zone, Diagonally Fed, Serrated	0.6x1x1 (3x4.5x4.5)	3 - 200	3.7 (12)
CRR-ESS-1x1.4	1 m x 1.4 m Elliptical Quiet Zone, Side Fed, Serrated	1x1.4x1.4 (2x4.5x4.5)	3 - 200	3.7 (12)
CRR-ESS-1.2x1.8	1.2 m x 1.8 m Elliptical Quiet Zone, Side Fed, Serrated	1.2x1.8x1.8 (4x6x6)	2 - 200	5.5 (18)
CRR-ESS-1.8x2.7	1.8 m x 2.7 m Elliptical Quiet Zone, Side Fed, Serrated	1.8x2.7x2.7 (6x9x9)	1.5 - 200	7.3 (24)
CRR-ESS-2.4x3.7	2.4 m x 3.7 m Elliptical Quiet Zone, Side Fed, Serrated	2.4x3.7x3.7 (8x12x12)	1 - 200	11 (36)
CRR-CRC-0.3	0.3 m Circular Quiet Zone, Center Fed, Rolled	0.3x0.3x0.3 (1x1x1)	24 - 200	0.8 (2.5)
CRR-CRC-0.5	0.5 m Circular Quiet Zone, Center Fed, Rolled	0.5x0.5x0.5 (1.6x1.6x1.6)	24 - 200	1.2 (4)
CRR-CRC-0.8	0.8 m Circular Quiet Zone, Center Fed, Rolled	0.8x0.8x0.8 (2.6x2.6x2.6)	24 - 200	1.8 (6)
CRR-CRC-0.9	0.9 m Circular Quiet Zone, Center Fed, Rolled	0.9x0.9x0.9 (3x3x3)	24 - 200	2.1 (7)
CRR-CRC-1	1 m Circular Quiet Zone, Center Fed, Rolled	1x1x1 (3x3x3)	24 - 200	2.3 (7.5)
CRR-CRC-5	5 m Circular Quiet Zone, Center Fed, Rolled	5x5x5 (16x16x16)	0.35 - 40	12.2 (40)

*Standard Compact Range Reflectors are designed to operate and meet performance specifications at frequencies up to 40 GHz. The surface accuracy of the reflectors can be improved for operation up to 200 GHz. The frequency can also be extended below the specified low frequency. Please contact us for specifications above 40 GHz and other application requirements.

QUIET ZONE SPECIFICATIONS

Parameter	Specification**
Amplitude Taper	≤ 1 dB
Amplitude Ripple	±0.5 dB
Phase Variation	±5° (≤ 18 GHz), ±10° (18 to 40 GHz)
Cross Polarization	-30 dB on Axis

**Specifications apply to full quiet zone at a 95% statistical confidence level. Statistical confidence level varies based on the quality and design of chamber and thermal conditions.