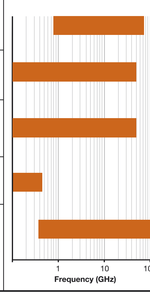
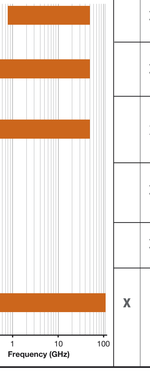
Which Measurement Probe or Feed for Which Configuration?

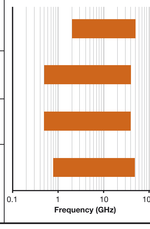
1 PLANAR AND CYLINDRICAL NEAR-FIELD

	FREQUENCY RANGE	SINGLE POL.	DUAL POL.	MAIN CHARACTERISTICS
DUAL POLARIZED MINIMUM SCATTERING PROBES			X	• Minimum waveguide cross-section for low backscattering • Tailored for Planar Near Field • Constant radiation pattern shape over frequency
OPEN BOUNDARY QUAD-RIDGE HORNS			X	• Suitable for PNF/CNF in the low-end of the frequency band (1.5 octaves) • Lightweight
REAR-FED OPEN BOUNDARY QUAD-RIDGE HORNS			X	• Suitable for PNF/CNF in the low-end of the frequency band (1.5 octaves)
LOW FREQUENCY PROBES			X	• Equalized beamwidths • Low profile and lightweight VHF/UHF band probe
OPEN-ENDED WAVEGUIDES		X		• Industry standard for PNF/CNF measurements • Integrated absorber panel

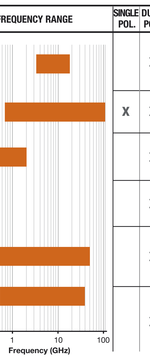
2 SPHERICAL NEAR-FIELD

	FREQUENCY RANGE	SINGLE POL.	DUAL POL.	MAIN CHARACTERISTICS
DUAL POLARIZED PROBES			X	• Quasi first-order spherical probe, allowing for first-order probe correction • High on-axis polarization purity
OPEN BOUNDARY QUAD-RIDGE HORNS			X	• Suitable for SNF in the low/mid-end of the frequency band, in combination with full probe correction • Lightweight
REAR-FED OPEN BOUNDARY QUAD-RIDGE HORNS			X	• Suitable for SNF in the low/mid-end of the frequency band, in combination with full probe correction
LOW FREQUENCY PROBES			X	• Quasi first-order spherical probe, allowing for first-order probe correction • Low profile and lightweight VHF/UHF band probe
VHF WIDEBAND DUAL POLARIZED PROBE			X	• High efficiency • Low return loss / VSWR
OPEN-ENDED WAVEGUIDES		X		• Entry-level solution for SNF • Integrated absorber panel

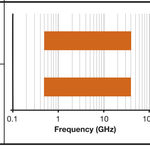
3 FAR-FIELD

	FREQUENCY RANGE	SINGLE POL.	DUAL POL.	MAIN CHARACTERISTICS
HIGH PRECISION OFFSET PARABOLIC REFLECTOR		X	X	• High gain • Stable phase center over frequency • Excellent on-axis cross-polar discrimination
CLOSED BOUNDARY QUAD-RIDGE HORNS			X	• Stable phase center over frequency • Excellent cross-polar discrimination and port-to-port isolation
DIAGONAL HORNS		X		• High gain • Equalized beamwidths • Extremely low sidelobes
DUAL POLARIZED PROBES			X	• High polarization purity • Equalized beamwidths

4 COMPACT ANTENNA TEST RANGE

	FREQUENCY RANGE	SINGLE POL.	DUAL POL.	MAIN CHARACTERISTICS
CATR FEEDS FOR CROSS-POLAR COMPENSATION			X	• Cross-polar compensation of single- or dual-cylindrical reflector CATRs • Optimal reflector illumination within WR bands
COMPACT RANGE FEED HORNS		X	X	• Optimal reflector illumination within WR bands
QUAD-RIDGE FLARED HORN			X	• Flat gain over a wide frequency band • Stable phase center over frequency • Low chamber/Quiet Zone illumination
LOW FREQUENCY PROBES			X	• Equalized beamwidths • Stable phase center over frequency • Low profile and lightweight VHF/UHF band feed
REAR-FED OPEN BOUNDARY QUAD-RIDGE HORNS			X	• Entry-level solution for CATR measurements
CLOSED BOUNDARY QUAD-RIDGE HORNS			X	• Stable phase center over frequency • Excellent cross-polar discrimination and port-to-port isolation

5 RCS MEASUREMENTS

	FREQUENCY RANGE	SINGLE POL.	DUAL POL.	MAIN CHARACTERISTICS
DIAGONAL HORNS		X		• Extremely low sidelobes • Very low coupling between adjacent horns
CLOSED BOUNDARY QUAD-RIDGE HORNS			X	• Excellent cross-polar discrimination and port-to-port isolation • Low coupling between adjacent horns

At MVG, we produce our antennas with outstanding performance in mind. It begins with a careful design process, alternating between simulations and measurements. It extends through fabrication, using the most advanced machining techniques of quality materials to achieve mechanically tight tolerances. This is why all our antenna specifications are outstanding. It is also why we can guarantee the best electrical performance/ operational bandwidth trade-off in the industry.

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