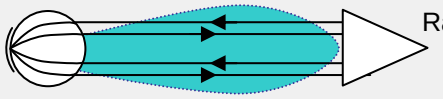
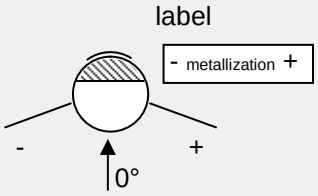
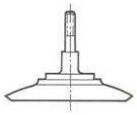
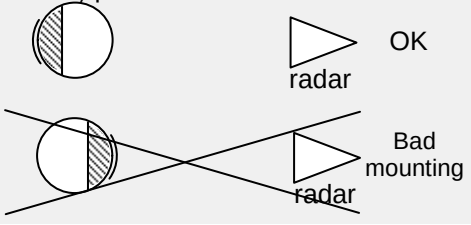
LUNEBERG REFLECTORS MONOSTATIC CIRCULAR POLARIZATION

Zéphyr

Plan #	4LUN04R0007
R.C.S. Measurements	We guarantee the specifications of the reflector according to plan # 4LUN04R0007. The reflector is delivered with 3 points of measurement (0° / -50° / +50° in azimuth at 0° of sight). The delivered measurement corresponds to the measurement of the lens alone. Further measurements options (patterns…) on specific request.
Response	Monostatic  Radar transmitter & receiver
Polarization	Circular. The radars use the circular polarization in particular in order to reduce the droplets effect. The circular radar reflector stands out of the clutter caused by the reflections of the rain because it reflects the signal without inversion of the direction of polarization, contrary to trihedral reflector or flat disk.
Metallization	 label - metallization + - + 0° Metallization on ± 70° The label of metallization locates the plane of measurement at ± 50°.
Radom	Waterproof composite protection (also against salted ambiance). Acceleration – vibration tests have been passed allowing mounting in supersonic targets
Standard fixing (in option)	 plan 4LUN04D0005 Development of any other fixing at request
Specific unit packaging	
⚠ Precautions of use	The response of the lens depends on the environment. • Avoid thick fairing • Avoid fairing made of dielectrical material with important losses • Avoid any object (especially metallic) positioned between the lens and the radar (strap, screw…) • Take care in mounting  OK radar Bad mounting radar

Lun'tech

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Reference	Frequency range	Measuring frequency (GHz)	Minimum Radar Cross Section guaranteed (sqm)		Diameter of the reflector without fixing		Weight without fixing (kg)
			R.C.S. in the axis	R.C.S. at ± azimuth angle	(inches)	(cm)	
XMC09	X	9,375	6	à ±50° 4	9,2	23	2,9
KMC07	Ku	15,54	6	à ±50° 5	7,0	18	1,3
KMC08.5	Ku	16,5	10	à ±50° 6	8,5	22	2,5
KMC09	Ku	16,5	11	à ±50° 7	9,2	23	2,9