



## LUNEBERG REFLECTORS BISTATIC RECTILINEAR POLARIZATION

Zéphyr

Plan #	4LUN04R0006		
R.C.S. Measurements	<p>We guarantee the specifications of the reflector according to plan # 4LUN04R0006. The reflector is delivered with 2 points of measurement (0° and 10° of bistatism in the axis). The delivered measurement corresponds to the measurement of the lens alone. Moreover the reflector can be used from S band to Ku band.</p> <p>Further measurement options (patterns, other frequencies...) on specific request.</p>		
Response	<p>Bistatic</p>	<p>As shown on this drawing, the reflected power at an angle of bistatism different from 0° is different from the reflected power in the axis. The larger the aperture of the pattern (large cone of response), the better the results of the reflector in bistatism.</p>	
Polarization	<p>Rectilinear. The reflected wave is on the same plane as the wave interrogating the reflector</p>		
Metallization		<p>Metallization on ± 70° The label of metallization locates the plane where R.C.S. measurements have been done.</p>	
Radom	<p>Waterproof composite protection (also against salted ambiance). Acceleration – vibration tests have been passed allowing mounting in supersonic targets</p>		
Standard fixing (in option)		<p>plan 4LUN04D0005 Development of any other fixing at request</p>	
Specific unit packaging			
<p>⚠ Precautions of use</p>	<p>The response of the lens depends on the environment.</p> <ul style="list-style-type: none"> <li>● Avoid thick fairing</li> <li>● Avoid fairing made of dielectrical material with important losses</li> <li>● Avoid any object (especially metallic) positioned between the lens and the radar (strap, screw...)</li> <li>● Take care in mounting</li> </ul>		



LUNEBERG REFLECTORS  
BISTATIC  
RECTILINEAR POLARIZATION

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 10° of bistatism	(inches)	(cm)	
XBR03	X	9,375	0,1	0,05	3,0	8	0,12
XBR04	X	9,375	0,4	0,2	4,0	10	0,27
XBR05	X	9,375	1,0	0,4	4,9	12	0,45
XBR07	X	9,375	2,2	0,7	7,0	18	1,3
XBR08.5	X	9,375	6	1	8,5	22	2,5
XBR09	X	9,375	6	1	9,2	23	2,9
XBR10	X	9,375	9	2	10,0	25	3,8

