

CBL 6144 vertical plus rotating mount CHA 9440A onto tripod BTP 6020A

## The X-Wing® BiLog® for RF EMC immunity testing

The combination of BiLog® technology with novel low frequency, folded elements (X-Wings®) allows low frequency power to be efficiently projected forward without significantly affecting the high frequency elements. The CBL 6144 gives an incredible antenna factor of only 3 dB at 26 MHz together with a useable VSWR making the CBL 6144 able to deliver 10 V/m with 80% AM modulation using an amplifier power of less than 500 W (chamber dependent) at 26 MHz.

#### **High Power Handling**

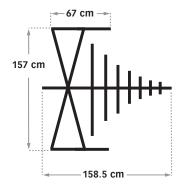
The CBL 6144 has been optimised for immunity testing to IEC 61000-4-3, and uses a high impedance balun, giving a considerably improved VSWR at low frequencies over the original immunity BiLog® CBL 6121A. Although it is larger in size than the classic emission BiLog®, it is still smaller than any conventional alternative. The CBL 6144 can handle powers up to 600 Watts and is suitable for testing in most shielded rooms and anechoic chambers.

### **Emission testing**

Although primarily designed as an immunity antenna, the CBL 6144 can be used for emission testing and can be supplied with individual calibration data.

- Ultra-broadband immunity antenna
- For compact chambers
- Reduced chamber coupling
- Up to 30% test time saved

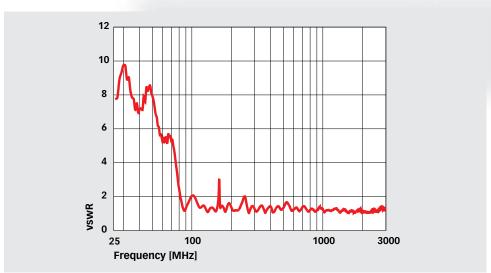
#### **Technical specifications**



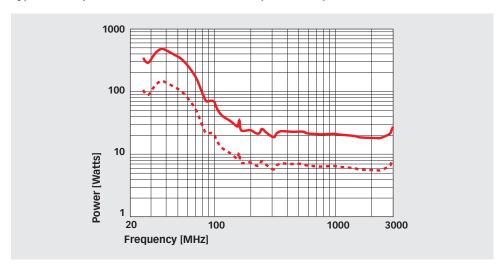
26 MHz to 3 GHz (useable to 20 MHz)
6 dB (200 MHz to 3 GHz) / 8 dB (700 MHz to 2.5 GHz)
50 Ω
600 W
N type female
Average 2:1 max
250 V/m at 1 m, 50 $\Omega$ source, free space conditions
approx. 1585 X 1570 X 670 (see drawing)
approx. 6.5 kg
BTP 6020A-1370 plus rotating mount CHA 9440A



## **Typical VSWR**



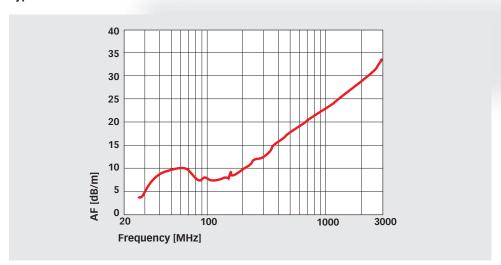
Typical drive power for 10 V/m at 3 m, ••• CW power, — power with 80% modulation



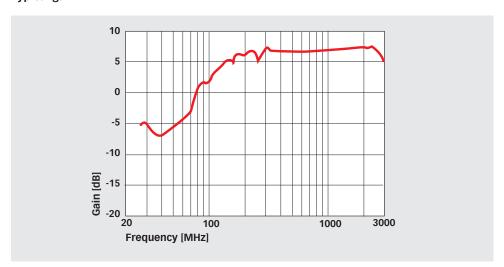




## Typical antenna factor



## Typical gain

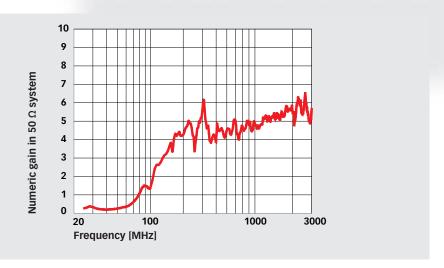






CBL 6144 horizontal plus rotating mount CHA 9440A onto tripod BTP 6020A

## Typical gain ratio





## **Delivery information**

Part number	Description
342-020	CBL 6144 X-Wing BiLog antenna 26 MHz - 3 GHz
97-244570	Ant Cert-TC Traceable calibration (ISO17025), order only with the antenna, free space calibration (horizontal), other calibrations on request
248523	BTP 6020A-1370 EMC Tripod with tube 1370 mm and mounting head for antennas with 22 mm tube
348-815	CHA 9440A Rotating mount to fit CBL 6140 onto BTP 6020

Rotating mount CHA 9440A

