

**LASER INTERFEROMETER GRAVITATIONAL WAVE
OBSERVATORY**

-LIGO-

CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Document Type	DCC Number	
Test Procedure and Results	LIGO-T010124-A-C	October 22, 2001
RF Distribution System, LSC Box Test Procedure		
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Distribution of this draft: NSF reviewers, LIGO scientists
This is an internal working note of the LIGO Laboratory

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Tech: _____

LIGO-T010124-A-C

Date: _____

Serial Number: _____

1. Overview

The LSC Box (D000097-A) functions as a passive power splitter. A signal applied to the RF input (J1) is split and is available as an output on each of 16 front panel SMA connectors (J2 through J17). The total insertion loss from the input to any output is approximately 17dBm. No power supplies are necessary for this system.

2. Test Setup

Using an RF signal generator, apply a 30 MHz, +10 dBm (2Vp-p) signal to the RF input (J1). Using a 100 MHz or faster oscilloscope with a 50 ohm input impedance, observe the RF output at each of the SMA outputs (J2 through J17)

3. Test Results

Output Port	Signal Level on Scope	Actual Level on Scope
J2	0.08Vp-p to 0.126Vp-p	
J3	0.08Vp-p to 0.126Vp-p	
J4	0.08Vp-p to 0.126Vp-p	
J5	0.08Vp-p to 0.126Vp-p	
J6	0.08Vp-p to 0.126Vp-p	
J7	0.08Vp-p to 0.126Vp-p	
J8	0.08Vp-p to 0.126Vp-p	
J9	0.08Vp-p to 0.126Vp-p	
J10	0.08Vp-p to 0.126Vp-p	
J11	0.08Vp-p to 0.126Vp-p	
J12	0.08Vp-p to 0.126Vp-p	
J13	0.08Vp-p to 0.126Vp-p	
J14	0.08Vp-p to 0.126Vp-p	
J15	0.08Vp-p to 0.126Vp-p	
J16	0.08Vp-p to 0.126Vp-p	
J17	0.08Vp-p to 0.126Vp-p	