

## Lumine 5-¼" 2-Way Illuminator Kit

This is a great little 2-way with world-class sound quality!  
Parts only. Price shown is for the pair.

Kit purchase includes (2) 15WU/4741T-00 woofers, (2) R3004/6620 tweeters, and two fully-assembled premium crossovers.

Don't let the size fool you! The Lumine uses the top-class Scan Speak Illuminator drivers. This little kit is a bit of a giant-killer, competing with larger systems with ease. Ideal for high-end desktop, studio monitor, or 2-channel audio use.

Accessories package optional on the pulldown menu. Cabinets not included.

### System Specifications

- System efficiency: ~86 dB .
- Recommended amplifier power: 30 - 250W
- Nominal impedance: 4 ohms
- Frequency response (3dB): 50- 20,000Hz
- Bass unit: Illuminator 15WU/4741T-00 5" Woofer
- Tweeter: R3004/6620 1" Tweeter
- Crossover frequency: @2500Hz

### Driver Features



Scan-Speak Illuminator 15WU/4741T-00 5.25" Woofer. The Illuminator woofers are based on compact under-hung motor systems with large neodymium ring magnets. The patent pending motor offers a very long linear excursion together with a very high force factor. The top plate is shaped to “guide” the backside airflow around the motor and with the very open cast aluminum chassis design the driver is virtually free from compression.

- Paper cone
- Cast frame

- Neodymium motor
- Underhung voice coil
- Long excursion



ScanSpeak Illuminator R3004/6620 1" Tweeter. The Illuminator tweeters continue on with the heritage of the renowned Revelator D29. The large-roll surround and textile dome diaphragm provide a flat frequency response to above 30KHz with outstanding off-axis dispersion. The face plates are die cast in aluminum for a beautiful look with maximum mechanical stability. R3004 builds on the experience of the one-inch R29 ring radiator, resulting in low resonance frequency, superb vocal rendition and excellent imaging at all listening locations. Tymphany's unique AirCirc Magnet System named for the way it optimizes air flow within the chamber – rearranges the traditional magnet structure from a single magnet to an open magnetic circuit comprised of six separate neodymium slugs. This, in combination with the chamber, results in the elimination of the reflections and resonance that compromise the performance of traditional motors.

- 1" Ring Radiator
- AirCirc Magnet System
- Aluminum die cast faceplate

### **Cabinet Drawing**

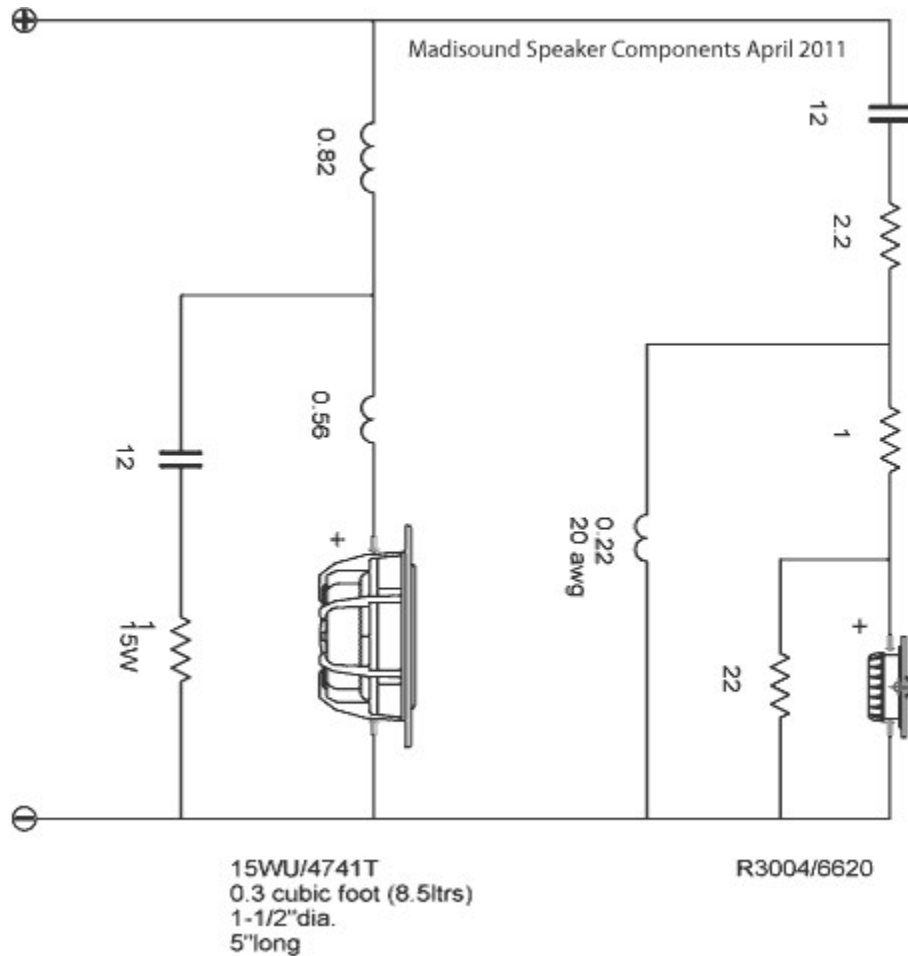
We recommend 0.3 cubic foot (8.5 liters) with a single vent 1.5" diameter by 5". If you wish to use a double-flared vent instead, make it 6". See below for the enclosure drawing.

[Lumine Cabinet Enclosure Plan \(PDF\)](#)

### **Other enclosure options:**

- 0.30 cu ft with a 1-1/2" diameter vent 5.5" long gives F3 51hz.
- 0.25 cu ft with a 1-1/2" diameter vent 6" long gives F3 55hz.
- 0.2 cu ft with a 1-1/2" diameter vent, 6" long gives F3 60hz.
- Any smaller enclosure and the port gets too long.
- Please note the very small enclosure will restrict the size of the crossover that can be used internally! Consider external wiring of the crossovers or building a false pedestal bottom to house the crossovers.

### **Crossover Schematic**



The woofer inductors are 0.82 mH + 0.56 mH Goertz copper foil. Series cap on tweeter is the superb Clarity CSA (please note the picture shows the older-style ESA caps). Mundorf brand metal oxide resistors are used. Unless requested otherwise, crossovers will be built on one 103B and one 149B board respectively.

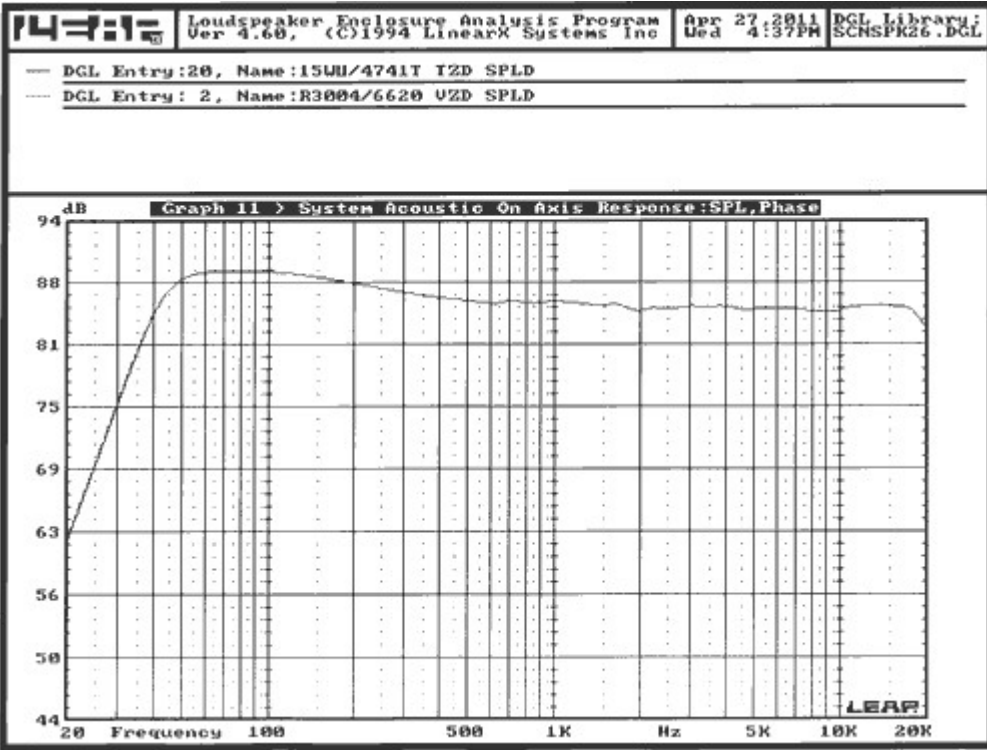
Woofer Board

Overall: 9.5" x 4"

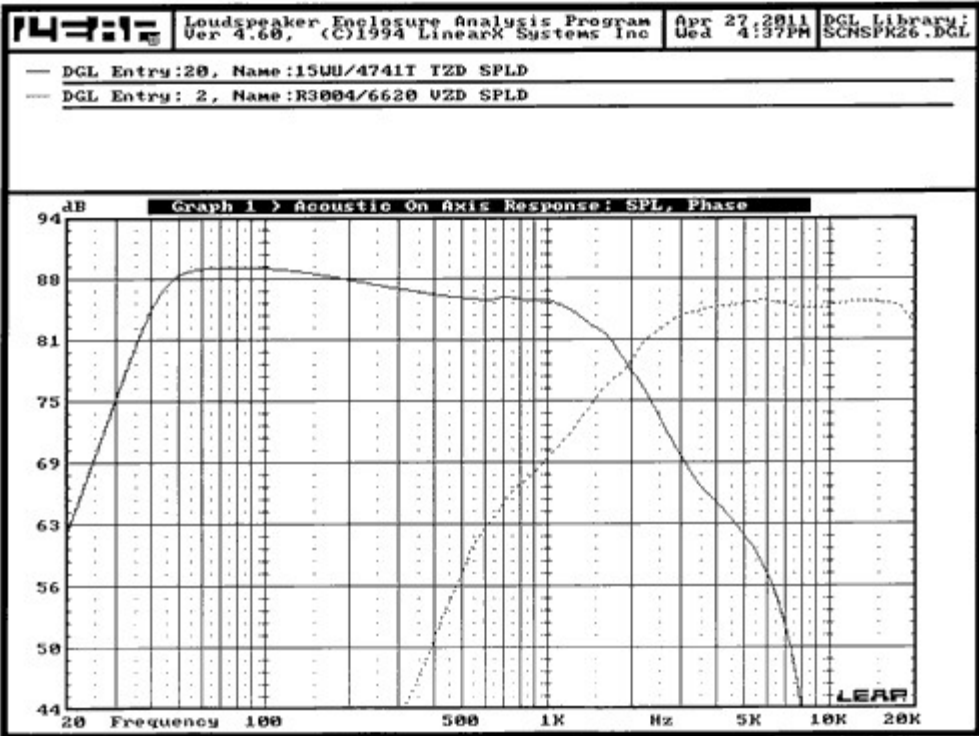
Hole spacing: 9" x 3.5"

Tweeter Board

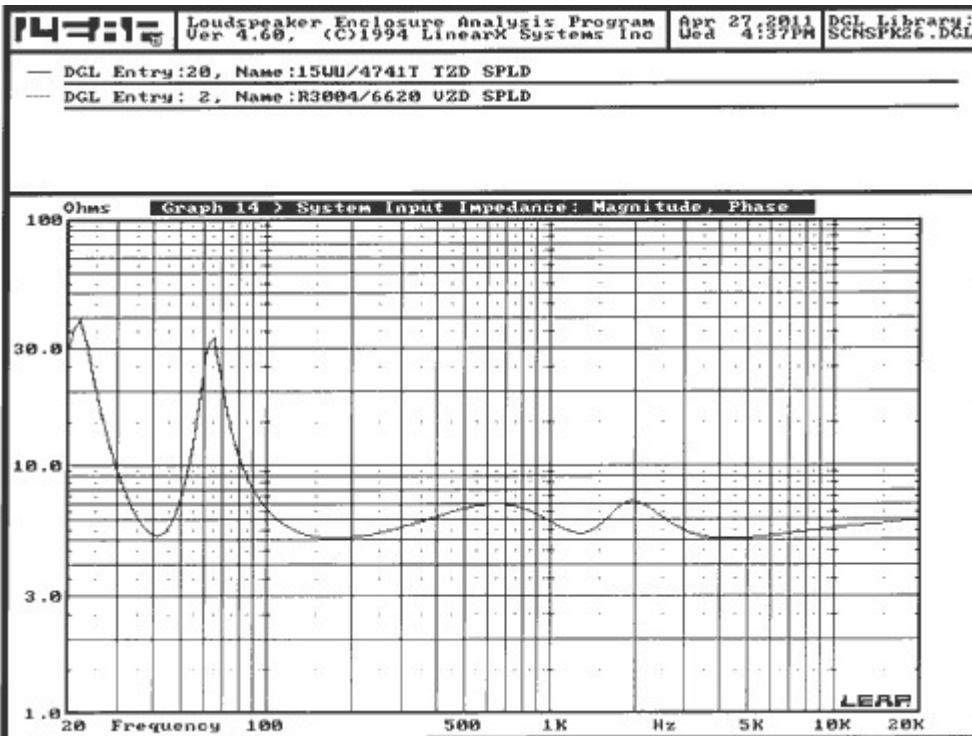
Overall: 4.25" x 3.5" one single mounting hole.



1. Summed response



2. Acoustic response showing crossover point



### 3. Impedance vs. frequency

#### Optional Accessories Package (+\$42.45) *includes 10% kit discount*

- 24x OXSOCKET #8 screws for mounting woofers and tweeters
- 24x #6 Screws for mounting crossovers and terminal cups
- 2x red and 2x black QC205 quick connects for tweeter
- 2x red QC205 and 2x black QC110 quick connects for woofer
- 2x red QC187 and 2x black QC187 quick connects for terminal cups
- 1x FOAM SHEET
- 1x Weldbond
- 10' Foamtape
- 12' Supra 1.6 Classic wire

#### Customer Comments

Here are some comments from a DIY builder: "I would describe the Lumine as being neutral, in the sense that it reproduces what is on the recording. Having said that, on a really good recording they are close to life-like. Detailed, transparent, smooth and crisp are adjectives I would use to describe them. I would call them bright except that in the past I have found bright speakers are fatiguing and these don't have that effect. Finally, for the music I listen to, which is mostly acoustic, they have more than adequate bass."