

Illuminator 6½" Midwoofer



Type Number: 18WU/4741T00

Features:

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.

Driver Highlights: Neo magnet, Under hung motor system, exceptionally long linear stroke



Specs:

Electrical Data

| | | | |
|-----------------------|------|------|-----|
| Nominal impedance | Zn | 4 | ohm |
| Minimum impedance | Zmin | 4.5 | ohm |
| Maximum impedance | Zo | 37.8 | ohm |
| DC resistance | Re | 3.2 | ohm |
| Voice coil inductance | Le | 0.5 | mH |

T-S Parameters

| | | | |
|-------------------------|-----|------|-----------------|
| Resonance Frequency | fs | 30 | Hz |
| Mechanical Q factor | Qms | 3.56 | |
| Electrical Q factor | Qes | 0.32 | |
| Total Q factor | Qts | 0.29 | |
| Force factor | Bl | 6 | Tm |
| Mechanical resistance | Rms | 1 | Kg/s |
| Moving mass | Mms | 18.9 | g |
| Suspension compliance | Cms | 1.49 | mm/N |
| Effective cone diameter | D | -- | cm |
| Effective piston area | Sd | 154 | cm ² |
| Equivalent volume | Vas | 49.9 | ltrs |
| Sensitivity (2.83V/1m) | | 87.2 | dB |
| Ratio BL/√(Re) | | -- | |
| Ratio fs/Qts | F | -- | |

Power handling

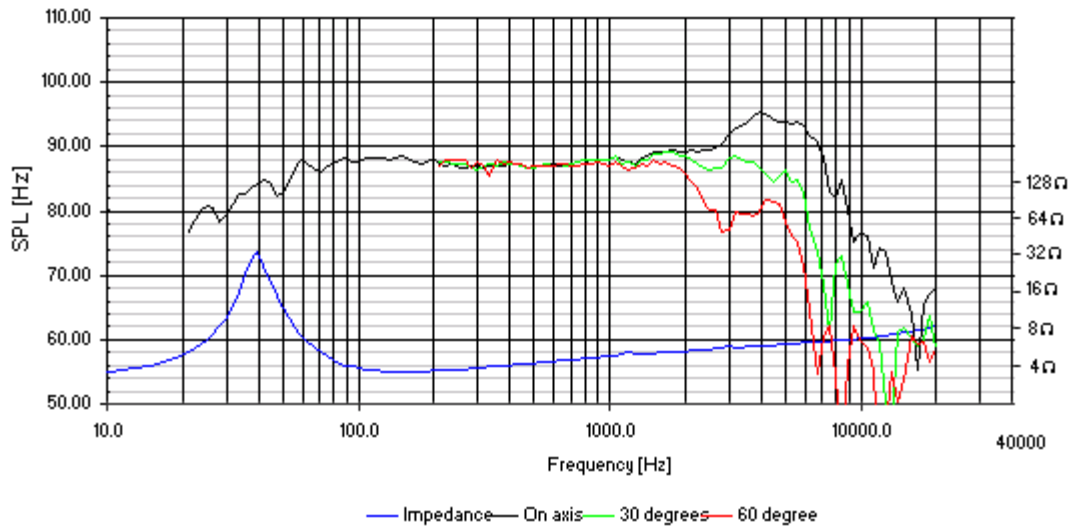
| | | |
|---------------------------------|-----|------|
| 100h RMS noise test (IEC) | 80 | W |
| Long-term Max Power (IEC 18.3) | 150 | W |
| Max linear SPL (rms) @ power | -- | dB/W |
| Short Term Max power (IEC 18.2) | 200 | W |

Voice Coil and Magnet Parameters

| | | |
|-------------------------|------|-----|
| Voice coil diameter | 42 | mm |
| Voice coil height | 8 | mm |
| Voice coil layers | 4 | |
| Height of the gap | 20 | mm |
| Linear excursion +/- | 6 | mm |
| Max mech. excursion +/- | 16 | mm |
| Flux density of gap | -- | mWb |
| Total useful flux | -- | mWb |
| Diameter of magnet | 90 | mm |
| Height of magnet | 4 | mm |
| Weight of magnet | 0.13 | Kg |

Notes:
IEC specs refer to IEC 60268-5 third edition.
All Tymphany products are RoHS compliant.

Frequency: 18WU/4741T00



Mechanical Dimensions: 18WU/4741T00

