

# Illuminator 6½" Midwoofer



**Type Number:** 18WU/8741T00

## 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	8	ohm
Minimum impedance	Zmin	7.5	ohm
Maximum impedance	Zo	58.4	ohm
DC resistance	Re	5.9	ohm
Voice coil inductance	Le	0.41	mH

### T-S Parameters

Resonance Frequency	fs	31	Hz
Mechanical Q factor	Qms	3.51	
Electrical Q factor	Qes	0.37	
Total Q factor	Qts	0.33	
Force factor	Bl	7.5	Tm
Mechanical resistance	Rms	1	Kg/s
Moving mass	Mms	18	g
Suspension compliance	Cms	1.46	mm/N
Effective cone diameter	D	--	cm
Effective piston area	Sd	154	cm <sup>2</sup>
Equivalent volume	Vas	49	ltrs
Sensitivity (2.83V/1m)		85.4	dB
Ratio BL/√(Re)		--	
Ratio fs/Qts	F	--	

### Power handling

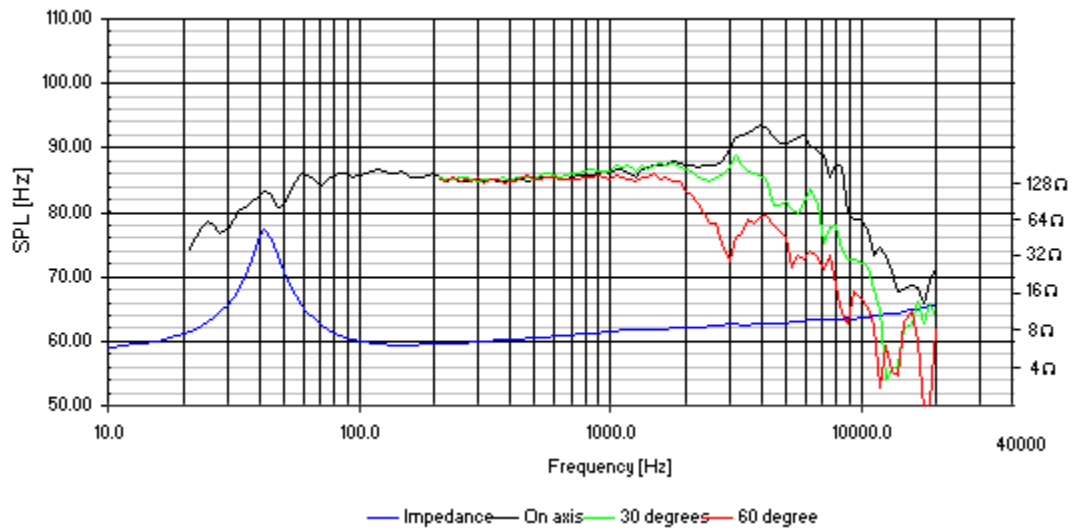
100h RMS noise test (IEC)	80	W
Long-term Max Power (IEC 18.3)	150	W
Max linear SPL (rms) @ power	--	dB/W
Short Term Max power (IEC 18.2)	--	W

### 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 +/-	9	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 ScanSpeak products are RoHS compliant.

Frequency: 18WU/8741T00



Mechanical Dimensions:18WU/8741T00

