The loudspeaker shall be a self-powered, full-range system; the transducers shall consist of two 4-inch low-frequency cone drivers and one 1-inch high-frequency metal dome tweeter. The loudspeaker system shall incorporate internal processing electronics and a three-channel amplifier, one channel for each driver. Processing functions shall include equalization, phase correction, signal division, and driver protection. Amplifier channels shall be class D. Amplifier output power shall be 500 W total for all three channels. Distortion (THD, IM, TIM) shall not exceed 0.02%.

Performance specifications for a typical production unit shall be as follows, measured at 1/3-octave resolution: operating frequency range shall be 65 Hz – 18 kHz; phase response shall be 102 Hz – 18 kHz ±45°; linear peak SPL shall be 116.5 dB with crest factor >16.5 dB, measured with M-noise, free field at 4 meters and referred to 1 meter. The horizontal and vertical coverage shall be 100°.

The loudspeaker shall be equipped with a Phoenix 5-pin male connector (three pins for balanced audio and two pins for DC power). The audio input shall be electronically balanced with a 10 kΩ impedance and accept a nominal -2.0 dBV (0.8 V rms) input signal.

The approved power source shall be a Meyer Sound 48 V DC multi-channel power supply model. Maximum long-term continuous current draw for the loudspeaker (> 10 s) shall be 1.0 A average at 48 V.

All components shall be mounted in an acoustically vented box shaped enclosure constructed of aluminum. The top and bottom shall incorporate M8 threaded mounting holes. The front protective grille shall be powder-coated, stamped steel.

Dimensions for the loudspeaker shall be W: 4.29 in (109 mm) x H: 15.90 in (404 mm) x D: 5.69 in (144 mm).

Weight shall be 14 lb (6.35 kg).

The loudspeaker shall be the Meyer Sound UP-4slim.