

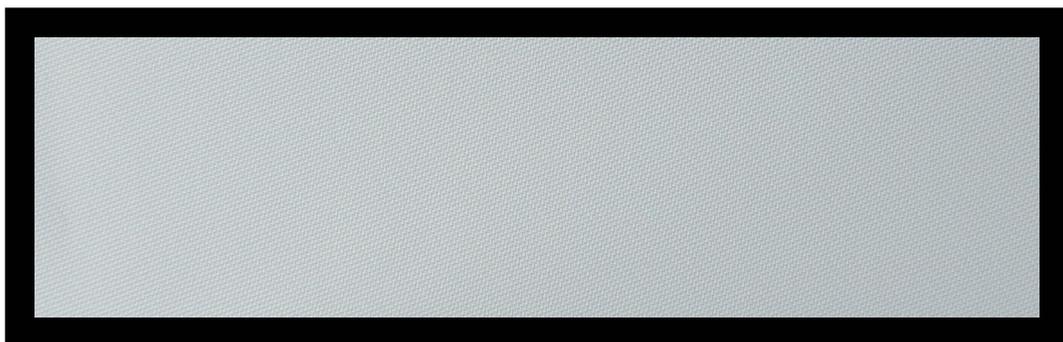
ClearPix™ Ultimate White 0.75

Designed as a benchmark for reference picture quality coupled with true acoustic transparency for the most exclusive dedicated Home Theater applications. Our unique woven Fiber-glass core with special PVC coating allows ClearPix™ Ultimate material to reach better and more linear off-axis light diffusion than even the best available Lambertian's laboratory light diffuser material. This allows absolutely perfect off-axis color diffusion, with no-color shifts throughout the whole viewing angle. The special structure of this material makes it not only Moiré-free, but also speckle free, so perfect for use with the best true RGB Laser projectors. It is also absent of any sparkling effect resulting in an ideal screen material for use in High-Dynamic range applications with resolutions that surpass the capability of human eye to perceive small details from the viewing position, and perfectly suited for today's 8K applications and tomorrow's 16K resolutions and beyond. Complete absence of sparkling effect and perfect on and off-axis color accuracy allows it to reach reference film-like image video quality, with very high image depth perception and High-Dynamic range in properly designed reference Home Theater and Media rooms. Extreme attention to picture performance makes this screen material the ideal choice for the most critical Post-production studio applications.

From the introduction of the first ClearPix™ screen material, Screen Research always stood as the industry benchmark for true acoustic transparency, and we are still unmatched today. ClearPix™ Ultimate widens further this gap, making it the most acoustically transparent screen material that Screen Research has ever introduced. This allows for proper positioning of front loudspeakers behind the screen, without the need of any acoustic compensation whatsoever.

Extreme flatness, material strength, resistance, dimensional stability and durability are also unique features of our award-winning range of ClearPix™ screen materials.

Sample



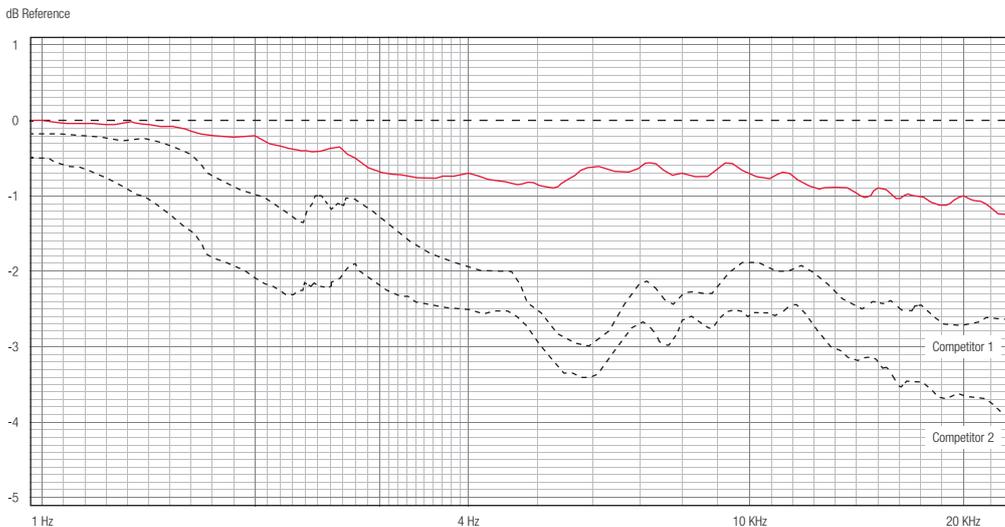
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Material Type

Material Type	Flexible Front Projection
Material Structure	Woven Fiber-Glass core PVC coated
Maximum Seamless Height	Depending on the screen model, about 3000 mm
Gain	0.75
Gain loss at 30° off-axis	7%
Half Gain	N/A
Viewing Angle	N/A (No-limits)
Resolution	Retina Screen (16K+ compatible)
Minimum Throw Distance	N/A
Speckle-Free	Yes (True RGB Laser Projector Ready)
Moirè-Free	Yes
True Acoustic Transparency	Yes
Acoustic Loss	0dB @1kHz / 0.2dB @2kHz / 0.7dB @4kHz / 0.7dB @8kHz / 0.9dB @16kHz / 1.0dB @20 kHz
Acoustic Transparency	0.5dB (acoustic loss between 10kHz and 20kHz)
Acoustic Loss with BB Layer	2.0dB @20 kHz
ALR Ambient Light Rejecting	4/10
Lay Flat Quality	Excellent
Flame Resistance	Yes

Acoustic Transparency



Acoustical transparency is tested with impulse response measurements using a Log-Sine Sweep test signal and repeated eight (8) times. A measurement microphone is placed at a distance of 1m from the loudspeaker used for the test. First the system measures itself and the surrounding environment and the result is used as a transfer function for subsequent measurements. This provides a reference flat line response from 80Hz-22kHz (0dB line). Then, a 1m x 1m section of screen material is placed in front of the loudspeaker and measured. The results shown above are the deviations from the flat-line response caused by placing the screen material in front of the loudspeaker. Loss caused by the screen is indicated as a dB change between 10kHz and 20kHz, and we also indicate exact dB loss at specific frequencies from 1kHz to 20kHz.

Reference Color Accuracy

At Screen Research we are very dedicated to achieve a flat spectral response with our screens. Our screen materials are designed to be easily calibrated to D65. Particular attention is dedicated to achieve a flat spectral response off-axis and to avoid even the smallest color-shifts, not only on-axis, but throughout the whole recommended viewing angle.