

## Ci3160REFM-THX Architectural Speaker

### THX® Certified Ultra Speaker with MAT™

A state-of-the-art architectural speaker in KEF's flagship The Reference range, the in-wall Ci-Reference architectural speaker Ci3160REFM-THX delivers the might and magic of pure accurate sound and brings a thrillingly immersive audio experience for movies and music at home. The KEF engineering team in Maidstone, UK, has once again pushed the limits of technology to deliver a world class speaker that not only meets the standards set by The Reference, but also one of the highest THX® performance classes – THX® Certified Ultra. Being THX® Certified Ultra means Ci3160REFM-THX has undergone hundreds of performance and quality assurance tests, from output levels, frequency response, signal-to-noise ratio, distortion and bass management to ensure it is capable of recreating high impact cinema sound and best-in-class audio fidelity.

Together with innovative technologies including the 12<sup>th</sup> generation Uni-Q driver array with Metamaterial Absorption Technology<sup>1</sup> (MAT™), Ci3160REFM-THX delivers an immersive, high-fidelity soundstage with unmatched sonic excellence even for large home theatres and living rooms.

### The benchmark of benchmarks

Since its launch in 1973, The Reference has redefined the standard to be the benchmark and continually set the benchmark for loudspeakers through the pioneering use and constant evolution of digital technologies. The Reference series is created in the pursuit of the perfect reproduction of recorded sound to achieve the highest possible audio accuracy. Every speaker in The Reference series is meticulously hand-assembled, with each one rigorously tested against the laboratory maintained line standard by KEF's highly trained expert craftspeople.

Ci-Reference speakers are built to the same exacting standards as the rest of The Reference series and are optimised for in-wall application. The range has been upgraded with the latest technological advances including the revolutionary 12<sup>th</sup> generation Uni-Q driver array with MAT and in-wall bass drivers, which are specially designed for this model, to deliver realistic and immersive sound with breath-taking dynamics for the most discerning music and movie lovers.

### 12<sup>th</sup> Generation Uni-Q® driver array with MAT™

At the heart of Ci3160REFM-THX sits the latest example of KEF's signature driver array - Uni-Q. Now in its 12<sup>th</sup> generation, this remarkable feat of engineering acts as a point source, dispersing sound more evenly allowing everyone to experience the same natural detailed sound, wherever in the room they are.

The Ci3160REFM-THX also benefits from another groundbreaking acoustic innovation: Metamaterial Absorption Technology (MAT). MAT is a highly complex maze-like structure that absorbs 99% of the unwanted sound from the rear of the tweeter, delivering a crisper, more natural treble performance.

### Reference-quality sound

Ci3160REFM-THX delivers a clean, rich, highly articulate bass, thanks to the two 160mm (6.5in.) bass drivers. Designed specifically for the in-wall environment, the massive, vented motor system handles significant amounts of raw power.

Simultaneously, the smart engineering and fine nuances of the driver design blend seamlessly into the Uni-Q driver array, making Ci3160REFM-THX a truly unified speaker, disappearing into the room, leaving an awe-inspiring, immersive experience.

### Total attention to detail

Every Ci-Reference speaker is a statement of quality, with total attention to detail that comes from being hand-crafted by KEF's masters in Maidstone, UK. Each is designed to be both acoustically and visually exceptional, and meticulously built to KEF's superlative standards.

The 11mm thick, precision-machined aluminium baffle of Ci3160REFM-THX is not only a mark of quality and aesthetic excellence, but also engineered to eliminate vibration and provides a stoic platform for the drivers to perform at their best.

Surrounding the Uni-Q driver array is the Shadow Flare – another example of form following function. A precision-made trim ring perfectly transitions sound from the driver into the room, eliminating diffraction effects.

### Hide your speakers, not your sound

'Hide your speakers, not your sound' is the concept behind KEF's comprehensive range of architectural speakers. Ci3160REFM-THX is engineered with best-in-class acoustic performance and designed to be discreet in appearance with the paintable magnetic metal grille, delivering an immersive soundscape via speakers that blend into the interior. Available in Aluminium Black/Grey, a hairline finished aluminium baffle in black, with the Uni-Q driver array in grey. Optional black cloth grille is available.



### Summary of features

- THX® Certified Ultra for high impact cinema sound
- Metamaterial Absorption Technology eliminates 99% of high-frequency distortion for pure, natural sound
- Bespoke 12<sup>th</sup> generation Uni-Q with MAT driver array for exceptional acoustic accuracy
- Two 160mm (6.5in.) bass drivers optimised for in-wall use
- Designed to be discreet in appearance
- Available in Aluminium Black/Grey finish
- Paintable magnetic metal grille that fits effortlessly into the interior
- Optional black cloth grille available as separate item



## Specifications

Model		Ci3160REFM-THX
Series		Ci-Reference
Nominal impedance		4Ω
Sensitivity (2.83V/1m)		89dB
Frequency response (±6dB) open-backed		40Hz - 28kHz
Frequency range (-10dB)		32Hz - 45kHz
Nominal coverage (degrees)		150°
Max SPL (dB)		110dB
Crossover frequency		600Hz, 3kHz
Drive units	LF	2 x 160mm (6.5in.)
	MF	125mm (5.25in.) Uni-Q
	HF	25mm (1in.) vented aluminium dome with Metamaterial Absorption Technology <sup>1</sup>
Recommended amplifier power		50 - 350W
Recommended high-pass filter (Hz)		35 - 80Hz
Product external dimensions (H x W x D)		680 x 230 x 105.7mm (26.77 x 9.06 x 4.16in.)
Cut-out dimensions (H x W)		660 x 209mm (25.98 x 8.23in.)
Net Weight		13.6kg (29.92lbs.)
Mounting depth from surface		99mm (3.9in.)
Optional rough in frame		RIF3160L
Ideal rear volume		60L
Minimum rear volume		30L
THX certification		THX <sup>®</sup> Certified Ultra
Safety and Regulatory Compliance		NA
Wall thickness (Maximum)		40mm (1.58in.)
Wall thickness (Minimum)		6mm (0.24in.)

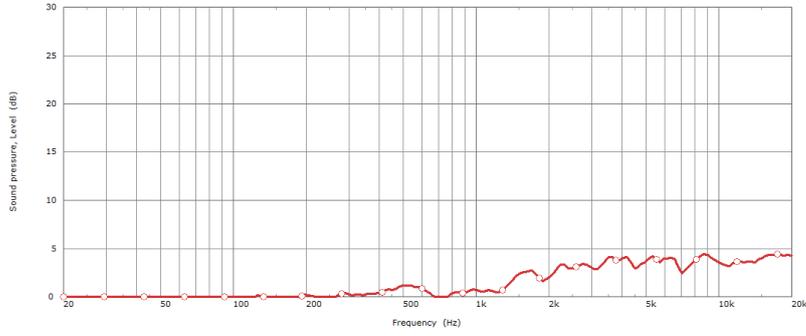


<sup>1</sup> Metamaterial Absorption Technology is a joint development with Acoustic Metamaterials Group.

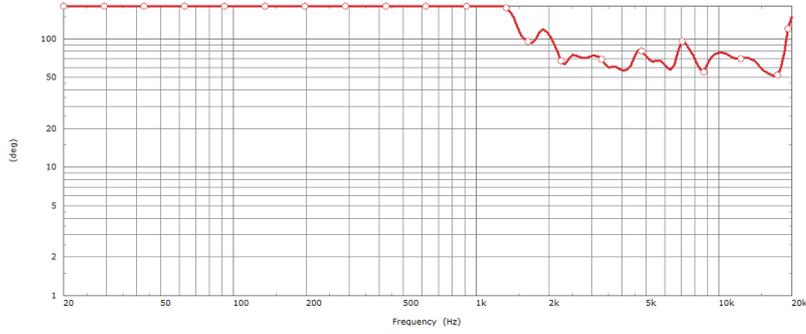
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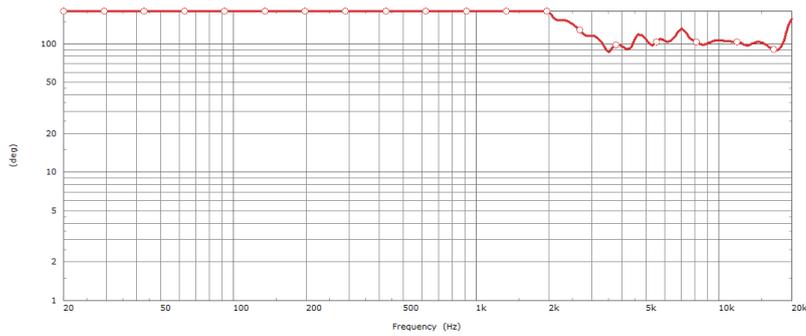
## Directivity Index



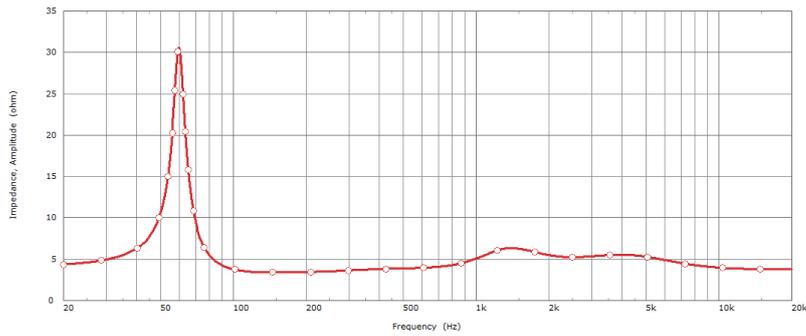
## Beamwidth -3dB



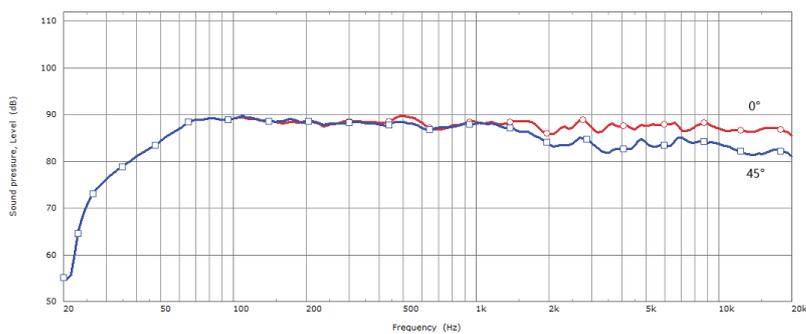
## Beamwidth -6dB



## Impedance

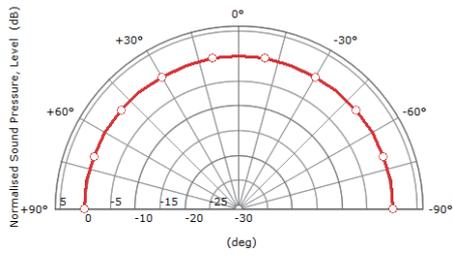


## Sensitivity (2.83V/1m)

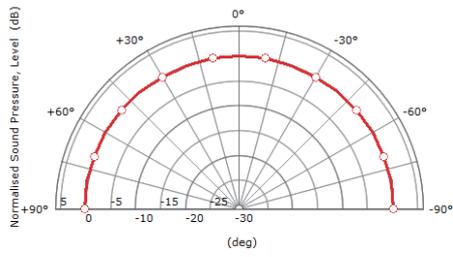


# Polar Responses

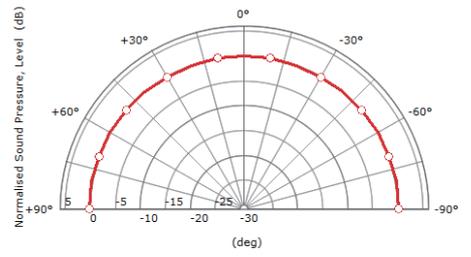
### Polar 63Hz



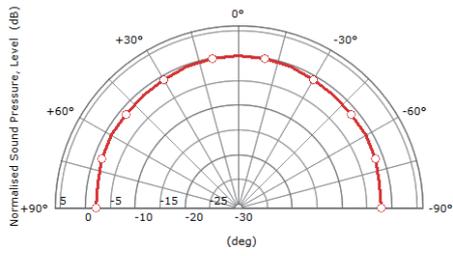
### Polar 125Hz



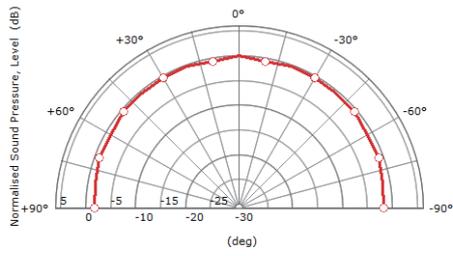
### Polar 250Hz



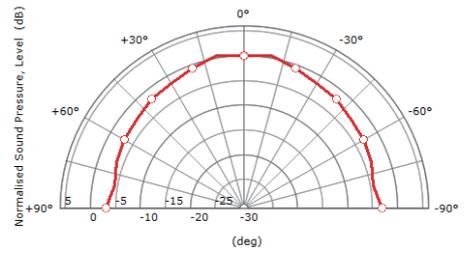
### Polar 500Hz



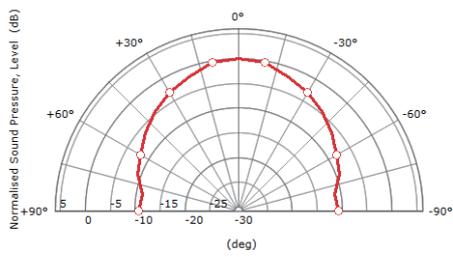
### Polar 1kHz



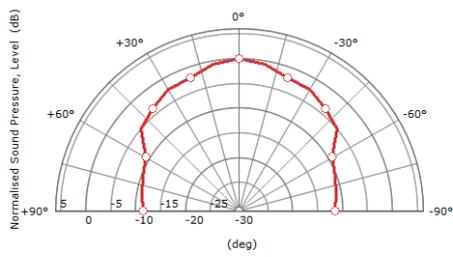
### Polar 2kHz



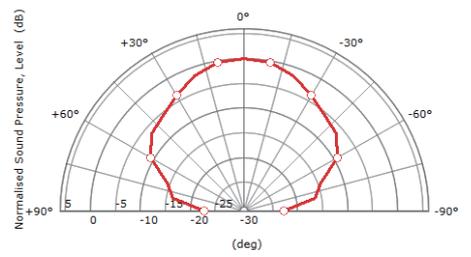
### Polar 4kHz



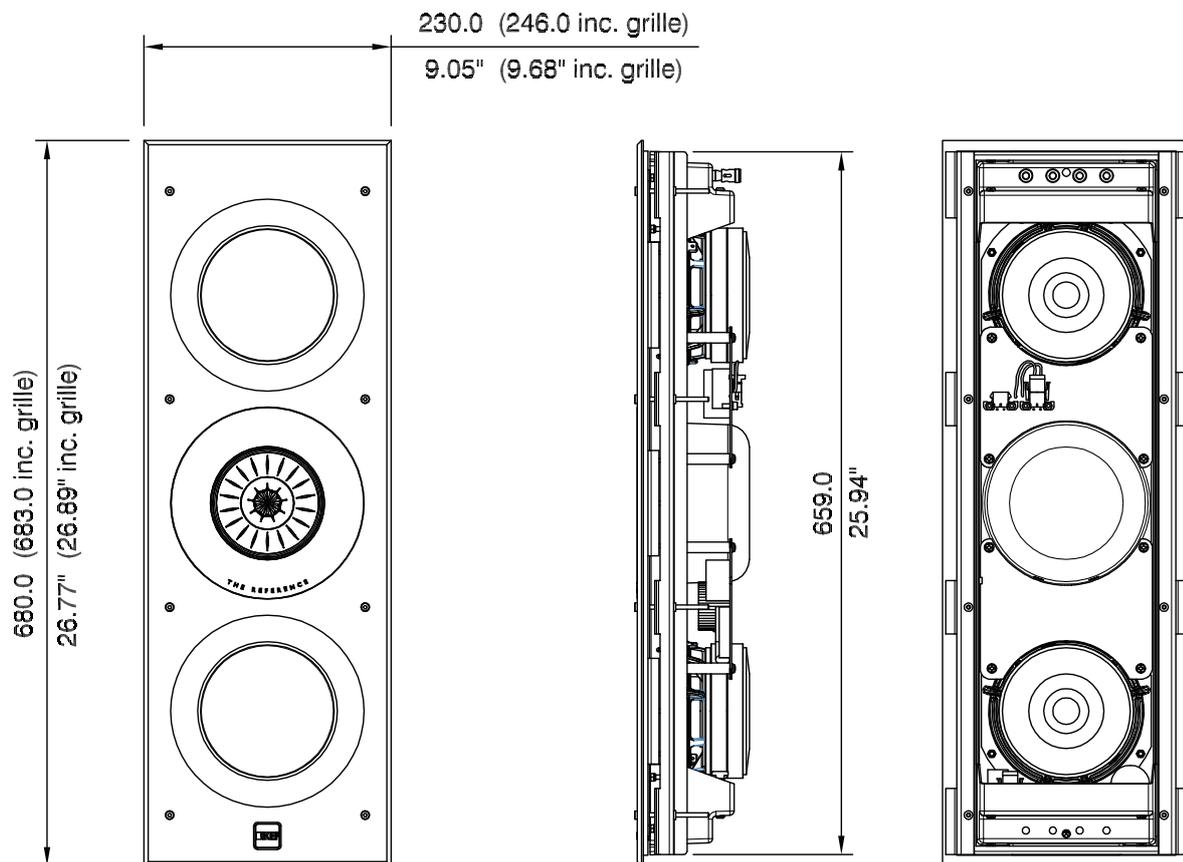
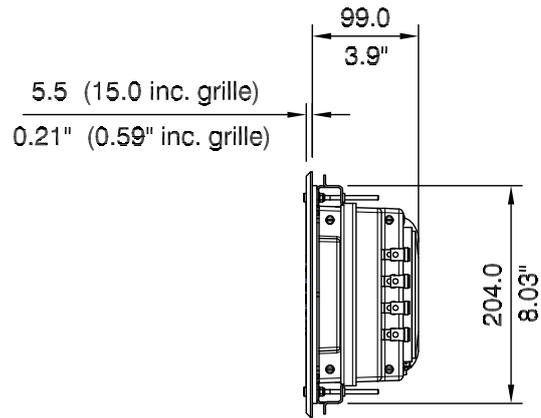
### Polar 8kHz



### Polar 16kHz



# Mechanical Diagrams



Dimensions in mm (inches)

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