

KF210 Loudspeaker

Preliminary Specifications

2-Way Line Array Loudspeaker

- Lightweight, compact, and high output line array system
- IP55 Rated for demanding outdoor environments



The KF210 line array system is a lightweight, compact, high output loudspeaker system offering integrated weather protection for a wide range of applications.

The KF210 incorporates four handles for easy handling, and a proprietary 3-point rigging system for suspension. Bi-amp or passive operation can be selected to optimize output or amplifier channel use via NL4 connectors with WP covers. The system is rated to IP55 for permanent installation in demanding environments backed by EAW's full warranty.

Engineered for a wide variety of applications, the compact KF210 module is comprised of 3in voice coil compression driver mounted to EAW's patented Isophasic waveguide, and two 2.5in voice coil high power 10in LF drivers. The output of these sources delivers up to 141dB with accurate pattern control to 400Hz to master challenging acoustic spaces.

TECHNOLOGIES



Beamwidth Matched Crossovers Introduced over a decade ago for our MK series loudspeakers, EAW Engineers use carefully-designed HF horns and crossovers to eliminate polar irregularities through the crossover point.



Focusing™ Use of advanced digital signal processing to perfect the impulse response of a loudspeaker in the time domain. Eliminating horn "honk" and splashiness, this makes the loudspeaker sound like a studio monitor instead of a "PA" speaker.



DynO™ Dynamic Optimization actively tracks input spectrum and power delivery, continually wicking maximizing output and fidelity at any drive level.



Phase Aligned LF™ Tuned spacing of LF components to extend pattern control without the need for enormous horns.



Symmetry of Sources™ Symmetrical arrangement of acoustic sources along a common axis for utmost consistency throughout the coverage pattern.



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2-WAY FULL-RANGE LINE ARRAY 90° x 12°

See **NOTES TABULAR DATA** for details

CONFIGURATION

Subsystem

	Transducer	Loading
LF	2 x 10 in cone, 2.5 in voice coil	Vented
HF	1x 1.4 in exit, 3 in voice coil compression driver	Isophasic Wave Guide

Operating Mode

	Amplifier Channels	External Signal Processing
Single-amp	LF/HF	DSP w/ EAW Focusing™ & DynO™
Bi-amp	LF,HF	DSP w/ EAW Focusing™ & DynO™

PERFORMANCE

Operating Range 55 Hz to 18 kHz

Nominal Beamwidth (*rotatable*)

Horz	90°
Vert	12°

Axial Sensitivity (*whole space SPL*)

LF/HF	101 dB	55 Hz to 18 kHz
LF	99 dB	55 Hz to 1200 Hz
HF	107 dB	800 Hz to 18 kHz

Input Impedance (*ohms*)

	Nominal	Minimum
LF/HF	8	5.3 @ 330 Hz
LF	8	6.4 @ 440 Hz
HF	8	8 @ 4400 Hz

High Pass Filter

High Pass =>50 Hz, 12 dB/octave Butterworth

Accelerated Life Test

LF/HF	69 V	500 W @ 8 ohm
LF	69 V	600 W @ 8 ohm
HF	35 V	150 W @ 8 ohm

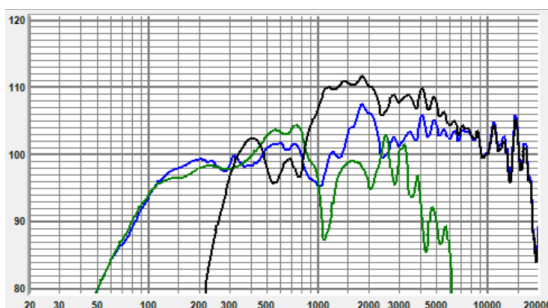
Calculated Axial Output Limit (*whole space SPL*)

	Average	Peak
LF/HF	128 dB	140 dB
LF	127 dB	139 dB
HF	129 dB	141 dB

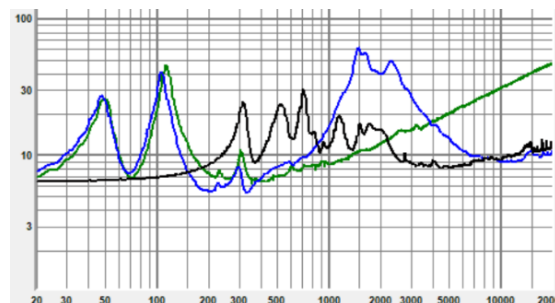
KF210 Loudspeaker

Preliminary Specifications

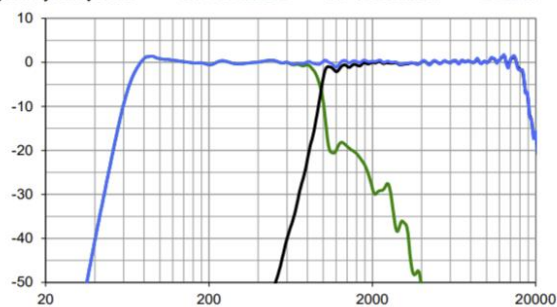
Unprocessed Frequency Response (LF, HF, LF/HF)



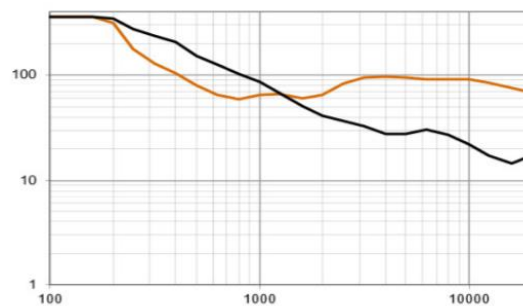
Impedance (LF, HF, LF/HF)



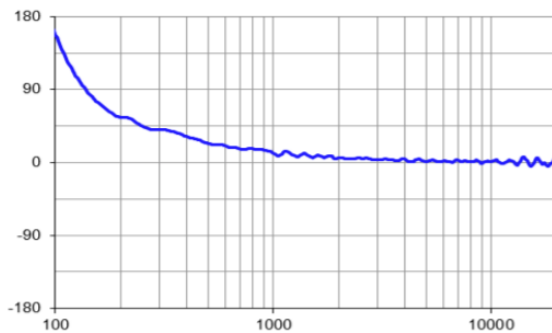
Frequency Response² ■=LF Processed ■=HF Processed ■=Overall



Beamwidth¹ ■=Horizontal ■=Vertical



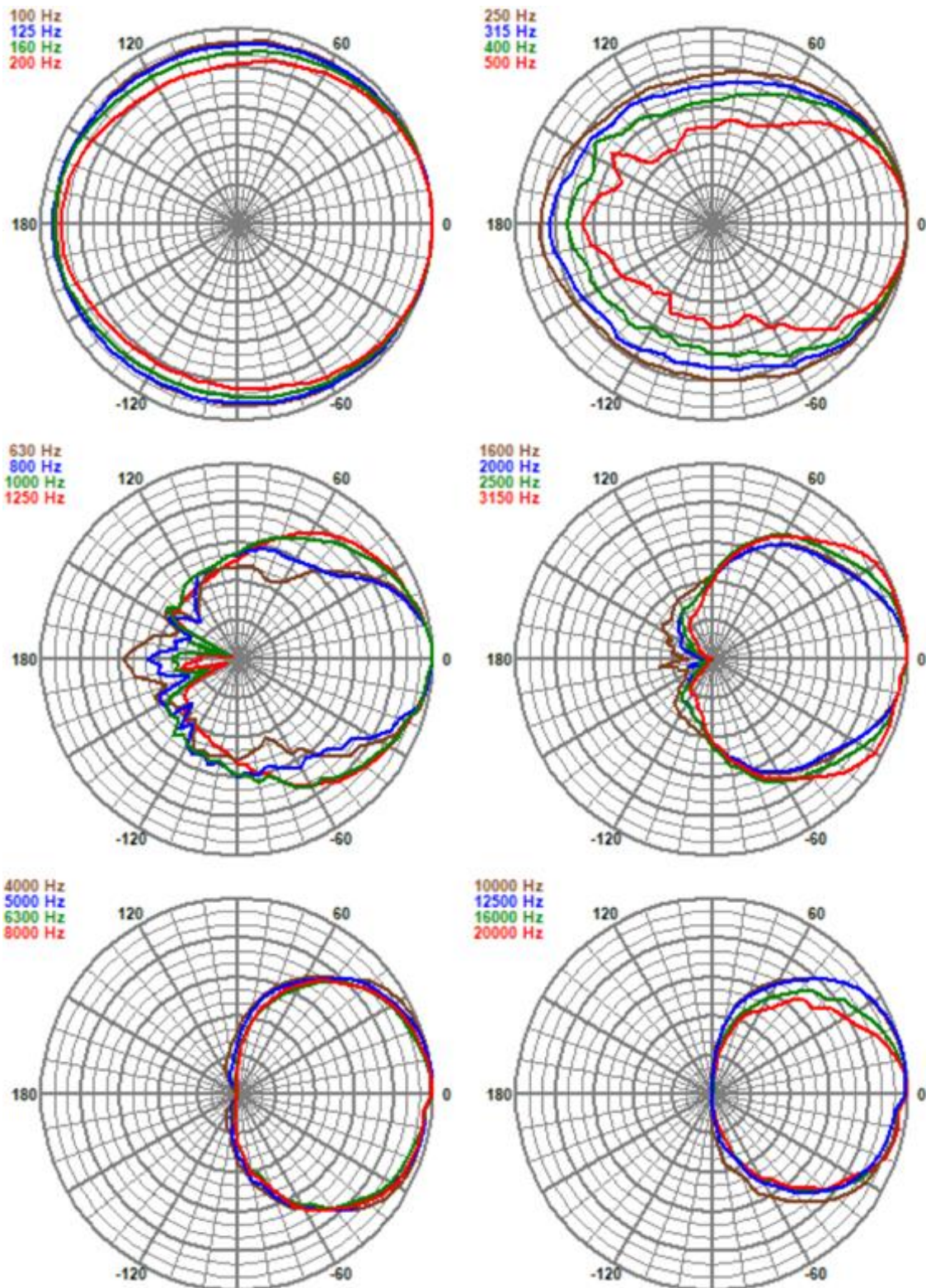
Phase Linearity



KF210 Loudspeaker

Preliminary Specifications

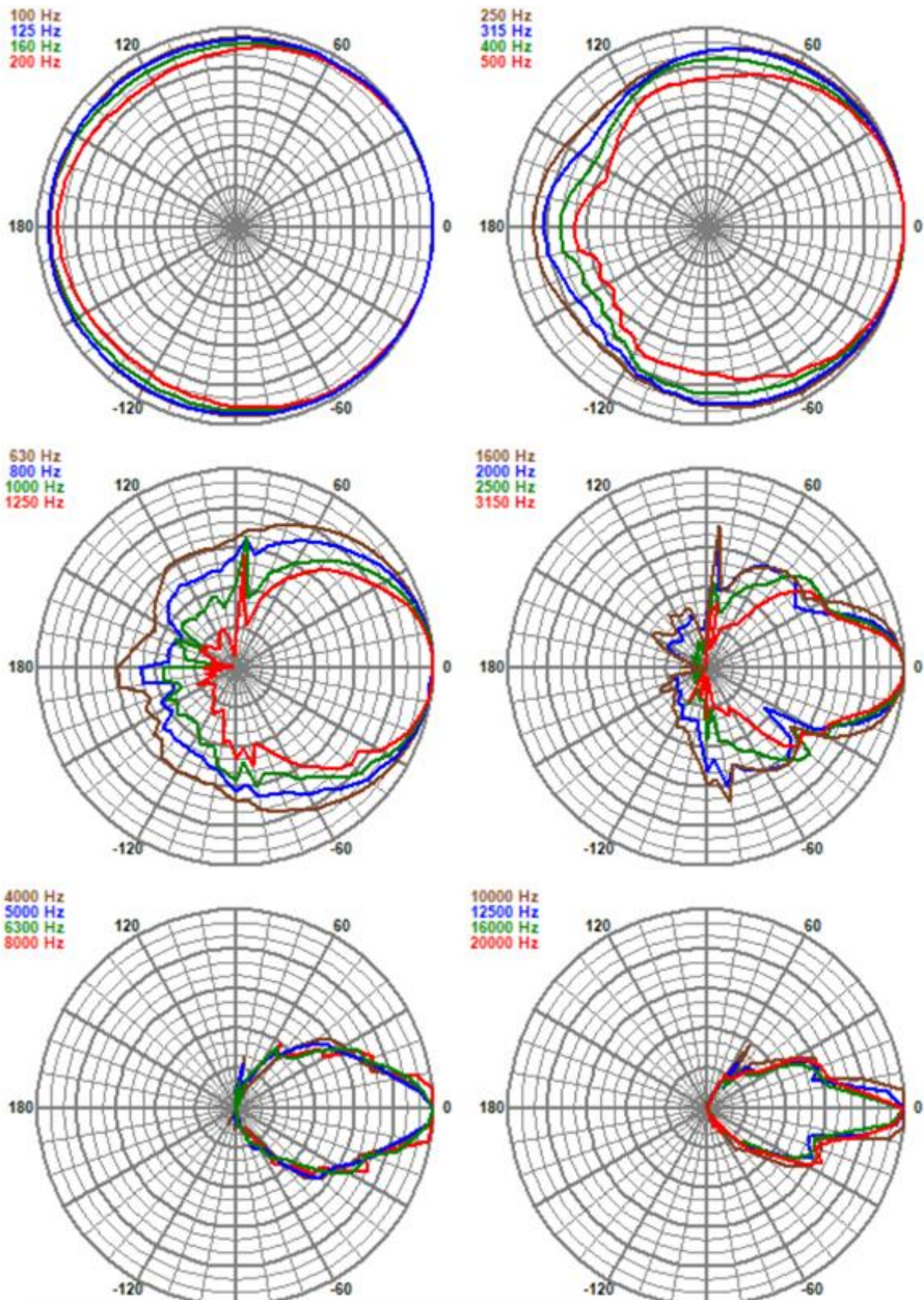
Horizontal Polars



KF210 Loudspeaker

Preliminary Specifications

Vertical Polars



KF210 Loudspeaker

Preliminary Specifications

