

CA 83T Column Array Loudspeaker

Audio/acoustic and electrical

Speaker type	Columnar line array speaker in extruded aluminum enclosure
Frequency range	113 Hz to 17.1 kHz, -10 dB, full space (per IEC 60268-5)
Frequency response	220 Hz to 15.5 kHz, -3 dB, full space
Power capacity	120 W (rms) continuous pink noise (per IEC 60268-5) 240 W (rms) continuous program
Maximum SPL	109 dB, 1 m, full space
Nominal sensitivity	90 dB SPL, 1 W, 1 m, 6.5 ohms direct, full space (per IEC 60268-5)
Nominal coverage angle (-6 dB, 1/3 octave, 4m)	
500 Hz	180° H x 73° V
1000 Hz	180° H x 38° V
2000 Hz	146° H x 18° V
4000 Hz	180° H x 9.5° V
Nominal impedance	6.5 ohms
Rotary switch taps	
70 V	64 W, 32 W, 16 W, 8 W, 6.5 ohms direct
100 V	null, 64 W, 32 W, 16 W, 6.5 ohms direct
Drivers	(8) 3" (76 mm) paper cone
Input connector	(1) 5 mm captive screw connector, 4 pole for 1 input and 1 loop-through

General

Package	1 speaker
Temperature/humidity	
Storage	-40 to +158°F (-40 to +70°C) / 10% to 90%, noncondensing
Operating	+32 to +122°F (0 to +50°C) / 10% to 90%, noncondensing
Ingress Protection (IP) Rating	IP54
Mounting	SMK PT CA Pan-Tilt mount or SMK LP CA Low-Profile mount (Included with speaker)
Adjustment range – SMK PT CA mount	
Pan	
At 15° tilt	+/- 51°, horizontal
At 10° tilt	+/- 61°, horizontal
At 5° tilt	+/- 69°, horizontal
At 0° tilt	+/- 74°, horizontal
Tilt:	0 to -15°, vertical
Adjustment range – SMK LP CA mount	
Tilt	+/- 5°, vertical
Enclosure type	Powder-coated aluminum extrusion with zinc die-cast endcaps and powder-coated steel grille
Enclosure Finish	
Black speaker	Powder coat, RAL 9011 (chassis), RAL 9017 (endcaps & grille)
White speaker	Powder coat, RAL 9003 (chassis, endcaps, & grille)
Enclosure outer dimensions	29.8" H x 5.0" D x 4.5" W (757 mm x 127 mm x 114 mm)
Product weight	
Speaker	16.9 lbs (7.7kg)
SMK PT CA mount	4.5 lbs (2.0 kg)
SMK LP CA mount	1.2 lbs (0.5 kg)

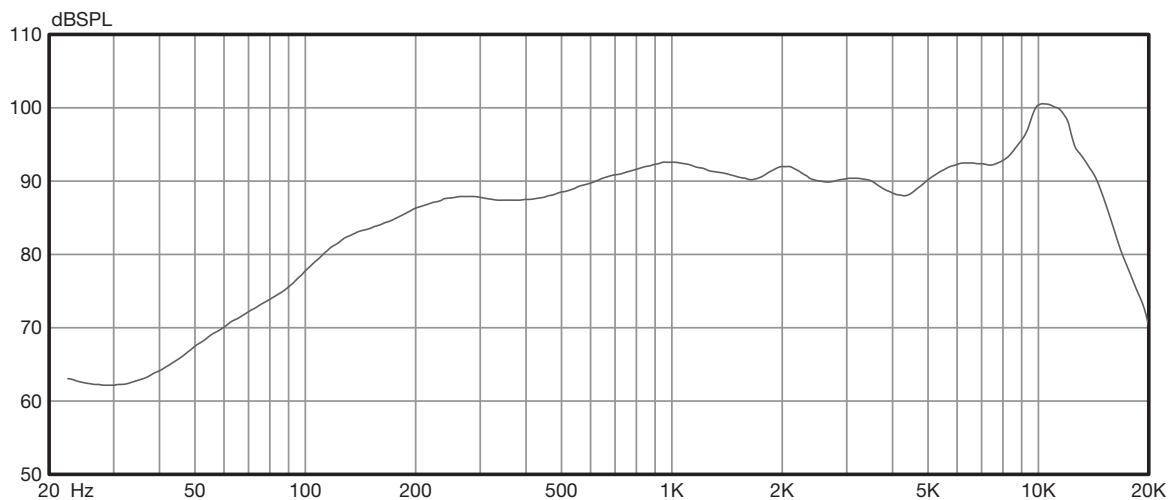
Specifications • CA 83T (Continued)

Regulatory compliance	CE, FCC Class B, ICES, RoHS, WEEE Designed to Meet UL1480A and CSA C22.2 No. 205 Designed to Meet IEC/EN 62368-1
Warranty	5 years parts and labor

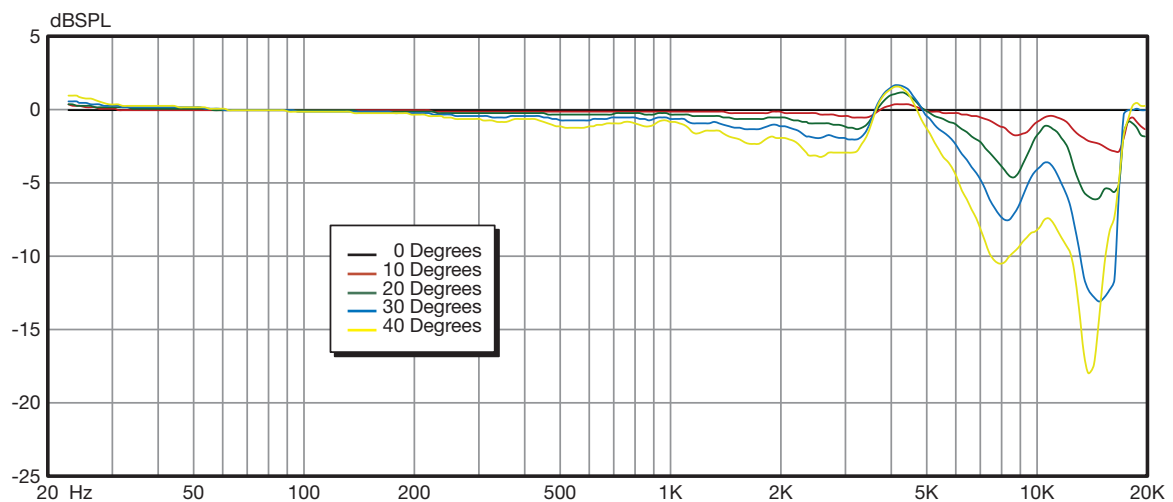
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CA 83T RESPONSE GRAPHS – FREQUENCY AND IMPEDANCE

SPL vs. FREQUENCY – 1 WATT @ 1 METER RESPONSE, FULL SPACE (4 π)



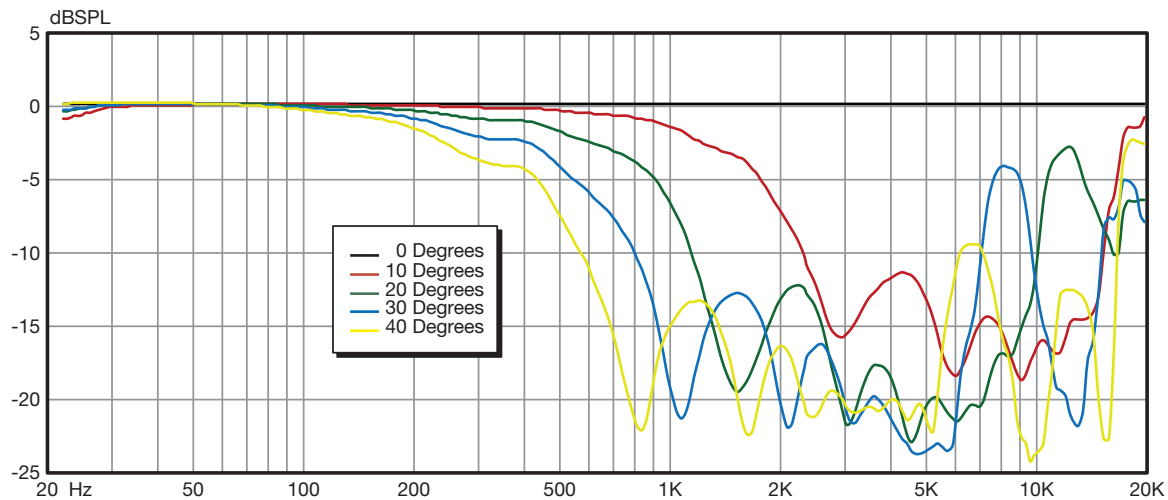
HORIZONTAL OFF-AXIS FREQUENCY RESPONSE, 1/3 OCTAVE, NORMALIZED ON-AXIS



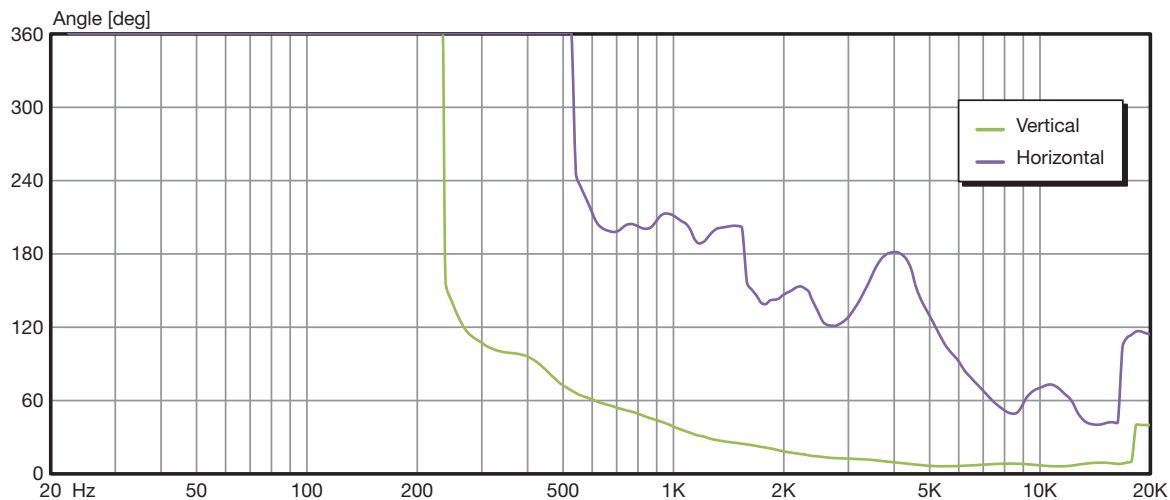
Specifications • CA 83T (Continued)

CA 83T RESPONSE GRAPHS – FREQUENCY AND IMPEDANCE

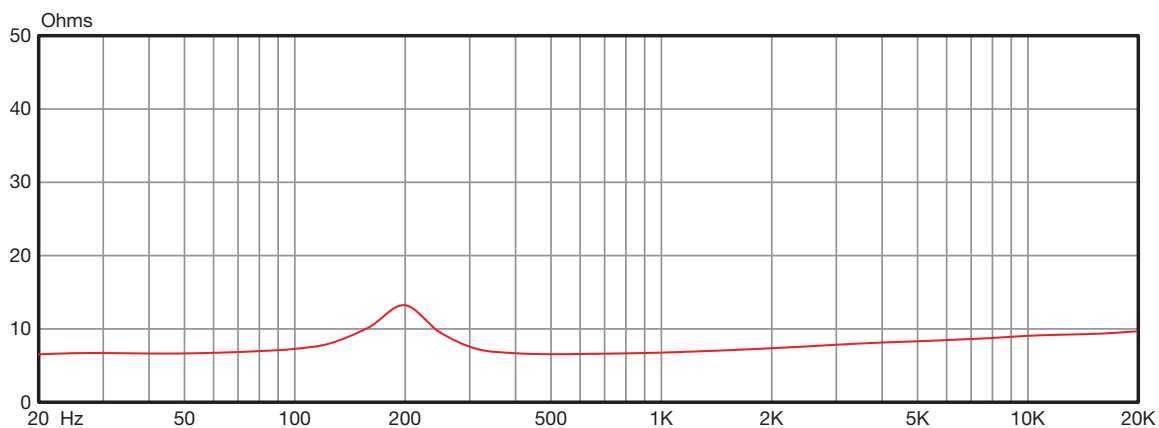
VERTICAL OFF-AXIS FREQUENCY RESPONSE, 1/3 OCTAVE, NORMALIZED ON-AXIS



BEAM WIDTH vs. FREQUENCY – COMBINED HORIZONTAL and VERTICAL, -6 dB, 1/3 OCTAVE, 4 m



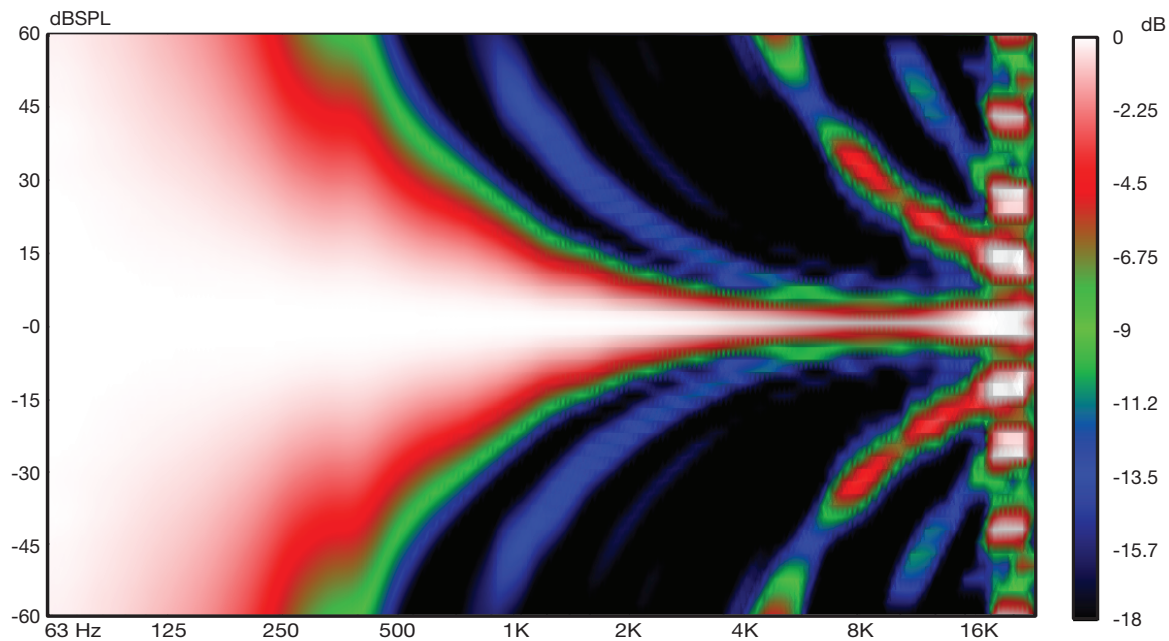
IMPEDANCE vs. FREQUENCY



Specifications • CA 83T (Continued)

CA 83T RESPONSE GRAPHS – FREQUENCY AND IMPEDANCE

VERTICAL MAP, 1/3 OCTAVE, 4 m



Specifications • CA 83T (Continued)

CA 83T POLAR GRAPHS – 1/3 OCTAVE, HORIZONTAL & VERTICAL

