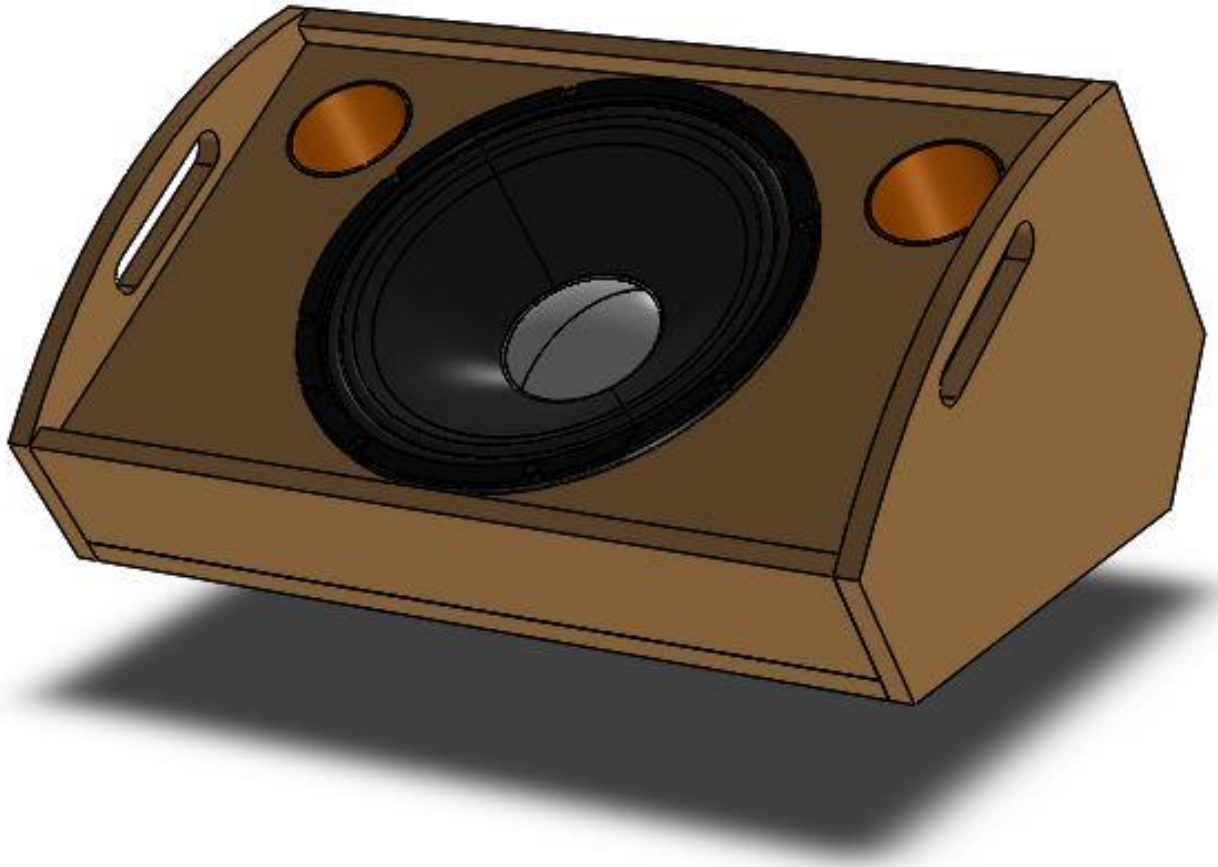
CX12.64

Compact wedge - 12” coaxial speaker

1x12” Coaxial transducer – 12CLX64 8 ohm

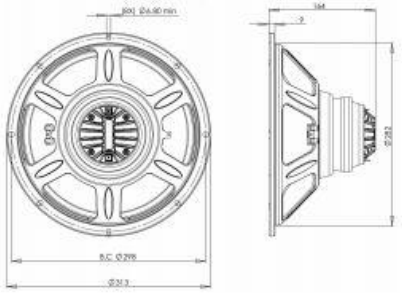


TRANSDUCER

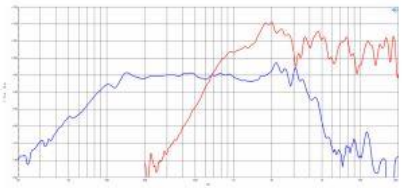
12CLX64

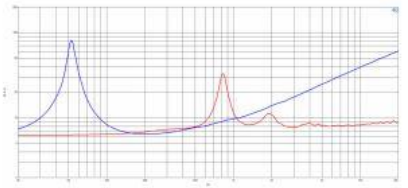
8Ω

Coaxials - 12.0 Inches



- 500 W continuous program power capacity
- 60° nominal coverage
- 54 - 18000 Hz response
- 96.2 dB sensitivity
- Single Neodymium magnet assembly
- Aluminum demodulating ring for very low distortion





SPECIFICATIONS

Nominal Diameter	320 mm (12.0 in)
Nominal Impedance	8 Ω
Minimum Impedance LF	6.6 Ω
Minimum Impedance HF	7.8 Ω
Frequency Range	54 - 18000 Hz
Dispersion Angle[1]	60 °
Woofer Cone Treatment	WP Waterproof Front Side
Magnet Material	Neodymium Ring

SPECIFICATIONS LF UNIT

Sensitivity[2]	96.2 dB
Nominal Power Handling[3]	250 W
Continuous Power Handling[4]	500 W
Voice Coil Diameter	64 mm (2.5 in)
Winding Material	Copper
Flux Density	0.87 T
Former Material	Kapton
Winding Depth	14.5 mm (0.57 in)
Magnetic Gap Depth	8.0 mm (0.31 in)

SPECIFICATIONS HF UNIT

Sensitivity[5]	106.0 dB
Nominal Power Handling[6]	70 W
Continuous Power Handling[7]	140 W
Voice Coil Diameter	51 mm (2.0 in)
Winding Material	Aluminum
Flux Density	1.59 T
Diaphragm Material	HT Polymer
Recommended Crossover[8]	1.2 kHz
Inductance	0.14 mH

PARAMETERS

Resonance Frequency	54 Hz
Re	5.6 Ω
Qes	0.61
Qms	10.1
Qts	0.57
Vas	74.0 dm^3 (2.61 ft^3)
Sd	522.0 cm^2 (80.91 in^2)
η_0	1.82 %
Xmax	± 5.3 mm
Xvar	± 5.5 mm
Mms	45.3 g
Bl	11.86 Txm
Le	0.54 mH
EBP	88 Hz

MOUNTING AND SHIPPING INFO

Overall Diameter	313 mm (12.32 in)
Bolt Circle Diameter	298 mm (11.73 in)
Baffle Cutout Diameter	282 mm (11.1 in)
Depth	164 mm (6.46 in)
Flange and Gasket Thickness	9 mm (0.35 in)
Net Weight	3.3 kg (7.28 lb)
Shipping Units	1
Shipping Weight	4.6 kg (10.14 lb)
Shipping Box	425x425x224 mm (16.73x16.73x8.82 in)

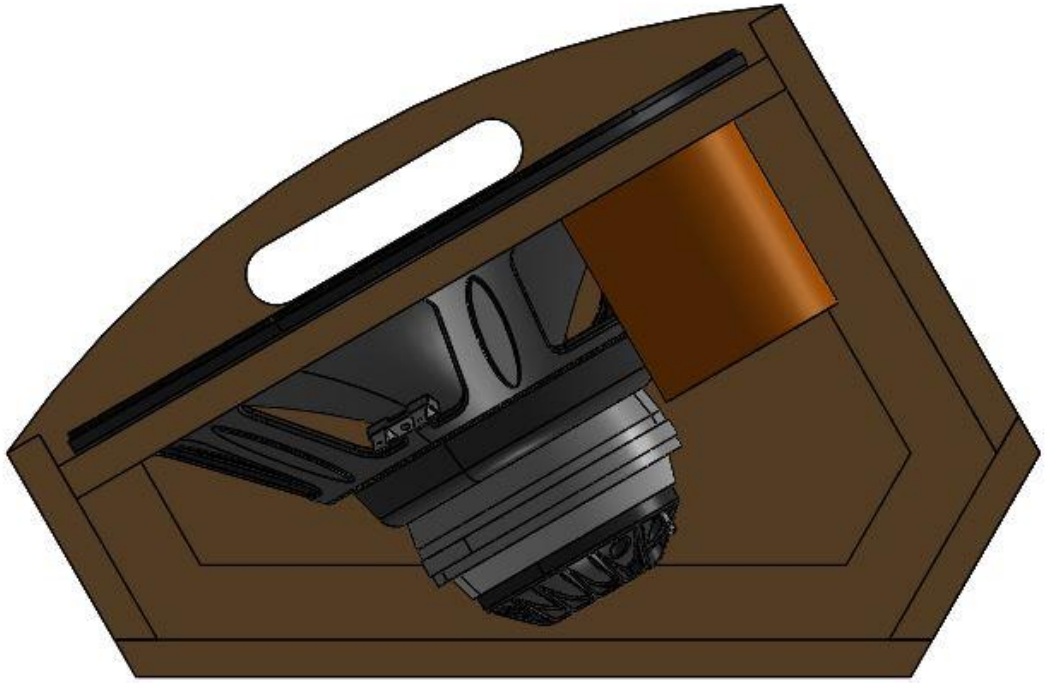
CROSSOVER

SERVICE KIT

LF recone kit	RCK12CLX648
MF replacement diaphragm	MMD5508

ENCLOSURE DESIGN

Internal view and notes



Side view (Internal)

- 15mm Wood thickness (birch plywood suggested)

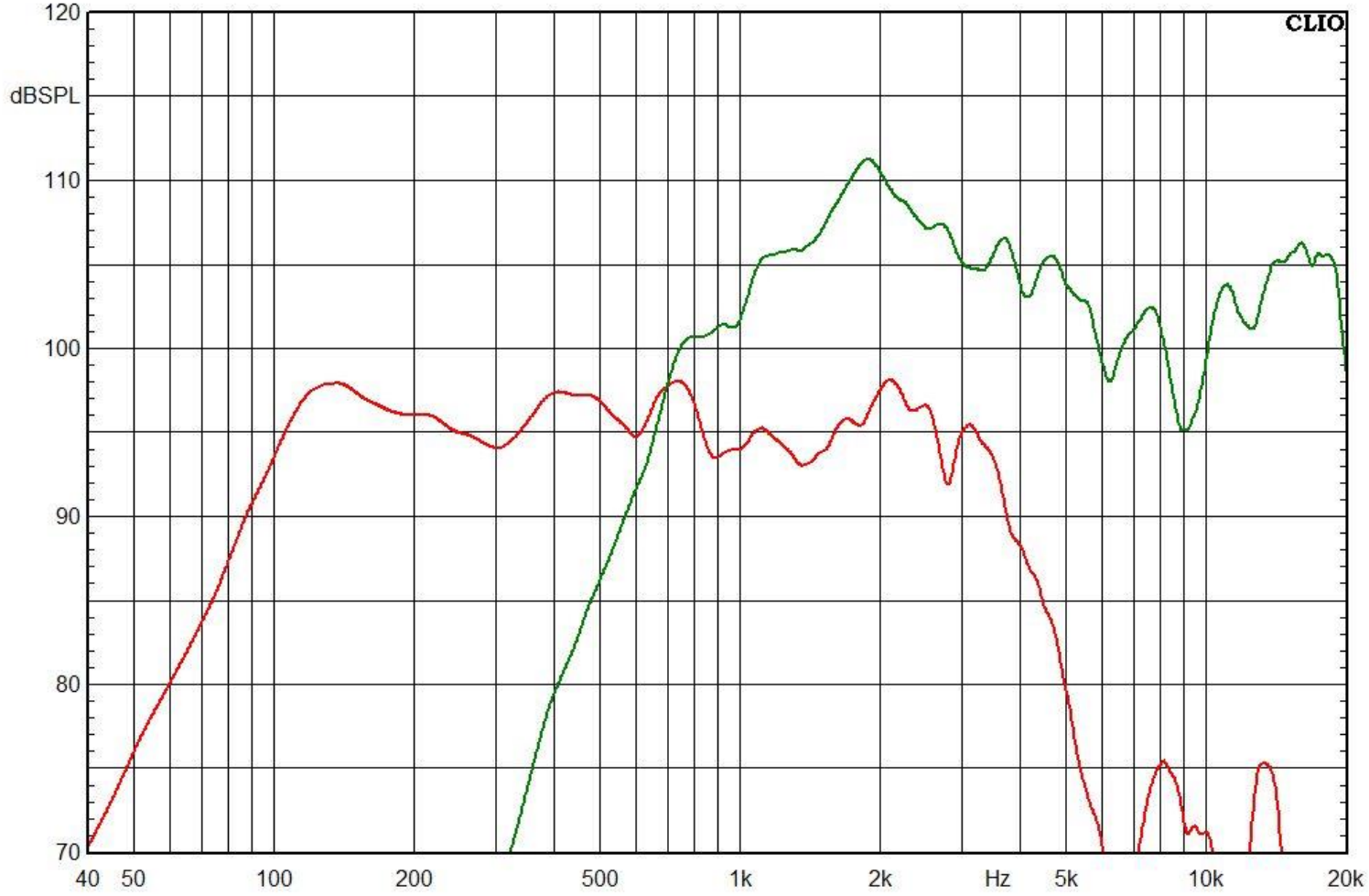
- A good dampening material should be placed inside the cabinet.

- M5 screws suggested for fixing the transducer.

- Vents have 75mm internal diameter and 100mm depth.

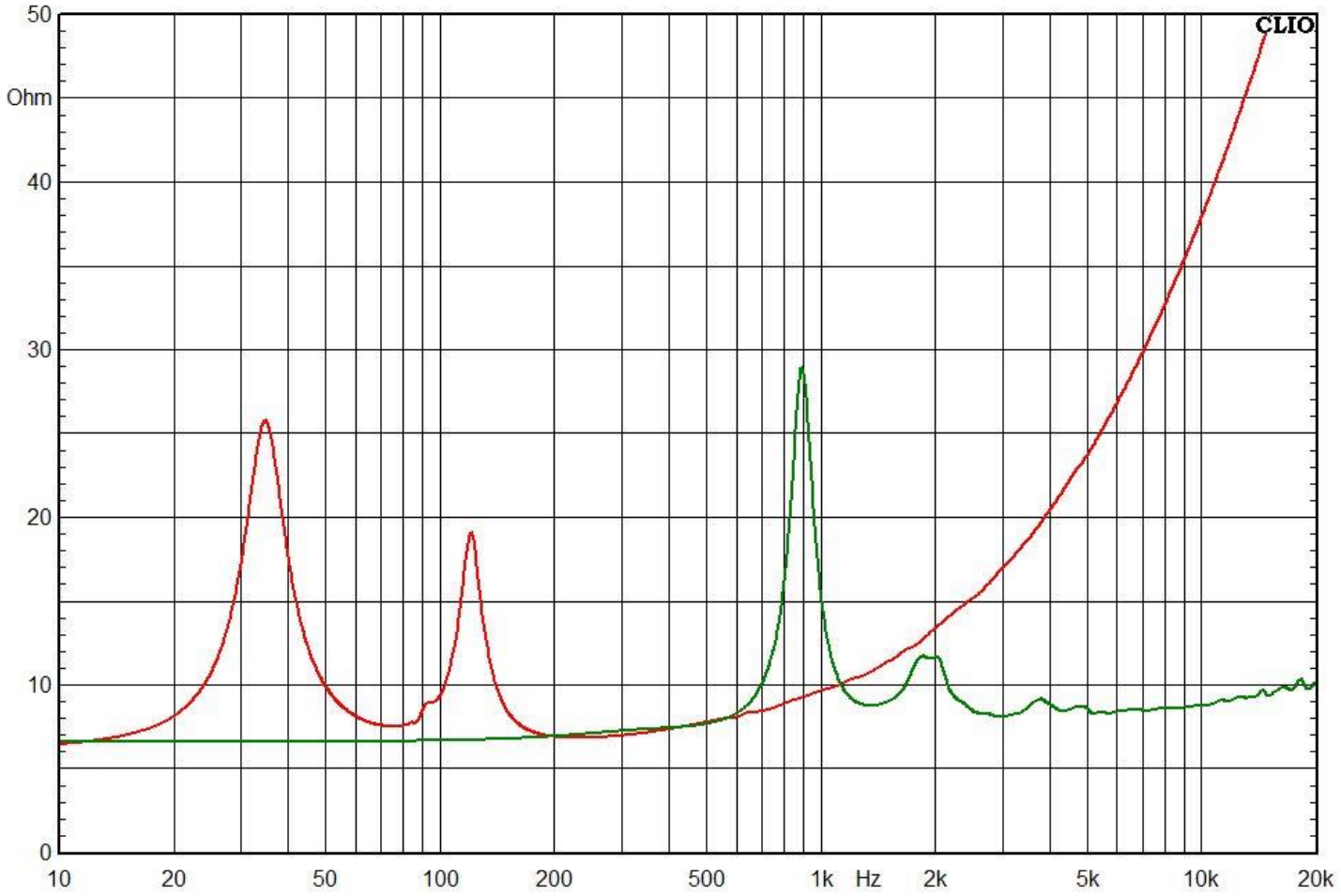
MEASUREMENTS

Unfiltered frequency response 2.83V@1m

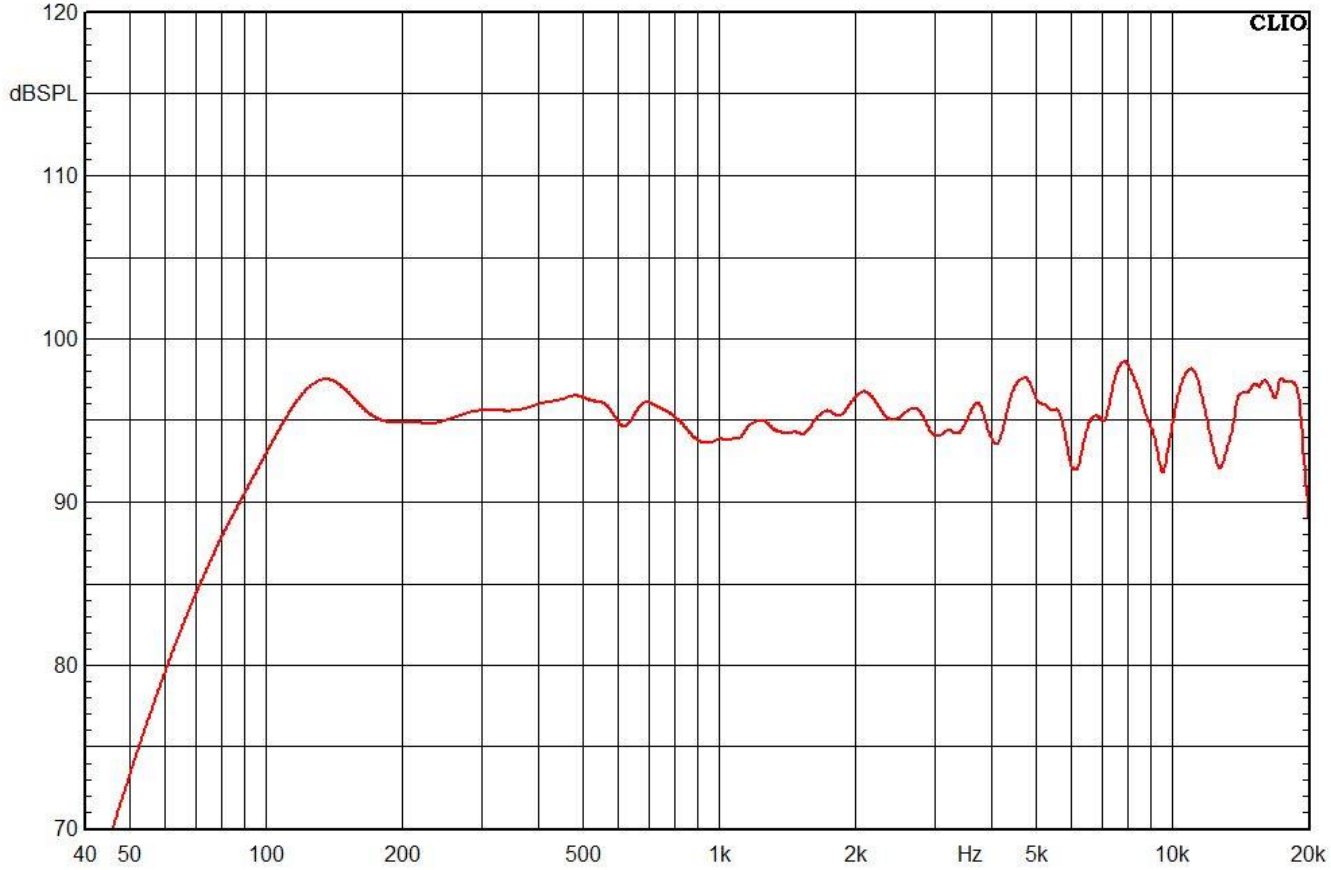


MEASUREMENTS

Impedance @-20dBu input



Active dsp settings



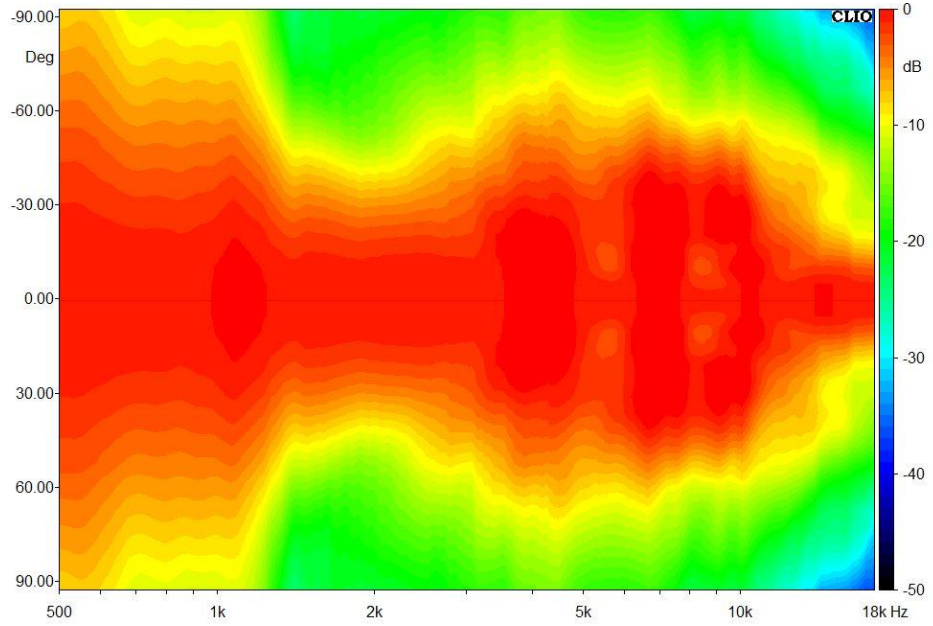
Processed Freqeuncy response

LF:
In: 0dB
HPF: 50Hz – BTW 24dB/Oct
Peaking #1: +3.5dB – Q:2 – Frq: 90Hz
Peaking #2: +2dB – Q:2 – Frq: 280Hz
Peaking #3: +3.5dB – Q:2.5 – Frq: 1300Hz
LPF: 2KHz – BTW 24dB/Oct

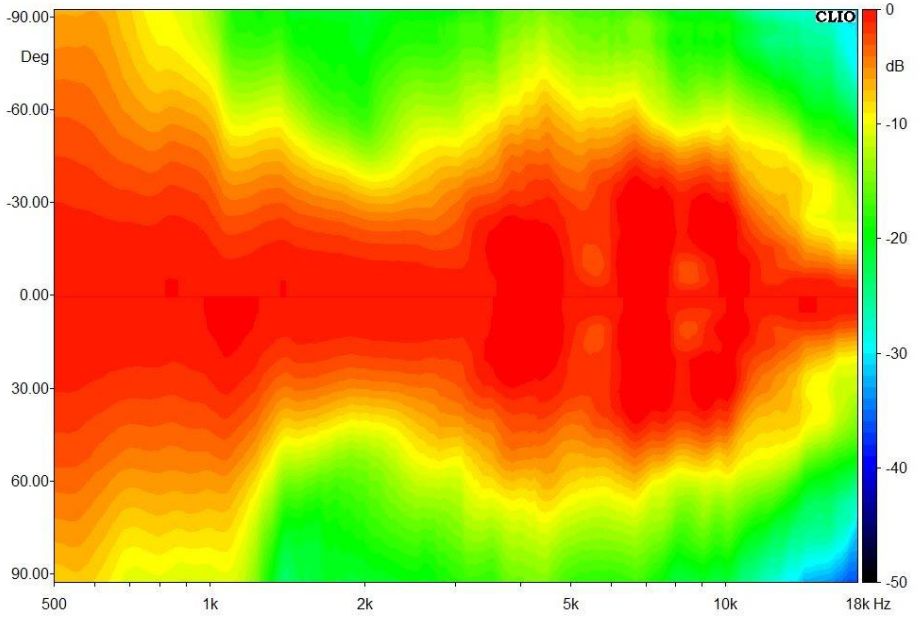
HF:
In: -8dB
Phase inverted
Delay: 0.13ms
HPF: 2.5KHz – L-R 24dB/Oct
Peaking #1: -4dB – Q:1.5 – Frq: 2KHz
Peaking #2: +3dB – Q:3 – Frq: 3.2KHz
Peaking #3: +3dB – Q:3 – Frq: 6.2KHz
Peaking #3: +6dB – Q:3 – Frq: 9KHz

Polar map

Directivity index with active dsp settings



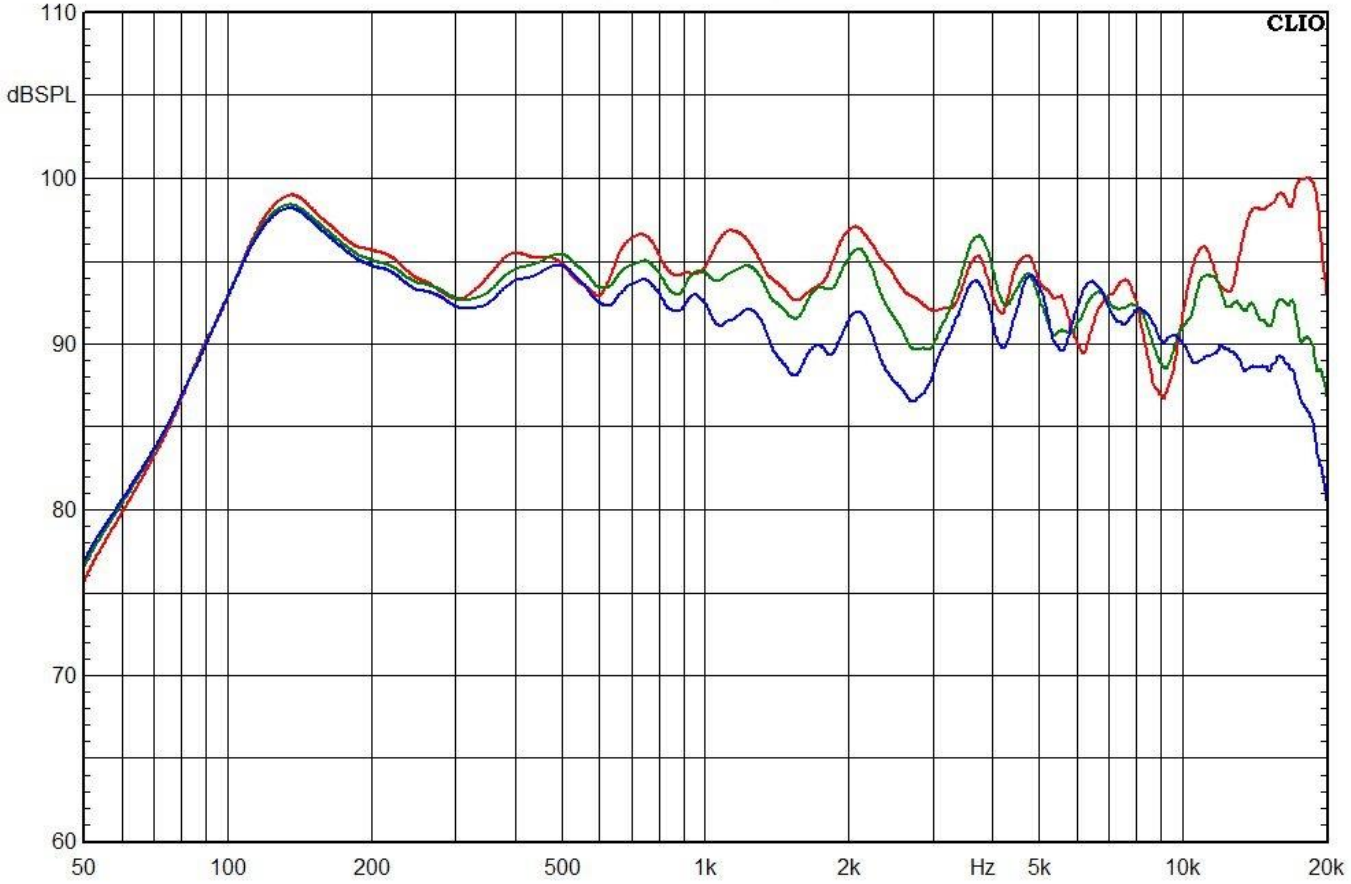
Horizontal plane



Vertical plane

MEASUREMENTS

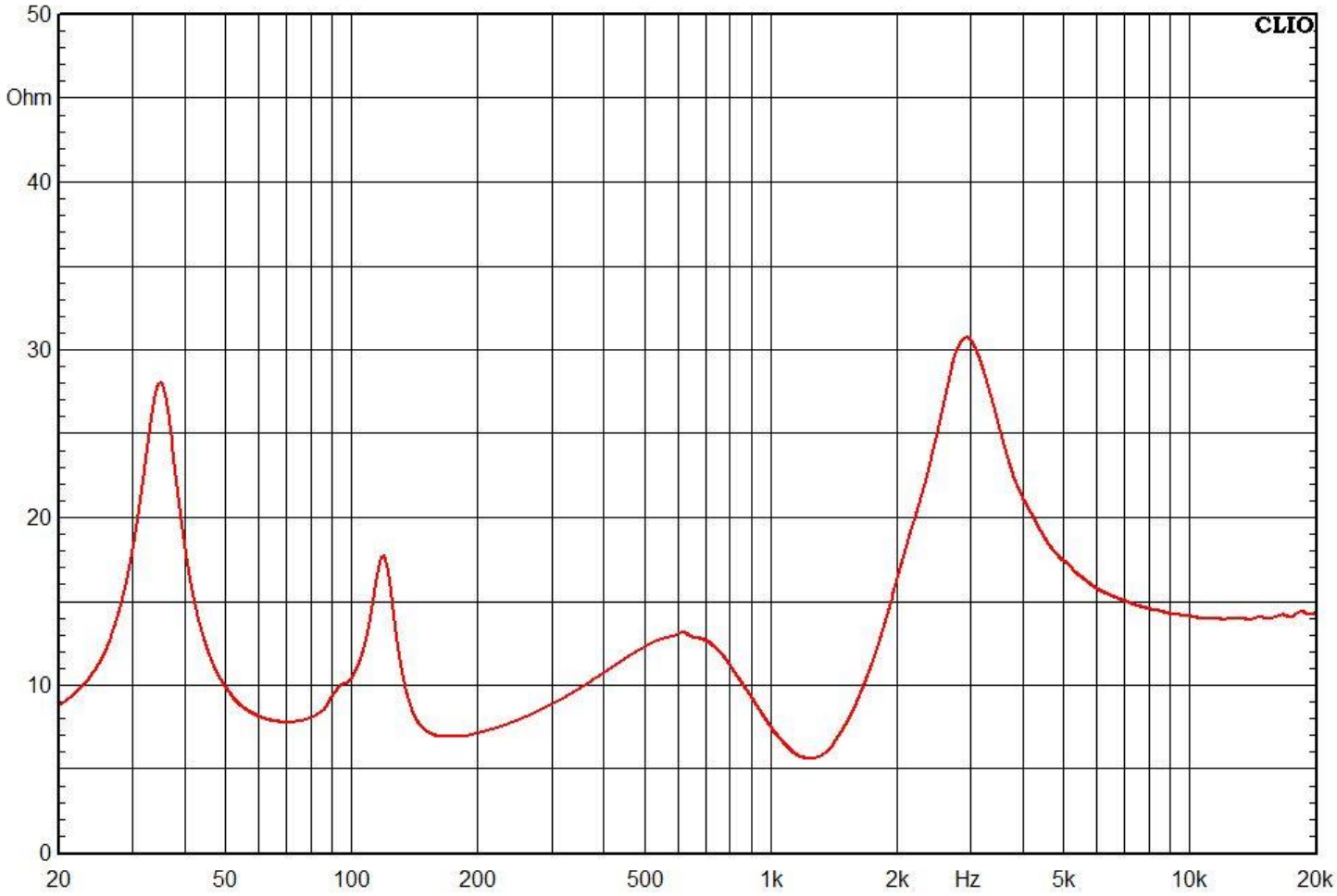
Frequency response @1W-1meter with B&C dedicated passive filter FBCLX64 (no eq applied)



Red – On axis Green – 15° Off axis Blue – 30° Off axis

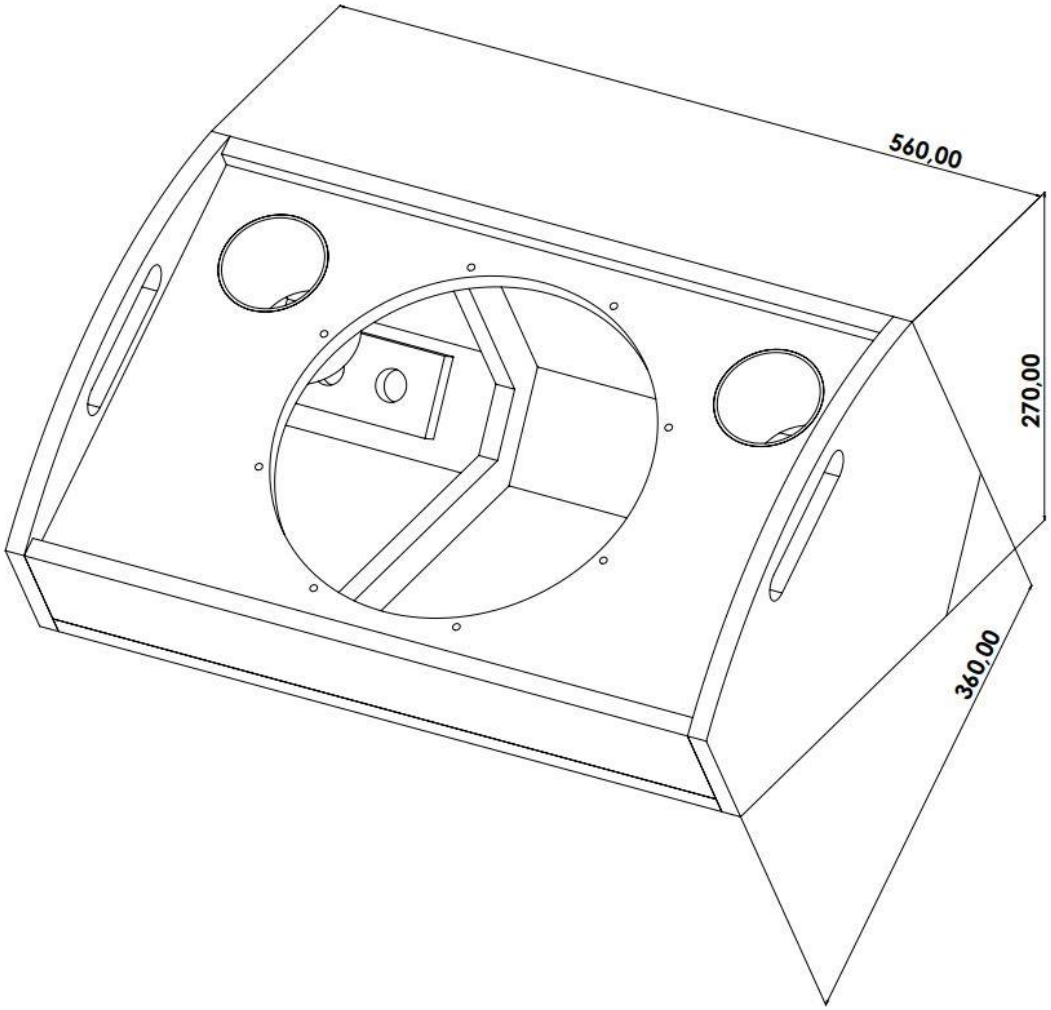
MEASUREMENTS

Impedance @-20dBu input with B&C dedicated passive filter (FBCLX64)



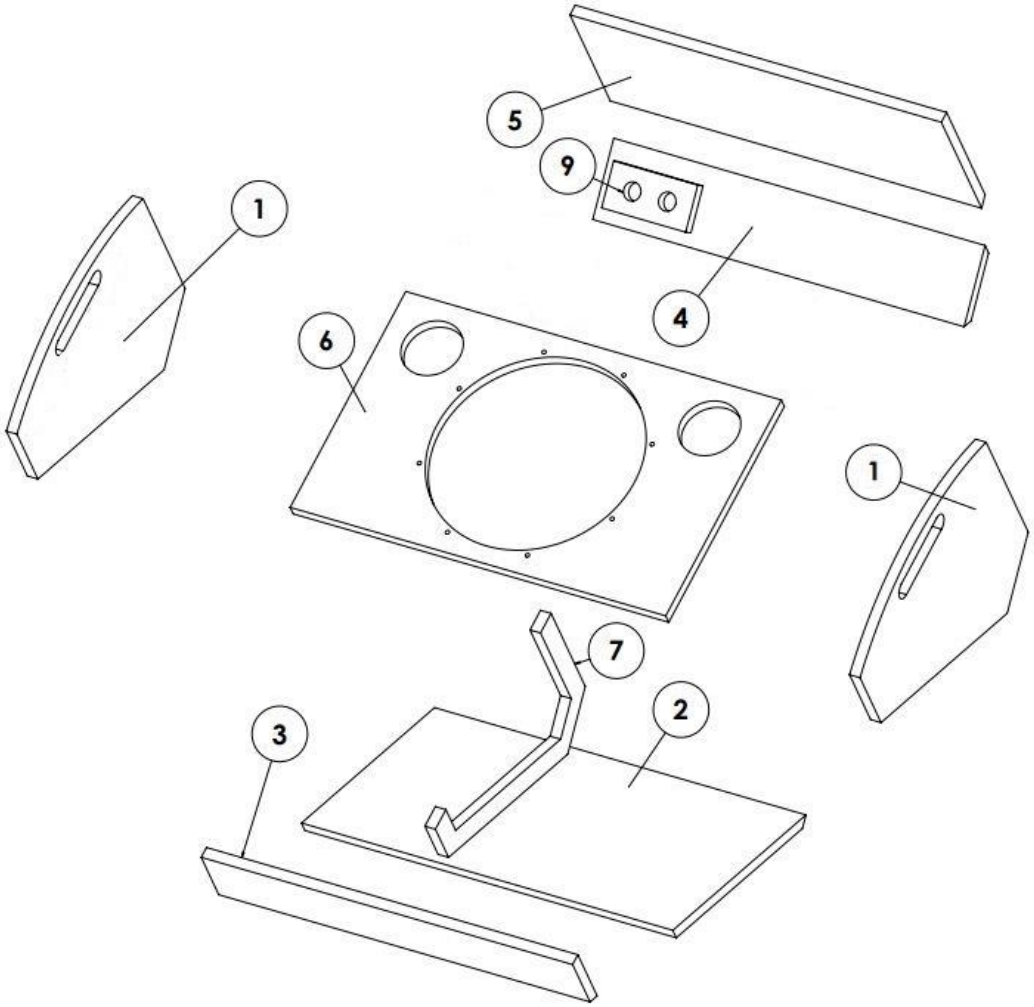
ENCLOSURE DESIGN

Overall dimensions



ENCLOSURE DESIGN

Exploded view and parts



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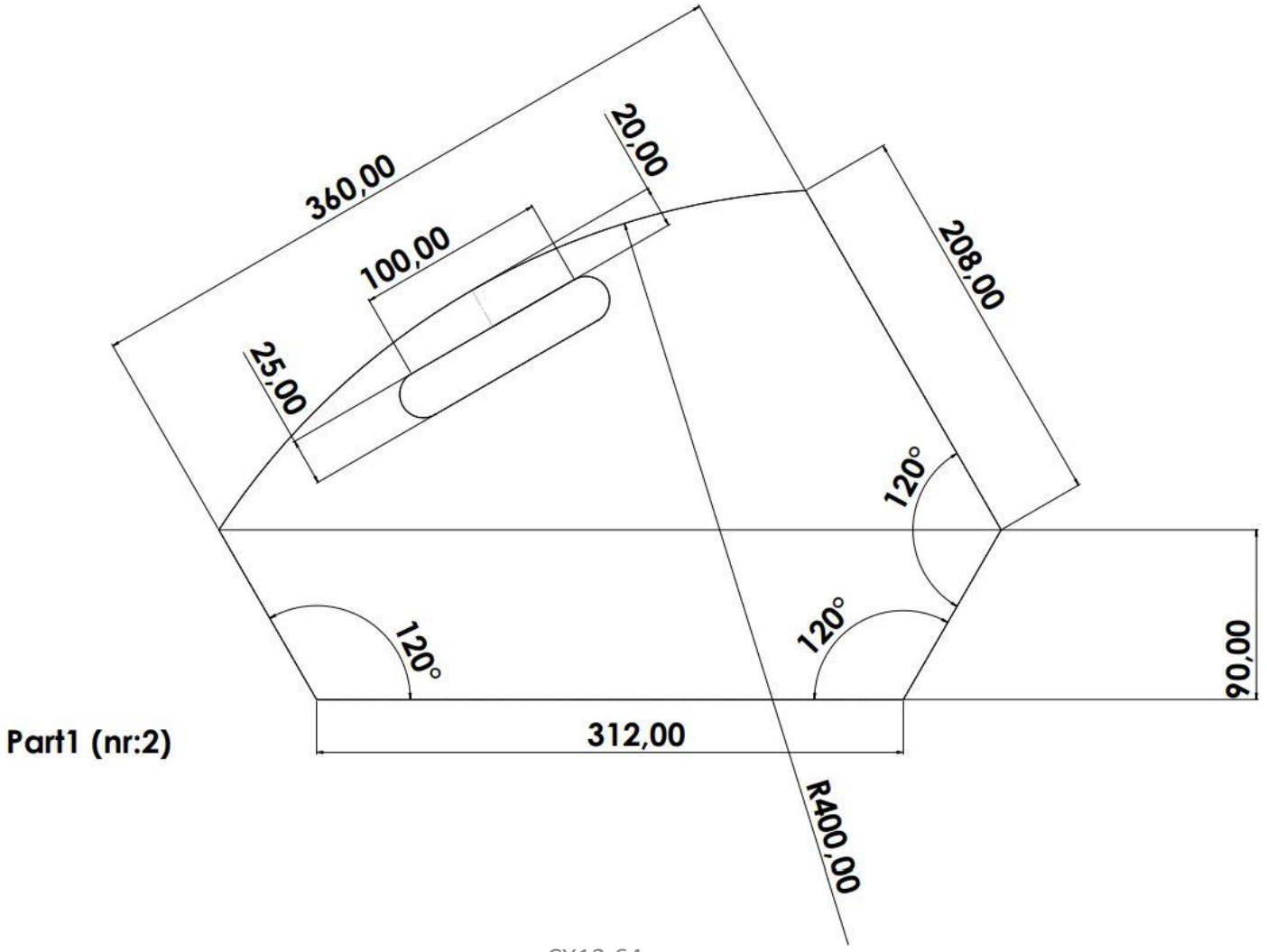
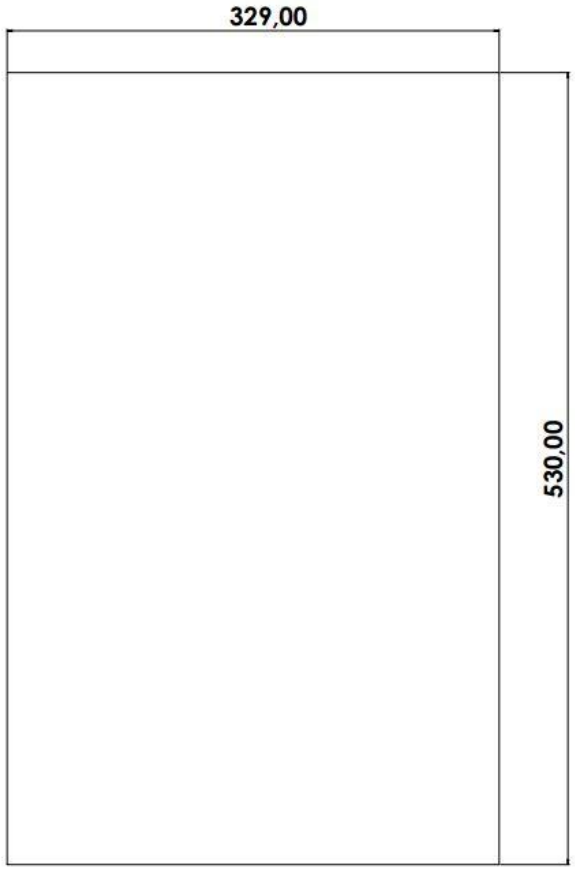
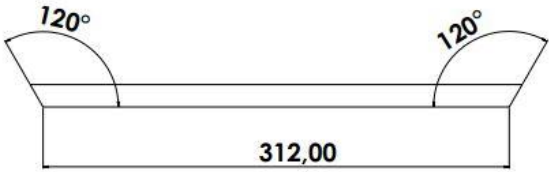


ENCLOSURE DESIGN



Part2



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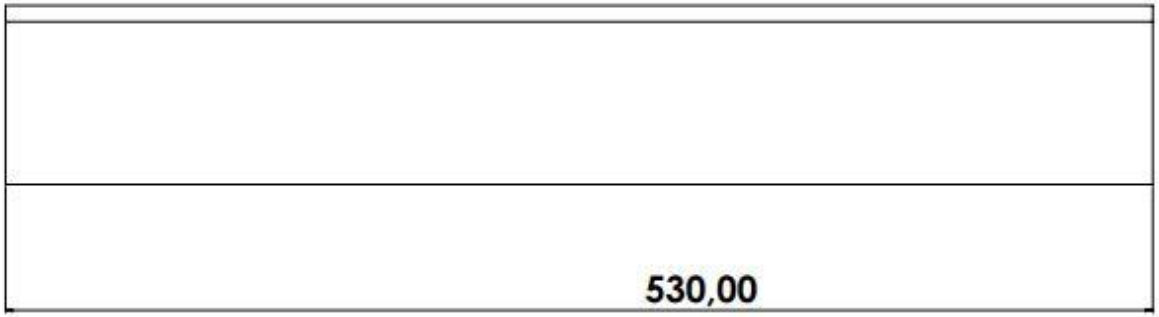
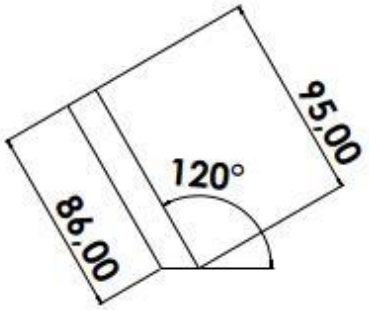
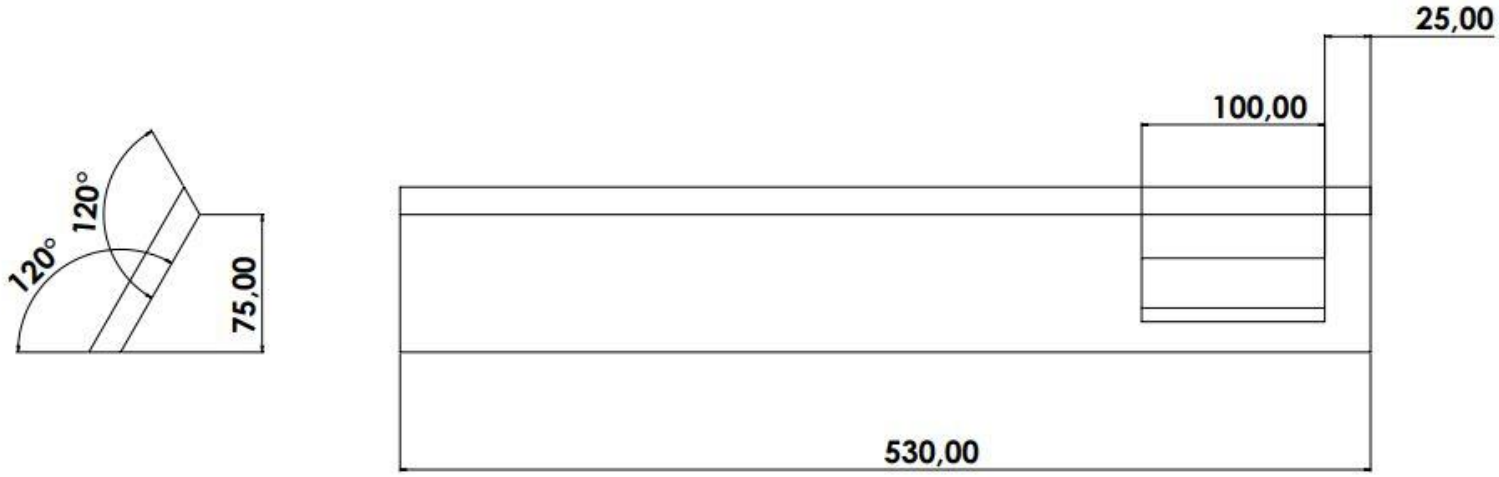




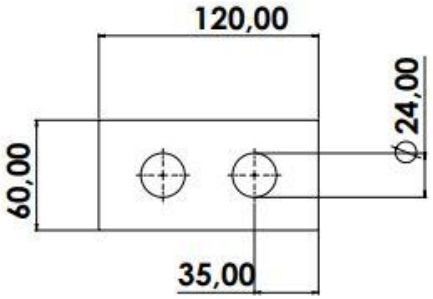
Part3

ENCLOSURE DESIGN

Part4



Part9
(Connectors panel)



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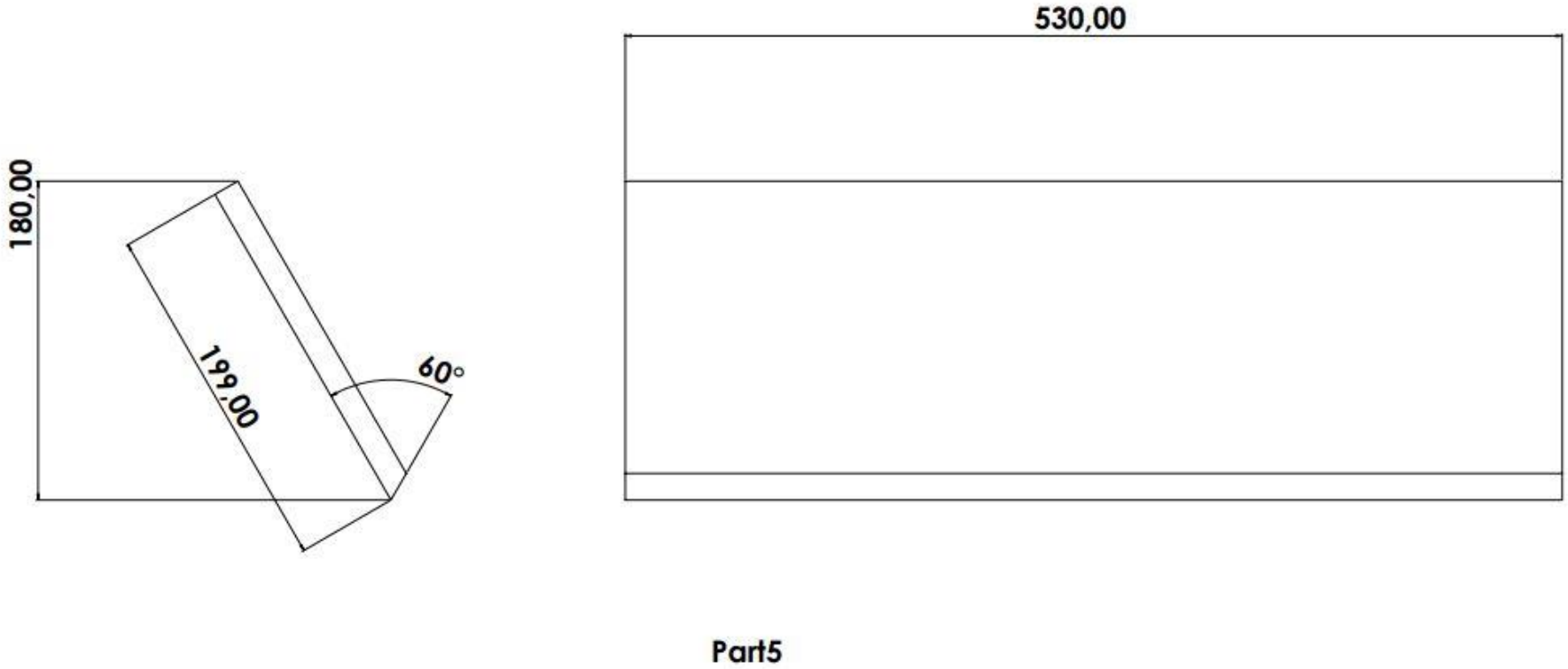
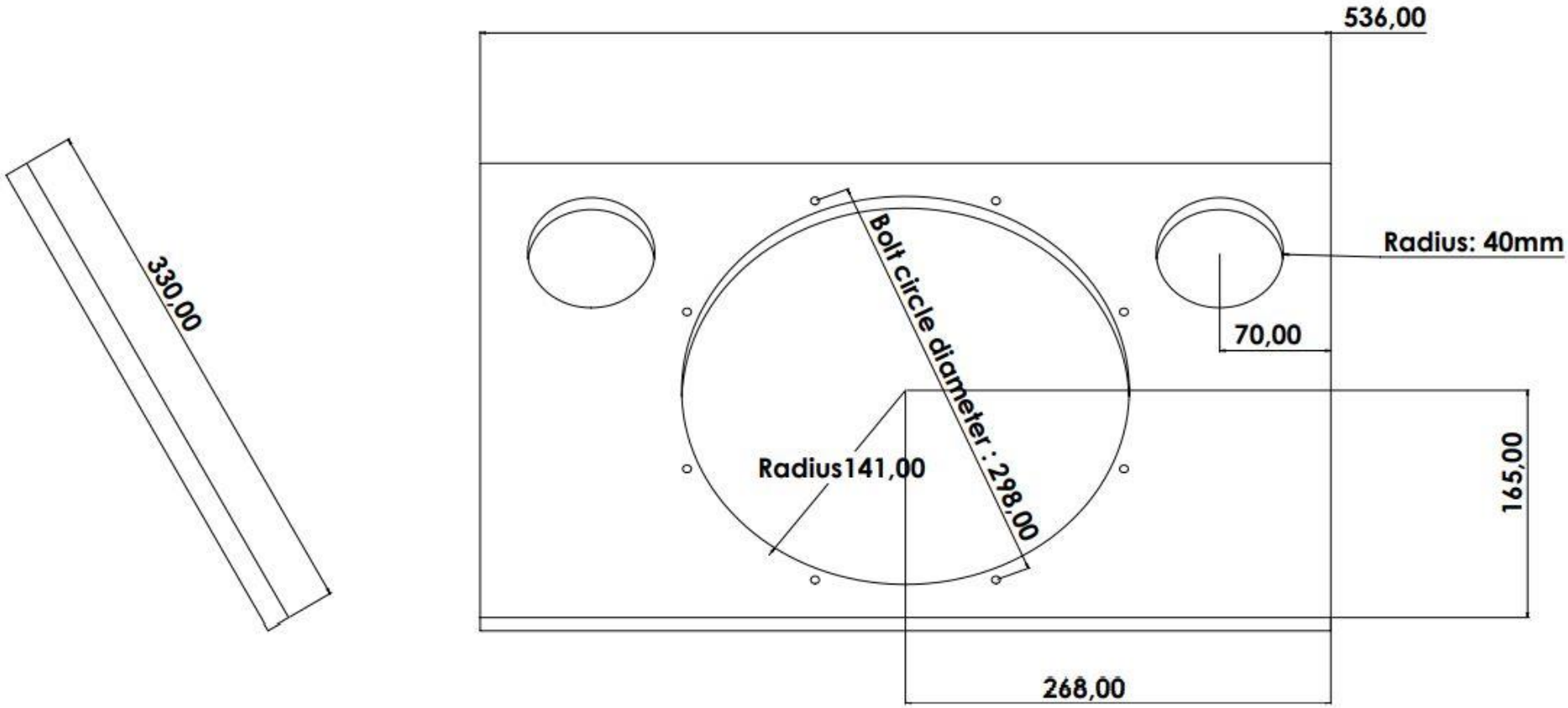


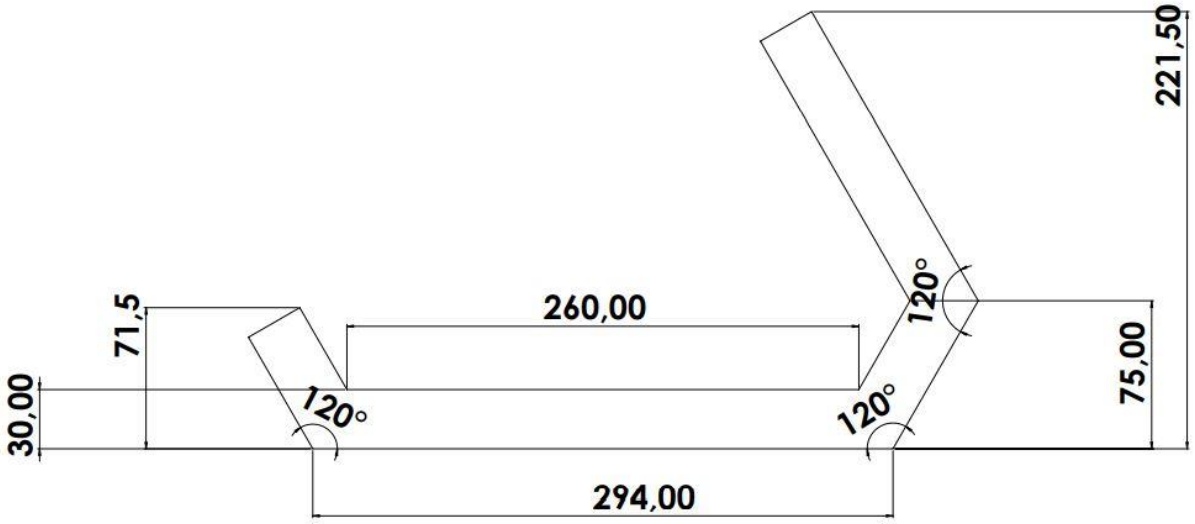
Part5

ENCLOSURE DESIGN



Part 6 (Baffle):
Vents have 75mm internal diameter and 100mm depth

ENCLOSURE DESIGN



Part7 (Internal reinforcement), to be placed at 180mm from part1