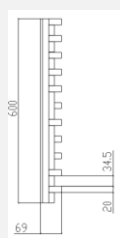
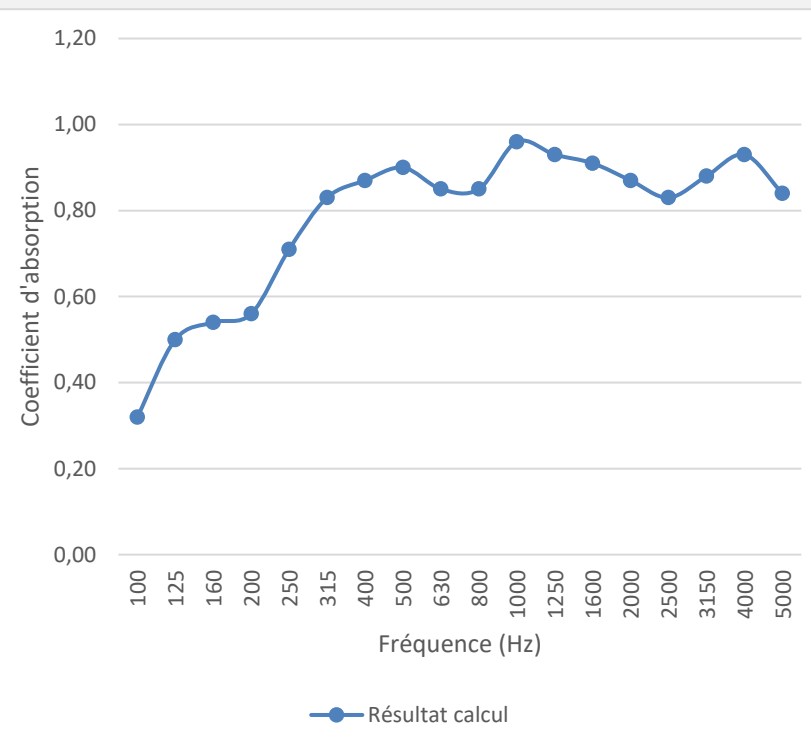


## 4.6 PANNEAUX LITE

| <b>COEFFICIENTS D'ABSORPTION <math>\alpha_w</math> ET NRC</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       | Essai n°27                                     |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------------------------------------------------|-------------------------------------------------------------------------------------|--|-----|------|------|-----|------|-----|------|-----|------|------|-----|------|-----|------|-----|------|------|-----|------|-----|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |       | Date de l'essai :<br>05/09/2022                |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
| <b>Description du complexe testé :</b><br>LINEA 24.3 Lite Plafond <ul style="list-style-type: none"> <li>- Plénum 250mm</li> <li>- Laine de roche 20mm</li> <li>- Vide 16mm</li> <li>- Lames 20x42mm</li> <li>- Espacement 34,5mm → 143,5 mm</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |       | Dimensions échantillon :<br>1879 x 600 x 69 mm |  |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |       | Norme utilisée :<br>NF EN ISO 11654            |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
| <table border="1"> <thead> <tr> <th>Fréquence (Hz)</th> <th>Alpha</th> <th></th> </tr> </thead> <tbody> <tr><td>100</td><td>0,32</td><td rowspan="3">0,45</td></tr> <tr><td>125</td><td>0,50</td></tr> <tr><td>160</td><td>0,54</td></tr> <tr><td>200</td><td>0,56</td><td rowspan="3">0,70</td></tr> <tr><td>250</td><td>0,71</td></tr> <tr><td>315</td><td>0,83</td></tr> <tr><td>400</td><td>0,87</td><td rowspan="3">0,85</td></tr> <tr><td>500</td><td>0,90</td></tr> <tr><td>630</td><td>0,85</td></tr> <tr><td>800</td><td>0,85</td><td rowspan="3">0,90</td></tr> <tr><td>1000</td><td>0,96</td></tr> <tr><td>1250</td><td>0,93</td></tr> <tr><td>1600</td><td>0,91</td><td rowspan="3">0,85</td></tr> <tr><td>2000</td><td>0,87</td></tr> <tr><td>2500</td><td>0,83</td></tr> <tr><td>3150</td><td>0,88</td><td rowspan="3">0,90</td></tr> <tr><td>4000</td><td>0,93</td></tr> <tr><td>5000</td><td>0,84</td></tr> </tbody> </table> |       | Fréquence (Hz)                                 | Alpha                                                                               |  | 100 | 0,32 | 0,45 | 125 | 0,50 | 160 | 0,54 | 200 | 0,56 | 0,70 | 250 | 0,71 | 315 | 0,83 | 400 | 0,87 | 0,85 | 500 | 0,90 | 630 | 0,85 | 800 | 0,85 | 0,90 | 1000 | 0,96 | 1250 | 0,93 | 1600 | 0,91 | 0,85 | 2000 | 0,87 | 2500 | 0,83 | 3150 | 0,88 | 0,90 | 4000 | 0,93 | 5000 | 0,84 |  <p style="text-align: center;">Fréquence (Hz)</p> <p style="text-align: center;">—●— Résultat calcul</p> |  |
| Fréquence (Hz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Alpha |                                                |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
| 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0,32  | 0,45                                           |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
| 125                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0,50  |                                                |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
| 160                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0,54  |                                                |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
| 200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0,56  | 0,70                                           |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
| 250                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0,71  |                                                |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
| 315                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0,83  |                                                |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
| 400                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0,87  | 0,85                                           |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
| 500                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0,90  |                                                |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
| 630                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0,85  |                                                |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
| 800                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0,85  | 0,90                                           |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
| 1000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0,96  |                                                |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
| 1250                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0,93  |                                                |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
| 1600                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0,91  | 0,85                                           |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
| 2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0,87  |                                                |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
| 2500                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0,83  |                                                |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
| 3150                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0,88  | 0,90                                           |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
| 4000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0,93  |                                                |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
| 5000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0,84  |                                                |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |       | $\alpha_w = 0,90$<br>$NRC = 0,85$              |                                                                                     |  |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                                                                                                                                                                              |  |