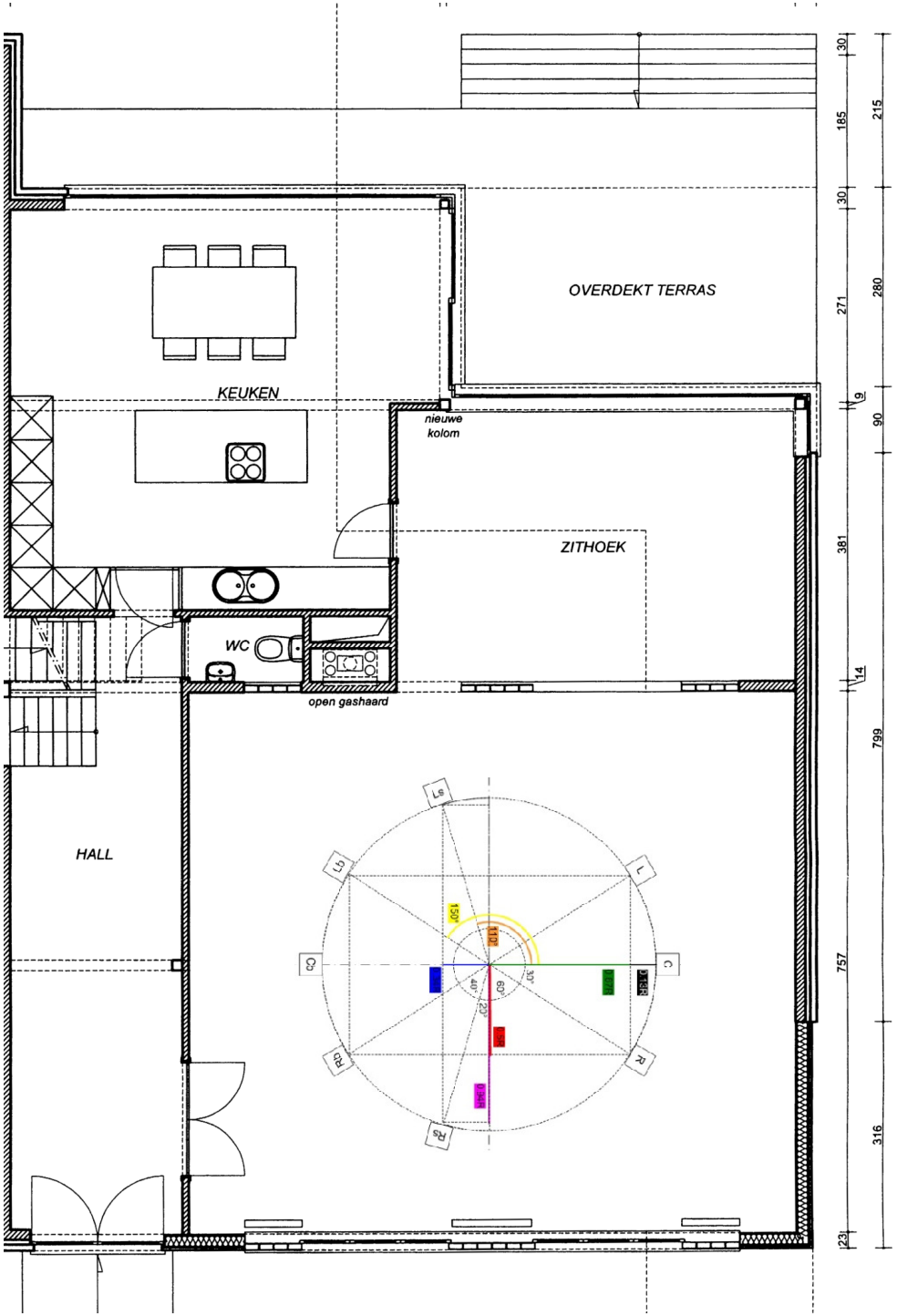
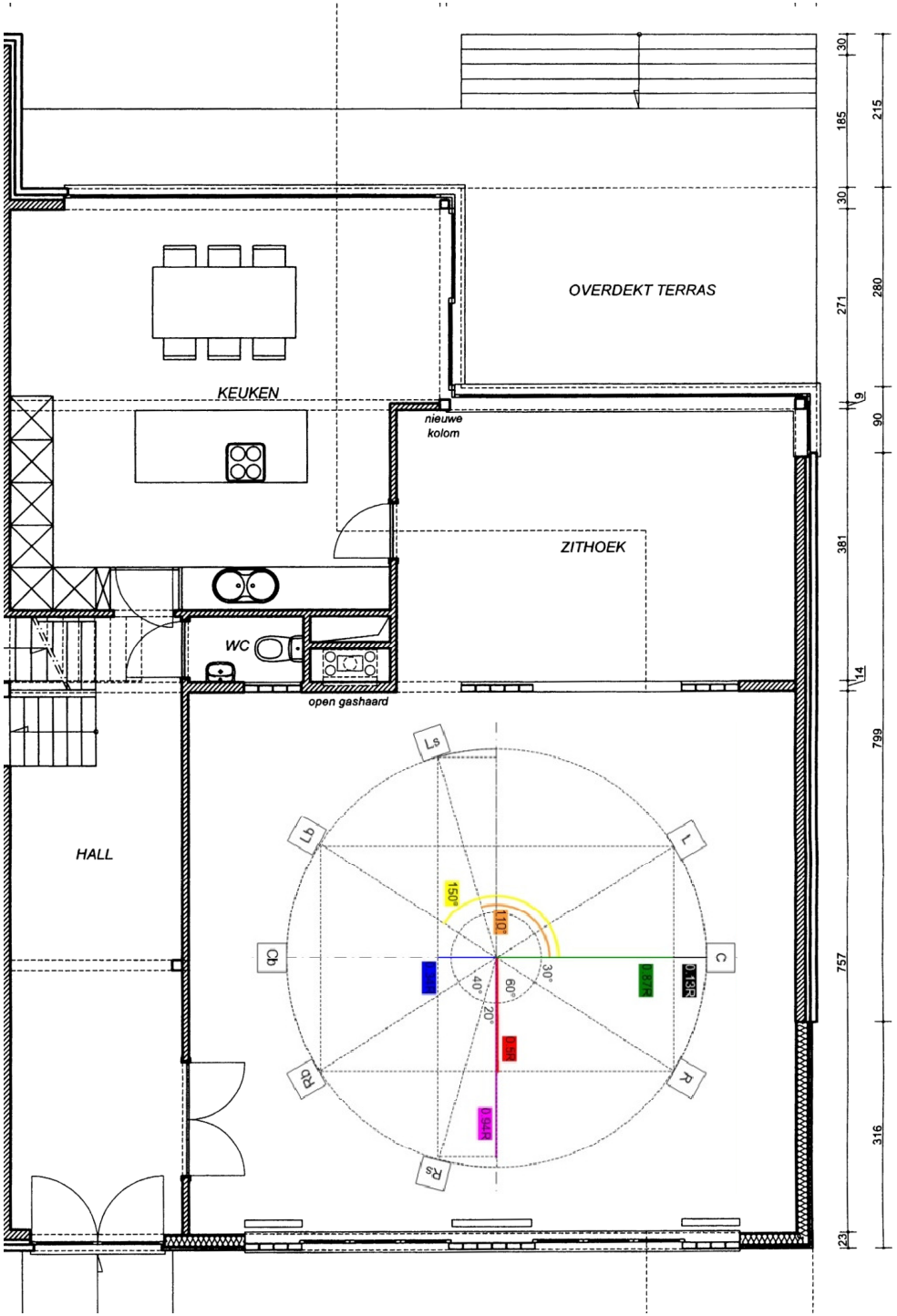



Option1:
Centralized setup

+
Perfect calibration circle,
ultimate multichannel stereo positioning
acoustical symmetry
Equidistant speaker backspace of 1m25
Equidistant speaker placement 5m inner diameter
works for 5.1/6.1/7.1

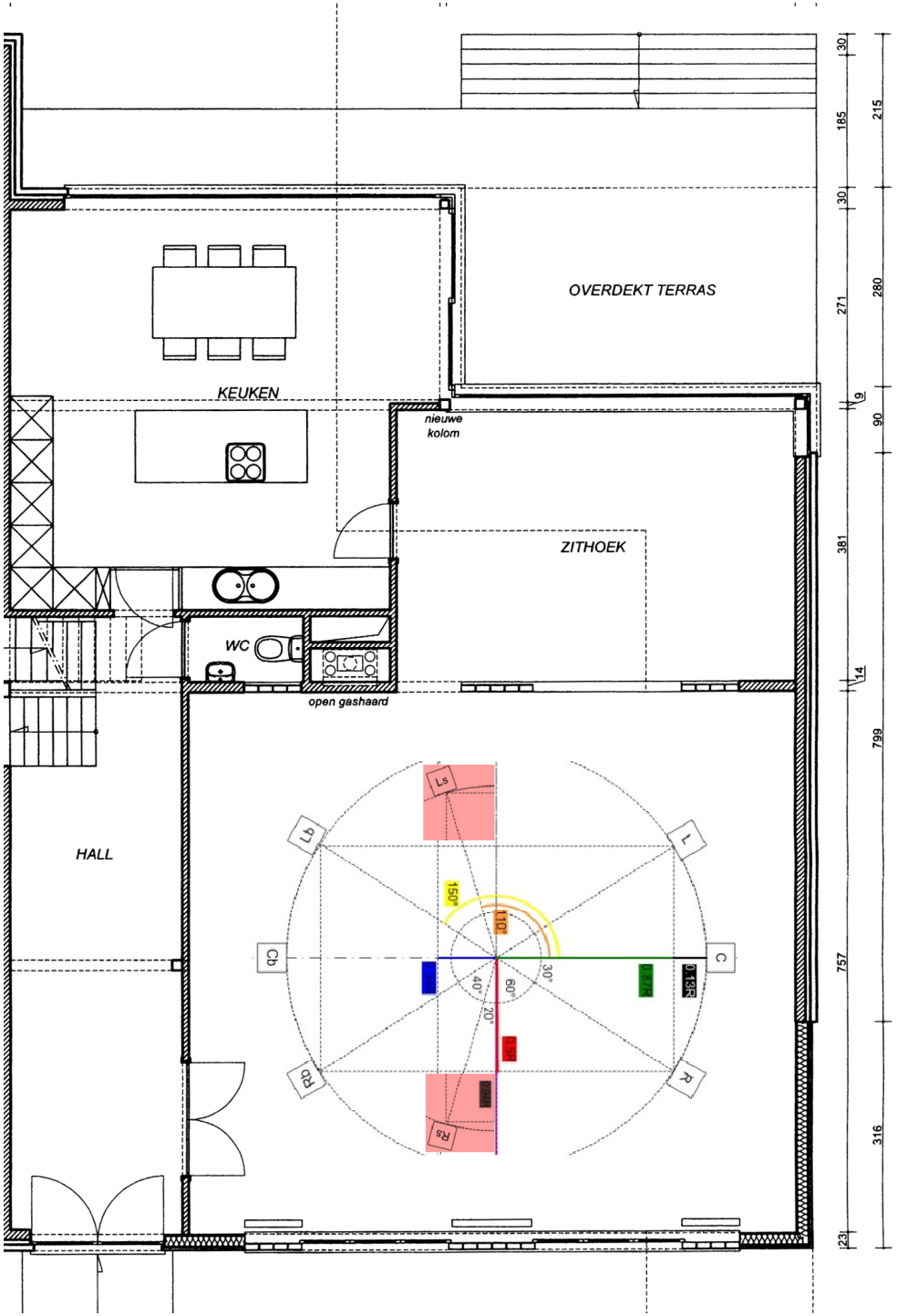
-
Limited furniture size & # within circle
Free hanging projection screen,
no wallmounted plasma




Option2:
Centralized setup, large diameter

+
acoustical symmetry
Equidistant speaker backspace of 0m85
Equidistant speaker placement 6m inner diameter
works for 5.1/6.1
More choice of furniture size & # within circle

-
Ls  positioned pretty aswkward to door towards rear room
In 7.1 config : Rb too close to door for practicality
Always move through the circle/setup no circum. passage
Free hanging projection screen,
no wallmounted plasma



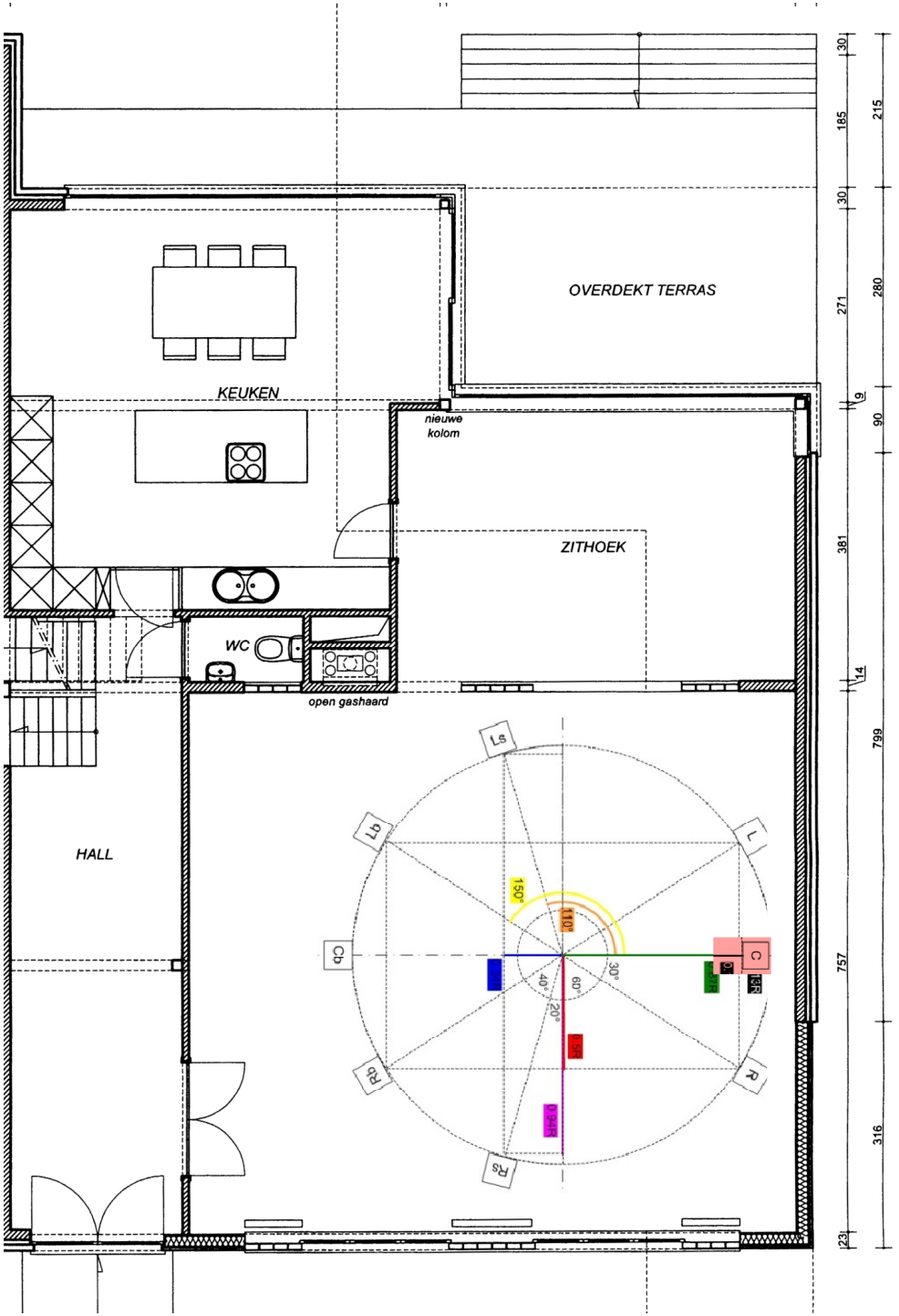

Option3:
Centralized setup, large diameter w/ shifted Ss's

+

Equidistant speaker backspace of 0m85
Equidistant speaker placement 6m inner diameter
works for 5.1/6.1
More choice of furniture size & # within circle

-

acoustical a-symmetry
In 7.1 config : Rb too close to door for practicality
Free hanging projection screen,
no wallmounted plasma




Option4:
Centralized setup, large diameter w/ shifted C

+
speaker placement 6m inner diameter
works for 5.1/6.1/7.1
More choice of furniture size & # within circle
wallmounted plasma/projection
Valid option for cinema
Passage to doors

-
acoustical a-symmetry
No quidistant speaker backspace
Not ok for multichannel stereo

Room Length: 8.42 (feet or meters) (inches)

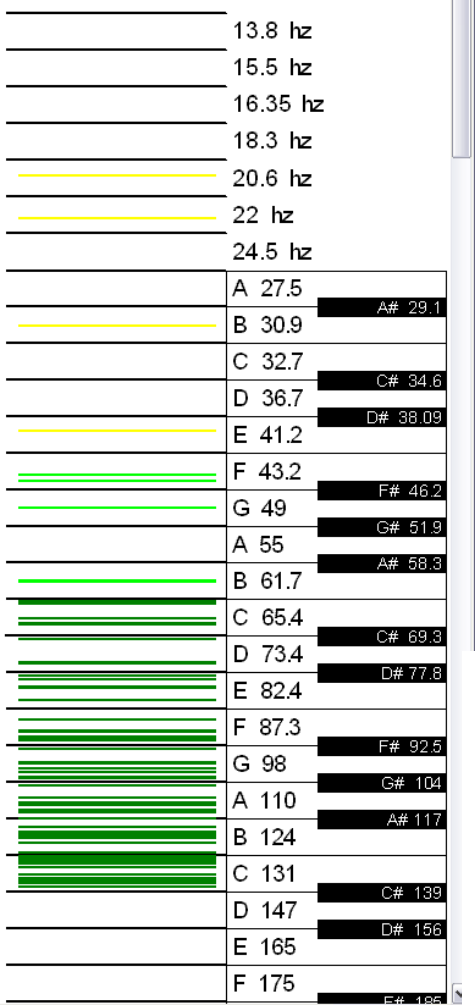
Room Width: 7.48 (feet or meters) (inches)

Room Height: 2.65 (feet or meters) (inches)

compute imperial (feet/inches) | compute metric (meters) | show options | Convert to Metric

Convert to Imperial

| Freq | % | Wavelength, 1/2, 1/4 | p,q,r Mode | Group Weighting |
|---|---|---|---|---|
| 20.5 hz | | 16.8 : 8.4 : 4.2 | (1,0,0 Axial) | Start iso, End iso |
| 23.0 hz | 10.8% | 14.97 : 7.49 : 3.74 | (0,1,0 Axial) | Start iso, End iso |
| 30.8 hz | 25.3% | 11.18 : 5.59 : 2.8 | (1,1,0 Tangential) | Start iso, End iso |
| 40.9 hz | 24.6% | 8.42 : 4.21 : 2.11 | (2,0,0 Axial) | Start iso, End iso |
| 46.0 hz | 11% | 7.49 : 3.74 : 1.87 | (0,2,0 Axial) | |
| 46.9 hz | 1.9% | 7.34 : 3.67 : 1.84 | (2,1,0 Tangential) | Start iso |
| 50.4 hz | 6.9% | 6.83 : 3.42 : 1.71 | (1,2,0 Tangential) | End iso |
| 61.4 hz | 17.9% | 5.61 : 2.8 : 1.4 | (3,0,0 Axial) | |
| 61.6 hz | 0.3% | 5.59 : 2.8 : 1.4 | (2,2,0 Tangential) | Start iso, Near |
| 65.0 hz | 5.2% | 5.3 : 2.65 : 1.32 | (0,0,1 Axial) | |
| 65.5 hz | 0.7% | 5.26 : 2.63 : 1.31 | (3,1,0 Tangential) | |
| 68.1 hz | 3.8% | 5.06 : 2.53 : 1.26 | (1,0,1 Tangential) | |
| 68.9 hz | 1.1% | 5 : 2.5 : 1.25 | (0,1,1 Tangential) | |
| 69.1 hz | 0.2% | 4.98 : 2.49 : 1.25 | (0,3,0 Axial) | |
| 71.9 hz | 3.8% | 4.79 : 2.4 : 1.2 | (1,1,1 Oblique) | |
| 72.0 hz | 0.1% | 4.78 : 2.39 : 1.2 | (1,3,0 Tangential) | Near |
| 76.7 hz | 6.1% | 4.49 : 2.25 : 1.12 | (3,2,0 Tangential) | |
| 76.8 hz | 0.1% | 4.48 : 2.24 : 1.12 | (2,0,1 Tangential) | |
| 79.6 hz | 3.5% | 4.33 : 2.16 : 1.08 | (0,2,1 Tangential) | |
| 80.2 hz | 0.7% | 4.29 : 2.15 : 1.07 | (2,1,1 Oblique) | |
| 80.3 hz | 0.1% | 4.29 : 2.14 : 1.07 | (2,3,0 Tangential) | |
| 81.8 hz | 1.8% | 4.21 : 2.11 : 1.05 | (4,0,0 Axial) | |
| 82.2 hz | 0.4% | 4.19 : 2.1 : 1.05 | (1,2,1 Oblique) | |
| 85.0 hz | 3.2% | 4.05 : 2.03 : 1.01 | (4,1,0 Tangential) | |
| 89.4 hz | 4.9% | 3.85 : 1.93 : 0.96 | (3,0,1 Tangential) | |
| 89.5 hz | 0.1% | 3.85 : 1.92 : 0.96 | (2,2,1 Oblique) | |
| 92.1 hz | 2.8% | 3.74 : 1.87 : 0.93 | (0,4,0 Axial) | |
| 92.3 hz | 0.2% | 3.73 : 1.87 : 0.93 | (3,1,1 Oblique) | |
| 92.4 hz | 0.1% | 3.73 : 1.86 : 0.93 | (3,3,0 Tangential) | |
| 93.9 hz | 1.5% | 3.67 : 1.83 : 0.92 | (4,2,0 Tangential) | |
| 94.3 hz | 0.4% | 3.65 : 1.83 : 0.91 | (1,4,0 Tangential) | |
| 94.8 hz | 0.5% | 3.63 : 1.82 : 0.91 | (0,3,1 Tangential) | |
| 97.0 hz | 2.2% | 3.55 : 1.78 : 0.89 | (1,3,1 Oblique) | |
| 100.5 hz | 3.4% | 3.43 : 1.71 : 0.86 | (3,2,1 Oblique) | |
| 100.8 hz | 0.2% | 3.42 : 1.71 : 0.85 | (2,4,0 Tangential) | |
| 102.3 hz | 1.4% | 3.37 : 1.68 : 0.84 | (5,0,0 Axial) | |
| 103.3 hz | 0.9% | 3.33 : 1.67 : 0.83 | (2,3,1 Oblique) | |
| 104.5 hz | 1.1% | 3.3 : 1.65 : 0.82 | (4,0,1 Tangential) | |
| 104.8 hz | 0.2% | 3.29 : 1.64 : 0.82 | (5,1,0 Tangential) | |
| 107.0 hz | 2% | 3.22 : 1.61 : 0.8 | (4,1,1 Oblique) | |
| 107.1 hz | 0% | 3.22 : 1.61 : 0.8 | (4,3,0 Tangential) | |
| 110.7 hz | 3.2% | 3.11 : 1.56 : 0.78 | (3,4,0 Tangential) | |
| 112.2 hz | 1.3% | 3.07 : 1.53 : 0.77 | (5,2,0 Tangential) | |




| H | W | L |
|---|---|---|
| 1 | 2,8235294 | 3,1764706 |
| 2 | 5,6470588 | 6,3529412 |
| 2,1 | 5,9294118 | 6,6705882 |
| 2,2 | 6,2117647 | 6,9882353 |
| 2,3 | 6,4941176 | 7,3058824 |
| 2,4 | 6,7764706 | 7,6235294 |
| 2,5 | 7,0588235 | 7,9411765 |
| 2,6 | 7,3411765 | 8,2588235 |
| 2,65 | 7,4823529 | 8,4176471 |
| 2,7 | 7,6235294 | 8,5764706 |
| 2,8 | 7,9058824 | 8,8941176 |
| 2,9 | 8,1882353 | 9,2117647 |
| 3 | 8,4705882 | 9,5294118 |
| 3,1 | 8,7529412 | 9,8470588 |
| 3,2 | 9,0352941 | 10,164706 |
| 3,3 | 9,3176471 | 10,482353 |
| 3,4 | 9,6 | 10,8 |
| 3,5 | 9,8823529 | 11,117647 |
| 3,6 | 10,164706 | 11,435294 |

**Computed Information:**

Room Dimensions: Length=8.42 m, Width=7.48 m, Height=2.65 m

Room Ratio: 1 : 2.82 : 3.17

R. Walker BBC 1996:

- 1.1w / h < 1 / h < ((4.5w / h) - 4): Pass
- 1< 3h & w < 3h: Fail
- no integer multiple within 5%: Pass

Nearest Known Ratio:

- "17) IEC 60268-13: Recommendation for listening room:1998" 1 : 1.963 : 2.593

RT60 (IEC/AEC N 12-A standard): 353 ms

- ±50ms from 200Hz to 3.5kHz = 303 to 403ms
- ±100ms above 3.5kHz = 253 to 453ms
- <+300ms at 63hz = 653ms
- 300<RT60<600ms

RT60 (ITU/EBU Control Room Recommended): 296 ms

- ±50ms from 200Hz to 4kHz = 246 to 346ms
- <+300ms at 63hz = 596ms
- 200<RT60<400ms

Absorbtion to achieve ITU RT60: 975 sabins

Volume: 166 m^3

Surface Area Total: 206 m^2

Surface Area Floor: 62 m^2

Surface Area Ceiling+Floor: 124 m^2

Surface Area Front Wall: 19 m^2

Surface Area Front and Rear Wall: 38 m^2

Surface Area Left Wall: 22 m^2

Surface Area Left and Right Wall: 44 m^2

Surface Area 4 Walls: 82 m^2

Surface Area 4 Walls + floor: 144 m^2

(sabins - front wall - carpet) / Left+Right+Rear wall: 15 %

(sabins - front wall) / Left+Right+Rear wall: 113 %

Schroeder Fc: 79hz

Frequency Regions:

- No modal boost: 1hz to 20hz
- Room Modes dominate: 20hz to 79hz
- Diffraction and Diffusion dominate: 79hz to 316hz
- Specular reflections and ray accoustics prevail: 316hz to 20000hz

Count (20.4-141hz) : Axials=14, Tangentials=60, Obliques=72

Count (20.4-100hz) : Axials=9, Tangentials=18, Obliques=6

Critical Distance (direct = reverberant field): 5.80m