# **Public Document Pack**

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A meeting of **Alcohol and Entertainment Licensing Sub-Committee** will be held in Committee Room 1, East Pallant House on **Thursday 17 August 2023** at **2.30 pm** 

MEMBERS: Mr I Ballantyne, Mr T O'Kelly and Mr H Potter

# SUPPLEMENT TO AGENDA

#### Part 1

Licensing Hearings (Pages 1 - 13)
 The Secret Boardroom, 2 Petersfield Road, Midhurst, West Sussex, GU29 9JH
 Application for a PREMISES LICENCE (Application Number – 233/01008/LAPRE)

The Sub-Committee is asked to consider the attached Sound Insulation Assessment dated 23 July 2023.

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# Report VA4817.230714.NIA

# 2 Petersfield Road, Midhurst

Sound Insulation Assessment

23 July 2023

The Secret Boardroom 2 Petersfield Road Midhurst GU29 9JH

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#### **1.** Introduction

The Secret Boardroom is a recently opened café at 2 Petersfield Road, Midhurst which is now applying for a licence.

Venta Acoustics has been commissioned to undertake tests and an assessment of the acoustic separation between the café and the residential dwellings above and provide recommendations.

#### 2. Site Description

The Secret Boardroom is located at ground floor level in the Tudor-style building at 2 Petersfield Road, with two residential dwellings at first-floor level above. The site is adjacent to a busy roundabout with continuous traffic during the day. The surrounding area is mixed-use, with newer apartments to the west and classic high street and ground-floor stores with residential first-floor elements to the north.

The unit is accessed via double doors on the corner of Petersfield Road and Rumbolds Hill, with large windows on both elevations. The space consists of several rooms which have been opened out to form a primarily open-plan space with attached toilets and a kitchen area.

The ceiling of the unit has a combination of exposed beams and flush ceilings. The overall floor construction is unknown but site measurements indicate a floor depth of 280mm throughout. This is assumed to be timber joist floors.

The first-floor dwellings are accessed via a separate staircase off Petersfield Road which also has a door into the ground-floor unit, which is usually kept locked.

The ground floor unit is understood to have existing approval for Class E use, which would include use as a café.

The Secret Boardroom is set up as a 1920s-themed cocktail bar, with a small bar in the central area with seating surrounding. The bar area includes a coffee machine and a small "Alexa" speaker which would be the only source of any music played in the venue.

#### 3. Sound Insulation Testing

Venta Acoustics visited the site at 13:00 on Thursday 13<sup>th</sup> July 2023 to undertake measurements of the sound insulation between the ground and first floor area. It is understood that attempts had been made by the manager of The Secret Boardroom to inform the residents that access would be required to undertake the testing. However, there was no answer from either dwelling when the attending consultant knocked on the doors.

As a compromise, testing was undertaken between the ground floor area and the common area at the staircase landing. This area has an overlap of approximately  $2m^2$  with the bar area below

although the ground floor door between the commercial unit and common area is a source of sound flanking.

| Manufacturer                |            | Serial No          | Calibration     |         |  |  |  |
|-----------------------------|------------|--------------------|-----------------|---------|--|--|--|
| Wanuacturer                 | Model Type | Serial NO          | Certificate No. | Date    |  |  |  |
| NTi Class 1 Integrating SLM | XL2        | A2A-15993-E0       | 1504971-2       | 28/3/23 |  |  |  |
| Larson Davis calibrator     | CAL200     | 13049              | 1504971-3       | 28/3/23 |  |  |  |
| Electro Voice               | ZLX-12P-EX | 095208361761760076 | -               | -       |  |  |  |
| Electro Voice               | ZLX-12P-EX | 095208361761760087 | -               | -       |  |  |  |
| 2 no. Unbranded WAV player  | -          | -                  | -               | -       |  |  |  |

The following equipment was used in the course of the survey:

The testing was undertaken following the general procedure defined in BS EN ISO 16283-1:2014 Acoustics – Field measurement of sound insulation in buildings and of building elements – Part 1: Airborne sound insulation as closely as reasonable using a pair of uncorrelated pink noise sources.

Pink noise was generated in the ground floor area with the resultant sound levels in the source room and the first-floor landing measured. The interconnecting door was kept tightly closed during the tests. The results were used to estimate the sound insulation performance of the floor.

Additional tests were undertaken in which music was played by the in-house speaker (Alexa device) and the audibility of the music was observed at first-floor level.

#### 3.2 Results

The test results are shown in Table 3.2 and are weighted as per the methodology described in BS EN ISO 717-1: 2013 Acoustics – Rating of sound insulation in buildings and of building elements - Part 1: Airborne sound insulation.

| Source                | Receive                 | Sound Insulation, D <sub>w</sub> |
|-----------------------|-------------------------|----------------------------------|
| Ground Floor Bar Area | First Floor Common Area | 36dB*                            |

 Table 3.2
 – Airborne sound insulation test result

\* The sound insulation performance may be compromised to a degree by flanking through the interleading door

The sound insulation performance to the first floor is indicated to be poor. However, it should be noted that this test may be compromised by sound flanking through an interleading door. Observations on site suggest that this flanking was present although not to the extent that it was the dominant sound transmission path. Some sound transmission through the floor and, to a lesser extent, up the common walls was also noted. It is estimated that the actual sound insulation performance of the area of floor tested is within 3dB of the calculated result (i.e. around D<sub>w</sub> 39dB).

This sound insulation performance is similar to that expected of a reasonable floor void with floorboards above a joist and a 9mm plasterboard ceiling attached directly to the underside of the joists (or notched between deeper joists).

Table 3.1- Equipment used for the tests

The management of the venue was asked to play music through the in-house speaker at a level they would typically use in the space. This was measured to be  $L_{Aeq}$  48dB in the bar area and was not audible in the first-floor landing space. Venta Acoustic's experience is that this source level would be quieter than expected other than as low level background music in a quiet café environment.

The speaker was then turned to full volume which was measured to have a music sound level of approximately  $L_{Aeq}$  70dB in the bar area. With music at this level, the rhythm in the music was audible at first-floor level although the lyrics were difficult to decern.

The speaker was turned down to a music level of approximately  $L_{Aeq}$  57dB in the bar. At this volume, the music was considered to be on the threshold of audibility at first-floor level, with the music rhythm just perceptible if an effort to listen for it is made.

The speaker system itself is small with little low frequency (bass) content which would be beneficial in minimising sound transmission through a floor with limited sound insulation.

| Music Source Level                  | Observations at first-floor level                                    |
|-------------------------------------|--|
| L <sub>Aeq</sub> 48dB               | Music was not audible  |
| L <sub>Aeq</sub> 70dB (full volume) | Rhythm in the music was audible although lyrics were not discernible |
| L <sub>Aeq</sub> 57dB               | Threshold of audibility. Rhythm audible with an effort.              |

Table 3.3 – Results of music tests

These observations were made during the day with the windows and doors to the stairwell closed resulting in ambient traffic noise levels of around L<sub>Aeq</sub> 35dB and background levels of around L<sub>A90</sub> 34dB. Lower levels would be expected in the dwellings at night and the audibility of music would be expected to be similarly increased. However, it should also be noted that there was a degree of flanking through the interconnecting door. The dominant sound transmission path was not evident during the music tests due to the relatively low sound levels.

As access into the dwellings was not provided the acoustic separation is necessarily estimated based on the performance measured to the common area.

#### 4. Discussion

Although access to the residential elements was not available, testing to an accessible first-floor area indicates that the sound insulation between ground and first floor level is relatively weak, as expected in a building of this age and construction. Music noise tests indicate that music would need to be limited to "ambient music" in the mid fifties to control sound transfer to the first floor. The use of a small speaker, as is used in the venue, generates limited bass which would reduce the impact on the neighbours.

It is noted that the premises has existing permission for Class E use which would allow for a café to operate with no limit on hours understood to be in place. The application of a licence to serve cocktails would not necessarily increase the noise levels above the currently permitted operations.

Discussions of improving the sound insulation performance of the ceiling and a noise management plan is suggested to help control the impact of noise on the residents above.

### 5. Recommendations

#### 5.1 Uprating the Ceiling

The current constructions of the floor/ceiling separating the ground floor café and first-floor apartments are unknown but are thought to be of a lightweight / timber construction.

Given the modest sound insulation performance measured, it is likely that the construction is a simple compartment floor formed from a ceiling attached to the underside of joists, with floor deck and finish above. There may or may not be mineral or glass wool insulation in the floor cavity.

Where improvements to the sound insulation of the floor are desired, this would require decoupling the ceiling from the joists and floor deck above and providing sufficient mass of the ceiling.

If the building is subject to heritage protection, it may not be permitted to remove the existing ceilings and the following would be recommended for installation below the insitu ceiling:

- Mason LDS (low dynamic stiffness) rubber hangers (<u>https://www.mason-uk.co.uk/l-d-s-rubber-hangers/</u>) to be installed on underside of existing ceiling.
- Metal frame ceiling grid attached to acoustic hangers to create a new ceiling at least 150mm below the underside of the ceiling (and more if possible)
- New plasterboard ceiling comprising two layers 15mm dense plasterboard such as SoundBloc or similar (minimum mass 13kg/m<sup>2</sup> per board), joints staggered and skimmed

If the existing ceiling can be removed, an enhanced sound insulation performance is predicted with a single large void between the floor above and the new ceiling:

- The existing ceiling should be removed and the void between the joists filled with a minimum of 100mm mineral wool between joists (density 10-33kg/m<sup>3</sup>)
- Mason LDS (low dynamic stiffness) rubber hangers (<u>https://www.mason-uk.co.uk/l-d-s-rubber-hangers/</u>) to be installed either inside the joists or on base of joists
- Metal frame ceiling grid attached to acoustic hangers to create a new ceiling at least 350mm below underside of the subfloor (and more if possible)
- New plasterboard ceiling comprising two layers 15mm dense plasterboard such as SoundBloc or similar (minimum mass 13kg/m<sup>2</sup> per board), joints staggered and skimmed
- It is strongly recommended that downlighters are not installed within the ceiling. If they must be installed, they should have acoustic hoods installed above.

To aid with the above description, Figure 5.1 shows an approximation of the floor build up (not to scale).

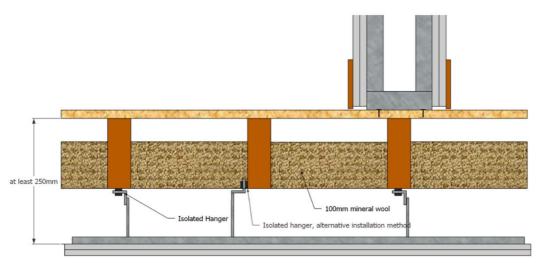


Figure 5.1 – Floor build up

The following sound insulation performances for the floor were measured / predicted. Note that  $D_w$  and  $R_w$  values are not directly comparable but provide an indication of the acoustic uplift that may be expected with works to the ceiling.

| Frequency (Hz)   | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | R <sub>w</sub> +C <sub>tr</sub> |
|--|----|-----|-----|-----|----|----|----|----|---------------------------------|
| Measured Sound Reduction<br>(D <sub>w</sub> )                    | 22 | 23  | 27  | 34  | 37 | 38 | 41 | 44 | 36(-4)                          |
| Prediction of existing floor<br>(R <sub>w</sub> )                | 9  | 20  | 34  | 40  | 39 | 45 | 50 | 53 | 40(-7)                          |
| Existing floor + suspended ceiling<br>(R <sub>w</sub> )          | 24 | 35  | 43  | 47  | 50 | 52 | 61 | 65 | 50(-4)                          |
| Remove existing ceiling + suspended ceiling<br>(R <sub>w</sub> ) | 28 | 43  | 51  | 47  | 61 | 62 | 65 | 65 | 57(-6)                          |

Table 5.1 – Measured and predicted sound reduction performance

Uprating the ceiling would provide a theoretical improvement of around 10dB, which would allow a subjective doubling of loudness in the space below for the same resulting levels on the flats above.

The expected sound levels in the flat above have been calculated for raised voices in the café and music playing on full volume (total reverberant sound level of around  $L_{Aeq}$  75dB) with the above ceiling options in place. The calculations are summarised on the attached sheet in Appendix B.

| Ceiling Option                              | Predicted Sound Level Above |
|---|-----------------------------|
| Existing Ceiling                            | L <sub>Aeq</sub> 36dB       |
| Existing Ceiling + Suspended Ceiling        | L <sub>Aeq</sub> 27dB       |
| Remove Existing ceiling + suspended ceiling | L <sub>Aeq</sub> 25dB       |

 Table 5.2
 – Predicted Sound Levels in Flats Above – raised voices + music on full volume

In all situations, the sound from the café below is likely to be audible. With the ceiling uprated, the sound levels would be 8-10dB below the recommended internal sound levels in BS8233<sup>1</sup> and may be acceptable for limited hours.

The above assumes a very lively atmosphere in the space below which would not be considered suitable for this location. As such, additional management of noise may be required by the business operator.

#### 5.2 Limiting of Operational Hours

Due to the sound transfer to the apartments above it is recommended that the premises does not operate after 23:00 hours. These are considered 'daytime' hours by most standards and guidance and higher sound limits would apply at this time. Operations after 23:00hours would need to be significantly quieter to avoid unreasonable disturbance.

#### 6. Noise Management Plan

The following noise management plan includes many measures that would be recommended for adoption by the management of the premises. This plan addresses both music noise and noise from guests. These measures are intended to minimise the noise impact on the neighbours.

#### 6.1 **Potential Noise Sources**

The management understand that the identification and recognition of potential causes of disturbance assists greatly in planning to avoid disturbances to the surroundings.

The following noise sources have been identified in relation to the proposed operation of the premises:

- Music noise from indoor areas;
- Noise from Patrons inside (shouting, laughing, etc.);
- Moving of furniture, deliveries and people arriving or leaving.

#### 6.2 Management Controls

The responsibility for the management controls will be assumed by the manager. Other members of staff may assume the role in the future following suitable training. If the venue is hired out, this responsibility will be shared with the event organisers as will be included in the contract for the hire of the venue.

To minimise noise break-out from the premises, the external door to the premises will be kept closed during the evening, except when being used for immediate access and egress.

<sup>&</sup>lt;sup>1</sup> It is acknowledged that BS8233 refers to 'anonymous' noise sources. In this instance it is used as a reference for comparison and not a target that would indicate acceptable sound levels.

A culture of neighbourly consideration will be encouraged amongst patrons through the use of signs and polite reminders from staff.

Patrons are expected to access and leave the premises on foot via Petersfield Road. Signs will be installed reminding patrons and smokers of the amenity of neighbours.

Public parking is available within a 2 minute walk of the premises. The sound of vehicles associated with the business is not expected to be a concern.

#### 6.2.1 Hours of Operation

It is recommended that the opening hours of the venue is limited to 23:00, with no music played or patrons allowed within the premises after this time.

Cleaning up after closure will be done carefully to avoid scrapping or banging of furniture. Where possible, this would be delayed until the following day.

#### 6.2.2 Music Limits

Music is expected to be played by a small speaker with limited bass and a lower upper volume level. It is still important that the impact of music on the dwellings above is understood. It is recommended that, although a guide figure has been identified based on the current floor constructions, the limit for noise levels would be set through a joint exercise with the neighbouring dwellings where music in the premises is adjusted until an agreeable level is achieved in the neighbouring dwellings. The limiter would then be set with this level as the maximum permitted level. Uprating of the ceiling may enable this limit to be revised in the future.

External speakers or radios will not be permitted to be brought into the venue. No instruments will be played in the venue.

Speakers will not be rigidly attached to the walls or ceiling of the venue.

#### 6.2.3 Patron Noise Management

Signs should be in place reminding guests of the proximity of neighbours and encouraging them to keep their voices down. Management or responsible staff will be present at all times to supervise the premises and control any boisterous behaviour.

#### 6.2.4 Private Events

Private events will limit the number of people available and would not be permitted to bring their own music systems into the premises. The hire agreement will include a term that outlines the importance of maintaining good relations with neighbours and the need to limit noise levels. Groups that are likely to generate high levels of noise would not be offered private hire.

#### 6.3 Deliveries

Deliveries and collections would only take place during the day. Emptying of glass bottles outside the premises will be avoided as far as possible in the evenings and, where required, done in a manner to minimise noise.

#### 6.4 Neighbour Relations

The management will endeavour to maintain a friendly, open and informative relationship with the nearby residents to allow concerns to be raised and addressed without hostility. Residents will be made aware of planned events with a reasonable notice period and concerns regarding these will be noted and acted upon.

#### 6.4.1 Complaints Procedure

A phone number and email address will be provided to nearby residents to allow efficient notification of the premises if noise levels are causing a disturbance. Clear instructions would be given to those likely to answer on these procedures for handling complaints.

A complaint action procedure will be produced and made available to staff who will be instructed to follow it on receiving a complaint. This procedure would include checking and adjusting the music volume and supervising patrons.

A timed and dated log will be kept in the office of all complaints, including actions taken and responses given. Other information recorded in the complaints log will include the approximate number of guests and staff present at the time of the complaint, and any specific activities or conditions which were noteworthy at the time. A sample complaint log sheet is attached at Appendix B. Any other notes or email communications should be copied and a record kept in the complaint log folder.

All complaints will be addressed promptly, with a response/explanation as well as any future actions or improvements that can be implemented.

#### 7. Conclusion

An assessment of the sound insulation between The Secret Boardroom at ground floor level of 2 Petersfield Road, Midhurst and the first-floor dwellings has been undertaken. As access to the dwellings is not available, this has been estimated on the basis of measurements to a common area.

The sound insulation performance of the floor is limited and would not support loud music or an overly lively atmosphere within the space.

However, as the space has current permission for Class E use, the premises may operate as a café. With careful management, the proposed licence would not increase the noise associated with the

space. To this end, limiting levels for music in the space have been proposed which should be confirmed as suitable through a joint exercise with the residents above.

Options to improve the sound insulation to the space above have been provided with predictions of the resulting sound levels above provided.

A noise management plan has been proposed to assist in limiting the impact on the dwellings above.

#### Steven Liddell MIOA

# **Airborne Sound Insulation Test**

#### Level difference

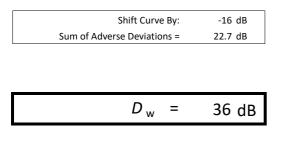
Field measurements of airborne sound insulation between rooms (NB Higher D<sub>w</sub> figures denote better sound insulation performance)

> Limit of measurement ≥ 37.2 Limit of measurement ≥ 37.1 Limit of measurement ≥ 37.2 Limit of measurement ≥ 38.5

#### Construction Tested:

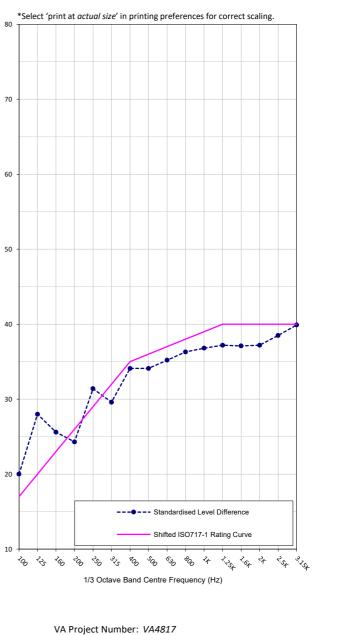
Туре

| Frequency<br>Hz | D<br>dB |
|-----------------|---------|
| 100             | 20.0    |
| 125             | 28.0    |
| 160             | 25.6    |
| 200             | 24.3    |
| 250             | 31.4    |
| 315             | 29.6    |
| 400             | 34.1    |
| 500             | 34.1    |
| 630             | 35.2    |
| 800             | 36.3    |
| 1k              | 36.8    |
| 1.25k           | 37.2    |
| 1.6k            | 37.1    |
| 2k              | 37.2    |
| 2.5k            | 38.5    |
| 3.15k           | 39.9    |



Evaluation based on field measurement results obtained in onethird octave bands by an engineering method.

Test Date: 13/09/2023



VENTA ACOUSTICS

Client: The Secret Boardroom

Site: 2 Petersfield Road, Midhurst

**Rooms Tested** 

Level Difference dB

Figure :

From : Ground Floor Bar To: 1st Floor Landing

#### VA4817/AB1

# **APPENDIX B** VA4817 - 2 Petersfield Road, Midhurst Noise Impact Assessment

#### Sound Transfer To Flat Above

| Existing Floor                  |    | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | 8 kHz | dB(A) |
|---------------------------------|----|-------|--------|--------|--------|-------|-------|-------|-------|-------|
| Source Noise Level              | Lw | 48    | 59     | 70     | 75     | 72    | 64    | 57    | 48    | 76    |
| Number of Voices                | 5  | 7     | 7      | 7      | 7      | 7     | 7     | 7     | 7     |       |
| Rev Correction                  |    | -14   | -14    | -11    | -10    | -9    | -9    | -10   | -10   |       |
| Voice level                     |    | 41    | 52     | 66     | 72     | 70    | 61    | 54    | 46    | 73    |
| Music at full volume            |    | 59    | 60     | 70     | 70     | 63    | 57    | 57    | 63    | 70    |
| Rev Level in Café               |    | 59    | 61     | 71     | 74     | 71    | 63    | 59    | 63    | 75    |
| Floor Area (m sqr)              | 15 | 12    | 12     | 12     | 12     | 12    | 12    | 12    | 12    |       |
| SRI                             |    | -9    | -20    | -34    | -40    | -39   | -45   | -50   | -53   |       |
| Rev correction in bedroom above |    | -11   | -12    | -12    | -12    | -12   | -12   | -12   | -12   |       |
| Level at receiver               |    | 51    | 40     | 37     | 35     | 31    | 17    | 8     | 9     | 36    |

| Existing + New Ceiling          |    | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | 8 kHz | dB(A) |
|---------------------------------|----|-------|--------|--------|--------|-------|-------|-------|-------|-------|
| Source Noise Level              | Lw | 48    | 59     | 70     | 75     | 72    | 64    | 57    | 48    | 76    |
| Number of Voices                | 5  | 7     | 7      | 7      | 7      | 7     | 7     | 7     | 7     |       |
| Rev Correction                  |    | -14   | -14    | -11    | -10    | -9    | -9    | -10   | -10   |       |
| Voice level                     |    | 41    | 52     | 66     | 72     | 70    | 61    | 54    | 46    | 73    |
| Music at full volume            |    | 59    | 60     | 70     | 70     | 63    | 57    | 57    | 63    | 70    |
| Rev Level in Café               |    | 59    | 61     | 71     | 74     | 71    | 63    | 59    | 63    | 75    |
| Floor Area (m sqr)              | 15 | 12    | 12     | 12     | 12     | 12    | 12    | 12    | 12    |       |
| SRI                             |    | -24   | -35    | -43    | -47    | -50   | -52   | -61   | -65   |       |
| Rev correction in bedroom above |    | -11   | -12    | -12    | -12    | -12   | -12   | -12   | -12   |       |
| Level at receiver               |    | 36    | 25     | 28     | 28     | 20    | 10    | -3    | -3    | 27    |

| Remove Ceiling + New Ceiling    |    | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | 8 kHz | dB(A) |
|---------------------------------|----|-------|--------|--------|--------|-------|-------|-------|-------|-------|
| Source Noise Level              | Lw | 48    | 59     | 70     | 75     | 72    | 64    | 57    | 48    | 76    |
| Number of Voices                | 5  | 7     | 7      | 7      | 7      | 7     | 7     | 7     | 7     |       |
| Rev Correction                  |    | -14   | -14    | -11    | -10    | -9    | -9    | -10   | -10   |       |
| Voice level                     |    | 41    | 52     | 66     | 72     | 70    | 61    | 54    | 46    | 73    |
| Music at full volume            |    | 59    | 60     | 70     | 70     | 63    | 57    | 57    | 63    | 70    |
| Rev Level in Café               |    | 59    | 61     | 71     | 74     | 71    | 63    | 59    | 63    | 75    |
| Floor Area (m sqr)              | 15 | 12    | 12     | 12     | 12     | 12    | 12    | 12    | 12    |       |
| SRI                             |    | -28   | -43    | -51    | -47    | -61   | -62   | -65   | -65   |       |
| Rev correction in bedroom above |    | -11   | -12    | -12    | -12    | -12   | -12   | -12   | -12   |       |
| Level at receiver               |    | 32    | 17     | 20     | 28     | 9     | 0     | -7    | -3    | 25    |

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