

Predicted Equipment Sound Levels

24-Hour Operation Equipment

The proposed equipment includes one Alcatel-Lucent LTE equipment installed on an existing rack. According to manufacturer data, the Alcatel-Lucent LTE cabinet produces a sound power level of 65 LwA, which is equivalent to 55 dB(A) at 5 feet. The equipment will be located within an equipment room that does not directly vent to the exterior.

To predict equipment noise levels at the receiving properties, this survey uses the methods established by ASHRAE and AHRI Standard 275-2010. Application factors such as location, height, and reflective surfaces, and noise reduction from intervening elements are accounted for in predicting the sound level at the receiving properties.

The nearest receiving property line is 275 feet south of the equipment room. The predicted sound level at the nearest property line is shown in Table 1 below.

Table 1
Application Factors and Predicted Noise Levels
For Proposed New Equipment in Shelter

Line	Application Factor	South
1	Equipment Sound Pressure Level at 5 ft. (dB(A)), L_{PS}	55
2	Distance Factor (DF) Inverse-Square Law (Free Field): $DF = 20\log(d1/d2)$	-35 (275 ft)
3	Estimated Transmission Loss (TL) of equipment walls	-20
4	New Equipment Sound Pressure Level at Receiver, L_{PR}	0

The predicted sound pressure level from the proposed equipment at the nearest receiving property is 0 dB(A), which meets the 60 dB(A) noise code limit.

Please contact us if you have any questions or require further information.

Sincerely,
SSA Acoustics, LLP



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