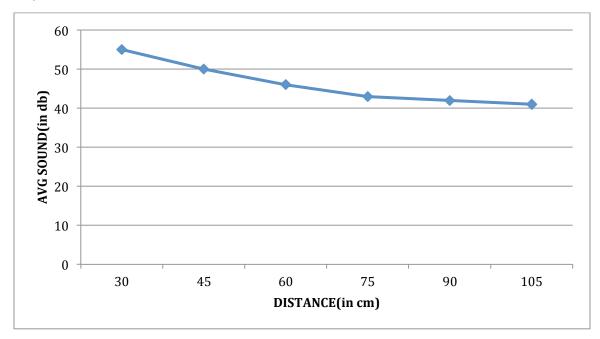
Results:

Table 1: Result shown in table are noted values of sound range and Average Sound in dB with distance from transmitter to a single Receiver.

| Distance(cm) | Sound Range(dB) | Average Sound(dB) |
|--------------|-----------------|-------------------|
| 30 | 51-60 | 55 |
| 45 | 45-56 | 50 |
| 60 | 42-50 | 46 |
| 75 | 40-45 | 43 |
| 90 | 39-44 | 42 |
| 105 | 39-42 | 41 |

Graph 1 : Shows the Interpretation of results between Average Sound in db with distance in cm.

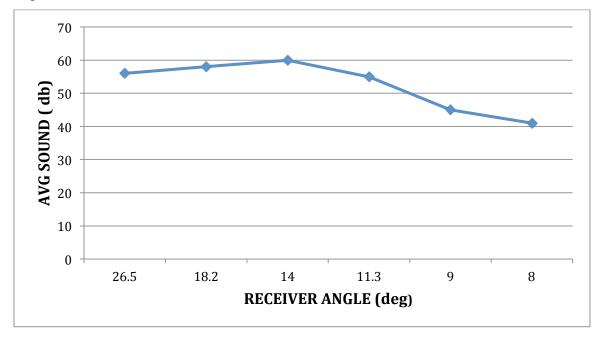


- As the distance is increased the intensity of the sound decrease exponentially.
- After certain distance (90cm) intensity of the sound remains constant.
- The experimentation result defines the maximum distance achievable of this VLC communication system is 70 cm.

Table 2: Result shown in table are noted values of sound range and Average Sound in dB with angle between LOS and other receivers.

| Reciever Angle from LOS(deg) | Sound Range(dB) | Average Sound(dB) |
|------------------------------|-----------------|-------------------|
| 26.5 | 52-60 | 56 |
| 18.2 | 51-68 | 58 |
| 14.0 | 53-75 | 60 |
| 11.3 | 50-61 | 55 |
| 9.00 | 40-50 | 45 |
| 8.00 | 39-43 | 41 |

Graph 2: Shown are Interpretation of results between Sound Intensity in db with receiver angle



- The above graph shows the variation of the sound intensity according to the change in angle between the receiver and LOS.
- Here, distance between the transmitter and the receiver remains constant.
- The experimentation result defines the suitable angle deviation from LOS is 15 deg.