Level report

1. T , c , E , niu , rho , φ , l , h2 , h3 , Φ , m2 , m3 , m :  
 20 , 343.0 , 69000000000 , 0.34 , 2700.0 , 0.368 , 0.06 , 0.003 , 0.001 , 0.496 , 4 , 2.7 , 6.7  
   
2. Insertion loss (IL) :  
 f = [ 125 250 500 1000 2000 4000 8000] Hz  
 IL = [-0.8 5.4 17.5 26.6 35.6 44.7 53.8] dB  
   
3. Minimum insertion loss required for each class :  
 A1 = [-4.0 -4.0 2.4 9.0 15.6 22.2 28.9] dB  
 A2 = [-4.0 -4.0 2.4 9.0 15.6 22.2 28.9] dB  
 A3 = [-4.2 1.6 7.3 13.0 18.7 24.4 30.2] dB  
 B1 = [-9.1 -3.0 3.0 11.0 19.1 27.3 35.4] dB  
 B2 = [-9.1 -3.0 6.0 15.0 24.0 33.1 42.1] dB  
 B3 = [-7.1 1.9 11.0 20.0 29.0 35.7 42.4] dB  
 C1 = [-4.7 -0.8 10.8 22.5 34.2 38.1 42.2] dB  
 C2 = [-6.7 3.5 13.8 24.0 34.2 38.1 42.2] dB  
 C3 = [ 1.1 9.2 17.4 25.5 33.6 38.1 42.2] dB  
   
4. Level of this lagging :  
 C2  
   
5. noise reduction estimate:  
 noise\_before : [ 71.1 67.3 73.9 84.1 91.5 93.2 88.4] dB  
 noise\_before\_dBA : [ 55.0 58.7 70.7 84.1 92.7 94.2 87.3] dBA  
 IL : [-0.8 5.4 17.5 26.6 35.6 44.7 53.8] dB  
 noise\_after : [ 71.9 61.9 56.4 57.5 55.9 48.5 34.6] dB  
 noise\_after\_dBA : [ 55.8 53.3 53.2 57.5 57.1 49.5 33.5] dBA  
 noise\_before\_dBA\_total : 97.2 dBA  
 noise\_after\_dBA\_total : 63.0 dBA  
 noise\_reduction\_dBA\_total : 34.3 dBA

