



Figure 3: Percentage of Reflectance versus Frequency for LDPE/CF (33%)

Table 1: Optimum Frequency Bands to Process the 5 Materials in the Frequency Range of 2 GHz to 18 GHz.

Materials	Optimum Frequency Band (GHz)
PS/CF(33%)	8.0 - 9.3 and 10.8 - 12.8
PS/GF(33%)	8.5 - 9.0 and 10.0 - 12.0
LDPE/GF(33%)	9.0 - 12.5
Nylon 66/GF(33%)	8.3 - 9.0 and 10.8 - 12.0
LDPE/CF(33%)	8.5 - 9.0 and 10.7 - 12.0

Table 2. Dielectric Loss Values at Different Frequencies for LDPE/GF (33%)

Materials	Dielectric Loss Value at 24 °C, 2.2 - 3.3 GHz	Dielectric Loss Value at 24°C, 8.2 -12.4 GHz
LDPE/GF (33%)	0.00606	0.0234