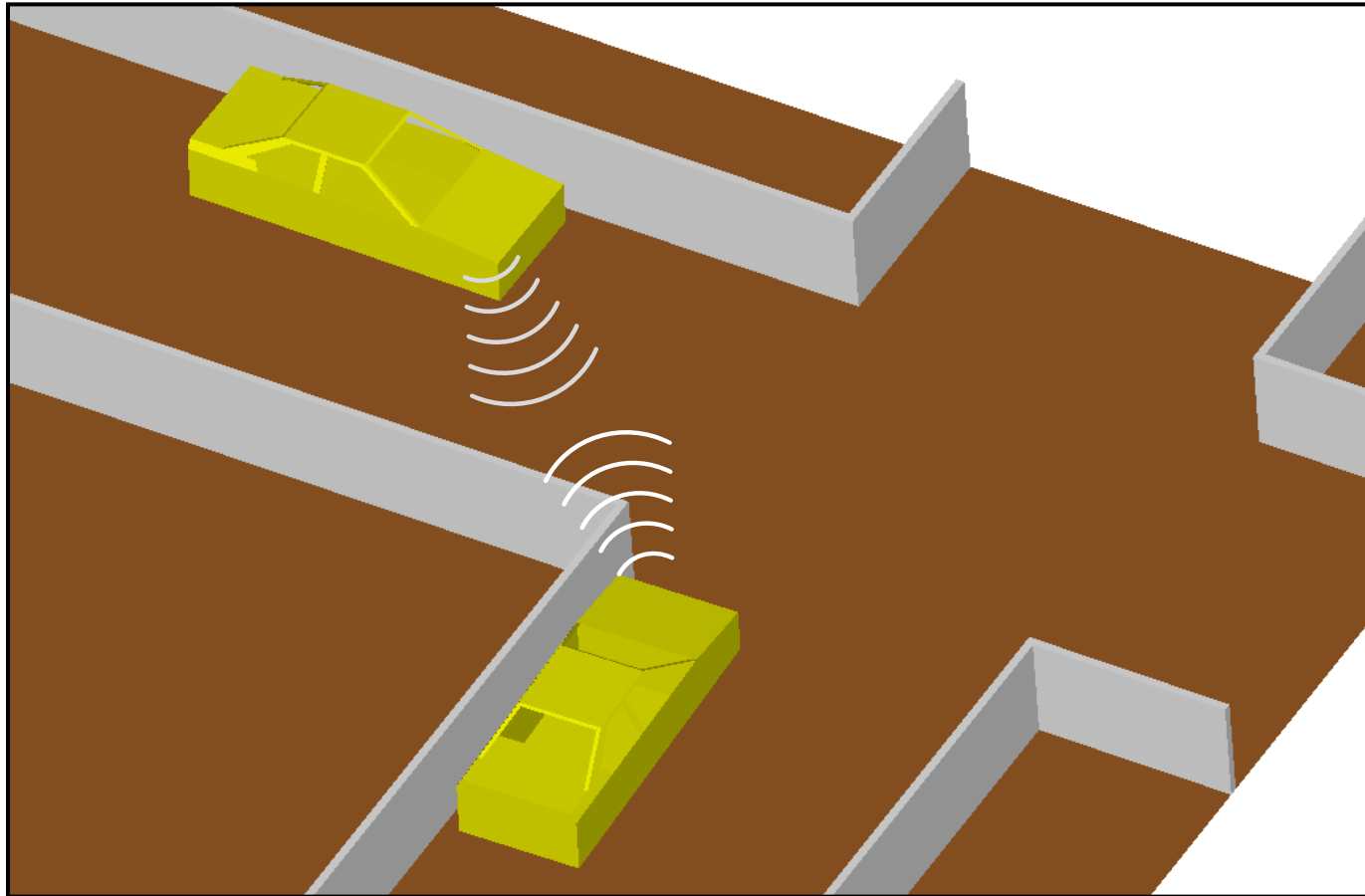
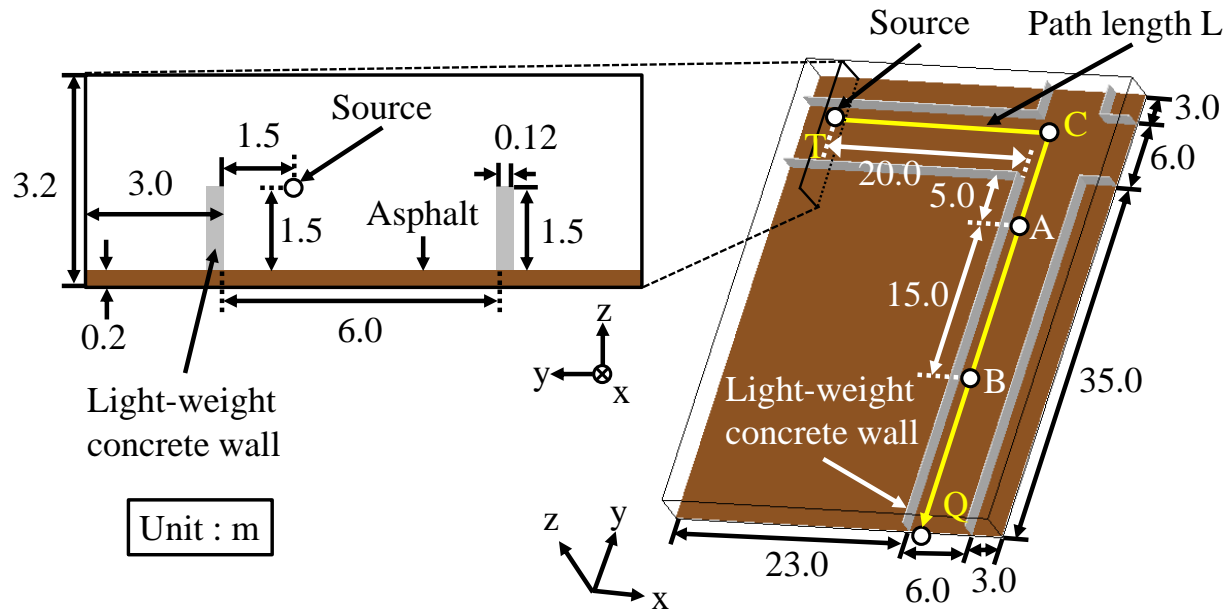


FDTD Simulation of Radio Wave Propagation for Inter Vehicle Communications

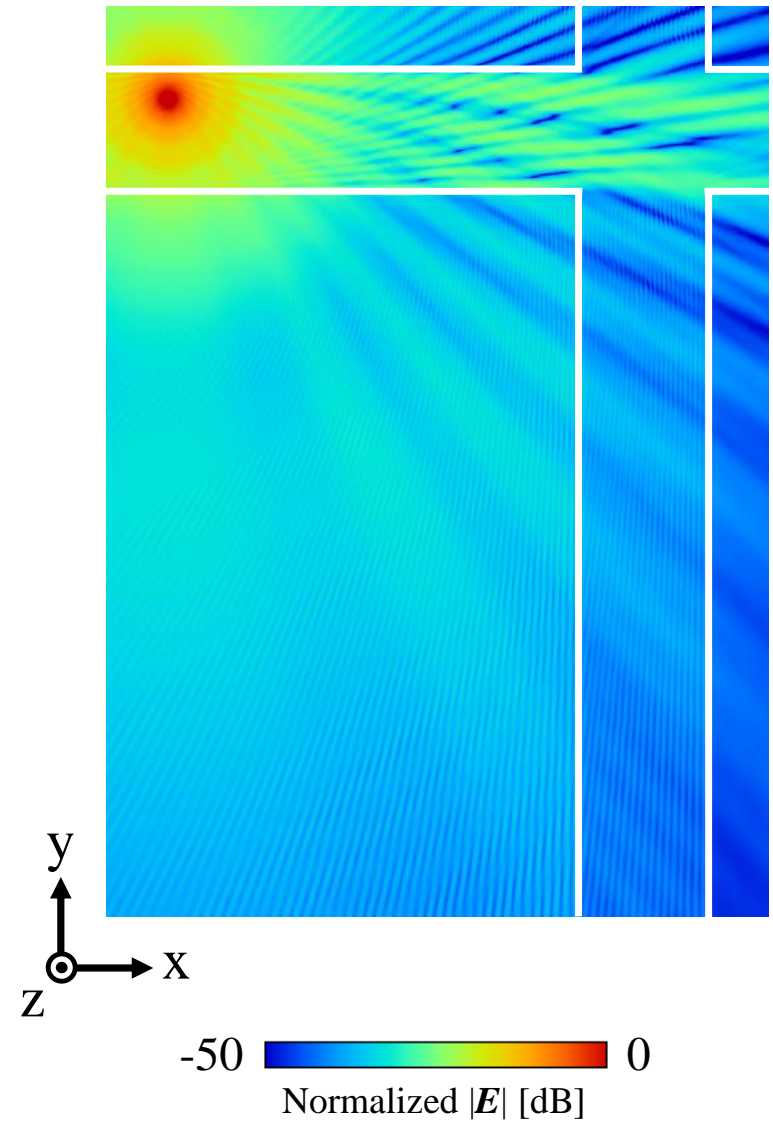
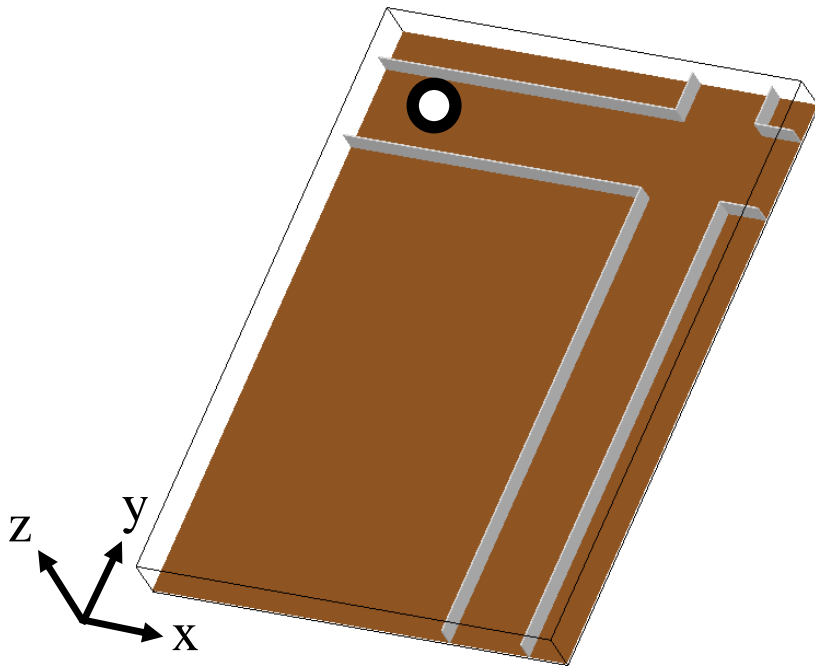


FDTD Simulation of Radio Wave Propagation at An Intersection in Residential Area

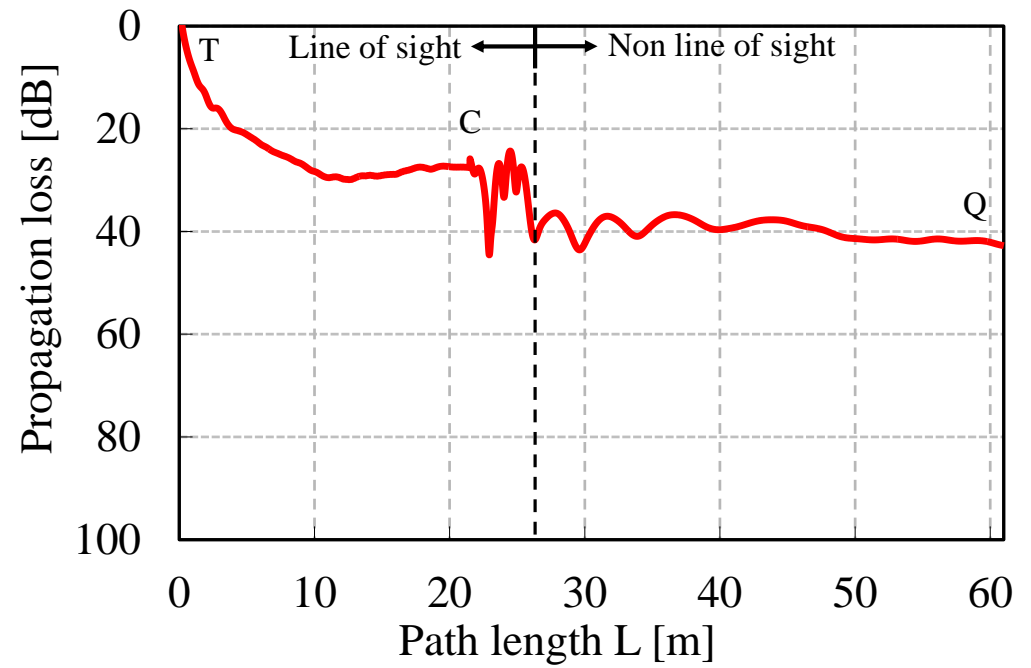
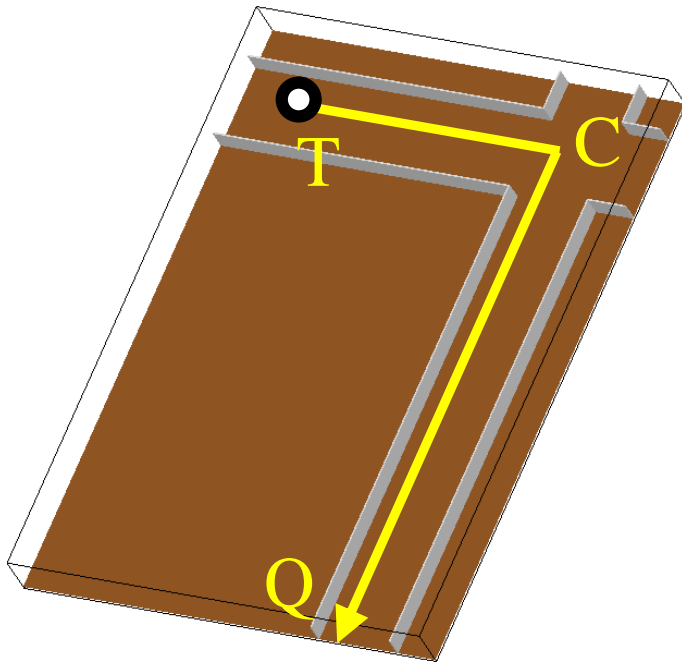


Source wave	Frequency [MHz]	720
	Polarized	Vertical
Road	Width [m]	6.0
Light-weight concrete wall	Relative permittivity ϵ_{rc}	2.0
	Electrical conductivity σ_c [S/m]	0.0278
Ground	Thickness [m]	0.2
	Relative permittivity ϵ_{rg}	4.9
	Electrical conductivity σ_g [S/m]	0.00761
Spatial increment Δ [mm]		10.0
Time increment Δt [ps]		18.3

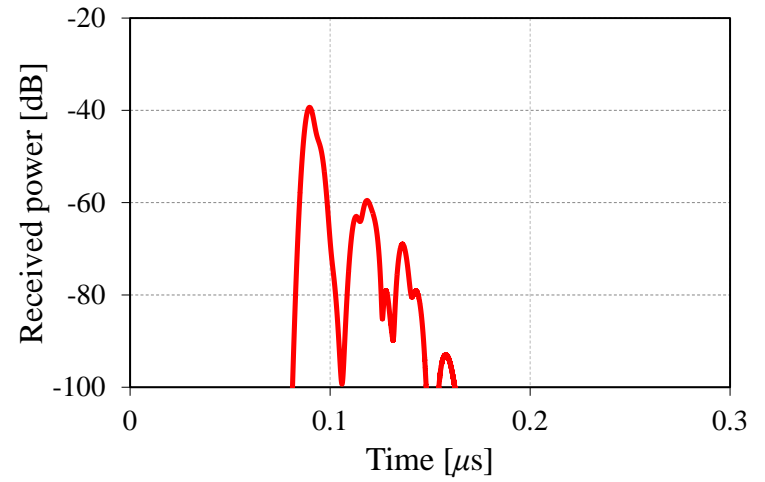
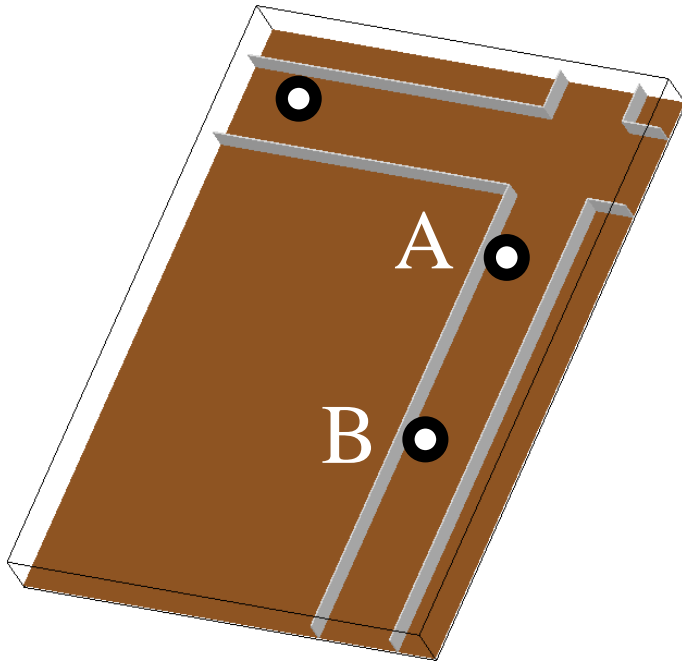
Electric Field Distribution



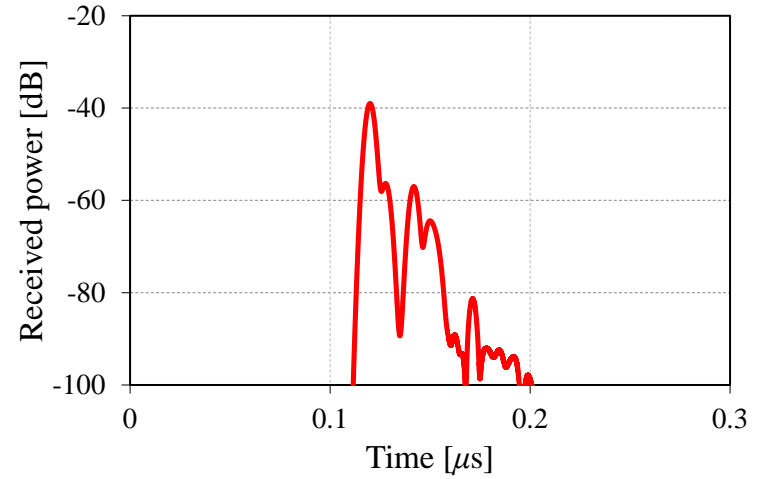
Propagation loss on the Path TCQ



Power delay profile at each point.



Point A



Point B