

```
function has_los = check_los(q, r_rel, p)

% Check if body x axis points at chief within range limit
r = norm(r_rel);

if r > 50 || r < 1e-9
    has_los = false;
    return;
end

% Body x axis in LVLH frame
R = quat_to_dcm(q);
body_x_lvlh = R(:,1);

% Line of sight to chief
los = -r_rel / r;

% Check alignment (cosine of angle)
cos_angle = dot(body_x_lvlh, los);

has_los = cos_angle > cosd(10);

end
```