Stokes parameters

Of elliptically polarized incident radiation, these are given by

$$s_0^0 = E_1^0 + E_2^0$$

$$s_1^0 = E_1^0 - E_2^0$$

$$s_2^0 = 2\sqrt{E_1^0 E_2^0} \cos \delta^0$$

$$s_3^0 = 2\sqrt{E_1^0 E_2^0} \sin \delta^0$$

where E_1^0 and E_2^0 specify the irradiances of the incident light polarized with their electric vectors vibrating perpendicular and parallel to the scattering, respectively and δ^0 is the phase difference between these electric vectors.
See also: scattering matrix

Source:
PAC, 1983, *55*, 931 *(Definitions, terminology and symbols in colloid and surface chemistry. Part 1.14: Light scattering (Provisional))* on page 933