

HIGH RESOLUTION LITHIUM LIKE SATELLITES  
TO THE  $1s^2 1s_0 - 1s 3p^1 P_1$  LINE  
IN LASER-PRODUCED DENSE PLASMAS

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The dielectronic satellite lines from the  $1s2l_a 3l_b$  and  $1s3l_a 3l_b$  double-excited configurations of lithium-like ions<sup>a</sup> have been studied<sup>b</sup> experimentally and theoretically under dense-plasma conditions. Good agreement between theory and measurements performed in laser-target interactions at 0.53  $\mu$ m wavelength,  $10^{14}$  W/cm<sup>2</sup> laser irradiance show that collisional equilibrium conditions are reached between  $n - 3$  singly and double excited levels at electron densities greater than  $10^{22}$  cm<sup>-3</sup> in Al and Si.