$$Calculos$$

$$I = \frac{V}{R_L}$$

$$V = I * R$$

$$Potencia\ P = R * I^2$$

$$P = V * I$$

Para la R = 220 Ω

$$I = \frac{V}{R}$$

$$I = \frac{15}{1420}$$

$$I = 0.010\ A$$

$$V = I * R$$

$$V = (0.010) * 220$$

$$V = 2.2\ V$$

$$P = R * I^2$$

$$P = 220 * (0.010)^2 = 0.022\ W$$

$$P = V * I$$

$$P = 2.2 * (0.010) = 0.022\ W$$

Para la R = 470 Ω

$$I = \frac{V}{R}$$

$$I = \frac{15}{1670}$$

$$I = 0.0089\ A$$

$$V = I * R$$

$$V = (0.0089) * 470$$

$$V = 4.183\ V$$

$$P = R * I^2$$

$$P = 470 * (0.0089)^2 = 0.0372 \ W$$

$$P = V * I$$

$$P = 4.183 * (0.0089) = 0.0372 \ W$$

Para la R = 680 Ω

$$I = \frac{V}{R}$$

$$I = \frac{15}{1880}$$

$$I = 0.0079 \ A$$

$$V = I * R$$

$$V = (0.0079) * 680$$

$$V = 5.372 \ V$$

$$P = R * I^2$$

$$P = 680 * (0.010)^2 = 0.042 \ W$$

$$P = V * I$$

$$P = 2.2 * (0.010) = 0.042 \ W$$

Para la R = 820 Ω

$$I = \frac{V}{R}$$

$$I = \frac{15}{2020}$$

$$I = 0.0074 \ A$$

$$V = I * R$$

$$V = (0.0074) * 820$$

$$V = 6.06 \, V$$

$$P = R * I^2$$

$$P = 820 * (0.0074)^2 = 0.044 \, W$$

$$P = V * I$$

$$P = 6.068 * (0.0074) = 0.044 \, W$$

Para la R = 1000 Ω

$$I = \frac{V}{R}$$

$$I = \frac{15}{2200}$$

$$I = 0.0068 \, A$$

$$V = I * R$$

$$V = (0.0068) * 1000$$

$$V = 6.8 \, V$$

$$P = R * I^2$$

$$P = 1000 * (0.0068)^2 = 0.046 \, W$$

$$P = V * I$$

$$P = 6.8 * (0.0068) = 0.046 \, W$$

Para la R = 1500 Ω

$$I = \frac{V}{R}$$

$$I = \frac{15}{2700}$$

$$I = 0.0055 \, A$$

$$V = I * R$$

$$V = (0.0055) * 1500$$

$$V = 8.25\ V$$

$$P = R * I^2$$

$$P = 1500 * (0.0055)^2 = 0.045\ W$$

$$P = V * I$$

$$P = 8.25 * (0.0055) = 0.045\ W$$

Para la R $= 1880\ \Omega$

$$I = \frac{V}{R}$$

$$I = \frac{15}{3000}$$

$$I = 0.005\ A$$

$$V = I * R$$

$$V = (0.005) * 1800$$

$$V = 9\ V$$

$$P = R * I^2$$

$$P = 1800 * (0.005)^2 = 0.045\ W$$

$$P = V * I$$

$$P = 9 * (0.005) = 0.045\ W$$

Para la R $= 2200\ \Omega$

$$I = \frac{V}{R}$$

$$I = \frac{15}{3400}$$

$$I = 0.0044\ A$$

$$V = I * R$$

$$V = (0.0044) * 2220$$

$$V = 9.68\ V$$

$$P = R * I^2$$

$$P = 2200 * (0.0044)^2 = 0.042\ W$$

$$P = V * I$$

$$P = 9.68 * (0.0044) = 0.042\ W$$

Para la R = 220 Ω

$$I = \frac{V}{R}$$

$$I = \frac{15}{5100}$$

$$I = 0.0029\ A$$

$$V = I * R$$

$$V = (0.0029) * 3900$$

$$V = 11.31\ V$$

$$P = R * I^2$$

$$P = 3900 * (0.0029)^2 = 0.032\ W$$

$$P = V * I$$

$$P = 11.31 * (0.0029) = 0.032\ W$$

Para la R = 4700 Ω

$$I = \frac{V}{R}$$

$$I = \frac{15}{5900}$$

$$I = 0.0025\ A$$

$$V = I * R$$

$$V = (0.0025) * 4700$$

$$V = 11.75\ V$$

$$P = R * I^2$$

$$P = 4700 * (0.0025)^2 = 0.029\ W$$

$$P = V * I$$

$$P = 11.75 * (0.0025) = 0.029\ W$$