$CH_4 + 2O_2 = CO_2 + 2H_2O$

Thus 1 mole of methane in combustion will produce 2 mole of water

16gm of methane will produce 36gm of water

1 gm of methane will produce 36/16 gm of water

$3.50 * 10^{-3}$ gm of methane will produce $(3.50 * 10^{-3}) * (36/16)$ gm of water.

Thus $7.875 * 10^{-3}$ gram of water will produce.