```
function [avg_ent, std_dev] = test_measures(input_im,N)

im_size = size(input_im);

num_rows = im_size(1);

num_cols = im_size(2);

row_length = floor(num_rows/N);

col_length = floor(num_cols/N);

ent_vector =  0;

avg_ent = 0;

for i = 0 : N - 1

  for j = 0 : N - 1

    temp_im = input_im(1 + i*row_length : (i+1)*row_length, 1 + j*col_length :
(j+1)*col_length, 1 : 3);

    temp_ent = entropy(temp_im);

    avg_ent = avg_ent + temp_ent;

    ent_vector = [ent_vector entropy(temp_im)];

  endfor

endfor

length = columns(ent_vector);

ent_vector = ent_vector(2:length);

avg_ent = avg_ent / N^2;

std_dev = std(ent_vector);

endfunction
```