LINE - MATR

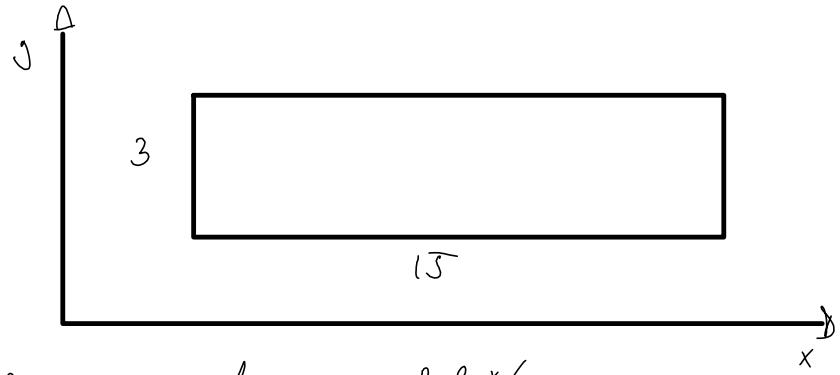
lunedì 27 gennaio 2025 10:49

DEVICE 2 — DOMC 2

4096 x 4096 — 2048 x 2048

2,6 μm x 2,6 μm — 4,2 μ x 4,2 μ

lps = 2000 — 30000 lps



$R_{15\ min} = \frac{1}{500\ \mu m} = 2\ px/mm$

Setup 1

$V_1 = \frac{4096}{3000} = 1,36\ px/mm$ — 2 cm

$CT = CF \cdot 2 = 1600\ €$

Setup 2

$V_{2y} = \frac{2048}{3000} = 0,68\ px/mm$ — 3 cm

$CT_2 = CF \cdot 3 = 450 \times 3 = 1350\ €$

1350 < 1600 SETUP 2

$speed_1 = \frac{lps}{2,72\ px/mm} = 7342\ \frac{mm}{s} = 7,3\ \frac{m}{s}$

$speed_2 = \frac{30000}{2,04\ px/mm} = 14705\ \frac{mm}{s} = 14,7\ m/s$

SETUP 2

1 h = 60 m. = 3600 >

$S = V \cdot t = 14{,}7\ m/s \cdot 3600 = 52\,9200$

$ogg = \frac{529200}{\text{lughezza surf}} = \frac{529200}{15} = 35280\ ogg$

$\frac{wd}{FOV} = \frac{f}{S.S}$

$wd = \frac{f \cdot FOV}{S.S} = \frac{50\,mm \cdot 3000\,mm}{8{,}6\,m} = 17441\,mm = 17{,}4\,mm$

$SS = 2048\ px \cdot 4{,}2\,\mu m = 8601{,}6 = 8{,}6\,mm$

$Defatone = \frac{N°\,pixel}{V} = \frac{10\,px}{2{,}04\,\frac{px}{m}} = 4{,}9\,mm$