

①	a	b	c	1,25	1,25	1,25
②	a	b	c	1,25	1,25	1,25
③	a	b	c	1,25	1,25	1,25
④	a	b	c	1,25	1,25	1,25
⑤	a	b	c	1,25	1,25	
⑥	a	b		1,25	1,25	

① $I_1 = \begin{bmatrix} 0 & 0 & 0 \\ 10 & 21 & 20 \\ 20 & 42 & 40 \end{bmatrix}$ $I_2 = \begin{bmatrix} 50 & 10 & 16 \\ 63 & 1 & 20 \\ 0 & 0 & 0 \end{bmatrix}$

(a) I_1 Spatial Resolution: 3×3 25%

$m_{I_1} = \frac{1}{3 \times 3} \times (10 + 21 + 20 + 20 + 42 + 40) = 17$ 25%

$P_{I_1} = \frac{1}{3 \times 3} \times (10^2 + 21^2 + 20^2 + 20^2 + 42^2 + 40^2) = 522,7$ W 25%

#bits = $3 \times 3 \times 6 = 54$ bit 25%

(b) $I_A = I_1$ AND $I_2 = \begin{bmatrix} 0 & 0 & 0 \\ 10 & 1 & 20 \\ 0 & 0 & 0 \end{bmatrix}$ 25%

$I_B = I_1 \times 0,25 = \begin{bmatrix} 0 & 0 & 0 \\ 2,5 & 5,25 & 5 \\ 5 & 10,5 & 10 \end{bmatrix}$

Integer Values 25%
 $\rightarrow \begin{bmatrix} 0 & 0 & 0 \\ 2 & 5 & 5 \\ 5 & 10 & 10 \end{bmatrix}$