

FM screening in IE

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FM screen

The FM screen is available from Imaging Engine 14.1 onwards.

This screen is a 1st order stochastic screen, equal to Monet screens, but with a reduced set of tiles: The FM screen only uses square shaped dots, whereas some Monet screens used rectangular shaped dots.

The FM Screen on Imaging Engine is added as an alternative to the Nexus FM screening option.

Nexus FM screening option versus Imaging Engine FM screen

On Nexus RIP FM screening is activated by selecting the FM screening option and specifying an FM dot size. The FM screen is dynamically created from a 1x1pix FM dot screen tile, scaled up to the requested FM dot size.

On Imaging Engine FM screening is obtained by selecting 'FM' as dot shape, and specifying a screen ruling that corresponds to an FM dot size. The screen is not dynamically created: for each different FM dot size a different screen tile is loaded.

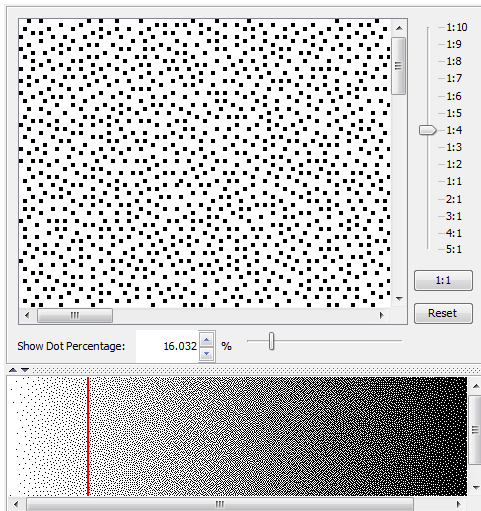


Figure 1: 1x1 pix FM screen tile on IE

On Nexus RIP a different separation is screened with a different rotation of the FM screen tile. The screened separations do not show much difference.

On IE a separation is screened with a different FM screen tile, selectable from the FM screen angle. The screened separations will show different orientations especially visible in mid-tones.

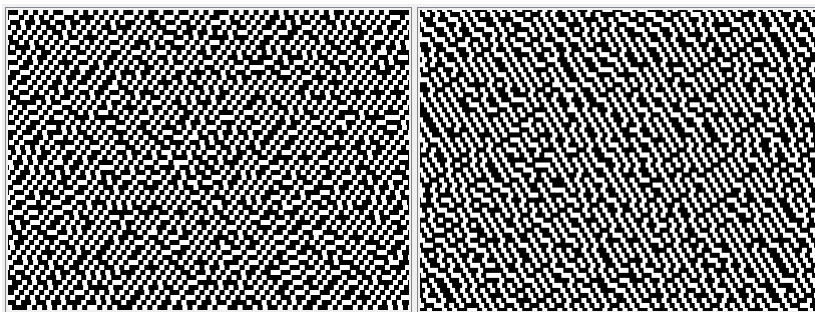


Figure 2: Different FM screen orientations on IE

License

The FM dot requires the Paragon Screen license.

How to use

On an IE expose ticket:

1. Select the required output resolution.
2. Select 'FM' as dot shape.
3. Select the screen ruling that corresponds with the required FM dot size.
See [FM dot size to FM screen ruling](#)

FM dot size to FM screen ruling

The table below shows the available FM dot sizes.

Use this table to select the screen ruling that corresponds with a wanted FM dot size, at the wanted output resolution.

FM dot size in pix	1000PPI	1200PPI	1270PPI	2000PPI	2400PPI	2540PPI	4000PPI	5080PPI
1x1	225LPI	270LPI	286LPI	450LPI	540LPI	572LPI	900LPI	1143LPI
2x2	113LPI	135LPI	143LPI	225LPI	270LPI	286LPI	450LPI	572LPI
3x3	75LPI	90LPI	95LPI	150LPI	180LPI	191LPI	300LPI	381LPI
4x4	55LPI	66LPI	70LPI	110LPI	132LPI	140LPI	220LPI	279LPI
5x5	45LPI	54LPI	57LPI	90LPI	108LPI	114LPI	180LPI	229LPI
6x6	38LPI	45LPI	48LPI	75LPI	90LPI	95LPI	150LPI	191LPI
7x7	32LPI	38LPI	41LPI	64LPI	77LPI	81LPI	128LPI	163LPI
8x8	28LPI	34LPI	36LPI	56LPI	67LPI	71LPI	112LPI	142LPI
10x10	22LPI	27LPI	28LPI	45LPI	53LPI	57LPI	89LPI	113LPI
12x12	19LPI	23LPI	24LPI	38LPI	46LPI	48LPI	76LPI	97LPI
14x14	16LPI	19LPI	20LPI	32LPI	38LPI	41LPI	64LPI	81LPI
16x16	14LPI	17LPI	18LPI	28LPI	34LPI	36LPI	56LPI	71LPI
20x20	12LPI	14LPI	15LPI	23LPI	28LPI	29LPI	46LPI	58LPI
24x24	9LPI	11LPI	12LPI	19LPI	22LPI	23LPI	37LPI	47LPI

Note: Grayed out screen rulings are only available when using offset screen angles (0°,15°,45°,75°,90°)