

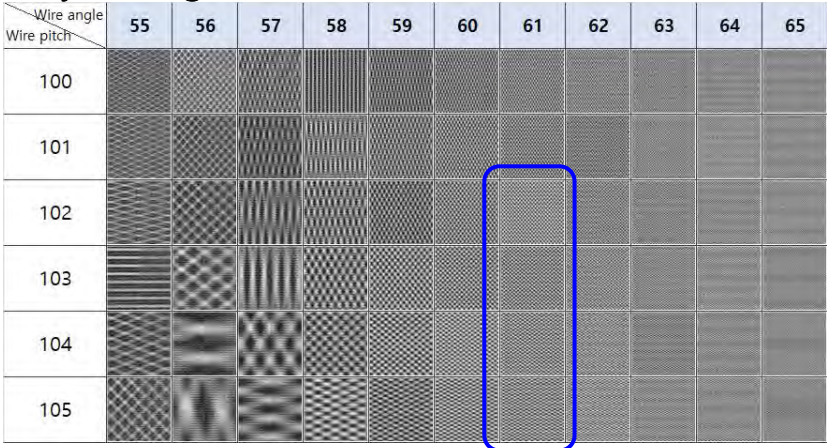
Moire analysis based on human eyes

For checking Moire pattern by wire angle, pixel shape & size

Analysis Moire phenomenon with Ray Tracing + FFT (Fast Fourier Transform)

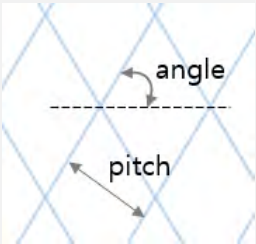
- Generating Moire patterns to be seen by human eyes.
- Considering real structure of touch panel.

[Ray Tracing Result]

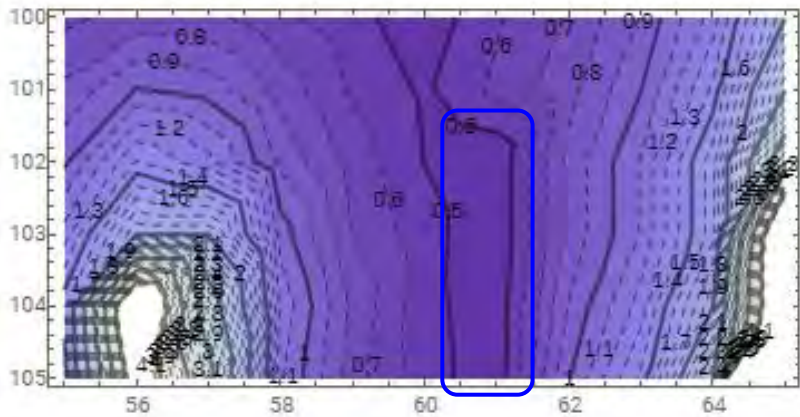


[Wire Split condition]

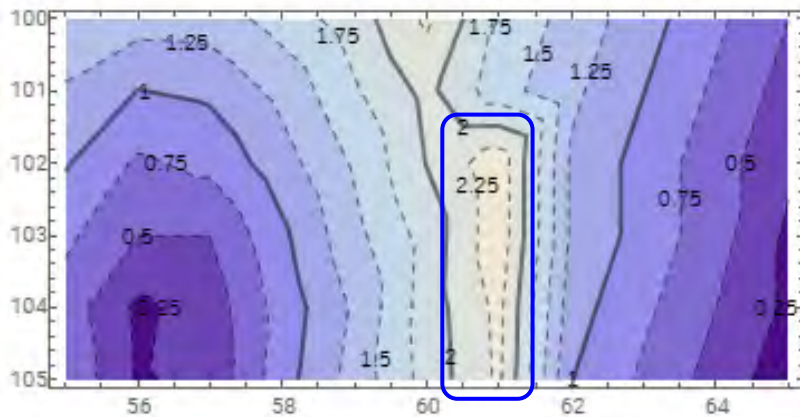
- Area for Sim. : 1cm x 1cm
- Pitch : 100~105 [μm]
- Angle : 55 ~ 65 [$^{\circ}$]



[Moire Pattern Pitch MAP]



[Moire Pattern Frequency MAP]



User can select wire pattern,
Through analyzing the cycle
of Moire with MAP results.

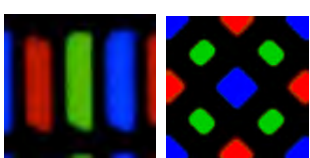
* Conditions with low visibility
of Moire Pattern
The narrower the pitch spacing
of the Moire Pattern
= The larger the Frequency
value, The better

WORK PROCESS

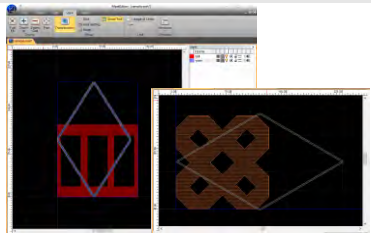
GDS II Import &
Structure generation



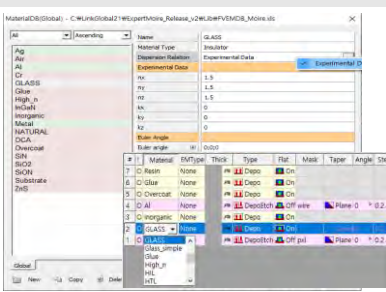
Import GDS II
& Build Mask File
Structure generation
Ray Tracing



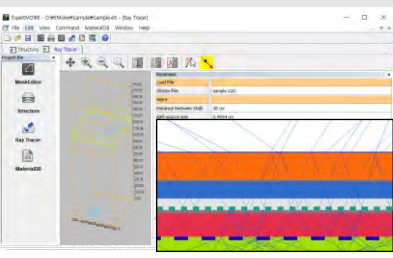
Import .gds file



Make Mask file



Set Material & Layer thickness

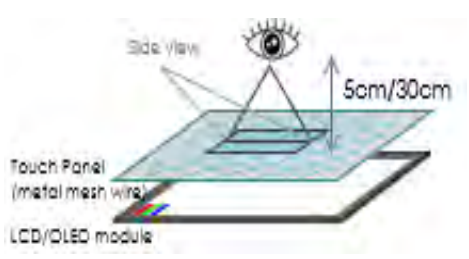


Set Ray tracer

Viewer



Check Moire Pattern



Distance condition (um)	5cm	30cm
A		
B		
C		

material	RI	thickness
Glass	1.5	1.0mm
Resin	1.4	0.5mm
Film	1.6	0.1mm

Glass	Glass-Resin	Film

Viewing Location
(Front/Side)

Layer
Thickness/RI

PXL Type condition	Wire condition	Sim. Result
	Change of Angle, Pitch	
	Wire Rotation	
	Unusual shape wire	

- Other types are also sim. available

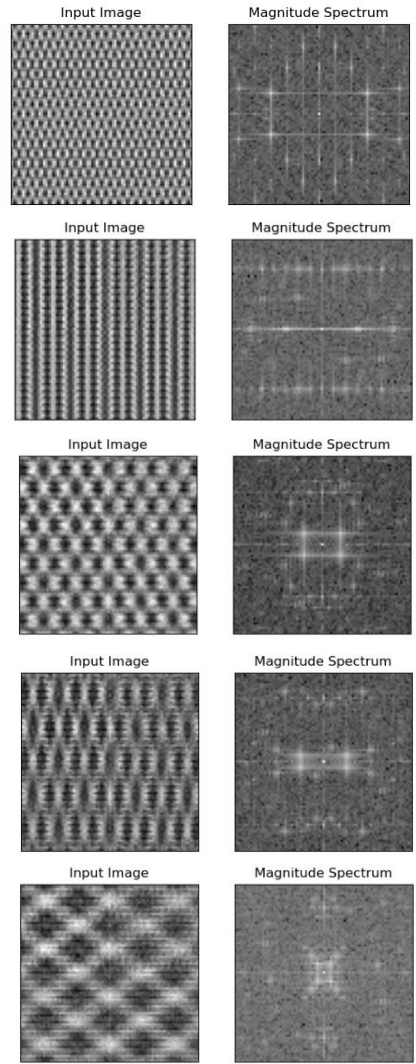
- input in .gds file format : \$sim. available

PXL / Wire Split

FFT Analysis



Analysis Moire Pattern
(Ray Tracing & FFT)



RayTracing + FFT

Moire Pattern Result

Expert Moire Key Benefits

Expert Moire

Strength

- ✓ Generating Moire pattern to be seen by human eyes
- ✓ Optimized engine for High Speed.
- ✓ Considering real structure with any patterns.

Contact Us

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