

Wafer Defect Analysis Report

Analysis ID:	9008fc1f-be9f-45dc-a32b-bafbac4ef77
Wafer ID:	N/A
Batch ID:	N/A
Date:	2025-11-23 12:56:08
Total Defects:	9
Severity Score:	0.50

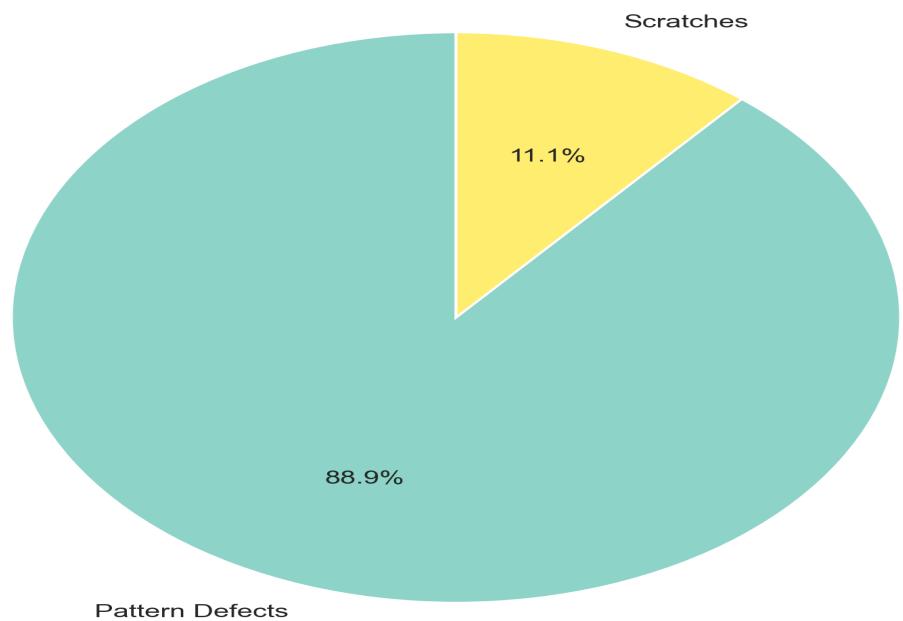
Executive Summary

This analysis identified 9 defects on the wafer with a severity score of 0.50 (HIGH). The most common defect type is Pattern Defects.

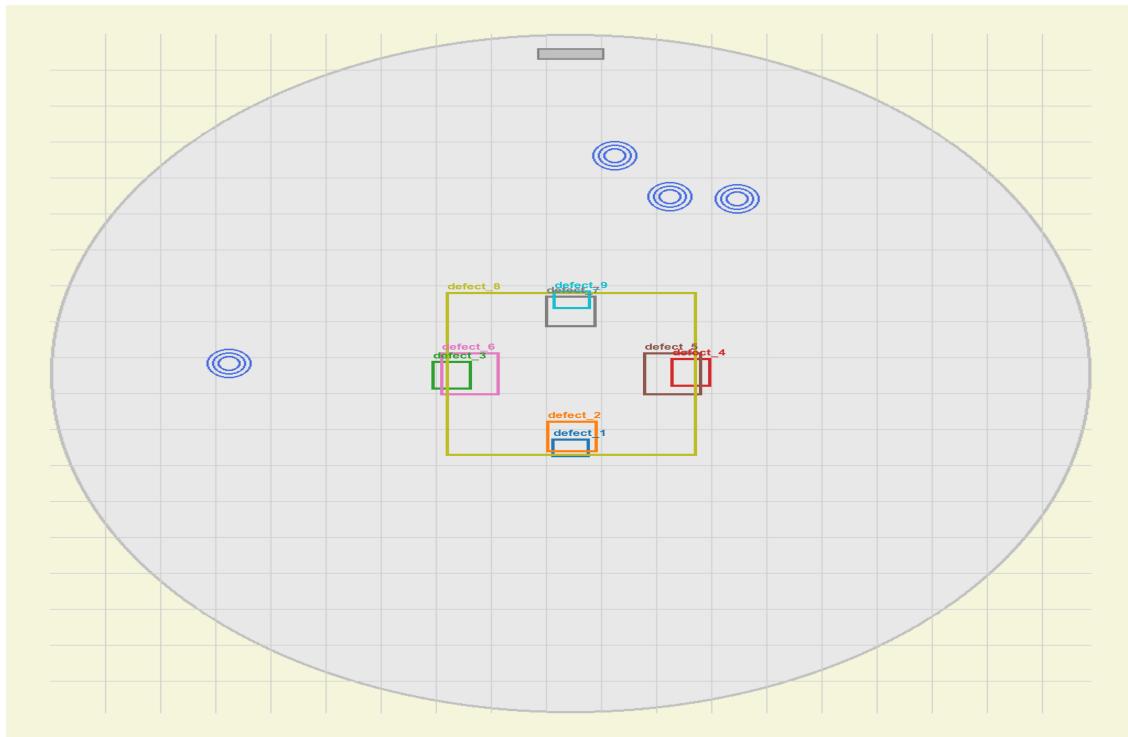
Defect Summary

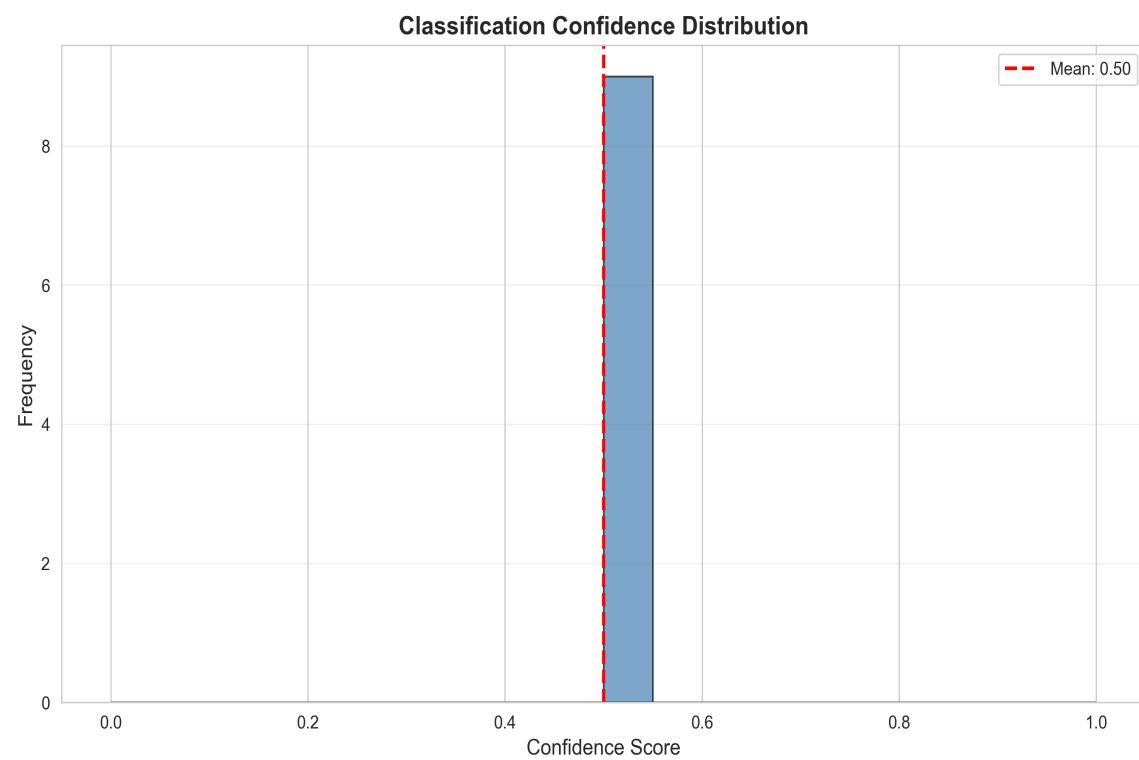
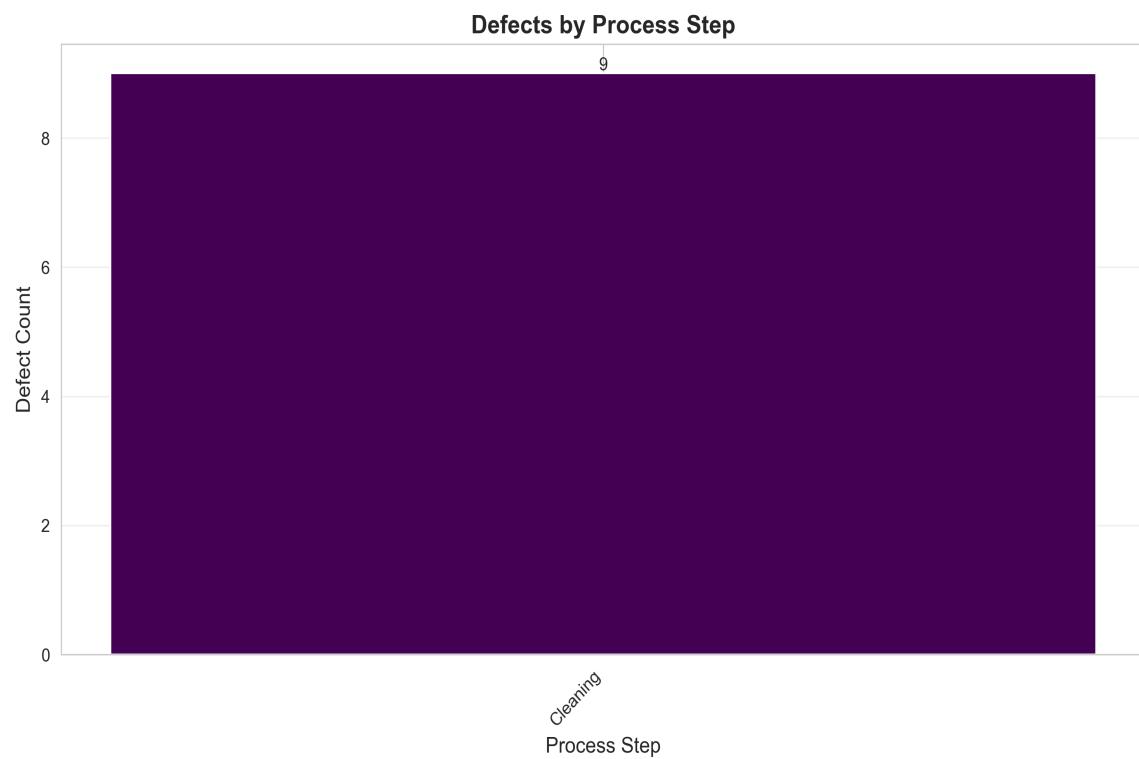
Defect Type	Count
Pattern Defects	8
Scratches	1

Defect Type Distribution

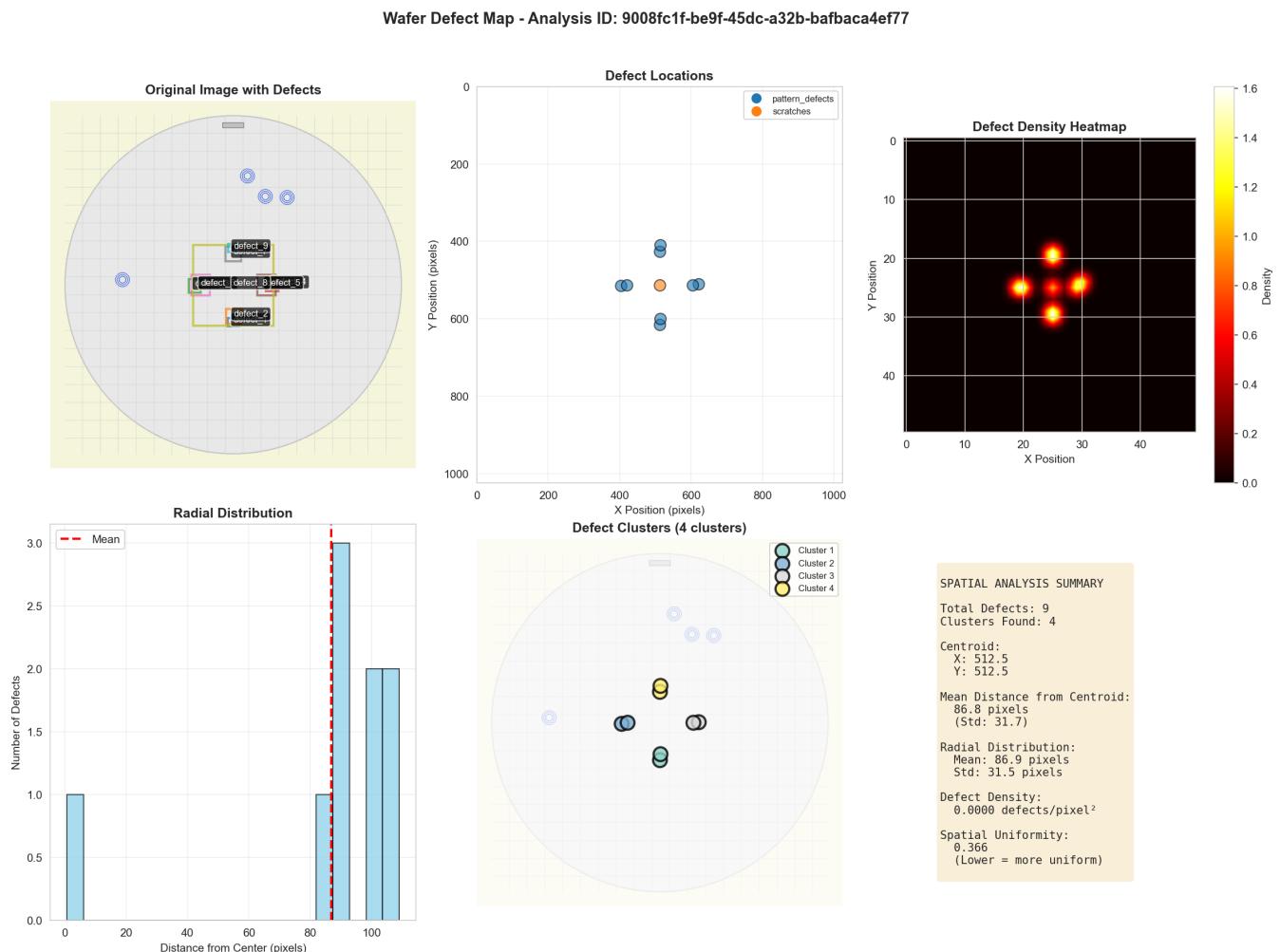


Defect Locations on Wafer





Defect Spatial Mapping



Spatial Analysis Statistics

Metric	Value
Total Clusters	4
Defect Density	0.0000 defects/pixel ²
Mean Distance from Centroid	86.8 pixels
Std Distance from Centroid	31.7 pixels
Radial Mean	86.9 pixels
Radial Std	31.5 pixels
Spatial Uniformity	0.366
Centroid X	512.5
Centroid Y	512.5

Defect Clusters

Analysis identified 4 defect cluster(s):

cluster_1: 2 defects

Defects: defect_1, defect_2

cluster_2: 2 defects

Defects: defect_3, defect_6

cluster_3: 2 defects

Defects: defect_4, defect_5

cluster_4: 2 defects

Defects: defect_7, defect_9

Detailed Defect Analysis

Defect 1: defect_1

Type:	Pattern Defects
Confidence:	50.00%
Location:	(496.0, 604.0) to (528.0, 627.0)
Area:	271.50 pixels ²
Process Step:	Cleaning
Likely Cause:	Requires manual investigation - advanced analysis unavailable
Root Cause Confidence:	50.00%

Recommendations:

- Review defect manually
- Check process logs
- Consult process engineer

Defect 2: defect_2

Type:	Pattern Defects
Confidence:	50.00%
Location:	(491.0, 579.0) to (535.0, 620.0)
Area:	502.50 pixels ²
Process Step:	Cleaning
Likely Cause:	Requires manual investigation - advanced analysis unavailable
Root Cause Confidence:	50.00%

Recommendations:

- Review defect manually
- Check process logs
- Consult process engineer

Defect 3: defect_3

Type:	Pattern Defects
Confidence:	50.00%
Location:	(387.0, 496.0) to (421.0, 533.0)

Area:	270.50 pixels ²
Process Step:	Cleaning
Likely Cause:	Requires manual investigation - advanced analysis unavailable
Root Cause Confidence:	50.00%

Recommendations:

- Review defect manually
- Check process logs
- Consult process engineer

Defect 4: defect_4

Type:	Pattern Defects
Confidence:	50.00%
Location:	(604.0, 492.0) to (638.0, 529.0)
Area:	270.50 pixels ²
Process Step:	Cleaning
Likely Cause:	Requires manual investigation - advanced analysis unavailable
Root Cause Confidence:	50.00%

Recommendations:

- Review defect manually
- Check process logs
- Consult process engineer

Defect 5: defect_5

Type:	Pattern Defects
Confidence:	50.00%
Location:	(579.0, 484.0) to (630.0, 541.0)
Area:	513.00 pixels ²
Process Step:	Cleaning
Likely Cause:	Requires manual investigation - advanced analysis unavailable
Root Cause Confidence:	50.00%

Recommendations:

- Review defect manually
- Check process logs
- Consult process engineer

Defect 6: defect_6

Type:	Pattern Defects
Confidence:	50.00%
Location:	(395.0, 484.0) to (446.0, 541.0)
Area:	513.00 pixels ²
Process Step:	Cleaning
Likely Cause:	Requires manual investigation - advanced analysis unavailable
Root Cause Confidence:	50.00%

Recommendations:

- Review defect manually
- Check process logs
- Consult process engineer

Defect 7: defect_7

Type:	Pattern Defects
Confidence:	50.00%
Location:	(490.0, 405.0) to (534.0, 446.0)
Area:	502.50 pixels ²
Process Step:	Cleaning
Likely Cause:	Requires manual investigation - advanced analysis unavailable
Root Cause Confidence:	50.00%

Recommendations:

- Review defect manually
- Check process logs
- Consult process engineer

Defect 8: defect_8

Type:	Scratches
Confidence:	50.00%

Location:	(400.0, 400.0) to (625.0, 625.0)
Area:	20757.00 pixels ²
Process Step:	Cleaning
Likely Cause:	Requires manual investigation - advanced analysis unavailable
Root Cause Confidence:	50.00%

Recommendations:

- Review defect manually
- Check process logs
- Consult process engineer

Defect 9: defect_9

Type:	Pattern Defects
Confidence:	50.00%
Location:	(497.0, 398.0) to (529.0, 421.0)
Area:	271.50 pixels ²
Process Step:	Cleaning
Likely Cause:	Requires manual investigation - advanced analysis unavailable
Root Cause Confidence:	50.00%

Recommendations:

- Review defect manually
- Check process logs
- Consult process engineer