

RPAAS PATTERN TESTING

Remotely Piloted Aerial Application System

RPAAS MODEL	AG-122 (22L)
GROUND SPEED	3 m/s
HEIGHT	3m
NOZZLE TYPE	TT110-01 (x8)
TARGET RATE	2 GPA
METHOD	WATER SENSITIVE PAPER, 1m SPACING, BARE GROUND

in collaboration with:



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AG-122 3m 3ms - 1

Aircraft
 Reg. #: AG-122 3m 3ms
 Series #: 1
 Make: Hyllo
 Model: AG-122
 Notes:

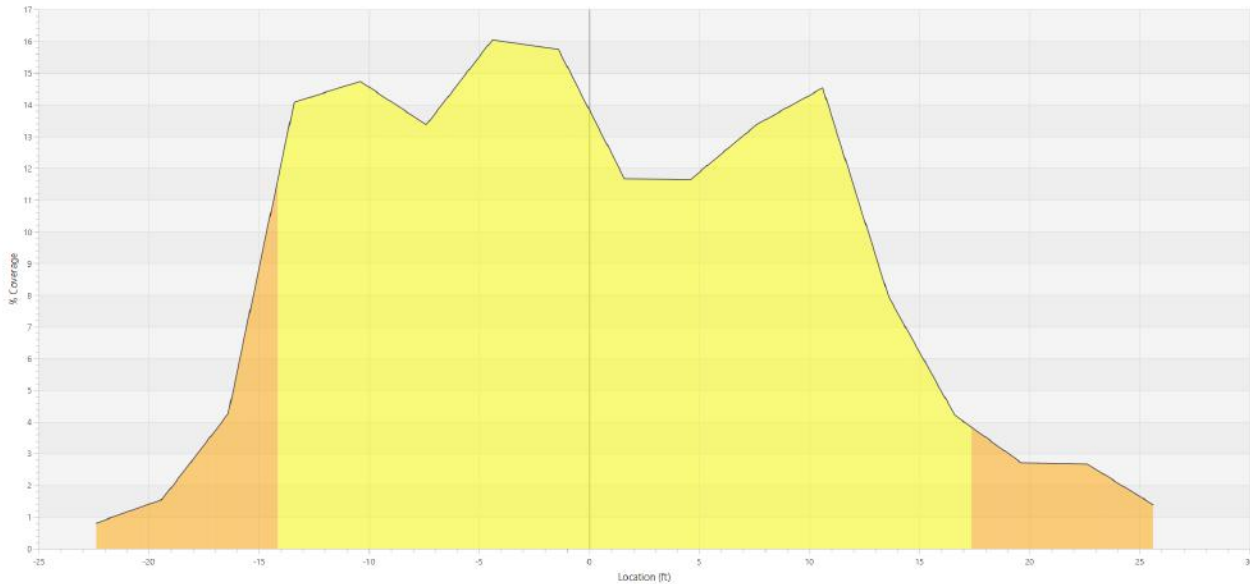
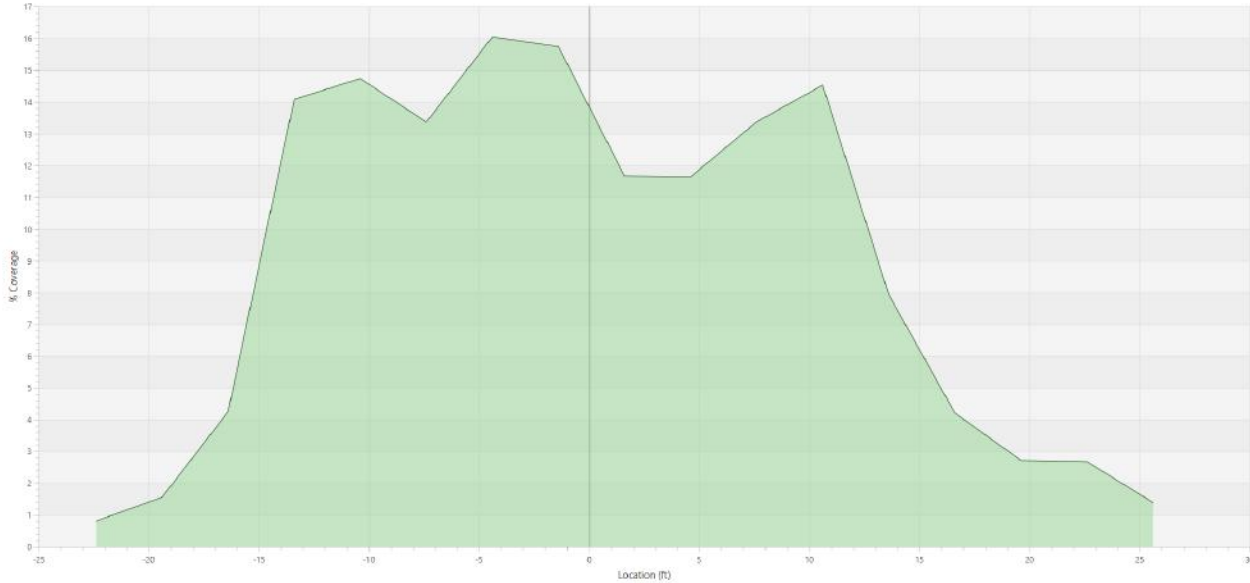
Configuration
 Spray: Water/Dye
 Target Rate: 2 GPA
 Boom Press: 63 psi
 TT110-01 (x8)
 Orif. #: 01, Def. = 90°

Flight Data
 Airspeed: -2 mph
 Spray Height: 10 ft
 Wind Speed: 9 mph
 Cross-Wind: 0.0 mph
 Ambient Temp: 75 °F
 Humidity: 57%

Measured Data
 VMD: 298 µm
 Dv01: 170 µm
 Dv09: 440 µm
 RS: 0.91
 DSC: M
 Drops/in²: 387
 Coverage: 8.78%

USDA Model
 VMD: *****
 Dv01: *****
 Dv09: *****
 RS: *****
 DSC: *****
Computed based on reported nozzles

-- % Coverage vs. In-Swath Location (ft) --



Very Fine	Fine	Medium	Coarse	Very Coarse	Extremely Coarse
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-- Simulated Overlap, In-Field Uniformity --

Racetrack



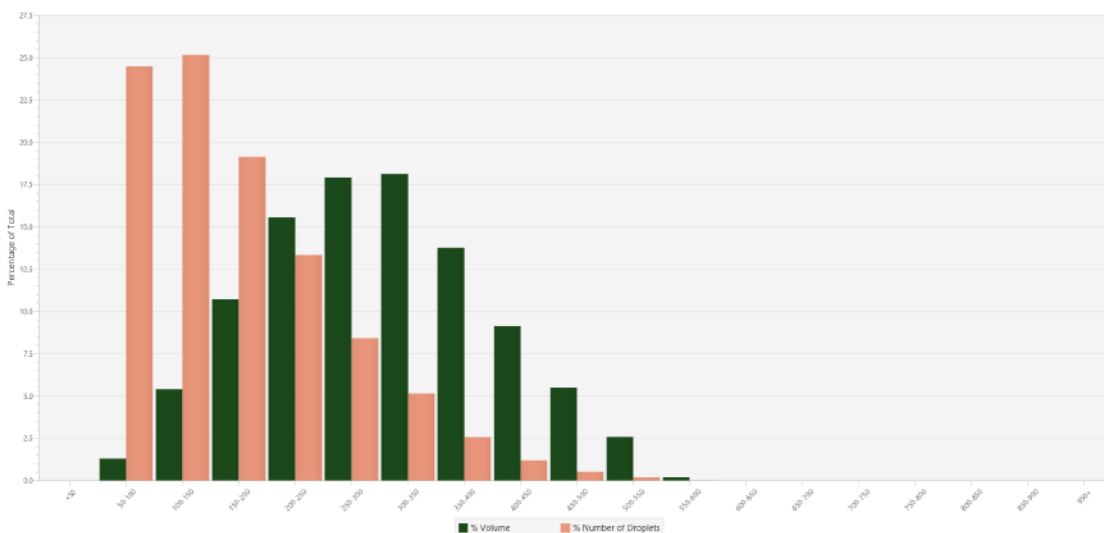
Swath	CV
24 FT	23%
26 FT	20%
28 FT	16%
30 FT	14%
32 FT	16%
34 FT	21%
36 FT	26%

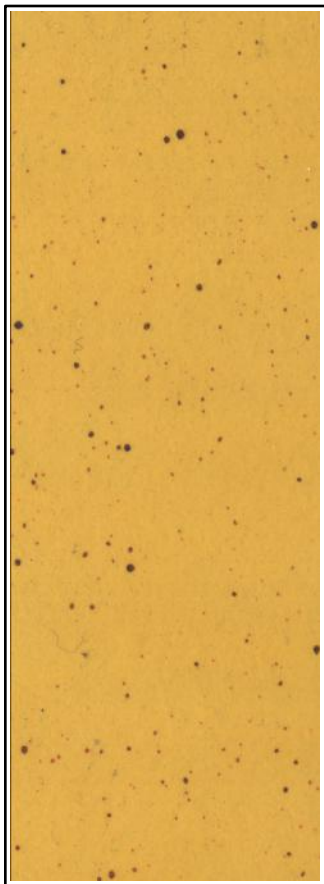
Back and Forth



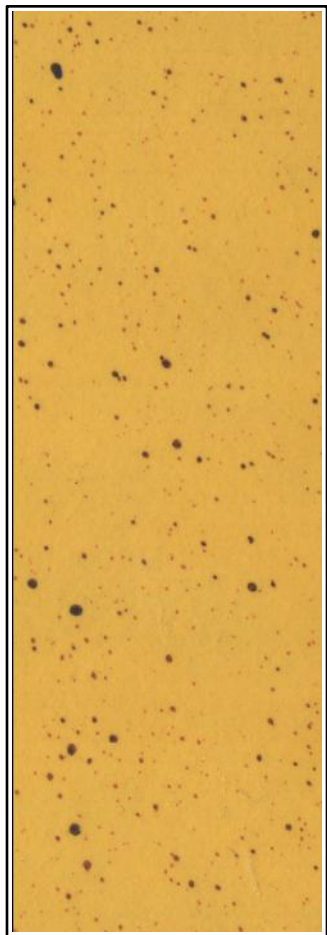
Swath	CV
24 FT	22%
26 FT	19%
28 FT	15%
30 FT	12%
32 FT	14%
34 FT	18%
36 FT	23%

Droplet Spectrum

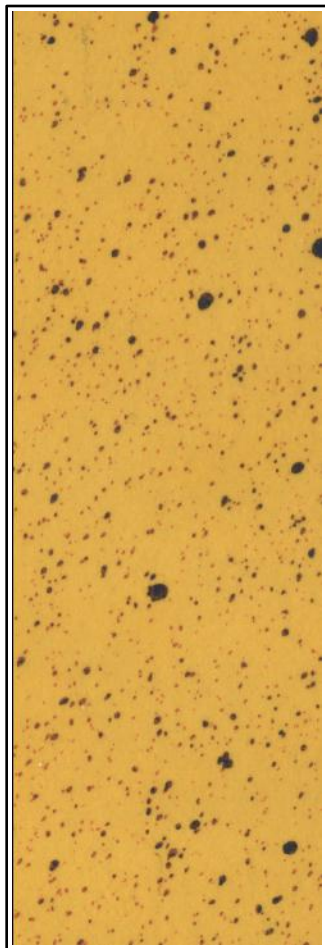


**AG-122_3ms_0**

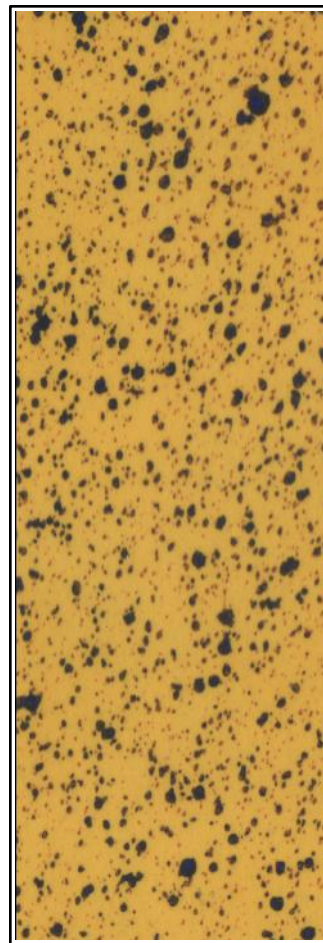
Cov. = 0.80%
D/in² = 105.93
VMD = 176 μm
Dv01 = 107 μm
Dv09 = 273 μm
RS = 0.94%
DSC = F

**AG-122_3ms_3**

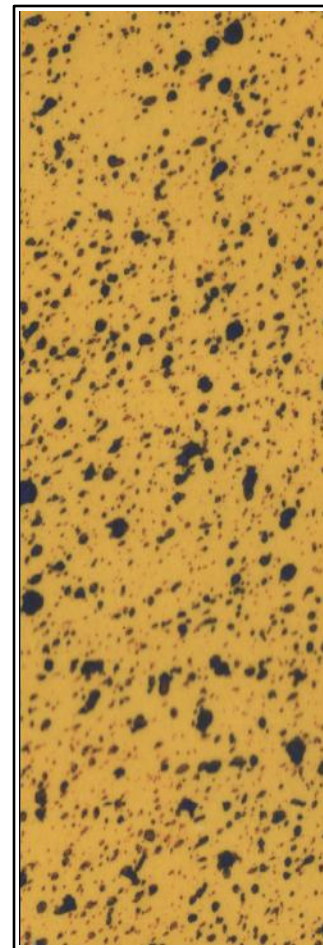
Cov. = 1.56%
D/in² = 180.32
VMD = 195 μm
Dv01 = 111 μm
Dv09 = 335 μm
RS = 1.15%
DSC = F

**AG-122_3ms_6**

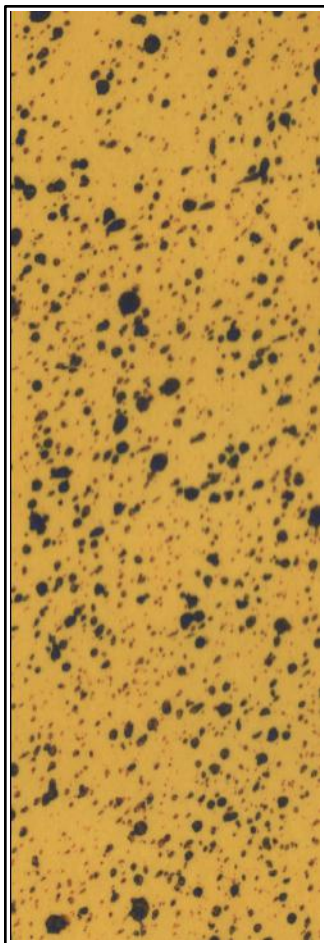
Cov. = 4.25%
D/in² = 427.60
VMD = 202 μm
Dv01 = 120 μm
Dv09 = 383 μm
RS = 1.30%
DSC = F

**AG-122_3ms_9**

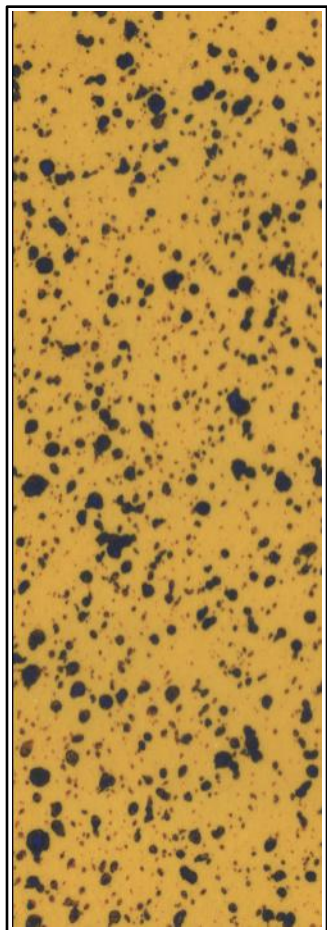
Cov. = 14.08%
D/in² = 727.38
VMD = 274 μm
Dv01 = 157 μm
Dv09 = 393 μm
RS = 0.86%
DSC = M

**AG-122_3ms_12**

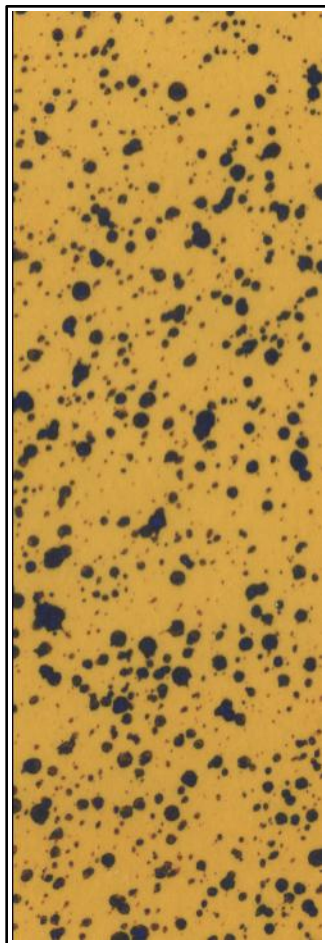
Cov. = 14.73%
D/in² = 635.10
VMD = 289 μm
Dv01 = 171 μm
Dv09 = 448 μm
RS = 0.96%
DSC = M

**AG-122_3ms_15**

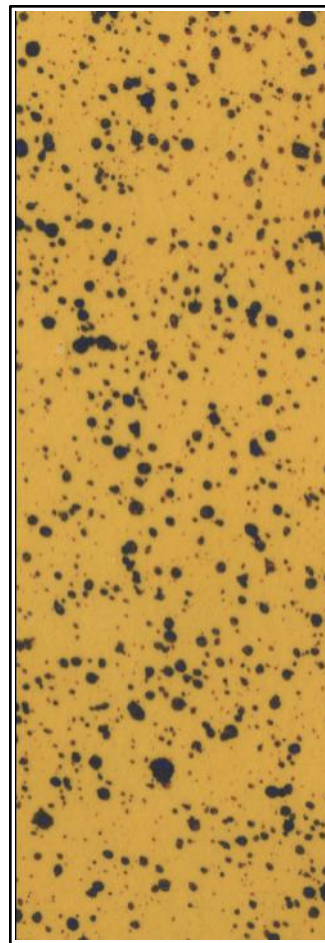
Cov. = 13.37%
D/in² = 531.91
VMD = 301 μm
Dv01 = 177 μm
Dv09 = 430 μm
RS = 0.84%
DSC = M

**AG-122_3ms_18**

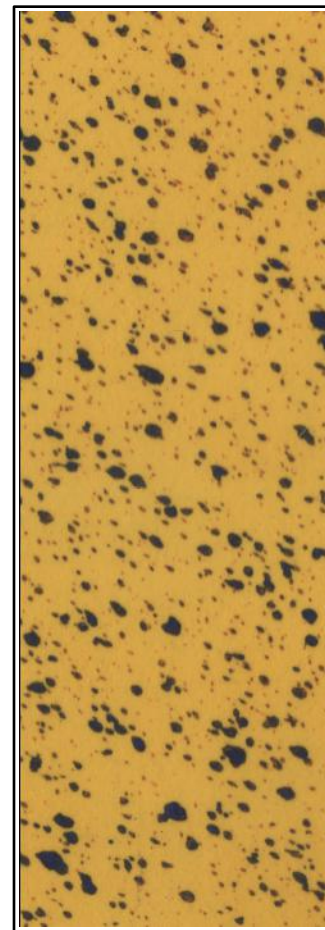
Cov. = 16.05%
D/in² = 487.76
VMD = 332 μm
Dv01 = 199 μm
Dv09 = 455 μm
RS = 0.77%
DSC = M

**AG-122_3ms_21**

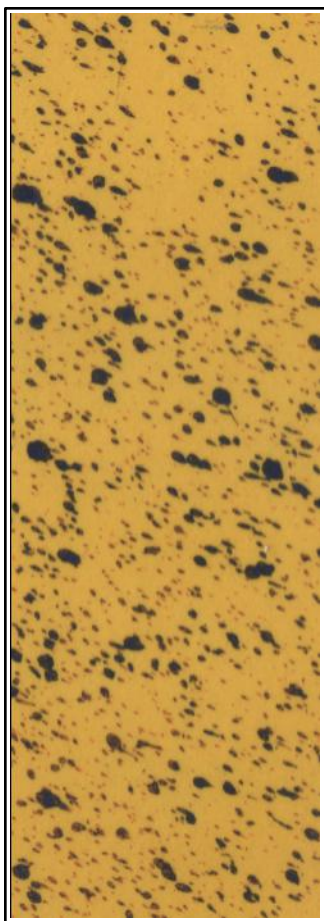
Cov. = 15.74%
D/in² = 415.72
VMD = 345 μm
Dv01 = 212 μm
Dv09 = 456 μm
RS = 0.71%
DSC = M

**AG-122_3ms_24**

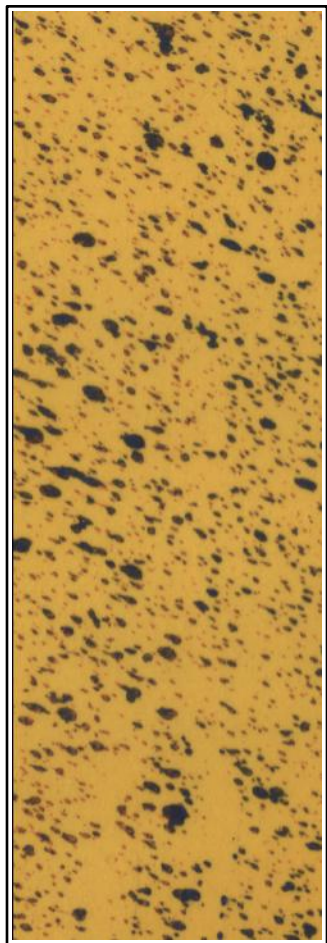
Cov. = 11.67%
D/in² = 417.38
VMD = 300 μm
Dv01 = 183 μm
Dv09 = 398 μm
RS = 0.72%
DSC = M

**AG-122_3ms_27**

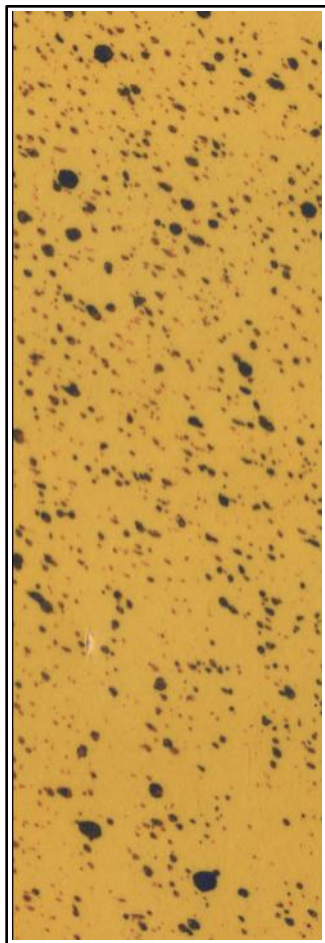
Cov. = 11.64%
D/in² = 388.69
VMD = 321 μm
Dv01 = 191 μm
Dv09 = 430 μm
RS = 0.74%
DSC = M

**AG-122_3ms_30**

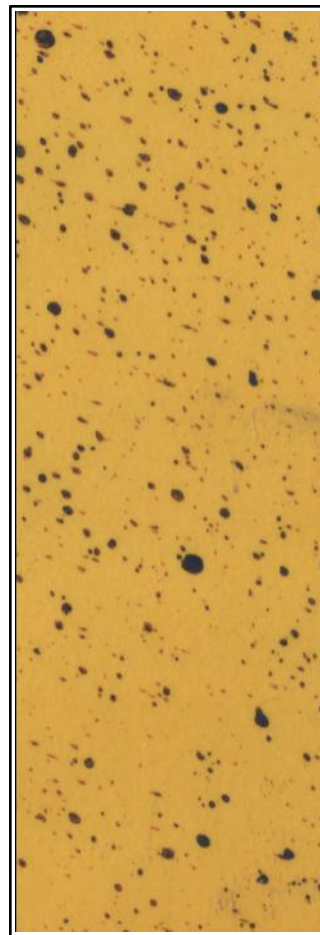
Cov. = 13.37%
D/in² = 462.13
VMD = 315 μm
Dv01 = 188 μm
Dv09 = 468 μm
RS = 0.89%
DSC = M

**AG-122_3ms_33**

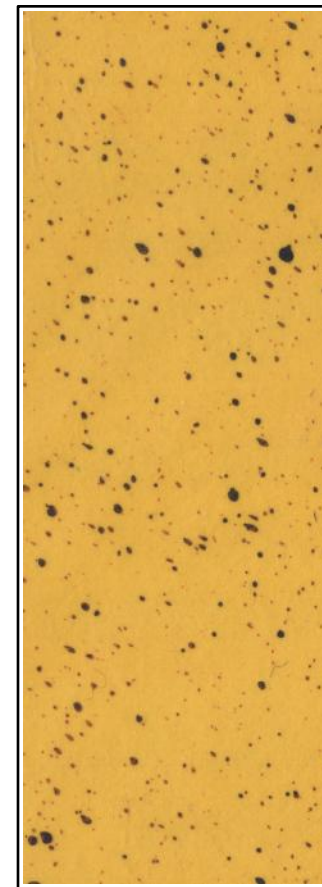
Cov. = 14.53%
D/in² = 585.87
VMD = 284 μm
Dv01 = 176 μm
Dv09 = 444 μm
RS = 0.94%
DSC = M

**AG-122_3ms_36**

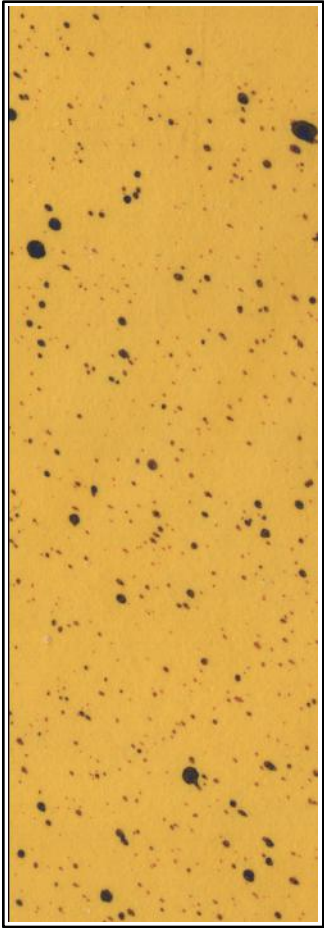
Cov. = 7.93%
D/in² = 410.22
VMD = 261 μm
Dv01 = 159 μm
Dv09 = 389 μm
RS = 0.88%
DSC = M

**AG-122_3ms_39**

Cov. = 4.21%
D/in² = 251.38
VMD = 257 μm
Dv01 = 148 μm
Dv09 = 370 μm
RS = 0.86%
DSC = M

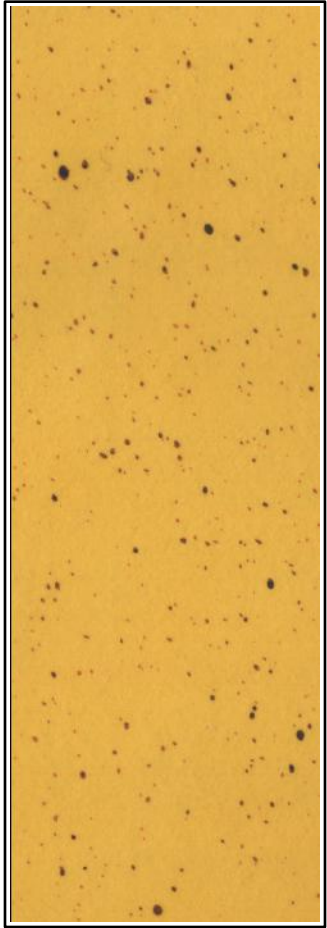
**AG-122_3ms_42**

Cov. = 2.72%
D/in² = 231.14
VMD = 211 μm
Dv01 = 129 μm
Dv09 = 334 μm
RS = 0.97%
DSC = F



AG-122_3ms_45

Cov. = 2.67%
D/in² = 195.43
VMD = 237 µm
Dv01 = 134 µm
Dv09 = 445 µm
RS = 1.31%
DSC = F



AG-122_3ms_48

Cov. = 1.39%
D/in² = 177.56
VMD = 183 µm
Dv01 = 109 µm
Dv09 = 302 µm
RS = 1.05%
DSC = F