A - device sits atop 4 rubber vibration dampening/anti-slip feet
B - device front door (not shown in view) opens towards user utilizing a "push to open" latch, door will auto open by means of hydraulic piston assist.
C - enclosure constructed of 1/8" thick aluminum 5052 alloy - corrosion resistant (will ensure robust anti flex enclosure)
D - paper is manually loaded into spool, spool is on linear rail with thumb operated lockrelease (device provides full target tracking on sample sheet.
E - optics package is rigidly mounted atop nylon spacing & angle blocks with proide the proper 14 degree angle and 7 inch lens to sample face distance.
F - manual polarizer movement via push 2 position push rod (ensures perfect 0 to 90 degree polarization change)
G - LED block attached to enclosure wall will house tri-color LED and affix fiber optic input cable
optical geometry (side view)
\[ \tan^{-1}(\frac{1.6}{7.2-0.6}) = 13 \text{ degrees} \]
customer specified range 10-15 degrees
spool diameter = 1.2 

distance to target 7.38 " ~ within spec
All geometry tested with test setup-
CONFIRMED TO WORK

epaper loading device tilted at 30 degrees to give +/− 80 degrees of viewing angle around sample
Device Prototype size
Device weight

~camera w/ lens 1.75 lb
~nylon spacing/angle blocks total 3.8170 lb
~polarizer w/frame approx .5 lb
~paper spooling device approx 7 lb
~led block .1 lb
~enclosure 16 Lb
~aluminum angle blocks .2 lb approx

TOTAL weight~ = 29 lb