

6. PROFESSIONAL IMAGING PRODUCT TEST PROCEDURE

6.1 Test Flow

A) Images per Job: The number of images which corresponds to at least 5 minutes continuous printing excluding 1st page, shall be computed according to Equation 2.

Equation 2: Calculation of Number of Images per Job

$$N_{IMAGES} = (M \times s) + 1$$

Where:

- N_{IMAGES} is The number of images per job
- s is the product speed in images per minute (ipm)
- M is the printing time, which is an integer value of 5 minutes or more.

B) Test Image: ISO/IEC Standard 24734:2014 AdGraphics Adobe Reader file page 2 shall be used the original image for Professional Imaging Product TEC testing.

C) Print Jobs: Print jobs for the test shall be sent over the network connection designated in Table 5 immediately before printing each job.

- 1) Each image in a print job shall be sent separately, (i.e., all images may be part of the same document), but shall not be specified in the document as multiple copies of a single original image.

6.2 Measurement Procedures

A) Measurement of Professional Imaging Product TEC shall be conducted according to Figure 1 and Table 6, subject to the following provisions:

- 1) Paper: There shall be sufficient paper in the UUT to perform the specified print.
- 2) Simplex mode Testing: Products shall be tested in simplex mode.
- 3) Energy Measurement Method: All measurements shall be recorded as accumulated energy over time, in Wh; all time shall be recorded in minutes or second.
 - a) "Zero meter" references may be accomplished by recording the accumulated energy consumption at that time rather than physically zeroing the meter.

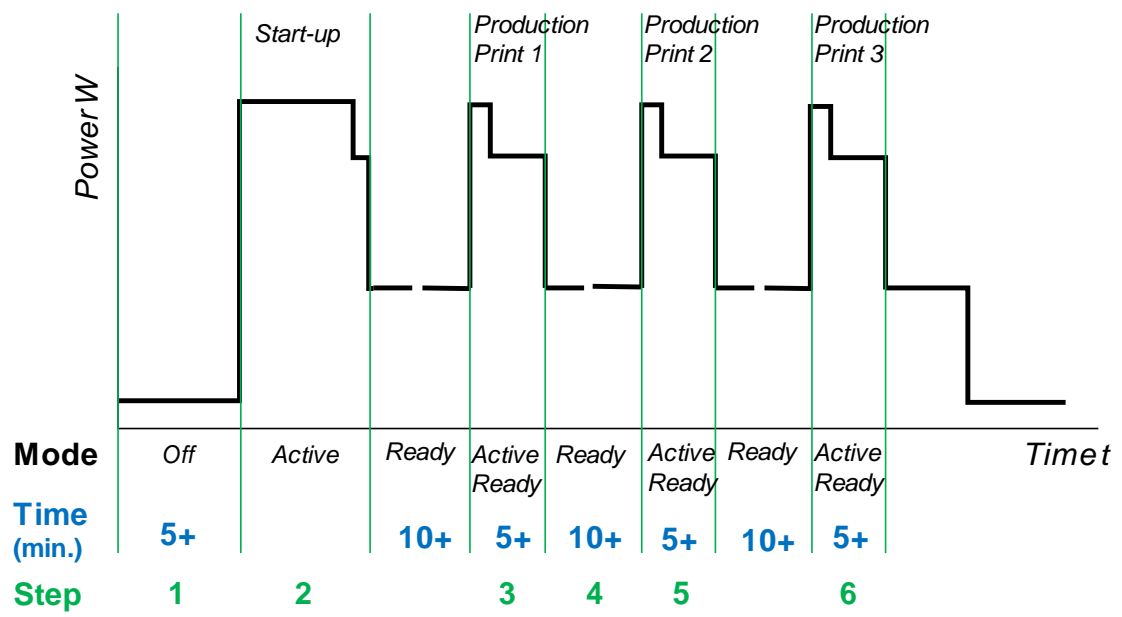


Figure 1 : TEC Test Procedure for Professional Imaging Products

Table 6: TEC Test Procedure for Professional Imaging Products

Step	Initial State	Action	Record (at end of steop)	Unit of Measure	Possible States Measured
1	Off	Connect the UUT to the meter. Ensure the unit is powered and in Off Mode. Zero the meter, measure energy over 5 minutes or more. Record both energy and time.	Off energy	Watt-hours (Wh)	Off
			Testing Interval time	Minutes (min)	
2	Off	Turn on unit and print a job of at least one output image simultaneously. Measure and record time to trailing edge of first page reaches exit point.	Start-up energy	Watt-hours (Wh)	Start-up
			Testing Interval time	Seconds (s)	
3	Ready	Production print 1 starts from at least 10 minutes ready duration after start-up. Zero meter and timer. Print one job (Print order includes number of pages, which corresponds to at least 5 minutes continuous printing excluding 1st page.) Measure energy and record time to tailing edge of first page reaches exit point.	FPPT from ready (transition) energy	Watt-hours (Wh)	FPPT from ready
			Testing Interval time	Seconds (s)	
		Continuously, after printing 1st page, print the number of pages, which corresponds to at least 5 minutes continuous printing. Measure energy, number of pages and record time to trailing edge of last page reaches exit point.	Production print 1 energy	Watt-hours (Wh)	Production print 1
			Number of images	Images	
Testing Interval time	Minutes (min)				
4	Ready	Zero meter and timer. Arbitrary time point after reaching stable print-ready mode. Measure energy over 5 minutes or more after arbitrary time point after reaching stable print-ready mode. Reacord both energy and time.	Ready energy	Watt-hours (Wh)	Ready
			Testing Interval time	Minutes (min)	
5	Ready	Production print 2 starts from at least 10 minutes ready duration after production print 1. Zero meter and timer. Print one job (Print order includes number of pages, which corresponds to at least 5 minutes continuous printing excluding 1st page.) Measure energy and record time to tailing edge of first page reaches exit point.	FPPT from ready (transition) energy	Watt-hours (Wh)	FPPT from ready
			Testing Interval time	Minutes (min)	
		Continuously, after printing 1st page, print the number of pages, which corresponds to at least 5 minutes continuous printing. Measure energy, number of pages and record time to trailing edge of last page reaches exit point.	Production print 1 energy	Watt-hours (Wh)	Production print 2
			Number of images	Images	
Testing Interval time	Minutes (min)				
6	Ready	Production print 3 starts from at least 10 minutes ready duration after production print 2. Zero meter and timer. Print one job (Print order includes number of pages, which corresponds to at least 5 minutes continuous printing excluding 1st page.) Measure energy and record time to tailing edge of first page reaches exit point.	FPPT from ready (transition) energy	Watt-hours (Wh)	FPPT from ready
			Testing Interval time	Minutes (min)	
		Continuously, after printing 1st page, print the number of pages, which corresponds to at least 5 minutes continuous printing. Measure energy, number of pages and record time to trailing edge of last page reaches exit point.	Production print 1 energy	Watt-hours (Wh)	Production print 3
			Number of images	Images	
Testing Interval time	Minutes (min)				