Bid Spec

1.0 <u>Description</u>
The projector shall be SXGA+ resolution. It should use LCOS technology with high contrast and
high brightness. Projector shall have seamless image with high uniformity. It must include power
zoom and power focus. Lens should be wide angle - 100 inch diagonal screen at less than 10 feet.

2.0 <u>Bid Specification</u>

Technology:
    a.   The projector must use the LCOS technology and incorporate AISYS system.
    b.   The projector must have a native resolution of SXGA+ (1400 x 1050).
    c.   The projector must support WXGA (for wide screen use).
    d.   The projector's brightness must be 3000 lumens with contrast of 900:1.
    e.   The projector lens must have a wide angle lens (100 inch diagonal screen at less than 10 feet).
    f.   The projector must have a built in powered optical zoom lens of 1.5 times.
    g.   The projector's pixel aperture must be 90% or higher.
    h.   The projector's uniformity must be 85% or higher.

Image Adjustments:
    a.   The projector must have a DICOM Simulation mode.
    b.   The projector must have 21 steps of preset gamma adjustment.
    c.   The projector must have a Photo mode.
    d.   The projector must have color temperature adjustment.
    e.   The projector must have color level adjustment.
    f.   The projector must have sRGB color space.
    g.   The projector must have automatic keystone correction of ±20 degrees vertically.
    h.   The projector must have the ability to be placed in a vertical position with the lens pointing up or down.

AC Lamp:
    a.   The projector must have an AC Lamp to improve optical efficiency for better color reproduction and brightness.

User Friendly Features:
    b.   The projector must have auto input detection.
    c.   The projector must have auto focus.
    d.   The projector must have auto vertical keystone.
    e.   The projector must have auto wall color correction.
    f.   The projector must have PictBridge compatibility to display images from with digital cameras and camcorders.
    g.   The projector must be able to display images from USB flash drives.
    h.   The projector must have an internal charging unit to run the fan for an adequate period of time, in order for the lamp to cool down when power has been accidentally removed from projector.

Inputs and Outputs:
    i.   The projector must have one HDMI™ (V.1.3 with Deep Color).
    j.   The projector must have one DVI input.
    k.   The projector must have ability to accept a VGA inputs.
    l.   The projector must have one VGA output to drive external monitor or other display device.
    m. The projector must have a USB port for PC-free presentations* and PictBridge.
    n.   The projector must have three audio input sources that switch automatically to match the image signal's input source.
    o.   The projector must have a variable audio output terminal for connection to external audio devices making it easy to control sound levels from the projector's remote control unit.
    p.   The projector must have s-video input.
    q.   The projector must have component input.
    r.   The projector must have composite video input.
    s.   The projector must have a RS-232 port for control.
    t.   The projector must have a built-in network interface for control.

Power Management:
    a. The projector must have an internal condenser to run the fan making it possible to unplug the projector as soon as it is turned off, to prevent damage to the projector and lamp in case of accidental power lost.

Control Management:
    b. The projector must have a network adapter for LAN control.
    c. The projector must have RS-232C serial control port to be used with control systems.
    d. The projector must have an IR sensor in the front and rear for remote control capability.

Control System Compatibility:
    a. The projector must be certified to be used with AMX, Crestron and Extron systems.

Ratings:
    a. The projector must be powered by 100V to 240V/ 50/60Hz.
    b. The projector must weight less than 12 pounds.
    c. The Projector's noise level must not exceed 35dB in brighter mode.

Warranty:
    a. The projector must have a 3 year warranty on parts and labor.
    b. The projector's lamp warranty must be 120 days.

*Only display JPEG images.

SX80 Mark II D Specifications

Basic	**Imaging Device**		0.55″ Reflective LCD Panels (LCoS) x 3
	Aspect Ratio		4:3 Ratio
	Native Resolution		SXGA+
	Brightness		3000 ANSI Lumens
	Uniformity		88%
	Contrast		900:1
	Keystone	**Vertical**	± 20 degrees (Auto/Manual)
		Horizontal	N/A
Optics	**Projection Lens**		F1.95 - 2.6, f=16.6 - 24.8 mm
	Lens Shift		10:0, Fixed
	Zoom		1.5x Powered, 12x Digital
	Focus		Powered (Auto/Manual)
	Screen Size		40"-300"
	Projection Distance Coverage		3.9 - 29.9 ft.
	Throw Ratio		1.48 - 2.18:1
Image Adjustments	**Image Mode**		sRGB, Presentation, Standard, Movie, Photo, DICOM
	Color Adjust		Dynamic Gamma, 6-Axis(RGBCMY) Color Adjustment
	Wall Correction		Auto / Manual
	Mounting		Ceiling / Rear / Ceiling and Rear
	Tilt Angle		Adjusting feet up to 10 degrees
Input Signals	**Digital PC Input**		SXGA+ / SXGA / WXGA / XGA / SVGA / VGA
	Scanning Frequency		H;15 ~ 75 kHz, V:50 ~ 85Hz, Dot clock: 170 MHz
	Analog PC Input		UXGA / SXGA+ / WXGA / SXGA / XGA / SVGA / VGA
	Scanning Frequency		H:15～75 kHz , V:50～85 Hz Dot clock: 170 MHz or less
	Video/S-video Input		NTSC / PAL / SECAM / NTSC4.43 / PAL-M / PAL-N
	Component Input		1080p / 1080i / 1035i / 720p / 576p / 480p / 576i / 480i
	Digital Video Input		HDMI: 1080p / 1080i / 720p / 576p / 480p
Terminals	**Inputs**	**DVI-I 29pin**	Digital PC input / Analog PC input / Digital video input
		HDMI	Version 1.3 Deep Color, Digital video input & Audio input (Linear PCM)
		D-sub 15pin	Analog PC input / Component input
		5BNC	D-sub 15 pin
		Mini DIN 4pin	S-Video input
		RCA	Video Input
		USB	USB Type 'A' Connection, PictBridge input
		Stereo mini-jack	Stereo audio input x3
	Outputs	**D-sub 15pin**	Analog PC out
		Stereo mini-jack	Stereo audio output x1
	Control	**RS-232**	D-sub 9pin
		RJ-45	Yes
	Built-in Speaker		1W (Mono)
Lamp	**Type**		230W NSH (AC)
	Life (Quiet/Normal)		2500/2000 Hours
Remote Control	**Sensor**		Wireless Infrared, Front / Back
	Mouse Control		N/A
Ratings	**Fan Noise (Normal / Quiet)**		35/31dB
	Power	**Consumption** (Normal / Quiet / Stand-by)	330W (normal) / 270W (quiet) / 15W (stand-by)
		Voltage	AC 100 ~ 240V, 50/60Hz
	Temperature	**Operating**	41 to 95 F (5 to 35 C)
		Storage	104 to -22 F (60 to -30 C), 5%RH ~ 90%RH
	Dimensions (W x D x H)		13.0" x 13.4" x 4.8" (332 x 340 x 121mm)
	Weight		11.5 lbs (5.2 kg)
	Warranty		3 years parts and labor, 120 day lamp