



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT

APPLICATION FOR HCAI SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY

APPLICATION #: OSP-0319

HCAI Special Seismic Certification Preapproval (OSP)

Type: ☐ New ☒ Renewal

Manufacturer Information

Manufacturer: Shimadzu Medical Systems

Manufacturer's Technical Representative: Jim Mekker / Akiharu Yamagata

Mailing Address: 25101 Chagrin Blvd. Suite 240, Beachwood, OH 44122

Telephone: (310) 217-8855

Email: mekker@shimadzu-usa.com

Product Information

Product Name: Fluoroscopy and Radiography Systems

Product Model Number(s): Sonialvision G4 and RADspeed

Product Category: Fluoroscopy and Radiography Systems

Product Sub-Category: Fluoroscopy and Radiography Systems

General Description: Multiple component digital radiography and fluoroscopy medical diagnostic imaging system.

Mounting Description: Several - See Certified Product Tables and UUT Sheet

Tested Seismic Enhancements: Seismic enhancements made to the test units and/or modifications required to address anomalies during the tests shall be incorporated into the production units.

Applicant Information

Applicant Company Name: W.E. GUNDY & ASSOCIATES INC.

Contact Person: Travis Soppe

Mailing Address: 1199 Shoreline Drive Suite 310, Boise, ID 83702

Telephone: (208) 342-5989

Email: tsoppe@wegai.com

Title: President



**DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT**

California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)

Company Name: W.E. GUNDY & ASSOCIATES INC.

Name: Travis Soppe

California License Number: S6115

Mailing Address: P.O. Box 9121, Boise, ID 83707

Telephone: (208) 342-5989

Email: tsoppe@wegai.com

Certification Method

☐ GR-63-Core

☒ ICC-ES AC156

☐ IEEE 344

☐ IEEE 693

☐ NEBS 3

☐ Other (Please Specify): _____

Testing Laboratory

Company Name: ENVIRONMENTAL TESTING LABORATORIES, INC. (ETL)

Contact Person: Jeremy Lange

Mailing Address: 11034 Indian Trail, Dallas TX 75229-3513

Telephone: (972) 247-9657

Email: jeremy@etldallas.com

BY: Mohammad Karim

DATE: 10/06/2026



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Seismic Parameters

Certified Response Spectral Acceleration Factors: (F_p/W_p)

Horizontal (A Flx-H), $g =$ 3.20 (A Rig-H), $g =$ 2.15

Vertical (A Flx-V), $g =$ 1.67 (A Rig-V), $g =$ 0.67

SDS (Design spectral response acceleration at short period, g) = 2.50 @ $z/h = 0$; 2.00 @ $z/h = 1$

H_f (Force amplification height factor) = 1 @ $z/h = 0$; 3.5 @ $z/h = 1$

R_u (Structure ductility reduction factor) = 1 @ $z/h = 0$; 1.3 @ $z/h = 1$

I_p (Importance factor) = 1.5

z/h (Height ratio factor) = 0 and 1

HCAI Approval (For Office Use Only) - Approval Expires on 10/06/2032

Date: 10/6/2026

Name: Mohammad Karim

Title: Supervisor, Health Facilities

Condition of Approval (if applicable): _____

OSP-0319

BY: Mohammad Karim

DATE: 10/06/2026



Table 1	SHIMADZU MEDICAL SYSTEMS SPECIAL SEISMIC CERTIFICATION CERTIFIED SYSTEM AND COMPONENTS	 WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING
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Manufacturer: Shimadzu Medical Systems

System: RADSPED X-Ray and Fluoroscopy System

System Component ¹	Shimadzu Part Number	Dimensions (in)			Weight (lb)	Mounting	UUT ²
		Width	Depth	Height			
Wall Stands							
BR 120 Wall Stand Wireless Digital Detector	503-61800-13	24.8	14.4	84.8	264	wall/floor	UUT _y -8
BR 120 Wall Stand Wireless Digital Detector	566-16500-42	24.8	14.4	84.8	264	wall/floor	same ⁵
BR 120 Wall Stand Flat Panel Detector	503-61800-13	24.8	14.4	84.8	264	wall/floor	interpolated
BR120 Wall Stand Fixed Panel Detector	503-61800-13	24.8	14.4	84.8	264	wall/floor	UUT _y -21
BR 120 Wall Stand Wireless Digital Detector	503-77185-35	26.4	14.4	85.3	283	wall/floor	interpolated
BR 120 Wall Stand Fixed Panel Detector	503-77185-35	26.4	14.4	85.3	283	wall/floor	UUT _z -5
BR 120T Tilting Wall Stand Fixed Panel Detector	566-16600-50	24.8	25.4	84.8	378	wall/floor	interpolated
BR 120T Tilting Wall Stand Wireless Detector Vertical	566-16600-50	24.8	25.4	84.8	378	wall/floor	UUT _x -1A
BR 120T Tilting Wall Stand Wireless Detector Flat	566-16600-50	24.8	25.4	84.8	378	wall/floor	UUT _x -1B
Patient Table							
BK-200 Table Wireless Digital Detector	503-61750-02	31.9	92.5	33.5	720 ³	floor	UUT _y -13
BK-200 Table Wireless Digital Detector	563-61750-81	31.9	92.5	33.5	720 ³	floor	same ⁵
Monitor Ceiling Suspension							
Flat Panel Monitor Suspension	ID10000F-2WOR	38.0	80.0	68.0	294 ⁴	ceiling	UUT _y -5

¹ All components are manufactured by Shimadzu Medical Systems. The part numbers listed uniquely identify the type of component, manufacturer, and material of construction for each sub-component within the tested units.

² The units were tested at different times and the subscripts on the UUT reference the following seismic test reports:
v = 16963 Rev2 / w = 17795-R3 / x = 17550 Rev1 / y = SQ10-1205-01 / z = SQ10-1503-01

³ Table weight listed does not include 350lb simulated patient weight included during the horizontal position tests.

⁴ Monitor Ceiling Suspension weight listed does not include the additional 30lbs mass attached to each monitor for simulation of varied monitor configurations.

⁵ Components identified as "same" are of identical construction to the tested UUT and differ only in color / software

SEISMIC CERTIFICATION LIMITS

CODE	Ip	S _{DS}	z / h	H _f	R _μ	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2025	1.5	2.0g	1.0	3.5	1.3	3.2g	2.15g	-	-
		2.5g	0	1.0	1.0	-	-	1.68g	0.68g

Table 1	SHIMADZU MEDICAL SYSTEMS SPECIAL SEISMIC CERTIFICATION CERTIFIED SYSTEM AND COMPONENTS	 WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING
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Manufacturer: Shimadzu Medical Systems

System: RADSPED X-Ray and Fluoroscopy System

System Component ¹		Shimadzu Part Number	Dimensions (in)			Weight (lb)	Mounting	UUT ²
			Width	Depth	Height			
Ceiling Mounted Tube								
Style Ed. CH-200 Ceiling 4.0x2.6 rail - 77.8" spacing		563-61670-95 563-69564-62 563-55400-52	157.5	102.0	68.0	777	ceiling	UUT _v -2
SR5 Ver. CH-200 Ceiling 4.0x2.6 rail - 77.8" spacing		566-29500 563-69564-62 563-55400-52	157.5	102.0	68.0	845	ceiling	interpolated
SR5 Ver. CH-200 Ceiling 4.0x2.6 rail - 38.4"spacing		566-29500 563-69564-62 563-55400-52	157.5	102.0	68.0	845	ceiling	UUT _w -1
SR5 Ver. CH-200 Ceiling 4.0x3.3 rail - 77.8" spacing		566-29500 563-69564-62 563-55400-53	216.5	129.9	68.0	857	ceiling	extrapolated*
SR5 Ver. CH-200 Ceiling 5.5x2.6 rail - 38.4" / 77.8"spacing		566-29500 563-69564-64 563-55400-52	216.5	129.9	68.0	872	ceiling	extrapolated*
SR5 Ver. CH-200 Ceiling 5.5x3.3 rail - 77.8" spacing		566-29500 563-69564-64 563-55400-53	216.5	129.9	68.0	884	ceiling	extrapolated*
Subcomponents	Subcomponents		ID		Notes		UUT	
	5.5m Longitudinal Rail		563-69564-64		97lbs - 5.5m fixed rail		extrapolated*	
	4.0m Longitudinal Rail		563-69564-62		71lbs - 4.0m fixed rail		UUT _v -2 / UUT _w -1	
	3.3m Transverse Rail		563-55400-53		58lbs - 3.3m travel rail		extrapolated*	
	2.6m Transverse Rail		563-55400-52		46lbs - 2.6m travel rail		UUT _v -2 / UUT _w -1	
	Style Ed. CH: X-Ray Tube/Collimator		563-61670-95		661lb		UUT _v -2	
	SR5 Ver. CH: X-Ray Tube/Collimator		566-29500		728lb		UUT _w -1	

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v = 16963 Rev2 / w = 17795-R3 / x = 17550 Rev1 / y = SQ10-1205-01 / z = SQ10-1503-01

*UUT_w-1 utilizes the heaviest X-Ray Tube + Collimator with 38.4in rail spacing producing the maximum loading thru the most vulnerable rail connections. The remaining extrapolated configurations utilize the identical SR5 Ver. CH: X-Ray Tube + Collimator as UUT_w-1 with varied rail configurations. The extrapolated longer rail configurations are connected at equivalent or shorter center to center spacing and cantilevered end lengths as compared with the tested shorter configurations.

SEISMIC CERTIFICATION LIMITS

CODE	Ip	S _{DS}	z / h	H _f	R _μ	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2025	1.5	2.0g	1.0	3.5	1.3	3.2g	2.15g	-	-
		2.5g	0	1.0	1.0	-	-	1.68g	0.68g

Table 1	SHIMADZU MEDICAL SYSTEMS SPECIAL SEISMIC CERTIFICATION CERTIFIED SYSTEM AND COMPONENTS	 WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING
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Manufacturer: Shimadzu Medical Systems

System: RADSPED X-Ray and Fluoroscopy System

System Component ¹	Shimadzu Part Number	Dimensions (in)			Weight (lb)	Mounting	UUT ²
		Width	Depth	Height			
Control / Power Cabinets							
BK-200 Control Cabinet	503-04403A	19.7	15.8	20.1	98	floor	UUT _y -14
CH-200 / BR-120 Control Cabinet	503-04427D	15.8	19.7	20.1	110	floor	UUT _y -25
CH-200 / BR-120 Control Cabinet	572-18677-02	15.8	19.7	20.1	110	floor	same ⁵
80kW High Voltage Generator UD150B-40	502-23375-01	27.6	15.9	71.1	435	wall/floor	UUT _y -30
80kW High Voltage Generator UD150B-41	502-23375-01	27.6	15.9	71.1	435	wall/floor	interpolated
80kW High Voltage Generator UD150B-40/41	562-23375-79	27.6	15.9	71.1	435	wall/floor	interpolated
X-Ray High Voltage Generator Cabinet	562-29200-02	27.5	19.7	72.6	606	wall/floor	UUT _z -3
PC / User Interface							
UD150B-40 X-Ray Control Console	502-23588	12.1	8.3	13.6	9	wall	UUT _y -10A
UD150B-40 X-Ray Control Console	502-23588	12.1	8.3	13.6	9	floor	UUT _y -10B
Generator Control Console	566-27900	9.5	2.5	12.0	11	wall	UUT _w -2
Side Station Computer	502-24407-13	7.8	19.6	16.8	28	floor	UUT _y -22
Canon CXDI-NE Workstation	CXDI-NE PC	7.8	18.8	16.5	28	floor	UUT _y -24

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v = 16963 Rev2 / w = 17795-R3 / x = 17550 Rev1 / y = SQ10-1205-01 / z = SQ10-1503-01

⁵ Components identified as "same" are of identical construction to the tested UUT and differ only in color / software

SEISMIC CERTIFICATION LIMITS

CODE	I _p	S _{DS}	z / h	H _f	R _μ	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2025	1.5	2.0g	1.0	3.5	1.3	3.2g	2.15g	-	-
		2.5g	0	1.0	1.0	-	-	1.68g	0.68g

UUT_z-1A

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid floor mounted with (4) ¾" diameter bolts.



Manufacturer: Shimadzu Medical Systems

Test Location: ETL (Dallas, TX)

Component: ZS-200 Elevating Table

Test Date: October 12-16, 2015

Model Number: 503-78001

Report Number: SQ10-1503-1 REV 1

UUT Function: Patient table with integrated x-ray system. Tested in horizontal position

UUT Description: Component of the SONIALVISION G4 X-Ray and Flouroscopy system, includes seismic option kits SV-G4.

UUT PROPERTIES

Weight (lb) with Patient	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
3,885	76.0	92.5	96	4.0	3.4	4.1

The patient table moves horizontally and vertically to accommodate different patients and procedures. The system was tested in the normal horizontal operating position with total simulated patient weight of 400lbs.

SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_{Z-1B}

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid floor mounted with (4) ¾" diameter bolts.



Manufacturer: Shimadzu Medical Systems

Test Location: ETL (Dallas, TX)

Component: ZS-200 Elevating Table

Test Date: October 12-16, 2015

Model Number: 503-78001

Report Number: SQ10-1503-1 REV 1

UUT Function: Patient table with integrated x-ray system. Tested in vertical position

UUT Description: Component of the SONIALVISION G4 X-Ray and Flouroscopy system, includes seismic option kits SV-G4.

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
3,485	76.0	92.5	96	4.4	4.4	5.1

The patient table moves horizontally and vertically to accommodate different patients and procedures. The system was tested in the normal vertical operating position.

SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_z-2	UNIT UNDER TEST (UUT) SUMMARY SHEET	
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Mounting Details: Combined rigid wall mounted with (2) ¼" diameter bolts and rigid floor mounted with (4) ½" diameter bolts.



Manufacturer: Shimadzu Medical Systems				Test Location: ETL (Dallas, TX)					
Component: ZS-200 Cabinet				Test Date: October 12-16, 2015					
Model Number: 502-29300-02				Report Number: SQ10-1503-1 REV 1					
UUT Function: Power distribution to ZS-200 Table									
UUT Description: Component of the SONIALVISION G4 X-Ray and Flouroscopy system.									
UUT PROPERTIES									
Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)					
	Width	Depth	Height	FB	SS	V			
569	27.5	19.7	72.6	N/A	N/A	N/A			
SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24									
	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70
Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.									

UUT_{z-3}

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Combined rigid wall mounted with (2) ¼" diameter bolts and rigid floor mounted with (4) ½" diameter bolts.



Manufacturer: Shimadzu Medical Systems				Test Location: ETL (Dallas, TX)					
Component: X-Ray High Voltage Cabinet				Test Date: October 12-16, 2015					
Model Number: 562-29200-02				Report Number: SQ10-1503-1 REV 1					
UUT Function: X-ray high voltage generator cabinet									
UUT Description: Component of the SONIALVISION G4 X-Ray and Flouroscopy system.									
UUT PROPERTIES									
Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)					
	Width	Depth	Height	FB	SS	V			
606	27.5	19.7	72.6	N/A	N/A	N/A			
SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24									
	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70
Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.									

UUT_z-4

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Combined rigid wall mounted with (2) ¼" diameter bolts and rigid floor mounted with (4) ½" diameter bolts.



Manufacturer: Shimadzu Medical Systems				Test Location: ETL (Dallas, TX)					
Component: DR-300 Digital Cabinet				Test Date: October 12-16, 2015					
Model Number: 562-29101				Report Number: SQ10-1503-1 REV 1					
UUT Function: Electrical cabinet									
UUT Description: Component of the SONIALVISION G4 X-Ray and Flouroscopy system.									
UUT PROPERTIES									
Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)					
	Width	Depth	Height	FB	SS	V			
654	27.5	19.7	72.6	N/A	N/A	N/A			
SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24									
	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70
Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.									

UUT_{z-5}

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Combined rigid wall mounted with (2) 1/4" diameter bolts and rigid floor mounted with (4) 3/8" diameter bolts.



Manufacturer: Shimadzu Medical Systems				Test Location: ETL (Dallas, TX)					
Component: BR-120 Wall Stand Fixed Panel Detector				Test Date: October 12-16, 2015					
Model Number: 503-77185-35				Report Number: SQ10-1503-1 REV 1					
UUT Function: Radiographic wall stand for X-ray exposures									
UUT Description: Component of the RADSPEED and SONIALVISION G4 X-Ray and Flouroscopy system. Tested with Konica Aero XE Flat Panel Detector									
UUT PROPERTIES									
Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)					
	Width	Depth	Height	FB	SS	V			
283	14.4	26.4	85.3	N/A	N/A	N/A			
SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24									
	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70
Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.									

UUT_{z-6}

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid base mounted with (6) 1/4" machine screws.



Manufacturer: Shimadzu Medical Systems				Test Location: ETL (Dallas, TX)					
Component: ZS-200 Control Console Remote				Test Date: October 12-16, 2015					
Model Number: 563-78007-02				Report Number: SQ10-1503-1 REV 1					
UUT Function: Control console remote for X-ray system									
UUT Description: Component of the SONIALVISION G4 X-Ray and Flouroscopy system.									
UUT PROPERTIES									
Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)					
	Width	Depth	Height	FB	SS	V			
24	21.6	12.3	2.3	> 33.0	>33.0	32.3			
SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24									
	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70
Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.									

UUT_{z-7}

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid floor mounted with (4) 3/8" diameter bolts.



Manufacturer: Shimadzu Medical Systems				Test Location: ETL (Dallas, TX)					
Component: DR-300 Image Processing PC				Test Date: October 12-16, 2015					
Model Number: 562-29102				Report Number: SQ10-1503-1 REV 1					
UUT Function: Imaging system PC									
UUT Description: Component of the SONIALVISION G4 X-Ray and Flouroscopy system									
UUT PROPERTIES									
Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)					
	Width	Depth	Height	FB	SS	V			
71	6.3	18.7	23.0	>33.0	17.9	> 33.0			
SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24									
	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70
Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.									

UUT_z-9	UNIT UNDER TEST (UUT) SUMMARY SHEET	
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Mounting Details: Rigid floor mounted with (2) 1" wide hand-tightened nylon cam buckle straps (200lb WLL) through slots in (4) L2.5x2.5x1/4" x 2.5" long brackets. Angle brackets anchored with (1) 3/8" diameter bolt each.



Manufacturer: Shimadzu Medical Systems				Test Location: ETL (Dallas, TX)					
Component: Konica Aero Workstation				Test Date: October 12-16, 2015					
Model Number: TPC-F046-SF				Report Number: SQ10-1503-1 REV 1					
UUT Function: Imaging System PC									
UUT Description: Component of the SONIALVISION G4 X-Ray and Flouroscopy system									
UUT PROPERTIES									
Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)					
	Width	Depth	Height	FB	SS	V			
16	4.0	14.9	13.3	>33.0	>33.0	> 33.0			
SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24									
	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70
Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.									

UUT_Z-13

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid wall mounted with (3) #10 machine screws



Manufacturer: Shimadzu Medical Systems

Test Location: ETL (Dallas, TX)

Component: Hewlett Packard WAP

Test Date: October 12-16, 2015

Model Number: J9650A

Report Number: SQ10-1503-1 REV 1

UUT Function: Wireless access point

UUT Description: Component of the SONIALVISION G4 X-Ray and Flouroscopy system.

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
2	6.6	2.8	8.0	N/A	N/A	N/A

SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_Z-14

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid floor mounted with (2) 3/8" diameter bolts



Manufacturer: Shimadzu Medical Systems	Test Location: ETL (Dallas, TX)
Component: Konica AERO X-Ray Interface	Test Date: October 12-16, 2015
Model Number: AeroDR Interface Unit2	Report Number: SQ10-1503-1 REV 1

UUT Function: X-ray interface

UUT Description: Component of the SONIALVISION G4 X-Ray and Flouroscopy system.

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
29	7.0	18.0	11.3	12.0	14.3	11.5

SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_z-15

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid wall mounted with (4) #10 machine screws



Manufacturer: Shimadzu Medical Systems	Test Location: ETL (Dallas, TX)
Component: LCD Touch Screen - Konica	Test Date: October 12-16, 2015
Model Number: ROM950AIII	Report Number: SQ10-1503-1 REV 1

UUT Function: Wall mounted display for x-ray system

UUT Description: Component of the SONIALVISION G4 X-Ray and Flouroscopy system

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
21	17.0	5.3	13.8	N/A	N/A	N/A

SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_z-16

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid wall mounted with (4) #10 machine screws



Manufacturer: Shimadzu Medical Systems

Test Location: ETL (Dallas, TX)

Component: LCD Screen - DR-300

Test Date: October 12-16, 2015

Model Number: SMD19102-SC6GF6211-2CH51

Report Number: SQ10-1503-1 REV 1

UUT Function: Wall mounted display for x-ray system

UUT Description: Component of the SONIALVISION G4 X-Ray and Fluoroscopy system

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
19	15.6	4.6	13.6	N/A	N/A	N/A

SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24

S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_y-5

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rails and connecting parts of the component bolt with 2 – ½" bolts (20 bolts total) to a Unistrut grid spaced at approximately 22" on center. The Unistrut grid consisted of Unistrut P1001 rails anchored with 2 - 3/8" bolts at each intersection to the ceiling fixture framing spaced at approximately 24" on center.



Manufacturer: Shimadzu Medical Systems **Test Location:** ETL (Dallas, TX)

Component: Flat Panel Monitor Suspension **Test Date:** October 16-19, 2012

Model Number: ID1000F-2WOR **Report Number:** SQ10-1205-01

UUT Function: Suspension of monitors used for medical equipment

UUT Description: Component of the RADSPED X-Ray and Fluoroscopy System

UUT PROPERTIES

*Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
294	38.0	80.0	68.0	N/A	N/A	N/A

*Weight listed does not include additional 30lb masses attached to each monitor for simulation of varied monitor configurations.

SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_y-8

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Combined rigid wall mounted with (2) 3/8" diameter bolts and rigid floor mounted with (4) 3/8" diameter bolts



Manufacturer: Shimadzu Medical Systems	Test Location: ETL (Dallas, TX)
Component: BR-120 Wall Stand - Wireless Detector	Test Date: October 16-19, 2012
Model Number: 503-61800-13	Report Number: SQ10-1205-01
UUT Function: Radiographic wall stand for X-ray exposures	
UUT Description: Component of the RADSPEED and SONIALVISION G4 X-Ray and Flouroscopy system, includes seismic option kit SMK1059. Tested with Canon CXDI-70C Wireless Digital Detector.	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
264	24.8	14.4	84.8	N/A	N/A	N/A

SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test. Seismic enhancements made to the test unit shall be incorporated into the production units.

UUT_y-10A

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid wall mounted with (6) #10 hex bolts



Manufacturer: Shimadzu Medical Systems **Test Location:** ETL (Dallas, TX)

Component: UD150B-40 X-Ray Control Console **Test Date:** October 16-19, 2012

Model Number: 502-23588 **Report Number:** SQ10-1205-01

UUT Function: Generator controls

UUT Description: Component of the RADSPED X-Ray and Fluoroscopy System

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
9	12.1	8.3	13.6	N/A	N/A	N/A

SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_y-10B

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid base mounted with (2) 1/4" diameter hex bolts



OSP-0319

BY: Mohammad Karim

DATE: 10/06/2026

Manufacturer: Shimadzu Medical Systems

Test Location: ETL (Dallas, TX)

Component: UD150B-40 X-Ray Control Console

Test Date: October 16-19, 2012

Model Number: 502-23588

Report Number: SQ10-1205-01

UUT Function: Generator controls

UUT Description: Component of the RADSPED X-Ray and Fluoroscopy System

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	Width	Depth
9	12.1	8.3	13.6	19.2	18.9	16.2

SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_y-13

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid floor mounted with (4) ½" diameter bolts



Manufacturer: Shimadzu Medical Systems

Test Location: ETL (Dallas, TX)

Component: BK-200 Table – Wireless Detector

Test Date: October 16-19, 2012

Model Number: 503-61750-02

Report Number: SQ10-1205-01

UUT Function: Motorized patient table for support and positioning for image acquisition

UUT Description: Component of the RADSPEED X-Ray and Flouroscopy System, includes seismic option kit SMK1059. Tested with Canon CDXI-70C Wireless Digital Detector.

UUT PROPERTIES

Weight (lb) with Patient	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
1,070	31.9	92.5	33.5	>33.0	4.5	9.6

The patient table moves vertically and horizontally to accommodate different patients and procedures. The system was tested in the normal operating position with a vertical height of 30" and a total simulated patient weight of 350lbs.

SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test. Seismic enhancements made to the test unit shall be incorporated into the production units.

UUT_y-14

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid floor mounted with 2 - 11 gauge bent steel plates (12" x 2") on both sides of the UUT anchored to the floor with (4) ¼" diameter bolts and connected to the UUT with 2" wide industrial Velcro tape at the top of the 12" leg.



Manufacturer: Shimadzu Medical Systems

Test Location: ETL (Dallas, TX)

Component: BK-200 Control Cabinet

Test Date: October 16-19, 2012

Model Number: 503-04403A

Report Number: SQ10-1205-01

UUT Function: Continuous rotating x-ray to generate diagnostic imaging

UUT Description: Component of the RADSPED X-Ray and Fluoroscopy System

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
98	19.7	15.8	20.1	>33.0	8.5	> 33.0

SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_y-21

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid wall mounted with (2) 3/8" diameter bolts and rigid floor mounted with (4) 3/8" diameter bolts



Manufacturer: Shimadzu Medical Systems

Test Location: ETL (Dallas, TX)

Component: BR-120 Wall Stand
Fixed Panel Detector

Test Date: October 16-19, 2012

Model Number: 503-61800-13

Report Number: SQ10-1205-01

UUT Function: Radiographic wall stand for X-ray exposures

UUT Description: Component of the RADSPEED X-Ray and Fluoroscopy System. Tested with Canon CXDI-70C Wireless Digital Detector.

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
264	24.8	14.4	84.8	N/A	N/A	N/A

SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_y-22

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid floor mounted with 2 - 11 gauge bent steel plates (12" x 2") on both sides of the UUT anchored to the floor with (4) 3/8" diameter bolts and connected to the UUT with 2" wide industrial Velcro tape at the top of the 12" leg.



Manufacturer: Shimadzu Medical Systems

Test Location: ETL (Dallas, TX)

Component: Side Station Computer

Test Date: October 16-19, 2012

Model Number: 502-24407-13

Report Number: SQ10-1205-01

UUT Function: PC for radiography system

UUT Description: Component of the RADSPED X-Ray and Fluoroscopy System

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
28	7.8	19.6	16.8	19.0	8.2	>33.0

SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_y-24

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid floor mounted with 2 - 11 gauge bent steel plates (12" x 2") on both sides of the UUT anchored to the floor with (4) 3/8" diameter bolts and connected to the UUT with 2" wide industrial Velcro tape at the top of the 12" leg.



Manufacturer: Shimadzu Medical Systems

Test Location: ETL (Dallas, TX)

Component: Canon CXDI-NE Workstation

Test Date: October 16-19, 2012

Model Number: CXDI-NE PC

Report Number: SQ10-1205-01

UUT Function: PC for radiography system

UUT Description: Component of the RADSPED X-Ray and Fluoroscopy System

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
28	7.8	18.8	16.5	26.5	9.1	10.8

SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_y-25

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid floor mounted with 2 - 11 gauge bent steel plates (12" x 2") on both sides of the UUT anchored to the floor with (4) ¼" diameter bolts and connected to the UUT with 2" wide industrial Velcro tape at the top of the 12" leg.



Manufacturer: Shimadzu Medical Systems

Test Location: ETL (Dallas, TX)

Component: CH-200 / BR-120 Control Cabinet

Test Date: October 16-19, 2012

Model Number: 503-04427D

Report Number: SQ10-1205-01

UUT Function: Control cabinet for radiography system

UUT Description: Component of the RADSPED X-Ray and Fluoroscopy System

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
110	19.7	15.8	20.1	18.8	1.4	>33.0

SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_y-30

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid wall mounted with (2) 1/4" diameter bolts and rigid floor mounted with (4) 3/8" diameter bolts



Manufacturer: Shimadzu Medical Systems

Test Location: ETL (Dallas, TX)

Component: 80kW High Voltage
UB150B-40 Generator Cabinet

Test Date: October 16-19, 2012

Model Number: 502-23375-01

Report Number: SQ10-1205-01

UUT Function: Generator for radiography system

UUT Description: Component of the RADSPED X-Ray and Fluoroscopy System

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
435	27.6	15.9	71.1	N/A	N/A	N/A

SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.60	0.0	1.0	1.0	1.5	-	-	1.74	0.70

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test. Seismic enhancements made to the test unit shall be incorporated into the production units.

UUT_x-1A

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid wall mounted with (2) 5/16" diameter grade 5 bolts and rigid floor mounted with (4) 1/2" diameter bolts



Manufacturer: Shimadzu Medical Systems

Test Location: ETL (Dallas, TX)

Component: BR-120T Tilting Wall Stand
Wireless Detector Vertical

Test Date: November 11, 2024

Model Number: 566-16600-50

Report Number: 17550 Rev 1

UUT Function: Radiographic tilting wall stand for X-ray exposures

UUT Description: Component of the RADSPED X-Ray and Fluoroscopy System. Tested with Canon CXDI-720C Wireless Detector in the vertical orientation.

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
378	24.8	25.4	84.8	N/A	N/A	N/A

SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.50	0.0	1.0	1.0	1.5	-	-	1.67	0.67

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_x-1B

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid wall mounted with (2) 5/16" diameter grade 5 bolts and rigid floor mounted with (4) 1/2" diameter bolts



Manufacturer: Shimadzu Medical Systems

Test Location: ETL (Dallas, TX)

Component: BR-120T Tilting Wall Stand
Wireless Detector Flat

Test Date: November 11, 2024

Model Number: 566-16600-50

Report Number: 17550 Rev 1

UUT Function: Radiographic tilting wall stand for X-ray exposures

UUT Description: Component of the RADSPEED X-Ray and Fluoroscopy System. Tested with Canon CXDI-720C Wireless Detector in the flat / horizontal orientation.

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
378	24.8	25.4	84.8	N/A	N/A	N/A

SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.50	0.0	1.0	1.0	1.5	-	-	1.67	0.67

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_w-1

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rails and connecting parts of the component bolt with 2 – M8 bolts (20 bolts total) to a Unistrut grid spaced at approximately 26" on center. The Unistrut grid consisted of Unistrut P1001 rails anchored with 2 - 3/8" bolts at each intersection to the ceiling fixture framing spaced at approximately 41" on center.



Manufacturer: Shimadzu Medical Systems

Test Location: ETL (Dallas, TX)

Component: SR5 Ver. CH-200 Ceiling Tube
4.0 x 2.6 Rail – 38.4" spacing

Test Date: June 24, 2025
Report Number: 17795-R3

Model Number: 566-29500 / 563-69564-62 / 563-55400-52

UUT Function: Ceiling suspended X-ray tube for use in radiographic imaging

UUT Description: Component of the RADSPED X-Ray and Fluoroscopy System. SR5 Ver. CH: X-Ray Tube + Collimator (566-29500) with 4.0m longitudinal rail (563-69564-62) spaced at 38.4in and 2.6m transverse rail (563-55400-52).

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
845	157.5	102.0	68.0	N/A	N/A	N/A

SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.50	0.0	1.0	1.0	1.5	-	-	1.67	0.67

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_{w-2}

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid wall mounted with (4) 3/8" diameter bolts.



Manufacturer: Shimadzu Medical Systems

Test Location: ETL (Dallas, TX)

Component: Generator Control Console

Test Date: June 24, 2025

Model Number: 566-27900

Report Number: 17795-R3

UUT Function: Generator controls

UUT Description: Component of the RADSPED X-Ray and Fluoroscopy System

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
11	9.5	2.5	12.0	N/A	N/A	N/A

SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.50	0.0	1.0	1.0	1.5	-	-	1.67	0.67

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT_v-2

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rails and connecting parts of the component bolt with 2 – ½" bolts (20 bolts total) to a Unistrut grid spaced approximately 28" on center. The Unistrut grid consisted of Unistrut P1001 rails anchored with 2 – 3/8" bolts at each intersection with the ceiling fixture framing spaced at approximately 41" on center.



Manufacturer: Shimadzu Medical Systems

Test Location: ETL (Dallas, TX)

Component: Style Ed. CH-200 Ceiling Tube
4.0 x 2.6 Rail – 77.8" spacing

Test Date: April 2023
Report Number: 16963 Rev 2

Model Number: 563-61760-95 / 563-69564-62 / 563-55400-52

UUT Function: Ceiling suspended x-ray tube for use in radiographic imaging

UUT Description: Component of the FLUOROspect X1system. Seismic kit SMK-1141. Style Ed. CH: X-Ray Tube + Collimator (563-61670-95) with 4.0m longitudinal rail (563-69564-62) spaced at 77.8in and 2.6m transverse rail (563-55400-52).

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
777	157.5	102.0	68.0	N/A	N/A	N/A

SEISMIC TEST PARAMETERS – CBC 2025 / ICC-ES AC 156-24

	S _{DS} (g)	z / h	H _f	R _μ	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.3	1.5	3.20	2.15	-	-
	2.50	0.0	1.0	1.0	1.5	-	-	1.67	0.67

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.