



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-0409

HCAI Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Siemens Healthcare GmbH

Manufacturer's Technical Representative: Dieter Freitag

Mailing Address: Siemensstr. 3, Forchheim, NA 91301

Telephone: (49919) 118-5412 Email: freitag.dieter@siemens-healthineers.com

Product Information

Product Name: Luminos Agile MAX

Product Model Number(s): See attachments

Product Category: Fluoroscopy and Radiography Systems

Product Sub-Category: Fluoroscopy and Radiography Systems

General Description: Components of multi-component radiography & fluoroscopy medical imaging system. Motorized transverse table motion in both vertical and horizontal positions is excluded from Special Seismic Certification.

Mounting Description: Several - See Certified Product Tables

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: 250 South 5th Street, Suite 510, Boise, ID 83702

Telephone: (208) 342-5989 Email: tsoppe@wegai.com

Title: SE

"A healthier California where all receive equitable, affordable, and quality health care"



STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY



**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 & ASOCIATES 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: 01/16/2026



A healthier California where all receive equitable, affordable, and quality health care



STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY



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

Seismic Parameters

Certified Response Spectral Acceleration Factors: (F_p/W_p)

Horizontal	(A_{Flx-H}) , g=	<u>3.2</u>	(A_{Rig-H}) , g=	<u>2.15</u>
Vertical	(A_{Flx-V}) , g=	<u>1.34</u>	(A_{Rig-V}) , g=	<u>0.54</u>

SDS (Design spectral response acceleration at short period, g) = 2.00

H_f (Force amplification height factor) = 3.5

R_u (Structure ductility reduction factor) = 1.3

I_p (Importance factor) = 1.5

z/h (Height ratio factor) = 1

HCAi Approval (For Office Use Only) - Approval Expires on 01/16/2032

Date: 1/16/2026

Name: Mohammad Karim

Title: Supervisor, Health Facilities

Condition of Approval (if applicable): _____

BY: Mohammad Karim

DATE: 01/16/2026



"A healthier California where all receive equitable, affordable, and quality health care"



STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY

TABLE 1	SIEMENS HEALTHCARE GmbH SPECIAL SEISMIC CERTIFICATION CERTIFIED SYSTEM AND COMPONENTS	 W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING
----------------	--	---

Manufacturer: Siemens Healthcare GmbH

System: LUMINOS AGILE MAX "SEISMIC EDITION"

System Component ¹⁾	Siemens Part Number	Dimensions (in)			Weight (lb)	Mounting	UUT ²
		Width	Depth	Height			
Ceiling Suspension Ysio X-Ray Tubes							
3D Stand Ysio 3m track-synchronized	7042232	167	119	32 - 103	754	ceiling	UUT _x -1
3D Stand Ysio 4m track-synchronized	7042240	167	172	32 - 103	815	ceiling	interpolated
3D Stand Ysio 4m track-automated	7042224	167	172	32 - 103	888	ceiling	UUT _w -1
Ceiling Suspension Displays							
DCS-2 with TUI (2 monitors)	10052164	167	27.9 - 55.1	63 - 102	392	ceiling	UUT _y -5
DCS-2 without TUI (2 monitors)	10094053	167	27.9 - 55.1	50 - 89	400	ceiling	interpolated
DCS-1 with TUI (1 monitor)	10052163	168	27.9 - 55.1	63 - 102	419	ceiling	interpolated
DCS-1 without TUI (1 monitor)	10094052	168	27.9 - 55.1	50 - 89	290	ceiling	UUT _x -6
Patient Tables							
Luminos Agile MAX "Seismic Edition"	10762200	82.7	87.5	77.0	3970 ³⁾	floor	UUT _z -6A UUT _z -6B

¹ All components are manufactured by Siemens Healthcare GmbH unless noted. Part numbers listed uniquely identify 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 UUTs reference the following seismic test reports:

w = SQ35-1204-01-r3 x = SSC10-1010-02-r2 y = SQ35-1301-01-r1 z = SQ35-1415-02-r4

³ Patient table weight does not include simulated patient weights of 400lb.

SEISMIC CERTIFICATION LIMITS: CBC 2025 - Ip = 1.5

System Component	S _{DS} (g)	z / h	H _f	R _μ	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
Ceiling Suspension X-Ray Tubes	2.0	1.0	3.50	1.30	3.20	2.15	1.34	0.54
Ceiling Suspension Displays	2.0	1.0	3.50	1.30	3.20	2.15	1.34	0.54
Patient Tables	2.0	1.0	3.50	1.30	3.20	2.15	1.34	0.54

TABLE 1	SIEMENS HEALTHCARE GmbH SPECIAL SEISMIC CERTIFICATION CERTIFIED SYSTEM AND COMPONENTS	 W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING
----------------	--	---

Manufacturer: Siemens Healthcare GmbH

System: LUMINOS AGILE MAX "SEISMIC EDITION"

System Component¹⁾	Siemens Part Number	Dimensions (in)			Weight (lb)	Mounting	UUT²
		Width	Depth	Height			
Wall Stands							
Tilting Bucky Wall Stand (right)	10681704	30.0	28.1	82.9	643	floor	UUT _z -2
Tilting Bucky Wall Stand (left)	10681705	30.0	28.1	82.9	643	floor	same
Imaging Systems							
Flurospot Compact (FLC)	10762482	13.4	26.0	21.7	86	floor	UUT _z -3
Generator Cabinets							
Polydoros F80-2	10096925	31.5	17.3	86.5	826	floor/wall	UUT _x -5
Wireless Access Points							
SCALANCE W700	10860657	7.9	3.1	6.2	5.5	wall	UUT _z -7

¹ All components are manufactured by Siemens Healthcare GmbH unless noted. Part numbers listed uniquely identify 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 UUTs reference the following seismic test reports:

w = SQ35-1204-01-r3 x = SSC10-1010-02-r2 y = SQ35-1301-01-r1 z = SQ35-1415-02-r4

SEISMIC CERTIFICATION LIMITS: CBC 2025 - Ip = 1.5

System Component	S_{DS} (g)	z / h	H_f	R_μ	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
Wall Stands	2.0	1.0	3.5	1.3	3.20	2.15	1.34	0.54
Imaging Systems	2.0	1.0	3.5	1.3	3.20	2.15	1.34	0.54
Generator Cabinets	2.0	1.0	3.5	1.3	3.20	2.15	1.34	0.54
Wireless Access Points	2.0	1.0	3.5	1.3	3.20	2.15	1.34	0.54

UUT_{x-1}UNIT UNDER TEST (UUT)
SUMMARY SHEET

Mounting Details: Rails and connecting parts of the component bolt with 2 -M10 bolts (20 bolts total) to unistrut grid spaced at 26.0" 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 20" on center.



Manufacturer: Siemens Healthcare GmbH

Test Location: Environmental Testing Laboratory

Component: X-Ray Tube Stand w/ 3m Bridge

Test Date: April 15-17, 2010

Model Number: 7042232

Report Number: SSC10-1010-2 Rev. 2

UUT Function: X-Ray stand, ceiling suspended, for use in radiography imaging, fully synchronized

UUT Description: Component of the Luminos dRF System

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
754	167.0	119.0	103.0	N/A	N/A	N/A

The ceiling suspended tube stand moves laterally, rotates, and extends up and down to accommodate different patients and procedures. The system was tested in the normal operating position with the system horizontally centered, no rotation, and with a height of 50" from mounting point to bottom of collimator.

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	1.30	1.5	3.20	2.15	1.34	0.54

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-1UNIT UNDER TEST (UUT)
SUMMARY SHEET

Mounting Details: Rails and connecting parts of the component bolt with 2 -M10 bolts (20 bolts total) to unistrut grid spaced at 27.0" 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 32" on center.

**Manufacturer:** Siemens Healthcare GmbH**Test Location:** Environmental Testing Laboratory**Component:** X-Ray Tube Stand w/ 4m Bridge**Test Date:** March 7 / May 16-17, 2012**Model Number:** 7042224**Report Number:** SQ35-1204-01 Rev. 3**UUT Function:** X-Ray stand, ceiling suspended, for use in radiography imaging, fully automated**UUT Description:** Component of the Luminos dRF System

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
888	167.0	172.0	60.0	N/A	N/A	N/A

The ceiling suspended tube stand moves laterally, rotates, and extends up and down to accommodate different patients and procedures. The system was tested in the normal operating position with the system horizontally centered, no rotation, and with a height of 50" from mounting point to bottom of collimator.

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	1.30	1.5	3.20	2.15	1.34	0.54

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-5UNIT UNDER TEST (UUT)
SUMMARY SHEET

Mounting Details: Rails and connecting parts of the component bolt with 2 -M10 bolts (20 bolts total) to unistrut grid spaced at 26.0" 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 20" on center.



Manufacturer: Siemens Healthcare GmbH / Mavig	Test Location: Environmental Testing Laboratory
---	---

Component: Ceiling Suspension Display (2 Monitors)	Test Date: January 10-11, 2013
--	--------------------------------

Model Number: 10502164	Report Number: SQ35-1301-01 Rev. 1
------------------------	------------------------------------

UUT Function: Ceiling suspended mount for dual monitors with touch user interface (TUI)

UUT Description: Component of the Luminos Agile Max "Seismic Edition" system

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
393	167.0	50.0	80.0	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	1.30	1.5	3.20	2.15	1.34	0.54

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-6UNIT UNDER TEST (UUT)
SUMMARY SHEET

Mounting Details: Rails and connecting parts of the component bolt with 2 -M10 bolts (20 bolts total) to unistrut grid spaced at 26.0" 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 20" on center.



Manufacturer: Siemens Healthcare GmbH / Mavig	Test Location: Environmental Testing Laboratory
--	--

Component: Ceiling Suspension Display (1 Monitor)	Test Date: April 15-17, 2010
--	-------------------------------------

Model / Serial Number: 10094052	Report Number: SSC10-1010-2 Rev. 2
--	---

UUT Function: Ceiling suspended mount for single monitor without touch user interface (TUI)

UUT Description: Component of the Luminos dRF System

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
290	168.0	50.0	62.0	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	1.30	1.5	3.20	2.15	1.34	0.54

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-6A**UNIT UNDER TEST (UUT)
SUMMARY SHEET****Mounting Details:** Rigid floor mounted with 12 - 3/4" grade 8 bolts.**Manufacturer:** Siemens Healthcare GmbH**Test Location:** Environmental Testing Laboratory**Component:** Luminos Agile Max - Horizontal Positioning System**Test Date:** July 9-12, 2014**Model Number:** 10762200**Report Number:** SQ35-1415-02 Rev. 4**UUT Function:** Motorized patient table and digital imaging device via fluoroscopy/radiography (Horizontal)**UUT Description:** Luminos Agile Max "Seismic Edition" system with patient table / detector in horizontal position. Pixium 3543 Ezh detector (10762402)**UUT PROPERTIES**

Weight (lb) with Patient	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
4,370	82.7	87.5	77.0	3.6	3.2	3.3

The patient table in the horizontal position moves vertically to accommodate different patients and procedures. The system was tested in the normal vertical operating position of 33" and with a total simulated patient weight of 400lbs.

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

	S _{DS} (g)	z / h	H _f	R _p	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.30	1.5	3.20	2.15	1.34	0.54

Note: The unit was full of contents during testing and remained functional (excluding table top movement) before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT_z-6B**UNIT UNDER TEST (UUT)
SUMMARY SHEET****Mounting Details:** Rigid floor mounted with 12 - 3/4" grade 8 bolts.**Manufacturer:** Siemens Healthcare GmbH**Test Location:** Environmental Testing Laboratory**Component:** Luminos Agile Max - Vertical Position**Test Date:** July 9-12, 2014**Model Number:** 10762200**Report Number:** SQ35-1415-02 Rev. 4**UUT Function:** Motorized patient table and digital imaging device via fluoroscopy/radiography (Vertical)**UUT Description:** Luminos Agile Max "Seismic Edition" system with patient table / detector in vertical position. Pixium 3543 Ezh detector (10762402)**UUT PROPERTIES**

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
3,970	82.7	87.5	77.0	4.6	3.5	3.9

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	1.30	1.5	3.20	2.15	1.34	0.54

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.

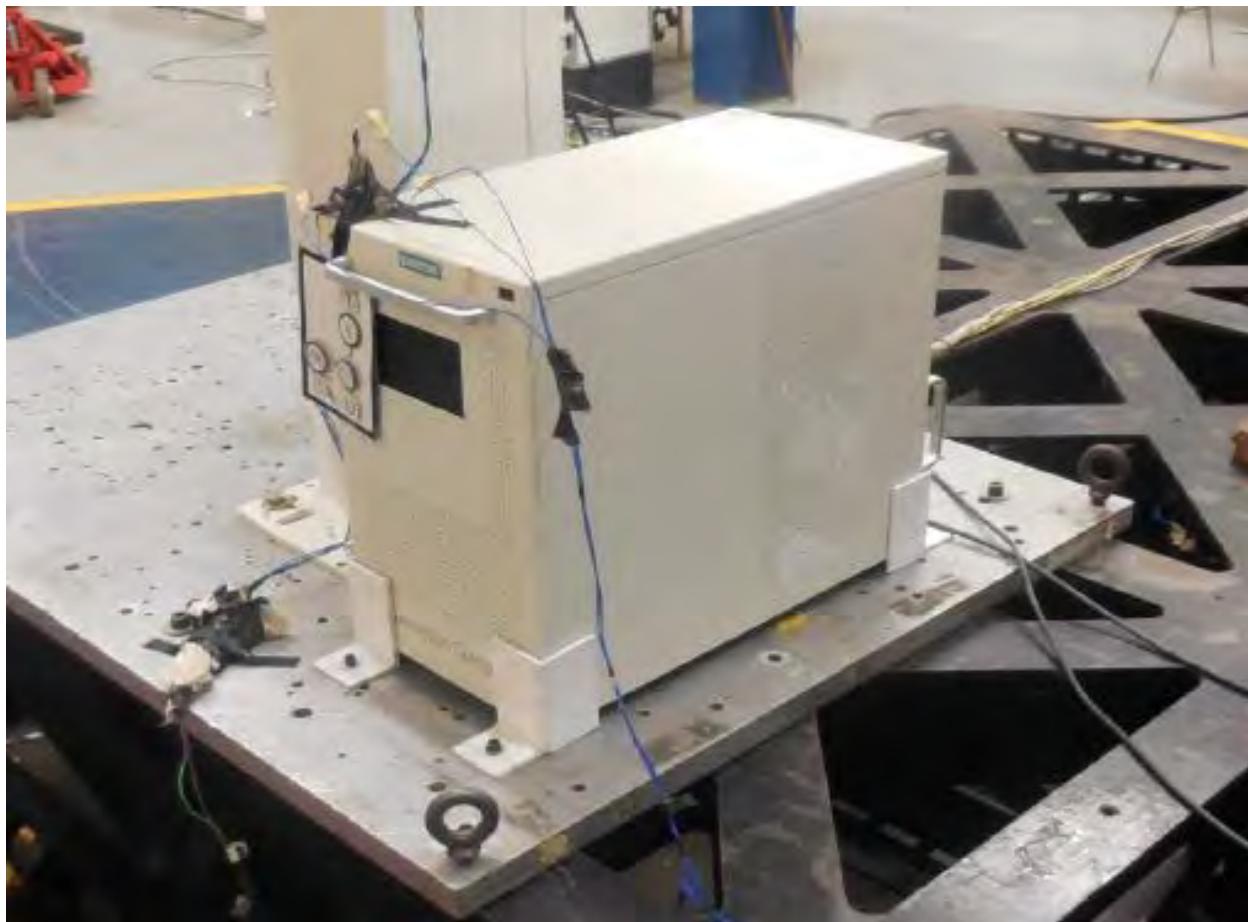
UUT_z-2**UNIT UNDER TEST (UUT)
SUMMARY SHEET****Mounting Details:** Rigid floor mounted with 4 - 5/8" grade 8 bolts.**Manufacturer:** Siemens Healthcare GmbH**Test Location:** Environmental Testing Laboratory**Component:** Tilting Bucky Wall Stand**Test Date:** July 9-12, 2014**Model Number:** 10681704**Report Number:** SQ35-1415-02 Rev. 4**UUT Function:** Radiographic wall stand for X-ray exposures**UUT Description:** Component of the Luminos Agile Max "Seismic Edition" system with Pixium 3543 Ezh detector (10762402)**UUT PROPERTIES**

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
643	30.0	28.1	82.9	11.7	9.1	9.1

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	1.30	1.5	3.20	2.15	1.34	0.54

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:** Rigid floor mounted with 4 - 3/8" grade 8 bolts.**Manufacturer:** Siemens Healthcare GmbH**Test Location:** Environmental Testing Laboratory**Component:** Fluorospot Compact (FLC)**Test Date:** July 9-12, 2014**Model Number:** 10762482**Report Number:** SQ35-1415-02 Rev. 4**UUT Function:** Digital imaging solution for fluoroscopy and radiography**UUT Description:** Component of the Luminos Agile Max "Seismic Edition" system**UUT PROPERTIES**

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
86	13.4	26.0	21.7	>33	>33	>33

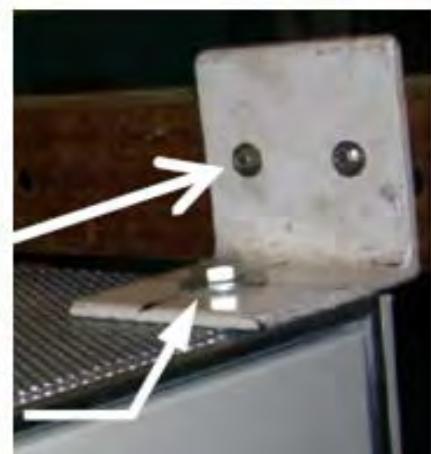
SEISMIC TEST PARAMETERS - CBC 2025 / ICC-ES AC 156-24

	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	1.30	1.5	3.20	2.15	1.34	0.54

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-5UNIT UNDER TEST (UUT)
SUMMARY SHEET

Mounting Details: Rigid wall mounted at top back side of unit with 4 - 1/4" grade 8 bolts and rigid floor mounted with 2 - 3/8" grade 8 bolts. Wall mount brackets constructed of 4" long L4x2.5x0.25 angles that bolt thru the short leg to the UUT with a single 1/2" grade 8 bolt.



Manufacturer: Siemens Healthcare GmbH

Test Location: Environmental Testing Laboratory

Component: Polydoros F80 Generator Cabinet

Test Date: April 15-17, 2010

Model Number: 10681704 / 7738680

Report Number: SSC10-1010-2 Rev. 2

UUT Function: Generator for radiography and fluoroscopy systems

UUT Description: Component of the Luminos dRF System

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
826	31.5	17.3	86.5	10.1	11.8	31.0

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

	S _{DS} (g)	z / h	H _f	R _p	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.30	1.5	3.20	2.15	1.34	0.54

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-7UNIT UNDER TEST (UUT)
SUMMARY SHEET

Mounting Details: Rigid wall mounted with 4 - #12 sheet metal screws and washers.



Manufacturer: Siemens Healthcare GmbH	Test Location: Environmental Testing Laboratory
Component: SCALANCE W700 WiFi Access Point	Test Date: July 9-12, 2014
Model Number: 10860657	Report Number: SQ35-1415-02 Rev. 4

UUT Function: Wireless waypoint for system

UUT Description: Component of the Luminos Agile Max "Seismic Edition" system

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
5.5	7.9	3.1	6.2	N/A	N/A	N/A

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

	S _{DS} (g)	z / h	H _f	R _p	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
	2.00	1.0	3.5	1.30	1.5	3.20	2.15	1.34	0.54

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.