APPLICATION FOR HCAI SPECIAL SEISMIC CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY

APPLICATION #: OSP-0664

HCAI Special Seismic Certification Preapproval (OSP)

Type: ☐ New ☒ Renewal

Manufacturer Information

Manufacturer: Siemens Healthcare GmbH, Diagnostic Imaging, Computed Tomography

Manufacturer's Technical Representative: Don Medlar

Mailing Address: Siemensstr. 3, Forchheim, Fo 91301

Telephone: (49919) 118-6521 Email: don.medlar@siemens-healthineers.com

Product Information

Product Name: SOMATOM CT Systems

Product Model Number(s): See attachment

Product Category: CT Systems

Product Sub-Category: NA

General Description: Multiple component systems for producing Computed Tomography (CT) medical images for a wide variety of medical diagnostic results.

Mounting Description: Base Mounted Rigid -

Tested Seismic Enhancements: None

Applicant Information

Applicant Company Name: WE Gundy & Associates, Inc

Contact Person: Travis Soppe

Mailing Address: PO Box 9121, Boise, ID 83707

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

Title: President

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: SUZHOU ELECTRICAL APPARATUS SCIENCE RESEARCH INSTITUTE CO., LTD. (EETI)

Contact Person: Tangfu Ji

Mailing Address: No. 5, Yuexi Qianzhu Road, Wuzhong District, Suzhou Jiangsu 215104

Telephone: (5126) 955-2195 Email: eeti-kz@eeti.cn

Company Name: IABG TEST LABORATORY

Contact Person: Steffen Roedling

Mailing Address: Einsteinstrasse 20, Ottobrunn Bavaria 85521

Telephone: (49896) 088-2052 Email: roedling@iabg.de

Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = See attachments

S_{DS} (Design spectral response acceleration at short period, g) = 2.0 at z/h = 1 and 2.5 at z/h = 0

a_p (Amplification factor) = See attachments

R_p (Response modification factor) = See attachments

Ω_0 (System overstrength factor) = See Attachment

I_p (Importance factor) = 1.5

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

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

HCAI Approval (For Office Use Only) - Approval Expires on 09/24/2030

Date: 9/24/2024

Name: Mohammad Karim Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to: S_{DS} (g) = 2.0 z/h = 1

Condition of Approval (if applicable):

TABLE 1

SIEMENS HEALTHCARE GmbH
SPECIAL SEISMIC CERTIFICATION
CERTIFIED SYSTEM AND COMPONENTS

WEGAI
W.E. GUNDY & ASSOCIATES, INC.
STRUCTURAL & EARTHQUAKE ENGINEERING

Manufacturer: Siemens Healthcare GmbH

System: SOMATOM CT Systems

System Component[1]	Siemens Part Number	Dimensions (in)			Weight (lb)	Mounting	UUT[2]
		Width	Depth	Height			
Gantries							
SOMATOM go.Now	11061618	81.3	32.8	69.4	2415	floor	UUT_w-1
SOMATOM go.Now	11061618	81.3	32.8	69.4	2469	floor	interpolated
SOMATOM go.Now	11061610	81.3	32.8	69.4	2469	floor	interpolated
SOMATOM go.Up	11061620	87.1	32.8	73.1	2790	floor	UUT_w-2
SOMATOM go.Up	11061620	86.7	32.8	73.1	2818	floor	interpolated
SOMATOM go.Up	11061628	86.7	32.8	73.1	2818	floor	UUT_v-2
SOMATOM.go.All	11061630	86.7	32.8	73.1	2835	floor	interpolated
SOMATOM.go.All	11061638	86.7	32.8	73.1	2835	floor	interpolated
SOMATOM.go.Top	11061648	86.7	32.8	73.1	2855	floor	interpolated
SOMATOM.go.Top	11061640	87.1	32.8	73.1	3014	floor	UUT_y-1
SOMATOM.go.Top	11061640	86.7	32.8	73.1	2855	floor	interpolated
SOMATOM go.Sim	11061660	94.4	33.5	76.9	3746	floor	interpolated
SOMATOM go.Sim	11061668	94.4	33.5	76.9	3746	floor	interpolated
SOMATOM go.Sim w/ RTP	11061660	94.4	33.5	82.4	3746	floor	interpolated
SOMATOM go.Sim w/ RTP	11061668	94.4	33.5	82.4	3746	floor	interpolated
SOMATOM go.Open Pro	11061678	94.4	33.5	76.9	3765	floor	interpolated
SOMATOM go.Open Pro	11061670	94.3	33.0	82.0	3765	floor	UUT_z-2
SOMATOM go.Open Pro	11061670	94.4	33.5	76.9	3765	floor	interpolated
SOMATOM go.Open Pro w/ RTP	11061678	94.4	33.5	82.4	3765	floor	interpolated
SOMATOM go.Open Pro w/ RTP	11061670	94.3	39.3	82.0	3910	floor	UUT_z-1
SOMATOM go.Open Pro w/ RTP	11061670	94.4	33.5	82.4	3765	floor	interpolated

[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-componenent within the tested units.

[2] The units were tested at different times and the subscripts on the UUT's reference the following lab test reports:
v - 1019-29 / w - TAF4-PB-17-229-V1 / x - TAF4-PB-17-230-V1 / y - TAB3-PB-18-035-V1 / z - TAB3-PB-19-155-V1

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

Manufacturer: Siemens Healthcare GmbH

System: SOMATOM CT Systems

System Component[1]	Siemens Part Number	Dimensions (in)			Weight (lb)	Mounting	UUT[2]
		Width	Depth	Height			
Image Reconstruction, UPS, and Inductor							
UPS-Rack	11331272	15.4	32.7	22.5	171	floor	UUT_z-6A
Image Reconstruction IRSxple	11269835	7.0	26.2	19.1	55	floor	UUT_z-6B
HP Cos Phi Inductor	11061318	11.8	7.9	15.8	44	wall	UUT_z-7A
HP Cos Phi Inductor	11061318	11.8	7.9	15.8	44	floor	UUT_z-7B
Patient Tables[3]							
PHS-Vario RT	11061333	27.6	94.8-176.7	21.8-98.4	913	floor	UUT_z-5
PHS-Vario 2	11061334	27.6	97.6-179.5	24.0-40.7	810	floor	UUT_y-2
PHS-Vario 1	11061332	25.6	97.0-163.2	21.8-38.3	740	floor	UUT_x-3
PHS-Vario RT	11061333	25.6	97.0-163.2	21.8-38.3	710	floor	UUT_x-4
PHS-Vector	11061331	25.6	97.0-157.5	32.6	670	floor	UUT_x-5

[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-componenent within the tested units.

[2] The units were tested at different times and the subscripts on the UUT's reference the following lab test reports:
v - 1019-29 / w - TAF4-PB-17-229-V1 / x - TAF4-PB-17-230-V1 / y - TAB3-PB-18-035-V1 / z - TAB3-PB-19-155-V1

[3] Patient table weights listed do not include simulated patient weight used for test. See UUT summary sheets for simulated patient weights.

SEISMIC CERTIFICATION LIMITS

System Component	Code	S_{DS} (g)	z / h	I_P	a_P	R_P	Ω_0	F_P / W_P
Gantries	CBC 2022	2.0	1.0	1.50	1.0	1.5	1.5	2.40
		2.5	0					1.13
UPS-Rack	CBC 2022	2.0	1.0	1.50	1.0	2.5	2.0	1.44
		2.5	0					1.13
Image Reconstruction IRSxple	CBC 2022	2.0	1.0	1.50	1.0	2.5	2.0	1.44
		2.5	0					1.13
HP Cos Phi Inductor	CBC 2022	2.0	1.0	1.50	1.0	2.5	2.0	1.44
		2.5	0					1.13
Patient Tables	CBC 2022	2.0	1.0	1.50	1.0	1.5	1.5	2.40
		2.5	0					1.13

UUT_z-1	**UNIT UNDER TEST (UUT) SUMMARY SHEET**	WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING

Mounting Details: Rigid floor mounted with (5) 5/8" grade 8 bolts

Manufacturer: Siemens Healthcare GmbH	**Test Location:** IABG mbH, Germany
Component: Go.Open Pro Gantry with RTP Laser	**Test Date:** November 2019
Model Number: 11061670	**Report Number:** TAB3-PB-19-155-V1
UUT Function: Continuous rotating x-ray to generate diagnostic imaging	
UUT Description: Component of the SOMATOM CT systems	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
3,910	94.3	39.3	82.0	15.2	13.7	> 33

SEISMIC TEST PARAMETERS

Building Code / Test Criteria	S_{DS} (g)	z / h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
	2.50	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_z-2	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. Gundy & Associates, Inc. Structural & Earthquake Engineering

Mounting Details: Rigid floor mounted with (5) 5/8" grade 8 bolts

Manufacturer: Siemens Healthcare GmbH	**Test Location:** IABG mbH, Germany
Component: Go.Open Pro Gantry	**Test Date:** November 2019
Model Number: 11061670	**Report Number:** TAB3-PB-19-155-V1
UUT Function: Continuous rotating x-ray to generate diagnostic imaging	
UUT Description: Component of the SOMATOM CT systems	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
3,765	94.3	33.0	82.0	14.2	9.3	>33

SEISMIC TEST PARAMETERS

Building Code / Test Criteria	S_{DS} (g)	z / h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
	2.50	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_z-5	**UNIT UNDER TEST (UUT) SUMMARY SHEET**	WEGAI W.E. Gundy & Associates, Inc. Structural & Earthquake Engineering

Mounting Details: Rigid floor mounted with (4) 5/8" grade 8 bolts.

Manufacturer: Siemens Healthcare GmbH	**Test Location:** IABG mbH, Germany
Component: PHS Vario RT Patient Table	**Test Date:** November 2019
Model Number: 11061333	**Report Number:** TAB3-PB-19-155-V1
UUT Function: Motorized patient support	
UUT Description: Component of the SOMATOM CT systems	

UUT PROPERTIES

Weight (lb) with Patient	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
1,319	27.6	134.2	38.4	4.0	15.6	> 33

The patient table moves vertically and horizontally to accommodate different positions and procedures. The system was tested in the normal operating position, with the table top extended 39.4 inches, vertically extended 38.4 inches, and with a total simulated patient weight of 406lbs.

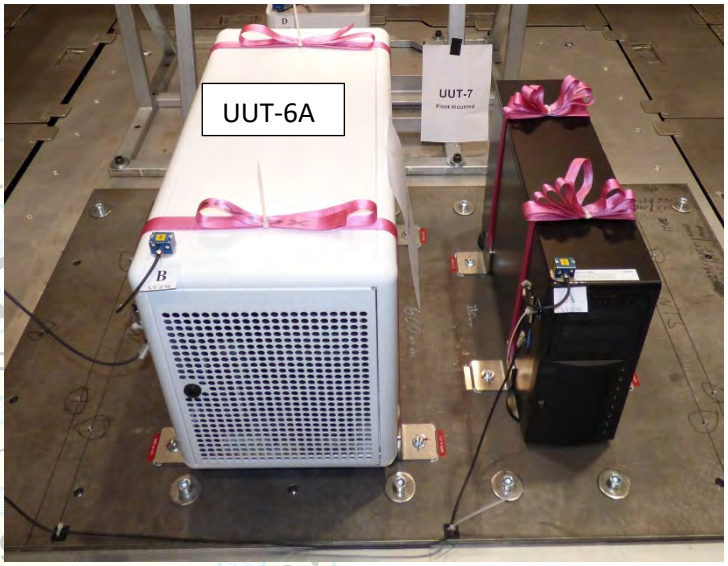
SEISMIC TEST PARAMETERS

Building Code / Test Criteria	S_{DS} (g)	z / h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
	2.50	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_z-6A	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING

Mounting Details: Rigid Floor mounting using Siemens provided seismic restraint kit SN:10432402. Seismic restraint kit includes a 1" wide hand tightened cam buckle strap (560lb WLL) looped thru angle brackets positioned on the long side of the unit. The four angle brackets are attached to the table with individual 3/8" grade 5 bolts.



Manufacturer: Siemens Healthcare GmbH	**Test Location:** IABG mbH, Germany
Component: UPS-Rack	**Test Date:** November 2019
Model Number: 11331272	**Report Number:** TAB3-PB-19-155-V1
UUT Function: Uninterruptable Power System	
UUT Description: Component of the SOMATOM CT systems.	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
171	15.4	32.7	22.5	> 33	12.7	> 33

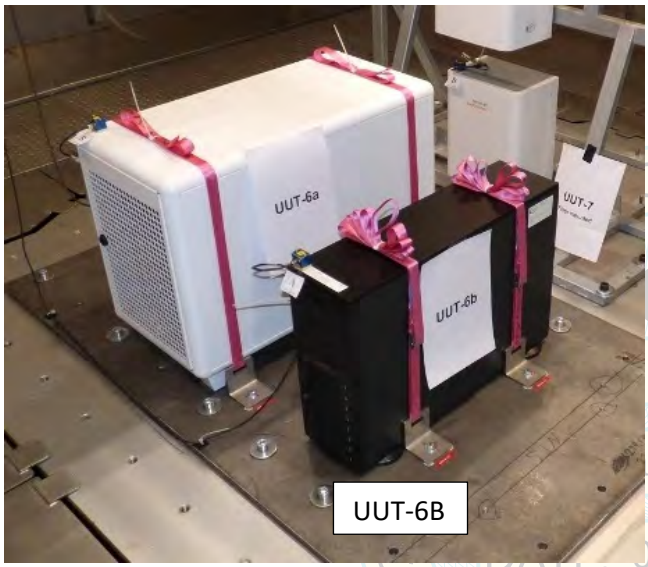
SEISMIC TEST PARAMETERS

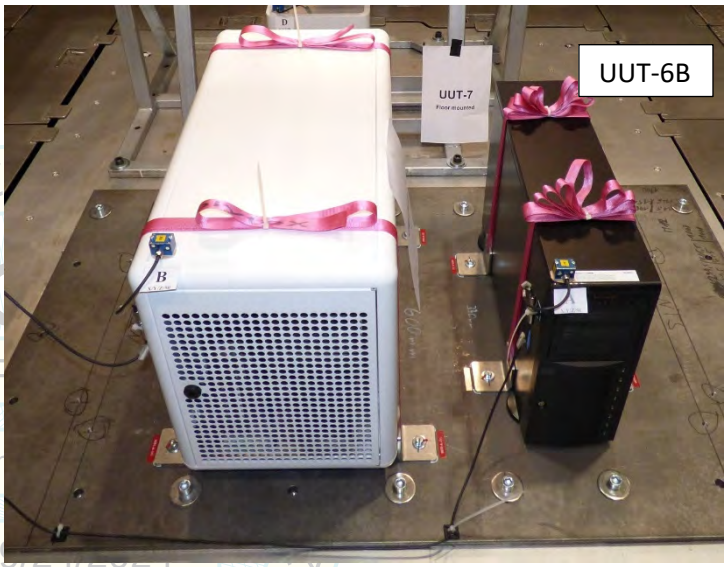
Building Code / Test Criteria	S_{DS} (g)	z / h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
	2.50	0	1.5	-	-	1.67	0.67

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_z-6B	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. Gundy & Associates, Inc. Structural & Earthquake Engineering

Mounting Details: Rigid Floor mounting using Siemens provided seismic restraint kit SN:10432402. Seismic restraint kit includes a 1" wide hand tightened cam buckle strap (560lb WLL) looped thru angle brackets positioned on the long side of the unit. The four angle brackets are attached to the table with individual 3/8" grade 5 bolts.





Manufacturer: Siemens Healthcare GmbH	**Test Location:** IABG mbH, Germany
Component: IRSxp1e – Image Reconstruction PC	**Test Date:** November 2019
Model Number: 11269835	**Report Number:** TAB3-PB-19-155-V1
UUT Function: Imaging System PC	
UUT Description: Component of the SOMATOM CT systems.	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
55	7	26.2	19.1	> 33	20.2	> 33

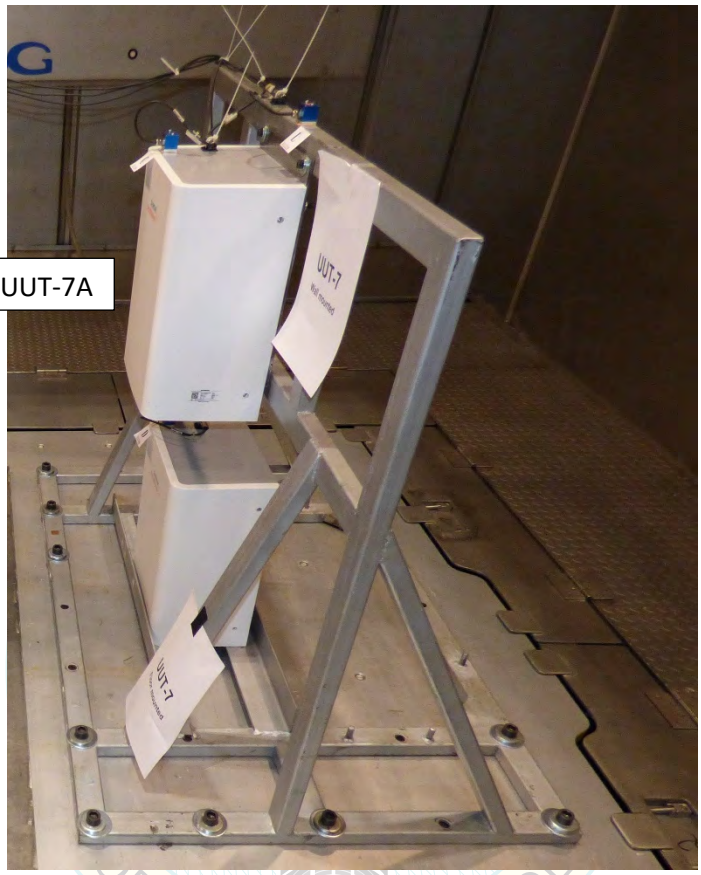
SEISMIC TEST PARAMETERS

Building Code / Test Criteria	S_{DS} (g)	z / h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
	2.50	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_z-7A	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. Gundy & Associates, Inc. Structural & Earthquake Engineering

Mounting Details: Rigid wall mounted with (4) M8 grade 5 bolts



Manufacturer: Siemens Healthcare GmbH	**Test Location:** IABG mbH, Germany
Component: HP Cos Phi Inductor	**Test Date:** November 2019
Model Number: 11061318	**Report Number:** TAB3-PB-19-155-V1
UUT Function: Cos Phi Inductor for modulation supply power for CT system.	
UUT Description: Component of the SOMATOM CT systems.	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
44	11.8	7.9	15.8	NA	NA	NA

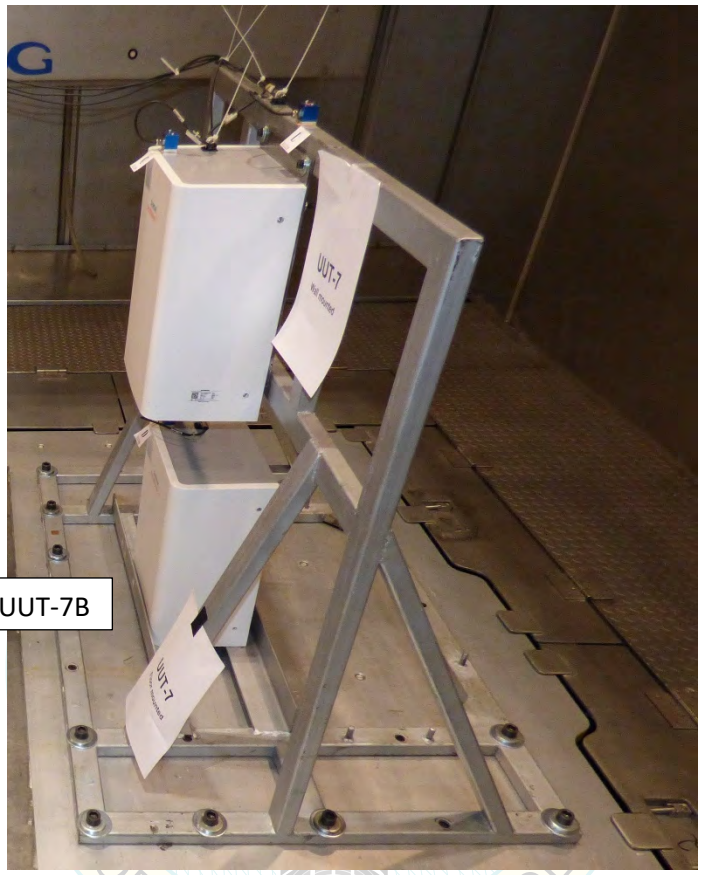
SEISMIC TEST PARAMETERS

Building Code / Test Criteria	S_{DS} (g)	z / h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
	2.50	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_z-7B	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. Gundy & Associates, Inc. Structural & Earthquake Engineering

Mounting Details: Rigid floor mounted with (4) M8 grade 5 bolts



Manufacturer: Siemens Healthcare GmbH	**Test Location:** IABG mbH, Germany
Component: HP Cos Phi Inductor	**Test Date:** November 2019
Model Number: 11061318	**Report Number:** TAB3-PB-19-155-V1
UUT Function: Cos Phi Inductor for modulation supply power for CT system.	
UUT Description: Component of the SOMATOM CT systems.	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
44	11.8	7.9	15.8	24.5	> 33	> 33

SEISMIC TEST PARAMETERS

Building Code / Test Criteria	S_{DS} (g)	z / h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
	2.50	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	WEGAI W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING

Mounting Details: Rigid floor mounted with 4 - M14 grade 12.9 bolts

Manufacturer: Siemens Healthcare GmbH	**Test Location:** IABG mbH, Germany
Component: SOMATOM go.Now Gantry	**Test Date:** August 2017
Model Number: 11061618 / 106074	**Report Number:** TAF4-PB-17-229-V1
UUT Function: Continuous rotating x-ray to generate diagnostic imaging	
UUT Description: Component of the SOMATOM CT systems	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
2,415	81.3	32.8	69.4	13.0	16.7	> 33

SEISMIC TEST PARAMETERS

Building Code / Test Criteria	S_{DS} (g)	z / h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
	2.50	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	WEGAI W.E. Gundy & Associates, Inc. Structural & Earthquake Engineering

Mounting Details: Rigid floor mounted with 4 - M14 grade 12.9 bolts

Manufacturer: Siemens Healthcare GmbH	**Test Location:** IABG mbH, Germany
Component: SOMATOM go.Up Gantry	**Test Date:** August 2017
Model Number: 11061620 / 111076	**Report Number:** TAF4-PB-17-229-V1
UUT Function: Continuous rotating x-ray to generate diagnostic imaging	
UUT Description: Component of the SOMATOM CT systems	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
2,790	87.1	32.8	73.1	8.2	8.0	7.8

SEISMIC TEST PARAMETERS

Building Code / Test Criteria	S_{DS} (g)	z / h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
	2.50	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-3	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. Gundy & Associates, Inc. Structural & Earthquake Engineering

Mounting Details: Rigid Floor mounted with 4 - M14 grade 12.9 bolts.

Manufacturer: Siemens Healthcare GmbH	**Test Location:** IABG mbH, Germany
Component: PHS Vario 1 Patient Table	**Test Date:** August 2017
Model Number: 11061332 / 10056	**Report Number:** TAF4-PB-17-230-V1
UUT Function: Motorized patient support	
UUT Description: Component of the SOMATOM CT systems	

UUT PROPERTIES

Weight (lb) with Patient	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
1,155	25.6	136.4	38.3	13.0	10.2	10.5

The patient table moves vertically and horizontally to accommodate different positions and procedures. The system was tested in the normal operating position, with the table top extended 39.4 inches, vertically extended 38.3 inches, and with a total simulated patient weight of 412lbs.

SEISMIC TEST PARAMETERS

Building Code / Test Criteria	S_{DS} (g)	z / h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
	2.50	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-4	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. Gundy & Associates, Inc. Structural & Earthquake Engineering

Mounting Details: Rigid Floor mounted with 4 - M14 grade 12.9 bolts.

Manufacturer: Siemens Healthcare GmbH	**Test Location:** IABG mbH, Germany
Component: PHS Vario RT Patient Table	**Test Date:** August 2017
Model Number: 11061333 / 10010	**Report Number:** TAF4-PB-17-230-V1
UUT Function: Motorized patient support	
UUT Description: Component of the SOMATOM CT systems	

UUT PROPERTIES

Weight (lb) with Patient	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
1,125	25.6	136.4	38.3	3.4	6.6	28.2

The patient table moves vertically and horizontally to accommodate different positions and procedures. The system was tested in the normal operating position, with the table top extended 39.4 inches, vertically extended 38.3 inches, and with a total simulated patient weight of 412lbs.

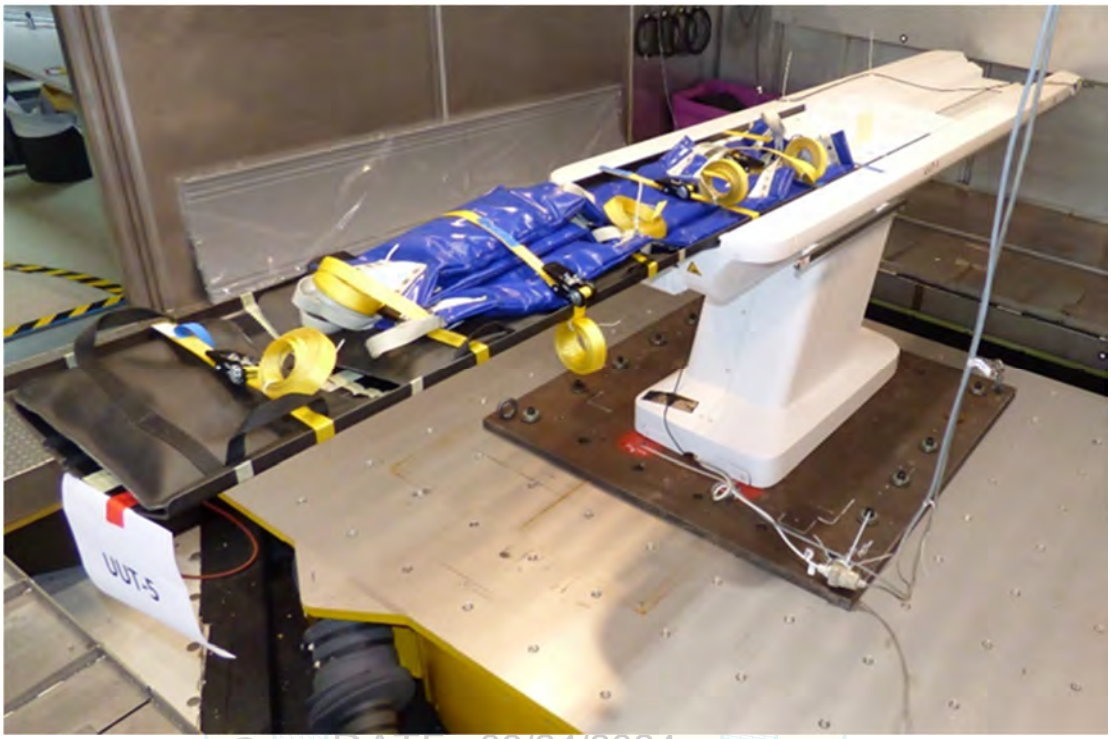
SEISMIC TEST PARAMETERS

Building Code / Test Criteria	S_{DS} (g)	z / h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
	2.50	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-5	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. Gundy & Associates, Inc. Structural & Earthquake Engineering

Mounting Details: Rigid Floor mounted with 4 - M14 grade 12.9 bolts.



Manufacturer: Siemens Healthcare GmbH	**Test Location:** IABG mbH, Germany
Component: PHS Vector Patient Table	**Test Date:** August 2017
Model Number: 11061331 / 10008	**Report Number:** TAF4-PB-17-230-V1
UUT Function: Motorized patient support	
UUT Description: Component of the SOMATOM CT systems	

UUT PROPERTIES

Weight (lb) with Patient	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
985	25.6	136.4	32.6	> 33	25.6	30.5

The patient table moves horizontally to accommodate different positions and procedures. The system was tested in the normal operating position, with the table top extended 39.4 inches and with a total simulated patient weight of 312lbs.

SEISMIC TEST PARAMETERS

Building Code / Test Criteria	S_{DS} (g)	z / h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
	2.50	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_y-1	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. Gundy & Associates, Inc. Structural & Earthquake Engineering

Mounting Details: Rigid floor mounted with 4 - 5/8" grade 8 bolts.

Manufacturer: Siemens Healthcare GmbH	**Test Location:** IABG mbH, Germany
Component: SOMATOM go.Top Gantry	**Test Date:** June 2018
Model Number: 11061640 / 119071	**Report Number:** TAB3-PB-18-035-V1
UUT Function: Continuous rotating x-ray to generate diagnostic imaging	
UUT Description: Component of the SOMATOM CT systems, supporting gantry arm for injector support	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
3,014	87.1	32.8	73.1	7.8	7.6	7.3

SEISMIC TEST PARAMETERS

Building Code / Test Criteria	S_{DS} (g)	z / h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
	2.50	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_y-2	UNIT UNDER TEST (UUT) SUMMARY SHEET	WEGAI W.E. Gundy & Associates, Inc. Structural & Earthquake Engineering

Mounting Details: Rigid Floor mounted with 4 - 5/8" grade 8 bolts.

Manufacturer: Siemens Healthcare GmbH	**Test Location:** IABG mbH, Germany
Component: PHS-Vario 2 Patient Table	**Test Date:** June 2018
Model Number: 11061334 / 1005	**Report Number:** TAB3-PB-18-035-V1
UUT Function: Motorized patient support	
UUT Description: Component of the SOMATOM CT systems	

UUT PROPERTIES

Weight (lb) with Patient	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
1,362	27.6	137.0	40.7	12.1	7.0	> 33

The patient table moves vertically and horizontally to accommodate different positions and procedures. The system was tested in the normal operating position, with the table top extended 39.4 inches, vertically extended 40.7 inches, and with a total simulated patient weight of 552lbs.

SEISMIC TEST PARAMETERS

Building Code / Test Criteria	S_{DS} (g)	z / h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
	2.50	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	WEGAI W.E. Gundy & Associates, Inc. Structural & Earthquake Engineering

Mounting Details: Rigid floor mounted with 4 - M14 grade 12.9 bolts

Manufacturer: Siemens Healthcare GmbH	**Test Location:** EETI, Shanghai China
Component: SOMATOM go.Up Gantry	**Test Date:** May 2024
Model Number: 11061628	**Report Number:** 1019-29
UUT Function: Continuous rotating x-ray to generate diagnostic imaging	
UUT Description: Component of the SOMATOM CT systems	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
2,818	86.7	32.8	73.1	7.0	14.0	> 33

SEISMIC TEST PARAMETERS

Building Code / Test Criteria	S_{DS} (g)	z / h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
	2.50	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.