



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

APPLICATION FOR OSHPD SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY

APPLICATION #: OSP – 0573 – 10

OSHPD Special Seismic Certification Preapproval (OSP)

Type: ☒ New ☐ Renewal

Manufacturer Information

Manufacturer: Philips Medical Systems DMC GmbH

Manufacturer's Technical Representative: Uwe Meyer-Douqué

Mailing Address: Roentgenstrasse 24, 22335 Hamburg

Telephone: +49 40 5078 1857

Email: Uwe.meyer-Douque@Philips.com

Product Information

Product Name: ProxiDiagnost

Product Type: Radiography and Fluoroscopy Medical Imaging System

Product Model Number: See Attachment

(List all unique product identification numbers and/or part numbers)

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

Mounting Description: Rigid floor mounted and rigid wall mounted, see attachment.

Applicant Information

Applicant Company Name: W.E. Gundy & Associates, Inc.

Contact Person: Travis Soppe, SE

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

Telephone: (208) 342-5898 Ext. 115

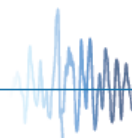
Email: tsoppe@wegai.com

I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2016.

Signature of Applicant:  Date: 07-12-2018

Title: President Company Name: W.E. Gundy & Associates, Inc.

"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"





**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION**

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

Company Name: W.E. Gundy & Associates, Inc.

Name: Travis Soppe, SE California License Number: S6115

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

Telephone: (208) 342-5898 Ext. 115 Email: tsoppe@wegai.com

Supports and Attachments Preapproval

- ☐ Supports and attachments are preapproved under OPM-
(Separate application for OSHPD Preapproval of Manufacturer's Certification (OPM) of Supports and attachments is required)
- ☒ Supports and attachments are not preapproved

Certification Method

☒ Testing in accordance with: ☒ ICC-ES AC156

☐ Other (Please Specify):

OSP-0573-10

BY: Ali Sumer

DATE: 02/22/2019

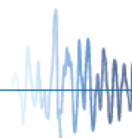
Testing Laboratory

Company Name: IABG mbH

Contact Name: Dr. Steffen Roedling

Mailing Address: Einsteinstrasse 20, Ottobrunn, Germany D-85521

Telephone: +49 (0) 89 / 6088-2052 Email: roedling@iabg.de





OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT FACILITIES DEVELOPMENT DIVISION

Seismic Parameters

Design in accordance with ASCE 7-10 Chapter 13: ☒ Yes ☐ No

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

S_{DS} (Design spectral response acceleration at short period, g) = 2.0 for $z/h = 1.0$ and 2.5 for $z/h = 0$

a_p (In-structure equipment or component amplification factor) = Multiple, see attachment

R_p (Equipment or component response modification factor) = Multiple, see attachment

Ω_0 (System overstrength factor) = Multiple, see attachment

I_p (Importance factor) = 1.5

z/h (Height factor ratio) = 1.0 at $S_{DS} = 2.0g$ and 0 at $S_{DS} = 2.5g$

Equipment or Component Natural Frequencies (Hz) = Multiple, see attachment

Overall dimensions and weight (or range thereof) = Multiple, see attachment

Equipment or Components @ grade designed in accordance with ASCE 7-10 Chapter 15: ☐ Yes ☒ No

Design Basis of Equipment or Components (V/W) = _____

S_{DS} (Design spectral response acceleration at short period, g) = _____

S_{D1} (Design spectral response acceleration at 1 second period, g) = _____

R (Response modification coefficient) = OSP-0573-10

Ω_0 (System overstrength factor) = _____

C_d (Deflection amplification factor) = BY: Ali Sumer

I_p (Importance factor) = 1.5

Height to Center of Gravity above base = DATE: 02/22/2019

Equipment or Component Natural Frequencies (Hz) = _____

Overall dimensions and weight (or range thereof) = _____

Tank(s) designed in accordance with ASME BPVC, 2015: ☐ Yes ☒ No

List of Attachments Supporting Special Seismic Certification

☒ Test Report(s) ☐ Drawings ☐ Calculations ☒ Manufacturer's Catalog

☒ Other(s) (Please Specify): Certified System Matrix, UUT Summary Sheets, Subcomponent Certification Letter

OSHPD Approval (For Office Use Only) – Approval Expires on December 31, 2022

Signature: _____

Date: February 21, 2019

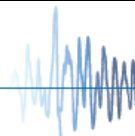
Print Name: Ali Sumer

Title: DSE

Special Seismic Certification Valid Up to : S_{DS} (g) = See Above

z/h = See Above

Condition of Approval (if applicable): _____



**PHILIPS MEDICAL SYSTEMS DMC GmbH
SPECIAL SEISMIC CERTIFICATION
CERTIFIED SYSTEM AND COMPONENTS**



Manufacturer: Philips Medical Systems DMC GmbH

System: ProxiDiagnost Radiography and Fluoroscopy System

System Component ¹⁾	Philips Part Number	Dimensions (in)			Weight (lb)	Mounting	UUT
		Width	Length	Height			
ProxiDiagnost Stand	4512 202 03561	78.7	65.0	62.6	3520 ²⁾	floor	UUT-1A/B/C ³⁾
Vertical Stand VS2	9897 010 01411	28.3	60.6	82.7	521	floor/wall	UUT-2A/B
M-Shield (AXIOMTEC)	4512 133 65532	9.1	5.9	1.8	1	floor	UUT-3
WIFI Access Point (ARUBA)	4512 201 12191	5.9	5.9	2.8	1	wall	UUT-4
WIFI Access Point (ARUBA)	4512 201 12xxx ⁴⁾	5.9	5.9	2.8	1	wall	same as UUT-4

¹⁾ All components are manufactured by Philips Medical Systems DMC GmbH unless noted in (). The part numbers listed uniquely identify the type of component, manufacturer, and material of construction for each sub-component within the tested units.

²⁾ ProxiDiagnost Stand weight listed does not include 540lb simulated patient weight included during the horizontal position seismic tests.

³⁾ The integrated patient table / detector of the ProxiDiagnost Stand system is designed to operate in both the vertical and horizontal positions. The system was tested with the patient table / detector in both the horizontal (UUT-1A/B) and vertical (UUT-1C) positions.

⁴⁾ The "xxx" designation indicates differences in color and software for the identified access point configuration.

SEISMIC CERTIFICATION LIMITS

System Component	Code	S _{DS} (g)	z / h	I _p	a _p	R _p	Ω ₀	F _p / W _p
ProxiDiagnost Stand	CBC 2016	2.0	1.0	1.50	1.0	1.5	1.5	2.40
		2.5	0					1.13
Vertical Stand VS2	CBC 2016	2.0	1.0	1.50	1.0	1.5	1.5	2.40
		2.5	0					1.13
M-Shield	CBC 2016	2.0	1.0	1.50	1.0	2.5	2.0	1.44
		2.5	0					1.13
WIFI Access Point	CBC 2016	2.0	1.0	1.50	1.0	2.5	2.0	1.44
		2.5	0					1.13

**PHILIPS MEDICAL SYSTEMS DMC GmbH
SPECIAL SEISMIC CERTIFICATION
CERTIFIED SUBCOMPONENTS**



Manufacturer: Philips Medical Systems DMC GmbH

System: ProxiDiagnost Radiography and Fluoroscopy System

Subcomponent	Philips Part Number ¹	Dimensions (in)			Weight (lb)	UUT
		Width	Length	Height		
WIFI Detectors						
Large Skyplate Pixium 3543 EZ	4598 012 42981	13.8	16.9	1.0	7	UUT-1B
	4598 012 4298x	13.8	16.9	1.0	7	interpolated
	4512 134 7214x	13.8	16.9	1.0	7	interpolated
	9897 010 0083x	13.8	16.9	1.0	7	interpolated
	9897 010 00835	13.8	16.9	1.0	7	UUT-1C
Small Skyplate Pixium 2430 EZ	4598 013 7483x	9.5	1.2	1.0	4	interpolated
	4512 134 7330x	9.5	1.2	1.0	4	interpolated
	9897 010 0084x	9.5	1.2	1.0	4	interpolated
	9897 010 00843	9.5	1.2	1.0	4	UUT-2B
¹⁾ "x" designation in Philips part number indicates differences in color, software, ect. for the identified Skyplate configuration.						
Fixed Detectors						
Fixed Detector Pixium TX4343RCE	4598 009 40141	20.0	19.4	2.0	44	UUT-1A / UUT-2A
	4598 009 4014x	20.0	19.4	2.0	44	interpolated
	4598 009 4015x	20.0	19.4	2.0	44	interpolated
Accessories						
Table Straps Adjustable	9890 010 87361	-	-	-	-	UUT-1A / UUT-1B
Table Footrest 800	4512 202 03801	-	-	-	-	UUT-1A / UUT-1B
Pair of Handgrips	9890 010 03641	-	-	-	-	UUT-1A / UUT-1B
Table Compression Belt	9804 666 22009	-	-	-	-	UUT-1A / UUT-1B

UUT-1A

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid floor mounted with 3 - M12 grade 10.9 bolts with washer



Manufacturer: Philips Medical Systems DMC GmbH

Component: ProxiDiagnost Stand - Horizontal

Model / Serial Number: 4512 202 03561

UUT Function: Motorized patient table and detector system used for X-Ray imaging.

UUT Description: ProxiDiagnost Radiography and Fluoroscopy System with patient table / detector in horizontal position. Installed Detector: Fixed Pixium TX4343 RCE - 4598 009 40141

Test Location: IABG mbH, Germany

Test Date: February 2018

UUT PROPERTIES

Weight (lb) with Patient	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
4,060	78.7"	65.0"	62.6"	5.4	22.3	3.1

The patient table in the horizontal position moves laterally both ways to accommodate different patients and procedures. The system was tested in the normal operating position with the table centered and a total simulated patient weight of 540lbs.

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 2016 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40		
	2.50	0.0	1.5			1.67	0.67

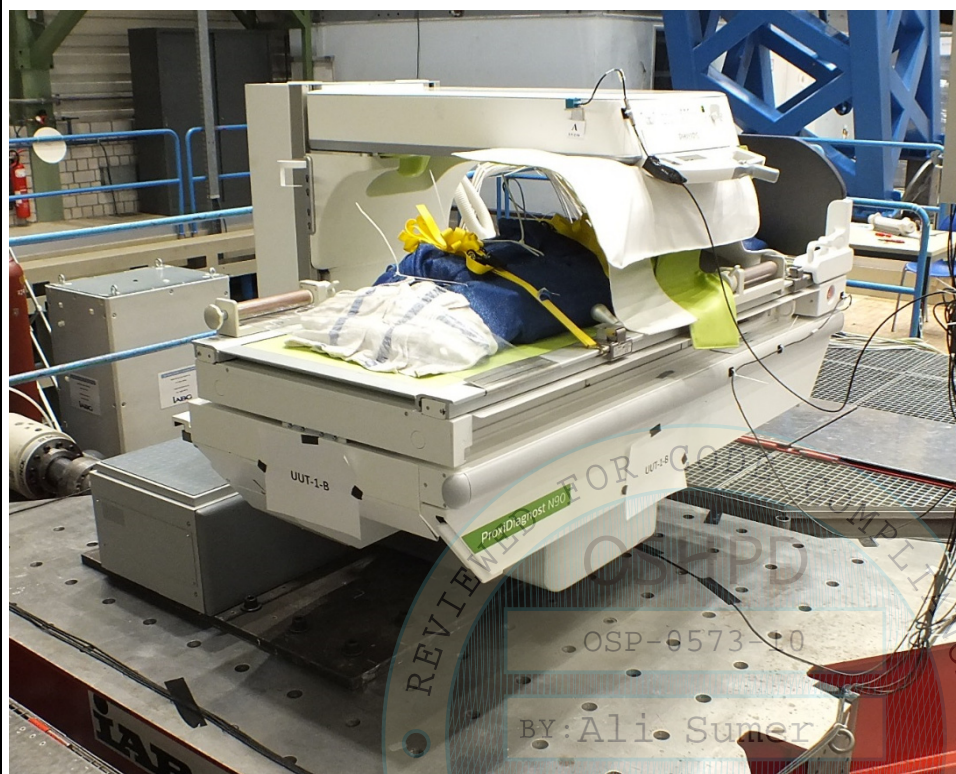
Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT-1B

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid floor mounted with 3 - M12 grade 10.9 bolts with washer



Manufacturer: Philips Medical Systems DMC GmbH

Component: ProxiDiagnost Stand - Horizontal

Model / Serial Number: 4512 202 03561

UUT Function: Motorized patient table and detector system used for X-Ray imaging.

UUT Description: ProxiDiagnost Radiography and Fluoroscopy System with patient table / detector in horizontal position. Installed Detector: WIFI Pixium 3543EZ - 4598 012 42981

Test Location: IABG mbH, Germany

Test Date: February 2018

UUT PROPERTIES

Weight (lb) with Patient	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
4,060	78.7"	65.0"	62.6"	5.4	23.3	3

The patient table in the horizontal position moves laterally both ways to accommodate different patients and procedures. The system was tested in the normal operating position with the table centered and a total simulated patient weight of 540lbs.

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 2016 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40		
	2.50	0.0	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-1C

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Rigid floor mounted with 3 - M12 grade 10.9 bolts with washer



Manufacturer: Philips Medical Systems DMC GmbH / 2019

Component: ProxiDiagnost Stand - Vertical

Model / Serial Number: 4512 202 03561

UUT Function: Motorized patient table and detector system used for X-Ray imaging.

UUT Description: ProxiDiagnost Radiography and Fluoroscopy System with patient table / detector in vertical position. Installed Detector: WIFI Pixium 3543EZ - 9897 010 00835

Test Location: IABG mbH, Germany

Test Date: February 2018

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
3,520	78.7"	65.0"	62.6"	3.1	9.3	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 2016 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40		
	2.50	0.0	1.5			1.67	0.67

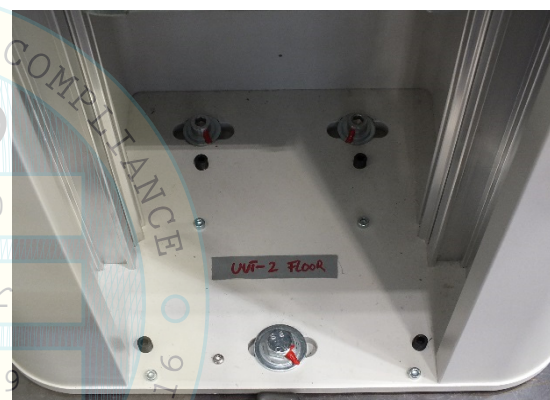
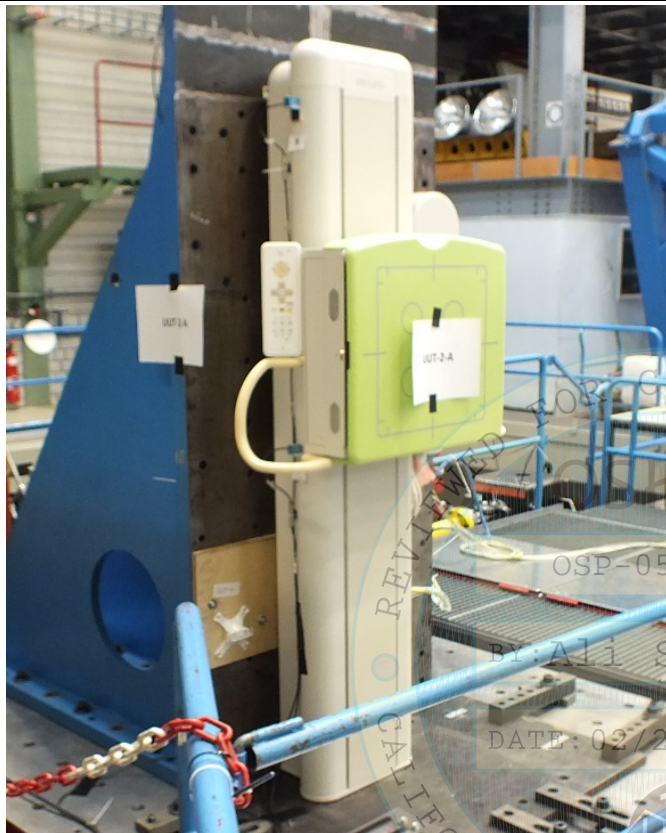
Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT-2A

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Floor/wall mount with 2 - M10 grade 8.8 and 1 - M12 grade 8.8 bolt with washers to the floor combined with 2 - M10 grade 10.9 bolts with washers to wall fixture. Additional electrical box mounted to wall fixture with 4 - M6 grade 8.8 bolts with washers.



Manufacturer: Philips Medical Systems DMC GmbH

Component: Vertical Stand VS2

Model / Serial Number: 9897 010 01411

UUT Function: Vertical X-Ray imaging system

UUT Description: Component of ProxiDiagnost Radiography and Fluoroscopy System. Installed Dectector: Fixed Pixium TX4343RCE - 4598 009 40141

Test Location: IABG mbH, Germany

Test Date: February 2018

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Fequency (Hz)		
	Width	Depth	Height	FB	SS	V
521	28.3"	60.6"	82.7"	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 2016 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40		
	2.50	0.0	1.5			1.67	0.67

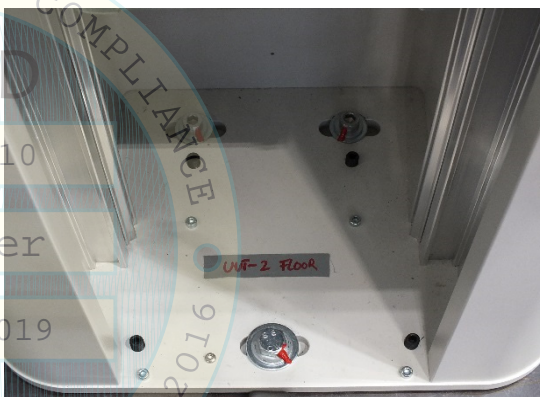
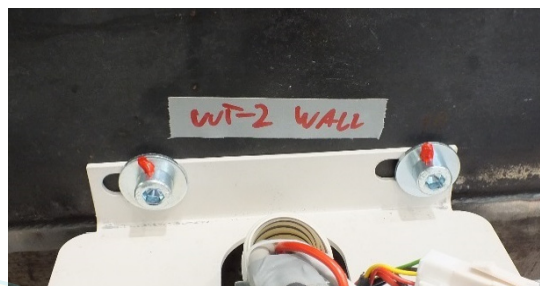
Note: The unit was full of contents during testing and remained fuctional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT-2B

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Floor/wall mount with 2 - M10 grade 8.8 and 1 - M12 grade 8.8 bolts with washers to the floor combined with 2 - M10 grade 10.9 bolts with washers to wall fixture. Additional electrical box mounted to wall fixture with 4 - M6 grade 8.8 bolts with washers.



Manufacturer: Philips Medical Systems DMC GmbH

Component: Vertical Stand VS2

Model / Serial Number: 9897 010 01411

UUT Function: Vertical X-Ray imaging system

UUT Description: Component of ProxiDiagnost Radiography and Fluoroscopy System. Installed Dectector: WIFI Pixium 2430EZ - 9897 010 00843

Test Location: IABG mbH, Germany

Test Date: February 2018

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
521	28.3"	60.6"	82.7"	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 2016 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40		
	2.50	0.0	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-3

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Floor mount with 3-9.0" long strips of VELCRO adhesive (Philips 4512-134-85811).



Manufacturer: AXIOMTEC

Component: M-Shield

Model / Serial Number: 4512 133 65532

UUT Function: Firewall hardware

UUT Description: Component of ProxiDiagnost Radiography and Fluoroscopy System

Test Location: IABG mbH, Germany

Test Date: February 2018

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
1	9.1"	5.9"	1.8"	> 33	> 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 2016 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40		
	2.50	0.0	1.5			1.67	0.67

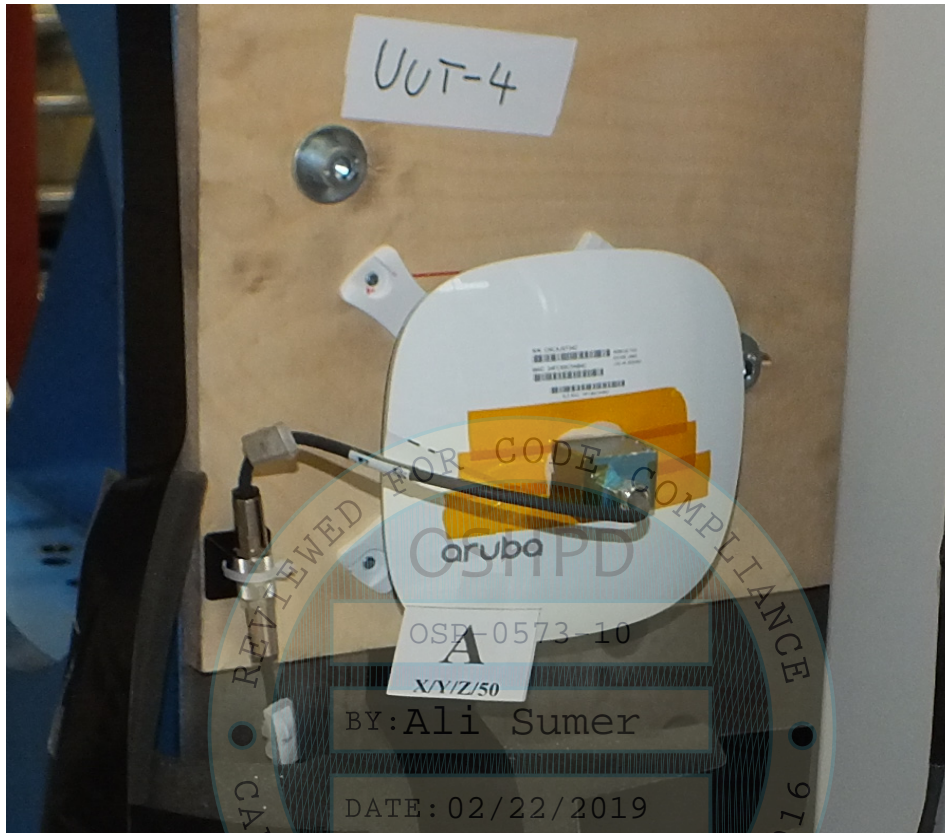
Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT-4

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Wall mount with 4 - size 3 wood screws.



Manufacturer: ARUBA

Component: WIFI Access Point

Model / Serial Number: 4512 201 12191

UUT Function: WIFI Module

UUT Description: Component of ProxiDiagnost Radiography and Fluoroscopy System

Test Location: IABG mbH, Germany

Test Date: February 2018

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
1	5.9"	5.9"	2.8"	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 2016 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40		
	2.50	0.0	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.