APPLICATION FOR OSHPD SPECIAL SEISMIC CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY

APPLICATION #: OSP-0547

OSHPD Special Seismic Certification Preapproval (OSP)

Type: ☐ New ☒ Renewal

Manufacturer Information

Manufacturer: LG Electronics USA, Inc.

Manufacturer's Technical Representative: John Cummings

Mailing Address: 4300 North Point Parkway, Suite 100, Alpharetta, GA 30022

Telephone: (678) 328-6411 Email: John.cummings@lge.com

Product Information

Product Name: Air Conditioning Units

Product Type: Air Conditioning Units - Split

Product Model Number: ARUM, ARWB, ARWN, ARUN, ARUB, ARNU, PRHR

General Description: Split system including heating and air conditioner units. Seismic enhancements made to the test units and modifications required to address the anomalies observed during the tests shall be incorporated into the production units.

Mounting Description: See Certified Product Tables, 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: Buehler Engineering, Inc

Contact Person: Gillian Montgomery

Mailing Address: 600 Q Street, Suite 200, Sacramento, CA 95811

Telephone: (916) 443-0303 Email: gmontgomery@buehlerengineering.com

Title: Senior Associate

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

Company Name: BUEHLER ENGINEERING, INC.

Name: Scott Hooker California License Number: S3937

Mailing Address: 600 Q St., Suite 200, Sacramento, CA 95811

Telephone: (916) 443-0303 Email: shooker@buehlerengineering.com

Certification Method

☐ GR-63-Core ☒ ICC-ES AC156 ☐ IEEE 344 ☐ IEEE 693 ☐ NEBS 3

☐ Other (Please Specify):

Testing Laboratory

Company Name: SEISMIC SIMULATION TEST CENTER (SESTEC) AT PUSAN NATIONAL UNIVERSITY (PNU)

Contact Person: Min-uk Gim

Mailing Address: 49 Busandaehak-ro, Mulgeum-eup, Yangsan Gyeongsangnam-do 50612

Telephone: +82-51-510-8186 Email: kkkmu7@pusan.ac.kr

Company Name: QUALTECH/CURTISS WRIGHT/TRENTEC

Contact Person: Daniel Mikow

Mailing Address: 4600 East Tech Drive, Cincinnati OH 45245

Telephone: (513) 201-2143 Email: dmikow@curtisswright.com

Seismic Parameters

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

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

a_p (Amplification factor) = 2.5

R_p (Response modification factor) = 6.0

Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

z/h (Height ratio factor) = 1

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

OSHPD Approval (For Office Use Only) - Approval Expires on 11/23/2027

Date: 11/22/2021

Name: Timothy Piland Title: Senior Structural Engineer

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

Condition of Approval (if applicable):

Table 1. Certified Product List

Group A: LG Multi V™ 5 Air Source Outdoor Unit UXA/UXB Chassis S_{DS} = 2.35g @ z/h=1.0 F_p / W_p = 1.76

Model Number	*Nominal Capacity (BTU/hr)*	*Voltage*	*Tested/ Interpolated*	Length (in)	Width (in)	Height (in)	Max Operating Weight (lbs)	Mounting
ARUM072BTE5	72000	3Φ, 208-230V	UUT-A1	36-5/8	29-29/32	66-17/32	423	Rigid Base Mount
ARUM072BTE5	72000	3Φ, 208-230V	Interpolated	36-5/8	29-29/32	66-17/32	430	Rigid Base Mount
ARUM072DTE5	72000	3Φ, 460V	Interpolated	36-5/8	29-29/32	66-17/32	436	Rigid Base Mount
ARUM096BTE5	96000	3Φ, 208-230V	Interpolated	48-13/16	29-29/32	66-17/32	519	Rigid Base Mount
ARUM096DTE5	96000	3Φ, 460V	Interpolated	48-13/16	29-29/32	66-17/32	519	Rigid Base Mount
ARUM121BTE5	119700	3Φ, 208-230V	Interpolated	48-13/16	29-29/32	66-17/32	519	Rigid Base Mount
ARUM121DTE5	119700	3Φ, 460V	Interpolated	48-13/16	29-29/32	66-17/32	519	Rigid Base Mount
ARUM144BTE5	144000	3Φ, 208-230V	Interpolated	48-13/16	29-29/32	66-17/32	642	Rigid Base Mount
ARUM144DTE5	144000	3Φ, 460V	Interpolated	48-13/16	29-29/32	66-17/32	642	Rigid Base Mount
ARUM168BTE5	168000	3Φ, 208-230V	Interpolated	48-13/16	29-29/32	66-17/32	642	Rigid Base Mount
ARUM168DTE5	168000	3Φ, 460V	Interpolated	48-13/16	29-29/32	66-17/32	642	Rigid Base Mount
ARUM192BTE5	192000	3Φ, 208-230V	Interpolated	48-13/16	29-29/32	66-17/32	659	Rigid Base Mount
ARUM192DTE5	192000	3Φ, 460V	Interpolated	48-13/16	29-29/32	66-17/32	659	Rigid Base Mount
ARUM216BTE5	216000	3Φ, 208-230V	Interpolated	48-13/16	29-29/32	66-17/32	659	Rigid Base Mount
ARUM216DTE5	216000	3Φ, 460V	Interpolated	48-13/16	29-29/32	66-17/32	659	Rigid Base Mount
ARUM241BTE5	233100	3Φ, 208-230V	Interpolated	48-13/16	29-29/32	66-17/32	659	Rigid Base Mount
ARUM241DTE5	233100	3Φ, 460V	Interpolated	48-13/16	29-29/32	66-17/32	659	Rigid Base Mount
ARUM241DTE5	233100	3Φ, 460V	UUT-A2	48-13/16	29-29/32	66-17/32	659	Rigid Base Mount
ARUM241DTE5	233100	3Φ, 460V	UUT-A3	48-13/16	29-29/32	66-17/32	659	Rigid Base Mount
LG Multi V™ 5 Outdoor System Model Numbers are noted below as components in double and triple frame systems.								
ARUM264BTE5	264000	3Φ, 208-230V	ARUM096BTE5+ARUM168BTE5					Rigid Base Mount
ARUM264DTE5	264000	3Φ, 460V	ARUM096DTE5+ARUM168DTE5					Rigid Base Mount
ARUM288BTE5	288000	3Φ, 208-230V	ARUM096BTE5+ARUM192BTE5					Rigid Base Mount
ARUM288DTE5	288000	3Φ, 460V	ARUM096DTE5+ARUM192DTE5					Rigid Base Mount
ARUM312BTE5	312000	3Φ, 208-230V	ARUM096BTE5+ARUM216BTE5					Rigid Base Mount
ARUM312DTE5	312000	3Φ, 460V	ARUM096DTE5+ARUM216DTE5					Rigid Base Mount
ARUM336BTE5	336000	3Φ, 208-230V	ARUM121BTE5+ARUM216BTE5					Rigid Base Mount
ARUM336DTE5	336000	3Φ, 460V	ARUM121DTE5+ARUM216DTE5					Rigid Base Mount
ARUM360BTE5	360000	3Φ, 208-230V	ARUM144BTE5+ARUM216BTE5					Rigid Base Mount
ARUM360DTE5	360000	3Φ, 460V	ARUM144DTE5+ARUM216DTE5					Rigid Base Mount
ARUM384BTE5	384000	3Φ, 208-230V	ARUM168BTE5+ARUM216BTE5					Rigid Base Mount
ARUM384DTE5	384000	3Φ, 460V	ARUM168DTE5+ARUM216DTE5					Rigid Base Mount
ARUM408BTE5	408000	3Φ, 208-230V	ARUM192BTE5+ARUM216BTE5					Rigid Base Mount
ARUM408DTE5	408000	3Φ, 460V	ARUM192DTE5+ARUM216DTE5					Rigid Base Mount
ARUM432BTE5	430500	3Φ, 208-230V	2 x ARUM121BTE5+ARUM192BTE5					Rigid Base Mount
ARUM432DTE5	430500	3Φ, 460V	2 x ARUM121DTE5+ARUM192DTE5					Rigid Base Mount
ARUM456BTE5	455700	208-230V	2 x ARUM121BTE5+ARUM216BTE5					Rigid Base Mount
ARUM456DTE5	455700	460V	2 x ARUM121DTE5+ARUM216DTE5					Rigid Base Mount
ARUM480BTE5	476700	208-230V	ARUM121BTE5+ARUM144BTE5+ARUM216BTE5					Rigid Base Mount
ARUM480DTE5	476700	460V	ARUM121DTE5+ARUM144DTE5+ARUM216DTE5					Rigid Base Mount
ARUM504BTE5	504000	208-230V	ARUM121BTE5+ARUM168BTE5+ARUM216BTE5					Rigid Base Mount
ARUM504DTE5	504000	460V	ARUM121DTE5+ARUM168DTE5+ARUM216DTE5					Rigid Base Mount

Piping interconnection between multiple units must be a flexible connection

Models shown in double and triple frame systems are structurally independent from each other due to required flexible connections.

See individual unit max operating weights for units listed in double and triple frame systems. Each unit in a frame system is anchored independently

Table 1. Certified Product List

Group B: LG Multi V™ IV Water Source Outdoor Unit UWC Chassis S_{DS} = 2.00g @ z/h=1.0 F_p / W_p = 1.50

Model Number	Nominal Capacity (BTU/hr)	Voltage	Tested/ Interpolated	Length (in)	Width (in)	Height (in)	Max Operating Weight (lbs)	Mounting
ARWB072BAS4	72000	3Φ, 208-230V	Extrapolated	29-3/4	19-3/4	39-1/4	295	Rigid Base Mount with or w/o rack
ARWB072DAS4	72000	3Φ, 460V	Extrapolated	29-3/4	19-3/4	39-1/4	295	
ARWB096BAS4	96000	3Φ, 208-230V	Extrapolated	29-3/4	19-3/4	39-1/4	295	
ARWB096DAS4	96000	3Φ, 460V	Extrapolated	29-3/4	19-3/4	39-1/4	295	
ARWB121BAS4	119700	3Φ, 208-230V	Extrapolated	29-3/4	19-3/4	39-1/4	295	
ARWB121DAS4	119700	3Φ, 460V	Extrapolated	29-3/4	19-3/4	39-1/4	295	
ARWB144BAS4	144000	3Φ, 208-230V	UUT-B1	29-3/4	19-3/4	39-1/4	295	Rigid Base Mount w/o rack
ARWB144BAS4	144000	3Φ, 208-230V	UUT-B1a	29-3/4	19-3/4	39-1/4	295	Rigid Base Mount with rack
ARWB144DAS4	144000	3Φ, 460V	Interpolated	29-3/4	19-3/4	39-1/4	295	Rigid Base Mount with or w/o rack
ARWB192DAS4	192000	3Φ, 460V	Interpolated	29-3/4	19-3/4	39-1/4	331	
ARWN072BAS4	72000	3Φ, 208-230V	Interpolated	29-3/4	19-3/4	39-1/4	295	
ARWN072DAS4	72000	3Φ, 460V	Interpolated	29-3/4	19-3/4	39-1/4	295	
ARWN096BAS4	96000	3Φ, 208-230V	Interpolated	29-3/4	19-3/4	39-1/4	295	
ARWN096DAS4	96000	3Φ, 460V	Interpolated	29-3/4	19-3/4	39-1/4	295	
ARWN121BAS4	119700	3Φ, 208-230V	Interpolated	29-3/4	19-3/4	39-1/4	295	
ARWN121DAS4	119700	3Φ, 460V	Interpolated	29-3/4	19-3/4	39-1/4	295	
ARWN144BAS4	144000	3Φ, 208-230V	Interpolated	29-3/4	19-3/4	39-1/4	295	
ARWN144DAS4	144000	3Φ, 460V	Interpolated	29-3/4	19-3/4	39-1/4	295	
ARWN192DAS4	192000	3Φ, 460V	UUT-B2	29-3/4	19-3/4	39-1/4	331	Rigid Base Mount w/o rack
ARWN192DAS4	192000	3Φ, 460V	UUT-B2a	29-3/4	19-3/4	39-1/4	331	Rigid Base Mount with rack
LG Multi V™ IV Water Source System Model Numbers are noted below as components in **double** and **triple frame systems**.								
ARWB192BAS4	192000	3Φ, 208-230V	ARWB121BAS4 + ARWB072BAS4					Rigid Base Mount with or w/o rack
ARWN192BAS4	192000	3Φ, 208-230V	ARWN121BAS4 + ARWN072BAS4					
ARWB240BAS4	239400	3Φ, 208-230V	ARWB121BAS4 + ARWB121BAS4					
ARWB240DAS4	239400	3Φ, 460V	ARWB144DAS4 + ARWB096DAS4					
ARWN240BAS4	239400	3Φ, 208-230V	ARWN121BAS4 + ARWN121BAS4					
ARWN240DAS4	239400	3Φ, 460V	ARWN144DAS4 + ARWN096DAS4					
ARWB288BAS4	287700	3Φ, 208-230V	2 x ARWB144BAS4					
ARWB289DAS4	287700	3Φ, 460V	2 x ARWB144DAS4					
ARWN288BAS4	287700	3Φ, 208-230V	2 x ARWN144BAS4					
ARWN289DAS4	287700	3Φ, 460V	2 x ARWN144DAS4					
ARWB336BAS4	336000	3Φ, 208-230V	ARWB096BAS4 + 2 x ARWB121BAS4					
ARWB337DAS4	336000	3Φ, 460V	ARWB144DAS4 + ARWB192DAS4					
ARWN336BAS4	336000	3Φ, 208-230V	ARWN096BAS4 + 2 x ARWN121BAS4					
ARWN337DAS4	336000	3Φ, 460V	ARWN144DAS4 + ARWN192DAS4					
ARWB432BAS4	430500	3Φ, 208-230V	3 x ARWB144BAS4					
ARWB432DAS4	430500	3Φ, 460V	3 x ARWB144DAS4					
ARWN432BAS4	430500	3Φ, 208-230V	3 x ARWN144BAS4					
ARWN432DAS4	430500	3Φ, 460V	3 x ARWN144DAS4					
ARWB480DAS4	472500	3Φ, 460V	2 x ARWB144DAS4 + ARWB192DAS4					
ARWN480DAS4	472500	3Φ, 460V	2 x ARWN144DAS4 + ARWN192DAS4					
ARWB576DAS4	571200	3Φ, 460V	3 x ARWB192DAS4					
ARWN576DAS4	571200	3Φ, 460V	3 x ARWN192DAS4					

Piping interconnection between multiple units must be a flexible connection.
Extrapolated unit are identical to the tested unit with the exception of software, indicated by separate part number of control board. Refer to Table 2.
Models shown in double and triple frame systems are structurally independent from each other due to required flexible connections.
See individual unit max operating weights for units listed in double and triple frame systems. Each unit in a frame system is anchored independently

Group C: LG Multi V Water Mini Water Source Outdoor Unit S_{DS} = 2.00g @ z/h=1.0 F_p / W_p = 1.50

Model Number	Nominal Capacity (BTU/hr)	Voltage	Tested/ Interpolated	Length (in)	Width (in)	Height (in)	Max Operating Weight (lbs)	Mounting
ARWN053GA2	52900	1Φ, 208-230V	UUT-C1	20-5/8	13-1/8	42-1/2	168	Rigid Base Mount

Group D: LG Multi V S Air Source Outdoor Unit (208-230V) S_{DS} = 2.00g @ z/h=1.0 F_p / W_p = 1.50

Model Number	Nominal Capacity (BTU/hr)	Tested/ Interpolated	Length (in)	Width (in)	Height (in)	Max Operating Weight (lbs)	Mounting
ARUN024GSS4	24000	UUT-D1	37-13/32	13	32-27/32	159	Rigid Base Mount
ARUN038GSS4	38000	UUT-D2	37-13/32	13	54-11/32	211	Rigid Base Mount
ARUN048GSS4	48000	Interpolated	37-13/32	13	54-11/32	211	Rigid Base Mount
ARUN053GSS4	53000	Interpolated	37-13/32	13	54-11/32	211	Rigid Base Mount
ARUN060GSS4	60000	Interpolated	37-13/32	13	54-11/32	260	Rigid Base Mount
ARUM036GSS5	38000	Interpolated	37-13/32	13	54-11/32	260	Rigid Base Mount
ARUM048GSS5	48000	UUT-D3	37-13/32	13	54-11/32	260	Rigid Base Mount
ARUB060GSS4	60000	UUT-D4	37-13/32	13	54-11/32	265	Rigid Base Mount

Table 1. Certified Product List

Group E: LG Multi V™ Indoor Ceiling Concealed Ducted - Mid/High Static S_{DS} = 2.00g @ z/h=1.0 F_p / W_p = 1.50

Model Number	*Nominal Capacity (BTU/hr)*	*Tested/ Interpolated*	Length (in)	Width (in)	Height (in)	Max Operating Weight (lbs)	Mounting
ARNU073M1A4	7500	UUT-E1	35-7/16	27-9/16	10-5/8	55	Suspended
ARNU073M1A4	7500	Interpolated	35-7/16	27-9/16	10-5/8	56	Suspended
ARNU093M1A4	9600	Interpolated	35-7/16	27-9/16	10-5/8	56	Suspended
ARNU123M1A4	12300	Interpolated	35-7/16	27-9/16	10-5/8	56	Suspended
ARNU153M1A4	15400	Interpolated	35-7/16	27-9/16	10-5/8	56	Suspended
ARNU183M1A4	19100	Interpolated	35-7/16	27-9/16	10-5/8	56	Suspended
ARNU243M1A4	24200	Interpolated	35-7/16	27-9/16	10-5/8	56	Suspended
ARNU243M1A4	24200	UUT-E2	35-7/16	27-9/16	10-5/8	62	Suspended
ARNU183BHA4	19100	Interpolated	34-3/4	17-3/4	10-1/4	59	Suspended
ARNU243BHA4	24200	Interpolated	34-3/4	17-3/4	10-1/4	59	Suspended
ARNU243BHA4	24200	UUT-E3	34-3/4	17-3/4	10-1/4	59	Suspended
ARNU073BGA4	7500	UUT-E4	46-17/32	17-23/32	11-23/32	84	Suspended
ARNU073BGA4	7500	Interpolated	46-17/32	17-23/32	11-23/32	84	Suspended
ARNU093BGA4	9600	Interpolated	46-17/32	17-23/32	11-23/32	84	Suspended
ARNU123BGA4	12300	Interpolated	46-17/32	17-23/32	11-23/32	84	Suspended
ARNU153BGA4	15400	Interpolated	46-17/32	17-23/32	11-23/32	84	Suspended
ARNU183BGA4	19100	Interpolated	46-17/32	17-23/32	11-23/32	84	Suspended
ARNU243BGA4	24200	Interpolated	46-17/32	17-23/32	11-23/32	84	Suspended
ARNU283BGA4	28000	Interpolated	46-17/32	17-23/32	11-23/32	84	Suspended
ARNU363BGA4	36200	Interpolated	46-17/32	17-23/32	11-23/32	84	Suspended
ARNU423BGA4	42000	Interpolated	46-17/32	14-23/32	11-23/32	84	Suspended
ARNU073M2A4	7500	UUT-E5	49-9/32	27-1/4	10-11/16	84	Suspended
ARNU073M2A4	7500	Interpolated	49-9/32	27-1/4	10-11/16	85	Suspended
ARNU093M2A4	9600	Interpolated	49-9/32	27-1/4	10-11/16	85	Suspended
ARNU123M2A4	12300	Interpolated	49-9/32	27-1/4	10-11/16	85	Suspended
ARNU153M2A4	15400	Interpolated	49-9/32	27-1/4	10-11/16	85	Suspended
ARNU183M2A4	19100	Interpolated	49-9/32	27-1/4	10-11/16	85	Suspended
ARNU243M2A4	24200	Interpolated	49-9/32	27-1/4	10-11/16	85	Suspended
ARNU283M2A4	28000	Interpolated	49-9/32	27-1/4	10-11/16	85	Suspended
ARNU363M2A4	36200	Interpolated	49-9/32	27-1/4	10-11/16	85	Suspended
ARNU423M2A4	42000	Interpolated	49-9/32	27-1/4	10-11/16	85	Suspended
ARNU283M3A4	28000	Interpolated	49-9/32	27-1/4	14-3/16	97	Suspended
ARNU363M3A4	36200	Interpolated	49-9/32	27-1/4	14-3/16	97	Suspended
ARNU423M3A4	42000	Interpolated	49-9/32	27-1/4	14-3/16	97	Suspended
ARNU483M3A4	48100	Interpolated	49-9/32	27-1/4	14-3/16	97	Suspended
ARNU543M3A4	54000	Interpolated	49-9/32	27-1/4	14-3/16	97	Suspended
ARNU543M3A4	54000	UUT-E6	49-9/32	27-1/4	14-3/16	97	Suspended
ARNU363BRA4	36200	Interpolated	46-7/16	23-7/32	14-31/32	117	Suspended
ARNU423BRA4	42000	Interpolated	48-7/16	23-7/32	14-31/32	117	Suspended
ARNU483BRA4	48100	Interpolated	48-7/16	23-7/32	14-31/32	117	Suspended
ARNU543BRA4	54000	Interpolated	48-7/16	23-7/32	14-31/32	117	Suspended
ARNU543BRA4	54000	UUT-E7	48-7/16	23-7/32	14-31/32	117	Suspended
ARNU483B8Z4	48100	UUT-E8	61-1/2	27-1/8	18-1/8	161	Suspended
ARNU483B8Z4	48100	Interpolated	61-1/2	27-1/8	18-1/8	161	Suspended
ARNU763B8Z4	76400	Interpolated	61-1/2	27-1/8	18-1/8	161	Suspended
ARNU963B8Z4	95900	Interpolated	61-1/2	27-1/8	18-1/8	161	Suspended
ARNU963B8Z4	95900	UUT-E9	61-1/2	27-1/8	18-1/8	161	Suspended
ARNU763B8A4	76400	Interpolated	61-1/2	27-3/32	18-1/8	192	Suspended
ARNU963B8A4	95900	Interpolated	61-1/2	27-3/32	18-1/8	192	Suspended
ARNU963B8A4	95900	UUT-E10	61-1/2	27-3/32	18-1/8	185	Suspended
ARNU963B8A4	95900	UUT-E11	61-1/2	27-3/32	18-1/8	192	Suspended

Mounting brackets to be supplemented with 3/8" inside diameter, 7/8" outside diameter and 14 gauge min washer and nut top and bottom for all units within product line to resolve test anomalies. Refer to UUT-E11 mounting details.

Group F: LG Multi V™ Ceiling Cassette 1-Way (208-230V) S_{DS} = 2.50g @ z/h=1.0 F_p / W_p = 1.88

Model Number	*Nominal Capacity (BTU/hr)*	*Tested/ Interpolated*	Length (in)	Width (in)	Height (in)	Max Operating Weight (lbs)	Mounting
ARNU073TUC4	8500	Extrapolated	33-27/32	17-23/32	5-3/16	30	Suspended
ARNU093TUC4	10900	Extrapolated	33-27/32	17-23/32	5-3/16	30	Suspended
ARNU123TUC4	13600	UUT-F1	33-27/32	17-23/32	5-3/16	30	Suspended
ARNU183TTC4	19100	Extrapolated	46-15/32	17-23/32	5-3/16	34	Suspended
ARNU243TTC4	24200	UUT-F2	46-15/32	17-23/32	5-3/16	34	Suspended

Extrapolated unit are identical to the tested unit with the exception of software, indicated by separate part number of control board. Refer to Table 2.

Table 1. Certified Product List

Group G: LG Multi V™ Ceiling Cassette 4-Way (208-230V) S_{DS} = 2.00g @ z/h=1.0 F_p / W_p = 1.50

Model Number	*Nominal Capacity (BTU/hr)*	*Tested/ Interpolated*	Length (in)	Width (in)	Height (in)	Max Operating Weight (lbs)	Mounting
ARNU053TRC4	5500	UUT-G1	22-7/16	22-7/16	8-7/16	31	Suspended
ARNU073TRC4	7500	Interpolated	22-7/16	22-7/16	8-7/16	31	Suspended
ARNU093TRC4	9600	Interpolated	22-7/16	22-7/16	8-7/16	31	Suspended
ARNU123TRC4	12300	Interpolated	22-7/16	22-7/16	8-7/16	31	Suspended
ARNU153TQC4	15400	Interpolated	22-7/16	22-7/16	10-3/32	34	Suspended
ARNU183TQC4	19100	UUT-G2	22-7/16	22-7/16	10-3/32	34	Suspended
ARNU073TNA4	7500	Interpolated	33-1/16	33-1/16	8-1/32	46	Suspended
ARNU093TNA4	9600	Interpolated	33-1/16	33-1/16	8-1/32	46	Suspended
ARNU123TNA4	12300	Interpolated	33-1/16	33-1/16	8-1/32	46	Suspended
ARNU153TNA4	15400	Interpolated	33-1/16	33-1/16	8-1/32	46	Suspended
ARNU183TNA4	19100	Interpolated	33-1/16	33-1/16	8-1/32	46	Suspended
ARNU243TNA4	24200	Interpolated	33-1/16	33-1/16	8-1/32	46	Suspended
ARNU243TPC4	24200	Interpolated	33-1/16	33-1/16	8-1/32	46	Suspended
ARNU283TPC4	28000	Interpolated	33-1/16	33-1/16	8-1/32	46	Suspended
ARNU243TMA4	24200	Interpolated	33-1/16	33-1/16	9-11/16	52	Suspended
ARNU283TMA4	28000	Interpolated	33-1/16	33-1/16	9-11/16	52	Suspended
ARNU363TMA4	36200	Interpolated	33-1/16	33-1/16	9-11/16	52	Suspended
ARNU363TNC4	36200	UUT-G3	33-1/16	33-1/16	9-11/16	54	Suspended
ARNU423TMC4	42000	Interpolated	33-1/16	33-1/16	11-11/32	56	Suspended
ARNU483TMC4	48100	UUT-G4	33-1/16	33-1/16	11-11/32	56	Suspended
ARNU053TAA4	5500	Interpolated	33-1/16	33-1/16	11-11/32	77	Suspended
ARNU073TAA4	7500	UUT-G5	33-1/16	33-1/16	11-11/32	77	Suspended
ARNU093TAA4	9600	Interpolated	33-1/16	33-1/16	11-11/32	77	Suspended
ARNU123TAA4	12300	Interpolated	33-1/16	33-1/16	11-11/32	77	Suspended
ARNU153TAA4	15400	Interpolated	33-1/16	33-1/16	11-11/32	77	Suspended
ARNU183TAA4	19100	Interpolated	33-1/16	33-1/16	11-11/32	77	Suspended
ARNU243TAA4	24200	Interpolated	33-1/16	33-1/16	11-11/32	77	Suspended
ARNU283TAA4	28000	Interpolated	33-1/16	33-1/16	11-11/32	77	Suspended
ARNU363TAA4	36200	Interpolated	33-1/16	33-1/16	11-11/32	77	Suspended
ARNU423TAA4	42000	Interpolated	33-1/16	33-1/16	11-11/32	77	Suspended
ARNU483TAA4	48100	UUT-G6	33-1/16	33-1/16	11-11/32	77	Suspended

Provide (2) #10-32 machine screws with flat and lock washers and nuts each mounting ear for all units within product line, refer to UUT-G4
Maximum 3" gap of 3" from support bracket to rod stiffener for all units within product line, refer to UUT-G2.

Group H: LG Multi V™ Wall Mounted (208/230V) S_{DS} = 2.35g @ z/h=1.0 F_p / W_p = 1.76

Model Number	*Nominal Capacity (BTU/hr)*	*Tested/ Interpolated*	Length (in)	Width (in)	Height (in)	Max Operating Weight (lbs)	Mounting
ARNU053SJA4	5000	Extrapolated	32-3/16	7-7/16	12-7/16	22	Wall Mount
ARNU073SJA4	7500	Extrapolated	32-3/16	7-7/16	12-7/16	22	Wall Mount
ARNU093SJA4	9600	Extrapolated	32-3/16	7-7/16	12-7/16	22	Wall Mount
ARNU123SJA4	12300	Extrapolated	32-3/16	7-7/16	12-7/16	22	Wall Mount
ARNU153SJA4	15400	UUT-H1	32-3/16	7-7/16	12-7/16	22	Wall Mount
ARNU183SKA4	19100	Extrapolated	38-3/8	8-1/4	13-15/16	31	Wall Mount
ARNU243SKA4	24200	UUT-H2	38-3/8	8-1/4	13-15/16	31	Wall Mount
ARNU053SJR4	5000	UUT-H3	32-15/16	7-9/16	12-1/8	22	Wall Mount
ARNU073SJR4	7500	Interpolated	32-15/16	7-9/16	12-1/8	22	Wall Mount
ARNU093SJR4	9600	Interpolated	32-15/16	7-9/16	12-1/8	22	Wall Mount
ARNU123SJR4	12300	Interpolated	32-15/16	7-9/16	12-1/8	22	Wall Mount
ARNU153SJR4	15400	Interpolated	32-15/16	7-9/16	12-1/8	22	Wall Mount
ARNU183SKR4	19100	Interpolated	39-5/16	8-3/8	13-9/16	31	Wall Mount
ARNU243SKR4	24200	UUT-H4	39-5/16	8-3/8	13-9/16	31	Wall Mount

Extrapolated unit are identical to the tested unit with the exception of software, indicated by separate part number of control board. Refer to Table 2.

Group J: LG Multi V™ Heat Recovery Units (208/230V) S_{DS} = 2.50g @ z/h=1.0 F_p / W_p = 1.88

Model Number	*Nominal Capacity (BTU/hr)*	*Tested/ Interpolated*	Length (in)	Width (in)	Height (in)	Max Operating Weight (lbs)	Mounting
PRHR023A	n/a	UUT-J1	19-1/8	18-15/16	8-5/8	35	Suspended
PRHR033A	n/a	Interpolated	19-1/8	18-15/16	8-5/8	37	Suspended
PRHR043A	n/a	Interpolated	19-1/8	18-15/16	8-5/8	40	Suspended
PRHR063A	n/a	Interpolated	31-1/4	18-15/16	8-5/8	60	Suspended
PRHR083A	n/a	UUT-J2	31-1/4	18-15/16	8-5/8	68	Suspended

Table 2. Certified Sub-Component List

Group A: LG Multi V™ 5 Air Source Outdoor Unit UXA/UXB Chassis S_{DS} = 2.35g @ z/h=1.0 F_p / W_p = 1.76

Rigid Base Mount

Part Number	*Weight*	*Manufacturer*	*Material*	*Tested / Interpolated*
Heat Exchanger				
ACG74185502	57.3 lb	LTS	Aluminum Fin, Copper Tube	Extrapolated
ACG74185504	61.7 lb	LTS	Aluminum Fin, Copper Tube	UUT-A1
ACG74185506	88.2 lb	LTS	Aluminum Fin, Copper Tube	UUT-A2, UUT-A3
Inverter Printed Circuit Board				
EBR83035702	< 5 lb	Joeng Min Electronics	Hard Plastic	UUT-A1
EBR80908606	< 5 lb	Joeng Min Electronics	Hard Plastic	Interpolated
EBR80908603	< 5 lb	Joeng Min Electronics	Hard Plastic	Interpolated
EBR80928303	< 5 lb	Joeng Min Electronics	Hard Plastic	UUT-A2
EBR82376301	< 5 lb	Joeng Min Electronics	Hard Plastic	Interpolated
EBR83035701	< 5 lb	Joeng Min Electronics	Hard Plastic	Interpolated
EBR88279003	< 5 lb	Joeng Min Electronics	Hard Plastic	UUT-A3
Fan Printed Circuit Board				
EBR79669810	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	UUT-A1
EBR79669806	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	Interpolated
EBR79669809	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	Interpolated
EBR79669811	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	UUT-A2
EBR88279204	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	UUT-A3
Noise Filter Circuit Board				
EAM63430903	2.8 lb	Sang Shin Electronics Co., Ltd.	Hard Plastic	UUT-A1
EAM63430904	2.8 lb	Sang Shin Electronics Co., Ltd.	Hard Plastic	Interpolated
EAM63430905	2.8 lb	Sang Shin Electronics Co., Ltd.	Hard Plastic	Interpolated
EAM63430906	2.8 lb	Sang Shin Electronics Co., Ltd.	Hard Plastic	UUT-A2, UUT-A3
Main Circuit Board				
EBR81880101	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	UUT-A1, UUT-A2, UUT-A3
External Circuit Board				
EBR79669907	< 1 lb	Joeng Min Electronics	Hard Plastic	UUT-A1, UUT-A2, UUT-A3
PI485 PCB				
EBR80820501	< 1 lb	Daeho Technology Korea Co., Ltd.	Hard Plastic	UUT-A1, UUT-A2, UUT-A3
Enclosure				
ARUM072-encl	155.4 lb	LG Electronics, Inc	SGCC, Resin and MSWR10	UUT-A1
ARUM096-encl	186.2 lb	LG Electronics, Inc	SGCC, Resin and MSWR10	Interpolated
ARUM121-encl	186.2 lb	LG Electronics, Inc	SGCC, Resin and MSWR10	Interpolated
ARUM144-encl	186.2 lb	LG Electronics, Inc	SGCC, Resin and MSWR10	Interpolated
ARUM168-encl	186.2 lb	LG Electronics, Inc	SGCC, Resin and MSWR10	Interpolated
ARUM192-encl	186.2 lb	LG Electronics, Inc	SGCC, Resin and MSWR10	Interpolated
ARUM216-encl	186.2 lb	LG Electronics, Inc	SGCC, Resin and MSWR10	Interpolated
ARUM241-encl	186.2 lb	LG Electronics, Inc	SGCC, Resin and MSWR10	UUT-A2, UUT-A3

Table 2. Certified Sub-Component List

Group B - Water Source Outdoor Unit UWC Chassis S_{DS} = 2.00g @ z/h=1.0 F_p / W_p = 1.50

Rigid Base Mount with or w/o rack [UUT-B#: rigid base mounted, UUT-B#a: rigid base mounted with rack)

Part Number	Weight	Manufacturer	Material	Tested / Interpolated
Heat Exchanger				
MDE62021801	49.0 lb	Alfa Laval	Stainless steel	UUT-B1, UUT-B1a
MDE62021803	51.0 lb	Alfa Laval	Stainless steel	UUT-B2, UUT-B2a
Printed Control Board				
EBR74374302 - comm	< 1 lb	MSE	Hard Plastic	UUT-B1, B1a, B2 & B2a
EBR74801101 - PI485	< 1 lb	MSE	Hard Plastic	UUT-B1, B1a, B2 & B2a
EBR74365001 - power	< 1 lb	Joeng min electronics	Hard Plastic	UUT-B1, B1a, B2 & B2a
EBR74363402 - external	< 1 lb	Joeng min electronics	Hard Plastic	UUT-B1, B1a, B2 & B2a
EBR75420406 - inverter	< 1 lb	Joeng min electronics	Hard Plastic	UUT-B2, UUT-B2a
EBR76166007 - inverter	< 1 lb	Joeng min electronics	Hard Plastic	Interpolated
EBR76610203 - inverter	< 1 lb	Joeng min electronics	Hard Plastic	UUT-B1, UUT-B1a
EAM62632201 - noise filter	< 1 lb	Sang Shin Electronics Co., Ltd.	Hard Plastic	Interpolated
EAM62632202 - noise filter	< 1 lb	Sang Shin Electronics Co., Ltd.	Hard Plastic	UUT-B2, UUT-B2a
EAM6263B201 - noise filter	< 1 lb	Sang Shin Electronics Co., Ltd.	Hard Plastic	UUT-B1, UUT-B1a
EBR76196401 - converter	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	UUT-B1, B1a, B2 & B2a
EBR76546001 - converter	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	Interpolated
EBR76981301 - converter	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	UUT-B2, UUT-B2a
EBR76336711 - main	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	Interpolated
EBR76336712 - main	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	Interpolated
EBR76336713 - main	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	Interpolated
EBR76336714 - main	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	Interpolated
EBR76336716 - main	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	Interpolated
EBR78043501 - main	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	Interpolated
EBR78043502 - main	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	Interpolated
EBR78043503 - main	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	Interpolated
EBR78043504 - main	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	Interpolated
EBR78043505 - main	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	Interpolated
EBR78043506 - main	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	Interpolated
EBR78043507 - main	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	Interpolated
EBR78043508 - main	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	UUT-B1, UUT-B1a
EBR78277401 - main	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	Interpolated
EBR78277402 - main	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	Interpolated
EBR78277403 - main	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	Interpolated
EBR78277404 - main	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	Interpolated
EBR78277406 - main	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	UUT-B2, UUT-B2a
Enclosure				
AGL73957601	11.6 lb	Daeyeong Electronics Co., Ltd	SGCC T1.0	UUT-B1, B1a, B2 & B2a
MAZ63479601	1 lb	Daeyeong Electronics Co., Ltd	SGCC T1.6	UUT-B1, B1a, B2 & B2a
MGC62920402	5 lb	Daeyeong Electronics Co., Ltd	SGCC T1.2	UUT-B1, B1a, B2 & B2a
MGC62920502	5 lb	Daeyeong Electronics Co., Ltd	SGCC T1.2	UUT-B1, B1a, B2 & B2a
MGC62920602	5 lb	Daeyeong Electronics Co., Ltd	SGCC T1.2	UUT-B1, B1a, B2 & B2a
AAN74139503	13 lb	Kum-a Metal Industry Co., Ltd	SGCC T1.2	UUT-B1, B1a, B2 & B2a
AGL73919703	11.2 lb	Maeil Precision Machinery Co., Ltd	SGCC T1.0	UUT-B1, UUT-B1a
AGL73919705	11.2 lb	Maeil Precision Machinery Co., Ltd	SGCC T1.0	UUT-B2, UUT-B2a
AGL74134401	11.2 lb	Maeil Precision Machinery Co., Ltd	SGCC T1.2	UUT-B1, B1a, B2 & B2a
AGL73957502	9 lb	Maeil Precision Machinery Co., Ltd	SGCC T1.2	UUT-B1, B1a, B2 & B2a
MGC62920304	5 lb	Maeil Precision Machinery Co., Ltd	SGCC T1.2	UUT-B1, B1a, B2 & B2a

Group C- Multi V Water Mini Water Source Outdoor Unit S_{DS} = 2.00g @ z/h=1.0 F_p / W_p = 1.50

Rigid Base Mount

Part Number	Weight	Manufacturer	Material	Tested / Interpolated
Heat Exchanger				
MDE62021804	19.2 lb	Alfa Laval	Stainless steel	UUT-C1
Main PCB				
EBR76963803	< 1 lb	Seyoung Co., Ltd.	Hard Plastic	UUT-C1
Inverter PCB				
EBR75228201	< 1 lb	Joeng min electronics	Hard Plastic	UUT-C1
Noise Filter				
EBR81792401	< 1 lb	Joeng min electronics	Hard Plastic	UUT-C1
Enclosure				
MAZ62564504	1 lb	Daeyeong Electronics Co., Ltd	SGCC T1.2	UUT-C1
AAN74295501	13.0 lb	Maeil Precision Machinery Co., Ltd	SGCC T1.6	UUT-C1
AGL74253001	11.2 lb	Maeil Precision Machinery Co., Ltd	SGCC T1.0	UUT-C1
AGL74253502	11.2 lb	Maeil Precision Machinery Co., Ltd	SGCC T1.0	UUT-C1
MGC63179702	5 lb	Maeil Precision Machinery Co., Ltd	SGCC T1.0	UUT-C1
MGC63180002	5 lb	Maeil Precision Machinery Co., Ltd	SGCC T1.0	UUT-C1

Table 2. Certified Sub-Component List

Group D: LG Multi V S Air Source Outdoor Unit **S_{DS} = 2.00g @ z/h=1.0** **F_p / W_p = 1.50**

Rigid Base Mount

Part Number	Weight (lb)	Manufacturer	Material	Tested / Interpolated
Heat Exchanger				
ACG73865309	14.9 lb	LTS Korea	Aluminum Fin, Copper Tube	UUT-D2
ACG65609419	18.7 lb	DongIL Aluminum	Aluminum Fin, Copper Tube	UUT-D1
ACG74186203	37.9 lb	DongIL Aluminum	Aluminum Fin, Copper Tube	UUT-D3, UUT-D4
Printed Control Board				
EBR83822901 - main	< 1 lb	Seyoung	Hard Plastic	UUT-D3
EBR77627622 - main	< 1 lb	Seyoung	Hard Plastic	UUT-D1
EBR80272314 - main	< 1 lb	Seyoung	Hard Plastic	UUT-D2
EBR83822903 - main	< 1 lb	Seyoung	Hard Plastic	interpolated
EBR83822906 - main	< 1 lb	Seyoung	Hard Plastic	UUT-D4
EBR80882201 - display	< 1 lb	Seyoung	Hard Plastic	UUT-D3
EBR78509901 - inverter	1.9 lb	Seyoung	Hard Plastic	UUT-D2
EBR78509902 - inverter	1.9 lb	Seyoung	Hard Plastic	UUT-D1
EBR83821105 - inverter	3 lb	Seyoung	Hard Plastic	UUT-D4
EBR81792501 - noise filter	1 lb	Joeng min electronics	Hard Plastic	UUT-D3, UUT-D2
EBR83821101 - inverter	3 lb	Joeng min electronics	Hard Plastic	Interpolated
EBR80100302 - sensor	< 1 lb	Joeng min electronics	Hard Plastic	Interpolated
EAM62792405 - noise filter	2.5 lb	Sangshin Electronics	Hard Plastic	Interpolated
EAM62792407 - noise filter	2.5 lb	Sangshin Electronics	Hard Plastic	UUT-D3
EBR79191502 - fan	< 1 lb	Daeho Technology	Hard Plastic	UUT-D3
EBR80820501 - sub PCB	< 1 lb	Daeho Technology	Hard Plastic	UUT-D4
EBR74374302 - sub PCB	< 1 lb	MSE	Hard Plastic	UUT-D1, UUT-D2
EBR74801101 - sub PCB	< 1 lb	MSE	Hard Plastic	UUT-D1, UUT-D2
Enclosure				
ARUN024GSS4-encl	32.8 lb	LG Electronics, Inc	Sheet Steel	UUT-D1
ARUN038GSS4-encl	47.0 lb	LG Electronics, Inc	Sheet Steel	UUT-D2
ARUN048GSS4-encl	47.0 lb	LG Electronics, Inc	Sheet Steel	Interpolated
ARUN053GSS4-encl	47.0 lb	LG Electronics, Inc	Sheet Steel	Interpolated
ARUN060GSS4-encl	47.0 lb	LG Electronics, Inc	Sheet Steel	Interpolated
ARUB060GSS4-encl	47.0 lb	LG Electronics, Inc	Sheet Steel	UUT-D4
ARUN036GSS5-encl	47.0 lb	LG Electronics, Inc	Sheet Steel	Interpolated
ARUN048GSS5-encl	47.0 lb	LG Electronics, Inc	Sheet Steel	UUT-D3

Table 2. Certified Sub-Component List

Group E: LG Multi V™ Indoor Ceiling Concealed Ducted - Mid/High Static Suspended S_{DS} = 2.00g @ z/h=1.0 F_p / W_p = 1.50

Part Number	Weight (lb)	Manufacturer	Material	Tested / Interpolated
Heat Exchanger				
ADL74001006	7.1 lb	Dong IL Aluminum Co.,Ltd	Aluminum Fin, Copper Tube	UUT-E1
ADL74001008	10.7 lb	Dong IL Aluminum Co.,Ltd	Aluminum Fin, Copper Tube	UUT-E2
ADL74001015	9 lb	Dong IL Aluminum Co.,Ltd	Aluminum Fin, Copper Tube	UUT-E5
ADL74001016	12 lb	Dong IL Aluminum Co.,Ltd	Aluminum Fin, Copper Tube	Interpolated
ADL74001018	15 lb	Dong IL Aluminum Co.,Ltd	Aluminum Fin, Copper Tube	UUT-E6
5421A10027C	9.5 lb	Dong IL Aluminum Co.,Ltd	Aluminum Fin, Copper Tube	UUT-E4
5421A20273A	12.6 lb	Dong IL Aluminum Co.,Ltd	Aluminum Fin, Copper Tube	UUT-E7
5421A20100R	5.9 lb	Lotte Aluminum	Aluminum Fin, Copper Tube	UUT-E3
5421A20217L	22.4 lb	LTS Korea	Aluminum Fin, Copper Tube	UUT-E4, UUT-E9, UUT-E9, UUT-E10, UUT-E11
Main Printed Control Board				
EBR81117102	< 1 lb	Joeng min electronics	ABS Plastic	UUT-E5
EBR81117116	< 1 lb	Joeng min electronics	ABS Plastic	UUT-E6
EBR77384109	< 1 lb	Joeng min electronics	ABS Plastic	Interpolated
EBR77384110	< 1 lb	Joeng min electronics	ABS Plastic	Interpolated
EBR78310704	< 1 lb	Joeng min electronics	ABS Plastic	UUT-E4
EBR79004801	< 1 lb	Joeng min electronics	ABS Plastic	UUT-E3
EBR79004802	< 1 lb	Joeng min electronics	ABS Plastic	UUT-E4
EBR79004804	< 1 lb	Joeng min electronics	ABS Plastic	UUT-E7, UUT-E11
EBR79004831	< 1 lb	Joeng min electronics	ABS Plastic	Interpolated
EBR86011304	< 1 lb	Joeng min electronics	ABS Plastic	UUT-E1, UUT-E2
EBR79004830	< 1 lb	Joeng min electronics	ABS Plastic	UUT-E8
EBR78310706	< 1 lb	Joeng min electronics	ABS Plastic	UUT-E9
EBR79004812	< 1 lb	Joeng min electronics	ABS Plastic	UUT-E10
Enclosure - Panel Assembly Upper				
AGL74236402	11.8 lb	Maeil Precision Machinery Co., Ltd	SGCC T0.8	UUT-E1, E2
AGL74236403	16.3 lb	Maeil Precision Machinery Co., Ltd	SGCC T0.8	UUT-E6
AGL74236404	16.3 lb	Maeil Precision Machinery Co., Ltd	SGCC T0.8	UUT-E5
AGL75653501	19.2 lb	Esung sanup	SGCC T0.8	UUT-E8, E9, E10, E11
3721A20177C	7.9 lb	Esung sanup	SGCC T1.0	UUT-E3
3721A20180C	9.7 lb	Dae Yang Jeong Gi	SGCC T1.0	UUT-E4
3721A20199C	18.8 lb	Dae Yang Jeong Gi	SGCC T1.0	UUT-E7
Enclosure - Panel Assembly Front				
AGL73917801	92.1 lb	Sung Chull Mfr, Co., Ltd	SGCC T1.6	UUT-E10, E11
AGL73917806	44.1 lb	Sung Chull Mfr, Co., Ltd	SGCC T1.6	UUT-E9
AGL75554005	50.7 lb	Sung Chull Mfr, Co., Ltd	SGCC T1.6	UUT-E8
AGL74234901	7.7 lb	Maeil Precision Machinery Co., Ltd	SGCC T0.6	UUT-E5
AGL74234902	5.6 lb	Maeil Precision Machinery Co., Ltd	SGCC T0.6	UUT-E1, E2
AGL74234903	6.8 lb	Maeil Precision Machinery Co., Ltd	SGCC T0.6	UUT-E6
Enclosure - Panel Assembly Side				
AGL74256802	3.1 lb	Dae Yang Jeong Gi	SGCC T0.8	UUT-E1, E2, E5
AGL74256804	4.2 lb	Dae Yang Jeong Gi	SGCC T0.8	UUT-E6
AGL74256831	7.7 lb	Dae Yang Jeong Gi	SGCC T0.8	UUT-E1, E2, E5
AGL74256832	7.1 lb	Dae Yang Jeong Gi	SGCC T0.8	UUT-E6
3721A23002B	8.8 lb	Dae Yang Jeong Gi	SGCC T1.0	UUT-E7
3721A23003B	6.4 lb	Dae Yang Jeong Gi	SGCC T1.0	UUT-E7
3721A24002H	3.6 lb	Bukookjeongmil	SGCC T1.0	UUT-E3
AGL35764412	14.9 lb	Esung sanup	SGCC T1.0	UUT-E8, E9, E10, E11
AGL35764707	15.6 lb	Esung sanup	SGCC T1.0	UUT-E8, E9, E10, E11
3721A24002G	3.1 lb	Esung sanup	SGCC T1.0	UUT-E3
3721A24003J	4.0 lb	Esung sanup	SGCC T1.0	UUT-E4
AGL74256831	4.9 lb	Maeil Precision Machinery Co., Ltd	SGCC T1.0	UUT-E4
Enclosure - Panel Assembly Rear				
AGL74235007	4.7 lb	Maeil Precision Machinery Co., Ltd	SGCC T0.6	UUT-E5
AGL74235008	6.6 lb	Maeil Precision Machinery Co., Ltd	SGCC T0.6	UUT-E6
AGL74235009	3.4 lb	Maeil Precision Machinery Co., Ltd	SGCC T0.6	UUT-E1, E2
3721A21004C	3.9 lb	Dae Yang Jeong Gi	SGCC T1.0	UUT-E3
3721A21005C	5.9 lb	Dae Yang Jeong Gi	SGCC T1.0	UUT-E3
3721A21006C	5.2 lb	Dae Yang Jeong Gi	SGCC T1.0	UUT-E4
3721A21007C	7.8 lb	Dae Yang Jeong Gi	SGCC T1.0	UUT-E4
Enclosure - Panel Assembly Base				
4790A10052B	12.4 lb	ShinSung Delta Tech Co., Ltd.	SGCC T1.6	UUT-E7
AAN75848701	8.7 lb	Esung sanup	SGCC T0.8	UUT-E8, E9, E10, E11
AAN75848702	8.7 lb	Esung sanup	SGCC T0.8	UUT-E8, E9, E10, E11

Table 2. Certified Sub-Component List

Group F - LG Multi V™ Ceiling Cassette 1-Way (208/230V) **S_{DS} = 2.50g @ z/h=1.0** **F_p / W_p = 1.88**

Suspended

Part Number	*Weight (lb)*	*Manufacturer*	*Material*	*Tested / Interpolated*
Heat Exchanger				
ADL36804601	5.4 lb	LG Electronics Inc.	Aluminum Fin, Copper Tube	UUT-F1
ADL36804501	8.0 lb	LG Electronics Inc.	Aluminum Fin, Copper Tube	UUT-F2
Main PCB				
EBR81221805	< 1 lb	LG Electronics Inc.	ABS Plastic	UUT-F1, UUT-F2
Enclosure				
ABJ36805705	13.9 lb	Kuma Metal	SGCC T0.6	UUT-F2
ABJ36805709	11.3 lb	Kuma Metal	SGCC T0.6	UUT-F1

Group G - LG Multi V™ Ceiling Cassette 4-Way (208/230V) **S_{DS} = 2.00g @ z/h=1.0** **F_p / W_p = 1.50**

Suspended

Part Number	*Weight (lb)*	*Manufacturer*	*Material*	*Tested / Interpolated*
Heat Exchanger				
ADL73841701	16.6 lb	Dong IL Aluminum CO., Ltd.	Aluminum Fin, Copper Tube	UUT-G5
ADL76120901	18.0 lb	Dong IL Aluminum CO., Ltd.	Aluminum Fin, Copper Tube	UUT-G6
ADL55996003	3.0 lb	Lotte Aluminum	Aluminum Fin, Copper Tube	UUT-G1
ADL55996002	6.1 lb	Lotte Aluminum	Aluminum Fin, Copper Tube	Interpolated
ADL55996001	7.8 lb	Lotte Aluminum	Aluminum Fin, Copper Tube	UUT-G2
ADL32881103	10.7 lb	Lotte Aluminum	Aluminum Fin, Copper Tube	Interpolated
ADL32881102	13.2 lb	Lotte Aluminum	Aluminum Fin, Copper Tube	Interpolated
ADL73841702	14.9 lb	Lotte Aluminum	Aluminum Fin, Copper Tube	UUT-G3
ADL73841802	15.1 lb	Lotte Aluminum	Aluminum Fin, Copper Tube	Interpolated
ADL32881101	15.6 lb	Lotte Aluminum	Aluminum Fin, Copper Tube	Interpolated
ADL73841801	18.0 lb	Lotte Aluminum	Aluminum Fin, Copper Tube	UUT-G4
ADL73841803	12.1 lb	Lotte Aluminum	Aluminum Fin, Copper Tube	Interpolated
Main PCB				
EBR81221804	< 1 lb	MSE	ABS Plastic	UUT-G1, G2, G3 and G4
EBR39187715	< 1 lb	MSE	ABS Plastic	Interpolated
EBR79629502	< 1 lb	MSE	ABS Plastic	Interpolated
EBR78401707	< 1 lb	MSE	ABS Plastic	Interpolated
EBR86339602	< 1 lb	MSE	ABS Plastic	UUT-G5, UUT-G6
Enclosure				
MBH65042403	4.7 lb	Bukookjeongmil	SGCC T0.6	UUT-G5, UUT-G6
MBH65062103	7.8 lb	Bukookjeongmil	SGCC T0.6	UUT-G5, UUT-G6
ABJ31579105	3.9 lb	Dae Yang Jeong Gi	SGCC T0.6	UUT-G4
ABJ32881207	3.5 lb	Dae Yang Jeong Gi	SGCC T0.6	UUT-G3
ABJ32881606	3.4 lb	Dae Yang Jeong Gi	SGCC T0.6	Interpolated
ABJ36864809	3.4 lb	Dae Yang Jeong Gi	SGCC T0.6	UUT-G2
ABJ36864810	2.9 lb	Dae Yang Jeong Gi	SGCC T0.6	UUT-G1
ABJ36864908	3.4 lb	Dae Yang Jeong Gi	SGCC T0.6	UUT-G2
ABJ36864909	3.0 lb	Dae Yang Jeong Gi	SGCC T0.6	UUT-G1
AAN36760003	5.0 lb	Esung sanup	SGCC T0.8	UUT-G1, G2
ABJ32881405	3.4 lb	Kuma Metal	SGCC T0.6	UUT-G3
ABJ32881906	2.9 lb	Kuma Metal	SGCC T0.6	Interpolated
ABJ32882405	3.9 lb	Kuma Metal	SGCC T0.6	UUT-G4
AAN31579002	12.8 lb	Kuma Metal	SGCC T0.8	Interpolated
AAN31579004	11.0 lb	Kuma Metal	SGCC T0.8	UUT-G3, G4
MBH33966802	2.0 lb	Kuma Metal	SGCC T0.6	UUT-G4
MBH33966602	2.0 lb	Kuma Metal	SGCC T0.6	UUT-G4
MBH36241202	2.0 lb	Kuma Metal	SGCC T0.6	UUT-G3
MBH36241402	2.0 lb	Kuma Metal	SGCC T0.6	UUT-G3
MBH36818602	2.0 lb	Kuma Metal	SGCC T0.6	Interpolated
MBH36819002	2.0 lb	Kuma Metal	SGCC T0.6	Interpolated
AAN31579009	11.0 lb	Kuma Metal	SGCC T0.8	UUT-G5, UUT-G6

Table 2. Certified Sub-Component List

Group H: LG Multi V™ Indoor Wall Mount **S_{DS} = 2.35 @ z/h=1.0** **F_p / W_p = 1.76**

Wall Mount

Part Number	*Weight (lb)*	*Manufacturer*	*Material*	*Tested / Interpolated*
Heat Exchanger				
ADL74920901	3.4 lb	Dong IL Aluminum CO., Ltd.	Aluminum Fin, Copper Tube	UUT-H1, UUT-H3
ADL74761211	5.6 lb	Dong IL Aluminum CO., Ltd.	Aluminum Fin, Copper Tube	UUT-H2, UUT-H4
Main Printed Control Board				
EBR82077501	< 1 lb	MSE	ABS Plastic	UUT-H2, UUT-H4
EBR82077502	< 1 lb	MSE	ABS Plastic	Interpolated
EBR82077503	< 1 lb	MSE	ABS Plastic	Interpolated
EBR82077504	< 1 lb	MSE	ABS Plastic	Interpolated
EBR82077505	< 1 lb	MSE	ABS Plastic	Interpolated
EBR82077506	< 1 lb	MSE	ABS Plastic	UUT-H1, UUT-H2
EBR82077507	< 1 lb	MSE	ABS Plastic	Interpolated
Enclosure				
ARNU053-153SJA4-encl	6.5 lb	LG Electronics, Inc	Plastic	UUT-H1
ARNU053-153SJR4-encl	6.5 lb	LG Electronics, Inc	Plastic	UUT-H3
ARNU183-243SKA4-encl	9.3 lb	LG Electronics, Inc	Plastic	UUT-H2
ARNU183-243SKR4-encl	11.3 lb	LG Electronics, Inc	Plastic	UUT-H4

Group J: LG Multi V™ Heat Recovery Units **S_{DS} = 2.50g @ z/h=1.0** **F_p / W_p = 1.88**

Suspended

Part Number	*Weight (lb)*	*Manufacturer*	*Material*	*Tested / Interpolated*
Main Printed Control Board				
EBR82017101	< 1 lb	LG Electronics Inc.	Hard Plastic	UUT-J1,UUT-J2
Expansion Valve - EEV				
MJX63992003	< 1 lb	Sanhua	Copper	UUT-J1,UUT-J2
Enclosure - Base Panel				
MAM65045003	4.2 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8	UUT-J1
MAM65824003	3.1 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8	Interpolated
MAM65824002	3.1 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8	Interpolated
MAM65824001	3.1 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8	Interpolated
MAM65824102	4.9 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8	Interpolated
MAM65824101	4.9 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8	Interpolated
MAM64284203	4.9 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8	UUT-J2
Enclosure - Bracket				
MAZ66148403	1.8 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8	UUT-J1
MAZ67164503	1.1 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8	Interpolated
MAZ67164502	1.1 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8	Interpolated
MAZ67164501	1.1 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8	Interpolated
MAZ67164602	1.8 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8	Interpolated
MAZ67164601	1.8 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8	Interpolated
MAZ66089601	<1 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8	Interpolated
MAZ66089605	<1 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8	Interpolated
MAZ34257911	2.9 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8	UUT-J2
MAZ66323801	8.6 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T1.0	UUT-J1, UUT-J2
MAZ67164201	<1 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T1.0	Interpolated
Enclosure - Top Cover				
MCK70110801	4.2 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8	UUT-J1
MCK71145601	3.3 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8	Interpolated
MCK71145602	5.1 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8	Interpolated
MCK69188003	8.6 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8	UUT-J2
Enclosure - Control Cover				
MCK70285802	3.8 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T1.0	UUT-J1
ACQ90393501	5.5 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T1.0	Interpolated
ACQ90393502	5.5 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T1.0	Interpolated
ACQ91543301	5.5 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T1.0	Interpolated
ACQ91543302	5.5 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T1.0	Interpolated
MCK71145501	3.9 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T1.0	Interpolated
MCK71145502	3.8 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T1.0	Interpolated
MCK70285801	7.5 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T1.0	UUT-J2
Enclosure - Side Cabinet				
AGL74553006	5.5 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T1.0	UUT-J1
AGL74553005	5.5 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T1.0	UUT-J2
MAZ67538601	0.2 lb	Dae Yang Jeong Gi	Sheet Steel SGCC T1.0	UUT-J1, UUT-J2

UUT-A1 Test Summary

Testing Lab: SESTEC
Testing Report: 2019-K-001(#1/9)
Test Sample Name: ARUM072BTE5 (UUT-1)

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARUM072BTE5	72000	423	Rigid Base Mount	X	Front-Back	4.8	36-5/8	29-29/32	66-17/32
				Y	Side-Side	5.0			
				Z	Vertical	>33.3			

Notes: Frequencies are for units prior to ICC ES AC-156 testing.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Base mount unit was bolted to a rigid fixture with 4-1/2" Ø Grade 2 bolts w/std flat (1 1/16" max) dia x 0.095" min thick) washer per SAE J429. Fixture bolted to shake table with 9- 1 1/4"Ø Grade 8 bolts. See figure below.
Seismic Modifications: None **Test Anomaly:** None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
CBC 2019	AC 156	2.50	1.0	4.00g	3.00g	1.67g	0.68g

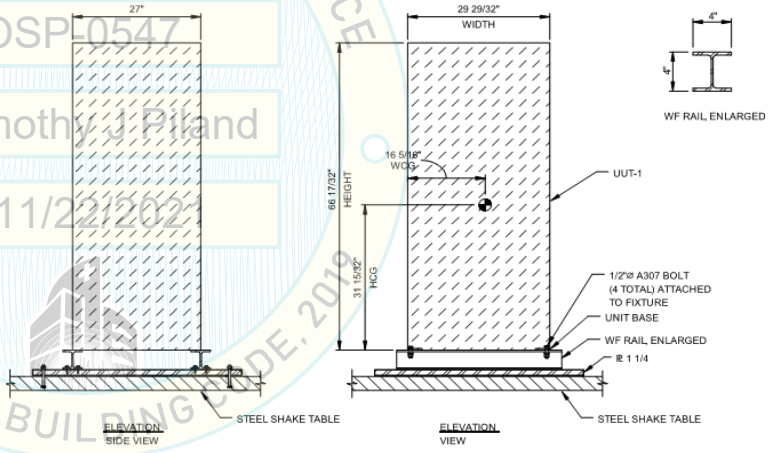

Figure UUT-1.1: Unit on the shake table

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-A1 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	61.7 lb	ACG74185504	LTS	Aluminum Fin, Copper Tube
Fan Motor	31.5 lb	EAU43080022	C&M	Aluminum
Compressor	67.9 lb	TBZ37957201	LG	Cast Iron
Inverter Printed Circuit Board	< 5 lb	EBR83035702	Joeng min electronics	Hard Plastic
Fan Printed Circuit Board	< 1 lb	EBR79669810	Seyoung Co.,Ltd.	Hard Plastic
Noise Filter Circuit Board	2.8 lb	EAM63430903	Sang Shin Electronics Co.,Ltd.	Hard Plastic
Main Circuit Board	< 1 lb	EBR81880101	Seyoung Co.,Ltd.	Hard Plastic
External Circuit Board	< 1 lb	EBR79669907	Joeng min electronics	Hard Plastic
PI485 PCB	< 1 lb	EBR80820501	Daeho Technology Korea Co.,Ltd	Hard Plastic
Enclosure	155.4 lb	ARUM072-encl	LG Electronics, Inc	SGCC, Resin and MSWR10

UUT-A2 Test Summary

Testing Lab: SESTEC
Testing Report: 2019-K-001(#2/9)
Test Sample Name: ARUM241DTE5 (UUT-2)

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARUM241DTE5	231100	659	Rigid Base Mount	X	Front-Back	4.8	48-13/16	29-29/32	66-17/32
				Y	Side-Side	5.3			
				Z	Vertical	26.8			

Notes: Frequencies are for units prior to ICC ES AC-156 testing.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Base mount unit was bolted to a rigid fixture with 4-1/2" Ø Grade 2 bolts w/std flat (1 1/16" max) dia x 0.095" min thick) washer per SAE J429. Fixture bolted to shake table with 9- 1 1/4"Ø Grade 8 bolts. See figure below.
Seismic Modifications: None **Test Anomaly:** None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.35	1.0	3.76g	2.82g	1.57g	0.64g

Figure UUT-A2.1: Unit on the shake table

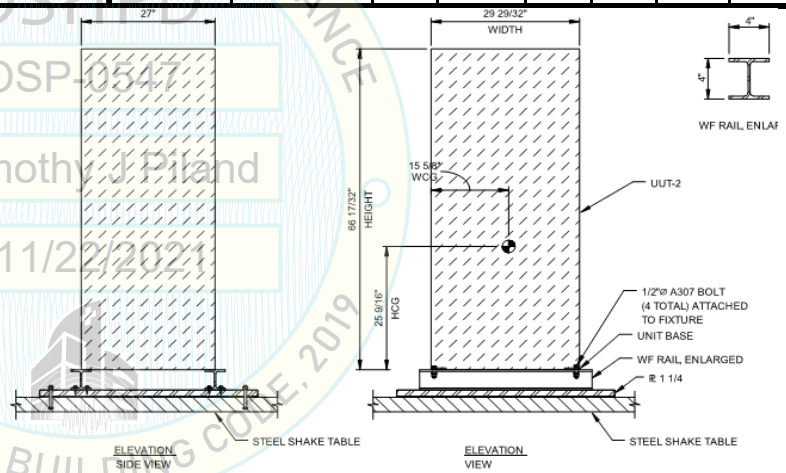

Figure UUT-A2.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-A2 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	88.2 lb	ACG74185506	LTS	Aluminum Fin, Copper Tube
Fan Motor	19.8 lb	EAU43080021	SCD	Aluminum
Compressor	70.1 lb	TBZ37957001	LG	Cast Iron
Inverter Printed Circuit Board	< 5 lb	EBR80928303	Joeng min electronics	Hard Plastic
Fan Printed Circuit Board	< 1 lb	EBR79669811	Seyoung Co.,Ltd.	Hard Plastic
Noise Filter Circuit Board	2.8 lb	EAM63430906	Sang Shin Electronics Co.,Ltd.	Hard Plastic
Main Circuit Board	< 1 lb	EBR81880101	Seyoung Co.,Ltd.	Hard Plastic
External Circuit Board	< 1 lb	EBR79669907	Joeng min electronics	Hard Plastic
PI485 PCB	< 1 lb	EBR80820501	Daeho Technology Korea Co.,Ltd.	Hard Plastic
Enclosure	186.2 lb	ARUM241-encl	LG Electronics, Inc	SGCC, Resin and MSWR10

UUT-A3 Test Summary

Testing Lab: SESTEC
Testing Report: 2020-K-30 #1
Test Sample Name: ARUM241DTE5 (UUT-1)

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARUM241DTE5	233100	659	Rigid Base Mount	X	Front-Back	5.3	48-13/16	29-29/32	66-17/32
				Y	Side-Side	4.8			
				Z	Vertical	24.5			

Notes: Frequencies are for units prior to ICC ES AC-156 testing.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Base Mount unit was bolted to a rigid fixture with 4-1/2"Ø Grade 2 bolts w/ std flat (1 1/16" max dia x 0.095" min thick) washer per JAE J429. Fixture bolted to shake table with 5-M30 (~1 1/4"Ø) Grade 8 bolts. See figure below.
Seismic Mod: none **Test Anom:** minor deformation at heat exchanger

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.35	1.0	3.76g	2.82g	1.57g	0.63g

Figure UUT-A3.1: Unit on the shake table

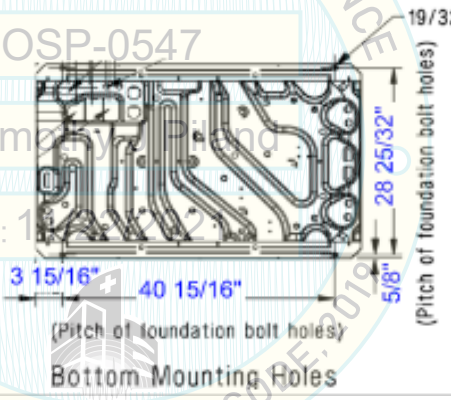

Figure UUT-A3.2: Mounting Detail

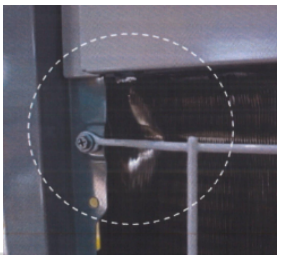

Figure UUT-A3.3: Test Anomaly

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-A3 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	88.2 lb	ACG74185506	LTS	Aluminum Fin, Copper Tube
Fan Motor	22.5 lb	EAU43080039	C&M	Aluminum Body, Copper Coil
Compressor	70.1 lb	TBZ37957001	LG	Cast Iron
Inverter Printed Circuit Board	< 5 lb	EBR88279003	Joeng min electronics	Hard Plastic
Fan Printed Circuit Board	< 1 lb	EBR88279204	Seyoung Co.,Ltd.	Hard Plastic
Noise Filter Circuit Board	2.8 lb	EAM63430906	Sang Shin Electronics Co.,Ltd.	Hard Plastic
Main Circuit Board	< 1 lb	EBR81880101	Seyoung Co.,Ltd.	Hard Plastic
External Circuit Board	< 1 lb	EBR79669907	Joeng min electronics	Hard Plastic
PI485 PCB	< 1 lb	EBR80820501	Daeho Technology Korea Co.,Ltd.	Hard Plastic
Enclosure	186.2 lb	ARUM241-encl	LG Electronics, Inc	SGCC, Resin and MSWR10

UUT-B1 Test Summary

Testing Lab: Curtiss Wright - Qual Tech
Testing Report: Q1732.0 Rev2
Test Sample Name: Q1732-01-01-04

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARWB144BAS4	144000	295	Rigid Base Mount	X	Front-Back	7.3	29-3/4	19-3/4	39-1/4
				Y	Side-Side	23.1			
				Z	Vertical	>33.3			

Notes: Frequencies are for units prior to ICC ES AC-156 testing.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Base mount unit was bolted to shake table with 4- 1/2"Ø Grade 8 bolts w/ std flat (1 1/16" max dia x 0.095" min thick) and split ring lock (0.869" max dia x 0.125" min thickness) washer per SAE J429. See figure below.

Seismic Modifications: None **Test Anomaly:** None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.30	1.0	3.68g	2.76g	1.88g	0.76g

Figure UUT-B1.1: Unit on the shake table (UUT-B1 is on left)

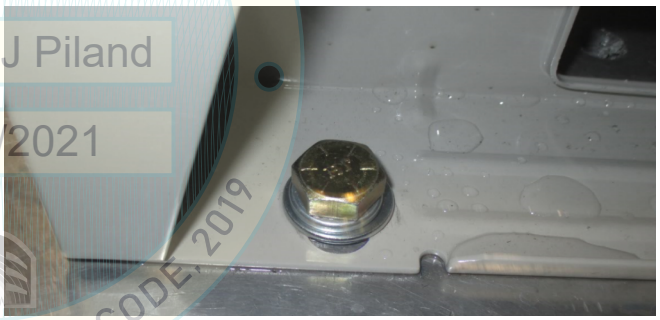

Figure UUT-B1.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-B1 Summary Tested Sub-Component

Sub-Component	Weight	Part Number	Manufacturer	Material
Heat Exchanger	49.0 lb	ACG74185506	LTS	Stainless Steel
Compressor	67.2 lb	JBA048MBA	LG	Gray Cast Iron
Comm. PCB	< 1 lb	EBR74374302	MSE	ABS Plastic
PI485 PCB	< 1 lb	EBR74801101	MSE	ABS Plastic
Power PCB	< 1 lb	EBR74365001	Joeng min electronics	ABS Plastic
External PCB	< 1 lb	EBR74363402	Joeng min electronics	ABS Plastic
Converter PCB	< 1 lb	EBR76196401	Seyoung Co.,LTD.	ABS Plastic
Inverter PCB	< 1 lb	EBR76610203	Joeng min electronics	ABS Plastic
Noise Filter	< 1 lb	EAM62632301	Sang Shin Electronics Co., LTD.	ABS Plastic
Main PCB	< 1 lb	EBR78043508	Seyoung Co.,LTD.	ABS Plastic
Enclosure	11.6 lb	AGL73957601	Daeyeong Electronics Co., Ltd	SGCC T1.0
Enclosure	1 lb	MAZ63479601	Daeyeong Electronics Co., Ltd	SGCC T1.6
Enclosure	5 lb	MGC62920402	Daeyeong Electronics Co., Ltd	SGCC T1.2
Enclosure	5 lb	MGC62920502	Daeyeong Electronics Co., Ltd	SGCC T1.2
Enclosure	5 lb	MGC62920602	Daeyeong Electronics Co., Ltd	SGCC T1.2
Enclosure	13.0 lb	AAN74139503	Kum-a Metal Industry Co., Ltd	SGCC T1.2
Enclosure	11.2 lb	AGL73919703	Maeil Precision Machinery Co., Ltd	SGCC T1.0
Enclosure	11.2 lb	AGL74134401	Maeil Precision Machinery Co., Ltd	SGCC T1.2
Enclosure	9 lb	AGL73957502	Maeil Precision Machinery Co., Ltd	SGCC T1.2
Enclosure	5 lb	MGC62920304	Maeil Precision Machinery Co., Ltd	SGCC T1.2

UUT-B1a Test Summary

Testing Lab: Curtiss Wright - Qual Tech
Testing Report: Q1732.0 Rev2
Test Sample Name: Q1732-01-01-05

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARWB144BAS4	144000	295	Rigid Base Mount on Rack	X	Front-Back	7.4	29-3/4	19-3/4	39-1/4
				Y	Side-Side	9.1			
				Z	Vertical	>33.3			

Notes: Frequencies are for units prior to ICC ES AC-156 testing.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Bolted to rack w/4-1/2"Ø Grade 8 bolts w/flat (1 1/16" max dia x0.095" min thick) and split ring lock (0.869" max Ø x 0.125" min thick) washer per SAE J429. Rack was based mounted to shake table w/ 4-5/8"Ø Grade 8 bolts w/ flat (1 5/16" max Ø x 0.095" min thick) and split ring lock (1.073" max Ø x 0.156" min thick) washer.

Seismic Modifications: None **Test Anomaly:** None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.60	1.0	4.16g	3.12g	1.88g	0.76g

Figure UUT-B1a.1: Unit on the shake table (farthest in photo)

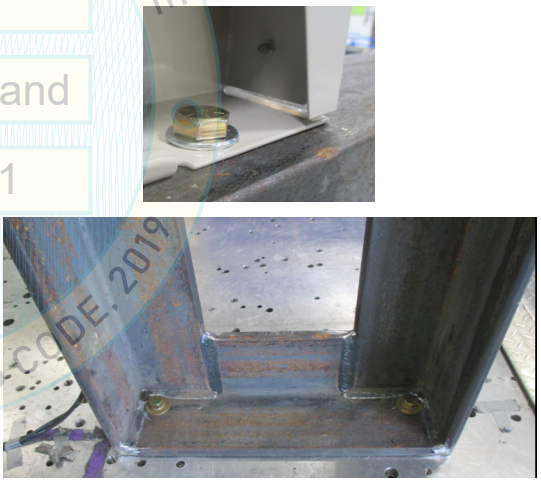

Figure UUT-B1a.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-B1 Summary Tested Sub-Component

Sub-Component	Weight	Part Number	Manufacturer	Material
Heat Exchanger	49.0 lb	ACG74185506	LTS	Stainless Steel
Compressor	67.2 lb	JBA048MBA	LG	Gray Cast Iron
Comm. PCB	< 1 lb	EBR74374302	MSE	ABS Plastic
PI485 PCB	< 1 lb	EBR74801101	MSE	ABS Plastic
Power PCB	< 1 lb	EBR74365001	Joeng min electronics	ABS Plastic
External PCB	< 1 lb	EBR74363402	Joeng min electronics	ABS Plastic
Converter PCB	< 1 lb	EBR76196401	Seyoung Co.,LTD.	ABS Plastic
Inverter PCB	< 1 lb	EBR76610203	Joeng min electronics	ABS Plastic
Noise Filter	< 1 lb	EAM62632301	Sang Shin Electronics Co., LTD.	ABS Plastic
Main PCB	< 1 lb	EBR78043508	Seyoung Co.,LTD.	ABS Plastic
Enclosure	11.6 lb	AGL73957601	Daeyeong Electronics Co., Ltd	SGCC T1.0
Enclosure	1 lb	MAZ63479601	Daeyeong Electronics Co., Ltd	SGCC T1.6
Enclosure	5 lb	MGC62920402	Daeyeong Electronics Co., Ltd	SGCC T1.2
Enclosure	5 lb	MGC62920502	Daeyeong Electronics Co., Ltd	SGCC T1.2
Enclosure	5 lb	MGC62920602	Daeyeong Electronics Co., Ltd	SGCC T1.2
Enclosure	13.0 lb	AAN74139503	Kum-a Metal Industry Co., Ltd	SGCC T1.2
Enclosure	11.2 lb	AGL73919703	Maeil Precision Machinery Co., Ltd	SGCC T1.0
Enclosure	11.2 lb	AGL74134401	Maeil Precision Machinery Co., Ltd	SGCC T1.2
Enclosure	9 lb	AGL73957502	Maeil Precision Machinery Co., Ltd	SGCC T1.2
Enclosure	5 lb	MGC62920304	Maeil Precision Machinery Co., Ltd	SGCC T1.2

UUT-B2 Test Summary

Testing Lab: Curtiss Wright - Qual Tech
Testing Report: Q1732.0 Rev2
Test Sample Name: Q1732-01-01-06

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARWN192DAS4	192000	331	Rigid Base Mount	X	Front-Back	7.1	29-3/4	19-3/4	39-1/4
				Y	Side-Side	23.9			
				Z	Vertical	>33.3			

Notes: Frequencies are for units prior to ICC ES AC-156 testing.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Base mount unit was bolted to shake table with 4- 1/2"Ø Grade 8 bolts w/ std flat (1 1/16" max dia x 0.095" min thick) and split ring lock (0.869" max dia x 0.125" min thickness) washer per SAE J429. See figure below.

Seismic Modifications: None **Test Anomaly:** None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.30	1.0	3.68g	2.76g	1.88g	0.76g

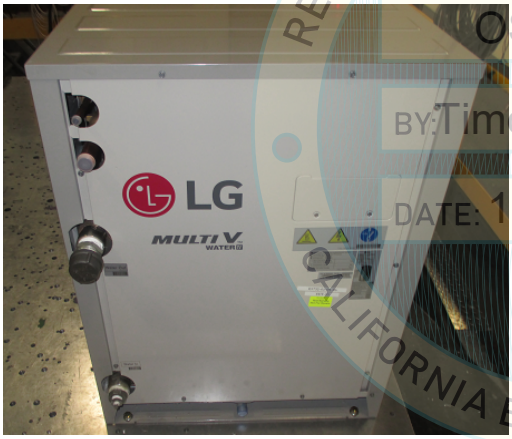

Figure UUT-B2.1: Unit on the shake table

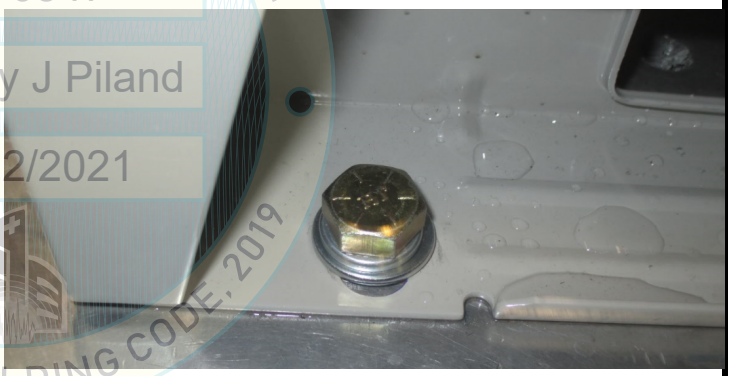

Figure UUT-B2.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-B2 Summary Tested Sub-Component

Sub-Component	Weight	Part Number	Manufacturer	Material
Heat Exchanger	51.0 lb	MDE62021803	LTS	Stainless Steel
Compressor	81.6 lb	JBA068MAA	LG	Gray Cast Iron
Comm. PCB	< 1 lb	EBR74374302	MSE	ABS Plastic
PI485 PCB	< 1 lb	EBR74801101	MSE	ABS Plastic
Power PCB	< 1 lb	EBR74365001	Joeng min electronics	ABS Plastic
External PCB	< 1 lb	EBR74363402	Joeng min electronics	ABS Plastic
Converter PCB	< 1 lb	EBR76196401	Seyoung Co.,LTD.	ABS Plastic
Converter PCB	< 1 lb	EBR76981301	Seyoung Co.,LTD.	ABS Plastic
Inverter PCB	< 1 lb	EBR75420406	Joeng min electronics	ABS Plastic
Noise Filter	< 1 lb	EAM62632202	Sang Shin Electronics Co., LTD.	ABS Plastic
Main PCB	< 1 lb	EBR78277406	Seyoung Co.,LTD.	ABS Plastic
Enclosure	11.6 lb	AGL73957601	Daeyeong Electronics Co., Ltd	SGCC T1.0
Enclosure	1 lb	MAZ63479601	Daeyeong Electronics Co., Ltd	SGCC T1.6
Enclosure	5 lb	MGC62920402	Daeyeong Electronics Co., Ltd	SGCC T1.2
Enclosure	5 lb	MGC62920502	Daeyeong Electronics Co., Ltd	SGCC T1.2
Enclosure	5 lb	MGC62920602	Daeyeong Electronics Co., Ltd	SGCC T1.2
Enclosure	13.0 lb	AAN74139503	Kum-a Metal Industry Co., Ltd	SGCC T1.2
Enclosure	11.2 lb	AGL73919705	Maeil Precision Machinery Co., Ltd	SGCC T1.0
Enclosure	11.2 lb	AGL74134401	Maeil Precision Machinery Co., Ltd	SGCC T1.2
Enclosure	9 lb	AGL73957502	Maeil Precision Machinery Co., Ltd	SGCC T1.2
Enclosure	5 lb	MGC62920304	Maeil Precision Machinery Co., Ltd	SGCC T1.2

UUT-B2a Test Summary

Testing Lab: Curtiss Wright - Qual Tech
Testing Report: Q1732.0 Rev2
Test Sample Name: Q1732-01-01-06

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARWN192DAS4	192000	331	Rigid Base Mount	X	Front-Back	6.4	29-3/4	19-3/4	39-1/4
				Y	Side-Side	7.8			
				Z	Vertical	>33.3			

Notes: Frequencies are for units prior to ICC ES AC-156 testing.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Bolted to rack w/4-1/2"Ø Grade 8 bolts w/flat (1 1/16" max dia x0.095" min thick) and split ring lock (0.869" max Ø x 0.125" min thick) washer per SAE J429. Rack was based mounted to shake table w/ 4-5/8"Ø Grade 8 bolts w/ flat (1 5/16" max Ø x 0.095" min thick) and split ring lock (1.073" max Ø x 0.156" min thick) washer.

Seismic Modifications: None **Test Anomaly:** None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.60	1.0	4.16g	3.12g	1.88g	0.76g

Figure UUT-B2a.1: Unit on the shake table (nearest in photo)

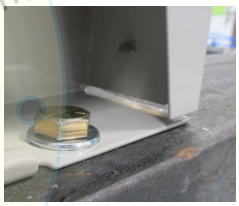

Figure UUT-B2a.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-B2 Summary Tested Sub-Component

Sub-Component	Weight	Part Number	Manufacturer	Material
Heat Exchanger	51.0 lb	MDE62021803	LTS	Stainless Steel
Compressor	81.6 lb	JBA068MAA	LG	Gray Cast Iron
Comm. PCB	< 1 lb	EBR74374302	MSE	ABS Plastic
PI485 PCB	< 1 lb	EBR74801101	MSE	ABS Plastic
Power PCB	< 1 lb	EBR74365001	Joeng min electronics	ABS Plastic
External PCB	< 1 lb	EBR74363402	Joeng min electronics	ABS Plastic
Converter PCB	< 1 lb	EBR76196401	Seyoung Co.,LTD.	ABS Plastic
Converter PCB	< 1 lb	EBR76981301	Seyoung Co.,LTD.	ABS Plastic
Inverter PCB	< 1 lb	EBR75420406	Joeng min electronics	ABS Plastic
Noise Filter	< 1 lb	EAM62632202	Sang Shin Electronics Co., LTD.	ABS Plastic
Main PCB	< 1 lb	EBR78277406	Seyoung Co.,LTD.	ABS Plastic
Enclosure	11.6 lb	AGL73957601	Daeyeong Electronics Co., Ltd	SGCC T1.0
Enclosure	1 lb	MAZ63479601	Daeyeong Electronics Co., Ltd	SGCC T1.6
Enclosure	5 lb	MGC62920402	Daeyeong Electronics Co., Ltd	SGCC T1.2
Enclosure	5 lb	MGC62920502	Daeyeong Electronics Co., Ltd	SGCC T1.2
Enclosure	5 lb	MGC62920602	Daeyeong Electronics Co., Ltd	SGCC T1.2
Enclosure	13.0 lb	AAN74139503	Kum-a Metal Industry Co., Ltd	SGCC T1.2
Enclosure	11.2 lb	AGL73919705	Maeil Precision Machinery Co., Ltd	SGCC T1.0
Enclosure	11.2 lb	AGL74134401	Maeil Precision Machinery Co., Ltd	SGCC T1.2
Enclosure	9 lb	AGL73957502	Maeil Precision Machinery Co., Ltd	SGCC T1.2
Enclosure	5 lb	MGC62920304	Maeil Precision Machinery Co., Ltd	SGCC T1.2

UUT-C1 Test Summary

Testing Lab: Curtiss Wright - Qual Tech
Testing Report: Q1732.0 Rev2
Test Sample Name: Q1732-01-01-08

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARWN053GA2	52900	168	Rigid Base Mount	X	Front-Back	17.6	20-1/8	13-5/8	42-1/2
				Y	Side-Side	24.5			
				Z	Vertical	>33.3			

Notes: Frequencies are for units prior to ICC ES AC-156 testing.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Base mount unit was bolted to shake table with 4- 1/2"Ø Grade 8 bolts w/std flat (1 1/16" max dia x 0.095" min thick) and split ring lock (0.869" max Ø x 0.125" min thickness) washer per SAE J429. See figure below.

Seismic Modifications: None **Test Anomaly:** None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.30	1.0	3.68g	2.76g	1.88g	0.76g

Figure UUT-C1.1: Unit on the shake table

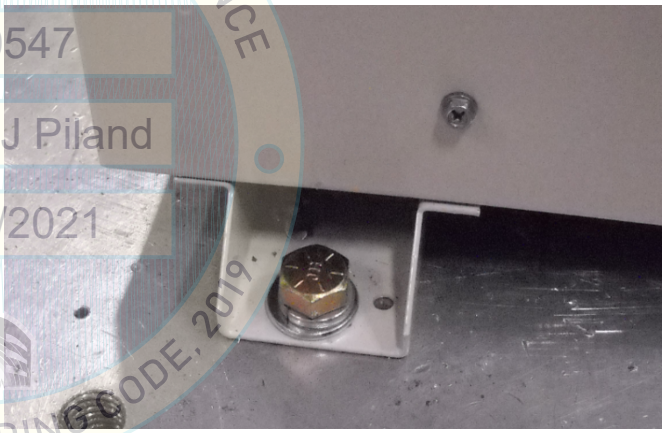

Figure UUT-C1.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-C1 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	49.0 lb	ACG74185506	LTS	Stainless Steel
Compressor	67.2 lb	TBZ37957001	LG	Cast Iron
Main PCB	< 1 lb	EBR76963803	Seyoung Co.,LTD.	ABS Plastic
Inverter PCB	< 1 lb	EBR75228201	Joeng min electronics	ABS Plastic
Noise Filter	< 1 lb	EBR81792401	Joeng min electronics	ABS Plastic
Enclosure	1 lb	MAZ62564504	Daeyeong Electronics Co., Ltd	SGCC T1.2
Enclosure	13.0 lb	AAN74295501	Maeil Precision Machinery Co., Ltd	SGCC T1.6
Enclosure	11.2 lb	AGL74253001	Maeil Precision Machinery Co., Ltd	SGCC T1.0
Enclosure	11.2 lb	AGL74253502	Maeil Precision Machinery Co., Ltd	SGCC T1.0
Enclosure	5 lb	MGC63179702	Maeil Precision Machinery Co., Ltd	SGCC T1.0
Enclosure	5 lb	MGC63180002	Maeil Precision Machinery Co., Ltd	SGCC T1.0

UUT-D1 Test Summary

Testing Lab: Curtiss Wright - Qual Tech
Testing Report: Q1732.0 Rev2
Test Sample Name: Q1732-01-01-09

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARUN024GSS4	24000	159	Rigid Base Mount	X	Front-Back	9.4	37-13/32	13	32-27/32
				Y	Side-Side	16.8			
				Z	Vertical	>33.3			

Notes: Frequencies are for units prior to ICC ES AC-156 testing.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Base mounted unit bolted direct shake table with 4- 1/2"Ø Grade 8 bolts w/std flat (1 1/16" max dia x 0.095" min thick) and split ring lock (0.869" max Ø x 0.125" min thickness) washer per SAE J429. See figure below.

Seismic Modifications: None **Test Anomaly:** None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.30	1.0	3.68g	2.76g	1.88g	0.76g

Figure UUT-D1.1: Unit on the shake table

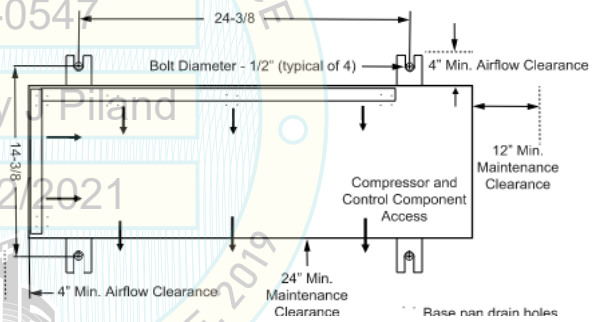

Figure UUT-D1.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-D1 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	18.7 lb	ACG65609419	DonglL Aluminium	Aluminum Fin, Copper Tube
Compressor	41.7 lb	GPT442MAA	Joeng min electronics	Cast Iron
Fan Motor	5.5 lb	4681A20172Q	Joeng min electronics	Aluminum
Inverter Printed Circuit Board	1.9 lb	EBR78509902	Seyoung	ABS Plastic
Main Printed Circuit Board	< 1 lb	EBR81792501	Joeng min electronics	ABS Plastic
Noise Filter Circuit Board	< 1 lb	EBR74801101	MSE	ABS Plastic
Sub PCB Printed Control Board	< 1 lb	EBR74374302	MSE	ABS Plastic
Sub PCB Printed Control Board	< 1 lb	EBR77627622	Seyoung	ABS Plastic
Enclosure	32.8 lb	ARUN024GSS4-encl	LG Electronics, Inc	Sheet Steel

UUT-D2 Test Summary

Testing Lab: Curtiss Wright - Qual Tech
Testing Report: Q1732.0 Rev2
Test Sample Name: Q1732-01-01-10

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARUN038GSS4	38000	211	Rigid Base Mount	X	Front-Back	4.9	37-13/32	13	54-11/32
				Y	Side-Side	7.8			
				Z	Vertical	>33.3			

Notes: Frequencies are for units prior to ICC ES AC-156 testing.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Base mounted unit bolted direct shake table with 4- 1/2"Ø Grade 8 bolts w/std flat (1 1/16" max dia x 0.095" min thick) and split ring lock (0.869" max Ø x 0.125" min thickness) washer per SAE J429. See figure below.

Seismic Modifications: None **Test Anomaly:** None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.30	1.0	3.68g	2.76g	1.88g	0.76g

Figure UUT-D2.1: Unit on the shake table

Figure UUT-D2.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-D2 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	14.9 lb	ACG73865309	LTS Korea	Aluminum Fin, Copper Tube
Compressor	41.7 lb	GPT442MAA	LG Electronics Inc.	Cast Iron
Fan Motor	5.5 lb	4681A20172Q	SCD	Aluminum
Inverter Printed Circuit Board	1.9 lb	EBR78509901	Seyoung	ABS Plastic
Main Printed Circuit Board	< 1 lb	EBR80272314	Seyoung	ABS Plastic
Sub PCB Printed Control Board	< 1 lb	EBR74801101	MSE	ABS Plastic
Sub PCB Printed Control Board	< 1 lb	EBR74374302	MSE	ABS Plastic
Enclosure	47.0 lb	ARUN038GSS4-encl	LG Electronics, Inc	Sheet Steel

UUT-D3 Test Summary

Testing Lab: SESTEC
Testing Report: 2020-K-30 #3
Test Sample Name: ARUM048GSS5 (UUT-3)

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARUM048GSS5	48000	260	Rigid Base Mount	X	Front-Back	8.0	37-13/32	13	54-11/32
				Y	Side-Side	4.8			
				Z	Vertical	24.3			

Notes: Frequencies are for units prior to ICC ES AC-156 testing.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Base mounted units are bolted to a rigid fixture with 4-3/8"Ø Grade 2 bolts per SAE J429 w/ flat (1" max square x 0.125" min thick) washer. Fixture mounted to shake table with 5-M0 (~1 1/4"Ø grade 8 bolts. See figure below.
Seismic Mod: none **Test Anomaly:** minor deformation at pane

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.00	1.0	3.20g	2.40g	1.34g	0.54g

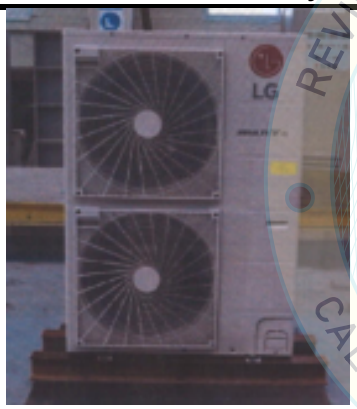

Figure UUT-D3.1: Unit on the shake table

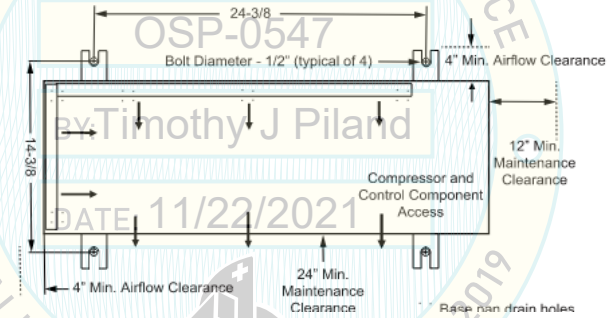

Figure UUT-D3.2: Mounting Detail

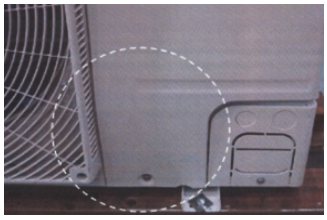

Figure UUT-D3.3: Test Anomaly

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-D4 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	37.9 lb	ACG74186203	DI SYSTEM	Aluminum Fin, Copper Tube
Fan Motor	4.9 lb	4681A20172Q	SCD CO., LTD	Steel SECC, BMC
Fan Motor	4.9 lb	4681A20172R	SCD CO., LTD	Steel SECC, BMC
Compressor	66.1 lb	TBZ38235901(JQC048MBC)	LG Electronics	Gray Cast Iron
Display Printed Control Board	< 1 lb	EBR80882201	Seyoung	Hard Plastic
Inverter Printed Circuit Board	3 lb	EBR83821101	Joeng min electronics	Hard Plastic
Main Printed Circuit Board	< 1 lb	EBR83822903	Seyoung	Hard Plastic
Noise Filter Circuit Board	2.5 lb	EAM62792405	Sangshin Electronics	Hard Plastic
Sensor Printed Control Board	< 1 lb	EBR80100302	Joeng min electronics	Hard Plastic
Sub PCB Printed Control Board	< 1 lb	EBR80820501	Daeho Technology	Hard Plastic
Enclosure	47.0 lb	ARUN048GSS5-encl	Kuma Metal	Sheet Steel

UUT-D4 Test Summary

Testing Lab: SESTEC
Testing Report: 2019-K-001(#3/9)
Test Sample Name: ARUB060GSS4 (UUT-3)

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARUB060GSS4	60000	265	Rigid Base Mount	X	Front-Back	4.8	37-7/16	13	54-3/8
				Y	Side-Side	5.3			
				Z	Vertical	26.8			

Notes: Frequencies are for units prior to ICC ES AC-156 testing.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Bolted to a rigid fixture w/4-1/2"Ø Grade 2 bolts per JAE 429 w/flat (3/4" max dia x 0.095" min thick over (1 1/16" max dia x 0.125" min thick) washer. Fixture mounted to shake table w/9- 1 1/4" Grade 8 bolts. See figure below

Seismic Modifications: none

Test Anomaly: One screw fell out on front lower left at panel. Screw is not essential to the connection of unit to mounting bracket.

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.00	1.0	3.20g	2.40g	1.34g	0.54g

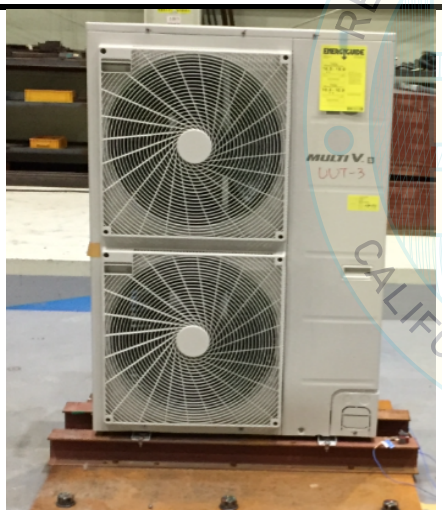

Figure UUT-D4.1: Unit on the shake table

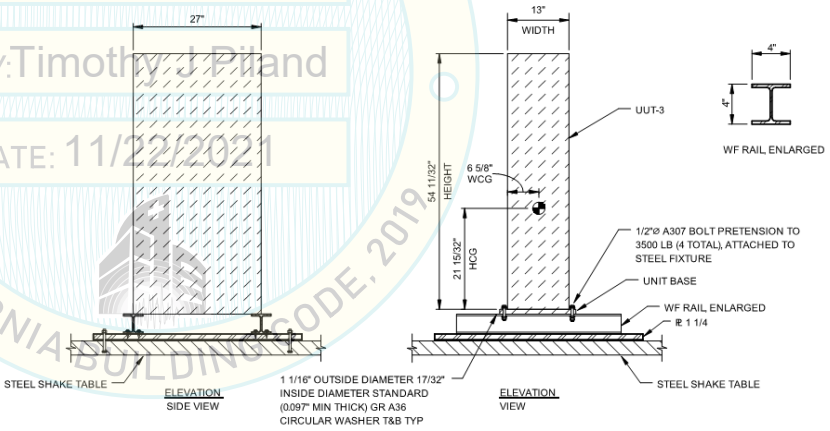

Figure UUT-D4.2: Mounting Detail

Figure UUT-D4.3: Anomaly - screw fell

Figure UUT-D4.4: Location of Anomaly

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-D4 Summary Tested Sub-Component

Sub-Component	Weight	Part Number	Manufacturer	Material
Heat Exchanger	37.9 lb	ACG74186203	DongIL Aluminum	Aluminum Fin, Copper Tube
Compressor	66.1 lb	TBZ38235901	LG Electronics Inc.	Cast Iron
Fan Motor	4.9 lb	4681A20172Q	SCD	Aluminum
Fan Motor	4.9 lb	4681A20172R	SCD	Aluminum
Display Printed Circuit Board	< 1 lb	EBR80882201	Seyoung	ABS Plastic
Inverter Printed Circuit Board	3 lb	EBR83821101	Joeng min electronics	ABS Plastic
Main Printed Circuit Board	< 1 lb	EBR83822901	Seyoung	ABS Plastic
Noise Printed Circuit Board	2.5 lb	EAM62792405	Sangshin Electronics	ABS Plastic
Sensor Printed Control Board	< 1 lb	EBR80100302	Joeng min electronics	ABS Plastic
Sub PCB Printed Control Board	< 1 lb	EBR80820501	Daeho Technology	ABS Plastic
Enclosure	47.0 lb	ARUB060GSS4-encl	LG Electronics, Inc	Sheet Steel

UUT-E1 Test Summary

Testing Lab: SESTEC
Testing Report: 2020-K-30 #5
Test Sample Name: ARNU073M1A4 (UUT-5)

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU073M1A4	7500	55	Suspend	X	Front-Back	NA	35-1/2	28-11/32	10-19/32
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Indoor units were suspended from steel fixture using (4) 3/8 dia A36 hanger rods w/ unistrut rod stiffeners and (8) 1/8 dia aircraft cable braces w/ Mason SCB-1 clips at each end. See figure below

Seismic Modifications: none **Test Anomaly:** none

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.34	1.0	3.76g	2.82g	1.57g	0.63g

Figure UUT-E1.1: Unit on the shake table

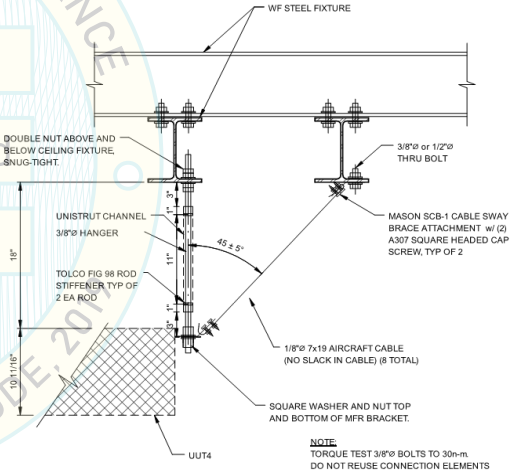

Figure UUT-E1.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-E1 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	7.1 lb	ADL74001006	Dong IL Aluminum Co.,Ltd	Aluminum Fin, Copper Tube
Fan Motor	4.4	4681A20172Y	SCD	Aluminum
Main Printed Control Board	< 1 lb	EBR86011304	Joeng min electronics	ABS Plastic
Enclosure - Panel Assembly Upper	11.8 lb	AGL74236402	Maeil Precision Machinery Co., Ltd	SGCC T0.8
Enclosure - Panel Assembly Front	5.6 lb	AGL74234902	Maeil Precision Machinery Co., Ltd	SGCC T0.6
Enclosure - Panel Assembly Side	3.1 lb	AGL74256802	Dae Yang Jeong Gi	SGCC T0.8
Enclosure - Panel Assembly Side	7.7 lb	AGL74256831	Dae Yang Jeong Gi	SGCC T0.8
Enclosure - Panel Assembly Rear	3.4 lb	AGL74235009	Maeil Precision Machinery Co., Ltd	SGCC T0.6

UUT-E2 Test Summary

Testing Lab: SESTEC
Testing Report: 2020-K-30 #6
Test Sample Name: ARNU243M1A4 (UUT-6)

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU243M1A4	24200	62	Suspend	X	Front-Back	NA	35-1/2	28-11/32	10-19/32
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Indoor units were suspended from steel fixture using (4) 3/8 dia A36 hanger rods w/ unistrut rod stiffeners and (8) 1/8 dia aircraft cable braces w/ Mason SCB-1 clips at each end. See figure below

Seismic Modifications: none **Test Anomaly:** none

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.34	1.0	3.76g	2.82g	1.57g	0.63g

Figure UUT-E2.1: Unit on the shake table

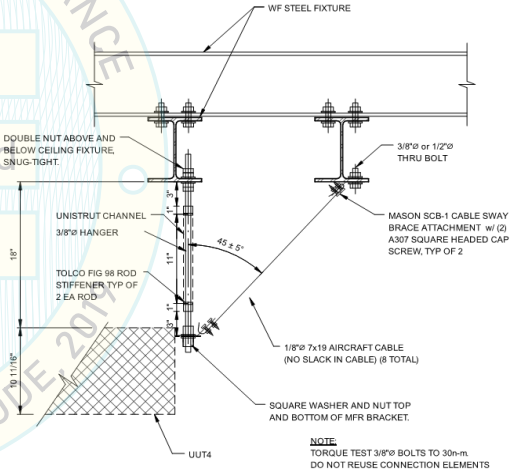

Figure UUT-E2.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-E2 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	10.7 lb	ADL74001008	Dong IL Aluminum Co.,Ltd	Aluminum Fin, Copper Tube
Fan Motor	4.4	4681A20172Y	SCD	Aluminum
Main Printed Control Board	< 1 lb	EBR86011304	Joeng min electronics	ABS Plastic
Enclosure - Panel Assembly Upper	11.8 lb	AGL74236402	Maeil Precision Machinery Co., Ltd	SGCC T0.8
Enclosure - Panel Assembly Front	5.6 lb	AGL74234902	Maeil Precision Machinery Co., Ltd	SGCC T0.6
Enclosure - Panel Assembly Side	3.1 lb	AGL74256802	Dae Yang Jeong Gi	SGCC T0.8
Enclosure - Panel Assembly Side	7.7 lb	AGL74256831	Dae Yang Jeong Gi	SGCC T0.8
Enclosure - Panel Assembly Rear	3.4 lb	AGL74235009	Maeil Precision Machinery Co., Ltd	SGCC T0.6

UUT-E3 Test Summary

Testing Lab: Curtiss Wright - Qual Tech
Testing Report: Q1740.0 Rev0
Test Sample Name: Q1740-04-01-01

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU243BHA4	24200	59	Suspend	X	Front-Back	NA	34-3/4	17-3/4	10-1/4
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Indoor units were suspended from steel fixture using (4) 3/8" dia A36 hanger rods w/ unistrut rod stiffeners and (8)1/8" dia aircraft cable braces w/ Mason SCB-1 clips at each end. See figure below

Seismic Modifications: None **Test Anomaly:** None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
CBC 2019	AC 156	3.25	1.0	5.20g	3.90g	2.18g	0.88g

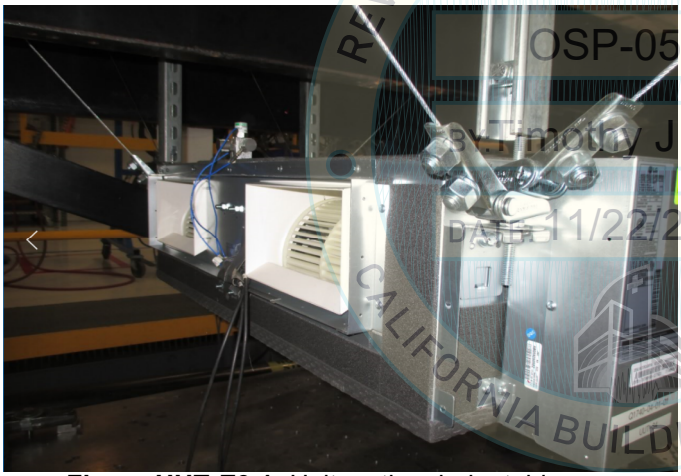

Figure UUT-E3.1: Unit on the shake table

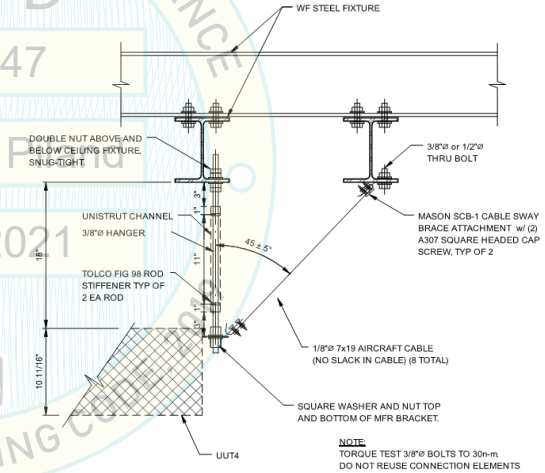

Figure UUT-E3.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-E3 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	5.9 lb	5421A20100R	Lotte Aluminium	Aluminum Fin, Copper Tube
Fan Motor	28.7 lb	4681A20197F	Nidec Shibaura	Carbon Steel/Polyester resin
Main Printed Circuit Board	< 1 lb	EBR79004801	Joeng min electronics	ABS Plastic
Enclosure - Panel Assembly Upper	7.9 lb	3721A20177C	Esung sanup	SGCC T1.0
Enclosure - Panel Assembly Side	3.6 lb	3721A24002H	Bukookjeongmil	SGCC T1.0
Enclosure - Panel Assembly Side	3.1 lb	3721A24002G	Esung sanup	SGCC T1.0
Enclosure - Panel Assembly Rear	3.9 lb	3721A21004C	Dae Yang Jeong Gi	SGCC T1.0
Enclosure - Panel Assembly Rear	5.9 lb	3721A21005C	Dae Yang Jeong Gi	SGCC T1.0

UUT-E4 Test Summary

Testing Lab: Curtiss Wright - Qual Tech
Testing Report: Q1526.0 Rev2
Test Sample Name: Q1526-05-01-01

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU073BGA4	7500	84	Suspend	X	Front-Back	NA	46-17/32	17-23/32	11-23/32
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Indoor units were suspended from steel fixture using (4) 3/8" dia A36 hanger rods w/ unistrut rod stiffeners and (8)1/8" dia aircraft cable braces w/ Mason SCB-1 clips at each end. See figure below

Seismic Modifications: None **Test Anomaly:** None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
CBC 2019	AC 156	2.95	1.0	4.72g	3.54g	1.98g	0.80g

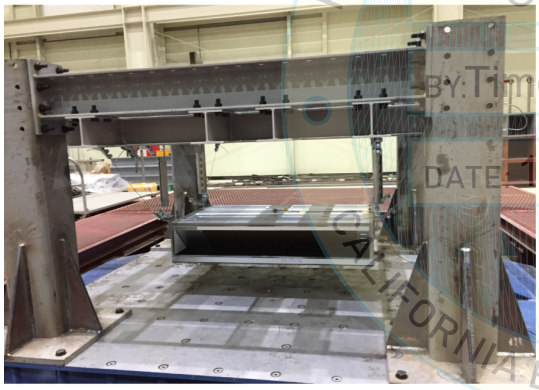

Figure UUT-E4.1: Unit on the shake table

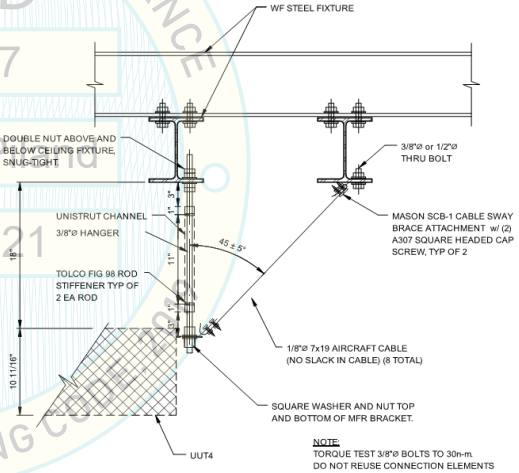

Figure UUT-E4.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-E4 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	9.5 lb	5421A10027C	Dong IL Aluminum Co.,Ltd	Aluminum Fin, Copper Tube
Fan Motor	14.8 lb	EAU37067106	C&M INCORPORATED	Carbon Steel/Polyester resin
Fan Motor	14.8 lb	EAU37067106	C&M INCORPORATED	Carbon Steel/Polyester resin
Main Printed Circuit Board	< 1 lb	EBR79004802	Joeng min electronics	ABS Plastic
Enclosure - Panel Assembly Upper	9.7 lb	3721A20180C	Dae Yang Jeong Gi	SGCC T1.0
Enclosure - Panel Assembly Side	4.0 lb	3721A24003J	Esung sanup	SGCC T1.0
Enclosure - Panel Assembly Side	4.9 lb	AGL74256831	Maeil Precision Machinery Co., Ltd	SGCC T1.0
Enclosure - Panel Assembly Rear	5.2 lb	3721A21006C	Dae Yang Jeong Gi	SGCC T1.0
Enclosure - Panel Assembly Rear	7.8 lb	3721A21007C	Dae Yang Jeong Gi	SGCC T1.0

UUT-E5 Test Summary

Testing Lab: SESTEC
Testing Report: 2019-K-001(#4/9)
Test Sample Name: ARNU073M2A4 (UUT-4)

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU073M2A4	7500	84	Suspend	X	Front-Back	NA	49-9/32	27-1/4	10-11/16
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Indoor units were suspended from steel fixture using (4) 3/8" dia A36 hanger rods w/ unistrut rod stiffeners and (8)1/8" dia aircraft cable braces w/ Mason SCB-1 clips at each end. See figure below

Seismic Modifications: None **Test Anomaly:** None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
CBC 2019	AC 156	2.50	1.0	4.00g	3.00g	1.68g	0.68g

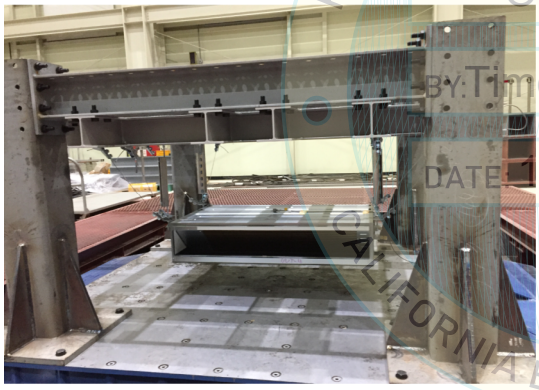

Figure UUT-E5.1: Unit on the shake table

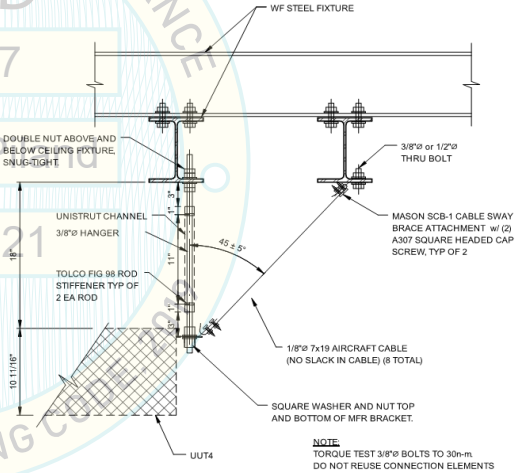

Figure UUT-E5.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-E5 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	9 lb	ADL74001015	Dong IL Aluminum Co.,Ltd	Aluminum Fin, Copper Tube
Fan Motor	15.2 lb	EAU37067103	C&M INCORPORATED	Aluminum
Main Printed Circuit Board	< 1 lb	EBR81117102	Joeng min electronics	Hard Plastic
Enclosure - Panel Assembly Upper	16.3 lb	AGL74236404	Maeil Precision Machinery Co., Ltd	SGCC T0.8
Enclosure - Panel Assembly Front	7.7 lb	AGL74234901	Maeil Precision Machinery Co., Ltd	SGCC T0.6
Enclosure - Panel Assembly Side	3.1 lb	AGL74256802	Dae Yang Jeong Gi	SGCC T0.8
Enclosure - Panel Assembly Side	7.7 lb	AGL74256831	Dae Yang Jeong Gi	SGCC T0.8
Enclosure - Panel Assembly Rear	4.7 lb	AGL74235007	Maeil Precision Machinery Co., Ltd	SGCC T0.6

UUT-E6 Test Summary

Testing Lab: SESTEC
Testing Report: 2019-K-001(#5/9)
Test Sample Name: ARNU543M3A4 (UUT-5)

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU543M3A4	54000	97	Suspend	X	Front-Back	NA	49-9/32	27-1/4	14-3/16
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Indoor units were suspended from steel fixture using (4) 3/8" dia A36 hanger rods w/ unistrut rod stiffeners and (8) 1/8" dia aircraft cable braces w/ Mason SCB-1 clips at each end. See figure below.
Seismic Modifications: None **Test Anomaly:** None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
CBC 2019	AC 156	2.50	1.0	4.00g	3.00g	1.67g	0.68g

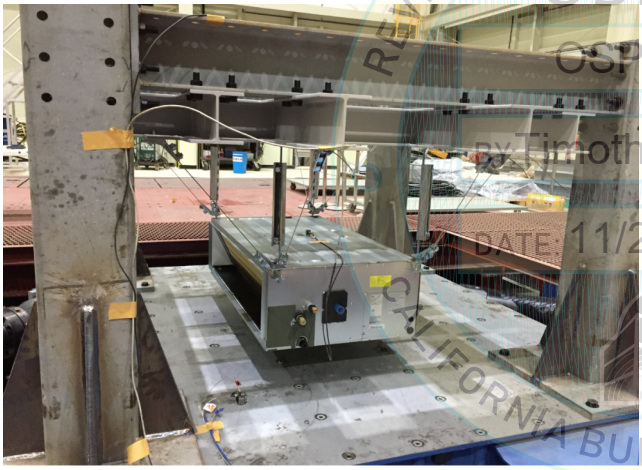

Figure UUT-E6.1: Unit on the shake table

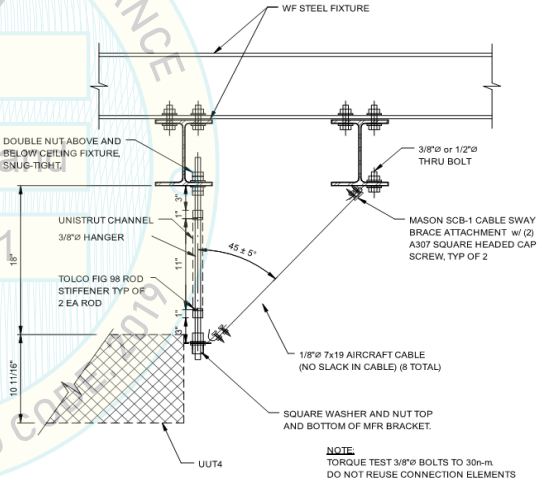

Figure UUT-E6.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-E6 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	15 lb	ADL74001018	Dong IL Aluminum Co.,Ltd	Aluminum Fin, Copper Tube
Fan Motor	14.8 lb	EAU37067120	C&M INCORPORATED	Aluminum
Main Printed Circuit Board	< 1 lb	EBR81117116	Joeng min electronics	Hard Plastic
Enclosure - Panel Assembly Upper	16.3 lb	AGL74236403	Maeil Precision Machinery Co., Ltd	SGCC T0.8
Enclosure - Panel Assembly Front	6.8 lb	AGL74234903	Maeil Precision Machinery Co., Ltd	SGCC T0.6
Enclosure - Panel Assembly Side	4.2 lb	AGL74256804	Dae Yang Jeong Gi	SGCC T0.8
Enclosure - Panel Assembly Side	7.1 lb	AGL74256832	Dae Yang Jeong Gi	SGCC T0.8
Enclosure - Panel Assembly Rear	6.6 lb	AGL74235007	Maeil Precision Machinery Co., Ltd	SGCC T0.6

UUT-E7 Test Summary

Testing Lab: Curtiss Wright - Qual Tech
Testing Report: Q1526.0 Rev2
Test Sample Name: Q1526-06-01-01

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU543BRA4	54000	117	Suspend	X	Front-Back	NA	48-7/16	23-7/32	14-31/32
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Indoor units were suspended from steel fixture using (4) 3/8" dia A36 hanger rods w/ unistrut rod stiffeners and (8) 1/8" dia aircraft cable braces w/ Mason SCB-1 clips at each end. See figure below.

Seismic Modifications: None **Test Anomaly:** None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
CBC 2019	AC 156	2.95	1.0	4.72g	3.54g	1.98g	0.80g

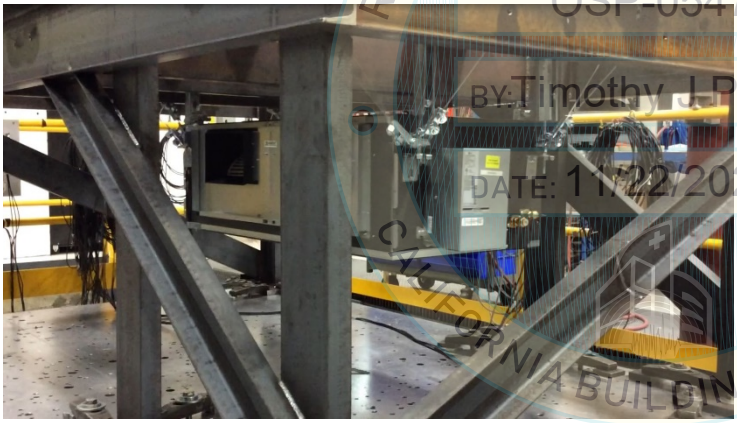

Figure UUT-E7.1: Unit on the shake table

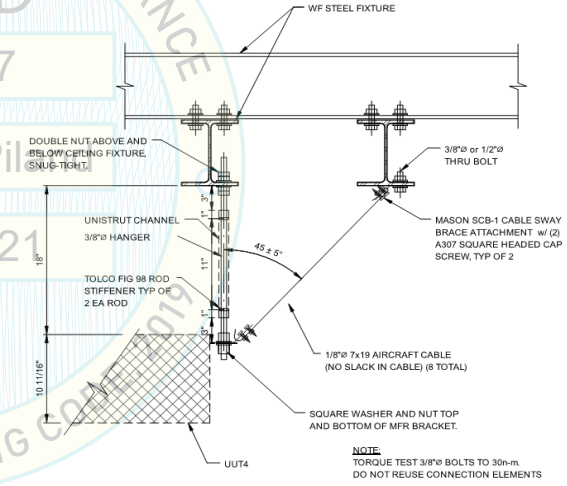

Figure UUT-E7.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-E7 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	12.6 lb	5421A20273A	Dong IL Aluminum CO.,LTD.	Aluminum Fin, Copper Tube
Fan Motor	6.6 lb	4681A20169B	Shibaura	Carbon Steel/Polyester resin
Fan Motor	6.6 lb	4681A20169B	Shibaura	Carbon Steel/Polyester resin
Main Printed Circuit Board	< 1 lb	EBR79004804	Joeng min electronics	Hard Plastic
Enclosure - Panel Assembly Upper	18.8 lb	3721A20199C	Dae Yang Jeong Gi	SGCC T1.0
Enclosure - Panel Assembly Side	8.8 lb	3721A23002B	Dae Yang Jeong Gi	SGCC T1.0
Enclosure - Panel Assembly Side	6.4 lb	3721A23003B	Dae Yang Jeong Gi	SGCC T1.0
Enclosure - Panel Assembly Base	12.4 lb	4790A10052B	ShinSung Delta Tech Co., Ltd.	SGCC T1.6

UUT-E8 Test Summary

Testing Lab: SESTEC
Testing Report: 2020-K-30 #7
Test Sample Name: ARNU483B8Z4 (UUT-7)

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU483B8Z4	48100	161	Suspend	X	Front-Back	NA	61-1/2	27-3/8	18-1/8
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Indoor units were suspended from steel fixture using (4) 3/8 dia A36 hanger rods w/ unistrut rod stiffeners and (8) 1/8 dia aircraft cable braces w/ Mason SCB-1 clips at each end. See figure below

Seismic Modifications: none

Test Anomaly: minor deformation at attachment bracket Provide 7/8"Ø oversized washers top and bottom as in UUT-E11.

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.34	1.0	3.76g	2.82g	1.57g	0.63g

Figure UUT-E8.1: Unit on the shake table

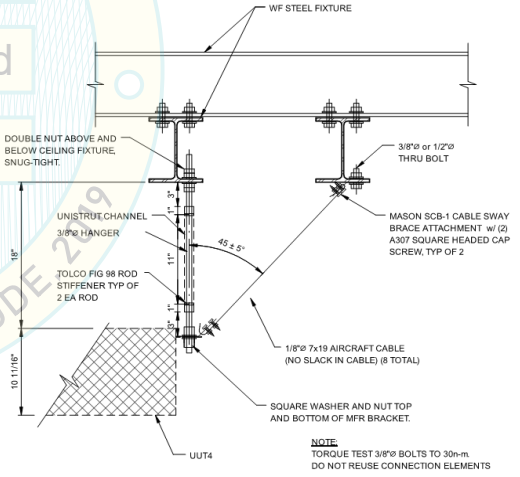

Figure UUT-E8.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-E8 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	22.4 lb	5421A20217L	LTS Korea	Al Fin, Cu Tube
Fan Motor	19.8 lb	EAU37067118	SCD	Aluminum
Main Printed Control Board	< 1 lb	EBR79004830	Joeng min electronics	ABS Plastic
Enclosure - Panel Assembly Upper	19.2 lb	AGL75653501	Esung sanup	SGCC T0.8
Enclosure - Panel Assembly Front	50.7 lb	AGL75554005	Sung Chull Mfr, Co., Ltd	SGCC T1.6
Enclosure - Panel Assembly Side	14.9 lb	AGL35764412	Esung sanup	SGCC T1.0
Enclosure - Panel Assembly Side	15.6 lb	AGL35764707	Esung sanup	SGCC T1.0
Enclosure - Panel Assembly Base	8.7 lb	AAN75848701	Esung sanup	SGCC T0.8
Enclosure - Panel Assembly Base	8.7 lb	AAN75848702	Esung sanup	SGCC T0.8

UUT-E9 Test Summary

Testing Lab: SESTEC
Testing Report: 2020-K-30 #8
Test Sample Name: ARNU963B8Z4 (UUT-8)

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU963B8Z4	95900	161	Suspend	X	Front-Back	NA	61-1/2	27-3/8	18-1/8
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Indoor units were suspended from steel fixture using (4) 3/8 dia A36 hanger rods w/ unistrut rod stiffeners and (8) 1/8 dia aircraft cable braces w/ Mason SCB-1 clips at each end. See figure below

Seismic Modifications: none

Test Anomaly: minor deformation at attachment bracket Provide 7/8"Ø oversized washers top and bottom as in UUT-E11.

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.34	1.0	3.76g	2.82g	1.57g	0.63g

Figure UUT-E9.1: Unit on the shake table

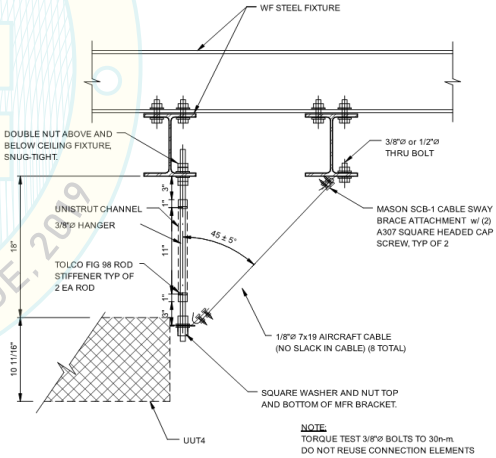

Figure UUT-E9.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-E9 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	22.4 lb	5421A20217L	LTS Korea	Al Fin, Cu Tube
Fan Motor	13.2 lb	EAU39857401	Panasonic	Aluminum
Main Printed Control Board	< 1 lb	EBR78310706	Joeng min electronics	ABS Plastic
Enclosure - Panel Assembly Upper	19.2 lb	AGL75653501	Esung sanup	SGCC T0.8
Enclosure - Panel Assembly Front	44.1 lb	AGL73917806	Sung Chull Mfr, Co., Ltd	SGCC T1.6
Enclosure - Panel Assembly Side	14.9 lb	AGL35764412	Esung sanup	SGCC T1.0
Enclosure - Panel Assembly Side	15.6 lb	AGL35764707	Esung sanup	SGCC T1.0
Enclosure - Panel Assembly Base	8.7 lb	AAN75848701	Esung sanup	SGCC T0.8
Enclosure - Panel Assembly Base	8.7 lb	AAN75848702	Esung sanup	SGCC T0.8

UUT-E10 Test Summary

Testing Lab: SESTEC
Testing Report: 2020-K-31 #1
Test Sample Name: ARNU963B8A4 (UUT-4)

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU963B8A4	95900	185	Suspend	X	Front-Back	NA	61-1/2	27-3/32	18-1/2
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Indoor units were suspended from steel fixture using (4) 3/8 dia A36 hanger rods w/ unistrut rod stiffeners and (8) 1/8 dia aircraft cable braces w/ Mason SCB-1 clips at each end. See figure below

Seismic Modifications: none

Test Anomaly: minor deformation at attachment bracket Provide 7/8"Ø oversized washers top and bottom as in UUT-E11.

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.50	1.0	4.00g	3.00g	1.67g	0.68g

Figure UUT-E10.1: Unit on the shake table

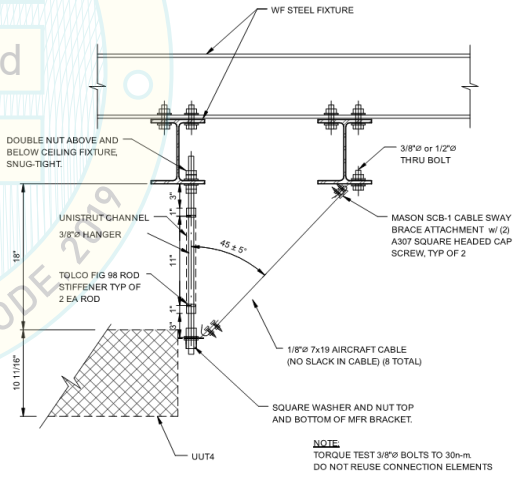

Figure UUT-E10.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-E10 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	22.4 lb	5421A20217L	LTS Korea	Al Fin, Cu Tube
Fan Motor	13.2 lb	EAU39857401	Panasonic	Aluminum
Main Printed Control Board	< 1 lb	EBR79004812	Joeng min electronics	ABS Plastic
Enclosure - Panel Assembly Upper	19.2 lb	AGL75653501	Esung sanup	SGCC T0.8
Enclosure - Panel Assembly Front	92.1 lb	AGL73917801	Sung Chull Mfr, Co., Ltd	SGCC T1.6
Enclosure - Panel Assembly Side	14.9 lb	AGL35764412	Esung sanup	SGCC T1.0
Enclosure - Panel Assembly Side	15.6 lb	AGL35764707	Esung sanup	SGCC T1.0
Enclosure - Panel Assembly Base	8.7 lb	AAN75848701	Esung sanup	SGCC T0.8
Enclosure - Panel Assembly Base	8.7 lb	AAN75848702	Esung sanup	SGCC T0.8

UUT-E11 Test Summary

Testing Lab: Curtiss Wright - Qual Tech
Testing Report: Q1526.0 Rev2
Test Sample Name: Q1526-07-01-01

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU963B8A4	95900	192	Suspend	X	Front-Back	NA	61-1/2	27-3/32	18-1/8
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Indoor units were suspended from steel fixture using (4) 3/8" dia A36 hanger rods w/ unistrut rod stiffeners and (8) 1/8" dia aircraft cable braces w/ Mason SCB-1 clips at each end. See figure below.

Seismic Modifications: None **Test Anomaly:** None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
CBC 2019	AC 156	2.95	1.0	4.72g	3.54g	1.98g	0.80g

Figure UUT-E11.1: Unit on the shake table

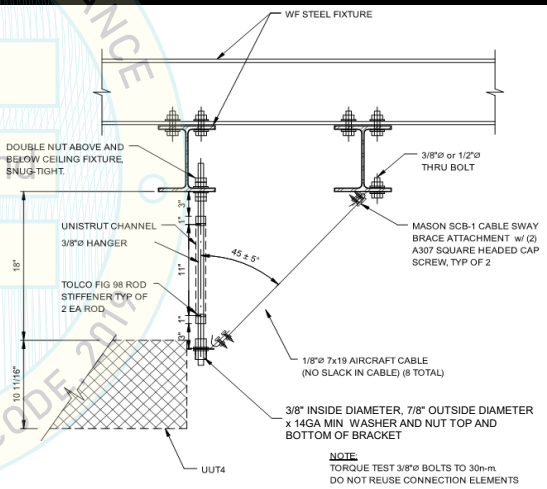

Figure UUT-E11.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-E11 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	22.4 lb	5421A20217L	LTS Korea	Aluminum Fin, Copper Tube
Fan Motor	13.2 lb	EAU39857401	Panasonic	Carbon Steel/Polyester resin
Main Printed Circuit Board	< 1 lb	EBR79004804	Joeng min electronics	Hard Plastic
Enclosure - Panel Assembly Upper	19.2 lb	AGL75653501	Esung sanup	SGCC T0.8
Enclosure - Panel Assembly Front	92.1 lb	AGL73917801	Sung Chull Mfr, Co., Ltd	SGCC T1.6
Enclosure - Panel Assembly Side	14.9 lb	AGL35764412	Esung sanup	SGCC T1.0
Enclosure - Panel Assembly Side	15.6 lb	AGL35764707	Esung sanup	SGCC T1.0
Enclosure - Panel Assembly Base	8.7 lb	AAN75848701	Esung sanup	SGCC T0.8
Enclosure - Panel Assembly Base	8.7 lb	AAN75848702	Esung sanup	SGCC T0.8

UUT-F1 Test Summary

Testing Lab: Curtiss Wright - Qual Tech
Testing Report: Q1526.0 Rev2
Test Sample Name: Q1526-08-01-01

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU123TUC4	13600	30	Suspend	X	Front-Back	NA	33-27/32	17-23/32	5-3/16
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Indoor units were suspended from steel fixture using (4) 3/8" dia A36 hanger rods w/ unistrut rod stiffeners and (8)1/8" dia aircraft cable braces w/ Mason SCB-1 clips at each end. See Figure below.

Seismic Modifications: None **Test Anomaly:** None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
CBC 2019	AC 156	2.95	1.0	4.72g	3.54g	1.98g	0.80g

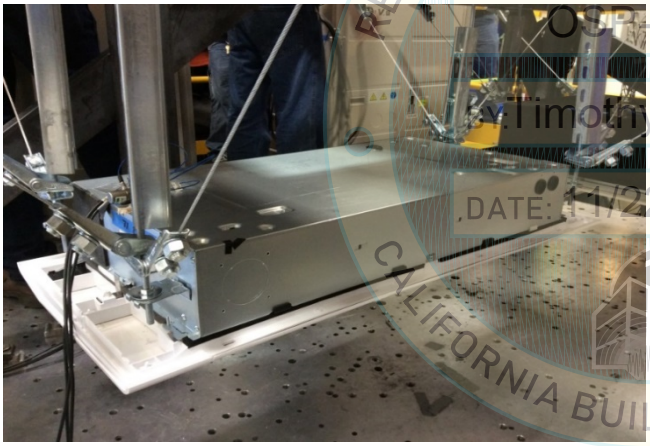

Figure UUT-F1.1: Unit on the shake table

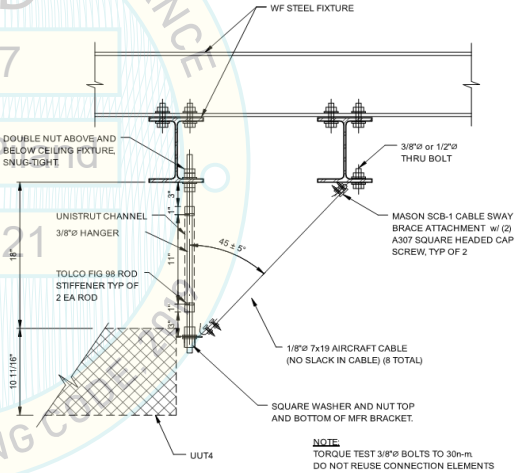

Figure UUT-F1.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-F1 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	5.4 lb	ADL36804501	LG Electronics Inc.	Aluminum Fin, Copper Tube
Fan Motor	1.8 lb	EAU62004010	Shibaura	Copper, resin
Main Printed Circuit Board	< 1 lb	EBR81221805	LG Electronics Inc.	ABS Plastic
Enclosure	11.3 lb	ABJ36805709	Kuma Metal	SGCC T0.6

UUT-F2 Test Summary

Testing Lab: Curtiss Wright - Qual Tech
Testing Report: Q1526.0 Rev2
Test Sample Name: Q1526-01-01-12

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU243TTC4	24200	34	Suspend	X	Front-Back	NA	46-15/32	17-23/32	5-3/16
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Indoor units were suspended from steel fixture using (4) 3/8" dia A36 hanger rods w/ unistrut rod stiffeners and (8)1/8" dia aircraft cable braces w/ Mason SCB-1 clips at each end. See Figure below.

Seismic Modifications: None **Test Anomaly:** None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
CBC 2019	AC 156	3.00	1.0	4.80g	3.60g	2.21g	0.89g

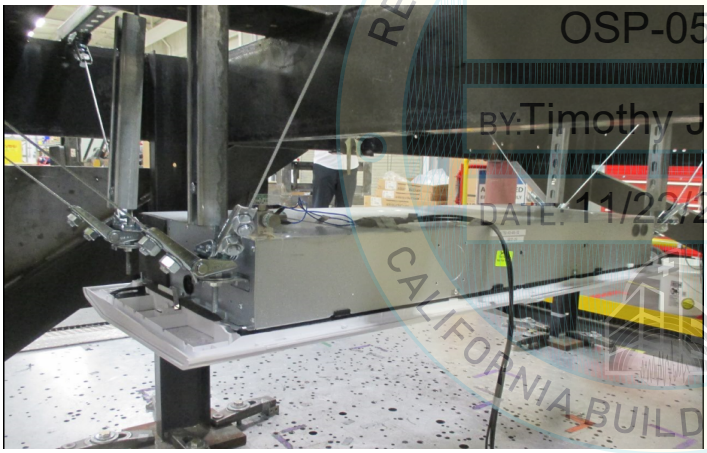

Figure UUT-F2.1: Unit on the shake table

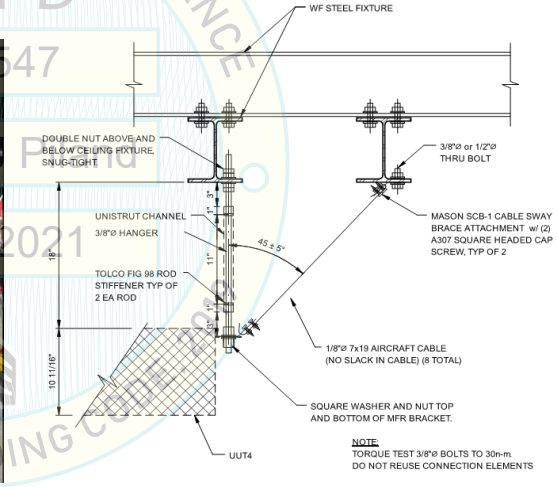

Figure UUT-F2.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-F2 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	8.0 lb	ADL36804501	LG Electronics Inc.	Aluminum Fin, Copper Tube
Fan Motor	1.8 lb	EAU62004010	Shibaura	Copper, resin
Main Printed Circuit Board	< 1 lb	EBR81221805	LG Electronics Inc.	ABS Plastic
Enclosure	13.9 lb	ABJ36805705	Kuma Metal	SGCC T0.6

UUT-G1 Test Summary

Testing Lab: Curtiss Wright - Qual Tech
Testing Report: Q1526.0 Rev2
Test Sample Name: Q1526-10-01-01

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU053TRC4	5500	31	Suspend	X	Front-Back	NA	22-7/16	22-7/16	8-7/16
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Indoor units were suspended from steel fixture using (4) 3/8 dia A36 hanger rods w/ unistrut rod stiffeners and (8) 1/8 dia aircraft cable braces w/ Mason SCB-1 clips at each end. See figure below

Seismic Modifications: none **Test Anomaly:** none

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.95	1.0	4.72g	3.54g	1.98g	0.80g

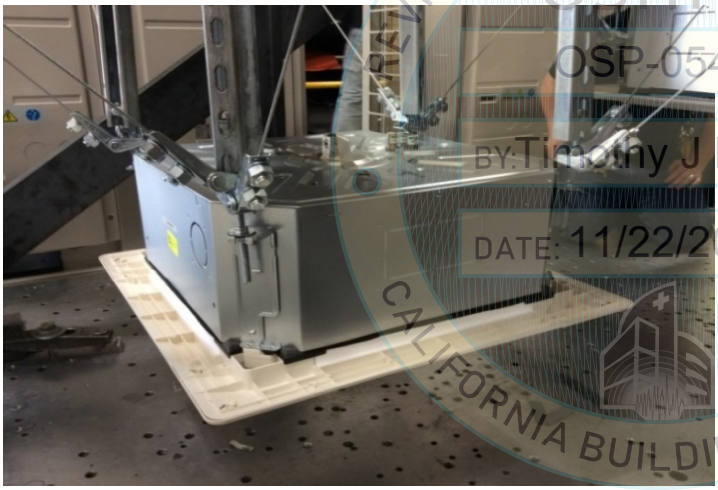

Figure UUT-G1.1: Unit on the shake table

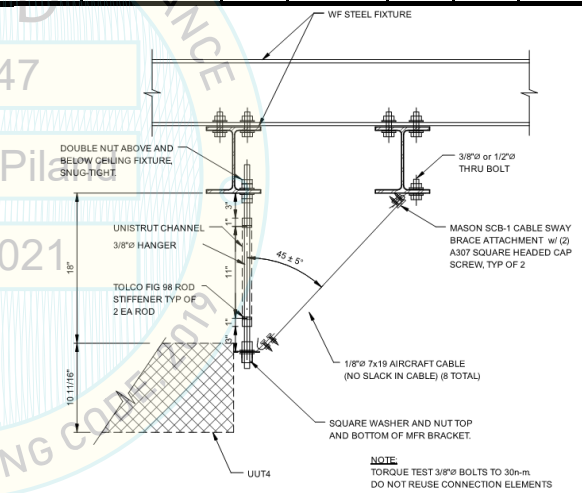

Figure UUT-G1.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-G1 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	3.0 lb	ADL55996003	Lotte Aluminium	Al Fin, Cu Tube
Fan Motor	3.5 lb	EAU32165801	Panasonic	Carbon Steel/Polyester resin
Main Printed Control Board	<1 lb	EBR81221804	MSE	ABS Plastic
Enclosure	3.4 lb	ABJ36864909	Dae Yang Jeong Gi	SGCC T0.6
Enclosure	3.4 lb	ABJ36864810	Dae Yang Jeong Gi	SGCC T0.6
Enclosure	5.0 lb	AAN36760003	Esung sanup	SGCC T0.8

UUT-G2 Test Summary

Testing Lab: Curtiss Wright - Qual Tech
Testing Report: Q1526.0 Rev2
Test Sample Name: Q1526-11-01-01

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU183TQC4	19100	34	Suspend	X	Front-Back	NA	22-7/16	22-7/16	10-3/32
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Indoor units were suspended from steel fixture using (4) 3/8 dia A36 hanger rods w/ unistrut rod stiffeners and (8) 1/8 dia aircraft cable braces w/ Mason SCB-1 clips at each end. See figure below

Seismic Modifications: Maximum gap of 3" from support bracket to Mason clips.

Test Anomaly: none

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.95	1.0	4.72g	3.54g	1.98g	0.80g

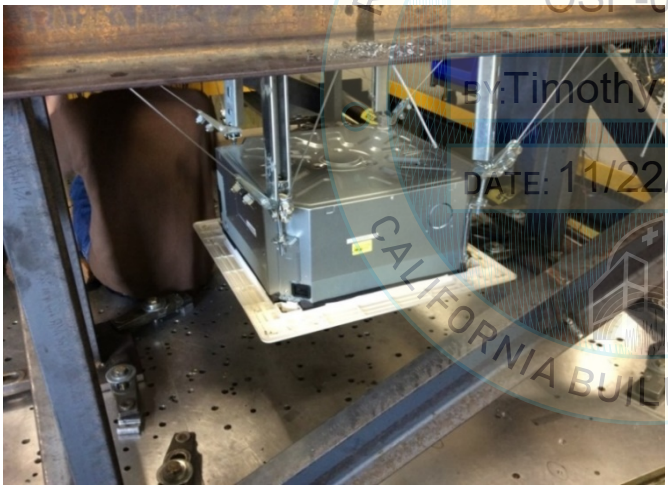

Figure UUT-G2.1: Unit on the shake table

Figure UUT-G2.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-G2 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	7.8 lb	ADL55996003	Lotte Aluminium	Al Fin, Cu Tube
Fan Motor	8.6 lb	EAU32165801	Panasonic	Carbon Steel/Polyester resin
Main Printed Control Board	<1 lb	EBR81221804	MSE	ABS Plastic
Enclosure	3.4 lb	ABJ36864908	Dae Yang Jeong Gi	SGCC T0.6
Enclosure	3.4 lb	ABJ36864809	Dae Yang Jeong Gi	SGCC T0.6
Enclosure	5.0 lb	AAN36760003	Esung sanup	SGCC T0.8

UUT-G3 Test Summary

Testing Lab: Curtiss Wright - Qual Tech
Testing Report: Q1526.0 Rev2
Test Sample Name: Q1526-12-01-01

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU363TNC4	36200	54	Suspend	X	Front-Back	NA	33-1/16	33-1/16	9-11/16
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Indoor units were suspended from steel fixture using (4) 3/8 dia A36 hanger rods w/ unistrut rod stiffeners and (8) 1/8 dia aircraft cable braces w/ Mason SCB-1 clips at each end. See figure below.

Seismic Modifications: (2) #10-32 machine screws with flat and lock washers and nuts each mounting ear. See figure on UUT-G4

Test Anomaly: none

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.95	1.0	4.72g	3.54g	1.98g	0.80g

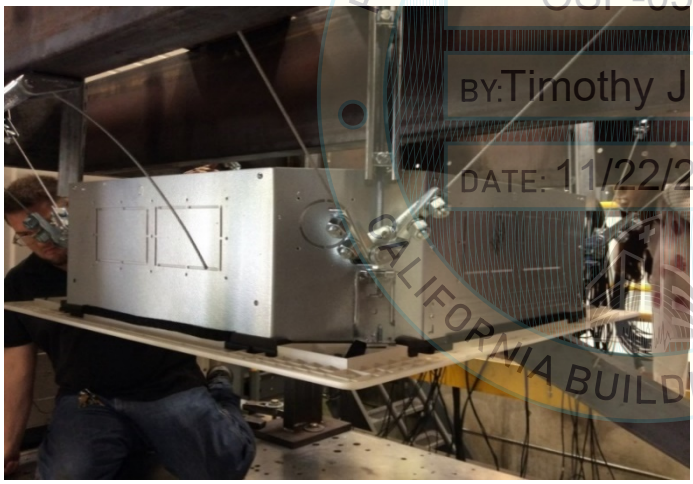

Figure UUT-G3.1: Unit on the shake table

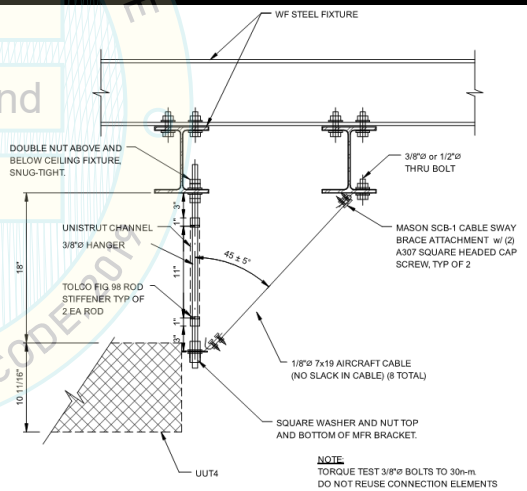

Figure UUT-G3.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-G3 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	14.9 lb	ADL73841702	Lotte Aluminium	Al Fin, Cu Tube
Fan Motor	6.6 lb	EAU31898201	Panasonic	Carbon Steel/Polyester resin
Main Printed Control Board	<1 lb	EBR81221804	MSE	ABS Plastic
Enclosure	3.5 lb	ABJ32881207	Dae Yang Jeong Gi	SGCC T0.6
Enclosure	3.9 lb	ABJ32881405	Kuma Metal	SGCC T0.6
Enclosure	11.0 lb	AAN31579004	Kuma Metal	SGCC T0.8
Enclosure	2.0 lb	MBH36241202	Kuma Metal	SGCC T0.6
Enclosure	2.0 lb	MBH36241402	Kuma Metal	SGCC T0.6

UUT-G4 Test Summary

Testing Lab: Curtiss Wright - Qual Tech
Testing Report: Q1526.0 Rev2
Test Sample Name: Q1526-13-01-02

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU483TMC4	48100	56	Suspend	X	Front-Back	NA	33-1/16	33-1/16	11-11/32
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Indoor units were suspended from steel fixture using (4) 3/8 dia A36 hanger rods w/ unistrut rod stiffeners and (8) 1/8 dia aircraft cable braces w/ Mason SCB-1 clips at each end. See figure on UUT-G3.

Seismic Modifications: 2-10-32 machine screws with flat and lock washers and nuts each mounting ear. See figure below.

Test Anomaly: none

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.95	1.0	4.72g	3.54g	1.98g	0.80g

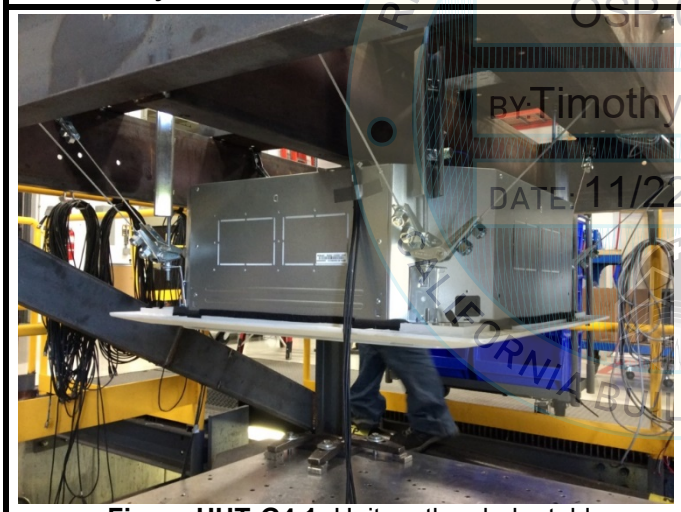

Figure UUT-G4.1: Unit on the shake table

Figure UUT-G4.2: Seismic Modification

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-G4 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	14.9 lb	ADL73841702	Lotte Aluminium	Al Fin, Cu Tube
Fan Motor	6.6 lb	EAU31898201	Panasonic	Carbon Steel/Polyester resin
Main Printed Control Board	<1 lb	EBR81221804	MSE	ABS Plastic
Enclosure	3.9 lb	ABJ31579105	Dae Yang Jeong Gi	SGCC T0.6
Enclosure	3.9 lb	ABJ32882405	Kuma Metal	SGCC T0.6
Enclosure	11.0 lb	AAN31579004	Kuma Metal	SGCC T0.8
Enclosure	2.0 lb	MBH33966802	Kuma Metal	SGCC T0.6
Enclosure	2.0 lb	MBH33966602	Kuma Metal	SGCC T0.6

UUT-G5 Test Summary

Testing Lab: SESTEC
Testing Report: 2020-K-31 #2
Test Sample Name: ARNU073TAA4 (UUT-9)

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU073TAA4	7500	77	Suspend	X	Front-Back	NA	33-1/16	33-1/16	11-11/32
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Indoor units were suspended from steel fixture using (4) 3/8 dia A36 hanger rods w/ unistrut rod stiffeners and (8) 1/8 dia aircraft cable braces w/ Mason SCB-1 clips at each end. See figure below

Seismic Modifications: none **Test Anomaly:** none

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.00	1.0	3.20g	2.40g	1.34g	0.54g

Figure UUT-G5.1: Unit on the shake table

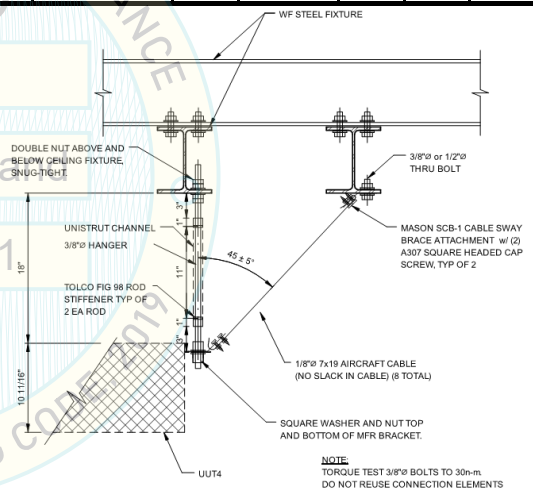

Figure UUT-G5.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-G5 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	16.6 1b	ADL76120901	Dong IL Aluminum CO., Ltd.	Al Fin, Cu Tube
Fan Motor	8.6 1b	4681A20172Z	SCD	Carbon Steel/Polyester resin
Main Printed Control Board	<1 lb	EBR86339602	DK	ABS Plastic
Enclosure	4.7 lb	MBH65042403	Bukookjeongmil	SGCC T0.6
Enclosure	7.8 lb	MBH65062103	Bukookjeongmil	SGCC T0.6
Enclosure	11.0 lb	AAN31579009	Kuma Metal	SGCC T0.8

UUT-G6 Test Summary

Testing Lab: SESTEC
Testing Report: 2020-K-30 #10
Test Sample Name: ARNU483TAA4 (UUT-10)

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU483TAA4	48100	77	Suspend	X	Front-Back	NA	33-1/16	33-1/16	11-11/32
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Indoor units were suspended from steel fixture using (4) 3/8 dia A36 hanger rods w/ unistrut rod stiffeners and (8) 1/8 dia aircraft cable braces w/ Mason SCB-1 clips at each end. See figure below

Seismic Modifications: none **Test Anomaly:** none

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.00	1.0	3.20g	2.40g	1.34g	0.54g

Figure UUT-G6.1: Unit on the shake table

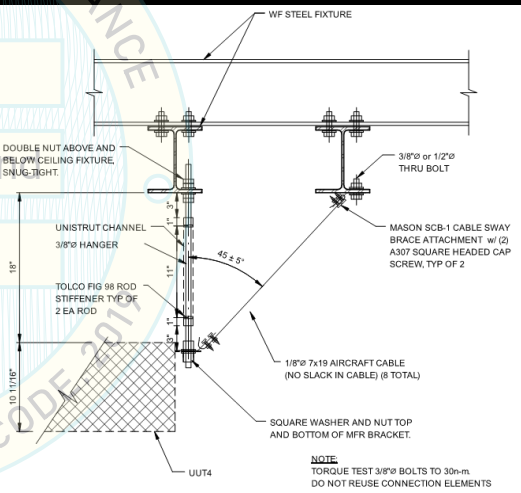

Figure UUT-G6.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-G6 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	16.6 1b	ADL76120901	Dong IL Aluminum CO., Ltd.	Al Fin, Cu Tube
Fan Motor	8.6 1b	4681A20172Z	SCD	Carbon Steel/Polyester resin
Main Printed Control Board	<1 lb	EBR86339602	DK	ABS Plastic
Enclosure	4.7 lb	MBH65042403	Bukookjeongmil	SGCC T0.6
Enclosure	7.8 lb	MBH65062103	Bukookjeongmil	SGCC T0.6
Enclosure	11.0 lb	AAN31579009	Kuma Metal	SGCC T0.8

UUT-H1 Test Summary

Testing Lab: SESTEC
Testing Report: 2019-K-001(#6/9)
Test Sample Name: ARNU153SJA4 (UUT-6)

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU153SJA4	15400	22	Wall	X	Front-Back	NA	32-3/16	7-7/16	12-7/16
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Mounting plate for wall mounted unit was attached to vertical steel fixture w/ 5-#14 sheet metal screws. See figure below.

Seismic Modifications: None

Test Anomaly: None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
CBC 2019	AC 156	2.50	1.0	4.00g	3.00g	1.67g	0.68g

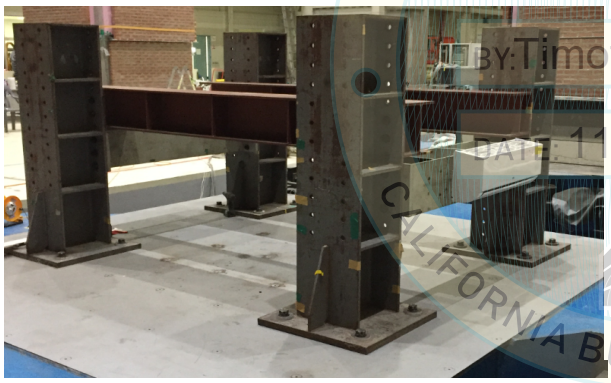

Figure UUT-H1.1: Unit on the shake table

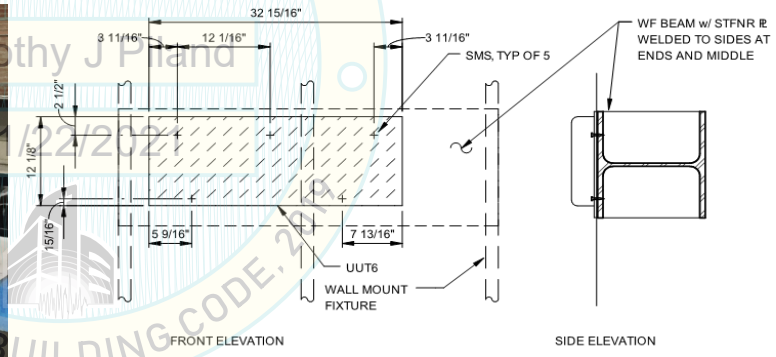

Figure UUT-H1.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-H1 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	3.4 lb	ADL74920901	Dong IL Aluminum CO.,Ltd.	Aluminum Fin, Copper Tube
Fan Motor	1.8 lb	EAU62004010	Nidec Shibaura Electronics Co., Ltd.	Aluminum
Main Printed Control Board	<1 lb	EBR82077506	MSE	Hard Plastic
Enclosure	6.5 lb	ARNU053-153SJA4-encl	LG Electronics, Inc	Plastic

UUT-H2 Test Summary

Testing Lab: SESTEC
Testing Report: 2019-K-001(#7/9)
Test Sample Name: ARNU243SKA4 (UUT-7)

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU243SKA4	24200	31	Wall	X	Front-Back	NA	38-3/8	8-1/4	13-15/16
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Mounting plate for wall mounted unit was attached to vertical steel fixture w/ 5-#14 sheet metal screws. See figure below.

Seismic Modifications: None

Test Anomaly: None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
CBC 2019	AC 156	2.50	1.0	4.00g	3.00g	1.67g	0.68g

Figure UUT-H2.1: Unit on the shake table

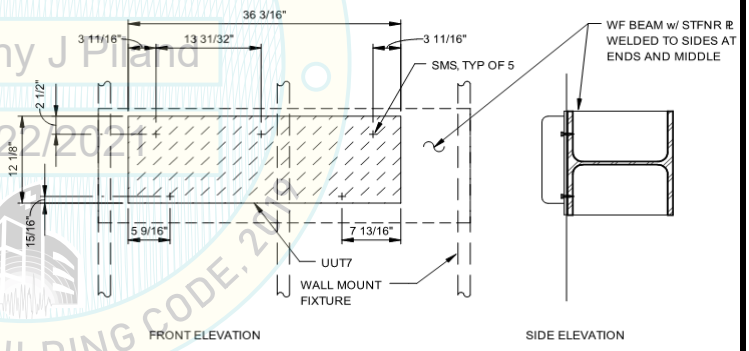

Figure UUT-H2.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-H2 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	5.6 lb	ADL74761211	Dong IL Aluminum CO.,Ltd.	Aluminum Fin, Copper Tube
Fan Motor	3.2 lb	EAU62543503	Nidec Shibaura Electronics Co., Ltd.	Aluminum
Main Printed Control Board	<1	EBR82077501	MSE	Hard Plastic
Enclosure	9.3 lb	ARNU183-243SKA4-encl	LG Electronics, Inc	Plastic

UUT-H3 Test Summary

Testing Lab: SESTEC
Testing Report: 2020-K-30 #11
Test Sample Name: ARNU053SJR4 (UUT-11)

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU053SJR4	5500	22	Wall	X	Front-Back	NA	32-15/16	7-9/16	12-1/8
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Mounting plate for wall mounted unit was attached to vertical steel fixture w/ 5-#14 sheet metal screws. See below.

Seismic Modifications: None

Test Anomaly: None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.34	1.0	3.76g	2.82g	1.57g	0.62g

Figure UUT-H3.1: Unit on the shake table

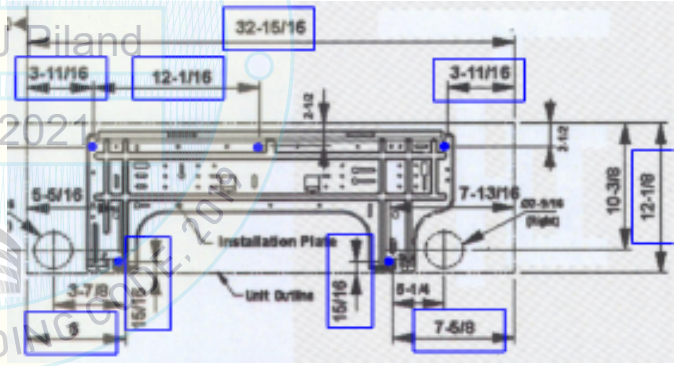

Figure UUT-H3.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-H3 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	3.4 lb	ADL74920901	Dong IL Aluminum CO.,Ltd.	Aluminum Fin, Copper Tube
Fan Motor	1.8 lb	EAU62004010	Nidec Shibaura Electronics Co., Ltd.	Aluminum
Main Printed Control Board	<1 lb	EBR82077507	MSE	Hard Plastic
Enclosure	6.5 lb	ARNU053-153SJR4-encl	LG Electronics, Inc	Plastic

UUT-H4 Test Summary

Testing Lab: SESTEC
Testing Report: 2020-K-30 #12
Test Sample Name: ARNU243SKR4 (UUT-12)

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
ARNU243SKR4	24200	31	Wall	X	Front-Back	NA	39-5/16	8-3/8	13-9/16
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Mounting plate for wall mounted unit was attached to vertical steel fixture w/ 5-#14 sheet metal screws. See below.

Seismic Modifications: None

Test Anomaly: None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
2019 CBC	AC 156	2.34	1.0	3.76g	2.82g	1.57g	0.62g

Figure UUT-H4.1: Unit on the shake table

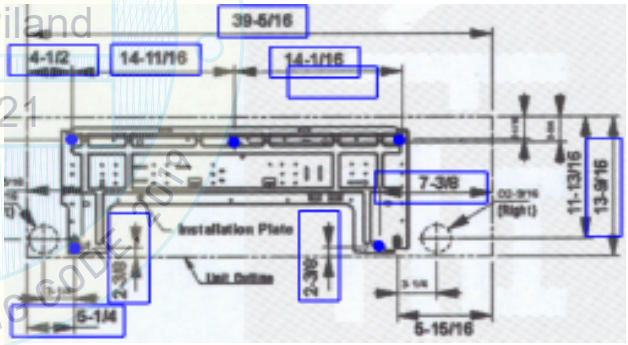

Figure UUT-H4.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-H4 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Heat Exchanger	5.6 lb	ADL74761211	Dong IL Aluminum CO.,Ltd.	Aluminum Fin, Copper Tube
Fan Motor	3.2 lb	EAU62543503	Nidec Shibaura Electronics Co., Ltd.	Aluminum
Main Printed Control Board	<1	EBR82077501	MSE	Hard Plastic
Enclosure	11.3 lb	ARNU183-243SKR4-encl	LG Electronics, Inc	Plastic

UUT-J1 Test Summary

Testing Lab: SESTEC
Testing Report: 2019-K-001(#8/9)
Test Sample Name: PRHR023A (UUT-8)

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
PRHR023A	n/a	35	Suspend	X	Front-Back	NA	19-1/8	18-15/16	8-5/8
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Indoor units were suspended from steel fixture using (4) 3/8" dia A36 hanger rods w/ unistrut rod stiffeners and (8)1/8" dia aircraft cable braces w/ Mason SCB-1 clips at each end. See figure below.
Seismic Modifications: None **Test Anomaly:** None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
CBC 2019	AC 156	2.50	1.0	4.00g	3.00g	1.67g	0.68g

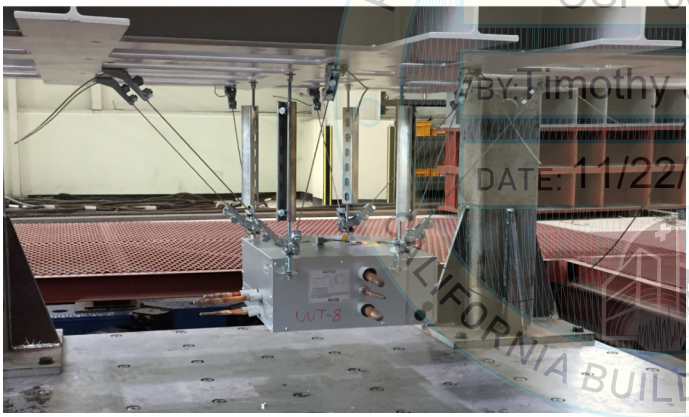

Figure UUT-J1.1: Unit on the shake table

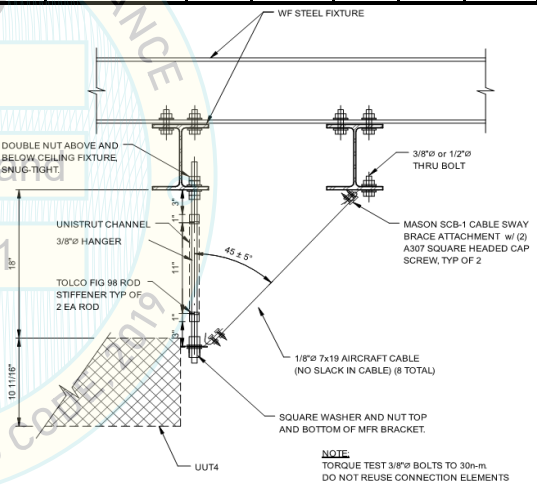

Figure UUT-J1.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-J1 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Main Circuit Board	< 1 lb	EBR82017101	LG Electronics Inc	Hard Plastic
Expansion Valve - EEV	< 1 lb	MJX63992003	Sanhua	Copper
Enclosure - Base Panel	4.2 lb	MAM65045003	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8
Enclosure - Bracket	1.8 lb	MAZ66148403	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8
Enclosure - Bracket	8.6 lb	MAZ66323801	Dae Yang Jeong Gi	Sheet Steel SGCC T1.0
Enclosure - Top Cover	4.2 lb	MCK70110801	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8
Enclosure - Control Cover	3.8 lb	MCK70285802	Dae Yang Jeong Gi	Sheet Steel SGCC T1.0
Enclosure - Side Cabinet	5.5 lb	AGL74553006	Dae Yang Jeong Gi	Sheet Steel SGCC T1.0
Enclosure - Side Cabinet	0.2 lb	MAZ67538601	Dae Yang Jeong Gi	Sheet Steel SGCC T1.0

UUT-J2 Test Summary

Testing Lab: SESTEC
Testing Report: 2019-K-001(#9/9)
Test Sample Name: PRHR083A (UUT-9)

Model Number	Nominal Capacity (BTU/hr)	Measured Operating Weight (lbs)	Mounting	Excitation Direction		Frequency (Hz)	Length (in)	Width (in)	Height (in)
PRHR083A	n/a	68	Suspend	X	Front-Back	NA	31-1/4	18-15/16	8-5/8
				Y	Side-Side	NA			
				Z	Vertical	NA			

Notes: Frequencies are NA as unit is installed on rigid fixture in accordance with ICC ES AC-156.
Model Number is based on nomenclature from the LG Catalog. Refer to Nomenclature.

Attachment Method Indoor units were suspended from steel fixture using (4) 3/8" dia A36 hanger rods w/ unistrut rod stiffeners and (8)1/8" dia aircraft cable braces w/ Mason SCB-1 clips at each end. See figure below.
Seismic Modifications: None **Test Anomaly:** None

Seismic Parameters

Building Code	Test Criteria	S_{DS} (g)	z/h	Horizontal		Vertical	
				A_{FLX-H}	A_{RIG-H}	A_{FLX-V}	A_{RIG-V}
CBC 2019	AC 156	2.50	1.0	4.00g	3.00g	1.67g	0.68g

Figure UUT-J2.1: Unit on the shake table

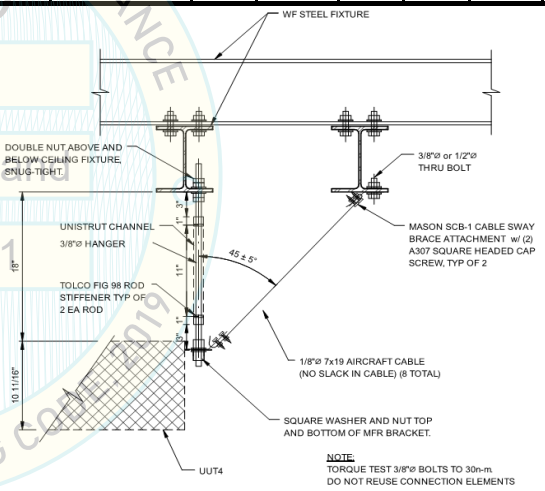

Figure UUT-J2.2: Mounting Detail

Notes: The UUT was full of contents during the test.
Unit maintained structural integrity and remained functional per manufacture requirements after shake table test

UUT-J2 Summary Tested Sub-Component

Sub-Component	*Weight*	*Part Number*	*Manufacturer*	*Material*
Main Circuit Board	< 1 lb	EBR82017101	LG Electronics Inc	Hard Plastic
Expansion Valve - EEV	< 1 lb	MJX63992003	Sanhua	Copper
Enclosure - Base Panel	4.9 lb	MAM64284203	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8
Enclosure - Bracket	2.9 lb	MAZ34257911	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8
Enclosure - Bracket	8.6 lb	MAZ66323801	Dae Yang Jeong Gi	Sheet Steel SGCC T1.0
Enclosure - Top Cover	8.6 lb	MCK69188003	Dae Yang Jeong Gi	Sheet Steel SGCC T0.8
Enclosure - Control Cover	7.5 lb	MCK70285801	Dae Yang Jeong Gi	Sheet Steel SGCC T1.0
Enclosure - Side Cabinet	5.5 lb	AGL74553005	Dae Yang Jeong Gi	Sheet Steel SGCC T1.0
Enclosure - Side Cabinet	0.2 lb	MAZ67538601	Dae Yang Jeong Gi	Sheet Steel SGCC T1.0