

DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION FACILITIES DEVELOPMENT DIVISION

OFFICE USE ONLY APPLICATION FOR HCAI SPECIAL SEISMIC **CERTIFICATION PREAPPROVAL (OSP)** APPLICATION #: OSP-0496 **HCAI Special Seismic Certification Preapproval (OSP)** Type: New Renewal **Manufacturer Information** Manufacturer: Myers Emergency Power Systems Manufacturer's Technical Representative: Kevin Wolverton Mailing Address: 44 South Commercial Way, Bethlehem, PA 18017 Telephone: (610) 868-3500 Email: kevin.wolverton@myerseps.com **Product Information** Product Name: UPS and Batteries Product Type: Lighting Inverter Systems Product Model Number: Various (See Attachment) Emergency Lighting Inverter System. mad Karim General Description: Mounting Description: Rigid Floor Mounted, Flush & Recess Wall Mounted Seismic enhancements made to the test units and/or modifications required to address Tested Seismic Enhancements: anomalies during the tests shall be incorporated into the production units. **Applicant Information** Applicant Company Name: Dynamic Certification Laboratories Contact Person: Kelly Laplace Mailing Address: 1315 Greg Parkway #109, Sparks, NV 89431

Email: kelly@shaketest.com





Telephone: (775) 358-5085

Title: Business Manager

09/26/2022 OSP-0496 Page 1 of 13



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION FACILITIES DEVELOPMENT DIVISION

California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)
Company Name: THE VMC GROUP
Name: Kenneth Tarlow California License Number: S2851
Mailing Address: 980 9th Street, 16th Floor, Sacramento, CA 95814
Telephone: (832) 627-2214 Email: ken.tarlow@thevmcgroup.com
Certification Method
☐ GR-63-Core X ICC-ES AC156 ☐ IEEE 344 ☐ IEEE 693 ☐ NEBS 3
Other (Please Specify):
COR CODE CO
Testing Laboratory
Company Name: DYNAMIC CERTIFICATION LABORATORY (DCL)
Contact Person: Kelly Laplace
Mailing Address: 1315 Greg St., Ste 109, Sparks NV 89431
Telephone: (775) 358-5085 Email: Kelly@shaketest.com
DATE: 09/26/2022
Z Whatanasaanasaanasaanasaanasaanasaanasaan







09/26/2022 OSP-0496 Page 2 of 13



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION FACILITIES DEVELOPMENT DIVISION

Seismic Parameters							
Design Basis of Equipment or Components (Fp/Wp) = 1.44							
SDS (Design spectral response accel-	eration at short period, g) = 2.0						
ap (Amplification factor) =	1.0						
R _P (Response modification factor) =	2.5						
Ω_0 (System overstrength factor) =	2.0						
Ip (Importance factor) =	1.5						
z/h (Height ratio factor) =	1						
Natural frequencies (Hz) =	See Attachment						
Overall dimensions and weight =	See Attachment						

HCAI Approval (For Office Use Only) - Approval Expires on 09/26/2028										
Date:	9/26/2022 S OSP-0496	1 G								
Name:	Mohammad Karim	Title:	Supervisor, Health Facilities							
Special	Seismic Certification Valid Up to: SDS (g) = 2.0	z/h =	1							
Conditio	on of Approval (if applicable): DATE 09/26/202	2 0								





09/26/2022 OSP-0496 Page 3 of 13

Table 1 - Certified Components: Recessed Wall Mount



DCL Project Number: 58623-2201

Manufacturer: Myers Emergency Power Systems

 Product Line:
 Illuminator Series LV

 Mounting Description:
 Recessed wall mount

 Certified Seismic Level:
 S_{DS}=2.0g, z/h=1.0

Model		Dimensions (in)	l e	Weight (lb)	Power (VA)	Voltage (V)	UUT
	Depth	Width	Height	weight (ib)	Power (VA)	voitage (v)	001
LV-1	6.50	14.25	17.75	55.0	175	120/277V	1

Special Seismic Certification

Table 2 - Certified Components: Flush Wall Mount

DCL Project Number: 58623-2201

Manufacturer: Myers Emergency Power Systems

Product Line: Illuminator Series LV
Mounting Description: Flush wall mount
Certified Seismic Level: S_{DS}=2.0g, z/h=1.0

Model		Dimensions (in)		Weight (lb)	Power (VA)	Voltage (V)	UUT
	Depth	Width	Height	Weight (ID)	Power (VA)	voitage (v)	
LV-1	6.50	14.25	517.7504	9655.0	175	120/277V	2
LV-2	9.25	19.00	22.00	111.0	350	120/277V	Interpolated
LV-3	9.25	19.00	22.00	136.0	550	120/277V	Interpolated
LV-4	9.25	25.25	hazz.oona	188.0	750	120/277V	3

Special Seismic Certification

Table 3 - Certified Components: Floor Mount

DCL Project Number: 58623-2201

Manufacturer: Myers Emergency Power Systems

Product Line: Illuminator Series LV

Mounting Description: Floor mount

Certified Seismic Level: S_{nc}=2.0g, z/h=1.0

5 _{DS} -2.0g, 2/11-1.0												
Model		Dimensions (in)	l e	Weight (lb)	Power (VA)	Voltage (V)	UUT					
Wiodei	Depth	Width	Height	weight (ib)	Power (VA)	voitage (v)	001					
LV-2	9.25	19.00	22.00	111.0	350	120/277V	Extrapolated					
LV-3	9.25	19.00	22.00	136.0	550	120/277V	4					
LV-4	9.25	25.25	22.00	188.0	750	120/277V	5					

Table 4 - Certified Subcomponents: Recessed Wall Mount



 DCL Project Number:
 58623-2201

 Certified Seismic Level:
 Sps=2.0g, z/h=1.0

	55 6, ,					
Compononent Type	nonent Type Manufacturer		Manufacturer Model		Construction Summary	иит
Enclosure	Myers Emergency Power Systems	CA-203703	Powder-coated cold-rolled carbon steel	1		
Main Transformers	Galaxy	XF-FM115055	Copper Windings	1		
AC Subassembly Inverter Module	Myers Emergency Power Systems	SA-404227-xx		1		
Batteries	Genesis	NP33-12		1		
Power Module Circuit Board	Precision Graphics	PCB404125xxx		1		
Control Circuit Board	Precision Graphics	PCB404128xxx		1		
Indicator/Test Circuit Board	Precision Graphics	PCB404174xxx		1		
System Metering Circuit Board	Precision Graphics	PCB404171xxx	ECON	1		
USB Storage Circuit Board	Precision Graphics	PCB404203xxx	190,	1		
System Display Circuit Board	Precision Graphics	PCB404158xxx		1		
Input/Output Relay Circuit Board	Precision Graphics	PCB404165xxx	406	1		

BY: Mohammad Karim

DATE: 09/26/2022

Table 5 - Certified Subcomponents: Flush Wall Mount



DCL Project Number: 58623-2201

Board

Certified Seismic Level:	S _{DS} =2.0g, z/h=1.0			
Compononent Type	Manufacturer	Model	Construction Summary	UUT
Enclosure	Myers Emergency	CA-203702	Powder-coated cold-rolled carbon	2
Liiciosure	Power Systems	CA-203715	steel	3
		XF-FM115055		2
Main Transformers	Galaxy	XF-FM115054	Copper Windings	Interpolated
		XF-FM115063		3
AC Subassembly	Myers Emergency	SA-404227-xx		2
Inverter Module	Power Systems	SA-404229-xx		3
Batteries	Genesis	NP33-12		2
Batteries	CSB	GP12340		3
Power Module Circuit	Precision Graphics	PCB404125xxx)E @	3
Board	Teamwise	PCB404125XXX	1 (0)	2
Control Circuit Board	Precision Graphics	PCB404128xxx		3
	Teamwise	PCB404128XXX		2
Indicator/Tost Circuit Doord	Precision Graphics	PCB404174xxx		3
Indicator/Test Circuit Board	Teamwise	PCB404174XXX		2
Circuit Breaker Circuit Board	Precision Graphics	PCB404178xxx	496	3
Circuit Breaker	CBI	C-Frame MKIV		3
Circuit breaker	Тусо	W67 Series		3
System Metering Circuit	Precision Graphics	Wonamma	ad Karim	3
Board	Teamwise	PCB404171xxx		2
LICD Charage Circuit Deand	Precision Graphics	DCB404363v40	2/2022	3
USB Storage Circuit Board	Teamwise	PCB404203xxx	0/2022	2
BACnet Communication Circuit Board	Precision Graphics	PCB404303xxx		3
System Display Circuit	Precision Graphics	PCB404158xxx		3
Board	Te <mark>amwise</mark>	r CD4U4136XXX		2
Input/Output Relay Circuit Board	Teamwise //	PCB404270xxx		2

Table 6 - Certified Subcomponents: Floor Mount



4

DCL Project Number: 58623-2201

System Display Circuit

Board

Precision Graphics

Teamwise

				CABORATORIES, CCC
Certified Seismic Level:	S _{DS} =2.0g, z/h=1.0			
Compononent Type	Manufacturer	Model	Construction Summary	UUT
Enclosure	Myers Emergency	CA-203707	Powder-coated cold-rolled carbon	4
Liiciosure	Power Systems	CA-203713	steel	5
Main Transformers	Galaxy	XF-FM115053	Copper Windings	4
Ivialii Transionniers	Galaxy	XF-FM115063	Copper Windings	5
AC Subassembly	Myers Emergency	SA-404228-xx		4
Inverter Module	Power Systems	SA-404229-xx		5
Batteries	Genesis	NP33-12		4
Datteries	CSB	GP12340		5
Power Module Circuit Board	Teamwise	PCB404125xxx		4, 5
Control Circuit Board	Precision Graphics	PCB404128xxx	ECO	4
	Teamwise	FCD404126XXX	010	5
Indicator/Test Circuit Board	Precision Graphics	PCB404174xxx		4
maicatory rest circuit board	Teamwise	1 CB404174XXX		5
Circuit Breaker Circuit	Precision Graphics	PCB404178xxx		4
Board	Teamwise	1 CD40417 0AAA	\(\lambda \lambda \lam	5
Circuit Breaker	CBI	C-Frame MKIV	496	4, 5
Circuit Breaker	Tyco Tyco	W67 Series	m	5
System Metering Circuit	Precision Graphics	PCB404171xxx		4
Board	Teamwise /	Mohamma	nd Karim	5
USB Storage Circuit Board	Teamwise	PCB404171xxx		4
Ethernet Communication Circuit Board	Texas Instruments	PCB404348xxx	6/2022	4
BACnet Communication Circuit Board	Teamwise	PCB404303xxx		5

PCB404158xxx

Table 7 - Tested Units: Recessed Wall Mount



DCL Project Number: 58623-2201

Manufacturer: Myers Emergency Power Systems

Product Line: Illuminator Series LV
Mounting Description: Recessed wall mount
Certified Seismic Level: S_{DS}=2.0g, z/h=1.0

Model		Dimensions (in)		Weight (lb)	Power (VA)	Voltage (V)	UUT
Wiodei	Depth	Width	Height	Weight (ib)	Fower (VA)	Voltage (V)	331
LV-1	6.50	14.25	17.75	55.0	175	120/277V	1

Special Seismic Certification

Table 8 - Tested Units: Flush Wall Mount

DCL Project Number: 58623-2201

Manufacturer: Myers Emergency Power Systems

Product Line: Illuminator Series LV

Mounting Description: Flush wall mount

Mounting Description: Flush wall mount

Certified Seismic Level: S_{DS}=2.0g, z/h=1.0

Dimensions (in) Power (VA) Model Weight (lb) Voltage (V) UUT Width Height Depth/ 17.75 120/277V LV-1 6.50 14.25 55.0 175 2 LV-4 9.25 25.25 22.00 188.0 750 120/277V 3

Special Seismic Certification

Table 9 - Tested Units: Floor Mount

BY: Mohammad Karim

DCL Project Number: 58623-2201

Manufacturer: Myers Emergency Power Systems 0/26/202

Product Line: Illuminator Series LV

Mounting Description: Floor mount

Mounting Description: Floor mount

Certified Seismic Level: S_{DS}=2.0g, z/h=1.0

Model		Din	nensions (in)		Weight (lb)	Power (VA)	Voltage (V)	UUT
iviodei	Depth	10	Width	Height	weight (ib)	Power (VA)	voitage (v)	001
LV-3	9.25		19.00	22.00	136.0	550	120/277V	4
LV-4	9.25		25.25	22.00	188.0	750	120/277V	5

UNIT UNDER TEST (UUT)

Summary Sheet

DCL Project Number: 58623-2201

Manufacturer: Myers Emergency Power Systems

Product Line: Illuminator Series LV

Model Number: LV-1

Product Construction Summary:

Powder-coated cold-rolled carbon steel enclosure. Hardware secured cover.

Options / Component Summary:

Galaxy XF-FM115055 Transformer, Myers Power Products SA-404227-xx Subassembly, Genesis NP33-12 Batteries, Precision Graphics PCB404125xxx Power Module Circuit Board, Precision Graphics PCB404128xxx Control Circuit Board, Precision Graphics PCB404174xxx Indicator/Test Circuit Board, Precision Graphics PCB404171xxx System Metering Circuit Board, Precision Graphics PCB404158xxx System Display Circuit Board, Precision Graphics Input/Output Relay Circuit Board

CERTIFICATION

LABORATORIES.LLC

Note: The UUT was was operational before and after shaking. The structural integrity of the component attachment system and force-resisting systems was maintained.

UUT Properties													
Operating Weight		D	imensions (in			Lowest Natural Frequency (Hz)							
(lb)	Depth	Width OS		P_04 (Height		Front-Back	Side-Side	Vertical					
55	6.5	14	.25	17	17.75		N/A	N/A					
		_ D	Seismic	Test Paramete	ers								
Building Code	Test Criteria	Sds (g)	z/h	IIIIIIau n	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)					
CBC 2022	ICC-ES AC156	2	ATE:)9/2 <mark>6</mark> /20	22 3.20	2.40	1.33	0.53					

Unit Mounting Description:

Rigid recess wall mount. Unit mounted to wall mount fixture using four (4) 1/2"-20 grade 5 hex head bolts, washers, and lock washers.



Overall view of UUT1

UNIT UNDER TEST (UUT)

Summary Sheet

DCL Project Number: 58623-2201

Manufacturer: Myers Emergency Power Systems

Product Line: Illuminator Series LV

Model Number: LV-1

Product Construction Summary:

Powder-coated cold-rolled carbon steel enclosure. Hardward secured cover.

Options / Component Summary:

Galaxy XF-FM115055 Transformer, Myers Power Products SA-404227-xx Subassembly, Genesis NP33-12 Batteries, Teamwise PCB404125xxx Power Module Circuit Board, Teamwise PCB404128xxx Control Circuit Board, Teamwise PCB404174xxx Indicator/Test Circuit Board, Teamwise PCB404171xxx System Metering Circuit Board, Teamwise PCB404158xxx System Display Circuit Board, Teamwise Input/Output Relay Circuit Board

CERTIFICATION

LABORATORIES.LLC

Note: The UUT was was operational before and after shaking. The structural integrity of the component attachment system and force-resisting systems was maintained.

UUT Properties

Operating Weight		Dimensions (inch	Lowest Natural Frequency (Hz)								
(lb)	Depth	epth Width			ight	Front-Back	Side-Side	Vertical			
111	9.25	4/	19 OS	P-0496	22	N/A	N/A	N/A			
Seismic Test Parameters											
Building Code	Test Criteria	Sds	RV. z/h	mmad K	Aflx-H	Arig-H	Aflx-V	Arig-V			
CBC 2022	ICC-ES AC156	2	1.0	1.5	3.20	2.40	1.33	0.53			
Unit Mounting Desc	cription:		DATE: 0	9/26/20	22	0	<u> </u>				

Unit Mounting Description:

Rigid flush wall mount. Unit mounted to wall mount fixture using (4) 1/2"-20 grade 5 hex head bolts, washers, and lock washers.



Overall view of UUT2

UNIT UNDER TEST (UUT)

Summary Sheet

DCL Project Number: 58623-2201

Manufacturer: Myers Emergency Power Systems

Product Line: Illuminator Series LV

Model Number: LV-4

Product Construction Summary:

Powder-coated cold-rolled carbon steel enclosure. Hardward secured cover.

Options / Component Summary:

Galaxy XF-FM115063 Transformer, Myers Power Products SA-404229-xx Subassembly, CSB GP12340 Batteries, Precision Graphics PCB404125xxx Power Module Circuit Board, Precision Graphics PCB404128xxx Control Circuit Board, Precision Graphics PCB404174xxx Indicator/Test Circuit Board, Precision Graphics PCB404171xxx System Metering Circuit Board, Precision Graphics PCB404348xxx Ethernet Communication Circuit Board, Precision Graphics PCB404158xxx System Display Circuit Board

LABORATORIES.LLC

Note: The UUT was was operational before and after shaking. The structural integrity of the component attachment system and force-resisting systems was maintained.

		1.5		บบา	T Properties						
Operating Weight	Dimensions (inches)						Lowest Natural Frequency (Hz)				
(lb)	Depth /		Width OS		P_0_/ Height		Front-Back	Side-Side	Vertical		
188	9.25		25.25	4/3/2/3/3/3/3/3/3/3/3/3/3/3/3/3/3/3/3/3/	020202020202	22	N/A	N/A	N/A		
Seismic Test Parameters											
Building Code	Test Criteria	Sds	БҮ.	z/hona	imm _{ip} id k	Aflx-H	Arig-H	Aflx-V	Arig-V		
CBC 2022	ICC-ES AC156	2		1.0	1.5	3.20	2.40	1.33	0.53		

Unit Mounting Description:

Rigid flush wall mount. Unit mounted to wall mount fixture using (4) 5/16"-18 grade 5 hex head bolts, washers, and lock washers.



Overall view of UUT3

UNIT UNDER TEST (UUT)

Summary Sheet

DCL Project Number: 58623-2201

Manufacturer: Myers Emergency Power Systems

Product Line: Illuminator Series LV

Model Number: LV-3

Product Construction Summary:

Powder-coated cold-rolled carbon steel enclosure. Hardward secured cover.

Options / Component Summary:

Galaxy XF-FM115053 Transformer, Myers Power Products SA-404228-xx Subassembly, Genesis NP33-12 Batteries, Teamwise PCB404125xxx Power Module Circuit Board, Precision Graphics PCB404128xxx Control Circuit Board, Precision Graphics PCB404174xxx Indicator/Test Circuit Board, Precision Graphics PCB404178xxx Circuit Breaker Circuit Board, CBI C-Frame MKIV Circuit Breaker, Precision Graphics PCB404171xxx System Metering Circuit Board, Teamwise PCB404348xxx Ethernet Communications Circuit Board, Precision Graphics PCB404158xxx System Display Circuit Board

CERTIFICATION

LABORATORIES.LLC

Note: The UUT was was operational before and after shaking. The structural integrity of the component attachment system and force-resisting systems was maintained.

UUT Properties											
Operating Weight		Dim	ensions (inch	Lowest Natural Frequency (Hz)							
(lb)	Depth	Wi Wi	dth OS	P Height		Front-Back	Side-Side	Vertical			
111	9.25		<u>.9</u>	22		23.9	24.8	>33.3			
Seismic Test Parameters											
Building Code	Test Criteria	Sds	Y zyhona	amm _i ad K	Aflx-H	Arig-H	Aflx-V	Arig-V			
CBC 2022	ICC-ES AC156	2	1.0	1.5	3.20	2.40	1.33	0.53			

Unit Mounting Description:

Rigid floor mount. Unit mounted to shake table plate using (4) 5/8"-11 grade 5 hex head bolts, washers, and lock washers.



Overall view of UUT4

UNIT UNDER TEST (UUT)

Summary Sheet

DCL Project Number: 58623-2201

Manufacturer: Myers Emergency Power Systems

Product Line: Illuminator Series LV

Model Number: LV-4

Product Construction Summary:

Powder-coated cold-rolled carbon steel enclosure. Hardward secured cover.

Options / Component Summary:

Galaxy XF-FM115063 Transformer, Myers Power Products SA-404229-xx Subassembly, CSB GP12340 Batteries, Teamwise PCB404125xxx Power Module Circuit Board, Teamwise PCB404128xxx Control Circuit Board, Teamwise PCB404174xxx Indicator/Test Circuit Board, Teamwise PCB404178xxx Circuit Breaker Circuit Board, CBI C-Frame MKIV Circuit Breaker, Tyco W67 Series Circuit Breaker, Teamwise PCB404171xxx System Metering Circuit Board, Teamwise PCB404203xxx USB Storage Circuit Board, Teamwise PCB404158xxx System Display Circuit Board

CERTIFICATION

LABORATORIES.LLC

Note: The UUT was was operational before and after shaking. The structural integrity of the component attachment system and force-resisting systems was maintained.

		1.5		UU1	Properties						
Operating Weight	Dimensions (inches)						Lowest Natural Frequency (Hz)				
(lb)	Depth		Width OS		P Height		Front-Back	Side-Side	Vertical		
188	9.25		25.25 22				23.9	24.8	>33.3		
Seismic Test Parameters											
Building Code	Test Criteria	Sds	БY.	zyhona	ımm _{ıp} ad K	Aflx-H	Arig-H	Aflx-V	Arig-V		
CBC 2022	ICC-ES AC156	2		1.0	1.5	3.20	2.40	1.33	0.53		

Unit Mounting Description:

Rigid floor mount. Unit mounted to shake table plate using (4) 5/8"-11 grade 5 hex head bolts, washers, and lock washers.



Overall view of UUT5