

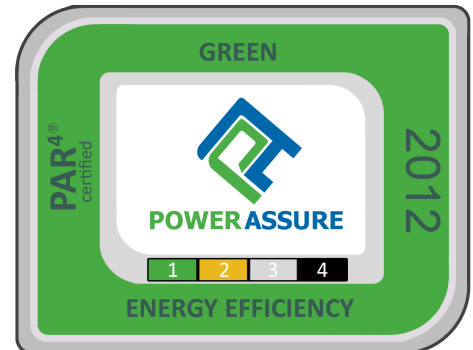
PAR⁴® - Energy Efficiency Certification

Sample Card Number: PA20130905220238001
Date: 2013-09-05

Machine Specification:

Lopoco LP-4250 LP-4250-6H

1 intel Xeon E3-1265L V2 @2.5GHz, 4 cores
 2 Kingston 9965525-018.A00LF 4GB @1333MHz
 6 WDC WD10JPVT-00A SATA 1000GB @5400RPM
 1 generic low-power @200W

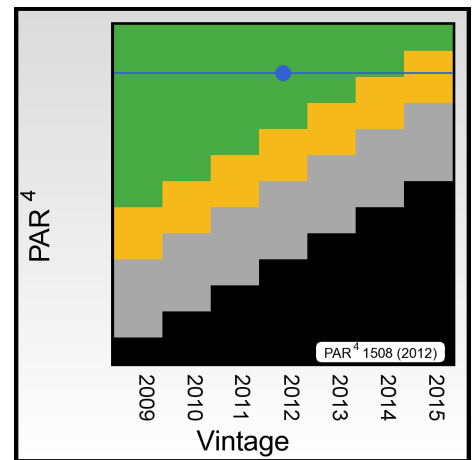


Results:

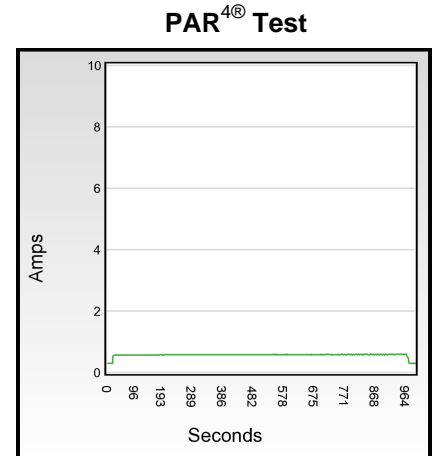
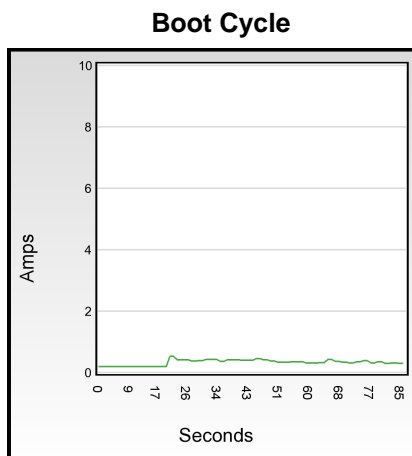
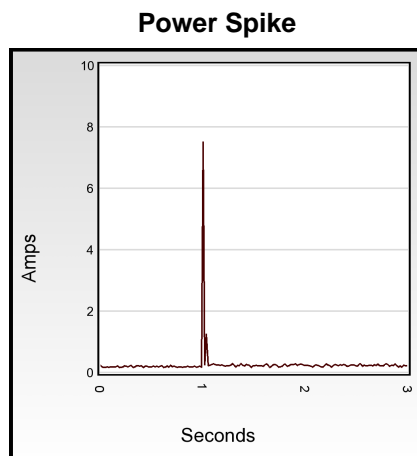
Vintage PAR⁴: 1,508
Vintage Year: 2012
PAR⁴ Rating: GREEN

Absolute PAR⁴ 2,108

3 Year Cost (Est): \$91.46



Power Consumption Details				
OFF	IDLE	LOADED	PEAK	BOOT TIME
7.489W	26.61W	67.57W	67.57W	84s
121.7V	121.8V	121.9V	121.9V	
0.184A	0.286A	0.583A	0.583A	
0.3PF	0.8PF	0.9PF	0.9PF	



System Under Test

Hardware

Manufacturer	Lopoco
Product Family	LP-4250
Product	LP-4250-6H
Version	1.0
CPU Count	1
CPU Manufacturer	intel
CPU Model	Xeon E3-1265L V2
CPU Speed	2.5GHz
CPU Cores	4
Core Threads	2
Total Logical Processors	8
RAM Count	2
RAM Manufacturer	Kingston
RAM Model	9965525-018.A00LF
RAM Speed	1333MHz
RAM Size	4GB
Hard Drive Count	6
Hard Drive Manufacturer	WDC
Hard Drive Model	WD10JPVT-00A
Hard Drive Type	SATA
Hard Drive Size	1000GB
Hard Drive Speed	5,400RPM
LAN Count	0
LAN Manufacturer	
LAN Model	
LAN Type	
Power Supply Count	1
Power Supply Manufacturer	generic
Power Supply Model	low-power
Power Supply Rating	200Watts

Benchmark

Operating System	Power Assure ArchLinux
Measurement Client Version	PALabs Energy Efficiency Measurement Client v.7.0.7.2378
Transactions per Second	150,200,000
Absolute PAR ^{4®}	2108
Vintage	2012
Vintage PAR ^{4®}	1508
Ambient Air Temperature	24°C / 75°F

Notes

Measurement Devices

Power Analyzer

Power Meter ID	4243246
Hardware Vendor	Tektronix
Power Meter	DPO5034
Serial Number	C010756
Connectivity	GP-IB
Calibration Label	Tektronix
Calibration Date	2011-09-04
Certified By	Zhongyuan Cao

Oscilloscope

Oscilloscope ID	4243246
Hardware Vendor	Tektronix
Oscilloscope	DPO5034
Serial Number	C010756
Connectivity	GP-IB
Calibration Label	Tektronix
Calibration Date	2011-09-04
Certified By	Zhongyuan Cao

Electrical Data				
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	Average Power (W)	Average Voltage (V)	Average Current (A)	Average Power Factor
Off	7.489	121.7	0.184	0.33
Idle	26.61	121.8	0.286	0.76
Loaded	67.57	121.9	0.583	0.95

Average Voltage	Average Power Factor
121.8V	0.94PF

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The information contained within this document is subject to change without notice. This certificate was generated by measuring the power consumption and other metrics on a specific machine configuration. Since machine components can vary, Power Assure does not guarantee the same results will be reproduced with the same machine configuration or any other machine configuration.

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PAR⁴[®]

The PAR4 process is protected by United States Patent 7970561. Other patents pending.

For more information about PAR4 visit www.par4.org

MACHINE SETTINGS

Unless noted otherwise, all machine settings (e.g. BIOS configuration) are at their factory defaults. Default enabling of advanced features (e.g. power saving, hyper-threading and over-clocking) vary from manufacturer to manufacturer and machine/model to machine/model. Where optional hardware devices (e.g. disk drives) are installed, they are assumed to be powered on and running, but are not specifically exercised by the tests performed.

POWER CONSUMPTION

Power consumption is measured at an ambient temperature (machine air inlet) of 72-76°F (22.2-24.4°C). Higher ambient (air inlet) temperatures will typically cause increased power consumption on machines with variable speed fans. If you are using these results to determine maximum power consumption and the ambient temperature in your data center is outside the stated range, you are advised to re-test in your own environment.

COST ESTIMATE

The estimated cost of running the specified machine configuration over three years, running in the IDLE state for 80% of the time and the LOADED state for 20% of the time, and assuming electricity costs of US\$ 0.10 (ten cents) per KWh.