

Comparison of The Zap Box on 208v 3-Phase Premises

Test began at 3/16/11 16:38:00
Test ended at 3/22/11 16:38:00

Test began at 3/24/11 16:38:00
Test ended at 3/31/11 16:38:00

<u>Measurement</u>	<u>Before</u>	<u>After</u>	<u>Units</u>	<u>Change</u>	<u>%Change</u>
Voltage, Phase 1, Ave:	214.2	214.2	volts	0.0	0.0 %
Voltage, Phase 2, Ave:	214.0	213.9	volts	-0.1	-0.1 %
Voltage, Phase 3, Ave:	212.1	212.1	volts	-0.1	-0.0 %
Current, Phase 1, Ave:	30.9	22.6	amps	-8.3	-26.7 %
Current, Phase 2, Ave:	10.0	13.1	amps	3.0	30.3 %
Current, Phase 3, Ave:	11.0	14.0	amps	3.1	27.9 %
True Power, Phase 1, Ave:	3231.5	2397.2	Watts	-834.3	-25.8 %
True Power, Phase 1, Max:	12896.0	5312.0	Watts	-7584.0	-58.8 %
True Power, Phase 2, Ave:	809.6	704.1	Watts	-105.5	-13.0 %
True Power, Phase 2, Max:	69580.8	22041.6	Watts	-47539.2	-68.3 %
True Power, Phase 3, Ave:	892.3	775.0	Watts	-117.3	-13.1 %
True Power, Phase 3, Max:	20947.2	33433.6	Watts	12486.4	59.6 %
Total True Power Ave:	4933.4	3876.3	Watts	-1057.1	-21.4 %
VA Power, Phase 1, Ave:	3789.8	2782.2	VA	-1007.6	-26.6 %
VA Power, Phase 1, Max:	15840.0	6873.6	VA	-8966.4	-56.6 %
VA Power, Phase 2, Ave:	1245.6	1623.9	VA	378.3	30.4 %
VA Power, Phase 2, Max:	96409.6	27065.6	VA	-69344.0	-71.9 %
VA Power, Phase 3, Ave:	1340.8	1714.5	VA	373.8	27.9 %
VA Power, Phase 3, Max:	26048.0	56166.4	VA	30118.4	115.6 %
Total VA Power Ave:	6376.1	6120.6	VA	-255.5	-4.0 %
Total Power Factor:	0.77	0.63		-0.14	-18.1 %
Energy, Phase 1:	465.33480	402.72620	KWH	-62.60860	-13.5 %
Energy, Phase 2:	116.58057	118.29183	KWH	1.71125	1.5 %
Energy, Phase 3:	128.49295	130.20225	KWH	1.70930	1.3 %
Energy, Total Elapsed:	710.40832	651.22028	KWH	-59.18805	-8.3 %
Energy, estimated per month:	3603.8	2831.6	KWH	-772.2	-21.4 %
Cost, Total Elapsed:	\$116.16	\$106.48		\$-9.68	-8.3 %
Cost, estimated per month:	\$589.26	\$463.00		\$-126.26	-21.4 %
(at \$0.16351/KWH)					
Peak Demand:	10215.2	8596.8	Watts	-1618.4	-15.8 %
Demand Period:	3/17/11 18:53:00	3/24/11 17:53:00			
Peak Ave VA:	12920.0	9810.4	VA	-3109.6	-24.1 %
Peak VA Period:	3/17/11 14:08:00	3/30/11 15:38:00			

Conclusion: Using The Box Zap obtained a reduction of energy consumption in KWh of 21.4% and the maximum demand in KVA of 15.8%.

This represents a savings of U.S. \$126.26 per month

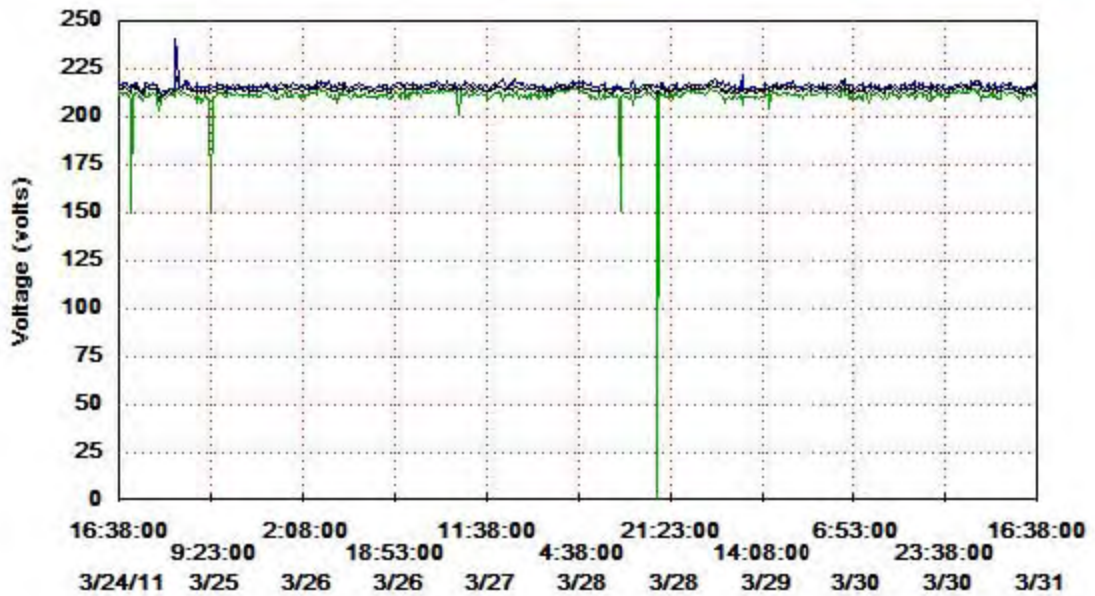
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

V12 Ave = 214.20 V12 Max = 228.00 V12 Min = 151.40



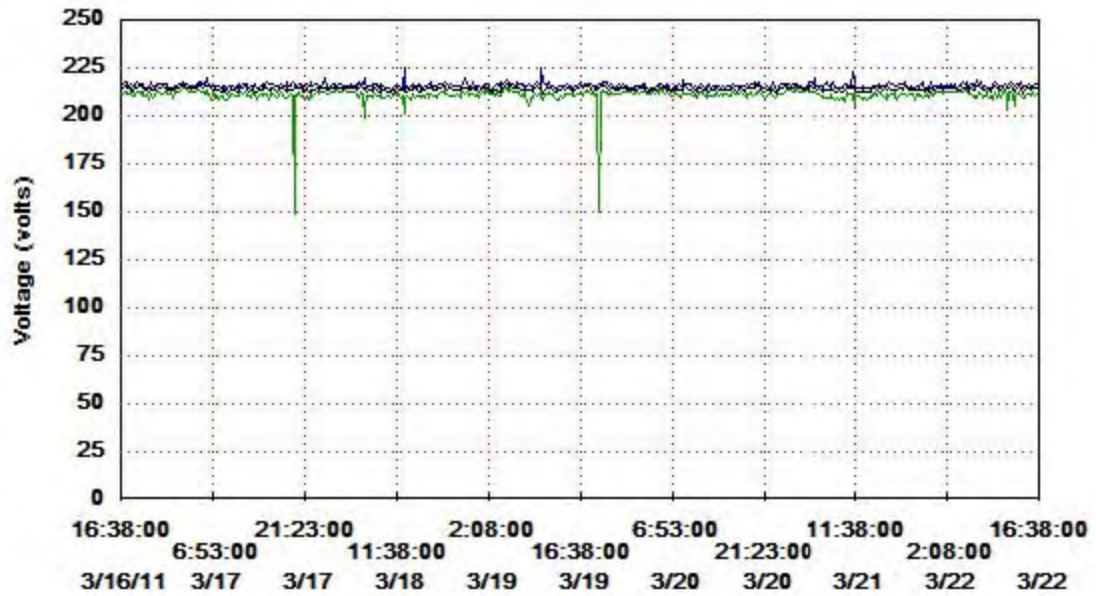
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

V12 Ave = 214.22 V12 Max = 241.00 V12 Min = 0.00



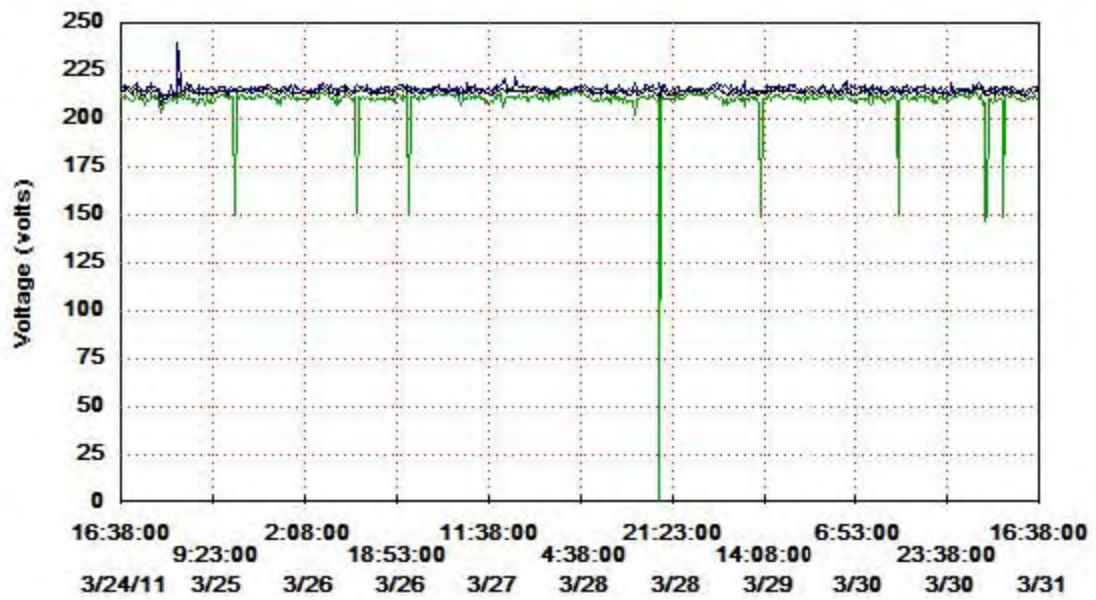
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

V23 Ave = 214.04 V23 Max = 225.10 V23 Min = 148.80



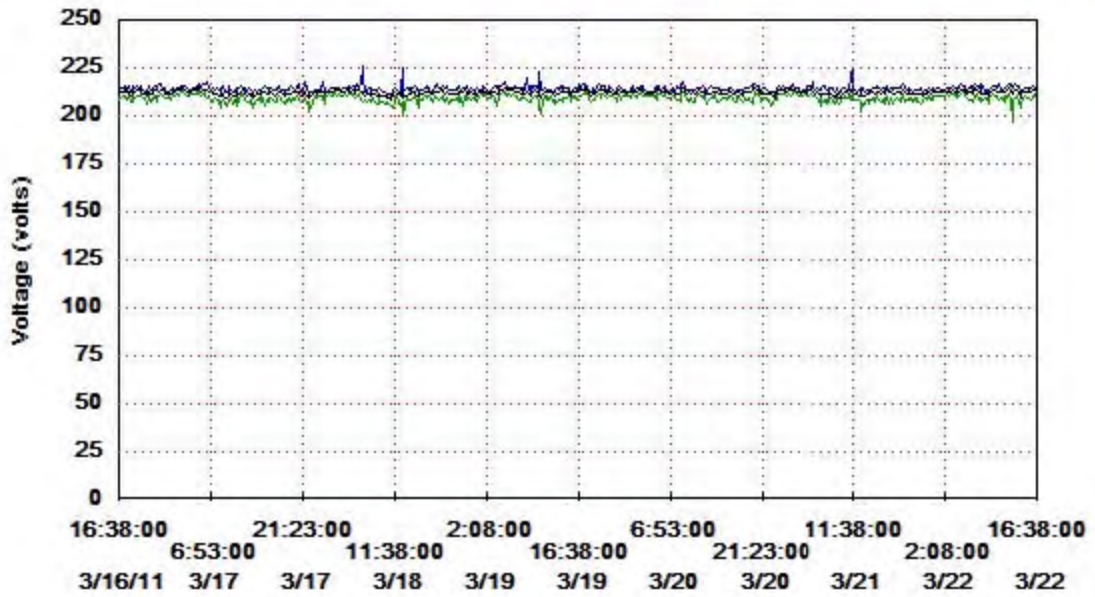
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

V23 Ave = 213.91 V23 Max = 239.20 V23 Min = 0.00



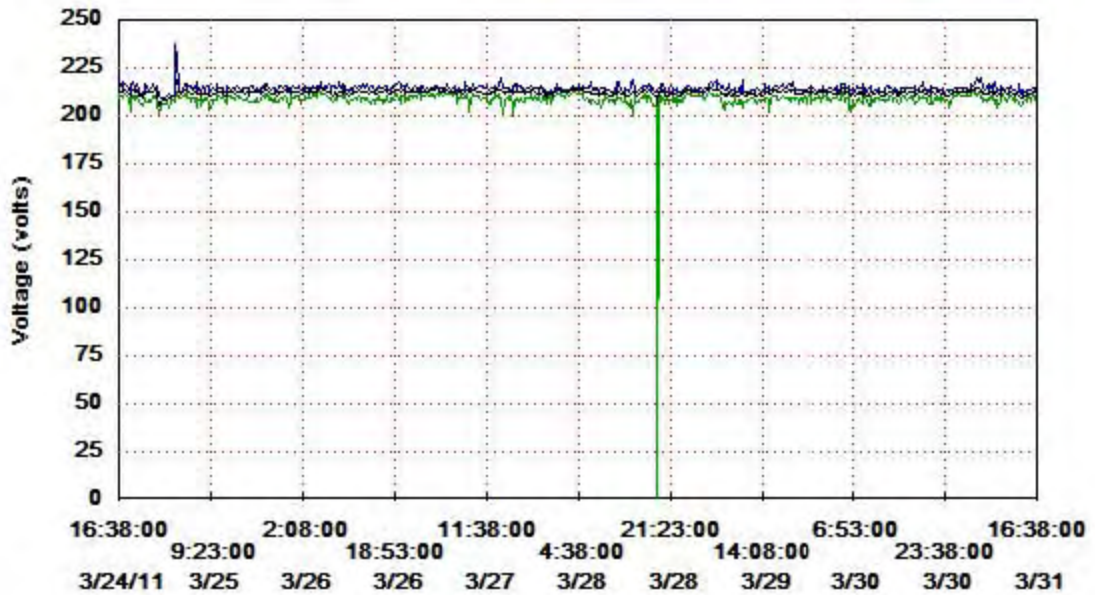
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

V31 Ave = 212.15 V31 Max = 226.40 V31 Min = 197.20



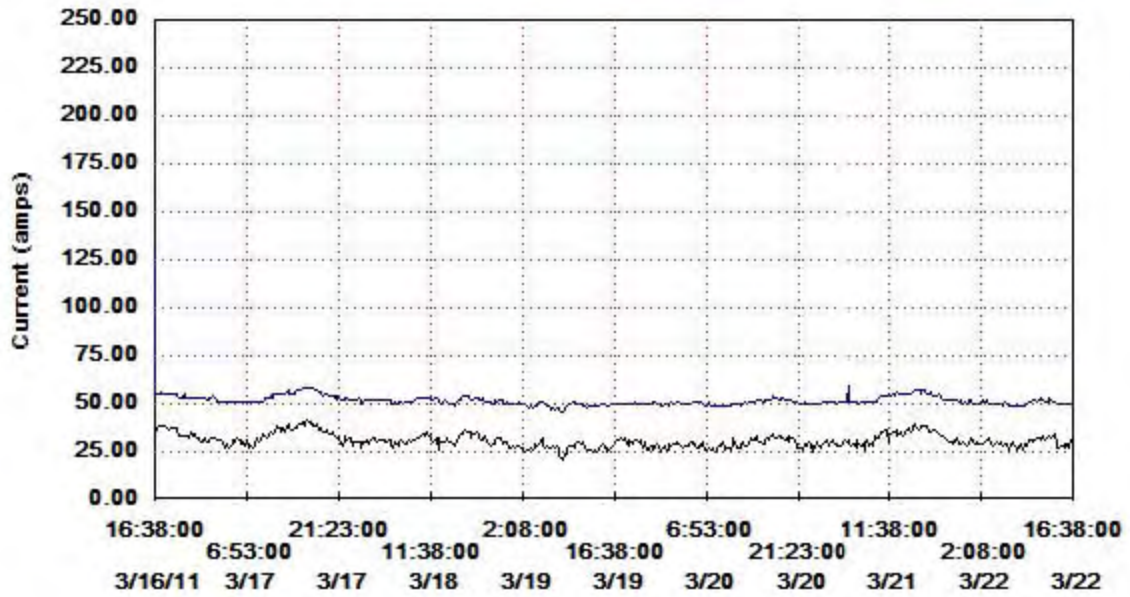
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

V31 Ave = 212.05 V31 Max = 237.30 V31 Min = 0.00



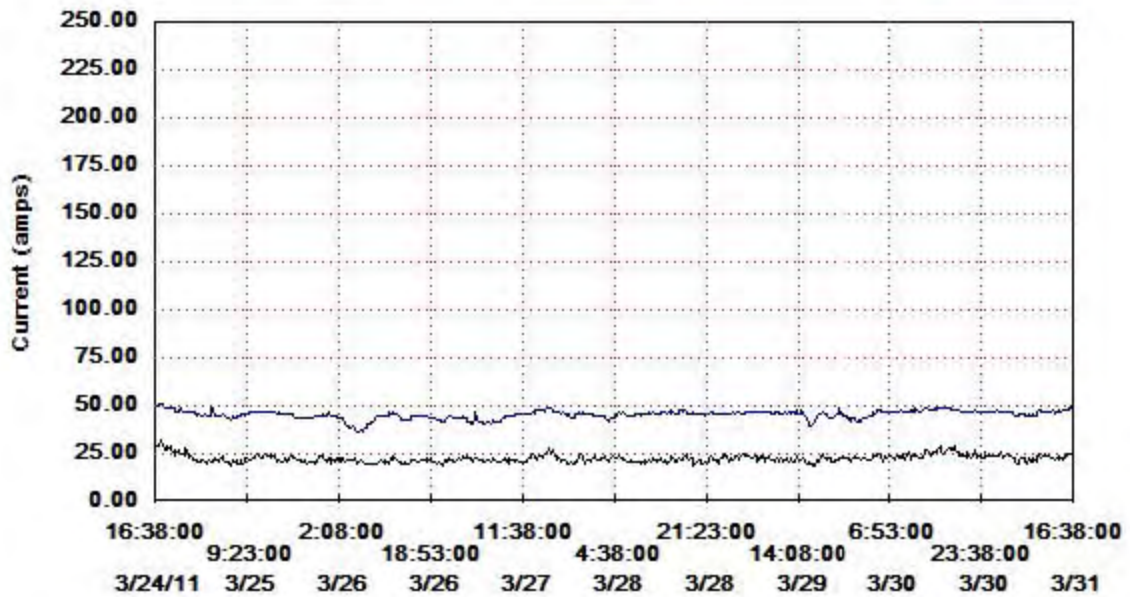
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

I1 Ave = 30.88 I1 Max = 130.43 I1 Min = 0.00



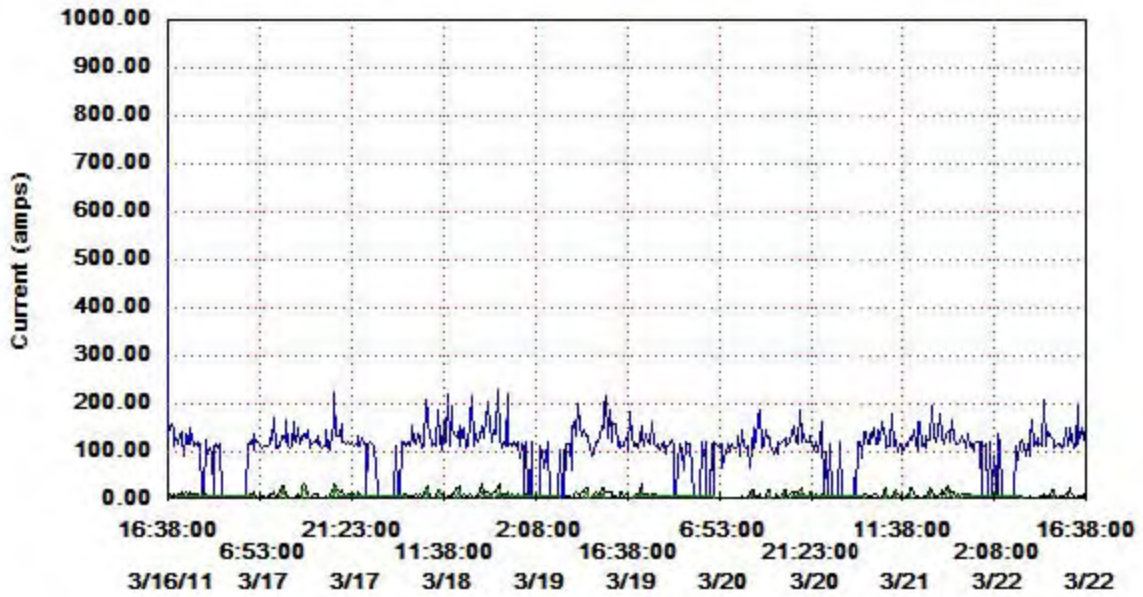
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

I1 Ave = 22.64 I1 Max = 51.26 I1 Min = 0.00



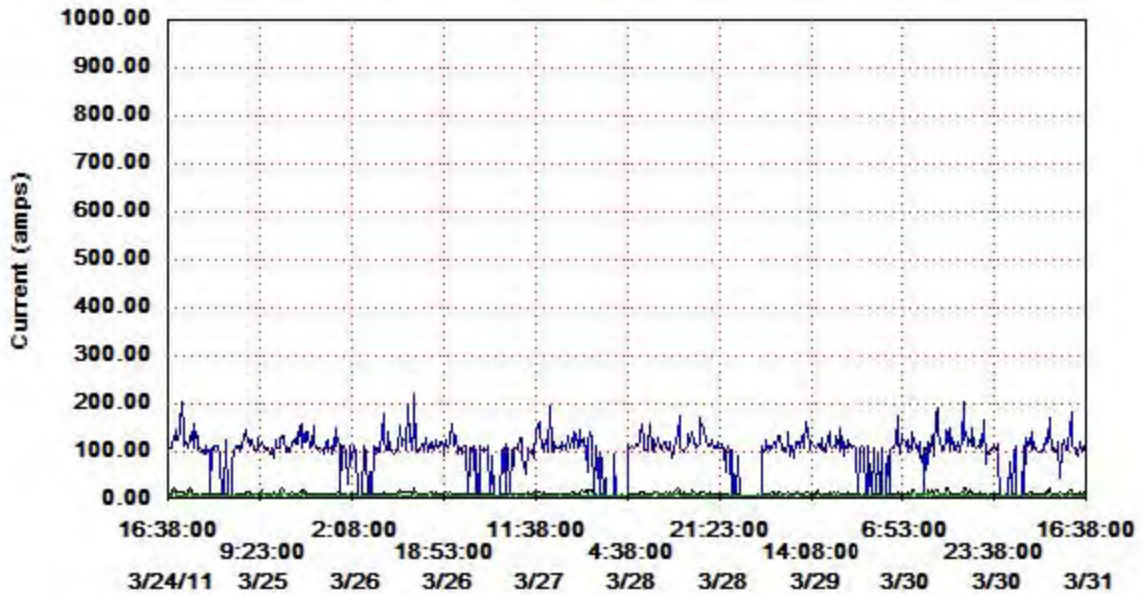
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

I₂ Ave = 10.02 I₂ Max = 772.61 I₂ Min = 0.00



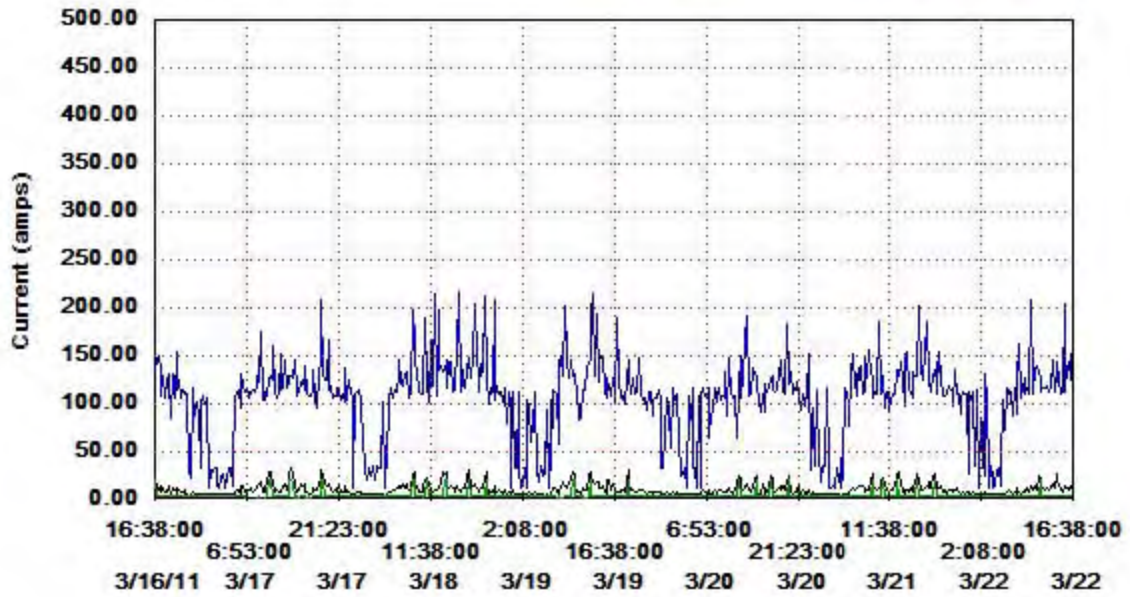
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

I₂ Ave = 13.09 I₂ Max = 220.99 I₂ Min = 0.00



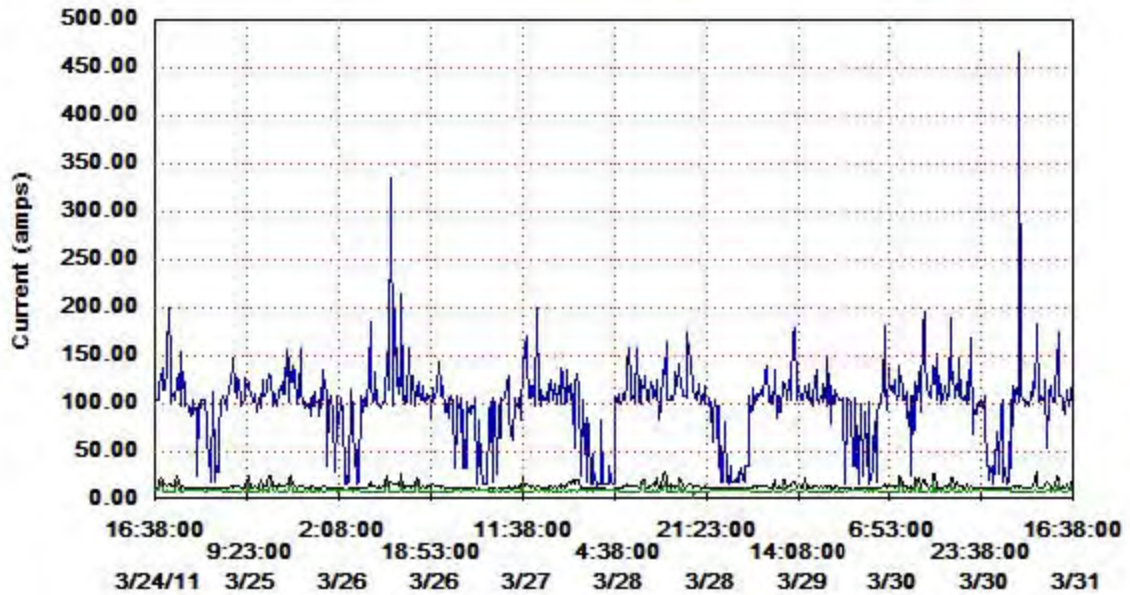
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

I3 Ave = 10.96 I3 Max = 217.22 I3 Min = 0.00



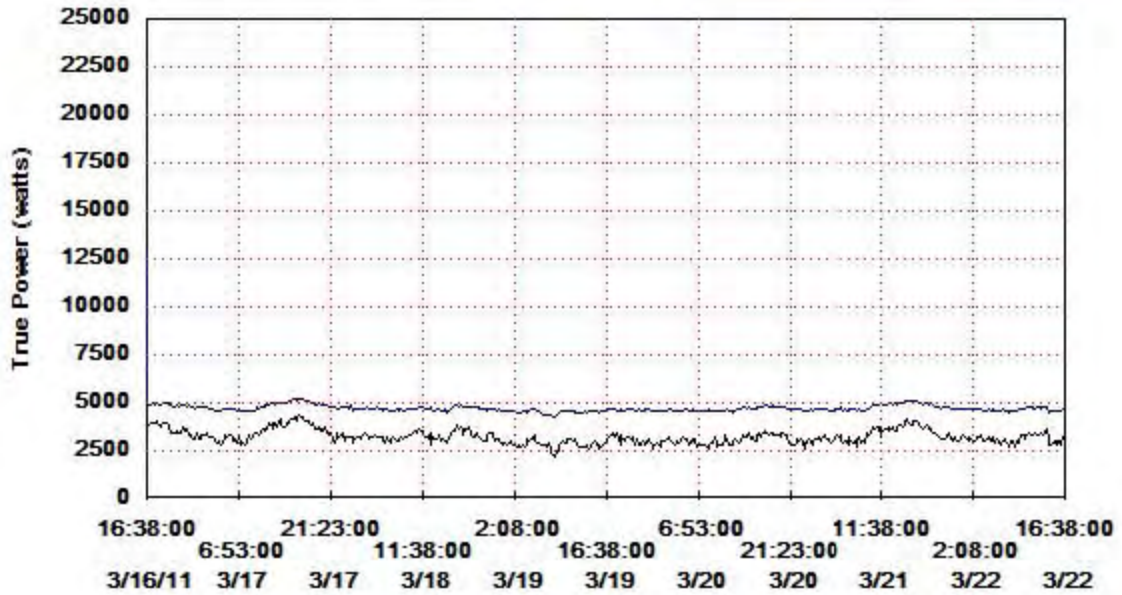
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

I3 Ave = 14.04 I3 Max = 467.58 I3 Min = 0.00



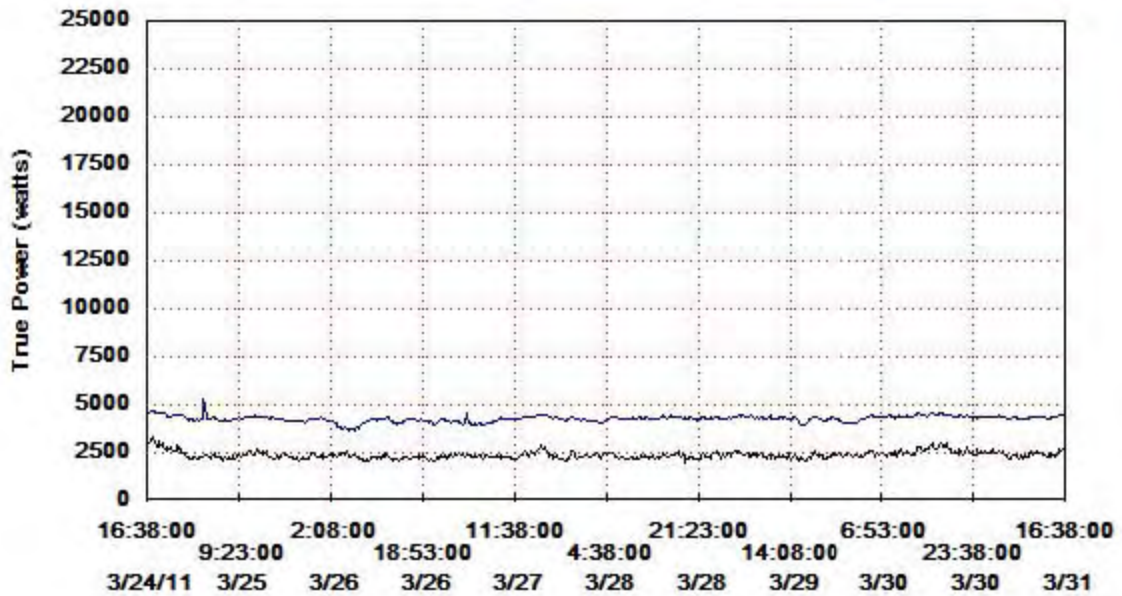
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

Phase 1 Ave = 3231.2 Phase 1 Max = 12896.0 Phase 1 Min = 0.00



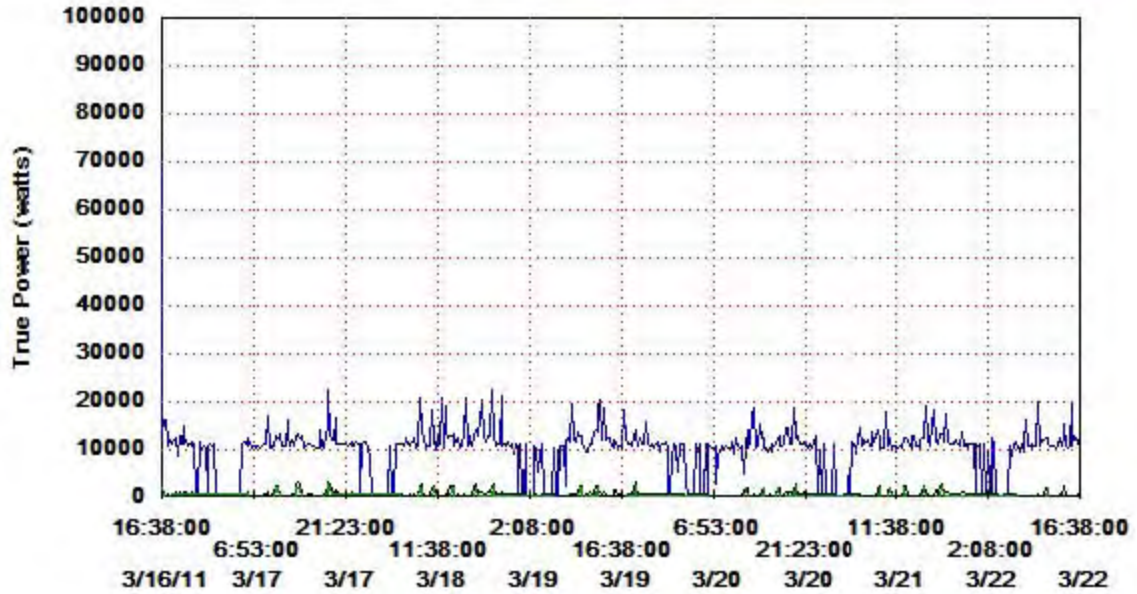
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

Phase 1 Ave = 2397.5 Phase 1 Max = 5312.0 Phase 1 Min = 0.00



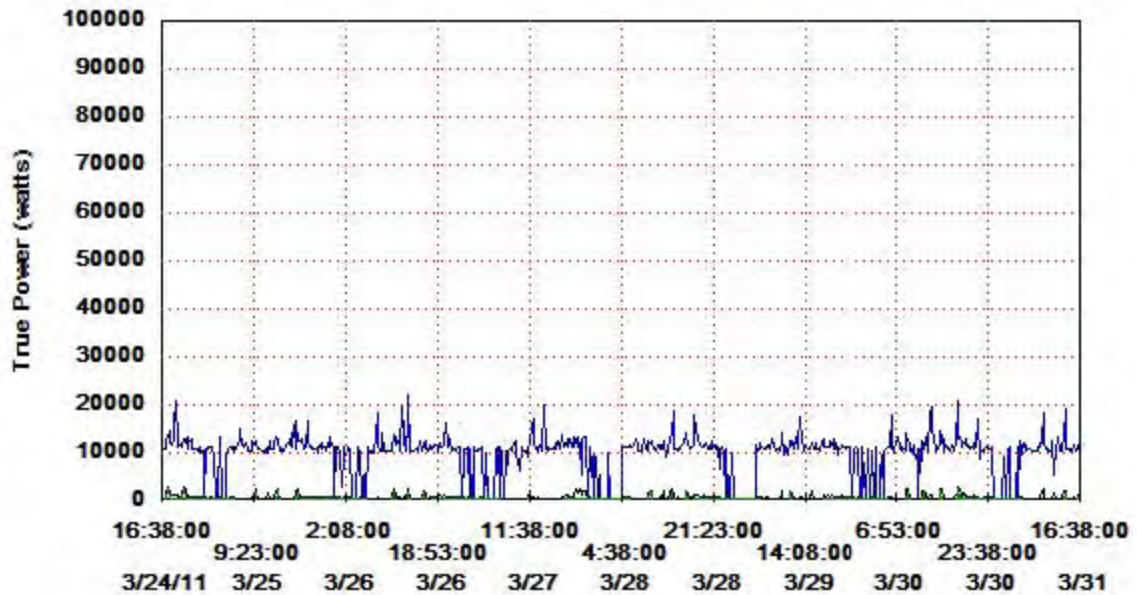
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

Phase 2 Ave = 808.45 Phase 2 Max = 69580.8 Phase 2 Min = 0.00



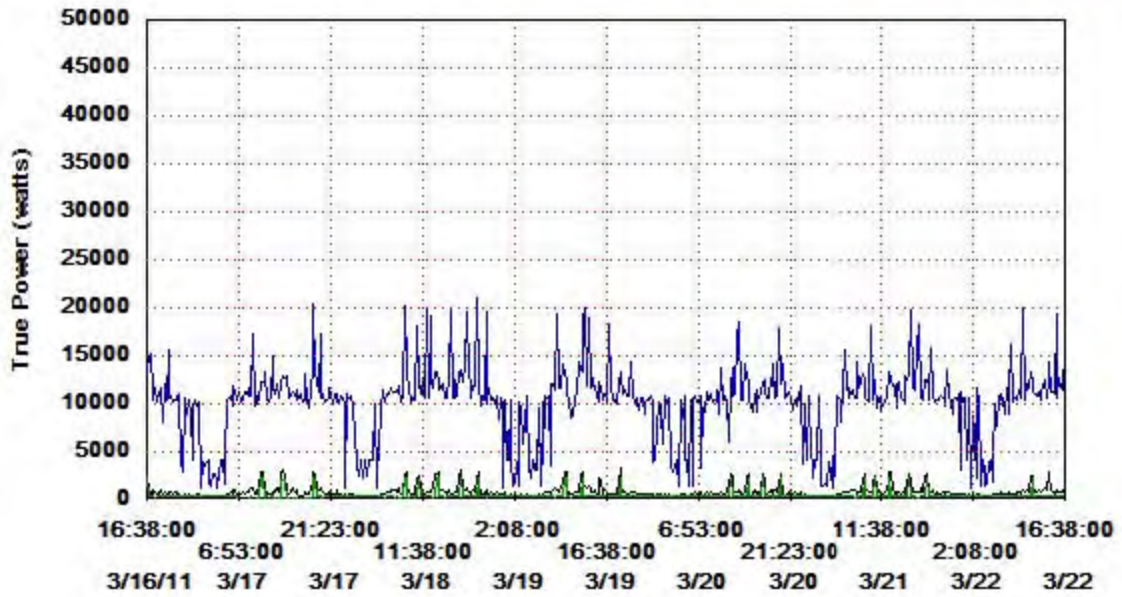
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

Phase 2 Ave = 706.77 Phase 2 Max = 22041.6 Phase 2 Min = 0.00



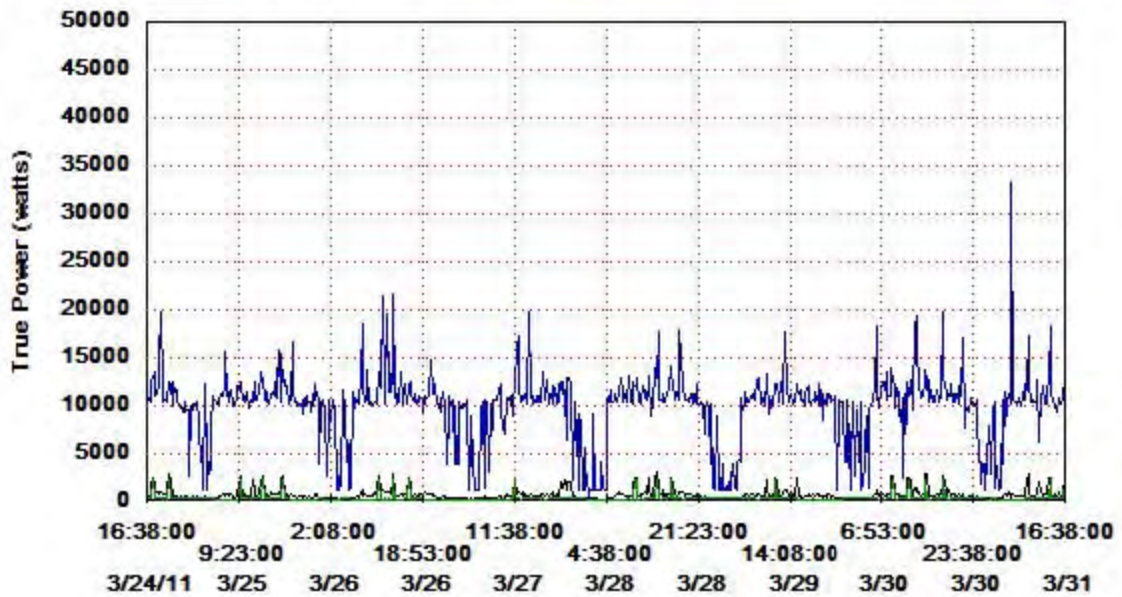
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

Phase 3 Ave = 891.83 Phase 3 Max = 20947.2 Phase 3 Min = 0.00



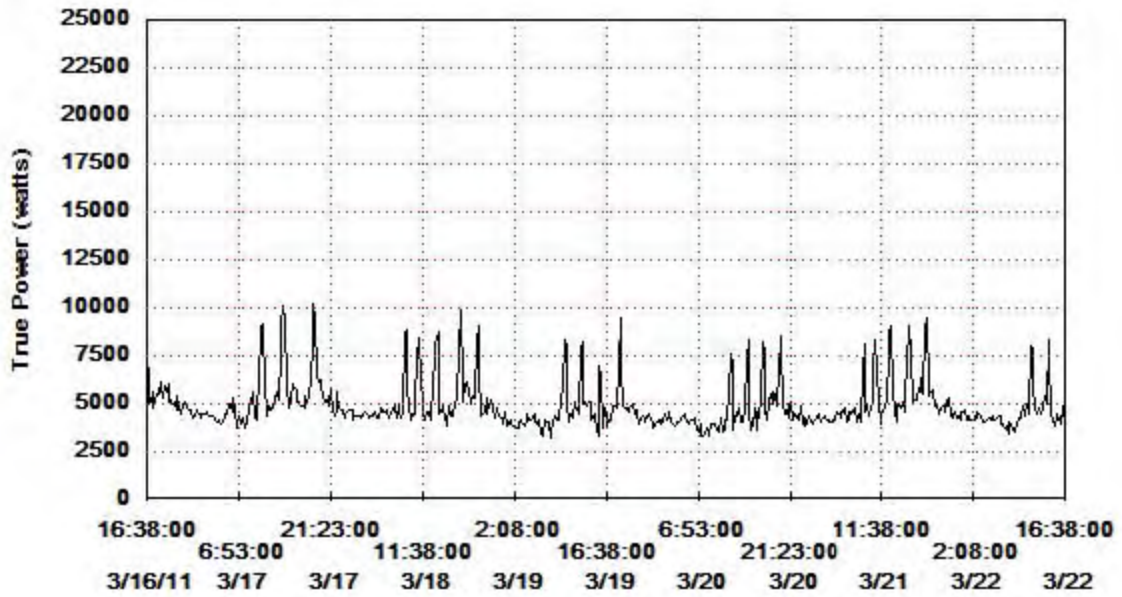
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

Phase 3 Ave = 778.06 Phase 3 Max = 33433.6 Phase 3 Min = 0.00



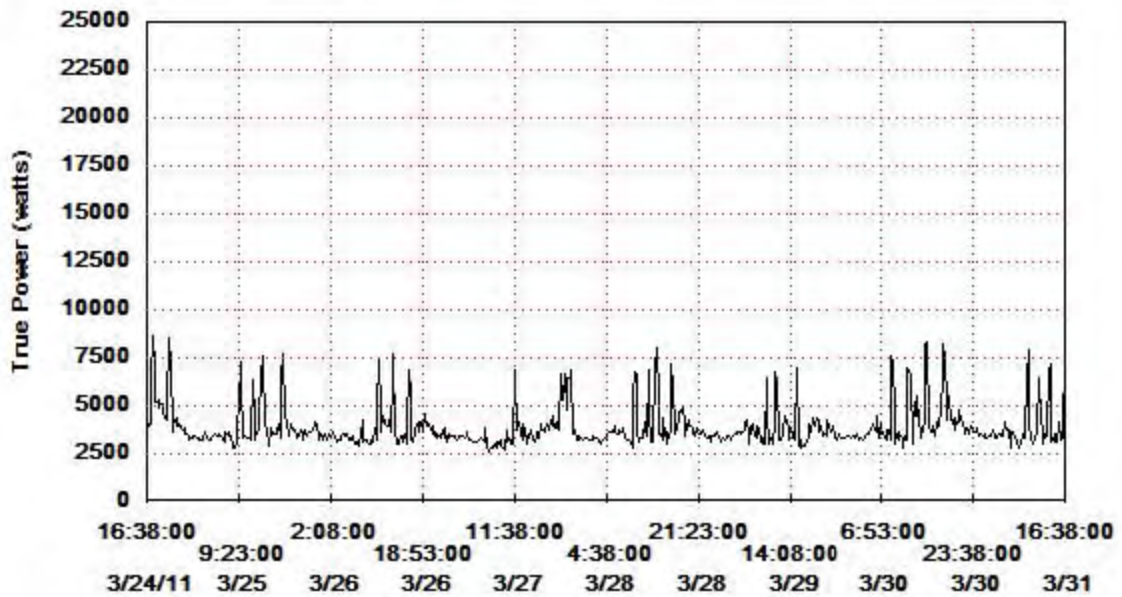
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

□ Total = 4931.4



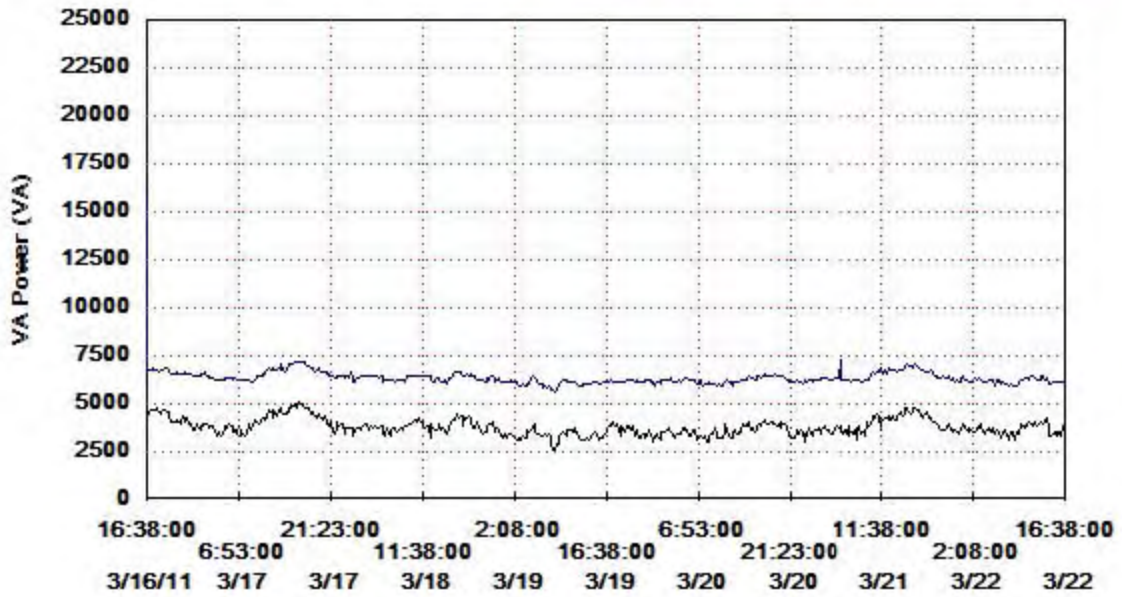
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

□ Total = 3882.4



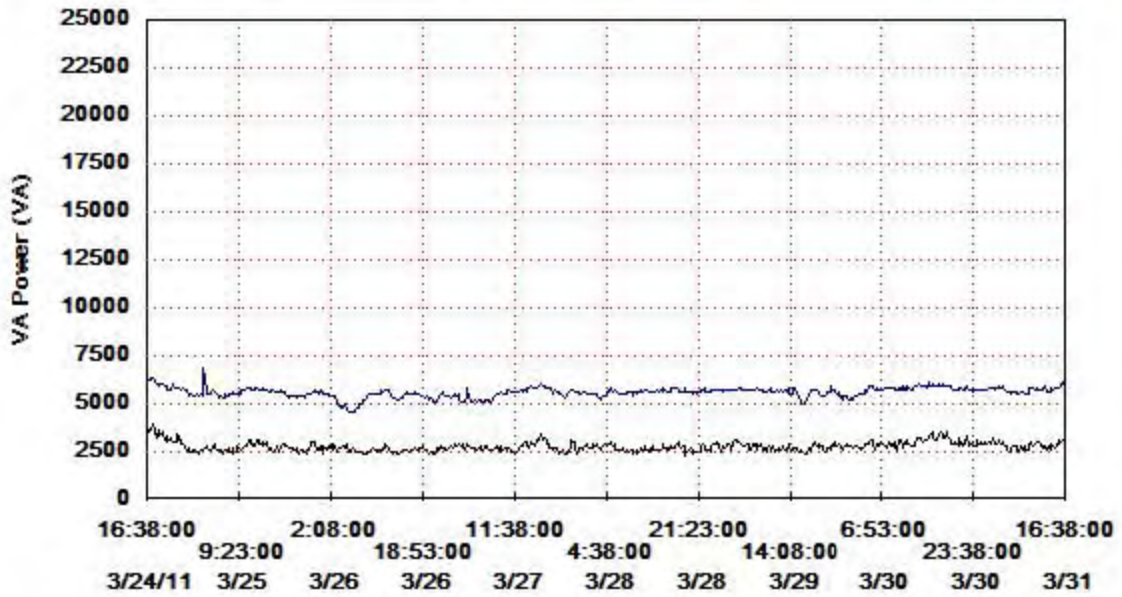
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

Phase 1 Ave = 3789.4 Phase 1 Max = 15840.0 Phase 1 Min = 0.00



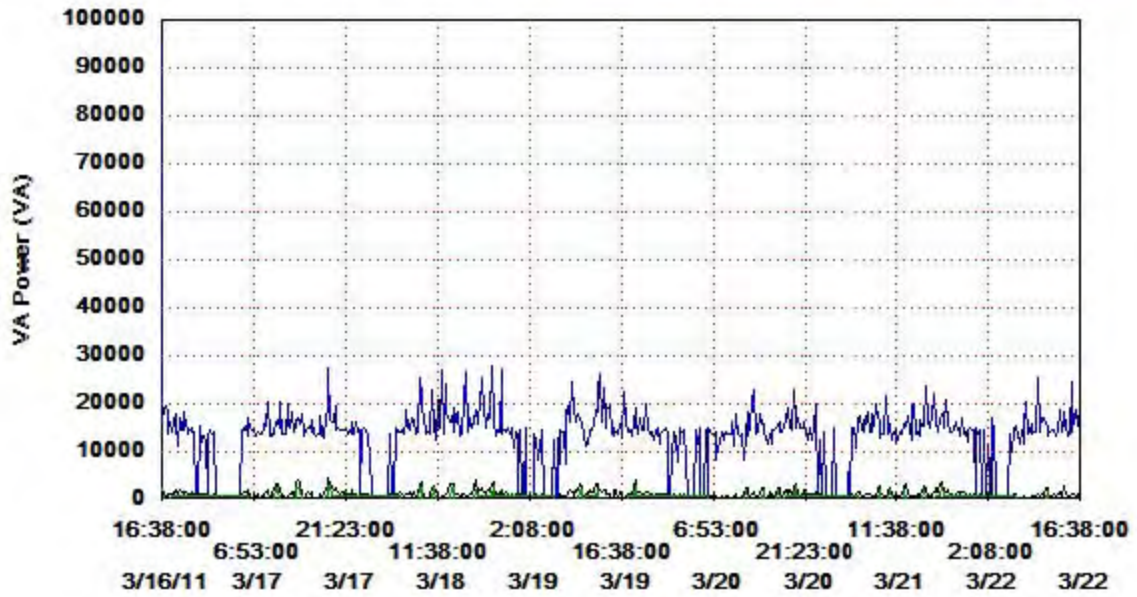
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

Phase 1 Ave = 2782.6 Phase 1 Max = 6873.6 Phase 1 Min = 0.00



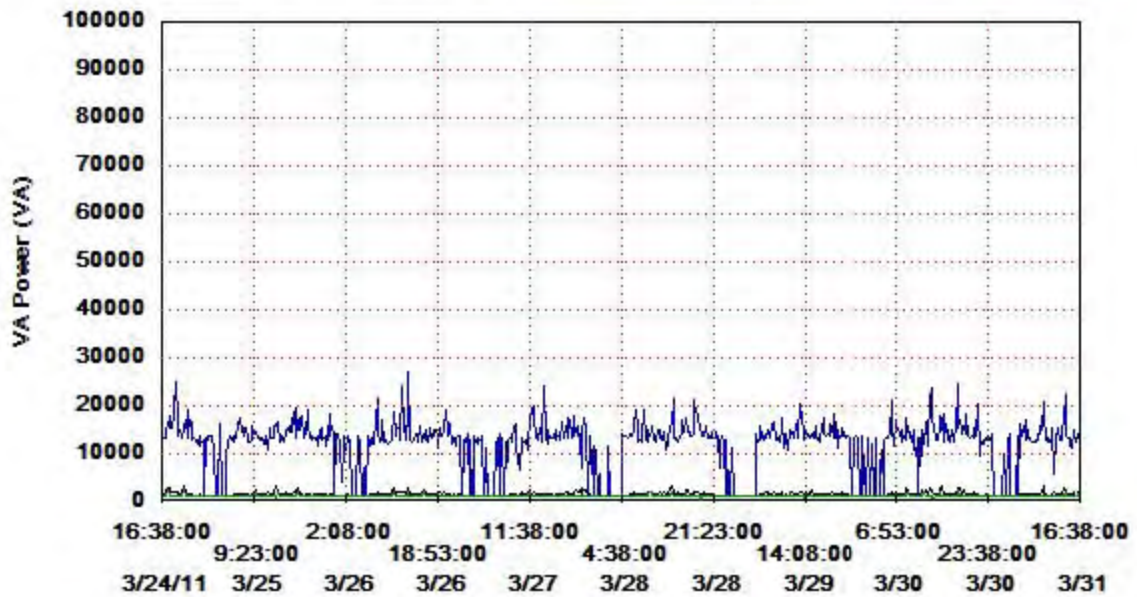
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

Phase 2 Ave = 1244.1 Phase 2 Max = 96409.6 Phase 2 Min = 0.00



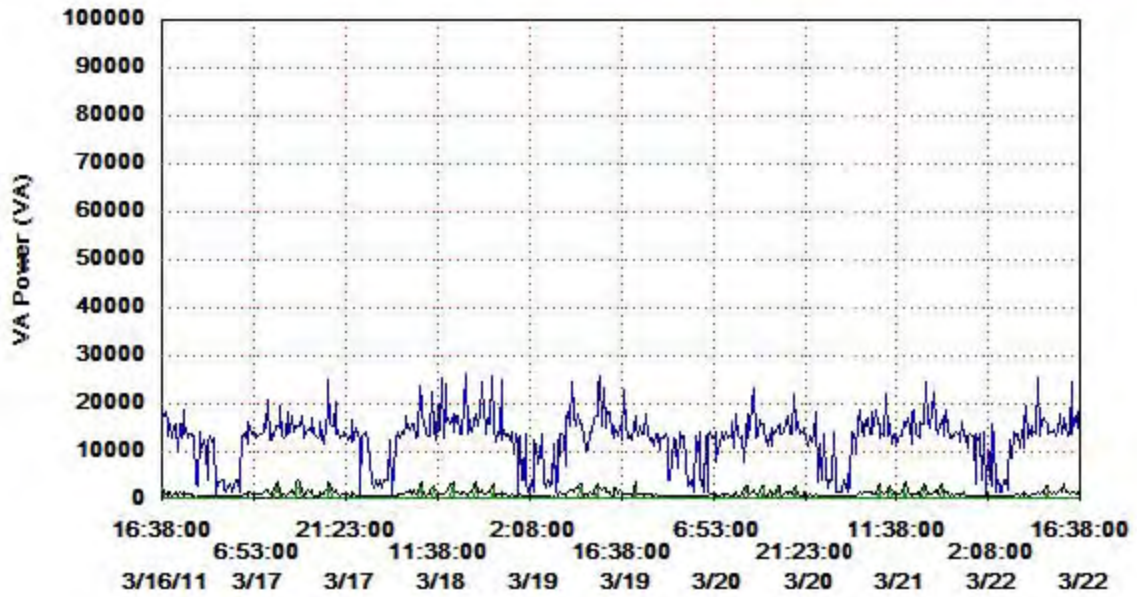
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

Phase 2 Ave = 1625.6 Phase 2 Max = 27065.6 Phase 2 Min = 0.00



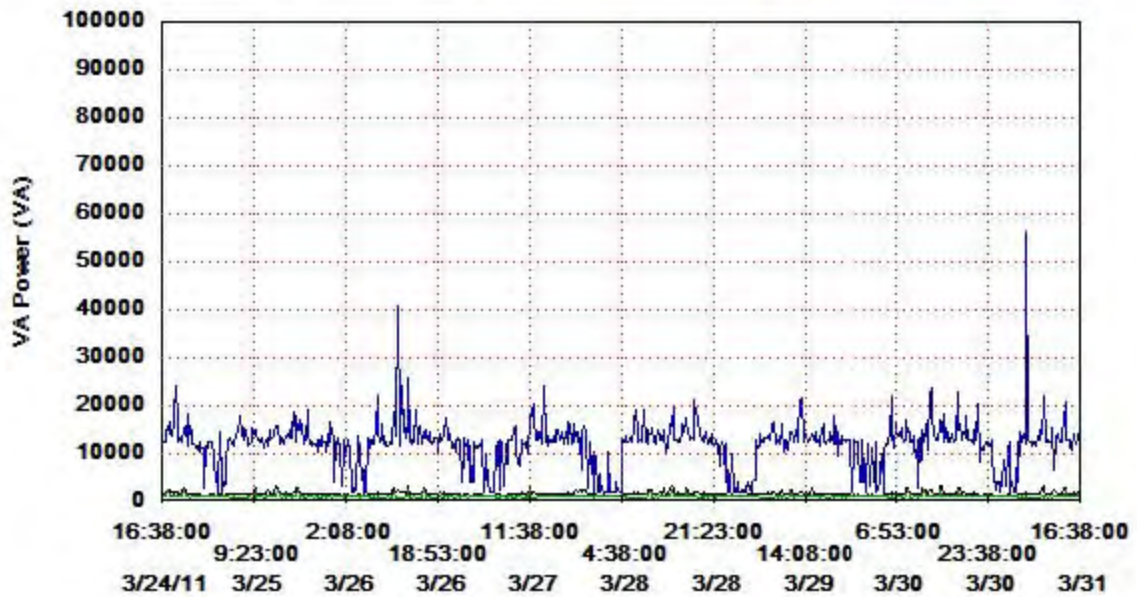
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

Phase 3 Ave = 1340.1 Phase 3 Max = 26048.0 Phase 3 Min = 0.00



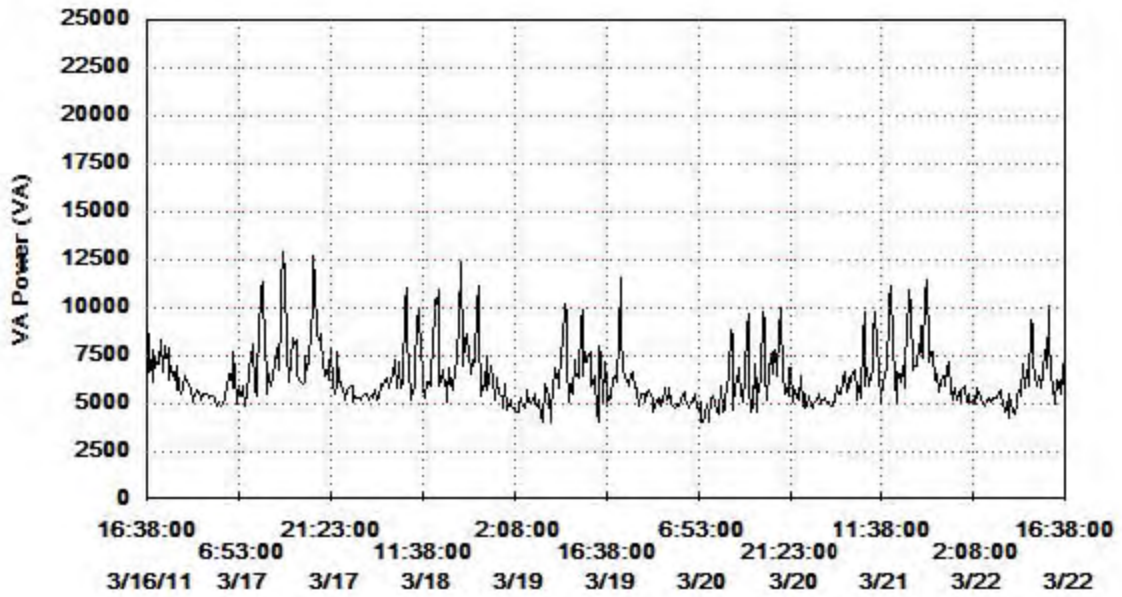
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

Phase 3 Ave = 1716.6 Phase 3 Max = 56166.4 Phase 3 Min = 0.00



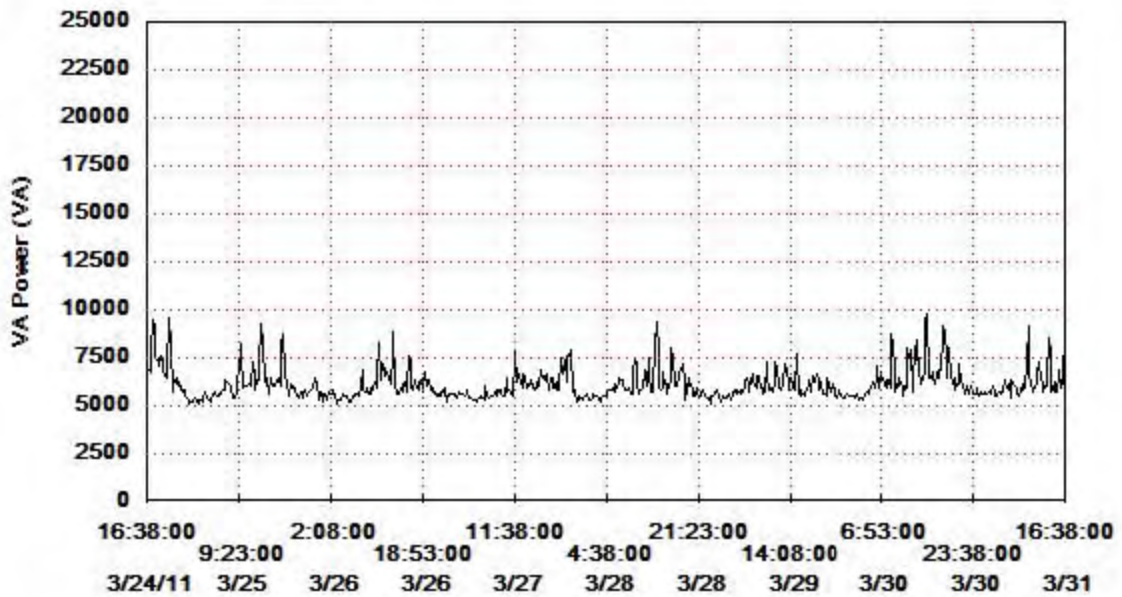
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

□ Total = 6373.7



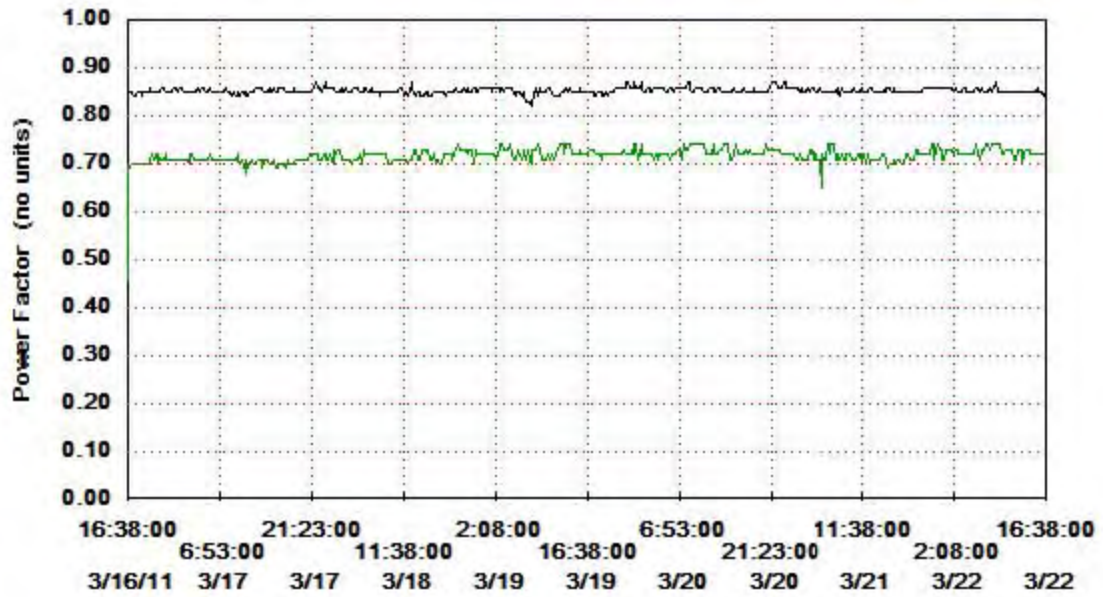
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

□ Total = 6124.9



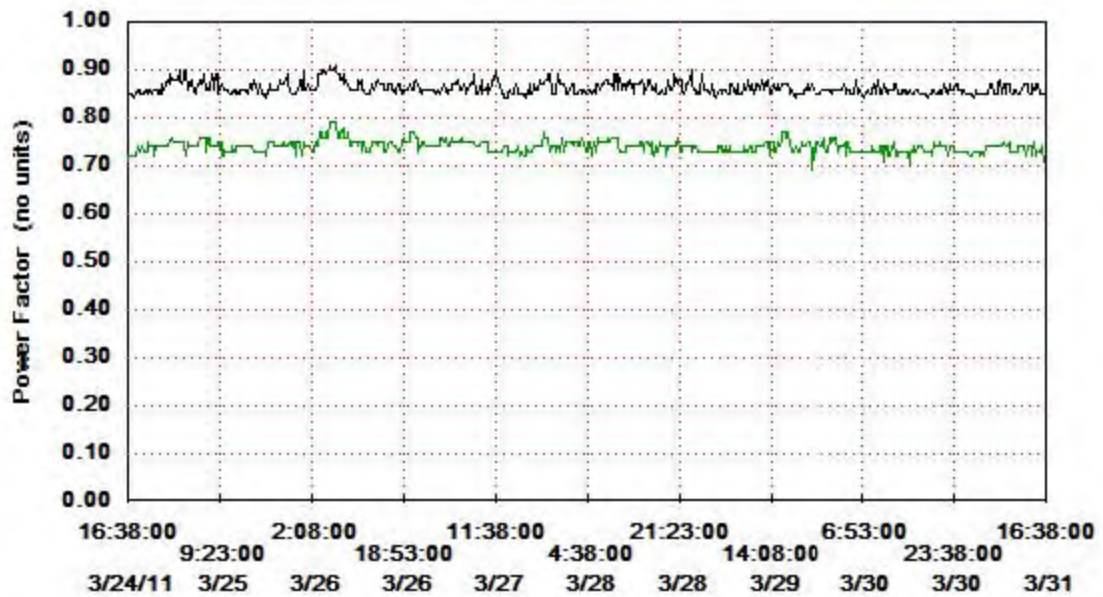
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

Phase 1 Ave = 0.85 Phase 1 Max = 1.00 Phase 1 Min = 0.46



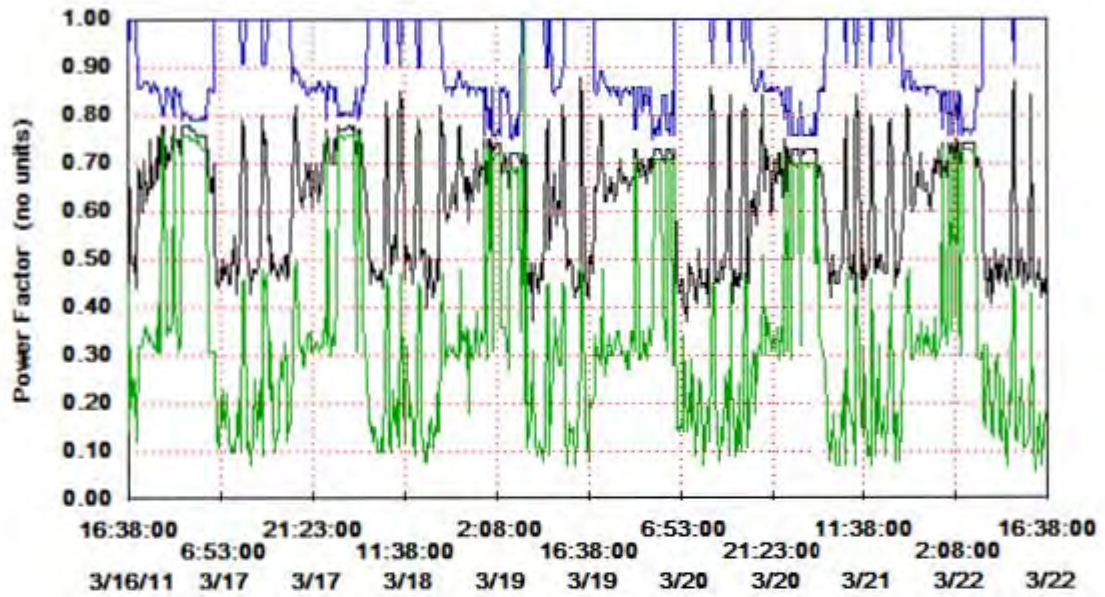
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

Phase 1 Ave = 0.86 Phase 1 Max = 1.00 Phase 1 Min = 0.69



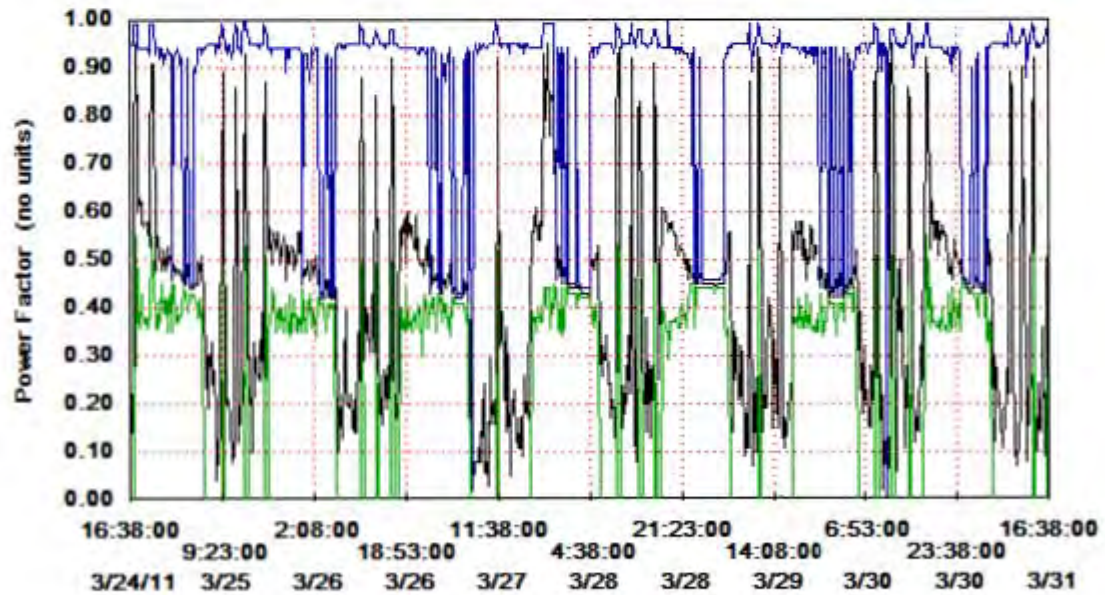
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

Phase 2 Ave = 0.62 Phase 2 Max = 1.00 Phase 2 Min = 0.06



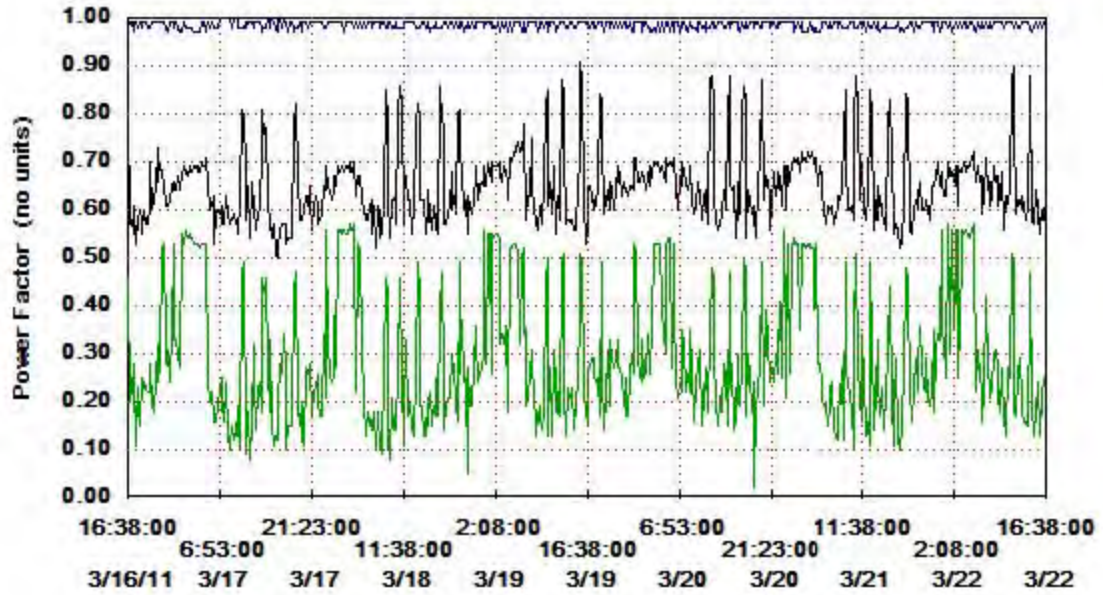
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

Phase 2 Ave = 0.41 Phase 2 Max = 1.00 Phase 2 Min = 0.00



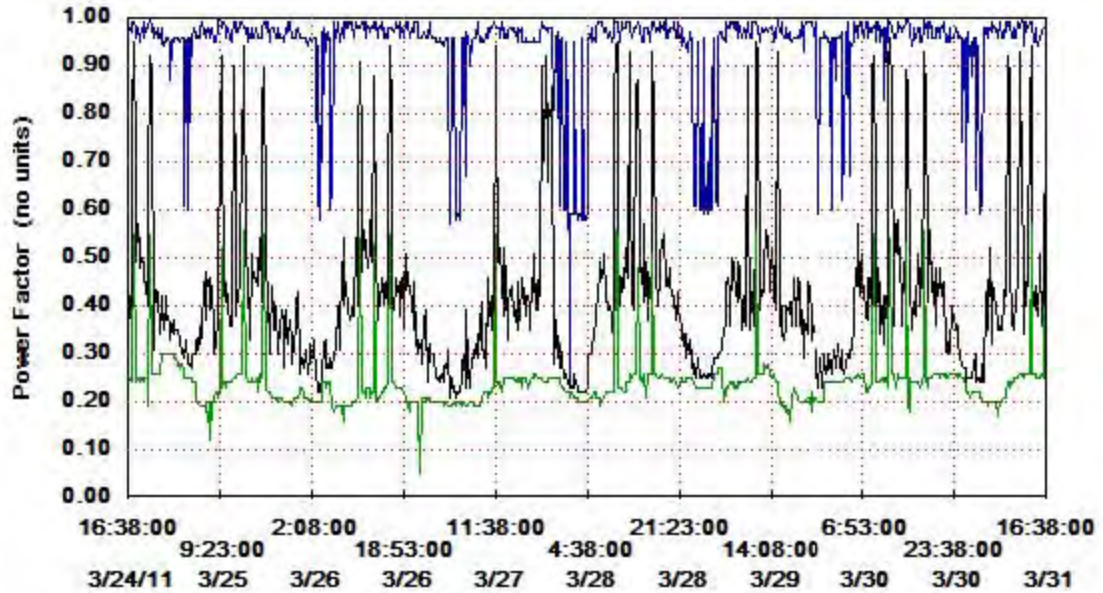
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

Phase 3 Ave = 0.65 Phase 3 Max = 1.00 Phase 3 Min = 0.02



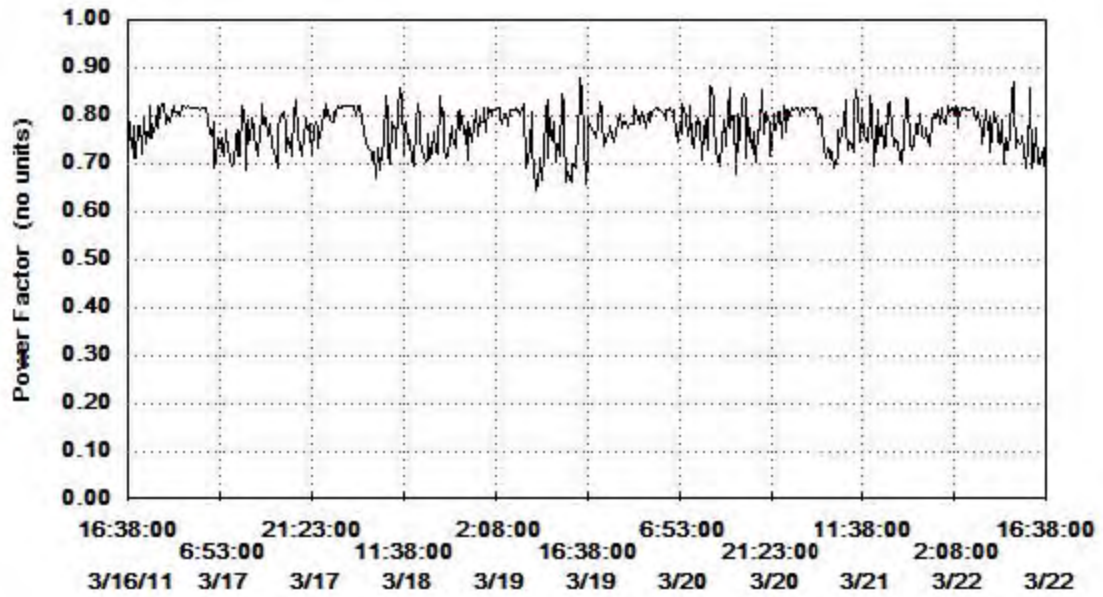
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

Phase 3 Ave = 0.42 Phase 3 Max = 1.00 Phase 3 Min = 0.05



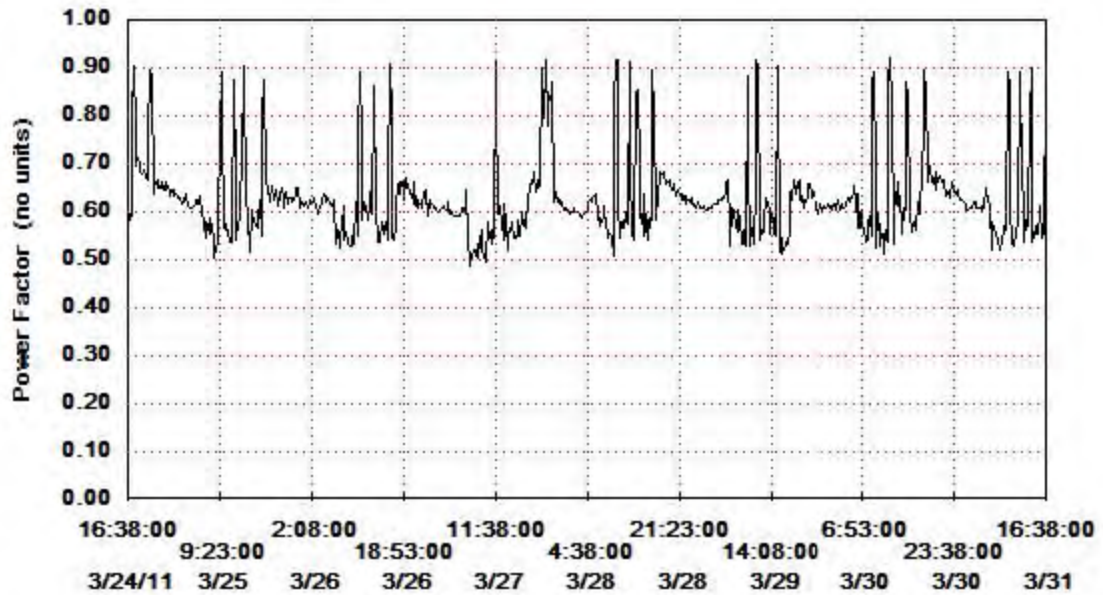
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

Ave Total = 0.77



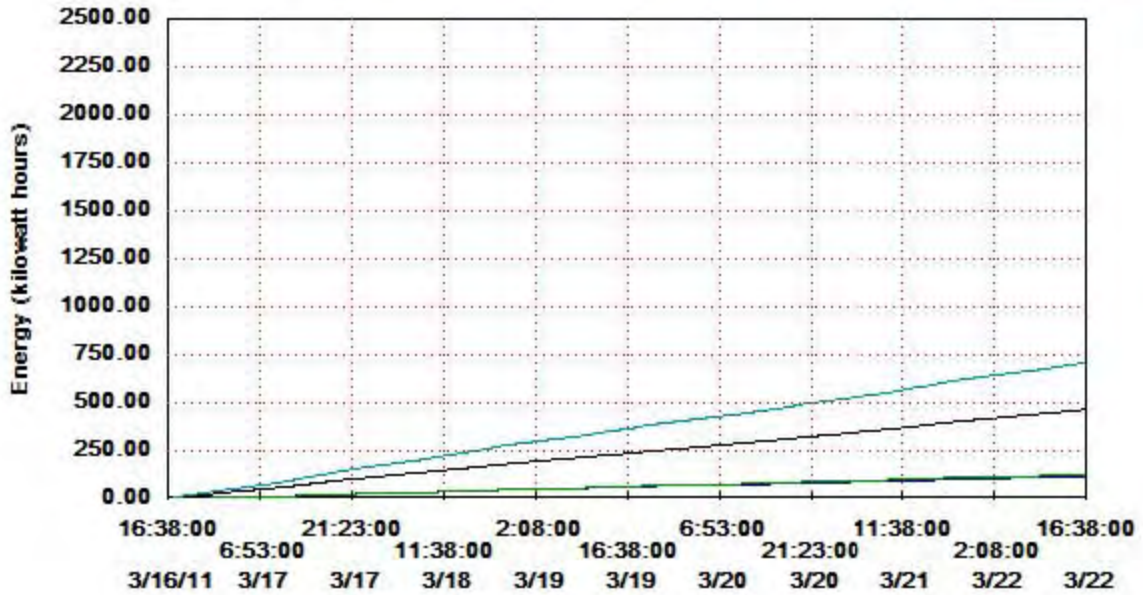
Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

Ave Total = 0.63



Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

Phase 1 = 465.27 Phase 2 = 116.13 Phase 3 = 127.97 Total = 709.37



Comparativo Consumo The Zap Box, 208V, trifasico- PH Mirador 50

Phase 1 = 402.67 Phase 2 = 118.90 Phase 3 = 130.80 Total = 652.36

