

<b>Report Number</b>	TRN-15314
<b>Customer</b>	Rod Rayner
<b>Contact</b>	Intalect Ltd
<b>Product Type</b>	IT Wireless System
<b>Test Purpose</b>	UMS Energy Performance Test
<b>Sales Order Ref</b>	20100
<b>Works Order Number</b>	WO-5658
<b>Test Item Reference</b>	TI-10236
<b>LAB Test Method Reference</b>	TES-20012
<b>Test Standards</b>	LM-79-08 and Elexon UMS Charge Code process V4.0
<b>Lab Location Reference</b>	UMS
<b>Tested by</b>	Steve Hunt
<b>Date of Test</b>	31/07/2015
<b>Analysed by</b>	Steve Hunt
<b>Number of products tested</b>	5

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Signed:




I.T Wireless NA ( ElephantWiFi Enterprise -  
Intalect )

Date: 31/07/2015

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### Test Conditions

Measurements were made with an ambient temperature of 23°C +/- 2°C. Measurements were taken only after sufficient time for thermal stabilisation has been allowed.

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### Test Equipment

Yokogawa WT210 Power Analyzer. Kikusui PCR2000M Stable AC Power Supply  
with PC control and data recording



Full data control and recording  
using Labview software and full  
integration of the AC Stable  
Power Supply and Power  
Analyser

<b>Product Name</b>	I.T Wireless NA ( ElephantWiFi Enterprise - Intalect )
<b>Part/Serial Number</b>	See (Identifier) below
<b>Type of Product</b>	IT Wireless System
<b>Test System Item 1</b>	Outdoor AP
<b>Test System Item 2</b>	POE Brick
<b>Test System Item 3</b>	Nanostation #1
<b>Test System Item 4</b>	Nanostation #2
<b>Ambient Temperature</b>	24.1°C
<b>Manufacturer</b>	Intalect Ltd
<b>Date of Manufacturer</b>	2015
<b>Thermal Management</b>	Passive
<b>Dimmable</b>	Yes
<b>Humidity</b>	<65% RH

Test Item	Identifier	Serial Number
TI-10236A	1	44D9E72E23A4
TI-10236B	2	44D9E72E24D0
TI-10236C	3	44D9E72E236C
TI-10236D	4	44D9E72E225B
TI-10236E	5	44D9E72E2240

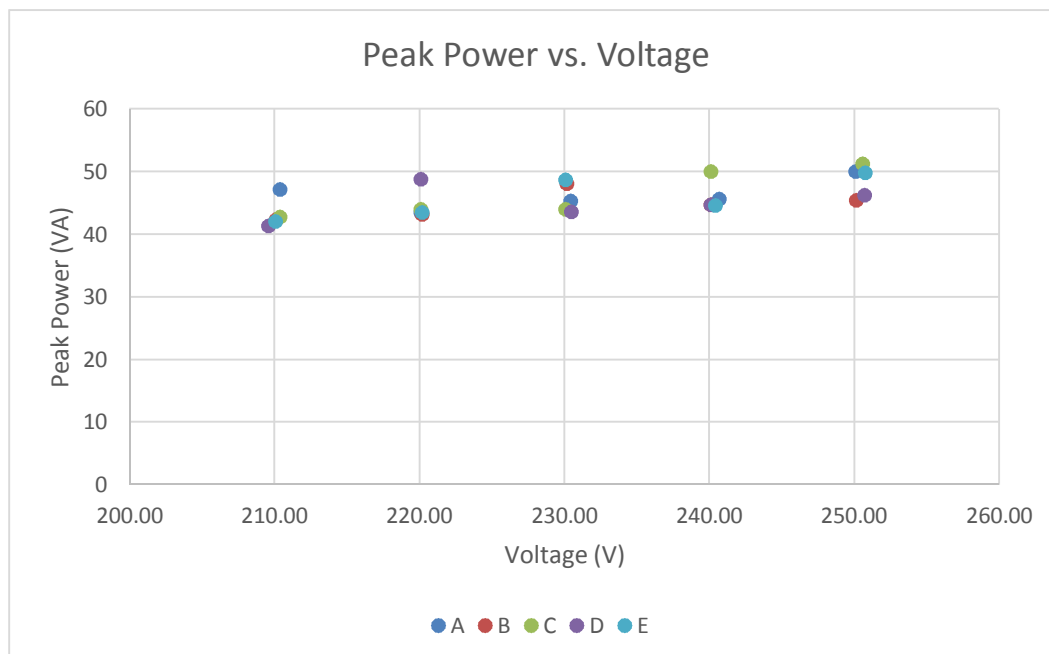
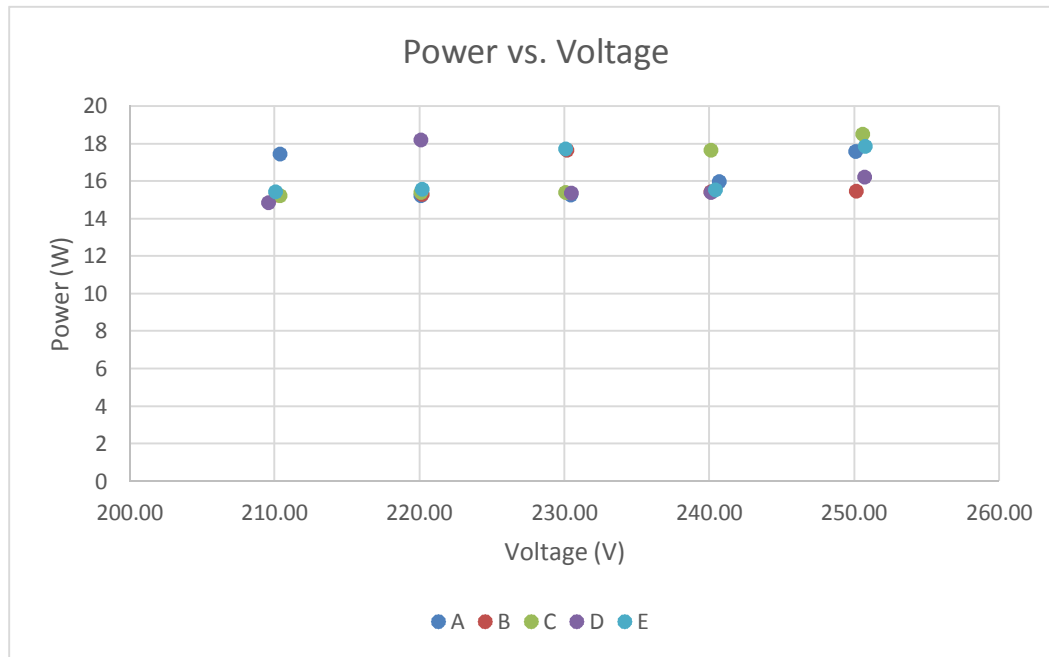
### Test Conditions

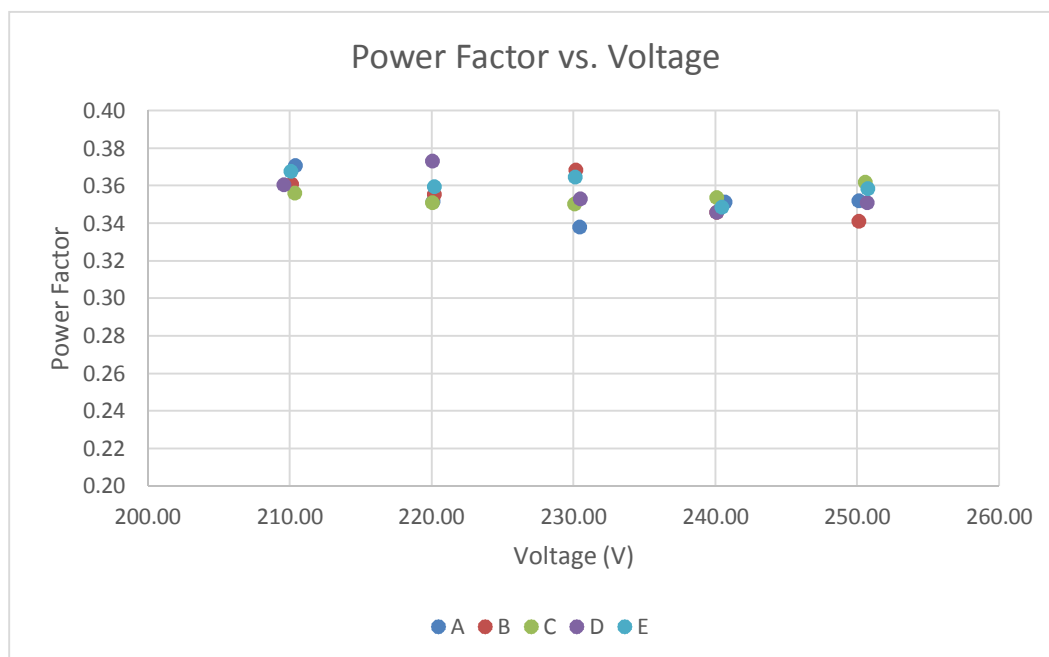
	Before Test	After Test
AC Supply Voltage (V)	251.05V	250.16V
AC Supply Frequency (Hz)	50Hz	50Hz
Voltage RMS Summation of the Harmonic Components (THD)	0.09%	0.12%

The test items were stabilised according to the electrical power stability of LM79-08. Stabilization is achieved when the difference in electrical power measurement is less than 0.5%. Each test item was stabilised at 250V.

### Test Results Summary

These are the summary graphs of the test results for all products tested. The raw results are on page 6 of this test report.





Power factors measured have a Leading phase angle and therefore the driver has capacitive properties.

### Measurement Uncertainty

Parameter	Uncertainty
Voltage (300 V, 50/60 Hz)	$\pm 0.061 V_{rms}$
Current (200 mA, 50/60Hz)	$\pm 0.07 mA_{rms}$
Current (0.5 A, 50/60Hz)	$\pm 0.16 mA_{rms}$
Current (5 A, 50/60Hz)	$\pm 0.0016 A_{rms}$
Power (300 V, 200 mA, 50/60 Hz)	$\pm 0.032 W_{rms}$
Power (300 V, 0.5 A, 50/60 Hz)	$\pm 0.09 W_{rms}$
Power (300 V, 5 A, 50/60 Hz)	$\pm 0.0009 kW_{rms}$
Frequency (50/60 Hz)	$\pm 0.001 Hz$
Power Factor	$\pm 0.0006 PF$

Measurements of power of 0.50W or greater are made with an uncertainty of less than or equal to 2% at the 95% confidence level. Measurements of power less than 0.50W are made with an uncertainty of less than or equal to 0.01W at the 95% confidence level.

### Full Test Results

Test Item	Voltage (V)	Current (mA)	Electrical Power (W)	Ambient Temp (°C)	Peak Power (VA)	Power Factor	Leading / Lagging
A	250.14	199.82	17.58	24.05	49.98	0.352	Leading
B	250.16	181.48	15.47	24.02	45.40	0.341	Leading
C	250.61	204.20	18.52	24.10	51.17	0.362	Leading
D	250.73	184.21	16.21	24.29	46.19	0.351	Leading
E	250.77	198.64	17.85	24.24	49.81	0.358	Leading
A	240.73	189.17	15.99	24.31	45.54	0.351	Leading
B	240.14	186.07	15.45	24.29	44.68	0.346	Leading
C	240.13	208.14	17.67	24.21	49.98	0.354	Leading
D	240.14	185.77	15.42	24.22	44.61	0.346	Leading
E	240.47	185.46	15.54	24.32	44.60	0.349	Leading
A	230.46	196.22	15.28	24.22	45.22	0.338	Leading
B	230.19	208.53	17.67	24.22	48.00	0.368	Leading
C	230.12	191.08	15.40	24.27	43.97	0.350	Leading
D	230.53	188.95	15.37	24.56	43.56	0.353	Leading
E	230.13	211.23	17.72	24.51	48.61	0.364	Leading
A	220.12	197.29	15.25	24.54	43.43	0.351	Leading
B	220.24	195.65	15.31	24.25	43.09	0.355	Leading
C	220.11	199.43	15.40	24.41	43.90	0.351	Leading
D	220.11	221.47	18.19	24.23	48.75	0.373	Leading
E	220.24	197.08	15.59	24.28	43.41	0.359	Leading
A	210.42	223.91	17.46	24.25	47.11	0.371	Leading
B	210.15	201.53	15.28	24.22	42.35	0.361	Leading
C	210.39	203.19	15.22	24.31	42.75	0.356	Leading
D	209.60	196.84	14.86	24.14	41.26	0.360	Leading
E	210.12	199.89	15.44	24.46	42.00	0.368	Leading

### Test Item Photographs

#### 10236-INFT-WIFINA-11536

Images of Product(s) under test. Identification of each of the products can be found on page 3 of this report



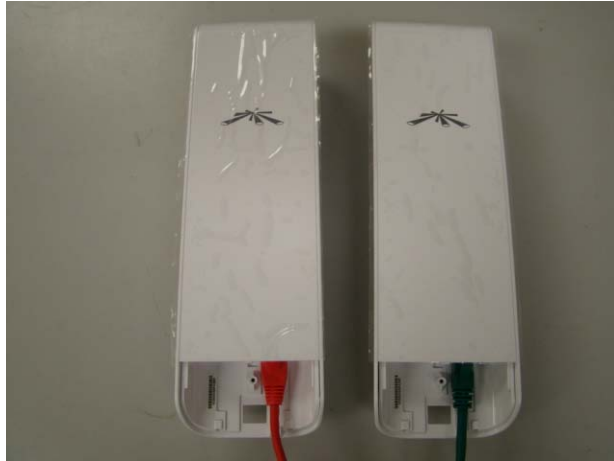
Outdoor AP



System Setup



POE



Nanostations



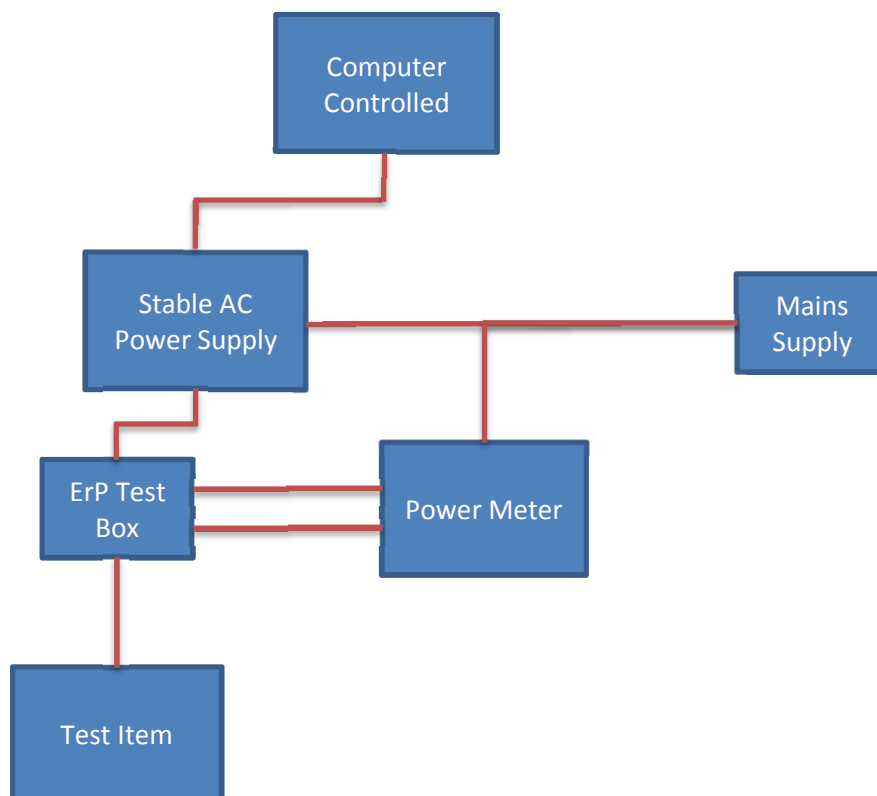
POE Supply



Example of Rating Label



### Appendix 1: Test item set-up



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