EDMI INTERNATIONAL TRADING (SHANGHAI) CO., LTD

Electricity Meter

Main Model: NC30 Serial Model: N/A

April 25, 2014

Report No.: 14070091-FCC-R1 (This report supersedes NONE)



Modifications made to the product: None

This Test Report is Issued Under the Authority of: David Huang David Huang Compliance Engineer Technical Manager

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Test result presented in this test report is applicable to the representative sample only.

RETEST Report To: FCC 15,249: 2013





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Country/Region	Scope
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Taiwan	EMC, RF, Telecom, Safety
Hong Kong	RF/Wireless ,Telecom
Australia	EMC, RF, Telecom, Safety
Korea	EMI, EMS, RF, Telecom, Safety
Japan	EMI, RF/Wireless, Telecom
Singapore	EMC, RF, Telecom
Europe	EMC, RF, Telecom, Safety



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1 EXECUTIVE SUMMARY & EUT INFORMATION

The purpose of this test programme was to demonstrate compliance of the EDMI INTERNATIONAL TRADING (SHANGHAI) CO., LTD, Electricity Meter and model: NC30 against the current Stipulated Standards. The Electricity Meter has demonstrated compliance with the FCC 15.249: 2013.

EUT Information

EUT

Description

: Electricity Meter

Main Model : NC30

Serial Model : N/A

Input Power : AC 120V 60Hz

Classification

Per Stipulated: FCC 15.249: 2013

Test Standard



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2 TECHNICAL DETAILS

Purpose	Compliance testing of Electricity Meter with stipulated standard
Applicant / Client	EDMI INTERNATIONAL TRADING (SHANGHAI) CO., LTD Room 1504-1508, Tower A, Cao He Jing High-Tech Bldg., 900 Yishan Road, Shanghai 200233, P.R.China
Manufacturer	EDMI INTERNATIONAL TRADING (SHANGHAI) CO., LTD Room 1504-1508, Tower A, Cao He Jing High-Tech Bldg., 900 Yishan Road, Shanghai 200233, P.R.China
Laboratory performing the tests	SIEMIC (Shenzhen-China) Laboratories Zone A, Floor 1, Building 2, Wan Ye Long Technology Park, South Side of Zhoushi Road, Bao'an District, Shenzhen, Guangdong, China Tel: +86-0755-2601 4629 / 2601 4953 Fax: +86-0755-2601 4953-810 Email: China@siemic.com.cn
Test report reference number	14070091-FCC-R1
Date EUT received	March 19, 2014
Standard applied	FCC 15.249: 2013
Dates of test (from - to)	March 26 to April 24, 2014
No of Units	#1
Equipment Category	DXX
Trade Name	■ EDMI
RF Operating Frequency (ies)	915-918.6 MHz
Number of Channels	10
Modulation	GFSK
FCC ID	2AB2ZNC30



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3 MODIFICATION

NONE

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4 TEST SUMMARY

The product was tested in accordance with the following specifications. All testing has been performed according to below product classification:

Spread Spectrum System/Device

Test Results Summary

1 est itestites Summing						
	Description					
§15.215(c)	20 dB Bandwidth&99% Occupied Bandwidth	Pass				
§15.249(a)	Field Strength Measurement	Pass				
§15.207(a)	Conducted Emissions	Pass				
§15.205(a), §15.209(a), §15.249, §15.35.	Radiated Emissions(Tx)	Pass				
/	Band-Edge	Pass				

Channels	Frequency(MHz)
1	915
2	915.4
3	915.8
4	916.2
5	916.6
6	917.0
7	917.4
8	917.8
9	918.2
10	918.6

Note: According with FCC Part 15.31(m), we tested low and high channels.



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5 MEASUREMENTS, EXAMINATION AND DERIVED RESULTS

5.1 20 dB Bandwidth&99% Occupied Bandwidth

1. Conducted Measurement

EUT was set for low, mid, high channel with modulated mode and highest RF output power.

The spectrum analyzer was connected to the antenna terminal.

2. Environmental Conditions Temperature 23°C

Relative Humidity 52%

Atmospheric Pressure 1008mbar

3. Conducted Emissions Measurement Uncertainty

All test measurements carried out are traceable to national standards. The uncertainty of the measurement at a confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2, in the range 30MHz - 40GHz is $\pm 1.5dB$.

4. Test date: March 26, 2014 Tested By: David Huang

Standard Requirement:

The bandwidth of a frequency hopping channel is the 20 dB emission bandwidth, measured with the hopping stopped. The system RF bandwidth is equal to the channel bandwidth multiplied by the number of channels in the hopset. The hopset shall be such that the near-term distribution of frequencies appears random, with sequential hops randomly distributed in both direction and magnitude of change in the hopset while the long-term distribution appears evenly distributed.

Procedures:

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 3. Set the spectrum analyzer as Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel, RBW ≥ 1% of the 20 dB bandwidth, VBW ≥ RBW, Sweep = auto, Detector function = peak, Trace = max hold.
- 4. Set the measured low, middle and high frequency and test 20dB bandwidth with spectrum analyzer.

Test Result: Pass

Test Mode:	Transmitting
	A

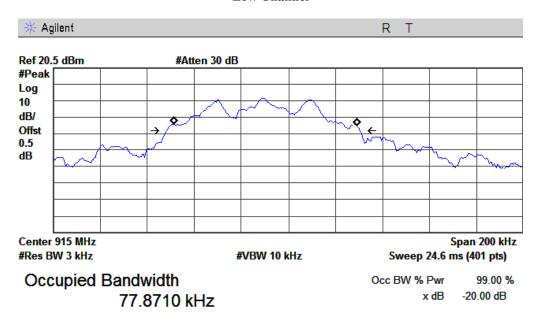
Channel	Frequency (MHz)	20dB Bandwidth (KHz)	99% Occupied Bandwidth (KHz)
Low	915	82.164	77.871
High	918.6	82.472	81.116



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The 20dB&99% bandwidth:

Low Channel



Transmit Freq Error -9.786 kHz x dB Bandwidth 82.164 kHz

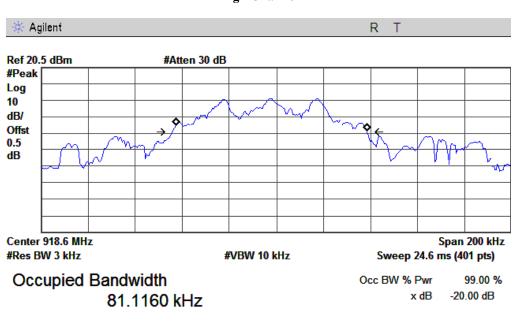
Transmit Freq Error

x dB Bandwidth

-2.163 kHz

82.472 kHz

High Channel



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5.2 Field Strength Measurement Radiated Measurement

Radiated Measurement

EUT was set for low, mid, high channel with modulated mode and highest RF output power.

2. Radiated Emissions Measurement Uncertainty

> All test measurements carried out are traceable to national standards. The uncertainty of the measurement at a confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2, in the range 30MHz - 40GHz is $\pm 1.5dB$.

3. **Environmental Conditions**

Temperature 22°C Relative Humidity 57% Atmospheric Pressure 1008mbar

Test date: April 24, 2014 4. Tested By: David Huang

Standard Requirement:

Fundamental frequency	Field strength of fundamental (millivolts/ meter)	Field strength of harmonics (microvolts/ meter)	
902–928 MHz	50	500	
2400–2483.5 MHz	50	500	
5725–5875 MHz	50	500	
24.0–24.25 GHz	250	2500	

Procedures:

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation.

Test Result: Pass



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Test Mode: Transmitting

Fundamental Field Strength:

Frequency (MHz)	S.A. Reading (dBµV)	Detector (PK/AV)	Polarity (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre-Amp. Gain (dB)	Cord. Amp. (dBµV/m)	Limit (dBµV/m)	Margin (dB)
915	86.72	PK	Н	22.5	0.9	22	88.12	114	-25.88
915	86.0	QP	Н	22.5	0.9	22	87.40	94	-6.60
915	83.81	PK	V	22.5	0.9	22	85.21	114	-28.79
915	83.40	QP	V	22.5	0.9	22	84.80	94	-9.20
918.6	87.35	PK	Н	22.5	0.9	22	88.75	114	-25.25
918.6	86.90	QP	Н	22.5	0.9	22	88.30	94	-5.70
918.6	84.78	PK	V	22.5	0.9	22	86.18	114	-27.82
918.6	84.20	QP	V	22.5	0.9	22	85.60	94	-8.40



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5.3 Conducted emissions Test Result

Standard Requirement:

	Conducted limit (dBµV)			
Frequency of emission (MHz)	Quasi-peak	Average		
0.15–0.5	66 to 56*	56 to 46*		
0.5–5	56	46		
5–30	60	50		

^{*}Decreases with the logarithm of the frequency.

Procedures:

- 1. All possible modes of operation were investigated. Only the 6 worst case emissions measured, using the correct CISPR and Average detectors, are reported. All other emissions were relatively insignificant.
- 2. A "-ve" margin indicates a PASS as it refers to the margin present below the limit line at the particular frequency.
- 3. Conducted Emissions Measurement Uncertainty
 All test measurements carried out are traceable to national standards. The uncertainty of the measurement at a confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2, in the range 9kHz 30MHz (Average & Quasi-peak) is ±3.5dB.

4. Environmental Conditions Temperature 19°C Relative Humidity 55%

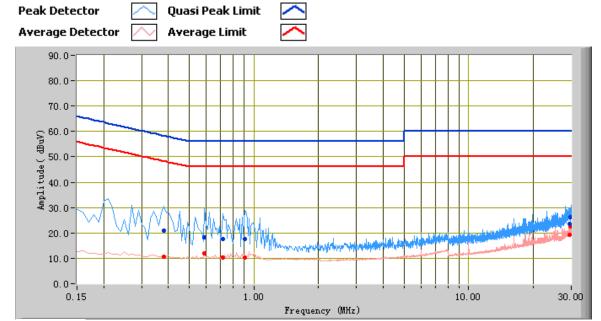
Atmospheric Pressure 1007mbar

5. Test date : April 02, 2014 Tested By : David Huang

Test Result: Pass

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Test Mode: Running



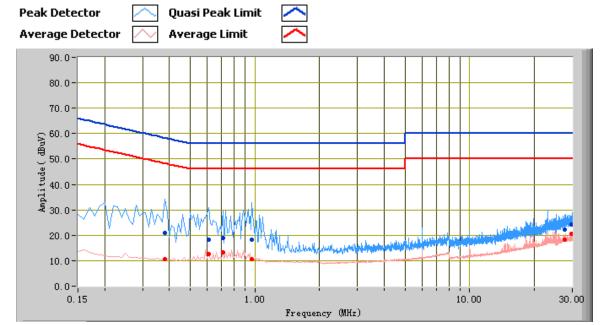
Test Data

Phase Line Plot at 120V AC, 60Hz

					,		
Frequency (MHz)	Quasi Peak (dBuV)	Limit (dBuV)	Margin (dB)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Factors (dB)
0.59	18.43	56.00	-37.57	11.82	46.00	-34.18	10.51
0.91	17.47	56.00	-38.53	10.30	46.00	-35.70	10.34
0.38	20.93	58.28	-37.35	10.61	48.28	-37.67	11.08
0.72	17.69	56.00	-38.31	10.38	46.00	-35.62	10.44
29.66	26.33	60.00	-33.67	22.54	50.00	-27.46	16.19
29.42	23.62	60.00	-36.38	19.40	50.00	-30.60	16.14

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Test Mode: Running



Test Data

Phase Natural Plot at 120V AC, 60Hz

Frequency (MHz)	Quasi Peak (dBuV)	Limit (dBuV)	Margin (dB)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Factors (dB)
0.97	18.20	56.00	-37.80	10.79	46.00	-35.21	10.31
0.38	20.85	58.28	-37.43	10.61	48.28	-37.67	11.08
0.61	18.30	56.00	-37.70	12.47	46.00	-33.53	10.50
0.71	18.79	56.00	-37.21	13.40	46.00	-32.60	10.44
27.74	22.35	60.00	-37.65	18.35	50.00	-31.65	15.98
29.66	24.28	60.00	-35.72	20.50	50.00	-29.50	16.19

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5.4 Radiated Emissions (TX)

- 1. All possible modes of operation were investigated. Only the 6 worst case emissions measured, using the correct CISPR detectors, are reported. All other emissions were relatively insignificant.
- 2. A "-ve" margin indicates a PASS as it refers to the margin present below the limit line at the particular frequency.
- 3. Radiated Emissions Measurement Uncertainty

All test measurements carried out are traceable to national standards. The uncertainty of the measurement at a confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2, in the range 30MHz – 1GHz (3m & 10m) & 1GHz above (3m) is +5.6/-4.5dB.

4. Environmental Conditions Temperature 22°C Relative Humidity 57%

Atmospheric Pressure 1008mbar

5. Test date : April 24, 2014 Tested By : David Huang

Standard Requirement:

The emissions from the Low-power radio-frequency devices shall not exceed the field strength levels specified in the following table and the level of any unwanted emissions shall not exceed the level of the fundamental emission. The tighter limit applies at the band edges.

The spurious emission scanned frequency range is 30MHz – 25GHz.

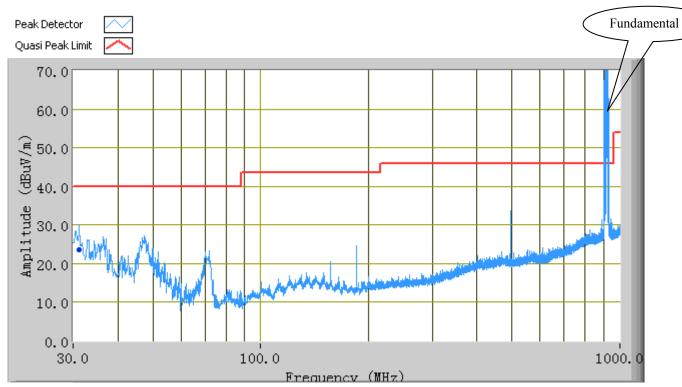
Test Result: Pass



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Test Mode: Transmitting

Below 1GHz



Test Data

Frequency (MHz)	Quasi Peak (dBuV/m)	Azimuth	Polarity(H/V)	Height (cm)	Factors (dB)	Limit (dBuV)	Margin (dB)
31.23	23.59	238.00	V	115.00	-2.30	40.00	-16.41



Title: RF Test
Main Model: NC30
Serial Model: N/A

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Transmitting **Test Mode:**

Above 1 GHz.

Low Channel (915 MHz)

Frequency	S.A.	Detector	Direction	Height	Polarity	Ant.	Cable	Pre- Amp.	Cord.	Limit	Margin
(MHz)	Reading	(PK/AV)	(degree)	(m)	(H/V)	Factor	Loss	Gain	Amp.	$(dB\mu V/m)$	(dB)
	(dBµV)					(dB/m)	(dB)	(dB)	(dBµV/m)		
1830	42.56	PK	182	1.2	V	28.41	1.8	24	48.77	74	-25.23
1830	40.89	AV	182	1.2	V	28.41	1.8	24	47.10	54	-6.90
1830	43.94	PK	105	1.3	Н	28.41	1.8	24	50.15	74	-23.85
1830	42.55	AV	105	1.3	Н	28.41	1.8	24	48.76	54	-5.24
2745	39.50	PK	167	1.3	V	30.35	3.67	24	49.52	74	-24.48
2745	38.12	AV	167	1.3	V	30.35	3.67	24	48.14	54	-5.86
2745	39.16	PK	125	1.4	Н	30.35	3.67	24	49.18	74	-24.82
2745	38.47	AV	125	1.4	Н	30.35	3.67	24	48.49	54	-5.51
2282	40.71	PK	172	1.2	V	29.24	3.63	24	49.58	74	-24.42
2282	39.23	AV	172	1.2	V	29.24	3.63	24	48.10	54	-5.90
2282	40.78	PK	110	1.3	Н	29.24	3.63	24	49.65	74	-24.35
2282	38.79	AV	110	1.3	Н	29.24	3.63	24	47.66	54	-6.34

High Channel (918.6 MHz)

Frequency	S.A.	Detector	Direction	Height	Polarity	Ant.	Cable	Pre- Amp.	Cord.	Limit	Margin
(MHz)	Reading	(PK/AV)	(degree)	(m)	(H/V)	Factor	Loss	Gain	Amp.	$(dB\mu V/m)$	(dB)
	(dBµV)					(dB/m)	(dB)	(dB)	$(dB\mu V/m)$		
1837.2	45.09	PK	43	1.6	V	28.41	1.8	24	51.30	74	-22.70
1837.2	42.03	AV	43	1.6	V	28.41	1.8	24	48.24	54	-5.76
1837.2	42.41	PK	127	1.4	Н	28.41	1.8	24	48.62	74	-25.38
1837.2	41.55	AV	127	1.4	Н	28.41	1.8	24	47.76	54	-6.24
2755.8	37.59	PK	145	1.3	V	30.35	3.67	24	47.61	74	-26.39
2755.8	36.44	AV	145	1.3	V	30.35	3.67	24	46.46	54	-7.54
2755.8	41.41	PK	64	1.6	Н	30.35	3.67	24	51.43	74	-22.57
2755.8	40.88	AV	64	1.6	Н	30.35	3.67	24	50.90	54	-3.10
2282	39.04	PK	148	1.1	V	29.24	3.63	24	47.91	74	-26.09
2282	38.21	AV	148	1.1	V	29.24	3.63	24	47.08	54	-6.92
2282	39.90	PK	75	1.4	Н	29.24	3.63	24	48.77	74	-25.23
2282	38.57	AV	75	1.4	Н	29.24	3.63	24	47.44	54	-6.56

Spurious emissions in restricted band for FCC:

The Spurious Emission was checked in restricted band. No emissions were found and only noise floor.

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5.5 Band-Edge

1. In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the radio frequency power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under Section A8.4(4), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Tables 2 and 3 is not required.

2. Environmental Conditions Temperature 20°C Relative Humidity 60%

Atmospheric Pressure 1008mbar

3. Test date : April 01, 2014 Tested By : David Huang

Procedures: (Radiated Method Only)

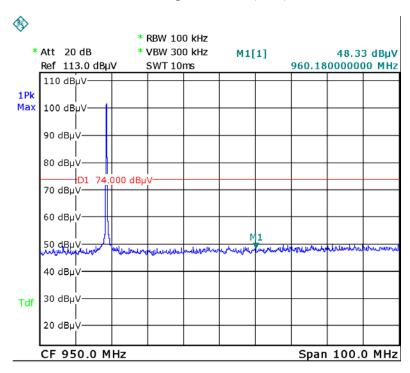
- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2. Position the EUT on the rotated table inside the anechoic chamber without connection to measurement instrument. Turn on the EUT and make it operate in transmitting mode. Then set it to Low Channel and High Channel within its operating range, and make sure the instrument is operated in its linear range. Repeat above procedures until all measured frequencies were complete.
- 3. Set band RBW=1MHz, VBW=3MHz with a convenient frequency span from band edge.
- 4. Find the highest point in edge frequency, and then calculated results.
- 5. Repeat above procedures until all measured frequencies were complete.

Test Result: Pass

Please refer to the following tables and plots.

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Band Edge, 960M-1G (Peak)

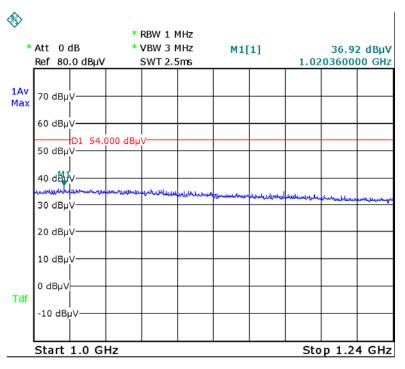


Date: 10.APR.2014 18:27:56

Note: Because the Pk<54 dBuV, it is not need to be test against in QP detector.

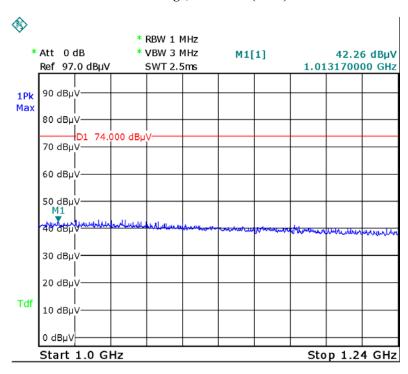
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Band Edge, 1G-1.24G (Average)



Date: 10.APR.2014 21:51:55

Band Edge, 1G-1.24G (Peak)



Date: 10.APR.2014 21:52:47



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Annex A. TEST INSTRUMENT & METHOD

Annex A.i. TEST INSTRUMENTATION & GENERAL PROCEDURES

Instrument	Model	Serial #	Calibration Date	Calibration Due Date
AC Line Conducted Emissions				
EMI test receiver	ESCS30	8471241027	05/27/2013	05/26/2014
Line Impedance Stabilization Network	LI-125A	191106	11/14/2013	11/13/2014
Line Impedance Stabilization Network	LI-125A	191107	11/14/2013	11/13/2014
LISN	ISN T800	34373	01/11/2014	01/10/2015
Double Ridge Horn Antenna (1~18GHz)	AH-118	71283	11/20/2013	11/19/2014
Transient Limiter	LIT-153	531118	09/02/2013	09/01/2014
RF conducted test				
Agilent ESA-E SERIES SPECTRUM ANALYZER	E4407B	MY45108319	09/17/2013	09/16/2014
Power Splitter	1#	1#	09/02/2013	09/01/2014
DC Power Supply	E3640A	MY40004013	09/17/2013	09/16/2014
Wireless Connectivity Test Set	N4010A	GB44440198	03/20/2014	03/19/2015

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Annex A. ii. RADIATED EMISSIONS TEST DESCRIPTION

Limit

1. Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (mV/m)	Measurement Distance (m)
30-88	100*	3
88-216	150*	3
216-960	200*	3
Above 960	500	3

Remark: Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

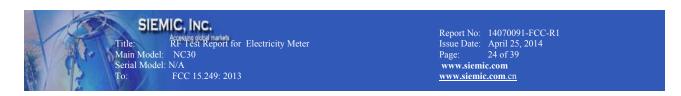
2. In the above emission table, the tighter limit applies at the band edges.

Frequency (Hz)	Field Strength (μV/m at 3-meter)	Field Strength (dBµV/m at 3-meter)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

EUT Characterisation

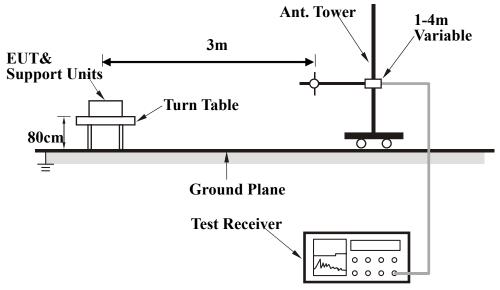
EUT characterisation, over the frequency range from 30MHz to 10th Harmonic, was done in order to minimise radiated emissions testing time while still maintaining high confidence in the test results.

The EUT was placed in the chamber, at a height of about 0.8m on a turntable. Its radiated emissions frequency profile was observed, using a spectrum analyzer /receiver with the appropriate broadband antenna placed 3m away from the EUT. Radiated emissions from the EUT were maximised by rotating the turntable manually, changing the antenna polarisation and manipulating the EUT cables while observing the frequency profile on the spectrum analyzer / receiver. Frequency points at which maximum emissions occurred, clock frequencies and operating frequencies were then noted for the formal radiated emissions test at the Open Area Test Site (OATS) or 3m EMC chamber.



Test Set-up

- 1. The EUT and supporting equipment were set up in accordance with the requirements of the standard on top of a 1.5m X 1.0m X 0.8m high, non-metallic table.
- 2. The filtered power supply for the EUT and supporting equipment were tapped from the appropriate power sockets located on the turntable.
- 3. The relevant broadband antenna was set at the required test distance away from the EUT and supporting equipment boundary.



Test Method

The following procedure was performed to determine the maximum emission axis of EUT:

- 1. With the receiving antenna is H polarization, rotate the EUT in turns with three orthogonal axes to determine the axis of maximum emission.
- 2. With the receiving antenna is V polarization, rotate the EUT in turns with three orthogonal axes to determine the axis of maximum emission.
- 3. Compare the results derived from above two steps. So, the axis of maximum emission from EUT was determined and the configuration was used to perform the final measurement.

Final Radiated Emission Measurement

- 1. Setup the configuration according to figure 1. Turn on EUT and make sure that it is in normal function.
- 2. For emission frequencies measured below 1 GHz, a pre-scan is performed in a shielded chamber to determine the accurate frequencies of higher emissions will be checked on a open test site. As the same purpose, for emission frequencies measured above 1 GHz, a pre-scan also be performed with a 1 meter measuring distance before final test.
- 3. For emission frequencies measured below and above 1 GHz, set the spectrum analyzer on a 100 kHz and 1 MHz resolution bandwidth respectively for each frequency measured in step 2.
- 4. The search antenna is to be raised and lowered over a range from 1 to 4 meters in horizontally polarized orientation. Position the highness when the highest value is indicated on spectrum analyzer, then change the orientation of EUT on test table over a range from 0 ° to 360 ° with a speed as slow as possible, and keep the azimuth that highest emission is indicated on the spectrum analyzer. Vary the antenna position again and record the highest value as a final reading.
- 5. Repeat step 4 until all frequencies need to be measured was complete.
- 6. Repeat step 5 with search antenna in vertical polarized orientations.

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During the radiated emission test, the Spectrum Analyzer was set with the following configurations:

Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	Peak	100 kHz	100 kHz
Above 1000	Peak	1 MHz	1 MHz
Above 1000	Average	1 MHz	10 Hz

Description of Radiated Emissions Program

This EMC Measurement software run LabView automation software and offers a common user interface for electromagnetic interference (EMI) measurements. This software is a modern and powerful tool for controlling and monitoring EMI test receivers and EMC test systems. It guarantees reliable collection, evaluation, and documentation of measurement results. Basically, this program will run a pre-scan measurement before it proceeds with the final measurement. The pre-scan routine will run the scan on four different antenna heights, 2 antenna polarity, and 360 degrees table rotation. For example, the program was set to run 30 MHz to 1 GHz scan; the program will first start from a meter antenna height and divide the 30 MHz to 1 GHz into 10 separate parts of maximum hold sweeps. Each parts of maximum hold sweep, the program will collect the data from 0 degree to 360 degrees table rotation. After the program complete the 1m scan, the antenna continues to rise to 2m and continue the scan. The step will repeated for all specified antenna height and polarity. This program will perform the Quasi Peak measurement after the signal maximization process and pre-scan routine. The final measurement will be base on the pre-scan data reduction result.

Sample Calculation Example

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any) from the measured reading. For the limit is employed average value, therefore the peak value can be transferred to average value by subtracting the duty factor. The basic equation with a sample calculation is as follows:

Peak = Reading + Corrected Factor

where

Corr. Factor = Antenna Factor + Cable Factor - Amplifier Gain (if any) And the average value is

Average = Peak Value + Duty Factor or Set RBW = 1MHz, VBW = 10Hz.

Note:

If the measured frequencies are fall in the restricted frequency band, the limit employed must be quasi peak value when frequencies are below or equal to 1 GHz. And the measuring instrument is set to quasi peak detector function.



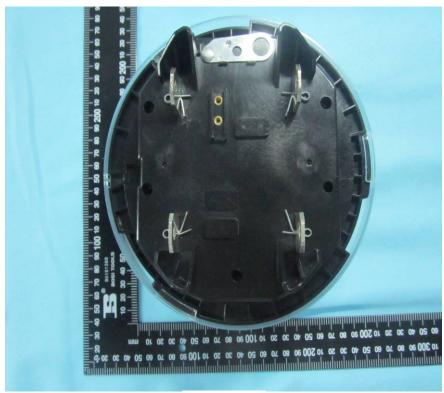
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Annex B. EUT AND TEST SETUP PHOTOGRAPHS

Annex B.i. Photograph 1: EUT External Photo



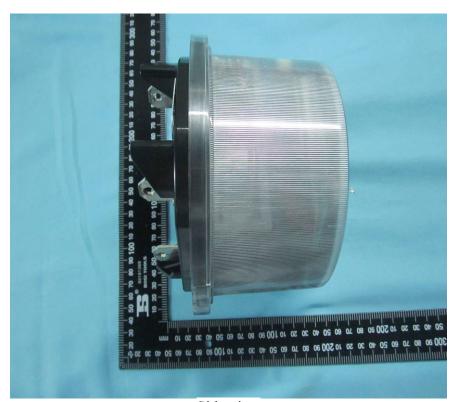
Top view



Bottom view



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Side view

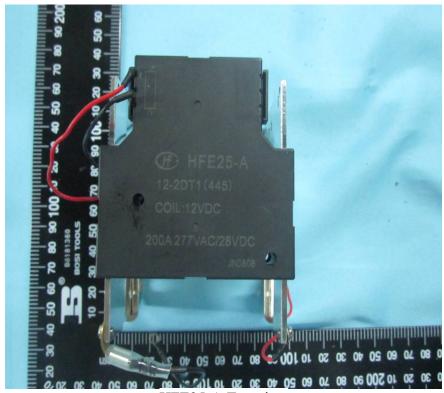


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Annex B.i. Photograph 1: EUT Internal Photo



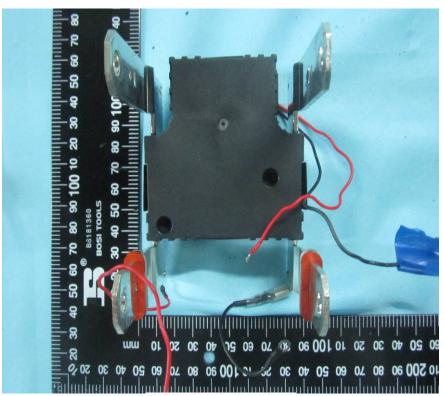
Uncover view



HFE25-A Top view



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HFE25-A Bottom view



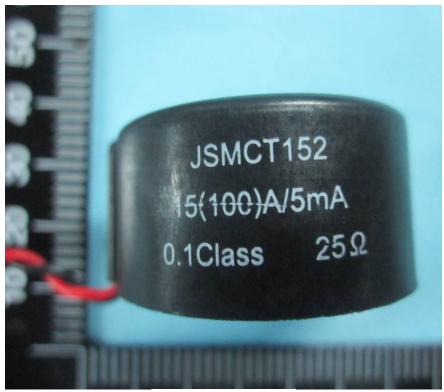
JSMCT152 top view



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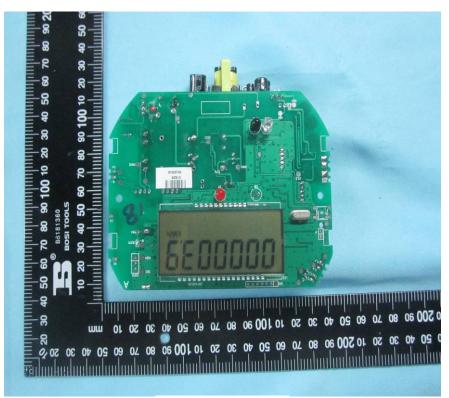
JSMCT152 bottom view



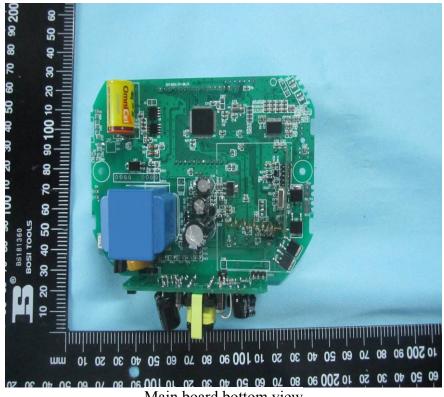
JSMCT152 label view

SIEMIC, INC. RF Test Report for Electricity Meter Main Model: NC30 Serial Model: N/A

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Main board top view



Main board bottom view

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Annex B.iii. Photograph 2: Test Setup Photo

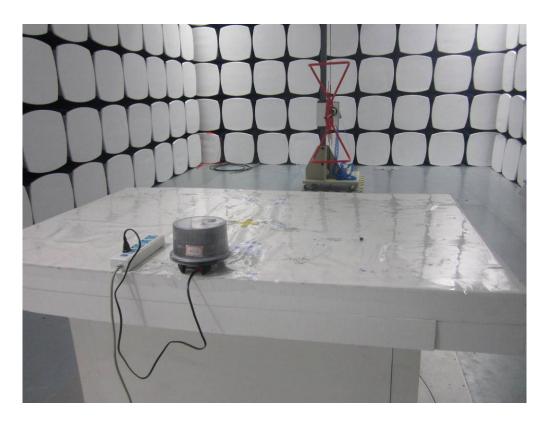


Conducted Emissions Test Setup Front View



Conducted Emissions Test Setup Side View

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Radiated Spurious Emissions Test Setup Below 1GHz - Front View



Radiated Spurious Emissions Test Setup Above 1GHz -Front View



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Annex C. TEST SETUP AND SUPPORTING EQUIPMENT

EUT TEST CONDITIONS

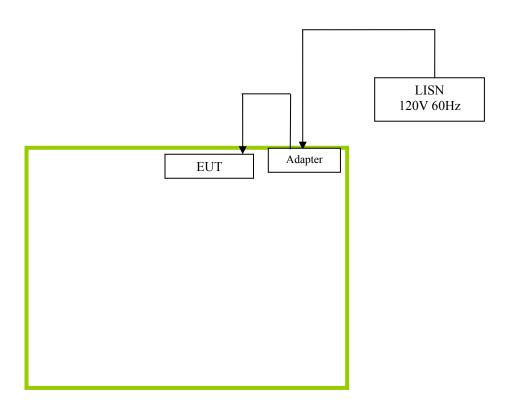
Annex C. i. SUPPORTING EQUIPMENT DESCRIPTION

The following is a description of supporting equipment and details of cables used with the EUT.

Equipment Description (Including Brand Name)	Model & Serial Number	Cable Description (List Length, Type & Purpose)	
N/A	N/A	N/A	

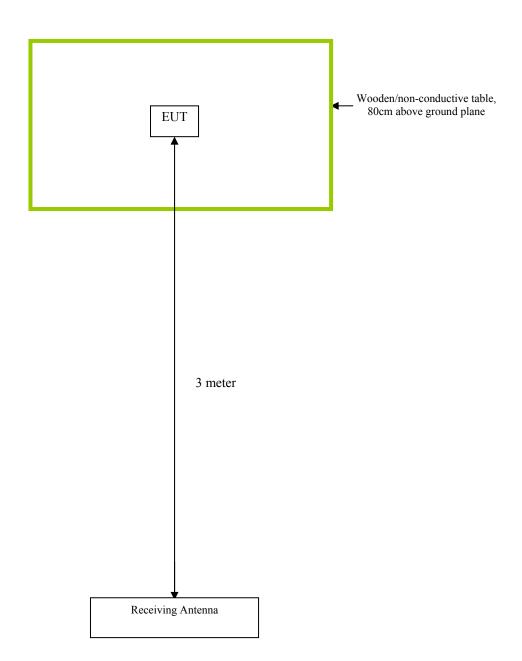
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Block Configuration Diagram for Conducted Emissions



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Block Configuration Diagram for Radiated Emissions





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Annex C.ii. EUT OPERATING CONDITIONS

The following is the description of how the EUT is exercised during testing.

Test	Description Of Operation
Emissions Testing	The EUT was continuously transmitting to stimulate the worst case.



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Annex D. USER MANUAL / BLOCK DIAGRAM / SCHEMATICS / PART LIST

Please see attachment



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Annex E. DECLARATION OF SIMILARITY

NONE