CERTIFICATE OF COMPLIANCE

No. C13C063

Holder of Certificate: GREE Electric Appliances Inc. of zhuhai
Jinji West Road, Qianshan, Zhuhai, Guangdong 519070, P. R. China
Product: Air Conditioner
Model/Type: GTH42K3FI
GKH42K3FI
GFH42K3FI
GUHD42NK3FO

Is complied with:

EMC Directive: 2004/108/EC

Test acc. To: EN55014-1: 2006+A1:2009+A2:2011
EN55014-2: 1997+A1: 2001+A2:2008
EN61000-3-2: 2006+A1:2009+A2:2009
EN61000-3-3: 2008
EN61000-3-11: 2000
EN61000-3-12: 2005

Report Number: GER13C063E

This certificate of conformity is based on the adequate technical documentation and the tests in Testing Laboratory of Gree Electric Appliances Inc. of Zhuhai. This declaration becomes invalid if technical or operational modifications are introduced without the manufacturer's consent.
Note: Testing Laboratory of Gree Electric Appliances Inc. of Zhuhai is accredited by TUV Rheinland, CNAS, VDE, etc.

(Authorized signature)
Name: Li zhikun
Date: 2013-03-15

Jinji West Road, Qianshan, Zhuhai, Guangdong 519070 P.R.China
Tel:+86 756 8614883; Fax:+86 756 8614998

EMC TEST REPORT

Product Name	:	Split-type Room Air Conditioner
Product Model	:	GTH42K3FI(indoor unit) GFH42K3FI(indoor unit) GKH42K3FI(indoor unit) GUHD42NK3FO（outdoor unit）
Serial No.	:	Pre-production model
Date of Receipt	:	2013.03.15
Test Period	:	2013.03.15
Applicant	:	Gree Electric Appliances, Inc. of Zhuhai
Testing Location	:	Gree EMC Testing Lab.

Applicable The Following Selected Harmonized Standards:

EN55014-1: 2006+A1:2009+A2:2011
EN55014-2: 1997+A1: 2001+A2:2008
EN61000-3-2: 2006+A1:2009+A2:2009
EN61000-3-3: 2008
EN61000-3-11: 2000
EN61000-3-12: 2005

Tested by :	**Liujie**		2013-03-15
	Printed Name	*Signature*	*Date((YY-MM-DD)*
Reviewed by :	Li zhikun		2013-03-15
	Printed Name	*Signature*	*Date((YY-MM-DD)*

EMC LABORATORY OF GREE ELETRIC APPLIANCES INC. OF ZHUHAI

Address: Jinji West Road. Qianshan Zhuhai China Postcode: 519070
Tel:（0756）8668624 Fax:（0756）8614998

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Remark:

Principle of Configuration Selection of test set-up and operation mode

Emission: The Equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

Immunity: The Equipment under test (EUT) was configured to have its highest possible susceptibility against the tested phenomena. The test modes were adapted accordingly in reference to the instructions for use.

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1. Test Summary

4. EMISSION TESTS:

4.1 Mains and additional Terminal Continuous Disturbance Voltage

Test Result: Pass

4.2 Discontinuous Interference on AC Mains

Test Result: Pass

4.3 Disturbance Power

Test Result: Pass

4.4 Harmonics on AC Mains

Test Result: Pass

4.5 Voltage Fluctuation on AC Mains

Test Result: Pass

5. IMMUNITY TESTS:

5.1 Electrostatic Discharge (ESD)

Test Result: Pass

5.2 Electrical Fast Transient/Burst (EFT)

Test Result: Pass

5.3 Surge

Test Result: Pass

5.4 Immunity to conducted Disturbances, induced by RF fields

Test Result: Pass

5.5 Voltage Dips and Short interruptions

Test Result: Pass

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2. Products Description

Power Supply : AC 220-240V , 50Hz

Power Cord : Unshielded

Interconnection Line : Unshielded

Additional Equipment : IR Remote Controller

Protection : Class Ⅰ

Operation Mode : Standby
Fan
Cool
Heat
Dry
Auto

General Description :

For these current models, they are split-type models consisting of two parts, one indoor unit and one common outdoor unit, For the common outdoor unit (GUHD42NK3FO), it can match three different model indoor units (GTH42K3FI, GKH42K3FI and GFH42K3FI) to work, and the power are supplied from the indoor and outdoor units respectively, all EMS test (Immunity item) are applied to the three different combination for indoor and outdoor units.

About the particular information of the modes, please refer to Technical Construction Document, user manual, etc.

Electric wiring between indoor and outdoor units

3. List of Test and Measurement Instruments

Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
EMI Test Receiver	R&S	ESCS30	100353	07/07/2013
L.I.S.N	R&S	ENV4200	100031	07/07/2013
Pulse limiter	R&S	ESH3-Z2	100066	07/07/2013
Absorbing Clamp	R&S	MDS-21	100194	07/07/2013
Voltage Probe	Schwarbeck	TK9420	9426-235	07/07/2013
Clicks Analyzer	Schaffner	DIA1512D	21534	07/07/2013
Harmonic/Flicker Testing system	CI	PACS-3	72823	03/28/2014
ESD Simulator System	TESTQ	NSG438	1198	08/13/2013
EFT/B Generator	Schaffner	NSG2025-4	1237	07/07/2013
Capacitive Coupling Clamp	Schaffner	CDN126	532	07/07/2013
RF-Generator	Schaffner	NSG2070	1022	03/28/2014
Coupling/Decoupling Network	Schaffner	CDN M316	15072	07/07/2013
EM clamp	Schaffner	KEMZ801	15792	07/07/2013
Voltage Swell/DIP/Interrupt Source	KeyTek ECAT	EP62	0512181	11/30/2013
Surge Generator-Combination Wave	KeyTek ECAT	510A	0512182	11/30/2013
Coupling/Decoupling Network	KeyTek ECAT	E4554A	0512183	11/30/2013

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4. Emission Test

4.1 Main and Additional Terminal Continuous Disturbance Voltage

Date of testing	:	2013.03.15
Temperature	:	26°C/18°C
Operational mode	:	Cool /Heat, High speed
Humidity	:	65%RH~67%RH
Test procedure	:	EN55014-1: 2006+A1:2009+A2:2011
Frequency range	:	0.15M - 30MHz
Kind of test site	:	Shielded room
Test result	:	Pass

1.Test Setup:

The EUT is on an insulating plane (height=80cm)
The distance between EUT and L.I.S.N is 80cm.
The distance between EUT and other metal conductors grounded is at least 80cm.

2.If the result of the measurement with the Quasi Peak detector is below the Average limit, the measurement with Average Detector has been omitted.
Disturbances other than those mentioned are small or not detectable.

Receiver setup:
Detector:Peak+Average; IF-BW: 9kHz; Step: 4.5kHz; M-Time: 20ms
The test data are as follows:

At main terminal: Pass

Model: GUHD42NK3FO（outdoor unit）

Cooling mode **Port: Power Cord- L line**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)				
Trace1:	14-QP			
Trace2:	14-AV			
Trace3:	---			
TRACE	FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1 Quasi Peak	162 kHz	54.51	L1 gnd	-10.84
2 Average	162 kHz	48.54	L1 gnd	-9.62
1 Quasi Peak	422 kHz	37.55	L1 gnd	-19.85
2 Average	422 kHz	33.19	L1 gnd	-14.63
2 Average	1.786 MHz	35.67	L1 gnd	-10.32
1 Quasi Peak	1.846 MHz	39.66	L1 gnd	-16.33
1 Quasi Peak	2.226 MHz	40.16	L1 gnd	-15.83
2 Average	2.67 MHz	35.33	L1 gnd	-10.67
1 Quasi Peak	6.274 MHz	34.56	L1 gnd	-25.44
2 Average	6.278 MHz	30.47	L1 gnd	-19.52
1 Quasi Peak	21.566 MHz	34.04	L1 gnd	-25.95
2 Average	21.666 MHz	29.07	L1 gnd	-20.92

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Model: GUHD42NK3FO（outdoor unit）

Cooling mode **Port: Power Cord- N line**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)			
Trace1:	14-QP		
Trace2:	14-AV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
1 Quasi Peak	162 kHz	53.80 L1 gnd	-11.55
2 Average	162 kHz	47.77 L1 gnd	-10.39
2 Average	382 kHz	33.00 L1 gnd	-15.90
1 Quasi Peak	442 kHz	36.14 L1 gnd	-20.87
2 Average	1.786 MHz	35.38 L1 gnd	-10.61
1 Quasi Peak	1.83 MHz	38.75 L1 gnd	-17.25
1 Quasi Peak	2.242 MHz	35.56 L1 gnd	-20.43
2 Average	2.426 MHz	33.36 L1 gnd	-12.63
2 Average	5.874 MHz	30.39 L1 gnd	-19.60
1 Quasi Peak	6.274 MHz	35.80 L1 gnd	-24.19
1 Quasi Peak	21.61 MHz	34.01 L1 gnd	-25.98
2 Average	21.682 MHz	28.50 L1 gnd	-21.49

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Model: GUHD42NK3FO（outdoor unit）

Heating mode **Port: Power Cord- L line**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)				
Trace1:	14-QP			
Trace2:	14-AV			
Trace3:	---			
TRACE	FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1 Quasi Peak	162 kHz	55.20	L1 gnd	-10.15
2 Average	162 kHz	49.45	L1 gnd	-8.71
1 Quasi Peak	442 kHz	35.92	L1 gnd	-21.09
2 Average	442 kHz	31.94	L1 gnd	-15.38
2 Average	1.806 MHz	34.74	L1 gnd	-11.25
1 Quasi Peak	1.826 MHz	38.82	L1 gnd	-17.17
1 Quasi Peak	2.366 MHz	39.11	L1 gnd	-16.88
2 Average	2.586 MHz	35.19	L1 gnd	-10.80
2 Average	6.058 MHz	29.09	L1 gnd	-20.90
1 Quasi Peak	6.098 MHz	33.78	L1 gnd	-26.21
2 Average	21.666 MHz	29.03	L1 gnd	-20.96
1 Quasi Peak	21.702 MHz	34.13	L1 gnd	-25.86

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Model: GUHD42NK3FO（outdoor unit）

Heating mode **Port: Power Cord- N line**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)				
Trace1:	14-QP			
Trace2:	14-AV			
Trace3:	---			
TRACE	FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1 Quasi Peak	162 kHz	56.44	L1 gnd	-8.91
2 Average	162 kHz	50.60	L1 gnd	-7.56
2 Average	422 kHz	31.08	L1 gnd	-16.74
1 Quasi Peak	482 kHz	33.12	L1 gnd	-23.18
2 Average	1.766 MHz	34.44	L1 gnd	-11.55
1 Quasi Peak	1.838 MHz	38.48	L1 gnd	-17.51
2 Average	2.206 MHz	32.92	L1 gnd	-13.07
1 Quasi Peak	2.33 MHz	36.67	L1 gnd	-19.32
1 Quasi Peak	5.95 MHz	34.38	L1 gnd	-25.61
2 Average	6.21 MHz	29.45	L1 gnd	-20.54
1 Quasi Peak	21.55 MHz	33.46	L1 gnd	-26.53
2 Average	21.622 MHz	28.45	L1 gnd	-21.54

Model: GTH42K3FI(indoor unit)

Cooling mode **Port: Power Cord- L line**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)					
Trace1:	14-QP				
Trace2:	14-AV				
Trace3:	---				
TRACE		FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1	Quasi Peak	150 kHz	58.46	L1 gnd	-7.53
2	Average	154 kHz	37.79	L1 gnd	-20.92
2	Average	450 kHz	34.51	L1 gnd	-12.62
1	Quasi Peak	462 kHz	41.34	L1 gnd	-15.31
2	Average	978 kHz	26.98	L1 gnd	-19.01
1	Quasi Peak	1.006 MHz	31.88	L1 gnd	-24.11
2	Average	4.11 MHz	29.86	L1 gnd	-16.13
1	Quasi Peak	4.202 MHz	34.43	L1 gnd	-21.56
1	Quasi Peak	5.142 MHz	33.59	L1 gnd	-26.40
2	Average	5.21 MHz	28.30	L1 gnd	-21.69
1	Quasi Peak	18.182 MHz	52.88	L1 gnd	-7.11
2	Average	18.318 MHz	45.87	L1 gnd	-4.12

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Model: GTH42K3FI(indoor unit)

Cooling mode **Port: Power Cord- N line**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)					
Trace1:	14-QP				
Trace2:	14-AV				
Trace3:	---				
TRACE		FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1	Quasi Peak	150 kHz	58.26	L1 gnd	-7.73
2	Average	170 kHz	37.31	L1 gnd	-20.33
1	Quasi Peak	458 kHz	39.93	L1 gnd	-16.79
2	Average	458 kHz	34.68	L1 gnd	-12.26
2	Average	1.642 MHz	26.37	L1 gnd	-19.62
1	Quasi Peak	1.662 MHz	32.42	L1 gnd	-23.57
2	Average	3.77 MHz	30.47	L1 gnd	-15.53
1	Quasi Peak	3.974 MHz	36.69	L1 gnd	-19.30
2	Average	5.214 MHz	30.15	L1 gnd	-19.84
1	Quasi Peak	5.394 MHz	34.45	L1 gnd	-25.54
1	Quasi Peak	18.318 MHz	52.73	L1 gnd	-7.26
2	Average	18.438 MHz	45.90	L1 gnd	-4.09

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Model: GTH42K3FI(indoor unit)

Heating mode **Port: Power Cord- L line**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)				
Trace1:	14-QP			
Trace2:	14-AV			
Trace3:	---			
TRACE	FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1 Quasi Peak	154 kHz	56.76	L1 gnd	-9.01
2 Average	342 kHz	29.56	L1 gnd	-20.53
2 Average	450 kHz	34.09	L1 gnd	-13.04
1 Quasi Peak	458 kHz	40.01	L1 gnd	-16.71
1 Quasi Peak	978 kHz	34.18	L1 gnd	-21.81
2 Average	978 kHz	28.83	L1 gnd	-17.16
1 Quasi Peak	3.95 MHz	36.22	L1 gnd	-19.77
2 Average	3.974 MHz	29.79	L1 gnd	-16.20
1 Quasi Peak	9.31 MHz	32.88	L1 gnd	-27.11
2 Average	9.53 MHz	27.80	L1 gnd	-22.19
1 Quasi Peak	17.966 MHz	52.05	L1 gnd	-7.94
2 Average	18.102 MHz	45.85	L1 gnd	-4.14

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Model: GTH42K3FI(indoor unit)

Heating mode **Port: Power Cord- N line**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)					
Trace1:	14-QP				
Trace2:	14-AV				
Trace3:	---				
TRACE		FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1	Quasi Peak	150 kHz	58.59	L1 gnd	-7.40
2	Average	362 kHz	28.38	L1 gnd	-21.09
1	Quasi Peak	462 kHz	39.24	L1 gnd	-17.40
2	Average	462 kHz	33.89	L1 gnd	-12.96
2	Average	974 kHz	26.12	L1 gnd	-19.87
1	Quasi Peak	1.01 MHz	32.19	L1 gnd	-23.80
1	Quasi Peak	3.97 MHz	36.73	L1 gnd	-19.26
2	Average	4.01 MHz	31.27	L1 gnd	-14.72
1	Quasi Peak	9.082 MHz	33.24	L1 gnd	-26.76
2	Average	9.302 MHz	27.91	L1 gnd	-22.08
1	Quasi Peak	17.942 MHz	51.29	L1 gnd	-8.70
2	Average	18.23 MHz	46.07	L1 gnd	-3.92

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Model: GKH42K3FI(indoor unit)

Cooling mode **Port: Power Cord- L line**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)					
Trace1:	14-QP				
Trace2:	14-AV				
Trace3:	---				
TRACE		FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1	Quasi Peak	166 kHz	59.22	L1 gnd	-5.93
2	Average	182 kHz	49.56	L1 gnd	-7.34
1	Quasi Peak	438 kHz	42.35	L1 gnd	-14.74
2	Average	470 kHz	40.08	L1 gnd	-6.58
2	Average	1.054 MHz	37.62	L1 gnd	-8.37
1	Quasi Peak	1.258 MHz	42.26	L1 gnd	-13.73
1	Quasi Peak	3.226 MHz	48.76	L1 gnd	-7.23
2	Average	3.274 MHz	41.86	L1 gnd	-4.13
1	Quasi Peak	9.186 MHz	44.14	L1 gnd	-15.85
2	Average	9.45 MHz	38.12	L1 gnd	-11.87
1	Quasi Peak	12.542 MHz	37.22	L1 gnd	-22.77
2	Average	12.614 MHz	31.20	L1 gnd	-18.79

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Model: GKH42K3FI(indoor unit)

Cooling mode **Port: Power Cord- N line**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)				
Trace1:	14-QP			
Trace2:	14-AV			
Trace3:	---			
TRACE	FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1 Quasi Peak	162 kHz	60.10	L1 gnd	-5.26
2 Average	166 kHz	51.02	L1 gnd	-6.87
1 Quasi Peak	462 kHz	40.51	L1 gnd	-16.14
2 Average	466 kHz	40.06	L1 gnd	-6.69
1 Quasi Peak	1.438 MHz	43.77	L1 gnd	-12.22
2 Average	1.51 MHz	36.67	L1 gnd	-9.32
2 Average	3.366 MHz	42.08	L1 gnd	-3.91
1 Quasi Peak	3.39 MHz	48.68	L1 gnd	-7.31
1 Quasi Peak	9.206 MHz	45.58	L1 gnd	-14.41
2 Average	9.342 MHz	38.12	L1 gnd	-11.88
2 Average	12.706 MHz	30.57	L1 gnd	-19.42
1 Quasi Peak	14.022 MHz	35.92	L1 gnd	-24.07

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Model: GKH42K3FI(indoor unit)

Heating mode **Port: Power Cord- L line**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)					
Trace1:	14-QP				
Trace2:	14-AV				
Trace3:	---				
TRACE		FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1	Quasi Peak	166 kHz	58.96	L1 gnd	-6.19
2	Average	166 kHz	50.22	L1 gnd	-7.68
1	Quasi Peak	382 kHz	45.09	L1 gnd	-13.14
2	Average	498 kHz	36.97	L1 gnd	-9.07
2	Average	1.054 MHz	35.96	L1 gnd	-10.03
1	Quasi Peak	1.926 MHz	40.06	L1 gnd	-15.93
2	Average	3.294 MHz	41.72	L1 gnd	-4.28
1	Quasi Peak	3.386 MHz	48.42	L1 gnd	-7.58
1	Quasi Peak	9.226 MHz	44.15	L1 gnd	-15.84
2	Average	9.23 MHz	39.01	L1 gnd	-10.98
1	Quasi Peak	12.706 MHz	37.18	L1 gnd	-22.81
2	Average	12.706 MHz	32.23	L1 gnd	-17.77

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Model: GKH42K3FI(indoor unit)

Heating mode **Port: Power Cord- N line**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)					
Trace1:	14-QP				
Trace2:	14-AV				
Trace3:	---				
TRACE		FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1	Quasi Peak	166 kHz	59.16	L1 gnd	-5.99
2	Average	182 kHz	49.96	L1 gnd	-6.95
1	Quasi Peak	382 kHz	44.64	L1 gnd	-13.58
2	Average	470 kHz	39.90	L1 gnd	-6.76
2	Average	1.73 MHz	35.84	L1 gnd	-10.15
1	Quasi Peak	2.062 MHz	41.20	L1 gnd	-14.79
1	Quasi Peak	3.174 MHz	47.55	L1 gnd	-8.44
2	Average	3.25 MHz	40.74	L1 gnd	-5.25
2	Average	9.122 MHz	35.89	L1 gnd	-14.10
1	Quasi Peak	9.154 MHz	41.79	L1 gnd	-18.20
2	Average	12.706 MHz	27.25	L1 gnd	-22.74
1	Quasi Peak	14.238 MHz	33.69	L1 gnd	-26.30

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Model: GFH42K3FI(indoor unit)

Cooling mode **Port: Power Cord- L line**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)					
Trace1:	14-QP				
Trace2:	14-AV				
Trace3:	---				
TRACE		FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1	Quasi Peak	154 kHz	59.77	L1 gnd	-6.00
2	Average	154 kHz	45.05	L1 gnd	-13.66
1	Quasi Peak	174 kHz	53.66	L1 gnd	-11.10
1	Quasi Peak	190 kHz	54.32	L1 gnd	-9.71
2	Average	466 kHz	43.42	L1 gnd	-3.34
2	Average	1.882 MHz	39.13	L1 gnd	-6.86
2	Average	5.602 MHz	37.91	L1 gnd	-12.08
2	Average	6.154 MHz	40.70	L1 gnd	-9.29
1	Quasi Peak	6.186 MHz	46.80	L1 gnd	-13.19
2	Average	20.25 MHz	39.53	L1 gnd	-10.46
1	Quasi Peak	20.29 MHz	46.69	L1 gnd	-13.30
1	Quasi Peak	20.502 MHz	45.87	L1 gnd	-14.12

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Model: GFH42K3FI(indoor unit)

Cooling mode **Port: Power Cord- N line**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)				
Trace1:	14-QP			
Trace2:	14-AV			
Trace3:	---			
TRACE	FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1 Quasi Peak	154 kHz	60.17	L1 gnd	-5.60
2 Average	406 kHz	37.38	L1 gnd	-10.86
1 Quasi Peak	466 kHz	45.90	L1 gnd	-10.68
2 Average	466 kHz	43.00	L1 gnd	-3.75
2 Average	1.886 MHz	34.22	L1 gnd	-11.77
1 Quasi Peak	2.554 MHz	36.65	L1 gnd	-19.34
2 Average	5.686 MHz	38.45	L1 gnd	-11.54
1 Quasi Peak	5.87 MHz	44.91	L1 gnd	-15.08
2 Average	19.926 MHz	38.38	L1 gnd	-11.61
1 Quasi Peak	20.026 MHz	43.56	L1 gnd	-16.43

THIS TEST REPORT IS RESPONSIBLE FOR THE SAMPLE TESTED ONLY AND SHOULD NOT BE DUPLICATED IN PART WITHOUT PERMISSION OF THE TEST LAB

Model: GFH42K3FI(indoor unit)

Heating mode **Port: Power Cord- L line**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)				
Trace1:	14-QP			
Trace2:	14-AV			
Trace3:	---			
TRACE	FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1 Quasi Peak	154 kHz	59.62	L1 gnd	-6.15
2 Average	378 kHz	37.34	L1 gnd	-11.67
1 Quasi Peak	462 kHz	45.34	L1 gnd	-11.30
2 Average	462 kHz	42.62	L1 gnd	-4.23
1 Quasi Peak	1.766 MHz	35.98	L1 gnd	-20.01
2 Average	1.854 MHz	33.37	L1 gnd	-12.62
1 Quasi Peak	5.71 MHz	45.68	L1 gnd	-14.31
2 Average	6.262 MHz	41.42	L1 gnd	-8.57
1 Quasi Peak	19.918 MHz	49.51	L1 gnd	-10.48
2 Average	20.298 MHz	42.26	L1 gnd	-7.73

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Model: GFH42K3FI(indoor unit)

Heating mode **Port: Power Cord- N line**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)					
Trace1:		14-QP			
Trace2:		14-AV			
Trace3:		---			
TRACE		FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1	Quasi Peak	154 kHz	59.67	L1 gnd	-6.10
2	Average	406 kHz	38.10	L1 gnd	-10.14
1	Quasi Peak	462 kHz	45.67	L1 gnd	-10.97
2	Average	462 kHz	43.14	L1 gnd	-3.71
2	Average	1.766 MHz	32.90	L1 gnd	-13.09
1	Quasi Peak	1.822 MHz	36.07	L1 gnd	-19.92
1	Quasi Peak	5.702 MHz	44.79	L1 gnd	-15.20
2	Average	6.174 MHz	40.55	L1 gnd	-9.44
1	Quasi Peak	19.946 MHz	47.21	L1 gnd	-12.78
2	Average	20.018 MHz	42.79	L1 gnd	-7.20

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According to EN55014.1, for terminal disturbance voltage, the test start frequency shall be obtained per the formula: $f_{start}=60/L$ (MHz), so, here, the $f_{start}=60/8.0=7.5$ MHz. Where, the length of interconnection line is 8.0 meters.

Cooling mode **Port:** Interconnection line at indoor unit

Final measurement results

EDIT PEAK LIST (Final Measurement Results)				
Trace1:	TV-QP			
Trace2:	TV-AV			
Trace3:	---			
TRACE	FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1 Quasi Peak	6.076 MHz	60.91	L1 gnd	-13.08
2 Average	6.096 MHz	55.48	L1 gnd	-8.51
2 Average	8.508 MHz	51.42	L1 gnd	-12.57
1 Quasi Peak	8.524 MHz	58.04	L1 gnd	-15.95
1 Quasi Peak	10.276 MHz	47.74	L1 gnd	-26.26
2 Average	10.284 MHz	42.89	L1 gnd	-21.11
2 Average	15.86 MHz	44.92	L1 gnd	-19.08
1 Quasi Peak	15.98 MHz	51.37	L1 gnd	-22.62
1 Quasi Peak	20.012 MHz	55.19	L1 gnd	-18.80
2 Average	20.028 MHz	47.42	L1 gnd	-16.57
1 Quasi Peak	28.716 MHz	47.81	L1 gnd	-26.18
2 Average	28.716 MHz	41.51	L1 gnd	-22.48

Additional terminal:

Cooling mode **Port:** Interconnection line at outdoor unit

Final measurement results

EDIT PEAK LIST (Final Measurement Results)				
Trace1:	TV-QP			
Trace2:	TV-AV			
Trace3:	---			
TRACE	FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1 Quasi Peak	6 MHz	57.64	L1 gnd	-16.35
2 Average	6.26 MHz	51.71	L1 gnd	-12.28
1 Quasi Peak	7.856 MHz	54.45	L1 gnd	-19.55
2 Average	7.888 MHz	48.54	L1 gnd	-15.45
1 Quasi Peak	10.66 MHz	48.28	L1 gnd	-25.72
2 Average	10.712 MHz	42.98	L1 gnd	-21.01
1 Quasi Peak	19.876 MHz	51.27	L1 gnd	-22.72
2 Average	19.928 MHz	43.72	L1 gnd	-20.27

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Additional terminal:

Heating mode **Port: Interconnection line at indoor unit**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)				
Trace1:	TV-QP			
Trace2:	TV-AV			
Trace3:	---			
TRACE	FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1 Quasi Peak	6.004 MHz	57.98	L1 gnd	-16.01
2 Average	6.004 MHz	52.77	L1 gnd	-11.22
2 Average	8.528 MHz	51.84	L1 gnd	-12.15
1 Quasi Peak	8.564 MHz	58.99	L1 gnd	-15.00
1 Quasi Peak	10.624 MHz	47.80	L1 gnd	-26.19
2 Average	10.624 MHz	42.33	L1 gnd	-21.66
1 Quasi Peak	15.64 MHz	51.12	L1 gnd	-22.87
2 Average	15.7 MHz	45.01	L1 gnd	-18.98
1 Quasi Peak	19.932 MHz	54.98	L1 gnd	-19.01
2 Average	20.012 MHz	48.26	L1 gnd	-15.73
2 Average	28.736 MHz	40.13	L1 gnd	-23.86
1 Quasi Peak	28.796 MHz	48.12	L1 gnd	-25.88

Additional terminal:

Heating mode **Port: Interconnection line at outdoor unit**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)					
Trace1:	TV-QP				
Trace2:	TV-AV				
Trace3:	---				
TRACE	FREQUENCY	LEVEL dBµV			DELTA LIMIT dB
1 Quasi Peak	6.016 MHz	56.32	L1	gnd	-17.67
2 Average	6.056 MHz	51.17	L1	gnd	-12.82
1 Quasi Peak	7.92 MHz	55.34	L1	gnd	-18.65
2 Average	7.92 MHz	48.74	L1	gnd	-15.25
1 Quasi Peak	10.656 MHz	47.86	L1	gnd	-26.13
2 Average	10.768 MHz	42.43	L1	gnd	-21.56
1 Quasi Peak	19.836 MHz	48.40	L1	gnd	-25.59
2 Average	19.912 MHz	42.84	L1	gnd	-21.15

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4.2 Discontinuous Interference on AC Mains

Date of testing	:	2013.03.15
Temperature	:	24°C~26°C
Humidity	:	66%RH~67%RH
Test procedure	:	EN55014-1: 2006+A1:2009+A2:2011
Frequency range	:	0.15M – 30MHz
Kind of test site	:	Shielded room
Operational mode	:	Dry
Test result	:	Pass

1.Test Setup

The EUT is on an insulating plane (height=80cm)
The distance between EUT and L.I.S.N is 80cm.
The distance between EUT and other metal conductors grounded is at least 80cm.

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2. Test results.

Model: GUHD42NK3FO（outdoor unit）					
Run A (Observation time=120Mins0Sec)					
Frequency (MHz)		0.15	0.5	1.4	30
Limit value (L)(**dB**μV)		66	56	56	60
Amount of clicks >L	Short (n1)	3	2	1	0
	Long (n2)	0	0	0	0
Total (n=n1+n2)		3	2	1	0
Click Rate (N=n/T)		0. 03	0. 02	0. 01	0.00
Continuous(s)		0	0	0	0
Switching operations		---			
f factor		N/A			
Result		PASS			
Model: GFH42K3FI(indoor unit)					
Run A (Observation time=120Mins0Sec)					
Frequency (MHz)		0.15	0.5	1.4	30
Limit value (L)(**dB**μV)		66	56	56	60
Amount of clicks >L	Short (n1)	32	24	11	0
	Long (n2)	0	0	0	0
Total (n=n1+n2)		32	24	11	0
Click Rate (N=n/T)		0. 27	0. 20	0. 09	0.00
Continuous(s)		0	0	0	0
Switching operations		---			
f factor		N/A			
Result		PASS			
Model: GTH42K3FI(indoor unit)					
Run A (Observation time=120Mins0Sec)					
Frequency (MHz)		0.15	0.5	1.4	30
Limit value (L)(**dB**μV)		66	56	56	60
Amount of clicks >L	Short (n1)	31	23	10	0
	Long (n2)	0	0	0	0
Total (n=n1+n2)		31	23	10	0
Click Rate (N=n/T)		0. 26	0. 19	0. 08	0.00
Continuous(s)		0	0	0	0
Switching operations		---			
f factor		N/A			
Result		PASS			

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Model: GKH42K3FI(indoor unit)					
Run A (Observation time=120Mins0Sec)					
Frequency (MHz)		0.15	0.5	1.4	30
Limit value (L)(**dB**μV)		66	56	56	60
Amount of clicks >L	Short (n1)	31	23	10	0
	Long (n2)	0	0	0	0
Total (n=n1+n2)		31	23	10	0
Click Rate (N=n/T)		0. 26	0. 19	0. 08	0.00
Continuous(s)		0	0	0	0
Switching operations		---			
f factor		N/A			
Result		PASS			

4.3 Disturbance Power

Date of testing	:	2013.03.15
Temperature	:	25°C/18°C
Operational mode	:	Cool /Heat, High speed
Humidity	:	65%RH~67%RH
Test procedure	:	EN55014-1: 2006+A1:2009+A2:2011
Frequency range	:	30M - 300MHz
Kind of test site	:	Shielded room
Test ports	:	AC Mains/ Interconnection line
Test result	:	Pass

1.Test Setup:

EUT and absorbing clamp are placed on an insulating plane (height=80cm). The distance between the absorbing clamp and other metal conductors grounded is 40cm above. EUT is connected to A.C power through an extended cord(≧6m). The absorbing clamp clamps the power line and moves along the power line to measure the maximum disturbance power emitted from the line. If EUT has an indoors unit and an outdoors unit, its interconnection lines and signal lines(or controlling lines) should be also measured ,too.

2.If the result of the measurement with the Quasi Peak detector is below the Average limit, the measurement with Average Detector has been omitted.

The power cord and interconnection line had been extended to a length of 6m and routed through an absorbing clamp. The clamp was moved along the cable to find the maximal emission.

Disturbances other than those mentioned are small or not detectable.

Receiver setup:

Detector:Peak+Average, IF-BW: 120kHz, Step: 60kHz, M-Time: 10ms.

The frequency spectra are as follows:

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Model: GUHD42NK3FO（outdoor unit）

Cooling mode **Port: Power Cord**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)			
Trace1:	P14-QP		
Trace2:	P14-AV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBpW	DELTA LIMIT dB
1 Quasi Peak	34 MHz	37.43	-7.71
2 Average	34.16 MHz	23.49	-11.65
1 Quasi Peak	53.2 MHz	37.71	-8.14
2 Average	53.24 MHz	20.54	-15.31
1 Quasi Peak	67.24 MHz	29.29	-17.08
1 Quasi Peak	101.96 MHz	34.92	-12.73
1 Quasi Peak	102.24 MHz	34.58	-13.09

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Model: GUHD42NK3FO（outdoor unit）

Heating mode **Port: Power Cord**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)			
Trace1:	P14-QP		
Trace2:	P14-AV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBpW	DELTA LIMIT dB
2 Average	33.96 MHz	24.49	-10.65
1 Quasi Peak	42 MHz	35.03	-10.41
2 Average	56.48 MHz	20.82	-15.15
1 Quasi Peak	59.8 MHz	32.43	-13.66
1 Quasi Peak	66.2 MHz	29.09	-17.24
1 Quasi Peak	101.96 MHz	35.86	-11.79
1 Quasi Peak	103.44 MHz	34.50	-13.21

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Model: GUHD42NK3FO（outdoor unit）

Cooling mode **Port: Interconnection line, at indoor unit.**

Heating mode **Port: Interconnection line, at indoor unit.**

Model: GUHD42NK3FO（outdoor unit）

Cooling mode **Port: Interconnection line, at outdoor unit.**

Heating mode **Port: Interconnection line, at outdoor unit.**

Model: GTH42K3FI(indoor unit)

Cooling mode **Port: Power Cord**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)			
Trace1:	P14-QP		
Trace2:	P14-AV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBpW	DELTA LIMIT dB
1 Quasi Peak	40.36 MHz	38.13	-7.24
2 Average	41.44 MHz	24.93	-10.48
1 Quasi Peak	97.56 MHz	25.84	-21.65
1 Quasi Peak	121.76 MHz	22.83	-25.56

Model: GTH42K3FI(indoor unit)

Heating mode **Port: Power Cord**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)			
Trace1:	P14-QP		
Trace2:	P14-AV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBpW	DELTA LIMIT dB
1 Quasi Peak	41.08 MHz	36.56	-8.84
2 Average	41.08 MHz	22.81	-12.59
1 Quasi Peak	89.48 MHz	24.85	-22.34
1 Quasi Peak	129.6 MHz	22.38	-26.30

Model: GFH42K3FI(indoor unit)

Cooling mode **Port: Power Cord**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)			
Trace1:	P14-QP		
Trace2:	P14-AV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBpW	DELTA LIMIT dB
1 Quasi Peak	37.72 MHz	37.05	-8.23
2 Average	37.84 MHz	25.67	-9.61
1 Quasi Peak	53.2 MHz	32.61	-13.24
1 Quasi Peak	75.84 MHz	32.85	-13.84
2 Average	75.84 MHz	26.13	-10.56
1 Quasi Peak	101.16 MHz	30.90	-16.73
2 Average	101.16 MHz	25.12	-12.50
1 Quasi Peak	102.68 MHz	26.18	-21.50
1 Quasi Peak	122.72 MHz	24.59	-23.83

Model: GFH42K3FI(indoor unit)

Heating mode **Port: Power Cord**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)			
Trace1:	P14-QP		
Trace2:	P14-AV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBpW	DELTA LIMIT dB
1 Quasi Peak	36.76 MHz	34.53	-10.71
2 Average	38.24 MHz	23.41	-11.89
1 Quasi Peak	53.24 MHz	30.42	-15.44
1 Quasi Peak	66.04 MHz	30.89	-15.44
2 Average	75.84 MHz	25.33	-11.36
1 Quasi Peak	87.64 MHz	29.86	-17.26
1 Quasi Peak	119.44 MHz	22.78	-25.52
1 Quasi Peak	124.84 MHz	25.68	-22.83

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Model: GKH42K3FI(indoor unit)

Cooling mode **Port: Power Cord**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)			
Trace1:	P14-QP		
Trace2:	P14-AV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBpW	DELTA LIMIT dB
1 Quasi Peak	30.28 MHz	33.00	-12.00
2 Average	30.28 MHz	22.77	-12.23
1 Quasi Peak	60.68 MHz	40.60	-5.53
2 Average	60.84 MHz	28.26	-7.87
1 Quasi Peak	78.68 MHz	28.85	-17.95
1 Quasi Peak	86.64 MHz	32.84	-14.25
2 Average	95.12 MHz	23.02	-14.39
1 Quasi Peak	102.56 MHz	29.70	-17.98
1 Quasi Peak	125.56 MHz	28.81	-19.72

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Model: GKH42K3FI(indoor unit)

Heating mode **Port: Power Cord**

Final measurement results

EDIT PEAK LIST (Final Measurement Results)			
Trace1:	P14-QP		
Trace2:	P14-AV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBpW	DELTA LIMIT dB
1 Quasi Peak	30.16 MHz	33.66	-11.34
2 Average	30.16 MHz	23.54	-11.46
2 Average	60.4 MHz	27.28	-8.84
1 Quasi Peak	60.64 MHz	39.87	-6.25
1 Quasi Peak	78.92 MHz	29.52	-17.28
2 Average	87.04 MHz	22.18	-14.93
1 Quasi Peak	99.08 MHz	28.95	-18.60
1 Quasi Peak	110.36 MHz	31.25	-16.71
1 Quasi Peak	123.2 MHz	30.26	-18.19

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Model: wired controller

Cooling mode **Port: Interconnection line, Near wired controller**

Heating mode **Port: Interconnection line, Near wired controller**

Model: Control panel

Cooling mode **Port: Interconnection line, Away from wired controller**

Heating mode **Port: Interconnection line, Away from wired controller**

4.4 Harmonics on AC Mains

Date of testing	:	2013.03.15
Temperature	:	25°C/18°C
Humidity	:	66%RH~67%RH
Test procedure	:	EN61000-3-2: 2006+A1:2009+A2:2009 EN61000-3-12: 2005
Harmonics order	:	2 – 40
Equipment Class	:	A
Operational mode	:	Cool /Heat, High speed
Test result	:	Pass

1.Test Setup:

2. Test result.

The test results are shown as follows:

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Model: GUHD42NK3FO（outdoor unit）

Cooling mode/ Standard used:EN/IEC 61000-3-12 Ed.2 Short cyclic,Rsce= 120 (Not balanced Tab. 2)

Hn	Ieff [A]	Ieff [%]	Limit [%]	Result
2	27.375E-3	0.150	8.00	PASS
3	1.426	7.799	27.00	PASS
4	16.166E-3	0.088	4.00	PASS
5	930.383E-3	5.089	15.00	PASS
6	21.054E-3	0.115	2.67	PASS
7	888.934E-3	4.863	10.00	PASS
8	16.487E-3	0.090	2.00	PASS
9	789.124E-3	4.317	6.00	PASS
10	28.175E-3	0.154	1.60	PASS
11	731.628E-3	4.002	5.00	PASS
12	16.857E-3	0.092	1.33	PASS
13	594.494E-3	3.252	4.00	PASS
14	16.008E-3	0.088		PASS
15	544.016E-3	2.976		PASS
16	13.270E-3	0.073		PASS
17	399.298E-3	2.184		PASS
18	10.171E-3	0.056		PASS
19	362.717E-3	1.984		PASS
20	13.307E-3	0.073		PASS
21	249.939E-3	1.367		PASS
22	8.336E-3	0.046		PASS
23	200.722E-3	1.098		PASS
24	14.202E-3	0.078		PASS
25	127.442E-3	0.697		PASS
26	24.383E-3	0.133		PASS
27	69.895E-3	0.382		PASS
28	26.797E-3	0.147		PASS
29	64.002E-3	0.350		PASS
30	12.492E-3	0.068		PASS
31	38.978E-3	0.213		PASS
32	7.765E-3	0.042		PASS
33	48.829E-3	0.267		PASS
34	7.958E-3	0.044		PASS
35	56.227E-3	0.308		PASS
36	6.351E-3	0.035		PASS
37	44.021E-3	0.241		PASS
38	5.316E-3	0.029		PASS
39	59.829E-3	0.327		PASS
40	7.280E-3	0.040		PASS

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Model: GUHD42NK3FO（outdoor unit）

Heating mode/ Standard used:EN/IEC 61000-3-12 Ed.2 Short cyclic,Rsce= 120 (Not balanced Tab. 2)

Hn	Ieff [A]	Ieff [%]	Limit [%]	Result
2	28.849E-3	0.178	8.00	PASS
3	1.294	7.994	27.00	PASS
4	15.284E-3	0.094	4.00	PASS
5	863.342E-3	5.334	15.00	PASS
6	19.953E-3	0.123	2.67	PASS
7	811.795E-3	5.016	10.00	PASS
8	15.835E-3	0.098	2.00	PASS
9	739.375E-3	4.568	6.00	PASS
10	26.489E-3	0.164	1.60	PASS
11	684.403E-3	4.229	5.00	PASS
12	15.628E-3	0.097	1.33	PASS
13	555.026E-3	3.429	4.00	PASS
14	14.859E-3	0.092		PASS
15	522.732E-3	3.230		PASS
16	13.074E-3	0.081		PASS
17	383.783E-3	2.371		PASS
18	9.804E-3	0.061		PASS
19	363.091E-3	2.243		PASS
20	13.247E-3	0.082		PASS
21	237.069E-3	1.465		PASS
22	8.006E-3	0.049		PASS
23	215.809E-3	1.333		PASS
24	14.156E-3	0.087		PASS
25	129.041E-3	0.797		PASS
26	29.108E-3	0.180		PASS
27	81.195E-3	0.502		PASS
28	29.101E-3	0.180		PASS
29	65.884E-3	0.407		PASS
30	12.616E-3	0.078		PASS
31	23.984E-3	0.148		PASS
32	8.242E-3	0.051		PASS
33	38.215E-3	0.236		PASS
34	8.364E-3	0.052		PASS
35	47.185E-3	0.292		PASS
36	6.531E-3	0.040		PASS
37	36.548E-3	0.226		PASS
38	5.610E-3	0.035		PASS
39	53.939E-3	0.333		PASS
40	6.693E-3	0.041		PASS

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Model: GKH42K3FI(indoor unit)

fan mode

Test Result: Pass **Source qualification: Normal**
THC(A): 0.49 **I-THD(pk%): 13.43** **POHC(A): 0.004** **POHC Limit(A): 0.251**
Highest parameter values during test:

V_RMS (Volts):	230.47	Frequency(Hz):	50.00
I_Peak (Amps):	0.721	I_RMS (Amps):	0.451
I_Fund (Amps):	0.445	Crest Factor:	1.651
Power (Watts):	100	Power Factor:	0.982

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.401	1.080	37.2	0.437	1.620	26.99	Pass
3	0.210	2.300	9.1	0.231	3.450	6.70	Pass
4	0.028	0.430	6.4	0.041	0.645	6.36	Pass
5	0.059	1.140	5.1	0.076	1.710	4.47	Pass
6	0.042	0.300	14.1	0.056	0.450	12.45	Pass
7	0.012	0.770	1.5	0.027	1.155	2.32	Pass
8	0.025	0.230	11.0	0.031	0.345	8.92	Pass
9	0.008	0.400	2.1	0.015	0.600	2.48	Pass
10	0.005	0.184	2.7	0.008	0.276	2.94	Pass
11	0.007	0.330	2.2	0.009	0.495	1.72	Pass
12	0.004	0.153	2.6	0.006	0.230	2.68	Pass
13	0.003	0.210	1.6	0.005	0.315	1.45	Pass
14	0.003	0.131	2.3	0.004	0.197	1.96	Pass
15	0.004	0.150	2.5	0.005	0.225	2.06	Pass
16	0.002	0.115	2.0	0.003	0.173	1.97	Pass
17	0.002	0.132	1.6	0.003	0.199	1.43	Pass
18	0.002	0.102	1.6	0.003	0.153	1.71	Pass
19	0.002	0.118	1.8	0.003	0.178	1.55	Pass
20	0.002	0.092	1.8	0.003	0.138	1.84	Pass
21	0.002	0.107	1.6	0.002	0.161	1.45	Pass
22	0.002	0.084	1.9	0.002	0.125	1.86	Pass
23	0.002	0.098	1.6	0.002	0.147	1.53	Pass
24	0.001	0.077	1.9	0.002	0.115	1.93	Pass
25	0.002	0.090	1.7	0.002	0.135	1.66	Pass
26	0.001	0.071	1.9	0.002	0.106	1.95	Pass
27	0.001	0.083	1.6	0.002	0.125	1.48	Pass
28	0.001	0.066	1.8	0.002	0.099	1.78	Pass
29	0.001	0.078	1.5	0.002	0.116	1.46	Pass
30	0.001	0.061	1.8	0.002	0.092	1.78	Pass
31	0.001	0.073	1.5	0.002	0.109	1.45	Pass
32	0.001	0.058	1.7	0.001	0.086	1.73	Pass
33	0.001	0.068	1.5	0.002	0.102	1.51	Pass
34	0.001	0.054	1.7	0.001	0.081	1.72	Pass
35	0.001	0.064	1.5	0.001	0.096	1.46	Pass
36	0.001	0.051	1.7	0.001	0.077	1.74	Pass
37	0.001	0.061	1.5	0.001	0.091	1.51	Pass
38	0.001	0.048	1.8	0.001	0.073	1.75	Pass
39	0.001	0.058	1.5	0.001	0.087	1.46	Pass
40	0.001	0.046	1.8	0.001	0.069	1.75	Pass

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Model: GTH42K3FI(indoor unit)

fan mode

Test Result: Pass **Source qualification: Normal**
THC(A): 0.50 **I-THD(pk%): 13.50** **POHC(A): 0.004** **POHC Limit(A): 0.251**
Highest parameter values during test:

V_RMS (Volts):	230.40	Frequency(Hz):	50.00
I_Peak (Amps):	0.945	I_RMS (Amps):	0.584
I_Fund (Amps):	0.576	Crest Factor:	1.750
Power (Watts):	132	Power Factor:	0.982

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.307	1.080	28.4	0.457	1.620	28.19	Pass
3	0.208	2.300	9.1	0.251	3.450	7.29	Pass
4	0.027	0.430	6.4	0.045	0.645	6.94	Pass
5	0.059	1.140	5.2	0.075	1.710	4.36	Pass
6	0.025	0.300	8.2	0.051	0.450	11.38	Pass
7	0.011	0.770	1.5	0.016	1.155	1.36	Pass
8	0.018	0.230	8.0	0.031	0.345	8.94	Pass
9	0.007	0.400	1.7	0.011	0.600	1.82	Pass
10	0.006	0.184	3.3	0.007	0.276	2.69	Pass
11	0.006	0.330	1.9	0.009	0.495	1.80	Pass
12	0.004	0.153	2.6	0.006	0.230	2.62	Pass
13	0.004	0.210	1.7	0.005	0.315	1.61	Pass
14	0.003	0.131	2.1	0.004	0.197	2.12	Pass
15	0.004	0.150	2.4	0.005	0.225	2.10	Pass
16	0.002	0.115	2.0	0.003	0.173	2.00	Pass
17	0.002	0.132	1.6	0.003	0.199	1.61	Pass
18	0.002	0.102	1.7	0.003	0.153	1.83	Pass
19	0.002	0.118	1.7	0.003	0.178	1.78	Pass
20	0.002	0.092	1.7	0.003	0.138	1.96	Pass
21	0.002	0.107	1.5	0.003	0.161	1.61	Pass
22	0.001	0.084	1.7	0.002	0.125	1.92	Pass
23	0.001	0.098	1.5	0.002	0.147	1.59	Pass
24	0.001	0.077	1.7	0.002	0.115	1.84	Pass
25	0.001	0.090	1.4	0.002	0.135	1.57	Pass
26	0.001	0.071	1.7	0.002	0.106	1.94	Pass
27	0.001	0.083	1.5	0.002	0.125	1.56	Pass
28	0.001	0.066	1.7	0.002	0.099	1.87	Pass
29	0.001	0.078	1.5	0.002	0.116	1.59	Pass
30	0.001	0.061	1.6	0.002	0.092	1.88	Pass
31	0.001	0.073	1.4	0.002	0.109	1.56	Pass
32	0.001	0.058	1.6	0.002	0.086	1.84	Pass
33	0.001	0.068	1.4	0.002	0.102	1.57	Pass
34	0.001	0.054	1.6	0.002	0.081	1.86	Pass
35	0.001	0.064	1.4	0.001	0.096	1.55	Pass
36	0.001	0.051	1.6	0.001	0.077	1.83	Pass
37	0.001	0.061	1.4	0.001	0.091	1.56	Pass
38	0.001	0.048	1.6	0.001	0.073	1.86	Pass
39	0.001	0.058	1.4	0.001	0.087	1.57	Pass
40	0.001	0.046	1.7	0.001	0.069	1.88	Pass

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Model: GFH42K3FI(indoor unit)

fan mode

Test Result: Pass **Source qualification: Normal**
THC(A): 0.92 **I-THD(pk%): 13.26** **POHC(A): 0.006** **POHC Limit(A): 0.251**
Highest parameter values during test:

V_RMS (Volts):	229.95	Frequency(Hz):	50.00
I_Peak (Amps):	1.222	I_RMS (Amps):	0.754
I_Fund (Amps):	0.743	Crest Factor:	1.639
Power (Watts):	171	Power Factor:	0.988

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.626	1.080	58.0	0.702	1.620	43.36	Pass
3	0.518	2.300	22.5	0.529	3.450	15.32	Pass
4	0.139	0.430	32.2	0.193	0.645	29.94	Pass
5	0.151	1.140	13.3	0.160	1.710	9.37	Pass
6	0.034	0.300	11.2	0.058	0.450	12.85	Pass
7	0.061	0.770	7.9	0.064	1.155	5.55	Pass
8	0.031	0.230	13.4	0.042	0.345	12.13	Pass
9	0.029	0.400	7.3	0.031	0.600	5.18	Pass
10	0.022	0.184	11.9	0.028	0.276	9.99	Pass
11	0.012	0.330	3.7	0.014	0.495	2.78	Pass
12	0.012	0.153	8.1	0.015	0.230	6.54	Pass
13	0.006	0.210	2.6	0.008	0.315	2.62	Pass
14	0.005	0.131	4.2	0.007	0.197	3.71	Pass
15	0.004	0.150	3.0	0.006	0.225	2.84	Pass
16	0.003	0.115	2.5	0.005	0.173	2.70	Pass
17	0.004	0.132	2.7	0.005	0.199	2.57	Pass
18	0.003	0.102	3.0	0.005	0.153	3.30	Pass
19	0.003	0.118	2.4	0.005	0.178	2.55	Pass
20	0.003	0.092	3.4	0.005	0.138	3.30	Pass
21	0.003	0.107	2.3	0.004	0.161	2.44	Pass
22	0.003	0.084	3.1	0.004	0.125	3.16	Pass
23	0.002	0.098	2.4	0.004	0.147	2.52	Pass
24	0.002	0.077	2.9	0.004	0.115	3.06	Pass
25	0.002	0.090	2.4	0.003	0.135	2.44	Pass
26	0.002	0.071	2.8	0.003	0.106	3.00	Pass
27	0.002	0.083	2.4	0.003	0.125	2.53	Pass
28	0.002	0.066	2.8	0.003	0.099	3.09	Pass
29	0.002	0.078	2.4	0.003	0.116	2.48	Pass
30	0.002	0.061	2.8	0.003	0.092	3.07	Pass
31	0.002	0.073	2.3	0.003	0.109	2.47	Pass
32	0.002	0.058	2.8	0.003	0.086	2.99	Pass
33	0.002	0.068	2.4	0.003	0.102	2.50	Pass
34	0.002	0.054	2.8	0.002	0.081	3.03	Pass
35	0.002	0.064	2.4	0.002	0.096	2.50	Pass
36	0.001	0.051	2.9	0.002	0.077	3.04	Pass
37	0.001	0.061	2.4	0.002	0.091	2.52	Pass
38	0.001	0.048	2.9	0.002	0.073	3.06	Pass
39	0.001	0.058	2.4	0.002	0.087	2.51	Pass
40	0.001	0.046	2.9	0.002	0.069	3.14	Pass

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4.5 Voltage Fluctuation on AC Mains

Date of testing	:	2013.03.15
Temperature	:	24°C~26°C
Humidity	:	66%RH~67%RH
Test procedure	:	EN61000-3-3: 2008 EN61000-3-11: 2000
Frequency Range	:	0-2kHz
Test observation period	:	120min
Operational mode	:	Dry
Test result	:	Pass

1.Test Setup:

2. Test result.

Model	d_c [%]	d_{max} [%]	d (t)[ms]	Pst	Plt
GUHD42NK3FO（outdoor unit）	0.96	0.99	0.0	0.185	0.155
GFH42K3FI(indoor unit)	0.14	1.51	0.0	0.208	0.203
GTH42K3FI(indoor unit)	0.13	1.52	0.0	0.221	0.205
GKH42K3FI(indoor unit)	0.16	1.53	0.0	0.214	0.207
Limit	**3.30**	**6.00**	**500.0**	**1.000**	**0.650**

Remark:

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5. Immunity Tests

5.1 Electrostatic Discharge (ESD)

Date of testing	:	2013.03.15
Temperature	:	24°C~26°C
Humidity	:	56%RH
Test procedure	:	EN55014-2: 1997+A1: 2001+A2:2008
Basic Standard	:	IEC 61000-4-2:2008
Performance Criterion	:	B
Operational mode	:	Cool, High fan
Test result	:	Pass

1. Test setup

Note: HCP means Horizontal Coupling Plane,
VCP means Vertical Coupling Plane
GRP means Ground Reference Plane

The EUT was put on a 0.8m high wooden tabel/0.1m high for floor standing equipment standing on the ground reference plane(GRP) 3m by 2m in size, made by iron 1.0 mm thick.
A horizontal coupling plane(HCP) 1.6m by 0.8m in size was placed on the table, and the EUT with its cables were isolated from the HCP by an insulating support thick than 0.5mm. The VCP 0.5m by 0.5m in size & HCP were constructed from the same material type & thinness as that of the GRP, and connected to the GRP via a 470kΩ resistor at each end.
The distance between EUT and any of the other metallic surface excepted the GRP, HCP & VCP was greater than 1m.
The EUT was arranged and connected according to its functional requirements.

Direct static electricity discharges was applied only to those points and surface which are accessible to personnel during normal usage.

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2. Test result

Location of Discharge	Type of Discharge	Level(kV)	Polarity	Number of Discharge	Result
Remote Receiver	Air	8.0	±	10	A
Display window	Air	8.0	±	10	A
Manual key	Air	8.0	±	10	A
Touchable screw	Contact	4.0	±	10	A
Remote Controller	Air	8.0	±	10	A
	HCP	4.0	±	10	A
	VCP	4.0	±	10	A
Remark: The Air discharge could not occur and the EUT worked normally during the test, no degradation of function occurred.					

Air -Air Discharge
Contact -Contact Discharge
HCP—Horizontal Coupling Plate,
VCP—Vertical Coupling Plate

5.2 Electrical Fast Transient/Burst (EFT)

Date of testing	:	2013.03.15
Temperature	:	24°C
Humidity	:	67%RH
Test procedure	:	EN55014-2: 1997+A1: 2001+A2:2008
Basic Standard	:	IEC 61000-4-4:2004
Repetition Frequency	:	5kHz
Performance Criterion	:	B
Operational mode	:	Cool, High fan
Test result	:	Pass

1.Test Setup

The EUT is placed on an insulating plane, it is 0.1m high for table model and 0.1m high for floor type above the grounded reference plane. EUT is at least 0.5m away from the wall of the EMC laboratory and other metal conductors grounded except the grounded reference plane., and its four borders are at least 0.1m away from the borders of the grounded reference plane. The cable between EUT and CDN is not more than 0.5m.

For signal lines and control lines, the burst signal is coupled by a capacitive coupling clamp.

2. Test result:

Location	Voltage (kV)	Duration (s)	Coupled by	Result
L +N+PE	±1	120	CDN	A
Interconnection line	±0.5	120	Capacitive Coupling Clamp	A
Remark: The EUT worked normally during the test, no degradation of function occurred.				

5.3 Surge

Date of testing	:	2013.03.15
Temperature	:	24°C
Humidity	:	67%RH
Test procedure	:	EN55014-2: 1997+A1: 2001+A2:2008
Basic Standard	:	IEC 61000-4-5:2005
Performance Criterion	:	B
Operational mode	:	Cool, High fan
Test result	:	Pass

1.Test Setup

The cable between EUT and CDN is not more than 1m..
No other special specifications.

2.Test result

Location	Polarity	Phase Angle	Number of test	Pulse Voltage (kV)	Result
L—N	±	0°	5	1	A
	±	90°	5	1	A
	±	180°	5	1	A
	±	270°	5	1	A
L-PE	±	0°	5	2	A
	±	90°	5	2	A
	±	180°	5	2	A
	±	270°	5	2	A
N-PE	±	0°	5	2	A
	±	90°	5	2	A
	±	180°	5	2	A
	±	270°	5	2	A
Remark: The EUT worked normally during the test, no degradation of function occurred.					

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5.4 Immunity to conducted Disturbances, induced by RF fields

Date of testing	:	2013.03.15
Temperature	:	24°C
Humidity	:	67%RH
Test procedure	:	EN55014-2: 1997+A1: 2001+A2:2008
Basic Standard	:	IEC 61000-4-6:2008
Frequency range	:	150k~230MHz
Modulation	:	80%AM, 1kHz sine-wave
Dwell time/Step size	:	3000ms / 1%
Performance Criterion	:	A
Operational mode	:	Cool, High fan
Test result	:	Pass

1. Test Setup

Frequency Range	Coupling Port	Strength	Coupling Method	Result
0.15MHz~80MHz	AC Mains	3V	CDN	A
80MHz~230MHz	AC Mains	3V	CDN	A
0.15MHz~80MHz	Interconnection wire	1V	Coupling/Decoupling Network	A
80MHz~230MHz	Interconnection wire	1V	Coupling/Decoupling Network	A
Remark: The EUT worked normally during the test, no degradation of function occurred.				

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5.5 Voltage Dips and Short interruptions

Date of testing	:	2013.03.15
Temperature	:	24°C
Humidity	:	67%RH
Test procedure	:	EN55014-2: 1997+A1: 2001+A2:2008
Basic Standard	:	IEC 61000-4-11:2004
Performance Criterion	:	C
Operational mode	:	Cool, High fan
Test result	:	Pass

1.Test Setup

No other special specifications.

2. Test result.

Severity Level		Test Level	Duration	Intervals	Phase Angle	Number of Test	Result
Short Interruption 100%		0%U_T	0.5P	3min	0°	3	A
					180°	3	A
Voltage Dips	60%	40%U_T	10P	3min	0°	3	B
					180°	3	B
	30%	70%U_T	25P	3min	0°	3	B
					180°	3	B

Remark:

1, U_T: Nominal Voltage of EUT.

2, During the test of 40%U_T, 70%U_T the EUT stopped, but it could recover the primal status. No degradation of function occurred.

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