

FCC 47 CFR PART 22H and 24E

Product Type : 2G/3.5G Module

Applicant : Telit Communications S.p.A.

Address : Via Stazione di Prosecco, 5/B, Sgonico, TS 34010, Italy

Trade Name : Telit

Model Number : HE910-NAG

Test Specification: FCC 47 CFR PART 22H: Oct, 2011

FCC 47 CFR PART 24E: Oct, 2011

CANADA RSS-132 ISSUE 2: Sep., 2005 CANADA RSS-133 ISSUE 5: Feb., 2009 Canada RSS-Gen ISSUE 3: Dec., 2010

ANSI/TIA-603-C-2004

Application

Purpose:

Original

Receive Date : Apr. 11, 2012

Issue Date : Apr. 13, 2012

Issue by

A Test Lab Techno Corp.

No. 140-1, Changan Street, Bade City, Taoyuan County 334, Taiwan R.O.C.

Tel: +886-3-2710188 / Fax: +886-3-2710190

ilac-MRA



Taiwan Accreditation Foundation accreditation number: 1330

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Revision History

Rev.	Issue Date	Revisions	Revised By
00	Apr. 13, 2012	Initial Issue	

Verification of Compliance

Issued Date: 04/13/2012

Product Type : 2G/3.5G Module

Applicant : Telit Communications S.p.A.

Address : Via Stazione di Prosecco, 5/B, Sgonico, TS 34010, Italy

Trade Name : Telit

Model Number : HE910-NAG FCC ID : RI7HE910NA

IC ID : 5131A-HE910NA

EUT Rated Voltage : DC 3.8V

Test Voltage : DC 3.8V

Applicable : FCC 47 CFR PART 22H: Oct, 2011 Standard FCC 47 CFR PART 24E: Oct, 2011

> CANADA RSS-132 ISSUE 2: Sep., 2005 CANADA RSS-133 ISSUE 5: Feb., 2009 Canada RSS-Gen ISSUE 3: Dec., 2010

ANSI/TIA-603-C-2004

Application : Original

Purpose

Test Result : Complied

Performing Lab. : A Test Lab Techno Corp.

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Taoyuan County 334, Taiwan R.O.C.

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http://www.atl-lab.com.tw/e-index.htm

The above equipment was tested by A Test Lab Techno Corp. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4: 2009 and the energy emitted by the sample tested as described in this report is in compliance with the requirements of FCC Rules Part 22H, Part 24E.

The test results of this report relate only to the tested sample identified in this report.

Approved By : Reviewed By :

(Manager) (Murphy Wang) (Testing Engineer) (Fly Lu)



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1 General Information

1.1. EUT Description

Applica	nt	Telit Communications S.p.A.								
Applicant Address		Via Stazione di Prosecco, 5/B, Sgonico, TS 34010, Italy								
Manufa		Telit Communications S.p.A.								
Manufa	cturer Address	Via Stazi	Via Stazione di Prosecco, 5/B, Sgonico, TS 34010, Italy							
Product	Туре	2G/3.5G	Module							
Trade N	lame	Telit								
Model N	lumber	HE910-N	NAG							
FCC ID		RI7HE91	IONA							
IC ID		5131A-H	IE910NA							
	OOM/ODDO/	Band	UL Frequency (MHz)		DL Frequency (MHz	:)	Modulation			
	GSM/GPRS/ EGPRS	850	824.2 ~ 848.8		869.2 ~ 893.8		GMSK/8PSK			
Mode	LOFINO	1900	1850.2 ~ 1909.8		1930.2 ~ 1989.8		GMSK/8PSK			
Mode	WCDMA/	Band	UL Frequency (MHz)		DL Frequency (MHz	<u>:</u>)	Modulation			
	HSDPA/	II	1852.4 ~ 1907.6		1932.4 ~ 1987.6		QPSK			
	HSUPA	V	826.4 ~ 846.6		871.4 ~ 891.6		QPSK			
Channe	l Control	Auto								
Test Us	ed Antenna	Trade Na	Trade Name:Tel Cab, Model Number:T-AT314, Type:Dipole Antenna							
Antenna	a Gain (dBi)	GSM/GPRS/EGPRS 850		:	5.22 dBi					
		GSM/GPRS/EGPRS 1900 :			3.31 dBi					
		WCDMA/ HSDPA/ HSUPA Band II : 3.31 dBi								
		WCDMA/ HSDPA/ HSUPA Band V : 5.22 dBi								
Max. RF	Output power	GSM/GPRS 850		:	32.38 dBm /	1.73	0 W			
		EGPRS 850		:	29.49 dBm /	0.88	9 W			
		GSM/GPRS 1900		:	29.21 dBm /	0.83	4 W			
		EGPRS 1900		:	28.27 dBm /	0.67	1 W			
		WCDMA/ HSDPA/ HSUPA Band II		:	26.44 dBm /	0.44	1 W			
		WCDMA/ HSDPA/ HSUPA Band V		:	26.43 dBm /	0.44	.0 W			
Max. EF	RP/EIRP	GSM/GF	PRS 850	:	30.20 dBm /	1.04	7 W			
		EGPRS	850	:	29.07 dBm /	0.80	7 W			
		GSM/GF	PRS 1900	:	26.81 dBm /	0.48	0 W			
		EGPRS	1900	:	26.20 dBm /	0.41	7 W			
		WCDMA	/ HSDPA/ HSUPA Band II	:	24.81 dBm /	0.30	3 W			
		WCDMA	/ HSDPA/ HSUPA Band V	:	22.22 dBm /	0.16	7 W			
Emissio	Emission Designator		PRS 850	:	244KGXW					
			850	:	249KG7W					
		GSM/GF	PRS 1900	:	247KGXW					
		EGPRS	1900	:	249KG7W					
		WCDMA	/ HSDPA/ HSUPA Band II	:	4M07F9W					
		WCDMA	/ HSDPA/ HSUPA Band V	:	4M09F9W					

1.2. Mode of Operation

ATL has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: GSM 850 Link Mode
Mode 2: GSM 1900 Link Mode
Mode 3: GPRS 850 Link Mode
Mode 4: GPRS 1900 Link Mode
Mode 5: EGPRS 850 Link Mode
Mode 6: EGPRS 1900 Link Mode
Mode 7: WCDMA Band II Link Mode
Mode 8: WCDMA Band V Link Mode
Mode 9: Receive Mode

Note: Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.

Tested System Details

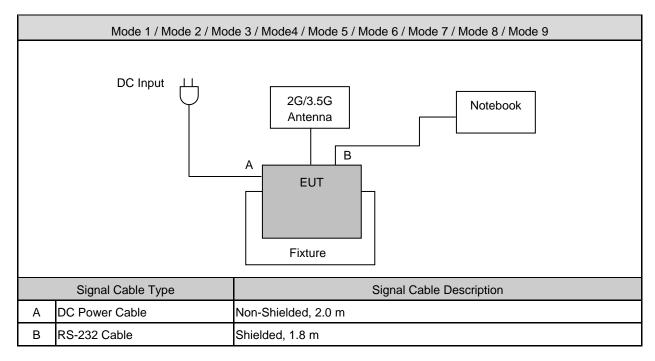
The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer Model Number		Serial Number	Power Cord
1.	Universal Radio Communication Tester	R&S	CMU200	109369	N/A

1.3. EUT Exercise Software

1.	Setup the EUT and Base Station (CMU200) as shown on 1.4.
2.	Turn on the power of all equipment.

1.4. Configuration of Test System Details



1.5. Test Site Environment

Items	Required (IEC 68-1)	Actual		
Temperature (°C)	15-35	23.0		
Humidity (%RH)	25-75	55.2		
Barometric pressure (mbar)	860-1060	950		



1.6. Summary of Test Result

Description	FCC Rule	IC Rule	Limit	Result
Conducted Output Power	§2.1046	N/A	N/A	Pass
Effective Radiated Power	§22.913(a)(2)	RSS-132(4.4) SRSP-503(5.1.3)	< 7 Watts for FCC (<6.3 Watts for IC)	Pass
Equivalent Isotropic Radiated Power	§24.232(c)	RSS-133 (6.4) SRSP-510(5.1.2)	< 2 Watts	Pass
Occupied Bandwidth	§2.1049 §22.917(a) §24.238(a)	RSS-Gen (4.6.1)	N/A	Pass
Band Edge Measurement	§2.1051 §22.917(a) §24.238(a)	RSS-132 (4.5.1)RSS-133 (6.5.1)	< 43+10log ₁₀ (P[Watts])	Pass
Conducted Spurious Emission	§2.1051 §22.917(a) §24.238(a)	RSS-132 (4.5.1) RSS-133 (6.5.1)	< 43+10log ₁₀ (P[Watts])	Pass
Field Strength of Spurious Radiation	§2.1053 §22.917(a) §24.238(a)	RSS-132 (4.5.1) RSS-133 (6.5.1) RSS-Gen (4.10)	< 43+10log ₁₀ (P[Watts])	Pass
Frequency Stability for Temperature & Voltage	§2.1055 §22.355 §24.235	RSS-132(4.3) RSS-133(6.3)	< 2.5 ppm	Pass

2 RF Output Power Test

2.1. Limit

N/A

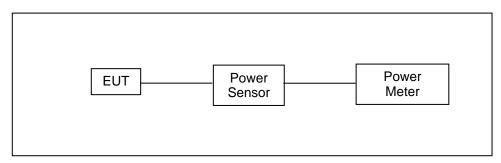
2.2. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Universal Radio Communication Tester	ROHDE & SCHWARZ	CMU200	109369	08/10/2010	(2)
Single Channel PK Power Sensor	Agilent	N1911A	MY45101619	07/19/2010	(2)
Wideband Power Meter	Agilent	N1921A	MY45241957	07/19/2010	(2)
Test Site	ATL	TE05	TE05	N.C.R.	

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

2.3. Test Setup



2.4. Test Procedure

The measurement is made according to ANSI/TIA-603-C-2004 as follows:

- 1. The transmitter output was connected to power meter and base station through power divider.
- 2. Set base station for EUT at GSM 850: PCL=5 and PCS 1900: PCL=0.
- 3. Set base station for EUT at WCDMA Band V and WCDMA Band II, power level was set to maximum.
- 4. Select lowest, middle, and highest channels for each band.



2.5. Uncertainty

The measurement uncertainty is defined as for RF output power measurement is 1.2 dB.

2.6. Test Result

Model Number	HE910-NAG					
Test Item	RF Output Po	ower				
Date of Test	04/11/2012		Test Site	TE05		
		Frequency	Burst Ave	rage Power	Pea	k Power
Bands	Data Rate	(MHz)	(dBm)	(W)	(dBm)	(W)
		824.2	32.08	1.614	32.26	1.683
GSM 850		836.4	32.13	1.633	32.25	1.679
		848.8	32.07	1.611	32.24	1.675
		824.2	32.17	1.648	32.38	1.730
	4Down1Up	836.4	32.15	1.641	32.27	1.687
		848.8	32.10	1.622	32.22	1.667
		824.2	32.13	1.633	32.25	1.679
	3Down2Up	836.4	32.14	1.637	32.25	1.679
0000000		848.8	32.11	1.626	32.24	1.675
GRRS 850	2Down3Up	824.2	31.31	1.352	31.41	1.384
		836.4	31.22	1.324	31.32	1.355
		848.8	31.21	1.321	31.31	1.352
	1Down4Up	824.2	30.13	1.030	30.33	1.079
		836.4	30.11	1.026	30.21	1.050
		848.8	30.09	1.021	30.12	1.028
		824.2	26.69	0.467	29.49	0.889
	4Down1Up	836.4	26.66	0.463	29.46	0.883
		848.8	26.61	0.458	29.42	0.875
		824.2	26.58	0.455	29.31	0.853
	3Down2Up	836.4	26.56	0.453	29.29	0.849
EGPRS 850		848.8	26.47	0.444	29.26	0.843
EGFK3 000		824.2	25.32	0.340	28.82	0.762
	2Down3Up	836.4	25.31	0.340	28.81	0.760
		848.8	25.30	0.339	28.80	0.759
		824.2	24.72	0.296	27.95	0.624
	1Down4Up	836.4	24.70	0.295	27.92	0.619
		848.8	24.69	0.294	27.90	0.617



Model Number	HE910-NAG						
Test Item	RF Output Power						
Date of Test	04/11/2012			Test Site	TE05		
		Frequency	Burst Ave	rage Power	Peak Power		
Bands	Data Rate	(MHz)	(dBm)	(W)	(dBm)	(W)	
		1850.20	28.95	0.785	29.12	0.817	
GSM 1900		1880.00	28.94	0.783	29.09	0.811	
		1909.80	28.93	0.782	29.08	0.809	
		1850.20	28.99	0.793	29.21	0.834	
	4Down1Up	1880.00	28.98	0.791	29.20	0.832	
		1909.80	28.96	0.787	29.18	0.828	
		1850.20	28.96	0.787	29.16	0.824	
	3Down2Up	1880.00	28.95	0.785	29.15	0.822	
ODDO 4000		1909.80	28.94	0.783	29.14	0.820	
GRRS 1900	2Down3Up	1850.20	28.16	0.655	28.31	0.678	
		1880.00	28.15	0.653	28.27	0.671	
		1909.80	28.13	0.650	27.25	0.531	
	1Down4Up	1850.20	27.06	0.508	27.15	0.519	
		1880.00	26.95	0.495	27.13	0.516	
		1909.80	26.94	0.494	27.12	0.515	
		1850.20	25.32	0.340	28.27	0.671	
	4Down1Up	1880.00	25.27	0.337	28.23	0.665	
		1909.80	25.26	0.336	28.21	0.662	
		1850.20	25.28	0.337	28.22	0.664	
	3Down2Up	1880.00	25.26	0.336	28.18	0.658	
ECDDC 4000		1909.80	25.23	0.333	28.17	0.656	
EGPRS 1900		1850.20	24.61	0.289	27.63	0.579	
	2Down3Up	1880.00	24.57	0.286	27.57	0.571	
		1909.80	24.56	0.286	27.53	0.566	
		1850.20	23.45	0.221	26.45	0.442	
	1Down4Up	1880.00	23.37	0.217	26.41	0.438	
		1909.80	23.36	0.217	26.37	0.434	

Model Number	HE910-NAG	HE910-NAG						
Test Item	RF Output P	ower						
Date of Test	04/11/2012			Test Site	TE05			
	0.1.7.4	Frequency	Burst Average Power		Peak	Power		
Bands	Sub-Test	(MHz)	(dBm)	(W)	(dBm)	(W)		
		1852.4	23.70	0.234	26.44	0.441		
WCDMA Band II		1880.0	23.31	0.214	26.07	0.405		
Dana n		1907.6	23.37	0.217	26.13	0.410		
		1852.4	23.18	0.208	25.94	0.393		
	1	1880.0	22.79	0.190	25.57	0.361		
		1907.6	22.83	0.192	25.63	0.366		
	2	1852.4	23.17	0.207	25.93	0.392		
HSDPA Band II		1880.0	22.78	0.190	25.56	0.360		
		1907.6	22.82	0.191	25.62	0.365		
		1852.4	23.18	0.208	25.94	0.393		
	3	1880.0	22.79	0.190	25.57	0.361		
		1907.6	22.81	0.191	25.61	0.364		
		1852.4	23.17	0.207	25.93	0.392		
	4	1880.0	22.78	0.190	25.56	0.360		
		1907.6	22.82	0.191	25.62	0.365		
		1852.4	23.16	0.207	25.91	0.390		
	1	1880.0	22.77	0.189	25.54	0.358		
		1907.6	22.81	0.191	25.61	0.364		
		1852.4	21.15	0.130	23.90	0.245		
	2	1880.0	20.76	0.119	23.53	0.225		
		1907.6	20.80	0.120	23.60	0.229		
		1852.4	22.17	0.165	24.92	0.310		
HSUPA Band II	3	1880.0	21.76	0.150	24.53	0.284		
Β αιΙ α ΙΙ		1907.6	21.82	0.152	24.62	0.290		
		1852.4	21.15	0.130	23.90	0.245		
	4	1880.0	20.76	0.119	23.53	0.225		
		1907.6	20.82	0.121	23.62	0.230		
		1852.4	23.15	0.207	25.90	0.389		
	5	1880.0	22.76	0.189	25.53	0.357		
		1907.6	22.79	0.190	25.59	0.362		

Model Number	HE910-NAG	HE910-NAG						
Test Item	RF Output P	ower						
Date of Test	04/11/2012			Test Site	TE05			
	0.1.7.4	Frequency	Burst Average Power		Peak Power			
Bands	Sub-Test	(MHz)	(dBm)	(W)	(dBm)	(W)		
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		826.4	23.76	0.238	26.43	0.440		
WCDMA Band V		836.4	23.58	0.228	26.28	0.425		
Dana v		846.4	23.54	0.226	26.23	0.420		
		826.4	23.05	0.202	26.39	0.436		
	1	836.4	22.94	0.197	26.24	0.421		
		846.4	22.81	0.191	26.21	0.418		
HSDPA Band V	2	826.4	23.04	0.201	26.38	0.435		
		836.4	22.93	0.196	26.23	0.420		
		846.4	22.81	0.191	26.21	0.418		
		826.4	23.03	0.201	26.37	0.434		
	3	836.4	22.93	0.196	26.23	0.420		
		846.4	22.79	0.190	26.19	0.416		
		826.4	23.02	0.200	26.36	0.433		
	4	836.4	22.91	0.195	26.21	0.418		
		846.4	22.78	0.190	26.18	0.415		
		826.4	22.98	0.199	26.32	0.429		
	1	836.4	22.87	0.194	26.22	0.419		
		846.4	22.77	0.189	26.17	0.414		
		826.4	20.97	0.125	24.31	0.270		
	2	836.4	20.86	0.122	24.21	0.264		
		846.4	20.76	0.119	24.16	0.261		
		826.4	21.97	0.157	25.31	0.340		
HSUPA	3	836.4	21.86	0.153	25.21	0.332		
Band V		846.4	21.77	0.150	25.17	0.329		
		826.4	20.97	0.125	24.31	0.270		
	4	836.4	20.88	0.122	24.23	0.265		
		846.4	20.79	0.120	24.19	0.262		
		826.4	22.97	0.198	26.31	0.428		
	5	836.4	22.87	0.194	26.22	0.419		
		846.4	22.76	0.189	26.16	0.413		

Effective Radiated Power / Equivalent Isotropic Radiated Power Test

Report Number: 1204FR16

3.1. Limit

3

For FCC Part 22.913(a)(2): The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

For FCC Part 24.232(b): The EIRP of mobile transmitters and auxiliary test transmitters must not exceed 2 Watts.

3.2. Test Instruments

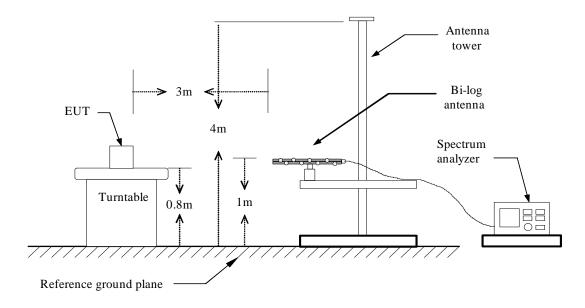
	3 Meter Chamber								
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark				
RF Pre-selector	Agilent	N9039A	MY46520256	01/16/2012	(2)				
Spectrum Analyzer	Agilent	E4446A	MY46180578	01/16/2012	(1)				
Pre Amplifier	Agilent	8449B	3008A02237	02/22/2012	(1)				
Pre Amplifier	Agilent	8447D	2944A10961	02/22/2012	(1)				
Broadband Antenna (30MHz~1GHz)	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	9163-270	07/29/2011	(1)				
Horn Antenna (1~18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	06/29/2011	(1)				
Horn Antenna (18~40GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	06/28/2011	(1)				
Test Site	ATL	TE01	888001	12/20/2011	(1)				

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

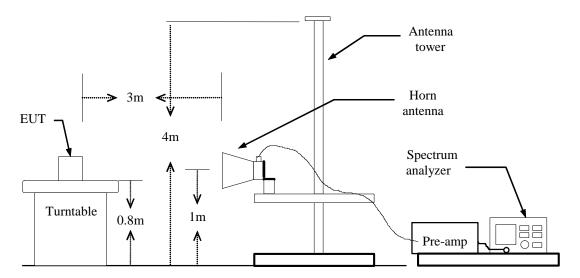
Note: N.C.R. = No Calibration Request.

3.3. Setup

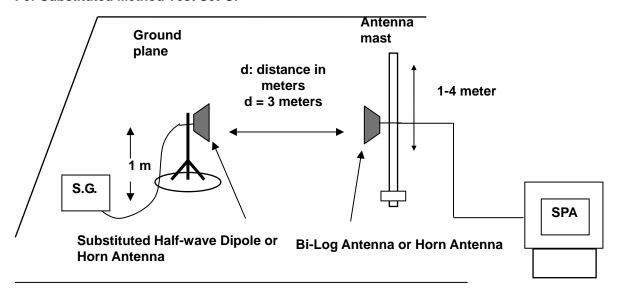
Below 1 GHz



Above 1 GHz



For Substituted Method Test Set-UP



3.4. Test Procedure

The measurement is made according to ANSI/TIA-603-C-2004 as follows:

The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer.

During the measurement of the EUT, the resolution bandwidth was set to 3MHz and the average bandwidth was set to 3MHz. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna. The reading was recorded and the field strength (E in dBuV/m) was calculated.

ERP in frequency band 824-849MHz, and EIRP in frequency band 1851.25 –1910MHz were measured using a substitution method. The EUT was replaced by half-wave dipole (824-849MHz) or horn antenna (1851.25-1910MHz) connected to a signal generator. The spectrum analyzer reading was recorded and ERP/EIRP was calculated as follows:

ERP = S.G. output (dBm) + Antenna Gain (dBd) - Cable (dB)

EIRP = S.G. output (dBm) + Antenna Gain (dBi) - Cable (dB)

3.5. Uncertainty

The measurement uncertainty is defined as for Field Strength of Spurious Radiation measurement is ± 3.072 dB.

3.6. Test Result

Model Number	HE910-NAG								
Test Item	ERP/EIRP								
Date of Test	04/11/2012				Test Site	TE01			
Test Mode	Frequency	Ant. Read Level		Correction factor	El	RP	Limit		
rest Mode	(MHz)	Polar.	(dBm)	(dBm)	(dBm)	(W)	LIIIIII		
	824.2	Н	17.62	11.95	29.57	0.906	< 7W		
	024.2	V	11.34	11.29	22.63	0.183	< 7W		
Mode 1	836.4	Н	17.29	12.07	29.36	0.863	< 7W		
	030.4	V	12.05	11.34	23.39	0.218	< 7W		
	848.8	Ι	15.48	12.50	27.98	0.628	< 7W		
		V	11.67	11.47	23.14	0.206	< 7W		
	824.2	Η	18.25	11.95	30.20	1.047	< 7W		
		V	11.04	11.29	22.33	0.171	< 7W		
Mode 3	836.4	Н	17.31	12.07	29.38	0.867	< 7W		
Wode 3	030.4	V	12.08	11.34	23.42	0.220	< 7W		
	848.8	Н	15.44	12.51	27.95	0.624	< 7W		
	040.0	V	11.76	11.47	23.23	0.210	< 7W		
	824.2	Η	17.78	11.29	29.07	0.807	< 7W		
	024.2	V	11.44	11.29	22.73	0.187	< 7W		
Mode 5	836.4	Н	16.48	12.07	28.55	0.716	< 7W		
Wode 5	030.4	V	10.48	11.34	21.82	0.152	< 7W		
	848.8	Н	13.72	12.51	26.23	0.420	< 7W		
	0-0.0	V	12.64	11.47	24.11	0.258	< 7W		

Note: 1. ERP/EIRP = Read Level + Correction factor.

^{2.} For WCDMA signals, a peak detector is used with RBW = VBW = 5MHz.

^{3.} For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW= 1 MHz.

Model Number	HE910-NAG									
Test Item	ERP/EIRP	ERP/EIRP								
Date of Test	04/11/2012				Test Site	TE01				
T . M . I	Frequency	Ant. Read Level		Correction factor	EI	RP	1			
Test Mode	(MHz)	Polar.	(dBm)	(dBm)	(dBm)	(W)	Limit			
	1850.20	Н	15.67	10.49	26.16	0.413	< 2W			
	1030.20	V	17.75	8.33	26.08	0.406	< 2W			
Mode 2	1880.00	Н	15.82	10.51	26.33	0.430	< 2W			
	1000.00	V	17.60	8.57	26.17	0.414	< 2W			
	1909.80	Н	16.27	10.52	26.79	0.478	< 2W			
	1909.60	V	17.37	8.80	26.17	0.414	< 2W			
	1850.20	Н	15.81	10.49	26.30	0.427	< 2W			
	1000.20	V	17.69	8.33	26.02	0.400	< 2W			
Mode 4	1880.00	Ι	15.72	10.51	26.23	0.420	< 2W			
Mode 4	1880.00	V	17.61	8.57	26.18	0.415	< 2W			
	1909.80	Ι	16.30	10.51	26.81	0.480	< 2W			
	1909.60	٧	17.36	8.80	26.16	0.413	< 2W			
	1850.20	Н	15.09	10.49	25.58	0.361	< 2W			
	1000.20	V	17.48	8.33	25.81	0.381	< 2W			
Mode 6	1880.00	Н	15.69	10.51	26.20	0.417	< 2W			
Mode 0	1000.00	V	17.28	8.57	25.85	0.385	< 2W			
	1909.80	Н	15.43	10.52	25.95	0.394	< 2W			
	1909.00	V	16.99	8.81	25.80	0.380	< 2W			

Note: 1. ERP/EIRP = Read Level + Correction factor.

^{2.} For WCDMA signals, a peak detector is used with RBW = VBW = 5MHz.

^{3.} For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW= 1 MHz.

Model Number	HE910-NAG	HE910-NAG							
Test Item	ERP/EIRP	ERP/EIRP							
Date of Test	04/11/2012	04/11/2012 Test Site TE01							
Test Mode	Frequency	Ant.	Read Level	Correction factor	or	EIRP	Limit		
rest Mode	(MHz)	Polar. (d	(dBm)	(dBm)	(dBm) (W)	LIIIII		
	1852.4	Н	12.45	10.50	22.95	0.197	< 2W		
		V	16.45	8.36	24.81	0.303	< 2W		
Mode 7	1880.0	Н	12.27	10.52	22.79	0.190	< 2W		
Wiode 7	1000.0	V	15.65	8.57	24.22	0.264	< 2W		
	1907.6	Н	12.57	10.52	23.09	0.204	< 2W		
		V	15.04	8.78	23.82	0.241	< 2W		

Model Number	HE910-NAG	HE910-NAG							
Test Item	ERP/EIRP	ERP/EIRP							
Date of Test	04/11/2012	04/11/2012 Test Site TE01							
Test Mode	Frequency	Ant.	Read Level	Correction facto	r	ERP		Limit	
rest Mode	(MHz)	Polar. (dBm)		(dBm)	(dBm)	(W)		
	826.4	Н	10.23	11.99	22.22	!	0.167	< 7W	
	020.4	V	7.02	11.31	18.33	1	0.068	< 7W	
Mode 8	836.4	Н	9.76	12.07	21.83	3	0.152	< 7W	
Widde 8	030.4	V	6.36	11.34	17.70)	0.059	< 7W	
	846.4	Н	8.59	12.39	20.98	3	0.125	< 7W	
	040.4	V	6.02	11.42	17.44		0.055	< 7W	

Note: 1. ERP/EIRP = Read Level + Correction factor.

- 2. For WCDMA signals, a peak detector is used with RBW = VBW = 5MHz.
- 3. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW= 1 MHz.

4 Occupied Bandwidth Test

4.1. Limit

The Occupied Bandwidth Limit:

N/A.

The Band Edge Limit:

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10log(P) dB.

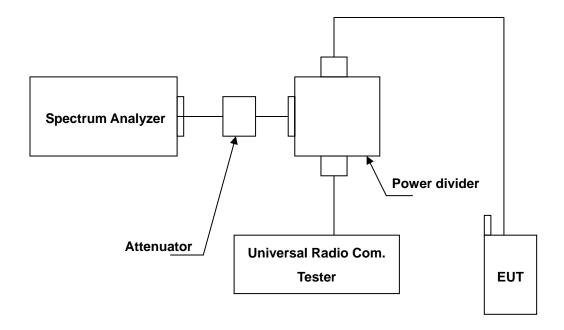
4.2. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Spectrum Analyzer	Agilent	E4445A	MY46181986	05/16/2011	(2)
Universal Radio Communication Tester	ROHDE & SCHWARZ	CMU200	109369	08/10/2010	(2)
Attenuator	RADIALL	R41572000	0603033073	N.C.R.	
Power divider	Agilent	87302C	3239A00760	N.C.R.	
Test Site	ATL	TE05	TE05	N.C.R.	

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

4.3. Setup



4.4. Test Procedure

The measurement is made according to FCC rules part 22 and 24:

- 1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
- 2. The occupied bandwidth of middle channel for the highest and lowest RF powers was measured.
- 3. The band edge of low and high channels for the highest RF powers within the transmitting frequency band were measured. Setting RBW as roughly BW/100.
- 4. The band edge setting:
 - a. RB=10 kHz; VB=30 kHz for GSM 850 and PCS 1900.
 - b. RB=100 kHz; VB=300 kHz for WCDMA Band V and WCDMA Band II.

4.5. Uncertainty

The measurement uncertainty is defined as ± 10 Hz

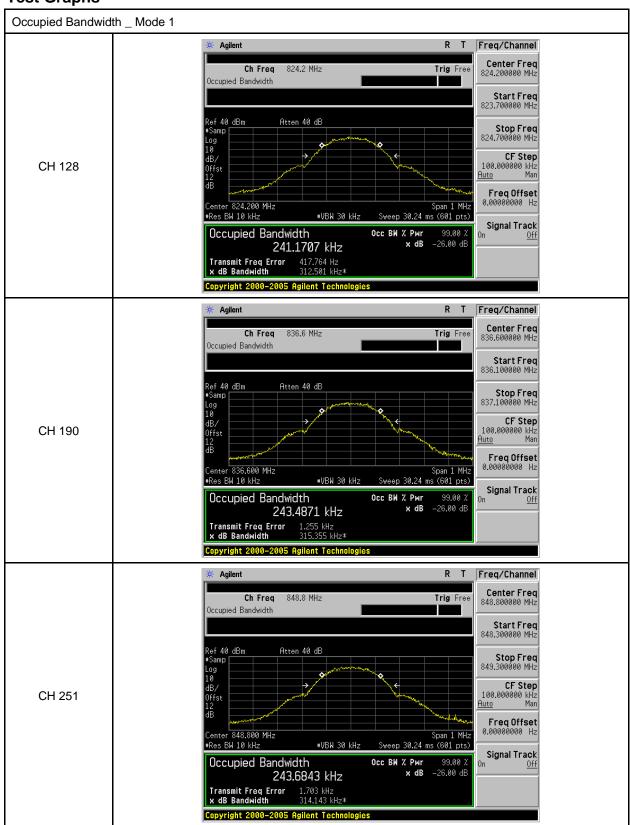
4.6. Test Result

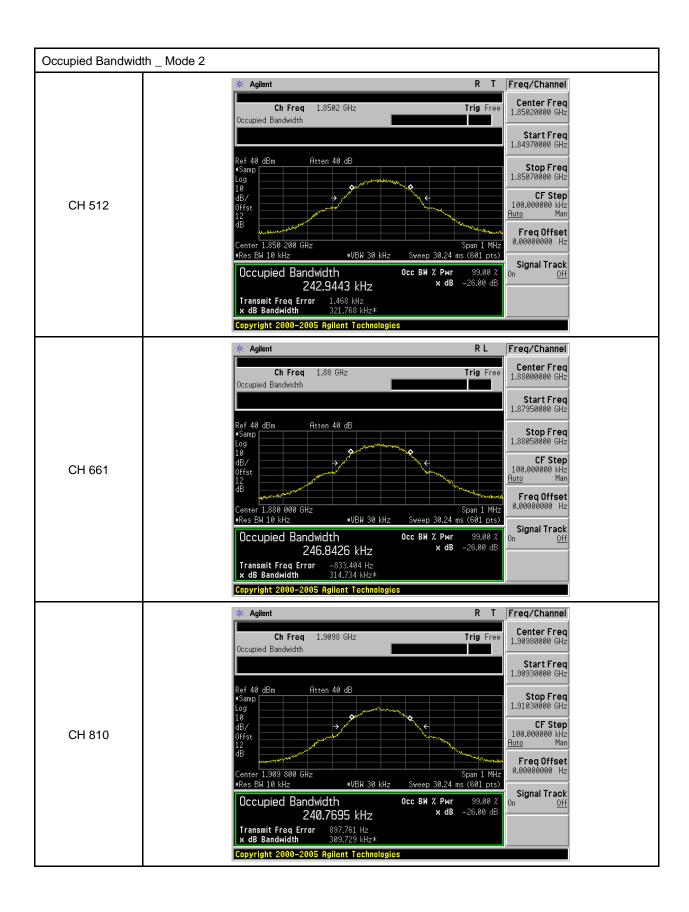
Model Number	HE910-NAG	HE910-NAG							
Test Item	Occupied Bar	Occupied Bandwidth							
Date of Test	04/11/2012		Test Site	TE05					
Test Mode	Channel	Frequency (MHz)	99% Bandwidth (kHz)		Note				
	128	824.2	241.1707	RBW:10K	Hz , VBW:30KHz				
Mode 1	190	836.4	243.4871	RBW:10K	Hz , VBW:30KHz				
	251	848.8	243.6843	RBW:10KHz , VBW:30KHz					
	512	1850.20	242.9443	RBW:10K	RBW:10KHz , VBW:30KHz				
Mode 2	661	1880.00	246.8426	RBW:10KHz , VBW:30KHz					
	810	1909.80	240.7695	RBW:10K	Hz , VBW:30KHz				
	128	824.2	248.7750	RBW:10K	Hz , VBW:30KHz				
Mode 5	190	836.4	248.7293	RBW:10K	Hz , VBW:30KHz				
	251	848.8	252.8001	RBW:10K	Hz , VBW:30KHz				
	512	1850.20	248.4062	RBW:10K	Hz , VBW:30KHz				
Mode 6	661	1880.00	247.2272	RBW:10K	Hz , VBW:30KHz				
	810	1909.80	249.3242	RBW:10KHz , VBW:30KHz					

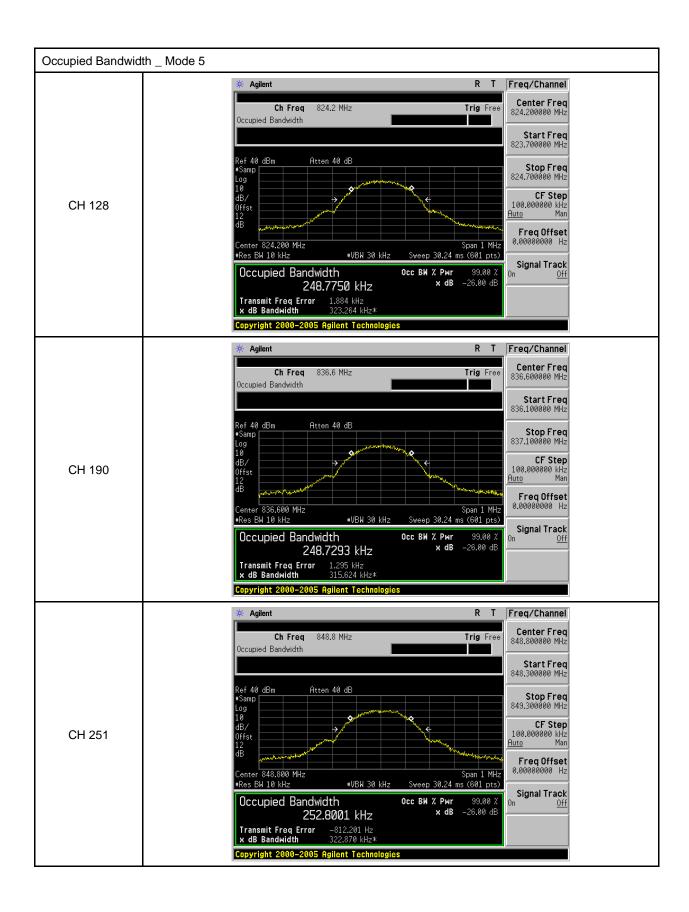
Model Number	HE910-NAG	HE910-NAG								
Test Item	Occupied Bar	Occupied Bandwidth								
Date of Test	04/11/2012			Test Site	TE05					
Test Mode	Channel	Frequency (MHz)	99% Bandwidth (MHz)	Note						
	9262	1852.4	4.0734	RBW:100KHz , VBW:300KHz						
Mode 7	9400	1880.0	4.0698	RBW:100K	Hz , VBW:300KHz					
	9538	1907.6	4.0662	RBW:100KHz , VBW:300KHz						
	4132	826.4	4.0850	RBW:100K	Hz , VBW:300KHz					
Mode 8	4183	836.4	4.0816	RBW:100K	Hz , VBW:300KHz					
	4233	846.4	4.0774	RBW:100K	Hz , VBW:300KHz					

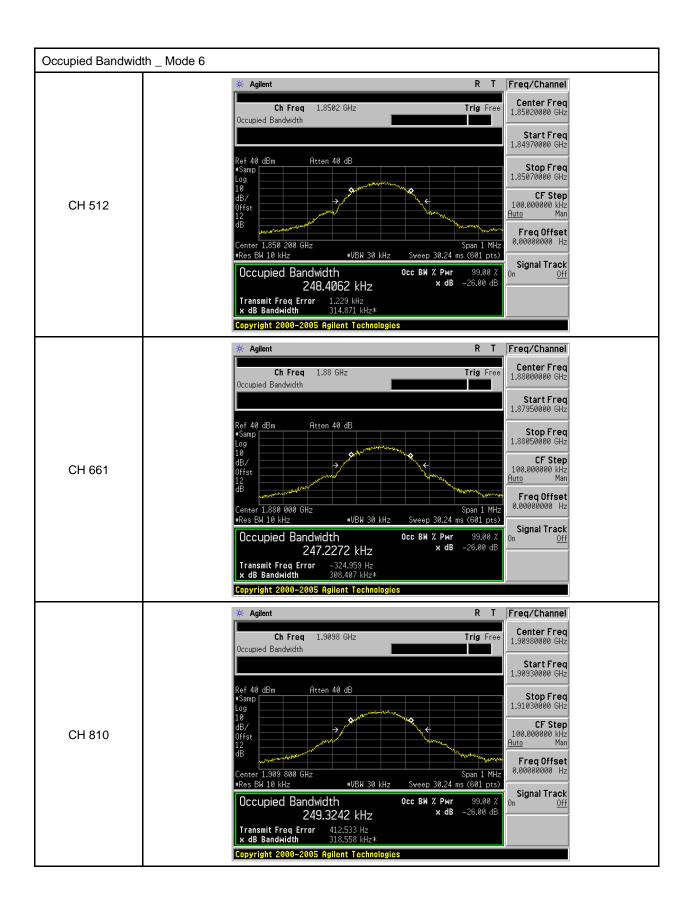
Model Number	HE910-NAG							
Test Item	Band Edge							
Date of Test	04/11/2012	04/11/2012 Test Site TE05						
Test Mode	Band	Channel	Frequency (MHz)	Bandwidth (dBm)	Limit (dBm)	Result		
Made 1	Lower	128	824.0000	-18.21	-13	Pass		
Mode 1	Higher	251	849.0000	-19.25	-13	Pass		
Mode 2	Lower	512	1850.000	-27.76	-13	Pass		
iviode 2	Higher	810	1910.000	-30.35	-13	Pass		
M 1 7	Lower	9262	1850.000	-28.16	-13	Pass		
Mode 7	Higher	9538	1910.000	-28.07	-13	Pass		
Madao	Lower	4132	824.0000	-16.88	-13	Pass		
Mode 8	Higher	4233	849.0000	-17.70	-13	Pass		

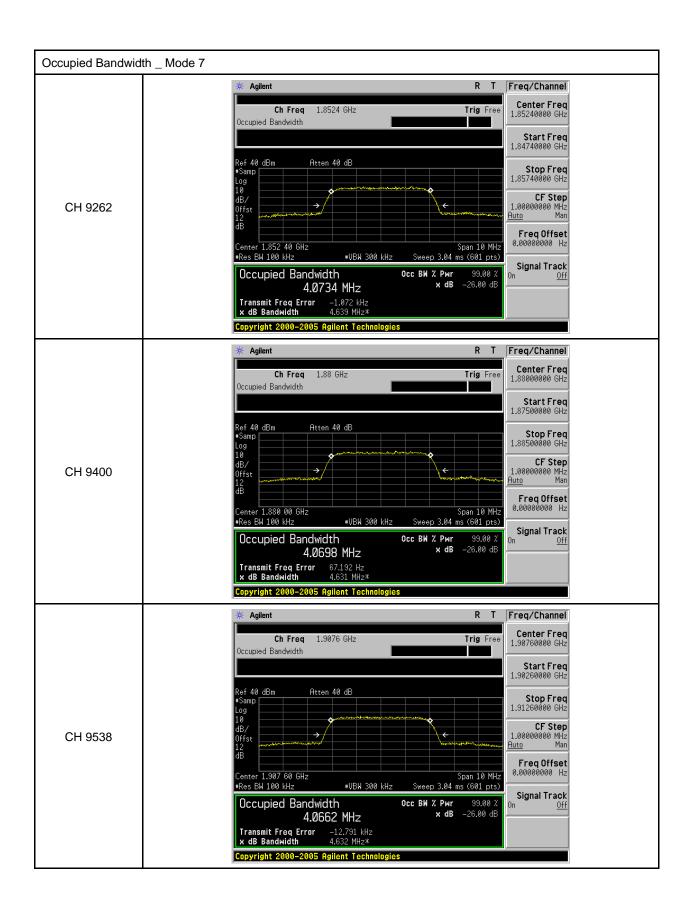
4.7. Test Graphs

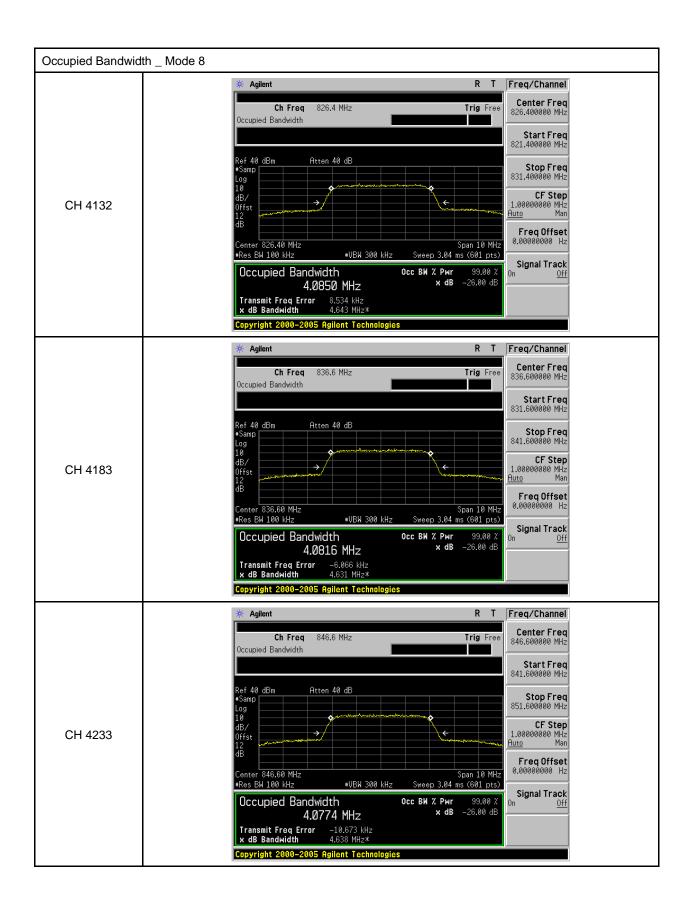


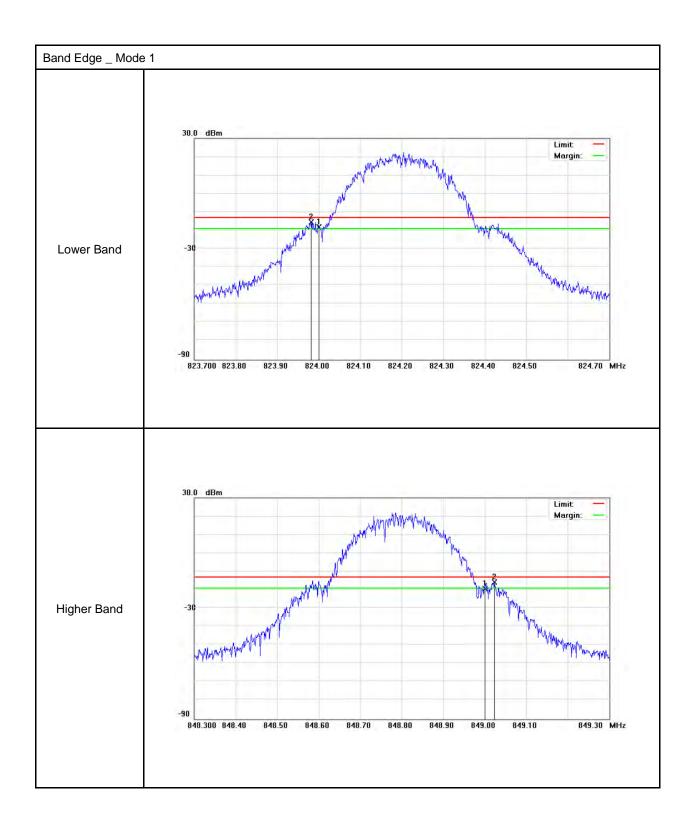


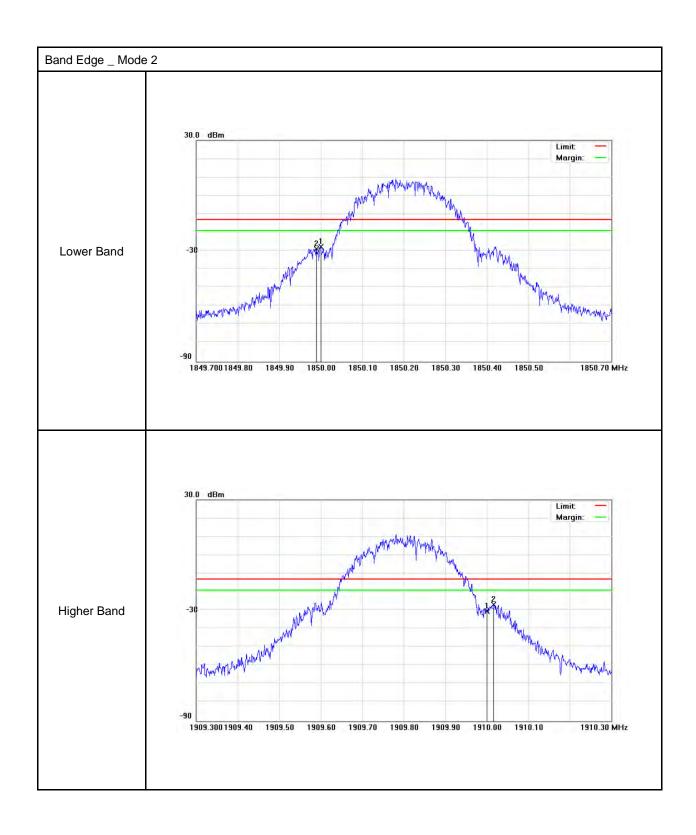


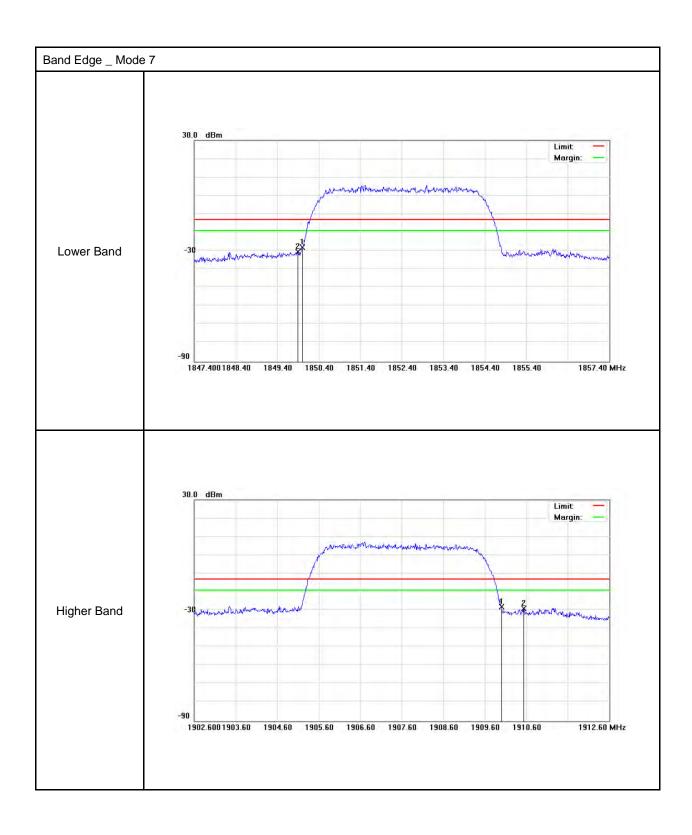


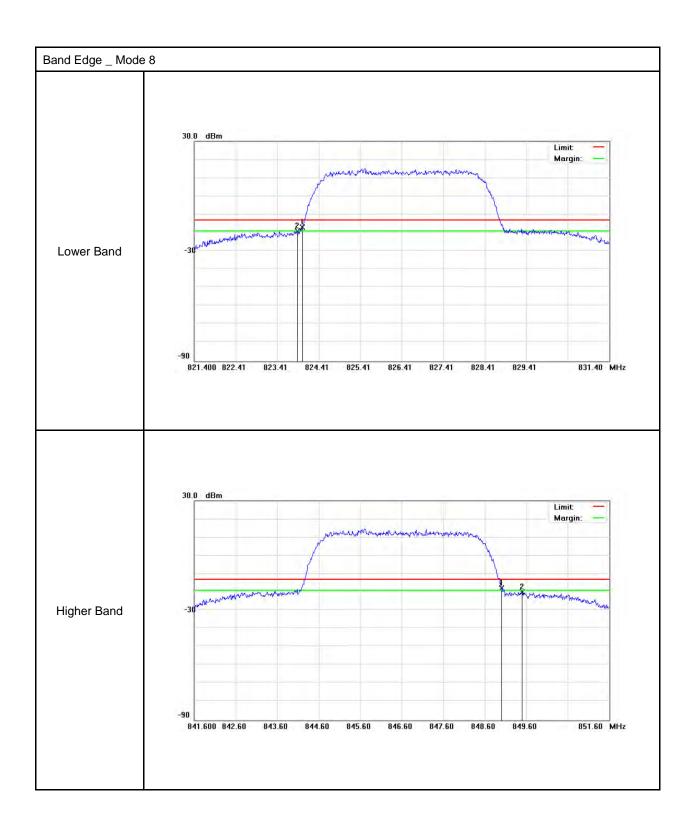












5 Conducted Spurious Emission Test

5.1. Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10log(P) dB.

5.2. Test Instruments

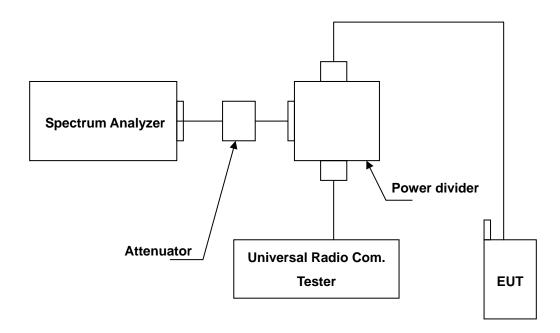
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Spectrum Analyzer	Agilent	E4445A	MY46181986	05/16/2011	(2)
Universal Radio Communication Tester	ROHDE & SCHWARZ	CMU200	109369	08/10/2010	(2)
Attenuator	RADIALL	R41572000	0603033073	N.C.R.	
Power divider	Agilent	87302C	3239A00760	N.C.R.	
Test Site	ATL	TE05	TE05	N.C.R.	

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

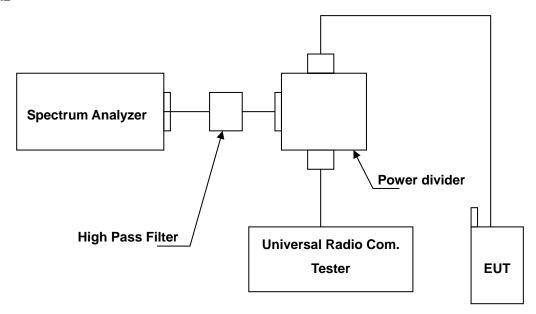
Note: N.C.R. = No Calibration Request.

5.3. Setup

Below 2.8GHz



Above 2.8GHz



5.4. Test Procedure

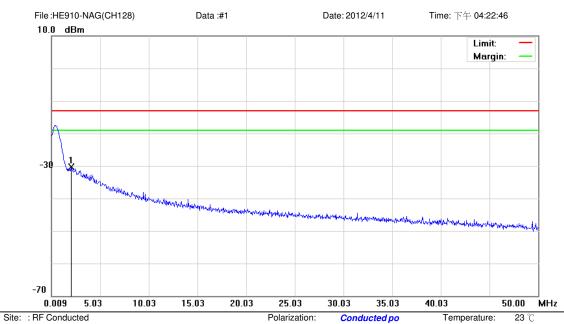
- 1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
- 2. The middle channel for the highest RF power within the transmitting frequency was measured.
- 3. The conducted spurious emission for the whole frequency range was taken.
- 4. Test setting at GSM 850 RB>100 kHz, VB>100 kHz; PCS 1900 RB>1MHz, VB>1MHz.

5.5. Uncertainty

The measurement uncertainty is evaluated as ± 2.24 dB.

5.6. Test Result

Model Number	HE910-NAG		
Test Item	Conducted Spurious Emission		
Test Mode	Mode 1 / Mode 2 / Mode 7 / Mode 8		
Date of Test	04/11/2012	Test Site	TE05



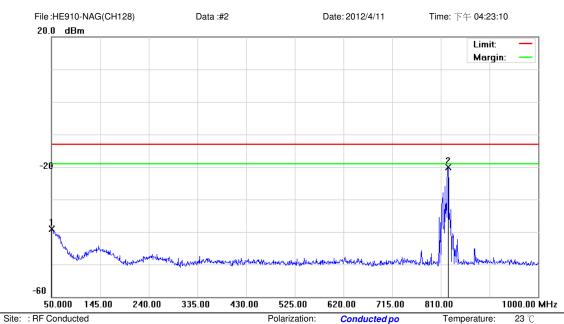
EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 1 Note: CH 128 Polarization: Conducted po Temperature: 23
Power: DC 3.8V Humidity: 55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2.0085	-61.69	31.37	-30.32	-13.00	-17.32	peak			

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

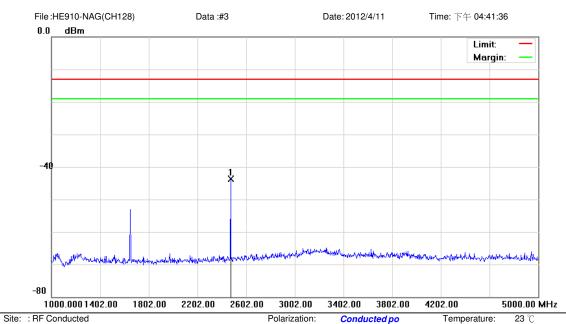
M/N: HE910-NAG

Mode: 1 Note: CH 128

Polarization:	Conducted po	Temperature:	23
Power:	DC 3.8V	Humidity:	55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		50.9500	-53.67	14.52	-39.15	-13.00	-26.15	peak			
2	*	824.2500	-23.96	3.84	-20.12	-13.00	-7.12	peak			Tx

^{*:}Maximum data x:Over limit !:over margin



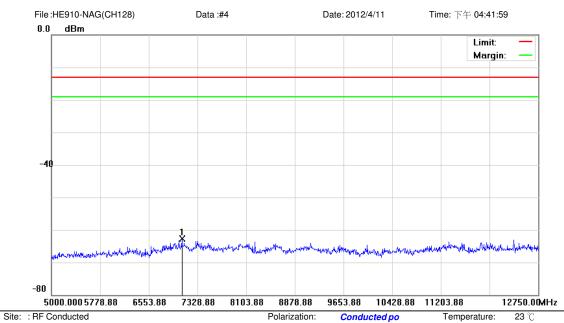
EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 1 Note: CH 128 Polarization: Conducted po Temperature: 23
Power: DC 3.8V Humidity: 55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2472.000	-48.12	4.45	-43.67	-13.00	-30.67	peak			

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

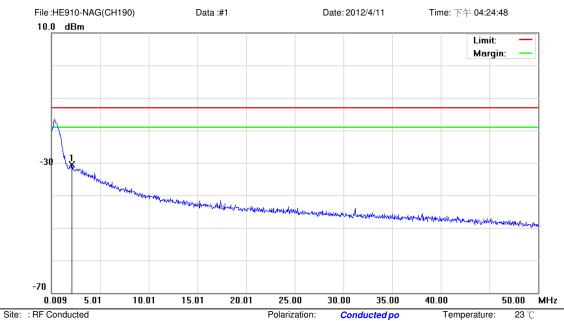
M/N: HE910-NAG

Mode: 1 Note: CH 128

Polarization:	Conducted po	Temperature:	23
Power:	DC 3.8V	Humidity:	55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	7077.000	-67.64	4.96	-62.68	-13.00	-49.68	peak			

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 1 Note: CH 190 Polarization: Conducted po DC 3.8V Power:

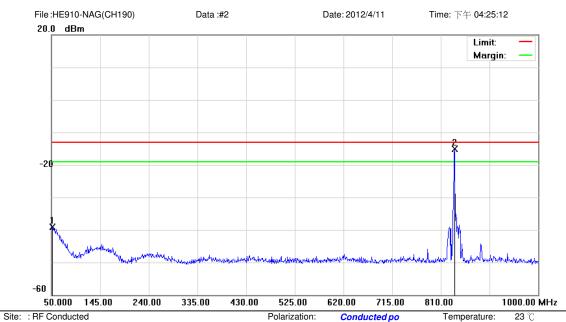
Distance:

23 ℃ Temperature: Humidity: 55.2 %

RBW: 1000 KHz VBW: 1000 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2.1086	-62.09	31.54	-30.55	-13.00	-17.55	peak			

^{*:}Maximum data x:Over limit !:over margin



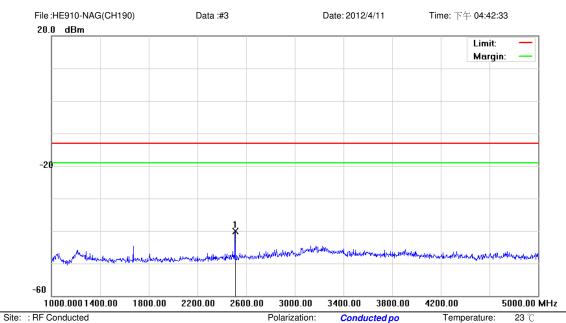
EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 1 Note: CH 190 Polarization: Conducted po Temperature: 23
Power: DC 3.8V Humidity: 55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		51.9000	-53.48	14.36	-39.12	-13.00	-26.12	peak			
2	*	836.6000	-19.06	3.96	-15.10	-13.00	-2.10	peak			Tx

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

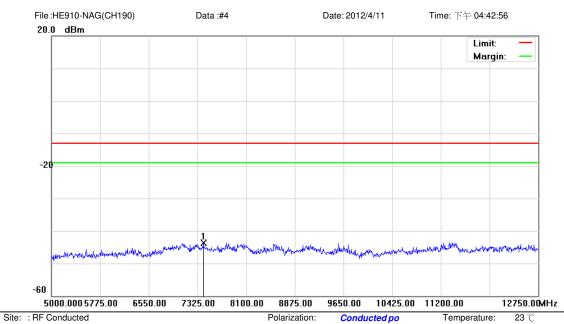
M/N: HE910-NAG Mode: 1

Note: CH 190

Polarization:	Conducted po	Temperature:	23
Power:	DC 3.8V	Humidity: 5	55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2510.000	-44.40	4.36	-40.04	-13.00	-27.04	peak			

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

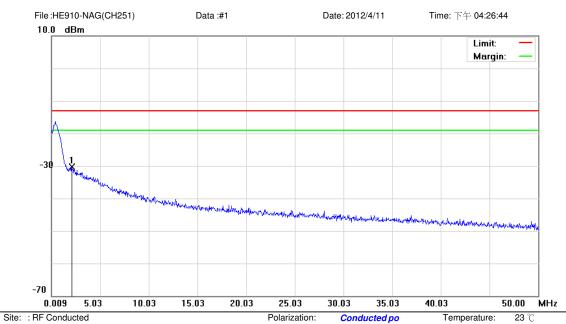
M/N: HE910-NAG Mode: 1

Note: CH 190

Polarization:	Conducted po	I emperature:	23 °C
Power:	DC 3.8V	Humidity:	55.2 %
Distance		DDW 4000	

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	7421.875	-48.84	5.21	-43.63	-13.00	-30.63	peak			

^{*:}Maximum data x:Over limit !:over margin



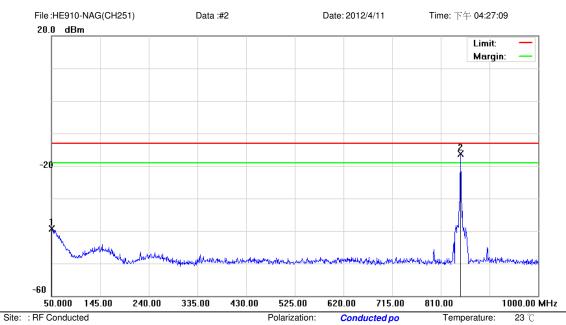
EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 1 Note: CH 251 Polarization: Conducted po Temperature: 23
Power: DC 3.8V Humidity: 55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2.0836	-61.81	31.50	-30.31	-13.00	-17.31	peak			

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

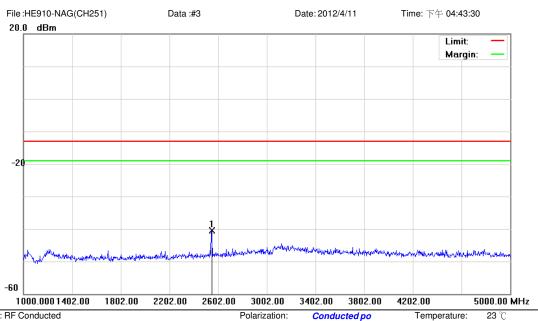
M/N: HE910-NAG Mode: 1 Note: CH 251

DC 3.8V Power:

Humidity: 55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		50.9500	-53.86	14.52	-39.34	-13.00	-26.34	peak			
2	*	848.9500	-20.26	3.98	-16.28	-13.00	-3.28	peak			Tx

^{*:}Maximum data x:Over limit !:over margin



Site: : RF Conducted

Limit: FCC Part 22 conducted(9k-12.75G)

EUT: 2G/3.5G Module

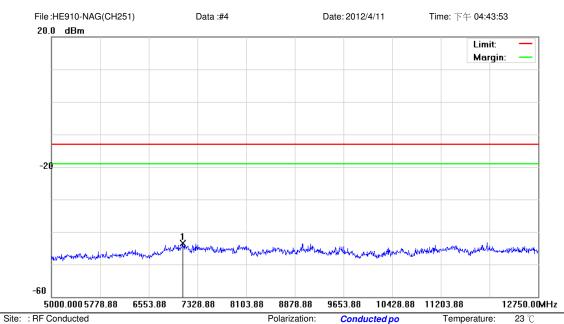
M/N: HE910-NAG

Mode: 1 Note: CH 251

Polarization:	Conducted po	Temperature:	23
Power:	DC 3.8V	Humidity:	55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2546.000	-44.95	4.45	-40.50	-13.00	-27.50	peak			

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

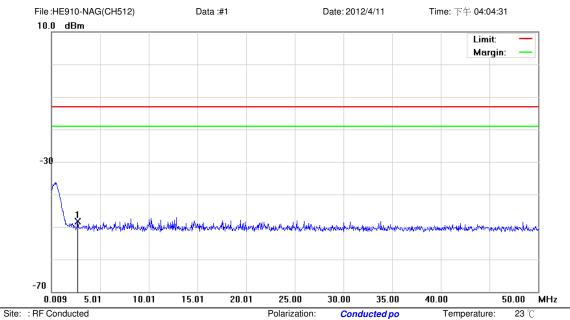
M/N: HE910-NAG

Mode: 1 Note: CH 251

Polarization:	Conducted po	Temperature:	23
Power:	DC 3.8V	Humidity: 5	55.2 %

N	٥.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
			MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
	1	*	7088.625	-48.52	5.03	-43.49	-13.00	-30.49	peak			

^{*:}Maximum data x:Over limit !:over margin



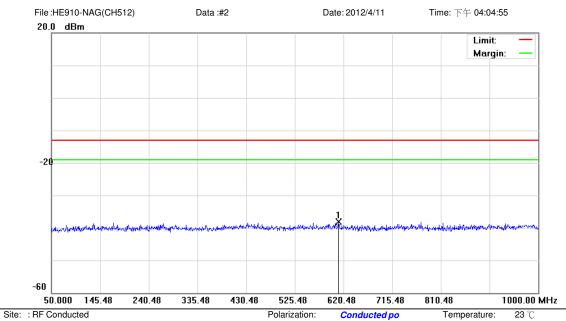
EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 2 Note: CH 512 Polarization: Conducted po Temperature: 23
Power: DC 3.8V Humidity: 55.2 %

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
	MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1 *	2.7084	-61.17	12.83	-48.34	-13.00	-35.34	peak			

^{*:}Maximum data x:Over limit !:over margin



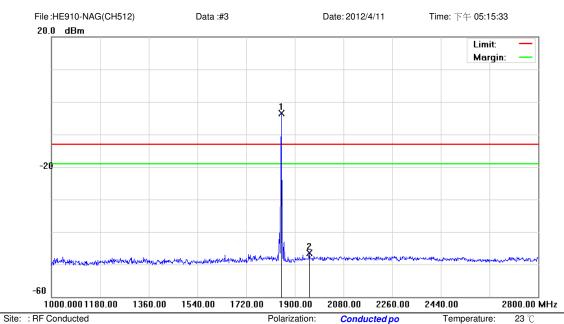
EUT: 2G/3.5G Module M/N: HE910-NAG

Mode: 2 Note: CH 512

Conducted po Temperature: DC 3.8V Humidity: 55.2 % Power:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	610.5000	-51.26	13.16	-38.10	-13.00	-25.10	peak			

^{*:}Maximum data x:Over limit !:over margin



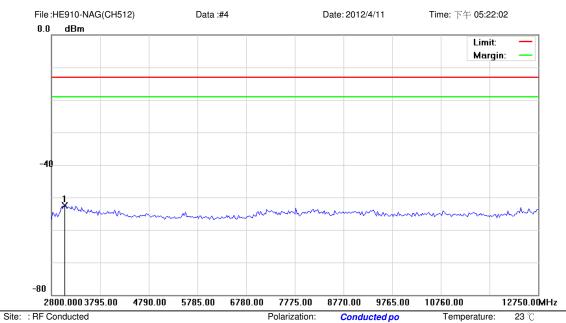
EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 2 Note: CH 512 Polarization: Conducted po Temperature: 23
Power: DC 3.8V Humidity: 55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	1850.500	-7.67	4.26	-3.41	-13.00	9.59	peak			Tx
2		1954.000	-51.10	4.69	-46.41	-13.00	-33.41	peak			

^{*:}Maximum data x:Over limit !:over margin



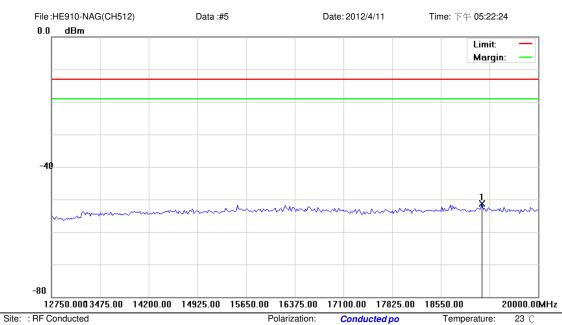
EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 2 Note: CH 512 Polarization: Conducted po Temperature: 23
Power: DC 3.8V Humidity: 55.2 %

N	0.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
			MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
	1	*	3073.625	-57.84	5.40	-52.44	-13.00	-39.44	peak			

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

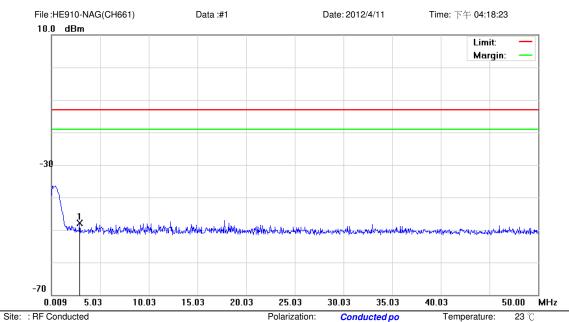
M/N: HE910-NAG

Mode: 2 Note: CH 512 Power: DC 3.8V

Humidity: 55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	19166.250	-58.43	7.20	-51.23	-13.00	-38.23	peak			

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

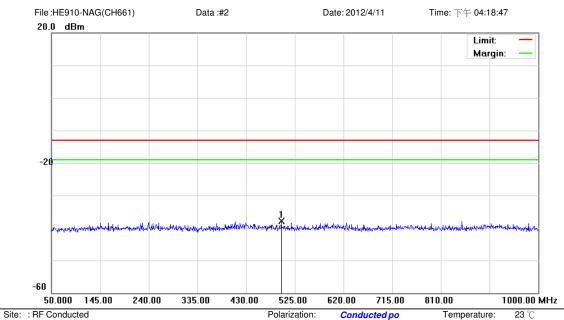
M/N: HE910-NAG

Mode: 2 Note: CH 661

Polarization:	Conducted po	l emperature:	23
Power:	DC 3.8V	Humidity: 5	5.2 %

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
	MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1 *	2.9085	-60.91	12.94	-47.97	-13.00	-34.97	peak			

^{*:}Maximum data x:Over limit !:over margin



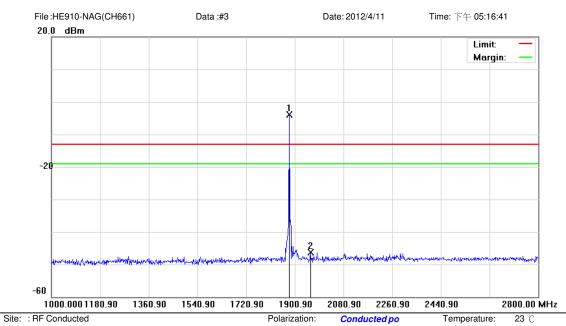
EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 2 Note: CH 661 Polarization: Conducted po Temperature: 23
Power: DC 3.8V Humidity: 55.2 %

N	0.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
			MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
	1	*	498.4000	-51.01	13.14	-37.87	-13.00	-24.87	peak			

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

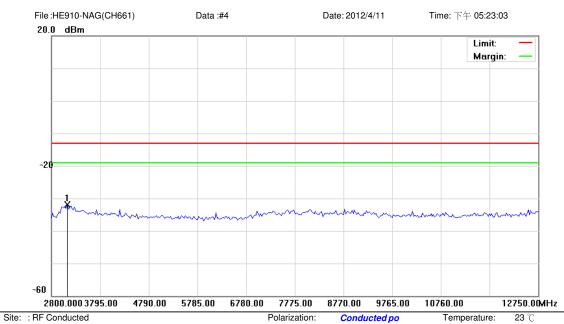
M/N: HE910-NAG

Mode: 2 Note: CH 661

Conducted po DC 3.8V Humidity: 55.2 % Power:

-	No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
			MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
Ī	1	*	1880.200	-8.60	4.65	-3.95	-13.00	9.05	peak			Tx
	2		1957.600	-51.01	4.71	-46.30	-13.00	-33.30	peak			

^{*:}Maximum data x:Over limit !:over margin

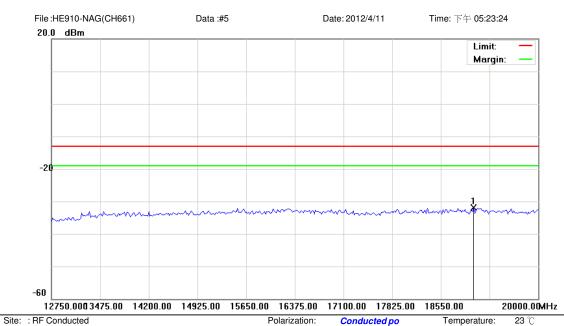


EUT: 2G/3.5G Module M/N: HE910-NAG

Mode: 2 Note: CH 661 Power: DC 3.8V Humidity: 55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	3123.375	-37.19	5.30	-31.89	-13.00	-18.89	peak			

^{*:}Maximum data x:Over limit !:over margin



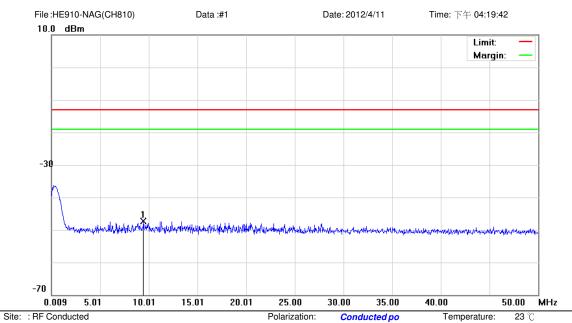
EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 2 Note: CH 661 Polarization: Conducted po Temperature: 23
Power: DC 3.8V Humidity: 55.2 %

N	0.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
			MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
	1	*	19039.375	-39.11	7.17	-31.94	-13.00	-18.94	peak			

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

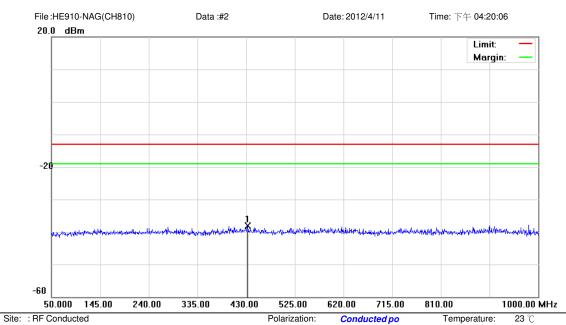
M/N: HE910-NAG

Mode: 2 Note: CH 810

i dianzalidii.	Conducted po	remperature	. 20 C
Power:	DC 3.8V	Humidity:	55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	9.4573	-60.69	13.30	-47.39	-13.00	-34.39	peak			

^{*:}Maximum data x:Over limit !:over margin



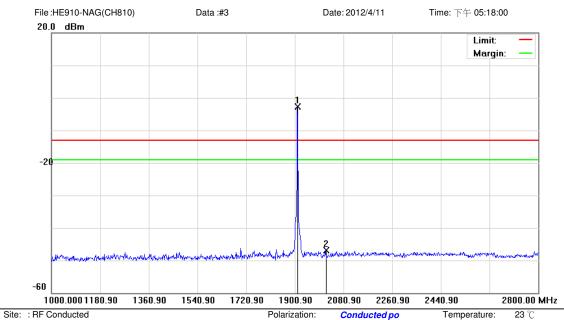
EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 2 Note: CH 810 Polarization: Conducted po Temperature: DC 3.8V Humidity: 55.2 % Power:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	432.3750	-51.43	13.25	-38.18	-13.00	-25.18	peak			

^{*:}Maximum data x:Over limit !:over margin



Limit: FCC Part 24 conducted(9k-12.75G)

EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 2 Note: CH 810 Polarization: Conducted po DC 3.8V Power:

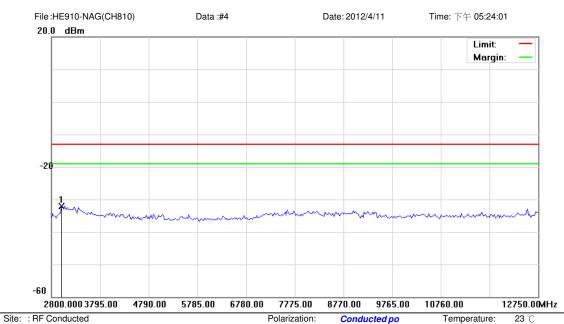
Distance:

23 ℃ Temperature: Humidity: 55.2 %

RBW: 1000 KHz VBW: 1000 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	1909.900	-8.49	5.71	-2.78	-13.00	10.22	peak			Tx
2		2014.300	-51.31	4.42	-46.89	-13.00	-33.89	peak			

^{*:}Maximum data x:Over limit !:over margin



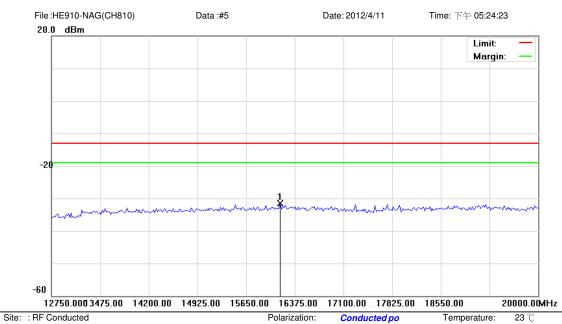
EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 2 Note: CH 810 Polarization: Conducted po Temperature: 23
Power: DC 3.8V Humidity: 55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2999.000	-37.48	5.48	-32.00	-13.00	-19.00	peak			

^{*:}Maximum data x:Over limit !:over margin



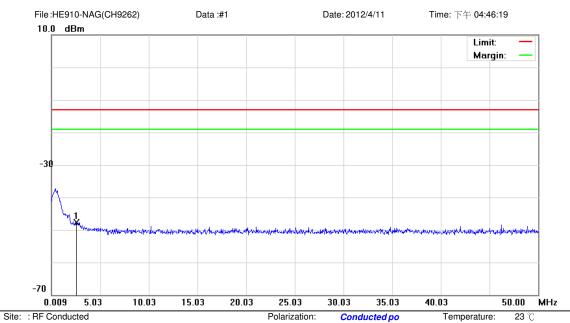
EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 2 Note: CH 810 Power: DC 3.8V Humidity: 55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	16157.500	-37.87	6.34	-31.53	-13.00	-18.53	peak			

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

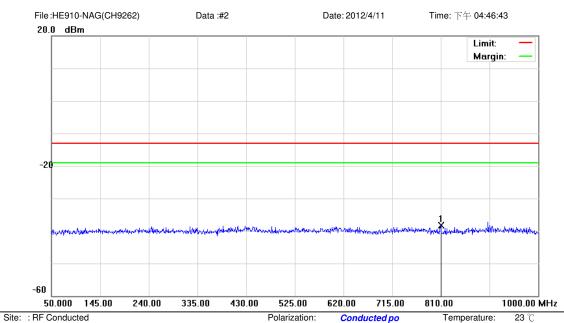
M/N: HE910-NAG

Mode: 7 Note: CH 9262

Polarization:	Conducted po	l emperature:	23
Power:	DC 3.8V	Humidity:	55.2 %

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
	MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1 *	2.5583	-60.50	12.83	-47.67	-13.00	-34.67	peak			

^{*:}Maximum data x:Over limit !:over margin



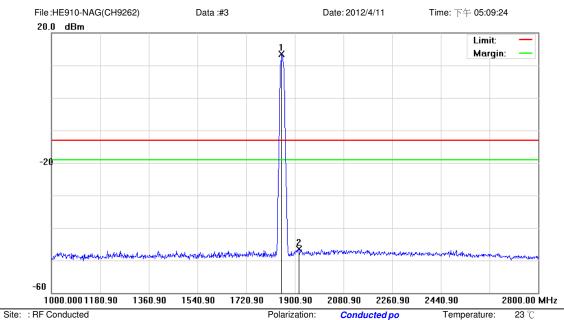
EUT: 2G/3.5G Module M/N: HE910-NAG

Mode: 7 Note: CH 9262

525.00	620.00	715.00	810.00	1000.00 MHz
Polarization	: Condu	ıcted po	Tempera	ture: 23 ℃
Power:	DC 3.8V		Humidity	: 55.2 %
Distance:			RBW: 10	00 KHz VBW: 1000 KHz

N	0.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
			MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
	1	*	809.5250	-51.37	13.17	-38.20	-13.00	-25.20	peak			

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 7 Note: CH 9262 Polarization: Conducted po DC 3.8V Power:

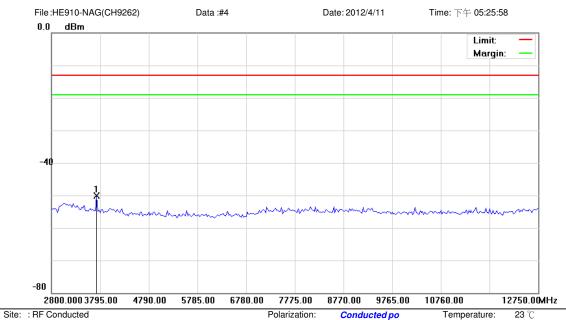
Distance:

23 ℃ Temperature: Humidity: 55.2 %

RBW: 1000 KHz VBW: 1000 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	1851.400	9.23	4.26	13.49	-13.00	26.49	peak			Tx
2		1913.500	-51.95	5.38	-46.57	-13.00	-33.57	peak			

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

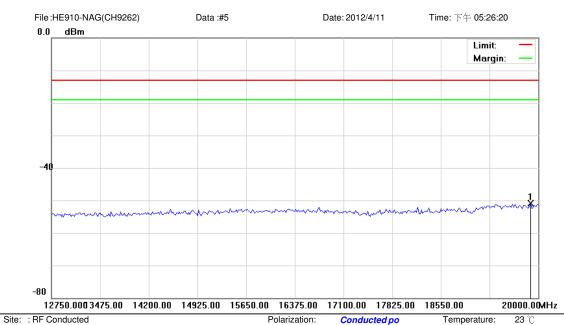
M/N: HE910-NAG Mode: 7

Note: CH 9262

23 ℃ Polarization: Conducted po Temperature: Power: DC 3.8V Humidity: 55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	3720.375	-55.04	4.88	-50.16	-13.00	-37.16	peak			

^{*:}Maximum data x:Over limit !:over margin



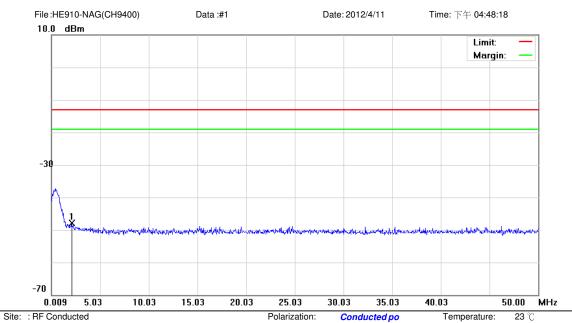
EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 7 Note: CH 9262 Polarization: Conducted po Temperature: 23
Power: DC 3.8V Humidity: 55.2 %

١	No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
			MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
	1	*	19891.250	-58.27	7.41	-50.86	-13.00	-37.86	peak			

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

M/N: HE910-NAG

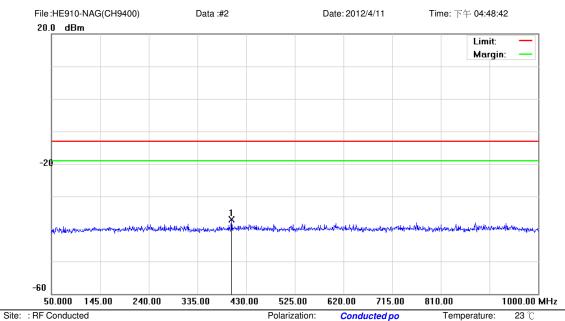
Mode: 7 Note: CH 9400

Polarization:	Conducted po	Temperature	23
Power:	DC 3.8V	Humidity:	55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2.0836	-61.01	13.17	-47.84	-13.00	-34.84	peak			

^{*:}Maximum data x:Over limit !:over margin





Limit: FCC Part 24 conducted(9k-12.75G)

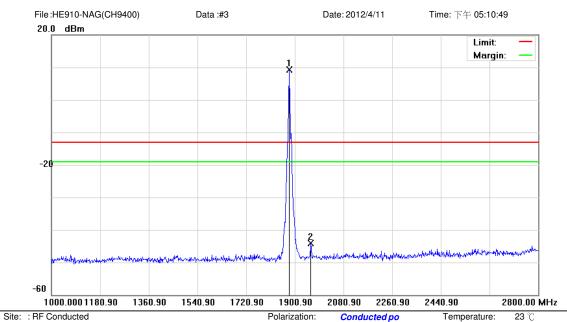
EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 7 Note: CH 9400 Polarization: Conducted po Temperature: DC 3.8V Humidity: 55.2 % Power:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	401.5000	-50.29	13.24	-37.05	-13.00	-24.05	peak			

^{*:}Maximum data x:Over limit !:over margin



Limit: FCC Part 24 conducted(9k-12.75G)

EUT: 2G/3.5G Module

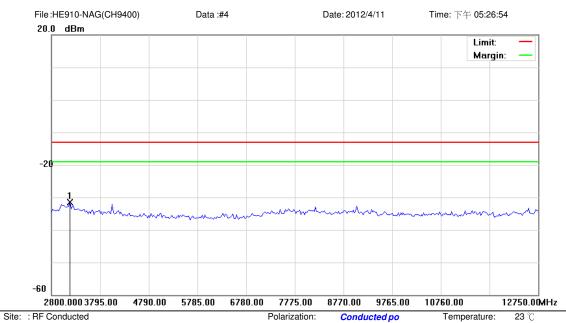
M/N: HE910-NAG

Mode: 7 Note: CH 9400

Polarization:	Conducted po	Temperature:	23
Power:	DC 3.8V	Humidity:	55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	1878.400	4.64	4.61	9.25	-13.00	22.25	peak			Tx
2		1959.400	-48.75	4.73	-44.02	-13.00	-31.02	peak			

^{*:}Maximum data x:Over limit !:over margin



Limit: FCC Part 24 conducted(9k-12.75G)

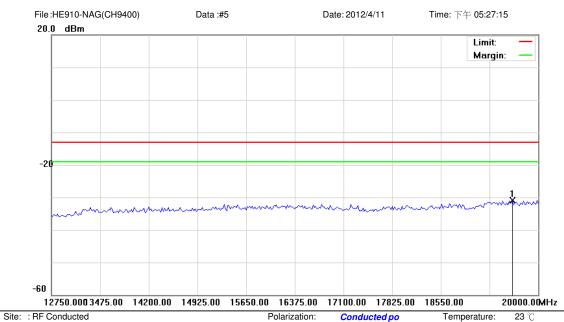
EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 7 Note: CH 9400 Polarization: Conducted po Temperature: Power: DC 3.8V Humidity: 55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	3173.125	-36.79	5.25	-31.54	-13.00	-18.54	peak			

^{*:}Maximum data x:Over limit !:over margin



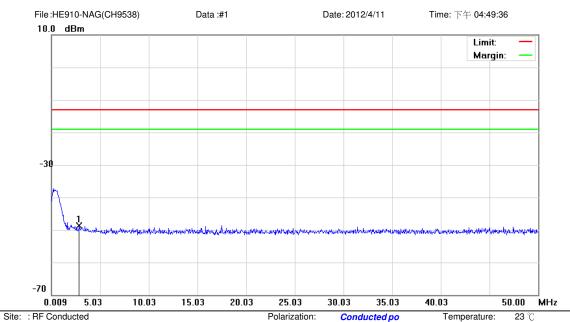
EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 7 Note: CH 9400 Polarization: Conducted po Temperature: 23
Power: DC 3.8V Humidity: 55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	19619.375	-38.27	7.33	-30.94	-13.00	-17.94	peak			

^{*:}Maximum data x:Over limit !:over margin



Limit: FCC Part 24 conducted(9k-12.75G)

EUT: 2G/3.5G Module

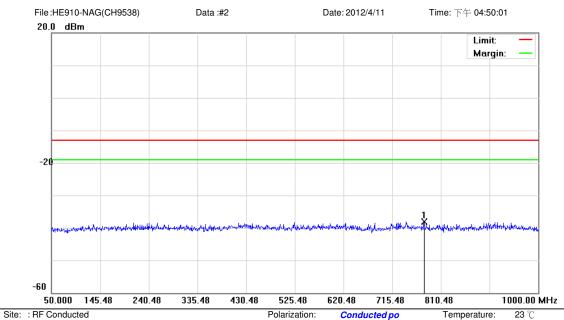
M/N: HE910-NAG

Mode: 7 Note: CH 9538

Polarization:	Conducted po	l emperature:	23
Power:	DC 3.8V	Humidity:	55.2 %

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
	MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1 *	2.8584	-61.52	12.92	-48.60	-13.00	-35.60	peak			

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

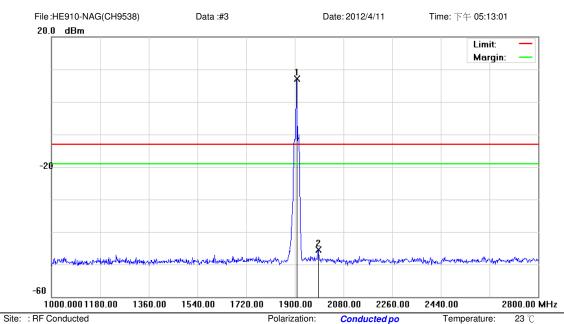
M/N: HE910-NAG

Mode: 7 Note: CH 9538

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48	525	48	620.	48	715	48	810	48	1000.00	MHz
-	Polariz			Conduc			0.0	Temperature		
	Power:		DC 3.8	3V				Humidity:	55.2 %	
	Distanc	ce:						RBW: 1000	KHz VBW:	1000 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	777.2250	-51.26	13.15	-38.11	-13.00	-25.11	peak			

^{*:}Maximum data x:Over limit !:over margin



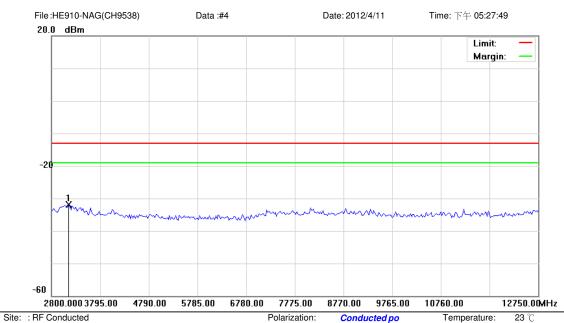
EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 7 Note: CH 9538 Polarization: Conducted po Temperature: 23
Power: DC 3.8V Humidity: 55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	1906.300	1.03	6.05	7.08	-13.00	20.08	peak			Tx
2		1986.400	-50.16	4.69	-45.47	-13.00	-32.47	peak			

^{*:}Maximum data x:Over limit !:over margin



Limit: FCC Part 24 conducted(9k-12.75G)

EUT: 2G/3.5G Module

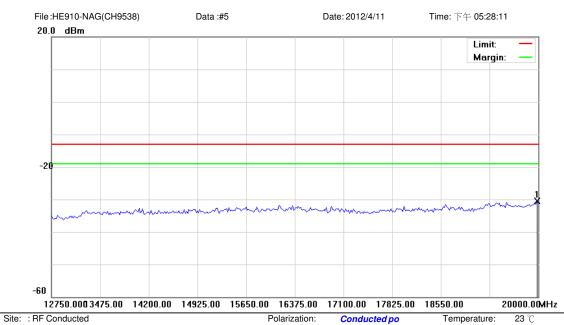
M/N: HE910-NAG Mode: 7

Note: CH 9538

Polarization	Conducted po	Temperature	: 23 ℃
Power:	DC 3.8V	Humidity:	55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	3148.250	-37.16	5.27	-31.89	-13.00	-18.89	peak			

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 7 Note: CH 9538

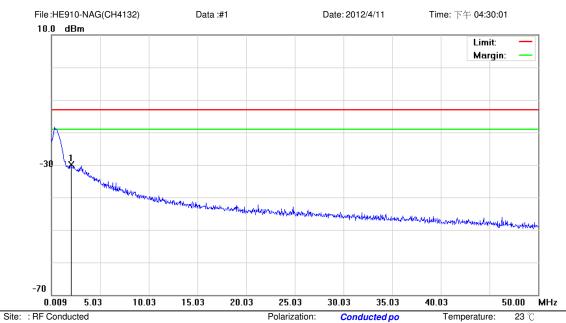
Conducted po Polarization: Power: DC 3.8V Humidity: 55.2 %

RBW: 1000 KHz VBW: 1000 KHz Distance:

N	lo.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
			MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
	1	*	19981.875	-38.02	7.43	-30.59	-13.00	-17.59	peak			

^{*:}Maximum data x:Over limit !:over margin





EUT: 2G/3.5G Module

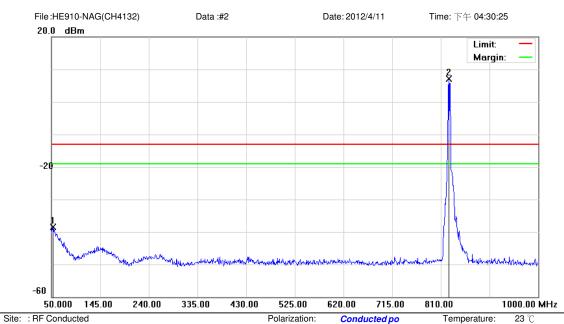
M/N: HE910-NAG

Mode: 8 Note: CH 4132 Polarization: Conducted po Temperature: DC 3.8V Humidity: 55.2 % Power:

RBW: 1000 KHz VBW: 1000 KHz Distance:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	1.9836	-61.25	31.33	-29.92	-13.00	-16.92	peak			

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

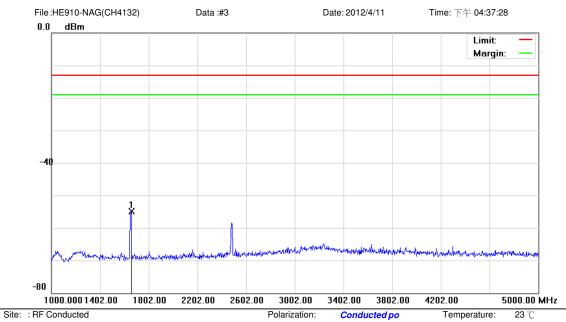
M/N: HE910-NAG

Mode: 8 Note: CH 4132

Polarization:	Conducted po	Temperature:	23 (
Power:	DC 3.8V	Humidity:	55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		52.3750	-52.86	14.27	-38.59	-13.00	-25.59	peak			
2	*	825.2000	3.31	3.84	7.15	-13.00	20.15	peak			Tx

^{*:}Maximum data x:Over limit !:over margin



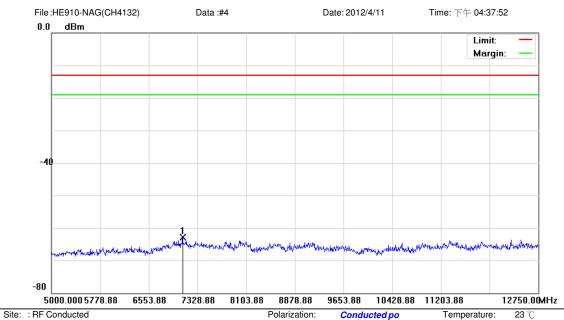
EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 8 Note: CH 4132 Polarization: Conducted po Temperature: 23
Power: DC 3.8V Humidity: 55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	1654.000	-59.42	4.45	-54.97	-13.00	-41.97	peak			

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module M/N: HE910-NAG

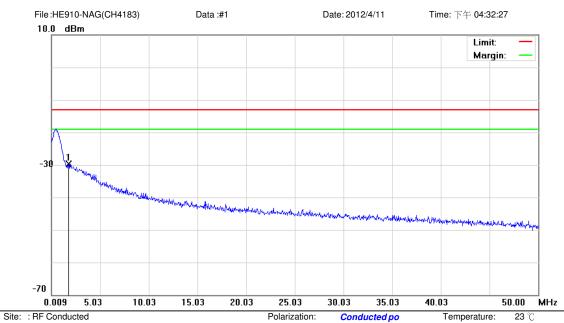
Mode: 8 Note: CH 4132

Conducted po Temperature: Power: DC 3.8V Humidity: 55.2 %

RBW: 1000 KHz VBW: 1000 KHz Distance:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	7088.625	-67.93	5.03	-62.90	-13.00	-49.90	peak			

^{*:}Maximum data x:Over limit !:over margin



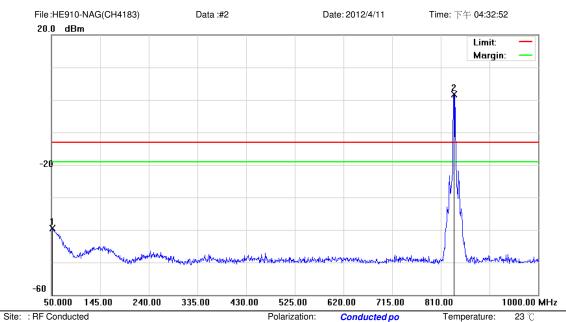
EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 8 Note: CH 4183 Polarization: Conducted po Temperature: 23
Power: DC 3.8V Humidity: 55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	1.7337	-60.68	31.02	-29.66	-13.00	-16.66	peak			

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

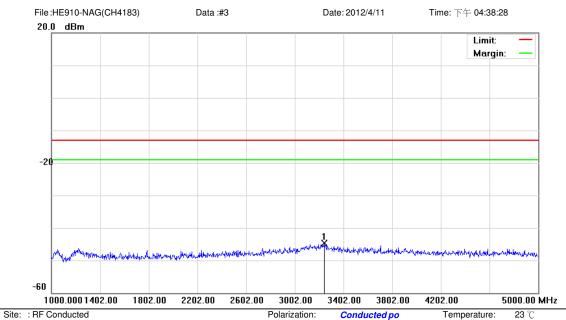
M/N: HE910-NAG Mode: 8 Note: CH 4183

Conducted po Temperature: DC 3.8V Humidity: 55.2 % Power:

RBW: 1000 KHz VBW: 1000 KHz Distance:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		51.4250	-53.89	14.44	-39.45	-13.00	-26.45	peak			
2	*	835.1750	-2.19	3.95	1.76	-13.00	14.76	peak			Tx

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

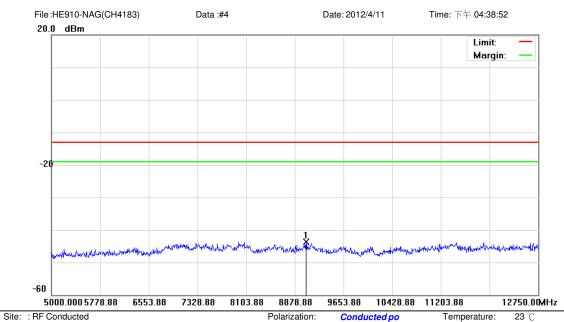
M/N: HE910-NAG

Mode: 8 Note: CH 4183

0	3002.00	3402.00	3802.00	4202.00	5000.00 MHz
	Polarization:	Conduc	cted po	Temperatu	ıre: 23 °C
	Power: [OC 3.8V		Humidity:	55.2 %
	Distance:			RBW: 100	0 KHz VBW: 1000 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	3242.000	-49.45	4.69	-44.76	-13.00	-31.76	peak			

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

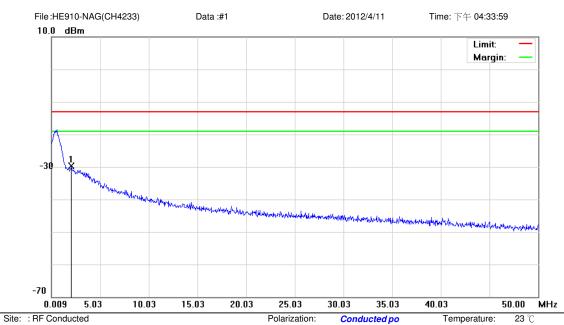
M/N: HE910-NAG

Mode: 8 Note: CH 4183

Polarization:	Conducted po	Temperature:	23
Power:	DC 3.8V	Humidity:	55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	9053.250	-49.01	5.41	-43.60	-13.00	-30.60	peak			

^{*:}Maximum data x:Over limit !:over margin



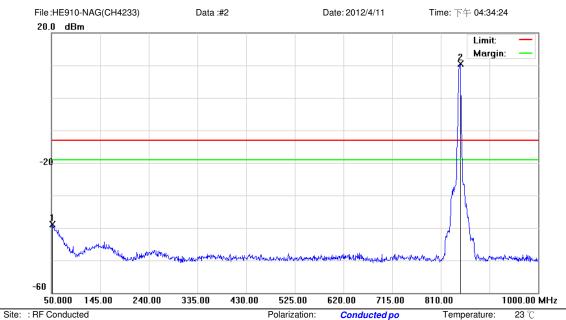
EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 8 Note: CH 4233 Power: DC 3.8V Humidity: 55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2.0586	-61.20	31.45	-29.75	-13.00	-16.75	peak			

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

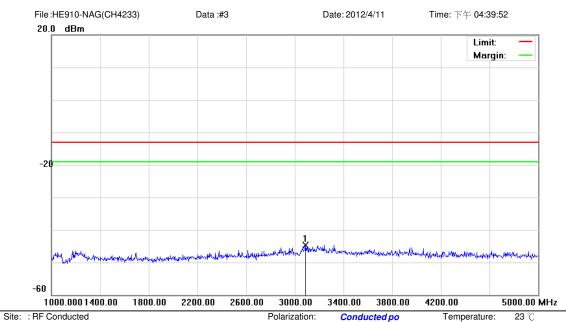
M/N: HE910-NAG Mode: 8 Note: CH 4233

Conducted po Temperature: DC 3.8V Humidity: 55.2 % Power:

RBW: 1000 KHz VBW: 1000 KHz Distance:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		51.4250	-53.32	14.44	-38.88	-13.00	-25.88	peak			
2	*	847.5250	6.43	3.98	10.41	-13.00	23.41	peak			Tx

^{*:}Maximum data x:Over limit !:over margin



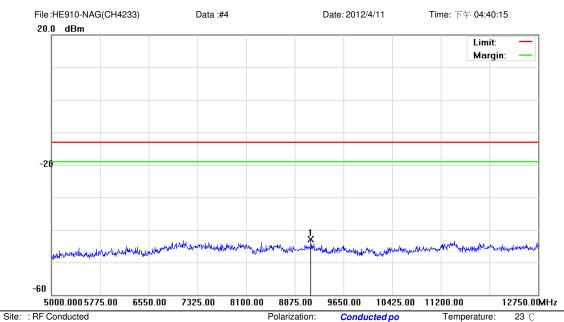
EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 8 Note: CH 4233 Polarization: Conducted po Temperature: 23
Power: DC 3.8V Humidity: 55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	3088.000	-49.19	4.50	-44.69	-13.00	-31.69	peak			

^{*:}Maximum data x:Over limit !:over margin



EUT: 2G/3.5G Module

M/N: HE910-NAG

Mode: 8 Note: CH 4233 Polarization: Conducted po Temperature: 23
Power: DC 3.8V Humidity: 55.2 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	9130.750	-48.78	5.85	-42.93	-13.00	-29.93	peak			

^{*:}Maximum data x:Over limit !:over margin

6 Field Strength of Spurious Radiation Test

6.1. Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10log(P) dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

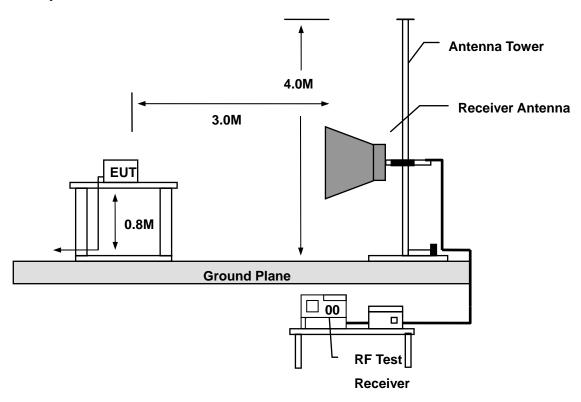
6.2. Test Instruments

	3 Meter Chamber											
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark							
RF Pre-selector	Agilent	N9039A	MY46520256	01/16/2012	(2)							
Spectrum Analyzer	Agilent	E4446A	MY46180578	01/16/2012	(1)							
Pre Amplifier	Agilent	8449B	3008A02237	02/22/2012	(1)							
Pre Amplifier	Agilent	8447D	2944A10961	02/22/2012	(1)							
Broadband Antenna (30MHz~1GHz)	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	9163-270	07/29/2011	(1)							
Horn Antenna (1~18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	06/29/2011	(1)							
Horn Antenna (18~40GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	06/28/2011	(1)							
Test Site	ATL	TE01	888001	12/20/2011	(1)							

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

6.3. Setup



6.4. Test Procedure

Final radiation measurements were made on a three-meter, Semi Anechoic Chamber. The EUT system was placed on a nonconductive turntable which is 0.8 meters height, top surface 1.0 x 1.5 meter. The spectrum was examined from 250 MHz to 2.5 GHz in order to cover the whole spectrum below 10th harmonic which could generate from the EUT. During the test, EUT was set to transmit continuously & Measurements spectrum range from 30 MHz to 26.5 GHz is investigated.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

A nonconductive material surrounded the EUT to supporting the EUT for standing on tree orthogonal planes. At each condition, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

SCHWARZBECK MESS-ELEKTRONIK Biconilog Antenna (mode VULB9163) at 3 Meter and the SCHWARZBECK Double Ridged Guide Antenna (model BBHA9120D&9170) was used in frequencies 1 – 26.5 GHz at a distance of 1 meter. All test results were extrapolated to equivalent signal at 3 meters utilizing an inverse linear distance extrapolation Factor (20dB/decade).

For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. No post – detector video filters were used in the test. The spectrum analyzer's 6 dB bandwidth was set to 1 MHz, and the analyzer was operated in the peak detection mode, for frequencies both below and up 1 GHz. The average levels were obtained by subtracting the duty cycle correction factor from the peak readings.

The following procedures were used to convert the emission levels measured in decibels referenced to 1 microvolt (dBuV) into field intensity in micro volts pre meter (uV/m).

The actual field intensity in decibels referenced to 1 microvolt in to field intensity in micro colts per meter (dBuV/m).

The actual field is intensity in referenced to 1 microvolt per meter (dBuV/m) is determined by algebraically adding the measured reading in dBuV, the antenna factor (dB), and cable loss (dB) and Subtracting the gain of preamplifier (dB) is auto calculate in spectrum analyzer.

(1) Amplitude (dBuV/m) = FI (dBuV) +AF (dBuV) +CL (dBuV)-Gain (dB)

FI= Reading of the field intensity.

AF= Antenna factor.

CL= Cable loss.

P.S Amplitude is auto calculate in spectrum analyzer.

(2) Actual Amplitude (dBuV/m) = Amplitude (dBuV)-Dis(dB)

The FCC specified emission limits were calculated according the EUT operating frequency and by following linear interpolation equations:

(a) For fundamental frequency: Transmitter Output < +30dBm

(b) For spurious frequency: Spurious emission limits = fundamental emission limit /10

6.5. Uncertainty

The measurement uncertainty is defined as for Field Strength of Spurious Radiation measurement is ± 3.072 dB.

6.6. Test Result

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}$C)/Hum.($^{\circ}$RH):} \qquad 23.0({^{\circ}$C})/55.2$^{\circ}RH

Mode: 1 Date: 04/12/2012

Frequency: 824.2 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
96.5000	-62.50	-1.16	-63.66	-13.00	-50.66	peak	Н
300.0000	-60.65	-2.36	-63.01	-13.00	-50.01	peak	Н
398.5000	-62.48	2.41	-60.07	-13.00	-47.07	peak	Н
587.0000	-71.54	7.72	-63.82	-13.00	-50.82	peak	Н
772.0000	-76.40	9.74	-66.66	-13.00	-53.66	peak	Н
940.0000	-75.84	14.86	-60.98	-13.00	-47.98	peak	Н
3088.000	-68.04	14.22	-53.82	-13.00	-40.82	peak	Н
5752.000	-70.96	22.37	-48.59	-13.00	-35.59	peak	Н
7960.000	-71.17	29.58	-41.59	-13.00	-28.59	peak	Н
131.5000	-68.34	13.57	-54.77	-13.00	-41.77	peak	V
215.0000	-63.15	7.11	-56.04	-13.00	-43.04	peak	V
399.0000	-55.92	1.35	-54.57	-13.00	-41.57	peak	V
587.0000	-68.01	6.46	-61.55	-13.00	-48.55	peak	V
720.0000	-76.52	10.86	-65.66	-13.00	-52.66	peak	V
972.0000	-77.31	12.46	-64.85	-13.00	-51.85	peak	V
3808.000	-69.39	20.18	-49.21	-13.00	-36.21	peak	V
5908.000	-72.06	22.88	-49.18	-13.00	-36.18	peak	V
7864.000	-71.74	26.39	-45.35	-13.00	-32.35	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 1 Date: 04/12/2012

Frequency: 836.4 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
96.5000	-62.72	-1.16	-63.88	-13.00	-50.88	peak	Н
215.0000	-55.54	0.06	-55.48	-13.00	-42.48	peak	Н
398.5000	-62.11	2.41	-59.70	-13.00	-46.70	peak	Н
558.5000	-70.60	7.83	-62.77	-13.00	-49.77	peak	Н
705.5000	-77.91	7.10	-70.81	-13.00	-57.81	peak	Н
970.0000	-79.10	14.58	-64.52	-13.00	-51.52	peak	Н
3544.000	-69.39	15.57	-53.82	-13.00	-40.82	peak	Н
5824.000	-71.18	22.57	-48.61	-13.00	-35.61	peak	Н
7888.000	-71.62	29.51	-42.11	-13.00	-29.11	peak	Н
131.5000	-70.19	13.57	-56.62	-13.00	-43.62	peak	V
215.0000	-61.99	7.11	-54.88	-13.00	-41.88	peak	V
399.0000	-56.16	1.35	-54.81	-13.00	-41.81	peak	V
530.0000	-65.53	3.68	-61.85	-13.00	-48.85	peak	V
673.0000	-75.10	9.50	-65.60	-13.00	-52.60	peak	V
933.5000	-77.85	12.45	-65.40	-13.00	-52.40	peak	V
3808.000	-69.16	20.18	-48.98	-13.00	-35.98	peak	V
5956.000	-71.14	22.82	-48.32	-13.00	-35.32	peak	V
7900.000	-71.54	26.38	-45.16	-13.00	-32.16	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 1 Date: 04/12/2012

Frequency: 848.8 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
120.0000	-61.05	-5.42	-66.47	-13.00	-53.47	peak	Н
220.0000	-62.74	-0.52	-63.26	-13.00	-50.26	peak	Н
398.5000	-61.96	2.41	-59.55	-13.00	-46.55	peak	Н
563.0000	-75.74	7.77	-67.97	-13.00	-54.97	peak	Н
799.5000	-72.28	11.22	-61.06	-13.00	-48.06	peak	Н
953.0000	-76.72	14.84	-61.88	-13.00	-48.88	peak	Н
2884.000	-68.74	13.53	-55.21	-13.00	-42.21	peak	Н
5452.000	-72.17	21.54	-50.63	-13.00	-37.63	peak	Н
7648.000	-71.44	29.32	-42.12	-13.00	-29.12	peak	Н
130.5000	-71.04	14.10	-56.94	-13.00	-43.94	peak	V
215.0000	-62.71	7.11	-55.60	-13.00	-42.60	peak	V
398.0000	-55.54	1.36	-54.18	-13.00	-41.18	peak	V
530.0000	-65.16	3.68	-61.48	-13.00	-48.48	peak	V
701.5000	-74.08	10.24	-63.84	-13.00	-50.84	peak	V
940.0000	-76.48	12.74	-63.74	-13.00	-50.74	peak	V
3580.000	-69.11	19.68	-49.43	-13.00	-36.43	peak	V
5920.000	-71.28	22.87	-48.41	-13.00	-35.41	peak	V
7876.000	-71.47	26.39	-45.08	-13.00	-32.08	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 2 Date: 04/12/2012

Frequency: 1850.2 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
96.5000	-63.59	-1.16	-64.75	-13.00	-51.75	peak	Н
215.0000	-59.42	0.06	-59.36	-13.00	-46.36	peak	Н
358.0000	-71.26	-0.02	-71.28	-13.00	-58.28	peak	Н
530.0000	-69.65	7.95	-61.70	-13.00	-48.70	peak	Н
687.0000	-77.67	6.99	-70.68	-13.00	-57.68	peak	Н
816.0000	-79.03	11.78	-67.25	-13.00	-54.25	peak	Н
3832.000	-68.62	16.12	-52.50	-13.00	-39.50	peak	Н
6160.000	-71.75	24.04	-47.71	-13.00	-34.71	peak	Н
7708.000	-70.77	29.36	-41.41	-13.00	-28.41	peak	Н
127.5000	-71.64	11.90	-59.74	-13.00	-46.74	peak	V
215.0000	-64.77	7.11	-57.66	-13.00	-44.66	peak	V
444.0000	-70.22	1.50	-68.72	-13.00	-55.72	peak	V
615.5000	-75.63	8.56	-67.07	-13.00	-54.07	peak	V
750.0000	-78.72	10.72	-68.00	-13.00	-55.00	peak	V
875.0000	-79.92	11.07	-68.85	-13.00	-55.85	peak	V
3640.000	-68.13	19.80	-48.33	-13.00	-35.33	peak	V
5668.000	-71.22	23.24	-47.98	-13.00	-34.98	peak	V
7552.000	-71.03	26.49	-44.54	-13.00	-31.54	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 2 Date: 04/12/2012

Frequency: 1880.0 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
96.5000	-64.22	-1.16	-65.38	-13.00	-52.38	peak	Н
214.5000	-59.70	0.12	-59.58	-13.00	-46.58	peak	Н
444.0000	-71.69	4.04	-67.65	-13.00	-54.65	peak	Н
644.5000	-74.26	6.90	-67.36	-13.00	-54.36	peak	Н
759.0000	-76.77	9.05	-67.72	-13.00	-54.72	peak	Н
896.0000	-80.21	13.89	-66.32	-13.00	-53.32	peak	Н
3112.000	-67.92	14.27	-53.65	-13.00	-40.65	peak	Н
5548.000	-71.66	21.81	-49.85	-13.00	-36.85	peak	Н
7408.000	-70.92	28.90	-42.02	-13.00	-29.02	peak	Н
130.5000	-70.99	14.10	-56.89	-13.00	-43.89	peak	V
231.5000	-71.25	1.93	-69.32	-13.00	-56.32	peak	V
399.5000	-55.24	1.33	-53.91	-13.00	-40.91	peak	V
558.5000	-66.69	4.35	-62.34	-13.00	-49.34	peak	V
750.0000	-78.08	10.72	-67.36	-13.00	-54.36	peak	V
864.0000	-79.89	11.46	-68.43	-13.00	-55.43	peak	V
3700.000	-69.56	19.93	-49.63	-13.00	-36.63	peak	V
6004.000	-71.05	22.77	-48.28	-13.00	-35.28	peak	V
7660.000	-71.36	26.45	-44.91	-13.00	-31.91	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 2 Date: 04/12/2012

Frequency: 1909.8 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
96.5000	-63.91	-1.16	-65.07	-13.00	-52.07	peak	Н
243.5000	-67.83	-2.83	-70.66	-13.00	-57.66	peak	Н
472.5000	-76.00	5.31	-70.69	-13.00	-57.69	peak	Н
615.5000	-74.91	7.75	-67.16	-13.00	-54.16	peak	Н
799.5000	-73.77	11.22	-62.55	-13.00	-49.55	peak	Н
971.5000	-79.03	14.55	-64.48	-13.00	-51.48	peak	Н
3436.000	-68.28	15.28	-53.00	-13.00	-40.00	peak	Н
5632.000	-71.06	22.05	-49.01	-13.00	-36.01	peak	Н
7372.000	-71.46	28.79	-42.67	-13.00	-29.67	peak	Н
131.0000	-72.16	13.83	-58.33	-13.00	-45.33	peak	V
200.0000	-67.41	10.15	-57.26	-13.00	-44.26	peak	V
300.5000	-65.03	2.67	-62.36	-13.00	-49.36	peak	V
495.0000	-71.55	2.66	-68.89	-13.00	-55.89	peak	V
673.0000	-74.77	9.50	-65.27	-13.00	-52.27	peak	V
898.5000	-78.81	10.61	-68.20	-13.00	-55.20	peak	V
3952.000	-68.66	20.49	-48.17	-13.00	-35.17	peak	V
6148.000	-71.04	23.38	-47.66	-13.00	-34.66	peak	V
7660.000	-71.64	26.45	-45.19	-13.00	-32.19	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 3 Date: 04/12/2012

Frequency: 824.2 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
96.5000	-62.51	-1.16	-63.67	-13.00	-50.67	peak	Н
215.0000	-55.38	0.06	-55.32	-13.00	-42.32	peak	Н
399.5000	-62.91	2.50	-60.41	-13.00	-47.41	peak	Н
558.5000	-70.35	7.83	-62.52	-13.00	-49.52	peak	Н
772.0000	-71.97	9.74	-62.23	-13.00	-49.23	peak	Н
967.5000	-79.24	14.64	-64.60	-13.00	-51.60	peak	Н
3532.000	-68.55	15.55	-53.00	-13.00	-40.00	peak	Н
5728.000	-71.99	22.31	-49.68	-13.00	-36.68	peak	Н
7900.000	-71.22	29.53	-41.69	-13.00	-28.69	peak	Н
131.0000	-70.17	13.83	-56.34	-13.00	-43.34	peak	V
215.0000	-63.06	7.11	-55.95	-13.00	-42.95	peak	V
399.0000	-54.98	1.35	-53.63	-13.00	-40.63	peak	V
530.0000	-64.63	3.68	-60.95	-13.00	-47.95	peak	V
701.5000	-77.43	10.24	-67.19	-13.00	-54.19	peak	V
928.5000	-78.77	12.24	-66.53	-13.00	-53.53	peak	V
3640.000	-69.10	19.80	-49.30	-13.00	-36.30	peak	V
5524.000	-71.73	23.45	-48.28	-13.00	-35.28	peak	V
7564.000	-71.80	26.49	-45.31	-13.00	-32.31	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 3 Date: 04/12/2012

Frequency: 836.4 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
96.0000	-62.23	-1.06	-63.29	-13.00	-50.29	peak	Н
215.0000	-55.40	0.06	-55.34	-13.00	-42.34	peak	Н
399.5000	-61.55	2.50	-59.05	-13.00	-46.05	peak	Н
530.0000	-69.92	7.95	-61.97	-13.00	-48.97	peak	Н
732.5000	-77.59	7.92	-69.67	-13.00	-56.67	peak	Н
940.5000	-77.60	14.86	-62.74	-13.00	-49.74	peak	Н
3376.000	-67.83	15.10	-52.73	-13.00	-39.73	peak	Н
5836.000	-71.14	22.60	-48.54	-13.00	-35.54	peak	Н
7828.000	-71.81	29.46	-42.35	-13.00	-29.35	peak	Н
132.5000	-68.58	13.02	-55.56	-13.00	-42.56	peak	V
215.0000	-62.73	7.11	-55.62	-13.00	-42.62	peak	V
400.0000	-55.96	1.33	-54.63	-13.00	-41.63	peak	V
530.0000	-64.38	3.68	-60.70	-13.00	-47.70	peak	V
720.5000	-76.44	10.85	-65.59	-13.00	-52.59	peak	V
940.5000	-75.65	12.73	-62.92	-13.00	-49.92	peak	V
2932.000	-69.20	15.87	-53.33	-13.00	-40.33	peak	V
4732.000	-70.95	22.76	-48.19	-13.00	-35.19	peak	V
7168.000	-70.84	25.84	-45.00	-13.00	-32.00	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 3 Date: 04/12/2012

Frequency: 848.8 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
130.5000	-62.44	-4.79	-67.23	-13.00	-54.23	peak	Н
243.5000	-67.38	-2.83	-70.21	-13.00	-57.21	peak	Н
412.0000	-70.94	3.07	-67.87	-13.00	-54.87	peak	Н
644.5000	-74.48	6.90	-67.58	-13.00	-54.58	peak	Н
775.5000	-78.68	9.94	-68.74	-13.00	-55.74	peak	Н
952.5000	-77.11	14.83	-62.28	-13.00	-49.28	peak	Н
3580.000	-68.04	15.64	-52.40	-13.00	-39.40	peak	Н
5932.000	-70.08	22.87	-47.21	-13.00	-34.21	peak	Н
7780.000	-69.92	29.43	-40.49	-13.00	-27.49	peak	Н
130.0000	-70.12	14.37	-55.75	-13.00	-42.75	peak	V
300.0000	-60.86	2.71	-58.15	-13.00	-45.15	peak	V
400.0000	-56.00	1.33	-54.67	-13.00	-41.67	peak	V
558.5000	-66.14	4.35	-61.79	-13.00	-48.79	peak	V
774.5000	-74.70	11.20	-63.50	-13.00	-50.50	peak	V
952.0000	-75.02	12.53	-62.49	-13.00	-49.49	peak	V
3724.000	-69.57	20.00	-49.57	-13.00	-36.57	peak	V
6052.000	-71.85	22.97	-48.88	-13.00	-35.88	peak	V
7744.000	-71.45	26.43	-45.02	-13.00	-32.02	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 4 Date: 04/12/2012

Frequency: 1850.2 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
120.0000	-64.69	-5.42	-70.11	-13.00	-57.11	peak	Н
215.0000	-58.62	0.06	-58.56	-13.00	-45.56	peak	Н
398.5000	-63.08	2.41	-60.67	-13.00	-47.67	peak	Н
597.5000	-74.87	7.90	-66.97	-13.00	-53.97	peak	Н
771.5000	-80.29	9.72	-70.57	-13.00	-57.57	peak	Н
896.0000	-77.56	13.89	-63.67	-13.00	-50.67	peak	Н
3520.000	-68.61	15.54	-53.07	-13.00	-40.07	peak	Н
5440.000	-70.89	21.50	-49.39	-13.00	-36.39	peak	Н
7744.000	-71.37	29.40	-41.97	-13.00	-28.97	peak	Н
130.5000	-69.79	14.10	-55.69	-13.00	-42.69	peak	V
289.5000	-66.61	1.77	-64.84	-13.00	-51.84	peak	V
400.0000	-56.10	1.33	-54.77	-13.00	-41.77	peak	V
615.5000	-75.03	8.56	-66.47	-13.00	-53.47	peak	V
744.0000	-78.57	10.59	-67.98	-13.00	-54.98	peak	V
933.5000	-79.97	12.45	-67.52	-13.00	-54.52	peak	V
3604.000	-69.05	19.73	-49.32	-13.00	-36.32	peak	V
5872.000	-71.25	22.93	-48.32	-13.00	-35.32	peak	V
7480.000	-71.75	26.47	-45.28	-13.00	-32.28	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 4 Date: 04/12/2012

Frequency: 1880.0 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
96.5000	-63.50	-1.16	-64.66	-13.00	-51.66	peak	Н
215.0000	-58.97	0.06	-58.91	-13.00	-45.91	peak	Н
398.5000	-61.47	2.41	-59.06	-13.00	-46.06	peak	Н
558.5000	-70.38	7.83	-62.55	-13.00	-49.55	peak	Н
726.5000	-79.38	7.72	-71.66	-13.00	-58.66	peak	Н
854.5000	-80.57	12.77	-67.80	-13.00	-54.80	peak	Н
3592.000	-67.95	15.67	-52.28	-13.00	-39.28	peak	Н
5872.000	-70.93	22.70	-48.23	-13.00	-35.23	peak	Н
7660.000	-71.03	29.33	-41.70	-13.00	-28.70	peak	Н
132.5000	-71.22	13.02	-58.20	-13.00	-45.20	peak	V
200.0000	-67.35	10.15	-57.20	-13.00	-44.20	peak	V
300.0000	-65.92	2.71	-63.21	-13.00	-50.21	peak	V
501.0000	-67.33	2.75	-64.58	-13.00	-51.58	peak	V
701.5000	-77.23	10.24	-66.99	-13.00	-53.99	peak	V
854.5000	-80.15	11.54	-68.61	-13.00	-55.61	peak	V
3496.000	-69.10	19.49	-49.61	-13.00	-36.61	peak	V
5536.000	-70.81	23.44	-47.37	-13.00	-34.37	peak	V
7492.000	-71.30	26.48	-44.82	-13.00	-31.82	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 4 Date: 04/12/2012

Frequency: 1909.8 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
96.5000	-63.93	-1.16	-65.09	-13.00	-52.09	peak	Н
284.0000	-67.17	-3.94	-71.11	-13.00	-58.11	peak	Н
444.0000	-72.46	4.04	-68.42	-13.00	-55.42	peak	Н
644.5000	-74.47	6.90	-67.57	-13.00	-54.57	peak	Н
796.5000	-70.80	11.06	-59.74	-13.00	-46.74	peak	Н
951.0000	-79.19	14.85	-64.34	-13.00	-51.34	peak	Н
4036.000	-68.84	16.49	-52.35	-13.00	-39.35	peak	Н
6160.000	-71.65	24.04	-47.61	-13.00	-34.61	peak	Н
7876.000	-71.74	29.51	-42.23	-13.00	-29.23	peak	Н
132.0000	-71.71	13.29	-58.42	-13.00	-45.42	peak	V
215.0000	-64.27	7.11	-57.16	-13.00	-44.16	peak	V
398.5000	-55.56	1.34	-54.22	-13.00	-41.22	peak	V
530.0000	-64.72	3.68	-61.04	-13.00	-48.04	peak	V
781.0000	-73.56	11.31	-62.25	-13.00	-49.25	peak	V
943.0000	-78.55	12.68	-65.87	-13.00	-52.87	peak	V
3616.000	-69.00	19.77	-49.23	-13.00	-36.23	peak	V
5728.000	-70.82	23.16	-47.66	-13.00	-34.66	peak	V
7576.000	-71.37	26.47	-44.90	-13.00	-31.90	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 5 Date: 04/12/2012

Frequency: 824.2 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
96.5000	-62.06	-1.16	-63.22	-13.00	-50.22	peak	Н
186.0000	-64.84	-6.49	-71.33	-13.00	-58.33	peak	Н
399.0000	-63.28	2.46	-60.82	-13.00	-47.82	peak	Н
599.5000	-73.01	7.94	-65.07	-13.00	-52.07	peak	Н
746.0000	-77.25	8.47	-68.78	-13.00	-55.78	peak	Н
933.5000	-79.35	14.82	-64.53	-13.00	-51.53	peak	Н
2968.000	-67.99	13.82	-54.17	-13.00	-41.17	peak	Н
5320.000	-71.88	21.12	-50.76	-13.00	-37.76	peak	Н
7804.000	-71.81	29.44	-42.37	-13.00	-29.37	peak	Н
131.5000	-69.51	13.57	-55.94	-13.00	-42.94	peak	V
200.0000	-66.50	10.15	-56.35	-13.00	-43.35	peak	V
400.0000	-55.60	1.33	-54.27	-13.00	-41.27	peak	V
530.0000	-64.97	3.68	-61.29	-13.00	-48.29	peak	V
717.5000	-76.18	10.78	-65.40	-13.00	-52.40	peak	V
912.0000	-79.73	11.36	-68.37	-13.00	-55.37	peak	V
3628.000	-69.30	19.78	-49.52	-13.00	-36.52	peak	V
5716.000	-71.44	23.17	-48.27	-13.00	-35.27	peak	V
7612.000	-71.39	26.47	-44.92	-13.00	-31.92	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 5 Date: 04/12/2012

Frequency: 836.4 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
96.0000	-62.65	-1.06	-63.71	-13.00	-50.71	peak	Н
215.0000	-55.70	0.06	-55.64	-13.00	-42.64	peak	Н
398.5000	-61.55	2.41	-59.14	-13.00	-46.14	peak	Н
558.5000	-70.39	7.83	-62.56	-13.00	-49.56	peak	Н
737.0000	-77.87	8.09	-69.78	-13.00	-56.78	peak	Н
940.5000	-78.01	14.86	-63.15	-13.00	-50.15	peak	Н
3604.000	-68.21	15.69	-52.52	-13.00	-39.52	peak	Н
5920.000	-71.21	22.83	-48.38	-13.00	-35.38	peak	Н
7744.000	-71.38	29.40	-41.98	-13.00	-28.98	peak	Н
130.5000	-70.49	14.10	-56.39	-13.00	-43.39	peak	V
200.0000	-66.37	10.15	-56.22	-13.00	-43.22	peak	V
329.5000	-68.57	1.11	-67.46	-13.00	-54.46	peak	V
399.5000	-55.03	1.33	-53.70	-13.00	-40.70	peak	V
587.0000	-69.00	6.46	-62.54	-13.00	-49.54	peak	V
923.5000	-79.54	12.02	-67.52	-13.00	-54.52	peak	V
3436.000	-68.27	19.11	-49.16	-13.00	-36.16	peak	V
5644.000	-71.45	23.28	-48.17	-13.00	-35.17	peak	V
7696.000	-71.64	26.45	-45.19	-13.00	-32.19	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 5 Date: 04/12/2012

Frequency: 848.8 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
96.5000	-62.54	-1.16	-63.70	-13.00	-50.70	peak	Н
215.0000	-55.72	0.06	-55.66	-13.00	-42.66	peak	Н
399.5000	-61.28	2.50	-58.78	-13.00	-45.78	peak	Н
587.0000	-71.06	7.72	-63.34	-13.00	-50.34	peak	Н
745.0000	-74.92	8.42	-66.50	-13.00	-53.50	peak	Н
953.0000	-79.15	14.84	-64.31	-13.00	-51.31	peak	Н
2548.000	-65.21	12.36	-52.85	-13.00	-39.85	peak	Н
5236.000	-71.01	20.85	-50.16	-13.00	-37.16	peak	Н
7612.000	-71.04	29.30	-41.74	-13.00	-28.74	peak	Н
130.5000	-69.17	14.10	-55.07	-13.00	-42.07	peak	V
215.0000	-62.66	7.11	-55.55	-13.00	-42.55	peak	V
399.5000	-55.55	1.33	-54.22	-13.00	-41.22	peak	V
558.5000	-66.66	4.35	-62.31	-13.00	-49.31	peak	V
744.0000	-78.65	10.59	-68.06	-13.00	-55.06	peak	V
949.0000	-78.46	12.57	-65.89	-13.00	-52.89	peak	V
3316.000	-68.64	18.38	-50.26	-13.00	-37.26	peak	V
5536.000	-71.32	23.44	-47.88	-13.00	-34.88	peak	V
7720.000	-71.55	26.43	-45.12	-13.00	-32.12	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 6 Date: 04/12/2012

Frequency: 1850.2 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
96.5000	-64.02	-1.16	-65.18	-13.00	-52.18	peak	Н
216.0000	-66.51	-0.05	-66.56	-13.00	-53.56	peak	Н
399.5000	-61.95	2.50	-59.45	-13.00	-46.45	peak	Н
530.0000	-69.17	7.95	-61.22	-13.00	-48.22	peak	Н
684.5000	-75.30	7.01	-68.29	-13.00	-55.29	peak	Н
864.0000	-80.26	13.05	-67.21	-13.00	-54.21	peak	Н
3448.000	-67.66	15.33	-52.33	-13.00	-39.33	peak	Н
5656.000	-71.30	22.11	-49.19	-13.00	-36.19	peak	Н
7636.000	-71.37	29.31	-42.06	-13.00	-29.06	peak	Н
131.5000	-70.87	13.57	-57.30	-13.00	-44.30	peak	V
200.0000	-66.35	10.15	-56.20	-13.00	-43.20	peak	V
398.0000	-54.82	1.36	-53.46	-13.00	-40.46	peak	V
558.5000	-66.94	4.35	-62.59	-13.00	-49.59	peak	V
687.5000	-74.98	9.80	-65.18	-13.00	-52.18	peak	V
840.0000	-79.58	11.35	-68.23	-13.00	-55.23	peak	V
3004.000	-66.22	16.44	-49.78	-13.00	-36.78	peak	V
5404.000	-70.11	23.49	-46.62	-13.00	-33.62	peak	V
7396.000	-71.39	26.30	-45.09	-13.00	-32.09	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 6 Date: 04/12/2012

Frequency: 1880.0 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
96.5000	-63.05	-1.16	-64.21	-13.00	-51.21	peak	Н
215.0000	-58.25	0.06	-58.19	-13.00	-45.19	peak	Н
399.5000	-61.63	2.50	-59.13	-13.00	-46.13	peak	Н
530.0000	-69.22	7.95	-61.27	-13.00	-48.27	peak	Н
701.5000	-79.69	6.99	-72.70	-13.00	-59.70	peak	Н
880.5000	-80.52	13.23	-67.29	-13.00	-54.29	peak	Н
3472.000	-67.93	15.41	-52.52	-13.00	-39.52	peak	Н
5872.000	-71.00	22.70	-48.30	-13.00	-35.30	peak	Н
7492.000	-72.67	29.17	-43.50	-13.00	-30.50	peak	Н
130.5000	-70.93	14.10	-56.83	-13.00	-43.83	peak	V
215.0000	-65.15	7.11	-58.04	-13.00	-45.04	peak	V
398.5000	-55.20	1.34	-53.86	-13.00	-40.86	peak	V
530.0000	-64.90	3.68	-61.22	-13.00	-48.22	peak	V
701.5000	-77.53	10.24	-67.29	-13.00	-54.29	peak	V
864.0000	-80.41	11.46	-68.95	-13.00	-55.95	peak	V
3292.000	-68.52	18.23	-50.29	-13.00	-37.29	peak	V
5620.000	-70.52	23.30	-47.22	-13.00	-34.22	peak	V
7348.000	-71.92	26.20	-45.72	-13.00	-32.72	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 6 Date: 04/12/2012

Frequency: 1909.8 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
96.0000	-64.29	-1.06	-65.35	-13.00	-52.35	peak	Н
215.0000	-58.19	0.06	-58.13	-13.00	-45.13	peak	Н
398.5000	-62.78	2.41	-60.37	-13.00	-47.37	peak	Н
558.5000	-70.06	7.83	-62.23	-13.00	-49.23	peak	Н
719.0000	-79.62	7.47	-72.15	-13.00	-59.15	peak	Н
896.0000	-77.22	13.89	-63.33	-13.00	-50.33	peak	Н
3652.000	-68.44	15.78	-52.66	-13.00	-39.66	peak	Н
6172.000	-70.90	24.12	-46.78	-13.00	-33.78	peak	Н
7696.000	-70.93	29.37	-41.56	-13.00	-28.56	peak	Н
130.0000	-72.08	14.37	-57.71	-13.00	-44.71	peak	V
215.0000	-64.06	7.11	-56.95	-13.00	-43.95	peak	V
399.5000	-54.65	1.33	-53.32	-13.00	-40.32	peak	V
558.5000	-65.69	4.35	-61.34	-13.00	-48.34	peak	V
799.5000	-72.00	11.86	-60.14	-13.00	-47.14	peak	V
916.5000	-79.96	11.65	-68.31	-13.00	-55.31	peak	V
3544.000	-68.80	19.60	-49.20	-13.00	-36.20	peak	V
5500.000	-70.68	23.49	-47.19	-13.00	-34.19	peak	V
7420.000	-72.14	26.34	-45.80	-13.00	-32.80	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 7 Date: 04/12/2012

Frequency: 1852.4 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
96.5000	-63.58	-1.16	-64.74	-13.00	-51.74	peak	Н
214.5000	-57.95	0.12	-57.83	-13.00	-44.83	peak	Н
398.0000	-63.60	2.37	-61.23	-13.00	-48.23	peak	Н
587.0000	-73.41	7.72	-65.69	-13.00	-52.69	peak	Н
768.0000	-79.82	9.54	-70.28	-13.00	-57.28	peak	Н
899.5000	-79.19	14.04	-65.15	-13.00	-52.15	peak	Н
3460.000	-69.50	15.36	-54.14	-13.00	-41.14	peak	Н
5836.000	-71.07	22.60	-48.47	-13.00	-35.47	peak	Н
7924.000	-72.24	29.55	-42.69	-13.00	-29.69	peak	Н
130.5000	-71.67	14.09	-57.58	-13.00	-44.58	peak	V
200.0000	-66.81	10.15	-56.66	-13.00	-43.66	peak	V
399.5000	-56.05	1.33	-54.72	-13.00	-41.72	peak	V
587.0000	-69.22	6.46	-62.76	-13.00	-49.76	peak	V
796.5000	-72.42	11.77	-60.65	-13.00	-47.65	peak	V
924.0000	-80.30	12.04	-68.26	-13.00	-55.26	peak	V
3532.000	-68.54	19.58	-48.96	-13.00	-35.96	peak	V
5656.000	-71.18	23.26	-47.92	-13.00	-34.92	peak	V
7612.000	-71.15	26.47	-44.68	-13.00	-31.68	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 7 Date: 04/12/2012

Frequency: 1880.0 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
96.5000	-64.14	-1.16	-65.30	-13.00	-52.30	peak	Н
215.0000	-58.62	0.06	-58.56	-13.00	-45.56	peak	Н
398.5000	-60.62	2.41	-58.21	-13.00	-45.21	peak	Н
558.5000	-70.96	7.83	-63.13	-13.00	-50.13	peak	Н
730.0000	-79.13	7.85	-71.28	-13.00	-58.28	peak	Н
898.5000	-79.96	13.99	-65.97	-13.00	-52.97	peak	Н
3496.000	-68.95	15.49	-53.46	-13.00	-40.46	peak	Н
5764.000	-71.15	22.41	-48.74	-13.00	-35.74	peak	Н
7612.000	-71.52	29.30	-42.22	-13.00	-29.22	peak	Н
131.0000	-71.74	13.83	-57.91	-13.00	-44.91	peak	V
215.0000	-65.07	7.11	-57.96	-13.00	-44.96	peak	V
399.5000	-54.59	1.33	-53.26	-13.00	-40.26	peak	V
530.0000	-65.51	3.68	-61.83	-13.00	-48.83	peak	V
709.0000	-76.65	10.49	-66.16	-13.00	-53.16	peak	V
899.5000	-78.40	10.60	-67.80	-13.00	-54.80	peak	V
3652.000	-69.08	19.84	-49.24	-13.00	-36.24	peak	V
5644.000	-71.70	23.28	-48.42	-13.00	-35.42	peak	V
7540.000	-71.89	26.49	-45.40	-13.00	-32.40	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 7 Date: 04/12/2012

Frequency: 1907.6 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
96.5000	-63.02	-1.16	-64.18	-13.00	-51.18	peak	Н
215.0000	-58.79	0.06	-58.73	-13.00	-45.73	peak	Н
386.5000	-68.87	1.35	-67.52	-13.00	-54.52	peak	Н
500.0000	-71.50	6.97	-64.53	-13.00	-51.53	peak	Н
710.0000	-77.76	7.22	-70.54	-13.00	-57.54	peak	Н
840.0000	-76.64	12.10	-64.54	-13.00	-51.54	peak	Н
3616.000	-68.53	15.72	-52.81	-13.00	-39.81	peak	Н
6040.000	-71.32	23.30	-48.02	-13.00	-35.02	peak	Н
7876.000	-71.03	29.51	-41.52	-13.00	-28.52	peak	Н
131.5000	-70.47	13.56	-56.91	-13.00	-43.91	peak	V
200.0000	-67.04	10.15	-56.89	-13.00	-43.89	peak	V
340.0000	-71.63	1.19	-70.44	-13.00	-57.44	peak	V
444.0000	-71.20	1.50	-69.70	-13.00	-56.70	peak	V
673.0000	-74.44	9.50	-64.94	-13.00	-51.94	peak	V
875.0000	-79.21	11.07	-68.14	-13.00	-55.14	peak	V
3808.000	-69.77	20.18	-49.59	-13.00	-36.59	peak	V
5848.000	-71.37	22.98	-48.39	-13.00	-35.39	peak	V
7564.000	-71.32	26.49	-44.83	-13.00	-31.83	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 8 Date: 04/12/2012

Frequency: 826.4 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
96.5000	-63.96	-1.16	-65.12	-13.00	-52.12	peak	Н
215.0000	-58.81	0.06	-58.75	-13.00	-45.75	peak	Н
398.5000	-62.77	2.41	-60.36	-13.00	-47.36	peak	Н
558.5000	-70.50	7.83	-62.67	-13.00	-49.67	peak	Н
730.0000	-79.98	7.85	-72.13	-13.00	-59.13	peak	Н
940.0000	-78.82	14.86	-63.96	-13.00	-50.96	peak	Н
3796.000	-68.81	16.05	-52.76	-13.00	-39.76	peak	Н
5980.000	-71.75	23.00	-48.75	-13.00	-35.75	peak	Н
7780.000	-70.38	29.43	-40.95	-13.00	-27.95	peak	Н
131.0000	-71.55	13.83	-57.72	-13.00	-44.72	peak	V
220.0000	-69.11	5.29	-63.82	-13.00	-50.82	peak	V
398.5000	-55.81	1.34	-54.47	-13.00	-41.47	peak	V
558.5000	-67.22	4.35	-62.87	-13.00	-49.87	peak	V
730.0000	-76.35	10.68	-65.67	-13.00	-52.67	peak	V
939.5000	-80.35	12.72	-67.63	-13.00	-54.63	peak	V
3004.000	-67.11	16.44	-50.67	-13.00	-37.67	peak	V
5476.000	-72.04	23.49	-48.55	-13.00	-35.55	peak	V
7660.000	-71.15	26.45	-44.70	-13.00	-31.70	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 8 Date: 04/12/2012

Frequency: 836.4 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
96.5000	-63.15	-1.16	-64.31	-13.00	-51.31	peak	Н
215.0000	-58.21	0.06	-58.15	-13.00	-45.15	peak	Н
444.0000	-73.00	4.04	-68.96	-13.00	-55.96	peak	Н
597.5000	-75.11	7.90	-67.21	-13.00	-54.21	peak	Н
756.0000	-79.16	8.91	-70.25	-13.00	-57.25	peak	Н
952.0000	-80.76	14.85	-65.91	-13.00	-52.91	peak	Н
3652.000	-68.70	15.78	-52.92	-13.00	-39.92	peak	Н
6124.000	-71.37	23.82	-47.55	-13.00	-34.55	peak	Н
7864.000	-70.96	29.50	-41.46	-13.00	-28.46	peak	Н
131.5000	-69.58	13.57	-56.01	-13.00	-43.01	peak	V
215.0000	-64.12	7.11	-57.01	-13.00	-44.01	peak	V
399.5000	-55.56	1.33	-54.23	-13.00	-41.23	peak	V
530.0000	-65.62	3.68	-61.94	-13.00	-48.94	peak	V
701.5000	-77.15	10.24	-66.91	-13.00	-53.91	peak	V
939.5000	-80.22	12.72	-67.50	-13.00	-54.50	peak	V
3496.000	-68.35	19.49	-48.86	-13.00	-35.86	peak	V
5656.000	-71.09	23.26	-47.83	-13.00	-34.83	peak	V
7504.000	-71.39	26.50	-44.89	-13.00	-31.89	peak	V

Standard: FCC Part 22 Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \qquad \mbox{HE910-NAG} \qquad \mbox{Temp.($^{\circ}_{\mathbb{C}}$)/Hum.($^{\circ}_{\mathbb{C}}$)} \mbox{23.0($^{\circ}_{\mathbb{C}}$)/55.2$$$ RH}$

Mode: 8 Date: 04/12/2012

Frequency: 846.4 MHz Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
157.5000	-66.35	0.67	-65.68	-13.00	-52.68	peak	Н
300.0000	-63.78	-2.36	-66.14	-13.00	-53.14	peak	Н
444.0000	-71.47	4.04	-67.43	-13.00	-54.43	peak	Н
558.5000	-70.49	7.83	-62.66	-13.00	-49.66	peak	Н
730.0000	-78.68	7.85	-70.83	-13.00	-57.83	peak	Н
958.0000	-79.82	14.83	-64.99	-13.00	-51.99	peak	Н
3508.000	-69.23	15.50	-53.73	-13.00	-40.73	peak	Н
6040.000	-71.52	23.30	-48.22	-13.00	-35.22	peak	Н
7876.000	-71.83	29.51	-42.32	-13.00	-29.32	peak	Н
130.5000	-72.46	14.10	-58.36	-13.00	-45.36	peak	V
215.0000	-64.91	7.11	-57.80	-13.00	-44.80	peak	V
398.5000	-55.00	1.34	-53.66	-13.00	-40.66	peak	V
615.5000	-74.61	8.56	-66.05	-13.00	-53.05	peak	V
730.0000	-77.64	10.68	-66.96	-13.00	-53.96	peak	V
952.0000	-78.54	12.53	-66.01	-13.00	-53.01	peak	V
3892.000	-68.81	20.36	-48.45	-13.00	-35.45	peak	V
6220.000	-71.83	23.69	-48.14	-13.00	-35.14	peak	V
8008.000	-71.74	26.34	-45.40	-13.00	-32.40	peak	V

Standard: RSS-Gen Test Distance: 3m

Test item: Radiated Emission Power: DC 3.8V

 $\label{eq:model_Number:} \mbox{Model Number:} \mbox{ HE910-NAG} \mbox{ Temp.($^{\circ}$C)/Hum.($^{\circ}$RH):} \mbox{ 23.0($^{\circ}$C)/55.2$^{\circ}$RH}$

Mode: 9 Date: 04/12/2012

Test By: Fly Lu

Frequency	Reading	Correct Factor	Result	Limit	Margin	Remark	Ant.Polar.
(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		H/V
2750.000	39.00	1.32	40.32	74.00	-33.68	peak	Н
4598.000	36.30	7.26	43.56	74.00	-30.44	peak	Н
5739.000	36.00	10.40	46.40	74.00	-27.60	peak	Н
2799.000	41.72	1.49	43.21	74.00	-30.79	peak	V
4416.000	37.45	6.67	44.12	74.00	-29.88	peak	V
5977.000	35.44	10.82	46.26	74.00	-27.74	peak	V

7 Frequency Stability (Temperature Variation) Test

7.1. Limit

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5ppm) of the center frequency.

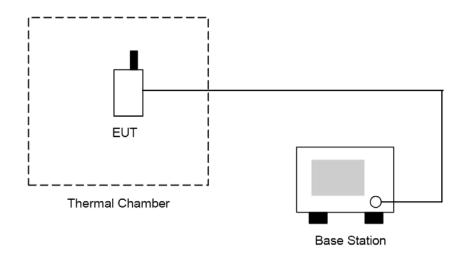
7.2. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Universal Radio Communication Tester	ROHDE & SCHWARZ	CMU200	109369	08/10/2010	(2)
Temperature & Humidity Chamber	TAICHY	MHU-225LA	980729	08/24/2011	(1)
Test Site	ATL	TE05	TE05	N.C.R.	

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

7.3. Setup



7.4. Test Procedure

The measurement is made according to FCC rules part 22 and 24:

- 1. The EUT and test equipment were set up as shown on the following section.
- 2. With all power removed, the temperature was decreased to -30°C and permitted to stabilize for three hours. Power was applied and the maximum change in frequency was note within one minute.
- 3. With power OFF, the temperature was raised in 10°C steps. The sample was permitted to stabilize at each step for at least one-half hour. Power was applied and the maximum frequency change was noted within one minute.
- 4. The temperature tests were performed for the worst case.
- 5. Test data was recorded.

7.5. Uncertainty

The measurement uncertainty is defined as for Frequency Stability (Temperature Variation) measurement is ± 10Hz.

7.6. Test Result

Model Number	HE910-NAG						
Test Item	Frequency Stability (Ter	nperature Variation)					
Test Mode	Mode 1						
Date of Test	04/12/2012		Test Site	TE05			
Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result			
-30	12	0.014	±2.5	Pass			
-20	5	0.006	±2.5	Pass			
-10	9	0.011	±2.5	Pass			
0	10	0.012	±2.5	Pass			
10	7	0.008	±2.5	Pass			
20	6	0.007	±2.5	Pass			
30	8	0.010	±2.5	Pass			
40	9	0.011	±2.5	Pass			
50	11	0.013	±2.5	Pass			

Model Number	HE910-NAG							
Test Item	Frequency Stability (Temperature Variation)							
Test Mode	Mode 2							
Date of Test	04/12/2012		Test Site	TE05				
Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result				
-30	11	0.006	±2.5	Pass				
-20	7	0.004	±2.5	Pass				
-10	9	0.005	±2.5	Pass				
0	15	0.008	±2.5	Pass				
10	-16	-0.009	±2.5	Pass				
20	10	0.005	±2.5	Pass				
30	12	0.006	±2.5	Pass				
40	8	0.004	±2.5	Pass				
50	10	0.005	±2.5	Pass				

Model Number	HE910-NAG						
Test Item	Frequency Stability (Temperature Variation)						
Test Mode	Mode 7						
Date of Test	04/12/2012		Test Site	TE05			
Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result			
-30	-14	-0.007	±2.5	Pass			
-20	-8	-0.004	±2.5	Pass			
-10	-6	-0.003	±2.5	Pass			
0	-10	-0.005	±2.5	Pass			
10	-7	-0.004	±2.5	Pass			
20	-15	-0.008	±2.5	Pass			
30	-13	-0.007	±2.5	Pass			
40	-12	-0.006	±2.5	Pass			
50	-6	-0.003	±2.5	Pass			

Model Number	HE910-NAG							
Test Item	Frequency Stability (Temperature Variation)							
Test Mode	Mode 8							
Date of Test	04/12/2012		Test Site	TE05				
Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result				
-30	-9	-0.011	±2.5	Pass				
-20	-5	-0.006	±2.5	Pass				
-10	-8	-0.010	±2.5	Pass				
0	-6	-0.007	±2.5	Pass				
10	-4	-0.005	±2.5	Pass				
20	-5	-0.006	±2.5	Pass				
30	-7	-0.008	±2.5	Pass				
40	-9	-0.011	±2.5	Pass				
50	-10	-0.012	±2.5	Pass				

8 Frequency Stability (Voltage Variation) Test

8.1. **Limit**

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5ppm) of the center frequency.

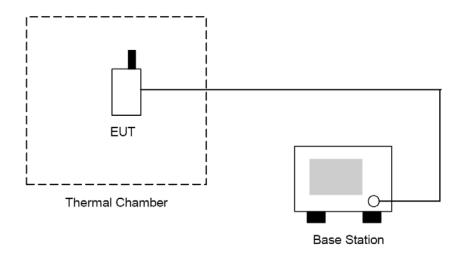
8.2. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Universal Radio Communication Tester	ROHDE & SCHWARZ	CMU200	109369	08/10/2010	(2)
Temperature & Humidity Chamber	TAICHY	MHU-225LA	980729	08/24/2011	(1)
Test Site	ATL	TE05	TE05	N.C.R.	

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

8.3. Setup



8.4. Test Procedure

- 1. The EUT was placed in a temperature chamber at 25 ± 5 °C and connected as the following section.
- 2. The power supply voltage to the EUT was varied from BEP to 115% of the nominal value measured at the input to the EUT.
- 3. The variation in frequency was measured for the worst case.

8.5. Uncertainty

The measurement uncertainty is defined as for Frequency Stability (Voltage Variation) measurement is \pm 10Hz.

8.6. Test Result

Model Number	HE910-NAG							
Test Item	Freque	Frequency Stability (Voltage Variation)						
Test Mode	Mode '	1						
Date of Test	04/12/2	04/12/2012 Test Site TE05						
Level Voltage Deviation [Vdc] [Hz]		Deviation [Hz]	Deviation [ppm]	Limit [ppm]	Result			
Battery full	point	4.20	8	0.010	±2.5	Pass		
Normal	3.80 10		0.012	±2.5	Pass			
Battery cut-of	f point	3.40	9	0.011	±2.5	Pass		

Model Number	HE910-NAG							
Test Item	Freque	Frequency Stability (Voltage Variation)						
Test Mode	Mode 2	Mode 2						
Date of Test	04/12/2	04/12/2012 Test Site TE05						
Level Voltage Deviation [Vdc] [Hz]		Deviation [ppm]	Limit [ppm]	Result				
Battery full	point 4.20 13			0.007	±2.5	Pass		
Normal 3.80 11		0.006	±2.5	Pass				
Battery cut-of	f point	3.40	10	0.005	±2.5	Pass		

Model Number	HE910-NAG							
Test Item	Freque	Frequency Stability (Voltage Variation)						
Test Mode	Mode 1	Mode 7						
Date of Test	04/12/2	04/12/2012 Test Site TE05						
Level Voltage Deviation [Vdc] [Hz]			Deviation [Hz]	Deviation [ppm]	Limit [ppm]	Result		
Battery full	ull point 4.20 -9			-0.005	±2.5	Pass		
Normal 3.80 -12		-0.006	±2.5	Pass				
Battery cut-off point 3.40 -8 -0					±2.5	Pass		

Model Number	HE910	HE910-NAG						
Test Item	Freque	Frequency Stability (Voltage Variation)						
Test Mode	Mode 8	Mode 8						
Date of Test	04/12/2	04/12/2012 Test Site TE05						
Level Voltage Deviation [Vdc] [Hz]			Deviation [Hz]	Deviation [ppm]	Limit [ppm]	Result		
Battery full	Battery full point 4.20 -9			-0.011	±2.5	Pass		
Normal 3.80 -8		-8	-0.010	±2.5	Pass			
Battery cut-off point 3.40 -6		-6	-0.007	±2.5	Pass			