

File: HE910(CH661)

Data: #4

Date: 2011/12/2

Time: 上午 09:24:35



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 2

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	3247.750	-37.63	5.11	-32.52	-13.00	-19.52	peak		

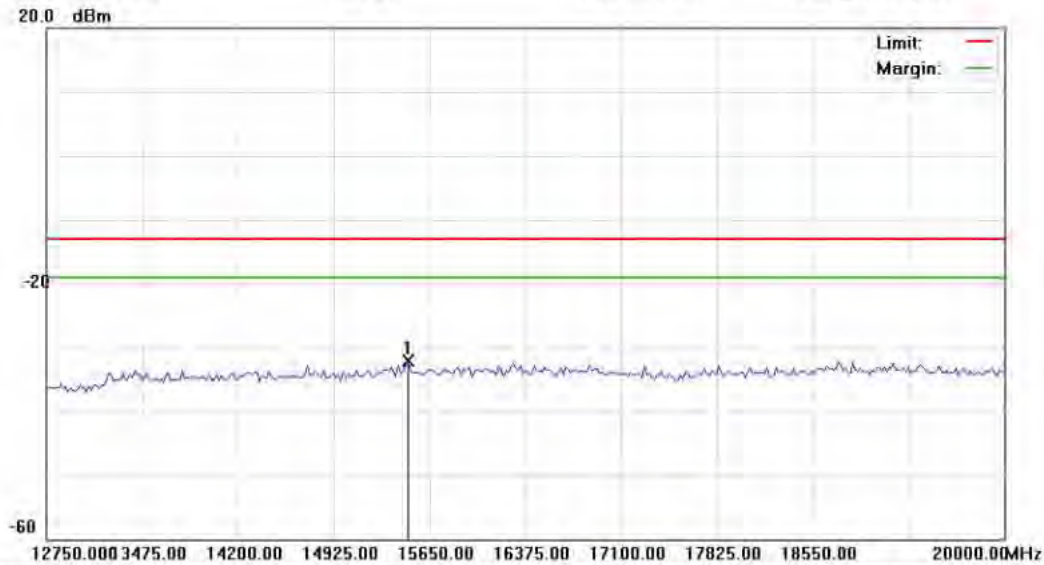
*:Maximum data x:Over limit !:over margin

File: HE910 (CH661)

Data: #5

Date: 2011/12/2

Time: 上午 09:24:56



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 2

Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table
		MHz	Level	Factor	ment			Height	Degree
			dBm	dB	dBm	dBm	dB	cm	degree
1	*	15486.875	-38.34	6.15	-32.19	-13.00	-19.19	peak	

*:Maximum data x:Over limit !:over margin

File: HE910 (CH810)

Data: #1

Date: 2011/12/1

Time: 下午 05:27:23



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 2

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	4.6332	-62.54	18.22	-49.32	-13.00	-36.32	peak		

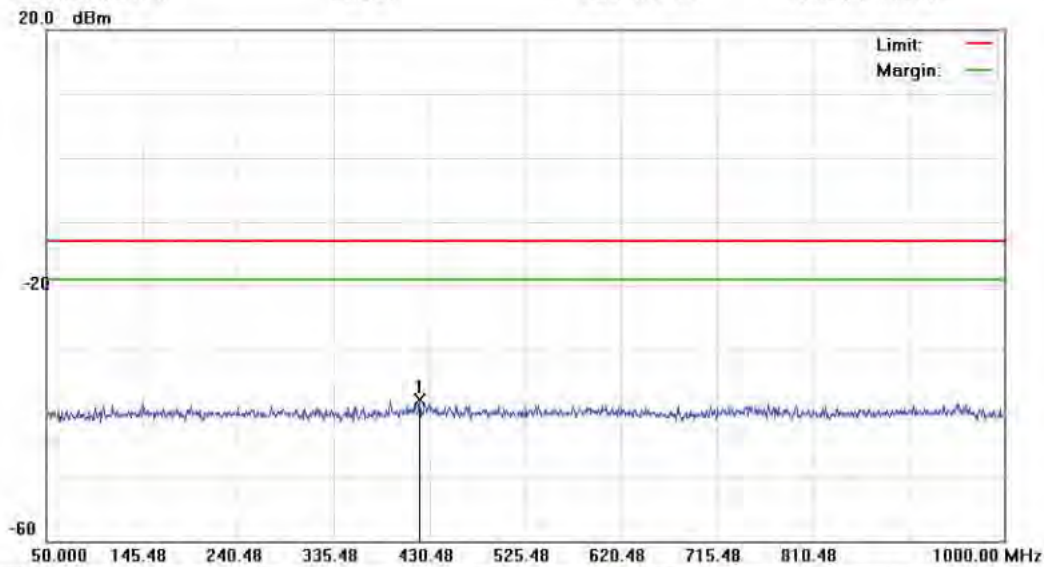
*:Maximum data x:Over limit !:over margin

File: HE910.CH810

Data: #2

Date: 2011/12/1

Time: 下午 05:27:47



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 2

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	420.5000	-51.14	13.24	-37.90	-13.00	-24.90	peak		

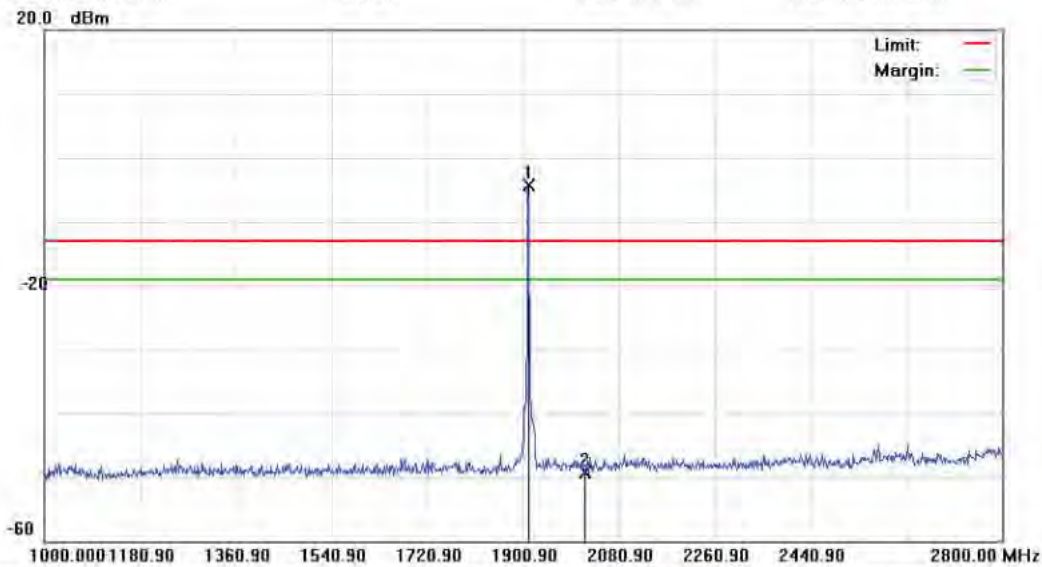
*:Maximum data x:Over limit !:over margin

File: HE910.CH810

Data: #3

Date: 2011/12/1

Time: 下午 05:54:58



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 2

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	1909.900	-10.01	5.71	-4.30	-13.00	8.70	peak		Tx
2		2017.000	-53.72	4.41	-49.31	-13.00	-36.31	peak		

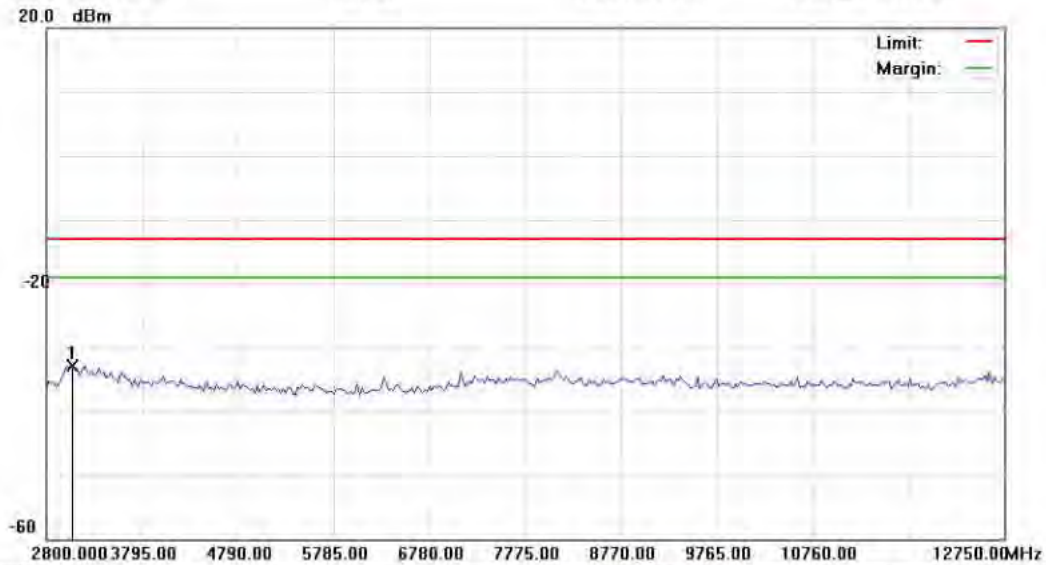
*:Maximum data x:Over limit !:over margin

File: HE910(CH810)

Data: #4

Date: 2011/12/2

Time: 上午 09:25:38



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 2

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	3073.625	-38.22	5.40	-32.82	-13.00	-19.82	peak		

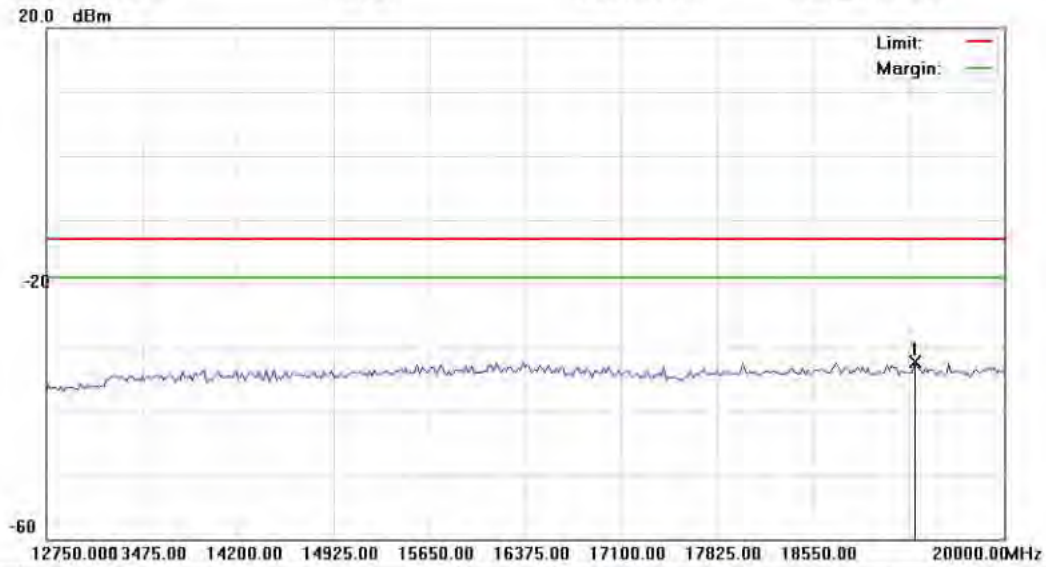
*:Maximum data x:Over limit !:over margin

File: HE910 (CH810)

Data: #5

Date: 2011/12/2

Time: 上午 09:26:00



Site: RF Conducted

Polarization: Conducted pa

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 2

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	19329.375	-39.52	7.25	-32.27	-13.00	-19.27	peak		

*:Maximum data x:Over limit !:over margin

File: HE910(CH9262)

Data: #1

Date: 2011/12/2

Time: 上午 09:40:22



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 3

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	5.2831	-62.06	18.27	-48.79	-13.00	-35.79	peak		

*:Maximum data x:Over limit !:over margin

File: HE910(CH9262)

Data: #2

Date: 2011/12/2

Time: 上午 09:40:47



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 3

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	575.8250	-50.98	13.18	-37.80	-13.00	-24.80	peak		

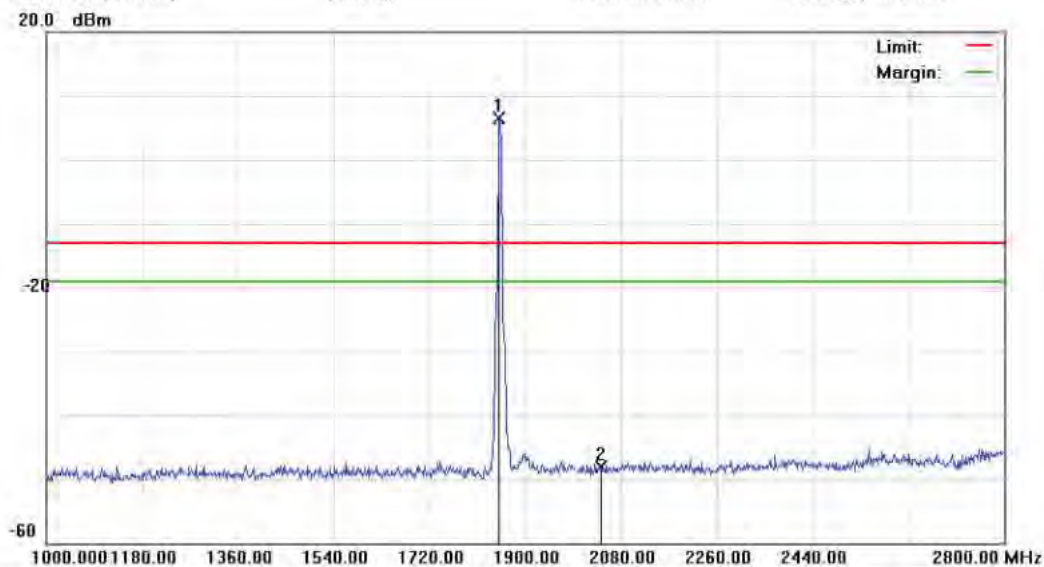
*:Maximum data x:Over limit !:over margin

File: HE910 (CH9262)

Data: #3

Date: 2011/12/2

Time: 上午 09:46:50



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 3

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	1850.500	2.34	4.26	6.60	-13.00	19.60	peak		Tx
2		2041.300	-52.68	4.50	-48.18	-13.00	-35.18	peak		

*:Maximum data x:Over limit !:over margin

File: HE910(CH9262)

Data: #4

Date: 2011/12/2

Time: 上午 09:55:15



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 3

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	3720.375	-54.97	4.88	-50.09	-13.00	-37.09	peak		

*:Maximum data x:Over limit !:over margin

File: HE910(CH9262)

Data: #5

Date: 2011/12/2

Time: 上午 09:55:37



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 3

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBm	dB	dBm	dBm	dB	cm	degree
1	*	18731.250	-59.15	7.08	-52.07	-13.00	-39.07	peak	Comment

*:Maximum data x:Over limit !:over margin

File: HE910(CH9400)

Data: #1

Date: 2011/12/2

Time: 上午 09:41:49



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 3

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	5.0828	-62.70	18.27	-49.43	-13.00	-36.43	peak		

*:Maximum data x:Over limit !:over margin

File: HE910(CH9400)

Data: #2

Date: 2011/12/2

Time: 上午 09:42:13



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 3

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	639.9500	-51.09	13.11	-37.98	-13.00	-24.98	peak		

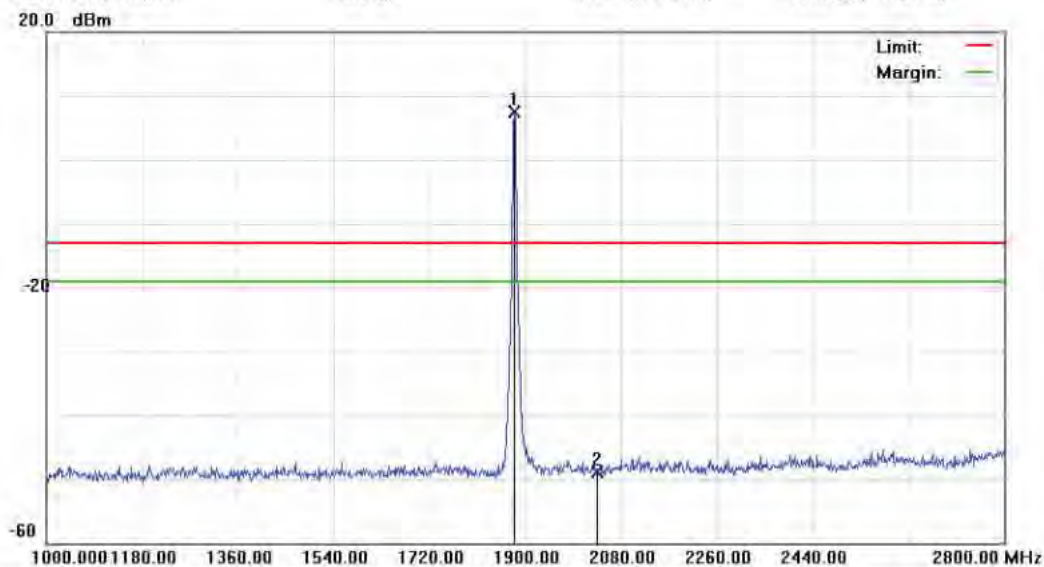
*:Maximum data x:Over limit !:over margin

File: HE910(CH9400)

Data: #3

Date: 2011/12/2

Time: 上午 09:49:14



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 3

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	1878.400	2.80	4.61	7.41	-13.00	20.41	peak		Tx
2		2034.100	-53.44	4.48	-48.96	-13.00	-35.96	peak		

*:Maximum data x:Over limit !:over margin

File: HE910(CH9400)

Data: #4

Date: 2011/12/2

Time: 上午 09:56:14



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 3

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	2999.000	-38.13	5.48	-32.65	-13.00	-19.65	peak		

*:Maximum data x:Over limit !:over margin

File: HE910(CH9400)

Data: #5

Date: 2011/12/2

Time: 上午 09:56:36



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 3

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	19456.250	-38.52	7.28	-31.24	-13.00	-18.24	peak		

*:Maximum data x:Over limit !:over margin

File: HE910 (CH9538)

Data: #1

Date: 2011/12/2

Time: 上午 09:43:35



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 3

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	6.5578	-62.78	18.26	-49.52	-13.00	-36.52	peak		

*:Maximum data x:Over limit !:over margin

File: HE910(CH9538)

Data: #2

Date: 2011/12/2

Time: 上午 09:44:00



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 3

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	718.8000	-51.56	13.13	-38.43	-13.00	-25.43	peak		

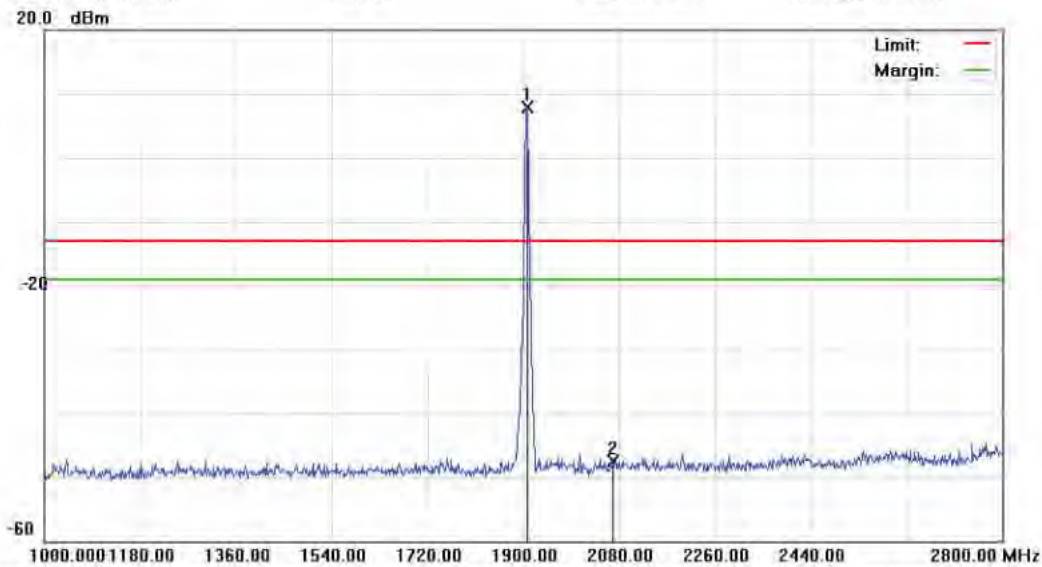
*:Maximum data x:Over limit !:over margin

File: HE910(CH9538)

Data: #3

Date: 2011/12/2

Time: 上午 09:51:03



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 3

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	1909.000	2.14	5.80	7.94	-13.00	20.94	peak		Tx
2		2069.200	-51.95	4.41	-47.54	-13.00	-34.54	peak		

*:Maximum data x:Over limit !:over margin

File: HE910(CH9538)

Data: #4

Date: 2011/12/2

Time: 上午 09:57:12



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 3

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	3073.625	-37.74	5.40	-32.34	-13.00	-19.34	peak		

*:Maximum data x:Over limit !:over margin

File: HE910(CH9538)

Data: #5

Date: 2011/12/2

Time: 上午 09:57:33



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 3

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	19800.625	-39.21	7.38	-31.83	-13.00	-18.83	peak		

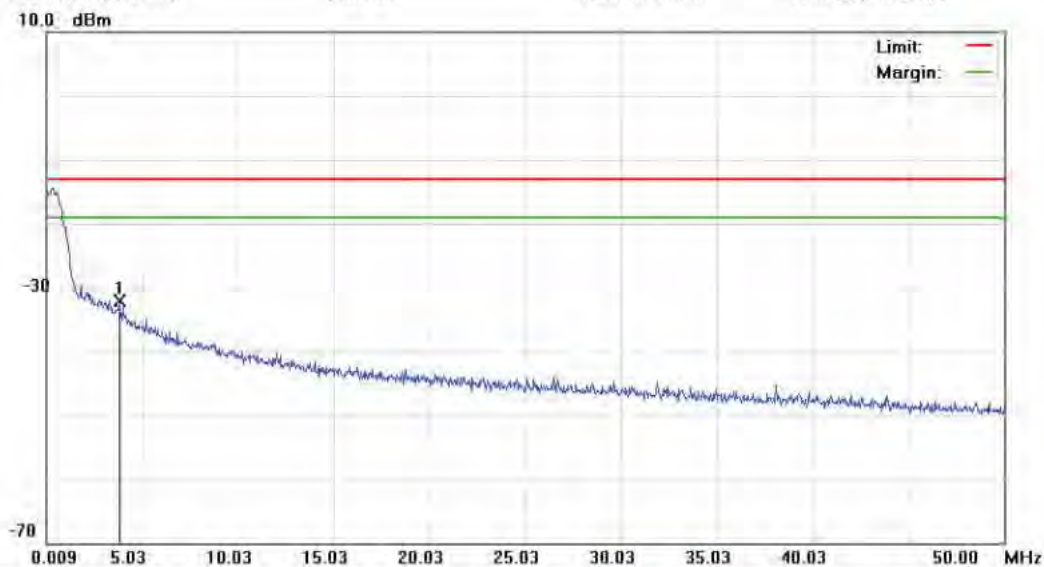
*:Maximum data x:Over limit !:over margin

File: HE910(CH4132)

Data: #1

Date: 2011/12/2

Time: 上午 10:05:45



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 4

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	3.8083	-61.96	29.79	-32.17	-13.00	-19.17	peak		

*:Maximum data x:Over limit !:over margin



Site: RF Conducted Polarization: *Conducted pa* Temperature: 23 °C
Limit: FCC Part 22 conducted (9k-12.75G) Power: DC 3.8V Humidity: 55.2%
EUT: 2G/3G Module Distance: RBW: 1000 kHz VBW: 1000 kHz
M/N: HE910
Mode: 4
Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1		50.4750	-53.86	14.61	-39.25	-13.00	-26.25	peak		
2	*	825.2000	17.45	3.84	21.29	-13.00	34.29	peak		Tx

*:Maximum data x:Over limit l:over margin

File: HE910 (CH4132)

Data: #3

Date: 2011/12/2

Time: 上午 10:14:30



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 4

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	1654.000	-62.18	4.45	-57.73	-13.00	-44.73	peak		

*:Maximum data x:Over limit !:over margin

File: HE910(CH4132)

Data: #4

Date: 2011/12/2

Time: 上午 10:14:53



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 4

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	11409.250	-69.26	5.56	-63.70	-13.00	-50.70	peak		

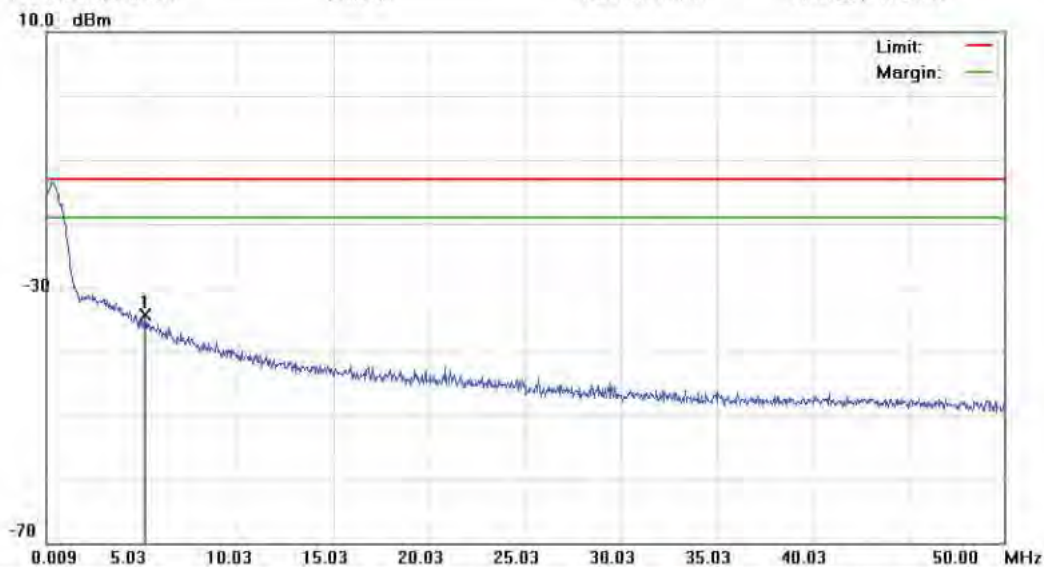
*:Maximum data x:Over limit !:over margin

File: HE910(CH4183)

Data: #1

Date: 2011/12/2

Time: 上午 10:08:50



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 4

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	5.1581	-62.25	27.89	-34.36	-13.00	-21.36	peak		

*:Maximum data x:Over limit !:over margin



Site: RF Conducted Polarization: Conducted po Temperature: 23 °C
Limit: FCC Part 22 conducted (9k-12.75G) Power: DC 3.8V Humidity: 55.2%
EUT: 2G/3G Module Distance: RBW: 1000 kHz VBW: 1000 kHz
M/N: HE910
Mode: 4
Note:

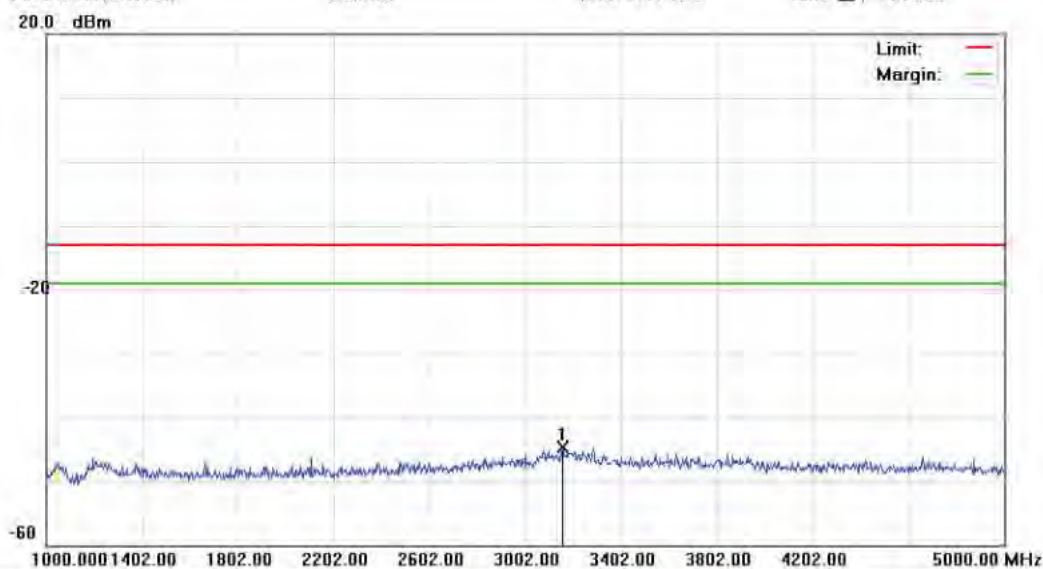
No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1		50.4750	-54.25	14.61	-39.64	-13.00	-26.64	peak			
2	*	835.6500	16.80	3.95	20.75	-13.00	33.75	peak			Tx

File: HE910(CH4183)

Data: #3

Date: 2011/12/2

Time: 上午 10:18:22



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 4

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	3156.000	-49.29	4.57	-44.72	-13.00	-31.72	peak		

*:Maximum data x:Over limit !:over margin

File: HE910(CH4183)

Data: #4

Date: 2011/12/2

Time: 上午 10:18:45



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 4

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	9142.375	-49.20	5.99	-43.21	-13.00	-30.21	peak		

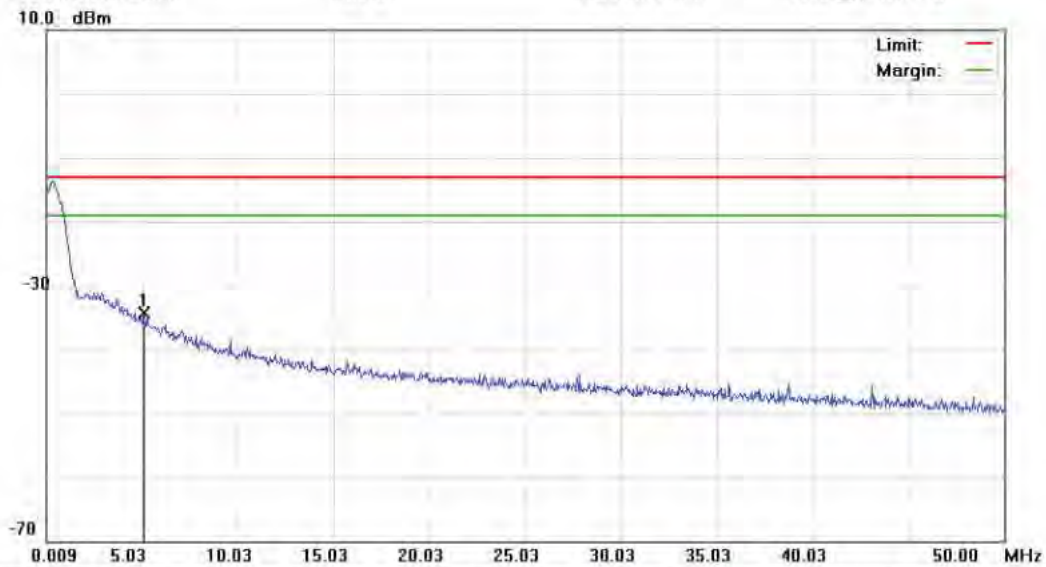
*:Maximum data x:Over limit !:over margin

File: HE910(CH4233)

Data: #1

Date: 2011/12/2

Time: 上午 10:11:54



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

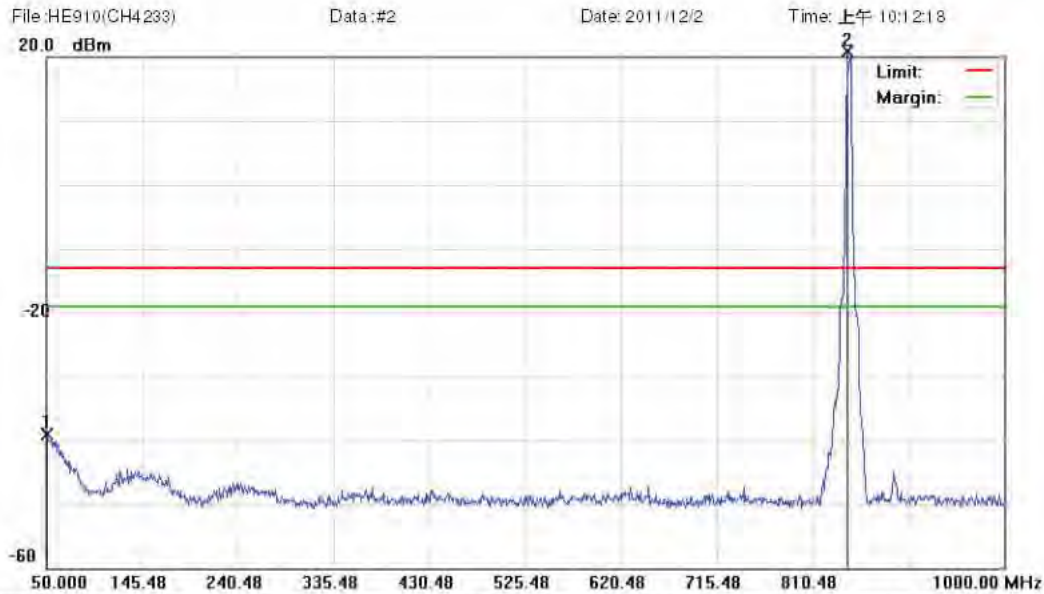
M/N: HE910

Mode: 4

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	5.0830	-62.35	27.96	-34.39	-13.00	-21.39	peak		

*:Maximum data x:Over limit !:over margin



Site: RF Conducted Polarization: *Conducted pa* Temperature: 23 °C
Limit: FCC Part 22 conducted (9k-12.75G) Power: DC 3.8V Humidity: 55.2%
EUT: 2G/3G Module Distance: RBW: 1000 kHz VBW: 1000 kHz
M/N: HE910
Mode: 4
Note:

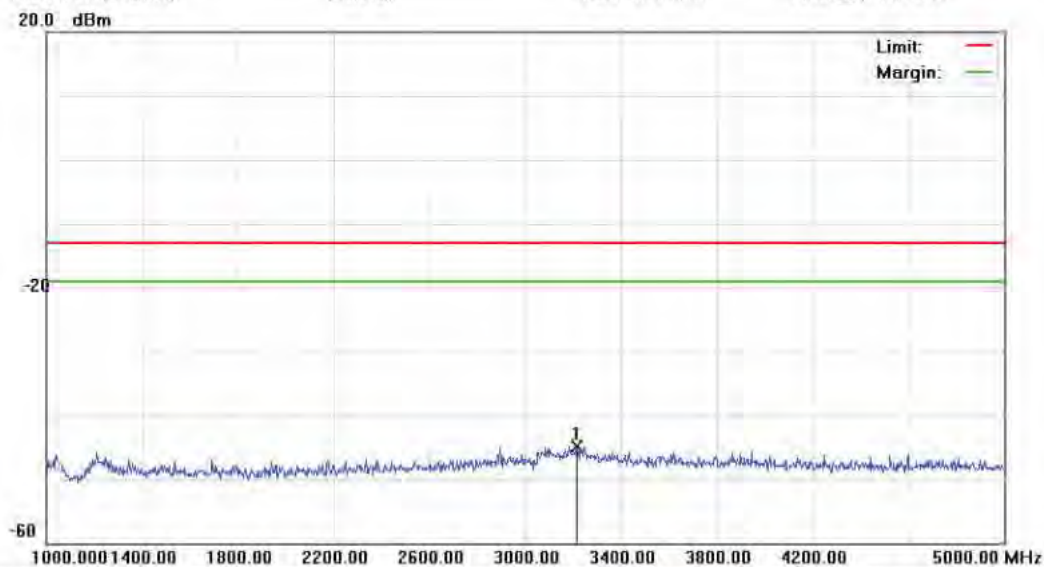
No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1		50.4750	-53.78	14.61	-39.17	-13.00	-26.17	peak			
2	*	845.1500	16.95	3.99	20.94	-13.00	33.94	peak			Tx

File: HE910 (CH4233)

Data: #3

Date: 2011/12/2

Time: 上午 10:19:50



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 4

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	3214.000	-49.60	4.67	-44.93	-13.00	-31.93	peak		

*:Maximum data x:Over limit !:over margin

File: HE910(CH4233)

Data: #4

Date: 2011/12/2

Time: 上午 10:20:13



Site: RF Conducted

Polarization: Conducted po

Temperature: 23 °C

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

Power: DC 3.8V

Humidity: 55.2%

EUT: 2G/3G Module

Distance:

RBW: 1000 kHz VBW: 1000 kHz

M/N: HE910

Mode: 4

Note:

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	7084.750	-48.32	5.00	-43.32	-13.00	-30.32	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 $43 + 10\log(P)$ dB.

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

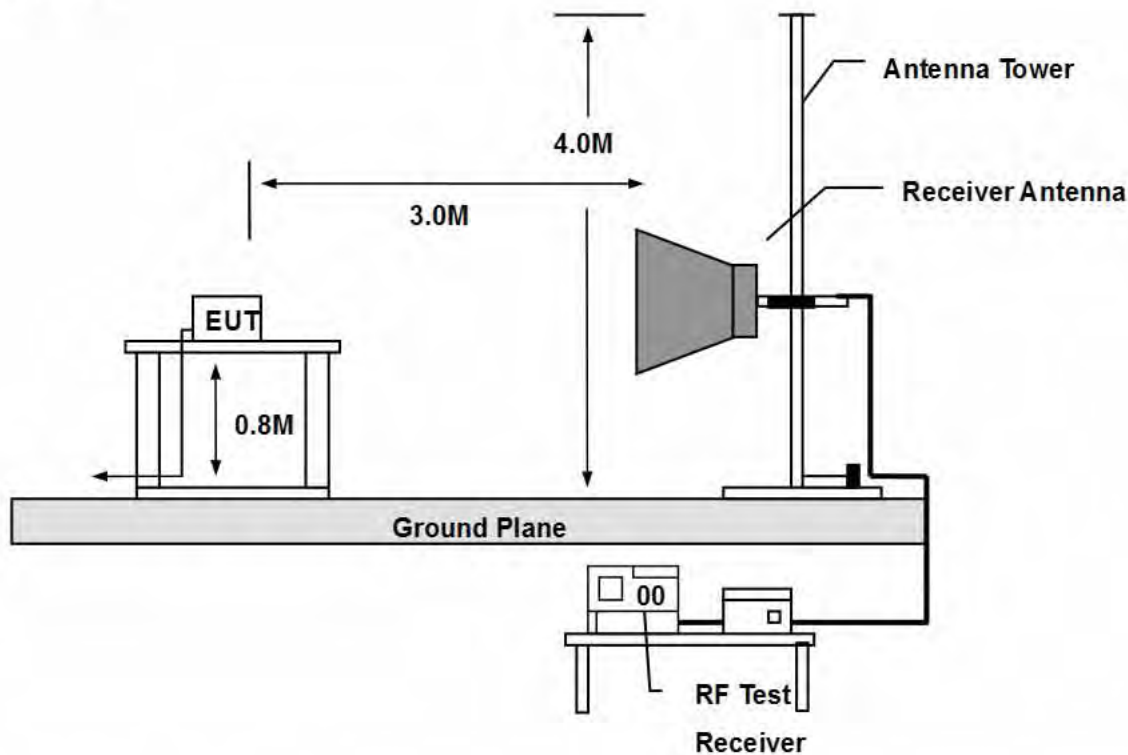
6.2. Test Instruments

3 Meter Chamber					
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
RF Pre-selector	Agilent	N9039A	MY46520256	01/18/2011	(2)
Spectrum Analyzer	Agilent	E4446A	MY46180578	01/18/2011	(1)
Pre Amplifier	Agilent	8449B	3008A02237	02/23/2011	(1)
Pre Amplifier	Agilent	8447D	2944A10961	02/23/2011	(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	12/24/2010	(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 three 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 (model 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 per meter (uV/m).

The actual field intensity in decibels referenced to 1 microvolt in to field intensity in micro volts 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.

$$(1) \text{ Amplitude (dBuV/m) = FI (dBuV) + AF (dBuV) + CL (dBuV) - Gain (dB)}$$

FI= Reading of the field intensity.

AF= Antenna factor.

CL= Cable loss.

P.S Amplitude is auto calculate in spectrum analyzer.

$$(2) \text{ Actual Amplitude (dBuV/m) = Amplitude (dBuV) - Dis(dB)}$$

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
Model:	HE910	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 1	Date:	2011/12/06
Frequency:	824.2 MHz	Test By:	Fly Lu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	45.0000	-50.63	8.77	-41.86	-13.00	-28.86	peak	H
2	84.5000	-79.80	-1.89	-81.69	-13.00	-68.69	peak	H
3	199.5000	-70.78	2.50	-68.28	-13.00	-55.28	peak	H
4	291.5000	-62.68	-3.19	-65.87	-13.00	-52.87	peak	H
5	497.5000	-78.64	6.82	-71.82	-13.00	-58.82	peak	H
6	684.5000	-79.38	7.01	-72.37	-13.00	-59.37	peak	H
7	5428.000	-71.26	21.47	-49.79	-13.00	-36.79	peak	H
8	7708.000	-70.79	29.36	-41.43	-13.00	-28.43	peak	H
9	11080.000	-72.83	36.50	-36.33	-13.00	-23.33	peak	H
1	45.0000	-57.68	-6.91	-64.59	-13.00	-51.59	peak	V
2	92.5000	-64.58	-4.73	-69.31	-13.00	-56.31	peak	V
3	137.5000	-79.79	10.31	-69.48	-13.00	-56.48	peak	V
4	251.0000	-80.18	-0.98	-81.16	-13.00	-68.16	peak	V
5	448.5000	-81.08	1.56	-79.52	-13.00	-66.52	peak	V
6	716.0000	-80.45	10.72	-69.73	-13.00	-56.73	peak	V
7	2836.000	-67.71	15.08	-52.63	-13.00	-39.63	peak	V
8	6184.000	-71.80	23.54	-48.26	-13.00	-35.26	peak	V
9	9940.000	-73.17	30.27	-42.90	-13.00	-29.90	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	DC 3.8V
Model:	HE910	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 1	Date:	2011/12/06
Frequency:	836.4 MHz	Test By:	Fly Lu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	45.0000	-63.69	8.77	-54.92	-13.00	-41.92	peak	H
2	92.5000	-65.18	-0.43	-65.61	-13.00	-52.61	peak	H
3	324.5000	-72.85	-0.84	-73.69	-13.00	-60.69	peak	H
4	529.0000	-80.44	7.94	-72.50	-13.00	-59.50	peak	H
5	860.0000	-80.98	13.02	-67.96	-13.00	-54.96	peak	H
6	932.5000	-81.25	14.81	-66.44	-13.00	-53.44	peak	H
7	4540.000	-69.57	17.30	-52.27	-13.00	-39.27	peak	H
8	6220.000	-70.96	24.41	-46.55	-13.00	-33.55	peak	H
9	8572.000	-72.13	28.40	-43.73	-13.00	-30.73	peak	H
1	45.0000	-55.03	-6.91	-61.94	-13.00	-48.94	peak	V
2	133.5000	-80.02	12.47	-67.55	-13.00	-54.55	peak	V
3	201.0000	-76.85	10.04	-66.81	-13.00	-53.81	peak	V
4	289.5000	-71.29	1.77	-69.52	-13.00	-56.52	peak	V
5	524.0000	-76.25	3.34	-72.91	-13.00	-59.91	peak	V
6	744.0000	-74.92	10.59	-64.33	-13.00	-51.33	peak	V
7	3112.000	-68.08	17.11	-50.97	-13.00	-37.97	peak	V
8	7084.000	-70.53	25.66	-44.87	-13.00	-31.87	peak	V
9	11608.000	-73.66	38.26	-35.40	-13.00	-22.40	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	DC 3.8V
Model:	HE910	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 1	Date:	2011/12/06
Frequency:	848.8 MHz	Test By:	Fly Lu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	92.5000	-64.54	-0.43	-64.97	-13.00	-51.97	peak	H
2	181.0000	-72.68	-6.76	-79.44	-13.00	-66.44	peak	H
3	216.0000	-73.76	-0.05	-73.81	-13.00	-60.81	peak	H
4	357.0000	-75.98	-0.04	-76.02	-13.00	-63.02	peak	H
5	545.0000	-72.46	8.15	-64.31	-13.00	-51.31	peak	H
6	756.0000	-74.13	8.91	-65.22	-13.00	-52.22	peak	H
7	4960.000	-70.77	19.85	-50.92	-13.00	-37.92	peak	H
8	7672.000	-71.66	29.35	-42.31	-13.00	-29.31	peak	H
9	9820.000	-73.70	31.61	-42.09	-13.00	-29.09	peak	H
1	130.5000	-79.54	14.10	-65.44	-13.00	-52.44	peak	V
2	302.0000	-70.17	2.55	-67.62	-13.00	-54.62	peak	V
3	493.5000	-80.54	2.63	-77.91	-13.00	-64.91	peak	V
4	662.5000	-80.79	9.41	-71.38	-13.00	-58.38	peak	V
5	756.0000	-73.44	10.86	-62.58	-13.00	-49.58	peak	V
6	804.0000	-69.94	11.76	-58.18	-13.00	-45.18	peak	V
7	4816.000	-69.79	22.98	-46.81	-13.00	-33.81	peak	V
8	9472.000	-72.43	28.25	-44.18	-13.00	-31.18	peak	V
9	11032.000	-74.04	36.76	-37.28	-13.00	-24.28	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	DC 3.8V
Model:	HE910	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 2	Date:	2011/12/06
Frequency:	1850.2 MHz	Test By:	Fly Lu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	92.5000	-63.86	-0.43	-64.29	-13.00	-51.29	peak	H
2	162.5000	-76.89	-0.48	-77.37	-13.00	-64.37	peak	H
3	198.5000	-70.02	1.56	-68.46	-13.00	-55.46	peak	H
4	390.0000	-78.58	1.66	-76.92	-13.00	-63.92	peak	H
5	754.5000	-80.28	8.85	-71.43	-13.00	-58.43	peak	H
6	898.0000	-80.60	13.97	-66.63	-13.00	-53.63	peak	H
7	4660.000	-69.98	18.03	-51.95	-13.00	-38.95	peak	H
8	7144.000	-71.16	28.04	-43.12	-13.00	-30.12	peak	H
9	10240.000	-73.89	33.20	-40.69	-13.00	-27.69	peak	H
1	60.5000	-79.01	-5.27	-84.28	-13.00	-71.28	peak	V
2	130.5000	-81.04	14.10	-66.94	-13.00	-53.94	peak	V
3	160.0000	-81.97	12.68	-69.29	-13.00	-56.29	peak	V
4	280.0000	-78.83	0.91	-77.92	-13.00	-64.92	peak	V
5	579.5000	-80.50	5.89	-74.61	-13.00	-61.61	peak	V
6	805.0000	-80.57	11.72	-68.85	-13.00	-55.85	peak	V
7	4108.000	-68.90	20.94	-47.96	-13.00	-34.96	peak	V
8	5536.000	-71.46	23.44	-48.02	-13.00	-35.02	peak	V
9	9376.000	-72.23	27.42	-44.81	-13.00	-31.81	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	DC 3.8V
Model:	HE910	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 2	Date:	2011/12/06
Frequency:	1880.0 MHz	Test By:	Fly Lu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	37.0000	-75.58	8.74	-66.84	-13.00	-53.84	peak	H
2	159.0000	-80.63	1.13	-79.50	-13.00	-66.50	peak	H
3	239.0000	-79.30	-1.97	-81.27	-13.00	-68.27	peak	H
4	427.0000	-80.75	3.59	-77.16	-13.00	-64.16	peak	H
5	600.5000	-79.47	7.93	-71.54	-13.00	-58.54	peak	H
6	813.0000	-80.84	11.68	-69.16	-13.00	-56.16	peak	H
7	4492.000	-69.86	17.04	-52.82	-13.00	-39.82	peak	H
8	7504.000	-71.70	29.20	-42.50	-13.00	-29.50	peak	H
9	11176.000	-74.12	36.58	-37.54	-13.00	-24.54	peak	H
1	132.0000	-80.86	13.29	-67.57	-13.00	-54.57	peak	V
2	160.5000	-78.93	12.20	-66.73	-13.00	-53.73	peak	V
3	213.5000	-80.68	7.67	-73.01	-13.00	-60.01	peak	V
4	287.5000	-77.34	1.58	-75.76	-13.00	-62.76	peak	V
5	476.5000	-78.47	2.26	-76.21	-13.00	-63.21	peak	V
6	775.0000	-79.89	11.20	-68.69	-13.00	-55.69	peak	V
7	4468.000	-70.10	22.08	-48.02	-13.00	-35.02	peak	V
8	7024.000	-71.37	25.54	-45.83	-13.00	-32.83	peak	V
9	9448.000	-73.32	28.06	-45.26	-13.00	-32.26	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	DC 3.8V
Model:	HE910	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 2	Date:	2011/12/06
Frequency:	1909.8 MHz	Test By:	Fly Lu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	37.0000	-75.28	8.74	-66.54	-13.00	-53.54	peak	H
2	198.0000	-72.54	1.11	-71.43	-13.00	-58.43	peak	H
3	374.5000	-79.54	0.57	-78.97	-13.00	-65.97	peak	H
4	613.0000	-79.38	7.78	-71.60	-13.00	-58.60	peak	H
5	820.5000	-79.85	11.92	-67.93	-13.00	-54.93	peak	H
6	931.5000	-81.08	14.81	-66.27	-13.00	-53.27	peak	H
7	4036.000	-69.03	16.49	-52.54	-13.00	-39.54	peak	H
8	6472.000	-71.86	25.98	-45.88	-13.00	-32.88	peak	H
9	10108.000	-72.63	32.75	-39.88	-13.00	-26.88	peak	H
1	92.5000	-63.58	-4.73	-68.31	-13.00	-55.31	peak	V
2	131.0000	-79.99	13.83	-66.16	-13.00	-53.16	peak	V
3	160.0000	-81.24	12.68	-68.56	-13.00	-55.56	peak	V
4	201.0000	-78.30	10.04	-68.26	-13.00	-55.26	peak	V
5	218.0000	-81.47	6.02	-75.45	-13.00	-62.45	peak	V
6	390.0000	-74.07	1.49	-72.58	-13.00	-59.58	peak	V
7	4816.000	-70.89	22.98	-47.91	-13.00	-34.91	peak	V
8	8452.000	-72.04	26.11	-45.93	-13.00	-32.93	peak	V
9	9820.000	-72.96	29.79	-43.17	-13.00	-30.17	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	DC 3.8V
Model:	HE910	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	2011/12/06
Frequency:	1852.4 MHz	Test By:	Fly Lu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	41.0000	-79.97	9.47	-70.50	-13.00	-57.50	peak	H
2	238.0000	-79.01	-1.85	-80.86	-13.00	-67.86	peak	H
3	287.5000	-74.60	-3.60	-78.20	-13.00	-65.20	peak	H
4	514.5000	-80.07	7.47	-72.60	-13.00	-59.60	peak	H
5	773.0000	-80.78	9.81	-70.97	-13.00	-57.97	peak	H
6	930.5000	-80.58	14.81	-65.77	-13.00	-52.77	peak	H
7	4912.000	-70.08	19.57	-50.51	-13.00	-37.51	peak	H
8	8332.000	-71.50	29.05	-42.45	-13.00	-29.45	peak	H
9	10348.000	-72.66	33.56	-39.10	-13.00	-26.10	peak	H
1	201.0000	-76.49	10.04	-66.45	-13.00	-53.45	peak	V
2	284.5000	-76.29	1.31	-74.98	-13.00	-61.98	peak	V
3	488.5000	-79.41	2.54	-76.87	-13.00	-63.87	peak	V
4	624.0000	-79.05	8.83	-70.22	-13.00	-57.22	peak	V
5	751.5000	-64.52	10.76	-53.76	-13.00	-40.76	peak	V
6	872.0000	-80.16	11.18	-68.98	-13.00	-55.98	peak	V
7	3772.000	-68.86	20.10	-48.76	-13.00	-35.76	peak	V
8	7636.000	-71.83	26.46	-45.37	-13.00	-32.37	peak	V
9	10444.000	-73.87	32.93	-40.94	-13.00	-27.94	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	DC 3.8V
Model:	HE910	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	2011/12/06
Frequency:	1880.0 MHz	Test By:	Fly Lu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	41.0000	-80.03	9.47	-70.56	-13.00	-57.56	peak	H
2	200.0000	-73.43	2.95	-70.48	-13.00	-57.48	peak	H
3	289.0000	-74.76	-3.45	-78.21	-13.00	-65.21	peak	H
4	542.0000	-79.59	8.22	-71.37	-13.00	-58.37	peak	H
5	685.0000	-80.26	7.02	-73.24	-13.00	-60.24	peak	H
6	780.0000	-77.93	10.19	-67.74	-13.00	-54.74	peak	H
7	5632.000	-71.06	22.05	-49.01	-13.00	-36.01	peak	H
8	8020.000	-71.67	29.57	-42.10	-13.00	-29.10	peak	H
9	9496.000	-72.90	30.17	-42.73	-13.00	-29.73	peak	H
1	92.5000	-63.89	-4.73	-68.62	-13.00	-55.62	peak	V
2	160.0000	-80.42	12.68	-67.74	-13.00	-54.74	peak	V
3	228.0000	-81.50	2.82	-78.68	-13.00	-65.68	peak	V
4	390.0000	-72.70	1.49	-71.21	-13.00	-58.21	peak	V
5	571.0000	-79.60	5.22	-74.38	-13.00	-61.38	peak	V
6	768.0000	-79.96	11.09	-68.87	-13.00	-55.87	peak	V
7	5260.000	-70.47	23.47	-47.00	-13.00	-34.00	peak	V
8	8440.000	-71.73	26.11	-45.62	-13.00	-32.62	peak	V
9	11380.000	-72.98	37.74	-35.24	-13.00	-22.24	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	DC 3.8V
Model:	HE910	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	2011/12/06
Frequency:	1907.6 MHz	Test By:	Fly Lu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	37.0000	-76.08	8.74	-67.34	-13.00	-54.34	peak	H
2	155.5000	-77.12	0.01	-77.11	-13.00	-64.11	peak	H
3	201.5000	-74.25	2.61	-71.64	-13.00	-58.64	peak	H
4	430.5000	-80.26	3.68	-76.58	-13.00	-63.58	peak	H
5	611.0000	-80.14	7.80	-72.34	-13.00	-59.34	peak	H
6	773.0000	-80.79	9.81	-70.98	-13.00	-57.98	peak	H
7	6628.000	-70.90	26.51	-44.39	-13.00	-31.39	peak	H
8	8632.000	-71.64	28.09	-43.55	-13.00	-30.55	peak	H
9	10756.000	-73.46	35.29	-38.17	-13.00	-25.17	peak	H
1	130.5000	-81.04	14.10	-66.94	-13.00	-53.94	peak	V
2	200.0000	-79.20	10.15	-69.05	-13.00	-56.05	peak	V
3	444.0000	-79.70	1.50	-78.20	-13.00	-65.20	peak	V
4	539.5000	-78.82	4.23	-74.59	-13.00	-61.59	peak	V
5	780.0000	-77.79	11.28	-66.51	-13.00	-53.51	peak	V
6	942.5000	-81.03	12.69	-68.34	-13.00	-55.34	peak	V
7	4576.000	-70.53	22.37	-48.16	-13.00	-35.16	peak	V
8	7876.000	-70.35	26.39	-43.96	-13.00	-30.96	peak	V
9	10408.000	-73.31	32.73	-40.58	-13.00	-27.58	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	DC 3.8V
Model:	HE910	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	2011/12/06
Frequency:	826.4 MHz	Test By:	Fly Lu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	36.5000	-77.95	8.59	-69.36	-13.00	-56.36	peak	H
2	92.5000	-66.37	-0.43	-66.80	-13.00	-53.80	peak	H
3	199.0000	-74.72	2.02	-72.70	-13.00	-59.70	peak	H
4	314.5000	-80.35	-1.31	-81.66	-13.00	-68.66	peak	H
5	567.0000	-80.90	7.74	-73.16	-13.00	-60.16	peak	H
6	604.5000	-77.26	7.89	-69.37	-13.00	-56.37	peak	H
7	4672.000	-69.71	18.11	-51.60	-13.00	-38.60	peak	H
8	7024.000	-69.82	27.65	-42.17	-13.00	-29.17	peak	H
9	9904.000	-72.38	31.97	-40.41	-13.00	-27.41	peak	H
1	92.5000	-65.21	-4.73	-69.94	-13.00	-56.94	peak	V
2	130.5000	-80.57	14.10	-66.47	-13.00	-53.47	peak	V
3	160.0000	-78.10	12.68	-65.42	-13.00	-52.42	peak	V
4	217.5000	-79.51	6.20	-73.31	-13.00	-60.31	peak	V
5	386.5000	-80.68	1.53	-79.15	-13.00	-66.15	peak	V
6	594.0000	-80.90	7.00	-73.90	-13.00	-60.90	peak	V
7	3784.000	-68.80	20.12	-48.68	-13.00	-35.68	peak	V
8	7216.000	-70.84	25.93	-44.91	-13.00	-31.91	peak	V
9	11680.000	-73.11	38.40	-34.71	-13.00	-21.71	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	DC 3.8V
Model:	HE910	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	2011/12/06
Frequency:	836.4 MHz	Test By:	Fly Lu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	36.5000	-78.32	8.59	-69.73	-13.00	-56.73	peak	H
2	54.0000	-79.53	6.59	-72.94	-13.00	-59.94	peak	H
3	92.5000	-65.88	-0.43	-66.31	-13.00	-53.31	peak	H
4	198.0000	-74.86	1.11	-73.75	-13.00	-60.75	peak	H
5	378.0000	-82.02	0.70	-81.32	-13.00	-68.32	peak	H
6	610.0000	-80.56	7.82	-72.74	-13.00	-59.74	peak	H
7	4828.000	-70.55	19.04	-51.51	-13.00	-38.51	peak	H
8	6904.000	-71.61	27.30	-44.31	-13.00	-31.31	peak	H
9	9844.000	-73.22	31.71	-41.51	-13.00	-28.51	peak	H
1	92.5000	-66.47	-4.73	-71.20	-13.00	-58.20	peak	V
2	130.0000	-81.24	14.37	-66.87	-13.00	-53.87	peak	V
3	160.5000	-79.42	12.20	-67.22	-13.00	-54.22	peak	V
4	195.5000	-78.89	5.92	-72.97	-13.00	-59.97	peak	V
5	281.0000	-82.08	1.00	-81.08	-13.00	-68.08	peak	V
6	574.5000	-81.66	5.50	-76.16	-13.00	-63.16	peak	V
7	4960.000	-69.81	23.34	-46.47	-13.00	-33.47	peak	V
8	8356.000	-71.47	26.16	-45.31	-13.00	-32.31	peak	V
9	10504.000	-74.23	33.25	-40.98	-13.00	-27.98	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	DC 3.8V
Model:	HE910	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	2011/12/06
Frequency:	846.4 MHz	Test By:	Fly Lu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	37.0000	-78.08	8.74	-69.34	-13.00	-56.34	peak	H
2	92.5000	-65.93	-0.43	-66.36	-13.00	-53.36	peak	H
3	200.0000	-75.24	2.95	-72.29	-13.00	-59.29	peak	H
4	403.0000	-81.29	2.67	-78.62	-13.00	-65.62	peak	H
5	633.0000	-78.98	7.13	-71.85	-13.00	-58.85	peak	H
6	976.0000	-81.57	14.44	-67.13	-13.00	-54.13	peak	H
7	3292.000	-67.94	14.85	-53.09	-13.00	-40.09	peak	H
8	7636.000	-71.16	29.31	-41.85	-13.00	-28.85	peak	H
9	11104.000	-73.75	36.53	-37.22	-13.00	-24.22	peak	H
1	159.5000	-78.68	12.45	-66.23	-13.00	-53.23	peak	V
2	200.5000	-76.13	10.08	-66.05	-13.00	-53.05	peak	V
3	371.5000	-82.13	1.98	-80.15	-13.00	-67.15	peak	V
4	436.5000	-81.47	1.43	-80.04	-13.00	-67.04	peak	V
5	649.5000	-80.89	8.98	-71.91	-13.00	-58.91	peak	V
6	950.0000	-86.12	12.57	-73.55	-13.00	-60.55	peak	V
7	6136.000	-72.11	23.33	-48.78	-13.00	-35.78	peak	V
8	8248.000	-71.66	26.21	-45.45	-13.00	-32.45	peak	V
9	10864.000	-73.86	35.74	-38.12	-13.00	-25.12	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	DC 3.8V
Model:	HE910	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 7	Date:	2011/12/06
		Test By:	Fly Lu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Peak Limit (dBm)	AVG. Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	3569.000	38.03	3.67	41.70	74.00	54.00	-32.30	peak	H
2	5473.000	35.05	9.91	44.96	74.00	54.00	-29.04	peak	H
3	6425.000	35.93	12.58	48.51	74.00	54.00	-25.49	peak	H
1	2862.000	37.09	1.73	38.82	74.00	54.00	-35.18	peak	V
2	4199.000	36.35	5.93	42.28	74.00	54.00	-31.72	peak	V
3	5557.000	35.05	10.08	45.13	74.00	54.00	-28.87	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 $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) of the center frequency.

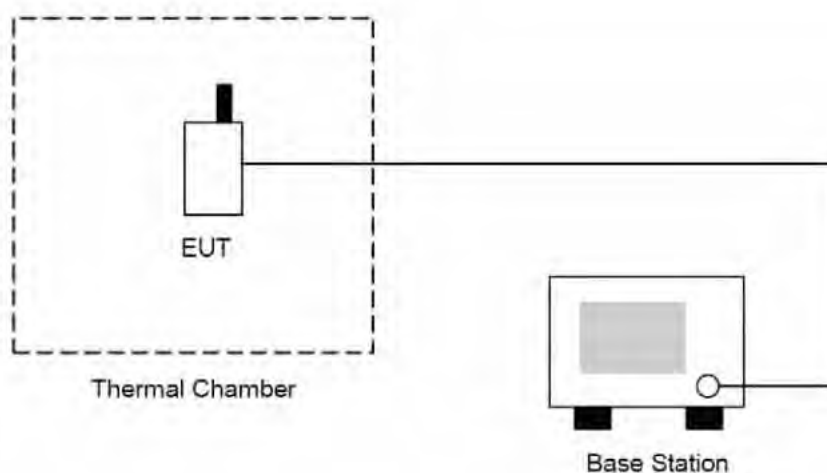
7.2. Test Instruments

Describe	Manufacturer	Model No.	Serial No.	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	TE02	TE02	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 $\pm 10\text{Hz}$.

7.6. Test Result

Model Number	HE910			
Test Item	Frequency Stability (Temperature Variation)			
Test Mode	Mode 1: GSM 850 Link			
Date of Test	12/02/2011		Test Site	TE02
Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
-30	14	0.017	±2.5	Pass
-20	12	0.014	±2.5	Pass
-10	13	0.016	±2.5	Pass
0	13	0.016	±2.5	Pass
10	13	0.016	±2.5	Pass
20	14	0.017	±2.5	Pass
30	15	0.018	±2.5	Pass
40	14	0.017	±2.5	Pass
50	13	0.016	±2.5	Pass

Model Number	HE910			
Test Item	Frequency Stability (Temperature Variation)			
Test Mode	Mode 2: GSM 1900 Link			
Date of Test	12/02/2011		Test Site	TE02
Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
-30	-18	-0.010	±2.5	Pass
-20	-17	-0.009	±2.5	Pass
-10	-18	-0.010	±2.5	Pass
0	-15	-0.008	±2.5	Pass
10	-16	-0.009	±2.5	Pass
20	-19	-0.010	±2.5	Pass
30	18	0.010	±2.5	Pass
40	17	0.009	±2.5	Pass
50	-15	-0.008	±2.5	Pass

Model Number	HE910			
Test Item	Frequency Stability (Temperature Variation)			
Test Mode	Mode 3: WCDMA Band II Link			
Date of Test	12/02/2011		Test Site	TE02
Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
-30	-14	-0.007	±2.5	Pass
-20	-14	-0.007	±2.5	Pass
-10	-13	-0.007	±2.5	Pass
0	-13	-0.007	±2.5	Pass
10	-15	-0.008	±2.5	Pass
20	-14	-0.007	±2.5	Pass
30	-14	-0.007	±2.5	Pass
40	-16	-0.009	±2.5	Pass
50	-15	-0.008	±2.5	Pass

Model Number	HE910			
Test Item	Frequency Stability (Temperature Variation)			
Test Mode	Mode 4: WCDMA Band V Link			
Date of Test	12/02/2011		Test Site	TE02
Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
-30	-9	-0.011	±2.5	Pass
-20	-10	-0.012	±2.5	Pass
-10	-8	-0.010	±2.5	Pass
0	-8	-0.010	±2.5	Pass
10	-7	-0.008	±2.5	Pass
20	-9	-0.011	±2.5	Pass
30	-9	-0.011	±2.5	Pass
40	-10	-0.012	±2.5	Pass
50	-9	-0.011	±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 $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) of the center frequency.

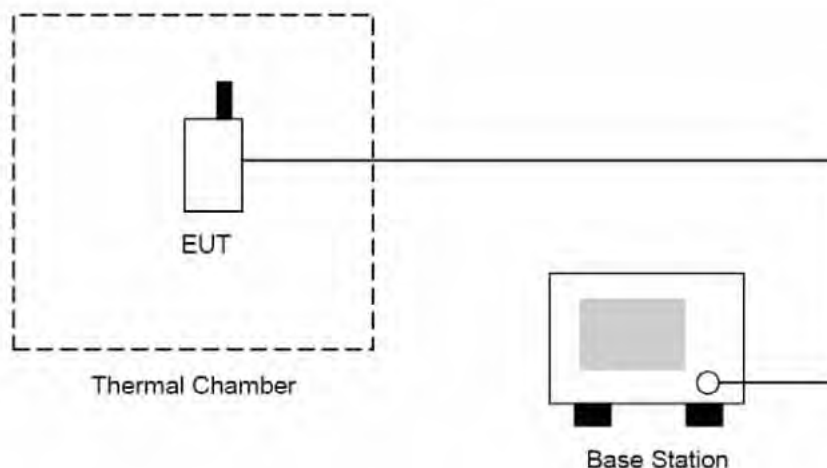
8.2. Test Instruments

Describe	Manufacturer	Model No.	Serial No.	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	TE02	TE02	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 $25 \pm 5^\circ\text{C}$ 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 $\pm 10\text{Hz}$.

8.6. Test Result

Model Number	HE910				
Test Item	Frequency Stability (Voltage Variation)				
Test Mode	Mode 1: GSM 850 Link				
Date of Test	12/02/2011		Test Site	TE02	
Level	Voltage [V]	Deviation [Hz]	Deviation [ppm]	Limit [ppm]	Result
High voltage	4.20	14	0.017	± 2.5	Pass
Normal voltage	3.80	13	0.016	± 2.5	Pass
Low voltage	3.40	12	0.014	± 2.5	Pass

Model Number	HE910				
Test Item	Frequency Stability (Voltage Variation)				
Test Mode	Mode 2: GSM 1900 Link				
Date of Test	12/02/2011		Test Site	TE02	
Level	Voltage [V]	Deviation [Hz]	Deviation [ppm]	Limit [ppm]	Result
High voltage	4.20	-20	-0.011	± 2.5	Pass
Normal voltage	3.80	-18	-0.010	± 2.5	Pass
Low voltage	3.40	-23	-0.012	± 2.5	Pass

Model Number	HE910				
Test Item	Frequency Stability (Voltage Variation)				
Test Mode	Mode 3: WCDMA Band II Link				
Date of Test	12/02/2011		Test Site	TE02	
Level	Voltage [V]	Deviation [Hz]	Deviation [ppm]	Limit [ppm]	Result
High voltage	4.20	10	0.005	± 2.5	Pass
Normal voltage	3.80	-12	-0.006	± 2.5	Pass
Low voltage	3.40	-15	-0.008	± 2.5	Pass

Model Number	HE910				
Test Item	Frequency Stability (Voltage Variation)				
Test Mode	Mode 4: WCDMA Band V Link				
Date of Test	12/02/2011			Test Site	TE02
Level	Voltage [V]	Deviation [Hz]	Deviation [ppm]	Limit [ppm]	Result
High voltage	4.20	-9	-0.011	±2.5	Pass
Normal voltage	3.80	-8	-0.010	±2.5	Pass
Low voltage	3.40	-6	-0.007	±2.5	Pass