TEST REPORT

FCC ID: Y44-S4

IC: 9932A-S4

Applicant : Stonex Europe Srl

Address : Via Zucchi 1, 20900 Monza(MB), Italy

Equipment Under Test (EUT):

Name : S4 Handheld

Model : S4H, S4C

In Accordance with: FCC PART 2; FCC PART 22H; FCC PART 24E

RSS-132, Issue 3, January 2013

RSS-133, Issue 6, January 2013

Report No : CST-TCB140729047

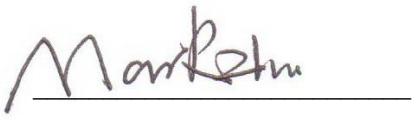
Date of Test : August 09- August 15, 2014

Date of Issue : August 17, 2014

Test Result: **PASS**

In the configuration tested, the EUT complied with the standards specified above

Authorized Signature



(Mark Zhu)

General Manager

The manufacture should ensure that all the products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

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Contents

1. General Information

1.1. Description of Device (EUT)

EUT	:	S4 Handheld
Trade Name	:	N/A
Model No.	:	S4H, S4C (S4H and S4C are electrically identical, the only difference is Model Number, S4H was tested for representative)
Power supply	:	DC 7.4V Supply by battery
Adapter	:	Manufacturer: NIL Model No.:PSA15R-150P
Operation frequency	:	IEEE 802.11b: 2412 MHz – 2462 MHz IEEE 802.11g: 2412 MHz – 2462 MHz Bluetooth 2.0: 2402 – 2480MHz GSM/GPRS 850: 824.2 MHz – 848.8 MHz GSM/GPRS 1900: 1850.2 MHz – 1909.8 MHz
Modulation	:	IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK), IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK), Bluetooth 2.0: GFSK GSM/GPRS: GMSK
Antenna Type	:	PCB Antenna, max gain -3 dBi for WIFI, PCB Antenna, max gain -3 dBi for BT. PCB Antenna, max gain -3 dBi for GSM/GPRS 850/1900
Applicant	:	Stonex Europe Srl
Address	:	Via Zucchi 1,20900 Monza(MB), Italy
Manufacturer	:	Stonex Europe Srl
Address	:	Via Zucchi 1,20900 Monza(MB), Italy

1.2. Test Lab information

Alpha Product Testing Laboratory
Building B, East Area of Nanchang Second, Industrial Zone, Gushu 2nd Road
Bao'an, Shenzhen, China
FCC Registered No.:197647
IC Registration Number: 12135A

2. Summary of test

2.1. Summary of test result

Description of Test Item	Standard	Results
Conducted Output power	FCC PART 2: 2.1046 FCC PART 22H: 22.913 (a) FCC PART 24E: 24.232 (c) RSS-132 5.4 RSS-133 6.4	PASS
Radiated Output power(erp/eirp)	FCC PART 22H:22.913 (a) FCC PART 24E:24.232(c) RSS-132 5.4 RSS-133 6.4	PASS
Occupied bandwidth	FCC PART 2: 2.1049 FCC PART 22H: 22.917 (b) FCC PART 24E: 24.238 (b)	PASS
Frequency stability	FCC PART 2: 2.1055 FCC PART 22H: 22.355 FCC PART 24E: 24.235 RSS-132 5.3 RSS-133 6.3	PASS
Conducted spurious emission (Antenna terminal)	FCC PART 2: 2.1051 FCC PART 22H: 22.917 FCC PART 24E: 24.238 RSS-132 5.5 RSS-133 6.5	PASS
Radiated spurious emissions	FCC PART 2: 2.1053 FCC PART 22H: 22.917 FCC PART 24E: 24.238 RSS-132 5.5 RSS-133 6.5	PASS
Band edge compliance	FCC PART 22H: 22.917 (b) FCC PART 24E: 24.238 (b) RSS-132 5.5 RSS-133 6.5	PASS
Power Line Conducted Emission Test	FCC Part 15: 15.207 ANSI C63.4: 2003	PASS

2.2. Assistant equipment used for test

Description	:	Adapter
Manufacturer	:	NIL
Model No.	:	PSA15R-150P
Input	:	AC 100-240V 50-60Hz
Output	:	DC 15V, 1.0A

2.3. Test mode

During all testing, EUT is in link mode with base station emulator at maximum power level in each test mode and channel as below:

Mode	Channel	Frequency(MHz)
GSM 850	128	824.2
	190	836.6
	251	848.8
PCS 1900	512	1850.2
	661	1880.0
	810	1909.8

2.4. Test Environment Conditions

Temperature range	21-25℃
Humidity range	40-75%
Pressure range	86-106kPa

2.5. Measurement Uncertainty (95% confidence levels, k=2)

Item	MU	Remark
Uncertainty for Power point Conducted Emissions Test	2.42dB	
Uncertainty for Radiation Emission test in 3m chamber (30MHz to 1GHz)	3.54dB	Polarize: V
	4.1dB	Polarize: H
Uncertainty for Radiation Emission test in 3m chamber (1GHz to 25GHz)	2.08dB	Polarize: H
	2.56dB	Polarize: V
Uncertainty for radio frequency	1×10-9	
Uncertainty for conducted RF Power	0.65dB	
Uncertainty for temperature	0.2℃	
Uncertainty for humidity	1%	
Uncertainty for DC and low frequency voltages	0.06%	

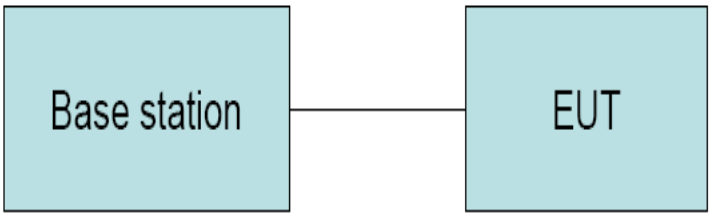
2.6. Test Equipment

Equipment	Manufacture	Model No.	Serial No.	Last cal.	Cal Interval
3m Semi-Anechoic	ETS-LINDGREN	N/A	SEL0017	Nov. 16, 13	1Year
Spectrum analyzer	Agilent	E4407B	MY49510055	Oct. 30, 13	1Year
Receiver	R&S	ESCI	101165	Oct. 30, 13	1Year
Receiver	R&S	ESCI	101202	Oct. 30, 13	1Year
Bilog Antenna	SCHWARZBECK	VULB 9168	9168-438	Mar.11, 14	1Year
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D(1201)	Mar.11, 14	1Year
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170 D(1432)	Mar.11, 14	1Year
Active Loop Antenna	Beijing Daze	ZN30900A	SEL0097	Mar.12, 13	1Year
L.I.S.N.	SCHWARZBECK	NSLK8126	8126466	Oct. 30, 13	1Year
Cable	Resenberger	SUCOFLEX 104	MY6562/4	Oct. 30, 13	1Year
Cable	Resenberger	SUCOFLEX 104	309972/4	Oct. 30, 13	1Year
Cable	Resenberger	SUCOFLEX 104	329112/4	Oct. 30, 13	1Year
Power Meter	Anritsu	ML2487A	6K00001491	Oct. 30, 13	1Year
Power sensor	Anritsu	ML2491A	32516	Oct. 30, 13	1Year
Pre-amplifier	SCHWARZBECK	BBV9743	9743-019	Oct. 30, 13	1Year
Pre-amplifier	Quietek	AP-180C	CHM-0602012	Oct. 30, 13	1Year
Base station	Agilent	E5515C	GB44300243	Oct. 30, 13	1 Year
Temperature controller	Terchy	MHQ	120	Oct. 30, 13	1Year
Power divider	Anritsu	K240C	020346	Oct. 30, 13	1 Year
Signal Generator	ROHDE&SCHWARZ	CMU200	116785	Oct. 30, 13	1 Year

Attenuator	Agilent	8491B	MY39262165	Oct. 30, 13	1 Year
X-series USB Peak and Average Power Sensor	Agilent	U2021XA	MY54080020	2014.01.19	1Year
X-series USB Peak and Average Power Sensor	Agilent	U2021XA	MY54110001	2014.01.19	1 Year
4 Ch.Simultaneous Sampling 14 Bits 2 MS/s	Agilent	U2531A	TW54063507	2014.01.19	1 Year

3. Conducted Output power

3.1. Block Diagram of Test Setup



3.2. Limit

Cellular Telephone 850MHz	PCS 1900MHz
38.5dBm(ERP)	33dBm(EIRP)

3.3. Test Procedure

(1) The EUT's RF output port as connected to base station.
(2) A call is set up by the SS according to the generic call set up procedure
(3) Set EUT at maximum power level through base station by power level command
(4) Measure the maximum output power of EUT at each frequency band and mode by base station.

3.4. Test Result

GSM 850 :

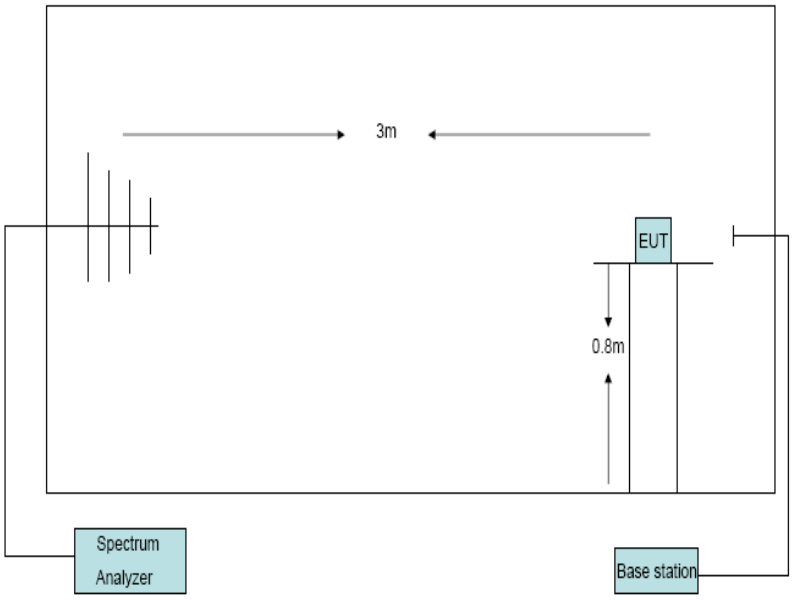
EUT: S4 Handheld	M/N:S4H	Power: DC 7.4V		
Ambient Temperature:24℃	Relative Humidity: 62%			
Test date: 2014-08-11	Test site: RF site	Tested by: Simple Guan		
Conclusion: PASS				
Mode	Channel	Frequency (MHz)	Output power (dBm)	Limit (dBm)
GSM 850	128	824.2	32.58	38.5
	190	836.6	32.59	38.5
	251	848.8	32.69	38.5
GPRS 850 (1 uplink slot)	128	824.2	32.56	38.5
	190	836.6	32.55	38.5
	251	848.8	32.63	38.5
GPRS 850 (2 uplink slot)	128	824.2	31.56	38.5
	190	836.6	31.62	38.5
	251	848.8	31.68	38.5
GPRS 850 (3 uplink slot)	128	824.2	29.60	38.5
	190	836.6	29.64	38.5
	251	848.8	29.76	38.5
GPRS 850 (4 uplink slot)	128	824.2	28.20	38.5
	190	836.6	28.32	38.5
	251	848.8	28.42	38.5
Note: N/A				

PCS 1900:

EUT: S4 Handheld M/N:S4H Power: DC 7.4V				
Ambient Temperature:24℃	Relative Humidity: 62%			
Test date: 2014-08-11	Test site: RF site Tested by: Simple Guan			
Conclusion: PASS				
Mode	Channel	Frequency (MHz)	Output power (dBm)	Limit (dBm)
PCS1900	512	1850.2	29.74	33
	661	1880.0	29.77	33
	810	1909.8	29.81	33
GPRS 1900 (1 uplink slot)	512	1850.2	29.73	33
	661	1880.0	29.76	33
	810	1909.8	29.81	33
GPRS 1900 (2 uplink slot)	512	1850.2	28.75	33
	661	1880.0	28.77	33
	810	1909.8	28.81	33
GPRS 1900 (3 uplink slot)	512	1850.2	26.59	33
	661	1880.0	26.64	33
	810	1909.8	26.67	33
GPRS 1900 (4 uplink slot)	512	1850.2	26.10	33
	661	1880.0	26.08	33
	810	1909.8	26.19	33
Note: N/A				

4. Radiated Output power

4.1. Block Diagram of Test Setup



4.2. Limit

Cellular Telephone 850MHz	PCS 1900MHz
38.5dBm(ERP)	33dBm(EIRP)

4.3. Test Procedure

1. The EUT was placed on a non-conductive rotating platform with 0.8 meter height in an anechoic chamber. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer with RBW= 3MHz, VBW= 3MHz and peak detector settings.
2. During the measurement, the EUT was enforced in maximum power and linked with a base station. The highest emission was recorded from analyzer power level (LVL) from the 360 degrees rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 meters in both horizontally and vertically polarized orientations
3. Effective Isotropic Radiated Power (EIRP) was measured by substitution method according to TIA/EIA-603-C. The EUT was replaced by dipole antenna (for frequency below 1GHz) or Horn antenna (for frequency above 1GHz) at same location with same polarize of receiving antenna and then a known power of each measure frequency from

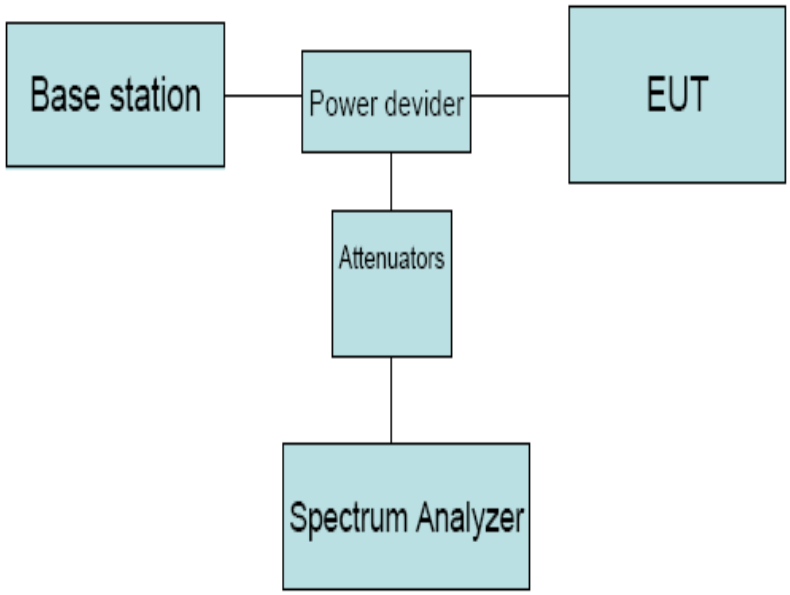
S.G. was applied into the dipole antenna or Horn antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna. The correction factor (in dB) = S.G. - Tx Cable loss + Substitution antenna gain –Substitution antenna Loss (only for Dipole antenna) - Analyzer reading. Then the EUT's EIRP was calculated with the correction factor, EIRP= LVL + Correction factor and ERP = EIRP – 2.15

4.4. Test Result

EUT: S4 Handheld M/N:S4H					
Power: DC 7.4V					
Ambient Temperature:23℃			Relative Humidity: 60%		
Test date: 2014-08-11			Test site: RF site	Tested by: Simple Guan	
Conclusion: PASS					
Mode	Channel	LVL (dBm)	Correction factor(dB)	ERP (dBm)	EIRP (dBm)
GSM 850	128	4.5	26.61	28.96	/
	190	4.5	26.86	29.21	/
	251	4.8	26.49	29.14	/
PCS 1900	512	4.5	22.27	/	26.77
	661	4.5	22.66	/	27.16
	810	4.6	22.37	/	26.97
ERP=LVL + Correction factor -2.15 EIRP=LVL+ Correction factor					

5. Occupied Bandwidth

5.1. B lock Diagram of Test Setup



5.2. Limit

N/A

5.3. Test Procedure

1. The EUT' RF output port was connected to Spectrum Analyzer and Base Station via power divider.

2. Spectrum analyzer's occupied bandwidth measure function was used to measure 99% bandwidth and -26dBc bandwidth

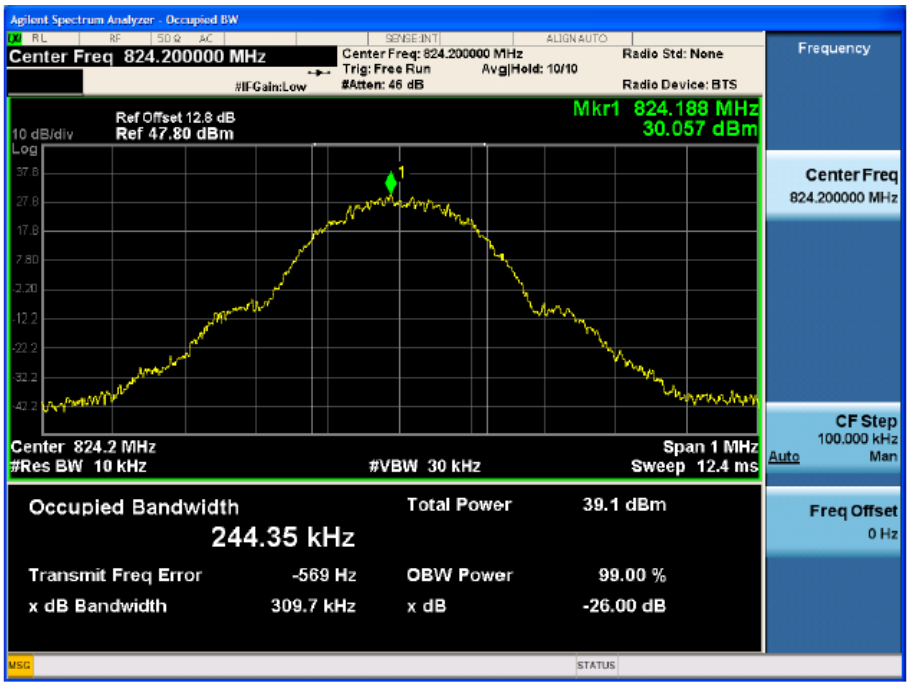
.

5.4. Test Result

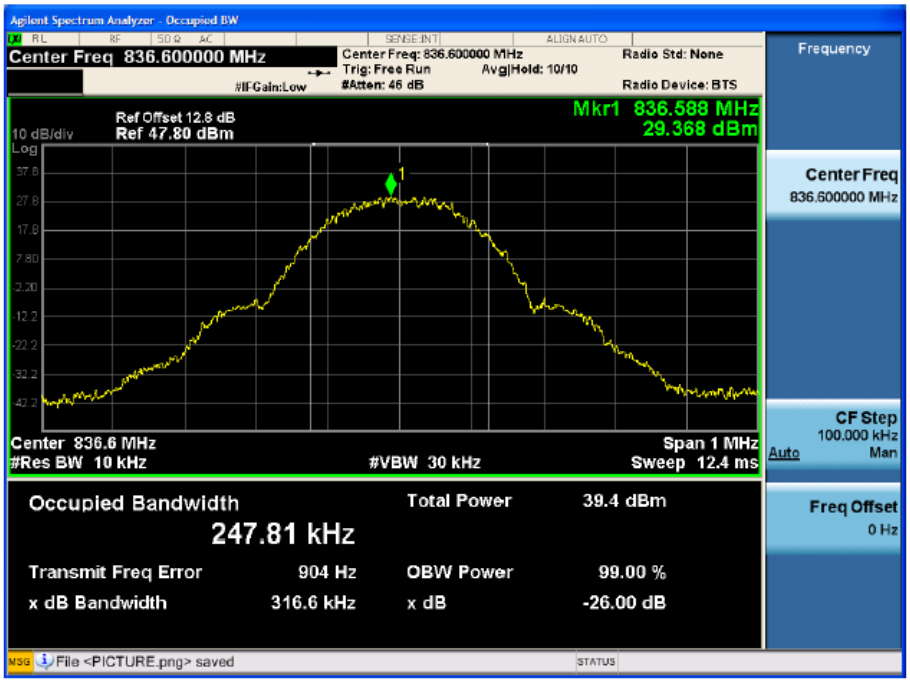
EUT: S4 Handheld M/N:S4H			
Power: DC 7.4V			
Ambient Temperature:23℃		Relative Humidity: 60%	
Test date: 2014-08-11		Test site: RF site	Tested by: Simple Guan
Mode	Channel	99% bandwidth (KHz)	-26dBc bandwidth (KHz)
GSM 850	128	244.35	309.7
	190	247.81	316.6
	251	245.13	318.5
PCS 1900	512	247.31	316.2
	661	251.75	316.3
	810	248.21	321.8

5.5. Orginal test data

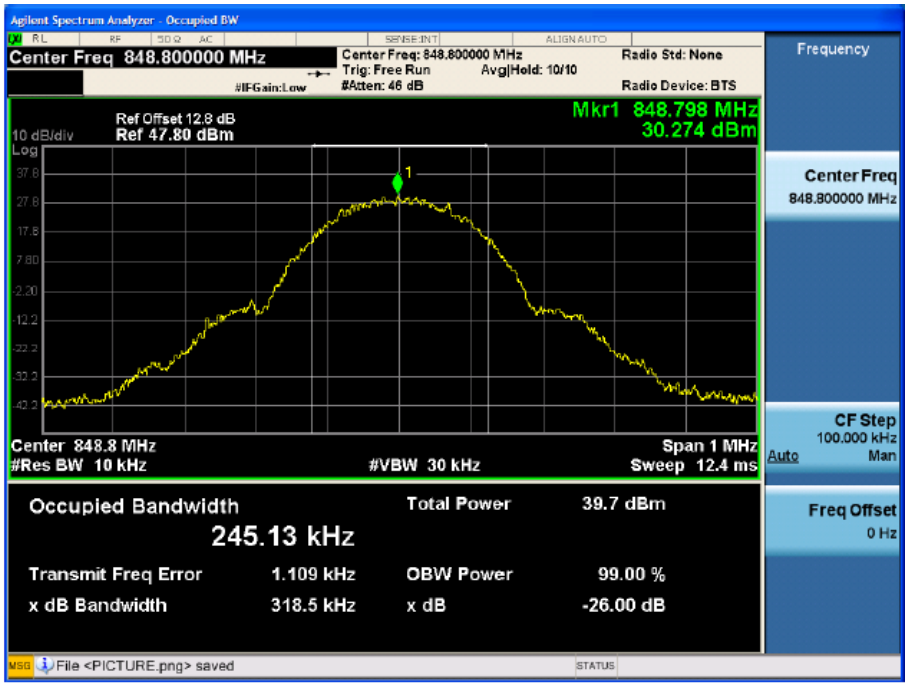
GSM 850
CH128



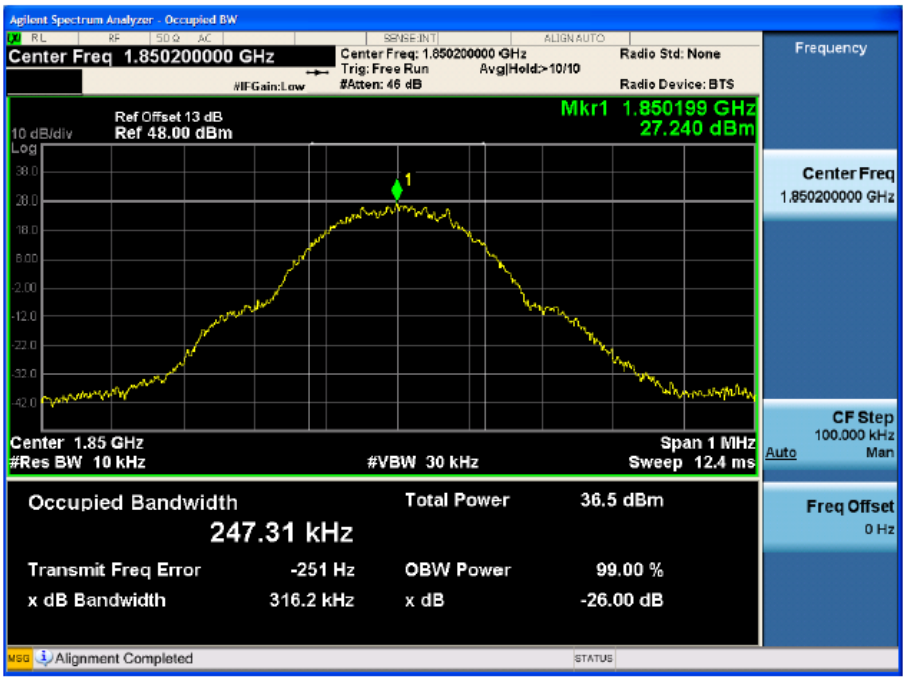
CH190


Agilent Spectrum Analyzer - Occupied BW
Center Freq 836.600000 MHz
Center Freq: 836.600000 MHz
Trig: Free Run
Avg|Hold: 10/10
#Atten: 46 dB
Radio Std: None
Radio Device: BTS
#IFGain:Low
Ref Offset 12.8 dB
10 dB/div
Ref 47.80 dBm
Log
Mkr1 836.588 MHz
29.368 dBm
Center 836.6 MHz
#Res BW 10 kHz
#VBW 30 kHz
Span 1 MHz
Sweep 12.4 ms
Occupied Bandwidth
247.81 kHz
Total Power
39.4 dBm
Transmit Freq Error
904 Hz
OBW Power
99.00 %
x dB Bandwidth
316.6 kHz
x dB
-26.00 dB
File <PICTURE.png> saved
Frequency
Center Freq
836.600000 MHz
CF Step
100.000 kHz
Auto
Man
Freq Offset
0 Hz

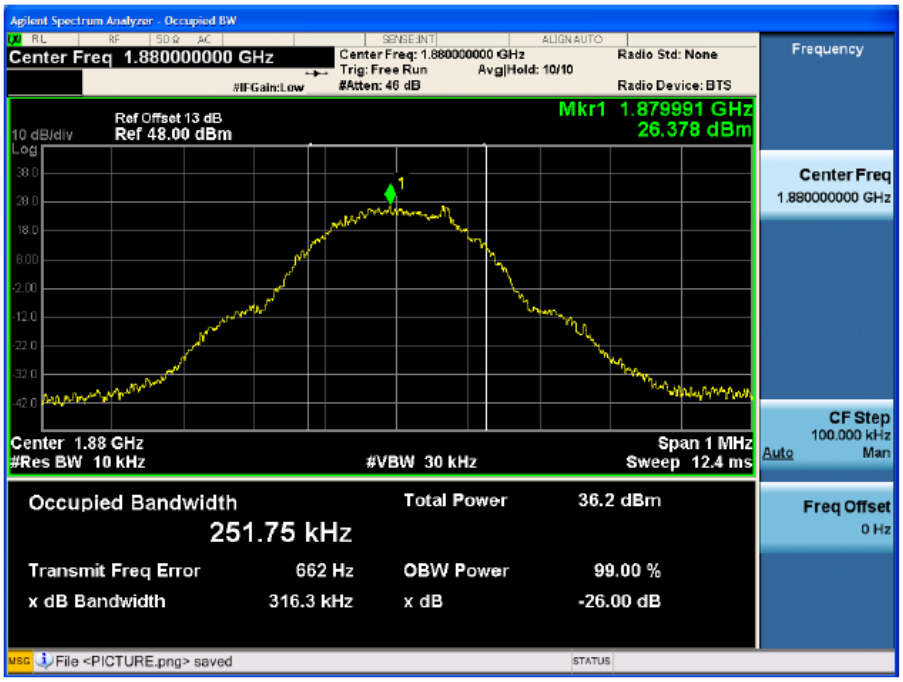
CH251


Agilent Spectrum Analyzer - Occupied BW
Center Freq 848.800000 MHz
Center Freq: 848.800000 MHz
Trig: Free Run
Avg|Hold: 10/10
#Atten: 46 dB
Radio Std: None
Radio Device: BTS
#IFGain:Low
Ref Offset 12.8 dB
10 dB/div
Ref 47.80 dBm
Log
Mkr1 848.798 MHz
30.274 dBm
Center 848.8 MHz
#Res BW 10 kHz
#VBW 30 kHz
Span 1 MHz
Sweep 12.4 ms
Occupied Bandwidth
245.13 kHz
Total Power
39.7 dBm
Transmit Freq Error
1.109 kHz
OBW Power
99.00 %
x dB Bandwidth
318.5 kHz
x dB
-26.00 dB
File <PICTURE.png> saved
Frequency
Center Freq
848.800000 MHz
CF Step
100.000 kHz
Auto
Man
Freq Offset
0 Hz

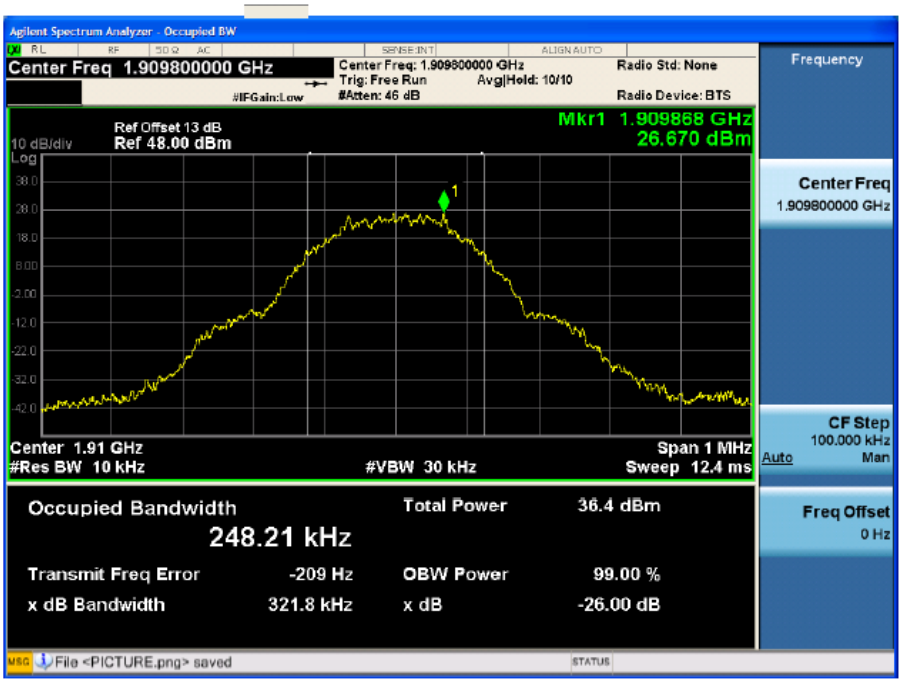
PCS 1900
CH512



CH661

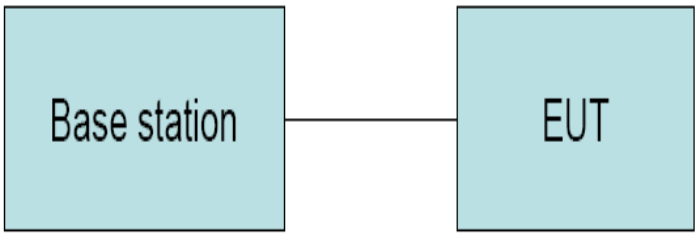


CH810


Agilent Spectrum Analyzer - Occupied BW
Center Freq 1.909800000 GHz
Center Freq: 1.909800000 GHz
Trig: Free Run
Avg|Hold: 10/10
#Atten: 46 dB
Radio Std: None
Radio Device: BTS
#IFGain:Low
Frequency
Ref Offset 13 dB
10 dB/div
Ref 48.00 dBm
Log
Mkr1 1.909868 GHz
26.670 dBm
Center Freq
1.909800000 GHz
Center 1.91 GHz
#Res BW 10 kHz
#VBW 30 kHz
Span 1 MHz
Sweep 12.4 ms
CF Step
100.000 kHz
Auto
Man
Occupied Bandwidth
248.21 kHz
Total Power
36.4 dBm
Freq Offset
0 Hz
Transmit Freq Error
-209 Hz
OBW Power
99.00 %
x dB Bandwidth
321.8 kHz
x dB
-26.00 dB
File <PICTURE.png> saved

6. Frequency stability

6.1. Block Diagram of Test Setup



6.2. Limit

Cellular Telephone 850MHz	PCS 1900MHz
± 2.5 ppm	Must stay within the authorized frequency block

6.3. Test Procedure

Test Procedures for Temperature Variation:

1. The EUT was set up in the thermal chamber and connected with the base station.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized for three hours. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power ON, the temperature was raised in 10°C step up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

Test Procedures for Voltage Variation

1. The EUT was placed in a temperature chamber at 25±5° C and connected with the base station.
2. The power supply voltage to the EUT was varied from DC 5V to 3.5V
3. The variation in frequency was measured for the worst case.

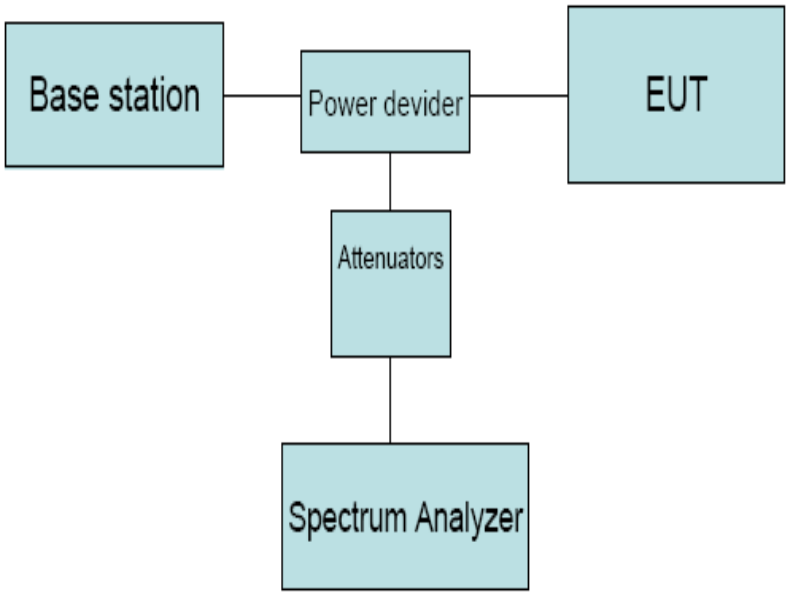
6.4. Test Result

EUT: S4 Handheld M/N:S4H			
Power: DC 7.4V			
Ambient Temperature:23℃		Relative Humidity: 60%	
Test date: 2014-08-11		Test site: RF site	Tested by: Simple Guan
Conclusion: PASS			
Mode	Voltage (V)	Frequency error (Hz)	frequency error (ppm)
GSM 850 CH 190	8.5V	17.78	0.02
	7.5V	-18.42	-0.02
	6.5V	15.24	0.02
	6.4V	-16.35	-0.02
	6.3V	-16.32	-0.02
PCS 1900 CH661	8.5V	-26.35	-0.01
	7.5V	36.32	0.02
	6.5V	-29.18	-0.02
	6.4V	30.35	0.02
	6.3V	-28.36	-0.02

Mode	Temperature (℃)	Frequency error (Hz)	frequency error (ppm)
GSM 850 CH190	-30	28.68	0.03
	-20	25.32	0.03
	-10	23.22	0.03
	0	20.86	0.02
	10	-15.22	-0.02
	20	18.44	0.02
	30	-12.85	-0.02
	40	-13.12	-0.02
	50	-23.05	-0.01
PCS 1900 CH661	-30	42.56	0.02
	-20	41.08	0.02
	-10	39.26	0.02
	0	39.52	0.02
	10	-25.98	-0.01
	20	33.95	0.02
	30	-25.16	-0.01
	40	20.88	0.02
	50	-15.22	-0.02

7. Conducted spurious emissions

7.1. Block Diagram of Test Setup



7.2. Limit

The mean power of emissions must be attenuated below the mean power of the unmodulated carrier (P) on any frequency outside the frequency band by at least (43 + 10 log P) dB, in this case, -13dBm.

7.3. Test Procedure

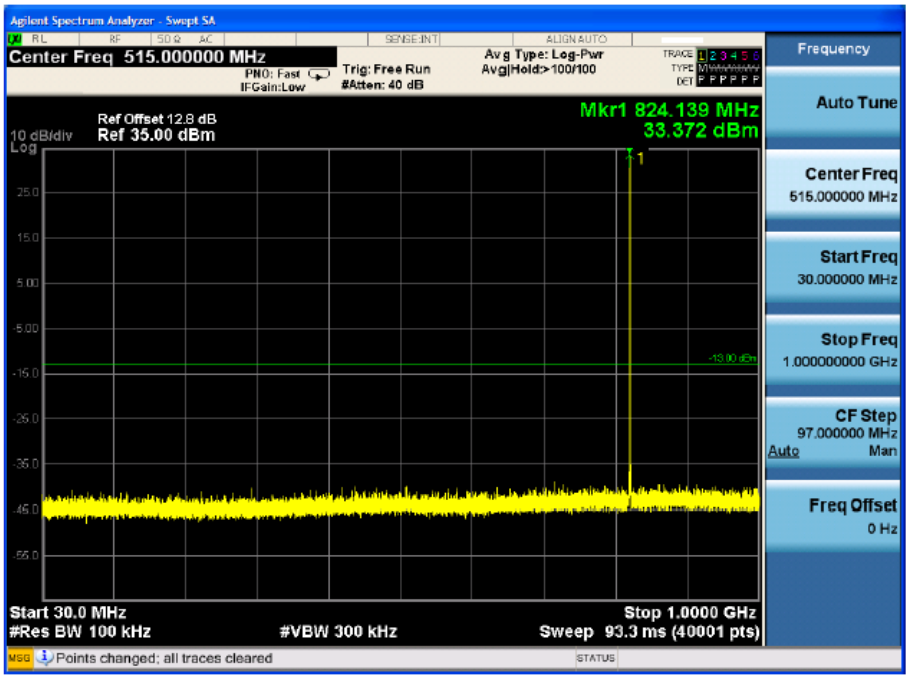
1. The EUT was connected to spectrum analyzer and base station via power divider.

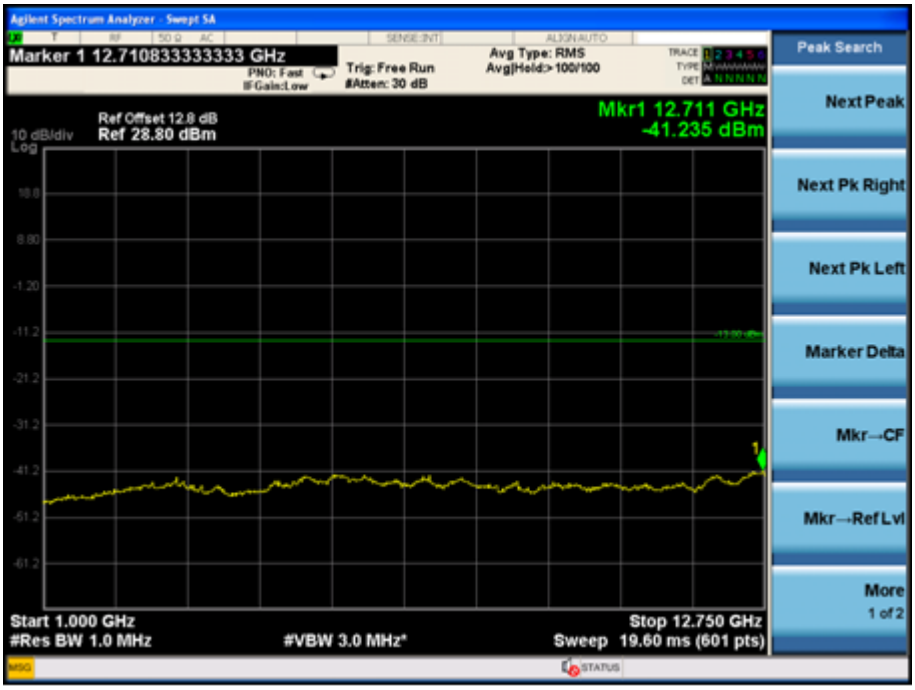
2. The low, middle and high channels of each band and mode's spurious emissions for 30MHz to 10th Harmonic were measured by Spectrum analyzer.

7.4. Test Result

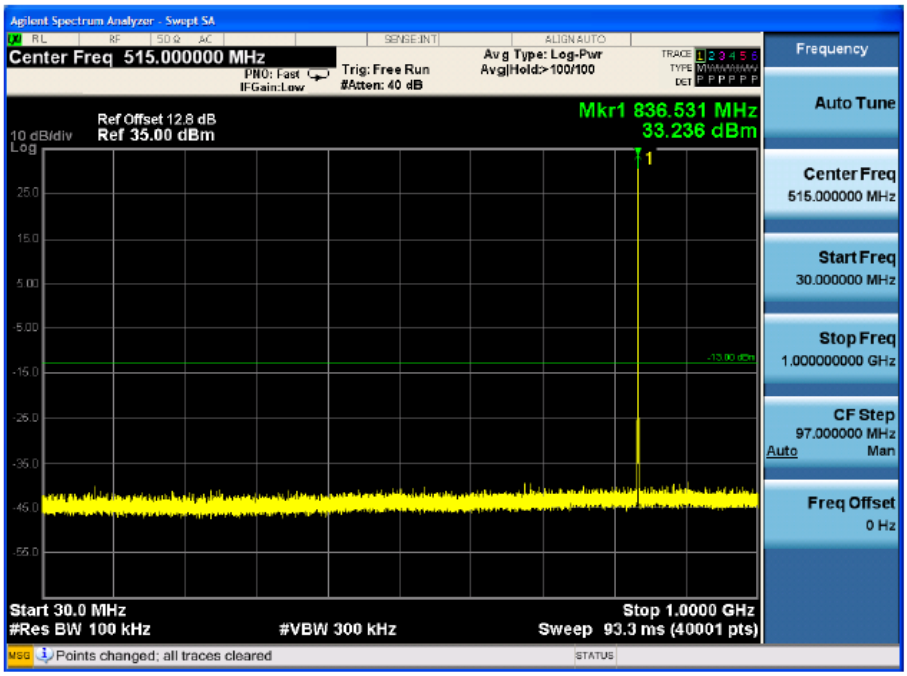
PASS

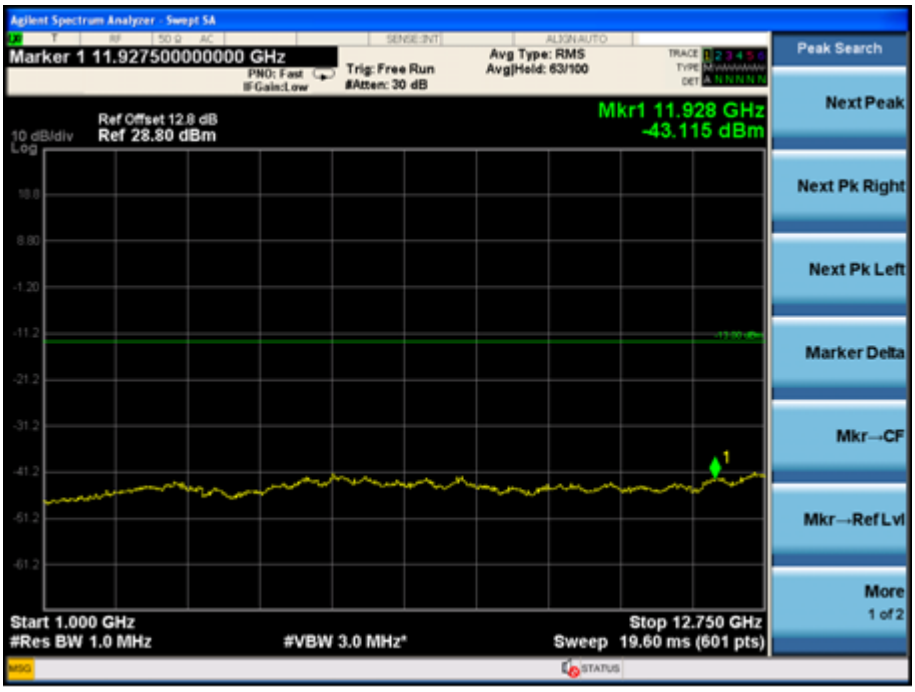
Test Mode: GSM 850 CH 128



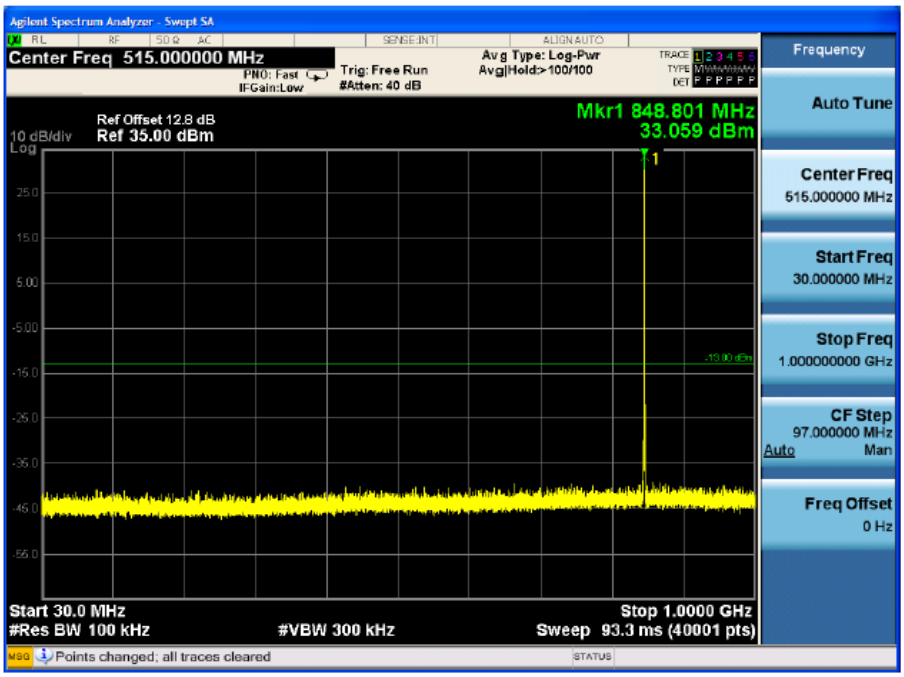


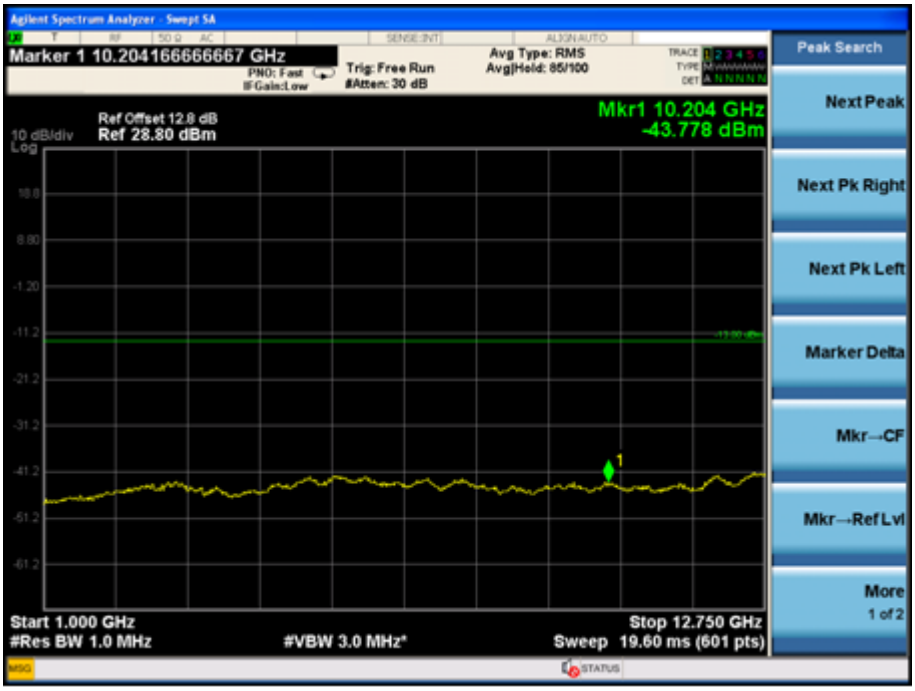
Test Mode: GSM 850 CH 190



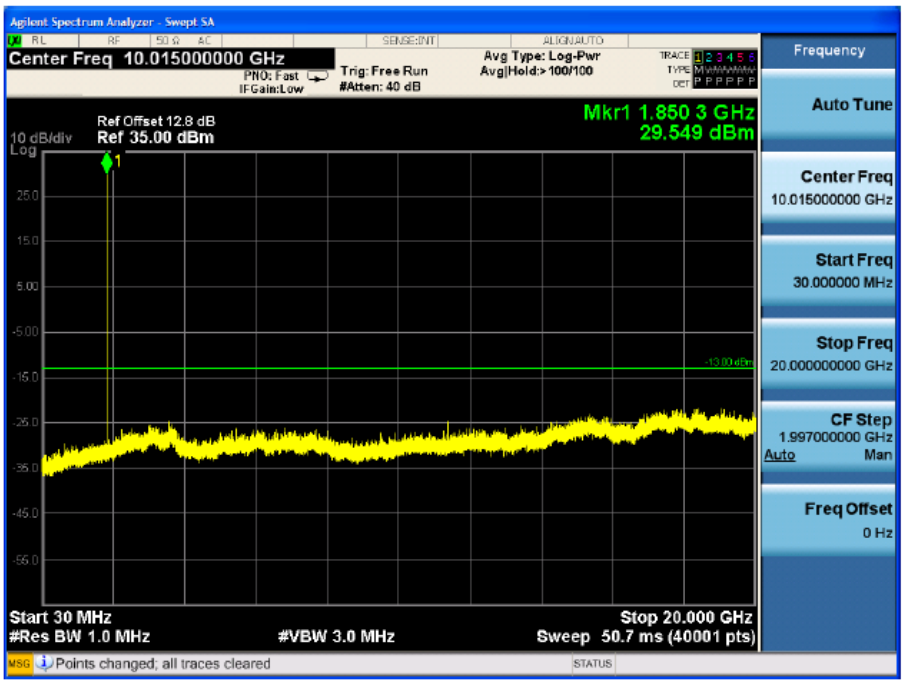


Test Mode: GSM 850 CH 251

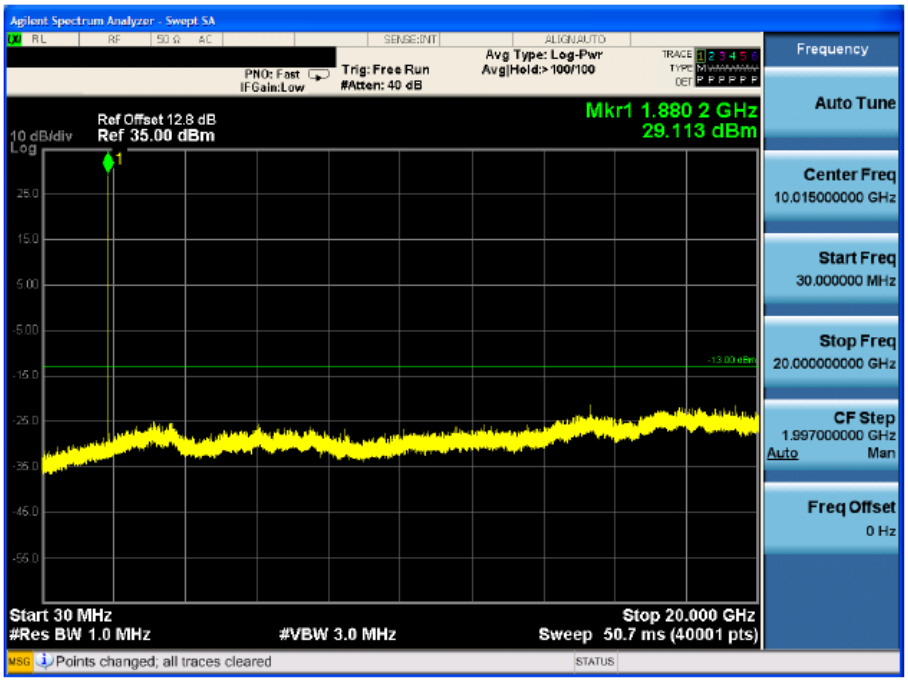




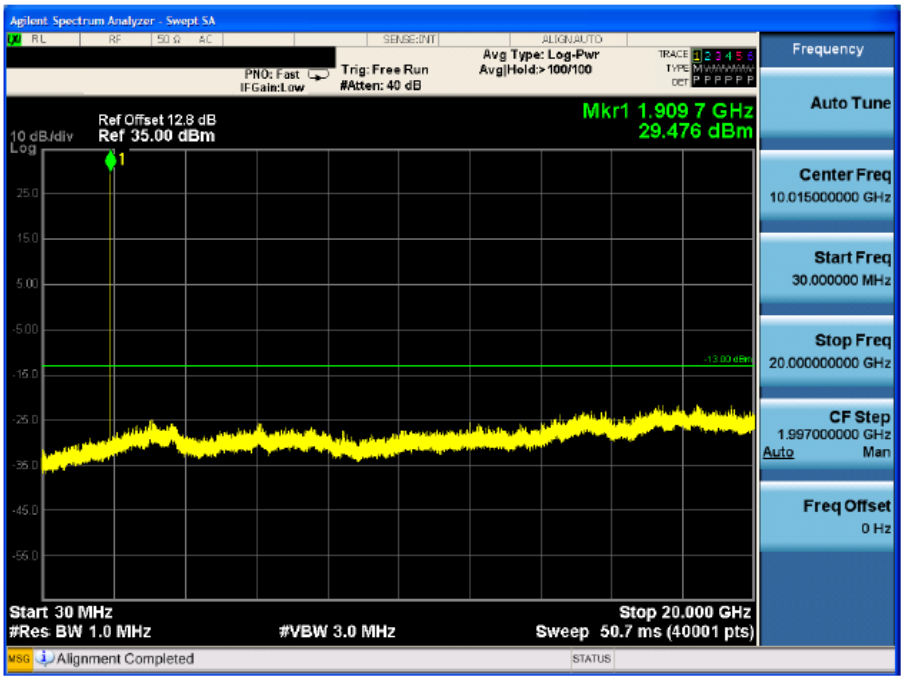
Test Mode: GSM 1900 CH 512



Test Mode: GSM 1900 CH 661

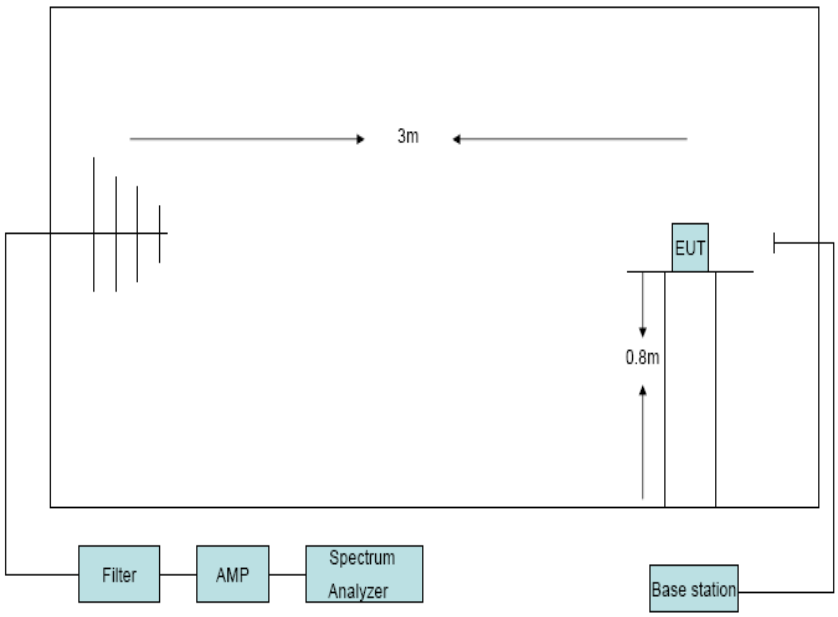


Test Mode: GSM 1900 CH 810



8. Radiated Spurious emissions

8.1. Block Diagram of Test Setup



8.2. Limit

The mean power of emissions must be attenuated below the mean power of the unmodulated carrier (P) on any frequency outside the frequency band by at least (43 + 10 log P) dB, in this case, -13dBm.

8.3. Test Procedure

1. The EUT was placed on an non-conductive rotating platform with 0.8 meter height in an anechoic chamber. The radiated spurious emissions from 30MHz to 10th harmonious of fundamental frequency were measured at 3m with a test antenna and a spectrum analyzer with RBW= 1MHz, VBW= 1MHz ,peak detector settings.
2. During the measurement, the EUT was enforced in maximum power and linked with a base station. All the spurious emissions (record as LVL) at 3m were measured by rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 meters in both horizontally and vertically polarized orientations.
3. Final spurious emissions levels were measured by substitution method according to TIA/EIA-603-C. The EUT was replaced by dipole antenna (for frequency below 1GHz) or Horn antenna (for frequency above 1GHz) at same location with same polarize of receiver antenna and then a known power of each measure frequency from S.G. was

applied into the dipole antenna or Horn antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna. The correction factor (in dB) = S.G. - Tx Cable loss + Substitution antenna gain –Substitution antenna loss (only for Dipole antenna) - Analyzer reading. Then final spurious emissions were calculated with the correction factor, EIRP= LVL + Correction factor and ERP = EIRP – 2.15

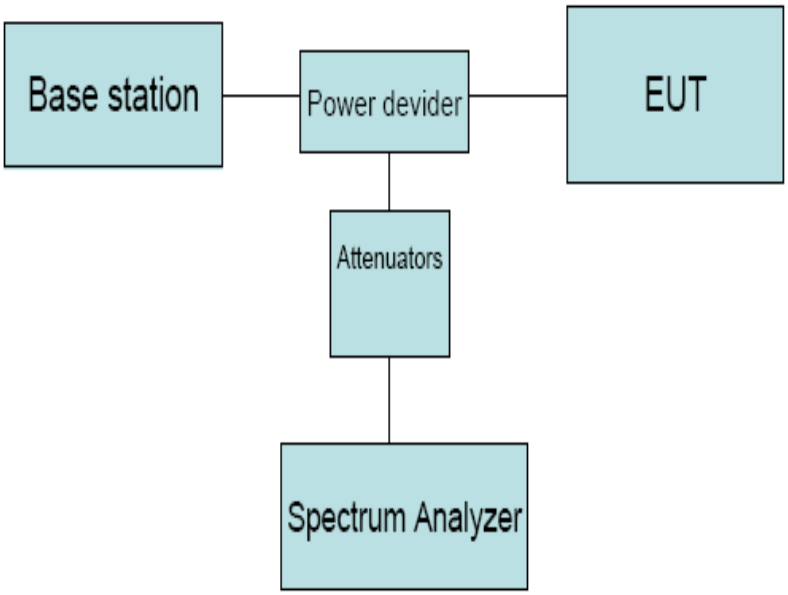
8.4. Test Result

EUT:S4 Handheld M/N:S4H						
Power: DC 7.4V						
Test Date: 2014-08-11	Test site: RF Chamber		Tested by: Simple Guan			
Ambient Temperature: 24℃	Relative Humidity: 60%					
Conclusion: PASS						
Test result						
Test Mode： GSM 850 CH128						
Frequency (MHz)	Antenna polarization	LVL (dBm)	Correction factor(dB)	Result (ERP)(dBm)	Limit (dBm)	Margin (dB)
537.31	H	-58.01	-6.53	-64.54	-13.00	51.54
537.31	V	-61.27	-6.53	-67.80	-13.00	54.80
1648.4	H	-56.32	11.50	-44.82	-13.00	31.82
1648.4	V	-46.48	10.56	-35.92	-13.00	22.92
Test Mode： GSM 850 CH190						
1673.2	H	-55.76	10.94	-44.82	-13.00	31.82
1673.2	V	-52.18	10.90	-41.28	-13.00	28.28
Test mode: GSM 850 CH251						
1697.6	H	-48.94	11.67	-37.27	-13.00	24.27
1697.6	V	-44.63	11.13	-33.5	-13.00	20.5

Test Mode：GSM 1900 CH512						
Frequency (MHz)	Antenna polarization	LVL (dBm)	Correction factor(dB)	Result (EIRP)(dBm)	Limit (dBm)	Margin (dB)
537.31	H	-58.36	-6.53	-64.89	-13.00	51.89
537.31	V	-57.36	-6.53	-63.89	-13.00	50.89
3700.4	H	-54.37	8.57	-45.8	-13.00	32.8
3700.4	V	-53.69	8.37	-45.32	-13.00	32.32
Test Mode： GSM 1900 CH661						
3760	H	-55.87	8.75	-47.12	-13.00	34.12
3760	V	-53.46	8.55	-44.91	-13.00	31.91
Test mode: GSM 1900 CH810						
3819.6	H	-58.63	8.94	-49.69	-13.00	36.69
3819.6	V	-55.32	8.72	-46.6	-13.00	33.6
Note: All the other emissions not recorded were too low to read, and deemed to comply with limit.						

9. Band Edge Compliance

9.1. Block Diagram of Test Setup



9.2. Limit

The mean power of emissions must be attenuated below the mean power of the unmodulated carrier (P) on any frequency outside the frequency band by at least (43 + 10 log P) dB, in this case, -13dBm.

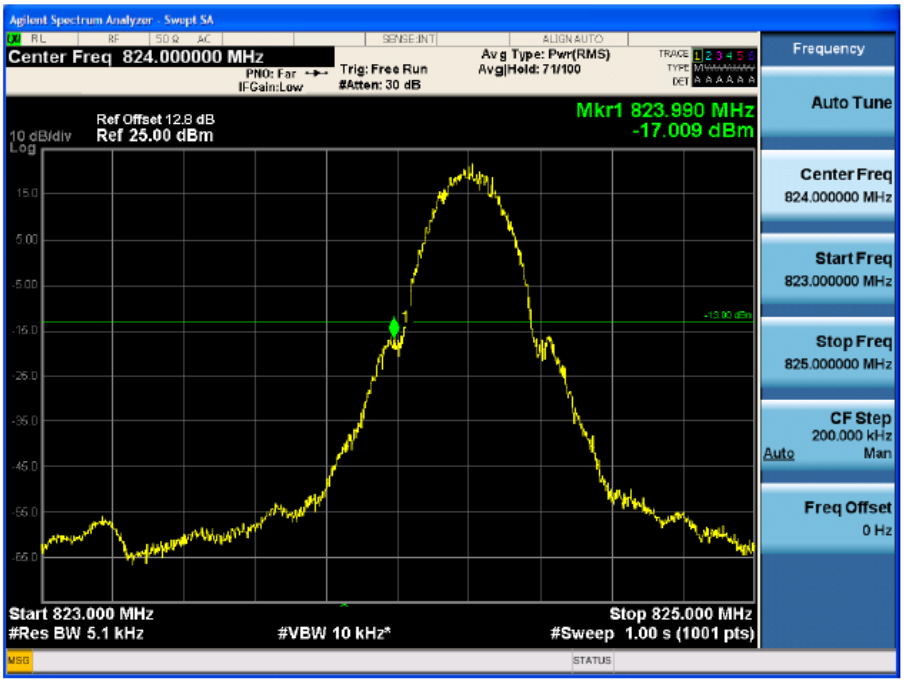
9.3. Test Procedure

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The band edges of low and high channels for the highest RF powers were measured.

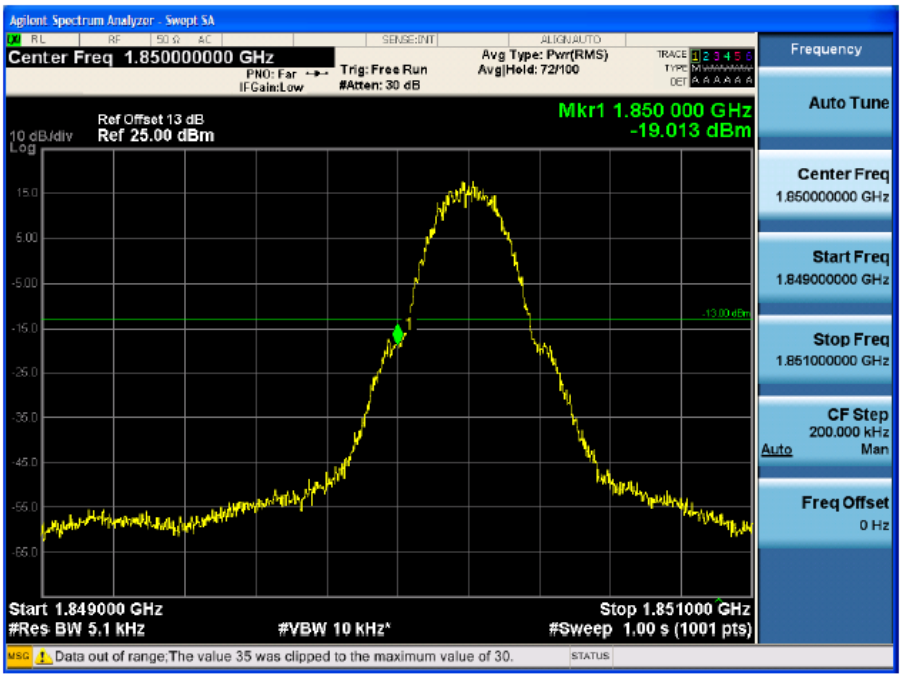
9.4. Test Result

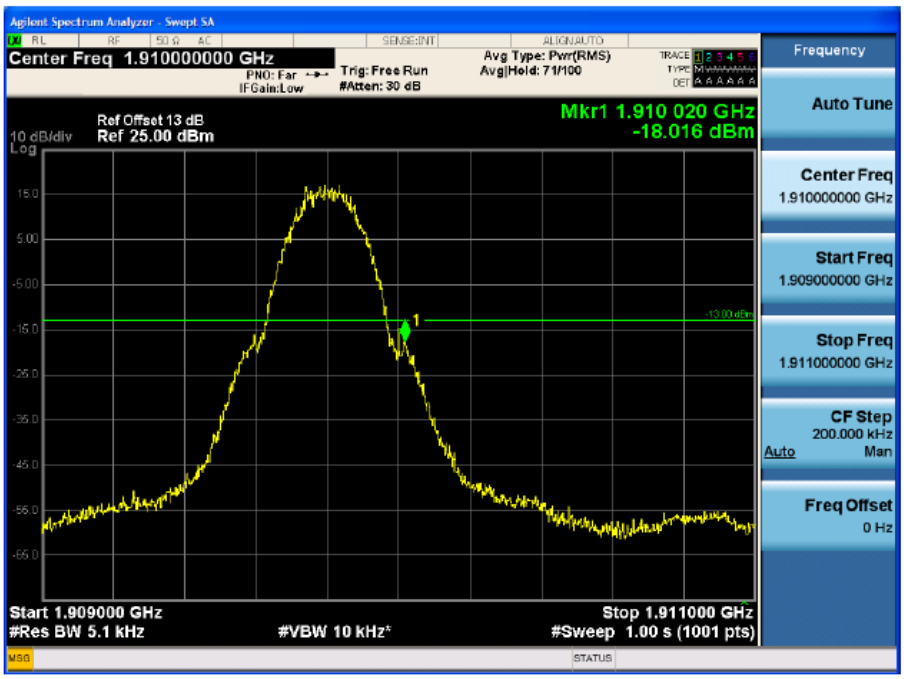
PASS

Test Mode: GSM 850



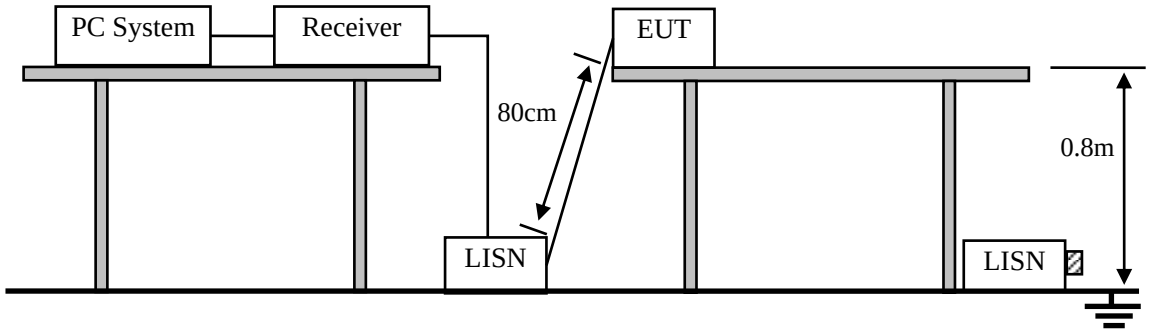
Test Mode: GSM 1900





10. Power line conducted emission

10.1. Block Diagram of Test Setup



:50Ω Terminator

10.2. Limit

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

10.3. Test Procedure

(1) The EUT was placed on a non-metallic table, 80cm above the ground plane.

(2) Setup the EUT and simulator as shown in 10.1

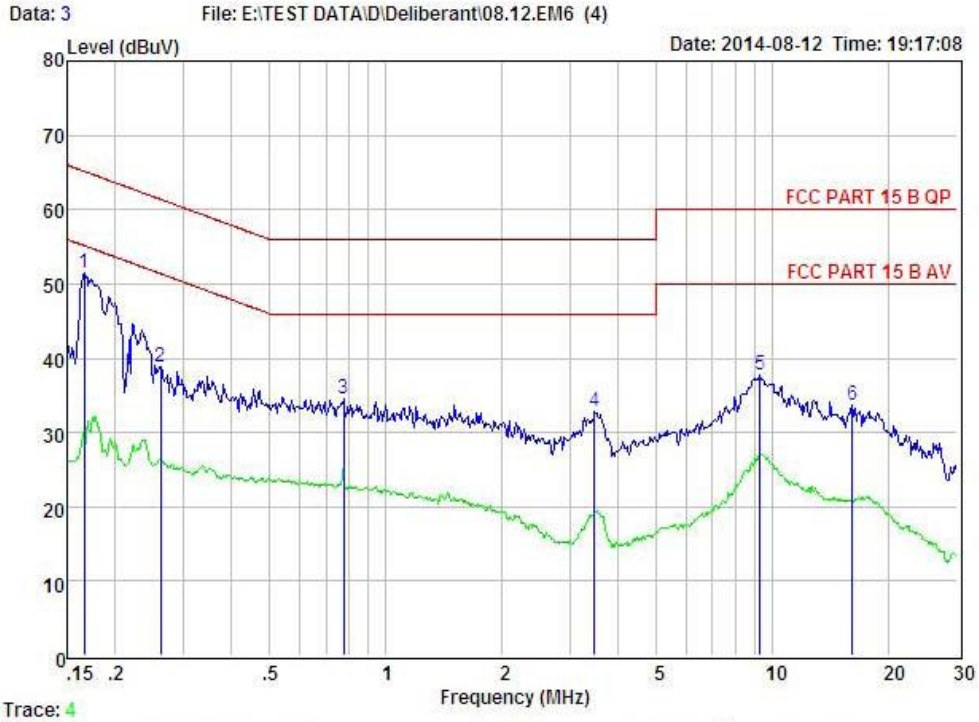
(3) The EUT Power connected to the power mains through a power adapter and a line impedance stabilization network (L.I.S.N1). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N1), this provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). Both sides of power line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4 2009 and ANSI C64.10:2009 on conducted Emission test.

(4) The bandwidth of test receiver is set at 10 kHz.

(5) The frequency range from 150 KHz to 30MHz is checked.

10.4.Test Result

PASS. (See below detailed test data)



Trace: 4

Condition : FCC PART 15 B QP POL: LINE Temp:24 ℃ Hum:56 %
EUT :
Model No : S4H
Test Mode : Normal Working
Power : AC 120V/60Hz
Test Engineer:
Remark :

Item	Freq	Read	LISN Factor	Preamp Factor	Cable Lose	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	0.166	41.67	0.03	-9.72	0.10	51.52	65.16	-13.64	Peak
2	0.262	28.95	0.03	-9.72	0.10	38.80	61.38	-22.58	Peak
3	0.779	24.63	0.00	-9.71	0.10	34.44	56.00	-21.56	Peak
4	3.472	22.89	0.08	-9.69	0.12	32.78	56.00	-23.22	Peak
5	9.302	28.08	0.17	-9.39	0.19	37.83	60.00	-22.17	Peak
6	16.055	23.70	0.25	-9.40	0.27	33.62	60.00	-26.38	Peak

Remarks: Level = Read + LISN Factor - Preamp Factor + Cable loss

---------END OF THE REPORT-------