Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone, Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China

TEST REPORT

FCC ID: 2ABCS-A6102

Applicant : Truly Industrial (ShanWei) Ltd

Address : Truly Industrial Area, Shanwei City, Guangdong Province, People's Republic of China

Equipment Under Test(EUT):

Name : 3D PAD

Model : A6102, A6100, N103D

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

Report No : STI130621090-3

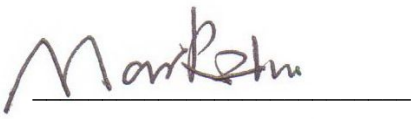
Date of Test : November 10. 2013- January 10, 2014

Date of Issue : January 10, 2014

Test Result: **PASS**

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

Authorized Signature



(Mark Zhu)

General Manager

Contents

1. General Information

1.1. Description of Device (EUT)

EUT	:	3D PAD
Trade Name	:	TRULY
Model No.	:	A6102, A6100, N103D
DIFF.	:	All model's the function, software and electric circuit are the same, only with a model named different. The test model: A6102.
Power supply	:	DC 3.7V Supply by battery DC 5V from adapter with AC 120V/60Hz adapter
Adapter	:	Manufacturer: Ktec Model No.:KAS29A0500250D5
Radio Technology	:	NFC, Bluetooth 4.0, Bluetooth 2.1+EDR, IEEE 802.11a,b,g,n/HT20,n/HT40, GSM 850/1900, WCDMA BAND II/V
GSM Power class	:	GSM 850: Class 4 GSM 1900: Class 1
Operation frequency	:	NFC:13.56MHz IEEE 802.11a: 5745MHz-5825MHz IEEE 802.11b: 2412MHz-2462MHz IEEE 802.11g: 2412MHz-2462MHz IEEE 802.11n HT20: 2412-2462MHz, IEEE 802.11n HT40:2422-2452MHz Bluetooth 4.0: 2402-2480MHz Bluetooth 2.1+EDR: 2402-2480MHz GSM 850: 824.2MHz—848.8MHz GSM 1900: 1850.2MHz—1909.8MHz WCDMA BAND II: 1852.4MHz—1907.6MHz WCDMA BAND V: 826.4MHz—846.6MHz
Modulation	:	IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK), IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK), IEEE 802.11n :OFDM(64QAM, 16QAM, QPSK, BPSK), Bluetooth 2.1+EDR: GFSK, π/4 DQPSK, 8-DPSK, Bluetooth 4.0: GFSK, GSM: GMSK, WCDMA: QPSK
Antenna Type	:	PIFA Antenna, max gain 1 dBi for WIFI, PIFA Antenna, max gain 1 dBi for BT. PIFA Antenna, max gain 1.5 dBi for GSM PIFA Antenna, max gain 1.5 dBi for WCDMA

Applicant	:	Truly Industrial (ShanWei) Ltd
Address	:	Truly Industrial Area, Shanwei City, Guangdong Province, People's Republic of China
Manufacturer	:	Truly Industrial (ShanWei) Ltd
Address	:	Truly Industrial Area, Shanwei City, Guangdong Province, People's Republic of China

Note: This report only test for GSM, for other radio test see other test report.

1.2. Test Lab information

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
FCC Registered No.:197647

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)	PASS
Radiated Output power(erp/eirp)	FCC PART 22H:22.913 (a) FCC PART 24E:24.232(c)	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	PASS
Conducted spurious emission (Antenna terminal)	FCC PART 2: 2.1051 FCC PART 22H: 22.917 FCC PART 24E: 24.238	PASS
Radiated spurious emissions	FCC PART 2: 2.1053 FCC PART 22H: 22.917 FCC PART 24E: 24.238	PASS
Band edge compliance	FCC PART 22H: 22.917 (b) FCC PART 24E: 24.238 (b)	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	:	Ktec
Model No.	:	KAS29A0500250D5

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	E4443A	MY46185649	Oct. 30, 13	1Year
Receiver	R&S	ESCI	100492	Oct. 30, 13	1Year
Receiver	R&S	ESCI	101202	Oct. 30, 13	1Year
Bilog Antenna	Sunol	JB3	A121206	Mar.12, 13	1Year
Horn Antenna	EMCO	3115	640201028-06	Mar.12, 13	1Year
Power Meter	Anritsu	ML2487A	6K00001491	Oct. 30, 13	1Year
ETS Horn Antenna	ETS	3160	SEL0076	Mar.12, 13	1Year
Active Loop Antenna	Beijing Daze	ZN30900A	SEL0097	Mar.12, 13	1Year
Cable	Resenberger	N/A	No.1	Oct. 30, 13	1Year
Cable	SCHWARZBECK	N/A	No.2	Oct. 30, 13	1Year
Cable	SCHWARZBECK	N/A	No.3	Oct. 30, 13	1Year
Pre-amplifier	R&S	AFS42-00101800-25-S-42	SEL0081	Oct. 30, 13	1Year
Pre-amplifier	R&S	AFS33-18002650-30-8P-44	SEL0080	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	HP	83732B	VS3449051	Oct. 30, 13	1 Year
Attenuator	Agilent	8491B	MY39262165	Oct. 30, 13	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

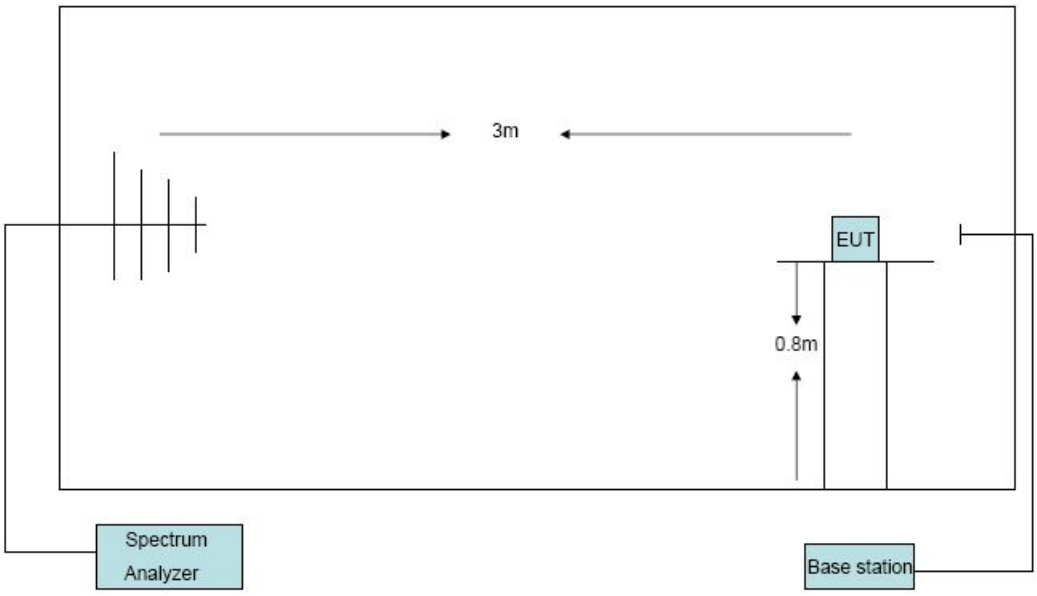
(1) The EUT's RF output port was connected to base station.
(2) A call is set up by the SS according to the generic call set up procedure
(3) Set EUT at maximum power level through base station by power level command
(4) Measure the maximum output power of EUT at each frequency band and mode by base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

3.4. Test Result

EUT: 3D PAD M/N:A6102 Power: DC 5V from adapter						
Ambient Temperature:24℃		Relative Humidity: 62%				
Test date: 2014-01-08		Test site: RF site Tested by: Simple Guan				
Conclusion: PASS						
Mode	Channel	PK Output Power(dBm)	ERP (dBm)	EIRP (dBm)	Limit	
					ERP(dBm)	EIRP(dBm)
GSM 850	128	32.51	31.86	/	38.5	/
	190	32.57	31.92	/	38.5	/
	251	32.68	32.03	/	38.5	/
PCS 1900	512	28.14	/	29.64	/	33
	661	28.32	/	29.82	/	33
	810	28.43	/	29.93	/	33
Note: EIRP=Pk output power +Antenna Gain(1.5dBi); ERP=PK output power + Antenna Gain(1.5dBi) -2.15						

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 an 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 lelow 1GHz) or Horn antenna(for frequecny above 1GHz) at same location with same polarize of reveiver antenna and then a known power of each measure frequency from

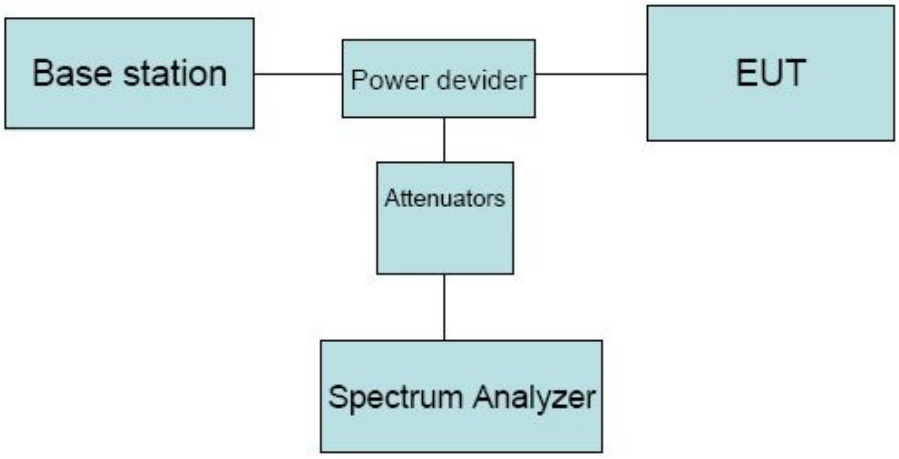
S.G. was applied into the dipole antenna or Horn antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna. The correction factor (in dB) = S.G. - Tx Cable loss + Substitution antenna gain –Substitution antenna Loss(only for Dipole antenna) - 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: 3D PAD M/N:A6102					
Power: DC 5V from adapter					
Ambient Temperature:23℃			Relative Humidity: 60%		
Test date: 2013-11-26			Test site: RF site	Tested by: Simple Guan	
Conclusion: PASS					
Mode	Channel	LVL (dBm)	Correction factor(dB)	ERP (dBm)	EIRP (dBm)
GSM 850	128	2.35	30.42	30.62	/
	190	2.16	30.21	30.22	/
	251	2.24	30.05	30.14	/
PCS 1900	512	-17.52	46.80	/	29.28
	661	-17.63	46.45	/	28.82
	810	-17.21	46.58	/	29.37
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

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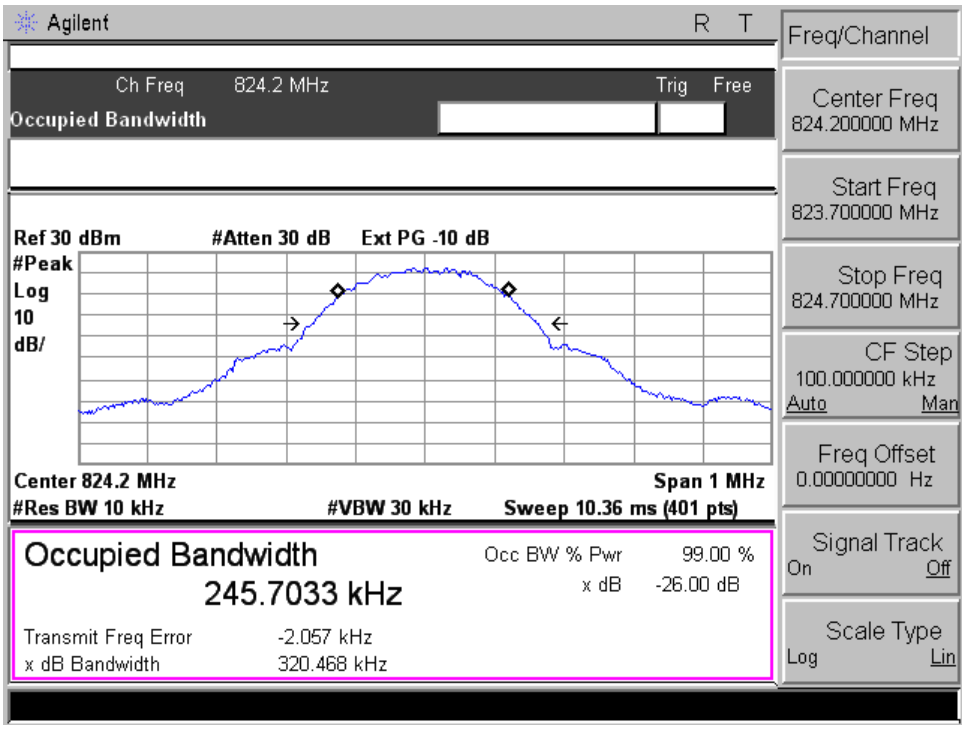
5.4. Test Result

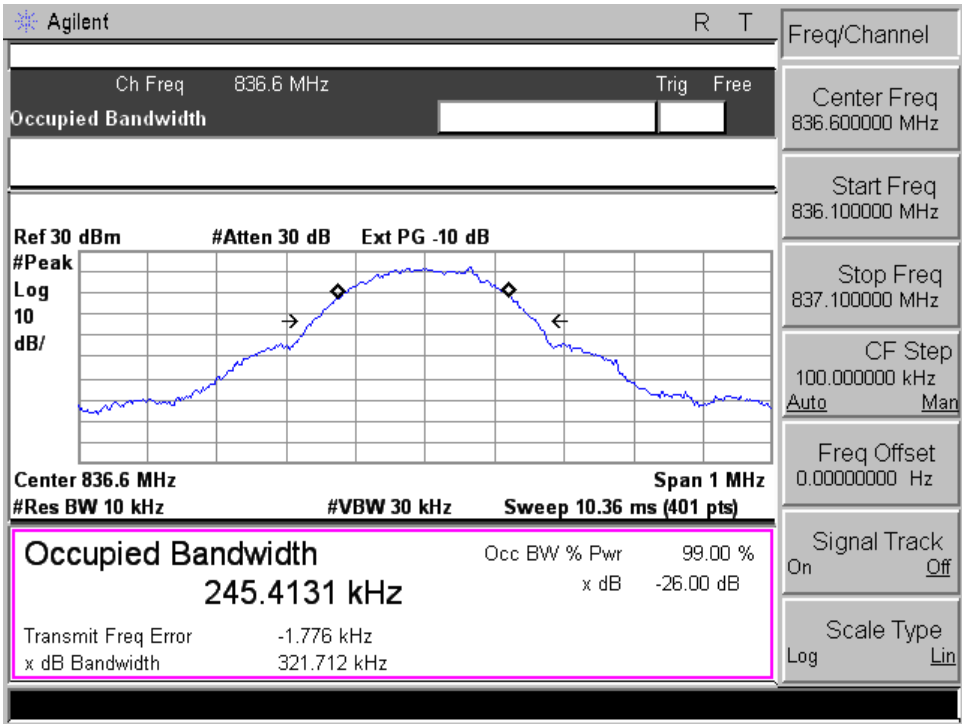
EUT: 3D PAD M/N:A6102			
Power: DC 5V from adapter			
Ambient Temperature:23℃		Relative Humidity: 60%	
Test date: 2013-11-26		Test site: RF site	Tested by: Simple Guan
Mode	Channel	99% bandwidth (KHz)	-26dBc bandwidth (KHz)
GSM 850	128	245.70	320.47
	190	245.41	321.71
	251	245.73	322.21
PCS 1900	512	244.65	327.25
	661	247.14	322.91
	810	247.12	321.39

5.5. Orginal test data

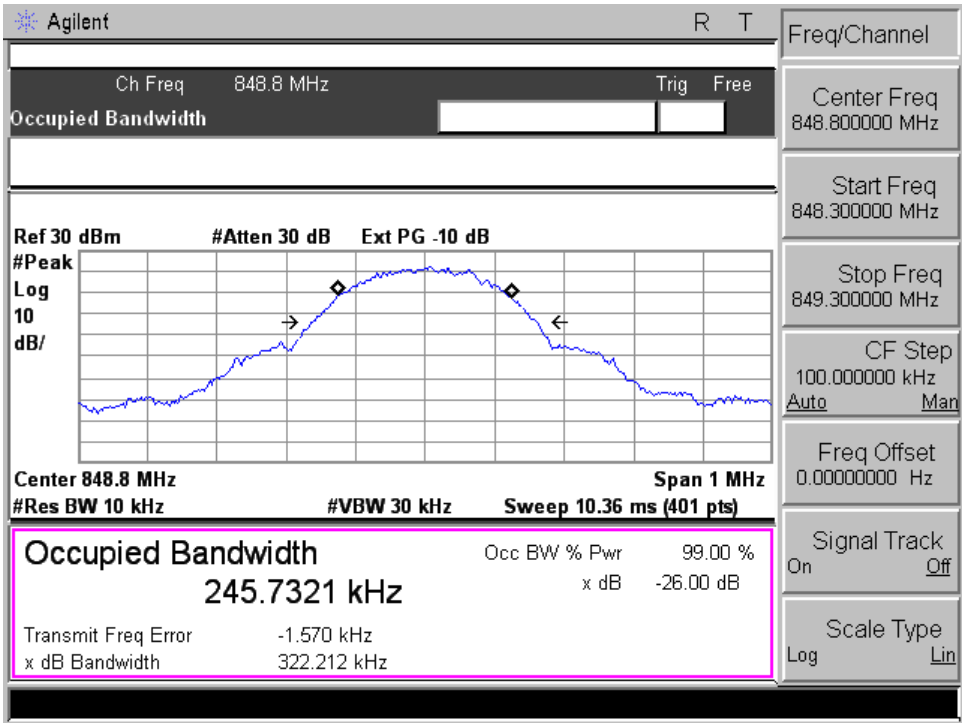
GSM 850 CH128



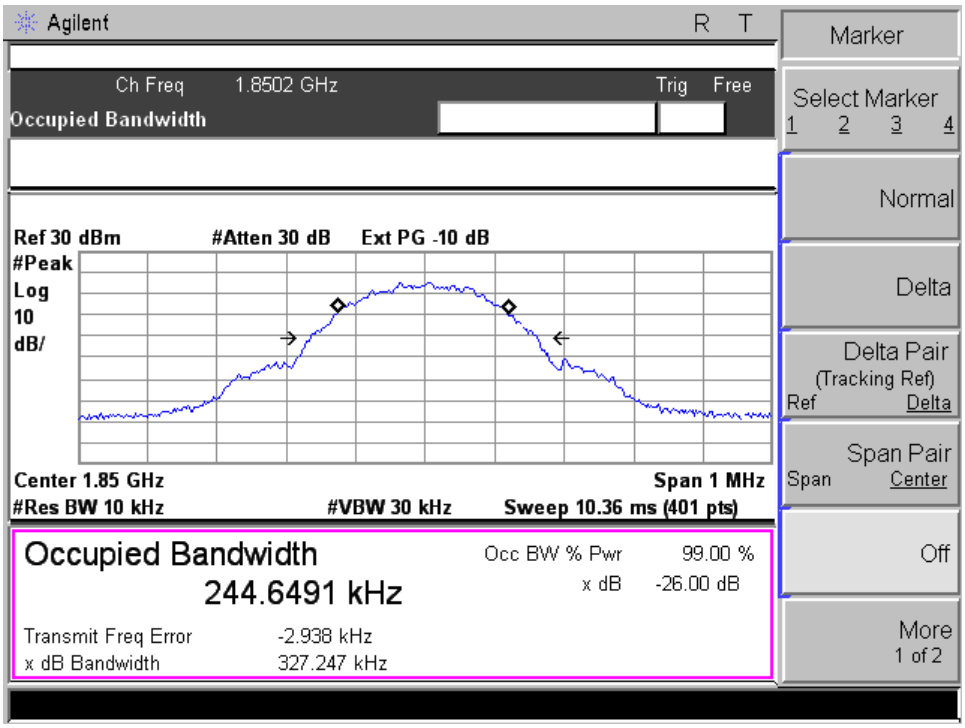
GSM 850 CH190



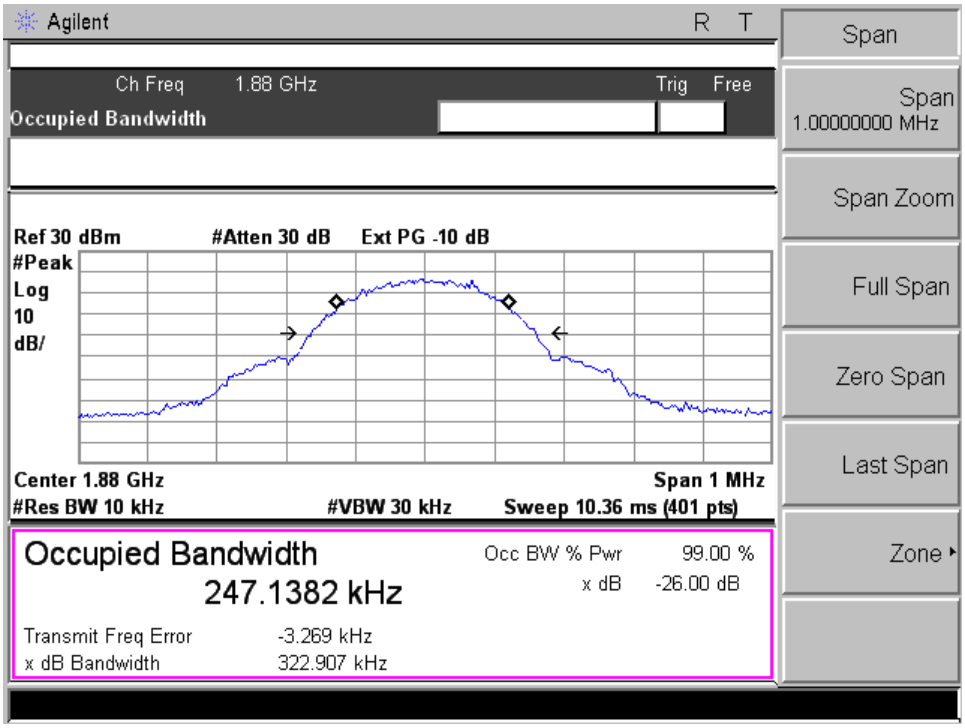
GSM 850 CH251



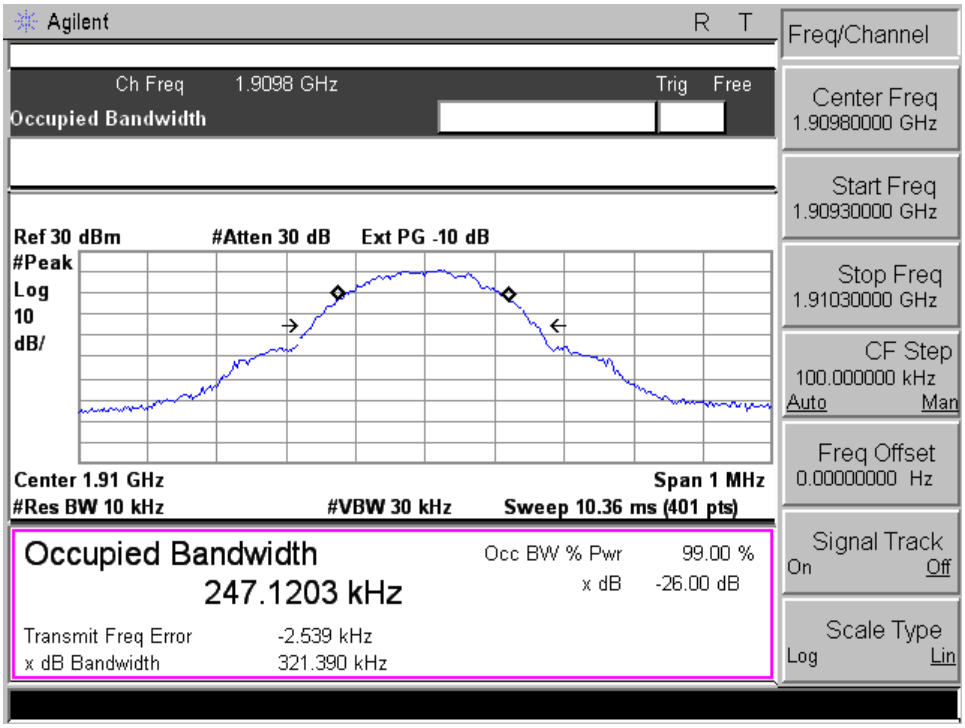
PCS 1900 CH512



PCS 1900 CH661



PCS 1900 CH810



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 -10°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 OFF, the temperature was raised in 10°C step up to 45°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.
4. If the EUT can not be turned on at -10°C, the testing lowest temperature will be raised in 10°C step until the EUT can be turned on.

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.

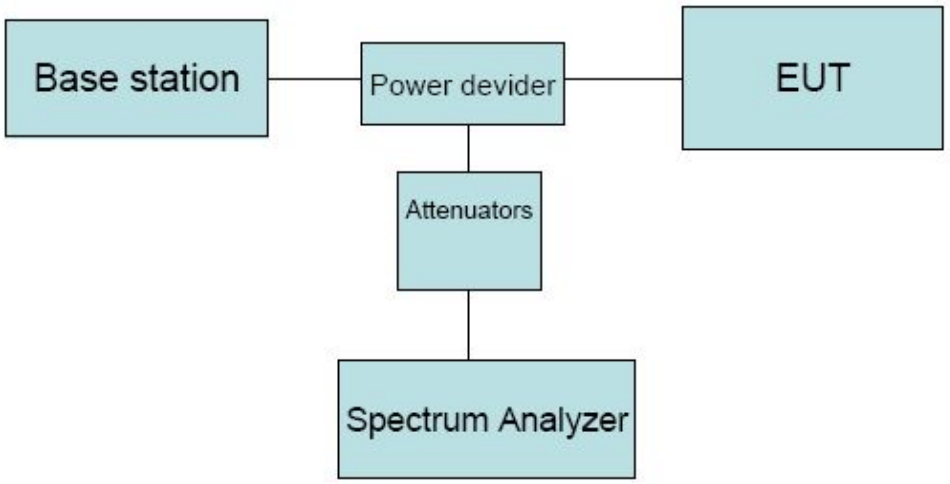
6.4. Test Result

EUT: 3D PAD M/N:A6102			
Power: DC 5V from adapter			
Ambient Temperature:23℃		Relative Humidity: 60%	
Test date: 2013-11-26		Test site: RF site	Tested by: Simple Guan
Conclusion: PASS			
Mode	Voltage (V)	Frequency error (Hz)	frequency error (ppm)
GSM 850 CH 190	5V	-16.34	-0.02
	4.5V	-16.18	-0.019
	4V	-18.75	-0.022
	3.5V	-22.94	-0.027
	3V	-14.68	-0.018
PCS 1900 CH661	5V	-33.75	-0.018
	4.5V	-35.04	-0.019
	4V	-34.29	-0.018
	3.5V	-30.18	-0.016
	3V	-31.72	-0.017

Mode	Temperature (℃)	Frequency error (Hz)	frequency error (ppm)
GSM 850 CH190	-10	20.87	0.025
	0	-18.53	-0.022
	10	-16.74	-0.020
	20	-18.59	-0.022
	30	-21.34	-0.026
	40	-19.57	-0.023
	50	-23.62	-0.028
PCS 1900 CH661	-10	64.74	0.034
	0	65.93	0.035
	10	70.08	0.037
	20	73.79	0.039
	30	72.68	0.039
	40	-55.21	-0.029
	50	-46.57	-0.025

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

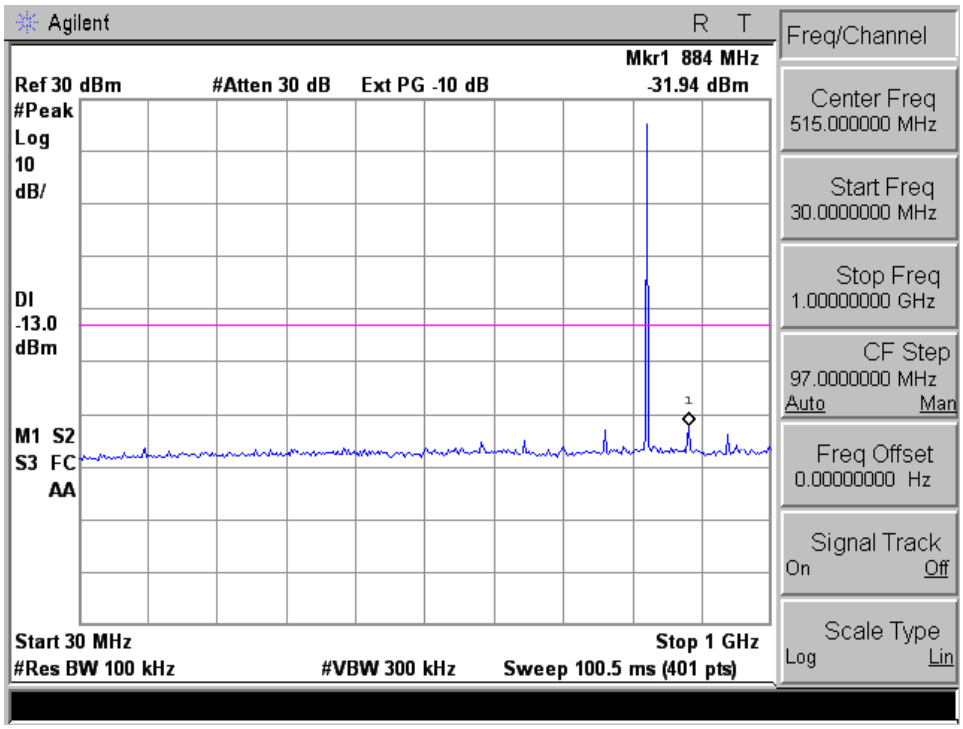
1. The EUT was connected to spectrum analyzer and base station via power divider.

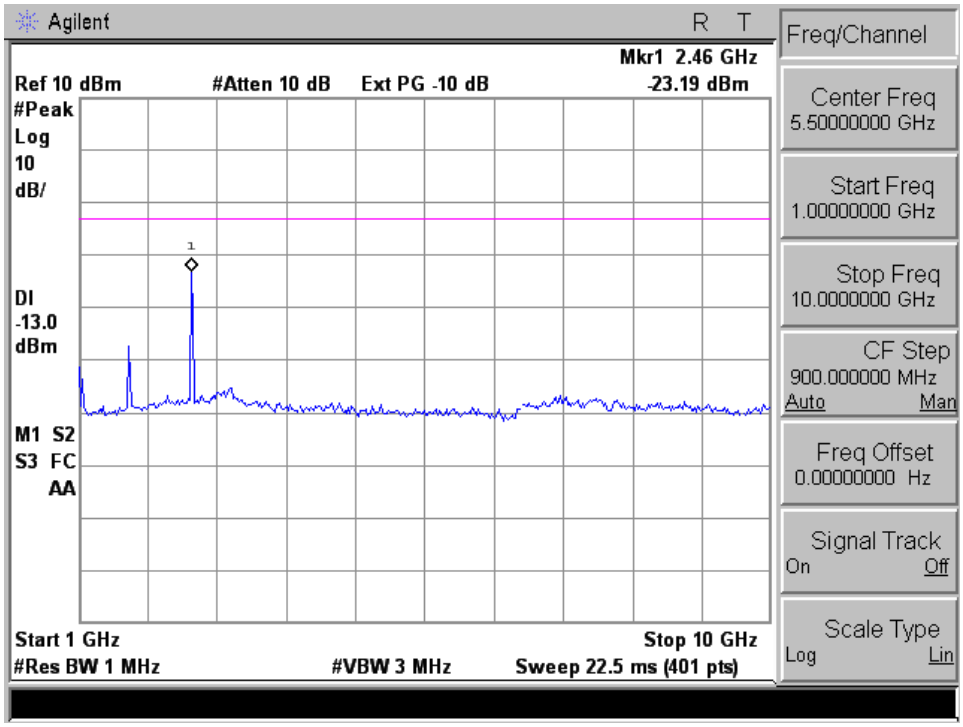
2. The low, middle and high channels of each band and mode's spurious emissions for 30MHz to 10th Harmonic were measured by Spectrum analyzer.

7.4. Test Result

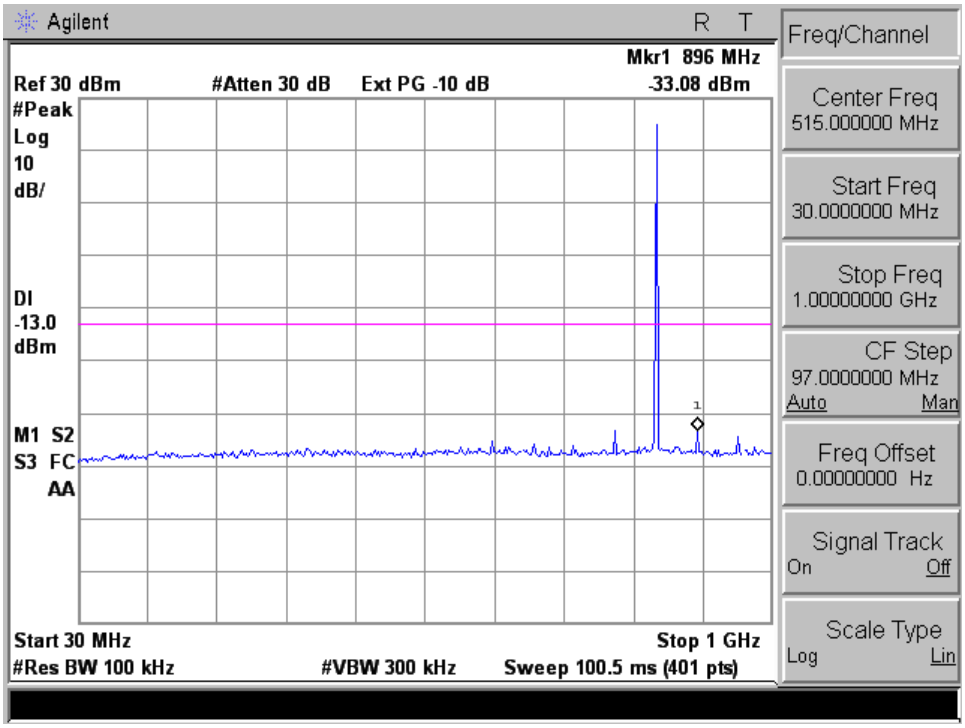
PASS

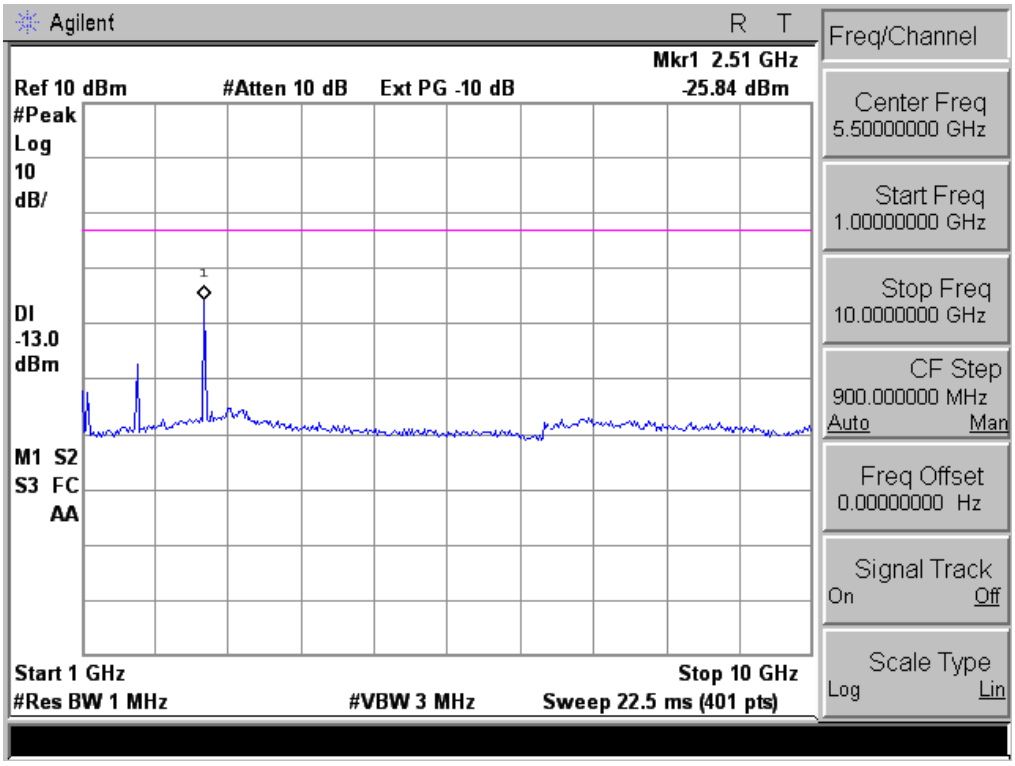
Test Mode: GSM 850 CH 128



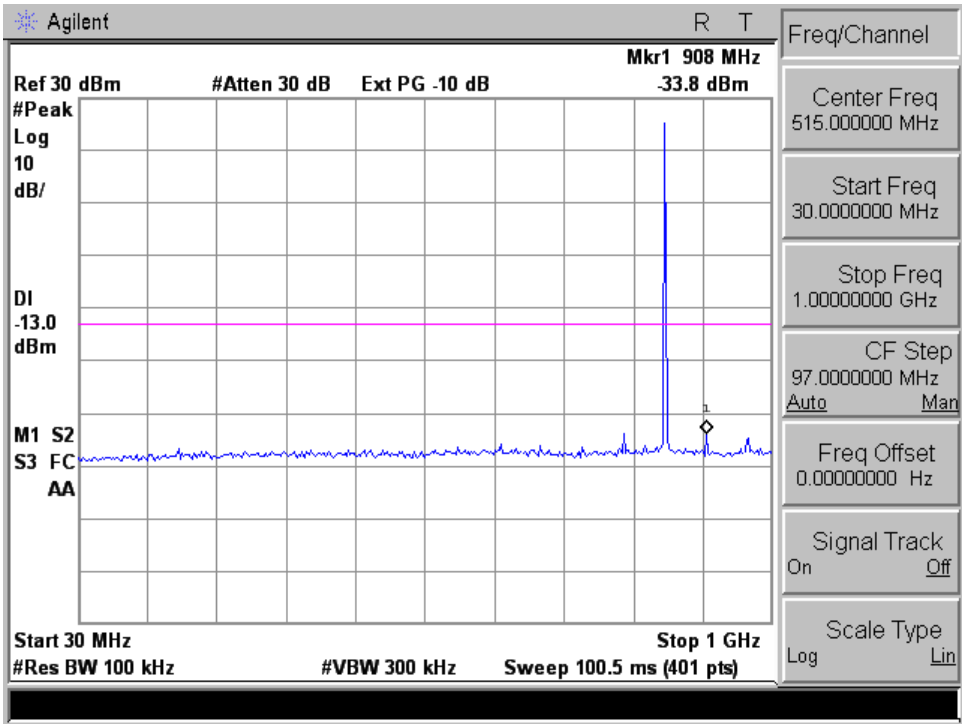


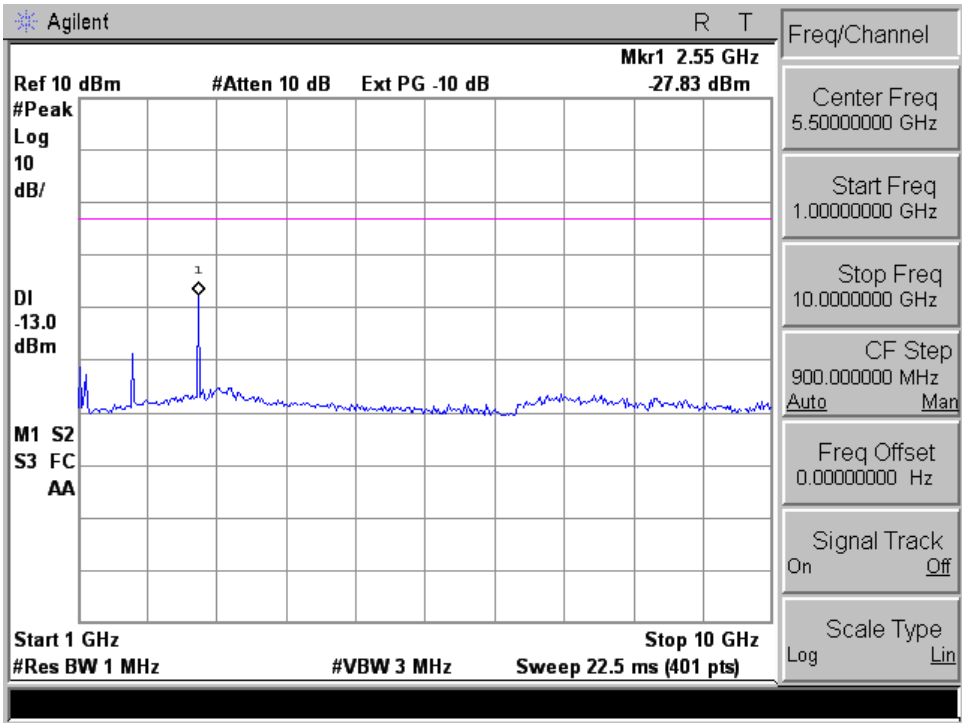
Test Mode: GSM 850 CH 190



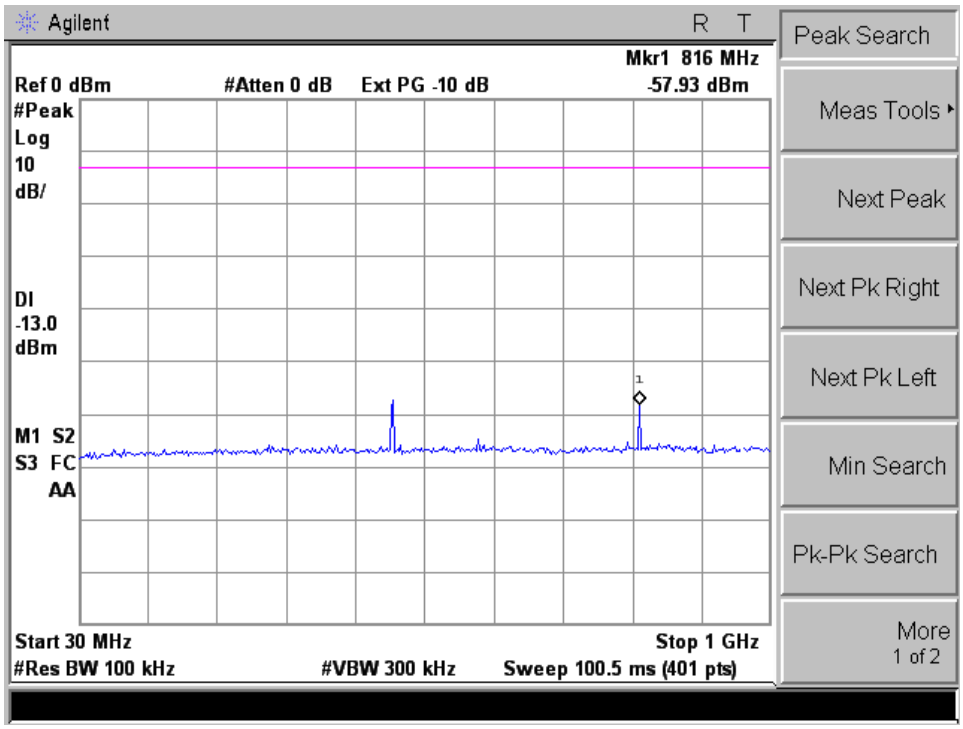


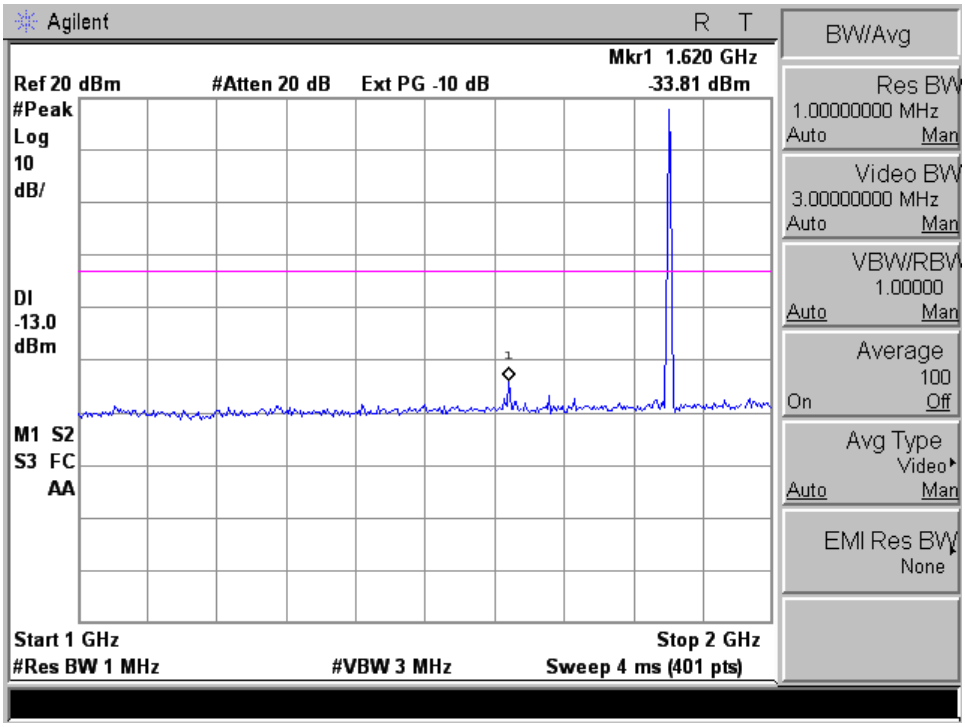
Test Mode: GSM 850 CH 251

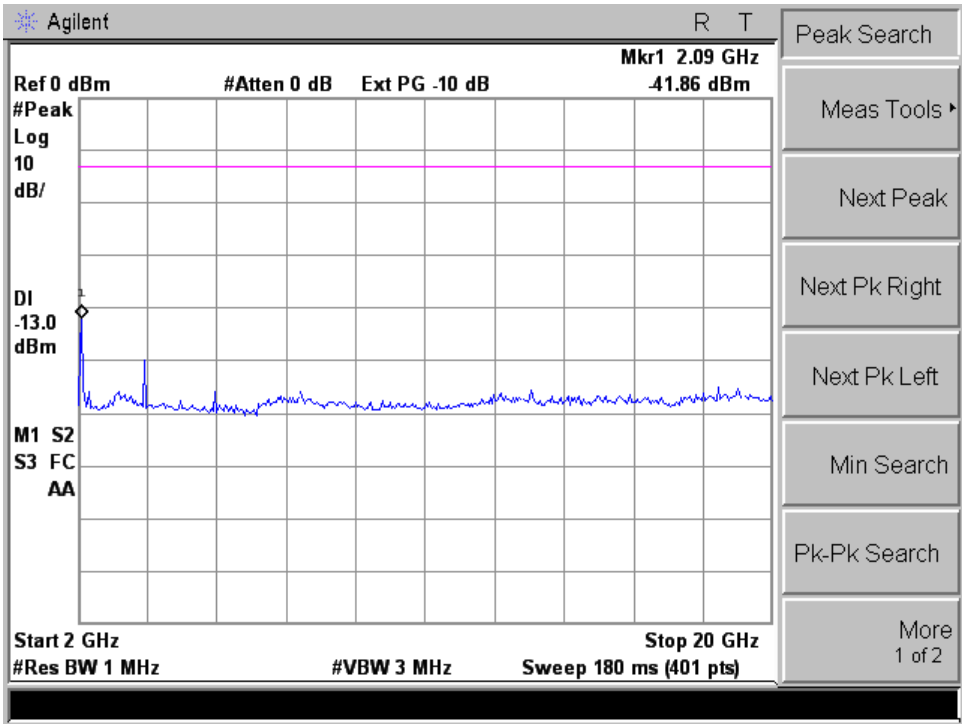




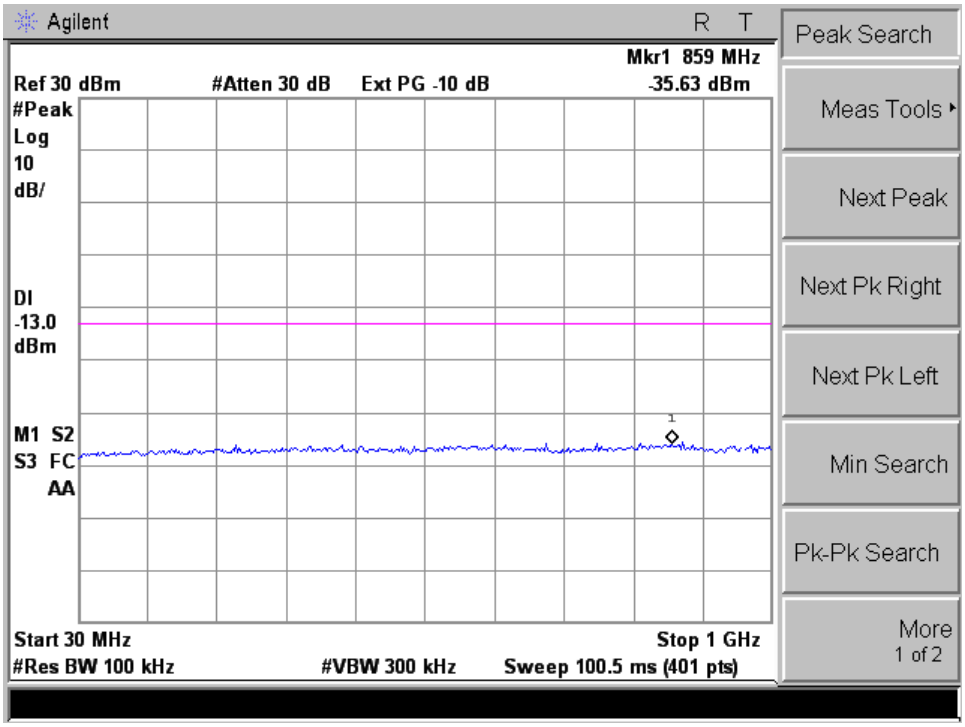
Test Mode: GSM 1900 CH 512

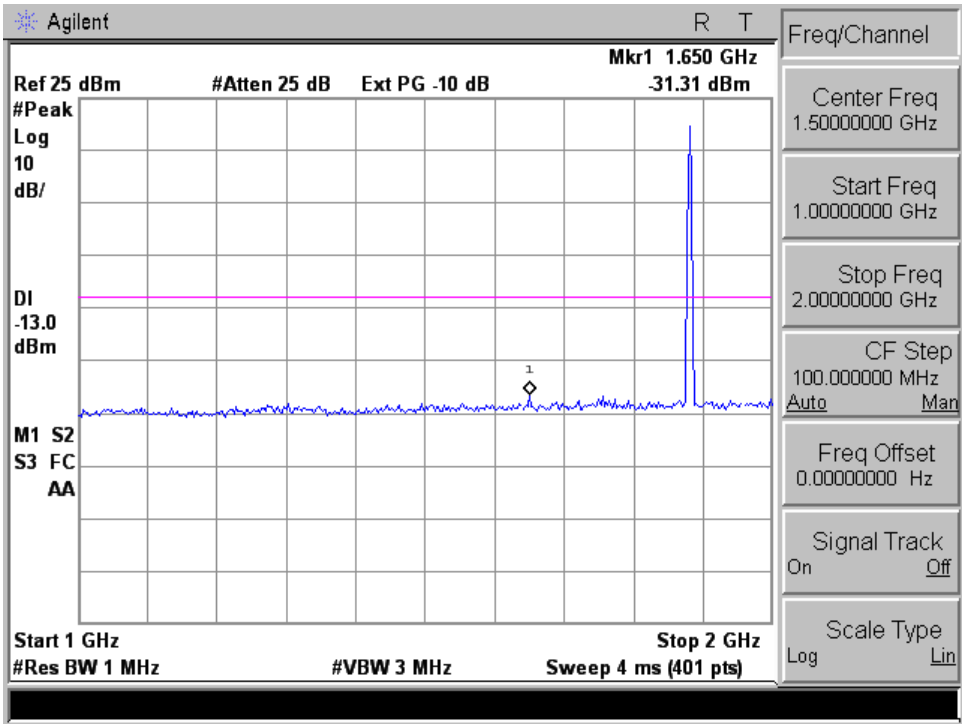






Test Mode: GSM 1900 CH 661




Agilent
R T
Mkr1 1.650 GHz
Ref 25 dBm
#Atten 25 dB
Ext PG -10 dB
-31.31 dBm
#Peak
Log
10
dB/
Dl
-13.0
dBm
M1 S2
S3 FC
AA
Start 1 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 2 GHz
Sweep 4 ms (401 pts)
Freq/Channel
Center Freq
1.50000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
2.00000000 GHz
CF Step
100.000000 MHz
Auto
Man
Freq Offset
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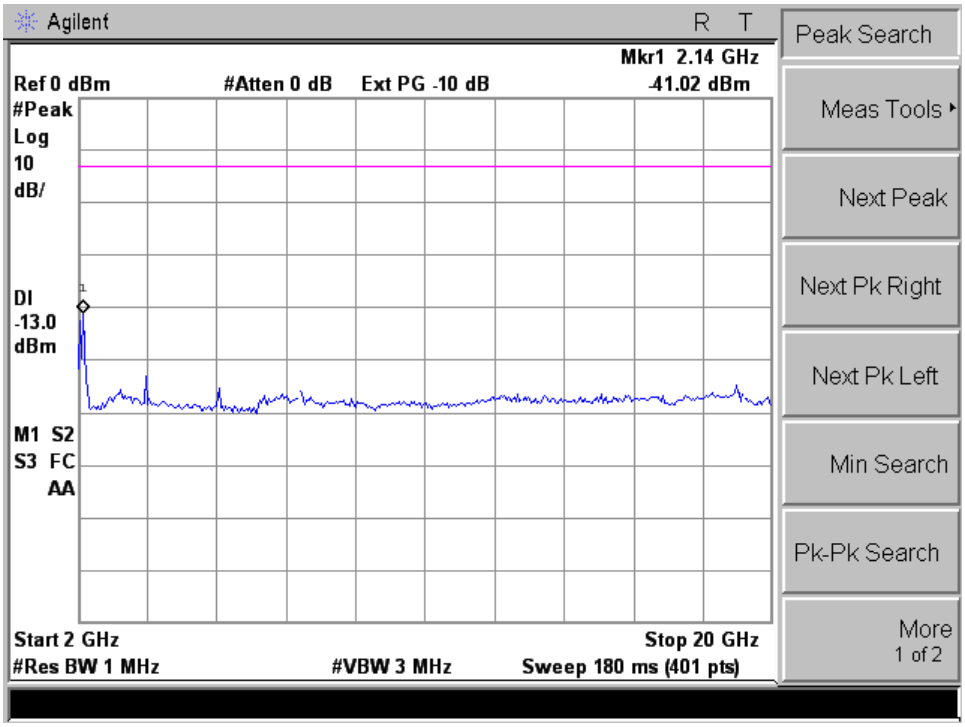
Signal Track
On
Off
Scale Type
Log
Lin


Agilent
R T
Mkr1 2.14 GHz
Ref 0 dBm
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Ext PG -10 dB
-41.02 dBm
#Peak
Log
10
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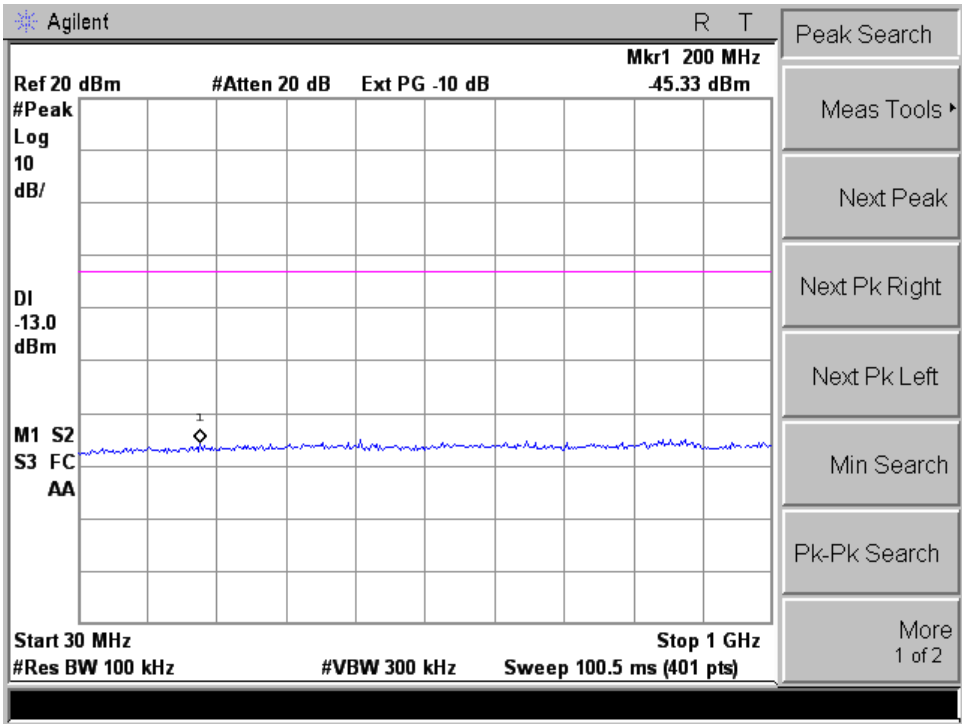
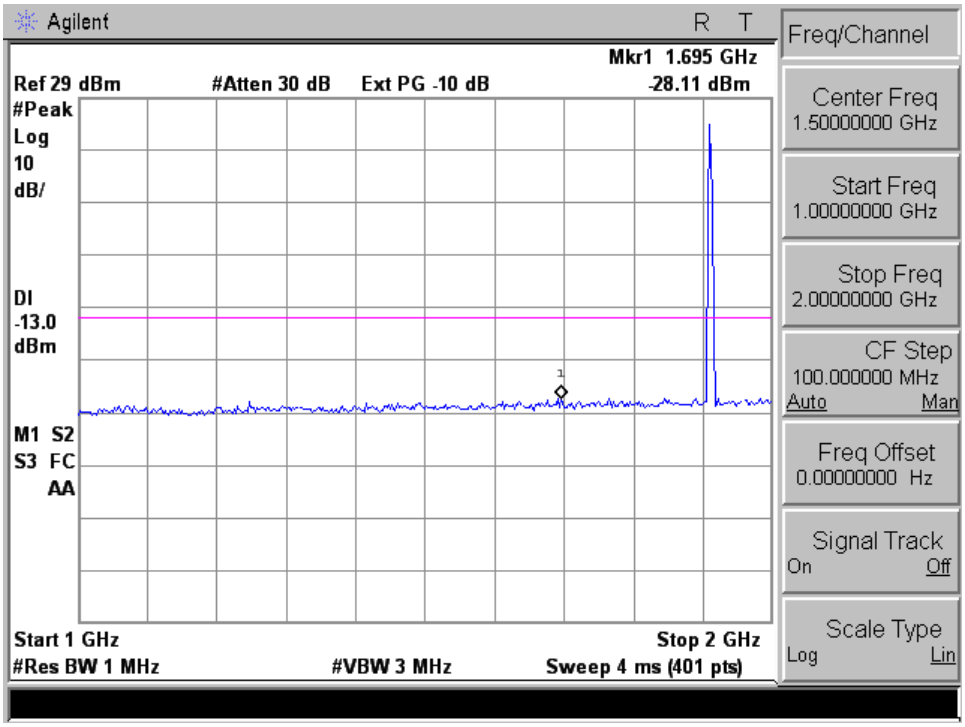
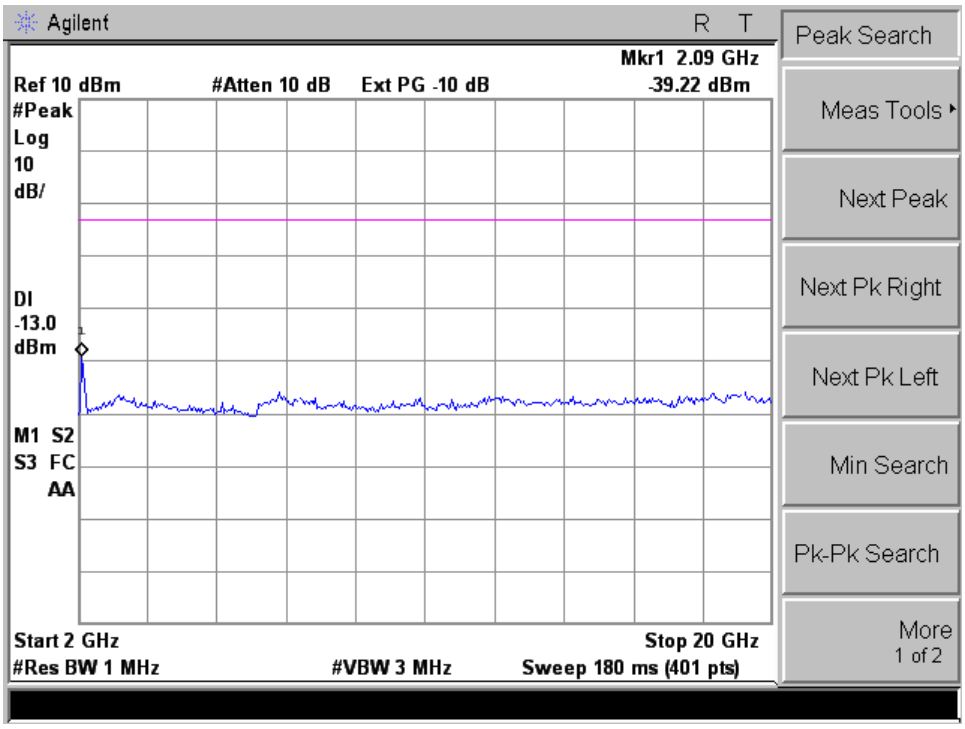
Dl
-13.0
dBm
M1 S2
S3 FC
AA
Start 2 GHz
#Res BW 1 MHz
#VBW 3 MHz
Stop 20 GHz
Sweep 180 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

Test Mode: GSM 1900 CH 810

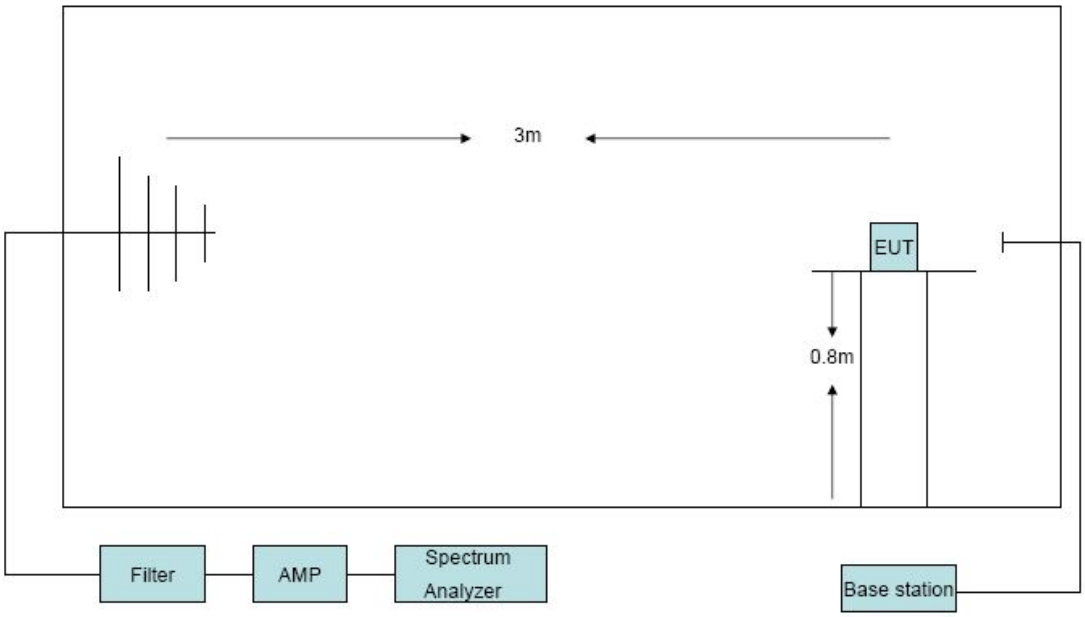





Agilent
R T
Mkr1 2.09 GHz
Ref 10 dBm
#Atten 10 dB
Ext PG -10 dB
-39.22 dBm
#Peak
Log
10
dB/
Dl
-13.0
dBm
M1 S2
S3 FC
AA
Start 2 GHz
Stop 20 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 180 ms (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

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

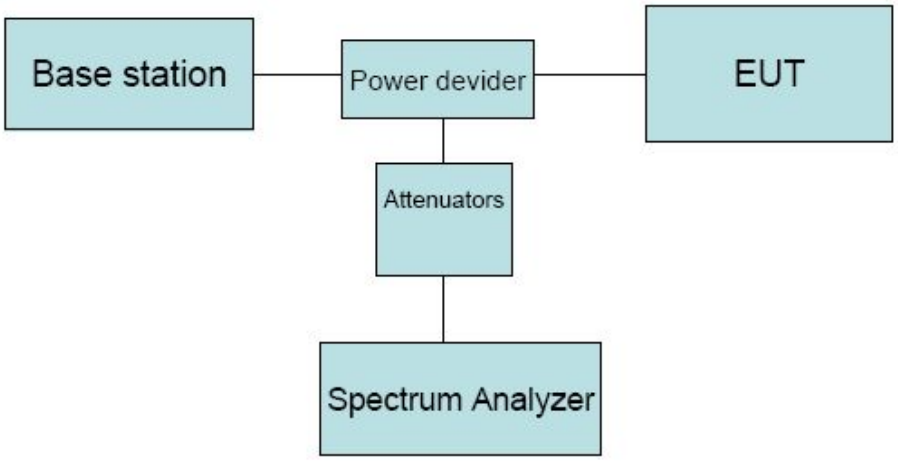
8.4. Test Result

EUT:3D PAD M/N:A6102						
Power: DC 5V from adapter						
Test Date: 2013-11-26	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)
1648.4	H	-59.87	11.50	-50.52	-13.00	37.52
1648.4	V	-54.36	10.56	-45.95	-13.00	32.95
Test Mode： GSM 850 CH190						
1673.2	H	-58.29	10.94	-49.5	-13.00	36.50
2509.8	H	/	/	/	-13.00	/
1673.2	V	-52.43	10.90	-43.68	-13.00	30.68
2509.8	V	/	/	/	-13.00	/
Test mode: GSM 850 CH251						
1697.6	H	-57.68	11.67	-48.16	-13.00	35.16
2546.4	H	/	/	/	-13.00	/
1697.6	V	-53.35	11.13	-44.37	-13.00	31.37
2546.4	V	/	/	/	-13.00	/

Test Mode：GSM 1900 CH512						
Frequency (MHz)	Antenna polarization	LVL (dBm)	Correction factor(dB)	Result (EIRP)(dBm)	Limit (dBm)	Margin (dB)
3700.4	H	-53.68	8.57	-45.11	-13.00	32.11
5550.6	H	/	/	/	-13.00	/
3700.4	V	-51.72	8.37	-43.35	-13.00	30.35
5550.6	V	/	/	/	-13.00	/
Test Mode： GSM 1900 CH661						
3760	H	-52.84	8.75	-44.09	-13.00	31.09
5640	H	/	/	/	-13.00	/
3760	V	-49.68	8.55	-41.13	-13.00	28.13
5640	V	/	/	/	-13.00	/
Test mode: GSM 1900 CH810						
3819.6	H	-56.14	8.94	-47.20	-13.00	34.20
5729.4	H	/	/	/	-13.00	/
3819.6	V	-52.84	8.72	-44.12	-13.00	31.12
5729.4	V	/	/	/	-13.00	/
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.

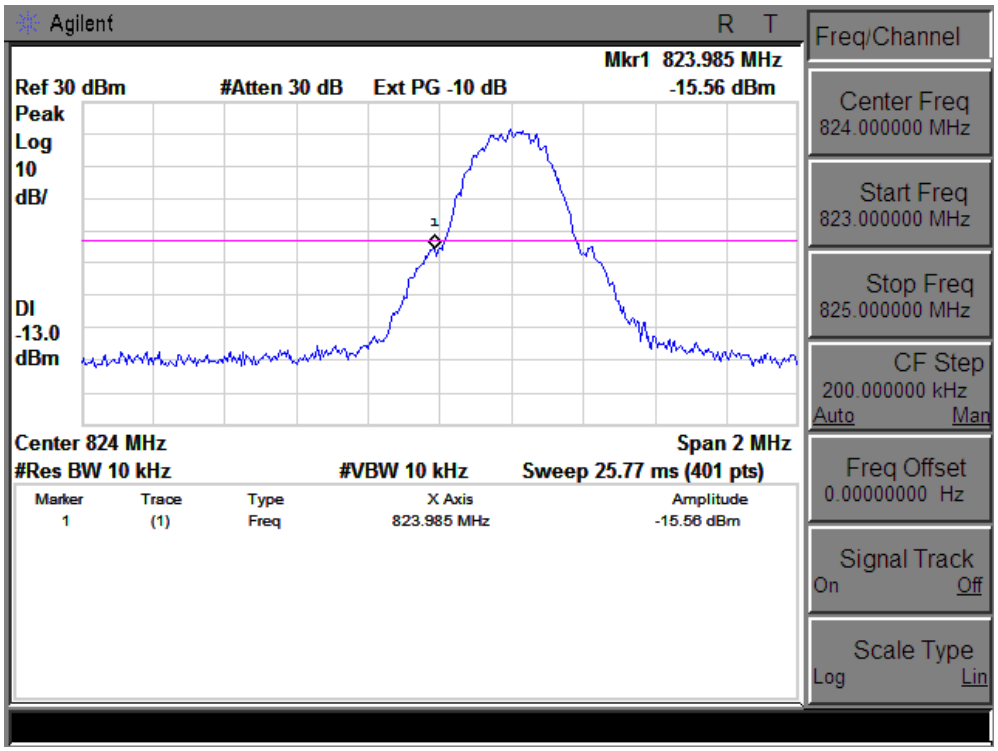
9.3. Test Procedure

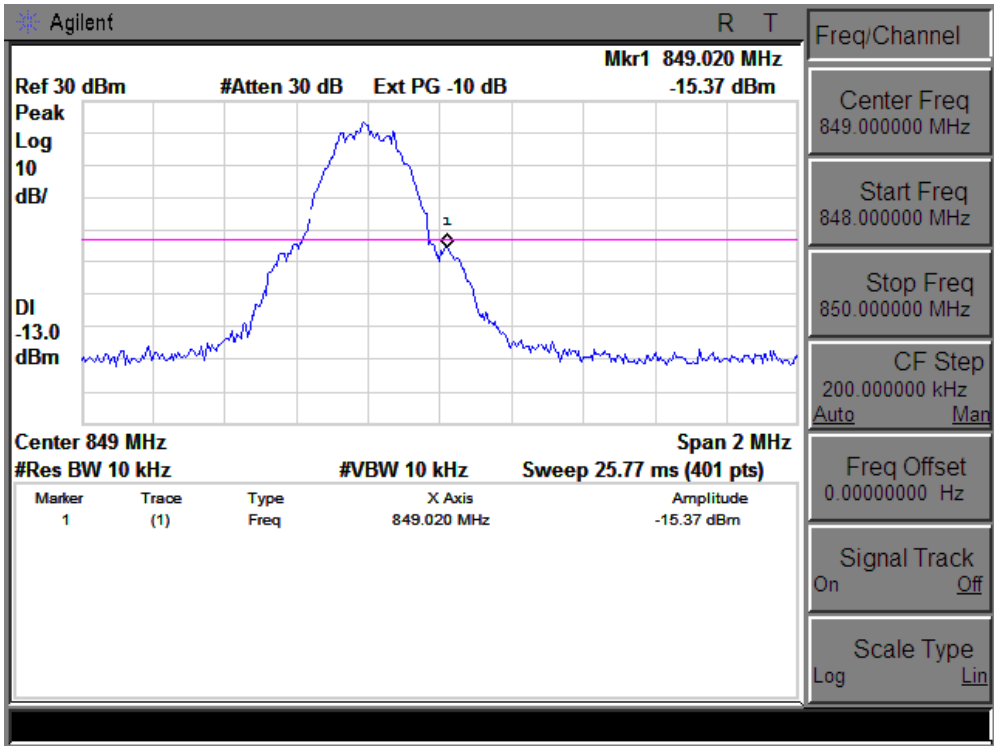
1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The band edges of low and high channels for the highest RF powers were measured.

9.4. Test Result

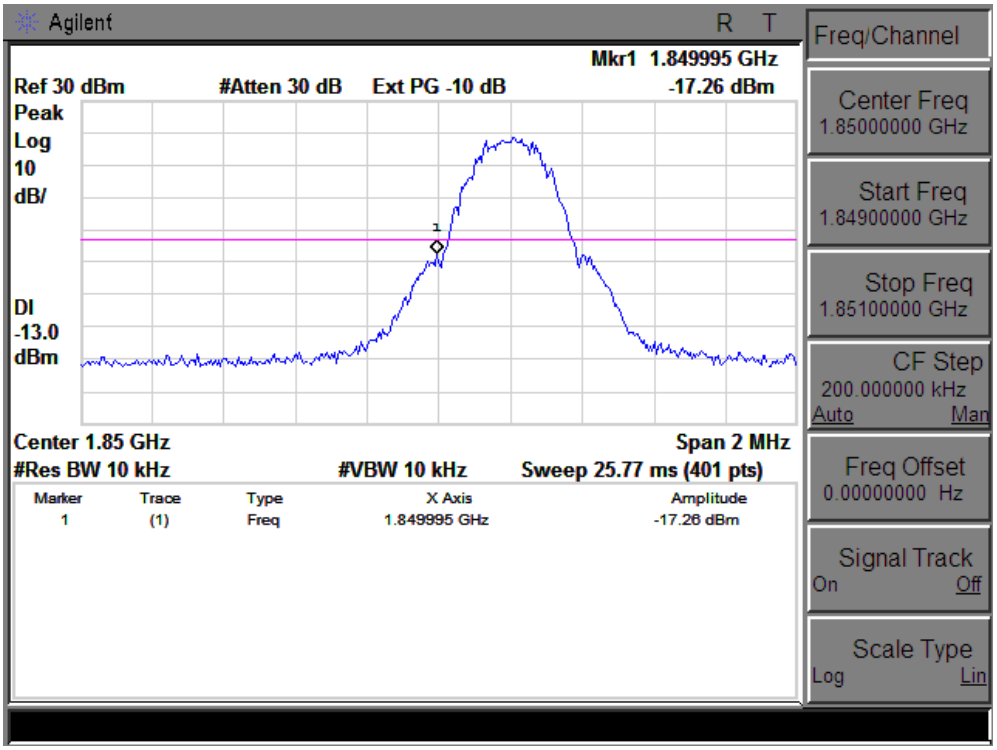
PASS

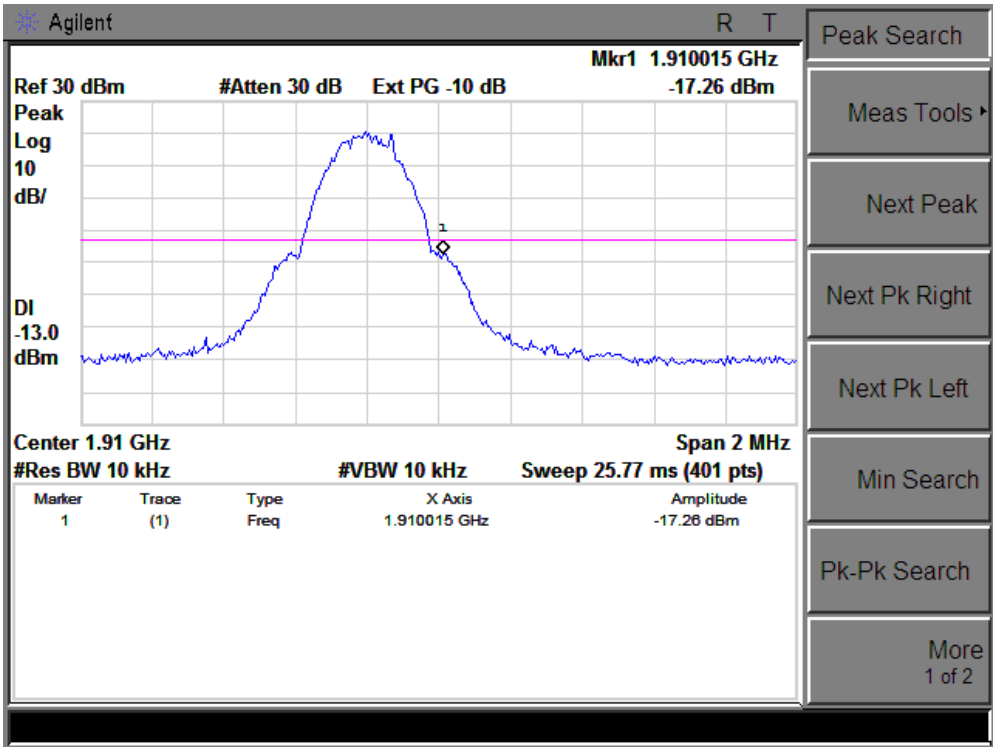
Test Mode: GSM 850





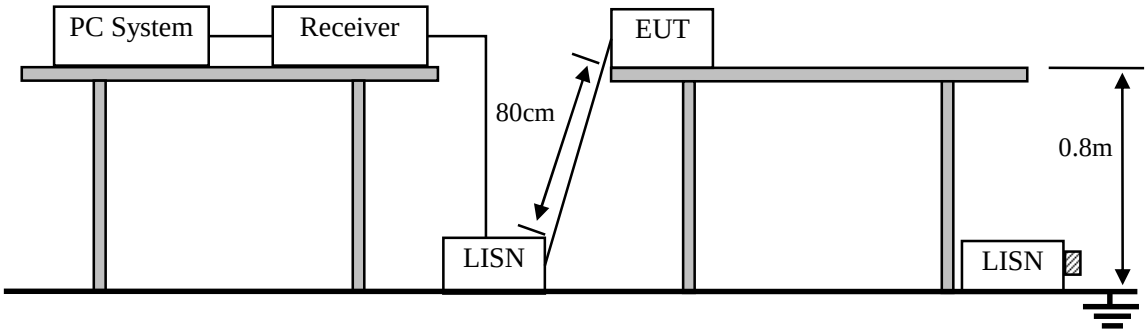
Test Mode: GSM 1900





10. Power line conducted emission

10.1. Block Diagram of Test Setup



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.

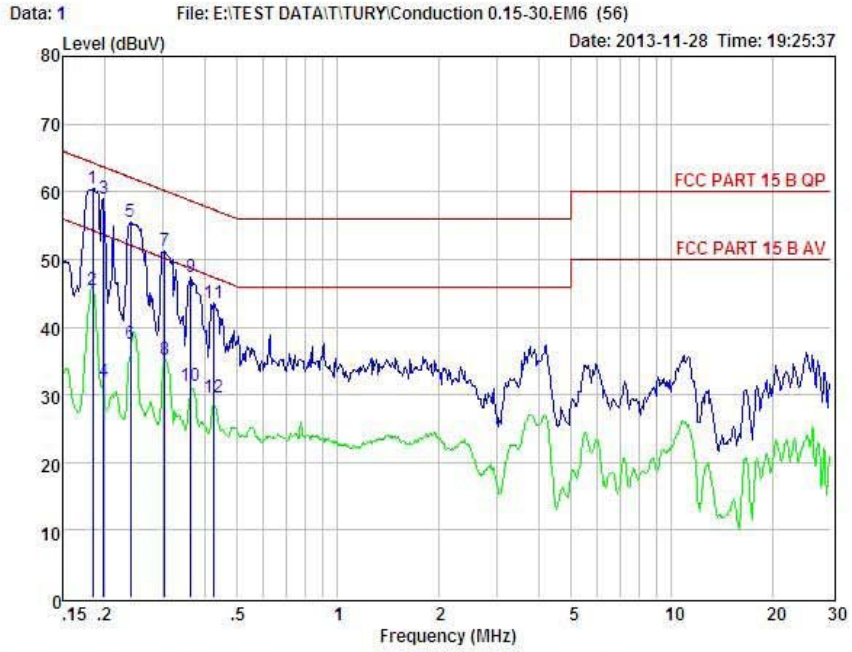
(4) The bandwidth of test receiver is set at 10KHz.

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

10.4.Test Result

PASS. (See below detailed test data)

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 Fax: +86-755-26736857
Website: http://www.cessz.com Email:Service@cessz.com

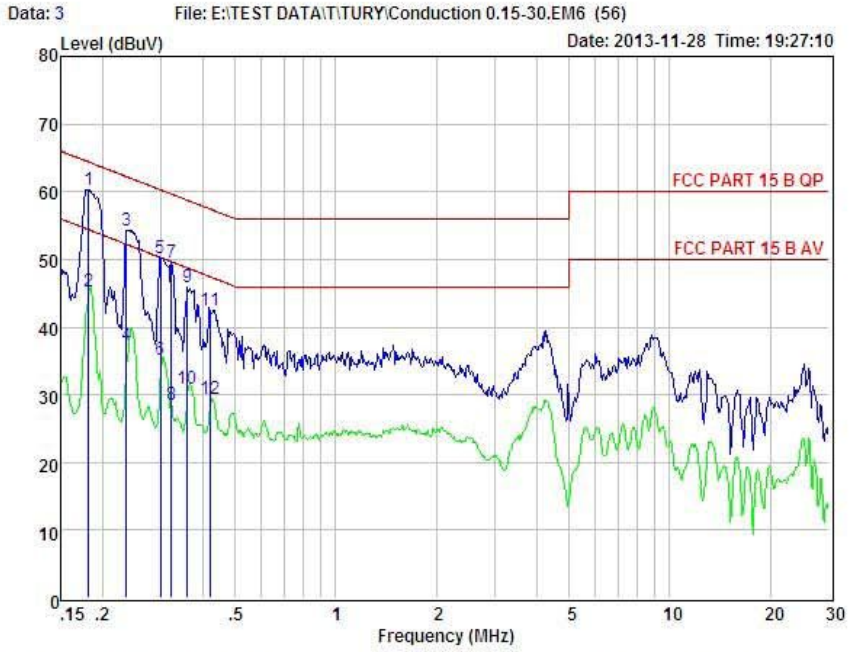


Condition : FCC PART 15 B QP POL: NEUTRAL Temp:24 ℃ Hum:56 %
EUT : 3D PAD
Model No : A6102
Test Mode : Link mode
Power : DC 5V From Adapter AC 120V/60Hz
Test Engineer: Simple
Remark :

Item	Freq	Read	LISN Factor	Preamp Factor	Cable Lose	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	0.184	50.54	0.03	-9.72	0.10	60.39	64.28	-3.89	QP
2	0.184	35.54	0.03	-9.72	0.10	45.39	54.28	-8.89	Average
3	0.199	49.11	0.03	-9.72	0.10	58.96	63.67	-4.71	QP
4	0.199	22.11	0.03	-9.72	0.10	31.96	53.67	-21.71	Average
5	0.239	45.63	0.03	-9.72	0.10	55.48	62.13	-6.65	QP
6	0.239	27.63	0.03	-9.72	0.10	37.48	52.13	-14.65	Average
7	0.303	41.32	0.03	-9.72	0.10	51.17	60.15	-8.98	QP
8	0.303	25.32	0.03	-9.72	0.10	35.17	50.15	-14.98	Average
9	0.363	37.56	0.03	-9.72	0.10	47.41	58.65	-11.24	QP
10	0.363	21.56	0.03	-9.72	0.10	31.41	48.65	-17.24	Average
11	0.426	33.76	0.03	-9.72	0.10	43.61	57.33	-13.72	QP
12	0.426	19.76	0.03	-9.72	0.10	29.61	47.33	-17.72	Average

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

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 Fax: +86-755-26736857
Website: http://www.cessz.com Email:Service@cessz.com



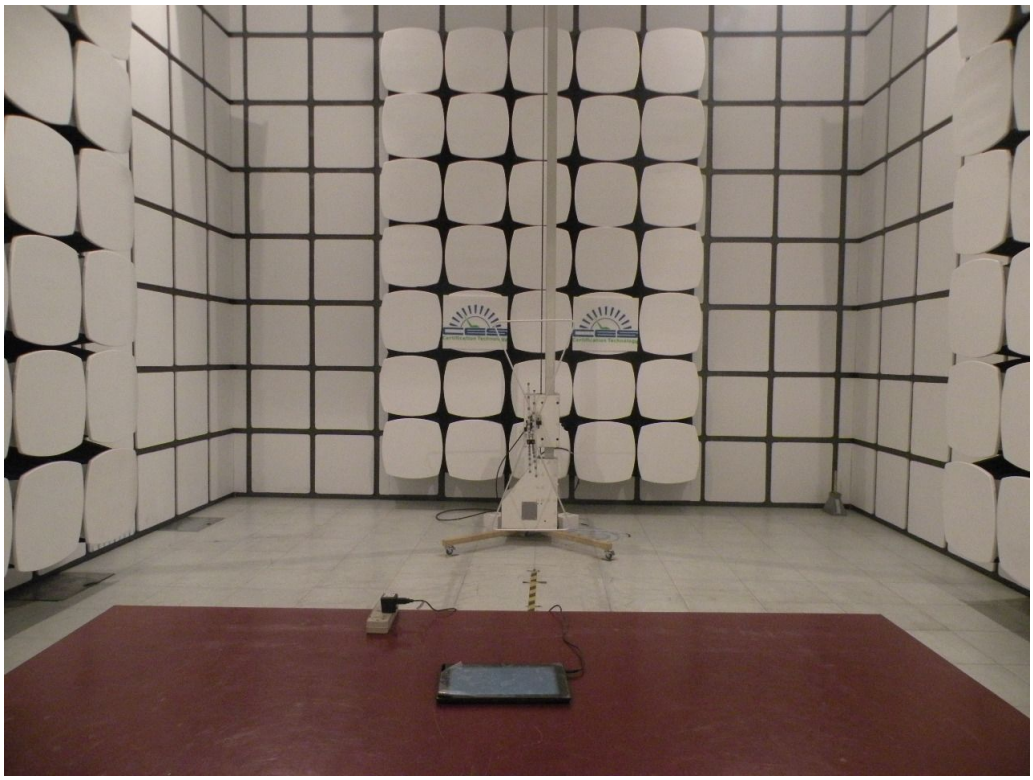
Condition : FCC PART 15 B QP POL: LINE Temp:24 ℃ Hum:56 %
EUT : 3D PAD
Model No : A6102
Test Mode : Link mode
Power : DC 5V From Adapter AC 120V/60Hz
Test Engineer: Simple
Remark :

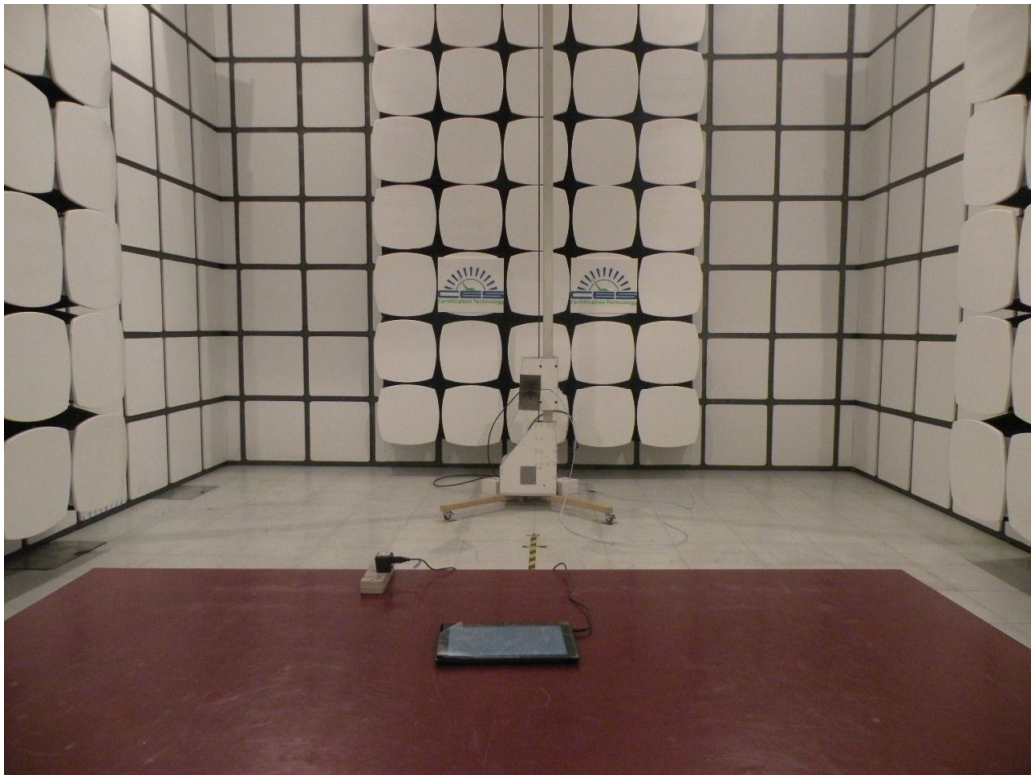
Item	Freq	Read	LISN Factor	Preamp Factor	Cable Lose	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	0.182	50.50	0.03	-9.72	0.10	60.35	64.42	-4.07	QP
2	0.182	35.50	0.03	-9.72	0.10	45.35	54.42	-9.07	Average
3	0.237	44.47	0.03	-9.72	0.10	54.32	62.22	-7.90	QP
4	0.237	27.47	0.03	-9.72	0.10	37.32	52.22	-14.90	Average
5	0.299	40.42	0.03	-9.72	0.10	50.27	60.28	-10.01	QP
6	0.299	25.42	0.03	-9.72	0.10	35.27	50.28	-15.01	Average
7	0.322	39.72	0.03	-9.72	0.10	49.57	59.66	-10.09	QP
8	0.322	18.72	0.03	-9.72	0.10	28.57	49.66	-21.09	Average
9	0.360	36.02	0.03	-9.72	0.10	45.87	58.74	-12.87	QP
10	0.360	21.02	0.03	-9.72	0.10	30.87	48.74	-17.87	Average
11	0.419	32.58	0.03	-9.72	0.10	42.43	57.46	-15.03	QP
12	0.419	19.58	0.03	-9.72	0.10	29.43	47.46	-18.03	Average

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

11. Test setup photo

Photographs-Radiated Emission Test Setup in Chamber



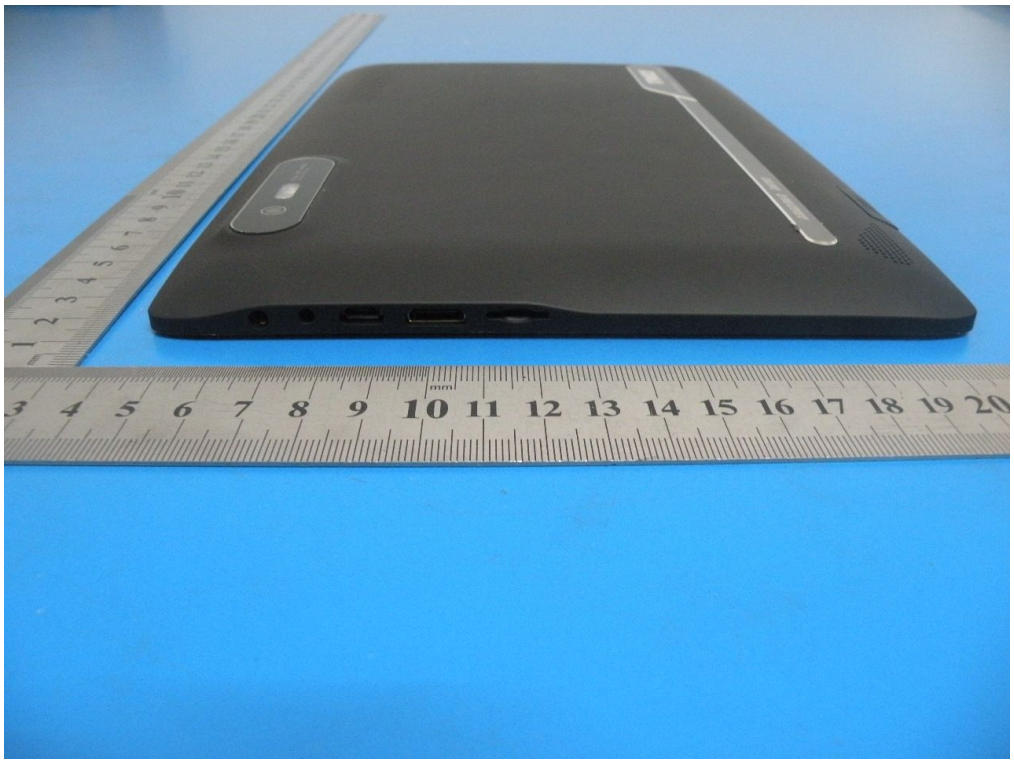


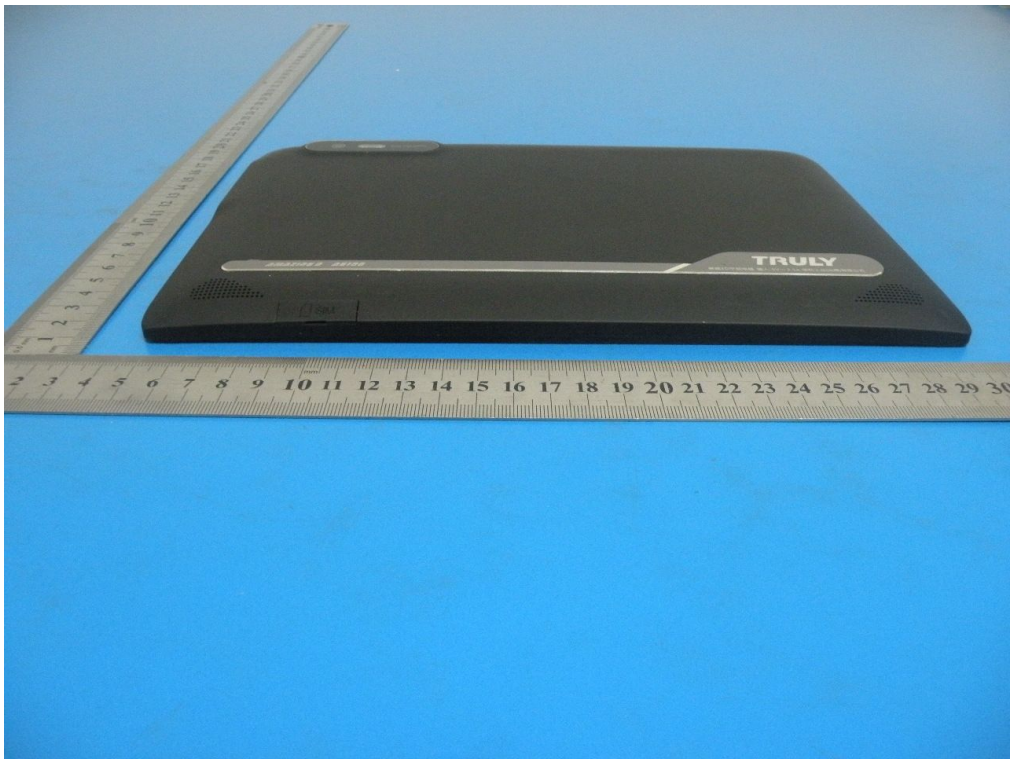
Photographs-Conducted Emission Test Setup

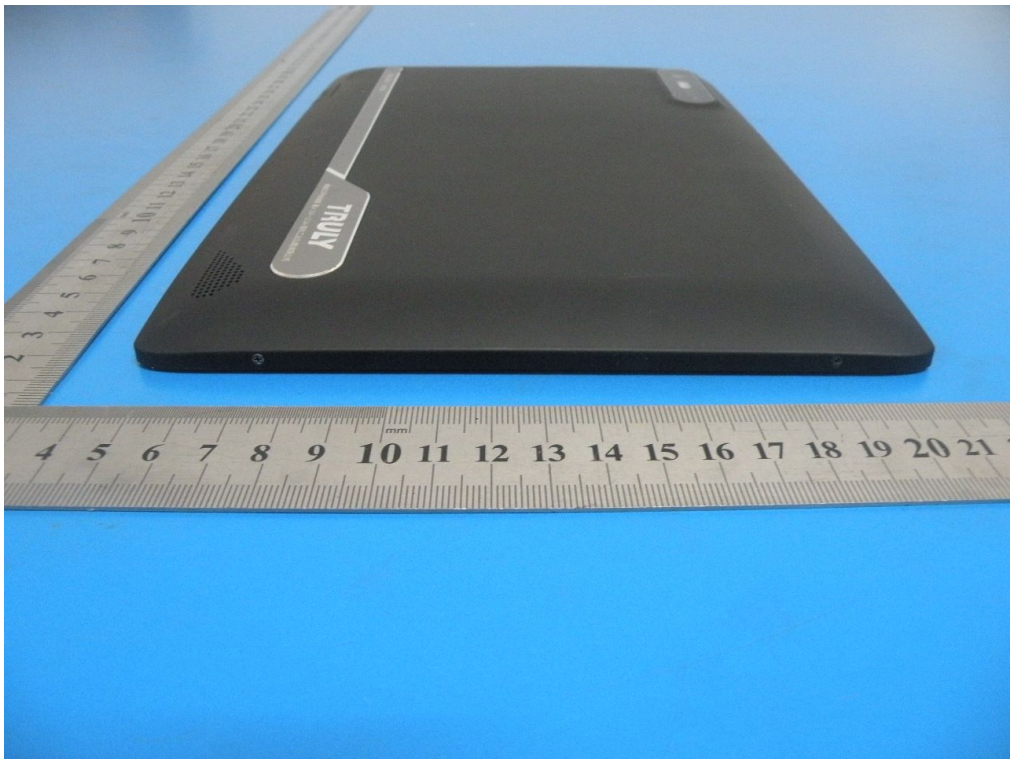
12. Photos of EUT


TRULY


TRULY




TRULY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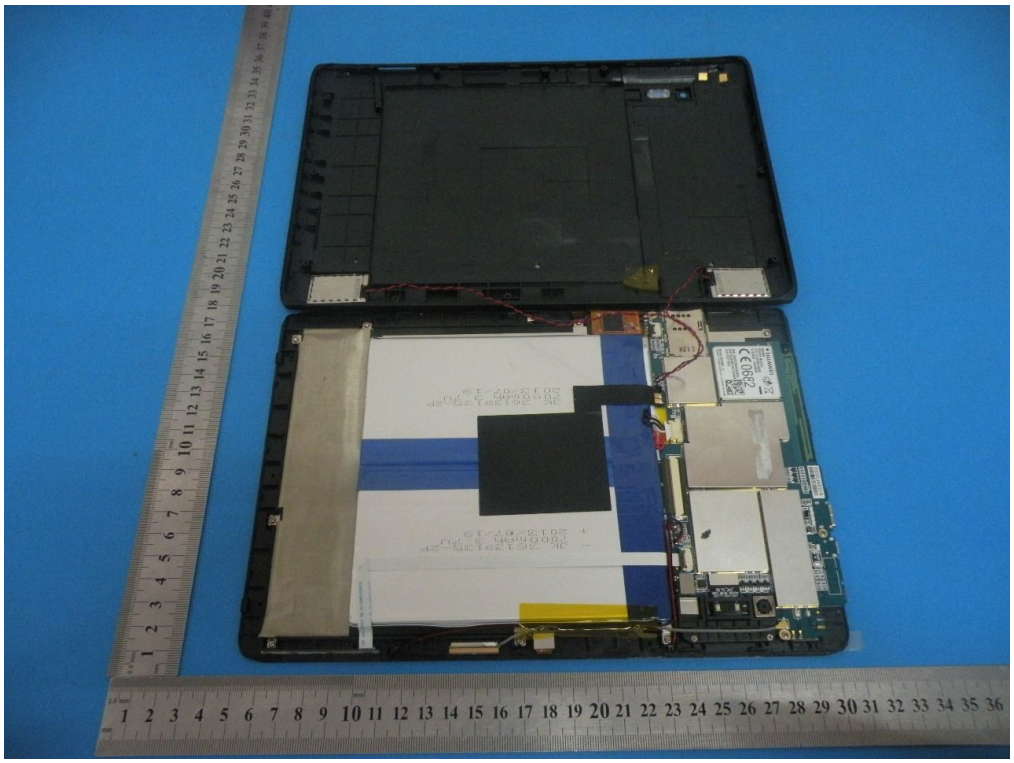
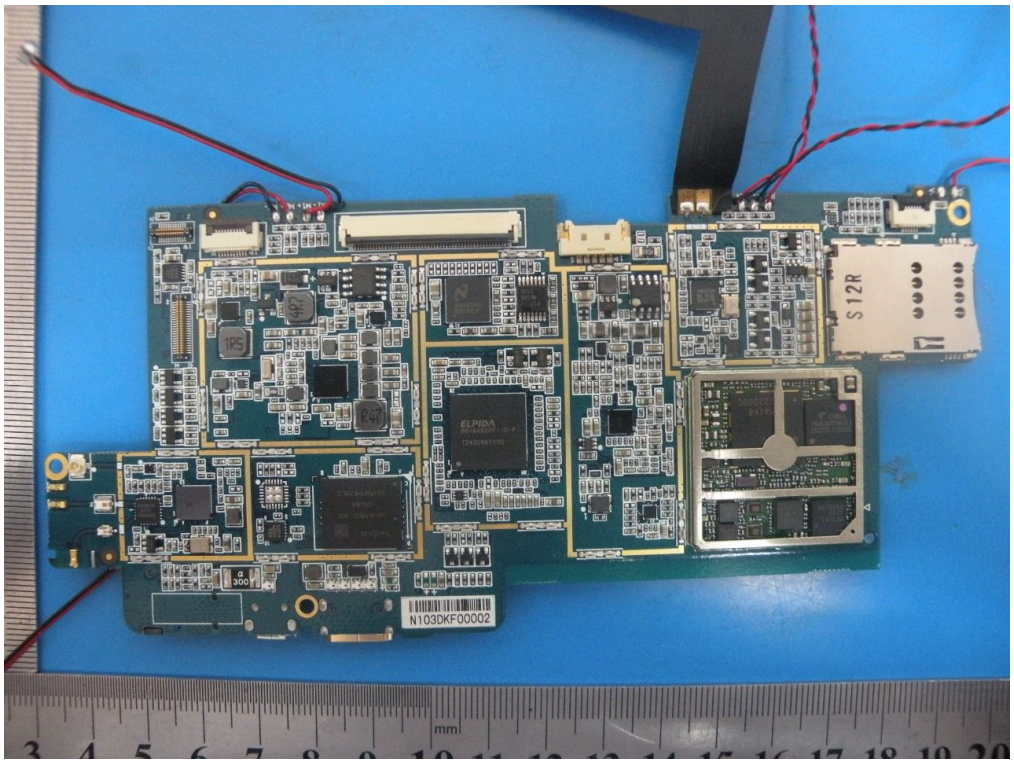



HUAWEI
MU509
HSDPA Module
FCC ID:QISMU509B
IC:6369A-MU509B
CE 0682
IMEI:354525045554803
S/N:5GA6RB1262104408
P/N:51077828
Model:MU509-b
HUAWEI TECHNOLOGIES CO.,LTD MADE IN CHINA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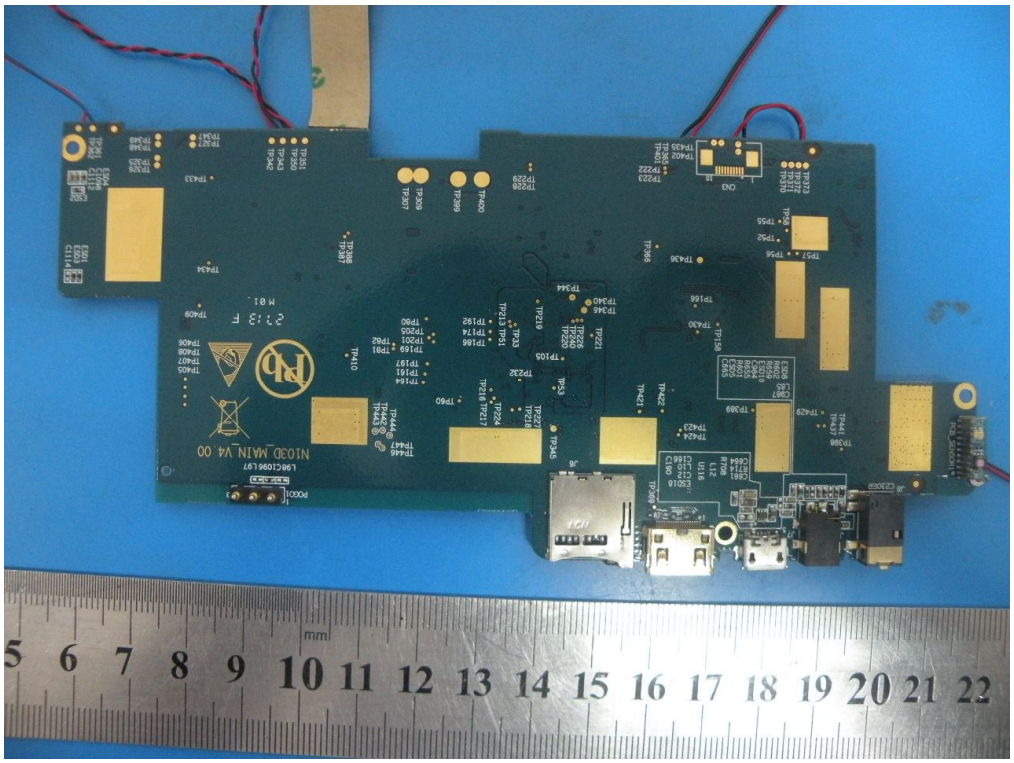
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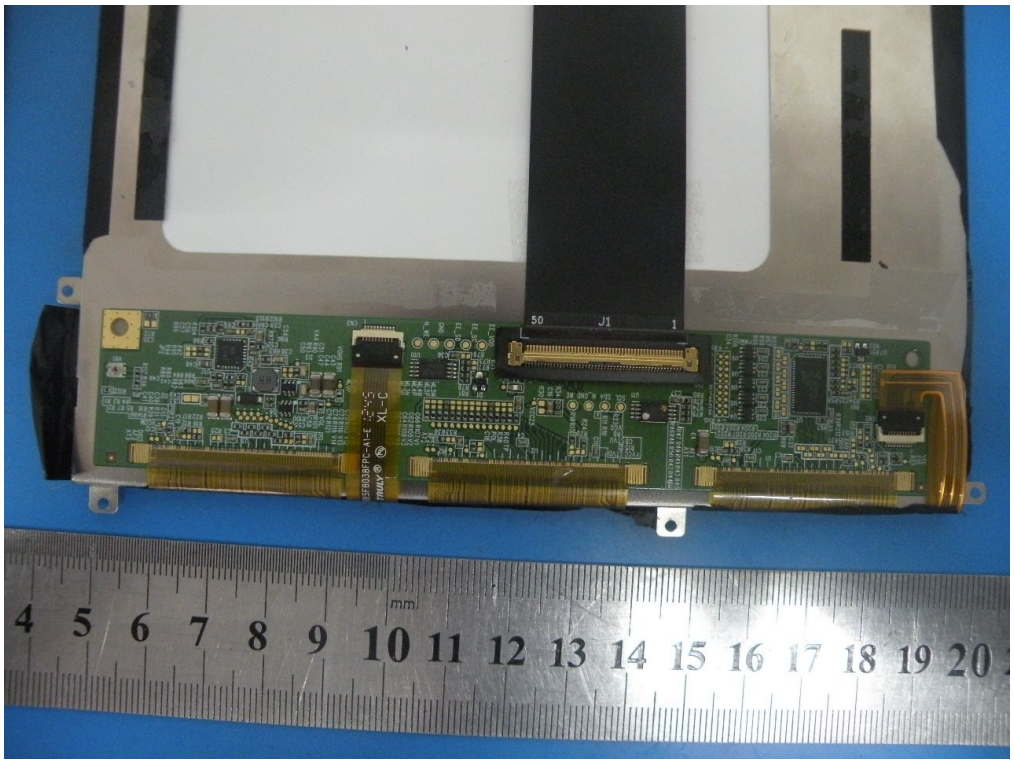
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mm

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