

FCC RADIO TEST REPORT FCC ID: Z87AIRUS7310

Product: Mobile phone

Trade Name: gigo,airus,taxcel,yaddas,tellme,abba one

Model Name: 7310

Serial Model: 8020, 5380, 7120, 6510, 4410, 5520, sky, tiger,

chat, tap

Report No.: NTEK-2013NT0613117F3

Prepared for

ABBA INNOVATION S.A.S.

Calle 76 No 52-40 Local 1, Alto Prado, Barranquilla, Colombia

Prepared by

Shenzhen NTEK Testing Technology Co., Ltd.

1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street Bao'an District, Shenzhen P.R. China

Tel.: +86-0755-61156588 Fax.: +86-0755-61156599 Website:www.ntek.org.cn



TEST RESULT CERTIFICATION

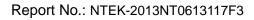
Report No.: NTEK-2013NT0613117F3

Applicant's name:	ABBA INN	NOVATION S.A.S
Address:	Calle 76 N	No 52-40 Local 1, Alto Prado, Barranquilla, Colombia
Manufacture's Name:	Movicom	Technology Co., Limited
Address:		07a Zhan Tao Technology Building Min Zhi Road Long n Zhen China
Product description		
Product name:	Mobile ph	one
Model and/or type reference :	7310	
Serial Model:	8020, 538	30, 7120, 6510, 4410, 5520, sky, tiger, chat, tap
Standards:	FCC Part	15.247
Test procedure	ANSI C63	3.4-2003
	n complian	ted by NTEK, and the test results show that the ce with the FCC requirements. And it is applicable only t.
This report shall not be reproduc	ced except	in full, without the written approval of NTEK, this
•	ised by NT	EK, personal only, and shall be noted in the revision of
the document.		
Date of Test		05 has 0040 40 has 0040
Date (s) of performance of tests.		05 June 2013 ~10 June 2013
Date of Issue		13 June 2013
Test Result	:	Pass
Testing Engine	er :	Apple Huong
	-	(Apple Huang)
		(+ - - - - - - - - -
Technical Man	ager :	Tom Thong
	-	(Tom Zhang)
Authorized Sig	natory:	Borey Young
	-	(Bovey Yang)
		(Bovoy rang)



Table of Contents

	Page
1 . SUMMARY OF TEST RESULTS	5
1.1 TEST FACILITY	6
1.2 MEASUREMENT UNCERTAINTY	6
2 . GENERAL INFORMATION	7
2.1 GENERAL DESCRIPTION OF EUT	7
2.2 DESCRIPTION OF TEST MODES	9
2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTE	D 10
2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)	11
2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS	12
3 . EMC EMISSION TEST	13
3.1 CONDUCTED EMISSION MEASUREMENT	13
3.1.1 POWER LINE CONDUCTED EMISSION LIMITS	13
3.1.2 TEST PROCEDURE 3.1.3 DEVIATION FROM TEST STANDARD	14 14
3.1.4 TEST SETUP	14
3.1.5 EUT OPERATING CONDITIONS	14
3.1.6 TEST RESULTS	15
3.2 RADIATED EMISSION MEASUREMENT	17
3.2.1 RADIATED EMISSION LIMITS	17
3.2.2 TEST PROCEDURE 3.2.3 DEVIATION FROM TEST STANDARD	18 18
3.2.4 TEST SETUP	19
3.2.5 EUT OPERATING CONDITIONS	20
3.2.6 TEST RESULTS (BETWEEN 9KHZ – 30 MHZ)	21
3.2.7 TEST RESULTS (BETWEEN 30MHZ – 1GHZ) 3.2.8 TEST RESULTS (ABOVE 1000 MHZ)	22 24
4 . POWER SPECTRAL DENSITY TEST	54
4.1 APPLIED PROCEDURES / LIMIT 4.1.1 TEST PROCEDURE	54 54
4.1.2 DEVIATION FROM STANDARD	54
4.1.3 TEST SETUP	54
4.1.4 EUT OPERATION CONDITIONS	54
4.1.5 TEST RESULTS	55
5 . BANDWIDTH TEST	61
5.1 APPLIED PROCEDURES / LIMIT	61
5.1.1 TEST PROCEDURE	61





_		_	_	_		
Гэ	h	\mathbf{a}	Λf	Γ	nte	ents

lable of Contents	Page
5.1.2 DEVIATION FROM STANDARD 5.1.3 TEST SETUP 5.1.4 EUT OPERATION CONDITIONS 5.1.5 TEST RESULTS	61 61 61 62
6 . PEAK OUTPUT POWER TEST	68
6.1 APPLIED PROCEDURES / LIMIT	68
6.1.1 TEST PROCEDURE 6.1.2 DEVIATION FROM STANDARD 6.1.3 TEST SETUP 6.1.4 EUT OPERATION CONDITIONS 6.1.5 TEST RESULTS	68 68 68 69
7 . ANTENNA REQUIREMENT	70
7.1 STANDARD REQUIREMENT	70
7.2 EUT ANTENNA	70
8 . EUT TEST PHOTO APPENDIX-PHOTOGRAPHS OF EUT CONSTRUCTIONAL DETAILS	71



1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.247) , Subpart C				
Standard Section	Test Item	Judgment	Remark	
15.207	Conducted Emission	PASS		
15.247 (a)(2)	6dB Bandwidth	PASS		
15.247 (b)	Peak Output Power	PASS		
15.247 (c)	Radiated Spurious Emission	PASS		
15.247 (d)	Power Spectral Density	PASS		
15.205	Band Edge Emission	PASS		
15.203	Antenna Requirement	PASS		

NOTE:

(1)" N/A" denotes test is not applicable in this Test Report



1.1 TEST FACILITY

NTEK Testing Technology Co., Ltd

Add.:1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen P.R. China.

FCC Registration No.:238937; IC Registration No.:9270A-1

CNAS Registration No.:L5516

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $\mathbf{y} \pm \mathbf{U}$, where expended uncertainty \mathbf{U} is based on a standard uncertainty multiplied by a coverage factor of $\mathbf{k=2}$, providing a level of confidence of approximately 95 % $^{\circ}$

No.	Item	Uncertainty
1	Conducted Emission Test	±1.38dB
2	RF power,conducted	±0.16dB
3	Spurious emissions,conducted	±0.21dB
4	All emissions,radiated(<1G)	±4.68dB
5	All emissions,radiated(>1G)	±4.89dB
6	Temperature	±0.5°C
7	Humidity	±2%



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	Mobile phone				
Trade Name	gigo,airus,taxcel,yaddas,tellme,abba one				
Model Name	7310				
Serial Model	8020, 5380, 7120, 6510, 4410, 5520, sky, tiger, chat, tap				
Madal Difference	All the model are the	same circuit and RF module,			
Model Difference	except the model nan	ne.			
	The EUT is a Mobile				
	Operation	802.11b/g/n:2412~2462 MHz			
	Frequency:				
	Modulation Type:	CCK/OFDM/DBPSK/DAPSK			
	Bit Rate of	802.11b:11/5.5/2/1 Mbps			
	Transmitter	802.11g:54/48/36/24/18/12/9/6			
		Mbps			
Product Description		802.11n:72.2/52/6.5 Mbps			
•	Number Of Channel	802.11b/g/n: 11CH			
	Antenna	Please see Note 3.			
	Designation:				
	Output	802.11b: 9.45 dBm (Max.)			
	Power(Conducted):	802.11g: 7.43 dBm (Max.)			
		802.11n: 7.68 dBm (Max.)			
	Antenna Gain (dBi)	1.0dbi			
	Frequency:2402 – 24				
Bluetooth	Modulation:GFSK				
Bidotootii	Output Power: 0.895dBm				
	Frequency: GSM 850 MHz;:824.2-848.4MHz				
	PCS 1900 MHz: 1850				
	Modulation:GMSK	5.2 1000101111.12			
GSM/PCS	Output Power: GSM850(Class 4) : 1.702 W (32.31dBm)				
	GPRS850(Multislot Class 8) : 1.694 W (32.29 dBm) GSM1900				
	(Class 1): 1.044 W (30.19dBm)				
	GPRS1900 (Multislot Class 8) : 1.051 W (30.22 dBm)				
Channel List	Please refer to the No	ote 2.			
Ratings	DC 3.7V				
	Power Supply				
Adoptor	Model No.:JKY36-SP	0502000			
Adapter	Input:100-240V~ 50/60Hz				
	Output:DC5.0V,2000mA				
	Rated Voltage: 3.7V				
Battery	Charge Limit: 4.2V				
	capacity :1500mah				
Connecting I/O Port(s)	Please refer to the Us	ser's Manual			



Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.

	Channel List for 802.11b/g/n						
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	04	2427	07	2442	10	2457
02	2417	05	2432	08	2447	11	2462
03	2422	06	2437	09	2452		

3.

Table for Filed Antenna

	able for the attribute					
Ant	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
А	N/A	N/A	internal Antenna	N/A	1.0	N/A



2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

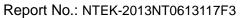
Pretest Mode	Description
Mode 1	802.11b CH1/ CH6/ CH11
Mode 2	802.11g CH1/ CH6/ CH11
Mode 3	802.11n CH1/ CH6/ CH11
Mode 4	Link Mode

For Conducted Emission		
Final Test Mode	Description	
Mode 4	Link Mode	

For Radiated Emission		
Final Test Mode	Description	
Mode 1	802.11b CH1/ CH6/ CH11	
Mode 2	802.11g CH1/ CH6/ CH11	
Mode 3	802.11n CH1/ CH6/ CH11	

Note:

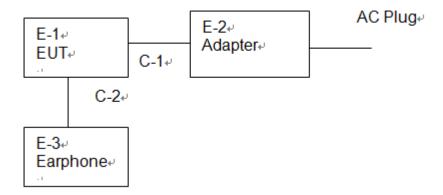
- (1) The measurements are performed at the highest, middle, lowest available channels.
- (2) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported





2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Conducted Emission Test



Radiated Spurious Emission Test

E-1 EUT



2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	Mobile phone	AIRUS	7310	N/A	EUT
E-2	Adapter	N/A	YSN05100	N/A	
E-3	Earphone	N/A	N/A	N/A	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	No	No	1.2M	
C-2	No	No	0.8M	

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in <code>"Length_"</code> column.



2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Spectrum Analyzer	Agilent	E4407B	MY4510804 0	2012.07.06	2013.07.05	1 year
2	Test Receiver	R&S	ESPI	101318	2012.06.07	2013.06.06	1 year
3	Bilog Antenna	TESEQ	CBL6111D	31216	2012.07.06	2013.07.05	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	620026441 6	2012.06.07	2013.06.06	1 year
5	Spectrum Analyzer	ADVANTEST	R3132	150900201	2012.06.07	2013.06.06	1 year
6	Horn Antenna	EM	EM-AH-101 80	2011071402	2012.07.06	2013.07.05	1 year
7	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2012.07.06	2013.07.05	1 year
8	Amplifier	EM	EM-30180	060538	2011.12.22	2012.12.21	1 year
9	Loop Antenna	ARA	PLA-1030/B	1029	2012.06.08	2013.06.07	1 year
10	Power Meter	R&S	NRVS	100696	2012.07.06	2013.07.05	1 year
11	Power Sensor	R&S	URV5-Z4	0395.1619. 05	2012.07.06	2013.07.05	1 year

Conduction Test equipment

	luction rest equip		T \	0		0 111 / 1	0 111 11
Item	Kind of	Manufactu	Type No.	Serial No.	Last	Calibrated	Calibration
	Equipment	rer			calibration	until	period
1	Test Receiver	R&S	ESCI	101160	2012.06.06	2013.06.05	1 year
2	LISN	R&S	ENV216	101313	2012.08.24	2013.08.23	1 year
3	LISN	EMCO	3816/2	00042990	2012.08.24	2013.08.23	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264417	2012.06.07	2013.06.06	1 year
5	Passive Voltage Probe	R&S	ESH2-Z3	100196	2012.06.07	2013.06.06	1 year
6	Absorbing clamp	R&S	MOS-21	100423	2012.06.08	2013.06.07	1 year



3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

	Class A (dBuV)		Class B	Ctondord	
FREQUENCY (MHz)	Quasi-peak	Average	Quasi-peak	Average	Standard
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	CISPR
0.50 -5.0	73.00	60.00	56.00	46.00	CISPR
5.0 -30.0	73.00	60.00	60.00	50.00	CISPR

0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	73.00	60.00	56.00	46.00	FCC
5.0 -30.0	73.00	60.00	60.00	50.00	FCC

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz



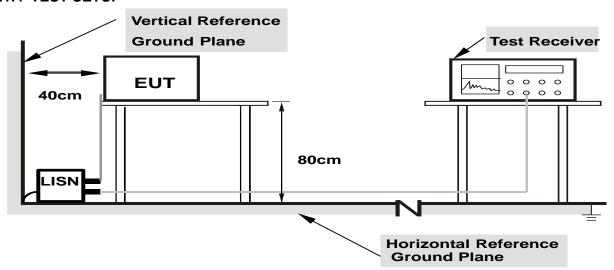
3.1.2 TEST PROCEDURE

- a. The EUT was placed 0.4 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item -EUT Test Photos.

3.1.3 DEVIATION FROM TEST STANDARD

No deviation

3.1.4 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

3.1.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.



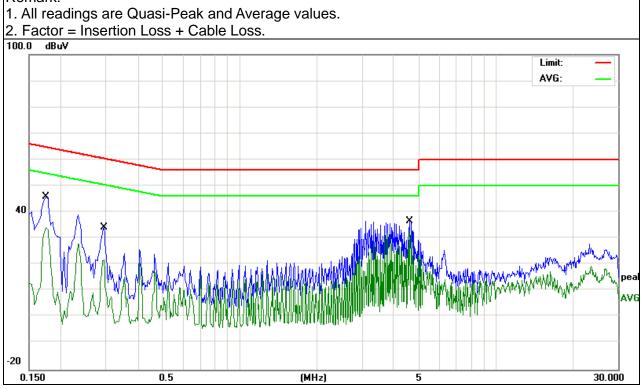
3.1.6 TEST RESULTS

EUT:	Mobile phone	Model Name. :	7310					
Temperature :	26 ℃	Relative Humidity:	54%					
Pressure :	1010hPa	Phase :	L					
Test Voltage :	DC 5V from Adapter AC 120V/60Hz	Test Mode:	Link Mode					

Report No.: NTEK-2013NT0613117F3

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Tune
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Detector Type
0.174	45.14	0.69	45.83	64.76	-18.93	QP
0.174	33.37	0.69	34.06	54.76	-20.7	AVG
0.294	33.62	0.61	34.23	60.41	-26.18	QP
0.294	21.09	0.61	21.7	50.41	-28.71	AVG
4.6059	35.95	0.46	36.41	56	-19.59	QP
4.6059	32.52	0.46	32.98	46	-13.02	AVG

Remark:





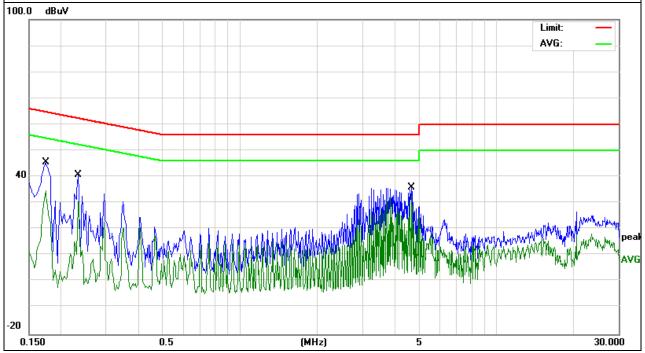
EUT: Model Name. : Mobile phone 7310 Relative Humidity: 54% Temperature: **26** ℃ Pressure: 1010hPa Ν Phase: DC 5V from Adapter AC Test Voltage : Test Mode: Link Mode 120V/60Hz

Report No.: NTEK-2013NT0613117F3

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Data ator Type
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Detector Type
0.174	44.9	0.69	45.59	64.76	-19.17	QP
0.174	34.04	0.69	34.73	54.76	-20.03	AVG
0.234	40.24	0.4	40.64	62.3	-21.66	QP
0.234	30.12	0.4	30.52	52.3	-21.78	AVG
4.6619	35.56	0.46	36.02	56	-19.98	QP
4.6619	32.59	0.46	33.05	46	-12.95	AVG

Remark:

- All readings are Quasi-Peak and Average values.
 Factor = Insertion Loss + Cable Loss.





3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies	Field Strength	Measurement Distance		
(MHz)	(micorvolts/meter)	(meters)		
0.009~0.490	2400/F(KHz)	300		
0.490~1.705	24000/F(KHz)	30		
1.705~30.0	30	30		
30~88	100	3		
88~216	150	3		
216~960	200	3		
Above 960	500	3		

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	Class A (dBu	ıV/m) (at 3M)	Class B (dBuV/m) (at 3M)		
	PEAK	AVERAGE	PEAK	AVERAGE	
Above 1000	80	60	74	54	

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

Spectrum Parameter	Setting	
Attenuation	Auto	
Start Frequency	1000 MHz	
Stop Frequency	10th carrier harmonic	
RB / VB (emission in restricted	4 Mile / 4 Mile for Dools 4 Mile / 40/lefor Asserts	
band)	1 MHz / 1 MHz for Peak, 1 MHz / <i>10Hz</i> for Average	

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP



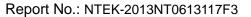
3.2.2 TEST PROCEDURE

- a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos. Note:

Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

3.2.3 DEVIATION FROM TEST STANDARD

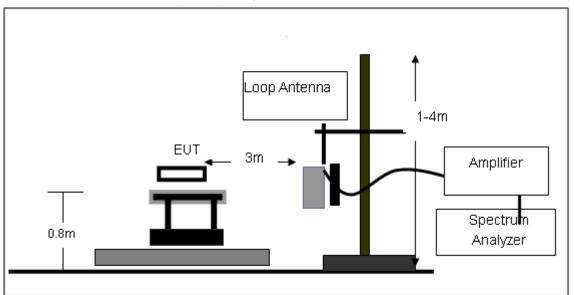
No deviation



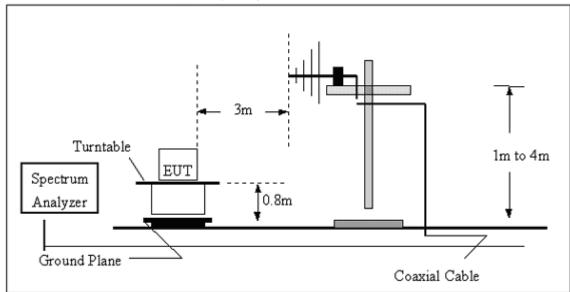


3.2.4 TEST SETUP

(A) Radiated Emission Test-Up Frequency Below 30MHz

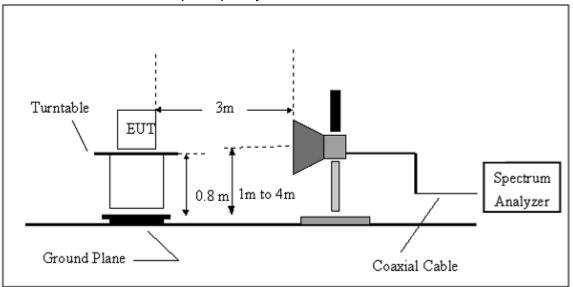


(B) Radiated Emission Test-Up Frequency 30MHz~1GHz





(C) Radiated Emission Test-Up Frequency Above 1GHz



3.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.



3.2.6 TEST RESULTS (BETWEEN 9KHZ - 30 MHZ)

EUT:	Mobile phone	Model Name. :	7310
Temperature:	20 ℃	Relative Humidtity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.7V
Test Mode:	TX	Polarization :	

Report No.: NTEK-2013NT0613117F3

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
				PASS
				PASS

NOTE:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor =40 log (specific distance/test distance)(dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.

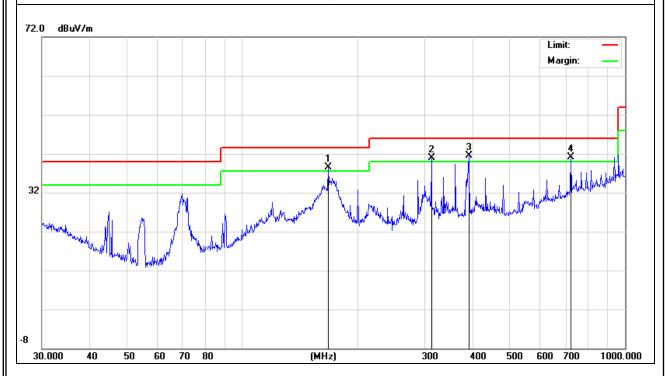


3.2.7 TEST RESULTS (BETWEEN 30MHZ - 1GHZ)

EUT:	Mobile phone	Model Name :	7310
Temperature:	20 ℃	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX	Polarization:	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
167.8242	27.86	10.59	38.45	43.5	-5.05	QP
312.1792	25.85	15.13	40.98	46	-5.02	QP
390.7225	23.69	17.78	41.47	46	-4.53	QP
721.7259	15.49	25.59	41.08	46	-4.92	QP

Remark:





EUT : Mobile phone Model Name : 7310

Temperature : 20 °C Relative Humidity : 48%

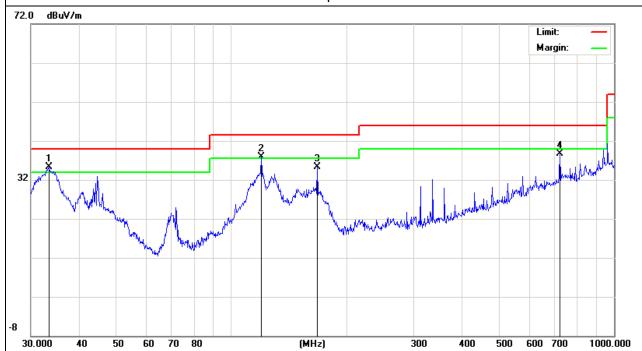
Pressure : 1010 hPa Test Voltage : DC 3.7V

Test Mode : TX Polarization : Vertical

Report No.: NTEK-2013NT0613117F3

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
33.4448	18.56	16.67	35.23	40	-4.77	QP
119.8555	25.82	12.09	37.91	43.5	-5.59	QP
167.824	24.66	10.59	35.25	43.5	-8.25	QP
721.7259	13.14	25.59	38.73	46	-7.27	QP

Remark:



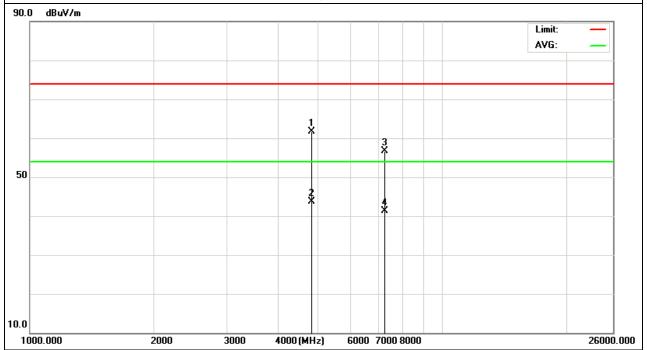


3.2.8 TEST RESULTS (ABOVE 1000 MHZ)

EUT:	Mobile phone	Model Name :	7310
Temperature:	20 ℃	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	CH1 (802.11b Mode)/2412	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Data atau Tura
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
4824.133	51.19	10.44	61.63	74	-12.37	peak
4824.133	33.3	10.44	43.74	54	-10.26	AVG
7236.152	44.23	12.39	56.62	74	-17.38	peak
7236.152	28.99	12.39	41.38	54	-12.62	AVG

Remark:



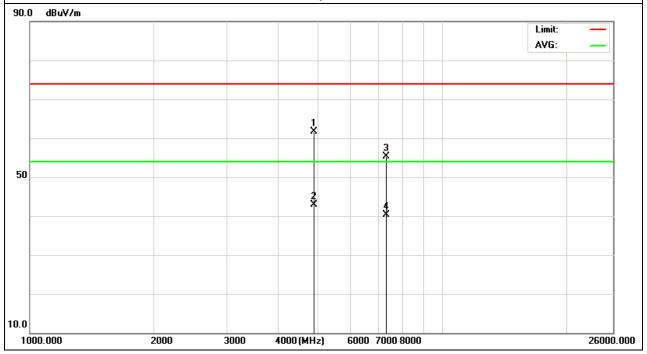


EUT: Mobile phone Model Name : 7310 Temperature: Relative Humidity: 20 ℃ 48% Test Voltage : DC 3.7V Pressure: 1010 hPa Test Mode : CH1 (802.11b Mode)/2412 Polarization: Vertical

Report No.: NTEK-2013NT0613117F3

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
4874.167	51.29	10.4	61.69	74	-12.31	peak
4874.167	32.44	10.4	42.84	54	-11.16	AVG
7311.158	42.56	12.75	55.31	74	-18.69	peak
7311.158	27.52	12.75	40.27	54	-13.73	AVG

Remark:





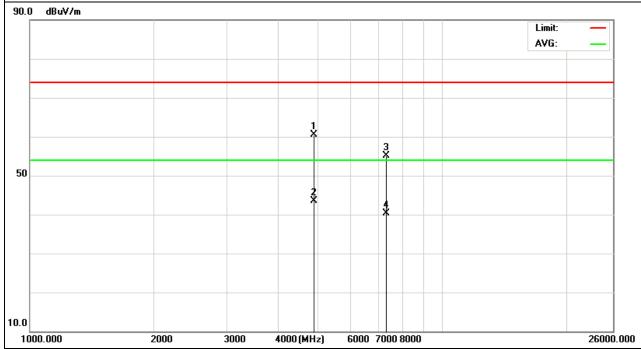
Page 26 of 72

EUT:	Mobile phone	Model Name :	7310
Temperature:	20 ℃	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	CH6 (802.11b Mode)/2437	Polarization:	Horizontal

Report No.: NTEK-2013NT0613117F3

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Data stor Turo
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
4874.149	50.18	10.4	60.58	74	-13.42	peak
4874.149	33.2	10.4	43.6	54	-10.4	AVG
7311.126	42.42	12.75	55.17	74	-18.83	peak
7311.126	27.53	12.75	40.28	54	-13.72	AVG

Remark:





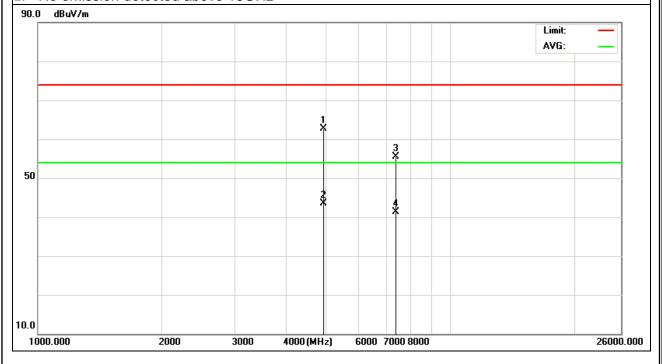
Mobile phone EUT: Model Name : 7310 Relative Humidity: Temperature: 20 ℃ 48% Test Voltage : Pressure: DC 3.7V 1010 hPa Test Mode : CH6 (802.11b Mode)/2437 Polarization: Vertical

Report No.: NTEK-2013NT0613117F3

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
4924.164	52.23	10.39	62.62	74	-11.38	peak
4934.164	33.13	10.44	43.57	54	-10.43	AVG
7386.122	42.8	12.68	55.48	74	-18.52	peak
7386.122	28.67	12.68	41.35	54	-12.65	AVG

Remark:

- 1. Factor = Antenna Factor + Cable Loss Pre-amplifier.
- 2. No emission detected above 18GHz





EUT: Mobile phone Model Name : 7310 Relative Humidity: **2**0 ℃ Temperature: 48% Test Voltage : Pressure: DC 3.7V 1010 hPa Test Mode : CH11 (802.11b Mode)/2462 Polarization: Horizontal

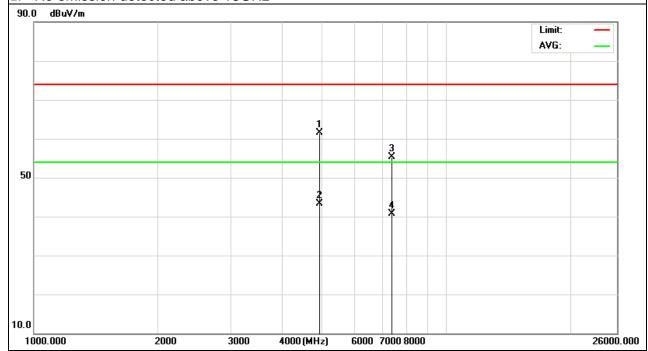
Report No.: NTEK-2013NT0613117F3

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
4924.142	51.15	10.39	61.54	74	-12.46	peak
4924.142	32.98	10.39	43.37	54	-10.63	AVG
7386.138	42.54	12.68	55.22	74	-18.78	peak
7386.138	27.95	12.68	40.63	54	-13.37	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss - Pre-amplifier.

2. No emission detected above 18GHz



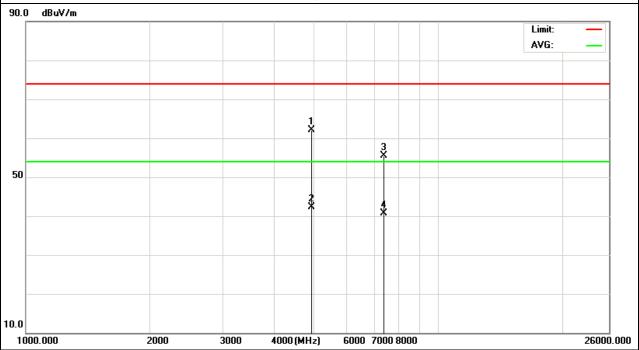


EUT: Mobile phone Model Name : 7310 **20** ℃ Relative Humidity: Temperature: 48% Test Voltage : Pressure: DC 3.7V 1010 hPa Test Mode : CH11 (802.11b Mode)/2462 Polarization: Vertical

Report No.: NTEK-2013NT0613117F3

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
4924.118	51.77	10.39	62.16	74	-11.84	peak
4924.118	31.96	10.39	42.35	54	-11.65	AVG
7386.14	42.76	12.68	55.44	74	-18.56	peak
7386.14	28.04	12.68	40.72	54	-13.28	AVG

Remark:



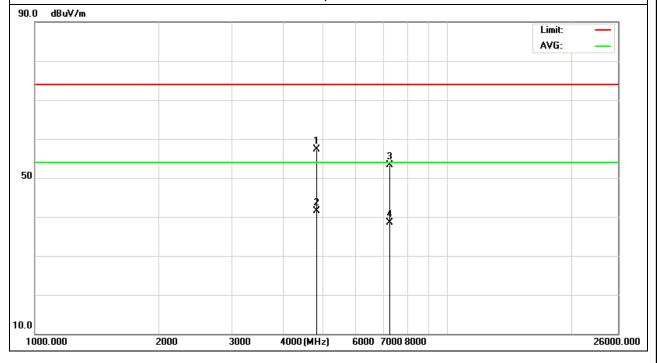


EUT: Model Name : Mobile phone 7310 **20** ℃ Relative Humidity: Temperature: 48% Test Voltage : Pressure: 1010 hPa DC 3.7V Test Mode : CH1 (802.11g Mode)/2412 Polarization: Horizontal

Report No.: NTEK-2013NT0613117F3

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Time
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
4824.165	46.92	10.44	57.36	74	-16.64	peak
4824.165	31.1	10.44	41.54	54	-12.46	AVG
7236.121	40.84	12.39	53.23	74	-20.77	peak
7236.121	26.06	12.39	38.45	54	-15.55	AVG

Remark:



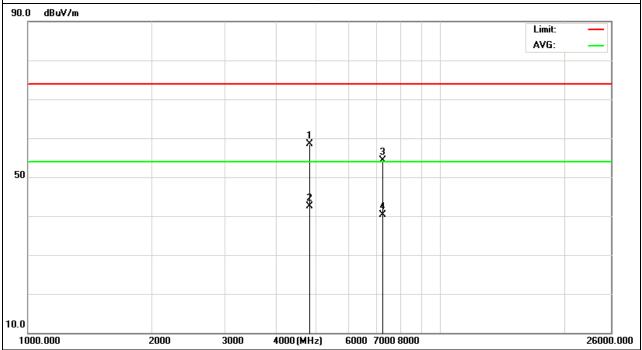


EUT: Mobile phone Model Name : 7310 **2**0 ℃ Relative Humidity: Temperature: 48% Test Voltage : Pressure: DC 3.7V 1010 hPa Test Mode : CH1 (802.11g Mode)/2412 Polarization: Vertical

Report No.: NTEK-2013NT0613117F3

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
4824.154	48.01	10.44	58.45	74	-15.55	peak
4824.154	32.08	10.44	42.52	54	-11.48	AVG
7236.138	41.93	12.39	54.32	74	-19.68	peak
7236.138	27.95	12.39	40.34	54	-13.66	AVG

Remark:

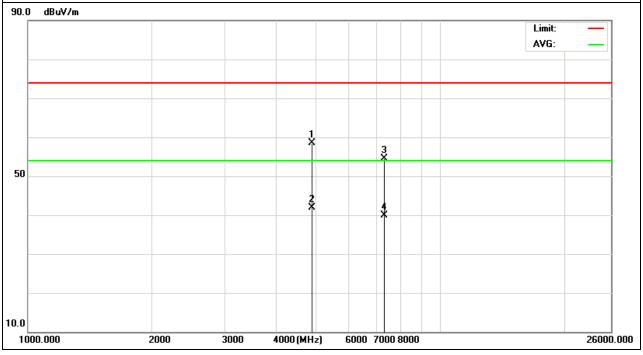




EUT:	Mobile phone	Model Name :	7310
Temperature:	20 ℃	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	CH6 (802.11g Mode)/2437	Polarization:	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
4874.13	48.15	10.4	58.55	74	-15.45	peak
4874.13	31.58	10.4	41.98	54	-12.02	AVG
7311.168	41.84	12.75	54.59	74	-19.41	peak
7311.168	27.12	12.75	39.87	54	-14.13	AVG

Remark:

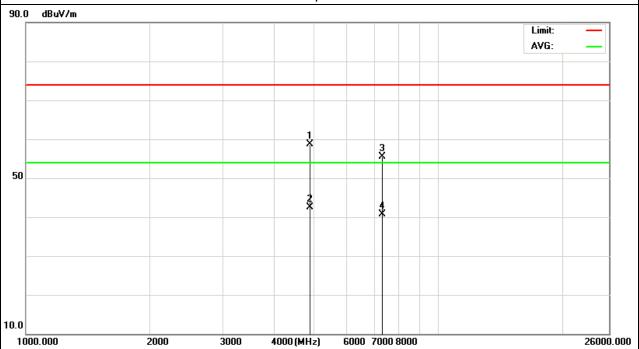




EUT:	Mobile phone	Model Name :	7310
Temperature:	20 ℃	Relative Humidity:	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	CH6 (802.11g Mode)/2437	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Dotostor Typo
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
4874.164	48.3	10.4	58.7	74	-15.3	peak
4874.164	32.18	10.4	42.58	54	-11.42	AVG
7311.125	42.79	12.75	55.54	74	-18.46	peak
7311.125	28.03	12.75	40.78	54	-13.22	AVG

Remark:

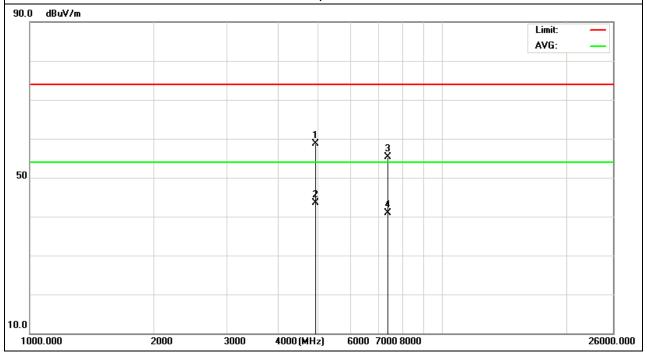




EUT:	Mobile phone	Model Name :	7310
Temperature:	20 ℃	Relative Humidity:	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	CH11 (802.11g Mode)/2462	Polarization:	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Turns
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
4924.134	48.28	10.39	58.67	74	-15.33	peak
4924.134	33.13	10.39	43.52	54	-10.48	AVG
7386.142	42.66	12.68	55.34	74	-18.66	peak
7386.142	28.13	12.68	40.81	54	-13.19	AVG

Remark:

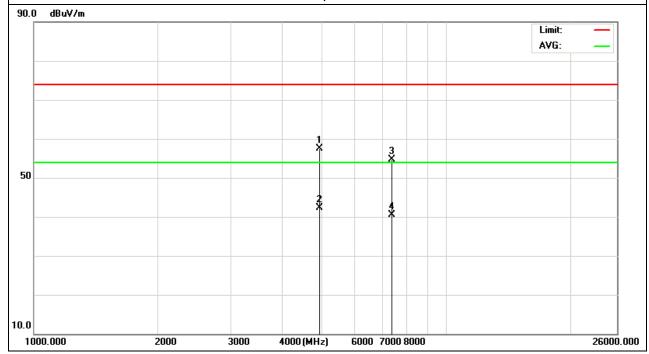




EUT:	Mobile phone	Model Name :	7310
Temperature:	20 ℃	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	CH11(802.11g Mode)/2462	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	
4924.146	47.13	10.39	57.52	74	-16.48	peak
4924.146	31.96	10.39	42.35	54	-11.65	AVG
7386.125	41.98	12.68	54.66	74	-19.34	peak
7386.125	27.85	12.68	40.53	54	-13.47	AVG

Remark:

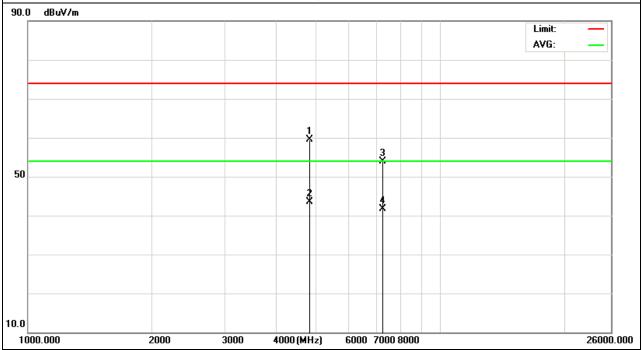




EUT:	Mobile phone	Model Name :	7310
Temperature:	20 ℃	Relative Humidity:	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	CH1(802.11n Mode)/2412	Polarization:	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	
4824.137	49.02	10.44	59.46	74	-14.54	peak
4824.137	33.1	10.44	43.54	54	-10.46	AVG
7236.125	41.48	12.39	53.87	74	-20.13	peak
7236.125	29.4	12.39	41.79	54	-12.21	AVG

Remark:

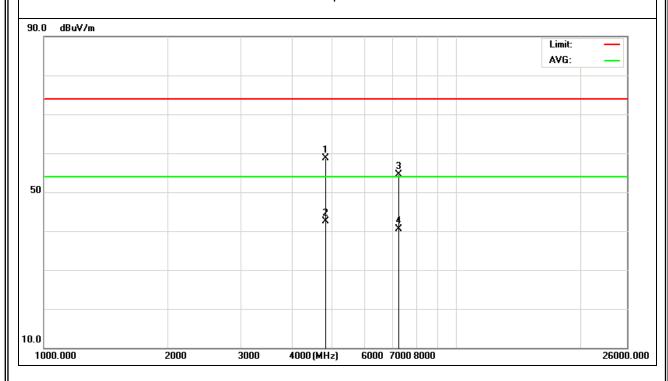




EUT:	Mobile phone	Model Name :	7310
Temperature:	20 ℃	Relative Humidity:	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	CH1(802.11n Mode)/2412	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Data eter Tura
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
4824.158	48.33	10.44	58.77	74	-15.23	peak
4824.158	32.02	10.44	42.46	54	-11.54	AVG
7236.144	42.19	12.39	54.58	74	-19.42	peak
7236.144	28.11	12.39	40.5	54	-13.5	AVG

Remark:

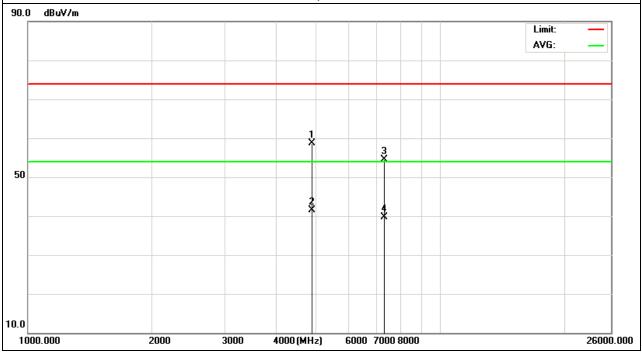




EUT:	Mobile phone	Model Name :	7310
Temperature:	20 ℃	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	CH6(802.11n Mode)/2437	Polarization:	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Data eter Tura
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
4874.154	48.35	10.4	58.75	74	-15.25	peak
4874.154	31.16	10.4	41.56	54	-12.44	AVG
7311.176	41.71	12.75	54.46	74	-19.54	peak
7311.176	26.89	12.75	39.64	54	-14.36	AVG

Remark:

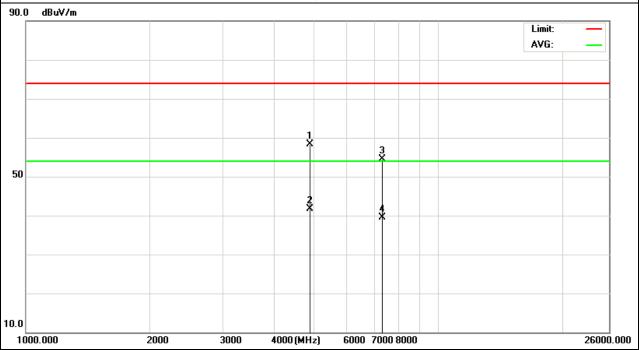




EUT:	Mobile phone	Model Name :	7310
Temperature:	20 ℃	Relative Humidity:	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	CH6(802.11n Mode)/2437	Polarization:	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
4874.155	47.86	10.4	58.26	74	-15.74	peak
4874.155	31.28	10.4	41.68	54	-12.32	AVG
7311.163	41.73	12.75	54.48	74	-19.52	peak
7311.163	26.82	12.75	39.57	54	-14.43	AVG

Remark:



CH11(802.11n Mode)/2462



Temperature:

Test Mode :

Pressure:

EUT:

Mobile phoneModel Name :731020 ℃Relative Humidity :48%1010 hPaTest Voltage :DC 3.7V

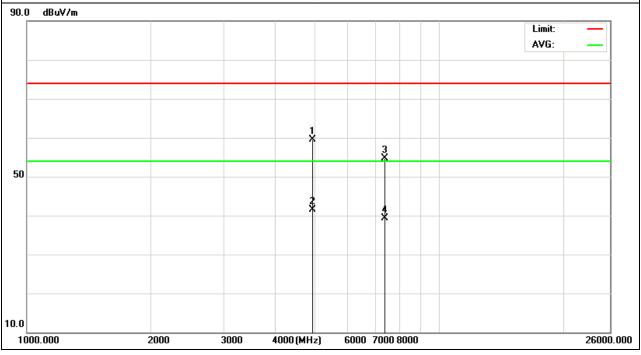
Polarization:

Report No.: NTEK-2013NT0613117F3

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
4924.135	49.07	10.39	59.46	74	-14.54	peak
4924.135	31.19	10.39	41.58	54	-12.42	AVG
7386.174	42.12	12.68	54.8	74	-19.2	peak
7386.174	26.69	12.68	39.37	54	-14.63	AVG

Remark:



CH11(802.11n Mode)/2462



EUT:

Test Mode :

Mobile phone Model Name : 7310 Relative Humidity: Temperature: 20 ℃ 48% Test Voltage : DC 3.7V Pressure: 1010 hPa

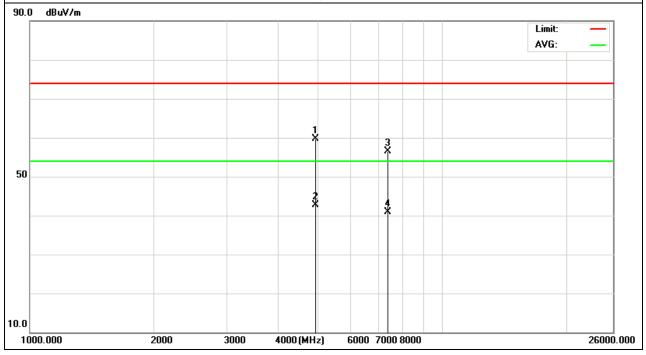
Polarization:

Report No.: NTEK-2013NT0613117F3

Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Datastar Tuna
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
4924.142	49.33	10.39	59.72	74	-14.28	peak
4924.142	32.27	10.39	42.66	54	-11.34	AVG
7386.168	43.91	12.68	56.59	74	-17.41	peak
7386.168	28.29	12.68	40.97	54	-13.03	AVG

Remark:

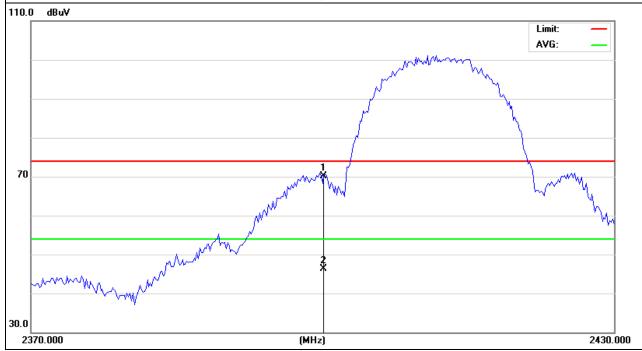




EUT:	Mobile phone	Model Name :	7310
Temperature:	20 ℃	Relative Humidity:	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	CH1(802.11b Mode)	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Data eter Tura
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2400	83.19	-12.99	70.2	74	-3.8	peak
2400	59.3	-12.99	46.31	54	-7.69	AVG

Remark:

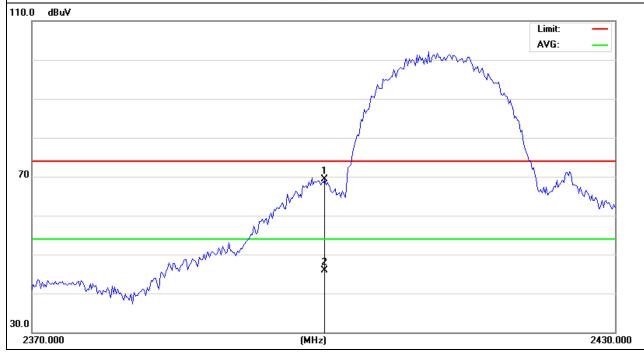




EUT:	Mobile phone	Model Name :	7310
Temperature:	20 ℃	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	CH1(802.11b Mode)	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Data eter Tune
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2400	82.29	-12.99	69.3	74	-4.7	peak
2400	58.96	-12.99	45.97	54	-8.03	AVG

Remark:

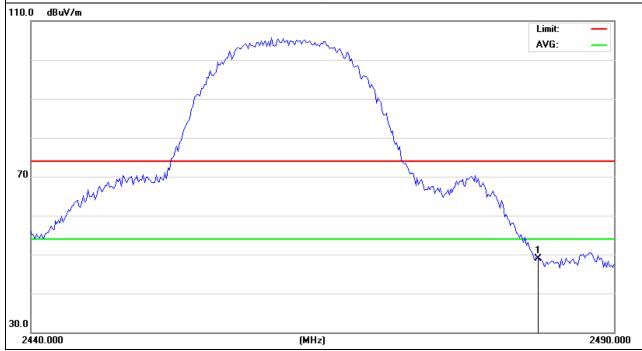




EUT:	Mobile phone	Model Name :	7310
Temperature :	20 ℃	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	CH11(802.11b Mode)	Polarization:	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2483.5	61.68	-12.78	48.9	74	-25.1	peak

Remark:

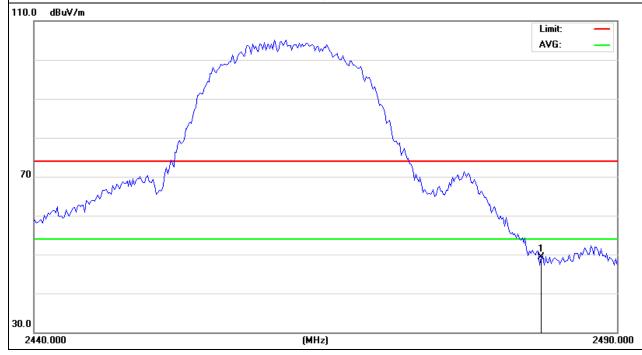




EUT:	Mobile phone	Model Name :	7310
Temperature:	20 ℃	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	CH11(802.11b Mode)	Polarization:	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2483.5	62.18	-12.78	49.4	74	-24.6	peak

Remark:



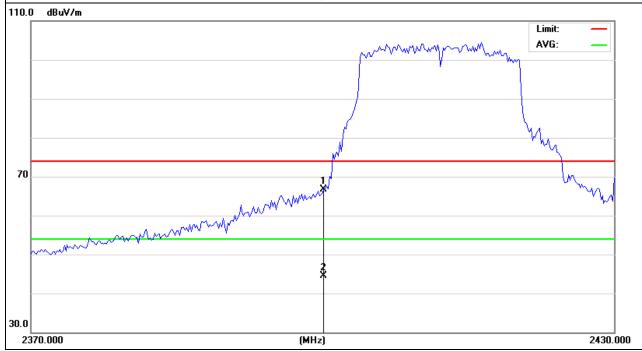


EUT: Mobile phone Model Name : 7310 **20** ℃ Relative Humidity: Temperature: 48% Test Voltage : Pressure: 1010 hPa DC 3.7V Test Mode : CH1(802.11g Mode) Polarization: Horizontal

Report No.: NTEK-2013NT0613117F3

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Dotostor Typo
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2400	79.62	-12.99	66.63	74	-7.37	peak
2400	57.57	-12.99	44.58	54	-9.42	AVG

Remark:

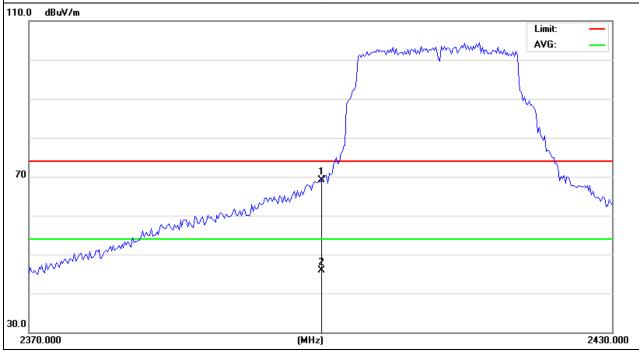




EUT:	Mobile phone	Model Name :	7310
Temperature:	20 ℃	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	CH1(802.11gMode)	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Data eter Tura
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2400	82.09	-12.99	69.1	74	-4.9	peak
2400	58.87	-12.99	45.88	54	-8.12	AVG

Remark:

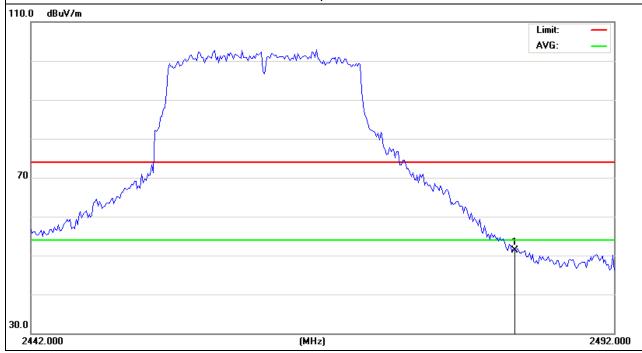




EUT:	Mobile phone	Model Name :	7310
Temperature:	20 ℃	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	CH11(802.11g Mode)	Polarization:	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Data eter Tura
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2483.5	64.18	-12.78	51.4	74	-22.6	peak

Remark:

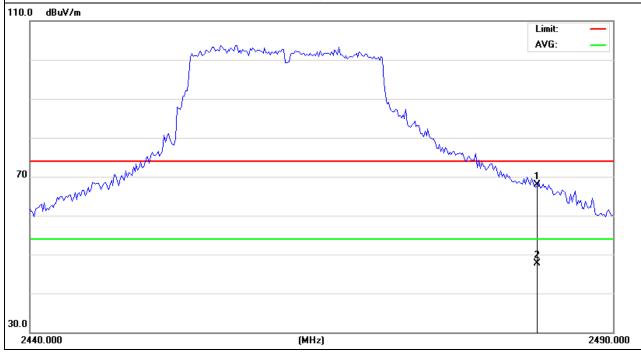




EUT:	Mobile phone	Model Name :	7310
Temperature:	20 ℃	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	CH11(802.11g Mode)	Polarization:	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Data eter Tura
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2483.5	80.7	-12.78	67.92	74	-6.08	peak
2483.5	60.45	-12.78	47.67	54	-6.33	AVG

Remark:

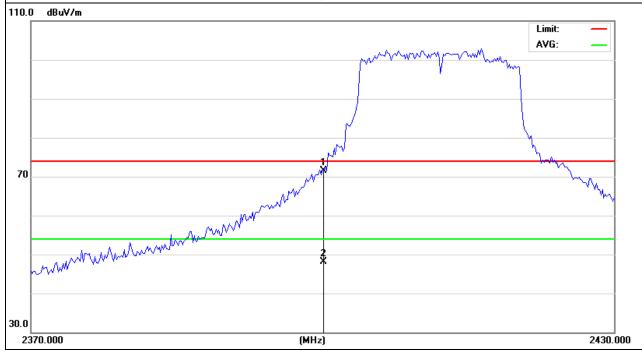




EUT:	Mobile phone	Model Name :	7310
Temperature:	20 ℃	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	CH1(802.11N Mode)	Polarization:	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Data eter Tura
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2400	84.49	-12.99	71.5	74	-2.5	peak
2400	61.04	-12.99	48.05	54	-5.95	AVG

Remark:

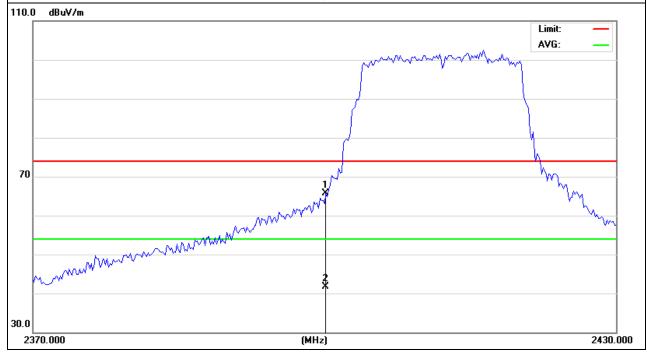




EUT:	Mobile phone	Model Name :	7310
Temperature:	20 ℃	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	CH1(802.11N Mode)	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Data eter Tune
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2400	78.79	-12.99	65.8	74	-8.2	peak
2400	54.74	-12.99	41.75	54	-12.25	AVG

Remark:

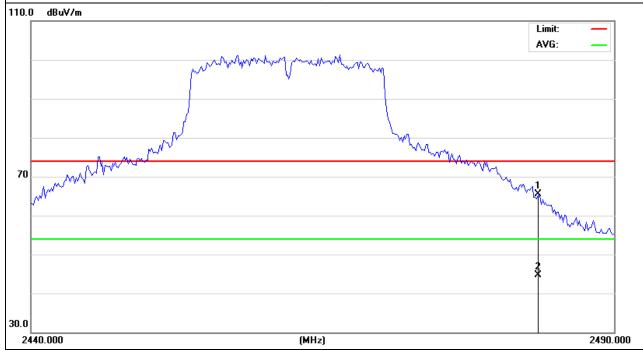




EUT:	Mobile phone	Model Name :	7310
Temperature:	20 ℃	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	CH11(802.11N Mode)	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2483.5	78.31	-12.78	65.53	74	-8.47	peak
2483.5	57.39	-12.78	44.61	54	-9.39	AVG

Remark:

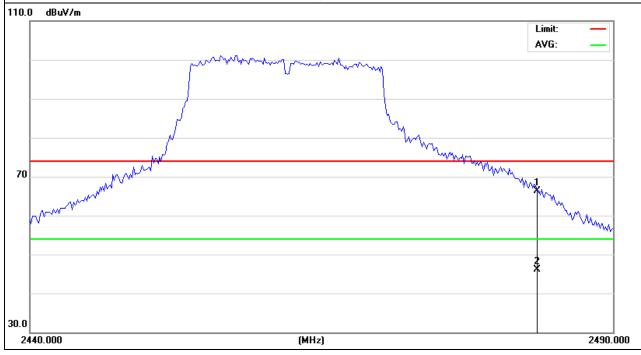




EUT:	Mobile phone	Model Name :	7310
Temperature:	20 ℃	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	CH11(802.11N Mode)	Polarization:	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2483.5	79.04	-12.78	66.26	74	-7.74	peak
2483.5	58.96	-12.78	46.18	54	-7.82	AVG

Remark:





4. POWER SPECTRAL DENSITY TEST

4.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247), Subpart C					
Section	Test Item	Limit	Frequency Range (MHz)	Result	
15.247	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS	

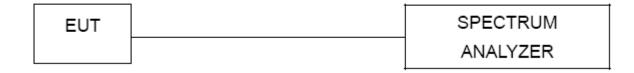
4.1.1 TEST PROCEDURE

- 1. Set analyzer center frequency to DTS channel center frequency.
- 2. Set the span to 1.5 times the DTS channel bandwidth.
- 3. Set the RBW \geq 3 kHz.
- 4. Set the VBW \geq 3 x RBW.
- 5. Detector = peak.
- 6. Sweep time = auto couple.
- 7. Trace mode = max hold.
- 8. Allow trace to fully stabilize.
- 9. Use the peak marker function to determine the maximum amplitude level.
- 10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

4.1.2 DEVIATION FROM STANDARD

No deviation.

4.1.3 TEST SETUP



4.1.4 EUT OPERATION CONDITIONS

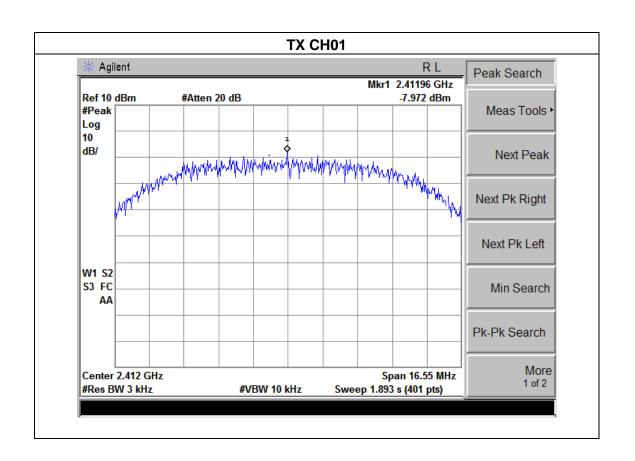
The EUT tested system was configured as the statements of 2.1 Unless otherwise a special operating condition is specified in the follows during the testing.



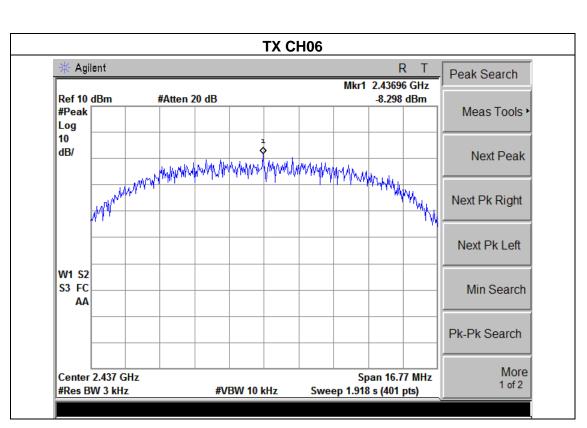
4.1.5 TEST RESULTS

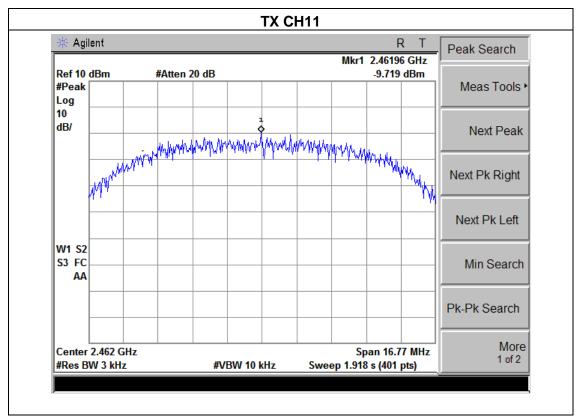
EUT:	Mobile phone	Model Name :	7310	
Temperature :	25 ℃	Relative Humidity:	60%	
Pressure :	1015 hPa	Test Voltage :	DC 3.7V	
Test Mode :	TX b Mode /CH01, CH06, CH11			

Frequency	Power Density (dBm)	Limit (dBm)	Result
2412 MHz	-7.972	8	PASS
2437 MHz	-8.298	8	PASS
2462 MHz	-9.719	8	PASS











EUT: Mobile phone Model Name: 7310

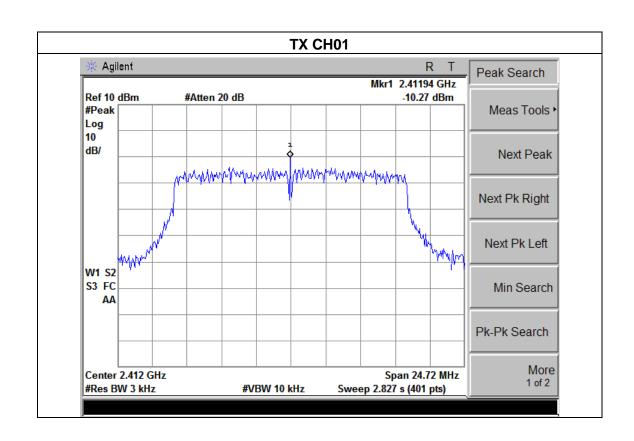
Temperature: 25 °C Relative Humidity: 60%

Pressure: 1015 hPa Test Voltage: DC 3.7V

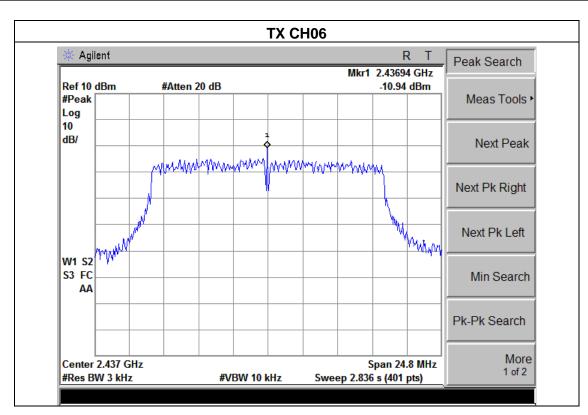
Test Mode: TX g Mode /CH01, CH06, CH11

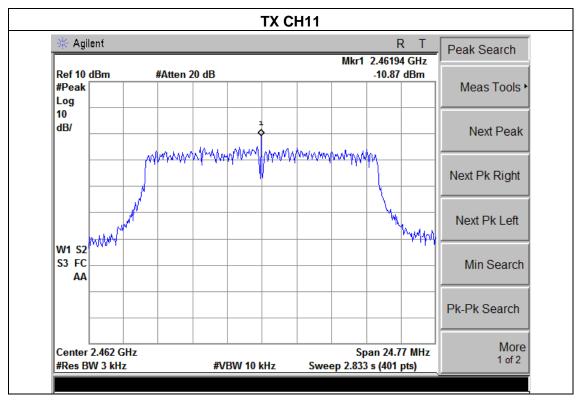
Report No.: NTEK-2013NT0613117F3

Frequency	Power Density (dBm)	Limit (dBm)	Result
2412 MHz	-10.27	8	PASS
2437 MHz	-10.94	8	PASS
2462 MHz	-10.87	8	PASS











EUT: Mobile phone Model Name: 7310

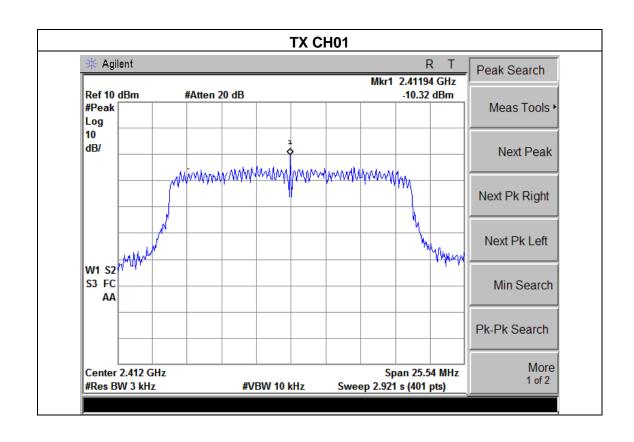
Temperature: 25 °C Relative Humidity: 60%

Pressure: 1015 hPa Test Voltage: DC 3.7V

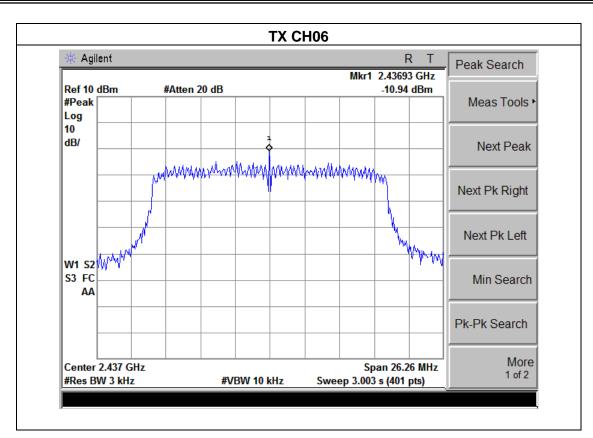
Test Mode: TX n Mode /CH01, CH06, CH11

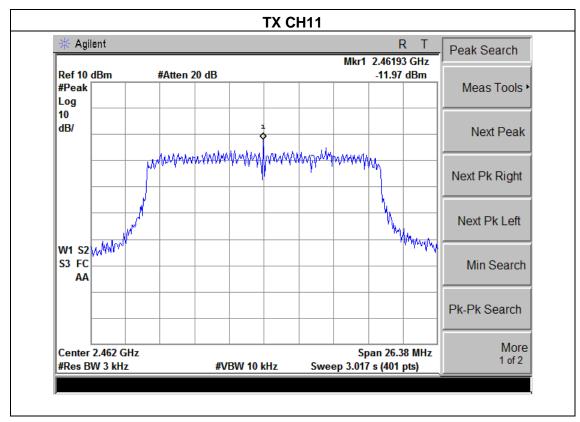
Report No.: NTEK-2013NT0613117F3

Frequency	Power Density (dBm)	Limit (dBm)	Result
2412 MHz	-10.32	8	PASS
2437 MHz	-10.94	8	PASS
2462 MHz	-11.97	8	PASS











5. BANDWIDTH TEST

5.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C								
Section	Test Item	Limit	Frequency Range (MHz)	Result				
15.247(a)(2)	Bandwidth	>= 500KHz (6dB bandwidth)	2400-2483.5	PASS				

5.1.1 TEST PROCEDURE

Set RBW = 100 kHz.

Set the video bandwidth (VBW) \geq 3 \square RBW.

Detector = Peak.

Trace mode = max hold.

Sweep = auto couple.

Allow the trace to stabilize.

Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP

EUT	SPECTRUM
	ANALYZER

5.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

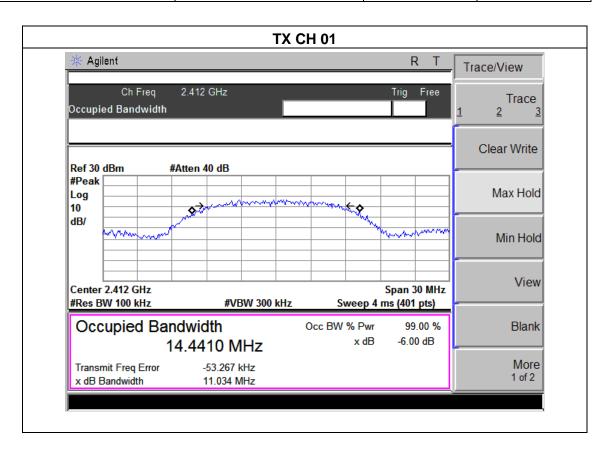


5.1.5 TEST RESULTS

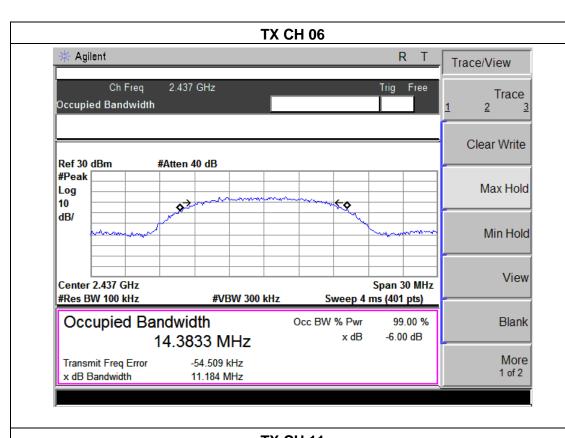
EUT:	Mobile phone	Model Name :	7310		
Temperature:	25 ℃	Relative Humidity:	60%		
Pressure :	1012 hPa	Test Voltage :	DC 3.7V		
Test Mode :	TX b Mode /CH01, CH06, CH11				

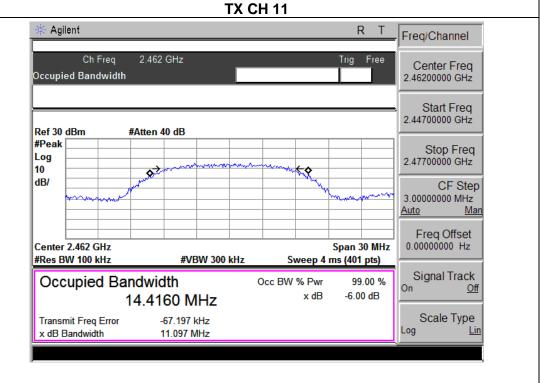
Page 62 of 72

Frequency	6dB Bandwidth (MHz)	Channel Separation (MHz)	Result	
2412 MHz	11.03	>=500KHz	PASS	
2437 MHz	11.18	>=500KHz	PASS	
2462 MHz	11.09	>=500KHz	PASS	











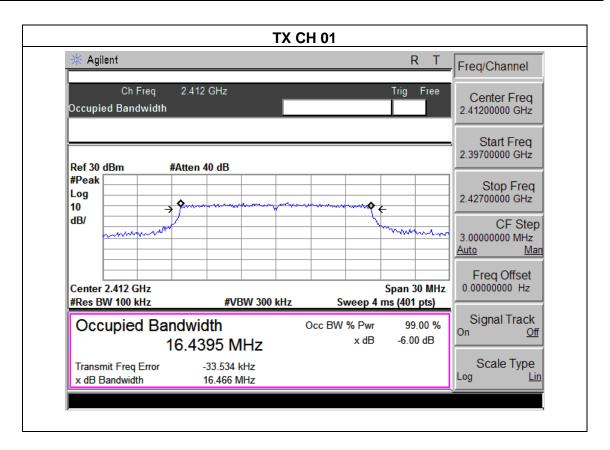
EUT: Mobile phone Model Name: 7310

Temperature: 25 °C Relative Humidity: 60%

Pressure: 1012 hPa Test Voltage: DC 3.7V

Test Mode: TX g Mode /CH01, CH06, CH11

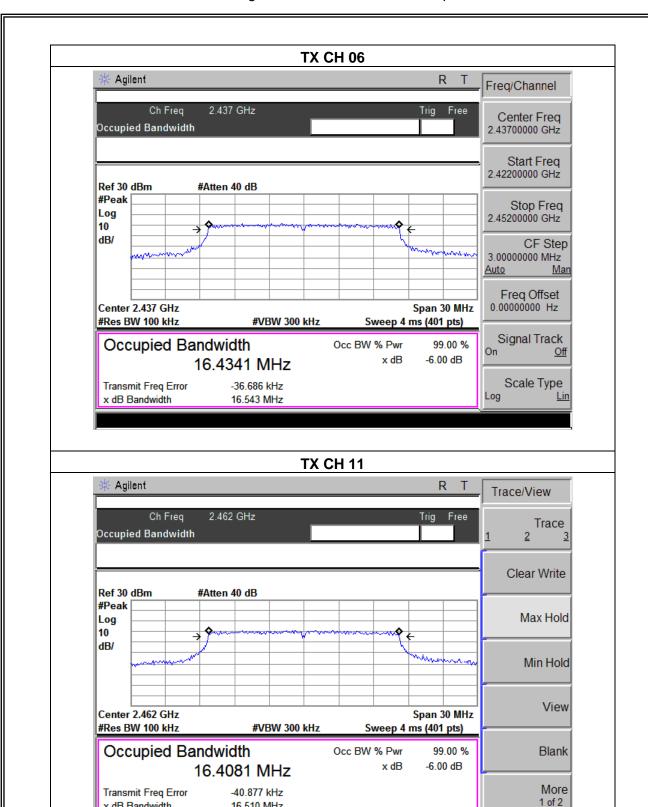
Frequency	6dB Bandwidth (MHz)	Channel Separation (MHz)	Result	
2412 MHz	16.46	>=500KHz	PASS	
2437 MHz	16.54	>=500KHz	PASS	
2462 MHz	16.51	>=500KHz	PASS	





x dB Bandwidth

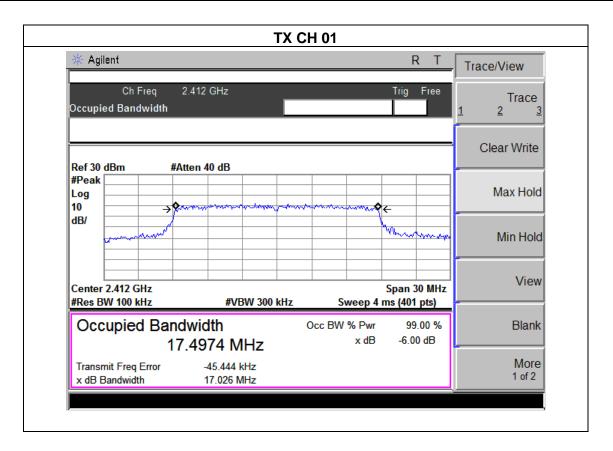
16.510 MHz

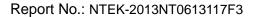




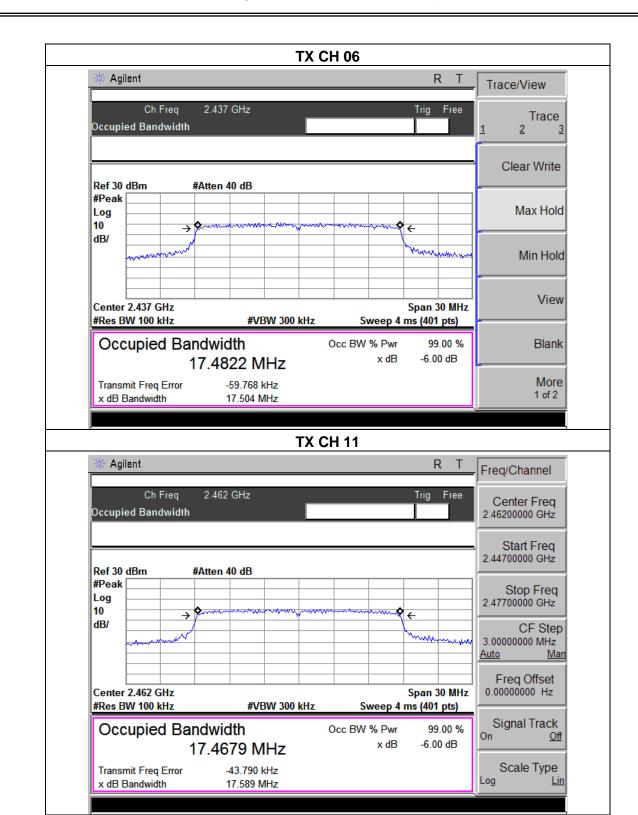
EUT:	Mobile phone	Model Name :	7310
Temperature:	25 ℃	Relative Humidity:	60%
Pressure:	1012 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX n Mode /CH01, CH06, CH1		

Frequency	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Channel Separation (MHz)	Result
2412 MHz	17.02	17.48	>=500KHz	PASS
2437 MHz	17.50	17.50	>=500KHz	PASS
2462 MHz	17.58	17.48	>=500KHz	PASS











6. PEAK OUTPUT POWER TEST

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247), Subpart C							
Section	Test Item	Limit	Frequency Range (MHz)	Result			
15.247(b)(3)	Peak Output Power	1 watt or 30dBm	2400-2483.5	PASS			

6.1.1 TEST PROCEDURE

a. The EUT was directly connected to the Power meter

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP

EUT	POWER	METER
	TOWLK	MIL I LIX

6.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.



6.1.5 TEST RESULTS

EUT:	Mobile phone	Model Name :	7310		
Temperature:	25 ℃	Relative Humidity:	60%		
Pressure :	1012 hPa	DC 3.7V			
Test Mode :	TX b/g/n Mode /CH01, CH06, CH11				

	TX 802.11b Mode						
Test Channe	Frequency	Maximum Peak Conducted Quency Output Power					
	(MHz)	(dBm)	dBm				
CH01	2412	30					
CH06	2437 9.32		30				
CH11	2462	9.12	30				
		TX 802.11g Mode					
CH01	CH01 2412 7.43		30				
CH06	2437	7.25	30				
CH11	11 2462 7.19		30				
TX 802.11n Mode							
CH01	2412	7.01	30				
CH06	2437	7.68	30				
CH11	2462	7.54	30				



7. ANTENNA REQUIREMENT

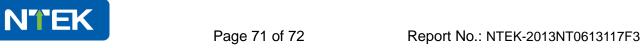
7.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

Report No.: NTEK-2013NT0613117F3

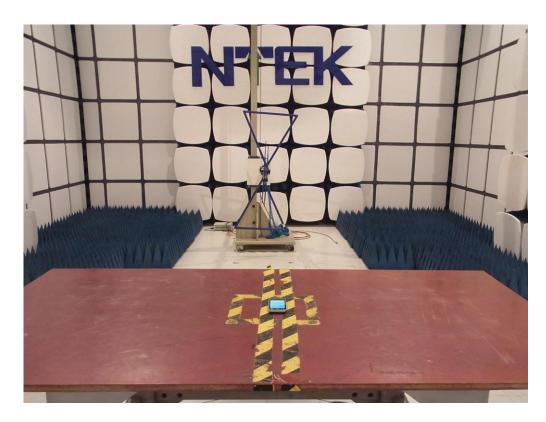
7.2 EUT ANTENNA

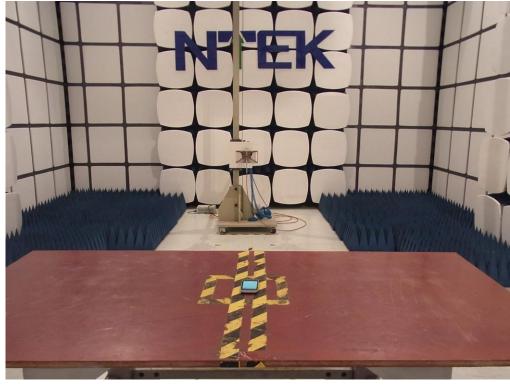
	Γhe	Eι	JΤ	antenna	is	internal	l antenna.	lt	comp	oly wi	ith 1	the	stanc	larc	regu	iremen	ıt.
--	-----	----	----	---------	----	----------	------------	----	------	--------	-------	-----	-------	------	------	--------	-----



8. EUT TEST PHOTO









Conducted Measurement Photos

