AIT

Page 1 of 49 Rev: None

FCC RADIO TEST REPORT FCC ID: 2AIZZKY-T600PDA

Product: mobile communication terminal

Trade Name: Konying

Model Name: KY-T600PDA

Serial Model: N/A

Prepared for

Shenzhen Kang Ying Technology Co., Ltd.

Units 608, Saiba Electronic tower, No.6, Langshan 2Rd., Hi-Tech Industrial Park North, Nanshan, Shenzhen China

Prepared by

Dongguan Yaxu(AiT) Technology Limited

No. 22, Jin QianLing Street 3, JiTiGang Village, HuangJiang
Town, DongGuan, GuangDong, China.



Page 2 of 49 Rev: None

TEST RESULT CERTIFICATION

Applicant's name	Shenzhen Kang Ying Technology Co., Ltd.
Address	Units 608, Saiba Electronic tower, No.6,Langshan 2Rd., Hi-Tech Industrial Park North, Nanshan, Shenzhen China
Manufacture's Name	Shenzhen Kang Ying Technology Co., Ltd.
Address	Units 608, Saiba Electronic tower, No.6,Langshan 2Rd., Hi-Tech Industrial Park North, Nanshan, Shenzhen China
Product description	
Product name	mobile communication terminal
Model and/or type reference	KY-T600PDA
Serial Model	N/A
Standards	FCC Part15.247
Test procedure	ANSI C63.10-2013
	eve has been tested by AiT, and the test results show that the equipment pliance with the FCC requirements. And it is applicable only to the tested port.
This report shall not be rep	produced except in full, without the written approval of AiT, this document
may be altered or revised	by AiT, personal only, and shall be noted in the revision of the document.
Date of Test	
Date (s) of performance of	tests Jun. 12 2016 ~Jun. 26 2016
Date of Issue	Jun. 26 2016

Testing Engineer :

Seal-Chen (Seal Chen)

Technical Manager:

(Jackie Deng)



Report No.: E-R1606012-4 Page 3 of 49 Rev: None

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	8
2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	9
2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)	10
2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS	11
3 . EMC EMISSION TEST	13
3.1 CONDUCTED EMISSION MEASUREMENT 3.1.1 POWER LINE CONDUCTED EMISSION LIMITS	13 13
3.1.2 TEST PROCEDURE	14
3.1.3 DEVIATION FROM TEST STANDARD	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	18
3.2.3 DEVIATION FROM TEST STANDARD 3.2.4 TEST SETUP	18 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)	22
3.2.8 TEST RESULTS (1GHZ~ 10TH HARMONIC)	23
4 . POWER SPECTRAL DENSITY TEST	35
4.1 APPLIED PROCEDURES / LIMIT	35
4.1.1 TEST PROCEDURE	35
4.1.2 DEVIATION FROM STANDARD	35
4.1.3 TEST SETUP	35
4.1.4 EUT OPERATION CONDITIONS 4.1.5 TEST RESULTS	35 36



Report No.: E-R1606012-4 Page 4 of 49 Rev: None

Table of Contents Page

5 . BANDWIDTH TEST	38
5.1 APPLIED PROCEDURES / LIMIT 5.1.1 TEST PROCEDURE 5.1.2 EUT OPERATION CONDITIONS 5.1.3 TEST RESULTS	38 38 38 39
6 . PEAK OUTPUT POWER TEST	41
6.1 APPLIED PROCEDURES / LIMIT	41
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	41 41 41 41 42
7 . 100 KHZ BANDWIDTH OF FREQUENCY BAND EDGE 7.1 DEVIATION FROM STANDARD 7.2 TEST SETUP 7.3 EUT OPERATION CONDITIONS 7.4 TEST RESULTS	43 43 43 44 45
8 . ANTENNA REQUIREMENT	47
8.1 STANDARD REQUIREMENT	47
8.2 EUT ANTENNA	47
9 . EUT TEST PHOTO APPENDIX-PHOTOGRAPHS OF EUT CONSTRUCTIONAL DETAILS	48



Page 5 of 49 Rev: None

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



Page 6 of 49 Rev: None

1.1 TEST FACILITY

DongGuan Yaxu(AiT) Technology Limited

No. 22, JinQianLing Street 3, JiTiGang Village, Huang-Jiang Town, DongGuan, Guangdong, 523757 China.

FCC Registration No.: 248337

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%



Report No.: E-R1606012-4 Page 7 of 49

Rev: None

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	mobile communication terminal		
Model Name	KY-T600PDA		
Serial Model	N/A		
Model Difference	N/A		
	The EUT is a mobile	communication terminal	
	Operation	2402~2480MHz	
	Frequency:		
	Modulation Type:	GFSK	
	Bluetooth version:	4.0 BLE	
	Bit Rate of	1 Mbps	
Product Description	Transmitter		
	Number Of Channel 40CH		
	Antenna	Please see Note 3.	
	Designation:		
	Output	5.62dBm(PK)	
	Power(Conducted):		
	Antenna Gain (dBi)	0dbi	
Channel List	Please refer to the Note 2.		
Ratings	DC 3.8V		
Adapter	M/N:MX520U,Input:10	00-240V, 50/60Hz, 0.35A, Output:DC 5V,	
Adapter	2A		
Battery	DC 3.8V, 5200mAh		
BT versions	V4.0 BLE because the firmware limitation, this product only supports BT4.0		
	BLE. And users can not enable other RF function by themselves.		
HW	V1.0		
SW	V1.1		

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

2.

Channel	Frequency (MHz)
00	2402
01	2404
38	2478
39	2480

3.

Table for Filed Antenna

A	nt	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE



Page 8 of 49 Rev: None

А	N/A	N/A	Internal antenna	Pogo pin connector	0	BT Antenna
---	-----	-----	------------------	--------------------	---	------------

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	CH00
Mode 2	CH19
Mode 3	CH39
Mode 4	BT link

For Conducted Emission		
Final Test Mode	Description	
Mode 4	BT link	

For Radiated Emission		
Final Test Mode	Description	
Mode 1	CH00	
Mode 2	CH19	
Mode 3	CH39	

Note:

⁽¹⁾ The measurements are performed at the highest, middle, lowest available channels. Test performed by fully-charged battery.

⁽²⁾ The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.



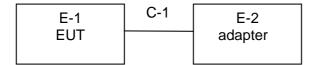
Page 9 of 49 Rev: None

2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Radiated Spurious Emission Test

E-1 EUT

Conducted Emission Test





Page 10 of 49 Rev: None

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	Brand Model/Type No.		Series No.	Note
E-1	mobile communication terminal	N/A	KY-T600PDA	N/A	EUT
E-2	Adapter	N/A	MX520U	N/A	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	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.



Report No.: E-R1606012-4 Page 11 of 49

Rev: None

2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

AC power line conducted test

No	Test Equipment	Test Equipment Manufacturer Model No		Serial No	Cal. Date	Cal. Due Date
1	EMI Test Receiver	R&S	ESCI	100124	2015.06.29	2016.06.28
2	LISN	Kyoritsu	KNW-242	8-837-4	2015.06.29	2016.06.28
3	LISN	Kyoritsu	KNW-407	8-1789-3	2015.06.29	2016.06.28
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264417	2015.06.29	2016.06.28

Radiation Test equipment

No	Test Equipment	Manufacturer	Model No	Serial No	Cal. Date	Cal. Due Date
1	Spectrum Analyzer	ADVANTEST	R3182	150900201	2015.06.29	2016.06.28
2	EMI Measuring Receiver	R&S	ESR	101660	2015.12.12	2016.12.11
3	Low Noise Pre Amplifier	Tsj	MLA-10K01-B01-27	1205323	2015.06.29	2016.06.28
4	Low Noise Pre Amplifier	Tsj	MLA-0120-A02-34	2648A04738	2015.12.02	2016.12.01
5	TRILOG Super Broadband test Antenna	SCHWARZBEC K	VULB9160	9160-3206	2015.12.03	2016.12.02
6	Broadband Horn Antenna	SCHWARZBEC K	BBHA9120D	452	2015.12.03	2016.12.02
7	SHF-EHF Horn	SCHWARZBEC K	BBHA9170	BBHA917036 7	2015.12.03	2016.12.02
8	Loop Antenna	ARA	PLA-1030/B	1029	2015.03.20	2016.03.19
9	Radiated Cable 1# (30MHz-1GHz)	FUJIKURA	5D-2W	01	2016.01.04	2017.01.03
10	Radiated Cable 2# (1GHz -25GHz)	FUJIKURA	10D2W	02	2015.12.25	2016.12.24
11	Conducted Cable 1#(9KHz-30MHz)	FUJIKURA	1D-2W	01	2016.01.04	2017.01.03
12	SMA Antenna connector	Dosin	Dosin-SMA	N/A	N/A	N/A
13	Power Mete	Anritsu	ML2487B	110553	2015.07.10	2016.07.09



Page 12 of 49 Rev: None

14	Power Sensor	Anritsu	MA2411B	100345	2015.07.10	2016.07.09

Note: The SMA antenna connector is soldered on the PCB board in order to perform conducted tests and this SMA antenna connector is listed in the equipment list.

Low Noise Pre Amplifier:

MLA-10K01-B01-27: gain :27db, frequency range:9kHz~1000MHz MLA-0120-A02-34: gain :34db, frequency range:1GHz~26.5GHz

Page 13 of 49 Rev: None

3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

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

FREQUENCY (MHz)	Class A	(dBuV)	Class B	Standard	
FREQUENCY (IVIDZ)	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			



Page 14 of 49 Rev: None

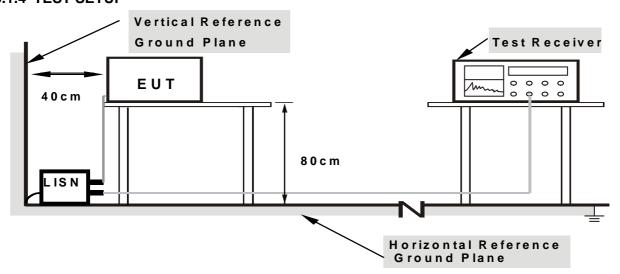
3.1.2 TEST PROCEDURE

- a. The EUT was placed 0.8 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

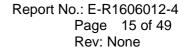


Note: 1.Support units were connected to second LISN.

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.

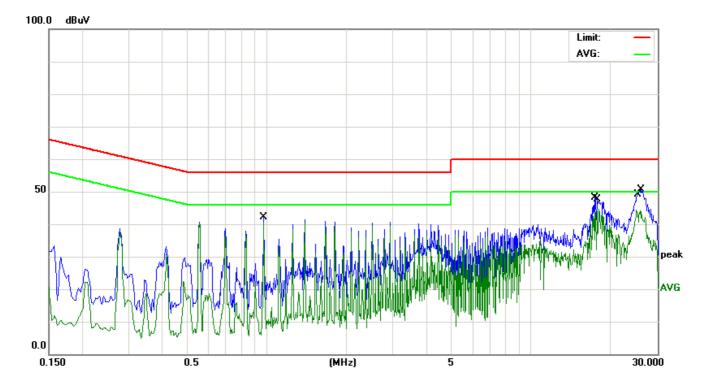


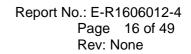


3.1.6 TEST RESULTS

EUT:	mobile communication terminal	Model Name. :	KY-T600PDA
Temperature:	20 ℃	Relative Humidtity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 5V by adapter AC120V/60Hz
Test Mode:	4	Phase:	L

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.9740	31.95	10.18	42.13	56.00	-13.87	QP	
2		0.9740	30.12	10.18	40.30	46.00	-5.70	AVG	
3		17.3980	37.69	10.42	48.11	60.00	-11.89	QP	
4	*	17.9460	34.08	10.43	44.51	50.00	-5.49	AVG	
5		25.0459	33.80	10.58	44.38	50.00	-5.62	AVG	
6		26.0220	40.11	10.61	50.72	60.00	-9.28	QP	

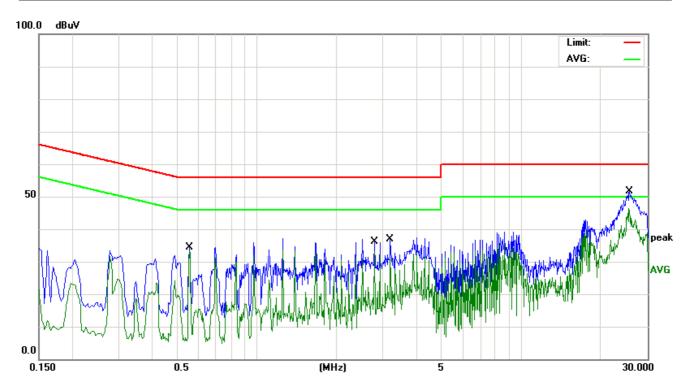






EUT:	mobile communication terminal	Model Name. :	KY-T600PDA
Temperature:	20 ℃	Relative Humidtity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 5V by adapter AC120V/60Hz
Test Mode:	4	Phase:	N

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.5580	23.99	10.32	34.31	56.00	-21.69	QP	
2	0.5580	22.84	10.32	33.16	46.00	-12.84	AVG	
3	2.7860	23.02	10.18	33.20	46.00	-12.80	AVG	
4	3.2060	26.65	10.18	36.83	56.00	-19.17	QP	
5	25.4700	38.60	10.59	49.19	60.00	-10.81	QP	
6	25.4700	30.20	10.59	40.79	50.00	-9.21	AVG	
7 *	25.6299	40.91	10.60	51.51	60.00	-8.49	QP	





Report No.: E-R1606012-4 Page 17 of 49 Rev: None

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)&A8.5, then the 15.209(a) limit in the table below has to be followed.

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under Section A8.4 (4), the attenuation required shall be 30 dB instead of 20 dB. Attenuation

below the general field strength limits specified in RSS-Gen is not required.

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)

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

Notes:

(1) 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	1 MHz / 1 MHz for Dook, 1 MHz / 10Hz for Average			
band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average			

Receiver Parameter	Setting
Attenuation	Auto



Page 18 of 49 Rev: None

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 0.8m(1.5m above 1G) 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: Fro radiated meissiont test above 1GHz:
 - Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.

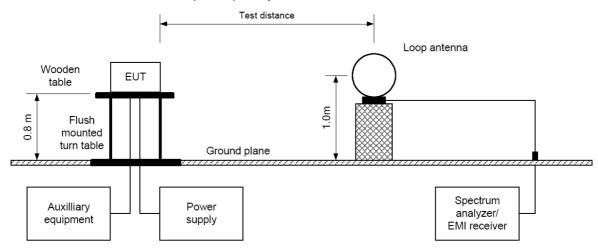
3.2.3 DEVIATION FROM TEST STANDARD

No deviation

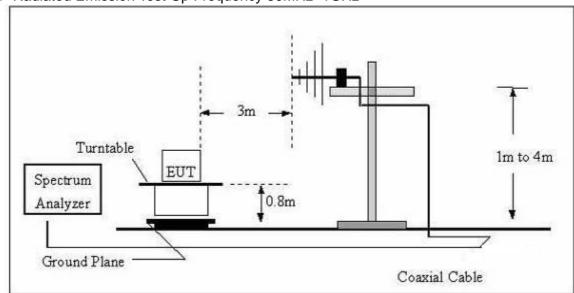
Page 19 of 49 Rev: None

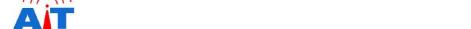
3.2.4 TEST SETUP

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



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

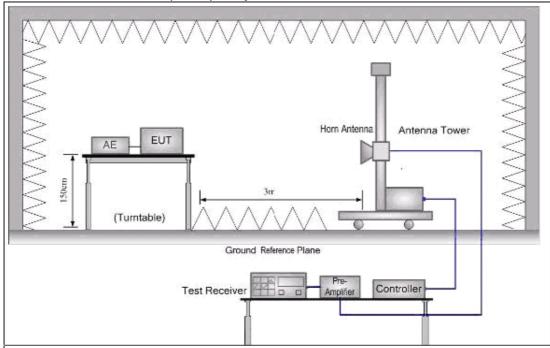




Report No.: E-R1606012-4 Page 20 of 49

Rev: None

(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.



Page 21 of 49 Rev: None

3.2.6 TEST RESULTS (BETWEEN 9KHZ - 30 MHZ)

IEU I •	mobile communication terminal	Model Name. :	KY-T600PDA
Temperature:	20 ℃	Relative Humidtity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.8V by battery
Test Mode:	TX	Polarization :	

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

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.



Report No.: E-R1606012-4 Page 22 of 49

Rev: None

3.2.7 TEST RESULTS (BETWEEN 30MHZ - 1GHZ)

IF() .	mobile communication terminal	Model Name :	KY-T600PDA
Temperature:	20 ℃	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.8V by battery
Test Mode:	TX 2440(worse-case)		

Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector	
(H/V)	(MHz) (dBuV)		(dB)	(dBuV/m)	(dBuV/m)	(dB)	Туре	
V	42.15	21.34	6.24	27.58	40	-12.42	QP	
V	95.27	25.76	11.95	37.71	43.5	-5.79	QP	
V	188.64	24.22	10.36	34.58	43.5	-8.92	QP	
V	581.23	17.35	14.58	31.93	46	-14.07	QP	
Н	98.75	25.74	5.66	31.4	43.5	-12.1	QP	
Н	205.44	26.88	8.86	35.74	43.5	-7.76	QP	
Н	337.47	25.12	10.36	35.48	46	-10.52	QP	
Н	584.15	23.95	14.58	38.53	46	-7.47	QP	

Remark:

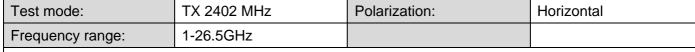
Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit

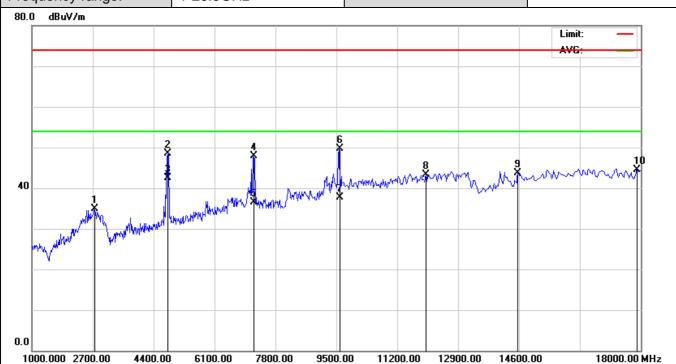


Report No.: E-R1606012-4 Page 23 of 49

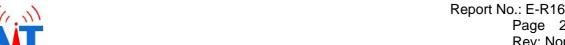
Rev: None

3.2.8 TEST RESULTS (1GHZ~ 10TH HARMONIC)

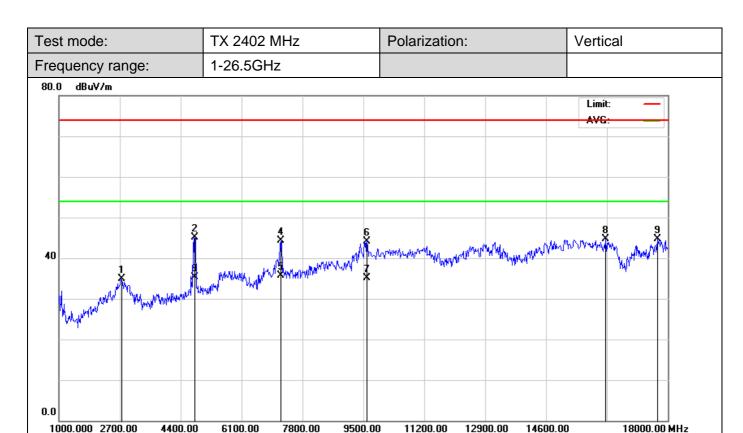




Freq. (MHz)	Reading (dBµV)	Factor (dB)	Corrected Amplitude (dBµV/m)	Calbe Lost (dB)	Ant. Factor (dB/m)	Pr- Amp. Gain (dB)	Limit (dBµV/m)	Margin (dB)	Detector (PK/QP/AV)	Polar (H/V)
2750.08	38.13	-3.22	34.91	2.35	28.78	34.35	74	-39.09	peak	Н
4804.00	43.54	5.06	48.6	3.57	36	34.51	74	-25.4	peak	Н
4804.00	37.42	5.06	42.48	3.57	36	34.51	54	-11.52	AVG	Н
7206.00	40.97	7.03	48	4.92	36.62	34.51	74	-26	peak	Н
7206.00	29.46	7.03	36.49	4.92	36.62	34.51	54	-17.51	AVG	Н
9608.00	39.07	10.63	49.7	6.15	38.81	34.33	74	-24.3	peak	Н
9608.00	27.16	10.63	37.79	6.15	38.81	34.33	54	-16.21	AVG	Н
12009.76	26.01	17.35	43.36	8.69	43.28	34.62	74	-30.64	peak	Н
14575.98	26.13	17.63	43.76	9.69	43.2	35.26	74	-30.24	peak	Н
17896.25	19.81	24.75	44.56	11.33	48.84	35.42	74	-29.44	peak	Н



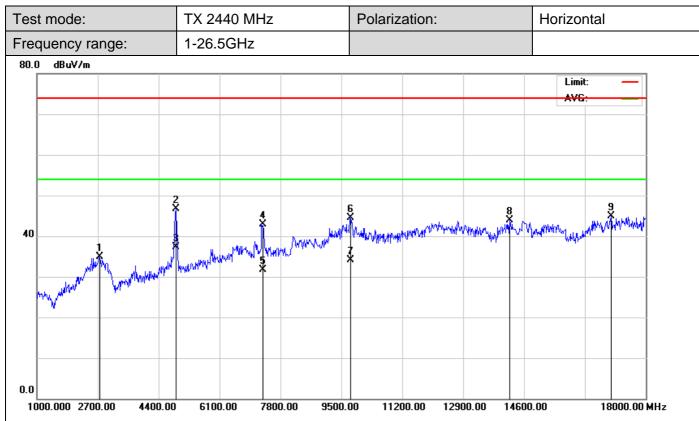
Report No.: E-R1606012-4 Page 24 of 49 Rev: None



Freq. (MHz)	Reading (dBµV)	Factor (dB)	Corrected Amplitude (dBµV/m)	Calbe Lost (dB)	Ant. Factor (dB/m)	Pr- Amp. Gain (dB)	Limit (dBµV/m)	Margin (dB)	Detector (PK/QP/AV)	Polar (H/V)
2750.08	38.13	-3.22	34.91	2.35	28.78	34.35	74	-39.09	peak	V
4804	40.04	5.06	45.1	3.57	36	34.51	74	-28.9	peak	V
4804	30.17	5.06	35.23	3.57	36	34.51	54	-18.77	AVG	V
7206	37.37	7.03	44.4	4.92	36.62	34.51	74	-29.6	peak	V
7206	28.69	7.03	35.72	4.92	36.62	34.51	54	-18.28	AVG	V
9608	33.57	10.63	44.2	6.15	38.81	34.33	74	-29.8	peak	V
9608	24.45	10.63	35.08	6.15	38.81	34.33	54	-18.92	AVG	V
16268.14	28.81	15.85	44.66	9.98	40.49	34.62	74	-29.34	peak	V
17711	19.92	24.88	44.8	11.42	48.72	35.26	74	-29.2	peak	٧



Report No.: E-R1606012-4 Page 25 of 49 Rev: None

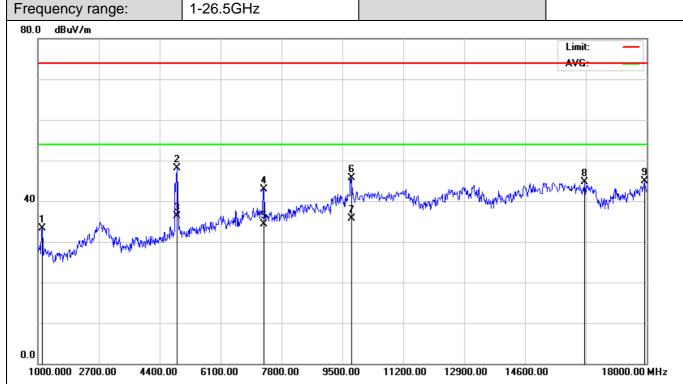


Freq. (MHz)	Reading (dBµV)	Factor (dB)	Corrected Amplitude (dBµV/m)	Calbe Lost (dB)	Ant. Factor (dB/m)	Pr- Amp. Gain (dB)	Limit (dBµV/m)	Margin (dB)	Detector (PK/QP/AV)	Polar (H/V)
2750.08	38.13	-3.22	34.91	2.35	28.78	34.35	74	-39.09	peak	Н
4880	41.56	5.14	46.7	3.84	35.91	34.61	74	-27.3	peak	Н
4880	32.14	5.14	37.28	3.84	35.91	34.61	54	-16.72	AVG	Н
7320	35.38	7.52	42.9	5.23	36.86	34.57	74	-31.1	peak	Н
7320	24.16	7.52	31.68	5.23	36.86	34.57	54	-22.32	AVG	Н
9760	33.24	11.36	44.6	6.45	39.6	34.69	74	-29.4	peak	Н
9760	22.68	11.36	34.04	6.45	39.6	34.69	54	-19.96	AVG	Н
14201.69	25.87	18.09	43.96	9.45	43.85	35.21	74	-30.04	peak	Н
17038.15	24.1	20.8	44.9	11.37	45.1	35.67	74	-29.1	peak	Н
2750.08	38.13	-3.22	34.91	2.35	28.78	34.35	74	-39.09	peak	Н

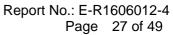


Rev: None



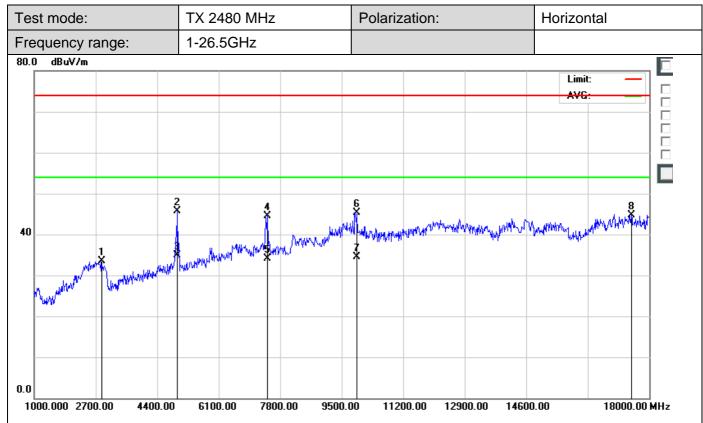


Freq. (MHz)	Reading (dBµV)	Factor (dB)	Corrected Amplitude (dBµV/m)	Calbe Lost (dB)	Ant. Factor (dB/m)	Pr- Amp. Gain (dB)	Limit (dBµV/m)	Margin (dB)	Detector (PK/QP/AV)	Polar (H/V)
1135.62	44.05	-10.75	33.3	2.14	21.57	34.46	74	-40.7	peak	V
4880.00	43.06	5.14	48.2	3.84	35.91	34.61	74	-25.8	peak	V
4880.00	31.15	5.14	36.29	3.84	35.91	34.61	54	-17.71	AVG	V
7320.00	35.48	7.52	43	5.23	36.86	34.57	74	-31	peak	V
7320.00	26.87	7.52	34.39	5.23	36.86	34.57	54	-19.61	AVG	V
9760.00	34.44	11.36	45.8	6.45	39.6	34.69	74	-28.2	peak	V
9760.00	24.33	11.36	35.69	6.45	39.6	34.69	54	-18.31	AVG	V
16268.14	28.81	15.85	44.66	9.68	41.38	35.21	74	-29.34	peak	V
17948.05	20.29	24.71	45	11.25	49.13	35.67	74	-29	peak	V

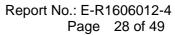


Page 27 of 4 Rev: None



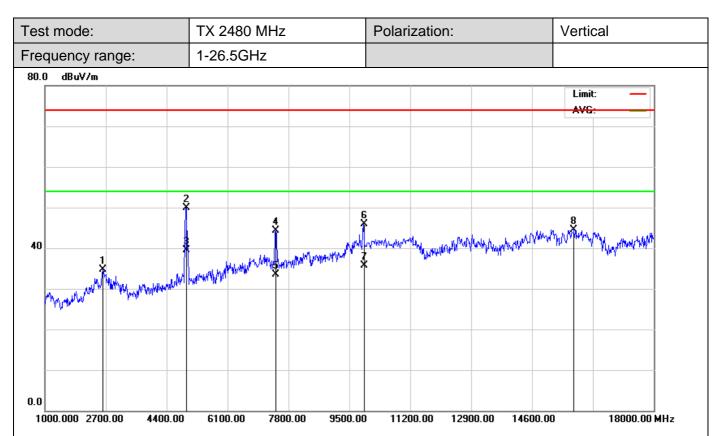


Freq. (MHz)	Reading (dBµV)	Factor (dB)	Corrected Amplitude (dBµV/m)	Calbe Lost (dB)	Ant. Factor (dB/m)	Pr- Amp. Gain (dB)	Limit (dBµV/m)	Margin (dB)	Detector (PK/QP/AV)	Polar (H/V)
2863.65	36.05	-2.55	33.5	2.41	29.61	34.57	74	-40.5	peak	Н
4960.00	40.58	5.22	45.8	3.95	35.95	34.68	74	-28.2	peak	Н
4960.00	29.76	5.22	34.98	3.95	35.95	34.68	54	-19.02	AVG	Н
7440.00	36.54	8.06	44.6	5.64	37.14	34.72	74	-29.4	peak	Н
7440.00	26.14	8.06	34.2	5.64	37.14	34.72	54	-19.8	AVG	Н
9920.00	33.2	12.1	45.3	6.68	40.36	34.94	74	-28.7	peak	Н
9920.00	22.36	12.1	34.46	6.68	40.36	34.94	54	-19.54	AVG	Н
17507.00	19.67	25.03	44.7	11.42	49.07	35.46	74	-29.3	peak	Н



Rev: None





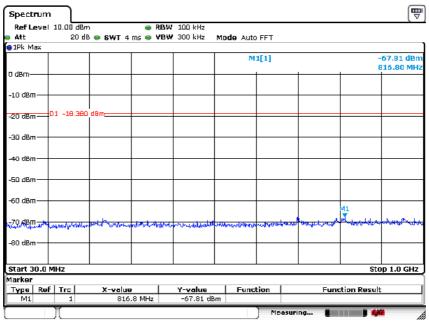
Freq. (MHz)	Reading (dBµV)	Factor (dB)	Corrected Amplitude (dBµV/m)	Calbe Lost (dB)	Ant. Factor (dB/m)	Pr- Amp. Gain (dB)	Limit (dBµV/m)	Margin (dB)	Detector (PK/QP/AV)	Polar (H/V)
2625.80	38.84	-4.04	34.8	2.41	28.07	34.52	74	-39.2	peak	V
4960.00	44.68	5.22	49.9	3.95	35.95	34.68	74	-24.1	peak	V
4960.00	34.32	5.22	39.54	3.95	35.95	34.68	54	-14.46	AVG	V
7440.00	36.34	8.06	44.4	5.64	37.14	34.72	74	-29.6	peak	V
7440.00	25.48	8.06	33.54	5.64	37.14	34.72	54	-20.46	AVG	V
9920.00	33.8	12.1	45.9	6.68	40.36	34.94	74	-28.1	peak	V
9920.00	23.59	12.1	35.69	6.68	40.36	34.94	54	-18.31	AVG	V
15773.00	28.04	16.56	44.6	11.24	40.8	35.48	74	-29.4	peak	V



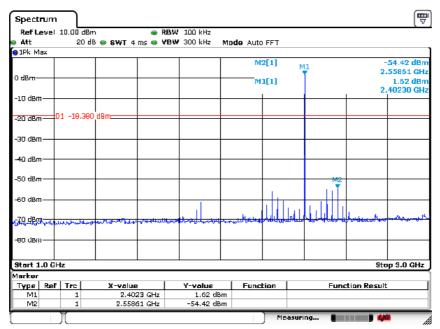


Conducted Spurious Emissions at Antenna Port:

Low Channel



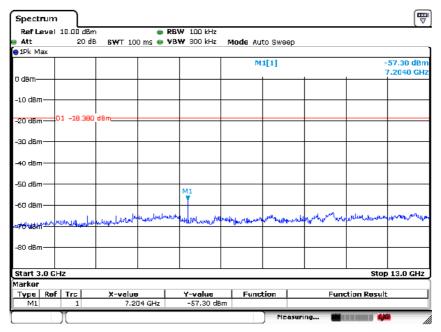
Date: 13.JUN 2016 17:58:07



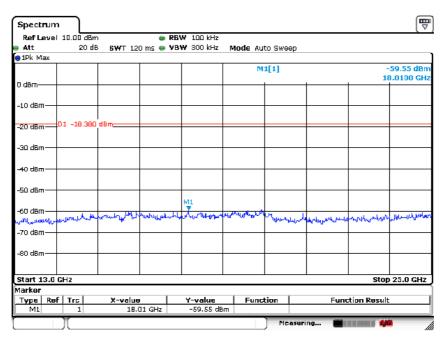
Date: 13.JUN 2016 17:57:42







Date: 13.JUN 2016 17:58:20

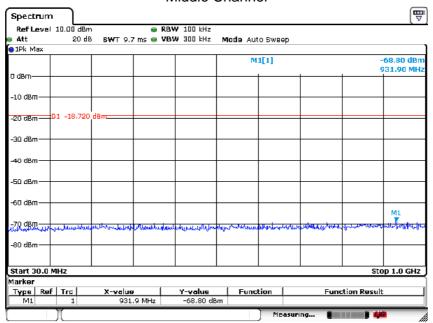


Date: 13.JUN 2015 17:58:31

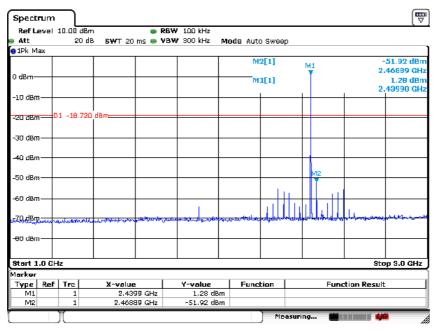




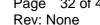
Middle Channel



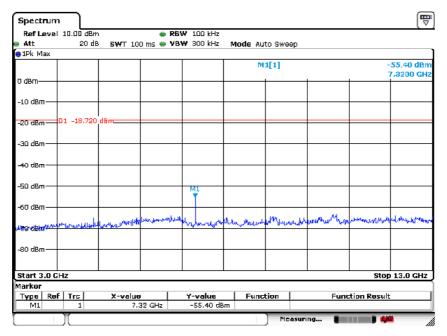
Date: 13.JUN 2016 17:59:14



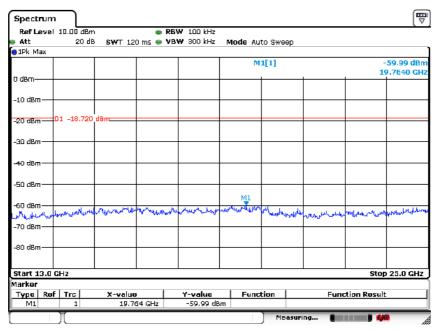
Date: 13.JUN 2016 17:58:58







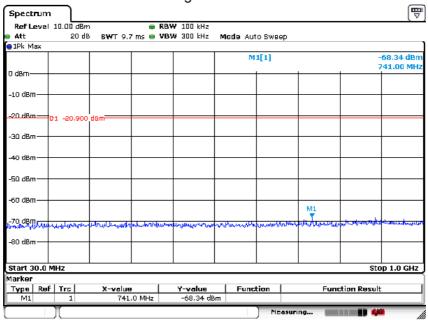
Date: 13.JUN 2016 17:59:21



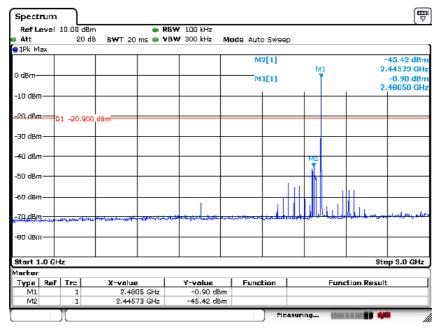
Date: 13.JUN 2016 17:59:30



High Channel



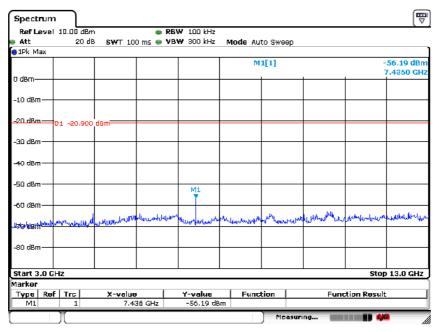
Date: 13.JUN 2016 18:00:12



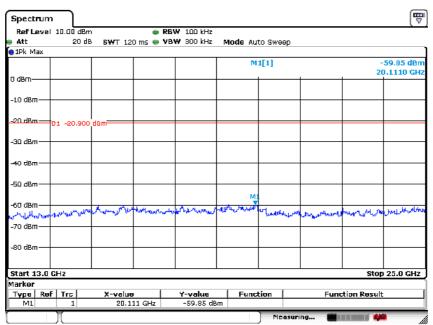
Date: 13.JUN 2016 17:59:58







Date: 13.JUN 2015 18:00:19



Date: 13.JUN 2015 18:00:29



Page 35 of 49 Rev: None

4. POWER SPECTRAL DENSITY TEST

4.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C&A8.2								
Section	Test Item	Limit	Frequency Range (MHz)	Result				
15.247	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS				

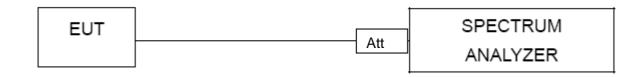
4.1.1 TEST PROCEDURE

- 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.





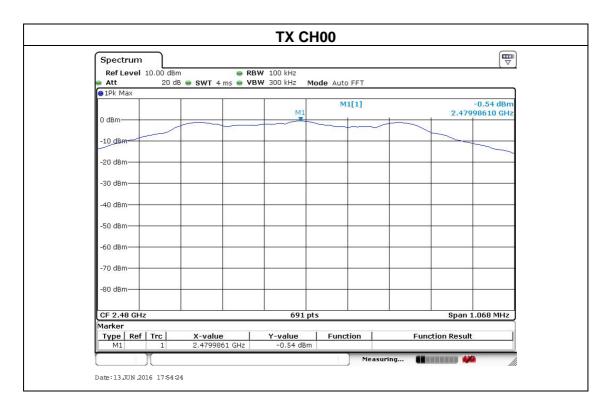
4.1.5 TEST RESULTS

HUI.	mobile communication terminal	Model Name :	KY-T600PDA
Temperature:	25 ℃	Relative Humidity:	56%
Pressure:	1015 hPa	Test Voltage :	DC 3.8V
Test Mode :	TX Mode /CH00, CH19, CH39		

Note: The relevant measured result has the offset with cable loss already.

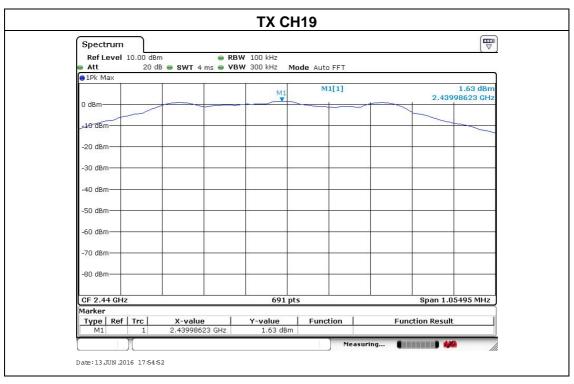
Frequency	Power Density (dBm/100kHz)	Power Density (dBm/3kHz)	Limit (dBm/3 kHz)	Result
2402 MHz	-0.54	-14.66	8	PASS
2440 MHz	1.63	-13.57	8	PASS
2480 MHz	1.53	-13.67	8	PASS

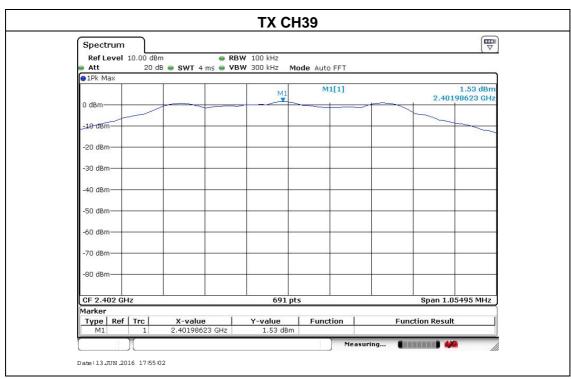
BWCF = $10\log (3 \text{ kHz}/100 \text{ kHz} = -15.2 \text{ dB})$













Page 38 of 49 Rev: None

5. BANDWIDTH TEST

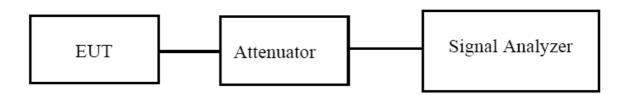
5.1 APPLIED PROCEDURES / LIMIT

7.1 1 E1ED 1 17.0 0 E D 0 17.2 0 7 E 11.11 1						
	FCC Part15 (15.247) , Subpart C&A8.2					
Section Test Item Limit Frequency Range (MHz) Result						
15.247(a)(2) &A8.2	Bandwidth	>= 500KHz (6dB bandwidth)	2400-2483.5	PASS		

5.1.1 TEST PROCEDURE

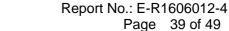
According to KDB 558074 D01 DTS Meas Guidance v03r04

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator
- 2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
- 3. Measure the frequency difference of two frequencies that were attenuated 6 dB from the reference level. Record the frequency difference as the emission bandwidth.
- 4. Repeat above procedures until all frequencies measured were complete.



5.1.2 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.



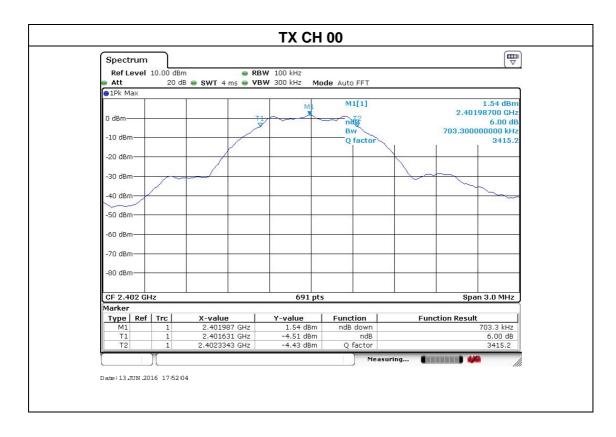
Rev: None



5.1.3 TEST RESULTS

IFUI .	mobile communication terminal	Model Name :	KY-T600PDA
Temperature:	25 ℃	Relative Humidity:	56%
Pressure :	1012 hPa	Test Voltage :	DC 3.8V
Test Mode :	TX Mode /CH00, CH19, CH39		

Channel	Frequency (MHz)	6dB bandwidth (kHz)	99% bandwidth (MHz)	Limit (kHz)	Result
Low	2402	699.00	/	>500	Pass
Middle	2440	703.30	/	>500	Pass
High	2480	703.30	/	>500	Pass









Page 41 of 49 Rev: None

6. PEAK OUTPUT POWER TEST

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C &A8.4					
Section Test Item Limit Frequency Range (MHz) Result					
15.247(b)(3) &A8.4	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
-----	--	-------	-------

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.



Report No.: E-R1606012-4 Page 42 of 49 Rev: None

6.1.5 TEST RESULTS

IFUI:	mobile communication terminal	Model Name :	KY-T600PDA
Temperature:	25 ℃	Relative Humidity:	60%
Pressure:	1012 hPa	Test Voltage :	DC 3.8V
Test Mode :	TX Mode		

	TX Mode					
Test Channe	Frequency	Maximum Conducted Output Power (PK)	LIMIT			
Charine	(MHz)	(dBm)	dBm			
CH00	2402	4.57	30			
CH19	2440	5.62	30			
CH39	2480	5.55	30			



Page 43 of 49 Rev: None

7. 100 KHZ BANDWIDTH OF FREQUENCY BAND EDGE APPLICABLE STANDARD

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a)&A1.1 is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a)&A8.5, must also comply with the radiated emission limits specified in §15.209(a) &A1.1 (see §15.205(c)) &A8.5.

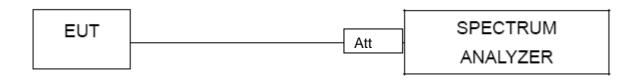
TEST PROCEDURE

- a) Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- b) Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
- c) Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
- d) Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
- e) Repeat above procedures until all measured frequencies were complete.

7.1 DEVIATION FROM STANDARD

No deviation.

7.2 TEST SETUP





Page 44 of 49 Rev: None

7.3 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.



Report No.: E-R1606012-4 Page 45 of 49

Rev: None

7.4 TEST RESULTS

IEUI •	mobile communication terminal	Model Name :	KY-T600PDA
Temperature:	25 ℃	Relative Humidity:	56%
Pressure:	1012 hPa	Test Voltage :	DC 3.8V

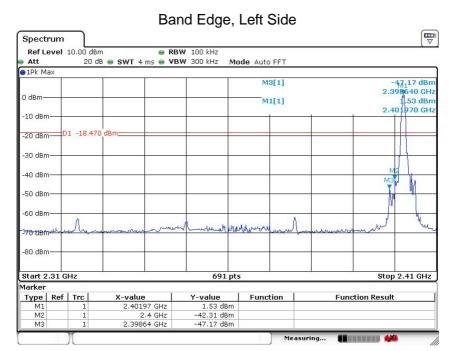
Frequency Band	Delta Peak to band emission (dBc)		Result
2390.00	48.7	20	Pass
2483.50	60.65	20	Pass

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector	Comment
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Type	Comment
2390	48.75	1.05	49.8	74	-24.2	peak	Vertical
2390	45.16	1.05	46.21	74	-27.79	peak	Horizontal
2483.5	46.33	1.29	47.62	74	-26.38	peak	Vertical
2483.5	46.87	1.29	48.16	74	-25.84	peak	Horizontal

Note: Test method to see chapter 3.2. When PK value is lower than the Average value limit, average not record.

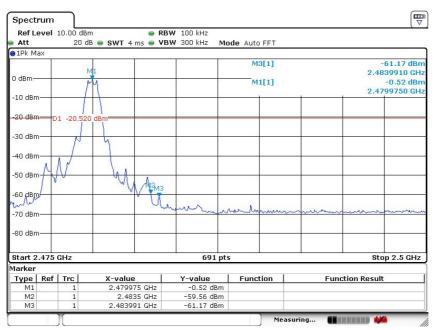


Rev: None



Date: 13 JUN .2016 17:57:19

Band Edge, Right Side



Date: 13 JUN .2016 17:56:43



Page 47 of 49 Rev: None

8. ANTENNA REQUIREMENT

8.1 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.

8.2 EUT ANTENNA

The EUT antenna is Internal antenna with "pogo pin" antenna connector..



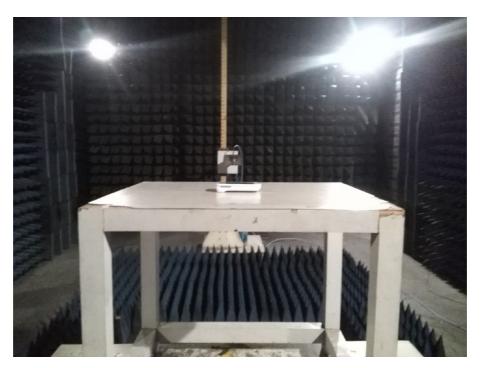
Report No.: E-R1606012-4 Page 48 of 49

Rev: None

9. EUT TEST PHOTO









Report No.: E-R1606012-4 Page 49 of 49 Rev: None

Conducted Measurement Photos

