



A D T

FCC TEST REPORT

REPORT NO.: RF130322C03
MODEL NO.: GT-C3595
FCC ID: A3LGTC3595
RECEIVED: Mar. 22, 2013
TESTED: Mar. 23 ~ Mar. 28, 2013
ISSUED: Apr. 08, 2013

APPLICANT: SAMSUNG Electronics Co., LTD.

ADDRESS: 129, Samsung-ro, Yeongtong-gu, Suwon-si,
Gyeonggi-do, 443-742, Republic of Korea

ISSUED BY: Bureau Veritas Consumer Products Services
(H.K.) Ltd., Taoyuan Branch

LAB ADDRESS: No. 47, 14th Ling, Chia Pau Vil., Lin Kou Dist.,
New Taipei City, Taiwan, R.O.C.

TEST LOCATION: No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei
Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

This report should not be used by the client to claim
product certification, approval, or endorsement by
TAF or any government agencies.



This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification.

Table of Contents

RELEASE CONTROL RECORD	4
1. CERTIFICATION	5
2. SUMMARY OF TEST RESULTS	6
2.1 MEASUREMENT UNCERTAINTY	6
3. GENERAL INFORMATION	7
3.1 GENERAL DESCRIPTION OF EUT	7
3.2 DESCRIPTION OF TEST MODES	8
3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL	9
3.3 DESCRIPTION OF SUPPORT UNITS	11
3.3.1 CONFIGURATION OF SYSTEM UNDER TEST	11
3.4 GENERAL DESCRIPTION OF APPLIED STANDARDS	12
4. TEST TYPES AND RESULTS	13
4.1 Radiated Emission AND BANDEDGE Measurement	13
4.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT	13
4.1.2 TEST INSTRUMENTS	14
4.1.3 TEST PROCEDURES	15
4.1.4 DEVIATION FROM TEST STANDARD	15
4.1.5 TEST SETUP	16
4.1.6 EUT OPERATING CONDITIONS	17
4.1.7 TEST RESULTS	18
4.2 CONDUCTED EMISSION MEASUREMENT	26
4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT	26
4.2.2 TEST INSTRUMENTS	26
4.2.3 TEST PROCEDURES	27
4.2.4 DEVIATION FROM TEST STANDARD	27
4.2.5 TEST SETUP	28
4.2.6 EUT OPERATING CONDITIONS	28
4.2.7 TEST RESULTS	29
4.3 NUMBER OF HOPPING FREQUENCY USED	31
4.3.1 LIMIT OF HOPPING FREQUENCY USED	31
4.3.2 TEST SETUP	31
4.3.3 TEST INSTRUMENTS	31
4.3.4 TEST PROCEDURES	31
4.3.5 DEVIATION FROM TEST STANDARD	31
4.3.6 TEST RESULTS	31
4.4 DWELL TIME ON EACH CHANNEL	33
4.4.1 LIMIT OF DWELL TIME USED	33
4.4.2 TEST SETUP	33
4.4.3 TEST INSTRUMENTS	33
4.4.4 TEST PROCEDURES	33
4.4.5 DEVIATION FROM TEST STANDARD	33
4.4.6 TEST RESULTS	34
4.5 CHANNEL BANDWIDTH	37
4.5.1 LIMITS OF CHANNEL BANDWIDTH	37
4.5.2 TEST SETUP	37
4.5.3 TEST INSTRUMENTS	37
4.5.4 TEST PROCEDURE	37



A D T

4.5.5	DEVIATION FROM TEST STANDARD	37
4.5.6	EUT OPERATING CONDITION	37
4.5.7	TEST RESULTS.....	38
4.6	HOPPING CHANNEL SEPARATION	39
4.6.1	LIMIT OF HOPPING CHANNEL SEPARATION	39
4.6.2	TEST SETUP	39
4.6.3	TEST INSTRUMENTS	39
4.6.4	TEST PROCEDURES.....	39
4.6.5	DEVIATION FROM TEST STANDARD	39
4.6.6	TEST RESULTS.....	40
4.7	MAXIMUM OUTPUT POWER.....	41
4.7.1	LIMITS OF MAXIMUM OUTPUT POWER MEASUREMENT	41
4.7.2	TEST SETUP	41
4.7.3	TEST INSTRUMENTS	41
4.7.4	TEST PROCEDURES.....	41
4.7.5	DEVIATION FROM TEST STANDARD	41
4.7.6	EUT OPERATING CONDITION	41
4.7.7	TEST RESULTS.....	42
4.8	CONDUCTED OUT OF BAND EMISSION MEASUREMENT	43
4.8.1	LIMITS OF CONDUCTED OUT OF BAND EMISSION MEASUREMENT	43
4.8.2	TEST INSTRUMENTS	43
4.8.3	TEST PROCEDURE	43
4.8.4	DEVIATION FROM TEST STANDARD	43
4.8.5	EUT OPERATING CONDITION	43
4.8.6	TEST RESULTS.....	43
5.	PHOTOGRAPHS OF THE TEST CONFIGURATION	47
6.	INFORMATION ON THE TESTING LABORATORIES	48
7.	APPENDIX A - Modifications recorders for engineering changes to the eut BY THE LAB	49



A D T

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF130322C03	Original release	Apr. 08, 2013



A D T

1. CERTIFICATION

PRODUCT: GSM Mobile Phone

MODEL NO.: GT-C3595

BRAND: SAMSUNG

APPLICANT: SAMSUNG Electronics Co., LTD.

TESTED: Mar. 23 ~ Mar. 28, 2013

TEST SAMPLE: Production Unit

STANDARDS: FCC Part 15, Subpart C (Section 15.247)

ANSI C63.10-2009

The above equipment (model: GT-C3595) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : Evonne Liu , **DATE** : Apr. 08, 2013
Evonne Liu / Specialist

APPROVED BY : Sam chen , **DATE** : Apr. 08, 2013
Sam Chen / Assistant Manager

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C			
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	REMARK
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -14.41dB at 1.64063MHz.
15.247(a)(1) (iii)	Number of Hopping Frequency Used	PASS	Meet the requirement of limit.
15.247(a)(1) (iii)	Dwell Time on Each Channel	PASS	Meet the requirement of limit.
15.247(a)(1)	1. Hopping Channel Separation 2. Spectrum Bandwidth of a Frequency Hopping Sequence Spread Spectrum System	PASS	Meet the requirement of limit.
15.247(b)	Maximum Peak Output Power	PASS	Meet the requirement of limit.
15.247(d)	Transmitter Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -9.62dB at 7323.00MHz.
15.247(d)	Band Edge Measurement	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	No antenna connector is used.

NOTE: If The Frequency Hopping System operating in 2400-2483.5MHz band and the output power less than 125mW. The hopping channel carrier frequencies separated by a minimum of 25kHz or two-thirds of the 20dB bandwidth of hopping channel whichever is greater.

2.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emission	150kHz ~ 30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	2.93 dB
	200MHz ~1000MHz	2.95 dB
	1GHz ~ 18GHz	2.26 dB
	18GHz ~ 40GHz	1.94 dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	GSM Mobile Phone
MODEL NO.	GT-C3595
POWER SUPPLY	4.75Vdc (adapter or host equipment) 3.7Vdc (Li-ion battery)
MODULATION TYPE	GFSK, $\pi/4$ -DQPSK, 8DPSK
MODULATION TECHNOLOGY	FHSS
TRANSFER RATE	1/2/3Mbps
OPERATING FREQUENCY	2402 ~ 2480MHz
NUMBER OF CHANNEL	79
MAX. OUTPUT POWER	6.871mW
ANTENNA TYPE	Chip antenna with -3.42dBi gain
ANTENNA CONNECTOR	N/A
I/O PORTS	Refer to user's manual
DATA CABLE	Refer to Note as below
ACCESSORY DEVICES	Refer to Note as below

NOTE:

1. The EUT has following accessories.

No.	Product	Brand	MODEL	Description
1	AC Adapter	SAMSUNG	ETA3U30EBE	I/P: 100-240Vac, 50-60Hz, 0.15A O/P: 4.75Vdc, 0.55A
2	Battery	SAMSUNG	AB463446BU	Rating: 3.7 Vdc, 800mAh Type: Li-ion
3	Earphone	SAMSUNG	GH59-11356B	--

2. IMEI Code is 356429050000323

3. HW version is REV1.0

4. SW version is C3595.001

5. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 DESCRIPTION OF TEST MODES

79 channels are provided to this EUT:

CHANNEL	FREQ. (MHz)	CHANNEL	FREQ. (MHz)	CHANNEL	FREQ. (MHz)	CHANNEL	FREQ. (MHz)
0	2402	20	2422	40	2442	60	2462
1	2403	21	2423	41	2443	61	2463
2	2404	22	2424	42	2444	62	2464
3	2405	23	2425	43	2445	63	2465
4	2406	24	2426	44	2446	64	2466
5	2407	25	2427	45	2447	65	2467
6	2408	26	2428	46	2448	66	2468
7	2409	27	2429	47	2449	67	2469
8	2410	28	2430	48	2450	68	2470
9	2411	29	2431	49	2451	69	2471
10	2412	30	2432	50	2452	70	2472
11	2413	31	2433	51	2453	71	2473
12	2414	32	2434	52	2454	72	2474
13	2415	33	2435	53	2455	73	2475
14	2416	34	2436	54	2456	74	2476
15	2417	35	2437	55	2457	75	2477
16	2418	36	2438	56	2458	76	2478
17	2419	37	2439	57	2459	77	2479
18	2420	38	2440	58	2460	78	2480
19	2421	39	2441	59	2461		

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
-	√	√	√	√	-

Where **RE≥1G**: Radiated Emission above 1GHz

RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

APCM: Antenna Port Conducted Measurement

NOTE: 1. For Radiated emission test, pre-tested GFSK, $\pi/4$ -DQPSK, 8DPSK modulation type and found GFSK was the worse, therefore chosen for the final test and presented in the test report.

2. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **Y-plane**.

RADIATED EMISSION TEST (ABOVE 1 GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, antenna ports (if EUT with antenna diversity architecture) and packet type.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	PACKET TYPE
0 to 78	0, 39, 78	FHSS	GFSK	DH5

RADIATED EMISSION TEST (BELOW 1 GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, antenna ports (if EUT with antenna diversity architecture) and packet type.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	PACKET TYPE
0 to 78	78	FHSS	GFSK	DH5

POWER LINE CONDUCTED EMISSION:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, antenna ports (if EUT with antenna diversity architecture) and packet type.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	PACKET TYPE
0 to 78	78	FHSS	GFSK	DH5

**ANTENNA PORT CONDUCTED MEASUREMENT:**

- ☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.
- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, antenna ports (if EUT with antenna diversity architecture), and packet types.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	PACKET TYPE
0 to 78	0, 39, 78	FHSS	GFSK	DH5
0 to 78	0, 39, 78	FHSS	$\pi/4$ -DQPSK	DH5
0 to 78	0, 39, 78	FHSS	8DPSK	DH5

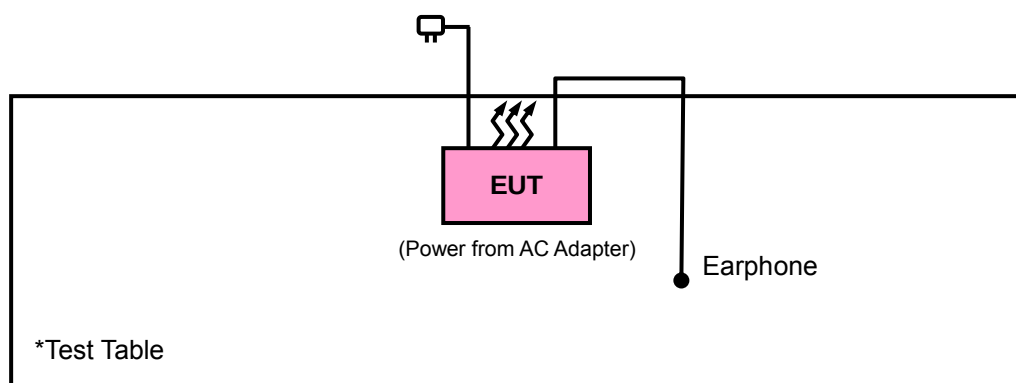
TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE $\geq$ 1G	25deg. C, 65%RH	120Vac, 60Hz	Kay Wu
RE<1G	25deg. C, 65%RH	120Vac, 60Hz	Kay Wu
PLC	25deg. C, 65%RH	120Vac, 60Hz	Anson Lin
APCM	25deg. C, 68%RH	120Vac, 60Hz	Howard Kao

3.3 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units.

3.3.1 CONFIGURATION OF SYSTEM UNDER TEST



3.4 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C. (15.247)

558074 D01 DTS Meas Guidance v02

FCC Public Notice DA 00-705

ANSI C63.10-2009

All test items have been performed and recorded as per the above standards.

NOTE: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B. The test report has been issued separately.

4. TEST TYPES AND RESULTS

4.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)
0.009 ~ 0.490	$2400/F(\text{kHz})$	300
0.490 ~ 1.705	$24000/F(\text{kHz})$	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCI	100744	Apr. 19, 2012	Apr. 18, 2013
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Dec. 17, 2012	Dec. 16, 2013
BILOG Antenna SCHWARZBECK	VULB9168	9168-472	Apr. 03, 2012	Apr. 02, 2013
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-969	Jan. 07, 2013	Jan. 06, 2014
HORN Antenna SCHWARZBECK	BBHA 9170	9170-480	Dec. 25, 2012	Dec. 24, 2013
Loop Antenna	HFH2-Z2	100070	Jan. 31, 2012	Jan. 30, 2014
Preamplifier EMCI	EMC 012645	980115	Dec. 28, 2012	Dec. 27, 2013
Preamplifier EMCI	EMC 184045	980116	Dec. 28, 2012	Dec. 27, 2013
Preamplifier EMCI	EMC 330H	980112	Dec. 28, 2012	Dec. 27, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309219/4	Oct. 19, 2012	Oct. 18, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250130/4	Oct. 19, 2012	Oct. 18, 2013
RF signal cable Worken	RG-213	NA	Dec. 29, 2012	Dec. 28, 2013
Software	E3 6.120103	NA	NA	NA
Antenna Tower MF	MFA-440H	NA	NA	NA
Turn Table MF	MFT-201SS	NA	NA	NA
Antenna Tower & Turn Table Controller MF	MF-7802	NA	NA	NA

- NOTE:**
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The calibration interval of the loop antenna is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
 3. The test was performed in HwaYa Chamber 10.
 4. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
 5. The FCC Site Registration No. is 690701.
 6. The IC Site Registration No. is IC 7450F-10.

4.1.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE:

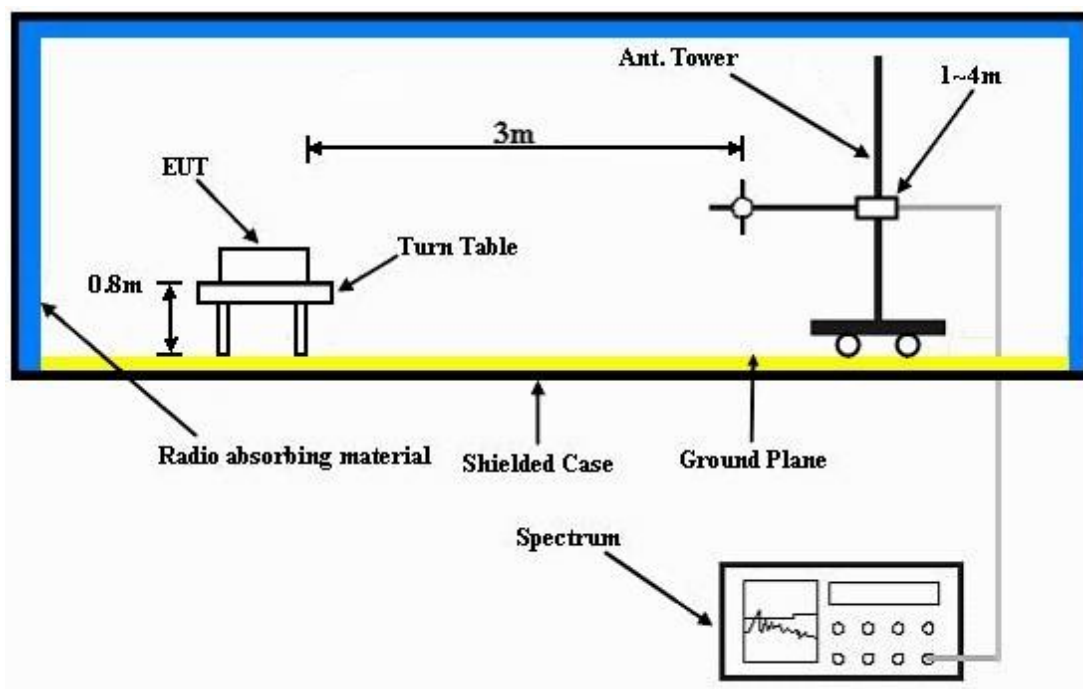
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth is 3MHz for Peak detection; resolution bandwidth is 1 MHz and video bandwidth is 10 Hz for Average detection (except fundamental, bandedge and harmonic frequency) at frequency above 1GHz.
3. The DH5 packet was the worst case duty cycle for a transmit dwell time on a channel, based upon Bluetooth theory the transmitter is on $0.625 * 5$ per 296.25 ms per channel. Therefore, the duty cycle correlation factor be equal to: $20\log(3.125 / 100) = -30.1$ dB.
Average value = peak reading + duty cycle correlation factor.
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 DEVIATION FROM TEST STANDARD

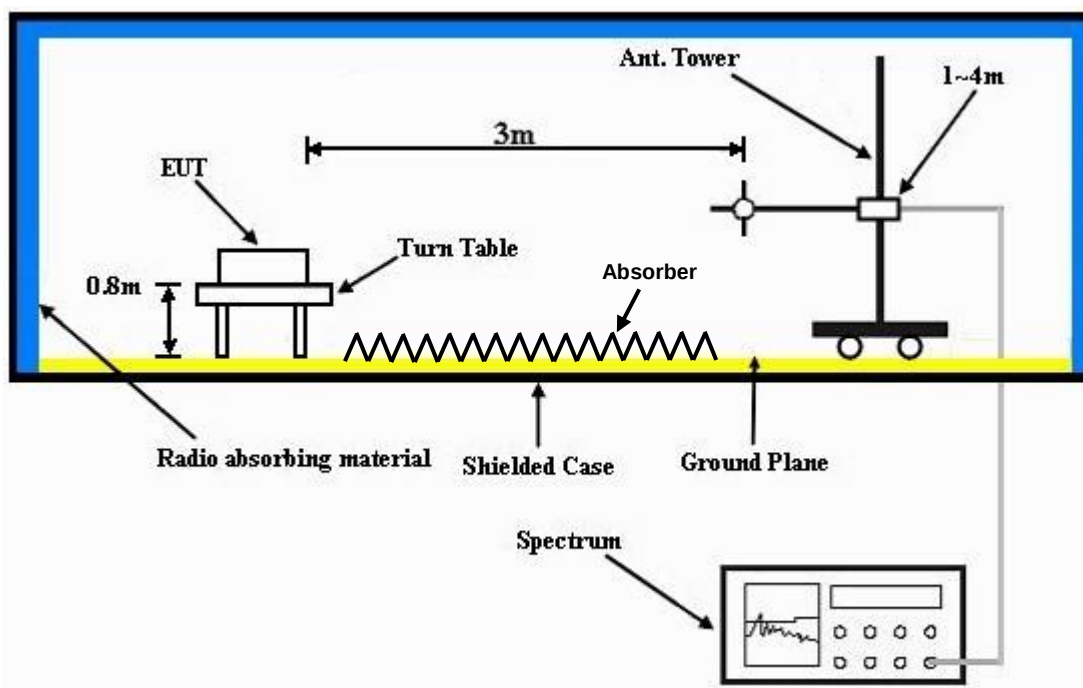
No deviation.

4.1.5 TEST SETUP

Frequency Range 30MHz ~ 1GHz



Frequency Range above 1GHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.6 EUT OPERATING CONDITIONS

- a. Placed the EUT on a testing table.
- b. Use the software to control the EUT under transmission condition continuously at specific channel frequency.



A D T

4.1.7 TEST RESULTS

ABOVE 1GHz WORST-CASE DATA : GFSK

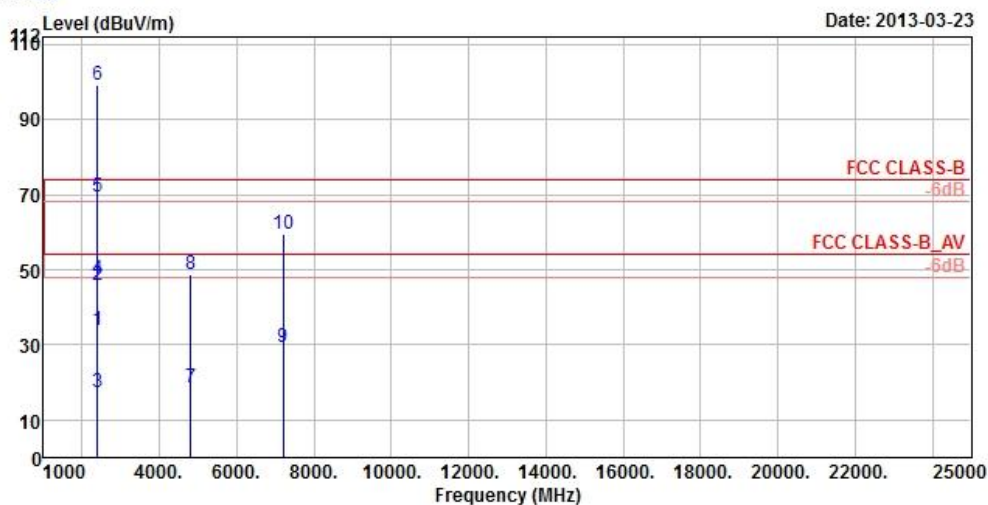


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 19

Date: 2013-03-23



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m HORIZONTAL
Brand/Model: GT-C3595
Remark : BT TX CH00
Tested by : Kay Wu
Temperature : 25°C
Humidity : 65%
Plane : Y
Rate : DH5

	Freq	Level	Read Level	Limit Line	OverAntenna Limit	Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	dB	cm	deg	
1	2390.00	33.86	39.60	54.00	-20.14	26.91	4.87	37.52	101	338	Average
2	2390.00	45.91	51.65	74.00	-28.09	26.91	4.87	37.52	101	338	Peak
3	2400.00	17.49	23.23	54.00	-36.51	26.91	4.87	37.52	101	338	Average
4	2400.00	47.59	53.33	74.00	-26.41	26.91	4.87	37.52	101	338	Peak
5 av	2402.00	69.25	74.99			26.91	4.87	37.52	101	338	Average
6 pp	2402.00	99.35	105.09			26.91	4.87	37.52	101	338	Peak
7	4804.00	18.53	32.97	54.00	-35.47	30.97	7.69	53.10	117	356	Average
8	4804.00	48.64	63.08	74.00	-25.36	30.97	7.69	53.10	117	356	Peak
9	7206.00	29.29	36.29	54.00	-24.71	35.60	9.57	52.17	101	99	Average
10	7206.00	59.39	66.39	74.00	-14.61	35.60	9.57	52.17	101	99	Peak



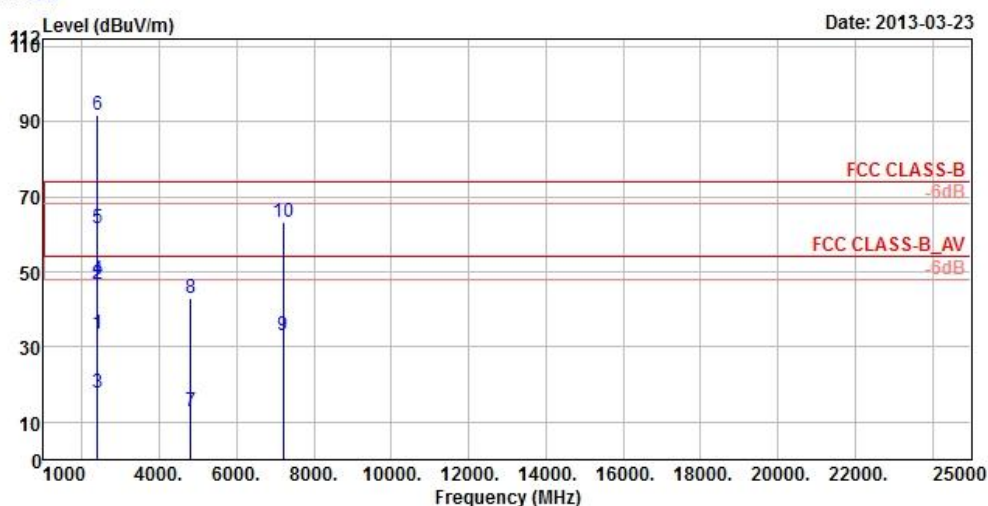
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 20



Site : 966 Chamber 5
 Condition : FCC CLASS-B 3m VERTICAL
 Brand/Model: GT-C3595
 Remark : BT TX CH00
 Tested by : Kay Wu
 Temperature : 25°C
 Humidity : 65%
 Plane : Y
 Rate : DH5

	Freq	Level	Read Level	Limit Line	OverAntenna Limit	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	dB	cm	deg	
1	2390.00	33.67	39.41	54.00	-20.33	26.91	4.87	37.52	100	355	Average
2	2390.00	46.78	52.52	74.00	-27.22	26.91	4.87	37.52	100	355	Peak
3	2400.00	17.71	23.45	54.00	-36.29	26.91	4.87	37.52	100	355	Average
4	2400.00	47.82	53.56	74.00	-26.18	26.91	4.87	37.52	100	355	Peak
5 av	2402.00	61.57	67.31			26.91	4.87	37.52	100	355	Average
6 pp	2402.00	91.67	97.41			26.91	4.87	37.52	100	355	Peak
7	4804.00	12.93	27.37	54.00	-41.07	30.97	7.69	53.10	100	360	Average
8	4804.00	43.03	57.47	74.00	-30.97	30.97	7.69	53.10	100	360	Peak
9	7206.00	33.22	40.22	54.00	-20.78	35.60	9.57	52.17	111	20	Average
10	7206.00	63.32	70.32	74.00	-10.68	35.60	9.57	52.17	111	20	Peak



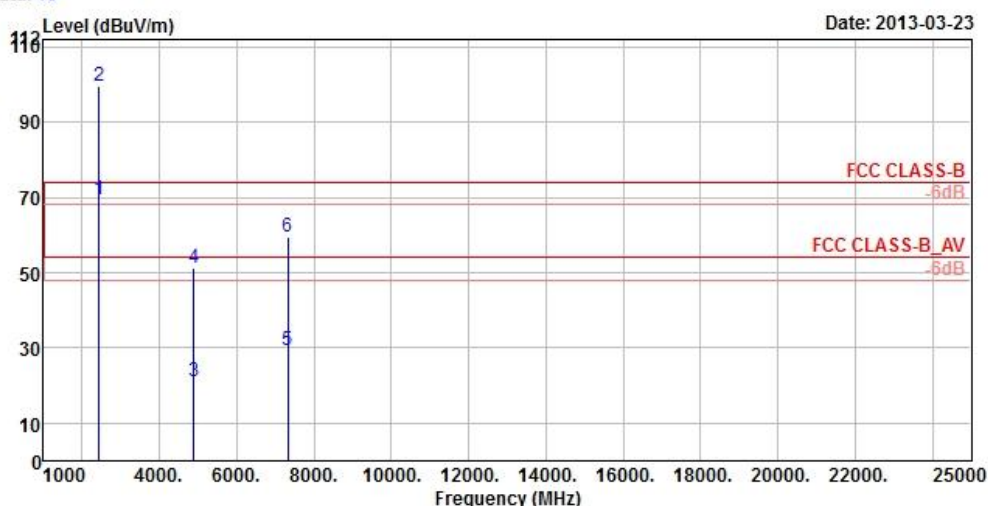
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 19



Site : 966 Chamber 5
 Condition : FCC CLASS-B 3m HORIZONTAL
 Brand/Model: GT-C3595
 Remark : BT TX CH39
 Tested by : Kay Wu
 Temperature : 25°C
 Humidity : 65%
 Plane : Y
 Rate : DH5

	Freq	Level	Read Level	Limit Line	OverAntenna Limit	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	dB	cm	deg	
1 av	2441.00	69.55	74.97			27.06	4.91	37.39	100	339	Average
2 pp	2441.00	99.65	105.07			27.06	4.91	37.39	100	339	Peak
3	4882.00	21.10	35.37	54.00	-32.90	31.06	7.72	53.05	138	38	Average
4	4882.00	51.20	65.47	74.00	-22.80	31.06	7.72	53.05	138	38	Peak
5	7323.00	29.25	35.50	54.00	-24.75	35.89	9.63	51.77	100	87	Average
6	7323.00	59.36	65.61	74.00	-14.64	35.89	9.63	51.77	100	87	Peak



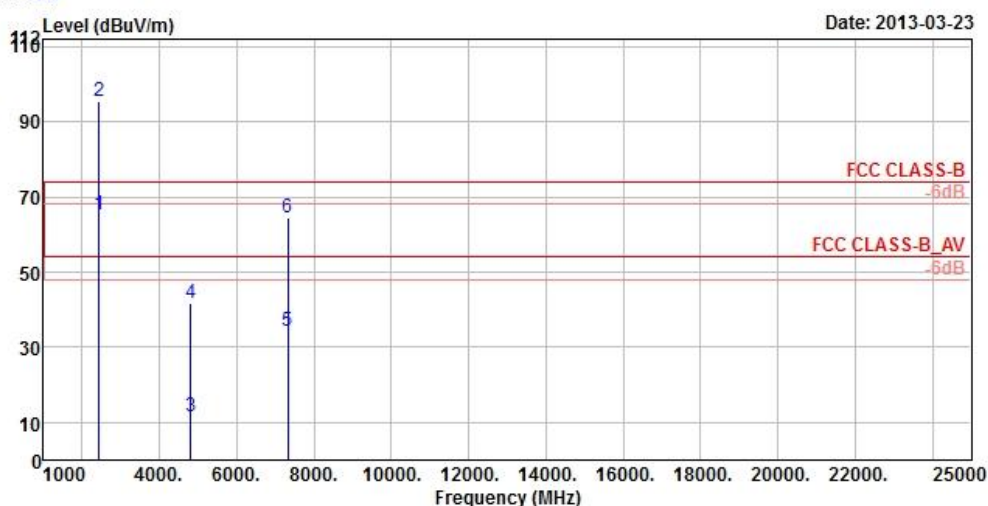
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 20



Site : 966 Chamber 5
 Condition : FCC CLASS-B 3m VERTICAL
 Brand/Model: GT-C3595
 Remark : BT TX CH39
 Tested by : Kay Wu
 Temperature : 25°C
 Humidity : 65%
 Plane : Y
 Rate : DH5

	Freq	Level	Read Level	Limit Line	OverAntenna Limit	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	dB	cm	deg	
1 av	2441.00	65.39	70.81			27.06	4.91	37.39	112	222	Average
2 pp	2441.00	95.49	100.91			27.06	4.91	37.39	112	222	Peak
3	4804.00	11.76	26.20	54.00	-42.24	30.97	7.69	53.10	100	360	Average
4	4804.00	41.87	56.31	74.00	-32.13	30.97	7.69	53.10	100	360	Peak
5	7323.00	34.27	40.52	54.00	-19.73	35.89	9.63	51.77	110	19	Average
6	7323.00	64.38	70.63	74.00	-9.62	35.89	9.63	51.77	110	19	Peak



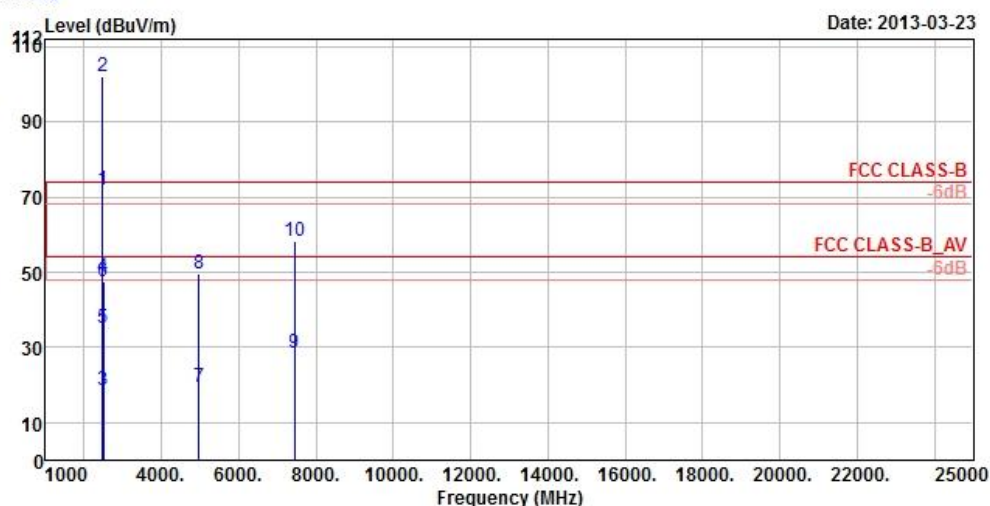
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 19



Site : 966 Chamber 5
 Condition : FCC CLASS-B 3m HORIZONTAL
 Brand/Model: GT-C3595
 Remark : BT TX CH78
 Tested by : Kay Wu
 Temperature : 25°C
 Humidity : 65%
 Plane : Y
 Rate : DH5

	Freq	Level	Read Level	Limit Line	OverAntenna Limit	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	dB	cm	deg	
1 av	2480.00	71.87	77.12			27.15	4.92	37.32	100	339	Average
2 pp	2480.00	101.97	107.22			27.15	4.92	37.32	100	339	Peak
3	2483.50	18.48	23.73	54.00	-35.52	27.15	4.92	37.32	100	339	Average
4	2483.50	48.58	53.83	74.00	-25.42	27.15	4.92	37.32	100	339	Peak
5	2485.50	35.21	40.46	54.00	-18.79	27.15	4.92	37.32	100	339	Average
6	2485.50	47.63	52.88	74.00	-26.37	27.15	4.92	37.32	100	339	Peak
7	4960.00	19.40	33.56	54.00	-34.60	31.16	7.72	53.04	120	50	Average
8	4960.00	49.50	63.66	74.00	-24.50	31.16	7.72	53.04	120	50	Peak
9	7440.00	28.32	33.81	54.00	-25.68	36.18	9.71	51.38	120	104	Average
10	7440.00	58.42	63.91	74.00	-15.58	36.18	9.71	51.38	120	104	Peak



A D T

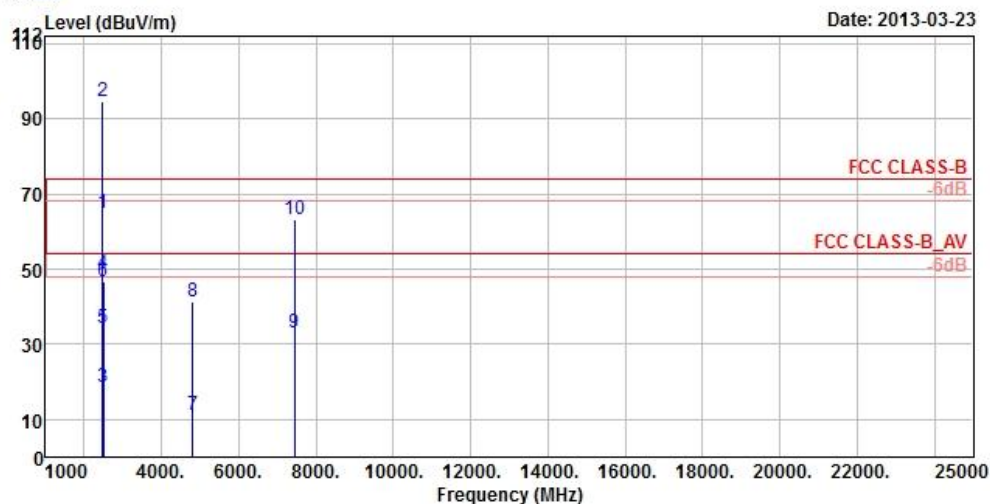


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 20

Date: 2013-03-23



Site : 966 Chamber 5
 Condition : FCC CLASS-B 3m VERTICAL
 Brand/Model: GT-C3595
 Remark : BT TX CH78
 Tested by : Kay Wu
 Temperature : 25°C
 Humidity : 65%
 Plane : Y
 Rate : DH5

	Freq	Level	Read Level	Limit Line	OverAntenna Limit	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	dB	cm	deg	
1 av	2480.00	64.74	69.99			27.15	4.92	37.32	100	320	Average
2 pp	2480.00	94.84	100.09			27.15	4.92	37.32	100	320	Peak
3	2483.50	18.59	23.84	54.00	-35.41	27.15	4.92	37.32	100	320	Average
4	2483.50	48.70	53.95	74.00	-25.30	27.15	4.92	37.32	100	320	Peak
5	2485.50	34.42	39.67	54.00	-19.58	27.15	4.92	37.32	100	320	Average
6	2485.50	46.59	51.84	74.00	-27.41	27.15	4.92	37.32	100	320	Peak
7	4804.00	11.05	25.49	54.00	-42.95	30.97	7.69	53.10	100	360	Average
8	4804.00	41.15	55.59	74.00	-32.85	30.97	7.69	53.10	100	360	Peak
9	7440.00	33.16	38.65	54.00	-20.84	36.18	9.71	51.38	107	19	Average
10	7440.00	63.27	68.76	74.00	-10.73	36.18	9.71	51.38	107	19	Peak



A D T

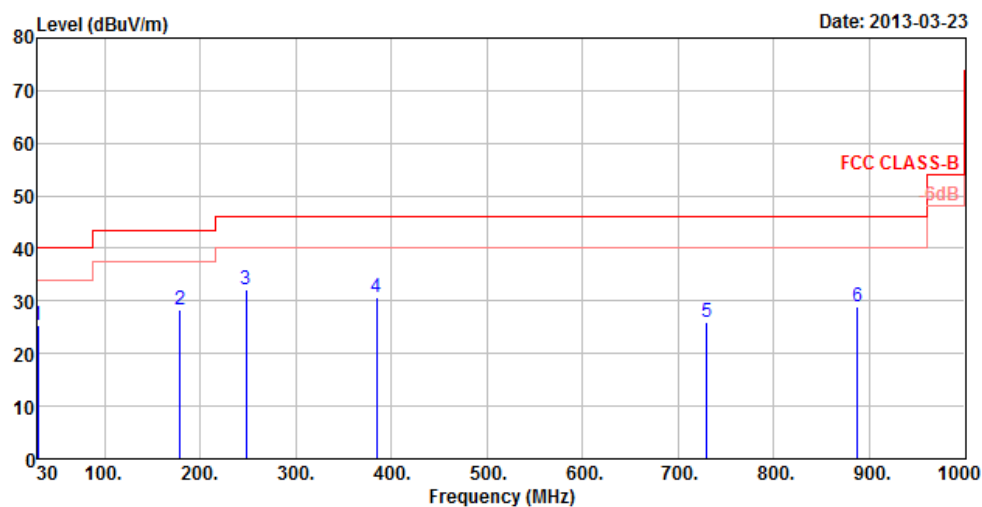
BELOW 1GHz WORST-CASE DATA : GFSK



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m HORIZONTAL
Brand/Model: GT-C3595
Remark : BT TX LF
Tested by : Kay Wu
Temperature : 25°C
Humidity : 65%
Plane : Y

	Freq	Level	Read Level	Limit Line	OverAntenna Limit	Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	dB	cm	deg	
1	30.54	25.44	43.85	40.00	-14.56	12.14	0.57	31.12	105	294	Peak
2	179.04	28.42	47.92	43.50	-15.08	10.83	1.50	31.83	113	264	Peak
3 pp	248.43	32.14	50.82	46.00	-13.86	11.40	1.83	31.91	118	284	Peak
4	384.70	30.63	45.28	46.00	-15.37	14.98	2.37	32.00	104	194	Peak
5	729.80	26.05	32.90	46.00	-19.95	21.23	3.52	31.60	114	347	Peak
6	887.30	29.00	33.71	46.00	-17.00	23.35	3.93	31.99	102	129	Peak



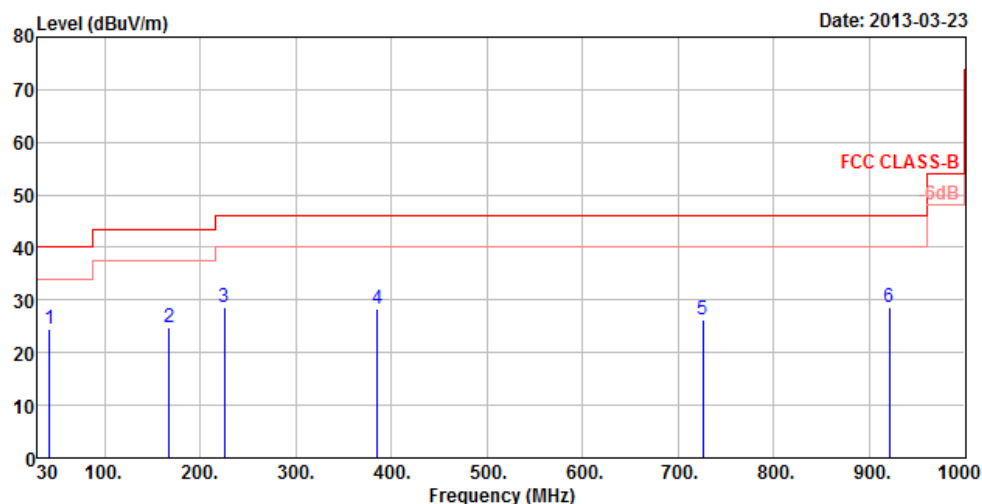
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m VERTICAL
Brand/Model: GT-C3595
Remark : BT TX LF
Tested by : Kay Wu
Temperature : 25°C
Humidity : 65%
Plane : Y

	Freq	Level	Read Level	Limit Line	OverLimit	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	dB	cm	deg	
1 pp	42.69	24.54	41.34	40.00	-15.46	13.58	0.70	31.08	128	308	Peak
2	167.43	24.68	43.05	43.50	-18.82	11.96	1.43	31.76	111	218	Peak
3	225.48	28.70	48.32	46.00	-17.30	10.46	1.72	31.80	106	268	Peak
4	385.40	28.20	42.85	46.00	-17.80	14.98	2.37	32.00	108	183	Peak
5	725.60	26.27	33.21	46.00	-19.73	21.18	3.50	31.62	107	276	Peak
6	920.90	28.63	33.00	46.00	-17.37	23.62	4.01	32.00	113	204	Peak

4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBμV)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

- NOTE:** 1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.
3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100288	Nov. 09, 2012	Nov. 08, 2013
RF signal cable Woken	5D-FB	Cable-HYCO2-01	Dec. 28, 2012	Dec. 27, 2013
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Dec. 21, 2012	Dec. 20, 2013
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Jul. 06, 2012	Jul. 05, 2013
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

- NOTE:** 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Shielded Room 2.
3. The VCCI Site Registration No. is C-2047.

4.2.3 TEST PROCEDURES

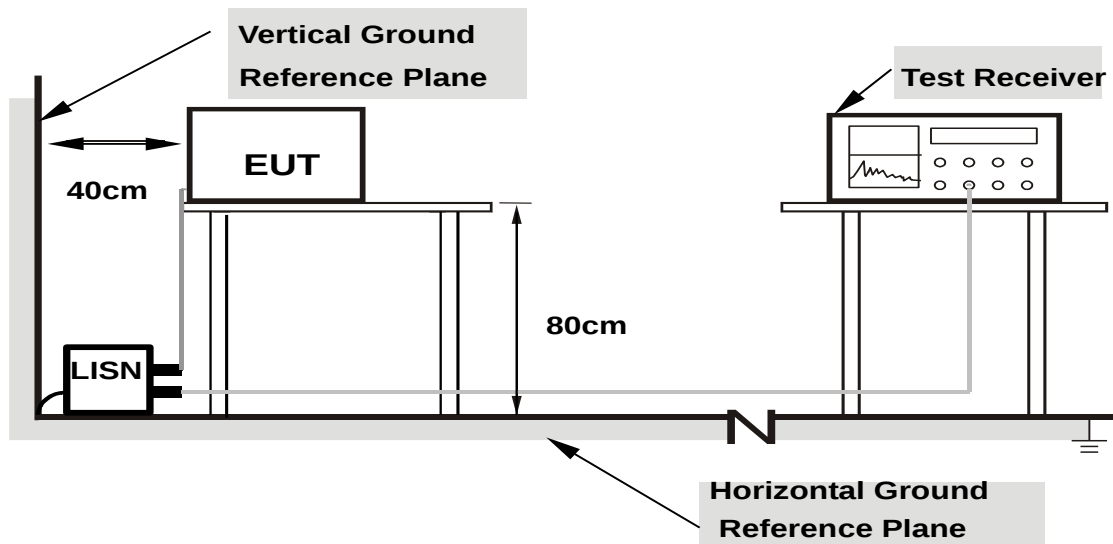
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

NOTE: All modes of operation were investigated and the worst-case emissions are reported.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

4.2.5 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

For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6.

4.2.7 TEST RESULTS

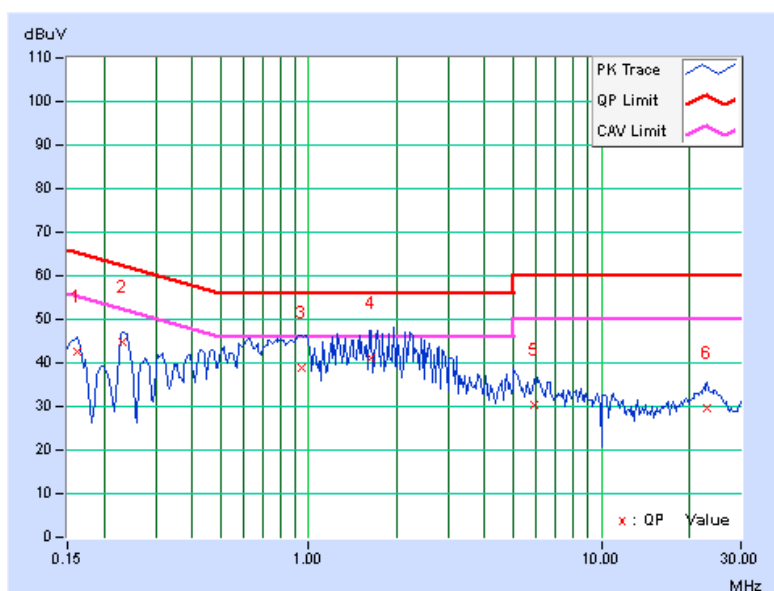
CONDUCTED WORST-CASE DATA : GFSK

PHASE	Line 1	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16172	0.12	42.62	31.25	42.74	31.37	65.38	55.38	-22.63	-24.00
2	0.23203	0.12	44.64	36.72	44.76	36.84	62.38	52.38	-17.61	-15.53
3	0.95078	0.21	38.68	27.08	38.89	27.29	56.00	46.00	-17.11	-18.71
4	1.64063	0.22	40.99	31.37	41.21	31.59	56.00	46.00	-14.79	-14.41
5	5.89063	0.44	30.08	19.82	30.52	20.26	60.00	50.00	-29.48	-29.74
6	23.06641	1.33	28.37	17.26	29.70	18.59	60.00	50.00	-30.30	-31.41

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

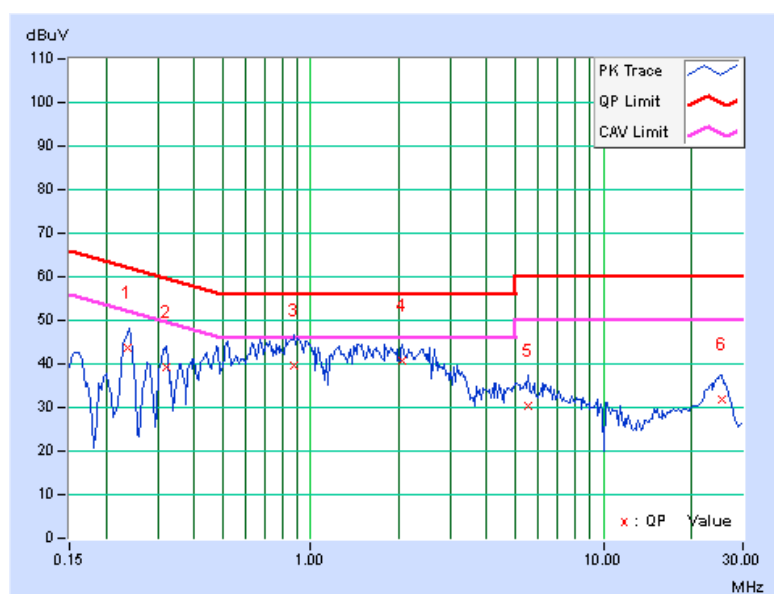


PHASE	Line 2	6dB BANDWIDTH	9kHz
-------	--------	---------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.23594	0.18	43.52	36.84	43.70	37.02	62.24	52.24	-18.54	-15.22
2	0.32188	0.19	39.00	29.34	39.19	29.53	59.66	49.66	-20.46	-20.12
3	0.87656	0.24	39.56	29.48	39.80	29.72	56.00	46.00	-16.20	-16.28
4	2.06641	0.28	40.63	31.29	40.91	31.57	56.00	46.00	-15.09	-14.43
5	5.50781	0.43	30.09	19.16	30.52	19.59	60.00	50.00	-29.48	-30.41
6	25.54297	1.05	30.71	18.49	31.76	19.54	60.00	50.00	-28.24	-30.46

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

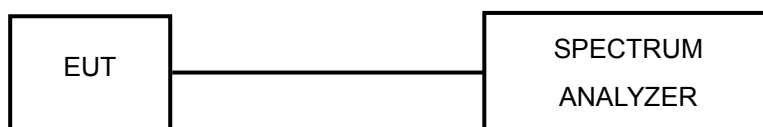


4.3 NUMBER OF HOPPING FREQUENCY USED

4.3.1 LIMIT OF HOPPING FREQUENCY USED

At least 15 channels frequencies, and should be equally spaced.

4.3.2 TEST SETUP



4.3.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

4.3.4 TEST PROCEDURES

- Check the calibration of the measuring instrument (SA) using either an internal calibrator or a known signal from an external generator.
- Turn on the EUT and connect its antenna terminal to measurement 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.
- Set the SA on MaxHold Mode, and then keep the EUT in hopping mode. Record all the signals from each channel until each one has been recorded.
- Set the SA on View mode and then plot the result on SA screen.
- Repeat above procedures until all frequencies measured were complete.

4.3.5 DEVIATION FROM TEST STANDARD

No deviation.

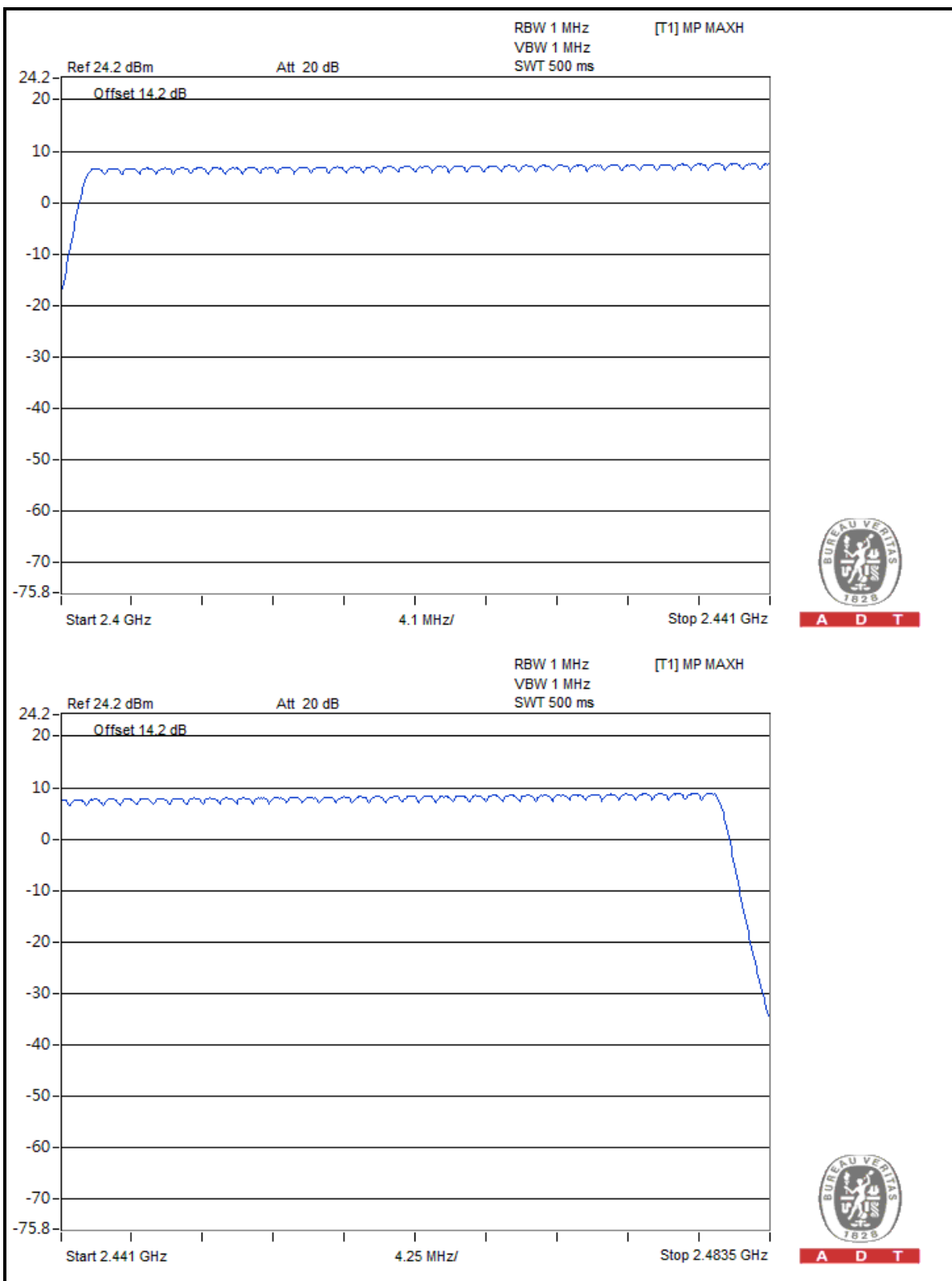
4.3.6 TEST RESULTS

There are 79 hopping frequencies in the hopping mode. Please refer to next page for the test result. On the plots, it shows that the hopping frequencies are equally spaced.



A D T

GFSK



A D T



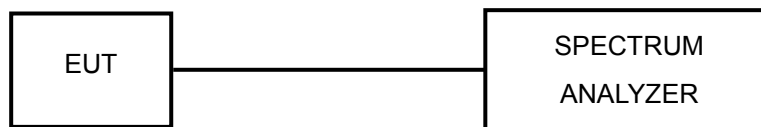
A D T

4.4 DWELL TIME ON EACH CHANNEL

4.4.1 LIMIT OF DWELL TIME USED

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

4.4.2 TEST SETUP



4.4.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

4.4.4 TEST PROCEDURES

- Check the calibration of the measuring instrument (SA) using either an internal calibrator or a known signal from an external generator.
- Turn on the EUT and connect its antenna terminal to measurement 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.
- Adjust the center frequency of SA on any frequency be measured and set SA to zero span mode. And then, set RBW and VBW of spectrum analyzer to proper value.
- Measure the time duration of one transmission on the measured frequency. And then plot the result with time difference of this time duration.
- Repeat above procedures until all different time-slot modes have been completed.

4.4.5 DEVIATION FROM TEST STANDARD

No deviation.



A D T

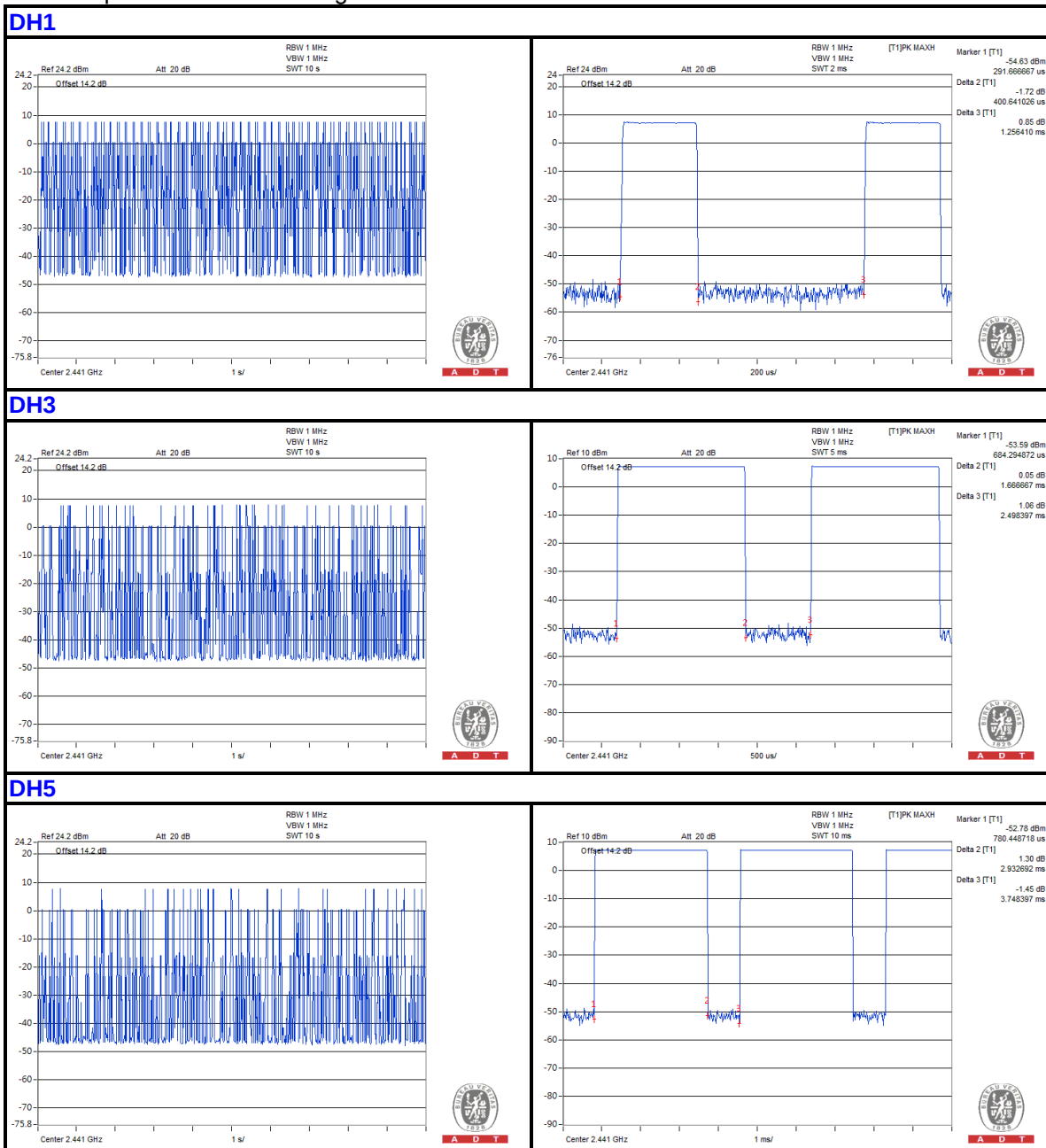
4.4.6 TEST RESULTS

GFSK

Mode	Average Hopping Channel	Package Transfer Time (usec)	Result (sec)	Limit (sec)
DH1	9.50	400.64	0.12	0.4
DH3	4.10	1666.67	0.22	0.4
DH5	2.70	2932.69	0.25	0.4

NOTE:

1. Dwell Time=79(channels) x 0.4(s) x average hopping channel x package transfer time
2. 79 channels come from the Hopping Channel number
3. Average Hopping Channel = hops/sweep time
4. t: Package Transfer Time(us)
5. Test plots of the transmitting time slot are shown as below.



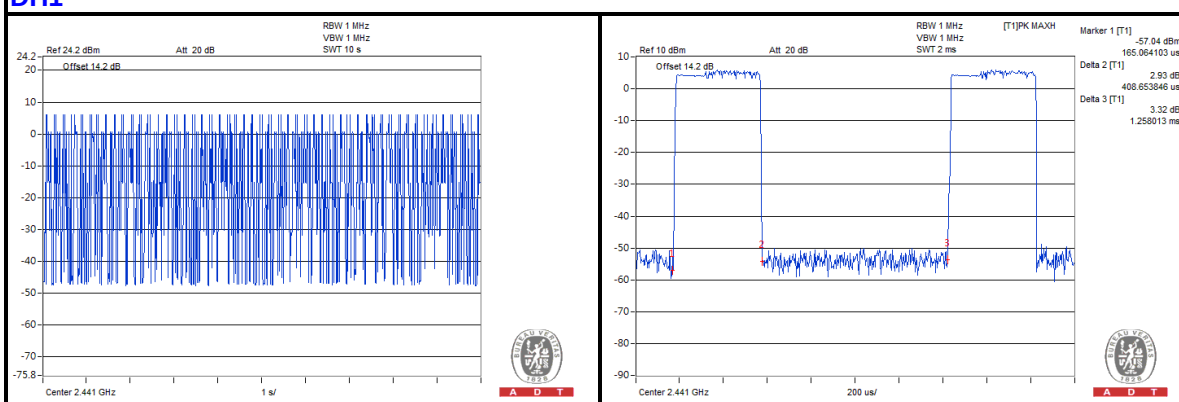
$\pi/4$ -DQPSK

Mode	Average Hopping Channel	Package Transfer Time (usec)	Result (sec)	Limit (sec)
DH1	8.30	408.65	0.11	0.4
DH3	4.60	1674.68	0.24	0.4
DH5	3.90	2940.71	0.36	0.4

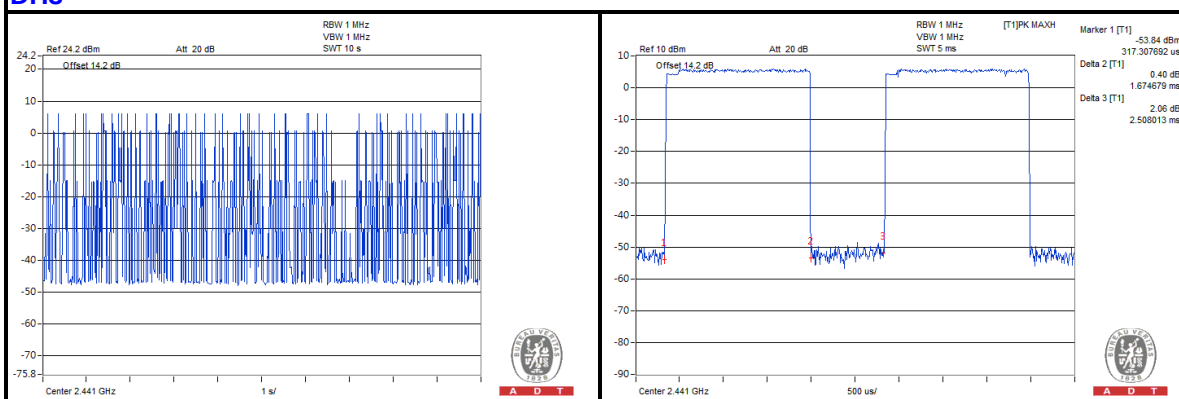
NOTE:

1. Dwell Time=79(channels) x 0.4(s) x average hopping channel x package transfer time
2. 79 channels come from the Hopping Channel number
3. Average Hopping Channel = hops/sweep time
4. t: Package Transfer Time(us)
5. Test plots of the transmitting time slot are shown as below.

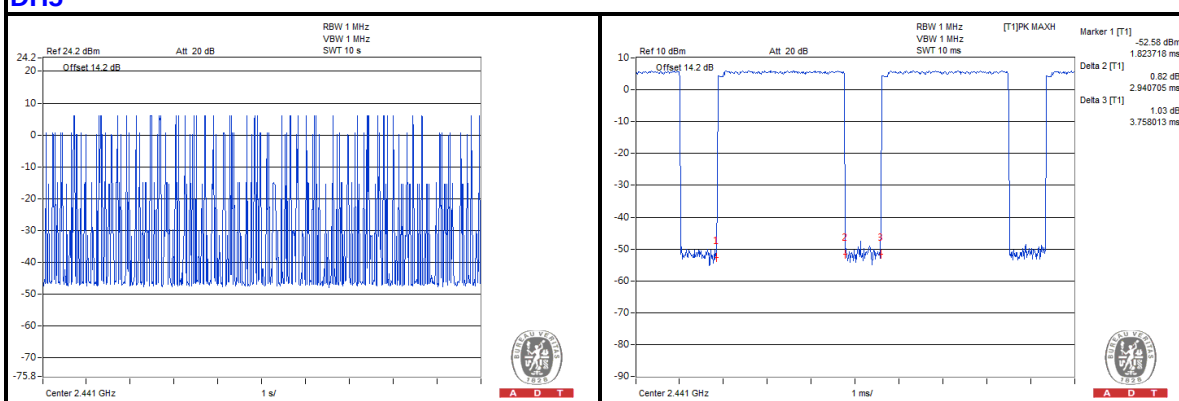
DH1



DH3



DH5





A D T

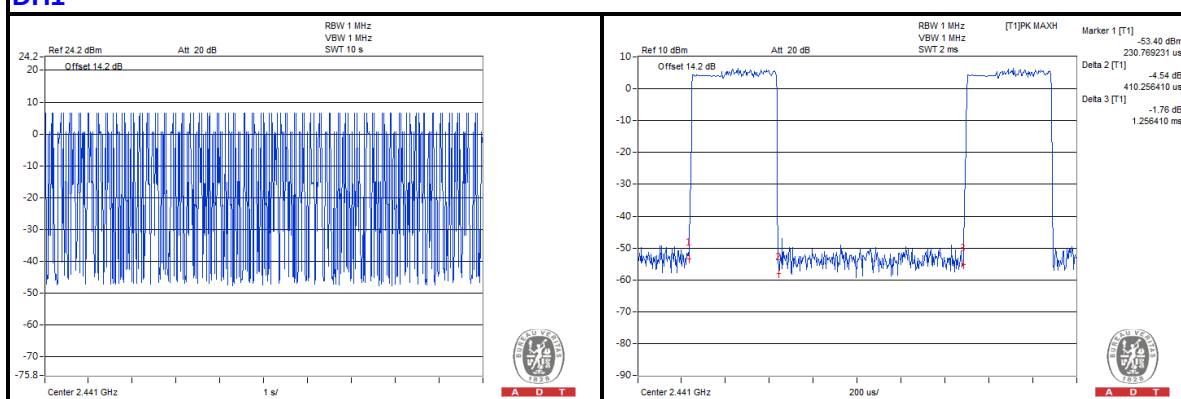
8DPSK

Mode	Average Hopping Channel	Package Transfer Time (usec)	Result (sec)	Limit (sec)
DH1	9.40	410.26	0.12	0.4
DH3	4.40	1668.27	0.23	0.4
DH5	3.30	2934.25	0.31	0.4

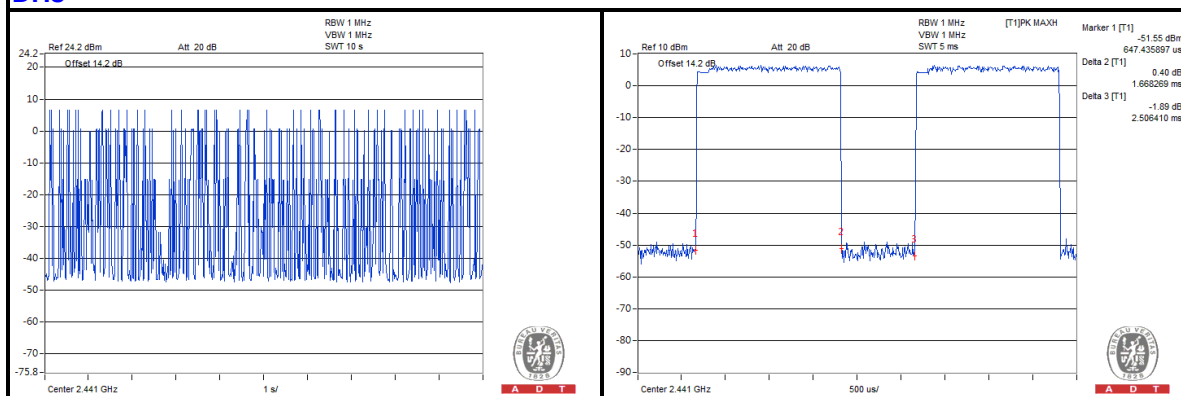
NOTE:

1. Dwell Time=79(channels) x 0.4(s) x average hopping channel x package transfer time
2. 79 channels come from the Hopping Channel number
3. Average Hopping Channel = hops/sweep time
4. t: Package Transfer Time(us)
5. Test plots of the transmitting time slot are shown as below.

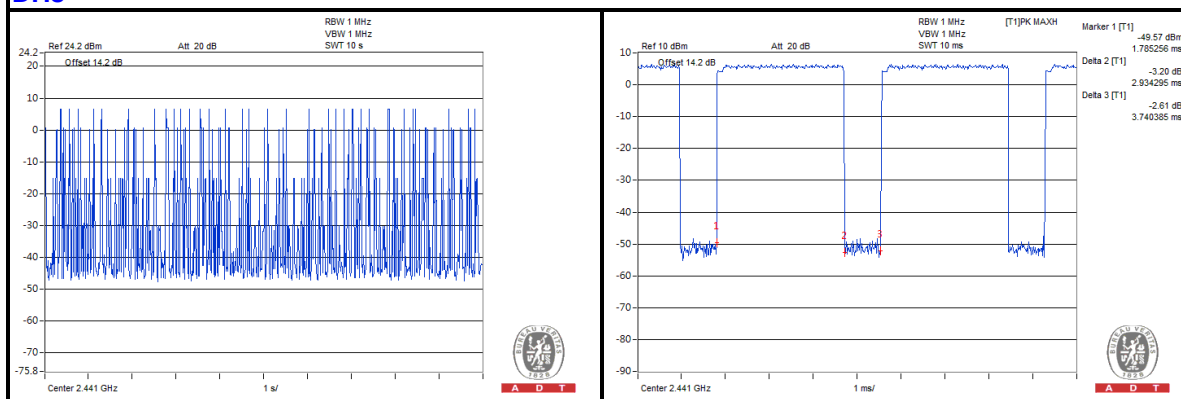
DH1



DH3



DH5

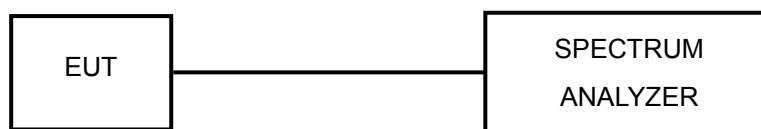


4.5 CHANNEL BANDWIDTH

4.5.1 LIMITS OF CHANNEL BANDWIDTH

For frequency hopping system operating in the 2400-2483.5MHz, If the 20dB bandwidth of hopping channel is greater than 25kHz, two-thirds 20dB bandwidth of hopping channel shall be a minimum limit for the hopping channel separation.

4.5.2 TEST SETUP



4.5.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

4.5.4 TEST PROCEDURE

- a. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- b. 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.
- c. Measure the frequency difference of two frequencies that were attenuated 20dB from the reference level. Record the frequency difference as the emission bandwidth.
- d. Repeat above procedures until all frequencies measured were complete.

4.5.5 DEVIATION FROM TEST STANDARD

No deviation.

4.5.6 EUT OPERATING CONDITION

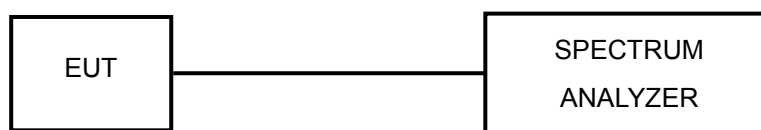
The software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel frequencies individually.

4.6 HOPPING CHANNEL SEPARATION

4.6.1 LIMIT OF HOPPING CHANNEL SEPARATION

At least 25kHz or two-third of 20dB hopping channel bandwidth (whichever is greater).

4.6.2 TEST SETUP



4.6.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

4.6.4 TEST PROCEDURES

- Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range.
- By using the MaxHold function record the separation of two adjacent channels.
- Measure the frequency difference of these two adjacent channels by SA MARK function. And then plot the result on SA screen.
- Repeat above procedures until all frequencies measured were complete.

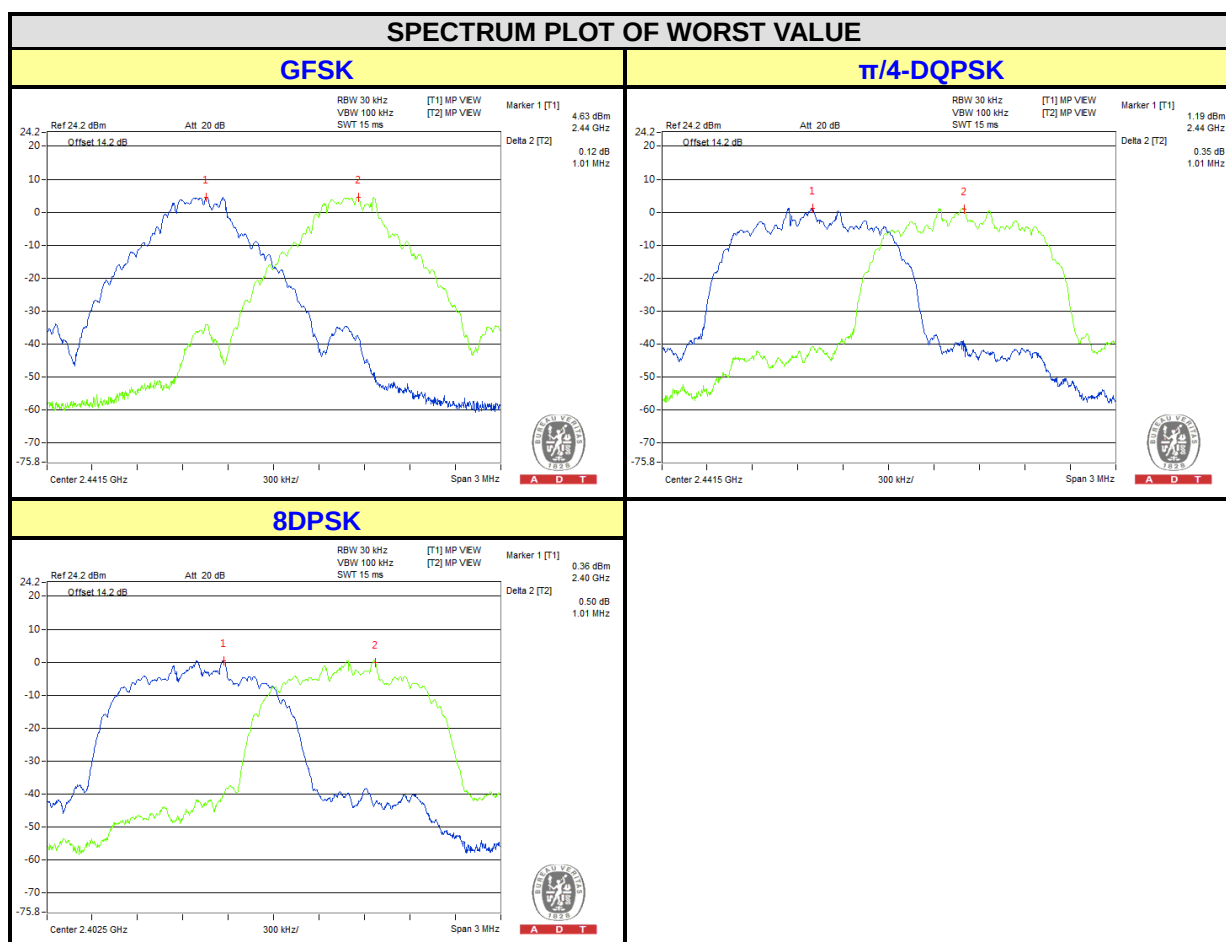
4.6.5 DEVIATION FROM TEST STANDARD

No deviation.

4.6.6 TEST RESULTS

CHAN.	FREQ. (MHz)	ADJACENT CHANNEL SEPARATION (MHz)			20dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)			PASS / FAIL
		GFSK	$\pi/4$ -DQPSK	8DPSK	GFSK	$\pi/4$ -DQPSK	8DPSK	GFSK	$\pi/4$ -DQPSK	8DPSK	
0	2402	1.01	1.00	1.01	0.958	1.32	1.31	0.639	0.880	0.873	PASS
39	2441	1.01	1.01	1.00	0.958	1.32	1.31	0.639	0.880	0.873	PASS
78	2480	1.00	1.01	1.00	0.959	1.32	1.31	0.639	0.880	0.873	PASS

NOTE: The minimum limit is two-third 20dB bandwidth.

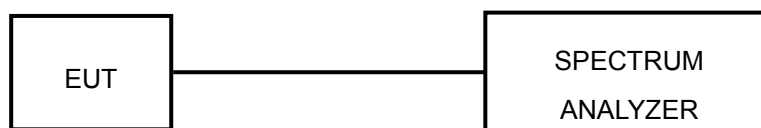


4.7 MAXIMUM OUTPUT POWER

4.7.1 LIMITS OF MAXIMUM OUTPUT POWER MEASUREMENT

The Maximum Output Power Measurement is 125mW.

4.7.2 TEST SETUP



4.7.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

4.7.4 TEST PROCEDURES

- Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 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.
- The center frequency of the spectrum analyzer is set to the fundamental frequency and using 3MHz RBW and 3MHz VBW.
- Measure the captured power within the band and recording the plot.
- Repeat above procedures until all frequencies required were complete.

4.7.5 DEVIATION FROM TEST STANDARD

No deviation.

4.7.6 EUT OPERATING CONDITION

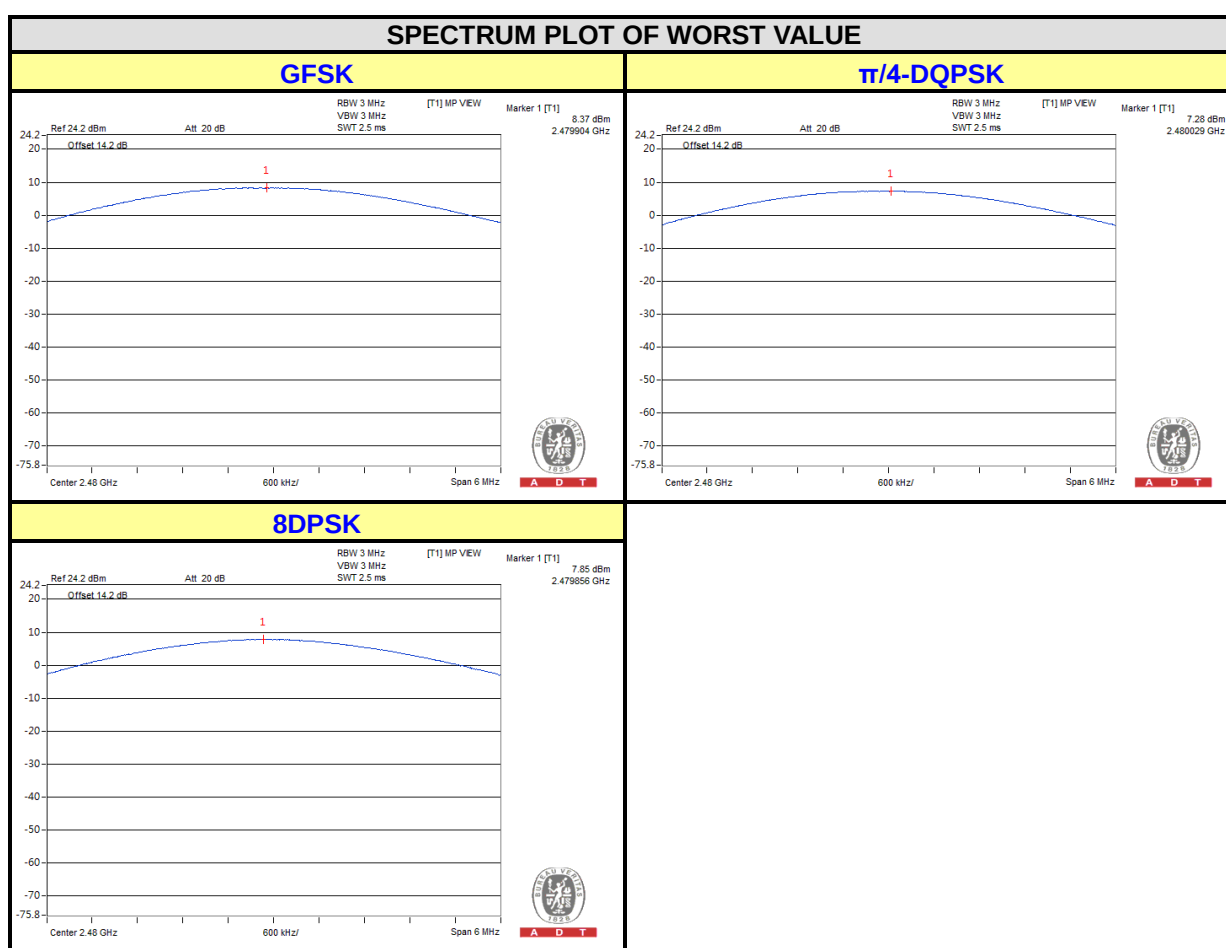
The software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel frequencies individually.



A D T

4.7.7 TEST RESULTS

CHANNEL	FREQUENCY (MHz)	OUTPUT POWER (mW)			OUTPUT POWER (dBm)			POWER LIMIT (mW)	PASS / FAIL
		GFSK	$\pi/4$ -DQPSK	8DPSK	GFSK	$\pi/4$ -DQPSK	8DPSK		
0	2402	4.111	3.459	3.936	6.14	5.39	5.95	125	PASS
39	2441	5.212	4.227	4.808	7.17	6.26	6.82	125	PASS
78	2480	6.871	5.346	6.095	8.37	7.28	7.85	125	PASS



4.8 CONDUCTED OUT OF BAND EMISSION MEASUREMENT

4.8.1 LIMITS OF CONDUCTED OUT OF BAND EMISSION MEASUREMENT

Below -20dB of the highest emission level of operating band (in 100KHz RBW).

4.8.2 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

4.8.3 TEST PROCEDURE

1. Set RBW = 100 kHz.
2. Set VBW = 300 kHz.
3. Set span to encompass the spectrum to be examined
4. Detector = peak.
5. Trace Mode = max hold.
6. Sweep = auto couple.

4.8.4 DEVIATION FROM TEST STANDARD

No deviation.

4.8.5 EUT OPERATING CONDITION

The software provided by client enabled the EUT to transmit continuously.

4.8.6 TEST RESULTS

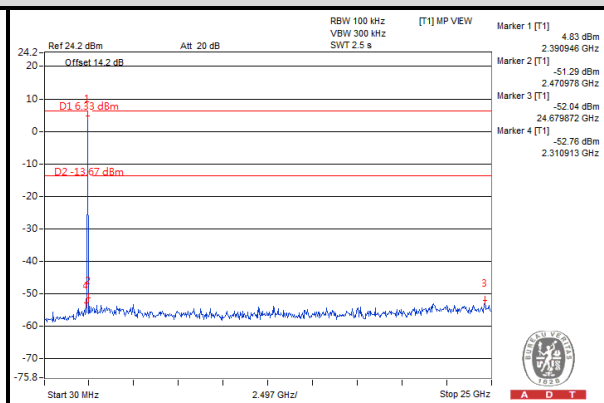
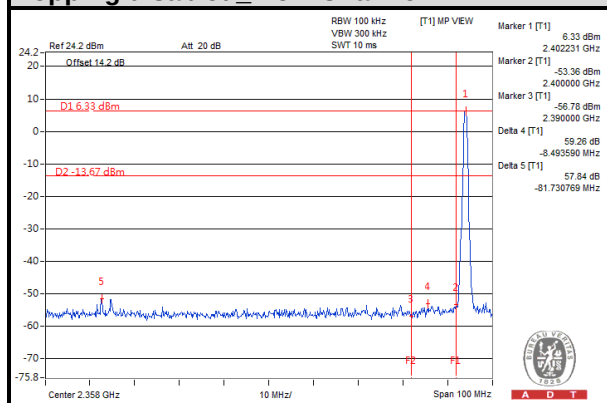
The spectrum plots are attached on the following images. D1 line indicates the highest level, D2 line indicates the 20dB offset below D1. It shows compliance with the requirement.



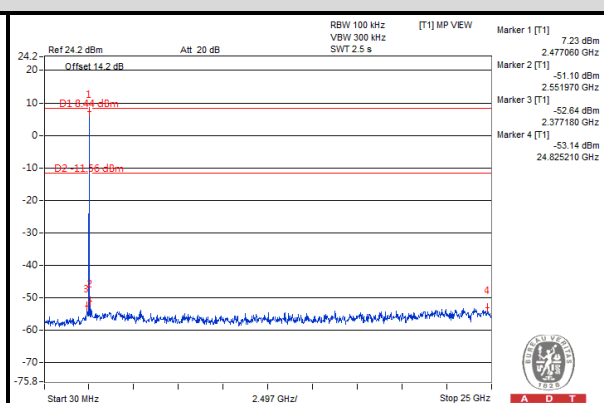
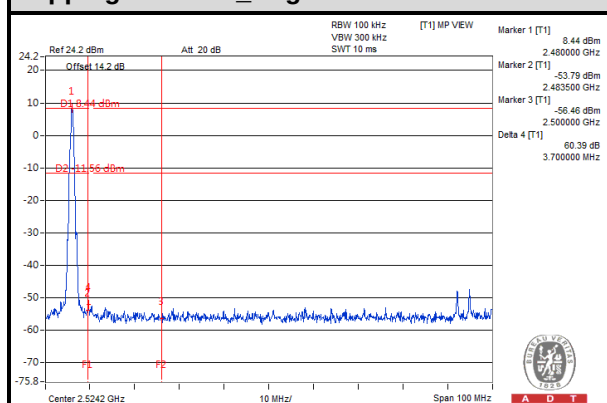
A D T

GFSK

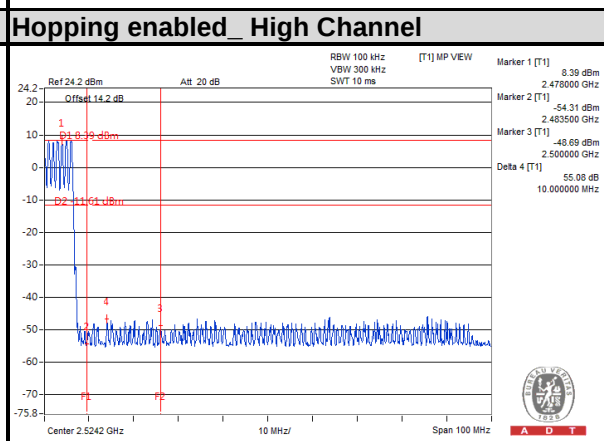
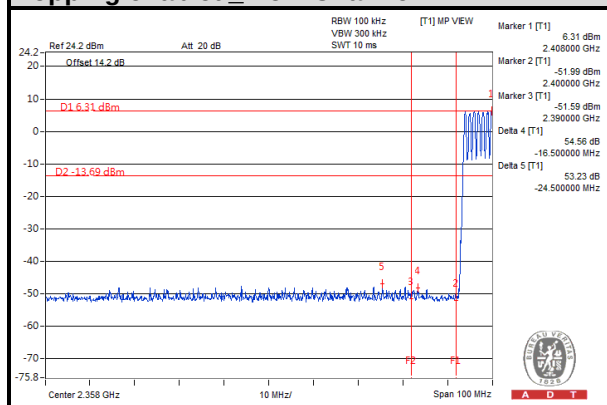
Hopping disabled_ Low Channel



Hopping disabled_ High Channel



Hopping enabled_ Low Channel

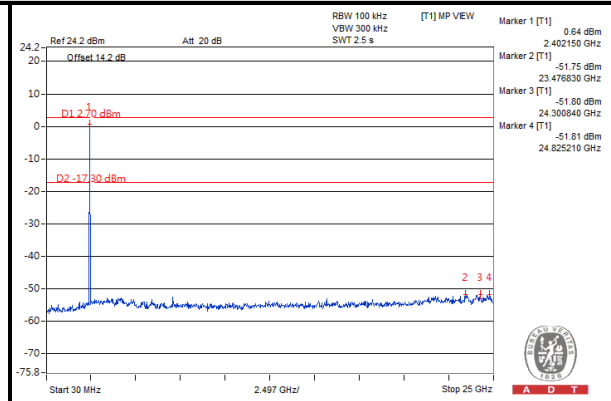
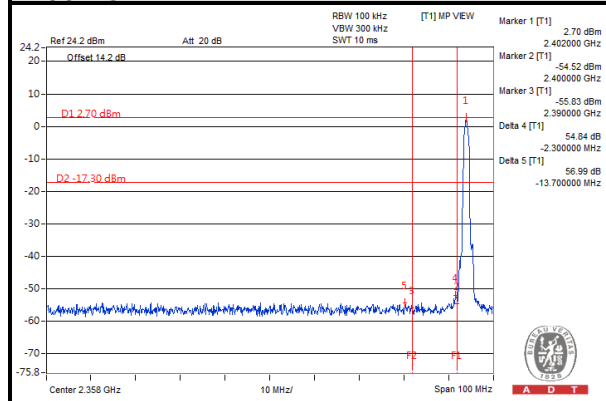




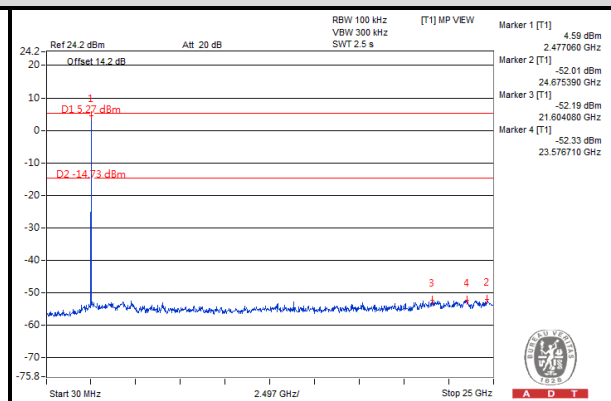
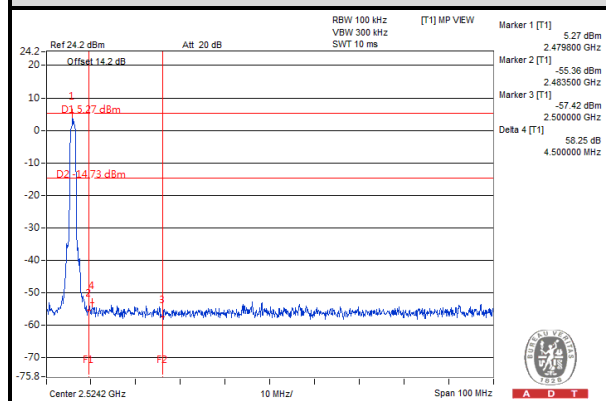
A D T

$\pi/4$ -DQPSK

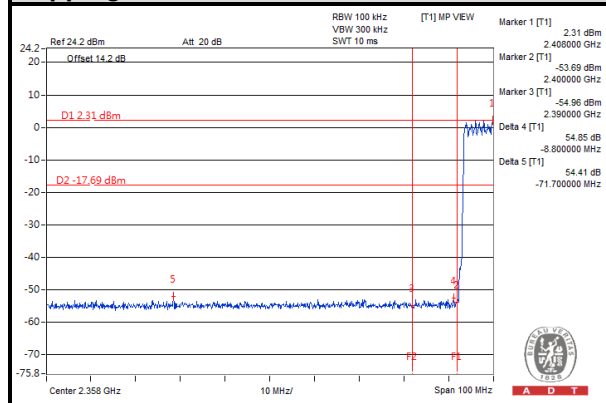
Hopping disabled_ Low Channel



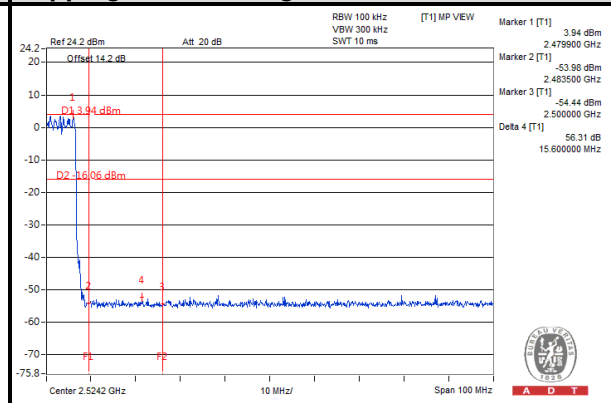
Hopping disabled_ High Channel



Hopping enabled_ Low Channel



Hopping enabled_ High Channel

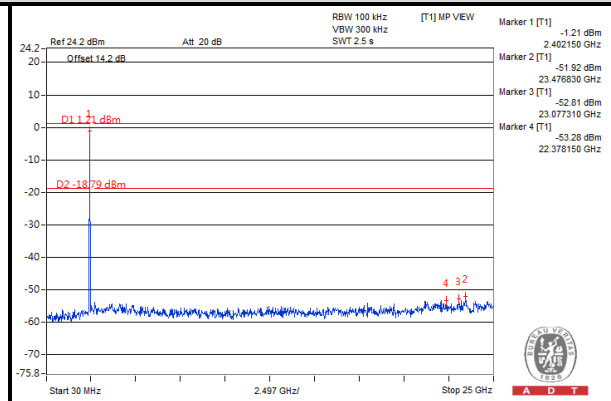
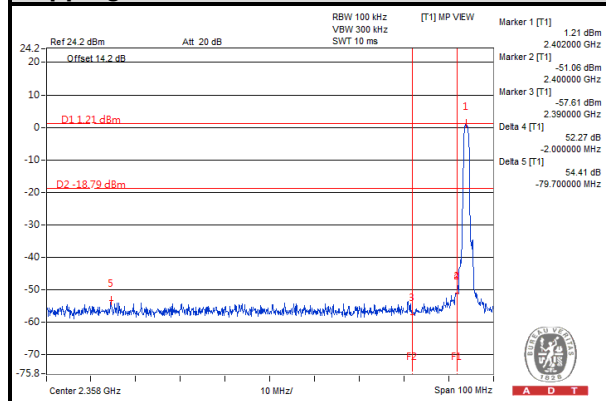




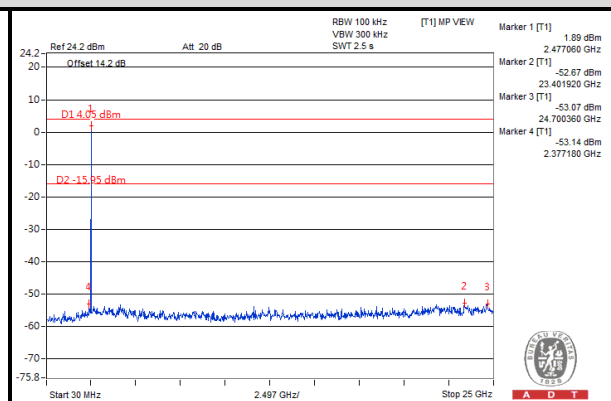
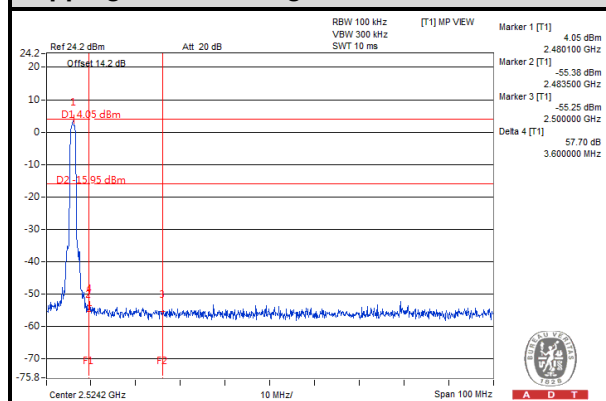
A D T

8DPSK

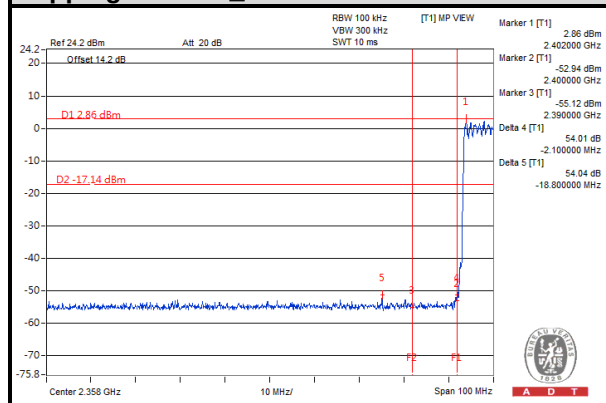
Hopping disabled_ Low Channel



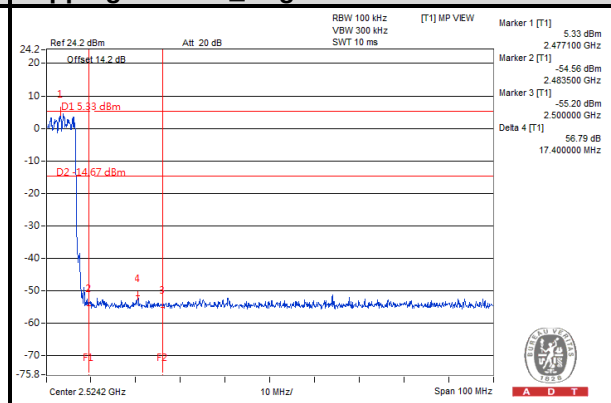
Hopping disabled_ High Channel



Hopping enabled_ Low Channel



Hopping enabled_ High Channel



5. PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).

6. INFORMATION ON THE TESTING LABORATORIES

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab:

Tel: 886-2-26052180

Fax: 886-2-26051924

Hsin Chu EMC/RF Lab:

Tel: 886-3-5935343

Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Telecom Lab:

Tel: 886-3-3183232

Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

The address and road map of all our labs can be found in our web site also.



A D T

7. APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.

--- END ---