

ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

INTENTIONAL RADIATOR CERTIFICATION TO FCC PART 15 SUBPART C REQUIREMENT

	OF
Product Name:	LTE Tablet PC
Brand Name:	N/A
Model No.:	AQT100
Model Difference:	N/A
FCC ID:	T5UAQT100
Report No.:	E2/2015/90043
Issue Date:	Oct. 12, 2015
FCC Rule Part:	§15.247, Cat: DTS
	Quanta Microsystems, Inc.
Prepared for:	No.188, Wenhua 2nd Rd., Guishan Dist., Taoyuan City 33377, Taiwan
	SGS Taiwan Ltd.
Prepared by:	Electronics & Communication Laboratory
	No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan 333



Note: This report shall not be reproduced except in full, without the written approval of SGS Taiwan Ltd. This document may be altered or revised by SGS Taiwan Ltd. personnel only, and shall be noted in the revision section of the document.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另右說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留卽天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeilndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



VERIFICATION OF COMPLIANCE

Applicant:	Quanta Microsystems, Inc. No.188, Wenhua 2nd Rd., Guishan Dist., Taoyuan City 33377, Taiwan
Product Name:	LTE Tablet PC
Brand Name:	N/A
Model No.:	AQT100
Model Difference:	N/A
FCC ID:	T5UAQT100
Report Number:	E2/2015/90043
Date of test:	Sep. 14, 2015 ~ Oct. 12, 2015
Date of EUT Received:	Sep. 14, 2015

We hereby certify that:

The above equipment was tested by SGS Taiwan Ltd. Electronics & Communication Laboratory The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10:2013 and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits.

The test results of this report relate only to the tested sample identified in this report.

Aken Huang	Date	Oct. 12, 2015
Aken Huang/ Engineer		
Yun Tsou	Date	Oct. 12, 2015
Yuri Tsai / Clerk		
Jim Chan	J Date	Oct. 12, 2015
	Yun Tsou	Aken Huang/Engineer Vin Tson Date Yuri Tsai / Clerk

Jim Chang / Asst. Manager

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

でいたいでは、 除非另有就明,此報告結果僅對測試之樣品負責,同時此樣品僅保留知天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms</u> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Revision History

Report Number	Revision	Description	Issue Date
E2/2015/90043	Rev.00	Initial creation of document	Oct. 12, 2015

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測试之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or ap-pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



Table of Contents

1	GEN	ERAL INFORMATION	6
	1.1	Product Description	6
	1.2	Product Feature of Equipment Under Test	7
	1.3	Test Methodology of Applied Standards	8
	1.4	Test Facility	8
	1.5	Special Accessories	8
	1.6	Equipment Modifications	8
2	SYST	EM TEST CONFIGURATION	9
	2.1	EUT Configuration	9
	2.2	EUT Exercise	9
	2.3	Test Procedure	9
	2.4	Measurement Results Explanation Example	9
	2.5	Configuration of Tested System	10
3	SUM	MARY OF TEST RESULTS	11
4	DESC	CRIPTION OF TEST MODES	
	4.1	Operated in 2400 ~ 2483.5MHz Band	.11
	4.2	The Worst Test Modes and Channel Details	12
_		SUREMENT UNCERTAINTY	12
5			13
5 6		DUCTED EMISSION TEST	
		DUCTED EMISSION TEST Standard Applicable:	14 14
	CON	DUCTED EMISSION TEST	14 14
	CON 6.1	DUCTED EMISSION TEST Standard Applicable: Measurement Equipment Used: EUT Setup:	14 14 14 14
	CON 6.1 6.2	DUCTED EMISSION TEST Standard Applicable: Measurement Equipment Used: EUT Setup: Test SET-UP (Block Diagram of Configuration)	14 14 14 14 15
	CON 6.1 6.2 6.3	DUCTED EMISSION TEST Standard Applicable: Measurement Equipment Used: EUT Setup: Test SET-UP (Block Diagram of Configuration) Measurement Procedure:	 14 14 14 14 15 15
	CON 6.1 6.2 6.3 6.4	DUCTED EMISSION TEST Standard Applicable: Measurement Equipment Used: EUT Setup: Test SET-UP (Block Diagram of Configuration)	 14 14 14 14 15 15
	CON 6.1 6.2 6.3 6.4 6.5 6.6	DUCTED EMISSION TEST Standard Applicable: Measurement Equipment Used: EUT Setup: Test SET-UP (Block Diagram of Configuration) Measurement Procedure:	 14 14 14 15 15 15
6	CON 6.1 6.2 6.3 6.4 6.5 6.6	DUCTED EMISSION TEST	 14 14 14 14 15 15 15 18
6	CON 6.1 6.2 6.3 6.4 6.5 6.6 PEA	DUCTED EMISSION TEST	 14 14 14 14 15 15 15 18 18
6	CON 6.1 6.2 6.3 6.4 6.5 6.6 PEAN 7.1	DUCTED EMISSION TEST	 14 14 14 15 15 15 18 18
6	CON 6.1 6.2 6.3 6.4 6.5 6.6 PEAN 7.1 7.2	DUCTED EMISSION TEST	 14 14 14 15 15 15 18 18 18 18 18 19
6	CON 6.1 6.2 6.3 6.4 6.5 6.6 PEAN 7.1 7.2 7.3	DUCTED EMISSION TEST	 14 14 14 15 15 15 18 18 18 18 18 19
6	CON 6.1 6.2 6.3 6.4 6.5 6.6 PEA 7.1 7.2 7.3 7.4 7.5	DUCTED EMISSION TEST	 14 14 14 15 15 15 18 18 18 18 19 20
7	CON 6.1 6.2 6.3 6.4 6.5 6.6 PEA 7.1 7.2 7.3 7.4 7.5	DUCTED EMISSION TEST	 14 14 14 15 15 15 18 18 18 18 19 20 21



FCC ID: T5UAQT100

	8.3	Test Set-up:	21
	8.4	Measurement Procedure:	
	8.5	Measurement Result:	
9		DUCTED BAND EDGES AND SPURIOUS EMISSION MEASUREMENT	
9	9.1	Standard Applicable	
	9.2	Measurement Equipment Used:	
	9.3	Test SET-UP:	
	9.4	Measurement Procedure	
	9.5	Measurement Result	
10		ATED BANDEDGE AND SPURIOUS EMISSION MEASUREMENT	
10	10.1	Standard Applicable	
	10.2	Measurement Equipment Used	
	10.2	Test SET-UP	
	10.4	Measurement Procedure	
	10.5	Field Strength Calculation	
	10.6	Test Results of Radiated Spurious Emissions form 9 kHz to 30 MHz	
	10.0	Measurement Result:	
11	-		
11	PEA	K POWER SPECTRAL DENSITY	
	11.2		
		Measurement Equipment Used:	
	11.3	Test Set-up:	
	11.4	Measurement Procedure:	
	11.5	Measurement Result:	51
12	ANTE	ENNA REQUIREMENT	54
	12.1	Standard Applicable:	54
	12.2	Antenna Connected Construction:	54



GENERAL INFORMATION 1

1.1 Product Description

General:

Product Name:	LTE Tablet PC		
Brand Name:	N/A		
Model No.:	AQT100		
Model Difference:	N/A		
Product SW/HW version:	NKJ_AQT 126 / B2	100-userdebug 5.1.1 NKJ.BJ.20150916.02.126	
Radio SW/HW version:	N/A		
Test SW Version:	N/A		
RF power setting in TEST SW:	N/A		
Data Cable (USB)	Model: 18-94U1DG1-004G Supplier: Dongguan Elinke Industrial Co.,Ltd		
	3.8Vdc from rechargeable battery or 5Vdc from AC/DC Adapter		
Power Supply:	Battery:	Model No.: NKJ, Supplier: TCL	
	Adapter:	Model No.: NSS050200B, Supplier: TPT	

Bluetooth Low Energy:

	-
Frequency Range:	2402 – 2480MHz
Bluetooth Version:	V4.0 dual mode
Channel number:	40 channels
Modulation type:	GFSK
Transmit Power:	1.06dBm
Antenna Designation:	PCB Antenna, Gain:4.7dBi

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document is unlawful and offenders may be prosecuted to the fullest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



1.2 Product Feature of Equipment Under Test

The equipment under Test (Hereafter Called: EUT) is supporting Wi-FI and Bluetooth features, and below is details of information.

Product Feature		
Product Name:	LTE Tablet PC	
Brand Name:	N/A	
Model No.:	AQT100	
Model Difference:	N/A	
FCC ID:	T5UAQT100	
Wi-Fi Specification	802.11b/g/n	
Bluetooth Version	V4.0 dual mode	

Note: The above EUT information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report feiter only to the sample(s) tested and such sample(s) are relatined to so days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Test Methodology of Applied Standards 1.3

FCC Part 15, Subpart C §15.247

FCC KDB 558074 D01 DTS Meas. Guidance V03r03

ANSI C63.10:2013

Note:

- 1. All test items have been performed and record as per the above standards.
- 2. The composite system is compliance with FCC Subpart B is authorized under a DoC procedure.
- 3. The EUT was placed 1.5m height for frequency above 1GHz in accordance with ANSI C63, 10 :2013

1.4 Test Facility

SGS Taiwan Ltd. Electronics & Communication Laboratory No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan. (TAF code 0513)

FCC Registration Numbers are: 628985

Canada Registration Number: 4620A-5.

1.5 Special Accessories

There are no special accessories used while test was conducted.

1.6 **Equipment Modifications**

There was no modification incorporated into the EUT.

でいたいでは、 除非另有就明,此報告結果僅對測試之樣品負責,同時此樣品僅保留知天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms</u> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



SYSTEM TEST CONFIGURATION 2

2.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

2.2 EUT Exercise

An engineering test mode (software/firmware) that applicant provided was utilized to manipulate the EUT into transmit, selection of the test channel, and modulation scheme.

2.3 Test Procedure

2.3.1 Conducted Emissions

The EUT is a placed on as turn table which is 0.8 m above ground plan. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz.. The CISPR Quasi-Peak and Average detector mode is employed according to §15.207. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

2.3.2 Radiated Emissions

The EUT is a placed on as turn table. For emissions testing at or below 1 GHz, the table height shall be 0.8 m above the reference ground plan. For emission measurements above 1 GHz, the table height shall be 1.5 m. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes and measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made "while keeping the antenna in the 'cone of radiation' from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response." is still within the 3dB illumination BW of the measurement antenna.

2.4 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuation factor between EUT conducted port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly EUT RF output level.

Note:

The spectrum analyzer offset is derived from RF cable loss and attenuator factor. Following shows an offset computation example with cable loss 1.9dB and splitter 0dB splitter. Offset = RF cable loss (dB)+ splitter(dB) = 1.9 + 0 = 1.9(dB)

でいたいでは、 除非另有就明,此報告結果僅對測試之樣品負責,同時此樣品僅保留知天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms</u> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



2.5 Configuration of Tested System



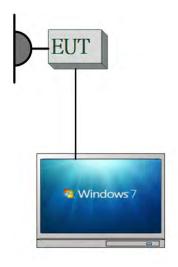


Fig. 2-3 AC Power Line Conducted Emission

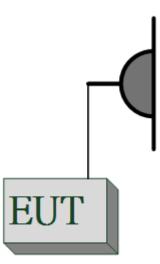


Table 2-1 Equipment Used in Tested System

ltem	Equipment	Mfr/Brand	Model/Model No.	Series No.	Data Cable	Power Cord
1.	BT4.0 Test Software	N/A	N/A	N/A	N/A	N/A

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Contention is stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are relative for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. SGS Taiwan Ltd.



SUMMARY OF TEST RESULTS 3

FCC Rules	Description Of Test	Result
§15.207(a)	AC Power Line Conducted Emission	Compliant
§15.247(b) (3)	Peak Output Power	Compliant
§15.247(a)(2)	6dB Bandwidth and 99% Power Emission Bandwidth	Compliant
§15.247(d)	Conducted Band Edge and Spurious Emission	Compliant
§15.247(d)	Radiated Band Edge and Spurious Emission	Compliant
§15.247(e)	Peak Power Density	Compliant
§15.203 §15.247(b)	Antenna Requirement	Compliant

DESCRIPTION OF TEST MODES 4

Operated in 2400 ~ 2483.5MHz Band 4.1

40 channels are provided for Bluetooth LE

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY	CHANNEL	FREQUENCY		
0	2402 MHz	14	2430 MHz	28	2458 MHz		
1	2404 MHz	15	2432 MHz	29	2460 MHz		
2	2406 MHz	16	2434 MHz	30	2462 MHz		
3	2408 MHz	17	2436 MHz	31	2464 MHz		
4	2410 MHz	18	2438 MHz	32	2466 MHz		
5	2412 MHz	19	2440 MHz	33	2468 MHz		
6	2414 MHz	20	2442 MHz	34	2470 MHz		
7	2416MHz	21	2444 MHz	35	2472 MHz		
8	2418 MHz	22	2446 MHz	36	2474 MHz		
9	2420 MHz	23	2448 MHz	37	2476 MHz		
10	2422 MHz	24	2450 MHz	38	2478 MHz		
11	2424 MHz	25	2452 MHz	39	2480 MHz		
12	2426 MHz	26	2454 MHz				
13	2428 MHz	27	2456 MHz				

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document is unlawful and offenders may be prosecuted to the fullest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



4.2 The Worst Test Modes and Channel Details

- 1. The EUT has been tested under operating condition.
- 2. Test program used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

RADIATED EMISSION TEST:

RADIATED EMISSION TEST (BELOW 1 GHz)								
MODE	AVAILABLE	TESTED	MODULATION	DATA RATE	ANTENNA			
INICIDE	CHANNEL	CHANNEL	WODULATION	(Mbps)	PORT			
Bluetooth LE 0 to 39 0,20,39 0		GFSK	1	MAIN				
RADIATED EMISSION TEST (ABOVE 1 GHz)								
	RADIA		N TEST (ABOVE	I GHZ)				
MODE	AVAILABLE	TESTED			ANTENNA			
MODE		TESTED	MODULATION		ANTENNA PORT			

Note:

The field strength of radiation emission was measured as EUT stand-up position (H mode) and lie down position (E1, E2 mode) for Bluetooth LE Transmitter for channel Low, Mid and High, the worst case E2 position was reported.

ANTENNA PORT CONDUCTED MEASUREMENT:

CONDUCTED TEST								
MODE	AVAILABLE	TESTED	MODULATION	DATA RATE	ANTENNA			
WICDL	CHANNEL CHANNEL MODOLATION		(Mbps)	PORT				
Bluetooth LE	0 to 39	0,20,39	GFSK	1	MAIN			

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained to so days only. 除非另有說明,此報告結果僅對測试之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



MEASUREMENT UNCERTAINTY 5

Test Items	Uncertainty
AC Power Line Conducted Emission	+/- 2.586 dB
Peak Output Power	+/- 0.84 dB
6dB Bandwidth	+/- 51.33 Hz
100 KHz Bandwidth Of Frequency Band Edges	+/- 0.84 dB
Peak Power Density	+/- 1.3 dB
Temperature	+/- 0.65 °C
Humidity	+/- 4.6 %
DC / AC Power Source	DC= +/- 0.13%, AC= +/- 0.2%

Radiated Spurious Emission:

Measurement uncertainty (Polarization : Vertical)	30MHz - 180MHz: +/- 3.37dB
	180MHz -417MHz: +/- 3.19dB
	0.417GHz-1GHz: +/- 3.19dB
	1GHz - 18GHz: +/- 4.04dB
	18GHz - 40GHz: +/- 4.04dB

	30MHz - 167MHz: +/- 4.22dB
Measurement uncertainty	167MHz -500MHz: +/- 3.44dB
(Polarization : Horizontal)	0.5GHz-1GHz: +/- 3.39dB
	1GHz - 18GHz: +/- 4.08dB
	18GHz - 40GHz: +/- 4.08dB

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

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document is unlawful and offenders may be prosecuted to the fullest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



CONDUCTED EMISSION TEST 6

6.1 **Standard Applicable:**

Frequency range within 150kHz to 30MHz shall not exceed the Limit table as below.

	Limits						
Frequency range	dB(uV)					
MHz	Quasi-peak	Average					
0.15 to 0.50	66 to 56	56 to 46					
0.50 to 5	56	46					
5 to 30	60	50					
Note							
1. The lower limit shall apply at the transition frequencies							

2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

6.2 Measurement Equipment Used:

Conducted Emission Test Site								
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.			
TYPE		NUMBER	NUMBER	CAL.				
EMI Test Receiver	R&S	ESCI 7	100950	12/12/2014	12/11/2015			
Coaxial Cables	N/A	N30N30-1042-150 cm	N/A	01/06/2015	01/07/2016			
LISN	Schwarzbeck	NSLK 8127	8127-648	06/09/2015	06/08/2016			
LISN	Rolf-Heine	NNB-2/16Z	99012	03/04/2015	03/03/2016			
Test Software	Farad	EZ-EMC	Ver. SGS-03A2	N.C.R.	N.C.R.			

6.3 EUT Setup:

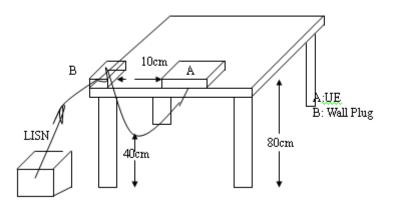
- 1. The conducted emission tests were performed in the test site, using the setup in accordance with the ANSI C63.10:2013.
- 2. The AC/DC Power adaptor of EUT was plug-in LISN. The EUT was placed flushed with the rear of the table.
- 3. The LISN was connected with 120Vac/60Hz power source.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

でいたいでは、 除非另有就明,此報告結果僅對測試之樣品負責,同時此樣品僅保留知天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms</u> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law SGS Taiwan Ltd.



6.4 Test SET-UP (Block Diagram of Configuration)



6.5 Measurement Procedure:

- 1. The EUT was placed on a table which is 0.8m above ground plan.
- 2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 3. Repeat above procedures until all phases of power being supplied by given UE are completed

6.6 Measurement Result:

The initial step in collecting conducted data is a spectrum analyzer peak scan of the measurement range. Significant peaks are then marked as shown on the following data page, and these signals are then quasi-peaked.

Note: Refer to next page for measurement data and plots. Note2: The * reveals the worst-case results that closet to the limit

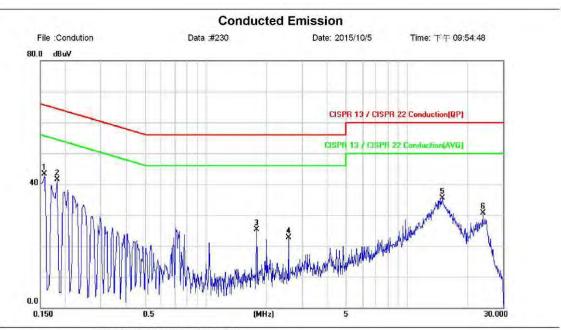
でいたいでは、 除非另有就明,此報告結果僅對測試之樣品負責,同時此樣品僅保留知天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms</u> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law SGS Taiwan Ltd.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only



AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode:	Operation mode		Test Date:	Oct. 06, 2015	
Temperature:	26	Humidity:	Test By:	Aken	
				Phase:	L1

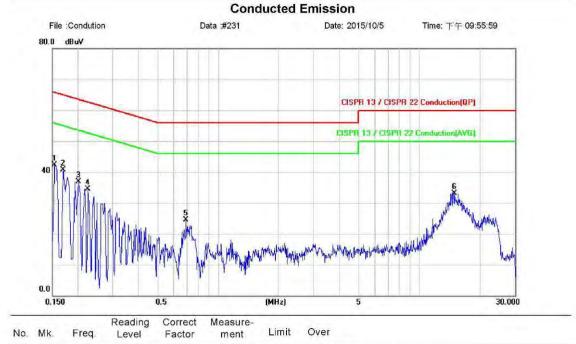


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1580	43.21	0.08	43.29	65.57	-22.28	peak	
2		0.1820	41.48	0.08	41.56	64.39	-22.83	peak	
3		1.7900	24.79	0.55	25.34	56.00	-30.66	peak	
4		2.5700	22.10	0.59	22.69	56.00	-33.31	peak	
5		14.9140	34.96	0.62	35.58	60.00	-24.42	peak	
6		23.8020	29.96	0.73	30.69	60.00	-29.31	peak	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有说明,此根告结果僅對測試之樣品負責,同時此樣品僅保留的天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or ap-reparatore of this document is unaveruent is unaveruent to any be prosecuted to the fulle at vertex of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.





No.	Mk.	Freq	Level	Factor	ment	Limit	Over			
	MH	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment	
1	*	0.1540	42.15	0.14	42.29	65.78	-23.49	peak		
2		0.1700	40.47	0.14	40.61	64.96	-24.35	peak		
3		0.2020	36.78	0.13	36.91	63.53	-26.62	peak		
4		0.2260	34.28	0.14	34.42	62.60	-28.18	peak		
5		0.6940	24.09	0.34	24.43	56.00	-31.57	peak		
6		15.0500	32.46	0.65	33.11	60.00	-26.89	peak		

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document is unlawful and offenders may be prosecuted to the fullest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



PEAK OUTPUT POWER MEASUREMENT 7

7.1 **Standard Applicable:**

For systems using digital modulation in the 2400-2483.5 MHz bands, the limit for peak output power is 1Watt.

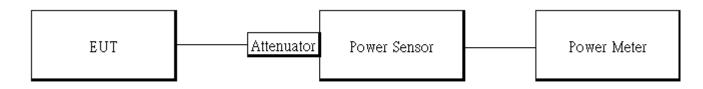
If the transmitting antenna of directional gain greater than 6dBi are used the peak output power form the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the Antenna exceeds 6dBi.

In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of Antenna exceeds 6dBi.

7.2 Measurement Equipment Used:

Conducted Emission Test Site								
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.			
TYPE		NUMBER	NUMBER	CAL.				
Spectrum Analyzer	Agilent	N9010A	MY53400256	10/15/2014	10/14/2015			
Power Meter	Anritsu	ML2496A	1326001	06/23/2015	06/22/2016			
Power Sensor	Anritsu	MA2411B	1315048	06/23/2015	06/22/2016			
Power Sensor	Anritsu	MA2411B	1315049	06/23/2015	06/22/2016			
Coaxial Cable 30cm	WOKEN	00100A1F1A195 C	RF01	12/19/2014	12/18/2015			
DC Block	PASTERNACK	PE8210	RF29	12/19/2014	12/18/2015			
Splitter	RF-LAMBAD	RFLT2W1G18G	RF35	12/19/2014	12/18/2015			
Attenuator	WOKEN	218FS-10	RF23	12/19/2014	12/18/2015			
DC Power Supply	Agilent	E3640A	MY53140006	05/04/2015	05/03/2016			

Test Set-up: 7.3



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

でいたいでは、 除非另有就明,此報告結果僅對測試之樣品負責,同時此樣品僅保留知天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms</u> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



7.4 Measurement Procedure:

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance V03r03.
- Remove the antenna from the EUT and then connect a low loss RF cable from the antenna. port to the power meter.

Power Meter:

It is used as the auxiliary test equipment to conduct the output power measurement.

- 4. Record the max. Reading as observed from Power Meter.
- 5. Repeat above procedures until all test default channel measured was complete.

Duty Factor:

	Duty Cycle	Duty Fator (dB)
Bluetooth LE	62.76%	2.02



Duty Cycle Factor: 10 * log (1/0.6276) = 2.02

でいたいでは、 除非另有就明,此報告結果僅對測試之樣品負責,同時此樣品僅保留知天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms</u> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



7.5 Measurement Result:

BT4.0 mode:

СН	Frequency (MHz)	Peak Power Output(dBm)	Required Limit
0	2402	-0.94	1 Watt = 30 dBm
20	2442	1.06	1 Watt = 30 dBm
39	2480	-2.01	1 Watt = 30 dBm

СН	Frequency (MHz)	Average Power Output(dBm)	Required Limit
0	2402	-3.35	1 Watt = 30 dBm
20	2442	-1.25	1 Watt = 30 dBm
39	2480	-4.36	1 Watt = 30 dBm

*Note: Measured by power meter, as cable loss+ Duty cycle factor that offsets on the power meter

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測试之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or ap-pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



6dB BANDWIDTH MEASUREMENT 8

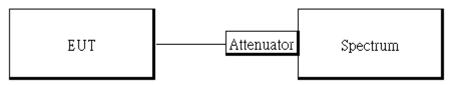
8.1 **Standard Applicable**

The minimum 6 dB bandwidth shall be at least 500 kHz.

8.2 Measurement Equipment Used

Conducted Emission Test Site							
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.		
TYPE		NUMBER	NUMBER	CAL.			
Spectrum Analyzer	Agilent	N9010A	MY53400256	10/15/2014	10/14/2015		
DC Block	PASTERNACK	PE8210	RF29	12/19/2014	12/18/2015		
Splitter	RF-LAMBAD	RFLT2W1G18 G	RF35	12/19/2014	12/18/2015		
Attenuator	WOKEN	218FS-10	RF23	12/19/2014	12/18/2015		

8.3 Test Set-up:



8.4 Measurement Procedure:

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance V03r03.
- 3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 4. For 6dB Bandwidth:

Set the spectrum analyzer as RBW=100 kHz, VBW= 3*RBW, Span = 5MHz, Detector=Peak, Sweep=auto.

5. Mark the peak frequency and –6dB (upper and lower) frequency.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

でいたいでは、 除非另有就明,此報告結果僅對測試之樣品負責,同時此樣品僅保留知天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms</u> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law SGS Taiwan Ltd.



8.5 Measurement Result:

BT4.0 mode

Frequency (MHz)	Bandwidth (MHz)	Bandwidth (MHz)	Result
2402	0.6635	> 0.5	PASS
2442	0.715	> 0.5	PASS
2480	0.6896	> 0.5	PASS

Note: Refer to next page for plots.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document is unlawful and offenders may be prosecuted to the fullest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



BT4.0 mode 6dB Band Width Test Data CH-Low



6dB Band Width Test Data CH-Mid



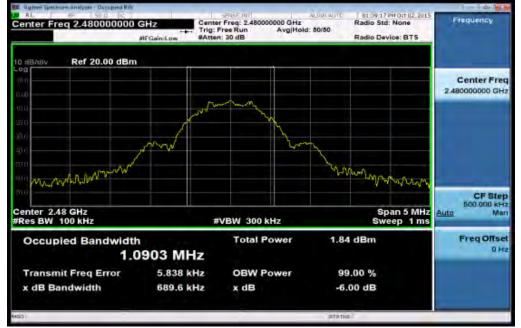
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report feiter only to the sample(s) tested and such sample(s) are relatined to so days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

GS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號



6dB Band Width Test Data CH-High



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Contention is stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are relative for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

GS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號



9 CONDUCTED BAND EDGES AND SPURIOUS EMISSION MEASUREMENT

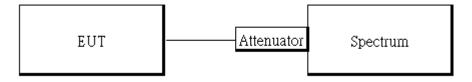
9.1 Standard Applicable

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. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

9.2 Measurement Equipment Used:

Conducted Emission Test Site							
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.		
TYPE		NUMBER	NUMBER	CAL.			
Spectrum Analyzer	Agilent	N9010A	MY53400256	10/15/2014	10/14/2015		
DC Block	PASTERNACK	PE8210	RF29	12/19/2014	12/18/2015		
Splitter	RF-LAMBAD	RFLT2W1G18 G	RF35	12/19/2014	12/18/2015		
Attenuator	WOKEN	218FS-10	RF23	12/19/2014	12/18/2015		

9.3 Test SET-UP:



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



9.4 Measurement Procedure

Conducted Band Edge:

- 1. To connect Antenna Port of EUT to Spectrum.
- 2. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance V03r03.
- 3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 4. Set start to edge frequency, and stop frequency of spectrum analyzer so as to encompass the spectrum to be examined.
- 5. Set the spectrum analyzer as RBW=100 kHz, VBW=300 kHz, Detector = Peak, Sweep = auto
- 6. Mark the highest reading of the emission as the reference level measurement.
- Set DL as the limit = reading on marker 1 20dBm
- 8. Marker on frequency, 2.3999GHz and 2.4836GHz, and examine shall 100 kHz immediately outside the authorized (2400~2483.5) be attenuated by 20dB at least relative to the maximum emission of power.
- 9. Repeat above procedures until all default test channel (low, middle, and high) was complete.

Conducted Spurious Emission:

- 1. To connect Antenna Port of EUT to Spectrum.
- 2. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance V03r03.
- 3. Set RBW = 100 kHz & VBW=300 kHz, Detector = Peak, Sweep = Auto
- 4. Allow trace to fully stabilize.
- 5. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.
- 6. Repeat above procedures until all default test channel measured were complete.

9.5 Measurement Result

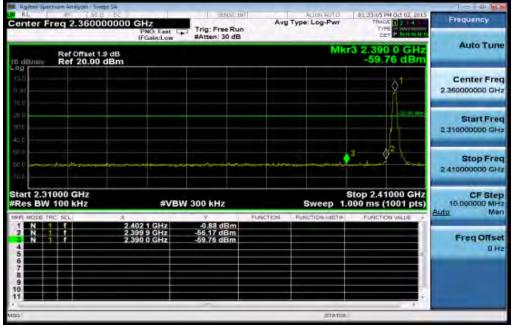
Note: Refer to next page spectrum analyzer data chart and tabular data sheets.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only

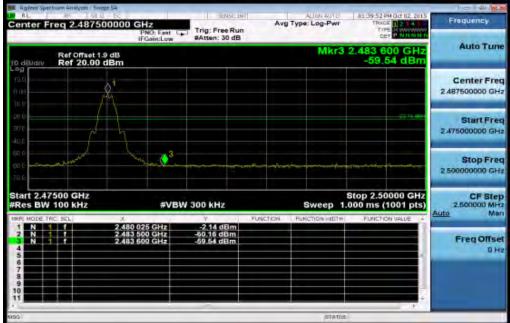
でいたいでは、 除非另有就明,此報告結果僅對測試之樣品負責,同時此樣品僅保留知天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms</u> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law SGS Taiwan Ltd.



BT4.0 mode **Band Edges Test Data CH-Low**



Band Edges Test Data CH-High

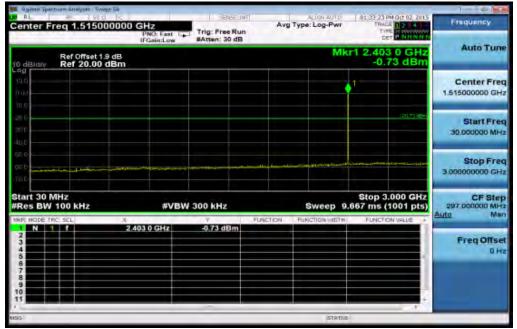


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

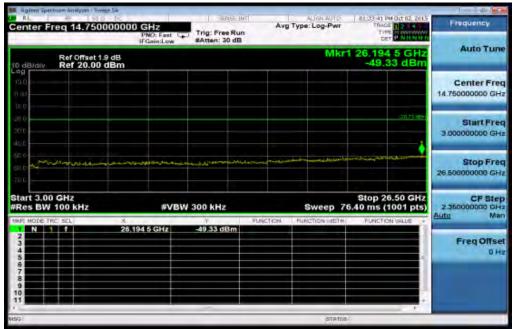
Unless otherwise stated the results shown in this test report feiter only to the sample(s) tested and such sample(s) are relatined to so days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

GS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號

Conducted Spurious Emission Measurement Result CH-Low 30MHz - 3GHz



CH-Low 3GHz – 26.5GHz



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report feiter only to the sample(s) tested and such sample(s) are relatined to so days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

GS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號



CH-Mid 30MHz - 3GHz

agien Spectrum Ann	lypes i Swept SA							
Center Freq 1.	515000000	GHZ PNO: Fast L	Trig: Free Run #Atten: 30 dB	Avg	Type: Log-Pwr	TRA	PM Oct 82, 2015	Frequency
O dBidey Ref	offset 1.9 dB 20.00 dBm	IF Galin, Low	PAtient St LD		M	cr1 2.44 0.	1 6 GHz 77 dBm	Auto Tun
.og 19.0 0.07						• ¹		Center Fre 1.515000000 GH
10.0 20.0 20.0							2921189	Start Fre
	والمتوافق المراجع والمعار سترور المحاري	Al and the second s		مى بەر يەر بەر يەر يەر يەر يەر يەر يەر يەر يەر يەر ي	بطلينين والموالية والمواري		فالإسلية	Stop Fre 3.00000000 GH
tart 30 MHz Res BW 100 k	Hz	#VBV	V 300 kHz	PUNICTION	Sweep 9	.667 ms	.000 GHz (1001 pts)	CF Str 297.000000 Mi Auto M
N 1 1 2 3 4 5 6 7	2.4	41 6 GHz	0.77 dBm					Freq Offs 0
8 9 10 11			~					
90					STATU	5.		

CH-Mid 3GHz – 26.5GHz

agient Spectrum Analyzer Sm	apt 54				0 0 0
Center Freq 14.750	PNO: Fast La	Trig: Free Run #Atten: 30 dB	Aug Type: Log-Pwr	01:37 49 PM Oct 02, 2015 TRACE 1 2 3 4	Frequency
Ref Offset 1		BAtten: 30 dB	Mki	1 26.312 0 GHz -49.23 dBm	Auto Tune
19.0) 0.07					Center Freq 14.75000000 GHz
10 dBidity Ref 20.00					Start Free 3.000000000 GHz
50.0 50.0 70.0	and the second	ىرىرامىرىغانومىيە ۋەتايار م _{ال} ىرىرىيە	and the second	and the second	Stop Frec 26.50000000 GH
Start 3.00 GHz #Res BW 100 kHz		300 kHz	Sweep 7	Stop 26.50 GHz 6.40 ms (1001 pts)	CF Step 2.350000000 GH: Auto Mar
1 N 1 7 2 3 4 5 6	26.312 0 GHz	-49,23 dBm			Freq Offset 0 Hz
7 8 9 10 11					
MSG			STATU	6	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document is unlawful and offenders may be prosecuted to the fullest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號 SGS Taiwan Ltd.



CH-High 30MHz – 3GHz

Agient Spectrum Analyzer i S		The strength of the strength o	constrainty with the strainty of	The second second	0 0 0
Center Freq 1.515	000000 GHz PNO: Fast L IF Gaint Low	Trig: Free Run	Aug Type: Log-Pwr	01.40.09 PM Oct 02, 2015 TRACE 12 3 4 1 TIPE DET 2 NH MIN	Frequency
D dBidly Ref Offset	1.9 dB		Mk	r1 2.480 3 GHz -2.07 dBm	Auto Tune
00 (50) (0)				¢t.	Center Fred 1.515000000 GH:
ος ού: οτ.				and the store	Start Free 30.000000 MH
0.0	and the second secon	a internet la procession de la constitución de la constitución de la constitución de la constitución de la cons	and the state of the	and the second	Stop Fre 3.00000000 GH
tart 30 MHz Res BW 100 kHz	#VBI	W 300 kHz	Sweep 9.	Stop 3.000 GHz .667 ms (1001 pts)	CF Ste 297.000000 MH <u>Auto</u> Ma
N 1 f 2 3 -	2,480 3 GHz	-2.07 dBm			Freq Offse 0 H
			STATUS	*	

CH- High 3GHz – 26.5GHz

Agient Spectrum Analyzes 1	Swept 54			and the second	0 0 0
Center Freq 14.75	0000000 GHz PNO: Fast	Trig: Free Run	Avg Type: Log-Pwr	81.46.28 PM Oct 82, 2015 TRACE 2 2 4 0 THE WARNER	Frequency
10 dB/div Ref 20.0	IFGain:Low	#Atten: 30 dB	Mkr	1 25.771 5 GHz -49.10 dBm	Auto Tune
19.0					Center Freq 14.75000000 GHz
10 diBudiy Ref 20.0					Start Freq 3.000000000 GHz
60.0 60.0	an han an haran managan an katan Pranayan.	and a state of the	and she wanted and a second	and an approximately shows	Stop Freq 26.50000000 GHz
Start 3.00 GHz #Res BW 100 kHz		W 300 kHz	Sweep 7	Stop 26.50 GHz 6.40 ms (1001 pts)	CF Step 2.35000000 GHa Auto Mar
1 N 1 7 2 3 4 5 6	25.771 5 GHz	-49.10 dBm			Freq Offsel 0 Hz
7 8 9 10 11					
wsg.			STATUS	1	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非务有或明,此根告结果僅對測試之樣品負責,同時此提品僅保留的日天。本報告未是体公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms</u> and <u>conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms</u> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document is advisued any be prosecuted to the fullest extent of the law. pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134 號



10 RADIATED BANDEDGE AND SPURIOUS EMISSION MEASUREMENT

10.1 Standard Applicable

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. In addition, radiated emissions which fall in the restricted bands must also comply with the §15.209 limit as below.

And according to §15.33(a) (1), for an intentional radiator operates below 10GHz, the frequency range of measurements: to the tenth harmonic of the highest fundamental frequency or to 40GHz, whichever is lower.

Frequency (MHz)	Field strength (microvolts/meter)	Distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	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.
- Emission level (dBµV/m) = 20 log Emission level (dBµV/m)

Chino Solution and Solution a tronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is frawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only



10.2 Measurement Equipment Used

966 Chamber						
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.	
ТҮРЕ		NUMBER	NUMBER	CAL.		
EMI Test Receiver	R&S	ESU 40	100363	04/09/2015	04/08/2016	
Loop Antenna	ETS-Lindgren	6502	00143303	12/09/2014	12/08/2015	
Broadband Antenna	TESEQ	CBL 6112D	35240	12/05/2014	12/04/2015	
Horn Antenna	ETS-Lindgren	3117	00143272	12/08/2014	12/07/2015	
Horn Antenna	ETS-Lindgren	3160-09	00117911	11/13/2014	11/12/2015	
Horn Antenna	ETS-Lindgren	3160-10	00117783	11/13/2014	11/12/2015	
Pre Amplifier	EMC Instruments	EMC330	980096	12/19/2014	12/18/2015	
Pre Amplifier	EMC Instruments	EMC001183 0	980199	12/19/2014	12/18/2015	
Pre Amplifier	R&S	SCU-18	10204	12/19/2014	12/18/2015	
Pre Amplifier	R&S	SCU-26	100780	12/19/2014	12/18/2015	
Coaxial Cable	Huber+Suhner	RG 214/U	966Rx 9K-30M	12/19/2014	12/18/2015	
Coaxial Cable	Huber+Suhner	RG 214/U SUCOFLEX 104	966Rx 30M-3G	12/19/2014	12/18/2015	
Coaxial Cable	Huber+Suhner	SUCOFLEX 104	966Rx 1G-18G	12/19/2014	12/18/2015	
Coaxial Cable	Huber+Suhner	mini 141-12 SUCOFLEX 104	966Rx 18G-40G	12/19/2014	12/18/2015	
Coaxial Cable	Huber+Suhner	SUCOFLEX 104	966Tx 30M-18G	12/19/2014	12/18/2015	
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	966Tx 18G-40G	12/19/2014	12/18/2015	
Attenuator	WOKEN	218FS-10	RF27	12/19/2014	12/18/2015	
Site NSA	SGS	966 Cham- ber C	SAC-C	03/04/2015	03/03/2016	
Site VSWR	SGS	966 Cham- ber C	SAC-C	03/04/2015	03/03/2016	
DC Power Supply	HOLA	DP-3003	D7070035	05/04/2015	05/03/2016	
Controller	MF	MF-7802	N/A	N.C.R.	N.C.R.	
Antenna Master	MF	N/A	N/A	N.C.R.	N.C.R.	
Turn Table	MF	N/A	N/A	N.C.R.	N.C.R.	
Test Software	World-Pallas	Dr. E	V 3.0 Lite	N.C.R.	N.C.R.	

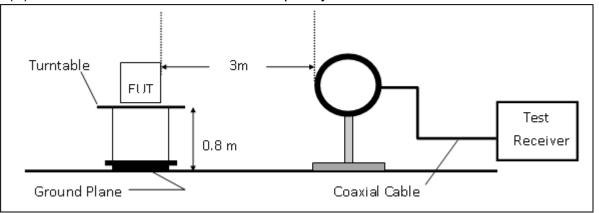
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測试之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or ap-pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

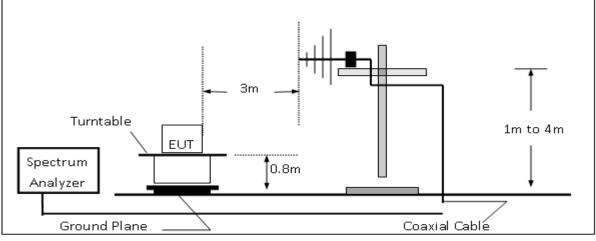


10.3 Test SET-UP

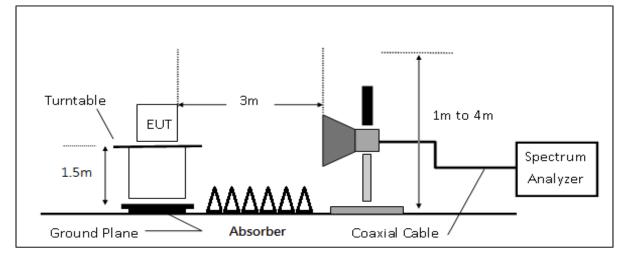
(A) Radiated Emission Test Set-UP Frequency Below 30MHz.



(B) Radiated Emission Test Set-Up, Frequency form 30MHz to 1000MHz



(C) Radiated Emission Test Set-UP Frequency Over 1 GHz



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless outletwise stated the results shown in this test report ferer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



10.4 Measurement Procedure

- 1. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance V03r03.
- The EUT was placed on a turn table with 0.8m for frequency< 1GHz and 0.8m for frequen-2. cy> 1GHz above ground plan.
- The turn table shall rotate 360 degrees to determine the position of maximum emission level. 3.
- EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the 4. highest emissions.
- Set the spectrum analyzer as RBW=120 kHz and VBW=300 kHz for Peak Detector (PK) 5. and Quasi-peak (QP) at frequency below 1 GHz.
- 6. Set the spectrum analyzer as RBW=1 MHz, VBW=3 MHz for Peak Detector at frequency above 1 GHz.
- 7. Set the spectrum analyzer as RBW=1 MHz, VBW=10 Hz (Duty cycle > 98%) or VBW \geq 1/T (Duty cycle < 98%) for Average Detector at frequency above 1 GHz.
- 8. When measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made "while keeping the antenna in the 'cone of radiation' from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response." is still within the 3dB illumination BW of the measurement antenna.
- 9. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 10. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. On spectrum, change spectrum mode in linear display mode, and reduce VBW = 10Hz if average reading is measured.
- 11. Repeat above procedures until all default test channel measured were complete.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only

Chino Solution and Solution a tronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is frawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



10.5 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS = RA + AF + CL - AG

Where	FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
	RA = Reading Amplitude	AG = Amplifier Gain
	AF = Antenna Factor	

Actual FS(dB μ V/m) = SPA. Reading level(dB μ V) + Factor(dB)

Factor(dB) = Antenna Factor(dB μ V/m) + Cable Loss(dB) – Pre_Amplifier Gain(dB)

Note :

"F": denotes Fundamental Frequency.; "H": denotes Harmonic Frequency.

"E" : denotes Band Edge Frequency. ; "S" : denotes Spurious Frequency.

10.6 Test Results of Radiated Spurious Emissions form 9 kHz to 30 MHz

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit per 15.31(o) was not reported.

10.7 Measurement Result:

Note: Refer to next page spectrum analyzer data chart and tabular data sheets.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only

でいたいでは、 除非另有就明,此報告結果僅對測試之樣品負責,同時此樣品僅保留知天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms</u> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Radiated Band Edge Measurement Result (BT4.0 mode)

Operation Mode : Fundamental Frequency : Operation Band : EUT Pol. :			2402 MHz BE CH LOW		Test Date : Temp. / Humi. : Test Engineer : Measurement Antenna Pol. :			25deg_C/57RH Pony Vertical	
Freq.	Note	Detector Mode	•	ctum g Level	Factor	Actual FS	Limit @3m	Margin	
MHz	F/H/E/S	PK/QP/AV	dBµV		dB	dBµV/m	dBµV/m	dB	
2390.00	Е	Peak	45	.91	6.62	52.53	74	-21.47	
2390.00	Е	Average	33	.39	6.62	40.01	54	-13.99	

Operation Mode :	BT4.0	Test Date :	
Fundamental Frequency :	2402 MHz	Temp. / Humi. :	25deg_C/57RH
Operation Band :	BE CH LOW	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol. :	Horizontal

Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Н	Peak	45.10	6.62	51.72	74	-22.28
2390.00	Н	Average	33.35	6.62	39.97	54	-14.03

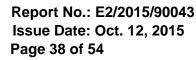
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測试之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or ap-pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



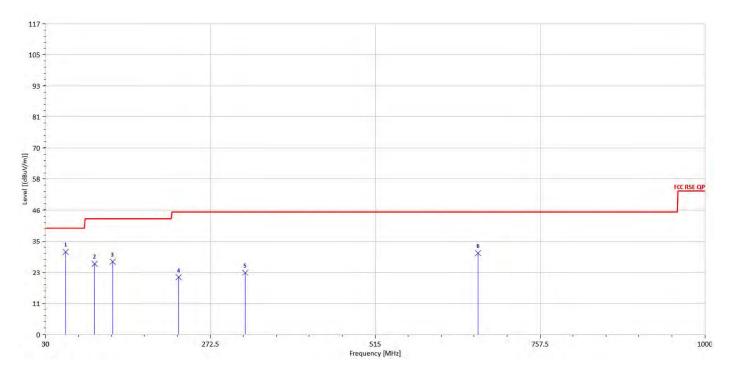
Fundamental Frequency: 2480		BE CH		Test Date : Temp. / Humi. : H Test Engineer : Measurement Antenna Pol. :		25deg_C/57RH Pony Vertical		
Freq. MHz 2483.50 2483.50	Note F/H/E/S E E	Detector Mode PK/QP/AV Peak Average	Readin dB 51	ctum ng Level 8µV .29 .98	Factor dB 6.96 6.96	Actual FS dBµV/m 58.26 49.94	Limit @3m dBµV/m 74 54	Margin dB -15.74 -4.06
Operation N Fundament Operation E EUT Pol. :	al Frequenc	BT4.0 y : 2480 M BE CH E2		Test Da Temp. / Test En Measure	Humi. :	enna Pol. :	25 deg_C Pony Horizonta	
Freq. MHz 2483.50 2483.50	Note F/H/E/S E E	Detector Mode PK/QP/AV Peak Average	Readin dB 50	ctum ng Level 8µ∨ .07 .66	Factor dB 6.96 6.96	Actual FS dBµV/m 57.03 48.62	Limit @3m dBµV/m 74 54	Margin dB -16.97 -5.38

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Radiated Spurious Emission Measurement Result (BT4.0 mode) For Frequency form 30MHz to 1000MHz

Operation Mode :	BT4.0	Test Date :	
Fundamental Frequency :	2402 MHz	Temp. / Humi. :	25deg_C/57RH
Operation Band :	Tx CH LOW	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol.:	Vertical



Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
60.07	S	Peak	59.52	-28.50	31.02	40	-8.98
102.75	S	Peak	49.97	-23.39	26.58	43.5	-16.92
128.94	S	Peak	48.72	-21.34	27.38	43.5	-16.12
225.94	S	Peak	44.03	-22.60	21.43	46	-24.57
323.91	S	Peak	41.78	-18.53	23.25	46	-22.75
666.32	S	Peak	42.22	-11.65	30.56	46	-15.44

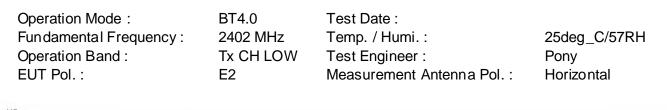
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

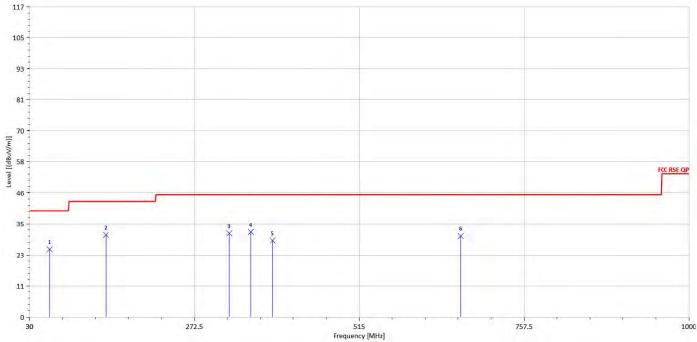
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document is unlawful and offenders may be prosecuted to the fullest extent of the law pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號



Report No.: E2/2015/90043 Issue Date: Oct. 12, 2015 Page 39 of 54



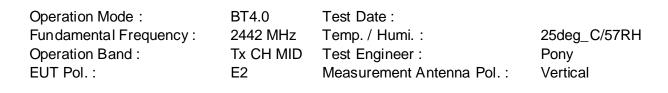


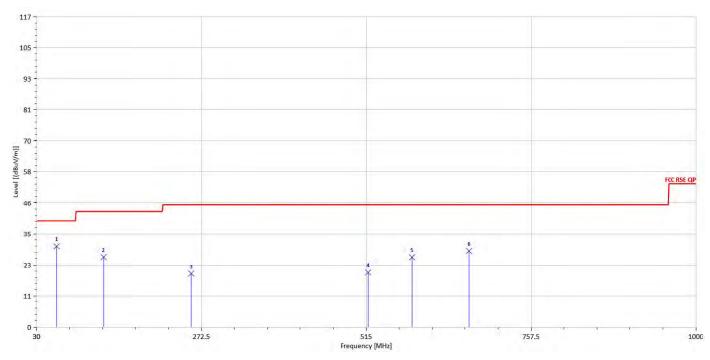
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
60.07	S	Peak	54.02	-28.50	25.53	40	-14.48
142.52	S	Peak	52.85	-21.92	30.93	43.5	-12.57
323.91	S	Peak	50.02	-18.53	31.49	46	-14.51
355.92	S	Peak	49.29	-17.29	32.00	46	-14.00
387.93	S	Peak	45.10	-16.28	28.82	46	-17.18
664.38	S	Peak	42.12	-11.66	30.46	46	-15.54

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Report No.: E2/2015/90043 Issue Date: Oct. 12, 2015 Page 40 of 54



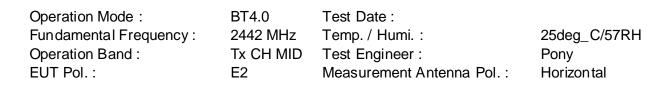


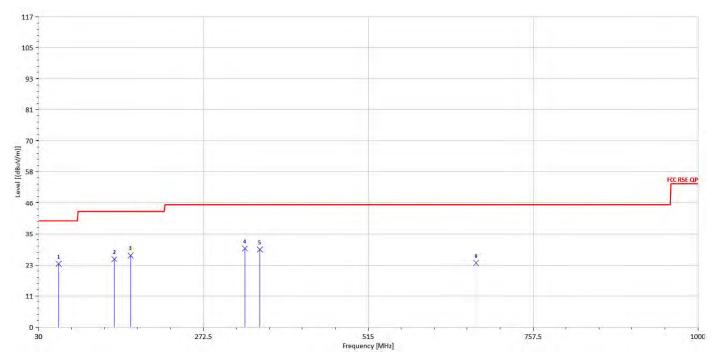
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
60.07	S	Peak	58.86	-28.50	30.36	40	-9.64
128.94	S	Peak	47.67	-21.34	26.33	43.5	-17.17
257.95	S	Peak	39.65	-19.57	20.09	46	-25.91
517.91	S	Peak	34.10	-13.60	20.49	46	-25.51
582.90	S	Peak	38.75	-12.45	26.30	46	-19.70
666.32	S	Peak	40.27	-11.65	28.62	46	-17.38

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Report No.: E2/2015/90043 Issue Date: Oct. 12, 2015 Page 41 of 54



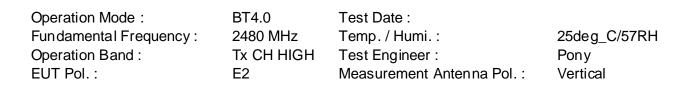


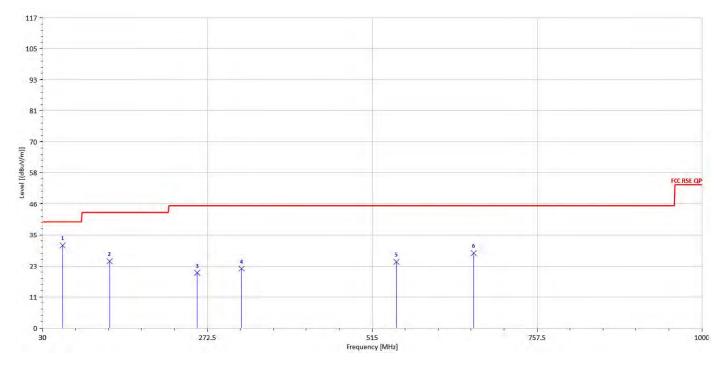
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
60.07	S	Peak	52.34	-28.50	23.84	40	-16.16
141.55	S	Peak	47.40	-21.81	25.59	43.5	-17.91
165.80	S	Peak	50.48	-23.56	26.92	43.5	-16.58
333.61	S	Peak	47.68	-18.12	29.56	46	-16.44
355.92	S	Peak	46.47	-17.29	29.18	46	-16.82
674.08	S	Peak	35.69	-11.50	24.19	46	-21.81

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Report No.: E2/2015/90043 Issue Date: Oct. 12, 2015 Page 42 of 54



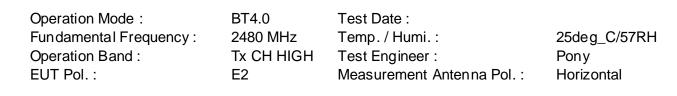


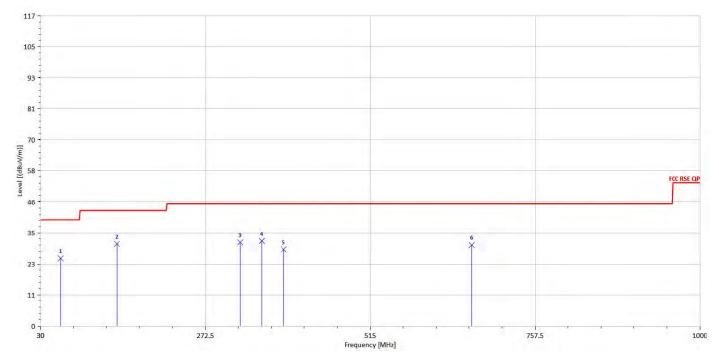
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
60.07	S	Peak	59.58	-28.50	31.08	40	-8.92
128.94	S	Peak	46.52	-21.34	25.18	43.5	-18.32
257.95	S	Peak	40.30	-19.57	20.73	46	-25.27
322.94	S	Peak	40.92	-18.55	22.37	46	-23.63
550.89	S	Peak	38.22	-13.24	24.98	46	-21.02
664.38	S	Peak	39.87	-11.66	28.20	46	-17.80

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Report No.: E2/2015/90043 Issue Date: Oct. 12, 2015 Page 43 of 54





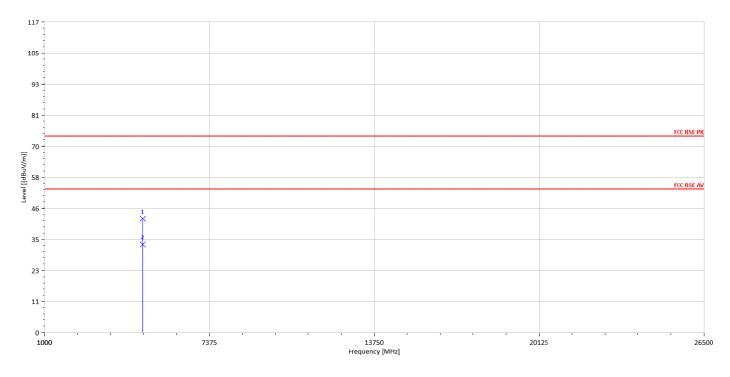
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
59.10	S	Peak	52.10	-28.23	23.87	40	-16.13
156.10	S	Peak	50.72	-22.90	27.81	43.5	-15.69
226.91	S	Peak	50.59	-22.53	28.06	46	-17.94
333.61	S	Peak	48.22	-18.12	30.10	46	-15.90
355.92	S	Peak	48.28	-17.29	30.99	46	-15.01
674.08	S	Peak	35.34	-11.50	23.84	46	-22.16

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Radiated Spurious Emission Measurement Result (BT4.0 mode) For Frequency above 1GHz

Operation Mode :	BT4.0	Test Date :	
Fundamental Frequency :	2402 MHz	Temp. / Humi. :	25deg_C/57RH
Operation Band :	Tx CH LOW	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol.:	Vertical



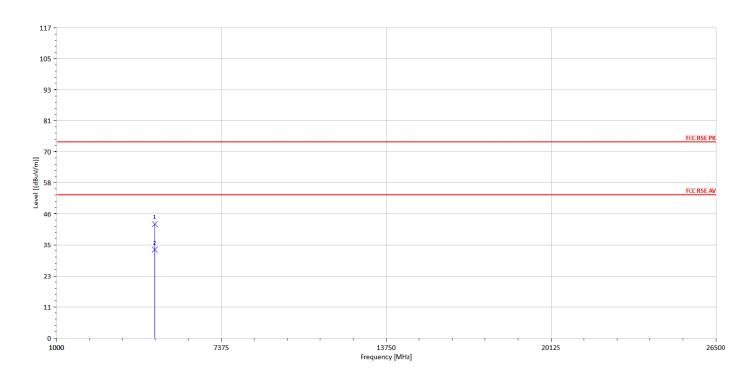
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4804.00	Н	Peak	31.95	10.98	42.92	74	-31.08
4804.00	Н	Average	22.25	10.98	33.23	54	-20.77

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Report No.: E2/2015/90043 Issue Date: Oct. 12, 2015 Page 45 of 54

Operation Mode :	BT4.0	Test Date :	
Fundamental Frequency :	2402 MHz	Temp. / Humi. :	25deg_C/57RH
Operation Band :	Tx CH LOW	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol.:	Horizontal



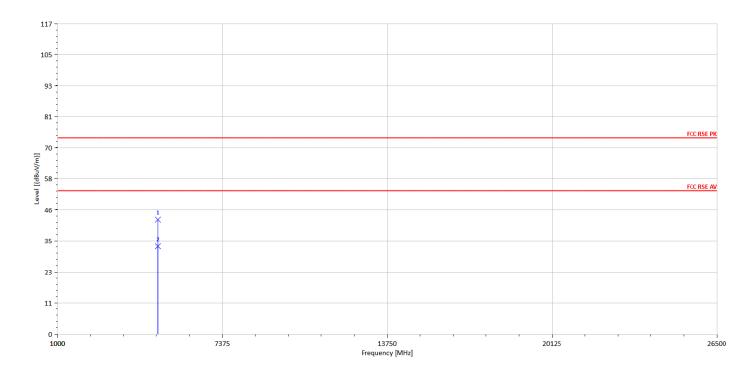
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4804.00	н	Peak	31.90	10.98	42.87	74	-31.13
4804.00	Н	Average	22.25	10.98	33.23	54	-20.77

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Report No.: E2/2015/90043 Issue Date: Oct. 12, 2015 Page 46 of 54

Operation Mode :	BT4.0	Test Date :	
Fundamental Frequency :	2442 MHz	Temp. / Humi. :	25deg_C/57RH
Operation Band :	Tx CH MID	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol.:	Vertical



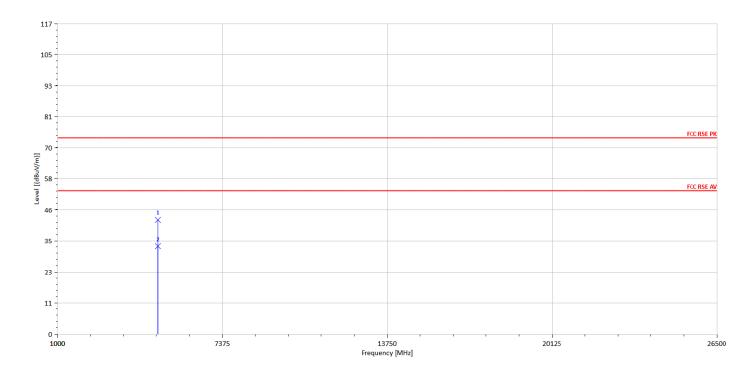
Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4884.00	Н	Peak	32.15	10.92	43.07	74	-30.93
4884.00	Н	Average	22.09	10.92	33.01	54	-20.99

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Report No.: E2/2015/90043 Issue Date: Oct. 12, 2015 Page 47 of 54

Operation Mode :	BT4.0	Test Date :	
Fundamental Frequency:	2442 MHz	Temp. / Humi. :	25deg_C/57RH
Operation Band :	Tx CH MID	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol.:	Horizontal



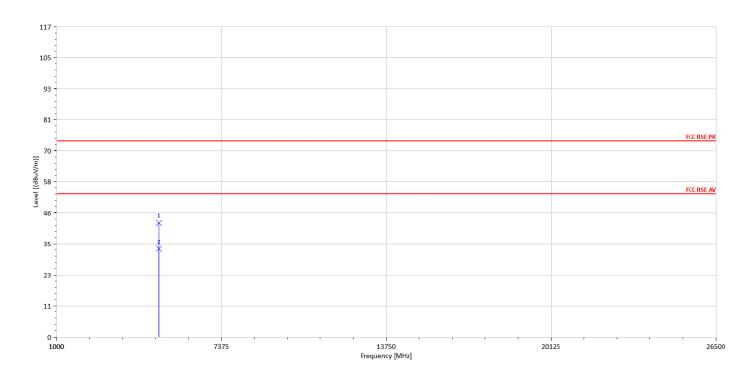
Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4884.00	Н	Peak	32.04	10.92	42.96	74	-31.04
4884.00	Н	Average	22.11	10.92	33.03	54	-20.97

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Report No.: E2/2015/90043 Issue Date: Oct. 12, 2015 Page 48 of 54

Operation Mode :	BT4.0	Test Date :	
Fundamental Frequency :	2480 MHz	Temp. / Humi. :	25deg_C/57RH
Operation Band :	Tx CH HIGH	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol.:	Vertical



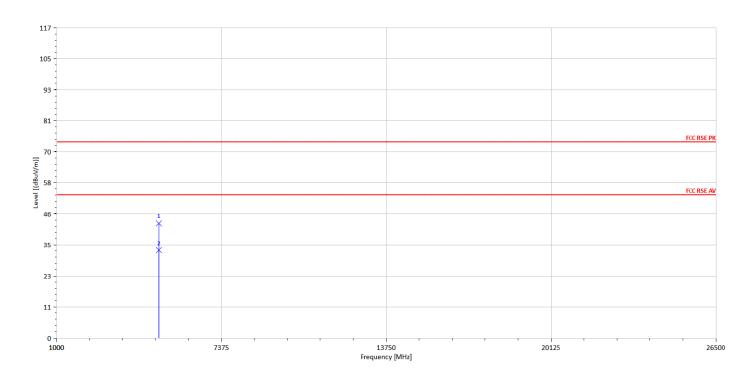
Freq.	Note	Detector	Spectum	Factor	Actual	Limit	Margin
		Mode	Reading Level		FS	@3m	
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4960.00	Н	Peak	31.99	10.99	42.99	74	-31.01
4960.00	Н	Average	22.21	10.99	33.20	54	-20.80

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Report No.: E2/2015/90043 Issue Date: Oct. 12, 2015 Page 49 of 54

Operation Mode :	BT4.0	Test Date :	
Fundamental Frequency :	2480 MHz	Temp. / Humi. :	25deg_C/57RH
Operation Band :	Tx CH HIGH	Test Engineer :	Pony
EUT Pol. :	E2	Measurement Antenna Pol.:	Horizontal



Freq.	Note	Detector Mode	Spectum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	F/H/E/S	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4960.00	н	Peak	32.17	10.99	43.16	74	-30.84
4960.00	Н	Average	22.08	10.99	33.07	54	-20.93

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



11 PEAK POWER SPECTRAL DENSITY

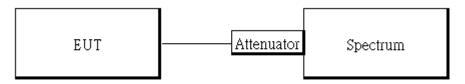
11.1 Standard Applicable:

The power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3 kHz band during any time interval of continuous transmission.

11.2 Measurement Equipment Used:

Conducted Emission Test Site								
EQUIPMENT	EQUIPMENT MFR MODEL SERIAL				CAL DUE.			
TYPE		NUMBER	NUMBER	CAL.				
Spectrum Analyzer	Agilent	N9010A	MY53400256	10/15/2014	10/14/2015			
DC Block	PASTERNACK	PE8210	RF29	12/19/2014	12/18/2015			
Splitter	RF-LAMBAD	RFLT2W1G18 G	RF35	12/19/2014	12/18/2015			
Attenuator	WOKEN	218FS-10	RF23	12/19/2014	12/18/2015			

11.3 Test Set-up:



11.4 Measurement Procedure:

- 1. Set analyzer center frequency to DTS channel center frequency.
- 2. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance V03r03.
- 3. Set the span to 1.5 times the DTS channel bandwidth.
- 4. Set the RBW = 3 kHz.
- 5. Set the VBW = 10 kHz.
- 6. Detector = peak.
- 7. Sweep time = auto couple.
- 8. Trace mode = max hold.
- 9. Allow trace to fully stabilize.
- 10. Use the peak marker function to determine the maximum amplitude level.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only

でいたいでは、 除非另有就明,此報告結果僅對測試之樣品負責,同時此樣品僅保留知天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms</u> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



11.5 Measurement Result:

BT4.0 mode

Frequency (MHz)	RF Power Density (dBm)	Maximum Limit (dBm)	Result
2402	-15.59	8	PASS
2442	-14.06	8	PASS
2480	-16.81	8	PASS

Note: Refer to next page for plots.

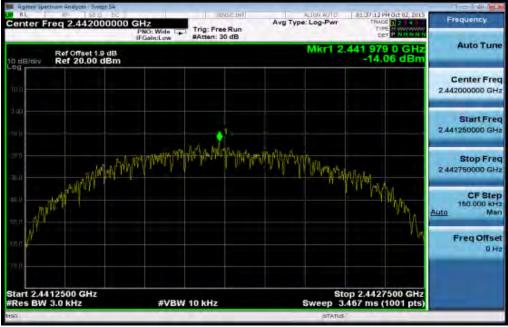
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



BT4.0 mode Power Spectral Density Test Plot (CH-Low)



Power Spectral Density Test Plot (CH-Mid)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report feiter only to the sample(s) tested and such sample(s) are relatined to so days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

GS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號



Power Spectral Density Test Plot (CH-High)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Contention is stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are relative for 90 days only. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

GS Taiwan Ltd. No.134,WuKungRoad,NewTaipeiIndustrialPark,WukuDistrict,NewTaipeiCity,Taiwan24803/新北市五股區新北產業園區五工路 134號



12 ANTENNA REQUIREMENT

12.1 Standard Applicable:

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

If the transmitting antenna is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi.

In case of point-to-point operation, the power shall be reduced by the one dB for every 3 dB that the directional gain of antenna exceeds 6dBi.

12.2 Antenna Connected Construction:

An embedded-in antenna design is used.

The antenna has no consideration of replacement. Please see EUT photo and antenna spec. for details.

The antenna gain is less than 6dBi. Therefore, it is not necessary to reduce maximum output power limit.

~ End of Report ~

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

でいたいでは、 除非另有就明,此報告結果僅對測試之樣品負責,同時此樣品僅保留知天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms</u> e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law