

No. 1 Workshop, M-10, Middle section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057

 Telephone:
 +86 (0) 755 2601 2053

 Fax:
 +86 (0) 755 2671 0594

 Email:
 ee.shenzhen@sgs.com

Report No.: SZEM141100637201 Page: 1 of 53

FCC REPORT

Application No:	SZEM1411006372HR		
Applicant:	BAK USA LLC		
Manufacturer/ Factory:	BAK USA LLC		
Product Name:	Tablet PC		
Model No.(EUT):	BAK BOARD 3G		
Trade Mark:	ВАК		
FCC ID:	2AEY7-BBG001		
Standards:	47 CFR Part 15, Subpart C (2014)		
Date of Receipt:	2014-11-25		
Date of Test:	2015-01-26 to 2015-02-02		
Date of Issue:	2015-08-03		
Test Result:	PASS *		

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

Authorized Signature:



Jack Zhang EMC Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. All test results in this report can be traceable to National or International Standards.



Report No.: SZEM141100637201 Page: 2 of 53

2 Version

Revision Record					
Version	Chapter	Date	Modifier	Remark	
00		2015-08-03		Original	

Authorized for issue by:		
Tested By	Eric Fu (Eric Fu) /Project Engineer	2015-02-02 Date
Prepared By	(Linlin Lv)/Clerk	2015-02-10
Checked By	Chris-3hong (Chris Zhong)/Reviewer	2015-06-23

[&]quot;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. 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.: SZEM141100637201 Page: 3 of 53

3 Test Summary

Test Item	Test Requirement	Test method	Result
Antenna Requirement	47 CFR Part 15, Subpart C Section 15.203/15.247 (c)	ANSI C63.10 2009	PASS
AC Power Line Conducted Emission	47 CFR Part 15, Subpart C Section 15.207	ANSI C63.10 2009	PASS
Conducted Peak Output Power	47 CFR Part 15, Subpart C Section 15.247 (b)(3)	KDB558074 D01 v03r02	PASS
6dB Occupied Bandwidth	47 CFR Part 15, Subpart C Section 15.247 (a)(2)	KDB558074 D01 v03r02	PASS
Power Spectral Density	47 CFR Part 15, Subpart C Section 15.247 (e)	KDB558074 D01 v03r02	PASS
Band-edge for RF Conducted Emissions	47 CFR Part 15, Subpart C Section 15.247(d)	KDB558074 D01 v03r02	PASS
RF Conducted Spurious Emissions	47 CFR Part 15, Subpart C Section 15.247(d)	KDB558074 D01 v03r02	PASS
Radiated Spurious Emissions	47 CFR Part 15, Subpart C Section 15.205/15.209	ANSI C63.10 2009	PASS
Restricted bands around fundamental frequency (Radiated Emission)	47 CFR Part 15, Subpart C Section 15.205/15.209	ANSI C63.10 2009	PASS

[&]quot;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. 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.: SZEM141100637201 Page: 4 of 53

4 Contents

			-
1	CO	VER PAGE	1
2	VE	RSION	2
3	TE	ST SUMMARY	3
4		DITENTS	-
-		NERAL INFORMATION	
5	GE		
	5.1	CLIENT INFORMATION	-
	5.2 5.3	GENERAL DESCRIPTION OF EUT	-
	5.4	DESCRIPTION OF SUPPORT UNITS	
	5.5	TEST LOCATION	7
	5.6	TEST FACILITY	
	5.7 5.8	DEVIATION FROM STANDARDS	
	5.9	OTHER INFORMATION REQUESTED BY THE CUSTOMER	
	5.10	EQUIPMENT LIST	
6	TE	ST RESULTS AND MEASUREMENT DATA	12
	6.1	ANTENNA REQUIREMENT	12
	6.2	CONDUCTED EMISSIONS	
	6.3	CONDUCTED PEAK OUTPUT POWER	
	6.4 6.5	6dB Occupy Bandwidth Power Spectral Density	-
	6.6	BAND-EDGE FOR RF CONDUCTED EMISSIONS	-
	6.7	SPURIOUS RF CONDUCTED EMISSIONS	
	6.8	RADIATED SPURIOUS EMISSION	
	6.8 6.8		
	6.9	RESTRICTED BANDS AROUND FUNDAMENTAL FREQUENCY	
7	PH	OTOGRAPHS - EUT TEST SETUP	
•			
	7.1 7.2	RADIATED EMISSION RADIATED SPURIOUS EMISSION	
	7.2	Conducted Emission	
8	РН	OTOGRAPHS - EUT CONSTRUCTIONAL DETAILS	
-			



Report No.: SZEM141100637201 Page: 5 of 53

5 General Information

5.1 Client Information

Applicant:	BAK USA LLC
Address of Applicant:	425 Michigan Avenue, Buffalo, New York 14203, USA
Manufacturer:	BAK USA LLC
Address of Manufacturer:	425 Michigan Avenue, Buffalo, New York 14203, USA
Factory:	BAK USA LLC
Address of Factory:	425 Michigan Avenue, Buffalo, New York 14203, USA

5.2 General Description of EUT

Product Name:	Tablet PC
Model No.:	BAK BOARD 3G
Trade mark:	ВАК
Frequency Range:	2402MHz to 2480MHz
Bluetooth Version:	V4.0
	This test report is for BLE mode
Modulation Type:	GFSK
Number of Channels:	40
Hopping Channel Type: Adaptive Frequency Hopping systems	
Sample Type:	Portable production
Test Software of EUT:	*#*#3646633#*#* (manufacturer declare)
EUT Function:	Tablet PC
Antenna Type:	integral
Antenna Gain:	-1.1 dBi
Adapter:	MODEL:KA23-0502000EUU INPUT:100-240VAC 50/60Hz 0.35A OUTPUT:5V=2000mA
Battery:	DC 3.7V 3600 mA (Li-on Rechargeable Battery)

[&]quot;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. 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.: SZEM141100637201 Page: 6 of 53

Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2402MHz	11	2422MHz	21	2442MHz	31	2462MHz
2	2404MHz	12	2424MHz	22	2444MHz	32	2464MHz
3	2406MHz	13	2426MHz	23	2446MHz	33	2466MHz
4	2408MHz	14	2428MHz	24	2448MHz	34	2468MHz
5	2410MHz	15	2430MHz	25	2450MHz	35	2470MHz
6	2412MHz	16	2432MHz	26	2452MHz	36	2472MHz
7	2414MHz	17	2434MHz	27	2454MHz	37	2474MHz
8	2416MHz	18	2436MHz	28	2456MHz	38	2476MHz
9	2418MHz	19	2438MHz	29	2458MHz	39	2478MHz
10	2420MHz	20	2440MHz	30	2460MHz	40	2480MHz

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Channel	Frequency	
The Lowest channel	2402MHz	
The Middle channel	2440MHz	
The Highest channel	2480MHz	



Report No.: SZEM141100637201 Page: 7 of 53

5.3 Test Environment

Operating Environment:		
Temperature:	25.0 °C	
Humidity:	53 % RH	
Atmospheric Pressure:	1015mbar	

5.4 Description of Support Units

The EUT has been tested independent unit.

5.5 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch E&E Lab,

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594 No tests were sub-contracted.



Report No.: SZEM141100637201 Page: 8 of 53

5.6 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• CNAS (No. CNAS L2929)

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

• VCCI

The 10m Semi-anechoic chamber and Shielded Room (7.5m x 4.0m x 3.0m) of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-823, R-4188, T-1153 and C-2383 respectively.

• FCC – Registration No.: 556682

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 556682.

Industry Canada (IC)

Two 3m Semi-anechoic chambers of SGS-CSTC Standards Technical Services Co., Ltd. have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1 & 4620C-2.

5.7 Deviation from Standards

None.

5.8 Abnormalities from Standard Conditions

None.

5.9 Other Information Requested by the Customer

None.





Report No.: SZEM141100637201 Page: 9 of 53

5.10 Equipment List

	Conducted Emission						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Due date (yyyy-mm-dd)		
1	Shielding Room	ZhongYu Electron	GB-88	SEL0042	2015-06-10		
2	LISN	Rohde & Schwarz	ENV216	SEL0152	2015-10-24		
3	LISN	ETS-LINDGREN	3816/2	SEL0021	2015-05-16		
4	8 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN- T8-02	SEL0162	2015-08-30		
5	4 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN- T4-02	SEL0163	2015-08-30		
6	2 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN- T2-02	SEL0164	2015-08-30		
7	EMI Test Receiver	Rohde & Schwarz	ESCI	SEL0022	2015-05-16		
8	Coaxial Cable	SGS	N/A	SEL0025	2015-05-29		
9	DC Power Supply	Zhao Xin	RXN-305D	SEL0117	2015-10-24		
10	Humidity/ Temperature Indicator	Shanhai Qixiang	ZJ1-2B	SEL0103	2015-10-24		
11	Barometer	Chang Chun	DYM3	SEL0088	2015-05-16		



Report No.: SZEM141100637201 Page: 10 of 53

	RE in Chamber						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Due date (yyyy-mm-dd)		
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEL0017	2015-06-10		
2	EMI Test Receiver	Agilent Technologies	N9038A	SEL0312	2015-09-16		
3	EMI Test software	AUDIX	E3	SEL0050	N/A		
4	BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEL0015	2015-10-24		
5	Double-ridged horn (1-18GHz)	ETS-LINDGREN	3117	SEL0006	2015-10-24		
6	Horn Antenna (18-26GHz)	ETS-LINDGREN	3160	SEL0076	2015-10-24		
7	Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEL0053	2015-05-16		
8	Pre-Amplifier (0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	SEL0168	2015-10-24		
9	Coaxial cable	SGS	N/A	SEL0027	2015-05-29		
10	Coaxial cable	SGS	N/A	SEL0189	2015-05-29		
11	Coaxial cable	SGS	N/A	SEL0121	2015-05-29		
12	Coaxial cable	SGS	N/A	SEL0178	2015-05-29		
13	Band filter	Amindeon	82346	SEL0094	2015-05-16		
14	Barometer	Chang Chun	DYM3	SEL0088	2015-05-16		
15	DC Power Supply	Zhao Xin	RXN-305D	SEL0117	2015-10-24		
16	Humidity/ Temperature Indicator	Shanhai Qixiang	ZJ1-2B	SEL0103	2015-10-24		
17	Signal Generator (10M-27GHz)	Rohde & Schwarz	SMR27	SEL0067	2015-05-16		
18	Signal Generator	Rohde & Schwarz	SMY01	SEL0155	2015-10-24		
19	Loop Antenna	Beijing Daze	ZN30401	SEL0203	2015-06-04		

[&]quot;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. 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.: SZEM141100637201 Page: 11 of 53

	RF connected test					
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Due date (yyyy-mm-dd)	
1	DC Power Supply	Zhao Xin	RXN-305D	SEL0117	2015-10-24	
2	Humidity/ Temperature Indicator	HYGRO	ZJ1-2B	SEL0033	2015-10-24	
3	Spectrum Analyzer	Rohde & Schwarz	FSP	SEL0154	2015-10-24	
4	Coaxial cable	SGS	N/A	SEL0178	2015-05-29	
5	Coaxial cable	SGS	N/A	SEL0179	2015-05-29	
6	Barometer	ChangChun	DYM3	SEL0088	2015-05-16	
7	Signal Generator	Rohde & Schwarz	SML03	SEL0068	2015-05-16	
8	Band filter	amideon	82346	SEL0094	2015-05-16	
9	POWER METER	R & S	NRVS	SEL0144	2015-10-24	
10	Attenuator	Beijin feihang taida	TST-2-6dB	SEL0205	2015-05-16	
11	Power Divider(splitter)	Agilent Technologies	11636B	SEL0130	2015-10-24	

Note: The calibration interval is one year, all the instruments are valid.

[&]quot;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. 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.: SZEM141100637201 Page: 12 of 53

Test results and Measurement Data 6

6.1 Antenna Requirement

Standard requirement: 47 CFR Part 15C Section 15.203 /247(c)

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

EUT Antenna:



The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is -1.1dBi.





Report No.: SZEM141100637201 Page: 13 of 53

I C63.10: 2009 Hz to 30MHz requency range (MHz) 0.15-0.5 0.5-5	Limit (d Quasi-peak 66 to 56*	BuV) Average	
requency range (MHz) 0.15-0.5	Quasi-peak	<i>.</i>	[
0.15-0.5	Quasi-peak	<i>.</i>	
0.15-0.5	-	Average	1
	66 to 56*	/ e. uge	
0.5-5		56 to 46*	
	56	46	
5-30	60	50	
creases with the logarithn	n of the frequency.		
0.5-5 56 46 5-30 60 50 * Decreases with the logarithm of the frequency. 1) The mains terminal disturbance voltage test was conducted in a room. 2) The EUT was connected to AC power source through a LISN 1 (L Impedance Stabilization Network) which provides a 50Ω/50µH + 5 impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect mult power cables to a single LISN provided the rating of the LISN was exceeded. 3) The tabletop EUT was placed upon a non-metallic table 0.8m abo ground reference plane. And for floor-standing arrangement, the E placed on the horizontal ground reference plane. 4) The test was performed with a vertical ground reference plane. The of the EUT shall be 0.4 m from the vertical ground reference plane. The unit was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary unit under test and bonded to a ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units a set was between the closest points of the LISN 1 and the EUT. All other units a set was between the closest points of the LISN 1 and the EUT. All other units a set was between the closest points of the LISN 1 and the EUT.		bugh a LISN 1 (Line a $50\Omega/50\mu$ H + 5Ω line the EUT were d to the ground or the unit being I to connect multiple of the LISN was not c table 0.8m above the rangement, the EUT erence plane. The read d reference plane. The ehorizontal ground om the boundary of the plane for LISNs his distance was EUT. All other units of 0.8 m from the LISN 2 e positions of	near ne was ar ne he 0f 2.
	npedance Stabilization N npedance. The power cal onnected to a second LIS eference plane in the sam neasured. A multiple sock ower cables to a single L xceeded. he tabletop EUT was place round reference plane. A laced on the horizontal gr he test was performed wi f the EUT shall be 0.4 m ertical ground reference p eference plane. The LISN nit under test and bonded nounted on top of the grou etween the closest points and EUT and associated en order to find the maximum	npedance Stabilization Network) which provides npedance. The power cables of all other units of onnected to a second LISN 2, which was bonded aference plane in the same way as the LISN 1 for neasured. A multiple socket outlet strip was used ower cables to a single LISN provided the rating xceeded. The tabletop EUT was placed upon a non-metalling round reference plane. And for floor-standing and laced on the horizontal ground reference plane, the test was performed with a vertical ground reference f the EUT shall be 0.4 m from the vertical ground reference plane. The LISN 1 was placed 0.8 m from it under test and bonded to a ground reference pounted on top of the ground reference plane. The tween the closest points of the LISN 1 and the ne EUT and associated equipment was at least 0 order to find the maximum emission, the relative	npedance Stabilization Network) which provides a $50\Omega/50\mu$ H + 5Ω line inpedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground efference plane in the same way as the LISN 1 for the unit being neasured. A multiple socket outlet strip was used to connect multiple ower cables to a single LISN provided the rating of the LISN was not exceeded. The tabletop EUT was placed upon a non-metallic table 0.8m above the round reference plane. And for floor-standing arrangement, the EUT laced on the horizontal ground reference plane, the test was performed with a vertical ground reference plane. The re- f the EUT shall be 0.4 m from the vertical ground reference plane. The ertical ground reference plane was bonded to the horizontal ground efference plane. The LISN 1 was placed 0.8 m from the boundary of the nit under test and bonded to a ground reference plane for LISNs

6.2 Conducted Emissions



Report No.: SZEM141100637201 Page: 14 of 53

Test Setup:	Shielding Room Test Receiver Test
Test Mode:	Non-hopping transmitting mode with all kind of modulation and all kind of data type Transmitting mode
Instruments Used:	Refer to section 5.10 for details
Test Results:	Pass



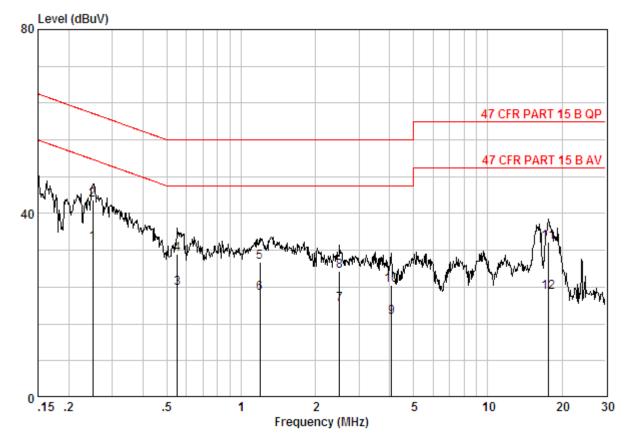
Report No.: SZEM141100637201 Page: 15 of 53

Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Live line:



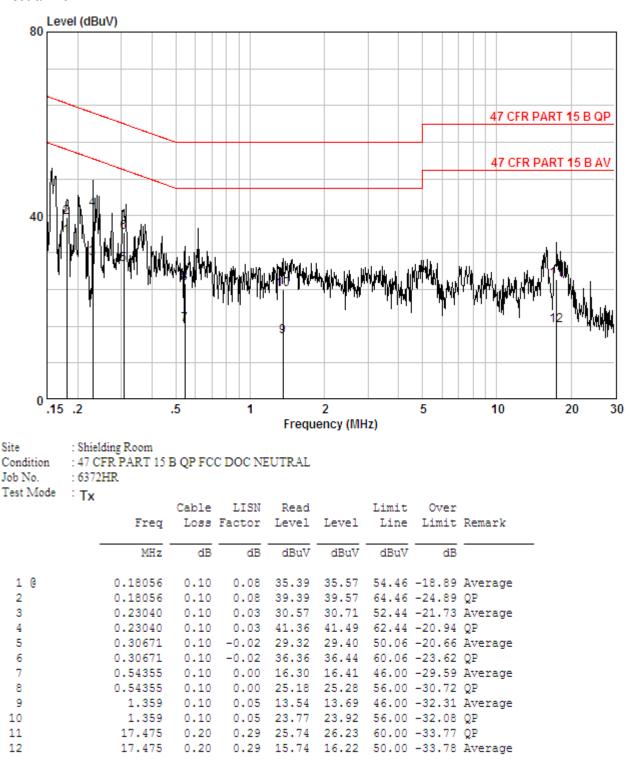
Site : Shielding Room Condition : 47 CFR PART 15 B QP FCC DOC LINE Job No. : 6372HR Test Mode : Tx

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
10	0.25078	0.10	0.08	33.34	33.52	51.73	-18.21	Average
2 0	0.25078	0.10	0.08	42.70	42.88	61.73	-18.85	QP
3	0.55226	0.10	0.13	23.52	23.75	46.00	-22.25	Average
4	0.55226	0.10	0.13	30.92	31.15	56.00	-24.85	QP
5	1.191	0.10	0.18	29.05	29.33	56.00	-26.67	QP
6	1.191	0.10	0.18	22.40	22.68	46.00	-23.32	Average
7	2.500	0.10	0.25	19.82	20.17	46.00	-25.83	Average
8	2.500	0.10	0.25	27.07	27.42	56.00	-28.58	QP
9	4.070	0.10	0.26	17.13	17.49	46.00	-28.51	Average
10	4.070	0.10	0.26	24.14	24.50	56.00	-31.50	QP
11	17.661	0.20	0.48	33.19	33.87	60.00	-26.13	QP
12	17.661	0.20	0.48	22.14	22.83	50.00	-27.17	Average



Report No.: SZEM141100637201 Page: 16 of 53

Neutral line:



Notes:

1. The following Quasi-Peak and Average measurements were performed on the EUT:

2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.



Report No.: SZEM141100637201 Page: 17 of 53

6.3 Conducted Peak Output Power

Test Requirement:	47 CFR Part 15C Section 15.247 (b)(1)		
Test Method:	KDB558074 D01 v03r02		
Test Setup:	Spectrum Analyzer		
	Non-Conducted Table		
	Course 1 B of sources Blance		
	Ground Reference Plane		
	Remark:		
	Offset the High-Frequency cable loss 1.5dB in the spectrum analyzer.		
Limit:	30dBm		
Test Mode:	Transmitting with GFSK modulation		
Instruments Used:	Refer to section 5.10 for details		
Test Results:	Pass		

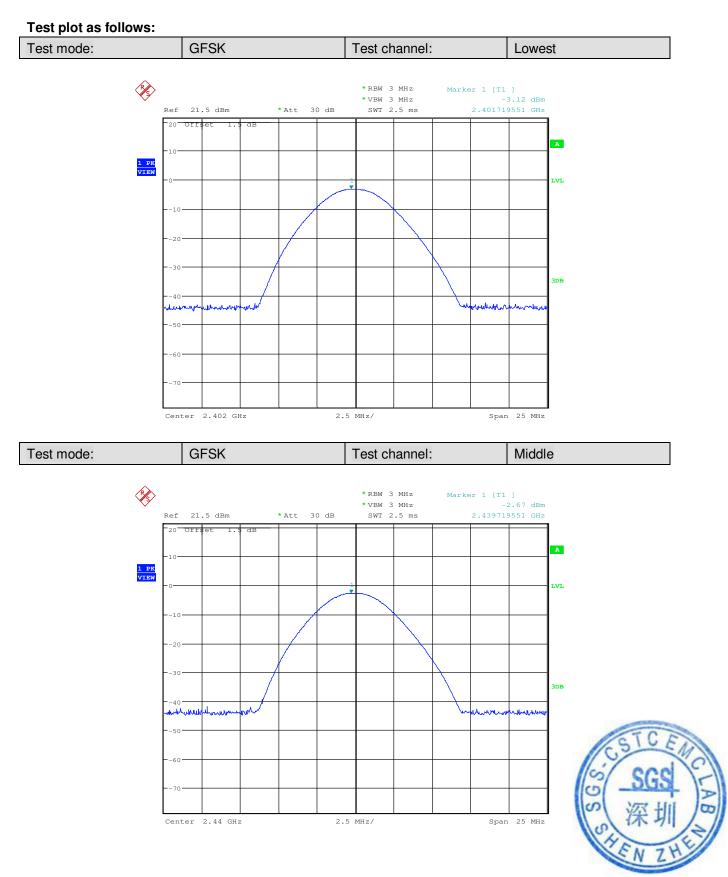
Measurement Data

GFSK mode					
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result		
Lowest	-3.12	30.00	Pass		
Middle	-2.67	30.00	Pass		
Highest	-2.75	30.00	Pass		

[&]quot;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. 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."

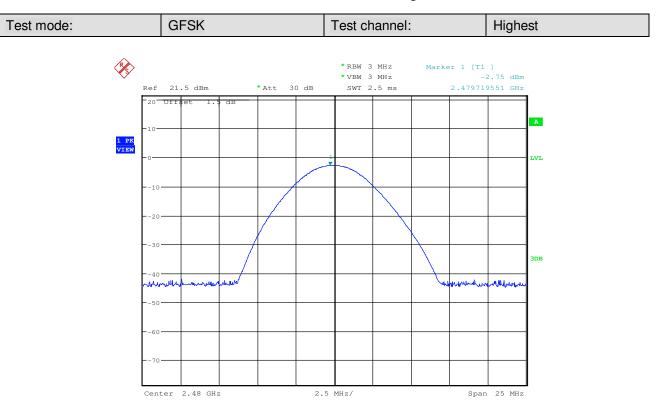


Report No.: SZEM141100637201 Page: 18 of 53





Report No.: SZEM141100637201 Page: 19 of 53





Report No.: SZEM141100637201 Page: 20 of 53

Test Requirement: 47 CFR Part 15C Section 15.247 (a)(2) **Test Method:** KDB558074 D01 v03r02 Test Setup: Spectrum Analyzer E.U.T C Non-Conducted Table **Ground Reference Plane** Limit: ≥ 500 kHz Test Mode: Transmitting with GFSK modulation Instruments Used: Refer to section 5.10 for details **Test Results:** Pass

6.4 6dB Occupy Bandwidth

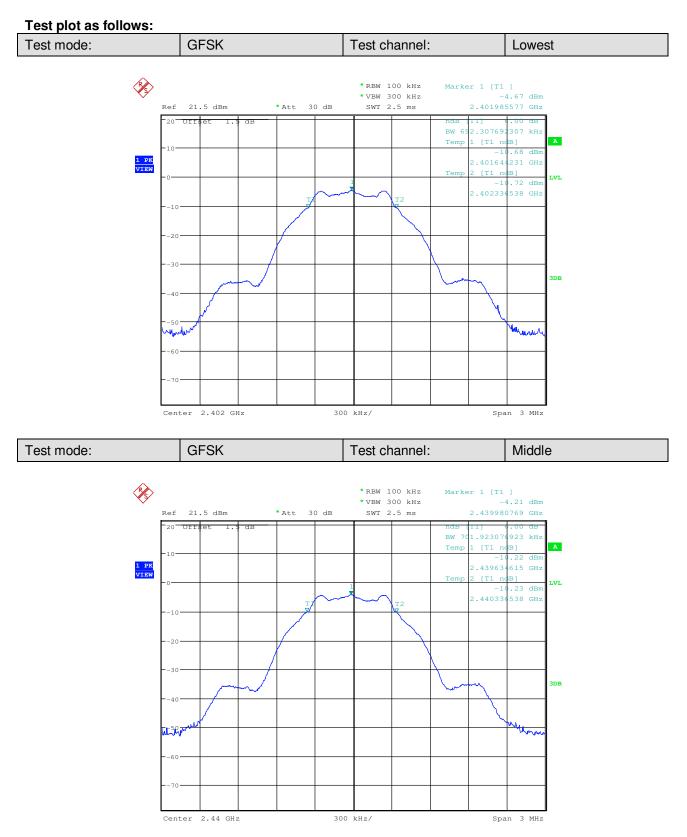
Measurement Data

Test channel	6dB Occupy Bandwidth (MHz)	Limit (kHz)	Result
Lowest	0.692	≥500	Pass
Middle	0.702	≥500	Pass
Highest	0.702	≥500	Pass

[&]quot;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. 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."

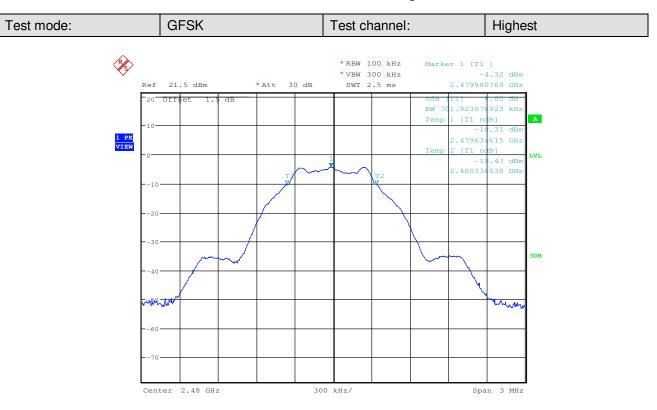


Report No.: SZEM141100637201 Page: 21 of 53





Report No.: SZEM141100637201 Page: 22 of 53





Report No.: SZEM141100637201 Page: 23 of 53

Test Requirement:	47 CFR Part 15C Section 15.247 (e)		
Test Method:	KDB558074 D01 v03r02		
Test Setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane		
Limit:	≤8.00dBm/3KHz		
Test Mode:	Transmitting with GFSK modulation		
Instruments Used:	Refer to section 5.10 for details		
Test Results: Pass			

6.5 Power Spectral Density

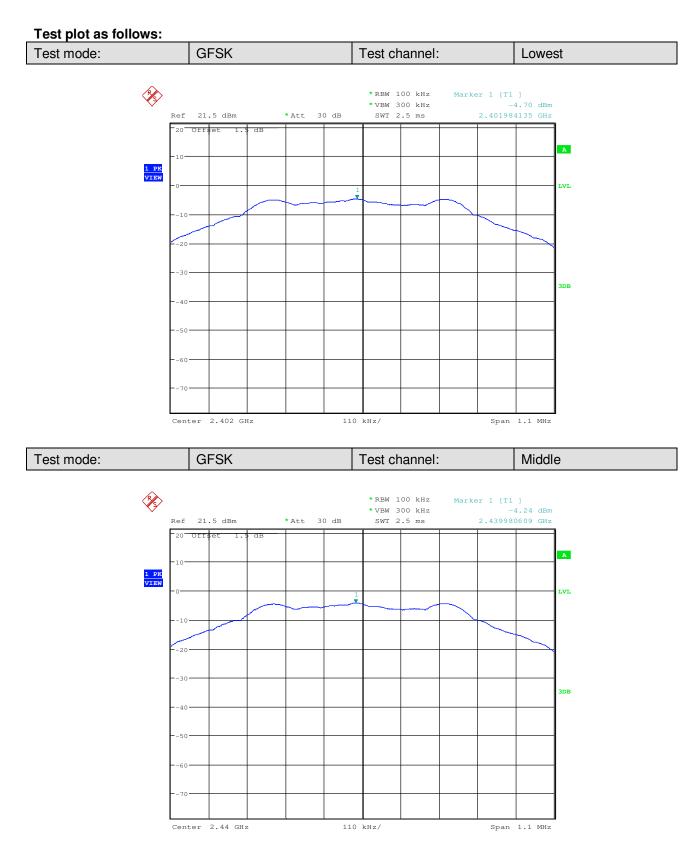
Measurement Data

GFSK mode					
Test channel	Power Spectral Density (dBm)	Limit (dBm/3KHz)	Result		
Lowest	-4.70	≤8.00	Pass		
Middle	-4.24	≤8.00	Pass		
Highest	-4.35	≤8.00	Pass		

[&]quot;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. 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."

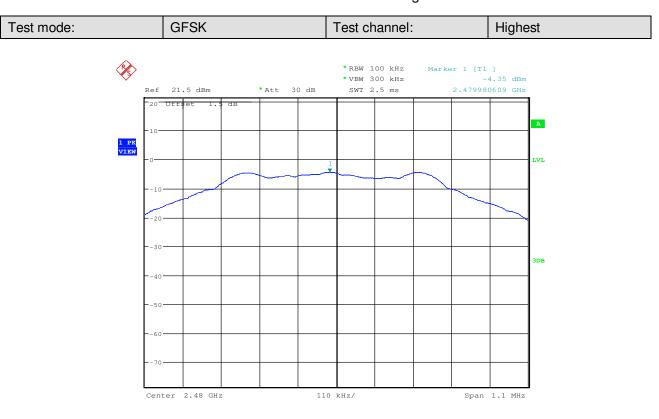


Report No.: SZEM141100637201 Page: 24 of 53





Report No.: SZEM141100637201 Page: 25 of 53





Report No.: SZEM141100637201 Page: 26 of 53

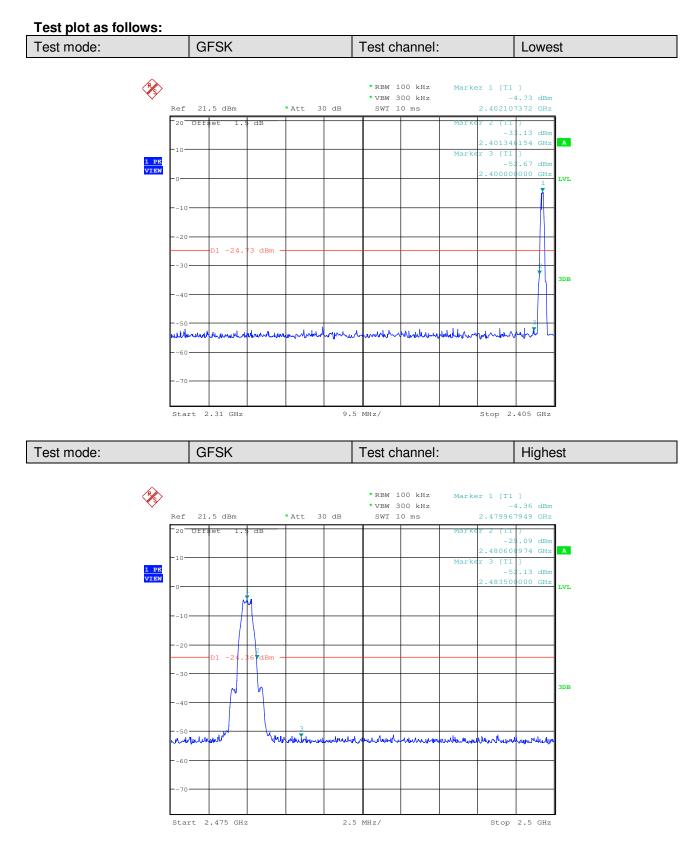
6.6 Band-edge for RF Conducted Emissions

Test Requirement:	47 CFR Part 15C Section 15.247 (d)		
Test Method:	KDB558074 D01 v03r02		
Test Setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane Remark: Offset the High-Frequency cable loss 1.5dB in the spectrum analyzer.		
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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.		
Test Mode:	Transmitting with GFSK modulation		
Instruments Used:	Refer to section 5.10 for details		
Test Results:	Pass		

[&]quot;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. 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.: SZEM141100637201 Page: 27 of 53





Report No.: SZEM141100637201 Page: 28 of 53

6.7 Spurious RF Conducted Emissions

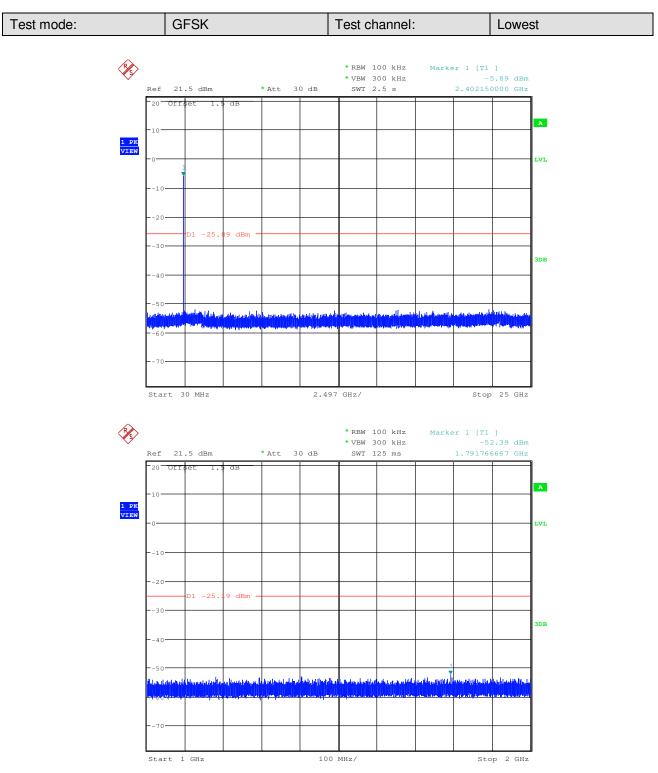
Test Requirement:	47 CFR Part 15C Section 15.247 (d)		
Test Method:	KDB558074 D01 v03r02		
Test Setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane		
	Remark: Offset the High-Frequency cable loss 1.5dB in the spectrum analyzer.		
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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.		
Test Mode:	Transmitting with GFSK modulation		
Instruments Used:	Refer to section 5.10 for details		
Test Results:	Pass		





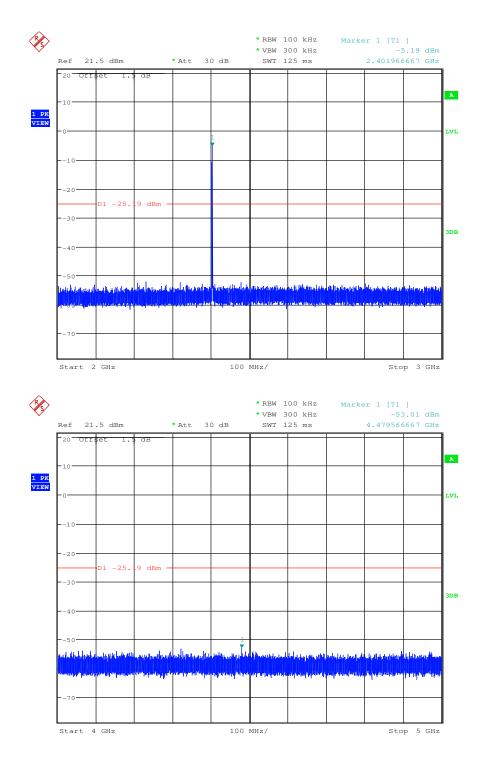
Report No.: SZEM141100637201 Page:

29 of 53



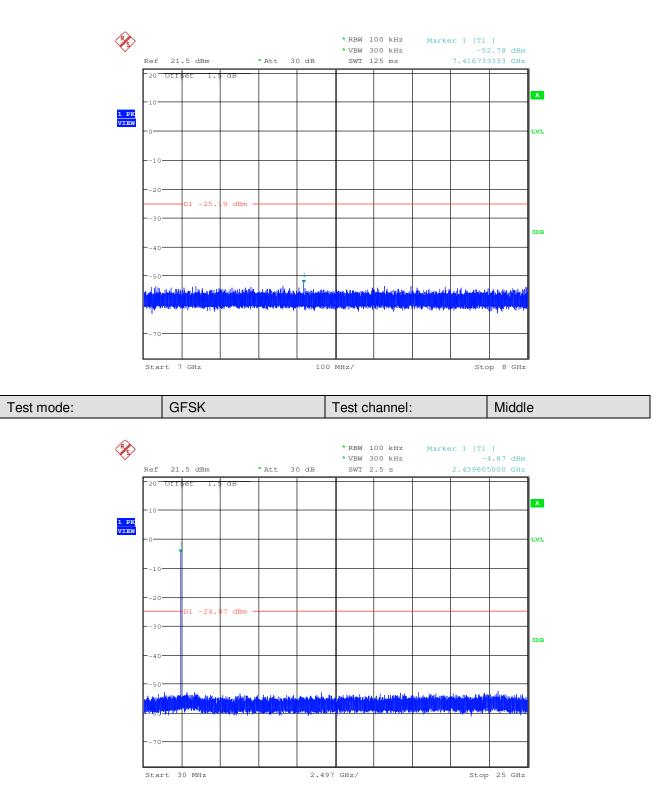


Report No.: SZEM141100637201 Page: 30 of 53



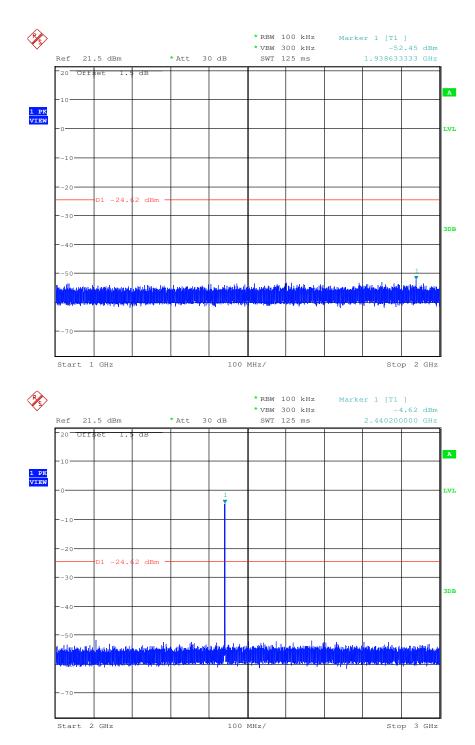


Report No.: SZEM141100637201 Page: 31 of 53



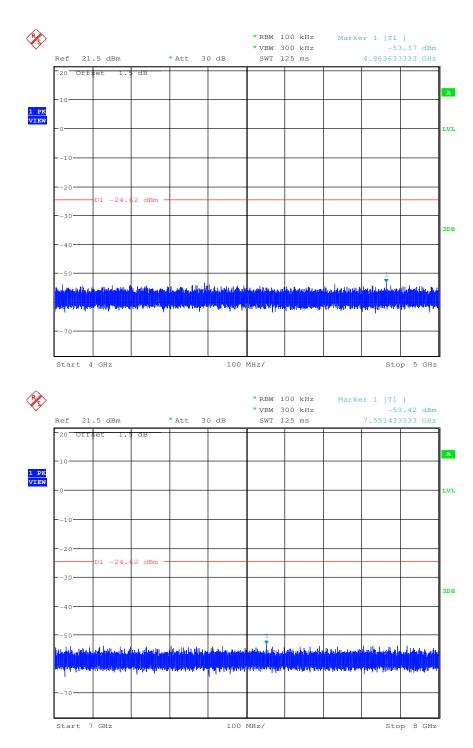


Report No.: SZEM141100637201 Page: 32 of 53



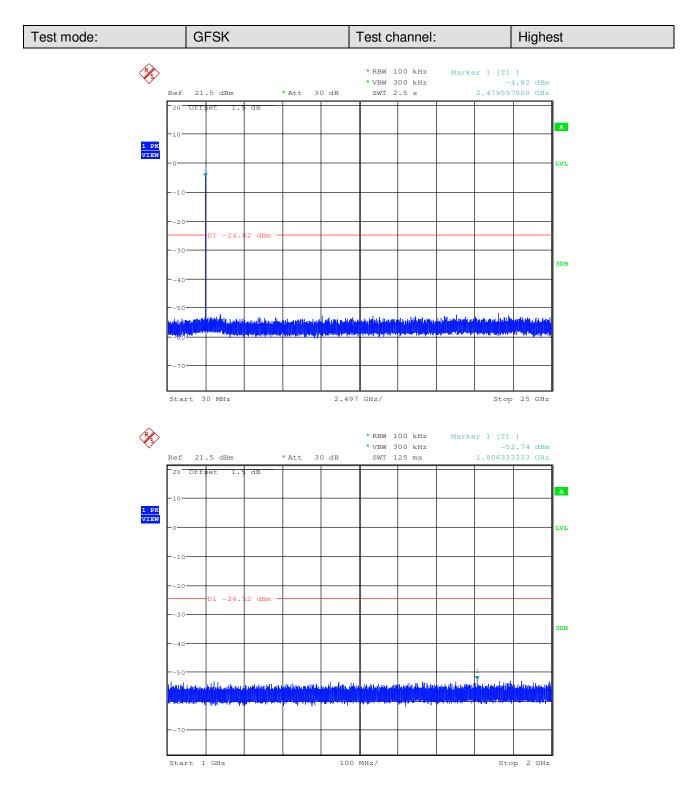


Report No.: SZEM141100637201 Page: 33 of 53



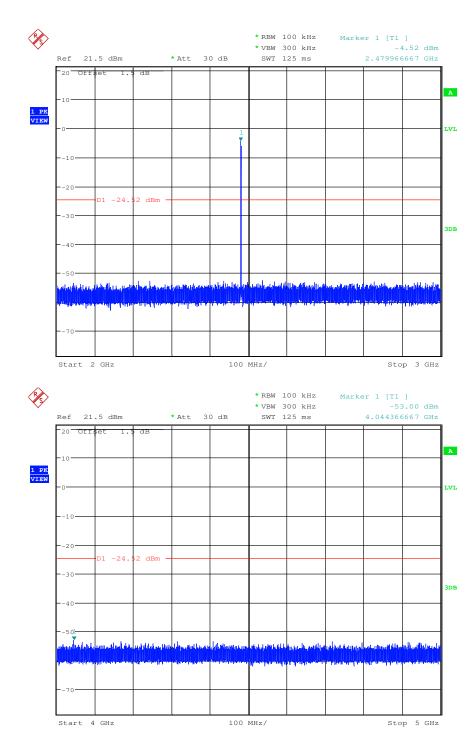


Report No.: SZEM141100637201 Page: 34 of 53



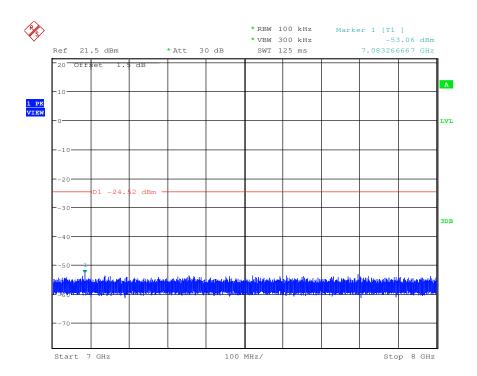


Report No.: SZEM141100637201 Page: 35 of 53





Report No.: SZEM141100637201 Page: 36 of 53



Remark:

Pretest 9kHz to 25GHz, find the highest point when testing, so only the worst data were shown in the test report. Per FCC Part 15.33 (a) and 15.31 (o) ,The amplitude of spurious emissions from intentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this part.

[&]quot;This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sqs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.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. 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.: SZEM141100637201 Page: 37 of 53

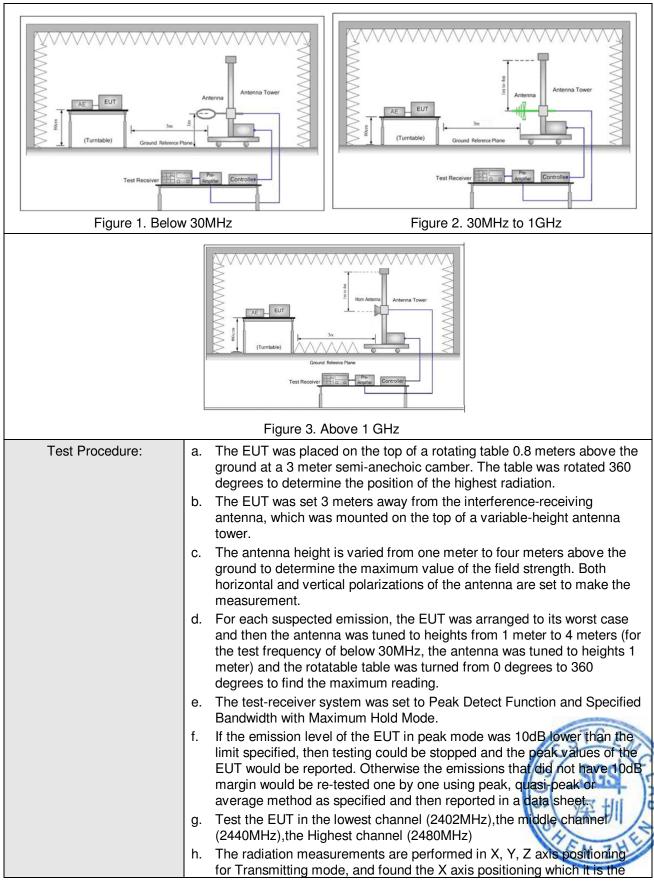
6.8 Radiated Spurious Emission

6.8.1 Spurious Emissions								
Test Requirement:	47 CFR Part 15C Secti	47 CFR Part 15C Section 15.209 and 15.205						
Test Method:	ANSI C63.10 2009	ANSI C63.10 2009						
Test Site:	Measurement Distance	: 3m	(Semi-Anech	noic Cham	ber)		
Receiver Setup:	Frequency		Detector	RBW		VBW	Remark]
	0.009MHz-0.090MH	z	Peak	10kHz	2	30kHz	Peak	
	0.009MHz-0.090MH	z	Average	10kHz	2	30kHz	Average	
	0.090MHz-0.110MH	z	Quasi-peak	10kHz	2	30kHz	Quasi-peak	
	0.110MHz-0.490MH	z	Peak	10kHz	2	30kHz	Peak	
	0.110MHz-0.490MH	z	Average	10kHz	2	30kHz	Average	
	0.490MHz -30MHz		Quasi-peak	10kHz	2	30kHz	Quasi-peak	
	30MHz-1GHz		Quasi-peak	100 kH	z	300kHz	Quasi-peak	
	Above 1GHz		Peak	1MHz	2	3MHz	Peak	
			Peak	1MHz	:	10Hz	Average	
Limit:	Frequency		eld strength rovolt/meter)	Limit (dBuV/m)	I	Remark	Measureme distance (r	
	0.009MHz-0.490MHz	24	400/F(kHz)	-		-	300	
	0.490MHz-1.705MHz	24	000/F(kHz)	-		-	30	
	1.705MHz-30MHz		30	-		-	30	
	30MHz-88MHz		100	40.0	Qı	uasi-peak	3	
	88MHz-216MHz		150	43.5	Qı	uasi-peak	3	
	216MHz-960MHz		200	46.0	Qı	uasi-peak	3	
	960MHz-1GHz		500	54.0	Qı	uasi-peak	3	
	Above 1GHz		500	54.0	A	Average	3	
	Note: 15.35(b), Unless otherwise specified, the limit on p frequency emissions is 20dB above the maximum permitted averag limit applicable to the equipment under test. This peak limit applies peak emission level radiated by the device.					erage emissio	n	
Test Setup:								

[&]quot;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. 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.: SZEM141100637201 Page: 38 of 53





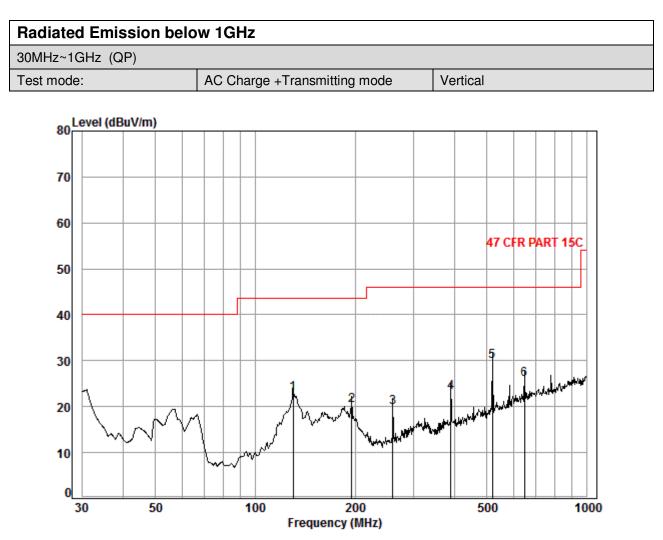
Report No.: SZEM141100637201 Page: 39 of 53

	worst case. i. Repeat above procedures until all frequencies measured was complete.
Exploratory Test Mode:	Transmitting with GFSK modulation Transmitting mode, AC Charge + Transmitting mode
Final Test Mode:	Transmitting with GFSK modulation Pretest the EUT at Transmitting mode and AC Charge + Transmitting mode, found the AC Charge +Transmitting mode which it is worse case For below 1GHz part, through pre-scan, the worst case is the lowest channel. Only the worst case is recorded in the report.
Instruments Used:	Refer to section 5.10 for details
Test Results:	Pass

[&]quot;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. 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.: SZEM141100637201 Page: 40 of 53



Condition: 47 CFR PART 15C 3m Vertical Test mode: AC charge+TX mode

	Freq			Preamp Factor				Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	129.92	1.28	7.70	27.01	40.89	22.86	43.50	-20.64
2	195.14	1.39	10.15	26.71	35.47	20.30	43.50	-23.20
3	260.14	1.72	12.50	26.51	32.12	19.83	46.00	-26.17
4	389.35	2.17	16.17	27.07	31.84	23.11	46.00	-22.89
5	519.06	2.62	18.33	27.67	36.65	29.93	46.00	-16.07
6	649.66	2.81	20.60	27.47	30.02	25.96	46.00	-20.04

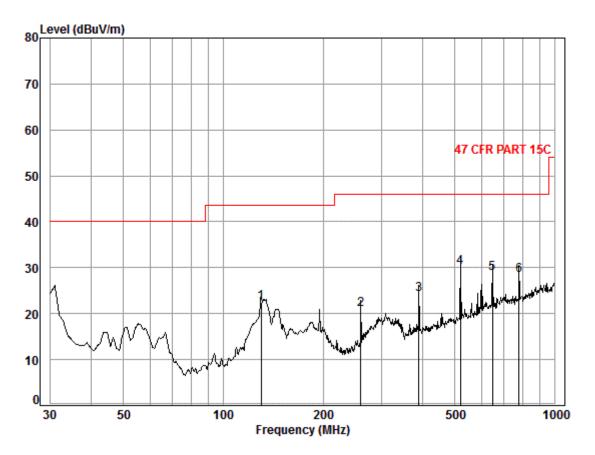


Report No.: SZEM141100637201 Page: 41 of 53

Test mode:

AC Charge +Transmitting mode

Horizontal



Condition: 47 CFR PART 15C 3m Horizontal Test mode: AC charge+TX mode

	Freq			Preamp Factor				Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 2 3 4 5	129.92 260.14 389.35 519.06 649.66	1.72 2.17 2.62	12.50 16.17 18.33	27.01 26.51 27.07 27.67 27.47	33.14 32.95 36.90	20.85 24.22 30.18	46.00 46.00 46.00	-25.15 -21.78 -15.82
6	779.61	3.14	22.02	27.32	30.60	28.44	46.00	-17.56



Report No.: SZEM141100637201 Page: 42 of 53

Test mode:	G	FSK	Test channel:	Lowest		Remark:	Peak
Freq.	Level	Limit	Margin	Ant.F.	Amp.G.	Cbl.L.	Polarization
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(dB)	(dB)	1 Ulanzation
3719.627	50.0	74.0	24.0	32.8	35.6	6.8	Vertical
4804.000	52.2	74.0	21.8	34.3	35.1	7.6	Vertical
6424.444	54.6	74.0	19.4	35.0	33.7	8.8	Vertical
7206.000	57.8	74.0	16.2	35.8	33.8	9.9	Vertical
9608.000	61.3	74.0	12.7	37.2	32.5	12.0	Vertical
11236.181	64.3	74.0	9.7	37.5	31.1	13.5	Vertical
3620.988	49.9	74.0	24.1	32.4	35.5	6.8	Horizontal
4804.000	53.3	74.0	20.7	34.3	35.1	7.6	Horizontal
6635.020	56.1	74.0	17.9	35.4	33.7	9.1	Horizontal
7206.000	57.4	74.0	16.6	35.8	33.8	9.9	Horizontal
9608.000	61.9	74.0	12.1	37.2	32.5	12.0	Horizontal
11480.387	64.4	74.0	9.6	37.6	31.6	13.5	Horizontal

6.8.2 Transmitter Emission above 1GHz

Test mode:		GFSK	Test channel:	Lowest		Remark:	Average
Freq.	Level	Limit	Margin	Ant.F.	Amp.G.	Cbl.L.	Polarization
(MHz)	(dBuV/m) (dBuV/m)	(dB)	(dB/m)	(dB)	(dB)	ΓοιατιΣαιίοτη
3719.627	36.8	54.0	17.2	32.8	35.6	6.8	Vertical
4804.000	39.2	54.0	14.8	34.3	35.1	7.6	Vertical
6424.444	42.1	54.0	11.9	35.0	33.7	8.8	Vertical
7206.000	43.8	54.0	10.2	35.8	33.8	9.9	Vertical
9608.000	48.2	54.0	5.8	37.2	32.5	12.0	Vertical
11236.181	50.7	54.0	3.3	37.5	31.1	13.5	Vertical
3620.988	36.8	54.0	17.2	32.4	35.5	6.8	Horizontal
4804.000	39.1	54.0	14.9	34.3	35.1	7.6	Horizontal
6635.020	42.9	54.0	11.1	35.4	33.7	9.1	Horizontal
7206.000	44.3	54.0	9.7	35.8	33.8	9.9	Horizontal
9608.000	48.1	54.0	5.9	37.2	32.5	12.0	Horizontal
11480.387	50.2	54.0	3.8	37.6	31.6	13.5	Horizontal



Report No.: SZEM141100637201 Page: 43 of 53

Test mode:	G	FSK	Test channel:	Middle		Remark:	Peak
Freq.	Level	Limit	Margin	Ant.F.	Amp.G.	Cbl.L.	Polarization
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(dB)	(dB)	1 Oldhzation
3897.008	50.6	74.0	23.4	33.2	35.4	6.9	Vertical
4880.000	53.1	74.0	20.9	34.5	35.2	7.6	Vertical
6540.592	55.6	74.0	18.4	35.3	33.7	9.0	Vertical
7320.000	57.5	74.0	16.5	35.7	33.8	10.0	Vertical
9760.000	60.8	74.0	13.2	37.3	32.1	12.3	Vertical
11175.945	63.7	74.0	10.3	37.5	31.1	13.4	Vertical
3673.266	50.9	74.0	23.1	32.6	35.6	6.8	Horizontal
4880.000	52.2	74.0	21.8	34.5	35.2	7.6	Horizontal
6658.840	55.8	74.0	18.2	35.4	33.7	9.1	Horizontal
7320.000	58.0	74.0	16.0	35.7	33.8	10.0	Horizontal
9760.000	61.5	74.0	12.5	37.3	32.1	12.3	Horizontal
11116.033	63.8	74.0	10.2	37.6	31.2	13.2	Horizontal

Test mode:	(GFSK	Test channel:	Middle		Remark:	Average
Freq.	Level	Limit	Margin	Ant.F.	Amp.G.	Cbl.L.	Polarization
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(dB)	(dB)	1 olalization
3897.008	37.2	54.0	16.8	33.2	35.4	6.9	Vertical
4880.000	38.8	54.0	15.2	34.5	35.2	7.6	Vertical
6540.592	42.7	54.0	11.3	35.3	33.7	9.0	Vertical
7320.000	43.4	54.0	10.6	35.7	33.8	10.0	Vertical
9760.000	48.1	54.0	5.9	37.3	32.1	12.3	Vertical
11175.945	50.9	54.0	3.1	37.5	31.1	13.4	Vertical
3673.266	36.9	54.0	17.1	32.6	35.6	6.8	Horizontal
4880.000	38.8	54.0	15.2	34.5	35.2	7.6	Horizontal
6658.840	43.0	54.0	11.0	35.4	33.7	9.1	Horizontal
7320.000	43.8	54.0	10.2	35.7	33.8	10.0	Horizontal
9760.000	48.0	54.0	6.0	37.3	32.1	12.3	Horizontal
11116.033	50.5	54.0	3.5	37.6	31.2	13.2	Horizontal



Report No.: SZEM141100637201 Page: 44 of 53

Test mode:	G	FSK	Test channel:	Highest		Remark:	Peak
Freq.	Level	Limit	Margin	Ant.F.	Amp.G.	Cbl.L.	Polarization
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(dB)	(dB)	1 Oldhzation
3595.129	49.7	74.0	24.3	32.4	35.5	6.8	Vertical
4960.000	52.0	74.0	22.0	34.6	35.3	7.6	Vertical
6231.706	54.9	74.0	19.1	34.9	33.7	8.6	Vertical
7440.000	57.2	74.0	16.8	35.8	33.9	10.1	Vertical
9920.000	60.4	74.0	13.6	37.3	32.1	12.3	Vertical
11439.321	63.8	74.0	10.2	37.6	31.5	13.5	Vertical
3753.100	50.3	74.0	23.7	32.9	35.6	6.8	Horizontal
4960.000	52.4	74.0	21.6	34.6	35.3	7.6	Horizontal
6198.299	54.5	74.0	19.5	34.9	33.8	8.5	Horizontal
7440.000	57.1	74.0	16.9	35.8	33.9	10.1	Horizontal
9920.000	60.5	74.0	13.5	37.3	32.1	12.3	Horizontal
10977.483	63.7	74.0	10.3	37.5	31.2	12.9	Horizontal

Test mode:		GFSK	Test channel:	Highest		Remark:	Average
Freq.	Level	Limit	Margin	Ant.F.	Amp.G.	Cbl.L.	Polarization
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(dB)	(dB)	1 Oldinzation
3595.129	36.7	54.0	17.3	32.4	35.5	6.8	Vertical
4960.000	39.4	54.0	14.6	34.6	35.3	7.6	Vertical
6231.706	42.0	54.0	12.0	34.9	33.7	8.6	Vertical
7440.000	44.4	54.0	9.6	35.8	33.9	10.1	Vertical
9920.000	48.6	54.0	5.4	37.3	32.1	12.3	Vertical
11439.321	50.2	54.0	3.8	37.6	31.5	13.5	Vertical
3753.100	36.6	54.0	17.4	32.9	35.6	6.8	Horizontal
4960.000	39.4	54.0	14.6	34.6	35.3	7.6	Horizontal
6198.299	41.7	54.0	12.3	34.9	33.8	8.5	Horizontal
7440.000	44.7	54.0	9.3	35.8	33.9	10.1	Horizontal
9920.000	48.6	54.0	5.4	37.3	32.1	12.3	Horizontal
10977.483	50.5	54.0	3.5	37.5	31.2	12.9	Horizontal



Report No.: SZEM141100637201 Page: 45 of 53

Remark:

- The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
 Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
- 2) Scan from 9kHz to 25GHz, the disturbance above 13GHz and below 1GHz were very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.





Report No.: SZEM141100637201 Page: 46 of 53

6.9 Restricted bands around fundamental frequency

		. ,				
Test Requirement:	47 CFR Part 15C Section 15.209 and 15.205					
Test Method:	ANSI C63.10 2009					
Test Site:	Measurement Distance: 3m (Semi-Anechoic Chamber)					
Limit:	Frequency	Limit (dBuV/m @3m)	Remark			
	30MHz-88MHz	40.0	Quasi-peak Value			
	88MHz-216MHz	43.5	Quasi-peak Value			
	216MHz-960MHz	46.0	Quasi-peak Value			
	960MHz-1GHz	54.0	Quasi-peak Value			
	Above 1GHz	54.0	Average Value			
		74.0	Peak Value			
Test Setup:						
Figure 1. 30Mt Test Procedure	Antenna Tower Hane Tane Tane Test Receiver Test Receiver Tes					



Report No.: SZEM141100637201 Page: 47 of 53

	 channel g. Test the EUT in the lowest channel , the Highest channel h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case. i. Repeat above procedures until all frequencies measured was complete. 			
Exploratory Test Mode:	Transmitting with GFSK modulation			
	Transmitting mode, AC Charge + Transmitting mode			
Final Test Mode:	Transmitting with GFSK modulation			
	Pretest the EUT at Transmitting mode and AC Charge + Transmitting mode, found the AC Charge +Transmitting mode which it is worse case Only the worst case is recorded in the report.			
Instruments Used:	Refer to section 5.10 for details			
Test Results:	Pass			



Report No.: SZEM141100637201 Page: 48 of 53

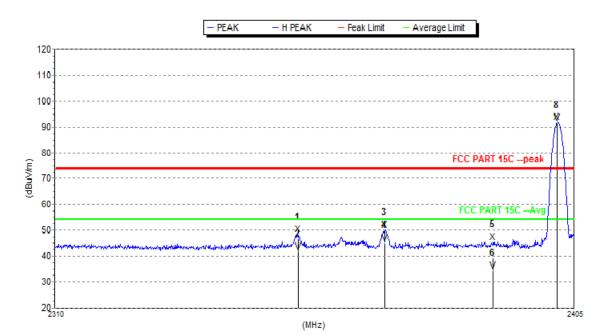
Test plot as follows: Worse case mode: GFSK (DH5) Test channel: Lowest Vertical PEAK V PEAK **Feak Limit** Average Limit 120 110 100 90 80 FCC PART 15C --peal (dBu//m) 70 60 FCC PART 15C -- Avg 50 40 30 20____ 2310 2405 (MHz)

Freq.(MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak							
2353.985	47.2	74.0	26.8	32.2	34.8	4.6	V
2369.755	47.5	74.0	26.5	32.3	34.8	4.6	V
2390	45.9	74.0	28.1	32.5	34.8	4.6	V
2401.960	86.2	74.0	-12.2	32.6	34.9	4.6	V
Average							
2353.985	38.2	54.0	15.8	2353.985	34.8	4.6	V
2369.755	41.0	54.0	13.0	2369.755	34.8	4.6	V
2390	33.0	54.0	21.0	2390	34.8	4.6	V
2401.960	86.0	54.0	-32.0	2401.960	34.9	4.6	V



Report No.: SZEM141100637201 Page: 49 of 53

Worse case mode:	GFSK (DH5)	Test channel:	Lowest	Horizontal

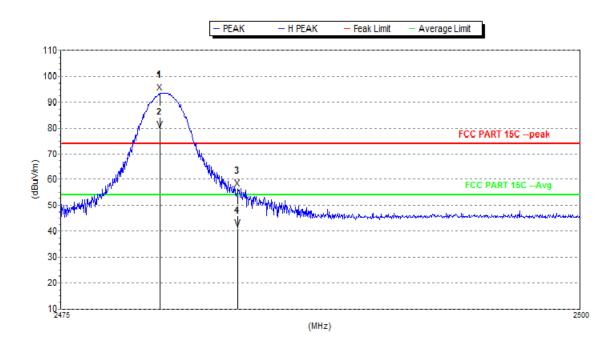


Freq.(MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak							
2354.080	48.3	74.0	25.7	32.2	34.8	4.6	Н
2369.945	50.0	74.0	24.0	32.3	34.9	4.6	Н
2390	45.4	74.0	28.6	32.5	34.8	4.6	Н
2401.960	91.8	74.0	-17.8	32.6	34.9	4.6	Н
Average							
2354.080	41.8	54.0	12.2	2354.080	34.8	4.6	Н
2369.945	45.1	54.0	8.9	2369.945	34.9	4.6	Н
2390	34.5	54.0	19.5	2390	34.8	4.6	Н
2401.960	91.7	54.0	-37.7	2401.960	34.9	4.6	Н



Report No.: SZEM141100637201 Page: 50 of 53

Worse case mode: GFSK (DH5)	Test channel:	Highest	Horizontal
-----------------------------	---------------	---------	------------

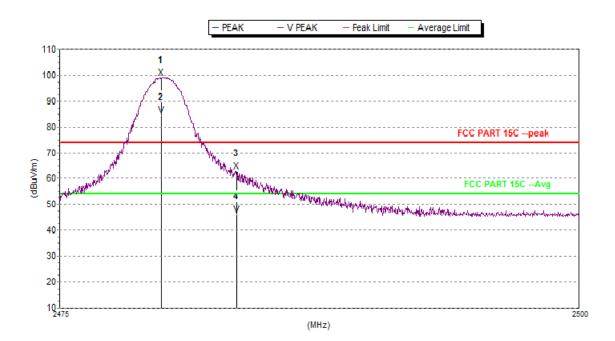


Freq.(MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F. (dB/m)	Amp.G. (dB)	CbI.L. (dB)	Pol.
Peak							
2479.775	93.5	74.0	-19.5	32.5	35.0	4.5	Н
2483.5	56.5	74.0	17.5	32.5	35.0	4.5	Н
Average							
2479.775	79.2	54.0	-25.2	32.5	35.0	4.5	Н
2483.5	41.0	54.0	13.0	32.5	35.0	4.5	Н



Report No.: SZEM141100637201 Page: 51 of 53

Worse case mode: GFSK (DH5) Test channel: Highest Vertical	
--	--



Freq.(MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak							
2479.875	99.1	74.0	-25.1	32.5	35.0	4.5	V
2483.5	63.0	74.0	11.0	32.5	35.0	4.5	V
Average							
2479.875	84.5	54.0	-30.5	32.5	35.0	4.5	V
2483.5	46.0	54.0	8.0	32.5	35.0	4.5	V

Note:

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor



Report No.: SZEM141100637201 Page: 52 of 53

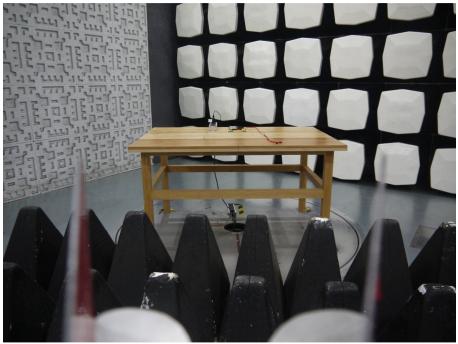
7 Photographs - EUT Test Setup

Test Model No.: BAK BOARD 3G

7.1 Radiated Emission



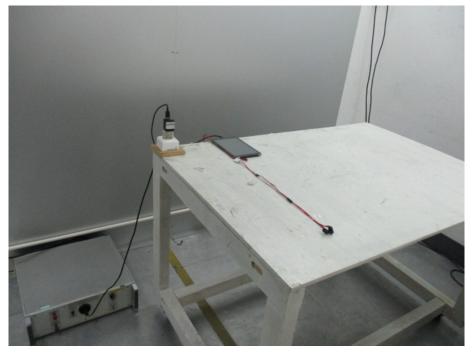
7.2 Radiated Spurious Emission





Report No.: SZEM141100637201 Page: 53 of 53

7.3 Conducted Emission



8 Photographs - EUT Constructional Details

Refer to Appendix A - Photographs of EUT Constructional Details for SZEM1411006372HR.