

Report No.: AR/2021/5000403

Page: 1 of 87

FCC TEST REPORT

Application No.: AR/2021/50004

Applicant: Xiaomi Communications Co., Ltd.

Address of Applicant #019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China,

100085

Manufacturer: Xiaomi Communications Co., Ltd.

Address of Manufacturer #019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China,

100085

EUT Description: Mobile Phone
Model No.: 21081111RG
Trade Mark: XIAOMI

FCC ID: 2AFZZ11RG

Standards: 47 CFR FCC Part 2, Subpart J

47 CFR Part 15, Subpart C

Date of Receipt: 2021/6/10

Date of Test: 2021/6/29 to 2021/7/19

Date of Issue: 2021/7/23

Test Result : PASS *

* In the configuration tested, the EUT detailed in this report complied with the standards specified above.

Authorized Signature:

Simon Ling Wireless Laboratory Manager

松場合体制を用章 Inspection & Testing Services S GS-CSTO Setting Services Pennical Services Pan Co., Ltd.



Report No.: AR/2021/5000403

Page: 2 of 87

1 Version

Revision Record								
Version Chapter Date Modifier Remark								
01		2021/7/23		Original				

Authorized for issue by:	
Prepared By	(Leah Chen) / Engineer
Checked By	Daniel Wang (Daniel Wang) / Reviewer





Report No.: AR/2021/5000403

Page: 3 of 87

2 Test Summary

Test Item	Test Requirement	Test Method	Test Result	Result
AC Power Line Conducted Emission	15.207	ANSI C63.10 2013	Clause 4.2	PASS
Conducted Output Power	15.247 (b)(3)	ANSI C63.10 2013	Clause 4.3	PASS
DTS (6 dB) Bandwidth	15.247 (a)(2)	ANSI C63.10 2013	Clause 4.4	PASS
Power Spectral Density	15.247 (e)	ANSI C63.10 2013	Clause 4.5	PASS
Band-edge for RF Conducted Emissions	15.247(d)	ANSI C63.10 2013	Clause 4.6	PASS
RF Conducted Spurious Emissions	15.247(d)	ANSI C63.10 2013	Clause 4.7	PASS
Radiated Spurious Emissions	15.205/15.209	ANSI C63.10 2013	Clause 4.8	PASS
Restricted bands around fundamental frequency (Radiated Emission)	15.205/15.209	ANSI C63.10 2013	Clause 4.9	PASS



Report No.: AR/2021/5000403

Page: 4 of 87

Contents

1	Versio	n	2
2	Test S	Summary	3
3	Gener	al Information	5
	3.1	Details of Client	5
	3.2	Test Location	5
	3.3	Test Facility	6
	3.4	General Description of EUT	7
	3.5	Test Environment	8
	3.6	Description of Support Units	8
4	Test re	esults and Measurement Data	9
	4.1	Antenna Requirement	9
	4.2	AC Power Line Conducted Emissions	10
	4.3	Duty Cycle	14
	4.4	Conducted Output Power	15
	4.5	DTS (6 dB) Bandwidth	16
	4.6	Power Spectral Density	17
	4.7	Band-edge for RF Conducted Emissions	18
	4.8	RF Conducted Spurious Emissions	19
	4.9	Radiated Spurious Emissions	20
	4.10	Restricted bands around fundamental frequency	23
5	Measu	rement Uncertainty (95% confidence levels, k=2)	25
6	Equipr	ment List	26
7	Photo	graphs - EUT Constructional Details	28





Report No.: AR/2021/5000403

Page: 5 of 87

General Information 3

3.1 Details of Client

Applicant:	Xiaomi Communications Co., Ltd.				
Address of Applicant	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085				
Manufacturer:	Xiaomi Communications Co., Ltd.				
Address of Manufacturer	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085				

3.2 Test Location

Company:	SGS-CSTC STANDARDS TECHNICAL SERVICES (XI 'AN) CO., LTD.
Address:	1/F, Unit D, Building 1, Kanghong Orange Technology Park, No.137, Keyuan 3rd Road, Fengdong New City, Xi'an, Shaanxi China
Post code:	710086
Test engineer:	Leah Chen,Ken Liu,Andy Yao



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Cestili CARD Rescheid-Regulation**



Report No.: AR/2021/5000403

Page: 6 of 87

3.3 Test Facility

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

A2LA (Certificate No. 4854.01)

SGS-CSTC STANDARDS TECHNICAL SERVICES (XI 'AN) CO., LTD. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 4854.01.

FCC-Designation Number: CN1271.





Report No.: AR/2021/5000403

Page: 7 of 87

3.4 General Description of EUT

EUT Description:	Mobile Phone
Model No.:	21081111RG
Trade Mark:	XIAOMI
Hardware Version:	P2
Software Version:	MIUI 12.5
Operation Frequency:	2400MHz~2483.5MHz fc = 2402 MHz + N * 2 MHz, where: -fc = "Operating Frequency" in MHz, -N = "Channel Number" with the range from 0 to 39.
Bluetooth version:	Bluetooth V5.2
Modulation Type:	GFSK
Number of Channel:	40
Sample Type:	⊠ Portable Device,
Antenna Type:	PIFA
Antenna Gain:	-2.9dBi

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



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/

1/F, Unit D, Building 1, Kanghang Orange Science Park, No.137, Keyuan 3rd Road, Fengalong New Town, XYan, Shaamai, China 710086 中国・西安・沣东新城科源三路137号康鴻橙方科技园1号楼D单元1层 邮第: 710086 t (86-29) 6282 7885 t (86-29) 6282 7885



Report No.: AR/2021/5000403

Page: 8 of 87

Remark:

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(CH0)	2402MHz
The Middle channel(CH19)	2440MHz
The Highest channel(CH39)	2480MHz

3.5 Test Environment

Operating Environment:				
Temperature:	25.0 °C			
Humidity:	50 % RH			
Atmospheric Pressure:	101.30 KPa			

3.6 Description of Support Units

The EUT has been tested independent unit.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.appx and, for electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.appx. 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 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 extend of the law length of the lawfullest extended the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention: To check the authenticity of testing (inspection report & certificate, please contact us at telephone: (86-755) 83071443, **Attention: To check the authenticity of testing (inspection report & certificate, please contact us at telephone: (86-755) 83071443,



Report No.: AR/2021/5000403

Page: 9 of 87

4 Test results and Measurement Data

4.1 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.

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is -2.9dBi.





Report No.: AR/2021/5000403

Page: 10 of 87

4.2 AC Power Line Conducted Emissions

Test Requirement:	47 CFR Part 15C Section 15.207				
Test Method:	ANSI C63.10: 2013				
Test Frequency Range:	150kHz to 30MHz				
Limit:	Fraguenov rango (MUz)	Limit (dBuV)			
	Frequency range (MHz)	Quasi-peak	Average		
	0.15-0.5	66 to 56*	56 to 46*		
	0.5-5	56	46		
	5-30	60	50		
	* Decreases with the log	arithm of the frequency.			
Test Procedure:	The mains terminal coroom.	listurbance voltage test was	conducted in a shielded		
	Impedance Stabilizat impedance. The positive connected to a second plane in the same of multiple socket outlet single LISN provided. 3) The tabletop EUT was ground reference plane placed on the horizor. 4) The test was perform the EUT shall be 0 vertical ground reference plane. The unit under test and mounted on top of the closest points of and associated equip	 room. 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linear 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 multiple power cables to single LISN provided the rating of the LISN was not exceeded. 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane. 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISN mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2. 5) In order to find the maximum emission, the relative positions of equipment. 			



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CND Doccheck@ss.com

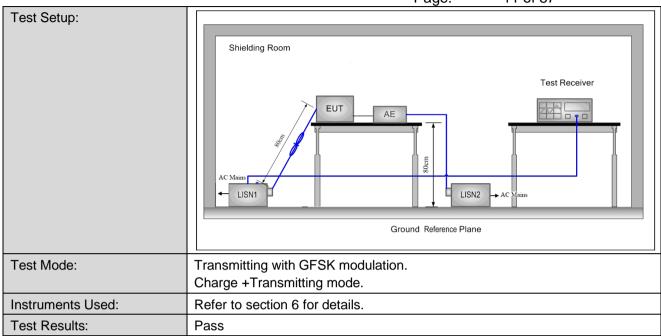
or email: CM.Doceneck@sgs.com ||FightD,Buiding 1,Karghong Orang-Soore Park, No.137, Repart 3rd Road, Fengtong New Town, Vian, Shaand, China 710086 中国 - 西安 - 沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 t (86-29) 6282 7885



Report No.: AR/2021/5000403

Page: 11 of 87





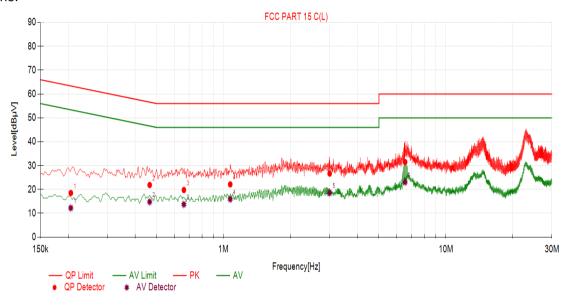
Report No.: AR/2021/5000403

Page: 12 of 87

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:



Test Graph

Final	Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Value [dBµV]	ΑV Limit [dBμV]	AV Margin [dB]	Verdict
1	0.2055	10.10	18.53	63.38	44.85	12.22	53.38	41.16	PASS
2	0.4651	10.10	21.86	56.60	34.74	14.80	46.60	31.80	PASS
3	0.6629	10.10	19.77	56.00	36.23	13.73	46.00	32.27	PASS
4	1.0714	10.10	22.13	56.00	33.87	15.92	46.00	30.08	PASS
5	3.0006	10.10	26.66	56.00	29.34	18.56	46.00	27.44	PASS
6	6.5581	10.10	31.51	60.00	28.49	23.09	50.00	26.91	PASS



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printe overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms-

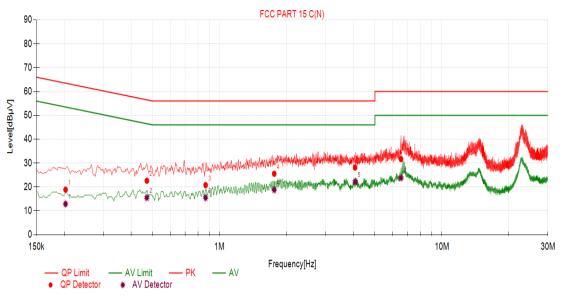
1/F, Unit D, Building 1, Kanghong Charge Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, X/an, Staansi, China 710086 中国・西安・沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮第:710086 t (86-29) 6282 7885 t (86-29) 6282 7885



Report No.: AR/2021/5000403

Page: 13 of 87

Neutral Line:



Test Graph

Final Data List									
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Value [dBµV]	ΑV Limit [dBμV]	AV Margin [dB]	Verdict
1	0.2028	10.10	18.86	63.50	44.64	12.86	53.50	40.64	PASS
2	0.4709	10.10	22.61	56.50	33.89	15.49	46.50	31.01	PASS
3	0.8653	10.10	20.75	56.00	35.25	15.47	46.00	30.53	PASS
4	1.7615	10.10	25.53	56.00	30.47	18.79	46.00	27.21	PASS
5	4.0701	10.10	28.13	56.00	27.87	22.19	46.00	23.81	PASS
6	6.5522	10.10	31.67	60.00	28.33	23.79	50.00	26.21	PASS

Remark:

- 1. The following Quasi-Peak and Average measurements were performed on the EUT:
- 2. Final Test Level = Receiver Reading + LISN Factor + Cable Loss.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printe overleaf, available on request or accessible at https://www.sgs.com/en/Terms-and-Conditions.Attractions/Terms-and-Conditions.Attractions-Terms-and-Conditions-and-to-Conditions-and-to-Interms-and-Conditions-And-Terms-and-Conditions-and-to-Interms-and-Conditions-And-Terms-and-Conditions-and-to-Interms-and-Conditions-And-Terms-and-Conditions-and-to-Interms-and-Conditions-And-Terms-and-Conditions-And-Terms-and-Conditions-And-Terms-and-Conditions-And-Terms-and-Conditions-And-Terms-and-Conditions-And-Terms-and-Conditions-And-Terms-and-Conditions-And-Terms-and-Conditions-And-Terms-and-Conditions-And-Terms-and-Conditions-And-Terms-and-Conditions-And-Terms-and-Conditions-And-Terms-and-Terms-and-Conditions-And-Terms-and-Terms-and-Conditions-And-Terms-and-Conditions-And-Terms-and-Conditions-And-Terms-and-Conditions-And-Terms-and-Conditions-And-Terms-and-Conditions-And-Terms-and-Conditions-And-Terms-and-Conditions-And-Terms-and-Conditions-And-Terms-and-Conditions-And-Terms-and-Conditions-And-Term

t/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengolong New Town, Xian, Shaarui, China 710086 中国 - 西安 - 沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 t (86-29) 6282 7885



Report No.: AR/2021/5000403

Page: 14 of 87

4.3 Duty Cycle

The detailed test data see: Appendix

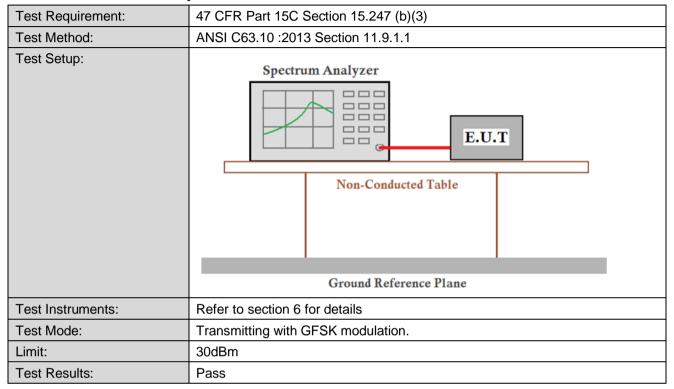




Report No.: AR/2021/5000403

Page: 15 of 87

4.4 Conducted Output Power



The detailed test data see: Appendix

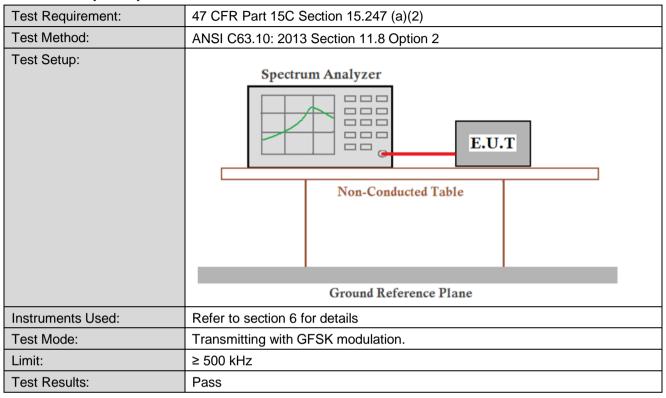




Report No.: AR/2021/5000403

Page: 16 of 87

4.5 DTS (6 dB) Bandwidth



The detailed test data see: Appendix

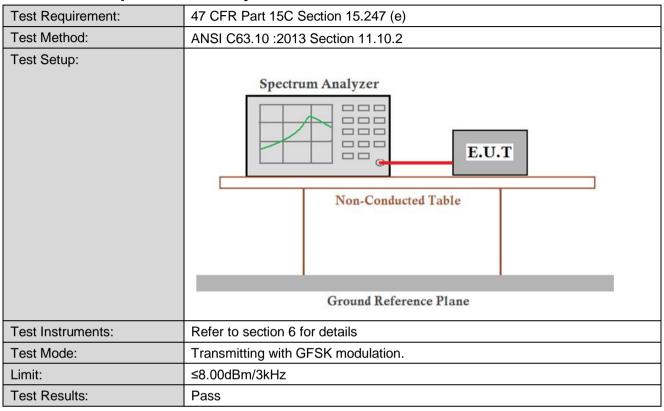




Report No.: AR/2021/5000403

Page: 17 of 87

4.6 Power Spectral Density



The detailed test data see: Appendix





Report No.: AR/2021/5000403

Page: 18 of 87

4.7 Band-edge for RF Conducted Emissions

Test Requirement:	47 CFR Part 15C Section 15.247 (d)
Test Method:	ANSI C63.10: 2013 Section 11.13
Test Setup:	Spectrum Analyzer E.U.T Non-Conducted Table
	Ground Reference Plane
Instruments Used:	Refer to section 6 for details
Test Mode:	Transmitting with GFSK modulation.
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 Results:	Pass

The detailed test data see: Appendix



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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, Gregory 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) are retained for 30 days only.

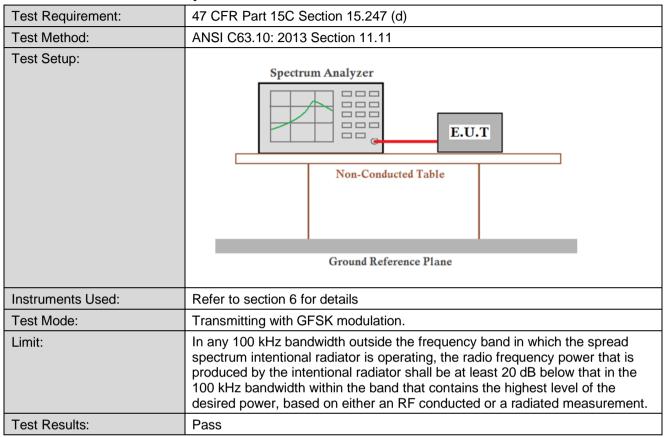
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Coscili (240 Pascheck Page 2004)**



Report No.: AR/2021/5000403

Page: 19 of 87

4.8 RF Conducted Spurious Emissions



The detailed test data see: Appendix



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.appx and, for electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.appx. 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 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 extend of the law length of the lawfullest extended the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

**Attention: To check the authenticity of testing (inspection report & certificate, please contact us at telephone: (86-755) 83071443, **Attention: To check the authenticity of testing (inspection report & certificate, please contact us at telephone: (86-755) 83071443,



Report No.: AR/2021/5000403

Page: 20 of 87

4.9 Radiated Spurious Emissions

Test Requirement:	47 CFR Part 15C Section	47 CFR Part 15C Section 15.209 and 15.205						
Test Method:	ANSI C63.10 :2013 Sect	ANSI C63.10 :2013 Section 11.12						
Test Site:	Measurement Distance: 3m (Semi-Anechoic Chamber)							
Receiver Setup:	Frequency	Detector	RBW	VBW	Remark			
	0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak			
	0.009MHz-0.090MHz	Average	10kHz	30kHz	Average			
	0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak			
	0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak			
	0.110MHz-0.490MHz	Average	10kHz	30kHz	Average			
	0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak			
	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak			
	Abovo 1CH	Peak	1MHz	3MHz	Peak			
	Above 1GHz	Peak	1MHz	3MHz	RMS			
Limit:	Frequency	Field strength (microvolt/meter)	Limit (dBuV/m)	Remark	Measurement distance (m)			
	0.009MHz-0.490MHz	2400/F(kHz)	-	-	300			
	0.490MHz-1.705MHz	24000/F(kHz)	-	-	30			
	1.705MHz-30MHz	30	-	-	30			
	30MHz-88MHz	100	40.0	Quasi-peak	3			
	88MHz-216MHz	150	43.5	Quasi-peak	3			
	216MHz-960MHz	200	46.0	Quasi-peak	3			
	960MHz-1GHz	500	54.0	Quasi-peak	3			
	Above 1GHz	500	54.0	Average	3			
	Remark: 15.35(b),Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.							



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate,

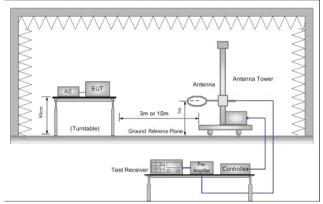
1/F, Unit D, Building 1, Kanghang Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, X/Ian, Shaamui, China 710086 中国 - 西安 - 洋东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86–29) 6282 7885 t (86–29) 6282 7885



Report No.: AR/2021/5000403

Page: 21 of 87

Test Setup:



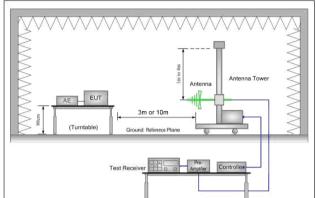


Figure 1. Below 30MHz

Figure 2. 30MHz to 1GHz

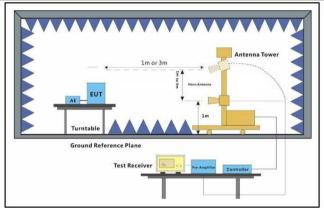


Figure 3. Above 1 GHz

Test Procedure:

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. Use the following spectrum analyzer settings:
 - (1) Span shall wide enough to fully capture the emission being measured;
 - (2) Set RBW=100 kHz for f < 1 GHz, RBW=1MHz for f>1GHz ; VBW \geqslant RBW; Sweep = auto;
 - Detector function = peak; Trace = max hold for peak
 - (3) For average measurement: use duty cycle correction factor method per 15.35(c).



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions-and-Conditions-and-Con

1/F, Unit D, Bulding 1, Kanghang Orange Science Park, No.137, Keyuan 3rd Road, Fengatong New Town, X/an, Steamai, China 710086 中国・西安・沣东新城科源三路137号康鴻橙方科技园1号楼D单元1层 邮第: 710086 t (86-29) 6282 7885 t (86-29) 6282 7885



Report No.: AR/2021/5000403

Page: 22 of 87

	Fage. 22 01 67
	Duty cycle = On time/100 milliseconds
	On time = N 1 *L 1 +N 2 *L 2 ++N n-1 *LN n-1 +N n *L n
	Where N 1 is number of type 1 pulses, L 1 is length of type 1 pulses, etc.
	Average Emission Level = Peak Emission Level + 20*log(Duty cycle)
	f. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters(for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
	g. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
	h. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
	i. Test the EUT in the lowest channel, the middle channel ,the Highest channel.
	j. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case.
	k. Repeat above procedures until all frequencies measured was complete.
Exploratory Test Mode:	Transmitting with GFSK modulation.
	Charge + Transmitting mode.
Final Test Mode:	Transmitting with GFSK modulation.
	Pretest the EUT at Charge + Transmitting mode,
	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 6 for details
Test Results:	Pass

The detailed test data see: Appendix



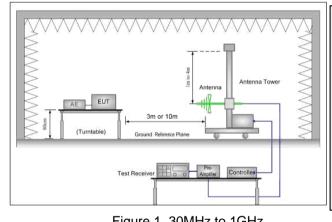


Report No.: AR/2021/5000403

Page: 23 of 87

4.10 Restricted bands around fundamental frequency

Test Requirement:	47 CFR Part 15C Section	7 CFR Part 15C Section 15.209 and 15.205					
Test Method:	ANSI C63.10: 2013 Sectio	ANSI C63.10: 2013 Section 11.12					
Test Site:	Measurement Distance: 3r	Measurement Distance: 3m (Semi-Anechoic Chamber)					
Limit:	Frequency	Limit (dBuV/m)	Remark				
	30MHz-88MHz	40.0	Quasi-peak				
	88MHz-216MHz	43.5	Quasi-peak				
	216MHz-960MHz	46.0	Quasi-peak				
	960MHz-1GHz	54.0	Quasi-peak				
	Above 4CLI-	54.0	Average Value				
	Above 1GHz	74.0	Peak Value				
Test Setup:		<u>.</u>					



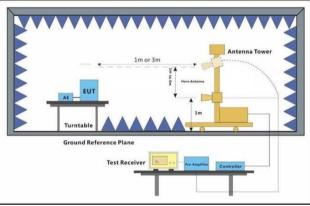


Figure 1. 30MHz to 1GHz

Figure 2. Above 1 GHz



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx. 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 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 extend of the law Luless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention:Docheck the authenticity of testing (inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Attention:**Docheck the authenticity of testing (inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Attention:**Docheck the authenticity of testing (inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, ***The company in this test report reference the contact us at telephone: (86-755) 8307 1443, ***The company in this test report reference the company in this test report reference the company in this test report reference the company in the company in the company



Report No.: AR/2021/5000403

Page: 24 of 87

	1 agc. 24 01 07
Test Procedure:	 a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. g. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel h. Test the EUT in the lowest channel , the Highest channel i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case. j. Repeat above procedures until all frequencies measured was complete.
Exploratory Test Mode:	Transmitting with GFSK modulation. Charge + Transmitting mode.
Final Test Mode:	Transmitting with GFSK modulation.
	Pretest the EUT at Charge + Transmitting mode.
	Only the worst case is recorded in the report.
Instruments Used:	Refer to section 6 for details
Test Results:	Pass

The detailed test data see: Appendix



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate,



Report No.: AR/2021/5000403

Page: 25 of 87

5 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Total RF power, conducted	±0.35dB
2	RF power density, conducted	±1.96dB
3	Spurious emissions, conducted	±0.41dB
4	Radio Frequency	±7.10 x 10 ⁻⁸
5	Duty Cycle	±0.49%
6	Occupied Bandwidth	±0.2%
7	Frquency Stability	±0.2ppm
8	Conduction Emission	± 3.0dB (150kHz to 30MHz)
		± 4.8dB (Below 1GHz)
0	Dadieted Emission	± 4.8dB (1GHz to 6GHz)
9	Radiated Emission	± 4.5dB (6GHz to 18GHz)
		± 5.02dB (Above 18GHz)



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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, Gregory 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) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Coscili (240 Pascheck Page 2004)**



Report No.: AR/2021/5000403

Page: 26 of 87

6 Equipment List

RF conducted								
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (yyyy-mm-dd)	Cal. Due date (yyyy-mm-dd)			
Temperature and humidity meter	MingGao	T809	XAW01-01-04	2020/11/6	2021/11/5			
Radio communication analyzer	ROHDE&SCHWARZ	CMW 500	XAW01-03-07	2020/10/26	2021/10/25			
Spectrum Analyzer	ROHDE&SCHWARZ	FSU	100366	2021/6/8	2022/6/7			
Spectrum Analyzer	ROHDE&SCHWARZ	FSV3044	101146	2021/6/8	2022/6/7			
temperature chamber	Votsch	VT4002	XAW01-18-01	2021/4/1	2022/3/31			
Filter bank	Tonscend	JS0806-F	19C8060147	NCR	NCR			
RF control unit	Tonscend	JS0806-1	NCR	NCR	NCR			
Test Software	Tonscend	JS1120-3 (v2.6.77.0518)	NCR	NCR	NCR			

CE Test System								
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date			
Shielding Room	Brilliant-emc	N/A	XAW03-35-01	2019-09-11	2022-09-10			
Test receiver	ROHDE&SCHWARZ	ESR	XAW01-08-01	2020-09-11	2021-09-10			
Artificial network	ROHDE&SCHWARZ	ENV216	XAW01-04-01	2020-08-04	2021-08-03			
Temperature and humidity meter	MingGao	TH101B	XAW01-01-01	2020-11-06	2021-11-05			
Measurement Software	Tonscend	TS+ CE V2.5	XAW02-05-02	NCR	NCR			





Report No.: AR/2021/5000403

Page: 27 of 87

	RSE Test System									
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date					
Semi-Anechoic Chamber	Brilliant-emc	N/A	XAW03-35-01	2019-09-11	2022-09-10					
MXA signal analyzer	Keysight	N9020A	XAW01-06-01	2021-04-01	2022-03-31					
Test receiver	ROHDE&SCHWARZ	ESR	XAW01-08-01	2020-09-11	2021-09-10					
Receiving antenna (30MHz-3GHz)	Schwarzbeck	VULB 9163	XAW01-09-01	2019-10-13	2021-10-12					
Receiving antenna (1GHz~18GHz)	Schwarzbeck	BBHA 9120D	XAW01-09-02	2019-10-13	2021-10-12					
Receiving antenna (15GHz~40GHz)	Schwarzbeck	BBHA 9170	XAW01-09-03	2019-10-13	2021-10-12					
Directional antenna rack controller	Max-Full	MF-7802BS	XAW03-03-01	NCR	NCR					
High-speed antenna rack controller	Max-Full	MF-7802	XAW03-04-01	NCR	NCR					
Filter bank	Tonscend	JS0806-F	XAW03-05-01	NCR	NCR					
Filter bank	Tonscend	JS0806s	XAW03-05-02	NCR	NCR					
Amplifier	Tonscend	TAP00903040	XAW01-41-01	2020-10-26	2021-10-25					
Amplifier	Tonscend	TAP01018048	XAW01-41-02	2020-10-26	2021-10-25					
Amplifier	Tonscend	TAP18040048	XAW01-41-03	2020-10-27	2021-10-26					
Amplifier	Shanghai Steed	YX28980930	XAW01-41-06	2020-10-26	2021-10-25					
Temperature and humidity meter	MingGao	TH101B	XAW01-01-01	2020-11-06	2021-11-05					
Measurement Software	Tonscend	TS+ RSE V3.0.0.2	XAW02-05-01	NCR	NCR					



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/

1/F, Unit D, Building 1, Kanghong Orange Science Park, No. 137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

t (86–29) 6282 7885 www.sgsgroup.com.cn sgs.china@sgs.com



Report No.: AR/2021/5000403

Page: 28 of 87

7 Photographs - EUT Constructional Details

Refer to Appendix A Setup Photos.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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, Gregory 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) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Coscili (240 Pascheck Page 2004)**

1/F, Unit D, Building T, Kanghong Orange Science Park, No. 137, Keyuan 3rd Road, Fengolong New Town, XYan, Steami, China 710086 中国・西安・沣东新城科源三路137号康湾橙方科技园1号楼D单元1层 邮编: 710086

t (86-29) 6282 7885 t (86-29) 6282 7885



Report No.: AR/2021/5000403

Page: 29 of 87

Appendix



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx.and, for electronic Documents a thite://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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 document. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or faisification of the content or appearance of this document is unlawfull 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 30 days only.

1/F, Unit D, Building 1, Kanghong Orange Science Park, No. 137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885



Report No.: AR/2021/5000403

Page: 30 of 87

DTS Bandwidth Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
		2402	0.672	2401.667	2402.339	0.5	PASS
BLE_1M	Ant1	2440	0.672	2439.667	2440.339	0.5	PASS
		2480	0.672	2479.667	2480.339	0.5	PASS
		2402	1.185	2401.410	2402.595	0.5	PASS
BLE_2M	Ant1	2440	1.190	2439.405	2440.595	0.5	PASS
		2480	1.245	2479.350	2480.595	0.5	PASS



Report No.: AR/2021/5000403

Page: 31 of 87

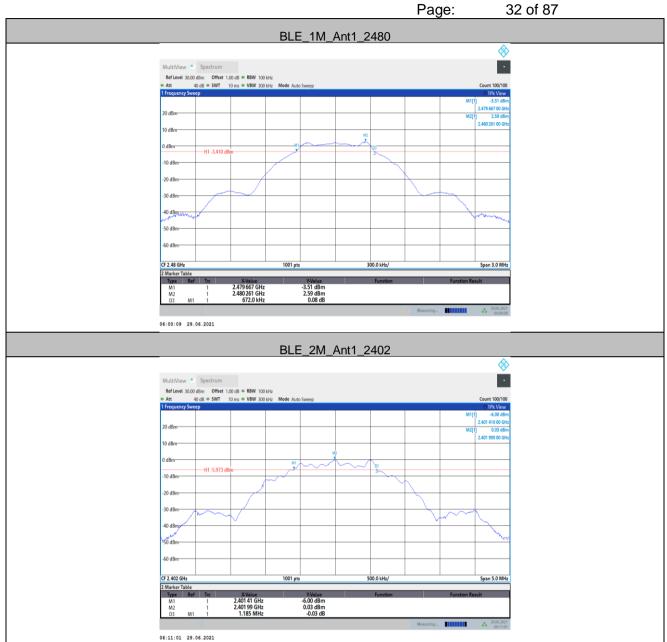
Test Graphs







Report No.: AR/2021/5000403





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/

or email: CN.Doccheck@sgs.com |IFLbit10, bilding 1, Kanghong Crange Ssiene Park, No.137, Keyara 3rd Read, Fengolong New Town, Xira, Stearni, China 710086 |中国-西安・沣东新城科頭三路137号康鸿推方科技园1号楼D单元1层 邮第:710086

t (86-29) 6282 7885 t (86-29) 6282 7885



Report No.: AR/2021/5000403

Page: 33 of 87





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/

or email: CNLOccheck@sgs.com ||Fight||Dishiding||KanghongOrang>Saren Patk | Na13||Keyaan3rdRead, Fengolong||New Town, Xira, Steamsi, Clina 710086 ||中国・西安・沣东新城科源三路137号康鸿槽方科技园1号楼D单元1层 邮第: 710086

t (86–29) 6282 7885 www. t (86–29) 6282 7885 sgs.c



Report No.: AR/2021/5000403

Page: 34 of 87

Occupied Channel Bandwidth Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
		2402	1.027	2401.499	2402.526		PASS
BLE_1M	Ant1	2440	1.025	2439.500	2440.525		PASS
		2480	1.025	2479.499	2480.523		PASS
		2402	2.059	2400.981	2403.040		PASS
BLE_2M	Ant1	2440	2.057	2438.982	2441.039		PASS
		2480	2.054	2478.977	2481.030		PASS



Report No.: AR/2021/5000403

Page: 35 of 87

Test Graphs







Report No.: AR/2021/5000403

Page: 36 of 87



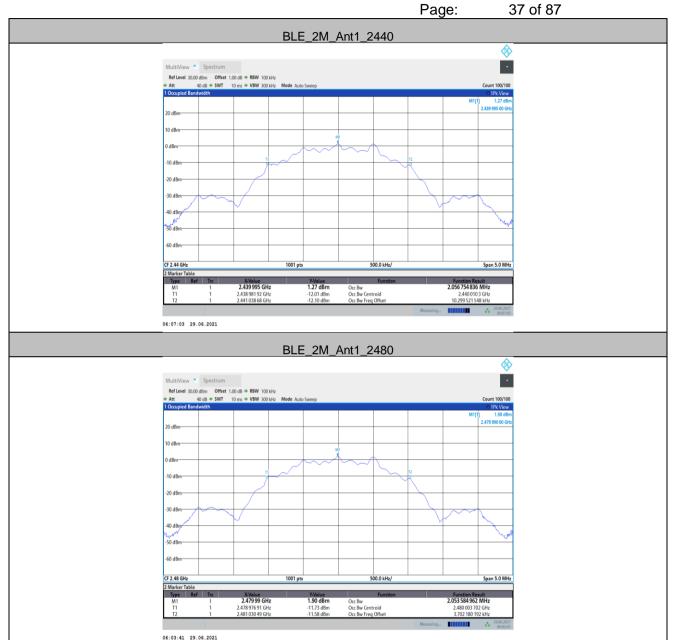


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/

1/F, Unit D, Bulding 1, Kanghang Orange Science Park, No.137, Keyuan 3rd Road, Fengolong New Town, X/lan, Shaami, China 710086 中国・西安・沣东新城科源三路137号康鴻橙方科技园1号楼D单元1层 邮编: 710086 t (86–29) 6282 7885 t (86–29) 6282 7885



Report No.: AR/2021/5000403







Report No.: AR/2021/5000403

Page: 38 of 87

Maximum conducted output power Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
		2402	1.4	≤30	PASS
BLE_1M	Ant1	2440	2.67	≤30	PASS
		2480	3.35	≤30	PASS
		2402	1.55	≤30	PASS
BLE_2M	Ant1	2440	2.71	≤30	PASS
		2480	3.48	≤30	PASS

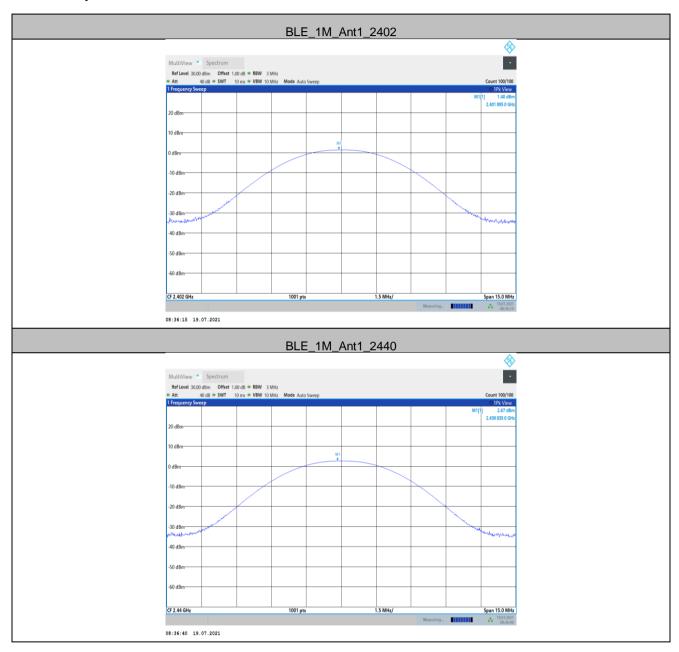




Report No.: AR/2021/5000403

Page: 39 of 87

Test Graphs







Report No.: AR/2021/5000403

Page: 40 of 87





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/

1/F, Unit D, Bulding 1, Kanghang Orange Science Park, No.137, Keyuan 3rd Road, Fengolong New Town, X/lan, Shaami, China 710086 中国・西安・沣东新城科源三路137号康鴻橙方科技园1号楼D单元1层 邮编: 710086 t (86–29) 6282 7885 t (86–29) 6282 7885



Report No.: AR/2021/5000403

Page: 41 of 87





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/

1/F, Unit D, Bulding 1, Kanghang Orange Science Park, No.137, Keyuan 3rd Road, Fengolong New Town, X/lan, Shaami, China 710086 中国・西安・沣东新城科源三路137号康鴻橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 t (86-29) 6282 7885



Report No.: AR/2021/5000403

Page: 42 of 87

Maximum power spectral density Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
		2402	-13.99	≤8	PASS
BLE_1M	Ant1	2440	-12.7	≤8	PASS
		2480	-12.03	≤8	PASS
		2402	-16	≤8	PASS
BLE_2M	Ant1	2440	-14.83	≤8	PASS
		2480	-14.11	≤8	PASS

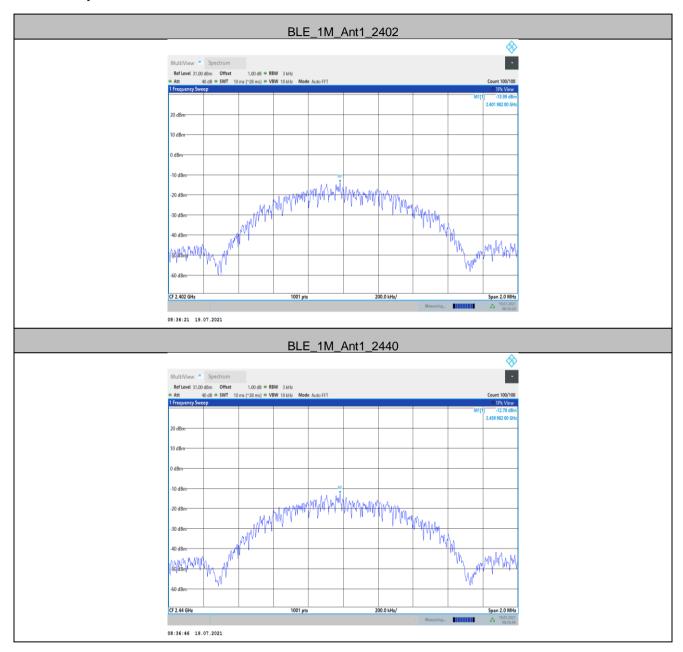




Report No.: AR/2021/5000403

Page: 43 of 87

Test Graphs



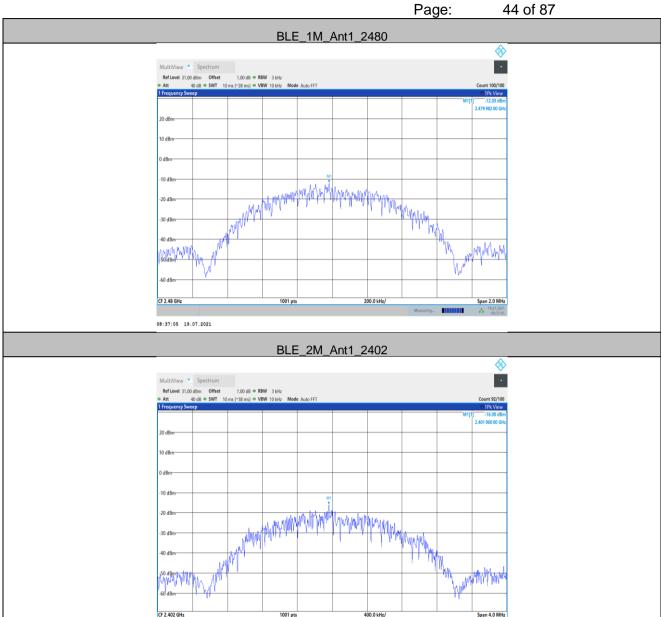


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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, Gregory 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) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Coscili (240 Pascheck Page 2004).



Report No.: AR/2021/5000403





08:37:24 19.07.2021

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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, Gregory 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) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Coscili (240 Pascheck Page 2004).

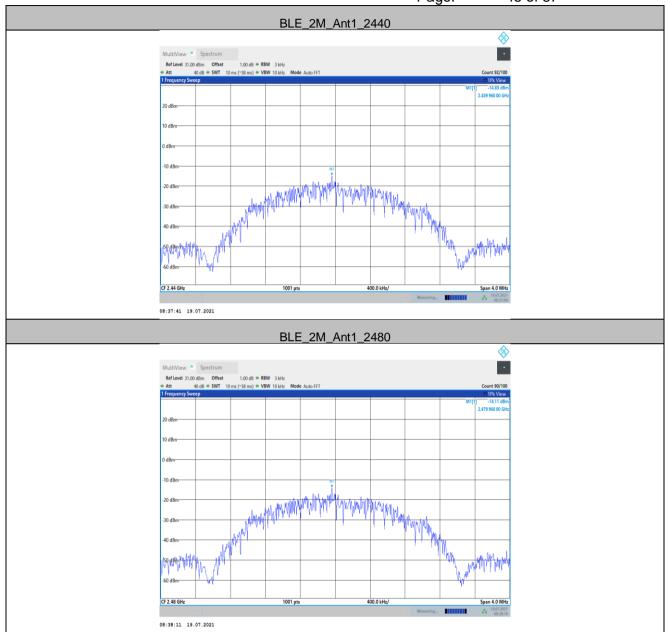
or email: <u>CN. Doccheck@sgs.com</u> |If Juhil D, kilding I, Karghong Oraps Saince Park, No.137, Keyan 3rd Road, Fengdong New Town, Xira, Shaamai, China 710086 中国 - 西安 - 洋东新城科源 正路137号康治推方科技园号楼D单元1层 邮第: 710086

t (86-29) 6282 7885 t (86-29) 6282 7885



Report No.: AR/2021/5000403

Page: 45 of 87





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Cestili CARD Rescheid-Regulation**

or email: <u>CN. Doccheck@sgs.com</u> |If Juhil D, kilding I, Karghong Oraps Saince Park, No.137, Keyan 3rd Road, Fengdong New Town, Xira, Shaamai, China 710086 中国 - 西安 - 洋东新城科源 正路137号康治推方科技园号楼D单元1层 邮第: 710086

t (86–29) 6282 7885 t (86–29) 6282 7885



Report No.: AR/2021/5000403

Page: 46 of 87

Band edge measurements Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
DIE 4M	A	Low	2402	0.87	-58.28	<=-19.13	PASS
BLE_1M	Ant1	High	2480	2.67	-59.01	<=-17.33	PASS
		Low	2402	0.02	-31.38	<=-19.98	PASS
BLE_2M	Ant1	High	2480	1.97	-57.24	<=-18.03	PASS





Report No.: AR/2021/5000403

Page: 47 of 87

Test Graphs





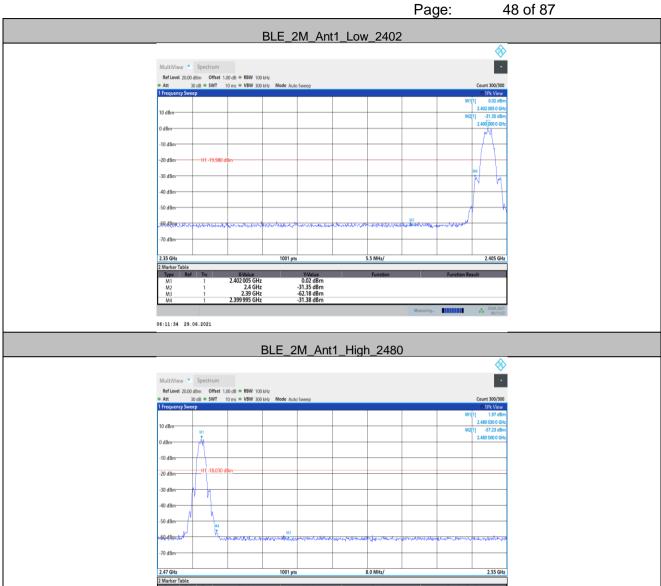
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/

or email: CNLOccheck@sgs.com ||Fight||Dishiding||KanghongOrang>skore|Patk||Ni37||Keyaan3rlRead, Fengolog||New Town, Xira, Stearst, Clina 710086 |中国-西安-沣东新城科源三路137号康鸿槽方科技园1号楼D单元1层 邮第: 710086

t (86–29) 6282 7885 www.sgsgroup.com.cn t (86–29) 6282 7885 sgs.china@sgs.com



Report No.: AR/2021/5000403





06:04:02 29.06.2021

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/

1/F, Unit D, Bulding 1, Kanghang Orange Science Park, No.137, Keyuan 3rd Road, Fengolong New Town, X/lan, Shaami, China 710086 中国・西安・沣东新城科源三路137号康鴻橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 t (86-29) 6282 7885



Report No.: AR/2021/5000403

Page: 49 of 87

Conducted Spurious Emission Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel	Result[dBm]	Limit[dBm]	Verdict
			Reference	0.84	0.84		PASS
		2402	30~1000	0.84	-64.62	<=-19.16	PASS
			1000~26500	0.84	-55.81	<=-19.16	PASS
			Reference	2.02	2.02		PASS
BLE_1M	Ant1	2440	30~1000	2.02	-64.06	<=-17.98	PASS
			1000~26500	2.02	-55.37	<=-17.98	PASS
			Reference	2.60	2.60		PASS
		2480	30~1000	2.60	-64.65	<=-17.4	PASS
			1000~26500	2.60	-55.92	<=-17.4	PASS
			Reference	0.04	0.04		PASS
		2402	30~1000	0.04	-64.67	<=-19.96	PASS
			1000~26500	0.04	-55.3	<=-19.96	PASS
			Reference	1.27	1.27		PASS
BLE_2M	Ant1	2440	30~1000	1.27	-64.32	<=-18.73	PASS
			1000~26500	1.27	-55.87	<=-18.73	PASS
		2480	Reference	1.91	1.91		PASS
			30~1000	1.91	-64.63	<=-18.09	PASS
			1000~26500	1.91	-56.21	<=-18.09	PASS

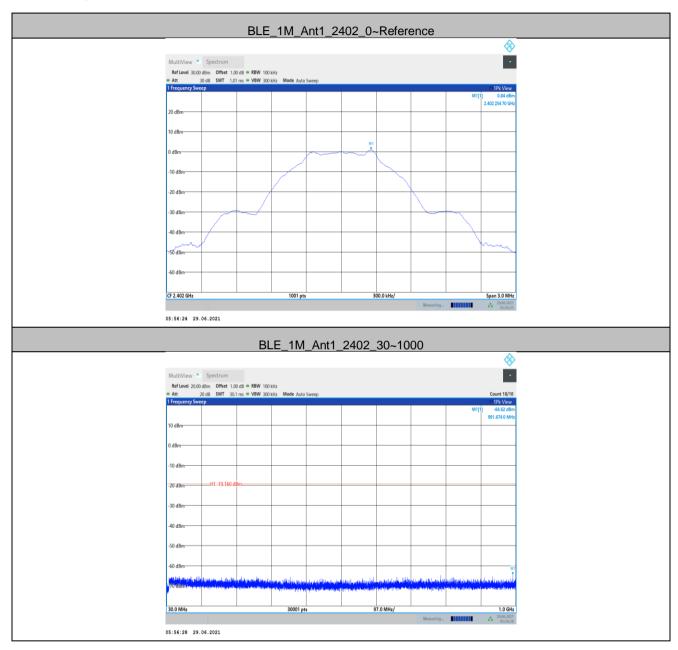




Report No.: AR/2021/5000403

Page: 50 of 87

Test Graphs

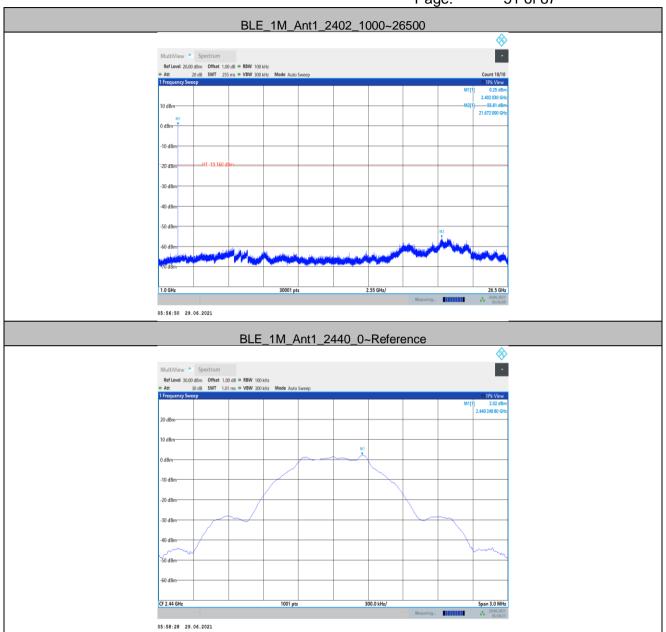






Report No.: AR/2021/5000403

Page: 51 of 87





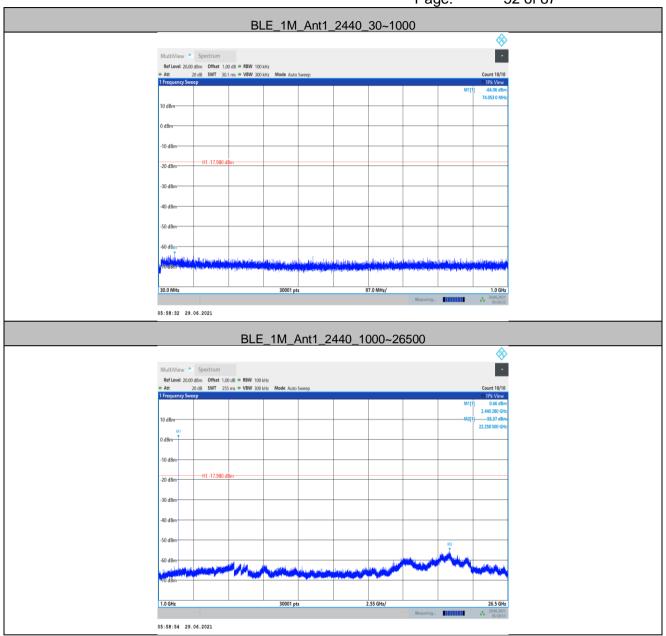
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/

1/F, Unit D, Bulding 1, Kanghang Orange Science Park, No.137, Keyuan 3rd Road, Fengolong New Town, X/lan, Shaami, China 710086 中国・西安・沣东新城科源三路137号康鴻橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 t (86-29) 6282 7885



Report No.: AR/2021/5000403

Page: 52 of 87





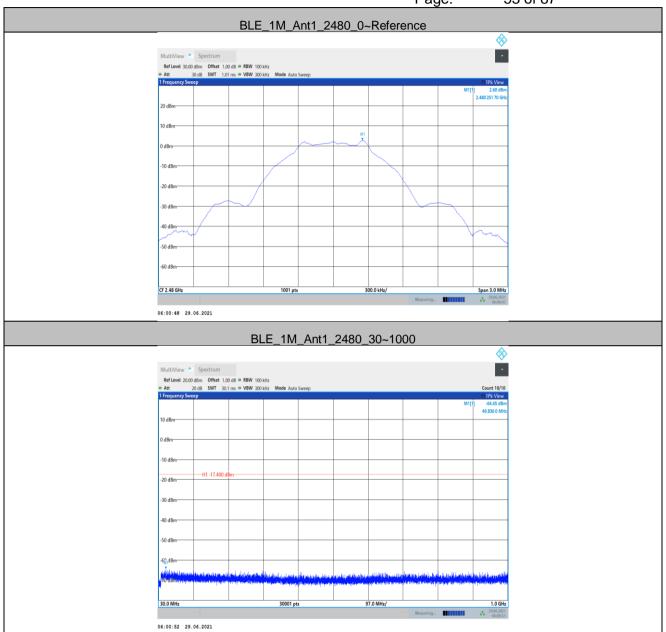
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/

1/F, Unit D, Bulding 1, Kanghang Orange Science Park, No.137, Keyuan 3rd Road, Fengolong New Town, X/lan, Shaami, China 710086 中国・西安・沣东新城科源三路137号康鴻橙方科技园1号楼D单元1层 邮编: 710086 t (86–29) 6282 7885 t (86–29) 6282 7885



Report No.: AR/2021/5000403

Page: 53 of 87





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/

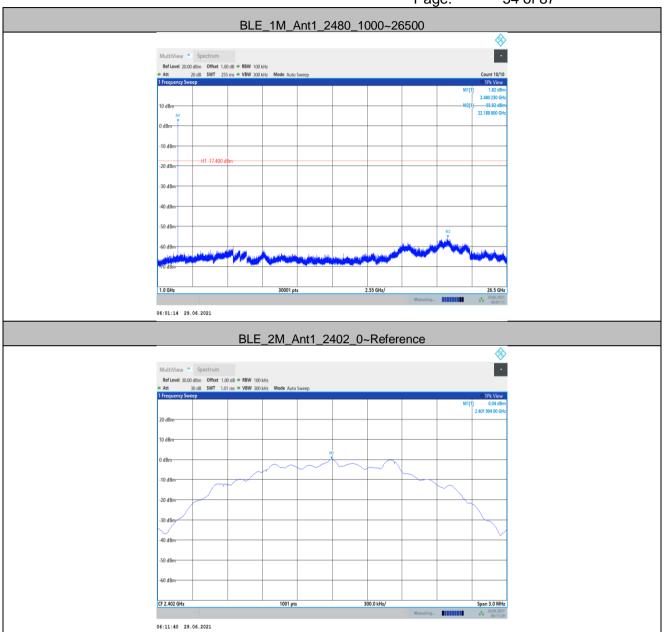
or email: CM.Doccheck@sgs.com ||Fight|| Building (, Karghong Changs Soene Park, Noi 37, Keyan 34 Road, Fengdong New Town, Vian, Shaami, China 710086 |中国 - 西安 - 沣东新城科源三路137号康鸿橙方科技园号楼D单元1层 邮第: 710086

t (86-29) 6282 7885 t (86-29) 6282 7885



Report No.: AR/2021/5000403

Page: 54 of 87





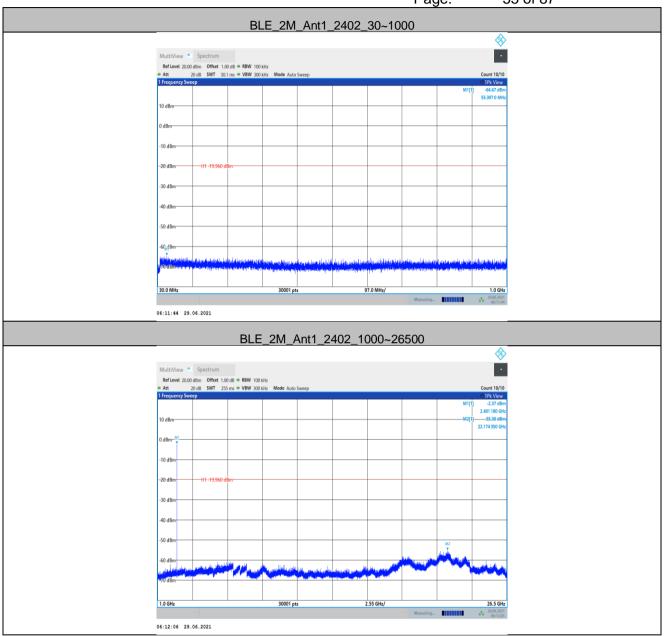
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/

1/F, Unit D, Bulding 1, Kanghang Orange Science Park, No.137, Keyuan 3rd Road, Fengolong New Town, X/lan, Shaami, China 710086 中国・西安・沣东新城科源三路137号康鴻橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 t (86-29) 6282 7885



Report No.: AR/2021/5000403

Page: 55 of 87





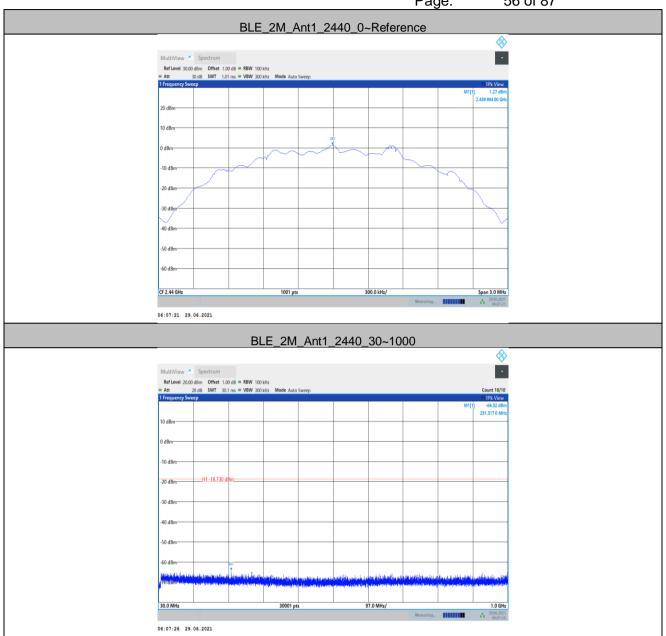
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/

1/F, Unit D, Bulding 1, Kanghang Orange Science Park, No.137, Keyuan 3rd Road, Fengolong New Town, X/lan, Shaami, China 710086 中国・西安・沣东新城科源三路137号康鴻橙方科技园1号楼D单元1层 邮编: 710086 t (86–29) 6282 7885 t (86–29) 6282 7885



Report No.: AR/2021/5000403

Page: 56 of 87





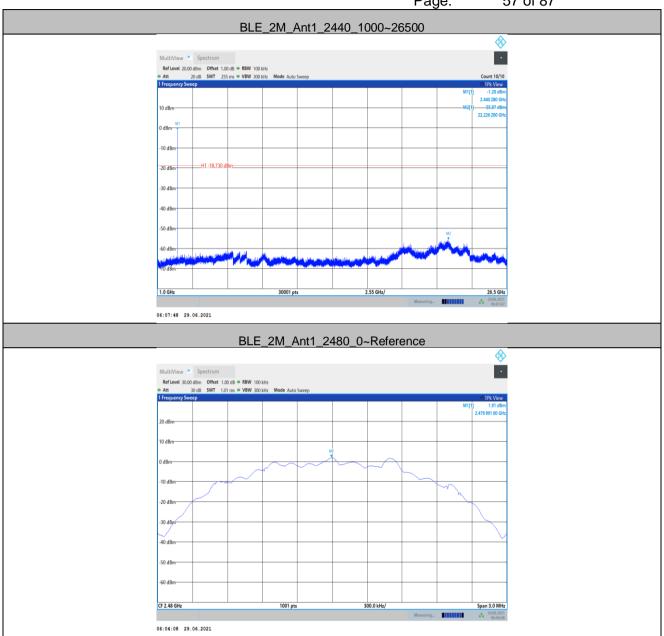
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/

1/F, Unit D, Bulding 1, Kanghang Orange Science Park, No.137, Keyuan 3rd Road, Fengolong New Town, X/lan, Shaami, China 710086 中国・西安・沣东新城科源三路137号康鴻橙方科技园1号楼D单元1层 邮编: 710086 t (86–29) 6282 7885 t (86–29) 6282 7885



Report No.: AR/2021/5000403

Page: 57 of 87





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/

1/F, Unit D, Building 1, Kanghong Orange Science Park, No. 137, Kevuan 3rd Road, Fenodong New Town, Xi'an, Shaanxi, China 71,0086 中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

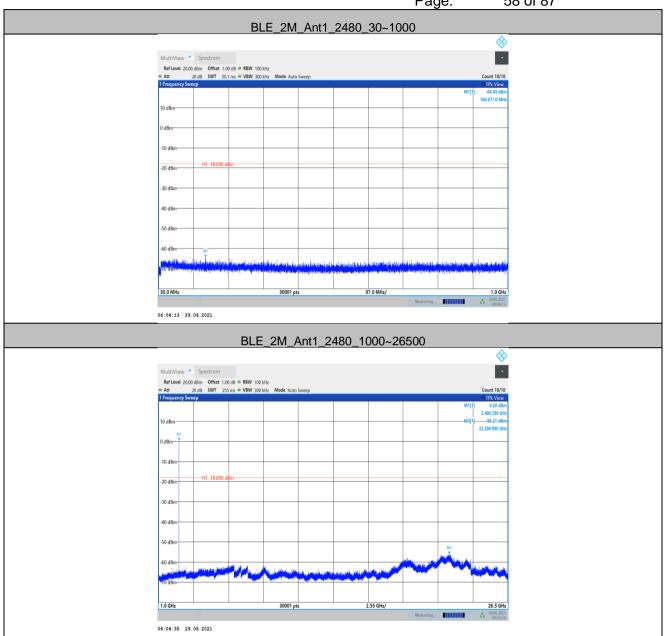
t (86-29) 6282 7885 t (86–29) 6282 7885

www.sasaroup.com.cn sas.china@sas.com



Report No.: AR/2021/5000403

Page: 58 of 87





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/

1/F, Unit D, Building 1, Kanghong Orange Science Park, No. 137, Kevuan 3rd Road, Fenodong New Town, Xi'an, Shaanxi, China 71,0086 中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 t (86–29) 6282 7885

www.sasaroup.com.cn sas.china@sas.com



Report No.: AR/2021/5000403

Page: 59 of 87

Duty Cycle Test Result

TestMode	Antenna	Channel	ON Time [ms]	Period [ms]	Х	DC [%]	xFactor	Limit	Verdict
		2402	2.13	2.50	0.8520	85.20	0.70		PASS
BLE_1M	Ant1	2440	2.13	2.50	0.8520	85.20	0.70		PASS
		2480	2.13	2.50	0.8520	85.20	0.70		PASS
		2402	1.07	1.88	0.5691	56.91	2.45		PASS
BLE_2M	Ant1	2440	1.07	1.88	0.5691	56.91	2.45		PASS
		2480	1.07	1.88	0.5691	56.91	2.45		PASS



Report No.: AR/2021/5000403

Page: 60 of 87

Test Graphs





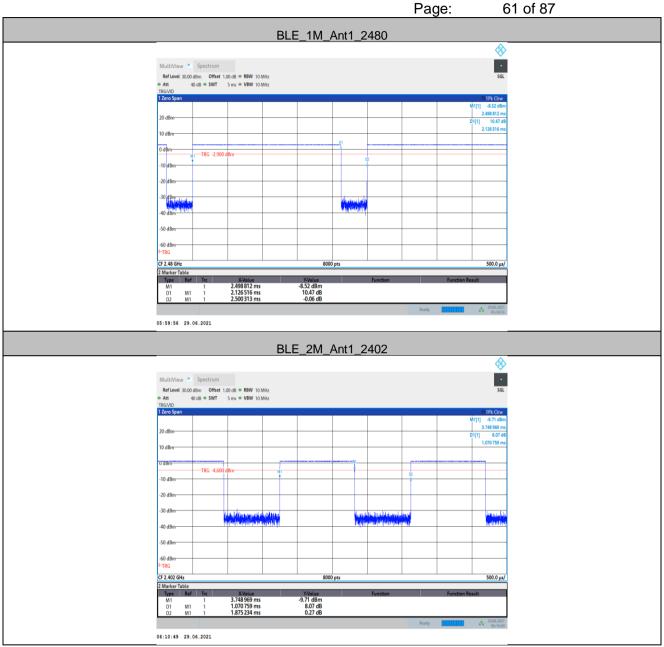
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/

or email: CNLOccheck@sgs.com ||Fight||Dishiding||KanghongOrang>skore|Patk||Ni37||Keyaan3rlRead, Fengolog||New Town, Xira, Stearst, Clina 710086 |中国-西安-沣东新城科源三路137号康鸿槽方科技园1号楼D单元1层 邮第: 710086

t (86–29) 6282 7885 w t (86–29) 6282 7885 sç



Report No.: AR/2021/5000403





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/

1/F, Unit D, Bulding 1, Kanghang Orange Science Park, No.137, Keyuan 3rd Road, Fengolong New Town, X/lan, Shaami, China 710086 中国・西安・沣东新城科源三路137号康鴻橙方科技园1号楼D单元1层 邮编: 710086 t (86–29) 6282 7885 t (86–29) 6282 7885



Report No.: AR/2021/5000403





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/

1/F, Unit D, Bulding 1, Kanghang Orange Science Park, No.137, Keyuan 3rd Road, Fengolong New Town, X/lan, Shaami, China 710086 中国・西安・沣东新城科源三路137号康鴻橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 t (86-29) 6282 7885

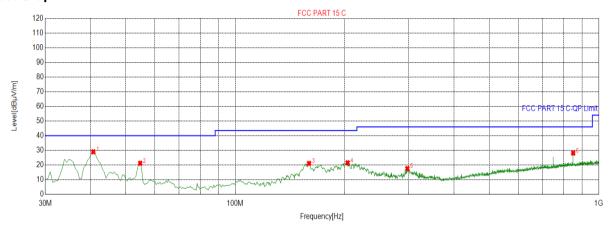


Report No.: AR/2021/5000403

Page: 63 of 87

Radiated Spurious Emission

Radiated Emission below 1GHz Charge + Transmitting Test Graph



QP Detector

Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	40.6753	29.00	-22.22	40.00	11.00	224	122	Horizontal			
2	54.7474	21.18	-22.07	40.00	18.82	274	210	Horizontal			
3	159.559	21.09	-25.55	43.50	22.41	265	235	Horizontal			
4	203.716	21.50	-22.23	43.50	22.00	231	235	Horizontal			
6	850.060	28.16	-8.55	46.00	17.84	241	355	Horizontal			
5	297.368	17.57	-19.42	46.00	28.43	227	67	Horizontal			

Final Data List



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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 30 days only.

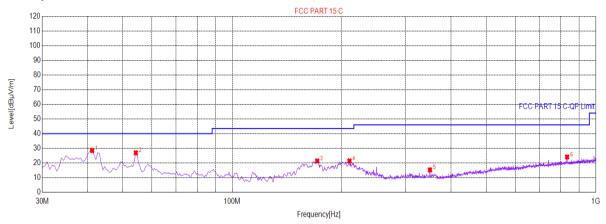
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Certificate, Please contact us at telephone: (86-755) 8307 1443, **Certificate, Please contact us at telephone: (86-755) 8307 1443, **Certificate, Please contact us at telephone: (86-755) 8307 1443, **Certificate, Please contact us at telephone: (86-755) 8307 1443, **Certificate, Please contact us at telephone: (86-755) 8307 1443, **Certificate, Please contact us at telephone: (86-755) 8307 1443, **Certificate, Please contact us at telephone: (86-755)



Report No.: AR/2021/5000403

Page: 64 of 87

Test Graph



QP Detector

Suspected List

Gagpa	otou Liot											
Susp	Suspected List											
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity				
1	41.1606	28.43	-22.13	40.00	11.57	174	8	Vertical				
2	54.2621	26.90	-22.00	40.00	13.10	125	303	Vertical				
3	171.205	21.39	-25.09	43.50	22.11	241	350	Vertical				
4	210.025	21.41	-21.77	43.50	22.09	124	310	Vertical				
5	349.774	15.28	-17.73	46.00	30.72	189	125	Vertical				
6	833.561	24.09	-8.62	46.00	21.91	187	154	Vertical				

Final Data List

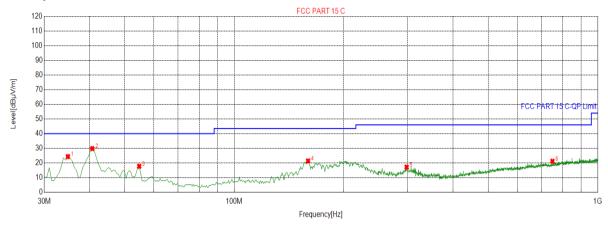




Report No.: AR/2021/5000403

Page: 65 of 87

Test Graph



QP Detector

Suspected List

Suspe	ected List							
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	34.8524	24.35	-23.95	40.00	15.65	187	32	Horizontal
2	40.6753	29.81	-22.22	40.00	10.19	195	182	Horizontal
3	54.7474	17.75	-22.07	40.00	22.25	241	256	Horizontal
4	159.559	21.38	-25.55	43.50	22.12	189	260	Horizontal
5	297.853	17.20	-19.42	46.00	28.80	168	71	Horizontal
6	750.100	21.20	-9.64	46.00	24.80	187	302	Horizontal

Final Data List

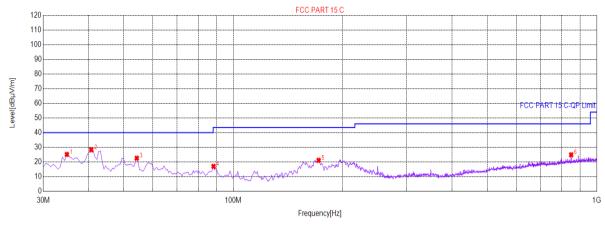




Report No.: AR/2021/5000403

Page: 66 of 87

Test Graph



QP Detector

Suspected List

U UU PU	oteu List							
Susp	ected List							
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	34.8524	25.15	-23.95	40.00	14.85	174	85	Vertical
2	40.6753	28.28	-22.22	40.00	11.72	198	331	Vertical
3	54.2621	22.59	-22.00	40.00	17.41	224	0	Vertical
4	88.2291	17.01	-24.99	43.50	26.49	187	146	Vertical
5	171.690	21.13	-25.05	43.50	22.37	196	339	Vertical
6	850.060	24.89	-8.55	46.00	21.11	176	150	Vertical

Final Data List



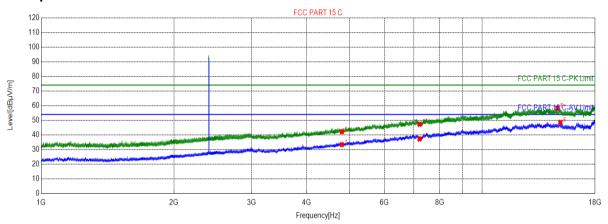


Report No.: AR/2021/5000403

Page: 67 of 87

Transmitter Emission above 1GHz BLE_1M_Channel 0

Test Graph



Suspected List

Susp	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	4804.00	33.41	-15.41	54.00	20.59	186	201	Horizontal			
2	4804.00	42.19	-15.41	74.00	31.81	254	172	Horizontal			
3	7206.00	47.25	-8.59	74.00	26.75	144	158	Horizontal			
4	7206.00	37.29	-8.59	54.00	16.71	235	305	Horizontal			
5	14799.4	58.38	3.32	74.00	15.62	200	274	Horizontal			
6	15032.2	48.55	3.45	54.00	5.45	155	2	Horizontal			

Final Data List



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues define 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, forger 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 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, 1818.

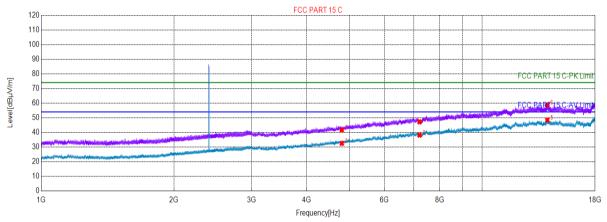


Report No.: AR/2021/5000403

Page: 68 of 87

BLE_1M _Channel 0

Test Graph



★ PK Detector
★ AV Detector

Suspected List

Susp	ected List							
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4804.00	41.68	-15.41	74.00	32.32	263	94	Vertical
2	4804.00	32.53	-15.41	54.00	21.47	325	169	Vertical
3	7206.00	38.16	-8.59	54.00	15.84	128	210	Vertical
4	7206.00	47.18	-8.59	74.00	26.82	145	213	Vertical
5	14042.8	48.41	3.20	54.00	5.59	274	40	Vertical
6	14042.8	58.64	3.20	74.00	15.36	255	196	Vertical

Final Data List



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed everteaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to leave and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to leave and Conditions for Electronic Documents at https://www.sgs.com/en/Terms-and-Conditions.aspx and its electronic Document system of the service of t

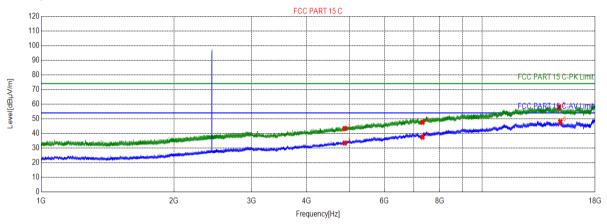


Report No.: AR/2021/5000403

Page: 69 of 87

BLE_1M _Channel 19

Test Graph



★ PK Detector
★ AV Detector

Suspected List

Susp	ected List							
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4880.00	43.34	-15.07	74.00	30.66	254	347	Horizontal
2	4880.00	33.43	-15.07	54.00	20.57	158	358	Horizontal
3	7320.00	47.61	-8.63	74.00	26.39	166	232	Horizontal
4	7320.00	37.51	-8.63	54.00	16.49	204	143	Horizontal
5	14945.2	57.89	2.98	74.00	16.11	211	58	Horizontal
6	15030.4	47.98	3.47	54.00	6.02	196	183	Horizontal

Final Data List



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed everteaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to leave and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to leave and Conditions for Electronic Documents at https://www.sgs.com/en/Terms-and-Conditions.aspx and its electronic Document system of the service of t

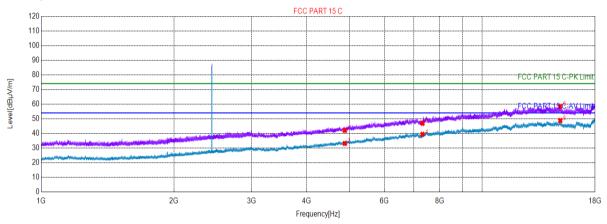


Report No.: AR/2021/5000403

Page: 70 of 87

BLE_1M _Channel 19

Test Graph



★ PK Detector
★ AV Detector

Suspected List

Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4880.00	42.05	-15.07	74.00	31.95	263	110	Vertical
2	4880.00	33.16	-15.07	54.00	20.84	325	23	Vertical
3	7320.00	46.87	-8.63	74.00	27.13	148	332	Vertical
4	7320.00	39.35	-8.63	54.00	14.65	266	170	Vertical
5	15010.6	58.31	3.66	74.00	15.69	245	332	Vertical
6	15028.6	48.76	3.49	54.00	5.24	289	125	Vertical

Final Data List



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overteaf, available on request or accessible at http://www.sas.com/en/Terms-and-Conditions.agxx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sas.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues define 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, frogery 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 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 83071443,

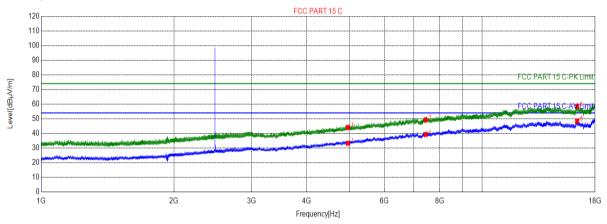


Report No.: AR/2021/5000403

Page: 71 of 87

BLE_1M _Channel 39

Test Graph



★ PK Detector
★ AV Detector

Suspected List

Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4960.00	33.30	-14.40	54.00	20.70	174	46	Horizontal
2	4960.00	44.17	-14.40	74.00	29.83	185	75	Horizontal
3	7440.00	49.26	-7.31	74.00	24.74	162	262	Horizontal
4	7440.00	39.17	-7.31	54.00	14.83	187	4	Horizontal
5	16408.7	48.42	1.36	54.00	5.58	195	218	Horizontal
6	16414.7	58.41	1.25	74.00	15.59	199	132	Horizontal

Final Data List



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed everteaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to leave and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to leave and Conditions for Electronic Documents at https://www.sgs.com/en/Terms-and-Conditions.aspx and its electronic Document system of the service of t

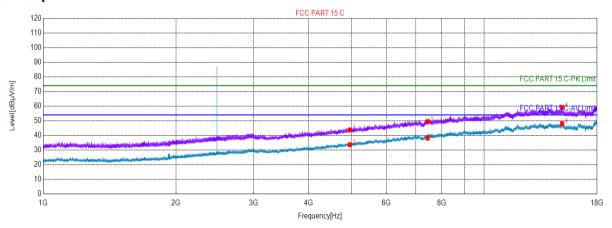


Report No.: AR/2021/5000403

Page: 72 of 87

BLE_1M _Channel 39

Test Graph



★ PK Detector
★ AV Detector

Suspected List

Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4960.00	43.72	-14.40	74.00	30.28	265	92	Vertical
2	4960.00	33.63	-14.40	54.00	20.37	254	118	Vertical
3	7440.00	49.43	-7.31	74.00	24.57	142	228	Vertical
4	7440.00	38.16	-7.31	54.00	15.84	325	287	Vertical
5	15011.8	48.09	3.65	54.00	5.91	289	199	Vertical
6	15015.4	59.12	3.61	74.00	14.88	255	63	Vertical

Final Data List



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed everteaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to leave and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to leave and Conditions for Electronic Documents at https://www.sgs.com/en/Terms-and-Conditions.aspx and its electronic Document system of the service of t

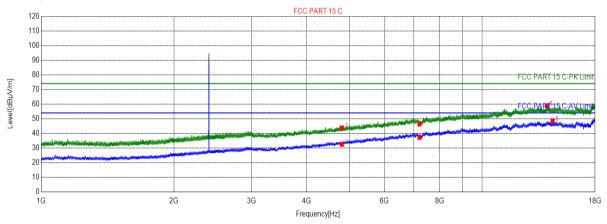


Report No.: AR/2021/5000403

Page: 73 of 87

BLE_2M _Channel 0

Test Graph



★ PK Detector
★ AV Detector

Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	4804.00	43.76	-15.41	74.00	30.24	145	73	Horizontal			
2	4804.00	32.53	-15.41	54.00	21.47	168	76	Horizontal			
3	7206.00	46.43	-8.59	74.00	27.57	178	133	Horizontal			
4	7206.00	37.27	-8.59	54.00	16.73	204	162	Horizontal			
5	14033.2	58.73	3.06	74.00	15.27	166	234	Horizontal			
6	14437.6	48.50	2.49	54.00	5.50	244	320	Horizontal			

Final Data List



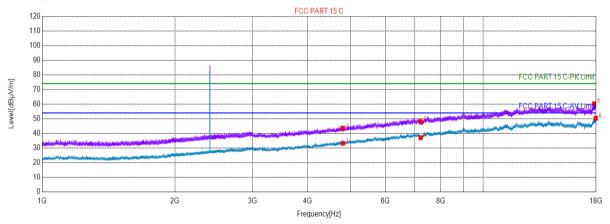


Report No.: AR/2021/5000403

Page: 74 of 87

BLE_2M _Channel 0

Test Graph



★ PK Detector
★ AV Detector

Suspected List

Susp	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	4804.00	43.50	-15.41	74.00	30.50	263	349	Vertical			
2	4804.00	33.31	-15.41	54.00	20.69	325	104	Vertical			
3	7206.00	48.16	-8.59	74.00	25.84	148	305	Vertical			
4	7206.00	37.10	-8.59	54.00	16.90	255	132	Vertical			
5	17839.7	60.24	1.04	74.00	13.76	321	144	Vertical			
6	17993.3	50.35	1.52	54.00	3.65	342	349	Vertical			

Final Data List



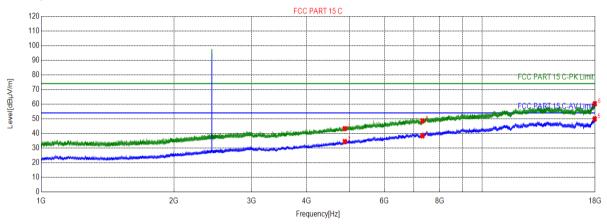


Report No.: AR/2021/5000403

Page: 75 of 87

BLE_2M _Channel 19

Test Graph



★ PK Detector
★ AV Detector

Suspected List

Suspe	Suspected List											
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity				
1	4880.00	43.28	-15.07	74.00	30.72	156	73	Horizontal				
2	4880.00	34.45	-15.07	54.00	19.55	258	234	Horizontal				
3	7320.00	48.49	-8.63	74.00	25.51	114	58	Horizontal				
4	7320.00	38.29	-8.63	54.00	15.71	146	117	Horizontal				
5	17989.7	49.92	1.59	54.00	4.08	186	114	Horizontal				
6	17996.3	60.25	1.46	74.00	13.75	155	89	Horizontal				

Final Data List



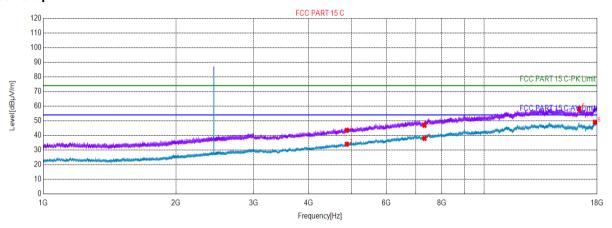


Report No.: AR/2021/5000403

Page: 76 of 87

BLE_2M _Channel 19

Test Graph



★ PK Detector
★ AV Detector

Suspected List

Susp	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	4880.00	43.51	-15.07	74.00	30.49	265	60	Vertical			
2	4880.00	34.03	-15.07	54.00	19.97	255	247	Vertical			
3	7320.00	46.86	-8.63	74.00	27.14	321	347	Vertical			
4	7320.00	37.96	-8.63	54.00	16.04	255	202	Vertical			
5	16418.9	58.18	1.17	74.00	15.82	142	44	Vertical			
6	17817.5	49.01	1.06	54.00	4.99	263	306	Vertical			

Final Data List



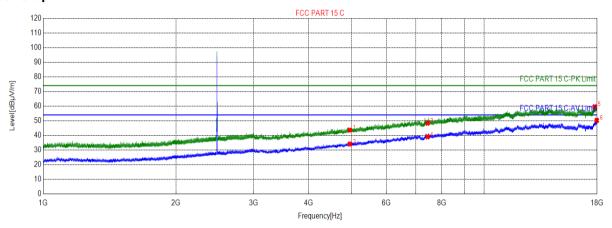


Report No.: AR/2021/5000403

Page: 77 of 87

BLE 2M Channel 39

Test Graph



★ PK Detector
★ AV Detector

Suspected List

Susp	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	4960.00	43.63	-14.40	74.00	30.37	263	61	Horizontal			
2	4960.00	34.13	-14.40	54.00	19.87	244	166	Horizontal			
3	7440.00	48.39	-7.31	74.00	25.61	256	234	Horizontal			
4	7440.00	39.06	-7.31	54.00	14.94	214	304	Horizontal			
5	17807.9	59.52	1.07	74.00	14.48	158	104	Horizontal			
6	17995.7	50.26	1.47	54.00	3.74	186	320	Horizontal			

Final Data List



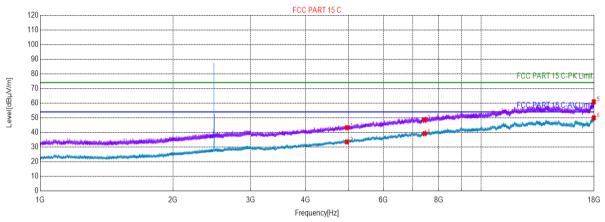


Report No.: AR/2021/5000403

Page: 78 of 87

BLE_2M _Channel 39

Test Graph



PK Detector

AV Detector

Suspected List

Suspe	Suspected List											
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity				
1	4960.00	43.14	-14.40	74.00	30.86	265	147	Vertical				
2	4960.00	33.51	-14.40	54.00	20.49	255	175	Vertical				
3	7440.00	48.35	-7.31	74.00	25.65	321	75	Vertical				
4	7440.00	39.15	-7.31	54.00	14.85	145	102	Vertical				
5	17994.5	60.84	1.49	74.00	13.16	288	146	Vertical				
6	17997.5	49.97	1.43	54.00	4.03	325	262	Vertical				

Final Data List

Remark:

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

Factor = Antenna Factor + Cable Factor - Preamplifier Factor

Final Test Level =Receiver Reading + Factor

- 2) Scan from 9kHz to 25GHz, the disturbance between 9KHz to 30MHz was very low, and the above harmonics were the highest point could be found when testing, The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- 3) As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the peak measurements were shown in the report.
- 4) All Modes have been tested, but only the worst case data displayed in this report.





Report No.: AR/2021/5000403

Page: 79 of 87



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/

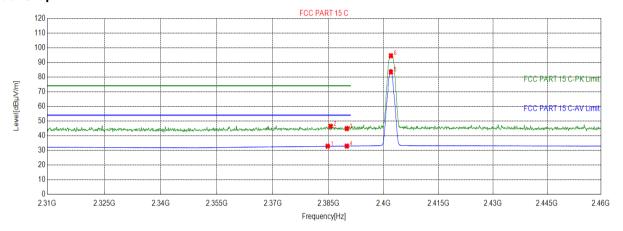


Report No.: AR/2021/5000403

Page: 80 of 87

Restricted bands around fundamental frequency Test plots BLE_1M_Channel 0

Test Graph



Suspected List

Susne	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2384.81	32.85	9.46	54.00	21.15	187	147	Horizontal			
2	2385.63	46.39	9.48	74.00	27.61	145	60	Horizontal			
3	2390.00	44.81	9.60	74.00	29.19	204	254	Horizontal			
4	2390.00	32.91	9.60	54.00	21.09	266	144	Horizontal			
5	2402.00	83.37	9.87	0.00	-83.37	254	320	Horizontal			
6	2402.00	94.49	9.87	0.00	-94.49	123	256	Horizontal			

Final Data List



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx. 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 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 extend of the law Luless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention:Docheck the authenticity of testing (inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Attention:**Docheck the authenticity of testing (inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Attention:**Docheck the authenticity of testing (inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, ***The company in this test report reference the contact us at telephone: (86-755) 8307 1443, ***The company in this test report reference the company in this test report reference the company in this test report reference the company in the company in the company

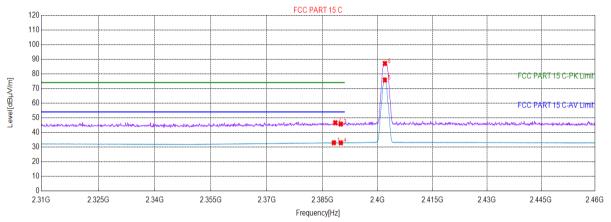


Report No.: AR/2021/5000403

Page: 81 of 87

BLE_1M _Channel 0

Test Graph



★ PK Detector
★ AV Detector

Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2388.11	32.94	9.55	54.00	21.06	256	179	Vertical			
2	2388.48	46.59	9.56	74.00	27.41	325	254	Vertical			
3	2390.00	45.71	9.60	74.00	28.29	321	144	Vertical			
4	2390.00	32.88	9.60	54.00	21.12	258	78	Vertical			
5	2402.00	75.77	9.87	0.00	-75.77	365	125	Vertical			
6	2402.00	87.10	9.87	0.00	-87.10	244	1	Vertical			

Final Data List



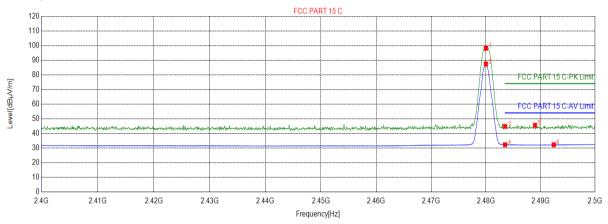


Report No.: AR/2021/5000403

Page: 82 of 87

BLE_1M_Channel 39

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2480.00	98.17	8.47	0.00	-98.17	174	21	Horizontal			
2	2480.00	87.37	8.47	0.00	-87.37	189	15	Horizontal			
3	2483.50	44.78	8.48	74.00	29.22	174	148	Horizontal			
4	2483.50	32.26	8.48	54.00	21.74	168	154	Horizontal			
5	2488.99	45.60	8.50	74.00	28.40	148	2	Horizontal			
6	2492.44	32.25	8.56	54.00	21.75	198	165	Horizontal			

Final Data List



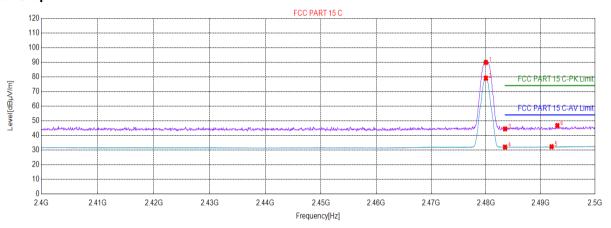


Report No.: AR/2021/5000403

Page: 83 of 87

BLE 1M Channel 39

Test Graph



★ PK Detector

AV Detector

Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2480.00	89.82	8.47	0.00	-89.82	174	14	Vertical			
2	2480.00	79.07	8.47	0.00	-79.07	152	185	Vertical			
3	2483.50	44.44	8.48	74.00	29.56	178	165	Vertical			
4	2483.50	32.04	8.48	54.00	21.96	169	174	Vertical			
5	2492.04	32.28	8.55	54.00	21.72	252	19	Vertical			
6	2493.09	46.74	8.57	74.00	27.26	148	145	Vertical			

Final Data List



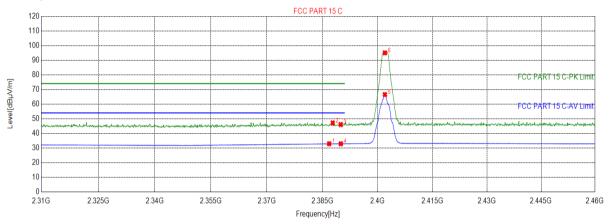


Report No.: AR/2021/5000403

Page: 84 of 87

BLE_2M _Channel 0

Test Graph



★ PK Detector
★ AV Detector

Suspected List

Susp	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2386.83	32.92	9.52	54.00	21.08	180	152	Horizontal			
2	2387.81	47.15	9.54	74.00	26.85	250	265	Horizontal			
3	2390.00	46.04	9.60	74.00	27.96	156	301	Horizontal			
4	2390.00	32.92	9.60	54.00	21.08	144	15	Horizontal			
5	2402.00	66.50	9.87	0.00	-66.50	182	262	Horizontal			
6	2402.00	95.02	9.87	0.00	-95.02	196	322	Horizontal			

Final Data List



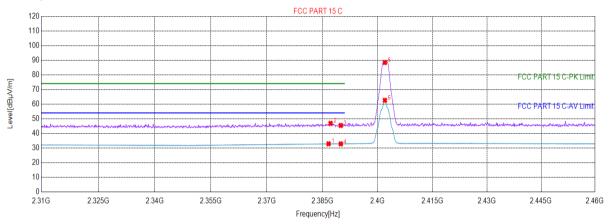


Report No.: AR/2021/5000403

Page: 85 of 87

BLE 2M Channel 0

Test Graph



◆ PK Detector

AV Detector

Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2386.68	32.89	9.51	54.00	21.11	268	148	Vertical			
2	2387.21	46.87	9.53	74.00	27.13	245	265	Vertical			
3	2390.00	45.43	9.60	74.00	28.57	223	211	Vertical			
4	2390.00	32.86	9.60	54.00	21.14	320	145	Vertical			
5	2402.00	88.40	9.87	0.00	-88.40	312	102	Vertical			
6	2402.00	62.59	9.87	0.00	-62.59	340	26	Vertical			

Final Data List



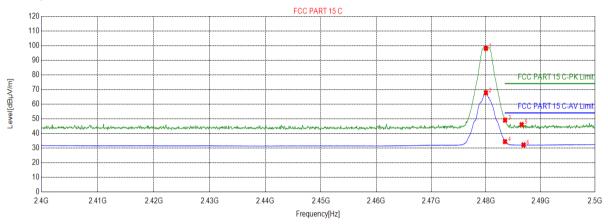


Report No.: AR/2021/5000403

Page: 86 of 87

BLE_2M _Channel 39

Test Graph



★ PK Detector

■ AV Detector

Suspected List

Suspected List												
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity				
1	2480.00	98.08	8.47	0.00	-98.08	156	165	Horizontal				
2	2480.00	67.74	8.47	0.00	-67.74	254	254	Horizontal				
3	2483.50	49.09	8.48	74.00	24.91	144	144	Horizontal				
4	2483.50	34.38	8.48	54.00	19.62	186	58	Horizontal				
5	2486.54	46.01	8.49	74.00	27.99	194	213	Horizontal				
6	2486.89	32.14	8.49	54.00	21.86	176	255	Horizontal				

Final Data List



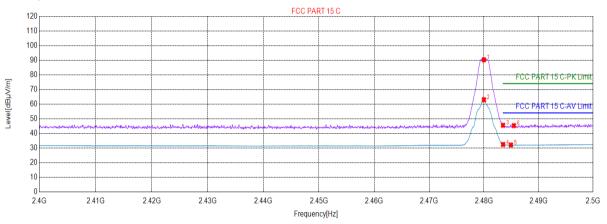


Report No.: AR/2021/5000403

Page: 87 of 87

BLE_2M _Channel 39

Test Graph



★ PK Detector **

AV Detector

Suspected List

Suspected List											
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2480.00	90.28	8.47	0.00	-90.28	285	165	Vertical			
2	2480.00	62.99	8.47	0.00	-62.99	246	254	Vertical			
3	2483.50	45.54	8.48	74.00	28.46	320	25	Vertical			
4	2483.50	32.45	8.48	54.00	21.55	311	0	Vertical			
5	2484.94	32.11	8.49	54.00	21.89	356	146	Vertical			
6	2485.49	45.31	8.49	74.00	28.69	322	320	Vertical			

Final Data List

Remark:

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

Factor = Antenna Factor + Cable Factor - Preamplifier Factor

Final Test Level =Receiver Reading + Factor

All Modes have been tested, but only the worst case data displayed in this report.

The End

