



RADIO TEST REPORT

For

Shenzhen Huafurui Technology Co., Ltd.

Smartphone

Test Model: KINGKONG ES PRO

Prepared for : Shenzhen Huafurui Technology Co., Ltd.
Address : Unit 601-03, 6/F, Block A, Building 1, Ganfeng Technology Building, No. 993 Jiaxian Road, Xiangjiaotang Community, Bantian Street, Longgang District, Shenzhen, P.R. China

Prepared by : Shenzhen LCS Compliance Testing Laboratory Ltd.
Address : Room 101/201, Building A, and Room 101/301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Subdistrict, Bao'an District, Shenzhen, Guangdong, China

Tel : (+86)755-82591330
Fax : (+86)755-82591332
Web : www.LCS-cert.com
Mail : webmaster@LCS-cert.com

Date of receipt of test sample : May 21, 2024
Number of tested samples : 2
Sample No. : A240520136-1, A240520136-2
Serial number : Prototype
Date of Test : May 21, 2024 ~ June 07, 2024
Date of Report : August 03, 2026



RADIO TEST REPORT ETSI EN 301 511 V12.5.1 (2017-03) Global System for Mobile communications (GSM); Mobile Stations (MS) equipment; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU		
Report Reference No. : LCSA07276088EH Date of Issue..... : August 03, 2026		
Testing Laboratory Name..... : Shenzhen LCS Compliance Testing Laboratory Ltd. Address..... : Room 101/201, Building A, and Room 101/301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Subdistrict, Bao'an District, Shenzhen, Guangdong, China Testing Location/ Procedure.... : Full application of Harmonised standards ■ Partial application of Harmonised standards □ Other standard testing method □		
Applicant's Name..... : Shenzhen Huafurui Technology Co., Ltd. Address..... : Unit 601-03, 6/F, Block A, Building 1, Ganfeng Technology Building, No. 993 Jiaxian Road, Xiangjiaotang Community, Bantian Street, Longgang District, Shenzhen, P.R. China		
Test Specification Standard..... : ETSI EN 301 511 V12.5.1 (2017-03) Test Report Form No..... : LCSEMC-1.0 TRF Originator..... : Shenzhen LCS Compliance Testing Laboratory Ltd. Master TRF..... : Dated 2017-06		
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Test Item Description..... : Smartphone Trade Mark..... : CUBOT Test Model..... : KINGKONG ES PRO Ratings : Please Refer to Page 6 Result : Positive		

Compiled by:

Ling Zhu/ Administrator

Supervised by:

Jack Liu/ Technique principal

Approved by:

Gavin Liang/ Manager



RADIO -- TEST REPORT

Test Report No. : LCSA07276088EH	<u>August 03, 2026</u> Date of issue
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Test Model.....	: KINGKONG ES PRO
EUT.....	: Smartphone
Applicant.....	: Shenzhen Huafurui Technology Co., Ltd.
Address.....	: Unit 601-03, 6/F, Block A, Building 1, Ganfeng Technology Building, No. 993 Jiaxian Road, Xiangjiaotang Community, Bantian Street, Longgang District, Shenzhen, P.R. China
Telephone.....	: /
Fax.....	: /
Manufacturer.....	: Shenzhen Huafurui Technology Co., Ltd.
Address.....	: Unit 601-03, 6/F, Block A, Building 1, Ganfeng Technology Building, No. 993 Jiaxian Road, Xiangjiaotang Community, Bantian Street, Longgang District, Shenzhen, P.R. China
Telephone.....	: /
Fax.....	: /
Factory.....	: Shenzhen Huafurui Technology Co., Ltd.
Address.....	: Unit 601-03, 6/F, Block A, Building 1, Ganfeng Technology Building, No. 993 Jiaxian Road, Xiangjiaotang Community, Bantian Street, Longgang District, Shenzhen, P.R. China
Telephone.....	: /
Fax.....	: /

Test Result	Positive
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The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.



Revision History

Report Version	Issue Date	Revision Content	Revised By
000	August 03, 2026	Initial Issue	---

Note: At the customer's request, the revised report was submitted to LCSA07276088EH applicant by quoting the test data of LCSA05204088EH original report.

Test Model: KINGKONG ES

Software Version: CUBOT_KINGKONG ES PRO_E081_V01

Change to

Test Model: KINGKONG ES PRO

Software Version: CUBOT_KINGKONG ES PRO_E083_V01



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1. GENERAL INFORMATION

1.1. Product Description for Equipment Under Test (EUT)

EUT	: Smartphone
Test Model	: KINGKONG ES PRO
Ratings	: Input: DC 5V, 2000mA Adapter1 Model: HJ-0502000W2-EU For AC Adapter Input: 100-240V~, 50/60Hz, 0.3A Adapter Output: 5.0V=2.0A Output Power: 10W DC 3.87V by Rechargeable Li-ion Battery, 5100mAh
Hardware Version	: Q16-MB-V2.0
Software Version	: CUBOT_KINGKONG ES PRO_E083_V01
Bluetooth	:
Frequency Range	: 2402MHz~2480MHz
Channel Number	: 79 channels for Bluetooth V5.0 (BDR/EDR) 40 channels for Bluetooth V5.0 (BT LE/ BT 2LE)
Channel Spacing	: 1MHz for Bluetooth V5.0 (BDR/EDR) 2MHz for Bluetooth V5.0 (BT LE/ BT 2LE)
Modulation Type	: GFSK, $\pi/4$ -DQPSK, 8-DPSK for Bluetooth V5.0 (BDR/EDR) GFSK for Bluetooth V5.0 (BT LE/ BT 2LE)
Bluetooth Version	: V5.0
Antenna Description	: PIFA Antenna, 2.64dBi(Max.)
WIFI(2.4G Band)	:
Frequency Range	: 2412MHz~2472MHz
Channel Spacing	: 5MHz
Channel Number	: 13 Channel for 20MHz bandwidth(2412~2472MHz) 9 channels for 40MHz bandwidth(2422~2462MHz)
Modulation Type	: 802.11b: DSSS (CCK, DQPSK, DBPSK) 802.11g/n: OFDM (64QAM, 16QAM, QPSK, BPSK)
Antenna Description	: PIFA Antenna, 2.64dBi(Max.)
WIFI(5.2G Band)	:
Frequency Range	: 5180MHz~5240MHz
Channel Number	: 4 channels for 20MHz bandwidth(5180~5240MHz) 2 channels for 40MHz bandwidth(5190~5230MHz) 1 channels for 80MHz bandwidth(5210MHz)
Modulation Type	: 802.11a/n: OFDM (64QAM, 16QAM, QPSK, BPSK) 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)
Antenna Description	: PIFA Antenna, 5.40dBi(Max.)
WIFI(5.8G Band)	:



Frequency Range : 5745MHz~5825MHz
Channel Number : 5 channels for 20MHz bandwidth(5745~5825MHz)
2 channels for 40MHz bandwidth(5755~5795MHz)
1 channels for 80MHz bandwidth(5775MHz)
Modulation Type : 802.11a/n: OFDM (64QAM, 16QAM, QPSK, BPSK)
802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)
Antenna Description : PIFA Antenna, 5.40dBi(Max.)

2G

Support Band : ☒ GSM 900 (EU-Band) ☒ DCS 1800 (EU-Band)
☒ GSM 850 (U.S.-Band) ☒ PCS 1900 (U.S.-Band)
Release Version : R99
GPRS Class : Class 12
EGPRS Class : Class 12
Uplink : GSM 900: 880MHz~915MHz
DCS 1800: 1710MHz~1785MHz
Downlink : GSM 900: 925MHz~960MHz
DCS 1800: 1805MHz~1880MHz
Type Of Modulation : GMSK for GSM/GPRS; GMSK/8PSK for EGPRS
Antenna Description : PIFA Antenna
0.03dBi (max.) For GSM 900
-2.58dBi (max.) For DCS 1800
Power Class : GSM 900: Level 5, DCS 1800: Level 0
EGPRS 900: Level 8, EGPRS 1800: Level 2

3G

Support Band : ☒ WCDMA Band I (EU-Band)
☒ WCDMA Band VIII (EU-Band)
Release Version : R9
Uplink : WCDMA Band I: 1920MHz~1980MHz
WCDMA Band VIII: 880MHz~915MHz
Downlink : WCDMA Band I: 2110MHz~2170MHz
WCDMA Band VIII: 925MHz~960MHz
Type Of Modulation : QPSK/16QAM
Antenna Description : PIFA Antenna
-2.31dBi (max.) For WCDMA Band I
0.03dBi (max.) For WCDMA Band VIII
Power Class : Level 3

LTE

Support Band : ☒ E-UTRA Band 1(EU-Band)
☒ E-UTRA Band 3(EU-Band)
☒ E-UTRA Band 7(EU-Band)
☒ E-UTRA Band 8(EU-Band)
☒ E-UTRA Band 20(EU-Band)

☒ E-UTRA Band 28(EU-Band)☒ E-UTRA Band 41(EU-Band)

LTE Release Version : R9

FDD Band : Uplink: E-UTRA Band 1: 1920MHz~1980MHz
E-UTRA Band 3: 1710MHz~1785MHz
E-UTRA Band 7: 2500MHz~2570MHz
E-UTRA Band 8: 880MHz~915MHz
E-UTRA Band 20: 832MHz~862MHz
E-UTRA Band 28: 703MHz~748MHz
Downlink: E-UTRA Band 1: 2110MHz~2170MHz
E-UTRA Band 3: 1805MHz~1880MHz
E-UTRA Band 7: 2620MHz~2690MHz
E-UTRA Band 8: 925MHz~960MHz
E-UTRA Band 20: 791MHz~821MHz
E-UTRA Band 28: 758MHz~803MHz

TDD Band : E-UTRA Band 41: 2500MHz~2690MHz

Type Of Modulation : QPSK/16QAM

Antenna Description : PIFA Antenna

-2.31dBi (max.) For E-UTRA Band 1

2.93dBi (max.) For E-UTRA Band 3

-1.67dBi (max.) For E-UTRA Band 7

0.03dBi (max.) For E-UTRA Band 8

-6.25dBi (max.) For E-UTRA Band 20

0.03dBi (max.) For E-UTRA Band 28

-1.67dBi (max.) For E-UTRA Band 41

Power Class : Class 3

GPS Receiver :

Receive Frequency : 1575.42MHz

Channel Number : 1

Antenna Description : PIFA Antenna, 0dBi(Max.)

GLONASS Receiver :

Receive Frequency : 1602.5625MHz

Channel Number : 1

Antenna Description : PIFA Antenna, 0dBi(Max.)

Galileo Receiver :

Receive Frequency : 1589.74MHz

Channel Number : 1

Antenna Description : PIFA Antenna, 0dBi(Max.)



1.2. Support Equipment List

Manufacturer	Description	Model	Serial Number	Certificate
ShenZhen HuaJin Electronics CO.,LTD	AC Power Adapter	HJ-0502000W 2-EU	---	CE

1.3. External I/O

I/O Port Description	Quantity	Cable
Type-C USB Port	1	USB Cable: 0.8m, unshielded

1.4. Objective

Standard Referenced	Standard Title	Standard Version
ETSI EN 301 511	Global System for Mobile communications (GSM); Mobile Stations (MS) equipment; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU	V12.5.1 (2017-03)
ETSI TS 151 010-1	Digital cellular telecommunications system (Phase 2+); Mobile Station (MS) conformance specification; Part 1: Conformance specification (3GPP TS 51.010-1 version 12.8.0 Release 12)	V12.8.0 (2016-05)

The objective is to determine compliance with ETSI EN 301 511 V12.5.1 (2017-03).

1.5. Test Conditions

Conditions	Temperature	Voltage
Normal	21-25°C	DC 3.87V
Low extreme Temperature/Low extreme Voltage (TL/VL);	-20°C	DC 3.48V
Low extreme Temperature/High extreme Voltage (TL/VH);	-20°C	DC 4.45V
High extreme Temperature/Low extreme Voltage (TH/VL);	45°C	DC 3.48V
High extreme Temperature/High extreme Voltage (TH/VH).	45°C	DC 4.45V
Note1: For all conditions, the humidity range is:40-75%, the pressure range is 86-106kPa. The High Voltage DC 4.45V and Low Voltage DC 3.48V was declared by manufacturer		



1.6. Description Of Test Mode

During all testing, EUT is in link mode with base station emulator at maximum power level in each test mode and channel as below:

Mode	Channel	Frequency(MHz)
GSM 900	975	880.2
	63	902.6
	124	914.8

Mode	Channel	Frequency(MHz)
DCS 1800	512	1710.2
	698	1747.4
	885	1784.8

Operating modes of EUT during test	
Traffic Mode	A communication link is set up with a System Simulator (ss). The Absolute Radio Frequency Channel Number is allocated to the lowest, middle and highest channel during the test for all working frequency bands. The EUT is commanded to operate at maximum transmitting power. A call has been established.
Idle Mode	The EUT is synchronized to SS, and able to respond to paging messages and incoming call. An established call has been released.

***Note: The EUT has two SIM card slots(SIM1 and SIM2). The result for GSM card slot(SIM1) is the worst case which was only recorded.

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

Test Item	Uncertainty
Radio Frequency	0.9×10^{-4}
Total RF Power, Conducted	1.0 dB
RF Power Density, Conducted	1.8 dB
Spurious Emissions, Conducted	1.8 dB
All Emissions, Radiated	3.1 dB
Temperature	0.5°C
Humidity	1 %
DC And Low Frequency Voltages	1 %

1.8. Description of Test Facility

NVLAP Accreditation Code is 600167-0.

FCC Designation Number is CN5024.

CAB identifier is CN0071.

CNAS Registration Number is L4595.



2. SYSTEM TEST CONFIGURATION

2.1. Justification

N/A

2.2. EUT Exercise Software

N/A

2.3. Special Accessories

The special accessories were supplied by Shenzhen LCS Compliance Testing Laboratory Ltd.

2.4. Block Diagram/Schematics

Please refer to the related document.

2.5. Equipment Modifications

Shenzhen LCS Compliance Testing Laboratory Ltd. has not done any modification on the EUT.

2.6. Test Setup

Please refer to the test setup photo.



3. SUMMARY OF TEST RESULTS

Test Engineer	:	Paddi Chen
Temperature/ Humidity:	:	23.0°C/ 53.0%

Reference Clause No. (ETSI TS 151 010-1)	Reference Clause No. (ETSI EN 301 511)	Description of Test Items	GSM 900	DCS 1800
			Result	Result
13.1	4.2.1	Transmitter - Frequency error and phase error		
		Normal	Pass	Pass
		TL/VL	Pass	Pass
		TL/VH	Pass	Pass
		TH/VL	Pass	Pass
		TH/VH	Pass	Pass
		Vibration X-axis	Pass	Pass
		Vibration Y-axis	Pass	Pass
		Vibration Z-axis	Pass	Pass
13.2	4.2.2	Transmitter - Frequency error under multipath and interference conditions		
		Normal	Pass	Pass
		TL/VL	Pass	Pass
		TL/VH	Pass	Pass
		TH/VL	Pass	Pass
		TH/VH	Pass	Pass
13.16.1	4.2.4	Frequency error and phase error in GPRS multislot configuration		
		Normal	Pass	Pass
		TL/VL	Pass	Pass
		TL/VH	Pass	Pass
		TH/VL	Pass	Pass
		TH/VH	Pass	Pass
		Vibration X-axis	Pass	Pass
		Vibration Y-axis	Pass	Pass
13.3	4.2.5	Transmitter output power and burst timing		
		Normal	Pass	Pass
		TL/VL	Pass	Pass
		TL/VH	Pass	Pass
		TH/VL	Pass	Pass
		TH/VH	Pass	Pass
13.4	4.2.6	Transmitter - Output RF spectrum		
		Normal	Pass	Pass
		TL/VL	Pass	Pass
		TL/VH	Pass	Pass
		TH/VL	Pass	Pass
		TH/VH	Pass	Pass



13.16.2	4.2.10	Transmitter output power in GPRS multislot configuration		
		Normal	Pass	Pass
		TL/VL	Pass	Pass
		TL/VH	Pass	Pass
		TH/VL	Pass	Pass
		TH/VH	Pass	Pass
13.16.3	4.2.11	Output RF spectrum in GPRS multislot configuration		
		Normal	Pass	Pass
		TL/VL	Pass	Pass
		TL/VH	Pass	Pass
		TH/VL	Pass	Pass
		TH/VH	Pass	Pass
12.1.1	4.2.12	Conducted spurious emissions - MS allocated a channel		
		Normal	Pass	Pass
		TN/VL	Pass	Pass
		TN/VH	Pass	Pass
12.1.2	4.2.13	Conducted spurious emissions - MS in idle mode		
		Normal	Pass	Pass
		TN/VL	Pass	Pass
		TN/VH	Pass	Pass
12.2.1	4.2.16	Radiated spurious emissions - MS allocated a channel		
		Normal	Pass	Pass
		TN/VL	Pass	Pass
		TN/VH	Pass	Pass
12.2.2	4.2.17	Radiated spurious emissions - MS in idle mode		
		Normal	Pass	Pass
		TN/VL	Pass	Pass
		TN/VH	Pass	Pass
14.7.1	4.2.20	Receiver Blocking and spurious response - speech channels		
		Normal	Pass	Pass
13.17.1	4.2.26	Frequency error and Modulation accuracy in EGPRS Configuration		
		Normal	Pass	Pass
		TL/VL	Pass	Pass
		TL/VH	Pass	Pass
		TH/VL	Pass	Pass
		TH/VH	Pass	Pass
13.17.2	4.2.27	Frequency error under multipath and interference conditions in EGPRS Configuration		
		Normal	Pass	Pass
		TL/VL	Pass	Pass
		TL/VH	Pass	Pass
		TH/VL	Pass	Pass
		TH/VH	Pass	Pass



13.17.3	4.2.28	EGPRS Transmitter output power	
		Normal	Pass
		TL/VL	Pass
		TL/VH	Pass
		TH/VL	Pass
		TH/VH	Pass
13.17.4	4.2.29	Output RF spectrum in EGPRS configuration	
		Normal	Pass
		TL/VL	Pass
		TL/VH	Pass
		TH/VL	Pass
		TH/VH	Pass
14.18.5	4.2.30	Blocking and spurious response in EGPRS configuration	
		Normal	Pass
14.6.1	4.2.32	Intermodulation rejection - speech channels	
		Normal	Pass
14.6.2	4.2.33	Intermodulation rejection - control channels	
		Normal	N/A
14.18.4	4.2.34	Intermodulation rejection - EGPRS	
		Normal	Pass
14.8.1	4.2.35	AM suppression - speech channels	
		Normal	Pass
14.8.1	4.2.36	AM suppression - control channels	
		Normal	N/A
14.8.3	4.2.37	AM suppression - packet channels	
		Normal	Pass
14.5.1.1	4.2.38	Adjacent channel rejection - speech channels (TCH/FS)	
		Normal	Pass
14.5.2	4.2.39	Adjacent channel rejection - control channels	
		Normal	N/A
14.18.3	4.2.40	Adjacent channel rejection - EGPRS	
		Normal	Pass
14.2.1	4.2.42	Reference sensitivity - TCH/FS	
		Normal	Pass
14.2.3	4.2.43	Reference sensitivity - FACCH/F	
		Normal	Pass
14.16.1	4.2.44	Minimum Input level for Reference Performance - GPRS	
		Normal	Pass
		TL/VL	Pass
		TL/VH	Pass



14.18.1	4.2.45	TH/VL	Pass	Pass
		TH/VH	Pass	Pass
		Minimum Input level for Reference Performance - EGPRS		
		Normal	Pass	Pass
		TL/VL (for MCS 4 only)	Pass	Pass
		TL/VH (for MCS 4 only)	Pass	Pass
		H/VL (for MCS 4 only)	Pass	Pass
		TH/VH (for MCS 4 only)	Pass	Pass

***Note:

Result: Describes test result of Test Case.

Pass: Test Case passed on specified conformance test platform.

Normal(TN/VN): Normal temperature – 25°C; Normal voltage. – DC 3.87V

TH: High extreme Temperature – 45°C

VH: High extreme Voltage – DC 4.45V

TL: Low extreme Temperature – -20°C

VL: Low extreme Voltage – DC 3.48V

Vibration X-axis/ Y-axis/ Z-axis: Vibration test condition for X/Y/Z axis.

N/A: Not applicable.

—: Not test.



4. LIST OF MEASURING EQUIPMENT

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	LTE Test Software	Tonscend	JS1120-1	N/A	N/A	N/A
2	RF Control Unit	Tonscend	JS0806-1	158060009	2023-10-18	2024-10-17
3	MXA Signal Analyzer	Agilent	N9020A	MY51250905	2023-10-18	2024-10-17
4	DC Power Supply	Agilent	E3642A	N/A	2023-10-18	2024-10-17
5	MXG Vector Signal Generator	Agilent	N5182A	MY47071151	2023-06-09	2024-06-08
6	PSG Analog Signal Generator	Agilent	E8257D	MY4520521	2023-06-09	2024-06-08
7	Temperature & Humidity Chamber	GUANGZHOU GOGNWEN	GDS-100	70932	2023-10-05	2024-10-04
8	EMI Test Software	Farad	EZ	/	N/A	N/A
9	3m Full Anechoic Chamber	MRDIANZI	FAC-3M	MR009	2022-08-17	2025-08-16
10	Positioning Controller	Max-Full	MF7802BS	MF780208586	N/A	N/A
11	Active Loop Antenna	SCHWARZBECK	FMZB 1519B	00005	2021-08-29	2024-08-28
12	By-log Antenna	SCHWARZBECK	VULB9163	9163-470	2021-09-12	2024-09-11
13	Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1925	2021-09-05	2024-09-04
14	Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	791	2021-08-29	2024-08-28
15	Broadband Preamplifier	SCHWARZBECK	BBV9719	9719-025	2021-08-29	2024-08-28
16	EMI Test Receiver	R&S	ESR 7	101181	2023-08-15	2024-08-14
17	RS SPECTRUM ANALYZER	R&S	FSP40	100503	2023-07-17	2024-07-16
18	Low-frequency amplifier	SchwarzZBECK	BBV9745	00253	2023-10-18	2024-10-17
19	High-frequency amplifier	JS Denki Pte	PA0118-43	JSPA21009	2023-10-18	2024-10-17
20	WIDEBAND RADIO COMMUNICATION TESTER	R&S	CMW 500	103818	2023-06-09	2024-06-08
21	RF Filter	Micro-Tronics	BRC50718	017	2023-10-18	2024-10-17
22	RF Filter	Micro-Tronics	BRC50719	011	2023-10-18	2024-10-17
23	RF Filter	Micro-Tronics	BRC50720	011	2023-10-18	2024-10-17
24	RF Filter	Micro-Tronics	BRC50721	013	2023-10-18	2024-10-17
25	RF Filter	Micro-Tronics	BRM50702	195	2023-08-15	2024-08-14
26	6dB Attenuator	/	100W/6dB	1172040	2023-06-09	2024-06-08
27	3dB Attenuator	/	2N-3dB	/	2023-10-18	2024-10-17



5. PHOTOGRAPHS OF TEST SETUP

Please refer to separated files Appendix D for Photographs of Test Setup_RF.

6. PHOTOGRAPHS OF THE EUT

Please refer to separated files Appendix C for Photographs of The EUT.



Annex A

Transmitter output power and burst timing(Worst Case)

Mode: GSM 900 , Low channel CH 975:880.2MHz						
Power Control level	Output power(dBm)					Conclusion
	Normal	TL/VL	TH/VL	TL/VH	TH/VH	
5	32.44	32.48	32.38	32.29	32.39	PASS
6	30.09	30.02	29.95	29.93	29.86	PASS
7	28.53	28.50	28.50	28.56	28.50	PASS
8	26.21	26.13	26.19	26.23	26.29	PASS
9	25.46	25.52	25.60	25.62	25.58	PASS
10	22.50	22.59	22.54	22.53	22.61	PASS
11	20.73	20.81	20.74	20.81	20.85	PASS
12	18.74	18.71	18.77	18.83	18.74	PASS
13	15.98	15.93	15.88	15.80	15.88	PASS
14	13.98	13.99	13.94	14.00	14.09	PASS
15	12.70	12.79	12.72	12.71	12.71	PASS
16	11.50	11.51	11.46	11.37	11.38	PASS
17	9.30	9.24	9.19	9.25	9.33	PASS
18	6.23	6.16	6.24	6.34	6.27	PASS
19	4.49	4.45	4.42	4.49	4.48	PASS



Mode: GSM 900 , middle channel CH 63:902.6MHz

Power Control level	Output power(dBm)					Conclusion
	Normal	TL/VL	TH/VL	TL/VH	TH/VH	
5	32.42	32.48	32.45	32.41	32.47	PASS
6	30.06	30.15	30.16	30.08	30.11	PASS
7	28.61	28.65	28.69	28.62	28.59	PASS
8	26.22	26.23	26.25	26.15	26.13	PASS
9	25.47	25.39	25.30	25.28	25.37	PASS
10	22.45	22.43	22.50	22.43	22.41	PASS
11	20.89	20.95	20.93	20.89	20.91	PASS
12	18.71	18.63	18.55	18.47	18.45	PASS
13	16.16	16.20	16.27	16.35	16.33	PASS
14	14.00	14.00	14.01	14.02	13.97	PASS
15	12.67	12.76	12.85	12.79	12.71	PASS
16	11.42	11.41	11.46	11.41	11.33	PASS
17	9.33	9.29	9.36	9.27	9.32	PASS
18	6.15	6.19	6.12	6.04	6.02	PASS
19	4.50	4.45	4.40	4.46	4.53	PASS



Mode: GSM 900 , High channel CH 124:914.8MHz

Power Control level	Output power(dBm)					Conclusion
	Normal	TL/VL	TH/VL	TL/VH	TH/VH	
5	32.52	32.54	32.53	32.63	32.56	PASS
6	29.94	30.00	29.97	29.89	29.80	PASS
7	28.52	28.44	28.45	28.41	28.31	PASS
8	26.26	26.17	26.22	26.20	26.18	PASS
9	25.42	25.52	25.44	25.35	25.31	PASS
10	22.48	22.46	22.45	22.49	22.51	PASS
11	20.80	20.86	20.84	20.81	20.85	PASS
12	18.68	18.61	18.53	18.54	18.54	PASS
13	16.07	16.11	16.02	15.93	15.87	PASS
14	14.04	14.10	14.20	14.14	14.19	PASS
15	12.72	12.63	12.62	12.63	12.63	PASS
16	11.38	11.28	11.19	11.12	11.20	PASS
17	9.31	9.24	9.16	9.24	9.14	PASS
18	6.25	6.20	6.26	6.34	6.39	PASS
19	4.52	4.54	4.58	4.48	4.45	PASS

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Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com



Mode: DCS1800, Low channel CH 512:1710.2MHz

Power Control level	Output power(dBm)					Conclusion
	Normal	TL/VL	TH/VL	TL/VH	TH/VH	
0	29.57	29.55	29.57	29.64	29.71	PASS
1	28.22	28.23	28.20	28.18	28.19	PASS
2	26.36	26.38	26.29	26.36	26.41	PASS
3	23.62	23.53	23.50	23.56	23.54	PASS
4	20.94	20.92	20.89	20.96	20.97	PASS
5	20.56	20.47	20.51	20.53	20.56	PASS
6	18.62	18.56	18.63	18.70	18.70	PASS
7	16.36	16.36	16.27	16.29	16.21	PASS
8	14.59	14.68	14.76	14.75	14.73	PASS
9	11.79	11.77	11.67	11.76	11.78	PASS
10	9.39	9.36	9.30	9.36	9.37	PASS
11	7.34	7.31	7.24	7.17	7.19	PASS
12	5.82	5.91	5.98	6.02	5.95	PASS
13	4.05	4.10	4.20	4.23	4.17	PASS
14	3.14	3.10	3.01	2.92	2.84	PASS
15	0.55	0.46	0.45	0.43	0.52	PASS

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Mode: DCS1800, middle channel CH 698:1747.4MHz

Power Control level	Output power(dBm)					Conclusion
	Normal	TL/VL	TH/VL	TL/VH	TH/VH	
0	29.67	29.68	29.65	29.68	29.76	PASS
1	28.25	28.26	28.31	28.31	28.25	PASS
2	26.28	26.37	26.39	26.41	26.40	PASS
3	23.53	23.60	23.64	23.57	23.65	PASS
4	21.02	21.00	20.92	20.93	20.98	PASS
5	20.42	20.37	20.45	20.41	20.43	PASS
6	18.81	18.90	18.92	18.84	18.86	PASS
7	16.46	16.41	16.45	16.36	16.38	PASS
8	14.51	14.59	14.67	14.63	14.64	PASS
9	11.93	11.94	11.99	12.07	12.09	PASS
10	9.41	9.43	9.33	9.23	9.21	PASS
11	7.39	7.38	7.40	7.45	7.47	PASS
12	5.73	5.64	5.71	5.72	5.62	PASS
13	4.14	4.04	4.13	4.13	4.14	PASS
14	3.03	2.99	2.96	2.98	2.89	PASS
15	0.71	0.67	0.70	0.61	0.67	PASS



Mode: DCS1800, high channel CH 885:1784.8MHz						
Power Control level	Output power(dBm)					Conclusion
	Normal	TL/VL	TH/VL	TL/VH	TH/VH	
0	29.63	29.72	29.72	29.65	29.57	PASS
1	28.29	28.31	28.37	28.33	28.27	PASS
2	26.29	26.24	26.16	26.09	26.19	PASS
3	23.57	23.67	23.59	23.61	23.51	PASS
4	21.00	21.01	21.02	21.10	21.03	PASS
5	20.40	20.38	20.35	20.28	20.30	PASS
6	18.78	18.79	18.86	18.83	18.86	PASS
7	16.39	16.47	16.49	16.44	16.51	PASS
8	14.47	14.43	14.38	14.36	14.26	PASS
9	11.76	11.81	11.81	11.74	11.78	PASS
10	9.49	9.51	9.52	9.43	9.40	PASS
11	7.32	7.38	7.43	7.50	7.59	PASS
12	5.70	5.65	5.64	5.67	5.73	PASS
13	4.13	4.15	4.18	4.11	4.21	PASS
14	3.15	3.18	3.24	3.19	3.14	PASS
15	0.73	0.71	0.69	0.67	0.73	PASS



Mode: EGPRS 900 , Low channel CH 975:880.2MHz

Power Control level	Output power(dBm)					Conclusion
	Normal	TL/VL	TH/VL	TL/VH	TH/VH	
8	26.22	26.20	26.18	26.10	26.10	PASS
9	25.41	25.37	25.40	25.38	25.39	PASS
10	22.39	22.40	22.36	22.40	22.47	PASS
11	20.71	20.72	20.69	20.60	20.69	PASS
12	18.83	18.78	18.80	18.81	18.86	PASS
13	16.17	16.07	16.06	16.00	15.94	PASS
14	14.05	14.13	14.05	13.96	13.93	PASS
15	12.82	12.90	12.86	12.85	12.87	PASS
16	11.46	11.39	11.33	11.34	11.30	PASS
17	9.46	9.38	9.36	9.32	9.23	PASS
18	6.22	6.30	6.38	6.37	6.37	PASS
19	4.66	4.76	4.73	4.70	4.62	PASS

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Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com



Mode: EGPRS 900 , middle channel CH 63:902.6MHz						
Power Control level	Output power(dBm)					Conclusion
	Normal	TL/VL	TH/VL	TL/VH	TH/VH	
8	26.15	26.12	26.05	26.13	26.08	PASS
9	25.42	25.38	25.42	25.41	25.40	PASS
10	22.37	22.37	22.37	22.34	22.33	PASS
11	20.84	20.85	20.81	20.90	20.84	PASS
12	18.83	18.78	18.85	18.78	18.83	PASS
13	16.10	16.07	16.05	16.11	16.20	PASS
14	14.09	14.16	14.15	14.22	14.24	PASS
15	12.81	12.82	12.75	12.83	12.81	PASS
16	11.46	11.49	11.55	11.55	11.47	PASS
17	9.36	9.45	9.37	9.42	9.36	PASS
18	6.16	6.25	6.35	6.40	6.38	PASS
19	4.54	4.59	4.58	4.52	4.43	PASS



Mode: EGPRS 900 , High channel CH 124:914.8MHz

Power Control level	Output power(dBm)					Conclusion
	Normal	TL/VL	TH/VL	TL/VH	TH/VH	
8	26.12	26.07	26.10	26.03	26.11	PASS
9	25.52	25.58	25.64	25.58	25.62	PASS
10	22.56	22.58	22.63	22.57	22.50	PASS
11	20.90	20.99	20.93	20.96	21.00	PASS
12	18.82	18.83	18.86	18.80	18.85	PASS
13	16.12	16.18	16.17	16.25	16.32	PASS
14	14.08	14.06	14.16	14.22	14.19	PASS
15	12.79	12.77	12.69	12.69	12.66	PASS
16	11.52	11.62	11.54	11.49	11.40	PASS
17	9.40	9.45	9.39	9.42	9.36	PASS
18	6.25	6.19	6.10	6.03	5.95	PASS
19	4.65	4.69	4.64	4.62	4.69	PASS

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Mode: EGPRS 1800, Low channel CH 512:1710.2MHz						
Power Control level	Output power(dBm)					Conclusion
	Normal	TL/VL	TH/VL	TL/VH	TH/VH	
2	26.29	26.32	26.22	26.24	26.28	PASS
3	23.71	23.66	23.58	23.66	23.67	PASS
4	21.02	21.04	21.07	21.15	21.20	PASS
5	20.51	20.55	20.47	20.50	20.58	PASS
6	18.72	18.73	18.74	18.76	18.85	PASS
7	16.37	16.36	16.28	16.32	16.24	PASS
8	14.51	14.42	14.49	14.42	14.45	PASS
9	11.91	11.84	11.84	11.80	11.81	PASS
10	9.55	9.63	9.63	9.62	9.68	PASS
11	7.34	7.32	7.31	7.35	7.31	PASS
12	5.79	5.80	5.81	5.82	5.89	PASS
13	3.98	4.00	4.09	4.09	4.11	PASS
14	3.15	3.22	3.12	3.13	3.22	PASS
15	0.59	0.60	0.63	0.69	0.63	PASS



Mode: EGPRS 1800, middle channel CH 698:1747.4MHz

Power Control level	Output power(dBm)					Conclusion
	Normal	TL/VL	TH/VL	TL/VH	TH/VH	
2	26.34	26.39	26.40	26.46	26.37	PASS
3	23.55	23.47	23.56	23.47	23.47	PASS
4	21.04	20.95	21.03	21.12	21.14	PASS
5	20.59	20.49	20.51	20.44	20.35	PASS
6	18.63	18.54	18.61	18.55	18.57	PASS
7	16.37	16.43	16.37	16.46	16.38	PASS
8	14.54	14.59	14.60	14.63	14.59	PASS
9	11.90	11.96	11.89	11.95	11.87	PASS
10	9.36	9.39	9.32	9.25	9.18	PASS
11	7.29	7.21	7.17	7.27	7.36	PASS
12	5.75	5.65	5.73	5.65	5.69	PASS
13	4.11	4.07	4.17	4.09	4.18	PASS
14	3.18	3.15	3.06	3.14	3.14	PASS
15	0.66	0.68	0.67	0.60	0.58	PASS

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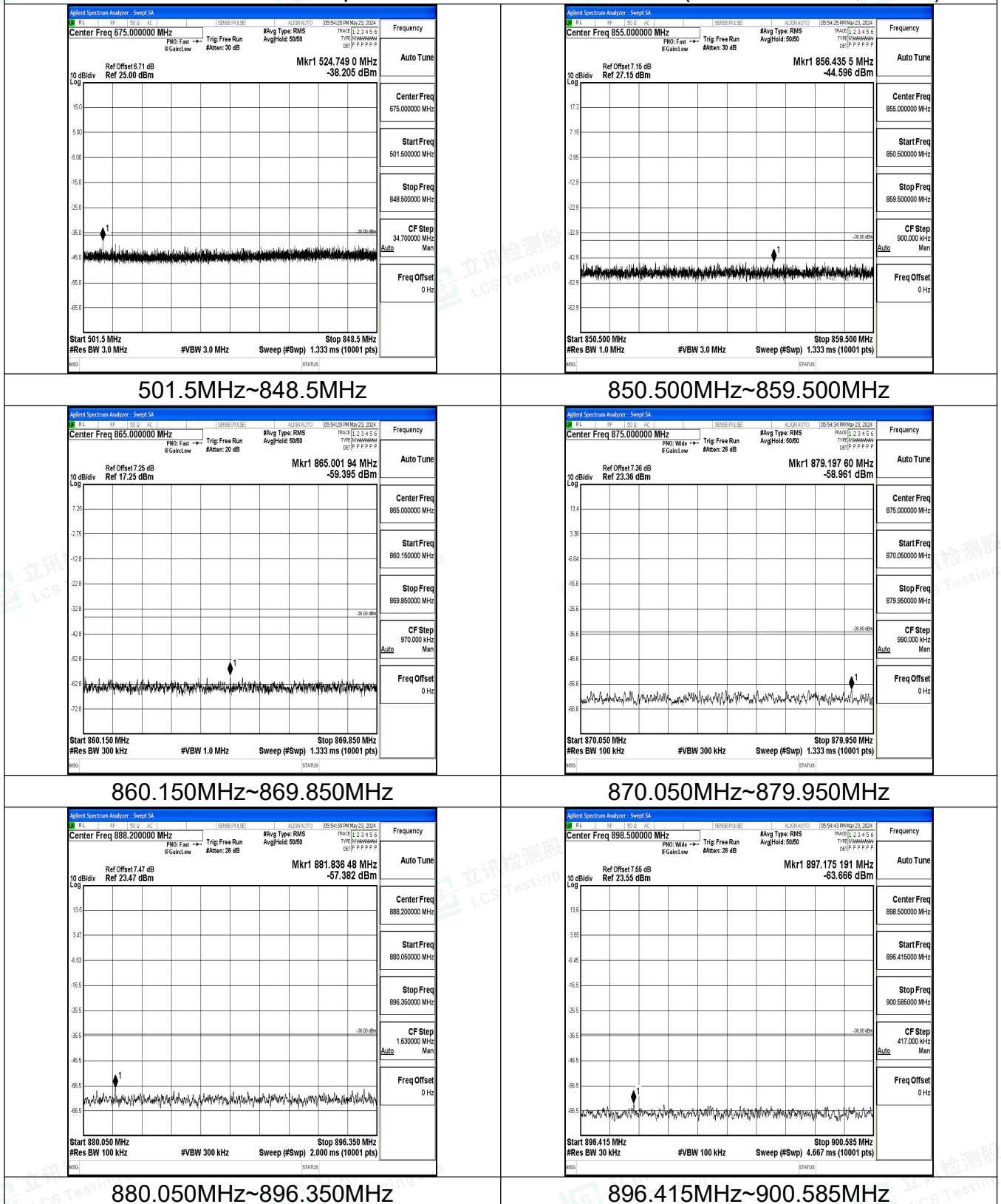
Mode: EGPRS 1800, high channel CH 885:1784.8MHz						
Power Control level	Output power(dBm)					Conclusion
	Normal	TL/VL	TH/VL	TL/VH	TH/VH	
2	26.24	26.16	26.11	26.21	26.12	PASS
3	23.58	23.59	23.55	23.50	23.45	PASS
4	21.08	21.16	21.26	21.32	21.26	PASS
5	20.46	20.49	20.52	20.59	20.68	PASS
6	18.74	18.82	18.73	18.67	18.72	PASS
7	16.49	16.44	16.35	16.34	16.42	PASS
8	14.52	14.48	14.58	14.57	14.53	PASS
9	11.90	11.89	11.90	11.85	11.77	PASS
10	9.55	9.46	9.52	9.47	9.38	PASS
11	7.38	7.45	7.49	7.56	7.52	PASS
12	5.76	5.75	5.69	5.74	5.74	PASS
13	4.10	4.07	4.03	4.03	4.09	PASS
14	3.14	3.20	3.27	3.22	3.24	PASS
15	0.67	0.71	0.74	0.67	0.75	PASS



Transmitter spurious emissions

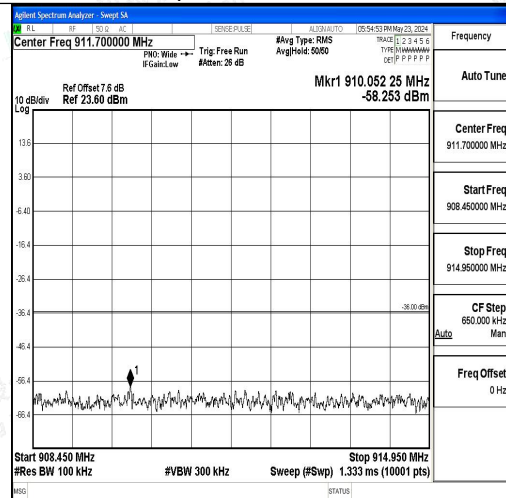
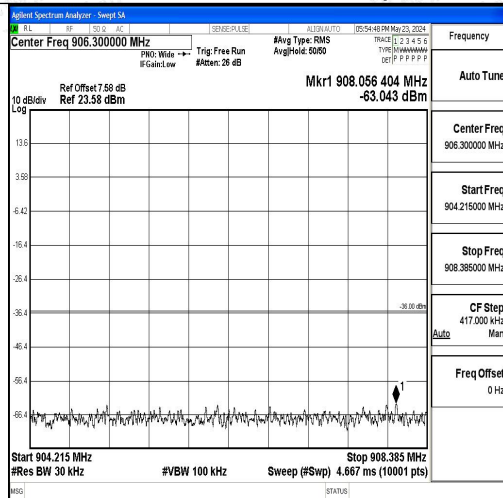
Conducted spurious emissions - MS allocated a channel (Worst Case)

The Worst Test Result of Spurious Emissions for GSM 900 (Middle Channel, Traffic)



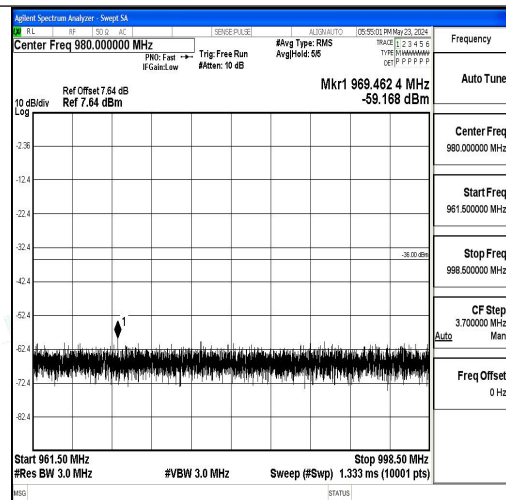
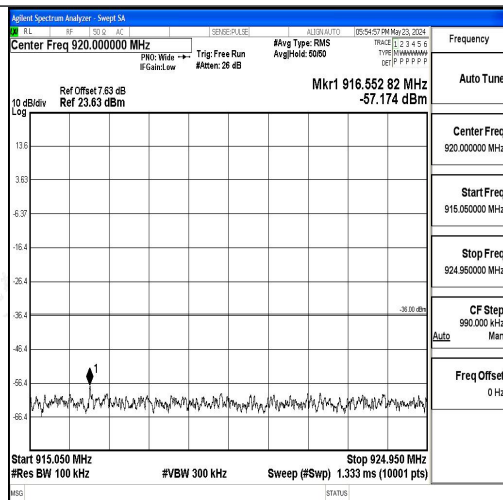


The Worst Test Result of Spurious Emissions for GSM 900 (Middle Channel, Traffic)



904.215MHz~908.385MHz

908.450MHz~914.950MHz

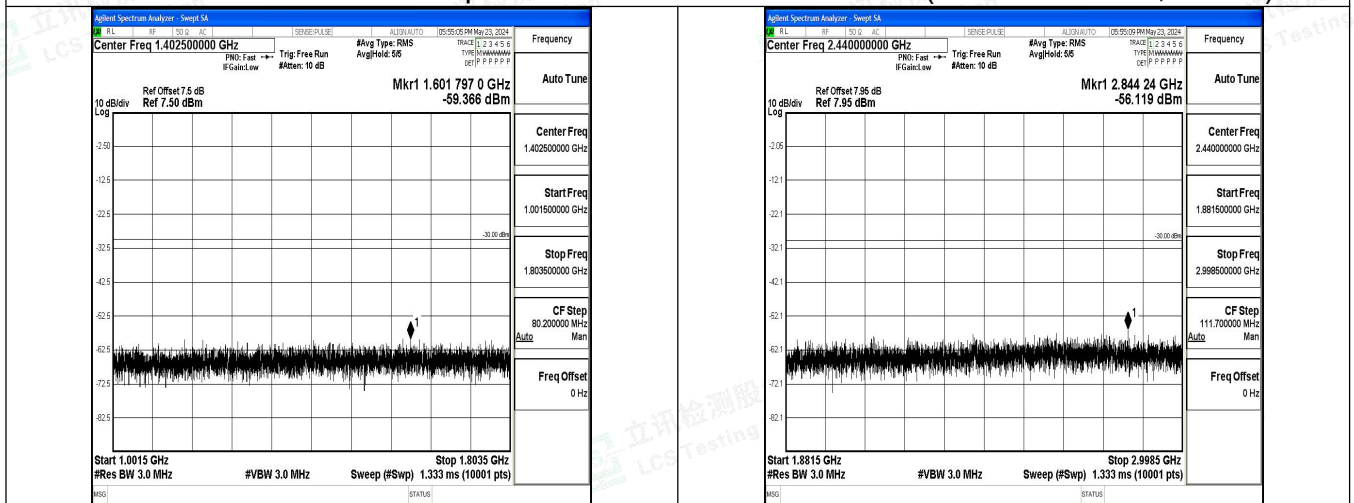


915.00MHz~924.950MHz

961.50MHz~998.50MHz

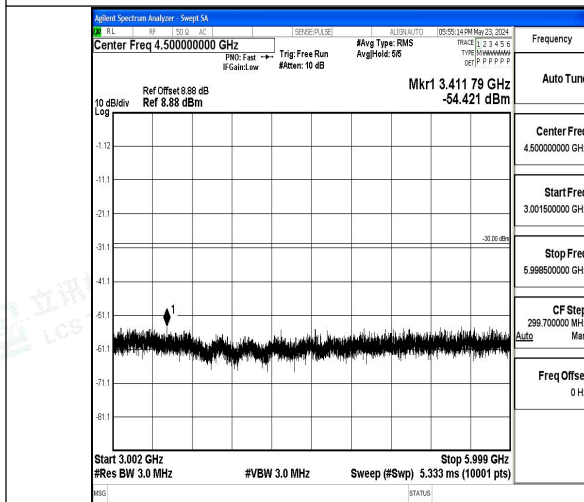


The Worst Test Result of Spurious Emissions for GSM 900 (Middle Channel, Traffic)

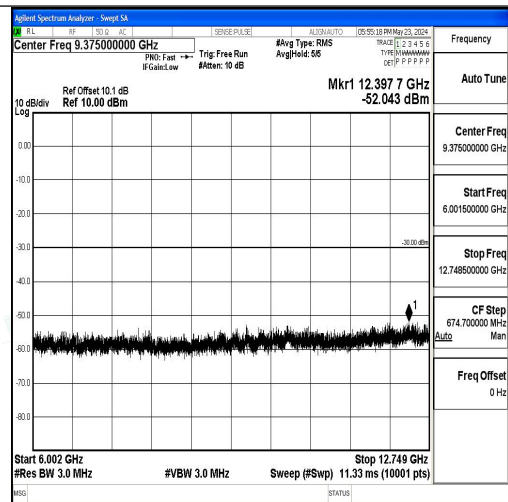


1.0015GHz~1.8035GHz

1.8815GHz~2.9985GHz

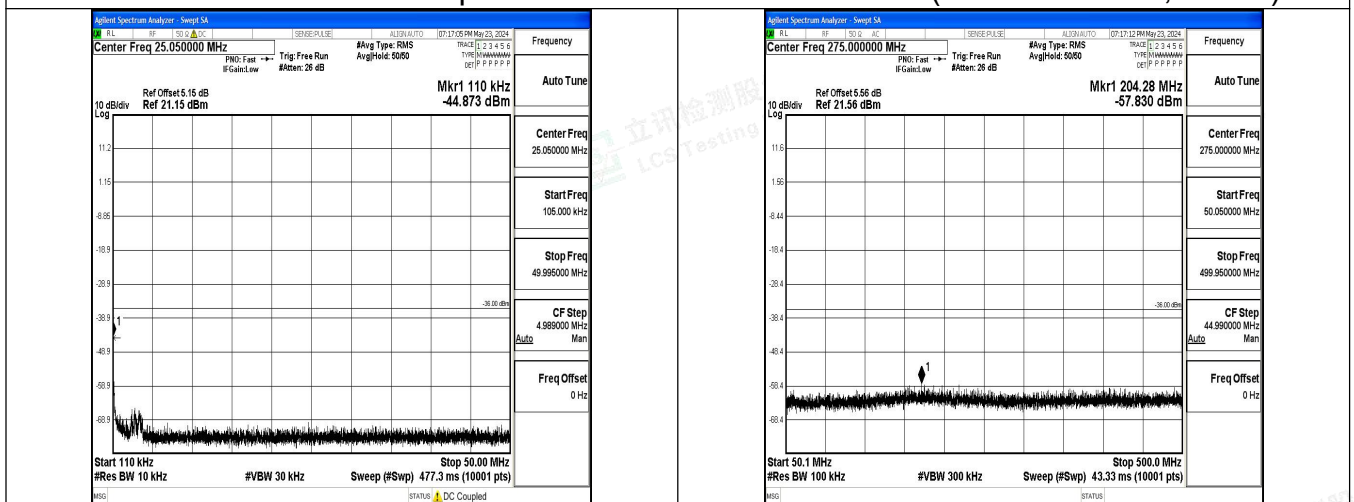


3.002GHz~5.999GHz



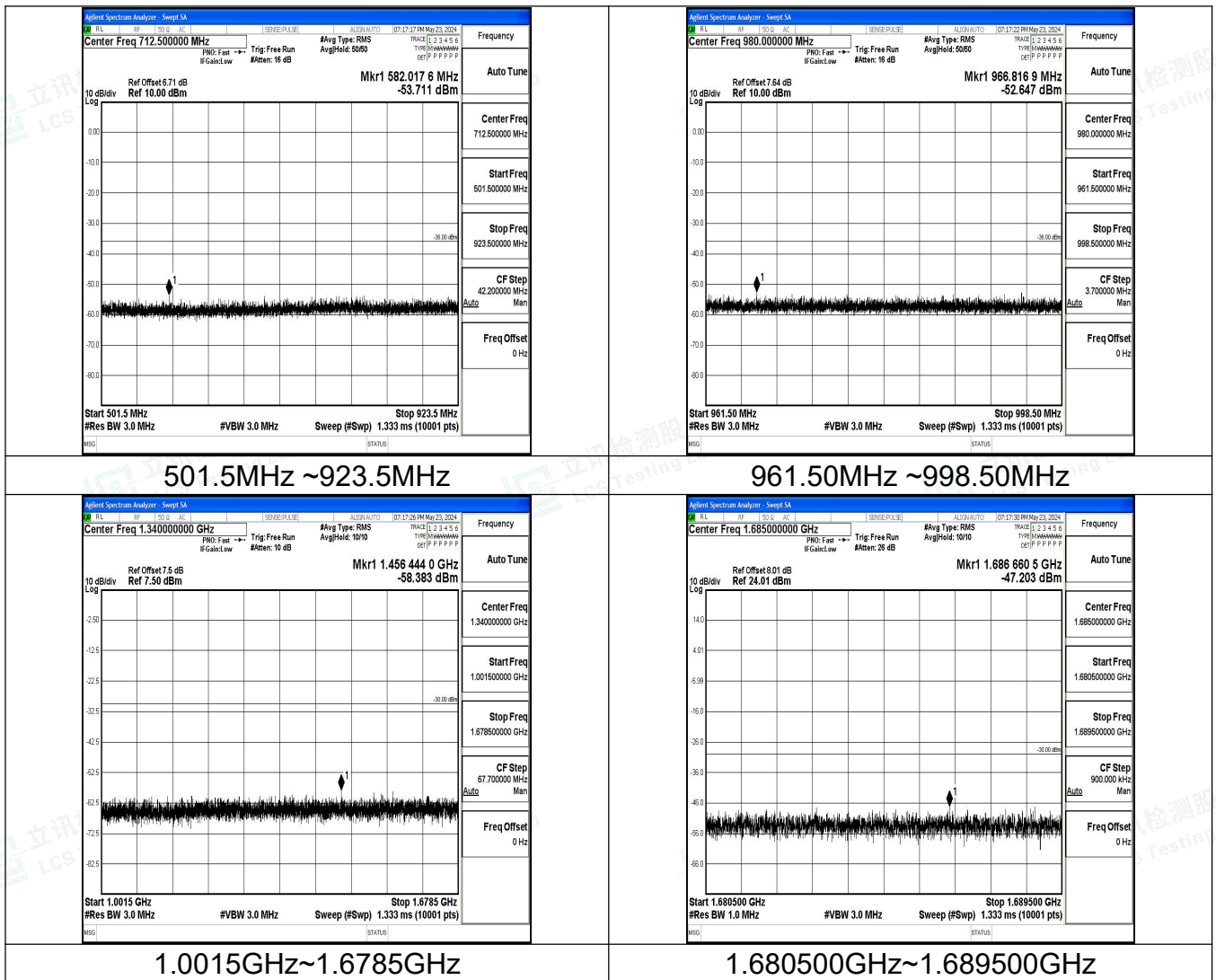
6.002GHz~12.749GHz

The Worst Test Result of Spurious Emissions for DCS 1800 (Middle Channel, Traffic)



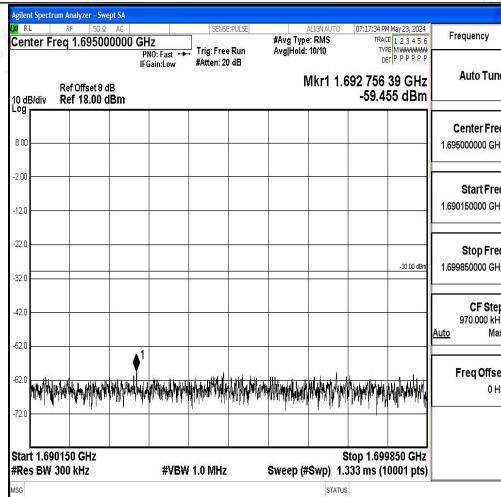
110KHz~50.00MHz

50.1MHz~500.0MHz

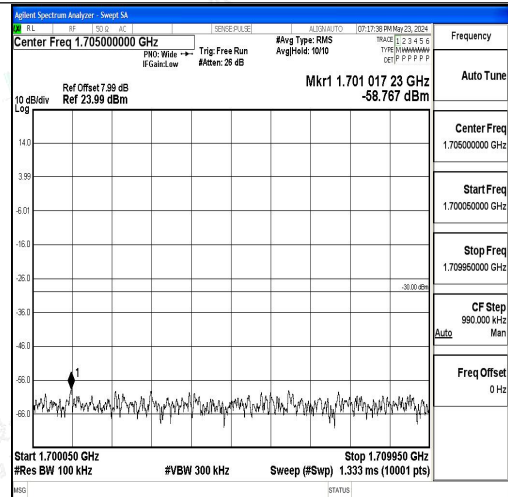




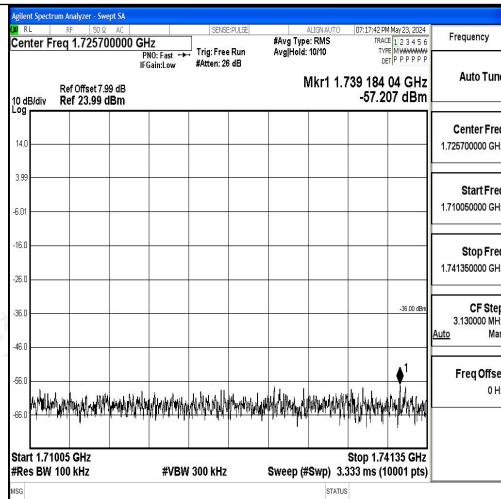
The Worst Test Result of Spurious Emissions for DCS 1800 (Middle Channel, Traffic)



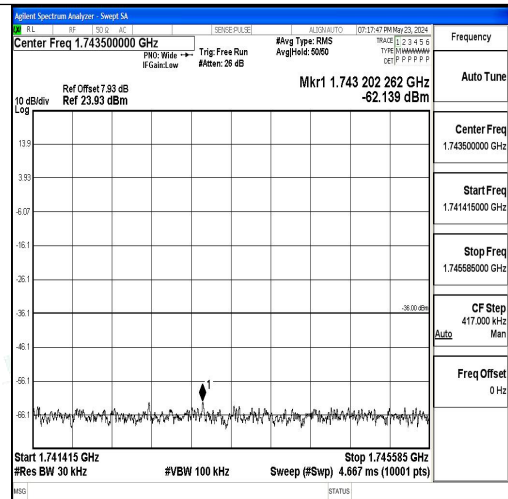
1.690150GHz~1.699850GHz



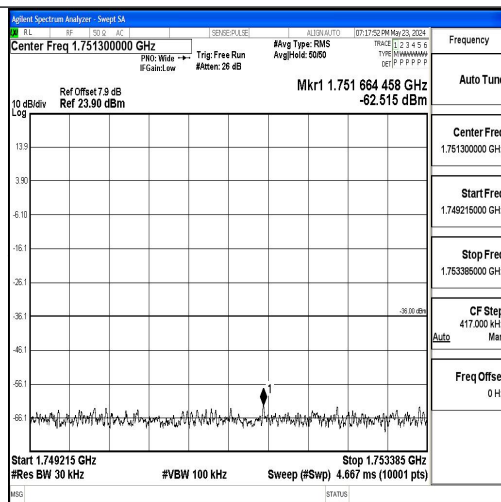
1.700050GHz~1.709950GHz



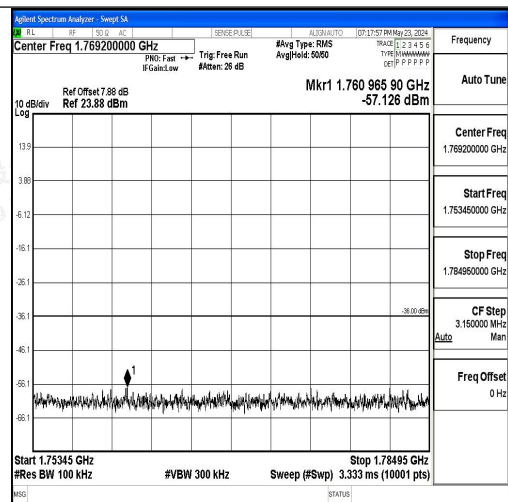
1.71005GHz~1.74135GHz



1.741415GHz~1.745585GHz



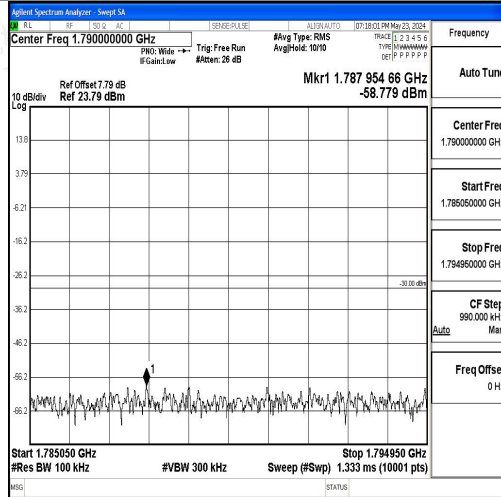
1.749215GHz~1.753385GHz



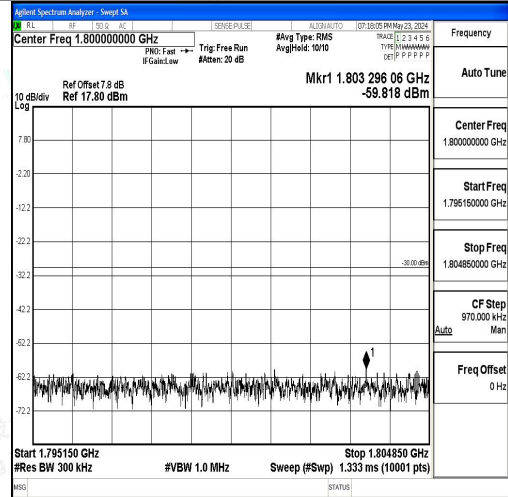
1.75345GHz~1.78495GHz



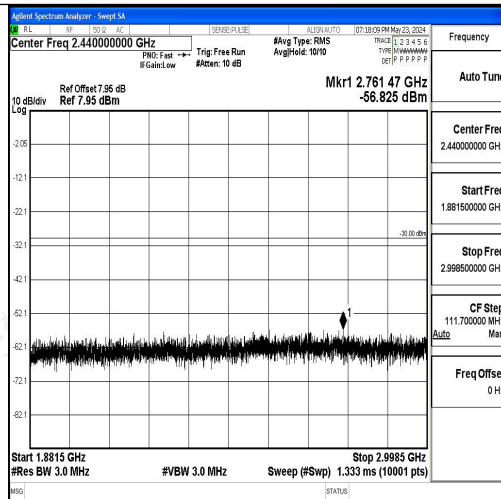
The Worst Test Result of Spurious Emissions for DCS 1800 (Middle Channel, Traffic)



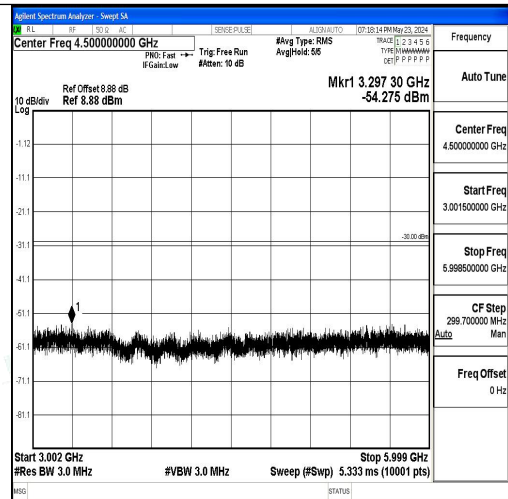
1.785050GHz~1.794950GHz



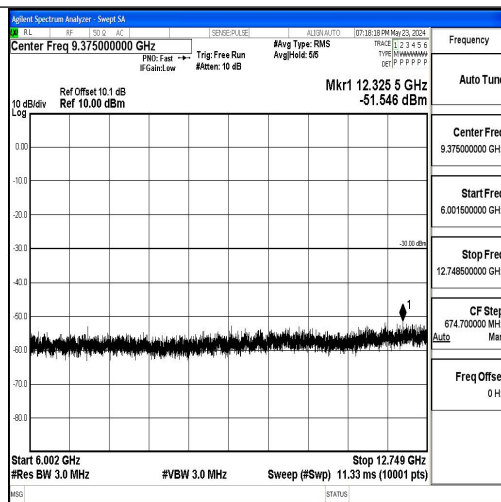
1.795150GHz~1.804850GHz



1.8815GHz~2.9985GHz



3.002GHz~5.999GHz



6.002GHz~12.749GHz



Transmitter spurious emissions

Radiated spurious emissions - MS allocated a channel(Worst Case)

GSM 900 Band: Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
203.07	Horizontal	-70.47	-36.00	Pass
325.32	H	-51.40	-36.00	
1793.30	H	-67.02	-30.00	
2691.43	H	-59.89	-30.00	
3589.43	H	-62.56	-30.00	
GSM 900 Band: Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
256.54	Vertical	-50.51	-36.00	Pass
481.17	V	-60.65	-36.00	
1792.93	V	-55.12	-30.00	
2692.59	V	-69.70	-30.00	
3586.20	V	-68.85	-30.00	

DCS 1800 Band: Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
69.50	Horizontal	-57.42	-36.00	Pass
342.33	H	-50.41	-36.00	
1441.00	H	-56.00	-30.00	
2826.22	H	-52.70	-30.00	
3496.36	H	-64.03	-30.00	
DCS 1800 Band: Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
196.50	Vertical	-60.09	-36.00	Pass
494.85	V	-64.56	-36.00	
1446.25	V	-59.95	-30.00	
2822.56	V	-51.37	-30.00	
3499.93	V	-66.76	-30.00	



Radiated spurious emissions - MS in Idle Mode(Worst Case)

GSM 900 Band: Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
252.73	Horizontal	-75.86	-57.00	Pass
320.53	H	-64.69	-57.00	
1496.21	H	-73.20	-47.00	
2781.99	H	-66.83	-47.00	
3445.96	H	-69.41	-47.00	
GSM 900 Band: Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
273.26	Vertical	-64.50	-57.00	Pass
397.59	V	-74.62	-57.00	
1791.67	V	-72.86	-47.00	
2640.46	V	-68.91	-47.00	
3265.21	V	-60.63	-47.00	

DCS 1800 Band: Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
82.13	Horizontal	-60.04	-57.00	Pass
417.45	H	-62.84	-57.00	
1232.46	H	-64.44	-47.00	
2488.90	H	-67.39	-47.00	
3732.04	H	-75.50	-47.00	
DCS 1800 Band: Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
283.94	Vertical	-71.35	-57.00	Pass
424.06	V	-67.60	-57.00	
1940.86	V	-66.16	-47.00	
2506.01	V	-69.34	-47.00	
3728.29	V	-67.03	-47.00	

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