47 CFR PART 15 SUBPART B

TEST REPORT

of

Odin

Model Name:	MG758/MG75X/MG75875075X /MG752/E750
Trade Name:	UniStrong
Brand Name:	UniStrong
Report No.:	SH10110004E01
FCC ID:	YYEMG75875075X

prepared for

Beijing UniStrong Science & Technology Co., Ltd.
6F East, A2 Building, #9 Jiuxianqiao East Road, Chaoyang District,
Beijing 100015, China

prepared by

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LAB CODE 20081223-00

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1 TEST CERTIFICATION

Equipment under Test:	Odin
Trade Name:	UniStrong
Brand Name:	UniStrong
Model Name:	MG758/MG75X/MG75875075X/MG752/E750
FCC ID:	YYEMG75875075X
Applicant:	Beijing UniStrong Science & Technology Co., Ltd.
Applicant Address:	6F East, A2 Building, #9 Jiuxianqiao East Road, Chaoyang District, Beijing 100015, China
Manufacturer:	Beijing UniStrong Science & Technology Co., Ltd.
Manufacturer Address:	6F East, A2 Building, #9 Jiuxianqiao East Road, Chaoyang District, Beijing 100015, China
Factory:	Shanghai e-Compass Science &Technology Co., Ltd.
Factory Address:	12/U, #159 Tianzhou Road, Xuhui District, Shanghai
Test Standards:	47 CFR Part 15 Subpart B
Test Date(s):	Nov.10, 2010 –Nov.30, 2010
Test Result:	PASS

*** We Hereby Certify That:**

The equipment under test was tested by Shenzhen Electronic Product Quality Testing Center Morlab Laboratory. The test data, data evaluation, test procedures and equipment configurations shown in this report were made in accordance with the requirement of related FCC rules.

The test results of this report only apply for the tested sample equipment identified above. The test report shall be invalid without all the signatures of the test engineer, the reviewer and the approver.

Tested by: Yuan Lijuan ..... Dated: 2010.12.09 .....
Yuan Lijuan

Reviewed by: Zhang Jun ..... Dated: 2010.12.09 .....
Zhang Jun

Approved by: Wei Bei ..... Dated: 2010.12.09 .....
Wei Bei

2 GENERAL INFORMATION

2.1 EUT Description

EUT Type	:	Odin
Model Name	:	MG758/MG75X/MG75875075X/MG752/E750
Serial No.	:	MG758180300118
IMEI	:	(359231032325498)
Hardware Version	:	V2.0
Software Version	:	01.001.1chs
Modulation Type.....	:	GMSK/8PSK
Power Supply	:	Battery
		Brand name: DBK
		Mode Name.: MG-4LH
		Capacitance: 3000mAh
		Rated voltage: 3.7V
		Charge limited: 4.2V
		Manufacturer: SHENZHEN DBK ELECTRONICS CO., LTD DBK Ind. Park, the north of longguan Rd. Hualian community,Longhua Town, Baoan District, Shenzhen
Ancillary Equipment	:	AC Adapter (Charger for Battery)
		Brand name: PHIHONG
		Mode Name.: PSAI05R-050Q
		Rated Input: AC 100/240V, 300mA, 50/60Hz
		Rated Output: DC 5V, 1000mA
		Manufacturer: PHIHONG TECHNOLOGY CO.,LTD Yinhu Industry park ,Qingxi district,Dongguan City,Guangdong Province

Note 1: The EUT is a GSM/GPRS/ EDGE/ Bluetooth/Wifi/GPS mobile phone . It supports GSM850/900/1800/1900MHz band and ISM 2.4GHz band.

Note 2: The normal configuration for the EUT is the MS associated with ancillary equipments e.g.theBattery.

Note 3: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

2.2 Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 15 Subpart B:

No.	Identity	Document Title
1	47 CFR Part 15 (10-1-05 Edition)	Radio Frequency Devices

Test detailed items/section required by FCC rules and results are as below:

No.	Section	Description	Result
1	15.107	Conducted Emission	PASS
2	15.109	Radiated Emission	PASS

2.3 Facilities and Accreditations

2.3.1 Facilities

Shenzhen Electronic Product Quality Testing Center Morlab Laboratory is a testing organization accredited by China National Accreditation Service for Laboratories (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L1659.

All measurement facilities used to collect the measurement data are located at Electronic Testing Building, Shahe Road, Xili, Nanshan District, Shenzhen 518055 CHINA. The test site is constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22; the FCC registration number is 741109.

2.3.2 Test Environment Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	20 – 25
Relative Humidity (%):	40 – 60
Atmospheric Pressure (kPa):	96

3 TEST CONDITIONS SETTING

3.1 Test Mode

1:The EUT configuration of the emission tests was MS＋Battery＋Charger.

Before the measurement, the lithium battery was completely discharge. During the measurement, the lithium battery and the charger were installed, and the MS were in charging state.

The Bluetooth function , wifi fuction and GPS fuction of the MS was activated.

An voice or data communication link was established between the MS and a System Simulator (SS),a communication link was established between the MS and Bluetooth headset,and the EUT accessed to the internet through a WLAN wireless router, and kept transceiving data with a network termination,at the same time,a communication link was established between the MS and GPS System Simulator (SS).

(1) The first test mode (GSM)

During the measurement of Traffic operating mode, a communication link was established between the EUT and a System Simulator (SS). The EUT operated at GSM 900MHz mid ARFCN (62) and maximum output power (level 5).

(2) The second test mode (GPRS)

In this test mode, a GPRS link was established between the EUT and a System Simulator(SS); date was transmitted between EUT and System Simulator (SS), and maintained during the measurement.

(3) The third test mode (EGPRS)

In this test mode, a EGPRS link was established between the EUT and a System Simulator(SS); date was transmitted between EUT and System Simulator (SS), and maintained during the measurement.

(4) The fourth test mode (Idle)

In this test mode, all fuction of the MS was activated,and the MS is in the state of idle mode.The MS was registered to the System Simulator (SS) but have no communication.

2:The EUT configuration of the emission tests is TransFlash Card + MS + Battery + PC.

(1) The first test mode (USB)

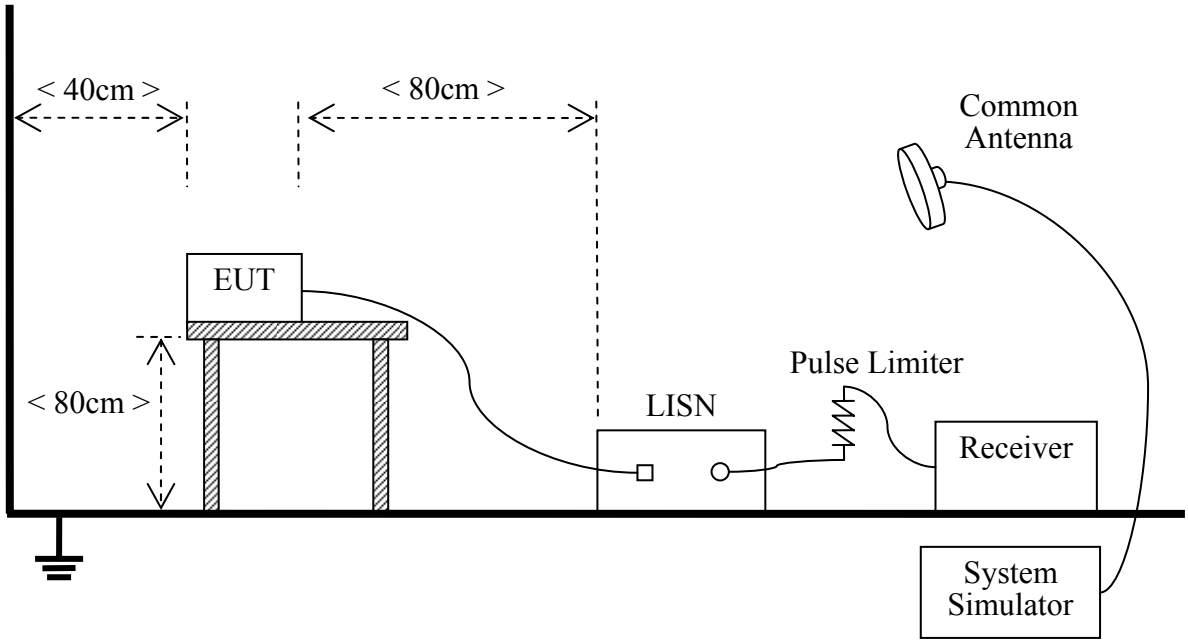
In this test mode, the EUT with a TransFlash Card embedded is connected with a PC via a special USB cable supplied by applicant. During the measurement, a communication link was established between the EUT and a System Simulator (SS), simultaneity, the date is transmitting between the PC and the TransFlash Card of the EUT.

NOTE: All configurations and test modes are performed, only the worst cases are recorded in this report.

3.2 Test Setup and Equipments List

3.2.1 Conducted Emission

A. Test Setup:



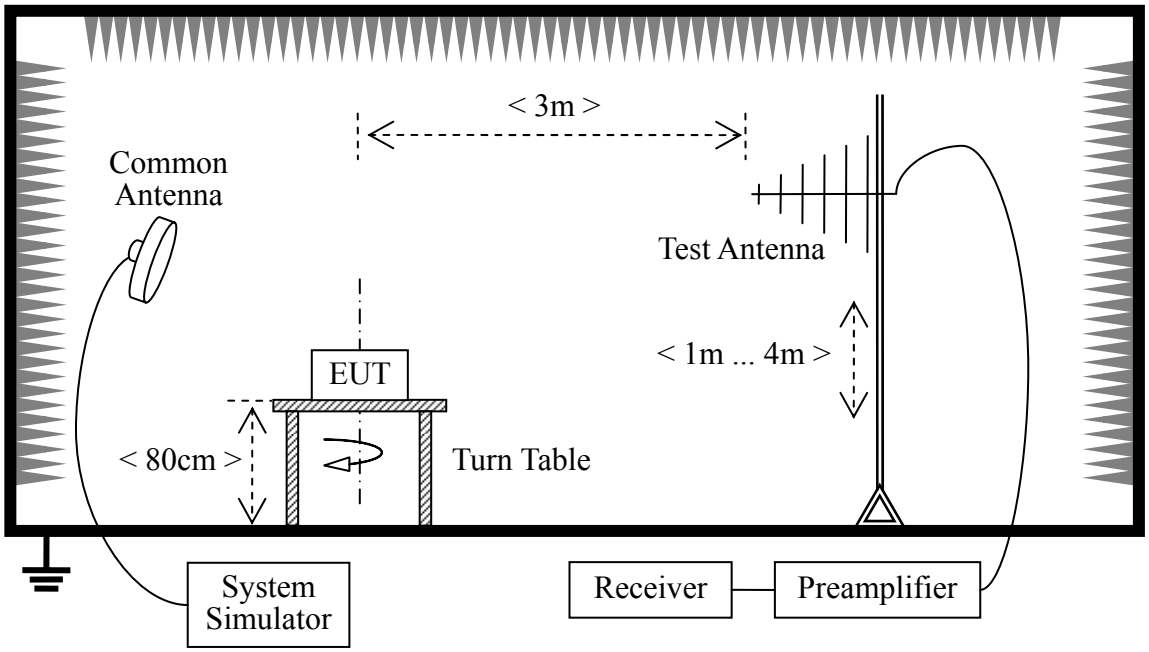
The EUT is placed on a 0.8m high insulating table, which stands on the grounded conducting floor, and keeps 0.4m away from the grounded conducting wall. The EUT is connected to the power mains through a LISN which provides 50Ω/50μH of coupling impedance for the measuring instrument. The Common Antenna is used for the call between the EUT and the System Simulator (SS). A Pulse Limiter is used to protect the measuring instrument. The factors of the whole test system are calibrated to correct the reading.

B. Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Receiver	Rohde&Schwarz	ESCI3	100666	2010.09	1year
LISN	Rohde&Schwarz	ENV216	812744	2010.09	1year
System Simulator	Rohde&Schwarz	CMU200	105571	2010.09	1year
Personal Computer	Lenovo	(n.a.)	(n.a.)	(n.a.)	(n.a.)

3.2.2 Radiated Emission

A. Test Setup:



The test is performed in a 3m Semi-Anechoic Chamber; the antenna factor, cable loss and so on of the site (factors) is calculated to correct the reading. The EUT is placed on a 0.8m high insulating Turn Table, and keeps 3m away from the Test Antenna, which is mounted on a variable-height antenna master tower. The Common Antenna is used for the call between the EUT and the System Simulator (SS).

B. Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Receiver	Rohde&Schwarz	ESCI3	100666	2010.09	1year
Full-Anechoic Chamber	Albatross	9m*6m*6m	(n.a.)	2010.09	1year
Test Antenna - Bi-Log	Rohde&Schwarz	HL562	100385	2010.09	1year
System Simulator	Rohde&Schwarz	CMU200	105571	2010.09	1year
Personal Computer	Lenovo	(n.a.)	(n.a.)	(n.a.)	(n.a.)

47 CFR PART 15B REQUIREMENTS

4 Conducted Emission

4.1 Requirement

According to FCC section 15.107, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a 50μH/50Ω line impedance stabilization network (LISN).

Frequency range (MHz)	Conducted Limit (dBμV)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5- 30	60	50

NOTE:

a) The limit subjects to the Class B digital device.

b) The lower limit shall apply at the band edges.

c) The limit decreases linearly with the logarithm of the frequency in the range 0.15 - 0.50MHz.

4.2 Test Description

See section 3.2.1 of this report.

4.3 Test Result

The maximum conducted interference is searched using Peak (PK), Quasi-peak (QP) and Average (AV) detectors; the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. All test modes are considered, refer to recorded points and plots below.

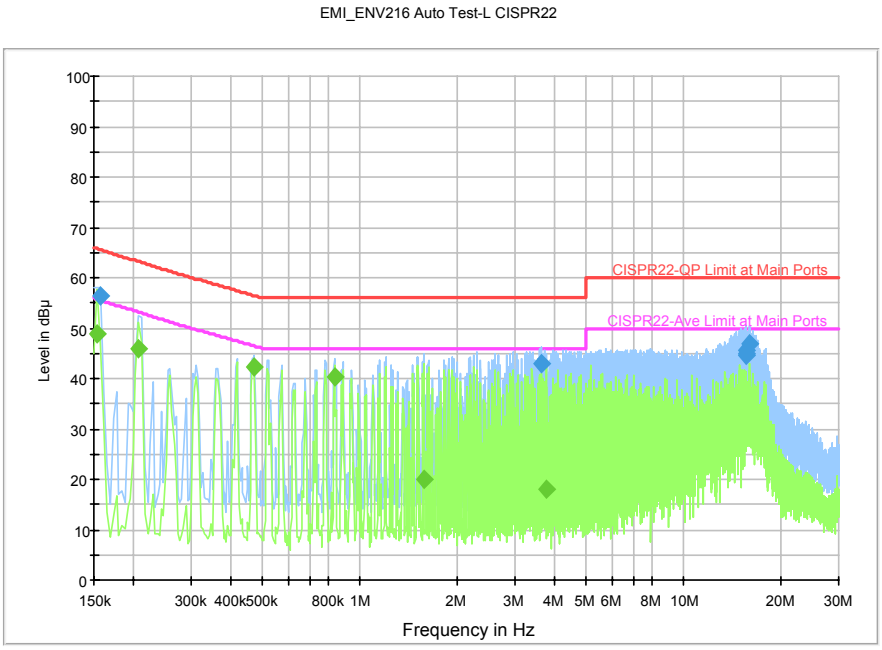
The EUT configuration of the emission tests is TransFlash Card + MS + Battery + PC.

A. Test Verdict Recorded for Suspicious Points:

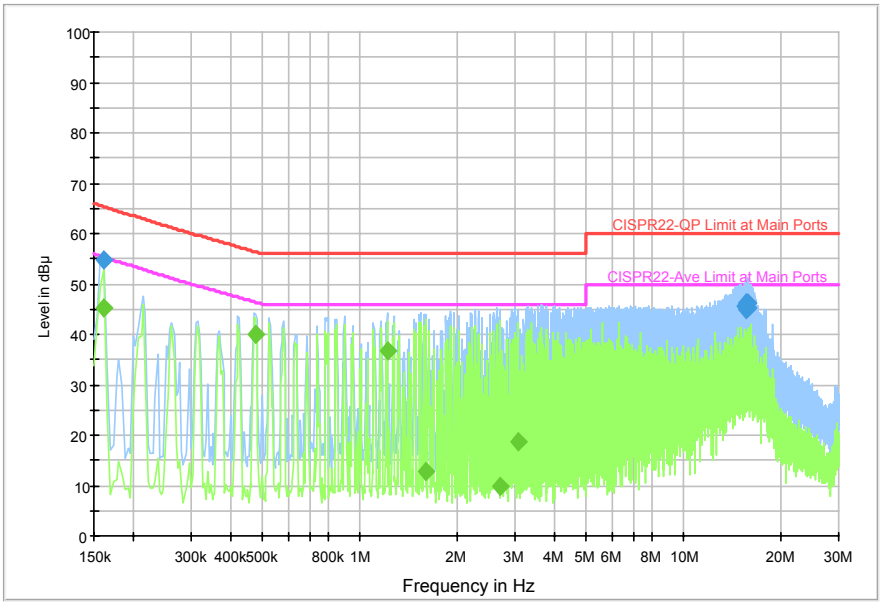
Frequency (MHz)	QuasiPeak (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)	Comment
0.161194	54.7	150.000	9.000	L	9.7	10.7	65.4	PASS
15.269025	45.7	150.000	9.000	L	10.3	14.3	60.0	PASS
15.567525	46.4	150.000	9.000	L	10.3	13.6	60.0	PASS
15.619762	45.0	150.000	9.000	L	10.3	15.0	60.0	PASS
15.698119	46.1	150.000	9.000	L	10.3	13.9	60.0	PASS
15.720506	45.3	150.000	9.000	L	10.3	14.7	60.0	PASS
0.157462	56.5	150.000	9.000	N	9.5	9.1	65.6	PASS
3.631256	42.8	150.000	9.000	N	9.9	13.2	56.0	PASS
15.496631	44.7	150.000	9.000	N	10.3	15.3	60.0	PASS
15.519019	45.6	150.000	9.000	N	10.3	14.4	60.0	PASS
15.560062	45.0	150.000	9.000	N	10.3	15.0	60.0	PASS
15.866025	46.7	150.000	9.000	N	10.3	13.3	60.0	PASS

Frequency (MHz)	Average (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)	Comment
0.161194	45.3	150.000	9.000	L	9.7	10.0	55.3	PASS
0.474619	40.1	150.000	9.000	L	9.6	6.3	46.4	PASS
1.209675	36.8	150.000	9.000	L	9.7	9.2	46.0	PASS
1.586531	12.7	150.000	9.000	L	9.7	33.3	46.0	PASS
2.694712	10.0	150.000	9.000	L	9.8	36.0	46.0	PASS
3.067838	18.5	150.000	9.000	L	9.8	27.5	46.0	PASS
0.153731	48.7	150.000	9.000	N	9.5	7.1	55.8	PASS
0.205969	45.8	150.000	9.000	N	9.7	7.4	53.2	PASS
0.467156	42.3	150.000	9.000	N	9.7	4.2	46.5	PASS
0.829088	40.3	150.000	9.000	N	9.7	5.7	46.0	PASS
1.564144	19.9	150.000	9.000	N	9.8	26.1	46.0	PASS
3.761850	18.0	150.000	9.000	N	9.9	28.0	46.0	PASS

B. Test Plot:



(Plot: L Phase)



(Plot: N Phase)

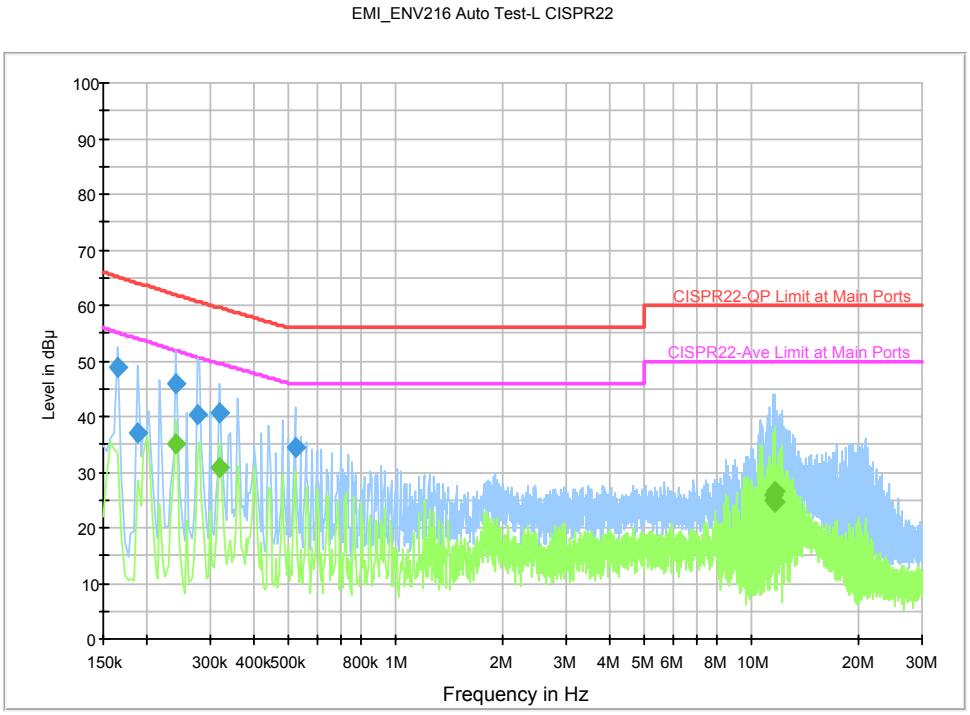
The EUT configuration of the emission tests is MS＋Battery＋Charger.

A. Test Verdict Recorded for Suspicious Points:

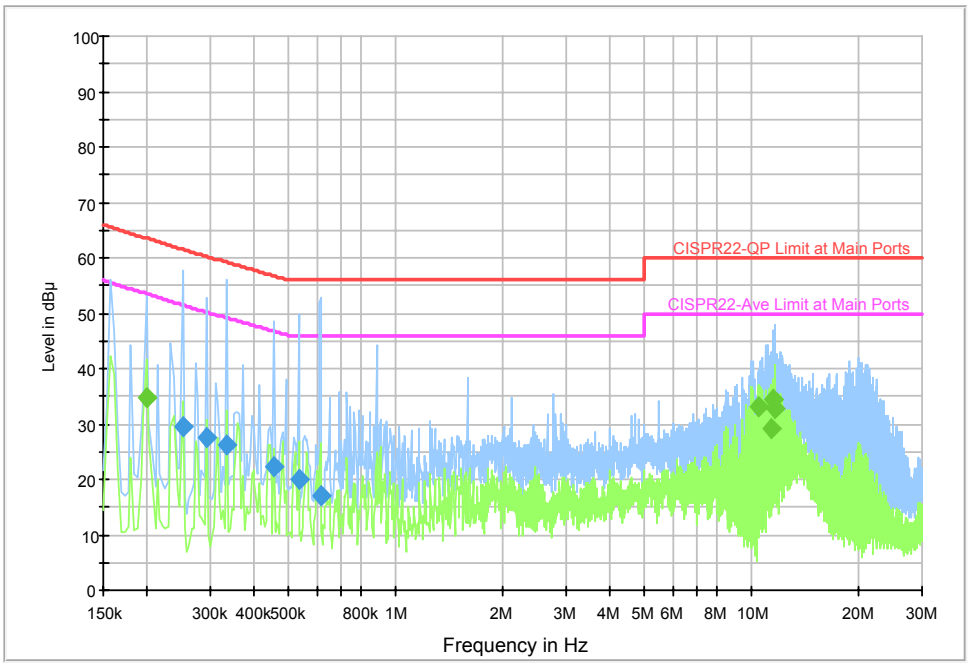
Frequency (MHz)	QuasiPeak (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)	Comment
0.164925	49.0	150.000	9.000	L	9.5	16.2	65.2	PASS
0.187312	37.0	150.000	9.000	L	9.6	27.0	64.0	PASS
0.239550	45.9	150.000	9.000	L	9.7	16.0	61.9	PASS
0.276862	40.4	150.000	9.000	L	9.7	20.3	60.7	PASS
0.317906	40.8	150.000	9.000	L	9.7	18.8	59.6	PASS
0.519394	34.5	150.000	9.000	L	9.7	21.5	56.0	PASS
0.250744	29.5	150.000	9.000	N	9.6	32.0	61.5	PASS
0.291788	27.6	150.000	9.000	N	9.6	32.7	60.3	PASS
0.332831	26.3	150.000	9.000	N	9.7	32.9	59.2	PASS
0.452231	22.2	150.000	9.000	N	9.7	34.6	56.8	PASS
0.530588	20.0	150.000	9.000	N	9.7	36.0	56.0	PASS
0.612675	16.9	150.000	9.000	N	9.7	39.1	56.0	PASS

Frequency (MHz)	Average (dB μ V)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)	Comment
0.239550	35.2	150.000	9.000	L	9.7	16.7	51.9	PASS
0.317906	30.7	150.000	9.000	L	9.7	18.8	49.5	PASS
11.422106	25.9	150.000	9.000	L	10.1	24.1	50.0	PASS
11.500462	24.9	150.000	9.000	L	10.1	25.1	50.0	PASS
11.541506	26.6	150.000	9.000	L	10.1	23.4	50.0	PASS
11.578819	24.5	150.000	9.000	L	10.1	25.5	50.0	PASS
0.198506	34.7	150.000	9.000	N	9.6	18.8	53.5	PASS
10.429594	33.0	150.000	9.000	N	10.1	17.0	50.0	PASS
11.310169	29.1	150.000	9.000	N	10.1	20.9	50.0	PASS
11.474344	34.3	150.000	9.000	N	10.1	15.7	50.0	PASS
11.515388	34.5	150.000	9.000	N	10.1	15.5	50.0	PASS
11.552700	32.9	150.000	9.000	N	10.1	17.1	50.0	PASS

B. Test Plot:



(Plot: L Phase)



(Plot: N Phase)

5 Radiated Emission

5.1 Requirement

According to FCC section 15.109, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency range (MHz)	Field Strength	
	μV/m	dBμV/m
30 - 88	100	40.0
88 - 216	150	43.5
216 - 960	200	46.0
Above 960	500	54.0

NOTE:

a) Field Strength (dBμV/m) = 20*log[Field Strength (μV/m)].

b) In the emission tables above, the tighter limit applies at the band edges.

5.2 Test Description

See section 3.2.2 of this report.

5.3 Test Result

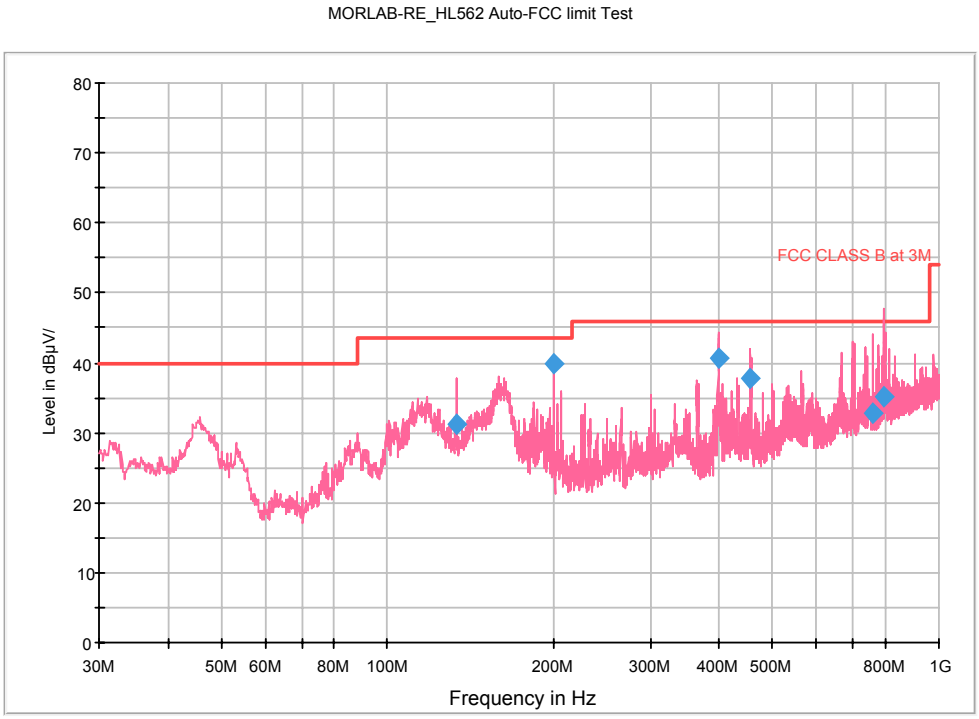
The maximum radiated emission is searched using PK, QP and AV detectors; the emission levels more than the limits, and that have narrow margins from the limits will be re-measured with AV and QP detectors. Both the vertical and the horizontal polarizations of the Test Antenna are considered to perform the tests. All test modes are considered, refer to recorded points and plots below.

The EUT configuration of the emission tests is TransFlash Card + MS + Battery + PC.

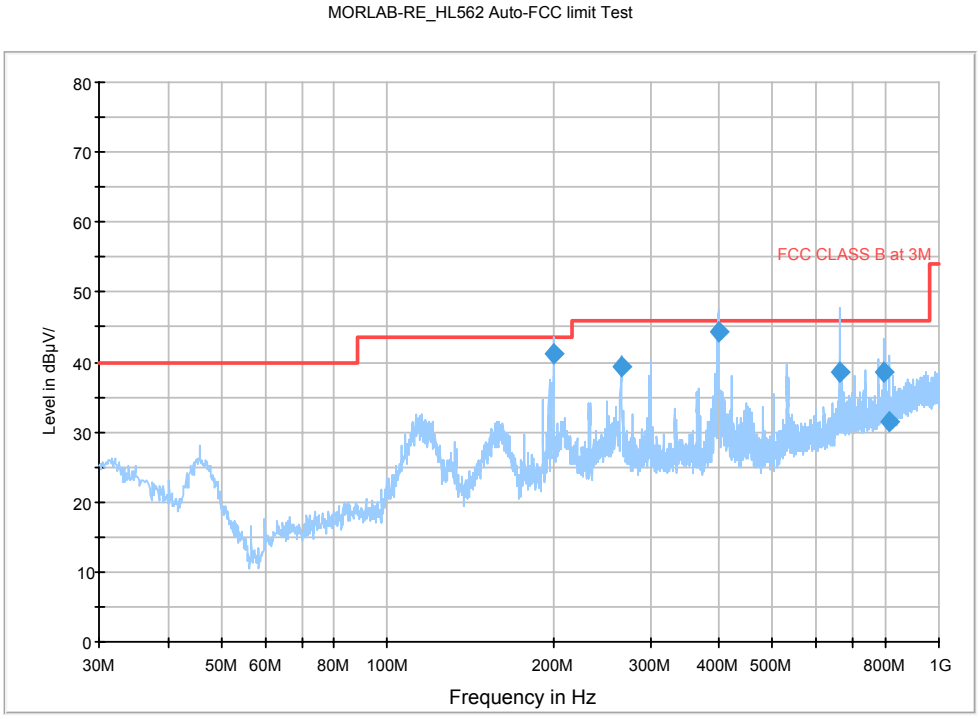
A. Test Verdict Recorded:

Frequency (MHz)	QuasiPeak (dBμV/m)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Comment
133.305000	31.1	100.0	V	354.0	12.2	12.4	43.5	PASS
200.235000	39.9	100.0	V	107.0	11.8	3.6	43.5	PASS
399.812500	40.7	100.0	V	86.0	20.1	5.3	46.0	PASS
455.466250	37.8	100.0	V	9.0	21.8	8.2	46.0	PASS
758.833750	32.7	100.0	V	96.0	28.6	13.3	46.0	PASS
796.421250	35.2	100.0	V	96.0	29.2	10.8	46.0	PASS
200.235000	41.1	100.0	H	344.0	11.8	2.4	43.5	PASS
266.437500	39.4	100.0	H	309.0	15.1	6.6	46.0	PASS
399.448750	44.3	100.0	H	117.0	20.1	1.7	46.0	PASS
663.046250	38.6	100.0	H	268.0	27.0	7.4	46.0	PASS
797.633750	38.7	100.0	H	128.0	29.3	7.3	46.0	PASS
814.608750	31.6	100.0	H	95.0	29.7	14.4	46.0	PASS

B. Test Plot:



(Plot: Test Antenna Vertical)



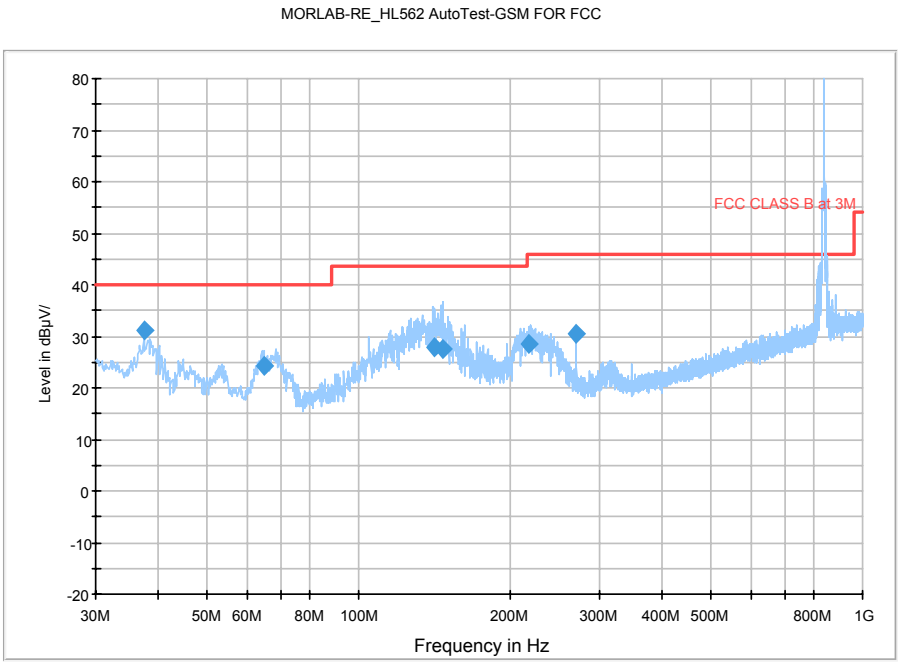
(Plot: Test Antenna Horizontal)

The EUT configuration of the emission tests is MS＋Battery＋Charger.

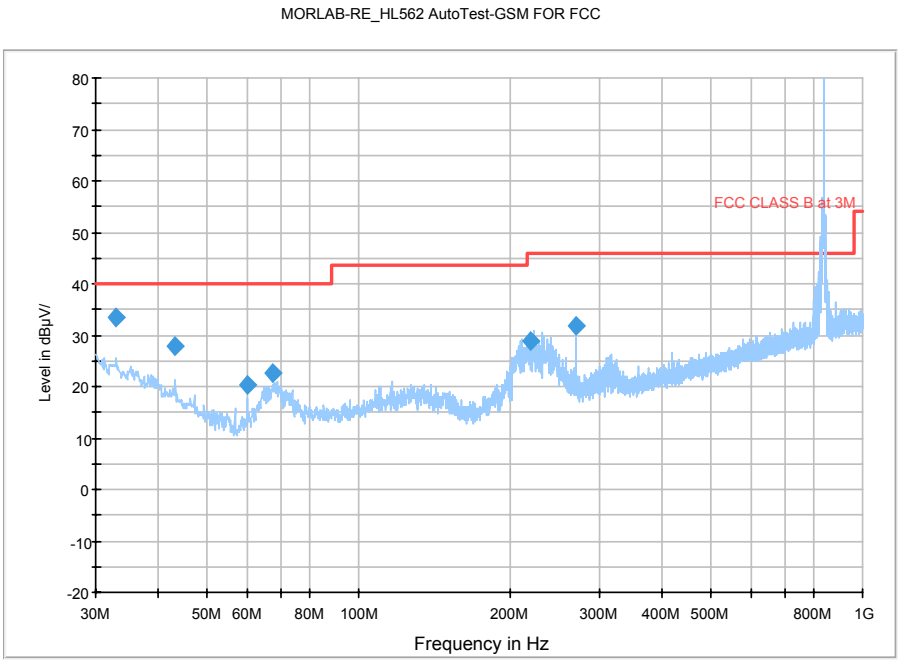
A. Test Verdict Recorded for Suspicious Points:

Frequency (MHz)	QuasiPeak (dBμV/m)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Comment
37.396250	31.2	100.0	V	286.0	16.6	8.8	40.0	PASS
64.677500	24.2	100.0	V	286.0	6.5	15.8	40.0	PASS
141.428750	27.8	100.0	V	0.0	10.8	15.7	43.5	PASS
146.642500	27.6	100.0	V	0.0	10.6	15.9	43.5	PASS
217.937500	28.6	100.0	V	123.0	11.5	17.4	46.0	PASS
269.953750	30.4	100.0	V	248.0	13.9	15.6	46.0	PASS
33.031250	33.3	100.0	H	254.0	18.8	6.7	40.0	PASS
43.216250	27.7	100.0	H	213.0	13.4	12.3	40.0	PASS
59.948750	20.2	100.0	H	304.0	5.3	19.8	40.0	PASS
67.345000	22.5	100.0	H	354.0	7.5	17.5	40.0	PASS
219.877500	28.8	100.0	H	294.0	11.6	17.2	46.0	PASS
269.953750	31.8	100.0	H	0.0	13.9	14.2	46.0	PASS

B. Test Plot:



(Plot: Test Antenna Vertical)



(Plot: Test Antenna Horizontal)

**** END OF REPORT ****