

TEST REPORT

Report No.: BCTC2411224958-5E

Applicant: Acer India PVT Limited

Product Name: Tablet

Test Model: Acer Iconia Tab iM10-22

Tested Date: 2024-11-14 to 2024-11-26


Issued Date: 2024-11-26

Shenzhen BCTC Testing Co., Ltd.



FCC ID: 2A94K-IM10-22

Product Name: Tablet

Trademark: 

Model/Type reference: Acer Iconia Tab iM10-22
Acer One T10-22L

Prepared For: Acer India PVT Limited

Address: Acer India PVT Limited, 6th Floor, Embassy Heights, No.13, Magrath Road,
Bangalore, 560025, India

Manufacturer: Acer India PVT Limited

Address: Acer India PVT Limited, 6th Floor, Embassy Heights, No.13, Magrath Road,
Bangalore, 560025, India

Prepared By: Shenzhen BCTC Testing Co., Ltd.

Address: 1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road,
Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China

Sample Received Date: 2024-11-27

Sample tested Date: 2024-11-14 to 2024-11-26

Issue Date: 2024-11-26

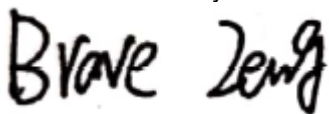
Report No.: BCTC2411224958-5E

Test Standards: FCC CFR Title 47 Part 2
FCC CFR Title 47 Part22 Subpart H
FCC CFR Title 47 Part24 Subpart E
ANSI/ TIA/ EIA-603-D-2010
FCC KDB 971168 D01 Power Meas. License Digital Systems v03v01

Test Results: PASS

Remark: This is GSM radio test report.

Tested by:



Brave Zeng/ Project Handler

Approved by:



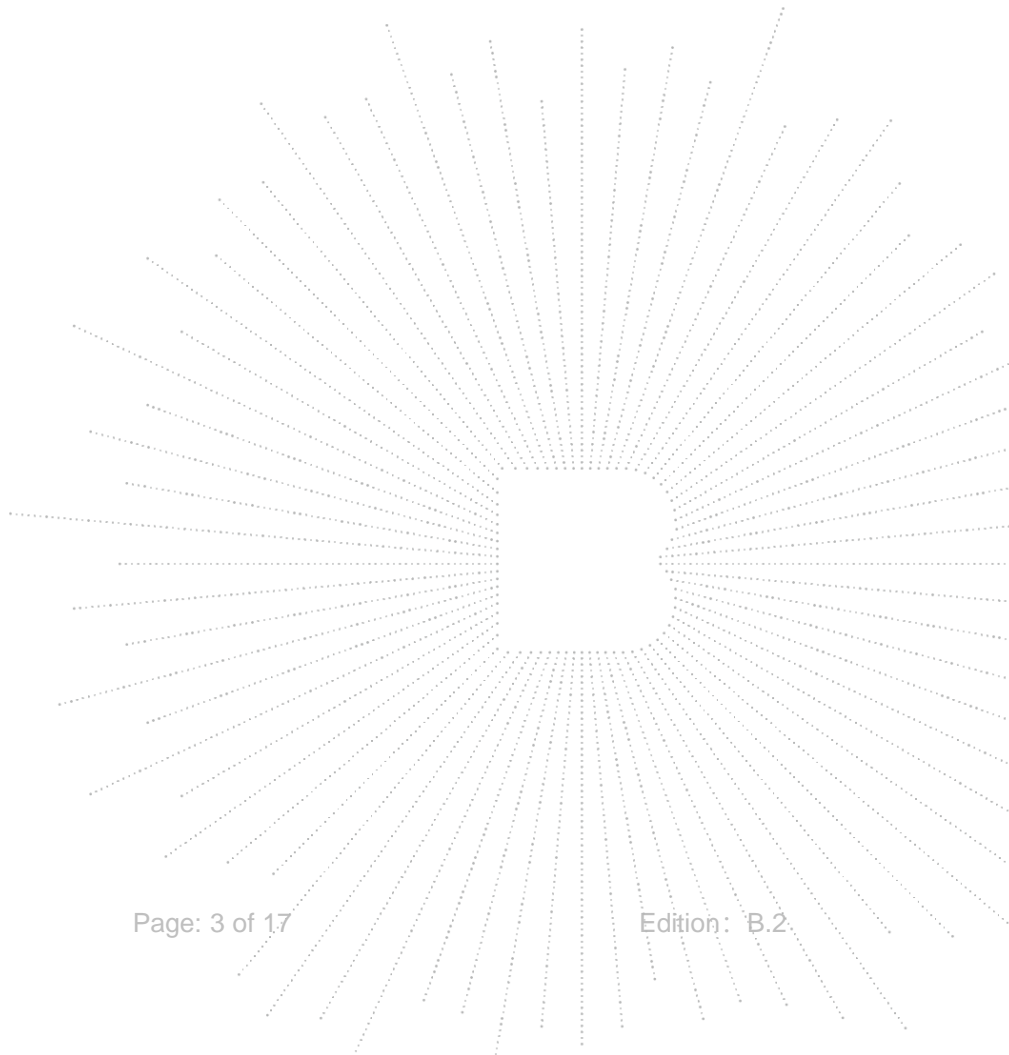
Zero Zhou/Reviewer

The test report is effective only with both signature and specialized stamp. This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen BCTC Testing Co., Ltd, this report can't be reproduced except in full. The tested sample(s) and the sample information are provided by the client.

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(Note: N/A Means Not Applicable)



1. Version

Report No.	Issue Date	Description	Approved
BCTC2411224958-5E	2024-11-26	Original	Valid

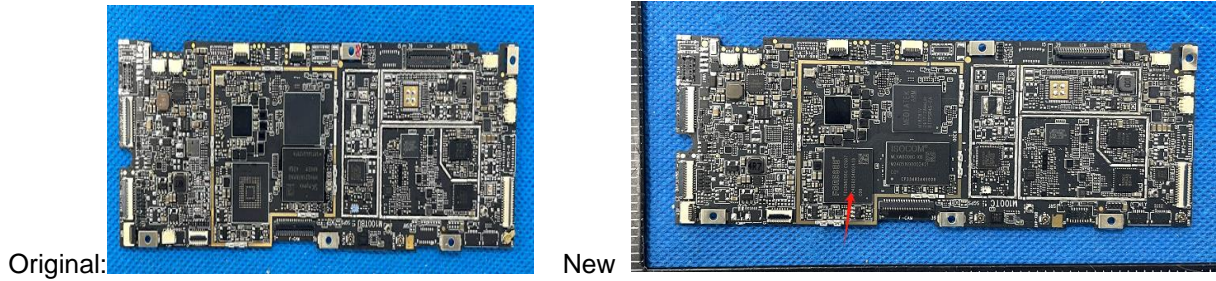
2. Test Summary

The Product has been tested according to the following specifications:

No.	Test Parameter	Clause No.	Results
1	RF Exposure	§1.1307, §2.1093	PASS
2	Spurious Emissions at Antenna Terminal	§22.917 (a), §24.238 (a),	PASS
3	Spurious Radiation Emissions	§22.917 (a), §24.238 (a),	PASS
4	Out of Band Emissions	§22.917 (a), §24.238 (a),	PASS

Note: According to the following changes of the product, the adapter is added and the memory IC chip is added on the board

Therefore, the radiation stray test is only performed on the original report (BCTC2408633035-5E).



Note: According to the following changes in the original test report (BCTC2408633035-5E), Update only test instruments, radiation spurious, EUT photos, etc.

3. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

No.	Item	Uncertainty
1	3m chamber Radiated spurious emission(30MHz-1GHz)	U=4.3dB
2	3m chamber Radiated spurious emission(9KHz-30MHz)	U=3.7dB
3	3m chamber Radiated spurious emission(1GHz-18GHz)	U=4.5dB
4	3m chamber Radiated spurious emission(18GHz-40GHz)	U=3.34dB
5	Conducted Emission (150kHz-30MHz)	U=3.20dB
6	Conducted Adjacent channel power	U=1.38dB
7	Conducted output power uncertainty Above 1G	U=1.576dB
8	Conducted output power uncertainty below 1G	U=1.28dB
9	humidity uncertainty	U=5.3%
10	Temperature uncertainty	U=0.59°C

4. Product Information And Test Setup


4.1 Product Information

Model/Type Reference:	Acer Iconia Tab iM10-22 Acer One T10-22L
Model Differences:	All the model are the same circuit and RF module, except model names.
Hardware Version:	N/A
Software Version:	N/A
Operation Frequency:	GSM/GPRS/EGPRS 850: TX: 824~849MHz; RX: 869~894MHz; GSM/GPRS/EGPRS 1900: TX:1850~1910MHz; RX:1930~1990MHz;
GPRS Class:	Class 12
Max RF Output Power:	GSM/GPRS/EGPRS 850: 32.71 dBm, GSM/GPRS/EGPRS 1900: 29.12 dBm
Type of Modulation:	GSM with GMSK Modulation GSM/GPRS 850: 254GXW EGPRS 850:252G7W
Type of Emission:	GSM/GPRS 1900: 249KGXW EGPRS 1900:244KG7W
Antenna installation:	Internal antenna GSM850: 1.86 dBi GSM1900: 0.11 dBi
Antenna Gain:	Remark: <input type="checkbox"/> The antenna gain of the product comes from the antenna report provided by the customer, and the test data is affected by the customer information. <input checked="" type="checkbox"/> The antenna gain of the product is provided by the customer, and the test data is affected by the customer information.
Connecting I/O Port(s)	Please refer to the User's Manual
Ratings:	DC 9V from adapter/DC 3.8V from battery Model: 623022C-1 Input: 100-240V~50/60Hz 0.8A Max Type-C Output: 5.0V===3.0A, 9.0V===2.0A, 12.0V===1.5A 18.0W Max PPS: 3.3-5.9V===3.0A 17.7W Max, 3.3-11.0V===1.65A 18.2W Max
Adapter Information:	

4.2 Test Setup Configuration

See test photographs attached in *EUT TEST SETUP PHOTOGRAPHS* for the actual connections between Product and support equipment.

4.3 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
E-1	Tablet		Acer Iconia Tab iM10-22	N/A	EUT
E-2	Adapter	N/A	623022C-1	N/A	Auxiliary

Item	Shielded Type	Ferrite Core	Length	Note
C-1	N/A	N/A	1M	DC cable unshielded

Notes:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

4.5 Test Mode

Testing Configure			
Support Band	Support Standard	Channel Frequency	Channel Number
GSM 850	GSM/GPRS/EGPRS	824.2 MHz	128
		836.6 MHz	190
		848.8 MHz	251
PCS 1900	GSM/GPRS/EGPRS	1850.2 MHz	512
		1880.0 MHz	661
		1909.8 MHz	810
Note 1: Both the SIM 1 and SIM 2 were tested, the worst mode is the SIM 1, the data recording in the report.			

EUT Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/ Without Core
/	/	/	/
/	/	/	/

Auxiliary Equipment List and Details

Description	Manufacturer	Model	Serial Number
/	/	/	/

Special Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/ Without Core
/	/	/	/

5. Test Facility And Test Instrument Used

5.1 Test Facility

All measurement facilities used to collect the measurement data are located at Shenzhen BCTC Testing Co., Ltd. Address: 1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.

FCC Test Firm Registration Number: 712850

A2LA certificate registration number is: CN1212

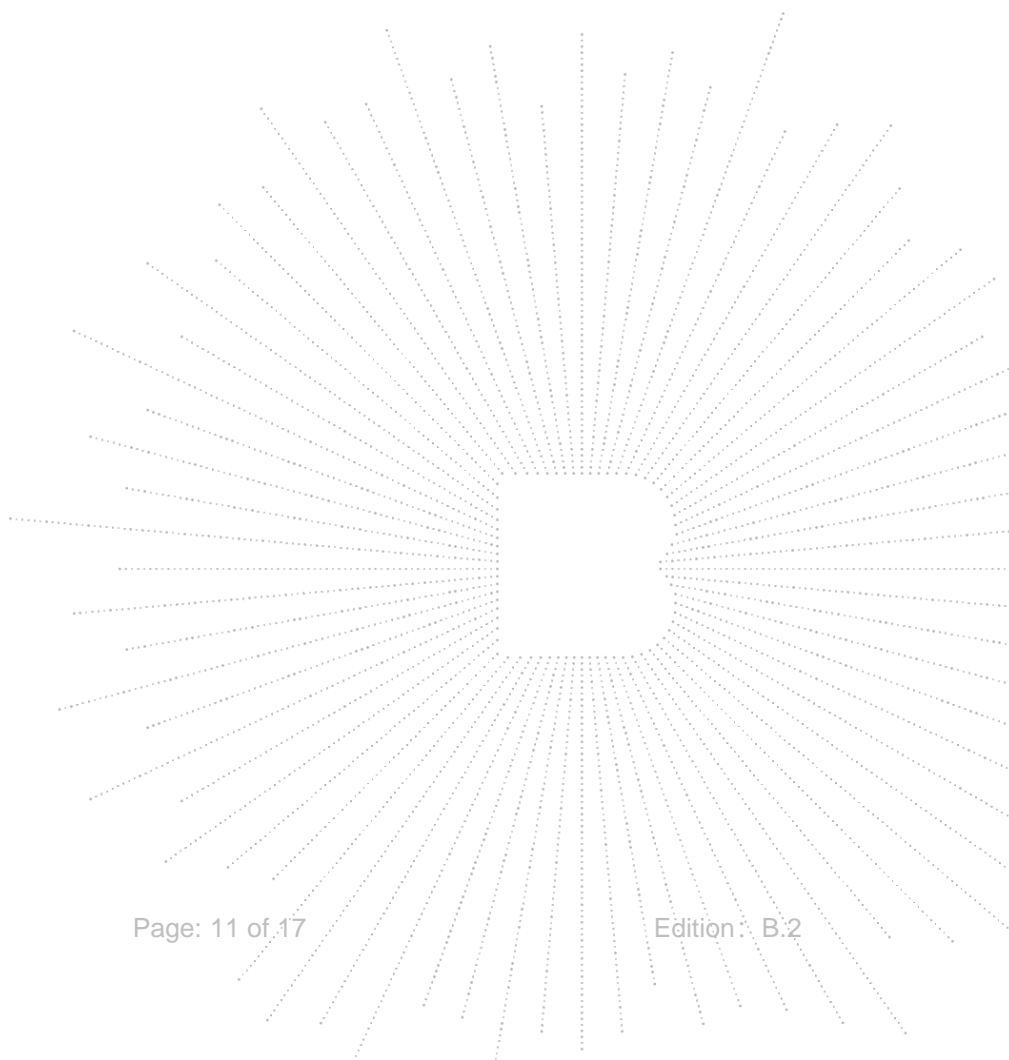
ISED Registered No.: 23583

ISED CAB identifier: CN0017

5.2 Test Instrument Used

RF Conducted Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Power meter	Keysight	E4419	\	May 16, 2024	May 15, 2025
Power Sensor (AV)	Keysight	E9300A	\	May 16, 2024	May 15, 2025
Signal Analyzer 20kHz-26.5GHz	Keysight	N9020A	MY49100060	May 16, 2024	May 15, 2025
Spectrum Analyzer 9kHz-40GHz	R&S	FSP40	100363	May 16, 2024	May 15, 2025
Radio frequency control box	MAIWEI	MW100-RFCB	\	\	\
Software	MAIWEI	MTS 8310	\	\	\

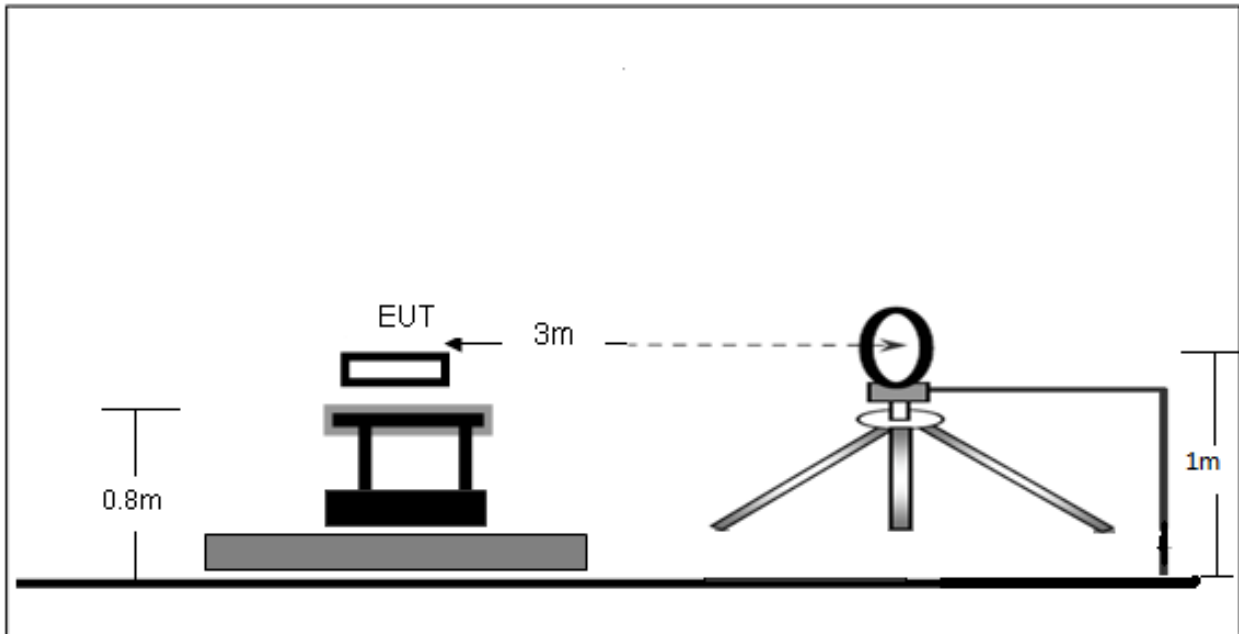
Radiated Emissions Test (966 Chamber02)					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
966 chamber	SKET	966 Room	966	Oct. 31. 2024	Oct. 30. 2027
Receiver	R&S	ESR3	102075	May 16, 2024	May 15, 2025
Receiver	R&S	ESRI7	100010	Oct. 31. 2024	Oct. 30. 2025
Amplifier	SKET	LNPA-30M01G-30	SK2021082004	Oct. 31. 2024	Oct. 30. 2025
TRILOG Broadband Antenna	Schwarzbeck	VULB9168	1323	May 21, 2024	May 20, 2025
Loop Antenna(9KHz -30MHz)	Schwarzbeck	FMZB1519B	00014	May 21, 2024	May 20, 2025
Amplifier	SKET	LAPA_01G18 G-45dB	SK2021040901	May 16, 2024	May 15, 2025
Horn Antenna	Schwarzbeck	BBHA9120D	1541	May 21, 2024	May 20, 2025
Amplifier(18G Hz-40GHz)	MITEQ	TTA1840-35-HG	2034381	May 16, 2024	May 15, 2025
Horn Antenn(18GHz -40GHz)	Schwarzbeck	BBHA9170	00822	May 21, 2024	May 20, 2025
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 16, 2024	May 15, 2025
Software	Frad	EZ-EMC	FA-03A2 RE	\	\



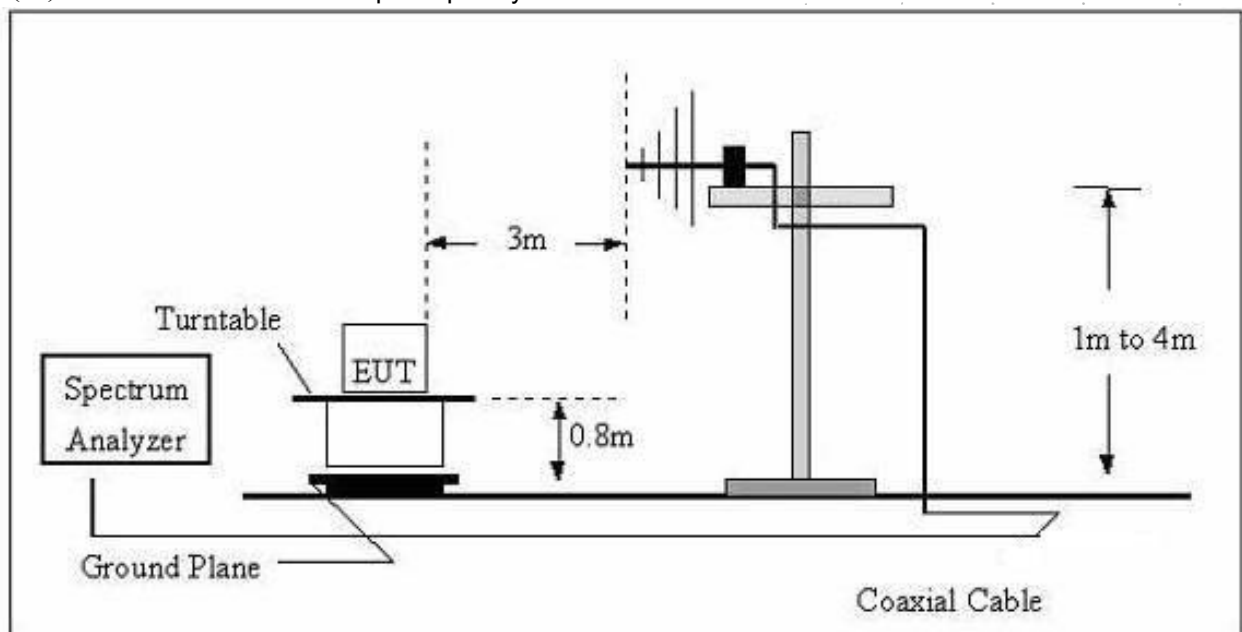
6. Spurious Radiated Emissions

6.1 Block Diagram Of Test Setup

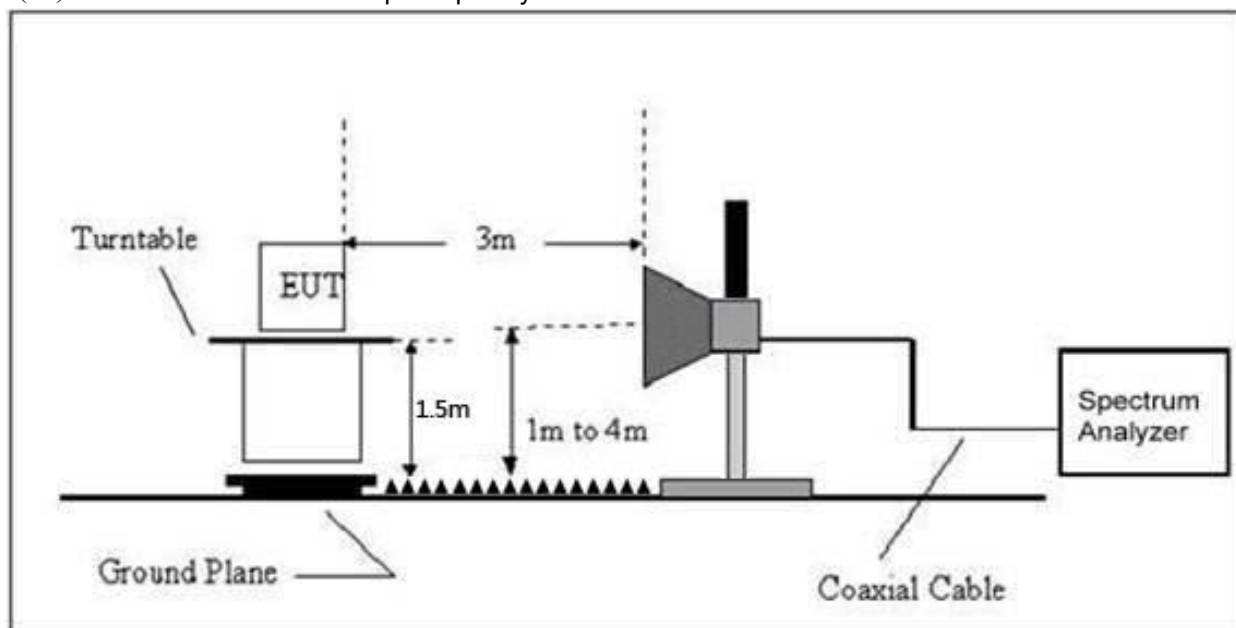
(A) Radiated Emission Test-Up Frequency Below 30MHz



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz



6.2 Limit

According to §22.917(a), the power of any emissions outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

According to §24.238(a), the power of any emissions outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

According to §27.53 (h), the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ dB.

6.3 Test procedure

1. The setup of EUT is according with per ANSI/TIA Standard 603D and ANSI C63.4-2014 measurement procedure.
2. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.
3. The frequency range up to tenth harmonic of the fundamental frequency was investigated.
4. Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.

Spurious attenuation limit in dB = $43 + 10 \log_{10}(\text{power out in Watts})$

6.4 Test Result

For Cellular Band_GSM850 Mode

Frequency (MHz)	Reading (dBm)	Correct dB	Result (dBm)	Limit (dBm)	Margin (dB)	Polar H/V
Low Channel (824.2MHz)						
91.25	-14.34	-30.57	-44.91	-13.00	-31.91	H
1648.40	-15.15	-27.29	-42.44	-13.00	-29.44	H
2472.60	-13.61	-25.18	-38.79	-13.00	-25.79	H
91.25	-13.25	-30.57	-43.82	-13.00	-30.82	V
1648.40	-8.35	-27.29	-35.64	-13.00	-22.64	V
2472.60	-9.75	-25.18	-34.93	-13.00	-21.93	V
Middle Channel (836.6MHz)						
91.25	-9.58	-30.57	-40.15	-13.00	-27.15	H
1673.20	-12.16	-27.32	-39.48	-13.00	-26.48	H
2509.80	-13.26	-25.07	-38.33	-13.00	-25.33	H
91.25	-11.55	-30.57	-42.12	-13.00	-29.12	V
1673.20	-6.71	-27.32	-34.03	-13.00	-21.03	V
2509.80	-6.72	-25.07	-31.79	-13.00	-18.79	V
High Channel (848.8MHz)						
91.25	-9.67	-30.57	-40.24	-13.00	-27.24	H
1697.60	-13.87	-27.27	-41.14	-13.00	-28.14	H
2546.40	-9.35	-24.96	-34.31	-13.00	-21.31	H
91.25	-11.51	-30.57	-42.08	-13.00	-29.08	V
1697.60	-9.05	-27.27	-36.32	-13.00	-23.32	V
2546.40	-8.68	-24.96	-33.64	-13.00	-20.64	V

For PCS Band_GSM1900 Mode

Frequency (MHz)	Reading (dBm)	Correct dB	Result (dBm)	Limit (dBm)	Margin (dB)	Polar H/V
Low Channel (1850.2MHz)						
91.25	-11.40	-30.57	-41.97	-13.00	-28.97	H
3700.40	-10.06	-22.20	-32.26	-13.00	-19.26	H
5550.60	-13.65	-19.32	-32.97	-13.00	-19.97	H
91.25	-13.24	-30.57	-43.81	-13.00	-30.81	V
3700.40	-8.31	-22.20	-30.51	-13.00	-17.51	V
5550.60	-7.88	-19.32	-27.20	-13.00	-14.20	V
Middle Channel (1880MHz)						
91.25	-12.68	-30.57	-43.25	-13.00	-30.25	H
3760.00	-10.16	-22.08	-32.24	-13.00	-19.24	H
5640.00	-13.25	-19.28	-32.53	-13.00	-19.53	H
91.25	-11.36	-30.57	-41.93	-13.00	-28.93	V
3760.00	-6.56	-22.08	-28.64	-13.00	-15.64	V
5640.00	-8.44	-19.28	-27.72	-13.00	-14.72	V
High Channel (1909.8MHz)						
91.25	-10.50	-30.57	-41.07	-13.00	-28.07	H
3819.60	-13.17	-21.96	-35.13	-13.00	-22.13	H
5729.40	-9.79	-19.24	-29.03	-13.00	-16.03	H
91.25	-7.61	-30.57	-38.18	-13.00	-25.18	V
3819.60	-6.38	-21.96	-28.34	-13.00	-15.34	V
5729.40	-11.23	-19.24	-30.47	-13.00	-17.47	V

Note: Result=Reading+ Correct, Margin= Result- Limit

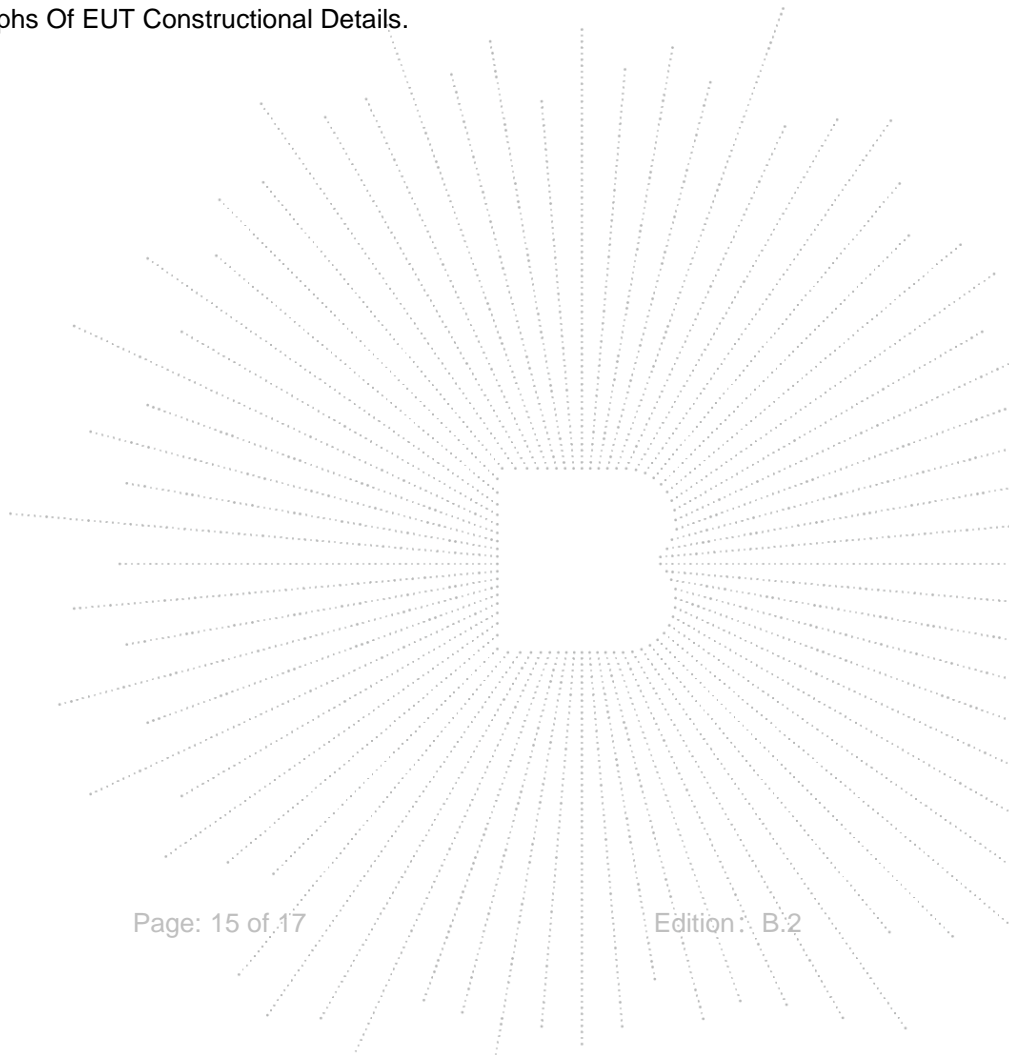
Note: Testing is carried out with frequency rang 9kHz to the tenth harmonics, other than listed in the table above are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

7. EUT Photographs

EUT Photo

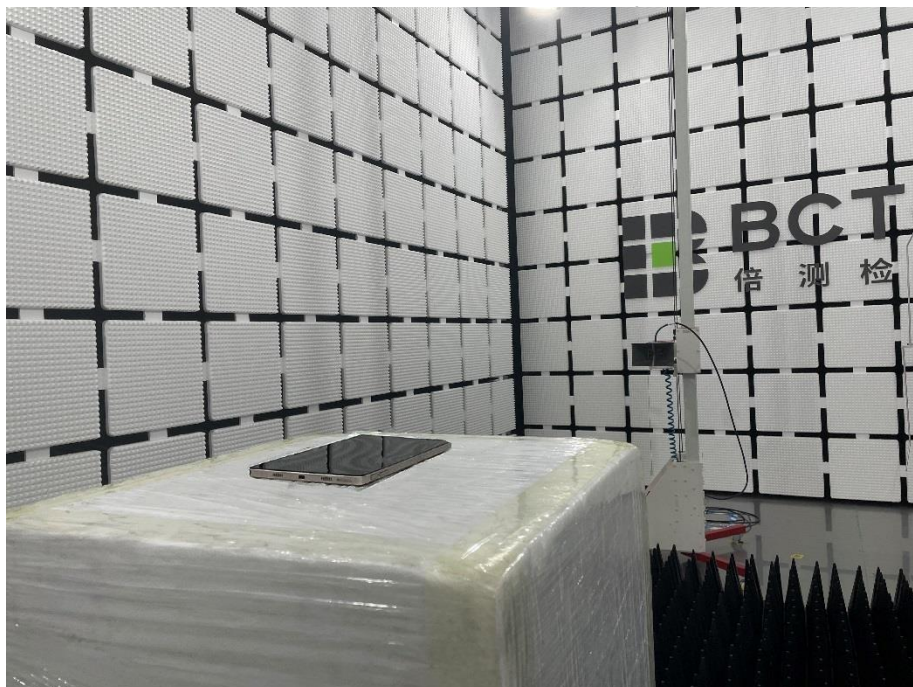


NOTE: Appendix-Photographs Of EUT Constructional Details.



8. EUT Test Setup Photographs

Radiated Measurement Photos



STATEMENT

1. The equipment lists are traceable to the national reference standards.
2. The test report can not be partially copied unless prior written approval is issued from our lab.
3. The test report is invalid without the "special seal for inspection and testing".
4. The test report is invalid without the signature of the approver.
5. The test process and test result is only related to the Unit Under Test.
6. Sample information is provided by the client and the laboratory is not responsible for its authenticity.
7. The quality system of our laboratory is in accordance with ISO/IEC17025.
8. If there is any objection to this test report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

Address:

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***** END *****