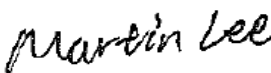



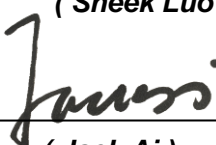
TEST REPORT

Report No. : CQASZ20200500416E
Applicant: Shenzhen Times Innovation Technology Co., Ltd
Address of Applicant: Room 3, 6/F, Building 3, WINLEAD, Fada Road, Bantian Street, Longgang District, Shenzhen, China.
Equipment Under Test (EUT):
EUT Name: Baseus Type-C Male to 3.5mm Female Adapter L54
Model No.: L54
Brand Name: Baseus
Standards: EN 55032:2015
EN 55035:2017
Date of Receipt: 2020-05-21
Date of Test: 2020-05-21 to 2020-05-25
Date of Issue: 2020-05-25
Test Result : PASS*

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

Tested By: 
(Martin Lee)

Reviewed By: 
(Sheek Luo)

Approved By: 
(Jack Ai)



1 Version

Revision History of Report

Report No.	Version	Description	Issue Date
CQASZ20200500416E	Rev.01	Initial report	2020-05-25

2 Test Summary

Electromagnetic Compatibility (EMC) Part				
Electromagnetic Interference (EMI)				
Test item	Test Requirement	Test Method	Class / Severity	Result
Radiated Emission (30MHz to 1GHz)	EN 55032:2015	EN 55032:2015	Class B	PASS ³⁾
Conducted Emission (150kHz to 30MHz)	EN 55032:2015	EN 55032:2015	Class B	N/A ²⁾
Harmonic Emission on AC, 50Hz	EN IEC 61000-3- 2:2019	EN IEC 61000-3-2:2019	Table 1 of EN IEC 61000-3-2	N/A ²⁾
Flicker Emission on AC	EN 61000-3- 3:2013+A1:2019	EN 61000-3- 3:2013+A1:2019	Clause 5 of EN 61000-3-3	N/A ²⁾
Electromagnetic Susceptibility (EMS)				
Electrostatic discharges (ESD)	EN 55035:2017	EN 61000-4-2:2009	Clause 5	PASS
Radiated Immunity	EN 55035:2017	EN 61000-4-3:2006 +A1:2008+A2:2010	Clause 5	PASS
Power frequency magnetic field	EN 55035:2017	EN 61000-4-8:2010	Clause 5	N/A ¹⁾
Electrical Fast Transients (EFT)	EN 55035:2017	EN 61000-4-4:2012	Clause 5	N/A ²⁾
Surge Immunity	EN 55035:2017	EN 61000-4-5:2014	Clause 5	N/A ²⁾
Injected Currents, 150kHz to 80MHz	EN 55035:2017	EN 61000-4-6:2014	Clause 5	N/A ²⁾
Voltage Dips and Interruptions	EN 55035:2017	EN 61000-4-11:2004	Clause 5	N/A ²⁾

Remark:

§ If the highest frequency of the internal sources of the EUT is less than 108 MHz, the measurement shall only be made up to 1 GHz. (Refer to EN 55032:2015 Clause 8 table 1 Conditional testing procedure)

§ If the highest frequency of the internal sources of the EUT is between 108 MHz and 500 MHz, the measurement shall only be made up to 2 GHz. (Refer to EN 55032:2015 Clause 8 table 1 Conditional testing procedure)

§ If the highest frequency of the internal sources of the EUT is between 500 MHz and 1 GHz, the measurement shall only be made up to 5 GHz. (Refer to EN 55032:2015 Clause 8 table 1 Conditional testing procedure)

§ If the highest frequency of the internal sources of the EUT is above 1 GHz, the measurement shall be made up to 5 times the highest frequency or 6 GHz, whichever is less. (Refer to EN 55032:2015 Clause 8 table 1 Conditional testing procedure)

N/A¹⁾: Because this test EUT is not belonging to apparatus containing devices susceptible to magnetic fields, therefore, it is not applicable.

N/A²⁾: Because this test EUT powered by the phone.

PASS³⁾: The highest frequency of the internal sources of the EUT is below 108 MHz.

The tested sample(s) and the sample information are provided by the client.

3 Contents

	Page
1 VERSION.....	2
2 TEST SUMMARY	3
3 CONTENTS.....	4
4 GENERAL INFORMATION	5
4.1 CLIENT INFORMATION.....	5
4.2 GENERAL DESCRIPTION OF EUT	5
4.3 DESCRIPTION OF SUPPORT UNITS.....	6
4.1 TEST LOCATION.....	6
4.2 DEVIATION FROM STANDARDS.....	6
4.3 ABNORMALITIES FROM STANDARD CONDITIONS	6
4.4 OTHER INFORMATION REQUESTED BY THE CUSTOMER.....	6
4.5 MEASUREMENT UNCERTAINTY (95% CONFIDENCE LEVELS, K=2).....	6
5 EQUIPMENT LIST	7
6 EMISSION TEST RESULTS	9
6.1 RADIATED EMISSIONS	9
7 IMMUNITY TEST RESULTS	12
7.1 RADIATED IMMUNITY	13
7.2 ESD	15
APPENDIX 1 PHOTOGRAPHS OF TEST SETUP	17
APPENDIX 2 PHOTOGRAPHS OF EUT	18

4 General Information

4.1 Client Information

Applicant:	Shenzhen Times Innovation Technology Co., Ltd
Address of Applicant:	Room 3, 6/F, Building 3, WINLEAD, Fada Road, Bantian Street, Longgang District, Shenzhen, China.
Manufacturer:	Shenzhen Times Innovation Technology Co., Ltd
Address of Manufacturer:	Room 3, 6/F, Building 3, WINLEAD, Fada Road, Bantian Street, Longgang District, Shenzhen, China.
Factory:	Shenzhen Times Innovation Technology Co., Ltd
Address of Factory:	Room 3, 6/F, Building 3, WINLEAD, Fada Road, Bantian Street, Longgang District, Shenzhen, China.

4.2 General Description of EUT

Product Name:	Baseus Type-C Male to 3.5mm Female Adapter L54
Model No.:	L54
Trade Mark:	Baseus
Power Supply:	Powered by the phone
Test Mode:	
Normal working	Connect the phone and headphones to play music

Note: Only one model number: L54, but it comes in tow colors (black, gray), only gray EUT was tested.

4.3 Description of Support Units

The EUT has been tested with associated equipment below.

1) support equipment

Description	Manufacturer	Model No.	Certification	Supplied by
Phone	HUAWEI	HONOR20	/	CQA
Headphone	/	/	/	CQA

2) Cable

Cable No.	Description	Manufacturer	Cable Type/Length	Supplied by
/	/	/	/	/

4.1 Test Location

Other than radiated immunity, all tests were performed at:

Shenzhen Huaxia Testing Technology Co., Ltd.,

1F., Block A of Tongsheng Technology Building, Huahui Road, Dalang Street, Longhua District, Shenzhen, China

Radiated immunity test is performed at:

Guangdong Huizhou Quality & Measuring Supervision Testing Institute

Quality Supervision & Test Building No.1, Wenhua 2th Road, Jiangbei, Huizhou, Guangdong, China

4.2 Deviation from Standards

None.

4.3 Abnormalities from Standard Conditions

None.

4.4 Other Information Requested by the Customer

None.

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

No.	Item	Measurement Uncertainty
1	Conduction emission	3.74dB (9kHz to 150kHz)
		3.34dB (150kHz to 30MHz)
2	Radiated emission	5.12dB (30MHz-1GHz)
		4.60dB (1GHz-6GHz)
3	Radiated Immunity	1.61dB
4	Conducted Immunity	0.92dB
5	Temperature test	0.8°C
6	Humidity test	2.0%
7	DC power test	0.5 %

5 Equipment List

Radiated Emissions					
Equipment	Manufacturer	Model No	Inventory No.	Cal Date	Cal Due Date
Loop antenna	SCHWARZBECK	FMZB 1516	CQA-060	2019/10/21	2020/10/20
Horn Antenna	R&S	BBHA 9170	CQA-088	2019/9/25	2020/9/24
Horn Antenna	R&S	HF906	CQA-012	2019/9/26	2020/9/25
Bilog Antenna	R&S	HL562	CQA-011	2019/9/26	2020/9/25
EMI Test Receiver	R&S	ESR7	CQA-005	2019/10/25	2020/10/24
Spectrum analyzer	R&S	FSU26	CQA-038	2019/10/25	2020/10/24
Preamplifier	MITEQ	AMF-6D-02001800-29-20P	CQA-036	2019/10/25	2020/10/24
Coaxial cable (1GHz~40GHz)	CQA	N/A	C007	2019/9/26	2020/9/25
Coaxial cable (9KHz~1GHz)	CQA	N/A	C013	2019/9/26	2020/9/25

Electrostatic Discharge					
Equipment	Manufacturer	Model No	Inventory No.	Cal Date	Cal Due Date
ESD Simulator	EM TEST	DITO	CQA-001	2019/9/26	2020/9/25

Guangdong Huizhou Quality & Measuring Supervision Testing Institute:

Radiated Immunity (80MHz-6GHz)					
Equipment	Manufacturer	Model No	Inventory No.	Cal Date	Cal Due Date
3m Anechoic Chamber	Albatross	APC13102-SAC	Z-064	2017/12/2	2020/12/1
Signal Generator	R&S	SMB100A	Z-063-01	2020/4/18	2021/4/17
Power amplifier	R&S	BBA150-BC1000	Z-140	2019/6/2	2020/6/1
Power amplifier	R&S	BBA150-D200+E200	Z-144	2019/11/28	2020/11/27
log-periodic antenna	R&S	HL046E	Z-063-18	2019/4/19	2021/4/18
Stacked Double Log-periodic Antenna	Schwarzbeck	STLP 9149	Z-063-19	2019/4/19	2021/4/18
Power Meter	R&S	NRP2	Z-063-06	2019/6/2	2020/6/1

Audio mouth	BK	BK-4227	Z-063-23	2020/4/19	2021/4/18
Audio Box	BK	ACO-B0X	Z-063-24	2020/4/19	2021/4/18
Audio analyzer	R&S	UPL	Z-063-76	2020/4/19	2021/4/18

6 Emission Test Results

6.1 Radiated Emissions

Test Requirement: EN 55032

Test Method: EN 55032

Measurement Distance: 3m

EUT Operation:

Ambient: Temp.: 25.5°C

Humid.: 54%

Press.: 1009mbar

Test Mode: Normal working

Receive Setup:

Frequency range (MHz)	Detector	RBW	VBW
30-1000	Quasi-peak	120kHz	300kHz
Above 1000	Peak	1MHz	3MHz

Table 1: Requirements for radiated emissions for Class B equipment

Limit:

Frequency	Limit(@3m)	Detector
30MHz-230MHz	40dB μ V/m	QP
230MHz-1GHz	47dB μ V/m	QP
1GHz-3GHz	50dB μ V/m	Average
	70dB μ V/m	PK
3GHz-6GHz	54dB μ V/m	Average
	74dB μ V/m	PK

Test Setup:

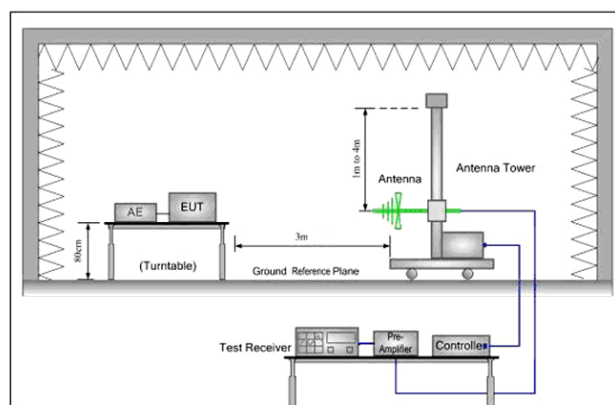


Figure 1. 30MHz to 1GHz

- From 30 MHz to 1GHz test procedure as below:
- The radiated emissions were tested in a semi-anechoic chamber.
- The EUT is placed on a turntable, which is 0.8m above ground plane.
- The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- EUT is set 3m away from the receiving antenna, which is moved from 1m to 4m to find out the maximum emissions.
- Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- Repeat above procedures until the measurements for all frequencies are complete.

Test Procedure:

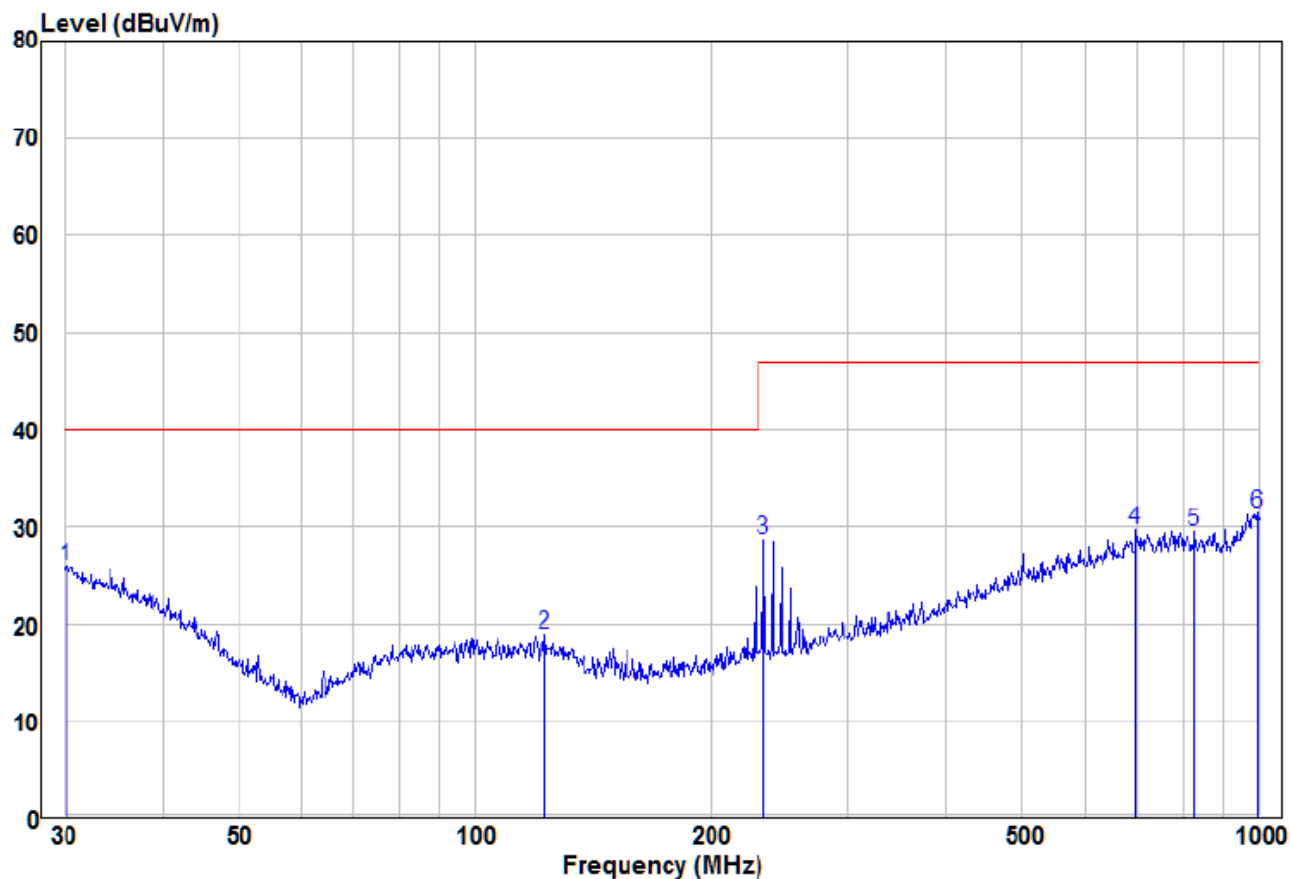
Equipment Used: Refer to section 5 for details.

Test result: PASS

Measurement Data:

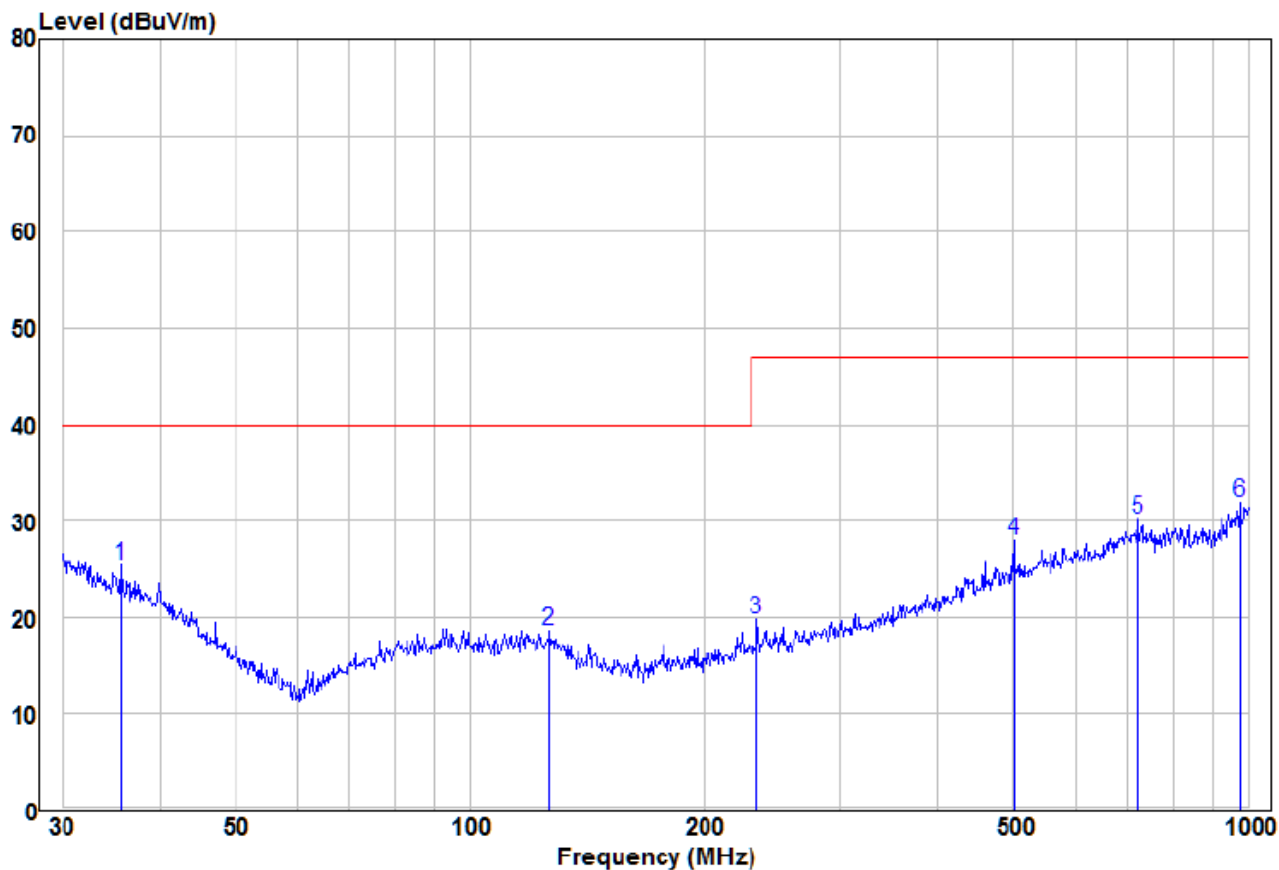
Below 1GHz:

Horizontal:



	Read			Limit	Over		
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Pol/Phase
1 pp	30.11	7.55	18.37	25.92	40.00	-14.08	HORIZONTAL
2	122.83	8.33	10.59	18.92	40.00	-21.08	HORIZONTAL
3	234.17	19.02	9.58	28.60	47.00	-18.40	HORIZONTAL
4	696.86	9.56	20.04	29.60	47.00	-17.40	HORIZONTAL
5	830.40	8.83	20.66	29.49	47.00	-17.51	HORIZONTAL
6	996.50	8.29	23.05	31.34	47.00	-15.66	HORIZONTAL

Vertical:



		Read			Limit	Over		
	Freq	Level	Factor	Level	Line	Limit	Remark	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1	pp	35.62	9.10	16.38	25.48	40.00	-14.52	VERTICAL
2		126.77	8.24	10.44	18.68	40.00	-21.32	VERTICAL
3		234.17	10.26	9.58	19.84	47.00	-27.16	VERTICAL
4		501.18	10.67	17.29	27.96	47.00	-19.04	VERTICAL
5		721.73	10.00	20.23	30.23	47.00	-16.77	VERTICAL
6		975.75	9.37	22.47	31.84	47.00	-15.16	VERTICAL

Remark: The EUT was test at 3m in field chamber.

Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor.

7 Immunity Test Results

Performance Criteria Description in Clause 8 of EN 55035

Criterion A:	<p>The equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function or change of operation state is allowed below a performance level specified by the manufacturer when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.</p>
Criterion B:	<p>During the test application of the disturbance, degradation of performance is allowed. However, no unintended change of actual operating state or stored data is allowed to persist after the test.</p> <p>After the test, the equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed, below a performance level specified by the manufacturer, when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance.</p> <p>If the minimum performance level (or the permissible performance loss), or recovery time, is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.</p>
Criterion C:	<p>Loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls by the user in accordance with the manufacturer's instructions. A reboot or re-start operation is allowed.</p> <p>Information stored in non-volatile memory, or protected by a battery backup, shall not be lost.</p>

7.1 Radiated Immunity

Test Requirement: EN 55035

Test Method: EN 61000-4-3

EUT Operation:

Ambient: Temp.: 24°C
Power AC 230V, 50Hz

Humid.: 52%

Press.: 1009 mbar

Test Mode: Normal working

Criterion Required: A

Equipment Used: Refer to section 5 for details.

Test Setup:

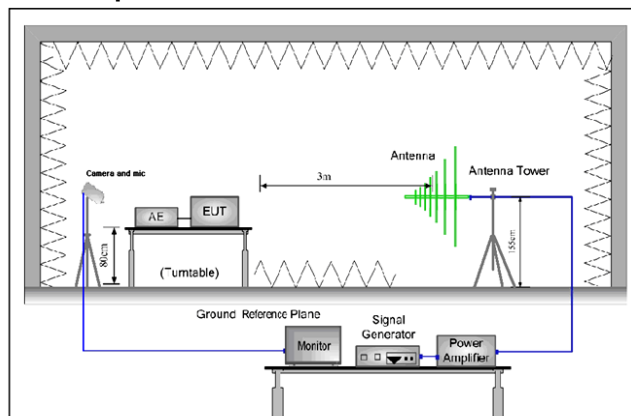


Figure 1. 80MHz to 1GHz

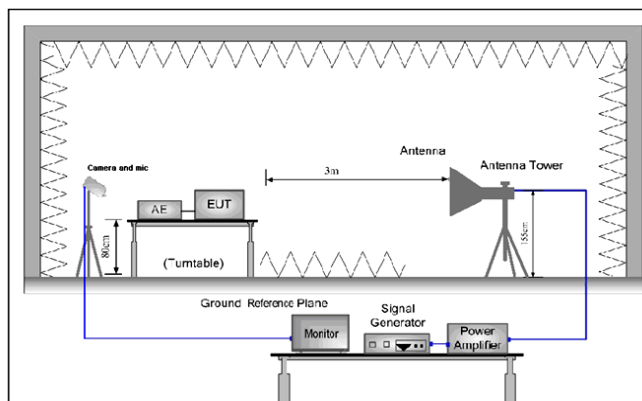


Figure 2. 1GHz to 6GHz

Test Procedure:

- 1) For table-top equipment, the EUT was placed in the chamber on a non-conductive table 0.8m high. For arrangement of floor-standing equipment, the EUT was mounted on a non-conductive support 0.1m above the supporting plane. For human body-mounted equipment, the EUT may be tested in the same manner as table top items.
- 2) If possible, a minimum of 1 m of cable is exposed to the electromagnetic field. Excess length of cables interconnecting units of the EUT shall be bundled low-inductively in the approximate center of the cable to form a bundle 30 cm to 40 cm in length.
- 3) The EUT was initially placed with one face coincident with the calibration plane. The EUT face being illuminated was contained within the UFA (Uniform Field Area).
- 4) The frequency ranges to be considered were swept with the signal modulated and pausing to adjust the RF signal level or to switch oscillators and antennas as necessary. Where the frequency range was swept incrementally, the step size was not exceed 1 % of the preceding frequency value.
- 5) The dwell time of the amplitude modulated carrier at each frequency was not be less than the time necessary for the EUT to be exercised and to respond, and was not less than 0.5 s.
- 6) The test normally was performed with the generating antenna facing each side of the EUT.
- 7) The polarization of the field generated by each antenna necessitates testing each selected side twice, once with the antenna positioned vertically and again with the antenna positioned horizontally.
- 8) The EUT was performed in a configuration to actual installation conditions, a video camera and/or an audio monitor were used to monitor the performance of the EUT.

Test result: PASS

Test result:

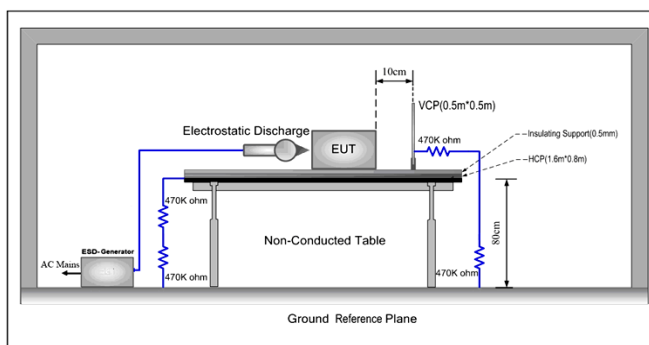
Frequency	Level	Modulation	EUT Face	Antenna Polaxis	Result / Observations
80MHz-1GHz, 1800MHz 2600MHz 3500MHz 5000MHz	3V/m	1kHz, 80% Amp. Mod, 1% increment Dwell time: 3 seconds	Front	V	A
				H	A
			Back	V	A
				H	A
			Left	V	A
				H	A
			Right	V	A
				H	A
			Top	V	A
				H	A
			Under	V	A
				H	A

Remarks:

A: No performance degradation during test.

7.2 ESD

Test Requirement:	EN 55035	
Test Method:	EN 61000-4-2	
EUT Operation:		
Ambient:	Temp.: 25.7°C	Humid.:52%
Test Mode:	Normal working	
Power	AC 230V, 50Hz	
Discharge Impedance:	330 Ω / 150 pF	
Polarity:	Positive & Negative	
Number of Discharge:	Minimum 10 times at each test point	
Discharge Mode:	Single Discharge	
Discharge Period:	1 second minimum	
Equipment Used:	Refer to section 5 for details.	
Test Setup:		



Test set-up for tabletop equipment

Test Procedure:

- 1) Contact discharges to the conductive surfaces and to coupling planes:
The EUT was exposed to at least 200 discharges, 100 each at negative and positive polarity, at a minimum of four test points (a minimum of 50 discharges at each point). One of the test points was subjected to at least 50 indirect discharges (contact) to the centre of the front edge of the horizontal coupling plane. The remaining three test points shall each receive at least 50 direct contact discharges. If no direct contact test points were available, then at least 200 indirect discharges were applied in the indirect mode. Tests were performed at a maximum repetition rate of one discharge per second.
Air discharge at slots and apertures, and insulating surfaces:
On those parts of the EUT where it was not possible to perform contact discharge testing, the equipment was investigated to identify user accessible points where breakdown may occur. This investigation was restricted to those areas normally handled by the user. A minimum of 10 single air discharges were applied to the selected test point for each such area.
The application of electrostatic discharges to the contacts of open connectors was not required by this standard.
- 2) The EUT was put on a 0.8m high wooden table for table-top equipment or 0.1m high for floor standing equipment standing on the ground reference plane(GRP).
- 3) A horizontal coupling plane(HCP) 1.6m by 0.8m in size was placed on the table, and the EUT with its cables were isolated from the HCP by an insulating support thick than 0.5mm. The VCP 0.5m by 0.5m in size & HCP were constructed from the same material type & thickness as that of the GRP, and connected to the GRP via a 470k Ω resistor at each end. The distance between EUT and any of the other metallic surfaces accepted the GRP, HCP and VCP was greater than 1m.
- 4) During the contact discharges, the tip of the discharge electrode was touch the

EUT before the discharge switch is operated. During the air discharges, the round discharge tip of the discharge electrode was approached as fast as possible to touch the EUT.

- 5) After each discharge, the ESD generator was removed from the EUT, the generator was then retriggered for a new single discharge. For ungrounded product, a discharge cable with two resistances was used after each discharge to remove remnant electrostatic voltage. 10 times of each polarity single discharge were applied to HCP and VCP.

Test result: PASS

Test data:

Observations:

Test Point:

1. All insulated enclosure and seams.
2. All accessible metal parts of the enclosure.

Direct Application Test Results				
Direct Application			Test Results	
Discharge Level (kV)	Pulse No.	Test Point	Contact Discharge	Air Discharge
± 8	10 for every level	1	N/A	A
± 4	10 for every level	2	A	N/A
Indirect Application for tabletop equipment Test Results				
Indirect Application			Test Results	
Discharge Level (kV)	Pulse No.		Horizontal Coupling	Vertical Coupling
± 4	10 for every level		A	A

Remark:

A: No performance degradation during test.

N/A: Not applicable

APPENDIX 1 PHOTOGRAPHS OF TEST SETUP

Test Model No.: L54

Radiated emission Test Setup (30MHz~1GHz)

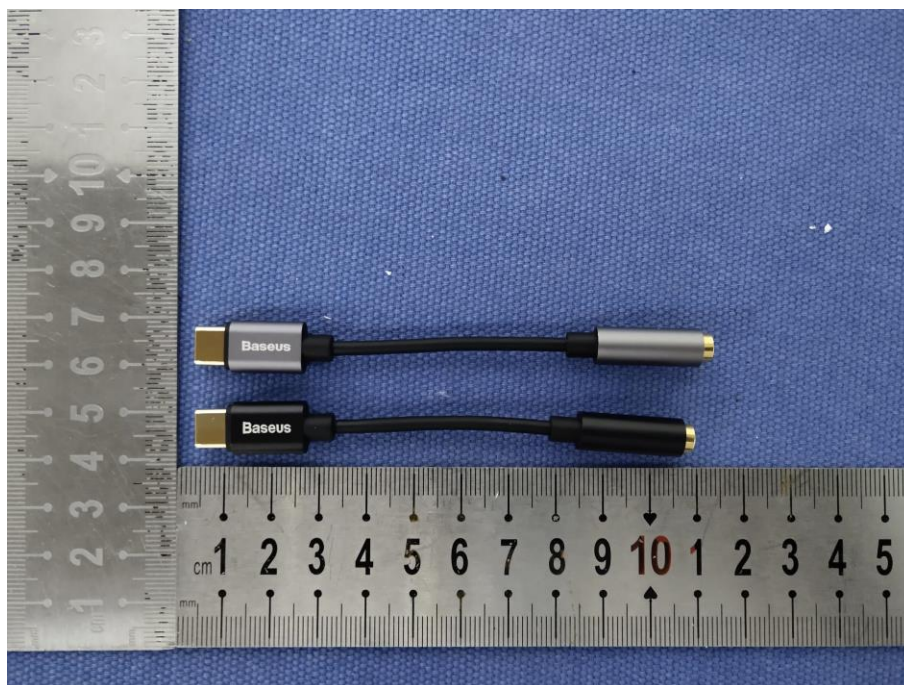


Electrostatic discharge Test Setup

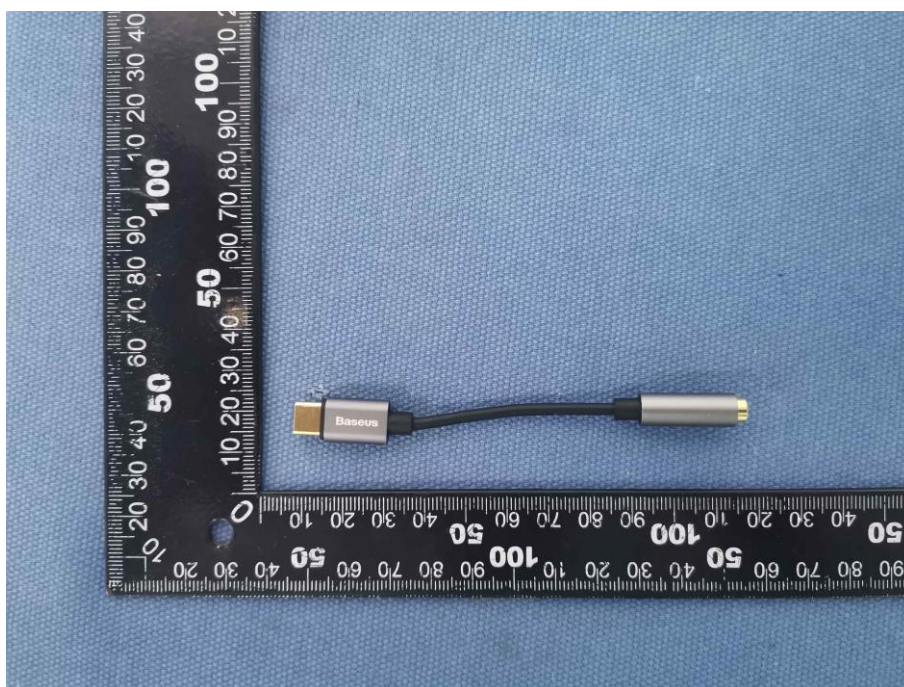


APPENDIX 2 PHOTOGRAPHS OF EUT

Test Model No.: L54



Note: Only one model number: L54, but it comes in tow colors (black, gray), only gray EUT was tested.





*** End of Report ***