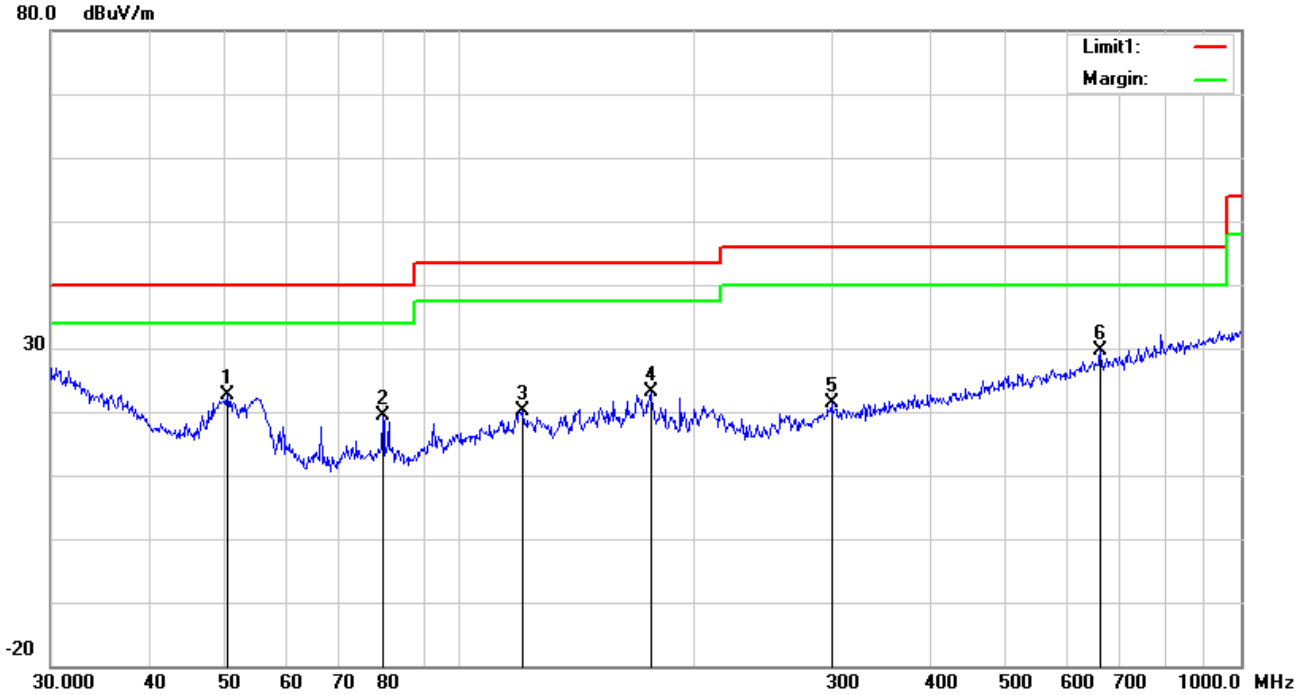
Test Mode:	Transmitting Mode

30MHz -1GHz

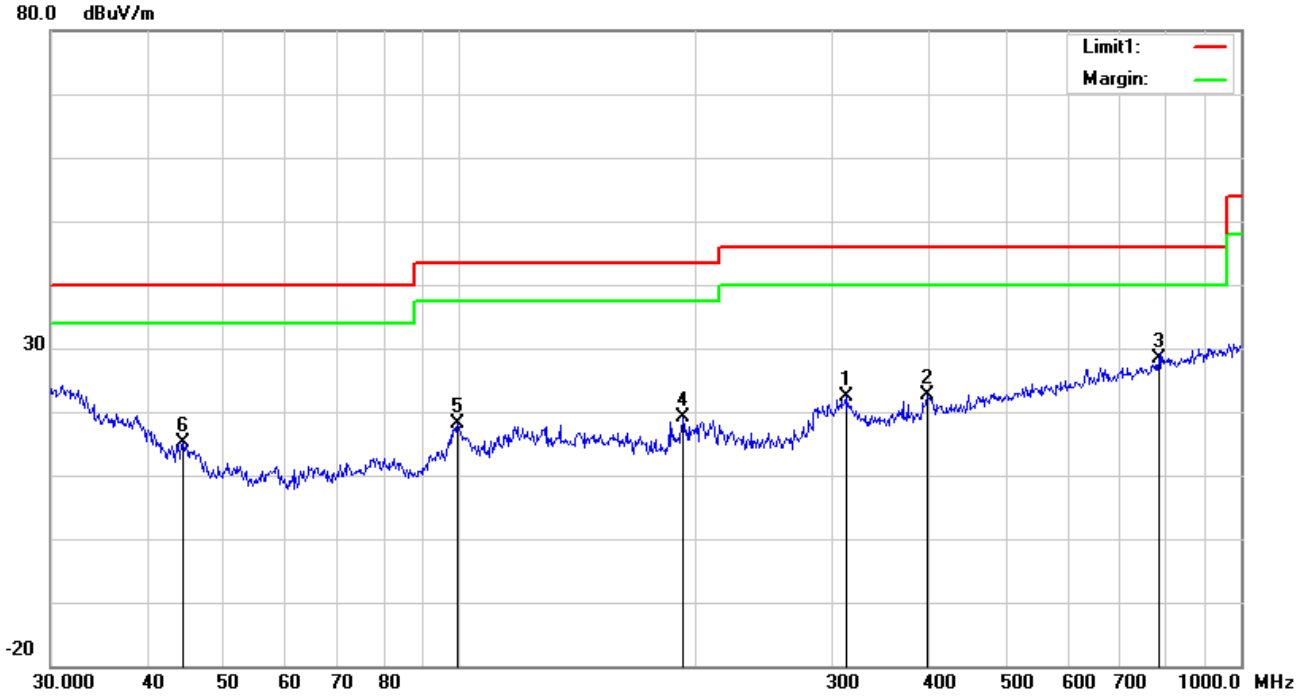


Test Data

Vertical Polarity Plot @3m

No.	P/L	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
		(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	V	50.4089	35.94	peak	8.36	22.38	0.80	22.72	40.00	-17.28	100	219
2	V	79.8003	33.10	peak	7.60	22.42	1.05	19.33	40.00	-20.67	200	28
3	V	120.2766	27.46	peak	13.88	22.36	1.16	20.14	43.50	-23.36	100	253
4	V	175.6516	32.60	peak	11.35	22.25	1.36	23.06	43.50	-20.44	100	199
5	V	299.3158	28.23	peak	13.57	22.29	1.79	21.30	46.00	-24.70	100	8
6	V	661.1505	28.60	peak	19.77	21.45	2.61	29.53	46.00	-16.47	100	44

30MHz -1GHz



Test Data

Horizontal Polarity Plot @3m

No.	P/L	Frequency (MHz)	Reading (dBuV/m)	Detector	Ant_F (dB/m)	PA_G (dB)	Cab_L (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( )
1	H	312.1794	29.02	peak	13.86	22.26	1.85	22.47	46.00	-23.53	100	55
2	H	397.6334	27.07	peak	15.65	22.02	2.01	22.71	46.00	-23.29	100	42
3	H	785.0935	25.45	peak	21.22	21.18	2.93	28.42	46.00	-17.58	100	65
4	H	193.0945	28.24	peak	11.72	22.34	1.54	19.16	43.50	-24.34	100	8
5	H	99.5281	29.02	peak	10.29	22.32	1.11	18.10	43.50	-25.40	200	354
6	H	44.2752	25.58	peak	11.08	22.29	0.76	15.13	40.00	-24.87	100	81

Above 1GHz

Test Mode:	Transmitting Mode

Low Channel (2412 MHz) (b mode worst case)

Frequency (MHz)	S.A. Reading (dBμV)	Detector (PK/AV)	Polarity (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre-Amp. Gain (dB)	Cord Amp. (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4824	48.07	AV	V	33.39	7.22	48.46	40.22	54	-13.78
4824	43.06	AV	H	33.39	7.22	48.46	35.21	54	-18.79
4824	66.39	PK	V	33.39	7.22	48.46	58.54	74	-15.46
4824	62.91	PK	H	33.39	7.22	48.46	55.06	74	-18.94
12404	18.2	AV	V	41.14	12.74	46.74	25.34	54	-28.66
12404	19.57	AV	H	41.14	12.74	46.74	26.71	54	-27.29
12404	39.63	PK	V	41.14	12.74	46.74	46.77	74	-27.23
12404	40.49	PK	H	41.14	12.74	46.74	47.63	74	-26.37

Middle Channel (2437 MHz) (b mode worst case)

Frequency (MHz)	S.A. Reading (dBμV)	Detector (PK/AV)	Polarity (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre-Amp. Gain (dB)	Cord Amp. (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4874	45.49	AV	V	33.62	7.53	48.36	38.28	54	-15.72
4874	46.86	AV	H	33.62	7.53	48.36	39.65	54	-14.35
4874	66.35	PK	V	33.62	7.53	48.36	59.14	74	-14.86
4874	62.99	PK	H	33.62	7.53	48.36	55.78	74	-18.22
9553	39.56	AV	V	39.3	9.09	47.21	40.74	54	-13.26
9553	37.86	AV	H	39.3	9.09	47.21	39.04	54	-14.96
9553	49.68	PK	V	39.3	9.09	47.21	50.86	74	-23.14
9553	48.49	PK	H	39.3	9.09	47.21	49.67	74	-24.33

High Channel (2462 MHz) (b mode worst case)

Frequency (MHz)	S.A. Reading (dBμV)	Detector (PK/AV)	Polarity (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre-Amp. Gain (dB)	Cord Amp. (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4924	42.34	AV	V	33.74	7.78	48.34	35.52	54	-18.48
4924	43.93	AV	H	33.74	7.78	48.34	37.11	54	-16.89
4924	61.21	PK	V	33.74	7.78	48.34	54.39	74	-19.61
4924	56.97	PK	H	33.74	7.78	48.34	50.15	74	-23.85
17885	20.58	AV	V	41.95	17.84	45.46	34.91	54	-19.09
17885	18.72	AV	H	41.95	17.84	45.46	33.05	54	-20.95
17885	38.93	PK	V	41.95	17.84	45.46	53.26	74	-20.74
17885	41.74	PK	H	41.95	17.84	45.46	56.07	74	-17.93

Note:

*1, The testing has been conformed to 10*2462MHz=24,620MHz*

2, All other emissions more than 30 dB below the limit

3, X-Axis, Y-Axis and Z-Axis were investigated. The results above show only the worst case.

4, The radiated spurious test above 18GHz is subcontracted to SIEMIC (Nanjing-China) Laboratories. and found 30dB below the limit at least.

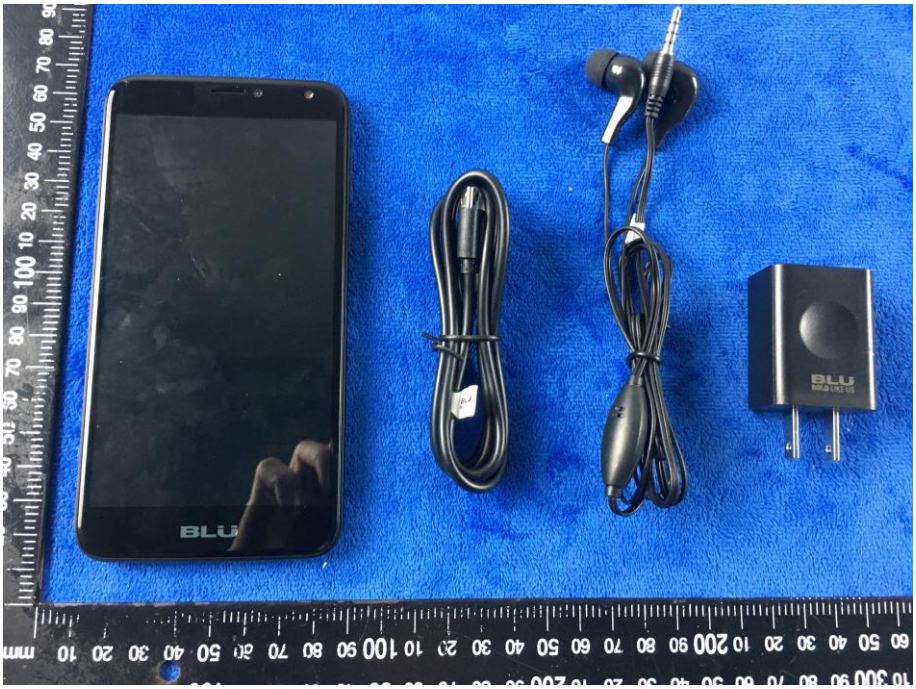
Annex A. TEST INSTRUMENT

Instrument	Model	Serial #	Cal Date	Cal Due	In use
AC Line Conducted					
EMI test receiver	ESCS30	8471241027	09/15/2017	09/14/2018	☑
Line Impedance	LI-125A	191106	09/23/2017	09/22/2018	☑
Line Impedance	LI-125A	191107	09/23/2017	09/22/2018	☑
ISN	ISN T800	34373	09/23/2017	09/22/2018	☐
Transient Limiter	LIT-153	531118	08/30/2017	08/29/2018	☑
RF conducted test					
Agilent ESA-E SERIES	E4407B	MY45108319	09/15/2017	09/14/2018	☑
Power Splitter	1#	1#	08/30/2017	08/29/2018	☑
DC Power Supply	E3640A	MY40004013	09/15/2017	09/14/2018	☑
Radiated Emissions					
EMI test receiver	ESL6	100262	09/15/2017	09/14/2018	☑
Positioning Controller	UC3000	MF780208282	11/17/2017	11/16/2018	☑
OPT 010 AMPLIFIER (0.1-1300MHz)	8447E	2727A02430	08/30/2017	08/29/2018	☑
Horn Antenna	BBHA9170	3145226D1	09/27/2017	09/26/2018	☑
Microwave Preamplifier (1 ~ 26.5GHz)	8449B	3008A02402	03/23/2017	03/22/2018	☑
Active Antenna (9kHz-30MHz)	AL-130	121031	10/12/2017	10/11/2018	☑
Bilog Antenna (30MHz~6GHz)	JB6	A110712	09/19/2017	09/18/2018	☑
Double Ridge Horn Antenna (1 ~18GHz)	AH-118	71283	09/22/2017	09/21/2018	☑
Universal Radio Communication Tester	CMU200	121393	09/23/2017	09/22/2018	☑

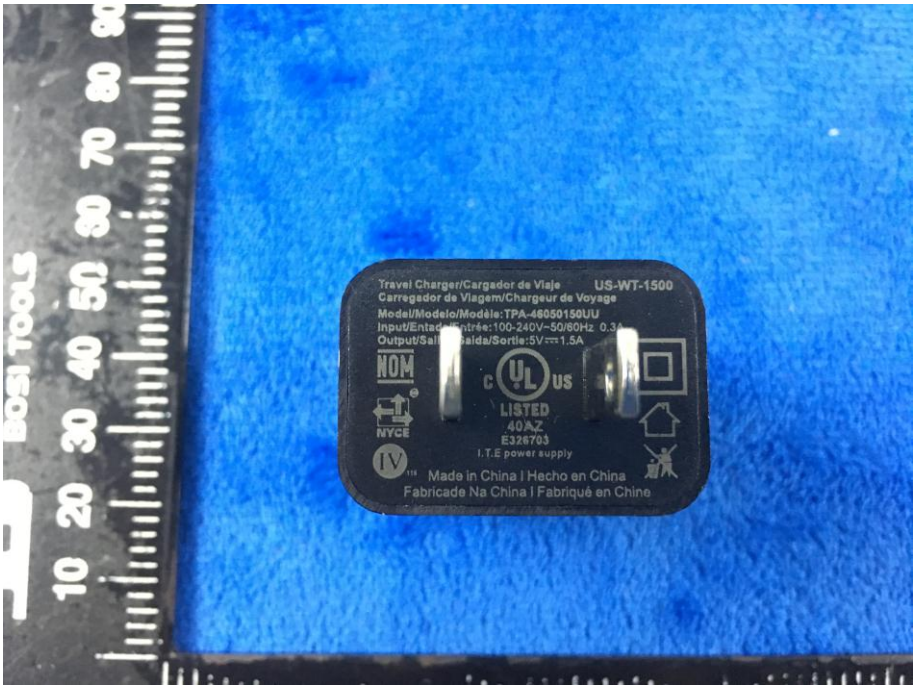
Annex B. EUT and Test Setup Photographs

Annex B.i. Photograph: EUT External Photo

Whole Package View



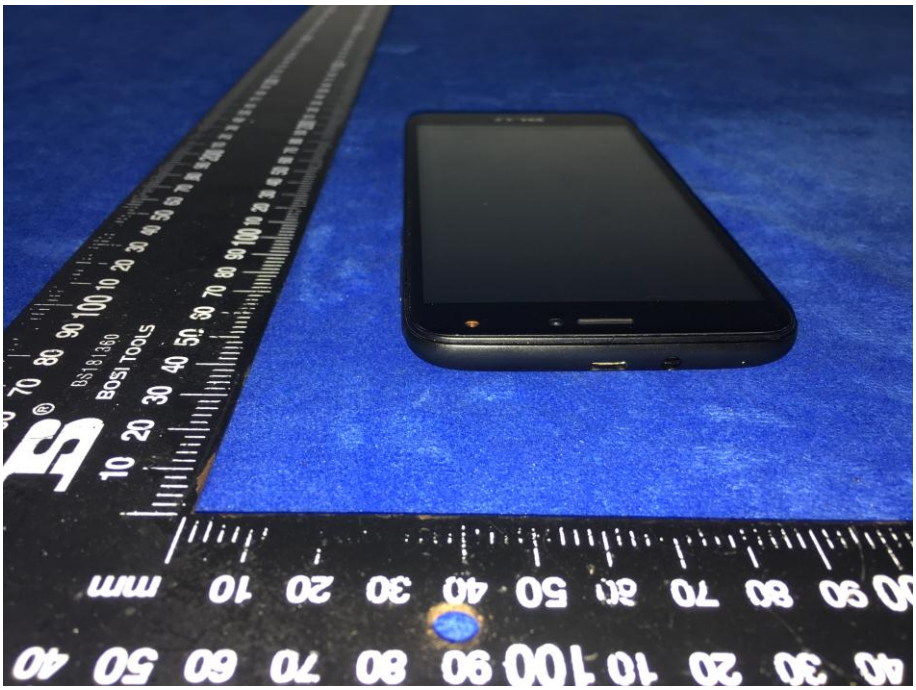
Adapter View



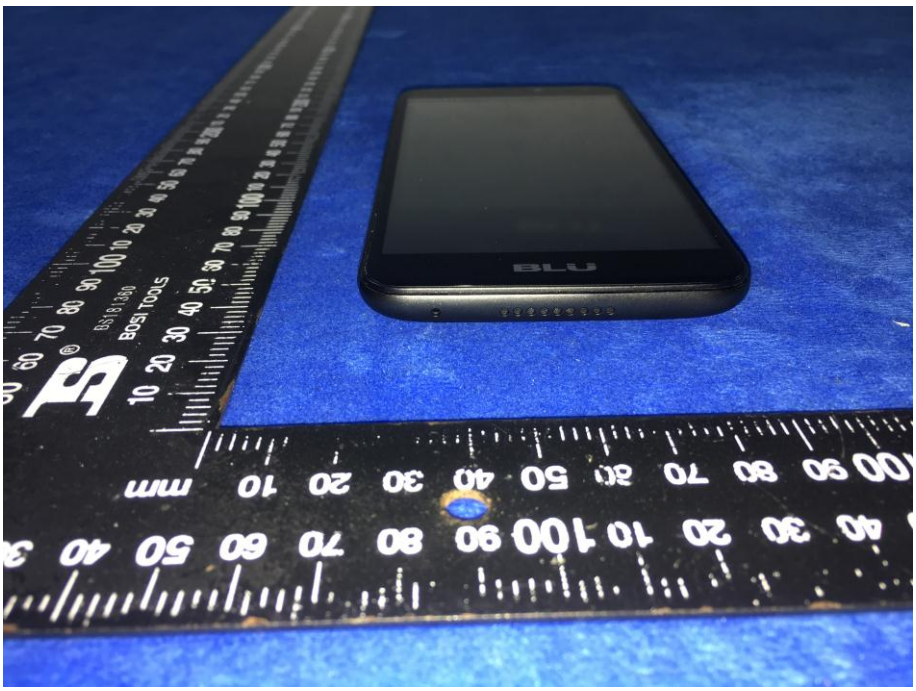
EUT - Front View

EUT - Rear View

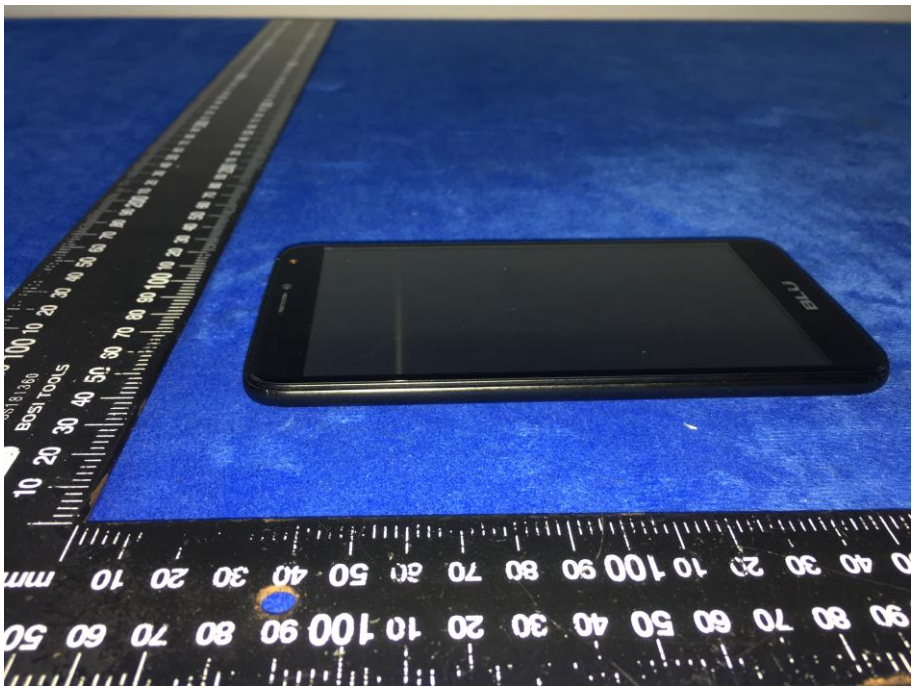
EUT - Top View



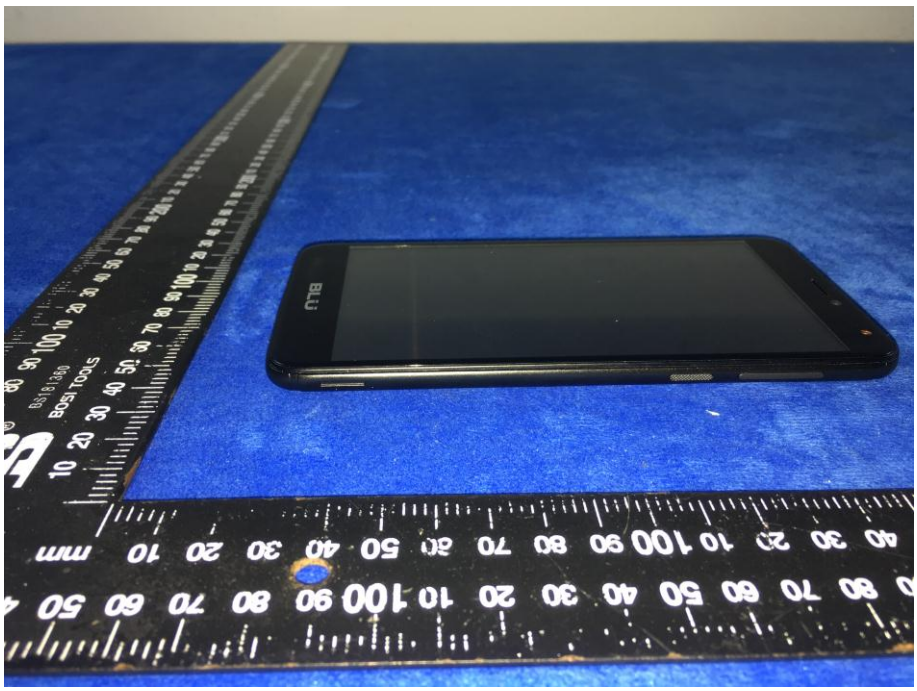
EUT - Bottom View



EUT - Left View



EUT - Right View

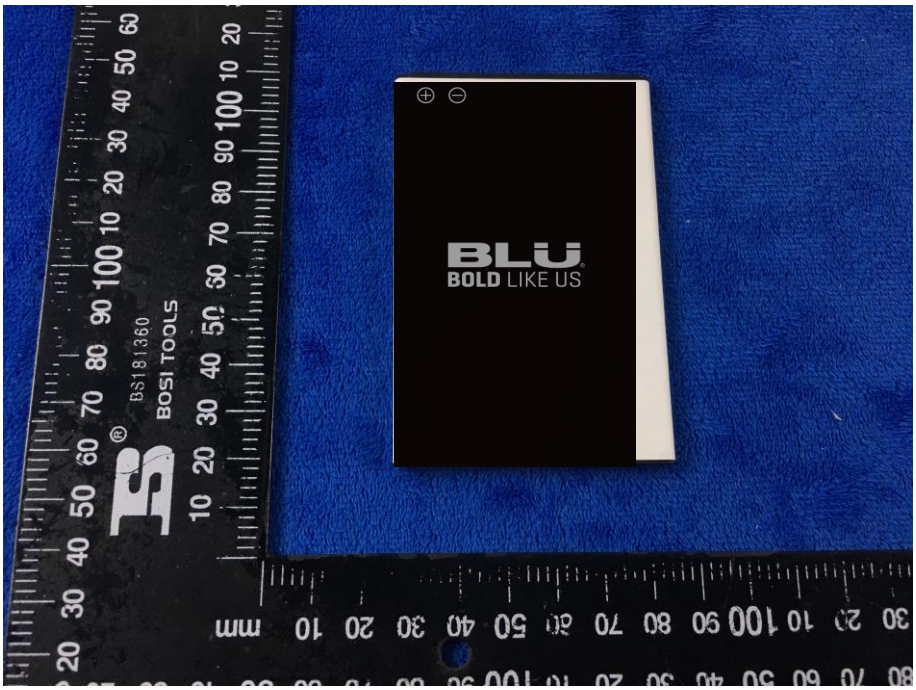


Annex B.ii. Photograph: EUT Internal Photo

Cover Off - Top View 1

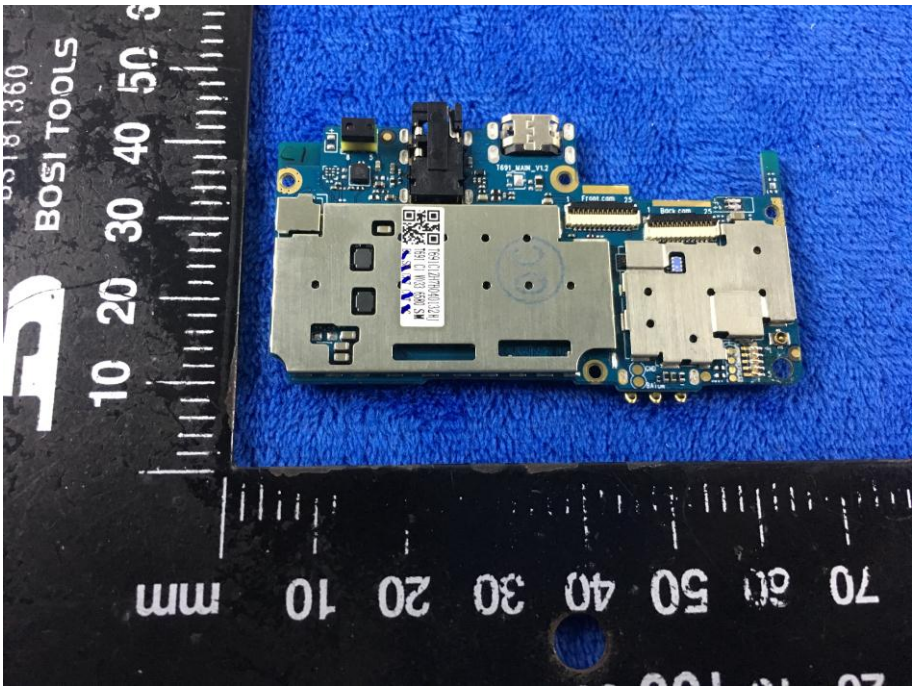
Cover Off - Top View 2

Battery - Front View

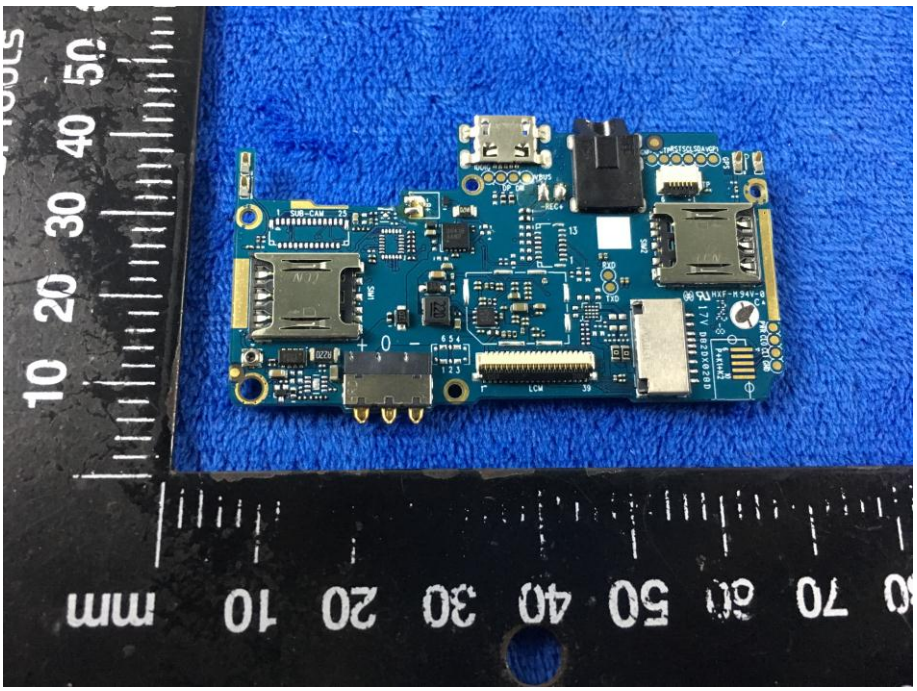


Battery - Rear View

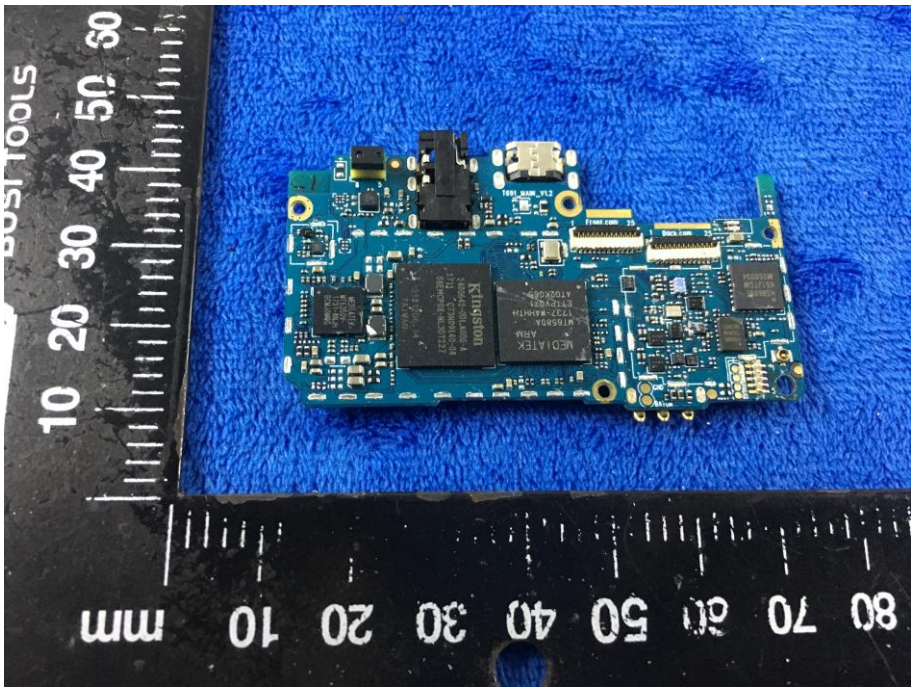
Mainboard with Shielding – Front View



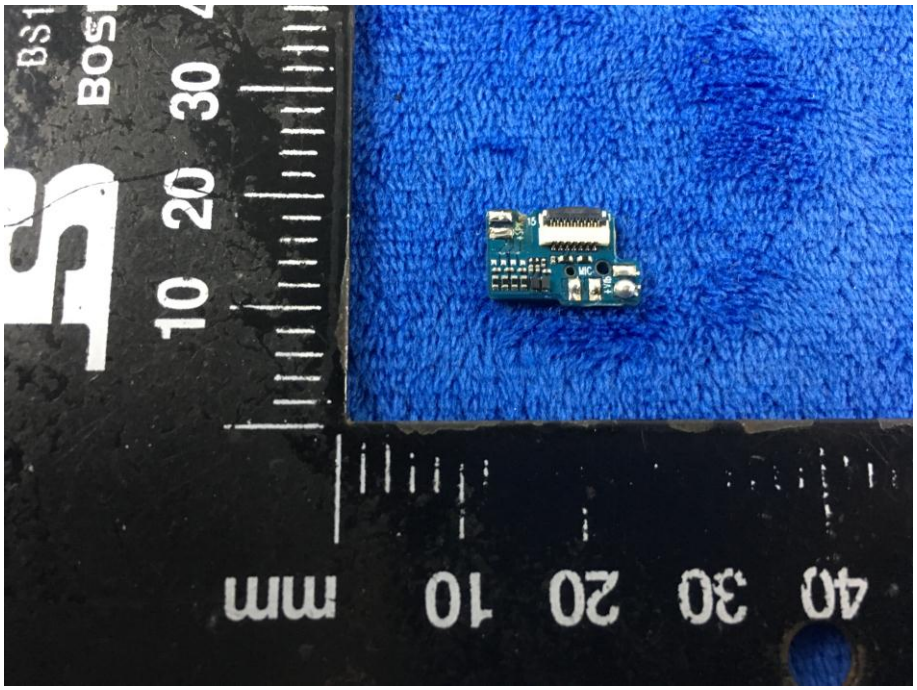
Mainboard with Shielding – Rear View



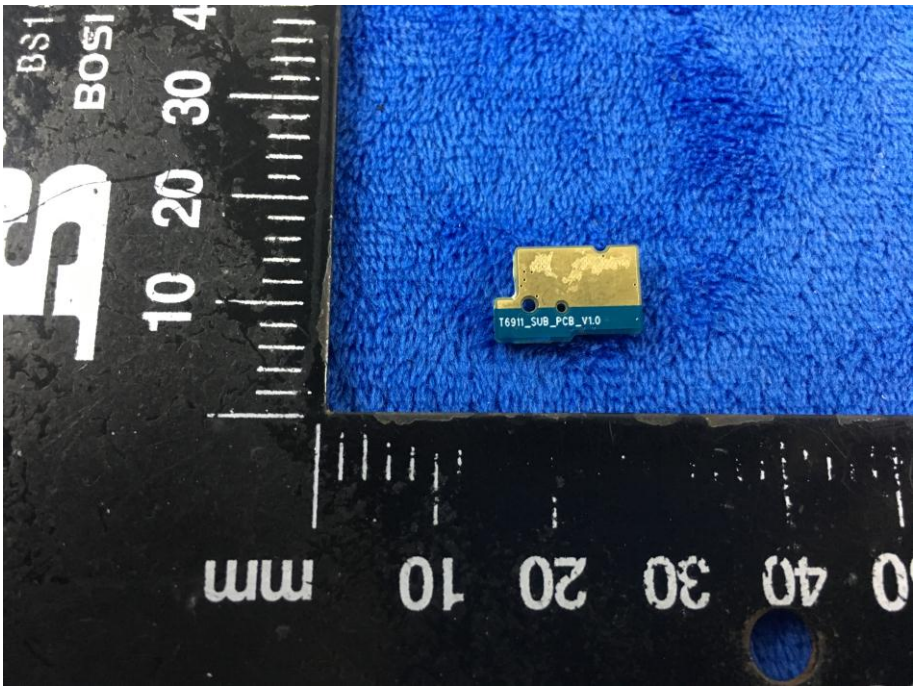
Mainboard without Shielding – Rear View



Small Mainboard – Front View



Small Mainboard – Rear View

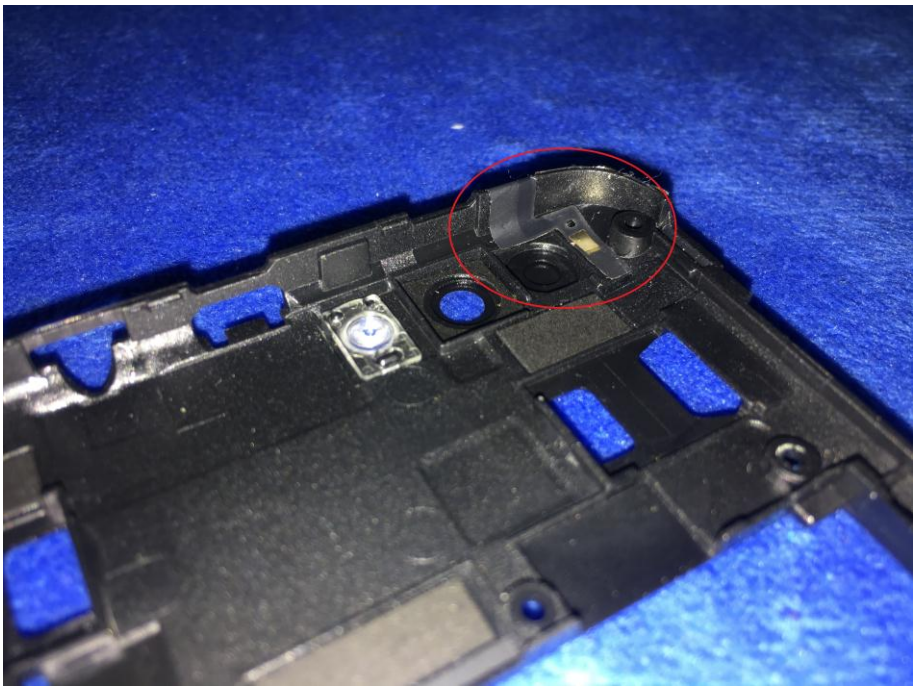


LCD – Front View

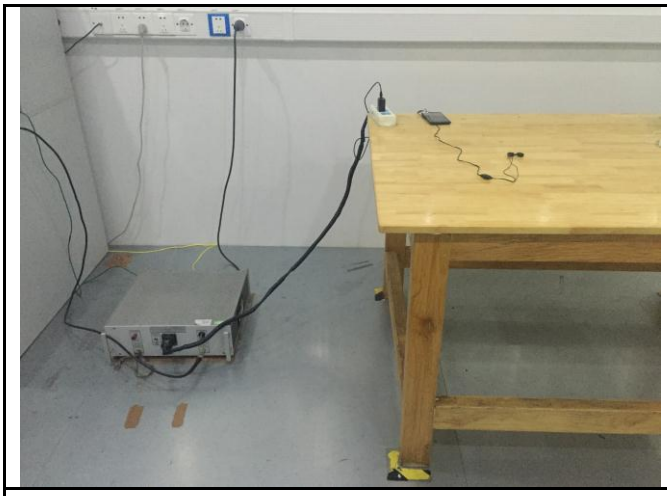
LCD – Rear View

GSM/PCS/UMTS-FDD - Antenna View

WIFI/BT/BLE/GPS - Antenna View

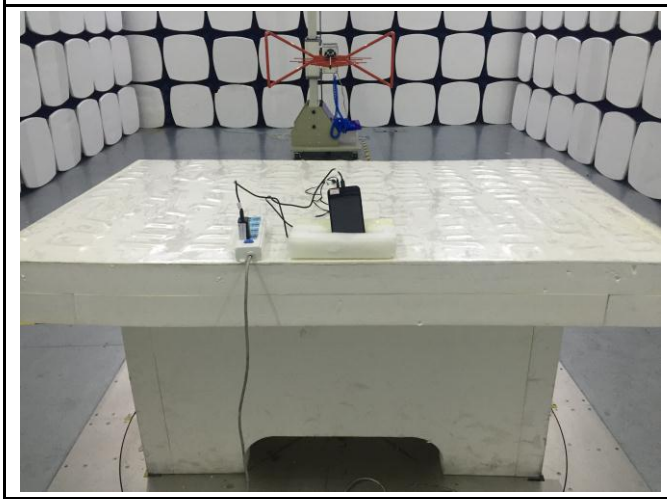


Annex B.iii. Photograph: Test Setup Photo

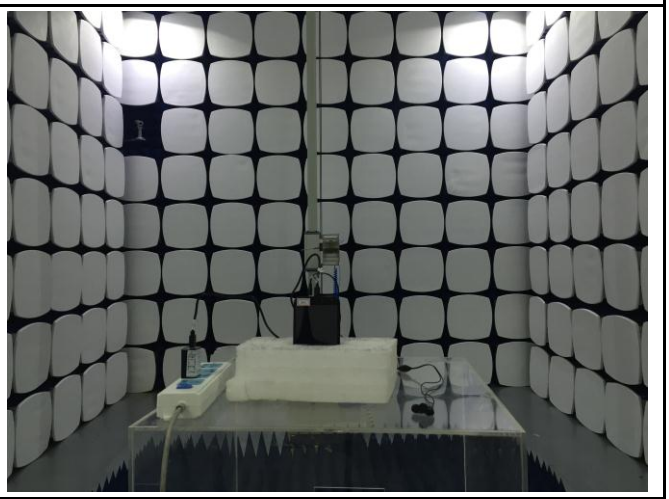


Conducted Emissions Test Setup Front View

Conducted Emissions Test Setup Side View



Radiated Spurious Emissions Test Setup Below 1GHz

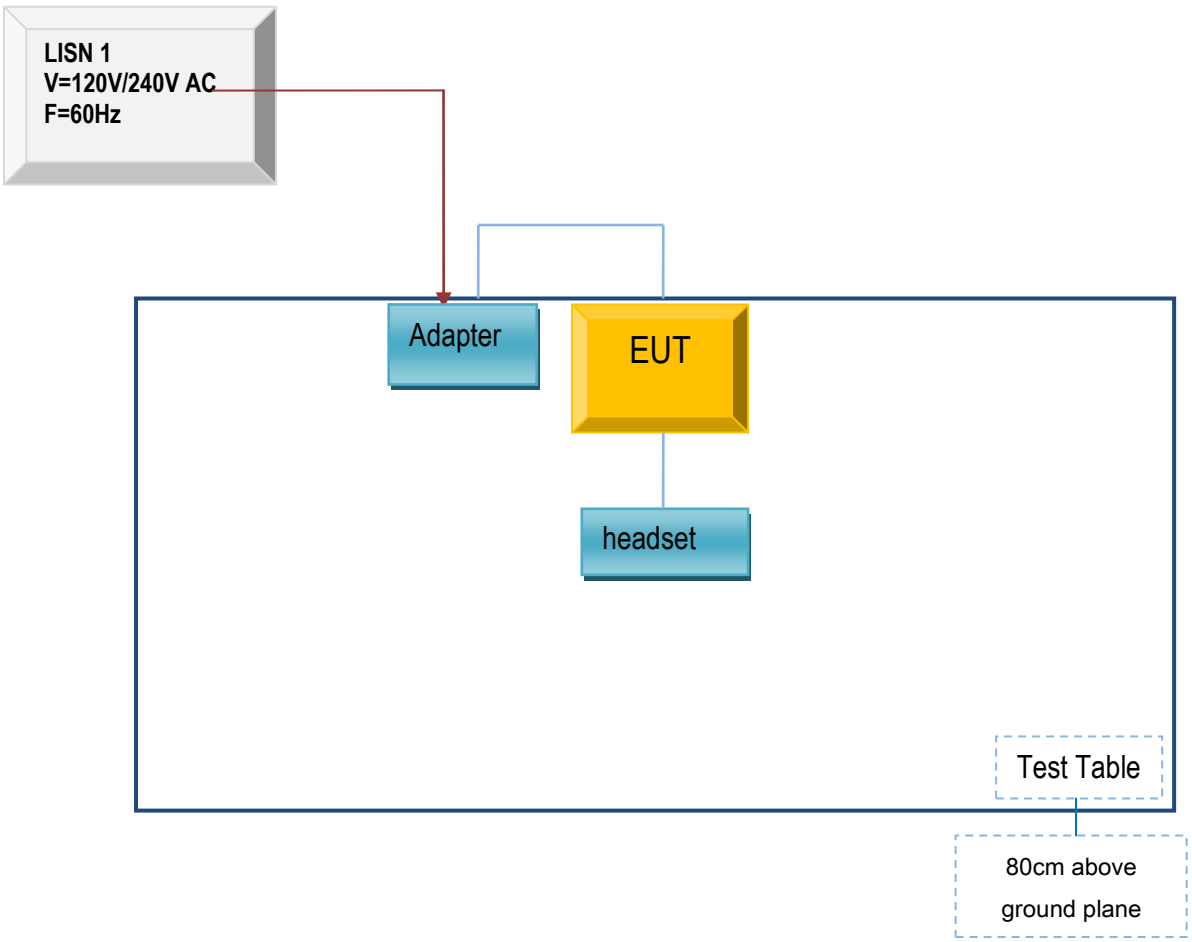


Radiated Spurious Emissions Test Setup Above 1GHz

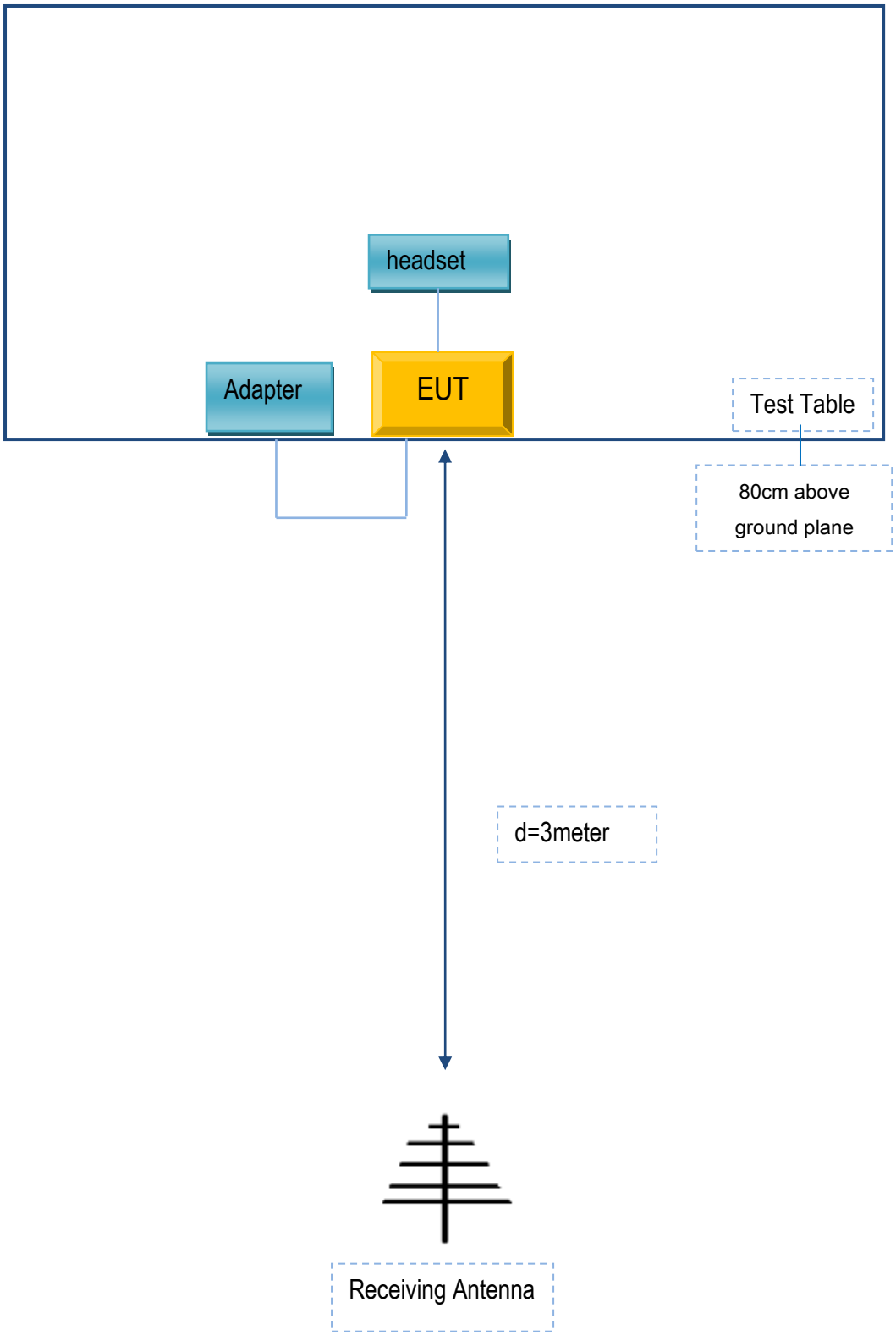
Annex C. TEST SETUP AND SUPPORTING EQUIPMENT

Annex C.ii. TEST SET UP BLOCK

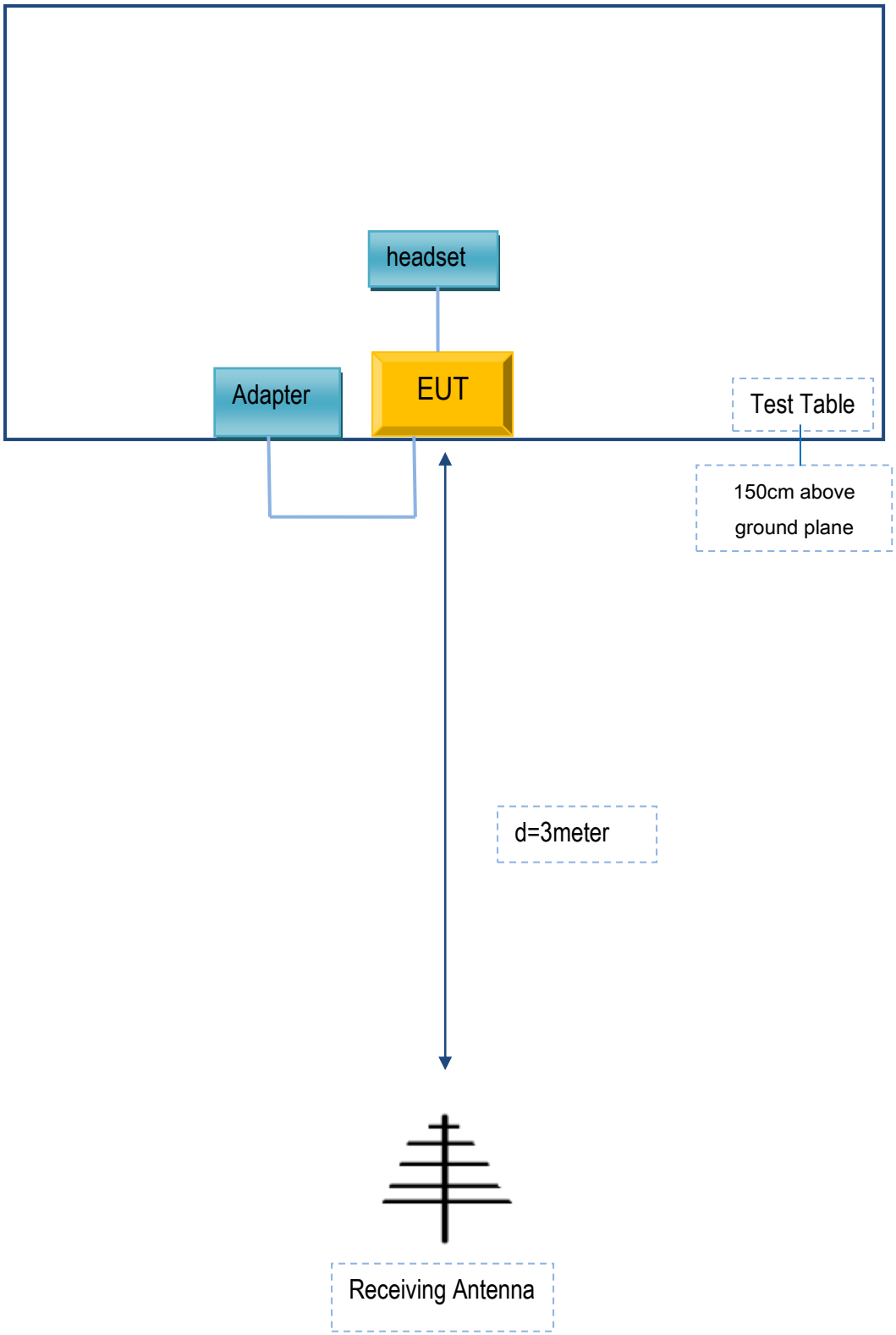
Block Configuration Diagram for AC Line Conducted Emissions



Block Configuration Diagram for Radiated Emissions （Below 1GHz）.



Block Configuration Diagram for Radiated Emissions （Above 1GHz）.



Annex C. il. SUPPORTING EQUIPMENT DESCRIPTION

The following is a description of supporting equipment and details of cables used with the EUT.

Supporting Equipment:

Manufacturer	Equipment Description	Model	Serial No
BLU Products, Inc.	Adapter	TPA-46050150UU	N/A
BLU Products, Inc.	headset	HORIZON R2	N/A

Supporting Cable:

Cable type	Shield Type	Ferrite Core	Length	Serial No
Power Cable	Un-shielding	No	0.8m	N/A

Annex D. User Manual / Block Diagram / Schematics / Partlist

Please see the attachment

Annex E. DECLARATION OF SIMILARITY

N/A