



TEST REPORT

No.I22Z61292-EMC06

for

BLU Products,Inc.

Smart Phone

Model Name: B1550VL

FCC ID: YHLBLUB1550VL

with

Hardware Version: V1.0

Software Version: BLU_B1550VL_V12.0.02.05.02.17_Fsec

Issued Date: 2022-09-30

Note:

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
I22Z61292-EMC06	Rev.0	1st edition	2022-09-30

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1. SUMMARY OF TEST REPORT

1.1. Test Items

Description	Smart Phone
Model Name	B1550VL
Brand Name	BLU
Applicant's name	BLU Products, Inc.
Manufacturer's Name	BLU Products, Inc.

1.2. Test Standards

FCC Part 2/22/24/27	10-1-20 Edition
ANSI C63.26	2015
KDB971168 D01	v03r01

1.3. Test Result

All test items are pass. Please refer to "6 Summary of Test Results" for detail.

1.4. Testing Location

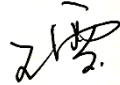
Address: No.18A, Kangding Street, Beijing Economic-Technology Development Area, Beijing,
P. R. China 100176

1.5. Project Data

Testing Start Date: 2022-08-10

Testing End Date: 2022-09-25

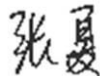
1.6. Signature



Wang Xue
(Prepared this test report)



Zhang Ying
(Reviewed this test report)



Zhang Xia
(Approved this test report)



2. CLIENT INFORMATION

2.1. Applicant Information

Company Name: BLU Products,Inc.
Address /Post: 10814 NW 33rd St # 100 Doral, FL 33172,USA
Contact Person: Zeng wei
Contact Email zwei@ctasiasz.com
Telephone: 305.715.7171
Fax: 305.436.8819

2.2. Manufacturer Information

Company Name: BLU Products,Inc.
Address /Post: 10814 NW 33rd St # 100 Doral, FL 33172,USA
Contact Person: Zeng wei
Contact Email zwei@ctasiasz.com
Telephone: 305.715.7171
Fax: 305.436.8819

3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT

(AE)

3.1. About EUT

Description	Smart Phone
Model Name	B1550VL
FCC ID	YHLBLUB1550VL
Frequency Bands	WCDMA Band 2,4,5
Antenna	Integrated
Extreme vol. Limits	3.6V to 4.4V (nominal: 3.85V)
Condition of EUT as received	No abnormality in appearance

Note: Components list, please refer to documents of the manufacturer.

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version	Date of receipt
UT47a	350547790009621	V1.0	BLU_B1550VL_V12.0.02.05.02.17_Fsec	2022-08-09

*EUT ID: is used to identify the test sample in the lab internally.

3.3. Internal Identification of AE used during the test

AE ID*	Description
AE1	Battery

*AE ID: is used to identify the test sample in the lab internally.

3.4. General Description

The Equipment Under Test (EUT) is a model Mobile Phone with integrated antenna. It consists of normal options: lithium battery, charger. Manual and specifications of the EUT were provided to fulfil the test. Samples undergoing test were selected by the Client.



4. REFERENCE DOCUMENTS

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC Part 22	PUBLIC MOBILE SERVICES	10-1-20 Edition
FCC Part 2	FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS	10-1-20 Edition
FCC Part 24	PERSONAL COMMUNICATIONS SERVICES	10-1-20 Edition
FCC Part 27	MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES	10-1-20 Edition
ANSI C63.26	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services	2015
KDB971168 D01	Power Meas License Digital Systems	v03r01

5. LABORATORY ENVIRONMENT

Semi-anechoic chamber 2 / Fully-anechoic chamber 3 (10 meters×6.7 meters×6.15 meters) did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 30 °C
Relative humidity	Min. = 35 %, Max. = 60 %
Shielding effectiveness	> 100 dB
Electrical insulation	>2 MΩ
Ground system resistance	< 0.5Ω
Normalised site attenuation (NSA)	<±3.5 dB, 3 m distance
Site voltage standing-wave ratio (S_{VSWR})	Between 0 and 6 dB, from 1GHz to 18GHz
Uniformity of field strength	Between 0 and 6 dB, from 80 to 6000 MHz

6. SUMMARY OF TEST RESULTS

Abbreviations used in this clause:		
Verdict Column	P	Pass
	F	Fail
	NA	Not applicable
	NM	Not measured

WCDMA Band II

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Emission Limit	2.1051/24.238	A.1	P

WCDMA Band V

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Emission Limit	2.1051/22.917	A.1	P

WCDMA Band IV

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Emission Limit	2.1051/27.53	A.1	P



7. STATEMENT

Since the information of samples in this report is provided by the client, the laboratory is not responsible for the authenticity of sample information.

This report takes measured values as criterion of test conclusion. The test conclusion meets the limit requirements.

8. TEST EQUIPMENTS UTILIZED

NO.	Description	TYPE	Manufacture	series number	CAL DUE DATE
1	Test Receiver	E4440A	MY48250642	Agilent	2023-03-10
2	EMI Antenna	VULB9163	9163-482	Schwarzbeck	2022-11-16
3	EMI Antenna	LB-7180-N F	J20300130000 5	A-INFO	2023-02-23
4	EMI Antenna	3117	00058889	ETS-Lindgren	2022-11-07
5	Signal Generator	SMF100A	101295	R&S	2022-12-11
6	Universal Radio Communication Tester	CMW500	143008	R&S	2022-12-11

ANNEX A: MEASUREMENT RESULTS

A.1 Emission Limit

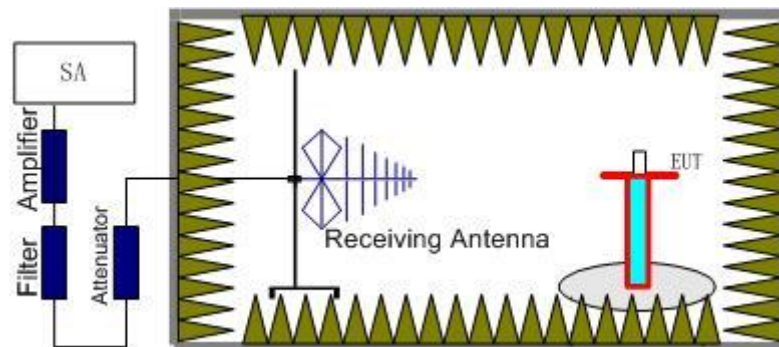
A.1.1 Measurement Method

The measurements procedures in TIA-603E-2016 are used.

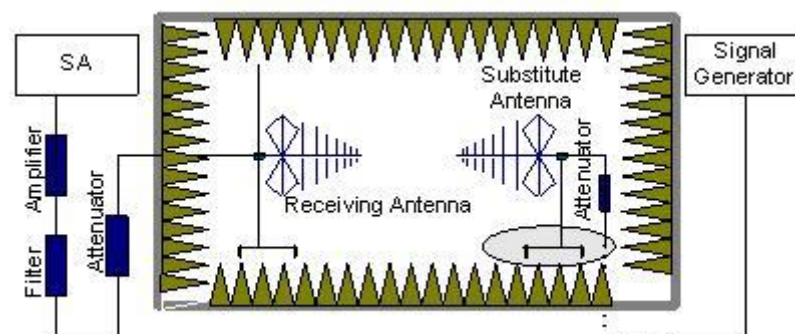
The spectrum was scanned from 30 MHz to the 10th harmonic of the highest frequency generated within the equipment. The resolution bandwidth is set as outlined in Part 24.238, Part 22.917, Part 27.53. The spectrum was scanned with the mobile station transmitting at carrier frequencies that pertain to low, mid and high channels of WCDMA Band II, WCDMA Band V and WCDMA Band IV.

The procedure of radiated spurious emissions is as follows:

1. EUT was placed on a 1.5-meter-high non-conductive stand at a 3-meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 1.5m. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all non-harmonic and harmonics of the transmit frequency through the 10th harmonic were measured with peak detector.



2. The EUT is then put into continuously transmitting mode at its maximum power level during the test. And the maximum value of the receiver should be recorded as (Pr).
3. The EUT shall be replaced by a substitution antenna. The test setup refers to figure below.



In the chamber, a substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is

connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (P_{Mea}) is applied to the input of the substitution antenna and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (P_r). The power of signal source (P_{Mea}) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

4. The Path loss (P_{pl}) between the Signal Source with the Substitution Antenna and the Substitution Antenna Gain (G_a) should be recorded after test.

A amplifier should be connected in for the test.

The Path loss (P_{pl}) is the summation of the cable loss and the gain of the amplifier.

The measurement results are obtained as described below:

$$\text{Power (EIRP)} = P_{Mea} - P_{pl} + G_a$$

5. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power.
6. ERP can be calculated from EIRP by subtracting the gain of the dipole, $ERP = EIRP - 2.15\text{dBi}$.

A.1.2 Measurement Limit

Part 22.917 , Part 24.238 and Part 27.53(h) specify that the power of any emission 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.

A.1.3 Measurement Results

Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies of WCDMA Band II (1852.4 MHz, 1880.0MHz and 1907.6MHz),WCDMA Band V(826.4MHz, 836.6MHz and 846.6MHz) and WCDMA Band IV(1712.4MHz, 1732.4MHz and 1752.6MHz). It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of the WCDMA Band II, WCDMA Band V and WCDMA Band IV into any of the other blocks. The equipment must still, however, meet emissions requirements with the carrier at all frequencies over which it is capable of operating and it is the manufacturer's responsibility to verify this.

A.1.4 Measurement Results Table

Frequency	Channel	Frequency Range	Result
WCDMA Band V	Low	30MHz-10GHz	Pass
	Middle	30MHz-10GHz	Pass
	High	30MHz-10GHz	Pass
WCDMA Band II	Low	30MHz-20GHz	Pass
	Middle	30MHz-20GHz	Pass
	High	30MHz-20GHz	Pass
WCDMA Band IV	Low	30MHz-20GHz	Pass
	Middle	30MHz-20GHz	Pass
	High	30MHz-20GHz	Pass

A.1.5 Sweep Table

Working Frequency	Subrange (GHz)	RBW	VBW	Sweep time (s)
WCDMA Band V	0.03~1	100kHz	300kHz	10
	1-2	1 MHz	3 MHz	2
	2~5	1 MHz	3 MHz	3
	5~8	1 MHz	3 MHz	3
	8~10	1 MHz	3 MHz	3
WCDMA Band II	0.03~1	100kHz	300kHz	10
	1-2	1 MHz	3 MHz	2
	2~5	1 MHz	3 MHz	3
	5~8	1 MHz	3 MHz	3
	8~11	1 MHz	3 MHz	3
	11~14	1 MHz	3 MHz	3
	14~18	1 MHz	3 MHz	3
18~20	1 MHz	3 MHz	2	
WCDMA Band IV	0.03~1	100kHz	300kHz	10
	1-2	1 MHz	3 MHz	2
	2~5	1 MHz	3 MHz	3
	5~8	1 MHz	3 MHz	3
	8~11	1 MHz	3 MHz	3
	11~14	1 MHz	3 MHz	3
	14~18	1 MHz	3 MHz	3
	18~20	1 MHz	3 MHz	2

**WCDMA BAND II Mode Channel 9262/1852.4MHz**

Frequency (MHz)	P _{Mea} (dBm)	Path Loss (dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3703.02	-46.91	6.42	8.48	-44.85	-13.00	31.85	H
5560.02	-55.17	7.19	10.59	-51.77	-13.00	38.77	V
7416.01	-42.24	8.16	12.10	-38.30	-13.00	25.30	V
9269.01	-51.00	9.08	13.26	-46.82	-13.00	33.82	V
11112.01	-48.11	9.78	13.18	-44.71	-13.00	31.71	V
12956.01	-48.40	10.48	13.47	-45.41	-13.00	32.41	H

WCDMA BAND II Mode Channel 9400/1880MHz

Frequency (MHz)	P _{Mea} (dBm)	Path Loss (dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3758.02	-48.12	6.27	8.56	-45.83	-13.00	32.83	H
5638.02	-50.29	7.27	10.57	-46.99	-13.00	33.99	V
7519.01	-39.34	8.31	12.22	-35.43	-13.00	22.43	V
9396.01	-50.38	9.04	13.34	-46.08	-13.00	33.08	H
11278.01	-44.82	9.86	13.14	-41.54	-13.00	28.54	V
13138.01	-44.11	10.77	13.69	-41.19	-13.00	28.19	V

WCDMA BAND II Mode Channel 9538/1907.6MHz

Frequency (MHz)	P _{Mea} (dBm)	Path Loss (dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3813.02	-55.80	6.10	8.64	-53.26	-13.00	40.26	V
5727.02	-50.67	7.30	10.55	-47.42	-13.00	34.42	H
7631.01	-44.13	8.11	12.30	-39.94	-13.00	26.94	H
9543.01	-52.88	9.39	13.36	-48.91	-13.00	35.91	V
11441.01	-47.55	9.96	13.11	-44.40	-13.00	31.40	V
13353.01	-44.18	10.57	13.99	-40.76	-13.00	27.76	V



WCDMA BAND V Mode Channel 4132/826.4MHz

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1635.01	-54.07	3.55	5.26	2.15	-54.51	-13.00	41.51	H
2475.00	-47.15	4.60	6.03	2.15	-47.87	-13.00	34.87	V
3303.02	-52.53	5.29	7.73	2.15	-52.24	-13.00	39.24	V
4125.02	-52.60	6.04	9.03	2.15	-51.76	-13.00	38.76	V
4951.01	-57.72	6.69	9.85	2.15	-56.71	-13.00	43.71	H
5762.01	-56.67	7.25	10.55	2.15	-55.52	-13.00	42.52	H

WCDMA BAND V Mode Channel 4183/836.6MHz

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1656.01	-54.44	3.57	5.22	2.15	-54.94	-13.00	41.94	H
2525.00	-46.34	4.65	6.15	2.15	-46.99	-13.00	33.99	H
3349.02	-56.88	5.32	7.84	2.15	-56.51	-13.00	43.51	V
4189.02	-53.87	6.18	9.09	2.15	-53.11	-13.00	40.11	H
5031.01	-57.84	6.58	9.94	2.15	-56.63	-13.00	43.63	V
5842.01	-55.74	7.21	10.53	2.15	-54.57	-13.00	41.57	V

WCDMA BAND V Mode Channel 4233/846.6MHz

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1699.01	-54.07	3.60	5.14	2.15	-54.68	-13.00	41.68	V
2538.00	-45.92	4.66	6.17	2.15	-46.56	-13.00	33.56	H
3384.02	-58.49	5.35	7.92	2.15	-58.07	-13.00	45.07	V
4240.02	-56.19	6.25	9.14	2.15	-55.45	-13.00	42.45	H
5095.01	-56.21	6.76	10.03	2.15	-55.09	-13.00	42.09	V
5926.01	-56.46	7.47	10.51	2.15	-55.57	-13.00	42.57	V

WCDMA BAND IV Mode Channel 1312/1712.4MHz

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3423.02	-53.42	5.38	8.02	-50.78	-13.00	37.78	V
5135.02	-67.73	6.86	10.09	-64.50	-13.00	51.50	H
6853.01	-47.36	7.82	11.42	-43.76	-13.00	30.76	H
8559.01	-56.33	8.57	13.01	-51.89	-13.00	38.89	V
10280.01	-55.39	9.57	13.01	-51.95	-13.00	38.95	H
11982.01	-58.57	10.14	13.00	-55.71	-13.00	42.71	V

WCDMA BAND IV Mode Channel 1412/1732.4MHz

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3463.02	-53.41	5.45	8.11	-50.75	-13.00	37.75	V
5201.02	-69.69	6.96	10.18	-66.47	-13.00	53.47	H
6933.01	-50.09	7.78	11.52	-46.35	-13.00	33.35	H
8659.01	-59.17	8.41	13.03	-54.55	-13.00	41.55	V
10400.01	-55.73	9.80	13.06	-52.47	-13.00	39.47	H
12127.01	-59.07	10.27	13.05	-56.29	-13.00	43.29	V

WCDMA BAND IV Mode Channel 1513/1752.6MHz

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3507.02	-58.33	5.53	8.21	-55.65	-13.00	42.65	H
5255.02	-69.29	7.00	10.26	-66.03	-13.00	53.03	H
7007.01	-50.37	8.29	11.61	-47.05	-13.00	34.05	H
8759.01	-60.54	8.54	13.05	-56.03	-13.00	43.03	V
10510.01	-55.88	9.61	13.10	-52.39	-13.00	39.39	H
12249.01	-58.83	10.03	13.10	-55.76	-13.00	42.76	V

Note: Expanded measurement uncertainty is $U = 4.69$ dB, $k = 2$.

*****END OF REPORT*****