

TEST REPORT FOR CERTIFICATION

On Behalf of

TLV CO.,LTD.

RFID module

Model No.: TLVRFID01

FCC ID: H3RTLVRFID01

Prepared for : TLV CO.,LTD.

881 Nagasuna, Noguchi, Kakogawa, Hyogo 675-8511 Japan

Prepared By : Audix Technology (Shenzhen) Co., Ltd.

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Report Number : ACS-F20036

Date of Test : Mar.21~Jul.20,2020

Date of Report : Jul.21,2020

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Appendix A. Photograph of Test

Appendix B. Photo of the EUT

TEST REPORT CERTIFICATION

Applicant : TLV CO.,LTD.
 Manufacture : TLV CO.,LTD.
 EUT Description : RFID module
 FCC ID : H3RTLVRFID01
 (A) Model No. : TLVRFID01
 (B) Test Voltage : DC 3.65V

Tested for comply with:
 FCC CFR 47 Part 15 Subpart C

Test procedure used:
 ANSI C63.10:2013

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to confirm comply with all the FCC Part 15 Subpart C requirements.

The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these tests. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC and IC requirements.

This Report is made under FCC Part 2.1075. No modifications were required during testing to bring this product into compliance.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

Date of Test : Mar.21~Jul.20,2020 Report of date: Jul.21,2020

Prepared by : Brave Zhang / Assistant Reviewer by : Sunny Lu / Deputy Manager

AUDIX 信華科技 (深圳) 有限公司
 Audix Technology (Shenzhen) Co., Ltd.
 EMC 部門報告專用章
 Stamp only for EMC Dept. Report
 Signature: David Jin
 David Jin / Deputy General Manager

Approved & Authorized Signer :

1. SUMMARY OF STANDARDS AND RESULTS

1.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION		
Description of Test Item	Standard	Results
Conducted Emission Test	FCC Part 15: 15.207 ANSI C63.10: 2013	N/A
Radiated Emission Test	FCC Part 15: 15.205, 15.209 ANSI C63.10: 2013	PASS

Note: N/A is mean Not Application

2. GENERAL INFORMATION

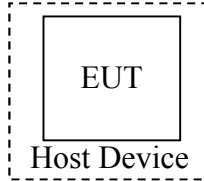
2.1. Description of Equipment Under Test

Applicant	TLV CO.,LTD.
Applicant Address	881 Nagasuna, Noguchi, Kakogawa, Hyogo 675-8511 Japan
Manufacturer	TLV CO.,LTD.
Manufacturer Address	881 Nagasuna, Noguchi, Kakogawa, Hyogo 675-8511 Japan
Product	RFID module
Model No.	TLVRFID01
Frequency Range	125kHz
Modulation	ASK
Host Device	Brand: TLV, Product name: Trap Man, M/N: TM7
Sample Type	Prototype production
Date of Receipt	Mar.03,2020
Date of Test	Mar.21~Jul.20,2020

2.2. Tested Supporting System Details

[None]

2.3. Block diagram of connection between the EUT and simulators



Host Device: Product name: Trap Man, M/N: TM7
(EUT: RFID module)

2.4. Test Facility

Site Description

Name of Firm : Audix Technology (Shenzhen) Co., Ltd.
 No. 6, Kefeng Road, Science & Technology
 Park, Nanshan District, Shenzhen,
 Guangdong, China

EMC Lab. : Certificated by Industry Canada
 Registration Number: IC 5183A-1
 Valid Date: Mar.31, 2021

: Certificated by DAkkS, Germany
 Registration No: D-PL-12151-01-00
 Valid Date: Dec.07, 2021

Accredited by NVLAP, USA
 NVLAP Code: 200372-0
 Valid Date: Mar.31, 2021

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

Test Item	Uncertainty
Uncertainty for Radiation Emission test in 3m chamber	3.6dB(30~200MHz, Polarization: H)
	4.0dB(30~200MHz, Polarization: V)
	3.6dB(200M~1GHz, Polarization: H)
	3.8dB(200M~1GHz, Polarization: V)
Uncertainty for Radiation spurious emission at frequency below 30MHz	2.6dB(9kHz~30MHz)
Uncertainty for Radiation Emission test in 3m chamber(1GHz-25GHz)	4.6dB(1~6GHz, Distance: 3m)
	4.6dB(6~25GHz, Distance: 3m)
Uncertainty for DC power test	0.1 %
Uncertainty for test site temperature and humidity	0.6°C
	3%

Note: EMI uncertainty is evaluated by CISPR16-4-2.
 The value of measurement uncertainty of EMI is less than U_{CISPR} .
 The value is not calculated in the test results.

3. POWER LINE CONDUCTED EMISSION TEST

According to Paragraph (c) of FCC Part 15 section 15.207, Tests to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines. Host device is battery powered and does not operate when host device is connected to AC lines.

4. RADIATED EMISSION TEST

4.1. Test Equipment

Frequency Range: 30-1000MHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3#Chamber(NSA)	AUDIX	N/A	N/A	May.10,19	1 Year
2.	3#Chamber(SE)	AUDIX	N/A	N/A	May.17,18	3 Year
3.	Signal Analyzer	Rohde & Schwarz	FSV30	104050	Apr.14,19	1 Year
4.	EMI Test Receiver	Rohde & Schwarz	ESR7	101547	Apr.14,19	1 Year
5.	Amplifier	HP	8447D	2648A04738	Apr.14,19	1 Year
6.	Tri-log-Broadband Antenna	SCHWARZBECK	VULB 9168	493	Jul.24,19	1 Year
7.	NSA Cable	HUBER+SUHNER	CFD400NL-LW	No.3	Oct.13,19	1 Year
8.	Coaxial Switch	Anritsu	MP59B	6201397222	Apr.14,19	1 Year
9.	Test Software	AUDIX	e3	6.2009-5-21a(n)	N/A	N/A

Note: N/A means Not applicable.

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3#Chamber(NSA)	AUDIX	N/A	N/A	May.03,20	1 Year
2.	3#Chamber(SE)	AUDIX	N/A	N/A	May.17,18	3 Year
3.	Signal Analyzer	Rohde & Schwarz	FSV30	104050	Apr.11,20	1 Year
4.	EMI Test Receiver	Rohde & Schwarz	ESR7	101547	Apr.12,20	1 Year
5.	Amplifier	HP	8447D	2648A04738	Apr.11,20	1 Year
6.	Bi log Antenna	TESEQ	CBL6112D	35375	Nov.26,19	1 Year
7.	NSA Cable	HUBER+SUHNER	CFD400NL-LW	No.3	Oct.13,19	1 Year
8.	Coaxial Switch	Anritsu	MP59B	6201397222	Apr.11,20	1 Year
9.	Test Software	AUDIX	e3	6.2009-5-21a(n)	N/A	N/A

Note: N/A means Not applicable.

Frequency Range: Below 30MHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	10m Chamber(NSA)	AUDIX	N/A	N/A	Apr.15,19	1 Year
2.	10m Chamber(SE)	AUDIX	N/A	N/A	Apr.15,18	3 Year
3.	Signal Analyzer	Rohde & Schwarz	FSV30	103670	Oct.13,19	1 Year
4.	EMI Test Receiver	Rohde & Schwarz	ESR3	101931	Apr.14,19	1 Year
5.	Amplifier	EMCI	EMC9135	980347	Jun.30,19	1 Year
6.	Loop Antenna	Chase	HLA6120	1062	Apr.18,19	1 Year
7.	RF Cable	SPUMA	CFD400NL-LW	No.4	Jun.30,19	1 Year
8.	Coaxial Switch	Anritsu	MP59B	6201397221	Apr.14,19	1 Year
9.	Coaxial Switch	Anritsu	MP59B	6201397220	Apr.14,19	1 Year
10.	Test Software	AUDIX	e3	6.100913a	N/A	N/A

Note: N/A means Not applicable.

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	10m Chamber(NSA)	AUDIX	N/A	N/A	Apr.14,20	1 Year
2.	10m Chamber(SE)	AUDIX	N/A	N/A	Apr.15,18	3 Year
3.	Signal Analyzer	Rohde & Schwarz	FSV30	103670	Oct.13,19	1 Year
4.	EMI Test Receiver	Rohde & Schwarz	ESR3	101931	Apr.12,20	1 Year
5.	Amplifier	EMCI	EMC9135	980347	Apr.12,20	1 Year
6.	Loop Antenna	Chase	HLA6120	1062	Apr.29,20	1 Year
7.	RF Cable	SPUMA	CFD400NL-LW	No.4	Apr.12,20	1 Year
8.	Coaxial Switch	Anritsu	MP59B	6201397221	Apr.12,20	1 Year
9.	Coaxial Switch	Anritsu	MP59B	6201397220	Apr.12,20	1 Year
10.	Test Software	AUDIX	e3	6.100913a	N/A	N/A

Note: N/A means Not applicable.

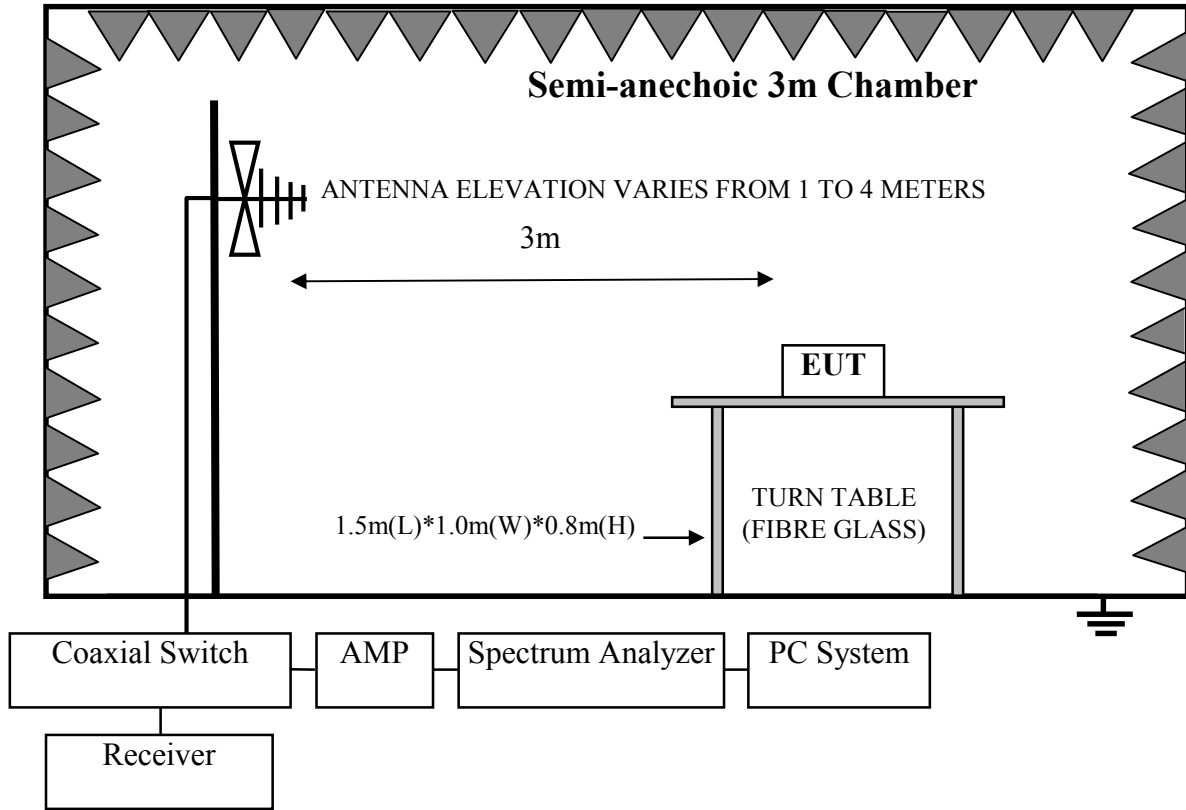
For frequency range 1GHz~25GHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	RF Chamber(Svswr)	AUDIX	N/A	N/A	Apr.16,20	1 Year
2.	RF Chamber(SE)	AUDIX	N/A	N/A	Apr.16,19	3 Year
3.	Signal Analyzer	Rohde&Schwarz	FSV30	104051	Apr.12,20	1 Year
4.	PXA Signal Analyzer	Agilent	N9030A	MY51380221	Apr.12,20	1 Year
5.	Horn Antenna	ETS	3117	00218552	Dec.02,19	1 Year
6.	Horn Antenna	ETS	3116	00060089	Dec.02,19	1 Year
7.	Amplifier	HP	8449B	3008A00863	Apr.23,19	1 Year
8.	Amplifier	EMCI	EMC184040SE	980507	Apr.12,20	1 Year
9.	RF Cable	EMCI	EMC102-KM-KM-3500	170702	Apr.12,20	1 Year
10.	Test Software	AUDIX	e3	6.100913a	N/A	N/A

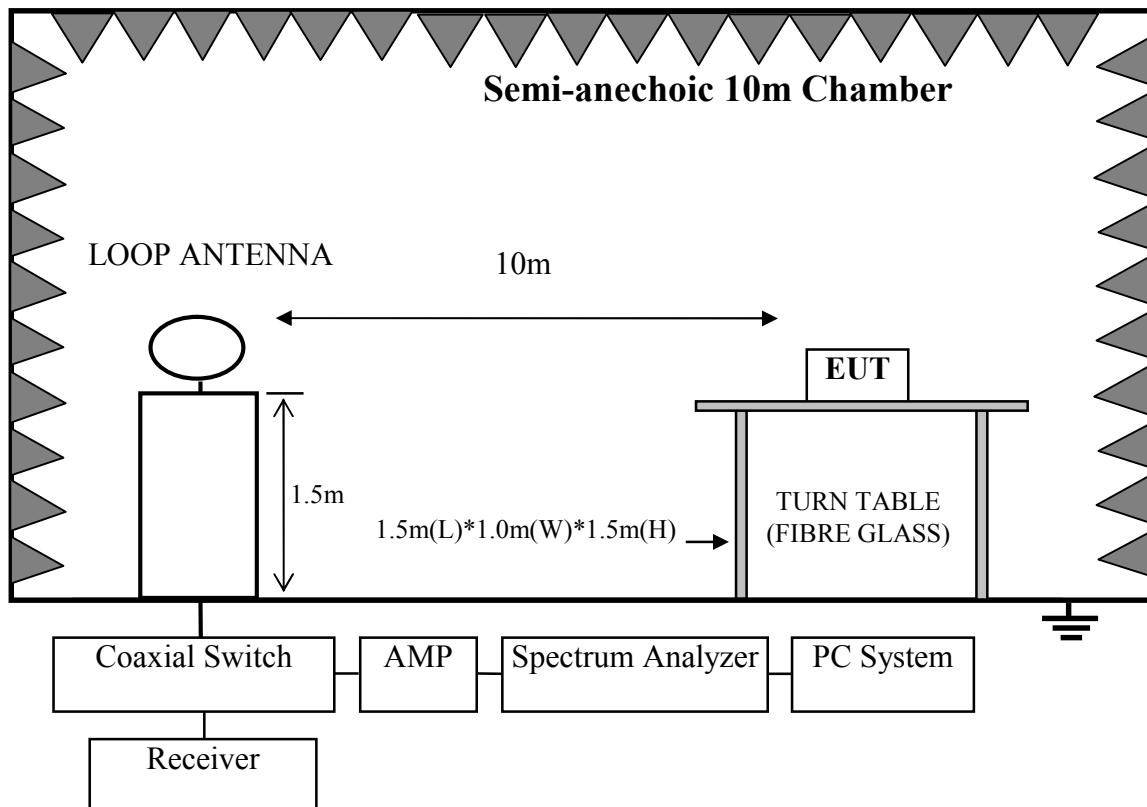
Note: N/A means Not applicable.

4.2. Block Diagram of Test Setup

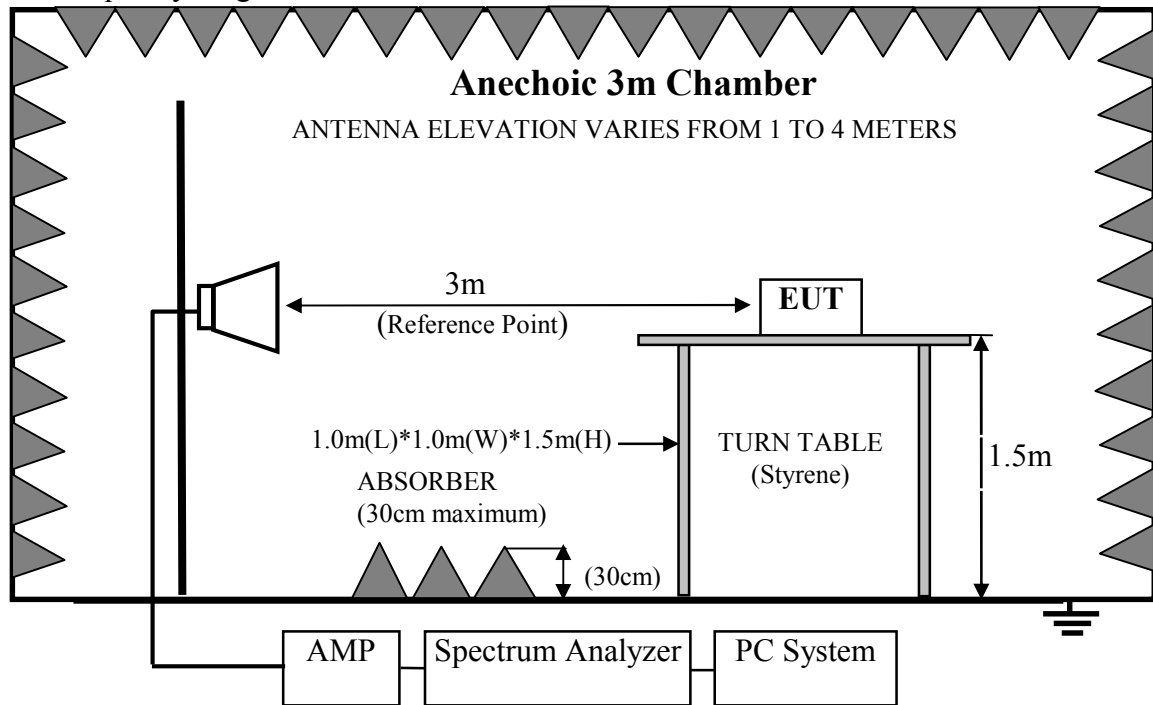
Frequency Range: 30-1000MHz



Frequency Range: Below 30MHz



For frequency range 1GHz-25GHz



4.3. Radiated Emission Limit

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		$\mu\text{V}/\text{m}$	$\text{dB}(\mu\text{V})/\text{m}$
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 $\text{dB}(\mu\text{V})/\text{m}$ (Peak) 54.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average)	

- Remark: (1) Emission level = Antenna Factor + Cable Loss + Reading
 (2) The smaller limit shall apply at the cross point between two frequency bands.
 (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

Radiated emission Limit(Below 30MHz)

Frequency (MHz)	Field strength (microvolts/meter)	Measurement Distance(meters)
0.009-0.490	$2400/F(\text{KHz})$	300
0.490-1.705	$24000/f(\text{KHz})$	30
1.705-30.0	30	30

- Remark: (1) Emission level $\text{dB}\mu\text{V} = 20 \log$ Emission level $\mu\text{V}/\text{m}$
 (2) In the emission table above, the tighter limit applies at the band edges.
 (3) The limit 1.705MHz to 30MHz in clause 4.3 are specified at 30 meters, and measurements were made at 10 meters, the limit is translated to 10 meters by using a formula as follows:
 $\text{Limit}_{10\text{m}} = \text{Limit}_{30\text{m}} + 40\log(30\text{m}/10\text{m})$ or $\text{Limit}_{10\text{m}} = \text{Limit}_{300\text{m}} + 40\log(300\text{m}/10\text{m})$

4.4. 15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

4.5. EUT Configuration on Test

The following equipment are installed on Radiated Emission Test to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

4.6. Operating Condition of EUT

- 4.6.1. Setup the EUT as shown in Section 4.2.
- 4.6.2. Turn on the power of all equipments.
- 4.6.3. Let the EUT worked in test mode (Tx Mode) and tested it.

4.7. Test Procedure

The EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna is set on Test. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.10-2013 on radiated emission Test.

This test was performed with EUT in X, Y, Z position, and the worse case was found when EUT in X position as the test photo indicated.

The bandwidth of the EMI test receiver (R&S ESR7) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

For emissions below 30MHz:

This test was performed on anechoic chamber with a conductive ground plane, EUT was put to 1.5m high turn table and at a distance of 10m from test antenna.

The bandwidth of the Spectrum's VBW is set at 3MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

The frequency range from 30MHz to 10th harmonic (25GHz) are checked. and no any emissions were found from 18GHz to 25GHz, So the radiated emissions from 18GHz to 25GHz were not record.

4.8. Radiated Emission Test Results

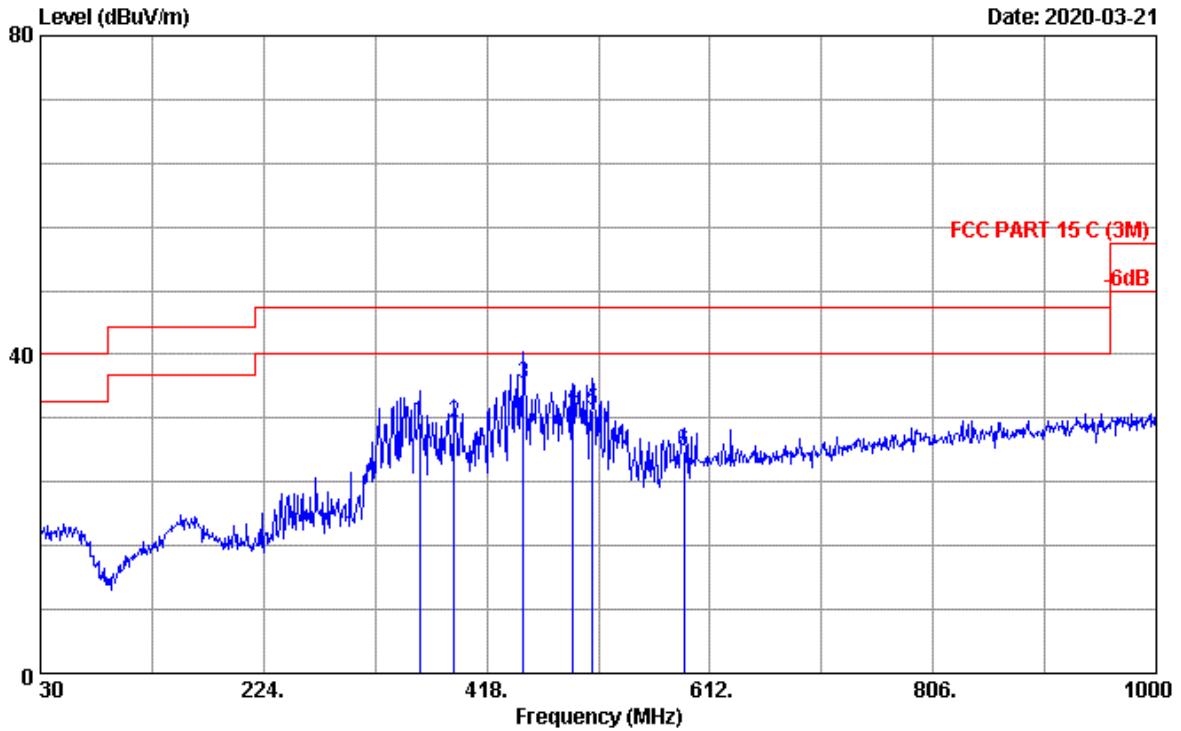
PASS.

Frequency Range: 30-1000MHz

Data: 1

File: E:\2020 Report Data\C\C&S\A1Z2003003.EM6 (6)

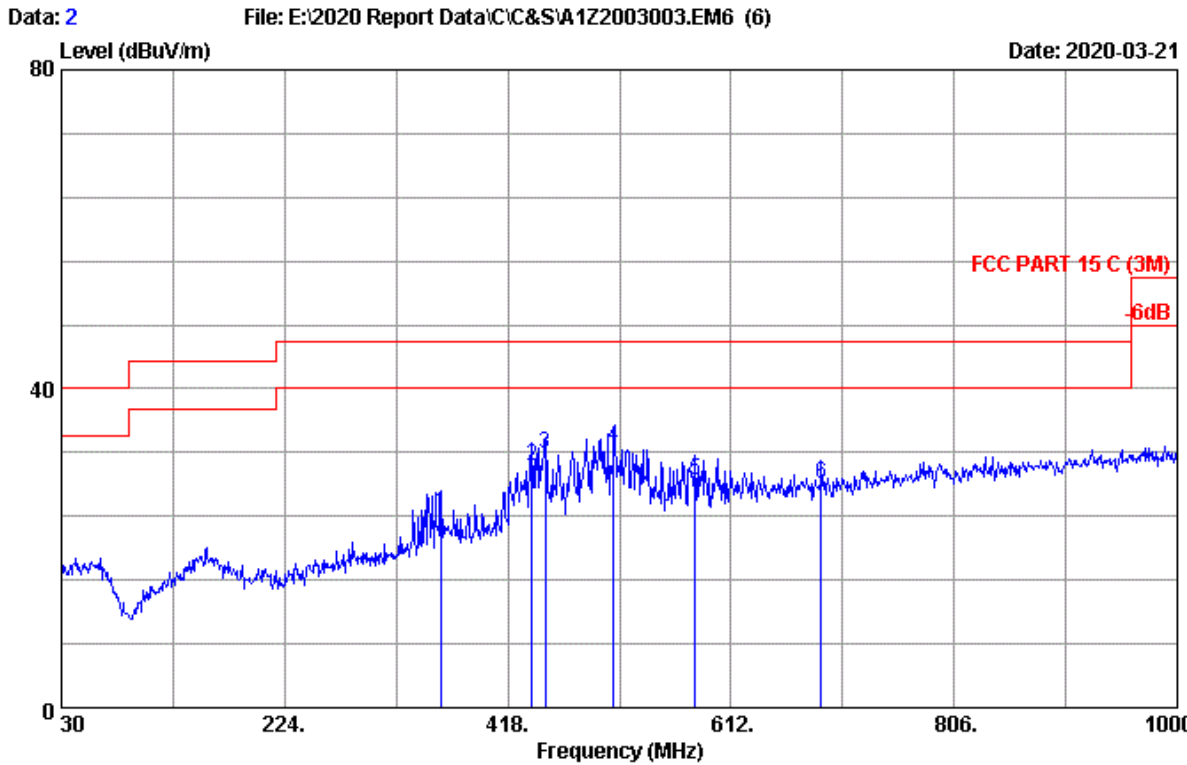
Date: 2020-03-21



Site no.	: 3m Chamber	Data no.	: 1
Dis. / Ant.	: 3m 2019 VULB9168-493	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15 C (3M)		
Env. / Ins.	: 23.4°C/54%	Engineer	: Hogen
Power rating	: DC3.65V		
Test Mode	: TX Mode		

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission		Limits (dBuV/m)	Margin (dB)	Remark
				Reading (dBuV)	Level (dBuV/m)			
1	359.800	21.40	1.95	8.04	31.39	46.00	14.61	QP
2	389.870	22.00	2.03	7.30	31.33	46.00	14.67	QP
3	450.010	23.50	2.19	10.62	36.31	46.00	9.69	QP
4	492.690	23.90	2.32	7.13	33.35	46.00	12.65	QP
5	510.150	24.10	2.37	6.44	32.91	46.00	13.09	QP
6	589.690	25.50	2.63	-0.29	27.84	46.00	18.16	QP

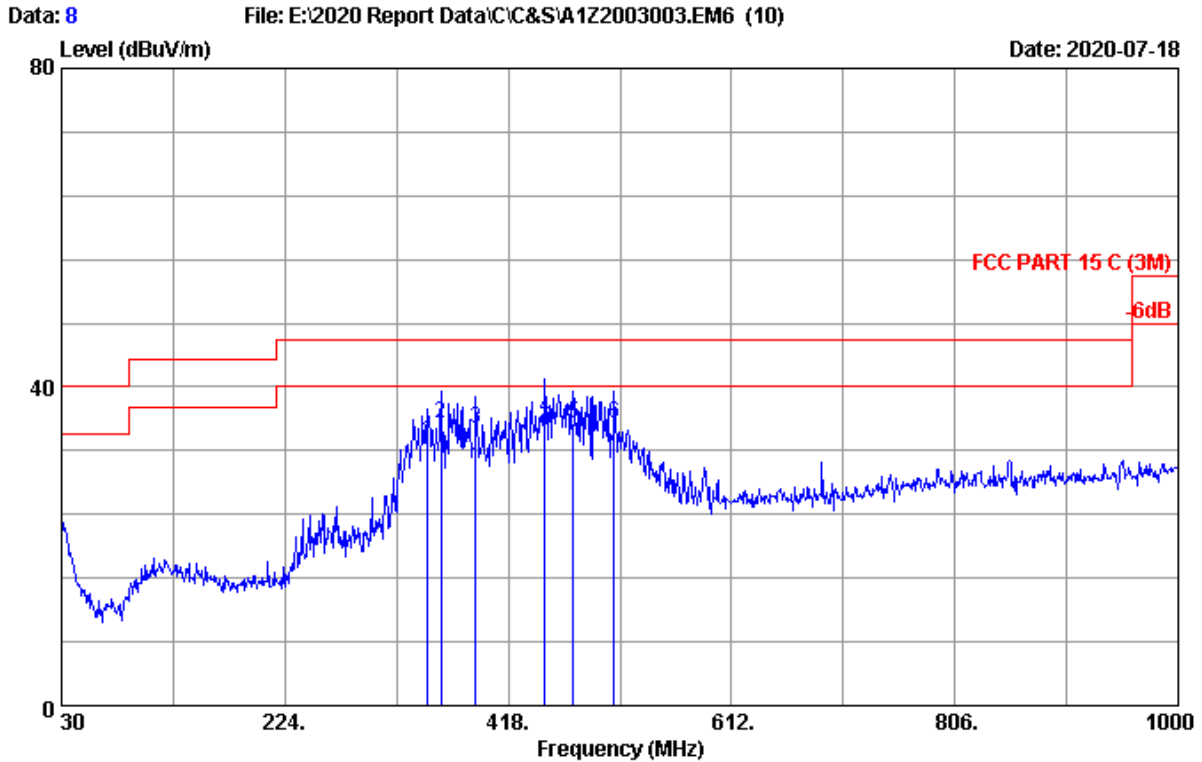
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no.	: 3m Chamber	Data no.	: 2
Dis. / Ant.	: 3m 2019 VULB9168-493	Ant. pol.	: VERTICAL
Limit	: FCC PART 15 C (3M)		
Env. / Ins.	: 23.4°C/54%	Engineer	: Hogen
Power rating	: DC3.65W		
Test Mode	: TX Mode		

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	359.800	21.40	1.95	0.87	24.22	46.00	21.78	QP
2	439.340	23.18	2.16	4.91	30.25	46.00	15.75	QP
3	450.980	23.52	2.20	6.15	31.87	46.00	14.13	QP
4	510.150	24.10	2.37	6.29	32.76	46.00	13.24	QP
5	580.960	25.40	2.60	0.63	28.63	46.00	17.37	QP
6	690.570	27.00	2.85	-1.81	28.04	46.00	17.96	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

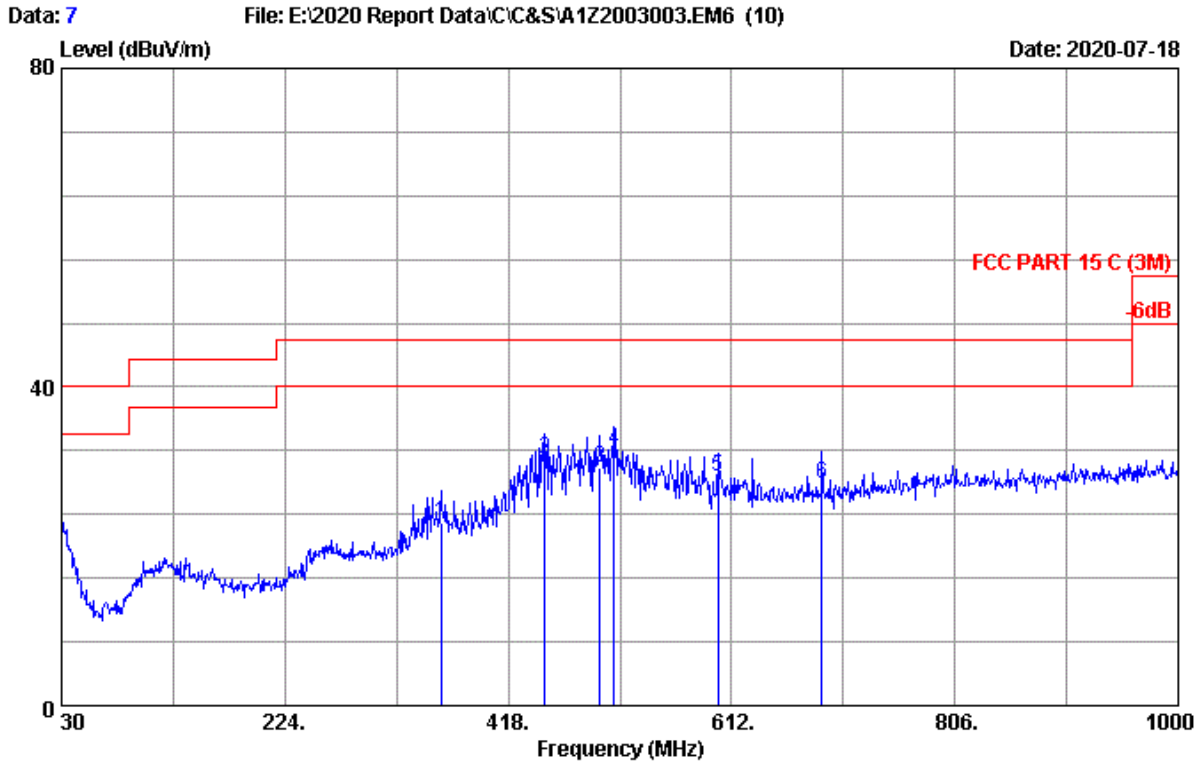


Site no. : 3m Chamber Data no. : 8
 Dis. / Ant. : 3m 2019 CBL6112D-35375 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 C (3M)
 Env. / Ins. : 23.4°C/54% Engineer : Hogen

Power rating : DC3.65V
 Test Mode : Bluetooth+RFID

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	348.160	20.47	1.93	10.90	33.30	46.00	12.70	QP
2	359.800	20.74	1.95	12.68	35.37	46.00	10.63	QP
3	389.870	21.47	2.03	11.35	34.85	46.00	11.15	QP
4	450.000	22.65	2.19	11.31	36.15	46.00	9.85	QP
5	474.260	23.11	2.26	10.05	35.42	46.00	10.58	QP
6	510.150	23.71	2.37	9.41	35.49	46.00	10.51	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



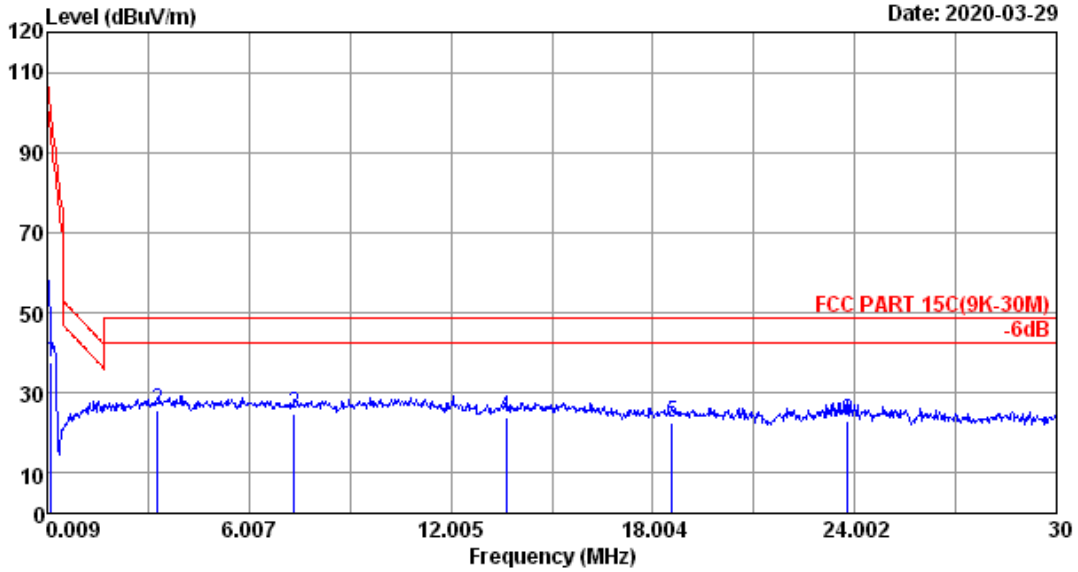
Site no. : 3m Chamber Data no. : 7
 Dis. / Ant. : 3m 2019 CBL6112D-35375 Ant. pol. : VERTICAL
 Limit : FCC PART 15 C (3M)
 Env. / Ins. : 23.4°C/54% Engineer : Hogen
 Power rating : DC3.65V
 Test Mode : Bluetooth+RFID

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	359.800	20.74	1.95	0.22	22.91	46.00	23.09	QP
2	450.010	22.65	2.19	6.23	31.07	46.00	14.93	QP
3	497.540	23.55	2.33	4.03	29.91	46.00	16.09	QP
4	510.150	23.71	2.37	5.91	31.99	46.00	14.01	QP
5	600.360	24.70	2.66	1.39	28.75	46.00	17.25	QP
6	690.570	25.06	2.85	0.04	27.95	46.00	18.05	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Frequency Range: Below 30MHz

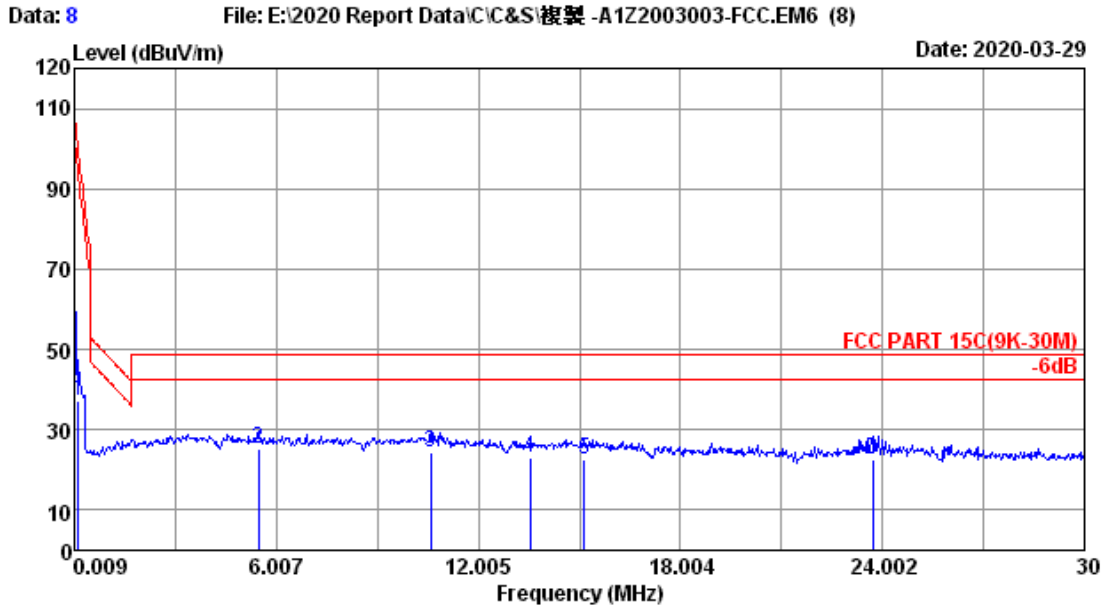
Data: 7 File: E:\2020 Report Data\C&S\複製 -A1Z2003003-FCC.EM6 (8) Date: 2020-03-29



Site no. : 10m Chamber Data no. : 7
 Dis. / Ant. : 10m 2019 HLA6120-10-E Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C(9K-30M)
 Env. / Ins. : 23.2*C/55% Engineer : Habit
 Power rating : DC 3.65V
 Test Mode : Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	0.125	20.10	0.34	17.39	37.83	99.22	61.39	QP
2	3.278	19.34	0.49	5.81	25.64	48.62	22.98	QP
3	7.357	18.46	0.69	5.78	24.93	48.62	23.69	QP
4	13.655	18.15	0.84	5.00	23.99	48.62	24.63	QP
5	18.573	17.81	0.92	3.68	22.41	48.62	26.21	QP
6	23.792	17.55	0.96	4.30	22.81	48.62	25.81	QP

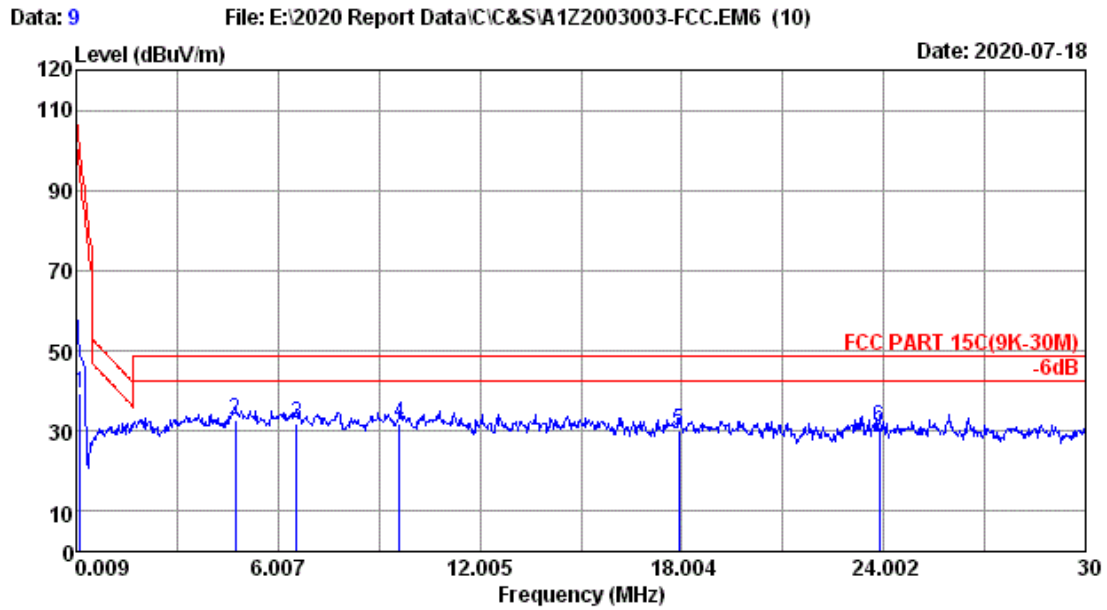
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 10m Chamber Data no. : 8
 Dis. / Ant. : 10m 2019 HLA6120-10-E Ant. pol. : VERTICAL
 Limit : FCC PART 15C(9K-30M)
 Env. / Ins. : 23.2*C/55% Engineer : Habit
 Power rating : DC 3.65V
 Test Mode : Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	0.125	20.10	0.38	16.89	37.37	99.22	61.85	QP
2	5.467	18.57	0.21	6.55	25.33	48.62	23.29	QP
3	10.596	18.28	0.27	5.60	24.15	48.62	24.47	QP
4	13.535	18.16	0.30	4.45	22.91	48.62	25.71	QP
5	15.154	18.09	0.31	4.19	22.59	48.62	26.03	QP
6	23.702	17.55	0.42	4.82	22.79	48.62	25.83	QP

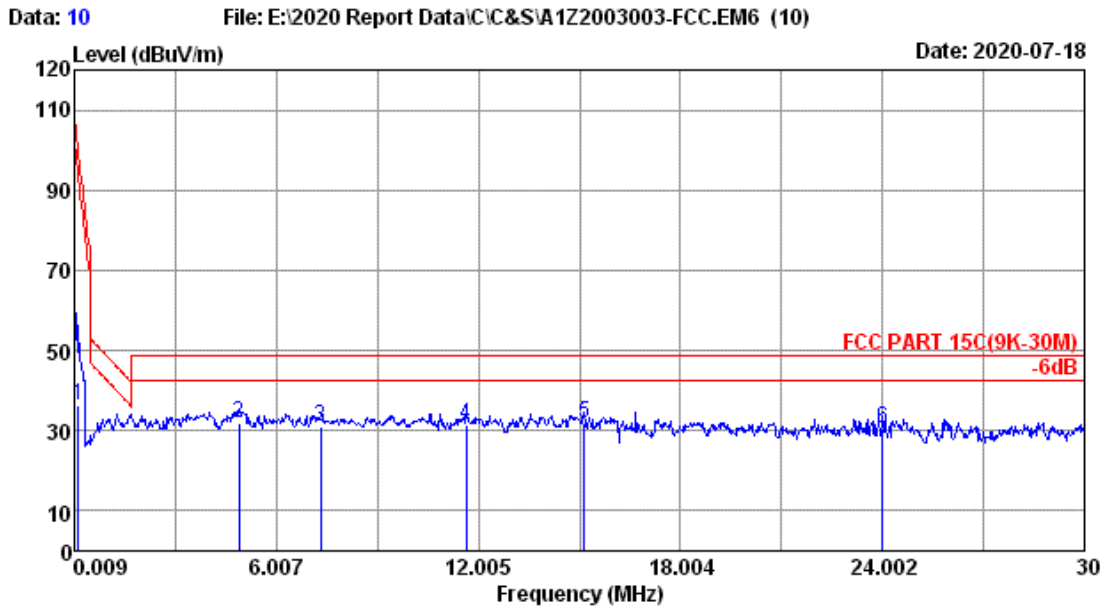
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 10m Chamber Data no. : 9
 Dis. / Ant. : 10m 2019 HLA6120-10-H Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C(9K-30M)
 Env. / Ins. : 22.2°C/56% Engineer : Habit
 Power rating : DC 3.65V
 Test Mode : Bluetooth+RFID

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	0.125	2.58	0.38	36.50	39.46	99.22	59.76	QP
2	4.748	1.15	0.21	31.43	32.79	48.62	15.83	QP
3	6.547	0.99	0.25	30.56	31.80	48.62	16.82	QP
4	9.606	0.80	0.26	30.76	31.82	48.62	16.80	QP
5	17.914	0.35	0.35	29.43	30.13	48.62	18.49	QP
6	23.882	0.02	0.42	30.47	30.91	48.62	17.71	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 10m Chamber Data no. : 10
 Dis. / Ant. : 10m 2019 HLA6120-10-E Ant. pol. : VERTICAL
 Limit : FCC PART 15C(9K-30M)
 Env. / Ins. : 22.2°C/56% Engineer : Habit
 Power rating : DC 3.65V
 Test Mode : Bluetooth+RFID

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	0.125	20.10	0.34	15.72	36.16	99.22	63.06	QP
2	4.898	18.63	0.64	12.60	31.87	48.62	16.75	QP
3	7.327	18.46	0.69	12.06	31.21	48.62	17.41	QP
4	11.646	18.23	0.80	12.45	31.48	48.62	17.14	QP
5	15.154	18.09	0.86	12.74	31.69	48.62	16.93	QP
6	24.002	17.54	0.96	12.00	30.50	48.62	18.12	QP

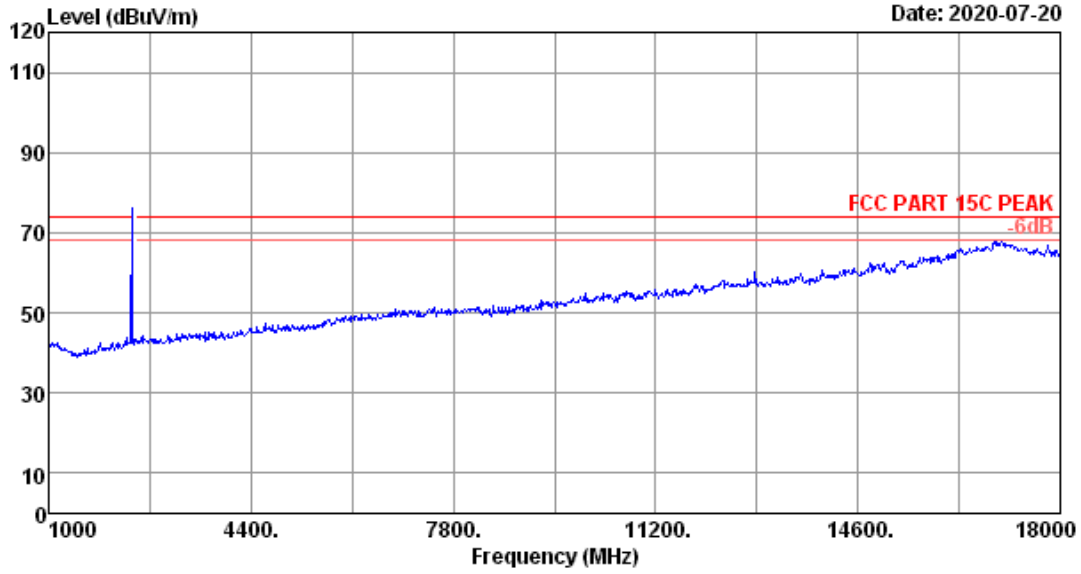
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Frequency Range: Above 1000MHz

Data: 3

File: F:\2019 Report\C\C&S\复件 (2) A1Z2003003-BT.EM6 (8)

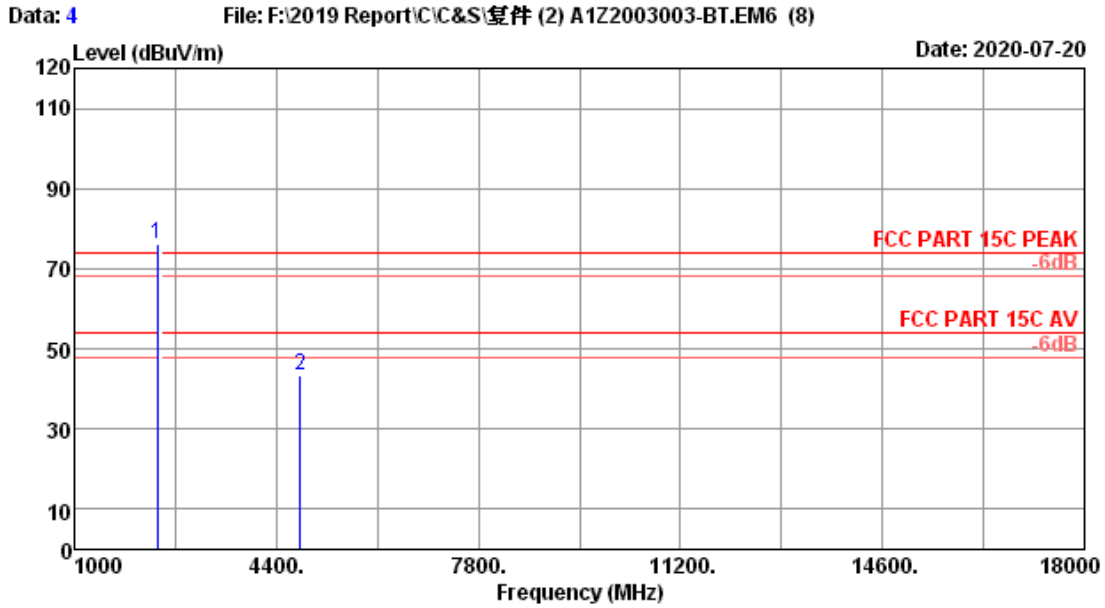
Date: 2020-07-20



Site no. : 3m Chamber
Dis. / Ant. : 3m 2019 3117
Limit : FCC PART 15C PEAK
Env. / Ins. : 23.4°C/52.9%

Data no. : 3
Ant. pol. : HORIZONTAL
Engineer : Garry

Power rating : DC3.65V
Test Mode : Bluetooth+RFID

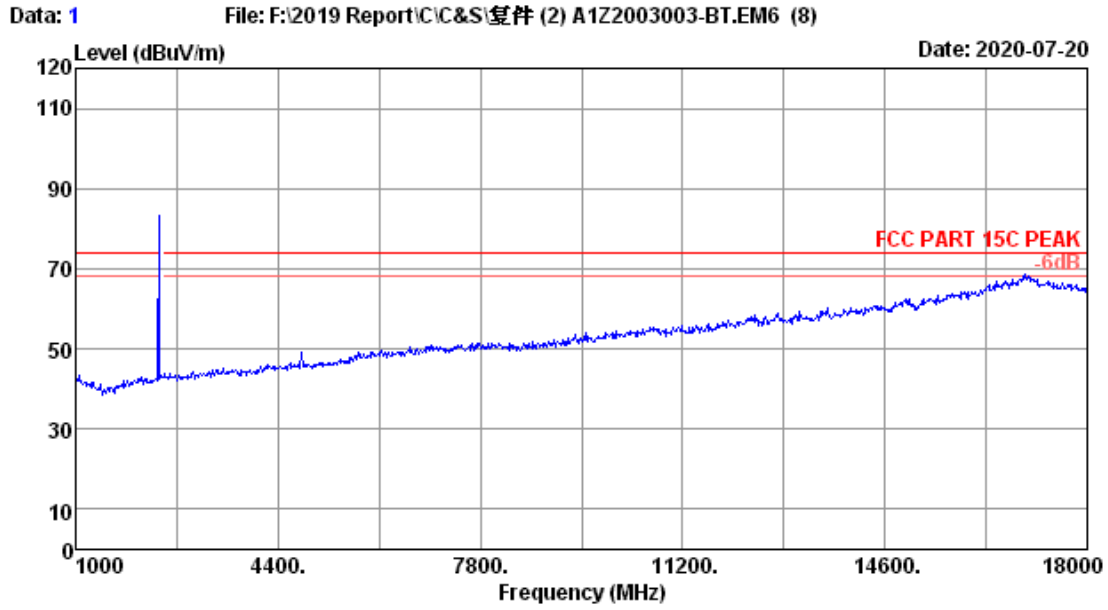


Site no. : 3m Chamber Data no. : 4
 Dis. / Ant. : 3m 2019 3117 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry

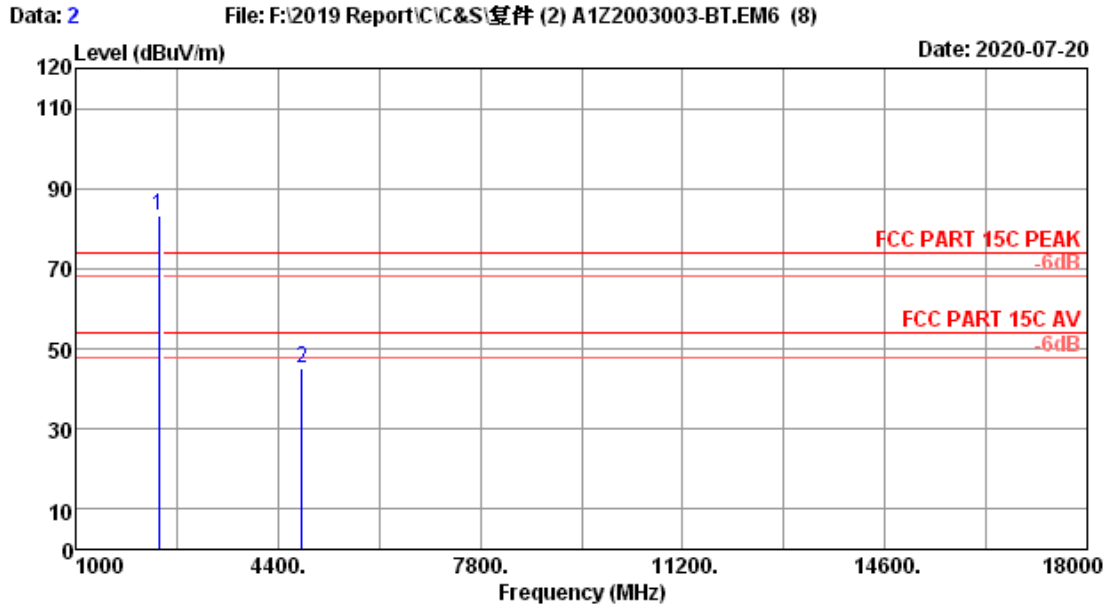
Power rating : DC3.65V
 Test Mode : Bluetooth+RFID

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.00	32.37	5.98	71.20	33.48	76.07	74.00	2.07	Peak
2	4804.00	34.36	7.40	34.89	33.18	43.47	50.00	30.53	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no.	: 3m Chamber	Data no.	: 1
Dis. / Ant.	: 3m 2019 3117	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK	Engineer	: Garry
Env. / Ins.	: 23.4°C/52.9%		
Power rating	: DC3.65V		
Test Mode	: Bluetooth+RFID		



Site no. : 3m Chamber Data no. : 2
 Dis. / Ant. : 3m 2019 3117 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.4*C/52.9% Engineer : Garry

Power rating : DC3.65V
 Test Mode : Bluetooth+RFID

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2402.00	32.37	5.98	78.29	33.48	83.16	-----	-----	Peak
2	4804.00	34.36	7.40	36.65	33.18	45.23	74.00	28.77	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.

5. DEVIATION TO TEST SPECIFICATIONS

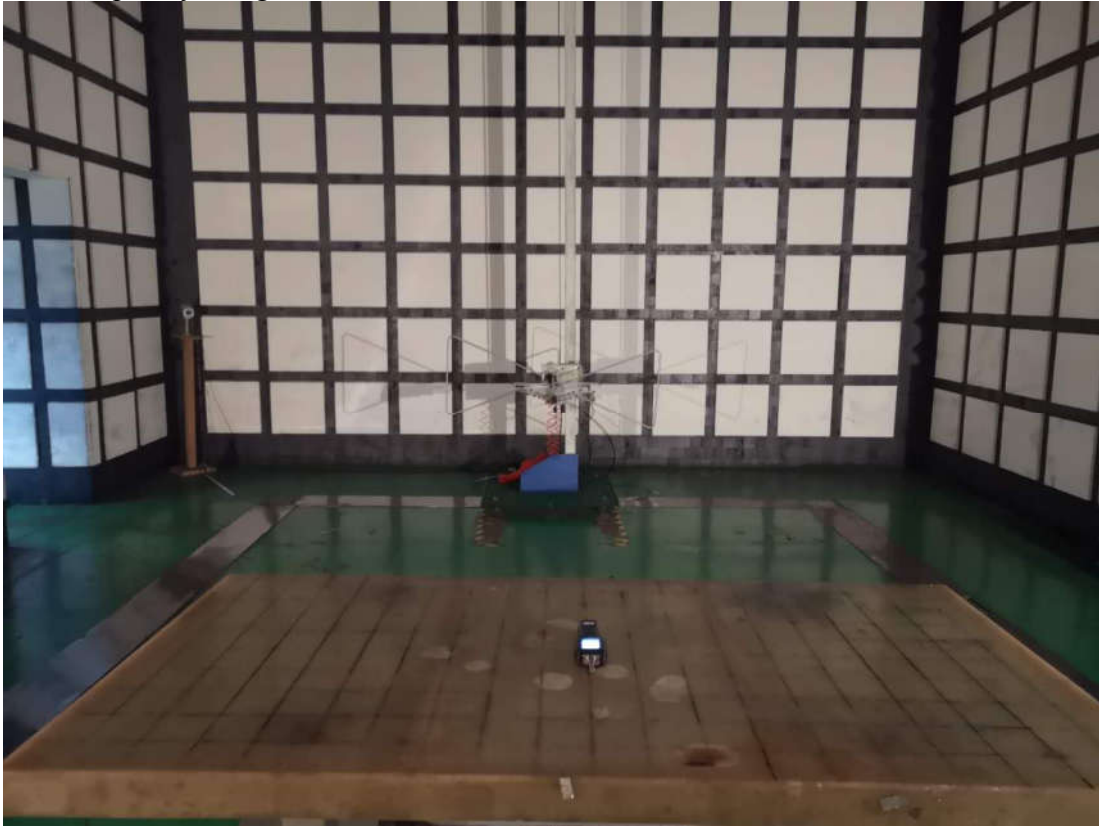
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..... **THE END**

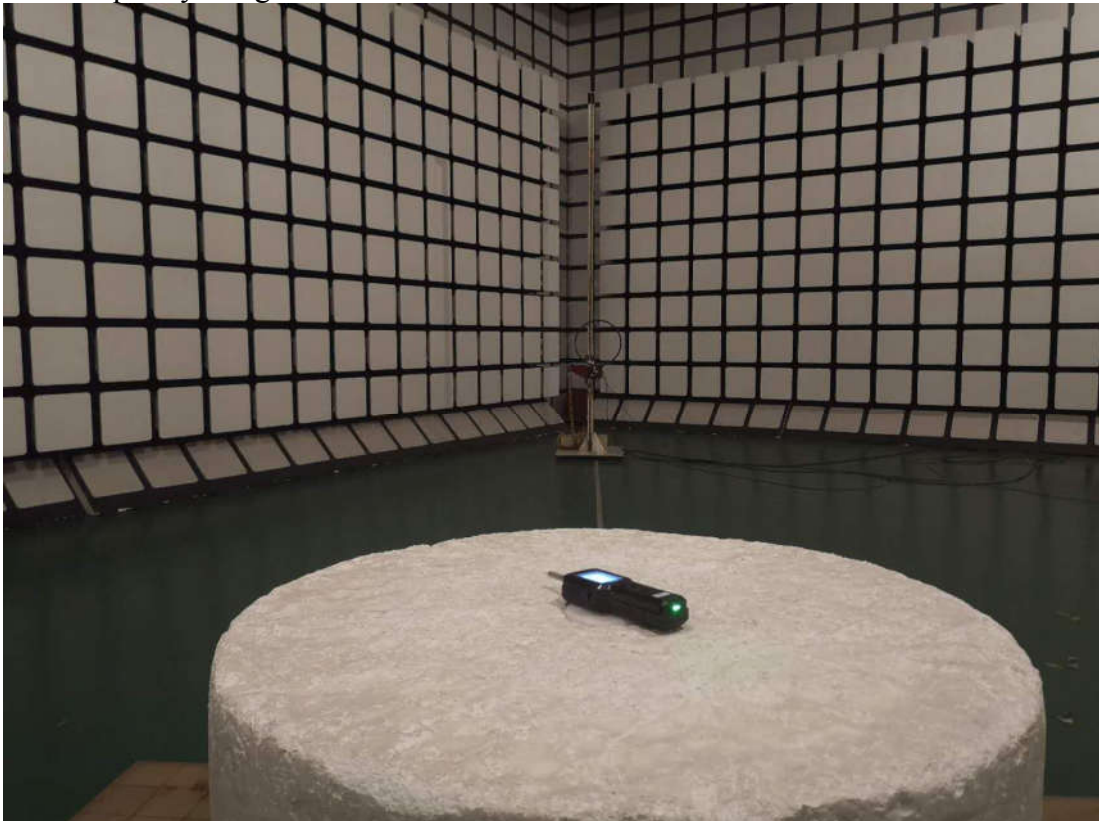
Appendix A. Photograph of Test

A.1 Photos of Radiated Emission Test

Frequency Range: 30-1000MHz



Frequency Range: below 30MHz



Frequency Range: Above 1000MHz

