

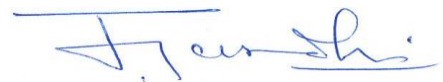
**NCC RADIO TEST REPORT**

|                                    |                                                      |
|------------------------------------|------------------------------------------------------|
| <b>Product name</b>                | CIRC ASL47 Transmitter CIRC ASL47<br>遙控器             |
| <b>Applicant</b>                   | 中光電智能機器人股份有限公司                                       |
| <b>Manufacture</b>                 | 思翼科技（深圳）有限公司<br>SIYI Technology (Shenzhen) Co., Ltd. |
| <b>Rating(s)</b>                   | DC5V from adapter or DC3.7V from<br>battery          |
| <b>Trademark</b>                   | CIRC                                                 |
| <b>Model and/or type reference</b> | CIRC ASL47                                           |
| <b>Standard</b>                    | LP0002:2020                                          |
| <b>Test Result</b>                 | PASS                                                 |

Date of receipt : 04-20-2021

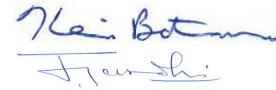
Date of Issue : 06-18-2021

Signature:



## NCC RADIO TEST REPORT

Report Reference No. ....: M210618N3-03  
 Compiled by (+ signature)..... Kevin Bothmann  
 Approved by (+ signature)..... Jay Gandhi  
 Date of issue .....: 2021-06-18



Applicant's name.....: 中光電智能機器人股份有限公司  
 Address.....: 新竹科學園區新竹市東區力行路 11 號 4 樓  
 Manufacture's Name.....: 思翼科技（深圳）有限公司  
 SIYI Technology (Shenzhen) Co., Ltd.  
 Address.....: 深圳市寶安區福永街道福圍社區 107 國道旁懷德銀山大廈 608、609、610  
 Room 608-610, Huaide-yinshan Mansion (beside national road 107), Fuwei Community, Fuyong Community, Baoan District, Shenzhen, China

## Test specification:

Standard.....: LP0002:2020  
 Test procedure.....: EIA 603、ANSI、FCC/47 CFR/2.1046、2.1047、2.1049、2.1051、2.1053 and 2.1055  
 Non-standard test method.....: N/A

## Test item description

Product name .....: CIRC ASL47 Transmitter CIRC ASL47 遙控器  
 Trademark : CIRC  
 Model and/or type reference .....: CIRC ASL47  
 Rating(s) .....: DC5V from adapter or DC3.7V from battery

## Testing Laboratory information:

Testing Laboratory Name .....: Electro Magnetic Test, Inc.  
 Address .....: 1547 Plymouth Street, Mountain View, CA 94043  
 CAB Identifier Number .....: US0036  
 Tel.....: (650) 965-4000  
 Fax.....: (650) 965-3000  
 E-mail.....: jgandhi@emtlabs.com

## Testing .....

Date of receipt of test item.....: Apr. 20, 2021  
 Date (s) of performance of tests.....: Apr. 20~ May. 11, 2021  
 Date of Issue .....: Jun. 18, 2021  
 Test Result .....: Pass

### GENERAL REPORT SUMMARY

This electromagnetic emission test report is generated by Electro Magnetic Test, Inc., which is an independent testing and consulting firm. The test report is based on testing performed Electro Magnetic Test, Inc. personnel according to the measurement procedure described in the test specification given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced in any form unless done so in full.

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Federal Government.

Electro Magnetic Test, Inc. is recognized by the following agencies for performing EMI/EMC testing:

| COUNTRY                                                                 | AGENCY                                                                                                                                                                                                                                     | IDENTIFYING #                      |
|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| USA                                                                     | Federal Communications Commission (FCC)<br>(EMT's test site is recognized by the FCC)                                                                                                                                                      | Registration Number:<br>90576      |
| USA, Canada, Taiwan,<br>Australia/New<br>Zealand, European<br>Community | National Voluntary Lab Accreditation Program (NVLAP)<br>(EMT is accredited by NVLAP. A copy of the NVLAP<br>Scope Of Accreditation is available upon request.)                                                                             | Lab Code: 200147-0                 |
| Canada                                                                  | Industry Canada                                                                                                                                                                                                                            | File No.: IC 2804                  |
| Japan                                                                   | Voluntary Control Council For Interference (VCCI)                                                                                                                                                                                          | A-0118                             |
|                                                                         | Open Field Test Site "A"                                                                                                                                                                                                                   | -                                  |
|                                                                         | Mains Conducted Emissions Test Site "A"                                                                                                                                                                                                    | -                                  |
|                                                                         | Telecom Conducted Emissions Test Site "A"                                                                                                                                                                                                  | -                                  |
|                                                                         | 3 Meter Semi-Anechoic Chamber Site "E"                                                                                                                                                                                                     | -                                  |
|                                                                         | 3 Meter Semi-Anechoic Chamber Site "E"<br>(1GHz – 6GHz)                                                                                                                                                                                    | -                                  |
|                                                                         | Mains Conducted Emissions Test Site "E"                                                                                                                                                                                                    | -                                  |
|                                                                         | Telecom Conducted Emissions Test Site "E"                                                                                                                                                                                                  | -                                  |
| Korea                                                                   | Ministry of Information and Communication's Radio<br>Research Laboratory (RRL) under the Asia Pacific<br>Economic Cooperation (APEC) Mutual Recognition<br>Arrangement (A copy of the Scope Of Accreditation is<br>available upon request) | US0036                             |
| Taiwan                                                                  | Bureau Of Standards, Metrology and Inspection (BSMI)                                                                                                                                                                                       | Reference Number:<br>SL2-IN-E-1024 |
| Australia / New<br>Zealand                                              | Australian Communications Authority (AUSTEL)                                                                                                                                                                                               | *                                  |

\*These agencies do not issue an identifying number to test labs.

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**1 . SUMMARY OF TEST RESULTS**

Test procedures according to the technical standards:

| LP0002 : 2020    |                                     |          |        |
|------------------|-------------------------------------|----------|--------|
| Standard Section | Test Item                           | Judgment | Remark |
| 5.7.4.5/3.3      | Conducted Emission                  | PASS     | None   |
| 5.7.4/3.6        | Radiated Spurious Emission          | PASS     | None   |
| 5.7.3.3          | Peak Output Power                   | PASS     | None   |
| 5.7.5            | Occupied Bandwidth                  | PASS     | None   |
| 5.7.3.3          | Power Density                       | PASS     | None   |
| 5.7.4/3.6        | Restricted Bands                    | PASS     | None   |
| 5.7.4/3.6        | ANTENNA CONDUCTED SPURIOUS EMISSION | PASS     | None   |
| 5.7.8            | Antenna Requirement                 | PASS     | None   |

**NOTE:**

(1) "N/A" denotes test is not applicable in this Test Report

### 1.1 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement  $y \pm U$ , where expanded uncertainty  $U$  is based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95 %.

| No. | Item                         | Uncertainty |
|-----|------------------------------|-------------|
| 1   | Conducted Emission Test      | 1.38dB      |
| 2   | Radiated Emission Test       | 3.17dB      |
| 3   | RF power,conducted           | 0.16dB      |
| 4   | Spurious emissions,conducted | 0.21dB      |
| 5   | All emissions,radiated(<1G)  | 4.68dB      |
| 6   | All emissions,radiated(>1G)  | 4.89dB      |

## 2 . GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF EUT

|                     |                                                    |                    |
|---------------------|----------------------------------------------------|--------------------|
| Equipment           | CIRC ASL47 Transmitter CIRC ASL47 遙控器              |                    |
| Trade Name          | CIRC                                               |                    |
| Model Name          | CIRC ASL47                                         |                    |
| Serial Model Name   | N/A                                                |                    |
| Product Description | The EUT is a CIRC ASL47 Transmitter CIRC ASL47遙控器. |                    |
|                     | Operation Frequency:                               | 5805MHz            |
|                     | Modulation Type:                                   | OFDM               |
|                     | Number Of Channel                                  | 1CH                |
|                     | Output Power:                                      | 15.42dBm           |
|                     | Antenna Designation:                               | Please see Note 2. |
|                     | Antenna Gain(Peak)                                 | 5.7dBi             |
| Channel List        | 5805MHz                                            |                    |
| Power Rating        | DC5V from adapter or DC3.7V from battery           |                    |
| Model difference    | N/A                                                |                    |

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.

Table for Filed Antenna

| Ant           | Manufacture Name | Model Name            | Antenna Type        | Connector | Gain (dBi) |
|---------------|------------------|-----------------------|---------------------|-----------|------------|
| BT ANT        | CSR              | BC417                 | PCB Antenna         | N/A       | 1.0dBi     |
| 2.4G<br>ANT 1 | 思翼科技（深圳）<br>有限公司 | YL-AN2400-12<br>01BMN | External<br>Antenna | N/A       | 5.7dBi     |
| 2.4G<br>ANT 2 | 思翼科技（深圳）<br>有限公司 | YL-AN2400-12<br>01BMN | External<br>Antenna | N/A       | 5.7dBi     |
| 5.8G<br>ANT 1 | 思翼科技（深圳）<br>有限公司 | YL-AN2400-12<br>01BMN | External<br>Antenna | N/A       | 5.7dBi     |
| 5.8G<br>ANT 2 | 思翼科技（深圳）<br>有限公司 | YL-AN2400-12<br>01BMN | External<br>Antenna | N/A       | 5.7dBi     |

## 2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

| Pretest Mode | Description |
|--------------|-------------|
| Mode 1       | TX Mode     |
| Mode 2       | RX          |

| For Conducted Emission |             |
|------------------------|-------------|
| Final Test Mode        | Description |
| Mode 1                 | TX Mode     |

| For Radiated Emission |                          |
|-----------------------|--------------------------|
| Final Test Mode       | Description (worst-case) |
| Mode 1                | TX Mode                  |
| Mode 2                | RX                       |

Note:

(1) The measurements are performed at the highest, middle, lowest available channels.

|                       |          |               |                |
|-----------------------|----------|---------------|----------------|
| Power Set             | default  |               |                |
| Test software Version | V1.2.0   | Test program: | SIYI Assistant |
| Frequency             | 5805 MHz |               |                |

1. Connect the EUT to the computer with USB port;
2. Open the " SIYI Assistant " test software after the connection, select the corresponding serial port connect and Input transmitting command ,And then click the “send” button.

## 2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

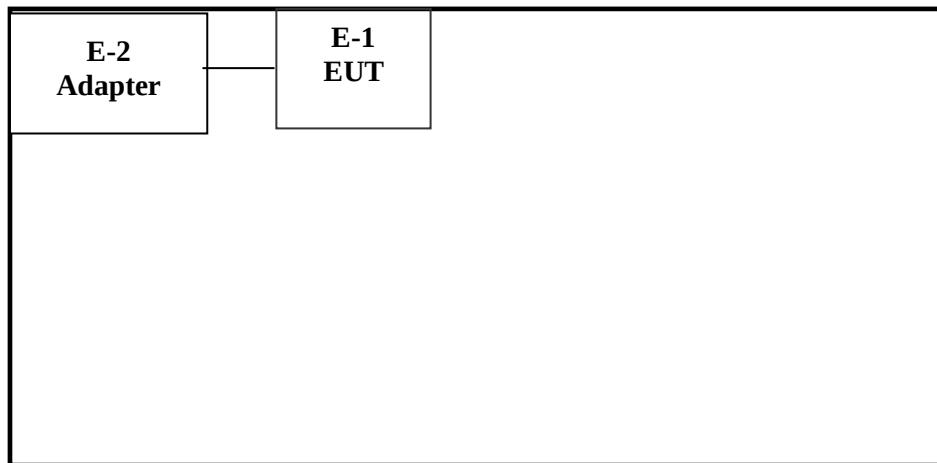
Block diagram of EUT configuration

CONDUCTED EMISSION

Test mode: mode 1

Non-Conductive Table

80cm above Ground Plane



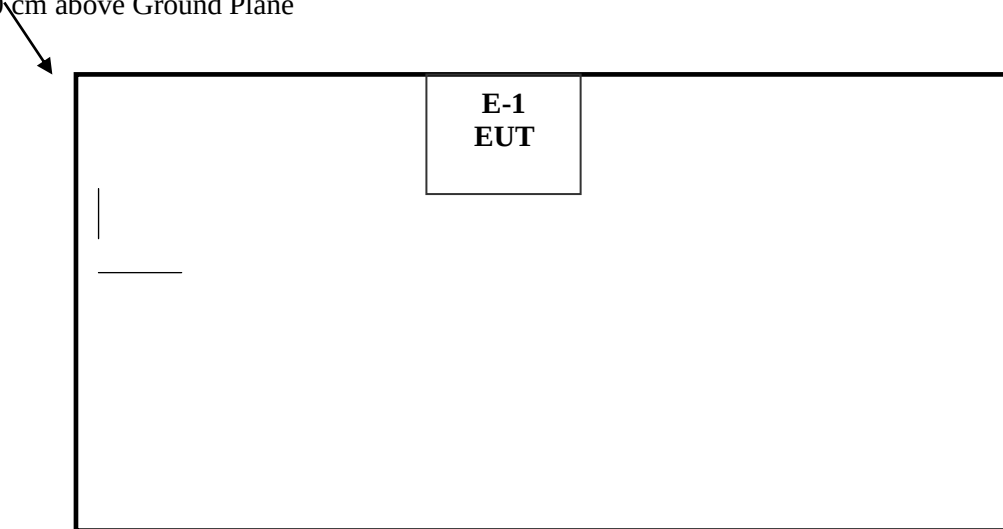
## Block diagram of EUT configuration

### RADIATED EMISSION

Test mode: mode 1, 2

Non-Conductive Table

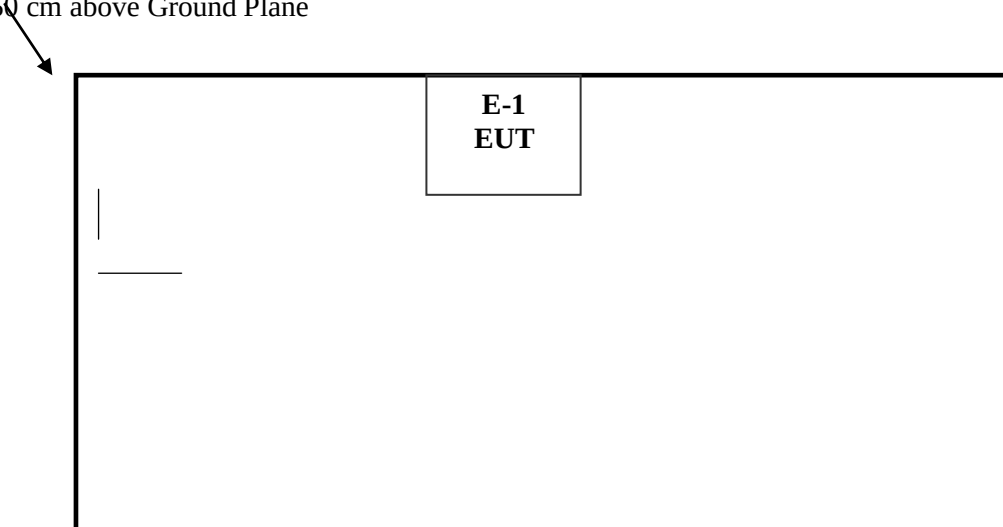
80 cm above Ground Plane



Test mode: mode 1, 2

Non-Conductive Table

150 cm above Ground Plane



## 2.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| Item | Equipment                                      | Mfr/Brand | Model/Type No. | FCC ID | Series No. | Note               |
|------|------------------------------------------------|-----------|----------------|--------|------------|--------------------|
| E-1  | CIRC ASL47<br>Transmitter<br>CIRC ASL47<br>遙控器 | CIRC      | CIRC ASL47     | N/A    | N/A        | EUT                |
| E-2  | Adapter                                        | NOKIA     | FC0302         | N/A    | N/A        | Test<br>Accessory* |

| Item | Equipment                      | Mfr/Brand                                          | Model/Type No. | Note                     |
|------|--------------------------------|----------------------------------------------------|----------------|--------------------------|
| 1    | OTG USB Line                   | CIRC                                               | CIRC ASL47     | EUT<br>Line length: 70cm |
| 2    | Rechargeable Li-ion<br>Battery | DONGGUAN<br>XINYANYANG<br>ELECTRONICS<br>CO., LTD. | P3464130*3P    | EUT                      |

### Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- (3) “YES” means “shielded” or “with ferrite core”; “NO” means “unshielded” or “without ferrite core”
- (4) “\*”: In this report, the applicant did not provide the accompanying accessories with the equipment. The accessories were provided by the laboratory (or the applicant) and inspected simultaneously.

## 2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

| EQUIPMENT TYPE       | MANU-FACTURER   | MODEL NUMBER | SERIAL NUMBER | CAL. DATE          | CAL. CYCLE |
|----------------------|-----------------|--------------|---------------|--------------------|------------|
| Spectrum Analyzer    | Keysight        | N9020A       | MY53300466    | April 29, 2021     | 1 Year     |
| RF Preselector       | Hewlett Packard | 85685A       | 3010A01157    | April 29, 2021     | 1 Year     |
| Quasi-Peak Adapter   | Hewlett Packard | 85650        | 2521A00584    | April 29, 2021     | 1 Year     |
| Preamplifier         | Com Power       | PA-102       | 1482          | April 29, 2021     | 1 Year     |
| RF Attenuator        | Mini-Circuits   | CAT-10       | Asset #1000   | September 09, 2020 | 1 Year     |
| LISN                 | Com Power       | LI-200       | 12012         | September 09, 2020 | 1 Year     |
| LISN                 | Com Power       | LI-200       | 12214         | September 09, 2020 | 1 Year     |
| LISN                 | Com Power       | LI-200       | 1767          | September 09, 2020 | 1 Year     |
| LISN                 | Com Power       | LI-200       | 1768          | December 29, 2020  | 1 Year     |
| Biconical Antenna    | Com Power       | AB-100       | 01557         | December 22, 2020  | 1 Year     |
| Log Periodic Antenna | Com Power       | AL-100       | 16037         | December 22, 2020  | 1 Year     |
| Horn Antenna         | Com Power       | AHA-118      | 711054        | September 09, 2020 | 1 Year     |
| Antenna Mast         | Com Power       | AM-400       | N/A           | N/A                | N/A        |
| Turntable            | Com Power       | TT-100       | N/A           | N/A                | N/A        |
| Computer             | Dell, Inc.      | DHS          | DNSV641       | N/A                | N/A        |

## EMI Test Equipment (Continued)

| EQUIPMENT TYPE             | MANU-FACTURER   | MODEL NUMBER | SERIAL NUMBER | CAL. DATE       | CAL. CYCLE |
|----------------------------|-----------------|--------------|---------------|-----------------|------------|
| EMI Receiver               | Rohde & Schwarz | ESU40        | 100127        | June 12, 2020   | 1 Year     |
| BiConiLog Antenna          | ETS-Lindgren    | 3142D        | 00102183      | August 14, 2020 | 1 Year     |
| Horn Antenna (1GHz-18GHz)  | ETS-Lindgren    | 3117         | 00109294      | May 6, 2021     | 1 Year     |
| Horn Antenna (15GHz-40GHz) | SCHWARZBECK     | BBHA 9170    | BBHA9170242   | May 6, 2021     | 1 Year     |
| Preamplifier               | Rohde & Schwarz | TS-PR18      | 100056        | June 12, 2020   | 1 Year     |
| Pre-Amplifier              | Agilent         | 8449B        | 3008A00409    | June 12, 2020   | 1 Year     |
| Antenna Mast               | ETS-Lindgren    | 2175         | 00095727      | N/A             | N/A        |
| Turntable                  | ETS-Lindgren    | 2187-3.0     | 00118231      | N/A             | N/A        |
| Computer                   | Acer            | Aspire 8930  | 85100050123   | N/A             | N/A        |
| Multi-Function Controller  | ETS-Lindgren    | 2090         | 00102270      | N/A             | N/A        |
| Loop Antenna               | ARA             | PLA-1030/B   | 1029          | May 19, 2020    | 1 Year     |

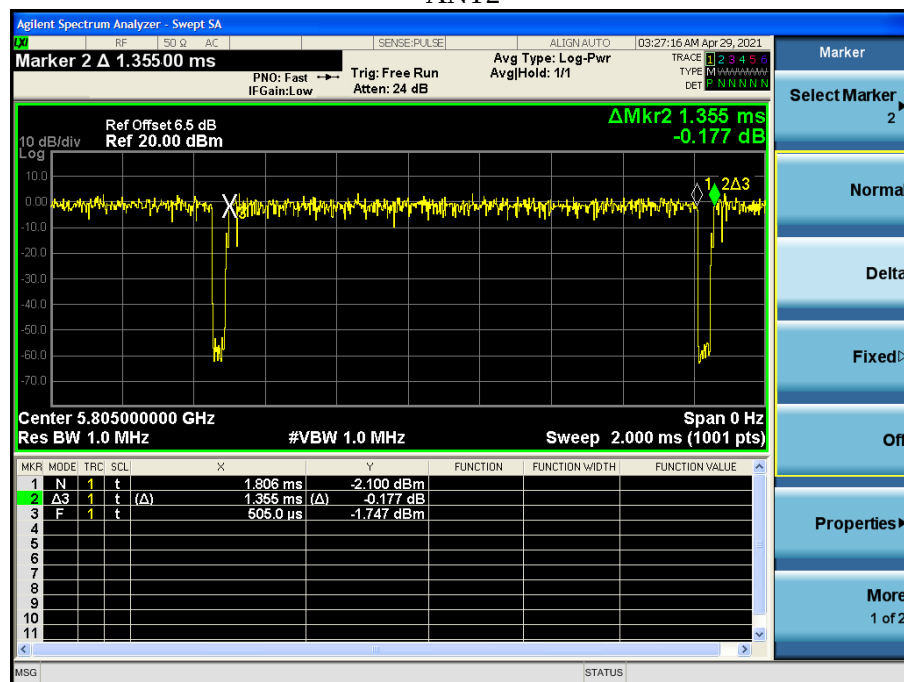
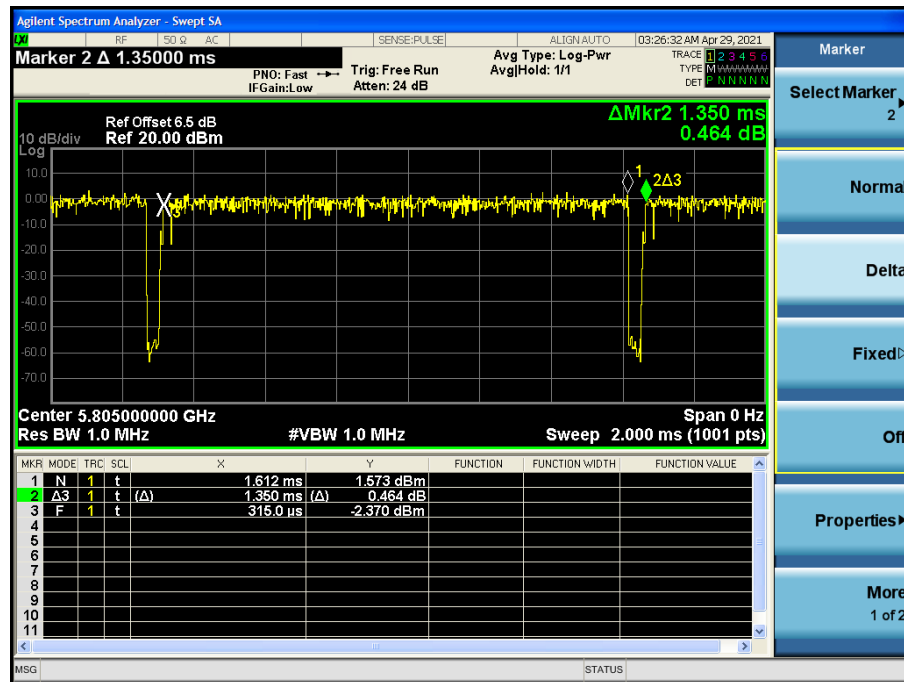
## 2.6. ON TIME, DUTY CYCLE AND MEASUREMENT METHODS

### 2.6.1 LIMITS

None; for reporting purposes only.

### 2.6.2 ON TIME AND DUTY CYCLE RESULTS

| Mode | ON Time<br>B<br>(msec) | Period<br>(msec) | Duty<br>Cycle<br>x<br>(linear) | Duty Cycle<br>(%) | 10log(1/x)Duty<br>Cycle<br>Correction<br>Factor<br>(dB) | 1/B<br>Minimum<br>VBW<br>(kHz) |
|------|------------------------|------------------|--------------------------------|-------------------|---------------------------------------------------------|--------------------------------|
| ANT1 |                        |                  |                                |                   |                                                         |                                |
| TX   | 1.297                  | 1.35             | 0.961                          | 96.07%            | 0.174                                                   | 0.771                          |
| ANT2 |                        |                  |                                |                   |                                                         |                                |
| TX   | 1.301                  | 1.355            | 0.960                          | 96.01%            | 0.177                                                   | 0.769                          |



## 3 . EMC EMISSION TEST

### 3.1 CONDUCTED EMISSION MEASUREMENT

POWER LINE CONDUCTED EMISSION Limits

(Frequency Range 150kHz-30MHz)

| FREQUENCY (MHz) | Class A (dBuV) |         | Class B (dBuV) |           | Standard |
|-----------------|----------------|---------|----------------|-----------|----------|
|                 | Quasi-peak     | Average | Quasi-peak     | Average   |          |
| 0.15 -0.5       |                |         | 66 - 56 *      | 56 - 46 * | CISPR    |
| 0.50 -5.0       |                |         | 56.00          | 46.00     | CISPR    |
| 5.0 -30.0       |                |         | 60.00          | 50.00     | CISPR    |

|           |  |  |           |           |        |
|-----------|--|--|-----------|-----------|--------|
| 0.15 -0.5 |  |  | 66 - 56 * | 56 - 46 * | LP0002 |
| 0.50 -5.0 |  |  | 56.00     | 46.00     | LP0002 |
| 5.0 -30.0 |  |  | 60.00     | 50.00     | LP0002 |

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " \* " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

| Receiver Parameters | Setting  |
|---------------------|----------|
| Attenuation         | 10 dB    |
| Start Frequency     | 0.15 MHz |
| Stop Frequency      | 30 MHz   |
| IF Bandwidth        | 9 kHz    |

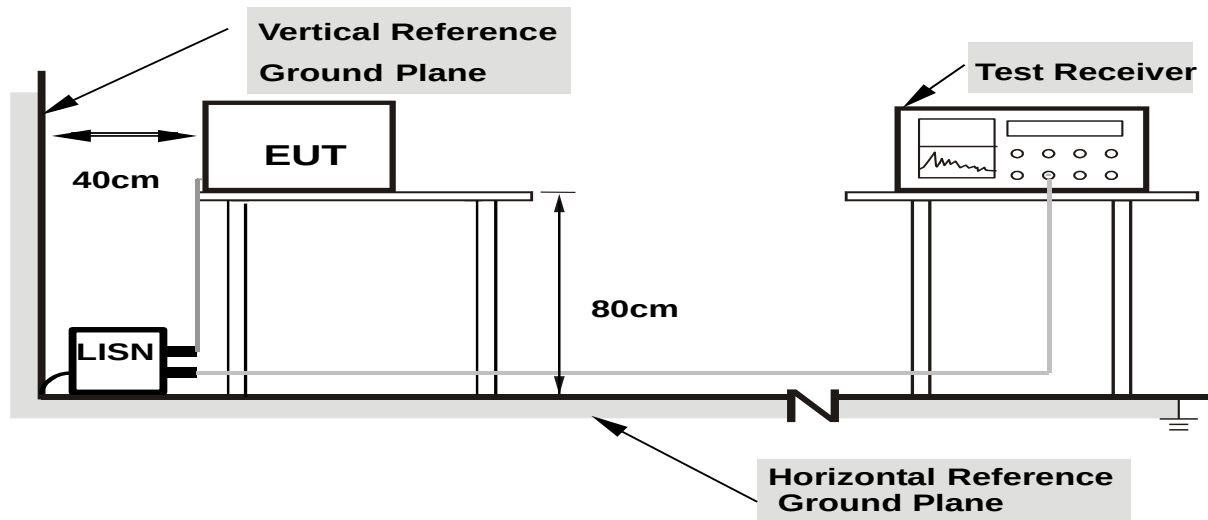
## TEST PROCEDURE

- The EUT was placed 0.4 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- LISN at least 80 cm from nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

## DEVIATION FROM TEST STANDARD

No deviation

## TEST SETUP

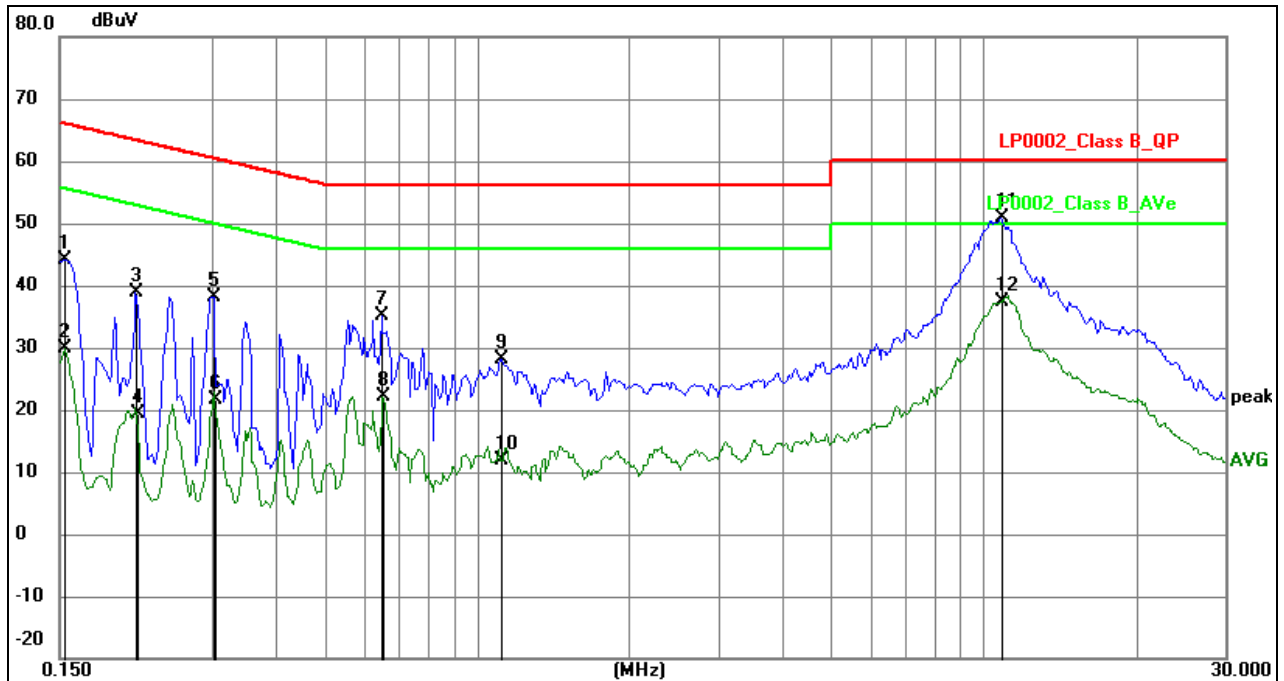


**Note: 1.Support units were connected to second LISN.**

**2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes**

## TEST RESULTS

|                |                                       |                     |            |
|----------------|---------------------------------------|---------------------|------------|
| EUT :          | CIRC ASL47 Transmitter CIRC ASL47 遙控器 | Model Name. :       | CIRC ASL47 |
| Temperature :  | 26 °C                                 | Relative Humidity : | 54%        |
| Pressure :     | 1010hPa                               | Test Date :         | 2021-04-27 |
| Test Mode :    | TX                                    | Phase :             | L          |
| Test Voltage : | AC 110V/60Hz for Adapter              |                     |            |

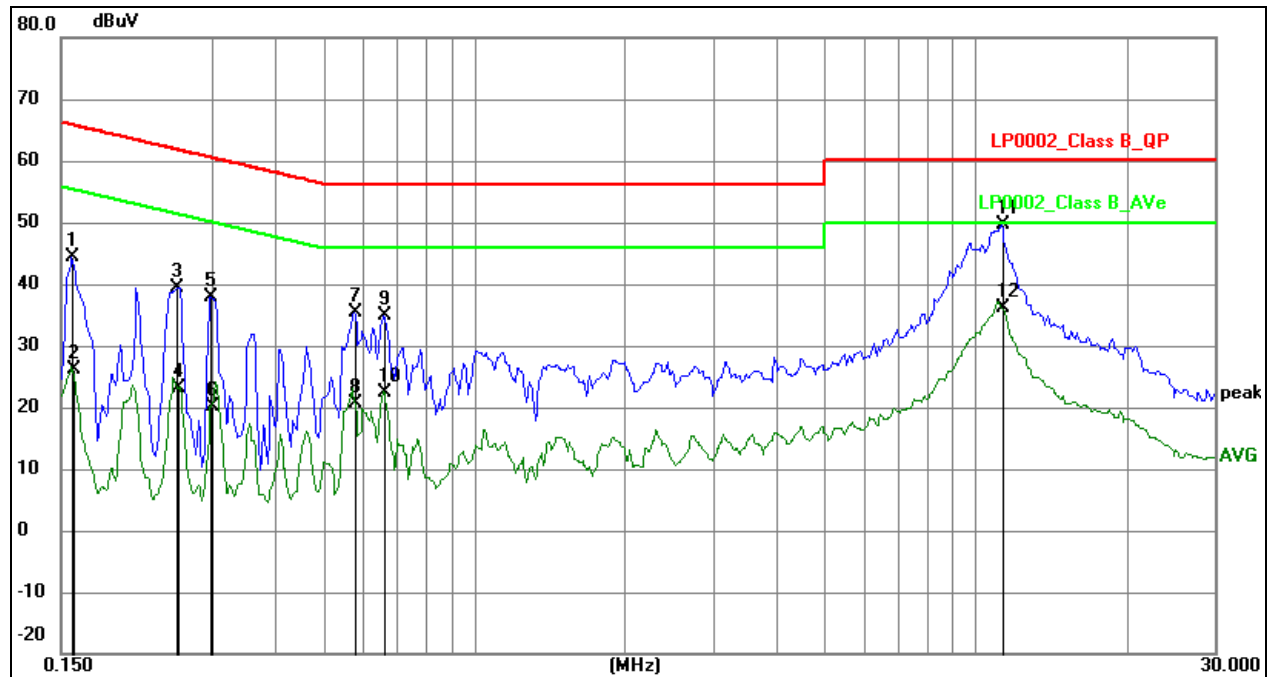


### Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss + Pulse limit.
3. '\*' means the worst case

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Detector | P/F |
|-----|-----------------|----------------|-------------|--------------|--------------|-------------|----------|-----|
| 1   | 0.1539          | 34.34          | 9.78        | 44.12        | 65.79        | -21.67      | peak     | P   |
| 2   | 0.1539          | 20.07          | 9.78        | 29.85        | 55.79        | -25.94      | AVG      | P   |
| 3   | 0.2124          | 29.07          | 9.75        | 38.82        | 63.11        | -24.29      | peak     | P   |
| 4   | 0.2128          | 9.51           | 9.75        | 19.26        | 53.10        | -33.84      | AVG      | P   |
| 5   | 0.3021          | 28.49          | 9.76        | 38.25        | 60.18        | -21.93      | peak     | P   |
| 6   | 0.3035          | 11.79          | 9.76        | 21.55        | 50.15        | -28.60      | AVG      | P   |
| 7   | 0.6492          | 25.44          | 9.78        | 35.22        | 56.00        | -20.78      | peak     | P   |
| 8   | 0.6531          | 12.37          | 9.78        | 22.15        | 46.00        | -23.85      | AVG      | P   |
| 9   | 1.1172          | 18.25          | 9.79        | 28.04        | 56.00        | -27.96      | peak     | P   |
| 10  | 1.1173          | 2.18           | 9.79        | 11.97        | 46.00        | -34.03      | AVG      | P   |
| 11  | 10.8273         | 40.57          | 10.20       | 50.77        | 60.00        | -9.23       | peak     | P   |
| 12  | 10.8473         | 27.16          | 10.20       | 37.36        | 50.00        | -12.64      | AVG      | P   |

|                |                                       |                     |            |
|----------------|---------------------------------------|---------------------|------------|
| EUT :          | CIRC ASL47 Transmitter CIRC ASL47 遙控器 | Model Name. :       | CIRC ASL47 |
| Temperature :  | 26 °C                                 | Relative Humidity : | 54%        |
| Pressure :     | 1010hPa                               | Test Date :         | 2021-04-27 |
| Test Mode :    | TX                                    | Phase :             | N          |
| Test Voltage : | AC 110V/60Hz for Adapter              |                     |            |



Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss + Pulse limit.
3. '\*' means the worst case

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Detector | P/F |
|-----|-----------------|----------------|-------------|--------------|--------------|-------------|----------|-----|
| 1   | 0.1578          | 34.65          | 9.78        | 44.43        | 65.58        | -21.15      | peak     | P   |
| 2   | 0.1582          | 16.27          | 9.78        | 26.05        | 55.56        | -29.51      | AVG      | P   |
| 3   | 0.2553          | 29.71          | 9.75        | 39.46        | 61.58        | -22.12      | peak     | P   |
| 4   | 0.2562          | 13.35          | 9.75        | 23.10        | 51.55        | -28.45      | AVG      | P   |
| 5   | 0.2982          | 28.04          | 9.76        | 37.80        | 60.29        | -22.49      | peak     | P   |
| 6   | 0.2987          | 10.46          | 9.76        | 20.22        | 50.28        | -30.06      | AVG      | P   |
| 7   | 0.5790          | 25.59          | 9.77        | 35.36        | 56.00        | -20.64      | peak     | P   |
| 8   | 0.5792          | 10.98          | 9.77        | 20.75        | 46.00        | -25.25      | AVG      | P   |
| 9   | 0.6609          | 24.98          | 9.78        | 34.76        | 56.00        | -21.24      | peak     | P   |
| 10  | 0.6613          | 12.70          | 9.78        | 22.48        | 46.00        | -23.52      | AVG      | P   |
| 11  | 11.2641         | 39.52          | 10.22       | 49.74        | 60.00        | -10.26      | peak     | P   |
| 12  | 11.2641         | 25.82          | 10.22       | 36.04        | 50.00        | -13.96      | AVG      | P   |

### 3.2 RADIATED EMISSION MEASUREMENT

#### Radiated Emission Limits

(Frequency Range 9kHz-1000MHz)

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 3.5, then the 3.6 limit in the table below has to be followed.

| Frequencies<br>(MHz) | Field Strength<br>(micorvolts/meter) | Measurement Distance<br>(meters) |
|----------------------|--------------------------------------|----------------------------------|
| 0.009~0.490          | 2400/F(kHz)                          | 300                              |
| 0.490~1.705          | 24000/F(kHz)                         | 30                               |
| 1.705~30.0           | 30                                   | 30                               |
| 30~88                | 100                                  | 3                                |
| 88~216               | 150                                  | 3                                |
| 216~960              | 200                                  | 3                                |
| Above 960            | 500                                  | 3                                |

#### LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

| FREQUENCY (MHz) | Class B (dBuV/m) (at 3M) |         |
|-----------------|--------------------------|---------|
|                 | PEAK                     | AVERAGE |
| Above 1000      | 74                       | 54      |

Notes:

- (1) The limit for radiated test was performed according to LP0002.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

#### FREQUENCY RANGE OF RADIATED MEASUREMENT (For unintentional radiators)

Frequency measurement range:

1 The spectrum shall be measured from the lowest radio frequency signal generated in the device (without going below 9 kHz), and the upper limit of the measurement range shall be decided according to the maximum operating frequency.

1.1 Maximum operating frequency less than 10 GHz: to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

1.2 Maximum operating frequency between 10 GHz~30 GHz: to the fifth harmonic of the highest fundamental frequency or to 100 GHz, whichever is lower.

1.3 Maximum operating frequency over 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 200 GHz, whichever is lower.

2 Particular attention should be paid to harmonics and subharmonics of the carrier frequency as well as to those frequencies removed from the carrier by multiples of the oscillator frequency. Radiation at the frequencies of multiplier stages should also be checked.

| Spectrum Parameter |            | Setting               |           |
|--------------------|------------|-----------------------|-----------|
| Attenuation        |            | Auto                  |           |
| Start Frequency    |            | 1000 MHz              |           |
| Stop Frequency     |            | 10th carrier harmonic |           |
| Measurement        | Duty cycle | RBW                   | Video B/W |
| PK                 | Any        | 1MHz                  | 3MHz      |
| AV                 | ≥98%       | 1MHz                  | 10Hz      |
|                    | <98%       | 1MHz                  | 1/T       |

NOTE: KDB 558074 Zero-Span Spectrum Analyzer Method

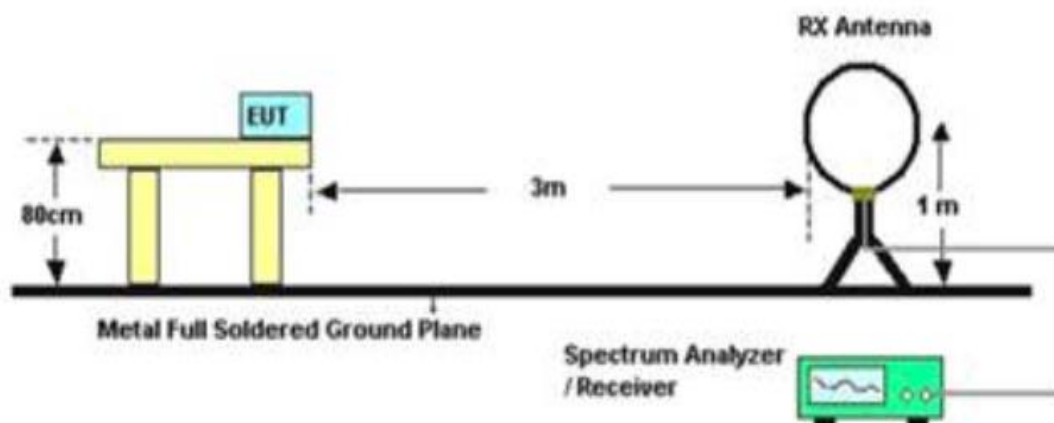
| Receiver Parameter     | Setting                          |
|------------------------|----------------------------------|
| Attenuation            | Auto                             |
| Start ~ Stop Frequency | 9kHz~150kHz / RB 200Hz for QP    |
| Start ~ Stop Frequency | 150kHz~30MHz / RB 9kHz for QP    |
| Start ~ Stop Frequency | 30MHz~1000MHz / RB 120kHz for QP |

## TEST PROCEDURE

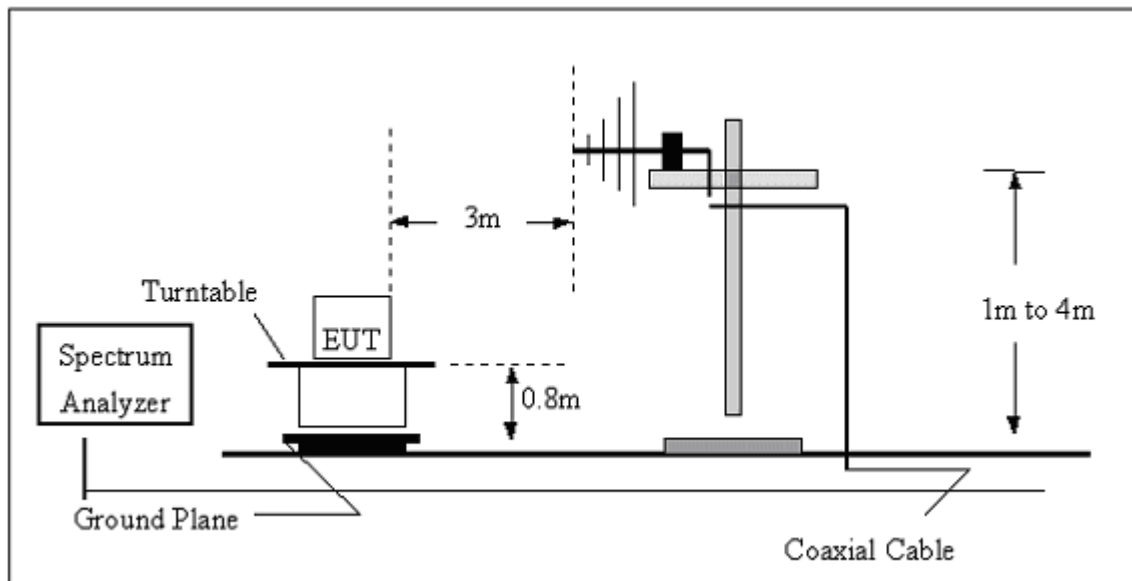
- The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- The EUT was placed on the top of a rotating table 0.8 or 1.5 meters above the ground at a 3 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

## 2 TEST SETUP

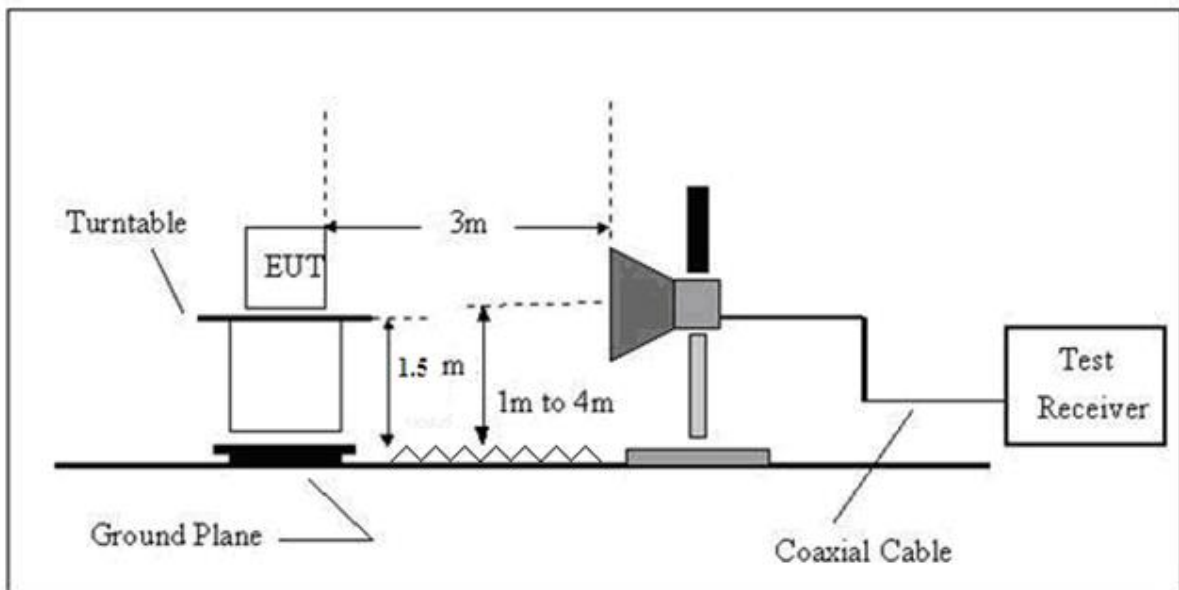
### (A) Radiated Emission Test-Up Frequency Below 30MHz



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



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



### 3 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

## TEST RESULTS

Between 9KHz – 30 MHz

|               |                                       |                     |            |
|---------------|---------------------------------------|---------------------|------------|
| EUT :         | CIRC ASL47 Transmitter CIRC ASL47 遙控器 | Model Name. :       | CIRC ASL47 |
| Temperature : | 24 °C                                 | Relative Humidity : | 54%        |
| Pressure :    | 1010 hPa                              | Test Date :         | 2021-04-27 |
| Test Mode :   | TX                                    | Polarization :      | --         |

| Freq. | Reading  | Limit    | Margin | State |
|-------|----------|----------|--------|-------|
| (MHz) | (dBuV/m) | (dBuV/m) | (dB)   | P/F   |
| --    | --       | --       | --     | N/A   |
| --    | --       | --       | --     | N/A   |

### NOTE:

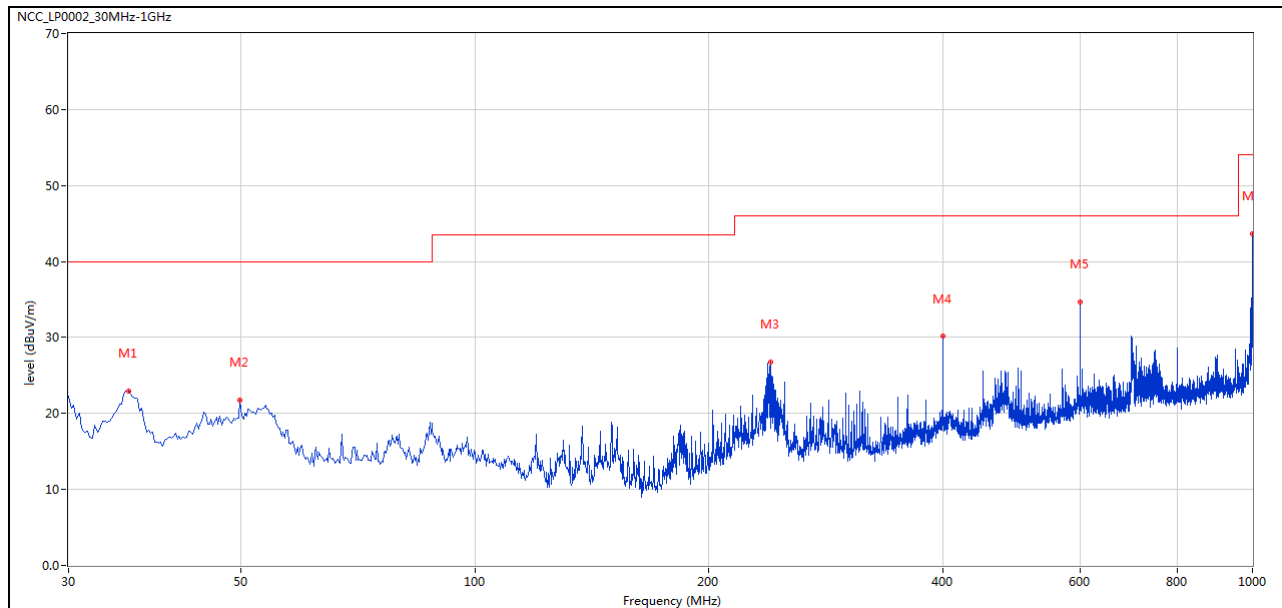
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor =  $40 \log (\text{specific distance/test distance})$ (dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.

## BETWEEN30 – 1000 MHZ

|               |                                       |                     |                     |
|---------------|---------------------------------------|---------------------|---------------------|
| EUT :         | CIRC ASL47 Transmitter CIRC ASL47 遙控器 | Model Name. :       | CIRC ASL47          |
| Temperature : | 26 °C                                 | Relative Humidity : | 56%                 |
| Pressure :    | 1010 hPa                              | Polarization :      | Vertical            |
| Test Mode :   | TX                                    | Test Voltage :      | DC3.7V from battery |
| Test Date :   | 2021-04-27                            |                     |                     |

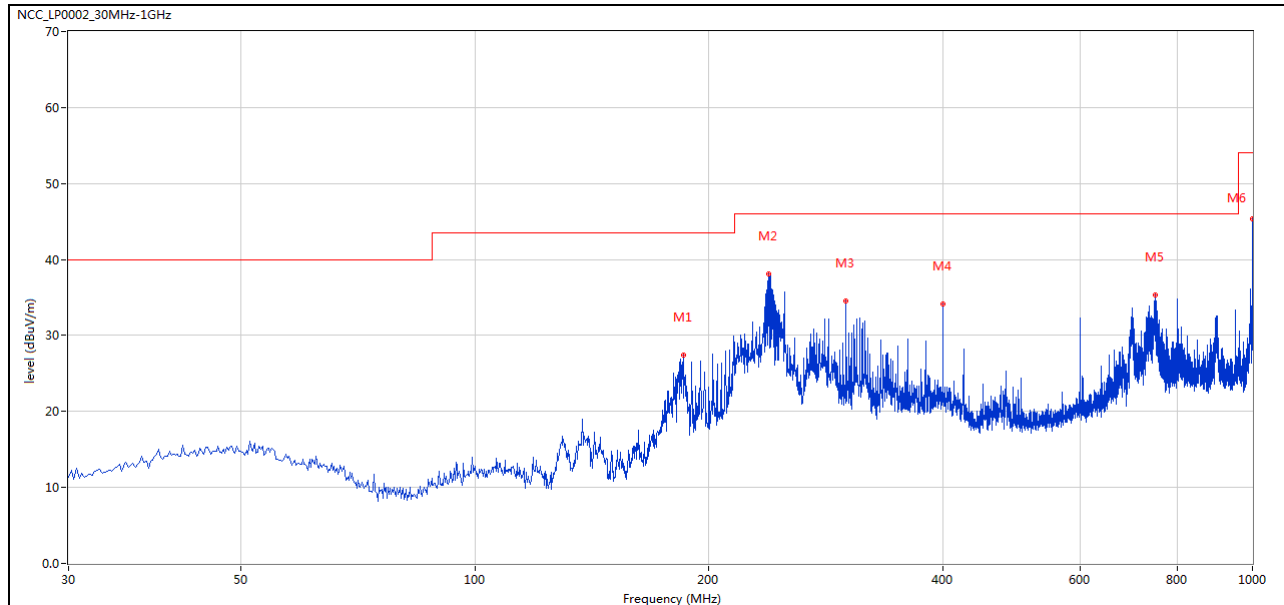


### Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Over Limit (dB) | Detector | ANT      | Verdict |
|-----|-----------------|------------------|-------------|----------------|-----------------|----------|----------|---------|
| 1   | 35.819          | 22.93            | -13.76      | 40.0           | -17.07          | Peak     | Vertical | Pass    |
| 2   | 49.880          | 21.77            | -11.36      | 40.0           | -18.23          | Peak     | Vertical | Pass    |
| 3   | 239.953         | 26.71            | -12.33      | 46.0           | -19.29          | Peak     | Vertical | Pass    |
| 4   | 399.963         | 30.12            | -8.57       | 46.0           | -15.88          | Peak     | Vertical | Pass    |
| 5   | 599.975         | 34.66            | -4.95       | 46.0           | -11.34          | Peak     | Vertical | Pass    |
| 6   | 1000.000        | 43.61            | -1.24       | 54.0           | -10.39          | Peak     | Vertical | Pass    |

|               |                                       |                     |                     |
|---------------|---------------------------------------|---------------------|---------------------|
| EUT :         | CIRC ASL47 Transmitter CIRC ASL47 遙控器 | Model Name. :       | CIRC ASL47          |
| Temperature : | 26 °C                                 | Relative Humidity : | 56%                 |
| Pressure :    | 1010 hPa                              | Polarization :      | Horizontal          |
| Test Mode :   | TX                                    | Test Voltage :      | DC3.7V from battery |
| Test Date :   | 2021-04-27                            |                     |                     |

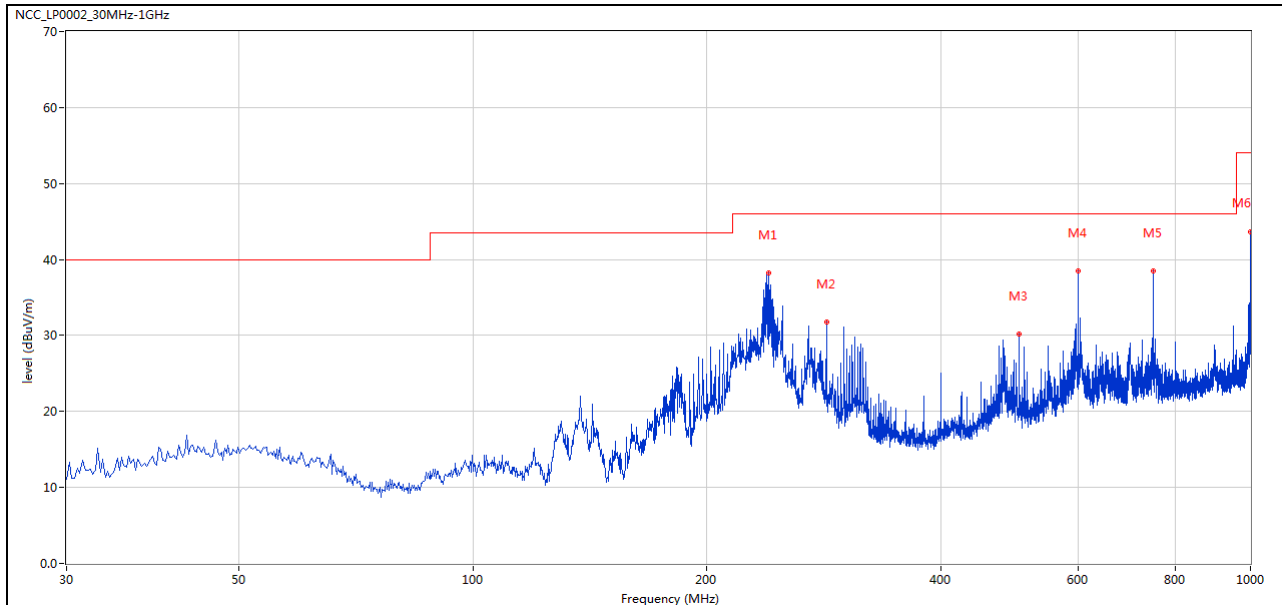


**Remark:**

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Over Limit (dB) | Detector | ANT        | Verdict |
|-----|-----------------|------------------|-------------|----------------|-----------------|----------|------------|---------|
| 1   | 185.161         | 27.45            | -14.90      | 43.5           | -16.05          | Peak     | Horizontal | Pass    |
| 2   | 238.740         | 38.16            | -12.43      | 46.0           | -7.84           | Peak     | Horizontal | Pass    |
| 3   | 299.835         | 34.59            | -11.03      | 46.0           | -11.41          | Peak     | Horizontal | Pass    |
| 4   | 399.963         | 34.10            | -8.57       | 46.0           | -11.90          | Peak     | Horizontal | Pass    |
| 5   | 749.075         | 35.38            | -3.38       | 46.0           | -10.62          | Peak     | Horizontal | Pass    |
| 6   | 1000.000        | 45.41            | -1.24       | 54.0           | -8.59           | Peak     | Horizontal | Pass    |

|               |                                       |                     |            |
|---------------|---------------------------------------|---------------------|------------|
| EUT :         | CIRC ASL47 Transmitter CIRC ASL47 遙控器 | Model Name :        | CIRC ASL47 |
| Temperature : | 24 °C                                 | Relative Humidity : | 54%        |
| Pressure :    | 1010 hPa                              | Test Date :         | 2021-04-27 |
| Test Mode :   | RX                                    | Polarization :      | Horizontal |
| Test Power :  | DC3.7V from battery                   |                     |            |

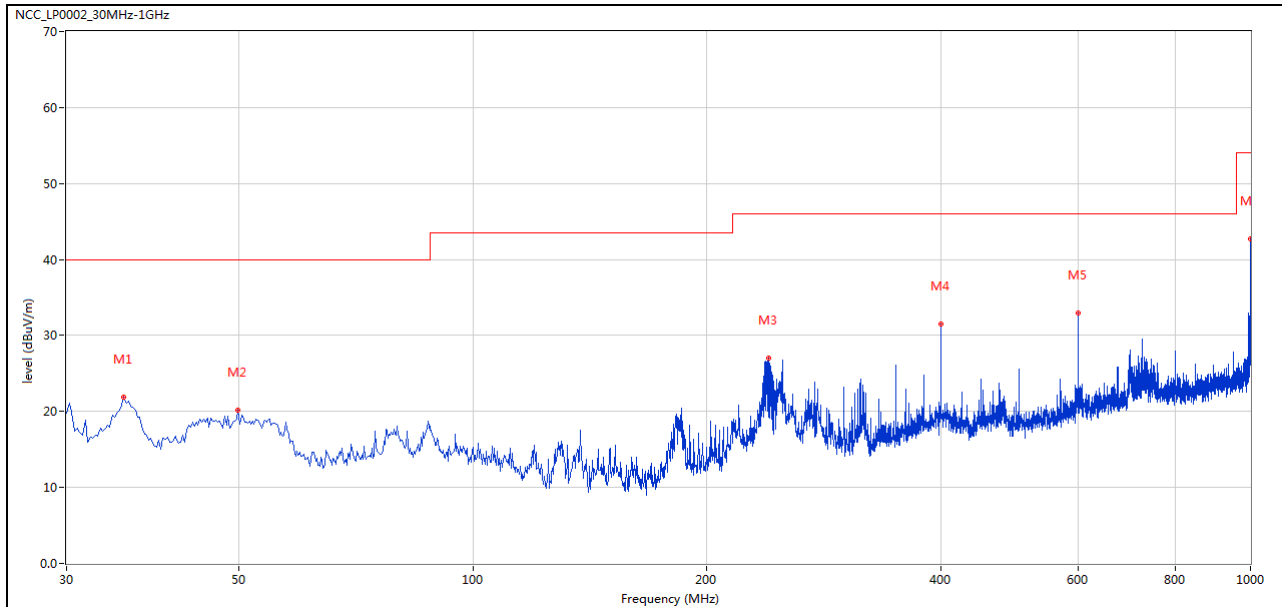


## Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Over Limit (dB) | Detector | ANT        | Verdict |
|-----|-----------------|------------------|-------------|----------------|-----------------|----------|------------|---------|
| 1   | 239.953         | 38.22            | -12.33      | 46.0           | -7.78           | Peak     | Horizontal | Pass    |
| 2   | 284.804         | 31.73            | -11.33      | 46.0           | -14.27          | Peak     | Horizontal | Pass    |
| 3   | 503.969         | 30.17            | -7.05       | 46.0           | -15.83          | Peak     | Horizontal | Pass    |
| 4   | 599.975         | 38.52            | -4.95       | 46.0           | -7.48           | Peak     | Horizontal | Pass    |
| 5   | 750.045         | 38.44            | -3.43       | 46.0           | -7.56           | Peak     | Horizontal | Pass    |
| 6   | 1000.000        | 43.68            | -1.24       | 54.0           | -10.32          | Peak     | Horizontal | Pass    |

|               |                                       |                     |            |
|---------------|---------------------------------------|---------------------|------------|
| EUT :         | CIRC ASL47 Transmitter CIRC ASL47 遙控器 | Model Name :        | CIRC ASL47 |
| Temperature : | 24 °C                                 | Relative Humidity : | 54%        |
| Pressure :    | 1010 hPa                              | Test Date :         | 2021-04-27 |
| Test Mode :   | RX                                    | Polarization :      | Vertical   |
| Test Power :  | DC3.7V from battery                   |                     |            |



## Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

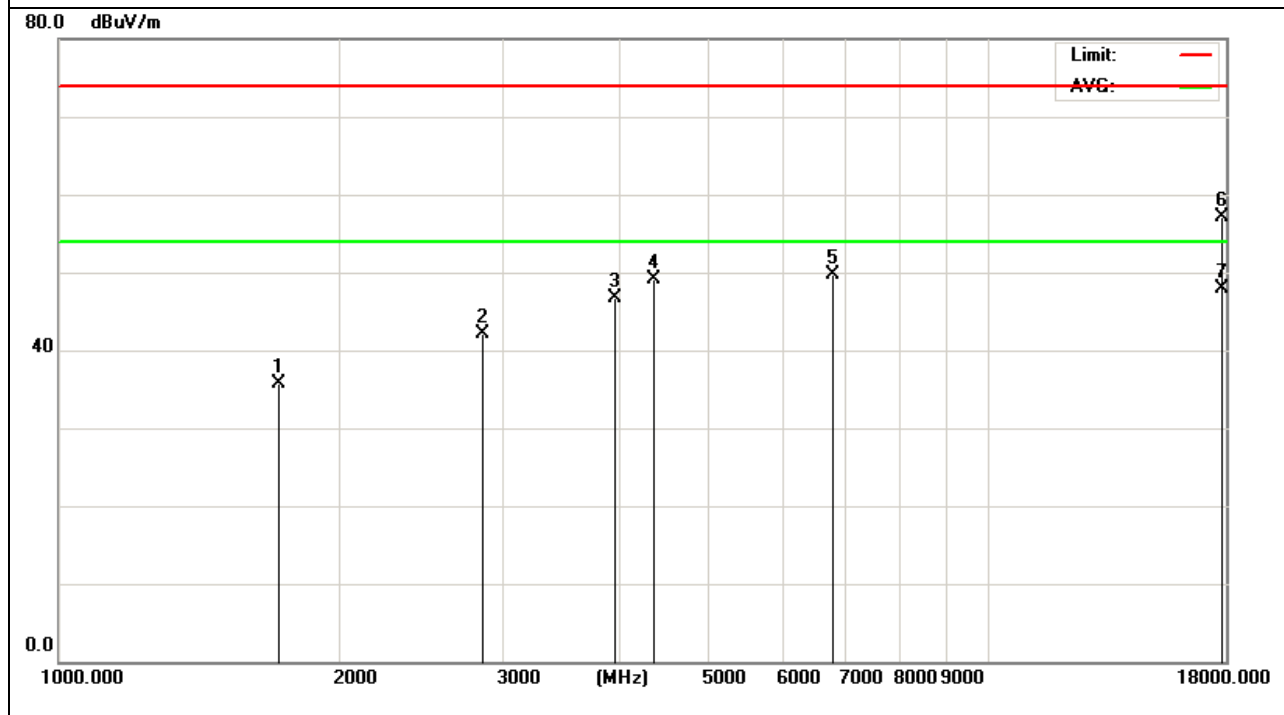
| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Over Limit (dB) | Detector | ANT      | Verdict |
|-----|-----------------|------------------|-------------|----------------|-----------------|----------|----------|---------|
| 1   | 35.576          | 21.95            | -13.84      | 40.0           | -18.05          | Peak     | Vertical | Pass    |
| 2   | 49.880          | 20.16            | -11.36      | 40.0           | -19.84          | Peak     | Vertical | Pass    |
| 3   | 239.953         | 27.02            | -12.33      | 46.0           | -18.98          | Peak     | Vertical | Pass    |
| 4   | 399.963         | 31.48            | -8.57       | 46.0           | -14.52          | Peak     | Vertical | Pass    |
| 5   | 599.975         | 33.02            | -4.95       | 46.0           | -12.98          | Peak     | Vertical | Pass    |
| 6   | 1000.000        | 42.74            | -1.24       | 54.0           | -11.26          | Peak     | Vertical | Pass    |

### 3.2.5 TEST RESULTS (ABOVE 1000 MHZ)

|               |                                       |                     |                     |
|---------------|---------------------------------------|---------------------|---------------------|
| EUT :         | CIRC ASL47 Transmitter CIRC ASL47 遙控器 | Model Name. :       | CIRC ASL47          |
| Temperature : | 26 °C                                 | Relative Humidity : | 56%                 |
| Pressure :    | 1010 hPa                              | Polarization :      | Horizontal          |
| Test Mode :   | TX                                    | Test Voltage :      | DC3.7V from battery |
| Test Date :   | 2021-04-27                            |                     |                     |

| Frequency<br>(MHz) | Meter Reading<br>(dBμV) | Factor<br>(dB) | Emission Level<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) | Detector Type |
|--------------------|-------------------------|----------------|----------------------------|--------------------|----------------|---------------|
| 1725.226           | 45.54                   | -9.55          | 35.99                      | 74.00              | -38.01         | peak          |
| 2849.886           | 44.72                   | -2.61          | 42.11                      | 74.00              | -31.89         | peak          |
| 3952.741           | 43.56                   | 3.5            | 47.06                      | 74.00              | -26.94         | peak          |
| 4364.032           | 44.68                   | 4.46           | 49.14                      | 74.00              | -24.86         | peak          |
| 6779.887           | 43.93                   | 6.04           | 49.97                      | 74.00              | -24.03         | peak          |
| 17754.510          | 32.64                   | 24.85          | 57.49                      | 74.00              | -16.51         | peak          |
| 17754.510          | 23.27                   | 24.85          | 48.12                      | 54.00              | -5.88          | AVG           |

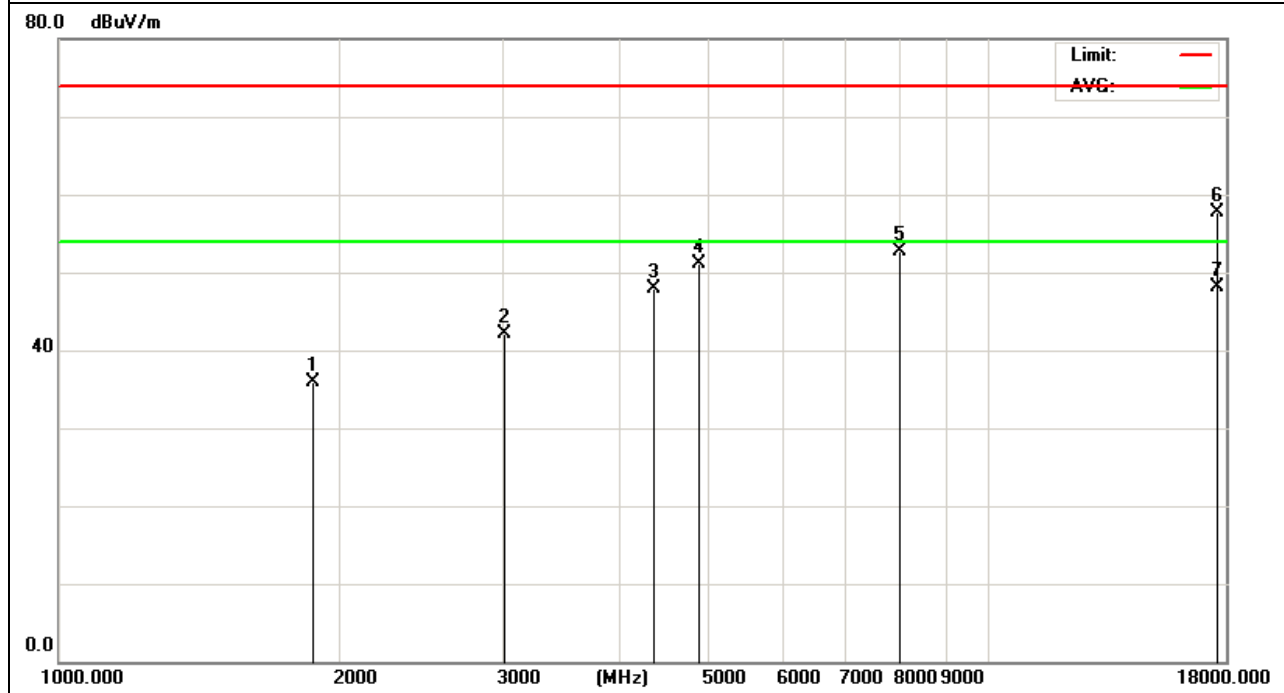
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



|               |                                       |                     |                     |
|---------------|---------------------------------------|---------------------|---------------------|
| EUT :         | CIRC ASL47 Transmitter CIRC ASL47 遙控器 | Model Name. :       | CIRC ASL47          |
| Temperature : | 26 °C                                 | Relative Humidity : | 56%                 |
| Pressure :    | 1010 hPa                              | Polarization :      | Vertical            |
| Test Mode :   | TX                                    | Test Voltage :      | DC3.7V from battery |
| Test Date :   | 2021-04-27                            |                     |                     |

| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|-----------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 1878.852  | 45.94         | -9.48  | 36.46          | 74.00    | -37.54 | peak          |
| 3012.069  | 43.61         | -1.65  | 41.96          | 74.00    | -32.04 | peak          |
| 4356.147  | 43.98         | 4.45   | 48.43          | 74.00    | -25.57 | peak          |
| 4885.404  | 45.84         | 5.14   | 50.98          | 74.00    | -23.02 | peak          |
| 8025.225  | 42.51         | 10.41  | 52.92          | 74.00    | -21.08 | peak          |
| 17555.802 | 32.99         | 24.99  | 57.98          | 74.00    | -16.02 | peak          |
| 17555.802 | 23.53         | 24.99  | 48.52          | 54.00    | -5.48  | AVG           |

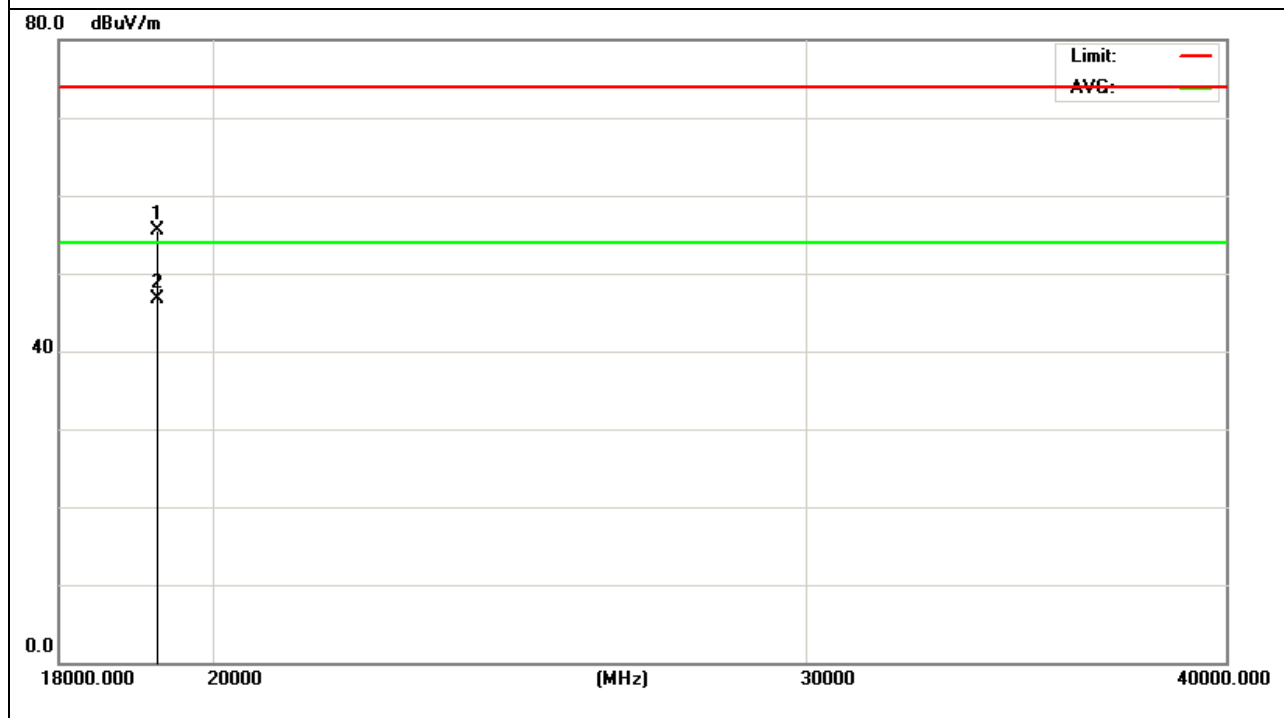
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



|               |                                       |                     |                     |
|---------------|---------------------------------------|---------------------|---------------------|
| EUT :         | CIRC ASL47 Transmitter CIRC ASL47 遙控器 | Model Name. :       | CIRC ASL47          |
| Temperature : | 26 °C                                 | Relative Humidity : | 56%                 |
| Pressure :    | 1010 hPa                              | Polarization :      | Horizontal          |
| Test Mode :   | TX                                    | Test Voltage :      | DC3.7V from battery |
| Test Date :   | 2021-04-27                            |                     |                     |

| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|-----------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 19244.000 | 40.69         | 14.15  | 54.84          | 74.00    | -19.16 | peak          |
| 19244.000 | 32.28         | 14.15  | 46.43          | 54.00    | -7.57  | AVG           |

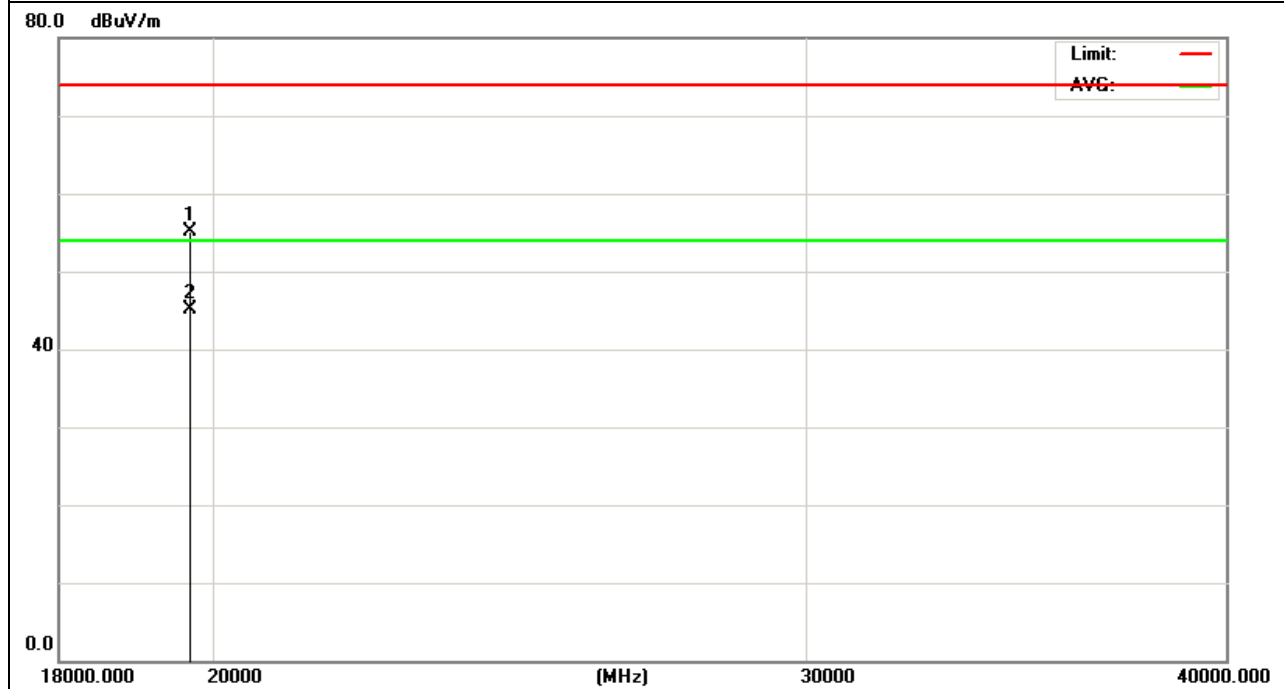
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



|               |                                       |                     |                     |
|---------------|---------------------------------------|---------------------|---------------------|
| EUT :         | CIRC ASL47 Transmitter CIRC ASL47 遙控器 | Model Name. :       | CIRC ASL47          |
| Temperature : | 26 °C                                 | Relative Humidity : | 56%                 |
| Pressure :    | 1010 hPa                              | Polarization :      | Vertical            |
| Test Mode :   | TX                                    | Test Voltage :      | DC3.7V from battery |
| Test Date :   | 2021-04-27                            |                     |                     |

| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|-----------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 19699.000 | 40.11         | 14.82  | 54.93          | 74.00    | -19.07 | peak          |
| 19699.000 | 30.63         | 14.82  | 45.45          | 54.00    | -8.55  | AVG           |

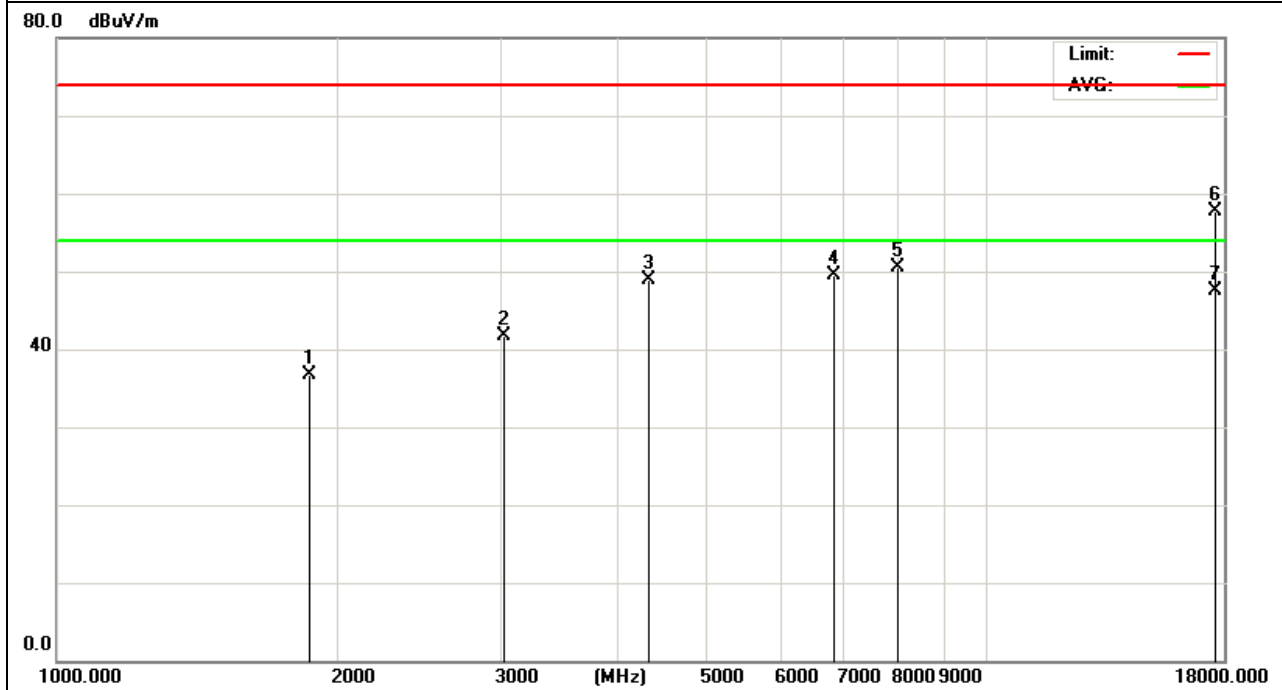
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



|                      |                                       |                     |               |
|----------------------|---------------------------------------|---------------------|---------------|
| EUT :                | CIRC ASL47 Transmitter CIRC ASL47 遙控器 | Model Name :        | CIRC ASL47    |
| Temperature :        | 24 °C                                 | Relative Humidity : | 54%           |
| Pressure :           | 1010 hPa                              | Test Date :         | 2021-04-27    |
| Test Mode :          | RX                                    | Polarization :      | Horizontal    |
| Measurement Distance | 3 m                                   | Frequency Range     | 1GHz to 40GHz |
| Test Power :         | DC3.7V from battery                   |                     |               |

| Frequency<br>(MHz) | Meter Reading<br>(dBμV) | Factor<br>(dB) | Emission Level<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) | Detector Type |
|--------------------|-------------------------|----------------|----------------------------|--------------------|----------------|---------------|
| 1866.536           | 46.13                   | -9.45          | 36.68                      | 74.00              | -37.32         | peak          |
| 3019.552           | 43.66                   | -1.63          | 42.03                      | 74.00              | -31.97         | peak          |
| 4325.042           | 44.78                   | 4.38           | 49.16                      | 74.00              | -24.84         | peak          |
| 6851.023           | 43.58                   | 6.09           | 49.67                      | 74.00              | -24.33         | peak          |
| 8023578            | 40.15                   | 10.41          | 50.56                      | 74.00              | -23.44         | peak          |
| 17599.558          | 32.89                   | 24.97          | 57.86                      | 74.00              | -16.14         | peak          |
| 17599.558          | 22.92                   | 24.97          | 47.89                      | 54.00              | -6.11          | AVG           |

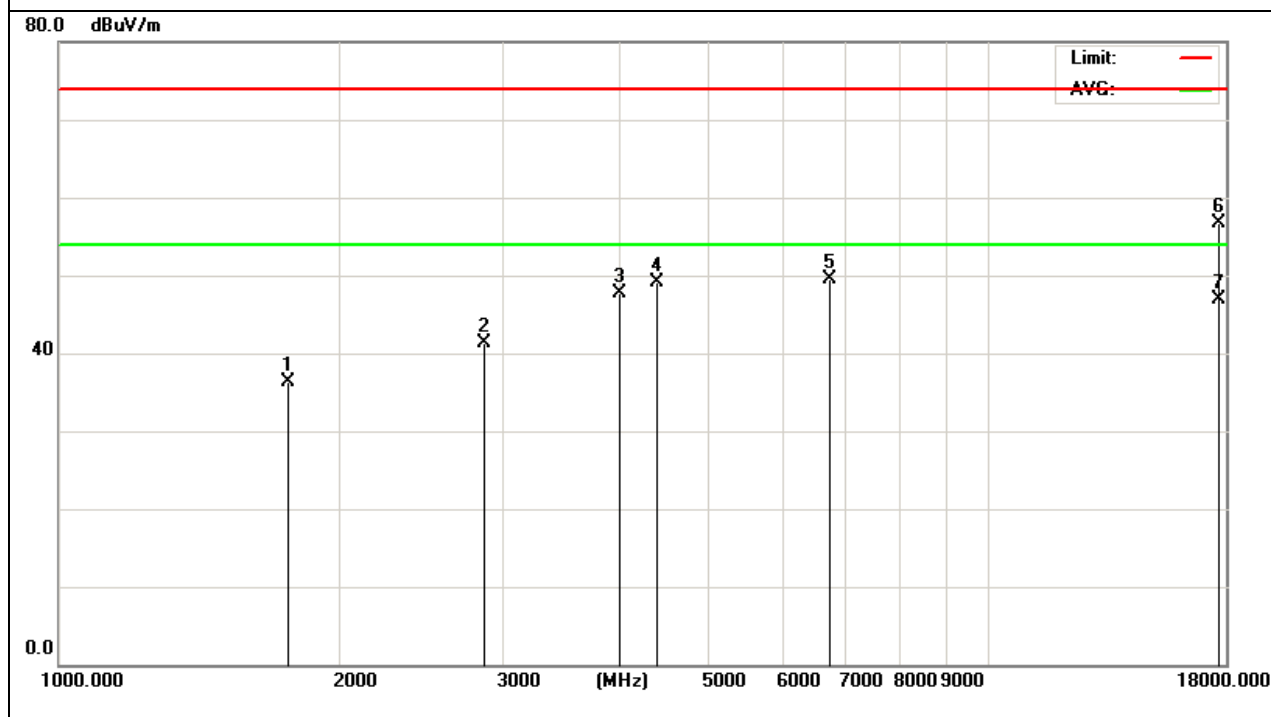
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



|                      |                                       |                     |               |
|----------------------|---------------------------------------|---------------------|---------------|
| EUT :                | CIRC ASL47 Transmitter CIRC ASL47 遙控器 | Model Name :        | CIRC ASL47    |
| Temperature :        | 24 °C                                 | Relative Humidity : | 54%           |
| Pressure :           | 1010 hPa                              | Test Date :         | 2021-04-27    |
| Test Mode :          | RX                                    | Polarization :      | Vertical      |
| Measurement Distance | 3 m                                   | Frequency Range     | 1GHz to 40GHz |
| Test Power :         | DC3.7V from battery                   |                     |               |

| Frequency<br>(MHz) | Meter Reading<br>(dBμV) | Factor<br>(dB) | Emission Level<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) | Detector Type |
|--------------------|-------------------------|----------------|----------------------------|--------------------|----------------|---------------|
| 1765.034           | 46.03                   | -9.45          | 36.58                      | 74.00              | -37.42         | peak          |
| 2863.648           | 43.47                   | -2.55          | 40.92                      | 74.00              | -33.08         | peak          |
| 3996.003           | 44.11                   | 3.80           | 47.91                      | 74.00              | -26.09         | peak          |
| 4384.187           | 44.66                   | 4.50           | 49.16                      | 74.00              | -24.84         | peak          |
| 6756.444           | 43.54                   | 6.01           | 49.55                      | 74.00              | -24.45         | peak          |
| 17654.223          | 32.23                   | 24.92          | 57.15                      | 74.00              | -16.85         | peak          |
| 17654.223          | 22.25                   | 24.92          | 47.17                      | 54.00              | -6.83          | AVG           |

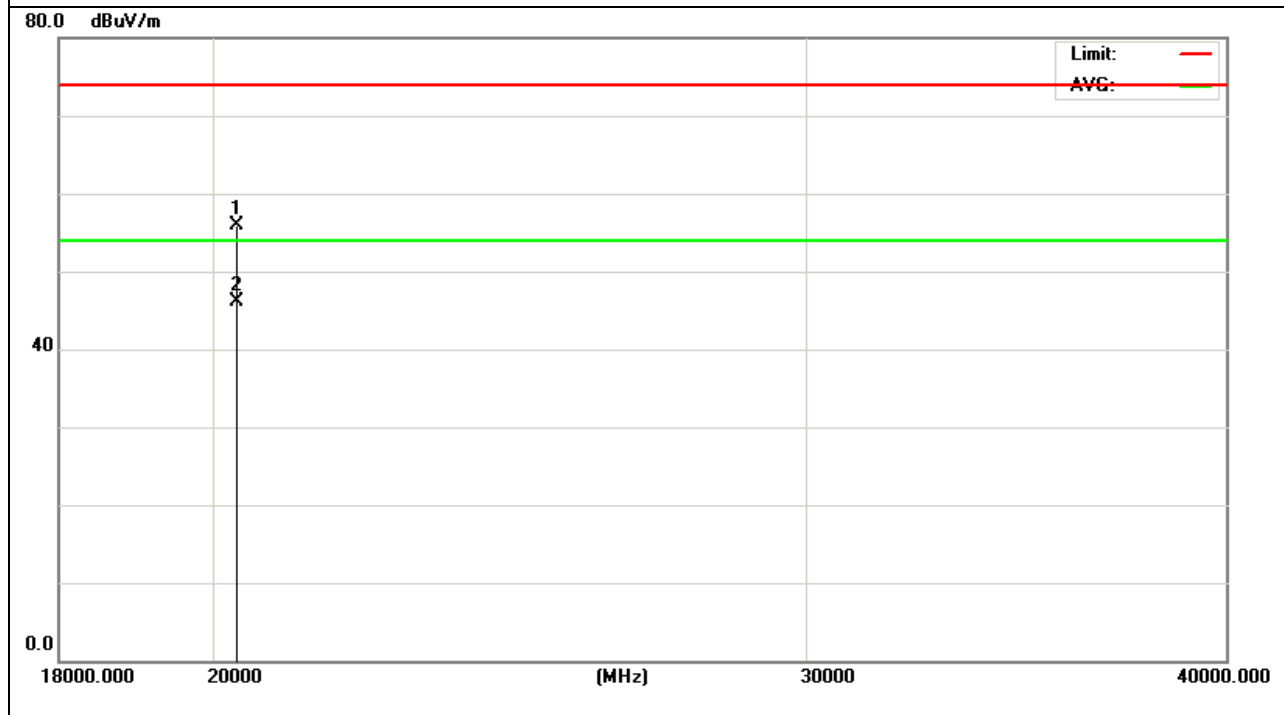
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



|                      |                                       |                     |               |
|----------------------|---------------------------------------|---------------------|---------------|
| EUT :                | CIRC ASL47 Transmitter CIRC ASL47 遙控器 | Model Name :        | CIRC ASL47    |
| Temperature :        | 24 °C                                 | Relative Humidity : | 54%           |
| Pressure :           | 1010 hPa                              | Test Date :         | 2021-04-27    |
| Test Mode :          | RX                                    | Polarization :      | Horizontal    |
| Measurement Distance | 3 m                                   | Frequency Range     | 1GHz to 40GHz |
| Test Power :         | DC3.7V from battery                   |                     |               |

| Frequency<br>(MHz) | Meter Reading<br>(dBμV) | Factor<br>(dB) | Emission Level<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) | Detector Type |
|--------------------|-------------------------|----------------|----------------------------|--------------------|----------------|---------------|
| 20311.000          | 39.64                   | 15.74          | 55.38                      | 74.00              | -18.62         | peak          |
| 20311.000          | 30.85                   | 15.74          | 46.59                      | 54.00              | -7.41          | AVG           |

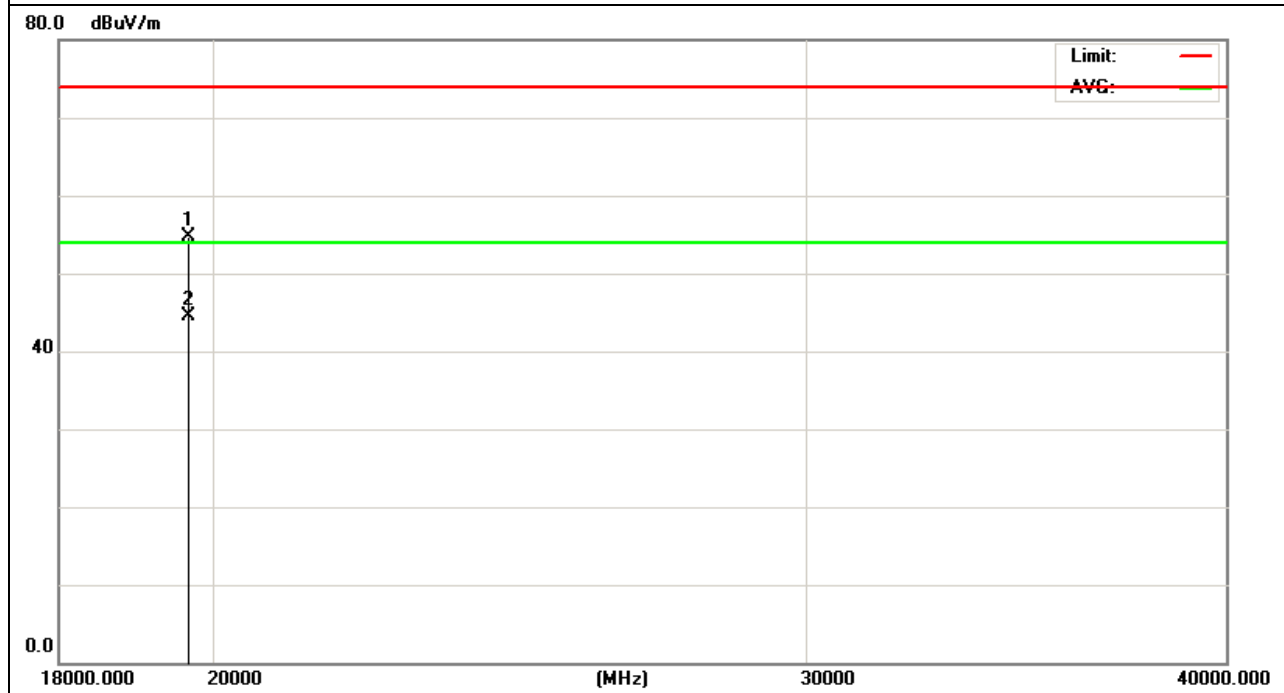
Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



|                      |                                       |                     |               |
|----------------------|---------------------------------------|---------------------|---------------|
| EUT :                | CIRC ASL47 Transmitter CIRC ASL47 遙控器 | Model Name :        | CIRC ASL47    |
| Temperature :        | 24 °C                                 | Relative Humidity : | 54%           |
| Pressure :           | 1010 hPa                              | Test Date :         | 2021-04-27    |
| Test Mode :          | RX                                    | Polarization :      | Vertical      |
| Measurement Distance | 3 m                                   | Frequency Range     | 1GHz to 40GHz |
| Test Power :         | DC3.7V from battery                   |                     |               |

| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|-----------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 19655.000 | 39.51         | 14.76  | 54.27          | 74.00    | -19.73 | peak          |
| 19655.000 | 29.48         | 14.76  | 44.24          | 54.00    | -9.76  | AVG           |

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.



Note: 10~25GHz any other emissions at least have 20dB margin. No recording in the test report

**TEST RESULTS (Restricted Bands Requirements)**

Because the mentioned conditions the Fundamental Frequency Range was far away from the restricted bands in the table published in 15.205, the test is not applicable.

## 4 . OCCUPIED BANDWIDTH TEST

### 4.1 Applied procedures / limit

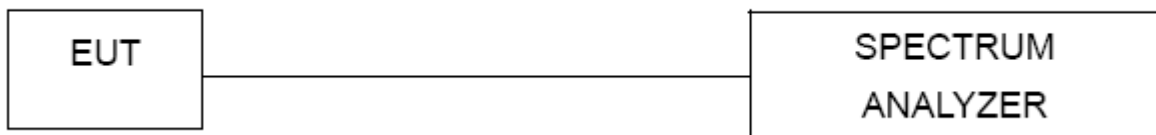
| LP0002  |           |                                         |                       |        |
|---------|-----------|-----------------------------------------|-----------------------|--------|
| Section | Test Item | Limit                                   | Frequency Range (MHz) | Result |
| 4.7.5   | Bandwidth | $\geq 500\text{kHz}$<br>(6dB bandwidth) | 5725-5825             | PASS   |

| Spectrum Parameter | Setting                                         |
|--------------------|-------------------------------------------------|
| Attenuation        | Auto                                            |
| Span Frequency     | $>$ Measurement Bandwidth or Channel Separation |
| RB                 | 100 kHz                                         |
| VB                 | 300 kHz                                         |
| Detector           | Peak                                            |
| Trace              | Max Hold                                        |
| Sweep Time         | Auto                                            |

### 4.2 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- Spectrum Setting : RBW= 100kHz, VBW=300kHz, Sweep time = Auto.

### 4.3 TEST SETUP



### 4.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

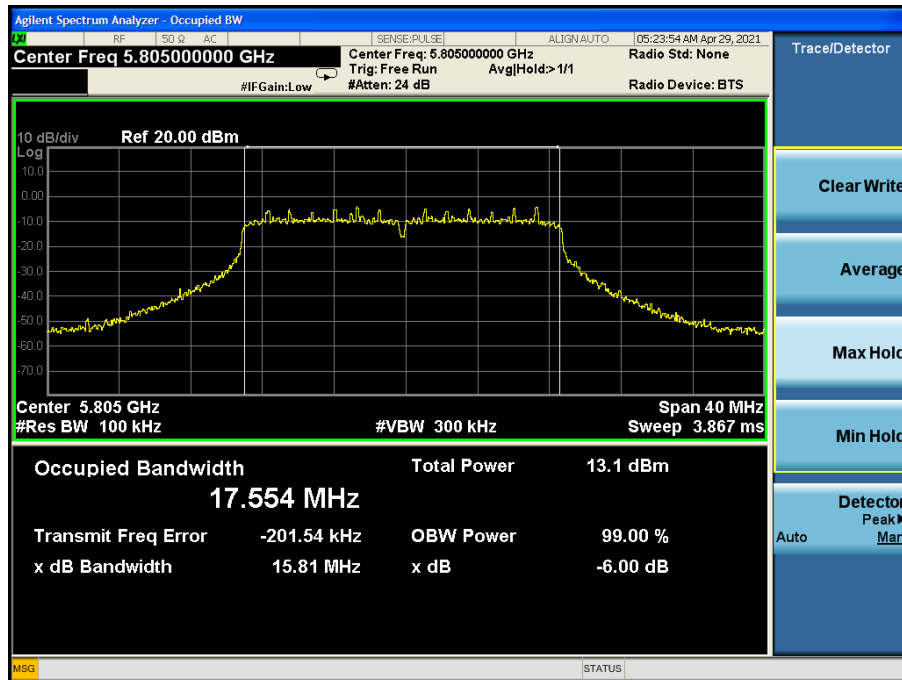
## 4.5 TEST RESULTS

|               |                                       |                     |                     |
|---------------|---------------------------------------|---------------------|---------------------|
| EUT :         | CIRC ASL47 Transmitter CIRC ASL47 遙控器 | Model Name :        | CIRC ASL47          |
| Temperature : | 25 °C                                 | Relative Humidity : | 56%                 |
| Pressure :    | 1010 hPa                              | Test Voltage :      | DC3.7V from battery |
| Test Mode :   | TX                                    |                     |                     |
| Test Date :   | 2021-04-29                            |                     |                     |

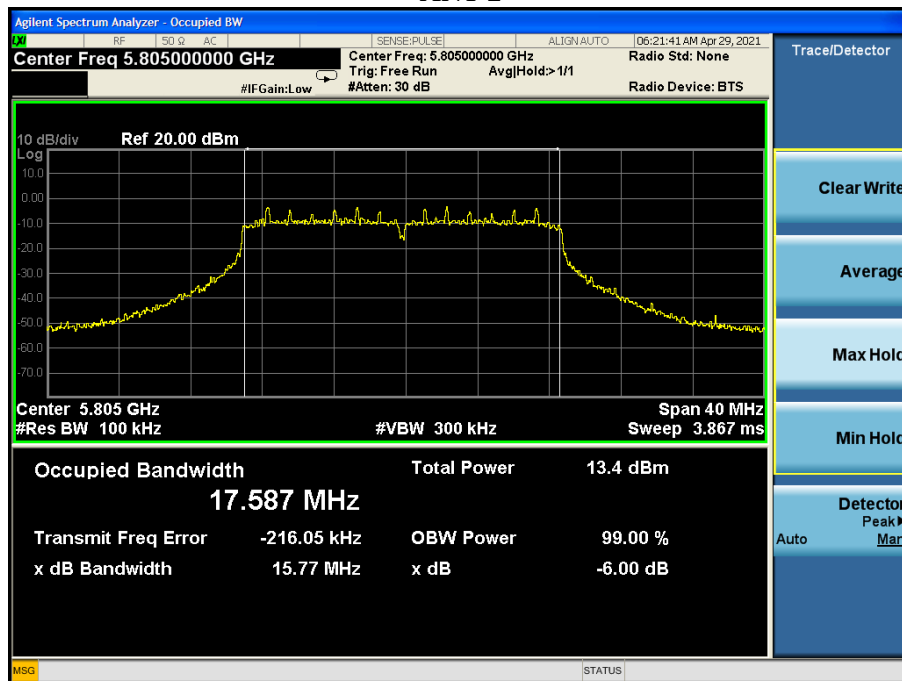
| Frequency | 6dB Bandwidth (MHz) | Limit ( kHz ) | Result |
|-----------|---------------------|---------------|--------|
| ANT1      |                     |               |        |
| 5805      | 15.81               | $\geq 500$    | Pass   |
| ANT2      |                     |               |        |
| 5805      | 15.77               | $\geq 500$    | Pass   |

## 6dB bandwidth

### ANT 1



### ANT 2



## 5 . POWER DENSITY

### 5.1 Applied procedures / limit

| LP0002  |               |       |                       |        |
|---------|---------------|-------|-----------------------|--------|
| Section | Test Item     | Limit | Frequency Range (MHz) | Result |
| 4.7.3.3 | Power density | 30dBm | 5725-5850             | PASS   |

| Spectrum Parameters | Setting                     |
|---------------------|-----------------------------|
| Attenuation         | Auto                        |
| Span Frequency      | > Operating Frequency Range |
| RB                  | 510 kHz                     |
| VB                  | 2 MHz                       |
| Detector            | Peak                        |
| Trace               | Max Hold                    |
| Sweep Time          | Auto                        |

### 5.2 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- Spectrum Setting : RBW= 510kHz, VBW=2MHz, Detector= Peak, Trace=Max Hold.

### 5.3 TEST SETUP



### 5.4 EUT OPERATION CONDITIONS

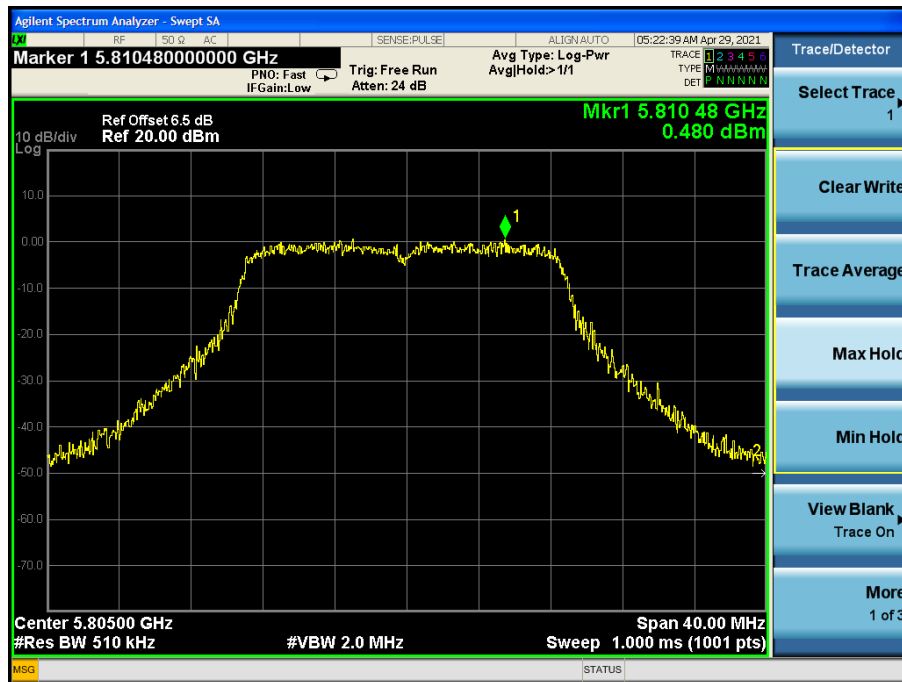
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

## 5.5 TEST RESULTS

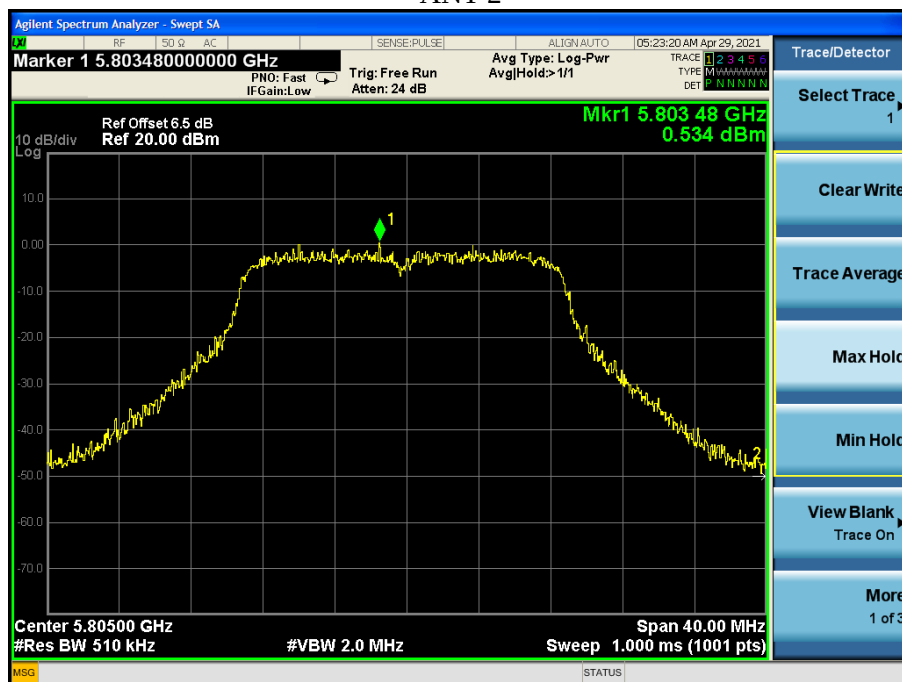
|               |                                       |                     |                     |
|---------------|---------------------------------------|---------------------|---------------------|
| EUT :         | CIRC ASL47 Transmitter CIRC ASL47 遙控器 | Model Name :        | CIRC ASL47          |
| Temperature : | 25 °C                                 | Relative Humidity : | 56%                 |
| Pressure :    | 1010 hPa                              | Test Voltage :      | DC3.7V from battery |
| Test Mode :   | TX                                    |                     |                     |
| Test Date :   | 2021-04-29                            |                     |                     |

| Frequency | Power Density (MHz) | Limit ( kHz ) | Result |
|-----------|---------------------|---------------|--------|
| ANT1      |                     |               |        |
| 5805      | 0.480               | 30            | Pass   |
| ANT2      |                     |               |        |
| 5805      | 0.534               | 30            | Pass   |

ANT 1



ANT 2



## 6 . OUTPUT POWER TEST

### 6.1 Applied procedures / limit

| LP0002  |                   |                |                       |        |
|---------|-------------------|----------------|-----------------------|--------|
| Section | Test Item         | Limit          | Frequency Range (MHz) | Result |
| 4.7.3.3 | Peak Output Power | 1 watt (30dBm) | 5725-5850             | PASS   |

### 6.2 TEST PROCEDURE

- a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,

### 6.3 DEVIATION FROM STANDARD

No deviation.

### 6.4 TEST SETUP



### 6.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

## 6.6 TEST RESULTS

|               |                                       |                     |                     |
|---------------|---------------------------------------|---------------------|---------------------|
| EUT :         | CIRC ASL47 Transmitter CIRC ASL47 遙控器 | Model Name :        | CIRC ASL47          |
| Temperature : | 25 °C                                 | Relative Humidity : | 56%                 |
| Pressure :    | 1010 hPa                              | Test Voltage :      | DC3.7V from battery |
| Test Mode :   | TX                                    |                     |                     |
| Test Date :   | 2021-04-29                            |                     |                     |

| Frequency | Output Power (dBm) | Limit ( kHz ) | Result |
|-----------|--------------------|---------------|--------|
| ANT1      |                    |               |        |
| 5805      | 15.42              | 30            | Pass   |
| ANT2      |                    |               |        |
| 5805      | 15.13              | 30            | Pass   |

## 7 . ANTENNA CONDUCTED SPURIOUS EMISSION

### 7.1 Applied procedures / limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the modulation products of the spreading sequence, the information sequence and the carrier frequency shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power or shall not exceed the general levels specified in Section 3.6.

| Frequencies (MHz) | Field Strength (micровolts/meter) | Measurement Distance (meters) |
|-------------------|-----------------------------------|-------------------------------|
| 0.009~0.490       | 2400/F(kHz)                       | 300                           |
| 0.490~1.705       | 24000/F(kHz)                      | 30                            |
| 1.705~30.0        | 30                                | 30                            |
| 30~88             | 100                               | 3                             |
| 88~216            | 150                               | 3                             |
| 216~960           | 200                               | 3                             |
| Above 960         | 500                               | 3                             |

### 7.2 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- Spectrum Setting : RBW= 1000kHz, VBW=1000kHz, Sweep time = Auto.

### 7.3 TEST SETUP



### 7.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

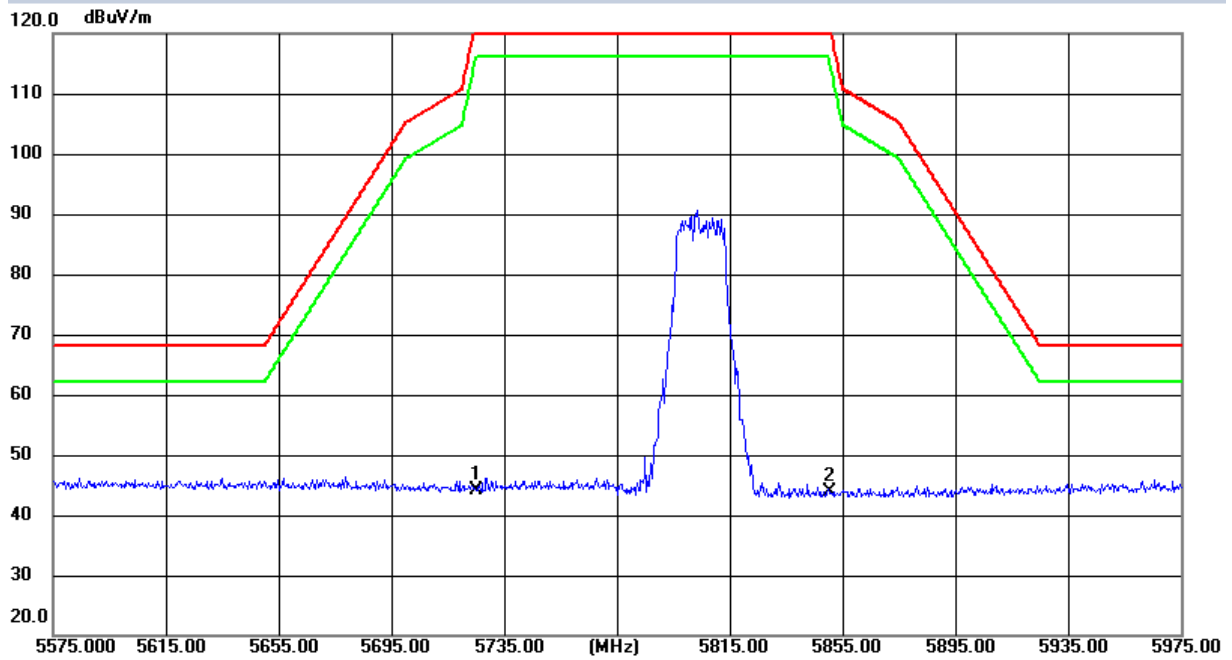
## 7.5 TEST RESULTS

|               |                                                                                                                                                                                                         |                     |                     |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|
| EUT :         | CIRC ASL47 Transmitter CIRC ASL47 遙控器                                                                                                                                                                   | Model Name :        | CIRC ASL47          |
| Temperature : | 25 °C                                                                                                                                                                                                   | Relative Humidity : | 56%                 |
| Pressure :    | 1010 hPa                                                                                                                                                                                                | Test Voltage :      | DC3.7V from battery |
| Test Mode :   | TX                                                                                                                                                                                                      |                     |                     |
| Test Date :   | 2021-04-27                                                                                                                                                                                              |                     |                     |
| Note :        | In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power. |                     |                     |

| Freq.<br>(MHz) | Ant.Pol.<br>H/V | Reading<br>(dBuv) | Ant/CF<br>(dB) | Act<br>(dBuv/m) | Limit<br>(dBuv/m) |
|----------------|-----------------|-------------------|----------------|-----------------|-------------------|
| 5725.000       | V               | 39.50             | 3.95           | 43.45           | 122.20            |
| 5850.000       | V               | 39.35             | 3.96           | 43.31           | 122.20            |
| 5725.000       | H               | 40.26             | 3.95           | 44.21           | 122.20            |
| 5850.000       | H               | 40.00             | 3.96           | 43.96           | 122.20            |

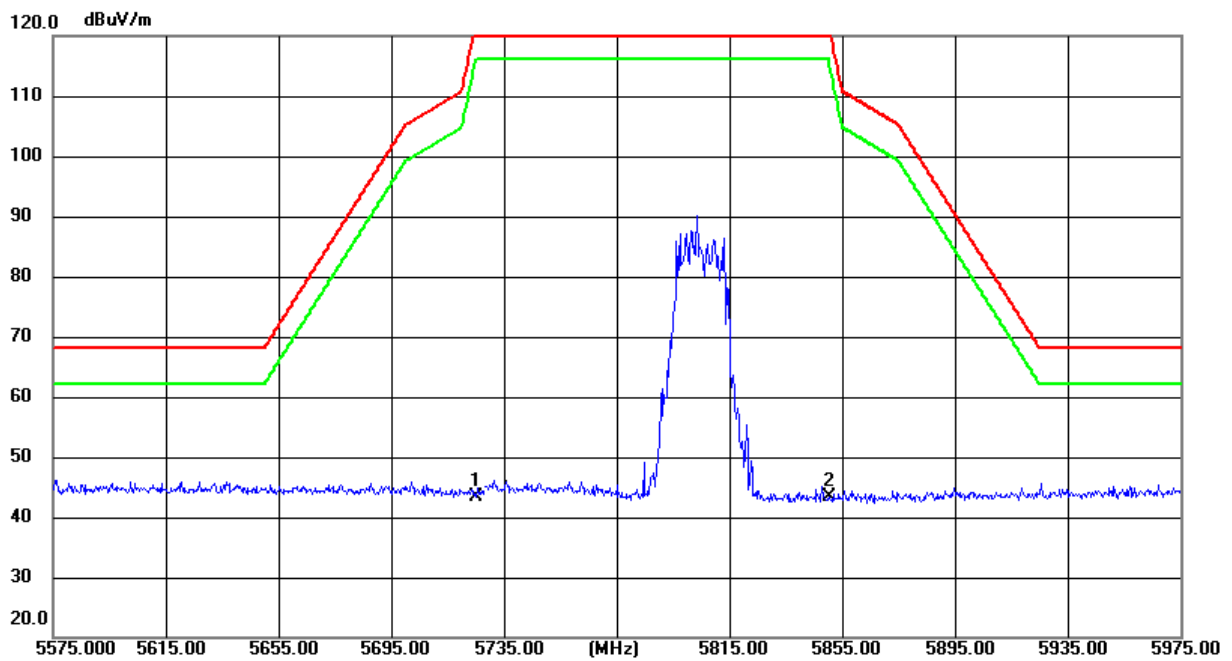
Detector mode: Peak

Polarity: Vertical



Detector mode: Peak

Polarity: Horizontal



## 8. ANTENNA REQUIREMENT

### 8.1 Standard requirement

4.10.3.1.1 requirement: Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

### 8.2 EUT Antenna

The antenna is External Antenna and no consideration of replacement. Antenna max. gain refer to page 9.

## 9. EUT TEST PHOTO

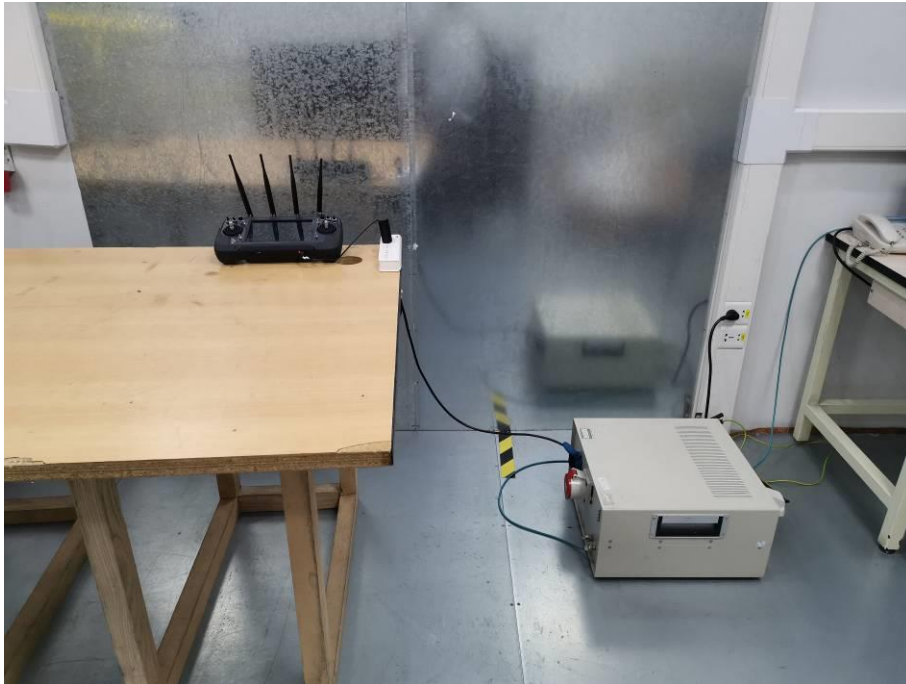
Radiated Measurement Photos  
30MHz-1GHz



Radiated Measurement Photos  
Above 1GHz



## Conducted Measurement Photos



## 10 . APPENDIX-Photographs of EUT Constructional Details

Please refer to report APPENDIX.

**\*\* End of Report \*\***