

Test Report

Verified code: 662644

Report No.: E20221227602901-3

Customer: Lumi United Technology Co., Ltd

Address: B1, Chongwen Park, Nanshan iPark, Liuxian Avenue, Taoyuan Residential District,
Nanshan District, Shenzhen, China

Sample Name: Camera Hub G3

Sample Model: CH-H03

Receive Sample
Test Date: Jan.05,2023

Test Date: Jan.12,2023 ~ Jan.12,2023

Reference
Document: CFR 47 FCC Part 15 Subpart C
RADIO FREQUENCY DEVICES:Subpart C—Intentional Radiators
§15.247 Radiated spurious emissions

Test Result: Pass

Prepared by: *Wen Wang*

Reviewed by: *Wu Xing*

Approved by: *Zhao Zetian*

GRG METROLOGY & TEST GROUP CO., LTD

Issued Date: 2023-04-14

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TABLE OF CONTENTS

| | | |
|-----|---|----|
| 1. | TEST RESULT SUMMARY | 6 |
| 2. | GENERAL DESCRIPTION OF EUT | 7 |
| 2.1 | APPLICANT | 7 |
| 2.2 | MANUFACTURER | 7 |
| 2.3 | BASIC DESCRIPTION OF EQUIPMENT UNDER TEST | 7 |
| 2.4 | CHANNEL LIST | 8 |
| 2.5 | TEST OPERATION MODE | 8 |
| 2.6 | LOCAL SUPPORTIVE | 8 |
| 2.7 | CONFIGURATION OF SYSTEM UNDER TEST | 8 |
| 3. | LABORATORY | 9 |
| 4. | ACCREDITATIONS | 9 |
| 5. | MEASUREMENT UNCERTAINTY | 10 |
| 6. | LIST OF USED TEST EQUIPMENT AT GRGT | 11 |
| 7. | RADIATED SPURIOUS EMISSIONS | 12 |
| 7.1 | LIMITS | 12 |
| 7.2 | TEST PROCEDURES | 12 |
| 7.3 | TEST SETUP | 15 |
| 7.4 | DATA SAMPLE | 16 |
| 7.5 | TEST RESULTS | 17 |
| | APPENDIX A. PHOTOGRAPH OF THE TEST CONNECTION DIAGRAM | 23 |
| | APPENDIX B. PHOTOGRAPH OF THE EUT | 23 |

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REPORT ISSUED HISTORY

| Report Version | Report No. | Description | Compile Date |
|----------------|-------------------|----------------|--------------|
| 1.0 | E20221227602901-3 | Original Issue | 2023-03-13 |

The applicant declared that the model CH-H03 comparison before and after the change as below:
The 802.11n HT40 mode of the 2.4G Wi-Fi module has been deleted for this model, as well as other modification information in the following table. There are corresponding changes to the circuit schematic and PCB layout, but this will not affect the RF performance test results. For details, see the following table:

| The Original model | | The New model | |
|--|---|------------------------|--|
| Change 1. Parameter before change | Bit number C160 is vacant | Parameter after Change | Add C160 capacitor, capacity : 12pF |
| Change 2. Add components | 1.R97 location as shown below 2.R17, C158, and C159 are empty as shown below 3.R34 is another name on the motherboard, under the camera | Parameter after Change | 1.Move bit number R97 position 2.Move bit number R34 position 3.Add resistor R17=120R, capacitor C158=27pF, C159=27pF |
| Change 3. Change component parameters (Change pcba: usb small version) | bit number: L1 (resistor) Parameter: 0R (usb small version) | Parameter after Change | bit number: L1 (magnetic bead) Parameter: magnetic bead value: 100MHz@120ohm magnetic beads (usb small version) |
| Change 4. Parameter before change (U1 added one replacement suppliers) | bit number: U1 parameter: 2.8V~30V\1MHz\2A\0.6mA\SOT23-6 SILERGY SY7200AABC | Parameter after Change | bit number: U1 A:parameter: 2.8V~30V\1MHz\2A\0.6mA\SOT23-6 SILERGY SY7200AABC B: parameter: 2.7~6V\60mA\0.8MHz\1A\SOT23-6 ETA ETA1617S2G |

| | | | |
|--|--|---------------------------|---|
| Change 5. Parameter before change | Bit number U6 is FORESEE/FS35ND02G-S3Y2QWFI000 | Parameter after Change | Bit number U6 is 1.ESMT/F50L2G41XA -104YG2B or 2.Winbond/W25N02KVZEIR |
| Change 6. Add components | Bit number U19 is HDSC/HC32F005C6UA | Parameter after Change | Bit number U19 is Cmsemicon/CMS32L031QN20 |
| Change 7. Change component parameters (Change pcba: usb small version) | 1.Bit number U18 is SmartSens/SC3335 2.Bit number U12 is 1.2V LDO | Parameter after Change | 1.Bit number U18 is SmartSens/SC3338 2.Bit number U12 is vacant |
| Change 8. Software Version | 3.2.8_0003.0004 | Parameter after Change | V3.5.2_0010.0004 |

Note: According to the difference declared letter by applicant, after evaluated only the Radiated Spurious Emission 30MHz to 1GHz test data need tested and revised, all other test data please refer to the report E20210426746801-10 issue on 2021-09-04.

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1. TEST RESULT SUMMARY

| Technical Requirements | | |
|--|-----------------------------|--------|
| CFR 47 FCC Part 15 Subpart C (§15.247) | | |
| Limit / Severity | Item | Result |
| §15.209 | Radiated spurious emissions | Pass |

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2. GENERAL DESCRIPTION OF EUT


2.1 APPLICANT

Name: Lumi United Technology Co., Ltd
Address: B1, Chongwen Park, Nanshan iPark, Liuxian Avenue, Taoyuan Residential District, Nanshan District, Shenzhen, China

2.2 MANUFACTURER

Name: Lumi United Technology Co., Ltd
Address: B1, Chongwen Park, Nanshan iPark, Liuxian Avenue, Taoyuan Residential District, Nanshan District, Shenzhen, China

2.3 BASIC DESCRIPTION OF EQUIPMENT UNDER TEST

Equipment: Camera Hub G3
Model No.: CH-H03
Adding Model: /
Trade Name: Aqara
FCC ID: 2AKIT-CHH03
Power Supply: DC5V power supplied by adapter
Adapter Specification: Model:A8A-050200U-US1
Input:100-240V~ 50/60Hz 0.35A
Output:5.0V  2.0A
Frequency Range: 2405MHz-2475MHz
Transmit Power: 7.58dBm
Modulation type: OQPSK
Antenna Specification: Internal antenna 2dBi gain (Max.)
Temperature Range: -10℃~40℃
Hardware Version: A20-GHC01-MIAN-X4
Software Version: V3.5.2_0010.0004
Sample No: E20221227602901-0002
Note: /

2.4 CHANNEL LIST

| Channel No. | Frequency (MHz) | Channel No. | Frequency (MHz) | Channel No. | Frequency (MHz) | Channel No. | Frequency (MHz) |
|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|
| 11 | 2405 | 12 | 2410 | 13 | 2415 | 14 | 2420 |
| 15 | 2425 | 16 | 2430 | 17 | 2435 | 18 | 2440 |
| 19 | 2445 | 20 | 2450 | 21 | 2455 | 22 | 2460 |
| 23 | 2465 | 24 | 2470 | 25 | 2475 | / | / |

2.5 TEST OPERATION MODE

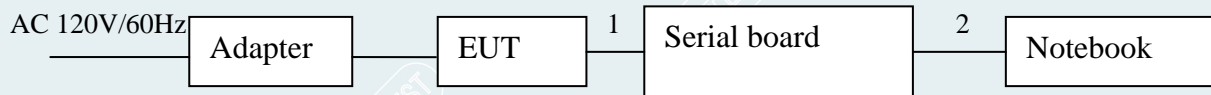
| Test Item | Mode No. | Description of the modes |
|-------------------|----------|-------------------------------------|
| Radiated Emission | 1 | Zigbee fixed frequency transmitting |

2.6 LOCAL SUPPORTIVE

| Name of Equipment | Manufacturer | Model | Serial Number | Note |
|-------------------|--------------|---------------------|---------------|------|
| Notebook | LENOVO | TianYi 310-14ISK | MP18DLC6 | / |
| Serial board | / | / | / | / |

| No. | Cable Type | Qty. | Shielded Type | Ferrite Core(Qty.) | Length |
|-----|------------|------|---------------|--------------------|--------|
| 1 | DC Cable | 1 | No | 0 | 1.0m |
| 2 | USB Cable | 1 | No | 0 | 1.5m |

2.7 CONFIGURATION OF SYSTEM UNDER TEST



Test software:

| Software version | Test level |
|------------------|------------|
| QCOM_V1.0 | 80 |

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3. LABORATORY

The tests & measurements refer to this report were performed by Shenzhen EMC Laboratory of GRG METROLOGY & TEST GROUP CO., LTD.

Add : Address: No.1301 Guanguang Road Xinlan Community, Guanlan Street, Longhua
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P.C. : 518110

Tel : 0755-61180008

Fax : 0755-61180008

4. ACCREDITATIONS

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025:2017.

USA A2LA(Certificate #2861.01)

The measuring facility of laboratories has been authorized or registered by the following approval agencies.

Canada ISED (Company Number: 24897, CAB identifier:CN0069)

USA FCC (Registration Number: 759402, Designation Number:CN1198)

Copies of granted accreditation certificates are available for downloading from our web site,
<http://www.grgtest.com>

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5. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

| Measurement | | Frequency | Uncertainty |
|-------------------|------------|----------------|---------------------|
| Radiated Emission | Horizontal | 30MHz~200MHz | 4.5dB ¹⁾ |
| | | 200MHz~1000MHz | 4.4dB ¹⁾ |
| | Vertical | 30MHz~200MHz | 4.4dB ¹⁾ |
| | | 200MHz~1000MHz | 4.5dB ¹⁾ |

| Measurement | Uncertainty |
|--------------|----------------------|
| RF frequency | 6.0×10^{-6} |
| Humidity | 6% |
| Temperature | 2°C |

Note:

¹⁾ This uncertainty represents an expanded uncertainty expressed at approximately the 95%.
This uncertainty represents an expanded uncertainty factor of $k=2$.

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6. LIST OF USED TEST EQUIPMENT AT GRGT

| Name of Equipment | Manufacturer | Model | Serial Number | Calibration Due |
|---|--------------|----------|---------------|-----------------|
| Radiated Spurious Emission(30MHz-1GHz) | | | | |
| Test S/W | EZ | CCS-03A1 | / | / |
| Test Receiver | R&S | ESR7 | 102444 | 2023-09-02 |
| Preamplifier | EMEC | EM330 | I00426 | 2023-03-05 |
| Bi-log Antenna | TESEQ | CBL6143A | 26039 | 2024-10-23 |

Note: The calibration cycle of the above instruments is 12 months except for the Bi-log Antenna which is 24 months.

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7. RADIATED SPURIOUS EMISSIONS

7.1 LIMITS

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator 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, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required.

| Frequency (MHz) | Quasi-peak($\mu\text{V/m}$) | Measurement distance(m) | Quasi-peak(dB $\mu\text{V/m}$)@distance 3m |
|-----------------|-------------------------------|-------------------------|---|
| 0.009-0.490 | 2400/F(kHz) | 300 | 128.5~93.8 |
| 0.490-1.705 | 24000/F(kHz) | 30 | 73.8~63 |
| 1.705-30.0 | 30 | 30 | 69.5 |
| 30~88 | 100 | 3 | 40 |
| 88~216 | 150 | 3 | 43.5 |
| 216~960 | 200 | 3 | 46 |
| Above 960 | 500 | 3 | 54 |

NOTE: (1) The lower limit shall apply at the transition frequencies.

(2) Above 18GHz test distance is 1m, so the Peak Limit=74+20*log(3/1)=83.54 (dB $\mu\text{V/m}$).

The Avg Limit=54+20*log(3/1)=63.54 (dB $\mu\text{V/m}$).

7.2 TEST PROCEDURES

1) Sequence of testing 9kHz to 30MHz

Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a rotatable table with 0.8 m height is used.

--- If the EUT is a floor standing device, it is placed on the ground.

--- Use serial board or connecting line to make EUT and notebook to communicate, according to the actual need to make EUT send constant frequency signal continuously.

--- The EUT is placed on a desktop position in the center of the turntable.

--- The measurement distance is 3 meter.

--- The EUT was set into operation.

Pre measurement:

--- The turntable rotates from 0 ° to 360 °.

--- The antenna height is 1.0 meter.

--- At each turntable position the analyzer sweeps with peak detection to find the maximum of all emissions.

Final measurement:

--- Identified emissions during the pre measurement the software maximizes by rotating the turntable position (0 ° to 360 °) and by rotating the elevation axes (0 ° to 360 °).

--- The final measurement will be done in the position (turntable and elevation) causing the highest

emissions with QP detector.

--- The final levels, frequency, measuring time, bandwidth, turntable position, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the pre measurement and the limit will be stored.

2) Sequence of testing 30MHz to 1GHz

Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a table with 0.8 m height is used, which is placed on the ground plane.

--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.

--- Use serial board or connecting line to make EUT and notebook to communicate, according to the actual need to make EUT send constant frequency signal continuously.

--- The EUT is placed on a desktop position in the center of the turntable.

--- The measurement distance is 3 meter.

--- The EUT was set into operation.

Pre measurement:

--- The turntable rotates from 0 ° to 360 °.

--- The antenna is polarized vertical and horizontal.

--- The antenna height changes from 1 to 4 meter.

--- At each turntable position, antenna polarization and height the analyzer sweeps three times in peak to find the maximum of all emissions.

Final measurement:

--- The final measurement will be performed with minimum the six highest peaks.

--- According to the maximum antenna and turntable positions of pre measurement the software maximize the peaks by changing turntable rotates from 0 ° to 360 ° and antenna movement between 1 and 4 meter.

--- The final measurement will be done with QP detector with an EMI receiver.

--- The final levels, frequency, measuring time, bandwidth, antenna height, antenna polarization, turntable angle, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the pre measurement with marked maximum final measurements and the limit will be stored.

3) Sequence of testing 1GHz to 18GHz

Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.

--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.

--- Use serial board or connecting line to make EUT and notebook to communicate, according to the actual need to make EUT send constant frequency signal continuously.

--- The EUT is placed on a desktop position in the center of the turntable.

--- The measurement distance is 3 meter.

--- The EUT was set into operation.

Pre measurement:

- The turntable rotates from 0 ° to 360 °.
- The antenna is polarized vertical and horizontal.
- The antenna height scan range is 1 meter to 4 meter.
- At each turntable position and antenna polarization the analyzer sweeps with peak detection to find the maximum of all emissions.

Final measurement:

- The final measurement will be performed with minimum the six highest peaks.
- According to the maximum antenna and turntable positions of pre measurement the software maximize the peaks by changing turntable rotates from 0 ° to 360 ° and antenna movement between 1 and 4 meter. This procedure is repeated for both antenna polarizations.
- The final measurement will be done in the position (turntable, EUT-table and antenna polarization) causing the highest emissions with Peak and Average detector.
- The final levels, frequency, measuring time, bandwidth, turntable position, EUT-table position, antenna polarization, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the pre measurement with marked maximum final measurements and the limit will be stored.

4) Sequence of testing above 18GHz**Setup:**

- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.
- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.
- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.
- Use serial board or connecting line to make EUT and notebook to communicate, according to the actual need to make EUT send constant frequency signal continuously.
- The EUT is placed on a desktop position in the center of the turntable.
- The measurement distance is 1 meter.
- The EUT was set into operation.

Pre measurement:

- The antenna is moved spherical over the EUT in different polarisations of the antenna.

Final measurement:

- The final measurement will be performed at the position and antenna orientation for all detected emissions that were found during the pre measurements with Peak and Average detector.
- The final levels, frequency, measuring time, bandwidth, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the pre measurement and the limit will be stored.

NOTE:

- (a). The frequency from 9kHz to 150kHz, Set RBW=300Hz(for Peak&AVG), RBW=300Hz(for Peak&AVG). the frequency from 150kHz to 30MHz, Set RBW=9kHz, RBW=9kHz, (for QP Detector).
- (b). The frequency from 30MHz to 1GHz, Set RBW=120kHz, RBW=300kHz, (for QP Detector).

7.3 TEST SETUP

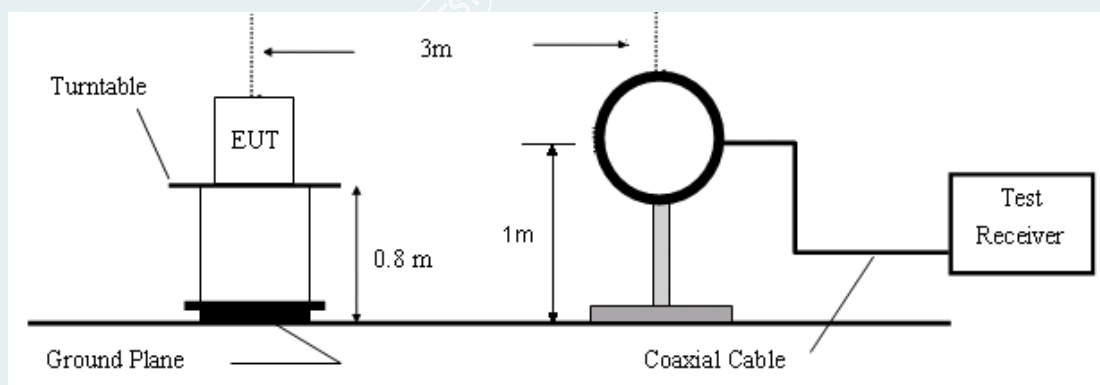


Figure 1. 9kHz to 30MHz radiated emissions test configuration

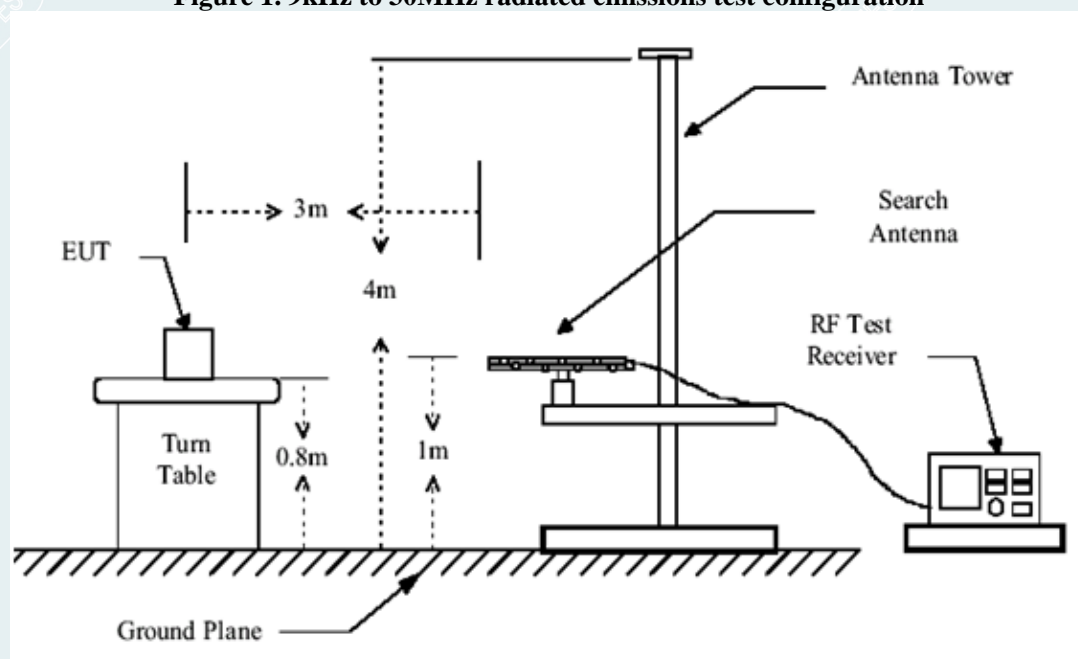


Figure 2. 30MHz to 1GHz radiated emissions test configuration

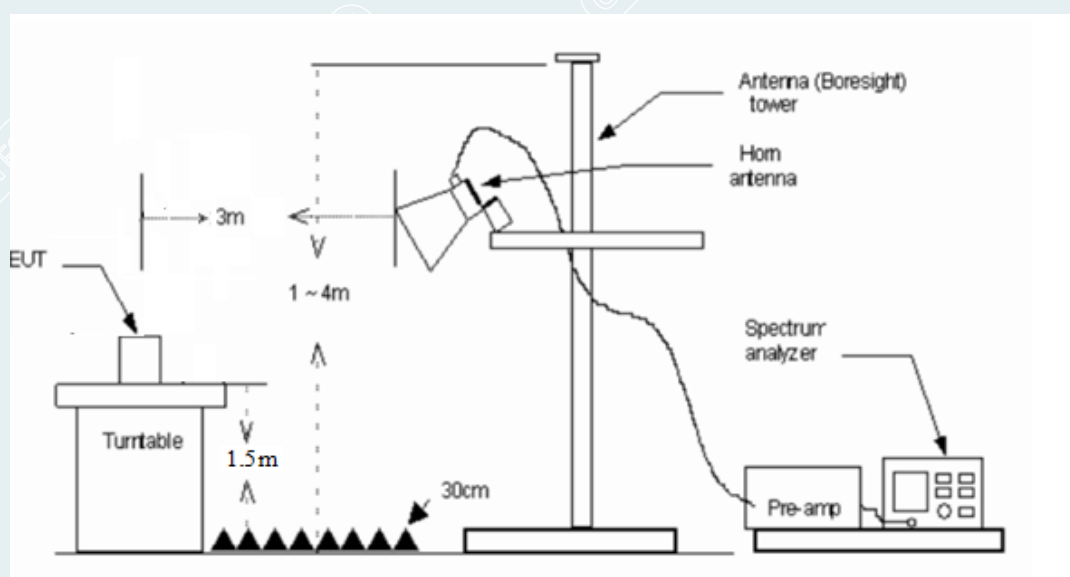


Figure 3. 1GHz-18GHz radiated emissions test configuration

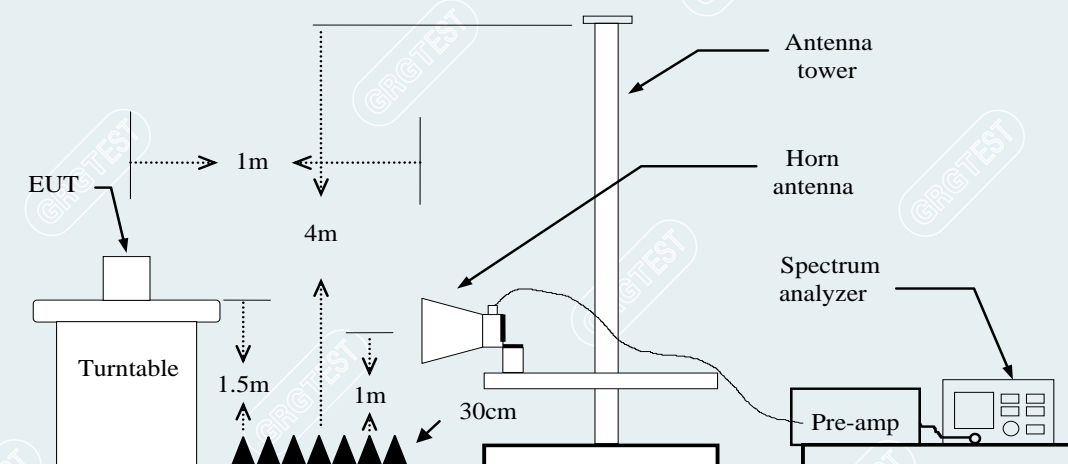


Figure 4. 18GHz-26.5GHz radiated emissions test configuration

7.4 DATA SAMPLE

30MHz to 1GHz

| No. | Frequency (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Pole |
|-----|--------------------|---------------------|----------------|--------------------|-------------------|----------------|--------|----------|
| xxx | xxx | 37.06 | -15.48 | 21.58 | 40.00 | -18.42 | QP | Vertical |

1GHz to 18GHz

| No. | Frequency (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Pole |
|-----|--------------------|---------------------|----------------|--------------------|-------------------|----------------|--------|----------|
| xxx | xxx | 65.45 | -11.12 | 54.33 | 74.00 | -19.67 | Peak | Vertical |
| xxx | xxx | 63.00 | -11.12 | 51.88 | 54.00 | -2.12 | AVG | Vertical |

Above 18GHz

| No. | Frequency (MHz) | Reading (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Pole |
|-----|--------------------|---------------------|----------------|-------------------|-------------------|----------------|--------|----------|
| xxx | xxx | 68.86 | 57.66 | -11.20 | 83.54 | 25.88 | peak | Vertical |
| xxx | xxx | 68.89 | -11.20 | 57.69 | 63.54 | 5.85 | AVG | Vertical |

Frequency (MHz) = Emission frequency in MHz

Ant.Pol. (H/V) = Antenna polarization

Reading (dBuV) = Uncorrected Analyzer / Receiver reading

Factor (dB) = Antenna factor + Cable loss – Amplifier gain

Result (dBuV/m) = Reading (dBuV) + Correction Factor (dB/m)

Limit (dBuV/m) = Limit stated in standard

Margin (dB) = Remark Result (dBuV/m) – Limit (dBuV/m)

Peak = Peak Reading

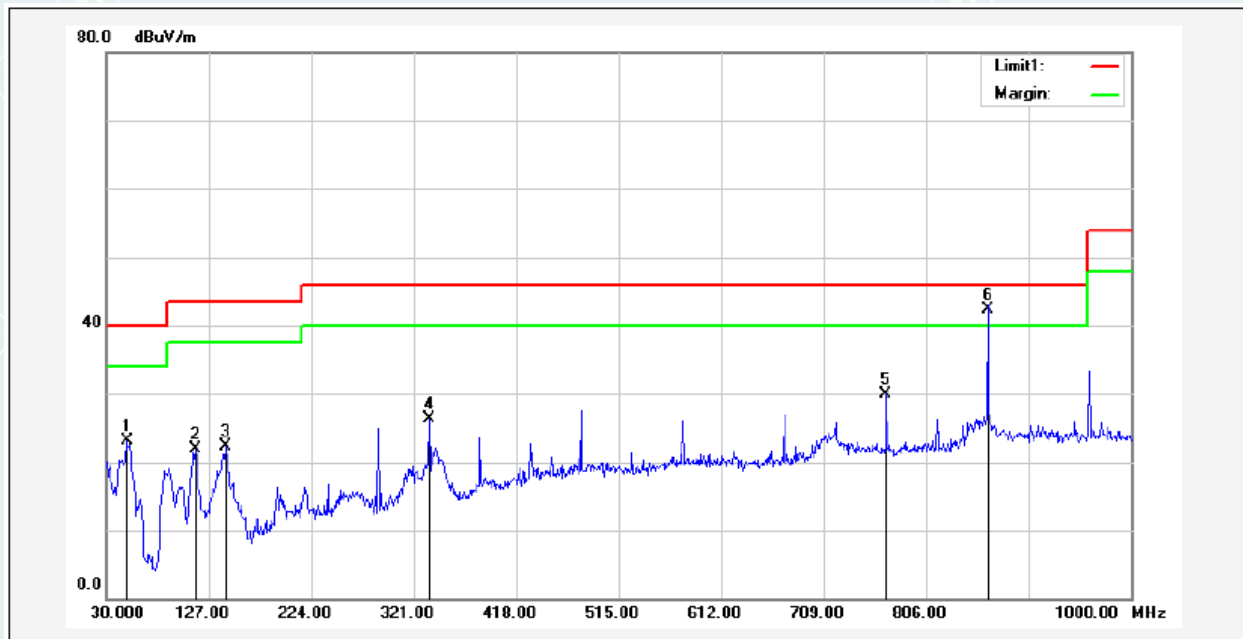
QP = Quasi-peak Reading

AVG = Average Reading

7.5 TEST RESULTS

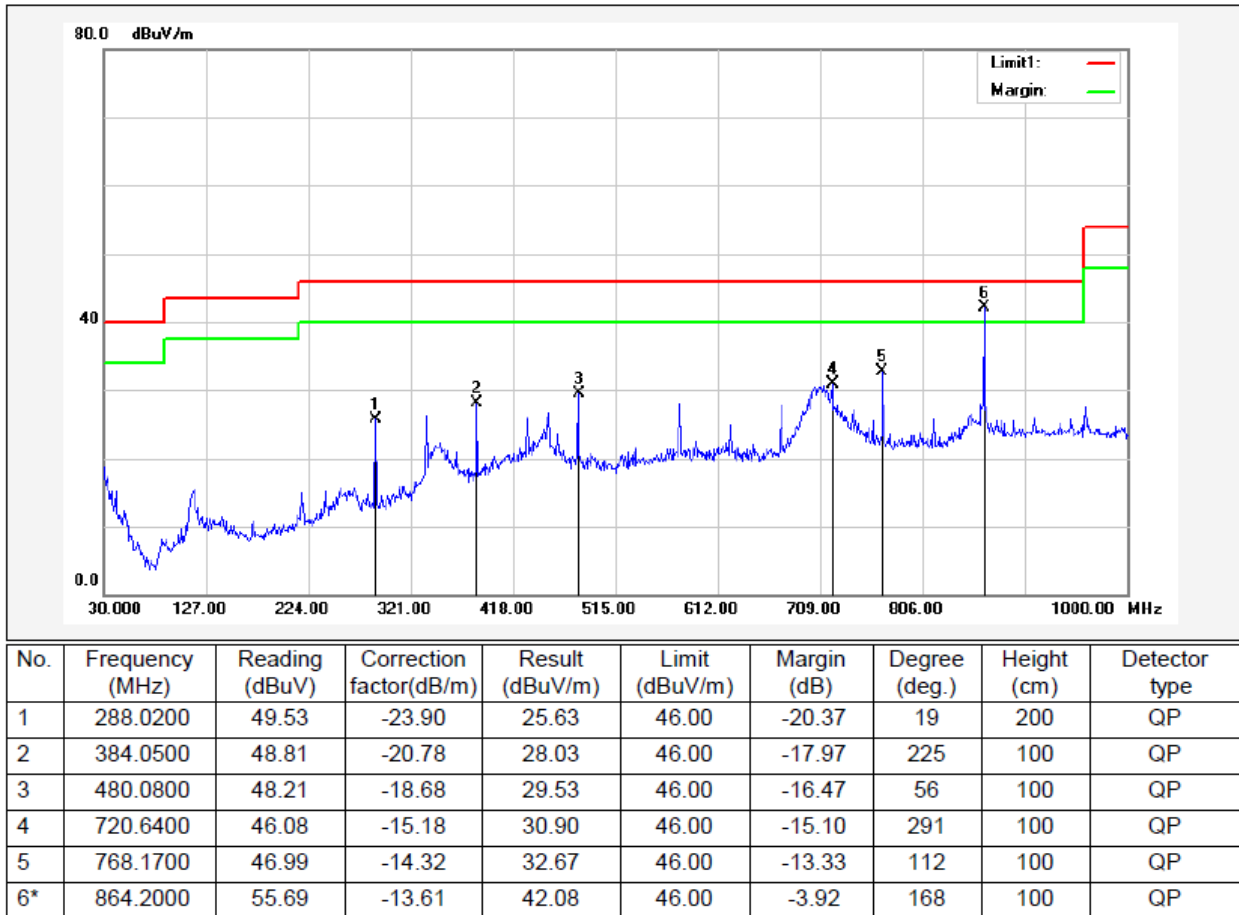
Below 1GHz

| | | | |
|----------------|--------------------------|---------------------------|-----------------------|
| EUT Name: | Camera Hub G3 | Test Mode: | Mode 1 |
| Model: | CH-H03 | Sample No: | E20221227602901-0002 |
| Power supply: | AC 120V/60Hz | Environmental Conditions: | 22.3°C/49%RH/101.0kPa |
| Test Engineer: | Huang Xinlong | Test Date: | 2023-01-12 |
| Channel | Lowest channel (2405MHz) | Polarity: | Vertical |

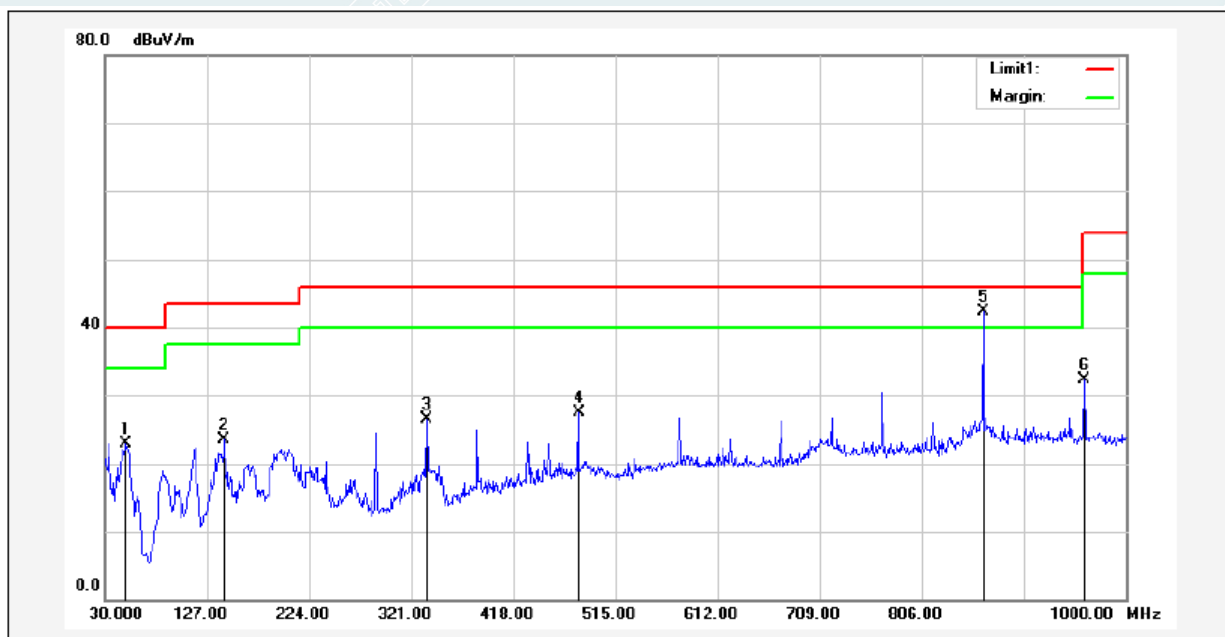


| No. | Frequency (MHz) | Reading (dBuV) | Correction factor(dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Degree (deg.) | Height (cm) | Detector type |
|-----|-----------------|----------------|-------------------------|-----------------|----------------|-------------|---------------|-------------|---------------|
| 1 | 49.4000 | 48.81 | -25.80 | 23.01 | 40.00 | -16.99 | 36 | 100 | QP |
| 2 | 114.3900 | 48.55 | -26.70 | 21.85 | 43.50 | -21.65 | 85 | 100 | QP |
| 3 | 143.4900 | 48.51 | -26.20 | 22.31 | 43.50 | -21.19 | 46 | 100 | QP |
| 4 | 335.5500 | 49.06 | -22.79 | 26.27 | 46.00 | -19.73 | 241 | 100 | QP |
| 5 | 768.1700 | 44.16 | -14.32 | 29.84 | 46.00 | -16.16 | 260 | 100 | QP |
| 6* | 864.2000 | 56.01 | -13.61 | 42.40 | 46.00 | -3.60 | 185 | 100 | QP |

| | | | |
|----------------|--------------------------|---------------------------|-----------------------|
| EUT Name: | Camera Hub G3 | Test Mode: | Mode 1 |
| Model: | CH-H03 | Sample No: | E20221227602901-0002 |
| Power supply: | AC 120V/60Hz | Environmental Conditions: | 22.3°C/49%RH/101.0kPa |
| Test Engineer: | Huang Xinlong | Test Date: | 2023-01-12 |
| Channel | Lowest channel (2405MHz) | Polarity: | Horizontal |

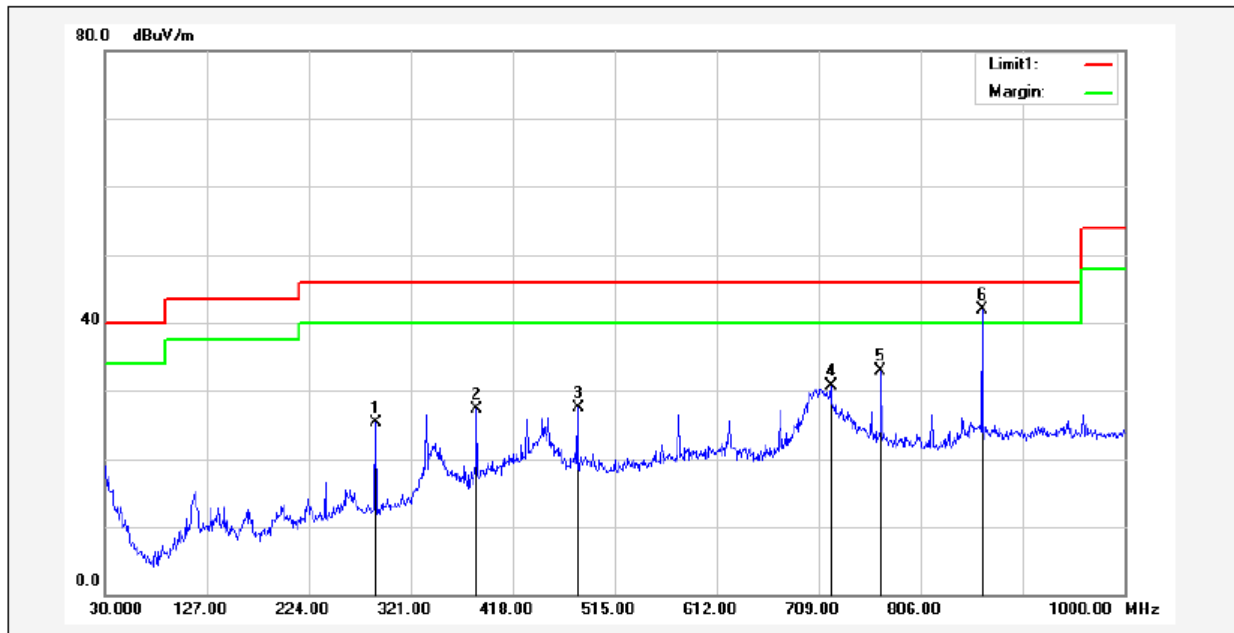


| | | | |
|----------------|--------------------------|---------------------------|-----------------------|
| EUT Name: | Camera Hub G3 | Test Mode: | Mode 1 |
| Model: | CH-H03 | Sample No: | E20221227602901-0002 |
| Power supply: | AC 120V/60Hz | Environmental Conditions: | 22.3°C/49%RH/101.0kPa |
| Test Engineer: | Huang Xinlong | Test Date: | 2023-01-12 |
| Channel | Lowest channel (2440MHz) | Polarity: | Vertical |



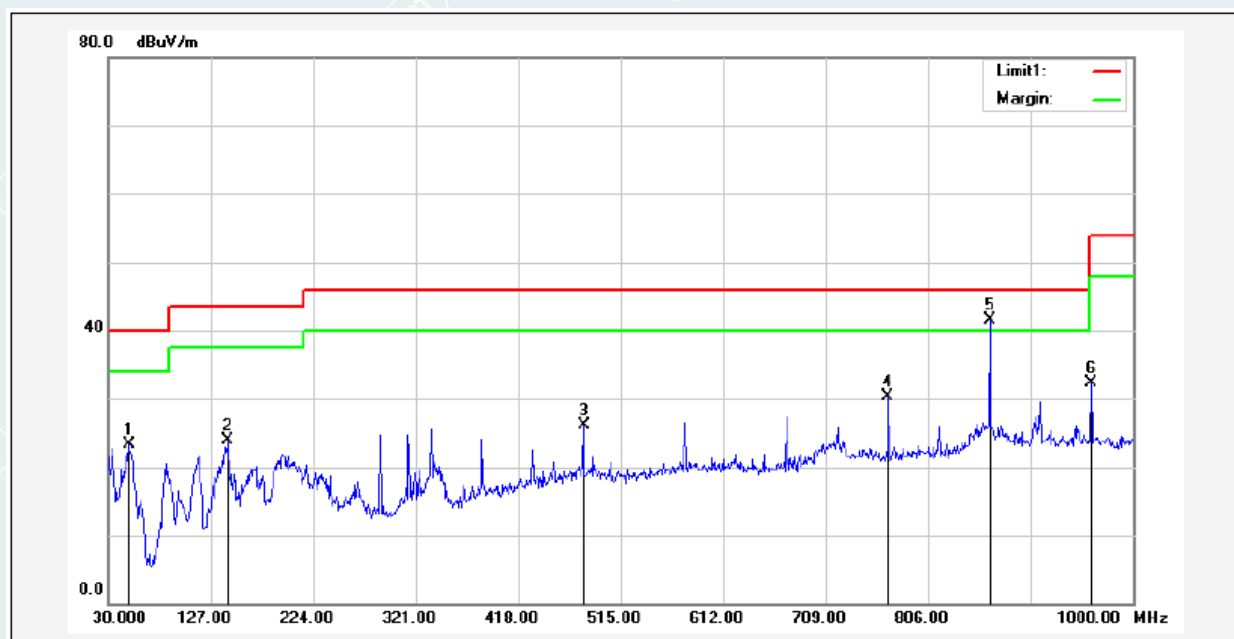
| No. | Frequency (MHz) | Reading (dBuV) | Correction factor(dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Degree (deg.) | Height (cm) | Detector type |
|-----|-----------------|----------------|-------------------------|-----------------|----------------|-------------|---------------|-------------|---------------|
| 1 | 50.3700 | 49.13 | -26.18 | 22.95 | 40.00 | -17.05 | 145 | 100 | QP |
| 2 | 143.4900 | 49.62 | -26.20 | 23.42 | 43.50 | -20.08 | 316 | 100 | QP |
| 3 | 335.5500 | 49.21 | -22.79 | 26.42 | 46.00 | -19.58 | 255 | 100 | QP |
| 4 | 480.0800 | 46.15 | -18.68 | 27.47 | 46.00 | -18.53 | 198 | 100 | QP |
| 5* | 864.2000 | 55.86 | -13.61 | 42.25 | 46.00 | -3.75 | 360 | 128 | QP |
| 6 | 960.2300 | 44.94 | -12.64 | 32.30 | 54.00 | -21.70 | 209 | 100 | QP |

| | | | |
|----------------|--------------------------|---------------------------|-----------------------|
| EUT Name: | Camera Hub G3 | Test Mode: | Mode 1 |
| Model: | CH-H03 | Sample No: | E20221227602901-0002 |
| Power supply: | AC 120V/60Hz | Environmental Conditions: | 22.3°C/49%RH/101.0kPa |
| Test Engineer: | Huang Xinlong | Test Date: | 2023-01-12 |
| Channel | Lowest channel (2440MHz) | Polarity: | Horizontal |



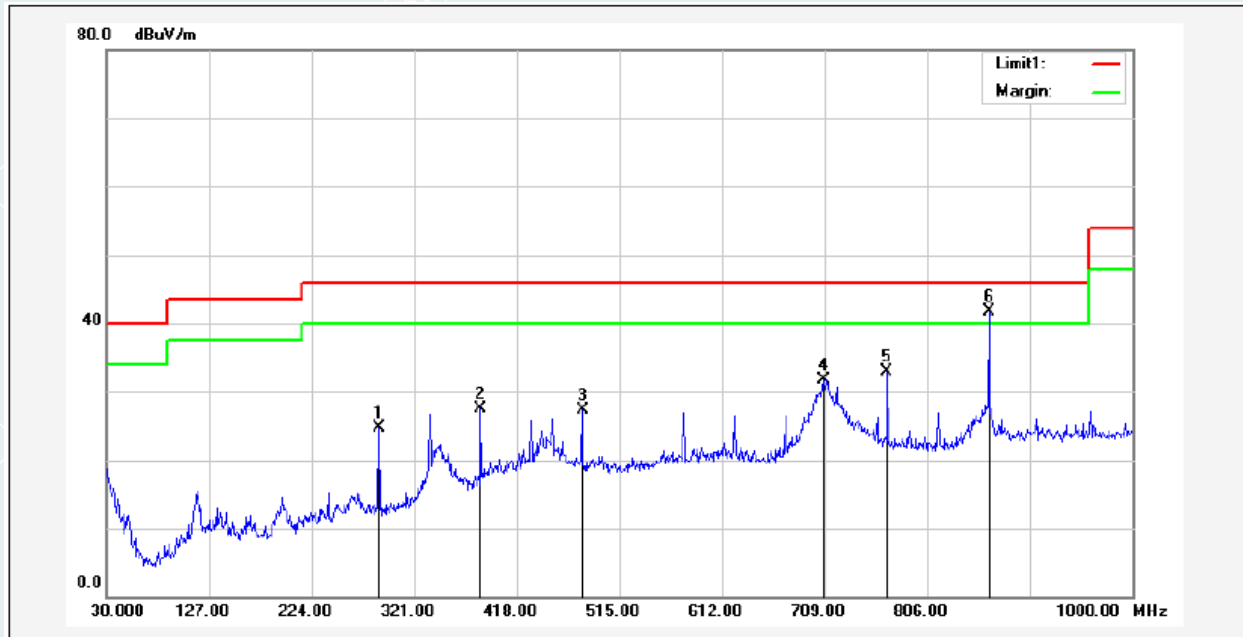
| No. | Frequency (MHz) | Reading (dBuV) | Correction factor(dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Degree (deg.) | Height (cm) | Detector type |
|-----|-----------------|----------------|-------------------------|-----------------|----------------|-------------|---------------|-------------|---------------|
| 1 | 288.0200 | 49.16 | -23.90 | 25.26 | 46.00 | -20.74 | 30 | 200 | QP |
| 2 | 384.0500 | 48.15 | -20.78 | 27.37 | 46.00 | -18.63 | 246 | 100 | QP |
| 3 | 480.0800 | 46.15 | -18.68 | 27.47 | 46.00 | -18.53 | 45 | 100 | QP |
| 4 | 720.6400 | 45.79 | -15.18 | 30.61 | 46.00 | -15.39 | 263 | 100 | QP |
| 5 | 768.1700 | 47.19 | -14.32 | 32.87 | 46.00 | -13.13 | 303 | 100 | QP |
| 6* | 864.2000 | 55.60 | -13.61 | 41.99 | 46.00 | -4.01 | 119 | 100 | QP |

| | | | |
|----------------|--------------------------|---------------------------|-----------------------|
| EUT Name: | Camera Hub G3 | Test Mode: | Mode 1 |
| Model: | CH-H03 | Sample No: | E20221227602901-0002 |
| Power supply: | AC 120V/60Hz | Environmental Conditions: | 22.3°C/49%RH/101.0kPa |
| Test Engineer: | Huang Xinlong | Test Date: | 2023-01-12 |
| Channel | Lowest channel (2475MHz) | Polarity: | Vertical |



| No. | Frequency (MHz) | Reading (dBuV) | Correction factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Degree (deg.) | Height (cm) | Detector type |
|-----|-----------------|----------------|--------------------------|-----------------|----------------|-------------|---------------|-------------|---------------|
| 1 | 49.4000 | 49.05 | -25.80 | 23.25 | 40.00 | -16.75 | 240 | 100 | QP |
| 2 | 143.4900 | 50.02 | -26.20 | 23.82 | 43.50 | -19.68 | 211 | 100 | QP |
| 3 | 480.0800 | 44.80 | -18.68 | 26.12 | 46.00 | -19.88 | 176 | 100 | QP |
| 4 | 768.1700 | 44.55 | -14.32 | 30.23 | 46.00 | -15.77 | 266 | 200 | QP |
| 5* | 864.2000 | 55.10 | -13.61 | 41.49 | 46.00 | -4.51 | 360 | 127 | QP |
| 6 | 960.2300 | 44.98 | -12.64 | 32.34 | 54.00 | -21.66 | 360 | 106 | QP |

| | | | |
|----------------|--------------------------|---------------------------|-----------------------|
| EUT Name: | Camera Hub G3 | Test Mode: | Mode 1 |
| Model: | CH-H03 | Sample No: | E20221227602901-0002 |
| Power supply: | AC 120V/60Hz | Environmental Conditions: | 22.3°C/49%RH/101.0kPa |
| Test Engineer: | Huang Xinlong | Test Date: | 2023-01-12 |
| Channel | Lowest channel (2475MHz) | Polarity: | Horizontal |



| No. | Frequency (MHz) | Reading (dBuV) | Correction factor(dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Degree (deg.) | Height (cm) | Detector type |
|-----|-----------------|----------------|-------------------------|-----------------|----------------|-------------|---------------|-------------|---------------|
| 1 | 288.0200 | 48.55 | -23.90 | 24.65 | 46.00 | -21.35 | 27 | 200 | QP |
| 2 | 384.0500 | 48.29 | -20.78 | 27.51 | 46.00 | -18.49 | 250 | 100 | QP |
| 3 | 480.0800 | 45.98 | -18.68 | 27.30 | 46.00 | -18.70 | 25 | 100 | QP |
| 4 | 708.0300 | 47.24 | -15.45 | 31.79 | 46.00 | -14.21 | 254 | 100 | QP |
| 5 | 768.1700 | 47.16 | -14.32 | 32.84 | 46.00 | -13.16 | 108 | 100 | QP |
| 6* | 864.2000 | 55.33 | -13.61 | 41.72 | 46.00 | -4.28 | 325 | 100 | QP |

Remark:

- 1 Radiated emissions measured in frequency range from 30MHz to 1GHz were made with an instrument using Quasi-peak detector mode.
- 2 Data of measurement within this frequency range shown “---” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 The IF bandwidth of Receiver between 30MHz to 1GHz was 120 kHz.

APPENDIX A. PHOTOGRAPH OF THE TEST CONNECTION DIAGRAM

Please refer to the attached document E20221227602901-18-Test photo-FCC+IC.

APPENDIX B. PHOTOGRAPH OF THE EUT

Please refer to the attached document E20221227602901-17 EUT Photo-FCC+IC.

----- End of Report -----