# EMI TEST REPORT

| | |
|---|---|
| **Test Report No.:** | FCN21007 |
| **Applicant:** | PRIMETECH ENGINEERING CORP. |
| **Address:** | Koishikawadaikoku Bldg.3F,1-3-25,Koishikawa,Bunkyo-ku, Tokyo 112-0002,Japan |
| **Equipment under test:** | InGaAs camera PXG130SP |
| **Test date:** | July 27, 2021 |
| **Regulations applied:** | FCC Part 15.107 (2020.10) Class A<br>FCC Part 15.109 (2020.10) Class A |
| **Test method used:** | ANSI C63.4-2014 including C63.4a-2017 |
| **Test result:** | Pass |
| **Modification during test:** | No |

Test site: e-OHTAMA, LTD. NAKAI EMC Center
Address: 456 Sakai, Nakai-machi, Ashigarakami-gun, Kanagawa, 259-0157 Japan
TEL: +81-465-87-2793 FAX: +81-465-81-5938

Verified by: Katsuo Terai
K. Terai Manager

Approved date: Aug. 24, 2021 Approved by: R. Hoshi
R. Hoshi Manager

Notes
- This test report is related only to the equipment described in the cover page.
- This report must not be reproduced in part without written permission by e-OHTAMA, LTD.
- The test results are obtained with test facilities which are traceable to national standards and/or international standards.

# ◇◇◇◇◇◇◇◇◇◇ C O N T E N T S ◇◇◇◇◇◇◇◇◇◇

# 1. Equipment under test (EUT)

## 1.1 Equipment rating

| Model/Type | Equipment name | Manufacturer | Power supply rating |
|---|---|---|---|
| PXG130SP | InGaAs camera | PRIMETECH ENGINEERING CORP. | DC12 V |
| UA310-1210 | AC Adapter | UNIFIVE Co., Ltd. | AC100 – 240 V 50/60 Hz, 1 Φ |

## 1.2 Condition

| | |
|---|---|
| Condition | Preproduction sample |

## 1.3 Receipt date

| | |
|---|---|
| Receipt date | July 27, 2021 |

## 1.4 Sampling

| | |
|---|---|
| Sampling of the equipment | The equipment was selected by the applicant therefore the test site has not sampling. |

## 2. Test conditions

The information in this clause is based on the application from the applicant.

### 2.1 Mode of operation

| | |
|---|---|
| Mode of operation | Video shooting mode<br>・Data bit width 16bit, Framerate 25Hz<br>・PID Temperature Control<br>・Number of pixels : 1300,000 pixels<br>・resolution : SXGA 1280 × 1024 |
| Program name / Version | pia / 64.17 |

### 2.2 Measurement arrangements of EUT

| | |
|---|---|
| Intended operational arrangement | Table-top, Floor-standing, Rack installation, Ceiling,<br>On hand, Tripod fixed, Device built-in |
| Measurement arrangement | Table-top |

### 2.3 Deviation from the test method

| | |
|---|---|
| Contents of deviation | No |

### 2.4 Submitted document

| | |
|---|---|
| Submitted document | Appendix 3 Family model |

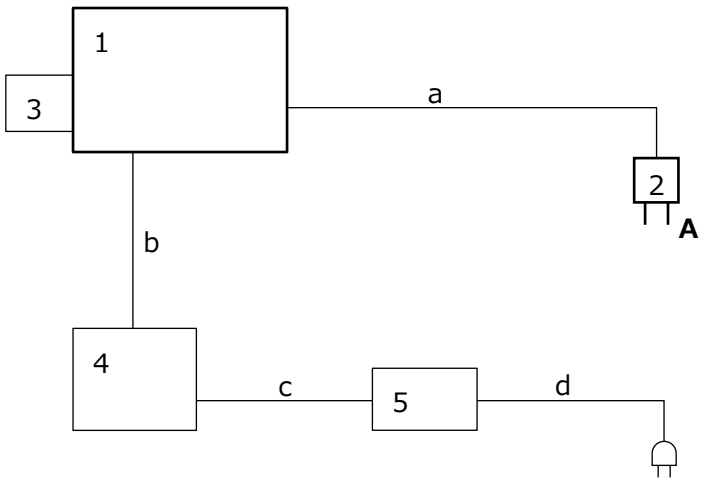
## 3. Summary of test results

| **Conducted emission** | | | | | |
|---|---|---|---|---|---|
| Test contents | The port with the EUT | Operator | Test site | Result | Remarks |
| Mains power port | Yes | S. Nagashima | No. 3 Site | Pass | |
| **Radiated emission** | | | | | |
| Test contents | The port with the EUT | Operator | Test site | Result | Remarks |
| Radiated emission (Up to 1 GHz) | Yes | S. Nagashima | No. 3 Site | Pass | |
| Radiated emission (Above 1 GHz) | Yes | S. Nagashima | No. 3 Site | Pass | |

# 4. Test configuration

The test of this report was executed that takes into consideration risks in the typical configurations by the applicant.
The all equipment and cables described in the test configuration were provided by the applicant.

## 4.1 System diagram




**A**: Test point

Number in figure corresponds to No. in clause 4.2 and clause 4.3.

## 4.2 Equipment list of test configuration

| No. | EUT | Model/Type | Equipment name | Ser. No. | FCC ID | Manufacturer | Input voltage | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | V | Hz | Φ | |
| 1 | ○ | PXG130SP | InGaAs camera | 0001 | — | PRIMETECH ENGINEERING CORP. | DC12 | — | — | |
| 2 | ○ | UA310-1210 | AC Adapter | L10-0518419 | — | UNIFIVE Co., Ltd. | AC120 | 60 | 1 | |
| 3 | | C1614A | CCTV Lens | — | — | RICOH IMAGING COMPANY, LTD. | — | — | — | |
| 4 | | P1G6MPBW | Note PC | 20113916H | DoC | Dynabook Inc. | DC5 | — | — | |
| 5 | | PA5177U-1ACA | AC ADAPTER | JZ2525278GGD | DoC | Dynabook Inc. | AC100 | 50 | 1 | |

## 4.3 Cable list

| No. | Connected from (port name) — to (port name) | Cable name | Length (m) | Qty. | Connector | Shielded | Remarks |
|---|---|---|---|---|---|---|---|
| a | 1 — 2 | DC cable | 3.0 | 1 | Plastic | No | |
| b | 1 — 4 | Ethernet cable | 5.0 | 1 | Metal | Yes | STP Cat. 6 |
| c | 4 — 5 | DC cable | 1.8 | 1 | Plastic | No | |
| d | 5 — AC100 V | AC cable | 0.4 | 1 | Plastic | No | |

# 5. EMI test (conducted emission, radiated emission)

## 5.1 Test specifications

| | |
|---|---|
| Regulations applied | FCC Part 15.107 (2020.10) Class A |
| | FCC Part 15.109 (2020.10) Class A |
| Test method used | ANSI C63.4-2014 including C63.4a-2017 |

| | | |
|---|---|---|
| Test date | | Jul. 27, 2021 |
| Environment | Temperature | 25 °C |
| | Relative humidity | 62 %RH |
| | Atmospheric pressure | 982 hPa |

| | | |
|---|---|---|
| EUT's highest internal frequency (*F*x): | | 297 MHz (Application by the applicant) |
| Highest fundamental frequency generated or used within the EUT or highest frequency at which it operates | | Highest measured frequency |
| | *F*x ≤ 108 MHz | 1 GHz |
| ○ | 108 MHz < *F*x ≤ 500 MHz | 2 GHz |
| | 500 MHz < *F*x ≤ 1000 MHz | 5 GHz |
| | *F*x > 1 GHz<br>or *F*x is unknown. | 5 × *F*x up to a maximum of 40 GHz<br>Highest measured frequency: — |

| | Conducted emission (Mains power port) | Radiated emission at frequencies up to 1 GHz | Radiated emission at frequencies above 1 GHz |
|---|---|---|---|
| Measurement facility | SAC | SAC | FSOATS<br>(SAC with RF absorber on the RGP) |
| Measurement frequency range | 150 kHz – 30 MHz<br>(LISN) | 30 MHz – 300 MHz<br>(Biconical antenna) | 1 GHz – 2 GHz<br>(Horn antenna) |
| | | 300 MHz – 1 GHz<br>(LPDA antenna) | |
| Actual measured distance | — | 10 m | 4.4 m<br>(The result is converted into the level in the distance of 3 m.) |
| Antenna height scan range | — | 1 m – 4 m | 1 m – 4 m |
| EMI receiver detection mode | Average mode: CISPR-Ave<br>9 kHz ($B_6$) | Quasi peak mode: QP<br>120 kHz ($B_6$) | Average mode: CISPR-Ave<br>1 MHz ($B_{imp}$) |
| | Quasi peak mode: QP<br>9 kHz ($B_6$) | | Peak mode: Peak<br>1 MHz ($B_{imp}$) |

### 5.2 Test procedure

| | |
|---|---|
| 1 | **Measurement of wide range frequencies using spectrum analyzer**<br>• Spectrum analyzer settings were optimized considering final measurement.<br>• Confirming the measurement instruments were not saturation by overload.<br>• Determine the cable arrangement giving the maximum emission level by the arrangement of the EUT, the arrangement of the local AE and the placement of cables within the range of typical to attempt varied. |
| 2 | **Selection of the frequencies**<br>• The frequencies showing high noise levels were chosen from the data on spectrum analyzer. |
| 3 | **Measurement by EMI receiver for selected frequencies**<br>• EMI receiver settings (IF bandwidth and detection mode) were in accordance with standards.<br>• Confirming the measurement instruments were not saturation by overload.<br>• The measured AV level is CISPR-Average of CISPR 16-1-1:2010.<br>• Radiated emission was measured at maximum radiation point obtained by operating the turn table and the antenna mast. |
| 4 | **Adjusting the angle of the antenna (above 1 GHz)**<br>• In the measurement above 1 GHz, if the antenna height exceeds the EUT height was measured by adjusting the angle of the antenna to the direction of the EUT. |

### 5.3 Calculation of measurement results

Measurement results are calculated by EMI measurement software as shown below sub-clause. The values of the factor and the cable loss at frequencies not selected at calibration are calculated by natural spline interpolation of the third degree.

#### 5.3.1 Conducted emission

| **Mains power port** |
|---|
| Measurement result = Measurement (receiver reading) + Correction factor (c.f.)<br>Correction factor (c.f.) = Factor of LISN + Cable loss |

#### 5.3.2 Radiated emission

| **Up to 1 GHz** |
|---|
| Measurement result = Measurement (receiver reading) + Correction factor (c.f.)<br>Correction factor (c.f.) = Antenna factor + Cable loss − Preamp gain |
| **Above 1 GHz** |
| Measurement result = Measurement (receiver reading) + Correction factor (c.f.)<br>Correction factor (c.f.) = Antenna factor + Cable loss − Preamp gain +<br>Factor of distance [20 log (Actual measurement distance / 3.0 m)] |

### 5.4 Uncertainty of EMI measurement (MIU)

The actual test results may contain measurement uncertainty and do not mean to assure complete repeatability and reproducibility. Our lab uses the CISPR International Standard CISPR 16-4-2 to calculate the measurement uncertainty as shown below. Our lab measurement uncertainty (MIU) coverage factor $k$=2, approximately 95 % confidence level:

| Measurement contents | Measurement specification | | | Uncertainty |
|---|---|---|---|---|
| Conducted emission | 9 kHz – 30 MHz (LISN) | Mains power port | — | 3.34 dB |
| Radiated emission | 30 MHz – 300 MHz (Biconical antenna) | 10 m | Horizontal | 3.78 dB |
| | | | Vertical | 3.75 dB |
| | 300 MHz – 1000 MHz (LPDA antenna) | 10 m | Horizontal | 3.84 dB |
| | | | Vertical | 3.84 dB |
| | 1 GHz – 6 GHz (Horn antenna) | 3 m (With floor absorber) | Horizontal | 5.18 dB |
| | | | Vertical | |
| | 6 GHz – 18 GHz (Horn antenna) | | Horizontal | 4.99 dB |
| | | | Vertical | |
| | 18 GHz – 26.5 GHz (Horn antenna) | | Horizontal | 5.36 dB |
| | | | Vertical | |
| | 26.5 GHz – 40 GHz (Horn antenna) | | Horizontal | 5.49 dB |
| | | | Vertical | |

### 5.5 Test results

**Conducted emission**

| Test item | Test point | Minimum margin | | | Result |
|---|---|---|---|---|---|
| Mains power port | **A** | L1 Phase | 5.978 MHz | 15.9 dB (QP) | Pass |

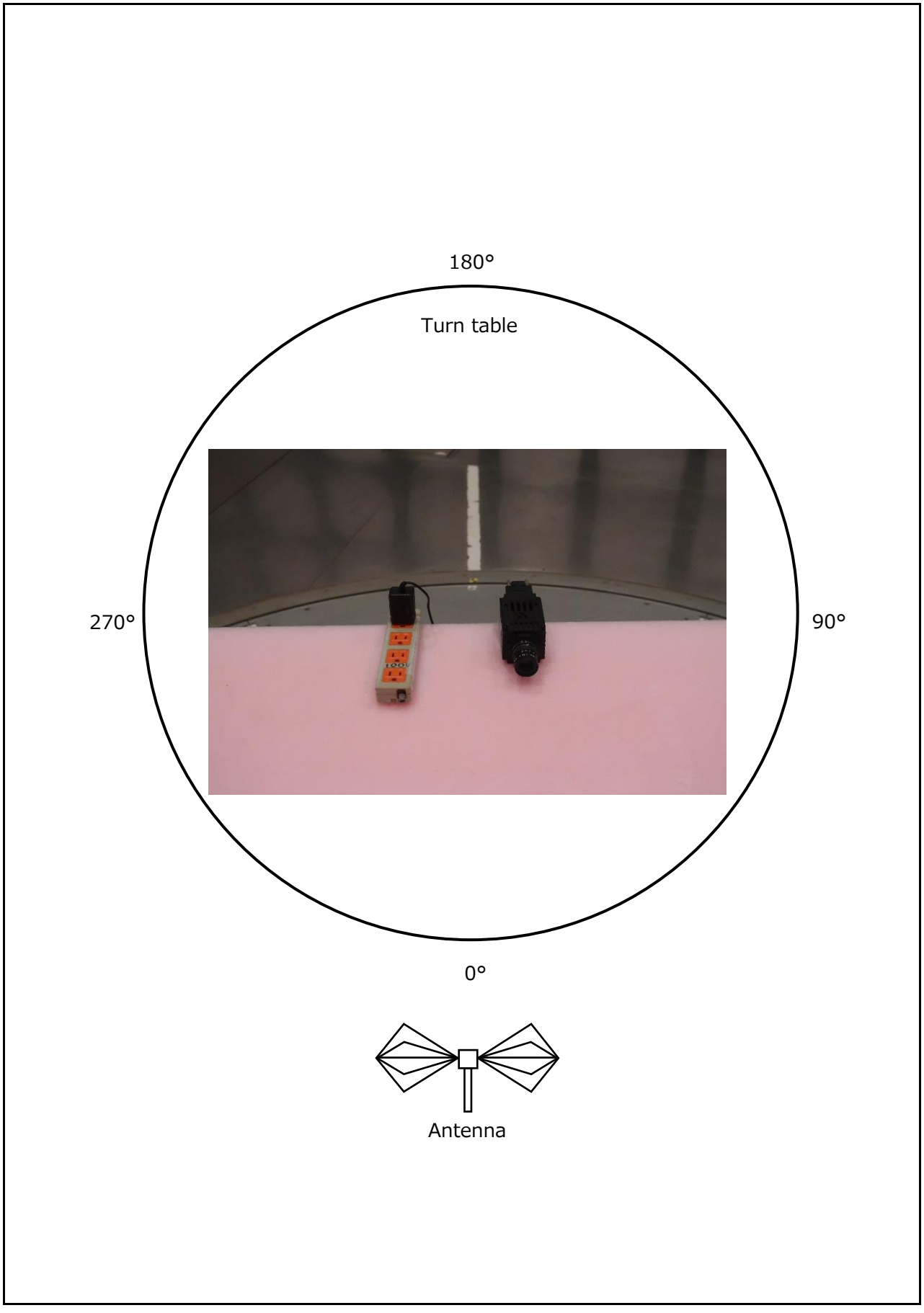
**Radiated emission**

| Test item | Minimum margin | | | Result |
|---|---|---|---|---|
| Radiated emission (Up to 1 GHz) | Horizontal | 875.000 MHz | 5.0 dB (QP) | Pass |
| Radiated emission (Above 1 GHz) | Vertical | 1124.994 MHz | 20.8 dB (AV) | Pass |

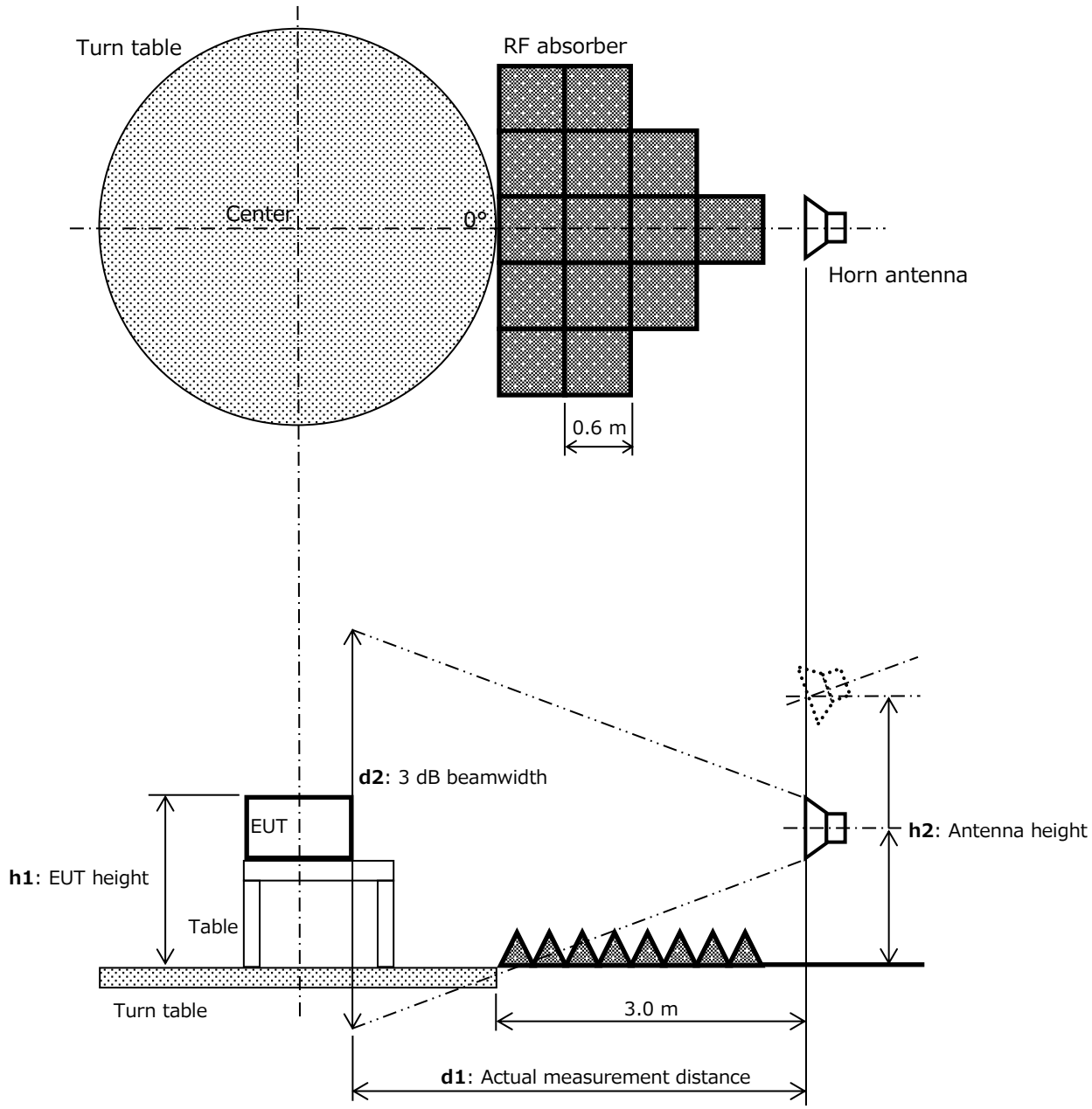
Refer to appendix 1 for details of the test result.

Note 1: The phase of mains power port is temporarily defined for measurement.

**5.6 Angle of EUT for radiated emission**



**5.7 Test layout of radiated emission (Above 1 GHz)**




| | | |
|---|---|---|
| h1 | EUT height | 0.87 m |
| h2 | Antenna height (scan range) | 1.0 m – 4.0 m |
| d1 | Actual measurement distance | 4.4 m |
| d2 | 3 dB beamwidth at 1 GHz – 6 GHz<br>d2 = 2 x d1 x tan (47° / 2) | 3.8 m |

## 6. List of measuring instruments

EMI test (conducted emission)

| Instrument name | Type | Ser. No. (ID) | Manufacturer | Due date of calibration |
|---|---|---|---|---|
| Spectrum analyzer / receiver | ESCI | 100418 | Rohde & Schwarz | 2022.02 |
| AMN (LISN) (Measurement port) | ESH3-Z5 | 831887/015 (R&SR) | Rohde & Schwarz | 2021.12 |
| Attenuator | 6810.01.A | (7018) | SUHNER | 2021.08 |
| Coax cable | 3D-2W | (2073) | Kansai Tsushin Densen | 2021.08 |
| | 5D-2W | (2041) | Kansai Tsushin Densen | 2021.08 |
| | TCF500DD4000 | 16G06010 | TOKUDEN PROSELL | 2021.08 |

EMI test (radiated emission / 30 MHz – 1 GHz)

| Instrument name | Type | Ser. No. (ID) | Manufacturer | Due date of calibration |
|---|---|---|---|---|
| Spectrum analyzer / receiver | ESCI | 100418 | Rohde & Schwarz | 2022.02 |
| Biconical antenna | BBA9106 | B-002 | Schwarzbeck | 2021.10 |
| Log-periodic antenna | UHALP9108-A | 0764 | Schwarzbeck | 2022.01 |
| Preamplifier | 8447F | 2805A03043 | Agilent Technology | 2021.08 |
| Coax cable (10 m) | SUCOFLEX106 | 2371/6 | SUHNER | 2021.08 |
| | LHPX-10D | (2096) | Hitachi | 2021.08 |
| | SUCOFLEX106 | 8910/6 | SUHNER | 2021.08 |
| | TCF500DD4000 | 16G06011 | TOKUDEN PROSELL | 2021.08 |
| | TCF500DD2000 | 16G06014 | TOKUDEN PROSELL | 2021.08 |
| Test site (Semi anechoic chamber) | FACT-10-QZ3.0 Standard Plus | ETS B Pink (No.3) | ETS LINDGREN | 2022.05 |

EMI test (radiated emission / 1 GHz – 18 GHz)

| Instrument name | Type | Ser. No. (ID) | Manufacturer | Due date of calibration |
|---|---|---|---|---|
| Spectrum analyzer / receiver | ESU40 | 100260 | Rohde & Schwarz | 2021.10 |
| Horn antenna | 3117 | 00081287 (H-ETS2) | ETS LINDGREN | 2021.10 |
| Preamplifier | 8449B | 3008A01298 | Agilent Technology | 2022.06 |
| RF cable | TCF358FG5000 | 16Y07001 | TOKUDEN PROSELL | 2022.06 |
| | TCF358FG300 | 13X24001 | | 2022.06 |

# Appendix 1 Test results

## Conducted emission data (Mains power port)

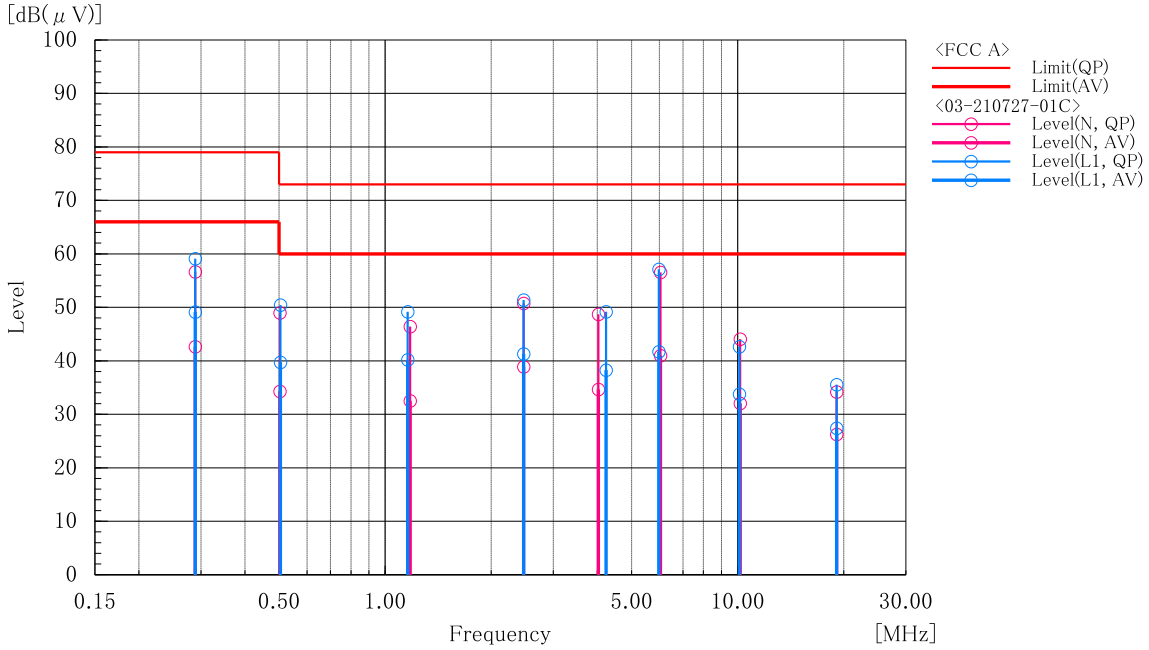
Test point **A**

e-OHTAMA, LTD.
NAKAI EMC Center

<<Conducted Emission>>

27 July,2021 14:50
03-210727-01C.ep9cedata

| | | | |
|---|---|---|---|
| Order No. | : EM21046 | Standard | : FCC Class A |
| Company | : PRIMETECH ENGINEERING CORP. | LISN | : R&SR |
| Model | : PXG130SP | Input Power | : AC120 V / 60 Hz |
| Serial | : 0001 | Temp/Humi | : 25 ℃ / 62 %RH |
| Condition | : Video Mode | Operator | : S.Nagashima |




Final Result

--- N (QP) ---

| No. | Frequency [MHz] | Reading [dB(μV)] | c.f [dB] | Result [dB(μV)] | Limit [dB(μV)] | Margin [dB] |
|---|---|---|---|---|---|---|
| 1 | 0.289 | 46.3 | 10.4 | 56.7 | 79.0 | 22.3 |
| 2 | 0.502 | 38.6 | 10.4 | 49.0 | 73.0 | 24.0 |
| 3 | 1.178 | 35.9 | 10.5 | 46.4 | 73.0 | 26.6 |
| 4 | 2.473 | 40.1 | 10.6 | 50.7 | 73.0 | 22.3 |
| 5 | 4.026 | 37.9 | 10.8 | 48.7 | 73.0 | 24.3 |
| 6 | 6.039 | 45.6 | 10.9 | 56.5 | 73.0 | 16.5 |
| 7 | 10.172 | 32.8 | 11.2 | 44.0 | 73.0 | 29.0 |
| 8 | 19.104 | 22.6 | 11.6 | 34.2 | 73.0 | 38.8 |

--- N (AV) ---

| No. | Frequency [MHz] | Reading [dB(μV)] | c.f [dB] | Result [dB(μV)] | Limit [dB(μV)] | Margin [dB] |
|---|---|---|---|---|---|---|
| 1 | 0.289 | 32.3 | 10.4 | 42.7 | 66.0 | 23.3 |
| 2 | 0.502 | 23.9 | 10.4 | 34.3 | 60.0 | 25.7 |
| 3 | 1.178 | 22.0 | 10.5 | 32.5 | 60.0 | 27.5 |
| 4 | 2.473 | 28.3 | 10.6 | 38.9 | 60.0 | 21.1 |
| 5 | 4.026 | 23.9 | 10.8 | 34.7 | 60.0 | 25.3 |
| 6 | 6.039 | 30.1 | 10.9 | 41.0 | 60.0 | 19.0 |
| 7 | 10.172 | 20.8 | 11.2 | 32.0 | 60.0 | 28.0 |
| 8 | 19.104 | 14.7 | 11.6 | 26.3 | 60.0 | 33.7 |

--- L1 (QP) ---

| No. | Frequency [MHz] | Reading [dB(μV)] | c.f [dB] | Result [dB(μV)] | Limit [dB(μV)] | Margin [dB] |
|---|---|---|---|---|---|---|
| 1 | 0.289 | 48.7 | 10.4 | 59.1 | 79.0 | 19.9 |
| 2 | 0.504 | 40.0 | 10.4 | 50.4 | 73.0 | 22.6 |
| 3 | 1.159 | 38.7 | 10.5 | 49.2 | 73.0 | 23.8 |
| 4 | 2.472 | 40.7 | 10.7 | 51.4 | 73.0 | 21.6 |
| 5 | 4.234 | 38.4 | 10.8 | 49.2 | 73.0 | 23.8 |
| 6 | 5.978 | 46.2 | 10.9 | 57.1 | 73.0 | 15.9 |
| 7 | 10.109 | 31.5 | 11.2 | 42.7 | 73.0 | 30.3 |
| 8 | 19.098 | 23.8 | 11.7 | 35.5 | 73.0 | 37.5 |

--- L1 (AV) ---

| No. | Frequency [MHz] | Reading [dB(μV)] | c.f [dB] | Result [dB(μV)] | Limit [dB(μV)] | Margin [dB] |
|---|---|---|---|---|---|---|
| 1 | 0.289 | 38.7 | 10.4 | 49.1 | 66.0 | 16.9 |
| 2 | 0.504 | 29.3 | 10.4 | 39.7 | 60.0 | 20.3 |
| 3 | 1.159 | 29.7 | 10.5 | 40.2 | 60.0 | 19.8 |
| 4 | 2.472 | 30.6 | 10.7 | 41.3 | 60.0 | 18.7 |
| 5 | 4.234 | 27.4 | 10.8 | 38.2 | 60.0 | 21.8 |
| 6 | 5.978 | 30.8 | 10.9 | 41.7 | 60.0 | 18.3 |
| 7 | 10.109 | 22.5 | 11.2 | 33.7 | 60.0 | 26.3 |
| 8 | 19.098 | 15.7 | 11.7 | 27.4 | 60.0 | 32.6 |

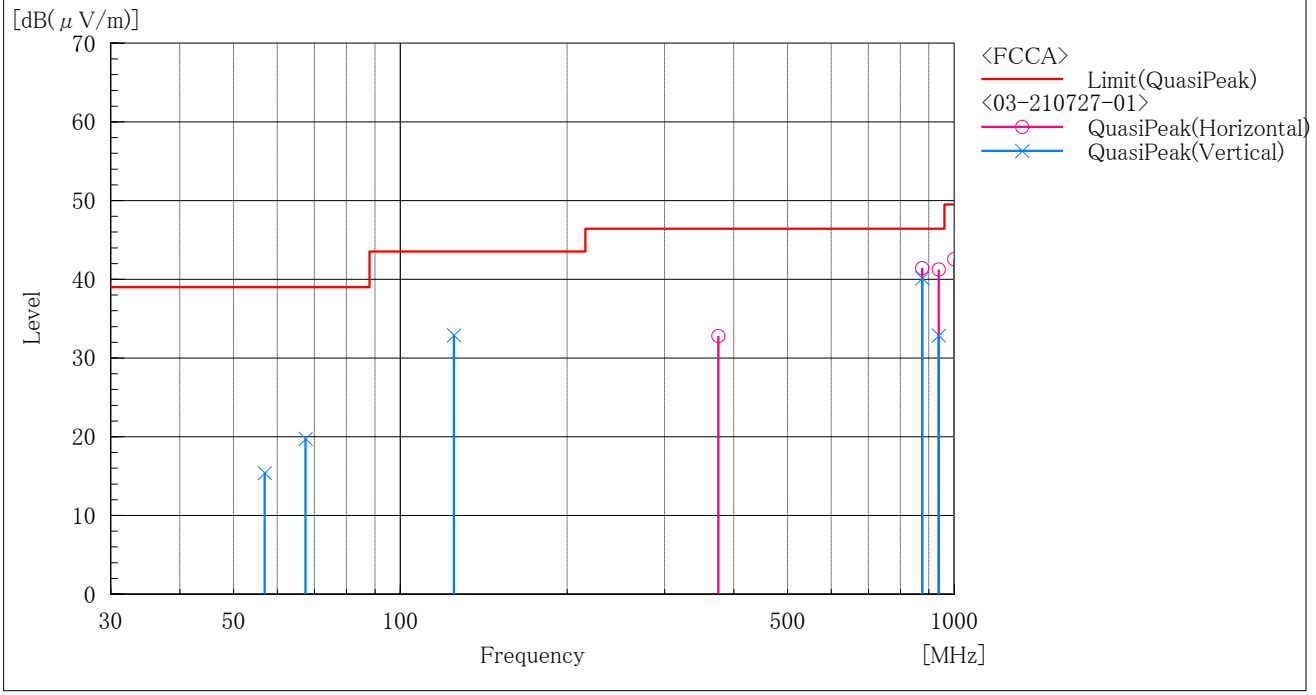
## Radiated emission data (Up to 1 GHz)

e-OHTAMA,LTD.
NAKAI EMC Center

<<Radiated Emission>>

27 July,2021 09:17
03-210727-01.dat

| | | | |
|---|---|---|---|
| Order No. | : EM21046 | Standard | : FCC Part.15 Class A 10m |
| Company | : PRIMETECH ENGINEERING CORP. | Remarks | : Test No.01 |
| Model | : PXG130SP | Input Power | : AC120 V / 60Hz |
| Serial No. | : 0001 | Temp/Humi | : 25 ℃ / 62 %RH |
| Condition | : Video Mode | Operator | : S.Nagashima |




Final Result

--- Horizontal Polarization (QP)---

| No. | Frequency [MHz] | Reading [dB(μV)] | c.f [dB(1/m)] | Result [dB(μV/m)] | Limit [dB(μV/m)] | Margin [dB] | Height [cm] | Angle [° ] |
|---|---|---|---|---|---|---|---|---|
| 1 | 374.984 | 41.2 | -8.4 | 32.8 | 46.4 | 13.6 | 265.0 | 60.2 |
| 2 | 875.000 | 39.4 | 2.0 | 41.4 | 46.4 | 5.0 | 100.0 | 304.1 |
| 3 | 937.485 | 38.6 | 2.6 | 41.2 | 46.4 | 5.2 | 100.0 | 323.6 |
| 4 | 999.995 | 39.9 | 2.6 | 42.5 | 49.5 | 7.0 | 100.0 | 306.7 |

--- Vertical Polarization (QP)---

| No. | Frequency [MHz] | Reading [dB(μV)] | c.f [dB(1/m)] | Result [dB(μV/m)] | Limit [dB(μV/m)] | Margin [dB] | Height [cm] | Angle [° ] |
|---|---|---|---|---|---|---|---|---|
| 1 | 56.939 | 32.7 | -17.3 | 15.4 | 39.0 | 23.6 | 100.0 | 245.5 |
| 2 | 67.439 | 39.5 | -19.8 | 19.7 | 39.0 | 19.3 | 222.6 | 352.5 |
| 3 | 124.999 | 44.8 | -11.9 | 32.9 | 43.5 | 10.6 | 100.0 | 315.5 |
| 4 | 874.996 | 38.1 | 2.0 | 40.1 | 46.4 | 6.3 | 214.5 | 169.6 |
| 5 | 937.508 | 30.3 | 2.6 | 32.9 | 46.4 | 13.5 | 192.8 | 152.7 |

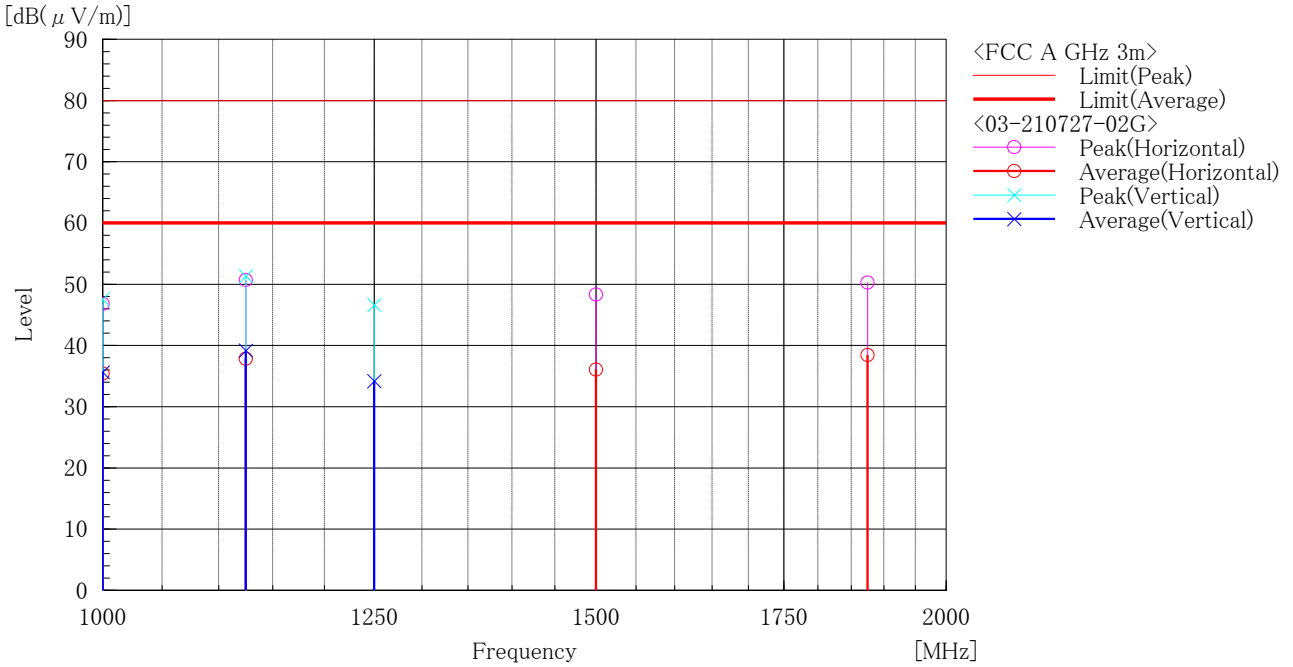
## Radiated emission data (Above 1 GHz)

e-OHTAMA,LTD.
NAKAI EMC Center

<<Radiated Emission>>

27 July,2021 13:58
03-210727-02G.dat

| | | | |
|---|---|---|---|
| Order No. | : EM21046 | Standard | : FCC Class A GHz 3m |
| Company | : PRIMETECH ENGINEERING CORP. | Remarks | : Test No.02G |
| Model | : PXG130SP | Input Power | : AC120 V / 60 Hz |
| Serial No. | : 0001 | Temp/Humi | : 25 ℃ / 62%RH |
| Condition | : Video Mode | Operator | : S.Nagashima |




Final Result

--- Horizontal Polarization (PK)---

| No. | Frequency [MHz] | Reading [dB(μV)] | c.f [dB(1/m)] | Result [dB(μV/m)] | Limit [dB(μV/m)] | Margin [dB] | Height [cm] | Angle [° ] |
|---|---|---|---|---|---|---|---|---|
| 1 | 1000.001 | 49.3 | -2.5 | 46.8 | 80.0 | 33.2 | 227.6 | 195.4 |
| 2 | 1124.983 | 52.8 | -2.1 | 50.7 | 80.0 | 29.3 | 233.7 | 283.9 |
| 3 | 1499.982 | 49.5 | -1.2 | 48.3 | 80.0 | 31.7 | 294.1 | 120.7 |
| 4 | 1874.982 | 48.6 | 1.7 | 50.3 | 80.0 | 29.7 | 290.2 | 311.5 |

--- Horizontal Polarization (CAV)---

| No. | Frequency [MHz] | Reading [dB(μV)] | c.f [dB(1/m)] | Result [dB(μV/m)] | Limit [dB(μV/m)] | Margin [dB] | Height [cm] | Angle [° ] |
|---|---|---|---|---|---|---|---|---|
| 1 | 1000.001 | 37.9 | -2.5 | 35.4 | 60.0 | 24.6 | 227.6 | 195.4 |
| 2 | 1124.983 | 39.9 | -2.1 | 37.8 | 60.0 | 22.2 | 233.7 | 283.9 |
| 3 | 1499.982 | 37.2 | -1.2 | 36.0 | 60.0 | 24.0 | 294.1 | 120.7 |
| 4 | 1874.982 | 36.7 | 1.7 | 38.4 | 60.0 | 21.6 | 290.2 | 311.5 |

--- Vertical Polarization (PK)---

| No. | Frequency [MHz] | Reading [dB(μV)] | c.f [dB(1/m)] | Result [dB(μV/m)] | Limit [dB(μV/m)] | Margin [dB] | Height [cm] | Angle [° ] |
|---|---|---|---|---|---|---|---|---|
| 1 | 1000.001 | 50.1 | -2.5 | 47.6 | 80.0 | 32.4 | 212.5 | 318.5 |
| 2 | 1124.994 | 53.4 | -2.1 | 51.3 | 80.0 | 28.7 | 100.0 | 198.6 |
| 3 | 1250.016 | 48.4 | -1.8 | 46.6 | 80.0 | 33.4 | 308.3 | 171.2 |

--- Vertical Polarization (CAV)---

| No. | Frequency [MHz] | Reading [dB(μV)] | c.f [dB(1/m)] | Result [dB(μV/m)] | Limit [dB(μV/m)] | Margin [dB] | Height [cm] | Angle [° ] |
|---|---|---|---|---|---|---|---|---|
| 1 | 1000.001 | 38.2 | -2.5 | 35.7 | 60.0 | 24.3 | 212.5 | 318.5 |
| 2 | 1124.994 | 41.3 | -2.1 | 39.2 | 60.0 | 20.8 | 100.0 | 198.6 |
| 3 | 1250.016 | 36.0 | -1.8 | 34.2 | 60.0 | 25.8 | 308.3 | 171.2 |

Note: The measurement level (Result) of radiated emission is converted into the level in the distance of 3 m.

## Appendix 3 Family model

| | Type name difference | | | |
|---|---|---|---|---|
| | Hardware | Firmware | Number of pixels | resolution |
| PXG130SP<br>Tested model | Only the difference of CMOS Image Sensor.<br>(IMX990-AABA-C) | Set the difference in the number of pixels of CMOS Image Sensor.<br>The parameters are different. | 1300,000 pixels | SXGA<br>1280 × 1024 |
| PXG030SP<br>Family model | Only the difference of CMOS Image Sensor.<br>(IMX991-AABA-C)<br><br>IMX990 and IMX991<br>In the image output area with the same pixels.<br>The electric circuit is the same with different sensors. | | 300,000 pixels | VGA<br>640 × 512 |
| The information in this clause is based on the application from the applicant.<br>The photograph of the board for each type name is shown on the next page. | | | | |