

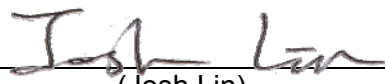
FCC Radio Test Report


FCC ID: Z5N-RMC06

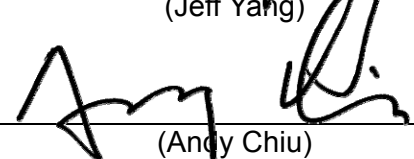
This report concerns (check one): ☒ Original Grant ☐ Class II Change

Project No. : 1507004
Equipment : Touch Switch
Model Name : L6N5A-AW
Applicant : LoongYee Industry Co.,Ltd
Address : No.14, Lane 103, Sec.2,Zhongxing Rd, Wu Gu
Dist,24873 New Taipei City, Taiwan, R.O.C.

Date of Receipt : Jul. 01, 2015
Date of Test : Jul. 01, 2015~Oct. 13, 2015
Issued Date : Oct. 14, 2015
Tested by : BTL Inc.

Testing Engineer : 
(Josh Lin)

Technical Manager : 
(Jeff Yang)

Authorized Signatory : 
(Andy Chiu)

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Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with the standards traceable to National Measurement Laboratory (**NML**) of **R.O.C.**, or National Institute of Standards and Technology (**NIST**) of **U.S.A.**

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Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

| Table of Contents | Page |
|--|-------------|
| 1 . CERTIFICATION | 6 |
| 2 . SUMMARY OF TEST RESULTS | 7 |
| 2.1 TEST FACILITY | 8 |
| 2.2 MEASUREMENT UNCERTAINTY | 9 |
| 3 .GENERAL INFORMATION | 10 |
| 3.1 GENERAL DESCRIPTION OF EUT | 10 |
| 3.2 DESCRIPTION OF TEST MODES | 11 |
| 3.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED | 12 |
| 3.4 DESCRIPTION OF SUPPORT UNITS | 12 |
| 4 . EMC EMISSION TEST | 13 |
| 4.1 CONDUCTED EMISSION MEASUREMENT | 13 |
| 4.1.1 POWER LINE CONDUCTED EMISSION | 13 |
| 4.1.2 TEST PROCEDURE | 13 |
| 4.1.3 DEVIATION FROM TEST STANDARD | 13 |
| 4.1.4 TEST SETUP | 14 |
| 4.1.5 EUT OPERATING CONDITIONS | 14 |
| 4.1.6 EUT TEST CONDITIONS | 14 |
| 4.1.7 TEST RESULTS | 14 |
| 4.2 RADIATED EMISSION MEASUREMENT | 15 |
| 4.2.1 RADIATED EMISSION LIMITS | 15 |
| 4.2.2 TESTPROCEDURE | 16 |
| 4.2.3 DEVIATION FROM TEST STANDARD | 16 |
| 4.2.4 TESTSETUP | 17 |
| 4.2.5 EUT OPERATING CONDITIONS | 18 |
| 4.2.6 EUT TEST CONDITIONS | 18 |
| 4.2.7 TEST RESULTS (9KHZ 30MHZ) | 18 |
| 4.2.8 TEST RESULTS (30MHZ to 1000 MHZ) | 18 |
| 4.2.9 TEST RESULTS (ABOVE1000 MHZ) | 19 |
| 5 . BANDWIDTH TEST | 20 |
| 5.1 TEST PROCEDURE | 20 |
| 5.2 DEVIATION FROM STANDARD | 20 |
| 5.3 TEST SETUP | 20 |
| 5.4 EUT OPERATION CONDITIONS | 20 |
| 5.5 EUT TEST CONDITIONS | 20 |
| 5.6 TEST RESULTS | 20 |
| 6 . MEASUREMENT INSTRUMENTS LIST AND SETTING | 21 |
| 7 . EUT TEST PHOTO | 22 |

Table of Contents**Page**

| | |
|--|----|
| ATTACHMENT A - CONDUCTED EMISSION | 25 |
| ATTACHMENT B -RADIATED EMISSION (9KHZ to 30MHZ) | 26 |
| ATTACHMENT C -RADIATED EMISSION (30MHZ TO 1000MHZ) | 28 |
| ATTACHMENT D -RADIATED EMISSION (ABOVE 1000MHZ) | 31 |
| ATTACHMENT E - BANDWIDTH | 36 |

REPORT ISSUED HISTORY

| Issued No. | Description | Issued Date |
|--------------------|-----------------|---------------|
| BTL-FCCP-2-1507004 | Original Issue. | Oct. 14, 2015 |

1. CERTIFICATION

Equipment : Touch Switch
Brand Name : Loong Yee
Model Name : L6N5A-AW
Applicant : LoongYee Industry Co.,Ltd
Manufacturer : LoongYee Industry Co.,Ltd
Address : No.14, Lane 103, Sec.2,Zhongxing Rd, Wu Gu Dist,24873 New Taipei City,
Taiwan, R.O.C.
Factory : LoongYee Industry Co.,Ltd
Address : No.14, Lane 103, Sec.2,Zhongxing Rd, Wu Gu Dist,24873 New Taipei City,
Taiwan, R.O.C.
Date of Test : Jul. 01, 2015~Oct. 13, 2015
Test Sample : Engineering Sample
Standard(s) : FCC Part15, Subpart C :2014 (15.249)/ ANSI C63.10-2013

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc..

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-2-1507004) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

| FCC Part15, Subpart C (15.249) | | | |
|--------------------------------|------------------------------|----------|----------|
| Standard Section | Test Item | Judgment | Remark |
| FCC | | | |
| 15.207(a) | Conducted Emission | N/A | Note (1) |
| 15.205 | Restricted Band of Operation | PASS | |
| 15.209 15.249(a) | Radiated Emissions | PASS | |
| 15.215(c) | 20dB Bandwidth Test | PASS | |

NOTE:

(1)"N/A" denotes test is not applicable to this device.

2.1 TEST FACILITY

Radiated emission Test (Below 1 GHz):

CB08: (FCC RN: 614388; FCC DN: TW1054; IC Assigned Code: 4428C-1)
1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

Radiated emission Test (Above 1 GHz):

CB08: (FCC RN: 614388; FCC DN: TW1054; IC Assigned Code: 4428C-1)
1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

2.2 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.

The BTL measurement uncertainty is less than the CISPR 16-4-2 U_{CISPR} requirement.

A. Radiated emission test:

| Test Site | Method | Measurement Frequency Range | U_{lab} (dB) |
|--------------|--------|-----------------------------|----------------|
| CB08 (3m) | CISPR | 9kHz ~ 150kHz | 4.00 |
| | | 150kHz ~ 30MHz | 4.00 |

| Test Site | Method | Measurement Frequency Range | Ant. H / V | U_{lab} (dB) |
|--------------|--------|-----------------------------|---------------|----------------|
| CB08 (3m) | CISPR | 30MHz ~ 200MHz | V | 3.06 |
| | | 30MHz ~ 200MHz | H | 2.58 |
| | | 200MHz ~ 1,000MHz | V | 3.50 |
| | | 200MHz ~ 1,000MHz | H | 3.10 |

| Test Site | Method | Measurement Frequency Range | Ant. H / V | U_{lab} (dB) |
|--------------|--------|-----------------------------|---------------|----------------|
| CB08 (3m) | CISPR | 1GHz ~ 6GHz | V | 4.14 |
| | | 1GHz ~ 6GHz | H | 4.14 |
| | | 6GHz ~ 18GHz | V | 5.34 |
| | | 6GHz ~ 18GHz | H | 5.34 |

| Test Site | Method | Measurement Frequency Range | U_{lab} (dB) |
|--------------|--------|-----------------------------|----------------|
| CB08 (3m) | CISPR | 18 ~ 26.5 GHz | 4.66 |
| | | 26.5 ~ 40 GHz | 4.74 |

Our calculated Measurement Instrumentation Uncertainty is shown in the tables above. These are our U_{lab} values in CISPR 16-4-2 terminology.

Since Table 1 of CISPR 16-4-2 has values of measurement instrumentation uncertainty, called U_{CISPR} , as follows:

Conducted Disturbance (mains port) – 150 kHz – 30 MHz: 3.6 dB

Radiated Disturbance (electric field strength on an open area test site or alternative test site) –

30 MHz – 1000 MHz: 5.2 dB

It can be seen that our U_{lab} values are smaller than U_{CISPR} .

If U_{lab} is less than or equal to U_{CISPR} , then:

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

If U_{lab} is greater than U_{CISPR} , then:

- compliance is deemed to occur if no measured disturbance level, increased by $(U_{lab} - U_{CISPR})$, exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level, increased by $(U_{lab} - U_{CISPR})$, exceeds the disturbance limit.

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

| | | |
|---------------------|--|---|
| Equipment | Touch Switch | |
| Brand Name | Loong Yee | |
| Model Name | L6N5A-AW | |
| Model Difference | N/A | |
| Product Description | Operation Frequency | 2.409GHz |
| | Modulation Technology | FSK(2.4Kbps) |
| | Data rate | |
| | Field Strength | 90.23dBuV/m(Peak Max) 79.13dBuV/m(AVG Max) |
| Power Source | Supplied from Battery Model: CR2032 H | |
| Power Rating | DC 3V | |

Note:

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

2. Channel List:

| Channel | Frequency (MHz) |
|---------|-----------------|
| 01 | 2409 |

3 Table for Filed Antenna:

| Ant. | Brand | Model Name | Antenna Type | Connector | Gain (dBi) | Note |
|------|-------|------------|--------------|-----------|------------|------|
| 1 | N/A | N/A | PCB | N/A | -4.39 | |

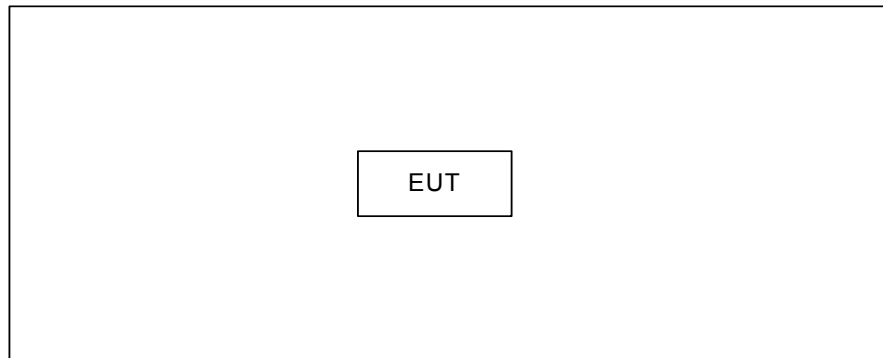
3.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based 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 |

| For Radiated Test | |
|-------------------|-------------|
| Final Test Mode | Description |
| Mode 1 | TX Mode |

3.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.4 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. |
|------|-----------|-----------|----------------|--------|------------|
| - | - | - | - | - | - |

| Item | Shielded Type | Ferrite Core | Length | Note |
|------|---------------|--------------|--------|------|
| - | - | - | - | - |

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 POWER LINE CONDUCTED EMISSION (FREQUENCY RANGE 150KHZ-30MHZ)

| Frequency of Emission (MHz) | Conducted Limit (dBμV) | |
|-----------------------------|------------------------|-----------|
| | Quasi-peak | Average |
| 0.15 -0.5 | 66 to 56* | 56 to 46* |
| 0.50 -5.0 | 56 | 46 |
| 5.0 -30.0 | 60 | 50 |

Note:

- (1) The limit of " * " decreases with the logarithm of the frequency
- (2) The test result calculated as following:
 Measurement Value = Reading Level + Correct Factor
 Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor(if use)
 Margin Level = Measurement Value - Limit Value

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 |

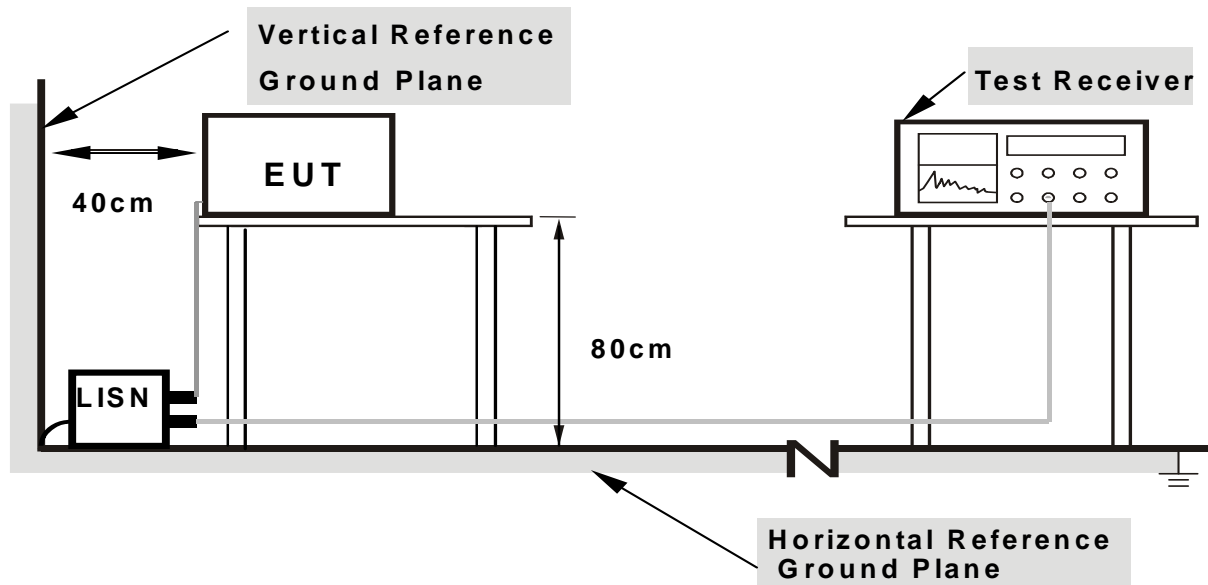
4.1.2 TEST PROCEDURE

- a. The EUT was placed 0.8 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.
- b. Interconnecting cables that hang closer than 40 cm to the groundplane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. 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.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.1.3 DEVIATION FROM TEST STANDARD

No deviation

4.1.4 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

4.1.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it).

4.1.6 EUT TEST CONDITIONS

Temperature: N/A

Relative Humidity: N/A

Test Voltage: N/A

4.1.7 TEST RESULTS

Please refer to the Attachment A.

Remark:

- (1) All readings are QP Mode value unless otherwise stated AVG in column of 'Note'. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform in this case, a "*" marked in AVG Mode column of Interference Voltage Measured.
- (2) Measuring frequency range from 150KHz to 30MHz.

4.2 RADIATED EMISSION MEASUREMENT

4.2.1 RADIATED EMISSION LIMITS (FCC 15.209)

| Frequencies (MHz) | Field Strength (micorvolts/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 |
| 960~1000 | 500 | 3 |

Harmonic emissions limits comply with below 54 dBuV/m at 3m. Other emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or comply with the radiated emissions limits specified in section 15.209(a) limit in the table below has to be followed.

Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission level (dBuV/m)=20log Emission level (uV/m).

LIMITS OF RADIATED EMISSION MEASUREMENT (FCC 15.209)

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

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

LIMITS OF RADIATED EMISSION MEASUREMENT (FCC Part 15.249)

| FCC Part 15 (15.249) , Subpart C | |
|--|----------------------|
| Limit | Frequency Range(MHz) |
| Field strength of fundamental 50000 μ V/m (94 dB μ V/m) @ 3 m | 2400-2483.5 |
| Field strength of harmonics 500 μ V/m (54 dB μ V/m) @ 3 m | Above 2483.5 |

| Spectrum Parameter | Setting |
|--------------------|-----------------------|
| Attenuation | Auto |
| Start Frequency | 1000 MHz |
| Stop Frequency | 10th carrier harmonic |

| Receiver Parameter | Setting |
|------------------------|-----------------------------------|
| Attenuation | Auto |
| Start ~ Stop Frequency | 9kHz~90kHz for PK/AVG detector |
| Start ~ Stop Frequency | 90kHz~110kHz for QP detector |
| Start ~ Stop Frequency | 110kHz~490kHz for PK/AVG detector |
| Start ~ Stop Frequency | 490kHz~30MHz for QP detector |
| Start ~ Stop Frequency | 30MHz~1000MHz for QP detector |

4.2.2 TESTPROCEDURE

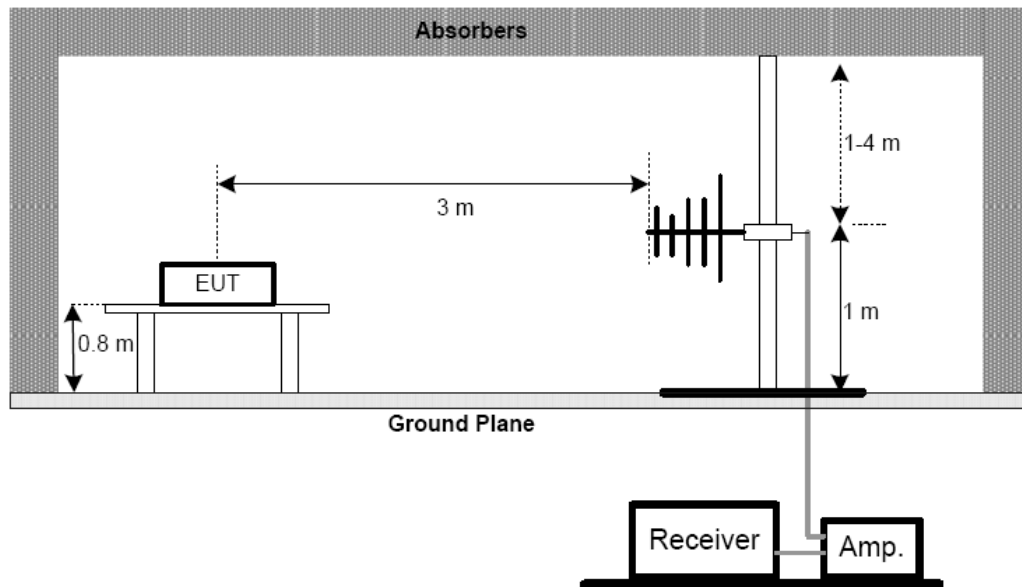
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- The height of the equipment or of the substitution antenna shall be 0.8 m or 1.5m, 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 radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1GHz)
- All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1GHz)
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.2.3 DEVIATION FROM TEST STANDARD

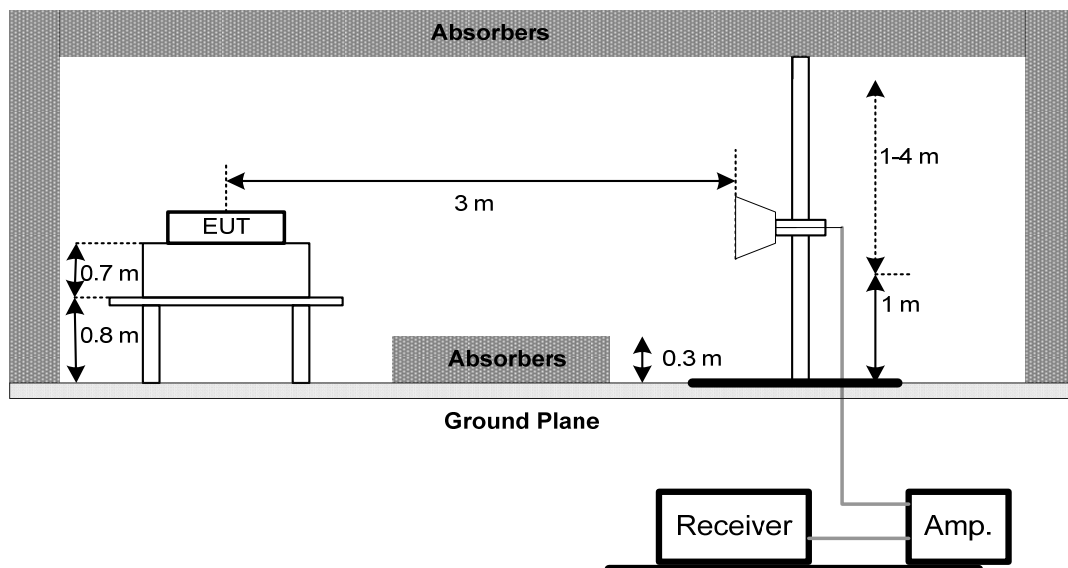
No deviation

4.2.4 TESTSETUP

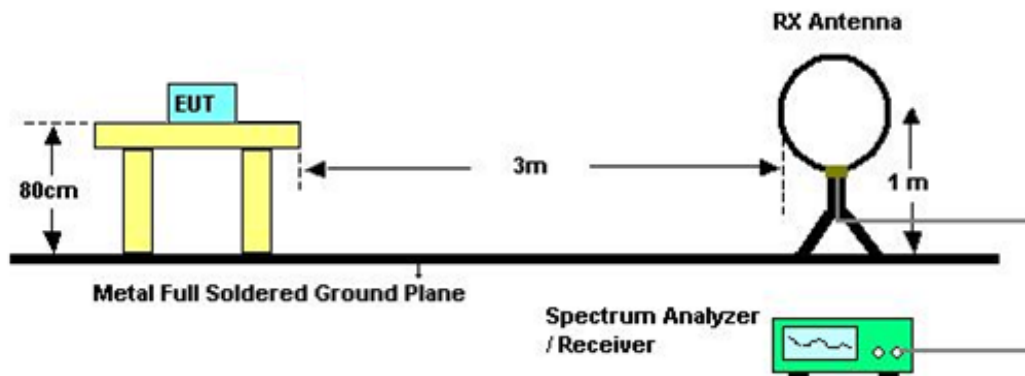
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(B) Radiated Emission Test Set-Up Frequency Above 1 GHz



(C) For radiated emissions below 30MHz



4.2.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

4.2.6 EUT TEST CONDITIONS

Temperature: 26°C

Relative Humidity: 61%

Test Voltage: DC 3V

4.2.7 TEST RESULTS (9KHZ 30MHZ)

Please refer to the Attachment B.

Remark:

- (1) The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
- (2) Distance extrapolation factor = $40 \log (\text{specific distance} / \text{test distance})$ (dB);.
- (3) Limit line = specific limits (dBuV) + distance extrapolation factor..

4.2.8 TEST RESULTS (30MHZ to 1000 MHZ)

Please refer to the Attachment C

Remark:

- (1) All readings are Peak unless otherwise stated QP in column of 『Note』 . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Peak detector mode or QP detector mode of the emission .

4.2.9 TEST RESULTS (ABOVE1000 MHZ)

Please refer to the Attachment D

Remark:

- (1) All readings are Peak unless otherwise stated QP in column of 『Note』 . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
- (3) 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.
- (4) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (5) EUT Orthogonal Axis:
“X” - denotes Laid on Table; “Y” - denotes Vertical Stand; “Z” - denotes Side Stand
- (6) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (7) No limit: This is fundamental signal, the judgment is not applicable.
For fundamental signal judgment was referred to Peak output test.

5. BANDWIDTH TEST

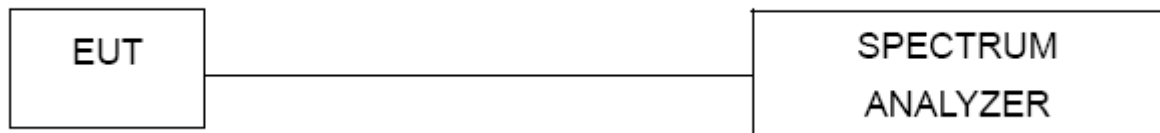
5.1 TEST PROCEDURE

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

5.2 DEVIATION FROM STANDARD

No deviation.

5.3 TEST SETUP



5.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.5 EUT TEST CONDITIONS

Temperature: 26°C
Relative Humidity: 61%
Test Voltage: DC 3V

5.6 TEST RESULTS

Please refer to the Attachment E

6. MEASUREMENT INSTRUMENTS LIST AND SETTING

| Radiated Emission Measurement | | | | | |
|-------------------------------|-------------------------|--------------------|------------------|------------|------------------|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Spectrum Analyzer | R&S | FSP-40 | 100129 | Jan.07, 2016 |
| 2 | Horn Antenna | Schwarzbeck | BBHA 9120 | D-325 | Jun. 15, 2016 |
| 3 | Microwave Pre_amplifier | Agilent | 8449B | 3008A01714 | Apr. 16, 2016 |
| 4 | Microflex Cable | Harbour industries | 27478LL142 | 1m | May 13, 2016 |
| 5 | Microflex Cable | EMC | S104-SMA | 8m | May 15, 2016 |
| 6 | Microflex Cable | Harbour industries | 27478LL142 | 3m | May 13, 2016 |
| 7 | Test Cable | LMR | LMR-400 | 12m | May 14, 2016 |
| 8 | Test Cable | LMR | LMR-400 | 3m | May 14, 2016 |
| 9 | Pre-Amplifier | Anritsu | MH648A | M92649 | Jun. 17, 2016 |
| 10 | Log-Bicon Antenna | Schwarzbeck | VULB9168-35 2 | 9168-352 | Jul. 31, 2016 |
| 11 | Loop Antenna | EMCO | 6502 | 00042960 | Nov. 08, 2015 |

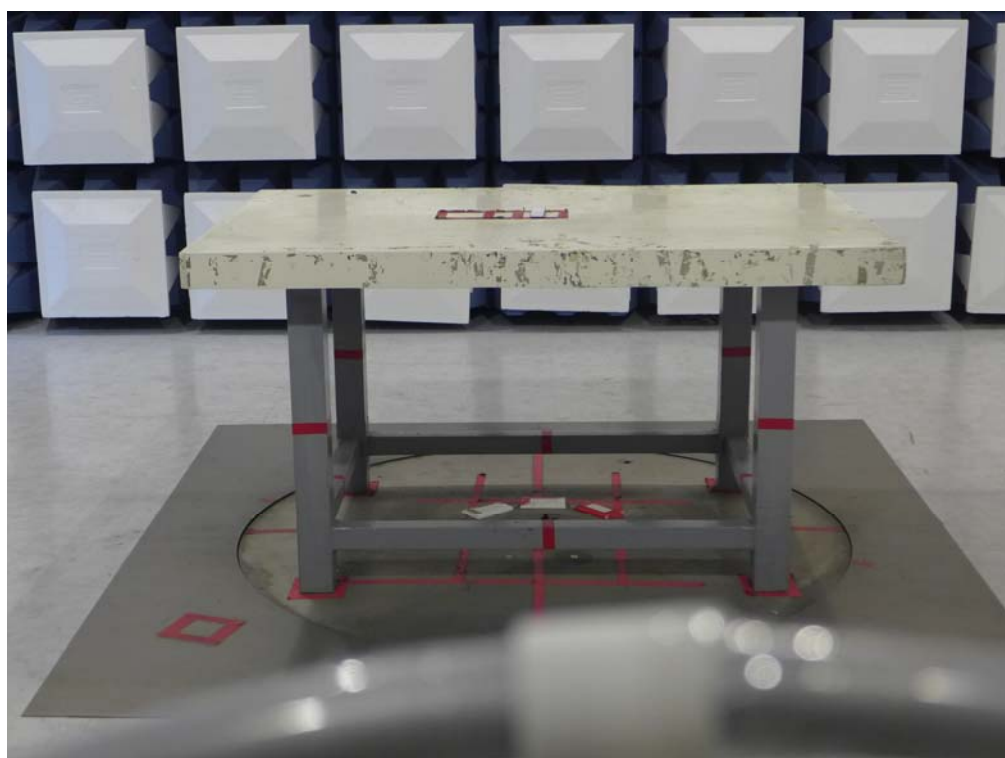
| Bandwidth | | | | | |
|-----------|-------------------|--------------|----------|------------|------------------|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Spectrum Analyzer | R&S | FSP-40 | 100129 | Jan.07, 2016 |

Remark: "N/A" denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

7. EUT TEST PHOTO

Radiated Measurement Photos

9KHz to 30MHz



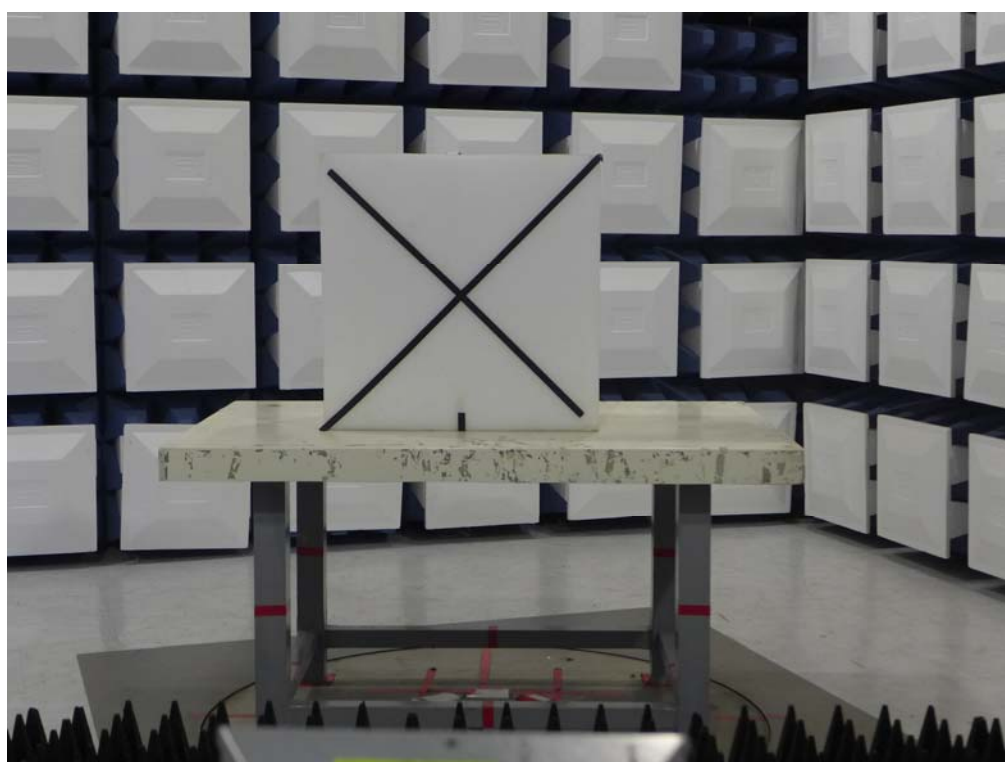
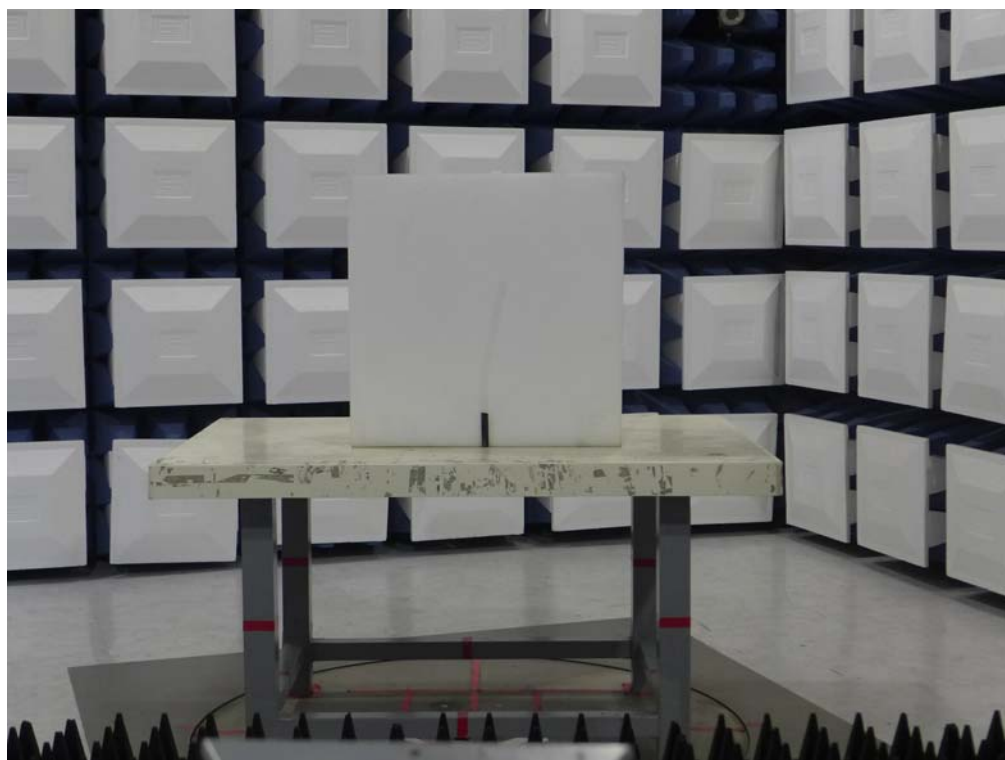
Radiated Measurement Photos

30MHz to 1000MHz



Radiated Measurement Photos

Above 1000MHz



ATTACHMENT A - CONDUCTED EMISSION

Test Mode: N/A

Note: "N/A" denotes test is not applicable to this device.

ATTACHMENT B -RADIATED EMISSION (9KHZ to 30MHZ)

Test Mode: TX Mode

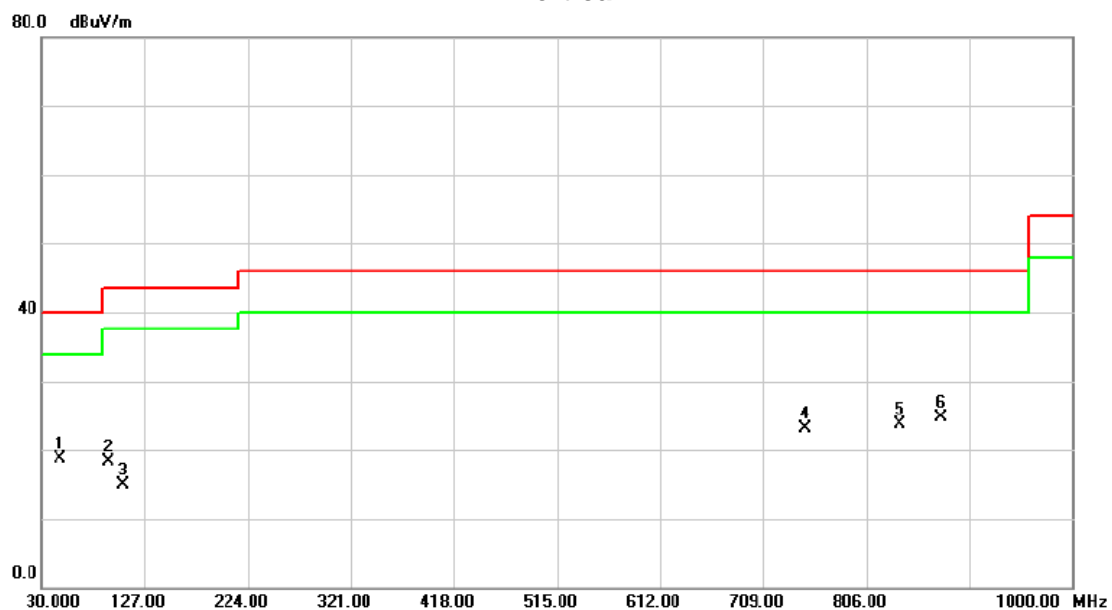
| Frequency (MHz) | Ant 0°/90° | Read level dBuV/m | Factor (dB) | Measured(FS) (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Note |
|-----------------|------------|-------------------|-------------|-----------------------|----------------|-------------|------|
| 0.0160 | 0° | 32.72 | 22.25 | 54.97 | 103.52 | -48.55 | AVG |
| 0.0160 | 0° | 43.63 | 22.25 | 65.88 | 123.52 | -57.64 | PK |
| 0.0247 | 0° | 29.53 | 22.03 | 51.56 | 99.75 | -48.19 | AVG |
| 0.0247 | 0° | 33.59 | 22.03 | 55.62 | 119.75 | -64.13 | PK |
| 0.0341 | 0° | 25.83 | 21.80 | 47.63 | 96.95 | -49.32 | AVG |
| 0.0341 | 0° | 34.52 | 21.80 | 56.32 | 116.95 | -60.63 | PK |
| 0.0810 | 0° | 23.79 | 20.90 | 44.69 | 89.43 | -44.74 | AVG |
| 0.0810 | 0° | 33.85 | 20.90 | 54.75 | 109.43 | -54.68 | PK |
| 1.1960 | 0° | 33.52 | 20.40 | 53.92 | 66.05 | -12.13 | QP |
| 1.2750 | 0° | 37.95 | 20.33 | 58.28 | 65.49 | -7.22 | QP |

| Frequency (MHz) | Ant 0°/90° | Read level dBuV/m | Factor (dB) | Measured(FS) (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Note |
|-----------------|------------|-------------------|-------------|-----------------------|----------------|-------------|------|
| 0.0190 | 90° | 33.67 | 22.18 | 55.85 | 102.03 | -46.18 | AVG |
| 0.0190 | 90° | 46.63 | 22.18 | 68.81 | 122.03 | -53.22 | PK |
| 0.0281 | 90° | 27.78 | 21.95 | 49.73 | 98.63 | -48.90 | AVG |
| 0.0281 | 90° | 34.66 | 21.95 | 56.61 | 118.63 | -62.02 | PK |
| 0.0360 | 90° | 24.95 | 21.75 | 46.70 | 96.48 | -49.78 | AVG |
| 0.0360 | 90° | 34.62 | 21.75 | 56.37 | 116.48 | -60.11 | PK |
| 0.0760 | 90° | 23.56 | 20.98 | 44.54 | 89.99 | -45.44 | AVG |
| 0.0760 | 90° | 37.00 | 20.98 | 57.98 | 109.99 | -52.00 | PK |
| 1.1400 | 90° | 35.70 | 20.46 | 56.16 | 66.47 | -10.31 | QP |
| 1.2500 | 90° | 33.22 | 20.35 | 53.57 | 65.67 | -12.10 | QP |

ATTACHMENT C -RADIATED EMISSION (30MHZ TO 1000MHZ)

Test Mode: TX Mode

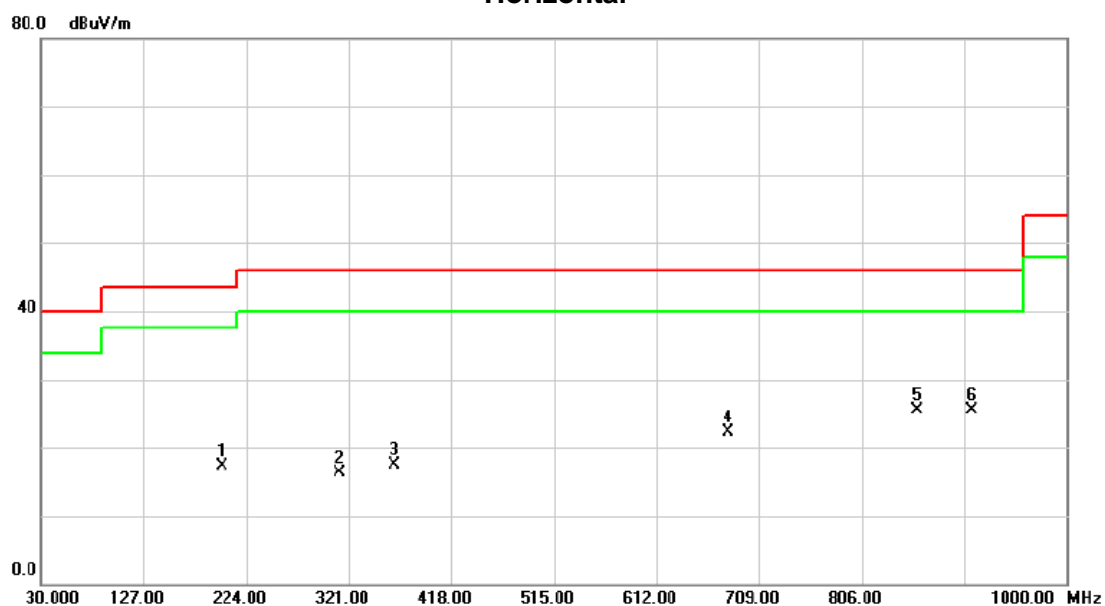
Vertical



| No. | Mk. | Freq. MHz | Reading Level dBuV | Correct Factor dB | Measure- ment dBuV/m | Limit dBuV/m | Margin dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1 | | 47.4600 | 33.07 | -14.37 | 18.70 | 40.00 | -21.30 | peak | |
| 2 | | 92.0800 | 36.53 | -18.29 | 18.24 | 43.50 | -25.26 | peak | |
| 3 | | 106.6300 | 30.31 | -15.44 | 14.87 | 43.50 | -28.63 | peak | |
| 4 | | 748.7700 | 26.47 | -3.46 | 23.01 | 46.00 | -22.99 | peak | |
| 5 | | 838.0100 | 26.43 | -2.75 | 23.68 | 46.00 | -22.32 | peak | |
| 6 | * | 876.8100 | 26.75 | -1.96 | 24.79 | 46.00 | -21.21 | peak | |

Test Mode: TX Mode

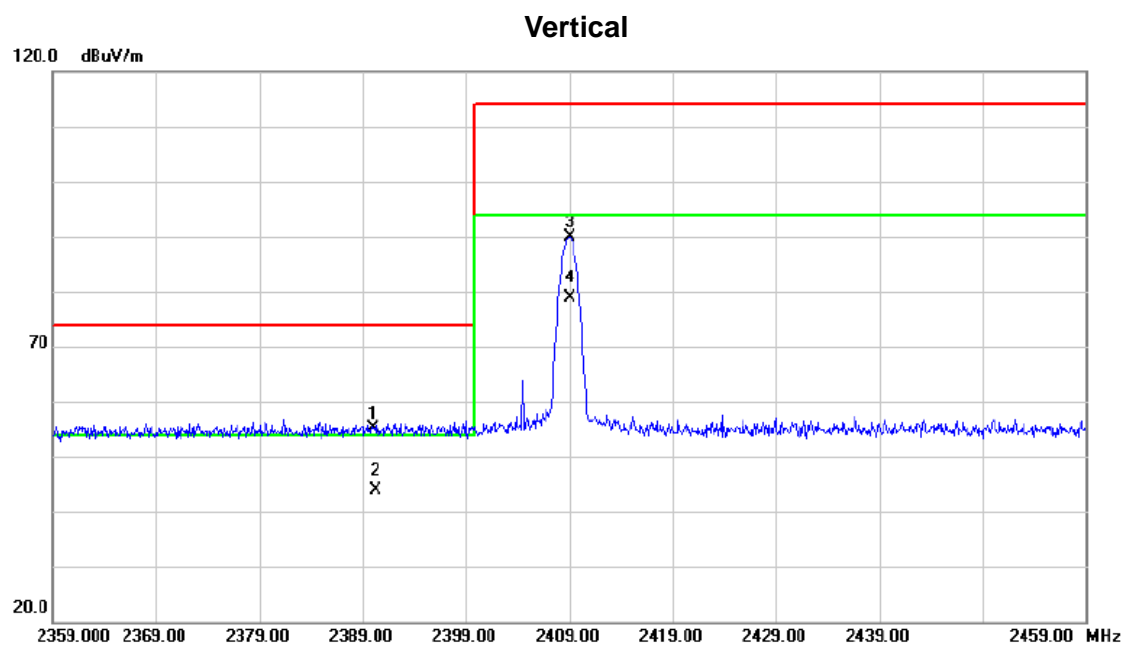
Horizontal



| No. | Mk. | Freq. MHz | Reading Level dBuV | Correct Factor dB | Measure- ment dBuV/m | Limit dBuV/m | Margin dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1 | | 201.6900 | 32.39 | -15.17 | 17.22 | 43.50 | -26.28 | peak | |
| 2 | | 312.2700 | 27.40 | -11.14 | 16.26 | 46.00 | -29.74 | peak | |
| 3 | | 363.6800 | 27.77 | -10.20 | 17.57 | 46.00 | -28.43 | peak | |
| 4 | | 679.9000 | 27.21 | -4.93 | 22.28 | 46.00 | -23.72 | peak | |
| 5 | | 858.3800 | 27.82 | -2.34 | 25.48 | 46.00 | -20.52 | peak | |
| 6 | * | 909.7900 | 26.93 | -1.35 | 25.58 | 46.00 | -20.42 | peak | |

ATTACHMENT D -RADIATED EMISSION (ABOVE 1000MHZ)

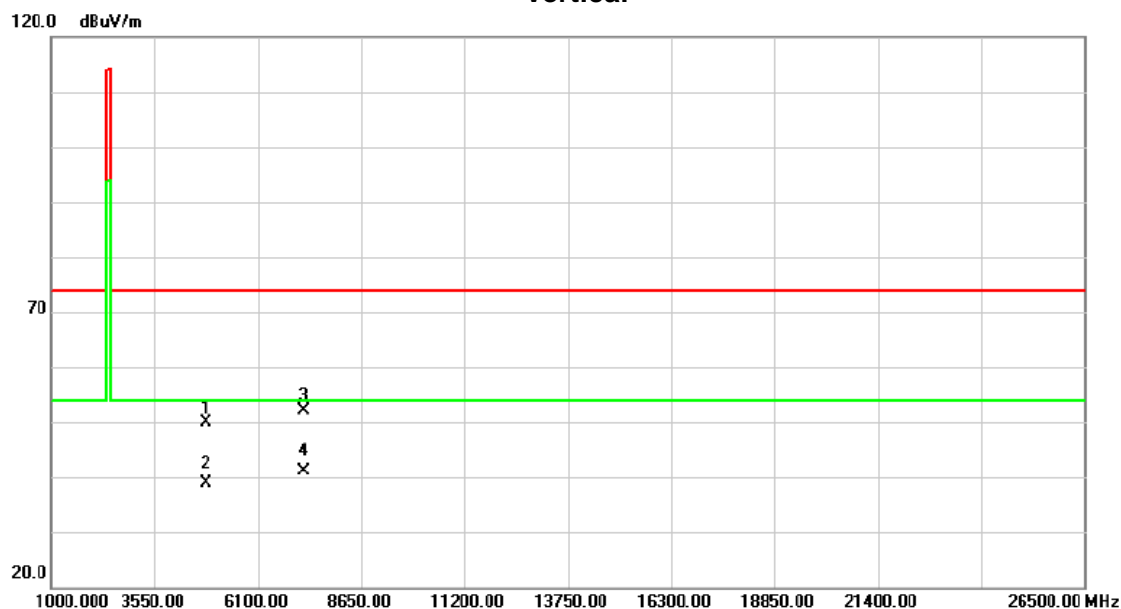
Test Mode : TX Mode



| No. | Mk. | Freq. MHz | Reading Level dBuV | Correct Factor dB | Measure- ment dBuV/m | Limit dBuV/m | Margin dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|----------|
| 1 | | 2390.000 | 24.52 | 30.56 | 55.08 | 74.00 | -18.92 | peak | |
| 2 | * | 2390.000 | 13.42 | 30.56 | 43.98 | 54.00 | -10.02 | AVG | |
| 3 | | 2409.000 | 59.26 | 30.62 | 89.88 | 114.00 | -24.12 | peak | NO LIMIT |
| 4 | | 2409.000 | 48.16 | 30.62 | 78.78 | 94.00 | -15.22 | AVG | NO LIMIT |

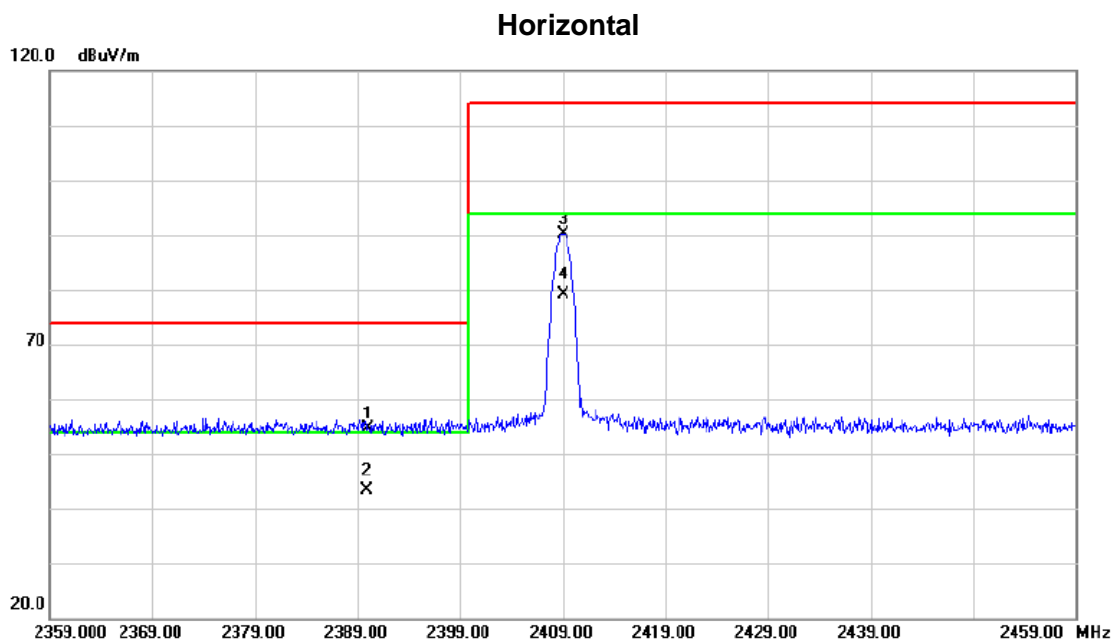
Test Mode : TX Mode

Vertical



| No. | Mk. | Freq. MHz | Reading Level dBuV | Correct Factor dB | Measure- ment dBuV/m | Limit dBuV/m | Margin dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1 | | 4817.940 | 46.65 | 3.29 | 49.94 | 74.00 | -24.06 | peak | |
| 2 | | 4817.940 | 35.55 | 3.29 | 38.84 | 54.00 | -15.16 | AVG | |
| 3 | | 7227.160 | 43.70 | 8.44 | 52.14 | 74.00 | -21.86 | peak | |
| 4 | * | 7227.160 | 32.60 | 8.44 | 41.04 | 54.00 | -12.96 | AVG | |

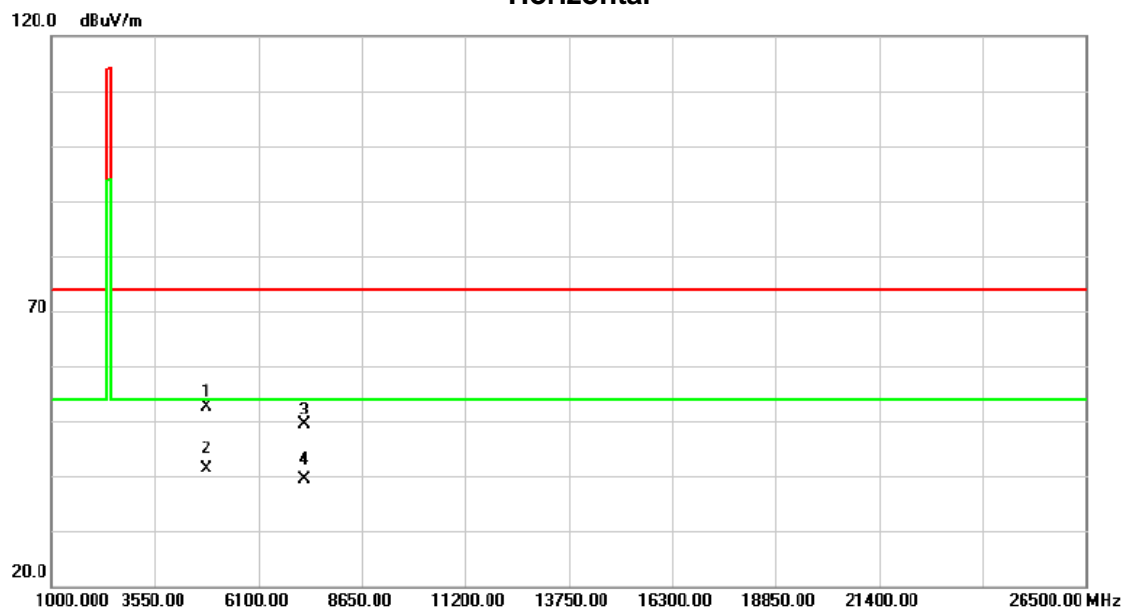
Test Mode : TX Mode



| No. | Mk. | Freq. MHz | Reading Level dBuV | Correct Factor dB | Measure- ment dBuV/m | Limit dBuV/m | Margin dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|----------|
| 1 | | 2390.000 | 23.95 | 30.56 | 54.51 | 74.00 | -19.49 | peak | |
| 2 | * | 2390.000 | 12.85 | 30.56 | 43.41 | 54.00 | -10.59 | AVG | |
| 3 | | 2409.000 | 59.61 | 30.62 | 90.23 | 114.00 | -23.77 | peak | NO LIMIT |
| 4 | | 2409.000 | 48.51 | 30.62 | 79.13 | 94.00 | -14.87 | AVG | NO LIMIT |

| | |
|-------------|---------|
| Test Mode : | TX Mode |
|-------------|---------|

Horizontal

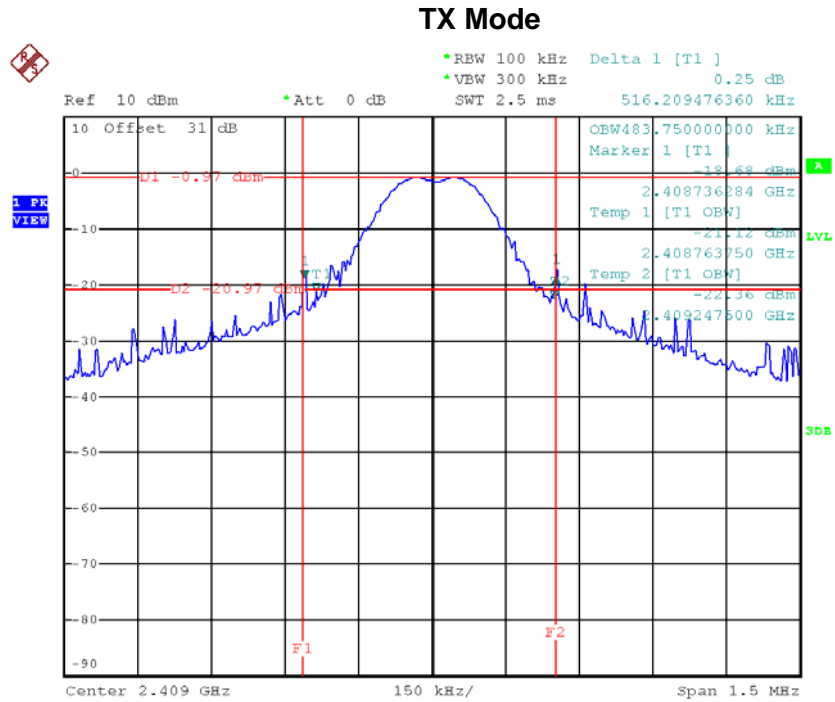


| No. | Mk. | Freq. MHz | Reading Level dBuV | Correct Factor dB | Measure- ment dBuV/m | Limit dBuV/m | Margin dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1 | | 4817.900 | 49.30 | 3.29 | 52.59 | 74.00 | -21.41 | peak | |
| 2 | * | 4817.900 | 38.20 | 3.29 | 41.49 | 54.00 | -12.51 | AVG | |
| 3 | | 7226.820 | 40.92 | 8.45 | 49.37 | 74.00 | -24.63 | peak | |
| 4 | | 7226.820 | 30.82 | 8.45 | 39.27 | 54.00 | -14.73 | AVG | |

ATTACHMENT E - BANDWIDTH

| | |
|------------|---------|
| Test Mode: | TX Mode |
|------------|---------|

| Frequency (MHz) | 20dB Bandwidth (MHz) | 99% Occupied BW (MHz) |
|-----------------|----------------------|-----------------------|
| 2409 | 0.52 | 0.48 |



Date: 20.AUG.2015 17:49:41